TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 180-42353-1

Job Description: Harley Davidson

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

Attention: Allan Miller

Approved for release.
Carrie L Gamber
Senior Project Manager
4/6/2015 4:29 PM

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04/06/2015

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery exceeds the control limits

HPLC/IC

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery exceeds the control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

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

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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: 180-42353-1

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 03/25/2015; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.2º C and 2.1º C.

Per Kait Fleming, Groundwater Sciences on Thursday, March 26, 2015, the sample IDs for samples HD-COD-SW-6-0/1-0 and HD-COD-SW-7-0/1-0 were to be switched in the system for reporting. Based on the field notes, sample HD-COD-SW-6-0/1-0 was sampled earlier in the day than sample HD-COD-SW-7-0/1-0. The samples were logged in according to Groundwater Sciences' request.

VOLATILES

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

The laboratory control sample (LCS) for batch 136938 recovered outside control limits for the following analytes: 1,1,2,2-Tetrachloroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 137218 recovered outside control limits for the following analytes: Bromomethane and Trans-1,3-dichloropropene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Tetrachloroethene and Trichloroethene failed the recovery criteria low for the MS/MSD of sample HD-MW-99S-0/1-0 (180-42353-20) in batch 180-137048.

METALS

Magnesium and Sodium were detected in method blank MB 180-136963/1-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.

Calcium was detected in method blank MB 180-137092/1-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 180-137006/2 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Bicarbonate Alkalinity as CaCO3 and Total Alkalinity as CaCO3 to pH 4.5 were detected in method blank MB 180-137006/27 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

IC

Chloride and Nitrate as N were detected in method blank MB 180-136546/46 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.

Chloride and Nitrate as N were detected in method blank MB 180-136546/6 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.

Chloride failed the recovery criteria low for the MS of sample HD-MW-99D-0/1-0 (180-42353-21) in batch 180-136546.

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

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Client Sample ID: HD-COD-SW-7-0/1-0 — Lab Sample ID: 180-42353-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.15	J	1.0	0.14	ug/L	1		8260C	Total/NA
Nitrate as N	3.6	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	81	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	34		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	45000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	4300		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	11000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	45000	B	100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	110	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	110	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-COD-SW-6-0/1-0 — Lab Sample ID: 180-42353-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	3.4	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	140	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	19		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	54000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	2900		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	10000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	59000	B	100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	110	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	110	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-COD-SW-8-0/1-0 — Lab Sample ID: 180-42353-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.27	J	1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	0.31	J	1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.32	J	1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	3.6	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	71	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	30		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	38000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	4300		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	8500	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	110	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	110	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-COD-SW-9-0/1-0 — Lab Sample ID: 180-42353-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.31	J	1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	0.37	J	1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.17	J	1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	4.3	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	100	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	58000		100	2.8	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-COD-SW-9-0/1-0 (Continued) — Lab Sample ID: 180-42353-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	7900		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	12000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	56000	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-COD-SW-10-0/1-0 — Lab Sample ID: 180-42353-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	3.1	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	130	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	27		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	83000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	8300		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	14000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	54000	B	100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	190	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	190	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-COD-SW-11-0/1-0 — Lab Sample ID: 180-42353-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.17	J	1.0	0.17	ug/L	1		8260C	Total/NA
Nitrate as N	4.1	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	88	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	20		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	75000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	2200		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	17000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	40000	B	100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	190	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	190	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-COD-SW-12-0/1-0 — Lab Sample ID: 180-42353-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.8	J	5.0	2.5	ug/L	1		8260C	Total/NA
Nitrate as N	5.6	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	37		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	69000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	16000		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	12000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	84000	B	100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	180	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	180	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-COD-SW-13-0/1-0 — Lab Sample ID: 180-42353-8

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-COD-SW-13-0/1-0 (Continued)

Lab Sample ID: 180-42353-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.38	J	1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	0.43	J	1.0	0.14	ug/L	1		8260C	Total/NA
Toluene	0.22	J	1.0	0.15	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.44	J	1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	3.5	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	77	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	30		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	55000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	5400		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	11000	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	120	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	120	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-COD-SW-15-0/1-0

Lab Sample ID: 180-42353-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.75	J	1.0	0.30	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	0.17	J	1.0	0.12	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	14		1.0	0.24	ug/L	1		8260C	Total/NA
Chloroform	0.18	J	1.0	0.17	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane	0.54	J	1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	12		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	7.7		1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	3.8	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	33		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	96000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	6200		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	19000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	78000	B	100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	240	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	240	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-COD-SW-16-0/1-0

Lab Sample ID: 180-42353-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.35	J	1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	0.27	J	1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.51	J	1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	3.6	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	72	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	29		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	36000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	4000		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	8200	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	87	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	87	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: 180-42353-1

Client Sample ID: HD-COD-SW-17-0/1-0 — Lab Sample ID: 180-42353-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.1		1.0	0.30	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	0.65	J	1.0	0.12	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	17		1.0	0.24	ug/L	1		8260C	Total/NA
Chloroform	0.17	J	1.0	0.17	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane	5.7		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	23		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	71	E	1.0	0.15	ug/L	1		8260C	Total/NA
1,1-Dichloroethene - DL	0.96	J	3.0	0.89	ug/L	3		8260C	Total/NA
Methylene Chloride - DL	1.5	J	3.0	0.38	ug/L	3		8260C	Total/NA
1,1-Dichloroethane - DL	0.63	J	3.0	0.35	ug/L	3		8260C	Total/NA
cis-1,2-Dichloroethene - DL	16		3.0	0.71	ug/L	3		8260C	Total/NA
1,1,1-Trichloroethane - DL	4.8		3.0	0.86	ug/L	3		8260C	Total/NA
Trichloroethene - DL	20		3.0	0.43	ug/L	3		8260C	Total/NA
Tetrachloroethene - DL	60		3.0	0.45	ug/L	3		8260C	Total/NA
Nitrate as N	3.7	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	140	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	32		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	97000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	6100		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	19000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	69000	B	100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	190	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	190	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-COD-SW-20-0/1-0 — Lab Sample ID: 180-42353-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	3.4	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	130	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	18		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	55000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	2900		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	10000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	61000	B	100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	120	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	120	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-COD-SW-26-0/1-0 — Lab Sample ID: 180-42353-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.41	J	1.0	0.17	ug/L	1		8260C	Total/NA
Trichloroethene	0.20	J	1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	2.6		1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	3.7	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	32		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	61000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	3600		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	14000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	58000	B	100	3.8	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-COD-SW-26-0/1-0 (Continued) — Lab Sample ID: 180-42353-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity as CaCO3 to pH 4.5	180	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	180	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-COD-SW-27-0/1-0 — Lab Sample ID: 180-42353-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.2		1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	3.5		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	2.3		1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	3.6	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	32		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	70000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	5700		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	15000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	60000	B	100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	170	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	170	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-COD-SW-28-0/1-0 — Lab Sample ID: 180-42353-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.41	J	1.0	0.24	ug/L	1		8260C	Total/NA
Chloroform	0.20	J	1.0	0.17	ug/L	1		8260C	Total/NA
Trichloroethene	0.37	J	1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.19	J	1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	4.4	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	100	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	27		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	64000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	6400		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	14000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	52000	B	100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	180	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	180	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-COD-SW-29-0/1-0 — Lab Sample ID: 180-42353-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.7	J	5.0	2.5	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.30	J	1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	0.31	J	1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.23	J	1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	3.5	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	67	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	30		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	71000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	6300		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	21000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	41000	B	100	3.8	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-COD-SW-29-0/1-0 (Continued) — Lab Sample ID: 180-42353-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity as CaCO3 to pH 4.5	120	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	120	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-QC1-0/1-2 — Lab Sample ID: 180-42353-17

No Detections.

Client Sample ID: HD-QC2-0/1-2 — Lab Sample ID: 180-42353-18

No Detections.

Client Sample ID: HD-QC1-0/1-1 — Lab Sample ID: 180-42353-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.6		1.0	0.30	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	0.59	J	1.0	0.12	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	22		1.0	0.24	ug/L	1		8260C	Total/NA
Chloroform	0.28	J	1.0	0.17	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane	1.4		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	34		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	23		1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	3.9	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	37		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	92000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	4600		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	18000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	52000	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-99S-0/1-0 — Lab Sample ID: 180-42353-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	2.4		1.0	0.30	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	1.3		1.0	0.12	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	32		1.0	0.24	ug/L	1		8260C	Total/NA
Chloroform	0.21	J	1.0	0.17	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane	5.6		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	32	F1	1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	23	F1	1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	2.8	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	87	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	29		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	110000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	3800		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	14000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	37000	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

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Client Sample ID: HD-MW-99D-0/1-0 — Lab Sample ID: 180-42353-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	7.8		5.0	1.5	ug/L	5		8260C	Total/NA
Methylene Chloride	2.4	J	5.0	0.63	ug/L	5		8260C	Total/NA
1,1-Dichloroethane	2.2	J	5.0	0.58	ug/L	5		8260C	Total/NA
cis-1,2-Dichloroethene	58		5.0	1.2	ug/L	5		8260C	Total/NA
1,1,1-Trichloroethane	10		5.0	1.4	ug/L	5		8260C	Total/NA
Trichloroethene	140		5.0	0.72	ug/L	5		8260C	Total/NA
Tetrachloroethene	12		5.0	0.74	ug/L	5		8260C	Total/NA
Nitrate as N	2.3	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	58	B F1	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	26		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	91000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	3000		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	13000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	24000	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-145A-0/1-0 — Lab Sample ID: 180-42353-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.93	J	1.0	0.30	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	0.33	J	1.0	0.12	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	20		1.0	0.24	ug/L	1		8260C	Total/NA
Chloroform	0.25	J	1.0	0.17	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane	1.3		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	22		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	11		1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	3.6	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	150	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	34		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	95000		100	2.8	ug/L	1		6020A	Total/NA
Potassium	5600		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	18000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	68000	B	100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	240	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	240	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-MW-100S-0/1-0 — Lab Sample ID: 180-42353-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	2.2	J	5.0	1.5	ug/L	5		8260C	Total/NA
Methylene Chloride	2.4	J	5.0	0.63	ug/L	5		8260C	Total/NA
1,1-Dichloroethane	0.84	J	5.0	0.58	ug/L	5		8260C	Total/NA
cis-1,2-Dichloroethene	31		5.0	1.2	ug/L	5		8260C	Total/NA
1,1,1-Trichloroethane	2.0	J	5.0	1.4	ug/L	5		8260C	Total/NA
Trichloroethene	61		5.0	0.72	ug/L	5		8260C	Total/NA
Tetrachloroethene	49		5.0	0.74	ug/L	5		8260C	Total/NA
Nitrate as N	3.6	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	100	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	34		1.0	0.21	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-MW-100S-0/1-0 (Continued)

Lab Sample ID: 180-42353-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	93000	B	100	2.8	ug/L	1		6020A	Total/NA
Potassium	4300		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	18000		100	1.2	ug/L	1		6020A	Total/NA
Sodium	48000		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-100I-0/1-0

Lab Sample ID: 180-42353-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.4		1.0	0.30	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	0.61	J	1.0	0.12	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	22		1.0	0.24	ug/L	1		8260C	Total/NA
Chloroform	0.24	J	1.0	0.17	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane	1.4		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	33		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	22		1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	3.6	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	33		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	95000	B	100	2.8	ug/L	1		6020A	Total/NA
Potassium	4700		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	19000		100	1.2	ug/L	1		6020A	Total/NA
Sodium	54000		100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	290	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	290	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

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

Lab Sample ID: 180-42353-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.98	J	2.0	0.59	ug/L	2		8260C	Total/NA
Methylene Chloride	0.65	J	2.0	0.25	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	1.1	J	2.0	0.23	ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	32		2.0	0.47	ug/L	2		8260C	Total/NA
1,1,1-Trichloroethane	6.0		2.0	0.57	ug/L	2		8260C	Total/NA
Trichloroethene	32		2.0	0.29	ug/L	2		8260C	Total/NA
Tetrachloroethene	79		2.0	0.30	ug/L	2		8260C	Total/NA
Nitrate as N	1.1	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
Sulfate	27		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	69000	B	100	2.8	ug/L	1		6020A	Total/NA
Potassium	9700		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	17000		100	1.2	ug/L	1		6020A	Total/NA
Sodium	94000		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-MW-93D-0/1-0

Lab Sample ID: 180-42353-26

This Detection Summary does not include radiochemical test results.

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

Lab Sample ID: 180-42353-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	3.0	J	10	3.0	ug/L	10		8260C	Total/NA
Methylene Chloride	5.9	J	10	1.3	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	3.8	J	10	1.2	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	67		10	2.4	ug/L	10		8260C	Total/NA
1,1,1-Trichloroethane	7.9	J	10	2.9	ug/L	10		8260C	Total/NA
Trichloroethene	120		10	1.4	ug/L	10		8260C	Total/NA
Tetrachloroethene	130		10	1.5	ug/L	10		8260C	Total/NA
Nitrate as N	0.33	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	95	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	29		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	72000	B	100	2.8	ug/L	1		6020A	Total/NA
Potassium	5400		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	15000		100	1.2	ug/L	1		6020A	Total/NA
Sodium	43000		100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	190	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	190	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-COD-SW-7-0/1-0
Date Collected: 03/24/15 12:05
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/30/15 16:39	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 16:39	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 16:39	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 16:39	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 16:39	1
Acetone	5.0	U	5.0	2.5	ug/L			03/30/15 16:39	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 16:39	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 16:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 16:39	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 16:39	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 16:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/30/15 16:39	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 16:39	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 16:39	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/30/15 16:39	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 16:39	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 16:39	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 16:39	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 16:39	1
Trichloroethene	**0.15**	**J**	1.0	0.14	ug/L			03/30/15 16:39	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 16:39	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 16:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 16:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 16:39	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 16:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 16:39	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 16:39	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/30/15 16:39	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 16:39	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 16:39	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 16:39	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 16:39	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 16:39	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 16:39	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 16:39	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 16:39	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 16:39	1
1,1,2,2-Tetrachloroethane	1.0	U *	1.0	0.20	ug/L			03/30/15 16:39	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 16:39	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*125*		*64 - 135*		*03/30/15 16:39*	*1*
Toluene-d8 (Surr)	*107*		*71 - 118*		*03/30/15 16:39*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 118*		*03/30/15 16:39*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 128*		*03/30/15 16:39*	*1*

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

Client Sample ID: HD-COD-SW-6-0/1-0
Date Collected: 03/24/15 10:40
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/30/15 17:03	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 17:03	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 17:03	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 17:03	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 17:03	1
Acetone	5.0	U	5.0	2.5	ug/L			03/30/15 17:03	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 17:03	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 17:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 17:03	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 17:03	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 17:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/30/15 17:03	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 17:03	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 17:03	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/30/15 17:03	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 17:03	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 17:03	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 17:03	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 17:03	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/30/15 17:03	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 17:03	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 17:03	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 17:03	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 17:03	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 17:03	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 17:03	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 17:03	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/30/15 17:03	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 17:03	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 17:03	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 17:03	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 17:03	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 17:03	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 17:03	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 17:03	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 17:03	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 17:03	1
1,1,2,2-Tetrachloroethane	1.0	U *	1.0	0.20	ug/L			03/30/15 17:03	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 17:03	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*124*		*64 - 135*		*03/30/15 17:03*	*1*
Toluene-d8 (Surr)	*104*		*71 - 118*		*03/30/15 17:03*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 118*		*03/30/15 17:03*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 128*		*03/30/15 17:03*	*1*

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

Client Sample ID: HD-COD-SW-8-0/1-0
Date Collected: 03/24/15 09:10
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/30/15 17:27	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 17:27	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 17:27	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 17:27	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 17:27	1
Acetone	5.0	U	5.0	2.5	ug/L			03/30/15 17:27	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 17:27	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 17:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 17:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 17:27	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 17:27	1
cis-1,2-Dichloroethene	**0.27**	**J**	1.0	0.24	ug/L			03/30/15 17:27	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 17:27	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 17:27	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/30/15 17:27	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 17:27	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 17:27	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 17:27	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 17:27	1
Trichloroethene	**0.31**	**J**	1.0	0.14	ug/L			03/30/15 17:27	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 17:27	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 17:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 17:27	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 17:27	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 17:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 17:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 17:27	1
Tetrachloroethene	**0.32**	**J**	1.0	0.15	ug/L			03/30/15 17:27	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 17:27	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 17:27	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 17:27	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 17:27	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 17:27	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 17:27	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 17:27	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 17:27	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 17:27	1
1,1,2,2-Tetrachloroethane	1.0	U *	1.0	0.20	ug/L			03/30/15 17:27	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 17:27	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*128*		*64 - 135*		*03/30/15 17:27*	*1*
Toluene-d8 (Surr)	*105*		*71 - 118*		*03/30/15 17:27*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 118*		*03/30/15 17:27*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 128*		*03/30/15 17:27*	*1*

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

Client Sample ID: HD-COD-SW-9-0/1-0
Date Collected: 03/24/15 12:20
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/30/15 17:51	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 17:51	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 17:51	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 17:51	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 17:51	1
Acetone	5.0	U	5.0	2.5	ug/L			03/30/15 17:51	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 17:51	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 17:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 17:51	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 17:51	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 17:51	1
cis-1,2-Dichloroethene	**0.31**	**J**	1.0	0.24	ug/L			03/30/15 17:51	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 17:51	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 17:51	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/30/15 17:51	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 17:51	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 17:51	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 17:51	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 17:51	1
Trichloroethene	**0.37**	**J**	1.0	0.14	ug/L			03/30/15 17:51	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 17:51	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 17:51	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 17:51	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 17:51	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 17:51	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 17:51	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 17:51	1
Tetrachloroethene	**0.17**	**J**	1.0	0.15	ug/L			03/30/15 17:51	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 17:51	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 17:51	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 17:51	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 17:51	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 17:51	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 17:51	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 17:51	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 17:51	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 17:51	1
1,1,2,2-Tetrachloroethane	1.0	U *	1.0	0.20	ug/L			03/30/15 17:51	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 17:51	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*129*		*64 - 135*		*03/30/15 17:51*	*1*
Toluene-d8 (Surr)	*104*		*71 - 118*		*03/30/15 17:51*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 118*		*03/30/15 17:51*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 128*		*03/30/15 17:51*	*1*

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

Client Sample ID: HD-COD-SW-10-0/1-0
Date Collected: 03/24/15 09:41
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/30/15 18:15	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 18:15	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 18:15	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 18:15	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 18:15	1
Acetone	5.0	U	5.0	2.5	ug/L			03/30/15 18:15	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 18:15	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 18:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 18:15	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 18:15	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 18:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/30/15 18:15	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 18:15	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 18:15	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/30/15 18:15	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 18:15	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 18:15	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 18:15	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 18:15	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/30/15 18:15	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 18:15	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 18:15	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 18:15	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 18:15	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 18:15	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 18:15	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 18:15	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/30/15 18:15	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 18:15	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 18:15	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 18:15	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 18:15	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 18:15	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 18:15	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 18:15	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 18:15	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 18:15	1
1,1,2,2-Tetrachloroethane	1.0	U *	1.0	0.20	ug/L			03/30/15 18:15	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 18:15	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*124*		*64 - 135*		*03/30/15 18:15*	*1*
Toluene-d8 (Surr)	*107*		*71 - 118*		*03/30/15 18:15*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 118*		*03/30/15 18:15*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 128*		*03/30/15 18:15*	*1*

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

Client Sample ID: HD-COD-SW-11-0/1-0
Date Collected: 03/24/15 13:15
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/30/15 18:39	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 18:39	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 18:39	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 18:39	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 18:39	1
Acetone	5.0	U	5.0	2.5	ug/L			03/30/15 18:39	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 18:39	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 18:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 18:39	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 18:39	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 18:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/30/15 18:39	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 18:39	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 18:39	1
Chloroform	**0.17**	**J**	1.0	0.17	ug/L			03/30/15 18:39	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 18:39	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 18:39	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 18:39	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 18:39	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/30/15 18:39	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 18:39	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 18:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 18:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 18:39	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 18:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 18:39	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 18:39	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/30/15 18:39	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 18:39	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 18:39	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 18:39	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 18:39	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 18:39	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 18:39	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 18:39	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 18:39	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 18:39	1
1,1,2,2-Tetrachloroethane	1.0	U *	1.0	0.20	ug/L			03/30/15 18:39	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 18:39	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*124*		*64 - 135*		*03/30/15 18:39*	*1*
Toluene-d8 (Surr)	*107*		*71 - 118*		*03/30/15 18:39*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 118*		*03/30/15 18:39*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 128*		*03/30/15 18:39*	*1*

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

Client Sample ID: HD-COD-SW-12-0/1-0
Date Collected: 03/24/15 13:25
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/30/15 19:03	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 19:03	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 19:03	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 19:03	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 19:03	1
Acetone	**2.8**	**J**	5.0	2.5	ug/L			03/30/15 19:03	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 19:03	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 19:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 19:03	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 19:03	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 19:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/30/15 19:03	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 19:03	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 19:03	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/30/15 19:03	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 19:03	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 19:03	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 19:03	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 19:03	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/30/15 19:03	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 19:03	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 19:03	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 19:03	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 19:03	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 19:03	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 19:03	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 19:03	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/30/15 19:03	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 19:03	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 19:03	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 19:03	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 19:03	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 19:03	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 19:03	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 19:03	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 19:03	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 19:03	1
1,1,2,2-Tetrachloroethane	1.0	U *	1.0	0.20	ug/L			03/30/15 19:03	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 19:03	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*128*		*64 - 135*		*03/30/15 19:03*	*1*
Toluene-d8 (Surr)	*110*		*71 - 118*		*03/30/15 19:03*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 118*		*03/30/15 19:03*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 128*		*03/30/15 19:03*	*1*

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

Client Sample ID: HD-COD-SW-13-0/1-0
Date Collected: 03/24/15 09:32
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/30/15 19:27	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 19:27	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 19:27	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 19:27	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 19:27	1
Acetone	5.0	U	5.0	2.5	ug/L			03/30/15 19:27	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 19:27	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 19:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 19:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 19:27	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 19:27	1
cis-1,2-Dichloroethene	**0.38**	**J**	1.0	0.24	ug/L			03/30/15 19:27	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 19:27	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 19:27	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/30/15 19:27	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 19:27	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 19:27	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 19:27	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 19:27	1
Trichloroethene	**0.43**	**J**	1.0	0.14	ug/L			03/30/15 19:27	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 19:27	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 19:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 19:27	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 19:27	1
Toluene	**0.22**	**J**	1.0	0.15	ug/L			03/30/15 19:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 19:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 19:27	1
Tetrachloroethene	**0.44**	**J**	1.0	0.15	ug/L			03/30/15 19:27	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 19:27	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 19:27	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 19:27	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 19:27	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 19:27	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 19:27	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 19:27	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 19:27	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 19:27	1
1,1,2,2-Tetrachloroethane	1.0	U *	1.0	0.20	ug/L			03/30/15 19:27	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 19:27	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*130*		*64 - 135*		*03/30/15 19:27*	*1*
Toluene-d8 (Surr)	*106*		*71 - 118*		*03/30/15 19:27*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 118*		*03/30/15 19:27*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 128*		*03/30/15 19:27*	*1*

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

Client Sample ID: HD-COD-SW-15-0/1-0
Date Collected: 03/24/15 13:45
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/30/15 19:51	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 19:51	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 19:51	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 19:51	1
1,1-Dichloroethene	**0.75**	**J**	1.0	0.30	ug/L			03/30/15 19:51	1
Acetone	5.0	U	5.0	2.5	ug/L			03/30/15 19:51	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 19:51	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 19:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 19:51	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 19:51	1
1,1-Dichloroethane	**0.17**	**J**	1.0	0.12	ug/L			03/30/15 19:51	1
cis-1,2-Dichloroethene	**14**		1.0	0.24	ug/L			03/30/15 19:51	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 19:51	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 19:51	1
Chloroform	**0.18**	**J**	1.0	0.17	ug/L			03/30/15 19:51	1
1,1,1-Trichloroethane	**0.54**	**J**	1.0	0.29	ug/L			03/30/15 19:51	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 19:51	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 19:51	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 19:51	1
Trichloroethene	**12**		1.0	0.14	ug/L			03/30/15 19:51	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 19:51	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 19:51	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 19:51	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 19:51	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 19:51	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 19:51	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 19:51	1
Tetrachloroethene	**7.7**		1.0	0.15	ug/L			03/30/15 19:51	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 19:51	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 19:51	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 19:51	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 19:51	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 19:51	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 19:51	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 19:51	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 19:51	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 19:51	1
1,1,2,2-Tetrachloroethane	1.0	U *	1.0	0.20	ug/L			03/30/15 19:51	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 19:51	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 19:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*130*		*64 - 135*		*03/30/15 19:51*	*1*
Toluene-d8 (Surr)	*104*		*71 - 118*		*03/30/15 19:51*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 118*		*03/30/15 19:51*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 128*		*03/30/15 19:51*	*1*

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

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

Client Sample ID: HD-COD-SW-16-0/1-0
Date Collected: 03/24/15 10:05
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/30/15 20:14	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 20:14	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 20:14	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 20:14	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 20:14	1
Acetone	5.0	U	5.0	2.5	ug/L			03/30/15 20:14	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 20:14	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 20:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 20:14	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 20:14	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 20:14	1
cis-1,2-Dichloroethene	**0.35**	**J**	1.0	0.24	ug/L			03/30/15 20:14	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 20:14	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 20:14	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/30/15 20:14	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 20:14	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 20:14	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 20:14	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 20:14	1
Trichloroethene	**0.27**	**J**	1.0	0.14	ug/L			03/30/15 20:14	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 20:14	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 20:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 20:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 20:14	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 20:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 20:14	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 20:14	1
Tetrachloroethene	**0.51**	**J**	1.0	0.15	ug/L			03/30/15 20:14	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 20:14	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 20:14	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 20:14	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 20:14	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 20:14	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 20:14	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 20:14	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 20:14	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 20:14	1
1,1,2,2-Tetrachloroethane	1.0	U *	1.0	0.20	ug/L			03/30/15 20:14	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 20:14	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*129*		*64 - 135*		*03/30/15 20:14*	*1*
Toluene-d8 (Surr)	*105*		*71 - 118*		*03/30/15 20:14*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 118*		*03/30/15 20:14*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 128*		*03/30/15 20:14*	*1*

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

Client Sample ID: HD-COD-SW-17-0/1-0
Date Collected: 03/24/15 10:15
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/31/15 15:17	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/31/15 15:17	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/31/15 15:17	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/31/15 15:17	1
1,1-Dichloroethene	**1.1**		1.0	0.30	ug/L			03/31/15 15:17	1
Acetone	5.0	U	5.0	2.5	ug/L			03/31/15 15:17	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/31/15 15:17	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/31/15 15:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/31/15 15:17	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/31/15 15:17	1
1,1-Dichloroethane	**0.65**	**J**	1.0	0.12	ug/L			03/31/15 15:17	1
cis-1,2-Dichloroethene	**17**		1.0	0.24	ug/L			03/31/15 15:17	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/31/15 15:17	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/31/15 15:17	1
Chloroform	**0.17**	**J**	1.0	0.17	ug/L			03/31/15 15:17	1
1,1,1-Trichloroethane	**5.7**		1.0	0.29	ug/L			03/31/15 15:17	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/31/15 15:17	1
Benzene	1.0	U	1.0	0.11	ug/L			03/31/15 15:17	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/31/15 15:17	1
Trichloroethene	**23**		1.0	0.14	ug/L			03/31/15 15:17	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/31/15 15:17	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/31/15 15:17	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/31/15 15:17	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/31/15 15:17	1
Toluene	1.0	U	1.0	0.15	ug/L			03/31/15 15:17	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/31/15 15:17	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/31/15 15:17	1
Tetrachloroethene	**71**	**E**	1.0	0.15	ug/L			03/31/15 15:17	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/31/15 15:17	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/31/15 15:17	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/31/15 15:17	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/31/15 15:17	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/31/15 15:17	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/31/15 15:17	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/31/15 15:17	1
Styrene	1.0	U	1.0	0.097	ug/L			03/31/15 15:17	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/31/15 15:17	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			03/31/15 15:17	1
Acrylonitrile	20	U	20	0.55	ug/L			03/31/15 15:17	1
1,4-Dioxane	200	U	200	34	ug/L			03/31/15 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*64 - 135*		*03/31/15 15:17*	*1*
Toluene-d8 (Surr)	*106*		*71 - 118*		*03/31/15 15:17*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 118*		*03/31/15 15:17*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 128*		*03/31/15 15:17*	*1*

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

Client Sample ID: HD-COD-SW-20-0/1-0
Date Collected: 03/24/15 10:50
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/30/15 21:02	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 21:02	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 21:02	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 21:02	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 21:02	1
Acetone	5.0	U	5.0	2.5	ug/L			03/30/15 21:02	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 21:02	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 21:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 21:02	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 21:02	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 21:02	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/30/15 21:02	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 21:02	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 21:02	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/30/15 21:02	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 21:02	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 21:02	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 21:02	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 21:02	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/30/15 21:02	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 21:02	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 21:02	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 21:02	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 21:02	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 21:02	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 21:02	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 21:02	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/30/15 21:02	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 21:02	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 21:02	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 21:02	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 21:02	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 21:02	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 21:02	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 21:02	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 21:02	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 21:02	1
1,1,2,2-Tetrachloroethane	1.0	U *	1.0	0.20	ug/L			03/30/15 21:02	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 21:02	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 21:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*130*		*64 - 135*		*03/30/15 21:02*	*1*
Toluene-d8 (Surr)	*102*		*71 - 118*		*03/30/15 21:02*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 118*		*03/30/15 21:02*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 128*		*03/30/15 21:02*	*1*

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

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

Client Sample ID: HD-COD-SW-26-0/1-0
Date Collected: 03/24/15 11:45
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/30/15 21:27	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 21:27	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 21:27	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 21:27	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 21:27	1
Acetone	5.0	U	5.0	2.5	ug/L			03/30/15 21:27	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 21:27	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 21:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 21:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 21:27	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 21:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/30/15 21:27	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 21:27	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 21:27	1
Chloroform	**0.41**	**J**	1.0	0.17	ug/L			03/30/15 21:27	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 21:27	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 21:27	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 21:27	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 21:27	1
Trichloroethene	**0.20**	**J**	1.0	0.14	ug/L			03/30/15 21:27	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 21:27	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 21:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 21:27	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 21:27	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 21:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 21:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 21:27	1
Tetrachloroethene	**2.6**		1.0	0.15	ug/L			03/30/15 21:27	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 21:27	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 21:27	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 21:27	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 21:27	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 21:27	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 21:27	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 21:27	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 21:27	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 21:27	1
1,1,2,2-Tetrachloroethane	1.0	U *	1.0	0.20	ug/L			03/30/15 21:27	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 21:27	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*134*		*64 - 135*		*03/30/15 21:27*	*1*
Toluene-d8 (Surr)	*111*		*71 - 118*		*03/30/15 21:27*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 118*		*03/30/15 21:27*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 128*		*03/30/15 21:27*	*1*

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

Client Sample ID: HD-COD-SW-27-0/1-0
Date Collected: 03/24/15 13:55
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/30/15 20:35	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 20:35	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 20:35	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 20:35	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 20:35	1
Acetone	5.0	U	5.0	2.5	ug/L			03/30/15 20:35	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 20:35	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 20:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 20:35	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 20:35	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 20:35	1
cis-1,2-Dichloroethene	**4.2**		1.0	0.24	ug/L			03/30/15 20:35	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 20:35	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 20:35	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/30/15 20:35	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 20:35	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 20:35	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 20:35	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 20:35	1
Trichloroethene	**3.5**		1.0	0.14	ug/L			03/30/15 20:35	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 20:35	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 20:35	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 20:35	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 20:35	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 20:35	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 20:35	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 20:35	1
Tetrachloroethene	**2.3**		1.0	0.15	ug/L			03/30/15 20:35	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 20:35	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 20:35	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 20:35	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 20:35	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 20:35	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 20:35	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 20:35	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 20:35	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 20:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 20:35	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 20:35	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 20:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*64 - 135*		*03/30/15 20:35*	*1*
Toluene-d8 (Surr)	*109*		*71 - 118*		*03/30/15 20:35*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 118*		*03/30/15 20:35*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 128*		*03/30/15 20:35*	*1*

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

Client Sample ID: HD-COD-SW-28-0/1-0
Date Collected: 03/24/15 13:00
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/30/15 21:00	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 21:00	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 21:00	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 21:00	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 21:00	1
Acetone	5.0	U	5.0	2.5	ug/L			03/30/15 21:00	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 21:00	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 21:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 21:00	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 21:00	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 21:00	1
cis-1,2-Dichloroethene	**0.41**	**J**	1.0	0.24	ug/L			03/30/15 21:00	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 21:00	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 21:00	1
Chloroform	**0.20**	**J**	1.0	0.17	ug/L			03/30/15 21:00	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 21:00	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 21:00	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 21:00	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 21:00	1
Trichloroethene	**0.37**	**J**	1.0	0.14	ug/L			03/30/15 21:00	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 21:00	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 21:00	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 21:00	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 21:00	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 21:00	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 21:00	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 21:00	1
Tetrachloroethene	**0.19**	**J**	1.0	0.15	ug/L			03/30/15 21:00	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 21:00	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 21:00	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 21:00	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 21:00	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 21:00	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 21:00	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 21:00	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 21:00	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 21:00	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 21:00	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 21:00	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*64 - 135*		*03/30/15 21:00*	*1*
Toluene-d8 (Surr)	*111*		*71 - 118*		*03/30/15 21:00*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 118*		*03/30/15 21:00*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 128*		*03/30/15 21:00*	*1*

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

Client Sample ID: HD-COD-SW-29-0/1-0
Date Collected: 03/24/15 09:00
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/30/15 21:24	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 21:24	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 21:24	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 21:24	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 21:24	1
Acetone	**2.7**	**J**	5.0	2.5	ug/L			03/30/15 21:24	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 21:24	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 21:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 21:24	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 21:24	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 21:24	1
cis-1,2-Dichloroethene	**0.30**	**J**	1.0	0.24	ug/L			03/30/15 21:24	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 21:24	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 21:24	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/30/15 21:24	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 21:24	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 21:24	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 21:24	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 21:24	1
Trichloroethene	**0.31**	**J**	1.0	0.14	ug/L			03/30/15 21:24	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 21:24	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 21:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 21:24	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 21:24	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 21:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 21:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 21:24	1
Tetrachloroethene	**0.23**	**J**	1.0	0.15	ug/L			03/30/15 21:24	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 21:24	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 21:24	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 21:24	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 21:24	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 21:24	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 21:24	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 21:24	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 21:24	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 21:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 21:24	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 21:24	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*64 - 135*		*03/30/15 21:24*	*1*
Toluene-d8 (Surr)	*103*		*71 - 118*		*03/30/15 21:24*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 118*		*03/30/15 21:24*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 128*		*03/30/15 21:24*	*1*

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

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

Client Sample ID: HD-QC1-0/1-2
Date Collected: 03/24/15 12:00
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-17
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/30/15 19:23	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 19:23	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 19:23	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 19:23	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 19:23	1
Acetone	5.0	U	5.0	2.5	ug/L			03/30/15 19:23	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 19:23	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 19:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 19:23	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 19:23	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 19:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/30/15 19:23	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 19:23	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 19:23	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/30/15 19:23	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 19:23	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 19:23	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 19:23	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 19:23	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/30/15 19:23	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 19:23	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 19:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 19:23	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 19:23	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 19:23	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 19:23	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 19:23	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/30/15 19:23	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 19:23	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 19:23	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 19:23	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 19:23	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 19:23	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 19:23	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 19:23	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 19:23	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 19:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 19:23	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 19:23	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*64 - 135*		*03/30/15 19:23*	*1*
Toluene-d8 (Surr)	*105*		*71 - 118*		*03/30/15 19:23*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 118*		*03/30/15 19:23*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 128*		*03/30/15 19:23*	*1*

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

Client Sample ID: HD-QC2-0/1-2
Date Collected: 03/24/15 12:01
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-18
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/30/15 22:12	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 22:12	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 22:12	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 22:12	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 22:12	1
Acetone	5.0	U	5.0	2.5	ug/L			03/30/15 22:12	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 22:12	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 22:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 22:12	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 22:12	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 22:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/30/15 22:12	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 22:12	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 22:12	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/30/15 22:12	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 22:12	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 22:12	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 22:12	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 22:12	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/30/15 22:12	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 22:12	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 22:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 22:12	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 22:12	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 22:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 22:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 22:12	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/30/15 22:12	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 22:12	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 22:12	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 22:12	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 22:12	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 22:12	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 22:12	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 22:12	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 22:12	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 22:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 22:12	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 22:12	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 22:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*64 - 135*		*03/30/15 22:12*	*1*
Toluene-d8 (Surr)	*108*		*71 - 118*		*03/30/15 22:12*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 118*		*03/30/15 22:12*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 128*		*03/30/15 22:12*	*1*

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

Client Sample ID: HD-QC1-0/1-1
Date Collected: 03/24/15 08:00
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-19
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/31/15 14:53	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/31/15 14:53	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/31/15 14:53	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/31/15 14:53	1
1,1-Dichloroethene	**1.6**		1.0	0.30	ug/L			03/31/15 14:53	1
Acetone	5.0	U	5.0	2.5	ug/L			03/31/15 14:53	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/31/15 14:53	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/31/15 14:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/31/15 14:53	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/31/15 14:53	1
1,1-Dichloroethane	**0.59**	**J**	1.0	0.12	ug/L			03/31/15 14:53	1
cis-1,2-Dichloroethene	**22**		1.0	0.24	ug/L			03/31/15 14:53	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/31/15 14:53	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/31/15 14:53	1
Chloroform	**0.28**	**J**	1.0	0.17	ug/L			03/31/15 14:53	1
1,1,1-Trichloroethane	**1.4**		1.0	0.29	ug/L			03/31/15 14:53	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/31/15 14:53	1
Benzene	1.0	U	1.0	0.11	ug/L			03/31/15 14:53	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/31/15 14:53	1
Trichloroethene	**34**		1.0	0.14	ug/L			03/31/15 14:53	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/31/15 14:53	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/31/15 14:53	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/31/15 14:53	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/31/15 14:53	1
Toluene	1.0	U	1.0	0.15	ug/L			03/31/15 14:53	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/31/15 14:53	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/31/15 14:53	1
Tetrachloroethene	**23**		1.0	0.15	ug/L			03/31/15 14:53	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/31/15 14:53	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/31/15 14:53	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/31/15 14:53	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/31/15 14:53	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/31/15 14:53	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/31/15 14:53	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/31/15 14:53	1
Styrene	1.0	U	1.0	0.097	ug/L			03/31/15 14:53	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/31/15 14:53	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			03/31/15 14:53	1
Acrylonitrile	20	U	20	0.55	ug/L			03/31/15 14:53	1
1,4-Dioxane	200	U	200	34	ug/L			03/31/15 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*64 - 135*		*03/31/15 14:53*	*1*
Toluene-d8 (Surr)	*109*		*71 - 118*		*03/31/15 14:53*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 118*		*03/31/15 14:53*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 128*		*03/31/15 14:53*	*1*

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

Client Sample ID: HD-MW-99S-0/1-0
Date Collected: 03/24/15 09:15
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-20
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/31/15 12:04	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/31/15 12:04	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/31/15 12:04	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/31/15 12:04	1
1,1-Dichloroethene	**2.4**		1.0	0.30	ug/L			03/31/15 12:04	1
Acetone	5.0	U	5.0	2.5	ug/L			03/31/15 12:04	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/31/15 12:04	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/31/15 12:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/31/15 12:04	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/31/15 12:04	1
1,1-Dichloroethane	**1.3**		1.0	0.12	ug/L			03/31/15 12:04	1
cis-1,2-Dichloroethene	**32**		1.0	0.24	ug/L			03/31/15 12:04	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/31/15 12:04	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/31/15 12:04	1
Chloroform	**0.21**	**J**	1.0	0.17	ug/L			03/31/15 12:04	1
1,1,1-Trichloroethane	**5.6**		1.0	0.29	ug/L			03/31/15 12:04	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/31/15 12:04	1
Benzene	1.0	U	1.0	0.11	ug/L			03/31/15 12:04	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/31/15 12:04	1
Trichloroethene	**32**	**F1**	1.0	0.14	ug/L			03/31/15 12:04	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/31/15 12:04	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/31/15 12:04	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/31/15 12:04	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/31/15 12:04	1
Toluene	1.0	U	1.0	0.15	ug/L			03/31/15 12:04	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/31/15 12:04	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/31/15 12:04	1
Tetrachloroethene	**23**	**F1**	1.0	0.15	ug/L			03/31/15 12:04	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/31/15 12:04	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/31/15 12:04	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/31/15 12:04	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/31/15 12:04	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/31/15 12:04	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/31/15 12:04	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/31/15 12:04	1
Styrene	1.0	U	1.0	0.097	ug/L			03/31/15 12:04	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/31/15 12:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			03/31/15 12:04	1
Acrylonitrile	20	U	20	0.55	ug/L			03/31/15 12:04	1
1,4-Dioxane	200	U	200	34	ug/L			03/31/15 12:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*64 - 135*		*03/31/15 12:04*	*1*
Toluene-d8 (Surr)	*108*		*71 - 118*		*03/31/15 12:04*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 118*		*03/31/15 12:04*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 128*		*03/31/15 12:04*	*1*

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

Client Sample ID: HD-MW-99D-0/1-0
Date Collected: 03/24/15 13:05
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-21
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	5.0	U	5.0	1.4	ug/L			03/30/15 23:01	5
Vinyl chloride	5.0	U	5.0	1.1	ug/L			03/30/15 23:01	5
Bromomethane	5.0	U	5.0	1.6	ug/L			03/30/15 23:01	5
Chloroethane	5.0	U	5.0	1.1	ug/L			03/30/15 23:01	5
1,1-Dichloroethene	**7.8**		5.0	1.5	ug/L			03/30/15 23:01	5
Acetone	25	U	25	13	ug/L			03/30/15 23:01	5
Carbon disulfide	5.0	U	5.0	1.1	ug/L			03/30/15 23:01	5
Methylene Chloride	**2.4**	**J**	5.0	0.63	ug/L			03/30/15 23:01	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.85	ug/L			03/30/15 23:01	5
Methyl tert-butyl ether	5.0	U	5.0	0.92	ug/L			03/30/15 23:01	5
1,1-Dichloroethane	**2.2**	**J**	5.0	0.58	ug/L			03/30/15 23:01	5
cis-1,2-Dichloroethene	**58**		5.0	1.2	ug/L			03/30/15 23:01	5
Bromochloromethane	5.0	U	5.0	0.90	ug/L			03/30/15 23:01	5
2-Butanone (MEK)	25	U	25	2.7	ug/L			03/30/15 23:01	5
Chloroform	5.0	U	5.0	0.85	ug/L			03/30/15 23:01	5
1,1,1-Trichloroethane	**10**		5.0	1.4	ug/L			03/30/15 23:01	5
Carbon tetrachloride	5.0	U	5.0	0.68	ug/L			03/30/15 23:01	5
Benzene	5.0	U	5.0	0.53	ug/L			03/30/15 23:01	5
1,2-Dichloroethane	5.0	U	5.0	1.1	ug/L			03/30/15 23:01	5
Trichloroethene	**140**		5.0	0.72	ug/L			03/30/15 23:01	5
1,2-Dichloropropane	5.0	U	5.0	0.47	ug/L			03/30/15 23:01	5
Bromodichloromethane	5.0	U	5.0	0.65	ug/L			03/30/15 23:01	5
cis-1,3-Dichloropropene	5.0	U	5.0	0.93	ug/L			03/30/15 23:01	5
4-Methyl-2-pentanone (MIBK)	25	U	25	2.6	ug/L			03/30/15 23:01	5
Toluene	5.0	U	5.0	0.75	ug/L			03/30/15 23:01	5
trans-1,3-Dichloropropene	5.0	U	5.0	0.74	ug/L			03/30/15 23:01	5
1,1,2-Trichloroethane	5.0	U	5.0	1.0	ug/L			03/30/15 23:01	5
Tetrachloroethene	**12**		5.0	0.74	ug/L			03/30/15 23:01	5
2-Hexanone	25	U	25	0.80	ug/L			03/30/15 23:01	5
Dibromochloromethane	5.0	U	5.0	0.68	ug/L			03/30/15 23:01	5
1,2-Dibromoethane (EDB)	5.0	U	5.0	0.90	ug/L			03/30/15 23:01	5
Chlorobenzene	5.0	U	5.0	0.68	ug/L			03/30/15 23:01	5
1,1,1,2-Tetrachloroethane	5.0	U	5.0	1.4	ug/L			03/30/15 23:01	5
Ethylbenzene	5.0	U	5.0	1.1	ug/L			03/30/15 23:01	5
Xylenes, Total	15	U	15	2.4	ug/L			03/30/15 23:01	5
Styrene	5.0	U	5.0	0.48	ug/L			03/30/15 23:01	5
Bromoform	5.0	U	5.0	0.96	ug/L			03/30/15 23:01	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1.0	ug/L			03/30/15 23:01	5
Acrylonitrile	100	U	100	2.7	ug/L			03/30/15 23:01	5
1,4-Dioxane	1000	U	1000	170	ug/L			03/30/15 23:01	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*64 - 135*		*03/30/15 23:01*	*5*
Toluene-d8 (Surr)	*109*		*71 - 118*		*03/30/15 23:01*	*5*
4-Bromofluorobenzene (Surr)	*103*		*70 - 118*		*03/30/15 23:01*	*5*
Dibromofluoromethane (Surr)	*109*		*70 - 128*		*03/30/15 23:01*	*5*

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

Client Sample ID: HD-MW-145A-0/1-0
Date Collected: 03/24/15 10:20
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-22
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/01/15 16:35	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/01/15 16:35	1
Bromomethane	1.0	U *	1.0	0.31	ug/L			04/01/15 16:35	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/01/15 16:35	1
1,1-Dichloroethene	**0.93**	**J**	1.0	0.30	ug/L			04/01/15 16:35	1
Acetone	5.0	U	5.0	2.5	ug/L			04/01/15 16:35	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/01/15 16:35	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/01/15 16:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/01/15 16:35	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/01/15 16:35	1
1,1-Dichloroethane	**0.33**	**J**	1.0	0.12	ug/L			04/01/15 16:35	1
cis-1,2-Dichloroethene	**20**		1.0	0.24	ug/L			04/01/15 16:35	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/01/15 16:35	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/01/15 16:35	1
Chloroform	**0.25**	**J**	1.0	0.17	ug/L			04/01/15 16:35	1
1,1,1-Trichloroethane	**1.3**		1.0	0.29	ug/L			04/01/15 16:35	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/01/15 16:35	1
Benzene	1.0	U	1.0	0.11	ug/L			04/01/15 16:35	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/01/15 16:35	1
Trichloroethene	**22**		1.0	0.14	ug/L			04/01/15 16:35	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/01/15 16:35	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/01/15 16:35	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/01/15 16:35	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/01/15 16:35	1
Toluene	1.0	U	1.0	0.15	ug/L			04/01/15 16:35	1
trans-1,3-Dichloropropene	1.0	U *	1.0	0.15	ug/L			04/01/15 16:35	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/01/15 16:35	1
Tetrachloroethene	**11**		1.0	0.15	ug/L			04/01/15 16:35	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/01/15 16:35	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/01/15 16:35	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/01/15 16:35	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/01/15 16:35	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/01/15 16:35	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/01/15 16:35	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/01/15 16:35	1
Styrene	1.0	U	1.0	0.097	ug/L			04/01/15 16:35	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/01/15 16:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/01/15 16:35	1
Acrylonitrile	20	U	20	0.55	ug/L			04/01/15 16:35	1
1,4-Dioxane	200	U	200	34	ug/L			04/01/15 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*64 - 135*		*04/01/15 16:35*	*1*
Toluene-d8 (Surr)	*105*		*71 - 118*		*04/01/15 16:35*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 118*		*04/01/15 16:35*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 128*		*04/01/15 16:35*	*1*

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

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

Client Sample ID: HD-MW-100S-0/1-0
Date Collected: 03/24/15 14:45
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-23
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	5.0	U	5.0	1.4	ug/L			03/31/15 16:30	5
Vinyl chloride	5.0	U	5.0	1.1	ug/L			03/31/15 16:30	5
Bromomethane	5.0	U	5.0	1.6	ug/L			03/31/15 16:30	5
Chloroethane	5.0	U	5.0	1.1	ug/L			03/31/15 16:30	5
1,1-Dichloroethene	**2.2**	**J**	5.0	1.5	ug/L			03/31/15 16:30	5
Acetone	25	U	25	13	ug/L			03/31/15 16:30	5
Carbon disulfide	5.0	U	5.0	1.1	ug/L			03/31/15 16:30	5
Methylene Chloride	**2.4**	**J**	5.0	0.63	ug/L			03/31/15 16:30	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.85	ug/L			03/31/15 16:30	5
Methyl tert-butyl ether	5.0	U	5.0	0.92	ug/L			03/31/15 16:30	5
1,1-Dichloroethane	**0.84**	**J**	5.0	0.58	ug/L			03/31/15 16:30	5
cis-1,2-Dichloroethene	**31**		5.0	1.2	ug/L			03/31/15 16:30	5
Bromochloromethane	5.0	U	5.0	0.90	ug/L			03/31/15 16:30	5
2-Butanone (MEK)	25	U	25	2.7	ug/L			03/31/15 16:30	5
Chloroform	5.0	U	5.0	0.85	ug/L			03/31/15 16:30	5
1,1,1-Trichloroethane	**2.0**	**J**	5.0	1.4	ug/L			03/31/15 16:30	5
Carbon tetrachloride	5.0	U	5.0	0.68	ug/L			03/31/15 16:30	5
Benzene	5.0	U	5.0	0.53	ug/L			03/31/15 16:30	5
1,2-Dichloroethane	5.0	U	5.0	1.1	ug/L			03/31/15 16:30	5
Trichloroethene	**61**		5.0	0.72	ug/L			03/31/15 16:30	5
1,2-Dichloropropane	5.0	U	5.0	0.47	ug/L			03/31/15 16:30	5
Bromodichloromethane	5.0	U	5.0	0.65	ug/L			03/31/15 16:30	5
cis-1,3-Dichloropropene	5.0	U	5.0	0.93	ug/L			03/31/15 16:30	5
4-Methyl-2-pentanone (MIBK)	25	U	25	2.6	ug/L			03/31/15 16:30	5
Toluene	5.0	U	5.0	0.75	ug/L			03/31/15 16:30	5
trans-1,3-Dichloropropene	5.0	U	5.0	0.74	ug/L			03/31/15 16:30	5
1,1,2-Trichloroethane	5.0	U	5.0	1.0	ug/L			03/31/15 16:30	5
Tetrachloroethene	**49**		5.0	0.74	ug/L			03/31/15 16:30	5
2-Hexanone	25	U	25	0.80	ug/L			03/31/15 16:30	5
Dibromochloromethane	5.0	U	5.0	0.68	ug/L			03/31/15 16:30	5
1,2-Dibromoethane (EDB)	5.0	U	5.0	0.90	ug/L			03/31/15 16:30	5
Chlorobenzene	5.0	U	5.0	0.68	ug/L			03/31/15 16:30	5
1,1,1,2-Tetrachloroethane	5.0	U	5.0	1.4	ug/L			03/31/15 16:30	5
Ethylbenzene	5.0	U	5.0	1.1	ug/L			03/31/15 16:30	5
Xylenes, Total	15	U	15	2.4	ug/L			03/31/15 16:30	5
Styrene	5.0	U	5.0	0.48	ug/L			03/31/15 16:30	5
Bromoform	5.0	U	5.0	0.96	ug/L			03/31/15 16:30	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1.0	ug/L			03/31/15 16:30	5
Acrylonitrile	100	U	100	2.7	ug/L			03/31/15 16:30	5
1,4-Dioxane	1000	U	1000	170	ug/L			03/31/15 16:30	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*64 - 135*		*03/31/15 16:30*	*5*
Toluene-d8 (Surr)	*109*		*71 - 118*		*03/31/15 16:30*	*5*
4-Bromofluorobenzene (Surr)	*101*		*70 - 118*		*03/31/15 16:30*	*5*
Dibromofluoromethane (Surr)	*111*		*70 - 128*		*03/31/15 16:30*	*5*

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

Client Sample ID: HD-MW-100I-0/1-0
Date Collected: 03/24/15 14:00
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-24
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/31/15 16:54	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/31/15 16:54	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/31/15 16:54	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/31/15 16:54	1
1,1-Dichloroethene	**1.4**		1.0	0.30	ug/L			03/31/15 16:54	1
Acetone	5.0	U	5.0	2.5	ug/L			03/31/15 16:54	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/31/15 16:54	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/31/15 16:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/31/15 16:54	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/31/15 16:54	1
1,1-Dichloroethane	**0.61**	**J**	1.0	0.12	ug/L			03/31/15 16:54	1
cis-1,2-Dichloroethene	**22**		1.0	0.24	ug/L			03/31/15 16:54	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/31/15 16:54	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/31/15 16:54	1
Chloroform	**0.24**	**J**	1.0	0.17	ug/L			03/31/15 16:54	1
1,1,1-Trichloroethane	**1.4**		1.0	0.29	ug/L			03/31/15 16:54	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/31/15 16:54	1
Benzene	1.0	U	1.0	0.11	ug/L			03/31/15 16:54	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/31/15 16:54	1
Trichloroethene	**33**		1.0	0.14	ug/L			03/31/15 16:54	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/31/15 16:54	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/31/15 16:54	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/31/15 16:54	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/31/15 16:54	1
Toluene	1.0	U	1.0	0.15	ug/L			03/31/15 16:54	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/31/15 16:54	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/31/15 16:54	1
Tetrachloroethene	**22**		1.0	0.15	ug/L			03/31/15 16:54	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/31/15 16:54	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/31/15 16:54	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/31/15 16:54	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/31/15 16:54	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/31/15 16:54	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/31/15 16:54	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/31/15 16:54	1
Styrene	1.0	U	1.0	0.097	ug/L			03/31/15 16:54	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/31/15 16:54	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			03/31/15 16:54	1
Acrylonitrile	20	U	20	0.55	ug/L			03/31/15 16:54	1
1,4-Dioxane	200	U	200	34	ug/L			03/31/15 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*64 - 135*		*03/31/15 16:54*	*1*
Toluene-d8 (Surr)	*101*		*71 - 118*		*03/31/15 16:54*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 118*		*03/31/15 16:54*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 128*		*03/31/15 16:54*	*1*

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

Client Sample ID: HD-MW-93S-0/1-0
Date Collected: 03/24/15 14:35
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-25
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	2.0	U	2.0	0.57	ug/L			04/01/15 16:59	2
Vinyl chloride	2.0	U	2.0	0.45	ug/L			04/01/15 16:59	2
Bromomethane	2.0	U *	2.0	0.63	ug/L			04/01/15 16:59	2
Chloroethane	2.0	U	2.0	0.43	ug/L			04/01/15 16:59	2
1,1-Dichloroethene	**0.98**	**J**	2.0	0.59	ug/L			04/01/15 16:59	2
Acetone	10	U	10	5.0	ug/L			04/01/15 16:59	2
Carbon disulfide	2.0	U	2.0	0.42	ug/L			04/01/15 16:59	2
Methylene Chloride	**0.65**	**J**	2.0	0.25	ug/L			04/01/15 16:59	2
trans-1,2-Dichloroethene	2.0	U	2.0	0.34	ug/L			04/01/15 16:59	2
Methyl tert-butyl ether	2.0	U	2.0	0.37	ug/L			04/01/15 16:59	2
1,1-Dichloroethane	**1.1**	**J**	2.0	0.23	ug/L			04/01/15 16:59	2
cis-1,2-Dichloroethene	**32**		2.0	0.47	ug/L			04/01/15 16:59	2
Bromochloromethane	2.0	U	2.0	0.36	ug/L			04/01/15 16:59	2
2-Butanone (MEK)	10	U	10	1.1	ug/L			04/01/15 16:59	2
Chloroform	2.0	U	2.0	0.34	ug/L			04/01/15 16:59	2
1,1,1-Trichloroethane	**6.0**		2.0	0.57	ug/L			04/01/15 16:59	2
Carbon tetrachloride	2.0	U	2.0	0.27	ug/L			04/01/15 16:59	2
Benzene	2.0	U	2.0	0.21	ug/L			04/01/15 16:59	2
1,2-Dichloroethane	2.0	U	2.0	0.42	ug/L			04/01/15 16:59	2
Trichloroethene	**32**		2.0	0.29	ug/L			04/01/15 16:59	2
1,2-Dichloropropane	2.0	U	2.0	0.19	ug/L			04/01/15 16:59	2
Bromodichloromethane	2.0	U	2.0	0.26	ug/L			04/01/15 16:59	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.37	ug/L			04/01/15 16:59	2
4-Methyl-2-pentanone (MIBK)	10	U	10	1.1	ug/L			04/01/15 16:59	2
Toluene	2.0	U	2.0	0.30	ug/L			04/01/15 16:59	2
trans-1,3-Dichloropropene	2.0	U *	2.0	0.30	ug/L			04/01/15 16:59	2
1,1,2-Trichloroethane	2.0	U	2.0	0.40	ug/L			04/01/15 16:59	2
Tetrachloroethene	**79**		2.0	0.30	ug/L			04/01/15 16:59	2
2-Hexanone	10	U	10	0.32	ug/L			04/01/15 16:59	2
Dibromochloromethane	2.0	U	2.0	0.27	ug/L			04/01/15 16:59	2
1,2-Dibromoethane (EDB)	2.0	U	2.0	0.36	ug/L			04/01/15 16:59	2
Chlorobenzene	2.0	U	2.0	0.27	ug/L			04/01/15 16:59	2
1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.55	ug/L			04/01/15 16:59	2
Ethylbenzene	2.0	U	2.0	0.45	ug/L			04/01/15 16:59	2
Xylenes, Total	6.0	U	6.0	0.98	ug/L			04/01/15 16:59	2
Styrene	2.0	U	2.0	0.19	ug/L			04/01/15 16:59	2
Bromoform	2.0	U	2.0	0.38	ug/L			04/01/15 16:59	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.40	ug/L			04/01/15 16:59	2
Acrylonitrile	40	U	40	1.1	ug/L			04/01/15 16:59	2
1,4-Dioxane	400	U	400	69	ug/L			04/01/15 16:59	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*64 - 135*		*04/01/15 16:59*	*2*
Toluene-d8 (Surr)	*102*		*71 - 118*		*04/01/15 16:59*	*2*
4-Bromofluorobenzene (Surr)	*98*		*70 - 118*		*04/01/15 16:59*	*2*
Dibromofluoromethane (Surr)	*113*		*70 - 128*		*04/01/15 16:59*	*2*

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

Client Sample ID: HD-MW-93D-0/1-0
Date Collected: 03/24/15 11:22
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-26
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	10	U	10	2.8	ug/L			03/31/15 18:06	10
Vinyl chloride	10	U	10	2.3	ug/L			03/31/15 18:06	10
Bromomethane	10	U	10	3.1	ug/L			03/31/15 18:06	10
Chloroethane	10	U	10	2.1	ug/L			03/31/15 18:06	10
1,1-Dichloroethene	**3.0**	**J**	10	3.0	ug/L			03/31/15 18:06	10
Acetone	50	U	50	25	ug/L			03/31/15 18:06	10
Carbon disulfide	10	U	10	2.1	ug/L			03/31/15 18:06	10
Methylene Chloride	**5.9**	**J**	10	1.3	ug/L			03/31/15 18:06	10
trans-1,2-Dichloroethene	10	U	10	1.7	ug/L			03/31/15 18:06	10
Methyl tert-butyl ether	10	U	10	1.8	ug/L			03/31/15 18:06	10
1,1-Dichloroethane	**3.8**	**J**	10	1.2	ug/L			03/31/15 18:06	10
cis-1,2-Dichloroethene	**67**		10	2.4	ug/L			03/31/15 18:06	10
Bromochloromethane	10	U	10	1.8	ug/L			03/31/15 18:06	10
2-Butanone (MEK)	50	U	50	5.5	ug/L			03/31/15 18:06	10
Chloroform	10	U	10	1.7	ug/L			03/31/15 18:06	10
1,1,1-Trichloroethane	**7.9**	**J**	10	2.9	ug/L			03/31/15 18:06	10
Carbon tetrachloride	10	U	10	1.4	ug/L			03/31/15 18:06	10
Benzene	10	U	10	1.1	ug/L			03/31/15 18:06	10
1,2-Dichloroethane	10	U	10	2.1	ug/L			03/31/15 18:06	10
Trichloroethene	**120**		10	1.4	ug/L			03/31/15 18:06	10
1,2-Dichloropropane	10	U	10	0.95	ug/L			03/31/15 18:06	10
Bromodichloromethane	10	U	10	1.3	ug/L			03/31/15 18:06	10
cis-1,3-Dichloropropene	10	U	10	1.9	ug/L			03/31/15 18:06	10
4-Methyl-2-pentanone (MIBK)	50	U	50	5.3	ug/L			03/31/15 18:06	10
Toluene	10	U	10	1.5	ug/L			03/31/15 18:06	10
trans-1,3-Dichloropropene	10	U	10	1.5	ug/L			03/31/15 18:06	10
1,1,2-Trichloroethane	10	U	10	2.0	ug/L			03/31/15 18:06	10
Tetrachloroethene	**130**		10	1.5	ug/L			03/31/15 18:06	10
2-Hexanone	50	U	50	1.6	ug/L			03/31/15 18:06	10
Dibromochloromethane	10	U	10	1.4	ug/L			03/31/15 18:06	10
1,2-Dibromoethane (EDB)	10	U	10	1.8	ug/L			03/31/15 18:06	10
Chlorobenzene	10	U	10	1.4	ug/L			03/31/15 18:06	10
1,1,1,2-Tetrachloroethane	10	U	10	2.8	ug/L			03/31/15 18:06	10
Ethylbenzene	10	U	10	2.3	ug/L			03/31/15 18:06	10
Xylenes, Total	30	U	30	4.9	ug/L			03/31/15 18:06	10
Styrene	10	U	10	0.97	ug/L			03/31/15 18:06	10
Bromoform	10	U	10	1.9	ug/L			03/31/15 18:06	10
1,1,2,2-Tetrachloroethane	10	U	10	2.0	ug/L			03/31/15 18:06	10
Acrylonitrile	200	U	200	5.5	ug/L			03/31/15 18:06	10
1,4-Dioxane	2000	U	2000	340	ug/L			03/31/15 18:06	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*64 - 135*		*03/31/15 18:06*	*10*
Toluene-d8 (Surr)	*111*		*71 - 118*		*03/31/15 18:06*	*10*
4-Bromofluorobenzene (Surr)	*102*		*70 - 118*		*03/31/15 18:06*	*10*
Dibromofluoromethane (Surr)	*109*		*70 - 128*		*03/31/15 18:06*	*10*

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

Client Sample ID: HD-COD-SW-17-0/1-0
Date Collected: 03/24/15 10:15
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	3.0	U	3.0	0.85	ug/L			04/01/15 16:11	3
Vinyl chloride	3.0	U	3.0	0.68	ug/L			04/01/15 16:11	3
Bromomethane	3.0	U *	3.0	0.94	ug/L			04/01/15 16:11	3
Chloroethane	3.0	U	3.0	0.64	ug/L			04/01/15 16:11	3
1,1-Dichloroethene	**0.96**	**J**	3.0	0.89	ug/L			04/01/15 16:11	3
Acetone	15	U	15	7.5	ug/L			04/01/15 16:11	3
Carbon disulfide	3.0	U	3.0	0.64	ug/L			04/01/15 16:11	3
Methylene Chloride	**1.5**	**J**	3.0	0.38	ug/L			04/01/15 16:11	3
trans-1,2-Dichloroethene	3.0	U	3.0	0.51	ug/L			04/01/15 16:11	3
Methyl tert-butyl ether	3.0	U	3.0	0.55	ug/L			04/01/15 16:11	3
1,1-Dichloroethane	**0.63**	**J**	3.0	0.35	ug/L			04/01/15 16:11	3
cis-1,2-Dichloroethene	**16**		3.0	0.71	ug/L			04/01/15 16:11	3
Bromochloromethane	3.0	U	3.0	0.54	ug/L			04/01/15 16:11	3
2-Butanone (MEK)	15	U	15	1.6	ug/L			04/01/15 16:11	3
Chloroform	3.0	U	3.0	0.51	ug/L			04/01/15 16:11	3
1,1,1-Trichloroethane	**4.8**		3.0	0.86	ug/L			04/01/15 16:11	3
Carbon tetrachloride	3.0	U	3.0	0.41	ug/L			04/01/15 16:11	3
Benzene	3.0	U	3.0	0.32	ug/L			04/01/15 16:11	3
1,2-Dichloroethane	3.0	U	3.0	0.64	ug/L			04/01/15 16:11	3
Trichloroethene	**20**		3.0	0.43	ug/L			04/01/15 16:11	3
1,2-Dichloropropane	3.0	U	3.0	0.28	ug/L			04/01/15 16:11	3
Bromodichloromethane	3.0	U	3.0	0.39	ug/L			04/01/15 16:11	3
cis-1,3-Dichloropropene	3.0	U	3.0	0.56	ug/L			04/01/15 16:11	3
4-Methyl-2-pentanone (MIBK)	15	U	15	1.6	ug/L			04/01/15 16:11	3
Toluene	3.0	U	3.0	0.45	ug/L			04/01/15 16:11	3
trans-1,3-Dichloropropene	3.0	U *	3.0	0.44	ug/L			04/01/15 16:11	3
1,1,2-Trichloroethane	3.0	U	3.0	0.60	ug/L			04/01/15 16:11	3
Tetrachloroethene	**60**		3.0	0.45	ug/L			04/01/15 16:11	3
2-Hexanone	15	U	15	0.48	ug/L			04/01/15 16:11	3
Dibromochloromethane	3.0	U	3.0	0.41	ug/L			04/01/15 16:11	3
1,2-Dibromoethane (EDB)	3.0	U	3.0	0.54	ug/L			04/01/15 16:11	3
Chlorobenzene	3.0	U	3.0	0.41	ug/L			04/01/15 16:11	3
1,1,1,2-Tetrachloroethane	3.0	U	3.0	0.83	ug/L			04/01/15 16:11	3
Ethylbenzene	3.0	U	3.0	0.68	ug/L			04/01/15 16:11	3
Xylenes, Total	9.0	U	9.0	1.5	ug/L			04/01/15 16:11	3
Styrene	3.0	U	3.0	0.29	ug/L			04/01/15 16:11	3
Bromoform	3.0	U	3.0	0.57	ug/L			04/01/15 16:11	3
1,1,2,2-Tetrachloroethane	3.0	U	3.0	0.60	ug/L			04/01/15 16:11	3
Acrylonitrile	60	U	60	1.6	ug/L			04/01/15 16:11	3
1,4-Dioxane	600	U	600	100	ug/L			04/01/15 16:11	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*64 - 135*		*04/01/15 16:11*	*3*
Toluene-d8 (Surr)	*103*		*71 - 118*		*04/01/15 16:11*	*3*
4-Bromofluorobenzene (Surr)	*99*		*70 - 118*		*04/01/15 16:11*	*3*
Dibromofluoromethane (Surr)	*109*		*70 - 128*		*04/01/15 16:11*	*3*

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-COD-SW-7-0/1-0
Date Collected: 03/24/15 12:05
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.6	B	0.10	0.0062	mg/L			03/25/15 18:27	1
Chloride	81	B	1.0	0.20	mg/L			03/25/15 18:27	1
Sulfate	34		1.0	0.21	mg/L			03/25/15 18:27	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-COD-SW-6-0/1-0
Date Collected: 03/24/15 10:40
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.4	B	0.10	0.0062	mg/L			03/25/15 17:00	1
Chloride	140	B	1.0	0.20	mg/L			03/25/15 17:00	1
Sulfate	19		1.0	0.21	mg/L			03/25/15 17:00	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-COD-SW-8-0/1-0
Date Collected: 03/24/15 09:10
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.6	B	0.10	0.0062	mg/L			03/25/15 15:06	1
Chloride	71	B	1.0	0.20	mg/L			03/25/15 15:06	1
Sulfate	30		1.0	0.21	mg/L			03/25/15 15:06	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-COD-SW-9-0/1-0
Date Collected: 03/24/15 12:20
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	4.3	B	0.10	0.0062	mg/L			03/26/15 00:31	1
Chloride	100	B	1.0	0.20	mg/L			03/26/15 00:31	1
Sulfate	31		1.0	0.21	mg/L			03/26/15 00:31	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-COD-SW-10-0/1-0
Date Collected: 03/24/15 09:41
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.1	B	0.10	0.0062	mg/L			03/26/15 00:48	1
Chloride	130	B	1.0	0.20	mg/L			03/26/15 00:48	1
Sulfate	27		1.0	0.21	mg/L			03/26/15 00:48	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-COD-SW-11-0/1-0
Date Collected: 03/24/15 13:15
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	4.1	B	0.10	0.0062	mg/L			03/25/15 22:47	1
Chloride	88	B	1.0	0.20	mg/L			03/25/15 22:47	1
Sulfate	20		1.0	0.21	mg/L			03/25/15 22:47	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-COD-SW-12-0/1-0
Date Collected: 03/24/15 13:25
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	5.6	B	0.10	0.0062	mg/L			03/26/15 01:05	1
Chloride	160	B	1.0	0.20	mg/L			03/26/15 01:05	1
Sulfate	37		1.0	0.21	mg/L			03/26/15 01:05	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-COD-SW-13-0/1-0
Date Collected: 03/24/15 09:32
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.5	B	0.10	0.0062	mg/L			03/25/15 17:17	1
Chloride	77	B	1.0	0.20	mg/L			03/25/15 17:17	1
Sulfate	30		1.0	0.21	mg/L			03/25/15 17:17	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-COD-SW-15-0/1-0
Date Collected: 03/24/15 13:45
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.8	B	0.10	0.0062	mg/L			03/26/15 03:58	1
Chloride	160	B	1.0	0.20	mg/L			03/26/15 03:58	1
Sulfate	33		1.0	0.21	mg/L			03/26/15 03:58	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-COD-SW-16-0/1-0
Date Collected: 03/24/15 10:05
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.6	B	0.10	0.0062	mg/L			03/25/15 17:35	1
Chloride	72	B	1.0	0.20	mg/L			03/25/15 17:35	1
Sulfate	29		1.0	0.21	mg/L			03/25/15 17:35	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-COD-SW-17-0/1-0
Date Collected: 03/24/15 10:15
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.7	B	0.10	0.0062	mg/L			03/26/15 04:33	1
Chloride	140	B	1.0	0.20	mg/L			03/26/15 04:33	1
Sulfate	32		1.0	0.21	mg/L			03/26/15 04:33	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-COD-SW-20-0/1-0
Date Collected: 03/24/15 10:50
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.4	B	0.10	0.0062	mg/L			03/25/15 17:52	1
Chloride	130	B	1.0	0.20	mg/L			03/25/15 17:52	1
Sulfate	18		1.0	0.21	mg/L			03/25/15 17:52	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-COD-SW-26-0/1-0
Date Collected: 03/24/15 11:45
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.7	B	0.10	0.0062	mg/L			03/25/15 18:09	1
Chloride	120	B	1.0	0.20	mg/L			03/25/15 18:09	1
Sulfate	32		1.0	0.21	mg/L			03/25/15 18:09	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-COD-SW-27-0/1-0
Date Collected: 03/24/15 13:55
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.6	B	0.10	0.0062	mg/L			03/26/15 01:22	1
Chloride	110	B	1.0	0.20	mg/L			03/26/15 01:22	1
Sulfate	32		1.0	0.21	mg/L			03/26/15 01:22	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-COD-SW-28-0/1-0
Date Collected: 03/24/15 13:00
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	4.4	B	0.10	0.0062	mg/L			03/26/15 03:06	1
Chloride	100	B	1.0	0.20	mg/L			03/26/15 03:06	1
Sulfate	27		1.0	0.21	mg/L			03/26/15 03:06	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-COD-SW-29-0/1-0
Date Collected: 03/24/15 09:00
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.5	B	0.10	0.0062	mg/L			03/25/15 14:49	1
Chloride	67	B	1.0	0.20	mg/L			03/25/15 14:49	1
Sulfate	30		1.0	0.21	mg/L			03/25/15 14:49	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-QC1-0/1-1
Date Collected: 03/24/15 08:00
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-19
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.9	B	0.10	0.0062	mg/L			03/25/15 14:34	1
Chloride	120	B	1.0	0.20	mg/L			03/25/15 14:34	1
Sulfate	37		1.0	0.21	mg/L			03/25/15 14:34	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-99S-0/1-0
Date Collected: 03/24/15 09:15
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-20
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	2.8	B	0.10	0.0062	mg/L			03/25/15 21:20	1
Chloride	87	B	1.0	0.20	mg/L			03/25/15 21:20	1
Sulfate	29		1.0	0.21	mg/L			03/25/15 21:20	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-99D-0/1-0
Date Collected: 03/24/15 13:05
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-21
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			03/26/15 02:14	1
Chloride	58	B F1	1.0	0.20	mg/L			03/26/15 02:14	1
Sulfate	26		1.0	0.21	mg/L			03/26/15 02:14	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-145A-0/1-0
Date Collected: 03/24/15 10:20
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-22
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.6	B	0.10	0.0062	mg/L			03/26/15 03:24	1
Chloride	150	B	1.0	0.20	mg/L			03/26/15 03:24	1
Sulfate	34		1.0	0.21	mg/L			03/26/15 03:24	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-100S-0/1-0
Date Collected: 03/24/15 14:45
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-23
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.6	B	0.10	0.0062	mg/L			03/26/15 03:41	1
Chloride	100	B	1.0	0.20	mg/L			03/26/15 03:41	1
Sulfate	34		1.0	0.21	mg/L			03/26/15 03:41	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-100I-0/1-0
Date Collected: 03/24/15 14:00
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-24
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.6	B	0.10	0.0062	mg/L			03/26/15 05:42	1
Chloride	110	B	1.0	0.20	mg/L			03/26/15 05:42	1
Sulfate	33		1.0	0.21	mg/L			03/26/15 05:42	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-93S-0/1-0
Date Collected: 03/24/15 14:35
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-25
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	1.1	B	0.10	0.0062	mg/L			03/26/15 06:34	1
Chloride	170	B	1.0	0.20	mg/L			03/26/15 06:34	1
Sulfate	27		1.0	0.21	mg/L			03/26/15 06:34	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-93D-0/1-0
Date Collected: 03/24/15 11:22
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-26
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.33	B	0.10	0.0062	mg/L			03/25/15 23:04	1
Chloride	95	B	1.0	0.20	mg/L			03/25/15 23:04	1
Sulfate	29		1.0	0.21	mg/L			03/25/15 23:04	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-COD-SW-7-0/1-0
Date Collected: 03/24/15 12:05
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	45000		100	2.8	ug/L		03/30/15 11:21	04/02/15 15:35	1
Potassium	4300		100	5.8	ug/L		03/30/15 11:21	04/02/15 15:35	1
Magnesium	11000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 15:35	1
Sodium	45000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 15:35	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-COD-SW-6-0/1-0
Date Collected: 03/24/15 10:40
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	54000		100	2.8	ug/L		03/30/15 11:21	04/02/15 15:39	1
Potassium	2900		100	5.8	ug/L		03/30/15 11:21	04/02/15 15:39	1
Magnesium	10000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 15:39	1
Sodium	59000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 15:39	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-COD-SW-8-0/1-0
Date Collected: 03/24/15 09:10
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	38000		100	2.8	ug/L		03/30/15 11:21	04/02/15 15:44	1
Potassium	4300		100	5.8	ug/L		03/30/15 11:21	04/02/15 15:44	1
Magnesium	8500	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 15:44	1
Sodium	42000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 15:44	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-COD-SW-9-0/1-0
Date Collected: 03/24/15 12:20
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	58000		100	2.8	ug/L		03/30/15 11:21	04/02/15 15:48	1
Potassium	7900		100	5.8	ug/L		03/30/15 11:21	04/02/15 15:48	1
Magnesium	12000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 15:48	1
Sodium	56000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 15:48	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-COD-SW-10-0/1-0
Date Collected: 03/24/15 09:41
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	83000		100	2.8	ug/L		03/30/15 11:21	04/02/15 15:52	1
Potassium	8300		100	5.8	ug/L		03/30/15 11:21	04/02/15 15:52	1
Magnesium	14000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 15:52	1
Sodium	54000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 15:52	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-COD-SW-11-0/1-0
Date Collected: 03/24/15 13:15
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	75000		100	2.8	ug/L		03/30/15 11:21	04/02/15 15:56	1
Potassium	2200		100	5.8	ug/L		03/30/15 11:21	04/02/15 15:56	1
Magnesium	17000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 15:56	1
Sodium	40000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 15:56	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-COD-SW-12-0/1-0
Date Collected: 03/24/15 13:25
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	69000		100	2.8	ug/L		03/30/15 11:21	04/02/15 16:01	1
Potassium	16000		100	5.8	ug/L		03/30/15 11:21	04/02/15 16:01	1
Magnesium	12000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 16:01	1
Sodium	84000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 16:01	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-COD-SW-13-0/1-0
Date Collected: 03/24/15 09:32
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	55000		100	2.8	ug/L		03/30/15 11:21	04/02/15 16:05	1
Potassium	5400		100	5.8	ug/L		03/30/15 11:21	04/02/15 16:05	1
Magnesium	11000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 16:05	1
Sodium	42000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 16:05	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-COD-SW-15-0/1-0
Date Collected: 03/24/15 13:45
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	96000		100	2.8	ug/L		03/30/15 11:21	04/02/15 16:21	1
Potassium	6200		100	5.8	ug/L		03/30/15 11:21	04/02/15 16:21	1
Magnesium	19000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 16:21	1
Sodium	78000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 16:21	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-COD-SW-16-0/1-0
Date Collected: 03/24/15 10:05
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	36000		100	2.8	ug/L		03/30/15 11:21	04/02/15 16:25	1
Potassium	4000		100	5.8	ug/L		03/30/15 11:21	04/02/15 16:25	1
Magnesium	8200	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 16:25	1
Sodium	42000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 16:25	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-COD-SW-17-0/1-0
Date Collected: 03/24/15 10:15
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	97000		100	2.8	ug/L		03/30/15 11:21	04/02/15 16:30	1
Potassium	6100		100	5.8	ug/L		03/30/15 11:21	04/02/15 16:30	1
Magnesium	19000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 16:30	1
Sodium	69000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 16:30	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-COD-SW-20-0/1-0
Date Collected: 03/24/15 10:50
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	55000		100	2.8	ug/L		03/30/15 11:21	04/02/15 16:34	1
Potassium	2900		100	5.8	ug/L		03/30/15 11:21	04/02/15 16:34	1
Magnesium	10000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 16:34	1
Sodium	61000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 16:34	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-COD-SW-26-0/1-0
Date Collected: 03/24/15 11:45
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	61000		100	2.8	ug/L		03/30/15 11:21	04/02/15 16:38	1
Potassium	3600		100	5.8	ug/L		03/30/15 11:21	04/02/15 16:38	1
Magnesium	14000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 16:38	1
Sodium	58000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 16:38	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-COD-SW-27-0/1-0
Date Collected: 03/24/15 13:55
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	70000		100	2.8	ug/L		03/30/15 11:21	04/02/15 16:42	1
Potassium	5700		100	5.8	ug/L		03/30/15 11:21	04/02/15 16:42	1
Magnesium	15000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 16:42	1
Sodium	60000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 16:42	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-COD-SW-28-0/1-0
Date Collected: 03/24/15 13:00
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	64000		100	2.8	ug/L		03/30/15 11:21	04/02/15 16:47	1
Potassium	6400		100	5.8	ug/L		03/30/15 11:21	04/02/15 16:47	1
Magnesium	14000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 16:47	1
Sodium	52000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 16:47	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-COD-SW-29-0/1-0
Date Collected: 03/24/15 09:00
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	71000		100	2.8	ug/L		03/30/15 11:21	04/02/15 16:51	1
Potassium	6300		100	5.8	ug/L		03/30/15 11:21	04/02/15 16:51	1
Magnesium	21000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 16:51	1
Sodium	41000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 16:51	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-QC1-0/1-1
Date Collected: 03/24/15 08:00
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-19
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	92000		100	2.8	ug/L		03/30/15 11:21	04/02/15 16:55	1
Potassium	4600		100	5.8	ug/L		03/30/15 11:21	04/02/15 16:55	1
Magnesium	18000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 16:55	1
Sodium	52000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 16:55	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-99S-0/1-0
Date Collected: 03/24/15 09:15
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-20
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110000		100	2.8	ug/L		03/30/15 11:21	04/02/15 16:59	1
Potassium	3800		100	5.8	ug/L		03/30/15 11:21	04/02/15 16:59	1
Magnesium	14000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 16:59	1
Sodium	37000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 16:59	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-99D-0/1-0
Date Collected: 03/24/15 13:05
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-21
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	91000		100	2.8	ug/L		03/30/15 11:21	04/02/15 17:32	1
Potassium	3000		100	5.8	ug/L		03/30/15 11:21	04/02/15 17:32	1
Magnesium	13000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 17:32	1
Sodium	24000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 17:32	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-145A-0/1-0
Date Collected: 03/24/15 10:20
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-22
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	95000		100	2.8	ug/L		03/30/15 11:21	04/02/15 17:37	1
Potassium	5600		100	5.8	ug/L		03/30/15 11:21	04/02/15 17:37	1
Magnesium	18000	B	100	1.2	ug/L		03/30/15 11:21	04/02/15 17:37	1
Sodium	68000	B	100	3.8	ug/L		03/30/15 11:21	04/02/15 17:37	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-100S-0/1-0
Date Collected: 03/24/15 14:45
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-23
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	93000	B	100	2.8	ug/L		03/31/15 11:18	04/02/15 17:53	1
Potassium	4300		100	5.8	ug/L		03/31/15 11:18	04/02/15 17:53	1
Magnesium	18000		100	1.2	ug/L		03/31/15 11:18	04/02/15 17:53	1
Sodium	48000		100	3.8	ug/L		03/31/15 11:18	04/02/15 17:53	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-100I-0/1-0
Date Collected: 03/24/15 14:00
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-24
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	95000	B	100	2.8	ug/L		03/31/15 11:18	04/02/15 18:26	1
Potassium	4700		100	5.8	ug/L		03/31/15 11:18	04/02/15 18:26	1
Magnesium	19000		100	1.2	ug/L		03/31/15 11:18	04/02/15 18:26	1
Sodium	54000		100	3.8	ug/L		03/31/15 11:18	04/02/15 18:26	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-93S-0/1-0
Date Collected: 03/24/15 14:35
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-25
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	69000	B	100	2.8	ug/L		03/31/15 11:18	04/02/15 18:30	1
Potassium	9700		100	5.8	ug/L		03/31/15 11:18	04/02/15 18:30	1
Magnesium	17000		100	1.2	ug/L		03/31/15 11:18	04/02/15 18:30	1
Sodium	94000		100	3.8	ug/L		03/31/15 11:18	04/02/15 18:30	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-93D-0/1-0
Date Collected: 03/24/15 11:22
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-26
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	72000	B	100	2.8	ug/L		03/31/15 11:18	04/02/15 18:35	1
Potassium	5400		100	5.8	ug/L		03/31/15 11:18	04/02/15 18:35	1
Magnesium	15000		100	1.2	ug/L		03/31/15 11:18	04/02/15 18:35	1
Sodium	43000		100	3.8	ug/L		03/31/15 11:18	04/02/15 18:35	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-COD-SW-7-0/1-0
Date Collected: 03/24/15 12:05
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**110**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**110**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-COD-SW-6-0/1-0
Date Collected: 03/24/15 10:40
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**110**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**110**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-COD-SW-8-0/1-0
Date Collected: 03/24/15 09:10
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**110**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**110**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-COD-SW-9-0/1-0
Date Collected: 03/24/15 12:20
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-4
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			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**140**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-COD-SW-10-0/1-0
Date Collected: 03/24/15 09:41
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**190**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**190**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-COD-SW-11-0/1-0
Date Collected: 03/24/15 13:15
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**190**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**190**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-COD-SW-12-0/1-0
Date Collected: 03/24/15 13:25
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**180**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**180**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-COD-SW-13-0/1-0
Date Collected: 03/24/15 09:32
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**120**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**120**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-COD-SW-15-0/1-0
Date Collected: 03/24/15 13:45
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**240**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**240**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-COD-SW-16-0/1-0
Date Collected: 03/24/15 10:05
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**87**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**87**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-COD-SW-17-0/1-0
Date Collected: 03/24/15 10:15
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**190**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**190**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-COD-SW-20-0/1-0
Date Collected: 03/24/15 10:50
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**120**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**120**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-COD-SW-26-0/1-0
Date Collected: 03/24/15 11:45
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**180**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**180**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-COD-SW-27-0/1-0
Date Collected: 03/24/15 13:55
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**170**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**170**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-COD-SW-28-0/1-0
Date Collected: 03/24/15 13:00
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**180**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**180**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-COD-SW-29-0/1-0
Date Collected: 03/24/15 09:00
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**120**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**120**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-QC1-0/1-1
Date Collected: 03/24/15 08:00
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-19
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			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**260**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-MW-99S-0/1-0
Date Collected: 03/24/15 09:15
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-20
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			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**270**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-MW-99D-0/1-0
Date Collected: 03/24/15 13:05
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-21
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			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	**260**	**B**	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-MW-145A-0/1-0
Date Collected: 03/24/15 10:20
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-22
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**240**	**B**	5.0	0.41	mg/L			03/31/15 05:51	1
Bicarbonate Alkalinity as CaCO3	**240**	**B**	5.0	0.41	mg/L			03/31/15 05:51	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:51	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-MW-100S-0/1-0
Date Collected: 03/24/15 14:45
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-23
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			03/31/15 05:51	1
Bicarbonate Alkalinity as CaCO3	**260**	**B**	5.0	0.41	mg/L			03/31/15 05:51	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:51	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-MW-100I-0/1-0
Date Collected: 03/24/15 14:00
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-24
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**290**	**B**	5.0	0.41	mg/L			03/31/15 05:51	1
Bicarbonate Alkalinity as CaCO3	**290**	**B**	5.0	0.41	mg/L			03/31/15 05:51	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:51	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-MW-93S-0/1-0
Date Collected: 03/24/15 14:35
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-25
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			03/31/15 05:51	1
Bicarbonate Alkalinity as CaCO3	**220**	**B**	5.0	0.41	mg/L			03/31/15 05:51	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:51	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

General Chemistry

Client Sample ID: HD-MW-93D-0/1-0
Date Collected: 03/24/15 11:22
Date Received: 03/25/15 09:30

Lab Sample ID: 180-42353-26
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**190**	**B**	5.0	0.41	mg/L			03/31/15 05:51	1
Bicarbonate Alkalinity as CaCO3	**190**	**B**	5.0	0.41	mg/L			03/31/15 05:51	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:51	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: 180-42353-1

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)
180-42353-1	HD-COD-SW-7-0/1-0	125	107	104	106
180-42353-2	HD-COD-SW-6-0/1-0	124	104	97	107
180-42353-3	HD-COD-SW-8-0/1-0	128	105	97	109
180-42353-4	HD-COD-SW-9-0/1-0	129	104	98	109
180-42353-5	HD-COD-SW-10-0/1-0	124	107	98	109
180-42353-6	HD-COD-SW-11-0/1-0	124	107	103	108
180-42353-7	HD-COD-SW-12-0/1-0	128	110	103	107
180-42353-8	HD-COD-SW-13-0/1-0	130	106	100	107
180-42353-9	HD-COD-SW-15-0/1-0	130	104	95	113
180-42353-10	HD-COD-SW-16-0/1-0	129	105	97	108
180-42353-11	HD-COD-SW-17-0/1-0	114	106	98	109
180-42353-11 - DL	HD-COD-SW-17-0/1-0	118	103	99	109
180-42353-12	HD-COD-SW-20-0/1-0	130	102	96	112
180-42353-13	HD-COD-SW-26-0/1-0	134	111	98	111
180-42353-14	HD-COD-SW-27-0/1-0	116	109	101	110
180-42353-15	HD-COD-SW-28-0/1-0	122	111	100	115
180-42353-16	HD-COD-SW-29-0/1-0	117	103	97	113
180-42353-17	HD-QC1-0/1-2	119	105	98	111
180-42353-18	HD-QC2-0/1-2	116	108	98	110
180-42353-19	HD-QC1-0/1-1	115	109	101	105
180-42353-20	HD-MW-99S-0/1-0	115	108	99	106
180-42353-20 MS	HD-MW-99S-0/1-0	109	102	101	101
180-42353-20 MSD	HD-MW-99S-0/1-0	109	102	100	101
180-42353-21	HD-MW-99D-0/1-0	117	109	103	109
180-42353-22	HD-MW-145A-0/1-0	114	105	94	107
180-42353-23	HD-MW-100S-0/1-0	116	109	101	111
180-42353-24	HD-MW-100I-0/1-0	117	101	95	111
180-42353-25	HD-MW-93S-0/1-0	121	102	98	113
180-42353-26	HD-MW-93D-0/1-0	119	111	102	109
LCS 180-136938/8	Lab Control Sample	121	100	101	100
LCS 180-136954/10	Lab Control Sample	101	96	95	93
LCS 180-137048/9	Lab Control Sample	111	105	103	102
LCS 180-137218/9	Lab Control Sample	103	100	97	100
MB 180-136938/5	Method Blank	121	106	98	104
MB 180-136954/7	Method Blank	113	111	100	102
MB 180-137048/6	Method Blank	112	106	97	104
MB 180-137218/6	Method Blank	116	102	97	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: 180-42353-1

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

Lab Sample ID: MB 180-136938/5
Matrix: Water
Analysis Batch: 136938

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			03/30/15 11:37	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 11:37	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 11:37	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 11:37	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 11:37	1
Acetone	5.0	U	5.0	2.5	ug/L			03/30/15 11:37	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 11:37	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 11:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 11:37	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 11:37	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 11:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/30/15 11:37	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 11:37	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 11:37	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/30/15 11:37	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 11:37	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 11:37	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 11:37	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 11:37	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/30/15 11:37	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 11:37	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 11:37	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 11:37	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 11:37	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 11:37	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 11:37	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 11:37	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/30/15 11:37	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 11:37	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 11:37	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 11:37	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 11:37	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 11:37	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 11:37	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 11:37	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 11:37	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 11:37	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 11:37	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 11:37	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 11:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*64 - 135*		*03/30/15 11:37*	*1*
Toluene-d8 (Surr)	*106*		*71 - 118*		*03/30/15 11:37*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 118*		*03/30/15 11:37*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 128*		*03/30/15 11:37*	*1*

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

Lab Sample ID: LCS 180-136938/8
Matrix: Water
Analysis Batch: 136938

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	8.62		ug/L		86	50 - 139
Vinyl chloride	10.0	9.46		ug/L		95	53 - 138
Bromomethane	10.0	11.2		ug/L		112	33 - 150
Chloroethane	10.0	8.96		ug/L		90	36 - 142
1,1-Dichloroethene	10.0	9.02		ug/L		90	65 - 136
Acetone	20.0	25.3		ug/L		126	22 - 150
Carbon disulfide	10.0	7.01		ug/L		70	54 - 132
Methylene Chloride	10.0	8.28		ug/L		83	63 - 129
trans-1,2-Dichloroethene	10.0	9.06		ug/L		91	73 - 126
Methyl tert-butyl ether	10.0	9.88		ug/L		99	64 - 123
1,1-Dichloroethane	10.0	8.96		ug/L		90	73 - 126
cis-1,2-Dichloroethene	10.0	9.00		ug/L		90	70 - 120
Bromochloromethane	10.0	9.63		ug/L		96	70 - 127
2-Butanone (MEK)	20.0	22.2		ug/L		111	39 - 138
Chloroform	10.0	9.75		ug/L		97	72 - 127
1,1,1-Trichloroethane	10.0	8.59		ug/L		86	63 - 133
Carbon tetrachloride	10.0	8.23		ug/L		82	55 - 150
Benzene	10.0	10.1		ug/L		101	80 - 120
1,2-Dichloroethane	10.0	11.9		ug/L		119	68 - 132
Trichloroethene	10.0	9.14		ug/L		91	73 - 120
1,2-Dichloropropane	10.0	9.50		ug/L		95	76 - 124
Bromodichloromethane	10.0	9.93		ug/L		99	66 - 130
cis-1,3-Dichloropropene	10.0	9.21		ug/L		92	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	19.2		ug/L		96	45 - 145
Toluene	10.0	10.7		ug/L		107	80 - 123
trans-1,3-Dichloropropene	10.0	10.8		ug/L		108	65 - 125
1,1,2-Trichloroethane	10.0	11.9		ug/L		119	77 - 127
Tetrachloroethene	10.0	9.91		ug/L		99	70 - 135
2-Hexanone	20.0	21.7		ug/L		108	25 - 132
Dibromochloromethane	10.0	10.2		ug/L		102	60 - 140
1,2-Dibromoethane (EDB)	10.0	12.2		ug/L		122	74 - 123
Chlorobenzene	10.0	10.8		ug/L		108	80 - 120
1,1,1,2-Tetrachloroethane	10.0	9.51		ug/L		95	63 - 140
Ethylbenzene	10.0	9.37		ug/L		94	72 - 126
Xylenes, Total	20.0	18.6		ug/L		93	76 - 128
Styrene	10.0	10.8		ug/L		108	71 - 127
Bromoform	10.0	11.5		ug/L		115	46 - 150
1,1,2,2-Tetrachloroethane	10.0	13.6	*	ug/L		136	62 - 125
1,4-Dioxane	200	286		ug/L		143	10 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*121*		*64 - 135*
Toluene-d8 (Surr)	*100*		*71 - 118*
4-Bromofluorobenzene (Surr)	*101*		*70 - 118*
Dibromofluoromethane (Surr)	*100*		*70 - 128*

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

Lab Sample ID: MB 180-136954/7
Matrix: Water
Analysis Batch: 136954

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			03/30/15 13:04	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/30/15 13:04	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/30/15 13:04	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 13:04	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/30/15 13:04	1
Acetone	5.0	U	5.0	2.5	ug/L			03/30/15 13:04	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/30/15 13:04	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/30/15 13:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/30/15 13:04	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/30/15 13:04	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/30/15 13:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/30/15 13:04	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/30/15 13:04	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/30/15 13:04	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/30/15 13:04	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/30/15 13:04	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/30/15 13:04	1
Benzene	1.0	U	1.0	0.11	ug/L			03/30/15 13:04	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/30/15 13:04	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/30/15 13:04	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/30/15 13:04	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/30/15 13:04	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/30/15 13:04	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/30/15 13:04	1
Toluene	1.0	U	1.0	0.15	ug/L			03/30/15 13:04	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/30/15 13:04	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 13:04	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/30/15 13:04	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/30/15 13:04	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/30/15 13:04	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/30/15 13:04	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/30/15 13:04	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/30/15 13:04	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/30/15 13:04	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/30/15 13:04	1
Styrene	1.0	U	1.0	0.097	ug/L			03/30/15 13:04	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/30/15 13:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			03/30/15 13:04	1
Acrylonitrile	20	U	20	0.55	ug/L			03/30/15 13:04	1
1,4-Dioxane	200	U	200	34	ug/L			03/30/15 13:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*64 - 135*		*03/30/15 13:04*	*1*
Toluene-d8 (Surr)	*111*		*71 - 118*		*03/30/15 13:04*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 118*		*03/30/15 13:04*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 128*		*03/30/15 13:04*	*1*

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

Lab Sample ID: LCS 180-136954/10
Matrix: Water
Analysis Batch: 136954

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	10.0	10.2		ug/L		102	50 - 139
Vinyl chloride	10.0	11.3		ug/L		113	53 - 138
Bromomethane	10.0	12.6		ug/L		126	33 - 150
Chloroethane	10.0	12.0		ug/L		120	36 - 142
1,1-Dichloroethene	10.0	8.64		ug/L		86	65 - 136
Acetone	20.0	22.6		ug/L		113	22 - 150
Carbon disulfide	10.0	6.37		ug/L		64	54 - 132
Methylene Chloride	10.0	8.67		ug/L		87	63 - 129
trans-1,2-Dichloroethene	10.0	9.21		ug/L		92	73 - 126
Methyl tert-butyl ether	10.0	9.43		ug/L		94	64 - 123
1,1-Dichloroethane	10.0	9.68		ug/L		97	73 - 126
cis-1,2-Dichloroethene	10.0	9.05		ug/L		91	70 - 120
Bromochloromethane	10.0	9.20		ug/L		92	70 - 127
2-Butanone (MEK)	20.0	16.0		ug/L		80	39 - 138
Chloroform	10.0	10.1		ug/L		101	72 - 127
1,1,1-Trichloroethane	10.0	9.92		ug/L		99	63 - 133
Carbon tetrachloride	10.0	10.7		ug/L		107	55 - 150
Benzene	10.0	9.47		ug/L		95	80 - 120
1,2-Dichloroethane	10.0	10.2		ug/L		102	68 - 132
Trichloroethene	10.0	9.33		ug/L		93	73 - 120
1,2-Dichloropropane	10.0	9.49		ug/L		95	76 - 124
Bromodichloromethane	10.0	9.58		ug/L		96	66 - 130
cis-1,3-Dichloropropene	10.0	9.81		ug/L		98	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	16.4		ug/L		82	45 - 145
Toluene	10.0	10.0		ug/L		100	80 - 123
trans-1,3-Dichloropropene	10.0	11.2		ug/L		112	65 - 125
1,1,2-Trichloroethane	10.0	10.4		ug/L		104	77 - 127
Tetrachloroethene	10.0	9.42		ug/L		94	70 - 135
2-Hexanone	20.0	14.8		ug/L		74	25 - 132
Dibromochloromethane	10.0	10.3		ug/L		103	60 - 140
1,2-Dibromoethane (EDB)	10.0	9.87		ug/L		99	74 - 123
Chlorobenzene	10.0	10.2		ug/L		102	80 - 120
1,1,1,2-Tetrachloroethane	10.0	11.1		ug/L		111	63 - 140
Ethylbenzene	10.0	9.71		ug/L		97	72 - 126
Xylenes, Total	20.0	19.5		ug/L		97	76 - 128
Styrene	10.0	9.94		ug/L		99	71 - 127
Bromoform	10.0	9.53		ug/L		95	46 - 150
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	62 - 125
1,4-Dioxane	200	153	J	ug/L		76	10 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 135*
Toluene-d8 (Surr)	*96*		*71 - 118*
4-Bromofluorobenzene (Surr)	*95*		*70 - 118*
Dibromofluoromethane (Surr)	*93*		*70 - 128*

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

Lab Sample ID: MB 180-137048/6
Matrix: Water
Analysis Batch: 137048

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			03/31/15 11:21	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/31/15 11:21	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/31/15 11:21	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/31/15 11:21	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/31/15 11:21	1
Acetone	5.0	U	5.0	2.5	ug/L			03/31/15 11:21	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/31/15 11:21	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/31/15 11:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/31/15 11:21	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/31/15 11:21	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/31/15 11:21	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/31/15 11:21	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/31/15 11:21	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/31/15 11:21	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/31/15 11:21	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/31/15 11:21	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/31/15 11:21	1
Benzene	1.0	U	1.0	0.11	ug/L			03/31/15 11:21	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/31/15 11:21	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/31/15 11:21	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/31/15 11:21	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/31/15 11:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/31/15 11:21	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/31/15 11:21	1
Toluene	1.0	U	1.0	0.15	ug/L			03/31/15 11:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/31/15 11:21	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/31/15 11:21	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/31/15 11:21	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/31/15 11:21	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/31/15 11:21	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/31/15 11:21	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/31/15 11:21	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/31/15 11:21	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/31/15 11:21	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/31/15 11:21	1
Styrene	1.0	U	1.0	0.097	ug/L			03/31/15 11:21	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/31/15 11:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			03/31/15 11:21	1
Acrylonitrile	20	U	20	0.55	ug/L			03/31/15 11:21	1
1,4-Dioxane	200	U	200	34	ug/L			03/31/15 11:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*64 - 135*		*03/31/15 11:21*	*1*
Toluene-d8 (Surr)	*106*		*71 - 118*		*03/31/15 11:21*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 118*		*03/31/15 11:21*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 128*		*03/31/15 11:21*	*1*

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

Lab Sample ID: LCS 180-137048/9
Matrix: Water
Analysis Batch: 137048

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	10.0	10.0		ug/L		100	50 - 139
Vinyl chloride	10.0	11.0		ug/L		110	53 - 138
Bromomethane	10.0	13.3		ug/L		133	33 - 150
Chloroethane	10.0	12.1		ug/L		121	36 - 142
1,1-Dichloroethene	10.0	9.56		ug/L		96	65 - 136
Acetone	20.0	20.8		ug/L		104	22 - 150
Carbon disulfide	10.0	7.90		ug/L		79	54 - 132
Methylene Chloride	10.0	9.55		ug/L		95	63 - 129
trans-1,2-Dichloroethene	10.0	9.98		ug/L		100	73 - 126
Methyl tert-butyl ether	10.0	9.94		ug/L		99	64 - 123
1,1-Dichloroethane	10.0	10.4		ug/L		104	73 - 126
cis-1,2-Dichloroethene	10.0	9.74		ug/L		97	70 - 120
Bromochloromethane	10.0	9.80		ug/L		98	70 - 127
2-Butanone (MEK)	20.0	15.6		ug/L		78	39 - 138
Chloroform	10.0	10.7		ug/L		107	72 - 127
1,1,1-Trichloroethane	10.0	11.2		ug/L		112	63 - 133
Carbon tetrachloride	10.0	12.0		ug/L		120	55 - 150
Benzene	10.0	10.5		ug/L		105	80 - 120
1,2-Dichloroethane	10.0	10.9		ug/L		109	68 - 132
Trichloroethene	10.0	9.63		ug/L		96	73 - 120
1,2-Dichloropropane	10.0	9.45		ug/L		95	76 - 124
Bromodichloromethane	10.0	9.90		ug/L		99	66 - 130
cis-1,3-Dichloropropene	10.0	10.0		ug/L		100	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	15.8		ug/L		79	45 - 145
Toluene	10.0	10.3		ug/L		103	80 - 123
trans-1,3-Dichloropropene	10.0	10.0		ug/L		100	65 - 125
1,1,2-Trichloroethane	10.0	9.82		ug/L		98	77 - 127
Tetrachloroethene	10.0	9.84		ug/L		98	70 - 135
2-Hexanone	20.0	13.4		ug/L		67	25 - 132
Dibromochloromethane	10.0	10.4		ug/L		104	60 - 140
1,2-Dibromoethane (EDB)	10.0	10.1		ug/L		101	74 - 123
Chlorobenzene	10.0	10.0		ug/L		100	80 - 120
1,1,1,2-Tetrachloroethane	10.0	11.1		ug/L		111	63 - 140
Ethylbenzene	10.0	9.79		ug/L		98	72 - 126
Xylenes, Total	20.0	19.8		ug/L		99	76 - 128
Styrene	10.0	10.2		ug/L		102	71 - 127
Bromoform	10.0	9.43		ug/L		94	46 - 150
1,1,2,2-Tetrachloroethane	10.0	10.1		ug/L		101	62 - 125
1,4-Dioxane	200	132	J	ug/L		66	10 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*64 - 135*
Toluene-d8 (Surr)	*105*		*71 - 118*
4-Bromofluorobenzene (Surr)	*103*		*70 - 118*
Dibromofluoromethane (Surr)	*102*		*70 - 128*

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

Lab Sample ID: 180-42353-20 MS
Matrix: Water
Analysis Batch: 137048

Client Sample ID: HD-MW-99S-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	11.4		ug/L		114	50 - 139
Vinyl chloride	1.0	U	10.0	12.2		ug/L		122	53 - 138
Bromomethane	1.0	U	10.0	13.9		ug/L		139	33 - 150
Chloroethane	1.0	U	10.0	13.3		ug/L		133	36 - 142
1,1-Dichloroethene	2.4		10.0	11.2		ug/L		88	65 - 136
Acetone	5.0	U	20.0	19.8		ug/L		99	22 - 150
Carbon disulfide	1.0	U	10.0	6.55		ug/L		65	54 - 132
Methylene Chloride	1.0	U	10.0	9.51		ug/L		95	63 - 129
trans-1,2-Dichloroethene	1.0	U	10.0	9.72		ug/L		97	73 - 126
Methyl tert-butyl ether	1.0	U	10.0	10.1		ug/L		101	64 - 123
1,1-Dichloroethane	1.3		10.0	11.6		ug/L		103	73 - 126
cis-1,2-Dichloroethene	32		10.0	40.1		ug/L		84	70 - 120
Bromochloromethane	1.0	U	10.0	9.85		ug/L		98	70 - 127
2-Butanone (MEK)	5.0	U	20.0	17.0		ug/L		85	39 - 138
Chloroform	0.21	J	10.0	11.0		ug/L		108	72 - 127
1,1,1-Trichloroethane	5.6		10.0	15.6		ug/L		100	63 - 133
Carbon tetrachloride	1.0	U	10.0	11.0		ug/L		110	55 - 150
Benzene	1.0	U	10.0	9.98		ug/L		100	80 - 120
1,2-Dichloroethane	1.0	U	10.0	10.8		ug/L		108	68 - 132
Trichloroethene	32	F1	10.0	37.9	F1	ug/L		58	73 - 120
1,2-Dichloropropane	1.0	U	10.0	9.64		ug/L		96	76 - 124
Bromodichloromethane	1.0	U	10.0	10.6		ug/L		106	66 - 130
cis-1,3-Dichloropropene	1.0	U	10.0	10.2		ug/L		102	66 - 120
4-Methyl-2-pentanone (MIBK)	5.0	U	20.0	17.2		ug/L		86	45 - 145
Toluene	1.0	U	10.0	10.4		ug/L		104	80 - 123
trans-1,3-Dichloropropene	1.0	U	10.0	11.5		ug/L		115	65 - 125
1,1,2-Trichloroethane	1.0	U	10.0	10.5		ug/L		105	77 - 127
Tetrachloroethene	23	F1	10.0	29.5	F1	ug/L		65	70 - 135
2-Hexanone	5.0	U	20.0	15.0		ug/L		75	25 - 132
Dibromochloromethane	1.0	U	10.0	10.5		ug/L		105	60 - 140
1,2-Dibromoethane (EDB)	1.0	U	10.0	10.2		ug/L		102	74 - 123
Chlorobenzene	1.0	U	10.0	10.7		ug/L		107	80 - 120
1,1,1,2-Tetrachloroethane	1.0	U	10.0	11.5		ug/L		115	63 - 140
Ethylbenzene	1.0	U	10.0	10.1		ug/L		101	72 - 126
Xylenes, Total	3.0	U	20.0	20.4		ug/L		102	76 - 128
Styrene	1.0	U	10.0	10.2		ug/L		102	71 - 127
Bromoform	1.0	U	10.0	10.1		ug/L		101	46 - 150
1,1,2,2-Tetrachloroethane	1.0	U	10.0	10.8		ug/L		108	62 - 125
1,4-Dioxane	200	U	200	144	J	ug/L		72	10 - 160

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*64 - 135*
Toluene-d8 (Surr)	*102*		*71 - 118*
4-Bromofluorobenzene (Surr)	*101*		*70 - 118*
Dibromofluoromethane (Surr)	*101*		*70 - 128*

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

Lab Sample ID: 180-42353-20 MSD
Matrix: Water
Analysis Batch: 137048

Client Sample ID: HD-MW-99S-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	11.3		ug/L		113	50 - 139	1	35
Vinyl chloride	1.0	U	10.0	11.4		ug/L		114	53 - 138	6	35
Bromomethane	1.0	U	10.0	13.9		ug/L		139	33 - 150	0	35
Chloroethane	1.0	U	10.0	12.4		ug/L		124	36 - 142	7	35
1,1-Dichloroethene	2.4		10.0	10.6		ug/L		83	65 - 136	5	35
Acetone	5.0	U	20.0	19.1		ug/L		96	22 - 150	4	35
Carbon disulfide	1.0	U	10.0	6.35		ug/L		64	54 - 132	3	35
Methylene Chloride	1.0	U	10.0	9.39		ug/L		94	63 - 129	1	35
trans-1,2-Dichloroethene	1.0	U	10.0	9.22		ug/L		92	73 - 126	5	35
Methyl tert-butyl ether	1.0	U	10.0	10.2		ug/L		102	64 - 123	1	35
1,1-Dichloroethane	1.3		10.0	11.3		ug/L		99	73 - 126	3	35
cis-1,2-Dichloroethene	32		10.0	39.5		ug/L		78	70 - 120	1	35
Bromochloromethane	1.0	U	10.0	9.53		ug/L		95	70 - 127	3	35
2-Butanone (MEK)	5.0	U	20.0	16.3		ug/L		81	39 - 138	4	35
Chloroform	0.21	J	10.0	10.2		ug/L		100	72 - 127	8	35
1,1,1-Trichloroethane	5.6		10.0	14.8		ug/L		92	63 - 133	5	35
Carbon tetrachloride	1.0	U	10.0	10.8		ug/L		108	55 - 150	2	35
Benzene	1.0	U	10.0	9.73		ug/L		97	80 - 120	3	32
1,2-Dichloroethane	1.0	U	10.0	10.5		ug/L		105	68 - 132	2	32
Trichloroethene	32	F1	10.0	36.0	F1	ug/L		40	73 - 120	5	35
1,2-Dichloropropane	1.0	U	10.0	10.0		ug/L		100	76 - 124	4	34
Bromodichloromethane	1.0	U	10.0	10.2		ug/L		102	66 - 130	4	35
cis-1,3-Dichloropropene	1.0	U	10.0	9.61		ug/L		96	66 - 120	6	35
4-Methyl-2-pentanone (MIBK)	5.0	U	20.0	16.7		ug/L		83	45 - 145	3	35
Toluene	1.0	U	10.0	9.90		ug/L		99	80 - 123	5	35
trans-1,3-Dichloropropene	1.0	U	10.0	11.6		ug/L		116	65 - 125	0	35
1,1,2-Trichloroethane	1.0	U	10.0	10.6		ug/L		106	77 - 127	1	35
Tetrachloroethene	23	F1	10.0	27.4	F1	ug/L		44	70 - 135	7	35
2-Hexanone	5.0	U	20.0	14.5		ug/L		72	25 - 132	4	35
Dibromochloromethane	1.0	U	10.0	10.2		ug/L		102	60 - 140	2	35
1,2-Dibromoethane (EDB)	1.0	U	10.0	10.3		ug/L		103	74 - 123	1	35
Chlorobenzene	1.0	U	10.0	10.0		ug/L		100	80 - 120	7	29
1,1,1,2-Tetrachloroethane	1.0	U	10.0	11.2		ug/L		112	63 - 140	3	34
Ethylbenzene	1.0	U	10.0	9.62		ug/L		96	72 - 126	5	33
Xylenes, Total	3.0	U	20.0	19.4		ug/L		97	76 - 128	5	32
Styrene	1.0	U	10.0	9.78		ug/L		98	71 - 127	4	34
Bromoform	1.0	U	10.0	9.72		ug/L		97	46 - 150	4	35
1,1,2,2-Tetrachloroethane	1.0	U	10.0	10.4		ug/L		104	62 - 125	4	35
1,4-Dioxane	200	U	200	138	J	ug/L		69	10 - 160	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*64 - 135*
Toluene-d8 (Surr)	*102*		*71 - 118*
4-Bromofluorobenzene (Surr)	*100*		*70 - 118*
Dibromofluoromethane (Surr)	*101*		*70 - 128*

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

Lab Sample ID: MB 180-137218/6
Matrix: Water
Analysis Batch: 137218

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			04/01/15 12:40	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/01/15 12:40	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/01/15 12:40	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/01/15 12:40	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/01/15 12:40	1
Acetone	5.0	U	5.0	2.5	ug/L			04/01/15 12:40	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/01/15 12:40	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/01/15 12:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/01/15 12:40	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/01/15 12:40	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/01/15 12:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			04/01/15 12:40	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/01/15 12:40	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/01/15 12:40	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/01/15 12:40	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/01/15 12:40	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/01/15 12:40	1
Benzene	1.0	U	1.0	0.11	ug/L			04/01/15 12:40	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/01/15 12:40	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			04/01/15 12:40	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/01/15 12:40	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/01/15 12:40	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/01/15 12:40	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/01/15 12:40	1
Toluene	1.0	U	1.0	0.15	ug/L			04/01/15 12:40	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/01/15 12:40	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/01/15 12:40	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/01/15 12:40	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/01/15 12:40	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/01/15 12:40	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/01/15 12:40	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/01/15 12:40	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/01/15 12:40	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/01/15 12:40	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/01/15 12:40	1
Styrene	1.0	U	1.0	0.097	ug/L			04/01/15 12:40	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/01/15 12:40	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/01/15 12:40	1
Acrylonitrile	20	U	20	0.55	ug/L			04/01/15 12:40	1
1,4-Dioxane	200	U	200	34	ug/L			04/01/15 12:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*64 - 135*		*04/01/15 12:40*	*1*
Toluene-d8 (Surr)	*102*		*71 - 118*		*04/01/15 12:40*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 118*		*04/01/15 12:40*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 128*		*04/01/15 12:40*	*1*

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

Lab Sample ID: LCS 180-137218/9
Matrix: Water
Analysis Batch: 137218

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	10.0	11.3		ug/L		113	50 - 139
Vinyl chloride	10.0	12.8		ug/L		128	53 - 138
Bromomethane	10.0	15.5	*	ug/L		155	33 - 150
Chloroethane	10.0	13.8		ug/L		138	36 - 142
1,1-Dichloroethene	10.0	8.92		ug/L		89	65 - 136
Acetone	20.0	18.4		ug/L		92	22 - 150
Carbon disulfide	10.0	7.69		ug/L		77	54 - 132
Methylene Chloride	10.0	9.47		ug/L		95	63 - 129
trans-1,2-Dichloroethene	10.0	9.65		ug/L		96	73 - 126
Methyl tert-butyl ether	10.0	9.74		ug/L		97	64 - 123
1,1-Dichloroethane	10.0	10.2		ug/L		102	73 - 126
cis-1,2-Dichloroethene	10.0	9.99		ug/L		100	70 - 120
Bromochloromethane	10.0	9.87		ug/L		99	70 - 127
2-Butanone (MEK)	20.0	15.3		ug/L		77	39 - 138
Chloroform	10.0	11.0		ug/L		110	72 - 127
1,1,1-Trichloroethane	10.0	10.8		ug/L		108	63 - 133
Carbon tetrachloride	10.0	11.1		ug/L		111	55 - 150
Benzene	10.0	10.1		ug/L		101	80 - 120
1,2-Dichloroethane	10.0	11.0		ug/L		110	68 - 132
Trichloroethene	10.0	9.67		ug/L		97	73 - 120
1,2-Dichloropropane	10.0	10.3		ug/L		103	76 - 124
Bromodichloromethane	10.0	10.5		ug/L		105	66 - 130
cis-1,3-Dichloropropene	10.0	10.3		ug/L		103	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	16.0		ug/L		80	45 - 145
Toluene	10.0	11.4		ug/L		114	80 - 123
trans-1,3-Dichloropropene	10.0	12.9	*	ug/L		129	65 - 125
1,1,2-Trichloroethane	10.0	11.3		ug/L		113	77 - 127
Tetrachloroethene	10.0	10.4		ug/L		104	70 - 135
2-Hexanone	20.0	13.6		ug/L		68	25 - 132
Dibromochloromethane	10.0	11.5		ug/L		115	60 - 140
1,2-Dibromoethane (EDB)	10.0	10.8		ug/L		108	74 - 123
Chlorobenzene	10.0	11.2		ug/L		112	80 - 120
1,1,1,2-Tetrachloroethane	10.0	12.0		ug/L		120	63 - 140
Ethylbenzene	10.0	10.9		ug/L		109	72 - 126
Xylenes, Total	20.0	21.4		ug/L		107	76 - 128
Styrene	10.0	10.9		ug/L		109	71 - 127
Bromoform	10.0	11.3		ug/L		113	46 - 150
1,1,2,2-Tetrachloroethane	10.0	11.3		ug/L		113	62 - 125
1,4-Dioxane	200	160	J	ug/L		80	10 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 135*
Toluene-d8 (Surr)	*100*		*71 - 118*
4-Bromofluorobenzene (Surr)	*97*		*70 - 118*
Dibromofluoromethane (Surr)	*100*		*70 - 128*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 180-136546/46
Matrix: Water
Analysis Batch: 136546

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	0.0307	J	0.10	0.0062	mg/L			03/26/15 00:13	1
Chloride	0.386	J	1.0	0.20	mg/L			03/26/15 00:13	1
Sulfate	1.0	U	1.0	0.21	mg/L			03/26/15 00:13	1

Lab Sample ID: MB 180-136546/6
Matrix: Water
Analysis Batch: 136546

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	0.0304	J	0.10	0.0062	mg/L			03/25/15 12:58	1
Chloride	0.358	J	1.0	0.20	mg/L			03/25/15 12:58	1
Sulfate	1.0	U	1.0	0.21	mg/L			03/25/15 12:58	1

Lab Sample ID: LCS 180-136546/45
Matrix: Water
Analysis Batch: 136546

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	2.59		mg/L		103	90 - 110
Chloride	50.0	49.3		mg/L		99	90 - 110
Sulfate	50.0	49.2		mg/L		98	90 - 110

Lab Sample ID: LCS 180-136546/5
Matrix: Water
Analysis Batch: 136546

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	2.55		mg/L		102	90 - 110
Chloride	50.0	48.5		mg/L		97	90 - 110
Sulfate	50.0	48.5		mg/L		97	90 - 110

Lab Sample ID: 180-42353-20 MS
Matrix: Water
Analysis Batch: 136546

Client Sample ID: HD-MW-99S-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	2.8	B	1.25	4.12		mg/L		103	80 - 120
Chloride	87	B	25.0	112		mg/L		102	80 - 120
Sulfate	29		25.0	54.2		mg/L		99	80 - 120

Lab Sample ID: 180-42353-20 MSD
Matrix: Water
Analysis Batch: 136546

Client Sample ID: HD-MW-99S-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	2.8	B	1.25	3.96		mg/L		90	80 - 120	4	20
Chloride	87	B	25.0	108		mg/L		85	80 - 120	4	20
Sulfate	29		25.0	51.6		mg/L		89	80 - 120	5	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 180-42353-21 MS — **Client Sample ID: HD-MW-99D-0/1-0**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 136546

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	2.3	B	1.25	3.39		mg/L		90	80 - 120
Chloride	58	B F1	25.0	78.1	F1	mg/L		78	80 - 120
Sulfate	26		25.0	48.1		mg/L		87	80 - 120

Lab Sample ID: 180-42353-21 MSD — **Client Sample ID: HD-MW-99D-0/1-0**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 136546

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	2.3	B	1.25	3.34		mg/L		86	80 - 120	1	20
Chloride	58	B F1	25.0	78.8		mg/L		81	80 - 120	1	20
Sulfate	26		25.0	48.5		mg/L		88	80 - 120	1	20

Lab Sample ID: 180-42353-24 MS — **Client Sample ID: HD-MW-100I-0/1-0**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 136546

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	3.6	B	1.25	4.80		mg/L		95	80 - 120
Chloride	110	B	25.0	134	4	mg/L		89	80 - 120
Sulfate	33		25.0	56.1		mg/L		91	80 - 120

Lab Sample ID: 180-42353-24 MSD — **Client Sample ID: HD-MW-100I-0/1-0**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 136546

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	3.6	B	1.25	5.02		mg/L		114	80 - 120	5	20
Chloride	110	B	25.0	140	4	mg/L		113	80 - 120	4	20
Sulfate	33		25.0	58.8		mg/L		102	80 - 120	5	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: 180-42353-20 MS — **Client Sample ID: HD-MW-99S-0/1-0**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 137424 — **Prep Batch: 136963**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	110000		50000	157000		ug/L		101	75 - 125
Potassium	3800		50000	53100		ug/L		98	75 - 125
Magnesium	14000	B	50000	56700		ug/L		85	75 - 125
Sodium	37000	B	50000	83900		ug/L		94	75 - 125

Lab Sample ID: 180-42353-20 MSD — **Client Sample ID: HD-MW-99S-0/1-0**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 137424 — **Prep Batch: 136963**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	110000		50000	156000		ug/L		99	75 - 125	1	20

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

Lab Sample ID: 180-42353-20 MSD
Matrix: Water
Analysis Batch: 137424

Client Sample ID: HD-MW-99S-0/1-0
Prep Type: Total/NA
Prep Batch: 136963

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Potassium	3800		50000	52800		ug/L		98	75 - 125	1	20
Magnesium	14000	B	50000	56000		ug/L		84	75 - 125	1	20
Sodium	37000	B	50000	83500		ug/L		93	75 - 125	0	20

Lab Sample ID: 180-42353-23 MS
Matrix: Water
Analysis Batch: 137424

Client Sample ID: HD-MW-100S-0/1-0
Prep Type: Total/NA
Prep Batch: 137092

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	93000	B	50000	140000		ug/L		95	75 - 125
Potassium	4300		50000	52000		ug/L		95	75 - 125
Magnesium	18000		50000	59300		ug/L		82	75 - 125
Sodium	48000		50000	93900		ug/L		91	75 - 125

Lab Sample ID: 180-42353-23 MSD
Matrix: Water
Analysis Batch: 137424

Client Sample ID: HD-MW-100S-0/1-0
Prep Type: Total/NA
Prep Batch: 137092

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	93000	B	50000	145000		ug/L		104	75 - 125	3	20
Potassium	4300		50000	53600		ug/L		99	75 - 125	3	20
Magnesium	18000		50000	60400		ug/L		84	75 - 125	2	20
Sodium	48000		50000	95600		ug/L		95	75 - 125	2	20

Lab Sample ID: MB 180-136963/1-A
Matrix: Water
Analysis Batch: 137424

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 136963

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100	U	100	2.8	ug/L		03/30/15 11:21	04/02/15 15:26	1
Potassium	100	U	100	5.8	ug/L		03/30/15 11:21	04/02/15 15:26	1
Magnesium	1.44	J	100	1.2	ug/L		03/30/15 11:21	04/02/15 15:26	1
Sodium	34.2	J	100	3.8	ug/L		03/30/15 11:21	04/02/15 15:26	1

Lab Sample ID: LCS 180-136963/2-A
Matrix: Water
Analysis Batch: 137424

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 136963

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	50000	47700		ug/L		95	80 - 120
Potassium	50000	46900		ug/L		94	80 - 120
Magnesium	50000	41000		ug/L		82	80 - 120
Sodium	50000	44400		ug/L		89	80 - 120

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

Lab Sample ID: MB 180-137092/1-A
Matrix: Water
Analysis Batch: 137424

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 137092

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	4.19	J	100	2.8	ug/L		03/31/15 11:18	04/02/15 17:44	1
Potassium	100	U	100	5.8	ug/L		03/31/15 11:18	04/02/15 17:44	1
Magnesium	100	U	100	1.2	ug/L		03/31/15 11:18	04/02/15 17:44	1
Sodium	100	U	100	3.8	ug/L		03/31/15 11:18	04/02/15 17:44	1

Lab Sample ID: LCS 180-137092/2-A
Matrix: Water
Analysis Batch: 137424

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 137092

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	50000	49900		ug/L		100	80 - 120
Potassium	50000	49100		ug/L		98	80 - 120
Magnesium	50000	43000		ug/L		86	80 - 120
Sodium	50000	46700		ug/L		93	80 - 120

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 180-137006/2
Matrix: Water
Analysis Batch: 137006

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			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	4.12	J	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Lab Sample ID: MB 180-137006/27
Matrix: Water
Analysis Batch: 137006

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			03/31/15 05:18	1
Bicarbonate Alkalinity as CaCO3	4.12	J	5.0	0.41	mg/L			03/31/15 05:18	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			03/31/15 05:18	1

Lab Sample ID: LCS 180-137006/1
Matrix: Water
Analysis Batch: 137006

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	251		mg/L		101	80 - 120

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 180-137006/26
Matrix: Water
Analysis Batch: 137006

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	249		mg/L		100	80 - 120		

Lab Sample ID: 180-42353-2 DU
Matrix: Water
Analysis Batch: 137006

Client Sample ID: HD-COD-SW-6-0/1-0
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	110	B		101		mg/L				4	20
Bicarbonate Alkalinity as CaCO3	110	B		101		mg/L				4	20
Carbonate Alkalinity as CaCO3	5.0	U		5.0	U	mg/L				NC	20

Lab Sample ID: 180-42353-11 DU
Matrix: Water
Analysis Batch: 137006

Client Sample ID: HD-COD-SW-17-0/1-0
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	190	B		190		mg/L				1	20
Bicarbonate Alkalinity as CaCO3	190	B		190		mg/L				1	20
Carbonate Alkalinity as CaCO3	5.0	U		5.0	U	mg/L				NC	20

Lab Sample ID: 180-42353-20 DU
Matrix: Water
Analysis Batch: 137006

Client Sample ID: HD-MW-99S-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	270	B		272		mg/L				0	20
Bicarbonate Alkalinity as CaCO3	270	B		272		mg/L				0	20
Carbonate Alkalinity as CaCO3	5.0	U		5.0	U	mg/L				NC	20

GC/MS VOA

Analysis Batch: 136938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42353-1	HD-COD-SW-7-0/1-0	Total/NA	Water	8260C	
180-42353-2	HD-COD-SW-6-0/1-0	Total/NA	Water	8260C	
180-42353-3	HD-COD-SW-8-0/1-0	Total/NA	Water	8260C	
180-42353-4	HD-COD-SW-9-0/1-0	Total/NA	Water	8260C	
180-42353-5	HD-COD-SW-10-0/1-0	Total/NA	Water	8260C	
180-42353-6	HD-COD-SW-11-0/1-0	Total/NA	Water	8260C	
180-42353-7	HD-COD-SW-12-0/1-0	Total/NA	Water	8260C	
180-42353-8	HD-COD-SW-13-0/1-0	Total/NA	Water	8260C	
180-42353-9	HD-COD-SW-15-0/1-0	Total/NA	Water	8260C	
180-42353-10	HD-COD-SW-16-0/1-0	Total/NA	Water	8260C	
180-42353-12	HD-COD-SW-20-0/1-0	Total/NA	Water	8260C	
180-42353-13	HD-COD-SW-26-0/1-0	Total/NA	Water	8260C	
LCS 180-136938/8	Lab Control Sample	Total/NA	Water	8260C	
MB 180-136938/5	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 136954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42353-14	HD-COD-SW-27-0/1-0	Total/NA	Water	8260C	
180-42353-15	HD-COD-SW-28-0/1-0	Total/NA	Water	8260C	
180-42353-16	HD-COD-SW-29-0/1-0	Total/NA	Water	8260C	
180-42353-17	HD-QC1-0/1-2	Total/NA	Water	8260C	
180-42353-18	HD-QC2-0/1-2	Total/NA	Water	8260C	
180-42353-21	HD-MW-99D-0/1-0	Total/NA	Water	8260C	
LCS 180-136954/10	Lab Control Sample	Total/NA	Water	8260C	
MB 180-136954/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 137048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42353-11	HD-COD-SW-17-0/1-0	Total/NA	Water	8260C	
180-42353-19	HD-QC1-0/1-1	Total/NA	Water	8260C	
180-42353-20	HD-MW-99S-0/1-0	Total/NA	Water	8260C	
180-42353-20 MS	HD-MW-99S-0/1-0	Total/NA	Water	8260C	
180-42353-20 MSD	HD-MW-99S-0/1-0	Total/NA	Water	8260C	
180-42353-23	HD-MW-100S-0/1-0	Total/NA	Water	8260C	
180-42353-24	HD-MW-100I-0/1-0	Total/NA	Water	8260C	
180-42353-26	HD-MW-93D-0/1-0	Total/NA	Water	8260C	
LCS 180-137048/9	Lab Control Sample	Total/NA	Water	8260C	
MB 180-137048/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 137218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42353-11 - DL	HD-COD-SW-17-0/1-0	Total/NA	Water	8260C	
180-42353-22	HD-MW-145A-0/1-0	Total/NA	Water	8260C	
180-42353-25	HD-MW-93S-0/1-0	Total/NA	Water	8260C	
LCS 180-137218/9	Lab Control Sample	Total/NA	Water	8260C	
MB 180-137218/6	Method Blank	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 136546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42353-1	HD-COD-SW-7-0/1-0	Total/NA	Water	300.0	
180-42353-2	HD-COD-SW-6-0/1-0	Total/NA	Water	300.0	
180-42353-3	HD-COD-SW-8-0/1-0	Total/NA	Water	300.0	
180-42353-4	HD-COD-SW-9-0/1-0	Total/NA	Water	300.0	
180-42353-5	HD-COD-SW-10-0/1-0	Total/NA	Water	300.0	
180-42353-6	HD-COD-SW-11-0/1-0	Total/NA	Water	300.0	
180-42353-7	HD-COD-SW-12-0/1-0	Total/NA	Water	300.0	
180-42353-8	HD-COD-SW-13-0/1-0	Total/NA	Water	300.0	
180-42353-9	HD-COD-SW-15-0/1-0	Total/NA	Water	300.0	
180-42353-10	HD-COD-SW-16-0/1-0	Total/NA	Water	300.0	
180-42353-11	HD-COD-SW-17-0/1-0	Total/NA	Water	300.0	
180-42353-12	HD-COD-SW-20-0/1-0	Total/NA	Water	300.0	
180-42353-13	HD-COD-SW-26-0/1-0	Total/NA	Water	300.0	
180-42353-14	HD-COD-SW-27-0/1-0	Total/NA	Water	300.0	
180-42353-15	HD-COD-SW-28-0/1-0	Total/NA	Water	300.0	
180-42353-16	HD-COD-SW-29-0/1-0	Total/NA	Water	300.0	
180-42353-19	HD-QC1-0/1-1	Total/NA	Water	300.0	
180-42353-20	HD-MW-99S-0/1-0	Total/NA	Water	300.0	
180-42353-20 MS	HD-MW-99S-0/1-0	Total/NA	Water	300.0	
180-42353-20 MSD	HD-MW-99S-0/1-0	Total/NA	Water	300.0	
180-42353-21	HD-MW-99D-0/1-0	Total/NA	Water	300.0	
180-42353-21 MS	HD-MW-99D-0/1-0	Total/NA	Water	300.0	
180-42353-21 MSD	HD-MW-99D-0/1-0	Total/NA	Water	300.0	
180-42353-22	HD-MW-145A-0/1-0	Total/NA	Water	300.0	
180-42353-23	HD-MW-100S-0/1-0	Total/NA	Water	300.0	
180-42353-24	HD-MW-100I-0/1-0	Total/NA	Water	300.0	
180-42353-24 MS	HD-MW-100I-0/1-0	Total/NA	Water	300.0	
180-42353-24 MSD	HD-MW-100I-0/1-0	Total/NA	Water	300.0	
180-42353-25	HD-MW-93S-0/1-0	Total/NA	Water	300.0	
180-42353-26	HD-MW-93D-0/1-0	Total/NA	Water	300.0	
LCS 180-136546/45	Lab Control Sample	Total/NA	Water	300.0	
LCS 180-136546/5	Lab Control Sample	Total/NA	Water	300.0	
MB 180-136546/46	Method Blank	Total/NA	Water	300.0	
MB 180-136546/6	Method Blank	Total/NA	Water	300.0	

Metals

Prep Batch: 136963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42353-1	HD-COD-SW-7-0/1-0	Total/NA	Water	3005A	
180-42353-2	HD-COD-SW-6-0/1-0	Total/NA	Water	3005A	
180-42353-3	HD-COD-SW-8-0/1-0	Total/NA	Water	3005A	
180-42353-4	HD-COD-SW-9-0/1-0	Total/NA	Water	3005A	
180-42353-5	HD-COD-SW-10-0/1-0	Total/NA	Water	3005A	
180-42353-6	HD-COD-SW-11-0/1-0	Total/NA	Water	3005A	
180-42353-7	HD-COD-SW-12-0/1-0	Total/NA	Water	3005A	
180-42353-8	HD-COD-SW-13-0/1-0	Total/NA	Water	3005A	
180-42353-9	HD-COD-SW-15-0/1-0	Total/NA	Water	3005A	
180-42353-10	HD-COD-SW-16-0/1-0	Total/NA	Water	3005A	
180-42353-11	HD-COD-SW-17-0/1-0	Total/NA	Water	3005A	

Metals (Continued)

Prep Batch: 136963 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42353-12	HD-COD-SW-20-0/1-0	Total/NA	Water	3005A	
180-42353-13	HD-COD-SW-26-0/1-0	Total/NA	Water	3005A	
180-42353-14	HD-COD-SW-27-0/1-0	Total/NA	Water	3005A	
180-42353-15	HD-COD-SW-28-0/1-0	Total/NA	Water	3005A	
180-42353-16	HD-COD-SW-29-0/1-0	Total/NA	Water	3005A	
180-42353-19	HD-QC1-0/1-1	Total/NA	Water	3005A	
180-42353-20	HD-MW-99S-0/1-0	Total/NA	Water	3005A	
180-42353-20 MS	HD-MW-99S-0/1-0	Total/NA	Water	3005A	
180-42353-20 MSD	HD-MW-99S-0/1-0	Total/NA	Water	3005A	
180-42353-20 PDS	HD-MW-99S-0/1-0	Total/NA	Water	3005A	
180-42353-20 SD	HD-MW-99S-0/1-0	Total/NA	Water	3005A	
180-42353-21	HD-MW-99D-0/1-0	Total/NA	Water	3005A	
180-42353-22	HD-MW-145A-0/1-0	Total/NA	Water	3005A	
LCS 180-136963/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 180-136963/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 137092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42353-23	HD-MW-100S-0/1-0	Total/NA	Water	3005A	
180-42353-23 MS	HD-MW-100S-0/1-0	Total/NA	Water	3005A	
180-42353-23 MSD	HD-MW-100S-0/1-0	Total/NA	Water	3005A	
180-42353-23 PDS	HD-MW-100S-0/1-0	Total/NA	Water	3005A	
180-42353-23 SD	HD-MW-100S-0/1-0	Total/NA	Water	3005A	
180-42353-24	HD-MW-100I-0/1-0	Total/NA	Water	3005A	
180-42353-25	HD-MW-93S-0/1-0	Total/NA	Water	3005A	
180-42353-26	HD-MW-93D-0/1-0	Total/NA	Water	3005A	
LCS 180-137092/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 180-137092/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 137424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42353-1	HD-COD-SW-7-0/1-0	Total/NA	Water	6020A	136963
180-42353-2	HD-COD-SW-6-0/1-0	Total/NA	Water	6020A	136963
180-42353-3	HD-COD-SW-8-0/1-0	Total/NA	Water	6020A	136963
180-42353-4	HD-COD-SW-9-0/1-0	Total/NA	Water	6020A	136963
180-42353-5	HD-COD-SW-10-0/1-0	Total/NA	Water	6020A	136963
180-42353-6	HD-COD-SW-11-0/1-0	Total/NA	Water	6020A	136963
180-42353-7	HD-COD-SW-12-0/1-0	Total/NA	Water	6020A	136963
180-42353-8	HD-COD-SW-13-0/1-0	Total/NA	Water	6020A	136963
180-42353-9	HD-COD-SW-15-0/1-0	Total/NA	Water	6020A	136963
180-42353-10	HD-COD-SW-16-0/1-0	Total/NA	Water	6020A	136963
180-42353-11	HD-COD-SW-17-0/1-0	Total/NA	Water	6020A	136963
180-42353-12	HD-COD-SW-20-0/1-0	Total/NA	Water	6020A	136963
180-42353-13	HD-COD-SW-26-0/1-0	Total/NA	Water	6020A	136963
180-42353-14	HD-COD-SW-27-0/1-0	Total/NA	Water	6020A	136963
180-42353-15	HD-COD-SW-28-0/1-0	Total/NA	Water	6020A	136963
180-42353-16	HD-COD-SW-29-0/1-0	Total/NA	Water	6020A	136963
180-42353-19	HD-QC1-0/1-1	Total/NA	Water	6020A	136963
180-42353-20	HD-MW-99S-0/1-0	Total/NA	Water	6020A	136963
180-42353-20 MS	HD-MW-99S-0/1-0	Total/NA	Water	6020A	136963
180-42353-20 MSD	HD-MW-99S-0/1-0	Total/NA	Water	6020A	136963

Metals (Continued)

Analysis Batch: 137424 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42353-20 PDS	HD-MW-99S-0/1-0	Total/NA	Water	6020A	136963
180-42353-20 SD	HD-MW-99S-0/1-0	Total/NA	Water	6020A	136963
180-42353-21	HD-MW-99D-0/1-0	Total/NA	Water	6020A	136963
180-42353-22	HD-MW-145A-0/1-0	Total/NA	Water	6020A	136963
180-42353-23	HD-MW-100S-0/1-0	Total/NA	Water	6020A	137092
180-42353-23 MS	HD-MW-100S-0/1-0	Total/NA	Water	6020A	137092
180-42353-23 MSD	HD-MW-100S-0/1-0	Total/NA	Water	6020A	137092
180-42353-23 PDS	HD-MW-100S-0/1-0	Total/NA	Water	6020A	137092
180-42353-23 SD	HD-MW-100S-0/1-0	Total/NA	Water	6020A	137092
180-42353-24	HD-MW-100I-0/1-0	Total/NA	Water	6020A	137092
180-42353-25	HD-MW-93S-0/1-0	Total/NA	Water	6020A	137092
180-42353-26	HD-MW-93D-0/1-0	Total/NA	Water	6020A	137092
CRI 180-137424/7	DL		Water	6020A	
CRI 180-137424/80	DL		Water	6020A	
ICSA 180-137424/8	ICS		Water	6020A	
ICSAB 180-137424/9	ICS		Water	6020A	
LCS 180-136963/2-A	Lab Control Sample	Total Recoverable	Water	6020A	136963
LCS 180-137092/2-A	Lab Control Sample	Total Recoverable	Water	6020A	137092
MB 180-136963/1-A	Method Blank	Total Recoverable	Water	6020A	136963
MB 180-137092/1-A	Method Blank	Total Recoverable	Water	6020A	137092

General Chemistry

Analysis Batch: 137006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42353-1	HD-COD-SW-7-0/1-0	Total/NA	Water	SM 2320B	
180-42353-2	HD-COD-SW-6-0/1-0	Total/NA	Water	SM 2320B	
180-42353-2 DU	HD-COD-SW-6-0/1-0	Total/NA	Water	SM 2320B	
180-42353-3	HD-COD-SW-8-0/1-0	Total/NA	Water	SM 2320B	
180-42353-4	HD-COD-SW-9-0/1-0	Total/NA	Water	SM 2320B	
180-42353-5	HD-COD-SW-10-0/1-0	Total/NA	Water	SM 2320B	
180-42353-6	HD-COD-SW-11-0/1-0	Total/NA	Water	SM 2320B	
180-42353-7	HD-COD-SW-12-0/1-0	Total/NA	Water	SM 2320B	
180-42353-8	HD-COD-SW-13-0/1-0	Total/NA	Water	SM 2320B	
180-42353-9	HD-COD-SW-15-0/1-0	Total/NA	Water	SM 2320B	
180-42353-10	HD-COD-SW-16-0/1-0	Total/NA	Water	SM 2320B	
180-42353-11	HD-COD-SW-17-0/1-0	Total/NA	Water	SM 2320B	
180-42353-11 DU	HD-COD-SW-17-0/1-0	Total/NA	Water	SM 2320B	
180-42353-12	HD-COD-SW-20-0/1-0	Total/NA	Water	SM 2320B	
180-42353-13	HD-COD-SW-26-0/1-0	Total/NA	Water	SM 2320B	
180-42353-14	HD-COD-SW-27-0/1-0	Total/NA	Water	SM 2320B	
180-42353-15	HD-COD-SW-28-0/1-0	Total/NA	Water	SM 2320B	
180-42353-16	HD-COD-SW-29-0/1-0	Total/NA	Water	SM 2320B	
180-42353-19	HD-QC1-0/1-1	Total/NA	Water	SM 2320B	
180-42353-20	HD-MW-99S-0/1-0	Total/NA	Water	SM 2320B	
180-42353-20 DU	HD-MW-99S-0/1-0	Total/NA	Water	SM 2320B	
180-42353-21	HD-MW-99D-0/1-0	Total/NA	Water	SM 2320B	
180-42353-22	HD-MW-145A-0/1-0	Total/NA	Water	SM 2320B	
180-42353-23	HD-MW-100S-0/1-0	Total/NA	Water	SM 2320B	
180-42353-24	HD-MW-100I-0/1-0	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 137006 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42353-25	HD-MW-93S-0/1-0	Total/NA	Water	SM 2320B	
180-42353-26	HD-MW-93D-0/1-0	Total/NA	Water	SM 2320B	
LCS 180-137006/1	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 180-137006/26	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 180-137006/2	Method Blank	Total/NA	Water	SM 2320B	
MB 180-137006/27	Method Blank	Total/NA	Water	SM 2320B	

Client Sample ID: HD-COD-SW-7-0/1-0

Lab Sample ID: 180-42353-1

Date Collected: 03/24/15 12:05

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	136938	03/30/15 16:39	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		136546	03/25/15 18:27	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 15:35	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-COD-SW-6-0/1-0

Lab Sample ID: 180-42353-2

Date Collected: 03/24/15 10:40

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	136938	03/30/15 17:03	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		136546	03/25/15 17:00	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 15:39	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-COD-SW-8-0/1-0

Lab Sample ID: 180-42353-3

Date Collected: 03/24/15 09:10

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	136938	03/30/15 17:27	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		136546	03/25/15 15:06	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 15:44	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-COD-SW-9-0/1-0

Lab Sample ID: 180-42353-4

Date Collected: 03/24/15 12:20

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	136938	03/30/15 17:51	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		136546	03/26/15 00:31	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 15:48	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-COD-SW-10-0/1-0

Lab Sample ID: 180-42353-5

Date Collected: 03/24/15 09:41

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	136938	03/30/15 18:15	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		136546	03/26/15 00:48	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 15:52	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-COD-SW-11-0/1-0

Lab Sample ID: 180-42353-6

Date Collected: 03/24/15 13:15

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	136938	03/30/15 18:39	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		136546	03/25/15 22:47	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 15:56	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-COD-SW-12-0/1-0

Lab Sample ID: 180-42353-7

Date Collected: 03/24/15 13:25

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	136938	03/30/15 19:03	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		136546	03/26/15 01:05	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 16:01	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-COD-SW-13-0/1-0

Lab Sample ID: 180-42353-8

Date Collected: 03/24/15 09:32

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	136938	03/30/15 19:27	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		136546	03/25/15 17:17	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 16:05	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-COD-SW-15-0/1-0

Lab Sample ID: 180-42353-9

Date Collected: 03/24/15 13:45

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	136938	03/30/15 19:51	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		136546	03/26/15 03:58	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 16:21	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-COD-SW-16-0/1-0

Lab Sample ID: 180-42353-10

Date Collected: 03/24/15 10:05

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	136938	03/30/15 20:14	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		136546	03/25/15 17:35	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 16:25	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-COD-SW-17-0/1-0

Lab Sample ID: 180-42353-11

Date Collected: 03/24/15 10:15

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	137048	03/31/15 15:17	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	8260C	DL	3	5 mL	5 mL	137218	04/01/15 16:11	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	300.0		1	1 mL		136546	03/26/15 04:33	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 16:30	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-COD-SW-20-0/1-0

Lab Sample ID: 180-42353-12

Date Collected: 03/24/15 10:50

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	136938	03/30/15 21:02	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		136546	03/25/15 17:52	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 16:34	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-COD-SW-26-0/1-0

Lab Sample ID: 180-42353-13

Date Collected: 03/24/15 11:45

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	136938	03/30/15 21:27	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		136546	03/25/15 18:09	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 16:38	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-COD-SW-27-0/1-0

Lab Sample ID: 180-42353-14

Date Collected: 03/24/15 13:55

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	136954	03/30/15 20:35	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	300.0		1	1 mL		136546	03/26/15 01:22	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 16:42	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-COD-SW-28-0/1-0

Lab Sample ID: 180-42353-15

Date Collected: 03/24/15 13:00

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	136954	03/30/15 21:00	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	300.0		1	1 mL		136546	03/26/15 03:06	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 16:47	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-COD-SW-29-0/1-0

Lab Sample ID: 180-42353-16

Date Collected: 03/24/15 09:00

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	136954	03/30/15 21:24	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	300.0		1	1 mL		136546	03/25/15 14:49	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 16:51	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

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

Lab Sample ID: 180-42353-17

Date Collected: 03/24/15 12:00

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	136954	03/30/15 19:23	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-QC2-0/1-2

Lab Sample ID: 180-42353-18

Date Collected: 03/24/15 12:01

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	136954	03/30/15 22:12	DLF	TAL PIT
	Instrument ID: CHHP5									

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

Lab Sample ID: 180-42353-19

Date Collected: 03/24/15 08:00

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	137048	03/31/15 14:53	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	300.0		1	1 mL		136546	03/25/15 14:34	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 16:55	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

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

Lab Sample ID: 180-42353-20

Date Collected: 03/24/15 09:15

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	137048	03/31/15 12:04	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	300.0		1	1 mL		136546	03/25/15 21:20	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 16:59	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

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

Lab Sample ID: 180-42353-21

Date Collected: 03/24/15 13:05

Matrix: Water

Date Received: 03/25/15 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		5	5 mL	5 mL	136954	03/30/15 23:01	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	300.0		1	1 mL		136546	03/26/15 02:14	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 17:32	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:18	CLL	TAL PIT
	Instrument ID: NOEQUIP									

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

Lab Sample ID: 180-42353-22

Date Collected: 03/24/15 10:20

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	137218	04/01/15 16:35	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	300.0		1	1 mL		136546	03/26/15 03:24	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	136963	03/30/15 11:21	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 17:37	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:51	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-MW-100S-0/1-0

Lab Sample ID: 180-42353-23

Date Collected: 03/24/15 14:45

Matrix: Water

Date Received: 03/25/15 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		5	5 mL	5 mL	137048	03/31/15 16:30	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	300.0		1	1 mL		136546	03/26/15 03:41	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	137092	03/31/15 11:18	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 17:53	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:51	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-MW-100I-0/1-0

Lab Sample ID: 180-42353-24

Date Collected: 03/24/15 14:00

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	137048	03/31/15 16:54	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	300.0		1	1 mL		136546	03/26/15 05:42	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	137092	03/31/15 11:18	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 18:26	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:51	CLL	TAL PIT
	Instrument ID: NOEQUIP									

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

Lab Sample ID: 180-42353-25

Date Collected: 03/24/15 14:35

Matrix: Water

Date Received: 03/25/15 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		2	5 mL	5 mL	137218	04/01/15 16:59	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	300.0		1	1 mL		136546	03/26/15 06:34	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	137092	03/31/15 11:18	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 18:30	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:51	CLL	TAL PIT
	Instrument ID: NOEQUIP									

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

Lab Sample ID: 180-42353-26

Date Collected: 03/24/15 11:22

Matrix: Water

Date Received: 03/25/15 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	5 mL	5 mL	137048	03/31/15 18:06	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	300.0		1	1 mL		136546	03/25/15 23:04	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	137092	03/31/15 11:18	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	137424	04/02/15 18:35	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137006	03/31/15 05:51	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

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

Analyst References:

Lab: TAL PIT

Batch Type: Prep

AB1 = Ashwin Baikadi

Batch Type: Analysis

CLL = Cheryl Loheyde

CNF = Caitlin Ferguson

DLF = Donald Ferguson

MJH = Matthew Hartman

Certification Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42353-1

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: 180-42353-1

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: 180-42353-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-42353-1	HD-COD-SW-7-0/1-0	Water	03/24/15 12:05	03/25/15 09:30
180-42353-2	HD-COD-SW-6-0/1-0	Water	03/24/15 10:40	03/25/15 09:30
180-42353-3	HD-COD-SW-8-0/1-0	Water	03/24/15 09:10	03/25/15 09:30
180-42353-4	HD-COD-SW-9-0/1-0	Water	03/24/15 12:20	03/25/15 09:30
180-42353-5	HD-COD-SW-10-0/1-0	Water	03/24/15 09:41	03/25/15 09:30
180-42353-6	HD-COD-SW-11-0/1-0	Water	03/24/15 13:15	03/25/15 09:30
180-42353-7	HD-COD-SW-12-0/1-0	Water	03/24/15 13:25	03/25/15 09:30
180-42353-8	HD-COD-SW-13-0/1-0	Water	03/24/15 09:32	03/25/15 09:30
180-42353-9	HD-COD-SW-15-0/1-0	Water	03/24/15 13:45	03/25/15 09:30
180-42353-10	HD-COD-SW-16-0/1-0	Water	03/24/15 10:05	03/25/15 09:30
180-42353-11	HD-COD-SW-17-0/1-0	Water	03/24/15 10:15	03/25/15 09:30
180-42353-12	HD-COD-SW-20-0/1-0	Water	03/24/15 10:50	03/25/15 09:30
180-42353-13	HD-COD-SW-26-0/1-0	Water	03/24/15 11:45	03/25/15 09:30
180-42353-14	HD-COD-SW-27-0/1-0	Water	03/24/15 13:55	03/25/15 09:30
180-42353-15	HD-COD-SW-28-0/1-0	Water	03/24/15 13:00	03/25/15 09:30
180-42353-16	HD-COD-SW-29-0/1-0	Water	03/24/15 09:00	03/25/15 09:30
180-42353-17	HD-QC1-0/1-2	Water	03/24/15 12:00	03/25/15 09:30
180-42353-18	HD-QC2-0/1-2	Water	03/24/15 12:01	03/25/15 09:30
180-42353-19	HD-QC1-0/1-1	Water	03/24/15 08:00	03/25/15 09:30
180-42353-20	HD-MW-99S-0/1-0	Water	03/24/15 09:15	03/25/15 09:30
180-42353-21	HD-MW-99D-0/1-0	Water	03/24/15 13:05	03/25/15 09:30
180-42353-22	HD-MW-145A-0/1-0	Water	03/24/15 10:20	03/25/15 09:30
180-42353-23	HD-MW-100S-0/1-0	Water	03/24/15 14:45	03/25/15 09:30
180-42353-24	HD-MW-100I-0/1-0	Water	03/24/15 14:00	03/25/15 09:30
180-42353-25	HD-MW-93S-0/1-0	Water	03/24/15 14:35	03/25/15 09:30
180-42353-26	HD-MW-93D-0/1-0	Water	03/24/15 11:22	03/25/15 09:30

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 135593

Lab Sample ID: IC 180-135593/4 Client Sample ID:

Date Analyzed: 03/16/15 12:41 Lab File ID: 50316004.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.25	Baseline	fergusond	03/17/15 09:42

Lab Sample ID: ICIS 180-135593/5 Client Sample ID:

Date Analyzed: 03/16/15 13:05 Lab File ID: 50316005.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.06	Peak Tail	fergusond	03/17/15 09:27

Lab Sample ID: IC 180-135593/6 Client Sample ID:

Date Analyzed: 03/16/15 13:29 Lab File ID: 50316006.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isobutyl alcohol	6.95	Peak Tail	fergusond	03/17/15 09:45

Lab Sample ID: IC 180-135593/7 Client Sample ID:

Date Analyzed: 03/16/15 13:53 Lab File ID: 50316007.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isobutyl alcohol	6.94	Peak Tail	fergusond	03/17/15 09:48

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 135593

Lab Sample ID: IC 180-135593/13 Client Sample ID:

Date Analyzed: 03/16/15 16:17 Lab File ID: 50316013.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.77	Poor chromatography	fergusond	03/17/15 10:01
Acrolein	3.25	Poor chromatography	fergusond	03/17/15 10:01
2-Hexanone	9.66	Poor chromatography	fergusond	03/17/15 10:01
trans-1,4-Dichloro-2-butene	11.74	Poor chromatography	fergusond	03/17/15 10:01

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 136954

Lab Sample ID: CCVIS 180-136954/2 Client Sample ID:

Date Analyzed: 03/30/15 11:52 Lab File ID: 50330002.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.06	Peak Tail	fergusond	03/30/15 12:20

Lab Sample ID: LCS 180-136954/10 Client Sample ID:

Date Analyzed: 03/30/15 14:33 Lab File ID: 50330010.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.06	Peak Tail	fergusond	03/30/15 14:58

Lab Sample ID: 180-42353-14 Client Sample ID: HD-COD-SW-27-0/1-0

Date Analyzed: 03/30/15 20:35 Lab File ID: 50330025.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.50	Split Peak	fergusond	03/31/15 08:48

Lab Sample ID: 180-42353-16 Client Sample ID: HD-COD-SW-29-0/1-0

Date Analyzed: 03/30/15 21:24 Lab File ID: 50330027.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	7.67	Split Peak	fergusond	03/31/15 08:52

Lab Sample ID: 180-42353-21 Client Sample ID: HD-MW-99D-0/1-0

Date Analyzed: 03/30/15 23:01 Lab File ID: 50330031.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.37	Split Peak	fergusond	03/31/15 09:15

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 137048

Lab Sample ID: CCVIS 180-137048/2 Client Sample ID:

Date Analyzed: 03/31/15 10:08 Lab File ID: 50331002.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.06	Peak Tail	fergusond	03/31/15 10:45

Lab Sample ID: 180-42353-20 Client Sample ID: HD-MW-99S-0/1-0

Date Analyzed: 03/31/15 12:04 Lab File ID: 50331007.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.35	Split Peak	fergusond	03/31/15 14:07

Lab Sample ID: LCS 180-137048/9 Client Sample ID:

Date Analyzed: 03/31/15 12:53 Lab File ID: 50331009.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.06	Peak Tail	fergusond	03/31/15 13:50

Lab Sample ID: 180-42353-20 MS Client Sample ID: HD-MW-99S-0/1-0 MS

Date Analyzed: 03/31/15 13:17 Lab File ID: 50331010.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.07	Peak Tail	fergusond	03/31/15 14:11

Lab Sample ID: 180-42353-20 MSD Client Sample ID: HD-MW-99S-0/1-0 MSD

Date Analyzed: 03/31/15 13:41 Lab File ID: 50331011.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.06	Peak Tail	fergusond	03/31/15 14:13

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 137048

Lab Sample ID: 180-42353-24 Client Sample ID: HD-MW-100I-0/1-0

Date Analyzed: 03/31/15 16:54 Lab File ID: 50331019.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.37	Split Peak	fergusond	04/01/15 08:01

Lab Sample ID: 180-42353-26 Client Sample ID: HD-MW-93D-0/1-0

Date Analyzed: 03/31/15 18:06 Lab File ID: 50331022.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethane	5.17	Split Peak	fergusond	04/01/15 08:08

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 137218

Lab Sample ID: CCVIS 180-137218/2 Client Sample ID:

Date Analyzed: 04/01/15 11:25 Lab File ID: 50401002.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	3.25	Peak Tail	fergusond	04/01/15 12:03

Lab Sample ID: LCS 180-137218/9 Client Sample ID:

Date Analyzed: 04/01/15 14:11 Lab File ID: 50401009.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.06	Peak Tail	fergusond	04/01/15 14:45

Lab Sample ID: 180-42353-11 DL Client Sample ID: HD-COD-SW-17-0/1-0 DL

Date Analyzed: 04/01/15 16:11 Lab File ID: 50401014.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.18	Poor chromatography	fergusond	04/02/15 07:59

Lab Sample ID: 180-42353-22 Client Sample ID: HD-MW-145A-0/1-0

Date Analyzed: 04/01/15 16:35 Lab File ID: 50401015.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl tert-butyl ether	4.62	Split Peak	fergusond	04/02/15 08:01
Chloroform	6.35	Split Peak	fergusond	04/02/15 08:01

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 131929

Lab Sample ID: IC 180-131929/6 Client Sample ID:

Date Analyzed: 01/28/15 13:58 Lab File ID: 60128006.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.25	Poor chromatography	fergusond	01/29/15 10:25
Chloroethane	2.39	Poor chromatography	fergusond	01/29/15 10:25
Acrylonitrile	4.55	Poor chromatography	fergusond	01/29/15 10:25
Methyl tert-butyl ether	4.61	Split Peak	fergusond	01/29/15 10:25
1,1-Dichloroethane	5.25	Split Peak	fergusond	01/29/15 10:25
1,1,1,2-Tetrachloroethane	10.56	Poor chromatography	fergusond	01/29/15 10:25

Lab Sample ID: IC 180-131929/7 Client Sample ID:

Date Analyzed: 01/28/15 14:21 Lab File ID: 60128007.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorofluoromethane	2.68	Baseline	fergusond	01/29/15 10:28
1,4-Dioxane	8.08	Peak Tail	fergusond	01/29/15 10:31
2-Hexanone	9.70	Baseline	fergusond	01/29/15 10:31

Lab Sample ID: ICIS 180-131929/8 Client Sample ID:

Date Analyzed: 01/28/15 14:45 Lab File ID: 60128008.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isobutyl alcohol	6.94	Peak Tail	fergusond	01/29/15 11:08

Lab Sample ID: IC 180-131929/9 Client Sample ID:

Date Analyzed: 01/28/15 15:09 Lab File ID: 60128009.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.24	Peak Tail	fergusond	01/29/15 10:51
1,4-Dioxane	8.07	Poor chromatography	fergusond	01/29/15 10:54

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 131929

Lab Sample ID: IC 180-131929/10 Client Sample ID:

Date Analyzed: 01/28/15 15:33 Lab File ID: 60128010.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.08	Peak Tail	fergusond	01/29/15 10:53

Lab Sample ID: IC 180-131929/11 Client Sample ID:

Date Analyzed: 01/28/15 15:57 Lab File ID: 60128011.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.08	Poor chromatography	fergusond	01/29/15 10:59

Lab Sample ID: IC 180-131929/12 Client Sample ID:

Date Analyzed: 01/28/15 16:21 Lab File ID: 60128012.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.06	Peak Tail	fergusond	01/29/15 11:12

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 136938

Lab Sample ID: 180-42353-1 Client Sample ID: HD-COD-SW-7-0/1-0

Date Analyzed: 03/30/15 16:39 Lab File ID: 60330017.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.48	Poor chromatography	fergusond	03/31/15 10:16

Lab Sample ID: 180-42353-2 Client Sample ID: HD-COD-SW-6-0/1-0

Date Analyzed: 03/30/15 17:03 Lab File ID: 60330018.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.46	Poor chromatography	fergusond	03/31/15 10:17

Lab Sample ID: 180-42353-3 Client Sample ID: HD-COD-SW-8-0/1-0

Date Analyzed: 03/30/15 17:27 Lab File ID: 60330019.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.47	Poor chromatography	fergusond	03/31/15 10:18

Lab Sample ID: 180-42353-4 Client Sample ID: HD-COD-SW-9-0/1-0

Date Analyzed: 03/30/15 17:51 Lab File ID: 60330020.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.46	Poor chromatography	fergusond	03/31/15 10:20

Lab Sample ID: 180-42353-6 Client Sample ID: HD-COD-SW-11-0/1-0

Date Analyzed: 03/30/15 18:39 Lab File ID: 60330022.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.48	Split Peak	fergusond	03/31/15 10:23
Chloroform	6.43	Split Peak	fergusond	03/31/15 10:23

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 136938

Lab Sample ID: 180-42353-9 Client Sample ID: HD-COD-SW-15-0/1-0

Date Analyzed: 03/30/15 19:51 Lab File ID: 60330025.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethane	5.24	Peak Not Found	fergusond	03/31/15 10:53

Lab Sample ID: 180-42353-12 Client Sample ID: HD-COD-SW-20-0/1-0

Date Analyzed: 03/30/15 21:02 Lab File ID: 60330028.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.48	Split Peak	fergusond	03/31/15 11:04
Toluene	9.07	Split Peak	fergusond	03/31/15 11:04

Lab Sample ID: 180-42353-13 Client Sample ID: HD-COD-SW-26-0/1-0

Date Analyzed: 03/30/15 21:27 Lab File ID: 60330029.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	5.98	Split Peak	fergusond	03/31/15 11:06
Toluene	9.04	Split Peak	fergusond	03/31/15 11:06

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

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.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
icccv_01200	03/26/15	03/25/15	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_01230	03/26/15	03/25/15	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
							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
							Nitrate as N	2.5 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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
							Chloride	2500 ug/mL
							Fluoride	125 ug/mL
							Nitrate as N	125 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Orthophosphate as P	125 ug/mL
							Sulfate	2500 ug/mL
..ICPRIMARYSTDB_00008	10/08/15	HIGH-PURITY STDS, Lot 1427626			(Purchased Reagent)		Nitrite as N	125 ug/mL
ICSTDL6_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
.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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00063	04/30/15	03/31/15	HNO3, Lot 1191081	250 mL	MMSCRI-1B_00004	1 mL	Calcium	0.1 ppm
							Magnesium	0.1 ppm
							Potassium	0.1 ppm
							Sodium	0.1 ppm
.MMSCRI-1B_00004	10/01/15	Inorganic Ventures, Lot H2-MEB549023			(Purchased Reagent)		Calcium	25 ppm
							Magnesium	25 ppm
							Potassium	25 ppm
							Sodium	25 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
							Mn	0.0225 ppm
							Ni	0.02 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Potassium	100 ppm
							Sodium	100 ppm

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
MTAPITTMSA_00023	12/01/15	INORGANIC VENTURES, Lot H2-MEB532044			(Purchased Reagent)		Calcium	5000 ug/mL
							Magnesium	5000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00027	01/30/15	12/30/14	Methanol, Lot 85233	10 mL	VOA8260INTRES_00051	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_00051	02/01/18	Restek, Lot A093504			(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
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_00029	01/30/15	12/30/14	Methanol, Lot 85233	100 mL	VOA8260SURRES_00075	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_00075	01/31/19	Restek, Lot A0101000			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VOA8260SURR_00032	04/10/15	03/10/15	Methanol, Lot 85233	100 mL	VOA8260SURRES_00063	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_00063	01/31/19	Restek, Lot A0100424			(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_00109	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

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	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,4-Dioxane	500 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Ethylbenzene	25 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylene Chloride	25 ug/mL
							Styrene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
							Xylenes, Total	50 ug/mL
.VOA8260GAS2ND_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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoform	200 ug/mL
							Carbon disulfide	200 ug/mL
							Carbon tetrachloride	200 ug/mL
							Chlorobenzene	200 ug/mL
							Chloroform	200 ug/mL
							cis-1,2-Dichloroethene	200 ug/mL
							cis-1,3-Dichloropropene	200 ug/mL
							Dibromochloromethane	200 ug/mL
							Ethylbenzene	200 ug/mL
							Methyl tert-butyl ether	200 ug/mL
							Methylene Chloride	200 ug/mL
							Styrene	200 ug/mL
							Tetrachloroethene	200 ug/mL
							Toluene	200 ug/mL
							trans-1,2-Dichloroethene	200 ug/mL
							trans-1,3-Dichloropropene	200 ug/mL
							Trichloroethene	200 ug/mL
							Xylenes, Total	400 ug/mL
..VOA8260MEGA2_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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	2000 ug/mL
							Xylenes, Total	4000 ug/mL
VOA8260VOAPRI_00097	01/28/15	01/21/15	Methanol, Lot 85233	8 mL	VOA8260GAS1ST_00081	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Dichlorofluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00094	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
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Dibromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexane	25 ug/mL
							Iodomethane	25 ug/mL
							Isobutyl alcohol	625 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	125 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							n-Butylbenzene	25 ug/mL
							n-Heptane	25 ug/mL
							N-Propylbenzene	25 ug/mL
							Naphthalene	25 ug/mL
							o-Xylene	25 ug/mL
							sec-Butylbenzene	25 ug/mL
							Styrene	25 ug/mL
							tert-Butylbenzene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Tetrahydrofuran	50 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							trans-1,4-Dichloro-2-butene	25 ug/mL
							Trichloroethene	25 ug/mL
.VOA8260GAS1ST_00081	09/30/16		Restek, Lot A0105755		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Butadiene	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Dichlorofluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.VOA8260VOAPRI_00094	01/31/15	12/31/14	Methanol, Lot 85233	10 mL	VOA8260KET1ST_00030	0.2 mL	2-Butanone (MEK)	200 ug/mL
							2-Hexanone	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone (MIBK)	200 ug/mL
							Acetone	200 ug/mL
					VOA8260MEGA1_00025	1 mL	1,1,1,2-Tetrachloroethane	200 ug/mL
							1,1,1-Trichloroethane	200 ug/mL
							1,1,2,2-Tetrachloroethane	200 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ug/mL
							1,1,2-Trichloroethane	200 ug/mL
							1,1-Dichloroethane	200 ug/mL
							1,1-Dichloroethene	200 ug/mL
							1,1-Dichloropropene	200 ug/mL
							1,2,3-Trichlorobenzene	200 ug/mL
							1,2,3-Trichloropropane	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2,4-Trimethylbenzene	200 ug/mL
							1,2-Dibromo-3-Chloropropane	200 ug/mL
							1,2-Dibromoethane (EDB)	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Dichloroethane	200 ug/mL
							1,2-Dichloropropane	200 ug/mL
							1,3,5-Trimethylbenzene	200 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dichloropropane	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	4000 ug/mL
							2,2-Dichloropropane	200 ug/mL
							2-Chlorotoluene	200 ug/mL
							2-Methyl-2-propanol	2000 ug/mL
							3-Chloro-1-propene	200 ug/mL
							4-Chlorotoluene	200 ug/mL
							4-Isopropyltoluene	200 ug/mL
							Acrylonitrile	2000 ug/mL
							Benzene	200 ug/mL
							Bromobenzene	200 ug/mL
							Bromochloromethane	200 ug/mL
							Bromodichloromethane	200 ug/mL
							Bromoform	200 ug/mL
							Carbon disulfide	200 ug/mL
							Carbon tetrachloride	200 ug/mL
							Chlorobenzene	200 ug/mL
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexane	200 ug/mL
							Iodomethane	200 ug/mL
							Isobutyl alcohol	5000 ug/mL
							Isopropylbenzene	200 ug/mL
							m-Xylene & p-Xylene	200 ug/mL
							Methyl acetate	1000 ug/mL
							Methyl tert-butyl ether	200 ug/mL
							Methylcyclohexane	200 ug/mL
							Methylene Chloride	200 ug/mL
							n-Butylbenzene	200 ug/mL
							n-Heptane	200 ug/mL
							N-Propylbenzene	200 ug/mL
							Naphthalene	200 ug/mL
							o-Xylene	200 ug/mL
							sec-Butylbenzene	200 ug/mL
							Styrene	200 ug/mL
							tert-Butylbenzene	200 ug/mL
							Tetrachloroethene	200 ug/mL
							Tetrahydrofuran	400 ug/mL
							Toluene	200 ug/mL
							trans-1,2-Dichloroethene	200 ug/mL
							trans-1,3-Dichloropropene	200 ug/mL
							trans-1,4-Dichloro-2-butene	200 ug/mL
							Trichloroethene	200 ug/mL
..VOA8260KET1ST_00030	02/28/16		Restek, Lot A093365		(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
..VOA8260MEGA1_00025	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrahydrofuran	4000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
							Trichloroethene	2000 ug/mL
VOA8260VOAPRI_00105	03/20/15	03/13/15	Methanol, Lot 85233	8 mL	VOA8260GAS1ST_00091	0.08 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Dichlorofluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00101	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
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	25 ug/mL
							Bromobenzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Dibromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexane	25 ug/mL
							Iodomethane	25 ug/mL
							Isobutyl alcohol	625 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	125 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							n-Butylbenzene	25 ug/mL
							n-Heptane	25 ug/mL
							N-Propylbenzene	25 ug/mL
							Naphthalene	25 ug/mL
							o-Xylene	25 ug/mL
							sec-Butylbenzene	25 ug/mL
							Styrene	25 ug/mL
							tert-Butylbenzene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Tetrahydrofuran	50 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							trans-1,4-Dichloro-2-butene	25 ug/mL
							Trichloroethene	25 ug/mL
.VOA8260GAS1ST_00091	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00101	03/24/15	02/24/15	Methanol, Lot 85233	10 mL	VOA8260KET1ST_00036	0.2 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_00027	1 mL	1,1,1,2-Tetrachloroethane	200 ug/mL
							1,1,1-Trichloroethane	200 ug/mL
							1,1,2,2-Tetrachloroethane	200 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ug/mL
							1,1,2-Trichloroethane	200 ug/mL
							1,1-Dichloroethane	200 ug/mL
							1,1-Dichloroethene	200 ug/mL
							1,1-Dichloropropene	200 ug/mL
							1,2,3-Trichlorobenzene	200 ug/mL
							1,2,3-Trichloropropane	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2,4-Trimethylbenzene	200 ug/mL
							1,2-Dibromo-3-Chloropropane	200 ug/mL
							1,2-Dibromoethane (EDB)	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Dichloroethane	200 ug/mL
							1,2-Dichloropropane	200 ug/mL
							1,3,5-Trimethylbenzene	200 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dichloropropane	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	4000 ug/mL
							2,2-Dichloropropane	200 ug/mL
							2-Chlorotoluene	200 ug/mL
							2-Methyl-2-propanol	2000 ug/mL
							3-Chloro-1-propene	200 ug/mL
							4-Chlorotoluene	200 ug/mL
							4-Isopropyltoluene	200 ug/mL
							Acrylonitrile	2000 ug/mL
							Benzene	200 ug/mL
							Bromobenzene	200 ug/mL
							Bromochloromethane	200 ug/mL
							Bromodichloromethane	200 ug/mL
							Bromoform	200 ug/mL
							Carbon disulfide	200 ug/mL
							Carbon tetrachloride	200 ug/mL
							Chlorobenzene	200 ug/mL
							Chloroform	200 ug/mL
							cis-1,2-Dichloroethene	200 ug/mL
							cis-1,3-Dichloropropene	200 ug/mL
							Cyclohexane	200 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromochloromethane	200 ug/mL
							Dibromomethane	200 ug/mL
							Ethyl ether	200 ug/mL
							Ethyl methacrylate	200 ug/mL
							Ethylbenzene	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexane	200 ug/mL
							Iodomethane	200 ug/mL
							Isobutyl alcohol	5000 ug/mL
							Isopropylbenzene	200 ug/mL
							m-Xylene & p-Xylene	200 ug/mL
							Methyl acetate	1000 ug/mL
							Methyl tert-butyl ether	200 ug/mL
							Methylcyclohexane	200 ug/mL
							Methylene Chloride	200 ug/mL
							n-Butylbenzene	200 ug/mL
							n-Heptane	200 ug/mL
							N-Propylbenzene	200 ug/mL
							Naphthalene	200 ug/mL
							o-Xylene	200 ug/mL
							sec-Butylbenzene	200 ug/mL
							Styrene	200 ug/mL
							tert-Butylbenzene	200 ug/mL
							Tetrachloroethene	200 ug/mL
							Tetrahydrofuran	400 ug/mL
							Toluene	200 ug/mL
							trans-1,2-Dichloroethene	200 ug/mL
							trans-1,3-Dichloropropene	200 ug/mL
							trans-1,4-Dichloro-2-butene	200 ug/mL
							Trichloroethene	200 ug/mL
..VOA8260KET1ST_00036	02/28/16		Restek, Lot A093365		(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
..VOA8260MEGA1_00027	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Tetrahydrofuran	4000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
							Trichloroethene	2000 ug/mL
VOA8260VOAPRI_00108	04/06/15	03/30/15	Methanol, Lot 85233	10 mL	VOA8260GAS1ST_00092	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_00092	09/30/16		Restek, Lot A0108198		(Purchased Reagent)		Bromomethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
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
voaWAcropri R_00006	02/02/15	01/02/15	Methanol, Lot 85233	50 mL	VOAACRORES_00062	0.0625 mL	Acrolein	25 ug/mL
.VOAACRORES_00062	02/28/15		Restek, Lot A0106504		(Purchased Reagent)		Acrolein	20000 ug/mL
voaWeemixpri_00001	01/29/15	12/29/14	Methanol, Lot 85233	25 mL	VOARESEE1ST_00017	0.125 mL	1,2-dichloro-4-(trifluoromethyl)benzene	25 ug/mL
							2,3,6-Trichlorotoluene	25 ug/mL
							2,4,5-Trichlorotoluene	25 ug/mL
							2,4-Dichloro-1-(triflouromethyl)-benzene	25 ug/mL
							2,5-Dichlorobenzotrifluoride	25 ug/mL
							2-Chlorobenzotrifluoride	25 ug/mL
							3-Chlorobenzotrifluoride	25 ug/mL
							3-Chlorotoluene	25 ug/mL
							4-Chlorobenzotrifluoride	25 ug/mL
.VOARESEE1ST_00017	02/28/15		Restek, Lot A097285		(Purchased Reagent)		1,2-dichloro-4-(trifluoromethyl)benzene	5000 ug/mL
							2,3,6-Trichlorotoluene	5000 ug/mL
							2,4,5-Trichlorotoluene	5000 ug/mL
							2,4-Dichloro-1-(triflouromethyl)-benzene	5000 ug/mL
							2,5-Dichlorobenzotrifluoride	5000 ug/mL
							2-Chlorobenzotrifluoride	5000 ug/mL
							3-Chlorobenzotrifluoride	5000 ug/mL
							3-Chlorotoluene	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorobenzotrifluoride	5000 ug/mL
voaWEEpri Res_00003	03/30/15	03/02/15	Methanol, Lot 85233	25 mL	VOARESEE1ST_00008	0.125 mL	1,2-dichloro-4-(trifluoromethyl)benzene	25 ug/mL
							2,3,6-Trichlorotoluene	25 ug/mL
							2,4,5-Trichlorotoluene	25 ug/mL
							2,4-Dichloro-1-(triflouromethyl)-benzene	25 ug/mL
							2,5-Dichlorobenzotrifluoride	25 ug/mL
							2-Chlorobenzotrifluoride	25 ug/mL
							3-Chlorobenzotrifluoride	25 ug/mL
							3-Chlorotoluene	25 ug/mL
							4-Chlorobenzotrifluoride	25 ug/mL
.VOARESEE1ST_00008	02/28/15		Restek, Lot A097285		(Purchased Reagent)		1,2-dichloro-4-(trifluoromethyl)benzene	5000 ug/mL
							2,3,6-Trichlorotoluene	5000 ug/mL
							2,4,5-Trichlorotoluene	5000 ug/mL
							2,4-Dichloro-1-(triflouromethyl)-benzene	5000 ug/mL
							2,5-Dichlorobenzotrifluoride	5000 ug/mL
							2-Chlorobenzotrifluoride	5000 ug/mL
							3-Chlorobenzotrifluoride	5000 ug/mL
							3-Chlorotoluene	5000 ug/mL
							4-Chlorobenzotrifluoride	5000 ug/mL
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
voaWVApri Res_00001	02/06/15	01/06/15	Methanol, Lot 85233	20 mL	VOA8260VARES_00049	0.125 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES_00049	04/30/15		Restek, Lot A0106957		(Purchased Reagent)		Vinyl acetate	4000 ug/mL
WALK125PPMCCV_00082	09/19/15	03/19/15	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_00091	09/19/15	03/19/15	DI Water, Lot Super Q	1000 mL	WNa2CO3P_00007	0.25 g	Total Alkalinity as CaCO3 to pH 4.5	250 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

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

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

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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 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"
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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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CERTIFICATE OF ANALYSIS

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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.

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.

4.2 **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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Phone: 1-800-LAB-SPEX • Fax: 732-603-9647

Reagent

MMSICSAB-1_00007

INORGANIC VENTURES™
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CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
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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.

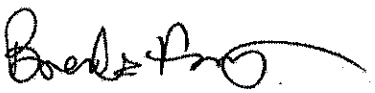
11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations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

INORGANIC VENTURES™
300 Technology Drive
Christiansburg, VA 24073 · USA
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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

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

x_i = individual results

n = number of measurements

Uncertainty (±) = 2 [$\Sigma(s_i)^2$]^{½} 2 = the coverage factor.

[$\Sigma(s_i)^2$]^{½} = 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

EXPIRES
01/2015

11.3 Period of Validity

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

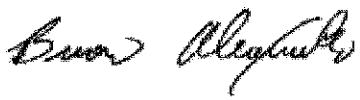
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Reagent

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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 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

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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 11/3/14 SLB

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_00081

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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. : 567645 **Lot No.:** A0105755

Description : 8260 List 1 / Std #3 Gases

8260 List 1 / Std #3 Gases 2,000 ug/ml, P&T Methanol, 1 ml/ampul

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot Q16A-86) **Purity** 99%	1,996.9 µg/mL	+/- 16.4920 µg/mL +/- 25.3820 µg/mL +/- 28.4359 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBC8470V) **Purity** 99%	2,003.6 µg/mL	+/- 13.5945 µg/mL +/- 23.6556 µg/mL +/- 26.9268 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 17542) **Purity** 99%	2,001.1 µg/mL	+/- 27.3546 µg/mL +/- 33.4976 µg/mL +/- 35.8765 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBD5808V) **Purity** 99%	1,999.9 µg/mL	+/- 23.4547 µg/mL +/- 30.3891 µg/mL +/- 32.9901 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	1,998.7 µg/mL	+/- 30.0266 µg/mL +/- 35.7004 µg/mL +/- 37.9363 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot SHBD1717V) **Purity** 99%	2,000.1 µg/mL	+/- 18.0935 µg/mL +/- 26.4730 µg/mL +/- 29.4228 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot Q9B-58) **Purity** 99%	1,999.1 µg/mL	+/- 17.9677 µg/mL +/- 26.3801 µg/mL +/- 29.3364 µg/mL	Gravimetric Unstressed Stressed
8	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4 (Lot SHBD5121V) **Purity** 99%	2,001.1 µg/mL	+/- 24.2299 µg/mL +/- 30.9989 µg/mL +/- 33.5557 µg/mL	Gravimetric Unstressed Stressed

Reagent

VOA8260GAS1ST_00091

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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)

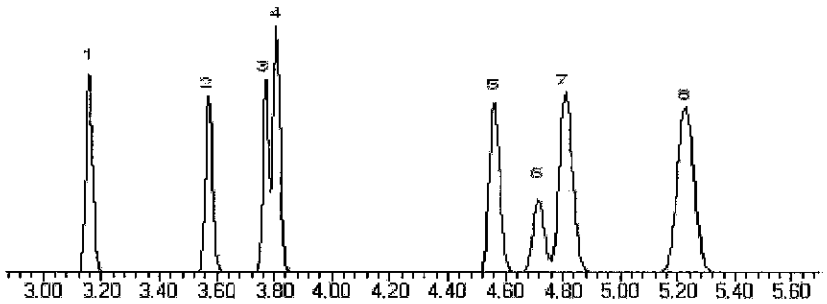
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

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 **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)

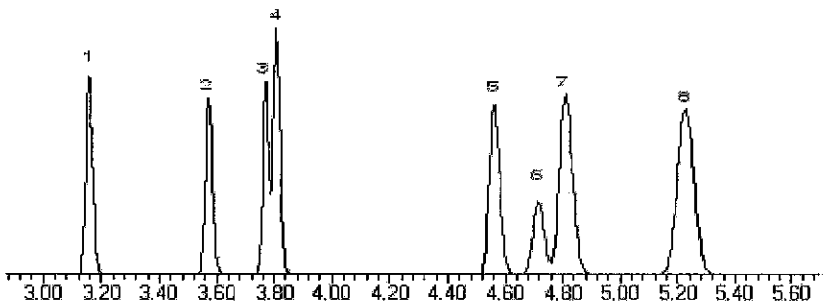
Carrier Gas:
helium-constant flow 2.0 mL/min.

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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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)

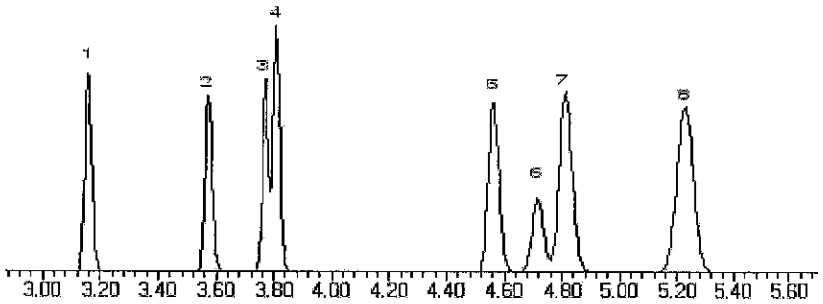
Carrier Gas:
helium-constant flow 2.0 mL/min.

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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FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

Catalog No. : 567649 **Lot No.:** A093504

Description : 8260 Internal Standard

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 25725-11-5		+/- 110.6323	µg/mL	Unstressed
	Purity 99%		+/- 111.0833	µg/mL	Stressed
2	Fluorobenzene	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 462-06-6		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed
3	1,4-Dioxane-d8	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 17647-74-4		+/- 110.6323	µg/mL	Unstressed
	Purity 99%		+/- 111.0833	µg/mL	Stressed
4	Chlorobenzene-d5	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 3114-55-4		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed
5	1,4-Dichlorobenzene-d4	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 3855-82-1		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed

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

Reagent

VOA8260INTRES_00091

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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 (Lot I201P5) **Purity** 99%	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 (Lot 1380033) **Purity** 99%	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 (Lot 11C-596) **Purity** 99%	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 (Lot PR-22736) **Purity** 99%	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 (Lot PR-18488) **Purity** 99%	250.8 µg/mL	+/- 1.4795 µg/mL +/- 5.3247 µg/mL +/- 5.3483 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260KET1ST_00030

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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. : 567642 **Lot No.:** A093365

Description : 8260 List 1 / Std #2 Ketones

8260 List 1 / Std #2 Ketones 10,000 ug/ml, P&T Methanol/Water (90:10), 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	Acetone	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 67-64-1		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
2	2-Butanone (MEK)	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 78-93-3		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 108-10-1		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
4	2-Hexanone	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 591-78-6		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed

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

Reagent

VOA8260KET1ST_00036

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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. : 567642 **Lot No.:** A093365

Description : 8260 List 1 / Std #2 Ketones

8260 List 1 / Std #2 Ketones 10,000 ug/ml, P&T Methanol/Water (90:10), 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	Acetone	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 67-64-1		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
2	2-Butanone (MEK)	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 78-93-3		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 108-10-1		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
4	2-Hexanone	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 591-78-6		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	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 +/- 667.2480 +/- 667.9837	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot BCBH7802V) **Purity** 99%	12,537.0 µg/mL	+/- 73.4069 +/- 667.2480 +/- 667.9837	µg/mL µg/mL 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 +/- 667.2480 +/- 667.9837	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKBK8325V) **Purity** 99%	12,537.0 µg/mL	+/- 73.4069 +/- 667.2480 +/- 667.9837	µg/mL µg/mL 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

RESTEK

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

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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 **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)

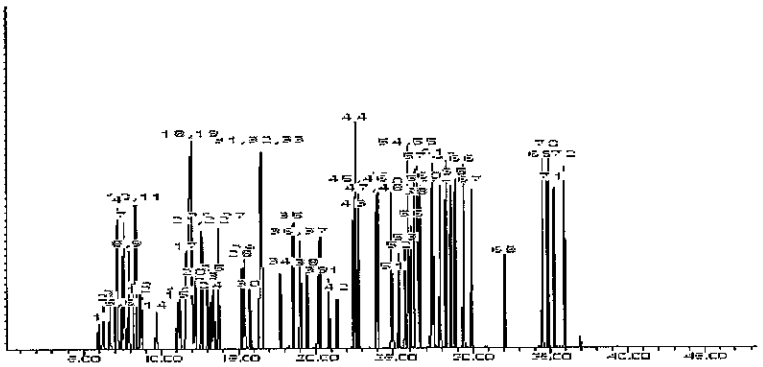
Carrier Gas:
helium-constant pressure 30 psi

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

VOA8260MEGA1_00025

RESTEK

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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 **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)

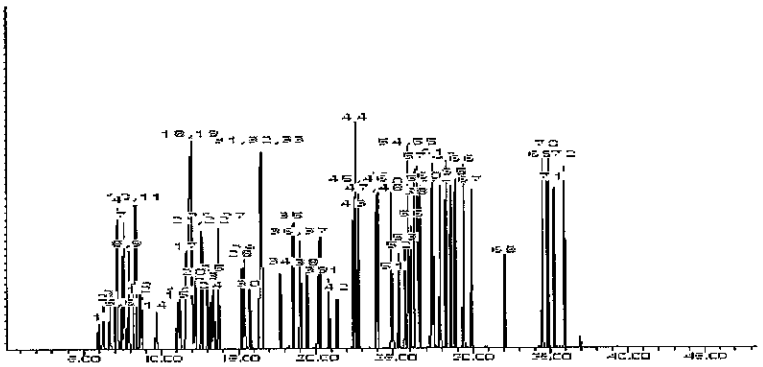
Carrier Gas:
helium-constant pressure 30 psi

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

VOA8260MEGA1_00027

RESTEK

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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. : 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)

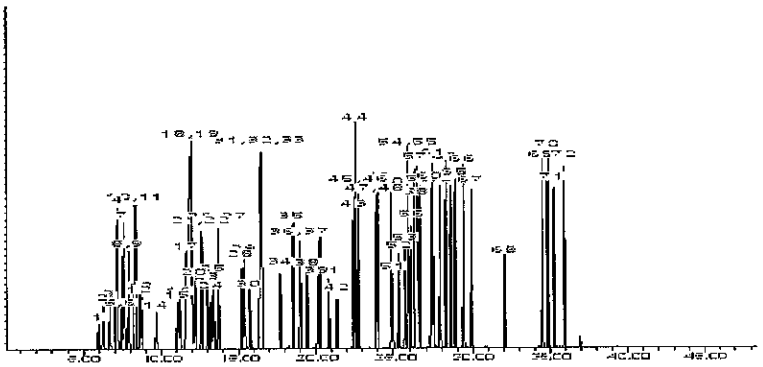
Carrier Gas:
helium-constant pressure 30 psi

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

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

www.restek.com

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ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
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 +/- 44.2531 +/- 44.4335	µg/mL µg/mL 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 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC **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.SEC **Purity** 97%	2,000.0 µg/mL	+/- 11.6284 +/- 44.2540 +/- 44.4344	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC **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.SEC **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.SEC **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.SEC **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.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)

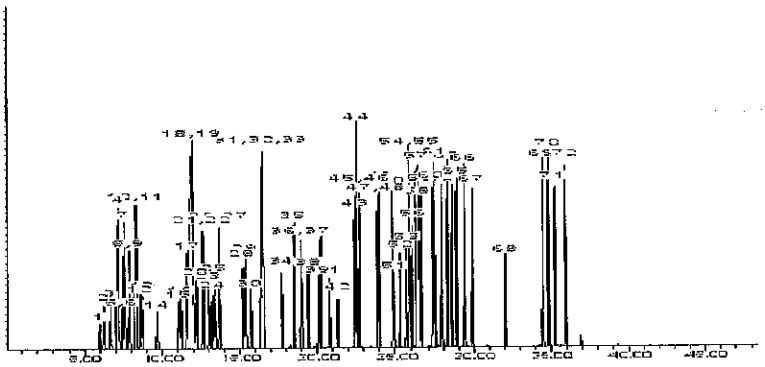
Carrier Gas:
helium-constant pressure 30 psi

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_00063

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567650 **Lot No.:** A0100424

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 : January 31, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 022012) **Purity** 99%	2,502.2 µg/mL	+/- 14.5480 µg/mL +/- 28.2159 µg/mL +/- 32.4683 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot 12K-027) **Purity** 99%	2,501.2 µg/mL	+/- 14.5422 µg/mL +/- 28.2046 µg/mL +/- 32.4554 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot 13I-050) **Purity** 99%	2,500.8 µg/mL	+/- 14.5399 µg/mL +/- 28.2001 µg/mL +/- 32.4502 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 01127COV) **Purity** 99%	2,501.4 µg/mL	+/- 14.5434 µg/mL +/- 28.2069 µg/mL +/- 32.4580 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260SURRES_00075

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567650 **Lot No.:** A0101000

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 : January 31, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane	2,509.6 µg/mL	+/- 14.5910 µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 022012)		+/- 28.2993 µg/mL	Unstressed
	Purity 99%		+/- 32.5644 µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,508.2 µg/mL	+/- 14.5829 µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot 12K-027)		+/- 28.2836 µg/mL	Unstressed
	Purity 99%		+/- 32.5462 µg/mL	Stressed
3	Toluene-d8	2,508.8 µg/mL	+/- 14.5864 µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot 13I-050)		+/- 28.2903 µg/mL	Unstressed
	Purity 99%		+/- 32.5540 µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,509.8 µg/mL	+/- 14.5922 µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 01127COV)		+/- 28.3016 µg/mL	Unstressed
	Purity 99%		+/- 32.5670 µg/mL	Stressed

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

Reagent

VOA8260VARES_00049

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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. : 567646 **Lot No.:** A0106957

Description : 8260 List 1 / Std #6 Vinyl Acetate

8260 List 1 / Std #6 Vinyl Acetate 4000 ug/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : April 30, 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	4,027.0 µg/mL	+/- 23.6327	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBC8935V)		+/- 214.3321	µg/mL	Unstressed
	Purity 99%		+/- 214.5684	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

VOA8260VARES_00050

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569724 **Lot No.:** 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_00062

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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. : 568720 **Lot No.:** A0106504

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 : February 28, 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	19,767.0 µg/mL	+/- 115.7401	µg/mL	Gravimetric
	CAS # 107-02-8 (Lot 140903JLM)		+/- 633.7922	µg/mL	Unstressed
	Purity 99%		+/- 736.7140	µg/mL	Stressed

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

Reagent

VOAACRORES_00064

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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. : 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

VOARESEE1ST_00008

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568363-FL **Lot No.:** A097285

Description : Custom EE Standard

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

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

Expiration Date : February 28, 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	3-Chlorobenzotrifluoride		5,001.0 µg/mL	+/- 29.3487	µg/mL	Gravimetric
	CAS # 98-15-7	(Lot 21324DO)		+/- 53.0822	µg/mL	Unstressed
	Purity 99%			+/- 61.7282	µg/mL	Stressed
2	4-Chlorobenzotrifluoride		5,003.0 µg/mL	+/- 29.3604	µg/mL	Gravimetric
	CAS # 98-56-6	(Lot 08507BO)		+/- 53.1034	µg/mL	Unstressed
	Purity 99%			+/- 61.7529	µg/mL	Stressed
3	2-Chlorobenzotrifluoride		5,005.0 µg/mL	+/- 29.3721	µg/mL	Gravimetric
	CAS # 88-16-4	(Lot I0316DQ)		+/- 53.1247	µg/mL	Unstressed
	Purity 99%			+/- 61.7775	µg/mL	Stressed
4	3-Chlorotoluene		5,000.0 µg/mL	+/- 29.3428	µg/mL	Gravimetric
	CAS # 108-41-8	(Lot 13528LX)		+/- 53.0716	µg/mL	Unstressed
	Purity 99%			+/- 61.7158	µg/mL	Stressed
5	2,4-Dichlorobenzotrifluoride		5,002.0 µg/mL	+/- 29.3545	µg/mL	Gravimetric
	CAS # 320-60-5	(Lot MKBL3552V)		+/- 53.0928	µg/mL	Unstressed
	Purity 99%			+/- 61.7405	µg/mL	Stressed
6	3,4-Dichlorobenzotrifluoride		5,000.0 µg/mL	+/- 29.3428	µg/mL	Gravimetric
	CAS # 328-84-7	(Lot 11105EJV)		+/- 53.0716	µg/mL	Unstressed
	Purity 99%			+/- 61.7158	µg/mL	Stressed
7	2,5-Dichlorobenzotrifluoride		5,000.0 µg/mL	+/- 29.3428	µg/mL	Gravimetric
	CAS # 320-50-3	(Lot 04415DSV)		+/- 53.0716	µg/mL	Unstressed
	Purity 99%			+/- 61.7158	µg/mL	Stressed
8	2,4-Dichlorotoluene		5,002.0 µg/mL	+/- 29.3545	µg/mL	Gravimetric
	CAS # 95-73-8	(Lot 07715JS)		+/- 53.0928	µg/mL	Unstressed
	Purity 99%			+/- 61.7405	µg/mL	Stressed

9	2,5-Dichlorotoluene		5,000.0	µg/mL	+/- 29.3428	µg/mL	Gravimetric
	CAS # 19398-61-9	(Lot 10119CU)			+/- 53.0716	µg/mL	Unstressed
	Purity 99%				+/- 61.7158	µg/mL	Stressed
10	2,6-Dichlorotoluene		5,001.0	µg/mL	+/- 29.3487	µg/mL	Gravimetric
	CAS # 118-69-4	(Lot 16921JS)			+/- 53.0822	µg/mL	Unstressed
	Purity 99%				+/- 61.7282	µg/mL	Stressed
11	3,4-Dichlorotoluene		5,003.0	µg/mL	+/- 29.3604	µg/mL	Gravimetric
	CAS # 95-75-0	(Lot 09419AS)			+/- 53.1034	µg/mL	Unstressed
	Purity 99%				+/- 61.7529	µg/mL	Stressed
12	2,3-Dichlorotoluene		5,008.0	µg/mL	+/- 29.3897	µg/mL	Gravimetric
	CAS # 32768-54-0	(Lot 00317)			+/- 53.1565	µg/mL	Unstressed
	Purity 99%				+/- 61.8146	µg/mL	Stressed
13	2,4,5-Trichlorotoluene		5,001.0	µg/mL	+/- 29.3487	µg/mL	Gravimetric
	CAS # 6639-30-1	(Lot 1767300)			+/- 53.0822	µg/mL	Unstressed
	Purity 99%				+/- 61.7282	µg/mL	Stressed
14	2,3,6-Trichlorotoluene		5,001.0	µg/mL	+/- 29.3487	µg/mL	Gravimetric
	CAS # 2077-46-5	(Lot RM01250)			+/- 53.0822	µg/mL	Unstressed
	Purity 99%				+/- 61.7282	µg/mL	Stressed

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

Reagent

VOARESEE1ST_00017

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 568363-FL **Lot No.:** A097285

Description : Custom EE Standard

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

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

Expiration Date : February 28, 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	3-Chlorobenzotrifluoride **CAS #** 98-15-7 **Purity** 99%	(Lot 21324DO)	5,001.0 µg/mL	+/- 29.3487 µg/mL +/- 53.0822 µg/mL +/- 61.7282 µg/mL	Gravimetric Unstressed Stressed
2	4-Chlorobenzotrifluoride **CAS #** 98-56-6 **Purity** 99%	(Lot 08507BO)	5,003.0 µg/mL	+/- 29.3604 µg/mL +/- 53.1034 µg/mL +/- 61.7529 µg/mL	Gravimetric Unstressed Stressed
3	2-Chlorobenzotrifluoride **CAS #** 88-16-4 **Purity** 99%	(Lot I0316DQ)	5,005.0 µg/mL	+/- 29.3721 µg/mL +/- 53.1247 µg/mL +/- 61.7775 µg/mL	Gravimetric Unstressed Stressed
4	3-Chlorotoluene **CAS #** 108-41-8 **Purity** 99%	(Lot 13528LX)	5,000.0 µg/mL	+/- 29.3428 µg/mL +/- 53.0716 µg/mL +/- 61.7158 µg/mL	Gravimetric Unstressed Stressed
5	2,4-Dichlorobenzotrifluoride **CAS #** 320-60-5 **Purity** 99%	(Lot MKBL3552V)	5,002.0 µg/mL	+/- 29.3545 µg/mL +/- 53.0928 µg/mL +/- 61.7405 µg/mL	Gravimetric Unstressed Stressed
6	3,4-Dichlorobenzotrifluoride **CAS #** 328-84-7 **Purity** 99%	(Lot 11105EJV)	5,000.0 µg/mL	+/- 29.3428 µg/mL +/- 53.0716 µg/mL +/- 61.7158 µg/mL	Gravimetric Unstressed Stressed
7	2,5-Dichlorobenzotrifluoride **CAS #** 320-50-3 **Purity** 99%	(Lot 04415DSV)	5,000.0 µg/mL	+/- 29.3428 µg/mL +/- 53.0716 µg/mL +/- 61.7158 µg/mL	Gravimetric Unstressed Stressed
8	2,4-Dichlorotoluene **CAS #** 95-73-8 **Purity** 99%	(Lot 07715JS)	5,002.0 µg/mL	+/- 29.3545 µg/mL +/- 53.0928 µg/mL +/- 61.7405 µg/mL	Gravimetric Unstressed Stressed

9	2,5-Dichlorotoluene		5,000.0	µg/mL	+/-	29.3428	µg/mL	Gravimetric
	CAS # 19398-61-9	(Lot 10119CU)			+/-	53.0716	µg/mL	Unstressed
	Purity 99%				+/-	61.7158	µg/mL	Stressed
10	2,6-Dichlorotoluene		5,001.0	µg/mL	+/-	29.3487	µg/mL	Gravimetric
	CAS # 118-69-4	(Lot 16921JS)			+/-	53.0822	µg/mL	Unstressed
	Purity 99%				+/-	61.7282	µg/mL	Stressed
11	3,4-Dichlorotoluene		5,003.0	µg/mL	+/-	29.3604	µg/mL	Gravimetric
	CAS # 95-75-0	(Lot 09419AS)			+/-	53.1034	µg/mL	Unstressed
	Purity 99%				+/-	61.7529	µg/mL	Stressed
12	2,3-Dichlorotoluene		5,008.0	µg/mL	+/-	29.3897	µg/mL	Gravimetric
	CAS # 32768-54-0	(Lot 00317)			+/-	53.1565	µg/mL	Unstressed
	Purity 99%				+/-	61.8146	µg/mL	Stressed
13	2,4,5-Trichlorotoluene		5,001.0	µg/mL	+/-	29.3487	µg/mL	Gravimetric
	CAS # 6639-30-1	(Lot 1767300)			+/-	53.0822	µg/mL	Unstressed
	Purity 99%				+/-	61.7282	µg/mL	Stressed
14	2,3,6-Trichlorotoluene		5,001.0	µg/mL	+/-	29.3487	µg/mL	Gravimetric
	CAS # 2077-46-5	(Lot RM01250)			+/-	53.0822	µg/mL	Unstressed
	Purity 99%				+/-	61.7282	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
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.: 180-42353-1

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-COD-SW-7-0/1-0	180-42353-1	106	125	107	104
HD-COD-SW-6-0/1-0	180-42353-2	107	124	104	97
HD-COD-SW-8-0/1-0	180-42353-3	109	128	105	97
HD-COD-SW-9-0/1-0	180-42353-4	109	129	104	98
HD-COD-SW-10-0/1-0	180-42353-5	109	124	107	98
HD-COD-SW-11-0/1-0	180-42353-6	108	124	107	103
HD-COD-SW-12-0/1-0	180-42353-7	107	128	110	103
HD-COD-SW-13-0/1-0	180-42353-8	107	130	106	100
HD-COD-SW-15-0/1-0	180-42353-9	113	130	104	95
HD-COD-SW-16-0/1-0	180-42353-10	108	129	105	97
HD-COD-SW-17-0/1-0	180-42353-11	109	114	106	98
HD-COD-SW-17-0/1-0 DL	180-42353-11 DL	109	118	103	99
HD-COD-SW-20-0/1-0	180-42353-12	112	130	102	96
HD-COD-SW-26-0/1-0	180-42353-13	111	134	111	98
HD-COD-SW-27-0/1-0	180-42353-14	110	116	109	101
HD-COD-SW-28-0/1-0	180-42353-15	115	122	111	100
HD-COD-SW-29-0/1-0	180-42353-16	113	117	103	97
HD-QC1-0/1-2	180-42353-17	111	119	105	98
HD-QC2-0/1-2	180-42353-18	110	116	108	98
HD-QC1-0/1-1	180-42353-19	105	115	109	101
HD-MW-99S-0/1-0	180-42353-20	106	115	108	99
HD-MW-99D-0/1-0	180-42353-21	109	117	109	103
HD-MW-145A-0/1-0	180-42353-22	107	114	105	94
HD-MW-100S-0/1-0	180-42353-23	111	116	109	101
HD-MW-100I-0/1-0	180-42353-24	111	117	101	95
HD-MW-93S-0/1-0	180-42353-25	113	121	102	98
HD-MW-93D-0/1-0	180-42353-26	109	119	111	102
	MB 180-136938/5	104	121	106	98
	MB 180-136954/7	102	113	111	100
	MB 180-137048/6	104	112	106	97
	MB 180-137218/6	108	116	102	97
	LCS 180-136938/8	100	121	100	101
	LCS 180-136954/10	93	101	96	95
	LCS 180-137048/9	102	111	105	103

	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 II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

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 #
	LCS 180-137218/9	100	103	100	97
HD-MW-99S-0/1-0 MS	180-42353-20 MS	101	109	102	101
HD-MW-99S-0/1-0 MSD	180-42353-20 MSD	101	109	102	100

	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.: 180-42353-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 60330008.D

Lab ID: LCS 180-136938/8 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	8.62	86	50-139	
Vinyl chloride	10.0	9.46	95	53-138	
Bromomethane	10.0	11.2	112	33-150	
Chloroethane	10.0	8.96	90	36-142	
1,1-Dichloroethene	10.0	9.02	90	65-136	
Acetone	20.0	25.3	126	22-150	
Carbon disulfide	10.0	7.01	70	54-132	
Methylene Chloride	10.0	8.28	83	63-129	
trans-1,2-Dichloroethene	10.0	9.06	91	73-126	
Methyl tert-butyl ether	10.0	9.88	99	64-123	
1,1-Dichloroethane	10.0	8.96	90	73-126	
cis-1,2-Dichloroethene	10.0	9.00	90	70-120	
Bromochloromethane	10.0	9.63	96	70-127	
2-Butanone (MEK)	20.0	22.2	111	39-138	
Chloroform	10.0	9.75	97	72-127	
1,1,1-Trichloroethane	10.0	8.59	86	63-133	
Carbon tetrachloride	10.0	8.23	82	55-150	
Benzene	10.0	10.1	101	80-120	
1,2-Dichloroethane	10.0	11.9	119	68-132	
Trichloroethene	10.0	9.14	91	73-120	
1,2-Dichloropropane	10.0	9.50	95	76-124	
Bromodichloromethane	10.0	9.93	99	66-130	
cis-1,3-Dichloropropene	10.0	9.21	92	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	19.2	96	45-145	
Toluene	10.0	10.7	107	80-123	
trans-1,3-Dichloropropene	10.0	10.8	108	65-125	
1,1,2-Trichloroethane	10.0	11.9	119	77-127	
Tetrachloroethene	10.0	9.91	99	70-135	
2-Hexanone	20.0	21.7	108	25-132	
Dibromochloromethane	10.0	10.2	102	60-140	
1,2-Dibromoethane (EDB)	10.0	12.2	122	74-123	
Chlorobenzene	10.0	10.8	108	80-120	
1,1,1,2-Tetrachloroethane	10.0	9.51	95	63-140	
Ethylbenzene	10.0	9.37	94	72-126	
Xylenes, Total	20.0	18.6	93	76-128	
Styrene	10.0	10.8	108	71-127	
Bromoform	10.0	11.5	115	46-150	
1,1,2,2-Tetrachloroethane	10.0	13.6	136	62-125	*
1,4-Dioxane	200	286	143	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.: 180-42353-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50330010.D

Lab ID: LCS 180-136954/10 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	10.2	102	50-139	
Vinyl chloride	10.0	11.3	113	53-138	
Bromomethane	10.0	12.6	126	33-150	
Chloroethane	10.0	12.0	120	36-142	
1,1-Dichloroethene	10.0	8.64	86	65-136	
Acetone	20.0	22.6	113	22-150	
Carbon disulfide	10.0	6.37	64	54-132	
Methylene Chloride	10.0	8.67	87	63-129	
trans-1,2-Dichloroethene	10.0	9.21	92	73-126	
Methyl tert-butyl ether	10.0	9.43	94	64-123	
1,1-Dichloroethane	10.0	9.68	97	73-126	
cis-1,2-Dichloroethene	10.0	9.05	91	70-120	
Bromochloromethane	10.0	9.20	92	70-127	
2-Butanone (MEK)	20.0	16.0	80	39-138	
Chloroform	10.0	10.1	101	72-127	
1,1,1-Trichloroethane	10.0	9.92	99	63-133	
Carbon tetrachloride	10.0	10.7	107	55-150	
Benzene	10.0	9.47	95	80-120	
1,2-Dichloroethane	10.0	10.2	102	68-132	
Trichloroethene	10.0	9.33	93	73-120	
1,2-Dichloropropane	10.0	9.49	95	76-124	
Bromodichloromethane	10.0	9.58	96	66-130	
cis-1,3-Dichloropropene	10.0	9.81	98	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	16.4	82	45-145	
Toluene	10.0	10.0	100	80-123	
trans-1,3-Dichloropropene	10.0	11.2	112	65-125	
1,1,2-Trichloroethane	10.0	10.4	104	77-127	
Tetrachloroethene	10.0	9.42	94	70-135	
2-Hexanone	20.0	14.8	74	25-132	
Dibromochloromethane	10.0	10.3	103	60-140	
1,2-Dibromoethane (EDB)	10.0	9.87	99	74-123	
Chlorobenzene	10.0	10.2	102	80-120	
1,1,1,2-Tetrachloroethane	10.0	11.1	111	63-140	
Ethylbenzene	10.0	9.71	97	72-126	
Xylenes, Total	20.0	19.5	97	76-128	
Styrene	10.0	9.94	99	71-127	
Bromoform	10.0	9.53	95	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.2	102	62-125	
1,4-Dioxane	200	153 J	76	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.: 180-42353-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50331009.D

Lab ID: LCS 180-137048/9 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	10.0	100	50-139	
Vinyl chloride	10.0	11.0	110	53-138	
Bromomethane	10.0	13.3	133	33-150	
Chloroethane	10.0	12.1	121	36-142	
1,1-Dichloroethene	10.0	9.56	96	65-136	
Acetone	20.0	20.8	104	22-150	
Carbon disulfide	10.0	7.90	79	54-132	
Methylene Chloride	10.0	9.55	95	63-129	
trans-1,2-Dichloroethene	10.0	9.98	100	73-126	
Methyl tert-butyl ether	10.0	9.94	99	64-123	
1,1-Dichloroethane	10.0	10.4	104	73-126	
cis-1,2-Dichloroethene	10.0	9.74	97	70-120	
Bromochloromethane	10.0	9.80	98	70-127	
2-Butanone (MEK)	20.0	15.6	78	39-138	
Chloroform	10.0	10.7	107	72-127	
1,1,1-Trichloroethane	10.0	11.2	112	63-133	
Carbon tetrachloride	10.0	12.0	120	55-150	
Benzene	10.0	10.5	105	80-120	
1,2-Dichloroethane	10.0	10.9	109	68-132	
Trichloroethene	10.0	9.63	96	73-120	
1,2-Dichloropropane	10.0	9.45	95	76-124	
Bromodichloromethane	10.0	9.90	99	66-130	
cis-1,3-Dichloropropene	10.0	10.0	100	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	15.8	79	45-145	
Toluene	10.0	10.3	103	80-123	
trans-1,3-Dichloropropene	10.0	10.0	100	65-125	
1,1,2-Trichloroethane	10.0	9.82	98	77-127	
Tetrachloroethene	10.0	9.84	98	70-135	
2-Hexanone	20.0	13.4	67	25-132	
Dibromochloromethane	10.0	10.4	104	60-140	
1,2-Dibromoethane (EDB)	10.0	10.1	101	74-123	
Chlorobenzene	10.0	10.0	100	80-120	
1,1,1,2-Tetrachloroethane	10.0	11.1	111	63-140	
Ethylbenzene	10.0	9.79	98	72-126	
Xylenes, Total	20.0	19.8	99	76-128	
Styrene	10.0	10.2	102	71-127	
Bromoform	10.0	9.43	94	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.1	101	62-125	
1,4-Dioxane	200	132 J	66	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.: 180-42353-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50401009.D

Lab ID: LCS 180-137218/9 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	11.3	113	50-139	
Vinyl chloride	10.0	12.8	128	53-138	
Bromomethane	10.0	15.5	155	33-150	*
Chloroethane	10.0	13.8	138	36-142	
1,1-Dichloroethene	10.0	8.92	89	65-136	
Acetone	20.0	18.4	92	22-150	
Carbon disulfide	10.0	7.69	77	54-132	
Methylene Chloride	10.0	9.47	95	63-129	
trans-1,2-Dichloroethene	10.0	9.65	96	73-126	
Methyl tert-butyl ether	10.0	9.74	97	64-123	
1,1-Dichloroethane	10.0	10.2	102	73-126	
cis-1,2-Dichloroethene	10.0	9.99	100	70-120	
Bromochloromethane	10.0	9.87	99	70-127	
2-Butanone (MEK)	20.0	15.3	77	39-138	
Chloroform	10.0	11.0	110	72-127	
1,1,1-Trichloroethane	10.0	10.8	108	63-133	
Carbon tetrachloride	10.0	11.1	111	55-150	
Benzene	10.0	10.1	101	80-120	
1,2-Dichloroethane	10.0	11.0	110	68-132	
Trichloroethene	10.0	9.67	97	73-120	
1,2-Dichloropropane	10.0	10.3	103	76-124	
Bromodichloromethane	10.0	10.5	105	66-130	
cis-1,3-Dichloropropene	10.0	10.3	103	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	16.0	80	45-145	
Toluene	10.0	11.4	114	80-123	
trans-1,3-Dichloropropene	10.0	12.9	129	65-125	*
1,1,2-Trichloroethane	10.0	11.3	113	77-127	
Tetrachloroethene	10.0	10.4	104	70-135	
2-Hexanone	20.0	13.6	68	25-132	
Dibromochloromethane	10.0	11.5	115	60-140	
1,2-Dibromoethane (EDB)	10.0	10.8	108	74-123	
Chlorobenzene	10.0	11.2	112	80-120	
1,1,1,2-Tetrachloroethane	10.0	12.0	120	63-140	
Ethylbenzene	10.0	10.9	109	72-126	
Xylenes, Total	20.0	21.4	107	76-128	
Styrene	10.0	10.9	109	71-127	
Bromoform	10.0	11.3	113	46-150	
1,1,2,2-Tetrachloroethane	10.0	11.3	113	62-125	
1,4-Dioxane	200	160 J	80	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.: 180-42353-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50331010.D

Lab ID: 180-42353-20 MS Client ID: HD-MW-99S-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	11.4	114	50-139	
Vinyl chloride	10.0	1.0 U	12.2	122	53-138	
Bromomethane	10.0	1.0 U	13.9	139	33-150	
Chloroethane	10.0	1.0 U	13.3	133	36-142	
1,1-Dichloroethene	10.0	2.4	11.2	88	65-136	
Acetone	20.0	5.0 U	19.8	99	22-150	
Carbon disulfide	10.0	1.0 U	6.55	65	54-132	
Methylene Chloride	10.0	1.0 U	9.51	95	63-129	
trans-1,2-Dichloroethene	10.0	1.0 U	9.72	97	73-126	
Methyl tert-butyl ether	10.0	1.0 U	10.1	101	64-123	
1,1-Dichloroethane	10.0	1.3	11.6	103	73-126	
cis-1,2-Dichloroethene	10.0	32	40.1	84	70-120	
Bromochloromethane	10.0	1.0 U	9.85	98	70-127	
2-Butanone (MEK)	20.0	5.0 U	17.0	85	39-138	
Chloroform	10.0	0.21 J	11.0	108	72-127	
1,1,1-Trichloroethane	10.0	5.6	15.6	100	63-133	
Carbon tetrachloride	10.0	1.0 U	11.0	110	55-150	
Benzene	10.0	1.0 U	9.98	100	80-120	
1,2-Dichloroethane	10.0	1.0 U	10.8	108	68-132	
Trichloroethene	10.0	32	37.9	58	73-120	F1
1,2-Dichloropropane	10.0	1.0 U	9.64	96	76-124	
Bromodichloromethane	10.0	1.0 U	10.6	106	66-130	
cis-1,3-Dichloropropene	10.0	1.0 U	10.2	102	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	5.0 U	17.2	86	45-145	
Toluene	10.0	1.0 U	10.4	104	80-123	
trans-1,3-Dichloropropene	10.0	1.0 U	11.5	115	65-125	
1,1,2-Trichloroethane	10.0	1.0 U	10.5	105	77-127	
Tetrachloroethene	10.0	23	29.5	65	70-135	F1
2-Hexanone	20.0	5.0 U	15.0	75	25-132	
Dibromochloromethane	10.0	1.0 U	10.5	105	60-140	
1,2-Dibromoethane (EDB)	10.0	1.0 U	10.2	102	74-123	
Chlorobenzene	10.0	1.0 U	10.7	107	80-120	
1,1,1,2-Tetrachloroethane	10.0	1.0 U	11.5	115	63-140	
Ethylbenzene	10.0	1.0 U	10.1	101	72-126	
Xylenes, Total	20.0	3.0 U	20.4	102	76-128	
Styrene	10.0	1.0 U	10.2	102	71-127	
Bromoform	10.0	1.0 U	10.1	101	46-150	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	10.8	108	62-125	
1,4-Dioxane	200	200 U	144 J	72	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.: 180-42353-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50331011.D

Lab ID: 180-42353-20 MSD Client ID: HD-MW-99S-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	11.3	113	1	35	50-139	
Vinyl chloride	10.0	11.4	114	6	35	53-138	
Bromomethane	10.0	13.9	139	0	35	33-150	
Chloroethane	10.0	12.4	124	7	35	36-142	
1,1-Dichloroethene	10.0	10.6	83	5	35	65-136	
Acetone	20.0	19.1	96	4	35	22-150	
Carbon disulfide	10.0	6.35	64	3	35	54-132	
Methylene Chloride	10.0	9.39	94	1	35	63-129	
trans-1,2-Dichloroethene	10.0	9.22	92	5	35	73-126	
Methyl tert-butyl ether	10.0	10.2	102	1	35	64-123	
1,1-Dichloroethane	10.0	11.3	99	3	35	73-126	
cis-1,2-Dichloroethene	10.0	39.5	78	1	35	70-120	
Bromochloromethane	10.0	9.53	95	3	35	70-127	
2-Butanone (MEK)	20.0	16.3	81	4	35	39-138	
Chloroform	10.0	10.2	100	8	35	72-127	
1,1,1-Trichloroethane	10.0	14.8	92	5	35	63-133	
Carbon tetrachloride	10.0	10.8	108	2	35	55-150	
Benzene	10.0	9.73	97	3	32	80-120	
1,2-Dichloroethane	10.0	10.5	105	2	32	68-132	
Trichloroethene	10.0	36.0	40	5	35	73-120	F1
1,2-Dichloropropane	10.0	10.0	100	4	34	76-124	
Bromodichloromethane	10.0	10.2	102	4	35	66-130	
cis-1,3-Dichloropropene	10.0	9.61	96	6	35	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	16.7	83	3	35	45-145	
Toluene	10.0	9.90	99	5	35	80-123	
trans-1,3-Dichloropropene	10.0	11.6	116	0	35	65-125	
1,1,2-Trichloroethane	10.0	10.6	106	1	35	77-127	
Tetrachloroethene	10.0	27.4	44	7	35	70-135	F1
2-Hexanone	20.0	14.5	72	4	35	25-132	
Dibromochloromethane	10.0	10.2	102	2	35	60-140	
1,2-Dibromoethane (EDB)	10.0	10.3	103	1	35	74-123	
Chlorobenzene	10.0	10.0	100	7	29	80-120	
1,1,1,2-Tetrachloroethane	10.0	11.2	112	3	34	63-140	
Ethylbenzene	10.0	9.62	96	5	33	72-126	
Xylenes, Total	20.0	19.4	97	5	32	76-128	
Styrene	10.0	9.78	98	4	34	71-127	
Bromoform	10.0	9.72	97	4	35	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.4	104	4	35	62-125	
1,4-Dioxane	200	138 J	69	4	35	10-160	

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.: 180-42353-1

SDG No.:

Lab File ID: 60330005.D Lab Sample ID: MB 180-136938/5

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

Instrument ID: CHHP6 Date Analyzed: 03/30/2015 11:37

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 180-136938/8	60330008.D	03/30/2015 13:03
HD-COD-SW-7-0/1-0	180-42353-1	60330017.D	03/30/2015 16:39
HD-COD-SW-6-0/1-0	180-42353-2	60330018.D	03/30/2015 17:03
HD-COD-SW-8-0/1-0	180-42353-3	60330019.D	03/30/2015 17:27
HD-COD-SW-9-0/1-0	180-42353-4	60330020.D	03/30/2015 17:51
HD-COD-SW-10-0/1-0	180-42353-5	60330021.D	03/30/2015 18:15
HD-COD-SW-11-0/1-0	180-42353-6	60330022.D	03/30/2015 18:39
HD-COD-SW-12-0/1-0	180-42353-7	60330023.D	03/30/2015 19:03
HD-COD-SW-13-0/1-0	180-42353-8	60330024.D	03/30/2015 19:27
HD-COD-SW-15-0/1-0	180-42353-9	60330025.D	03/30/2015 19:51
HD-COD-SW-16-0/1-0	180-42353-10	60330026.D	03/30/2015 20:14
HD-COD-SW-20-0/1-0	180-42353-12	60330028.D	03/30/2015 21:02
HD-COD-SW-26-0/1-0	180-42353-13	60330029.D	03/30/2015 21:27

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab File ID: 50330007.D Lab Sample ID: MB 180-136954/7

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

Instrument ID: CHHP5 Date Analyzed: 03/30/2015 13:04

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 180-136954/10	50330010.D	03/30/2015 14:33
HD-QC1-0/1-2	180-42353-17	50330022.D	03/30/2015 19:23
HD-COD-SW-27-0/1-0	180-42353-14	50330025.D	03/30/2015 20:35
HD-COD-SW-28-0/1-0	180-42353-15	50330026.D	03/30/2015 21:00
HD-COD-SW-29-0/1-0	180-42353-16	50330027.D	03/30/2015 21:24
HD-QC2-0/1-2	180-42353-18	50330029.D	03/30/2015 22:12
HD-MW-99D-0/1-0	180-42353-21	50330031.D	03/30/2015 23:01

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab File ID: 50331006.D Lab Sample ID: MB 180-137048/6

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

Instrument ID: CHHP5 Date Analyzed: 03/31/2015 11:21

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-99S-0/1-0	180-42353-20	50331007.D	03/31/2015 12:04
	LCS 180-137048/9	50331009.D	03/31/2015 12:53
HD-MW-99S-0/1-0 MS	180-42353-20 MS	50331010.D	03/31/2015 13:17
HD-MW-99S-0/1-0 MSD	180-42353-20 MSD	50331011.D	03/31/2015 13:41
HD-QC1-0/1-1	180-42353-19	50331014.D	03/31/2015 14:53
HD-COD-SW-17-0/1-0	180-42353-11	50331015.D	03/31/2015 15:17
HD-MW-100S-0/1-0	180-42353-23	50331018.D	03/31/2015 16:30
HD-MW-100I-0/1-0	180-42353-24	50331019.D	03/31/2015 16:54
HD-MW-93D-0/1-0	180-42353-26	50331022.D	03/31/2015 18:06

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab File ID: 50401006.D Lab Sample ID: MB 180-137218/6

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

Instrument ID: CHHP5 Date Analyzed: 04/01/2015 12:40

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 180-137218/9	50401009.D	04/01/2015 14:11
HD-COD-SW-17-0/1-0 DL	180-42353-11 DL	50401014.D	04/01/2015 16:11
HD-MW-145A-0/1-0	180-42353-22	50401015.D	04/01/2015 16:35
HD-MW-93S-0/1-0	180-42353-25	50401016.D	04/01/2015 16:59

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab File ID: 50316001.D BFB Injection Date: 03/16/2015

Instrument ID: CHHP5 BFB Injection Time: 10:49

Analysis Batch No.: 135593

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.7	
75	30.0 - 60.0 % of mass 95	54.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.8	(0.9)1
174	50.0 - 120.00 % of mass 95	85.5	
175	5.0 - 9.0 % of mass 174	6.4	(7.5)1
176	95.0 - 101.0 % of mass 174	83.4	(97.4)1
177	5.0 - 9.0 % of mass 176	4.9	(5.8)2

1-Value is % mass 174 2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-135593/4	50316004.D	03/16/2015	12:41
	ICIS 180-135593/5	50316005.D	03/16/2015	13:05
	IC 180-135593/6	50316006.D	03/16/2015	13:29
	IC 180-135593/7	50316007.D	03/16/2015	13:53
	IC 180-135593/8	50316008.D	03/16/2015	14:17
	IC 180-135593/9	50316009.D	03/16/2015	14:41
	IC 180-135593/10	50316010.D	03/16/2015	15:05
	IC 180-135593/13	50316013.D	03/16/2015	16:17

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab File ID: 50330005.D BFB Injection Date: 03/30/2015

Instrument ID: CHHP5 BFB Injection Time: 11:14

Analysis Batch No.: 136954

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.8	
75	30.0 - 60.0 % of mass 95	52.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	8.2	
173	Less than 2.0 % of mass 174	0.5	(0.6)1
174	50.0 - 120.00 % of mass 95	81.7	
175	5.0 - 9.0 % of mass 174	5.4	(6.6)1
176	95.0 - 101.0 % of mass 174	80.2	(98.2)1
177	5.0 - 9.0 % of mass 176	5.5	(6.9)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 180-136954/2	50330002.D	03/30/2015	11:52
	CCV 180-136954/3	50330003.D	03/30/2015	12:16
	MB 180-136954/7	50330007.D	03/30/2015	13:04
	LCS 180-136954/10	50330010.D	03/30/2015	14:33
HD-QC1-0/1-2	180-42353-17	50330022.D	03/30/2015	19:23
HD-COD-SW-27-0/1-0	180-42353-14	50330025.D	03/30/2015	20:35
HD-COD-SW-28-0/1-0	180-42353-15	50330026.D	03/30/2015	21:00
HD-COD-SW-29-0/1-0	180-42353-16	50330027.D	03/30/2015	21:24
HD-QC2-0/1-2	180-42353-18	50330029.D	03/30/2015	22:12
HD-MW-99D-0/1-0	180-42353-21	50330031.D	03/30/2015	23:01

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab File ID: 50331004.D BFB Injection Date: 03/31/2015

Instrument ID: CHHP5 BFB Injection Time: 09:26

Analysis Batch No.: 137048

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.5	
75	30.0 - 60.0 % of mass 95	54.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.5	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	80.2	
175	5.0 - 9.0 % of mass 174	6.6	(8.2)1
176	95.0 - 101.0 % of mass 174	76.7	(95.6)1
177	5.0 - 9.0 % of mass 176	5.2	(6.8)2

1-Value is % mass 174 2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-137048/2	50331002.D	03/31/2015	10:08
	CCV 180-137048/3	50331003.D	03/31/2015	10:32
	MB 180-137048/6	50331006.D	03/31/2015	11:21
HD-MW-99S-0/1-0	180-42353-20	50331007.D	03/31/2015	12:04
	LCS 180-137048/9	50331009.D	03/31/2015	12:53
HD-MW-99S-0/1-0 MS	180-42353-20 MS	50331010.D	03/31/2015	13:17
HD-MW-99S-0/1-0 MSD	180-42353-20 MSD	50331011.D	03/31/2015	13:41
HD-QC1-0/1-1	180-42353-19	50331014.D	03/31/2015	14:53
HD-COD-SW-17-0/1-0	180-42353-11	50331015.D	03/31/2015	15:17
HD-MW-100S-0/1-0	180-42353-23	50331018.D	03/31/2015	16:30
HD-MW-100I-0/1-0	180-42353-24	50331019.D	03/31/2015	16:54
HD-MW-93D-0/1-0	180-42353-26	50331022.D	03/31/2015	18:06

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab File ID: 50401004.D BFB Injection Date: 04/01/2015

Instrument ID: CHHP5 BFB Injection Time: 10:42

Analysis Batch No.: 137218

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.1	
75	30.0 - 60.0 % of mass 95	52.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	8.5	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	80.6	
175	5.0 - 9.0 % of mass 174	5.7	(7.1)1
176	95.0 - 101.0 % of mass 174	78.1	(96.9)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
	CCVIS 180-137218/2	50401002.D	04/01/2015	11:25
	CCV 180-137218/3	50401003.D	04/01/2015	11:49
	MB 180-137218/6	50401006.D	04/01/2015	12:40
	LCS 180-137218/9	50401009.D	04/01/2015	14:11
HD-COD-SW-17-0/1-0 DL	180-42353-11 DL	50401014.D	04/01/2015	16:11
HD-MW-145A-0/1-0	180-42353-22	50401015.D	04/01/2015	16:35
HD-MW-93S-0/1-0	180-42353-25	50401016.D	04/01/2015	16:59

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab File ID: 60128004.D BFB Injection Date: 01/28/2015

Instrument ID: CHHP6 BFB Injection Time: 11:55

Analysis Batch No.: 131929

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.1	
75	30.0 - 60.0 % of mass 95	48.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.0	
173	Less than 2.0 % of mass 174	0.5	(0.7)1
174	50.0 - 120.00 % of mass 95	64.3	
175	5.0 - 9.0 % of mass 174	4.8	(7.4)1
176	95.0 - 101.0 % of mass 174	64.5	(100.3)1
177	5.0 - 9.0 % of mass 176	4.6	(7.1)2

1-Value is % mass 174 2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-131929/6	60128006.D	01/28/2015	13:58
	IC 180-131929/7	60128007.D	01/28/2015	14:21
	ICIS 180-131929/8	60128008.D	01/28/2015	14:45
	IC 180-131929/9	60128009.D	01/28/2015	15:09
	IC 180-131929/10	60128010.D	01/28/2015	15:33
	IC 180-131929/11	60128011.D	01/28/2015	15:57
	IC 180-131929/12	60128012.D	01/28/2015	16:21
	IC 180-131929/13	60128013.D	01/28/2015	16:44

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab File ID: 60330001.D BFB Injection Date: 03/30/2015

Instrument ID: CHHP6 BFB Injection Time: 09:31

Analysis Batch No.: 136938

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.2	
75	30.0 - 60.0 % of mass 95	55.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.8	
173	Less than 2.0 % of mass 174	0.5	(0.8)1
174	50.0 - 120.00 % of mass 95	64.4	
175	5.0 - 9.0 % of mass 174	5.4	(8.3)1
176	95.0 - 101.0 % of mass 174	64.5	(100.1)1
177	5.0 - 9.0 % of mass 176	4.2	(6.5)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 180-136938/2	60330002.D	03/30/2015	10:12
	MB 180-136938/5	60330005.D	03/30/2015	11:37
	LCS 180-136938/8	60330008.D	03/30/2015	13:03
HD-COD-SW-7-0/1-0	180-42353-1	60330017.D	03/30/2015	16:39
HD-COD-SW-6-0/1-0	180-42353-2	60330018.D	03/30/2015	17:03
HD-COD-SW-8-0/1-0	180-42353-3	60330019.D	03/30/2015	17:27
HD-COD-SW-9-0/1-0	180-42353-4	60330020.D	03/30/2015	17:51
HD-COD-SW-10-0/1-0	180-42353-5	60330021.D	03/30/2015	18:15
HD-COD-SW-11-0/1-0	180-42353-6	60330022.D	03/30/2015	18:39
HD-COD-SW-12-0/1-0	180-42353-7	60330023.D	03/30/2015	19:03
HD-COD-SW-13-0/1-0	180-42353-8	60330024.D	03/30/2015	19:27
HD-COD-SW-15-0/1-0	180-42353-9	60330025.D	03/30/2015	19:51
HD-COD-SW-16-0/1-0	180-42353-10	60330026.D	03/30/2015	20:14
HD-COD-SW-20-0/1-0	180-42353-12	60330028.D	03/30/2015	21:02
HD-COD-SW-26-0/1-0	180-42353-13	60330029.D	03/30/2015	21:27

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Sample No.: CCVIS 180-136954/2 Date Analyzed: 03/30/2015 11:52

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 50330002.D Heated Purge: (Y/N) N

Calibration ID: 22514

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		135548	4.32	489209	7.28	107368	10.37
UPPER LIMIT		271096	4.82	978418	7.78	214736	10.87
LOWER LIMIT		67774	3.82	244605	6.78	53684	9.87
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-136954/3		116890	4.30	439717	7.28	97743	10.37
MB 180-136954/7		141937	4.30	488254	7.28	106640	10.36
LCS 180-136954/10		127652	4.31	464370	7.28	105827	10.37
180-42353-17	HD-QC1-0/1-2	95093	4.31	366415	7.28	80097	10.37
180-42353-14	HD-COD-SW-27-0/1-0	94221	4.29	376200	7.27	80781	10.36
180-42353-15	HD-COD-SW-28-0/1-0	91085	4.31	362118	7.28	77316	10.36
180-42353-16	HD-COD-SW-29-0/1-0	98632	4.29	365272	7.28	81373	10.36
180-42353-18	HD-QC2-0/1-2	106827	4.30	382733	7.28	83153	10.36
180-42353-21	HD-MW-99D-0/1-0	96941	4.30	384900	7.28	80810	10.36

TBA = TBA-d9 (IS)
FB = Fluorobenzene (IS)
CBZ = Chlorobenzene-d5

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Sample No.: CCVIS 180-136954/2 Date Analyzed: 03/30/2015 11:52

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 50330002.D Heated Purge: (Y/N) N

Calibration ID: 22514

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		162989	12.69				
UPPER LIMIT		325978	13.19				
LOWER LIMIT		81495	12.19				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-136954/3		117971	12.68				
MB 180-136954/7		152504	12.69				
LCS 180-136954/10		161688	12.69				
180-42353-17	HD-QC1-0/1-2	112161	12.69				
180-42353-14	HD-COD-SW-27-0/1-0	114953	12.68				
180-42353-15	HD-COD-SW-28-0/1-0	113425	12.69				
180-42353-16	HD-COD-SW-29-0/1-0	111188	12.68				
180-42353-18	HD-QC2-0/1-2	112519	12.69				
180-42353-21	HD-MW-99D-0/1-0	119660	12.69				

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.: 180-42353-1

SDG No.:

Sample No.: CCVIS 180-137048/2 Date Analyzed: 03/31/2015 10:08

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 50331002.D Heated Purge: (Y/N) N

Calibration ID: 22514

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		128979	4.31	451700	7.27	100479	10.36
UPPER LIMIT		257958	4.81	903400	7.77	200958	10.86
LOWER LIMIT		64490	3.81	225850	6.77	50240	9.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-137048/3		120952	4.30	434592	7.27	96350	10.36
MB 180-137048/6		128657	4.31	444816	7.28	96987	10.36
180-42353-20	HD-MW-99S-0/1-0	118835	4.30	444126	7.28	100926	10.36
LCS 180-137048/9		104283	4.31	426522	7.28	96127	10.36
180-42353-20 MS	HD-MW-99S-0/1-0 MS	119579	4.31	442274	7.28	101067	10.37
180-42353-20 MSD	HD-MW-99S-0/1-0 MSD	118602	4.31	459104	7.28	105546	10.37
180-42353-19	HD-QC1-0/1-1	114880	4.30	410723	7.28	86127	10.36
180-42353-11	HD-COD-SW-17-0/1-0	101382	4.31	408590	7.28	89028	10.36
180-42353-23	HD-MW-100S-0/1-0	111510	4.31	395960	7.28	85738	10.36
180-42353-24	HD-MW-100I-0/1-0	111072	4.30	389629	7.28	85422	10.36
180-42353-26	HD-MW-93D-0/1-0	96765	4.30	378284	7.27	77466	10.36

TBA = TBA-d9 (IS)
FB = Fluorobenzene (IS)
CBZ = Chlorobenzene-d5

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Sample No.: CCVIS 180-137048/2 Date Analyzed: 03/31/2015 10:08

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 50331002.D Heated Purge: (Y/N) N

Calibration ID: 22514

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		156941	12.69				
UPPER LIMIT		313882	13.19				
LOWER LIMIT		78471	12.19				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-137048/3		121085	12.69				
MB 180-137048/6		137224	12.69				
180-42353-20	HD-MW-99S-0/1-0	137561	12.68				
LCS 180-137048/9		150879	12.69				
180-42353-20 MS	HD-MW-99S-0/1-0 MS	153896	12.69				
180-42353-20 MSD	HD-MW-99S-0/1-0 MSD	157478	12.68				
180-42353-19	HD-QC1-0/1-1	123521	12.68				
180-42353-11	HD-COD-SW-17-0/1-0	122882	12.69				
180-42353-23	HD-MW-100S-0/1-0	120175	12.68				
180-42353-24	HD-MW-100I-0/1-0	121640	12.68				
180-42353-26	HD-MW-93D-0/1-0	116340	12.68				

DCB = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Sample No.: CCVIS 180-137218/2 Date Analyzed: 04/01/2015 11:25

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 50401002.D Heated Purge: (Y/N) N

Calibration ID: 22514

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		128318	4.32	490823	7.27	110088	10.36
UPPER LIMIT		256636	4.82	981646	7.77	220176	10.86
LOWER LIMIT		64159	3.82	245412	6.77	55044	9.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-137218/3		110911	4.30	443385	7.28	89996	10.36
MB 180-137218/6		122009	4.30	436499	7.28	98509	10.36
LCS 180-137218/9		122335	4.31	436378	7.27	96732	10.37
180-42353-11 DL	HD-COD-SW-17-0/1-0 DL	120092	4.31	421635	7.27	95398	10.36
180-42353-22	HD-MW-145A-0/1-0	104660	4.30	409276	7.27	90408	10.36
180-42353-25	HD-MW-93S-0/1-0	102689	4.30	376251	7.27	83130	10.36

TBA = TBA-d9 (IS)
FB = Fluorobenzene (IS)
CBZ = Chlorobenzene-d5

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Sample No.: CCVIS 180-137218/2 Date Analyzed: 04/01/2015 11:25

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 50401002.D Heated Purge: (Y/N) N

Calibration ID: 22514

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		166638	12.68				
UPPER LIMIT		333276	13.18				
LOWER LIMIT		83319	12.18				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-137218/3		115226	12.68				
MB 180-137218/6		139944	12.69				
LCS 180-137218/9		156165	12.68				
180-42353-11 DL	HD-COD-SW-17-0/1-0 DL	135376	12.68				
180-42353-22	HD-MW-145A-0/1-0	124346	12.68				
180-42353-25	HD-MW-93S-0/1-0	118795	12.68				

DCB = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Sample No.: CCVIS 180-136938/2 Date Analyzed: 03/30/2015 10:12

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 60330002.D Heated Purge: (Y/N) N

Calibration ID: 21588

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		229623	4.28	505716	7.33	107308	10.44
UPPER LIMIT		459246	4.78	1011432	7.83	214616	10.94
LOWER LIMIT		114812	3.78	252858	6.83	53654	9.94
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-136938/5		271835	4.27	594166	7.33	117363	10.43
LCS 180-136938/8		253324	4.28	529801	7.33	113057	10.44
180-42353-1	HD-COD-SW-7-0/1-0	245553	4.27	573420	7.33	118726	10.44
180-42353-2	HD-COD-SW-6-0/1-0	246424	4.27	567502	7.33	114995	10.44
180-42353-3	HD-COD-SW-8-0/1-0	248688	4.27	537461	7.33	109460	10.44
180-42353-4	HD-COD-SW-9-0/1-0	258137	4.28	554044	7.33	118839	10.44
180-42353-5	HD-COD-SW-10-0/1-0	251111	4.27	554991	7.33	117034	10.44
180-42353-6	HD-COD-SW-11-0/1-0	255906	4.27	562336	7.33	110480	10.44
180-42353-7	HD-COD-SW-12-0/1-0	251880	4.27	533203	7.33	104336	10.45
180-42353-8	HD-COD-SW-13-0/1-0	247248	4.28	548699	7.34	118658	10.44
180-42353-9	HD-COD-SW-15-0/1-0	253198	4.27	527341	7.33	105513	10.44
180-42353-10	HD-COD-SW-16-0/1-0	246124	4.27	525609	7.33	105217	10.44
180-42353-12	HD-COD-SW-20-0/1-0	236883	4.27	506650	7.33	103422	10.44
180-42353-13	HD-COD-SW-26-0/1-0	257253	4.26	520828	7.33	108406	10.44

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.: 180-42353-1

SDG No.:

Sample No.: CCVIS 180-136938/2 Date Analyzed: 03/30/2015 10:12

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 60330002.D Heated Purge: (Y/N) N

Calibration ID: 21588

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		167539	12.80				
UPPER LIMIT		335078	13.30				
LOWER LIMIT		83770	12.30				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-136938/5		187859	12.79				
LCS 180-136938/8		175872	12.79				
180-42353-1	HD-COD-SW-7-0/1-0	181360	12.79				
180-42353-2	HD-COD-SW-6-0/1-0	183472	12.79				
180-42353-3	HD-COD-SW-8-0/1-0	175370	12.79				
180-42353-4	HD-COD-SW-9-0/1-0	179243	12.79				
180-42353-5	HD-COD-SW-10-0/1-0	179750	12.79				
180-42353-6	HD-COD-SW-11-0/1-0	180762	12.79				
180-42353-7	HD-COD-SW-12-0/1-0	168042	12.79				
180-42353-8	HD-COD-SW-13-0/1-0	186823	12.79				
180-42353-9	HD-COD-SW-15-0/1-0	164994	12.80				
180-42353-10	HD-COD-SW-16-0/1-0	167581	12.79				
180-42353-12	HD-COD-SW-20-0/1-0	159275	12.79				
180-42353-13	HD-COD-SW-26-0/1-0	167623	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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 | Lab Sample ID: 180-42353-1

Matrix: Water | Lab File ID: 60330017.D

Analysis Method: 8260C | Date Collected: 03/24/2015 12:05

Sample wt/vol: 5(mL) | Date Analyzed: 03/30/2015 16:39

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.: 136938 | 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	0.15	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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 180-42353-1

Matrix: Water Lab File ID: 60330017.D

Analysis Method: 8260C Date Collected: 03/24/2015 12:05

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 16:39

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.: 136938 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)	125		64-135
2037-26-5	Toluene-d8 (Surr)	107		71-118
460-00-4	4-Bromofluorobenzene (Surr)	104		70-118
1868-53-7	Dibromofluoromethane (Surr)	106		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330017.D
Lims ID: 180-42353-E-1 Lab Sample ID: 180-42353-1
Client ID: HD-COD-SW-7-0/1-0
Sample Type: Client
Inject. Date: 30-Mar-2015 16:39:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-E-1
Misc. Info.: 180-0006236-017
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 10:16:36 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 10:16:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.272	4.284	-0.012	90	245553	1000.0	
* 2 Fluorobenzene (IS)	96	7.332	7.332	0.000	97	573420	50.0	
* 3 Chlorobenzene-d5	119	10.441	10.440	0.001	92	118726	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.789	12.795	-0.006	98	181360	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.602	6.596	0.006	93	137319	52.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.979	6.973	0.006	70	231602	62.4	
$ 7 Toluene-d8 (Surr)	98	8.981	8.980	0.001	94	499139	53.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.627	11.627	0.000	81	206500	51.9	
12 Chloromethane	50		1.765				ND	
13 Vinyl chloride	62		1.899				ND	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.392				ND	
22 1,1-Dichloroethene	96		3.371				ND	
24 Acetone	43	3.475	3.451	0.024	75	9224	9.09	M
26 Carbon disulfide	76		3.682				ND	
31 Methylene Chloride	84		4.168				ND	
33 Acrylonitrile	53		4.539				ND	
34 trans-1,2-Dichloroethene	96		4.606				ND	
35 Methyl tert-butyl ether	73		4.606				ND	
37 1,1-Dichloroethane	63		5.239				ND	
43 cis-1,2-Dichloroethene	96	5.994	5.981	0.013	8	2263	0.5505	
44 2-Butanone (MEK)	43		5.987				ND	
48 Chlorobromomethane	128		6.273				ND	
50 Chloroform	83		6.413				ND	
51 1,1,1-Trichloroethane	97		6.584				ND	
53 Carbon tetrachloride	117		6.760				ND	
56 Benzene	78		6.985				ND	
57 1,2-Dichloroethane	62		7.058				ND	
61 Trichloroethene	130	7.721	7.721	0.000	38	2427	0.7484	
64 1,2-Dichloropropane	63		7.989				ND	
65 1,4-Dioxane	88		8.074				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.275				ND	
71 cis-1,3-Dichloropropene	75		8.719				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.859				ND	
73 Toluene	91	9.048	9.047	0.001	70	7066	0.5821	
74 trans-1,3-Dichloropropene	75		9.297				ND	
76 1,1,2-Trichloroethane	97		9.485				ND	
77 Tetrachloroethene	164		9.571				ND	
79 2-Hexanone	43		9.692				ND	
81 Chlorodibromomethane	129		9.863				ND	
82 Ethylene Dibromide	107		9.984				ND	
84 Chlorobenzene	112		10.471				ND	
86 1,1,1,2-Tetrachloroethane	131		10.562				ND	
87 Ethylbenzene	106		10.568				ND	
88 m-Xylene & p-Xylene	106		10.696				ND	
89 o-Xylene	106		11.079				ND	
90 Styrene	104		11.104				ND	
91 Bromoform	173		11.292				ND	
96 1,1,2,2-Tetrachloroethane	83		11.754				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

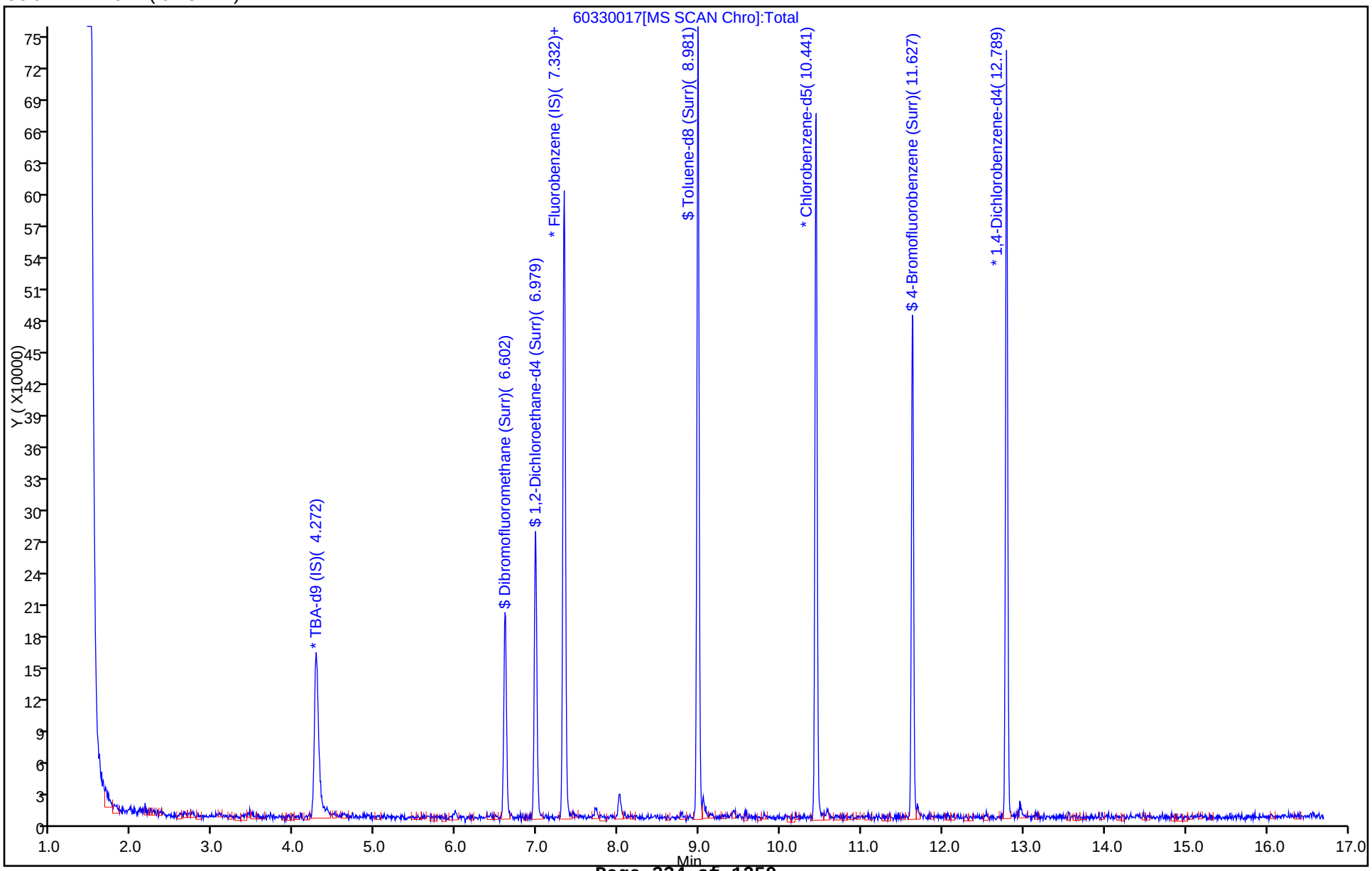
Report Date: 31-Mar-2015 10:16:36 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330017.D

Injection Date:	30-Mar-2015 16:39:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-42353-E-1	Lab Sample ID:	180-42353-1	Worklist Smp#:	17
Client ID:	HD-COD-SW-7-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

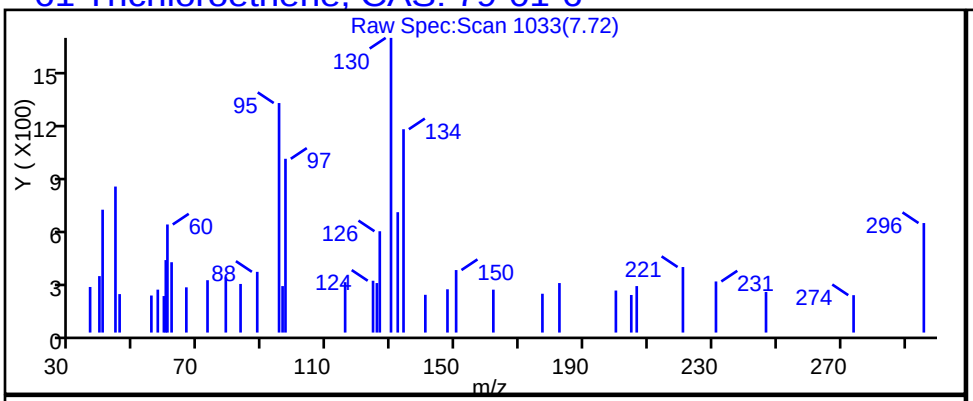


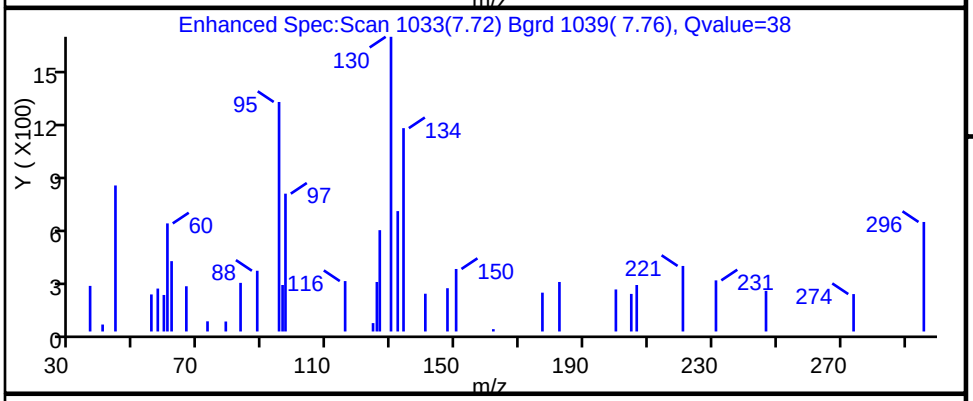
Report Date: 31-Mar-2015 10:16:36 Chrom Revision: 2.2 13-Mar-2015 11:20:44

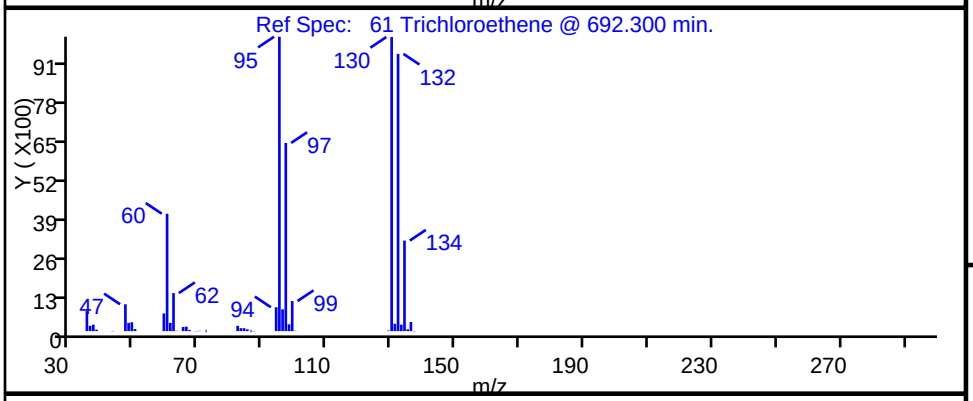
TestAmerica Pittsburgh

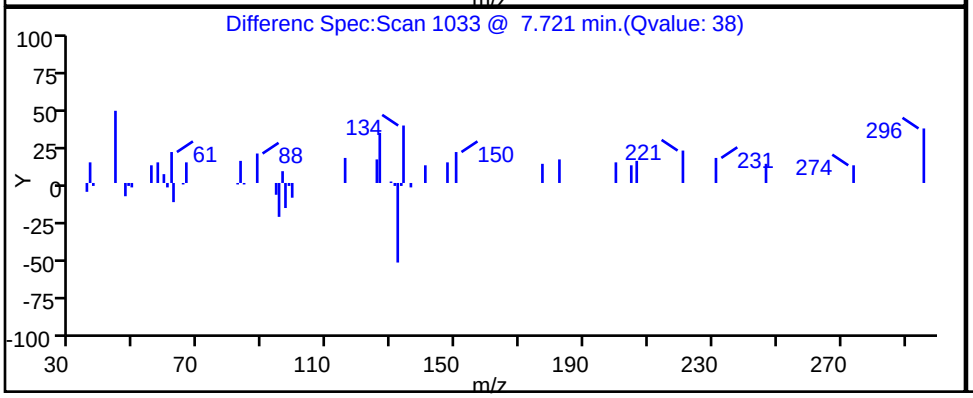
Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330017.D				
Injection Date:	30-Mar-2015 16:39:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-E-1	Lab Sample ID:	180-42353-1		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	001562	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

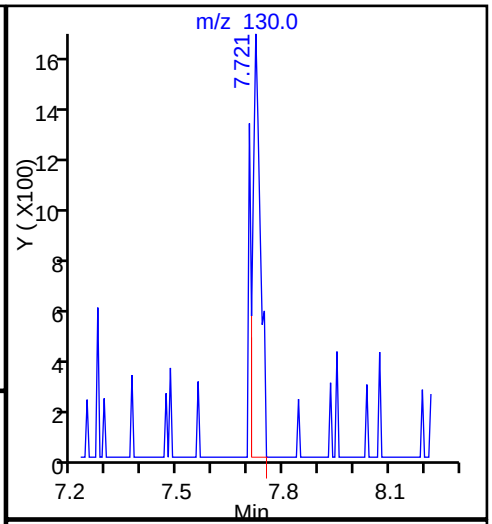
61 Trichloroethene, CAS: 79-01-6

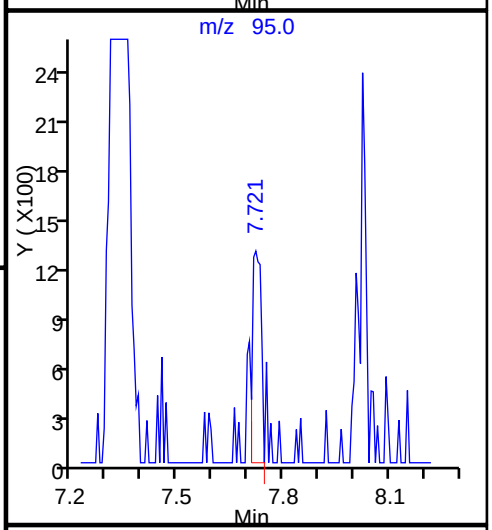


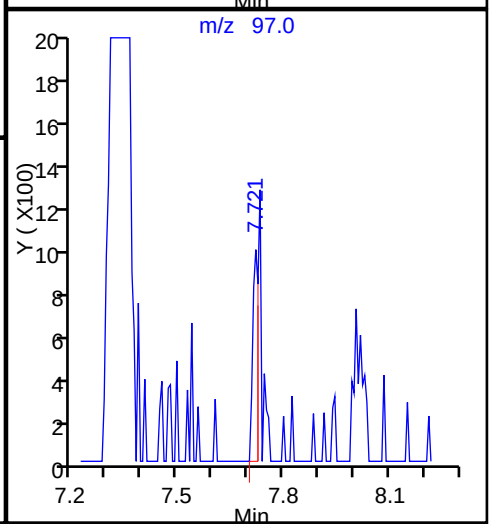












Manual Integration/User Assign Peak Report

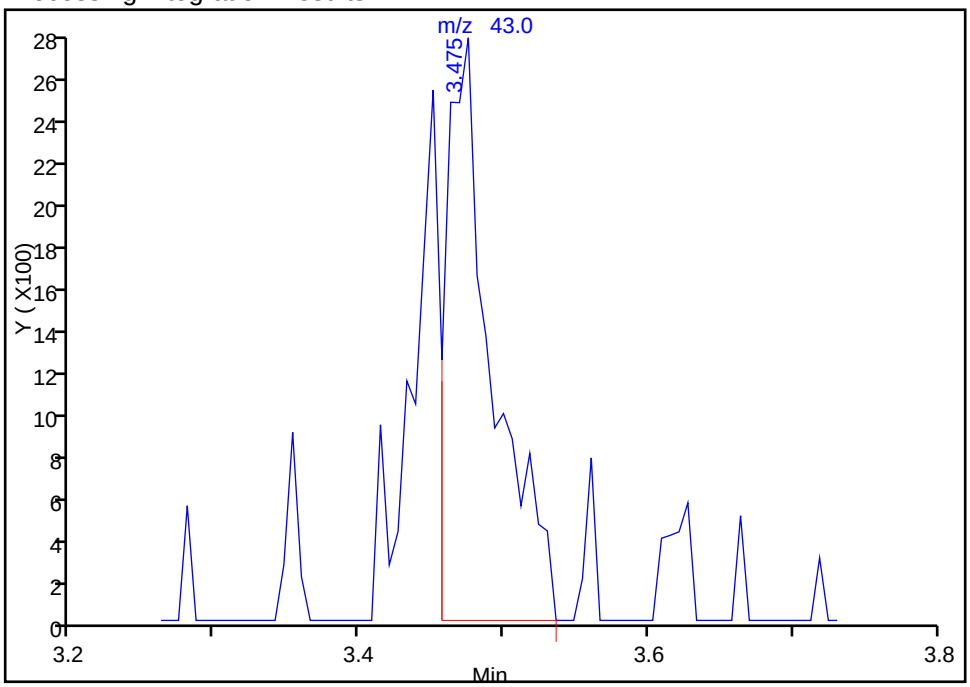
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330017.D				
Injection Date:	30-Mar-2015 16:39:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-E-1	Lab Sample ID:	180-42353-1		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	001562	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

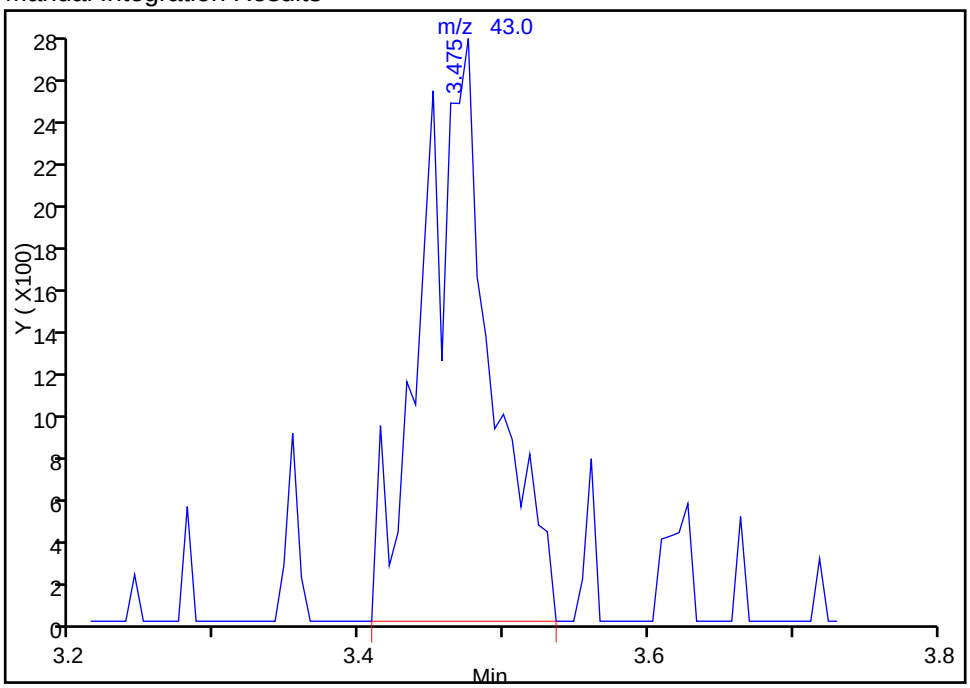
Processing Integration Results

RT: 3.48
Area: 6240
Amount: 6.151633
Amount Units: ng



Manual Integration Results

RT: 3.48
Area: 9224
Amount: 9.093376
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 10:16:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0 | Lab Sample ID: 180-42353-2

Matrix: Water | Lab File ID: 60330018.D

Analysis Method: 8260C | Date Collected: 03/24/2015 10:40

Sample wt/vol: 5(mL) | Date Analyzed: 03/30/2015 17:03

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.: 136938 | 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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 180-42353-2

Matrix: Water Lab File ID: 60330018.D

Analysis Method: 8260C Date Collected: 03/24/2015 10:40

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 17:03

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.: 136938 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)	124		64-135
2037-26-5	Toluene-d8 (Surr)	104		71-118
460-00-4	4-Bromofluorobenzene (Surr)	97		70-118
1868-53-7	Dibromofluoromethane (Surr)	107		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330018.D
Lims ID: 180-42353-E-2 Lab Sample ID: 180-42353-2
Client ID: HD-COD-SW-6-0/1-0
Sample Type: Client
Inject. Date: 30-Mar-2015 17:03:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-E-2
Misc. Info.: 180-0006236-018
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 10:17:35 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 10:17:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.273	4.284	-0.011	91	246424	1000.0	
* 2 Fluorobenzene (IS)	96	7.333	7.332	0.001	98	567502	50.0	
* 3 Chlorobenzene-d5	119	10.441	10.440	0.001	92	114995	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.789	12.795	-0.006	97	183472	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.603	6.596	0.007	93	137044	53.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.974	6.973	0.001	70	228707	62.2	
$ 7 Toluene-d8 (Surr)	98	8.981	8.980	0.001	93	470252	51.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.627	11.627	0.000	81	187843	48.7	
12 Chloromethane	50		1.765				ND	
13 Vinyl chloride	62		1.899				ND	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.392				ND	
22 1,1-Dichloroethene	96		3.371				ND	
24 Acetone	43	3.457	3.451	0.006	76	5481	5.46	M
26 Carbon disulfide	76		3.682				ND	
31 Methylene Chloride	84		4.168				ND	
33 Acrylonitrile	53		4.539				ND	
34 trans-1,2-Dichloroethene	96		4.606				ND	
35 Methyl tert-butyl ether	73		4.606				ND	
37 1,1-Dichloroethane	63		5.239				ND	
43 cis-1,2-Dichloroethene	96		5.981				ND	
44 2-Butanone (MEK)	43		5.987				ND	
48 Chlorobromomethane	128		6.273				ND	
50 Chloroform	83		6.413				ND	
51 1,1,1-Trichloroethane	97		6.584				ND	
53 Carbon tetrachloride	117		6.760				ND	
56 Benzene	78		6.985				ND	
57 1,2-Dichloroethane	62		7.058				ND	
61 Trichloroethene	130		7.721				ND	
64 1,2-Dichloropropane	63		7.989				ND	
65 1,4-Dioxane	88		8.074				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.275				ND	
71 cis-1,3-Dichloropropene	75		8.719				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.859				ND	
73 Toluene	91	9.048	9.047	0.001	60	5397	0.4591	
74 trans-1,3-Dichloropropene	75		9.297				ND	
76 1,1,2-Trichloroethane	97		9.485				ND	
77 Tetrachloroethene	164		9.571				ND	
79 2-Hexanone	43		9.692				ND	
81 Chlorodibromomethane	129		9.863				ND	
82 Ethylene Dibromide	107		9.984				ND	
84 Chlorobenzene	112		10.471				ND	
86 1,1,1,2-Tetrachloroethane	131		10.562				ND	
87 Ethylbenzene	106		10.568				ND	
88 m-Xylene & p-Xylene	106		10.696				ND	
89 o-Xylene	106		11.079				ND	
90 Styrene	104		11.104				ND	
91 Bromoform	173		11.292				ND	
96 1,1,2,2-Tetrachloroethane	83		11.754				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

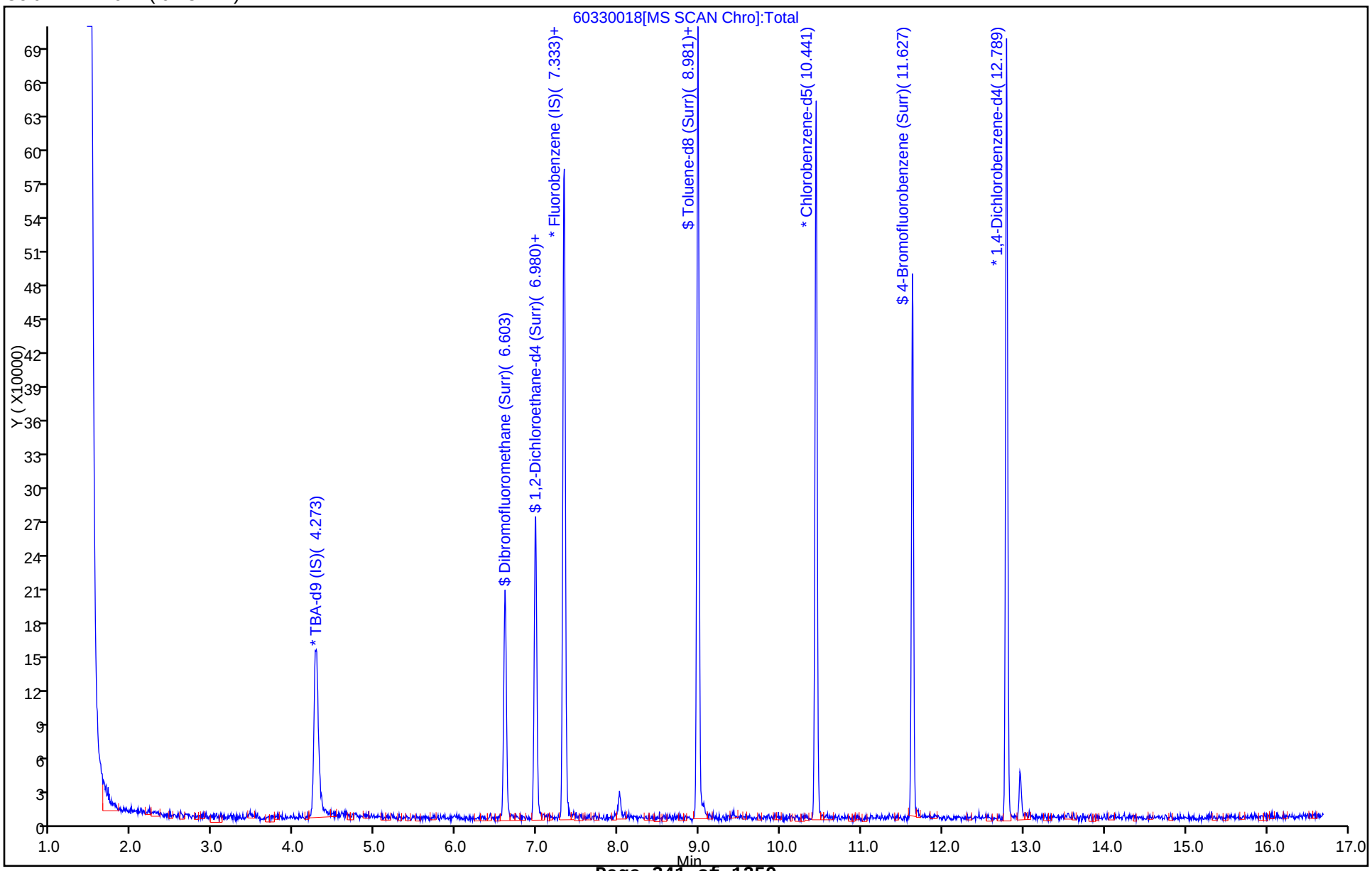
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 31-Mar-2015 10:17:35 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330018.D				
Injection Date:	30-Mar-2015 17:03:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-42353-E-2	Lab Sample ID:	180-42353-2	Worklist Smp#:	18
Client ID:	HD-COD-SW-6-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

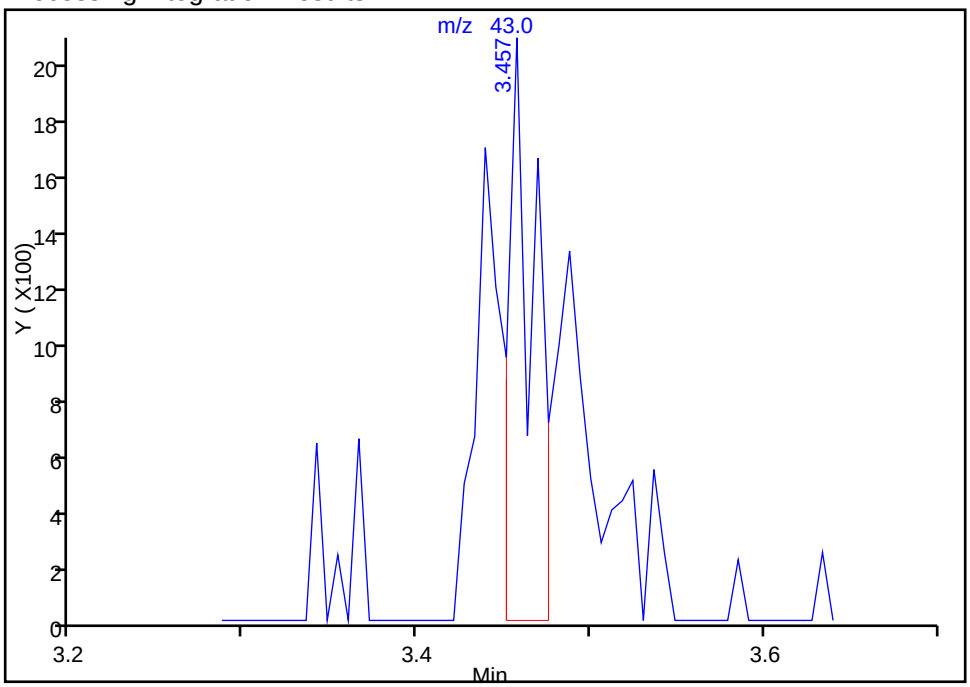
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330018.D				
Injection Date:	30-Mar-2015 17:03:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-E-2	Lab Sample ID:	180-42353-2		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	001562	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

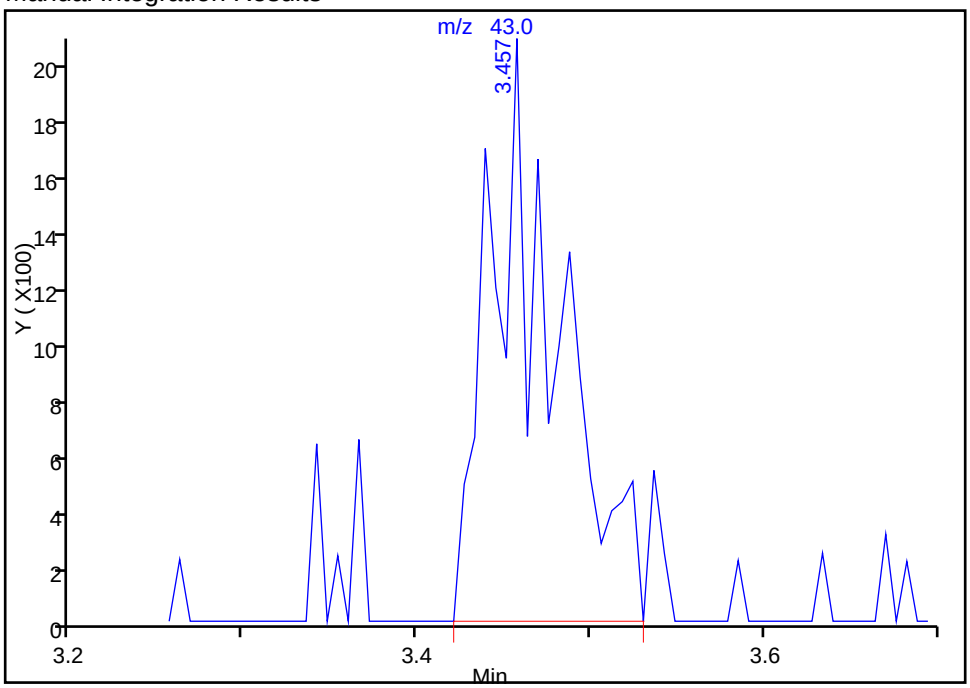
Processing Integration Results

RT: 3.46
Area: 2156
Amount: 2.147633
Amount Units: ng



Manual Integration Results

RT: 3.46
Area: 5481
Amount: 5.459729
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 10:17:35
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 180-42353-3

Matrix: Water Lab File ID: 60330019.D

Analysis Method: 8260C Date Collected: 03/24/2015 09:10

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 17:27

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.: 136938 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	0.27	J	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	0.31	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	0.32	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	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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 180-42353-3

Matrix: Water Lab File ID: 60330019.D

Analysis Method: 8260C Date Collected: 03/24/2015 09:10

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 17:27

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.: 136938 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)	128		64-135
2037-26-5	Toluene-d8 (Surr)	105		71-118
460-00-4	4-Bromofluorobenzene (Surr)	97		70-118
1868-53-7	Dibromofluoromethane (Surr)	109		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330019.D
Lims ID: 180-42353-C-3 Lab Sample ID: 180-42353-3
Client ID: HD-COD-SW-8-0/1-0
Sample Type: Client
Inject. Date: 30-Mar-2015 17:27:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-C-3
Misc. Info.: 180-0006236-019
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 10:18:47 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 10:18:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.273	4.284	-0.011	90	248688	1000.0	
* 2 Fluorobenzene (IS)	96	7.333	7.332	0.001	97	537461	50.0	
* 3 Chlorobenzene-d5	119	10.441	10.440	0.001	92	109460	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.790	12.795	-0.005	96	175370	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.603	6.596	0.007	92	132264	54.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.980	6.973	0.007	71	222202	63.9	
$ 7 Toluene-d8 (Surr)	98	8.981	8.980	0.001	94	454161	52.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.628	11.627	0.001	82	178101	48.5	
12 Chloromethane	50		1.765				ND	
13 Vinyl chloride	62		1.899				ND	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.392				ND	
22 1,1-Dichloroethene	96		3.371				ND	
24 Acetone	43	3.470	3.451	0.019	76	8736	9.19	M
26 Carbon disulfide	76		3.682				ND	
31 Methylene Chloride	84		4.168				ND	
33 Acrylonitrile	53		4.539				ND	
34 trans-1,2-Dichloroethene	96		4.606				ND	
35 Methyl tert-butyl ether	73		4.606				ND	
37 1,1-Dichloroethane	63		5.239				ND	
43 cis-1,2-Dichloroethene	96	5.976	5.981	-0.005	22	5167	1.34	
44 2-Butanone (MEK)	43		5.987				ND	
48 Chlorobromomethane	128		6.273				ND	
50 Chloroform	83		6.413				ND	
51 1,1,1-Trichloroethane	97		6.584				ND	
53 Carbon tetrachloride	117		6.760				ND	
56 Benzene	78		6.985				ND	
57 1,2-Dichloroethane	62		7.058				ND	
61 Trichloroethene	130	7.728	7.721	0.007	45	4716	1.55	
64 1,2-Dichloropropane	63		7.989				ND	
65 1,4-Dioxane	88		8.074				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.275				ND	
71 cis-1,3-Dichloropropene	75		8.719				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.859				ND	
73 Toluene	91	9.048	9.047	0.001	52	4405	0.3936	
74 trans-1,3-Dichloropropene	75		9.297				ND	
76 1,1,2-Trichloroethane	97		9.485				ND	
77 Tetrachloroethene	164	9.572	9.571	0.001	87	3197	1.60	
79 2-Hexanone	43		9.692				ND	
81 Chlorodibromomethane	129		9.863				ND	
82 Ethylene Dibromide	107		9.984				ND	
84 Chlorobenzene	112		10.471				ND	
86 1,1,1,2-Tetrachloroethane	131		10.562				ND	
87 Ethylbenzene	106		10.568				ND	
88 m-Xylene & p-Xylene	106		10.696				ND	
89 o-Xylene	106		11.079				ND	
90 Styrene	104		11.104				ND	
91 Bromoform	173		11.292				ND	
96 1,1,2,2-Tetrachloroethane	83		11.754				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

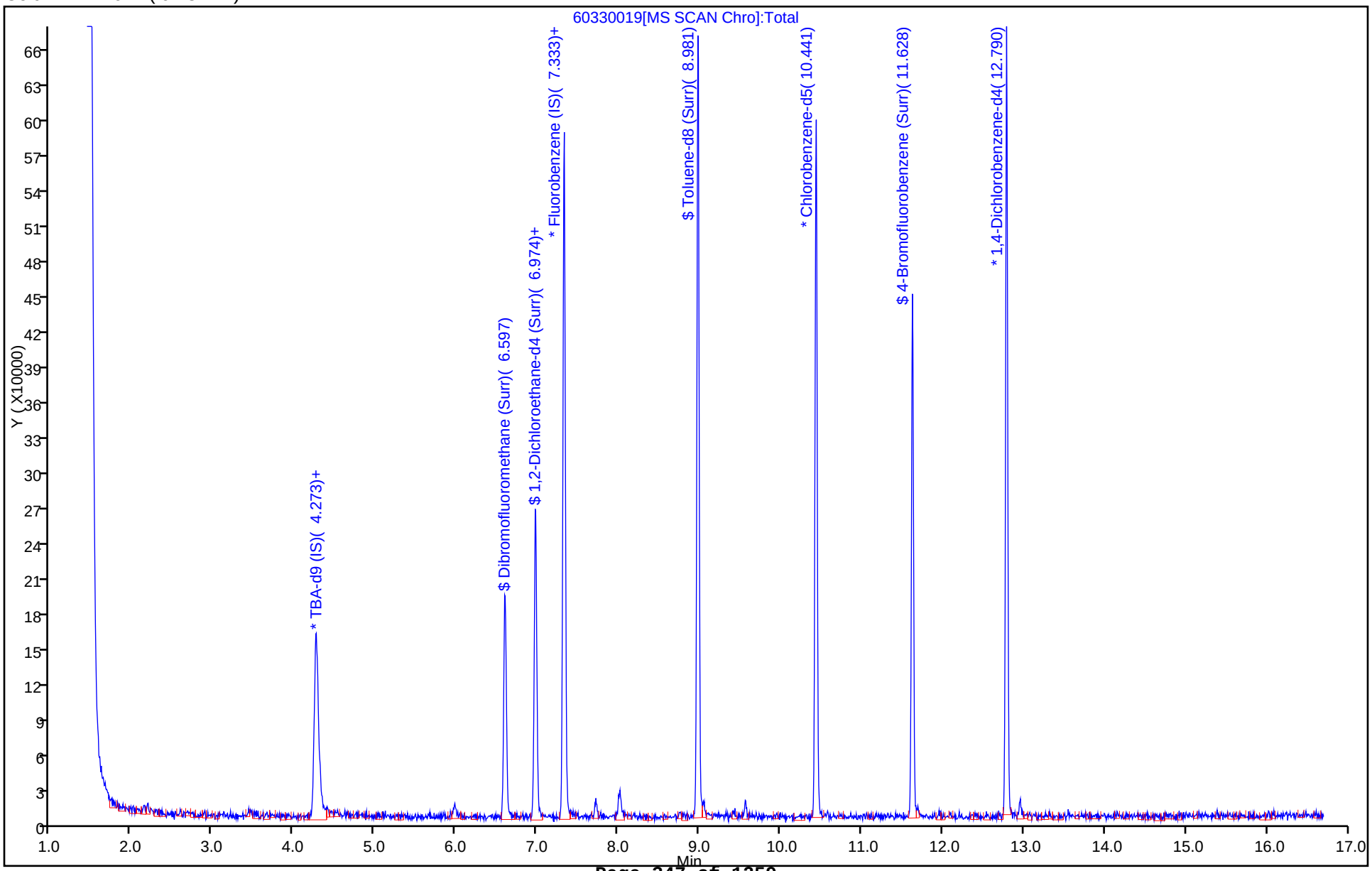
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 31-Mar-2015 10:18:48 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330019.D				
Injection Date:	30-Mar-2015 17:27:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-42353-C-3	Lab Sample ID:	180-42353-3	Worklist Smp#:	19
Client ID:	HD-COD-SW-8-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

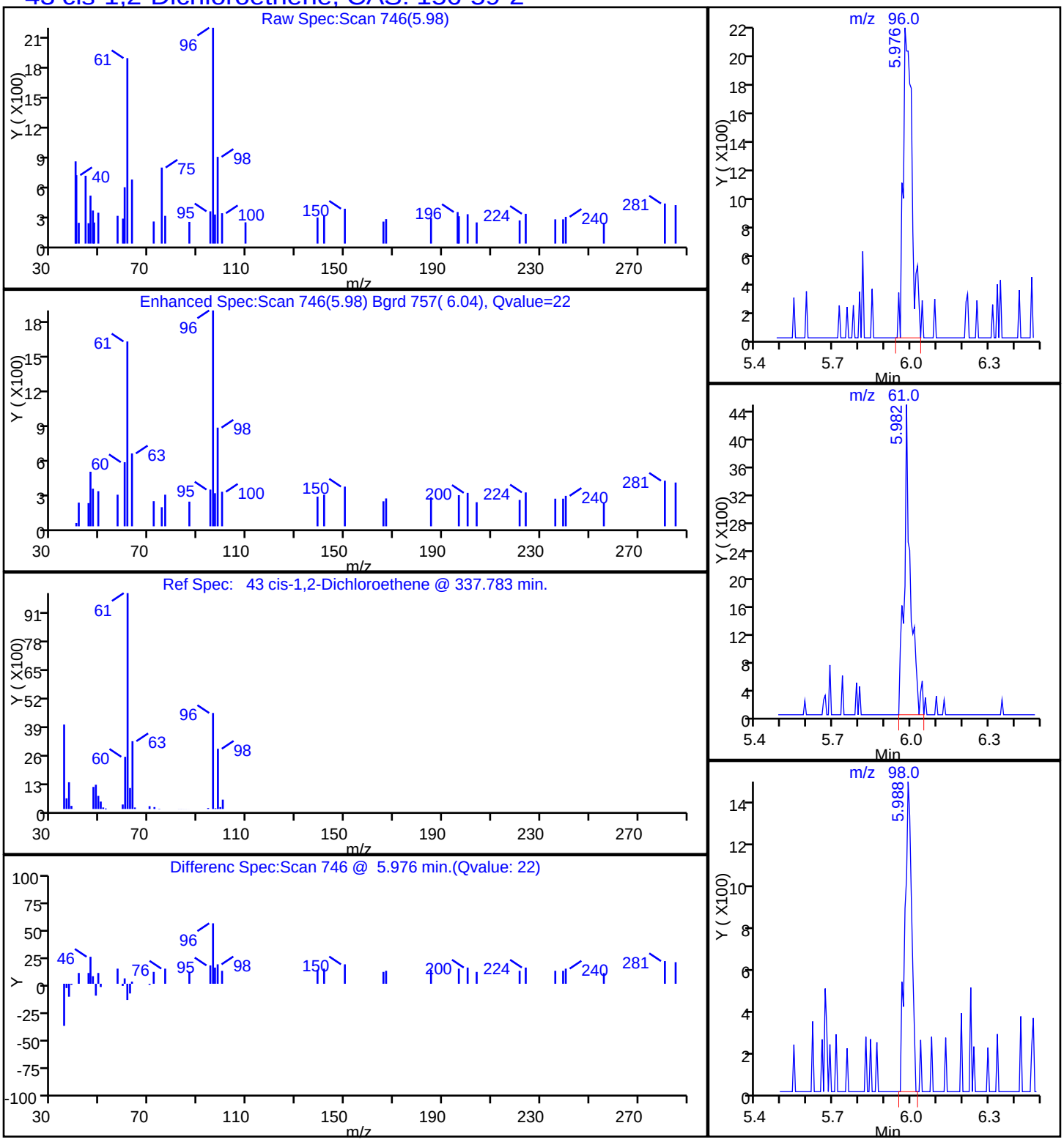


Report Date: 31-Mar-2015 10:18:48 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330019.D				
Injection Date:	30-Mar-2015 17:27:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-C-3	Lab Sample ID:	180-42353-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	001562	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

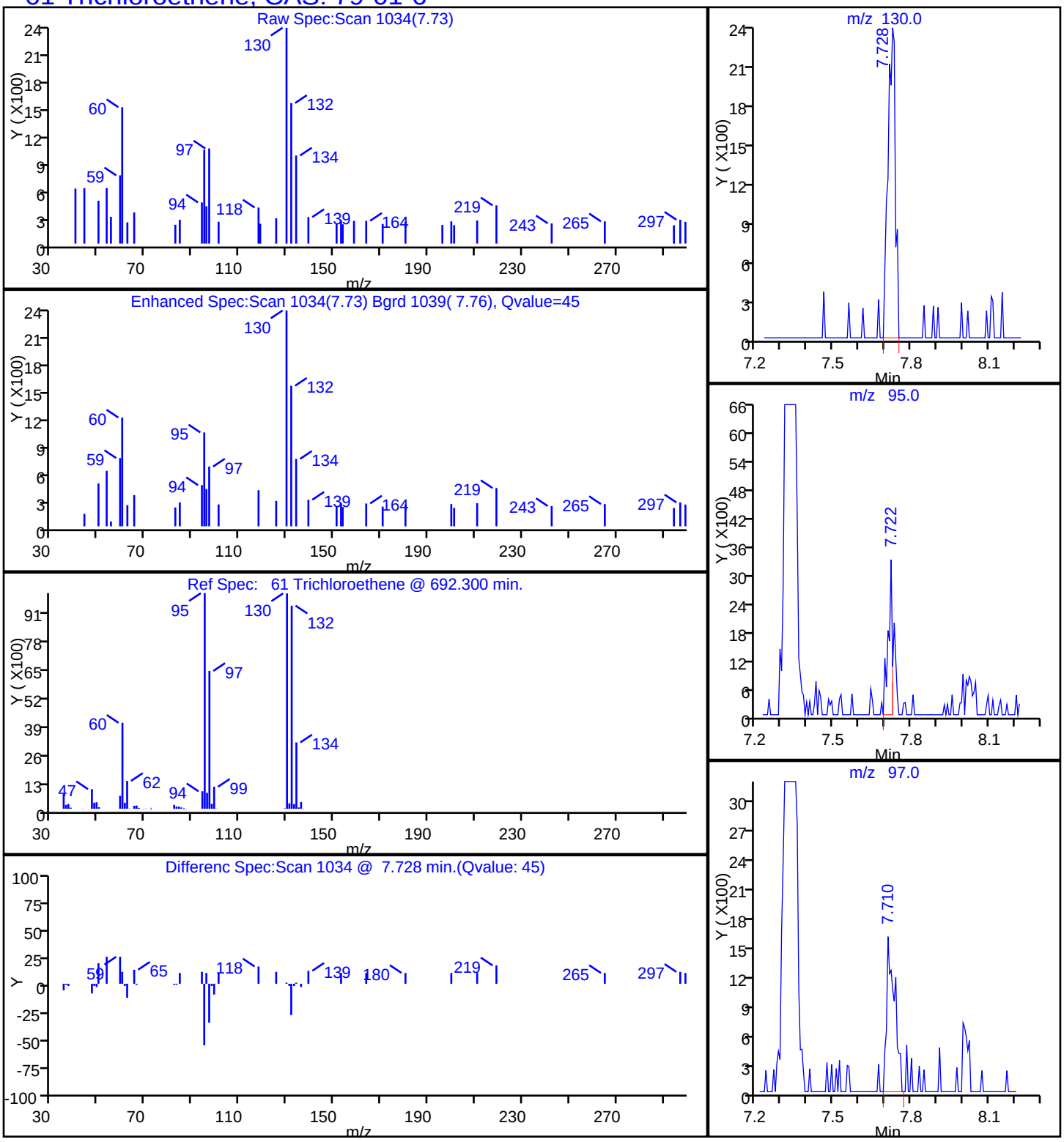


Report Date: 31-Mar-2015 10:18:48 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330019.D				
Injection Date:	30-Mar-2015 17:27:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-C-3	Lab Sample ID:	180-42353-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	001562	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

61 Trichloroethene, CAS: 79-01-6



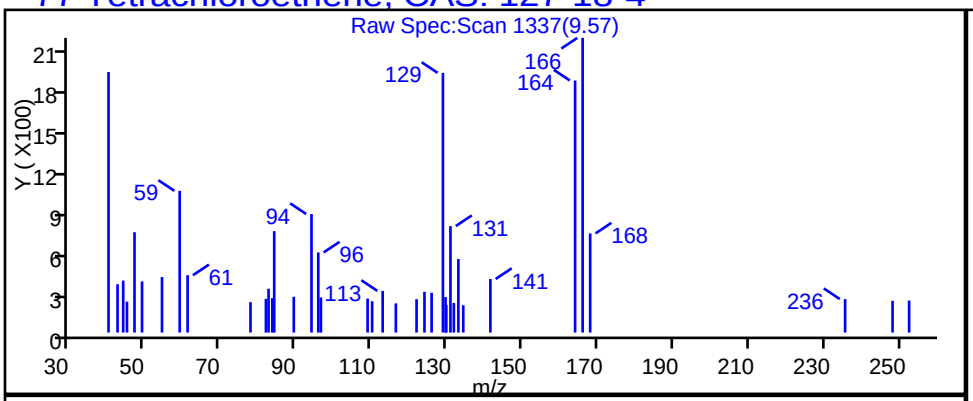
Report Date: 31-Mar-2015 10:18:48 Chrom Revision: 2.2 13-Mar-2015 11:20:44

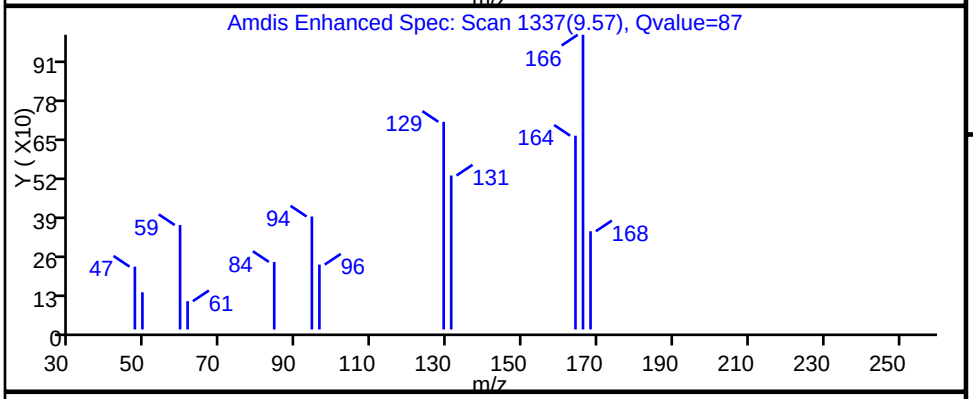
TestAmerica Pittsburgh

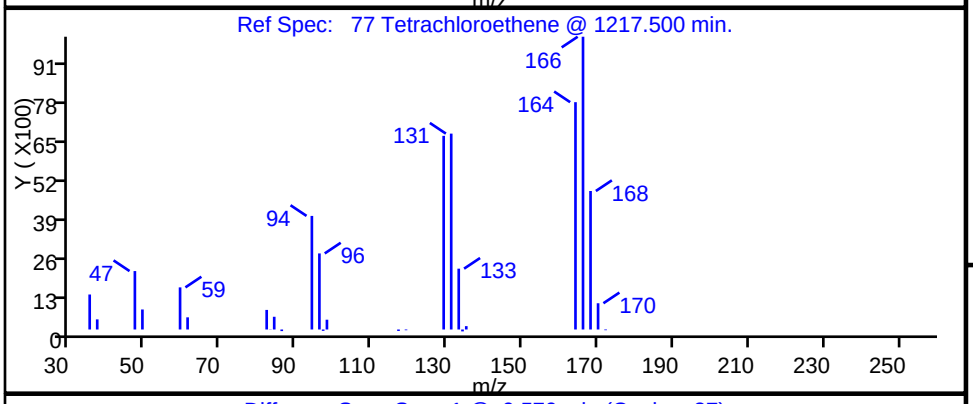
Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330019.D

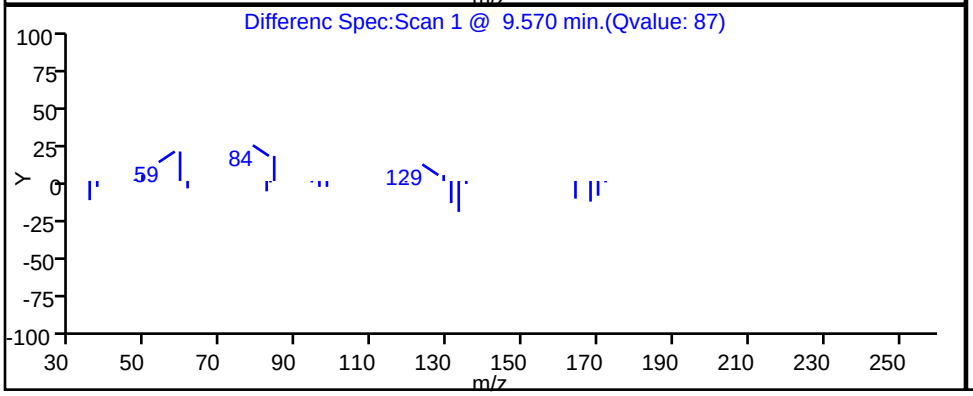
Injection Date:	30-Mar-2015 17:27:30	Instrument ID:	CHHP6
Lims ID:	180-42353-C-3	Lab Sample ID:	180-42353-3
Client ID:	HD-COD-SW-8-0/1-0		
Operator ID:	001562	ALS Bottle#:	19 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

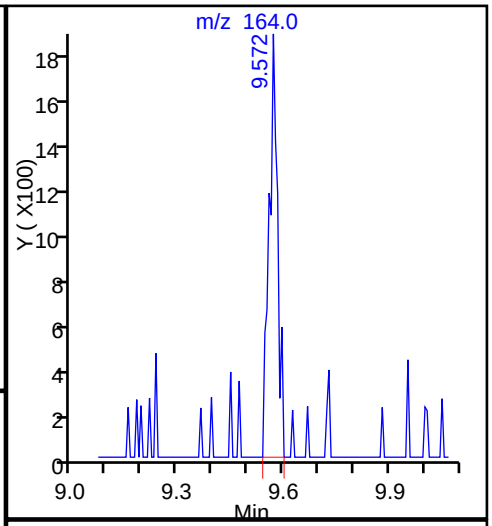
77 Tetrachloroethene, CAS: 127-18-4

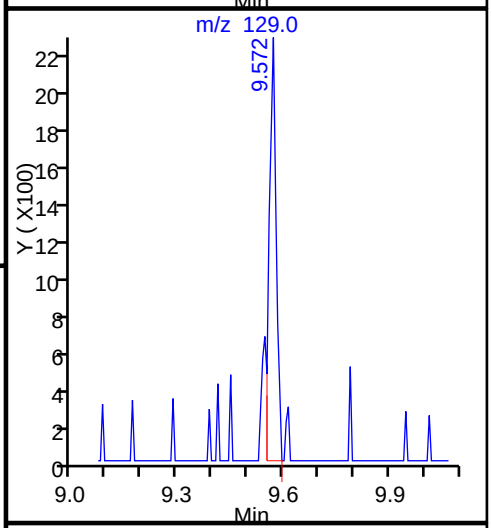


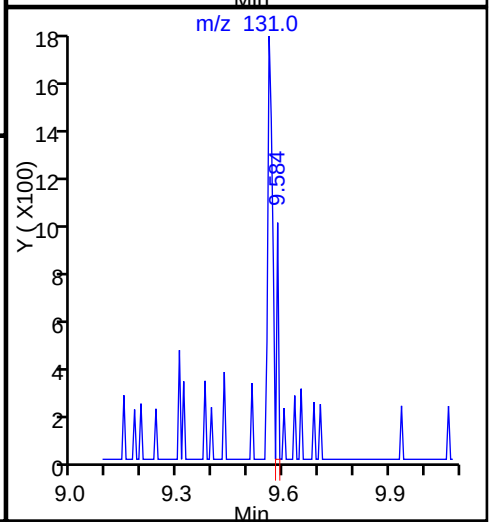












Manual Integration/User Assign Peak Report

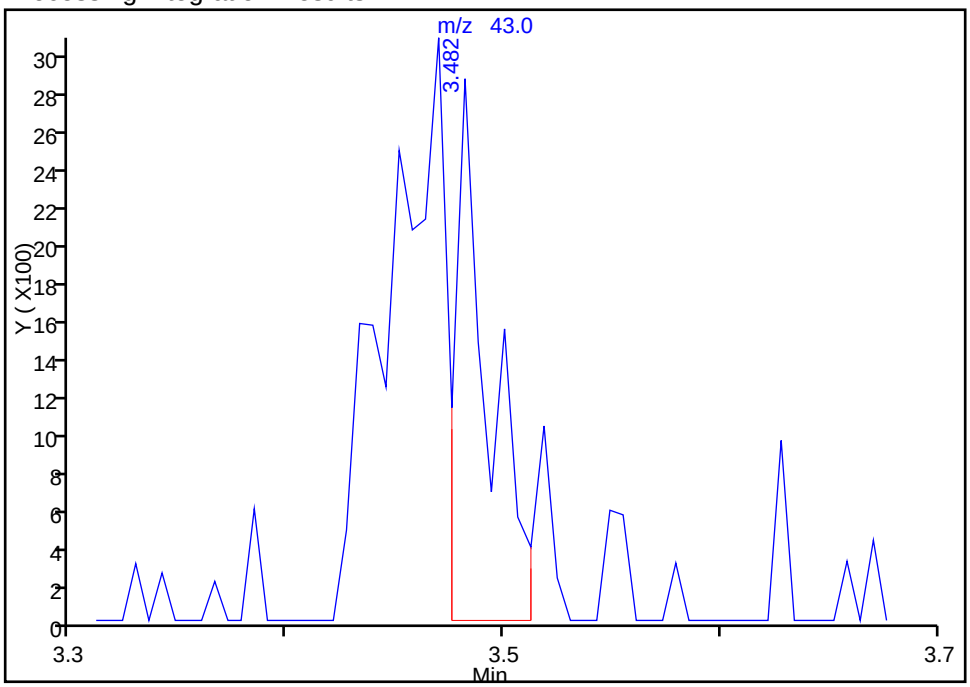
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330019.D				
Injection Date:	30-Mar-2015 17:27:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-C-3	Lab Sample ID:	180-42353-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	001562	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

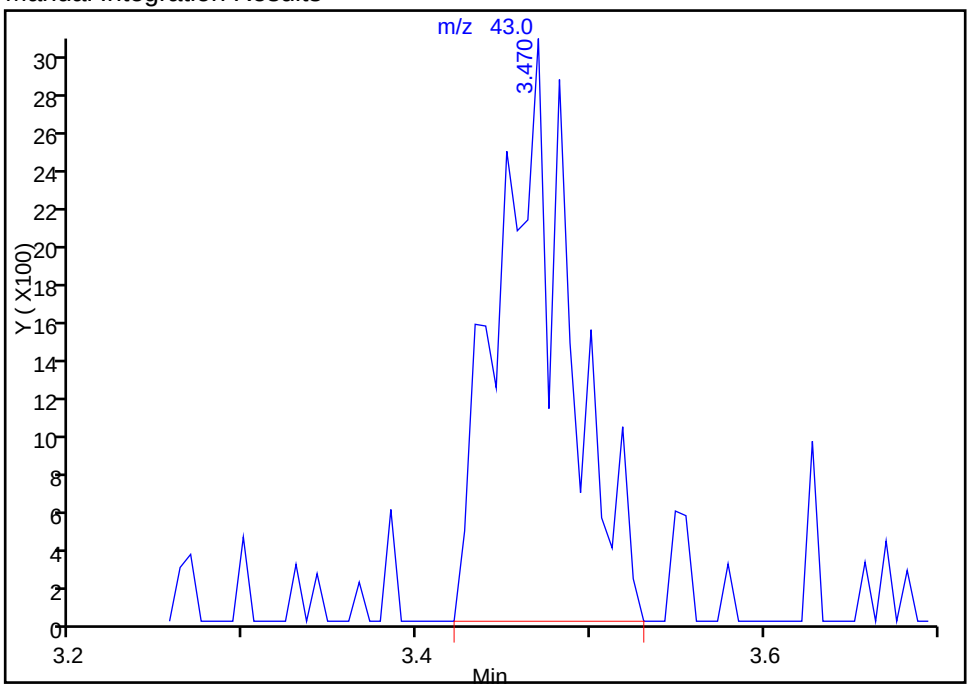
Processing Integration Results

RT: 3.48
Area: 3077
Amount: 3.236378
Amount Units: ng



Manual Integration Results

RT: 3.47
Area: 8736
Amount: 9.188494
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 10:18:47
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 180-42353-4

Matrix: Water Lab File ID: 60330020.D

Analysis Method: 8260C Date Collected: 03/24/2015 12:20

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 17:51

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.: 136938 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	0.31	J	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	0.37	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	0.17	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	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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 180-42353-4

Matrix: Water Lab File ID: 60330020.D

Analysis Method: 8260C Date Collected: 03/24/2015 12:20

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 17:51

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.: 136938 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)	129		64-135
2037-26-5	Toluene-d8 (Surr)	104		71-118
460-00-4	4-Bromofluorobenzene (Surr)	98		70-118
1868-53-7	Dibromofluoromethane (Surr)	109		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330020.D
Lims ID: 180-42353-D-4 Lab Sample ID: 180-42353-4
Client ID: HD-COD-SW-9-0/1-0
Sample Type: Client
Inject. Date: 30-Mar-2015 17:51:30 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-D-4
Misc. Info.: 180-0006236-020
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 10:20:00 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 10:20:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.283	4.284	-0.001	89	258137	1000.0	
* 2 Fluorobenzene (IS)	96	7.331	7.332	-0.001	97	554044	50.0	
* 3 Chlorobenzene-d5	119	10.440	10.440	0.000	91	118839	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.794	12.795	-0.001	97	179243	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.601	6.596	0.005	93	137071	54.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.978	6.973	0.005	70	230980	64.4	
$ 7 Toluene-d8 (Surr)	98	8.986	8.980	0.006	94	487032	52.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.626	11.627	-0.001	81	196204	49.2	
12 Chloromethane	50		1.765				ND	
13 Vinyl chloride	62		1.899				ND	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.392				ND	
22 1,1-Dichloroethene	96		3.371				ND	
24 Acetone	43	3.456	3.451	0.005	83	9330	9.52	M
26 Carbon disulfide	76		3.682				ND	
31 Methylene Chloride	84		4.168				ND	
33 Acrylonitrile	53		4.539				ND	
34 trans-1,2-Dichloroethene	96		4.606				ND	
35 Methyl tert-butyl ether	73		4.606				ND	
37 1,1-Dichloroethane	63		5.239				ND	
43 cis-1,2-Dichloroethene	96	5.993	5.981	0.012	81	6159	1.55	
44 2-Butanone (MEK)	43		5.987				ND	
48 Chlorobromomethane	128		6.273				ND	
50 Chloroform	83	6.419	6.413	0.006	29	2795	0.4481	
51 1,1,1-Trichloroethane	97		6.584				ND	
53 Carbon tetrachloride	117		6.760				ND	
56 Benzene	78		6.985				ND	
57 1,2-Dichloroethane	62		7.058				ND	
61 Trichloroethene	130	7.721	7.721	0.000	86	5765	1.84	
64 1,2-Dichloropropane	63		7.989				ND	
65 1,4-Dioxane	88		8.074				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.275				ND	
71 cis-1,3-Dichloropropene	75		8.719				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.859				ND	
73 Toluene	91	9.053	9.047	0.006	58	5121	0.4215	
74 trans-1,3-Dichloropropene	75		9.297				ND	
76 1,1,2-Trichloroethane	97		9.485				ND	
77 Tetrachloroethene	164	9.564	9.571	-0.007	43	1856	0.8554	
79 2-Hexanone	43		9.692				ND	
81 Chlorodibromomethane	129		9.863				ND	
82 Ethylene Dibromide	107		9.984				ND	
84 Chlorobenzene	112		10.471				ND	
86 1,1,1,2-Tetrachloroethane	131		10.562				ND	
87 Ethylbenzene	106		10.568				ND	
88 m-Xylene & p-Xylene	106		10.696				ND	
89 o-Xylene	106		11.079				ND	
90 Styrene	104		11.104				ND	
91 Bromoform	173		11.292				ND	
96 1,1,2,2-Tetrachloroethane	83		11.754				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

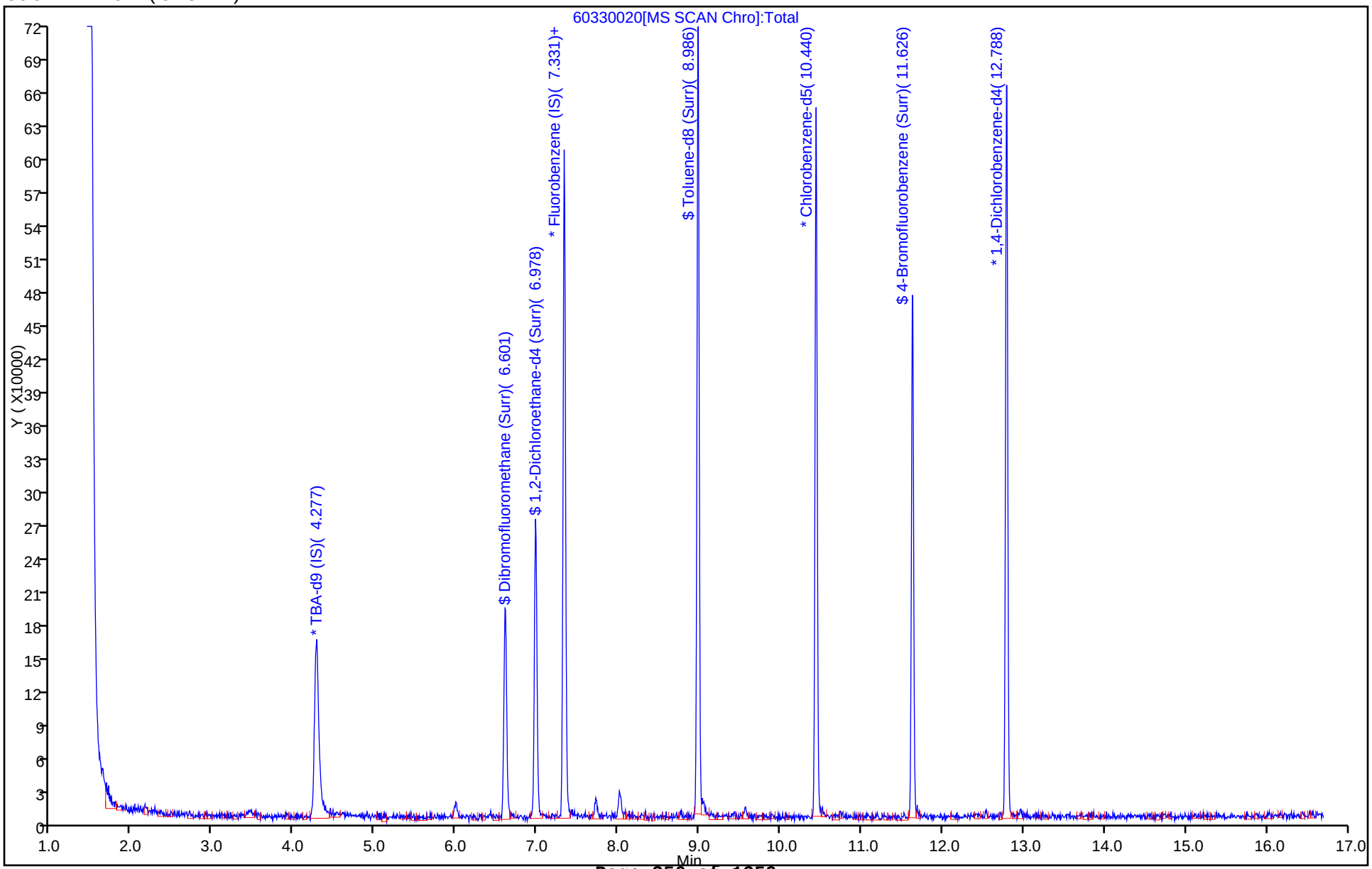
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 31-Mar-2015 10:20:01 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330020.D				
Injection Date:	30-Mar-2015 17:51:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-42353-D-4	Lab Sample ID:	180-42353-4	Worklist Smp#:	20
Client ID:	HD-COD-SW-9-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

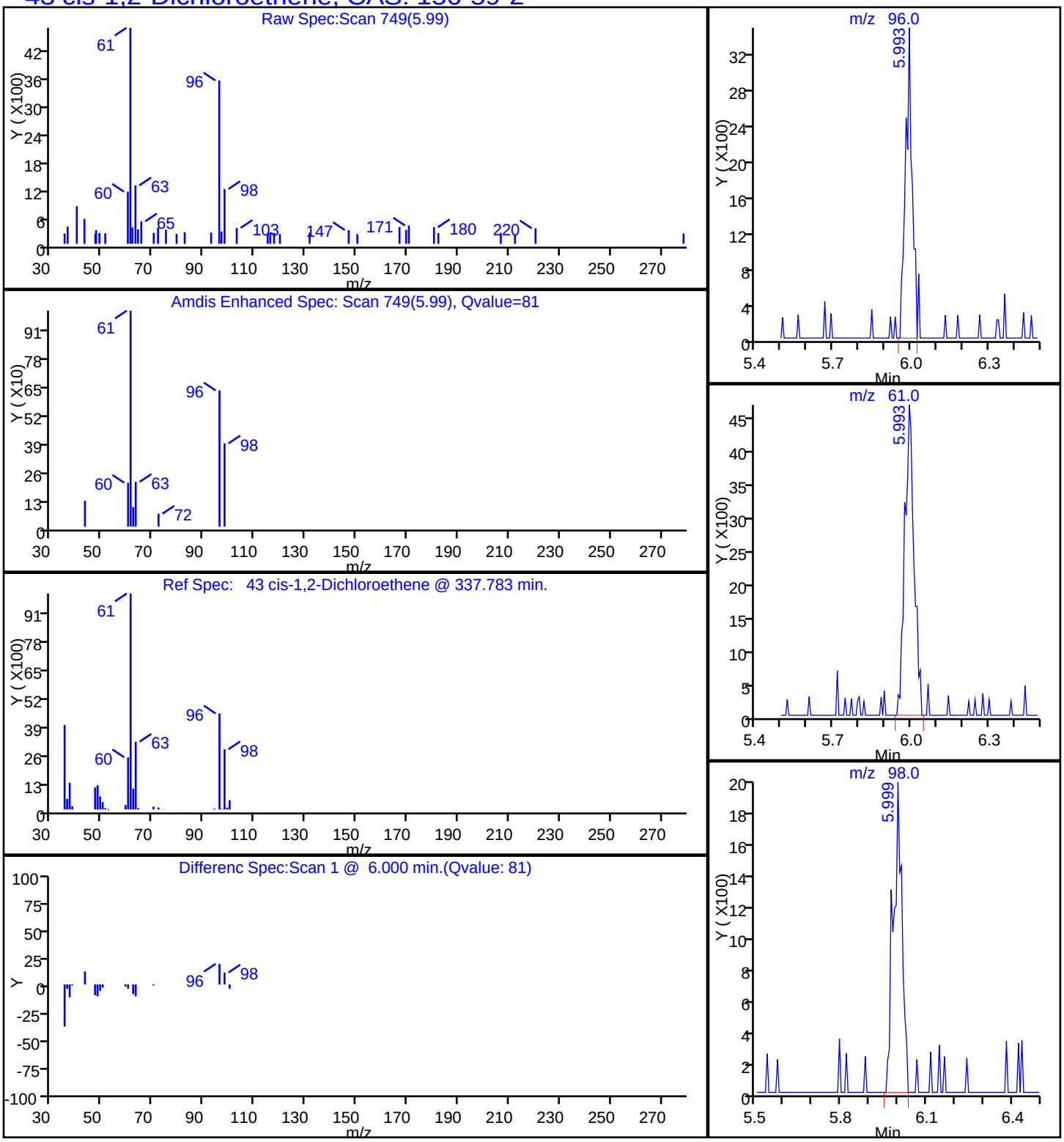


Report Date: 31-Mar-2015 10:20:01 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330020.D				
Injection Date:	30-Mar-2015 17:51:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-D-4	Lab Sample ID:	180-42353-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	001562	ALS Bottle#:	20	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

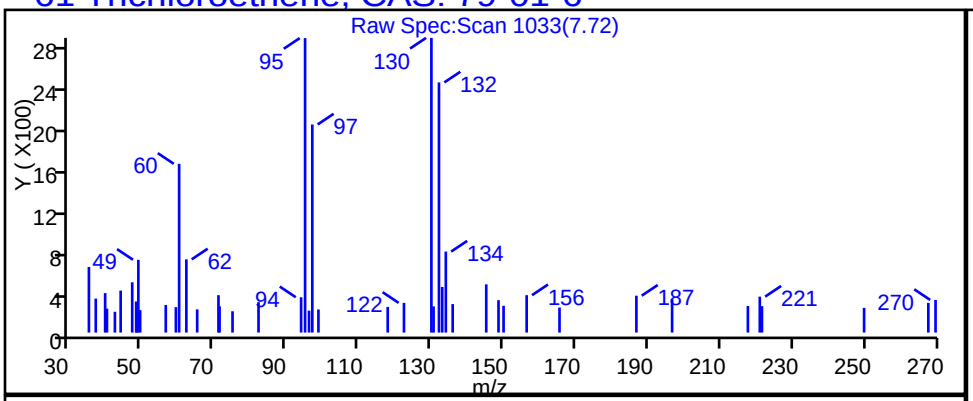


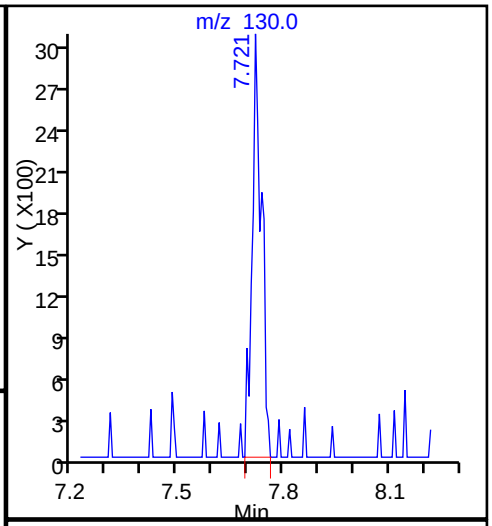
Report Date: 31-Mar-2015 10:20:01 Chrom Revision: 2.2 13-Mar-2015 11:20:44

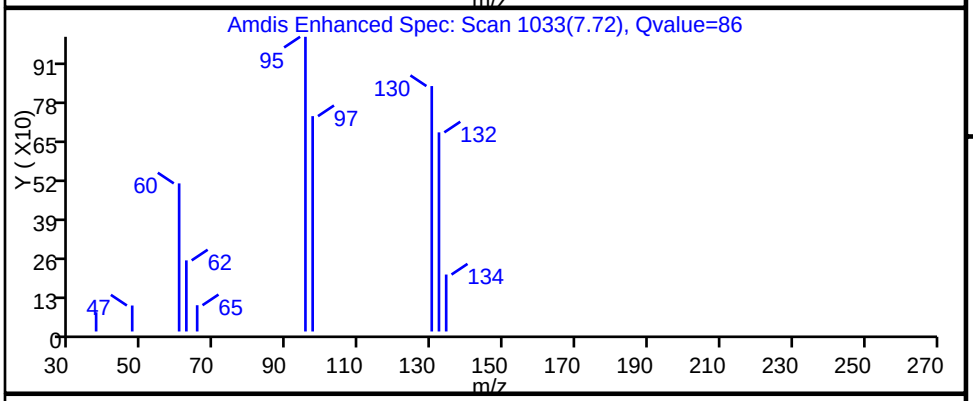
TestAmerica Pittsburgh

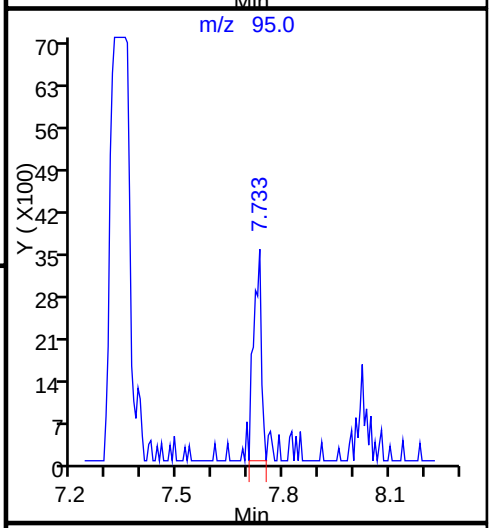
Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330020.D		
Injection Date:	30-Mar-2015 17:51:30	Instrument ID:	CHHP6
Lims ID:	180-42353-D-4	Lab Sample ID:	180-42353-4
Client ID:	HD-COD-SW-9-0/1-0		
Operator ID:	001562	ALS Bottle#:	20 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

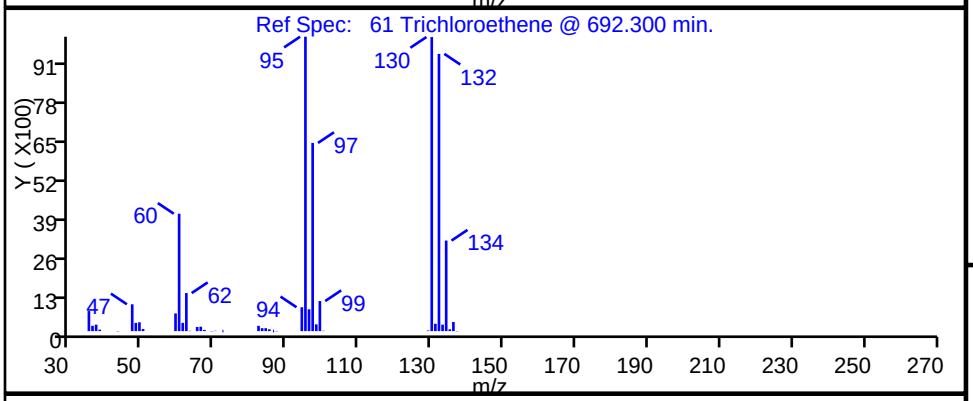
61 Trichloroethene, CAS: 79-01-6

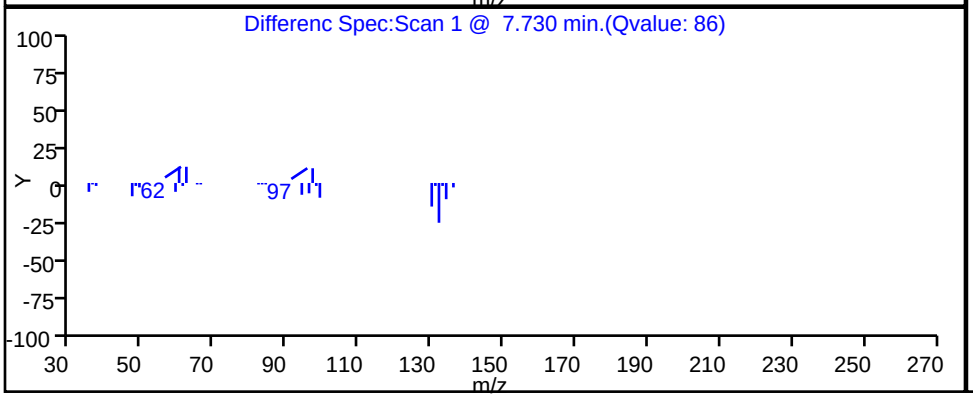


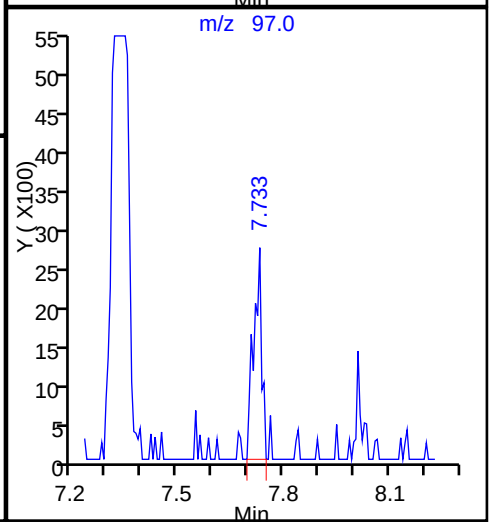












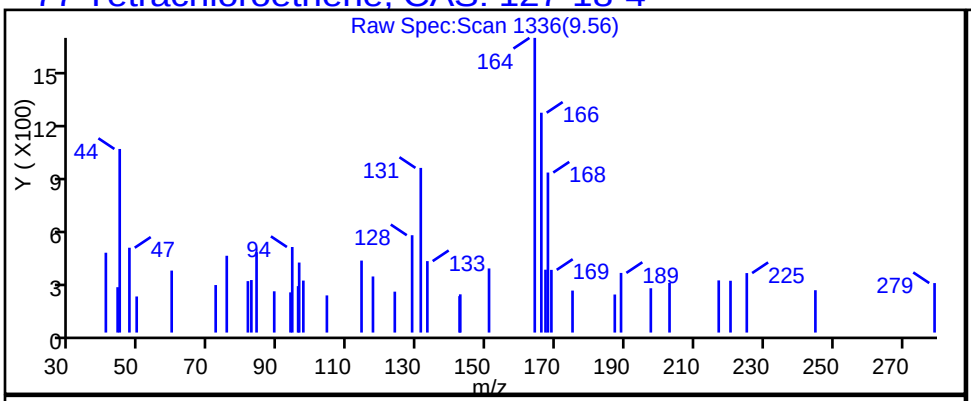
Report Date: 31-Mar-2015 10:20:01 Chrom Revision: 2.2 13-Mar-2015 11:20:44

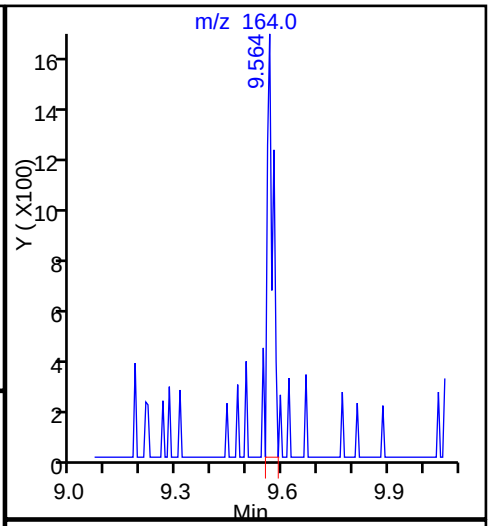
TestAmerica Pittsburgh

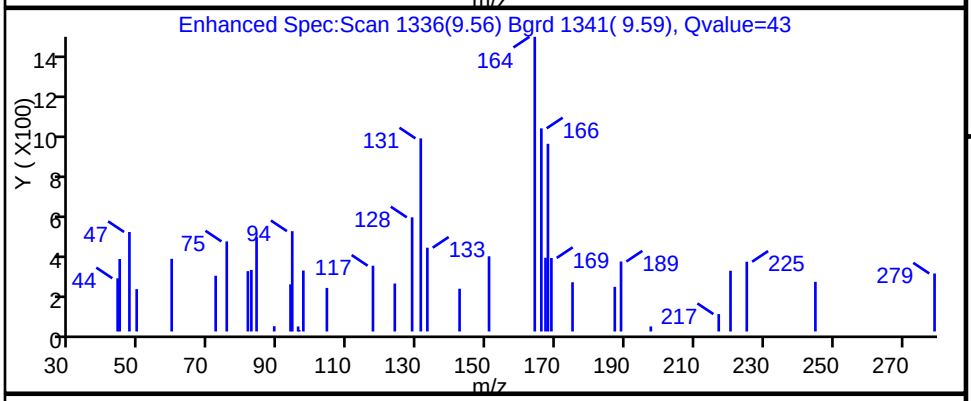
Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330020.D

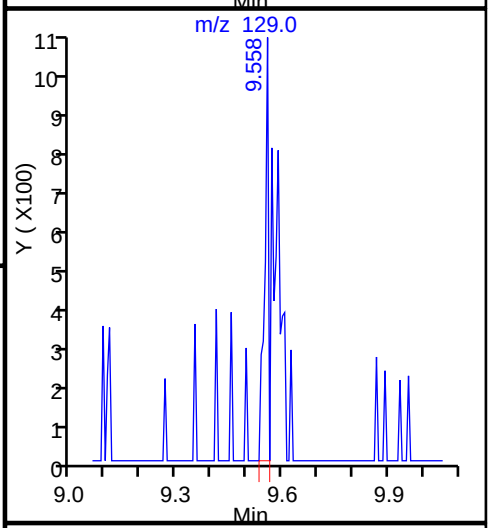
Injection Date:	30-Mar-2015 17:51:30	Instrument ID:	CHHP6
Lims ID:	180-42353-D-4	Lab Sample ID:	180-42353-4
Client ID:	HD-COD-SW-9-0/1-0		
Operator ID:	001562	ALS Bottle#:	20 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

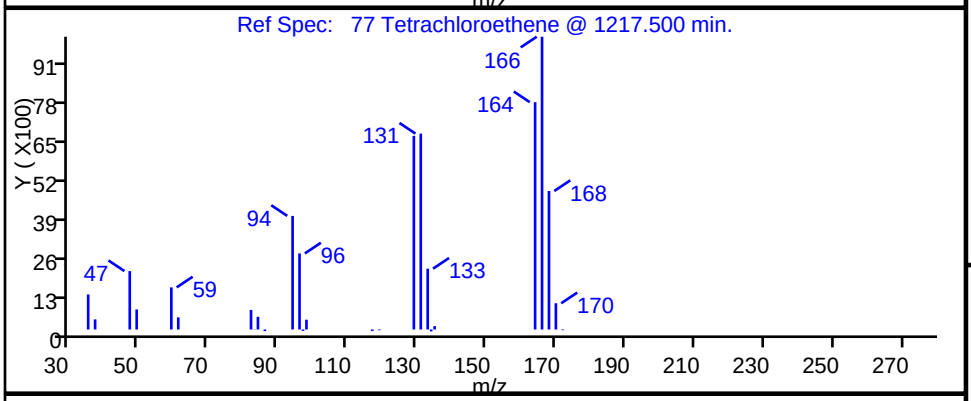
77 Tetrachloroethene, CAS: 127-18-4

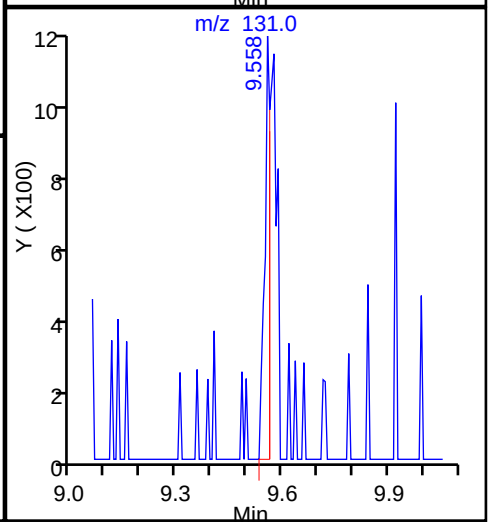


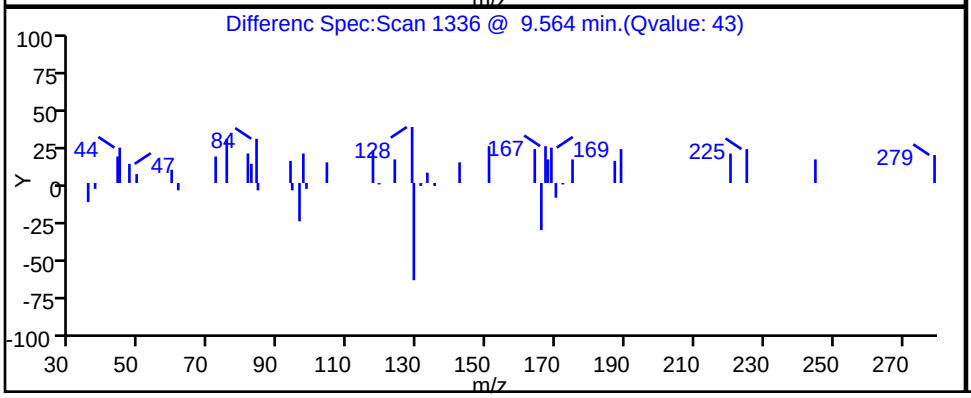












Manual Integration/User Assign Peak Report

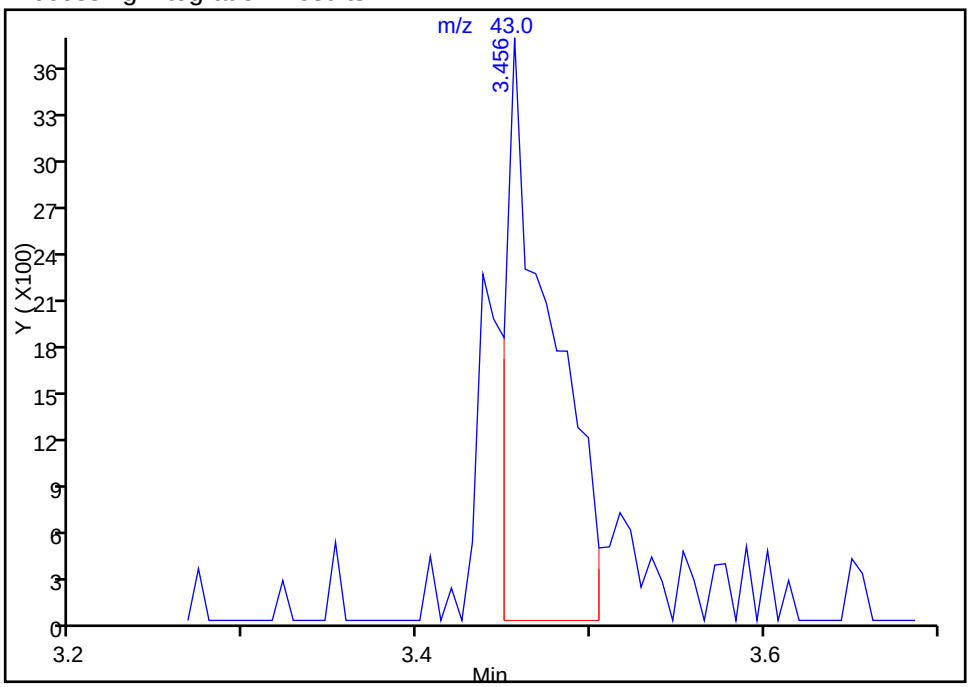
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330020.D				
Injection Date:	30-Mar-2015 17:51:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-D-4	Lab Sample ID:	180-42353-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	001562	ALS Bottle#:	20	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

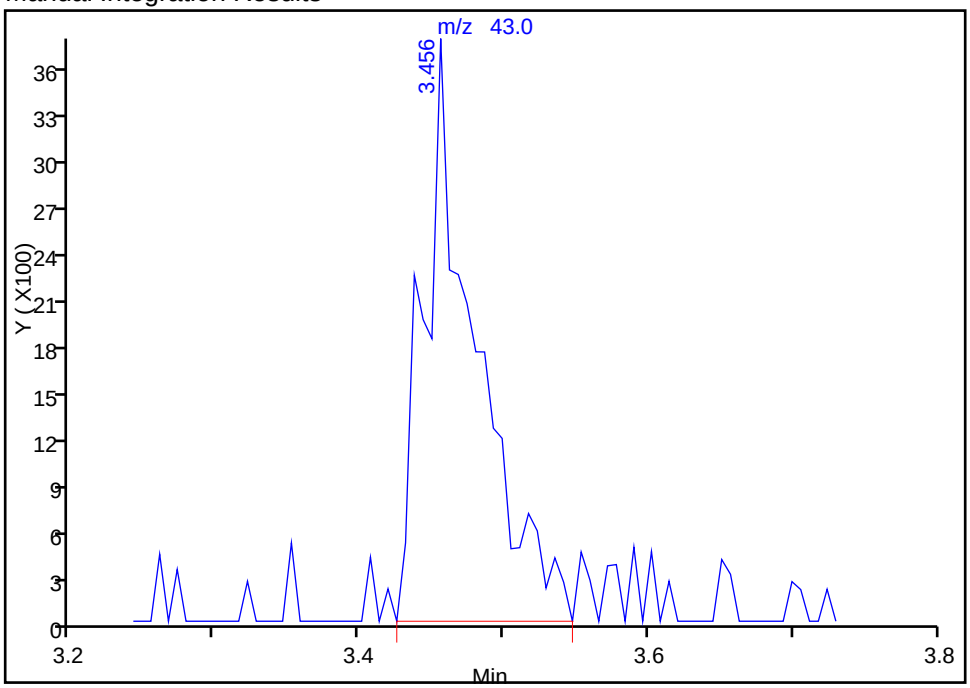
Processing Integration Results

RT: 3.46
Area: 6687
Amount: 6.822849
Amount Units: ng



Manual Integration Results

RT: 3.46
Area: 9330
Amount: 9.519542
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 10:20:00
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-10-0/1-0 Lab Sample ID: 180-42353-5

Matrix: Water Lab File ID: 60330021.D

Analysis Method: 8260C Date Collected: 03/24/2015 09:41

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 18:15

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.: 136938 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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-10-0/1-0 Lab Sample ID: 180-42353-5

Matrix: Water Lab File ID: 60330021.D

Analysis Method: 8260C Date Collected: 03/24/2015 09:41

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 18:15

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.: 136938 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)	124		64-135
2037-26-5	Toluene-d8 (Surr)	107		71-118
460-00-4	4-Bromofluorobenzene (Surr)	98		70-118
1868-53-7	Dibromofluoromethane (Surr)	109		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330021.D
Lims ID: 180-42353-D-5 Lab Sample ID: 180-42353-5
Client ID: HD-COD-SW-10-0/1-0
Sample Type: Client
Inject. Date: 30-Mar-2015 18:15:30 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-D-5
Misc. Info.: 180-0006236-021
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 10:21:39 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 10:21:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.272	4.284	-0.012	91	251111	1000.0	
* 2 Fluorobenzene (IS)	96	7.332	7.332	0.000	98	554991	50.0	
* 3 Chlorobenzene-d5	119	10.441	10.440	0.001	92	117034	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.789	12.795	-0.006	98	179750	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.608	6.596	0.012	92	136459	54.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.973	6.973	0.000	70	222850	62.0	
$ 7 Toluene-d8 (Surr)	98	8.987	8.980	0.007	94	493136	53.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.627	11.627	0.000	83	192088	48.9	
12 Chloromethane	50		1.765				ND	
13 Vinyl chloride	62		1.899				ND	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.392				ND	
22 1,1-Dichloroethene	96		3.371				ND	
24 Acetone	43	3.463	3.451	0.012	87	2777	2.83	
26 Carbon disulfide	76		3.682				ND	
31 Methylene Chloride	84		4.168				ND	
33 Acrylonitrile	53		4.539				ND	
34 trans-1,2-Dichloroethene	96		4.606				ND	
35 Methyl tert-butyl ether	73		4.606				ND	
37 1,1-Dichloroethane	63		5.239				ND	
43 cis-1,2-Dichloroethene	96	6.000	5.981	0.019	32	2257	0.5672	
44 2-Butanone (MEK)	43		5.987				ND	
48 Chlorobromomethane	128		6.273				ND	
50 Chloroform	83		6.413				ND	
51 1,1,1-Trichloroethane	97		6.584				ND	
53 Carbon tetrachloride	117		6.760				ND	
56 Benzene	78		6.985				ND	
57 1,2-Dichloroethane	62		7.058				ND	
61 Trichloroethene	130		7.721				ND	
64 1,2-Dichloropropane	63		7.989				ND	
65 1,4-Dioxane	88	8.068	8.074	-0.006	35	2086	91.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.275				ND	
71 cis-1,3-Dichloropropene	75		8.719				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.859				ND	
73 Toluene	91	9.054	9.047	0.007	47	4117	0.3441	
74 trans-1,3-Dichloropropene	75		9.297				ND	
76 1,1,2-Trichloroethane	97		9.485				ND	
77 Tetrachloroethene	164		9.571				ND	
79 2-Hexanone	43		9.692				ND	
81 Chlorodibromomethane	129		9.863				ND	
82 Ethylene Dibromide	107		9.984				ND	
84 Chlorobenzene	112		10.471				ND	
86 1,1,1,2-Tetrachloroethane	131		10.562				ND	
87 Ethylbenzene	106		10.568				ND	
88 m-Xylene & p-Xylene	106		10.696				ND	
89 o-Xylene	106		11.079				ND	
90 Styrene	104		11.104				ND	
91 Bromoform	173		11.292				ND	
96 1,1,2,2-Tetrachloroethane	83		11.754				ND	
S 131 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

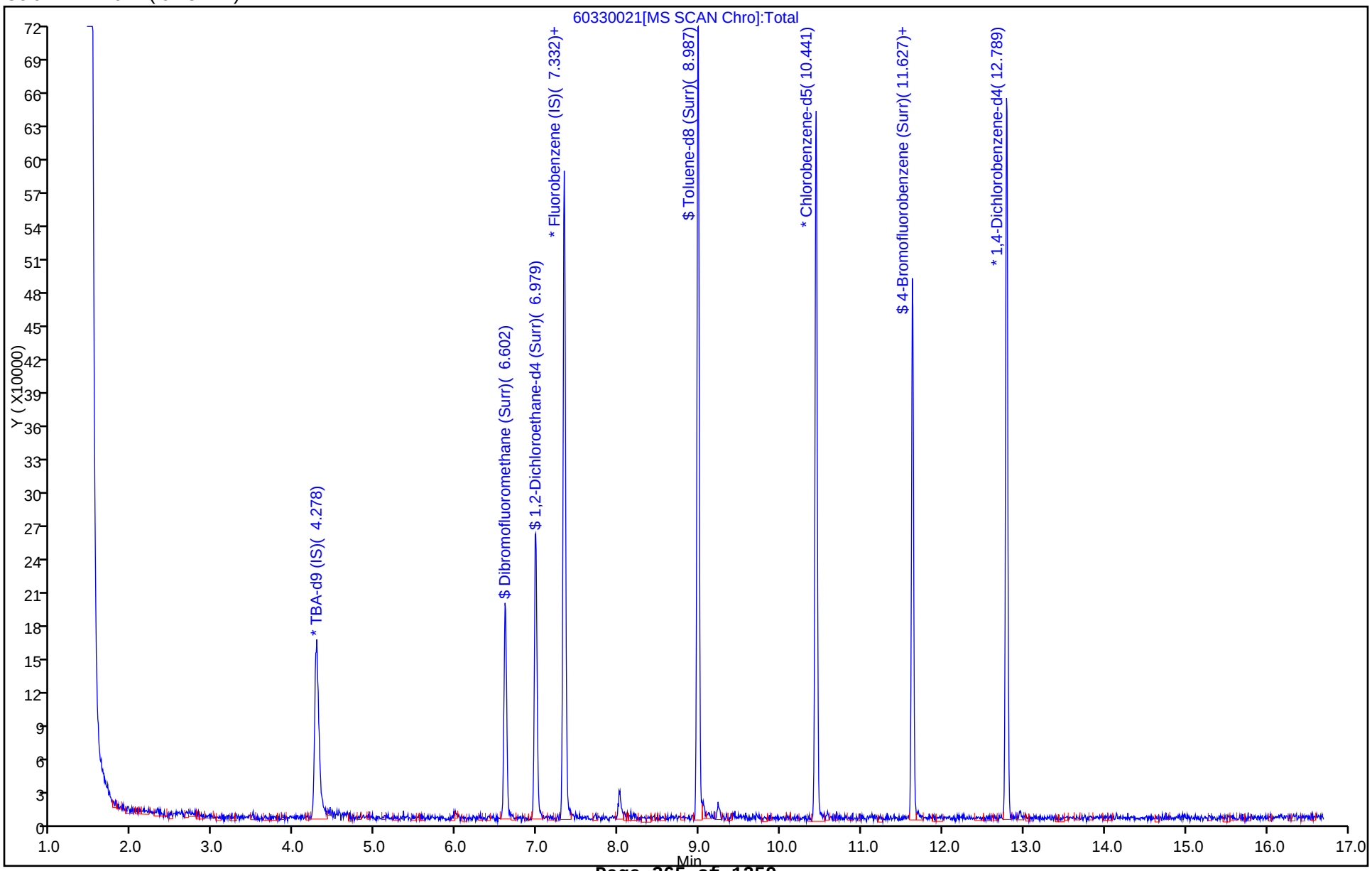
Report Date: 31-Mar-2015 10:21:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330021.D

Injection Date:	30-Mar-2015 18:15:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-42353-D-5	Lab Sample ID:	180-42353-5	Worklist Smp#:	21
Client ID:	HD-COD-SW-10-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-11-0/1-0 | Lab Sample ID: 180-42353-6

Matrix: Water | Lab File ID: 60330022.D

Analysis Method: 8260C | Date Collected: 03/24/2015 13:15

Sample wt/vol: 5(mL) | Date Analyzed: 03/30/2015 18:39

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.: 136938 | 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	0.17	J	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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-11-0/1-0 Lab Sample ID: 180-42353-6

Matrix: Water Lab File ID: 60330022.D

Analysis Method: 8260C Date Collected: 03/24/2015 13:15

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 18:39

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.: 136938 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)	124		64-135
2037-26-5	Toluene-d8 (Surr)	107		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\CHHP6\20150330-6236.b\60330022.D
Lims ID: 180-42353-D-6 Lab Sample ID: 180-42353-6
Client ID: HD-COD-SW-11-0/1-0
Sample Type: Client
Inject. Date: 30-Mar-2015 18:39:30 ALS Bottle#: 22 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-D-6
Misc. Info.: 180-0006236-022
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 10:23:40 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 10:23:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.272	4.284	-0.012	89	255906	1000.0	
* 2 Fluorobenzene (IS)	96	7.332	7.332	0.000	97	562336	50.0	
* 3 Chlorobenzene-d5	119	10.441	10.440	0.001	92	110480	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.789	12.795	-0.006	97	180762	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.608	6.596	0.012	92	136933	53.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.979	6.973	0.006	71	225765	62.0	
$ 7 Toluene-d8 (Surr)	98	8.981	8.980	0.001	94	466745	53.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.633	11.627	0.006	82	191444	51.7	
12 Chloromethane	50		1.765				ND	
13 Vinyl chloride	62		1.899				ND	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.392				ND	
22 1,1-Dichloroethene	96		3.371				ND	
24 Acetone	43	3.481	3.451	0.030	81	8745	8.79	M
26 Carbon disulfide	76		3.682				ND	
31 Methylene Chloride	84		4.168				ND	
33 Acrylonitrile	53		4.539				ND	
34 trans-1,2-Dichloroethene	96		4.606				ND	
35 Methyl tert-butyl ether	73		4.606				ND	
37 1,1-Dichloroethane	63		5.239				ND	
43 cis-1,2-Dichloroethene	96		5.981				ND	
44 2-Butanone (MEK)	43		5.987				ND	
48 Chlorobromomethane	128		6.273				ND	
50 Chloroform	83	6.432	6.413	0.019	46	5251	0.8294	M
51 1,1,1-Trichloroethane	97		6.584				ND	
53 Carbon tetrachloride	117		6.760				ND	
56 Benzene	78		6.985				ND	
57 1,2-Dichloroethane	62		7.058				ND	
61 Trichloroethene	130		7.721				ND	
64 1,2-Dichloropropane	63		7.989				ND	
65 1,4-Dioxane	88		8.074				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.275				ND	
71 cis-1,3-Dichloropropene	75		8.719				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.859				ND	
73 Toluene	91	9.054	9.047	0.007	55	4330	0.3834	
74 trans-1,3-Dichloropropene	75		9.297				ND	
76 1,1,2-Trichloroethane	97		9.485				ND	
77 Tetrachloroethene	164		9.571				ND	
79 2-Hexanone	43		9.692				ND	
81 Chlorodibromomethane	129		9.863				ND	
82 Ethylene Dibromide	107		9.984				ND	
84 Chlorobenzene	112		10.471				ND	
86 1,1,1,2-Tetrachloroethane	131		10.562				ND	
87 Ethylbenzene	106		10.568				ND	
88 m-Xylene & p-Xylene	106		10.696				ND	
89 o-Xylene	106		11.079				ND	
90 Styrene	104		11.104				ND	
91 Bromoform	173		11.292				ND	
96 1,1,2,2-Tetrachloroethane	83		11.754				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

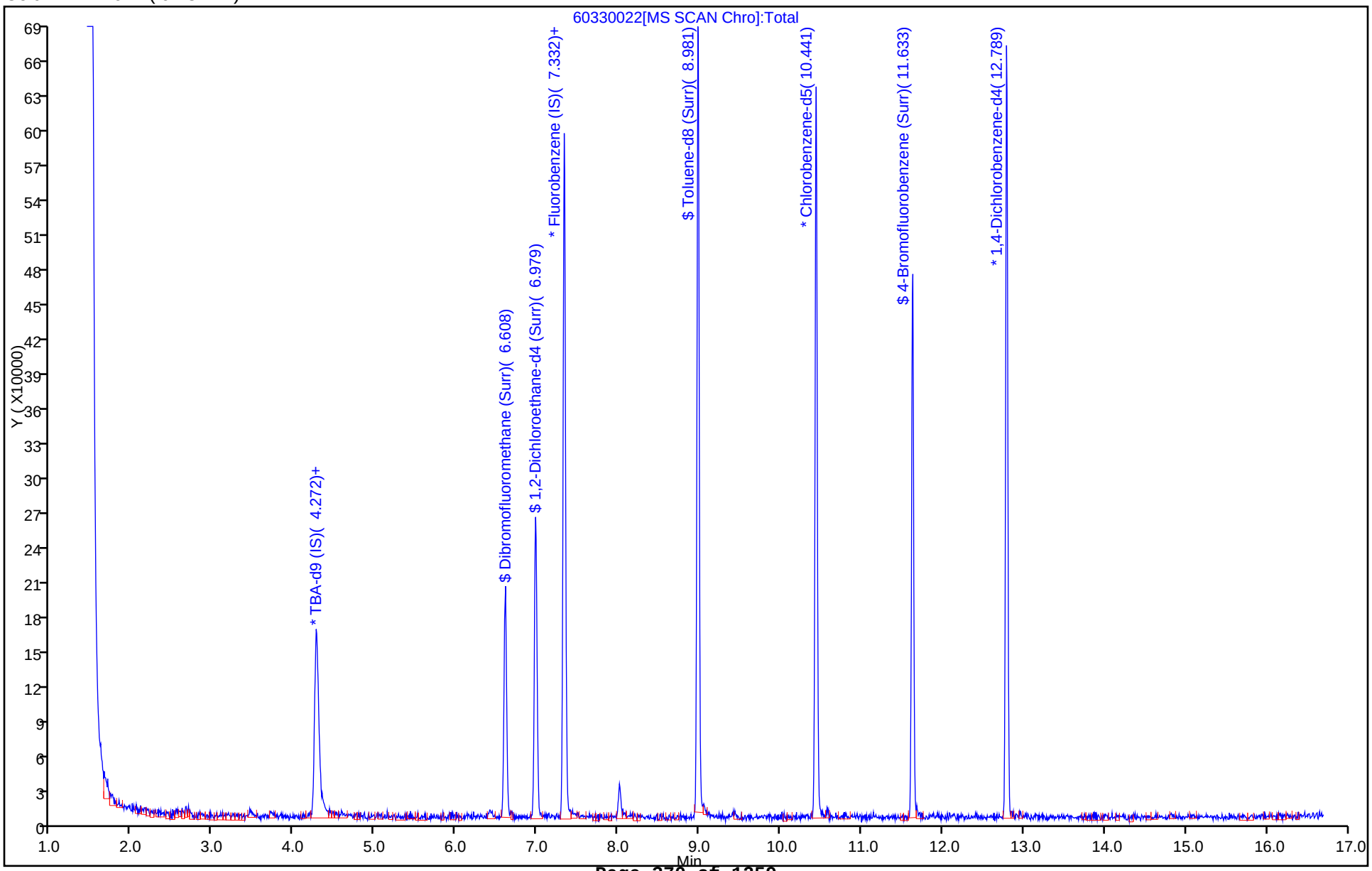
Report Date: 31-Mar-2015 10:23:40 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330022.D

Injection Date:	30-Mar-2015 18:39:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-42353-D-6	Lab Sample ID:	180-42353-6	Worklist Smp#:	22
Client ID:	HD-COD-SW-11-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

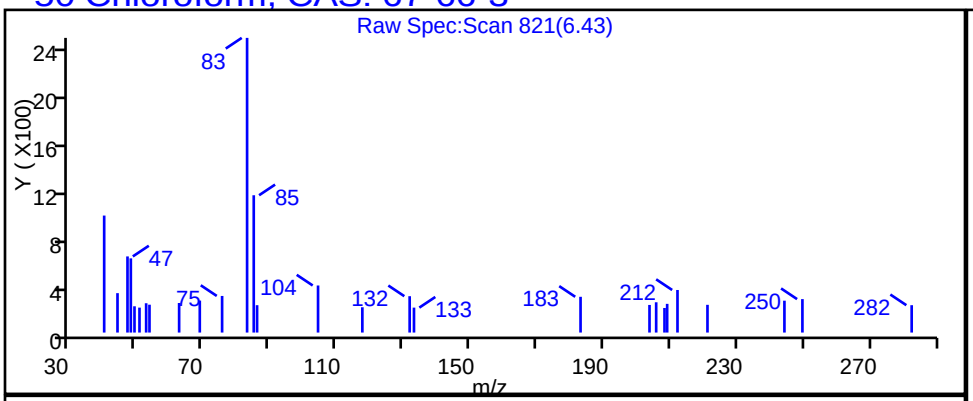


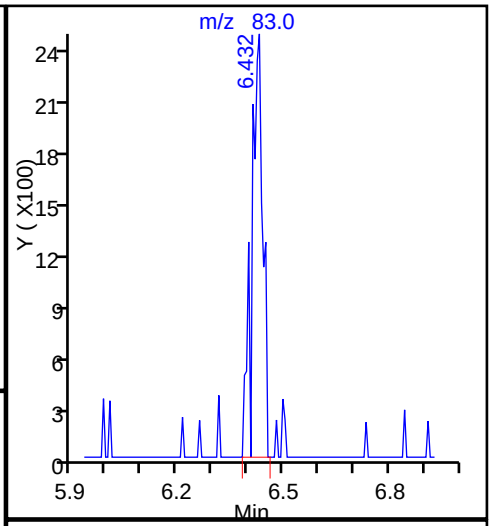
Report Date: 31-Mar-2015 10:23:40 Chrom Revision: 2.2 13-Mar-2015 11:20:44

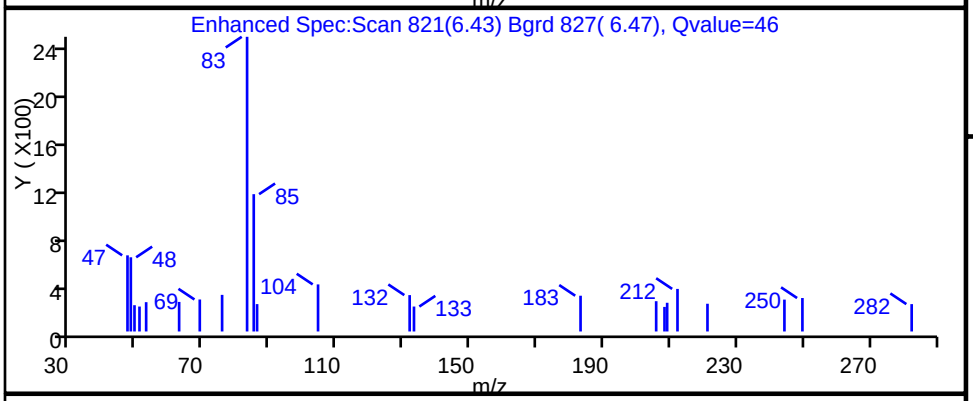
TestAmerica Pittsburgh

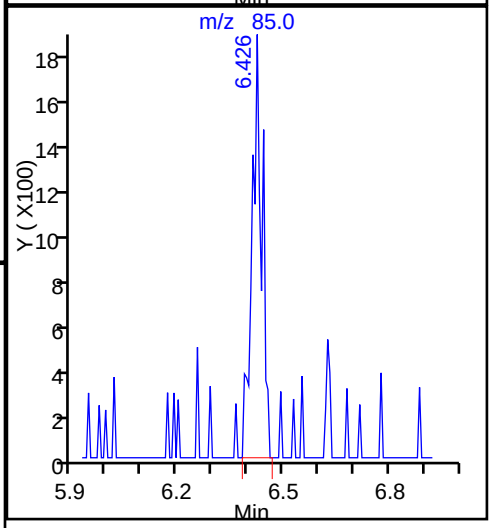
Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330022.D				
Injection Date:	30-Mar-2015 18:39:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-D-6	Lab Sample ID:	180-42353-6		
Client ID:	HD-COD-SW-11-0/1-0				
Operator ID:	001562	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

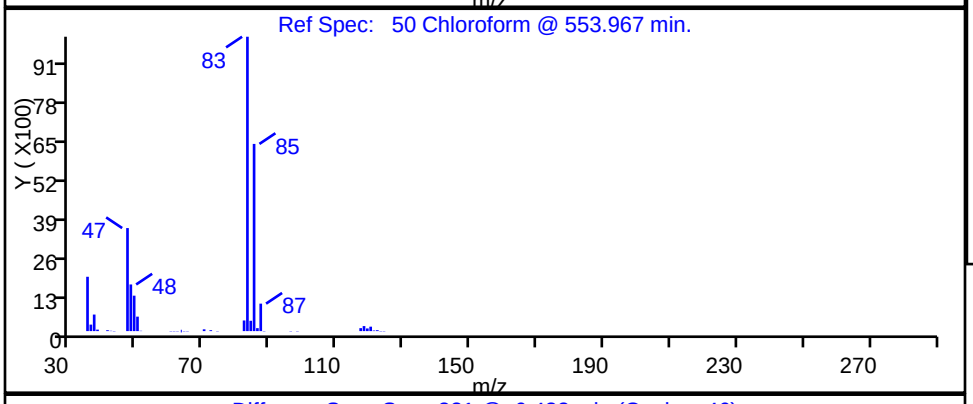
50 Chloroform, CAS: 67-66-3

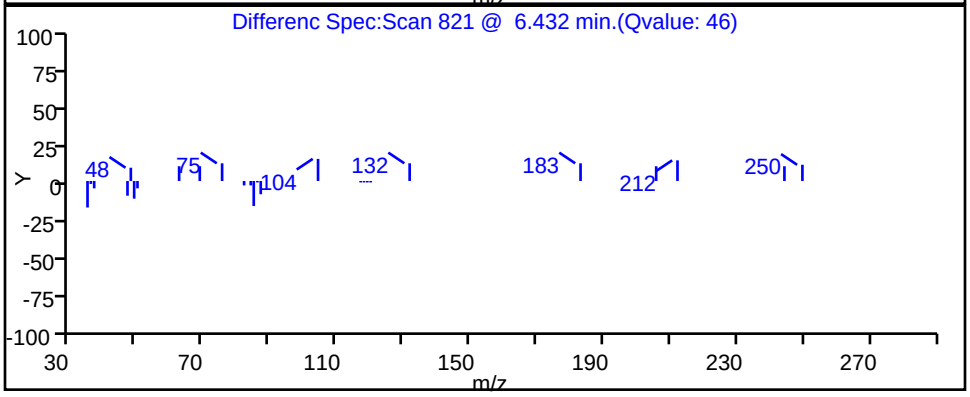












Manual Integration/User Assign Peak Report

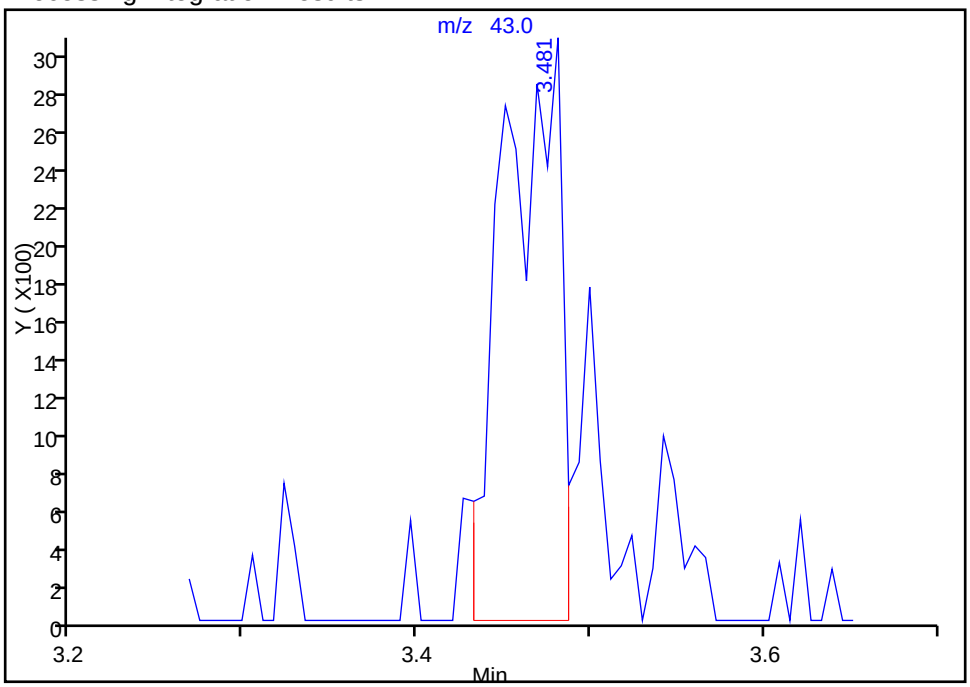
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330022.D				
Injection Date:	30-Mar-2015 18:39:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-D-6	Lab Sample ID:	180-42353-6		
Client ID:	HD-COD-SW-11-0/1-0				
Operator ID:	001562	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

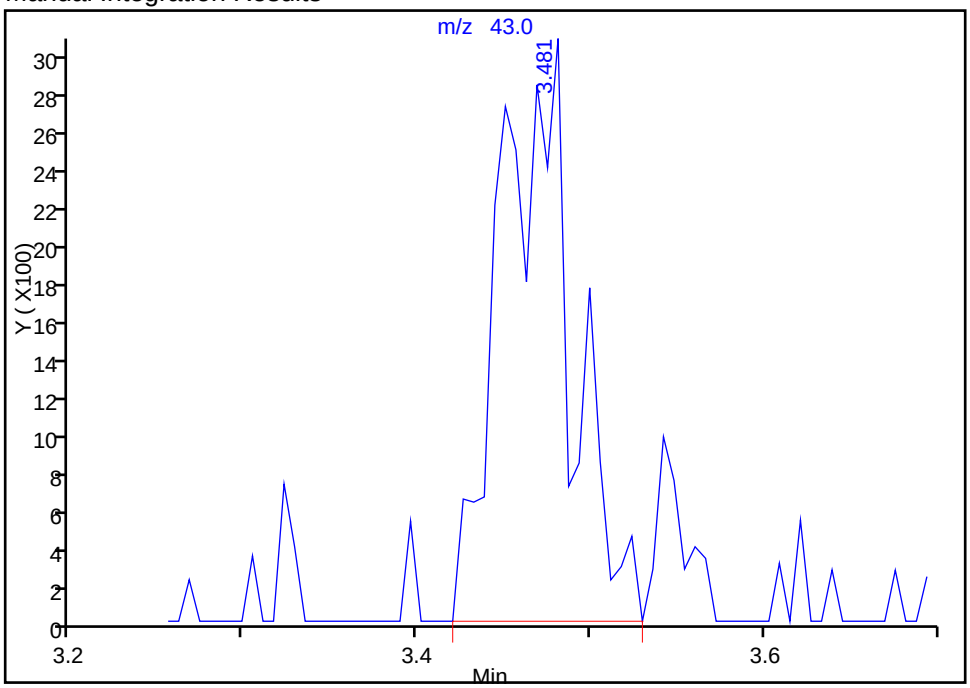
Processing Integration Results

RT: 3.48
Area: 6949
Amount: 6.985622
Amount Units: ng



Manual Integration Results

RT: 3.48
Area: 8745
Amount: 8.791088
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 10:23:39
Audit Action: Manually Integrated
Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

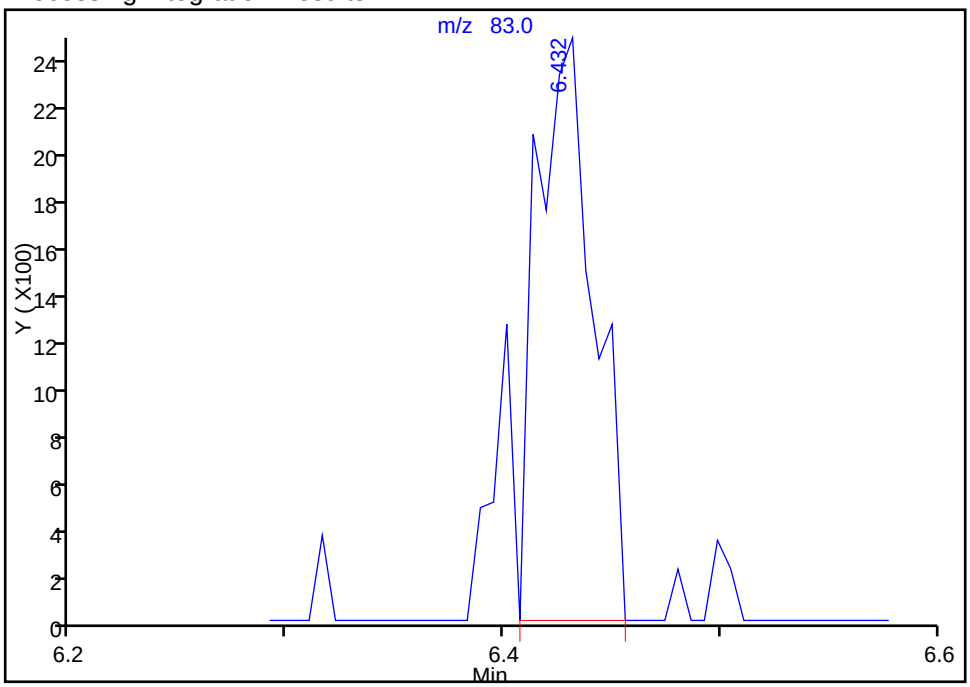
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330022.D				
Injection Date:	30-Mar-2015 18:39:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-D-6	Lab Sample ID:	180-42353-6		
Client ID:	HD-COD-SW-11-0/1-0				
Operator ID:	001562	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

50 Chloroform, CAS: 67-66-3

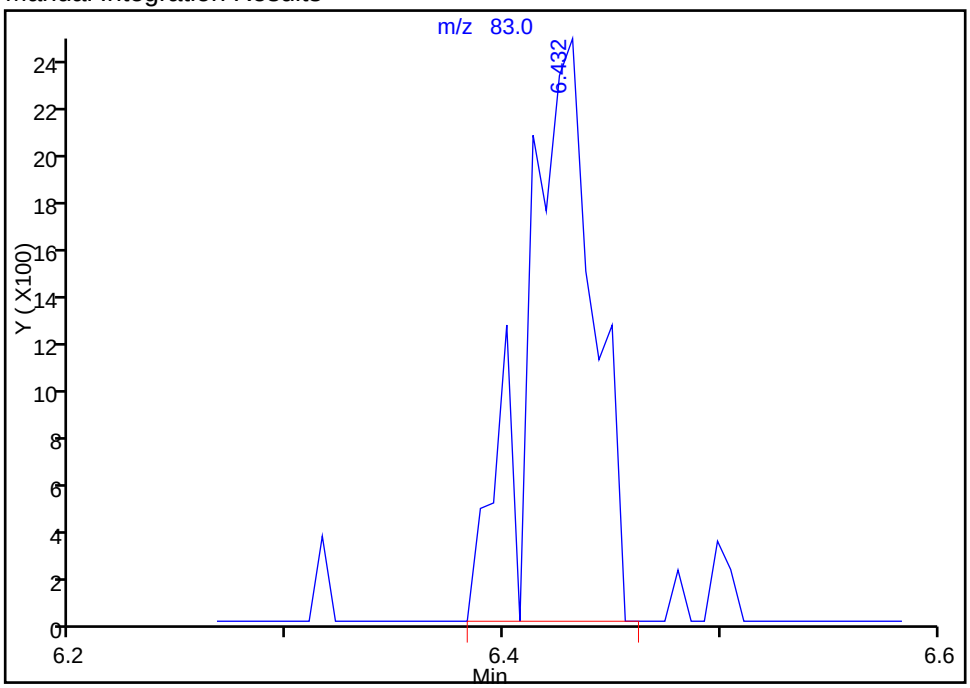
Processing Integration Results

RT: 6.43
Area: 4451
Amount: 0.703054
Amount Units: ng



Manual Integration Results

RT: 6.43
Area: 5251
Amount: 0.829417
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 10:23:39
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-12-0/1-0 | Lab Sample ID: 180-42353-7

Matrix: Water | Lab File ID: 60330023.D

Analysis Method: 8260C | Date Collected: 03/24/2015 13:25

Sample wt/vol: 5(mL) | Date Analyzed: 03/30/2015 19:03

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.: 136938 | 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	2.8	J	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.21
75-09-2	Methylene Chloride	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.17
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.18
75-34-3	1,1-Dichloroethane	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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-12-0/1-0 Lab Sample ID: 180-42353-7

Matrix: Water Lab File ID: 60330023.D

Analysis Method: 8260C Date Collected: 03/24/2015 13:25

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 19:03

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.: 136938 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)	128		64-135
2037-26-5	Toluene-d8 (Surr)	110		71-118
460-00-4	4-Bromofluorobenzene (Surr)	103		70-118
1868-53-7	Dibromofluoromethane (Surr)	107		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330023.D
Lims ID: 180-42353-D-7 Lab Sample ID: 180-42353-7
Client ID: HD-COD-SW-12-0/1-0
Sample Type: Client
Inject. Date: 30-Mar-2015 19:03:30 ALS Bottle#: 23 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-D-7
Misc. Info.: 180-0006236-023
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 10:25:10 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 10:25:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.266	4.284	-0.018	89	251880	1000.0	
* 2 Fluorobenzene (IS)	96	7.326	7.332	-0.006	98	533203	50.0	
* 3 Chlorobenzene-d5	119	10.447	10.440	0.007	92	104336	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.789	12.795	-0.006	97	168042	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.596	6.596	0.000	93	129433	53.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.980	6.973	0.007	71	220432	63.9	
$ 7 Toluene-d8 (Surr)	98	8.987	8.980	0.007	94	451059	54.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.634	11.627	0.007	82	180573	51.6	
12 Chloromethane	50		1.765				ND	
13 Vinyl chloride	62		1.899				ND	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.392				ND	
22 1,1-Dichloroethene	96		3.371				ND	
24 Acetone	43	3.470	3.451	0.019	72	13021	13.8	
26 Carbon disulfide	76		3.682				ND	
31 Methylene Chloride	84	4.193	4.168	0.025	1	2249	0.5138	
33 Acrylonitrile	53		4.539				ND	
34 trans-1,2-Dichloroethene	96		4.606				ND	
35 Methyl tert-butyl ether	73		4.606				ND	
37 1,1-Dichloroethane	63		5.239				ND	
43 cis-1,2-Dichloroethene	96		5.981				ND	
44 2-Butanone (MEK)	43		5.987				ND	
48 Chlorobromomethane	128		6.273				ND	
50 Chloroform	83	6.414	6.413	0.001	50	4060	0.6763	
51 1,1,1-Trichloroethane	97		6.584				ND	
53 Carbon tetrachloride	117		6.760				ND	
56 Benzene	78		6.985				ND	
57 1,2-Dichloroethane	62		7.058				ND	
61 Trichloroethene	130		7.721				ND	
64 1,2-Dichloropropane	63		7.989				ND	
65 1,4-Dioxane	88		8.074				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.275				ND	
71 cis-1,3-Dichloropropene	75		8.719				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.859				ND	
73 Toluene	91	9.054	9.047	0.007	95	7476	0.7009	
74 trans-1,3-Dichloropropene	75		9.297				ND	
76 1,1,2-Trichloroethane	97		9.485				ND	
77 Tetrachloroethene	164		9.571				ND	
79 2-Hexanone	43		9.692				ND	
81 Chlorodibromomethane	129		9.863				ND	
82 Ethylene Dibromide	107		9.984				ND	
84 Chlorobenzene	112		10.471				ND	
86 1,1,1,2-Tetrachloroethane	131		10.562				ND	
87 Ethylbenzene	106		10.568				ND	
88 m-Xylene & p-Xylene	106		10.696				ND	
89 o-Xylene	106		11.079				ND	
90 Styrene	104		11.104				ND	
91 Bromoform	173		11.292				ND	
96 1,1,2,2-Tetrachloroethane	83		11.754				ND	
S 131 Xylenes, Total	106		1.000				ND	

Reagents:

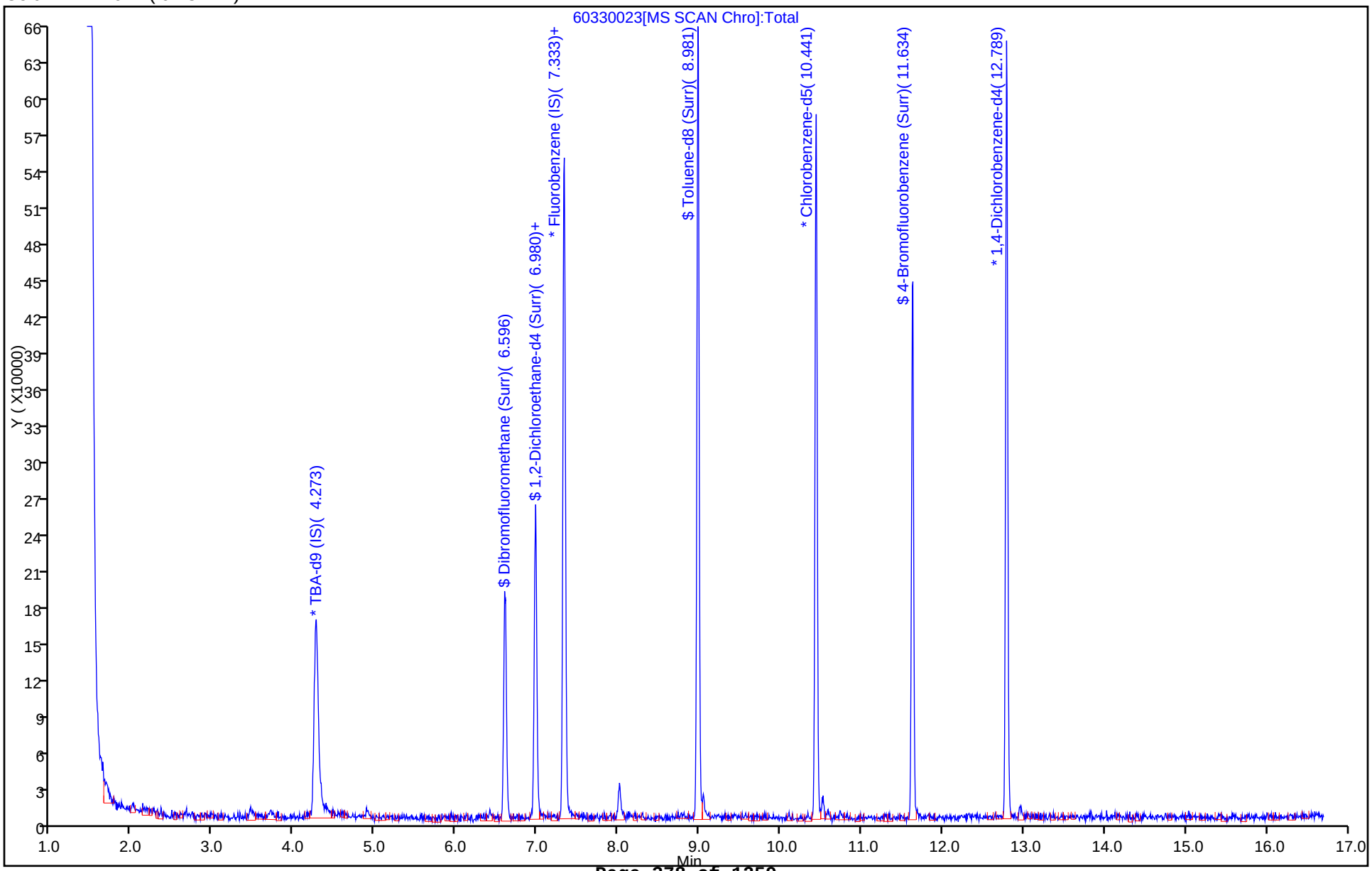
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 31-Mar-2015 10:25:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330023.D				
Injection Date:	30-Mar-2015 19:03:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-42353-D-7	Lab Sample ID:	180-42353-7	Worklist Smp#:	23
Client ID:	HD-COD-SW-12-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

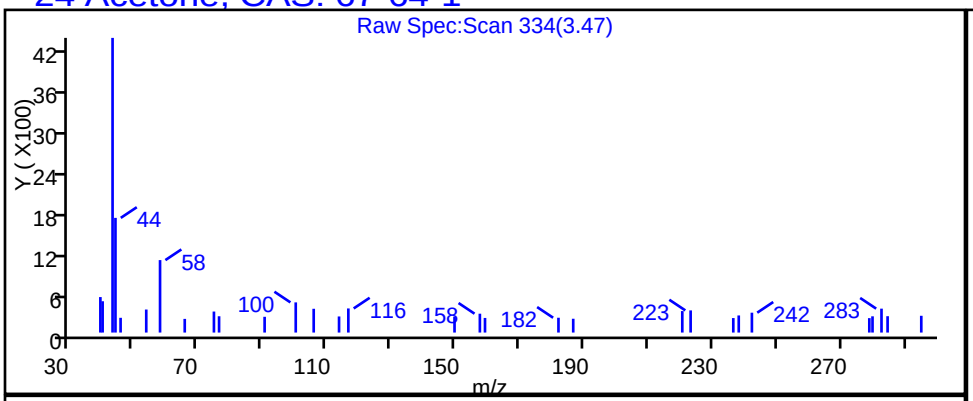


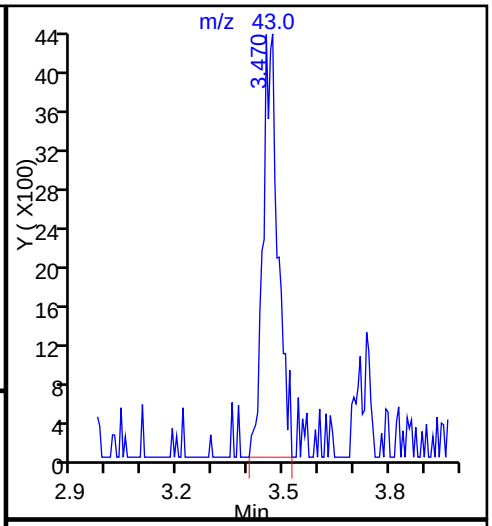
Report Date: 31-Mar-2015 10:25:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

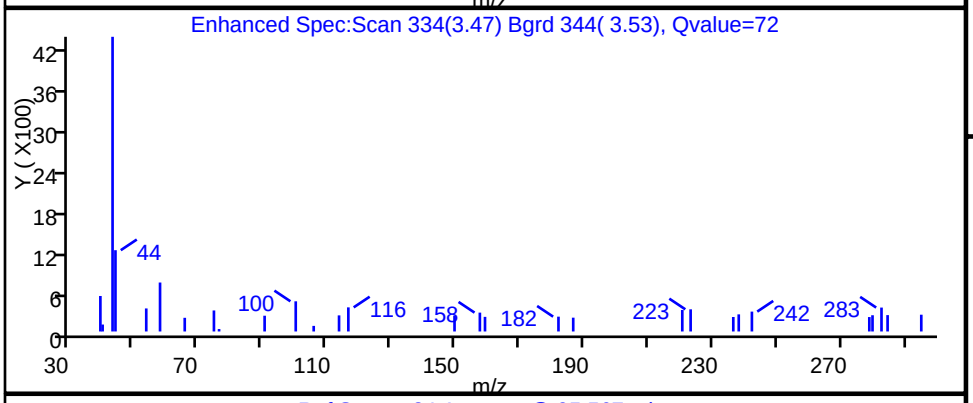
TestAmerica Pittsburgh

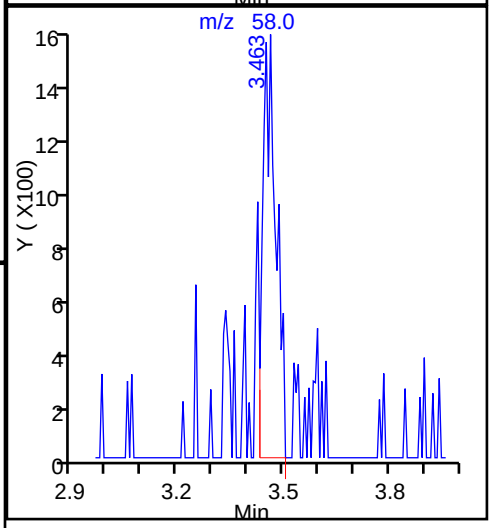
Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330023.D				
Injection Date:	30-Mar-2015 19:03:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-D-7	Lab Sample ID:	180-42353-7		
Client ID:	HD-COD-SW-12-0/1-0				
Operator ID:	001562	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

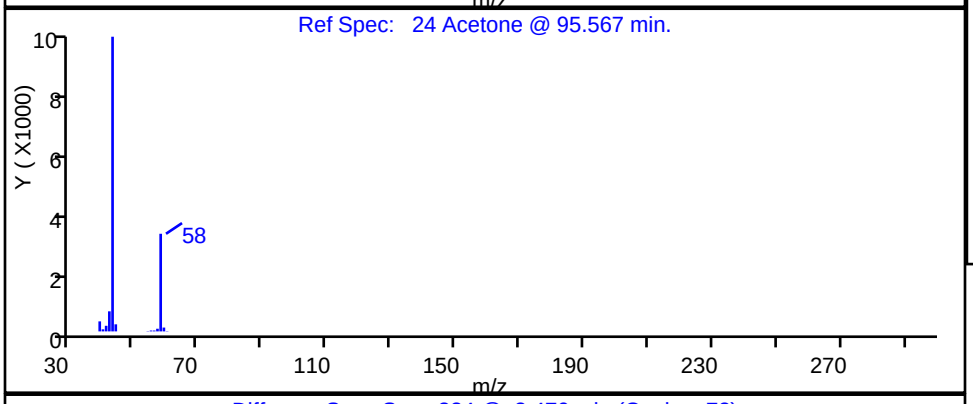
24 Acetone, CAS: 67-64-1

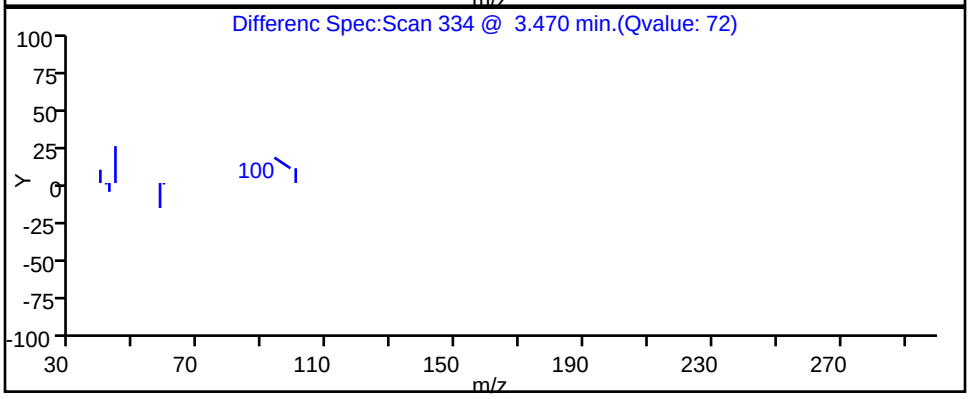












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 180-42353-8

Matrix: Water Lab File ID: 60330024.D

Analysis Method: 8260C Date Collected: 03/24/2015 09:32

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 19:27

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.: 136938 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	0.38	J	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	0.43	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	0.22	J	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	0.44	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	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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 180-42353-8

Matrix: Water Lab File ID: 60330024.D

Analysis Method: 8260C Date Collected: 03/24/2015 09:32

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 19:27

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.: 136938 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)	130		64-135
2037-26-5	Toluene-d8 (Surr)	106		71-118
460-00-4	4-Bromofluorobenzene (Surr)	100		70-118
1868-53-7	Dibromofluoromethane (Surr)	107		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330024.D
Lims ID: 180-42353-D-8 Lab Sample ID: 180-42353-8
Client ID: HD-COD-SW-13-0/1-0
Sample Type: Client
Inject. Date: 30-Mar-2015 19:27:30 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-D-8
Misc. Info.: 180-0006236-024
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 10:26:39 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 10:26:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.281	4.284	-0.003	91	247248	1000.0	
* 2 Fluorobenzene (IS)	96	7.335	7.332	0.003	97	548699	50.0	
* 3 Chlorobenzene-d5	119	10.444	10.440	0.004	91	118658	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.792	12.795	-0.003	97	186823	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.605	6.596	0.009	92	133289	53.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.982	6.973	0.009	71	230944	65.0	
$ 7 Toluene-d8 (Surr)	98	8.984	8.980	0.004	94	497663	53.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.624	11.627	-0.003	81	198717	49.9	
12 Chloromethane	50		1.765				ND	
13 Vinyl chloride	62		1.899				ND	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.392				ND	
22 1,1-Dichloroethene	96		3.371				ND	
24 Acetone	43	3.472	3.451	0.021	75	10643	11.0	
26 Carbon disulfide	76		3.682				ND	
31 Methylene Chloride	84		4.168				ND	
33 Acrylonitrile	53		4.539				ND	
34 trans-1,2-Dichloroethene	96		4.606				ND	
35 Methyl tert-butyl ether	73		4.606				ND	
37 1,1-Dichloroethane	63		5.239				ND	
43 cis-1,2-Dichloroethene	96	5.991	5.981	0.010	78	7405	1.88	
44 2-Butanone (MEK)	43		5.987				ND	
48 Chlorobromomethane	128		6.273				ND	
50 Chloroform	83		6.413				ND	
51 1,1,1-Trichloroethane	97		6.584				ND	
53 Carbon tetrachloride	117		6.760				ND	
56 Benzene	78		6.985				ND	
57 1,2-Dichloroethane	62		7.058				ND	
61 Trichloroethene	130	7.718	7.721	-0.003	85	6636	2.14	
64 1,2-Dichloropropane	63		7.989				ND	
65 1,4-Dioxane	88		8.074				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.275				ND	
71 cis-1,3-Dichloropropene	75		8.719				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.859				ND	
73 Toluene	91	9.051	9.047	0.004	98	13264	1.09	
74 trans-1,3-Dichloropropene	75		9.297				ND	
76 1,1,2-Trichloroethane	97		9.485				ND	
77 Tetrachloroethene	164	9.568	9.571	-0.003	82	4714	2.18	
79 2-Hexanone	43		9.692				ND	
81 Chlorodibromomethane	129		9.863				ND	
82 Ethylene Dibromide	107		9.984				ND	
84 Chlorobenzene	112		10.471				ND	
86 1,1,1,2-Tetrachloroethane	131		10.562				ND	
87 Ethylbenzene	106		10.568				ND	
88 m-Xylene & p-Xylene	106		10.696				ND	
89 o-Xylene	106		11.079				ND	
90 Styrene	104		11.104				ND	
91 Bromoform	173		11.292				ND	
96 1,1,2,2-Tetrachloroethane	83		11.754				ND	
S 131 Xylenes, Total	106		1.000				ND	

Reagents:

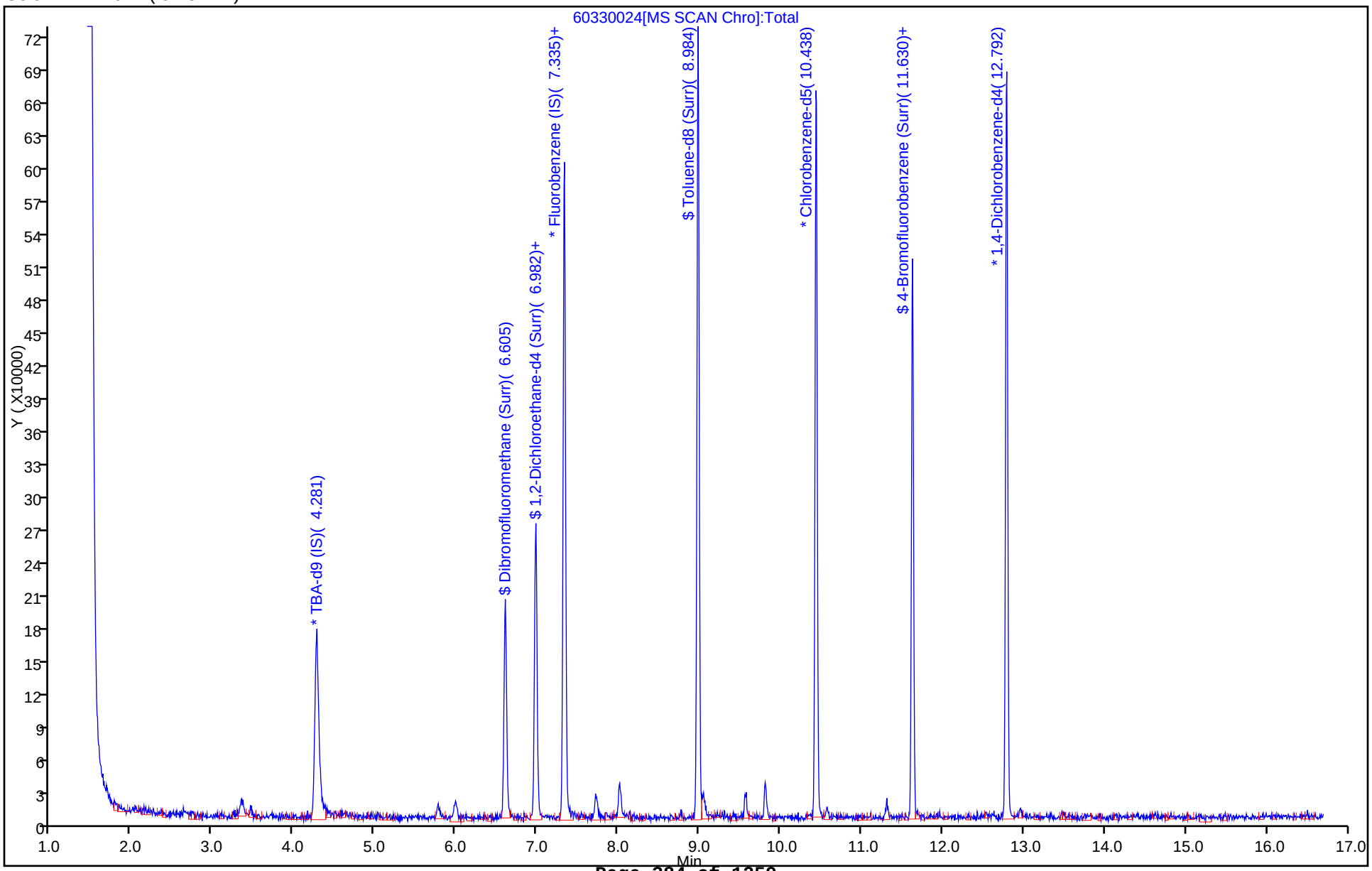
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 31-Mar-2015 10:26:40 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330024.D				
Injection Date:	30-Mar-2015 19:27:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-42353-D-8	Lab Sample ID:	180-42353-8	Worklist Smp#:	24
Client ID:	HD-COD-SW-13-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

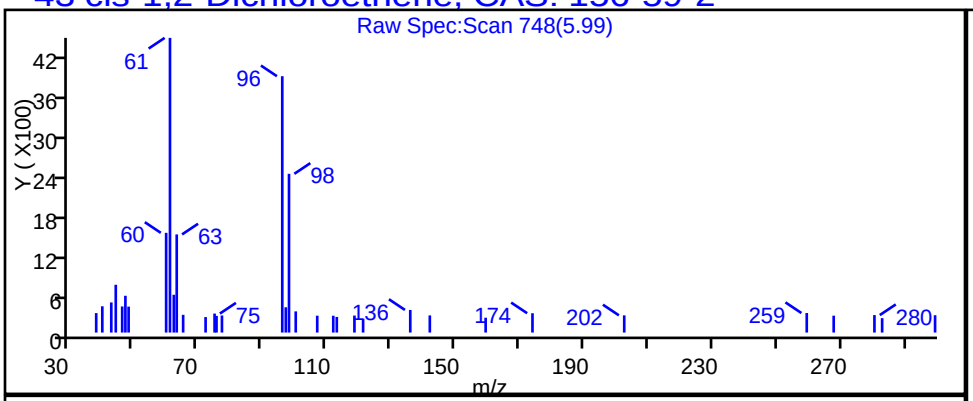


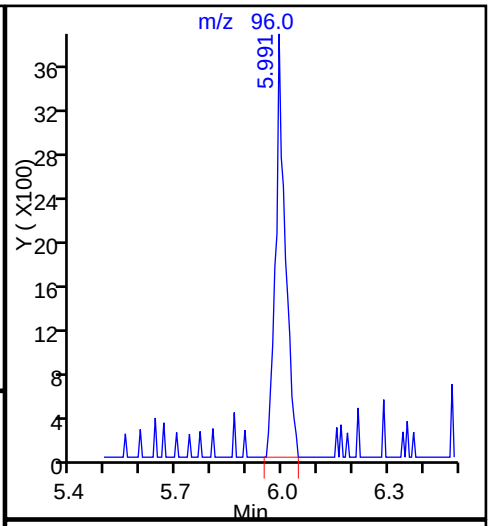
Report Date: 31-Mar-2015 10:26:40 Chrom Revision: 2.2 13-Mar-2015 11:20:44

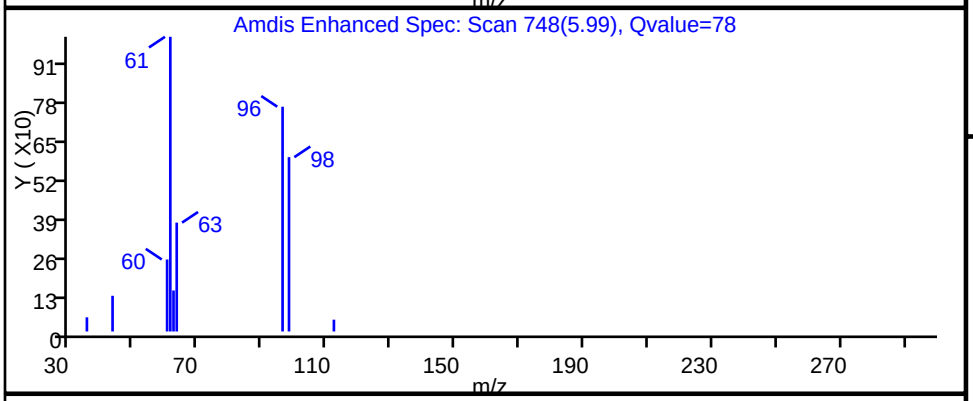
TestAmerica Pittsburgh

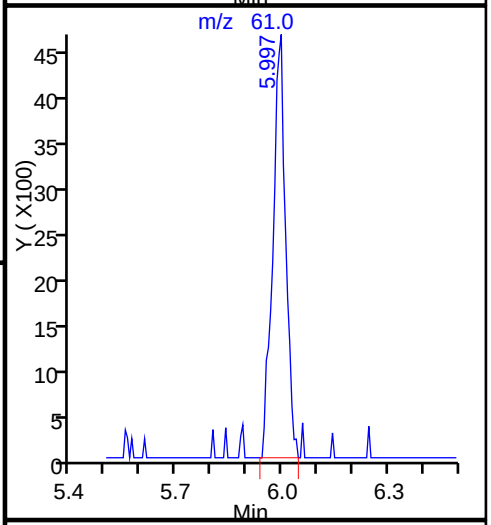
Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330024.D				
Injection Date:	30-Mar-2015 19:27:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-D-8	Lab Sample ID:	180-42353-8		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	001562	ALS Bottle#:	24	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

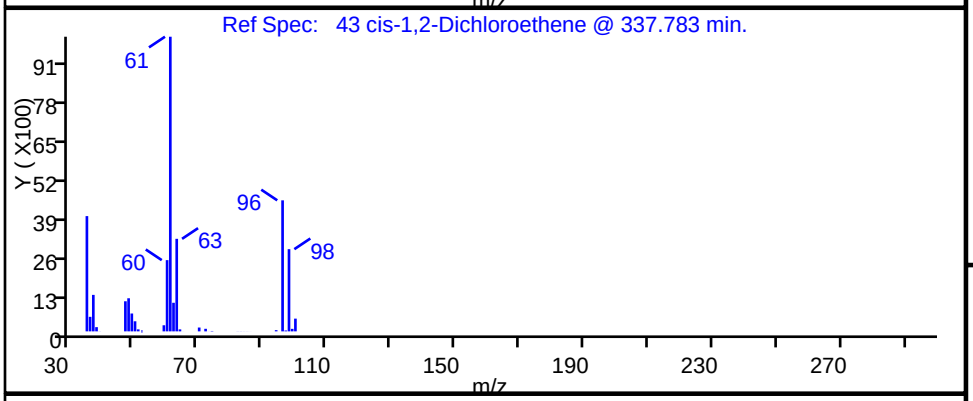
43 cis-1,2-Dichloroethene, CAS: 156-59-2

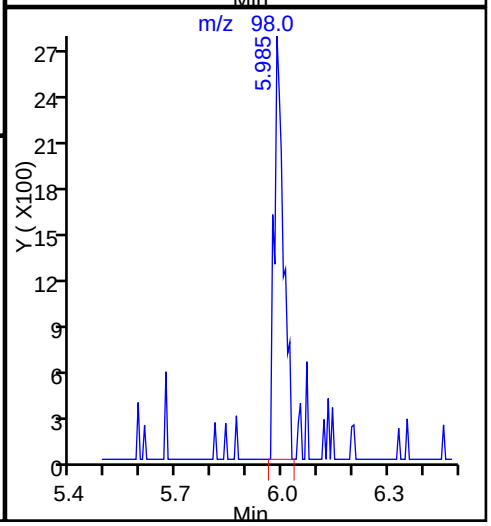


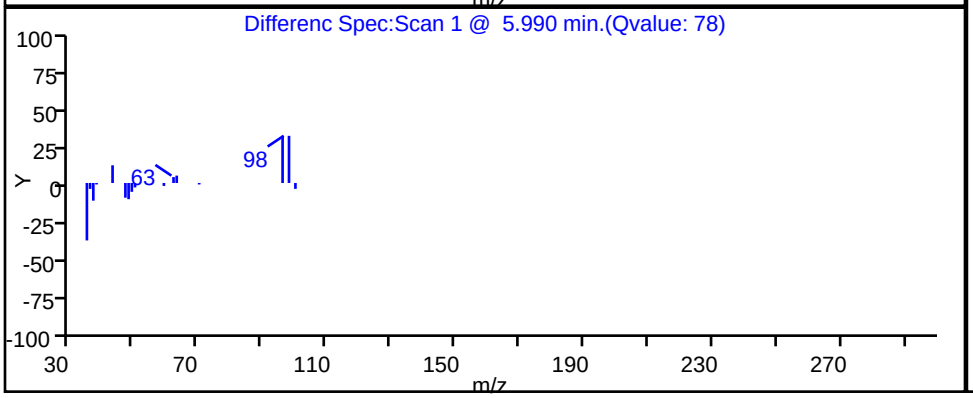










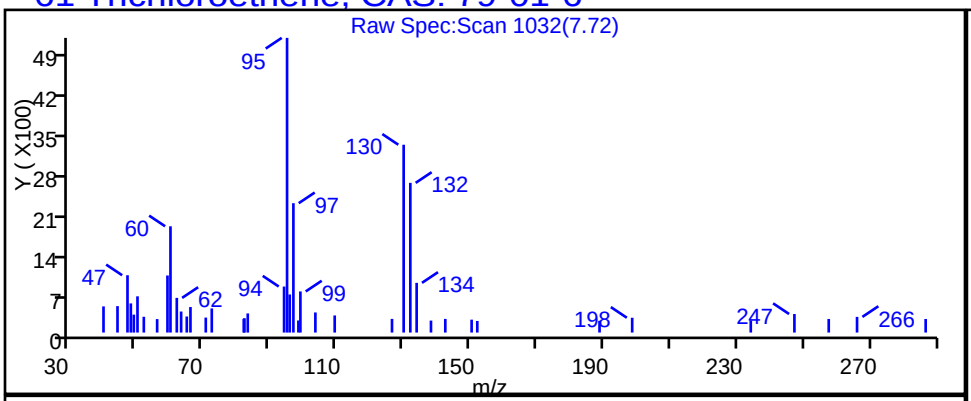


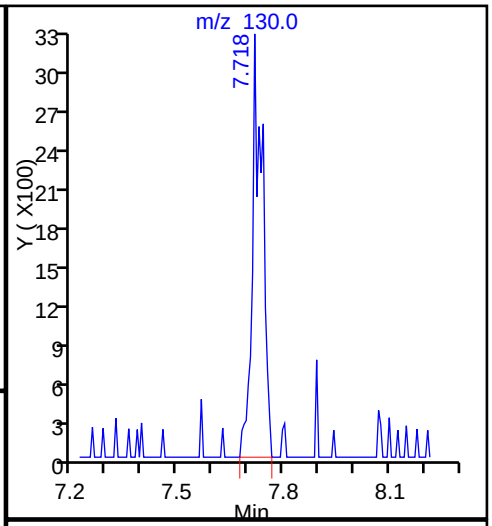
Report Date: 31-Mar-2015 10:26:40 Chrom Revision: 2.2 13-Mar-2015 11:20:44

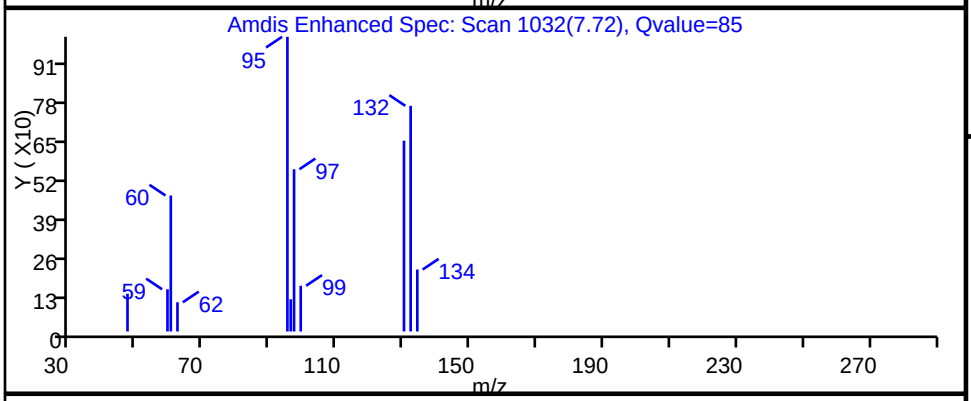
TestAmerica Pittsburgh

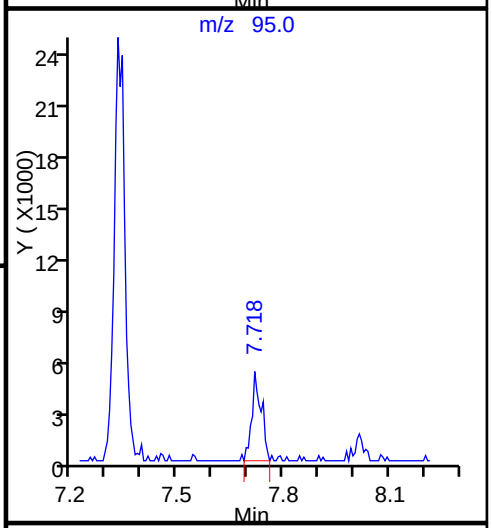
Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330024.D		
Injection Date:	30-Mar-2015 19:27:30	Instrument ID:	CHHP6
Lims ID:	180-42353-D-8	Lab Sample ID:	180-42353-8
Client ID:	HD-COD-SW-13-0/1-0		
Operator ID:	001562	ALS Bottle#:	24 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

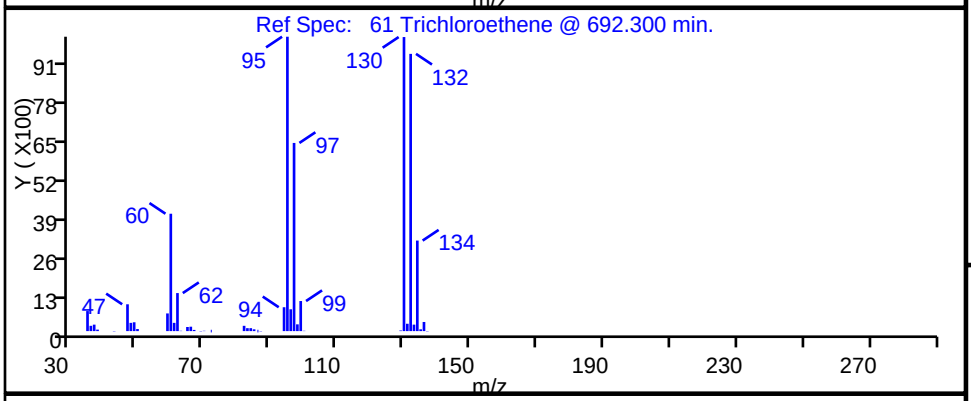
61 Trichloroethene, CAS: 79-01-6

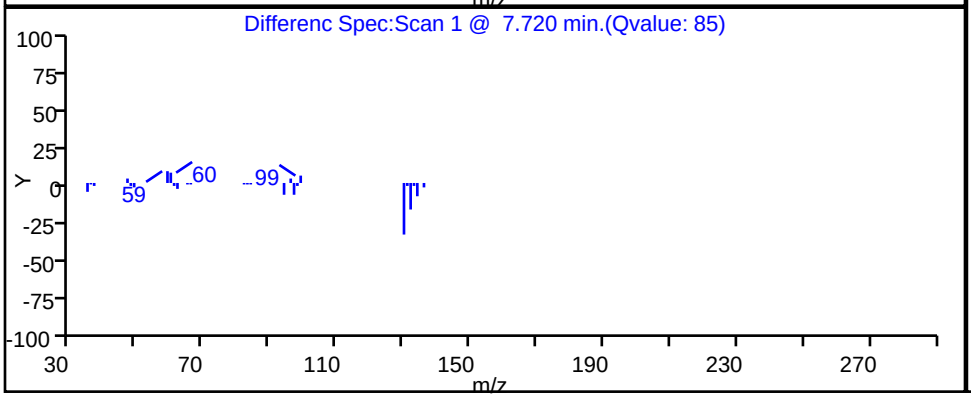


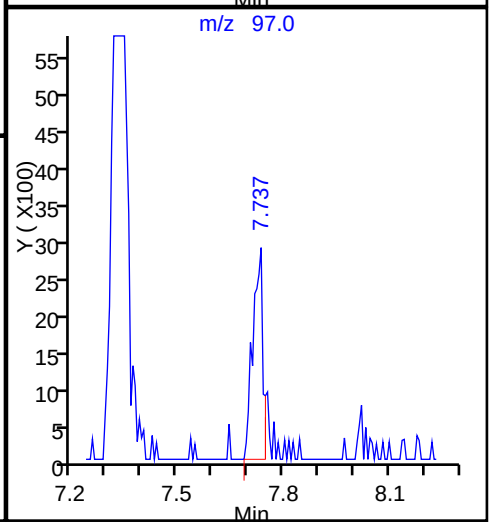










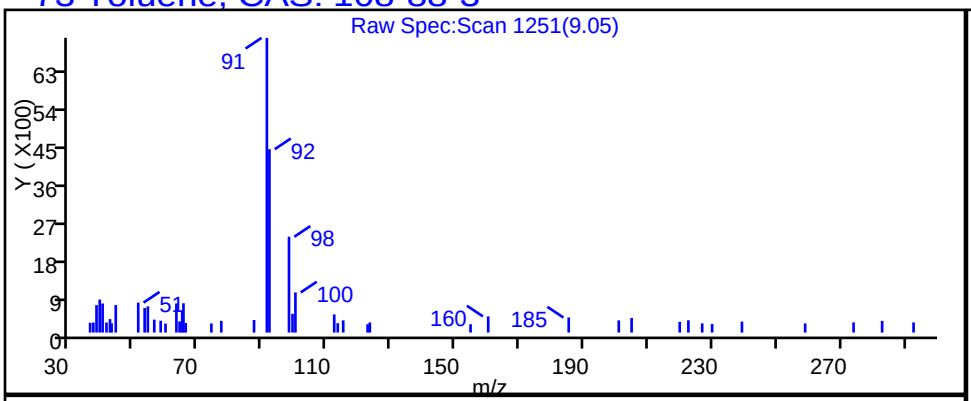


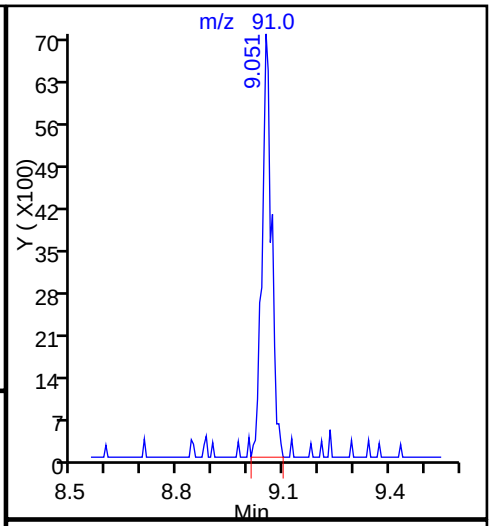
Report Date: 31-Mar-2015 10:26:40 Chrom Revision: 2.2 13-Mar-2015 11:20:44

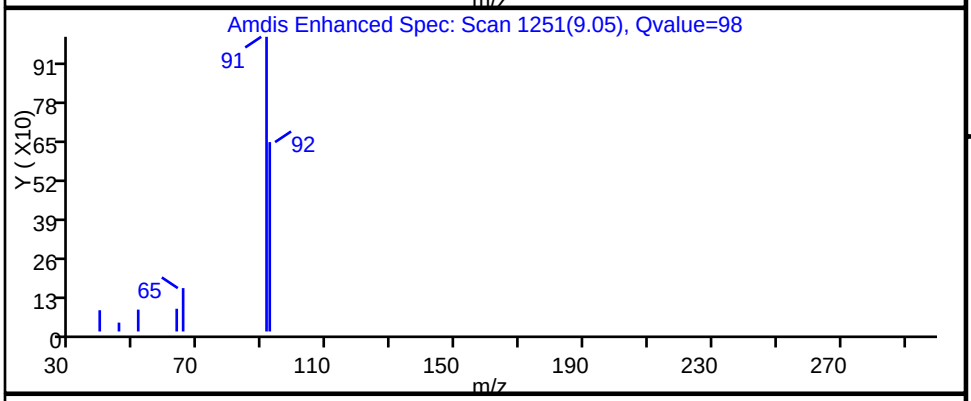
TestAmerica Pittsburgh

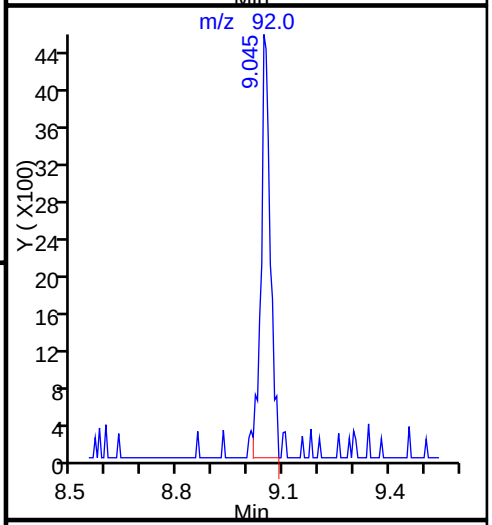
Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330024.D		
Injection Date:	30-Mar-2015 19:27:30	Instrument ID:	CHHP6
Lims ID:	180-42353-D-8	Lab Sample ID:	180-42353-8
Client ID:	HD-COD-SW-13-0/1-0		
Operator ID:	001562	ALS Bottle#:	24 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

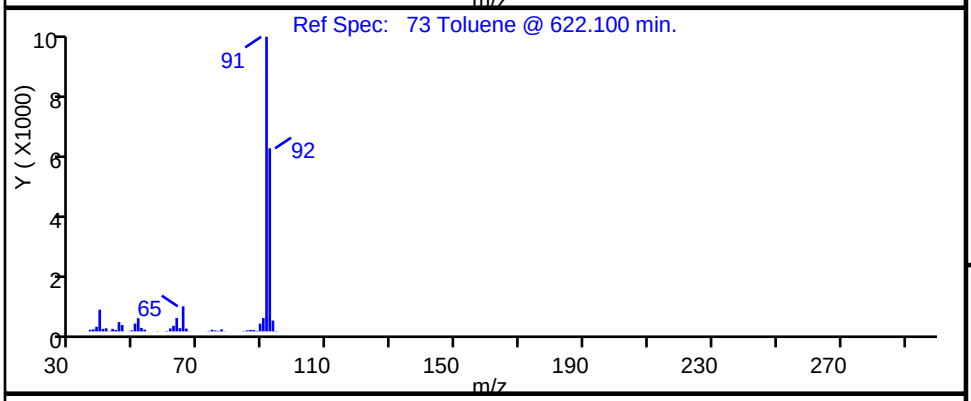
73 Toluene, CAS: 108-88-3

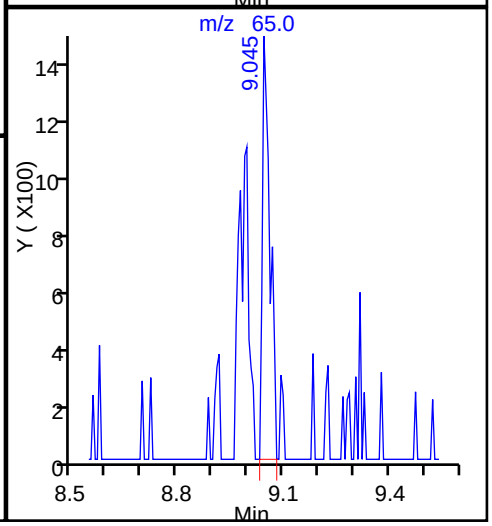


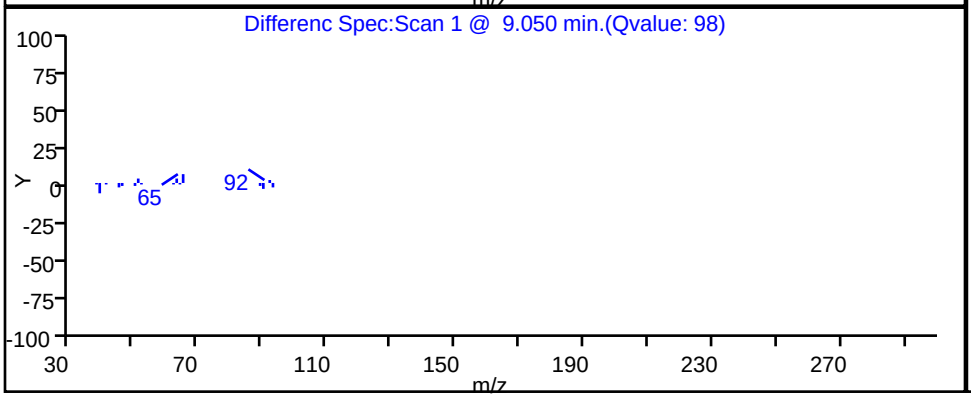










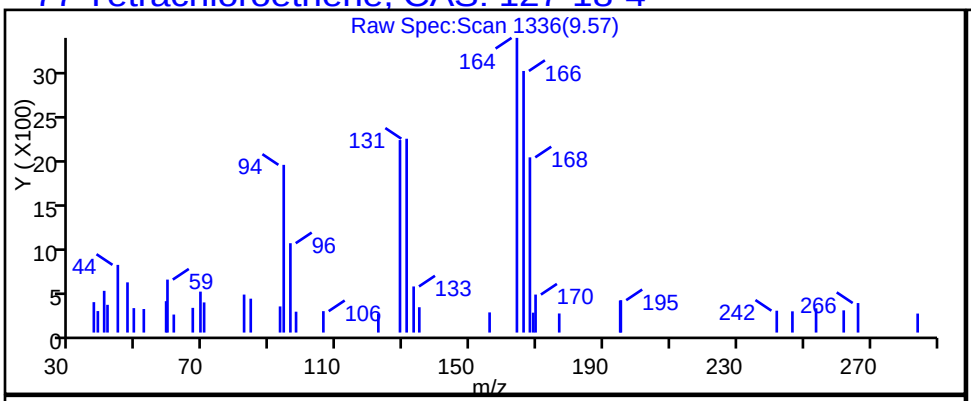


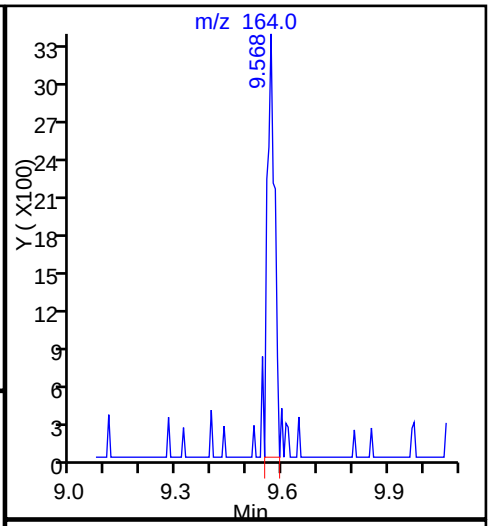
Report Date: 31-Mar-2015 10:26:40 Chrom Revision: 2.2 13-Mar-2015 11:20:44

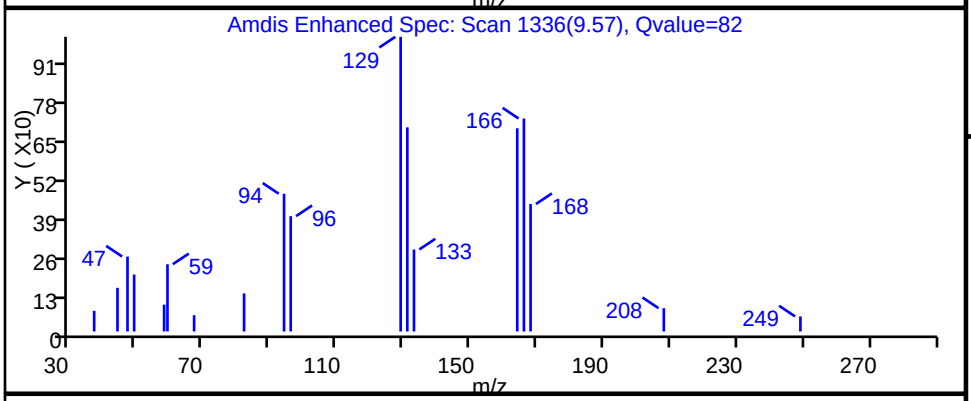
TestAmerica Pittsburgh

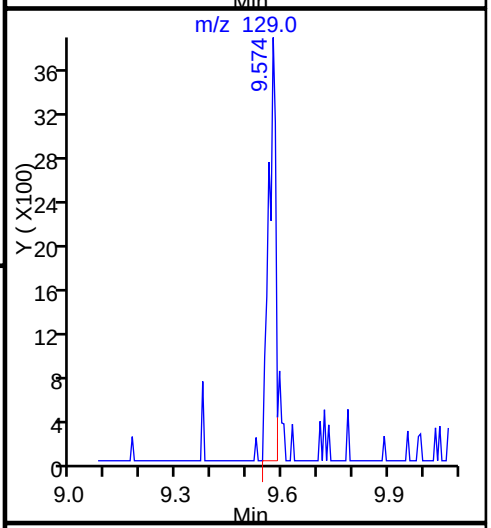
Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330024.D		
Injection Date:	30-Mar-2015 19:27:30	Instrument ID:	CHHP6
Lims ID:	180-42353-D-8	Lab Sample ID:	180-42353-8
Client ID:	HD-COD-SW-13-0/1-0		
Operator ID:	001562	ALS Bottle#:	24 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

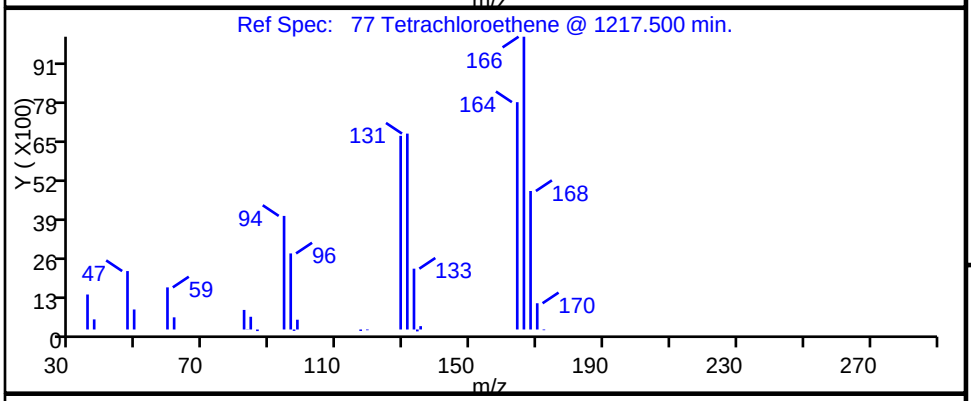
77 Tetrachloroethene, CAS: 127-18-4

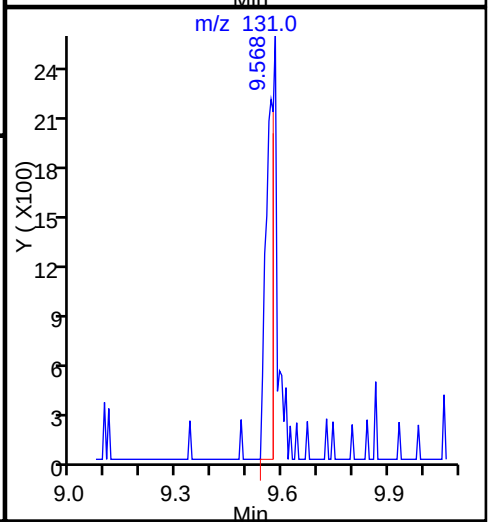


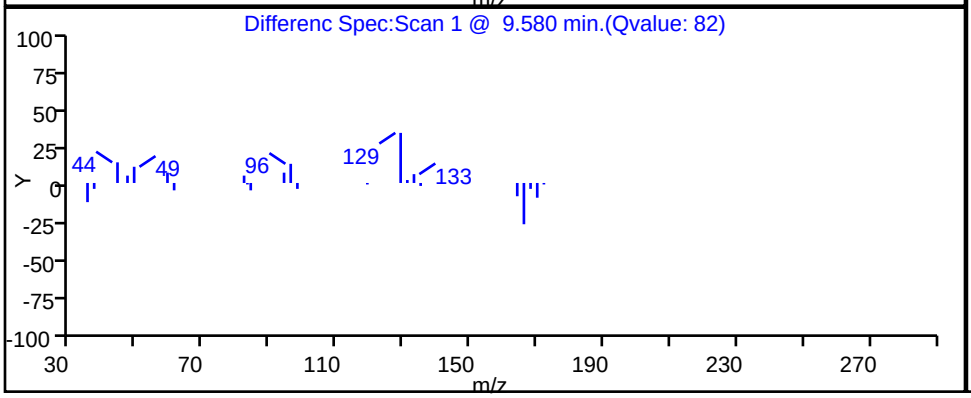












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 | Lab Sample ID: 180-42353-9

Matrix: Water | Lab File ID: 60330025.D

Analysis Method: 8260C | Date Collected: 03/24/2015 13:45

Sample wt/vol: 5(mL) | Date Analyzed: 03/30/2015 19:51

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.: 136938 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.28
75-01-4	Vinyl chloride	1.0	U	1.0	0.23
74-83-9	Bromomethane	1.0	U	1.0	0.31
75-00-3	Chloroethane	1.0	U	1.0	0.21
75-35-4	1,1-Dichloroethene	0.75	J	1.0	0.30
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.21
75-09-2	Methylene Chloride	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.17
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.18
75-34-3	1,1-Dichloroethane	0.17	J	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	14		1.0	0.24
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	0.18	J	1.0	0.17
71-55-6	1,1,1-Trichloroethane	0.54	J	1.0	0.29
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.14
71-43-2	Benzene	1.0	U	1.0	0.11
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
79-01-6	Trichloroethene	12		1.0	0.14
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.095
75-27-4	Bromodichloromethane	1.0	U	1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53
108-88-3	Toluene	1.0	U	1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.15
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
127-18-4	Tetrachloroethene	7.7		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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 180-42353-9

Matrix: Water Lab File ID: 60330025.D

Analysis Method: 8260C Date Collected: 03/24/2015 13:45

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 19:51

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.: 136938 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)	130		64-135
2037-26-5	Toluene-d8 (Surr)	104		71-118
460-00-4	4-Bromofluorobenzene (Surr)	95		70-118
1868-53-7	Dibromofluoromethane (Surr)	113		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330025.D
Lims ID: 180-42353-C-9 Lab Sample ID: 180-42353-9
Client ID: HD-COD-SW-15-0/1-0
Sample Type: Client
Inject. Date: 30-Mar-2015 19:51:30 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-C-9
Misc. Info.: 180-0006236-025
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 10:53:14 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 10:53:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.272	4.284	-0.012	89	253198	1000.0	
* 2 Fluorobenzene (IS)	96	7.332	7.332	0.000	97	527341	50.0	
* 3 Chlorobenzene-d5	119	10.440	10.440	0.000	92	105513	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.795	12.795	0.000	98	164994	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.602	6.596	0.006	93	134250	56.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.979	6.973	0.006	71	222687	65.2	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	94	430900	51.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.633	11.627	0.006	81	168515	47.6	
12 Chloromethane	50		1.765				ND	
13 Vinyl chloride	62		1.899				ND	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.392				ND	
22 1,1-Dichloroethene	96	3.378	3.371	0.007	93	11161	3.77	
24 Acetone	43	3.463	3.451	0.012	63	1482	1.59	
26 Carbon disulfide	76		3.682				ND	
31 Methylene Chloride	84		4.168				ND	
33 Acrylonitrile	53		4.539				ND	
34 trans-1,2-Dichloroethene	96		4.606				ND	
35 Methyl tert-butyl ether	73		4.606				ND	
37 1,1-Dichloroethane	63	5.239	5.239	0.000	1	5906	0.8565	M
43 cis-1,2-Dichloroethene	96	5.987	5.981	0.006	83	263824	69.8	
44 2-Butanone (MEK)	43		5.987				ND	
48 Chlorobromomethane	128		6.273				ND	
50 Chloroform	83	6.419	6.413	0.006	31	5249	0.8841	
51 1,1,1-Trichloroethane	97	6.590	6.584	0.006	96	12261	2.71	
53 Carbon tetrachloride	117	6.754	6.760	-0.006	1	800	0.2260	
56 Benzene	78		6.985				ND	
57 1,2-Dichloroethane	62		7.058				ND	
61 Trichloroethene	130	7.721	7.721	0.000	93	183941	61.7	
64 1,2-Dichloropropane	63		7.989				ND	
65 1,4-Dioxane	88		8.074				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.275				ND	
71 cis-1,3-Dichloropropene	75		8.719				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.859				ND	
73 Toluene	91	9.053	9.047	0.006	64	4672	0.4331	
74 trans-1,3-Dichloropropene	75		9.297				ND	
76 1,1,2-Trichloroethane	97	9.497	9.485	0.012	1	951	0.4855	
77 Tetrachloroethene	164	9.570	9.571	-0.001	94	74155	38.5	
79 2-Hexanone	43		9.692				ND	
81 Chlorodibromomethane	129		9.863				ND	
82 Ethylene Dibromide	107		9.984				ND	
84 Chlorobenzene	112		10.471				ND	
86 1,1,1,2-Tetrachloroethane	131		10.562				ND	
87 Ethylbenzene	106		10.568				ND	
88 m-Xylene & p-Xylene	106		10.696				ND	
89 o-Xylene	106		11.079				ND	
90 Styrene	104		11.104				ND	
91 Bromoform	173		11.292				ND	
96 1,1,2,2-Tetrachloroethane	83		11.754				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

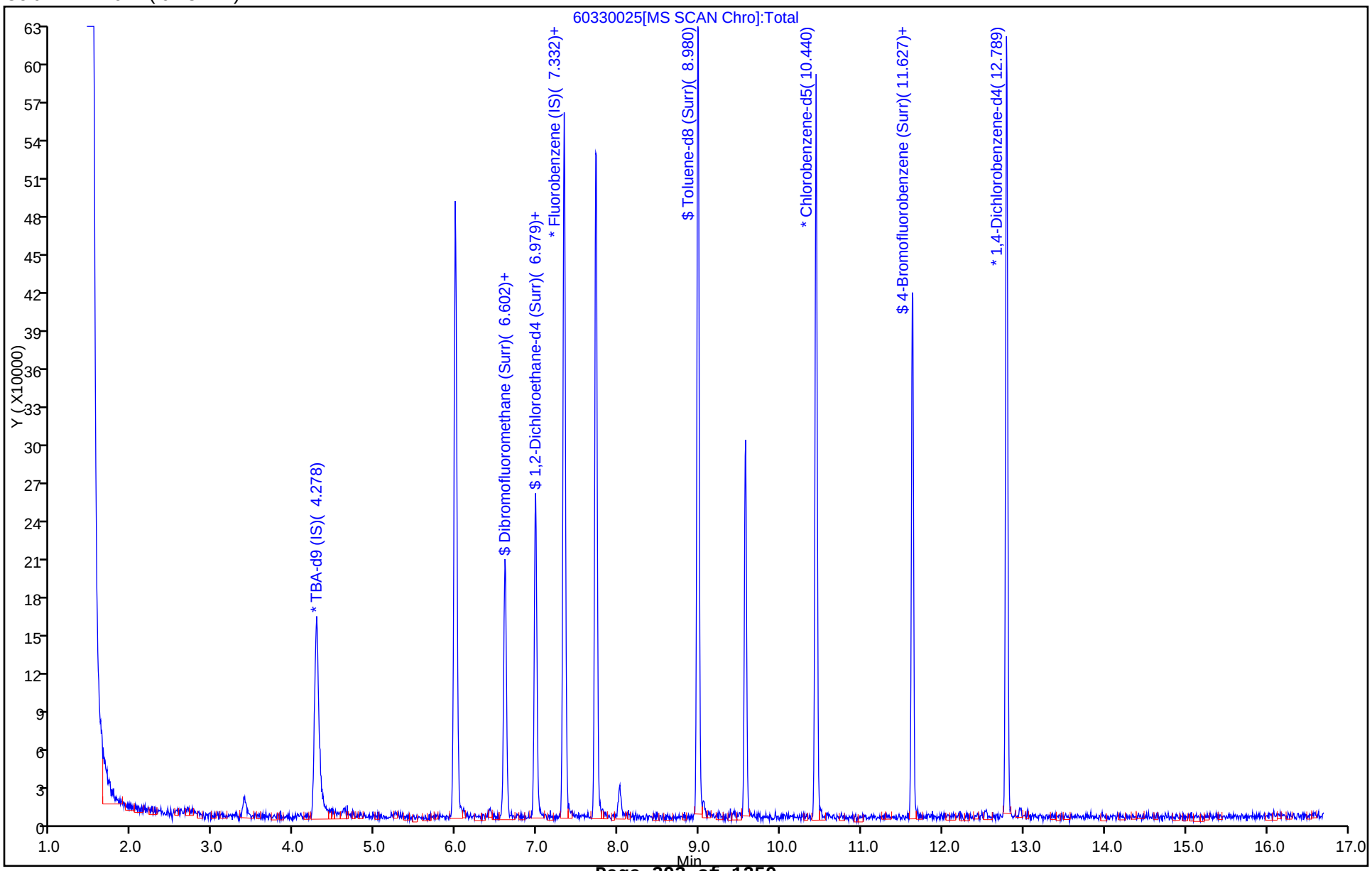
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 31-Mar-2015 10:53:14 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330025.D				
Injection Date:	30-Mar-2015 19:51:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-42353-C-9	Lab Sample ID:	180-42353-9	Worklist Smp#:	25
Client ID:	HD-COD-SW-15-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



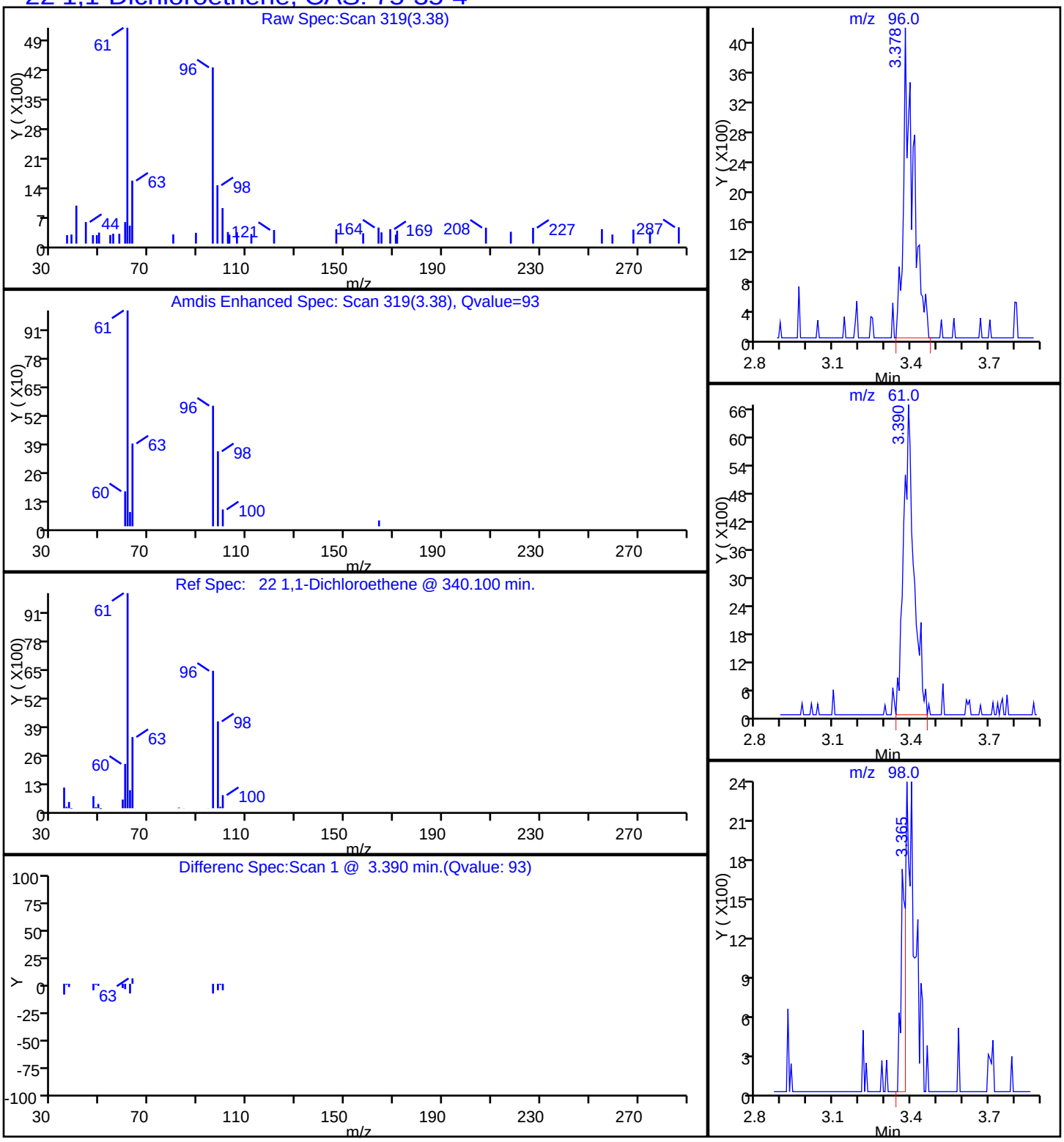
Report Date: 31-Mar-2015 10:53:14 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330025.D

Injection Date:	30-Mar-2015 19:51:30	Instrument ID:	CHHP6
Lims ID:	180-42353-C-9	Lab Sample ID:	180-42353-9
Client ID:	HD-COD-SW-15-0/1-0		
Operator ID:	001562	ALS Bottle#:	25 Worklist Smp#: 25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

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

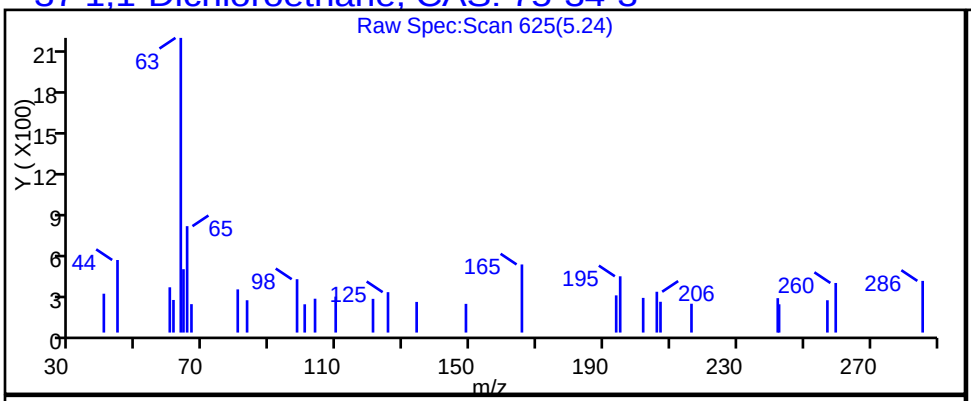


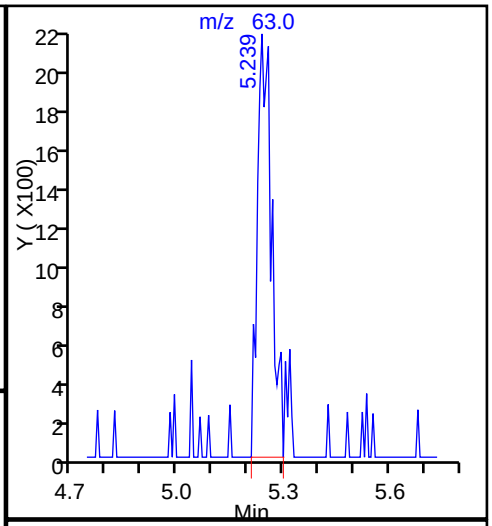
Report Date: 31-Mar-2015 10:53:14 Chrom Revision: 2.2 13-Mar-2015 11:20:44

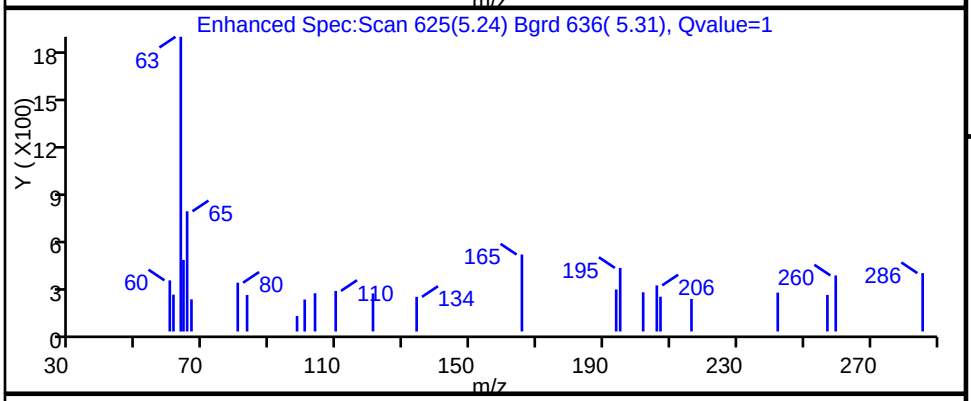
TestAmerica Pittsburgh

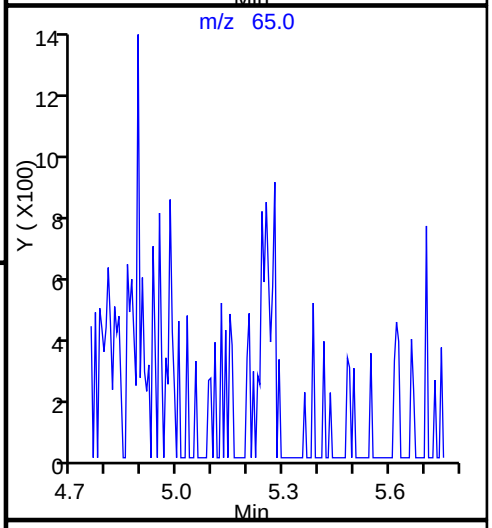
Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330025.D				
Injection Date:	30-Mar-2015 19:51:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-C-9	Lab Sample ID:	180-42353-9		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	001562	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

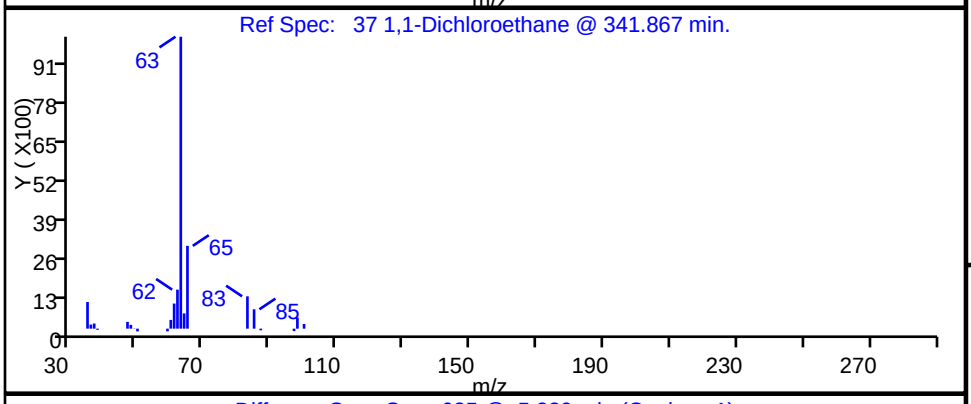
37 1,1-Dichloroethane, CAS: 75-34-3

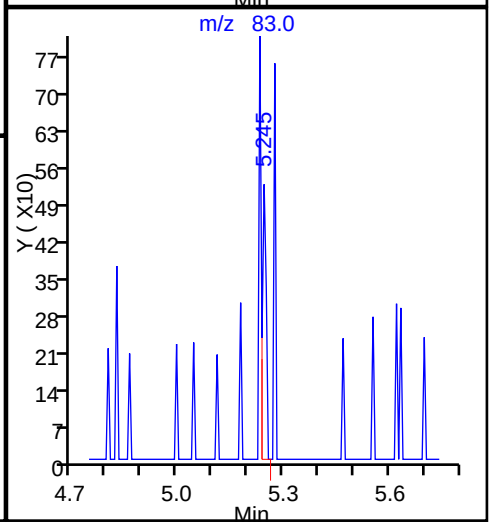


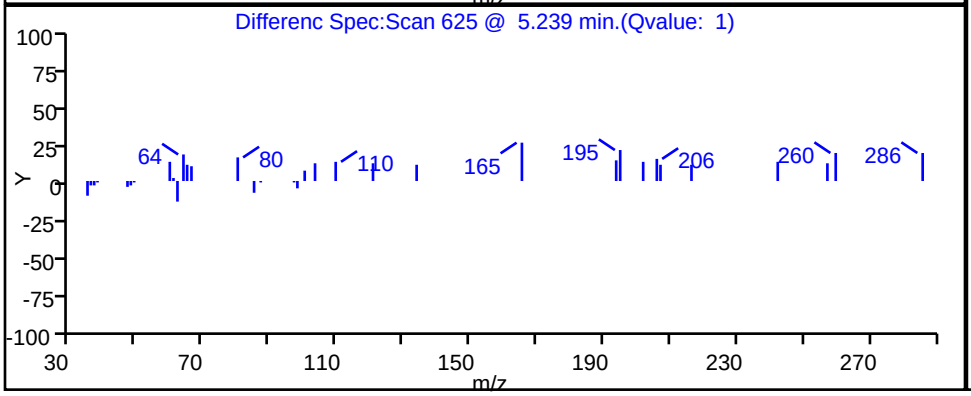










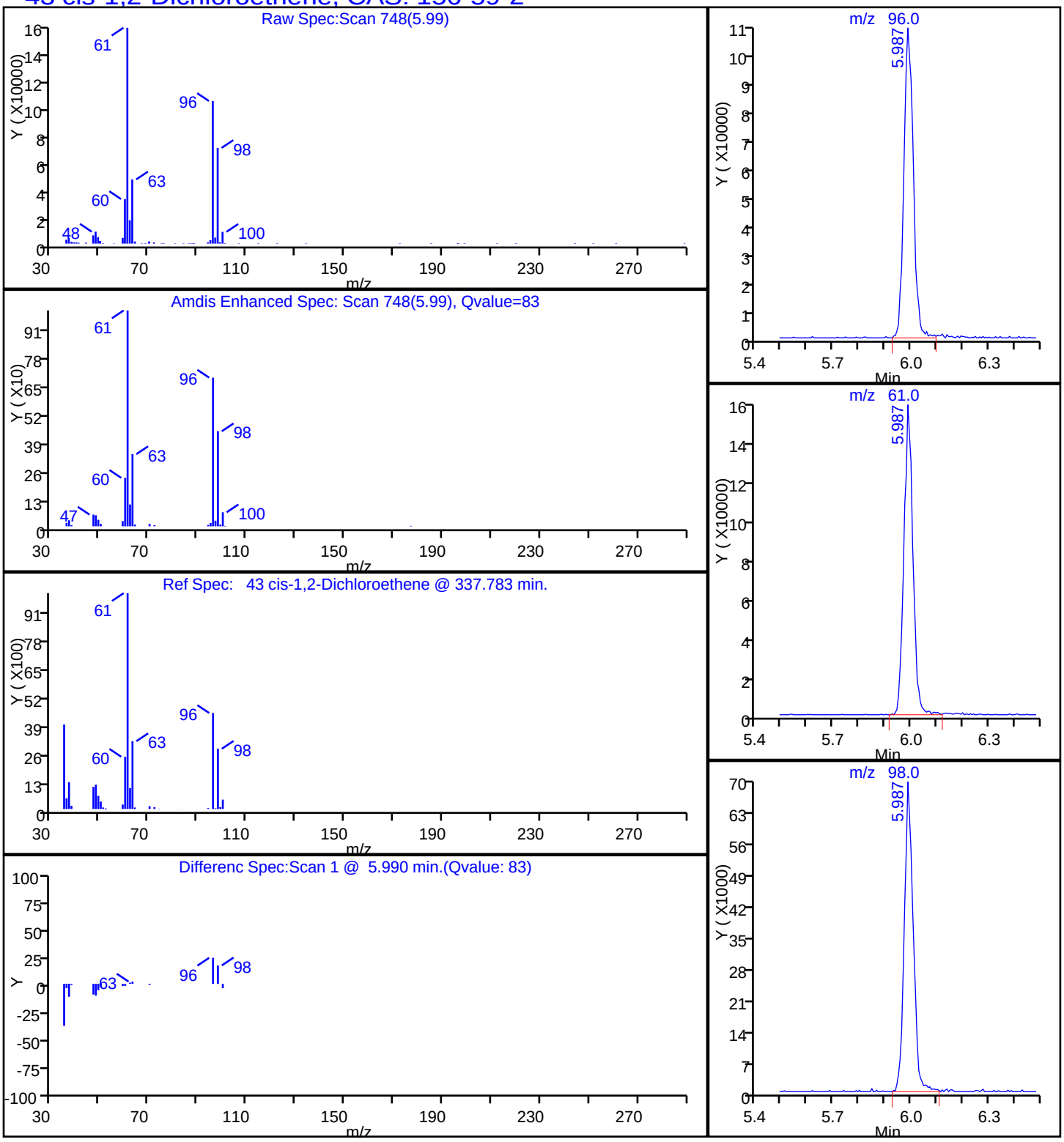


Report Date: 31-Mar-2015 10:53:14 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330025.D				
Injection Date:	30-Mar-2015 19:51:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-C-9	Lab Sample ID:	180-42353-9		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	001562	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

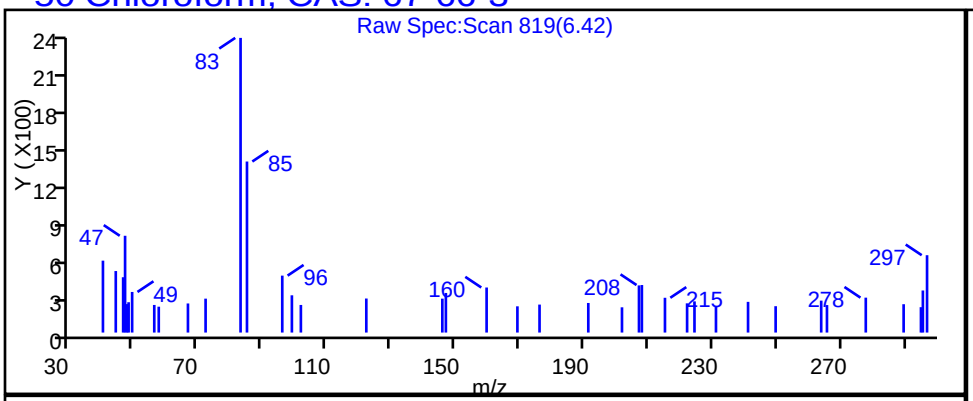


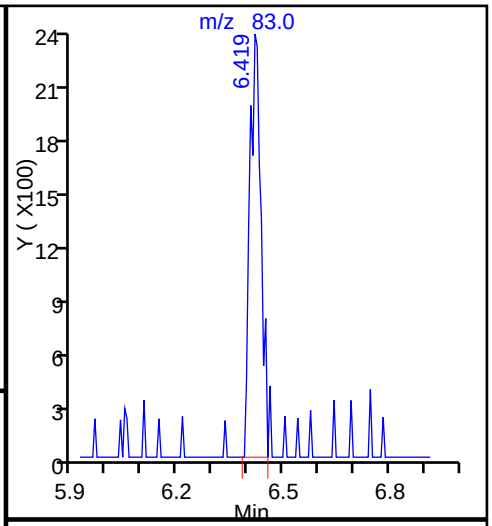
Report Date: 31-Mar-2015 10:53:14 Chrom Revision: 2.2 13-Mar-2015 11:20:44

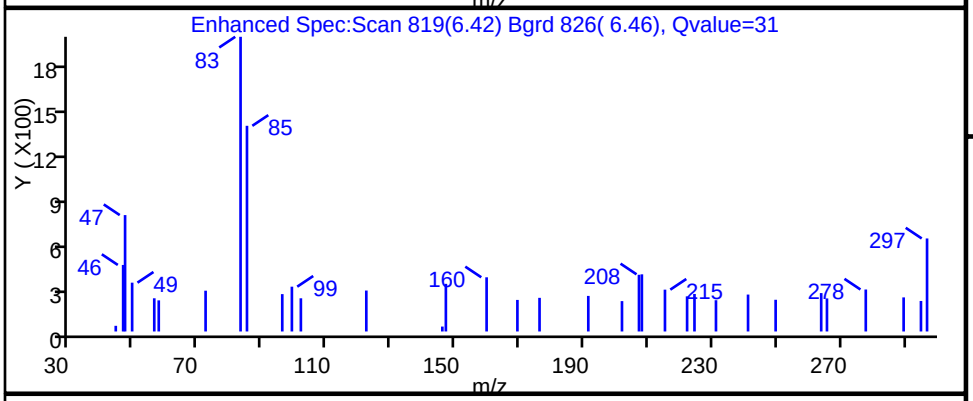
TestAmerica Pittsburgh

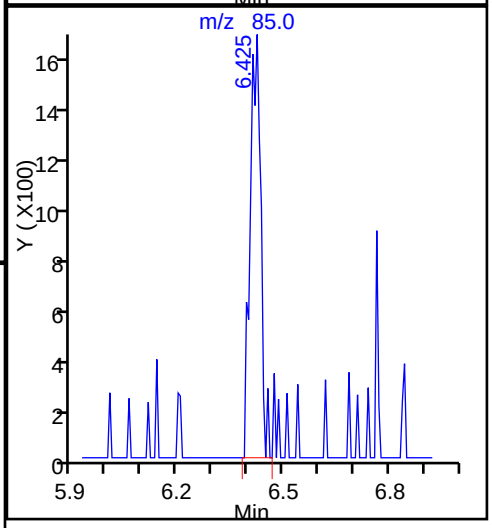
Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330025.D				
Injection Date:	30-Mar-2015 19:51:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-C-9	Lab Sample ID:	180-42353-9		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	001562	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

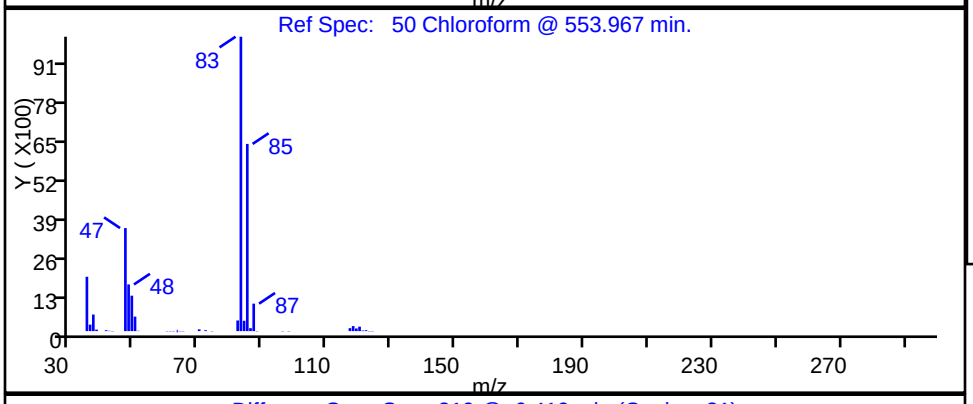
50 Chloroform, CAS: 67-66-3

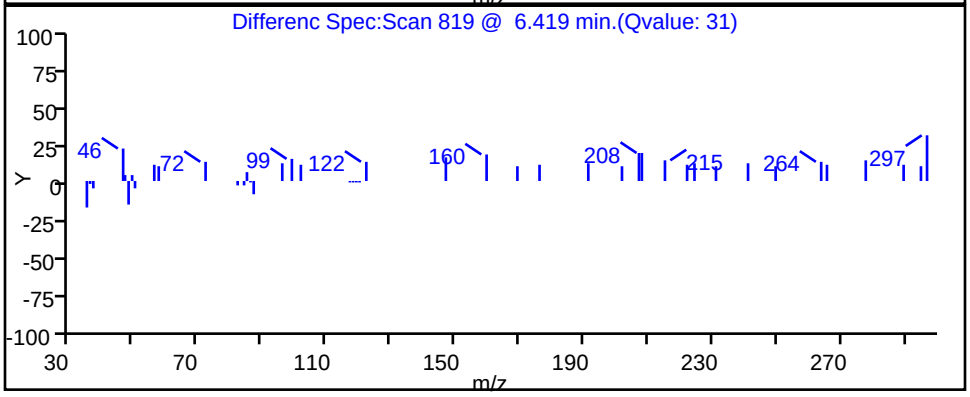










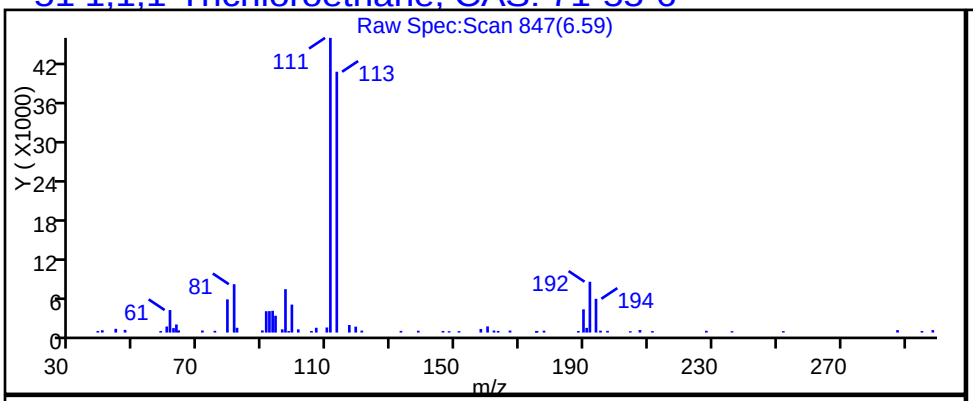


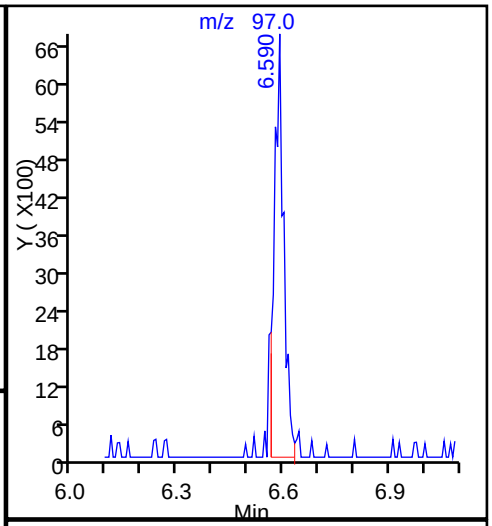
Report Date: 31-Mar-2015 10:53:14 Chrom Revision: 2.2 13-Mar-2015 11:20:44

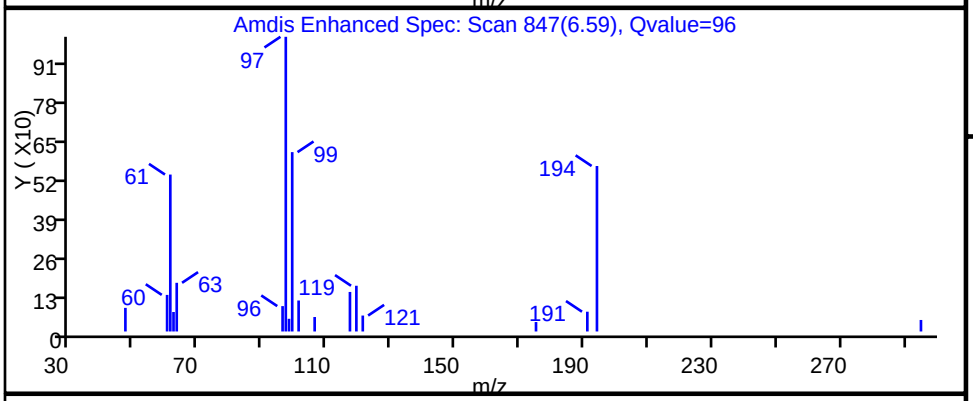
TestAmerica Pittsburgh

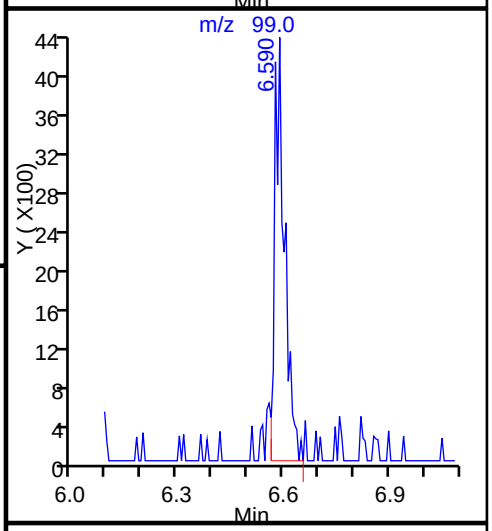
Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330025.D				
Injection Date:	30-Mar-2015 19:51:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-C-9	Lab Sample ID:	180-42353-9		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	001562	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

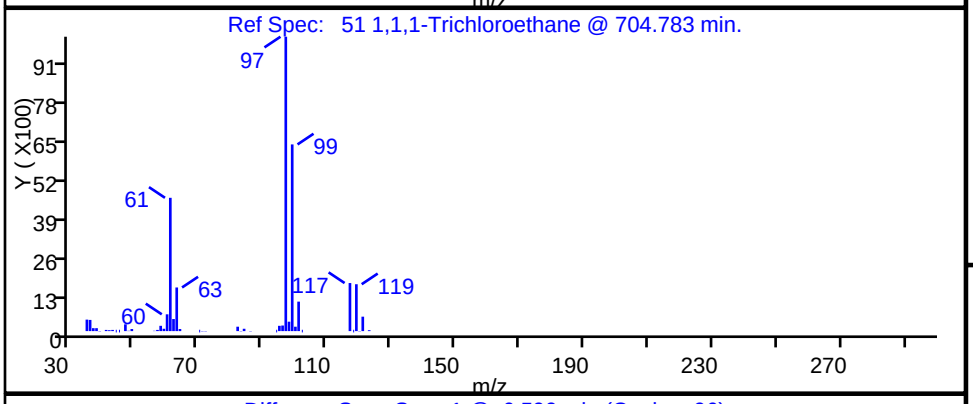
51 1,1,1-Trichloroethane, CAS: 71-55-6

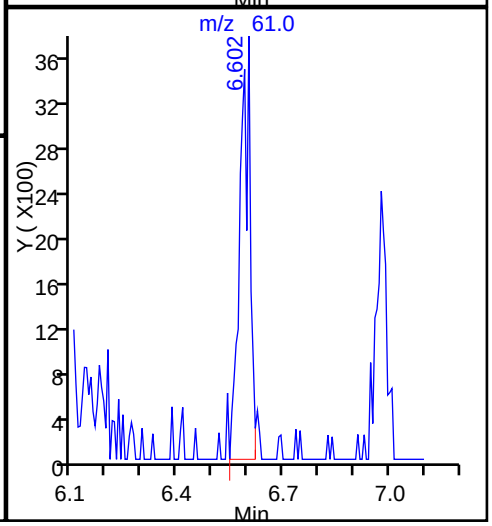


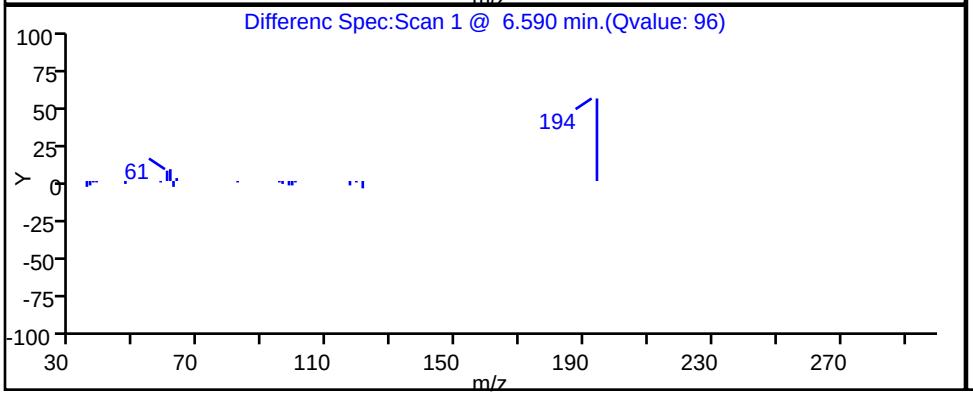










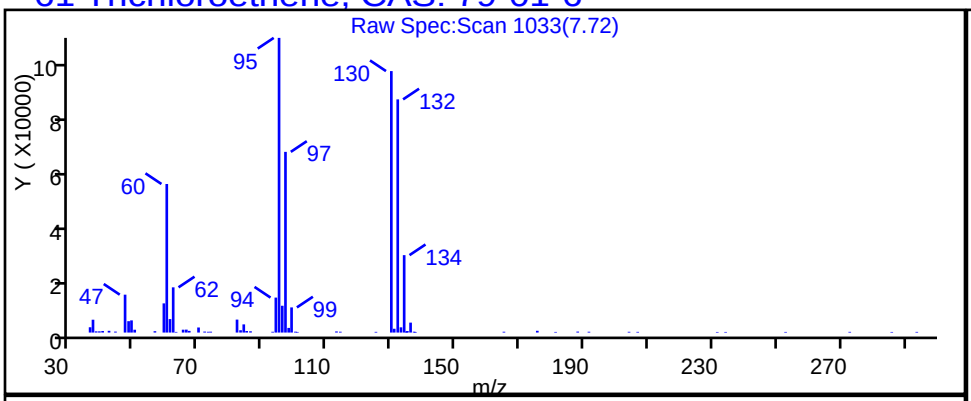


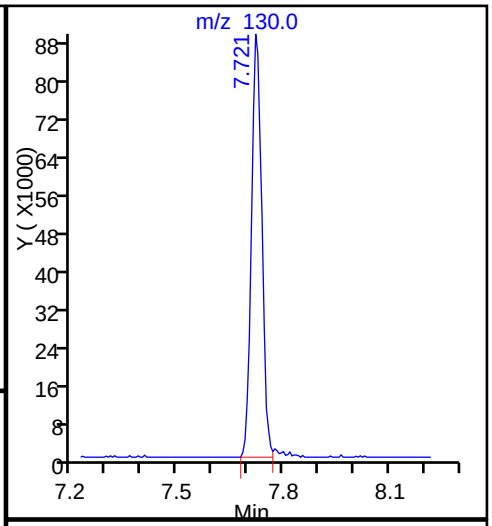
Report Date: 31-Mar-2015 10:53:14 Chrom Revision: 2.2 13-Mar-2015 11:20:44

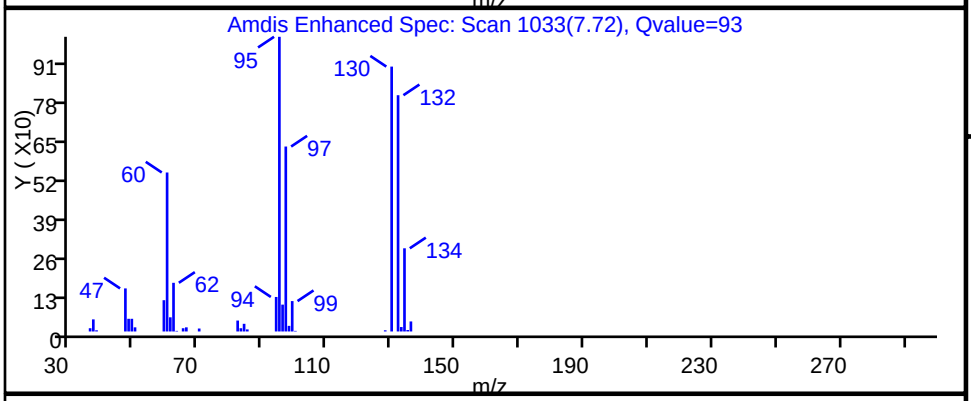
TestAmerica Pittsburgh

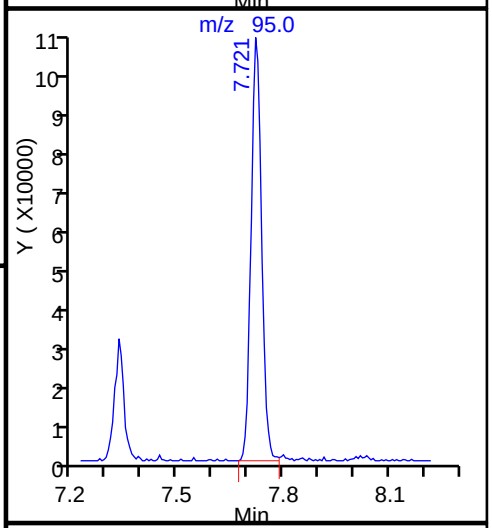
Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330025.D				
Injection Date:	30-Mar-2015 19:51:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-C-9	Lab Sample ID:	180-42353-9		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	001562	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

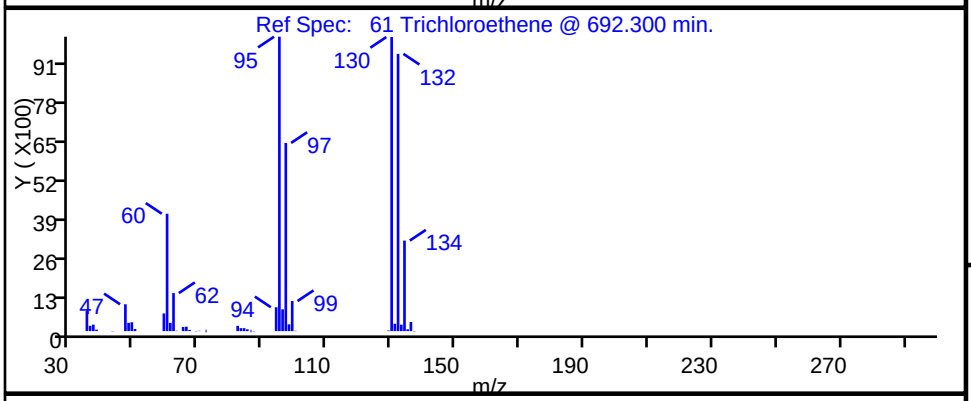
61 Trichloroethene, CAS: 79-01-6

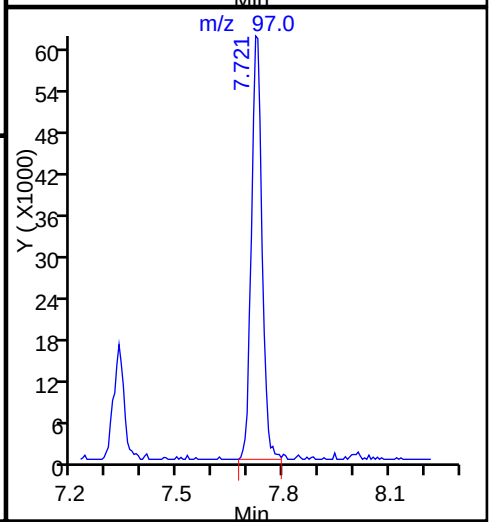


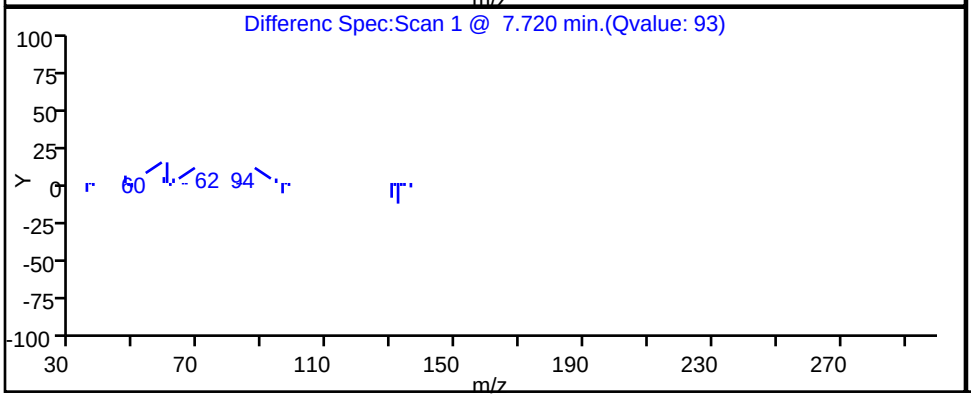












Report Date: 31-Mar-2015 10:53:14 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330025.D

Injection Date: 30-Mar-2015 19:51:30 Instrument ID: CHHP6

Lims ID: 180-42353-C-9 Lab Sample ID: 180-42353-9

Client ID: HD-COD-SW-15-0/1-0

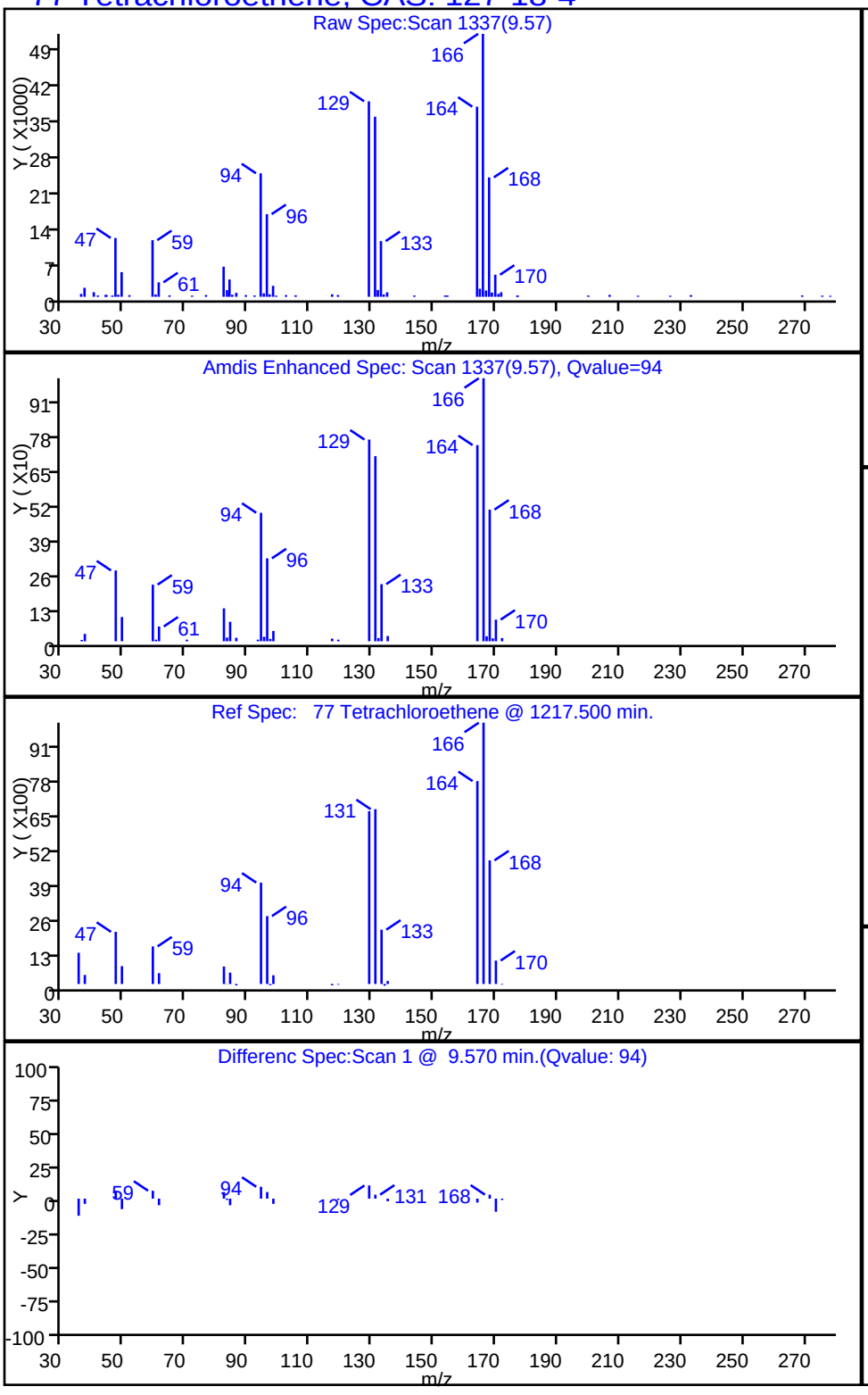
Operator ID: 001562 ALS Bottle#: 25 Worklist Smp#: 25

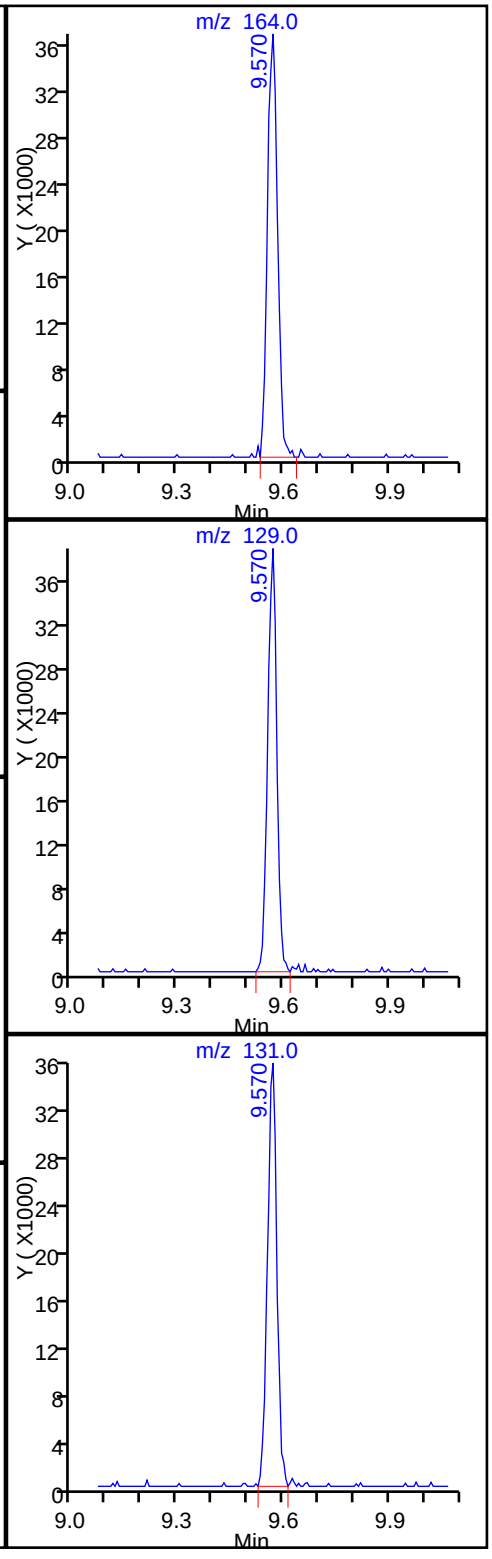
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm) Detector MS SCAN

77 Tetrachloroethene, CAS: 127-18-4





Manual Integration/User Assign Peak Report

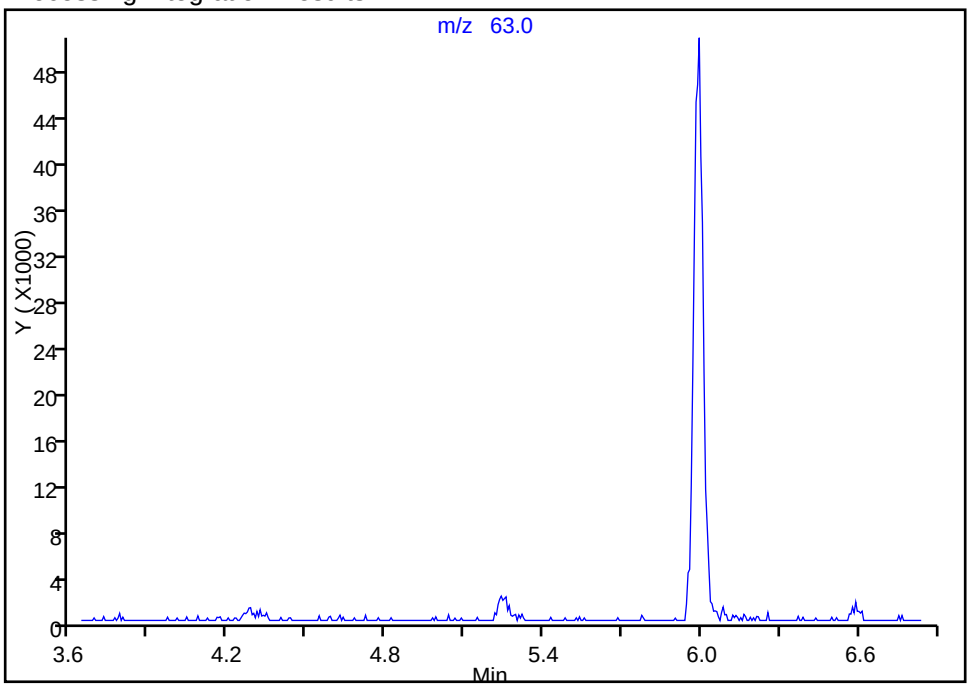
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330025.D				
Injection Date:	30-Mar-2015 19:51:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-C-9	Lab Sample ID:	180-42353-9		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	001562	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

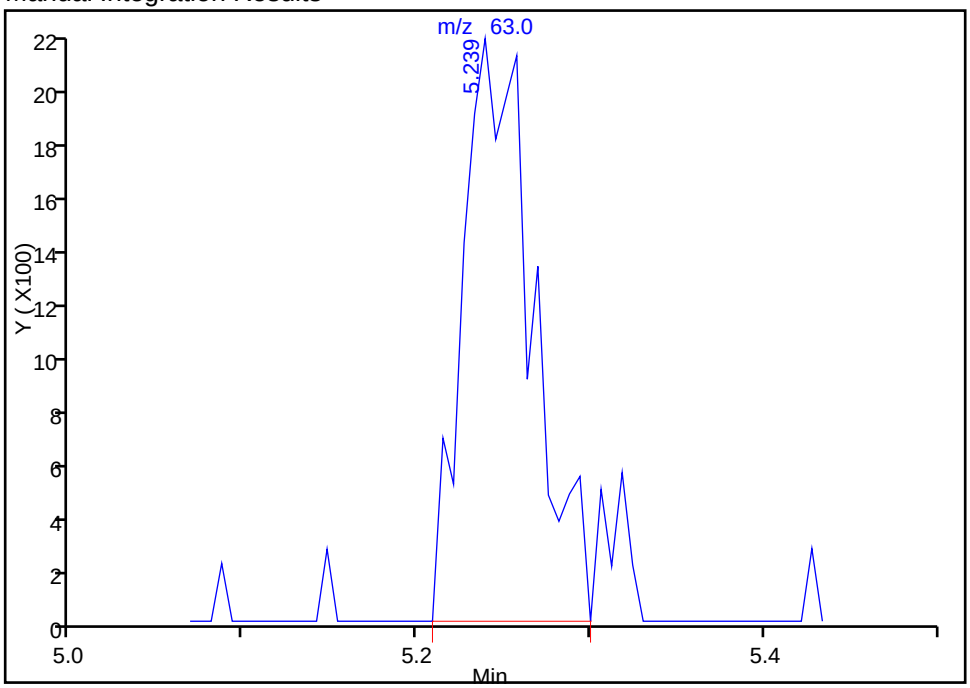
Not Detected
Expected RT: 5.24

Processing Integration Results



Manual Integration Results

RT: 5.24
Area: 5906
Amount: 0.856538
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 10:53:13
Audit Action: Manually Integrated
Audit Reason: Peak Not Found

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 180-42353-10

Matrix: Water Lab File ID: 60330026.D

Analysis Method: 8260C Date Collected: 03/24/2015 10:05

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 20:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 136938 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	0.35	J	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	0.27	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	0.51	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	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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 180-42353-10

Matrix: Water Lab File ID: 60330026.D

Analysis Method: 8260C Date Collected: 03/24/2015 10:05

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 20:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 136938 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)	129		64-135
2037-26-5	Toluene-d8 (Surr)	105		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\CHHP6\20150330-6236.b\60330026.D
Lims ID: 180-42353-D-10 Lab Sample ID: 180-42353-10
Client ID: HD-COD-SW-16-0/1-0
Sample Type: Client
Inject. Date: 30-Mar-2015 20:14:30 ALS Bottle#: 26 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-D-10
Misc. Info.: 180-0006236-026
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 11:02:14 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 11:02:14

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.267	4.284	-0.017	88	246124	1000.0	
*	2 Fluorobenzene (IS)	96	7.333	7.332	0.001	97	525609	50.0	
*	3 Chlorobenzene-d5	119	10.442	10.440	0.002	93	105217	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.790	12.795	-0.005	97	167581	50.0	
$	5 Dibromofluoromethane (Surr	113	6.603	6.596	0.007	93	128374	54.0	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.974	6.973	0.001	71	220135	64.7	
$	7 Toluene-d8 (Surr)	98	8.982	8.980	0.002	94	436339	52.6	
$	8 4-Bromofluorobenzene (Surr	95	11.628	11.627	0.001	80	171515	48.6	
	12 Chloromethane	50		1.765				ND	
	13 Vinyl chloride	62		1.899				ND	
	15 Bromomethane	94		2.246				ND	
	16 Chloroethane	64		2.392				ND	
	22 1,1-Dichloroethene	96		3.371				ND	
	24 Acetone	43	3.458	3.451	0.007	66	8957	9.63	
	26 Carbon disulfide	76		3.682				ND	
	31 Methylene Chloride	84		4.168				ND	
	33 Acrylonitrile	53		4.539				ND	
	34 trans-1,2-Dichloroethene	96		4.606				ND	
	35 Methyl tert-butyl ether	73		4.606				ND	
	37 1,1-Dichloroethane	63		5.239				ND	
	43 cis-1,2-Dichloroethene	96	5.989	5.981	0.008	64	6677	1.77	
	44 2-Butanone (MEK)	43		5.987				ND	
	48 Chlorobromomethane	128		6.273				ND	
	50 Chloroform	83		6.413				ND	
	51 1,1,1-Trichloroethane	97		6.584				ND	
	53 Carbon tetrachloride	117		6.760				ND	
	56 Benzene	78		6.985				ND	
	57 1,2-Dichloroethane	62		7.058				ND	
	61 Trichloroethene	130	7.729	7.721	0.008	76	4055	1.36	
	64 1,2-Dichloropropane	63		7.989				ND	
	65 1,4-Dioxane	88		8.074				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.275				ND	
71 cis-1,3-Dichloropropene	75		8.719				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.859				ND	
73 Toluene	91	9.043	9.047	-0.004	46	4411	0.4101	
74 trans-1,3-Dichloropropene	75		9.297				ND	
76 1,1,2-Trichloroethane	97		9.485				ND	
77 Tetrachloroethene	164	9.572	9.571	0.001	92	4851	2.53	
79 2-Hexanone	43		9.692				ND	
81 Chlorodibromomethane	129		9.863				ND	
82 Ethylene Dibromide	107		9.984				ND	
84 Chlorobenzene	112		10.471				ND	
86 1,1,1,2-Tetrachloroethane	131		10.562				ND	
87 Ethylbenzene	106		10.568				ND	
88 m-Xylene & p-Xylene	106		10.696				ND	
89 o-Xylene	106		11.079				ND	
90 Styrene	104		11.104				ND	
91 Bromoform	173		11.292				ND	
96 1,1,2,2-Tetrachloroethane	83		11.754				ND	
S 131 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

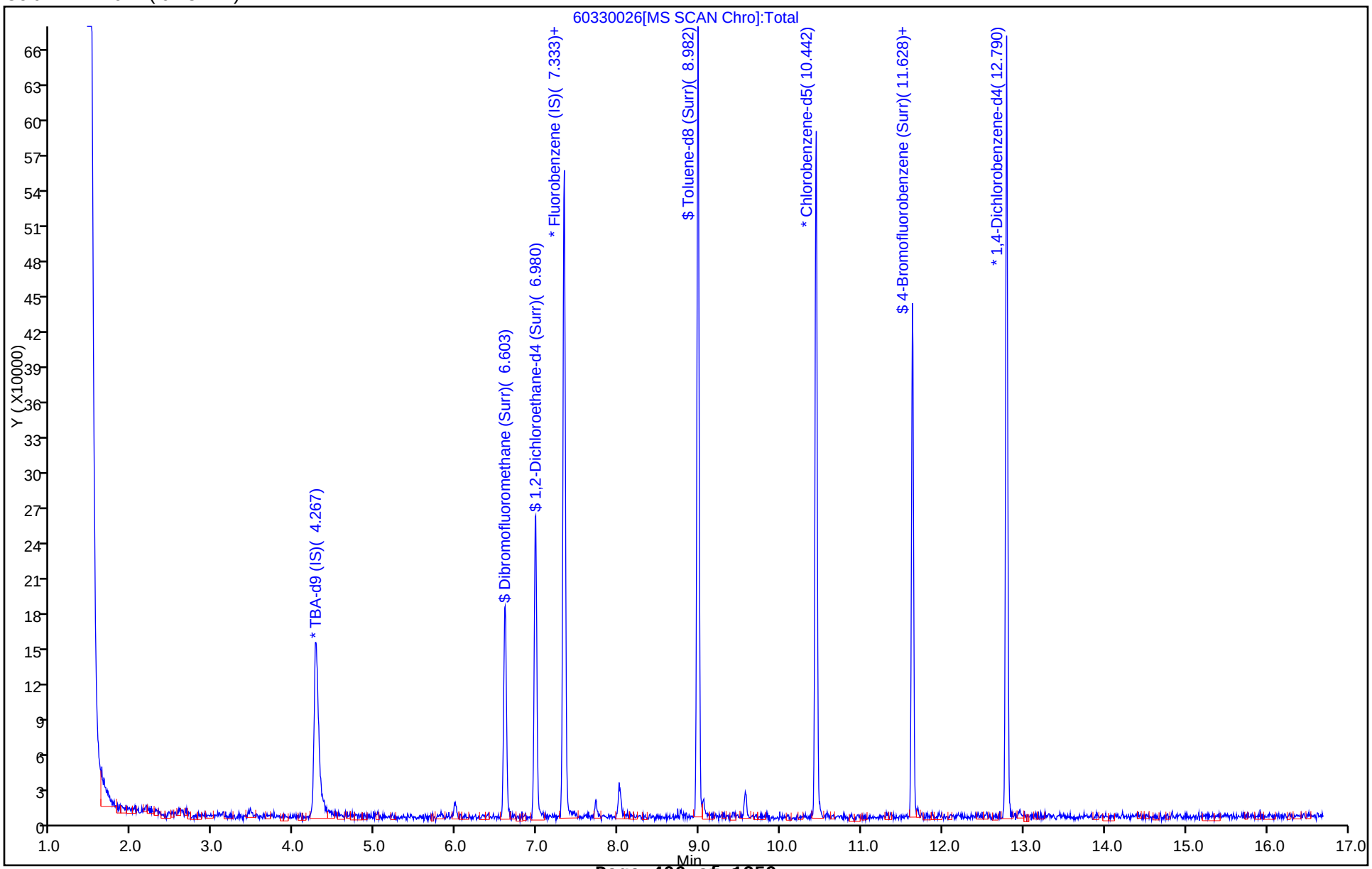
Report Date: 31-Mar-2015 11:02:14 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330026.D

Injection Date:	30-Mar-2015 20:14:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-42353-D-10	Lab Sample ID:	180-42353-10	Worklist Smp#:	26
Client ID:	HD-COD-SW-16-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

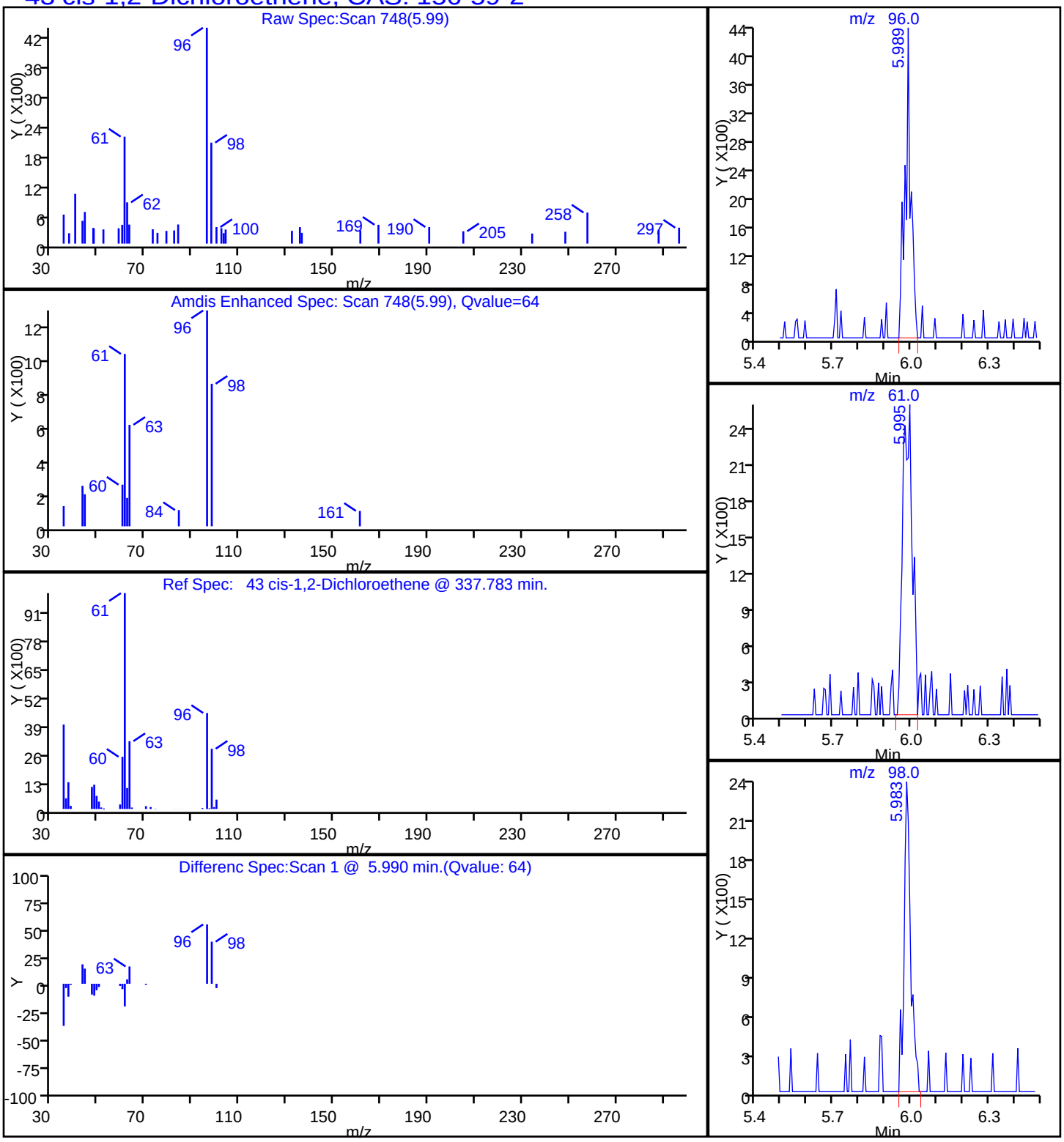


Report Date: 31-Mar-2015 11:02:14 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330026.D				
Injection Date:	30-Mar-2015 20:14:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-D-10	Lab Sample ID:	180-42353-10		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	001562	ALS Bottle#:	26	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

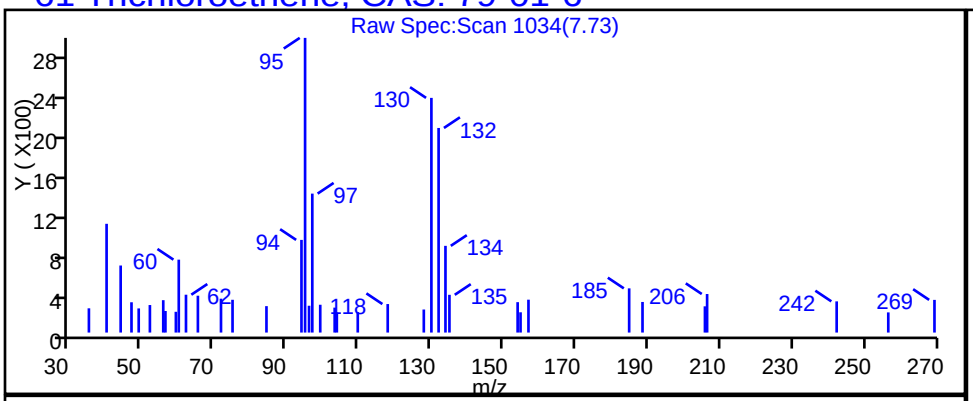


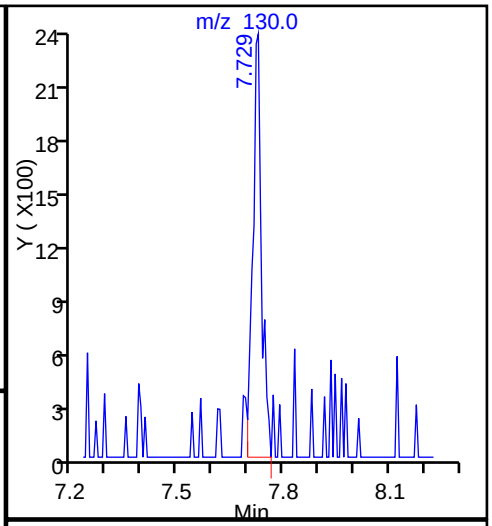
Report Date: 31-Mar-2015 11:02:14 Chrom Revision: 2.2 13-Mar-2015 11:20:44

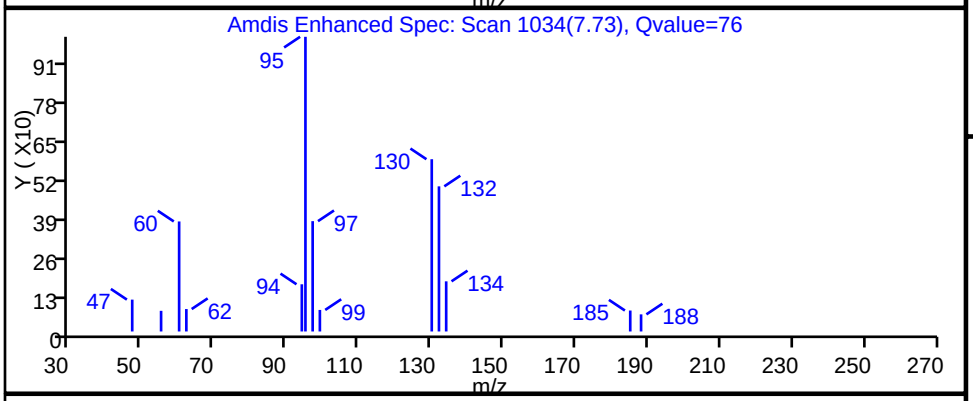
TestAmerica Pittsburgh

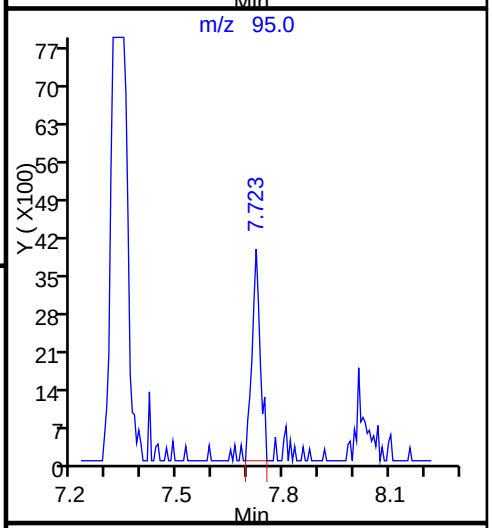
Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330026.D		
Injection Date:	30-Mar-2015 20:14:30	Instrument ID:	CHHP6
Lims ID:	180-42353-D-10	Lab Sample ID:	180-42353-10
Client ID:	HD-COD-SW-16-0/1-0		
Operator ID:	001562	ALS Bottle#:	26 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

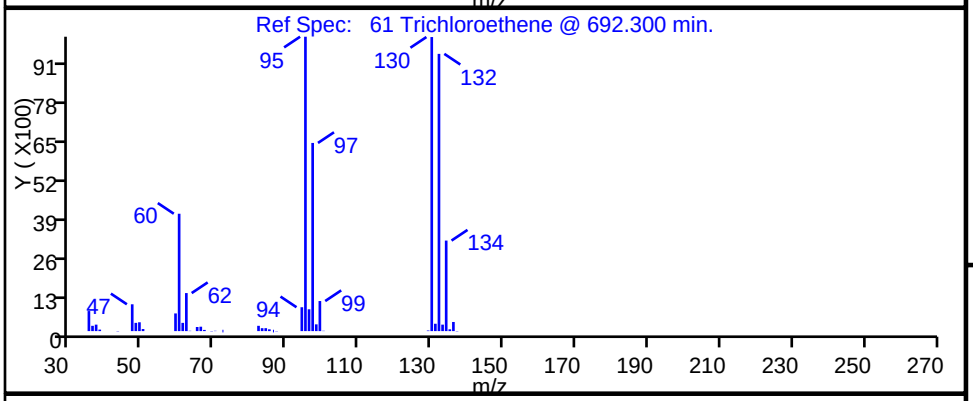
61 Trichloroethene, CAS: 79-01-6

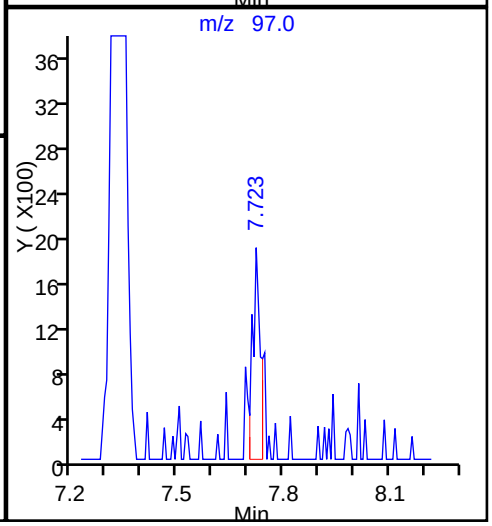


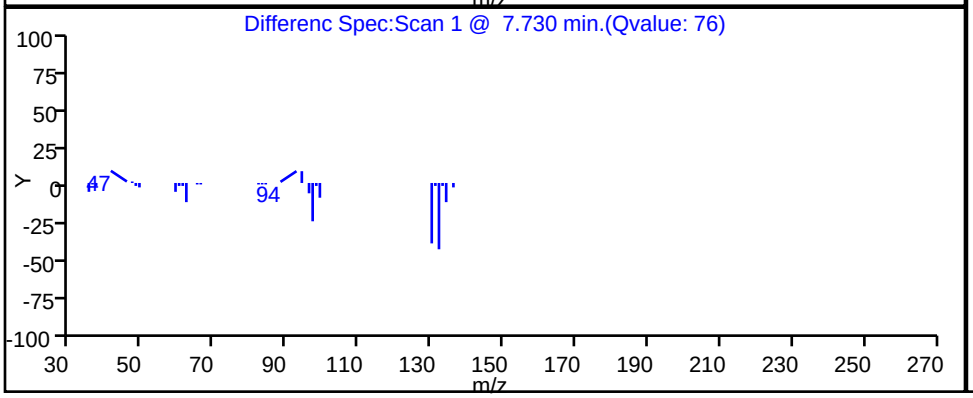










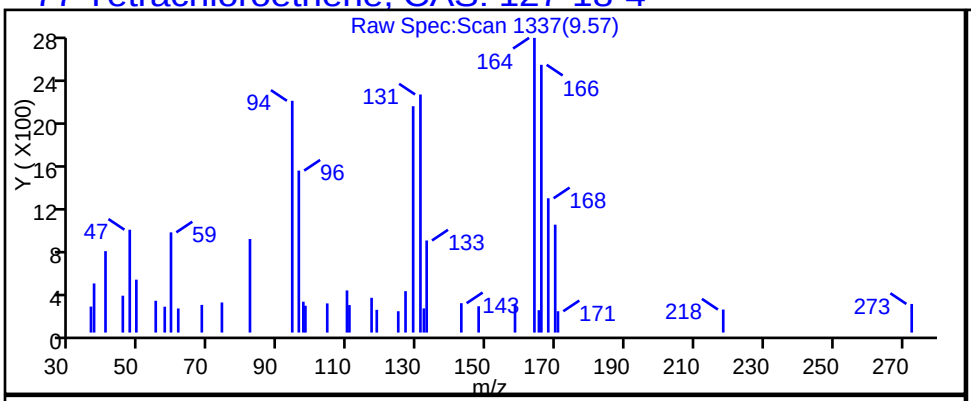


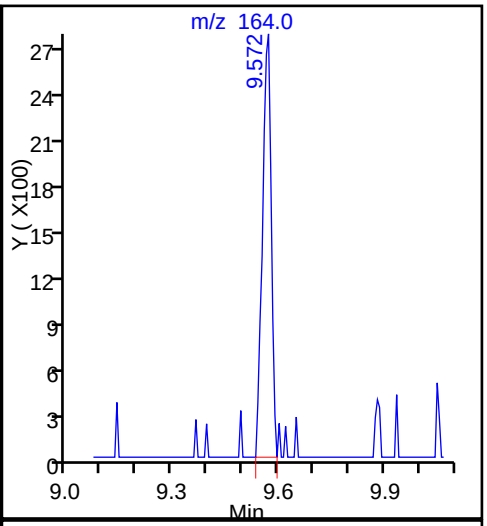
Report Date: 31-Mar-2015 11:02:14 Chrom Revision: 2.2 13-Mar-2015 11:20:44

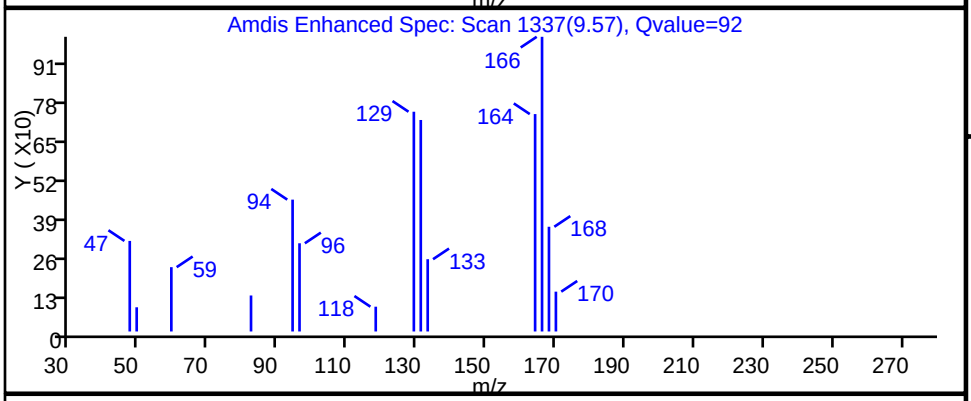
TestAmerica Pittsburgh

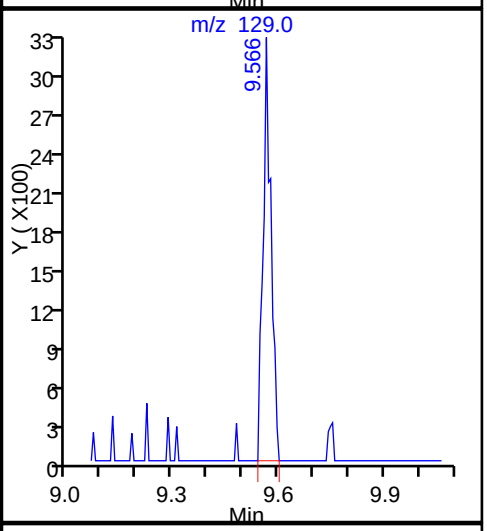
Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330026.D		
Injection Date:	30-Mar-2015 20:14:30	Instrument ID:	CHHP6
Lims ID:	180-42353-D-10	Lab Sample ID:	180-42353-10
Client ID:	HD-COD-SW-16-0/1-0		
Operator ID:	001562	ALS Bottle#:	26 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

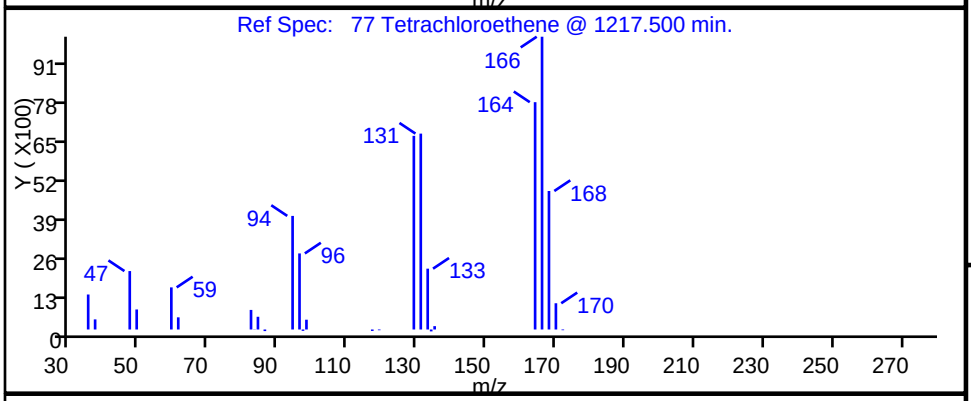
77 Tetrachloroethene, CAS: 127-18-4

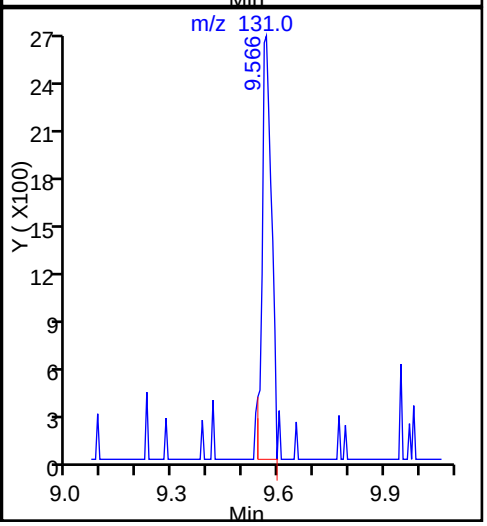


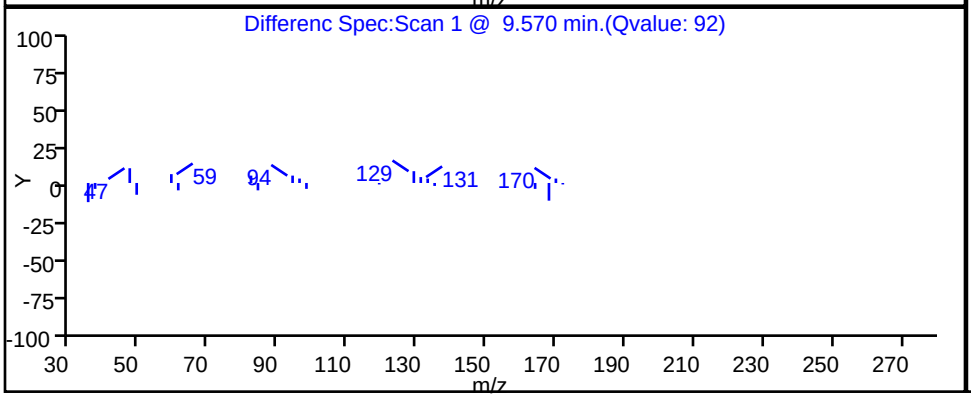












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 180-42353-11

Matrix: Water Lab File ID: 50331015.D

Analysis Method: 8260C Date Collected: 03/24/2015 10:15

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2015 15:17

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.: 137048 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	1.1		1.0	0.30
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.21
75-09-2	Methylene Chloride	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.17
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.18
75-34-3	1,1-Dichloroethane	0.65	J	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	17		1.0	0.24
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	0.17	J	1.0	0.17
71-55-6	1,1,1-Trichloroethane	5.7		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	23		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*	*71*	*E*	*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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 180-42353-11

Matrix: Water Lab File ID: 50331015.D

Analysis Method: 8260C Date Collected: 03/24/2015 10:15

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2015 15:17

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.: 137048 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		64-135
2037-26-5	Toluene-d8 (Surr)	106		71-118
460-00-4	4-Bromofluorobenzene (Surr)	98		70-118
1868-53-7	Dibromofluoromethane (Surr)	109		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331015.D
Lims ID: 180-42353-C-11 Lab Sample ID: 180-42353-11
Client ID: HD-COD-SW-17-0/1-0
Sample Type: Client
Inject. Date: 31-Mar-2015 15:17:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-C-11
Misc. Info.: 180-0006255-015
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 16:24:21 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 16:24:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.311	4.297	0.014	98	101382	1000.0	
* 2 Fluorobenzene (IS)	96	7.280	7.271	0.009	100	408590	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.362	0.002	98	89028	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.688	12.686	0.002	94	122882	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.532	6.531	0.001	79	101588	54.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.903	6.896	0.007	98	139584	57.0	
$ 7 Toluene-d8 (Surr)	98	8.922	8.921	0.001	100	374443	52.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.526	11.531	-0.005	97	125039	48.9	
12 Chloromethane	50		1.779				ND	
13 Vinyl chloride	62		1.913				ND	
15 Bromomethane	94		2.260				ND	
16 Chloroethane	64		2.400				ND	
22 1,1-Dichloroethene	96	3.399	3.385	0.014	88	13078	5.55	
24 Acetone	43		3.501				ND	
26 Carbon disulfide	76		3.671				ND	
31 Methylene Chloride	84		4.140				ND	
33 Acrylonitrile	53		4.547				ND	
34 trans-1,2-Dichloroethene	96		4.560				ND	
35 Methyl tert-butyl ether	73		4.596				ND	
37 1,1-Dichloroethane	63	5.181	5.168	0.013	96	14071	3.23	
45 cis-1,2-Dichloroethene	96	5.948	5.941	0.008	83	223514	87.1	
46 2-Butanone (MEK)	43		5.989				ND	
49 Chlorobromomethane	128		6.226				ND	
52 Chloroform	83	6.343	6.342	0.001	53	3374	0.8538	
53 1,1,1-Trichloroethane	97	6.538	6.531	0.007	79	72417	28.7	
56 Carbon tetrachloride	117		6.719				ND	
58 Benzene	78		6.956				ND	
59 1,2-Dichloroethane	62		6.987				ND	
64 Trichloroethene	130	7.669	7.668	0.001	99	278094	114.6	
67 1,2-Dichloropropane	63		7.905				ND	
70 1,4-Dioxane	88		8.058				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.197				ND	
74 cis-1,3-Dichloropropene	75		8.654				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.824				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.219				ND	
79 1,1,2-Trichloroethane	97		9.402				ND	
80 Tetrachloroethene	164	9.537	9.536	0.001	96	633678	355.1	E
82 2-Hexanone	43		9.658				ND	
84 Chlorodibromomethane	129		9.785				ND	
85 Ethylene Dibromide	107		9.901				ND	
87 Chlorobenzene	112		10.388				ND	
89 1,1,1,2-Tetrachloroethane	131		10.467				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.619				ND	
92 o-Xylene	106		11.014				ND	
93 Styrene	104		11.026				ND	
94 Bromoform	173		11.209				ND	
99 1,1,2,2-Tetrachloroethane	83		11.671				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

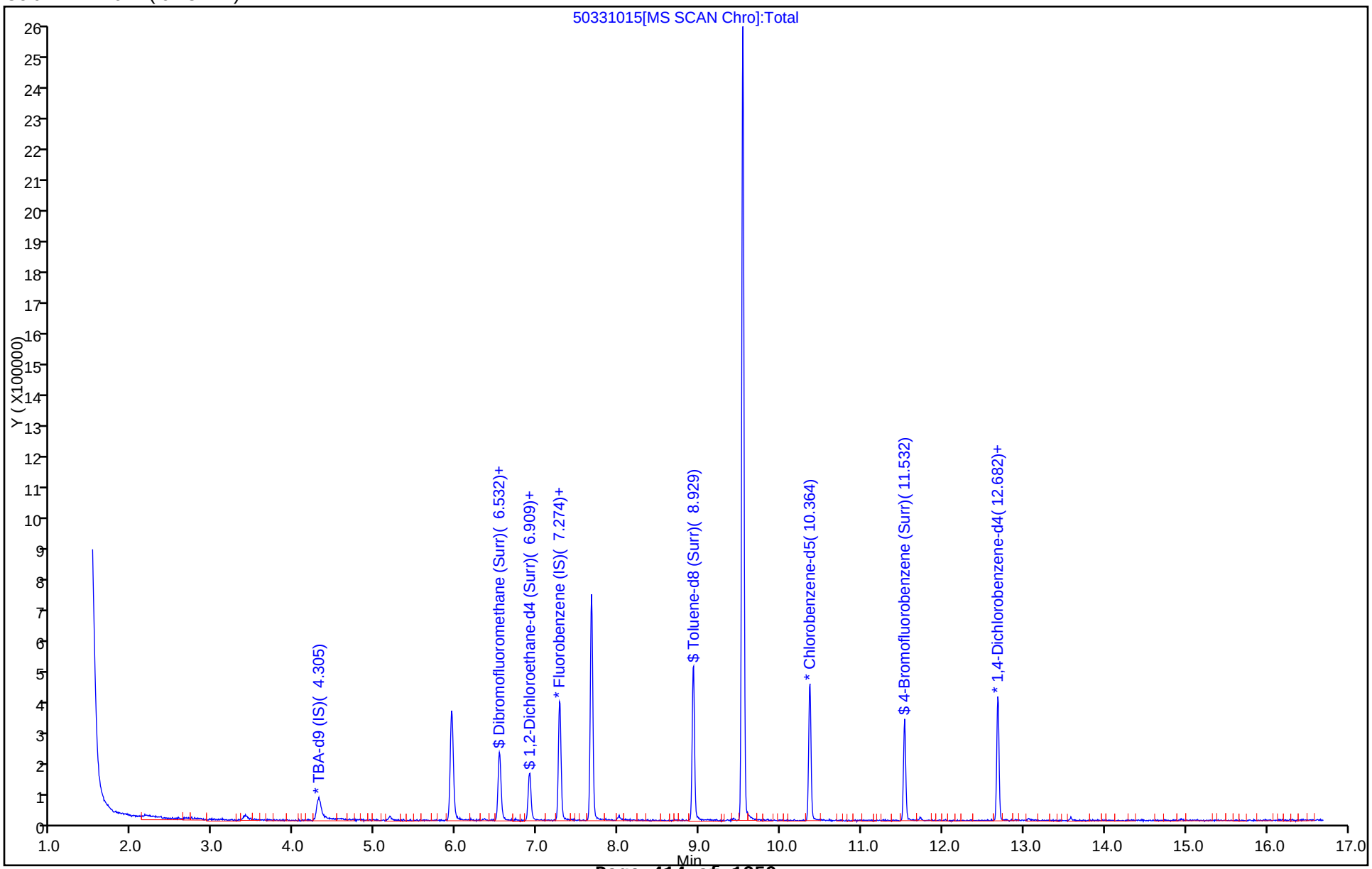
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 31-Mar-2015 16:24:22 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331015.D				
Injection Date:	31-Mar-2015 15:17:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-42353-C-11	Lab Sample ID:	180-42353-11	Worklist Smp#:	15
Client ID:	HD-COD-SW-17-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

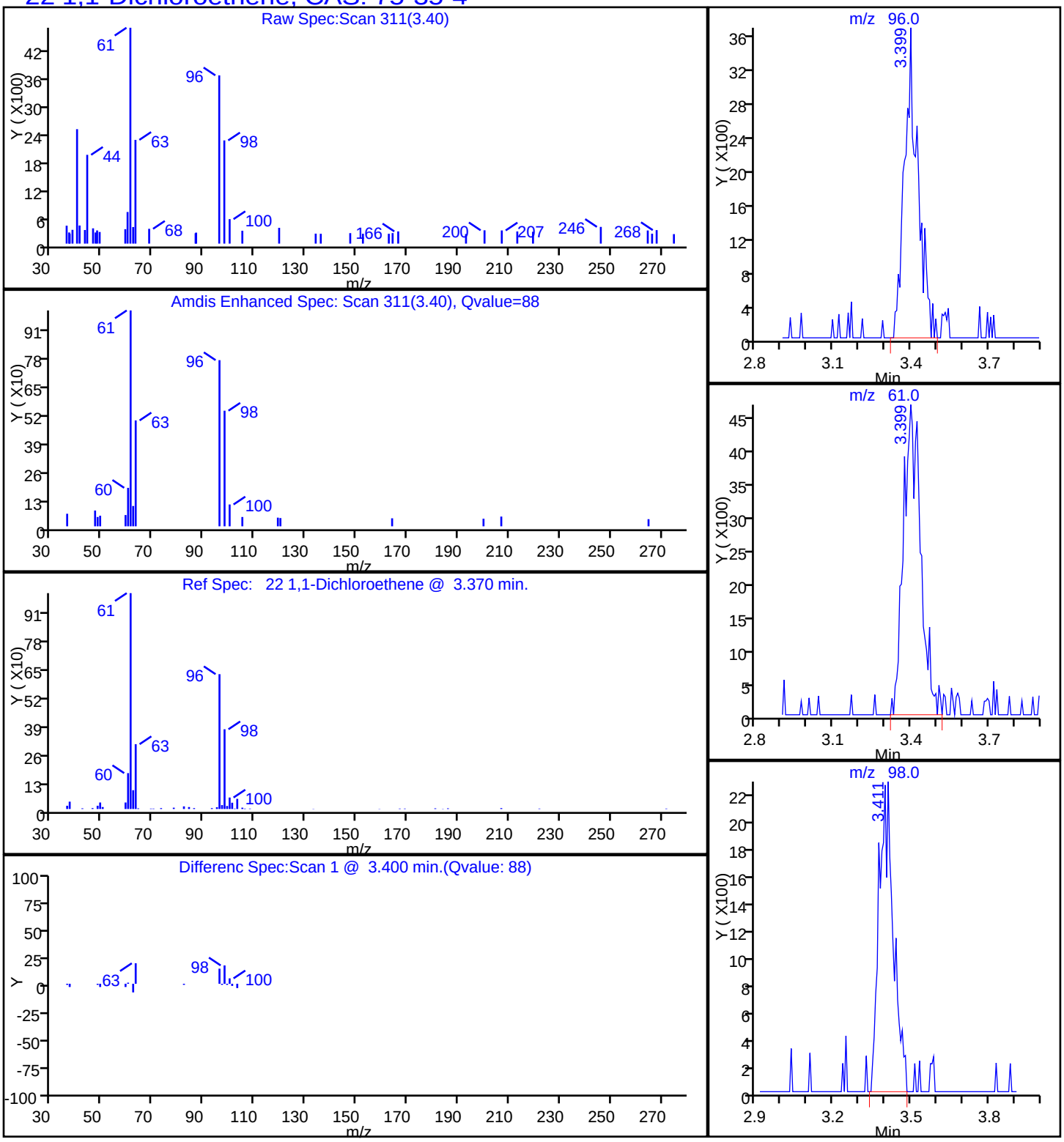


Report Date: 31-Mar-2015 16:24:22 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331015.D				
Injection Date:	31-Mar-2015 15:17:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-11	Lab Sample ID:	180-42353-11		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	001562	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

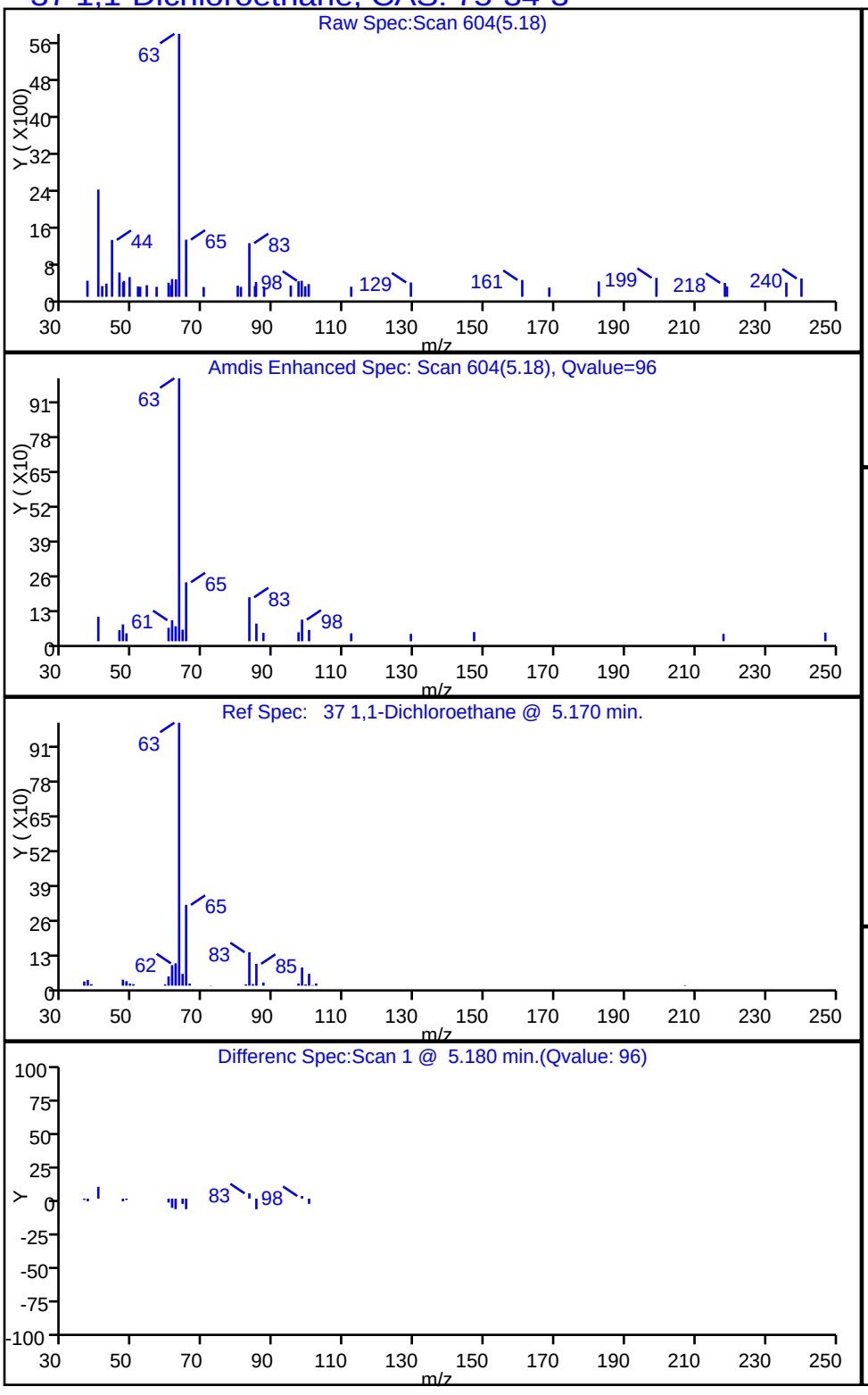


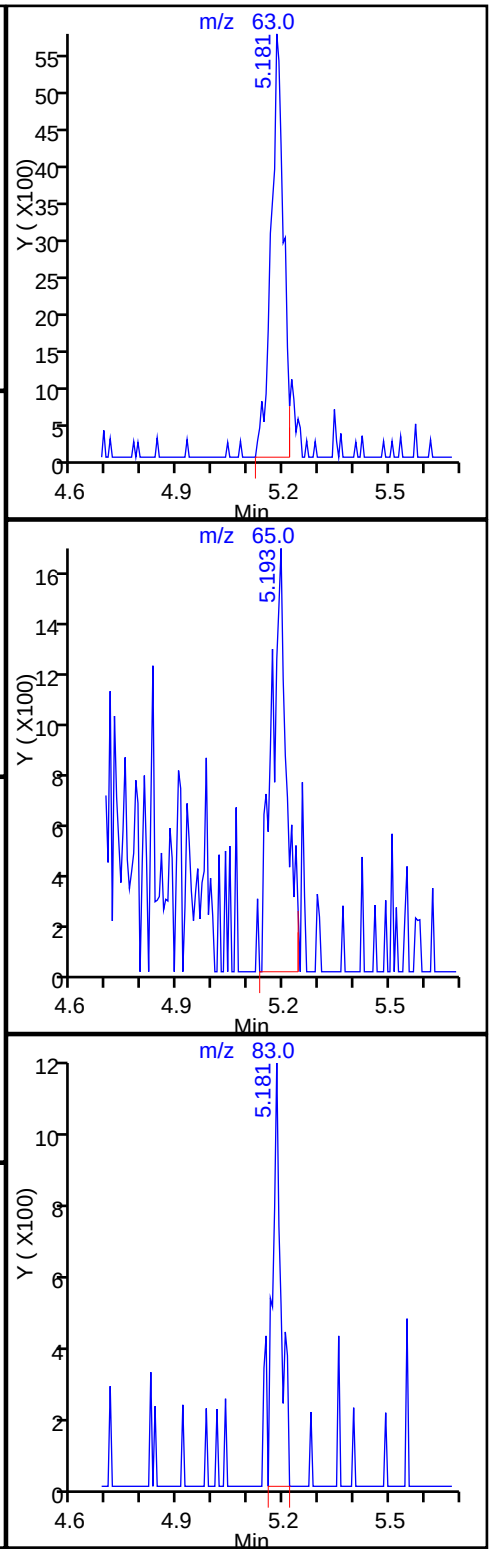
Report Date: 31-Mar-2015 16:24:22 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331015.D				
Injection Date:	31-Mar-2015 15:17:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-11	Lab Sample ID:	180-42353-11		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	001562	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



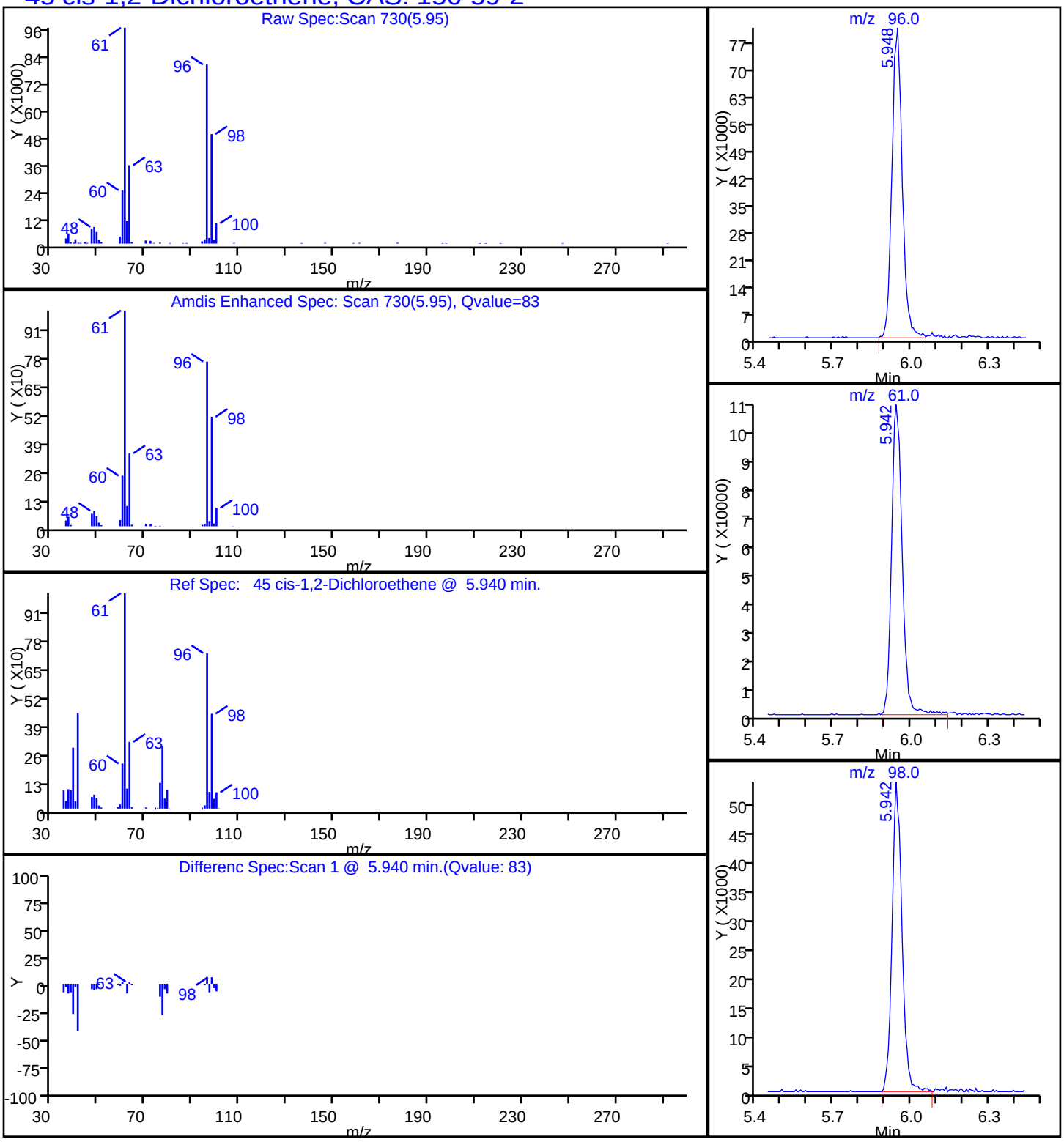


Report Date: 31-Mar-2015 16:24:22 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331015.D				
Injection Date:	31-Mar-2015 15:17:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-11	Lab Sample ID:	180-42353-11		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	001562	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

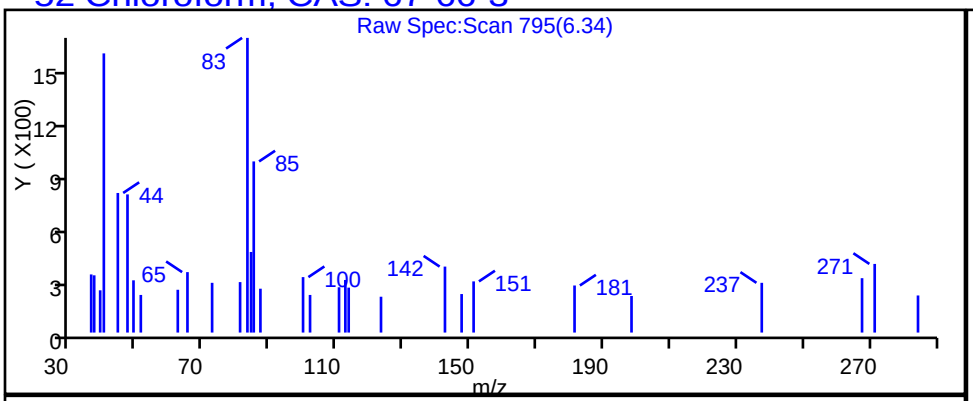


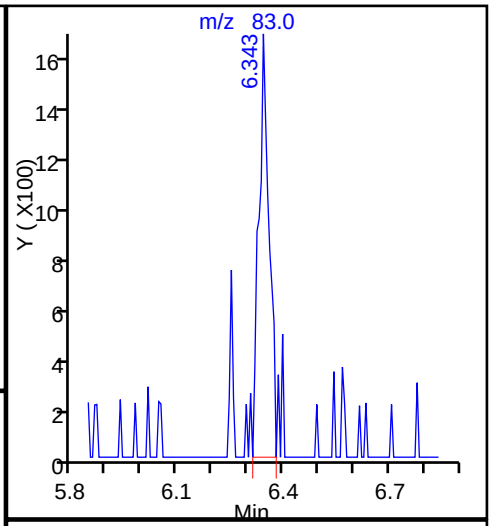
Report Date: 31-Mar-2015 16:24:22 Chrom Revision: 2.2 13-Mar-2015 11:20:44

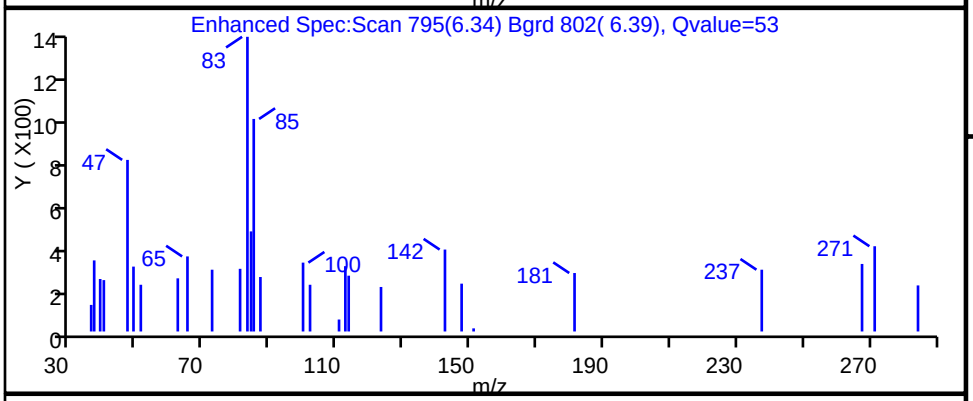
TestAmerica Pittsburgh

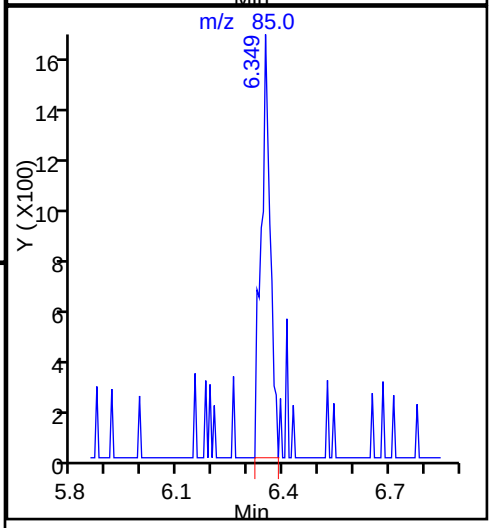
Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331015.D				
Injection Date:	31-Mar-2015 15:17:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-11	Lab Sample ID:	180-42353-11		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	001562	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

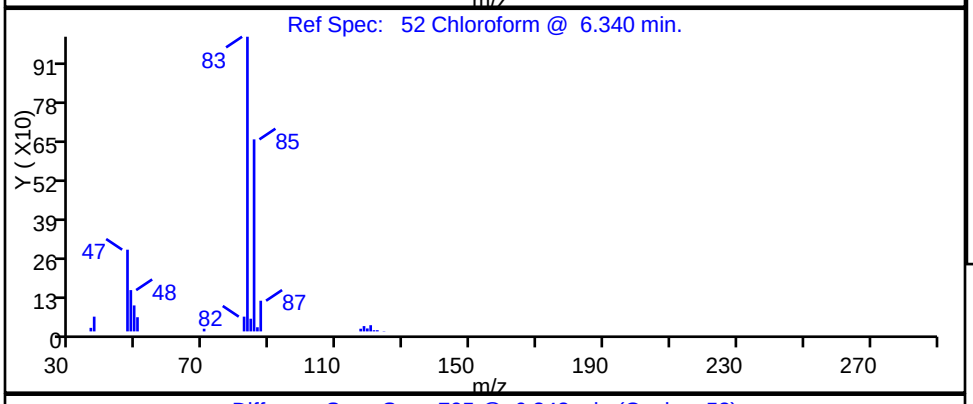
52 Chloroform, CAS: 67-66-3

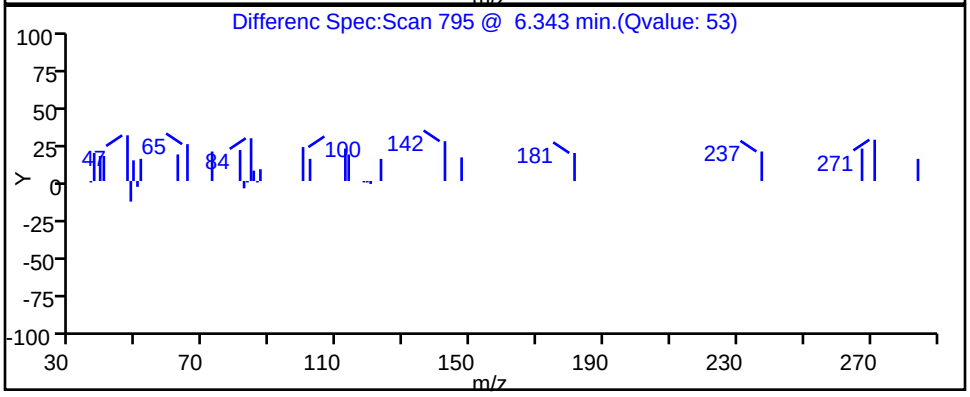










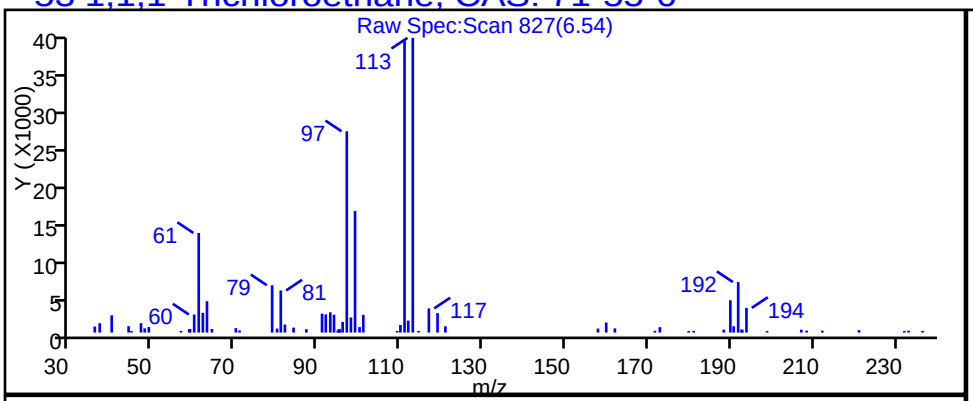


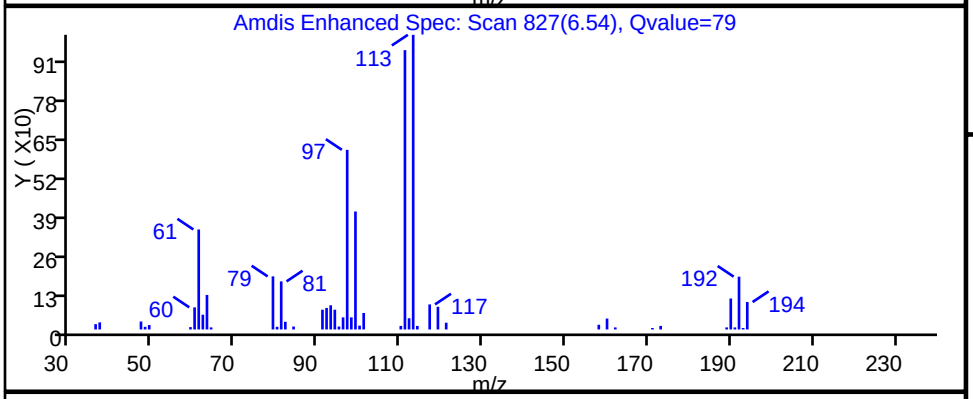
Report Date: 31-Mar-2015 16:24:22 Chrom Revision: 2.2 13-Mar-2015 11:20:44

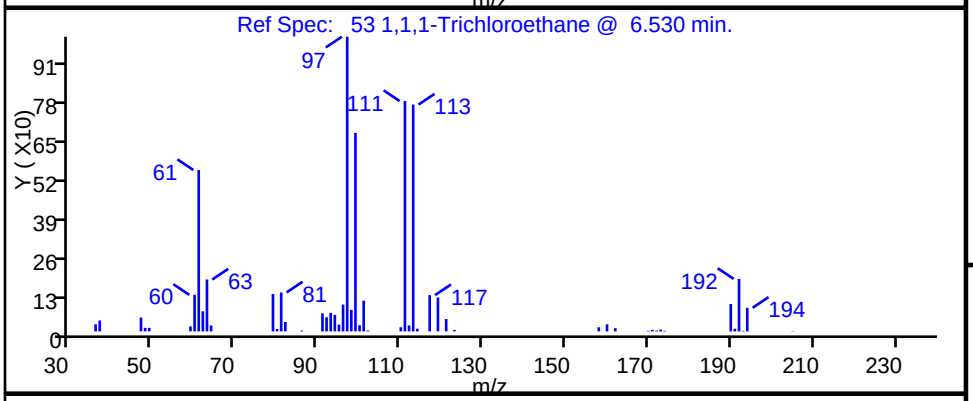
TestAmerica Pittsburgh

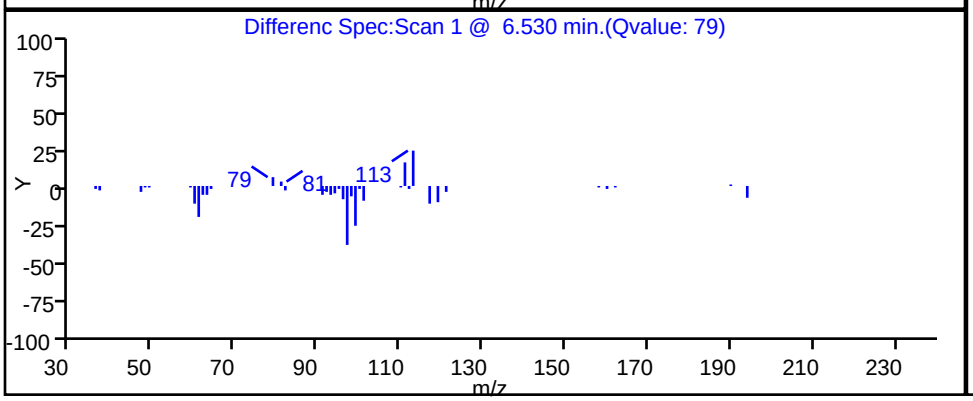
Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331015.D				
Injection Date:	31-Mar-2015 15:17:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-11	Lab Sample ID:	180-42353-11		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	001562	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

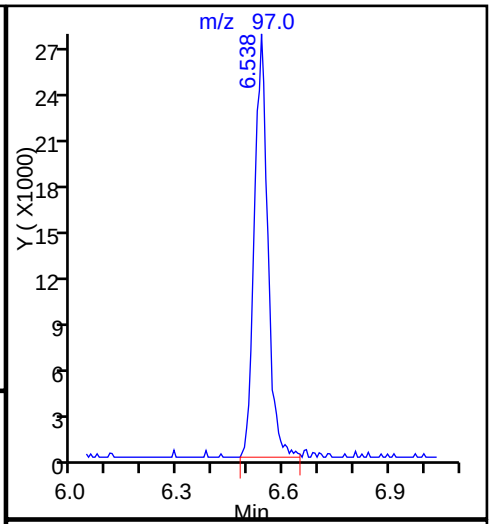
53 1,1,1-Trichloroethane, CAS: 71-55-6

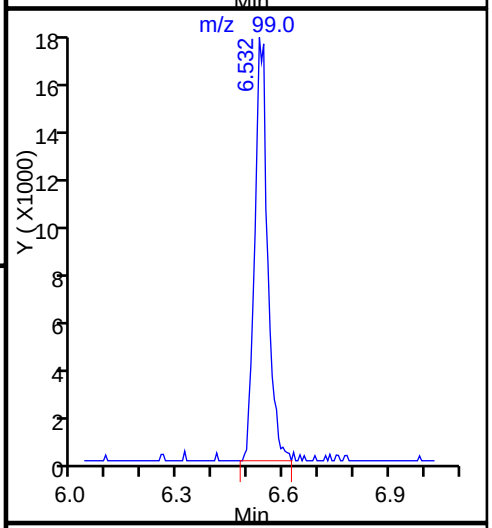


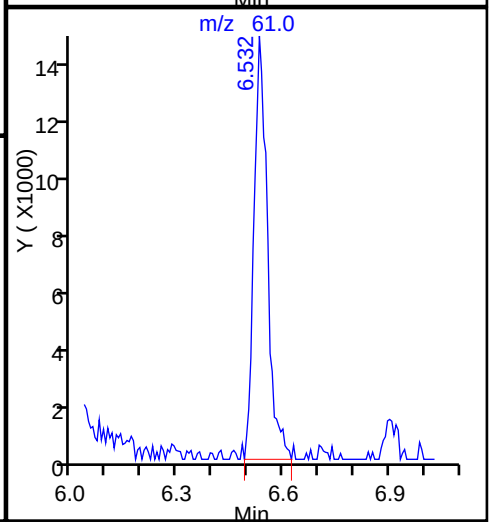










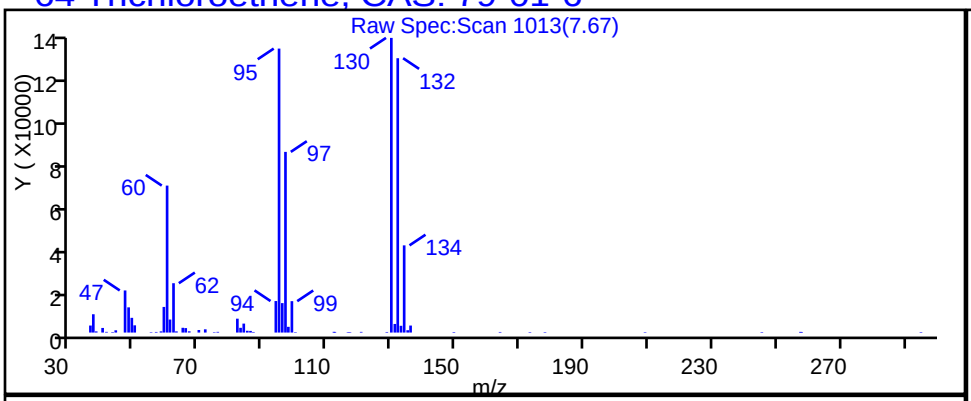


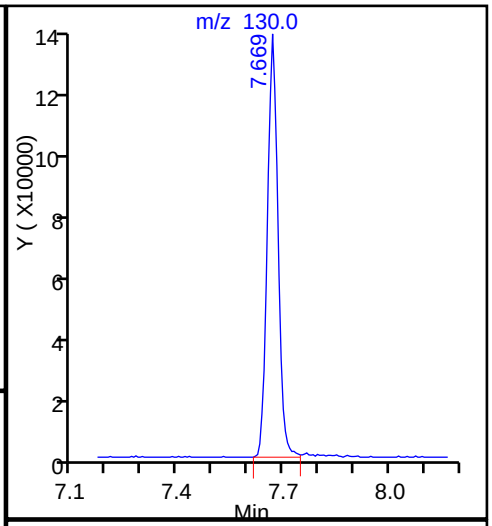
Report Date: 31-Mar-2015 16:24:22 Chrom Revision: 2.2 13-Mar-2015 11:20:44

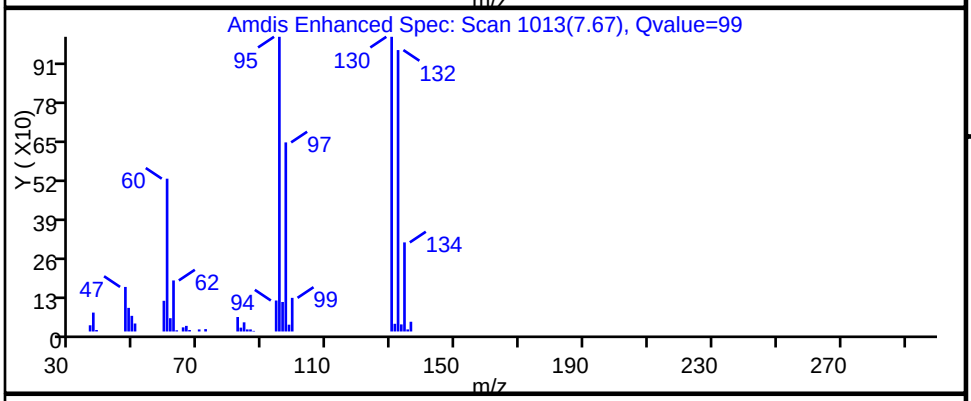
TestAmerica Pittsburgh

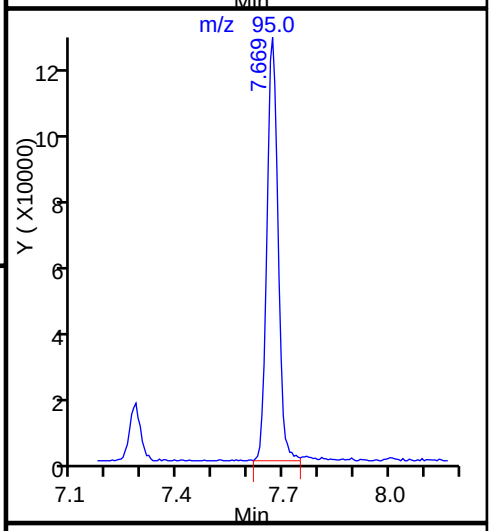
Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331015.D				
Injection Date:	31-Mar-2015 15:17:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-11	Lab Sample ID:	180-42353-11		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	001562	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

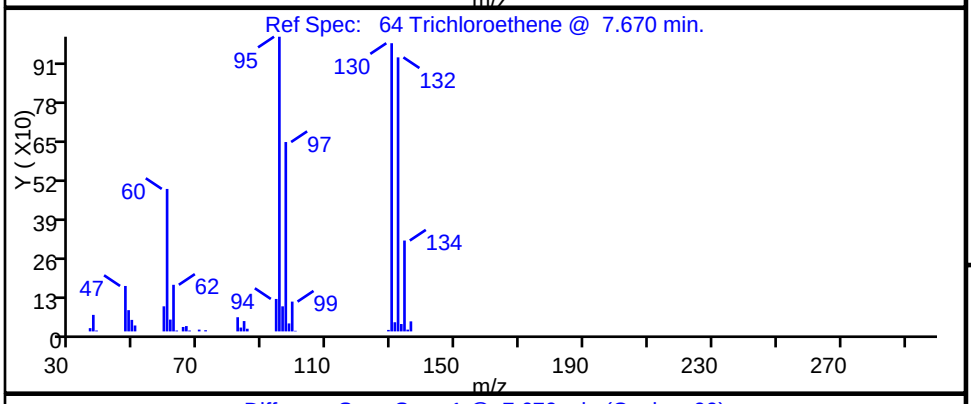
64 Trichloroethene, CAS: 79-01-6

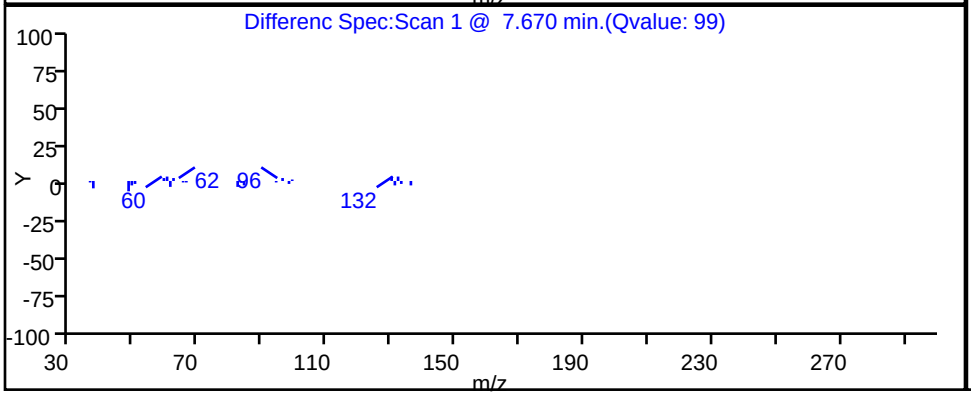


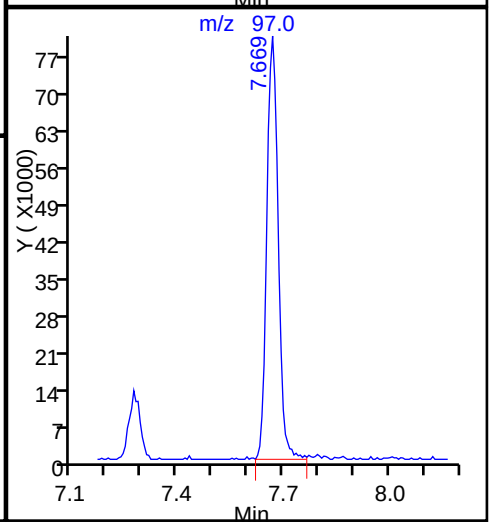












Report Date: 31-Mar-2015 16:24:23 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331015.D				
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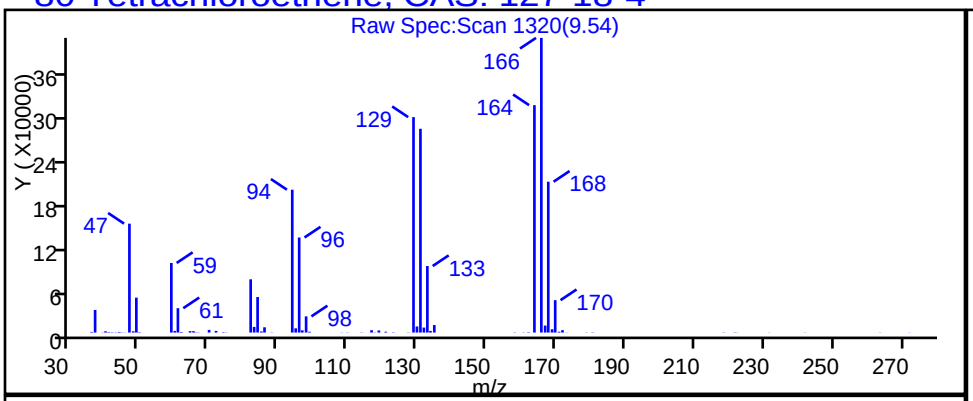
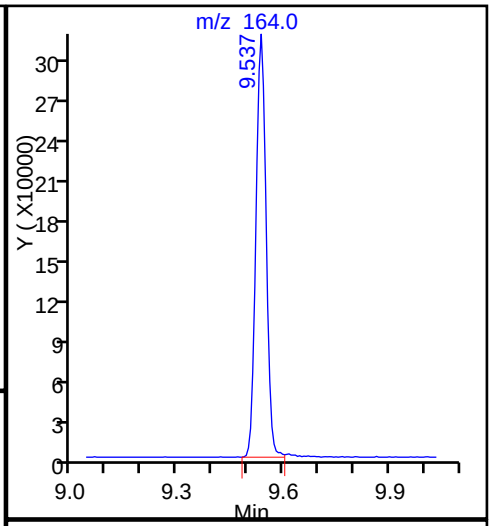
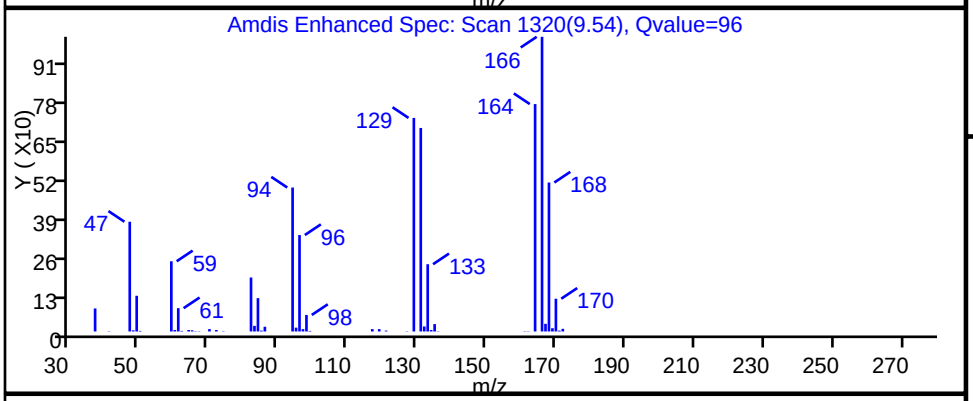
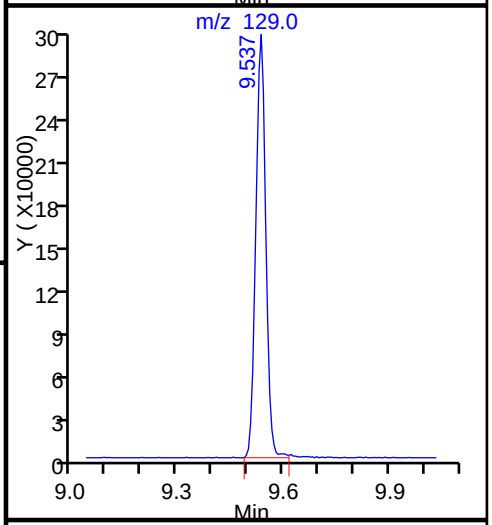
Lims ID:	180-42353-C-11	Lab Sample ID:	180-42353-11		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	001562	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

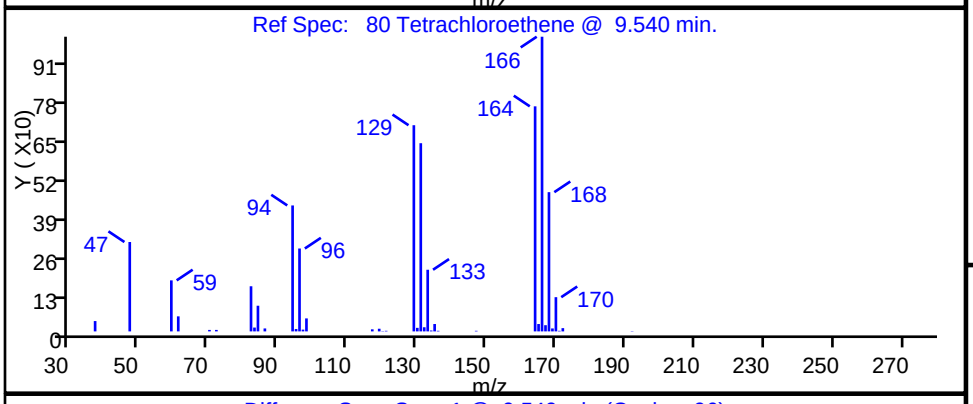
80 Tetrachloroethene, CAS: 127-18-4

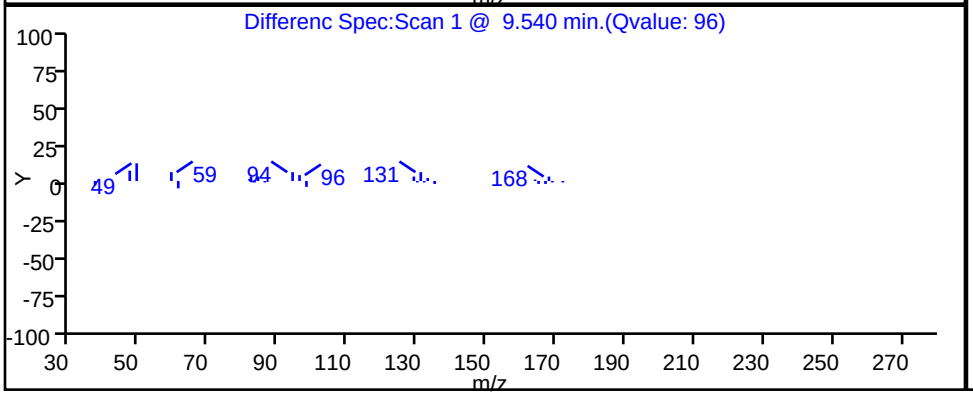


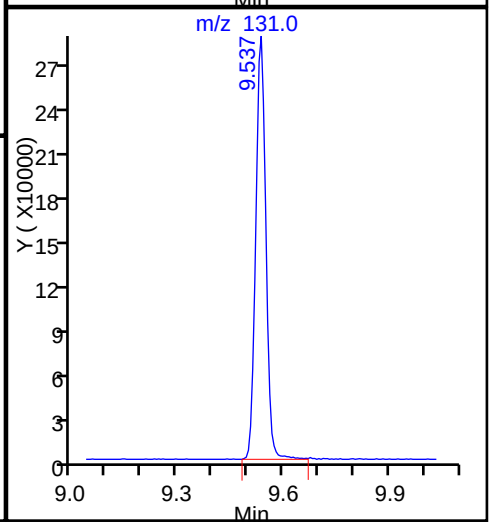












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 DL | Lab Sample ID: 180-42353-11 DL

Matrix: Water | Lab File ID: 50401014.D

Analysis Method: 8260C | Date Collected: 03/24/2015 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 04/01/2015 16:11

Soil Aliquot Vol: | Dilution Factor: 3

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 137218 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	3.0	U	3.0	0.85
75-01-4	Vinyl chloride	3.0	U	3.0	0.68
74-83-9	Bromomethane	3.0	U *	3.0	0.94
75-00-3	Chloroethane	3.0	U	3.0	0.64
75-35-4	1,1-Dichloroethene	0.96	J	3.0	0.89
67-64-1	Acetone	15	U	15	7.5
75-15-0	Carbon disulfide	3.0	U	3.0	0.64
75-09-2	Methylene Chloride	1.5	J	3.0	0.38
156-60-5	trans-1,2-Dichloroethene	3.0	U	3.0	0.51
1634-04-4	Methyl tert-butyl ether	3.0	U	3.0	0.55
75-34-3	1,1-Dichloroethane	0.63	J	3.0	0.35
156-59-2	cis-1,2-Dichloroethene	16		3.0	0.71
74-97-5	Bromochloromethane	3.0	U	3.0	0.54
78-93-3	2-Butanone (MEK)	15	U	15	1.6
67-66-3	Chloroform	3.0	U	3.0	0.51
71-55-6	1,1,1-Trichloroethane	4.8		3.0	0.86
56-23-5	Carbon tetrachloride	3.0	U	3.0	0.41
71-43-2	Benzene	3.0	U	3.0	0.32
107-06-2	1,2-Dichloroethane	3.0	U	3.0	0.64
79-01-6	Trichloroethene	20		3.0	0.43
78-87-5	1,2-Dichloropropane	3.0	U	3.0	0.28
75-27-4	Bromodichloromethane	3.0	U	3.0	0.39
10061-01-5	cis-1,3-Dichloropropene	3.0	U	3.0	0.56
108-10-1	4-Methyl-2-pentanone (MIBK)	15	U	15	1.6
108-88-3	Toluene	3.0	U	3.0	0.45
10061-02-6	trans-1,3-Dichloropropene	3.0	U *	3.0	0.44
79-00-5	1,1,2-Trichloroethane	3.0	U	3.0	0.60
127-18-4	Tetrachloroethene	60		3.0	0.45
591-78-6	2-Hexanone	15	U	15	0.48
124-48-1	Dibromochloromethane	3.0	U	3.0	0.41
106-93-4	1,2-Dibromoethane (EDB)	3.0	U	3.0	0.54
108-90-7	Chlorobenzene	3.0	U	3.0	0.41
630-20-6	1,1,1,2-Tetrachloroethane	3.0	U	3.0	0.83
100-41-4	Ethylbenzene	3.0	U	3.0	0.68
1330-20-7	Xylenes, Total	9.0	U	9.0	1.5
100-42-5	Styrene	3.0	U	3.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 DL Lab Sample ID: 180-42353-11 DL

Matrix: Water Lab File ID: 50401014.D

Analysis Method: 8260C Date Collected: 03/24/2015 10:15

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2015 16:11

Soil Aliquot Vol: Dilution Factor: 3

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 137218 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	*Bromoform*	*3.0*	*U*	*3.0*	*0.57*
79-34-5	*1,1,2,2-Tetrachloroethane*	*3.0*	*U*	*3.0*	*0.60*
107-13-1	*Acrylonitrile*	*60*	*U*	*60*	*1.6*
123-91-1	*1,4-Dioxane*	*600*	*U*	*600*	*100*

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	118		64-135
2037-26-5	Toluene-d8 (Surr)	103		71-118
460-00-4	4-Bromofluorobenzene (Surr)	99		70-118
1868-53-7	Dibromofluoromethane (Surr)	109		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401014.D
Lims ID: 180-42353-E-11 Lab Sample ID: 180-42353-11
Client ID: HD-COD-SW-17-0/1-0
Sample Type: Client
Inject. Date: 01-Apr-2015 16:11:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 3.0000
Sample Info: 180-42353-E-11, 3x
Misc. Info.: 180-0006280-014
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Apr-2015 07:59:23 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: fergusond Date: 02-Apr-2015 07:59:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.306	4.303	0.003	97	120092	1000.0	
* 2 Fluorobenzene (IS)	96	7.274	7.278	-0.004	100	421635	50.0	
* 3 Chlorobenzene-d5	119	10.359	10.362	-0.003	99	95398	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.683	12.680	0.003	94	135376	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.538	6.524	0.014	62	104798	54.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.903	6.895	0.008	97	148849	58.9	
$ 7 Toluene-d8 (Surr)	98	8.929	8.921	0.008	100	392287	51.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.533	11.531	0.002	97	135372	49.4	
12 Chloromethane	50		1.779				ND	
13 Vinyl chloride	62		1.907				ND	
15 Bromomethane	94		2.259				ND	
16 Chloroethane	64		2.393				ND	
22 1,1-Dichloroethene	96	3.387	3.385	0.002	47	3905	1.61	
24 Acetone	43	3.515	3.494	0.021	34	3356	3.89	
26 Carbon disulfide	76		3.671				ND	
31 Methylene Chloride	84	4.184	4.151	0.033	1	6806	2.42	M
33 Acrylonitrile	53		4.547				ND	
34 trans-1,2-Dichloroethene	96		4.565				ND	
35 Methyl tert-butyl ether	73		4.596				ND	
37 1,1-Dichloroethane	63	5.176	5.173	0.003	28	4700	1.05	
45 cis-1,2-Dichloroethene	96	5.948	5.934	0.014	84	70638	26.7	
46 2-Butanone (MEK)	43		5.989				ND	
49 Chlorobromomethane	128		6.226				ND	
52 Chloroform	83	6.350	6.341	0.009	18	1210	0.2967	
53 1,1,1-Trichloroethane	97	6.532	6.536	-0.004	62	20996	8.06	
56 Carbon tetrachloride	117		6.725				ND	
58 Benzene	78		6.956				ND	
59 1,2-Dichloroethane	62		6.986				ND	
64 Trichloroethene	130	7.670	7.668	0.002	98	83307	33.3	
67 1,2-Dichloropropane	63		7.899				ND	
70 1,4-Dioxane	88		8.057				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.191				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.824				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.219				ND	
79 1,1,2-Trichloroethane	97		9.401				ND	
80 Tetrachloroethene	164	9.537	9.535	0.002	95	191104	99.9	
82 2-Hexanone	43		9.651				ND	
84 Chlorodibromomethane	129		9.791				ND	
85 Ethylene Dibromide	107		9.900				ND	
87 Chlorobenzene	112		10.387				ND	
89 1,1,1,2-Tetrachloroethane	131		10.472				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.618				ND	
92 o-Xylene	106		11.014				ND	
93 Styrene	104		11.026				ND	
94 Bromoform	173		11.214				ND	
99 1,1,2,2-Tetrachloroethane	83		11.677				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

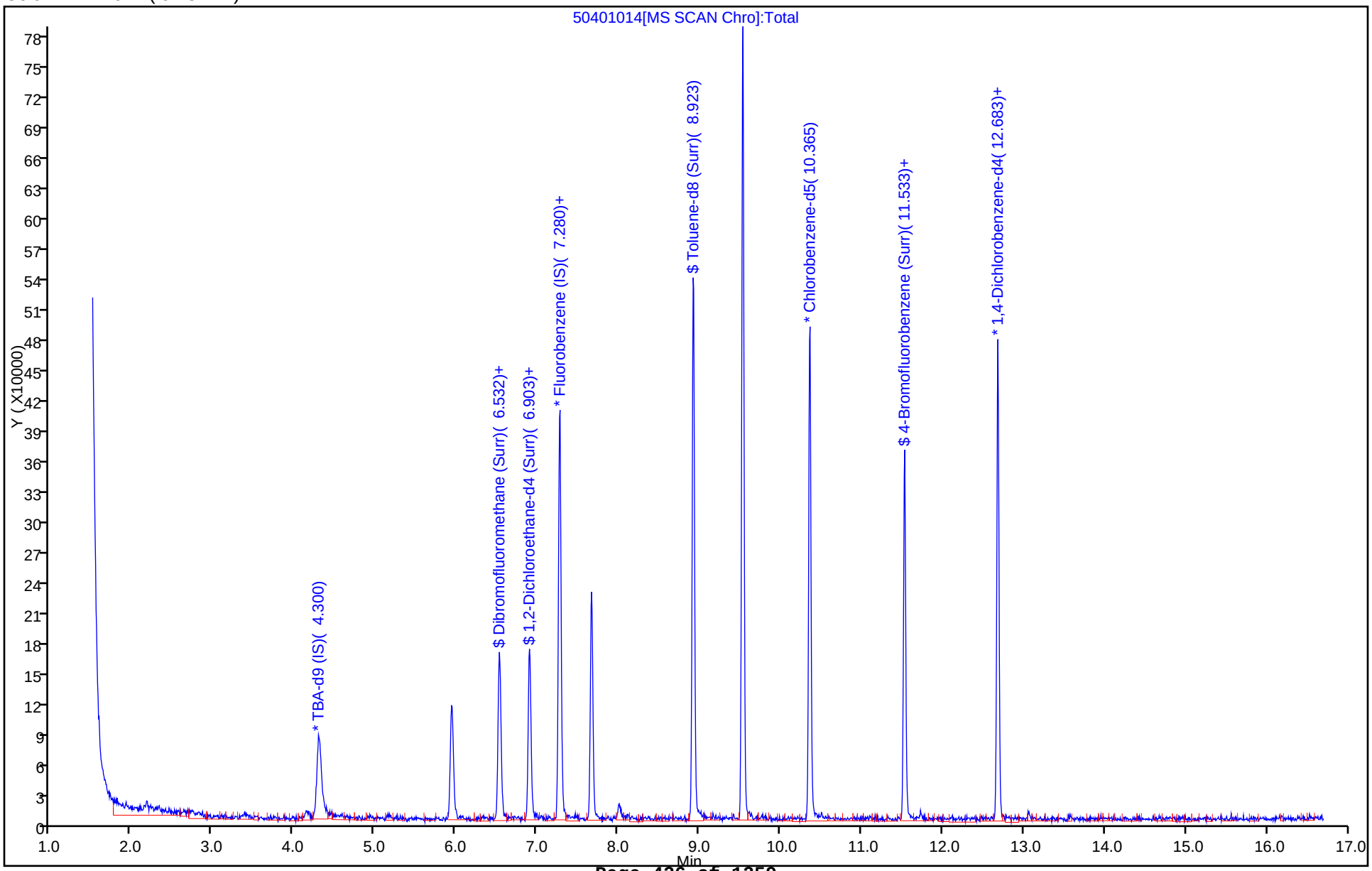
Report Date: 02-Apr-2015 07:59:23 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401014.D

Injection Date:	01-Apr-2015 16:11:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-42353-E-11	Lab Sample ID:	180-42353-11	Worklist Smp#:	14
Client ID:	HD-COD-SW-17-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	3.0000	ALS Bottle#:	13
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Report Date: 02-Apr-2015 07:59:24 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401014.D

Injection Date: 01-Apr-2015 16:11:30 Instrument ID: CHHP5

Lims ID: 180-42353-E-11 Lab Sample ID: 180-42353-11

Client ID: HD-COD-SW-17-0/1-0

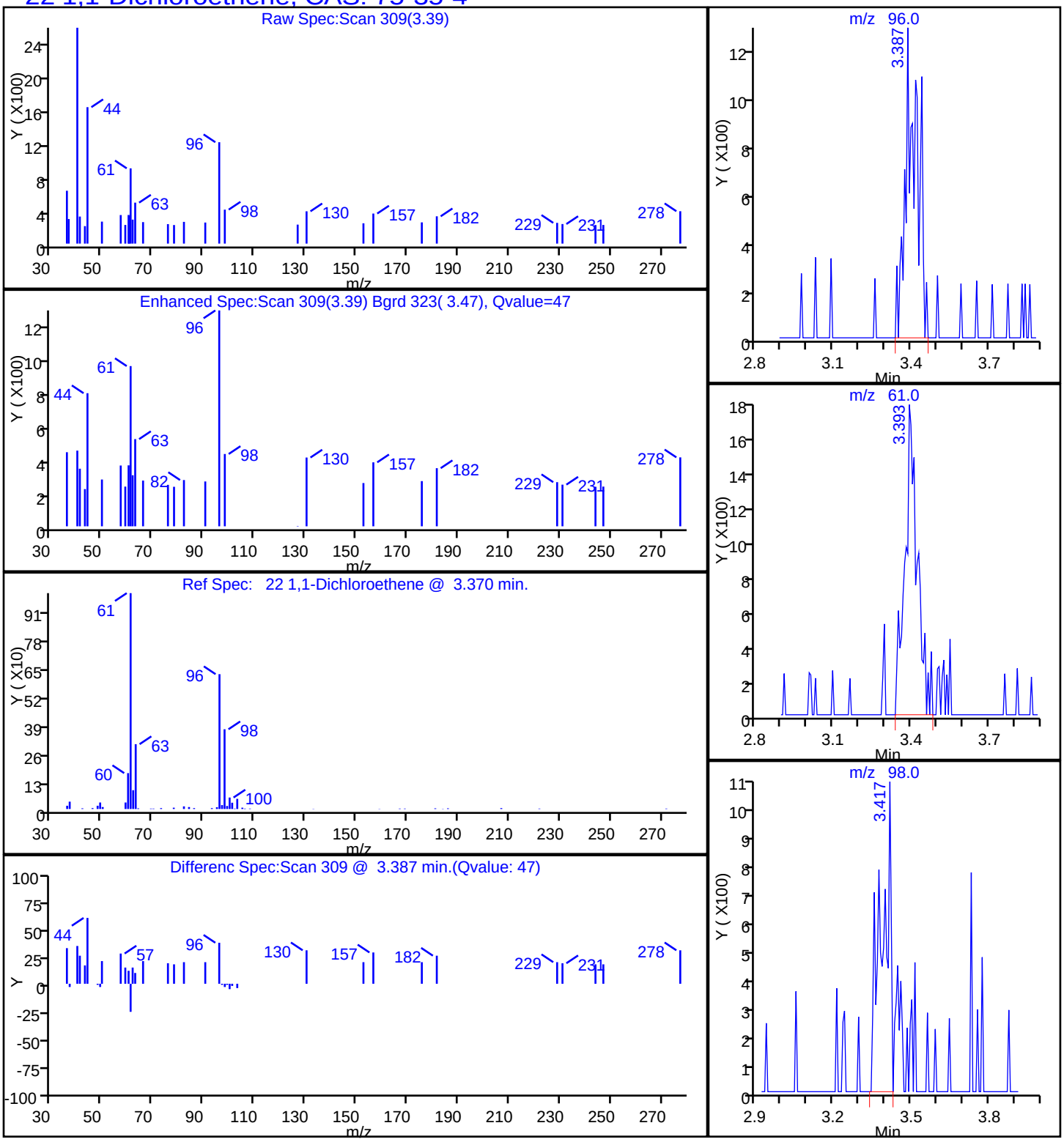
Operator ID: 001562 ALS Bottle#: 13 Worklist Smp#: 14

Purge Vol: 5.000 mL Dil. Factor: 3.0000

Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm) Detector MS SCAN

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

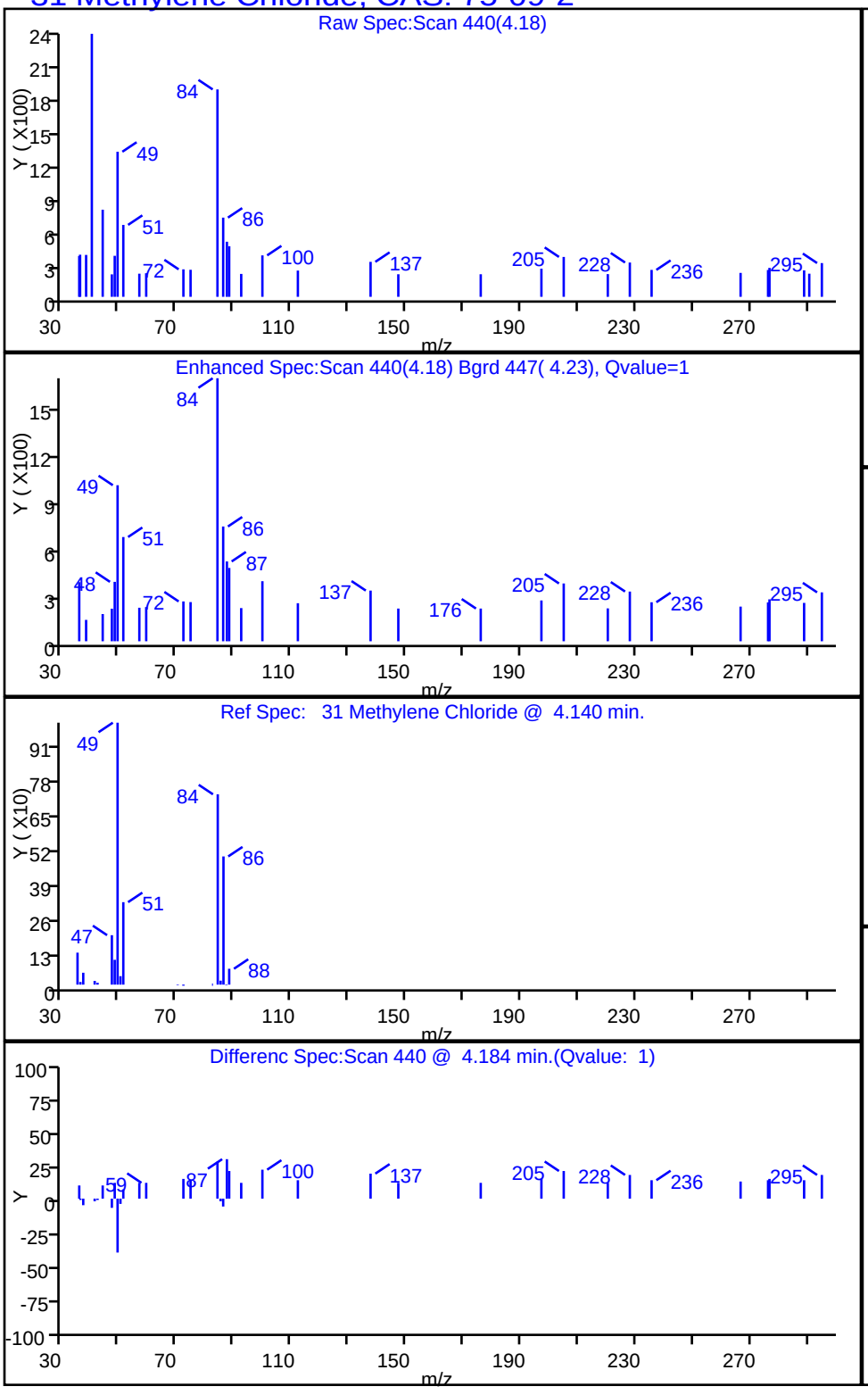


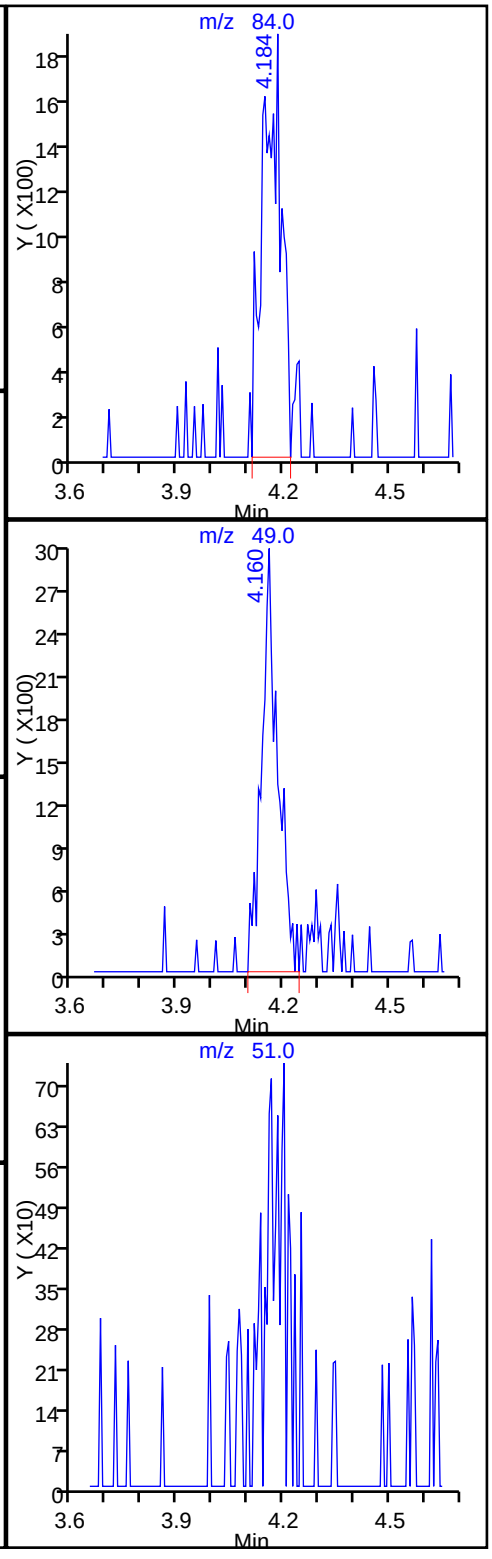
Report Date: 02-Apr-2015 07:59:24 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401014.D				
Injection Date:	01-Apr-2015 16:11:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-11	Lab Sample ID:	180-42353-11		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	3.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2



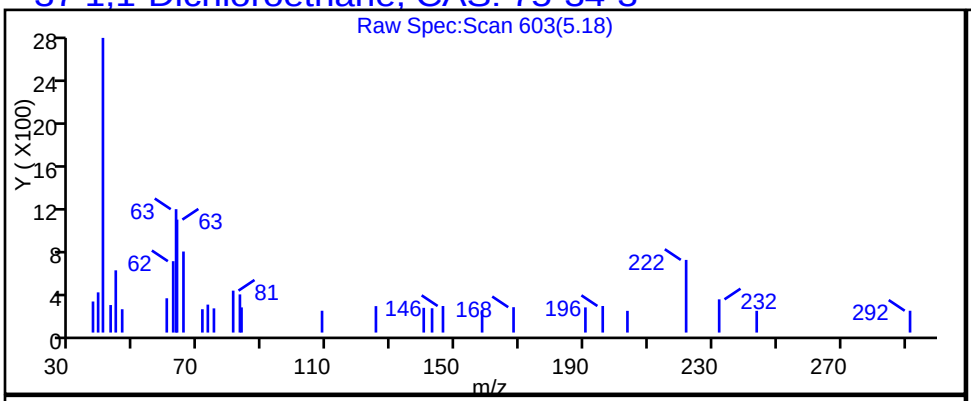


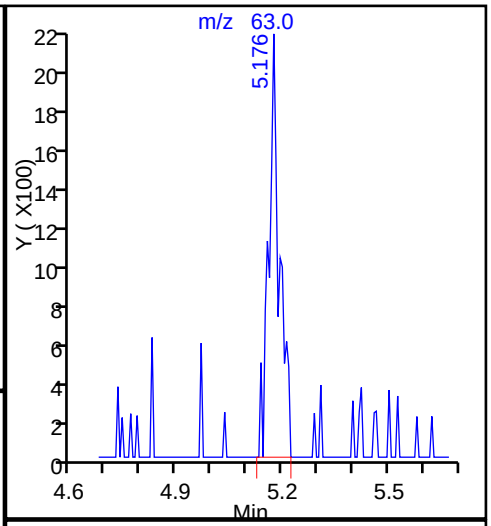
Report Date: 02-Apr-2015 07:59:24 Chrom Revision: 2.2 13-Mar-2015 11:20:44

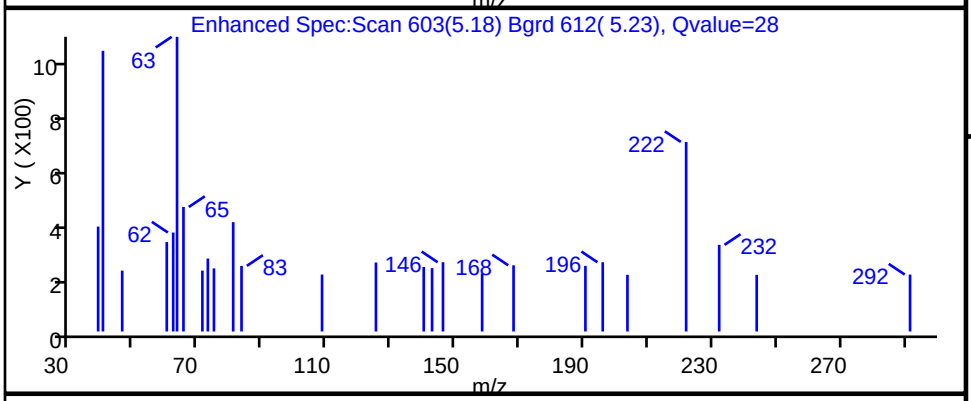
TestAmerica Pittsburgh

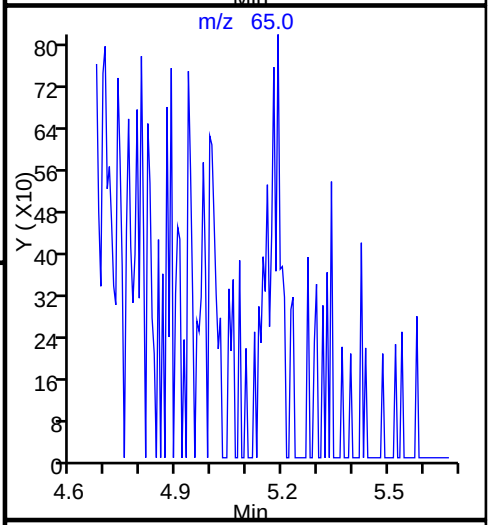
Data File:	\\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401014.D				
Injection Date:	01-Apr-2015 16:11:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-11	Lab Sample ID:	180-42353-11		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	3.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

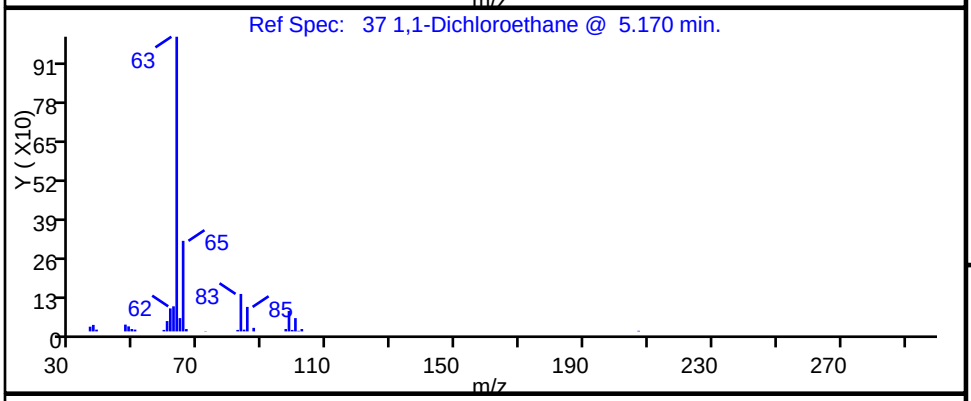
37 1,1-Dichloroethane, CAS: 75-34-3

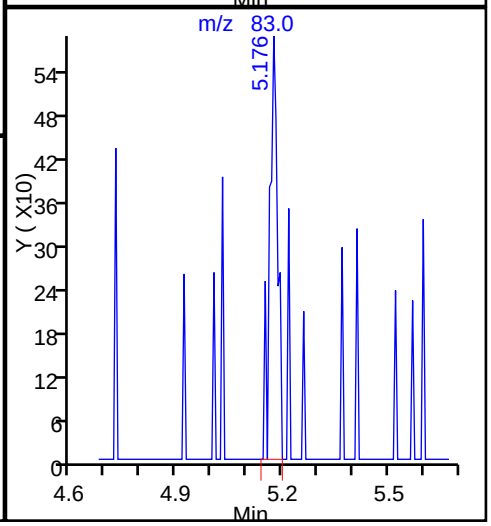


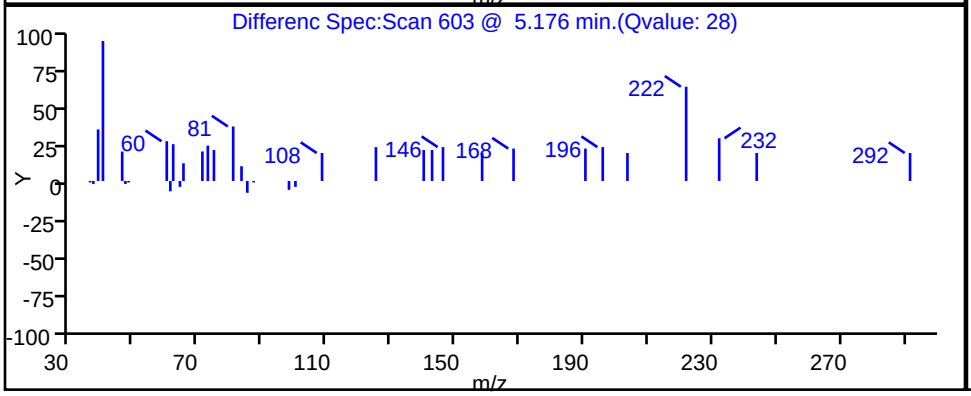










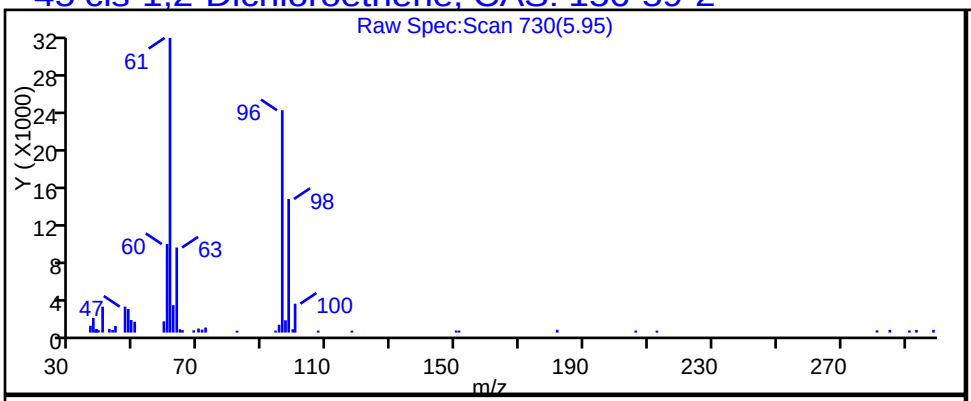


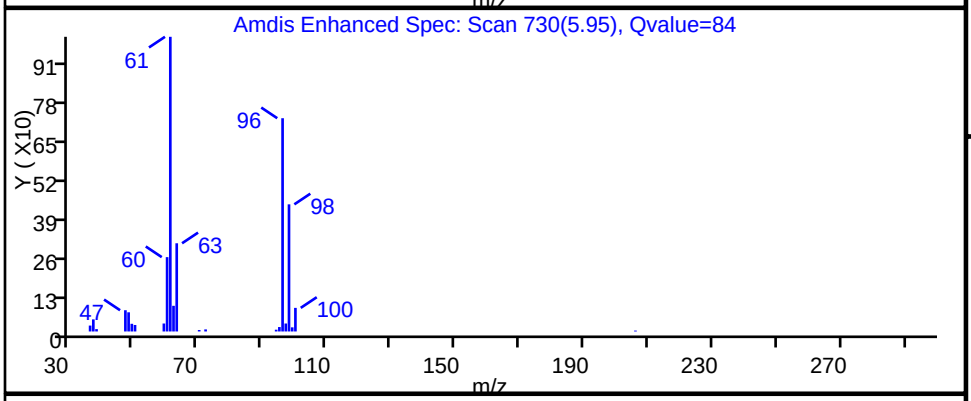
Report Date: 02-Apr-2015 07:59:24 Chrom Revision: 2.2 13-Mar-2015 11:20:44

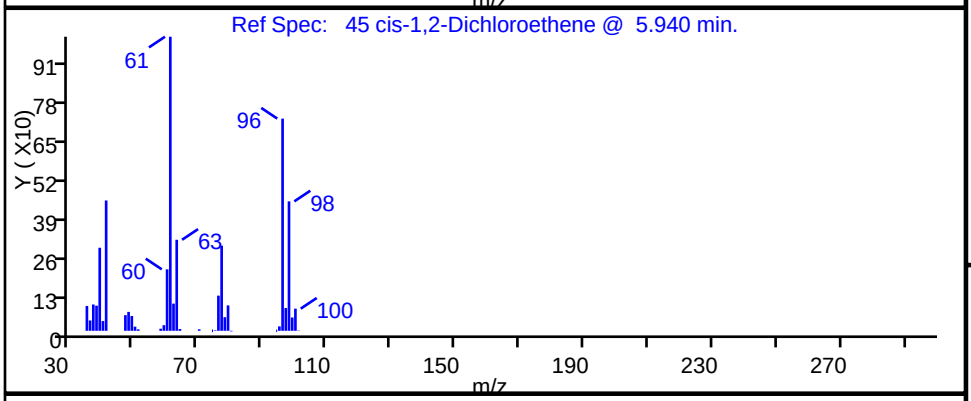
TestAmerica Pittsburgh

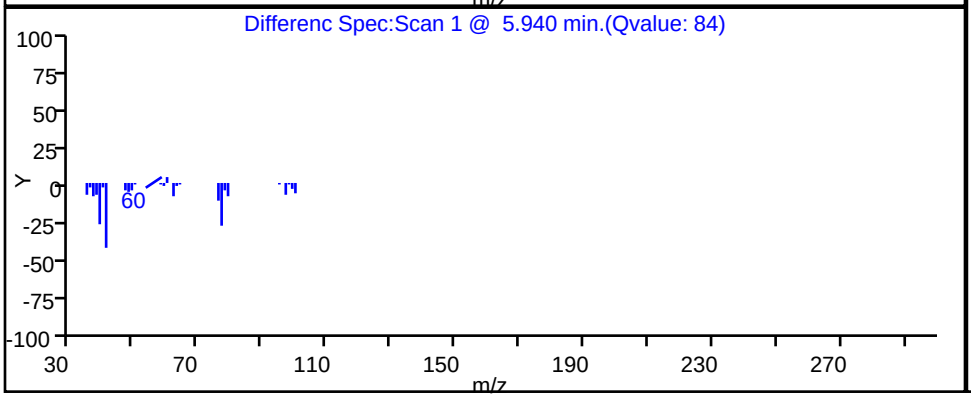
Data File:	\\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401014.D				
Injection Date:	01-Apr-2015 16:11:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-11	Lab Sample ID:	180-42353-11		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	3.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

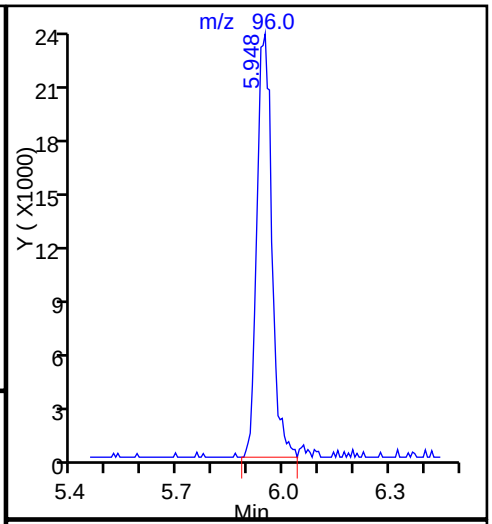
45 cis-1,2-Dichloroethene, CAS: 156-59-2

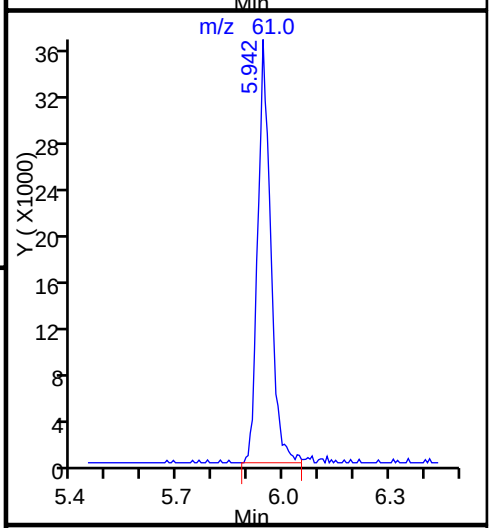


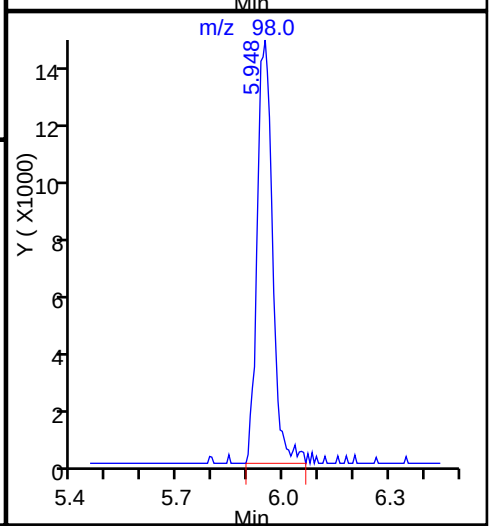










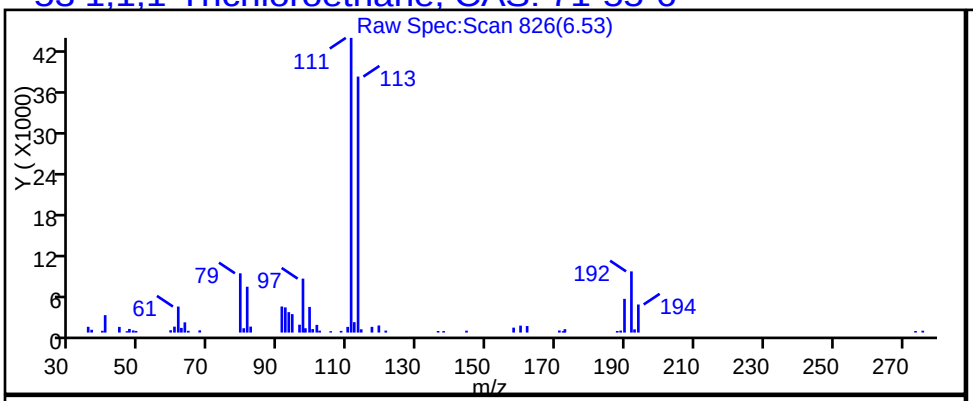


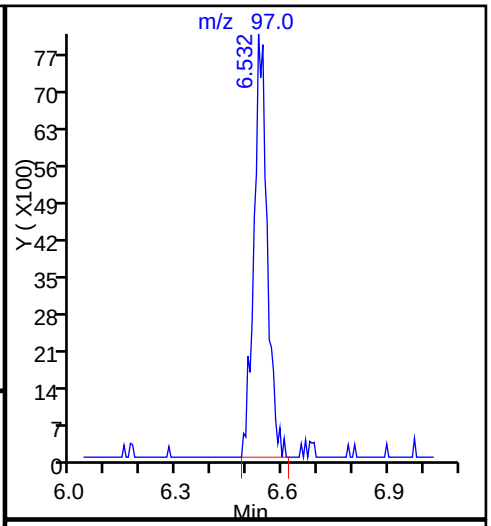
Report Date: 02-Apr-2015 07:59:24 Chrom Revision: 2.2 13-Mar-2015 11:20:44

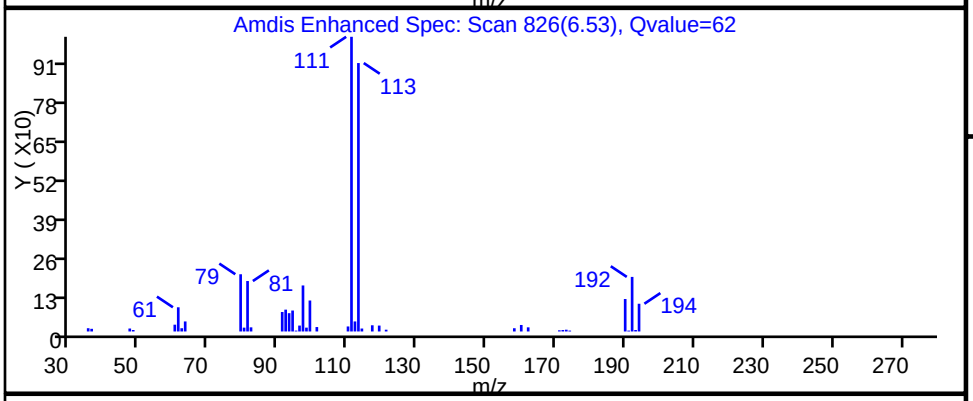
TestAmerica Pittsburgh

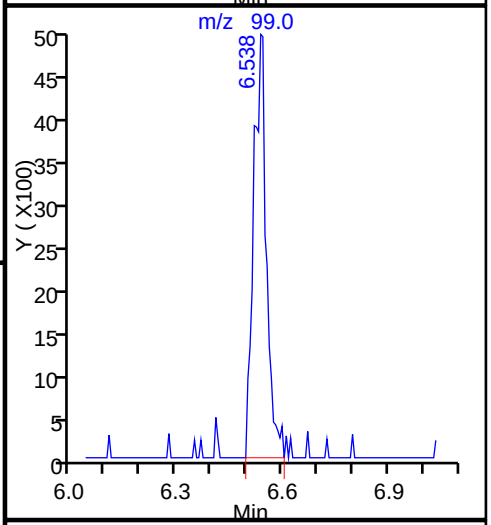
Data File:	\\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401014.D				
Injection Date:	01-Apr-2015 16:11:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-11	Lab Sample ID:	180-42353-11		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	3.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

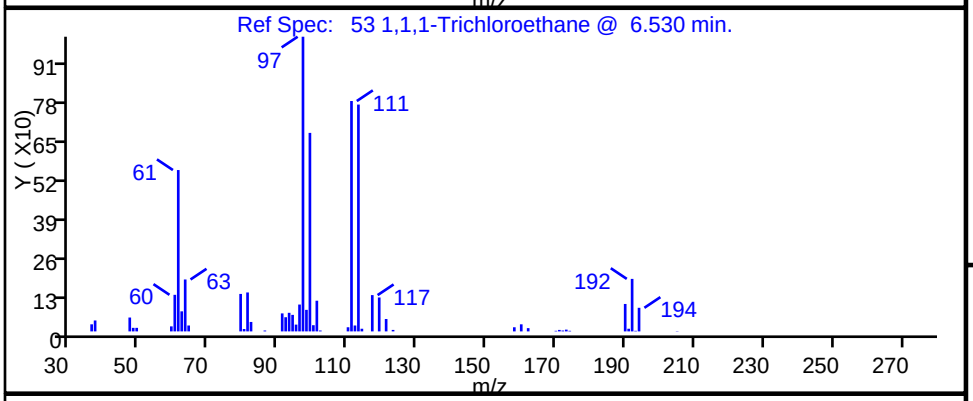
53 1,1,1-Trichloroethane, CAS: 71-55-6

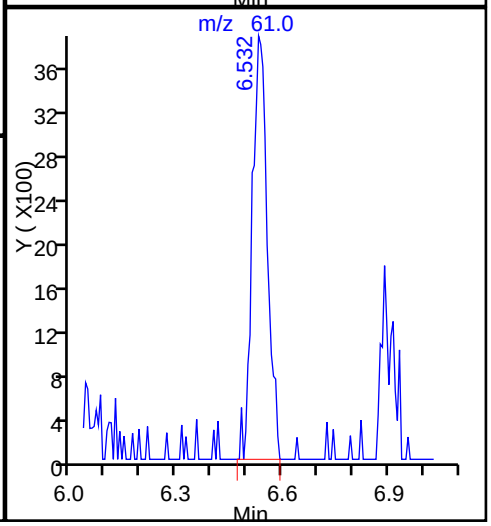


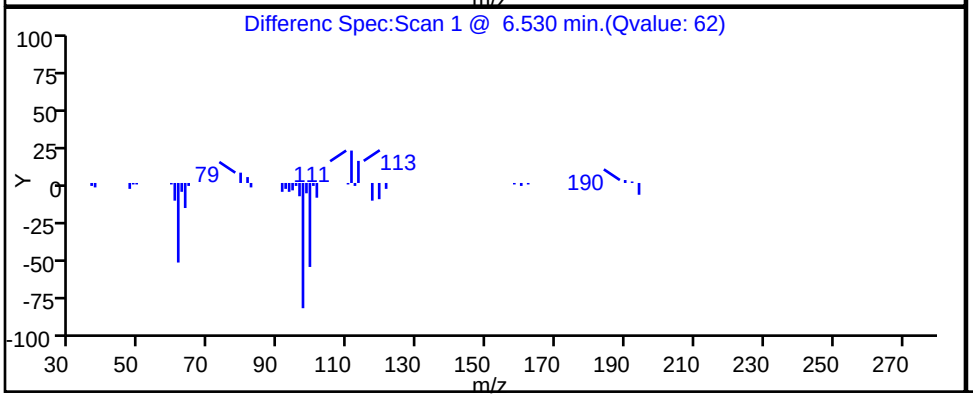










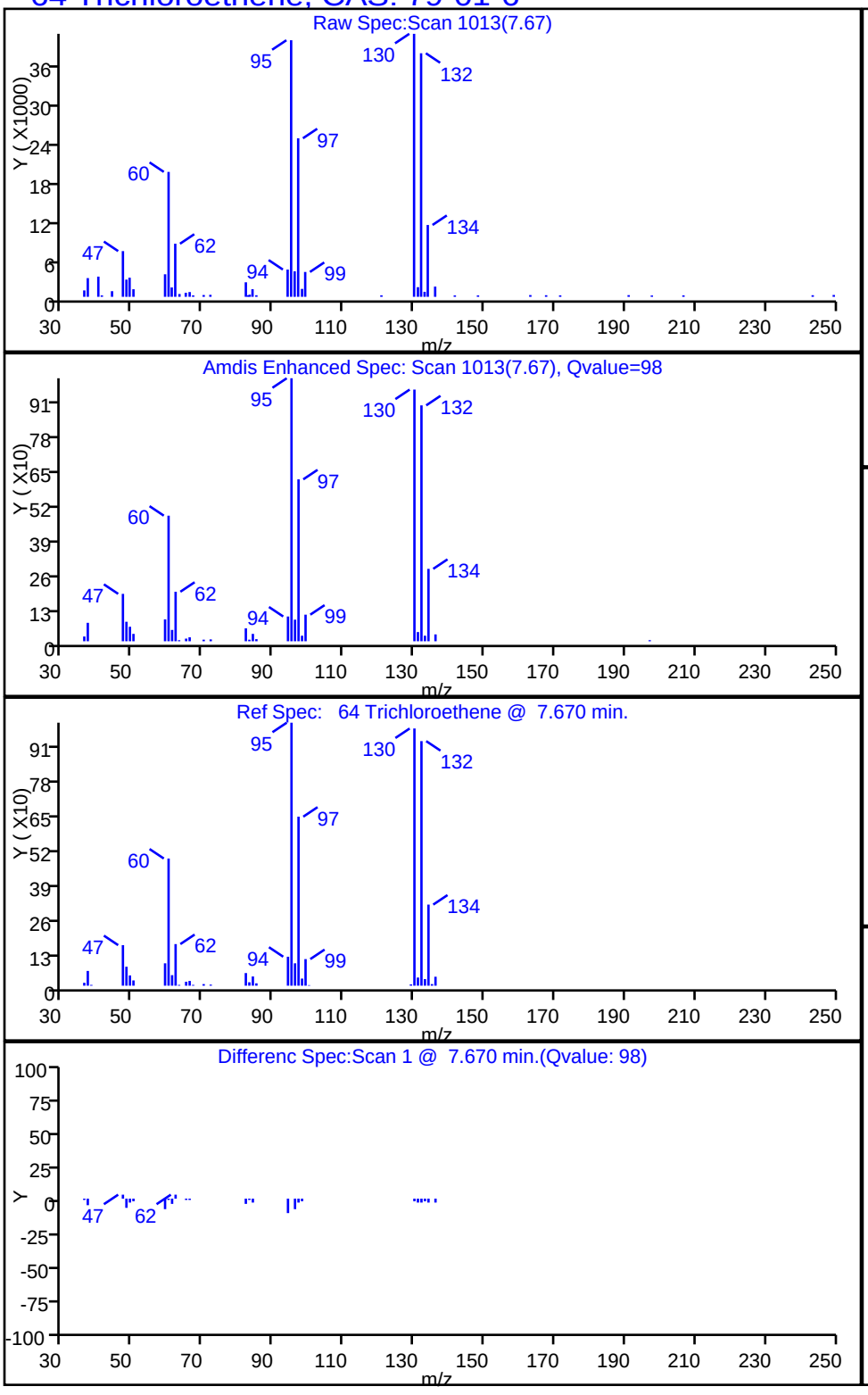


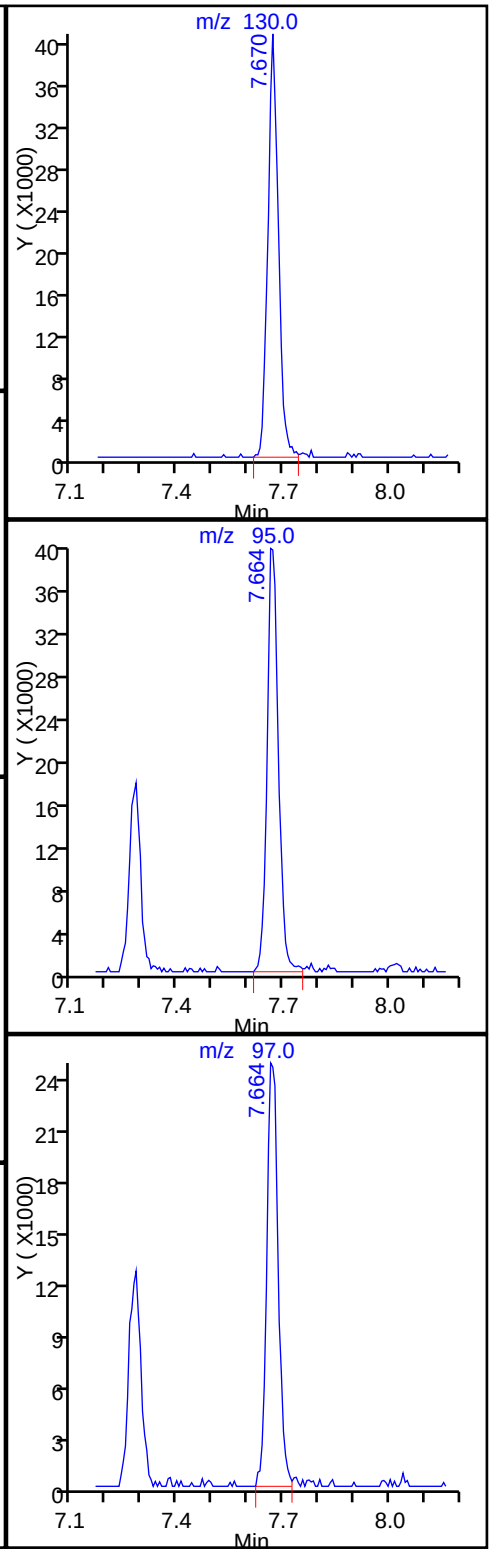
Report Date: 02-Apr-2015 07:59:24 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401014.D				
Injection Date:	01-Apr-2015 16:11:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-11	Lab Sample ID:	180-42353-11		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	3.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6





Report Date: 02-Apr-2015 07:59:24 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401014.D

Injection Date: 01-Apr-2015 16:11:30 Instrument ID: CHHP5

Lims ID: 180-42353-E-11 Lab Sample ID: 180-42353-11

Client ID: HD-COD-SW-17-0/1-0

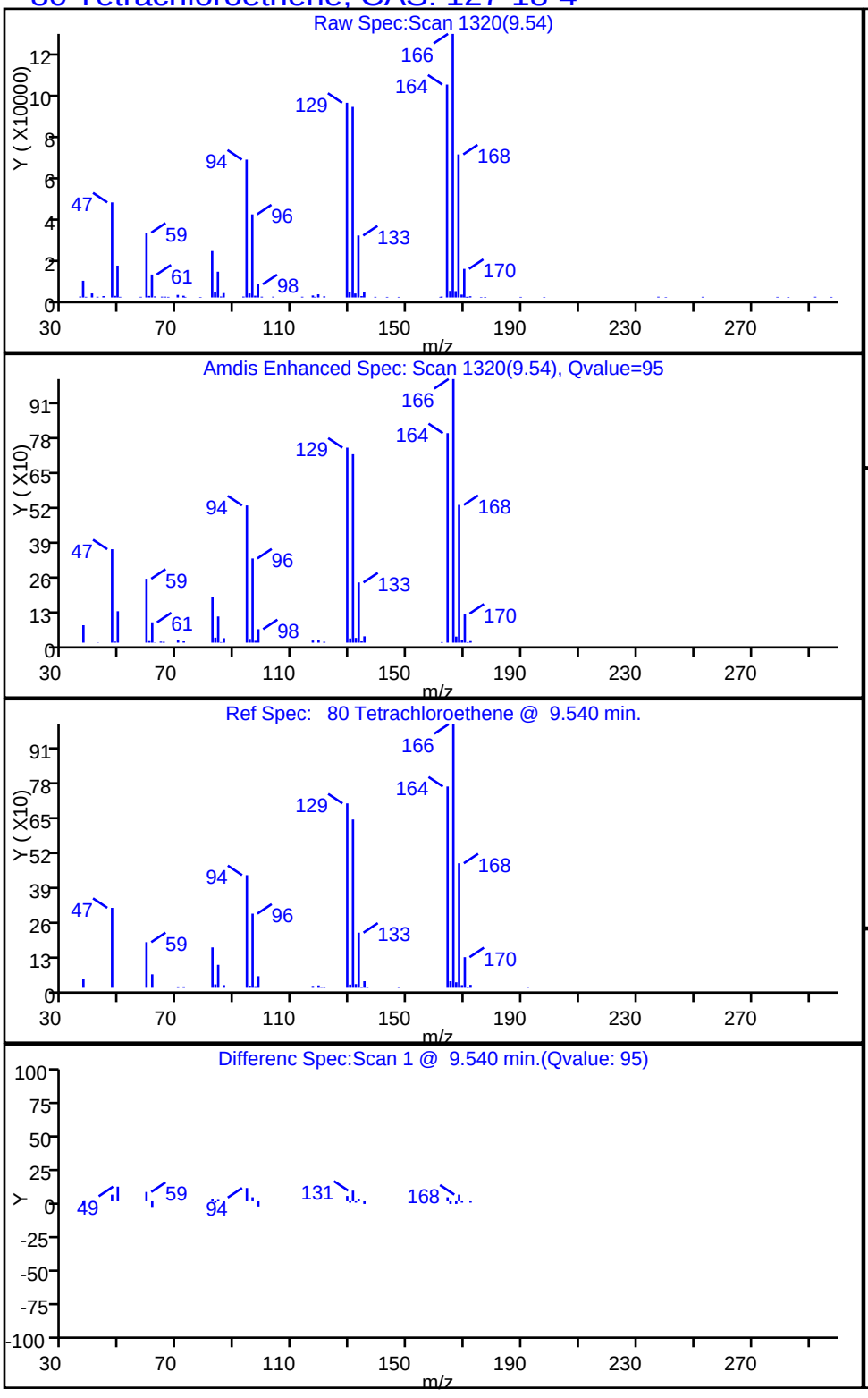
Operator ID: 001562 ALS Bottle#: 13 Worklist Smp#: 14

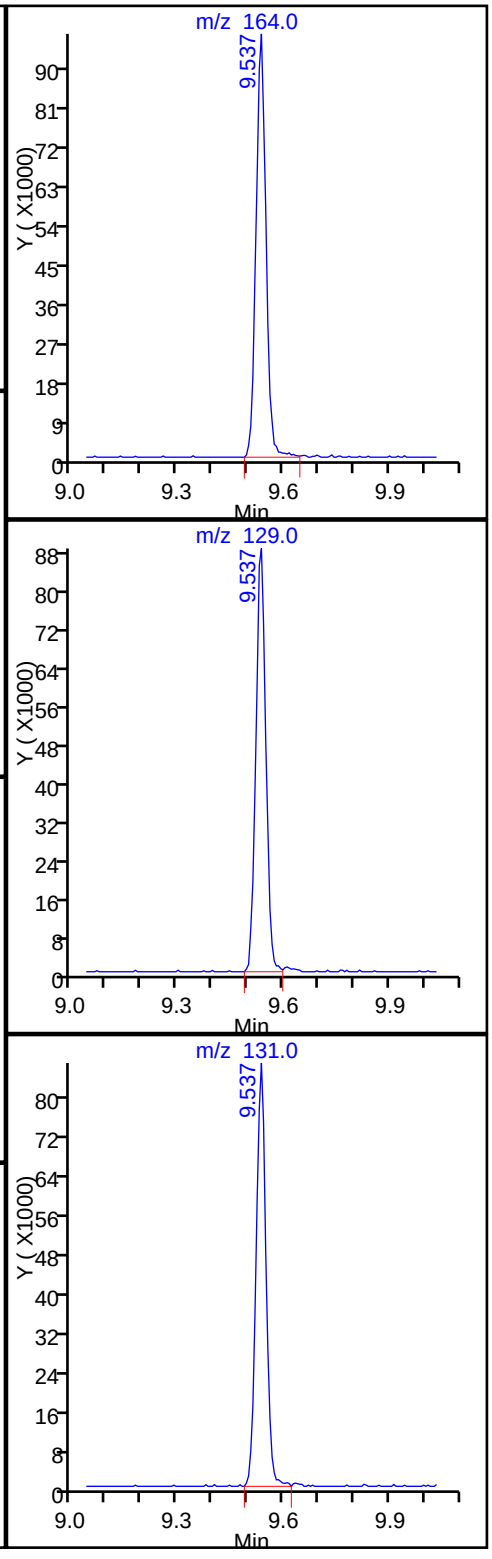
Purge Vol: 5.000 mL Dil. Factor: 3.0000

Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm) Detector MS SCAN

80 Tetrachloroethene, CAS: 127-18-4





Manual Integration/User Assign Peak Report

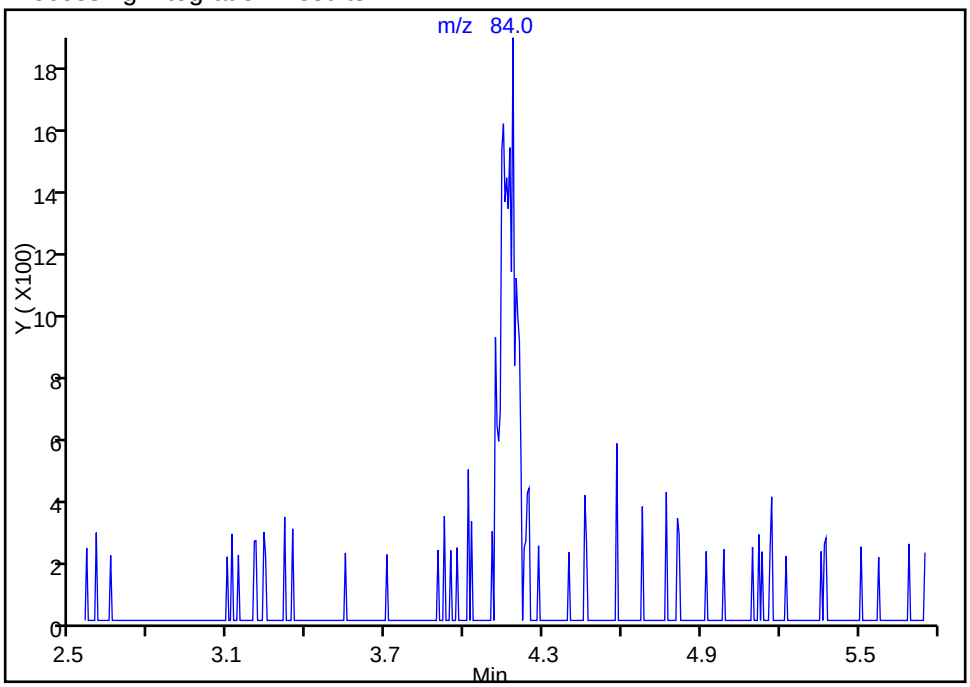
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401014.D				
Injection Date:	01-Apr-2015 16:11:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-11	Lab Sample ID:	180-42353-11		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	3.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2

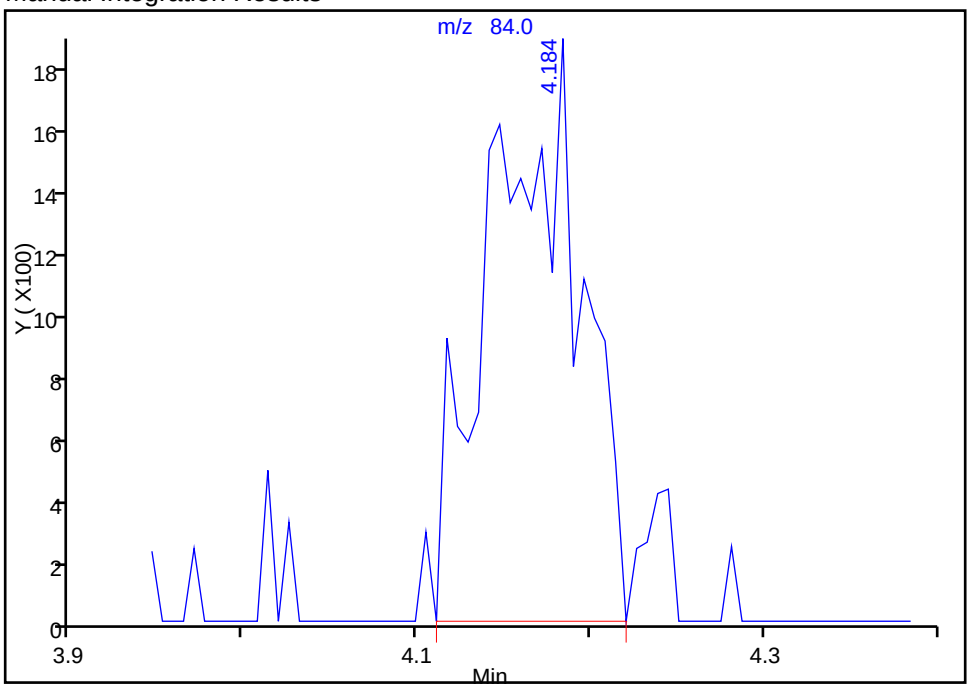
Not Detected
Expected RT: 4.15

Processing Integration Results



Manual Integration Results

RT: 4.18
Area: 6806
Amount: 2.420432
Amount Units: ng



Reviewer: fergusond, 02-Apr-2015 07:59:23
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-20-0/1-0 | Lab Sample ID: 180-42353-12

Matrix: Water | Lab File ID: 60330028.D

Analysis Method: 8260C | Date Collected: 03/24/2015 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 03/30/2015 21:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136938 | 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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-20-0/1-0 Lab Sample ID: 180-42353-12

Matrix: Water Lab File ID: 60330028.D

Analysis Method: 8260C Date Collected: 03/24/2015 10:50

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 21:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 136938 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)	130		64-135
2037-26-5	Toluene-d8 (Surr)	102		71-118
460-00-4	4-Bromofluorobenzene (Surr)	96		70-118
1868-53-7	Dibromofluoromethane (Surr)	112		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330028.D
Lims ID: 180-42353-E-12 Lab Sample ID: 180-42353-12
Client ID: HD-COD-SW-20-0/1-0
Sample Type: Client
Inject. Date: 30-Mar-2015 21:02:30 ALS Bottle#: 28 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-E-12
Misc. Info.: 180-0006236-028
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 11:04:52 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 11:04:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.274	4.284	-0.010	89	236883	1000.0	
* 2 Fluorobenzene (IS)	96	7.327	7.332	-0.005	98	506650	50.0	
* 3 Chlorobenzene-d5	119	10.442	10.440	0.002	92	103422	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.790	12.795	-0.005	97	159275	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.597	6.596	0.001	92	127819	55.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.975	6.973	0.002	70	212983	64.9	
$ 7 Toluene-d8 (Surr)	98	8.982	8.980	0.002	94	413878	50.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.628	11.627	0.001	79	166024	47.9	
12 Chloromethane	50		1.765				ND	
13 Vinyl chloride	62		1.899				ND	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.392				ND	
22 1,1-Dichloroethene	96		3.371				ND	
24 Acetone	43	3.483	3.451	0.032	67	3550	3.96	M
26 Carbon disulfide	76		3.682				ND	
31 Methylene Chloride	84		4.168				ND	
33 Acrylonitrile	53		4.539				ND	
34 trans-1,2-Dichloroethene	96		4.606				ND	
35 Methyl tert-butyl ether	73		4.606				ND	
37 1,1-Dichloroethane	63		5.239				ND	
43 cis-1,2-Dichloroethene	96		5.981				ND	
44 2-Butanone (MEK)	43		5.987				ND	
48 Chlorobromomethane	128		6.273				ND	
50 Chloroform	83		6.413				ND	
51 1,1,1-Trichloroethane	97		6.584				ND	
53 Carbon tetrachloride	117		6.760				ND	
56 Benzene	78		6.985				ND	
57 1,2-Dichloroethane	62		7.058				ND	
61 Trichloroethene	130		7.721				ND	
64 1,2-Dichloropropane	63		7.989				ND	
65 1,4-Dioxane	88		8.074				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.275				ND	
71 cis-1,3-Dichloropropene	75		8.719				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.859				ND	
73 Toluene	91	9.067	9.047	0.020	45	4492	0.4248	M
74 trans-1,3-Dichloropropene	75		9.297				ND	
76 1,1,2-Trichloroethane	97		9.485				ND	
77 Tetrachloroethene	164		9.571				ND	
79 2-Hexanone	43		9.692				ND	
81 Chlorodibromomethane	129		9.863				ND	
82 Ethylene Dibromide	107		9.984				ND	
84 Chlorobenzene	112		10.471				ND	
86 1,1,1,2-Tetrachloroethane	131		10.562				ND	
87 Ethylbenzene	106		10.568				ND	
88 m-Xylene & p-Xylene	106		10.696				ND	
89 o-Xylene	106		11.079				ND	
90 Styrene	104		11.104				ND	
91 Bromoform	173		11.292				ND	
96 1,1,2,2-Tetrachloroethane	83		11.754				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

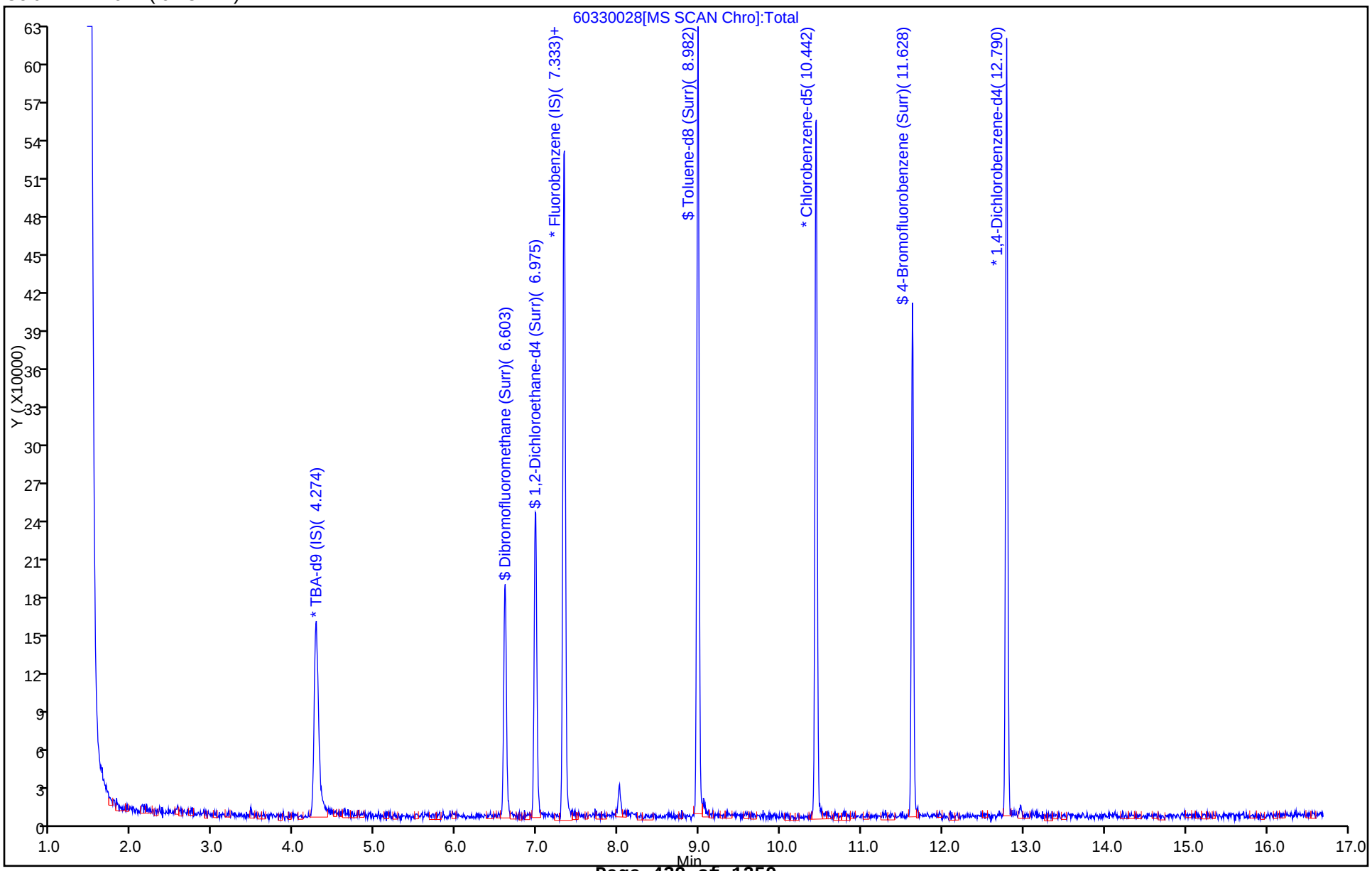
Report Date: 31-Mar-2015 11:04:52 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330028.D

Injection Date:	30-Mar-2015 21:02:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-42353-E-12	Lab Sample ID:	180-42353-12	Worklist Smp#:	28
Client ID:	HD-COD-SW-20-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

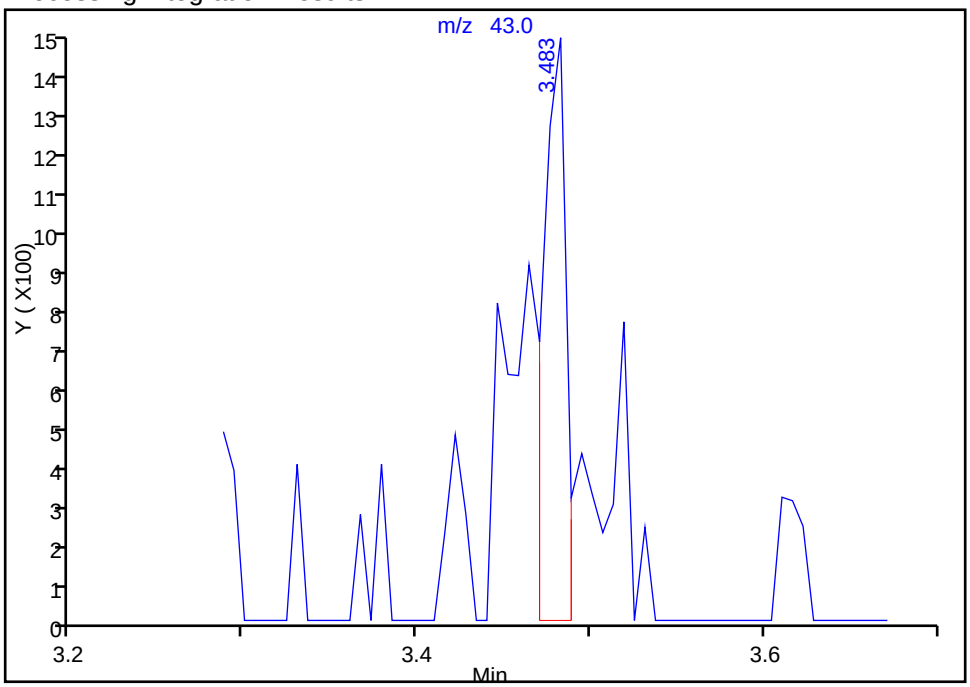
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330028.D				
Injection Date:	30-Mar-2015 21:02:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-E-12	Lab Sample ID:	180-42353-12		
Client ID:	HD-COD-SW-20-0/1-0				
Operator ID:	001562	ALS Bottle#:	28	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

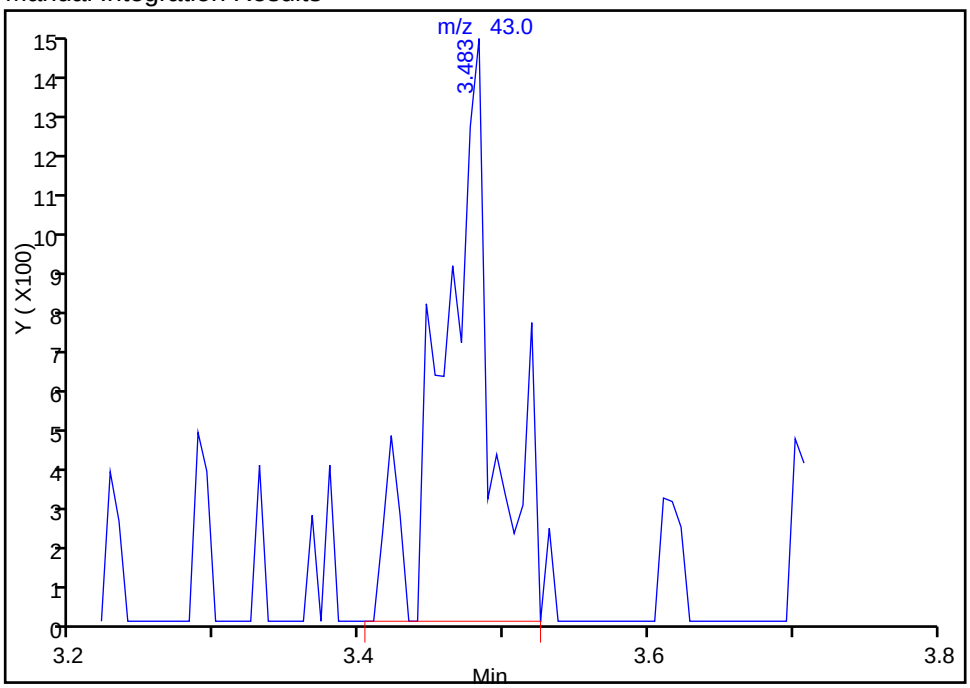
Processing Integration Results

RT: 3.48
Area: 1376
Amount: 1.535285
Amount Units: ng



Manual Integration Results

RT: 3.48
Area: 3550
Amount: 3.960947
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 11:04:52
Audit Action: Manually Integrated
Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

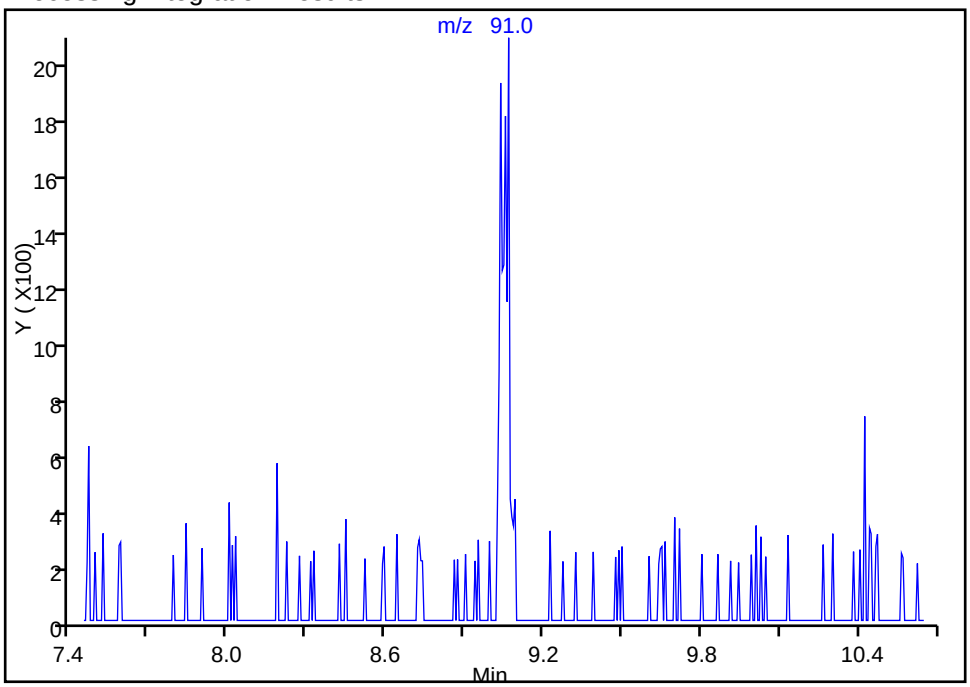
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330028.D				
Injection Date:	30-Mar-2015 21:02:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-E-12	Lab Sample ID:	180-42353-12		
Client ID:	HD-COD-SW-20-0/1-0				
Operator ID:	001562	ALS Bottle#:	28	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

73 Toluene, CAS: 108-88-3

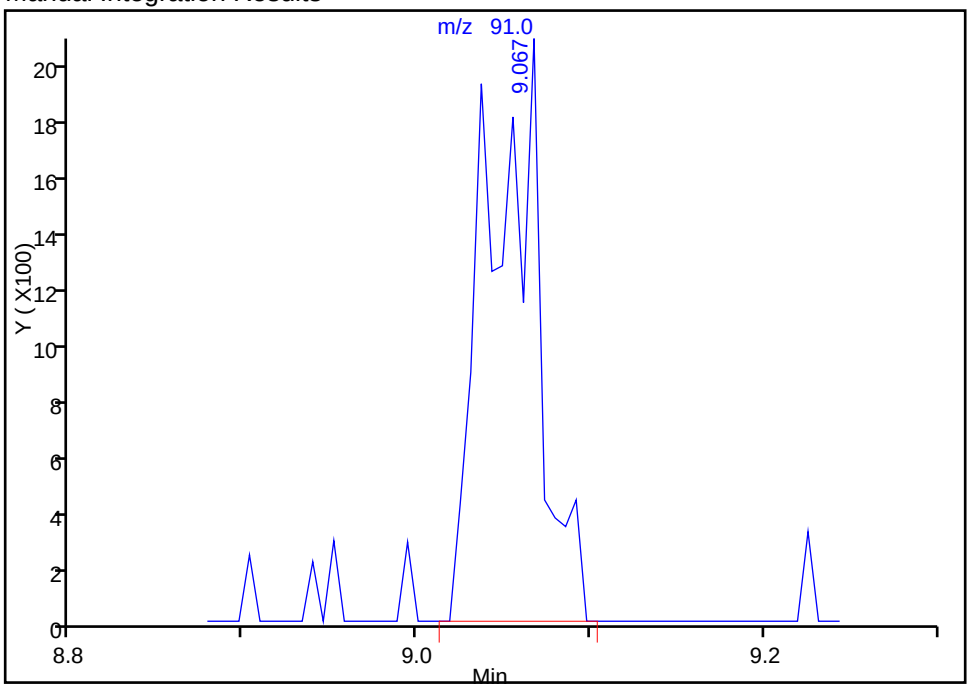
Not Detected
Expected RT: 9.05

Processing Integration Results



Manual Integration Results

RT: 9.07
Area: 4492
Amount: 0.424843
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 11:04:52
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 | Lab Sample ID: 180-42353-13

Matrix: Water | Lab File ID: 60330029.D

Analysis Method: 8260C | Date Collected: 03/24/2015 11:45

Sample wt/vol: 5(mL) | Date Analyzed: 03/30/2015 21:27

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.: 136938 | 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	0.41	J	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	0.20	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	2.6		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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 180-42353-13

Matrix: Water Lab File ID: 60330029.D

Analysis Method: 8260C Date Collected: 03/24/2015 11:45

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 21:27

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.: 136938 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)	134		64-135
2037-26-5	Toluene-d8 (Surr)	111		71-118
460-00-4	4-Bromofluorobenzene (Surr)	98		70-118
1868-53-7	Dibromofluoromethane (Surr)	111		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330029.D
Lims ID: 180-42353-D-13 Lab Sample ID: 180-42353-13
Client ID: HD-COD-SW-26-0/1-0
Sample Type: Client
Inject. Date: 30-Mar-2015 21:27:30 ALS Bottle#: 29 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-D-13
Misc. Info.: 180-0006236-029
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 11:06:17 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 11:06:17

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.262	4.284	-0.022	90	257253	1000.0	
*	2 Fluorobenzene (IS)	96	7.329	7.332	-0.003	98	520828	50.0	
*	3 Chlorobenzene-d5	119	10.443	10.440	0.003	92	108406	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.791	12.795	-0.004	95	167623	50.0	
$	5 Dibromofluoromethane (Surr	113	6.599	6.596	0.002	92	130845	55.5	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.976	6.973	0.003	71	226347	67.1	
$	7 Toluene-d8 (Surr)	98	8.983	8.980	0.003	94	473343	55.4	
$	8 4-Bromofluorobenzene (Surr	95	11.630	11.627	0.003	81	178604	49.1	
	12 Chloromethane	50	1.762	1.765	-0.003	9	1455	0.3428	
	13 Vinyl chloride	62		1.899				ND	
	15 Bromomethane	94		2.246				ND	
	16 Chloroethane	64		2.392				ND	
	22 1,1-Dichloroethene	96	3.399	3.371	0.028	1	2581	0.8827	
	24 Acetone	43	3.453	3.451	0.002	71	7228	7.85	
	26 Carbon disulfide	76		3.682				ND	
	31 Methylene Chloride	84		4.168				ND	
	33 Acrylonitrile	53		4.539				ND	
	34 trans-1,2-Dichloroethene	96		4.606				ND	
	35 Methyl tert-butyl ether	73		4.606				ND	
	37 1,1-Dichloroethane	63		5.239				ND	
	43 cis-1,2-Dichloroethene	96	5.984	5.981	0.003	1	3200	0.8570	M
	44 2-Butanone (MEK)	43		5.987				ND	
	48 Chlorobromomethane	128		6.273				ND	
	50 Chloroform	83	6.416	6.413	0.003	89	11942	2.04	
	51 1,1,1-Trichloroethane	97		6.584				ND	
	53 Carbon tetrachloride	117		6.760				ND	
	56 Benzene	78		6.985				ND	
	57 1,2-Dichloroethane	62		7.058				ND	
	61 Trichloroethene	130	7.724	7.721	0.003	30	2934	1.00	
	64 1,2-Dichloropropane	63		7.989				ND	
	65 1,4-Dioxane	88		8.074				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.275				ND	
71 cis-1,3-Dichloropropene	75		8.719				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.859				ND	
73 Toluene	91	9.044	9.047	-0.003	1	4804	0.4335	M
74 trans-1,3-Dichloropropene	75		9.297				ND	
76 1,1,2-Trichloroethane	97		9.485				ND	
77 Tetrachloroethene	164	9.573	9.571	0.002	92	25826	13.0	
79 2-Hexanone	43		9.692				ND	
81 Chlorodibromomethane	129		9.863				ND	
82 Ethylene Dibromide	107		9.984				ND	
84 Chlorobenzene	112		10.471				ND	
86 1,1,1,2-Tetrachloroethane	131		10.562				ND	
87 Ethylbenzene	106		10.568				ND	
88 m-Xylene & p-Xylene	106		10.696				ND	
89 o-Xylene	106		11.079				ND	
90 Styrene	104		11.104				ND	
91 Bromoform	173		11.292				ND	
96 1,1,2,2-Tetrachloroethane	83		11.754				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

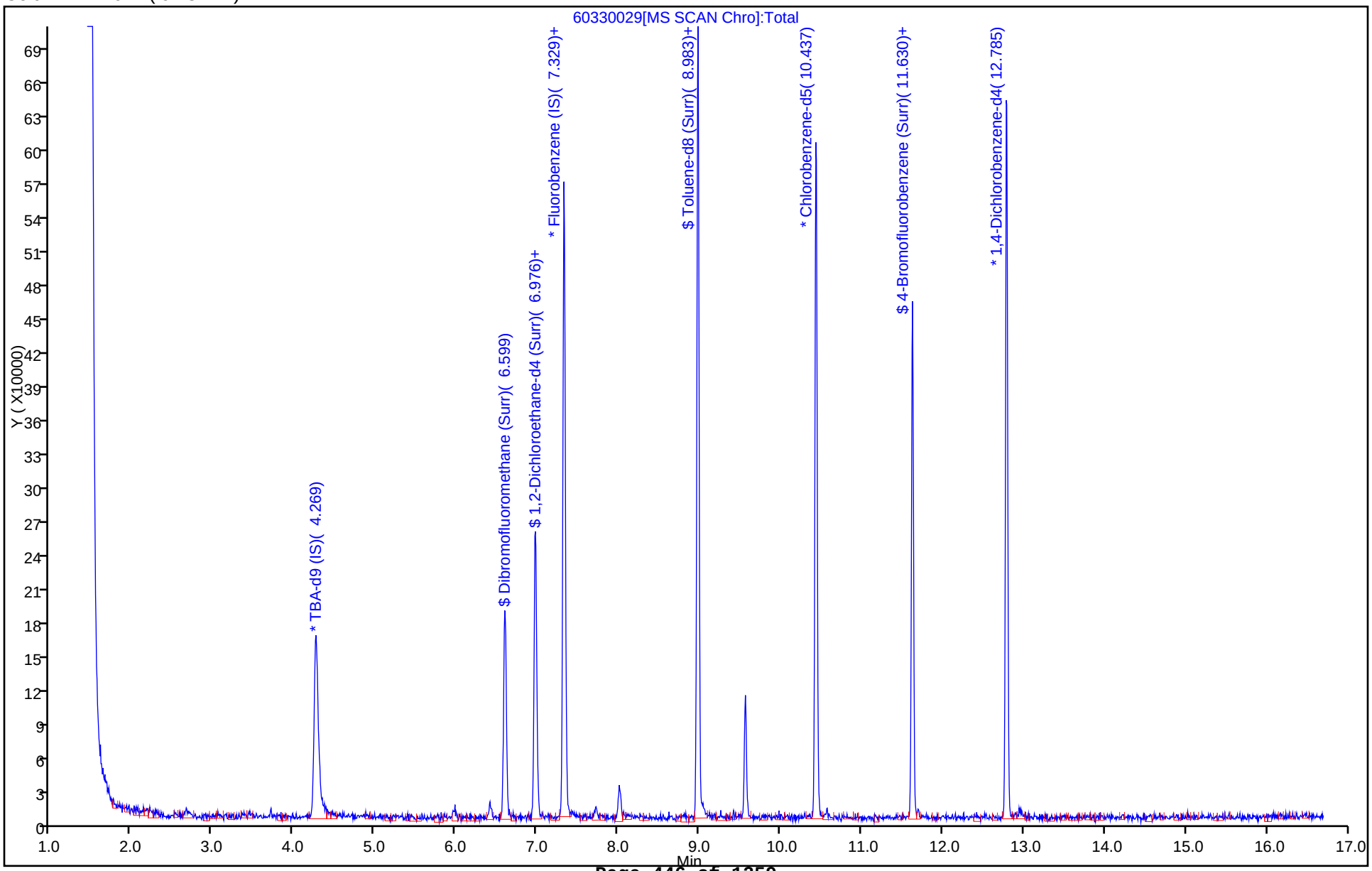
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 31-Mar-2015 11:06:17 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330029.D				
Injection Date:	30-Mar-2015 21:27:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-42353-D-13	Lab Sample ID:	180-42353-13	Worklist Smp#:	29
Client ID:	HD-COD-SW-26-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

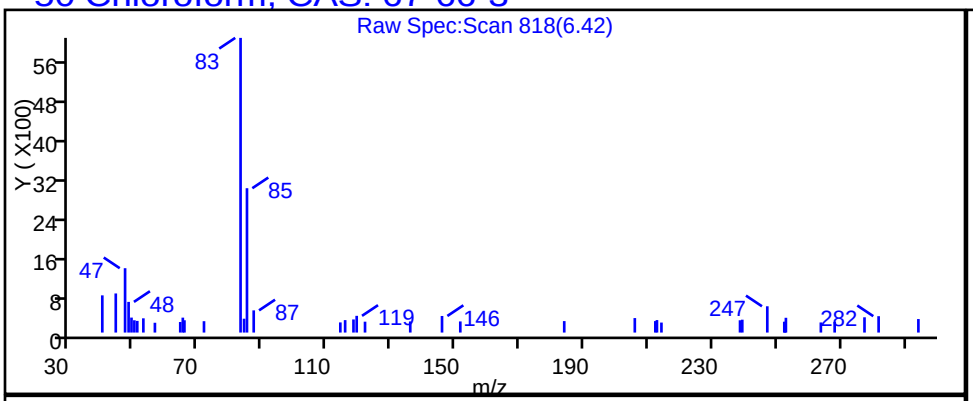


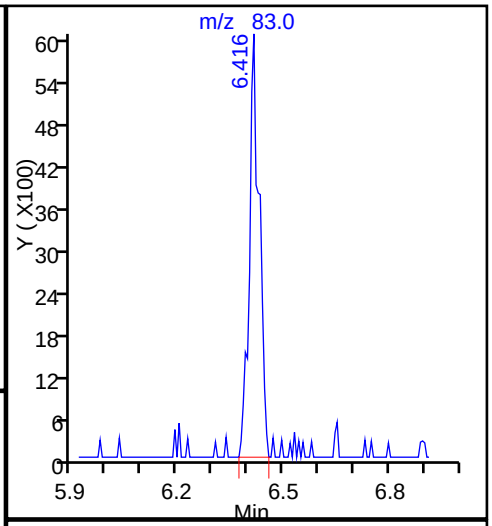
Report Date: 31-Mar-2015 11:06:17 Chrom Revision: 2.2 13-Mar-2015 11:20:44

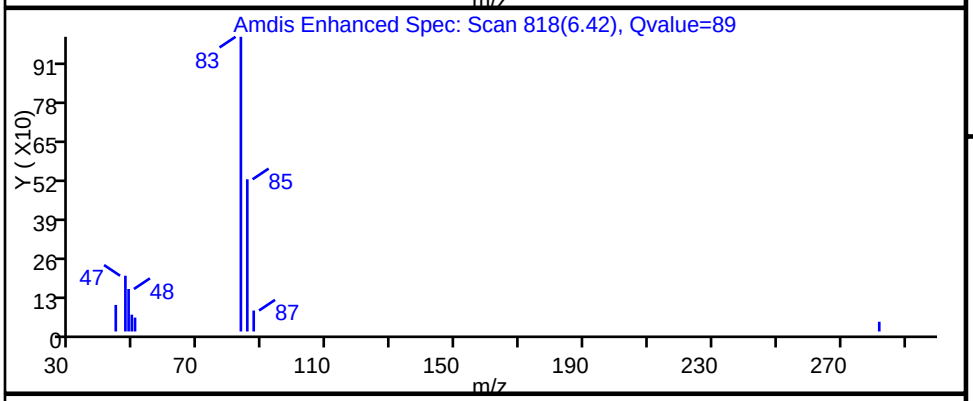
TestAmerica Pittsburgh

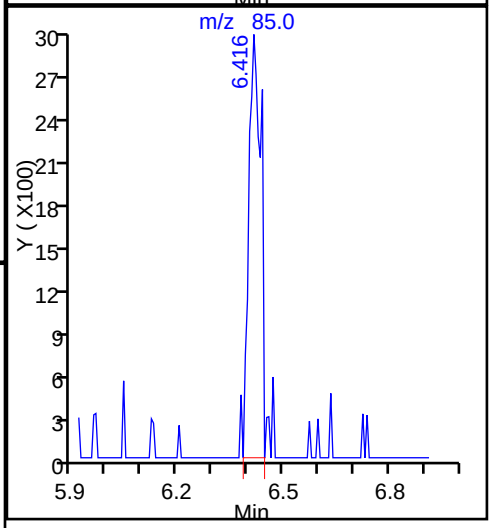
Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330029.D		
Injection Date:	30-Mar-2015 21:27:30	Instrument ID:	CHHP6
Lims ID:	180-42353-D-13	Lab Sample ID:	180-42353-13
Client ID:	HD-COD-SW-26-0/1-0		
Operator ID:	001562	ALS Bottle#:	29 Worklist Smp#: 29
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

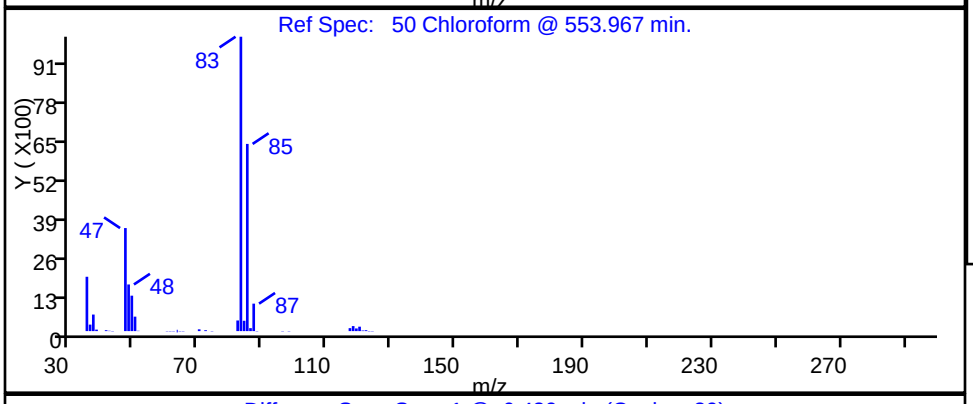
50 Chloroform, CAS: 67-66-3

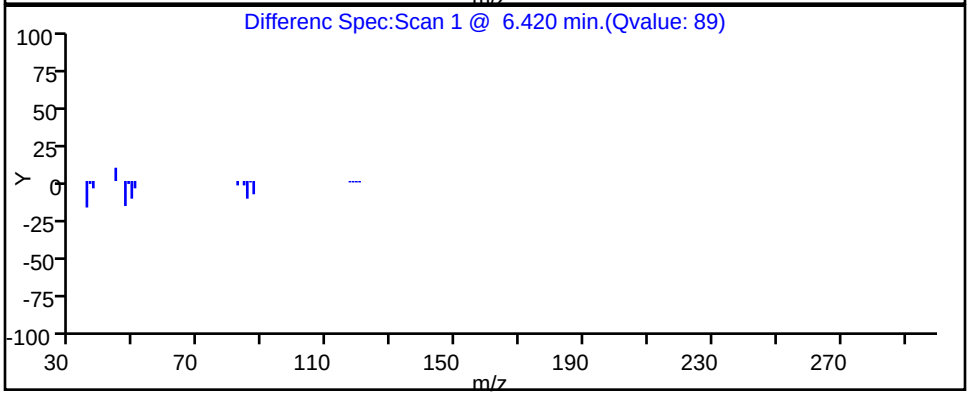










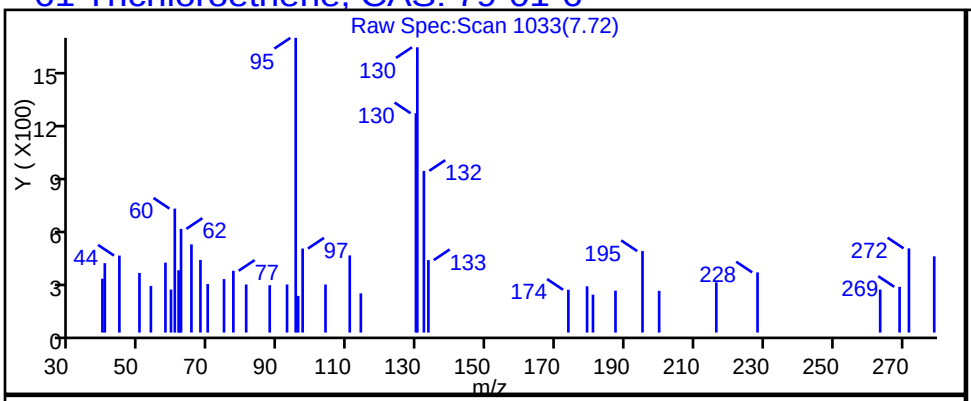


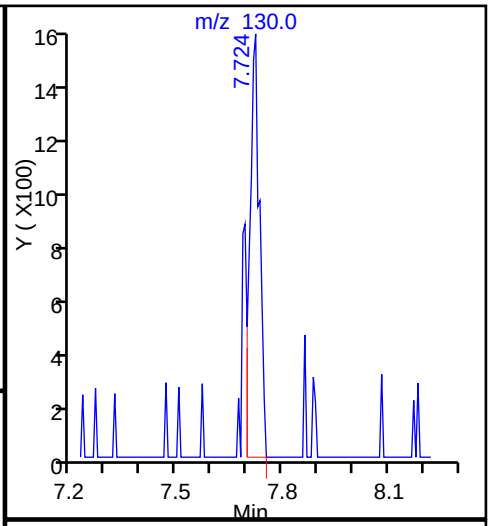
Report Date: 31-Mar-2015 11:06:17 Chrom Revision: 2.2 13-Mar-2015 11:20:44

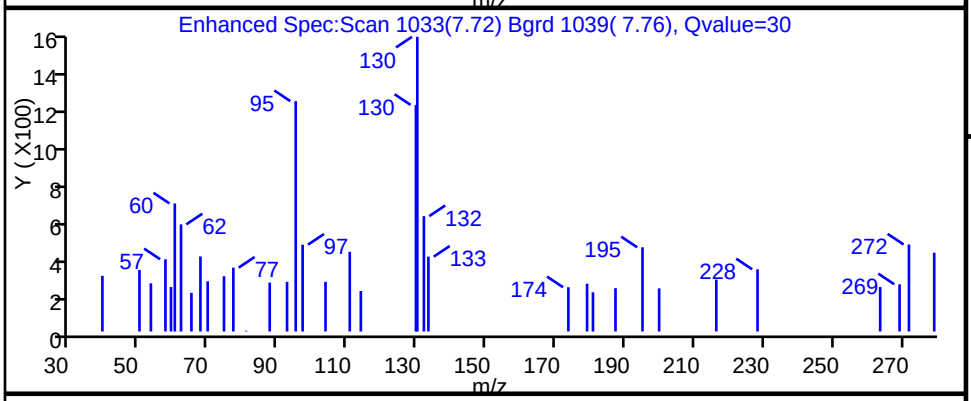
TestAmerica Pittsburgh

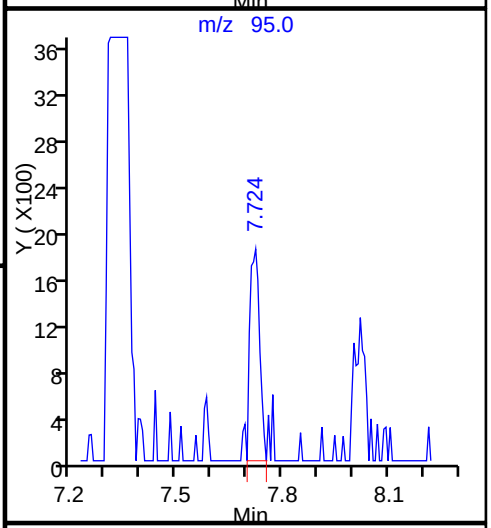
Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330029.D				
Injection Date:	30-Mar-2015 21:27:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-D-13	Lab Sample ID:	180-42353-13		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	001562	ALS Bottle#:	29	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

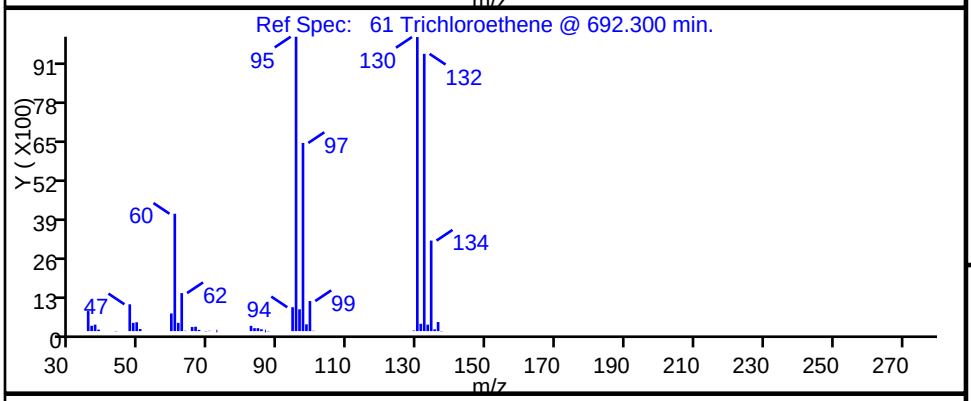
61 Trichloroethene, CAS: 79-01-6

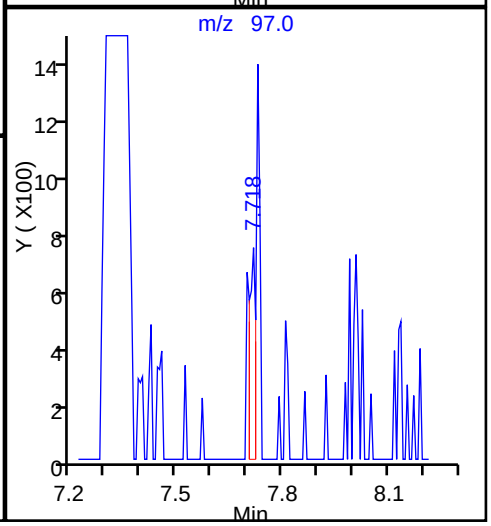


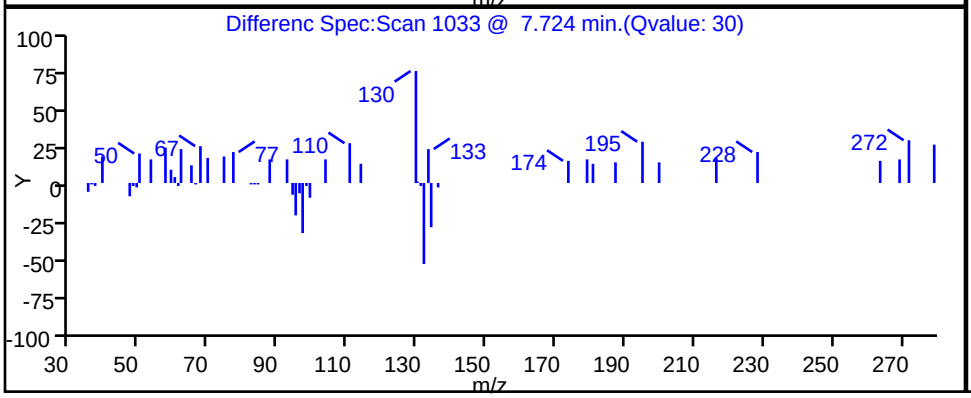










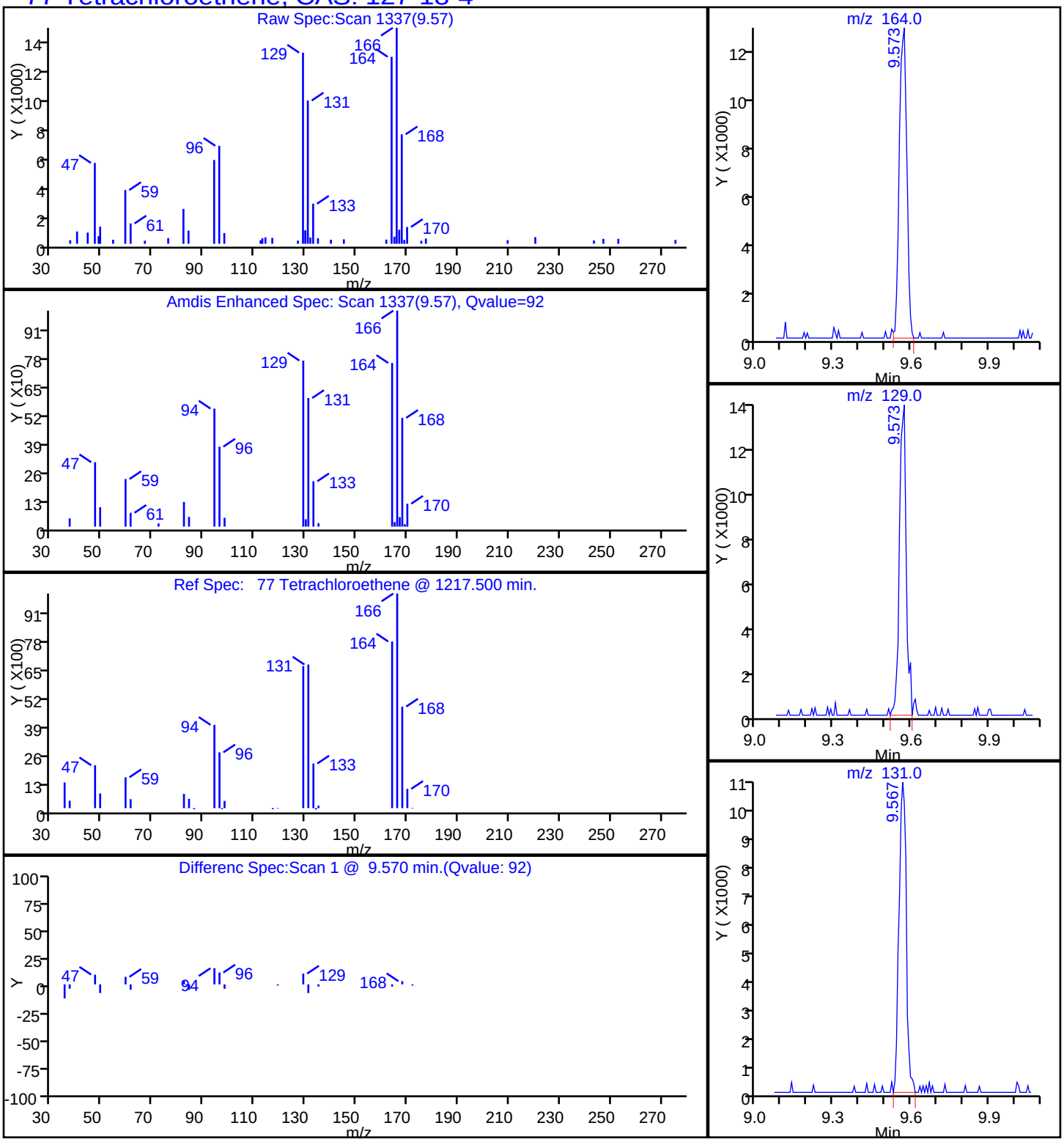


Report Date: 31-Mar-2015 11:06:17 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330029.D		
Injection Date:	30-Mar-2015 21:27:30	Instrument ID:	CHHP6
Lims ID:	180-42353-D-13	Lab Sample ID:	180-42353-13
Client ID:	HD-COD-SW-26-0/1-0		
Operator ID:	001562	ALS Bottle#:	29 Worklist Smp#: 29
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

77 Tetrachloroethene, CAS: 127-18-4



Manual Integration/User Assign Peak Report

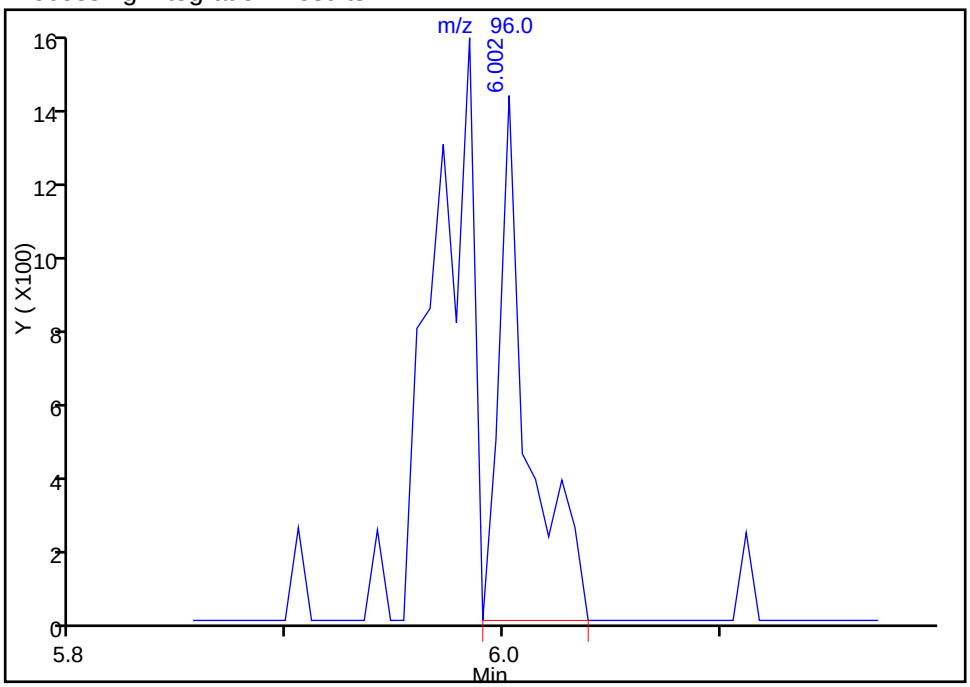
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330029.D				
Injection Date:	30-Mar-2015 21:27:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-D-13	Lab Sample ID:	180-42353-13		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	001562	ALS Bottle#:	29	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

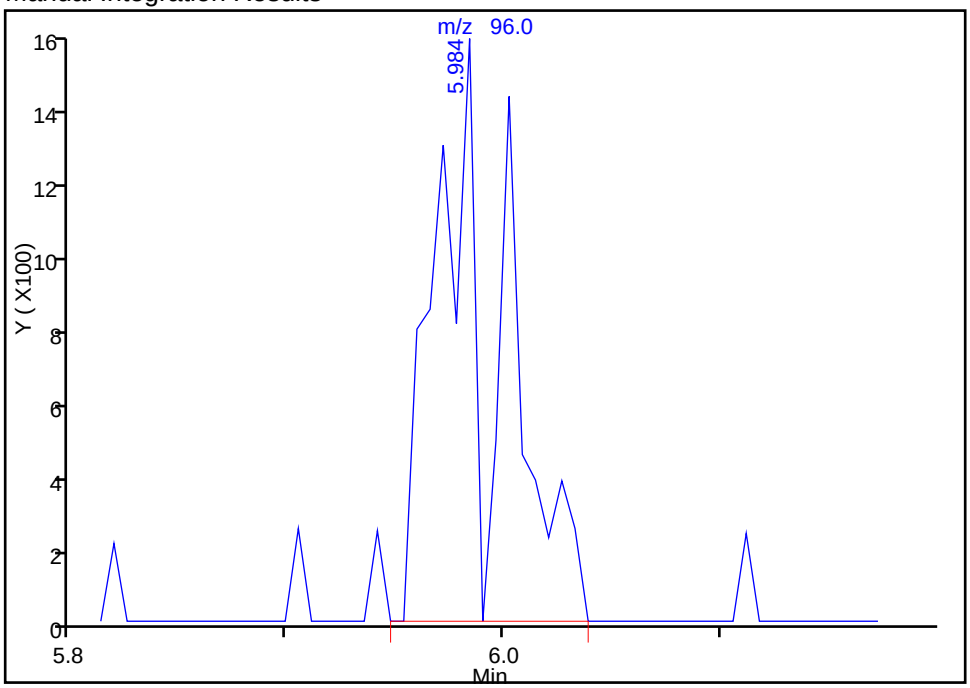
Processing Integration Results

RT: 6.00
Area: 1294
Amount: 0.346550
Amount Units: ng



Manual Integration Results

RT: 5.98
Area: 3200
Amount: 0.857001
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 11:06:17
Audit Action: Manually Integrated
Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

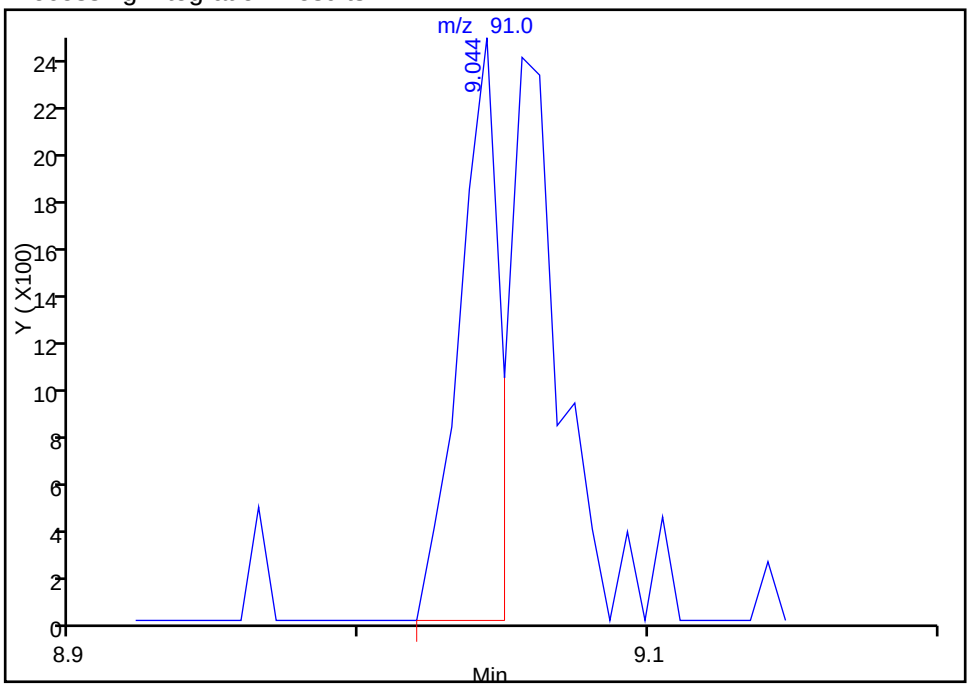
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330029.D				
Injection Date:	30-Mar-2015 21:27:30	Instrument ID:	CHHP6		
Lims ID:	180-42353-D-13	Lab Sample ID:	180-42353-13		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	001562	ALS Bottle#:	29	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

73 Toluene, CAS: 108-88-3

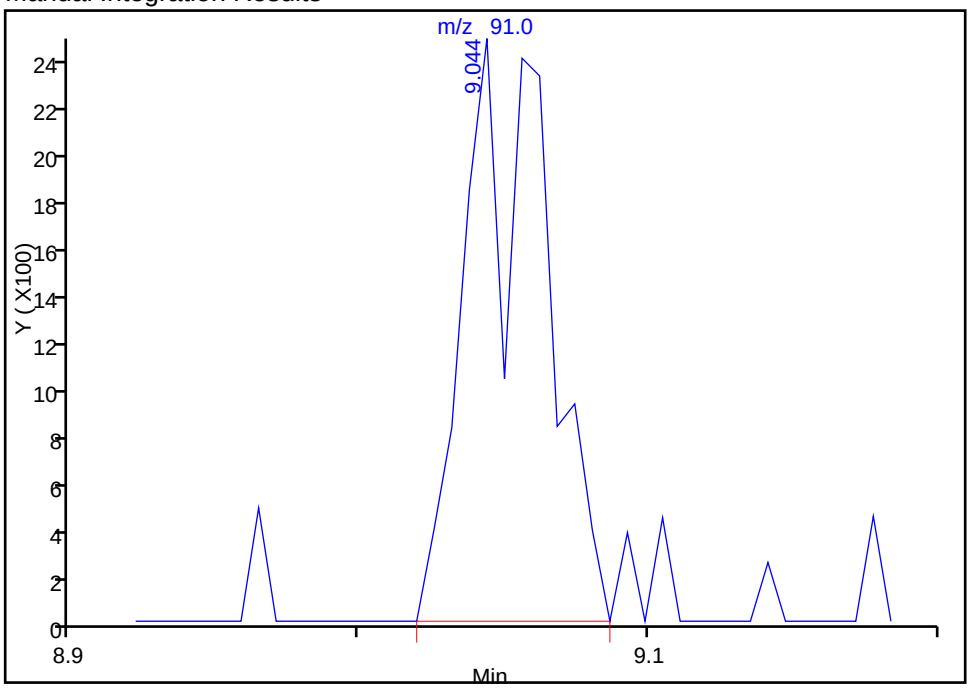
Processing Integration Results

RT: 9.04
Area: 2350
Amount: 0.212039
Amount Units: ng



Manual Integration Results

RT: 9.04
Area: 4804
Amount: 0.433462
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 11:06:17
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 180-42353-14

Matrix: Water Lab File ID: 50330025.D

Analysis Method: 8260C Date Collected: 03/24/2015 13:55

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 20:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 136954 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	4.2		1.0	0.24
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	1.0	U	1.0	0.17
71-55-6	1,1,1-Trichloroethane	1.0	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	3.5		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	2.3		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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 180-42353-14

Matrix: Water Lab File ID: 50330025.D

Analysis Method: 8260C Date Collected: 03/24/2015 13:55

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 20:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 136954 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)	116		64-135
2037-26-5	Toluene-d8 (Surr)	109		71-118
460-00-4	4-Bromofluorobenzene (Surr)	101		70-118
1868-53-7	Dibromofluoromethane (Surr)	110		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330025.D
Lims ID: 180-42353-C-14 Lab Sample ID: 180-42353-14
Client ID: HD-COD-SW-27-0/1-0
Sample Type: Client
Inject. Date: 30-Mar-2015 20:35:30 ALS Bottle#: 23 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-C-14
Misc. Info.: 180-0006238-025
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 08:48:55 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 08:48:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.293	4.301	-0.008	98	94221	1000.0	
* 2 Fluorobenzene (IS)	96	7.274	7.282	-0.008	100	376200	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.367	-0.003	99	80781	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.684	-0.002	93	114953	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.538	6.535	0.003	55	93877	54.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.903	6.900	0.003	97	130757	58.0	
$ 7 Toluene-d8 (Surr)	98	8.929	8.926	0.003	100	351799	54.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.532	11.536	-0.004	97	116685	50.3	
12 Chloromethane	50		1.784				ND	
13 Vinyl chloride	62		1.912				ND	
15 Bromomethane	94		2.259				ND	
16 Chloroethane	64		2.399				ND	
22 1,1-Dichloroethene	96	3.399	3.390	0.009	64	2486	1.15	
24 Acetone	43	3.496	3.506	-0.010	53	4392	5.70	M
26 Carbon disulfide	76		3.658				ND	
31 Methylene Chloride	84		4.151				ND	
33 Acrylonitrile	53		4.552				ND	
34 trans-1,2-Dichloroethene	96		4.570				ND	
35 Methyl tert-butyl ether	73		4.595				ND	
37 1,1-Dichloroethane	63		5.173				ND	
45 cis-1,2-Dichloroethene	96	5.942	5.939	0.003	84	50083	21.2	
46 2-Butanone (MEK)	43		5.994				ND	
49 Chlorobromomethane	128		6.231				ND	
52 Chloroform	83	6.355	6.347	0.008	28	2829	0.7775	
53 1,1,1-Trichloroethane	97	6.532	6.535	-0.003	55	2546	1.10	
56 Carbon tetrachloride	117		6.718				ND	
58 Benzene	78		6.955				ND	
59 1,2-Dichloroethane	62		6.986				ND	
64 Trichloroethene	130	7.669	7.667	0.002	95	39050	17.5	
67 1,2-Dichloropropane	63		7.904				ND	
70 1,4-Dioxane	88		8.062				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.196				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.823				ND	
76 Toluene	91		8.993				ND	
77 trans-1,3-Dichloropropene	75		9.218				ND	
79 1,1,2-Trichloroethane	97		9.401				ND	
80 Tetrachloroethene	164	9.537	9.541	-0.004	90	18375	11.3	
82 2-Hexanone	43		9.662				ND	
84 Chlorodibromomethane	129		9.796				ND	
85 Ethylene Dibromide	107		9.900				ND	
87 Chlorobenzene	112		10.392				ND	
89 1,1,1,2-Tetrachloroethane	131		10.478				ND	
90 Ethylbenzene	106		10.502				ND	
91 m-Xylene & p-Xylene	106		10.624				ND	
92 o-Xylene	106		11.013				ND	
93 Styrene	104		11.025				ND	
94 Bromoform	173		11.208				ND	
99 1,1,2,2-Tetrachloroethane	83		11.676				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

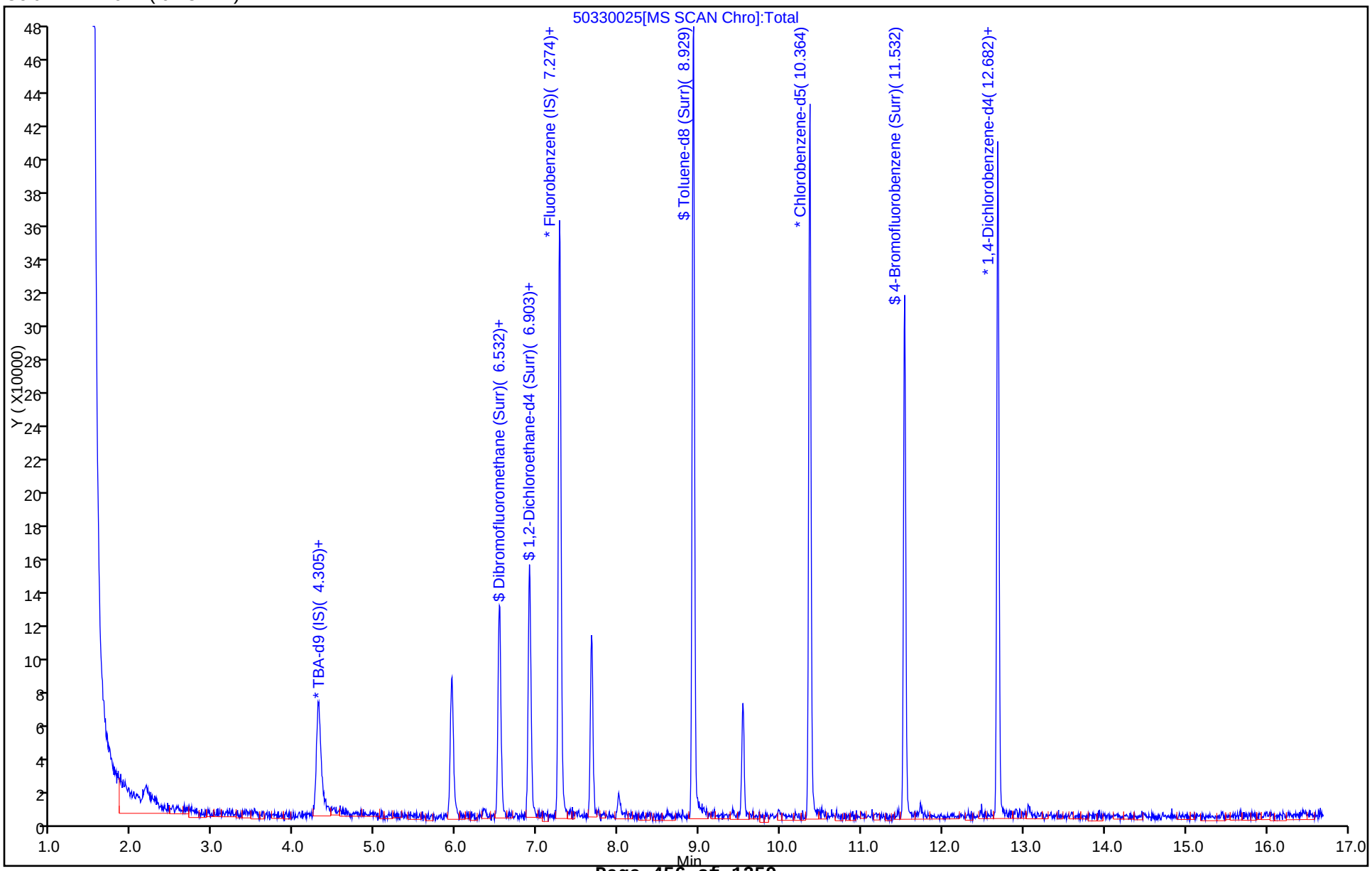
Report Date: 31-Mar-2015 08:48:55 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330025.D

Injection Date:	30-Mar-2015 20:35:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-42353-C-14	Lab Sample ID:	180-42353-14	Worklist Smp#:	25
Client ID:	HD-COD-SW-27-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

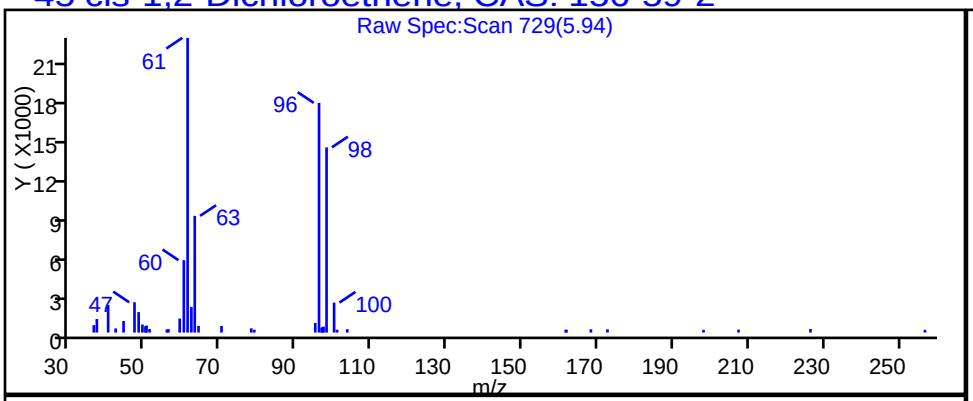


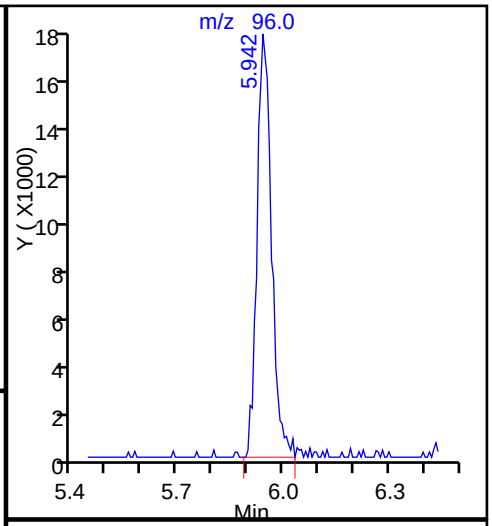
Report Date: 31-Mar-2015 08:48:55 Chrom Revision: 2.2 13-Mar-2015 11:20:44

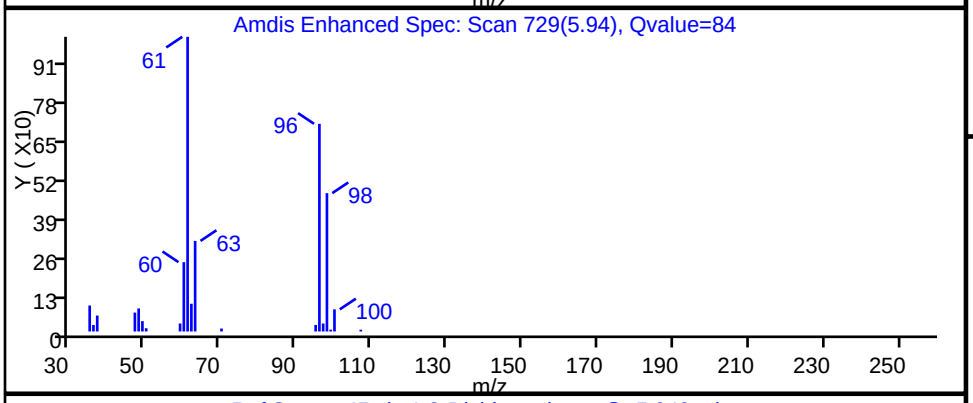
TestAmerica Pittsburgh

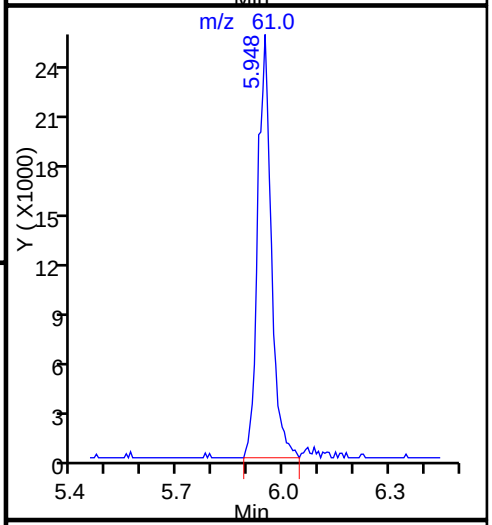
Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330025.D				
Injection Date:	30-Mar-2015 20:35:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-14	Lab Sample ID:	180-42353-14		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	001562	ALS Bottle#:	23	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

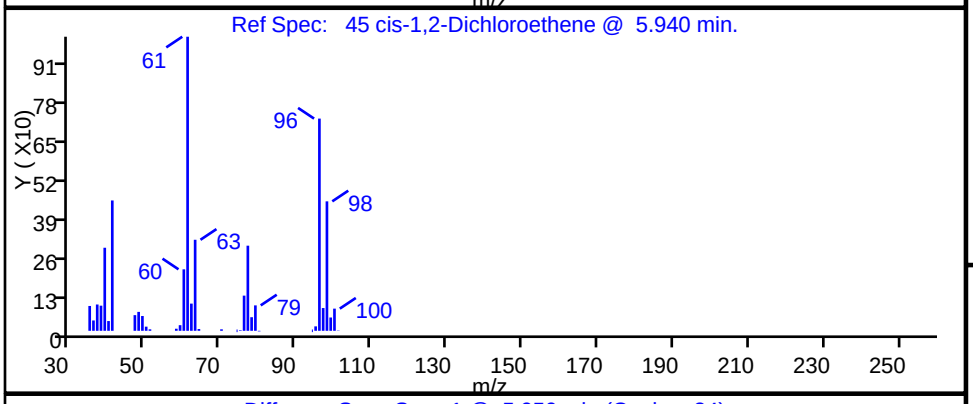
45 cis-1,2-Dichloroethene, CAS: 156-59-2

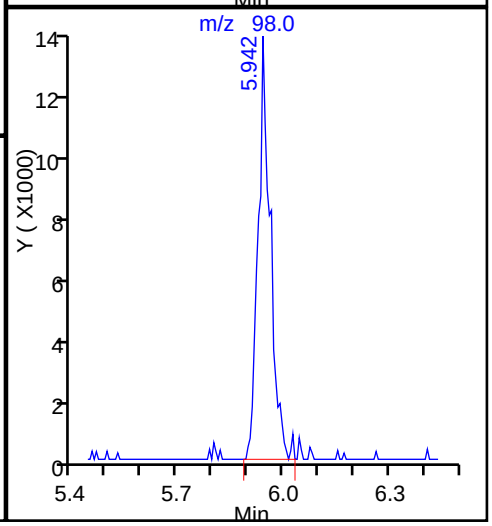


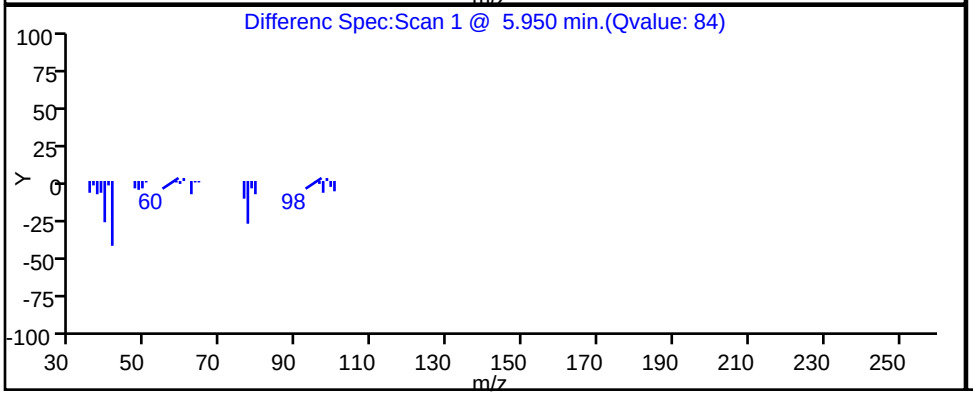










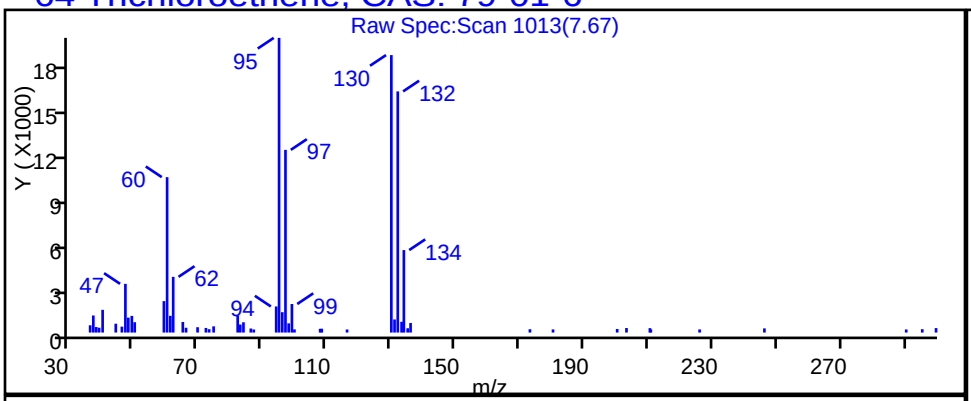


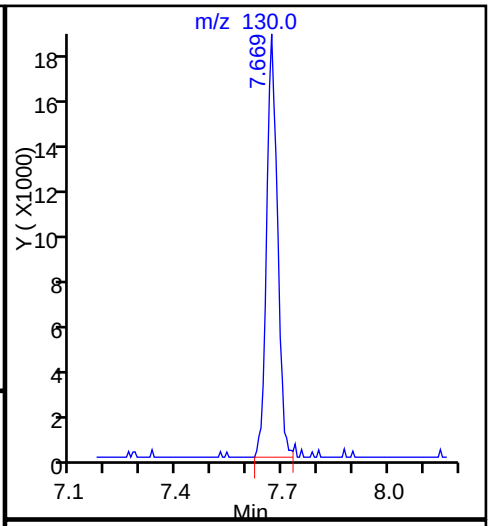
Report Date: 31-Mar-2015 08:48:55 Chrom Revision: 2.2 13-Mar-2015 11:20:44

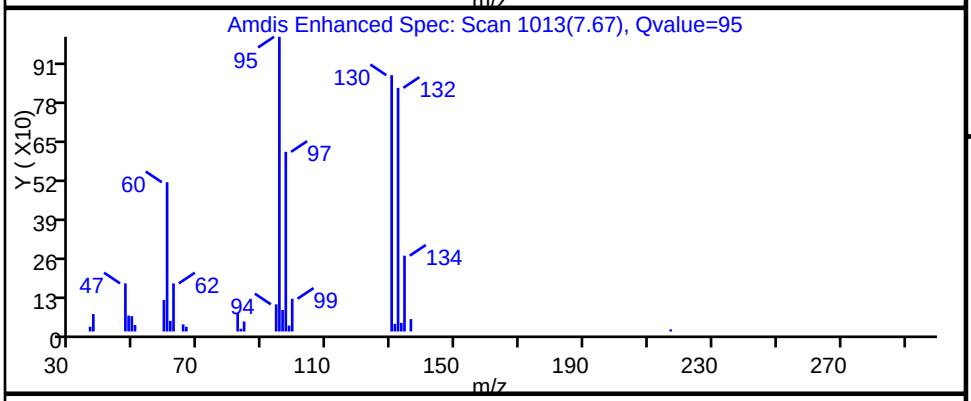
TestAmerica Pittsburgh

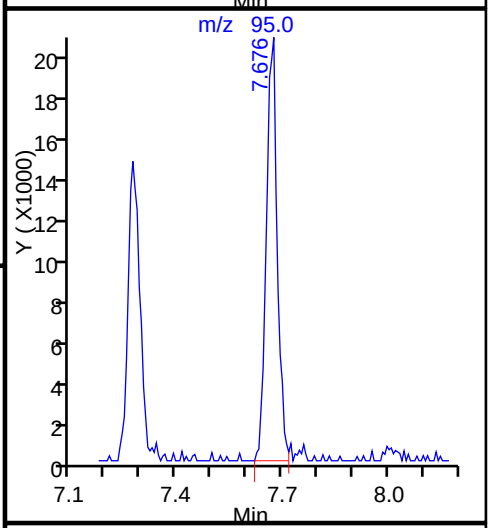
Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330025.D				
Injection Date:	30-Mar-2015 20:35:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-14	Lab Sample ID:	180-42353-14		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	001562	ALS Bottle#:	23	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

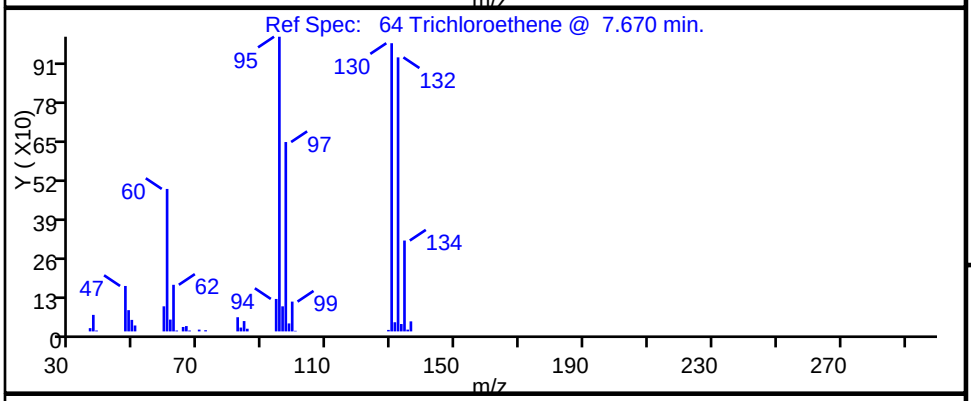
64 Trichloroethene, CAS: 79-01-6

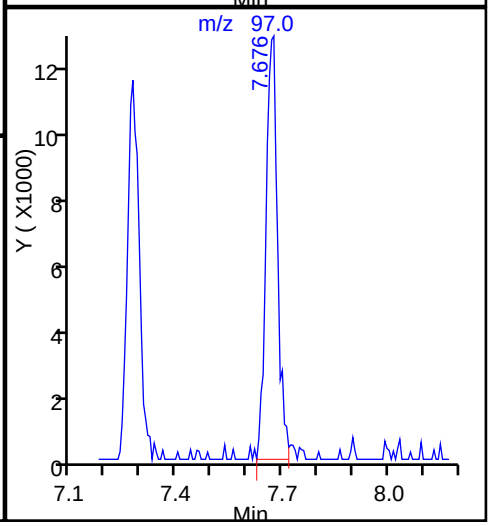


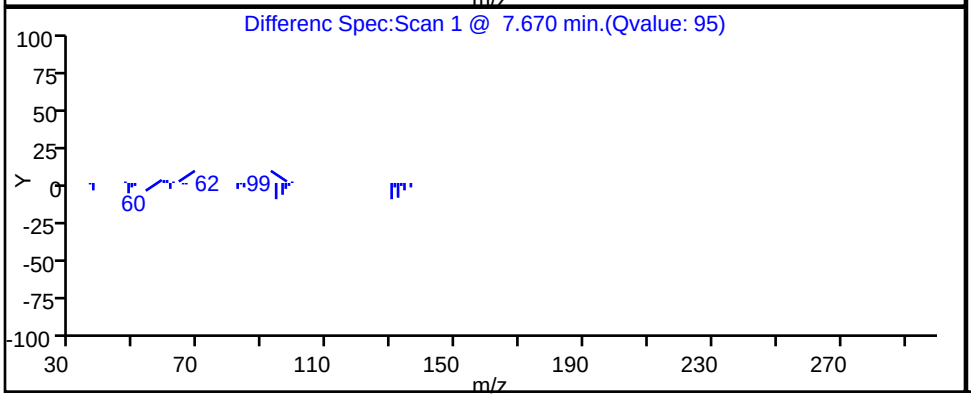










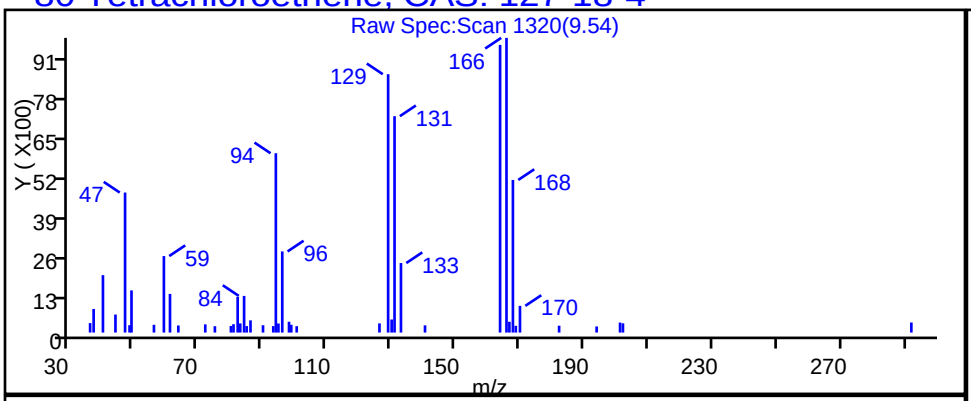


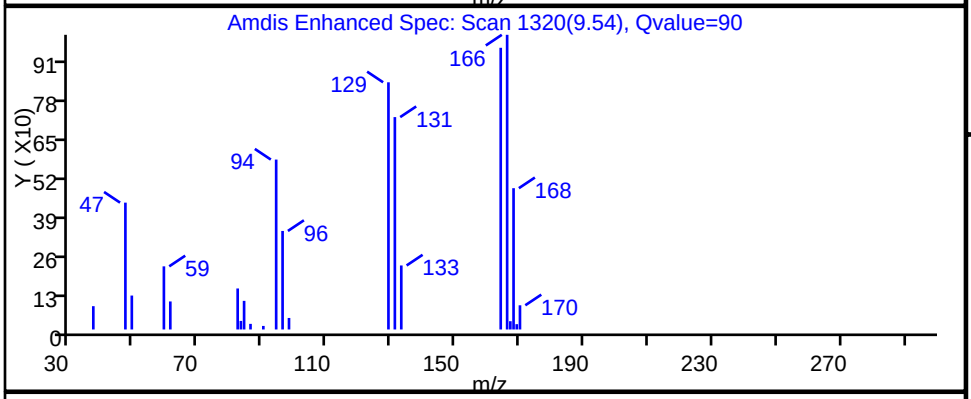
Report Date: 31-Mar-2015 08:48:55 Chrom Revision: 2.2 13-Mar-2015 11:20:44

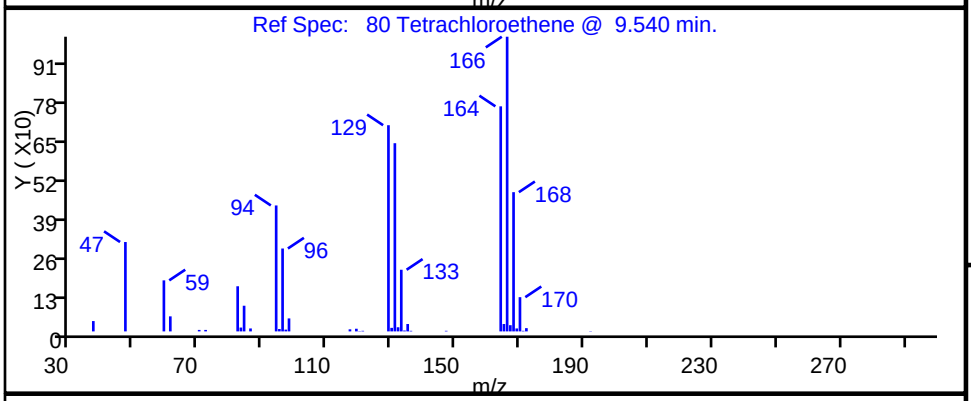
TestAmerica Pittsburgh

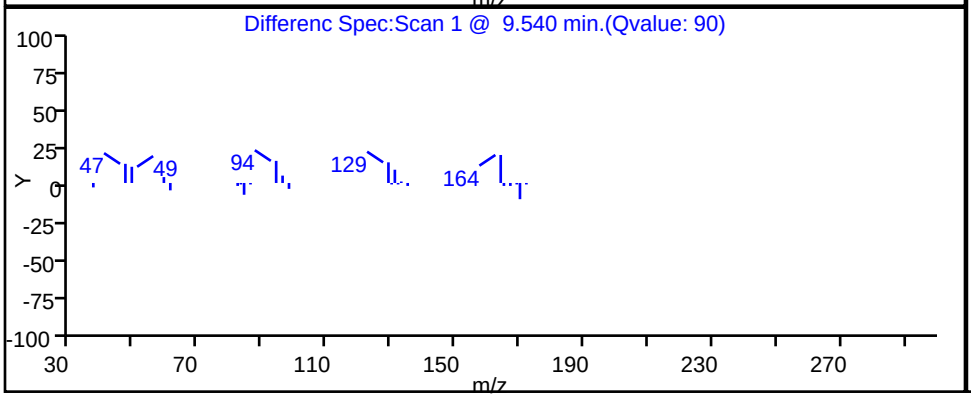
Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330025.D		
Injection Date:	30-Mar-2015 20:35:30	Instrument ID:	CHHP5
Lims ID:	180-42353-C-14	Lab Sample ID:	180-42353-14
Client ID:	HD-COD-SW-27-0/1-0		
Operator ID:	001562	ALS Bottle#:	23 Worklist Smp#: 25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

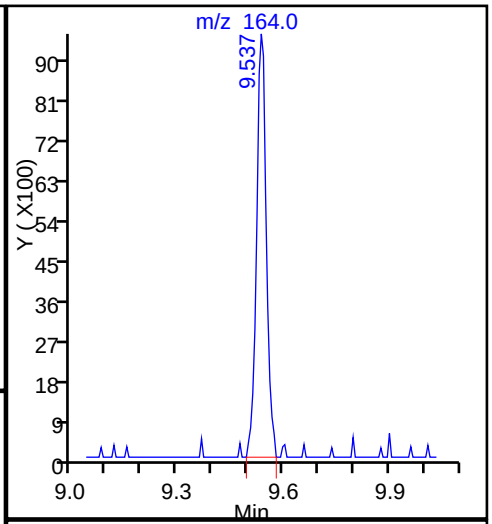
80 Tetrachloroethene, CAS: 127-18-4

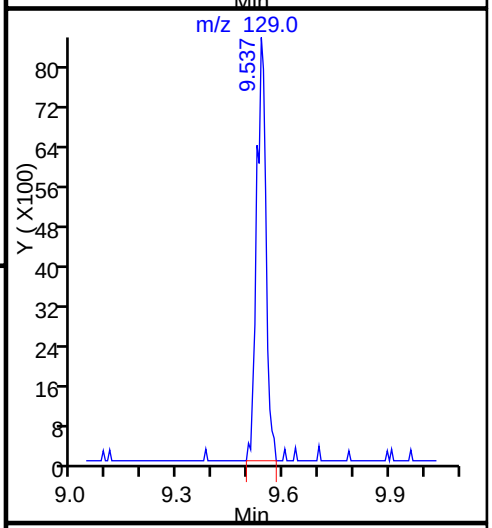


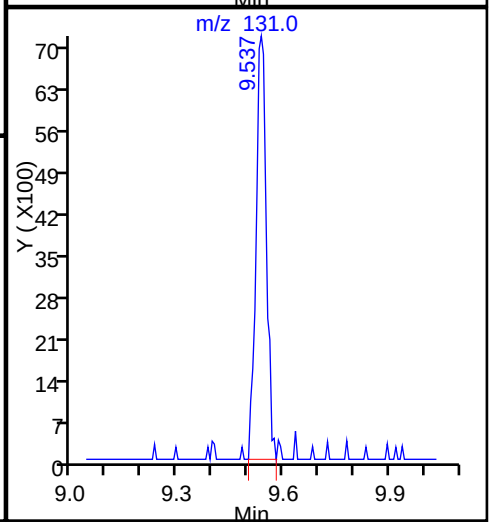












Manual Integration/User Assign Peak Report

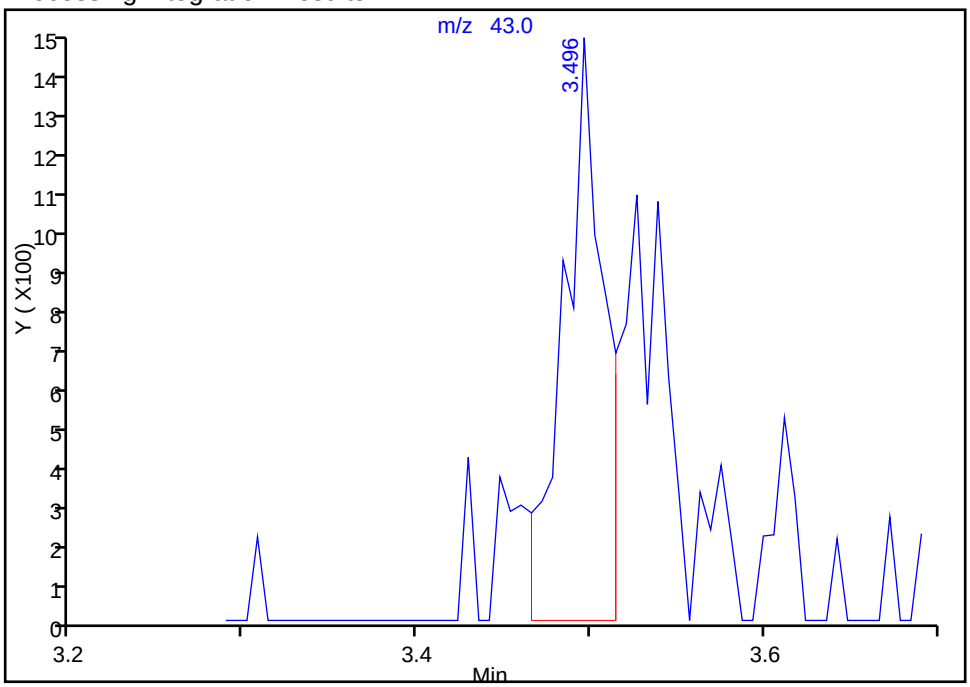
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330025.D				
Injection Date:	30-Mar-2015 20:35:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-14	Lab Sample ID:	180-42353-14		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	001562	ALS Bottle#:	23	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

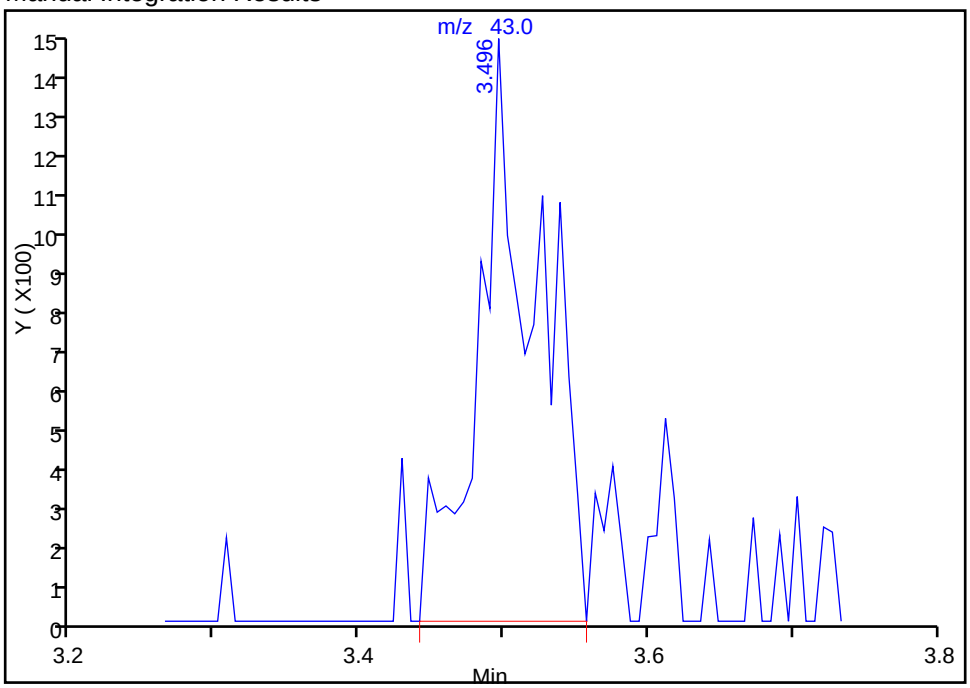
Processing Integration Results

RT: 3.50
Area: 2434
Amount: 3.158352
Amount Units: ng



Manual Integration Results

RT: 3.50
Area: 4392
Amount: 5.699048
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 08:48:55
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 180-42353-15

Matrix: Water Lab File ID: 50330026.D

Analysis Method: 8260C Date Collected: 03/24/2015 13:00

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 21:00

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.: 136954 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	0.41	J	1.0	0.24
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	0.20	J	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	0.37	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	0.19	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	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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 180-42353-15

Matrix: Water Lab File ID: 50330026.D

Analysis Method: 8260C Date Collected: 03/24/2015 13:00

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 21:00

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.: 136954 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)	122		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)	115		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330026.D
Lims ID: 180-42353-C-15 Lab Sample ID: 180-42353-15
Client ID: HD-COD-SW-28-0/1-0
Sample Type: Client
Inject. Date: 30-Mar-2015 21:00:30 ALS Bottle#: 24 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-C-15
Misc. Info.: 180-0006238-026
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 09:15:38 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 09:38:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.311	4.301	0.010	96	91085	1000.0	
* 2 Fluorobenzene (IS)	96	7.280	7.282	-0.002	100	362118	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.367	-0.003	99	77316	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.688	12.684	0.004	94	113425	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.532	6.535	-0.003	54	94372	57.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.909	6.900	0.009	98	132071	60.8	
$ 7 Toluene-d8 (Surr)	98	8.922	8.926	-0.004	100	340722	55.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.532	11.536	-0.004	97	110583	49.8	
12 Chloromethane	50		1.784				ND	
13 Vinyl chloride	62		1.912				ND	
15 Bromomethane	94		2.259				ND	
16 Chloroethane	64		2.399				ND	
22 1,1-Dichloroethene	96		3.390				ND	
24 Acetone	43	3.520	3.506	0.014	65	5833	7.86	
26 Carbon disulfide	76		3.658				ND	
31 Methylene Chloride	84		4.151				ND	
33 Acrylonitrile	53		4.552				ND	
34 trans-1,2-Dichloroethene	96		4.570				ND	
35 Methyl tert-butyl ether	73		4.595				ND	
37 1,1-Dichloroethane	63		5.173				ND	
45 cis-1,2-Dichloroethene	96	5.941	5.939	0.002	83	4633	2.04	
46 2-Butanone (MEK)	43		5.994				ND	
49 Chlorobromomethane	128		6.231				ND	
52 Chloroform	83	6.349	6.347	0.002	57	3588	1.02	
53 1,1,1-Trichloroethane	97		6.535				ND	
56 Carbon tetrachloride	117		6.718				ND	
58 Benzene	78		6.955				ND	
59 1,2-Dichloroethane	62		6.986				ND	
64 Trichloroethene	130	7.675	7.667	0.008	93	3983	1.85	
67 1,2-Dichloropropane	63		7.904				ND	
70 1,4-Dioxane	88		8.062				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83	8.192	8.196	-0.004	1	639	0.2740	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.823				ND	
76 Toluene	91		8.993				ND	
77 trans-1,3-Dichloropropene	75		9.218				ND	
79 1,1,2-Trichloroethane	97		9.401				ND	
80 Tetrachloroethene	164	9.537	9.541	-0.004	80	1503	0.9698	
82 2-Hexanone	43		9.662				ND	
84 Chlorodibromomethane	129		9.796				ND	
85 Ethylene Dibromide	107		9.900				ND	
87 Chlorobenzene	112		10.392				ND	
89 1,1,1,2-Tetrachloroethane	131		10.478				ND	
90 Ethylbenzene	106		10.502				ND	
91 m-Xylene & p-Xylene	106		10.624				ND	
92 o-Xylene	106		11.013				ND	
93 Styrene	104		11.025				ND	
94 Bromoform	173		11.208				ND	
99 1,1,2,2-Tetrachloroethane	83		11.676				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

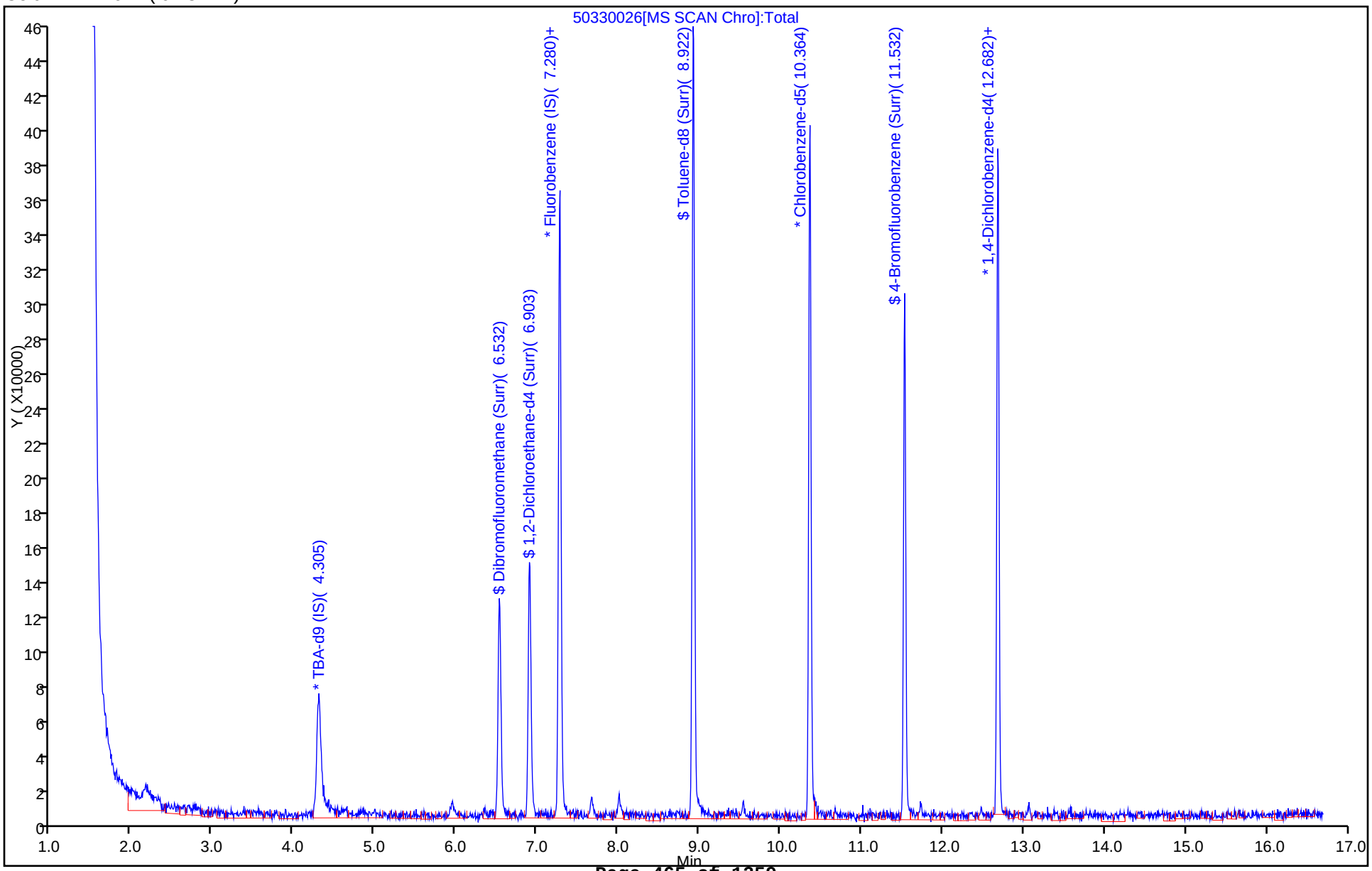
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 31-Mar-2015 09:38:34 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330026.D				
Injection Date:	30-Mar-2015 21:00:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-42353-C-15	Lab Sample ID:	180-42353-15	Worklist Smp#:	26
Client ID:	HD-COD-SW-28-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

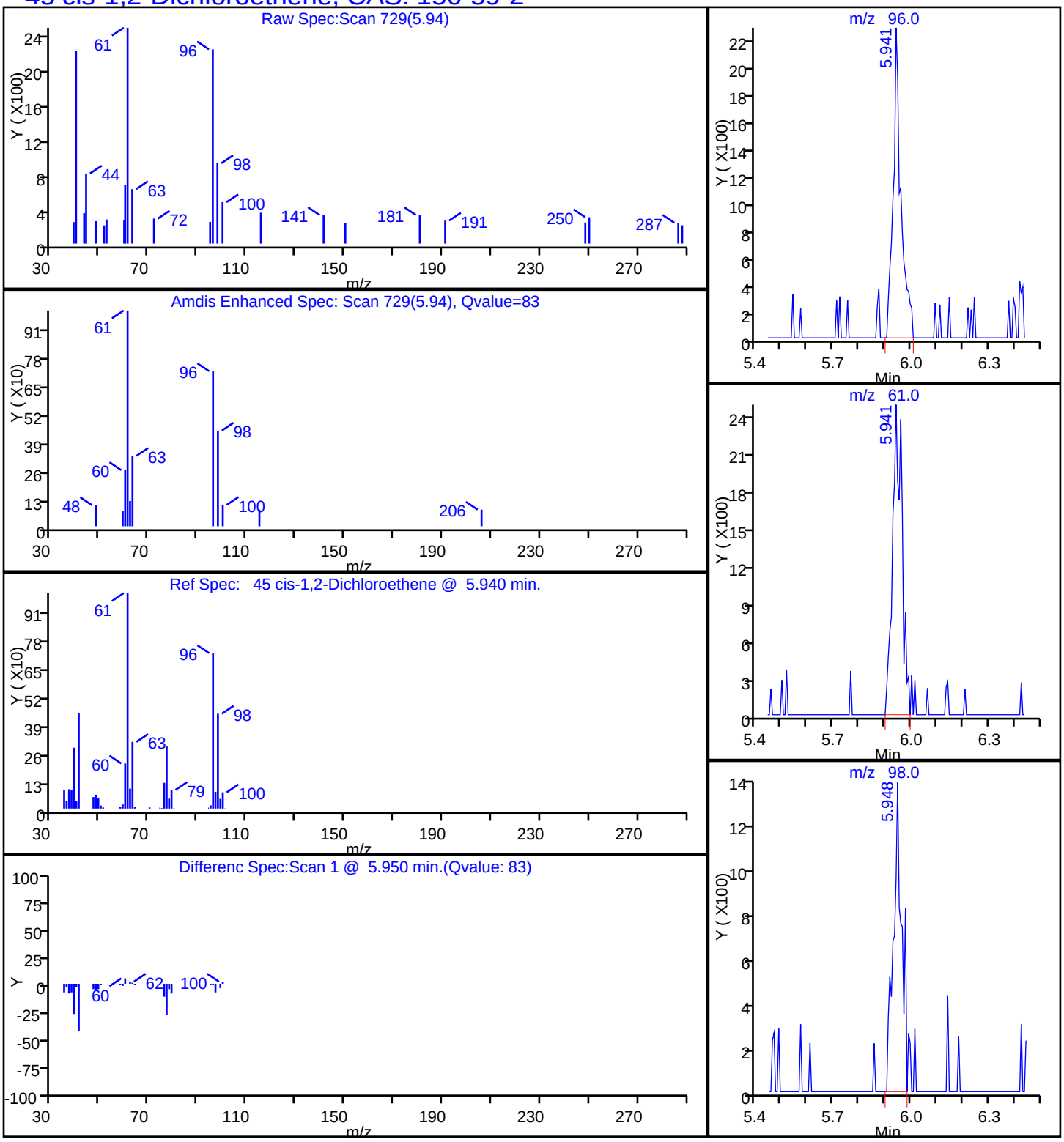


Report Date: 31-Mar-2015 09:38:35 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330026.D				
Injection Date:	30-Mar-2015 21:00:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-15	Lab Sample ID:	180-42353-15		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	001562	ALS Bottle#:	24	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

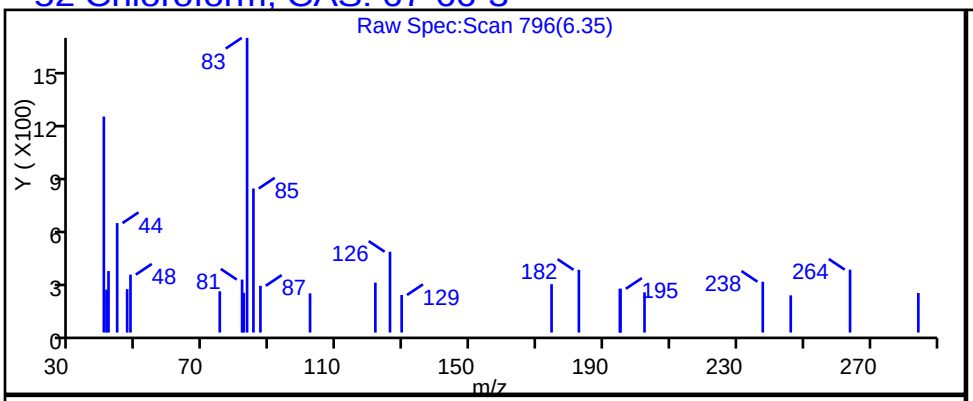


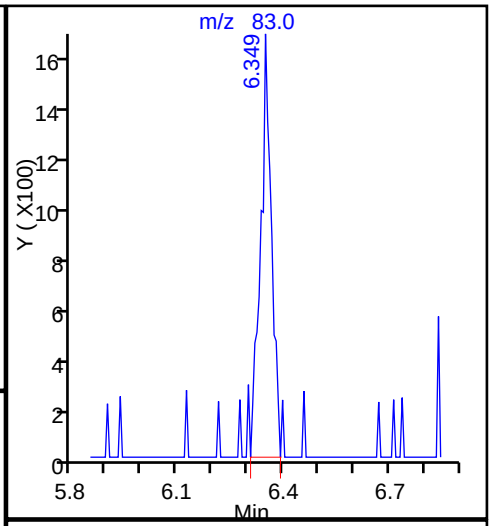
Report Date: 31-Mar-2015 09:38:35 Chrom Revision: 2.2 13-Mar-2015 11:20:44

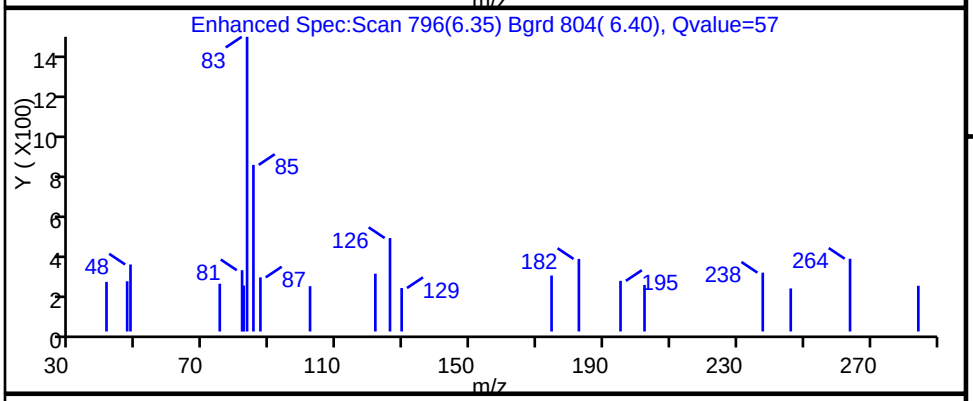
TestAmerica Pittsburgh

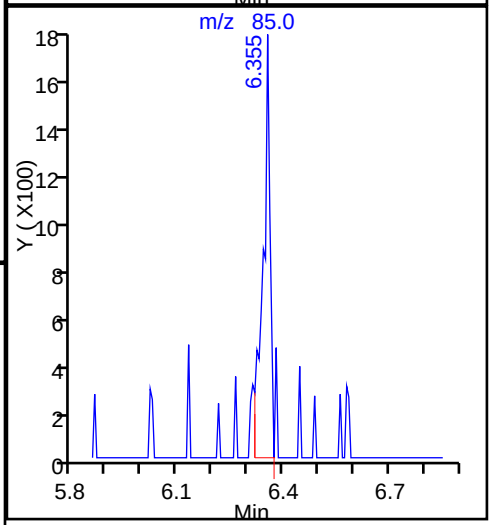
Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330026.D				
Injection Date:	30-Mar-2015 21:00:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-15	Lab Sample ID:	180-42353-15		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	001562	ALS Bottle#:	24	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

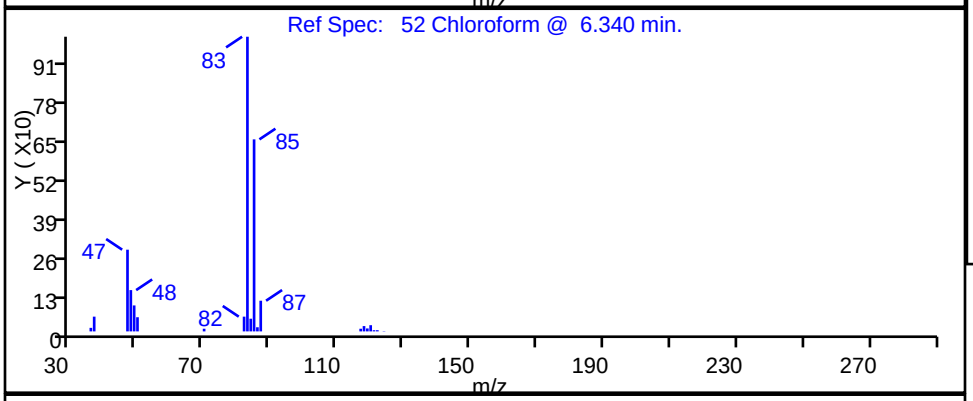
52 Chloroform, CAS: 67-66-3

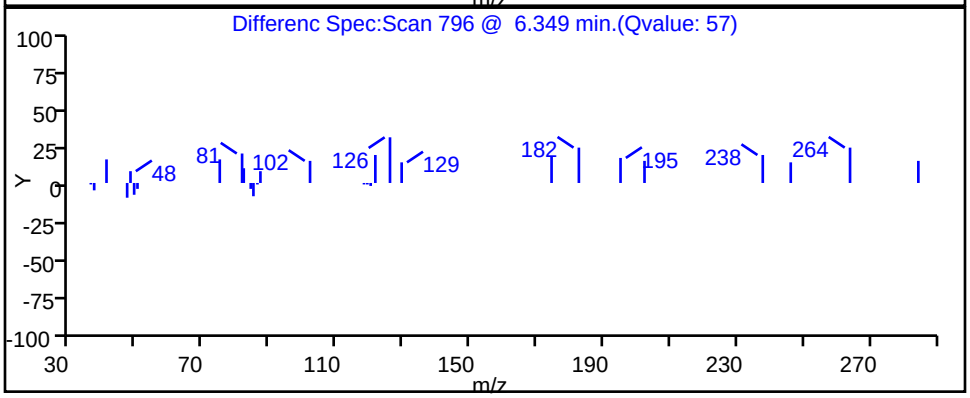










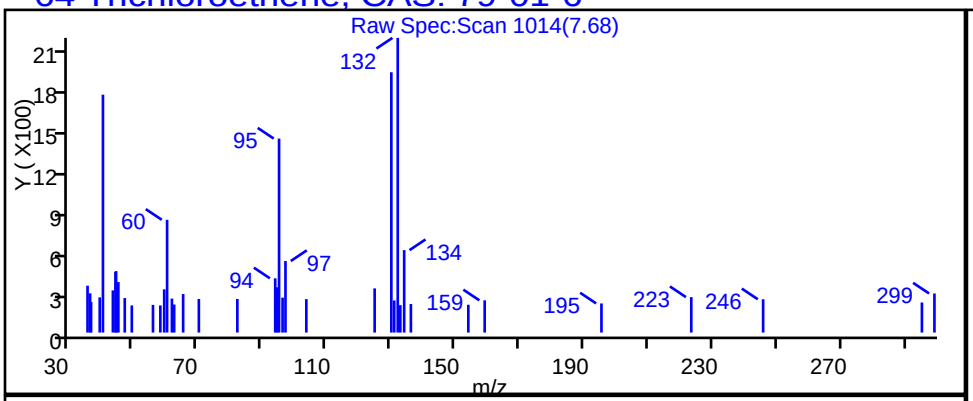


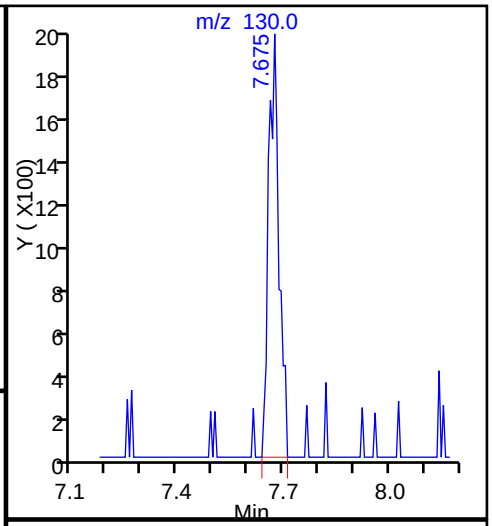
Report Date: 31-Mar-2015 09:38:35 Chrom Revision: 2.2 13-Mar-2015 11:20:44

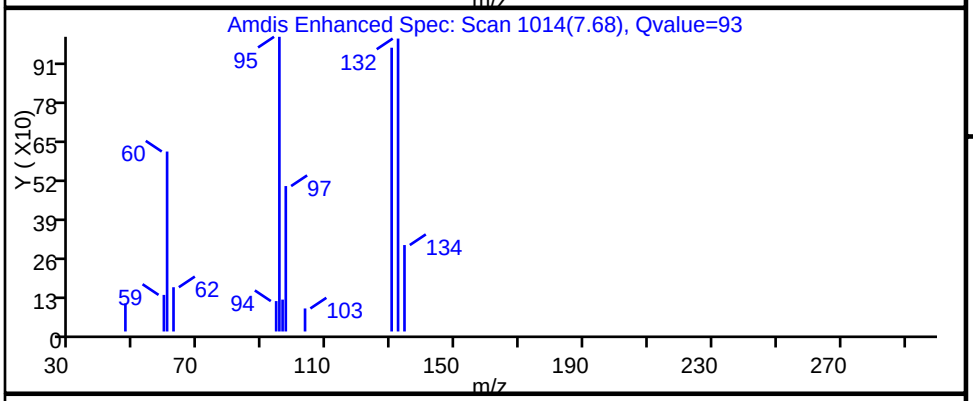
TestAmerica Pittsburgh

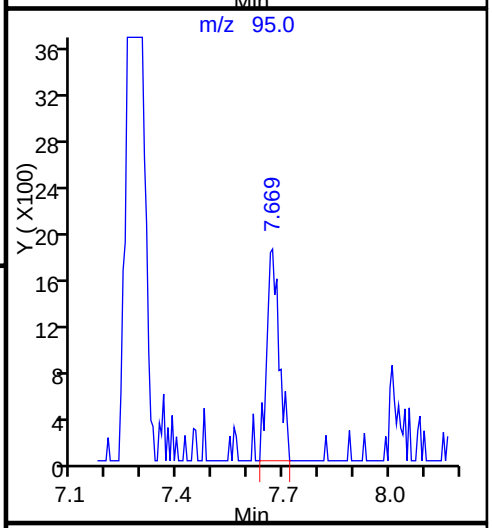
Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330026.D				
Injection Date:	30-Mar-2015 21:00:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-15	Lab Sample ID:	180-42353-15		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	001562	ALS Bottle#:	24	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

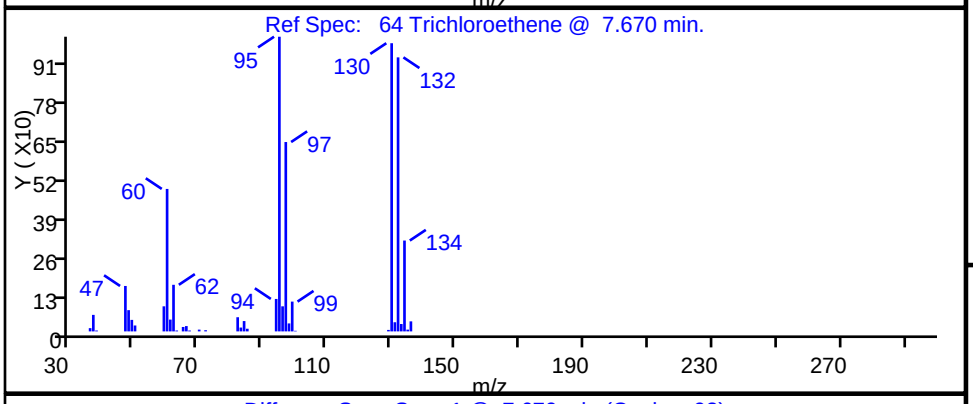
64 Trichloroethene, CAS: 79-01-6

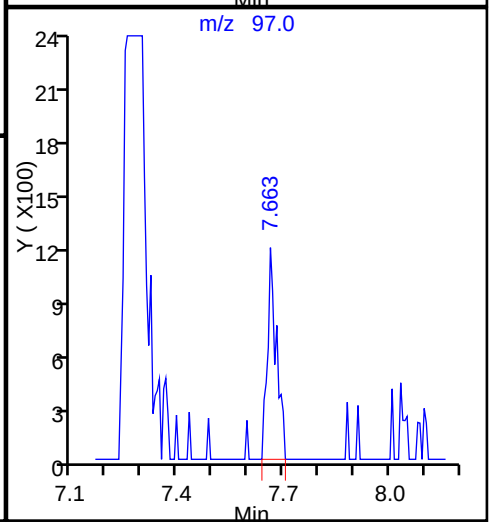


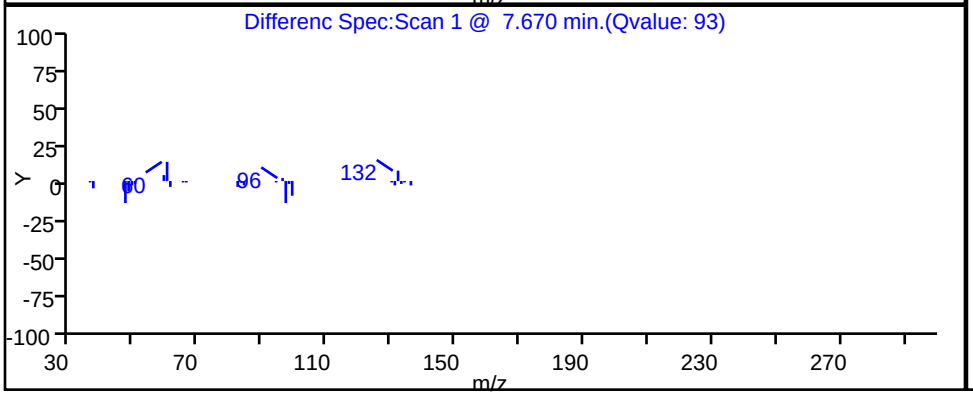










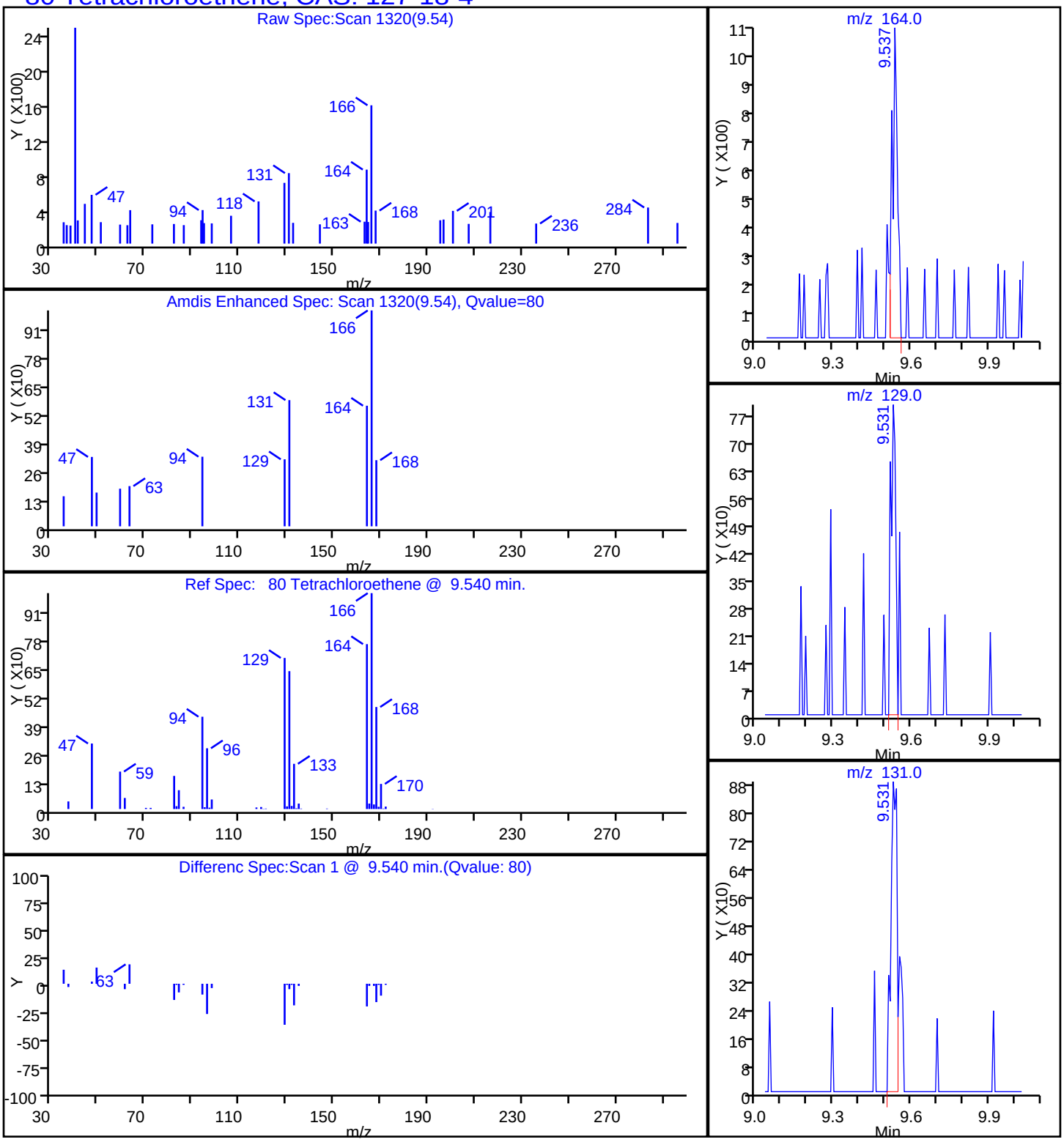


Report Date: 31-Mar-2015 09:38:35 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330026.D		
Injection Date:	30-Mar-2015 21:00:30	Instrument ID:	CHHP5
Lims ID:	180-42353-C-15	Lab Sample ID:	180-42353-15
Client ID:	HD-COD-SW-28-0/1-0		
Operator ID:	001562	ALS Bottle#:	24 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

80 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 | Lab Sample ID: 180-42353-16

Matrix: Water | Lab File ID: 50330027.D

Analysis Method: 8260C | Date Collected: 03/24/2015 09:00

Sample wt/vol: 5(mL) | Date Analyzed: 03/30/2015 21:24

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.: 136954 | 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	2.7	J	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.21
75-09-2	Methylene Chloride	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.17
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.18
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	0.30	J	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	0.31	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	0.23	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	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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 180-42353-16

Matrix: Water Lab File ID: 50330027.D

Analysis Method: 8260C Date Collected: 03/24/2015 09:00

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 21:24

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.: 136954 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)	117		64-135
2037-26-5	Toluene-d8 (Surr)	103		71-118
460-00-4	4-Bromofluorobenzene (Surr)	97		70-118
1868-53-7	Dibromofluoromethane (Surr)	113		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330027.D
Lims ID: 180-42353-C-16 Lab Sample ID: 180-42353-16
Client ID: HD-COD-SW-29-0/1-0
Sample Type: Client
Inject. Date: 30-Mar-2015 21:24:30 ALS Bottle#: 25 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-C-16
Misc. Info.: 180-0006238-027
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 08:52:10 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 08:52:10

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.293	4.301	-0.008	98	98632	1000.0	
*	2 Fluorobenzene (IS)	96	7.280	7.282	-0.002	100	365272	50.0	
*	3 Chlorobenzene-d5	119	10.364	10.367	-0.003	98	81373	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.682	12.684	-0.002	93	111188	50.0	
$	5 Dibromofluoromethane (Surr	113	6.531	6.535	-0.004	55	93602	56.3	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.903	6.900	0.003	97	128373	58.6	
$	7 Toluene-d8 (Surr)	98	8.928	8.926	0.002	100	334217	51.5	
$	8 4-Bromofluorobenzene (Surr	95	11.532	11.536	-0.004	98	112956	48.3	
	12 Chloromethane	50		1.784				ND	
	13 Vinyl chloride	62		1.912				ND	
	15 Bromomethane	94		2.259				ND	
	16 Chloroethane	64		2.399				ND	
	22 1,1-Dichloroethene	96		3.390				ND	
	24 Acetone	43	3.496	3.506	-0.010	82	10212	13.6	
	26 Carbon disulfide	76		3.658				ND	
	31 Methylene Chloride	84		4.151				ND	
	33 Acrylonitrile	53		4.552				ND	
	34 trans-1,2-Dichloroethene	96		4.570				ND	
	35 Methyl tert-butyl ether	73		4.595				ND	
	37 1,1-Dichloroethane	63		5.173				ND	
	45 cis-1,2-Dichloroethene	96	5.935	5.939	-0.004	10	3497	1.52	
	46 2-Butanone (MEK)	43		5.994				ND	
	49 Chlorobromomethane	128		6.231				ND	
	52 Chloroform	83		6.347				ND	
	53 1,1,1-Trichloroethane	97		6.535				ND	
	56 Carbon tetrachloride	117		6.718				ND	
	58 Benzene	78		6.955				ND	
	59 1,2-Dichloroethane	62		6.986				ND	
	64 Trichloroethene	130	7.669	7.667	0.002	88	3353	1.55	M
	67 1,2-Dichloropropane	63		7.904				ND	
	70 1,4-Dioxane	88		8.062				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.196				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.823				ND	
76 Toluene	91		8.993				ND	
77 trans-1,3-Dichloropropene	75		9.218				ND	
79 1,1,2-Trichloroethane	97		9.401				ND	
80 Tetrachloroethene	164	9.537	9.541	-0.004	94	1911	1.17	
82 2-Hexanone	43		9.662				ND	
84 Chlorodibromomethane	129		9.796				ND	
85 Ethylene Dibromide	107		9.900				ND	
87 Chlorobenzene	112		10.392				ND	
89 1,1,1,2-Tetrachloroethane	131		10.478				ND	
90 Ethylbenzene	106		10.502				ND	
91 m-Xylene & p-Xylene	106		10.624				ND	
92 o-Xylene	106		11.013				ND	
93 Styrene	104		11.025				ND	
94 Bromoform	173		11.208				ND	
99 1,1,2,2-Tetrachloroethane	83		11.676				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

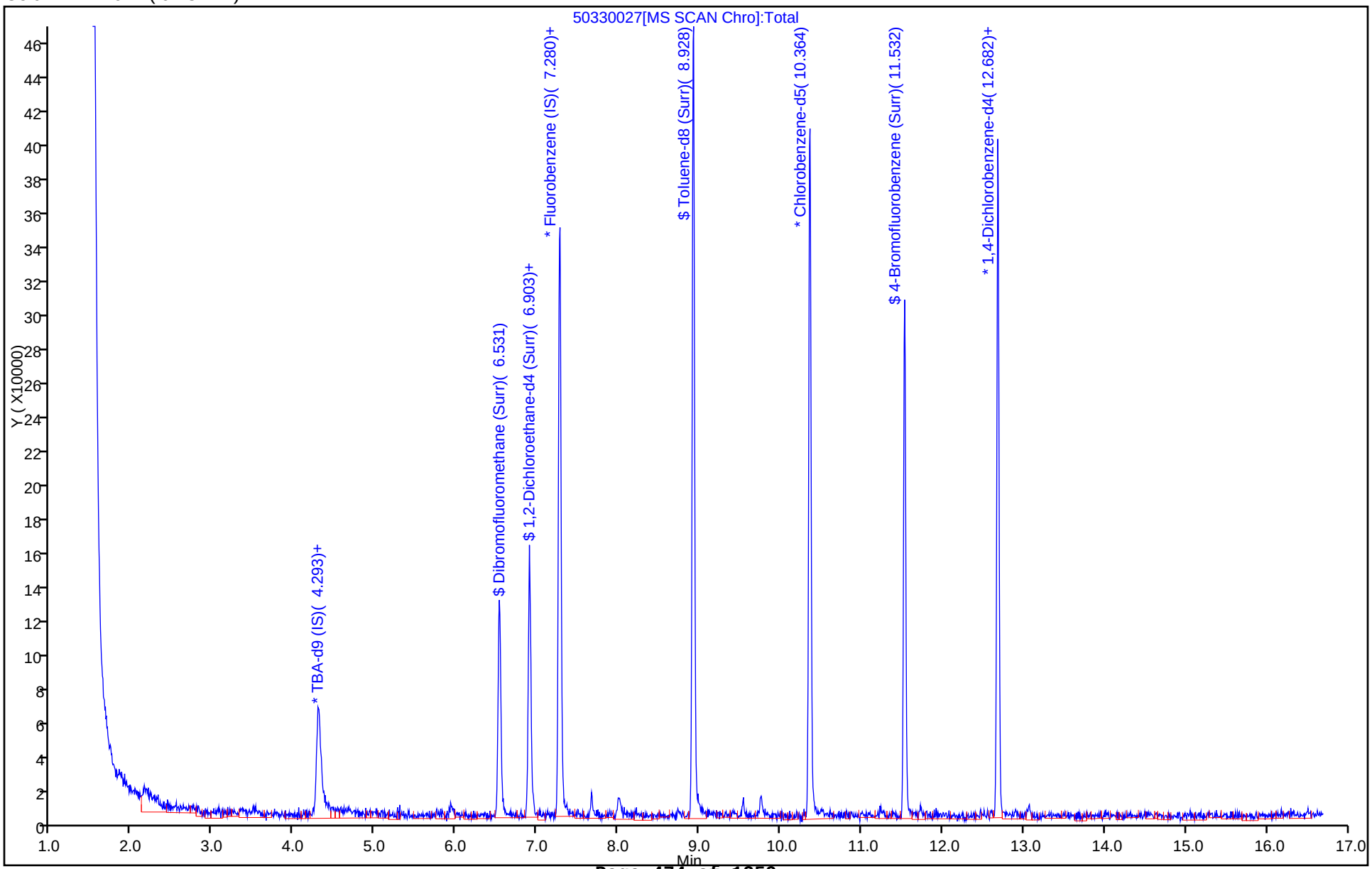
Report Date: 31-Mar-2015 08:52:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330027.D

Injection Date:	30-Mar-2015 21:24:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-42353-C-16	Lab Sample ID:	180-42353-16	Worklist Smp#:	27
Client ID:	HD-COD-SW-29-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

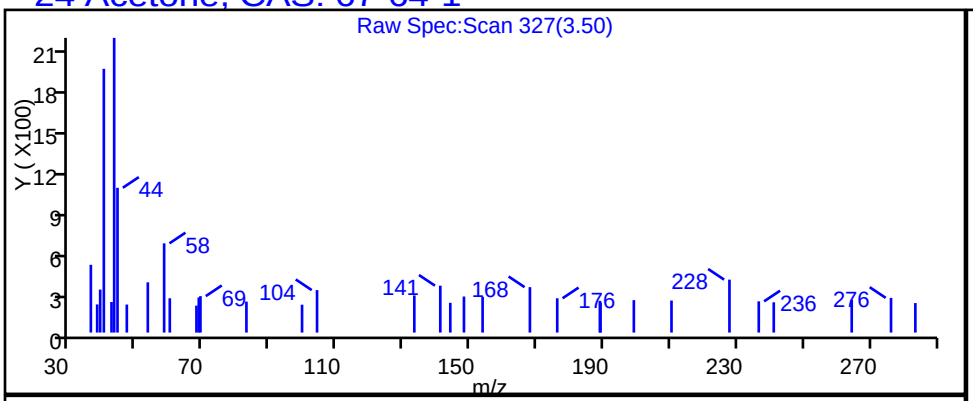


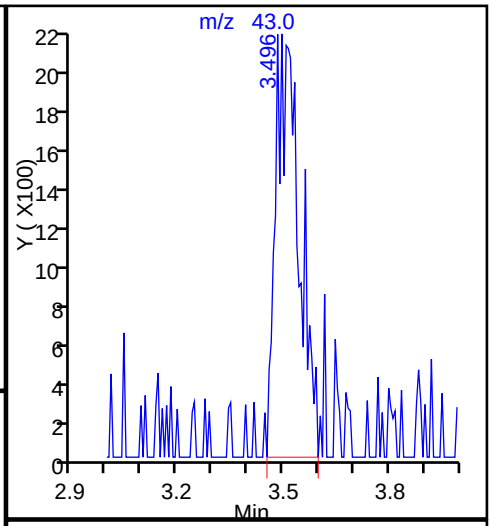
Report Date: 31-Mar-2015 08:52:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

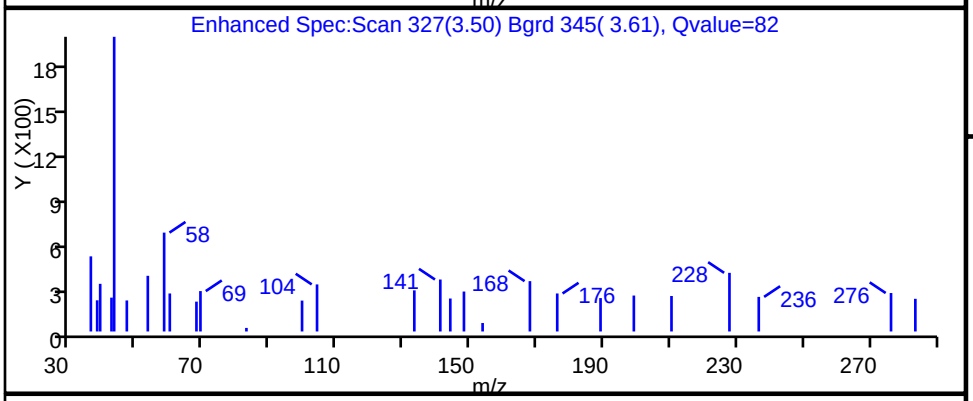
TestAmerica Pittsburgh

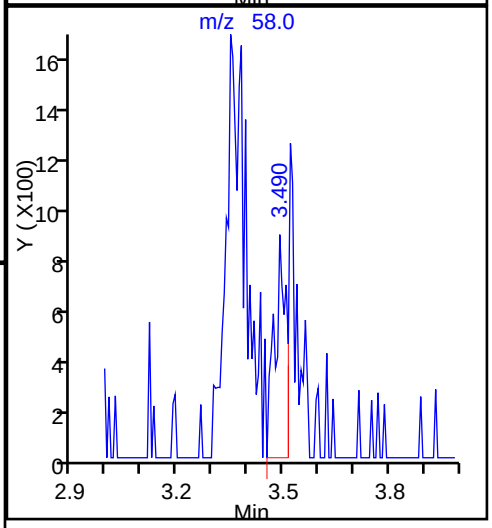
Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330027.D				
Injection Date:	30-Mar-2015 21:24:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-16	Lab Sample ID:	180-42353-16		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	001562	ALS Bottle#:	25	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

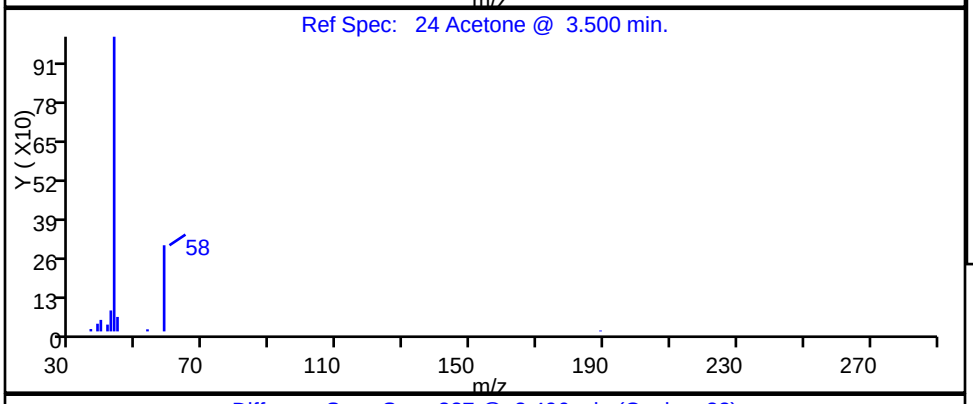
24 Acetone, CAS: 67-64-1

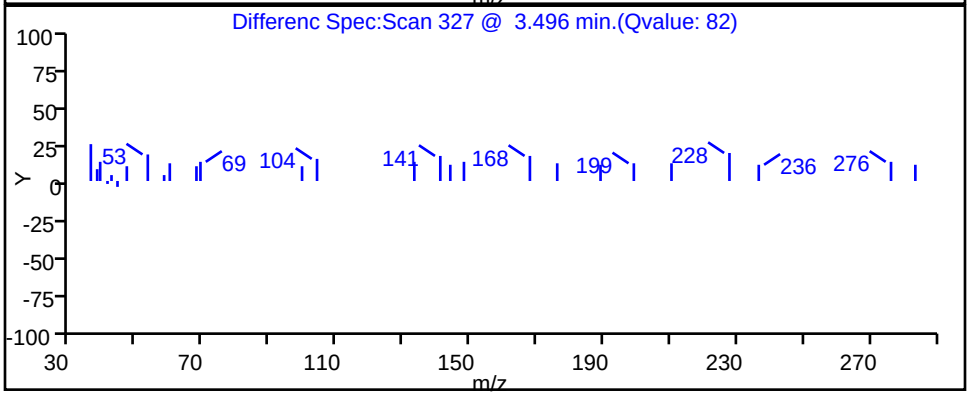










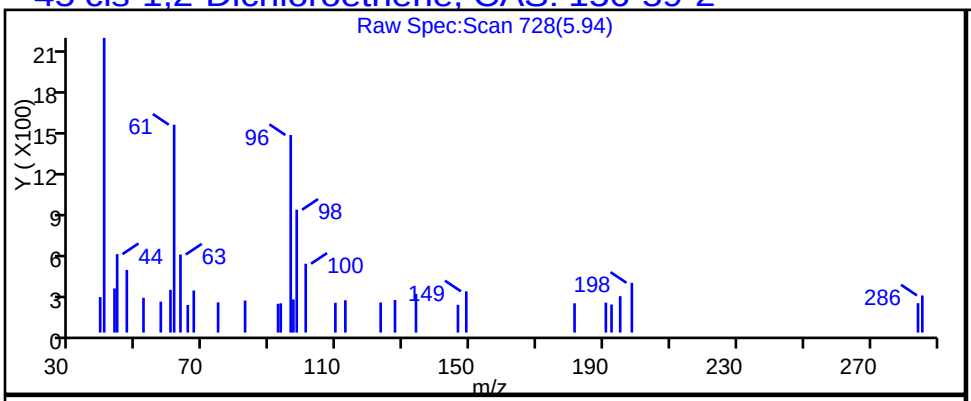


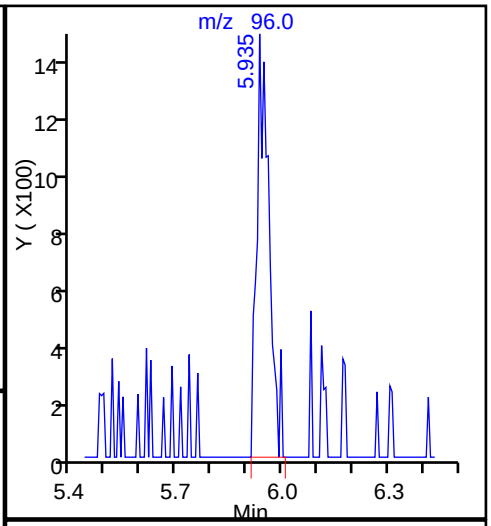
Report Date: 31-Mar-2015 08:52:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

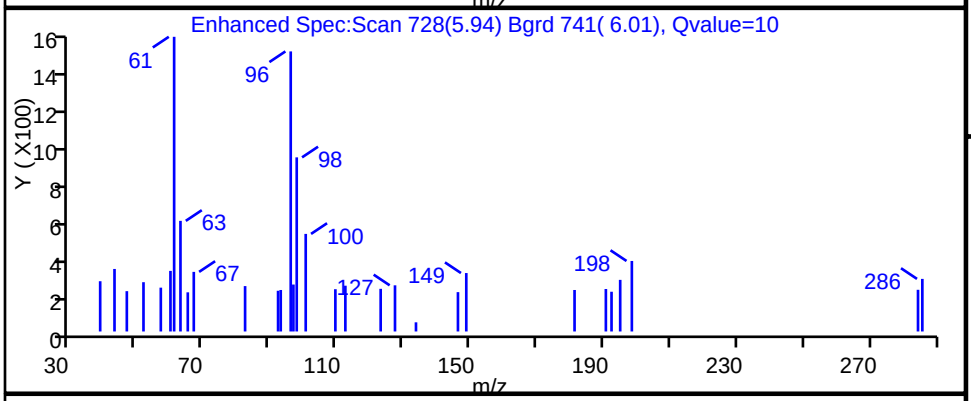
TestAmerica Pittsburgh

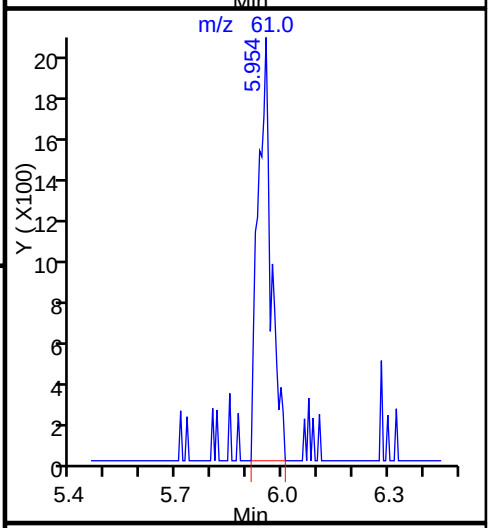
Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330027.D				
Injection Date:	30-Mar-2015 21:24:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-16	Lab Sample ID:	180-42353-16		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	001562	ALS Bottle#:	25	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

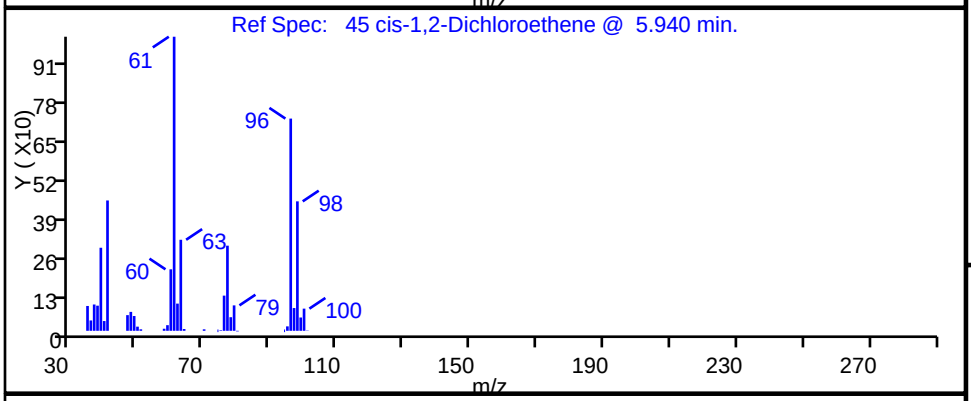
45 cis-1,2-Dichloroethene, CAS: 156-59-2

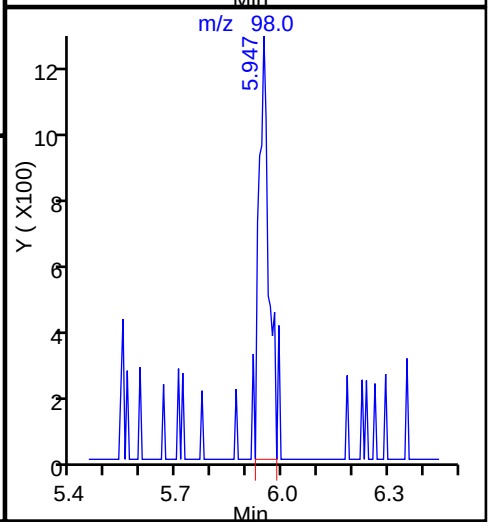


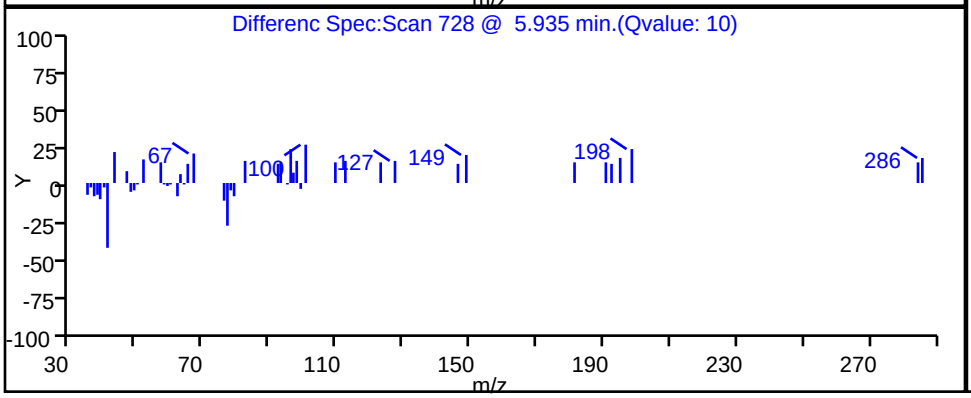










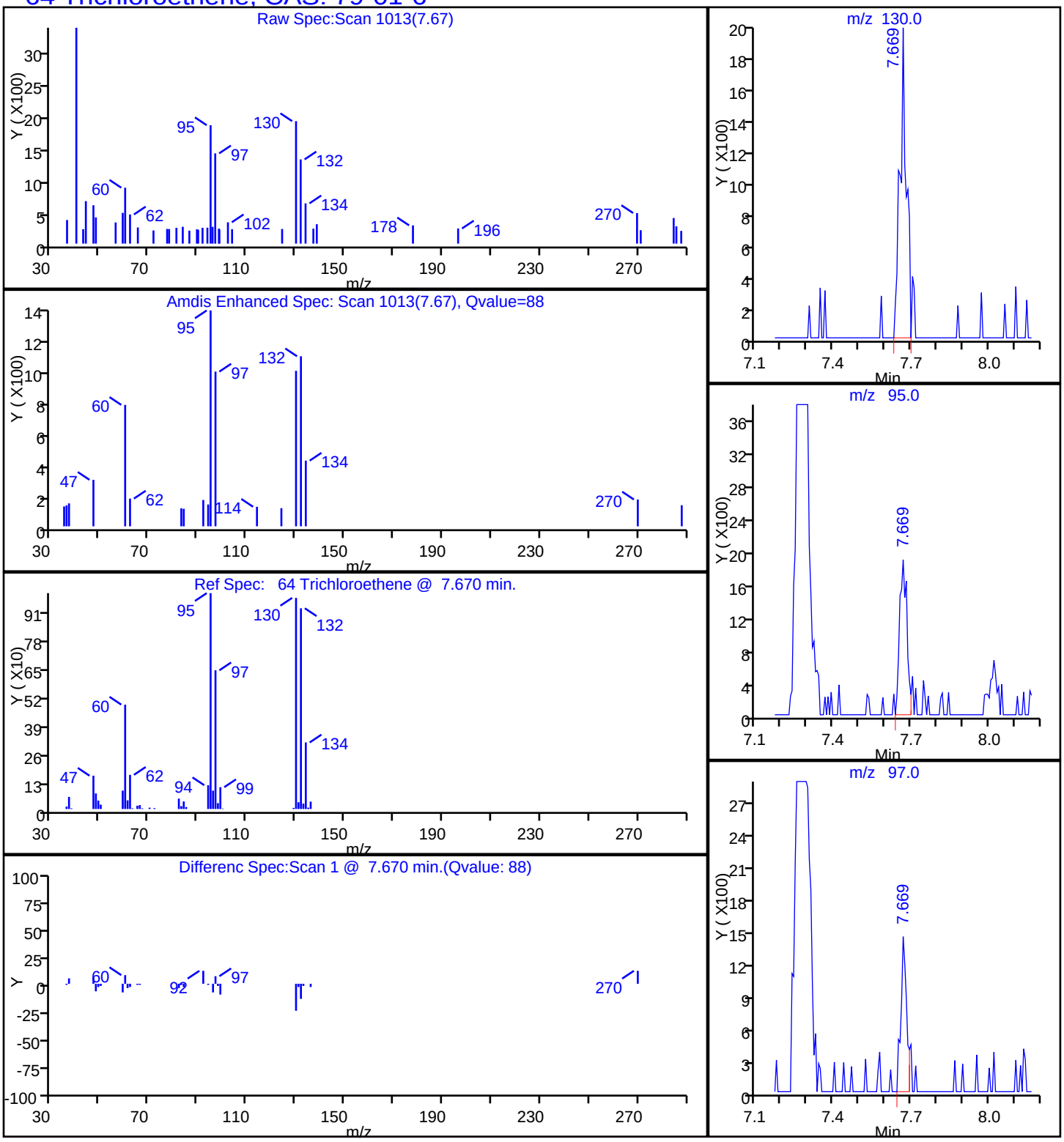


Report Date: 31-Mar-2015 08:52:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330027.D		
Injection Date:	30-Mar-2015 21:24:30	Instrument ID:	CHHP5
Lims ID:	180-42353-C-16	Lab Sample ID:	180-42353-16
Client ID:	HD-COD-SW-29-0/1-0		
Operator ID:	001562	ALS Bottle#:	25 Worklist Smp#: 27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

64 Trichloroethene, CAS: 79-01-6

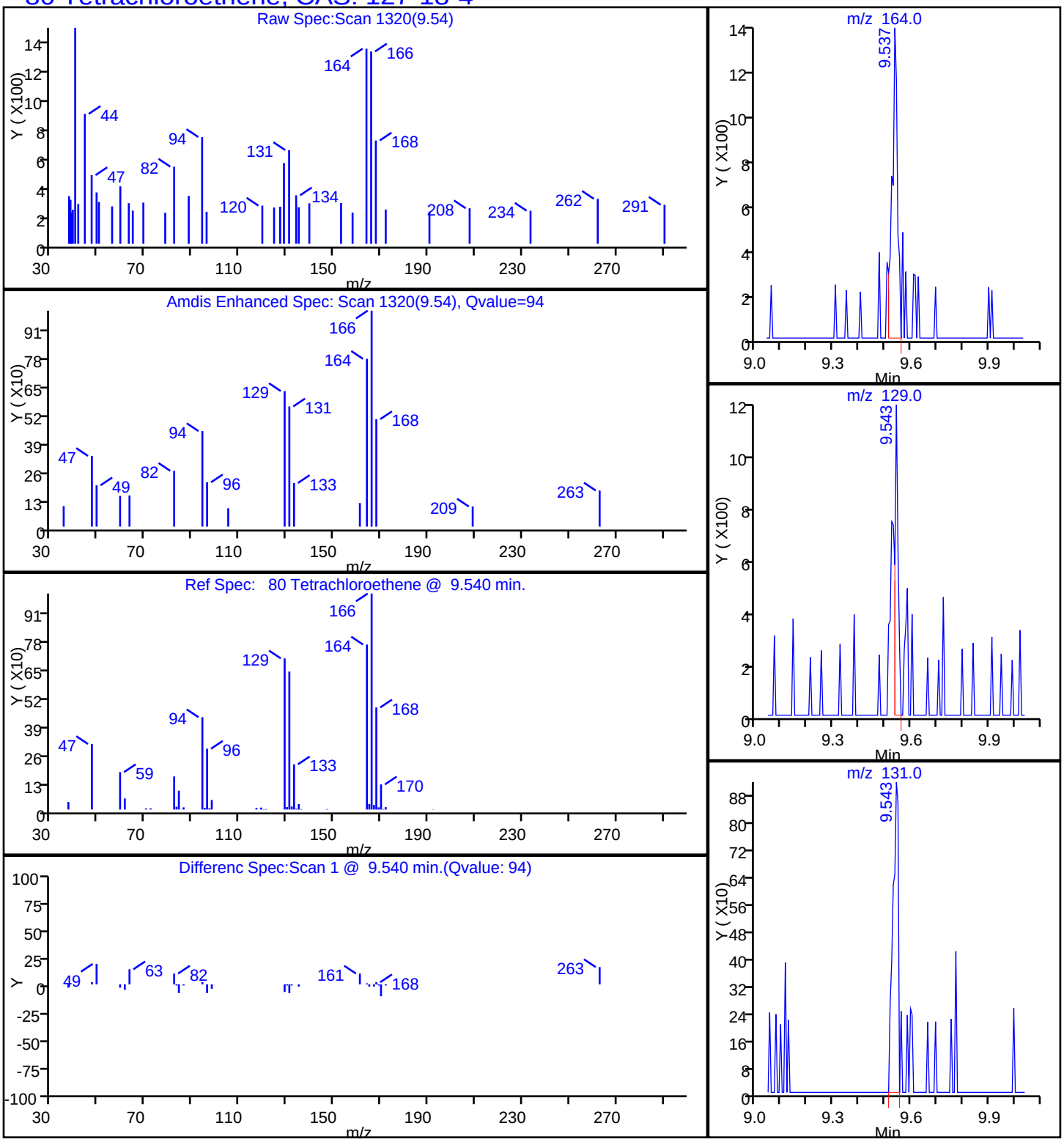


Report Date: 31-Mar-2015 08:52:11 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330027.D		
Injection Date:	30-Mar-2015 21:24:30	Instrument ID:	CHHP5
Lims ID:	180-42353-C-16	Lab Sample ID:	180-42353-16
Client ID:	HD-COD-SW-29-0/1-0		
Operator ID:	001562	ALS Bottle#:	25 Worklist Smp#: 27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

80 Tetrachloroethene, CAS: 127-18-4



Manual Integration/User Assign Peak Report

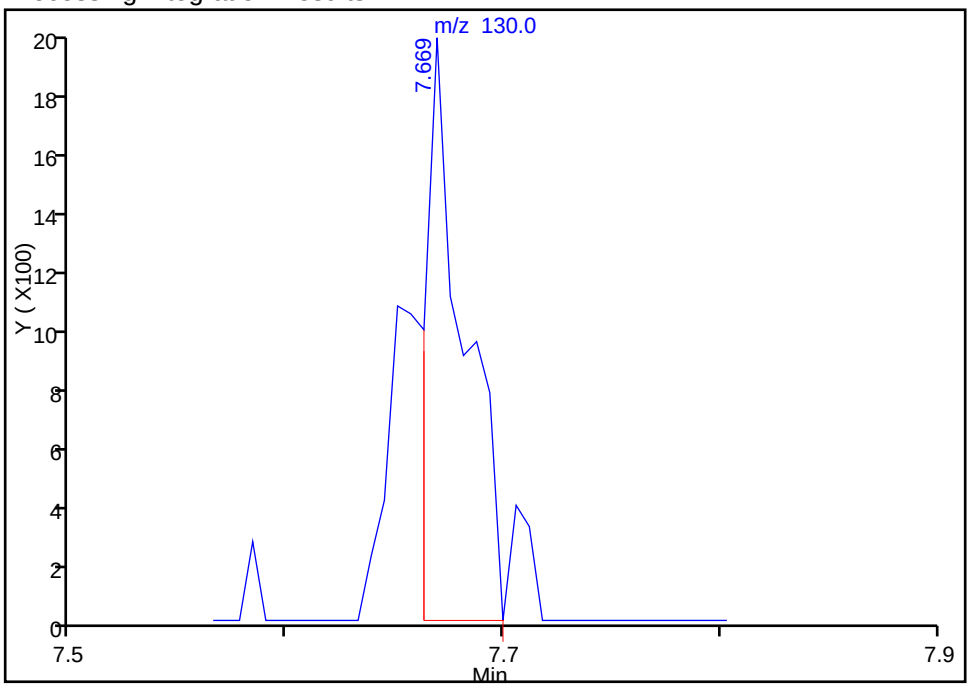
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330027.D				
Injection Date:	30-Mar-2015 21:24:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-16	Lab Sample ID:	180-42353-16		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	001562	ALS Bottle#:	25	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6

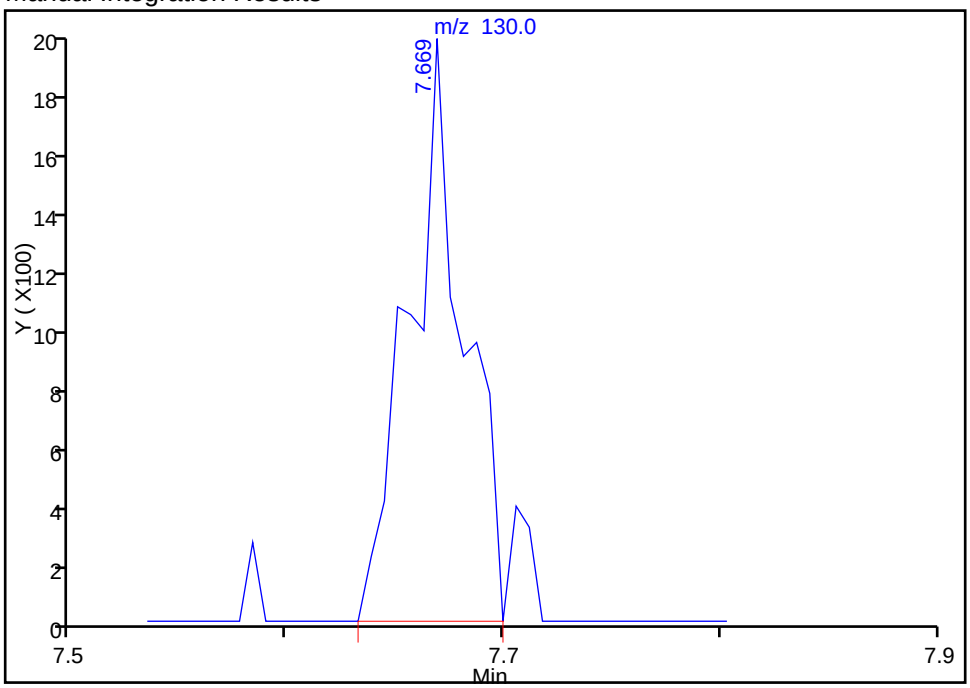
Processing Integration Results

RT: 7.67
Area: 2379
Amount: 1.096955
Amount Units: ng



Manual Integration Results

RT: 7.67
Area: 3353
Amount: 1.546066
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 08:52:10
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 180-42353-17

Matrix: Water Lab File ID: 50330022.D

Analysis Method: 8260C Date Collected: 03/24/2015 12:00

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 19:23

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.: 136954 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.: 180-42353-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 180-42353-17

Matrix: Water Lab File ID: 50330022.D

Analysis Method: 8260C Date Collected: 03/24/2015 12:00

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 19:23

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.: 136954 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)	119		64-135
2037-26-5	Toluene-d8 (Surr)	105		71-118
460-00-4	4-Bromofluorobenzene (Surr)	98		70-118
1868-53-7	Dibromofluoromethane (Surr)	111		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330022.D
Lims ID: 180-42353-A-17 Lab Sample ID: 180-42353-17
Client ID: HD-QC1-0/1-2
Sample Type: Client
Inject. Date: 30-Mar-2015 19:23:30 ALS Bottle#: 20 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-A-17
Misc. Info.: 180-0006238-022
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 08:44:27 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 08:44:27

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.308	4.301	0.007	97	95093	1000.0	
*	2 Fluorobenzene (IS)	96	7.277	7.282	-0.005	100	366415	50.0	
*	3 Chlorobenzene-d5	119	10.367	10.367	0.000	98	80097	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.685	12.684	0.001	93	112161	50.0	
$	5 Dibromofluoromethane (Surr	113	6.534	6.535	-0.001	55	92615	55.6	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.905	6.900	0.005	98	130222	59.3	
$	7 Toluene-d8 (Surr)	98	8.925	8.926	-0.001	99	334929	52.4	
$	8 4-Bromofluorobenzene (Surr	95	11.535	11.536	-0.001	97	113213	49.2	
	12 Chloromethane	50		1.784				ND	
	13 Vinyl chloride	62		1.912				ND	
	15 Bromomethane	94		2.259				ND	
	16 Chloroethane	64		2.399				ND	
	22 1,1-Dichloroethene	96		3.390				ND	
	24 Acetone	43		3.506				ND	
	26 Carbon disulfide	76		3.658				ND	
	31 Methylene Chloride	84		4.151				ND	
	33 Acrylonitrile	53		4.552				ND	
	34 trans-1,2-Dichloroethene	96		4.570				ND	
	35 Methyl tert-butyl ether	73		4.595				ND	
	37 1,1-Dichloroethane	63		5.173				ND	
	45 cis-1,2-Dichloroethene	96		5.939				ND	
	46 2-Butanone (MEK)	43		5.994				ND	
	49 Chlorobromomethane	128		6.231				ND	
	52 Chloroform	83		6.347				ND	
	53 1,1,1-Trichloroethane	97		6.535				ND	
	56 Carbon tetrachloride	117		6.718				ND	
	58 Benzene	78		6.955				ND	
	59 1,2-Dichloroethane	62		6.986				ND	
	64 Trichloroethene	130		7.667				ND	
	67 1,2-Dichloropropane	63		7.904				ND	
	70 1,4-Dioxane	88		8.062				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.196				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.823				ND	
76 Toluene	91		8.993				ND	
77 trans-1,3-Dichloropropene	75		9.218				ND	
79 1,1,2-Trichloroethane	97		9.401				ND	
80 Tetrachloroethene	164		9.541				ND	
82 2-Hexanone	43		9.662				ND	
84 Chlorodibromomethane	129		9.796				ND	
85 Ethylene Dibromide	107		9.900				ND	
87 Chlorobenzene	112		10.392				ND	
89 1,1,1,2-Tetrachloroethane	131		10.478				ND	
90 Ethylbenzene	106		10.502				ND	
91 m-Xylene & p-Xylene	106		10.624				ND	
92 o-Xylene	106		11.013				ND	
93 Styrene	104		11.025				ND	
94 Bromoform	173		11.208				ND	
99 1,1,2,2-Tetrachloroethane	83		11.676				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

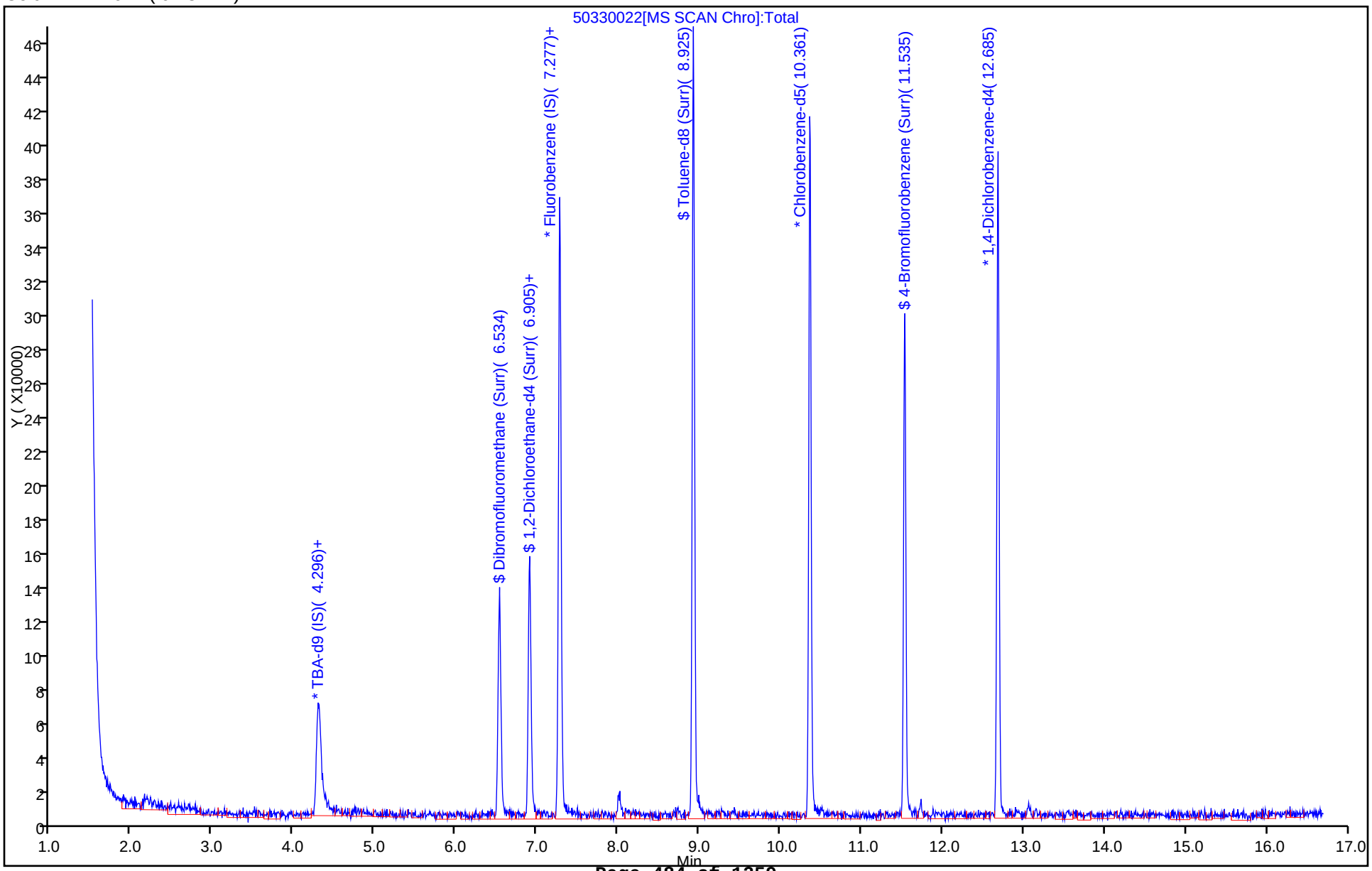
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 31-Mar-2015 08:44:27 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330022.D				
Injection Date:	30-Mar-2015 19:23:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-42353-A-17	Lab Sample ID:	180-42353-17	Worklist Smp#:	22
Client ID:	HD-QC1-0/1-2				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-QC2-0/1-2 Lab Sample ID: 180-42353-18

Matrix: Water Lab File ID: 50330029.D

Analysis Method: 8260C Date Collected: 03/24/2015 12:01

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 22:12

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.: 136954 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.: 180-42353-1

SDG No.:

Client Sample ID: HD-QC2-0/1-2 Lab Sample ID: 180-42353-18

Matrix: Water Lab File ID: 50330029.D

Analysis Method: 8260C Date Collected: 03/24/2015 12:01

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 22:12

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.: 136954 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)	116		64-135
2037-26-5	Toluene-d8 (Surr)	108		71-118
460-00-4	4-Bromofluorobenzene (Surr)	98		70-118
1868-53-7	Dibromofluoromethane (Surr)	110		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330029.D
Lims ID: 180-42353-A-18 Lab Sample ID: 180-42353-18
Client ID: HD-QC2-0/1-2
Sample Type: Client
Inject. Date: 30-Mar-2015 22:12:30 ALS Bottle#: 27 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-A-18
Misc. Info.: 180-0006238-029
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 08:53:36 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 08:53:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.303	4.301	0.002	97	106827	1000.0	
* 2 Fluorobenzene (IS)	96	7.278	7.282	-0.004	100	382733	50.0	
* 3 Chlorobenzene-d5	119	10.362	10.367	-0.005	98	83153	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.686	12.684	0.002	93	112519	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.530	6.535	-0.005	54	95465	54.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.901	6.900	0.001	97	133152	58.0	
$ 7 Toluene-d8 (Surr)	98	8.926	8.926	0.000	100	358952	54.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.530	11.536	-0.006	98	116438	48.8	
12 Chloromethane	50		1.784				ND	
13 Vinyl chloride	62		1.912				ND	
15 Bromomethane	94		2.259				ND	
16 Chloroethane	64		2.399				ND	
22 1,1-Dichloroethene	96		3.390				ND	
24 Acetone	43	3.524	3.506	0.018	56	5233	6.67	
26 Carbon disulfide	76		3.658				ND	
31 Methylene Chloride	84		4.151				ND	
33 Acrylonitrile	53		4.552				ND	
34 trans-1,2-Dichloroethene	96		4.570				ND	
35 Methyl tert-butyl ether	73		4.595				ND	
37 1,1-Dichloroethane	63		5.173				ND	
45 cis-1,2-Dichloroethene	96		5.939				ND	
46 2-Butanone (MEK)	43		5.994				ND	
49 Chlorobromomethane	128		6.231				ND	
52 Chloroform	83		6.347				ND	
53 1,1,1-Trichloroethane	97		6.535				ND	
56 Carbon tetrachloride	117		6.718				ND	
58 Benzene	78		6.955				ND	
59 1,2-Dichloroethane	62		6.986				ND	
64 Trichloroethene	130		7.667				ND	
67 1,2-Dichloropropane	63		7.904				ND	
70 1,4-Dioxane	88		8.062				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.196				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.823				ND	
76 Toluene	91		8.993				ND	
77 trans-1,3-Dichloropropene	75		9.218				ND	
79 1,1,2-Trichloroethane	97		9.401				ND	
80 Tetrachloroethene	164		9.541				ND	
82 2-Hexanone	43		9.662				ND	
84 Chlorodibromomethane	129		9.796				ND	
85 Ethylene Dibromide	107		9.900				ND	
87 Chlorobenzene	112		10.392				ND	
89 1,1,1,2-Tetrachloroethane	131		10.478				ND	
90 Ethylbenzene	106		10.502				ND	
91 m-Xylene & p-Xylene	106		10.624				ND	
92 o-Xylene	106		11.013				ND	
93 Styrene	104		11.025				ND	
94 Bromoform	173		11.208				ND	
99 1,1,2,2-Tetrachloroethane	83		11.676				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

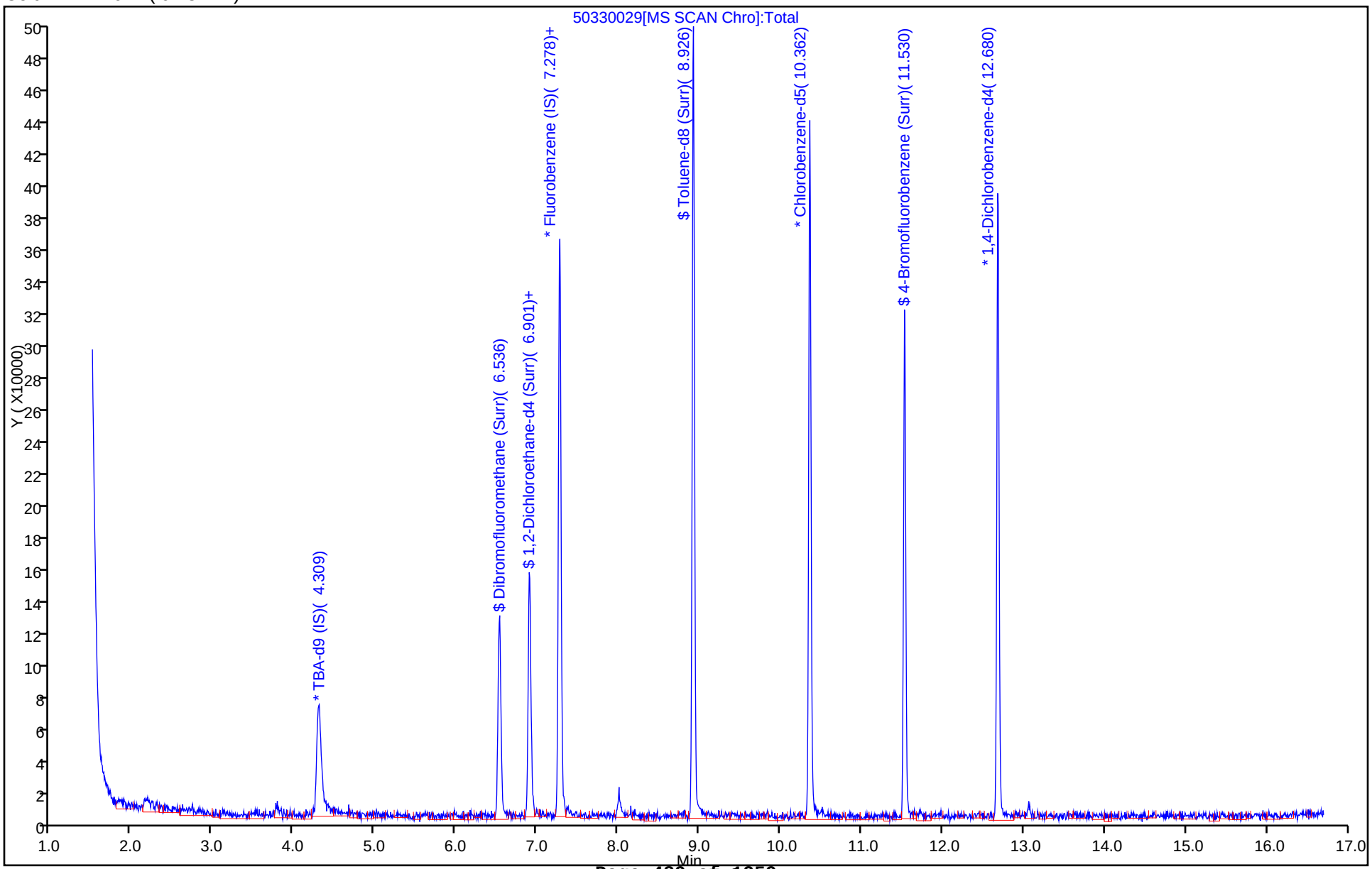
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 31-Mar-2015 08:53:36 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330029.D				
Injection Date:	30-Mar-2015 22:12:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-42353-A-18	Lab Sample ID:	180-42353-18	Worklist Smp#:	29
Client ID:	HD-QC2-0/1-2				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 | Lab Sample ID: 180-42353-19

Matrix: Water | Lab File ID: 50331014.D

Analysis Method: 8260C | Date Collected: 03/24/2015 08:00

Sample wt/vol: 5(mL) | Date Analyzed: 03/31/2015 14:53

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.: 137048 | 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	1.6		1.0	0.30
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.21
75-09-2	Methylene Chloride	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.17
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.18
75-34-3	1,1-Dichloroethane	0.59	J	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	22		1.0	0.24
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	0.28	J	1.0	0.17
71-55-6	1,1,1-Trichloroethane	1.4		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	34		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	23		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.: 180-42353-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 180-42353-19

Matrix: Water Lab File ID: 50331014.D

Analysis Method: 8260C Date Collected: 03/24/2015 08:00

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2015 14:53

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.: 137048 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)	115		64-135
2037-26-5	Toluene-d8 (Surr)	109		71-118
460-00-4	4-Bromofluorobenzene (Surr)	101		70-118
1868-53-7	Dibromofluoromethane (Surr)	105		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331014.D
Lims ID: 180-42353-D-19 Lab Sample ID: 180-42353-19
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 31-Mar-2015 14:53:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-D-19
Misc. Info.: 180-0006255-014
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 15:20:58 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 15:20:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.299	4.297	0.002	96	114880	1000.0	
* 2 Fluorobenzene (IS)	96	7.280	7.271	0.009	100	410723	50.0	
* 3 Chlorobenzene-d5	119	10.358	10.362	-0.004	99	86127	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.686	-0.004	93	123521	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.532	6.531	0.001	61	97759	52.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.903	6.896	0.007	99	141990	57.7	
$ 7 Toluene-d8 (Surr)	98	8.922	8.921	0.001	100	373391	54.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.532	11.531	0.001	98	125144	50.6	
12 Chloromethane	50		1.779				ND	
13 Vinyl chloride	62		1.913				ND	
15 Bromomethane	94		2.260				ND	
16 Chloroethane	64		2.400				ND	
22 1,1-Dichloroethene	96	3.405	3.385	0.020	96	19284	8.14	
24 Acetone	43	3.514	3.501	0.013	36	2221	2.64	
26 Carbon disulfide	76		3.671				ND	
31 Methylene Chloride	84		4.140				ND	
33 Acrylonitrile	53		4.547				ND	
34 trans-1,2-Dichloroethene	96		4.560				ND	
35 Methyl tert-butyl ether	73		4.596				ND	
37 1,1-Dichloroethane	63	5.187	5.168	0.019	70	12819	2.93	
45 cis-1,2-Dichloroethene	96	5.948	5.941	0.008	83	287801	111.5	
46 2-Butanone (MEK)	43		5.989				ND	
49 Chlorobromomethane	128		6.226				ND	
52 Chloroform	83	6.343	6.342	0.001	52	5538	1.39	
53 1,1,1-Trichloroethane	97	6.538	6.531	0.007	61	17285	6.81	
56 Carbon tetrachloride	117		6.719				ND	
58 Benzene	78		6.956				ND	
59 1,2-Dichloroethane	62		6.987				ND	
64 Trichloroethene	130	7.669	7.668	0.001	99	412297	169.1	
67 1,2-Dichloropropane	63		7.905				ND	
70 1,4-Dioxane	88		8.058				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.197				ND	
74 cis-1,3-Dichloropropene	75		8.654				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.824				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.219				ND	
79 1,1,2-Trichloroethane	97		9.402				ND	
80 Tetrachloroethene	164	9.531	9.536	-0.005	96	199792	115.7	
82 2-Hexanone	43		9.658				ND	
84 Chlorodibromomethane	129		9.785				ND	
85 Ethylene Dibromide	107		9.901				ND	
87 Chlorobenzene	112		10.388				ND	
89 1,1,1,2-Tetrachloroethane	131		10.467				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.619				ND	
92 o-Xylene	106		11.014				ND	
93 Styrene	104		11.026				ND	
94 Bromoform	173		11.209				ND	
99 1,1,2,2-Tetrachloroethane	83		11.671				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

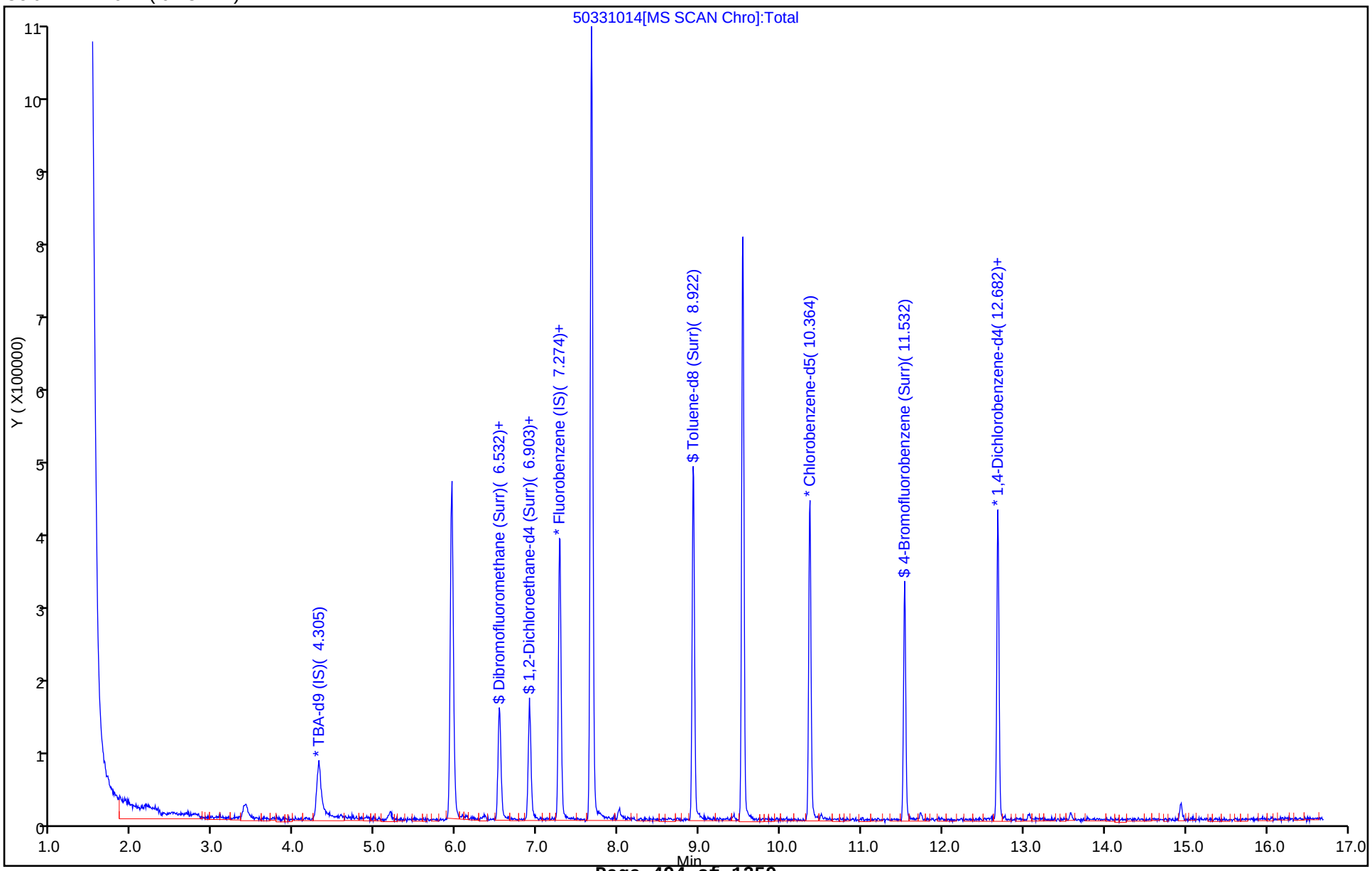
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 31-Mar-2015 15:20:58 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331014.D				
Injection Date:	31-Mar-2015 14:53:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-42353-D-19	Lab Sample ID:	180-42353-19	Worklist Smp#:	14
Client ID:	HD-QC1-0/1-1				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

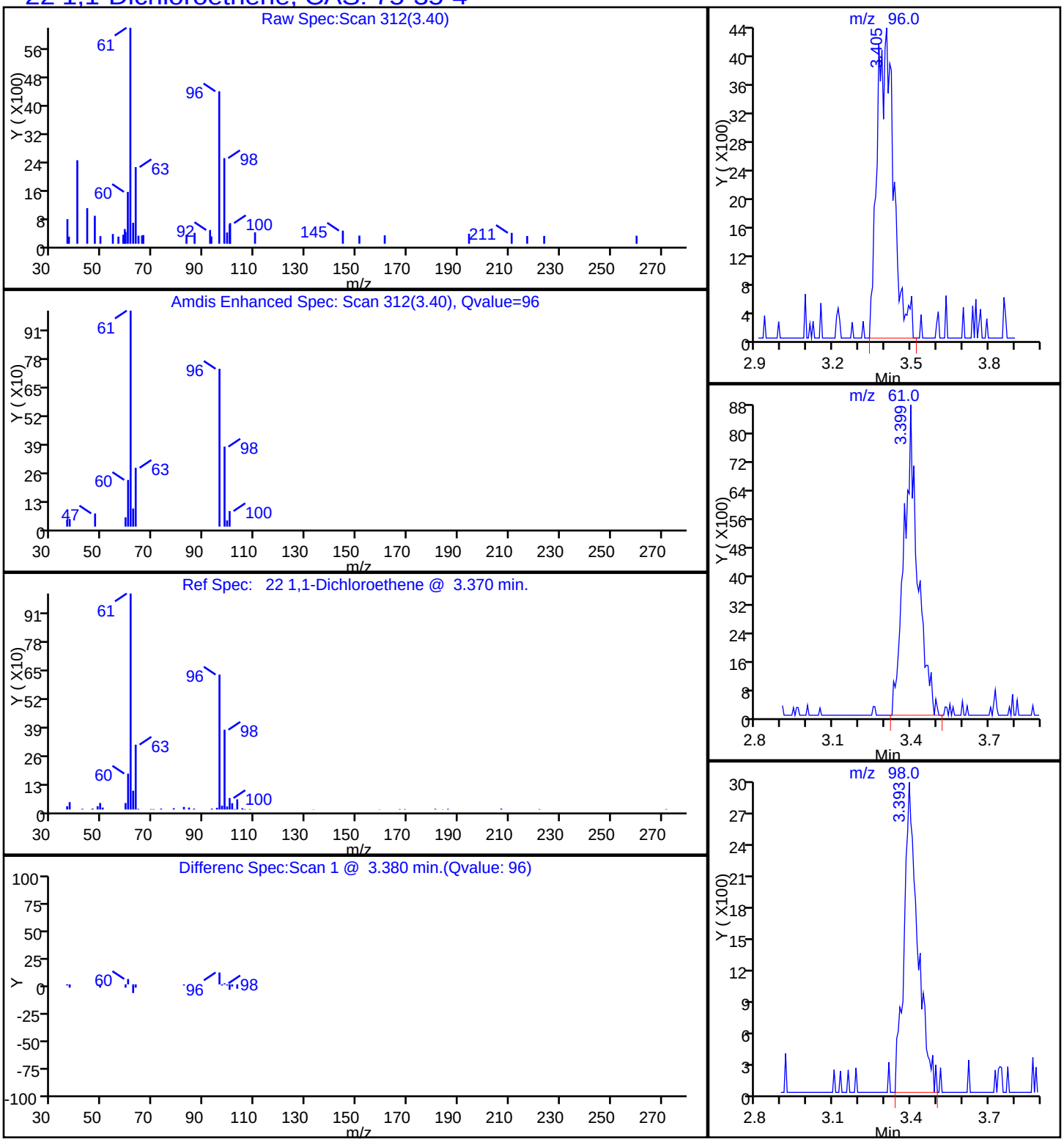


Report Date: 31-Mar-2015 15:20:58 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331014.D				
Injection Date:	31-Mar-2015 14:53:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-D-19	Lab Sample ID:	180-42353-19		
Client ID:	HD-QC1-0/1-1				
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

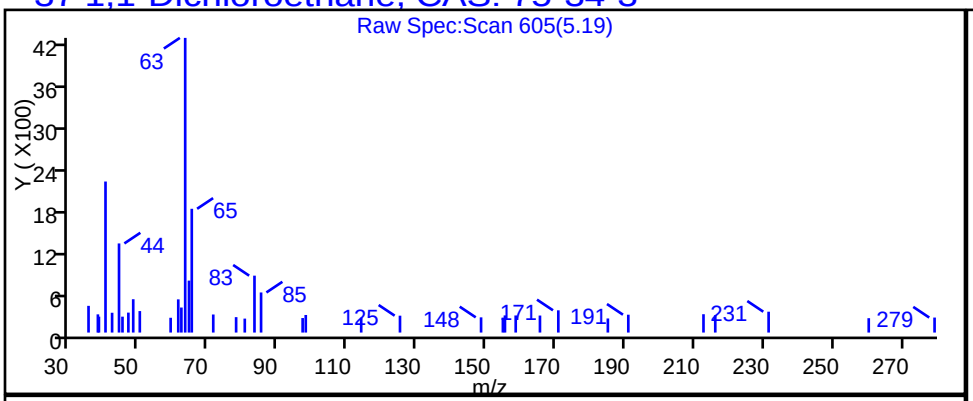


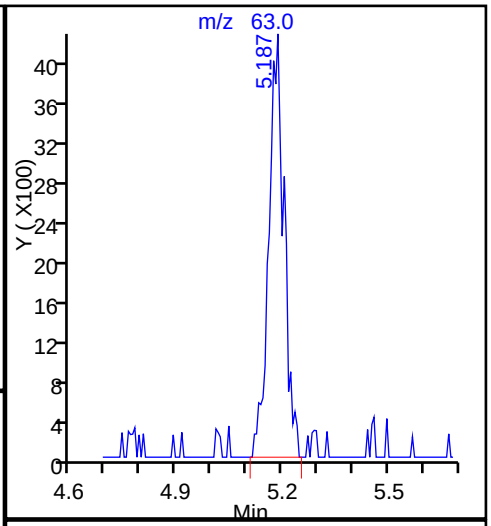
Report Date: 31-Mar-2015 15:20:58 Chrom Revision: 2.2 13-Mar-2015 11:20:44

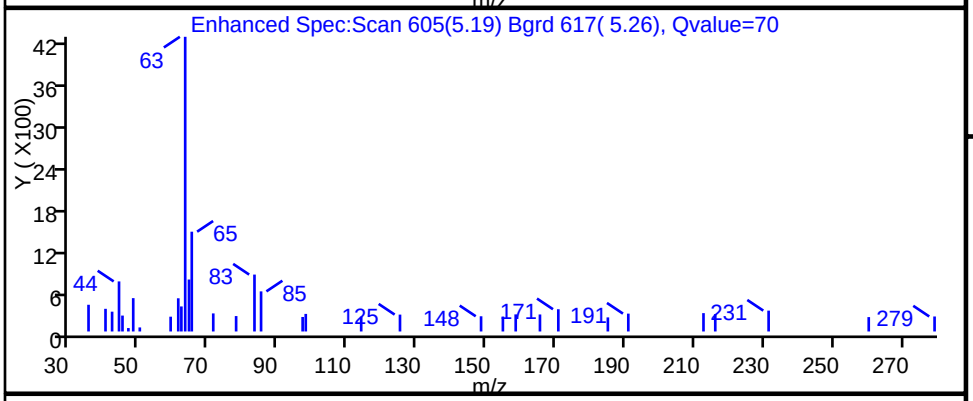
TestAmerica Pittsburgh

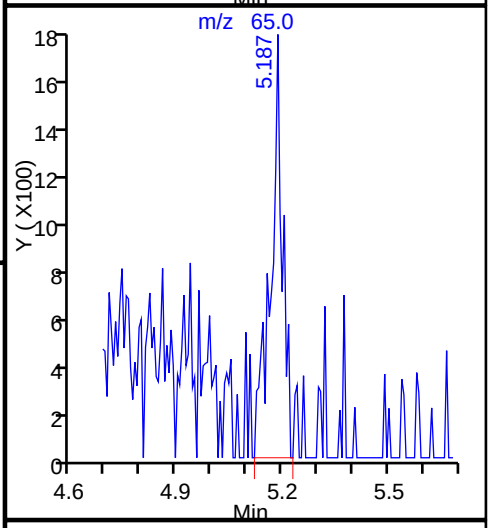
Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331014.D				
Injection Date:	31-Mar-2015 14:53:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-D-19	Lab Sample ID:	180-42353-19		
Client ID:	HD-QC1-0/1-1				
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

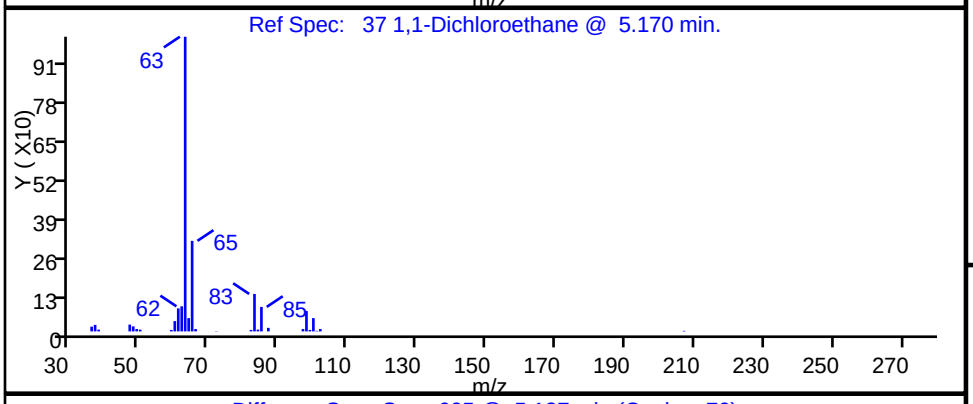
37 1,1-Dichloroethane, CAS: 75-34-3

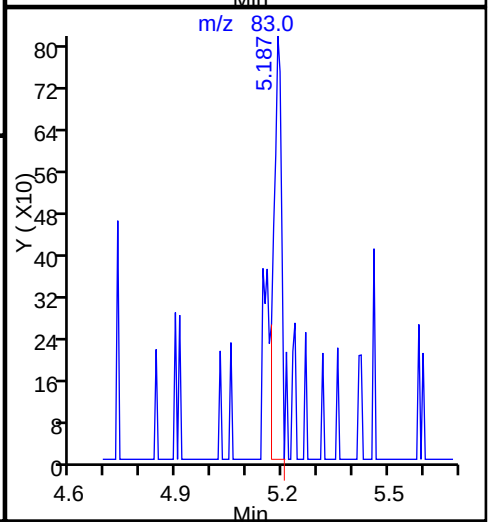


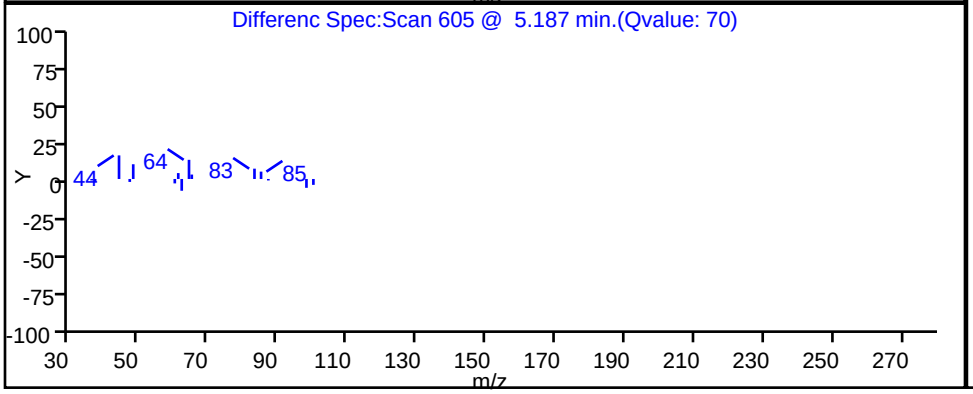












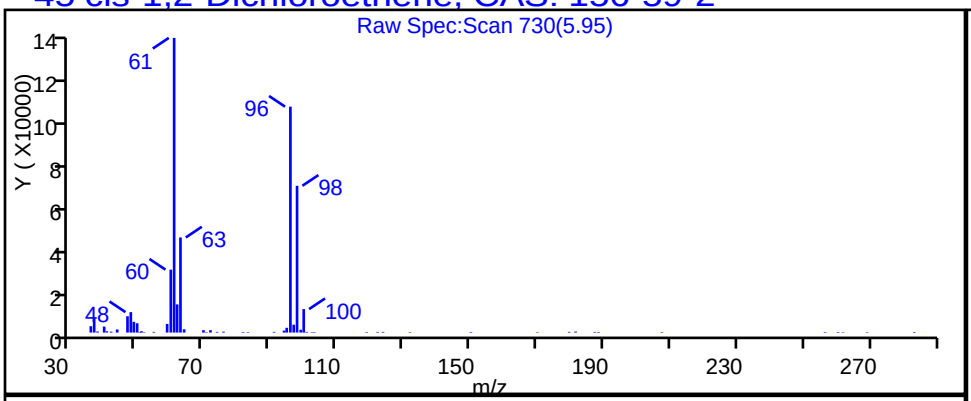
Report Date: 31-Mar-2015 15:20:58 Chrom Revision: 2.2 13-Mar-2015 11:20:44

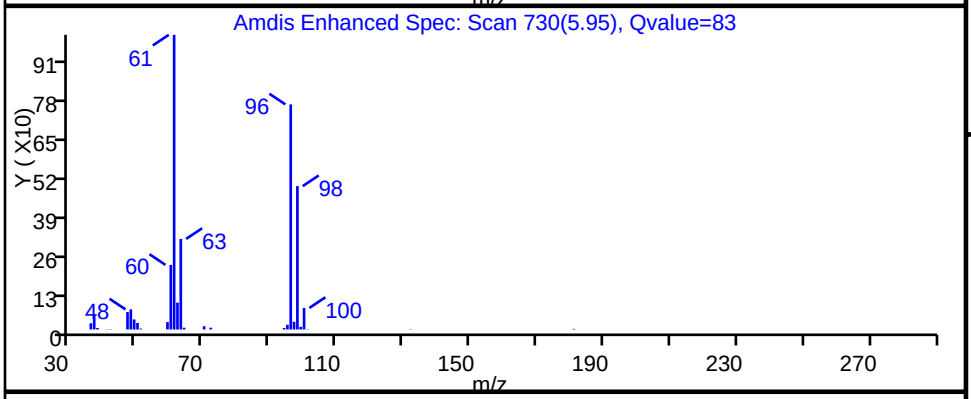
TestAmerica Pittsburgh

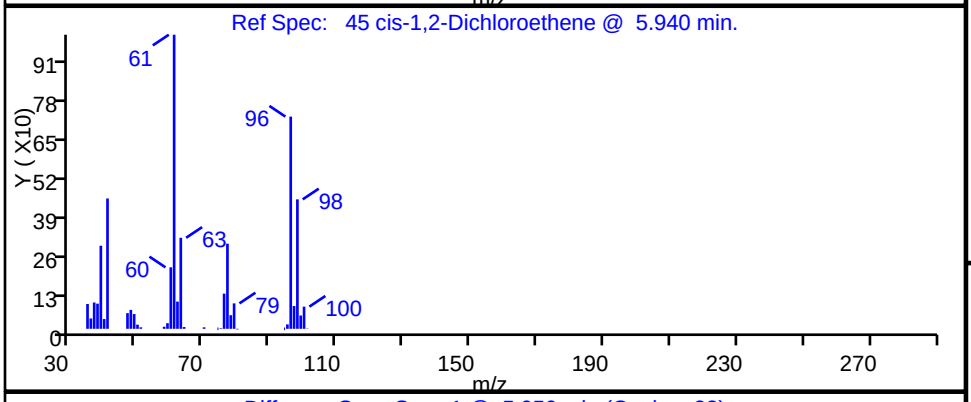
Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331014.D

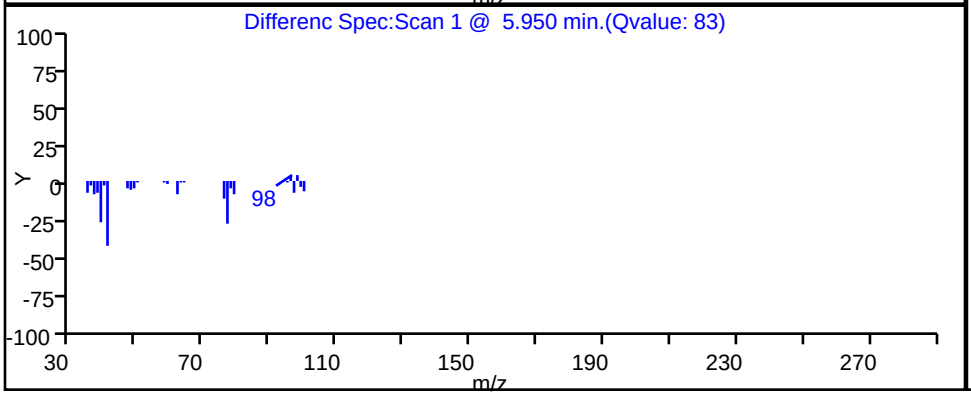
Injection Date:	31-Mar-2015 14:53:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-D-19	Lab Sample ID:	180-42353-19		
Client ID:	HD-QC1-0/1-1				
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

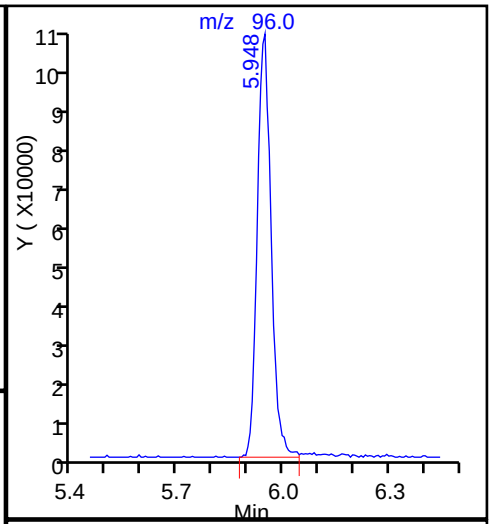
45 cis-1,2-Dichloroethene, CAS: 156-59-2

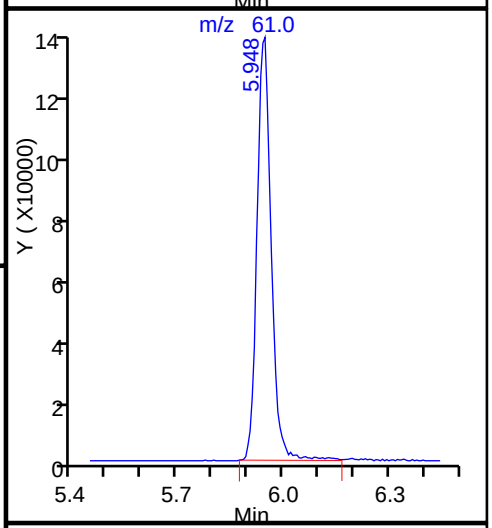


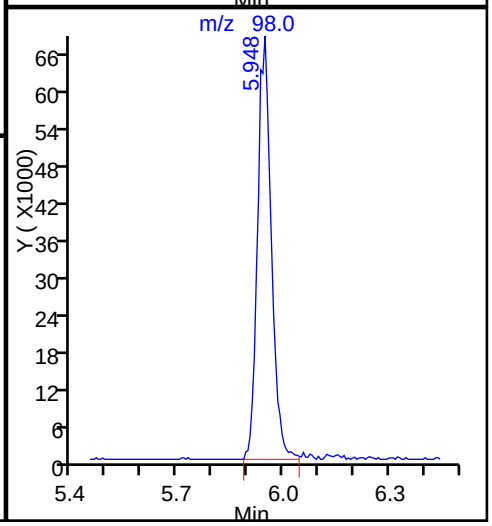










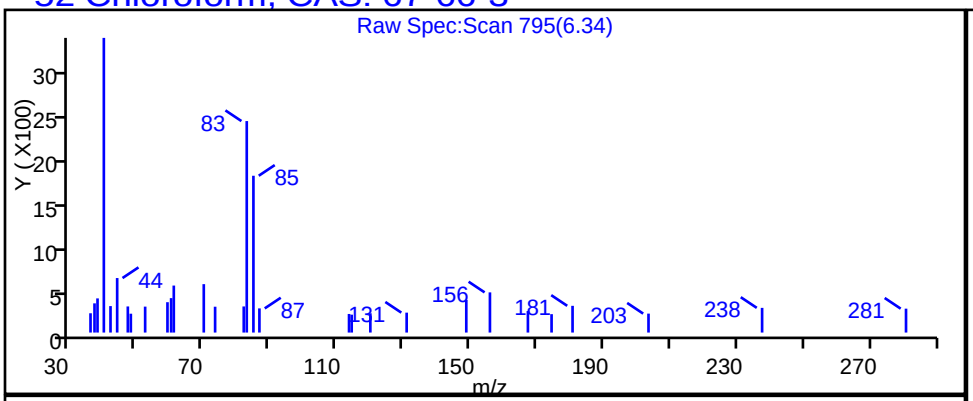


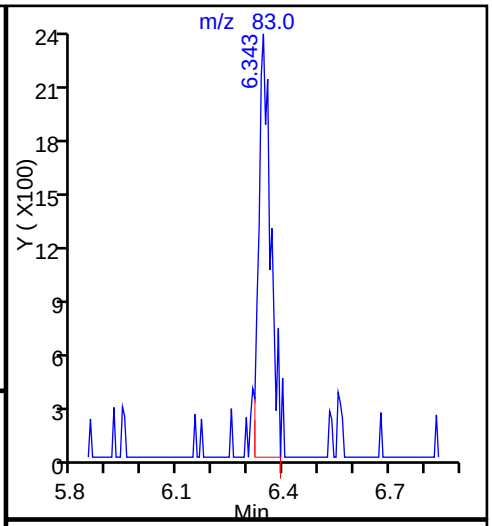
Report Date: 31-Mar-2015 15:20:58 Chrom Revision: 2.2 13-Mar-2015 11:20:44

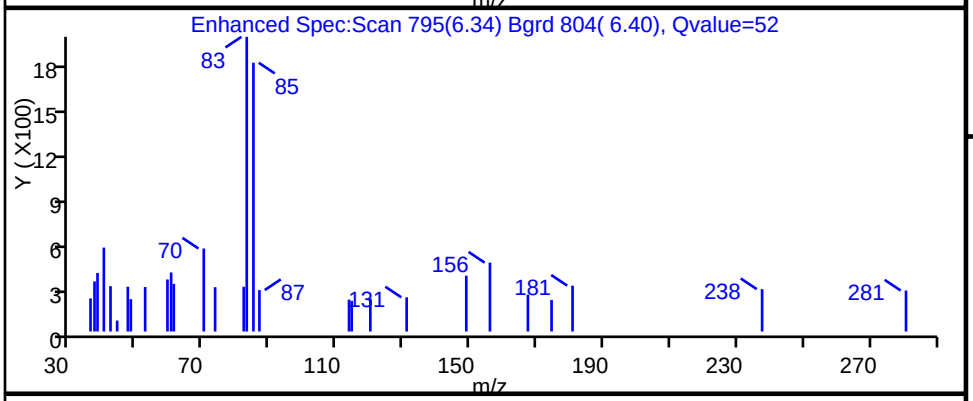
TestAmerica Pittsburgh

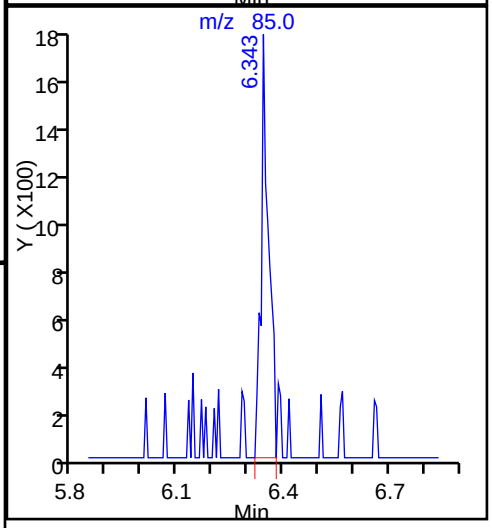
Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331014.D				
Injection Date:	31-Mar-2015 14:53:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-D-19	Lab Sample ID:	180-42353-19		
Client ID:	HD-QC1-0/1-1				
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

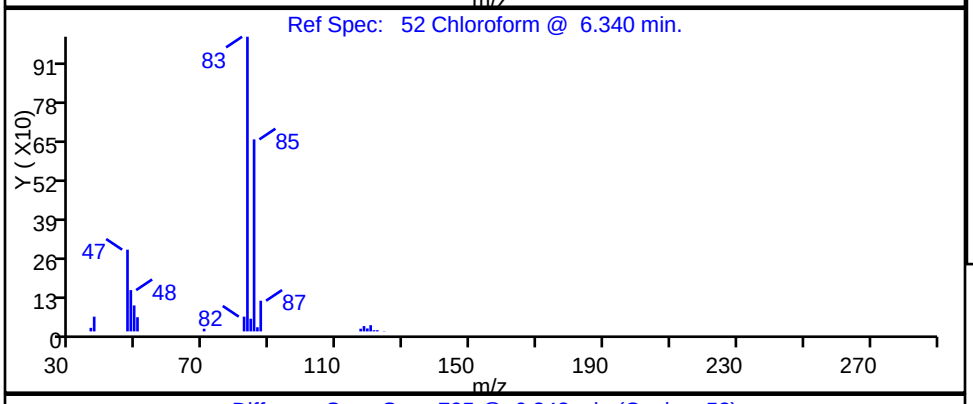
52 Chloroform, CAS: 67-66-3

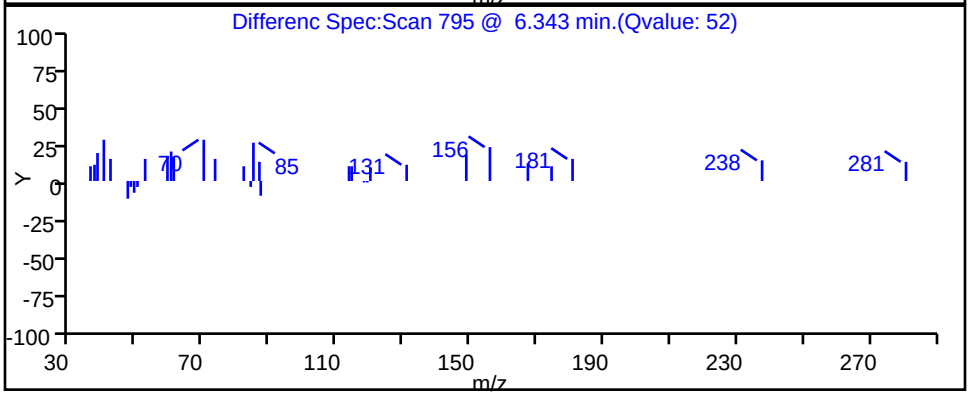










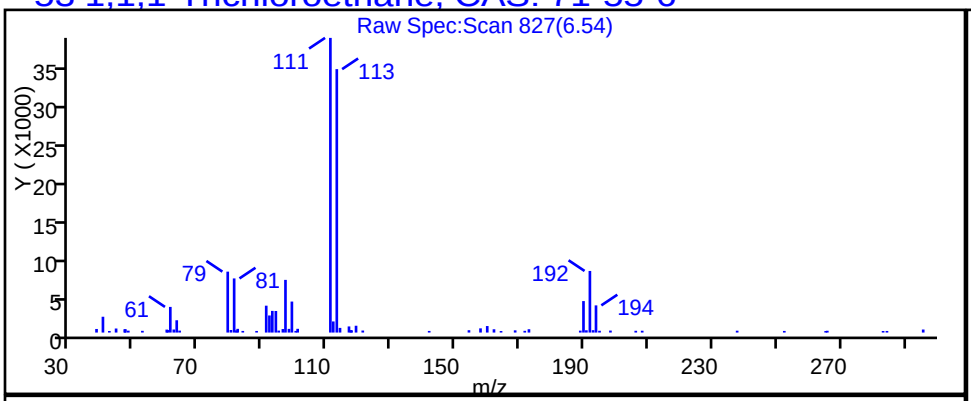


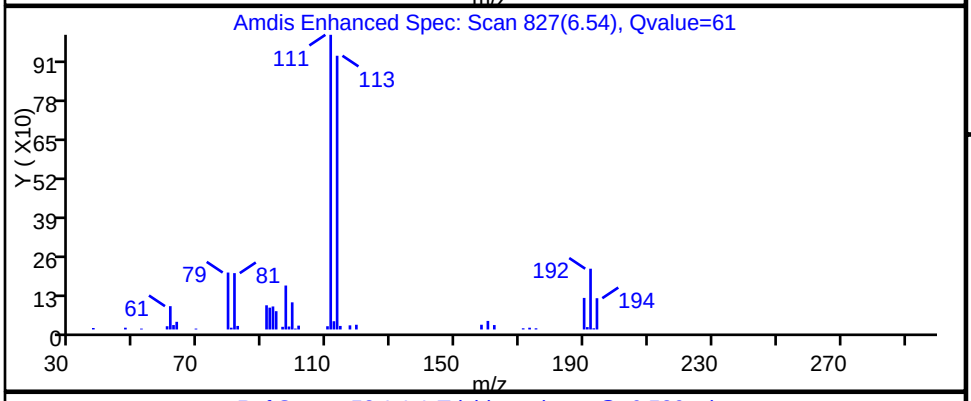
Report Date: 31-Mar-2015 15:20:58 Chrom Revision: 2.2 13-Mar-2015 11:20:44

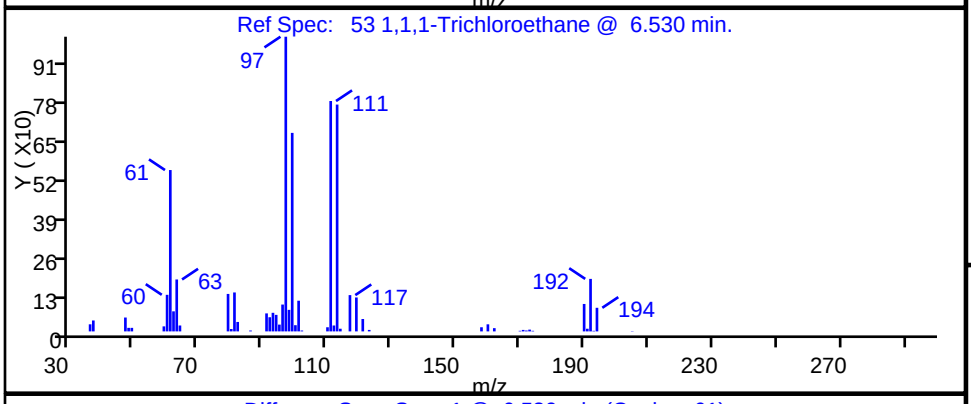
TestAmerica Pittsburgh

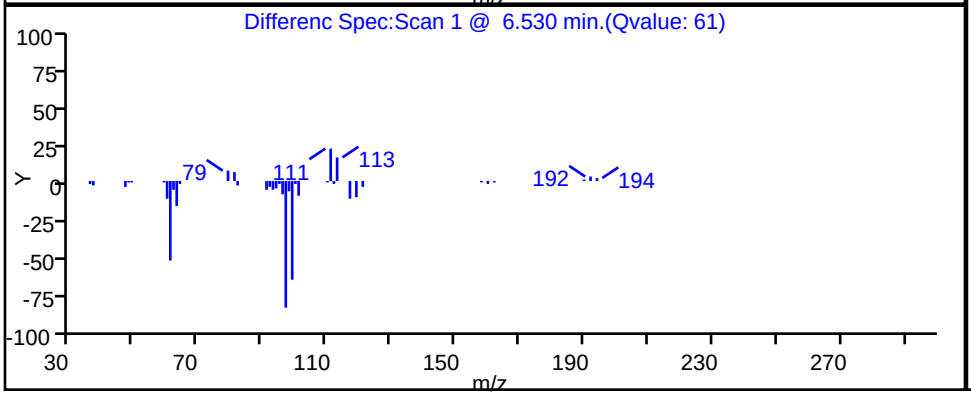
Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331014.D				
Injection Date:	31-Mar-2015 14:53:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-D-19	Lab Sample ID:	180-42353-19		
Client ID:	HD-QC1-0/1-1				
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

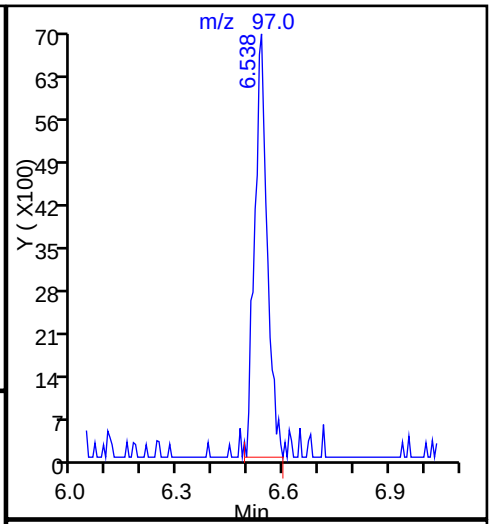
53 1,1,1-Trichloroethane, CAS: 71-55-6

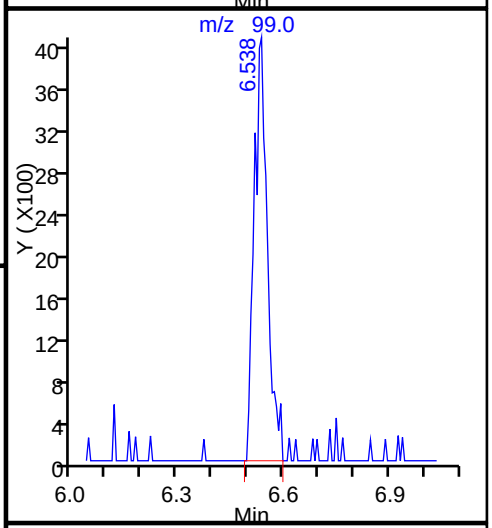


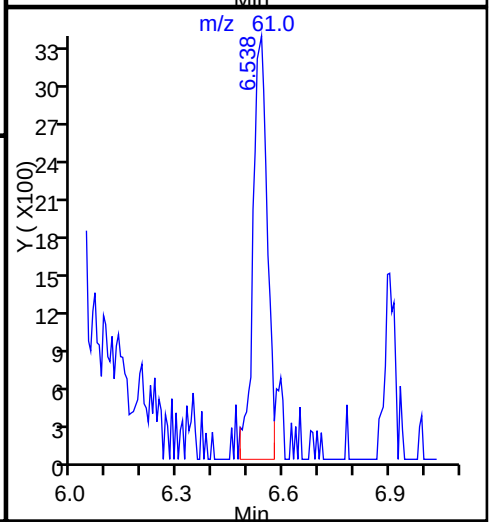










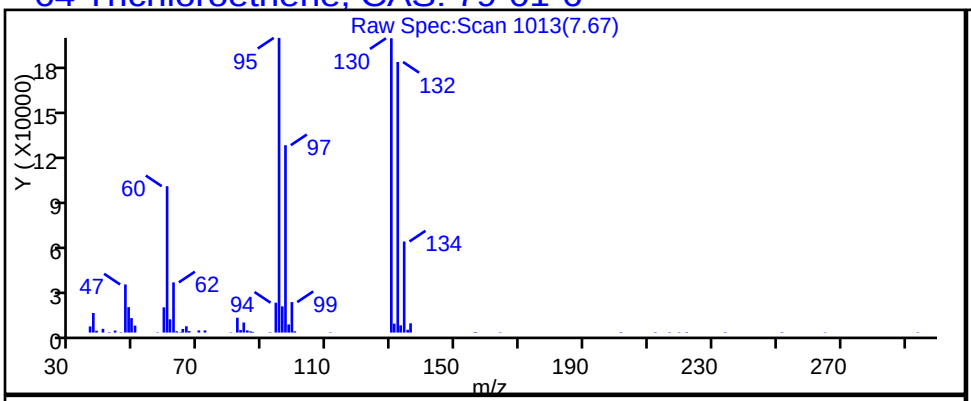


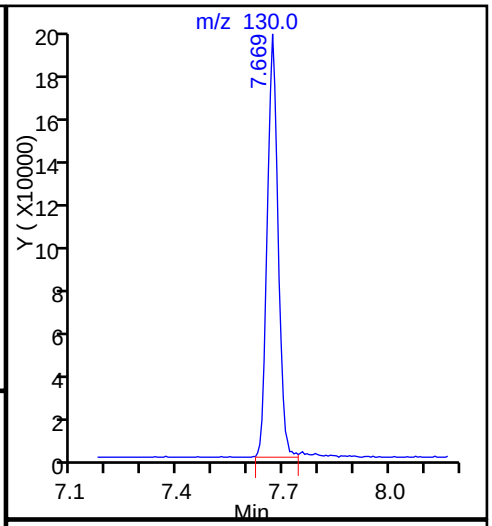
Report Date: 31-Mar-2015 15:20:58 Chrom Revision: 2.2 13-Mar-2015 11:20:44

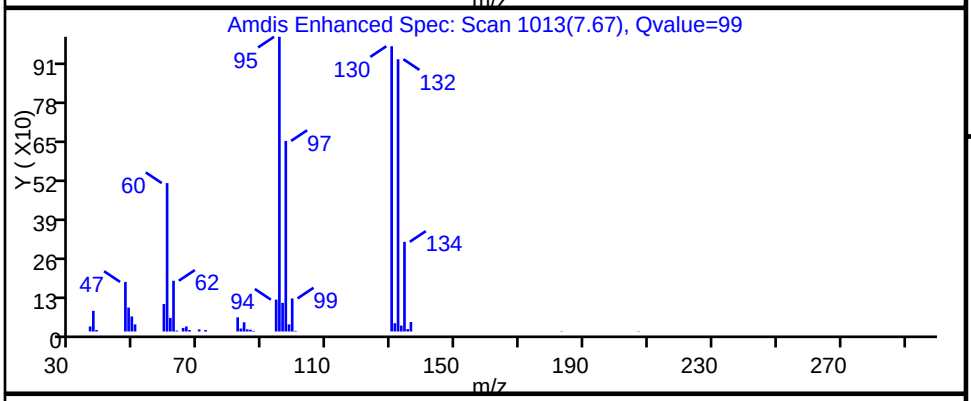
TestAmerica Pittsburgh

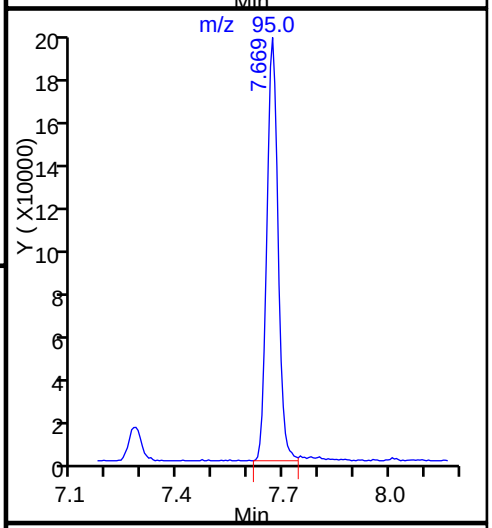
Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331014.D				
Injection Date:	31-Mar-2015 14:53:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-D-19	Lab Sample ID:	180-42353-19		
Client ID:	HD-QC1-0/1-1				
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

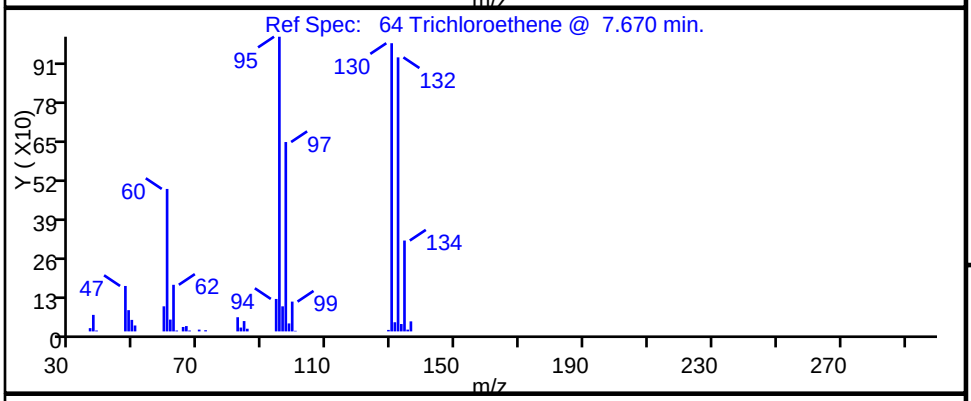
64 Trichloroethene, CAS: 79-01-6

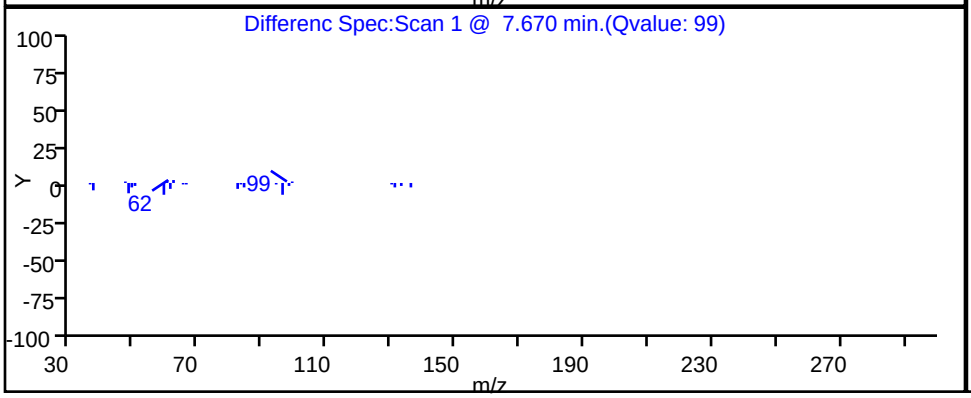


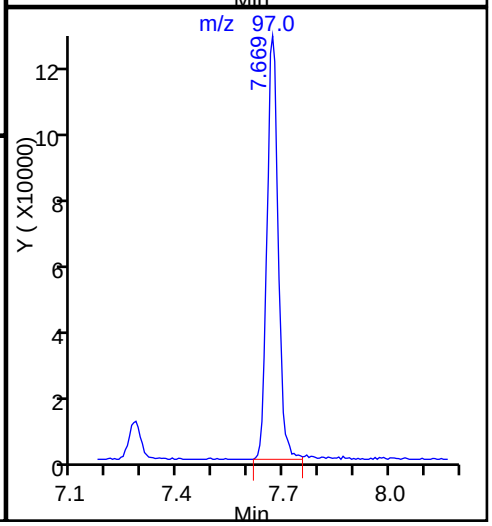










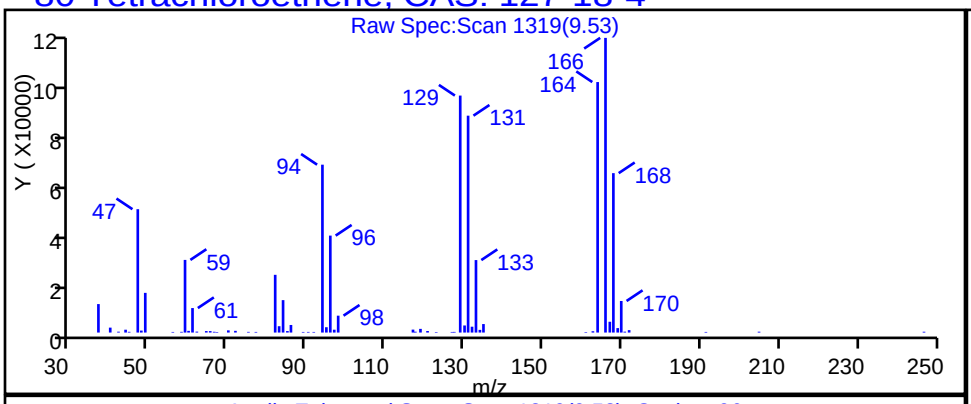


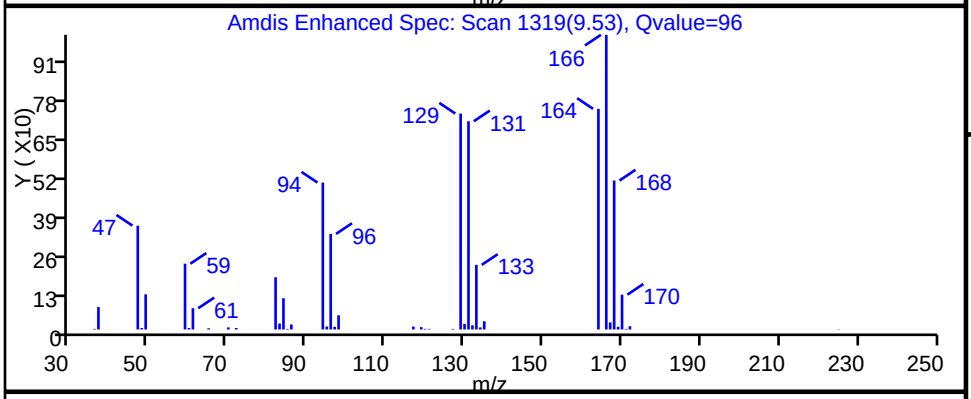
Report Date: 31-Mar-2015 15:20:58 Chrom Revision: 2.2 13-Mar-2015 11:20:44

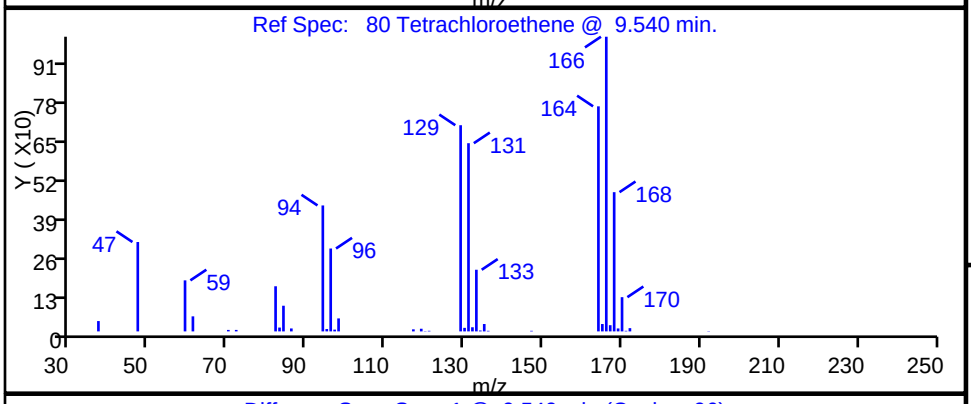
TestAmerica Pittsburgh

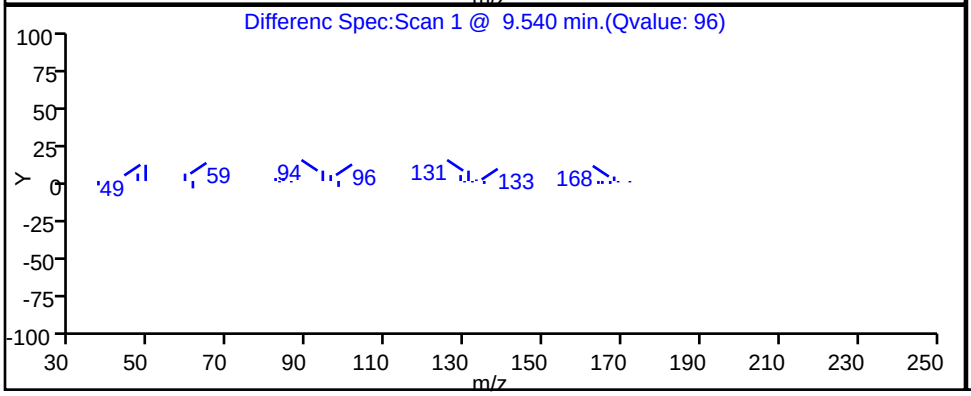
Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331014.D		
Injection Date:	31-Mar-2015 14:53:30	Instrument ID:	CHHP5
Lims ID:	180-42353-D-19	Lab Sample ID:	180-42353-19
Client ID:	HD-QC1-0/1-1		
Operator ID:	001562	ALS Bottle#:	13 Worklist Smp#: 14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

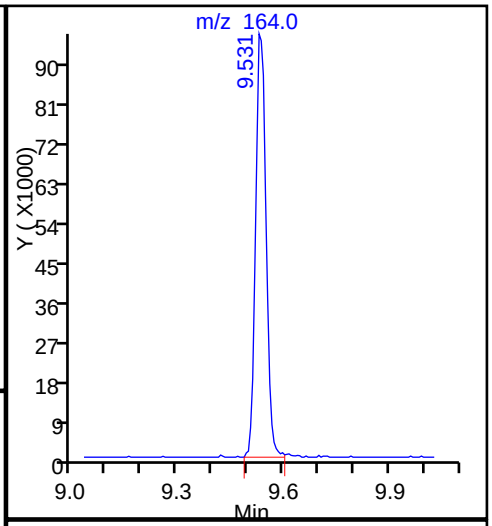
80 Tetrachloroethene, CAS: 127-18-4

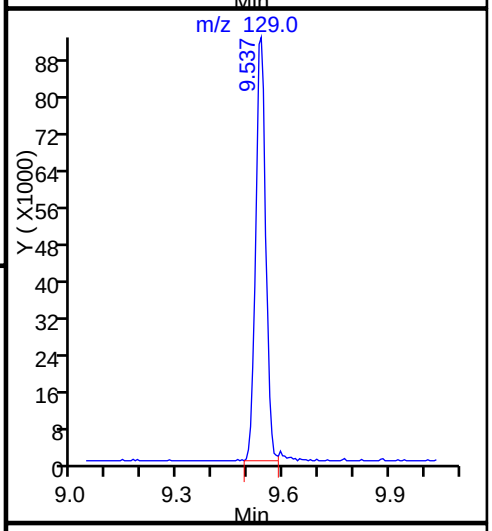


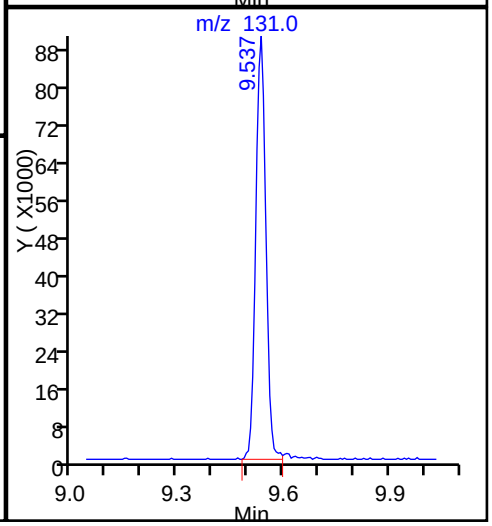












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-99S-0/1-0 | Lab Sample ID: 180-42353-20

Matrix: Water | Lab File ID: 50331007.D

Analysis Method: 8260C | Date Collected: 03/24/2015 09:15

Sample wt/vol: 5(mL) | Date Analyzed: 03/31/2015 12:04

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.: 137048 | 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	2.4		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	1.3		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	32		1.0	0.24
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	0.21	J	1.0	0.17
71-55-6	1,1,1-Trichloroethane	5.6		1.0	0.29
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.14
71-43-2	Benzene	1.0	U	1.0	0.11
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
79-01-6	Trichloroethene	32	F1	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	23	F1	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.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-99S-0/1-0 Lab Sample ID: 180-42353-20

Matrix: Water Lab File ID: 50331007.D

Analysis Method: 8260C Date Collected: 03/24/2015 09:15

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2015 12:04

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.: 137048 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)	115		64-135
2037-26-5	Toluene-d8 (Surr)	108		71-118
460-00-4	4-Bromofluorobenzene (Surr)	99		70-118
1868-53-7	Dibromofluoromethane (Surr)	106		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331007.D
Lims ID: 180-42353-E-20 Lab Sample ID: 180-42353-20
Client ID: HD-MW-99S-0/1-0
Sample Type: Client
Inject. Date: 31-Mar-2015 12:04:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-E-20
Misc. Info.: 180-0006255-007
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 14:07:20 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 14:07:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.295	4.297	-0.002	98	118835	1000.0	
* 2 Fluorobenzene (IS)	96	7.276	7.271	0.005	100	444126	50.0	
* 3 Chlorobenzene-d5	119	10.361	10.362	-0.001	98	100926	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.684	12.686	-0.002	93	137561	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.528	6.531	-0.003	79	107484	53.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.899	6.896	0.003	97	153497	57.6	
$ 7 Toluene-d8 (Surr)	98	8.925	8.921	0.004	100	432723	53.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.529	11.531	-0.002	98	144045	49.7	
11 Dichlorodifluoromethane	85		1.621				ND	
12 Chloromethane	50		1.779				ND	
13 Vinyl chloride	62		1.913				ND	
14 Butadiene	39		1.956				ND	
15 Bromomethane	94		2.260				ND	
16 Chloroethane	64		2.400				ND	
17 Dichlorofluoromethane	67		2.662				ND	
18 Trichlorofluoromethane	101		2.704				ND	
19 Ethanol	45		3.013				ND	
20 Ethyl ether	59		3.087				ND	
21 Acrolein	56		3.252				ND	
22 1,1-Dichloroethene	96	3.395	3.385	0.010	98	30205	11.8	
23 1,1,2-Trichloro-1,2,2-trif	101		3.428				ND	
24 Acetone	43		3.501				ND	
25 Iodomethane	142		3.580				ND	
26 Carbon disulfide	76		3.671				ND	
27 Isopropyl alcohol	45		3.767				ND	
29 Acetonitrile	40		3.932				ND	
28 3-Chloro-1-propene	76		3.945				ND	
30 Methyl acetate	43		4.024				ND	
31 Methylene Chloride	84	4.155	4.140	0.015	1	1030	0.3478	
32 2-Methyl-2-propanol	59		4.438				ND	
33 Acrylonitrile	53		4.547				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
34 trans-1,2-Dichloroethene	96	4.563	4.560	0.003	1	1152	0.4349	
35 Methyl tert-butyl ether	73	4.606	4.596	0.010	27	2365	0.4038	
36 Hexane	57		4.979				ND	
37 1,1-Dichloroethane	63	5.177	5.168	0.009	98	31794	6.72	
38 Vinyl acetate	43		5.296				ND	
39 2-Chloro-1,3-butadiene	53		5.306				ND	
41 Isopropyl ether	45		5.325				ND	
40 Isopropyl ether TIC	45		5.409				ND	
42 Tert-butyl ethyl ether	59		5.793				ND	
44 2,2-Dichloropropane	77		5.928				ND	
45 cis-1,2-Dichloroethene	96	5.938	5.941	-0.002	82	442756	158.6	
43 Tert-butyl ethyl ether (TI	59	6.005	5.961	0.044	0	335	0.0377	
46 2-Butanone (MEK)	43		5.989				ND	
47 Propionitrile	54		6.061				ND	
48 Ethyl acetate	43		6.091				ND	
49 Chlorobromomethane	128		6.226				ND	
50 Methacrylonitrile	41		6.237				ND	
51 Tetrahydrofuran	42		6.287				ND	
52 Chloroform	83	6.345	6.342	0.003	59	4500	1.05	M
53 1,1,1-Trichloroethane	97	6.534	6.531	0.003	80	76200	27.8	
54 Cyclohexane	56		6.585				ND	
55 1,1-Dichloropropene	75		6.719				ND	
56 Carbon tetrachloride	117		6.719				ND	
57 Isobutyl alcohol	41		6.950				ND	
58 Benzene	78		6.956				ND	
59 1,2-Dichloroethane	62		6.987				ND	
61 Tert-amyl methyl ether	73		7.113				ND	
60 Tert-amyl methyl ether (TI	73		7.262				ND	
62 n-Heptane	43		7.279				ND	
63 n-Butanol	56		7.655				ND	
64 Trichloroethene	130	7.666	7.668	-0.002	99	422590	160.3	
65 Ethyl acrylate	55		7.813				ND	
66 Methylcyclohexane	83		7.863				ND	
67 1,2-Dichloropropane	63		7.905				ND	
68 Dibromomethane	93		8.021				ND	
69 Methyl methacrylate	69		8.050				ND	
70 1,4-Dioxane	88		8.058				ND	
71 Dichlorobromomethane	83		8.197				ND	
72 2-Nitropropane	41		8.445				ND	
73 2-Chloroethyl vinyl ether	63		8.520				ND	
74 cis-1,3-Dichloropropene	75		8.654				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.824				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.219				ND	
78 Ethyl methacrylate	69		9.317				ND	
79 1,1,2-Trichloroethane	97		9.402				ND	
80 Tetrachloroethene	164	9.539	9.536	0.003	97	233194	115.3	
81 1,3-Dichloropropane	76		9.566				ND	
82 2-Hexanone	43		9.658				ND	
84 Chlorodibromomethane	129		9.785				ND	
83 n-Butyl acetate	43		9.790				ND	
85 Ethylene Dibromide	107		9.901				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.369				ND	
87 Chlorobenzene	112		10.388				ND	
88 4-Chlorobenzotrifluoride	180		10.430				ND	
89 1,1,1,2-Tetrachloroethane	131		10.467				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.619				ND	
92 o-Xylene	106		11.014				ND	
93 Styrene	104		11.026				ND	
94 Bromoform	173		11.209				ND	
96 2-Chlorobenzotrifluoride	180		11.270				ND	
95 Cyclohexanol	57	11.267	11.280	-0.013	1	114		NC
97 Isopropylbenzene	105		11.379				ND	
98 Cyclohexanone	55		11.475				ND	
99 1,1,2,2-Tetrachloroethane	83		11.671				ND	
100 Bromobenzene	156		11.683				ND	
101 1,2,3-Trichloropropane	110		11.726				ND	
102 trans-1,4-Dichloro-2-buten	53		11.732				ND	
103 N-Propylbenzene	120		11.787				ND	
104 2-Chlorotoluene	126		11.872				ND	
105 3-Chlorotoluene	126		11.933				ND	
106 1,3,5-Trimethylbenzene	105		11.963				ND	
107 4-Chlorotoluene	126		11.981				ND	
108 tert-Butylbenzene	119		12.286				ND	
109 Pentachloroethane	167		12.302				ND	
110 1,2,4-Trimethylbenzene	105		12.334				ND	
111 1,2-dichloro-4-(trifluorom	214		12.401				ND	
112 sec-Butylbenzene	105		12.511				ND	
113 1,3-Dichlorobenzene	146		12.614				ND	
114 4-Isopropyltoluene	119		12.651				ND	
115 1,4-Dichlorobenzene	146		12.705				ND	
117 1,2,3-Trimethylbenzene	105		12.759				ND	
116 2,4-Dichloro-1-(triflourom	214		12.760				ND	
118 2,5-Dichlorobenzotrifluori	214		12.803				ND	
119 Benzyl chloride	91		12.844				ND	
120 n-Butylbenzene	91		13.064				ND	
121 1,2-Dichlorobenzene	146		13.083				ND	
122 1,2-Dibromo-3-Chloropropan	75		13.861				ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.007				ND	
124 1,3,5-Trichlorobenzene	180		14.073				ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.427				ND	
126 1,2,4-Trichlorobenzene	180		14.695				ND	
127 Hexachlorobutadiene	225		14.859				ND	
128 Naphthalene	128		14.938				ND	
129 1,2,3-Trichlorobenzene	180		15.187				ND	
131 2,4,5-Trichlorotoluene	159		15.966				ND	
130 2,3,6-Trichlorotoluene	159		16.063				ND	
132 2-Methylnaphthalene	142		16.074				ND	
146 2,5-Dichlorotoluene	1		0.000				ND	
150 2,6-Dichlorotoluene	1		0.000				ND	
151 Isooctane	57		0.000				ND	
149 3,4-Dichlorotoluene	1		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
148 2,3-Dichlorotoluene	1		0.000				ND	
147 2,4-Dichlorotoluene	1		0.000				ND	
S 133 Xylenes, Total	106		1.000				ND	
S 134 1,2-Dichloroethene, Total	96				0		159.1	
S 135 1,3-Dichloropropene, Total	1		0.000				ND	
T 153 1,2 Epoxybutane TIC	42		0.000				ND	
T 136 Mesityl oxide TIC	83		0.000				ND	
T 137 Tetrahydrofuran TIC	42		0.000				ND	
T 138 Methyl n-amyl ketone TIC	43		0.000				ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

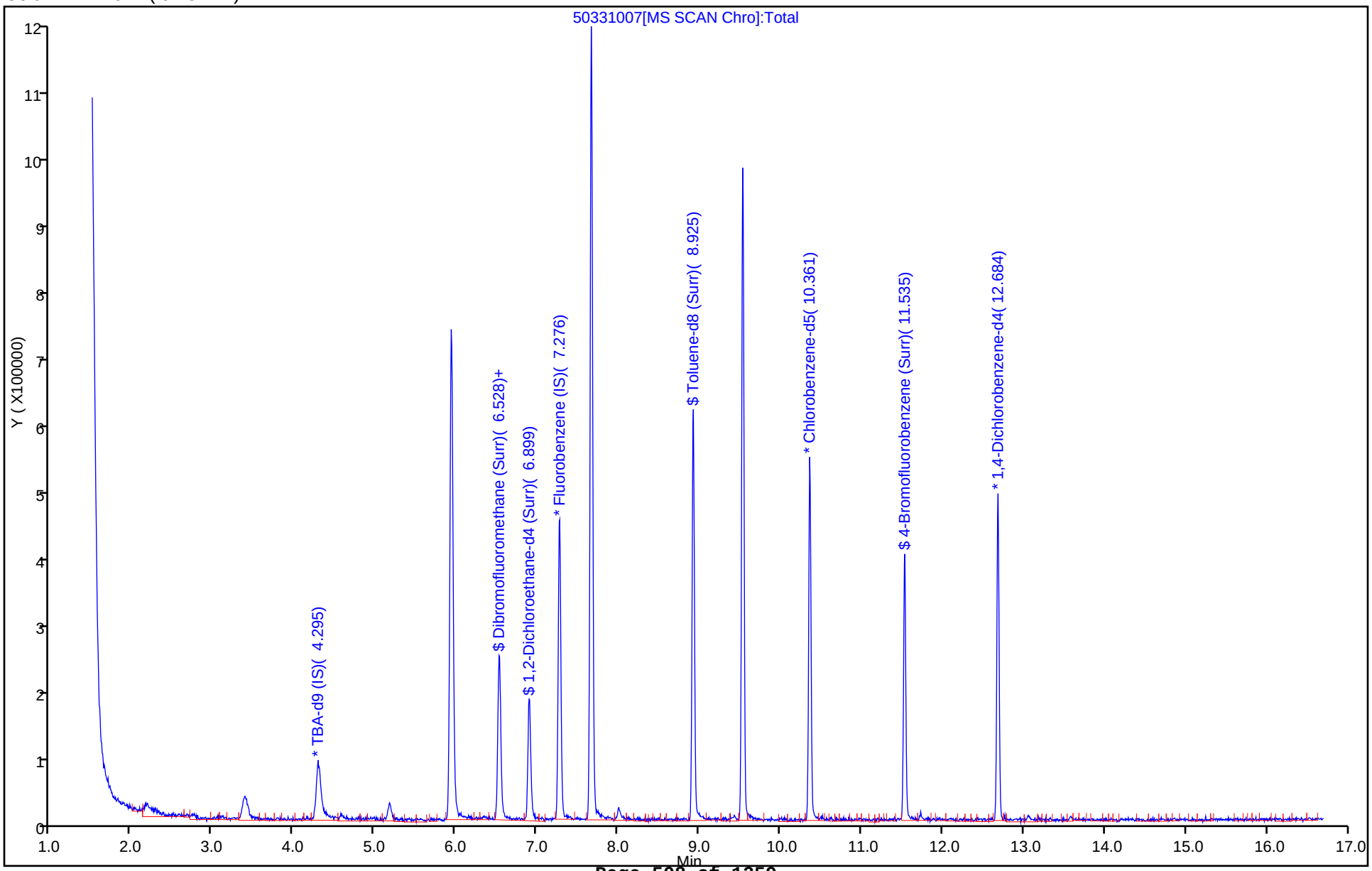
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 31-Mar-2015 14:07:20 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331007.D				
Injection Date:	31-Mar-2015 12:04:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-42353-E-20	Lab Sample ID:	180-42353-20	Worklist Smp#:	7
Client ID:	HD-MW-99S-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

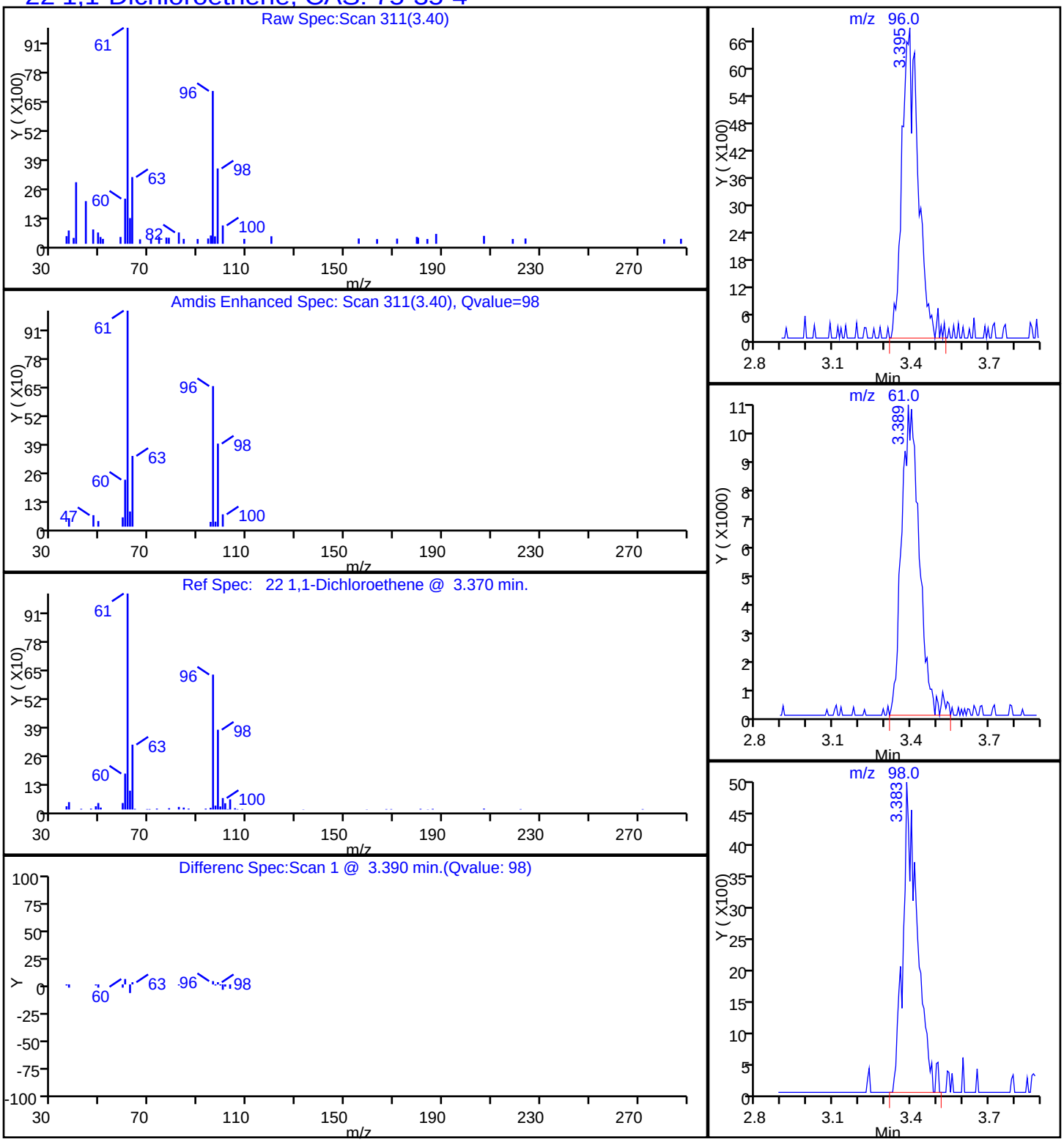


Report Date: 31-Mar-2015 14:07:20 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331007.D		
Injection Date:	31-Mar-2015 12:04:30	Instrument ID:	CHHP5
Lims ID:	180-42353-E-20	Lab Sample ID:	180-42353-20
Client ID:	HD-MW-99S-0/1-0		
Operator ID:	001562	ALS Bottle#:	6 Worklist Smp#: 7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

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

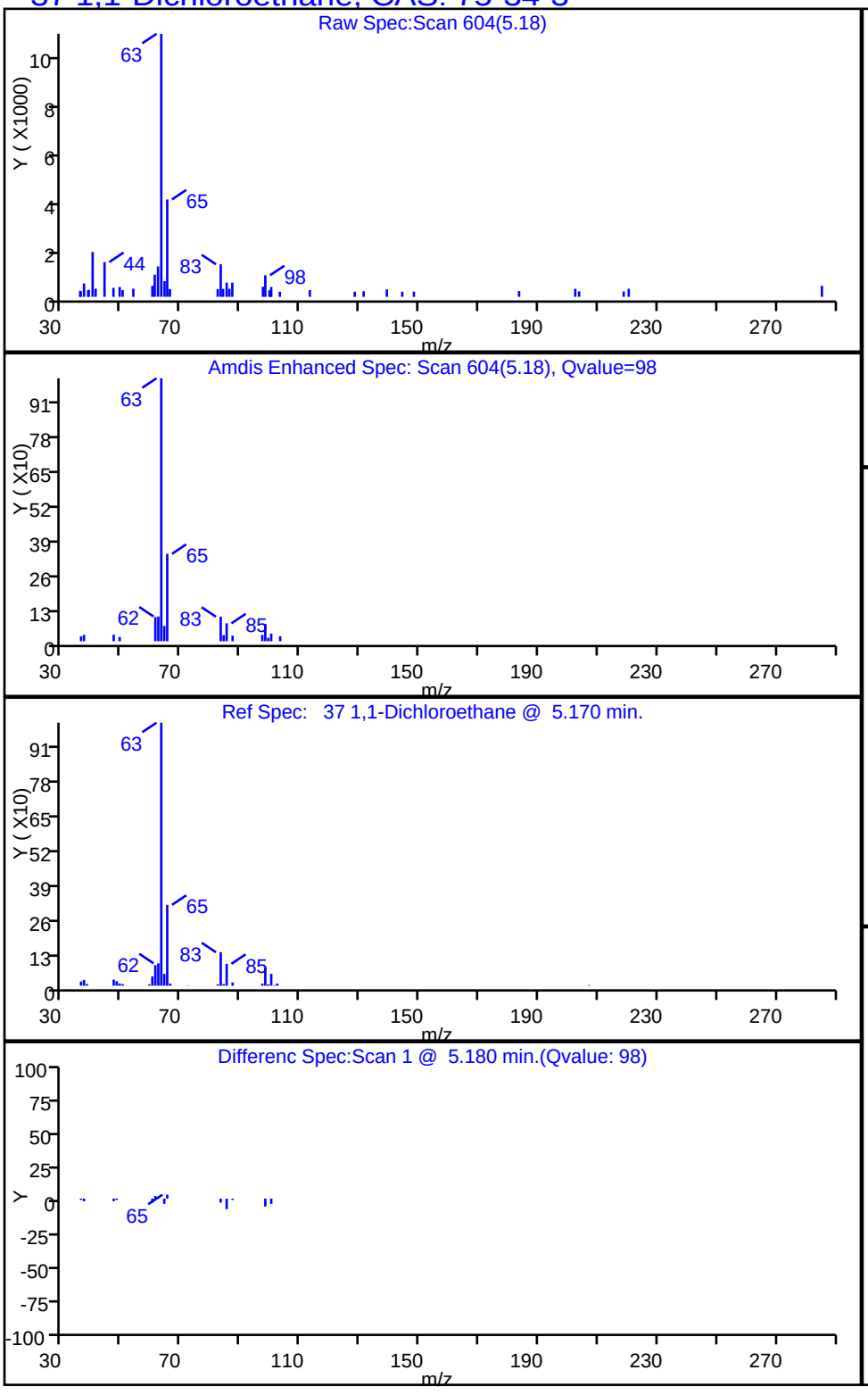


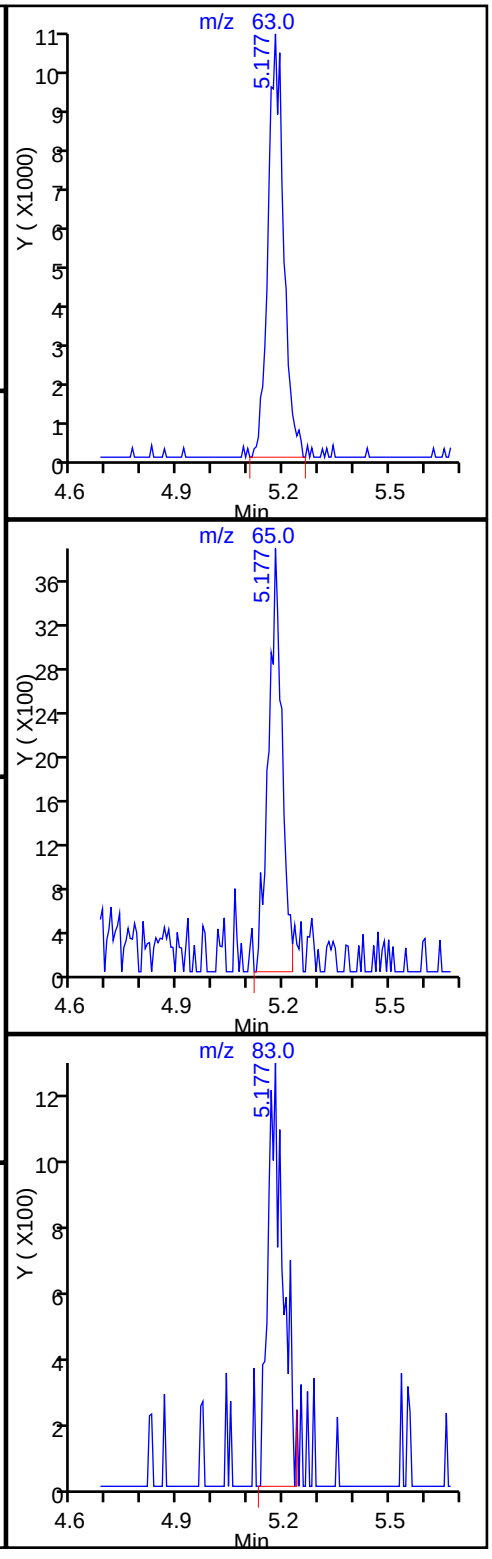
Report Date: 31-Mar-2015 14:07:20 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331007.D		
Injection Date:	31-Mar-2015 12:04:30	Instrument ID:	CHHP5
Lims ID:	180-42353-E-20	Lab Sample ID:	180-42353-20
Client ID:	HD-MW-99S-0/1-0		
Operator ID:	001562	ALS Bottle#:	6 Worklist Smp#: 7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

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



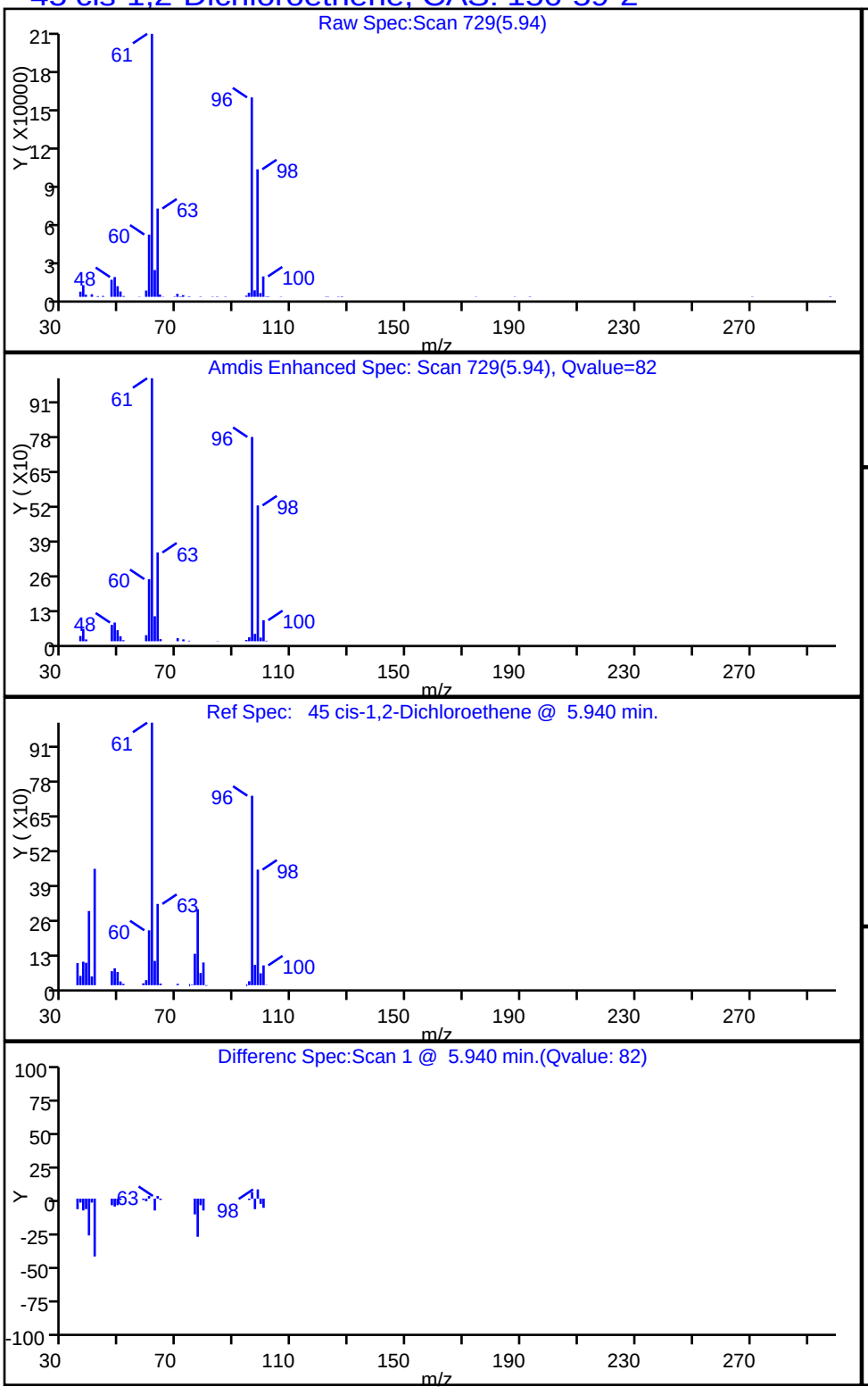


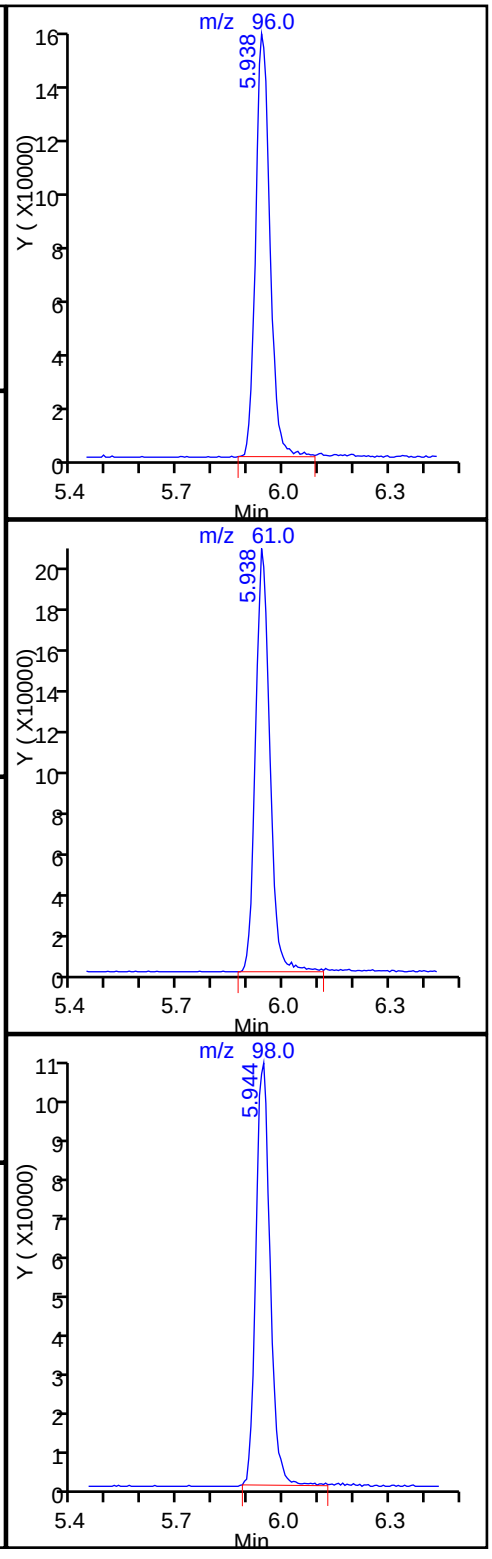
Report Date: 31-Mar-2015 14:07:20 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331007.D				
Injection Date:	31-Mar-2015 12:04:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-20	Lab Sample ID:	180-42353-20		
Client ID:	HD-MW-99S-0/1-0				
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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





Report Date: 31-Mar-2015 14:07:21 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331007.D				
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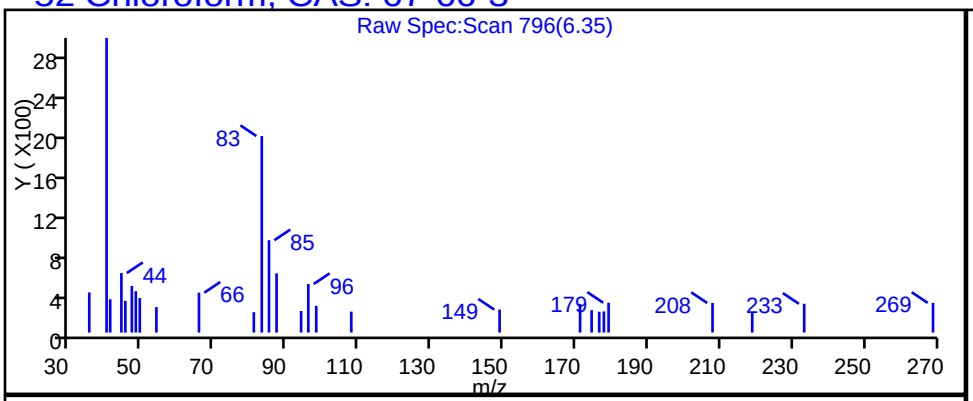
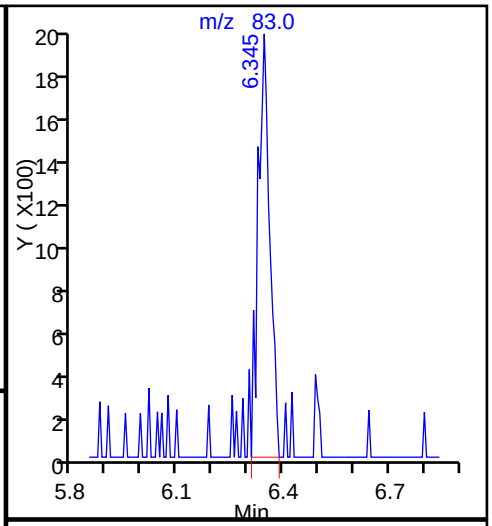
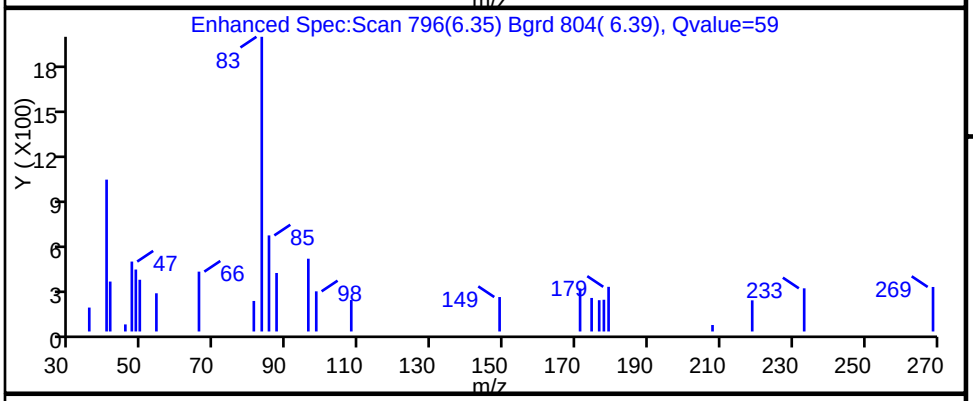
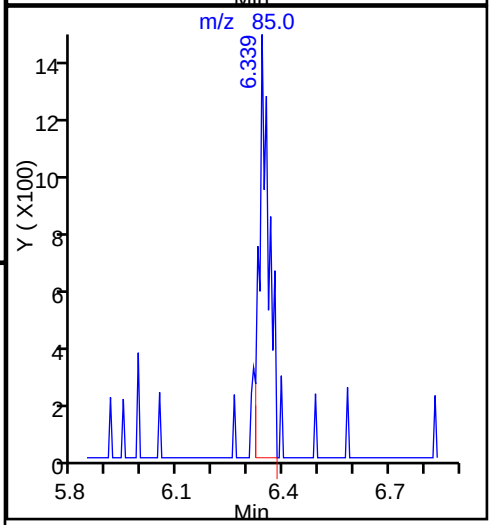
Lims ID:	180-42353-E-20	Lab Sample ID:	180-42353-20		
Client ID:	HD-MW-99S-0/1-0				
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

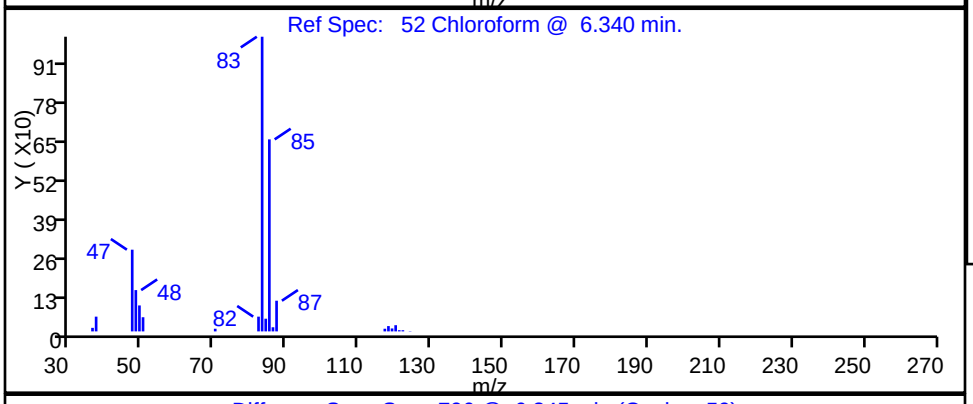
52 Chloroform, CAS: 67-66-3

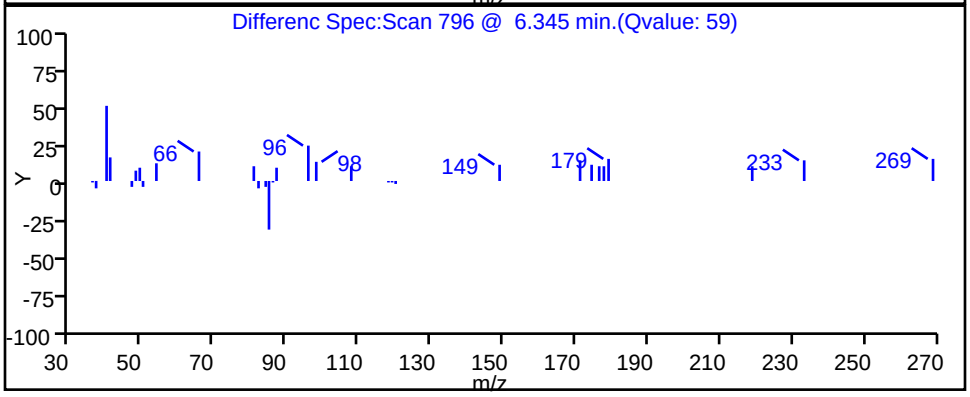










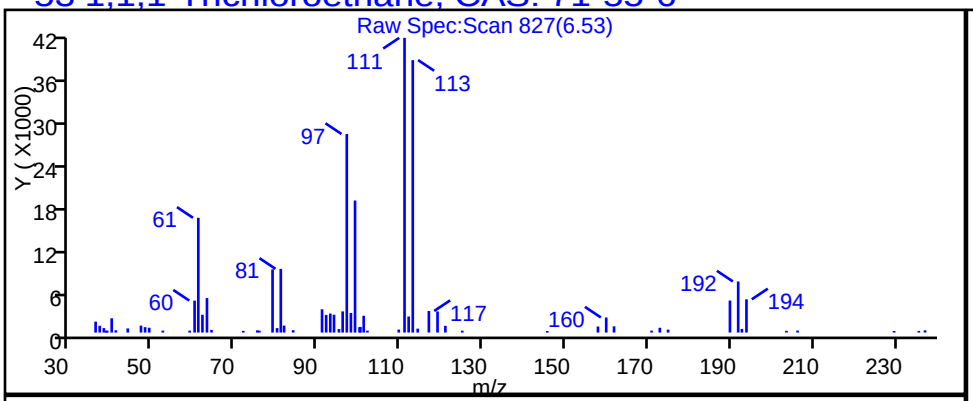


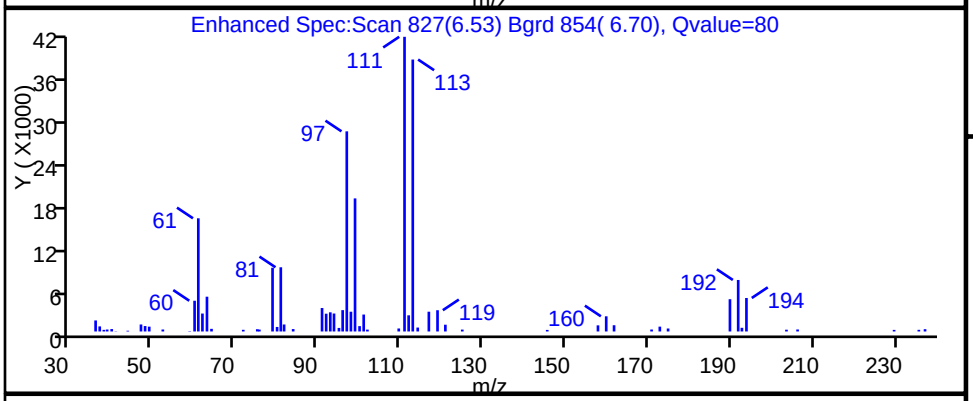
Report Date: 31-Mar-2015 14:07:21 Chrom Revision: 2.2 13-Mar-2015 11:20:44

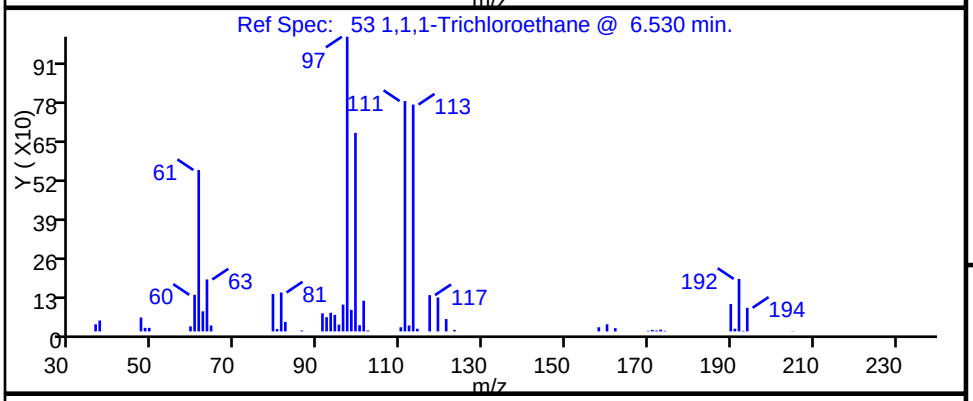
TestAmerica Pittsburgh

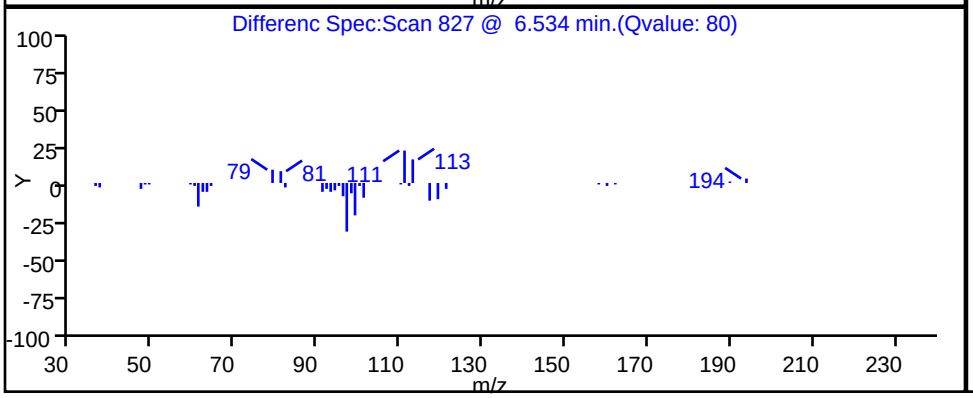
Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331007.D				
Injection Date:	31-Mar-2015 12:04:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-20	Lab Sample ID:	180-42353-20		
Client ID:	HD-MW-99S-0/1-0				
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

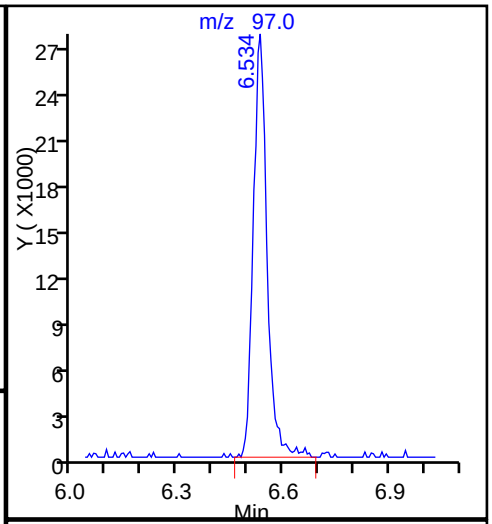
53 1,1,1-Trichloroethane, CAS: 71-55-6

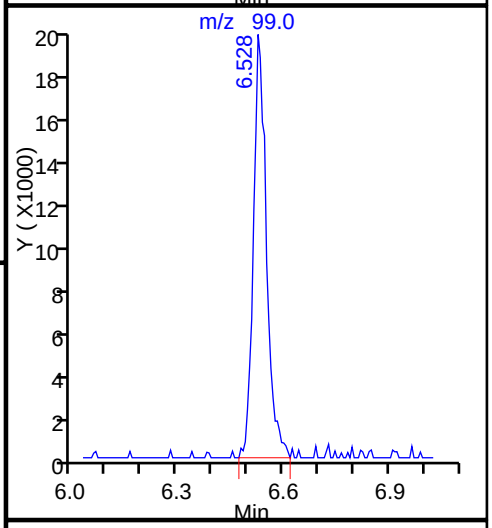


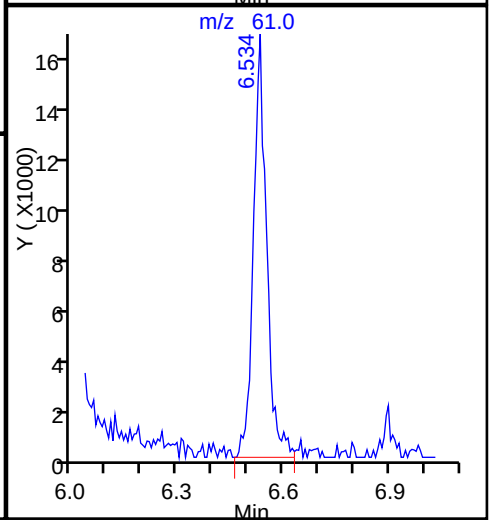










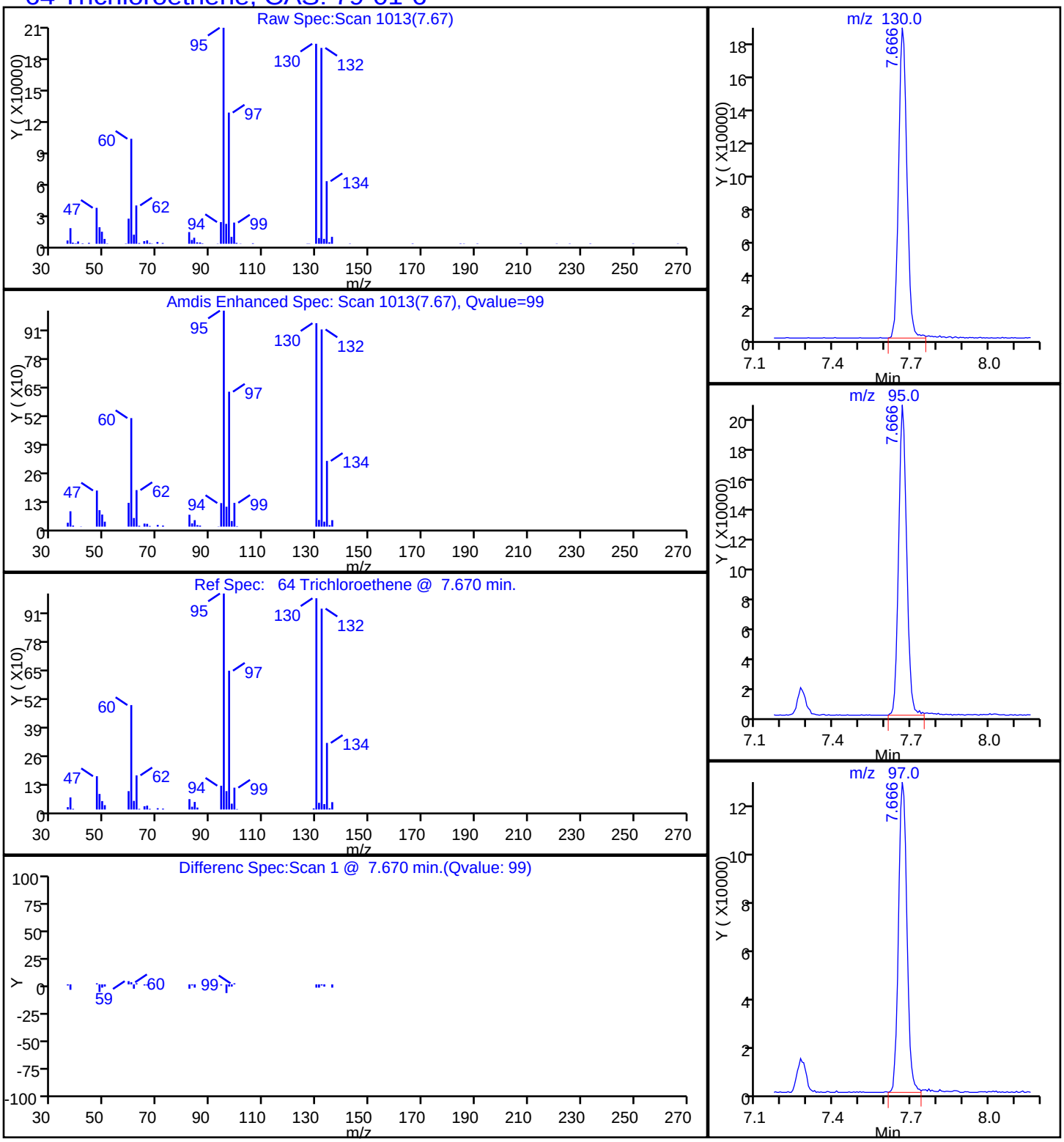


Report Date: 31-Mar-2015 14:07:21 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331007.D				
Injection Date:	31-Mar-2015 12:04:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-20	Lab Sample ID:	180-42353-20		
Client ID:	HD-MW-99S-0/1-0				
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6

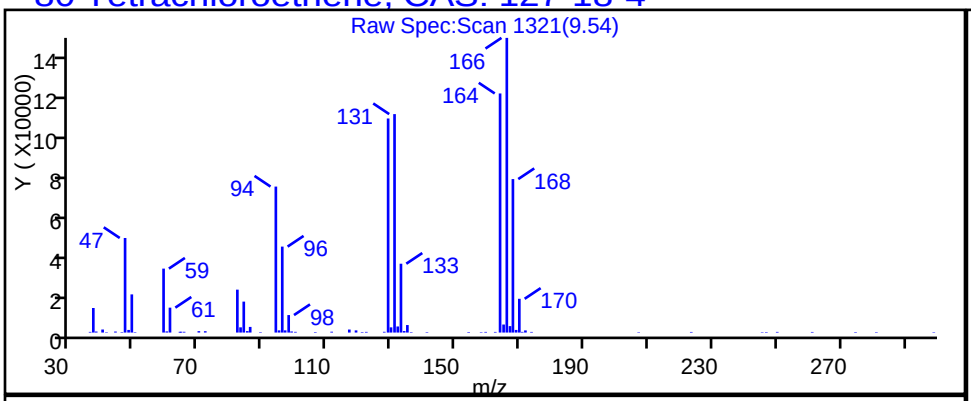


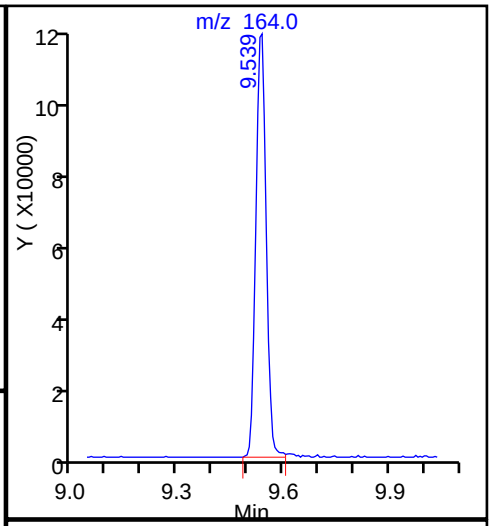
Report Date: 31-Mar-2015 14:07:21 Chrom Revision: 2.2 13-Mar-2015 11:20:44

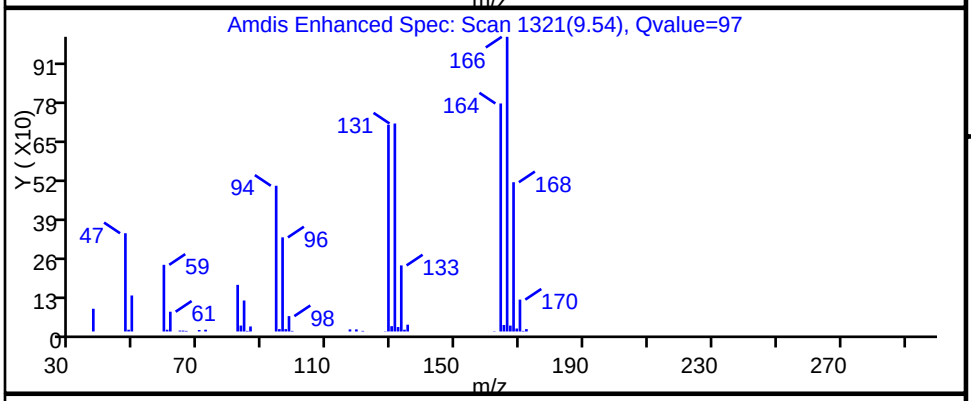
TestAmerica Pittsburgh

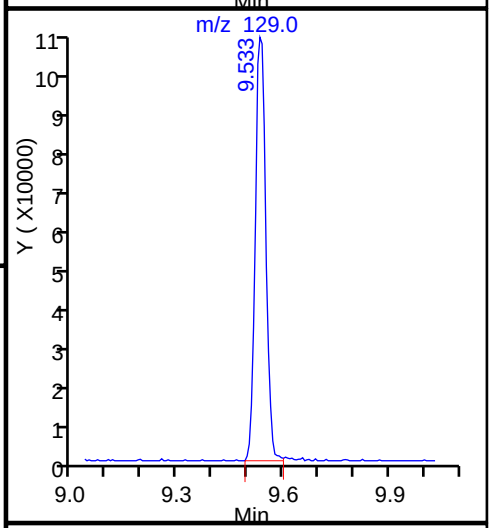
Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331007.D		
Injection Date:	31-Mar-2015 12:04:30	Instrument ID:	CHHP5
Lims ID:	180-42353-E-20	Lab Sample ID:	180-42353-20
Client ID:	HD-MW-99S-0/1-0		
Operator ID:	001562	ALS Bottle#:	6 Worklist Smp#: 7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

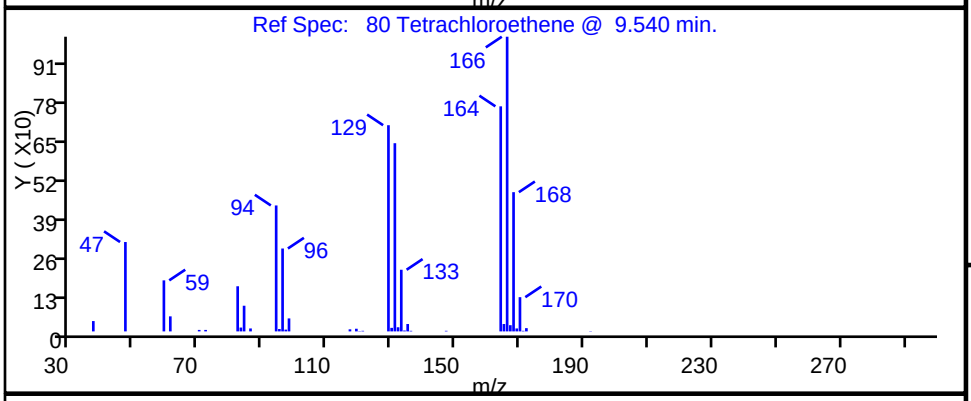
80 Tetrachloroethene, CAS: 127-18-4

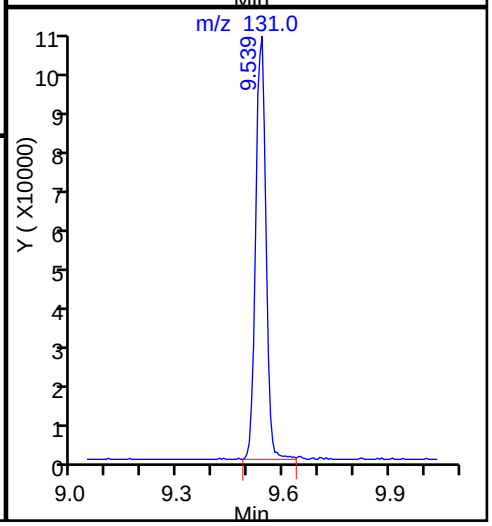


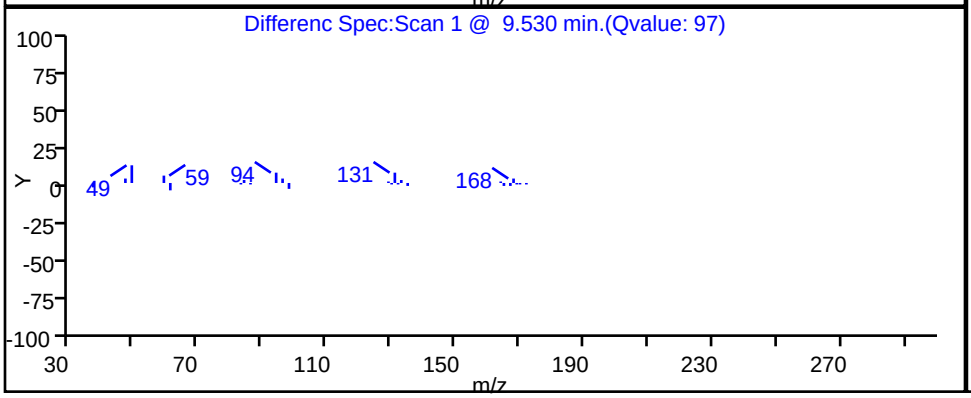












Manual Integration/User Assign Peak Report

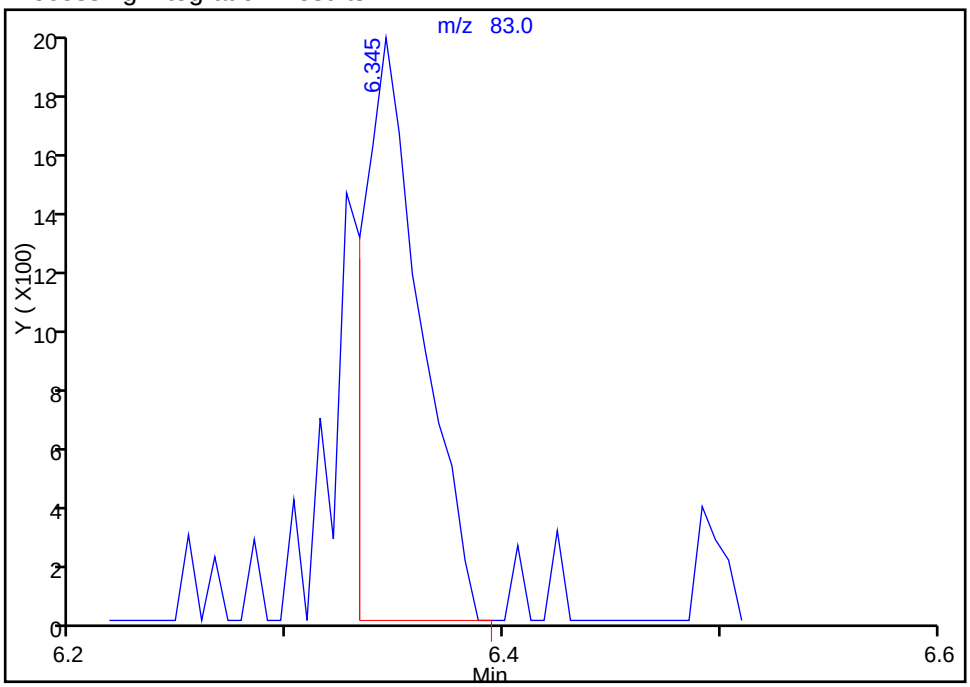
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331007.D				
Injection Date:	31-Mar-2015 12:04:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-20	Lab Sample ID:	180-42353-20		
Client ID:	HD-MW-99S-0/1-0				
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

52 Chloroform, CAS: 67-66-3

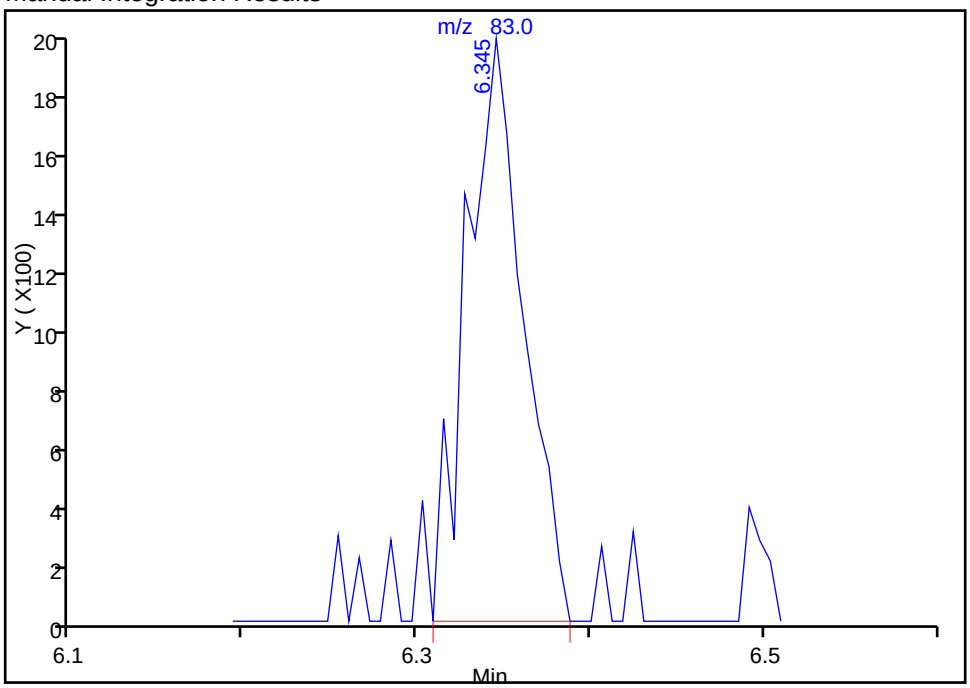
Processing Integration Results

RT: 6.35
Area: 3627
Amount: 0.844395
Amount Units: ng



Manual Integration Results

RT: 6.35
Area: 4500
Amount: 1.047636
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 14:07:20
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-99D-0/1-0 Lab Sample ID: 180-42353-21

Matrix: Water Lab File ID: 50330031.D

Analysis Method: 8260C Date Collected: 03/24/2015 13:05

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 23:01

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.: 136954 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	7.8		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	2.4	J	5.0	0.63
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.85
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.92
75-34-3	1,1-Dichloroethane	2.2	J	5.0	0.58
156-59-2	cis-1,2-Dichloroethene	58		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	10		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	140		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	12		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.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-99D-0/1-0 Lab Sample ID: 180-42353-21

Matrix: Water Lab File ID: 50330031.D

Analysis Method: 8260C Date Collected: 03/24/2015 13:05

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 23:01

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.: 136954 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)	117		64-135
2037-26-5	Toluene-d8 (Surr)	109		71-118
460-00-4	4-Bromofluorobenzene (Surr)	103		70-118
1868-53-7	Dibromofluoromethane (Surr)	109		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330031.D
Lims ID: 180-42353-E-21 Lab Sample ID: 180-42353-21
Client ID: HD-MW-99D-0/1-0
Sample Type: Client
Inject. Date: 30-Mar-2015 23:01:30 ALS Bottle#: 29 Worklist Smp#: 31
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 180-42353-E-21, 5x
Misc. Info.: 180-0006238-031
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 09:15:38 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 09:15:38

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.303	4.301	0.002	97	96941	1000.0	
*	2 Fluorobenzene (IS)	96	7.278	7.282	-0.004	100	384900	50.0	
*	3 Chlorobenzene-d5	119	10.362	10.367	-0.005	98	80810	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.686	12.684	0.002	93	119660	50.0	
$	5 Dibromofluoromethane (Surr	113	6.530	6.535	-0.005	63	95687	54.7	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.907	6.900	0.007	97	135114	58.5	
$	7 Toluene-d8 (Surr)	98	8.927	8.926	0.001	99	351038	54.5	
$	8 4-Bromofluorobenzene (Surr	95	11.530	11.536	-0.006	99	118954	51.3	
	12 Chloromethane	50		1.784				ND	
	13 Vinyl chloride	62		1.912				ND	
	15 Bromomethane	94		2.259				ND	
	16 Chloroethane	64		2.399				ND	
	22 1,1-Dichloroethene	96	3.384	3.390	-0.006	98	17397	7.84	
	24 Acetone	43		3.506				ND	
	26 Carbon disulfide	76		3.658				ND	
	31 Methylene Chloride	84	4.151	4.151	0.000	51	6245	2.43	
	33 Acrylonitrile	53		4.552				ND	
	34 trans-1,2-Dichloroethene	96		4.570				ND	
	35 Methyl tert-butyl ether	73		4.595				ND	
	37 1,1-Dichloroethane	63	5.173	5.173	0.000	29	9128	2.23	
	45 cis-1,2-Dichloroethene	96	5.940	5.939	0.001	84	140174	58.0	
	46 2-Butanone (MEK)	43		5.994				ND	
	49 Chlorobromomethane	128		6.231				ND	
	52 Chloroform	83	6.371	6.347	0.024	1	1772	0.4760	M
	53 1,1,1-Trichloroethane	97	6.536	6.535	0.001	63	23933	10.1	
	56 Carbon tetrachloride	117		6.718				ND	
	58 Benzene	78	6.955	6.955	0.000	1	2097	0.2299	
	59 1,2-Dichloroethane	62		6.986				ND	
	64 Trichloroethene	130	7.673	7.667	0.006	99	325893	142.6	
	67 1,2-Dichloropropane	63		7.904				ND	
	70 1,4-Dioxane	88		8.062				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.196				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.823				ND	
76 Toluene	91		8.993				ND	
77 trans-1,3-Dichloropropene	75		9.218				ND	
79 1,1,2-Trichloroethane	97		9.401				ND	
80 Tetrachloroethene	164	9.541	9.541	0.000	93	18913	11.7	
82 2-Hexanone	43		9.662				ND	
84 Chlorodibromomethane	129		9.796				ND	
85 Ethylene Dibromide	107		9.900				ND	
87 Chlorobenzene	112		10.392				ND	
89 1,1,1,2-Tetrachloroethane	131		10.478				ND	
90 Ethylbenzene	106		10.502				ND	
91 m-Xylene & p-Xylene	106		10.624				ND	
92 o-Xylene	106		11.013				ND	
93 Styrene	104		11.025				ND	
94 Bromoform	173		11.208				ND	
99 1,1,2,2-Tetrachloroethane	83		11.676				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

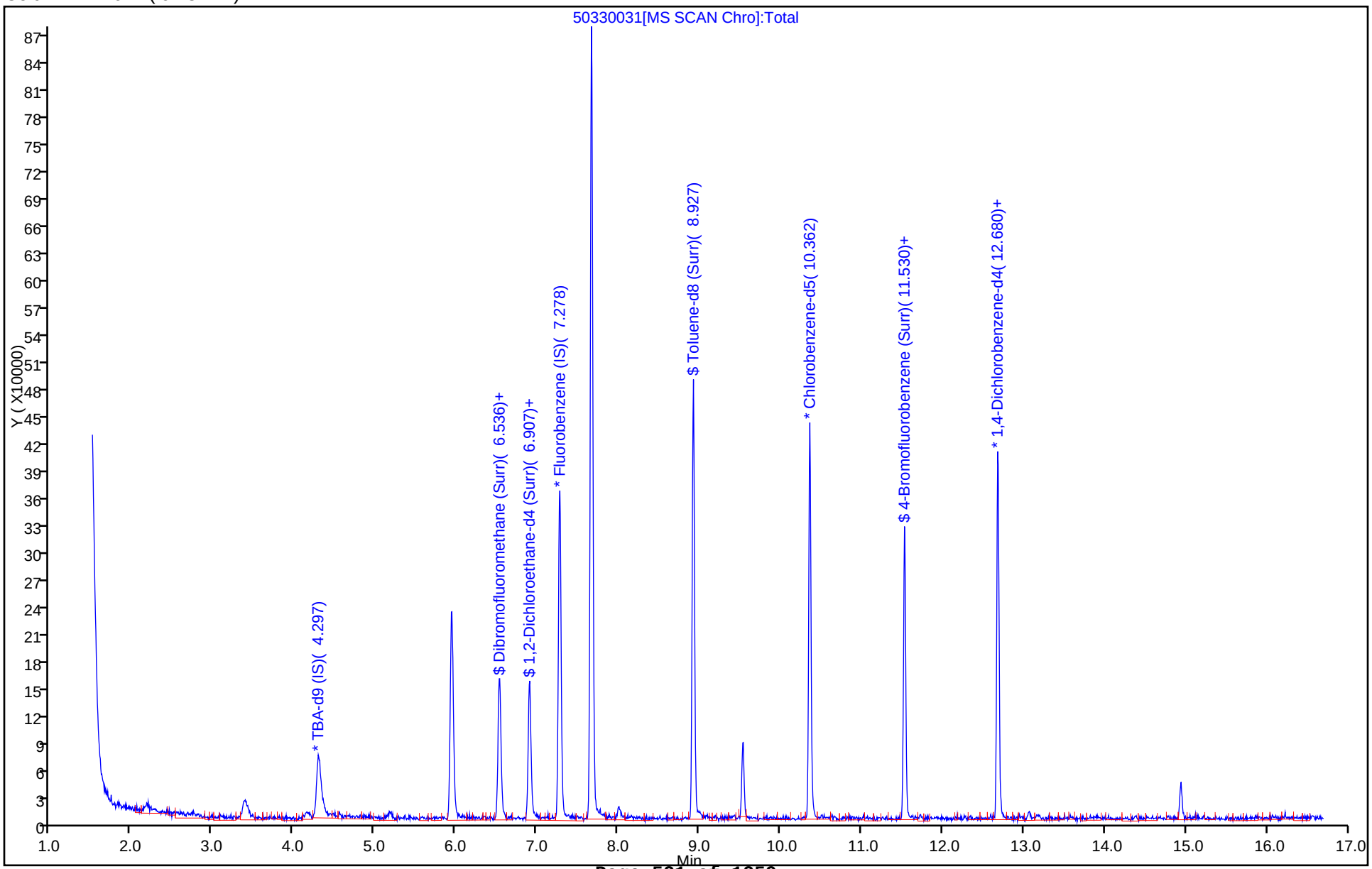
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 31-Mar-2015 09:15:39 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330031.D				
Injection Date:	30-Mar-2015 23:01:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-42353-E-21	Lab Sample ID:	180-42353-21	Worklist Smp#:	31
Client ID:	HD-MW-99D-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	29
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



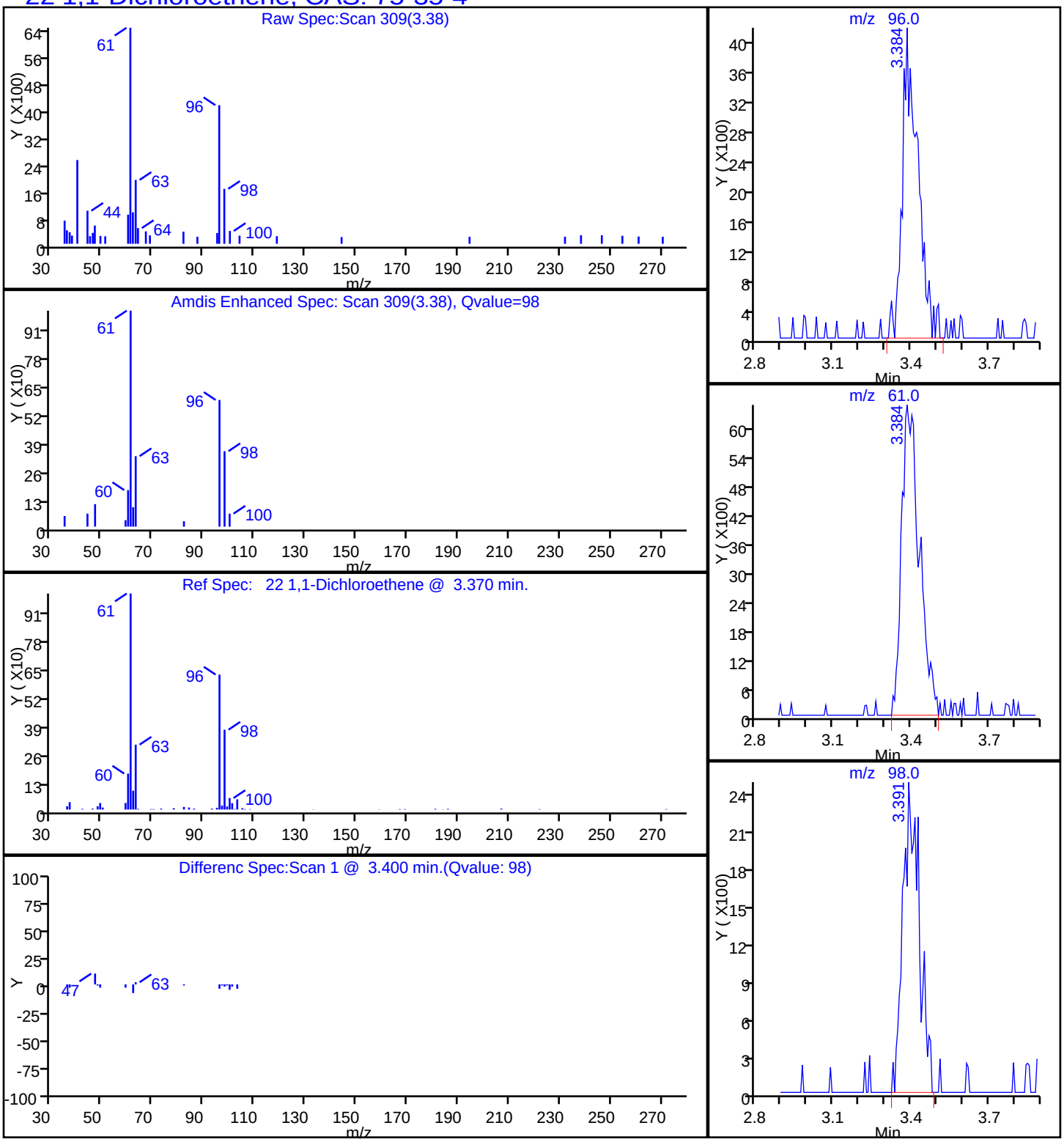
Report Date: 31-Mar-2015 09:15:39 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330031.D

Injection Date:	30-Mar-2015 23:01:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-21	Lab Sample ID:	180-42353-21		
Client ID:	HD-MW-99D-0/1-0				
Operator ID:	001562	ALS Bottle#:	29	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

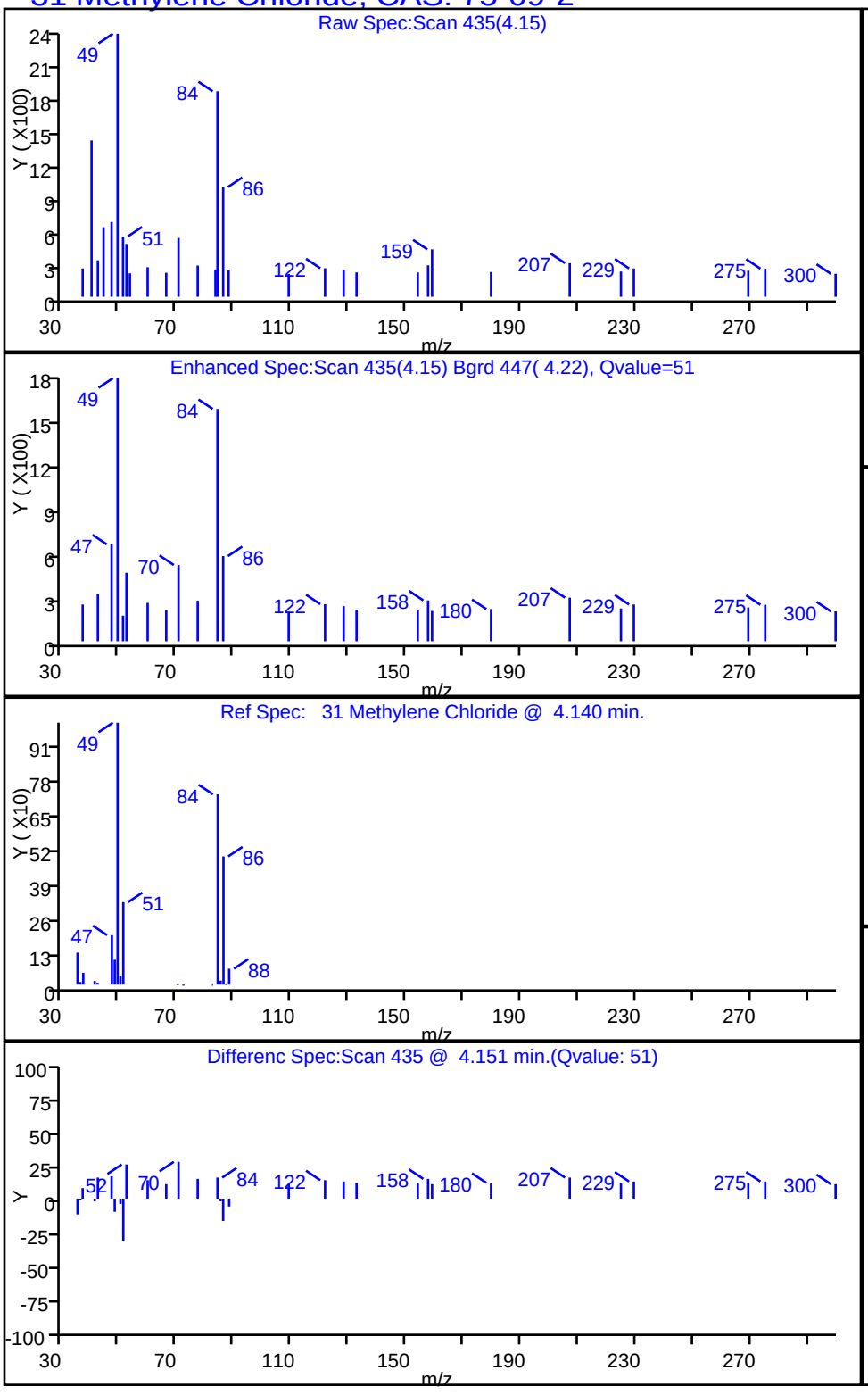


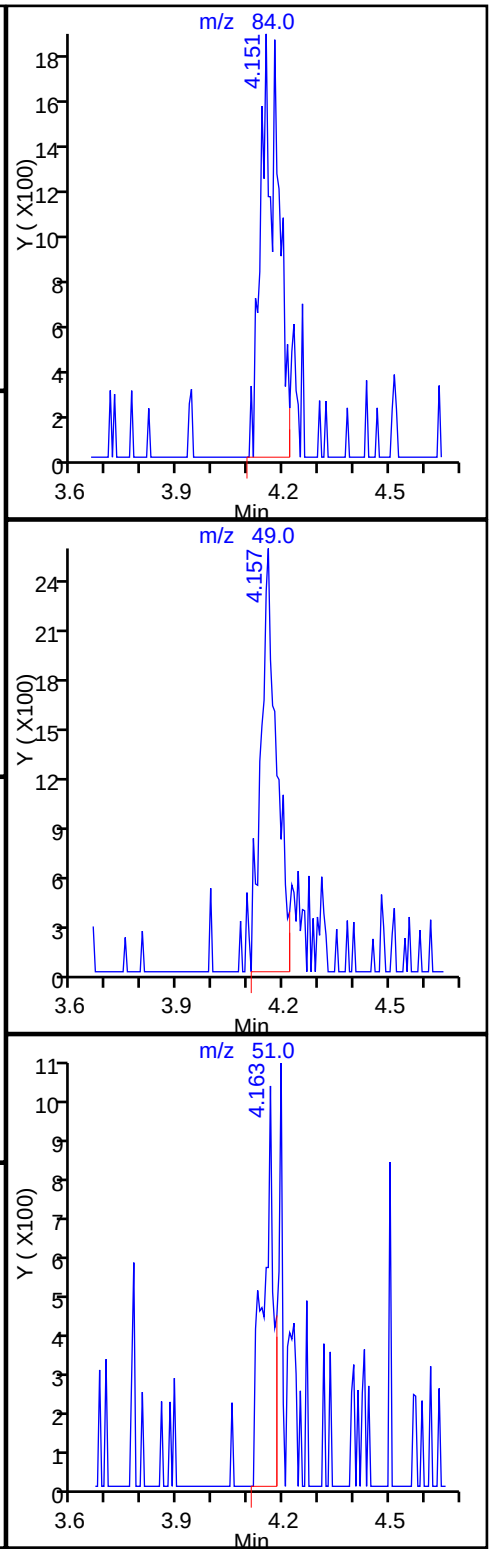
Report Date: 31-Mar-2015 09:15:39 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330031.D				
Injection Date:	30-Mar-2015 23:01:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-21	Lab Sample ID:	180-42353-21		
Client ID:	HD-MW-99D-0/1-0				
Operator ID:	001562	ALS Bottle#:	29	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2



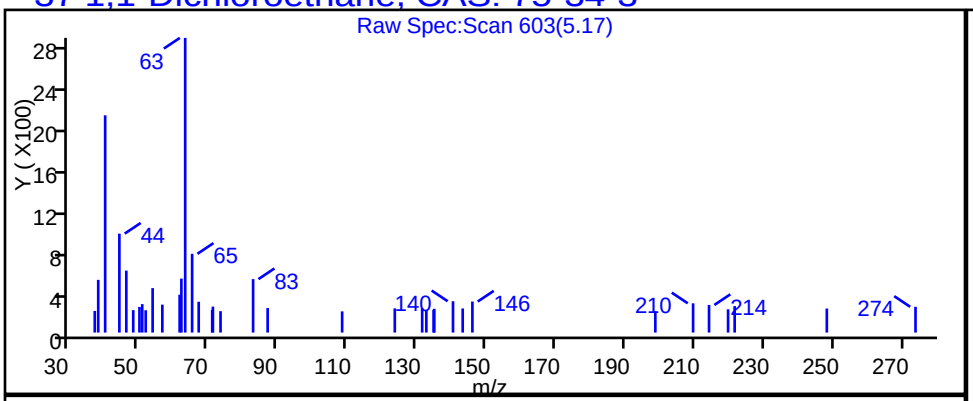


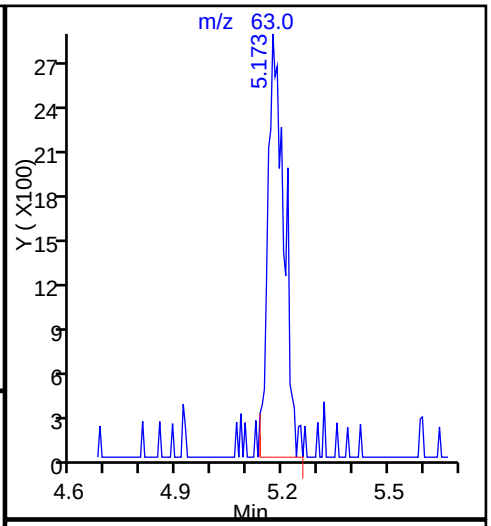
Report Date: 31-Mar-2015 09:15:39 Chrom Revision: 2.2 13-Mar-2015 11:20:44

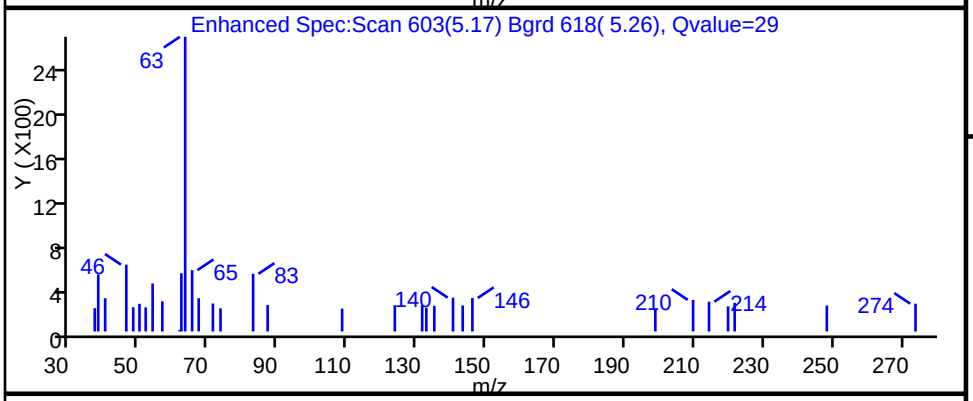
TestAmerica Pittsburgh

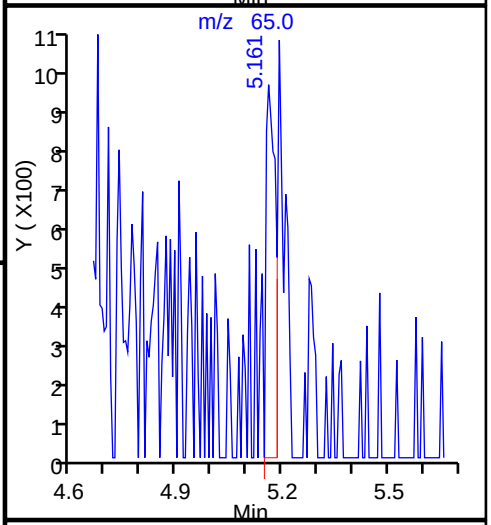
Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330031.D				
Injection Date:	30-Mar-2015 23:01:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-21	Lab Sample ID:	180-42353-21		
Client ID:	HD-MW-99D-0/1-0				
Operator ID:	001562	ALS Bottle#:	29	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

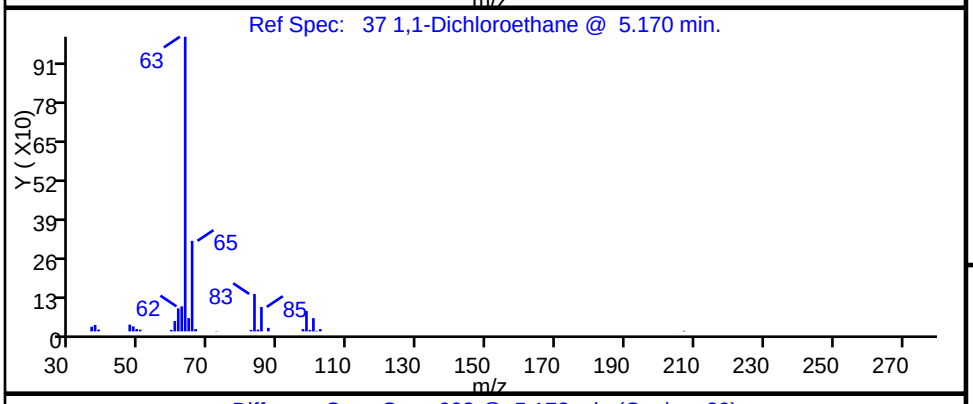
37 1,1-Dichloroethane, CAS: 75-34-3

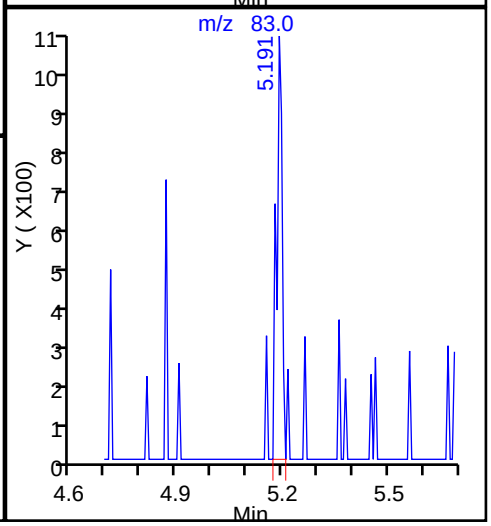


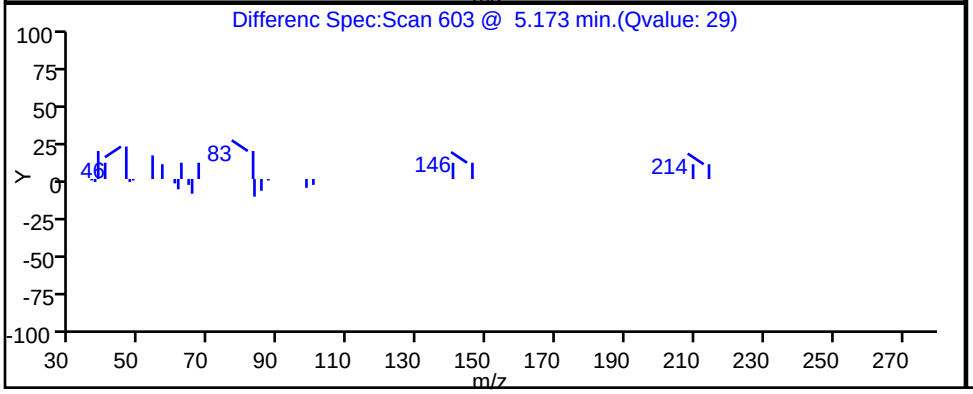










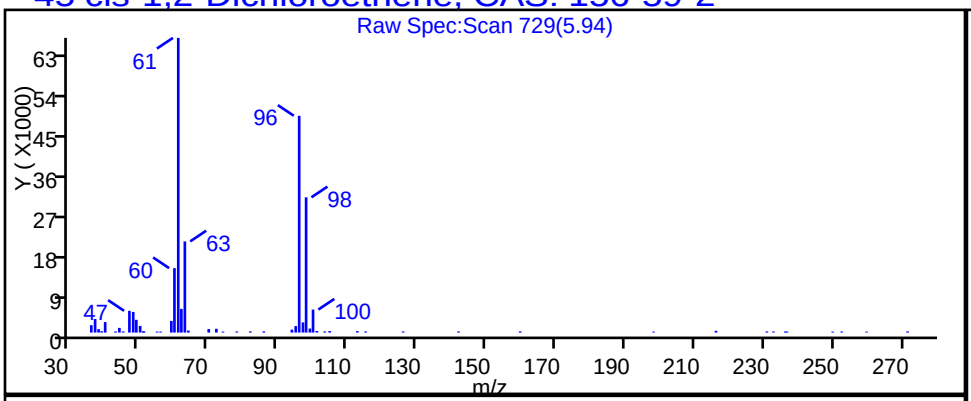


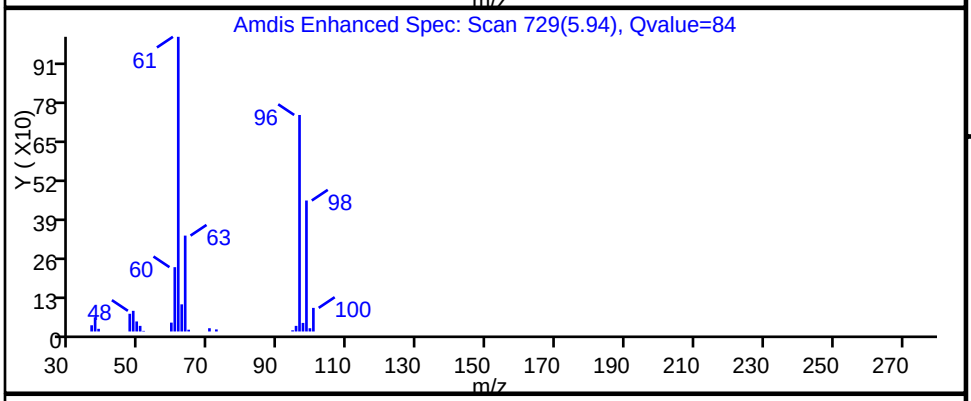
Report Date: 31-Mar-2015 09:15:39 Chrom Revision: 2.2 13-Mar-2015 11:20:44

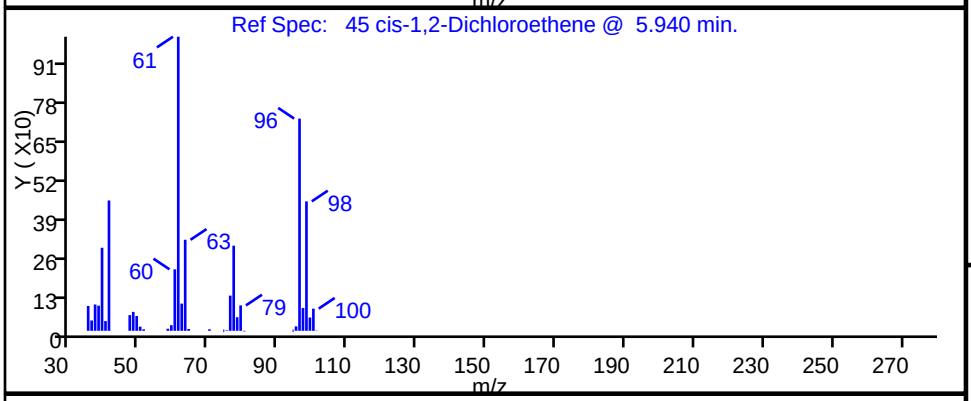
TestAmerica Pittsburgh

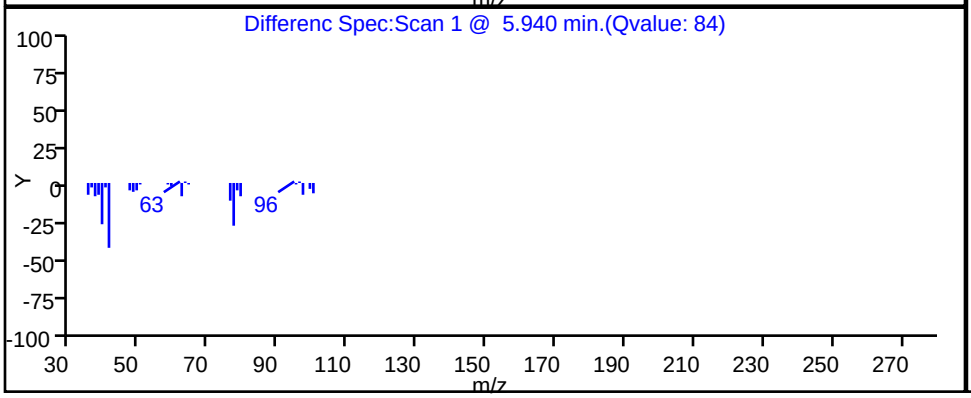
Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330031.D				
Injection Date:	30-Mar-2015 23:01:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-21	Lab Sample ID:	180-42353-21		
Client ID:	HD-MW-99D-0/1-0				
Operator ID:	001562	ALS Bottle#:	29	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

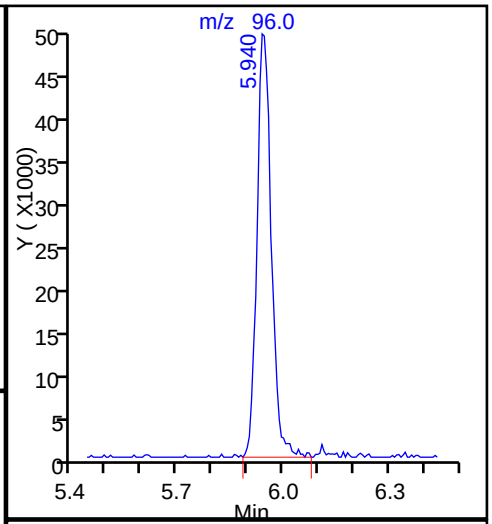
45 cis-1,2-Dichloroethene, CAS: 156-59-2

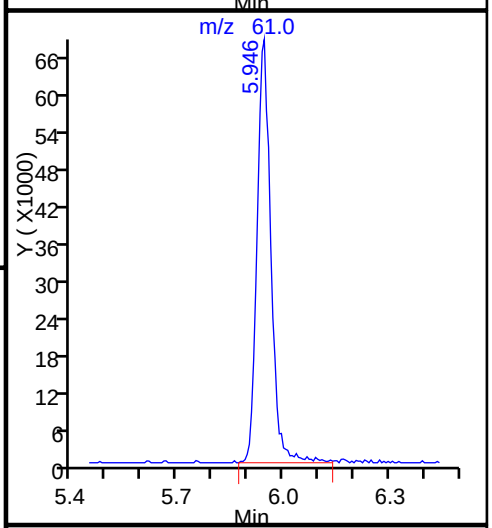


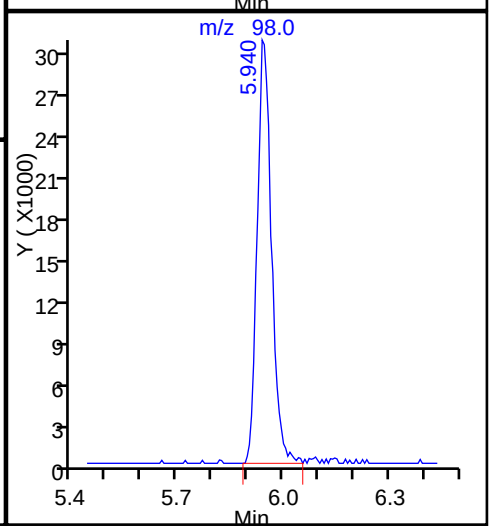










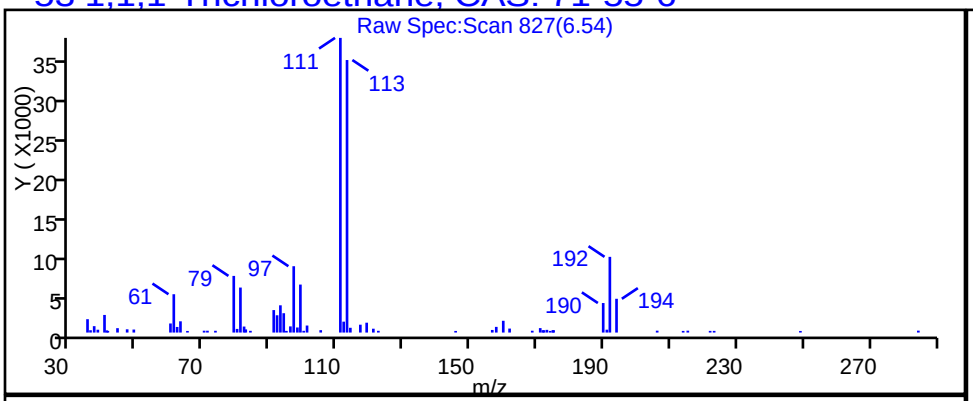


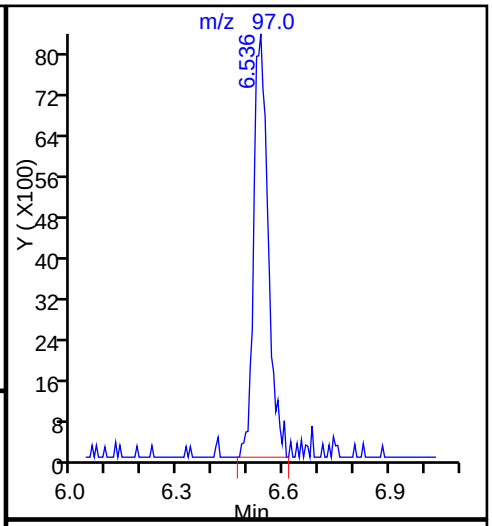
Report Date: 31-Mar-2015 09:15:39 Chrom Revision: 2.2 13-Mar-2015 11:20:44

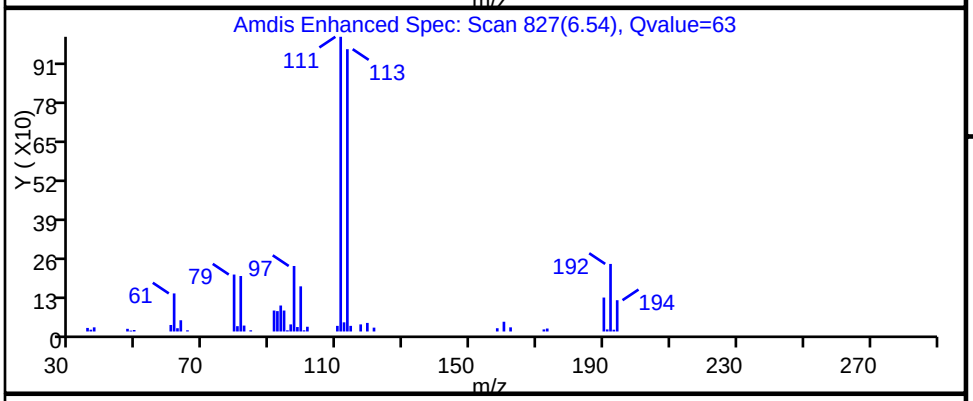
TestAmerica Pittsburgh

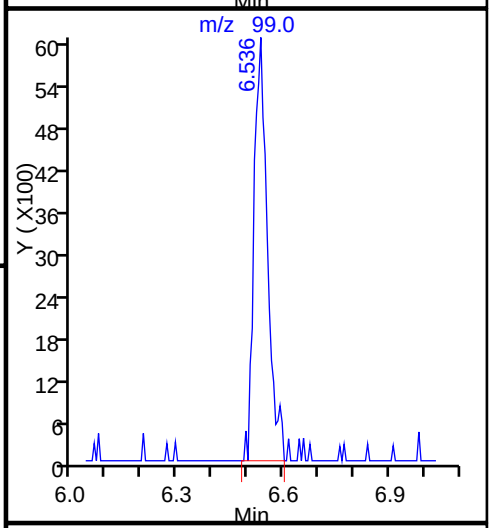
Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330031.D				
Injection Date:	30-Mar-2015 23:01:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-21	Lab Sample ID:	180-42353-21		
Client ID:	HD-MW-99D-0/1-0				
Operator ID:	001562	ALS Bottle#:	29	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

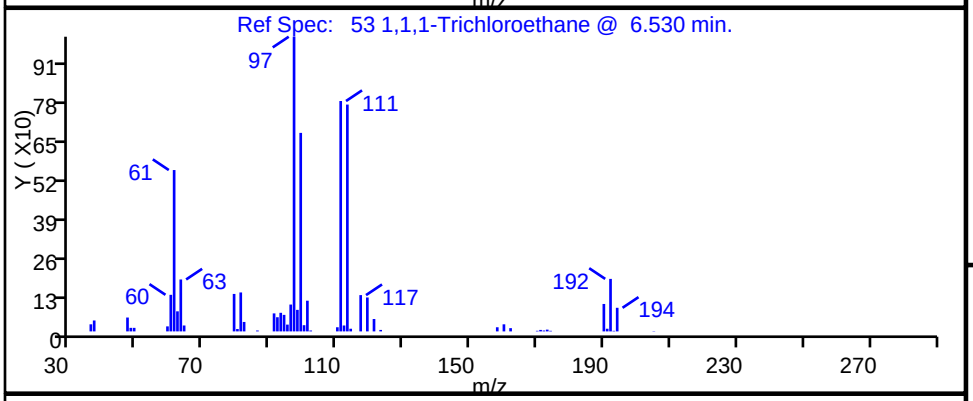
53 1,1,1-Trichloroethane, CAS: 71-55-6

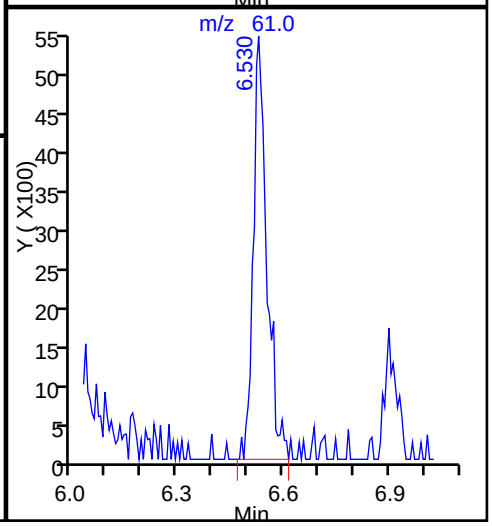


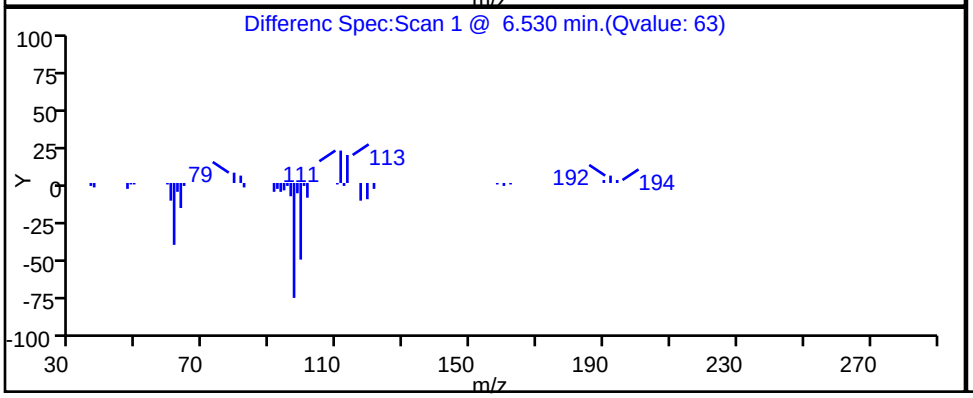










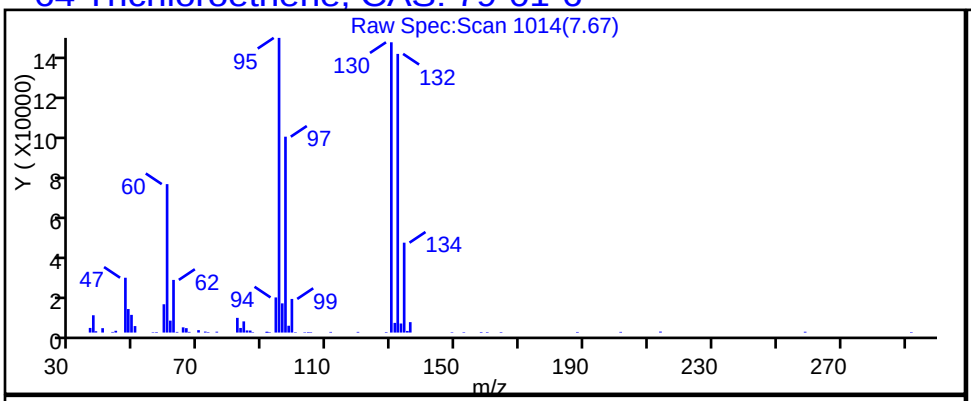


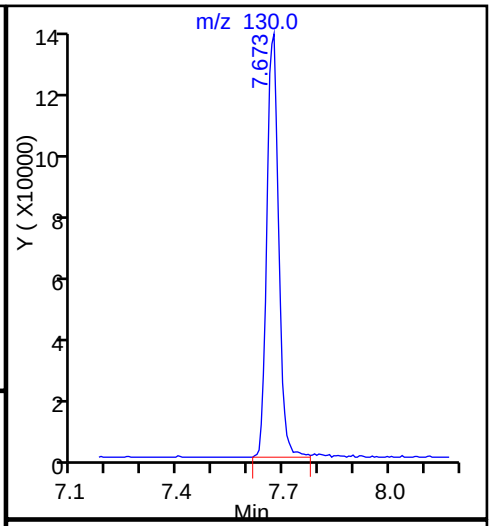
Report Date: 31-Mar-2015 09:15:39 Chrom Revision: 2.2 13-Mar-2015 11:20:44

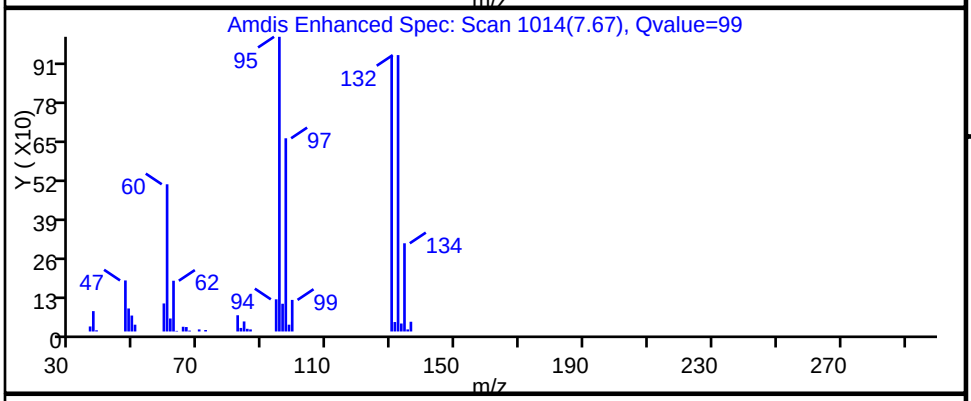
TestAmerica Pittsburgh

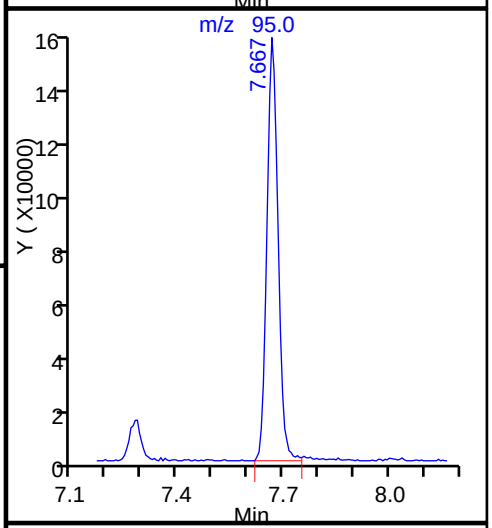
Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330031.D				
Injection Date:	30-Mar-2015 23:01:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-21	Lab Sample ID:	180-42353-21		
Client ID:	HD-MW-99D-0/1-0				
Operator ID:	001562	ALS Bottle#:	29	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

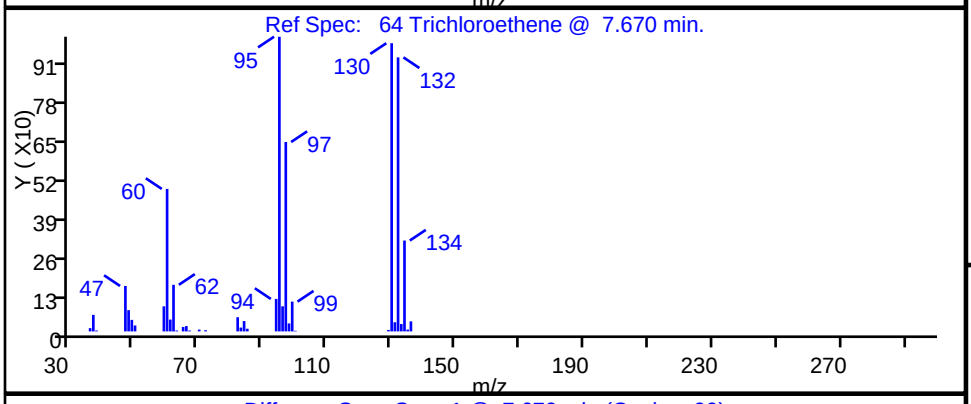
64 Trichloroethene, CAS: 79-01-6

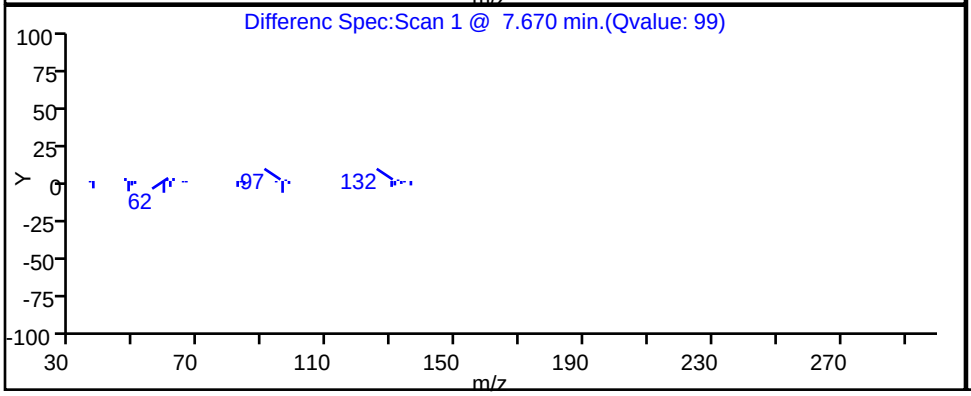


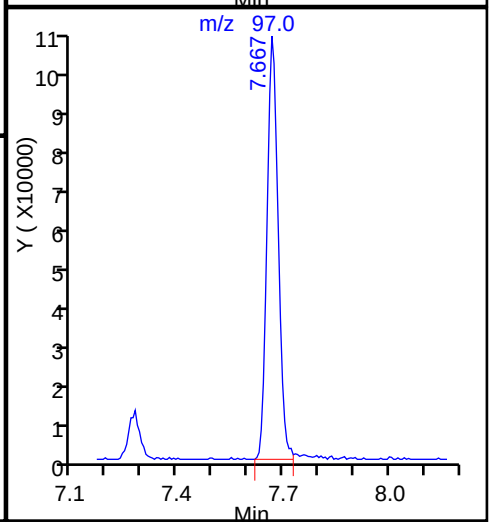












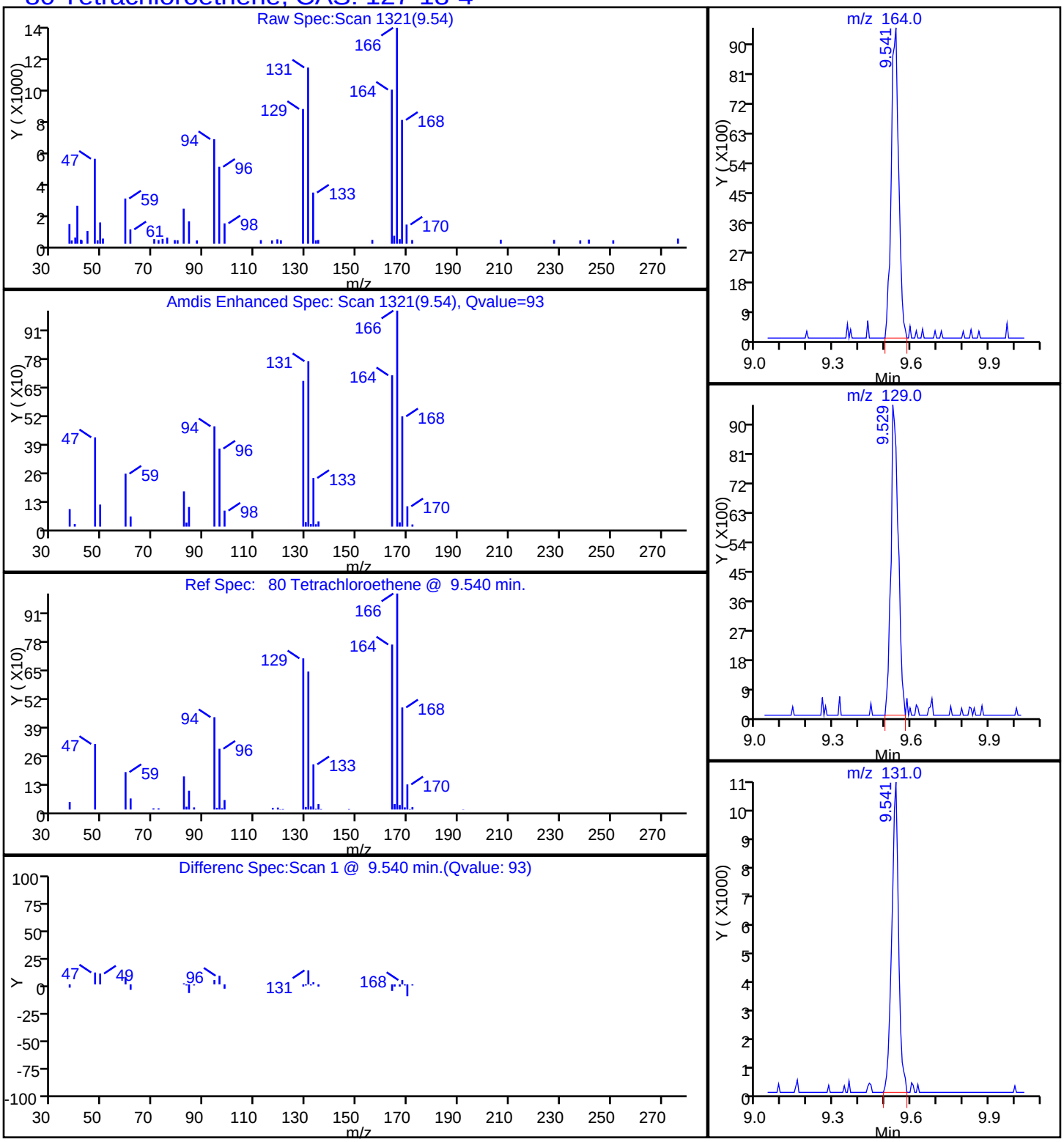
Report Date: 31-Mar-2015 09:15:39 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330031.D

Injection Date:	30-Mar-2015 23:01:30	Instrument ID:	CHHP5
Lims ID:	180-42353-E-21	Lab Sample ID:	180-42353-21
Client ID:	HD-MW-99D-0/1-0		
Operator ID:	001562	ALS Bottle#:	29 Worklist Smp#: 31
Purge Vol:	5.000 mL	Dil. Factor:	5.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

80 Tetrachloroethene, CAS: 127-18-4



Manual Integration/User Assign Peak Report

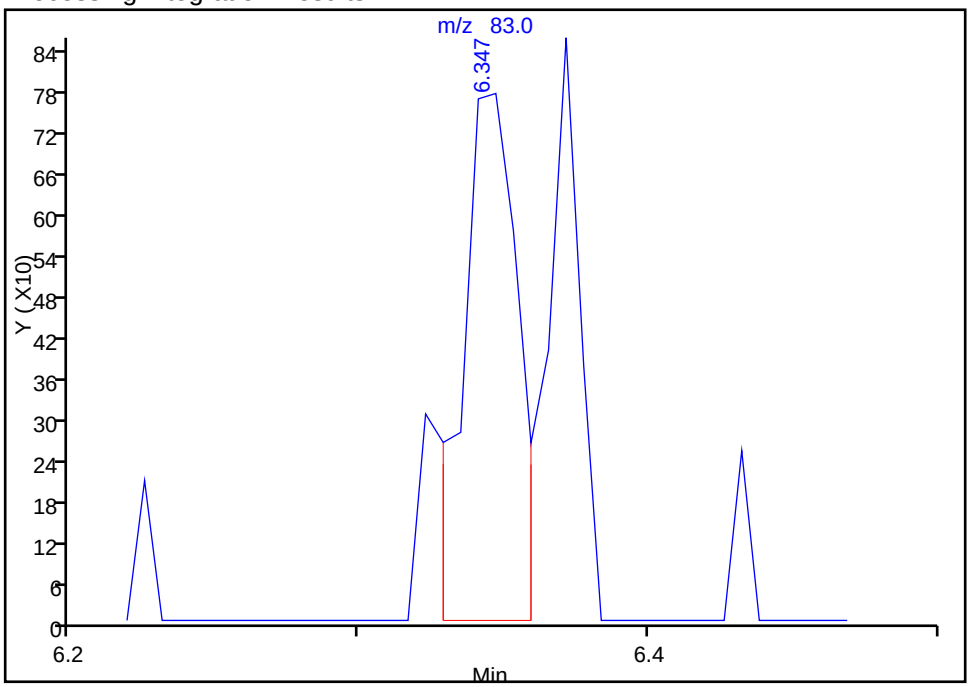
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330031.D				
Injection Date:	30-Mar-2015 23:01:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-21	Lab Sample ID:	180-42353-21		
Client ID:	HD-MW-99D-0/1-0				
Operator ID:	001562	ALS Bottle#:	29	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

52 Chloroform, CAS: 67-66-3

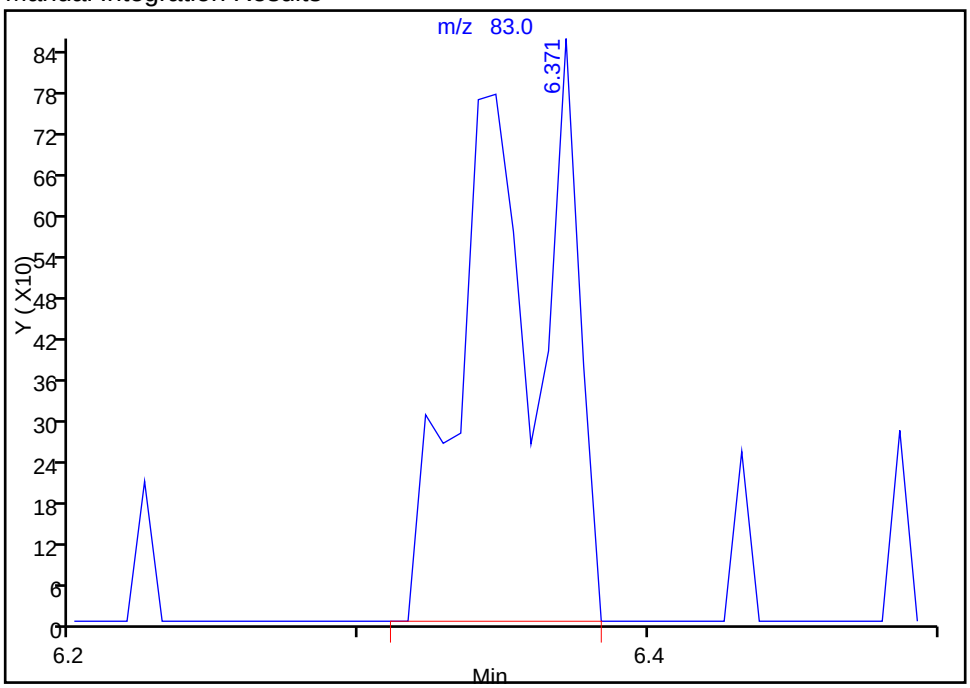
Processing Integration Results

RT: 6.35
Area: 1064
Amount: 0.285823
Amount Units: ng



Manual Integration Results

RT: 6.37
Area: 1772
Amount: 0.476014
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 09:15:38
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-145A-0/1-0 Lab Sample ID: 180-42353-22

Matrix: Water Lab File ID: 50401015.D

Analysis Method: 8260C Date Collected: 03/24/2015 10:20

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2015 16:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 137218 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.28
75-01-4	Vinyl chloride	1.0	U	1.0	0.23
74-83-9	Bromomethane	1.0	U *	1.0	0.31
75-00-3	Chloroethane	1.0	U	1.0	0.21
75-35-4	1,1-Dichloroethene	0.93	J	1.0	0.30
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.21
75-09-2	Methylene Chloride	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.17
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.18
75-34-3	1,1-Dichloroethane	0.33	J	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	20		1.0	0.24
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	0.25	J	1.0	0.17
71-55-6	1,1,1-Trichloroethane	1.3		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	22		1.0	0.14
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.095
75-27-4	Bromodichloromethane	1.0	U	1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53
108-88-3	Toluene	1.0	U	1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	1.0	U *	1.0	0.15
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
127-18-4	Tetrachloroethene	11		1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.16
124-48-1	Dibromochloromethane	1.0	U	1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
100-41-4	Ethylbenzene	1.0	U	1.0	0.23
1330-20-7	Xylenes, Total	3.0	U	3.0	0.49
100-42-5	Styrene	1.0	U	1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-145A-0/1-0 Lab Sample ID: 180-42353-22

Matrix: Water Lab File ID: 50401015.D

Analysis Method: 8260C Date Collected: 03/24/2015 10:20

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2015 16:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 137218 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		64-135
2037-26-5	Toluene-d8 (Surr)	105		71-118
460-00-4	4-Bromofluorobenzene (Surr)	94		70-118
1868-53-7	Dibromofluoromethane (Surr)	107		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401015.D
Lims ID: 180-42353-C-22 Lab Sample ID: 180-42353-22
Client ID: HD-MW-145A-0/1-0
Sample Type: Client
Inject. Date: 01-Apr-2015 16:35:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-C-22
Misc. Info.: 180-0006280-015
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Apr-2015 08:01:01 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: fergusond Date: 02-Apr-2015 08:01:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.299	4.303	-0.004	99	104660	1000.0	
* 2 Fluorobenzene (IS)	96	7.274	7.278	-0.004	100	409276	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.362	0.002	99	90408	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.680	0.002	94	124346	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.532	6.524	0.008	61	99441	53.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.903	6.895	0.008	97	139323	56.8	
$ 7 Toluene-d8 (Surr)	98	8.922	8.921	0.001	100	377794	52.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.532	11.531	0.001	97	122321	47.1	
12 Chloromethane	50		1.779				ND	
13 Vinyl chloride	62		1.907				ND	
15 Bromomethane	94		2.259				ND	
16 Chloroethane	64		2.393				ND	
22 1,1-Dichloroethene	96	3.380	3.385	-0.005	51	10938	4.63	
24 Acetone	43		3.494				ND	
26 Carbon disulfide	76		3.671				ND	
31 Methylene Chloride	84		4.151				ND	
33 Acrylonitrile	53		4.547				ND	
34 trans-1,2-Dichloroethene	96	4.573	4.565	0.008	1	1244	0.5096	
35 Methyl tert-butyl ether	73	4.615	4.596	0.019	32	1872	0.3469	M
37 1,1-Dichloroethane	63	5.175	5.173	0.002	41	7171	1.65	
45 cis-1,2-Dichloroethene	96	5.948	5.934	0.014	83	259743	101.0	
46 2-Butanone (MEK)	43		5.989				ND	
49 Chlorobromomethane	128		6.226				ND	
52 Chloroform	83	6.349	6.341	0.008	60	5040	1.27	M
53 1,1,1-Trichloroethane	97	6.538	6.536	0.002	61	16681	6.60	
56 Carbon tetrachloride	117		6.725				ND	
58 Benzene	78		6.956				ND	
59 1,2-Dichloroethane	62		6.986				ND	
64 Trichloroethene	130	7.669	7.668	0.001	98	263383	108.4	
67 1,2-Dichloropropane	63		7.899				ND	
70 1,4-Dioxane	88		8.057				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.191				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.824				ND	
76 Toluene	91	8.989	8.988	0.001	44	2535	0.2736	
77 trans-1,3-Dichloropropene	75		9.219				ND	
79 1,1,2-Trichloroethane	97		9.401				ND	
80 Tetrachloroethene	164	9.531	9.535	-0.004	97	100867	55.7	
82 2-Hexanone	43		9.651				ND	
84 Chlorodibromomethane	129		9.791				ND	
85 Ethylene Dibromide	107		9.900				ND	
87 Chlorobenzene	112		10.387				ND	
89 1,1,1,2-Tetrachloroethane	131		10.472				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.618				ND	
92 o-Xylene	106		11.014				ND	
93 Styrene	104		11.026				ND	
94 Bromoform	173		11.214				ND	
99 1,1,2,2-Tetrachloroethane	83		11.677				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

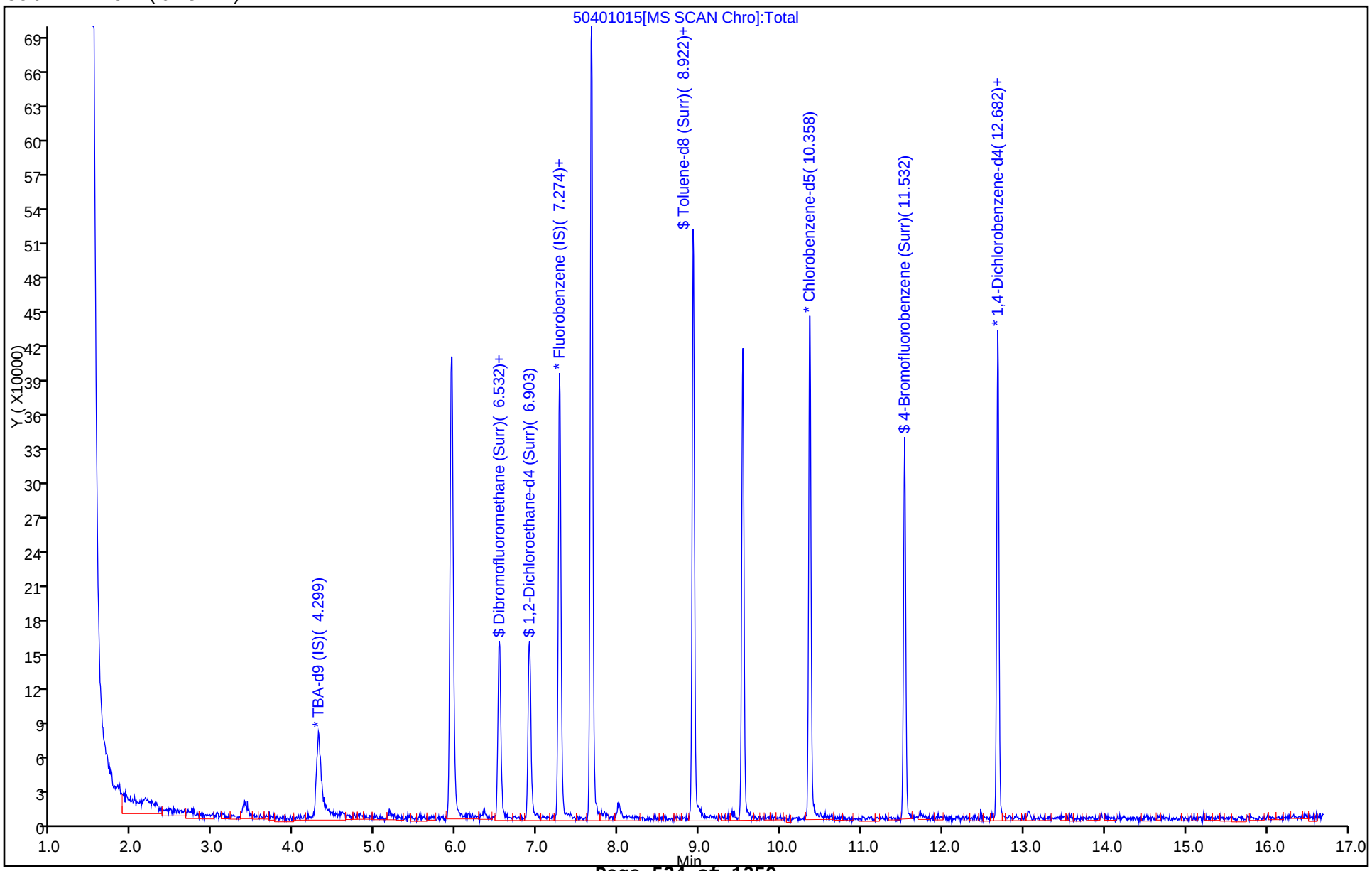
Report Date: 02-Apr-2015 08:01:02 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401015.D

Injection Date:	01-Apr-2015 16:35:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-42353-C-22	Lab Sample ID:	180-42353-22	Worklist Smp#:	15
Client ID:	HD-MW-145A-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



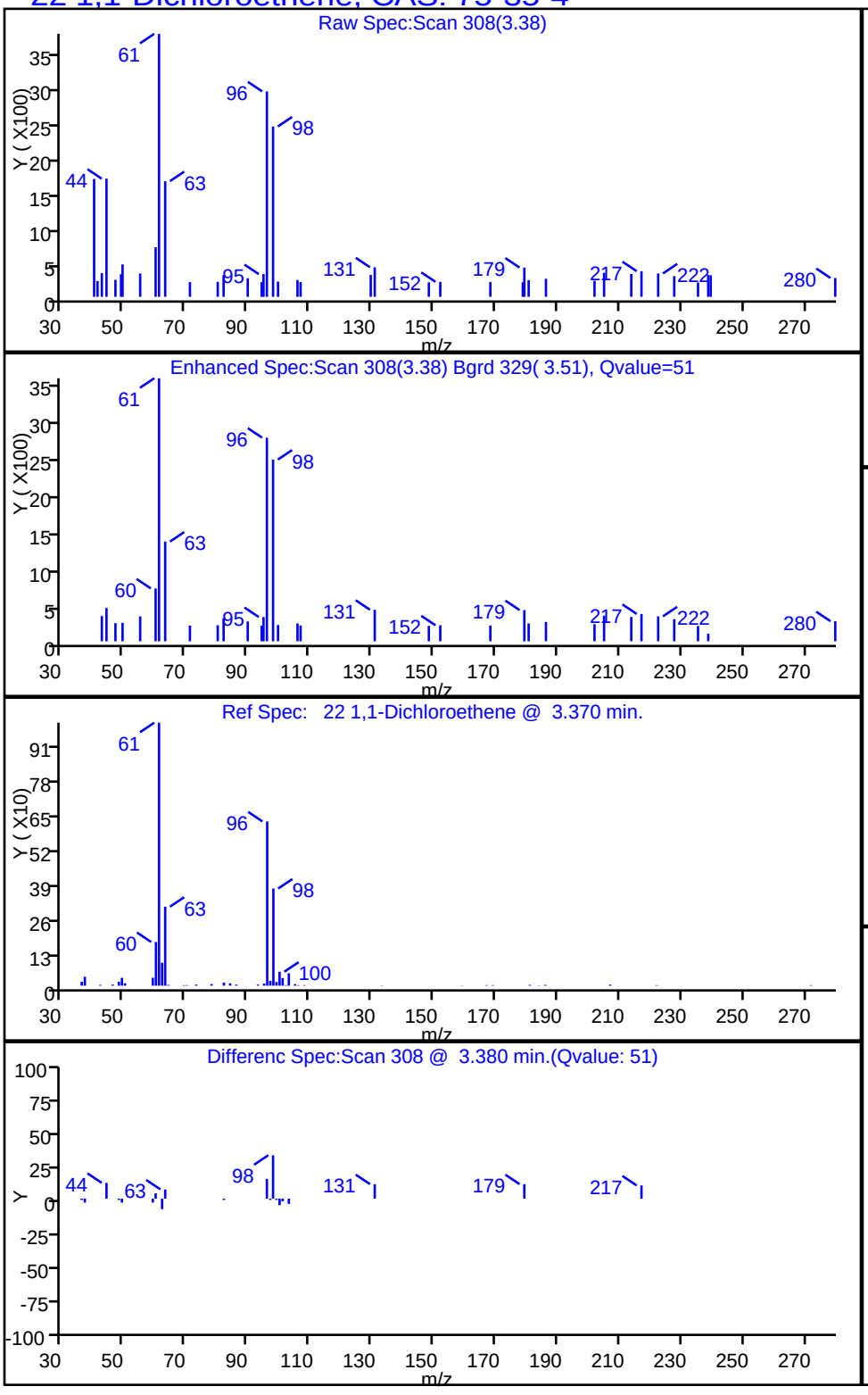
Report Date: 02-Apr-2015 08:01:02 Chrom Revision: 2.2 13-Mar-2015 11:20:44

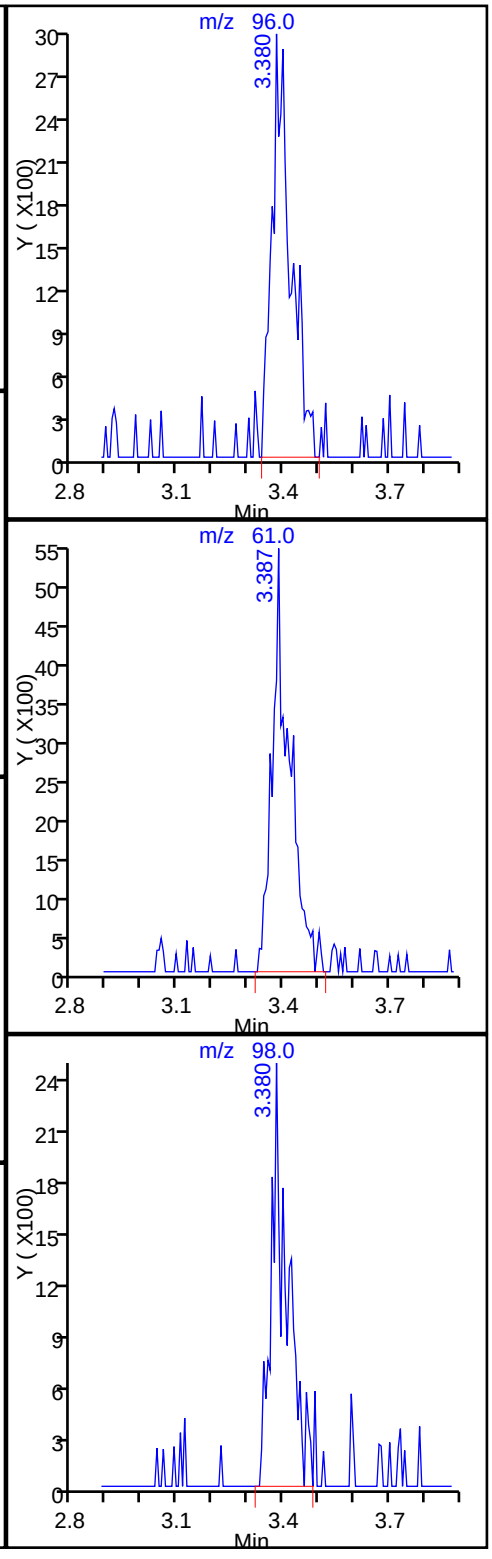
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401015.D

Injection Date:	01-Apr-2015 16:35:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-22	Lab Sample ID:	180-42353-22		
Client ID:	HD-MW-145A-0/1-0				
Operator ID:	001562	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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





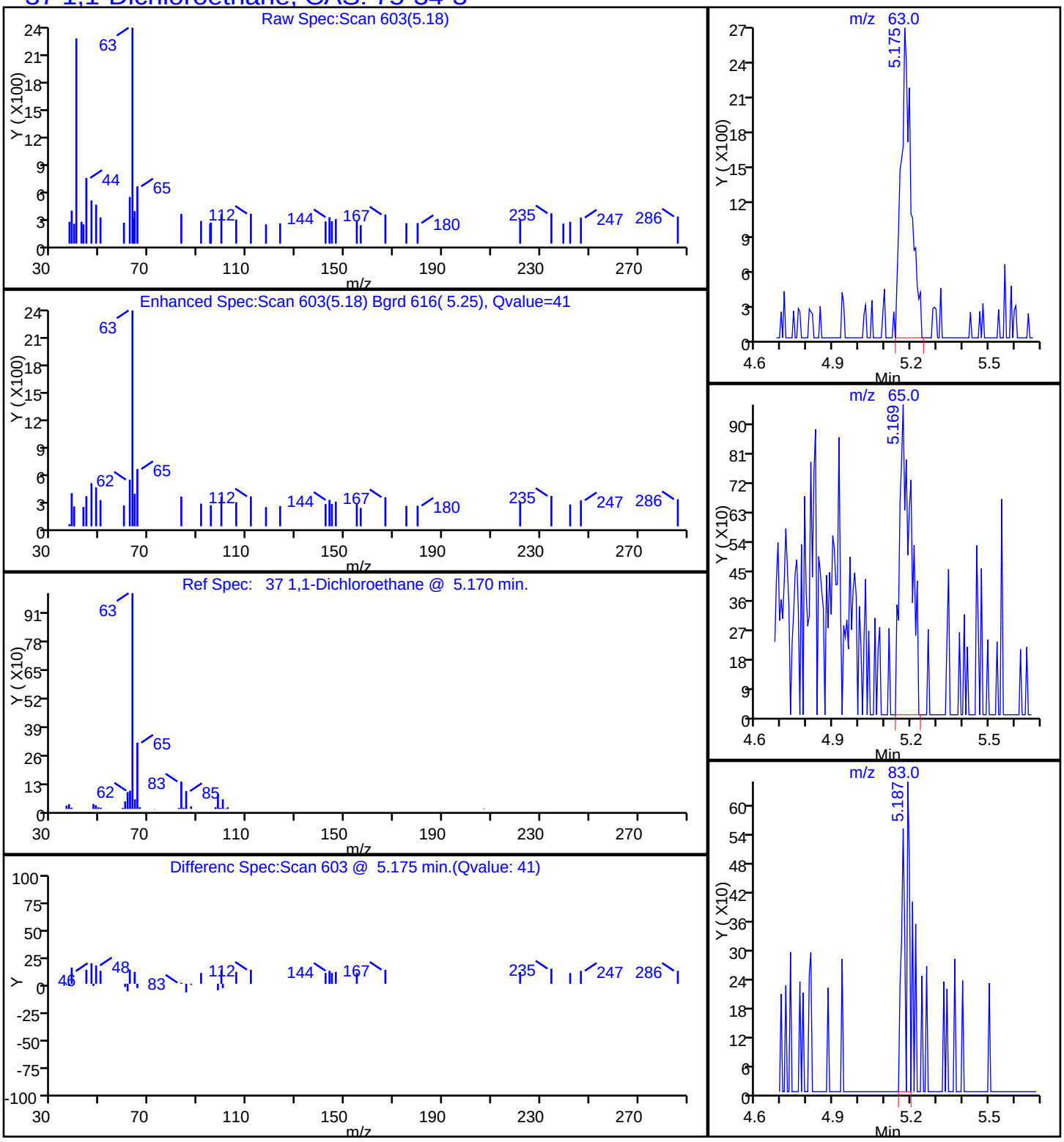
Report Date: 02-Apr-2015 08:01:02 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401015.D

Injection Date:	01-Apr-2015 16:35:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-22	Lab Sample ID:	180-42353-22		
Client ID:	HD-MW-145A-0/1-0				
Operator ID:	001562	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



Report Date: 02-Apr-2015 08:01:02 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401015.D

Injection Date: 01-Apr-2015 16:35:30 Instrument ID: CHHP5

Lims ID: 180-42353-C-22 Lab Sample ID: 180-42353-22

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

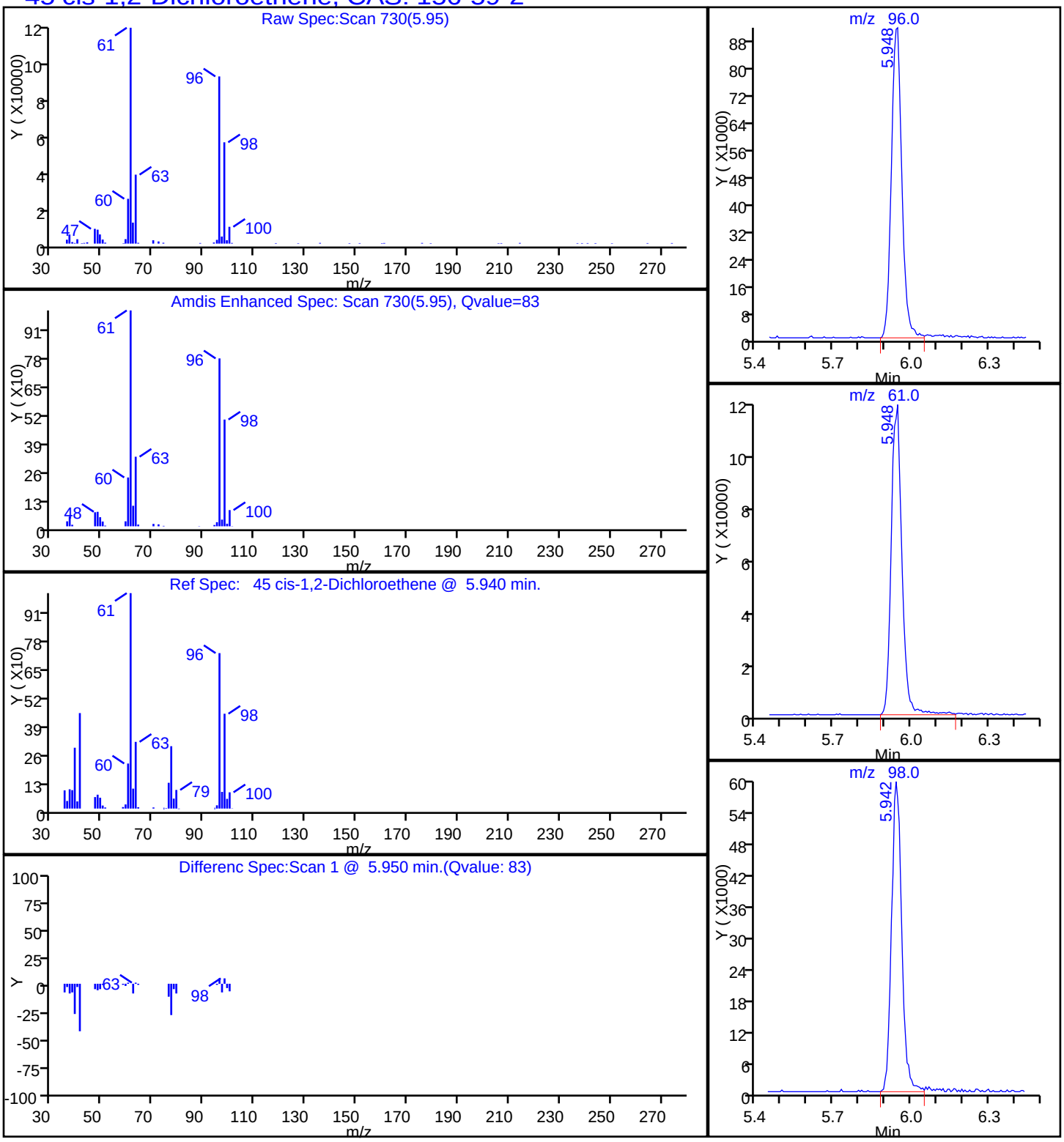
Operator ID: 001562 ALS Bottle#: 14 Worklist Smp#: 15

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm) Detector MS SCAN

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

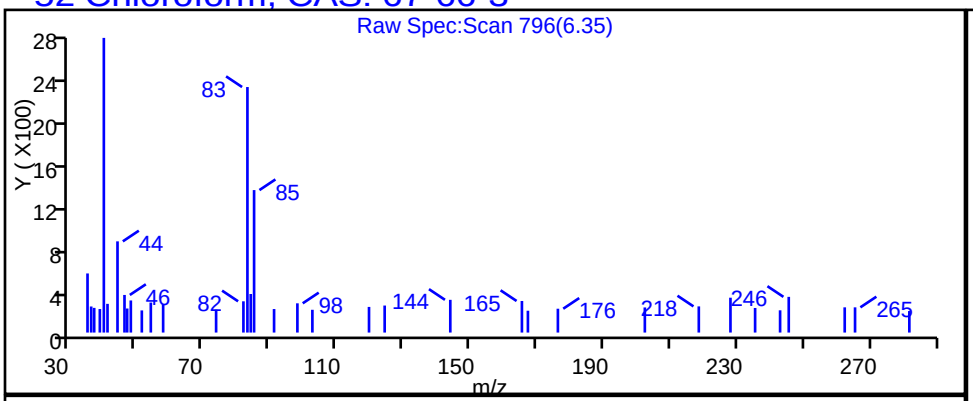


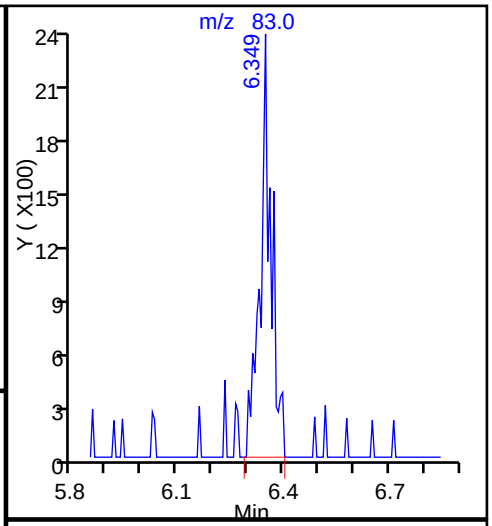
Report Date: 02-Apr-2015 08:01:02 Chrom Revision: 2.2 13-Mar-2015 11:20:44

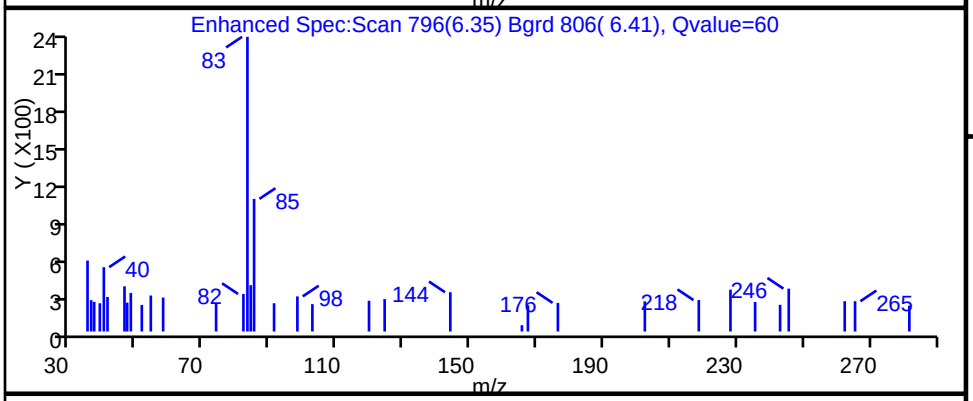
TestAmerica Pittsburgh

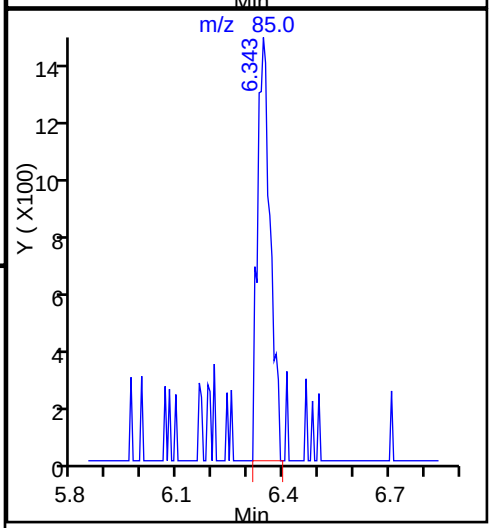
Data File:	\\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401015.D				
Injection Date:	01-Apr-2015 16:35:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-22	Lab Sample ID:	180-42353-22		
Client ID:	HD-MW-145A-0/1-0				
Operator ID:	001562	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

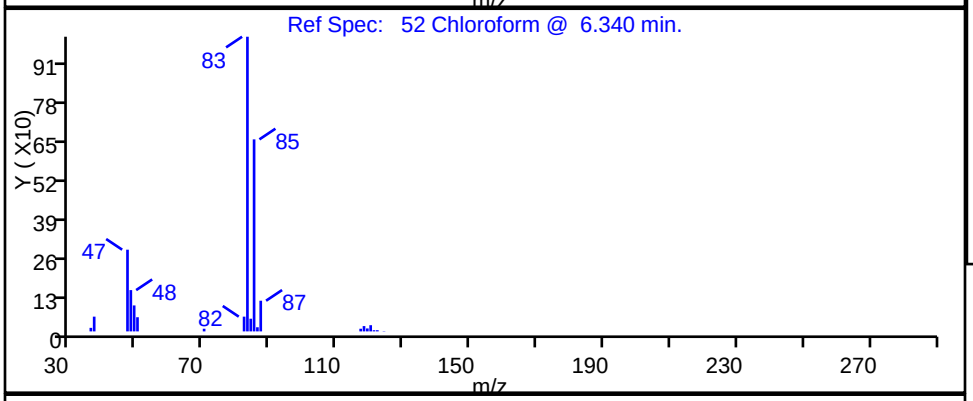
52 Chloroform, CAS: 67-66-3

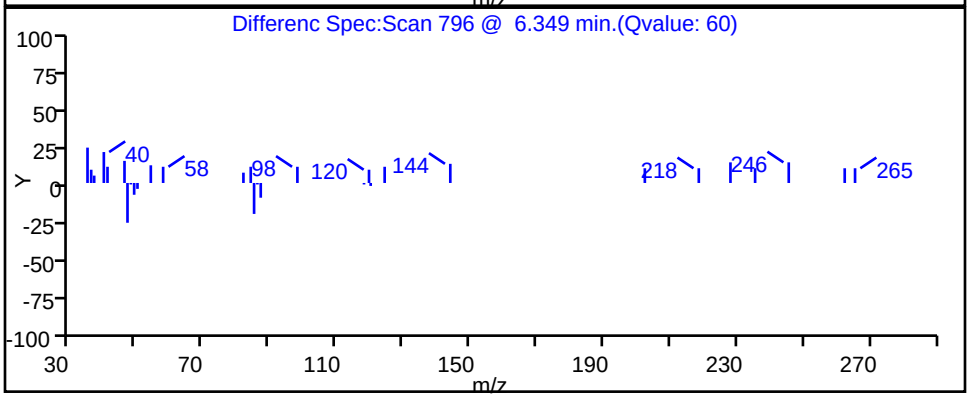










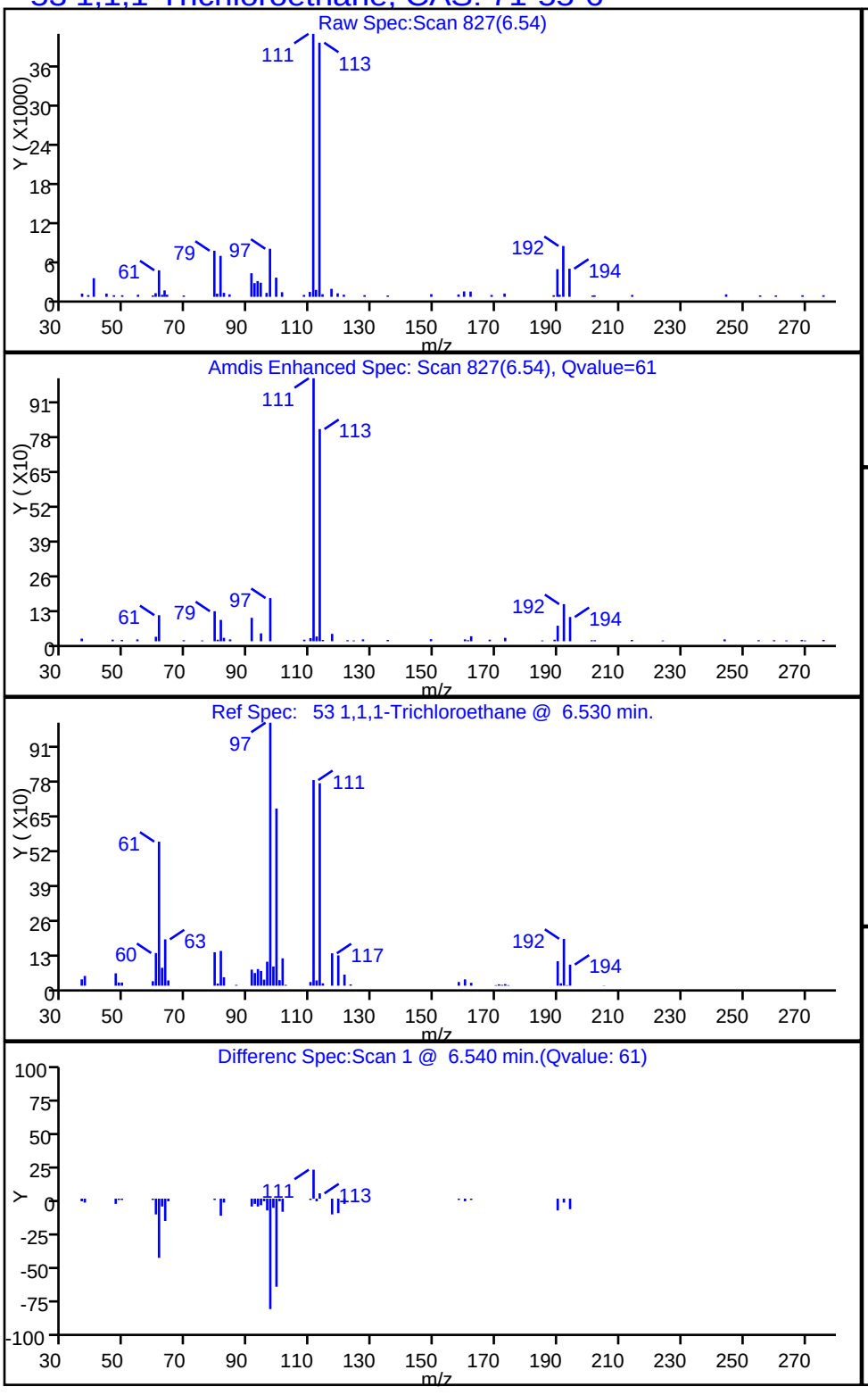


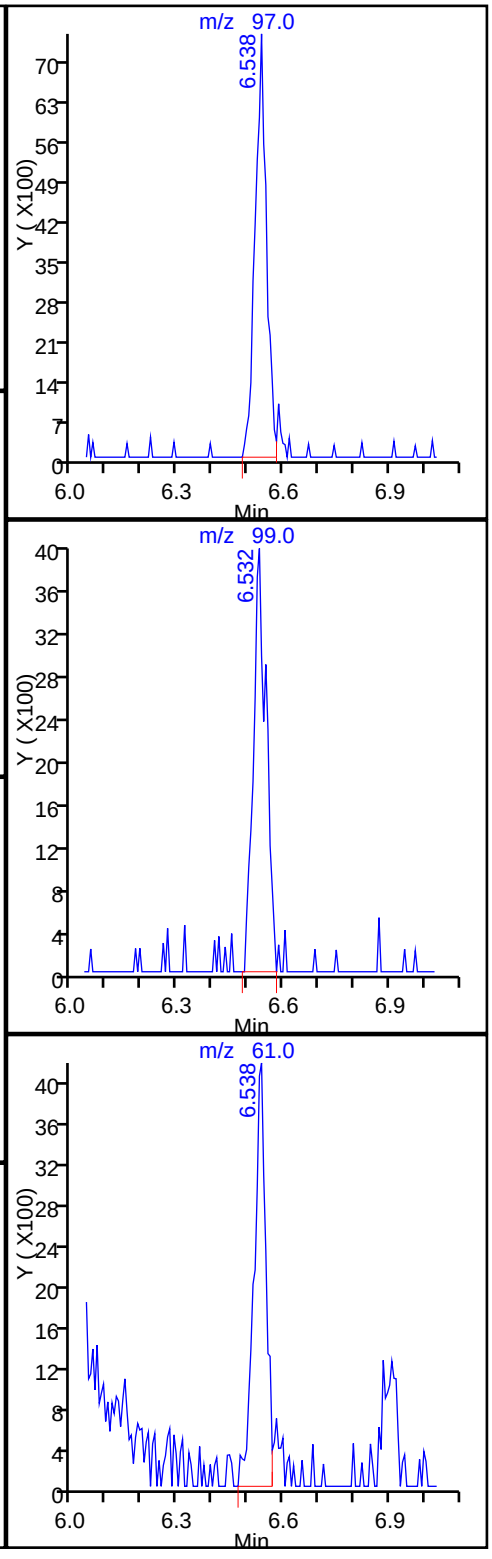
Report Date: 02-Apr-2015 08:01:02 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401015.D		
Injection Date:	01-Apr-2015 16:35:30	Instrument ID:	CHHP5
Lims ID:	180-42353-C-22	Lab Sample ID:	180-42353-22
Client ID:	HD-MW-145A-0/1-0		
Operator ID:	001562	ALS Bottle#:	14 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

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



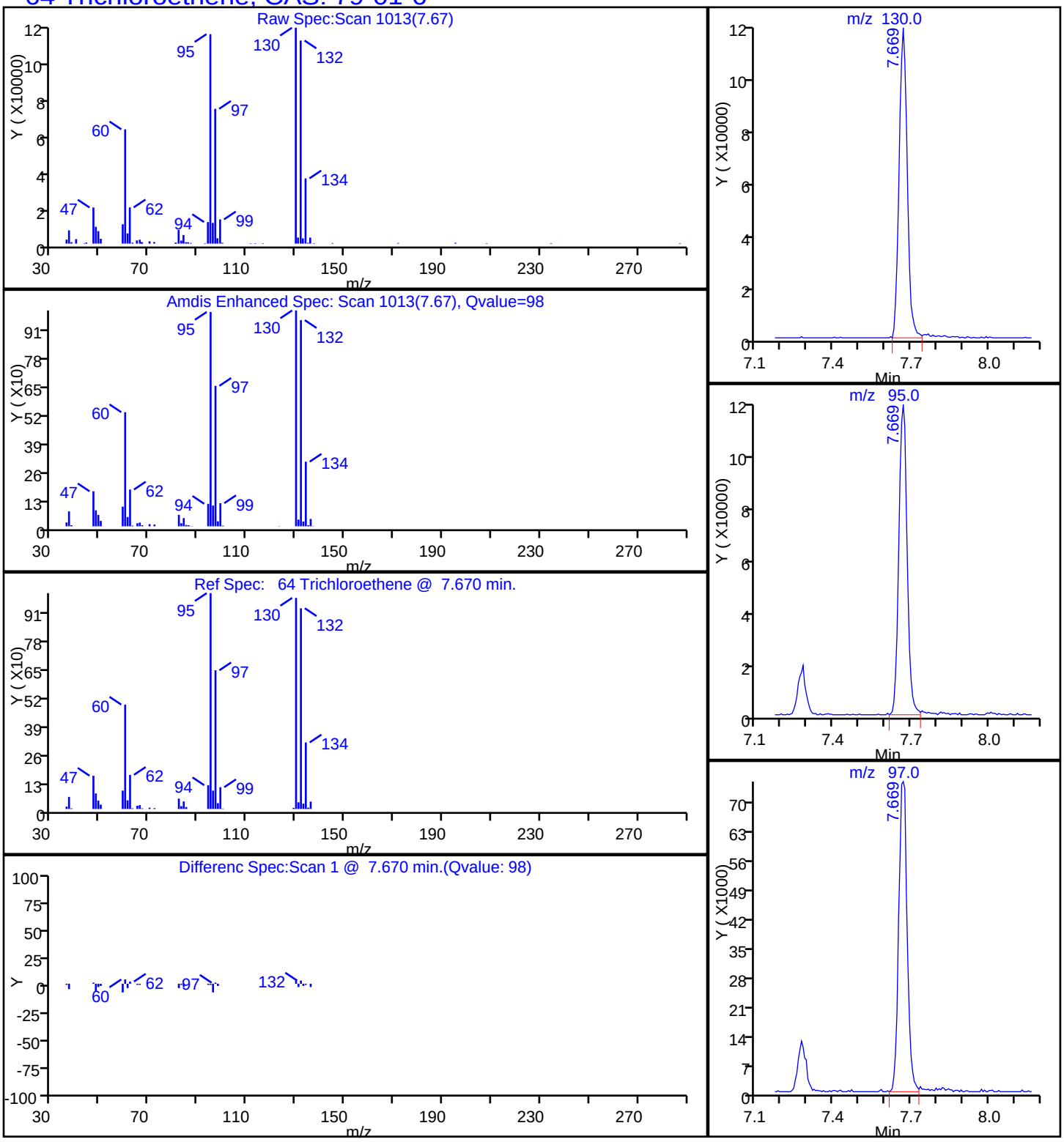


Report Date: 02-Apr-2015 08:01:02 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401015.D		
Injection Date:	01-Apr-2015 16:35:30	Instrument ID:	CHHP5
Lims ID:	180-42353-C-22	Lab Sample ID:	180-42353-22
Client ID:	HD-MW-145A-0/1-0		
Operator ID:	001562	ALS Bottle#:	14 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

64 Trichloroethene, CAS: 79-01-6



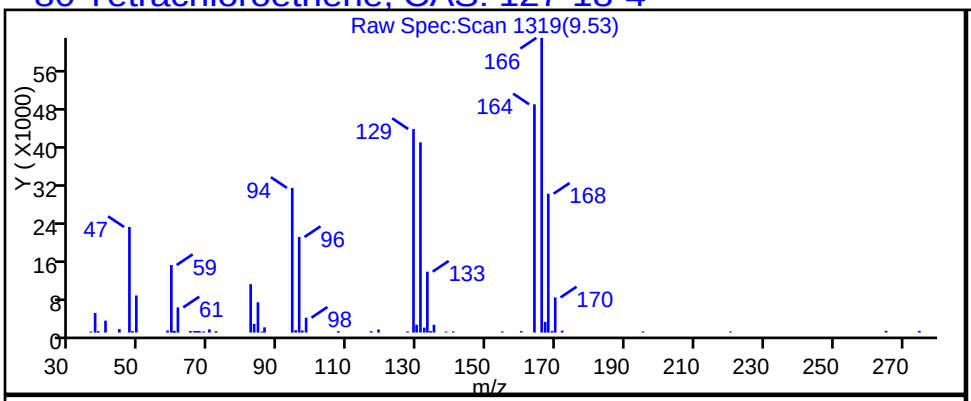
Report Date: 02-Apr-2015 08:01:02 Chrom Revision: 2.2 13-Mar-2015 11:20:44

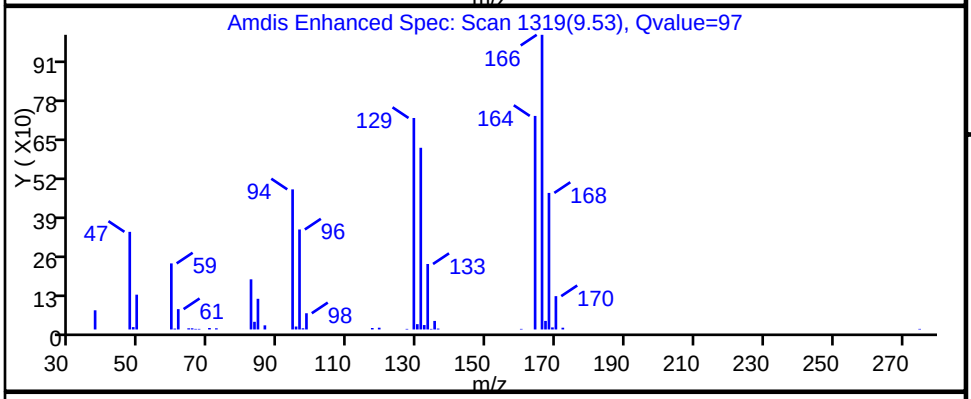
TestAmerica Pittsburgh

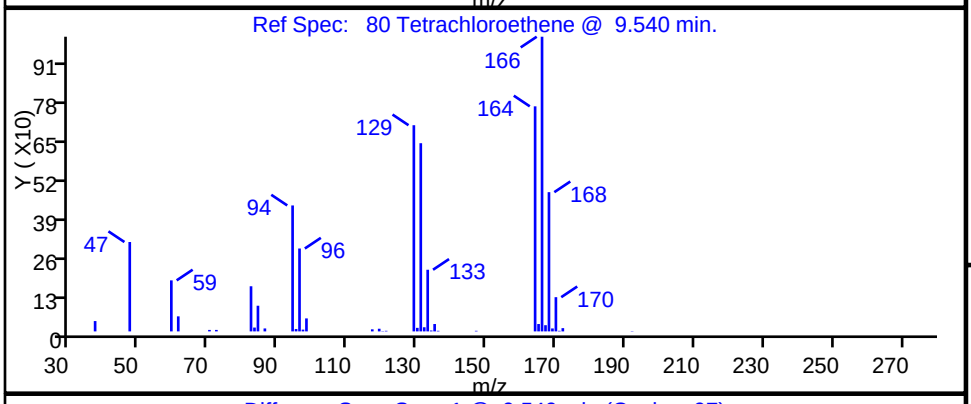
Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401015.D

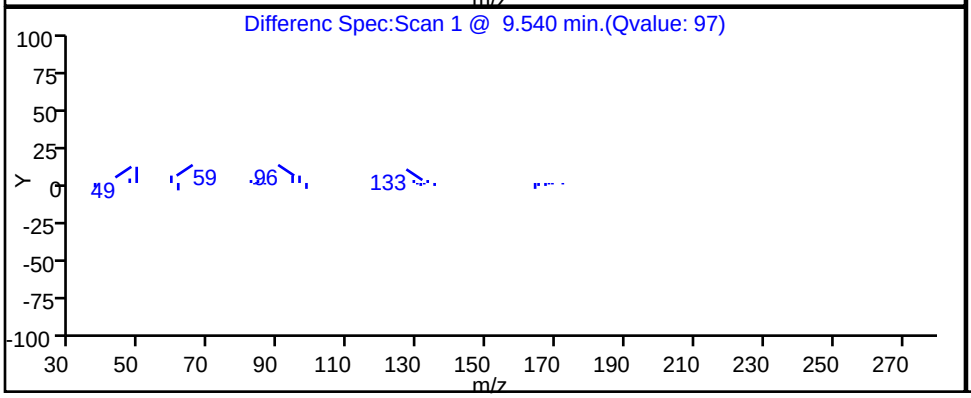
Injection Date:	01-Apr-2015 16:35:30	Instrument ID:	CHHP5
Lims ID:	180-42353-C-22	Lab Sample ID:	180-42353-22
Client ID:	HD-MW-145A-0/1-0		
Operator ID:	001562	ALS Bottle#:	14 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

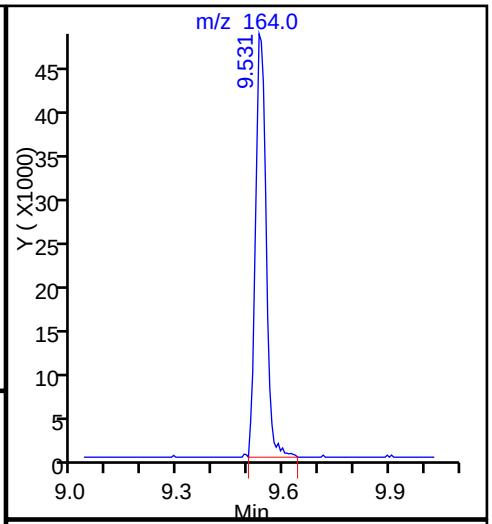
80 Tetrachloroethene, CAS: 127-18-4

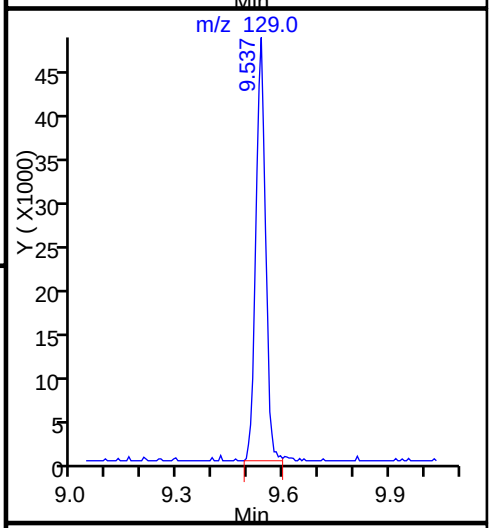


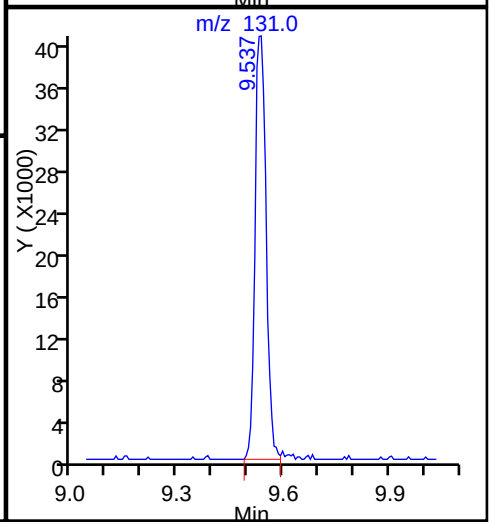












Manual Integration/User Assign Peak Report

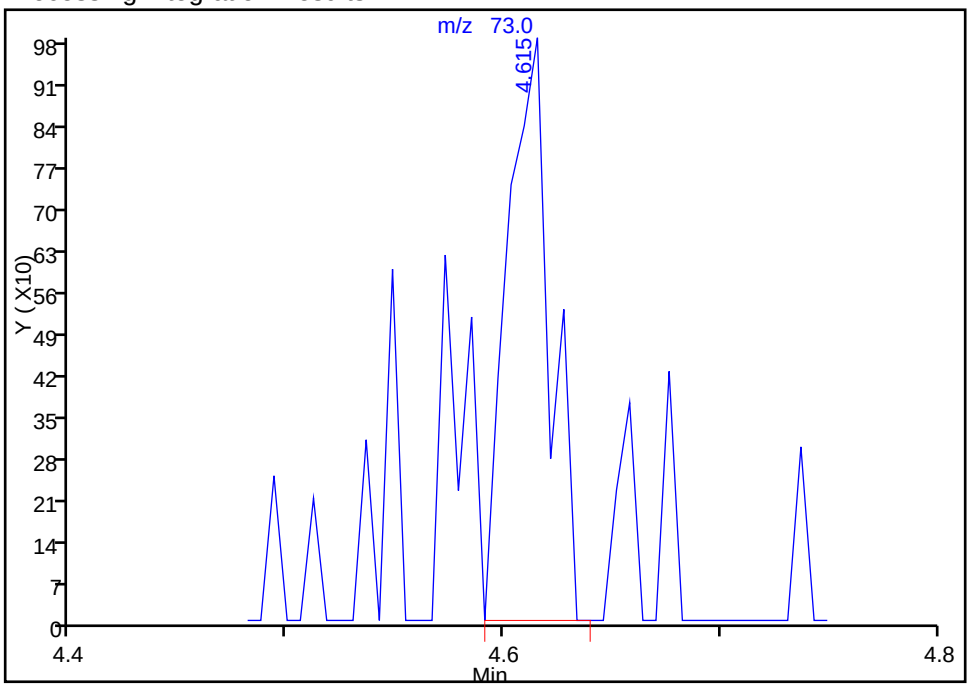
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401015.D				
Injection Date:	01-Apr-2015 16:35:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-22	Lab Sample ID:	180-42353-22		
Client ID:	HD-MW-145A-0/1-0				
Operator ID:	001562	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

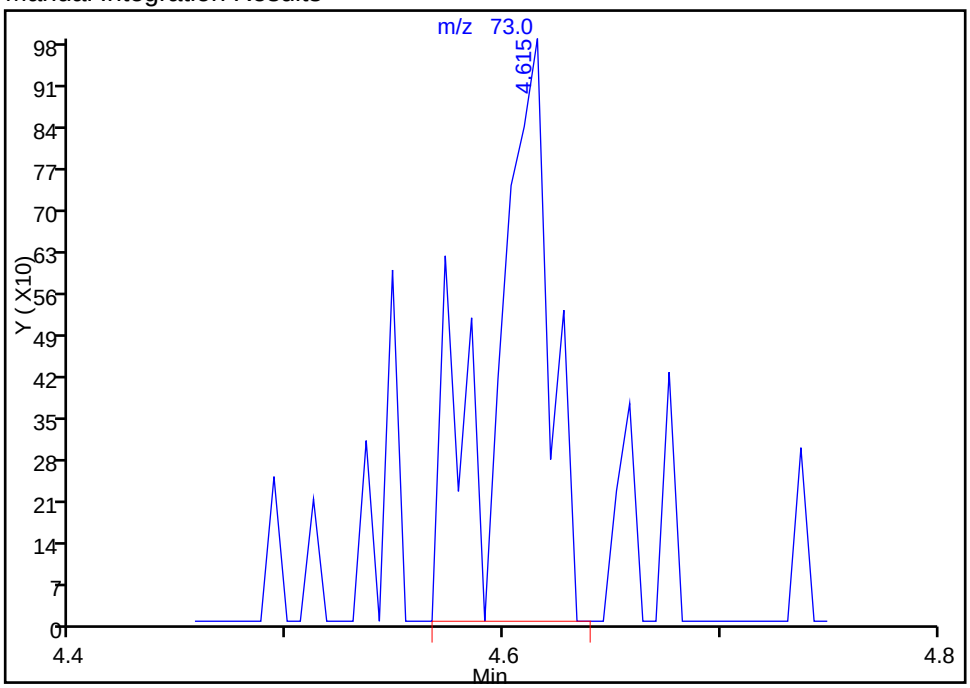
Processing Integration Results

RT: 4.62
Area: 1378
Amount: 0.255330
Amount Units: ng



Manual Integration Results

RT: 4.62
Area: 1872
Amount: 0.346864
Amount Units: ng



Reviewer: fergusond, 02-Apr-2015 08:01:01
Audit Action: Manually Integrated
Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

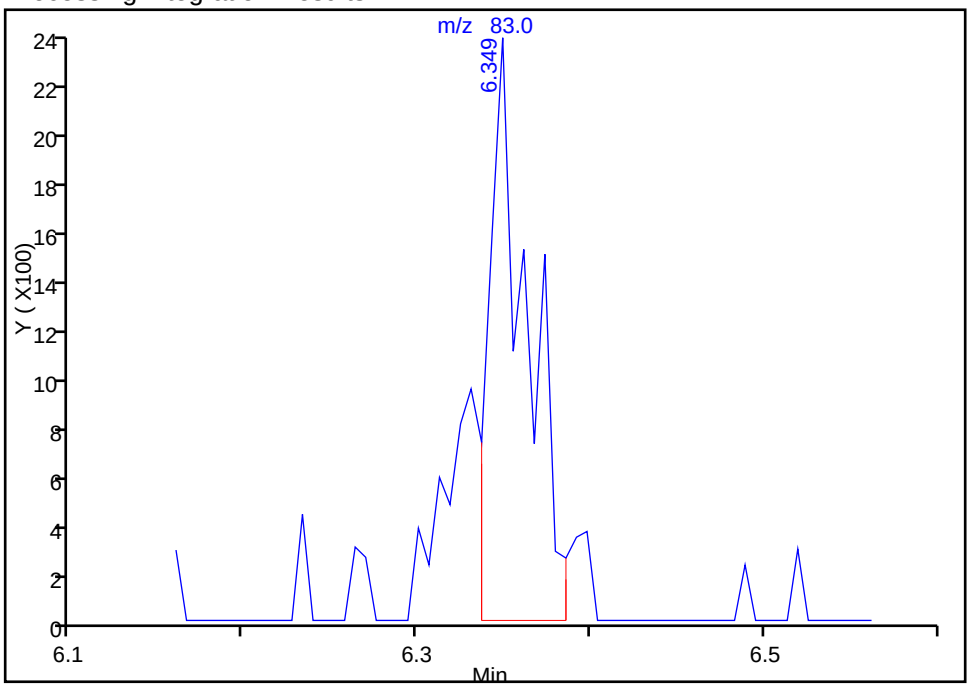
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401015.D				
Injection Date:	01-Apr-2015 16:35:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-22	Lab Sample ID:	180-42353-22		
Client ID:	HD-MW-145A-0/1-0				
Operator ID:	001562	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

52 Chloroform, CAS: 67-66-3

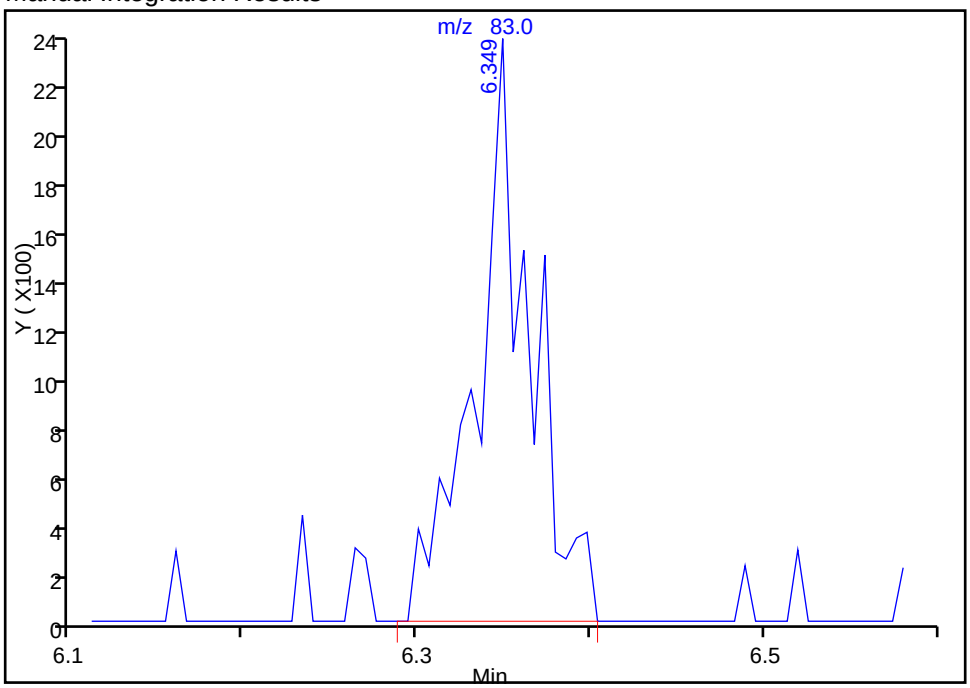
Processing Integration Results

RT: 6.35
Area: 3577
Amount: 0.903663
Amount Units: ng



Manual Integration Results

RT: 6.35
Area: 5040
Amount: 1.273264
Amount Units: ng



Reviewer: fergusond, 02-Apr-2015 08:01:01
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-100S-0/1-0 Lab Sample ID: 180-42353-23

Matrix: Water Lab File ID: 50331018.D

Analysis Method: 8260C Date Collected: 03/24/2015 14:45

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2015 16:30

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.: 137048 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	2.2	J	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	2.4	J	5.0	0.63
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.85
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.92
75-34-3	1,1-Dichloroethane	0.84	J	5.0	0.58
156-59-2	cis-1,2-Dichloroethene	31		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	2.0	J	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	61		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	49		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

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Matrix: Water Lab File ID: 50331018.D

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Sample wt/vol: 5(mL) Date Analyzed: 03/31/2015 16:30

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.: 137048 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)	116		64-135
2037-26-5	Toluene-d8 (Surr)	109		71-118
460-00-4	4-Bromofluorobenzene (Surr)	101		70-118
1868-53-7	Dibromofluoromethane (Surr)	111		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331018.D
Lims ID: 180-42353-E-23 Lab Sample ID: 180-42353-23
Client ID: HD-MW-100S-0/1-0
Sample Type: Client
Inject. Date: 31-Mar-2015 16:30:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 180-42353-E-23, 5x
Misc. Info.: 180-0006255-018
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Apr-2015 07:59:34 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: fergusond Date: 01-Apr-2015 07:59:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.305	4.297	0.008	98	111510	1000.0	
* 2 Fluorobenzene (IS)	96	7.280	7.271	0.009	100	395960	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.362	0.002	98	85738	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.686	-0.004	93	120175	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.532	6.531	0.001	56	99920	55.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.903	6.896	0.007	97	137461	57.9	
$ 7 Toluene-d8 (Surr)	98	8.923	8.921	0.002	99	371854	54.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.532	11.531	0.001	98	124566	50.6	
12 Chloromethane	50		1.779				ND	
13 Vinyl chloride	62		1.913				ND	
15 Bromomethane	94		2.260				ND	
16 Chloroethane	64		2.400				ND	
22 1,1-Dichloroethene	96	3.387	3.385	0.002	67	4994	2.19	
24 Acetone	43		3.501				ND	
26 Carbon disulfide	76		3.671				ND	
31 Methylene Chloride	84	4.159	4.140	0.019	58	6397	2.42	
33 Acrylonitrile	53		4.547				ND	
34 trans-1,2-Dichloroethene	96		4.560				ND	
35 Methyl tert-butyl ether	73		4.596				ND	
37 1,1-Dichloroethane	63	5.187	5.168	0.019	38	3557	0.8438	
45 cis-1,2-Dichloroethene	96	5.942	5.941	0.002	84	78064	31.4	
46 2-Butanone (MEK)	43		5.989				ND	
49 Chlorobromomethane	128		6.226				ND	
52 Chloroform	83	6.349	6.342	0.007	31	1184	0.3092	
53 1,1,1-Trichloroethane	97	6.532	6.531	0.001	56	4824	1.97	
56 Carbon tetrachloride	117		6.719				ND	
58 Benzene	78		6.956				ND	
59 1,2-Dichloroethane	62		6.987				ND	
64 Trichloroethene	130	7.669	7.668	0.001	99	143539	61.1	
67 1,2-Dichloropropane	63		7.905				ND	
70 1,4-Dioxane	88		8.058				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.197				ND	
74 cis-1,3-Dichloropropene	75		8.654				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.824				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.219				ND	
79 1,1,2-Trichloroethane	97		9.402				ND	
80 Tetrachloroethene	164	9.537	9.536	0.001	98	85037	49.5	
82 2-Hexanone	43		9.658				ND	
84 Chlorodibromomethane	129		9.785				ND	
85 Ethylene Dibromide	107		9.901				ND	
87 Chlorobenzene	112		10.388				ND	
89 1,1,1,2-Tetrachloroethane	131		10.467				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.619				ND	
92 o-Xylene	106		11.014				ND	
93 Styrene	104		11.026				ND	
94 Bromoform	173		11.209				ND	
99 1,1,2,2-Tetrachloroethane	83		11.671				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

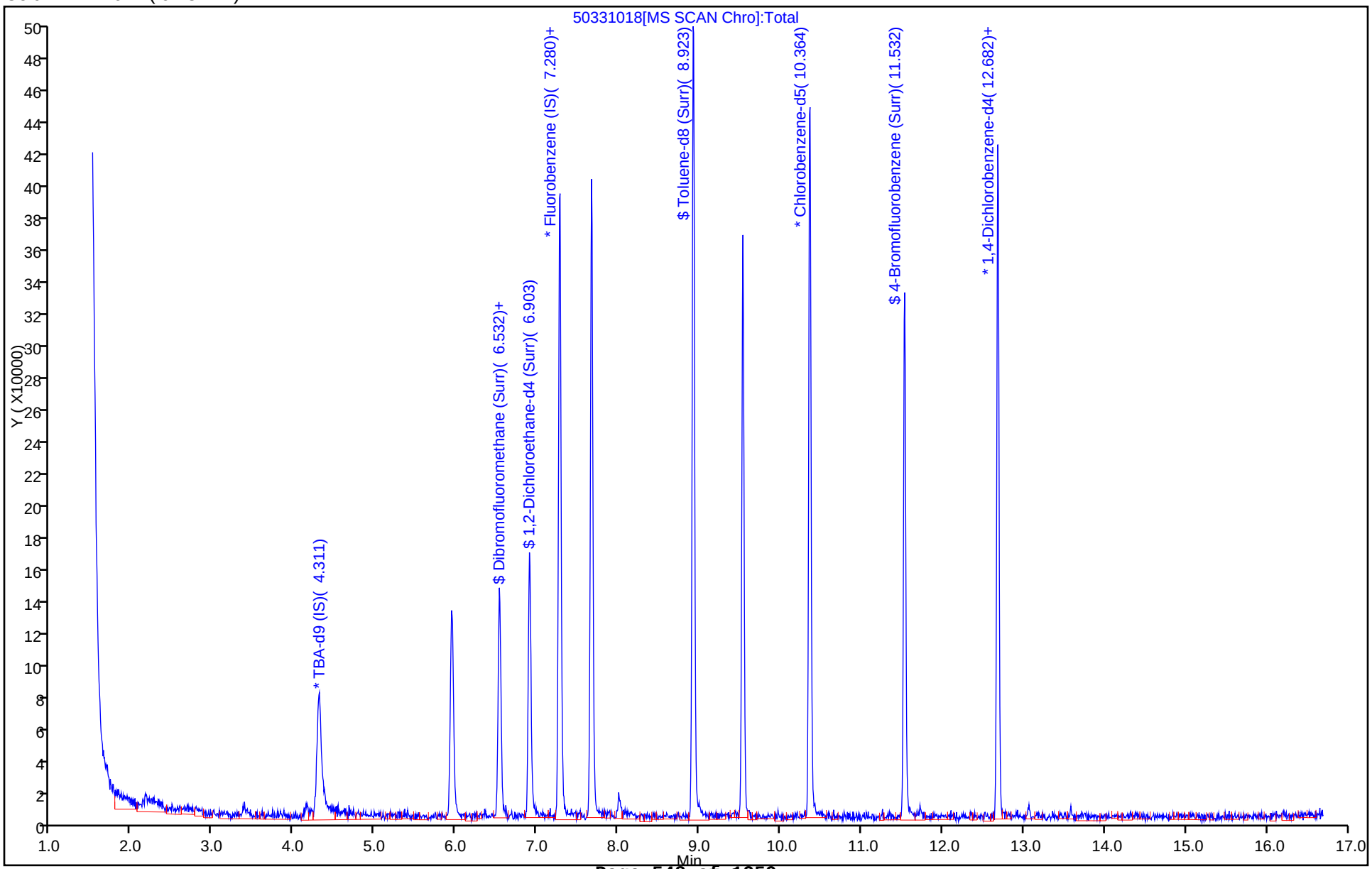
Report Date: 01-Apr-2015 07:59:34 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331018.D

Injection Date:	31-Mar-2015 16:30:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-42353-E-23	Lab Sample ID:	180-42353-23	Worklist Smp#:	18
Client ID:	HD-MW-100S-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	17
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Report Date: 01-Apr-2015 07:59:34 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

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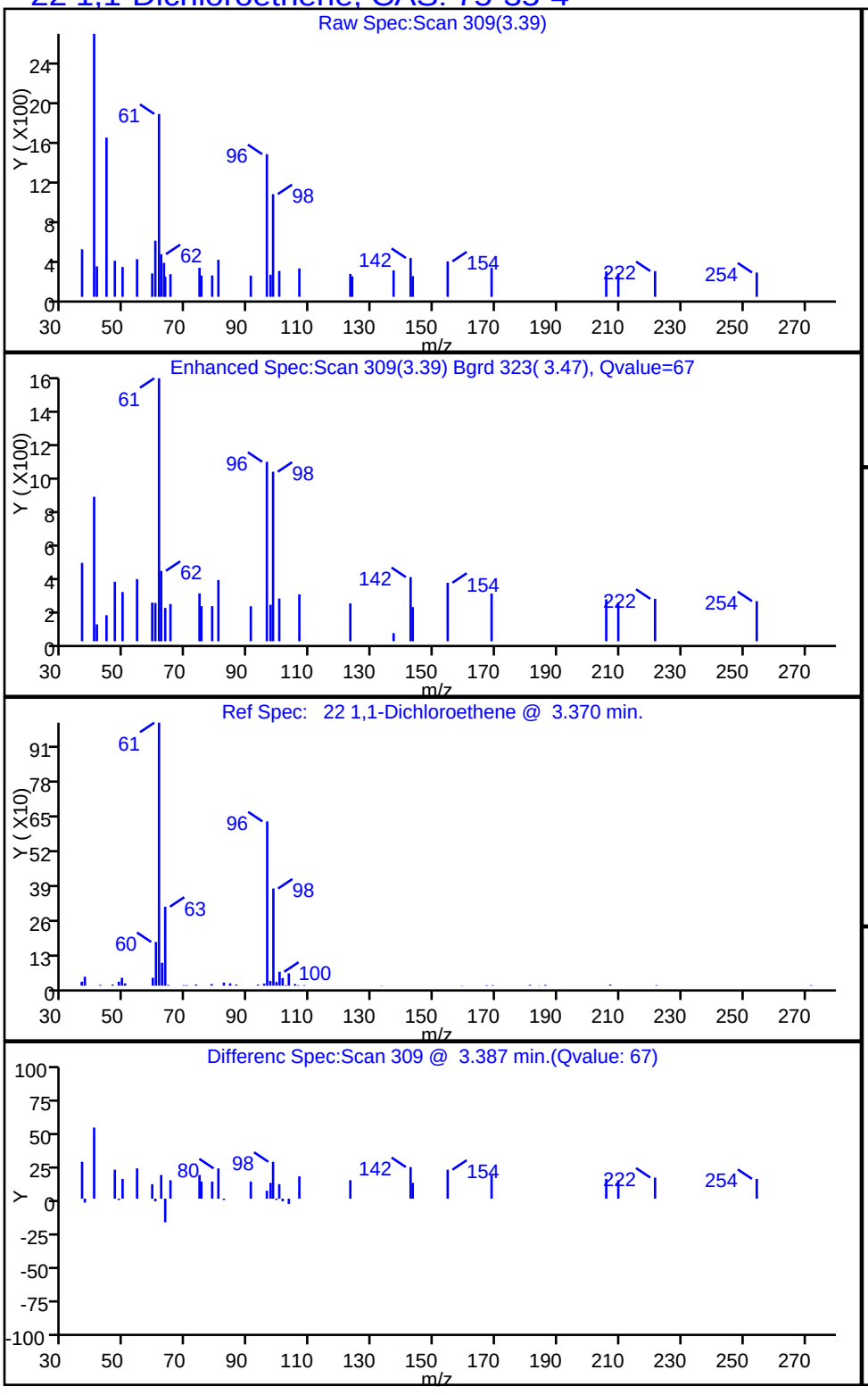
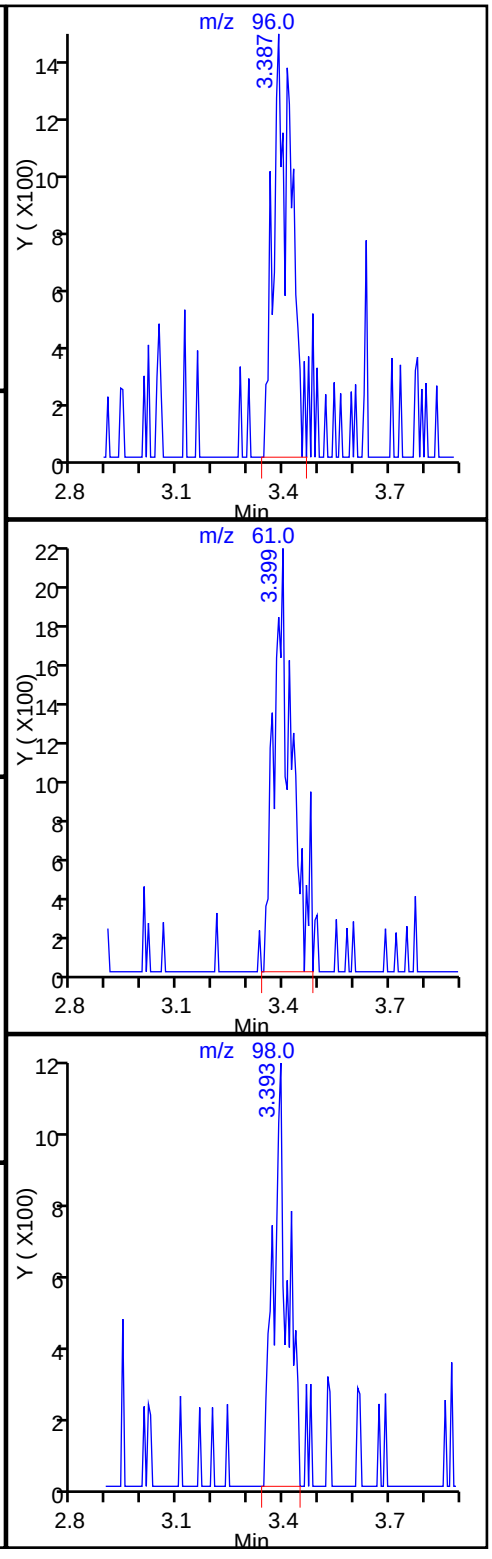
Injection Date:	31-Mar-2015 16:30:30	Instrument ID:	CHHP5
Lims ID:	180-42353-E-23	Lab Sample ID:	180-42353-23
Client ID:	HD-MW-100S-0/1-0		
Operator ID:	001562	ALS Bottle#:	17 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	5.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

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





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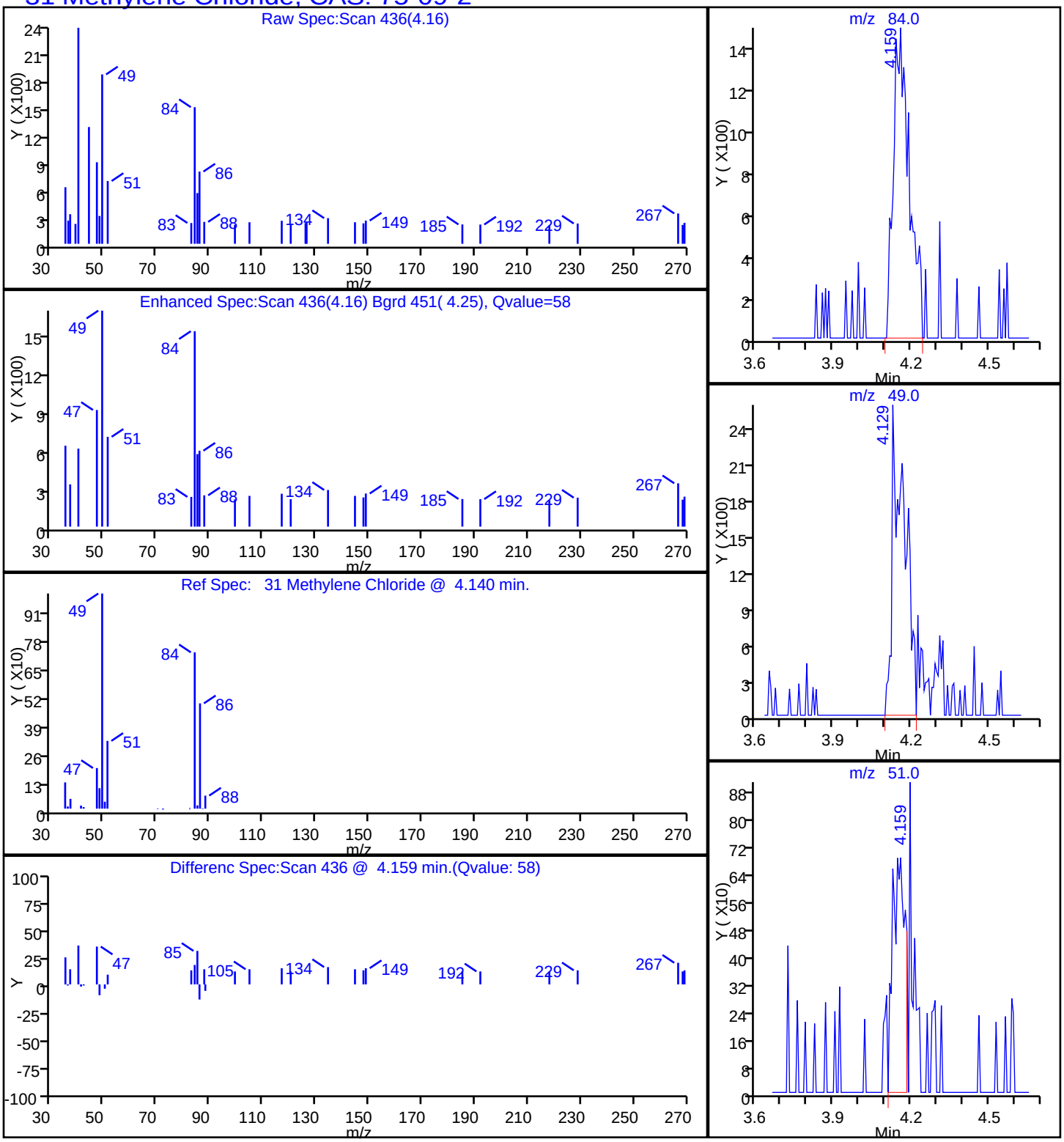
Injection Date:	31-Mar-2015 16:30:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-23	Lab Sample ID:	180-42353-23		
Client ID:	HD-MW-100S-0/1-0				
Operator ID:	001562	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2



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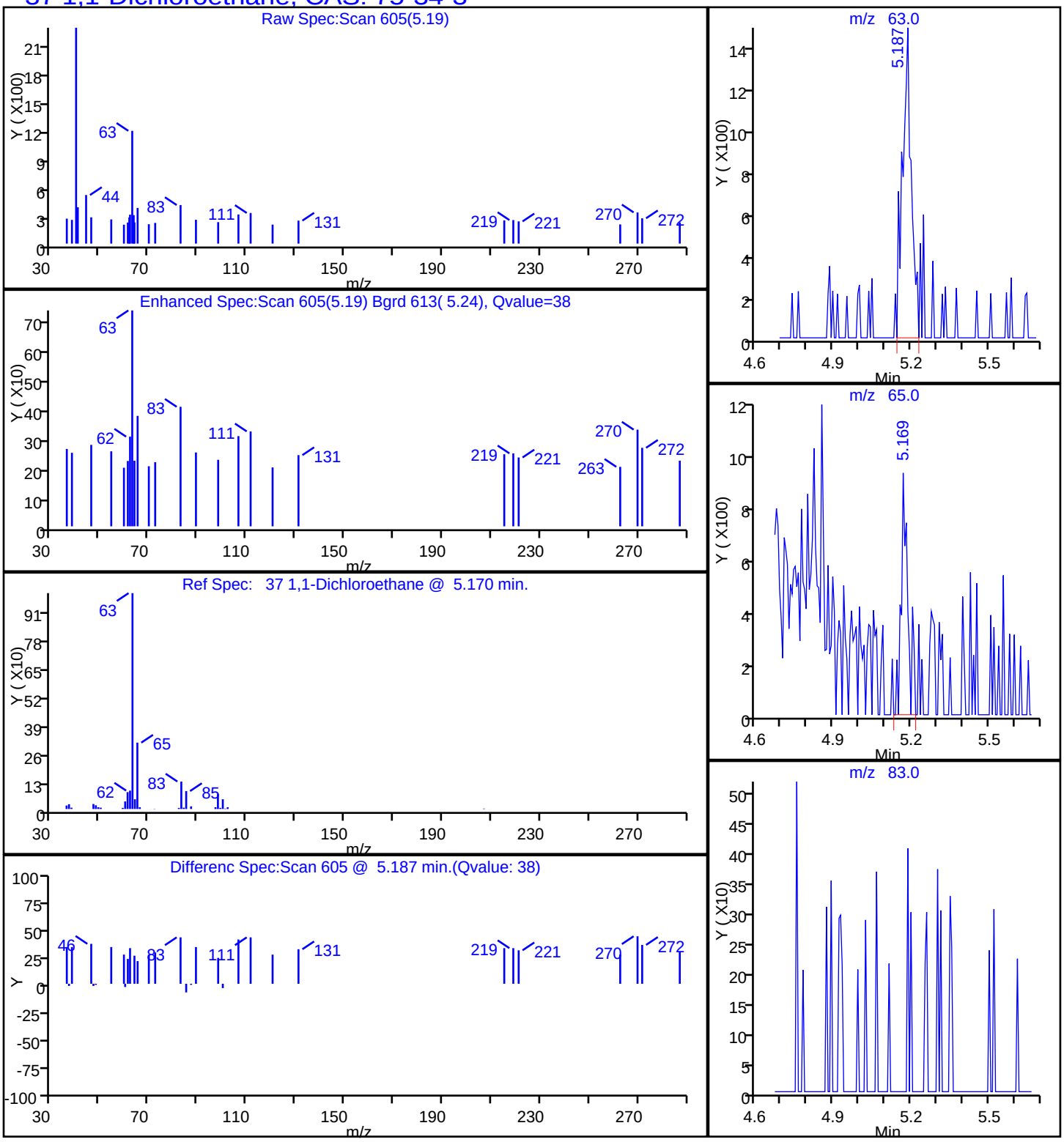
Injection Date:	31-Mar-2015 16:30:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-23	Lab Sample ID:	180-42353-23		
Client ID:	HD-MW-100S-0/1-0				
Operator ID:	001562	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



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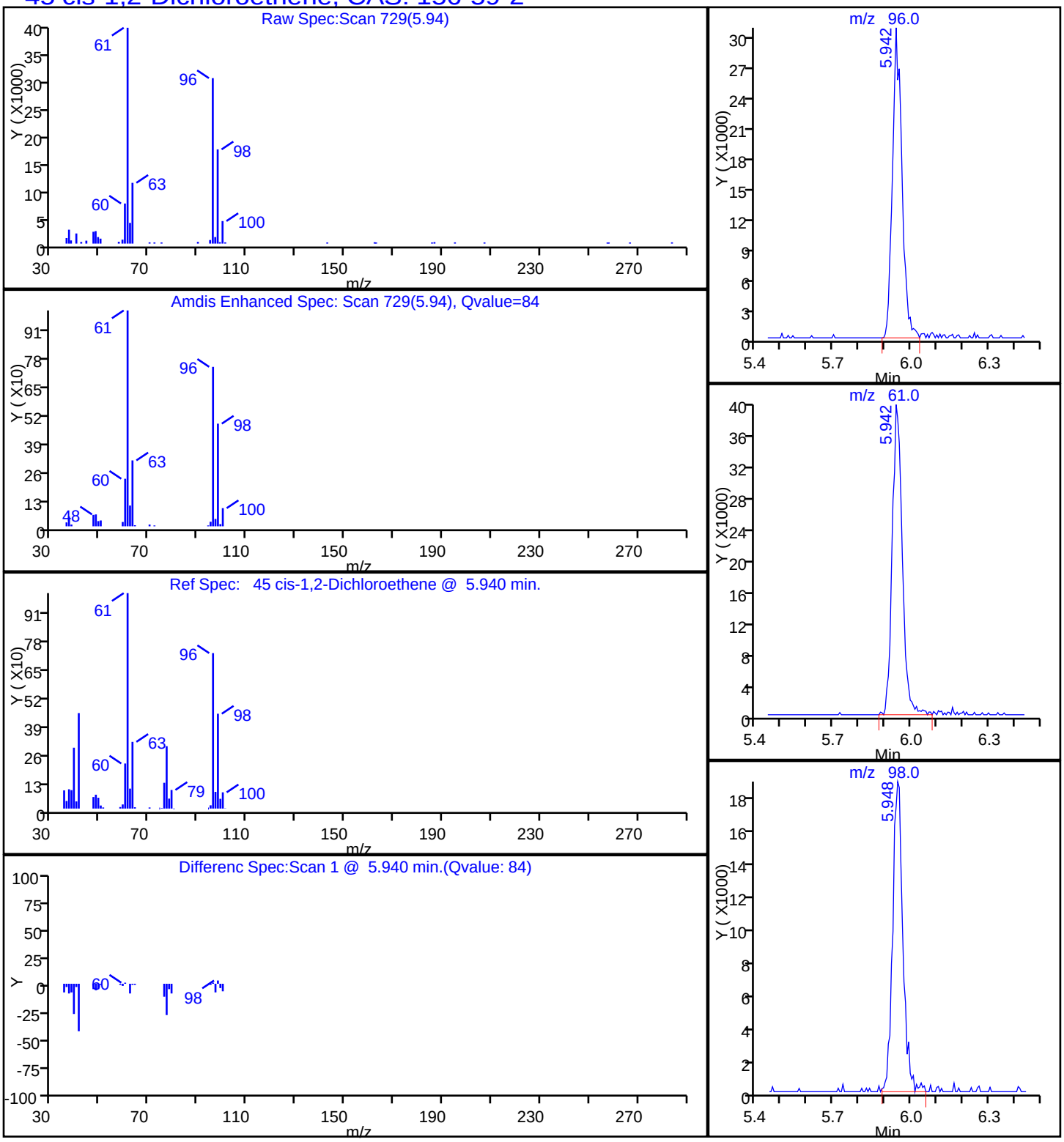
Injection Date:	31-Mar-2015 16:30:30	Instrument ID:	CHHP5
Lims ID:	180-42353-E-23	Lab Sample ID:	180-42353-23
Client ID:	HD-MW-100S-0/1-0		
Operator ID:	001562	ALS Bottle#:	17 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	5.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

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



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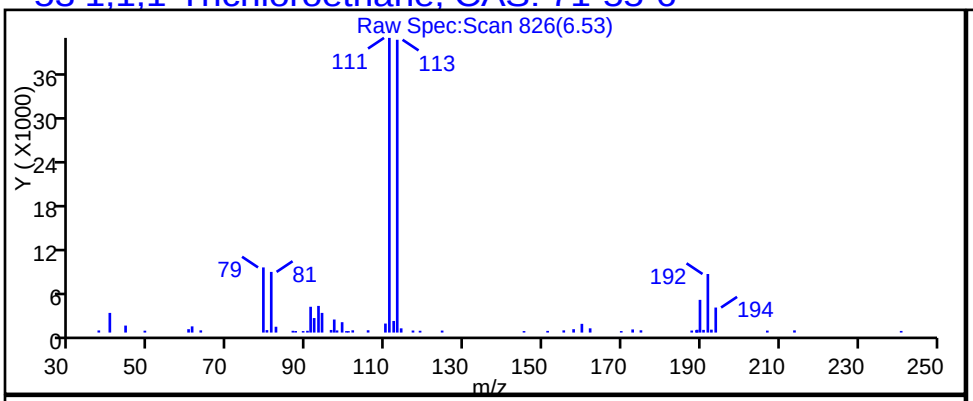
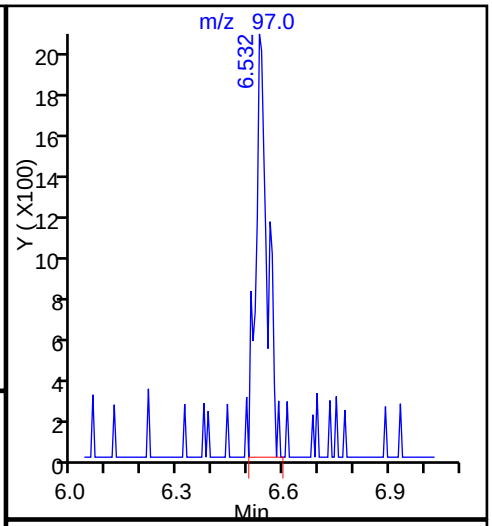
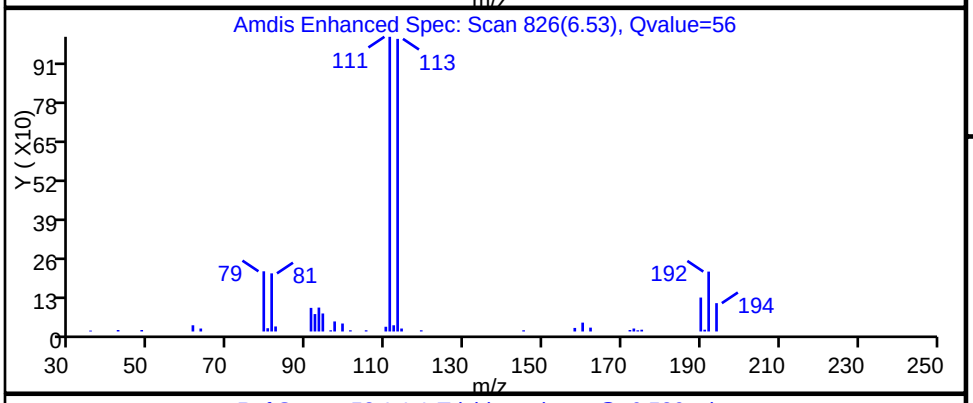
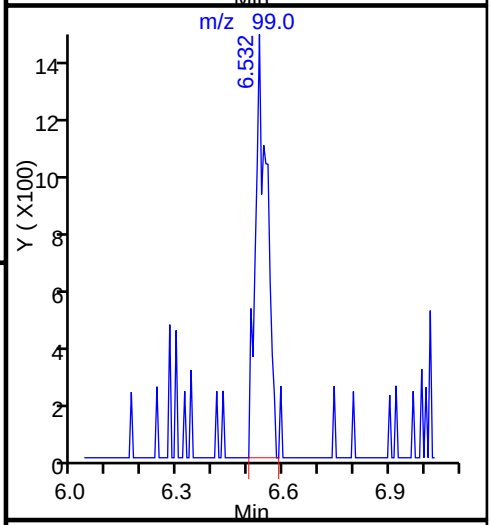
Injection Date:	31-Mar-2015 16:30:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-23	Lab Sample ID:	180-42353-23		
Client ID:	HD-MW-100S-0/1-0				
Operator ID:	001562	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

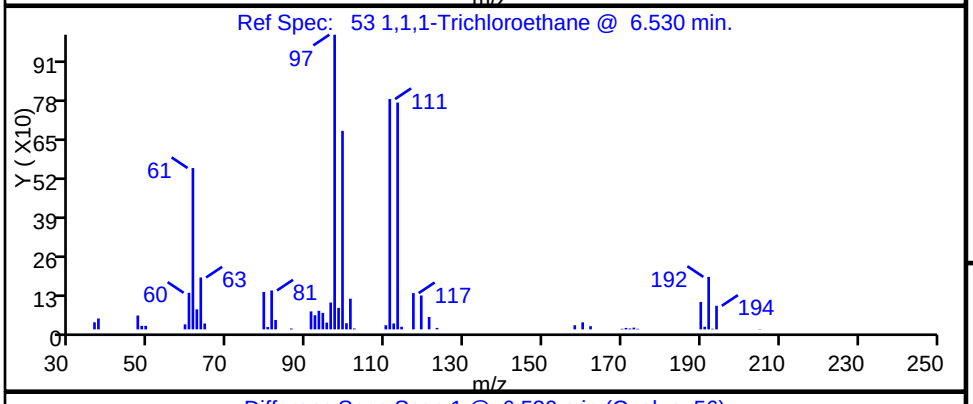
53 1,1,1-Trichloroethane, CAS: 71-55-6

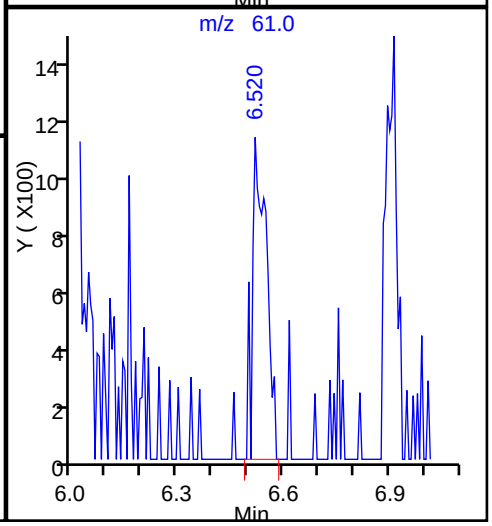


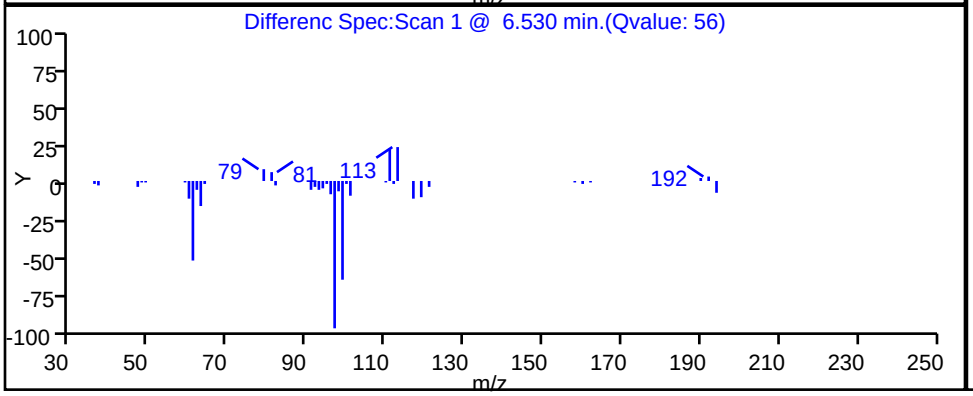












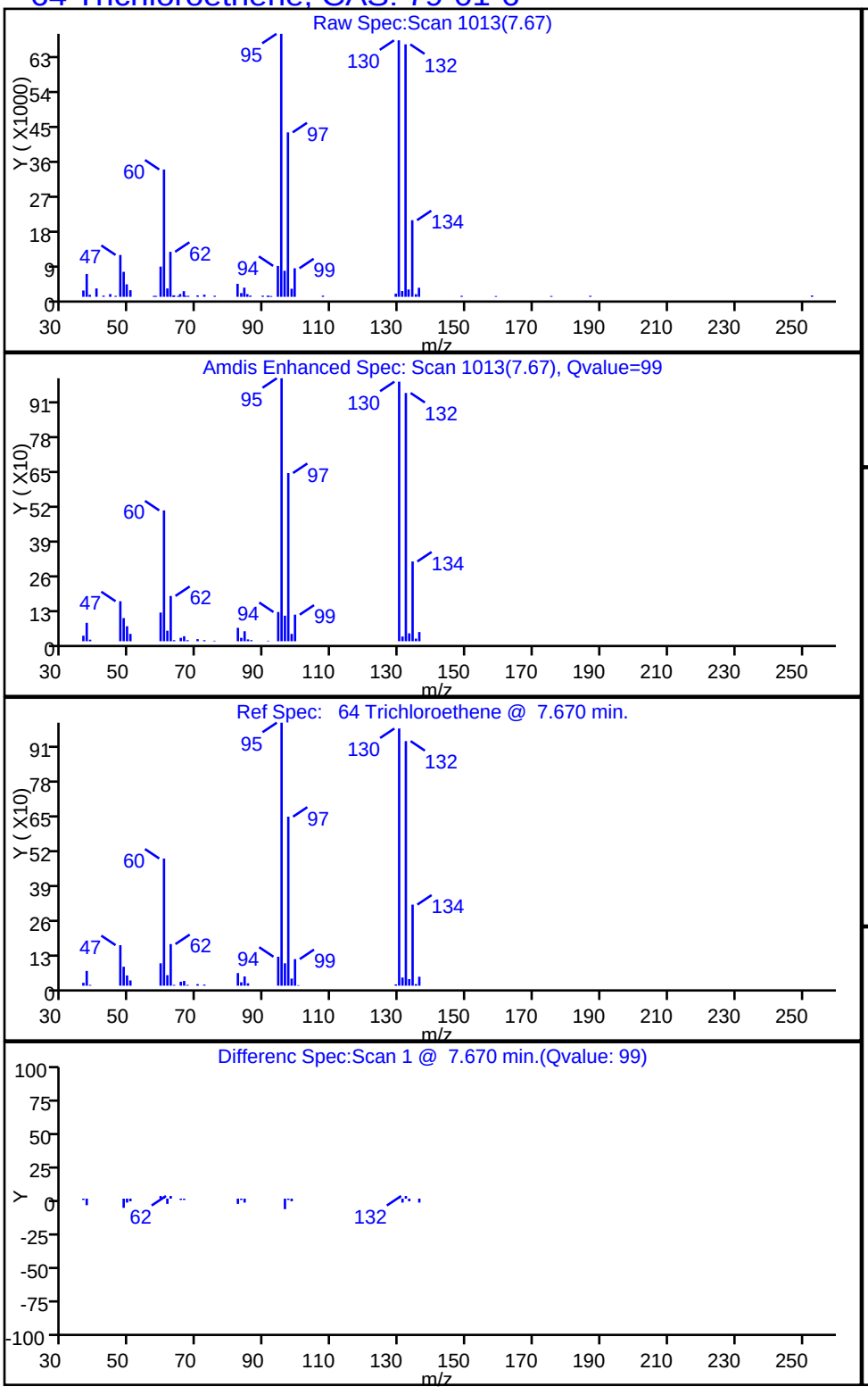
Report Date: 01-Apr-2015 07:59:34 Chrom Revision: 2.2 13-Mar-2015 11:20:44

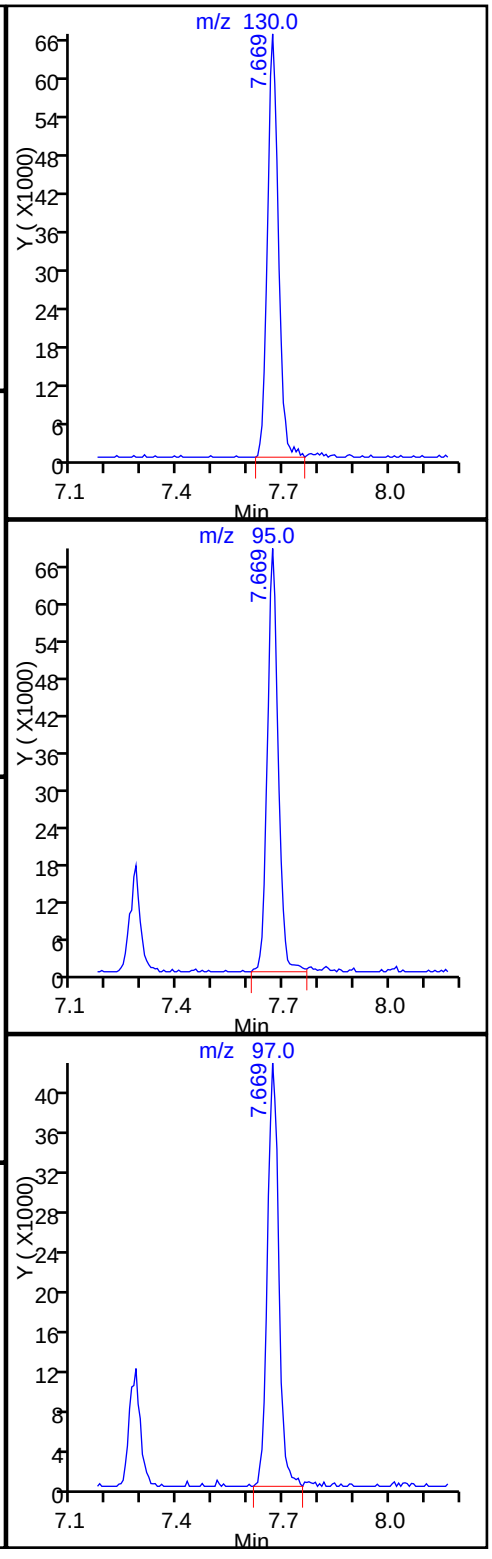
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331018.D

Injection Date:	31-Mar-2015 16:30:30	Instrument ID:	CHHP5
Lims ID:	180-42353-E-23	Lab Sample ID:	180-42353-23
Client ID:	HD-MW-100S-0/1-0		
Operator ID:	001562	ALS Bottle#:	17 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	5.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

64 Trichloroethene, CAS: 79-01-6





Report Date: 01-Apr-2015 07:59:34 Chrom Revision: 2.2 13-Mar-2015 11:20:44

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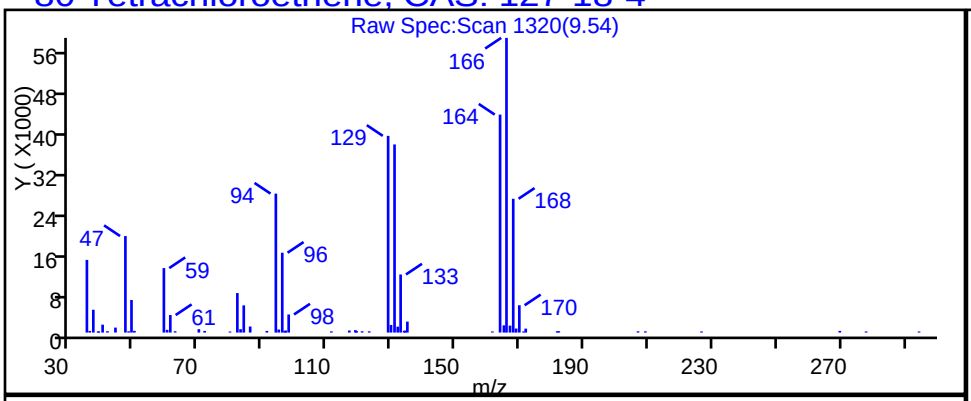
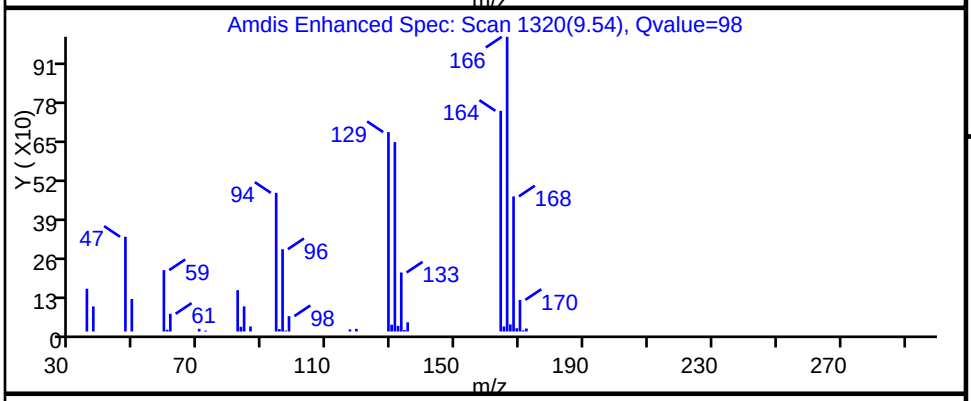
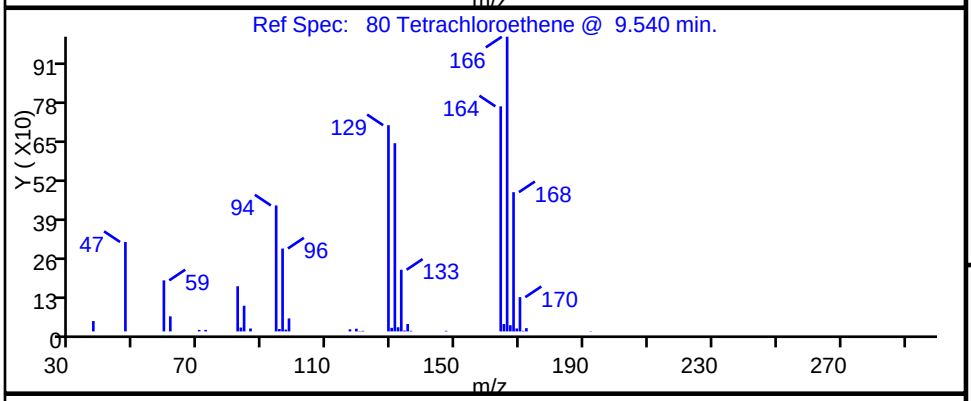
Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331018.D

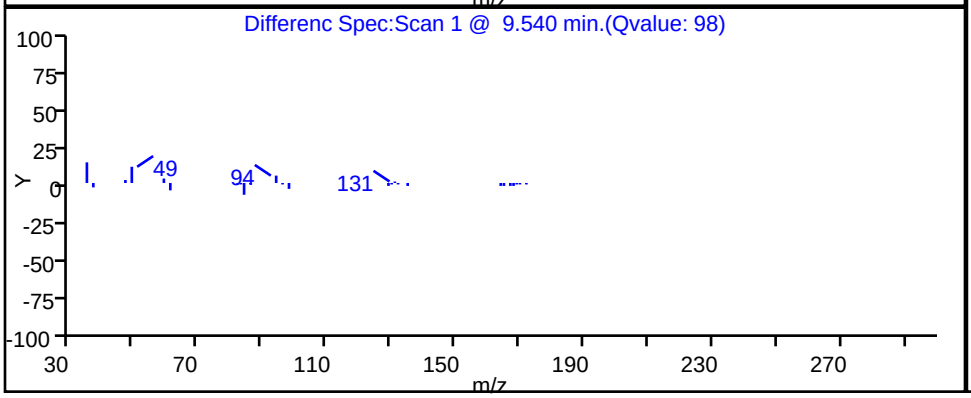
Injection Date:	31-Mar-2015 16:30:30	Instrument ID:	CHHP5
Lims ID:	180-42353-E-23	Lab Sample ID:	180-42353-23
Client ID:	HD-MW-100S-0/1-0		
Operator ID:	001562	ALS Bottle#:	17 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	5.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

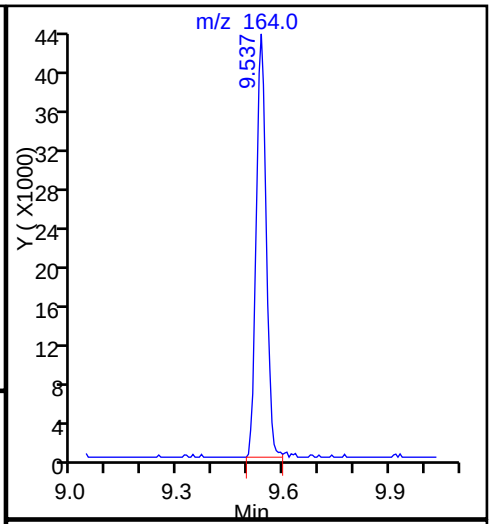
80 Tetrachloroethene, CAS: 127-18-4

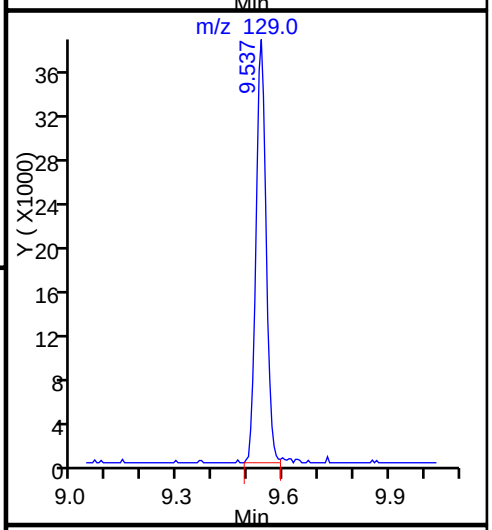


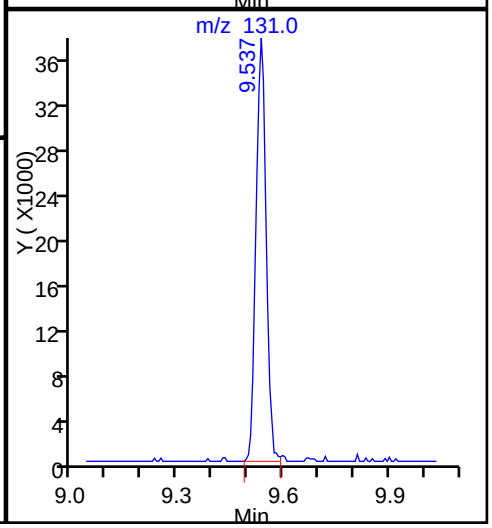












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-100I-0/1-0 | Lab Sample ID: 180-42353-24

Matrix: Water | Lab File ID: 50331019.D

Analysis Method: 8260C | Date Collected: 03/24/2015 14:00

Sample wt/vol: 5(mL) | Date Analyzed: 03/31/2015 16:54

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.: 137048 | 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	1.4		1.0	0.30
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.21
75-09-2	Methylene Chloride	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.17
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.18
75-34-3	1,1-Dichloroethane	0.61	J	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	22		1.0	0.24
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	0.24	J	1.0	0.17
71-55-6	1,1,1-Trichloroethane	1.4		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	33		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	22		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.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-100I-0/1-0 Lab Sample ID: 180-42353-24

Matrix: Water Lab File ID: 50331019.D

Analysis Method: 8260C Date Collected: 03/24/2015 14:00

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2015 16:54

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.: 137048 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)	117		64-135
2037-26-5	Toluene-d8 (Surr)	101		71-118
460-00-4	4-Bromofluorobenzene (Surr)	95		70-118
1868-53-7	Dibromofluoromethane (Surr)	111		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331019.D
Lims ID: 180-42353-E-24 Lab Sample ID: 180-42353-24
Client ID: HD-MW-100I-0/1-0
Sample Type: Client
Inject. Date: 31-Mar-2015 16:54:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-E-24
Misc. Info.: 180-0006255-019
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Apr-2015 08:01:09 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: fergusond Date: 01-Apr-2015 08:01:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.303	4.297	0.006	94	111072	1000.0	
* 2 Fluorobenzene (IS)	96	7.278	7.271	0.007	100	389629	50.0	
* 3 Chlorobenzene-d5	119	10.362	10.362	0.000	99	85422	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.680	12.686	-0.006	93	121640	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.524	6.531	-0.007	61	98153	55.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.901	6.896	0.005	98	136560	58.5	
$ 7 Toluene-d8 (Surr)	98	8.920	8.921	-0.001	99	345173	50.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.530	11.531	-0.001	97	116718	47.6	
12 Chloromethane	50		1.779				ND	
13 Vinyl chloride	62	1.931	1.913	0.018	2	2467	0.9576	
15 Bromomethane	94		2.260				ND	
16 Chloroethane	64		2.400				ND	
22 1,1-Dichloroethene	96	3.391	3.385	0.006	96	15750	7.01	
24 Acetone	43		3.501				ND	
26 Carbon disulfide	76		3.671				ND	
31 Methylene Chloride	84		4.140				ND	
33 Acrylonitrile	53		4.547				ND	
34 trans-1,2-Dichloroethene	96		4.560				ND	
35 Methyl tert-butyl ether	73	4.589	4.596	-0.007	4	2455	0.4778	
37 1,1-Dichloroethane	63	5.173	5.168	0.005	97	12720	3.07	
45 cis-1,2-Dichloroethene	96	5.946	5.941	0.006	84	270126	110.3	
46 2-Butanone (MEK)	43		5.989				ND	
49 Chlorobromomethane	128		6.226				ND	
52 Chloroform	83	6.365	6.342	0.023	17	4583	1.22	M
53 1,1,1-Trichloroethane	97	6.542	6.531	0.011	61	16314	6.78	
56 Carbon tetrachloride	117		6.719				ND	
58 Benzene	78		6.956				ND	
59 1,2-Dichloroethane	62		6.987				ND	
64 Trichloroethene	130	7.667	7.668	-0.001	99	385267	166.5	
67 1,2-Dichloropropane	63		7.905				ND	
70 1,4-Dioxane	88		8.058				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.197				ND	
74 cis-1,3-Dichloropropene	75		8.654				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.824				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.219				ND	
79 1,1,2-Trichloroethane	97		9.402				ND	
80 Tetrachloroethene	164	9.535	9.536	-0.001	97	190985	111.5	
82 2-Hexanone	43		9.658				ND	
84 Chlorodibromomethane	129		9.785				ND	
85 Ethylene Dibromide	107		9.901				ND	
87 Chlorobenzene	112		10.388				ND	
89 1,1,1,2-Tetrachloroethane	131		10.467				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.619				ND	
92 o-Xylene	106		11.014				ND	
93 Styrene	104		11.026				ND	
94 Bromoform	173		11.209				ND	
99 1,1,2,2-Tetrachloroethane	83		11.671				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

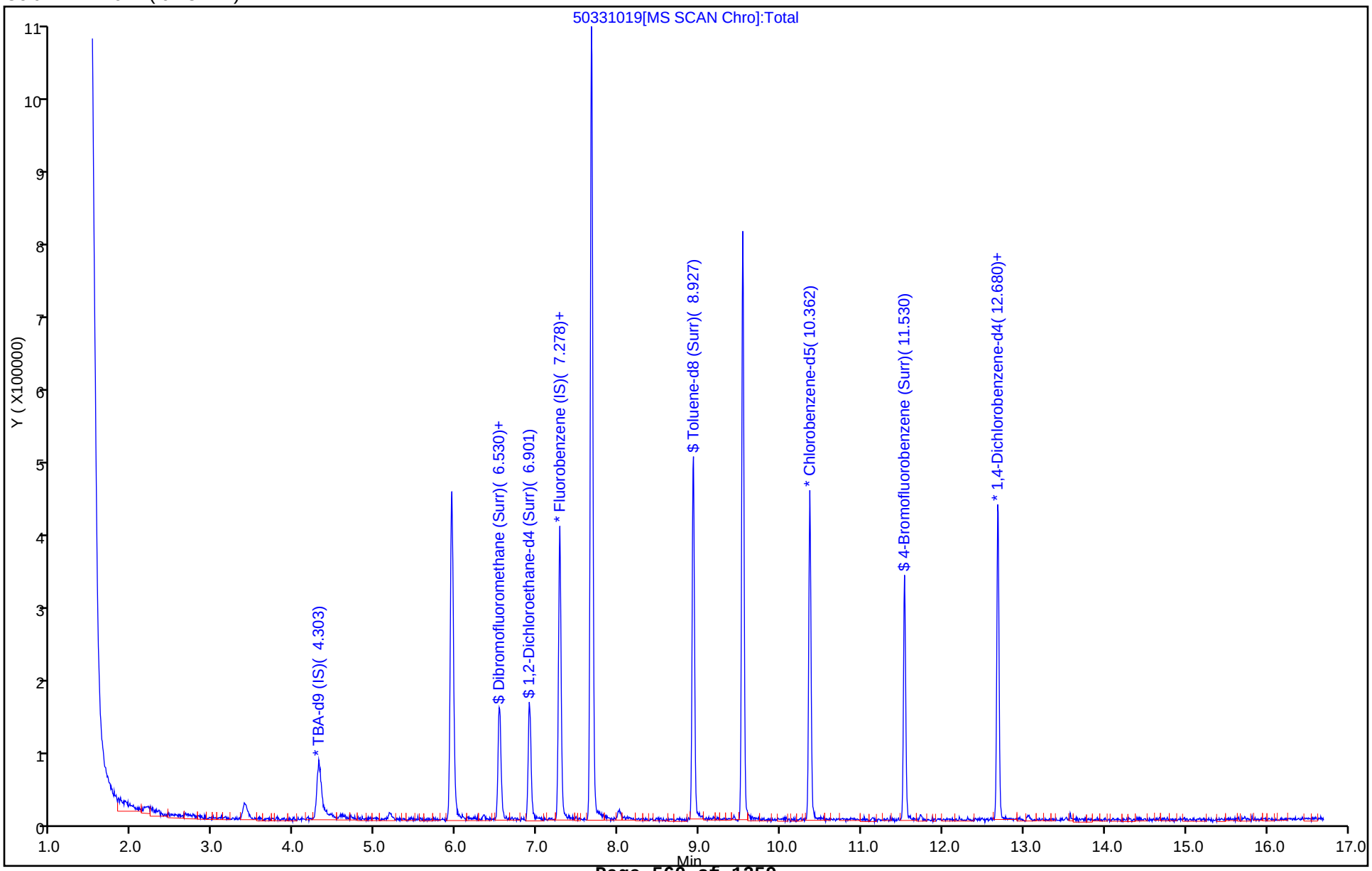
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 01-Apr-2015 08:01:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331019.D				
Injection Date:	31-Mar-2015 16:54:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-42353-E-24	Lab Sample ID:	180-42353-24	Worklist Smp#:	19
Client ID:	HD-MW-100I-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

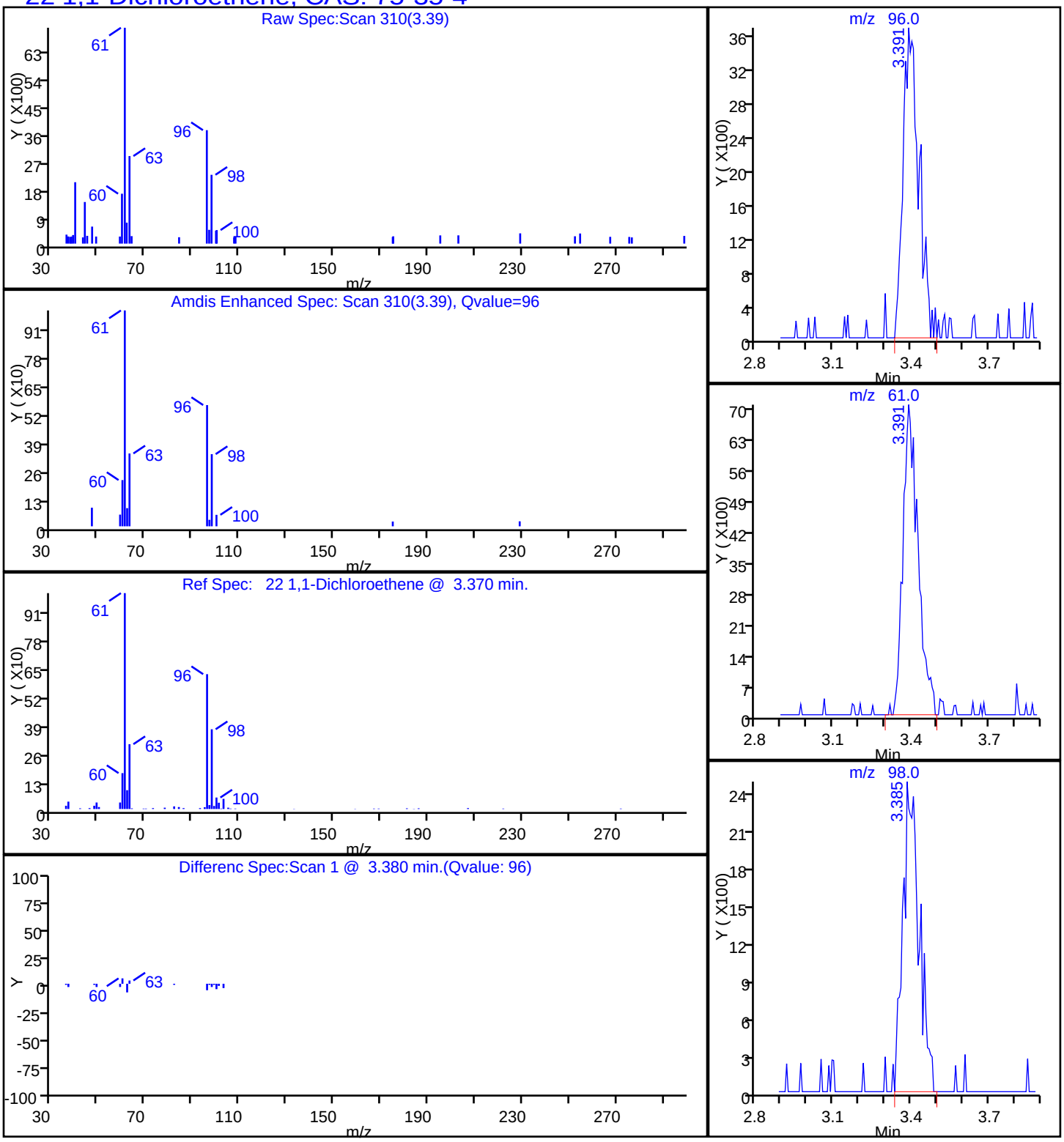


Report Date: 01-Apr-2015 08:01:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331019.D				
Injection Date:	31-Mar-2015 16:54:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-24	Lab Sample ID:	180-42353-24		
Client ID:	HD-MW-100I-0/1-0				
Operator ID:	001562	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



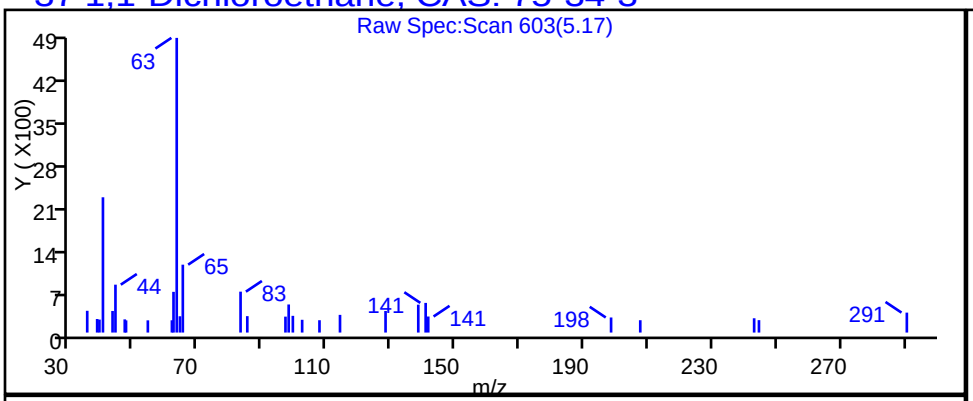
Report Date: 01-Apr-2015 08:01:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

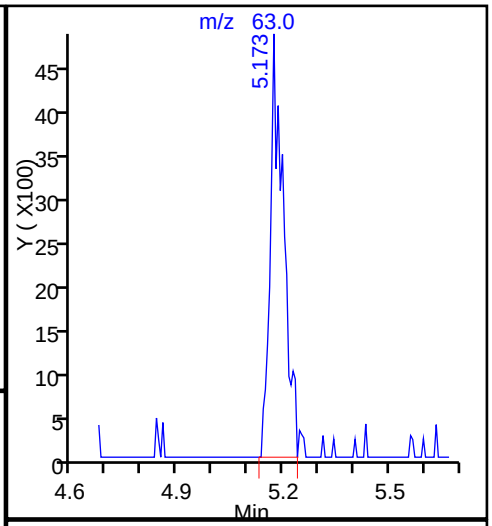
TestAmerica Pittsburgh

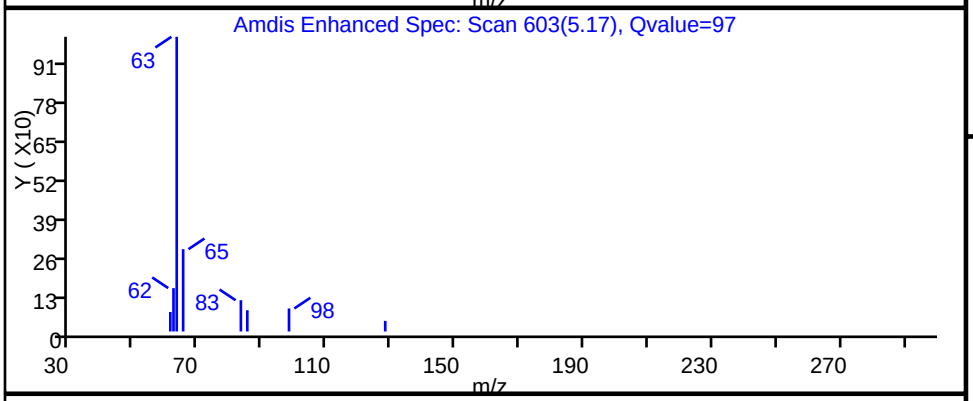
Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331019.D

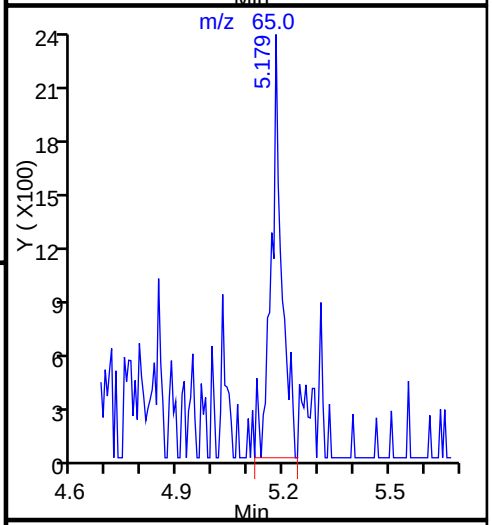
Injection Date:	31-Mar-2015 16:54:30	Instrument ID:	CHHP5
Lims ID:	180-42353-E-24	Lab Sample ID:	180-42353-24
Client ID:	HD-MW-100I-0/1-0		
Operator ID:	001562	ALS Bottle#:	18 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

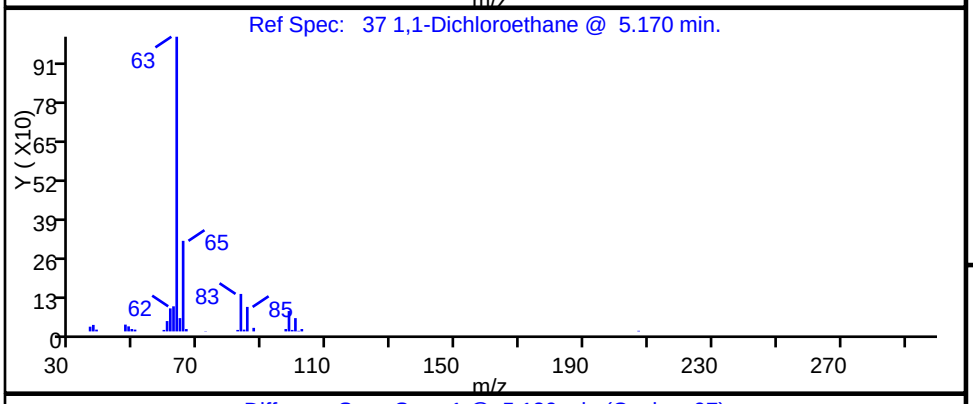
37 1,1-Dichloroethane, CAS: 75-34-3

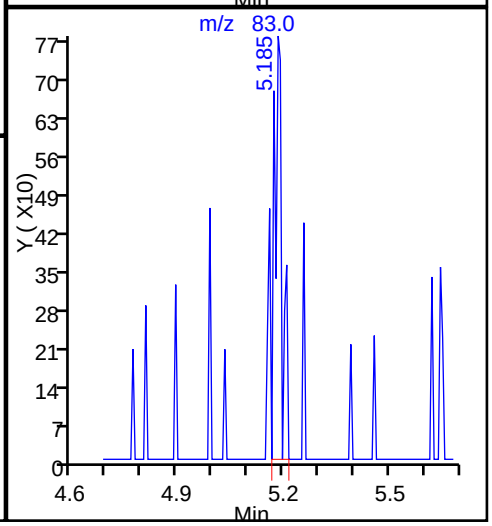


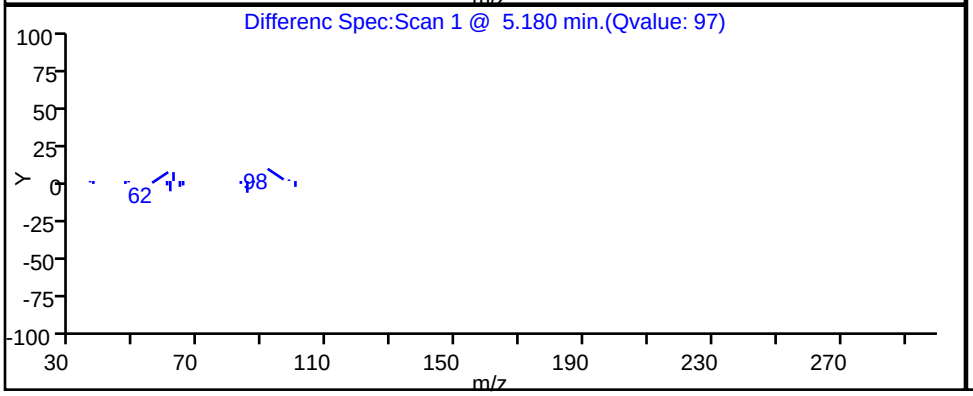










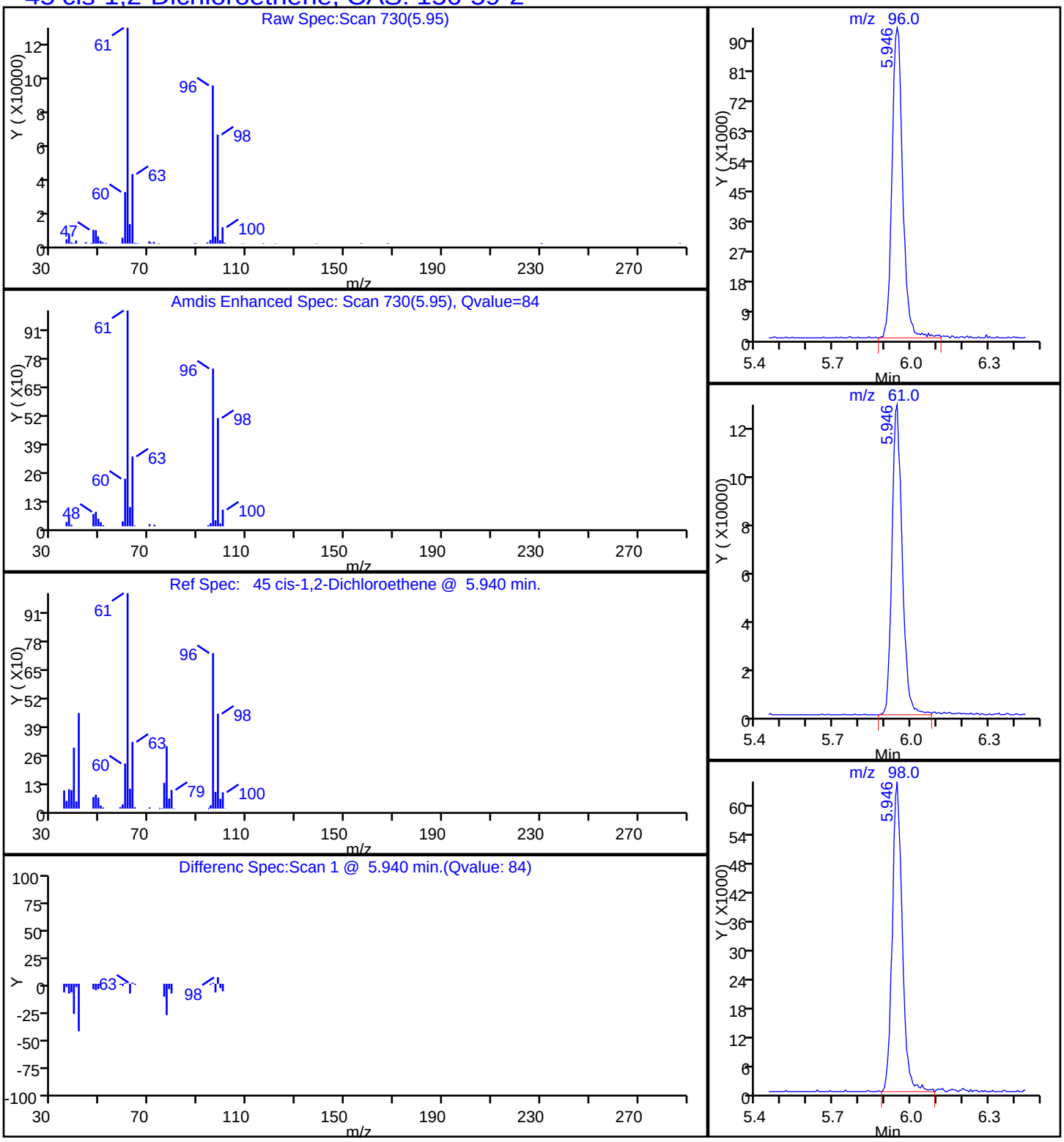


Report Date: 01-Apr-2015 08:01:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331019.D				
Injection Date:	31-Mar-2015 16:54:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-24	Lab Sample ID:	180-42353-24		
Client ID:	HD-MW-100I-0/1-0				
Operator ID:	001562	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

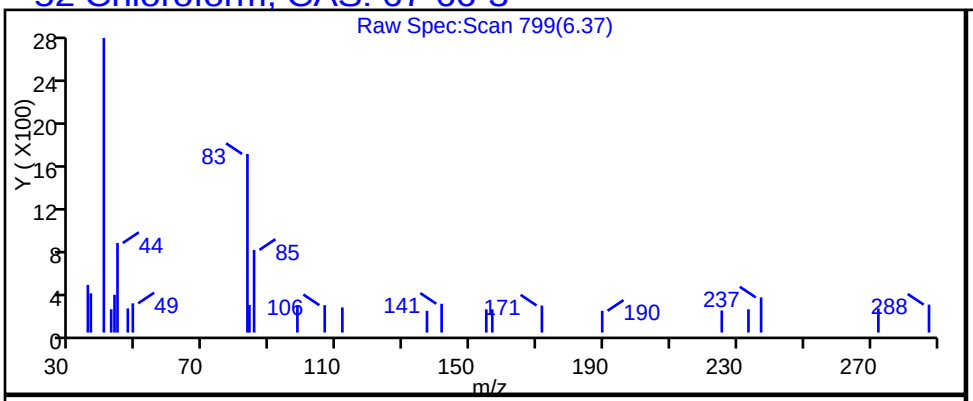


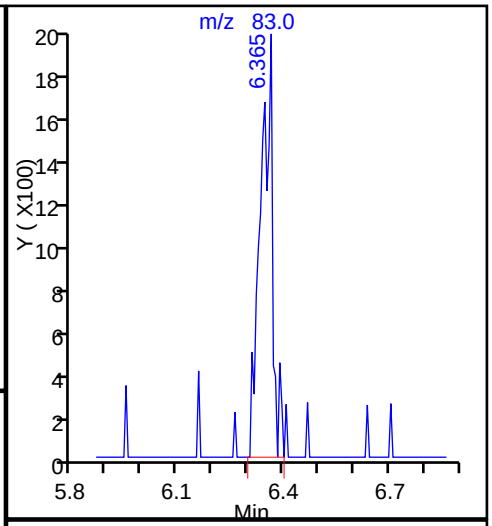
Report Date: 01-Apr-2015 08:01:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

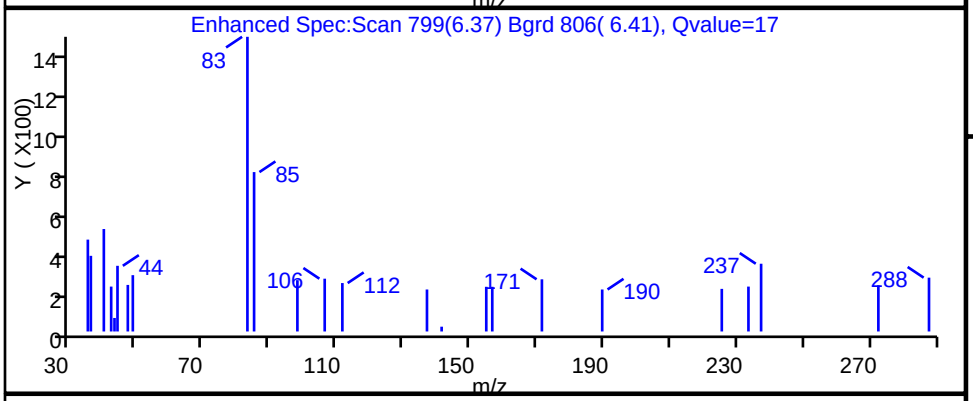
TestAmerica Pittsburgh

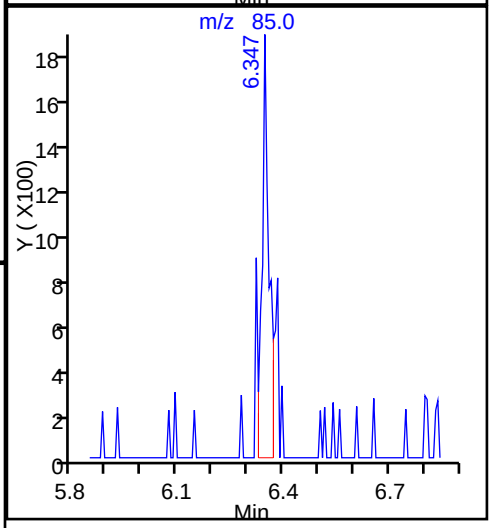
Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331019.D				
Injection Date:	31-Mar-2015 16:54:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-24	Lab Sample ID:	180-42353-24		
Client ID:	HD-MW-100I-0/1-0				
Operator ID:	001562	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

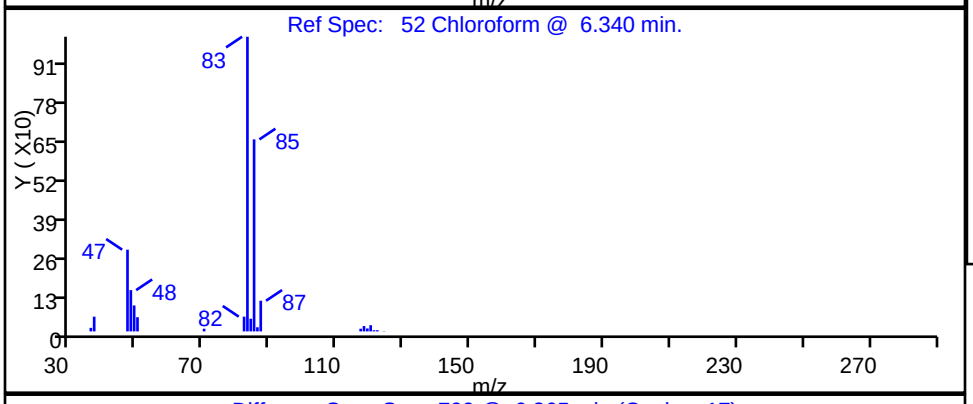
52 Chloroform, CAS: 67-66-3

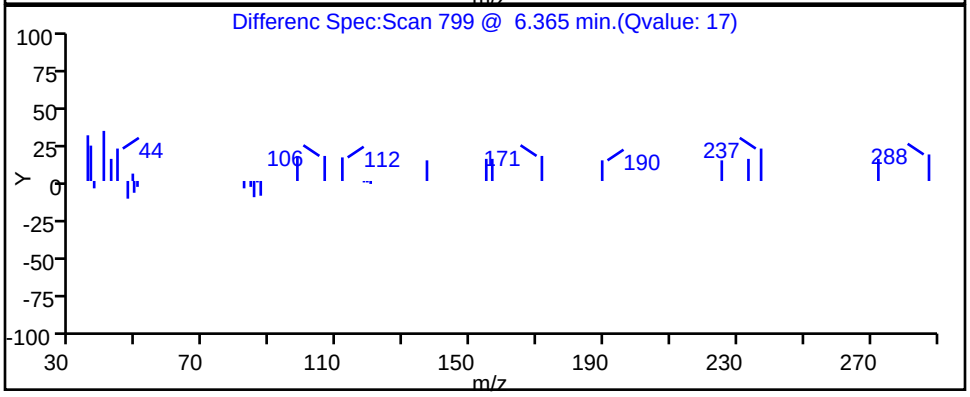












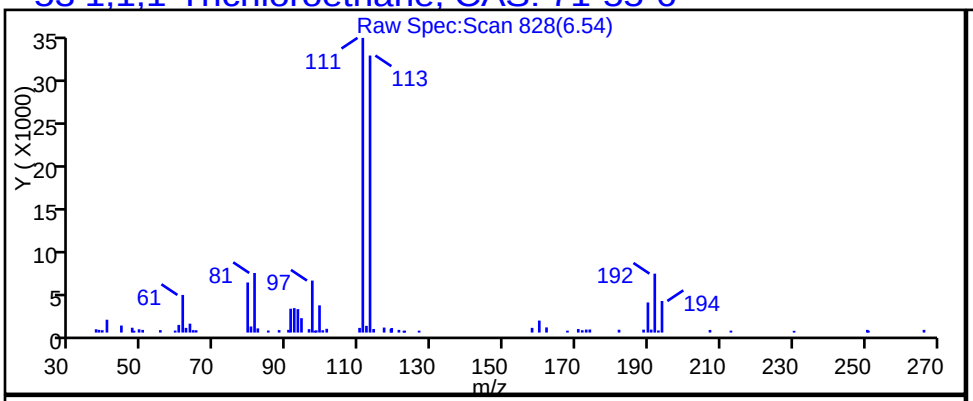
Report Date: 01-Apr-2015 08:01:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

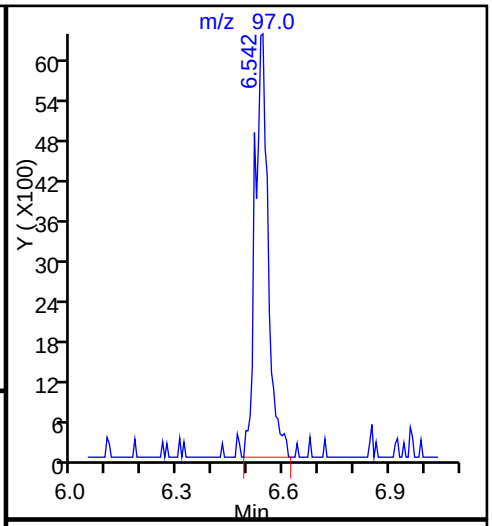
TestAmerica Pittsburgh

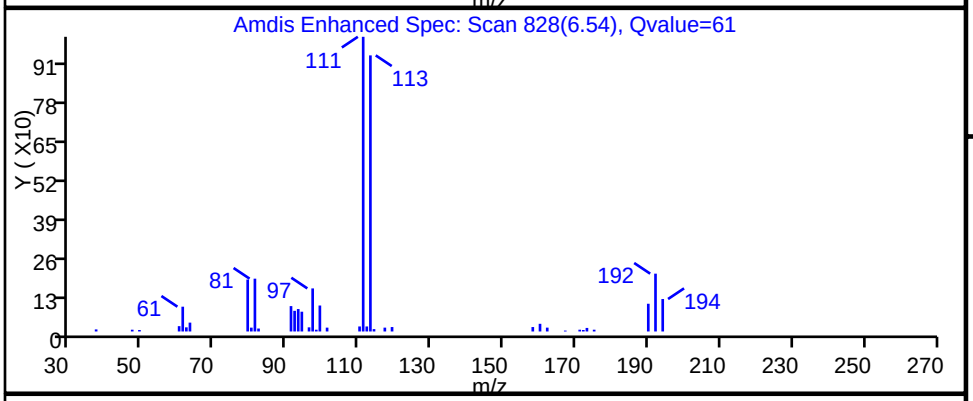
Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331019.D

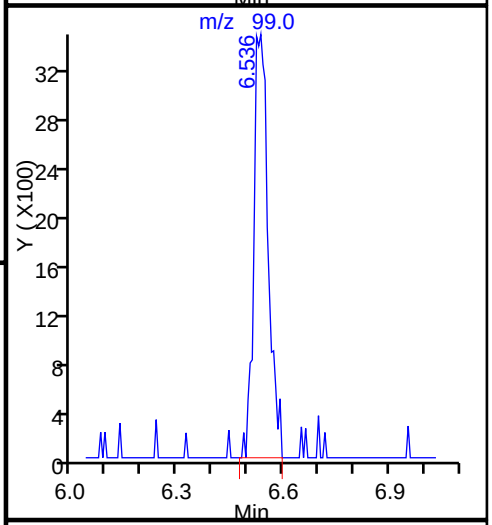
Injection Date:	31-Mar-2015 16:54:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-24	Lab Sample ID:	180-42353-24		
Client ID:	HD-MW-100I-0/1-0				
Operator ID:	001562	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

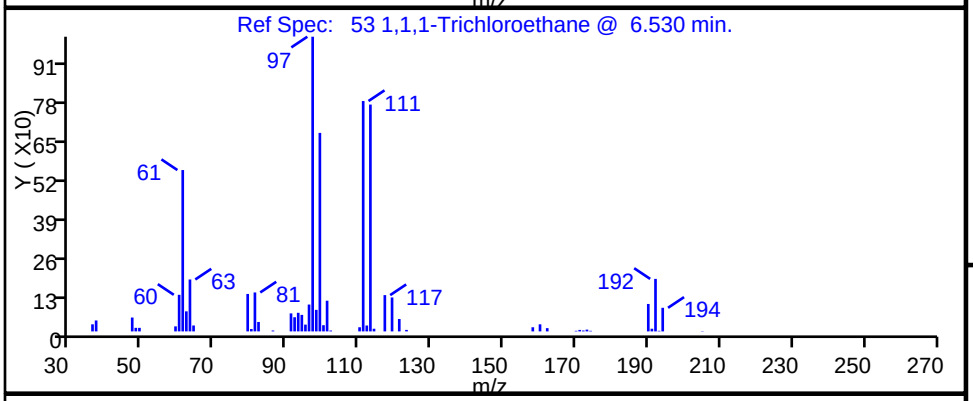
53 1,1,1-Trichloroethane, CAS: 71-55-6

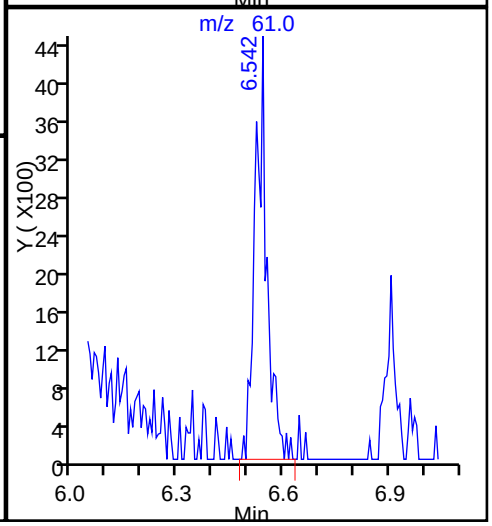


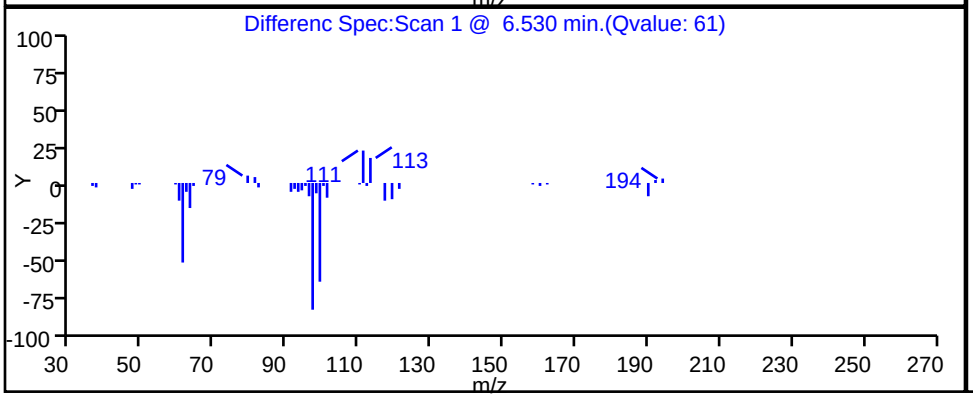












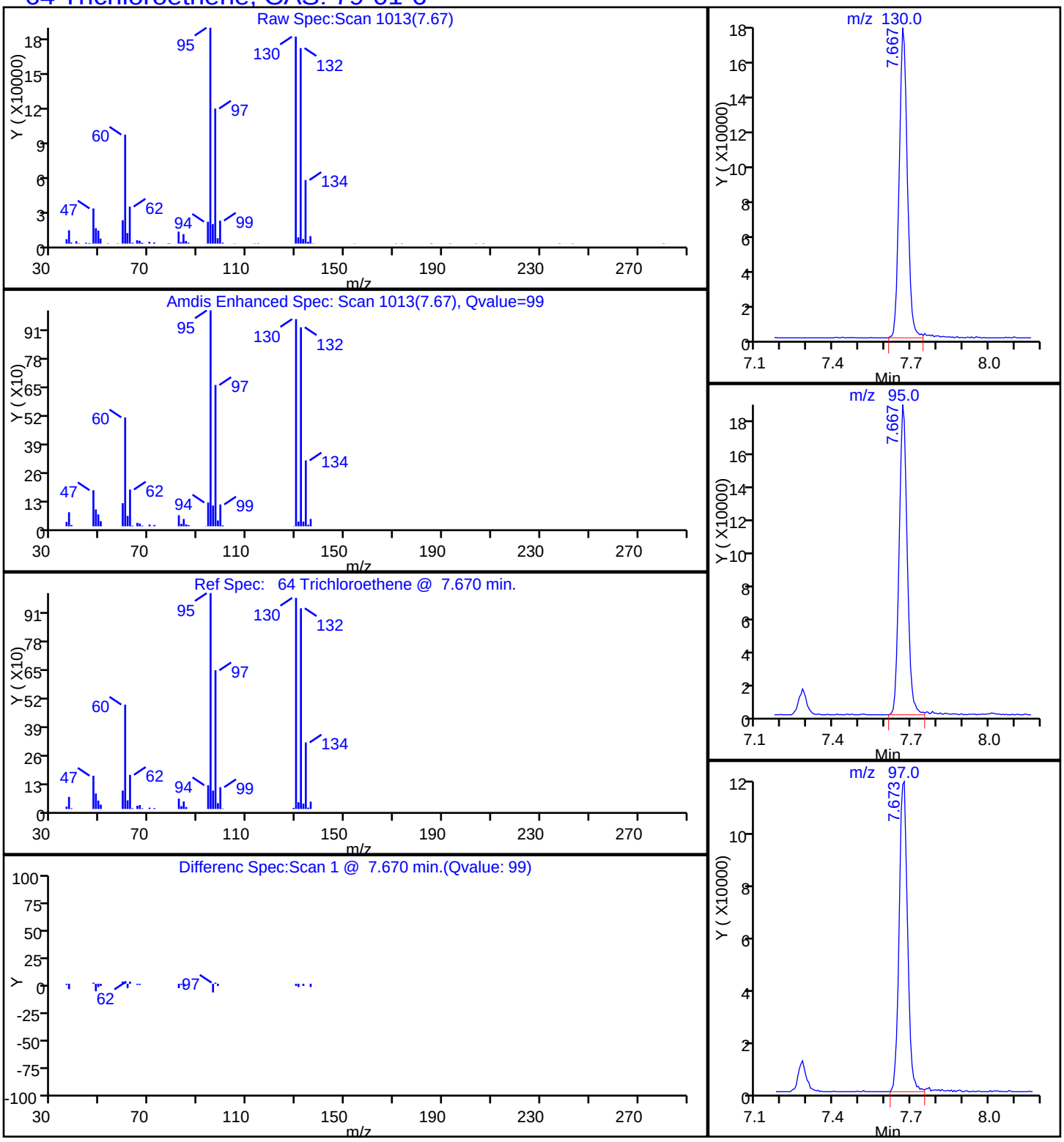
Report Date: 01-Apr-2015 08:01:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331019.D

Injection Date:	31-Mar-2015 16:54:30	Instrument ID:	CHHP5
Lims ID:	180-42353-E-24	Lab Sample ID:	180-42353-24
Client ID:	HD-MW-100I-0/1-0		
Operator ID:	001562	ALS Bottle#:	18 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

64 Trichloroethene, CAS: 79-01-6



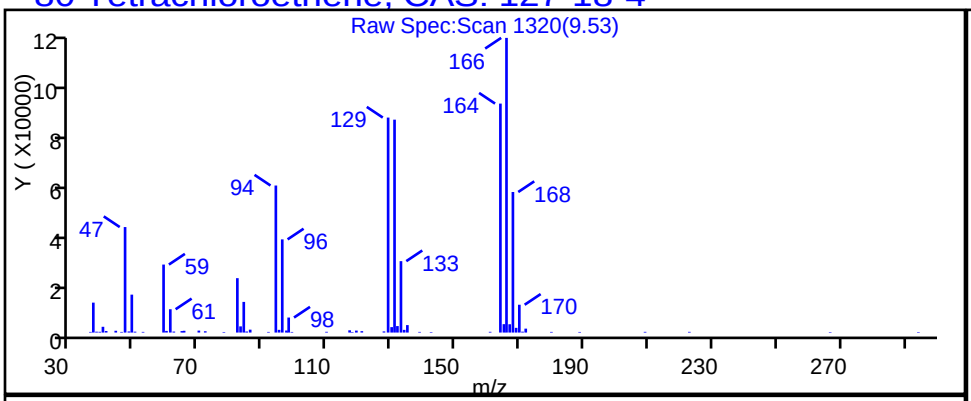
Report Date: 01-Apr-2015 08:01:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

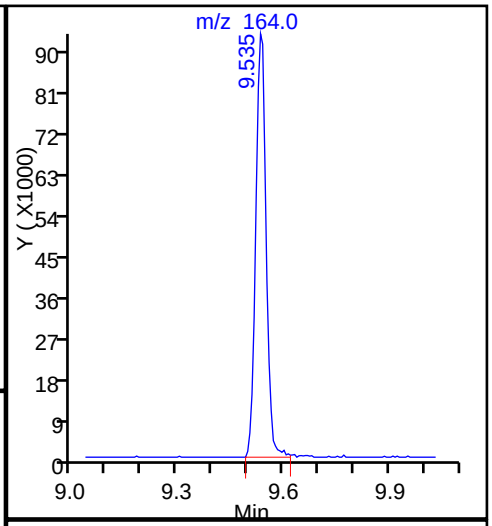
TestAmerica Pittsburgh

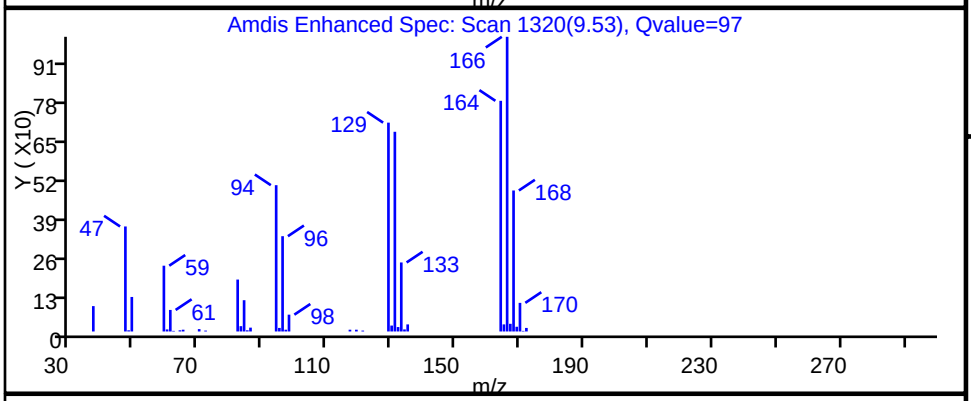
Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331019.D

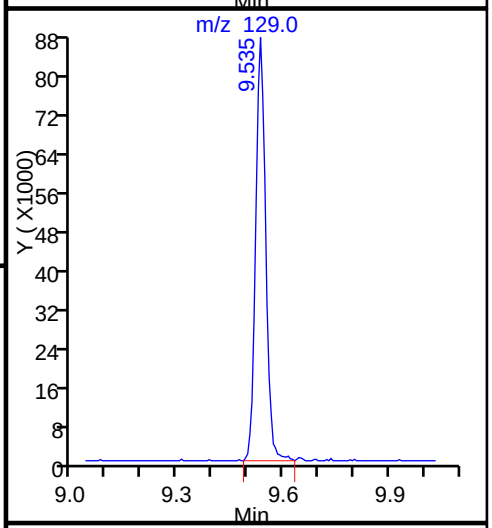
Injection Date:	31-Mar-2015 16:54:30	Instrument ID:	CHHP5
Lims ID:	180-42353-E-24	Lab Sample ID:	180-42353-24
Client ID:	HD-MW-100I-0/1-0		
Operator ID:	001562	ALS Bottle#:	18 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

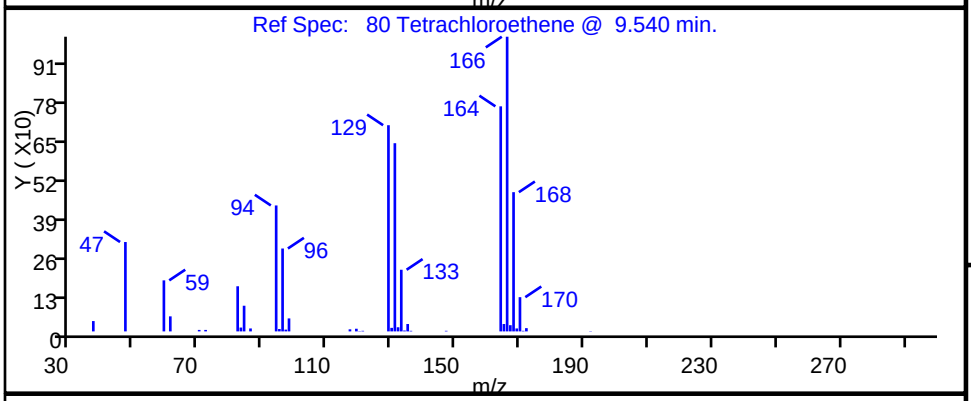
80 Tetrachloroethene, CAS: 127-18-4

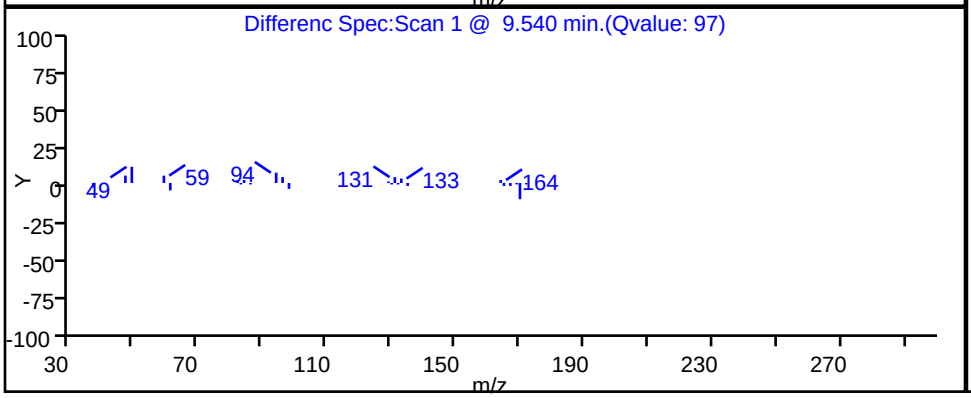


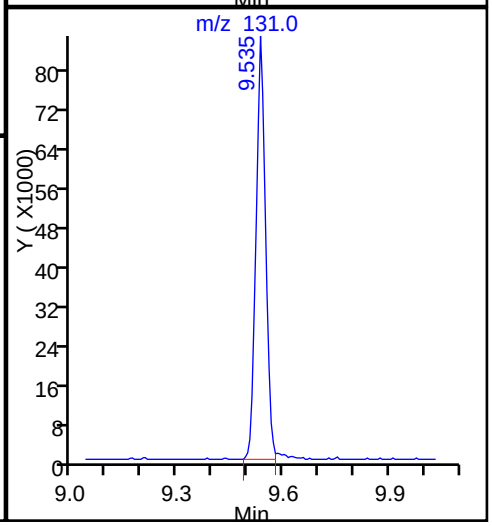












Manual Integration/User Assign Peak Report

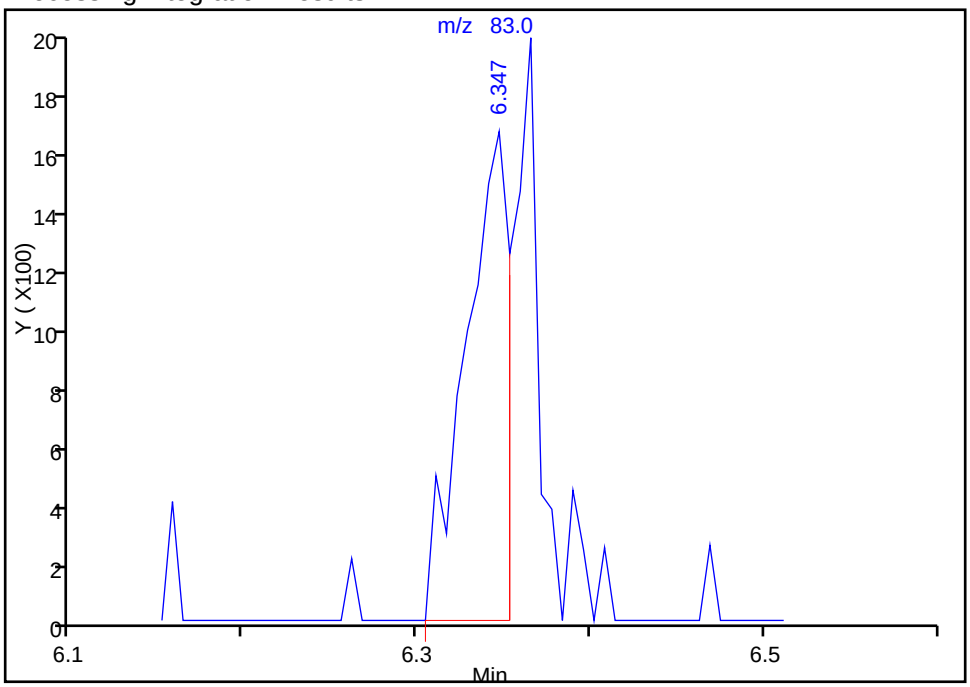
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331019.D				
Injection Date:	31-Mar-2015 16:54:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-24	Lab Sample ID:	180-42353-24		
Client ID:	HD-MW-100I-0/1-0				
Operator ID:	001562	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

52 Chloroform, CAS: 67-66-3

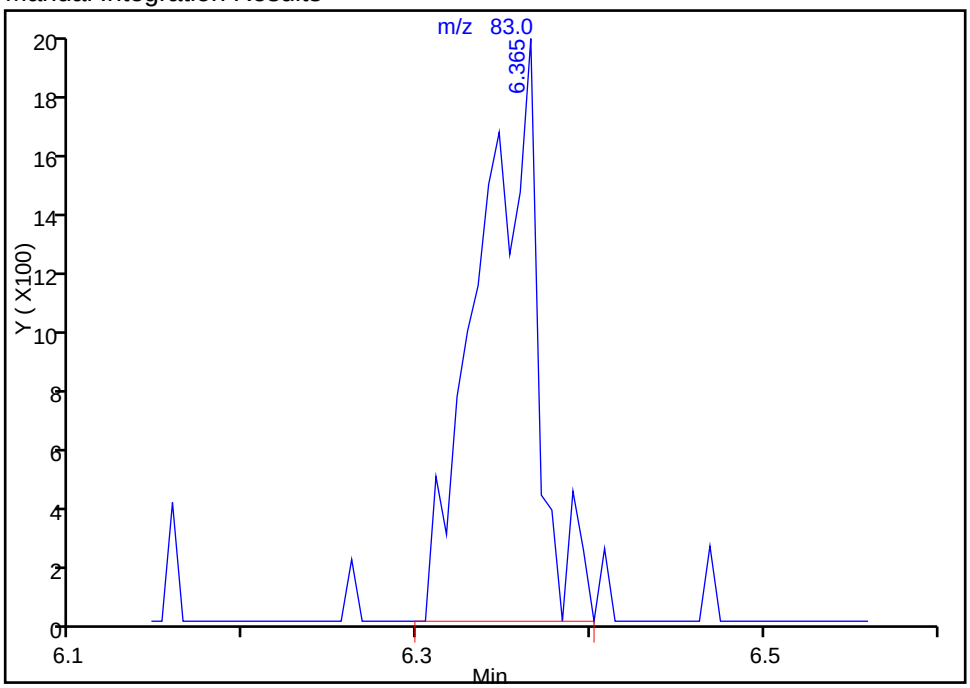
Processing Integration Results

RT: 6.35
Area: 2845
Amount: 0.754979
Amount Units: ng



Manual Integration Results

RT: 6.37
Area: 4583
Amount: 1.216193
Amount Units: ng



Reviewer: fergusond, 01-Apr-2015 08:01:09
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-93S-0/1-0 Lab Sample ID: 180-42353-25

Matrix: Water Lab File ID: 50401016.D

Analysis Method: 8260C Date Collected: 03/24/2015 14:35

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2015 16:59

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 137218 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	2.0	U	2.0	0.57
75-01-4	Vinyl chloride	2.0	U	2.0	0.45
74-83-9	Bromomethane	2.0	U *	2.0	0.63
75-00-3	Chloroethane	2.0	U	2.0	0.43
75-35-4	1,1-Dichloroethene	0.98	J	2.0	0.59
67-64-1	Acetone	10	U	10	5.0
75-15-0	Carbon disulfide	2.0	U	2.0	0.42
75-09-2	Methylene Chloride	0.65	J	2.0	0.25
156-60-5	trans-1,2-Dichloroethene	2.0	U	2.0	0.34
1634-04-4	Methyl tert-butyl ether	2.0	U	2.0	0.37
75-34-3	1,1-Dichloroethane	1.1	J	2.0	0.23
156-59-2	cis-1,2-Dichloroethene	32		2.0	0.47
74-97-5	Bromochloromethane	2.0	U	2.0	0.36
78-93-3	2-Butanone (MEK)	10	U	10	1.1
67-66-3	Chloroform	2.0	U	2.0	0.34
71-55-6	1,1,1-Trichloroethane	6.0		2.0	0.57
56-23-5	Carbon tetrachloride	2.0	U	2.0	0.27
71-43-2	Benzene	2.0	U	2.0	0.21
107-06-2	1,2-Dichloroethane	2.0	U	2.0	0.42
79-01-6	Trichloroethene	32		2.0	0.29
78-87-5	1,2-Dichloropropane	2.0	U	2.0	0.19
75-27-4	Bromodichloromethane	2.0	U	2.0	0.26
10061-01-5	cis-1,3-Dichloropropene	2.0	U	2.0	0.37
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	1.1
108-88-3	Toluene	2.0	U	2.0	0.30
10061-02-6	trans-1,3-Dichloropropene	2.0	U *	2.0	0.30
79-00-5	1,1,2-Trichloroethane	2.0	U	2.0	0.40
127-18-4	Tetrachloroethene	79		2.0	0.30
591-78-6	2-Hexanone	10	U	10	0.32
124-48-1	Dibromochloromethane	2.0	U	2.0	0.27
106-93-4	1,2-Dibromoethane (EDB)	2.0	U	2.0	0.36
108-90-7	Chlorobenzene	2.0	U	2.0	0.27
630-20-6	1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.55
100-41-4	Ethylbenzene	2.0	U	2.0	0.45
1330-20-7	Xylenes, Total	6.0	U	6.0	0.98
100-42-5	Styrene	2.0	U	2.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-93S-0/1-0 Lab Sample ID: 180-42353-25

Matrix: Water Lab File ID: 50401016.D

Analysis Method: 8260C Date Collected: 03/24/2015 14:35

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2015 16:59

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 137218 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	121		64-135
2037-26-5	Toluene-d8 (Surr)	102		71-118
460-00-4	4-Bromofluorobenzene (Surr)	98		70-118
1868-53-7	Dibromofluoromethane (Surr)	113		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401016.D
Lims ID: 180-42353-C-25 Lab Sample ID: 180-42353-25
Client ID: HD-MW-93S-0/1-0
Sample Type: Client
Inject. Date: 01-Apr-2015 16:59:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-42353-C-25, 2x
Misc. Info.: 180-0006280-016
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Apr-2015 08:02:57 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: fergusond Date: 02-Apr-2015 08:02:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.298	4.303	-0.005	96	102689	1000.0	
* 2 Fluorobenzene (IS)	96	7.273	7.278	-0.005	100	376251	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.362	0.002	99	83130	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.681	12.680	0.001	93	118795	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.531	6.524	0.007	67	96621	56.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.902	6.895	0.007	97	136474	60.5	
$ 7 Toluene-d8 (Surr)	98	8.922	8.921	0.001	100	337602	50.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.532	11.531	0.001	97	116929	49.0	
12 Chloromethane	50		1.779				ND	
13 Vinyl chloride	62		1.907				ND	
15 Bromomethane	94		2.259				ND	
16 Chloroethane	64		2.393				ND	
22 1,1-Dichloroethene	96	3.380	3.385	-0.005	37	5325	2.45	
24 Acetone	43	3.508	3.494	0.014	75	1680	2.18	
26 Carbon disulfide	76		3.671				ND	
31 Methylene Chloride	84	4.171	4.151	0.020	13	4056	1.62	
33 Acrylonitrile	53		4.547				ND	
34 trans-1,2-Dichloroethene	96	4.578	4.565	0.013	1	1064	0.4741	
35 Methyl tert-butyl ether	73		4.596				ND	
37 1,1-Dichloroethane	63	5.181	5.173	0.008	62	10953	2.73	
45 cis-1,2-Dichloroethene	96	5.941	5.934	0.007	84	189214	80.0	
46 2-Butanone (MEK)	43		5.989				ND	
49 Chlorobromomethane	128		6.226				ND	
52 Chloroform	83	6.355	6.341	0.014	29	725	0.1992	
53 1,1,1-Trichloroethane	97	6.543	6.536	0.007	67	34993	15.1	
56 Carbon tetrachloride	117		6.725				ND	
58 Benzene	78		6.956				ND	
59 1,2-Dichloroethane	62		6.986				ND	
64 Trichloroethene	130	7.669	7.668	0.001	98	180090	80.6	
67 1,2-Dichloropropane	63		7.899				ND	
70 1,4-Dioxane	88		8.057				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.191				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.824				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.219				ND	
79 1,1,2-Trichloroethane	97		9.401				ND	
80 Tetrachloroethene	164	9.536	9.535	0.001	98	329904	198.0	
82 2-Hexanone	43		9.651				ND	
84 Chlorodibromomethane	129		9.791				ND	
85 Ethylene Dibromide	107		9.900				ND	
87 Chlorobenzene	112		10.387				ND	
89 1,1,1,2-Tetrachloroethane	131		10.472				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.618				ND	
92 o-Xylene	106		11.014				ND	
93 Styrene	104		11.026				ND	
94 Bromoform	173		11.214				ND	
99 1,1,2,2-Tetrachloroethane	83		11.677				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

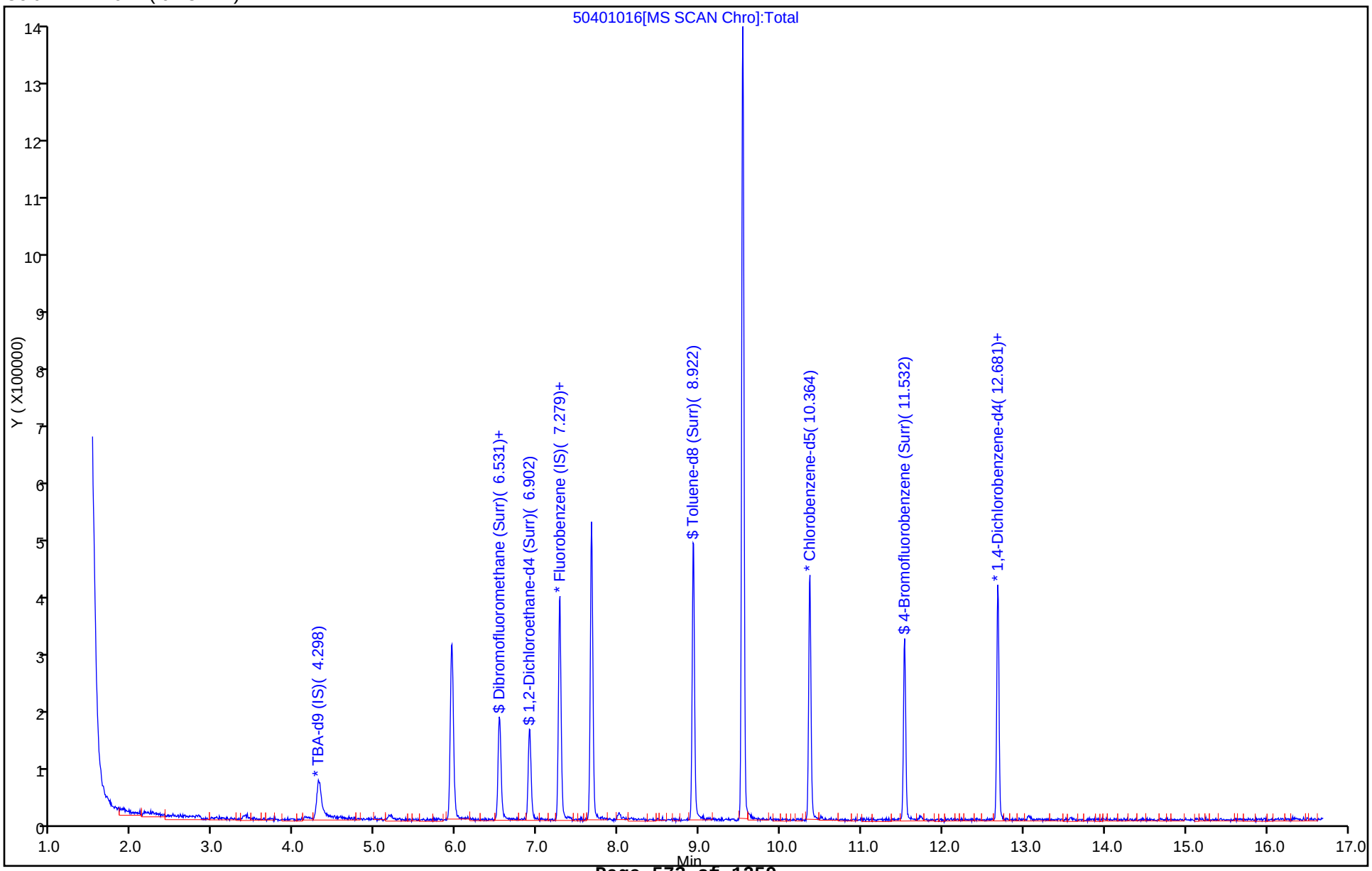
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 02-Apr-2015 08:02:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401016.D				
Injection Date:	01-Apr-2015 16:59:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-42353-C-25	Lab Sample ID:	180-42353-25	Worklist Smp#:	16
Client ID:	HD-MW-93S-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	15
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



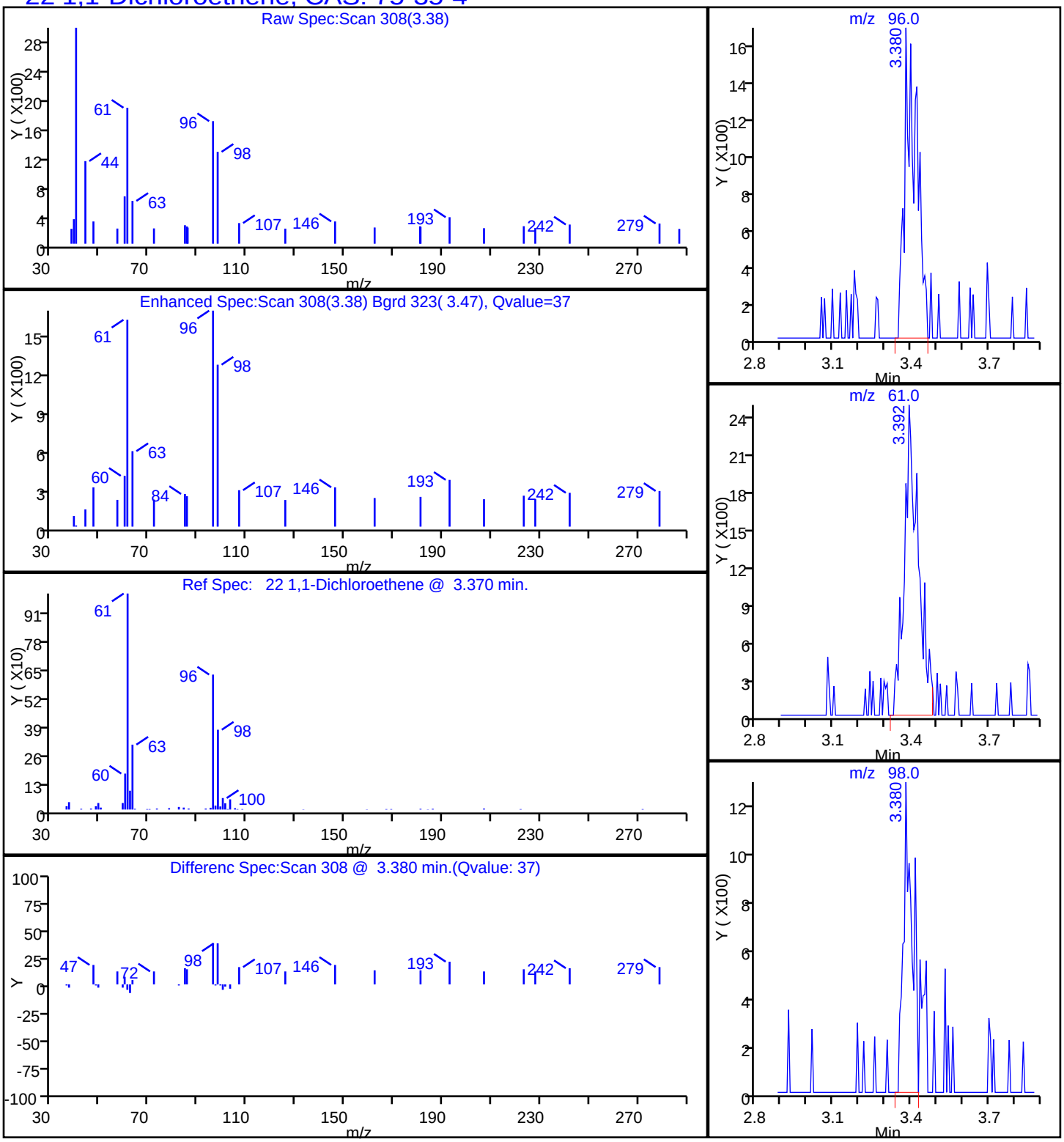
Report Date: 02-Apr-2015 08:02:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401016.D

Injection Date:	01-Apr-2015 16:59:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-25	Lab Sample ID:	180-42353-25		
Client ID:	HD-MW-93S-0/1-0				
Operator ID:	001562	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



Report Date: 02-Apr-2015 08:02:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401016.D				
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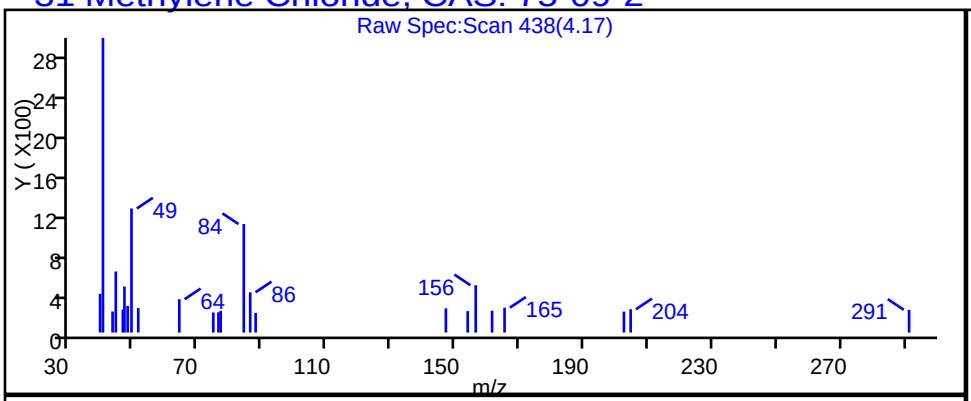
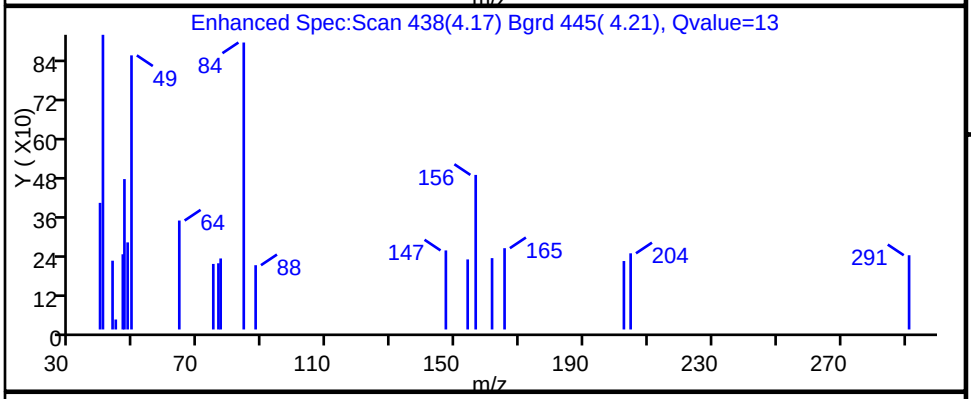
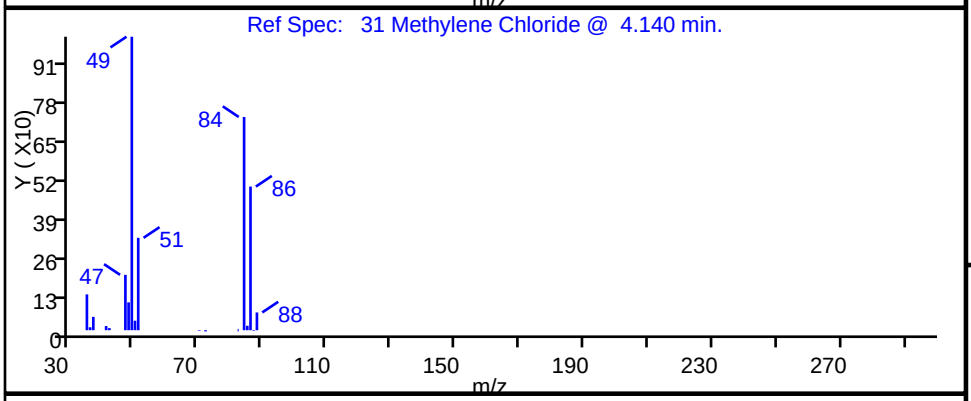
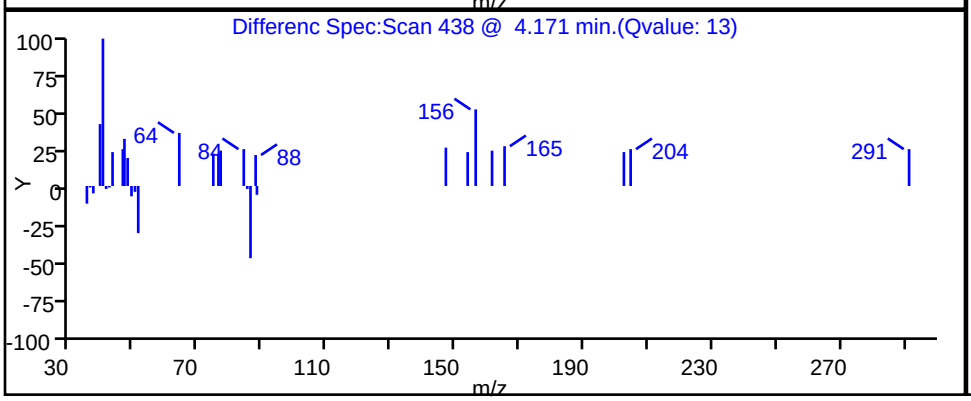
Lims ID:	180-42353-C-25	Lab Sample ID:	180-42353-25		
Client ID:	HD-MW-93S-0/1-0				
Operator ID:	001562	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

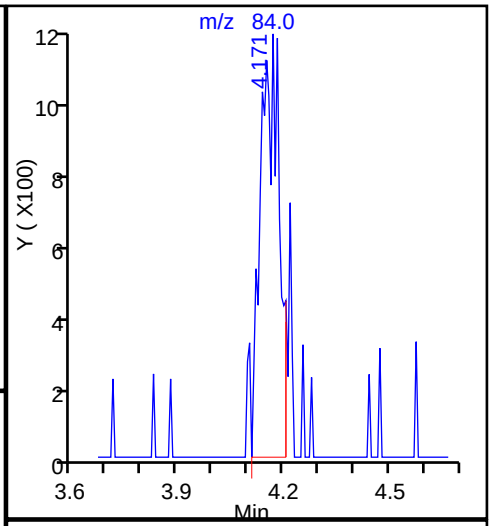
31 Methylene Chloride, CAS: 75-09-2

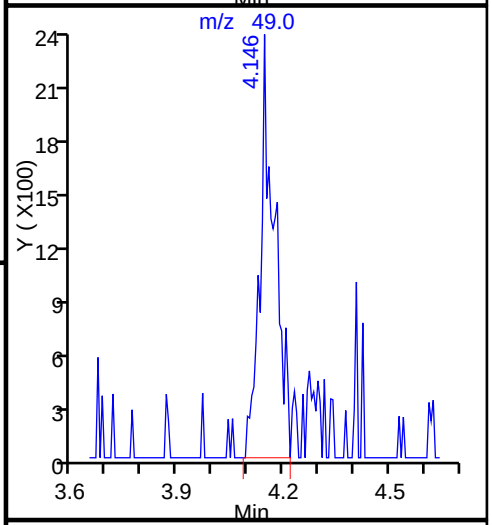


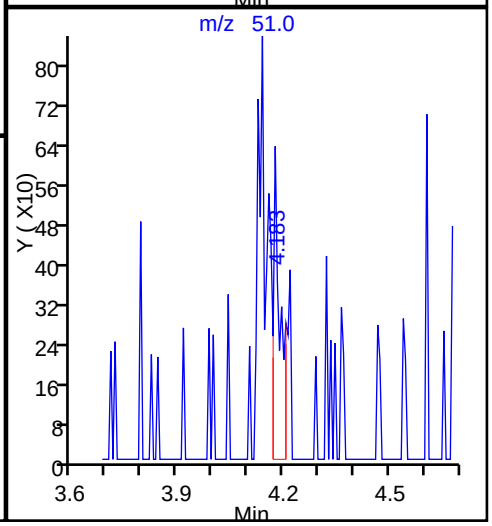












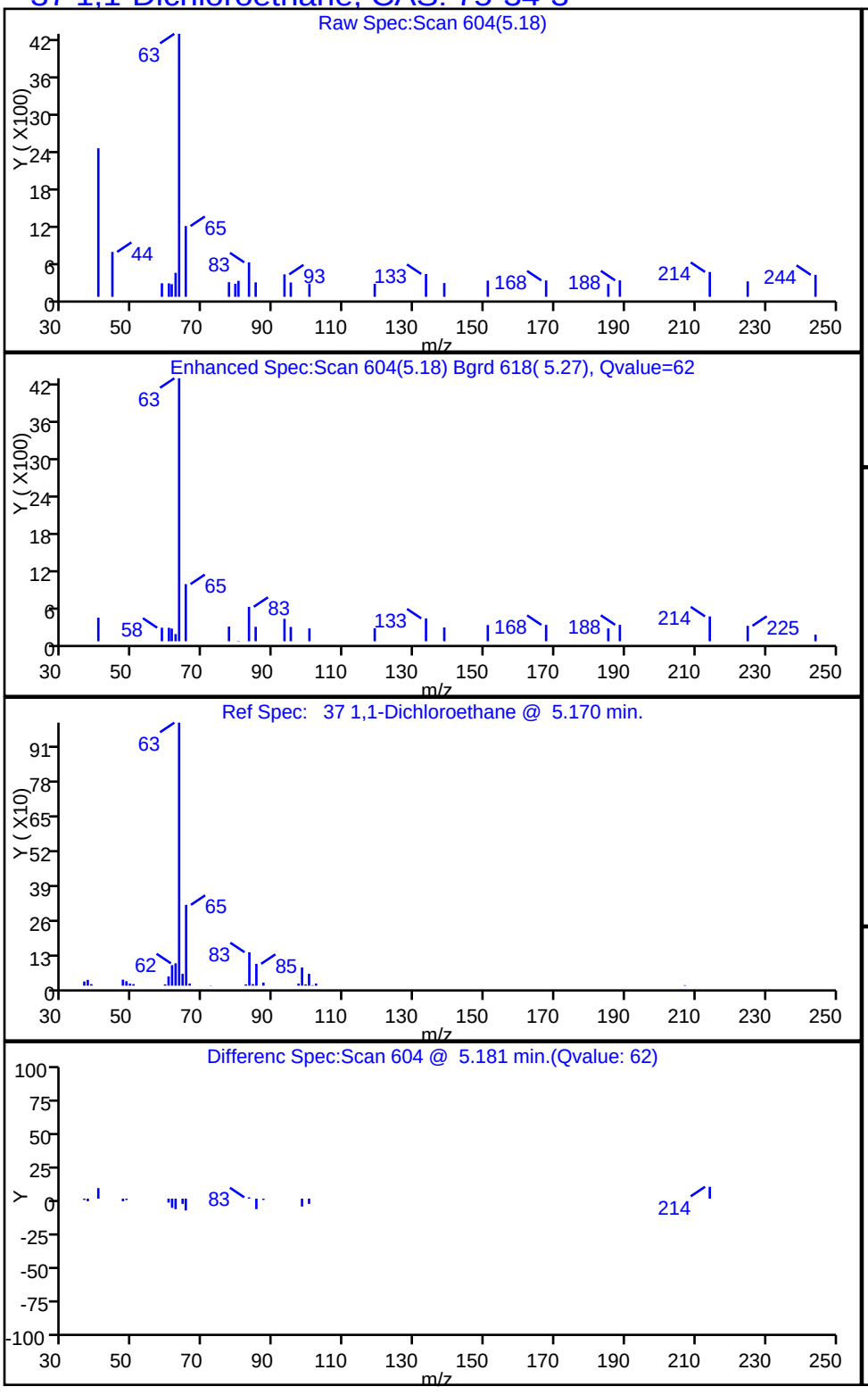
Report Date: 02-Apr-2015 08:02:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

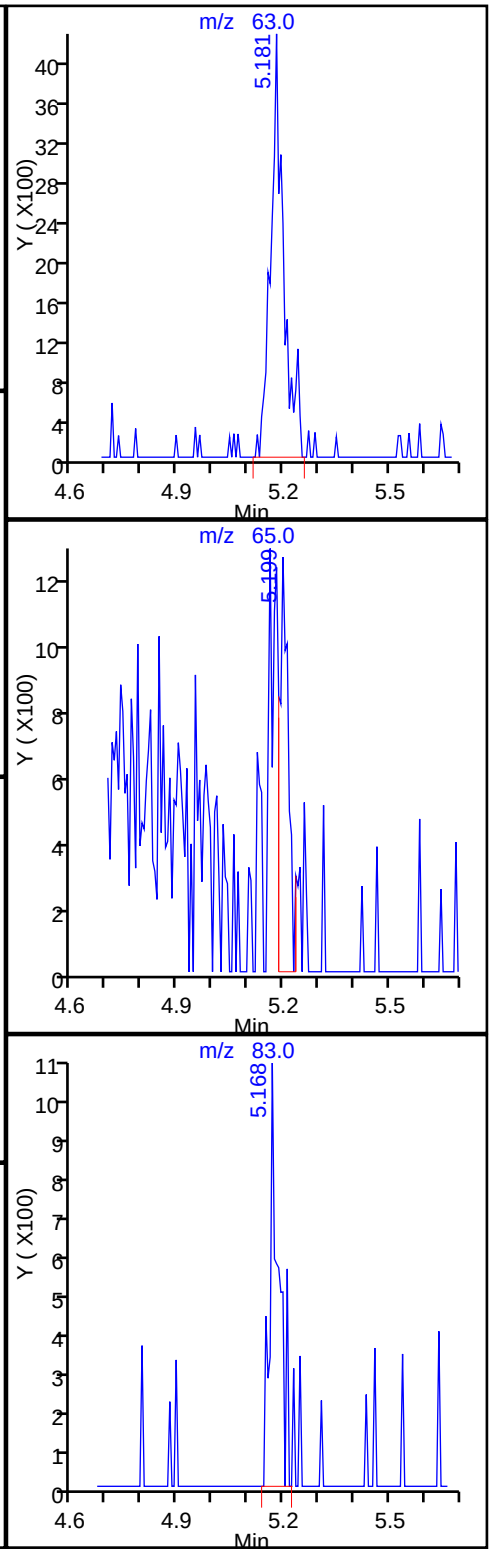
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401016.D

Injection Date:	01-Apr-2015 16:59:30	Instrument ID:	CHHP5
Lims ID:	180-42353-C-25	Lab Sample ID:	180-42353-25
Client ID:	HD-MW-93S-0/1-0		
Operator ID:	001562	ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

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





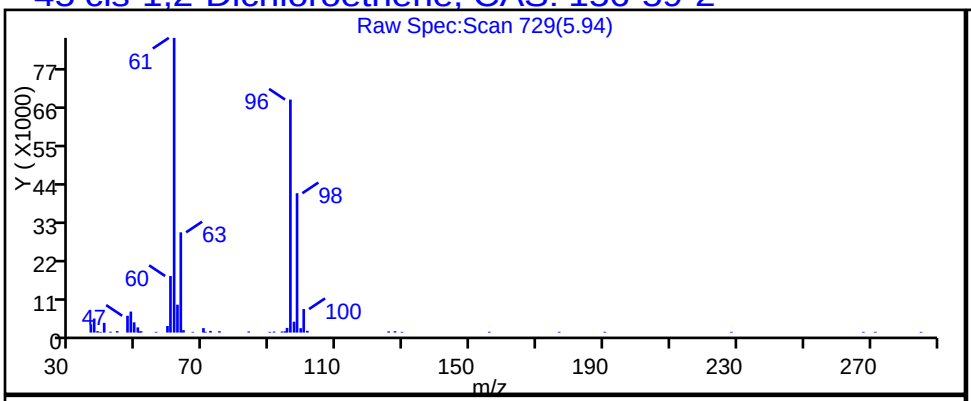
Report Date: 02-Apr-2015 08:02:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

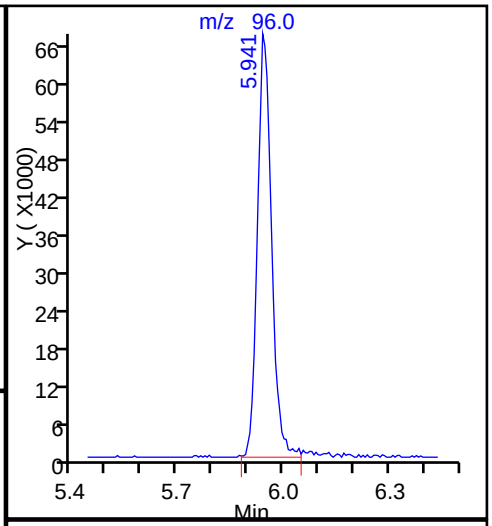
TestAmerica Pittsburgh

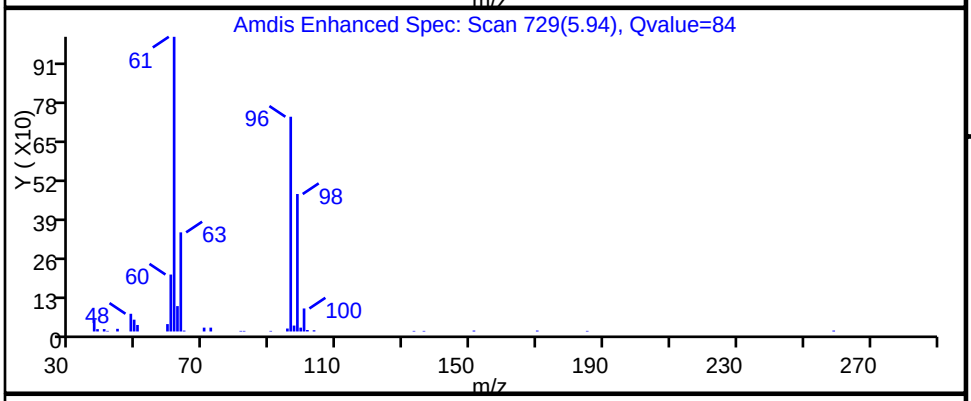
Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401016.D

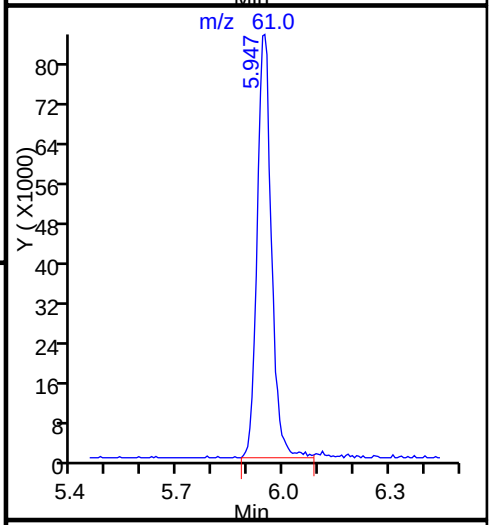
Injection Date:	01-Apr-2015 16:59:30	Instrument ID:	CHHP5
Lims ID:	180-42353-C-25	Lab Sample ID:	180-42353-25
Client ID:	HD-MW-93S-0/1-0		
Operator ID:	001562	ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

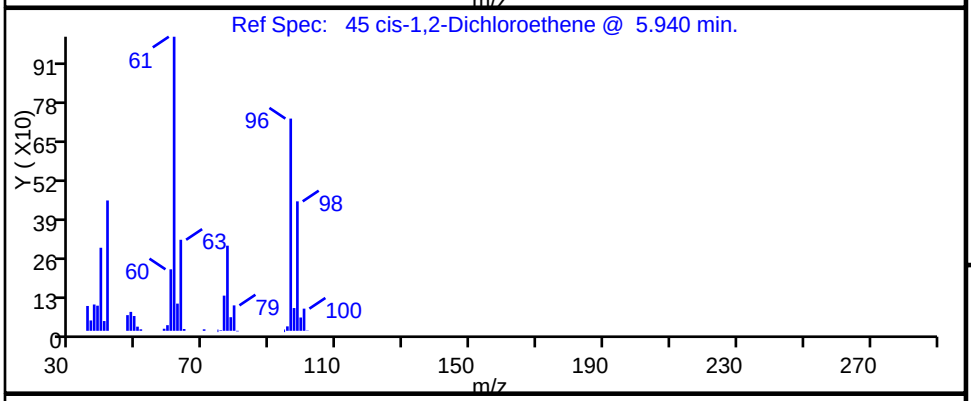
45 cis-1,2-Dichloroethene, CAS: 156-59-2

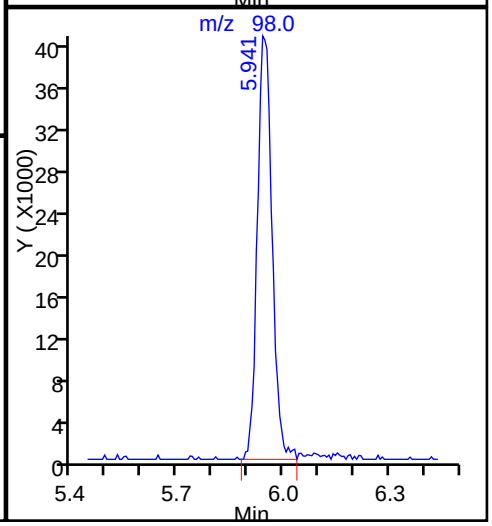


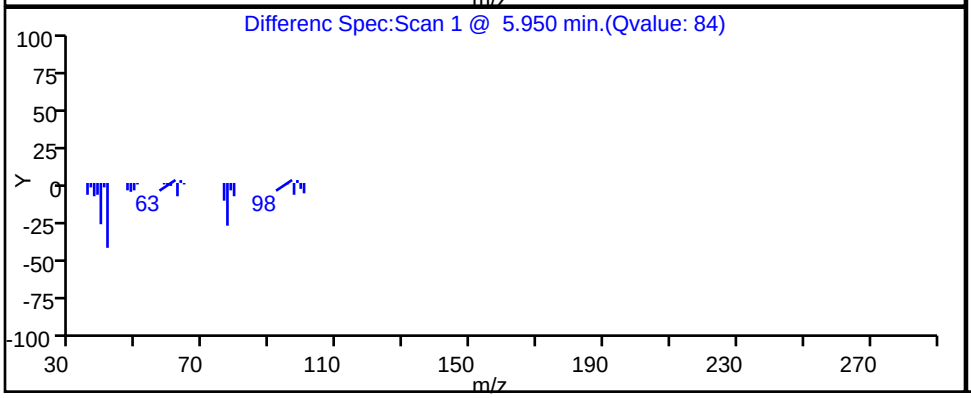










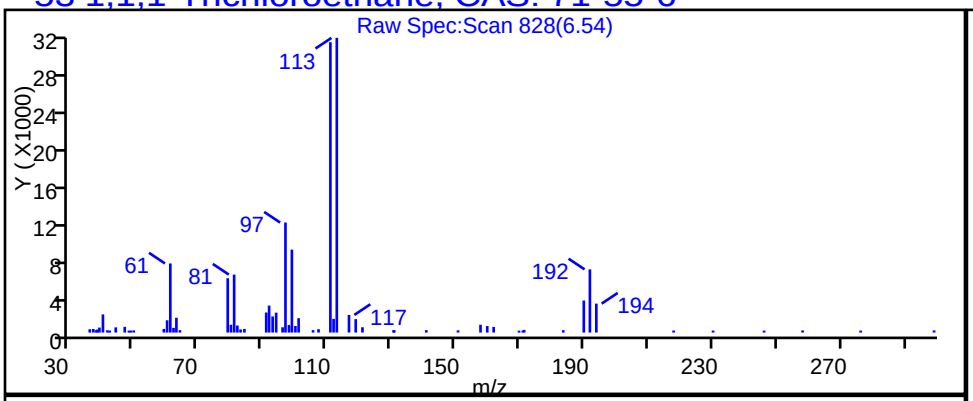


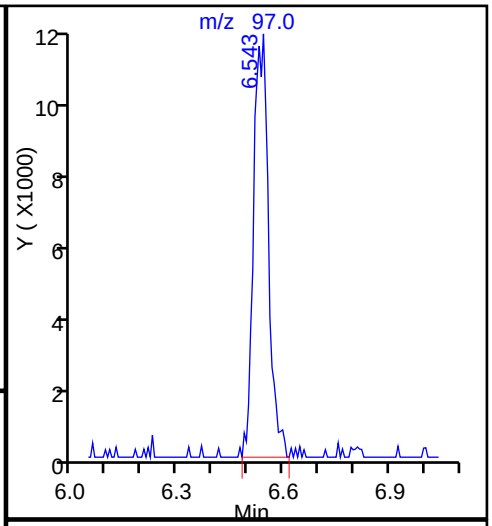
Report Date: 02-Apr-2015 08:02:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

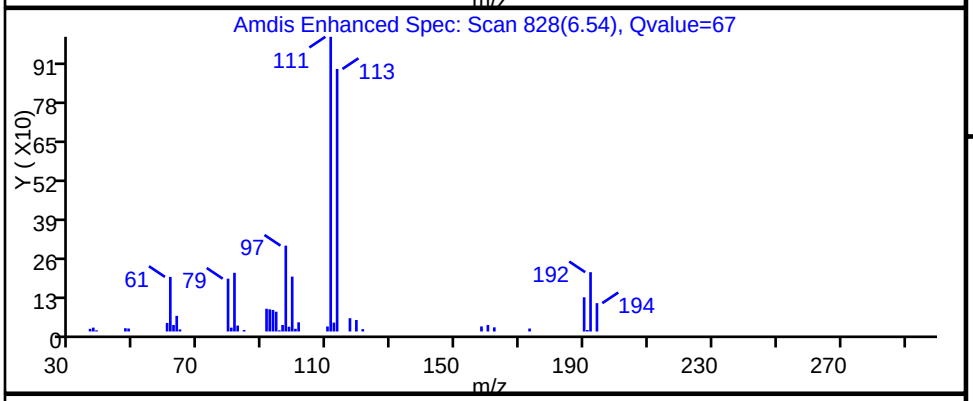
TestAmerica Pittsburgh

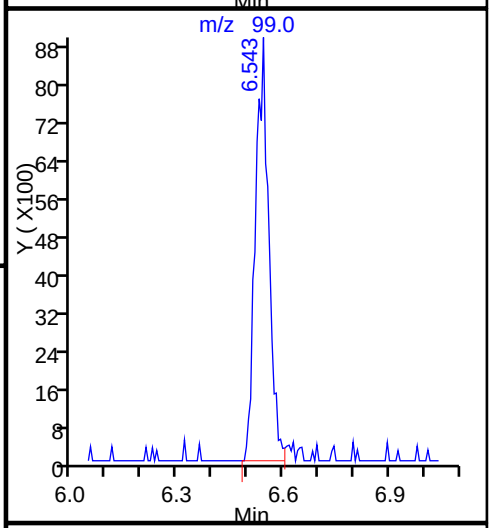
Data File:	\\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401016.D				
Injection Date:	01-Apr-2015 16:59:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-C-25	Lab Sample ID:	180-42353-25		
Client ID:	HD-MW-93S-0/1-0				
Operator ID:	001562	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

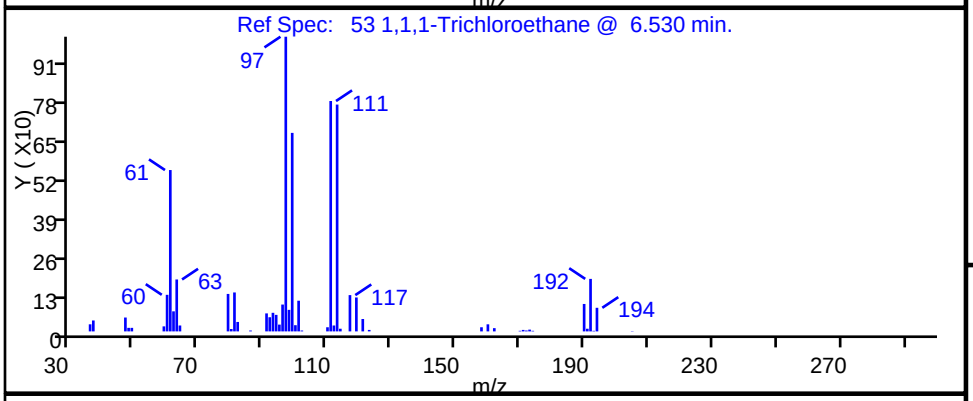
53 1,1,1-Trichloroethane, CAS: 71-55-6

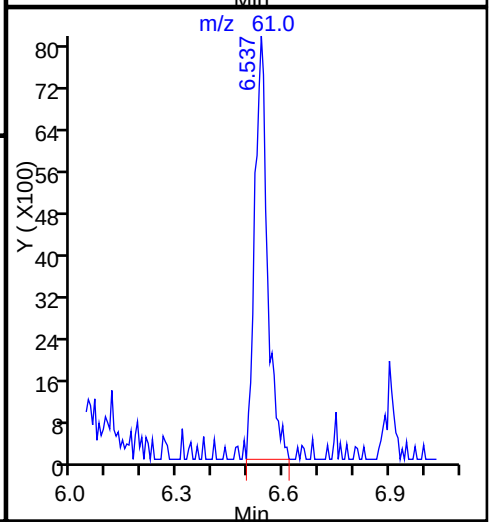


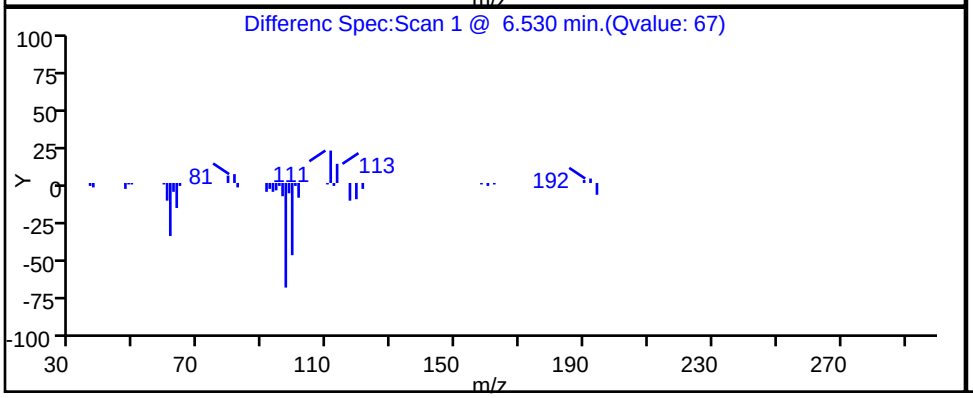










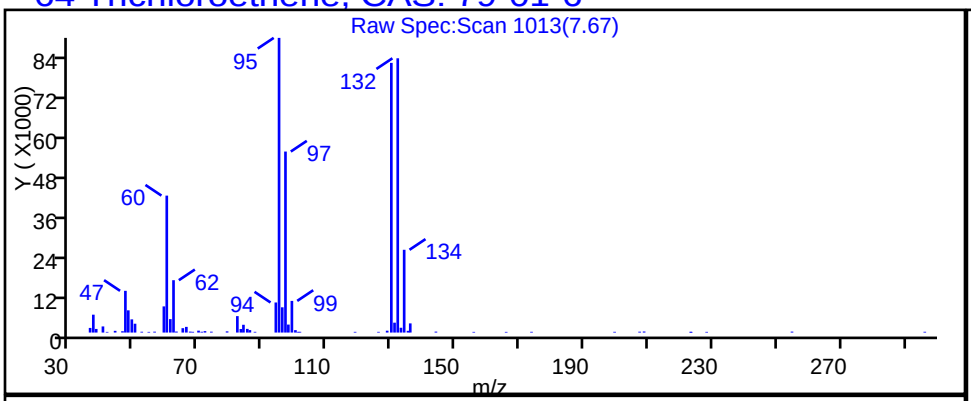


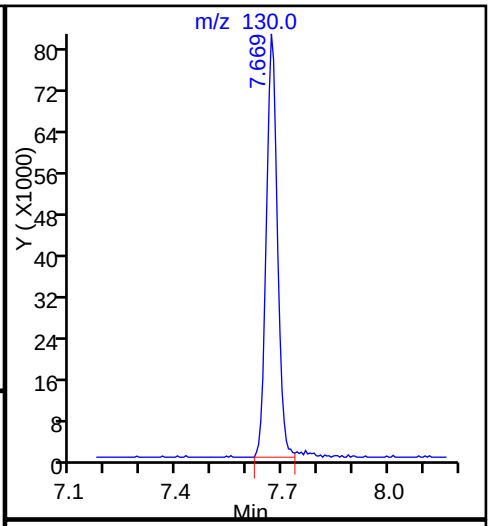
Report Date: 02-Apr-2015 08:02:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

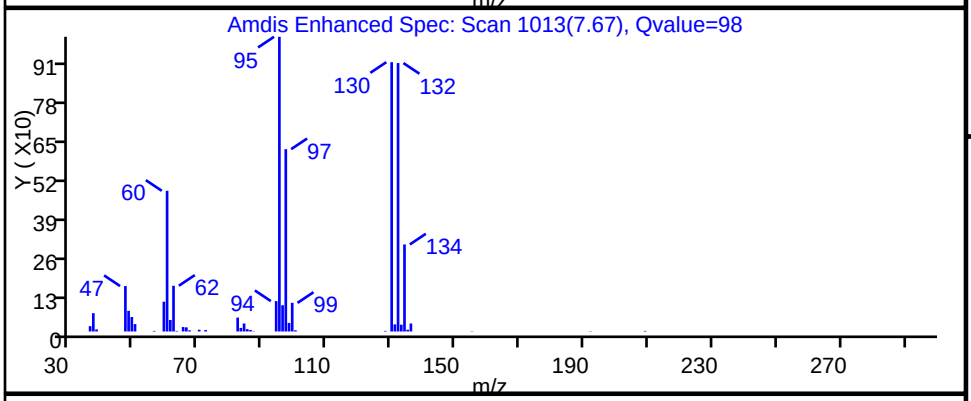
TestAmerica Pittsburgh

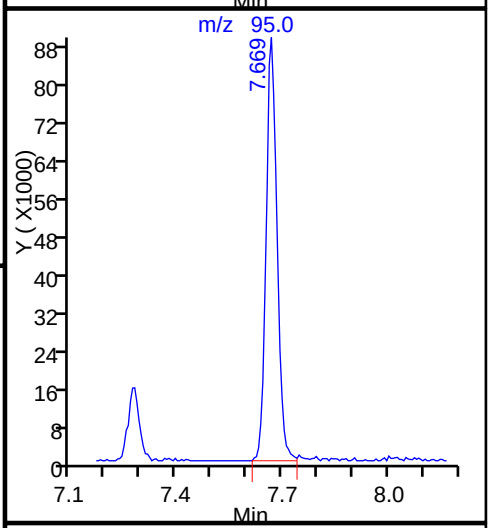
Data File:	\\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401016.D		
Injection Date:	01-Apr-2015 16:59:30	Instrument ID:	CHHP5
Lims ID:	180-42353-C-25	Lab Sample ID:	180-42353-25
Client ID:	HD-MW-93S-0/1-0		
Operator ID:	001562	ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

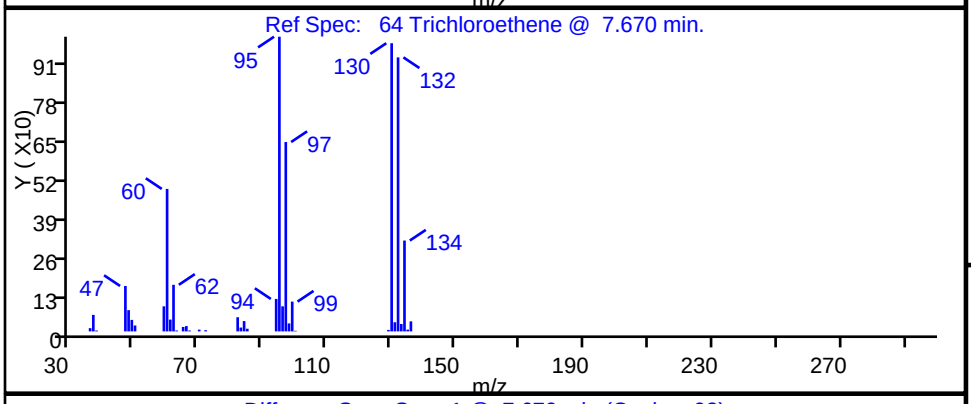
64 Trichloroethene, CAS: 79-01-6

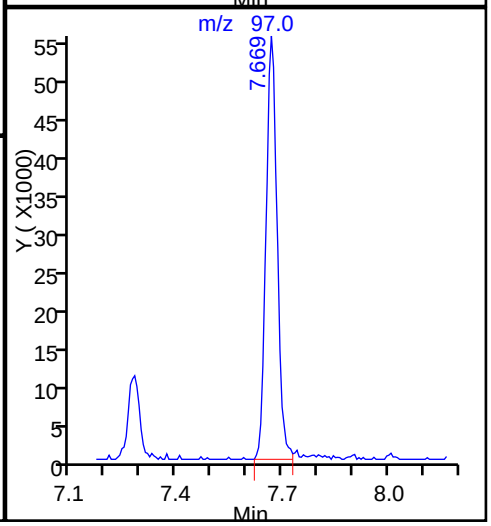


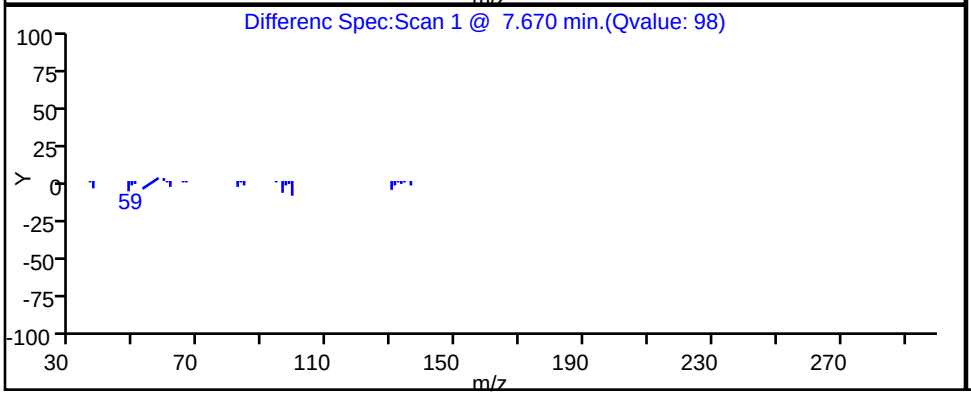












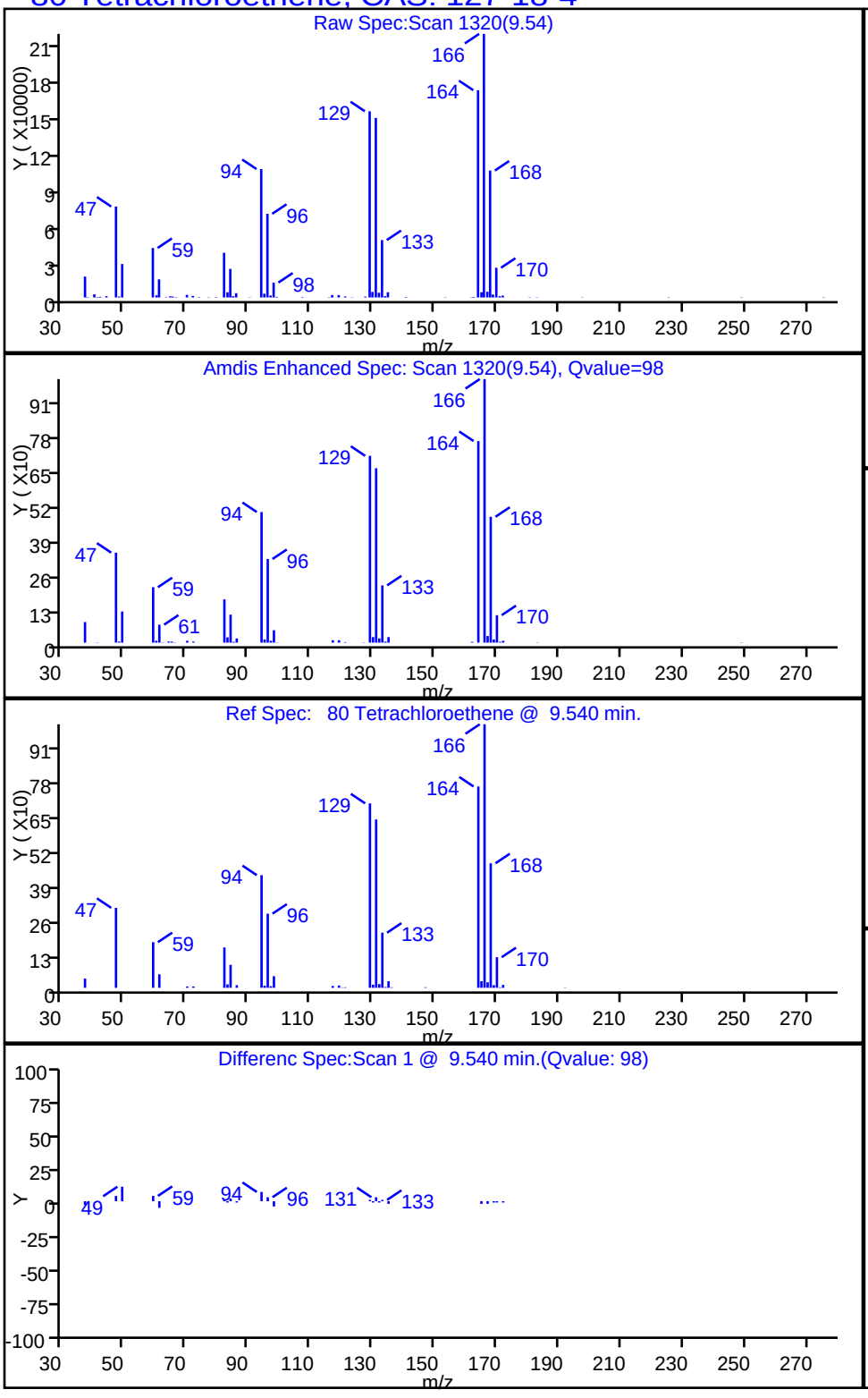
Report Date: 02-Apr-2015 08:02:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

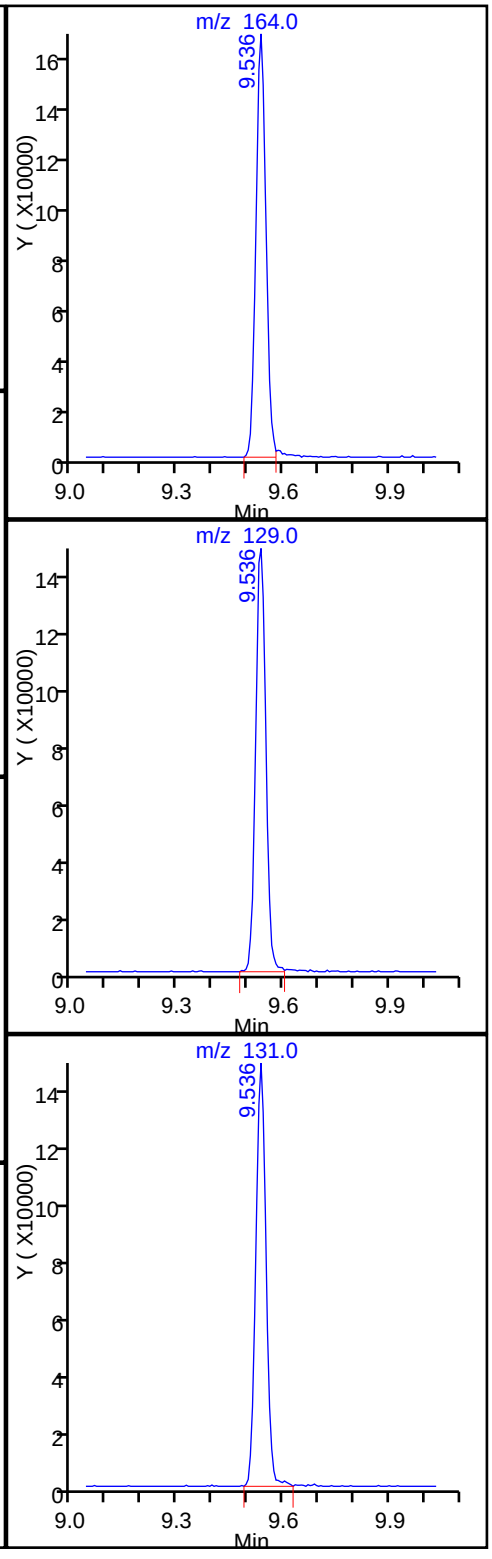
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401016.D

Injection Date:	01-Apr-2015 16:59:30	Instrument ID:	CHHP5
Lims ID:	180-42353-C-25	Lab Sample ID:	180-42353-25
Client ID:	HD-MW-93S-0/1-0		
Operator ID:	001562	ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

80 Tetrachloroethene, CAS: 127-18-4





FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-93D-0/1-0 Lab Sample ID: 180-42353-26

Matrix: Water Lab File ID: 50331022.D

Analysis Method: 8260C Date Collected: 03/24/2015 11:22

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2015 18:06

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.: 137048 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	3.0	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	5.9	J	10	1.3
156-60-5	trans-1,2-Dichloroethene	10	U	10	1.7
1634-04-4	Methyl tert-butyl ether	10	U	10	1.8
75-34-3	1,1-Dichloroethane	3.8	J	10	1.2
156-59-2	cis-1,2-Dichloroethene	67		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	7.9	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	120		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	130		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.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-93D-0/1-0 Lab Sample ID: 180-42353-26

Matrix: Water Lab File ID: 50331022.D

Analysis Method: 8260C Date Collected: 03/24/2015 11:22

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2015 18:06

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.: 137048 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)	119		64-135
2037-26-5	Toluene-d8 (Surr)	111		71-118
460-00-4	4-Bromofluorobenzene (Surr)	102		70-118
1868-53-7	Dibromofluoromethane (Surr)	109		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331022.D
Lims ID: 180-42353-E-26 Lab Sample ID: 180-42353-26
Client ID: HD-MW-93D-0/1-0
Sample Type: Client
Inject. Date: 31-Mar-2015 18:06:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 180-42353-E-26, 10x
Misc. Info.: 180-0006255-022
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Apr-2015 08:08:38 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: fergusond Date: 01-Apr-2015 08:08:38

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.303	4.297	0.006	97	96765	1000.0	
*	2 Fluorobenzene (IS)	96	7.272	7.271	0.001	100	378284	50.0	
*	3 Chlorobenzene-d5	119	10.363	10.362	0.001	99	77466	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.680	12.686	-0.006	93	116340	50.0	
$	5 Dibromofluoromethane (Surr	113	6.536	6.531	0.005	58	94177	54.7	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.901	6.896	0.005	98	135159	59.6	
$	7 Toluene-d8 (Surr)	98	8.927	8.921	0.006	100	342799	55.5	
$	8 4-Bromofluorobenzene (Surr	95	11.531	11.531	0.000	97	113869	51.2	
	12 Chloromethane	50		1.779				ND	
	13 Vinyl chloride	62		1.913				ND	
	15 Bromomethane	94		2.260				ND	
	16 Chloroethane	64		2.400				ND	
	22 1,1-Dichloroethene	96	3.427	3.385	0.042	43	3261	1.49	
	24 Acetone	43		3.501				ND	
	26 Carbon disulfide	76		3.671				ND	
	31 Methylene Chloride	84	4.157	4.140	0.017	55	7439	2.95	
	33 Acrylonitrile	53		4.547				ND	
	34 trans-1,2-Dichloroethene	96		4.560				ND	
	35 Methyl tert-butyl ether	73		4.596				ND	
	37 1,1-Dichloroethane	63	5.173	5.168	0.005	28	7678	1.91	M
	45 cis-1,2-Dichloroethene	96	5.946	5.941	0.006	84	79093	33.3	
	46 2-Butanone (MEK)	43		5.989				ND	
	49 Chlorobromomethane	128		6.226				ND	
	52 Chloroform	83		6.342				ND	
	53 1,1,1-Trichloroethane	97	6.530	6.531	-0.001	58	9207	3.94	
	56 Carbon tetrachloride	117		6.719				ND	
	58 Benzene	78		6.956				ND	
	59 1,2-Dichloroethane	62		6.987				ND	
	64 Trichloroethene	130	7.668	7.668	0.000	99	130241	58.0	
	67 1,2-Dichloropropane	63		7.905				ND	
	70 1,4-Dioxane	88		8.058				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.197				ND	
74 cis-1,3-Dichloropropene	75		8.654				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.824				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.219				ND	
79 1,1,2-Trichloroethane	97		9.402				ND	
80 Tetrachloroethene	164	9.535	9.536	-0.001	98	100871	65.0	
82 2-Hexanone	43		9.658				ND	
84 Chlorodibromomethane	129		9.785				ND	
85 Ethylene Dibromide	107		9.901				ND	
87 Chlorobenzene	112		10.388				ND	
89 1,1,1,2-Tetrachloroethane	131		10.467				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.619				ND	
92 o-Xylene	106		11.014				ND	
93 Styrene	104		11.026				ND	
94 Bromoform	173		11.209				ND	
99 1,1,2,2-Tetrachloroethane	83		11.671				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

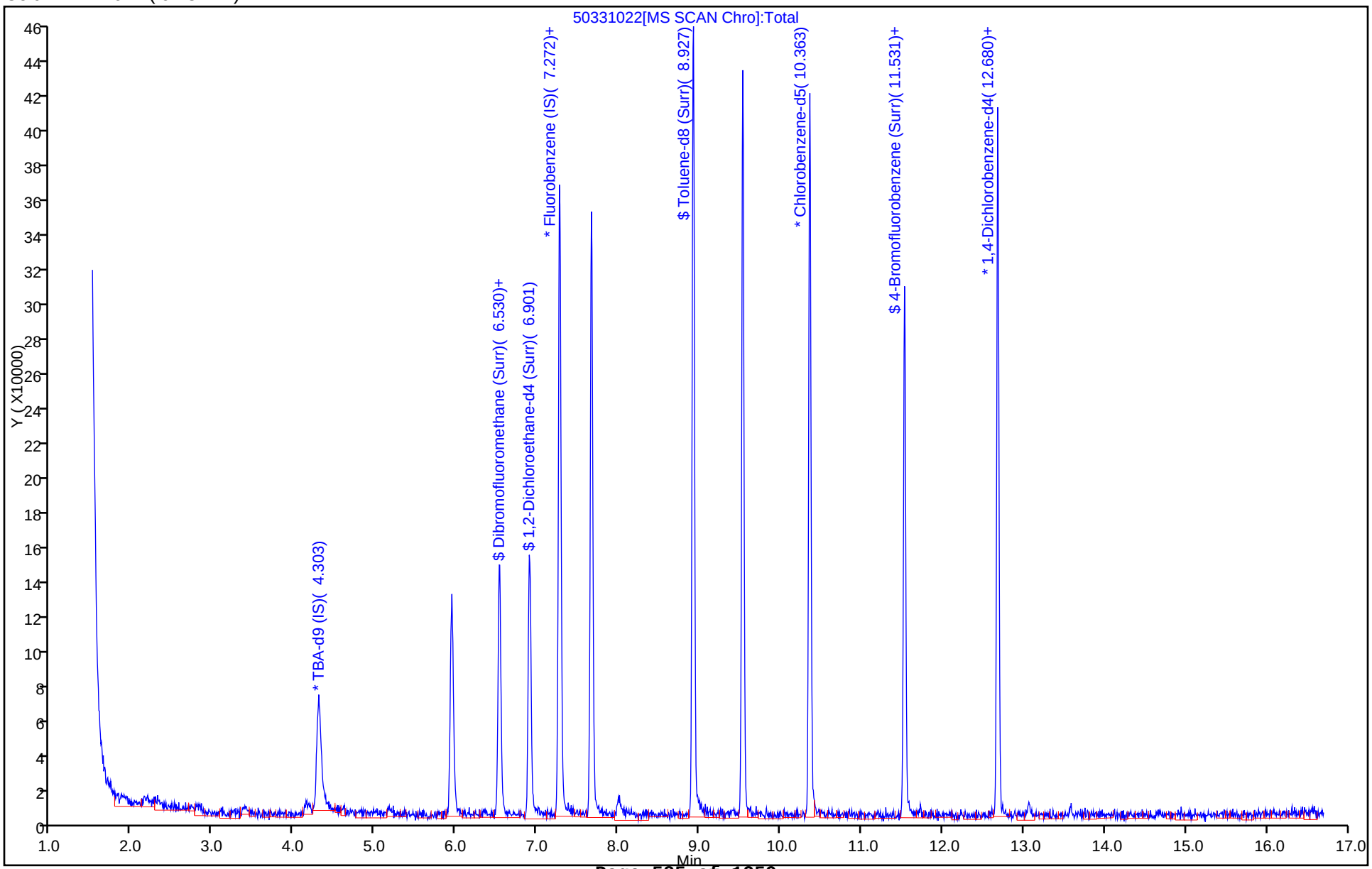
Report Date: 01-Apr-2015 08:08:38 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331022.D

Injection Date:	31-Mar-2015 18:06:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-42353-E-26	Lab Sample ID:	180-42353-26	Worklist Smp#:	22
Client ID:	HD-MW-93D-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	21
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



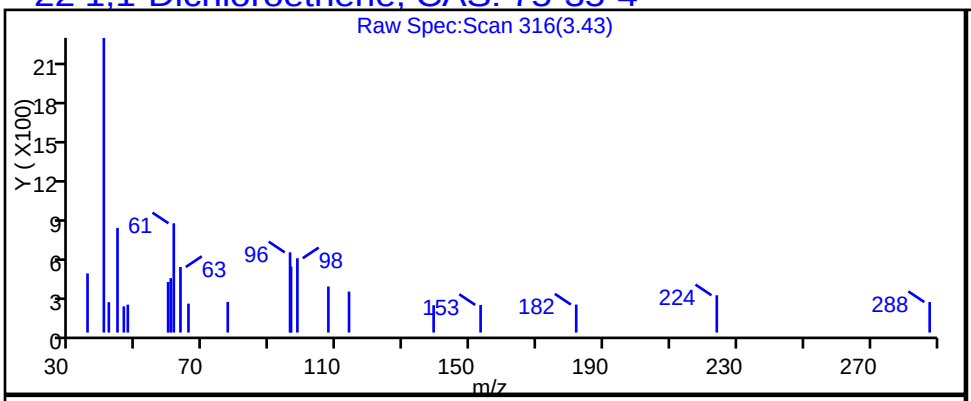
Report Date: 01-Apr-2015 08:08:38 Chrom Revision: 2.2 13-Mar-2015 11:20:44

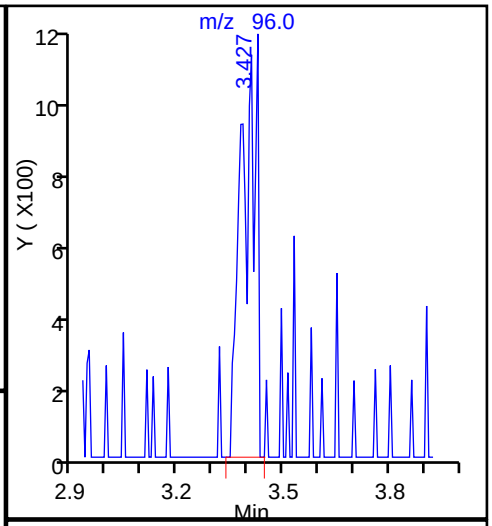
TestAmerica Pittsburgh

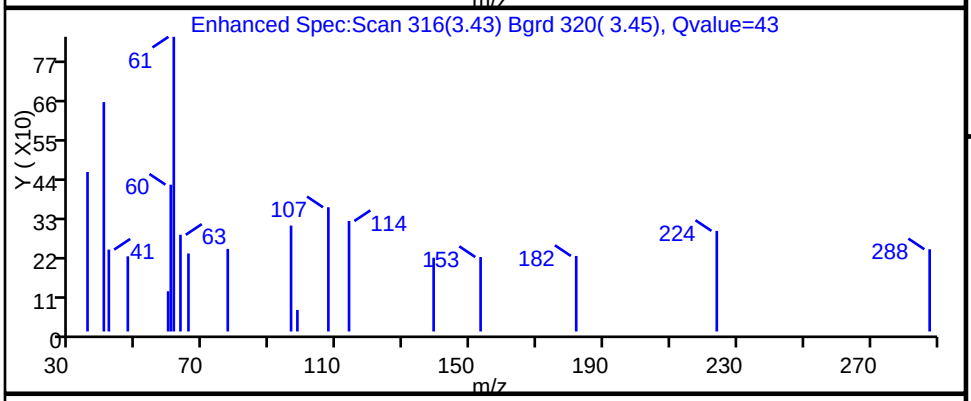
Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331022.D

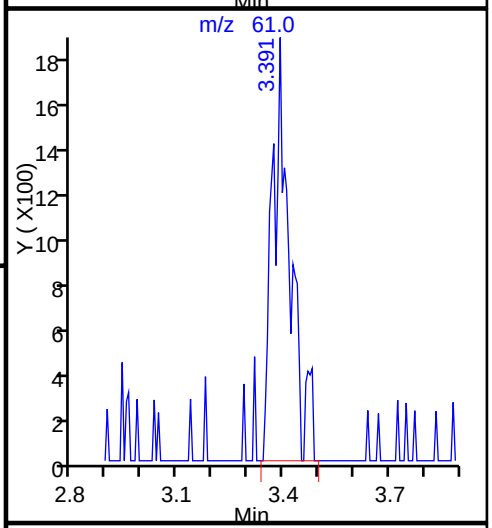
Injection Date:	31-Mar-2015 18:06:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-26	Lab Sample ID:	180-42353-26		
Client ID:	HD-MW-93D-0/1-0				
Operator ID:	001562	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

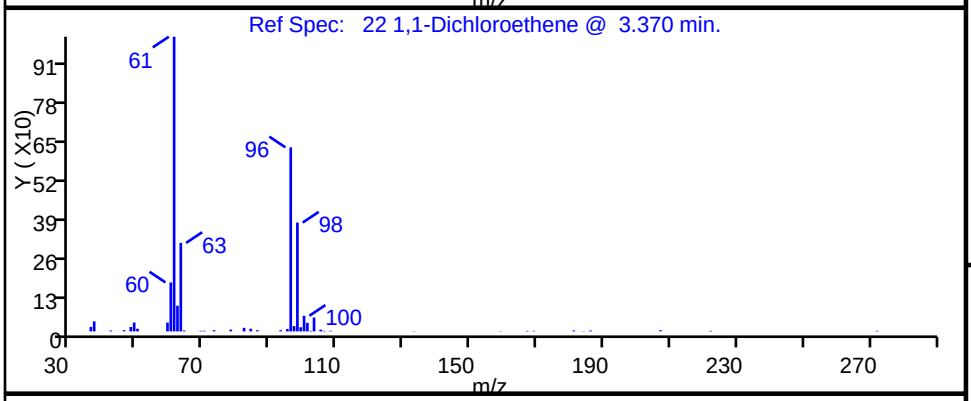
22 1,1-Dichloroethene, CAS: 75-35-4

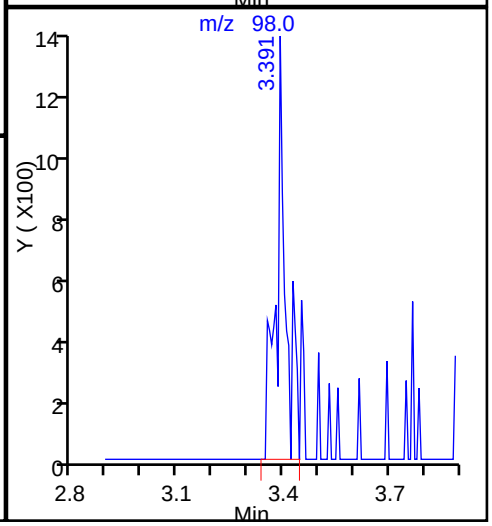


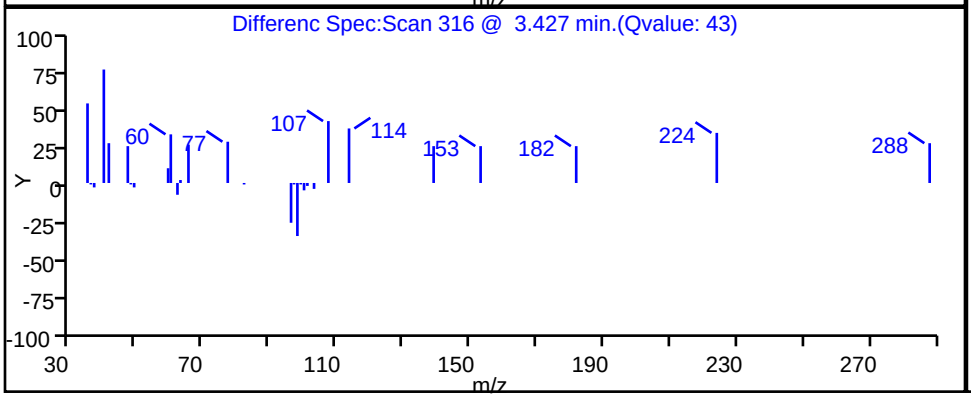












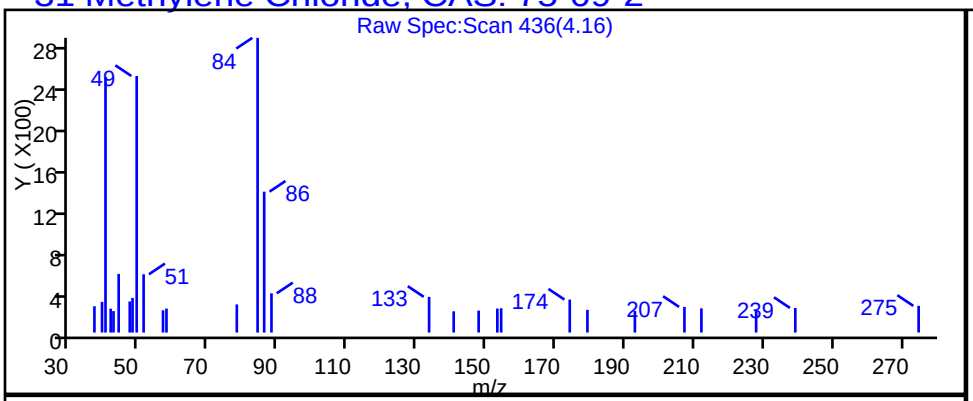
Report Date: 01-Apr-2015 08:08:38 Chrom Revision: 2.2 13-Mar-2015 11:20:44

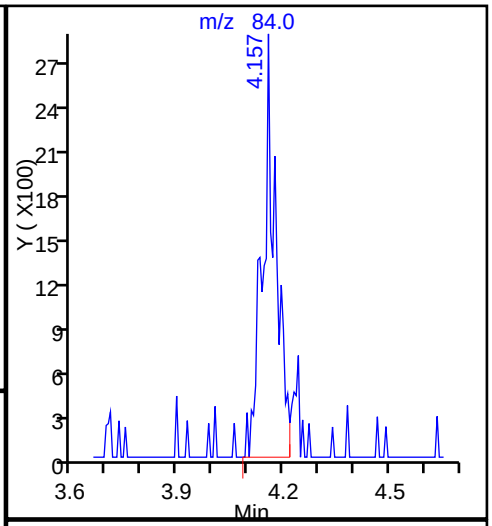
TestAmerica Pittsburgh

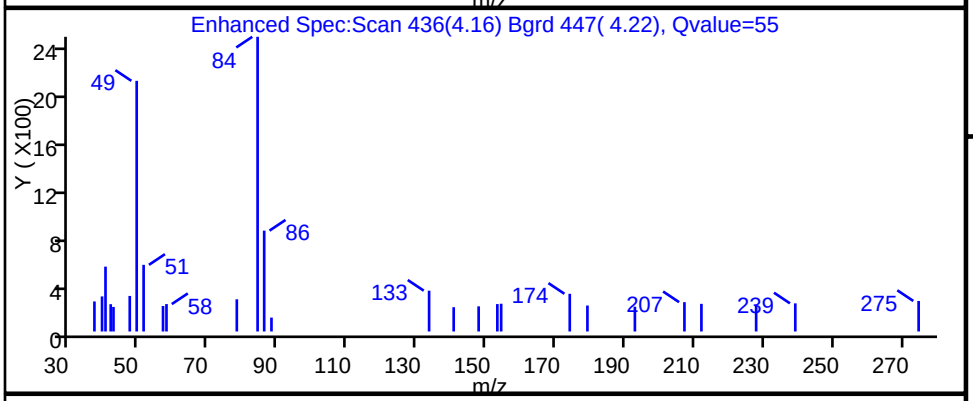
Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331022.D

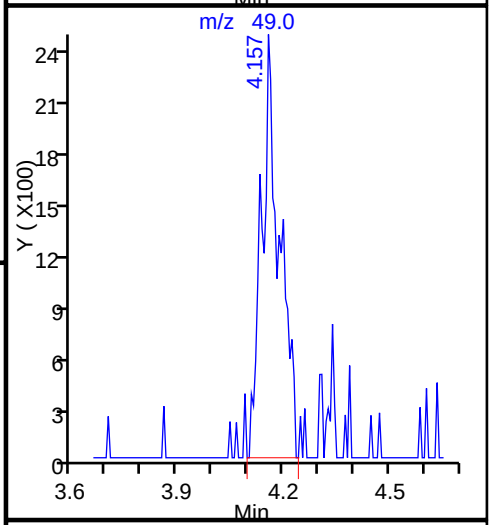
Injection Date:	31-Mar-2015 18:06:30	Instrument ID:	CHHP5
Lims ID:	180-42353-E-26	Lab Sample ID:	180-42353-26
Client ID:	HD-MW-93D-0/1-0		
Operator ID:	001562	ALS Bottle#:	21 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	10.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

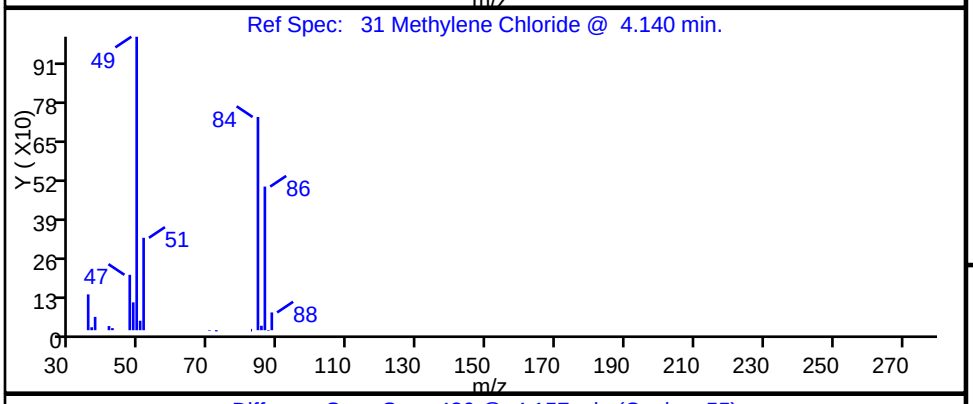
31 Methylene Chloride, CAS: 75-09-2

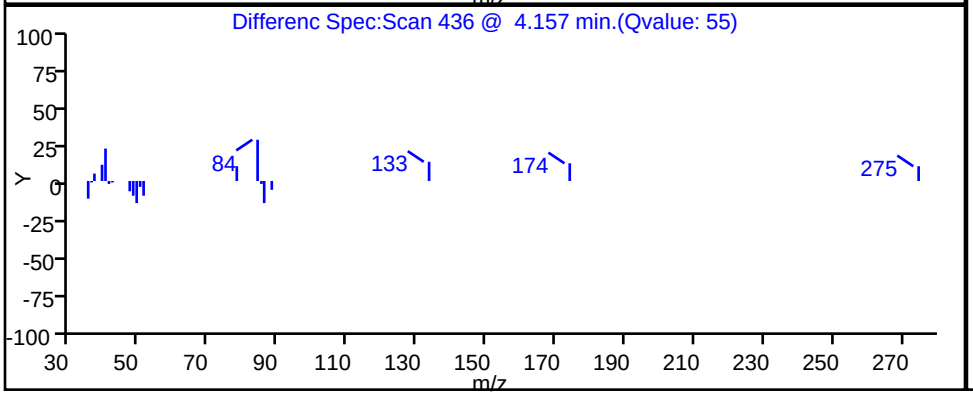


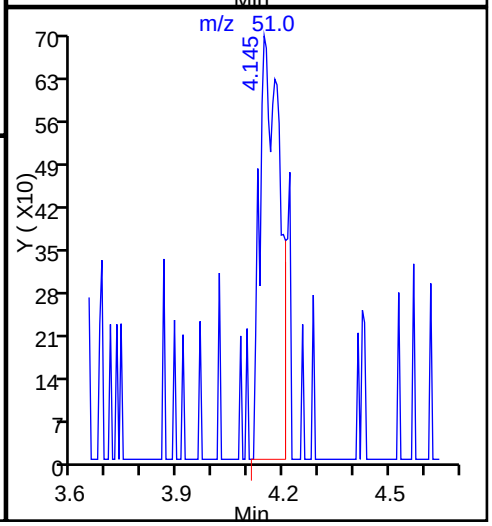












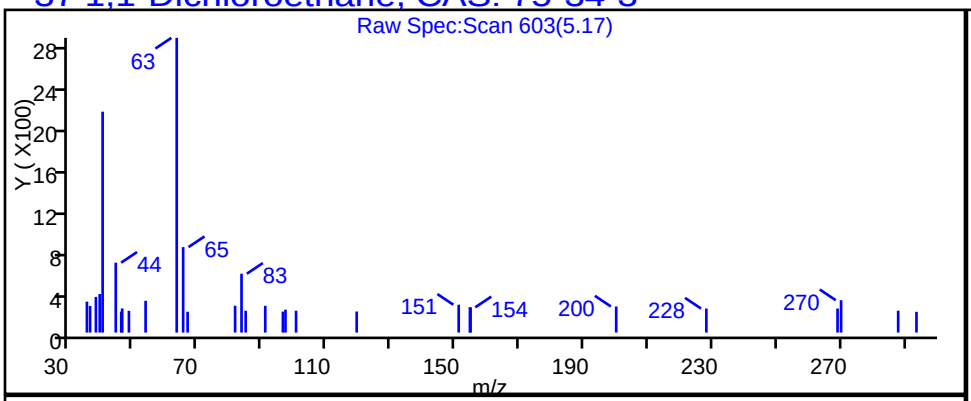
Report Date: 01-Apr-2015 08:08:38 Chrom Revision: 2.2 13-Mar-2015 11:20:44

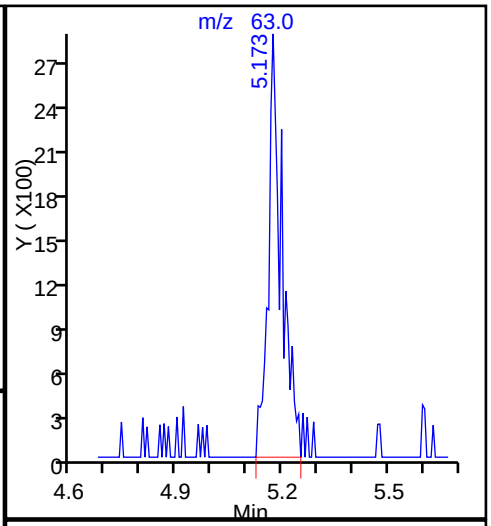
TestAmerica Pittsburgh

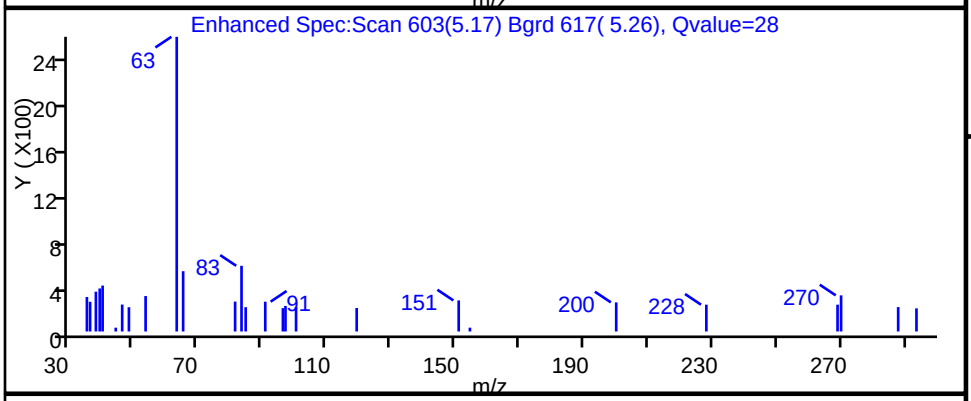
Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331022.D

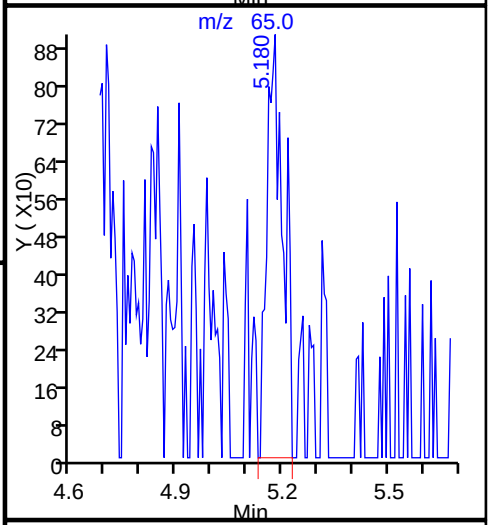
Injection Date:	31-Mar-2015 18:06:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-26	Lab Sample ID:	180-42353-26		
Client ID:	HD-MW-93D-0/1-0				
Operator ID:	001562	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

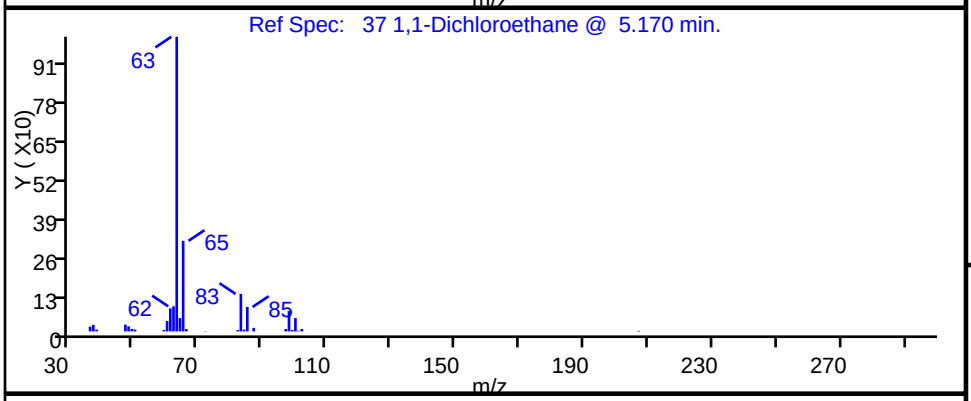
37 1,1-Dichloroethane, CAS: 75-34-3

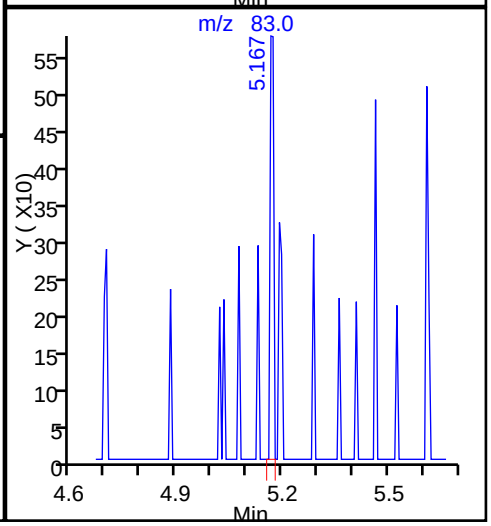


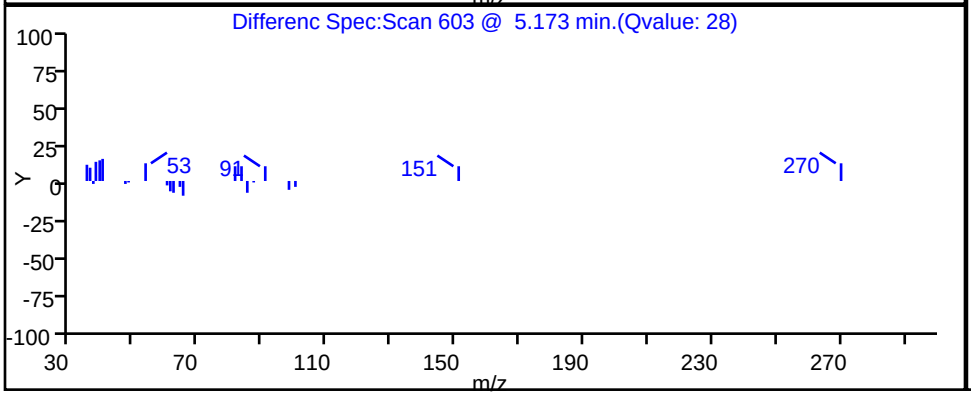












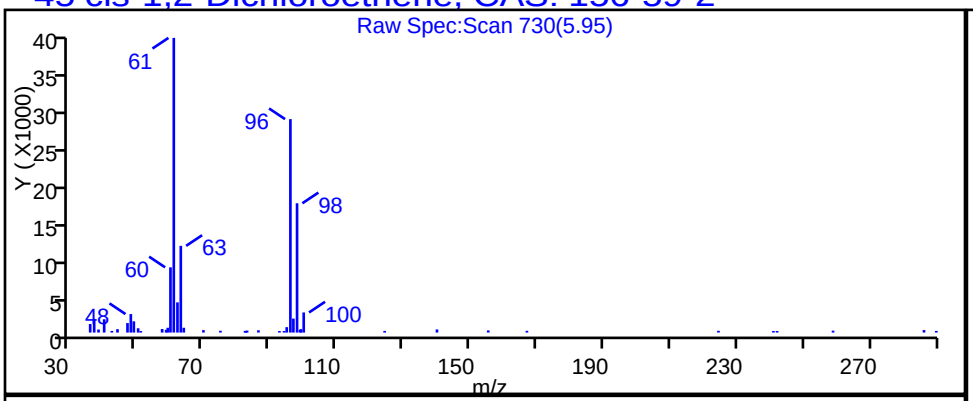
Report Date: 01-Apr-2015 08:08:38 Chrom Revision: 2.2 13-Mar-2015 11:20:44

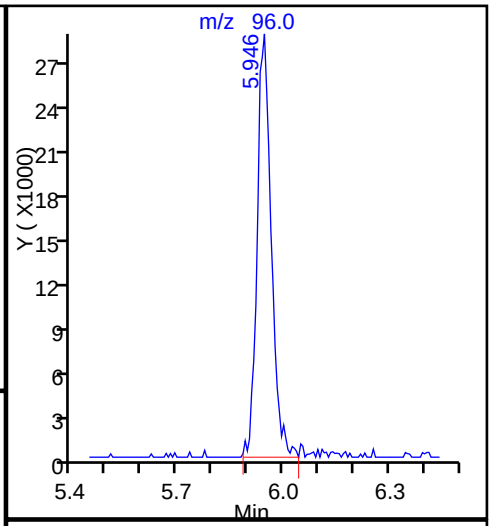
TestAmerica Pittsburgh

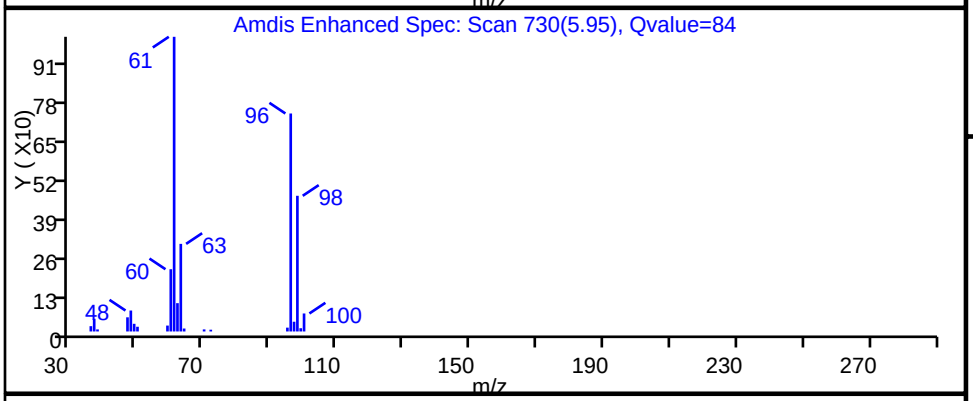
Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331022.D

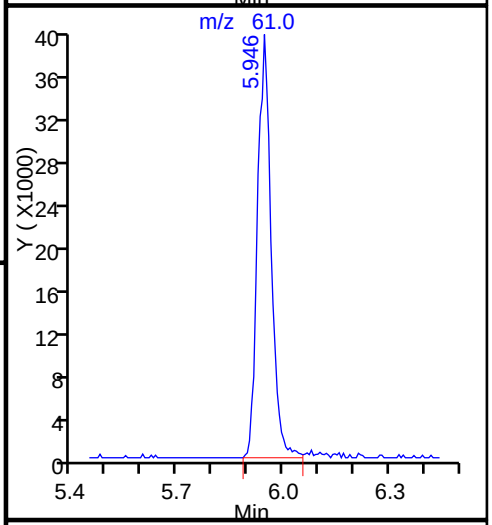
Injection Date:	31-Mar-2015 18:06:30	Instrument ID:	CHHP5
Lims ID:	180-42353-E-26	Lab Sample ID:	180-42353-26
Client ID:	HD-MW-93D-0/1-0		
Operator ID:	001562	ALS Bottle#:	21 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	10.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

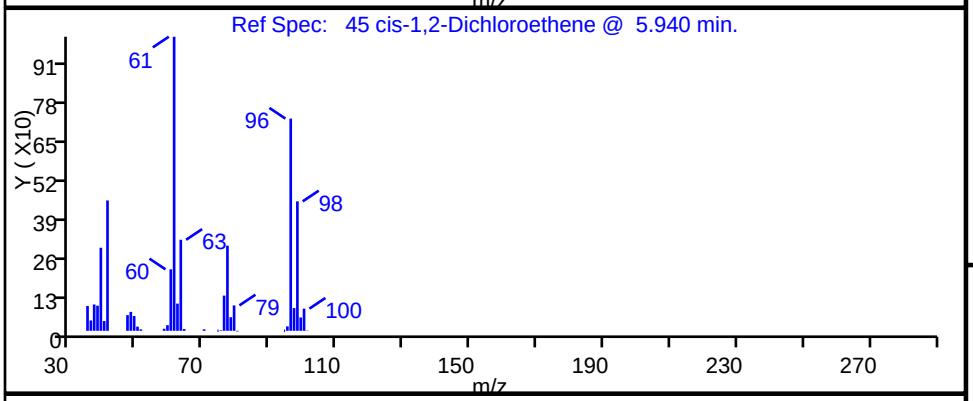
45 cis-1,2-Dichloroethene, CAS: 156-59-2

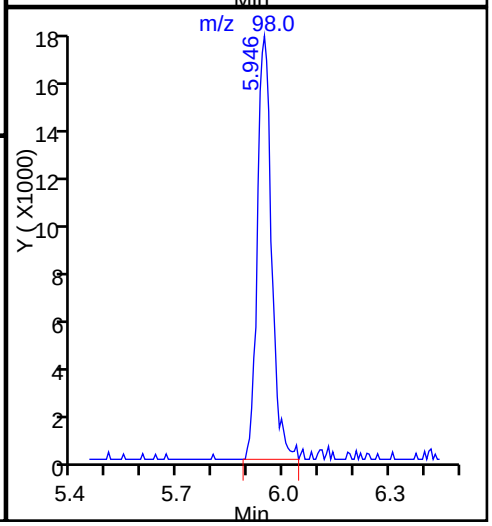


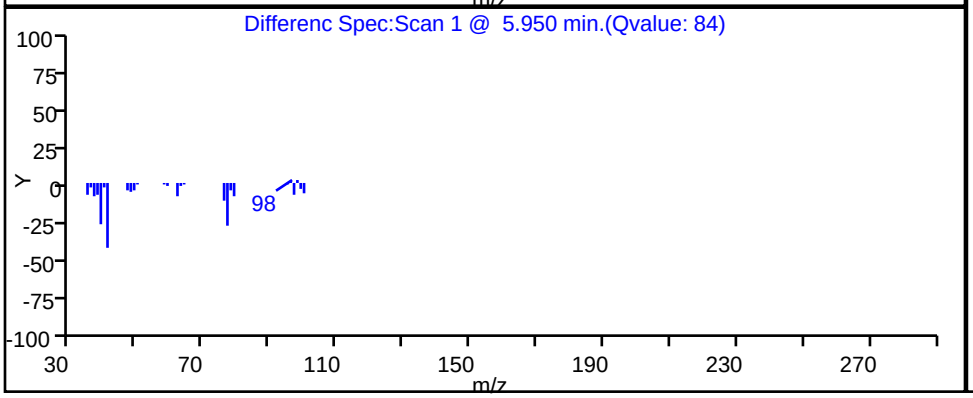












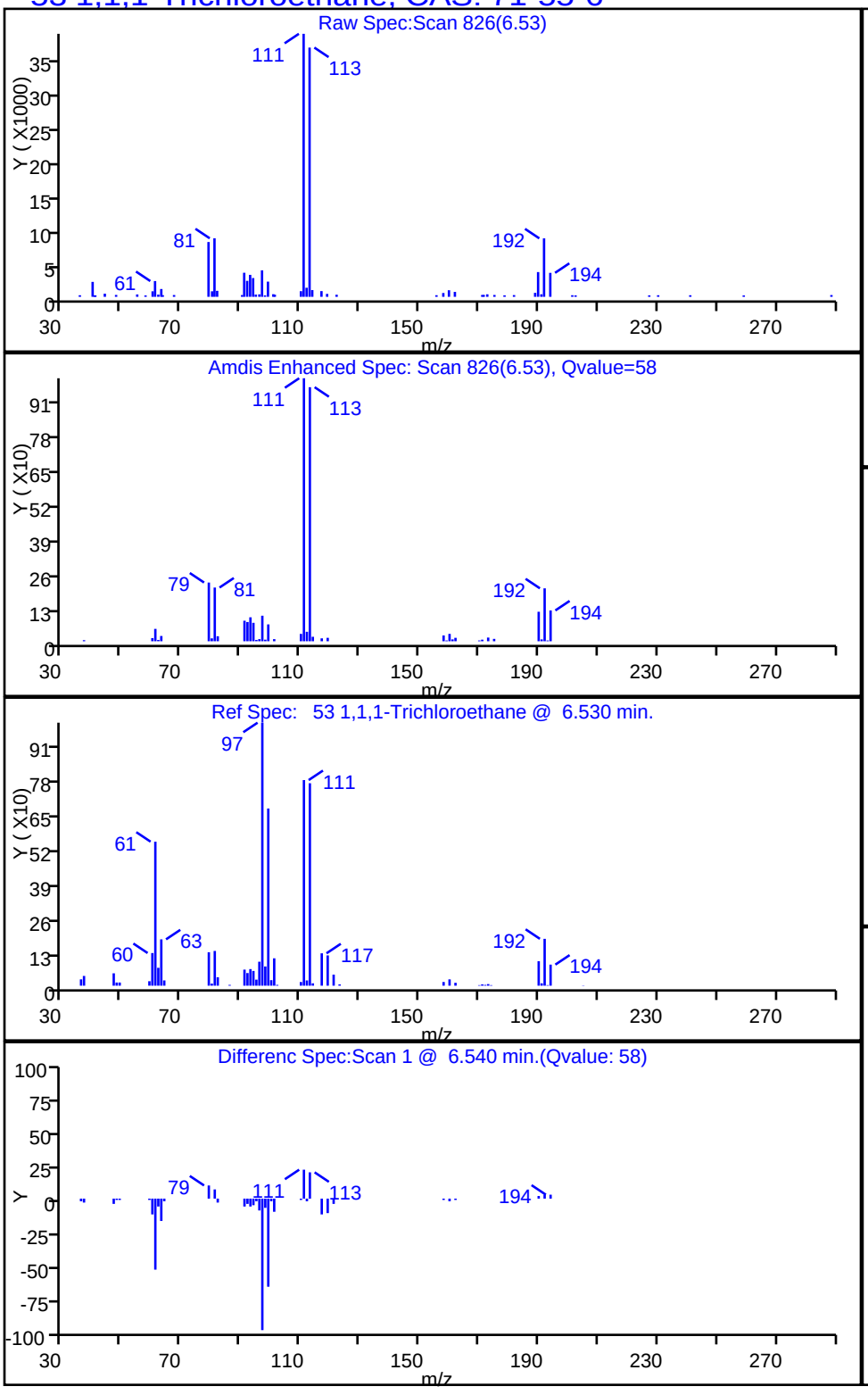
Report Date: 01-Apr-2015 08:08:38 Chrom Revision: 2.2 13-Mar-2015 11:20:44

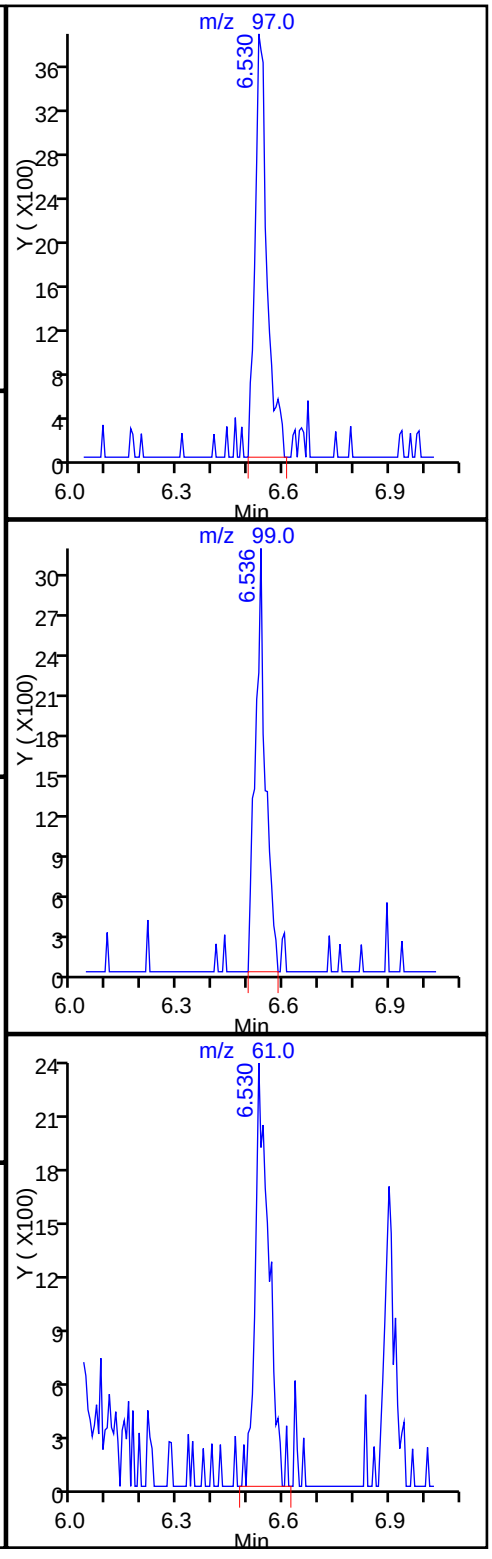
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331022.D

Injection Date:	31-Mar-2015 18:06:30	Instrument ID:	CHHP5
Lims ID:	180-42353-E-26	Lab Sample ID:	180-42353-26
Client ID:	HD-MW-93D-0/1-0		
Operator ID:	001562	ALS Bottle#:	21 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	10.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

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



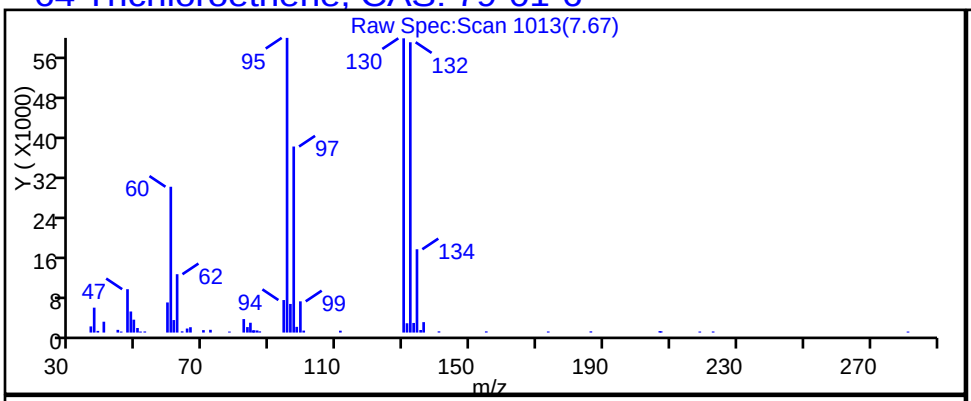


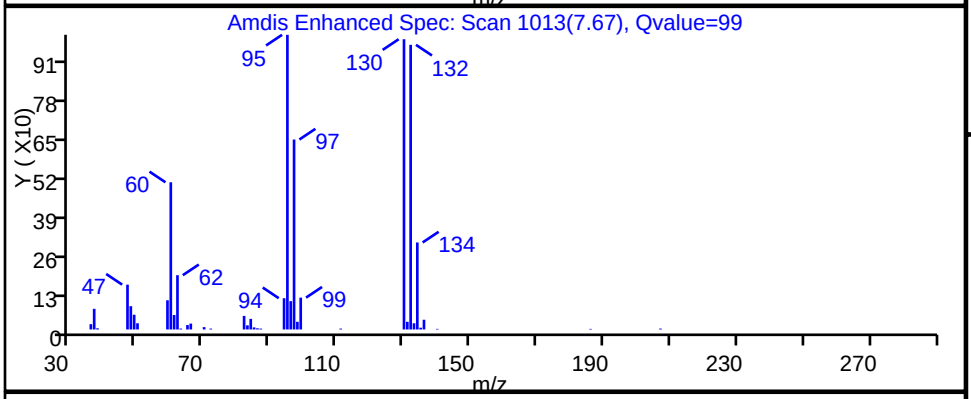
Report Date: 01-Apr-2015 08:08:38 Chrom Revision: 2.2 13-Mar-2015 11:20:44

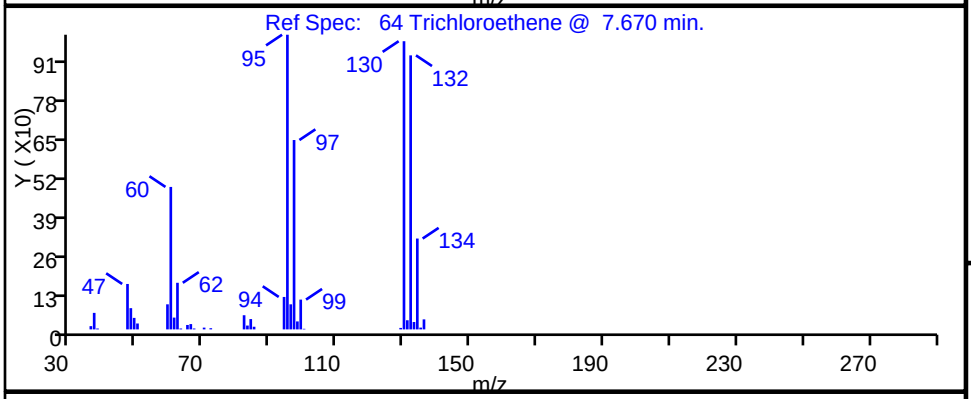
TestAmerica Pittsburgh

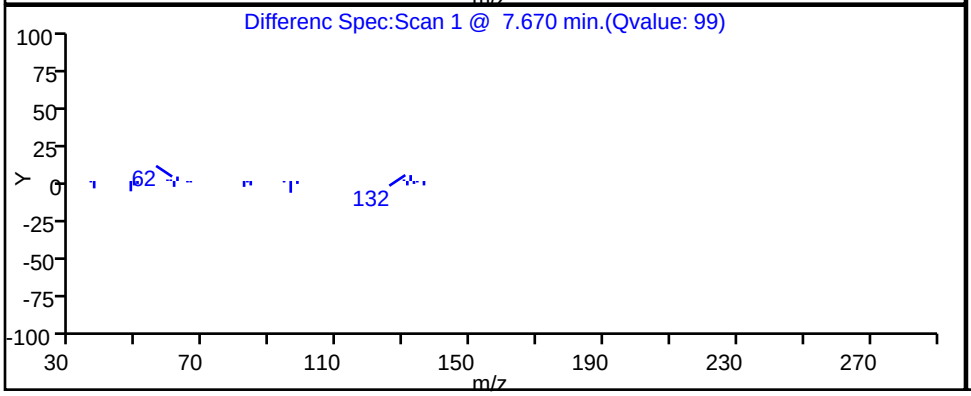
Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331022.D				
Injection Date:	31-Mar-2015 18:06:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-26	Lab Sample ID:	180-42353-26		
Client ID:	HD-MW-93D-0/1-0				
Operator ID:	001562	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

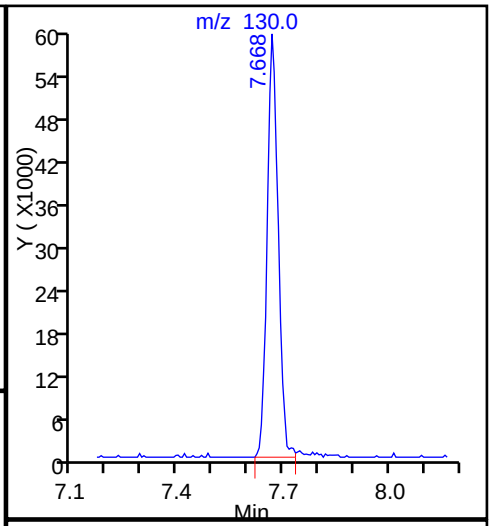
64 Trichloroethene, CAS: 79-01-6

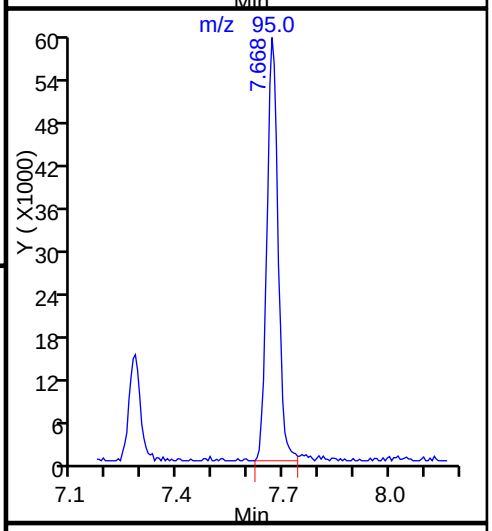


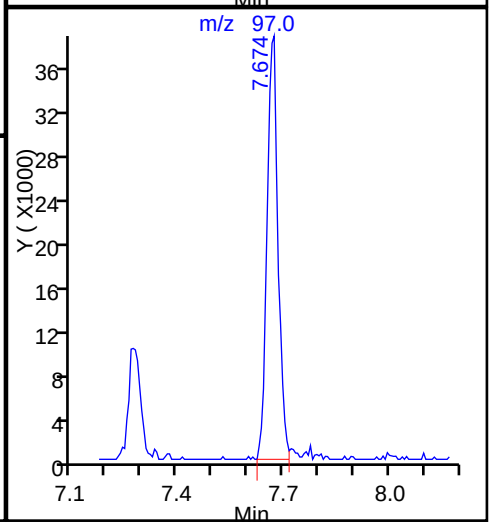












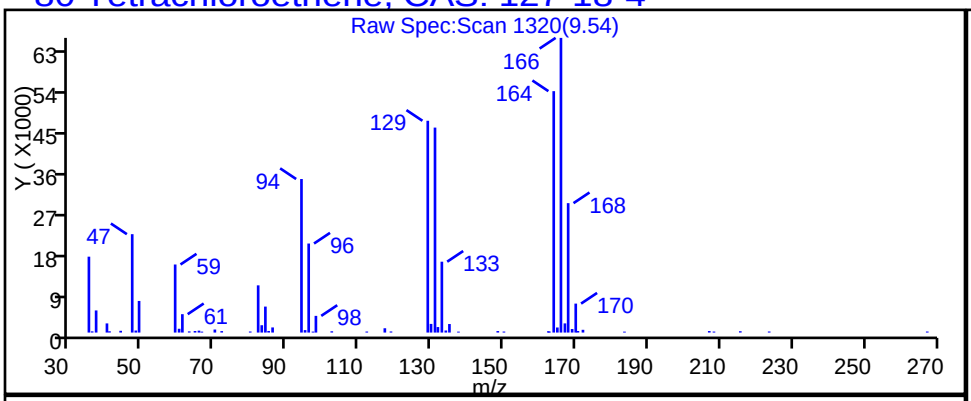
Report Date: 01-Apr-2015 08:08:38 Chrom Revision: 2.2 13-Mar-2015 11:20:44

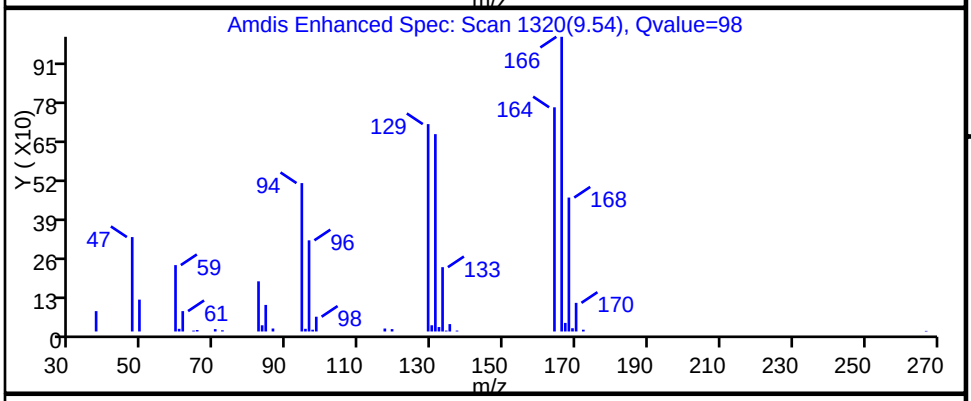
TestAmerica Pittsburgh

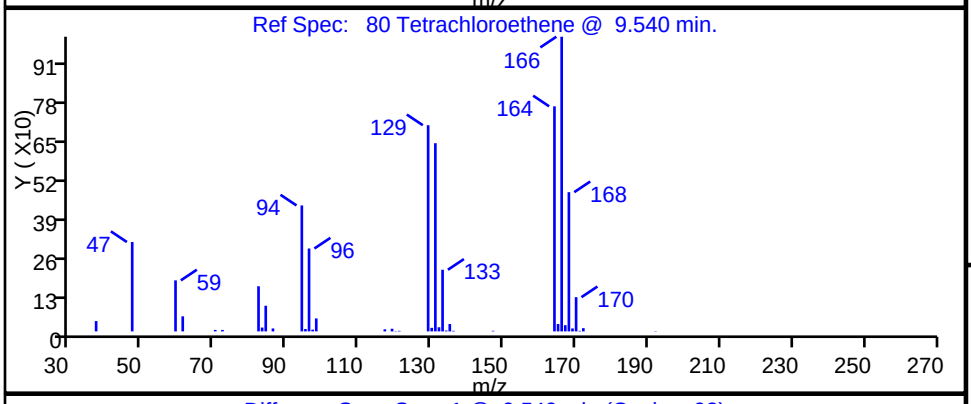
Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331022.D

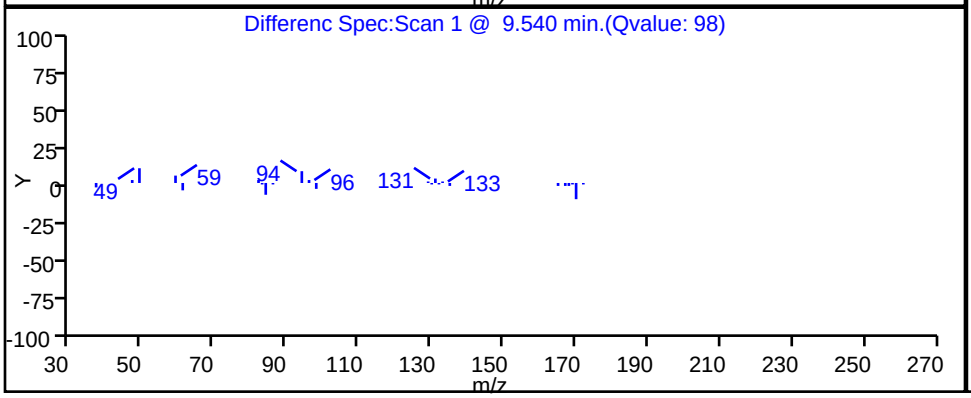
Injection Date:	31-Mar-2015 18:06:30	Instrument ID:	CHHP5
Lims ID:	180-42353-E-26	Lab Sample ID:	180-42353-26
Client ID:	HD-MW-93D-0/1-0		
Operator ID:	001562	ALS Bottle#:	21 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	10.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

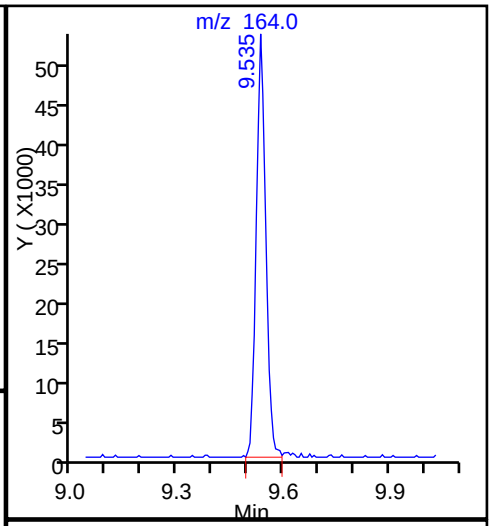
80 Tetrachloroethene, CAS: 127-18-4

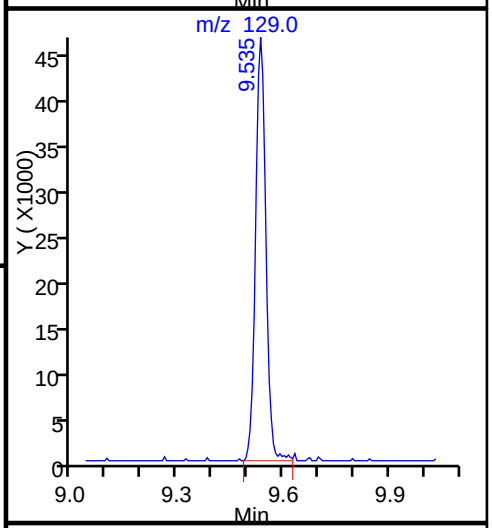


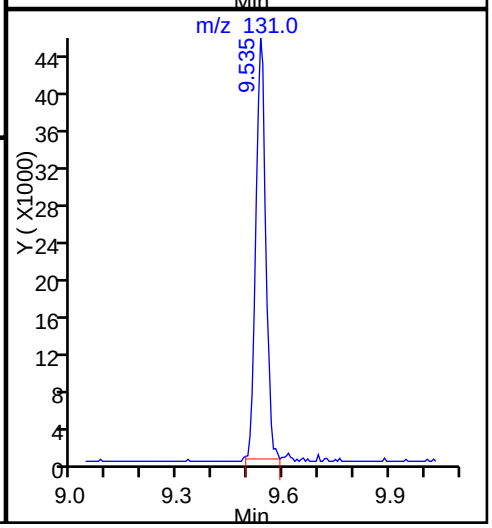












Manual Integration/User Assign Peak Report

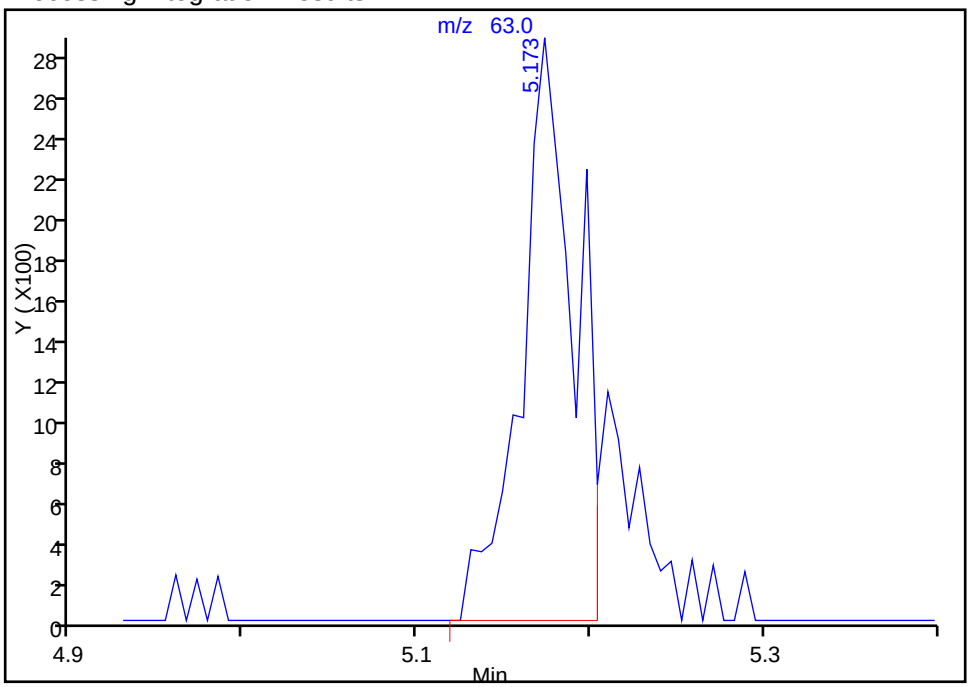
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331022.D				
Injection Date:	31-Mar-2015 18:06:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-26	Lab Sample ID:	180-42353-26		
Client ID:	HD-MW-93D-0/1-0				
Operator ID:	001562	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

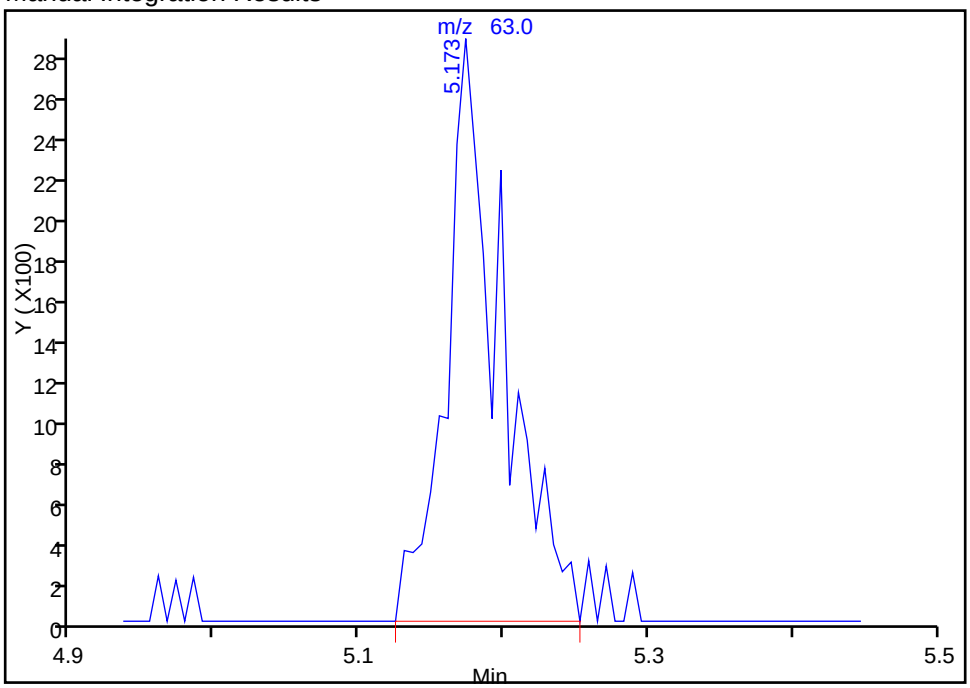
Processing Integration Results

RT: 5.17
Area: 6172
Amount: 1.532515
Amount Units: ng



Manual Integration Results

RT: 5.17
Area: 7678
Amount: 1.906456
Amount Units: ng



Reviewer: fergusond, 01-Apr-2015 08:08:38
Audit Action: Manually Integrated
Audit Reason: Split Peak

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-135593/13	50316013.D
Level 2	IC 180-135593/4	50316004.D
Level 3	ICIS 180-135593/5	50316005.D
Level 4	IC 180-135593/6	50316006.D
Level 5	IC 180-135593/7	50316007.D
Level 6	IC 180-135593/8	50316008.D
Level 7	IC 180-135593/9	50316009.D
Level 8	IC 180-135593/10	50316010.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	0.1981 0.2196	0.2184 0.2203	0.2158 0.2064	0.2176	0.2184	Ave		0.2143			0.1000	3.7		20.0			
Chloromethane	0.3161 0.2913	0.3036 0.2846	0.2971 0.2760	0.3139	0.2839	Ave		0.2958			0.1000	4.9		20.0			
Vinyl chloride	0.3339 0.3170	0.3476 0.3238	0.3406 0.2981	0.3521	0.3317	Ave		0.3306			0.1000	5.3		20.0			
1,3-Butadiene	0.4238 0.3606	0.3989 0.3546	0.3880 0.3243	0.3988	0.3720	Ave		0.3776			0.0100	8.3		20.0			
Bromomethane	0.3177 0.1565	0.2026 0.1546	0.1872 0.1489	0.2009	0.1727	Lin2	0.7885	0.1633			0.0500				0.9910		0.9900
Chloroethane	0.2320 0.2316	0.2215 0.2239	0.2348 0.2259	0.2403	0.2201	Ave		0.2287			0.0500	3.1		20.0			
Dichlorofluoromethane	0.6033 0.4953	0.5246 0.5015	0.5246 0.4874	0.5502	0.4911	Ave		0.5222			0.0100	7.5		20.0			
Trichlorofluoromethane	0.3610 0.3924	0.3936 0.3991	0.4043 0.3800	0.4504	0.3921	Ave		0.3966			0.1000	6.4		20.0			
Ethyl ether	0.2888 0.2638	0.2444 0.2500	0.2576 0.2556	0.2691	0.2633	Ave		0.2615			0.0100	5.2		20.0			
Acrolein	0.0310 0.0323	0.0302 0.0321	0.0313 0.0320	0.0335	0.0318	Ave		0.0318			0.0100	3.1		20.0			
1,1-Dichloroethene	0.3207 0.2859	0.2901 0.2792	0.2822 0.2667	0.2965	0.2853	Ave		0.2883			0.1000	5.4		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2914 0.2935	0.2973 0.2885	0.2973 0.2692	0.3100	0.2859	Ave		0.2916			0.1000	4.0		20.0			
Acetone	0.1044 0.1092	0.0964 0.1031	0.0956 0.1001	0.1134	0.0972	Ave		0.1024			0.0500	6.2		20.0			
Iodomethane	0.4015 0.3985	0.4019 0.3989	0.4026 0.3873	0.4200	0.3937	Ave		0.4005			0.0100	2.3		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.: 180-42353-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

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								
Carbon disulfide	0.7271 0.7017	0.7065 0.6934	0.7209 0.6551	0.7444	0.6916	Ave		0.7051			0.1000	3.8		20.0			
Allyl chloride	0.1408 0.1596	0.1433 0.1659	0.1497 0.1554	0.1576	0.1468	Ave		0.1524			0.0100	5.7		20.0			
Methyl acetate	0.2499 0.2446	0.2206 0.2371	0.2383 0.2398	0.2500	0.2368	Ave		0.2396			0.1000	3.9		20.0			
Methylene Chloride	0.4921 0.3038	0.3340 0.2965	0.3132 0.2964	0.3223	0.3092	Ave		0.3335			0.1000	20.0		20.0			
tert-Butyl alcohol	1.4634 1.1634	1.1166 1.0879	1.2271 1.0609	1.1679	1.1362	Ave		1.1779			0.0100	11.0		20.0			
Acrylonitrile	0.1262 0.1243	0.1185 0.1210	0.1238 0.1200	0.1302	0.1222	Ave		0.1233			0.0100	3.0		20.0			
trans-1,2-Dichloroethene	0.3010 0.2955	0.3039 0.2920	0.2999 0.2846	0.3158	0.2932	Ave		0.2982			0.1000	3.1		20.0			
Methyl tert-butyl ether	0.7046 0.6848	0.5895 0.6670	0.6262 0.6870	0.6643	0.6513	Ave		0.6593			0.1000	5.6		20.0			
Hexane	0.5105 0.4724	0.4808 0.4625	0.4867 0.4447	0.4928	0.4612	Ave		0.4764			0.0100	4.3		20.0			
1,1-Dichloroethane	0.5210 0.5346	0.5355 0.5274	0.5415 0.5173	0.5479	0.5333	Ave		0.5323			0.2000	1.9		20.0			
Vinyl acetate	0.3354 0.4226	0.3143 0.4225	0.3492 0.4312	0.3701	0.3754	Ave		0.3776			0.0100	12.0		20.0			
2,2-Dichloropropane	0.1102 0.1425	0.1245 0.1427	0.1303 0.1457	0.1368	0.1319	Ave		0.1331			0.0100	8.8		20.0			
cis-1,2-Dichloroethene	0.3333 0.3114	0.3188 0.3041	0.3064 0.2999	0.3262	0.3133	Ave		0.3142			0.1000	3.6		20.0			
2-Butanone (MEK)	0.1479 0.1689	0.1544 0.1707	0.1682 0.1707	0.1629	0.1664	Ave		0.1638			0.0500	5.1		20.0			
Bromochloromethane	0.1516 0.1369	0.1328 0.1312	0.1322 0.1303	0.1382	0.1345	Ave		0.1360			0.0100	5.1		20.0			
Tetrahydrofuran	0.1048 0.1057	0.0960 0.1019	0.1025 0.1042	0.1047	0.1007	Ave		0.1026			0.0100	3.0		20.0			
Chloroform	0.5131 0.4845	0.4800 0.4679	0.4876 0.4593	0.4976	0.4787	Ave		0.4836			0.2000	3.5		20.0			
1,1,1-Trichloroethane	0.2755 0.3251	0.2860 0.3242	0.3106 0.3133	0.3267	0.3088	Ave		0.3088			0.1000	6.1		20.0			
Cyclohexane	0.6382 0.5901	0.5930 0.5765	0.5992 0.5384	0.6258	0.5817	Ave		0.5929			0.1000	5.2		20.0			
Carbon tetrachloride	0.2289 0.2566	0.2357 0.2582	0.2463 0.2549	0.2561	0.2457	Ave		0.2478			0.1000	4.4		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

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	0.4232 0.3982	0.4094 0.3936	0.4088 0.3740	0.4106	0.3910	Ave		0.4011			0.0100	3.8		20.0			
Isobutyl alcohol	0.0062 0.0078	0.0044 0.0073	0.0062 0.0083	0.0069	0.0062	Ave		0.0067		*	0.0100	18.0		20.0			
Benzene	1.2964 1.1615	1.1929 1.1190	1.2156 1.0805	1.2375	1.1757	Ave		1.1849			0.5000	5.7		20.0			
1,2-Dichloroethane	0.3889 0.3972	0.3853 0.3828	0.3878 0.3740	0.4029	0.3849	Ave		0.3880			0.1000	2.3		20.0			
n-Heptane	0.4132 0.4165	0.4157 0.3968	0.4135 0.3813	0.4223	0.3971	Ave		0.4071			0.0100	3.4		20.0			
Trichloroethene	0.3236 0.2977	0.2885 0.2885	0.3022 0.2774	0.3045	0.2926	Ave		0.2969			0.2000	4.7		20.0			
Methylcyclohexane	0.5265 0.5361	0.5390 0.5114	0.5500 0.4900	0.5614	0.5230	Ave		0.5297			0.1000	4.2		20.0			
1,2-Dichloropropane	0.2976 0.3036	0.2675 0.2956	0.2870 0.2962	0.2996	0.2976	Ave		0.2931			0.1000	3.9		20.0			
Dibromomethane	0.1682 0.1567	0.1491 0.1563	0.1532 0.1546	0.1640	0.1603	Ave		0.1578			0.0100	3.9		20.0			
1,4-Dioxane	0.0033 0.0034	0.0029 0.0031	0.0029 0.0030	0.0032	0.0030	Ave		0.0031		*	0.0100	5.9		20.0			
Bromodichloromethane	0.2966 0.3370	0.3114 0.3262	0.3286 0.3235	0.3266	0.3259	Ave		0.3220			0.2000	3.9		20.0			
cis-1,3-Dichloropropene	0.2720 0.3463	0.2598 0.3498	0.2835 0.3541	0.3106	0.3095	Ave		0.3107			0.2000	12.0		20.0			
4-Methyl-2-pentanone (MIBK)	1.2503 1.3434	1.2818 1.3687	1.4091 1.3065	1.4145	1.4492	Ave		1.3529			0.1000	5.2		20.0			
Toluene	5.9882 4.5343	5.4946 4.5939	5.5890 4.1718	5.4186	5.2011	Ave		5.1239			0.4000	12.0		20.0			
trans-1,3-Dichloropropene	0.8645 0.9716	0.7455 1.0385	0.8963 1.0484	0.8911	0.9475	Ave		0.9254			0.1000	11.0		20.0			
Ethyl methacrylate	1.1000 1.2637	0.9953 1.3239	1.1753 1.3175	1.1818	1.2989	Ave		1.2070			0.0100	9.7		20.0			
1,1,2-Trichloroethane	1.0794 0.8993	0.9278 0.9152	1.0316 0.8752	0.9797	0.9793	Ave		0.9609			0.1000	7.3		20.0			
Tetrachloroethene	1.1314 0.9214	1.0730 0.9231	1.0654 0.8552	1.0357	1.0130	Ave		1.0023			0.2000	9.3		20.0			
1,3-Dichloropropane	1.9127 1.6507	1.8290 1.6948	1.9187 1.6444	1.8257	1.8122	Ave		1.7860			0.0100	6.1		20.0			
2-Hexanone	0.8865 1.0653	0.9324 1.1043	1.1169 1.0437	1.0718	1.0506	Ave		1.0339			0.1000	7.9		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

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	0.6589 0.7861	0.7302 0.8019	0.7961 0.7741	0.7741	0.8146	Ave		0.7670			0.1000	6.6		20.0			
1,2-Dibromoethane (EDB)	0.9462 0.8909	0.8507 0.9041	0.9478 0.8836	0.9579	0.9540	Ave		0.9169			0.1000	4.4		20.0			
3-Chlorobenzotrifluoride	2.1568 1.7885	2.0616 1.8999	2.0657 1.6136	2.0676	1.9855	Ave		1.9549			0.0100	9.2		20.0			
Chlorobenzene	3.9165 2.9120	3.3811 2.9538	3.4265 2.7856	3.3185	3.2780	Ave		3.2465			0.5000	11.0		20.0			
4-Chlorobenzotrifluoride	2.1386 1.7554	1.9292 1.8762	1.9271 1.5481	1.9634	1.9831	Ave		1.8901			0.0100	9.2		20.0			
1,1,1,2-Tetrachloroethane	0.7551 0.8493	0.8012 0.8680	0.8363 0.8428	0.8482	0.9047	Ave		0.8382			0.0100	5.3		20.0			
Ethylbenzene	1.9914 1.7179	1.9333 1.7672	1.9980 1.6464	1.9518	1.8953	Ave		1.8627			0.1000	7.2		20.0			
m-Xylene & p-Xylene	2.4849 2.1093	2.3674 2.1267	2.4171 1.9994	2.4234	2.2969	Ave		2.2781			0.1000	7.8		20.0			
o-Xylene	2.6403 2.0475	2.2064 2.0545	2.3516 1.9292	2.3257	2.2716	Ave		2.2283			0.3000	10.0		20.0			
Styrene	3.8818 3.3296	3.6611 3.3147	3.8658 3.1277	3.7940	3.7504	Ave		3.5907			0.3000	8.1		20.0			
Bromoform	0.4254 0.4898	0.4398 0.4974	0.4744 0.4894	0.4822	0.4911	Ave		0.4737			0.1000	5.6		20.0			
2-Chlorobenzotrifluoride	2.0985 1.7811	2.0764 1.8958	2.0751 1.6078	2.0615	2.0224	Ave		1.9523			0.0100	9.1		20.0			
Isopropylbenzene	6.2252 4.9838	6.1153 4.8827	6.0965 4.4013	6.0579	5.7184	Ave		5.5601			0.1000	13.0		20.0			
1,1,2,2-Tetrachloroethane	1.5778 1.3165	1.3921 1.3063	1.4139 1.2430	1.4088	1.3646	Ave		1.3779			0.3000	7.2		20.0			
Bromobenzene	0.9601 0.9043	0.9163 0.9102	0.9670 0.9012	0.9241	0.9202	Ave		0.9254			0.0100	2.7		20.0			
1,2,3-Trichloropropane	0.3380 0.3040	0.2838 0.2874	0.3205 0.3069	0.2961	0.2961	Ave		0.3041			0.0100	5.9		20.0			
trans-1,4-Dichloro-2-butene	0.2572 0.2562	0.2443 0.2601	0.2456 0.2696	0.2438	0.2460	Ave		0.2528			0.0100	3.7		20.0			
N-Propylbenzene	1.2305 1.1066	1.1620 1.0908	1.2081 1.0656	1.1555	1.1135	Ave		1.1416			0.0100	5.1		20.0			
2-Chlorotoluene	1.0248 0.9458	0.9575 0.9297	1.0195 0.9076	0.9558	0.9319	Ave		0.9591			0.0100	4.4		20.0			
3-Chlorotoluene	1.1523 1.0737	1.0357 1.0942	1.0635 0.9927	1.0618	1.1018	Ave		1.0720			0.0100	4.4		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

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								
1,3,5-Trimethylbenzene	3.5091 3.0301	3.2905 2.9338	3.3765 2.8104	3.3601	3.1525	Ave		3.1829			0.0100	7.6		20.0			
4-Chlorotoluene	1.1316 1.0097	1.0151 0.9774	1.0863 1.0009	1.0825	1.0021	Ave		1.0382			0.0100	5.2		20.0			
tert-Butylbenzene	3.1830 2.5928	2.8173 2.5318	2.9656 2.3701	2.8959	2.7052	Ave		2.7577			0.0100	9.5		20.0			
1,2,4-Trimethylbenzene	3.6039 3.1029	3.3270 3.0238	3.4986 2.8908	3.4674	3.2206	Ave		3.2669			0.0100	7.7		20.0			
3,4-Dichlorobenzotrifluoride	1.1042 1.0202	0.9953 1.0227	1.0269 0.9335	1.1049	1.0507	Ave		1.0323			0.0100	5.5		20.0			
sec-Butylbenzene	4.3054 3.6389	4.1108 3.5066	4.1991 3.2620	4.1487	3.8794	Ave		3.8814			0.0100	9.7		20.0			
1,3-Dichlorobenzene	1.9132 1.6438	1.7258 1.6071	1.7369 1.5897	1.7497	1.6725	Ave		1.7048			0.6000	6.1		20.0			
4-Isopropyltoluene	3.4872 3.0606	3.2348 2.9586	3.4694 2.7984	3.4562	3.1691	Ave		3.2043			0.0100	8.0		20.0			
1,4-Dichlorobenzene	1.9760 1.6976	1.7145 1.6569	1.7807 1.6355	1.7648	1.7035	Ave		1.7412			0.5000	6.1		20.0			
2,4-Dichlorobenzotrifluoride	1.0162 0.9585	0.9307 0.9665	1.0004 0.8567	1.0551	0.9508	Ave		0.9669			0.0100	6.2		20.0			
2,5-Dichlorobenzotrifluoride	1.1811 1.0613	1.0765 1.0776	1.0685 0.9818	1.1269	1.0793	Ave		1.0816			0.0100	5.2		20.0			
n-Butylbenzene	3.1276 2.8128	2.9811 2.7148	3.1079 2.5582	3.1414	2.9001	Ave		2.9180			0.0100	7.3		20.0			
1,2-Dichlorobenzene	1.7371 1.5488	1.5543 1.5042	1.6235 1.4749	1.6066	1.5803	Ave		1.5787			0.4000	5.1		20.0			
1,2-Dibromo-3-Chloropropane	0.1313 0.1386	0.1067 0.1383	0.1229 0.1385	0.1324	0.1248	Ave		0.1292			0.0500	8.5		20.0			
1,2,4-Trichlorobenzene	0.9720 0.8625	0.7083 0.8349	0.7579 0.7778	0.8780	0.7835	Ave		0.8219			0.2000	10.0		20.0			
Hexachlorobutadiene	0.4883 0.3899	0.3825 0.3778	0.3866 0.3464	0.4091	0.3724	Ave		0.3941			0.0100	11.0		20.0			
Naphthalene	2.3899 2.2683	1.8332 2.1948	1.9931 2.0920	2.3983	2.0941	Ave		2.1580			0.0100	9.0		20.0			
1,2,3-Trichlorobenzene	0.7895 0.7155	0.5376 0.7162	0.6024 0.6573	0.7303	0.6432	Ave		0.6740			0.0100	12.0		20.0			
2,4,5-Trichlorotoluene	0.4907 0.3881	0.2750 0.3876	0.2929 0.3431	0.3938	0.3283	Ave		0.3624			0.0100	19.0		20.0			
2,3,6-Trichlorotoluene	0.4374 0.3491	0.2501 0.3509	0.2713 0.3051	0.3608	0.2936	Ave		0.3273			0.0100	18.0		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.: 180-42353-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

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								
Dibromofluoromethane (Surr)	0.2497 0.2212	0.2276 0.2219	0.2284 0.2143	0.2334	0.2228	Ave		0.2274				4.7		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3017 0.2995	0.3055 0.2914	0.3015 0.2867	0.3115	0.3008	Ave		0.2998				2.6		20.0			
Toluene-d8 (Surr)	4.5313 3.5890	4.2126 3.6439	4.3365 3.2599	4.2301	4.0882	Ave		3.9864				11.0		20.0			
4-Bromofluorobenzene (Surr)	1.5722 1.3558	1.4371 1.3519	1.5107 1.2944	1.4891	1.4730	Ave		1.4356				6.6		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-135593/13	50316013.D
Level 2	IC 180-135593/4	50316004.D
Level 3	ICIS 180-135593/5	50316005.D
Level 4	IC 180-135593/6	50316006.D
Level 5	IC 180-135593/7	50316007.D
Level 6	IC 180-135593/8	50316008.D
Level 7	IC 180-135593/9	50316009.D
Level 8	IC 180-135593/10	50316010.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	11265 432190	59394 522240	116111 640090	173113	243823	5.00 175	25.0 200	50.0 250	75.0	100
Chloromethane	FB	Ave	17972 573343	82552 674845	159885 855933	249772	316915	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl chloride	FB	Ave	18981 624000	94520 767804	183317 924535	280135	370271	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Butadiene	FB	Ave	24095 709784	108469 840803	208815 1005925	317272	415323	5.00 175	25.0 200	50.0 250	75.0	100
Bromomethane	FB	Lin2	18060 307964	55097 366671	100717 461680	159846	192846	5.00 175	25.0 200	50.0 250	75.0	100
Chloroethane	FB	Ave	13187 455903	60248 530813	126349 700467	191164	245673	5.00 175	25.0 200	50.0 250	75.0	100
Dichlorofluoromethane	FB	Ave	34297 974888	142662 1188936	282324 1511714	437737	548270	5.00 175	25.0 200	50.0 250	75.0	100
Trichlorofluoromethane	FB	Ave	20521 772293	107038 946313	217544 1178605	358375	437688	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl ether	FB	Ave	16416 519119	66452 592652	138609 792637	214135	293889	5.00 175	25.0 200	50.0 250	75.0	100
Acrolein	FB	Ave	35289 81646	41017 95028	50582 109180	62132	71073	100 225	125 250	150 275	175	200
1,1-Dichloroethene	FB	Ave	18234 562804	78897 662050	151843 827120	235889	318457	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	16567 577719	80854 684103	159979 834802	246660	319162	5.00 175	25.0 200	50.0 250	75.0	100
Acetone	FB	Ave	29674 429781	52410 489133	102899 621064	180387	217095	25.0 350	50.0 400	100 500	150	200
Iodomethane	FB	Ave	22824 784350	109309 945860	216640 1201056	334141	439512	5.00 175	25.0 200	50.0 250	75.0	100
Carbon disulfide	FB	Ave	41336 1381152	192118 1643948	387934 2031733	592248	772081	5.00 175	25.0 200	50.0 250	75.0	100

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

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	8006 314052	38957 393345	80577 482122	125423	163875	5.00 175	25.0 200	50.0 250	75.0	100
Methyl acetate	FB	Ave	71022 2407305	299965 2810332	641136 3718382	994505	1321970	25.0 875	125 1000	250 1250	375	500
Methylene Chloride	FB	Ave	27978 597904	90836 703059	168570 919183	256424	345226	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butyl alcohol	TBA	Ave	10830 351016	39251 399281	83098 537174	133756	175500	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	71728 2446379	322268 2868164	666088 3721902	1035956	1363975	50.0 1750	250 2000	500 2500	750	1000
trans-1,2-Dichloroethene	FB	Ave	17111 581552	82640 692220	161381 882651	251288	327278	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	40058 1347848	160325 1581345	336961 2130684	528520	727030	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	29021 929791	130741 1096478	261916 1379168	392065	514868	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	29622 1052201	145639 1250453	291408 1604398	435915	595324	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl acetate	FB	Ave	19067 831670	85462 1001771	187915 1337263	294456	419086	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Ave	6267 280515	33850 338302	70106 452022	108858	147216	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,2-Dichloroethene	FB	Ave	18951 612812	86701 721075	164893 930230	259517	349805	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	42054 665013	83987 809232	180996 1059138	259227	371447	25.0 350	50.0 400	100 500	150	200
Bromochloromethane	FB	Ave	8619 269375	36107 311076	71124 404105	109930	150204	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Ave	11913 415944	52231 483324	110274 646482	166594	224920	10.0 350	50.0 400	100 500	150	200
Chloroform	FB	Ave	29168 953676	130523 1109416	262371 1424461	395935	534362	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	15663 639960	77770 768585	167130 971626	259963	344772	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	36280 1161488	161271 1366913	322468 1669676	497889	649387	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	13013 504991	64089 612080	132517 790495	203736	274328	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	24060 783682	111342 933326	219974 1159811	326699	436454	5.00 175	25.0 200	50.0 250	75.0	100
Isobutyl alcohol	FB	Ave	8820 386141	29897 433313	83109 644697	137203	174166	125 4375	625 5000	1250 6250	1875	2500

FORM VI

GC/MS VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Benzene	FB	Ave	73700 2286079	324419 2653105	654151 3351151	984614	1312435	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane	FB	Ave	22108 781760	104777 907622	208683 1159879	320594	429724	5.00 175	25.0 200	50.0 250	75.0	100
n-Heptane	FB	Ave	23490 819785	113041 940924	222515 1182643	335961	443357	5.00 175	25.0 200	50.0 250	75.0	100
Trichloroethene	FB	Ave	18397 586010	78459 684010	162608 860273	242252	326599	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	29934 1055175	146574 1212427	295972 1519674	446628	583894	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	16916 597514	72742 700921	154467 918714	238331	332279	5.00 175	25.0 200	50.0 250	75.0	100
Dibromomethane	FB	Ave	9562 308441	40542 370624	82469 479407	130496	178905	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Ave	3746 132396	15563 146272	31354 185631	50907	66490	100 3500	500 4000	1000 5000	1500	2000
Bromodichloromethane	FB	Ave	16863 663337	84673 773432	176851 1003399	259871	363842	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,3-Dichloropropene	FB	Ave	15462 681682	70642 829306	152581 1098242	247138	345528	5.00 175	25.0 200	50.0 250	75.0	100
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	75787 1390980	154453 1617802	342539 2109966	531084	747218	25.0 350	50.0 400	100 500	150	200
Toluene	CBZ	Ave	72597 2347437	331041 2714932	679332 3368812	1017198	1340817	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,3-Dichloropropene	CBZ	Ave	10481 502980	44917 613747	108942 846559	167274	244258	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl methacrylate	CBZ	Ave	13336 654210	59964 782394	142858 1063861	221852	334858	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloroethane	CBZ	Ave	13086 465584	55897 540864	125390 706748	183907	252461	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBZ	Ave	13716 477004	64647 545517	129494 690601	194422	261148	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBZ	Ave	23188 854593	110194 1001573	233217 1327847	342719	467174	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBZ	Ave	53734 1103034	112348 1305223	271508 1685534	402386	541680	25.0 350	50.0 400	100 500	150	200
Dibromochloromethane	CBZ	Ave	7988 406960	43996 473922	96762 625118	145315	210013	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromoethane (EDB)	CBZ	Ave	11471 461219	51254 534328	115204 713501	179814	245946	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorobenzotrifluoride	CBZ	Ave	26148 925933	124209 1122812	251080 1303041	388132	511845	5.00 175	25.0 200	50.0 250	75.0	100

FORM VI

GC/MS VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBZ	Ave	47481 1507544	203702 1745676	416488 2249414	622968	845046	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorobenzotrifluoride	CBZ	Ave	25927 908777	116232 1108797	234233 1250140	368570	511237	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBZ	Ave	9154 439701	48269 512980	101650 680608	159225	233228	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBZ	Ave	24142 889389	116477 1044399	242856 1329470	366398	488611	5.00 175	25.0 200	50.0 250	75.0	100
m-Xylene & p-Xylene	CBZ	Ave	30126 1092005	142634 1256840	293796 1614511	454933	592135	5.00 175	25.0 200	50.0 250	75.0	100
o-Xylene	CBZ	Ave	32009 1059986	132929 1214164	285835 1557898	436586	585609	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBZ	Ave	47061 1723778	220574 1958961	469890 2525667	712222	966850	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBZ	Ave	5157 253560	26498 293938	57667 395201	90522	126605	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorobenzotrifluoride	CBZ	Ave	25441 922108	125099 1120386	252226 1298335	386985	521379	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBZ	Ave	75470 2580136	368436 2885608	741027 3554151	1137215	1474178	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBZ	Ave	19128 681581	83874 772016	171864 1003707	264462	351798	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCB	Ave	16809 637569	80670 740842	168649 956763	253502	346996	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichloropropane	DCB	Ave	5918 214358	24990 233938	55900 325768	81225	111668	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,4-Dichloro-2-butene	DCB	Ave	4503 180624	21505 211691	42827 286166	66879	92761	5.00 175	25.0 200	50.0 250	75.0	100
N-Propylbenzene	DCB	Ave	21543 780243	102304 887838	210687 1131297	316980	419888	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCB	Ave	17942 666866	84295 756732	177793 963573	262207	351403	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorotoluene	DCB	Ave	20174 757051	91182 890638	185477 1053875	291288	415463	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCB	Ave	61438 2136446	289696 2387945	588847 2983647	921783	1188743	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCB	Ave	19812 711885	89370 795532	189449 1062581	296950	377870	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCB	Ave	55729 1828125	248042 2060731	517188 2516209	794422	1020106	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trimethylbenzene	DCB	Ave	63098 2187785	292909 2461131	610150 3068942	951216	1214438	5.00 175	25.0 200	50.0 250	75.0	100

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
3,4-Dichlorobenzotrifluoride	DCB	Ave	19333 719294	87627 832435	179092 991010	303120	396211	5.00 175	25.0 200	50.0 250	75.0	100
sec-Butylbenzene	DCB	Ave	75379 2565671	361915 2854173	732318 3463106	1138120	1462842	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichlorobenzene	DCB	Ave	33497 1159025	151937 1308081	302903 1687649	480001	630675	5.00 175	25.0 200	50.0 250	75.0	100
4-Isopropyltoluene	DCB	Ave	61054 2157955	284792 2408127	605051 2970922	948139	1195021	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dichlorobenzene	DCB	Ave	34596 1196958	150942 1348596	310551 1736319	484138	642365	5.00 175	25.0 200	50.0 250	75.0	100
2,4-Dichlorobenzotrifluoride	DCB	Ave	17792 675783	81937 786683	174468 909481	289446	358539	5.00 175	25.0 200	50.0 250	75.0	100
2,5-Dichlorobenzotrifluoride	DCB	Ave	20678 748317	94772 877059	186350 1042359	309155	406971	5.00 175	25.0 200	50.0 250	75.0	100
n-Butylbenzene	DCB	Ave	54758 1983203	262455 2209671	542017 2715831	861784	1093564	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichlorobenzene	DCB	Ave	30414 1092014	136843 1224311	283138 1565775	440732	595901	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromo-3-Chloropropane	DCB	Ave	2299 97714	9396 112547	21428 147059	36318	47067	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trichlorobenzene	DCB	Ave	17018 608110	62363 679520	132179 825772	240861	295444	5.00 175	25.0 200	50.0 250	75.0	100
Hexachlorobutadiene	DCB	Ave	8549 274932	33676 307470	67414 367792	112236	140410	5.00 175	25.0 200	50.0 250	75.0	100
Naphthalene	DCB	Ave	41842 1599300	161398 1786434	347596 2220927	657935	789643	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichlorobenzene	DCB	Ave	13823 504504	47333 582911	105062 697862	200345	242534	5.00 175	25.0 200	50.0 250	75.0	100
2,4,5-Trichlorotoluene	DCB	Ave	8592 273662	24209 315499	51080 364223	108037	123791	5.00 175	25.0 200	50.0 250	75.0	100
2,3,6-Trichlorotoluene	DCB	Ave	7658 246163	22020 285573	47319 323920	98974	110702	5.00 175	25.0 200	50.0 250	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	14193 435320	61901 526164	122918 664693	185698	248750	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	17152 589491	83077 691002	162227 889045	247858	335757	5.00 175	25.0 200	50.0 250	75.0	100
Toluene-d8 (Surr)	CBZ	Ave	54935 1858068	253798 2153477	527093 2632400	794092	1053927	5.00 175	25.0 200	50.0 250	75.0	100
4-Bromofluorobenzene (Surr)	CBZ	Ave	19061 701915	86585 798953	183629 1045249	279546	379740	5.00 175	25.0 200	50.0 250	75.0	100

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316004.D
Lims ID: IC VSTD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Mar-2015 12:41:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD5
Misc. Info.: 180-0006031-004
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:20 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 17-Mar-2015 09:28:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.302	4.305	-0.003	88	140612	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.277	7.273	0.004	97	543896	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.361	10.364	-0.003	99	120496	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.685	12.682	0.003	97	176082	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.535	6.525	0.010	94	61901	25.0	25.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.906	6.902	0.004	96	83077	25.0	25.5	
$ 7 Toluene-d8 (Surr)	98	8.919	8.922	-0.003	100	253798	25.0	26.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.529	11.532	-0.003	95	86585	25.0	25.0	
11 Dichlorodifluoromethane	85	1.619	1.616	0.003	98	59394	25.0	25.5	
12 Chloromethane	50	1.771	1.774	-0.003	100	82552	25.0	25.7	
13 Vinyl chloride	62	1.905	1.902	0.003	99	94520	25.0	26.3	
14 Butadiene	39	1.948	1.944	0.004	98	108469	25.0	26.4	
15 Bromomethane	94	2.252	2.249	0.003	90	55097	25.0	26.2	M
16 Chloroethane	64	2.392	2.370	0.022	97	60248	25.0	24.2	
17 Dichlorofluoromethane	67	2.660	2.650	0.010	98	142662	25.0	25.1	
18 Trichlorofluoromethane	101	2.690	2.711	-0.021	96	107038	25.0	24.8	
20 Ethyl ether	59	3.085	3.088	-0.003	98	66452	25.0	23.4	
21 Acrolein	56	3.256	3.252	0.004	96	41017	125.0	118.7	
22 1,1-Dichloroethene	96	3.371	3.386	-0.015	97	78897	25.0	25.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.444	3.429	0.015	97	80854	25.0	25.5	
24 Acetone	43	3.493	3.496	-0.003	98	52410	50.0	47.0	
25 Iodomethane	142	3.572	3.587	-0.015	98	109309	25.0	25.1	
26 Carbon disulfide	76	3.651	3.654	-0.003	100	192118	25.0	25.0	
28 3-Chloro-1-propene	76	3.931	3.940	-0.009	92	38957	25.0	23.5	
30 Methyl acetate	43	4.022	4.019	0.003	100	299965	125.0	115.1	
31 Methylene Chloride	84	4.144	4.134	0.010	95	90836	25.0	25.0	
32 2-Methyl-2-propanol	59	4.430	4.445	-0.015	90	39251	250.0	237.0	
33 Acrylonitrile	53	4.552	4.554	-0.002	100	322268	250.0	240.3	
34 trans-1,2-Dichloroethene	96	4.564	4.560	0.004	61	82640	25.0	25.5	
35 Methyl tert-butyl ether	73	4.594	4.591	0.003	96	160325	25.0	22.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.983	4.980	0.003	97	130741	25.0	25.2	
37 1,1-Dichloroethane	63	5.178	5.169	0.009	99	145639	25.0	25.2	
38 Vinyl acetate	43	5.300	5.290	0.010	100	85462	25.0	20.8	
44 2,2-Dichloropropane	77	5.926	5.923	0.003	85	33850	25.0	23.4	
45 cis-1,2-Dichloroethene	96	5.939	5.935	0.004	94	86701	25.0	25.4	
46 2-Butanone (MEK)	43	5.987	5.990	-0.003	99	83987	50.0	47.1	
49 Chlorobromomethane	128	6.224	6.233	-0.009	96	36107	25.0	24.4	
51 Tetrahydrofuran	42	6.285	6.288	-0.003	97	52231	50.0	46.8	
52 Chloroform	83	6.340	6.343	-0.003	96	130523	25.0	24.8	
53 1,1,1-Trichloroethane	97	6.529	6.531	-0.002	95	77770	25.0	23.2	
54 Cyclohexane	56	6.589	6.586	0.003	96	161271	25.0	25.0	
56 Carbon tetrachloride	117	6.723	6.720	0.003	69	64089	25.0	23.8	
55 1,1-Dichloropropene	75	6.729	6.726	0.003	96	111342	25.0	25.5	
57 Isobutyl alcohol	41	6.942	6.945	-0.003	33	29897	625.0	411.8	
58 Benzene	78	6.954	6.957	-0.003	98	324419	25.0	25.2	
59 1,2-Dichloroethane	62	6.985	6.981	0.004	98	104777	25.0	24.8	
62 n-Heptane	43	7.277	7.280	-0.003	65	113041	25.0	25.5	
64 Trichloroethene	130	7.666	7.669	-0.003	99	78459	25.0	24.3	
66 Methylcyclohexane	83	7.867	7.864	0.003	96	146574	25.0	25.4	
67 1,2-Dichloropropane	63	7.903	7.906	-0.003	95	72742	25.0	22.8	
68 Dibromomethane	93	8.031	8.028	0.003	94	40542	25.0	23.6	
70 1,4-Dioxane	88	8.068	8.058	0.010	87	15563	500.0	463.6	
71 Dichlorobromomethane	83	8.196	8.198	-0.002	97	84673	25.0	24.2	
74 cis-1,3-Dichloropropene	75	8.658	8.661	-0.002	98	70642	25.0	20.9	
75 4-Methyl-2-pentanone (MIBK	43	8.822	8.825	-0.003	98	154453	50.0	47.4	
76 Toluene	91	8.992	8.989	0.003	99	331041	25.0	26.8	
77 trans-1,3-Dichloropropene	75	9.224	9.220	0.004	95	44917	25.0	20.1	
78 Ethyl methacrylate	69	9.321	9.318	0.003	97	59964	25.0	20.6	
79 1,1,2-Trichloroethane	97	9.400	9.397	0.003	98	55897	25.0	24.1	
80 Tetrachloroethene	164	9.534	9.537	-0.003	96	64647	25.0	26.8	
81 1,3-Dichloropropane	76	9.570	9.567	0.003	98	110194	25.0	25.6	
82 2-Hexanone	43	9.662	9.658	0.004	99	112348	50.0	45.1	
84 Chlorodibromomethane	129	9.795	9.786	0.009	98	43996	25.0	23.8	
85 Ethylene Dibromide	107	9.899	9.902	-0.003	99	51254	25.0	23.2	
86 3-Chlorobenzotrifluoride	180	10.373	10.370	0.003	89	124209	25.0	26.4	
87 Chlorobenzene	112	10.392	10.394	-0.002	99	203702	25.0	26.0	
88 4-Chlorobenzotrifluoride	180	10.434	10.431	0.003	99	116232	25.0	25.5	
89 1,1,1,2-Tetrachloroethane	131	10.477	10.473	0.004	96	48269	25.0	23.9	
90 Ethylbenzene	106	10.501	10.498	0.003	100	116477	25.0	25.9	
91 m-Xylene & p-Xylene	106	10.617	10.619	-0.002	99	142634	25.0	26.0	
92 o-Xylene	106	11.012	11.015	-0.003	97	132929	25.0	24.8	
93 Styrene	104	11.024	11.027	-0.003	99	220574	25.0	25.5	
94 Bromoform	173	11.213	11.209	0.004	97	26498	25.0	23.2	
96 2-Chlorobenzotrifluoride	180	11.274	11.276	-0.002	97	125099	25.0	26.6	
97 Isopropylbenzene	105	11.377	11.380	-0.003	99	368436	25.0	27.5	
99 1,1,2,2-Tetrachloroethane	83	11.675	11.672	0.003	70	83874	25.0	25.3	
100 Bromobenzene	156	11.681	11.684	-0.003	98	80670	25.0	24.8	
101 1,2,3-Trichloropropane	110	11.718	11.720	-0.002	95	24990	25.0	23.3	
102 trans-1,4-Dichloro-2-buten	53	11.730	11.727	0.003	85	21505	25.0	24.2	
103 N-Propylbenzene	120	11.791	11.787	0.004	100	102304	25.0	25.4	
104 2-Chlorotoluene	126	11.876	11.873	0.003	99	84295	25.0	25.0	
105 3-Chlorotoluene	126	11.937	11.933	0.004	98	91182	25.0	24.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.961	11.964	-0.003	100	289696	25.0	25.8	
107 4-Chlorotoluene	126	11.986	11.982	0.004	96	89370	25.0	24.4	
108 tert-Butylbenzene	119	12.290	12.286	0.004	98	248042	25.0	25.5	
110 1,2,4-Trimethylbenzene	105	12.338	12.335	0.003	99	292909	25.0	25.5	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.402	-0.003	98	87627	25.0	24.1	
112 sec-Butylbenzene	105	12.509	12.505	0.004	100	361915	25.0	26.5	
113 1,3-Dichlorobenzene	146	12.618	12.615	0.003	99	151937	25.0	25.3	
114 4-Isopropyltoluene	119	12.655	12.651	0.004	99	284792	25.0	25.2	
115 1,4-Dichlorobenzene	146	12.709	12.706	0.003	98	150942	25.0	24.6	
116 2,4-Dichloro-1-(triflourom	214	12.758	12.761	-0.003	94	81937	25.0	24.1	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.809	-0.002	97	94772	25.0	24.9	
120 n-Butylbenzene	91	13.062	13.059	0.003	100	262455	25.0	25.5	
121 1,2-Dichlorobenzene	146	13.081	13.083	-0.002	99	136843	25.0	24.6	
122 1,2-Dibromo-3-Chloropropan	75	13.859	13.862	-0.003	92	9396	25.0	20.7	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.011	14.008	0.003	99	300911	75.0	71.6	
125 2,3- & 3,4- Dichlorotoluen	125	14.425	14.428	-0.003	99	191256	50.0	46.8	
126 1,2,4-Trichlorobenzene	180	14.693	14.689	0.004	98	62363	25.0	21.5	
127 Hexachlorobutadiene	225	14.863	14.860	0.003	95	33676	25.0	24.3	
128 Naphthalene	128	14.942	14.939	0.003	99	161398	25.0	21.2	
129 1,2,3-Trichlorobenzene	180	15.185	15.188	-0.003	97	47333	25.0	19.9	
131 2,4,5-Trichlorotoluene	159	15.964	15.961	0.003	95	24209	25.0	19.0	
130 2,3,6-Trichlorotoluene	159	16.061	16.064	-0.003	95	22020	25.0	19.1	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		50.0	50.7	
S 134 1,2-Dichloroethene, Total	96				0		50.0	50.8	
S 135 1,3-Dichloropropene, Total	1				0		50.0	41.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00003	Amount Added:	5.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	1.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	1.00	Units: uL	
VOA8260SURR_00032	Amount Added:	1.00	Units: uL	
VOA8260VOAPRI_00105	Amount Added:	1.00	Units: uL	
VOAVAPRI_00005	Amount Added:	1.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent

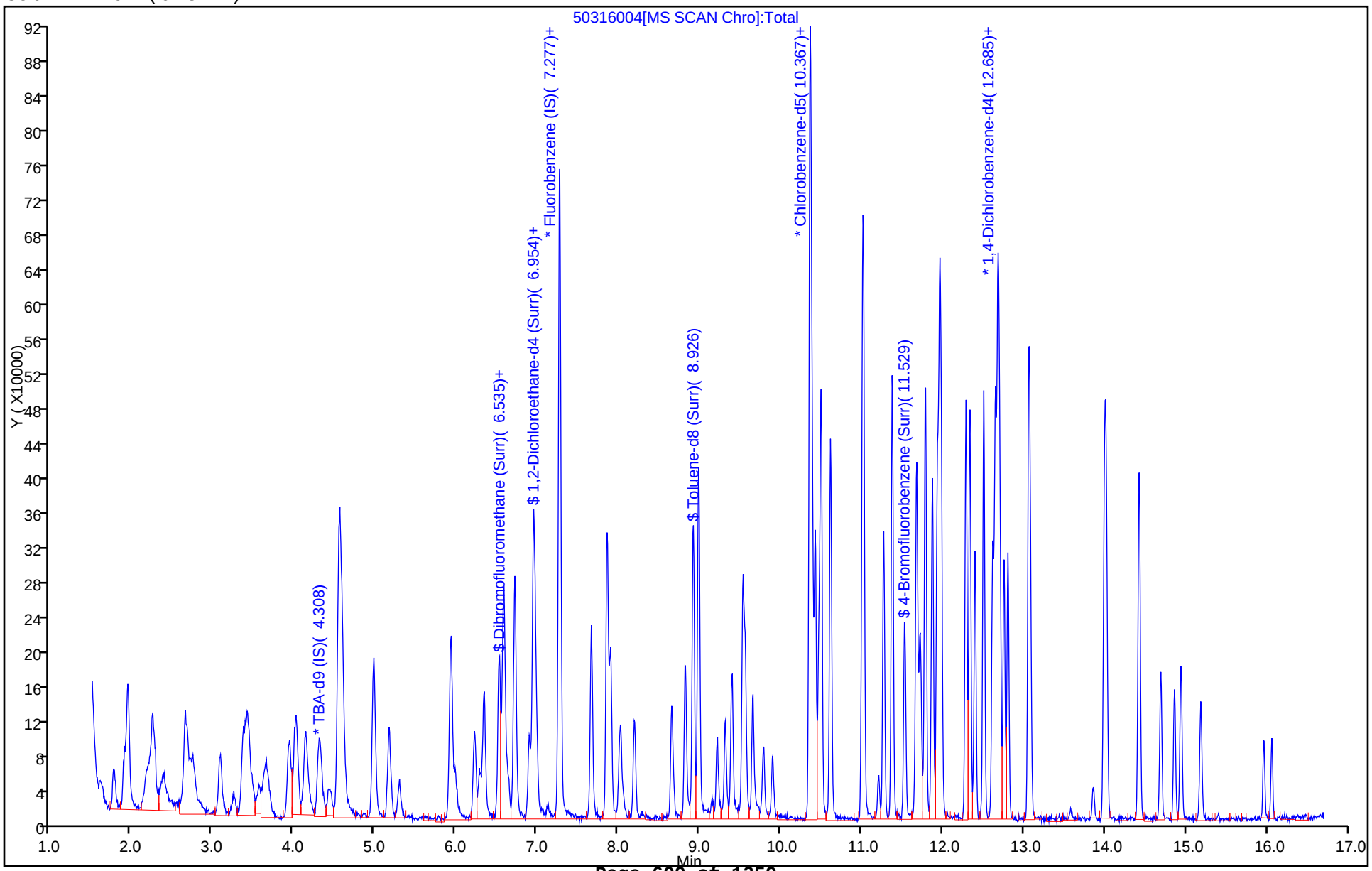
Report Date: 17-Mar-2015 10:59:21 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316004.D

Injection Date:	16-Mar-2015 12:41:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD5			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

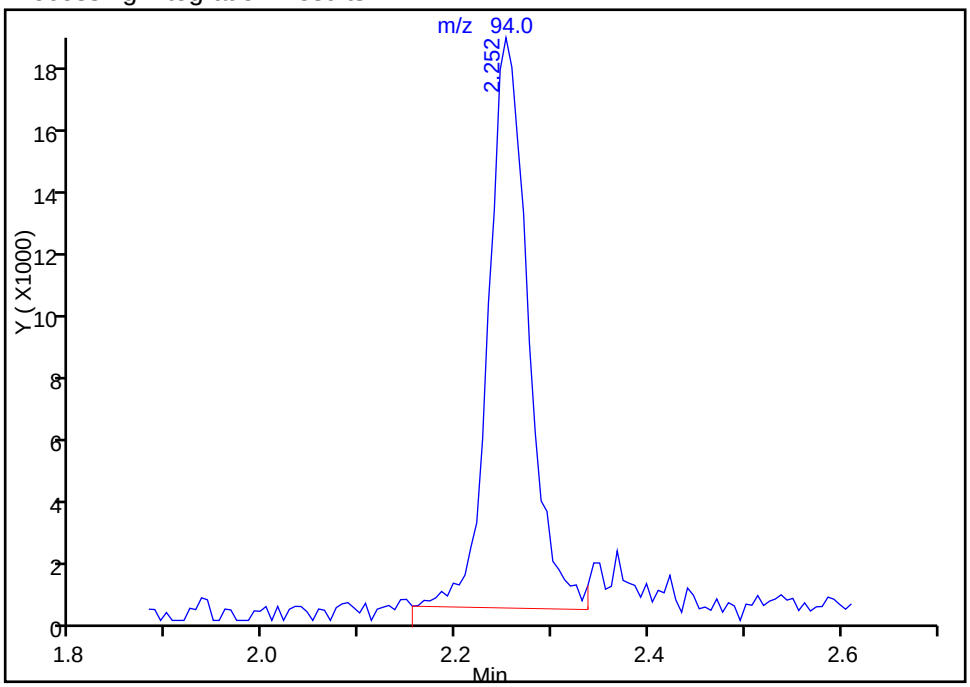
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316004.D				
Injection Date:	16-Mar-2015 12:41:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD5				
Client ID:					
Operator ID:	001562	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

15 Bromomethane, CAS: 74-83-9

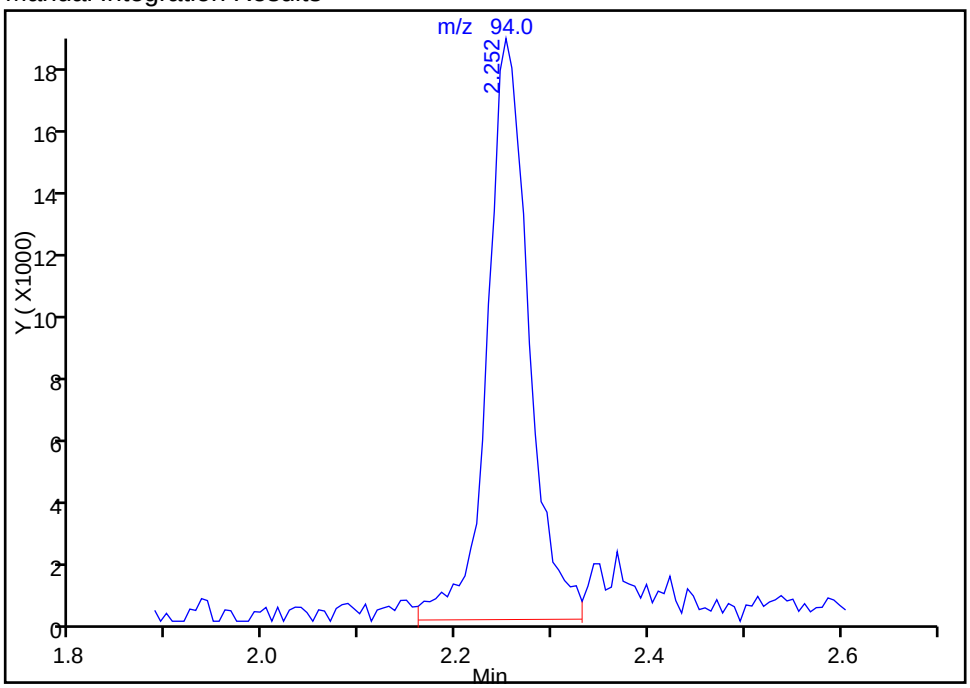
Processing Integration Results

RT: 2.25
Area: 51742
Amount: 22.147125
Amount Units: ng



Manual Integration Results

RT: 2.25
Area: 55097
Amount: 26.195176
Amount Units: ng



Reviewer: fergusond, 17-Mar-2015 09:42:10
Audit Action: Manually Integrated
Audit Reason: Baseline

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316005.D
Lims ID: ICIS VSTD10
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 16-Mar-2015 13:05:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS VSTD10
Misc. Info.: 180-0006031-005
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:21 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 16-Mar-2015 15:03:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.305	4.305	0.000	86	135440	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.273	7.273	0.000	99	538139	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.364	0.000	97	121549	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.682	0.000	98	174397	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.525	6.525	0.000	95	122918	50.0	50.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.902	6.902	0.000	99	162227	50.0	50.3	
$ 7 Toluene-d8 (Surr)	98	8.922	8.922	0.000	100	527093	50.0	54.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.532	11.532	0.000	95	183629	50.0	52.6	
11 Dichlorodifluoromethane	85	1.616	1.616	0.000	100	116111	50.0	50.3	
12 Chloromethane	50	1.774	1.774	0.000	100	159885	50.0	50.2	
13 Vinyl chloride	62	1.902	1.902	0.000	100	183317	50.0	51.5	
14 Butadiene	39	1.944	1.944	0.000	99	208815	50.0	51.4	
15 Bromomethane	94	2.249	2.249	0.000	93	100717	50.0	52.5	
16 Chloroethane	64	2.370	2.370	0.000	98	126349	50.0	51.3	
17 Dichlorofluoromethane	67	2.650	2.650	0.000	100	282324	50.0	50.2	
18 Trichlorofluoromethane	101	2.711	2.711	0.000	98	217544	50.0	51.0	
20 Ethyl ether	59	3.088	3.088	0.000	98	138609	50.0	49.2	
21 Acrolein	56	3.252	3.252	0.000	98	50582	150.0	147.9	
22 1,1-Dichloroethene	96	3.386	3.386	0.000	99	151843	50.0	48.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.429	3.429	0.000	97	159979	50.0	51.0	
24 Acetone	43	3.496	3.496	0.000	99	102899	100.0	93.3	
25 Iodomethane	142	3.587	3.587	0.000	96	216640	50.0	50.3	
26 Carbon disulfide	76	3.654	3.654	0.000	100	387934	50.0	51.1	
28 3-Chloro-1-propene	76	3.940	3.940	0.000	96	80577	50.0	49.1	
30 Methyl acetate	43	4.019	4.019	0.000	100	641136	250.0	248.6	
31 Methylene Chloride	84	4.134	4.134	0.000	86	168570	50.0	47.0	
32 2-Methyl-2-propanol	59	4.445	4.445	0.000	86	83098	500.0	520.9	
33 Acrylonitrile	53	4.554	4.554	0.000	99	666088	500.0	502.1	
34 trans-1,2-Dichloroethene	96	4.560	4.560	0.000	59	161381	50.0	50.3	
35 Methyl tert-butyl ether	73	4.591	4.591	0.000	96	336961	50.0	47.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.980	4.980	0.000	98	261916	50.0	51.1	
37 1,1-Dichloroethane	63	5.169	5.169	0.000	100	291408	50.0	50.9	
38 Vinyl acetate	43	5.290	5.290	0.000	100	187915	50.0	46.2	
44 2,2-Dichloropropane	77	5.923	5.923	0.000	67	70106	50.0	48.9	
45 cis-1,2-Dichloroethene	96	5.935	5.935	0.000	92	164893	50.0	48.8	
46 2-Butanone (MEK)	43	5.990	5.990	0.000	100	180996	100.0	102.7	
49 Chlorobromomethane	128	6.233	6.233	0.000	95	71124	50.0	48.6	
51 Tetrahydrofuran	42	6.288	6.288	0.000	98	110274	100.0	99.9	
52 Chloroform	83	6.343	6.343	0.000	96	262371	50.0	50.4	
53 1,1,1-Trichloroethane	97	6.531	6.531	0.000	95	167130	50.0	50.3	
54 Cyclohexane	56	6.586	6.586	0.000	95	322468	50.0	50.5	
56 Carbon tetrachloride	117	6.720	6.720	0.000	69	132517	50.0	49.7	
55 1,1-Dichloropropene	75	6.726	6.726	0.000	97	219974	50.0	51.0	
57 Isobutyl alcohol	41	6.945	6.945	0.000	37	83109	1250.0	1157.0	
58 Benzene	78	6.957	6.957	0.000	99	654151	50.0	51.3	
59 1,2-Dichloroethane	62	6.981	6.981	0.000	97	208683	50.0	50.0	
62 n-Heptane	43	7.280	7.280	0.000	81	222515	50.0	50.8	
64 Trichloroethene	130	7.669	7.669	0.000	98	162608	50.0	50.9	
66 Methylcyclohexane	83	7.864	7.864	0.000	96	295972	50.0	51.9	
67 1,2-Dichloropropane	63	7.906	7.906	0.000	95	154467	50.0	49.0	
68 Dibromomethane	93	8.028	8.028	0.000	95	82469	50.0	48.6	
70 1,4-Dioxane	88	8.058	8.058	0.000	96	31354	1000.0	944.0	M
71 Dichlorobromomethane	83	8.198	8.198	0.000	99	176851	50.0	51.0	
74 cis-1,3-Dichloropropene	75	8.661	8.661	0.000	99	152581	50.0	45.6	
75 4-Methyl-2-pentanone (MIBK	43	8.825	8.825	0.000	99	342539	100.0	104.1	
76 Toluene	91	8.989	8.989	0.000	100	679332	50.0	54.5	
77 trans-1,3-Dichloropropene	75	9.220	9.220	0.000	94	108942	50.0	48.4	
78 Ethyl methacrylate	69	9.318	9.318	0.000	96	142858	50.0	48.7	
79 1,1,2-Trichloroethane	97	9.397	9.397	0.000	99	125390	50.0	53.7	
80 Tetrachloroethene	164	9.537	9.537	0.000	95	129494	50.0	53.1	
81 1,3-Dichloropropane	76	9.567	9.567	0.000	98	233217	50.0	53.7	
82 2-Hexanone	43	9.658	9.658	0.000	99	271508	100.0	108.0	
84 Chlorodibromomethane	129	9.786	9.786	0.000	99	96762	50.0	51.9	
85 Ethylene Dibromide	107	9.902	9.902	0.000	98	115204	50.0	51.7	
86 3-Chlorobenzotrifluoride	180	10.370	10.370	0.000	97	251080	50.0	52.8	
87 Chlorobenzene	112	10.394	10.394	0.000	99	416488	50.0	52.8	
88 4-Chlorobenzotrifluoride	180	10.431	10.431	0.000	99	234233	50.0	51.0	
89 1,1,1,2-Tetrachloroethane	131	10.473	10.473	0.000	97	101650	50.0	49.9	
90 Ethylbenzene	106	10.498	10.498	0.000	100	242856	50.0	53.6	
91 m-Xylene & p-Xylene	106	10.619	10.619	0.000	99	293796	50.0	53.0	
92 o-Xylene	106	11.015	11.015	0.000	97	285835	50.0	52.8	
93 Styrene	104	11.027	11.027	0.000	99	469890	50.0	53.8	
94 Bromoform	173	11.209	11.209	0.000	96	57667	50.0	50.1	
96 2-Chlorobenzotrifluoride	180	11.276	11.276	0.000	99	252226	50.0	53.1	
97 Isopropylbenzene	105	11.380	11.380	0.000	100	741027	50.0	54.8	
99 1,1,2,2-Tetrachloroethane	83	11.672	11.672	0.000	97	171864	50.0	51.3	
100 Bromobenzene	156	11.684	11.684	0.000	98	168649	50.0	52.2	
101 1,2,3-Trichloropropane	110	11.720	11.720	0.000	97	55900	50.0	52.7	
102 trans-1,4-Dichloro-2-buten	53	11.727	11.727	0.000	88	42827	50.0	48.6	
103 N-Propylbenzene	120	11.787	11.787	0.000	100	210687	50.0	52.9	
104 2-Chlorotoluene	126	11.873	11.873	0.000	100	177793	50.0	53.1	
105 3-Chlorotoluene	126	11.933	11.933	0.000	99	185477	50.0	49.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.964	11.964	0.000	99	588847	50.0	53.0	
107 4-Chlorotoluene	126	11.982	11.982	0.000	99	189449	50.0	52.3	
108 tert-Butylbenzene	119	12.286	12.286	0.000	100	517188	50.0	53.8	
110 1,2,4-Trimethylbenzene	105	12.335	12.335	0.000	100	610150	50.0	53.5	
111 1,2-dichloro-4-(trifluorom	214	12.402	12.402	0.000	98	179092	50.0	49.7	
112 sec-Butylbenzene	105	12.505	12.505	0.000	100	732318	50.0	54.1	
113 1,3-Dichlorobenzene	146	12.615	12.615	0.000	98	302903	50.0	50.9	
114 4-Isopropyltoluene	119	12.651	12.651	0.000	99	605051	50.0	54.1	
115 1,4-Dichlorobenzene	146	12.706	12.706	0.000	98	310551	50.0	51.1	
116 2,4-Dichloro-1-(triflourom	214	12.761	12.761	0.000	94	174468	50.0	51.7	
118 2,5-Dichlorobenzotrifluori	214	12.809	12.809	0.000	98	186350	50.0	49.4	
120 n-Butylbenzene	91	13.059	13.059	0.000	100	542017	50.0	53.3	
121 1,2-Dichlorobenzene	146	13.083	13.083	0.000	100	283138	50.0	51.4	
122 1,2-Dibromo-3-Chloropropan	75	13.862	13.862	0.000	86	21428	50.0	47.6	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.008	14.008	0.000	99	613057	150.0	147.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.428	14.428	0.000	100	386758	100.0	95.5	
126 1,2,4-Trichlorobenzene	180	14.689	14.689	0.000	96	132179	50.0	46.1	
127 Hexachlorobutadiene	225	14.860	14.860	0.000	96	67414	50.0	49.0	
128 Naphthalene	128	14.939	14.939	0.000	100	347596	50.0	46.2	
129 1,2,3-Trichlorobenzene	180	15.188	15.188	0.000	98	105062	50.0	44.7	
131 2,4,5-Trichlorotoluene	159	15.961	15.961	0.000	96	51080	50.0	40.4	
130 2,3,6-Trichlorotoluene	159	16.064	16.064	0.000	97	47319	50.0	41.5	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	105.8	
S 134 1,2-Dichloroethene, Total	96				0		100.0	99.0	
S 135 1,3-Dichloropropene, Total	1				0		100.0	94.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAVAPRI_00005	Amount Added:	2.00	Units: uL	
VOA8260VOAPRI_00105	Amount Added:	2.00	Units: uL	
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	2.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	2.00	Units: uL	
VOAACRPRI_00003	Amount Added:	6.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent

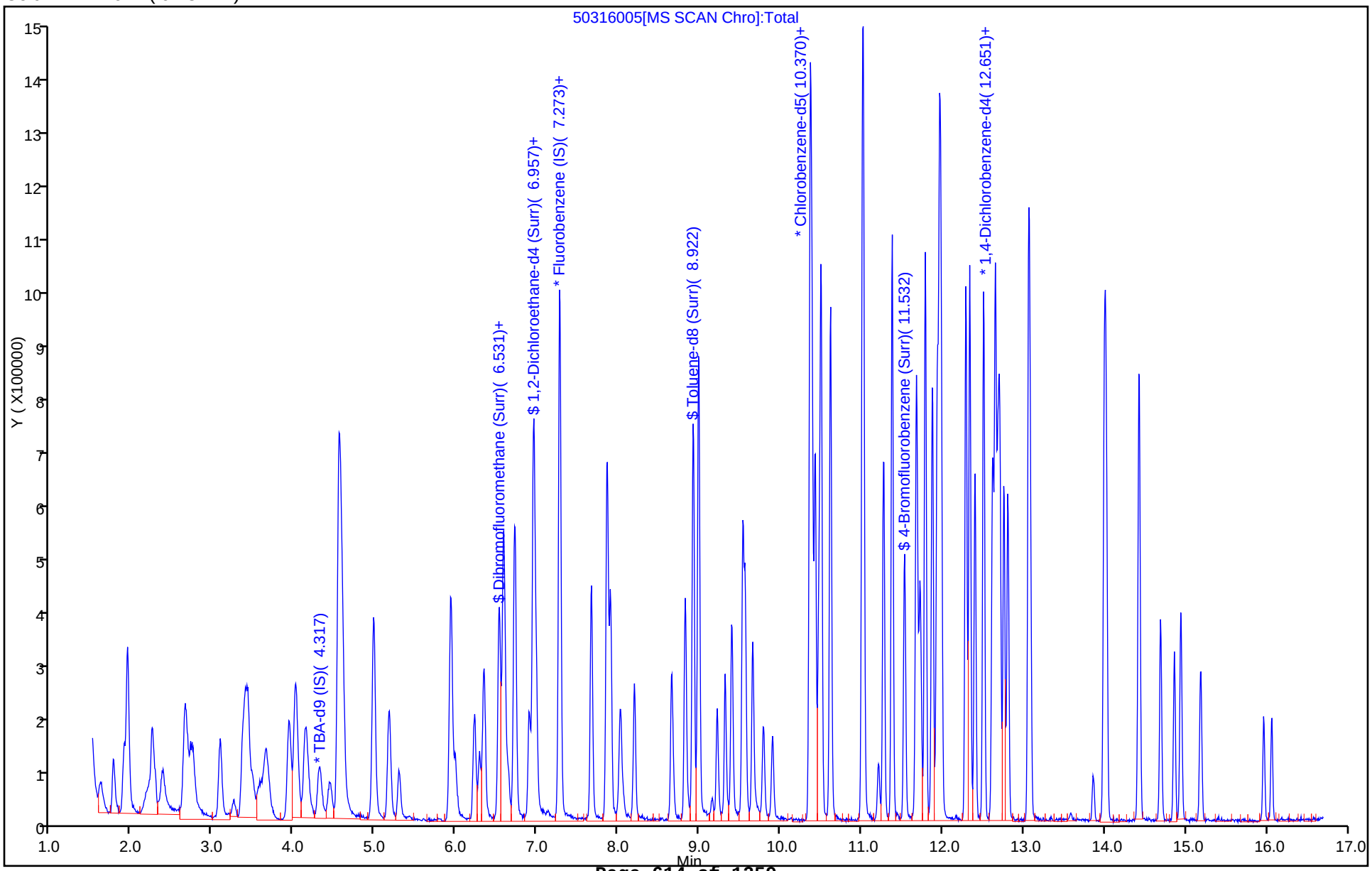
Report Date: 17-Mar-2015 10:59:23 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316005.D

Injection Date:	16-Mar-2015 13:05:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	ICIS VSTD10			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

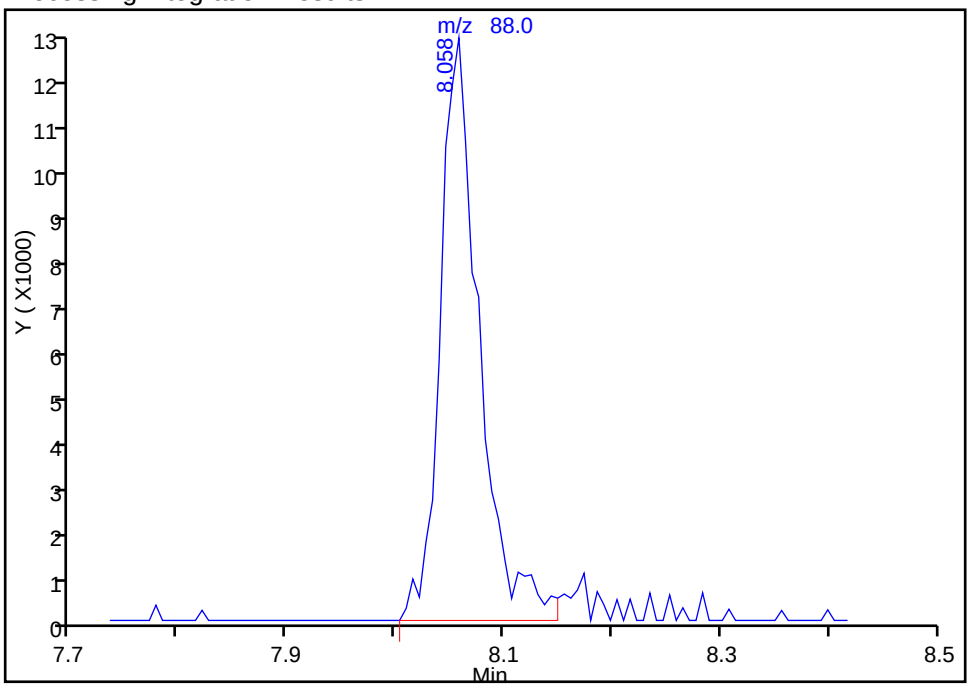
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316005.D
Injection Date: 16-Mar-2015 13:05:30 Instrument ID: CHHP5
Lims ID: ICIS VSTD10
Client ID:
Operator ID: 001562 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

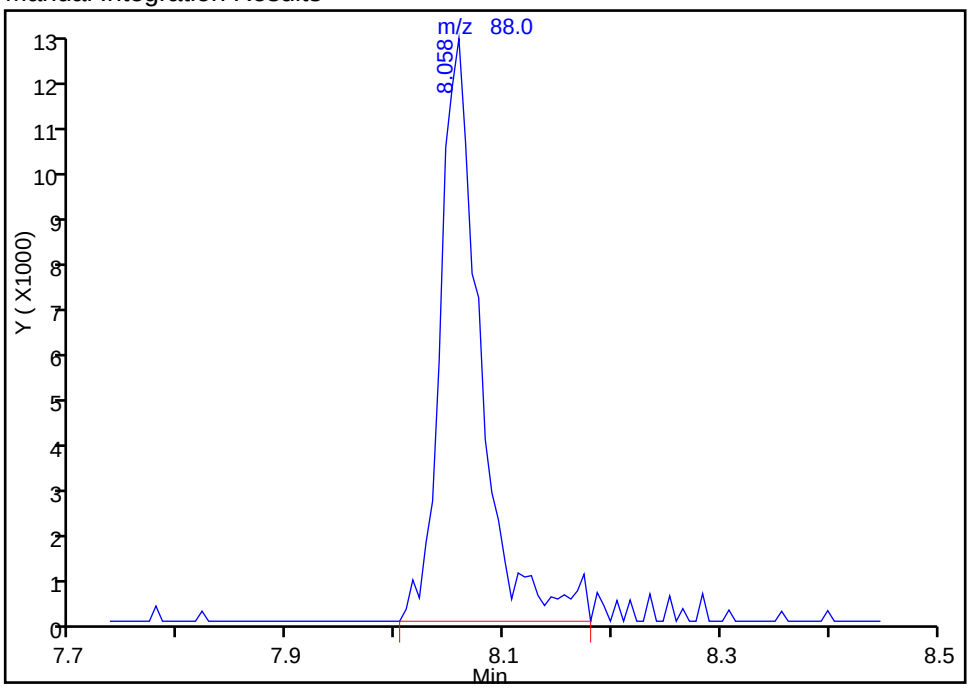
Processing Integration Results

RT: 8.06
Area: 30397
Amount: 939.9751
Amount Units: ng



Manual Integration Results

RT: 8.06
Area: 31354
Amount: 944.0403
Amount Units: ng



Reviewer: fergusond, 17-Mar-2015 09:27:38
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316006.D
Lims ID: IC VSTD15
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 16-Mar-2015 13:29:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD15
Misc. Info.: 180-0006031-006
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:26 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 17-Mar-2015 09:45:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.305	4.305	0.000	89	152705	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.273	7.273	0.000	99	530419	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.364	0.000	99	125149	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.682	0.000	95	182887	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.525	6.525	0.000	97	185698	75.0	77.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.902	6.902	0.000	96	247858	75.0	77.9	
$ 7 Toluene-d8 (Surr)	98	8.922	8.922	0.000	100	794092	75.0	79.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.532	11.532	0.000	97	279546	75.0	77.8	
11 Dichlorodifluoromethane	85	1.622	1.622	0.000	99	173113	75.0	76.1	
12 Chloromethane	50	1.768	1.768	0.000	99	249772	75.0	79.6	
13 Vinyl chloride	62	1.896	1.896	0.000	100	280135	75.0	79.9	
14 Butadiene	39	1.944	1.944	0.000	99	317272	75.0	79.2	
15 Bromomethane	94	2.249	2.249	0.000	92	159846	75.0	87.5	
16 Chloroethane	64	2.376	2.376	0.000	96	191164	75.0	78.8	
17 Dichlorofluoromethane	67	2.644	2.644	0.000	99	437737	75.0	79.0	
18 Trichlorofluoromethane	101	2.723	2.723	0.000	96	358375	75.0	85.2	
20 Ethyl ether	59	3.082	3.082	0.000	100	214135	75.0	77.2	
21 Acrolein	56	3.258	3.258	0.000	100	62132	175.0	184.3	
22 1,1-Dichloroethene	96	3.374	3.374	0.000	100	235889	75.0	77.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.423	3.423	0.000	100	246660	75.0	79.7	
24 Acetone	43	3.496	3.496	0.000	100	180387	150.0	166.0	
25 Iodomethane	142	3.581	3.581	0.000	100	334141	75.0	78.6	
26 Carbon disulfide	76	3.660	3.660	0.000	100	592248	75.0	79.2	
28 3-Chloro-1-propene	76	3.934	3.934	0.000	100	125423	75.0	77.6	
30 Methyl acetate	43	4.019	4.019	0.000	100	994505	375.0	391.2	
31 Methylene Chloride	84	4.147	4.147	0.000	100	256424	75.0	72.5	
32 2-Methyl-2-propanol	59	4.439	4.439	0.000	100	133756	750.0	743.6	
33 Acrylonitrile	53	4.554	4.554	0.000	100	1035956	750.0	792.2	
34 trans-1,2-Dichloroethene	96	4.560	4.560	0.000	100	251288	75.0	79.4	
35 Methyl tert-butyl ether	73	4.597	4.597	0.000	100	528520	75.0	75.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.980	4.980	0.000	100	392065	75.0	77.6	
37 1,1-Dichloroethane	63	5.175	5.175	0.000	100	435915	75.0	77.2	
38 Vinyl acetate	43	5.296	5.296	0.000	100	294456	75.0	73.5	
44 2,2-Dichloropropane	77	5.929	5.929	0.000	100	108858	75.0	77.1	
45 cis-1,2-Dichloroethene	96	5.941	5.941	0.000	100	259517	75.0	77.9	
46 2-Butanone (MEK)	43	5.990	5.990	0.000	100	259227	150.0	149.2	
49 Chlorobromomethane	128	6.227	6.227	0.000	100	109930	75.0	76.2	
51 Tetrahydrofuran	42	6.282	6.282	0.000	100	166594	150.0	153.1	
52 Chloroform	83	6.343	6.343	0.000	100	395935	75.0	77.2	
53 1,1,1-Trichloroethane	97	6.531	6.531	0.000	100	259963	75.0	79.4	
54 Cyclohexane	56	6.586	6.586	0.000	100	497889	75.0	79.2	
56 Carbon tetrachloride	117	6.720	6.720	0.000	100	203736	75.0	77.5	
55 1,1-Dichloropropene	75	6.726	6.726	0.000	100	326699	75.0	76.8	
57 Isobutyl alcohol	41	6.945	6.945	0.000	100	137203	1875.0	1937.9	M
58 Benzene	78	6.957	6.957	0.000	100	984614	75.0	78.3	
59 1,2-Dichloroethane	62	6.988	6.988	0.000	100	320594	75.0	77.9	
62 n-Heptane	43	7.280	7.280	0.000	100	335961	75.0	77.8	
64 Trichloroethene	130	7.669	7.669	0.000	100	242252	75.0	76.9	
66 Methylcyclohexane	83	7.864	7.864	0.000	100	446628	75.0	79.5	
67 1,2-Dichloropropane	63	7.906	7.906	0.000	100	238331	75.0	76.7	
68 Dibromomethane	93	8.022	8.022	0.000	100	130496	75.0	78.0	
70 1,4-Dioxane	88	8.058	8.058	0.000	100	50907	1500.0	1555.1	
71 Dichlorobromomethane	83	8.198	8.198	0.000	100	259871	75.0	76.1	
74 cis-1,3-Dichloropropene	75	8.661	8.661	0.000	100	247138	75.0	75.0	
75 4-Methyl-2-pentanone (MIBK	43	8.825	8.825	0.000	100	531084	150.0	156.8	
76 Toluene	91	8.989	8.989	0.000	100	1017198	75.0	79.3	
77 trans-1,3-Dichloropropene	75	9.220	9.220	0.000	100	167274	75.0	72.2	
78 Ethyl methacrylate	69	9.318	9.318	0.000	100	221852	75.0	73.4	
79 1,1,2-Trichloroethane	97	9.403	9.403	0.000	100	183907	75.0	76.5	
80 Tetrachloroethene	164	9.537	9.537	0.000	100	194422	75.0	77.5	
81 1,3-Dichloropropane	76	9.561	9.561	0.000	100	342719	75.0	76.7	
82 2-Hexanone	43	9.658	9.658	0.000	100	402386	150.0	155.5	
84 Chlorodibromomethane	129	9.792	9.792	0.000	100	145315	75.0	75.7	
85 Ethylene Dibromide	107	9.902	9.902	0.000	100	179814	75.0	78.4	
86 3-Chlorobenzotrifluoride	180	10.370	10.370	0.000	100	388132	75.0	79.3	
87 Chlorobenzene	112	10.388	10.388	0.000	100	622968	75.0	76.7	
88 4-Chlorobenzotrifluoride	180	10.431	10.431	0.000	100	368570	75.0	77.9	
89 1,1,1,2-Tetrachloroethane	131	10.473	10.473	0.000	100	159225	75.0	75.9	
90 Ethylbenzene	106	10.504	10.504	0.000	100	366398	75.0	78.6	
91 m-Xylene & p-Xylene	106	10.619	10.619	0.000	100	454933	75.0	79.8	
92 o-Xylene	106	11.009	11.009	0.000	100	436586	75.0	78.3	
93 Styrene	104	11.027	11.027	0.000	100	712222	75.0	79.2	
94 Bromoform	173	11.209	11.209	0.000	100	90522	75.0	76.3	
96 2-Chlorobenzotrifluoride	180	11.276	11.276	0.000	100	386985	75.0	79.2	
97 Isopropylbenzene	105	11.380	11.380	0.000	100	1137215	75.0	81.7	
99 1,1,2,2-Tetrachloroethane	83	11.678	11.678	0.000	100	264462	75.0	76.7	
100 Bromobenzene	156	11.678	11.678	0.000	100	253502	75.0	74.9	
101 1,2,3-Trichloropropane	110	11.721	11.721	0.000	100	81225	75.0	73.0	
102 trans-1,4-Dichloro-2-buten	53	11.733	11.733	0.000	100	66879	75.0	72.3	
103 N-Propylbenzene	120	11.787	11.787	0.000	100	316980	75.0	75.9	
104 2-Chlorotoluene	126	11.873	11.873	0.000	100	262207	75.0	74.7	
105 3-Chlorotoluene	126	11.933	11.933	0.000	100	291288	75.0	74.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.964	11.964	0.000	100	921783	75.0	79.2	
107 4-Chlorotoluene	126	11.982	11.982	0.000	100	296950	75.0	78.2	
108 tert-Butylbenzene	119	12.286	12.286	0.000	100	794422	75.0	78.8	
110 1,2,4-Trimethylbenzene	105	12.335	12.335	0.000	100	951216	75.0	79.6	
111 1,2-dichloro-4-(trifluorom	214	12.402	12.402	0.000	100	303120	75.0	80.3	
112 sec-Butylbenzene	105	12.511	12.511	0.000	100	1138120	75.0	80.2	
113 1,3-Dichlorobenzene	146	12.621	12.621	0.000	100	480001	75.0	77.0	
114 4-Isopropyltoluene	119	12.651	12.651	0.000	100	948139	75.0	80.9	
115 1,4-Dichlorobenzene	146	12.706	12.706	0.000	100	484138	75.0	76.0	
116 2,4-Dichloro-1-(triflourom	214	12.755	12.755	0.000	100	289446	75.0	81.8	
118 2,5-Dichlorobenzotrifluori	214	12.803	12.803	0.000	100	309155	75.0	78.1	
120 n-Butylbenzene	91	13.065	13.065	0.000	100	861784	75.0	80.7	
121 1,2-Dichlorobenzene	146	13.083	13.083	0.000	100	440732	75.0	76.3	
122 1,2-Dibromo-3-Chloropropan	75	13.856	13.856	0.000	100	36318	75.0	76.9	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.008	14.008	0.000	100	1058653	225.0	242.5	
125 2,3- & 3,4- Dichlorotoluen	125	14.428	14.428	0.000	100	694253	150.0	163.5	
126 1,2,4-Trichlorobenzene	180	14.695	14.695	0.000	100	240861	75.0	80.1	
127 Hexachlorobutadiene	225	14.866	14.866	0.000	100	112236	75.0	77.9	
128 Naphthalene	128	14.939	14.939	0.000	100	657935	75.0	83.4	
129 1,2,3-Trichlorobenzene	180	15.188	15.188	0.000	100	200345	75.0	81.3	
131 2,4,5-Trichlorotoluene	159	15.967	15.967	0.000	100	108037	75.0	81.5	
130 2,3,6-Trichlorotoluene	159	16.064	16.064	0.000	100	98974	75.0	82.7	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		150.0	158.1	
S 134 1,2-Dichloroethene, Total	96				0		150.0	157.3	
S 135 1,3-Dichloropropene, Total	1				0		150.0	147.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00003	Amount Added:	7.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	3.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	3.00	Units: uL	
VOA8260SURR_00032	Amount Added:	3.00	Units: uL	
VOA8260VOAPRI_00105	Amount Added:	3.00	Units: uL	
VOAVAPRI_00005	Amount Added:	3.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent

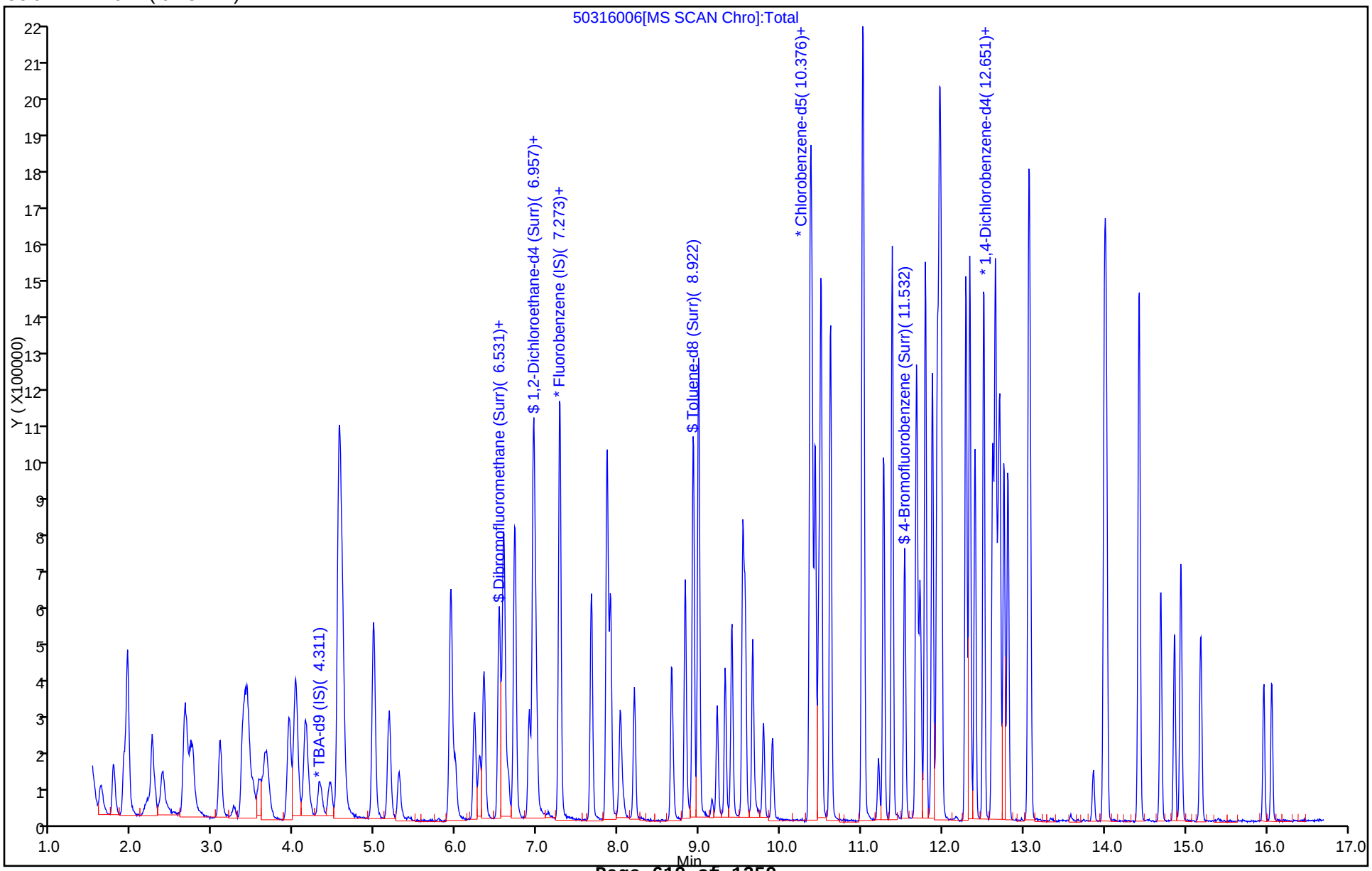
Report Date: 17-Mar-2015 10:59:27 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316006.D

Injection Date:	16-Mar-2015 13:29:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD15			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

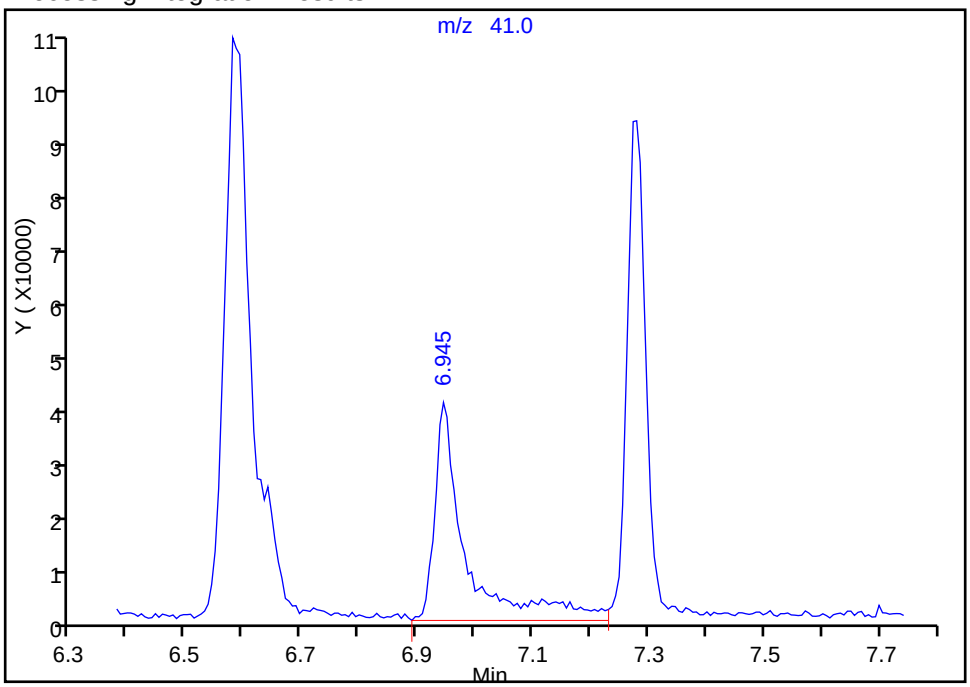
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316006.D				
Injection Date:	16-Mar-2015 13:29:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD15				
Client ID:					
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

57 Isobutyl alcohol, CAS: 78-83-1

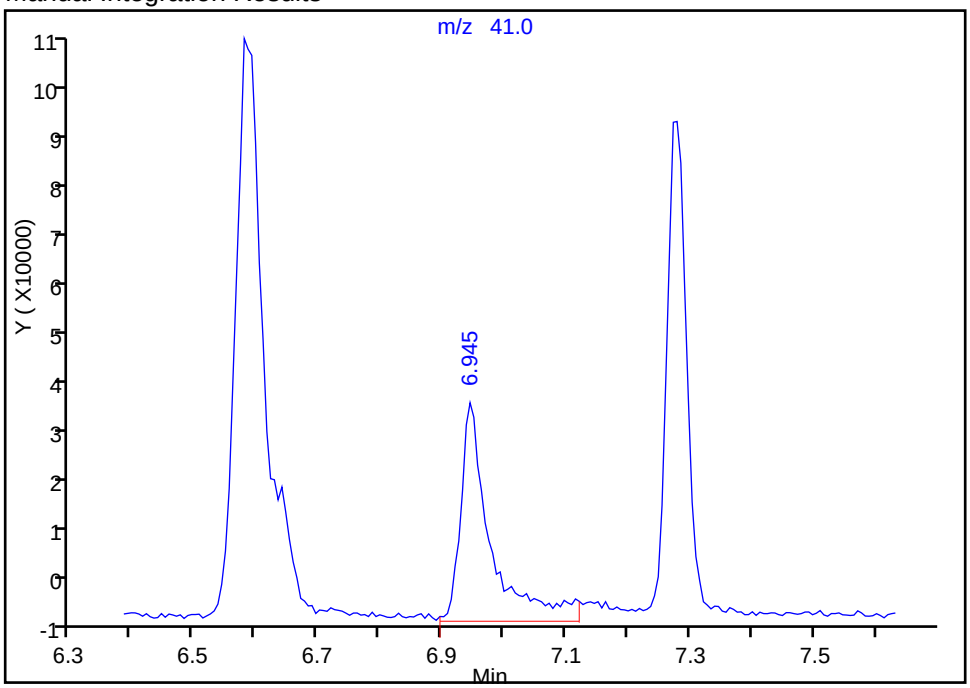
Processing Integration Results

RT: 6.94
Area: 150922
Amount: 2067.3126
Amount Units: ng



Manual Integration Results

RT: 6.94
Area: 137203
Amount: 1937.8985
Amount Units: ng



Reviewer: fergusond, 17-Mar-2015 09:45:06
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316007.D
Lims ID: IC VSTD20
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-Mar-2015 13:53:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD20
Misc. Info.: 180-0006031-007
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:28 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 17-Mar-2015 09:48:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.326	4.305	0.021	86	154462	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.270	7.273	-0.003	99	558174	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.367	10.364	0.003	99	128898	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.685	12.682	0.003	99	188542	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.528	6.525	0.003	99	248750	100.0	98.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.899	6.902	-0.003	97	335757	100.0	100.3	
$ 7 Toluene-d8 (Surr)	98	8.919	8.922	-0.003	100	1053927	100.0	102.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.529	11.532	-0.003	98	379740	100.0	102.6	
11 Dichlorodifluoromethane	85	1.619	1.622	-0.003	98	243823	100.0	101.9	
12 Chloromethane	50	1.777	1.768	0.009	100	316915	100.0	96.0	
13 Vinyl chloride	62	1.905	1.896	0.009	100	370271	100.0	100.3	
14 Butadiene	39	1.947	1.944	0.003	100	415323	100.0	98.5	
15 Bromomethane	94	2.251	2.249	0.002	99	192846	100.0	101.0	
16 Chloroethane	64	2.373	2.376	-0.003	99	245673	100.0	96.2	
17 Dichlorofluoromethane	67	2.653	2.644	0.009	100	548270	100.0	94.0	
18 Trichlorofluoromethane	101	2.702	2.723	-0.021	98	437688	100.0	98.9	
20 Ethyl ether	59	3.085	3.082	0.003	100	293889	100.0	100.7	
21 Acrolein	56	3.261	3.258	0.003	99	71073	200.0	200.4	
22 1,1-Dichloroethene	96	3.377	3.374	0.003	98	318457	100.0	98.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.432	3.423	0.009	98	319162	100.0	98.0	
24 Acetone	43	3.492	3.496	-0.004	100	217095	200.0	189.9	
25 Iodomethane	142	3.596	3.581	0.015	99	439512	100.0	98.3	
26 Carbon disulfide	76	3.669	3.660	0.009	100	772081	100.0	98.1	
28 3-Chloro-1-propene	76	3.930	3.934	-0.004	99	163875	100.0	96.3	
30 Methyl acetate	43	4.022	4.019	0.003	100	1321970	500.0	494.2	
31 Methylene Chloride	84	4.143	4.147	-0.004	98	345226	100.0	92.7	
32 2-Methyl-2-propanol	59	4.435	4.439	-0.004	99	175500	1000.0	964.6	
33 Acrylonitrile	53	4.551	4.554	-0.003	100	1363975	1000.0	991.2	
34 trans-1,2-Dichloroethene	96	4.557	4.560	-0.003	95	327278	100.0	98.3	
35 Methyl tert-butyl ether	73	4.594	4.597	-0.003	99	727030	100.0	98.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.983	4.980	0.003	99	514868	100.0	96.8	
37 1,1-Dichloroethane	63	5.171	5.175	-0.004	100	595324	100.0	100.2	
38 Vinyl acetate	43	5.293	5.296	-0.003	100	419086	100.0	99.4	
44 2,2-Dichloropropane	77	5.926	5.929	-0.003	98	147216	100.0	99.1	
45 cis-1,2-Dichloroethene	96	5.938	5.941	-0.003	98	349805	100.0	99.7	
46 2-Butanone (MEK)	43	5.987	5.990	-0.003	100	371447	200.0	203.2	
49 Chlorobromomethane	128	6.230	6.227	0.003	98	150204	100.0	99.0	
51 Tetrahydrofuran	42	6.285	6.282	0.003	99	224920	200.0	196.4	
52 Chloroform	83	6.346	6.343	0.003	100	534362	100.0	99.0	
53 1,1,1-Trichloroethane	97	6.528	6.531	-0.003	99	344772	100.0	100.0	
54 Cyclohexane	56	6.589	6.586	0.003	99	649387	100.0	98.1	
56 Carbon tetrachloride	117	6.717	6.720	-0.003	98	274328	100.0	99.2	
55 1,1-Dichloropropene	75	6.723	6.726	-0.003	98	436454	100.0	97.5	
57 Isobutyl alcohol	41	6.942	6.945	-0.003	98	174166	2500.0	2337.7	M
58 Benzene	78	6.954	6.957	-0.003	99	1312435	100.0	99.2	
59 1,2-Dichloroethane	62	6.984	6.988	-0.004	99	429724	100.0	99.2	
62 n-Heptane	43	7.276	7.280	-0.004	99	443357	100.0	97.6	
64 Trichloroethene	130	7.666	7.669	-0.003	99	326599	100.0	98.5	
66 Methylcyclohexane	83	7.860	7.864	-0.004	100	583894	100.0	98.7	
67 1,2-Dichloropropane	63	7.903	7.906	-0.003	99	332279	100.0	101.6	
68 Dibromomethane	93	8.025	8.022	0.003	99	178905	100.0	101.6	
70 1,4-Dioxane	88	8.055	8.058	-0.003	99	66490	2000.0	1930.1	
71 Dichlorobromomethane	83	8.195	8.198	-0.003	98	363842	100.0	101.2	
74 cis-1,3-Dichloropropene	75	8.657	8.661	-0.004	99	345528	100.0	99.6	
75 4-Methyl-2-pentanone (MIBK	43	8.822	8.825	-0.003	100	747218	200.0	214.2	
76 Toluene	91	8.992	8.989	0.003	100	1340817	100.0	101.5	
77 trans-1,3-Dichloropropene	75	9.217	9.220	-0.003	99	244258	100.0	102.4	
78 Ethyl methacrylate	69	9.314	9.318	-0.004	97	334858	100.0	107.6	
79 1,1,2-Trichloroethane	97	9.399	9.403	-0.004	99	252461	100.0	101.9	
80 Tetrachloroethene	164	9.539	9.537	0.002	99	261148	100.0	101.1	
81 1,3-Dichloropropane	76	9.564	9.561	0.003	100	467174	100.0	101.5	
82 2-Hexanone	43	9.655	9.658	-0.003	100	541680	200.0	203.2	
84 Chlorodibromomethane	129	9.789	9.792	-0.003	99	210013	100.0	106.2	
85 Ethylene Dibromide	107	9.898	9.902	-0.004	100	245946	100.0	104.0	
86 3-Chlorobenzotrifluoride	180	10.373	10.370	0.003	97	511845	100.0	101.6	
87 Chlorobenzene	112	10.391	10.388	0.003	100	845046	100.0	101.0	
88 4-Chlorobenzotrifluoride	180	10.428	10.431	-0.003	99	511237	100.0	104.9	
89 1,1,1,2-Tetrachloroethane	131	10.476	10.473	0.003	95	233228	100.0	107.9	
90 Ethylbenzene	106	10.501	10.504	-0.003	100	488611	100.0	101.8	
91 m-Xylene & p-Xylene	106	10.616	10.619	-0.003	100	592135	100.0	100.8	
92 o-Xylene	106	11.012	11.009	0.003	100	585609	100.0	101.9	
93 Styrene	104	11.024	11.027	-0.003	95	966850	100.0	104.4	
94 Bromoform	173	11.212	11.209	0.003	98	126605	100.0	103.7	
96 2-Chlorobenzotrifluoride	180	11.273	11.276	-0.003	99	521379	100.0	103.6	
97 Isopropylbenzene	105	11.377	11.380	-0.003	100	1474178	100.0	102.8	
99 1,1,2,2-Tetrachloroethane	83	11.675	11.678	-0.003	98	351798	100.0	99.0	
100 Bromobenzene	156	11.681	11.678	0.003	99	346996	100.0	99.4	
101 1,2,3-Trichloropropane	110	11.717	11.721	-0.003	97	111668	100.0	97.4	
102 trans-1,4-Dichloro-2-buten	53	11.729	11.733	-0.004	97	92761	100.0	97.3	
103 N-Propylbenzene	120	11.784	11.787	-0.003	100	419888	100.0	97.5	
104 2-Chlorotoluene	126	11.875	11.873	0.002	100	351403	100.0	97.2	
105 3-Chlorotoluene	126	11.936	11.933	0.003	98	415463	100.0	102.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.961	11.964	-0.003	100	1188743	100.0	99.0	
107 4-Chlorotoluene	126	11.985	11.982	0.003	97	377870	100.0	96.5	
108 tert-Butylbenzene	119	12.289	12.286	0.003	99	1020106	100.0	98.1	
110 1,2,4-Trimethylbenzene	105	12.338	12.335	0.003	100	1214438	100.0	98.6	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.402	-0.003	100	396211	100.0	101.8	
112 sec-Butylbenzene	105	12.508	12.511	-0.003	100	1462842	100.0	99.9	
113 1,3-Dichlorobenzene	146	12.618	12.621	-0.003	99	630675	100.0	98.1	
114 4-Isopropyltoluene	119	12.648	12.651	-0.003	100	1195021	100.0	98.9	
115 1,4-Dichlorobenzene	146	12.709	12.706	0.003	99	642365	100.0	97.8	
116 2,4-Dichloro-1-(triflourom	214	12.758	12.755	0.003	98	358539	100.0	98.3	
118 2,5-Dichlorobenzotrifluori	214	12.806	12.803	0.003	99	406971	100.0	99.8	
120 n-Butylbenzene	91	13.062	13.065	-0.003	100	1093564	100.0	99.4	
121 1,2-Dichlorobenzene	146	13.080	13.083	-0.003	99	595901	100.0	100.1	
122 1,2-Dibromo-3-Chloropropan	75	13.859	13.856	0.003	95	47067	100.0	96.6	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.005	14.008	-0.003	100	1333690	300.0	296.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.424	14.428	-0.004	100	866884	200.0	198.1	
126 1,2,4-Trichlorobenzene	180	14.692	14.695	-0.003	99	295444	100.0	95.3	
127 Hexachlorobutadiene	225	14.862	14.866	-0.004	98	140410	100.0	94.5	
128 Naphthalene	128	14.942	14.939	0.003	100	789643	100.0	97.0	
129 1,2,3-Trichlorobenzene	180	15.185	15.188	-0.003	98	242534	100.0	95.4	
131 2,4,5-Trichlorotoluene	159	15.964	15.967	-0.003	98	123791	100.0	90.6	
130 2,3,6-Trichlorotoluene	159	16.061	16.064	-0.003	98	110702	100.0	89.7	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		200.0	202.8	
S 134 1,2-Dichloroethene, Total	96				0		200.0	198.0	
S 135 1,3-Dichloropropene, Total	1				0		200.0	202.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAVAPRI_00005	Amount Added:	4.00	Units: uL	
VOA8260VOAPRI_00105	Amount Added:	4.00	Units: uL	
VOA8260SURR_00032	Amount Added:	4.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	4.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	4.00	Units: uL	
VOAACRPRI_00003	Amount Added:	8.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent

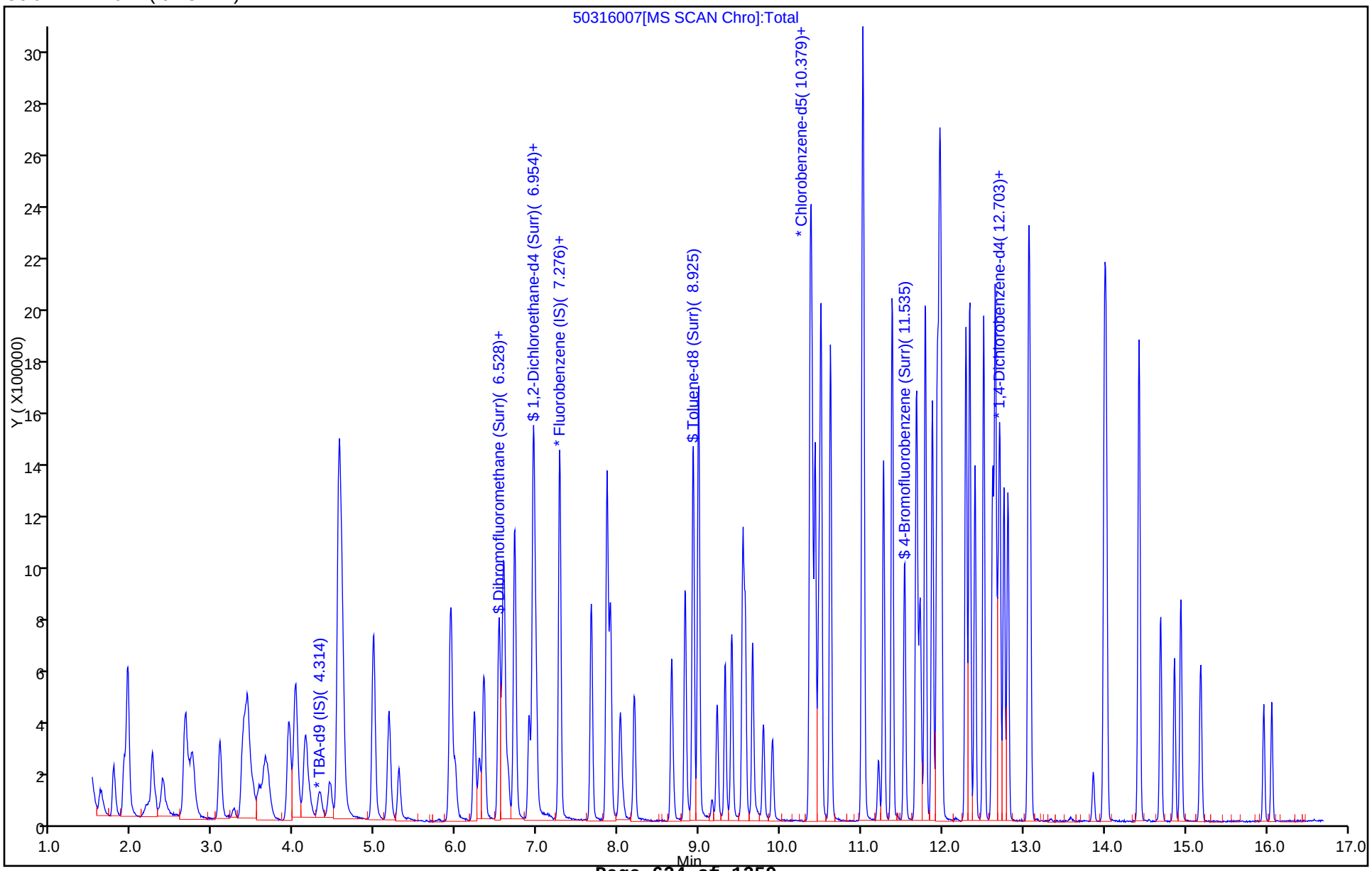
Report Date: 17-Mar-2015 10:59:29 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316007.D

Injection Date:	16-Mar-2015 13:53:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD20			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

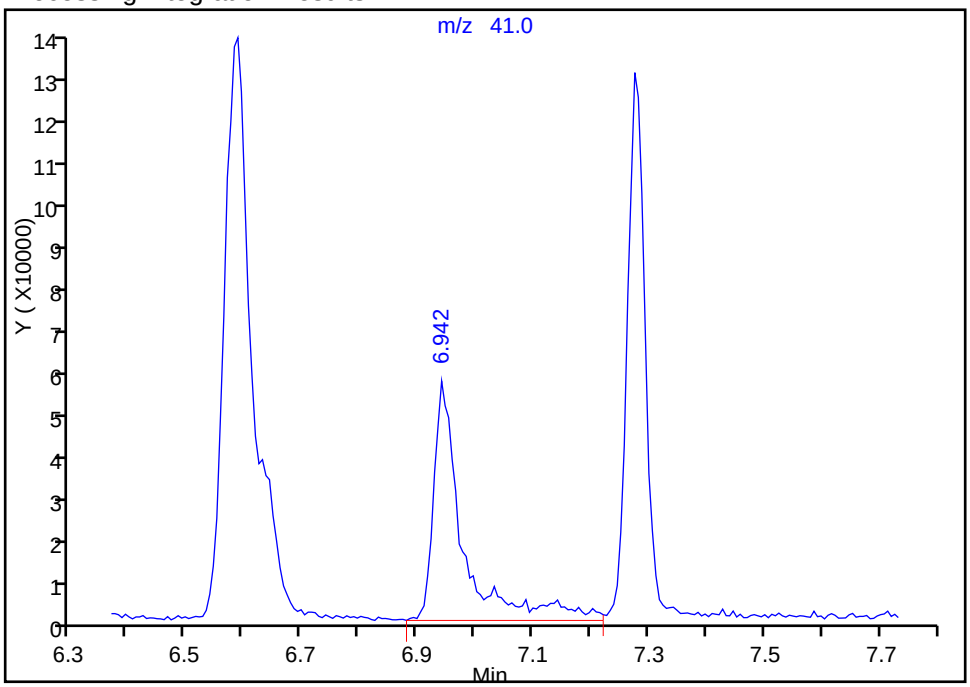
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316007.D				
Injection Date:	16-Mar-2015 13:53:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD20				
Client ID:					
Operator ID:	001562	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

57 Isobutyl alcohol, CAS: 78-83-1

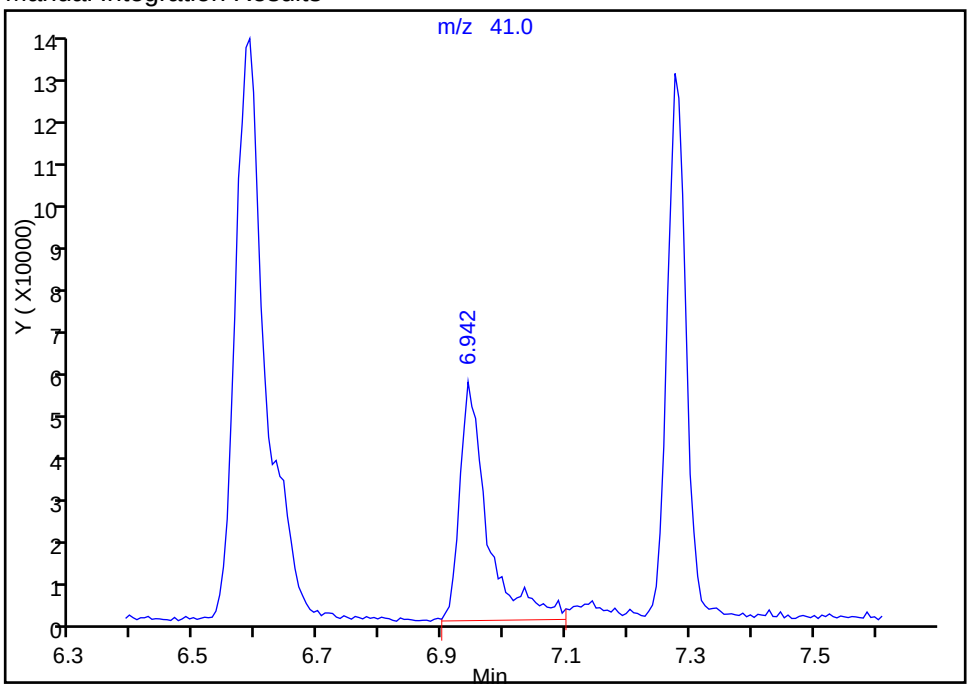
Processing Integration Results

RT: 6.94
Area: 197796
Amount: 2559.7908
Amount Units: ng



Manual Integration Results

RT: 6.94
Area: 174166
Amount: 2337.6542
Amount Units: ng



Reviewer: fergusond, 17-Mar-2015 09:48:25
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316008.D
Lims ID: IC VSTD35
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-Mar-2015 14:17:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD35
Misc. Info.: 180-0006031-008
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:29 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 17-Mar-2015 09:49:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.309	4.305	0.004	95	172412	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.273	-0.002	99	562344	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.362	10.364	-0.002	92	147916	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.686	12.682	0.004	95	201448	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.529	6.525	0.004	99	435320	175.0	170.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.902	-0.002	98	589491	175.0	174.8	
$ 7 Toluene-d8 (Surr)	98	8.920	8.922	-0.002	99	1858068	175.0	157.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.530	11.532	-0.002	98	701915	175.0	165.3	
11 Dichlorodifluoromethane	85	1.614	1.622	-0.008	99	432190	175.0	179.3	
12 Chloromethane	50	1.772	1.768	0.004	100	573343	175.0	172.3	
13 Vinyl chloride	62	1.906	1.896	0.010	100	624000	175.0	167.8	
14 Butadiene	39	1.948	1.944	0.004	99	709784	175.0	167.1	
15 Bromomethane	94	2.252	2.249	0.003	100	307964	175.0	162.9	
16 Chloroethane	64	2.380	2.376	0.004	98	455903	175.0	177.2	
17 Dichlorofluoromethane	67	2.648	2.644	0.004	100	974888	175.0	166.0	
18 Trichlorofluoromethane	101	2.703	2.723	-0.020	98	772293	175.0	173.1	
20 Ethyl ether	59	3.086	3.082	0.004	99	519119	175.0	176.5	
21 Acrolein	56	3.250	3.258	-0.008	100	81646	225.0	228.5	
22 1,1-Dichloroethene	96	3.372	3.374	-0.002	98	562804	175.0	173.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.427	3.423	0.004	98	577719	175.0	176.1	
24 Acetone	43	3.493	3.496	-0.003	100	429781	350.0	373.1	
25 Iodomethane	142	3.573	3.581	-0.008	100	784350	175.0	174.1	
26 Carbon disulfide	76	3.652	3.660	-0.008	100	1381152	175.0	174.2	
28 3-Chloro-1-propene	76	3.931	3.934	-0.003	100	314052	175.0	183.2	
30 Methyl acetate	43	4.017	4.019	-0.002	100	2407305	875.0	893.2	
31 Methylene Chloride	84	4.138	4.147	-0.009	97	597904	175.0	159.4	
32 2-Methyl-2-propanol	59	4.442	4.439	0.003	99	351016	1750.0	1728.4	
33 Acrylonitrile	53	4.546	4.554	-0.008	99	2446379	1750.0	1764.6	
34 trans-1,2-Dichloroethene	96	4.558	4.560	-0.002	92	581552	175.0	173.4	
35 Methyl tert-butyl ether	73	4.595	4.597	-0.002	98	1347848	175.0	181.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.978	4.980	-0.002	99	929791	175.0	173.5	
37 1,1-Dichloroethane	63	5.166	5.175	-0.009	100	1052201	175.0	175.7	
38 Vinyl acetate	43	5.294	5.296	-0.002	100	831670	175.0	195.8	
44 2,2-Dichloropropane	77	5.927	5.929	-0.002	98	280515	175.0	187.4	
45 cis-1,2-Dichloroethene	96	5.933	5.941	-0.008	98	612812	175.0	173.4	
46 2-Butanone (MEK)	43	5.982	5.990	-0.008	100	665013	350.0	361.1	
49 Chlorobromomethane	128	6.225	6.227	-0.002	99	269375	175.0	176.2	
51 Tetrahydrofuran	42	6.286	6.282	0.004	100	415944	350.0	360.6	
52 Chloroform	83	6.341	6.343	-0.003	100	953676	175.0	175.3	
53 1,1,1-Trichloroethane	97	6.529	6.531	-0.002	99	639960	175.0	184.3	
54 Cyclohexane	56	6.584	6.586	-0.002	99	1161488	175.0	174.2	
56 Carbon tetrachloride	117	6.718	6.720	-0.002	100	504991	175.0	181.2	
55 1,1-Dichloropropene	75	6.724	6.726	-0.002	100	783682	175.0	173.7	
57 Isobutyl alcohol	41	6.943	6.945	-0.002	98	386141	4375.0	5144.3	
58 Benzene	78	6.955	6.957	-0.002	98	2286079	175.0	171.5	
59 1,2-Dichloroethane	62	6.985	6.988	-0.003	99	781760	175.0	179.2	
62 n-Heptane	43	7.277	7.280	-0.003	90	819785	175.0	179.1	
64 Trichloroethene	130	7.667	7.669	-0.002	99	586010	175.0	175.5	
66 Methylcyclohexane	83	7.861	7.864	-0.003	100	1055175	175.0	177.1	
67 1,2-Dichloropropane	63	7.904	7.906	-0.002	98	597514	175.0	181.3	
68 Dibromomethane	93	8.026	8.022	0.004	100	308441	175.0	173.8	
70 1,4-Dioxane	88	8.056	8.058	-0.002	97	132396	3500.0	3814.7	
71 Dichlorobromomethane	83	8.196	8.198	-0.002	100	663337	175.0	183.2	
74 cis-1,3-Dichloropropene	75	8.658	8.661	-0.003	100	681682	175.0	195.1	
75 4-Methyl-2-pentanone (MIBK	43	8.823	8.825	-0.002	99	1390980	350.0	347.5	
76 Toluene	91	8.993	8.989	0.004	99	2347437	175.0	154.9	
77 trans-1,3-Dichloropropene	75	9.218	9.220	-0.002	98	502980	175.0	183.7	
78 Ethyl methacrylate	69	9.315	9.318	-0.003	98	654210	175.0	183.2	
79 1,1,2-Trichloroethane	97	9.400	9.403	-0.003	100	465584	175.0	163.8	
80 Tetrachloroethene	164	9.534	9.537	-0.003	99	477004	175.0	160.9	
81 1,3-Dichloropropane	76	9.565	9.561	0.004	99	854593	175.0	161.7	
82 2-Hexanone	43	9.656	9.658	-0.002	100	1103034	350.0	360.6	
84 Chlorodibromomethane	129	9.790	9.792	-0.002	99	406960	175.0	179.4	
85 Ethylene Dibromide	107	9.899	9.902	-0.003	99	461219	175.0	170.0	
86 3-Chlorobenzotrifluoride	180	10.374	10.370	0.004	87	925933	175.0	160.1	
87 Chlorobenzene	112	10.392	10.388	0.004	99	1507544	175.0	157.0	
88 4-Chlorobenzotrifluoride	180	10.429	10.431	-0.002	99	908777	175.0	162.5	
89 1,1,1,2-Tetrachloroethane	131	10.471	10.473	-0.002	95	439701	175.0	177.3	
90 Ethylbenzene	106	10.502	10.504	-0.002	99	889389	175.0	161.4	
91 m-Xylene & p-Xylene	106	10.617	10.619	-0.002	99	1092005	175.0	162.0	
92 o-Xylene	106	11.013	11.009	0.004	98	1059986	175.0	160.8	
93 Styrene	104	11.025	11.027	-0.002	93	1723778	175.0	162.3	
94 Bromoform	173	11.213	11.209	0.004	99	253560	175.0	180.9	
96 2-Chlorobenzotrifluoride	180	11.274	11.276	-0.002	99	922108	175.0	159.7	
97 Isopropylbenzene	105	11.378	11.380	-0.002	98	2580136	175.0	156.9	
99 1,1,2,2-Tetrachloroethane	83	11.676	11.678	-0.002	99	681581	175.0	167.2	
100 Bromobenzene	156	11.682	11.678	0.004	98	637569	175.0	171.0	
101 1,2,3-Trichloropropane	110	11.718	11.721	-0.002	98	214358	175.0	174.9	
102 trans-1,4-Dichloro-2-buten	53	11.730	11.733	-0.003	98	180624	175.0	177.3	
103 N-Propylbenzene	120	11.791	11.787	0.004	99	780243	175.0	169.6	
104 2-Chlorotoluene	126	11.876	11.873	0.003	99	666866	175.0	172.6	
105 3-Chlorotoluene	126	11.937	11.933	0.004	97	757051	175.0	175.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.962	11.964	-0.002	99	2136446	175.0	166.6	
107 4-Chlorotoluene	126	11.986	11.982	0.004	97	711885	175.0	170.2	
108 tert-Butylbenzene	119	12.290	12.286	0.004	100	1828125	175.0	164.5	
110 1,2,4-Trimethylbenzene	105	12.339	12.335	0.004	98	2187785	175.0	166.2	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.402	-0.002	100	719294	175.0	172.9	
112 sec-Butylbenzene	105	12.509	12.511	-0.002	99	2565671	175.0	164.1	
113 1,3-Dichlorobenzene	146	12.619	12.621	-0.002	99	1159025	175.0	168.7	
114 4-Isopropyltoluene	119	12.655	12.651	0.004	98	2157955	175.0	167.2	
115 1,4-Dichlorobenzene	146	12.704	12.706	-0.002	99	1196958	175.0	170.6	
116 2,4-Dichloro-1-(triflourom	214	12.759	12.755	0.004	99	675783	175.0	173.5	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.803	0.004	99	748317	175.0	171.7	
120 n-Butylbenzene	91	13.063	13.065	-0.002	99	1983203	175.0	168.7	
121 1,2-Dichlorobenzene	146	13.081	13.083	-0.002	99	1092014	175.0	171.7	
122 1,2-Dibromo-3-Chloropropan	75	13.860	13.856	0.004	95	97714	175.0	187.7	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.006	14.008	-0.002	99	2487475	525.0	517.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.425	14.428	-0.003	98	1639357	350.0	350.6	
126 1,2,4-Trichlorobenzene	180	14.693	14.695	-0.002	100	608110	175.0	183.6	
127 Hexachlorobutadiene	225	14.863	14.866	-0.003	98	274932	175.0	173.1	
128 Naphthalene	128	14.943	14.939	0.004	100	1599300	175.0	183.9	
129 1,2,3-Trichlorobenzene	180	15.186	15.188	-0.002	100	504504	175.0	185.8	
131 2,4,5-Trichlorotoluene	159	15.965	15.967	-0.002	99	273662	175.0	187.4	
130 2,3,6-Trichlorotoluene	159	16.062	16.064	-0.002	99	246163	175.0	186.7	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		350.0	322.8	
S 134 1,2-Dichloroethene, Total	96				0		350.0	346.8	
S 135 1,3-Dichloropropene, Total	1				0		350.0	378.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

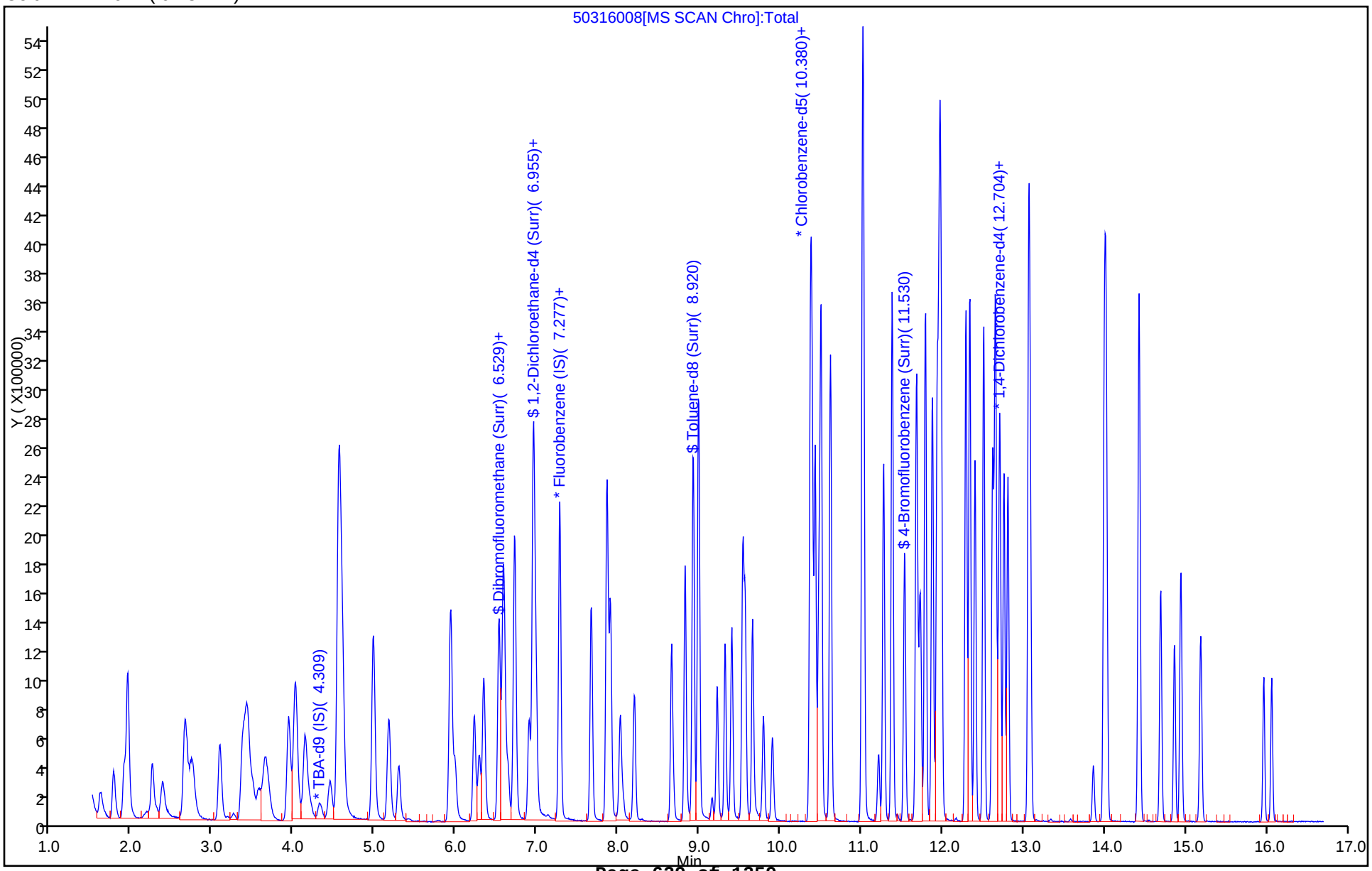
VOAACRPRI_00003	Amount Added:	9.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	7.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	7.00	Units: uL	
VOA8260SURR_00032	Amount Added:	7.00	Units: uL	
VOA8260VOAPRI_00105	Amount Added:	7.00	Units: uL	
VOAVAPRI_00005	Amount Added:	7.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 17-Mar-2015 10:59:30 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316008.D				
Injection Date:	16-Mar-2015 14:17:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD35			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316009.D
Lims ID: IC VSTD40
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 16-Mar-2015 14:41:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD40
Misc. Info.: 180-0006031-009
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:31 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 17-Mar-2015 09:50:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.327	4.305	0.022	86	183503	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.273	-0.002	99	592746	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.368	10.364	0.004	94	147746	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.685	12.682	0.003	94	203483	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.529	6.525	0.004	99	526164	200.0	195.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.902	-0.002	98	691002	200.0	194.4	
$ 7 Toluene-d8 (Surr)	98	8.926	8.922	0.004	99	2153477	200.0	182.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.529	11.532	-0.003	98	798953	200.0	188.3	
11 Dichlorodifluoromethane	85	1.619	1.622	-0.003	99	522240	200.0	205.5	
12 Chloromethane	50	1.778	1.768	0.010	100	674845	200.0	192.4	
13 Vinyl chloride	62	1.905	1.896	0.009	100	767804	200.0	195.9	
14 Butadiene	39	1.948	1.944	0.004	98	840803	200.0	187.8	
15 Bromomethane	94	2.252	2.249	0.003	100	366671	200.0	184.6	
16 Chloroethane	64	2.374	2.376	-0.002	99	530813	200.0	195.7	
17 Dichlorofluoromethane	67	2.654	2.644	0.010	99	1188936	200.0	192.0	
18 Trichlorofluoromethane	101	2.733	2.723	0.010	98	946313	200.0	201.3	
20 Ethyl ether	59	3.092	3.082	0.010	100	592652	200.0	191.1	
21 Acrolein	56	3.250	3.258	-0.008	100	95028	250.0	252.3	
22 1,1-Dichloroethene	96	3.378	3.374	0.004	98	662050	200.0	193.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.432	3.423	0.009	98	684103	200.0	197.9	
24 Acetone	43	3.505	3.496	0.009	100	489133	400.0	402.8	
25 Iodomethane	142	3.597	3.581	0.016	100	945860	200.0	199.2	
26 Carbon disulfide	76	3.664	3.660	0.004	100	1643948	200.0	196.7	
28 3-Chloro-1-propene	76	3.931	3.934	-0.003	99	393345	200.0	217.7	
30 Methyl acetate	43	4.022	4.019	0.003	99	2810332	1000.0	989.3	
31 Methylene Chloride	84	4.144	4.147	-0.003	98	703059	200.0	177.9	
32 2-Methyl-2-propanol	59	4.448	4.439	0.009	99	399281	2000.0	1847.2	
33 Acrylonitrile	53	4.552	4.554	-0.002	99	2868164	2000.0	1962.8	
34 trans-1,2-Dichloroethene	96	4.564	4.560	0.004	96	692220	200.0	195.8	
35 Methyl tert-butyl ether	73	4.600	4.597	0.003	98	1581345	200.0	202.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.978	4.980	-0.002	100	1096478	200.0	194.1	
37 1,1-Dichloroethane	63	5.172	5.175	-0.003	100	1250453	200.0	198.2	
38 Vinyl acetate	43	5.294	5.296	-0.002	100	1001771	200.0	223.8	
44 2,2-Dichloropropane	77	5.927	5.929	-0.002	98	338302	200.0	214.4	
45 cis-1,2-Dichloroethene	96	5.933	5.941	-0.008	98	721075	200.0	193.6	
46 2-Butanone (MEK)	43	5.987	5.990	-0.003	100	809232	400.0	416.8	
49 Chlorobromomethane	128	6.225	6.227	-0.002	98	311076	200.0	193.0	
51 Tetrahydrofuran	42	6.286	6.282	0.004	99	483324	400.0	397.5	
52 Chloroform	83	6.340	6.343	-0.003	100	1109416	200.0	193.5	
53 1,1,1-Trichloroethane	97	6.529	6.531	-0.002	99	768585	200.0	210.0	
54 Cyclohexane	56	6.584	6.586	-0.002	99	1366913	200.0	194.5	
56 Carbon tetrachloride	117	6.717	6.720	-0.003	99	612080	200.0	208.4	
55 1,1-Dichloropropene	75	6.724	6.726	-0.002	99	933326	200.0	196.3	
57 Isobutyl alcohol	41	6.949	6.945	0.004	98	433313	5000.0	5476.7	
58 Benzene	78	6.955	6.957	-0.002	97	2653105	200.0	188.9	
59 1,2-Dichloroethane	62	6.985	6.988	-0.003	99	907622	200.0	197.3	
62 n-Heptane	43	7.277	7.280	-0.003	88	940924	200.0	195.0	
64 Trichloroethene	130	7.666	7.669	-0.003	99	684010	200.0	194.4	
66 Methylcyclohexane	83	7.861	7.864	-0.003	100	1212427	200.0	193.1	
67 1,2-Dichloropropane	63	7.904	7.906	-0.002	98	700921	200.0	201.7	
68 Dibromomethane	93	8.025	8.022	0.003	99	370624	200.0	198.1	
70 1,4-Dioxane	88	8.062	8.058	0.004	98	146272	4000.0	3998.4	
71 Dichlorobromomethane	83	8.196	8.198	-0.002	100	773432	200.0	202.6	
74 cis-1,3-Dichloropropene	75	8.658	8.661	-0.003	99	829306	200.0	225.1	
75 4-Methyl-2-pentanone (MIBK	43	8.822	8.825	-0.003	99	1617802	400.0	404.7	
76 Toluene	91	8.993	8.989	0.004	99	2714932	200.0	179.3	
77 trans-1,3-Dichloropropene	75	9.218	9.220	-0.002	98	613747	200.0	224.4	
78 Ethyl methacrylate	69	9.315	9.318	-0.003	98	782394	200.0	219.4	
79 1,1,2-Trichloroethane	97	9.400	9.403	-0.003	99	540864	200.0	190.5	
80 Tetrachloroethene	164	9.540	9.537	0.003	99	545517	200.0	184.2	
81 1,3-Dichloropropane	76	9.564	9.561	0.003	99	1001573	200.0	189.8	
82 2-Hexanone	43	9.656	9.658	-0.002	100	1305223	400.0	427.2	
84 Chlorodibromomethane	129	9.790	9.792	-0.002	99	473922	200.0	209.1	
85 Ethylene Dibromide	107	9.899	9.902	-0.003	100	534328	200.0	197.2	
86 3-Chlorobenzotrifluoride	180	10.374	10.370	0.004	88	1122812	200.0	194.4	
87 Chlorobenzene	112	10.392	10.388	0.004	99	1745676	200.0	182.0	
88 4-Chlorobenzotrifluoride	180	10.428	10.431	-0.003	99	1108797	200.0	198.5	
89 1,1,1,2-Tetrachloroethane	131	10.477	10.473	0.004	95	512980	200.0	207.1	
90 Ethylbenzene	106	10.501	10.504	-0.003	98	1044399	200.0	189.8	
91 m-Xylene & p-Xylene	106	10.617	10.619	-0.002	98	1256840	200.0	186.7	
92 o-Xylene	106	11.012	11.009	0.003	99	1214164	200.0	184.4	
93 Styrene	104	11.025	11.027	-0.002	97	1958961	200.0	184.6	
94 Bromoform	173	11.213	11.209	0.004	98	293938	200.0	210.0	
96 2-Chlorobenzotrifluoride	180	11.274	11.276	-0.002	99	1120386	200.0	194.2	
97 Isopropylbenzene	105	11.377	11.380	-0.003	98	2885608	200.0	175.6	
99 1,1,2,2-Tetrachloroethane	83	11.675	11.678	-0.003	98	772016	200.0	189.6	
100 Bromobenzene	156	11.682	11.678	0.004	99	740842	200.0	196.7	
101 1,2,3-Trichloropropane	110	11.718	11.721	-0.002	96	233938	200.0	189.0	
102 trans-1,4-Dichloro-2-buten	53	11.730	11.733	-0.003	98	211691	200.0	205.7	
103 N-Propylbenzene	120	11.791	11.787	0.004	98	887838	200.0	191.1	
104 2-Chlorotoluene	126	11.870	11.873	-0.003	99	756732	200.0	193.9	
105 3-Chlorotoluene	126	11.937	11.933	0.004	97	890638	200.0	204.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.961	11.964	-0.003	99	2387945	200.0	184.4	
107 4-Chlorotoluene	126	11.980	11.982	-0.002	96	795532	200.0	188.3	
108 tert-Butylbenzene	119	12.290	12.286	0.004	99	2060731	200.0	183.6	
110 1,2,4-Trimethylbenzene	105	12.339	12.335	0.004	99	2461131	200.0	185.1	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.402	-0.003	99	832435	200.0	198.1	
112 sec-Butylbenzene	105	12.509	12.511	-0.002	99	2854173	200.0	180.7	
113 1,3-Dichlorobenzene	146	12.618	12.621	-0.003	99	1308081	200.0	188.5	
114 4-Isopropyltoluene	119	12.655	12.651	0.004	98	2408127	200.0	184.7	
115 1,4-Dichlorobenzene	146	12.710	12.706	0.004	99	1348596	200.0	190.3	
116 2,4-Dichloro-1-(triflourom	214	12.758	12.755	0.003	99	786683	200.0	199.9	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.803	0.004	99	877059	200.0	199.2	
120 n-Butylbenzene	91	13.062	13.065	-0.003	98	2209671	200.0	186.1	
121 1,2-Dichlorobenzene	146	13.081	13.083	-0.002	99	1224311	200.0	190.6	
122 1,2-Dibromo-3-Chloropropan	75	13.859	13.856	0.003	94	112547	200.0	214.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.005	14.008	-0.003	98	2860911	600.0	589.0	
125 2,3- & 3,4- Dichlorotoluen	125	14.425	14.428	-0.003	98	1868280	400.0	395.5	
126 1,2,4-Trichlorobenzene	180	14.693	14.695	-0.002	99	679520	200.0	203.2	
127 Hexachlorobutadiene	225	14.863	14.866	-0.003	99	307470	200.0	191.7	
128 Naphthalene	128	14.942	14.939	0.003	100	1786434	200.0	203.4	
129 1,2,3-Trichlorobenzene	180	15.186	15.188	-0.002	99	582911	200.0	212.5	
131 2,4,5-Trichlorotoluene	159	15.964	15.967	-0.003	98	315499	200.0	213.9	
130 2,3,6-Trichlorotoluene	159	16.062	16.064	-0.002	98	285573	200.0	214.4	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		400.0	371.1	
S 134 1,2-Dichloroethene, Total	96				0		400.0	389.4	
S 135 1,3-Dichloropropene, Total	1				0		400.0	449.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOAVAPRI_00005	Amount Added:	8.00	Units: uL	
VOA8260VOAPRI_00105	Amount Added:	8.00	Units: uL	
VOA8260SURR_00032	Amount Added:	8.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	8.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	8.00	Units: uL	
VOAACRPRI_00003	Amount Added:	10.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent

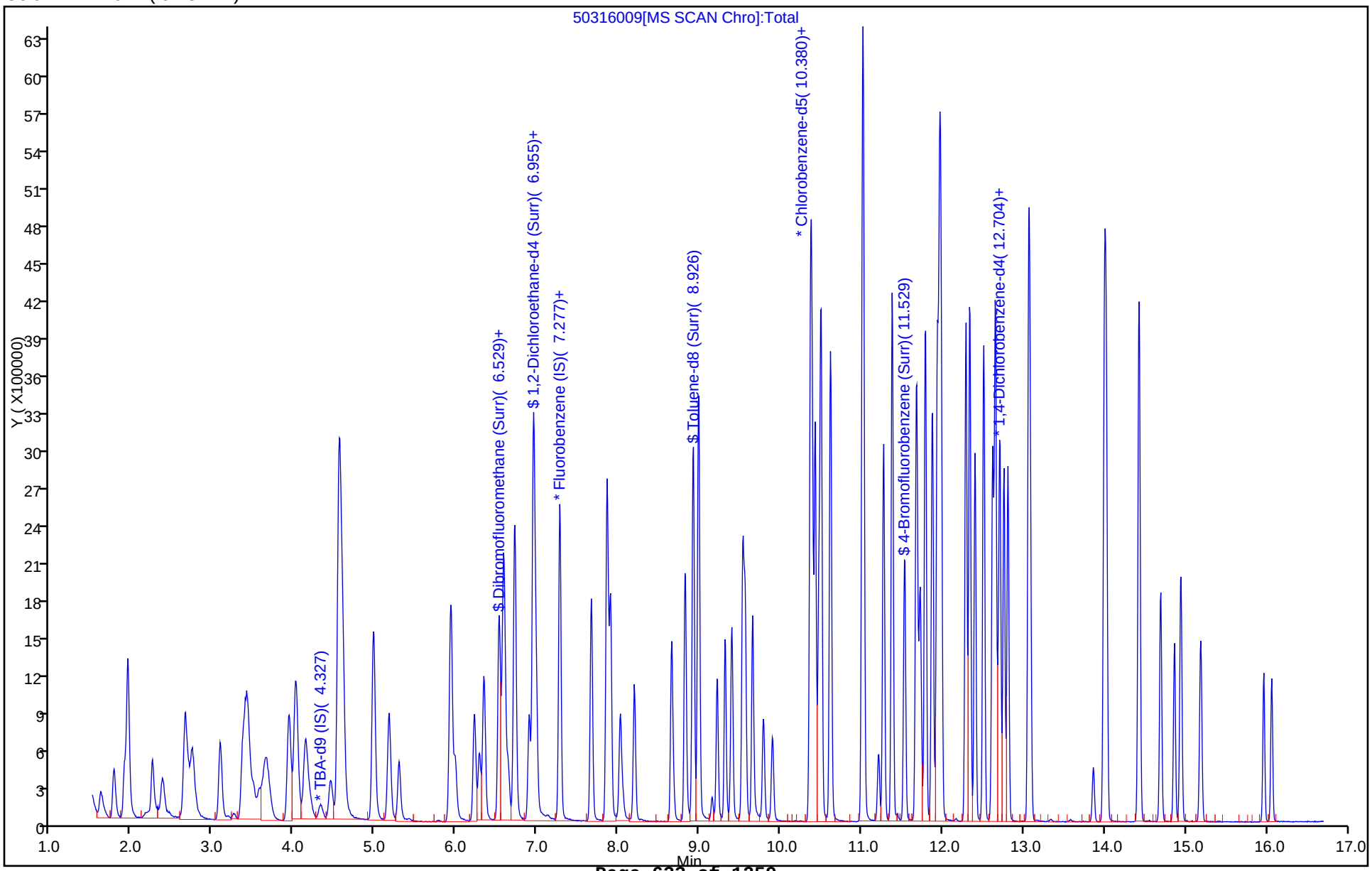
Report Date: 17-Mar-2015 10:59:31 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316009.D

Injection Date:	16-Mar-2015 14:41:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD40			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316010.D
Lims ID: IC VSTD50
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 16-Mar-2015 15:05:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD50
Misc. Info.: 180-0006031-010
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:32 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 17-Mar-2015 09:55:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.336	4.305	0.031	85	202534	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.275	7.273	0.002	99	620293	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.359	10.364	-0.005	77	161503	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.683	12.682	0.001	92	212327	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.527	6.525	0.001	99	664693	250.0	235.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.898	6.902	-0.004	99	889045	250.0	239.0	
$ 7 Toluene-d8 (Surr)	98	8.923	8.922	0.001	98	2632400	250.0	204.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.533	11.532	0.001	98	1045249	250.0	225.4	
11 Dichlorodifluoromethane	85	1.617	1.622	-0.005	99	640090	250.0	240.7	
12 Chloromethane	50	1.775	1.768	0.007	100	855933	250.0	233.2	
13 Vinyl chloride	62	1.909	1.896	0.013	100	924535	250.0	225.4	
14 Butadiene	39	1.946	1.944	0.002	99	1005925	250.0	214.7	
15 Bromomethane	94	2.250	2.249	0.001	100	461680	250.0	223.1	
16 Chloroethane	64	2.371	2.376	-0.005	99	700467	250.0	246.8	
17 Dichlorofluoromethane	67	2.651	2.644	0.007	100	1511714	250.0	233.3	
18 Trichlorofluoromethane	101	2.724	2.723	0.001	98	1178605	250.0	239.5	
20 Ethyl ether	59	3.083	3.082	0.001	99	792637	250.0	244.3	
21 Acrolein	56	3.254	3.258	-0.004	96	109180	275.0	277.0	
22 1,1-Dichloroethene	96	3.375	3.374	0.001	98	827120	250.0	231.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.424	3.423	0.001	99	834802	250.0	230.7	
24 Acetone	43	3.497	3.496	0.001	99	621064	500.0	488.8	
25 Iodomethane	142	3.594	3.581	0.013	100	1201056	250.0	241.7	
26 Carbon disulfide	76	3.655	3.660	-0.005	100	2031733	250.0	232.3	
28 3-Chloro-1-propene	76	3.935	3.934	0.001	99	482122	250.0	255.0	
30 Methyl acetate	43	4.014	4.019	-0.005	99	3718382	1250.0	1250.8	
31 Methylene Chloride	84	4.142	4.147	-0.005	98	919183	250.0	222.2	
32 2-Methyl-2-propanol	59	4.446	4.439	0.007	98	537174	2500.0	2251.6	
33 Acrylonitrile	53	4.549	4.554	-0.005	99	3721902	2500.0	2433.9	
34 trans-1,2-Dichloroethene	96	4.562	4.560	0.002	97	882651	250.0	238.6	
35 Methyl tert-butyl ether	73	4.598	4.597	0.001	98	2130684	250.0	260.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.975	4.980	-0.005	99	1379168	250.0	233.3	
37 1,1-Dichloroethane	63	5.170	5.175	-0.005	99	1604398	250.0	242.9	
38 Vinyl acetate	43	5.292	5.296	-0.004	100	1337263	250.0	285.5	
44 2,2-Dichloropropane	77	5.924	5.929	-0.005	97	452022	250.0	273.8	
45 cis-1,2-Dichloroethene	96	5.936	5.941	-0.005	97	930230	250.0	238.7	
46 2-Butanone (MEK)	43	5.985	5.990	-0.005	100	1059138	500.0	521.3	
49 Chlorobromomethane	128	6.222	6.227	-0.005	99	404105	250.0	239.6	
51 Tetrahydrofuran	42	6.283	6.282	0.001	99	646482	500.0	508.1	
52 Chloroform	83	6.338	6.343	-0.005	100	1424461	250.0	237.4	
53 1,1,1-Trichloroethane	97	6.527	6.531	-0.005	99	971626	250.0	253.6	
54 Cyclohexane	56	6.581	6.586	-0.005	98	1669676	250.0	227.0	
56 Carbon tetrachloride	117	6.715	6.720	-0.005	99	790495	250.0	257.2	
55 1,1-Dichloropropene	75	6.721	6.726	-0.005	99	1159811	250.0	233.1	
57 Isobutyl alcohol	41	6.946	6.945	0.001	97	644697	6250.0	7786.6	
58 Benzene	78	6.952	6.957	-0.005	97	3351151	250.0	228.0	
59 1,2-Dichloroethane	62	6.983	6.988	-0.005	99	1159879	250.0	241.0	
62 n-Heptane	43	7.275	7.280	-0.005	86	1182643	250.0	234.2	
64 Trichloroethene	130	7.664	7.669	-0.005	99	860273	250.0	233.6	
66 Methylcyclohexane	83	7.859	7.864	-0.005	99	1519674	250.0	231.3	
67 1,2-Dichloropropane	63	7.907	7.906	0.001	99	918714	250.0	252.7	
68 Dibromomethane	93	8.023	8.022	0.001	99	479407	250.0	244.9	
70 1,4-Dioxane	88	8.053	8.058	-0.005	98	185631	5000.0	4848.9	
71 Dichlorobromomethane	83	8.199	8.198	0.001	100	1003399	250.0	251.2	
74 cis-1,3-Dichloropropene	75	8.656	8.661	-0.005	99	1098242	250.0	284.9	
75 4-Methyl-2-pentanone (MIBK	43	8.820	8.825	-0.005	98	2109966	500.0	482.8	
76 Toluene	91	8.990	8.989	0.001	97	3368812	250.0	203.5	
77 trans-1,3-Dichloropropene	75	9.221	9.220	0.001	98	846559	250.0	283.2	
78 Ethyl methacrylate	69	9.319	9.318	0.001	98	1063861	250.0	272.9	
79 1,1,2-Trichloroethane	97	9.398	9.403	-0.005	99	706748	250.0	227.7	
80 Tetrachloroethene	164	9.538	9.537	0.001	99	690601	250.0	213.3	
81 1,3-Dichloropropane	76	9.562	9.561	0.001	100	1327847	250.0	230.2	
82 2-Hexanone	43	9.653	9.658	-0.005	99	1685534	500.0	504.7	
84 Chlorodibromomethane	129	9.787	9.792	-0.005	99	625118	250.0	252.3	
85 Ethylene Dibromide	107	9.903	9.902	0.001	99	713501	250.0	240.9	
86 3-Chlorobenzotrifluoride	180	10.371	10.370	0.001	87	1303041	250.0	206.4	
87 Chlorobenzene	112	10.390	10.388	0.002	98	2249414	250.0	214.5	
88 4-Chlorobenzotrifluoride	180	10.426	10.431	-0.005	99	1250140	250.0	204.8	
89 1,1,1,2-Tetrachloroethane	131	10.475	10.473	0.002	95	680608	250.0	251.4	
90 Ethylbenzene	106	10.499	10.504	-0.005	97	1329470	250.0	221.0	
91 m-Xylene & p-Xylene	106	10.621	10.619	0.002	97	1614511	250.0	219.4	
92 o-Xylene	106	11.010	11.009	0.001	94	1557898	250.0	216.4	
93 Styrene	104	11.022	11.027	-0.005	91	2525667	250.0	217.8	
94 Bromoform	173	11.211	11.209	0.002	99	395201	250.0	258.3	
96 2-Chlorobenzotrifluoride	180	11.272	11.276	-0.004	99	1298335	250.0	205.9	
97 Isopropylbenzene	105	11.381	11.380	0.001	97	3554151	250.0	197.9	
99 1,1,2,2-Tetrachloroethane	83	11.673	11.678	-0.005	98	1003707	250.0	225.5	
100 Bromobenzene	156	11.685	11.678	0.007	99	956763	250.0	243.5	
101 1,2,3-Trichloropropane	110	11.716	11.721	-0.004	97	325768	250.0	252.3	
102 trans-1,4-Dichloro-2-buten	53	11.728	11.733	-0.005	98	286166	250.0	266.5	
103 N-Propylbenzene	120	11.789	11.787	0.002	97	1131297	250.0	233.4	
104 2-Chlorotoluene	126	11.874	11.873	0.001	97	963573	250.0	236.6	
105 3-Chlorotoluene	126	11.935	11.933	0.002	96	1053875	250.0	231.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.965	11.964	0.001	98	2983647	250.0	220.7	
107 4-Chlorotoluene	126	11.983	11.982	0.001	97	1062581	250.0	241.0	
108 tert-Butylbenzene	119	12.288	12.286	0.002	98	2516209	250.0	214.9	
110 1,2,4-Trimethylbenzene	105	12.336	12.335	0.001	97	3068942	250.0	221.2	
111 1,2-dichloro-4-(trifluorom	214	12.403	12.402	0.001	99	991010	250.0	226.1	
112 sec-Butylbenzene	105	12.507	12.511	-0.004	98	3463106	250.0	210.1	
113 1,3-Dichlorobenzene	146	12.616	12.621	-0.005	98	1687649	250.0	233.1	
114 4-Isopropyltoluene	119	12.653	12.651	0.002	97	2970922	250.0	218.3	
115 1,4-Dichlorobenzene	146	12.707	12.706	0.001	98	1736319	250.0	234.8	
116 2,4-Dichloro-1-(triflourom	214	12.756	12.755	0.001	98	909481	250.0	221.5	
118 2,5-Dichlorobenzotrifluori	214	12.811	12.803	0.008	99	1042359	250.0	226.9	
120 n-Butylbenzene	91	13.060	13.065	-0.005	97	2715831	250.0	219.2	
121 1,2-Dichlorobenzene	146	13.078	13.083	-0.005	99	1565775	250.0	233.6	
122 1,2-Dibromo-3-Chloropropan	75	13.863	13.856	0.007	94	147059	250.0	268.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.003	14.008	-0.005	98	3379751	750.0	666.8	
125 2,3- & 3,4- Dichlorotoluen	125	14.423	14.428	-0.005	97	2218229	500.0	450.0	
126 1,2,4-Trichlorobenzene	180	14.691	14.695	-0.004	99	825772	250.0	236.6	
127 Hexachlorobutadiene	225	14.861	14.866	-0.005	99	367792	250.0	219.8	
128 Naphthalene	128	14.940	14.939	0.001	99	2220927	250.0	242.4	
129 1,2,3-Trichlorobenzene	180	15.189	15.188	0.001	99	697862	250.0	243.8	
131 2,4,5-Trichlorotoluene	159	15.962	15.967	-0.005	99	364223	250.0	236.6	
130 2,3,6-Trichlorotoluene	159	16.065	16.064	0.001	98	323920	250.0	233.1	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		500.0	435.9	
S 134 1,2-Dichloroethene, Total	96				0		500.0	477.2	
S 135 1,3-Dichloropropene, Total	1				0		500.0	568.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOAACRPRI_00003	Amount Added:	11.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	10.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	10.00	Units: uL	
VOA8260SURR_00032	Amount Added:	10.00	Units: uL	
VOA8260VOAPRI_00105	Amount Added:	10.00	Units: uL	
VOAVAPRI_00005	Amount Added:	10.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent

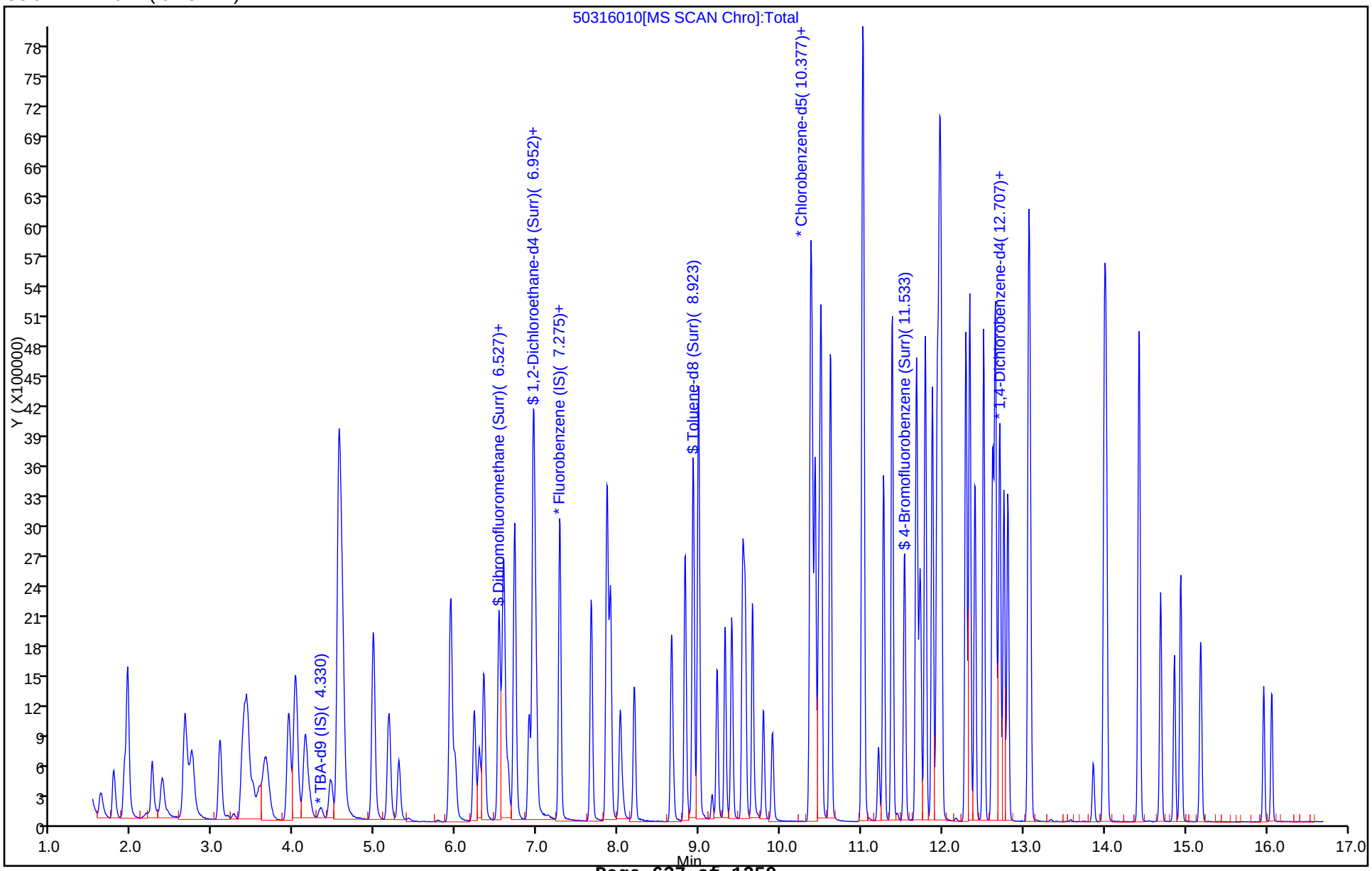
Report Date: 17-Mar-2015 10:59:33 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316010.D

Injection Date:	16-Mar-2015 15:05:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD50			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D
Lims ID: IC VSTD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Mar-2015 16:17:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD1
Misc. Info.: 180-0006031-013
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:33 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 17-Mar-2015 10:01:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.317	4.305	0.012	83	148007	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.274	7.273	0.001	99	568509	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.364	0.000	74	121234	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.682	0.000	96	175081	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.526	6.525	0.001	93	14193	5.00	5.49	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.903	6.902	0.001	96	17152	5.00	5.03	
$ 7 Toluene-d8 (Surr)	98	8.923	8.922	0.001	98	54935	5.00	5.68	
$ 8 4-Bromofluorobenzene (Surr	95	11.532	11.532	0.000	92	19061	5.00	5.48	
11 Dichlorodifluoromethane	85	1.616	1.622	-0.006	96	11265	5.00	4.62	
12 Chloromethane	50	1.768	1.768	0.000	97	17972	5.00	5.34	M
13 Vinyl chloride	62	1.908	1.896	0.012	96	18981	5.00	5.05	
14 Butadiene	39	1.951	1.944	0.007	98	24095	5.00	5.61	
15 Bromomethane	94	2.249	2.249	0.000	85	18060	5.00	4.90	
16 Chloroethane	64	2.377	2.376	0.001	53	13187	5.00	5.07	
17 Dichlorofluoromethane	67	2.644	2.644	0.000	99	34297	5.00	5.78	
18 Trichlorofluoromethane	101	2.711	2.723	-0.012	92	20521	5.00	4.55	
20 Ethyl ether	59	3.082	3.082	0.000	94	16416	5.00	5.52	
21 Acrolein	56	3.247	3.258	-0.011	96	35289	100.0	97.7	M
22 1,1-Dichloroethene	96	3.368	3.374	-0.006	97	18234	5.00	5.56	
23 1,1,2-Trichloro-1,2,2-trif	101	3.435	3.423	0.012	90	16567	5.00	5.00	
24 Acetone	43	3.490	3.496	-0.006	93	29674	25.0	25.5	
25 Iodomethane	142	3.581	3.581	0.000	97	22824	5.00	5.01	
26 Carbon disulfide	76	3.648	3.660	-0.012	98	41336	5.00	5.16	
28 3-Chloro-1-propene	76	3.940	3.934	0.006	95	8006	5.00	4.62	
30 Methyl acetate	43	4.031	4.019	0.012	100	71022	25.0	26.1	
31 Methylene Chloride	84	4.135	4.147	-0.012	96	27978	5.00	7.38	
32 2-Methyl-2-propanol	59	4.433	4.439	-0.006	73	10830	50.0	62.1	
33 Acrylonitrile	53	4.555	4.554	0.001	99	71728	50.0	51.2	
34 trans-1,2-Dichloroethene	96	4.555	4.560	-0.005	57	17111	5.00	5.05	
35 Methyl tert-butyl ether	73	4.603	4.597	0.006	94	40058	5.00	5.34	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.974	4.980	-0.006	96	29021	5.00	5.36	
37 1,1-Dichloroethane	63	5.169	5.175	-0.006	99	29622	5.00	4.89	
38 Vinyl acetate	43	5.297	5.296	0.001	79	19067	5.00	4.44	
44 2,2-Dichloropropane	77	5.936	5.929	0.007	87	6267	5.00	4.14	
45 cis-1,2-Dichloroethene	96	5.936	5.941	-0.005	95	18951	5.00	5.30	
46 2-Butanone (MEK)	43	5.996	5.990	0.006	99	42054	25.0	22.6	
49 Chlorobromomethane	128	6.234	6.227	0.007	95	8619	5.00	5.58	
51 Tetrahydrofuran	42	6.288	6.282	0.006	75	11913	10.0	10.2	
52 Chloroform	83	6.343	6.343	0.000	97	29168	5.00	5.30	
53 1,1,1-Trichloroethane	97	6.532	6.531	0.001	93	15663	5.00	4.46	
54 Cyclohexane	56	6.580	6.586	-0.006	94	36280	5.00	5.38	
56 Carbon tetrachloride	117	6.720	6.720	0.000	97	13013	5.00	4.62	
55 1,1-Dichloropropene	75	6.720	6.726	-0.006	97	24060	5.00	5.28	
57 Isobutyl alcohol	41	6.958	6.945	0.013	95	8820	125.0	116.2	
58 Benzene	78	6.958	6.957	0.001	96	73700	5.00	5.47	
59 1,2-Dichloroethane	62	6.976	6.988	-0.012	98	22108	5.00	5.01	
62 n-Heptane	43	7.274	7.280	-0.006	58	23490	5.00	5.08	
64 Trichloroethene	130	7.669	7.669	0.000	96	18397	5.00	5.45	
66 Methylcyclohexane	83	7.858	7.864	-0.006	94	29934	5.00	4.97	
67 1,2-Dichloropropane	63	7.907	7.906	0.001	90	16916	5.00	5.08	
68 Dibromomethane	93	8.022	8.022	0.000	93	9562	5.00	5.33	
70 1,4-Dioxane	88	8.047	8.058	-0.012	33	3746	100.0	106.8	
71 Dichlorobromomethane	83	8.193	8.198	-0.006	98	16863	5.00	4.61	
74 cis-1,3-Dichloropropene	75	8.655	8.661	-0.006	98	15462	5.00	4.38	
75 4-Methyl-2-pentanone (MIBK	43	8.831	8.825	0.006	99	75787	25.0	23.1	
76 Toluene	91	8.989	8.989	0.000	99	72597	5.00	5.84	
77 trans-1,3-Dichloropropene	75	9.208	9.220	-0.012	92	10481	5.00	4.67	
78 Ethyl methacrylate	69	9.318	9.318	0.000	94	13336	5.00	4.56	
79 1,1,2-Trichloroethane	97	9.403	9.403	0.000	95	13086	5.00	5.62	
80 Tetrachloroethene	164	9.531	9.537	-0.006	96	13716	5.00	5.64	
81 1,3-Dichloropropane	76	9.567	9.561	0.006	97	23188	5.00	5.35	
82 2-Hexanone	43	9.659	9.658	0.001	98	53734	25.0	21.4	M
84 Chlorodibromomethane	129	9.786	9.792	-0.006	95	7988	5.00	4.30	
85 Ethylene Dibromide	107	9.902	9.902	0.000	96	11471	5.00	5.16	
86 3-Chlorobenzotrifluoride	180	10.370	10.370	0.000	67	26148	5.00	5.52	
87 Chlorobenzene	112	10.389	10.388	0.001	98	47481	5.00	6.03	
88 4-Chlorobenzotrifluoride	180	10.425	10.431	-0.006	97	25927	5.00	5.66	
89 1,1,1,2-Tetrachloroethane	131	10.474	10.473	0.001	87	9154	5.00	4.50	
90 Ethylbenzene	106	10.504	10.504	0.000	99	24142	5.00	5.35	
91 m-Xylene & p-Xylene	106	10.614	10.619	-0.005	98	30126	5.00	5.45	
92 o-Xylene	106	11.015	11.009	0.006	97	32009	5.00	5.92	
93 Styrene	104	11.027	11.027	0.000	95	47061	5.00	5.41	
94 Bromoform	173	11.216	11.209	0.007	32	5157	5.00	4.49	
96 2-Chlorobenzotrifluoride	180	11.277	11.276	0.001	98	25441	5.00	5.37	
97 Isopropylbenzene	105	11.380	11.380	0.000	99	75470	5.00	5.60	
99 1,1,2,2-Tetrachloroethane	83	11.672	11.678	-0.006	93	19128	5.00	5.73	
100 Bromobenzene	156	11.691	11.678	0.012	97	16809	5.00	5.19	
101 1,2,3-Trichloropropane	110	11.721	11.721	0.001	89	5918	5.00	5.56	
102 trans-1,4-Dichloro-2-buten	53	11.739	11.733	0.006	50	4503	5.00	5.09	M
103 N-Propylbenzene	120	11.788	11.787	0.001	99	21543	5.00	5.39	
104 2-Chlorotoluene	126	11.873	11.873	0.000	99	17942	5.00	5.34	
105 3-Chlorotoluene	126	11.934	11.933	0.001	98	20174	5.00	5.37	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.964	11.964	0.000	99	61438	5.00	5.51	
107 4-Chlorotoluene	126	11.983	11.982	0.000	94	19812	5.00	5.45	
108 tert-Butylbenzene	119	12.287	12.286	0.001	97	55729	5.00	5.77	
110 1,2,4-Trimethylbenzene	105	12.335	12.335	0.000	97	63098	5.00	5.52	
111 1,2-dichloro-4-(trifluorom	214	12.408	12.402	0.006	98	19333	5.00	5.35	
112 sec-Butylbenzene	105	12.506	12.511	-0.005	100	75379	5.00	5.55	
113 1,3-Dichlorobenzene	146	12.621	12.621	0.000	98	33497	5.00	5.61	
114 4-Isopropyltoluene	119	12.652	12.651	0.001	98	61054	5.00	5.44	
115 1,4-Dichlorobenzene	146	12.706	12.706	0.000	98	34596	5.00	5.67	
116 2,4-Dichloro-1-(triflourom	214	12.755	12.755	0.000	94	17792	5.00	5.26	
118 2,5-Dichlorobenzotrifluori	214	12.810	12.803	0.007	96	20678	5.00	5.46	
120 n-Butylbenzene	91	13.065	13.065	0.000	99	54758	5.00	5.36	
121 1,2-Dichlorobenzene	146	13.084	13.083	0.001	99	30414	5.00	5.50	
122 1,2-Dibromo-3-Chloropropan	75	13.874	13.856	0.018	18	2299	5.00	5.08	
123 2,4- & 2,5- & 2,6- Dichlor	125	13.996	14.008	-0.012	93	71584	15.0	17.1	
125 2,3- & 3,4- Dichlorotoluen	125	14.428	14.428	0.000	97	46257	10.0	11.4	
126 1,2,4-Trichlorobenzene	180	14.690	14.695	-0.005	94	17018	5.00	5.91	
127 Hexachlorobutadiene	225	14.866	14.866	0.000	90	8549	5.00	6.19	
128 Naphthalene	128	14.939	14.939	0.000	99	41842	5.00	5.54	
129 1,2,3-Trichlorobenzene	180	15.189	15.188	0.000	95	13823	5.00	5.86	
131 2,4,5-Trichlorotoluene	159	15.961	15.967	-0.006	94	8592	5.00	6.77	
130 2,3,6-Trichlorotoluene	159	16.058	16.064	-0.006	94	7658	5.00	6.68	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		10.0	11.4	
S 134 1,2-Dichloroethene, Total	96				0		10.0	10.4	
S 135 1,3-Dichloropropene, Total	1				0		10.0	9.05	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00032	Amount Added:	0.20	Units: uL	
VOA8260VOAPRI_00105	Amount Added:	0.20	Units: uL	
VOAVAPRI_00005	Amount Added:	0.20	Units: uL	
voaWKetpri Re_00003	Amount Added:	0.80	Units: uL	
VOAACRPRI_00003	Amount Added:	4.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	0.20	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent

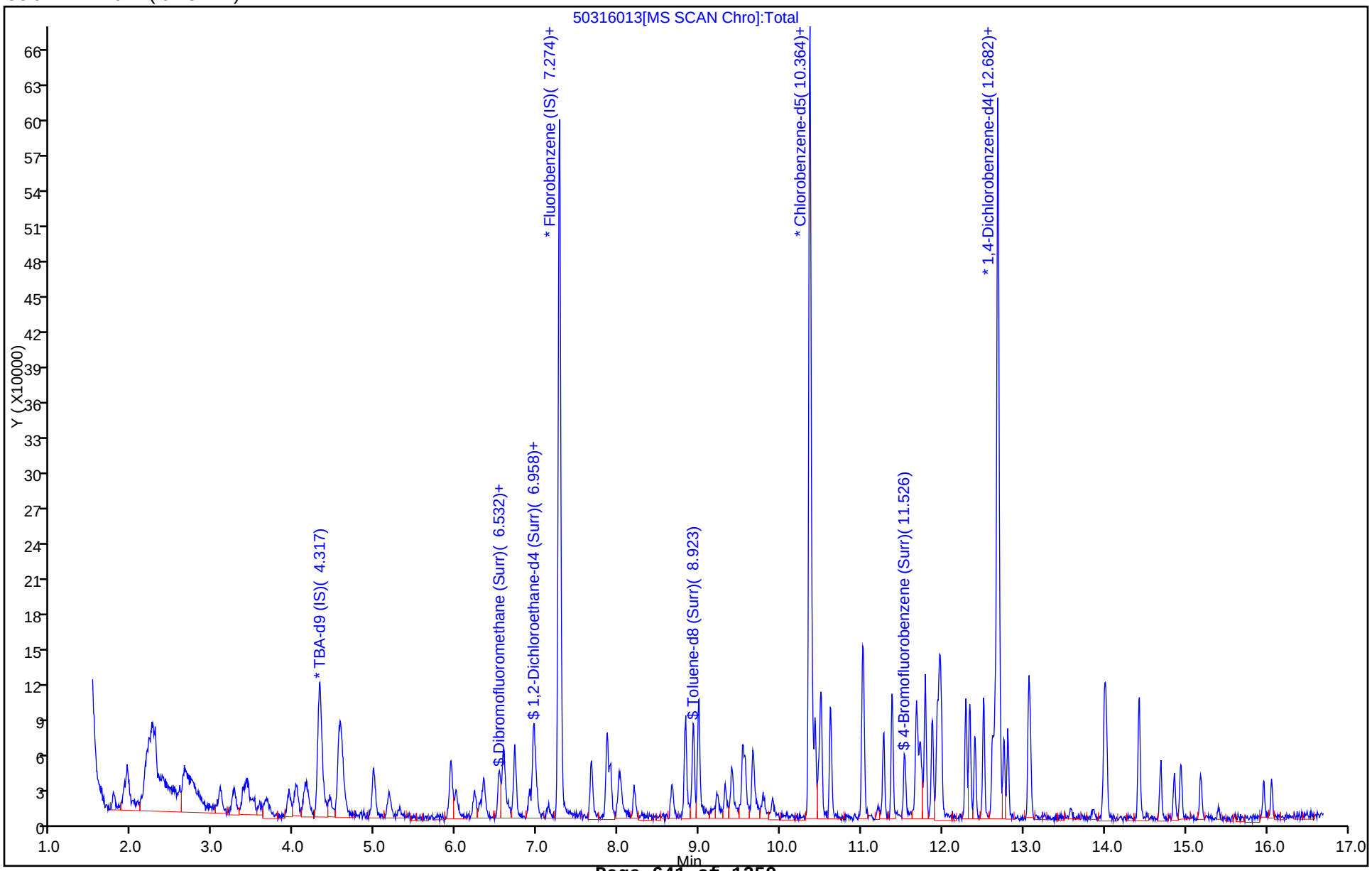
Report Date: 17-Mar-2015 10:59:34 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Injection Date:	16-Mar-2015 16:17:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD1			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

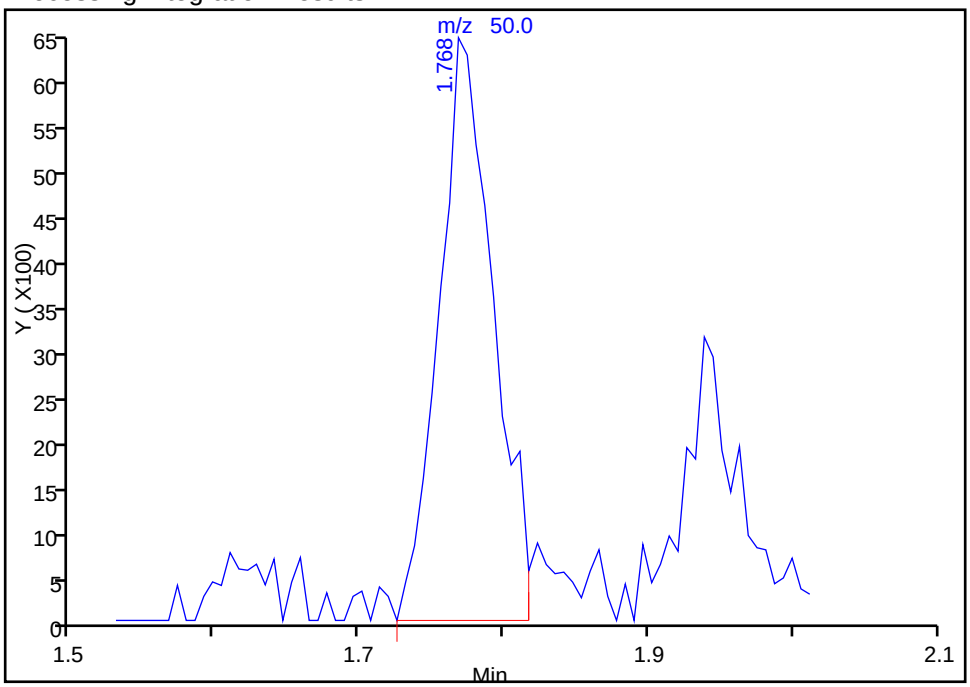
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D				
Injection Date:	16-Mar-2015 16:17:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

12 Chloromethane, CAS: 74-87-3

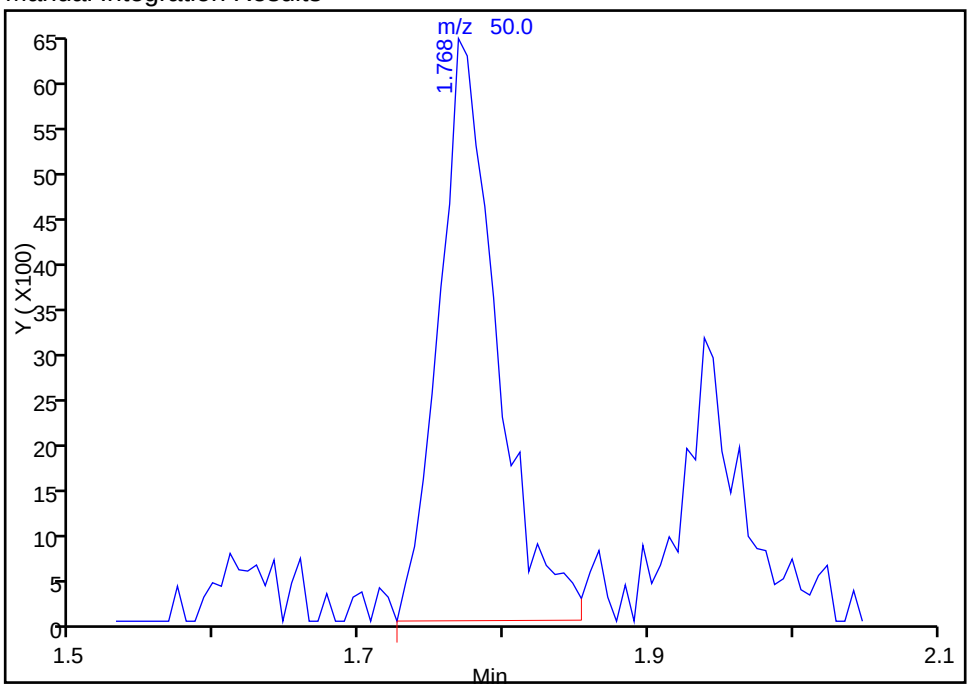
Processing Integration Results

RT: 1.77
Area: 16860
Amount: 4.846171
Amount Units: ng



Manual Integration Results

RT: 1.77
Area: 17972
Amount: 5.343308
Amount Units: ng



Reviewer: fergusond, 17-Mar-2015 10:01:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

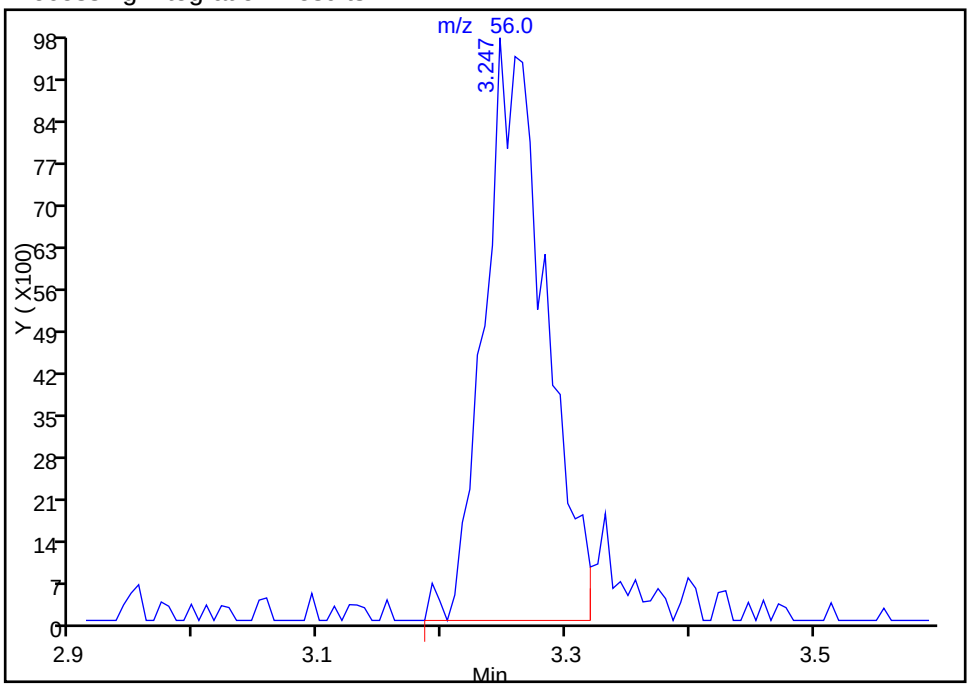
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D				
Injection Date:	16-Mar-2015 16:17:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

21 Acrolein, CAS: 107-02-8

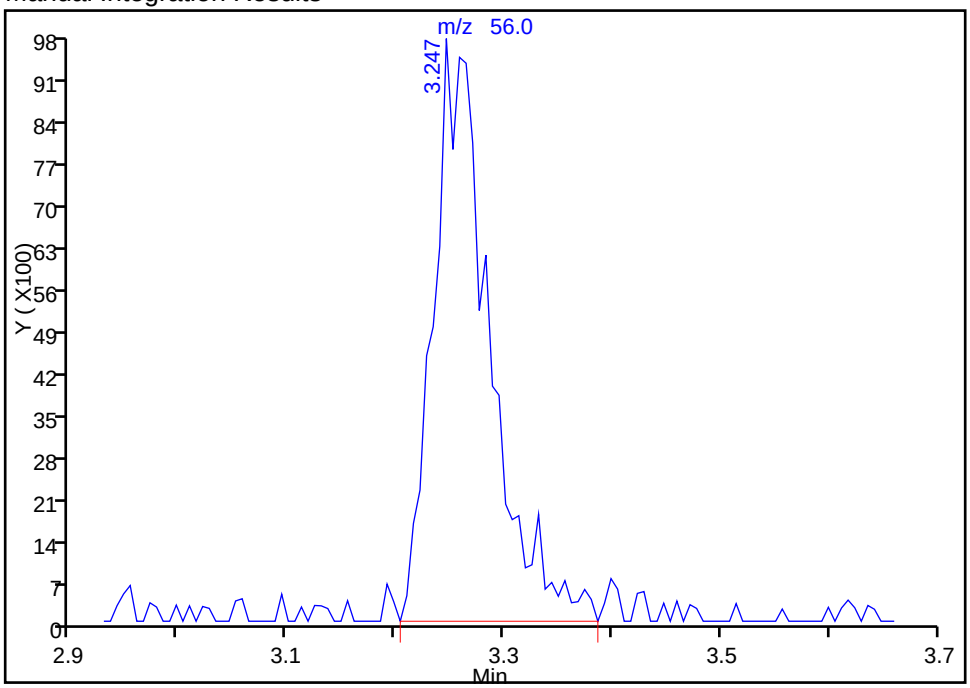
Processing Integration Results

RT: 3.25
Area: 33235
Amount: 92.071591
Amount Units: ng



Manual Integration Results

RT: 3.25
Area: 35289
Amount: 97.689446
Amount Units: ng



Reviewer: fergusond, 17-Mar-2015 10:01:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

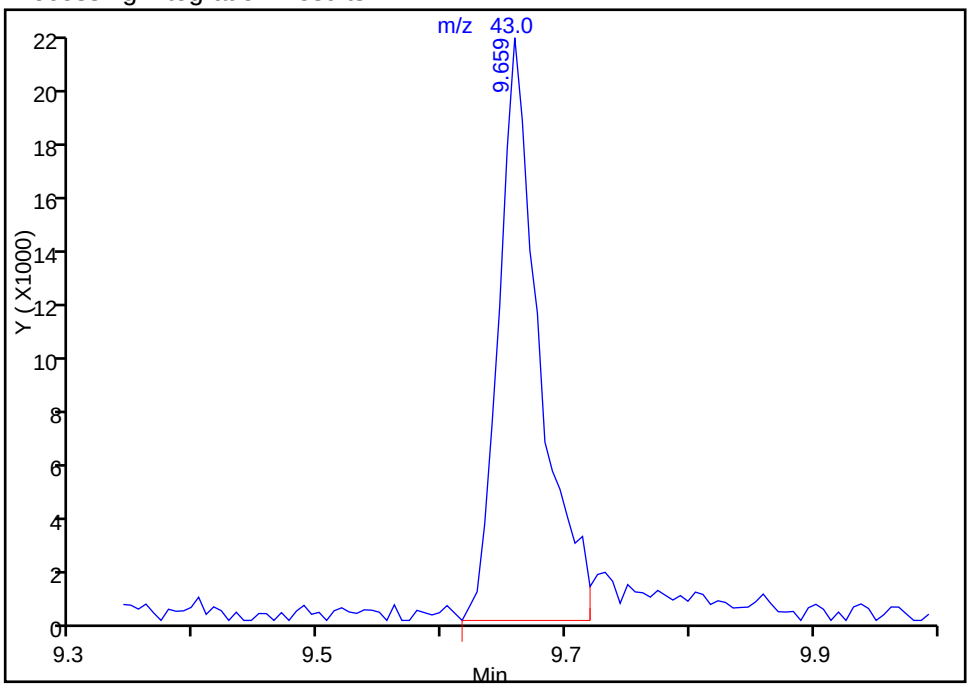
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D
Injection Date: 16-Mar-2015 16:17:30 Instrument ID: CHHP5
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

82 2-Hexanone, CAS: 591-78-6

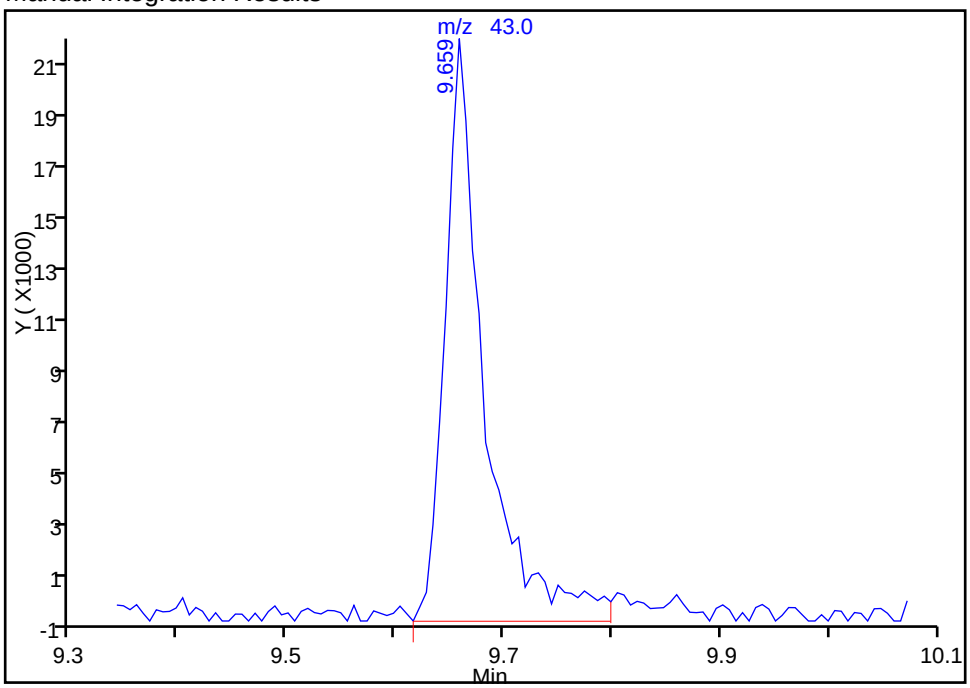
Processing Integration Results

RT: 9.66
Area: 48498
Amount: 19.235523
Amount Units: ng



Manual Integration Results

RT: 9.66
Area: 53734
Amount: 21.434406
Amount Units: ng



Reviewer: fergusond, 17-Mar-2015 10:01:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

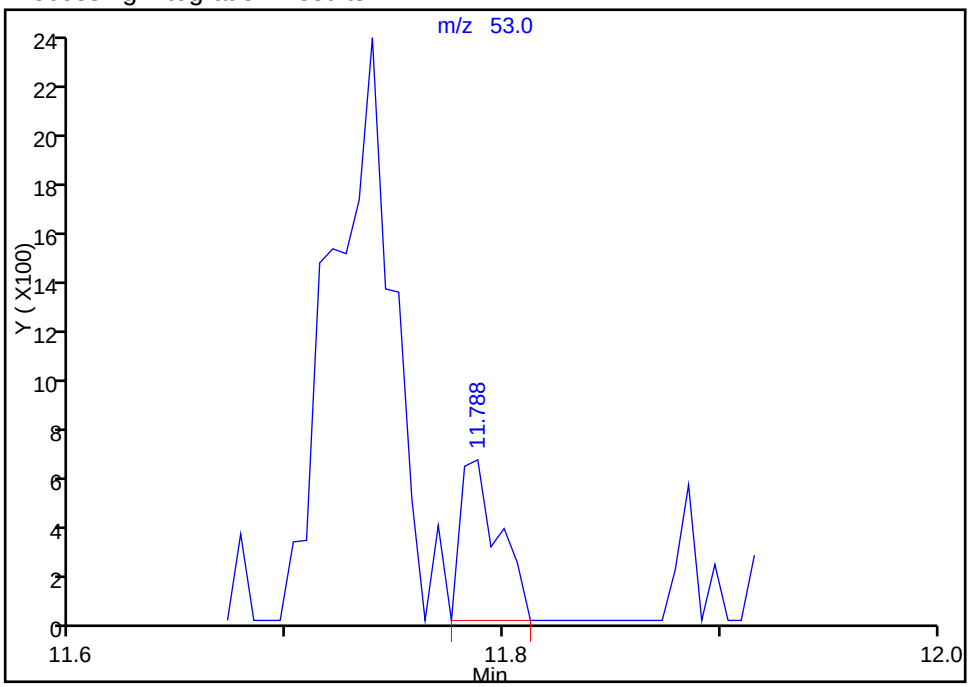
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D
Injection Date: 16-Mar-2015 16:17:30 Instrument ID: CHHP5
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

102 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

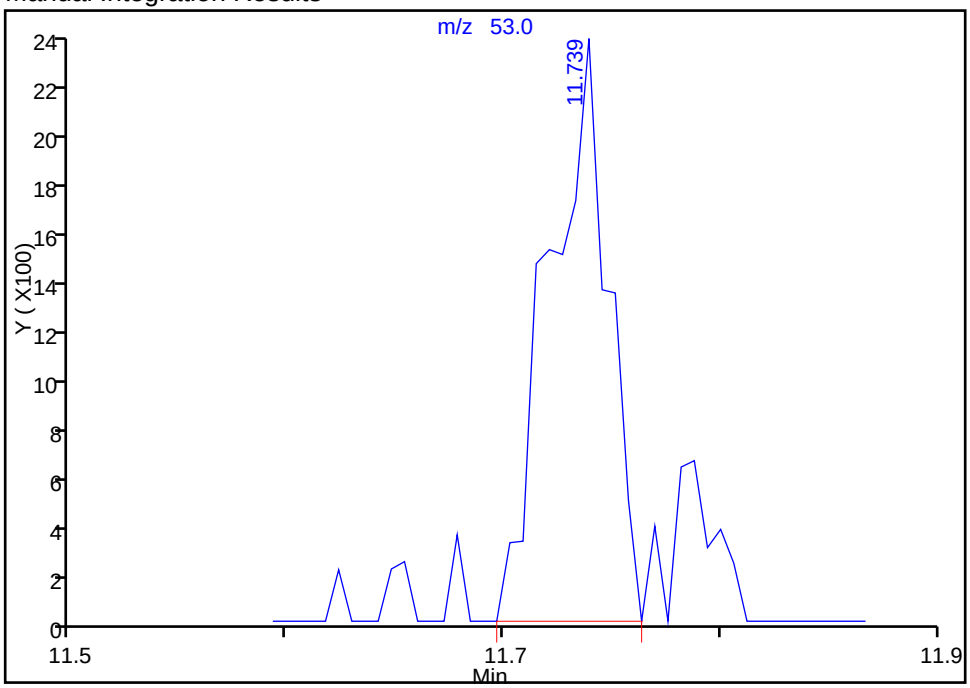
Processing Integration Results

RT: 11.79
Area: 798
Amount: 0.892929
Amount Units: ng



Manual Integration Results

RT: 11.74
Area: 4503
Amount: 5.086353
Amount Units: ng



Reviewer: fergusond, 17-Mar-2015 10:01:36
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.: 180-42353-1 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-131929/6	60128006.D
Level 2	IC 180-131929/7	60128007.D
Level 3	ICIS 180-131929/8	60128008.D
Level 4	IC 180-131929/9	60128009.D
Level 5	IC 180-131929/10	60128010.D
Level 6	IC 180-131929/11	60128011.D
Level 7	IC 180-131929/12	60128012.D
Level 8	IC 180-131929/13	60128013.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	0.2515 0.2570	0.3026 0.2707	0.2756 0.2444	0.2408	0.2772	Ave		0.2650			0.1000	7.8		20.0			
Chloromethane	0.3999 0.4010	0.4495 0.4049	0.4034 0.3807	0.3828	0.4377	Ave		0.4075			0.1000	6.0		20.0			
Vinyl chloride	0.3422 0.3550	0.3985 0.3659	0.3669 0.3370	0.3364	0.3870	Ave		0.3611			0.1000	6.4		20.0			
1,3-Butadiene	0.3856 0.3575	0.4506 0.3848	0.3871 0.3581	0.3471	0.4135	Ave		0.3855			0.0100	8.8		20.0			
Bromomethane	0.1467 0.1381	0.1750 0.1385	0.1535 0.1204	0.1356	0.1518	Ave		0.1449			0.0500	11.0		20.0			
Chloroethane	0.2246 0.2156	0.2378 0.2212	0.2308 0.2039	0.2024	0.2350	Ave		0.2214			0.0500	6.0		20.0			
Dichlorofluoromethane	0.5042 0.5028	0.6157 0.5326	0.5347 0.4962	0.4839	0.5527	Ave		0.5279			0.0100	8.0		20.0			
Trichlorofluoromethane	0.3860 0.3913	0.5126 0.4251	0.4168 0.3840	0.3562	0.4323	Ave		0.4130			0.1000	11.0		20.0			
Ethyl ether	0.3086 0.3102	0.3235 0.3233	0.3137 0.3151	0.2963	0.3289	Ave		0.3150			0.0100	3.3		20.0			
Acrolein	0.0396 0.0517	0.0543 0.0531	0.0483 0.0514	0.0494	0.0523	Ave		0.0500			0.0100	9.2		20.0			
1,1-Dichloroethene	0.2617 0.2769	0.3126 0.2902	0.2929 0.2710	0.2438	0.2966	Ave		0.2807			0.1000	7.8		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2784 0.2816	0.3066 0.2868	0.2842 0.2700	0.2572	0.3066	Ave		0.2839			0.1000	5.9		20.0			
Acetone	0.0798 0.0903	0.1021 0.0898	0.0810 0.0901	0.0853	0.0894	Ave		0.0884			0.0500	7.8		20.0			
Iodomethane	0.3845 0.4194	0.4548 0.4293	0.4169 0.4189	0.3736	0.4299	Ave		0.4159			0.0100	6.2		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.: 180-42353-1 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

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								
Carbon disulfide	0.7487 0.8423	0.8906 0.8871	0.8183 0.8610	0.7260	0.8778	Ave		0.8315			0.1000	7.6		20.0			
Allyl chloride	0.1478 0.1884	0.2053 0.1953	0.1824 0.1875	0.1614	0.1907	Ave		0.1823			0.0100	10.0		20.0			
Methyl acetate	0.1939 0.2192	0.2296 0.2217	0.2129 0.2109	0.2145	0.2292	Ave		0.2165			0.1000	5.3		20.0			
Methylene Chloride	0.5663 0.3764	0.4406 0.3812	0.3942 0.3763	0.3452	0.4033	Ave		0.4104			0.1000	17.0		20.0			
tert-Butyl alcohol	0.9048 1.1531	1.2046 1.1953	1.1245 1.1486	1.1865	1.1233	Ave		1.1301			0.0100	8.5		20.0			
Acrylonitrile	0.0986 0.1135	0.1174 0.1174	0.1124 0.1105	0.1114	0.1219	Ave		0.1129			0.0100	6.1		20.0			
trans-1,2-Dichloroethene	0.3049 0.3368	0.3676 0.3502	0.3416 0.3352	0.3064	0.3612	Ave		0.3380			0.1000	6.8		20.0			
Methyl tert-butyl ether	0.7928 0.9305	0.9167 0.9185	0.8812 0.8985	0.8253	0.9438	Ave		0.8884			0.1000	6.0		20.0			
Hexane	0.4629 0.4758	0.5115 0.4938	0.4880 0.4752	0.4742	0.5094	Ave		0.4863			0.0100	3.6		20.0			
1,1-Dichloroethane	0.6073 0.6486	0.7152 0.6711	0.6594 0.6387	0.5982	0.6916	Ave		0.6538			0.2000	6.1		20.0			
Vinyl acetate	0.3314 0.3275	0.3270 0.3665	0.3192 0.3491	0.3563	0.3424	Ave		0.3399			0.0100	4.8		20.0			
2-Butanone (MEK)	0.0981 0.1170	0.1045 0.1174	0.1091 0.1130	0.1341	0.1140	Ave		0.1134			0.0500	9.4		20.0			
cis-1,2-Dichloroethene	0.3245 0.3584	0.3872 0.3703	0.3585 0.3605	0.3251	0.3832	Ave		0.3585			0.1000	6.5		20.0			
2,2-Dichloropropane	0.3199 0.3750	0.4095 0.3953	0.3658 0.3787	0.3260	0.3957	Ave		0.3707			0.0100	8.8		20.0			
Bromochloromethane	0.1350 0.1448	0.1446 0.1494	0.1365 0.1459	0.1362	0.1490	Ave		0.1427			0.0100	4.1		20.0			
Tetrahydrofuran	0.0903 0.0790	0.0922 0.0786	0.0695 0.0777	0.0808	0.0836	Ave		0.0815			0.0100	8.9		20.0			
Chloroform	0.5289 0.5736	0.5990 0.5775	0.5675 0.5500	0.5145	0.5923	Ave		0.5629			0.2000	5.3		20.0			
1,1,1-Trichloroethane	0.3563 0.4446	0.4657 0.4553	0.4238 0.4340	0.3968	0.4543	Ave		0.4288			0.1000	8.5		20.0			
Cyclohexane	0.6359 0.6708	0.7886 0.6979	0.7167 0.6628	0.6153	0.7383	Ave		0.6908			0.1000	8.2		20.0			
Carbon tetrachloride	0.3118 0.3436	0.3285 0.3563	0.3441 0.3446	0.2948	0.3616	Ave		0.3357			0.1000	6.8		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

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	0.4003 0.4186	0.4561 0.4404	0.4219 0.4179	0.4152	0.4528	Ave		0.4279			0.0100	4.6		20.0			
Isobutyl alcohol	0.0043 0.0072	0.0064 0.0072	0.0064 0.0068	0.0074	0.0076	Ave		0.0067		*	0.0100	16.0		20.0			
Benzene	1.1307 1.1958	1.3767 1.2342	1.2896 1.1539	1.2476	1.3035	Ave		1.2415			0.5000	6.6		20.0			
1,2-Dichloroethane	0.4007 0.3996	0.4089 0.4174	0.3990 0.4021	0.4078	0.4253	Ave		0.4076			0.1000	2.3		20.0			
n-Heptane	0.3920 0.3756	0.4175 0.3951	0.4074 0.3772	0.3914	0.4078	Ave		0.3955			0.0100	3.8		20.0			
Trichloroethene	0.2891 0.2677	0.3005 0.2889	0.2760 0.2665	0.2817	0.2919	Ave		0.2828			0.2000	4.3		20.0			
Methylcyclohexane	0.5102 0.5411	0.6090 0.5779	0.5854 0.5414	0.5070	0.5852	Ave		0.5572			0.1000	6.8		20.0			
1,2-Dichloropropane	0.3166 0.3290	0.3285 0.3343	0.3184 0.3303	0.3331	0.3380	Ave		0.3285			0.1000	2.3		20.0			
1,4-Dioxane	0.0014 0.0021	0.0019 0.0021	0.0020 0.0019	0.0023	0.0026	Ave		0.0021		*	0.0100	16.0		20.0			
Dibromomethane	0.1216 0.1521	0.1431 0.1598	0.1502 0.1505	0.1442	0.1532	Ave		0.1468			0.0100	7.8		20.0			
Bromodichloromethane	0.2993 0.3553	0.3290 0.3756	0.3325 0.3612	0.3451	0.3571	Ave		0.3444			0.2000	6.9		20.0			
cis-1,3-Dichloropropene	0.3353 0.4110	0.3503 0.4405	0.3634 0.4227	0.4129	0.4256	Ave		0.3952			0.2000	10.0		20.0			
4-Methyl-2-pentanone (MIBK)	0.9540 1.1151	1.1043 1.1718	1.1815 1.0384	1.2050	1.2539	Ave		1.1280			0.1000	8.6		20.0			
Toluene	5.4914 4.5310	5.7208 4.7401	5.6426 4.1615	5.1921	5.4144	Ave		5.1117			0.4000	11.0		20.0			
trans-1,3-Dichloropropene	1.2695 1.3907	1.2955 1.4928	1.3784 1.3478	1.5487	1.4918	Ave		1.4019			0.1000	7.2		20.0			
Ethyl methacrylate	1.1291 1.2563	1.2172 1.3586	1.3093 1.2529	1.3664	1.4291	Ave		1.2899			0.0100	7.4		20.0			
1,1,2-Trichloroethane	1.0185 0.8514	1.0026 0.9021	0.9486 0.8143	0.9248	0.9635	Ave		0.9282			0.1000	7.6		20.0			
Tetrachloroethene	0.9955 0.7962	1.0058 0.8828	0.9677 0.7835	0.9124	0.9591	Ave		0.9129			0.2000	9.4		20.0			
1,3-Dichloropropane	1.7663 1.5809	1.8062 1.6986	1.7615 1.5218	1.8579	1.8132	Ave		1.7258			0.0100	6.8		20.0			
2-Hexanone	0.5452 0.6314	0.6409 0.6677	0.6587 0.6084	0.6924	0.7040	Ave		0.6436			0.1000	7.9		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

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	0.6719 0.7933	0.7287 0.8651	0.8081 0.7828	0.8040	0.8498	Ave		0.7880			0.1000	7.9		20.0			
1,2-Dibromoethane (EDB)	0.7702 0.8091	0.8566 0.8695	0.8717 0.7825	0.8987	0.8965	Ave		0.8444			0.1000	6.0		20.0			
3-Chlorobenzotrifluoride	2.1092 1.5798	1.9444 1.6709	2.0206 1.4750	1.6511	1.7758	Ave		1.7784			0.0100	13.0		20.0			
Chlorobenzene	3.4601 2.8835	3.3914 3.0356	3.4154 2.7518	3.2008	3.3854	Ave		3.1905			0.5000	8.5		20.0			
4-Chlorobenzotrifluoride	1.8212 1.5037	1.8756 1.5784	1.8254 1.4071	1.5671	1.6615	Ave		1.6550			0.0100	10.0		20.0			
1,1,1,2-Tetrachloroethane	0.8739 1.1196	1.1217 1.1535	1.1594 1.0827	1.0702	1.2192	Ave		1.1000			0.0100	9.3		20.0			
Ethylbenzene	2.0615 1.7563	2.0184 1.8372	2.0638 1.6858	1.8579	2.0338	Ave		1.9143			0.1000	7.8		20.0			
m-Xylene & p-Xylene	2.2289 2.2454	2.6070 2.2936	2.5188 2.0897	2.3575	2.5596	Ave		2.3626			0.1000	7.7		20.0			
o-Xylene	2.3535 2.3021	2.6114 2.3512	2.6901 2.1211	2.3725	2.6243	Ave		2.4283			0.3000	8.0		20.0			
Styrene	3.4711 3.4069	3.6753 3.5670	3.8725 3.1901	3.5790	3.8420	Ave		3.5755			0.3000	6.3		20.0			
Bromoform	0.3456 0.4498	0.4023 0.4747	0.4231 0.4455	0.3941	0.4408	Ave		0.4220			0.1000	9.6		20.0			
2-Chlorobenzotrifluoride	2.0831 1.6651	2.0073 1.7788	2.0600 1.5739	1.7397	1.9308	Ave		1.8549			0.0100	10.0		20.0			
Isopropylbenzene	6.1322 5.3578	7.0417 5.5217	6.7733 4.8040	5.7294	6.5255	Ave		5.9857			0.1000	13.0		20.0			
1,1,2,2-Tetrachloroethane	1.2405 1.1782	1.3514 1.2324	1.3065 1.1416	1.2206	1.3137	Ave		1.2481			0.3000	5.7		20.0			
Bromobenzene	0.8075 0.8703	0.8805 0.8822	0.8751 0.8614	0.9099	0.9143	Ave		0.8752			0.0100	3.8		20.0			
trans-1,4-Dichloro-2-butene	0.2451 0.2511	0.2240 0.2674	0.2263 0.2510	0.2496	0.2545	Ave		0.2461			0.0100	5.9		20.0			
1,2,3-Trichloropropane	0.2160 0.2538	0.2689 0.2524	0.2612 0.2534	0.2761	0.2673	Ave		0.2561			0.0100	7.1		20.0			
N-Propylbenzene	0.9508 1.0270	1.1121 1.0371	1.0896 0.9935	1.0682	1.0870	Ave		1.0457			0.0100	5.2		20.0			
2-Chlorotoluene	0.9024 0.8995	0.9760 0.9205	0.9138 0.8970	0.9017	0.9611	Ave		0.9215			0.0100	3.3		20.0			
3-Chlorotoluene	1.0017 0.9586	0.9692 0.9307	1.0137 0.9112	0.9609	0.9611	Ave		0.9634			0.0100	3.5		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.: 180-42353-1 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

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								
1,3,5-Trimethylbenzene	3.0768 3.2530	3.7359 3.2181	3.5555 3.0192	3.4050	3.6257	Ave		3.3612			0.0100	7.8		20.0			
4-Chlorotoluene	0.9577 0.8968	0.9866 0.9558	0.9331 0.9061	0.9440	0.9865	Ave		0.9458			0.0100	3.5		20.0			
tert-Butylbenzene	2.5600 2.5478	2.7508 2.5597	2.6532 2.3924	2.6993	2.7650	Ave		2.6160			0.0100	4.8		20.0			
1,2,4-Trimethylbenzene	3.3035 3.3532	3.8322 3.3235	3.7005 3.1044	3.4799	3.7246	Ave		3.4777			0.0100	7.3		20.0			
3,4-Dichlorobenzotrifluoride	0.9887 0.9504	1.0234 0.9539	1.0268 0.9051	0.9364	0.9894	Ave		0.9718			0.0100	4.4		20.0			
sec-Butylbenzene	3.9016 3.7982	4.5860 3.7545	4.3726 3.4441	4.1591	4.3402	Ave		4.0445			0.0100	9.5		20.0			
1,3-Dichlorobenzene	1.7518 1.6682	1.8502 1.6495	1.7633 1.5971	1.6478	1.7893	Ave		1.7146			0.6000	5.0		20.0			
4-Isopropyltoluene	3.1932 3.1803	3.5244 3.1617	3.4397 2.9124	3.3244	3.5095	Ave		3.2807			0.0100	6.4		20.0			
1,4-Dichlorobenzene	1.8921 1.7229	1.8544 1.7172	1.7634 1.6486	1.7582	1.8323	Ave		1.7736			0.5000	4.6		20.0			
2,4-Dichlorobenzotrifluoride	0.8418 0.9115	1.1643 0.9139	1.0936 0.9451	0.9618	0.9706	Ave		0.9753			0.0100	11.0		20.0			
2,5-Dichlorobenzotrifluoride	1.0277 1.1282	1.0948 1.1145	1.0804 0.9872	1.0256	1.1409	Ave		1.0749			0.0100	5.2		20.0			
n-Butylbenzene	2.8749 3.0408	3.5216 3.0472	3.3346 2.8083	3.1859	3.4281	Ave		3.1552			0.0100	8.2		20.0			
1,2-Dichlorobenzene	1.7178 1.6847	1.8218 1.6615	1.7626 1.6068	1.6829	1.7742	Ave		1.7140			0.4000	4.0		20.0			
1,2-Dibromo-3-Chloropropane	0.1196 0.1498	0.1418 0.1456	0.1302 0.1391	0.1296	0.1389	Ave		0.1368			0.0500	7.2		20.0			
1,2,4-Trichlorobenzene	1.2077 1.3259	1.4506 1.3099	1.3159 1.2520	1.3543	1.4062	Ave		1.3278			0.2000	5.9		20.0			
Hexachlorobutadiene	0.4827 0.5151	0.5622 0.5136	0.5273 0.4845	0.5177	0.5517	Ave		0.5193			0.0100	5.4		20.0			
Naphthalene	1.8023 2.3658	2.4053 2.3151	2.3140 2.1769	2.4289	2.4476	Ave		2.2820			0.0100	9.3		20.0			
1,2,3-Trichlorobenzene	0.9869 1.1121	1.2131 1.1031	1.0884 1.0649	1.1361	1.1802	Ave		1.1106			0.0100	6.3		20.0			
2,4,5-Trichlorotoluene	0.8654 0.8230	0.8306 0.8086	0.8131 0.7852	0.7828	0.8314	Ave		0.8175			0.0100	3.3		20.0			
2,3,6-Trichlorotoluene	0.7105 0.7303	0.7883 0.7307	0.7351 0.7070	0.6935	0.7334	Ave		0.7286			0.0100	3.9		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

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								
Dibromofluoromethane (Surr)	0.2174 0.2296	0.2406 0.2250	0.2312 0.2238	0.2125	0.2294	Ave		0.2262				3.8		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3069 0.3169	0.3462 0.3188	0.3353 0.3175	0.3254	0.3226	Ave		0.3237				3.8		20.0			
Toluene-d8 (Surr)	4.7309 3.4535	4.2834 3.3788	4.5099 3.1748	3.9656	4.0301	Ave		3.9409				14.0		20.0			
4-Bromofluorobenzene (Surr)	2.0381 1.5065	1.7519 1.5176	1.8406 1.4336	1.6178	1.7074	Ave		1.6767				12.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-131929/6	60128006.D
Level 2	IC 180-131929/7	60128007.D
Level 3	ICIS 180-131929/8	60128008.D
Level 4	IC 180-131929/9	60128009.D
Level 5	IC 180-131929/10	60128010.D
Level 6	IC 180-131929/11	60128011.D
Level 7	IC 180-131929/12	60128012.D
Level 8	IC 180-131929/13	60128013.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	12441 399376	61413 466774	123370 543864	178504	243452	5.00 175	25.0 200	50.0 250	75.0	100
Chloromethane	FB	Ave	19782 623186	91222 698118	180612 847288	283765	384421	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl chloride	FB	Ave	16929 551705	80864 630878	164249 750079	249364	339939	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Butadiene	FB	Ave	19072 555574	91449 663356	173303 797079	257326	363197	5.00 175	25.0 200	50.0 250	75.0	100
Bromomethane	FB	Ave	7254 214591	35506 238802	68708 267917	100551	133368	5.00 175	25.0 200	50.0 250	75.0	100
Chloroethane	FB	Ave	11109 335043	48264 381411	103324 453830	150069	206434	5.00 175	25.0 200	50.0 250	75.0	100
Dichlorofluoromethane	FB	Ave	24939 781500	124955 918274	239388 1104334	358712	485448	5.00 175	25.0 200	50.0 250	75.0	100
Trichlorofluoromethane	FB	Ave	19093 608185	104021 732912	186613 854688	264073	379709	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl ether	FB	Ave	15266 482160	65645 557320	140456 701385	219655	288913	5.00 175	25.0 200	50.0 250	75.0	100
Acrolein	FB	Ave	39186 103226	55086 114431	64846 125821	85368	91786	100 225	125 250	150 275	175	200
1,1-Dichloroethene	FB	Ave	12943 430377	63440 500308	131155 603276	180761	260475	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	13773 437728	62215 494476	127227 600973	190645	269318	5.00 175	25.0 200	50.0 250	75.0	100
Acetone	FB	Ave	19736 280558	41421 309648	72525 400973	126400	156961	25.0 350	50.0 400	100 500	150	200
Iodomethane	FB	Ave	19019 651846	92291 740212	186664 932274	276926	377556	5.00 175	25.0 200	50.0 250	75.0	100
Carbon disulfide	FB	Ave	37034 1309070	180744 1529475	366360 1916453	538178	770934	5.00 175	25.0 200	50.0 250	75.0	100

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

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	7309 292881	41661 336687	81645 417234	119671	167495	5.00 175	25.0 200	50.0 250	75.0	100
Methyl acetate	FB	Ave	47953 1703104	232955 1911445	476543 2346689	795107	1006389	25.0 875	125 1000	250 1250	375	500
Methylene Chloride	FB	Ave	28011 585012	89407 657192	176505 837610	255870	354231	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butyl alcohol	TBA	Ave	5769 335472	44315 373469	82385 475572	157863	196865	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	48759 1763284	238315 2023857	503259 2458471	825638	1070950	50.0 1750	250 2000	500 2500	750	1000
trans-1,2-Dichloroethene	FB	Ave	15080 523513	74610 603714	152947 746155	227148	317224	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	39215 1446119	186042 1583536	394527 1999816	611806	828973	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	22898 739493	103798 851374	218490 1057585	351514	447359	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	30038 1008065	145146 1157116	295240 1421566	443424	607468	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl acetate	FB	Ave	16394 509076	66357 631938	142927 777050	264095	300763	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	24262 363723	42402 404756	97685 502816	198782	200186	25.0 350	50.0 400	100 500	150	200
cis-1,2-Dichloroethene	FB	Ave	16049 557043	78570 638509	160524 802357	240979	336595	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Ave	15822 582789	83097 681588	163798 842775	241640	347540	5.00 175	25.0 200	50.0 250	75.0	100
Bromochloromethane	FB	Ave	6679 225087	29353 257539	61127 324697	100988	130848	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Ave	8931 245422	37414 271171	62273 346093	119820	146874	10.0 350	50.0 400	100 500	150	200
Chloroform	FB	Ave	26162 891515	121573 995734	254065 1224156	381367	520205	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	17622 690974	94502 785027	189759 966056	294109	399010	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	31454 1042561	160049 1203343	320878 1475197	456085	648441	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	15423 533960	66664 614377	154066 766964	218554	317552	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	19800 650661	92563 759338	188906 930038	307766	397719	5.00 175	25.0 200	50.0 250	75.0	100
Isobutyl alcohol	FB	Ave	5333 280190	32224 309707	71829 377064	137058	166021	125 4375	625 5000	1250 6250	1875	2500

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Benzene	FB	Ave	55932 1858516	279397 2127915	577373 2568317	924844	1144809	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane	FB	Ave	19819 620987	82990 719730	178647 895039	302310	373539	5.00 175	25.0 200	50.0 250	75.0	100
n-Heptane	FB	Ave	19391 583751	84739 681180	182403 839502	290134	358203	5.00 175	25.0 200	50.0 250	75.0	100
Trichloroethene	FB	Ave	14298 416102	60983 498060	123549 593184	208800	256342	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	25239 840990	123591 996383	262105 1205068	375853	513997	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	15660 511401	66666 576307	142558 735181	246898	296893	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Ave	1410 66654	7809 73473	18208 86605	33822	44901	100 3500	500 4000	1000 5000	1500	2000
Dibromomethane	FB	Ave	6013 236358	29036 275521	67249 334892	106863	134511	5.00 175	25.0 200	50.0 250	75.0	100
Bromodichloromethane	FB	Ave	14807 552260	66762 647525	148860 803958	255826	313642	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,3-Dichloropropene	FB	Ave	16586 638776	71082 759439	162719 940779	306111	373776	5.00 175	25.0 200	50.0 250	75.0	100
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	48490 833434	94789 963310	221045 1165825	401820	485147	25.0 350	50.0 400	100 500	150	200
Toluene	CBZ	Ave	55826 1693226	245530 1948278	527825 2335981	865706	1047433	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,3-Dichloropropene	CBZ	Ave	12906 519690	55603 613591	128942 756557	258221	288597	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl methacrylate	CBZ	Ave	11478 469489	52242 558436	122480 703298	227823	276463	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloroethane	CBZ	Ave	10354 318177	43032 370798	88732 457078	154194	186391	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBZ	Ave	10120 297552	43168 362836	90521 439818	152121	185546	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBZ	Ave	17956 590770	77521 698175	164779 854230	309767	350761	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBZ	Ave	27710 471926	55014 548903	123231 682982	230885	272392	25.0 350	50.0 400	100 500	150	200
Dibromochloromethane	CBZ	Ave	6831 296438	31276 355583	75589 439418	134047	164399	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromoethane (EDB)	CBZ	Ave	7830 302375	36764 357378	81540 439262	149846	173425	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorobenzotrifluoride	CBZ	Ave	21442 590382	83450 686787	189015 827969	275294	343534	5.00 175	25.0 200	50.0 250	75.0	100

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBZ	Ave	35175 1077548	145556 1247688	319491 1544665	533675	654919	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorobenzotrifluoride	CBZ	Ave	18514 561945	80499 648765	170754 789851	261287	321428	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBZ	Ave	8884 418399	48143 474135	108450 607735	178444	235848	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBZ	Ave	20957 656339	86627 755113	193055 946322	309783	393435	5.00 175	25.0 200	50.0 250	75.0	100
m-Xylene & p-Xylene	CBZ	Ave	22659 839112	111891 942705	235617 1173036	393071	495166	5.00 175	25.0 200	50.0 250	75.0	100
o-Xylene	CBZ	Ave	23926 860280	112080 966416	251637 1190653	395578	507675	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBZ	Ave	35287 1273143	157741 1466119	362245 1790733	596747	743239	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBZ	Ave	3513 168078	17267 195103	39579 250089	65704	85273	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorobenzotrifluoride	CBZ	Ave	21177 622262	86153 731138	192703 883499	290061	373509	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBZ	Ave	62340 2002206	302221 2269536	633598 2696635	955292	1262379	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBZ	Ave	12611 440302	58000 506563	122215 640819	203512	254135	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCB	Ave	13104 477179	60469 550534	135116 690860	223525	278729	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,4-Dichloro-2-butene	DCB	Ave	3977 137653	15381 166844	34948 201266	61317	77586	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichloropropane	DCB	Ave	3506 139161	18469 157512	40329 203260	67823	81476	5.00 175	25.0 200	50.0 250	75.0	100
N-Propylbenzene	DCB	Ave	15430 563113	76375 647166	168244 796757	262417	331379	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCB	Ave	14645 493158	67028 574430	141092 719388	221515	293005	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorotoluene	DCB	Ave	16255 525597	66559 580756	156510 730727	236047	292985	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCB	Ave	49931 1783600	256568 2008176	548969 2421330	836492	1105314	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCB	Ave	15542 491693	67753 596461	144067 726677	231900	300726	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCB	Ave	41544 1396912	188912 1597317	409657 1918630	663124	842934	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trimethylbenzene	DCB	Ave	53610 1838518	263177 2073941	571367 2489630	854880	1135474	5.00 175	25.0 200	50.0 250	75.0	100

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
3,4-Dichlorobenzotrifluoride	DCB	Ave	16045 521070	70285 595281	158534 725838	230038	301633	5.00 175	25.0 200	50.0 250	75.0	100
sec-Butylbenzene	DCB	Ave	63316 2082501	314946 2342860	675141 2762118	1021731	1323132	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichlorobenzene	DCB	Ave	28428 914665	127066 1029314	272251 1280853	404796	545480	5.00 175	25.0 200	50.0 250	75.0	100
4-Isopropyltoluene	DCB	Ave	51820 1743713	242039 1972986	531099 2335695	816686	1069888	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dichlorobenzene	DCB	Ave	30705 944630	127353 1071549	272272 1322179	431926	558588	5.00 175	25.0 200	50.0 250	75.0	100
2,4-Dichlorobenzotrifluoride	DCB	Ave	13661 499776	79958 570286	168861 757959	236290	295903	5.00 175	25.0 200	50.0 250	75.0	100
2,5-Dichlorobenzotrifluoride	DCB	Ave	16677 618602	75184 695499	166815 791743	251951	347814	5.00 175	25.0 200	50.0 250	75.0	100
n-Butylbenzene	DCB	Ave	46654 1667227	241849 1901534	514864 2252239	782657	1045083	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichlorobenzene	DCB	Ave	27877 923690	125111 1036802	272148 1288639	413439	540869	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromo-3-Chloropropane	DCB	Ave	1941 82124	9741 90830	20104 111534	31840	42357	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trichlorobenzene	DCB	Ave	19598 726984	99622 817434	203185 1004110	332715	428696	5.00 175	25.0 200	50.0 250	75.0	100
Hexachlorobutadiene	DCB	Ave	7834 282422	38609 320466	81412 388561	127169	168186	5.00 175	25.0 200	50.0 250	75.0	100
Naphthalene	DCB	Ave	29248 1297115	165187 1444669	357281 1745866	596683	746148	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichlorobenzene	DCB	Ave	16016 609774	83313 688354	168045 854020	279103	359783	5.00 175	25.0 200	50.0 250	75.0	100
2,4,5-Trichlorotoluene	DCB	Ave	14043 451216	57044 504552	125544 629698	192318	253456	5.00 175	25.0 200	50.0 250	75.0	100
2,3,6-Trichlorotoluene	DCB	Ave	11530 400428	54138 455993	113503 566962	170378	223585	5.00 175	25.0 200	50.0 250	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	10756 356892	48823 387858	103502 498125	157502	201508	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	15181 492507	70258 549644	150111 706731	241234	283354	5.00 175	25.0 200	50.0 250	75.0	100
Toluene-d8 (Surr)	CBZ	Ave	48094 1290581	183840 1388779	421866 1782119	661202	779639	5.00 175	25.0 200	50.0 250	75.0	100
4-Bromofluorobenzene (Surr)	CBZ	Ave	20719 562972	75189 623752	172172 804742	269743	330292	5.00 175	25.0 200	50.0 250	75.0	100

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

Curve Type Legend:
Ave = Average ISTD

TestAmerica Laboratories
Initial Calibration %Drift Report

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Instrument: CHHP6 Lims Location: 180
Lock State: Initial Calib Locked Cpnd Order: Compound Type
Integrator: RTE Last Modified: 29-Jan-2015 13:48:00
No.Compounds:146

Initial Calibration Batches

Ical Batch: \\PITCHROM\ChromData\CHHP6\20141018-3879.b
Inj Date : 18-Oct-2014 14:29:30, Sublist: chrom-MSVOA_LL_CHHP6*sub3

Ical Batch: \\PITCHROM\ChromData\CHHP6\20141118-4467.b
Inj Date : 18-Nov-2014 23:46:30, Sublist: chrom-MSVOA_LL_CHHP6*sub31

Ical Batch: \\PITCHROM\ChromData\CHHP6\20150128-5450.b
Inj Date : 28-Jan-2015 13:58:30, Sublist: chrom-MSVOA_LL_CHHP6*sub5

Limit Group: VOA 8260C ICAL

Detector 1: MS SCAN

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
* 1 TBA-d9 (IS)	166219	172370	181020	166706	179861	174392	179994	165623
* 2 Fluorobenzene (IS)	433221	469153	467228	485243	488527	476034	486166	445145
* 3 Chlorobenzene-d5	103593	103411	107218	109218	111724	107730	113095	112267
* 4 1,4-Dichlorobenzene-d4	143652	148646	152348	157204	156430	159771	164262	160396
$ 5 Dibromofluoromethane (	-3.9	6.4	2.2	-6.1	1.4	1.5	-0.5	-1.1
$ 6 1,2-Dichloroethane-d4	-5.2	6.9	3.6	0.5	-0.3	-2.1	-1.5	-1.9
$ 7 Toluene-d8 (Surr)	20.0	8.7	14.4	0.6	2.3	-12.4	-14.3	-19.4
$ 8 4-Bromofluorobenzene (	21.6	4.5	9.8	-3.5	1.8	-10.1	-9.5	-14.5
11 Dichlorodifluoromethan	-5.1	14.2	4.0	-9.1	4.6	-3.0	2.2	-7.8
12 Chloromethane	-1.9	10.3	-1.0	-6.1	7.4	-1.6	-0.6	-6.6
13 Vinyl chloride	-5.2	10.3	1.6	-6.8	7.2	-1.7	1.3	-6.7
14 Butadiene	0.0	16.9	0.4	-10.0	7.3	-7.3	-0.2	-7.1
15 Bromomethane	1.2	20.7	5.9	-6.4	4.8	-4.7	-4.4	-16.9
16 Chloroethane	1.4	7.4	4.2	-8.6	6.2	-2.6	-0.1	-7.9
17 Dichlorofluoromethane	-4.5	16.6	1.3	-8.3	4.7	-4.7	0.9	-6.0
18 Trichlorofluoromethane	-6.5	24.1	0.9	-13.8	4.7	-5.3	2.9	-7.0
19 Ethanol	-17.5	9.3	5.4	3.2	-10.5	1.4	8.8	
20 Ethyl ether	-2.0	2.7	-0.4	-5.9	4.4	-1.5	2.6	0.1
21 Acrolein	-20.8	8.6	-3.4	-1.3	4.5	3.3	6.2	2.8
22 1,1-Dichloroethene	-6.8	11.4	4.4	-13.1	5.6	-1.4	3.4	-3.4
23 1,1,2-Trichloro-1,2,2-	-1.9	8.0	0.1	-9.4	8.0	-0.8	1.0	-4.9
24 Acetone	-9.8	15.4	-8.4	-3.6	1.0	2.0	1.5	1.8
25 Iodomethane	-7.6	9.3	0.2	-10.2	3.4	0.8	3.2	0.7
26 Carbon disulfide	-10.0	7.1	-1.6	-12.7	5.6	1.3	6.7	3.6
27 Isopropyl alcohol	-8.7	-15.4	15.4	-0.1	-6.1	6.2	8.6	
28 Acetonitrile	26.2	-7.7	-4.5	-8.4	-3.8	-0.6	-1.3	
29 3-Chloro-1-propene	-19.0	12.6	0.0	-11.5	4.6	3.3	7.1	2.8
30 Methyl acetate	-10.4	6.1	-1.7	-0.9	5.9	1.2	2.4	-2.6
31 Methylene Chloride	* 38.0	7.3	-3.9	-15.9	-1.7	-8.3	-7.1	-8.3
32 2-Methyl-2-propanol	-19.9	6.6	-0.5	5.0	-0.6	2.0	5.8	1.6
33 Acrylonitrile	-12.7	4.0	-0.4	-1.3	8.0	0.5	4.0	-2.1
34 trans-1,2-Dichloroethe	-9.8	8.8	1.1	-9.3	6.9	-0.3	3.6	-0.8
35 Methyl tert-butyl ethe	-10.8	3.2	-0.8	-7.1	6.2	4.7	3.4	1.1
36 Hexane	-4.8	5.2	0.3	-2.5	4.7	-2.2	1.5	-2.3
37 1,1-Dichloroethane	-7.1	9.4	0.9	-8.5	5.8	-0.8	2.7	-2.3
38 Vinyl acetate	-2.5	-3.8	-6.1	4.8	0.7	-3.6	7.8	2.7
40 Isopropyl ether	5.3	-5.2	1.3	-1.8	-1.5	1.7	0.2	
39 2-Chloro-1,3-butadiene	-3.2	0.5	-2.4	1.5	1.7	4.0	-2.1	

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
41 Tert-butyl ethyl ether	2.4	-3.4	-0.8	-4.0	0.1	1.9	3.9	
44 2-Butanone (MEK)	-13.5	-7.9	-3.8	18.3	0.5	3.2	3.5	-0.4
42 2,2-Dichloropropane	-13.7	10.4	-1.3	-12.1	6.7	1.1	6.6	2.1
43 cis-1,2-Dichloroethene	-9.5	8.0	0.0	-9.3	6.9	0.0	3.3	0.6
45 Propionitrile	-5.3	0.9	4.1	-2.4	-1.3	1.9	2.3	
46 Ethyl acetate	-7.0	-3.1	3.2	-1.4	-0.6	3.6	5.2	
47 Methacrylonitrile	5.8	5.7	6.9	-0.2	-2.1	-6.1	-10.0	
49 Tetrahydrofuran	10.8	13.1	-14.6	-0.8	2.6	-3.1	-3.5	-4.6
48 Chlorobromomethane	-5.4	1.4	-4.3	-4.5	4.4	1.5	4.7	2.2
50 Chloroform	-6.0	6.4	0.8	-8.6	5.2	1.9	2.6	-2.3
51 1,1,1-Trichloroethane	-16.9	8.6	-1.2	-7.5	5.9	3.7	6.2	1.2
52 Cyclohexane	-7.9	14.2	3.7	-10.9	6.9	-2.9	1.0	-4.1
53 Carbon tetrachloride	-7.1	-2.1	2.5	-12.2	7.7	2.4	6.2	2.7
54 1,1-Dichloropropene	-6.5	6.6	-1.4	-3.0	5.8	-2.2	2.9	-2.3
55 Isobutyl alcohol R7	* -35.2	-4.5	-3.5	11.2	13.7	8.4	8.0	1.9
56 Benzene	-8.9	10.9	3.9	0.5	5.0	-3.7	-0.6	-7.1
57 1,2-Dichloroethane	-1.7	0.3	-2.1	0.1	4.3	-2.0	2.4	-1.3
58 Tert-amyl methyl ether	-1.9	-4.7	1.5	-2.1	-0.6	4.2	3.7	
59 n-Heptane	-0.9	5.6	3.0	-1.0	3.1	-5.0	-0.1	-4.6
60 n-Butanol R7	-14.7	-11.2	-3.7	-6.8	0.8	16.4	19.2	
61 Trichloroethene	2.2	6.3	-2.4	-0.4	3.2	-5.3	2.2	-5.7
62 Ethyl acrylate	-11.1	-4.7	-1.2	1.7	-0.5	9.0	6.8	
63 Methylcyclohexane	-8.4	9.3	5.1	-9.0	5.0	-2.9	3.7	-2.8
64 1,2-Dichloropropane	-3.6	0.0	-3.1	1.4	2.9	0.2	1.7	0.5
66 Methyl methacrylate	-5.8	-6.6	-0.5	-1.0	1.7	6.2	5.9	
65 1,4-Dioxane R7	* -30.6	-6.4	-1.1	11.0	24.4	4.3	3.7	-5.3
67 Dibromomethane	-17.2	-2.5	2.3	-1.8	4.3	3.6	8.9	2.5
68 Dichlorobromomethane	-13.1	-4.5	-3.5	0.2	3.7	3.2	9.1	4.9
69 2-Nitropropane	7.3	3.0	3.0	-0.8	-7.9	0.8	-5.4	
70 2-Chloroethyl vinyl et	-2.8	-8.2	-0.9	0.1	0.7	5.6	5.5	
71 cis-1,3-Dichloropropen	-15.2	-11.4	-8.0	4.5	7.7	4.0	11.5	7.0
72 4-Methyl-2-pentanone (	-15.4	-2.1	4.7	6.8	11.2	-1.1	3.9	-7.9
73 Toluene	7.4	11.9	10.4	1.6	5.9	-11.4	-7.3	-18.6
74 trans-1,3-Dichloroprop	-9.4	-7.6	-1.7	10.5	6.4	-0.8	6.5	-3.9
75 Ethyl methacrylate	-12.5	-5.6	1.5	5.9	10.8	-2.6	5.3	-2.9
76 1,1,2-Trichloroethane	9.7	8.0	2.2	-0.4	3.8	-8.3	-2.8	-12.3
77 Tetrachloroethene	9.0	10.2	6.0	-0.1	5.1	-12.8	-3.3	-14.2
78 1,3-Dichloropropane	2.3	4.7	2.1	7.7	5.1	-8.4	-1.6	-11.8
79 2-Hexanone	-15.3	-0.4	2.3	7.6	9.4	-1.9	3.8	-5.5
80 n-Butyl acetate	-8.4	-6.4	-5.0	-0.6	-0.4	11.3	9.5	
81 Chlorodibromomethane	-14.7	-7.5	2.6	2.0	7.9	0.7	9.8	-0.7
82 Ethylene Dibromide	-8.8	1.4	3.2	6.4	6.2	-4.2	3.0	-7.3
83 3-Chlorobenzotrifluori	18.6	9.3	13.6	-7.2	-0.1	-11.2	-6.0	-17.1
84 Chlorobenzene	8.4	6.3	7.1	0.3	6.1	-9.6	-4.9	-13.8
85 4-Chlorobenzotrifluori	10.0	13.3	10.3	-5.3	0.4	-9.1	-4.6	-15.0
87 Ethylbenzene	7.7	5.4	7.8	-2.9	6.2	-8.3	-4.0	-11.9
86 1,1,1,2-Tetrachloroeth	-20.6	2.0	5.4	-2.7	10.8	1.8	4.9	-1.6
88 m-Xylene & p-Xylene	-5.7	10.3	6.6	-0.2	8.3	-5.0	-2.9	-11.5
89 o-Xylene	-3.1	7.5	10.8	-2.3	8.1	-5.2	-3.2	-12.6
90 Styrene	-2.9	2.8	8.3	0.1	7.5	-4.7	-0.2	-10.8
129 Cyclohexanol R7, R2	-6.0	-11.6	-12.0	29.6				
91 Bromoform	-18.1	-4.7	0.3	-6.6	4.5	6.6	12.5	5.6
92 2-Chlorobenzotrifluori	12.3	8.2	11.1	-6.2	4.1	-10.2	-4.1	-15.1
93 Isopropylbenzene	2.4	17.6	13.2	-4.3	9.0	-10.5	-7.8	-19.7
94 Cyclohexanone	-13.6	-6.9	-0.8	3.1	-4.5	9.8	13.0	
96 1,1,2,2-Tetrachloroeth	-0.6	8.3	4.7	-2.2	5.3	-5.6	-1.3	-8.5
95 Bromobenzene	-7.7	0.6	0.0	4.0	4.5	-0.6	0.8	-1.6

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
97 trans-1,4-Dichloro-2-b	-0.4	-9.0	-8.0	1.4	3.4	2.0	8.6	2.0
98 1,2,3-Trichloropropane	-15.7	5.0	2.0	7.8	4.3	-0.9	-1.5	-1.1
99 N-Propylbenzene	-9.1	6.4	4.2	2.2	4.0	-1.8	-0.8	-5.0
100 2-Chlorotoluene	-2.1	5.9	-0.8	-2.1	4.3	-2.4	-0.1	-2.7
101 3-Chlorotoluene	4.0	0.6	5.2	-0.3	-0.2	-0.5	-3.4	-5.4
102 1,3,5-Trimethylbenzene	-8.5	11.1	5.8	1.3	7.9	-3.2	-4.3	-10.2
103 4-Chlorotoluene	1.3	4.3	-1.3	-0.2	4.3	-5.2	1.1	-4.2
104 tert-Butylbenzene	-2.1	5.2	1.4	3.2	5.7	-2.6	-2.2	-8.5
105 Pentachloroethane	25.6	-10.6	-21.2	17.8	1.1	9.2	-21.9	
106 1,2,4-Trimethylbenzene	-5.0	10.2	6.4	0.1	7.1	-3.6	-4.4	-10.7
107 1,2-dichloro-4-(triflu	1.7	5.3	5.7	-3.6	1.8	-2.2	-1.8	-6.9
108 sec-Butylbenzene	-3.5	13.4	8.1	2.8	7.3	-6.1	-7.2	-14.8
109 1,3-Dichlorobenzene	2.2	7.9	2.8	-3.9	4.4	-2.7	-3.8	-6.9
110 4-Isopropyltoluene	-2.7	7.4	4.8	1.3	7.0	-3.1	-3.6	-11.2
111 1,4-Dichlorobenzene	6.7	4.6	-0.6	-0.9	3.3	-2.9	-3.2	-7.0
113 2,4-Dichloro-1-(triflo	-13.7	19.4	12.1	-1.4	-0.5	-6.5	-6.3	-3.1
112 1,2,3-Trimethylbenzene	-1.9	-0.3	4.1	2.3	4.4	-1.8	-6.8	
114 2,5-Dichlorobenzotrifl	-4.4	1.8	0.5	-4.6	6.1	5.0	3.7	-8.2
115 Benzyl chloride	-5.8	-13.7	-7.2	-3.6	-0.3	14.8	15.6	
116 n-Butylbenzene	-8.9	11.6	5.7	1.0	8.7	-3.6	-3.4	-11.0
117 1,2-Dichlorobenzene	0.2	6.3	2.8	-1.8	3.5	-1.7	-3.1	-6.3
118 1,2-Dibromo-3-Chloropr	-12.6	3.7	-4.8	-5.3	1.5	9.5	6.4	1.6
119 2,4- & 2,5- & 2,6- Dic	-3.1	17.6	9.8	-0.7	3.8	-4.8	-8.2	-14.4
120 1,3,5-Trichlorobenzene	4.8	1.0	2.3	-0.6	-0.1	-1.3	-6.1	
121 2,3- & 3,4- Dichloroto	-3.4	18.4	6.2	-0.8	3.6	-4.3	-7.1	-12.7
122 1,2,4-Trichlorobenzene	-9.1	9.2	-0.9	2.0	5.9	-0.1	-1.3	-5.7
123 Hexachlorobutadiene	-7.0	8.3	1.5	-0.3	6.2	-0.8	-1.1	-6.7
124 Naphthalene	-21.0	5.4	1.4	6.4	7.3	3.7	1.5	-4.6
125 1,2,3-Trichlorobenzene	-11.1	9.2	-2.0	2.3	6.3	0.1	-0.7	-4.1
126 2,4,5-Trichlorotoluene	5.9	1.6	-0.5	-4.2	1.7	0.7	-1.1	-4.0
127 2,3,6-Trichlorotoluene	-2.5	8.2	0.9	-4.8	0.7	0.2	0.3	-3.0
128 2-Methylnaphthalene R1	* -34.0	-25.9	-8.9	2.4	14.2	26.5	25.7	

ICalib Error Legend

R7, Calibration Average RF < Min. RF Limit

R2, Missing the Required Number of Calibration Points

R1, Curve Coefs Fail the Rule Error Limit Test

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128006.D
Lims ID: IC VSTD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 28-Jan-2015 13:58:30 ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD1
Misc. Info.: 180-0005450-006
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:05 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 29-Jan-2015 10:25:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.261	4.279	-0.018	94	127519	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.327	7.327	0.000	98	494647	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.436	10.442	-0.006	91	101660	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.790	12.790	0.000	98	162281	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.597	6.597	0.000	51	10756	5.00	4.81	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.974	6.974	0.000	51	15181	5.00	4.74	
$ 7 Toluene-d8 (Surr)	98	8.982	8.982	0.000	94	48094	5.00	6.00	
$ 8 4-Bromofluorobenzene (Surr	95	11.628	11.628	0.000	79	20719	5.00	6.08	
11 Dichlorodifluoromethane	85	1.608	1.608	0.000	94	12441	5.00	4.75	
12 Chloromethane	50	1.767	1.773	-0.006	97	19782	5.00	4.91	
13 Vinyl chloride	62	1.900	1.907	-0.006	94	16929	5.00	4.74	
14 Butadiene	39	1.931	1.943	-0.012	96	19072	5.00	5.00	
15 Bromomethane	94	2.247	2.253	-0.006	77	7254	5.00	5.06	M
16 Chloroethane	64	2.393	2.393	0.000	58	11109	5.00	5.07	M
17 Dichlorofluoromethane	67	2.673	2.673	0.000	92	24939	5.00	4.78	
18 Trichlorofluoromethane	101	2.697	2.685	0.012	77	19093	5.00	4.67	
20 Ethyl ether	59	3.062	3.075	-0.013	96	15266	5.00	4.90	
21 Acrolein	56	3.251	3.263	-0.012	96	39186	100.0	79.2	
22 1,1-Dichloroethene	96	3.385	3.373	0.012	78	12943	5.00	4.66	
23 1,1,2-Trichloro-1,2,2-trif	101	3.433	3.427	0.006	68	13773	5.00	4.90	
24 Acetone	43	3.452	3.464	-0.012	97	19736	25.0	22.6	
25 Iodomethane	142	3.567	3.579	-0.012	99	19019	5.00	4.62	
26 Carbon disulfide	76	3.677	3.689	-0.012	100	37034	5.00	4.50	
29 3-Chloro-1-propene	76	3.963	3.957	0.006	66	7309	5.00	4.05	
30 Methyl acetate	43	3.969	3.969	0.000	97	47953	25.0	22.4	
31 Methylene Chloride	84	4.182	4.176	0.006	91	28011	5.00	6.90	
32 2-Methyl-2-propanol	59	4.395	4.407	-0.012	54	5769	50.0	40.0	
33 Acrylonitrile	53	4.547	4.547	0.000	91	48759	50.0	43.7	M
34 trans-1,2-Dichloroethene	96	4.602	4.614	-0.012	73	15080	5.00	4.51	
35 Methyl tert-butyl ether	73	4.608	4.614	-0.006	98	39215	5.00	4.46	M

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.033	5.033	0.000	96	22898	5.00	4.76	
37 1,1-Dichloroethane	63	5.246	5.246	0.000	55	30038	5.00	4.64	M
38 Vinyl acetate	43	5.283	5.283	0.000	77	16394	5.00	4.87	
44 2-Butanone (MEK)	43	5.982	5.982	0.000	80	24262	25.0	21.6	
43 cis-1,2-Dichloroethene	96	5.989	5.982	0.007	85	16049	5.00	4.53	
42 2,2-Dichloropropane	77	5.982	5.989	-0.006	59	15822	5.00	4.31	
49 Tetrahydrofuran	42	6.287	6.281	0.007	89	8931	10.0	11.1	
48 Chlorobromomethane	128	6.274	6.281	-0.006	94	6679	5.00	4.73	
50 Chloroform	83	6.414	6.414	0.000	94	26162	5.00	4.70	
51 1,1,1-Trichloroethane	97	6.585	6.585	0.000	94	17622	5.00	4.15	
52 Cyclohexane	56	6.658	6.664	-0.006	96	31454	5.00	4.60	
53 Carbon tetrachloride	117	6.755	6.767	-0.012	77	15423	5.00	4.64	
54 1,1-Dichloropropene	75	6.767	6.773	-0.006	90	19800	5.00	4.68	
55 Isobutyl alcohol	41	6.925	6.938	-0.013	43	5333	125.0	81.0	
56 Benzene	78	6.974	6.986	-0.012	97	55932	5.00	4.55	
57 1,2-Dichloroethane	62	7.059	7.065	-0.006	97	19819	5.00	4.91	
59 n-Heptane	43	7.345	7.345	0.000	94	19391	5.00	4.96	
61 Trichloroethene	130	7.722	7.722	0.000	95	14298	5.00	5.11	
63 Methylcyclohexane	83	7.966	7.966	0.000	92	25239	5.00	4.58	
64 1,2-Dichloropropane	63	7.996	7.990	0.006	96	15660	5.00	4.82	
65 1,4-Dioxane	88	8.069	8.075	-0.006	31	1410	100.0	69.4	
67 Dibromomethane	93	8.075	8.081	-0.006	91	6013	5.00	4.14	
68 Dichlorobromomethane	83	8.270	8.270	0.000	93	14807	5.00	4.35	
71 cis-1,3-Dichloropropene	75	8.720	8.720	0.000	92	16586	5.00	4.24	
72 4-Methyl-2-pentanone (MIBK	43	8.854	8.854	0.000	97	48490	25.0	21.1	
73 Toluene	91	9.049	9.048	0.001	97	55826	5.00	5.37	
74 trans-1,3-Dichloropropene	75	9.298	9.292	0.006	97	12906	5.00	4.53	
75 Ethyl methacrylate	69	9.347	9.347	0.000	88	11478	5.00	4.38	
76 1,1,2-Trichloroethane	97	9.487	9.493	-0.006	84	10354	5.00	5.49	
77 Tetrachloroethene	164	9.572	9.566	0.006	95	10120	5.00	5.45	
78 1,3-Dichloropropane	76	9.651	9.651	0.000	91	17956	5.00	5.12	
79 2-Hexanone	43	9.687	9.687	0.000	98	27710	25.0	21.2	
81 Chlorodibromomethane	129	9.870	9.864	0.006	88	6831	5.00	4.26	
82 Ethylene Dibromide	107	9.979	9.985	-0.006	69	7830	5.00	4.56	
83 3-Chlorobenzotrifluoride	180	10.429	10.429	0.000	91	21442	5.00	5.93	
84 Chlorobenzene	112	10.466	10.472	-0.006	92	35175	5.00	5.42	
85 4-Chlorobenzotrifluoride	180	10.521	10.521	0.000	95	18514	5.00	5.50	
87 Ethylbenzene	106	10.563	10.563	0.000	98	20957	5.00	5.38	
86 1,1,1,2-Tetrachloroethane	131	10.563	10.563	0.000	41	8884	5.00	3.97	M
88 m-Xylene & p-Xylene	106	10.697	10.697	0.000	97	22659	5.00	4.72	
89 o-Xylene	106	11.080	11.080	0.000	97	23926	5.00	4.85	
90 Styrene	104	11.099	11.099	0.000	93	35287	5.00	4.85	
91 Bromoform	173	11.281	11.287	-0.006	20	3513	5.00	4.09	
92 2-Chlorobenzotrifluoride	180	11.342	11.342	0.000	95	21177	5.00	5.62	
93 Isopropylbenzene	105	11.452	11.451	0.001	96	62340	5.00	5.12	
96 1,1,2,2-Tetrachloroethane	83	11.756	11.756	0.000	90	12611	5.00	4.97	
95 Bromobenzene	156	11.768	11.768	0.000	93	13104	5.00	4.61	
97 trans-1,4-Dichloro-2-buten	53	11.792	11.792	0.000	57	3977	5.00	4.98	
98 1,2,3-Trichloropropane	110	11.823	11.810	0.013	79	3506	5.00	4.22	
99 N-Propylbenzene	120	11.871	11.871	0.000	99	15430	5.00	4.55	
100 2-Chlorotoluene	126	11.963	11.956	0.006	94	14645	5.00	4.90	
101 3-Chlorotoluene	126	12.029	12.023	0.006	96	16255	5.00	5.20	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.048	12.048	0.000	92	49931	5.00	4.58	
103 4-Chlorotoluene	126	12.078	12.078	0.000	99	15542	5.00	5.06	
104 tert-Butylbenzene	119	12.364	12.364	0.000	93	41544	5.00	4.89	
106 1,2,4-Trimethylbenzene	105	12.425	12.425	0.000	96	53610	5.00	4.75	
107 1,2-dichloro-4-(trifluorom	214	12.455	12.455	0.000	95	16045	5.00	5.09	
108 sec-Butylbenzene	105	12.583	12.589	-0.006	95	63316	5.00	4.82	
109 1,3-Dichlorobenzene	146	12.711	12.711	0.000	93	28428	5.00	5.11	
110 4-Isopropyltoluene	119	12.747	12.741	0.006	95	51820	5.00	4.87	
111 1,4-Dichlorobenzene	146	12.814	12.814	0.000	89	30705	5.00	5.33	
113 2,4-Dichloro-1-(triflourom	214	12.826	12.826	0.000	55	13661	5.00	4.32	
114 2,5-Dichlorobenzotrifluori	214	12.869	12.869	0.000	94	16677	5.00	4.78	
116 n-Butylbenzene	91	13.155	13.155	0.000	96	46654	5.00	4.56	
117 1,2-Dichlorobenzene	146	13.167	13.173	-0.006	92	27877	5.00	5.01	
118 1,2-Dibromo-3-Chloropropan	75	13.958	13.964	-0.006	12	1941	5.00	4.37	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.104	14.104	0.000	98	75930	15.0	14.5	
121 2,3- & 3,4- Dichlorotoluen	125	14.524	14.518	0.006	98	55126	10.0	9.66	
122 1,2,4-Trichlorobenzene	180	14.785	14.791	-0.006	91	19598	5.00	4.55	
123 Hexachlorobutadiene	225	14.931	14.931	0.000	93	7834	5.00	4.65	
124 Naphthalene	128	15.053	15.053	0.000	97	29248	5.00	3.95	
125 1,2,3-Trichlorobenzene	180	15.278	15.278	0.000	92	16016	5.00	4.44	
126 2,4,5-Trichlorotoluene	159	16.045	16.044	0.001	0	14043	5.00	5.29	
127 2,3,6-Trichlorotoluene	159	16.148	16.148	0.000	90	11530	5.00	4.88	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		10.0	9.04	
S 131 Xylenes, Total	106				0		10.0	9.56	
S 132 1,3-Dichloropropene, Total	1				0		10.0	8.77	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00029	Amount Added:	0.20	Units: uL	
voaWeemixpri_00001	Amount Added:	0.20	Units: uL	
voaWVApri Res_00001	Amount Added:	0.20	Units: uL	
VOA8260VOAPRI_00097	Amount Added:	0.20	Units: uL	
VOAKETONEPRI_00003	Amount Added:	0.80	Units: uL	
voaWAcropri R_00006	Amount Added:	4.00	Units: uL	
VOA8260INT_00027	Amount Added:	2.00	Units: uL	Run Reagent

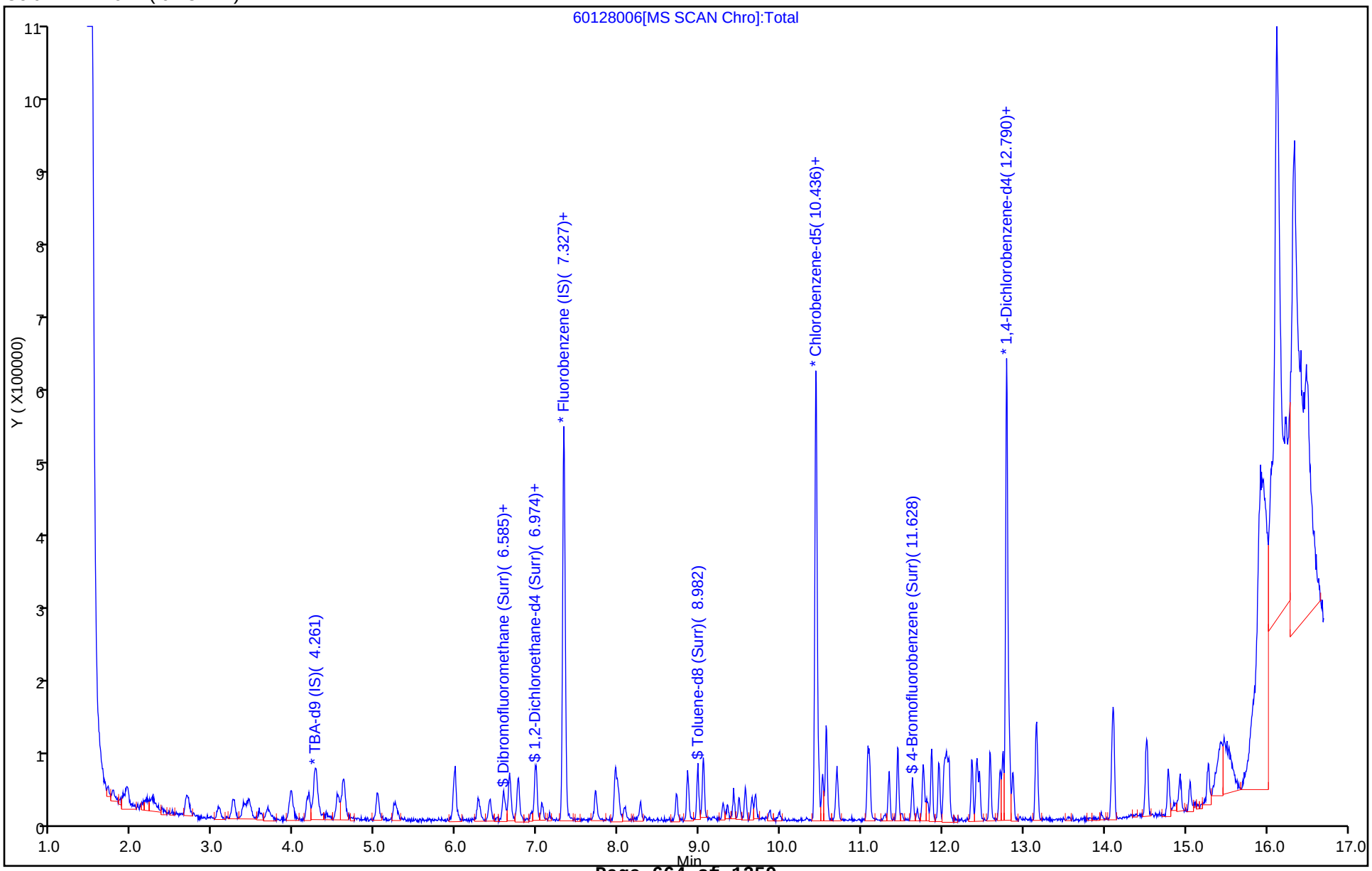
Report Date: 29-Jan-2015 12:59:06 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128006.D

Injection Date:	28-Jan-2015 13:58:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD1			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

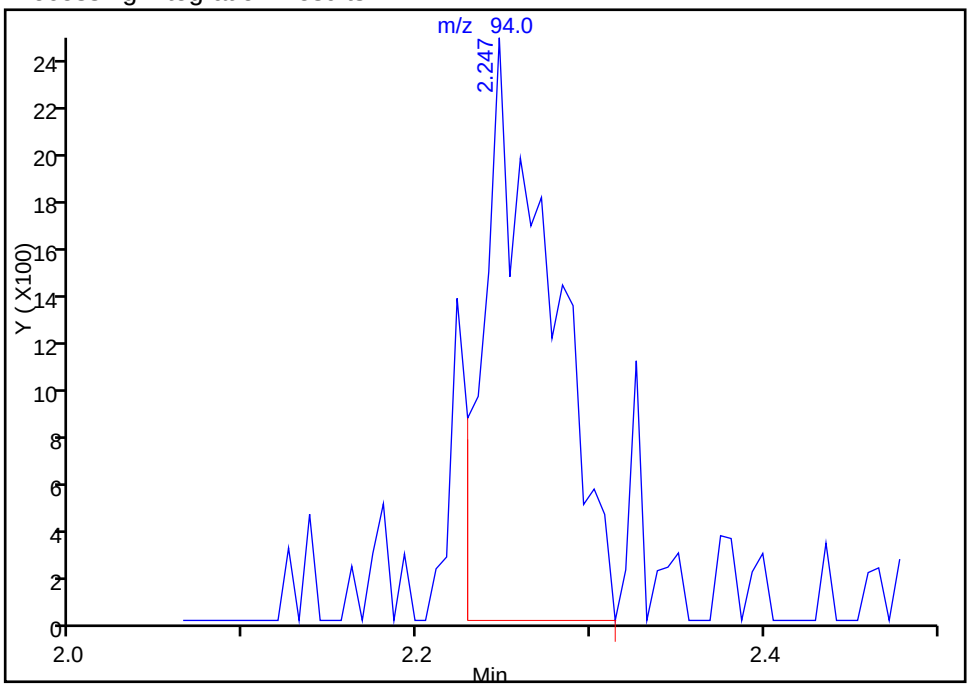
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128006.D				
Injection Date:	28-Jan-2015 13:58:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	4	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

15 Bromomethane, CAS: 74-83-9

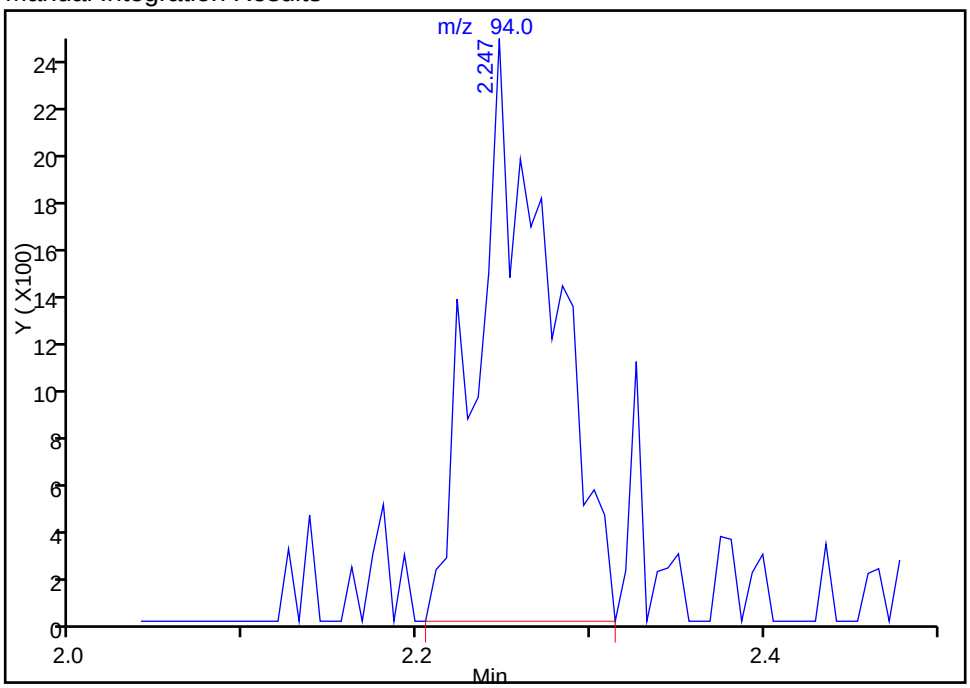
Processing Integration Results

RT: 2.25
Area: 6582
Amount: 4.663707
Amount Units: ng



Manual Integration Results

RT: 2.25
Area: 7254
Amount: 5.059028
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:25:48
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

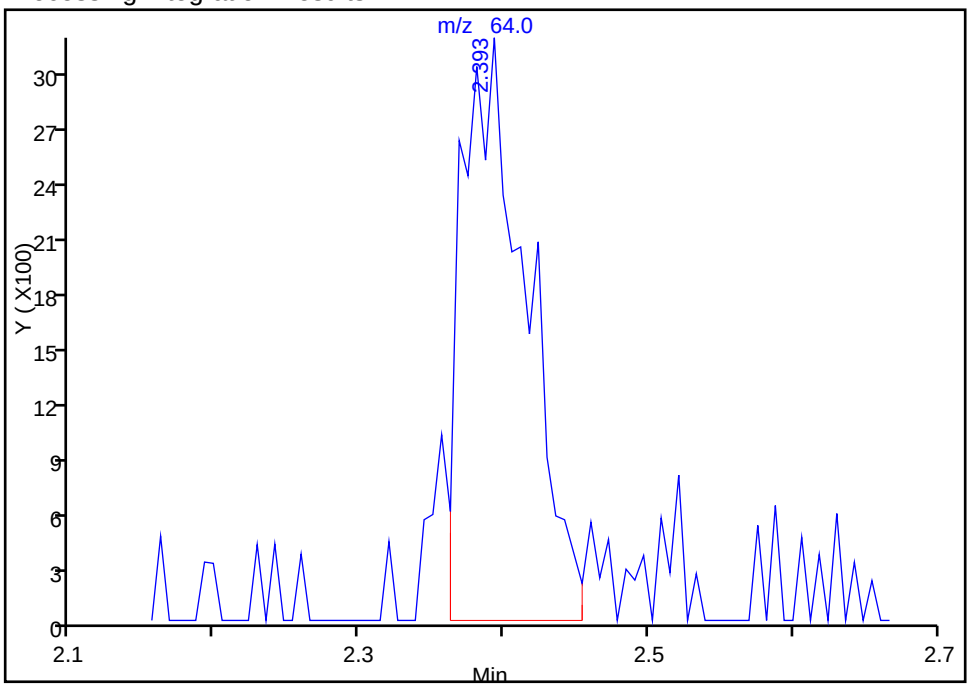
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128006.D				
Injection Date:	28-Jan-2015 13:58:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	4	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

16 Chloroethane, CAS: 75-00-3

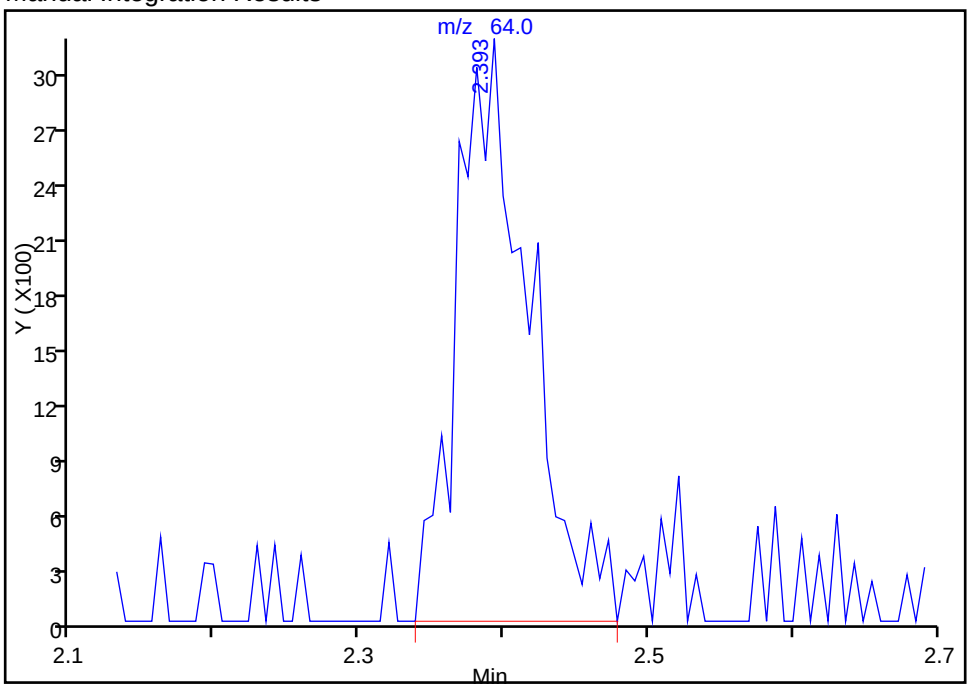
Processing Integration Results

RT: 2.39
Area: 9880
Amount: 4.574556
Amount Units: ng



Manual Integration Results

RT: 2.39
Area: 11109
Amount: 5.071451
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:25:48
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

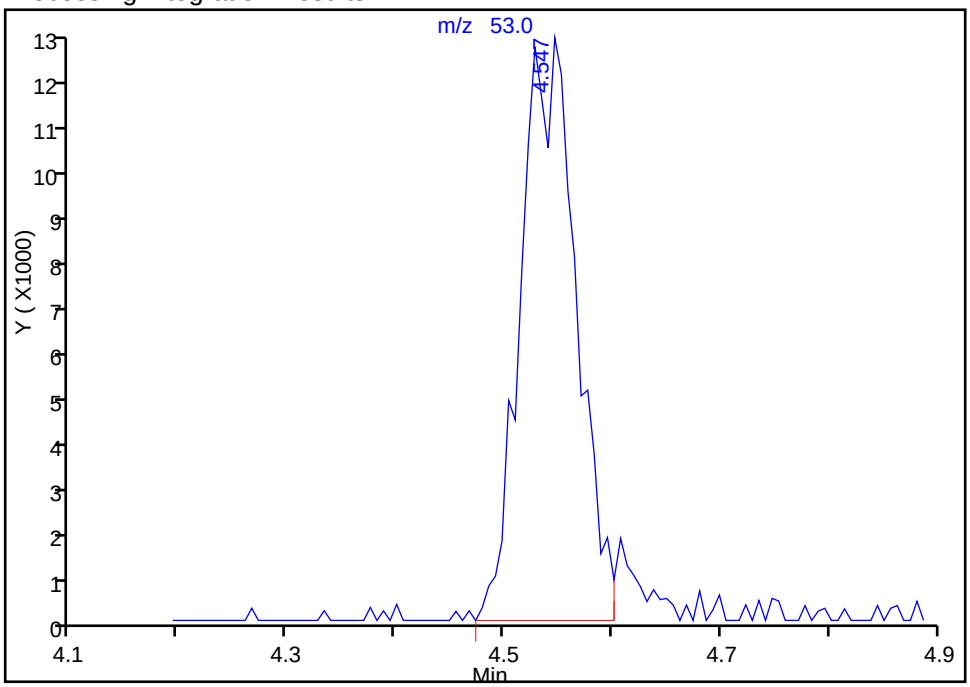
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128006.D				
Injection Date:	28-Jan-2015 13:58:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	4	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

33 Acrylonitrile, CAS: 107-13-1

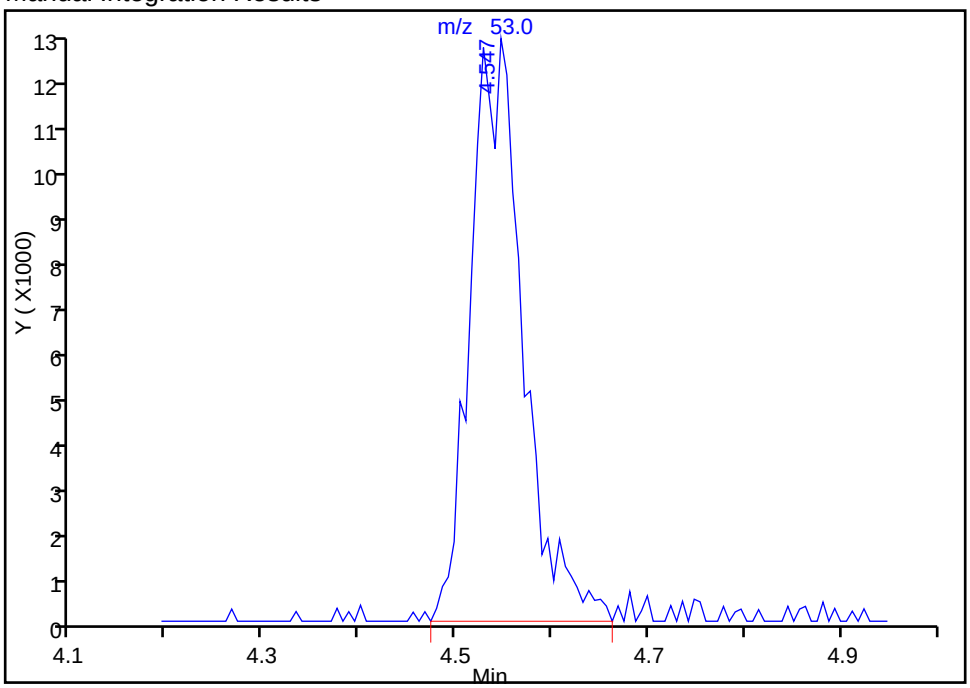
Processing Integration Results

RT: 4.55
Area: 46151
Amount: 41.571241
Amount Units: ng



Manual Integration Results

RT: 4.55
Area: 48759
Amount: 43.664000
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:25:48
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

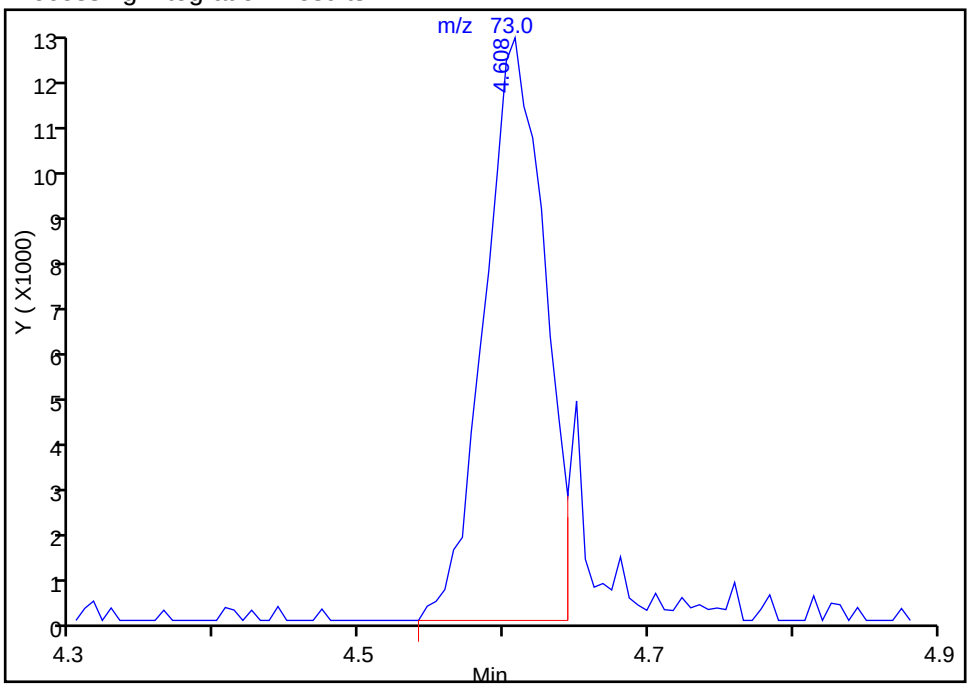
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128006.D
Injection Date: 28-Jan-2015 13:58:30 Instrument ID: CHHP6
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

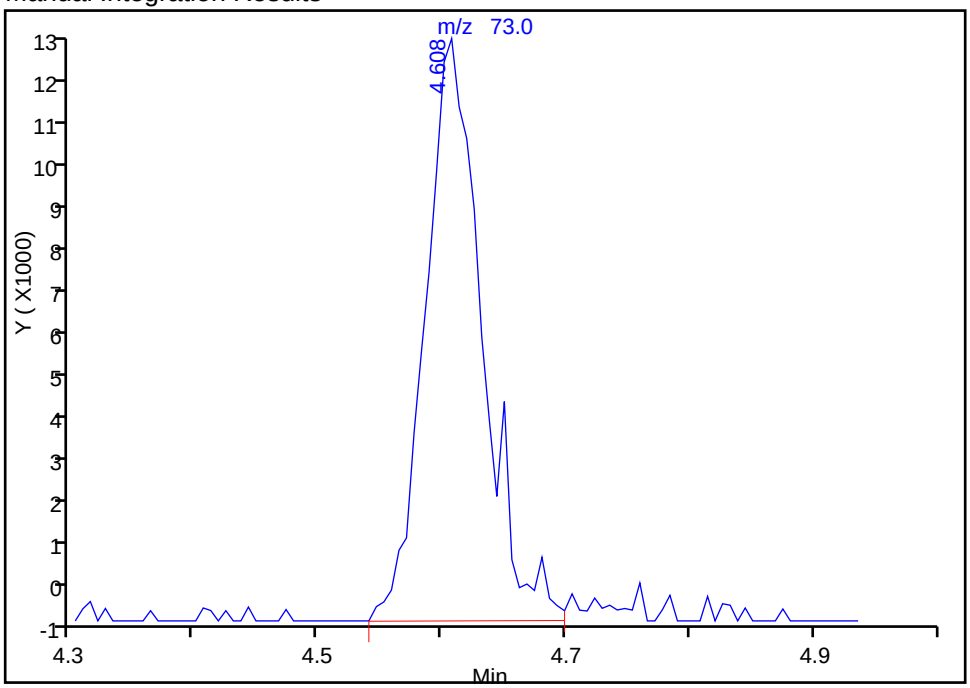
Processing Integration Results

RT: 4.61
Area: 35452
Amount: 4.077319
Amount Units: ng



Manual Integration Results

RT: 4.61
Area: 39215
Amount: 4.461825
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:25:48
Audit Action: Manually Integrated
Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

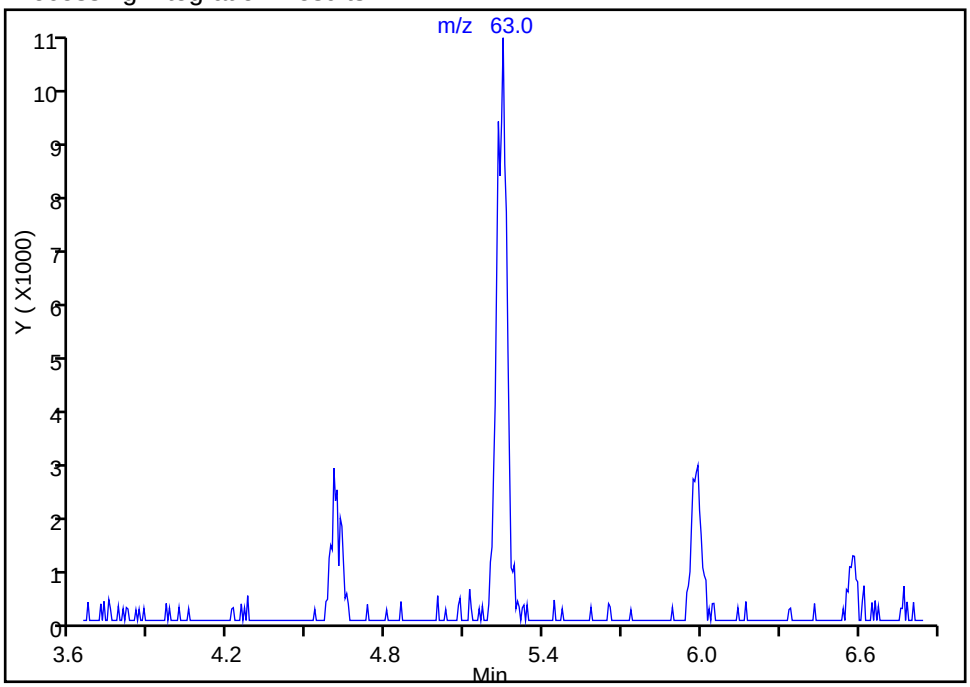
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128006.D				
Injection Date:	28-Jan-2015 13:58:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	4	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

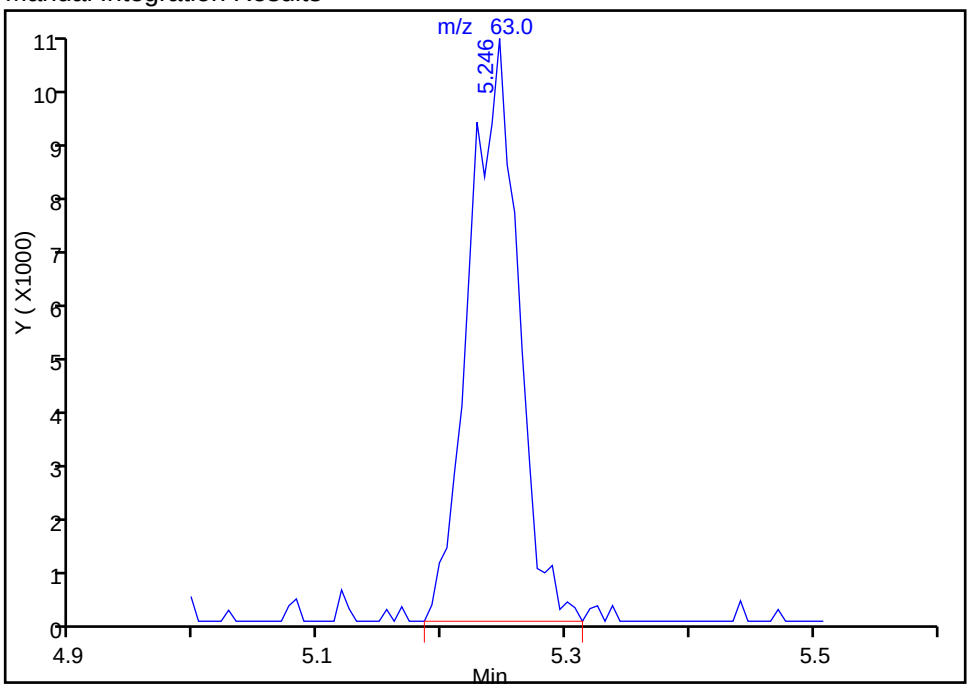
Not Detected
Expected RT: 5.25

Processing Integration Results



Manual Integration Results

RT: 5.25
Area: 30038
Amount: 4.644301
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:25:48
Audit Action: Manually Integrated
Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

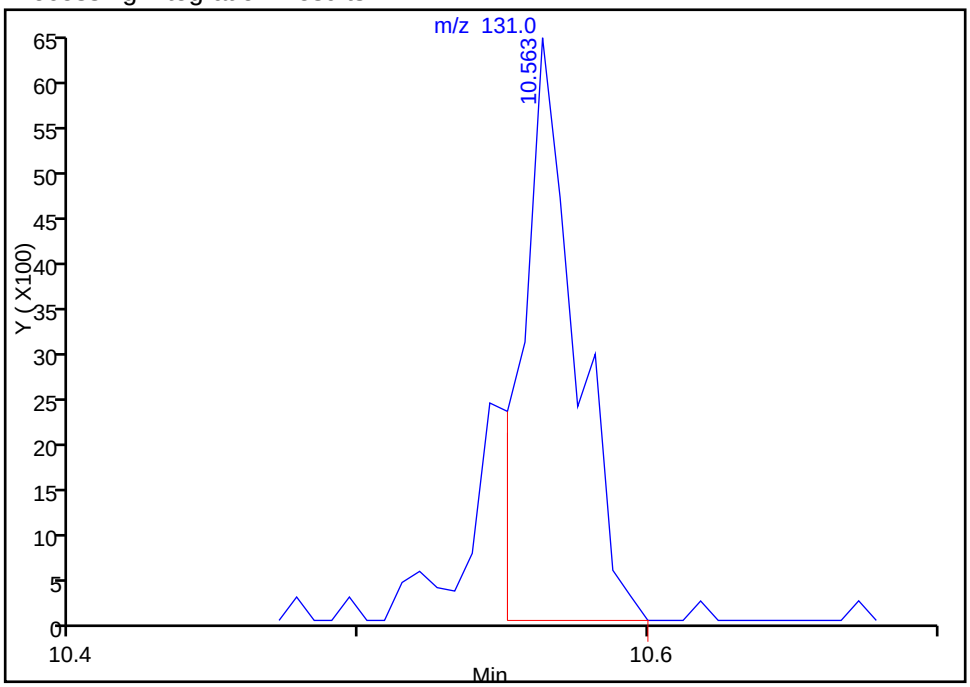
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128006.D				
Injection Date:	28-Jan-2015 13:58:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	4	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

86 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

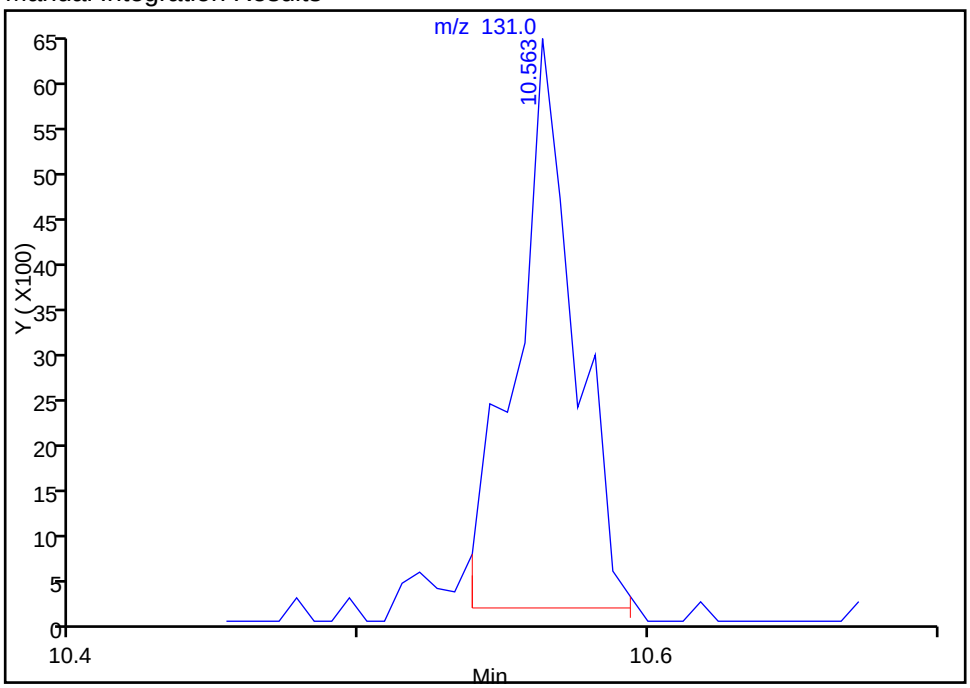
Processing Integration Results

RT: 10.56
Area: 8268
Amount: 3.722370
Amount Units: ng



Manual Integration Results

RT: 10.56
Area: 8884
Amount: 3.972161
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:25:48
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128007.D
Lims ID: IC VSTD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 28-Jan-2015 14:21:30 ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD5
Misc. Info.: 180-0005450-007
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:07 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 29-Jan-2015 10:28:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.274	4.279	-0.005	94	147158	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.328	7.327	0.001	97	405888	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.437	10.442	-0.005	92	85838	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.791	12.790	0.001	97	137352	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.604	6.597	0.007	90	48823	25.0	26.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.976	6.974	0.002	50	70258	25.0	26.7	
$ 7 Toluene-d8 (Surr)	98	8.983	8.982	0.001	94	183840	25.0	27.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.629	11.628	0.001	82	75189	25.0	26.1	
11 Dichlorodifluoromethane	85	1.610	1.608	0.002	99	61413	25.0	28.6	
12 Chloromethane	50	1.774	1.773	0.001	98	91222	25.0	27.6	
13 Vinyl chloride	62	1.902	1.907	-0.004	97	80864	25.0	27.6	
14 Butadiene	39	1.945	1.943	0.001	89	91449	25.0	29.2	
15 Bromomethane	94	2.261	2.253	0.008	92	35506	25.0	30.2	
16 Chloroethane	64	2.389	2.393	-0.004	97	48264	25.0	26.9	
17 Dichlorofluoromethane	67	2.675	2.673	0.002	94	124955	25.0	29.2	M
18 Trichlorofluoromethane	101	2.699	2.685	0.014	95	104021	25.0	31.0	
20 Ethyl ether	59	3.076	3.075	0.001	95	65645	25.0	25.7	
21 Acrolein	56	3.252	3.263	-0.011	97	55086	125.0	135.7	
22 1,1-Dichloroethene	96	3.368	3.373	-0.005	92	63440	25.0	27.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.441	3.427	0.014	94	62215	25.0	27.0	
24 Acetone	43	3.465	3.464	0.001	91	41421	50.0	57.7	
25 Iodomethane	142	3.581	3.579	0.002	99	92291	25.0	27.3	
26 Carbon disulfide	76	3.684	3.689	-0.005	99	180744	25.0	26.8	
29 3-Chloro-1-propene	76	3.958	3.957	0.001	76	41661	25.0	28.1	
30 Methyl acetate	43	3.964	3.969	-0.005	98	232955	125.0	132.6	
31 Methylene Chloride	84	4.183	4.176	0.007	99	89407	25.0	26.8	
32 2-Methyl-2-propanol	59	4.408	4.407	0.001	94	44315	250.0	266.5	
33 Acrylonitrile	53	4.542	4.547	-0.005	100	238315	250.0	260.1	
34 trans-1,2-Dichloroethene	96	4.621	4.614	0.007	77	74610	25.0	27.2	
35 Methyl tert-butyl ether	73	4.615	4.614	0.001	98	186042	25.0	25.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.029	5.033	-0.004	93	103798	25.0	26.3	
37 1,1-Dichloroethane	63	5.242	5.246	-0.004	96	145146	25.0	27.3	
38 Vinyl acetate	43	5.278	5.283	-0.005	94	66357	25.0	24.0	
44 2-Butanone (MEK)	43	5.972	5.982	-0.010	49	42402	50.0	46.1	
43 cis-1,2-Dichloroethene	96	5.990	5.982	0.008	85	78570	25.0	27.0	
42 2,2-Dichloropropane	77	5.990	5.989	0.002	66	83097	25.0	27.6	
49 Tetrahydrofuran	42	6.288	6.281	0.008	80	37414	50.0	56.6	
48 Chlorobromomethane	128	6.282	6.281	0.002	89	29353	25.0	25.3	
50 Chloroform	83	6.416	6.414	0.002	95	121573	25.0	26.6	
51 1,1,1-Trichloroethane	97	6.580	6.585	-0.005	97	94502	25.0	27.1	
52 Cyclohexane	56	6.665	6.664	0.001	96	160049	25.0	28.5	
53 Carbon tetrachloride	117	6.757	6.767	-0.010	95	66664	25.0	24.5	
54 1,1-Dichloropropene	75	6.775	6.773	0.002	94	92563	25.0	26.6	
55 Isobutyl alcohol	41	6.933	6.938	-0.005	88	32224	625.0	596.8	
56 Benzene	78	6.982	6.986	-0.004	97	279397	25.0	27.7	
57 1,2-Dichloroethane	62	7.061	7.065	-0.004	96	82990	25.0	25.1	
59 n-Heptane	43	7.353	7.345	0.008	95	84739	25.0	26.4	
61 Trichloroethene	130	7.718	7.722	-0.004	96	60983	25.0	26.6	
63 Methylcyclohexane	83	7.967	7.966	0.001	94	123591	25.0	27.3	
64 1,2-Dichloropropane	63	7.998	7.990	0.008	88	66666	25.0	25.0	
65 1,4-Dioxane	88	8.077	8.075	0.002	40	7809	500.0	468.1	M
67 Dibromomethane	93	8.083	8.081	0.002	93	29036	25.0	24.4	
68 Dichlorobromomethane	83	8.271	8.270	0.001	98	66762	25.0	23.9	
71 cis-1,3-Dichloropropene	75	8.721	8.720	0.001	91	71082	25.0	22.2	
72 4-Methyl-2-pentanone (MIBK	43	8.855	8.854	0.001	97	94789	50.0	48.9	
73 Toluene	91	9.050	9.048	0.002	99	245530	25.0	28.0	
74 trans-1,3-Dichloropropene	75	9.299	9.292	0.007	98	55603	25.0	23.1	
75 Ethyl methacrylate	69	9.354	9.347	0.007	91	52242	25.0	23.6	
76 1,1,2-Trichloroethane	97	9.488	9.493	-0.005	89	43032	25.0	27.0	
77 Tetrachloroethene	164	9.567	9.566	0.001	96	43168	25.0	27.5	
78 1,3-Dichloropropane	76	9.652	9.651	0.001	92	77521	25.0	26.2	
79 2-Hexanone	43	9.695	9.687	0.008	95	55014	50.0	49.8	M
81 Chlorodibromomethane	129	9.871	9.864	0.007	87	31276	25.0	23.1	
82 Ethylene Dibromide	107	9.981	9.985	-0.004	95	36764	25.0	25.4	
83 3-Chlorobenzotrifluoride	180	10.431	10.429	0.002	93	83450	25.0	27.3	
84 Chlorobenzene	112	10.467	10.472	-0.005	91	145556	25.0	26.6	
85 4-Chlorobenzotrifluoride	180	10.522	10.521	0.001	95	80499	25.0	28.3	
87 Ethylbenzene	106	10.571	10.563	0.008	99	86627	25.0	26.4	
86 1,1,1,2-Tetrachloroethane	131	10.559	10.563	-0.004	42	48143	25.0	25.5	
88 m-Xylene & p-Xylene	106	10.705	10.697	0.008	99	111891	25.0	27.6	
89 o-Xylene	106	11.076	11.080	-0.004	97	112080	25.0	26.9	
90 Styrene	104	11.106	11.099	0.007	95	157741	25.0	25.7	
91 Bromoform	173	11.283	11.287	-0.004	93	17267	25.0	23.8	
92 2-Chlorobenzotrifluoride	180	11.343	11.342	0.001	96	86153	25.0	27.1	
93 Isopropylbenzene	105	11.447	11.451	-0.004	97	302221	25.0	29.4	
96 1,1,2,2-Tetrachloroethane	83	11.757	11.756	0.001	96	58000	25.0	27.1	
95 Bromobenzene	156	11.769	11.768	0.001	97	60469	25.0	25.2	
97 trans-1,4-Dichloro-2-buten	53	11.794	11.792	0.002	60	15381	25.0	22.8	
98 1,2,3-Trichloropropane	110	11.812	11.810	0.002	83	18469	25.0	26.2	
99 N-Propylbenzene	120	11.867	11.871	-0.004	99	76375	25.0	26.6	
100 2-Chlorotoluene	126	11.958	11.956	0.002	95	67028	25.0	26.5	
101 3-Chlorotoluene	126	12.025	12.023	0.002	96	66559	25.0	25.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.049	12.048	0.001	93	256568	25.0	27.8	
103 4-Chlorotoluene	126	12.080	12.078	0.002	99	67753	25.0	26.1	
104 tert-Butylbenzene	119	12.365	12.364	0.001	92	188912	25.0	26.3	
106 1,2,4-Trimethylbenzene	105	12.426	12.425	0.001	97	263177	25.0	27.5	
107 1,2-dichloro-4-(trifluorom	214	12.457	12.455	0.002	97	70285	25.0	26.3	
108 sec-Butylbenzene	105	12.591	12.589	0.002	95	314946	25.0	28.3	
109 1,3-Dichlorobenzene	146	12.712	12.711	0.001	95	127066	25.0	27.0	
110 4-Isopropyltoluene	119	12.743	12.741	0.002	96	242039	25.0	26.9	
111 1,4-Dichlorobenzene	146	12.816	12.814	0.002	89	127353	25.0	26.1	
113 2,4-Dichloro-1-(triflourom	214	12.834	12.826	0.008	43	79958	25.0	29.8	
114 2,5-Dichlorobenzotrifluori	214	12.870	12.869	0.001	97	75184	25.0	25.5	
116 n-Butylbenzene	91	13.156	13.155	0.001	98	241849	25.0	27.9	
117 1,2-Dichlorobenzene	146	13.169	13.173	-0.005	92	125111	25.0	26.6	
118 1,2-Dibromo-3-Chloropropan	75	13.959	13.964	-0.005	70	9741	25.0	25.9	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.105	14.104	0.001	99	389895	75.0	88.2	
121 2,3- & 3,4- Dichlorotoluen	125	14.519	14.518	0.001	99	285810	50.0	59.2	
122 1,2,4-Trichlorobenzene	180	14.781	14.791	-0.010	93	99622	25.0	27.3	
123 Hexachlorobutadiene	225	14.927	14.931	-0.004	95	38609	25.0	27.1	
124 Naphthalene	128	15.054	15.053	0.001	97	165187	25.0	26.4	
125 1,2,3-Trichlorobenzene	180	15.279	15.278	0.001	94	83313	25.0	27.3	
126 2,4,5-Trichlorotoluene	159	16.046	16.044	0.002	0	57044	25.0	25.4	
127 2,3,6-Trichlorotoluene	159	16.149	16.148	0.001	94	54138	25.0	27.0	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		50.0	54.2	
S 131 Xylenes, Total	106				0		50.0	54.5	
S 132 1,3-Dichloropropene, Total	1				0		50.0	45.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00029	Amount Added:	1.00	Units: uL	
voaWAcropri R_00006	Amount Added:	5.00	Units: uL	
voaWeemixpri_00001	Amount Added:	1.00	Units: uL	
VOAKETONEPRI_00003	Amount Added:	1.00	Units: uL	
VOA8260VOAPRI_00097	Amount Added:	1.00	Units: uL	
voaWVApri Res_00001	Amount Added:	1.00	Units: uL	
VOA8260INT_00027	Amount Added:	2.00	Units: uL	Run Reagent

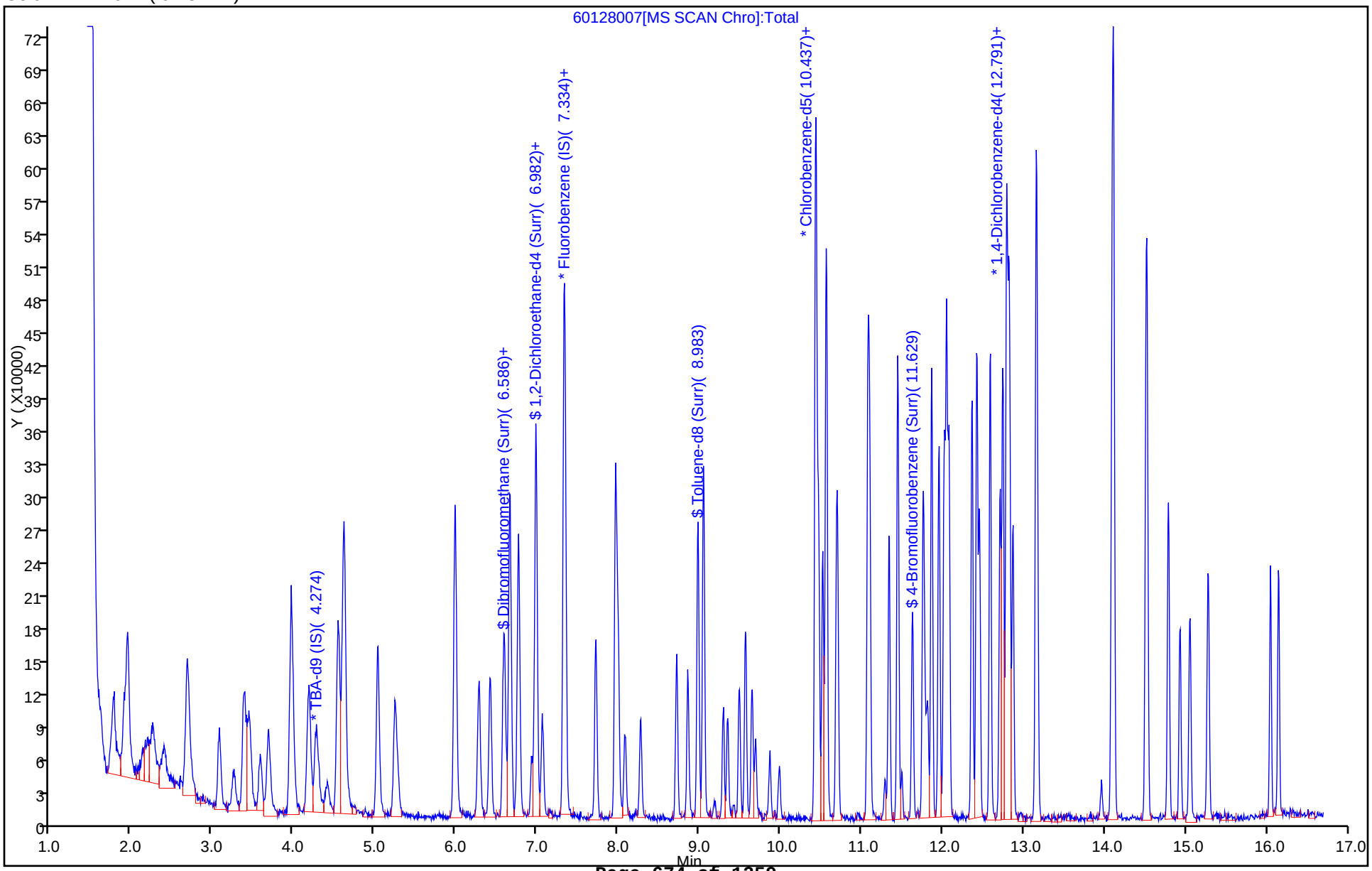
Report Date: 29-Jan-2015 12:59:08 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128007.D

Injection Date:	28-Jan-2015 14:21:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD5			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

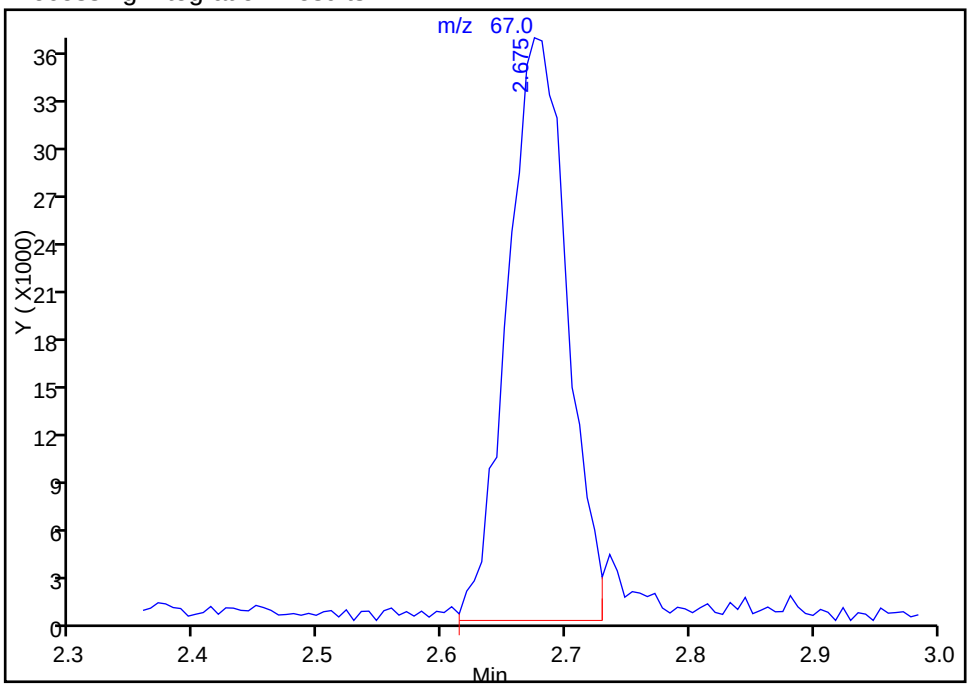
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128007.D
Injection Date: 28-Jan-2015 14:21:30 Instrument ID: CHHP6
Lims ID: IC VSTD5
Client ID:
Operator ID: 001562 ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

17 Dichlorofluoromethane, CAS: 75-43-4

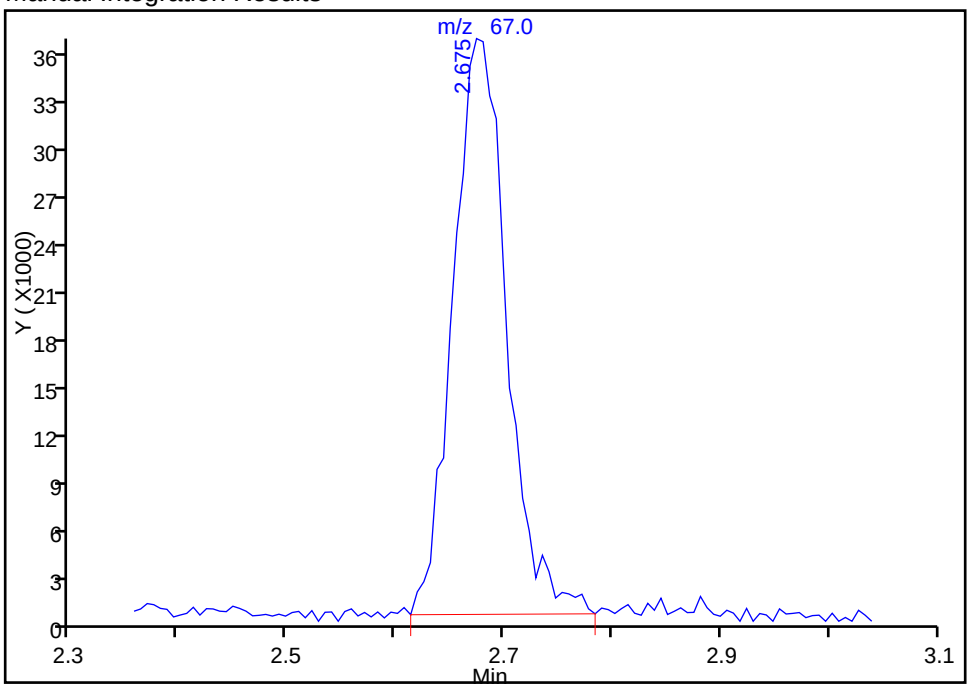
Processing Integration Results

RT: 2.67
Area: 123498
Amount: 28.870358
Amount Units: ng



Manual Integration Results

RT: 2.67
Area: 124955
Amount: 29.161301
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:28:06
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

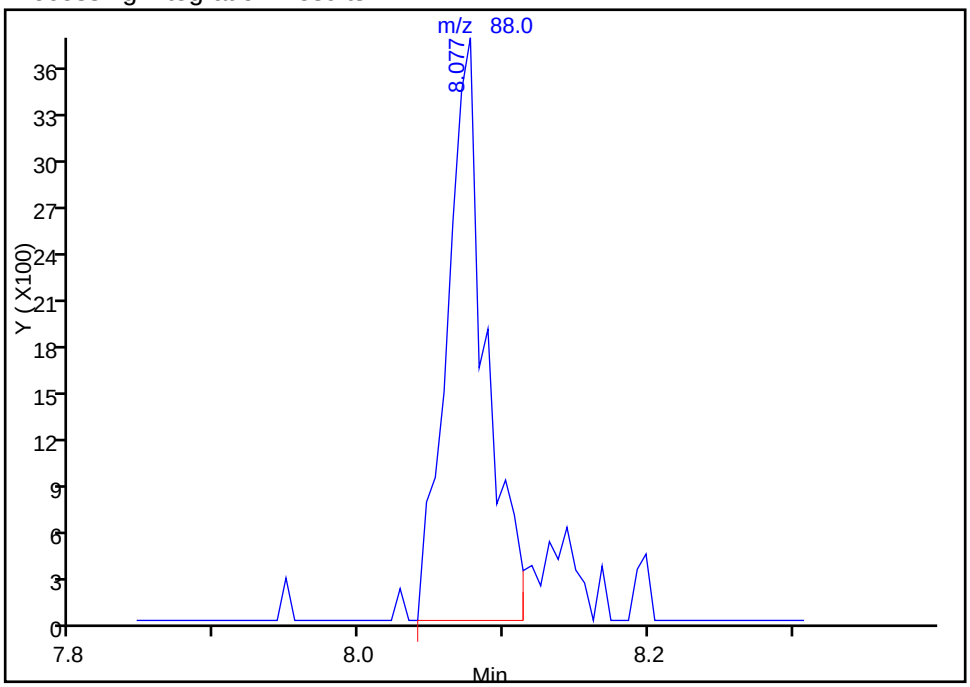
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128007.D
Injection Date: 28-Jan-2015 14:21:30 Instrument ID: CHHP6
Lims ID: IC VSTD5
Client ID:
Operator ID: 001562 ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

65 1,4-Dioxane, CAS: 123-91-1

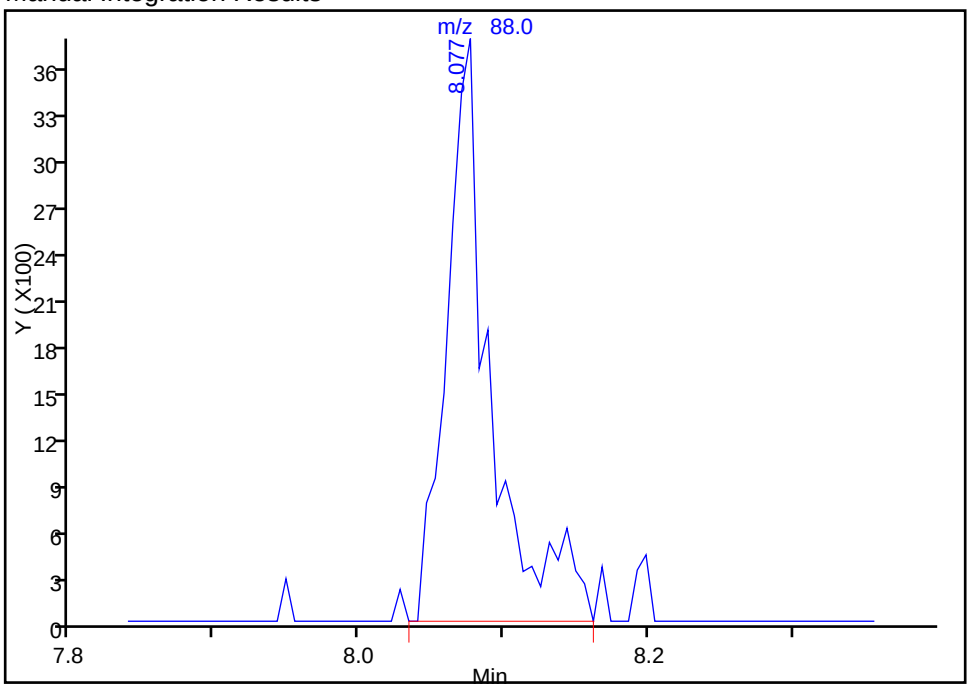
Processing Integration Results

RT: 8.08
Area: 6858
Amount: 429.4537
Amount Units: ng



Manual Integration Results

RT: 8.08
Area: 7809
Amount: 468.0903
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:31:00
Audit Action: Manually Integrated
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

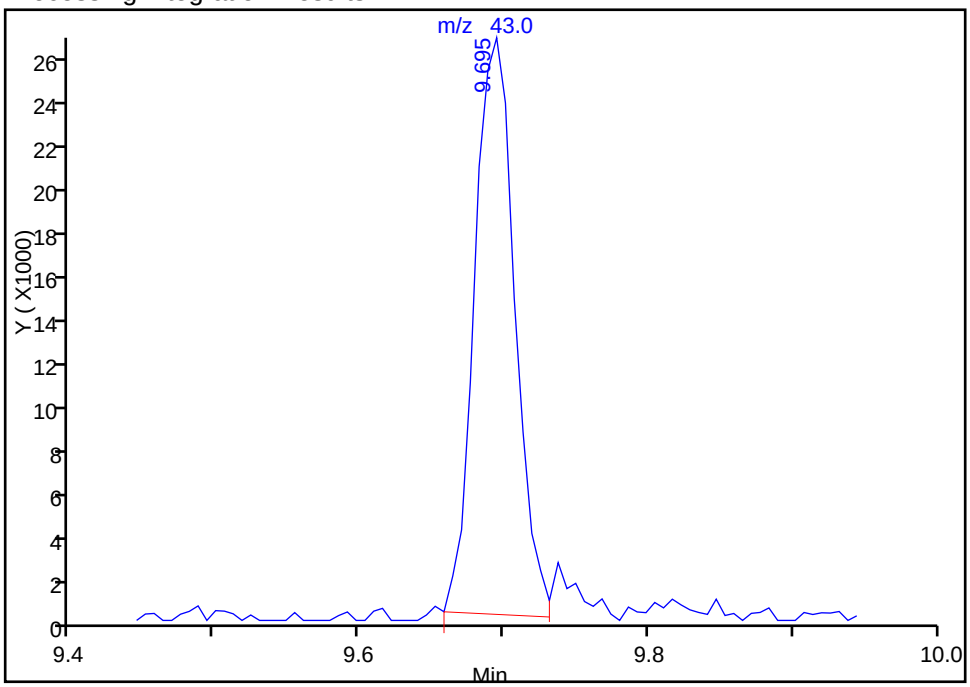
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128007.D				
Injection Date:	28-Jan-2015 14:21:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD5				
Client ID:					
Operator ID:	001562	ALS Bottle#:	5	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

79 2-Hexanone, CAS: 591-78-6

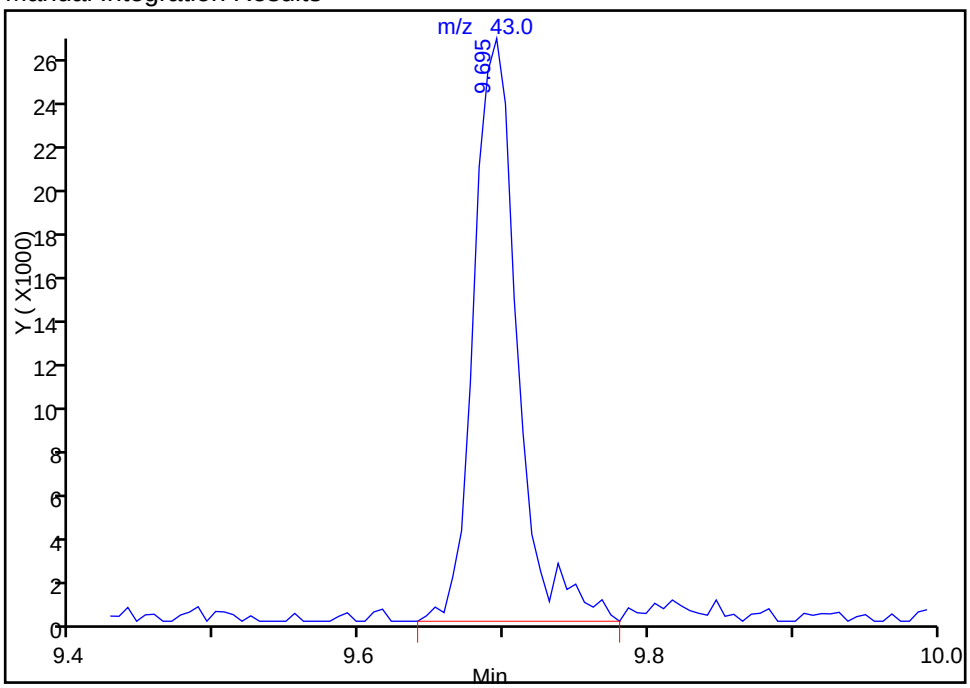
Processing Integration Results

RT: 9.69
Area: 50333
Amount: 46.043032
Amount Units: ng



Manual Integration Results

RT: 9.69
Area: 55014
Amount: 49.792035
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:31:00
Audit Action: Manually Integrated
Audit Reason: Baseline

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128008.D
Lims ID: ICIS VSTD10
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 28-Jan-2015 14:45:30 ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS VSTD10
Misc. Info.: 180-0005450-008
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:09 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 29-Jan-2015 10:09:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.279	4.279	0.000	95	146525	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.327	7.327	0.000	97	447720	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.442	10.442	0.000	93	93543	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.790	12.790	0.000	96	154402	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.597	6.597	0.000	92	103502	50.0	51.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.974	6.974	0.000	49	150111	50.0	51.8	
$ 7 Toluene-d8 (Surr)	98	8.982	8.982	0.000	94	421866	50.0	57.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.628	11.628	0.000	84	172172	50.0	54.9	
11 Dichlorodifluoromethane	85	1.608	1.608	0.000	100	123370	50.0	52.0	
12 Chloromethane	50	1.773	1.773	0.000	98	180612	50.0	49.5	
13 Vinyl chloride	62	1.907	1.907	0.000	98	164249	50.0	50.8	
14 Butadiene	39	1.943	1.943	0.000	91	173303	50.0	50.2	
15 Bromomethane	94	2.253	2.253	0.000	90	68708	50.0	52.9	
16 Chloroethane	64	2.393	2.393	0.000	98	103324	50.0	52.1	
17 Dichlorofluoromethane	67	2.673	2.673	0.000	96	239388	50.0	50.6	
18 Trichlorofluoromethane	101	2.685	2.685	0.000	74	186613	50.0	50.5	
20 Ethyl ether	59	3.075	3.075	0.000	95	140456	50.0	49.8	
21 Acrolein	56	3.263	3.263	0.000	93	64846	150.0	144.9	
22 1,1-Dichloroethene	96	3.373	3.373	0.000	94	131155	50.0	52.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.427	3.427	0.000	95	127227	50.0	50.0	
24 Acetone	43	3.464	3.464	0.000	100	72525	100.0	91.6	
25 Iodomethane	142	3.579	3.579	0.000	98	186664	50.0	50.1	
26 Carbon disulfide	76	3.689	3.689	0.000	100	366360	50.0	49.2	
29 3-Chloro-1-propene	76	3.957	3.957	0.000	78	81645	50.0	50.0	
30 Methyl acetate	43	3.969	3.969	0.000	97	476543	250.0	245.8	
31 Methylene Chloride	84	4.176	4.176	0.000	97	176505	50.0	48.0	
32 2-Methyl-2-propanol	59	4.407	4.407	0.000	96	82385	500.0	497.5	
33 Acrylonitrile	53	4.547	4.547	0.000	99	503259	500.0	497.9	
34 trans-1,2-Dichloroethene	96	4.614	4.614	0.000	74	152947	50.0	50.5	
35 Methyl tert-butyl ether	73	4.614	4.614	0.000	98	394527	50.0	49.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.033	5.033	0.000	93	218490	50.0	50.2	
37 1,1-Dichloroethane	63	5.246	5.246	0.000	96	295240	50.0	50.4	
38 Vinyl acetate	43	5.283	5.283	0.000	97	142927	50.0	47.0	
44 2-Butanone (MEK)	43	5.982	5.982	0.000	48	97685	100.0	96.2	
43 cis-1,2-Dichloroethene	96	5.982	5.982	0.000	85	160524	50.0	50.0	
42 2,2-Dichloropropane	77	5.989	5.989	0.000	64	163798	50.0	49.3	
49 Tetrahydrofuran	42	6.281	6.281	0.000	68	62273	100.0	85.4	
48 Chlorobromomethane	128	6.281	6.281	0.000	91	61127	50.0	47.8	
50 Chloroform	83	6.414	6.414	0.000	94	254065	50.0	50.4	
51 1,1,1-Trichloroethane	97	6.585	6.585	0.000	98	189759	50.0	49.4	
52 Cyclohexane	56	6.664	6.664	0.000	95	320878	50.0	51.9	
53 Carbon tetrachloride	117	6.767	6.767	0.000	94	154066	50.0	51.3	
54 1,1-Dichloropropene	75	6.773	6.773	0.000	93	188906	50.0	49.3	
55 Isobutyl alcohol	41	6.938	6.938	0.000	89	71829	1250.0	1206.0	M
56 Benzene	78	6.986	6.986	0.000	97	577373	50.0	51.9	
57 1,2-Dichloroethane	62	7.065	7.065	0.000	97	178647	50.0	48.9	
59 n-Heptane	43	7.345	7.345	0.000	95	182403	50.0	51.5	
61 Trichloroethene	130	7.722	7.722	0.000	96	123549	50.0	48.8	
63 Methylcyclohexane	83	7.966	7.966	0.000	94	262105	50.0	52.5	
64 1,2-Dichloropropane	63	7.990	7.990	0.000	86	142558	50.0	48.5	
65 1,4-Dioxane	88	8.075	8.075	0.000	38	18208	1000.0	989.5	
67 Dibromomethane	93	8.081	8.081	0.000	94	67249	50.0	51.2	
68 Dichlorobromomethane	83	8.270	8.270	0.000	98	148860	50.0	48.3	
71 cis-1,3-Dichloropropene	75	8.720	8.720	0.000	92	162719	50.0	46.0	
72 4-Methyl-2-pentanone (MIBK	43	8.854	8.854	0.000	97	221045	100.0	104.7	
73 Toluene	91	9.048	9.048	0.000	98	527825	50.0	55.2	
74 trans-1,3-Dichloropropene	75	9.292	9.292	0.000	98	128942	50.0	49.2	
75 Ethyl methacrylate	69	9.347	9.347	0.000	92	122480	50.0	50.8	
76 1,1,2-Trichloroethane	97	9.493	9.493	0.000	94	88732	50.0	51.1	
77 Tetrachloroethene	164	9.566	9.566	0.000	94	90521	50.0	53.0	
78 1,3-Dichloropropane	76	9.651	9.651	0.000	94	164779	50.0	51.0	
79 2-Hexanone	43	9.687	9.687	0.000	97	123231	100.0	102.3	
81 Chlorodibromomethane	129	9.864	9.864	0.000	91	75589	50.0	51.3	
82 Ethylene Dibromide	107	9.985	9.985	0.000	98	81540	50.0	51.6	
83 3-Chlorobenzotrifluoride	180	10.429	10.429	0.000	93	189015	50.0	56.8	
84 Chlorobenzene	112	10.472	10.472	0.000	90	319491	50.0	53.5	
85 4-Chlorobenzotrifluoride	180	10.521	10.521	0.000	97	170754	50.0	55.1	
87 Ethylbenzene	106	10.563	10.563	0.000	99	193055	50.0	53.9	
86 1,1,1,2-Tetrachloroethane	131	10.563	10.563	0.000	80	108450	50.0	52.7	
88 m-Xylene & p-Xylene	106	10.697	10.697	0.000	99	235617	50.0	53.3	
89 o-Xylene	106	11.080	11.080	0.000	96	251637	50.0	55.4	
90 Styrene	104	11.099	11.099	0.000	94	362245	50.0	54.2	
91 Bromoform	173	11.287	11.287	0.000	96	39579	50.0	50.1	
92 2-Chlorobenzotrifluoride	180	11.342	11.342	0.000	95	192703	50.0	55.5	
93 Isopropylbenzene	105	11.451	11.451	0.000	97	633598	50.0	56.6	
96 1,1,2,2-Tetrachloroethane	83	11.756	11.756	0.000	96	122215	50.0	52.3	
95 Bromobenzene	156	11.768	11.768	0.000	96	135116	50.0	50.0	
97 trans-1,4-Dichloro-2-buten	53	11.792	11.792	0.000	70	34948	50.0	46.0	
98 1,2,3-Trichloropropane	110	11.810	11.810	0.000	85	40329	50.0	51.0	
99 N-Propylbenzene	120	11.871	11.871	0.000	99	168244	50.0	52.1	
100 2-Chlorotoluene	126	11.956	11.956	0.000	94	141092	50.0	49.6	
101 3-Chlorotoluene	126	12.023	12.023	0.000	96	156510	50.0	52.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.048	12.048	0.000	94	548969	50.0	52.9	
103 4-Chlorotoluene	126	12.078	12.078	0.000	99	144067	50.0	49.3	
104 tert-Butylbenzene	119	12.364	12.364	0.000	92	409657	50.0	50.7	
106 1,2,4-Trimethylbenzene	105	12.425	12.425	0.000	98	571367	50.0	53.2	
107 1,2-dichloro-4-(trifluorom	214	12.455	12.455	0.000	97	158534	50.0	52.8	
108 sec-Butylbenzene	105	12.589	12.589	0.000	95	675141	50.0	54.1	
109 1,3-Dichlorobenzene	146	12.711	12.711	0.000	95	272251	50.0	51.4	
110 4-Isopropyltoluene	119	12.741	12.741	0.000	96	531099	50.0	52.4	
111 1,4-Dichlorobenzene	146	12.814	12.814	0.000	92	272272	50.0	49.7	
113 2,4-Dichloro-1-(triflourom	214	12.826	12.826	0.000	57	168861	50.0	56.1	
114 2,5-Dichlorobenzotrifluori	214	12.869	12.869	0.000	97	166815	50.0	50.3	
116 n-Butylbenzene	91	13.155	13.155	0.000	98	514864	50.0	52.8	
117 1,2-Dichlorobenzene	146	13.173	13.173	0.000	95	272148	50.0	51.4	
118 1,2-Dibromo-3-Chloropropan	75	13.958	13.964	-0.006	76	20104	50.0	47.6	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.104	14.104	0.000	99	818401	150.0	164.7	
121 2,3- & 3,4- Dichlorotoluen	125	14.518	14.518	0.000	99	576450	100.0	106.2	
122 1,2,4-Trichlorobenzene	180	14.791	14.791	0.000	94	203185	50.0	49.6	
123 Hexachlorobutadiene	225	14.931	14.931	0.000	96	81412	50.0	50.8	
124 Naphthalene	128	15.053	15.053	0.000	98	357281	50.0	50.7	
125 1,2,3-Trichlorobenzene	180	15.278	15.278	0.000	94	168045	50.0	49.0	
126 2,4,5-Trichlorotoluene	159	16.044	16.044	0.000	0	125544	50.0	49.7	
127 2,3,6-Trichlorotoluene	159	16.148	16.148	0.000	95	113503	50.0	50.4	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		100.0	100.5	
S 131 Xylenes, Total	106				0		100.0	108.7	
S 132 1,3-Dichloropropene, Total	1				0		100.0	95.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00029	Amount Added:	2.00	Units: uL	
voaWeemixpri_00001	Amount Added:	2.00	Units: uL	
voaWVApri Res_00001	Amount Added:	2.00	Units: uL	
VOAKETONEPRI_00003	Amount Added:	2.00	Units: uL	
VOA8260VOAPRI_00097	Amount Added:	2.00	Units: uL	
voaWAcropri R_00006	Amount Added:	6.00	Units: uL	
VOA8260INT_00027	Amount Added:	2.00	Units: uL	Run Reagent

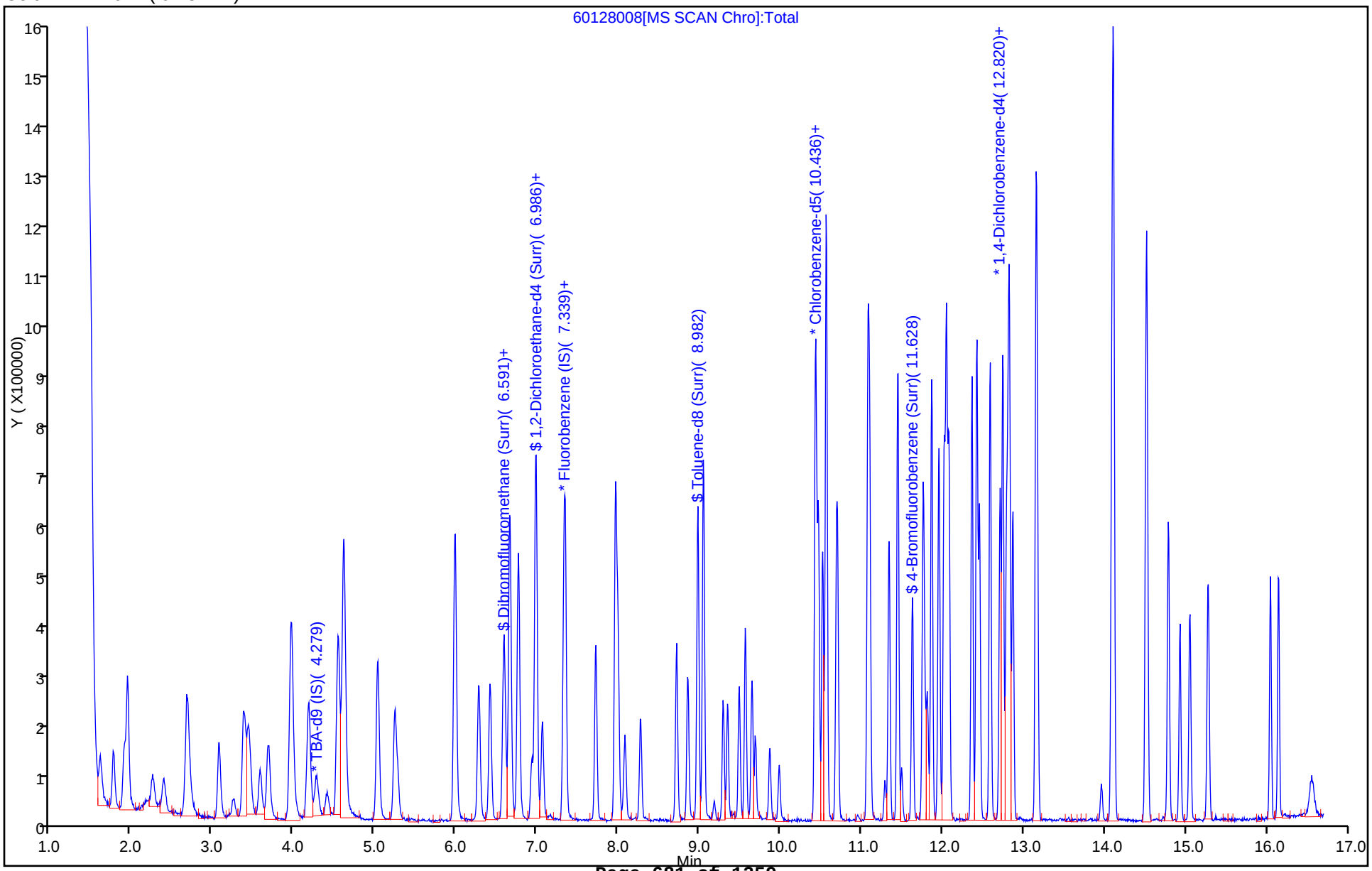
Report Date: 29-Jan-2015 12:59:09 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128008.D

Injection Date:	28-Jan-2015 14:45:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	ICIS VSTD10			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

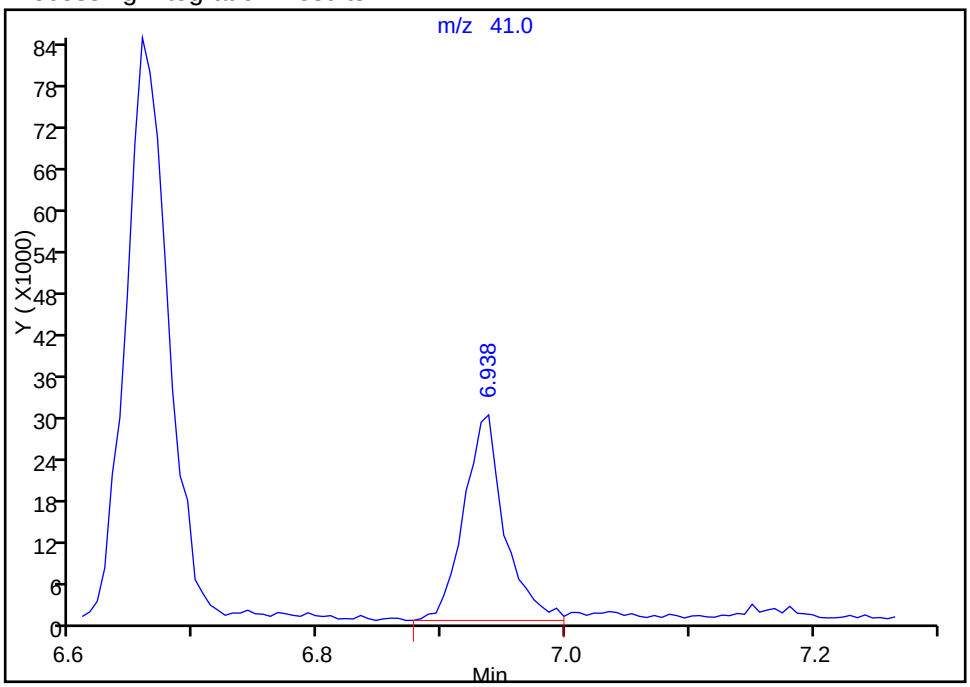
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128008.D				
Injection Date:	28-Jan-2015 14:45:30	Instrument ID:	CHHP6		
Lims ID:	ICIS VSTD10				
Client ID:					
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

55 Isobutyl alcohol, CAS: 78-83-1

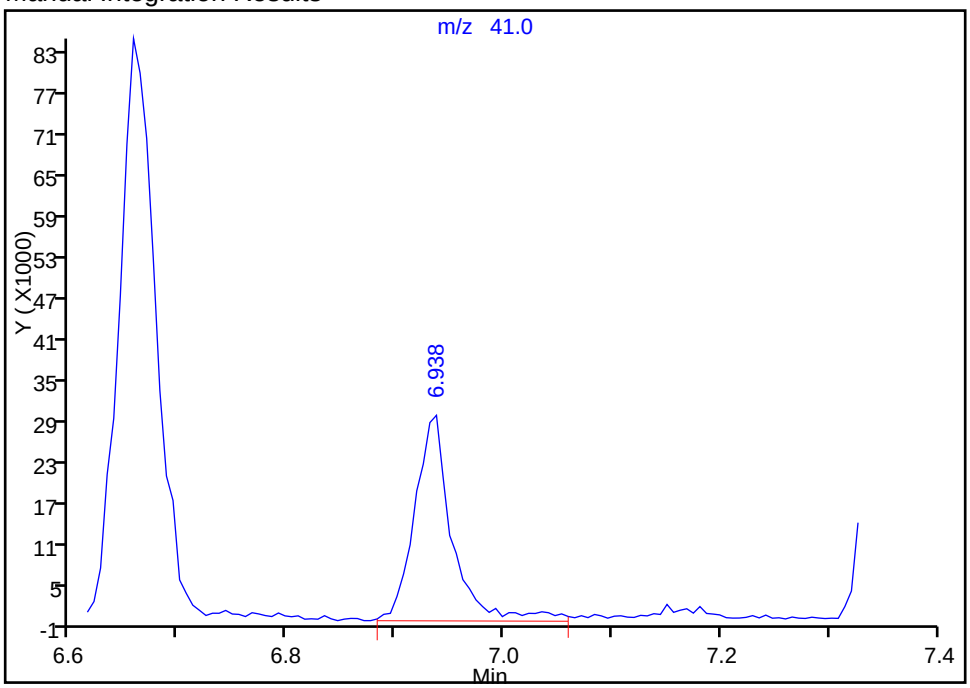
Processing Integration Results

RT: 6.94
Area: 67676
Amount: 1108.5181
Amount Units: ng



Manual Integration Results

RT: 6.94
Area: 71829
Amount: 1206.0150
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 11:08:50
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128009.D
Lims ID: IC VSTD15
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 28-Jan-2015 15:09:30 ALS Bottle#: 7 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD15
Misc. Info.: 180-0005450-009
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:10 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 29-Jan-2015 10:51:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.278	4.278	0.000	96	177406	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.326	7.326	0.000	98	494191	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.440	10.440	0.000	92	111156	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.789	12.789	0.000	95	163776	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.596	6.596	0.000	93	157502	75.0	70.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.973	6.973	0.000	69	241234	75.0	75.4	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	93	661202	75.0	75.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.627	11.627	0.000	83	269743	75.0	72.4	
11 Dichlorodifluoromethane	85	1.607	1.607	0.000	99	178504	75.0	68.2	
12 Chloromethane	50	1.759	1.759	0.000	99	283765	75.0	70.5	
13 Vinyl chloride	62	1.893	1.893	0.000	98	249364	75.0	69.9	
14 Butadiene	39	1.936	1.936	0.000	92	257326	75.0	67.5	
15 Bromomethane	94	2.240	2.240	0.000	92	100551	75.0	70.2	M
16 Chloroethane	64	2.380	2.380	0.000	99	150069	75.0	68.6	
17 Dichlorofluoromethane	67	2.666	2.666	0.000	96	358712	75.0	68.8	
18 Trichlorofluoromethane	101	2.684	2.684	0.000	68	264073	75.0	64.7	
20 Ethyl ether	59	3.067	3.067	0.000	95	219655	75.0	70.6	
21 Acrolein	56	3.244	3.244	0.000	99	85368	175.0	172.8	
22 1,1-Dichloroethene	96	3.365	3.365	0.000	92	180761	75.0	65.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.426	3.426	0.000	96	190645	75.0	67.9	
24 Acetone	43	3.451	3.451	0.000	99	126400	150.0	144.6	
25 Iodomethane	142	3.578	3.578	0.000	98	276926	75.0	67.4	
26 Carbon disulfide	76	3.676	3.676	0.000	100	538178	75.0	65.5	
29 3-Chloro-1-propene	76	3.956	3.956	0.000	70	119671	75.0	66.4	
30 Methyl acetate	43	3.962	3.962	0.000	97	795107	375.0	371.6	
31 Methylene Chloride	84	4.175	4.175	0.000	98	255870	75.0	63.1	
32 2-Methyl-2-propanol	59	4.412	4.412	0.000	94	157863	750.0	787.4	
33 Acrylonitrile	53	4.540	4.540	0.000	99	825638	750.0	740.0	
34 trans-1,2-Dichloroethene	96	4.613	4.613	0.000	72	227148	75.0	68.0	
35 Methyl tert-butyl ether	73	4.613	4.613	0.000	98	611806	75.0	69.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.026	5.026	0.000	95	351514	75.0	73.1	
37 1,1-Dichloroethane	63	5.239	5.239	0.000	97	443424	75.0	68.6	
38 Vinyl acetate	43	5.276	5.276	0.000	97	264095	75.0	78.6	
44 2-Butanone (MEK)	43	5.975	5.975	0.000	77	198782	150.0	177.4	
43 cis-1,2-Dichloroethene	96	5.981	5.981	0.000	86	240979	75.0	68.0	
42 2,2-Dichloropropane	77	5.987	5.987	0.000	64	241640	75.0	65.9	
49 Tetrahydrofuran	42	6.279	6.279	0.000	83	119820	150.0	148.8	
48 Chlorobromomethane	128	6.279	6.279	0.000	91	100988	75.0	71.6	
50 Chloroform	83	6.419	6.419	0.000	94	381367	75.0	68.5	
51 1,1,1-Trichloroethane	97	6.584	6.584	0.000	97	294109	75.0	69.4	
52 Cyclohexane	56	6.657	6.657	0.000	96	456085	75.0	66.8	
53 Carbon tetrachloride	117	6.760	6.760	0.000	96	218554	75.0	65.9	
54 1,1-Dichloropropene	75	6.766	6.766	0.000	93	307766	75.0	72.8	
55 Isobutyl alcohol	41	6.936	6.936	0.000	95	137058	1875.0	2084.8	
56 Benzene	78	6.985	6.985	0.000	98	924844	75.0	75.4	
57 1,2-Dichloroethane	62	7.058	7.058	0.000	97	302310	75.0	75.0	
59 n-Heptane	43	7.350	7.350	0.000	94	290134	75.0	74.2	
61 Trichloroethene	130	7.721	7.721	0.000	96	208800	75.0	74.7	
63 Methylcyclohexane	83	7.965	7.965	0.000	94	375853	75.0	68.3	
64 1,2-Dichloropropane	63	7.995	7.995	0.000	88	246898	75.0	76.0	
65 1,4-Dioxane	88	8.074	8.074	0.000	48	33822	1500.0	1665.1	M
67 Dibromomethane	93	8.080	8.080	0.000	97	106863	75.0	73.6	
68 Dichlorobromomethane	83	8.275	8.275	0.000	98	255826	75.0	75.2	
71 cis-1,3-Dichloropropene	75	8.719	8.719	0.000	92	306111	75.0	78.4	
72 4-Methyl-2-pentanone (MIBK	43	8.853	8.853	0.000	98	401820	150.0	160.2	
73 Toluene	91	9.047	9.047	0.000	98	865706	75.0	76.2	
74 trans-1,3-Dichloropropene	75	9.291	9.291	0.000	96	258221	75.0	82.9	
75 Ethyl methacrylate	69	9.345	9.345	0.000	91	227823	75.0	79.4	
76 1,1,2-Trichloroethane	97	9.491	9.491	0.000	92	154194	75.0	74.7	
77 Tetrachloroethene	164	9.564	9.564	0.000	95	152121	75.0	75.0	
78 1,3-Dichloropropane	76	9.650	9.650	0.000	92	309767	75.0	80.7	
79 2-Hexanone	43	9.692	9.692	0.000	98	230885	150.0	161.4	
81 Chlorodibromomethane	129	9.869	9.869	0.000	90	134047	75.0	76.5	
82 Ethylene Dibromide	107	9.984	9.984	0.000	100	149846	75.0	79.8	
83 3-Chlorobenzotrifluoride	180	10.428	10.428	0.000	93	275294	75.0	69.6	
84 Chlorobenzene	112	10.471	10.471	0.000	91	533675	75.0	75.2	
85 4-Chlorobenzotrifluoride	180	10.520	10.520	0.000	97	261287	75.0	71.0	
87 Ethylbenzene	106	10.568	10.568	0.000	98	309783	75.0	72.8	
86 1,1,1,2-Tetrachloroethane	131	10.562	10.562	0.000	91	178444	75.0	73.0	
88 m-Xylene & p-Xylene	106	10.702	10.702	0.000	99	393071	75.0	74.8	
89 o-Xylene	106	11.079	11.079	0.000	97	395578	75.0	73.3	
90 Styrene	104	11.098	11.098	0.000	94	596747	75.0	75.1	
91 Bromoform	173	11.292	11.292	0.000	95	65704	75.0	70.0	
92 2-Chlorobenzotrifluoride	180	11.341	11.341	0.000	96	290061	75.0	70.3	
93 Isopropylbenzene	105	11.444	11.444	0.000	98	955292	75.0	71.8	
96 1,1,2,2-Tetrachloroethane	83	11.755	11.755	0.000	95	203512	75.0	73.3	
95 Bromobenzene	156	11.767	11.767	0.000	97	223525	75.0	78.0	
97 trans-1,4-Dichloro-2-buten	53	11.791	11.791	0.000	74	61317	75.0	76.1	
98 1,2,3-Trichloropropane	110	11.815	11.815	0.000	84	67823	75.0	80.8	
99 N-Propylbenzene	120	11.864	11.864	0.000	98	262417	75.0	76.6	
100 2-Chlorotoluene	126	11.955	11.955	0.000	94	221515	75.0	73.4	
101 3-Chlorotoluene	126	12.022	12.022	0.000	96	236047	75.0	74.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.047	12.047	0.000	93	836492	75.0	76.0	
103 4-Chlorotoluene	126	12.083	12.083	0.000	98	231900	75.0	74.9	
104 tert-Butylbenzene	119	12.363	12.363	0.000	92	663124	75.0	77.4	
106 1,2,4-Trimethylbenzene	105	12.424	12.424	0.000	98	854880	75.0	75.0	
107 1,2-dichloro-4-(trifluorom	214	12.460	12.460	0.000	97	230038	75.0	72.3	
108 sec-Butylbenzene	105	12.588	12.588	0.000	96	1021731	75.0	77.1	
109 1,3-Dichlorobenzene	146	12.710	12.710	0.000	93	404796	75.0	72.1	
110 4-Isopropyltoluene	119	12.740	12.740	0.000	96	816686	75.0	76.0	
111 1,4-Dichlorobenzene	146	12.813	12.813	0.000	92	431926	75.0	74.3	
113 2,4-Dichloro-1-(triflourom	214	12.831	12.831	0.000	96	236290	75.0	74.0	
114 2,5-Dichlorobenzotrifluori	214	12.868	12.868	0.000	98	251951	75.0	71.6	
116 n-Butylbenzene	91	13.154	13.154	0.000	97	782657	75.0	75.7	
117 1,2-Dichlorobenzene	146	13.166	13.166	0.000	92	413439	75.0	73.6	
118 1,2-Dibromo-3-Chloropropan	75	13.957	13.963	-0.006	79	31840	75.0	71.0	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.103	14.103	0.000	98	1177478	225.0	223.4	
121 2,3- & 3,4- Dichlorotoluen	125	14.516	14.516	0.000	99	856615	150.0	148.8	
122 1,2,4-Trichlorobenzene	180	14.784	14.784	0.000	93	332715	75.0	76.5	
123 Hexachlorobutadiene	225	14.930	14.930	0.000	95	127169	75.0	74.8	
124 Naphthalene	128	15.052	15.052	0.000	98	596683	75.0	79.8	
125 1,2,3-Trichlorobenzene	180	15.277	15.277	0.000	94	279103	75.0	76.7	
126 2,4,5-Trichlorotoluene	159	16.049	16.049	0.000	0	192318	75.0	71.8	
127 2,3,6-Trichlorotoluene	159	16.147	16.147	0.000	93	170378	75.0	71.4	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		150.0	136.0	
S 131 Xylenes, Total	106				0		150.0	148.1	
S 132 1,3-Dichloropropene, Total	1				0		150.0	161.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00029	Amount Added:	3.00	Units: uL	
voaWeemixpri_00001	Amount Added:	3.00	Units: uL	
voaWVApri Res_00001	Amount Added:	3.00	Units: uL	
VOAKETONEPRI_00003	Amount Added:	3.00	Units: uL	
VOA8260VOAPRI_00097	Amount Added:	3.00	Units: uL	
voaWAcropri R_00006	Amount Added:	7.00	Units: uL	
VOA8260INT_00027	Amount Added:	2.00	Units: uL	Run Reagent

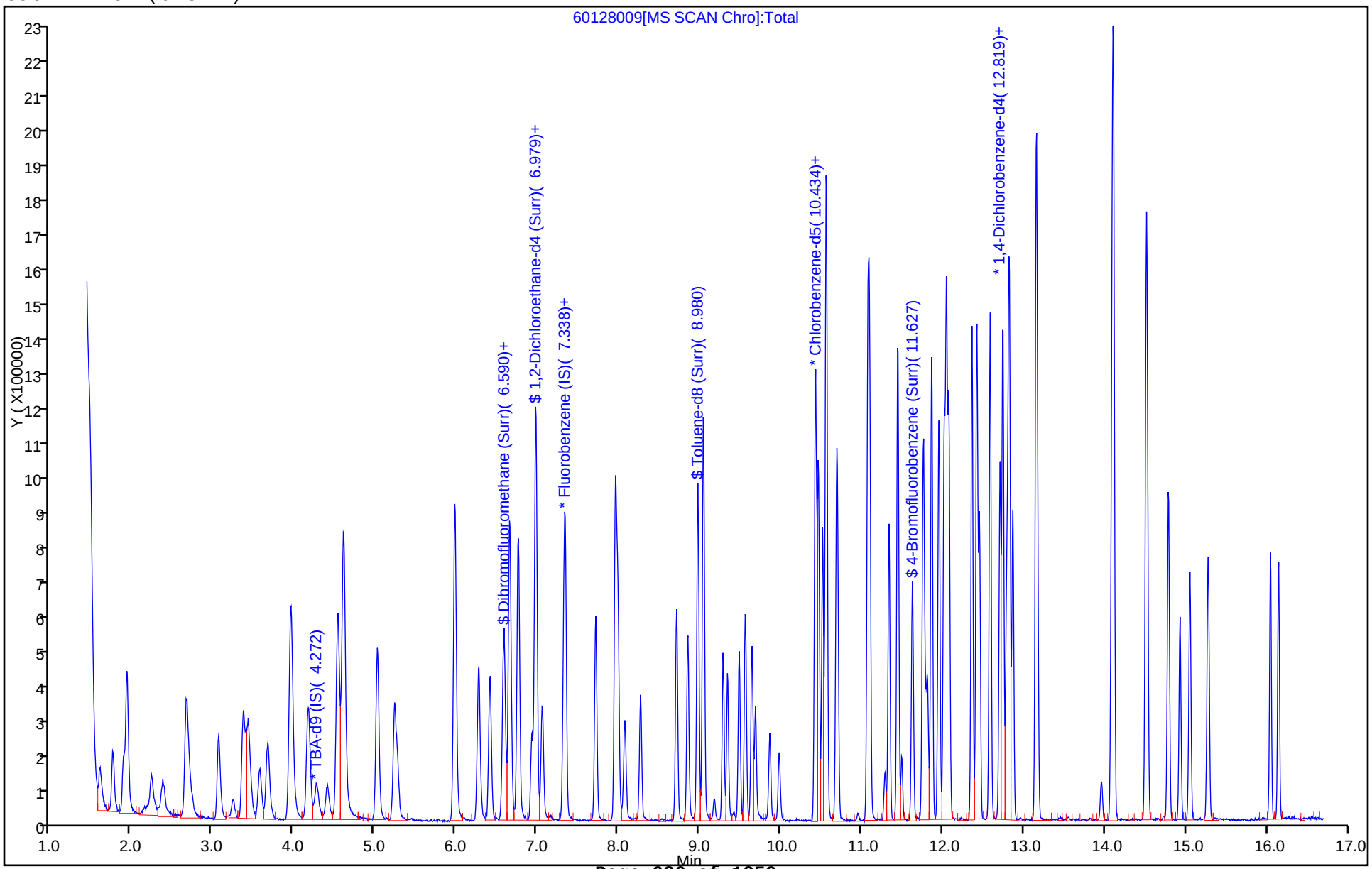
Report Date: 29-Jan-2015 12:59:11 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128009.D

Injection Date:	28-Jan-2015 15:09:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD15			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

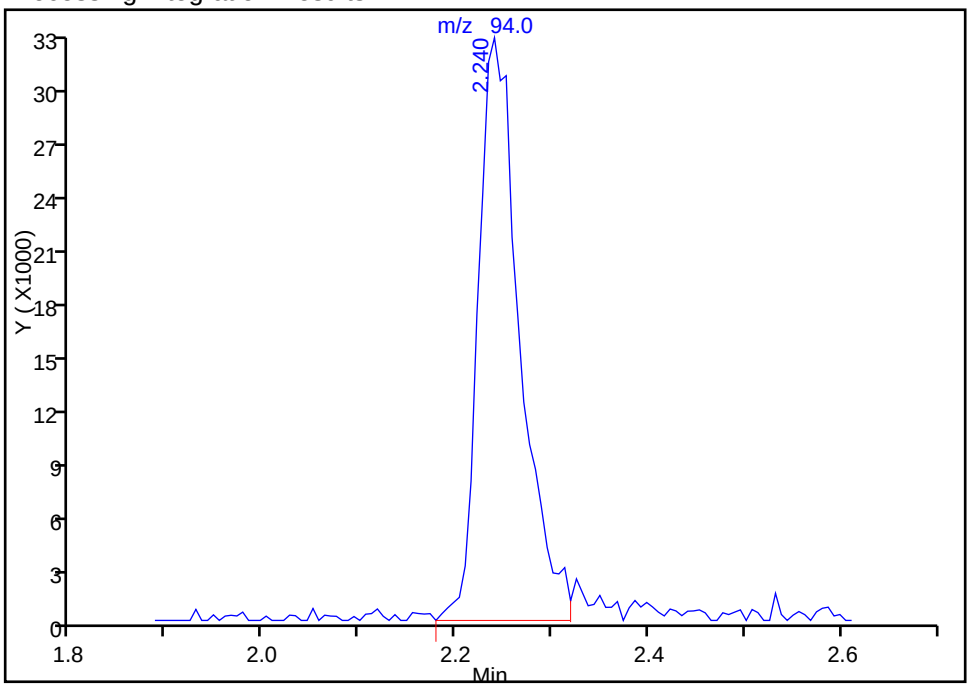
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128009.D				
Injection Date:	28-Jan-2015 15:09:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD15				
Client ID:					
Operator ID:	001562	ALS Bottle#:	7	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

15 Bromomethane, CAS: 74-83-9

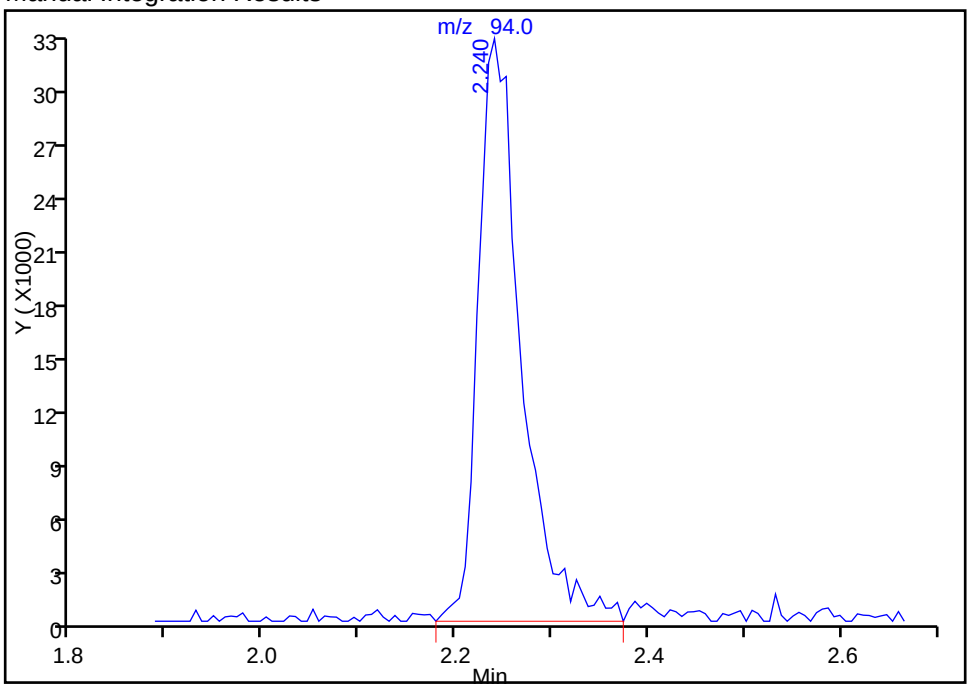
Processing Integration Results

RT: 2.24
Area: 97105
Amount: 68.057558
Amount Units: ng



Manual Integration Results

RT: 2.24
Area: 100551
Amount: 70.190204
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:51:24
Audit Action: Manually Integrated
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

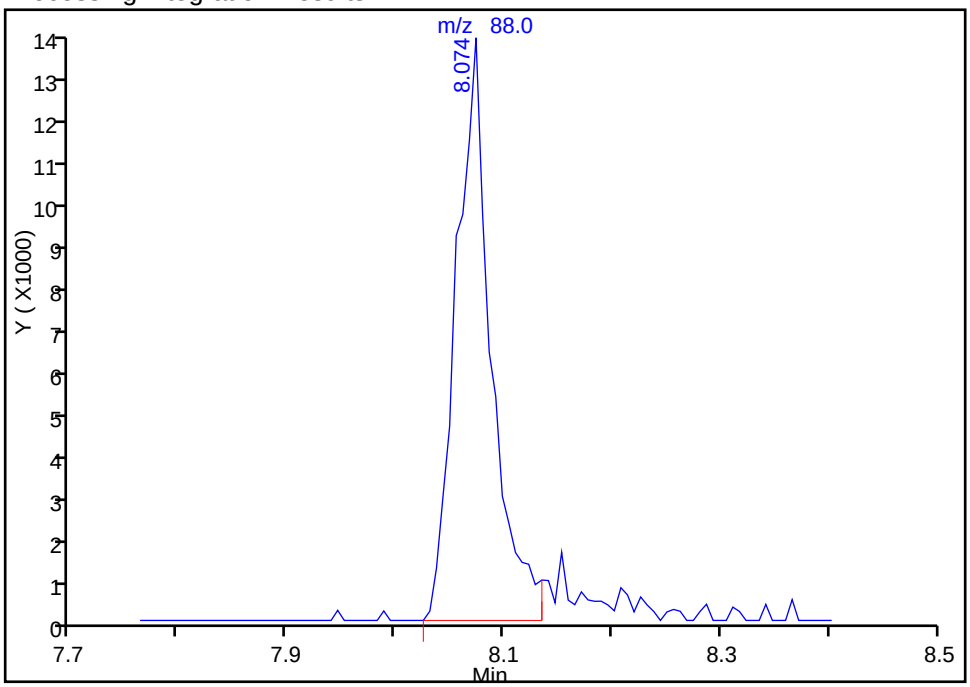
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128009.D				
Injection Date:	28-Jan-2015 15:09:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD15				
Client ID:					
Operator ID:	001562	ALS Bottle#:	7	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

65 1,4-Dioxane, CAS: 123-91-1

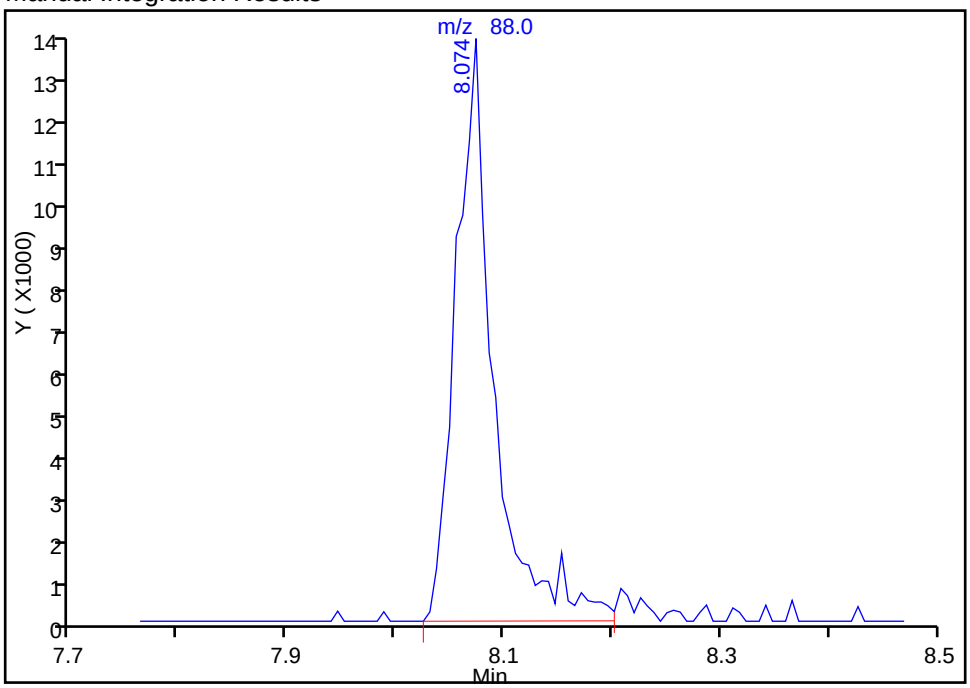
Processing Integration Results

RT: 8.07
Area: 31486
Amount: 1595.6203
Amount Units: ng



Manual Integration Results

RT: 8.07
Area: 33822
Amount: 1665.1175
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:54:39
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128010.D
Lims ID: IC VSTD20
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 28-Jan-2015 15:33:30 ALS Bottle#: 8 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD20
Misc. Info.: 180-0005450-010
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:13 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 29-Jan-2015 10:53:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.274	4.278	-0.004	95	175261	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.328	7.326	0.002	98	439145	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.437	10.440	-0.003	94	96726	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.791	12.789	0.002	95	152427	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.598	6.596	0.002	93	201508	100.0	101.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.975	6.973	0.002	70	283354	100.0	99.7	
$ 7 Toluene-d8 (Surr)	98	8.983	8.980	0.003	93	779639	100.0	102.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.629	11.627	0.002	83	330292	100.0	101.8	
11 Dichlorodifluoromethane	85	1.604	1.607	-0.003	99	243452	100.0	104.6	
12 Chloromethane	50	1.762	1.759	0.003	99	384421	100.0	107.4	
13 Vinyl chloride	62	1.896	1.893	0.003	98	339939	100.0	107.2	
14 Butadiene	39	1.938	1.936	0.002	91	363197	100.0	107.3	
15 Bromomethane	94	2.242	2.240	0.002	91	133368	100.0	104.8	
16 Chloroethane	64	2.382	2.380	0.002	99	206434	100.0	106.2	
17 Dichlorofluoromethane	67	2.668	2.666	0.002	97	485448	100.0	104.7	
18 Trichlorofluoromethane	101	2.686	2.684	0.002	97	379709	100.0	104.7	
20 Ethyl ether	59	3.064	3.067	-0.003	94	288913	100.0	104.4	
21 Acrolein	56	3.246	3.244	0.002	99	91786	200.0	209.0	
22 1,1-Dichloroethene	96	3.374	3.365	0.009	93	260475	100.0	105.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.429	3.426	0.003	95	269318	100.0	108.0	
24 Acetone	43	3.453	3.451	0.002	99	156961	200.0	202.1	
25 Iodomethane	142	3.581	3.578	0.003	99	377556	100.0	103.4	
26 Carbon disulfide	76	3.678	3.676	0.002	100	770934	100.0	105.6	
29 3-Chloro-1-propene	76	3.964	3.956	0.008	69	167495	100.0	104.6	
30 Methyl acetate	43	3.964	3.962	0.002	98	1006389	500.0	529.3	
31 Methylene Chloride	84	4.171	4.175	-0.004	98	354231	100.0	98.3	
32 2-Methyl-2-propanol	59	4.414	4.412	0.002	95	196865	1000.0	994.0	
33 Acrylonitrile	53	4.542	4.540	0.002	99	1070950	1000.0	1080.3	
34 trans-1,2-Dichloroethene	96	4.609	4.613	-0.004	74	317224	100.0	106.9	
35 Methyl tert-butyl ether	73	4.615	4.613	0.002	98	828973	100.0	106.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.029	5.026	0.003	94	447359	100.0	104.7	
37 1,1-Dichloroethane	63	5.241	5.239	0.002	97	607468	100.0	105.8	
38 Vinyl acetate	43	5.278	5.276	0.002	97	300763	100.0	100.7	
44 2-Butanone (MEK)	43	5.984	5.975	0.009	51	200186	200.0	201.0	
43 cis-1,2-Dichloroethene	96	5.984	5.981	0.003	86	336595	100.0	106.9	
42 2,2-Dichloropropane	77	5.990	5.987	0.003	66	347540	100.0	106.7	
49 Tetrahydrofuran	42	6.282	6.279	0.003	94	146874	200.0	205.3	
48 Chlorobromomethane	128	6.276	6.279	-0.003	94	130848	100.0	104.4	
50 Chloroform	83	6.422	6.419	0.003	94	520205	100.0	105.2	
51 1,1,1-Trichloroethane	97	6.580	6.584	-0.004	97	399010	100.0	105.9	
52 Cyclohexane	56	6.659	6.657	0.002	95	648441	100.0	106.9	
53 Carbon tetrachloride	117	6.762	6.760	0.002	97	317552	100.0	107.7	
54 1,1-Dichloropropene	75	6.768	6.766	0.002	94	397719	100.0	105.8	
55 Isobutyl alcohol	41	6.933	6.936	-0.003	95	166021	2500.0	2841.9	
56 Benzene	78	6.981	6.985	-0.004	98	1144809	100.0	105.0	
57 1,2-Dichloroethane	62	7.067	7.058	0.009	97	373539	100.0	104.3	
59 n-Heptane	43	7.352	7.350	0.002	95	358203	100.0	103.1	
61 Trichloroethene	130	7.724	7.721	0.003	97	256342	100.0	103.2	
63 Methylcyclohexane	83	7.967	7.965	0.002	95	513997	100.0	105.0	
64 1,2-Dichloropropane	63	7.997	7.995	0.002	88	296893	100.0	102.9	
65 1,4-Dioxane	88	8.076	8.074	0.002	43	44901	2000.0	2487.6	M
67 Dibromomethane	93	8.082	8.080	0.002	96	134511	100.0	104.3	
68 Dichlorobromomethane	83	8.277	8.275	0.002	98	313642	100.0	103.7	
71 cis-1,3-Dichloropropene	75	8.721	8.719	0.002	92	373776	100.0	107.7	
72 4-Methyl-2-pentanone (MIBK	43	8.855	8.853	0.002	97	485147	200.0	222.3	
73 Toluene	91	9.050	9.047	0.003	97	1047433	100.0	105.9	
74 trans-1,3-Dichloropropene	75	9.293	9.291	0.002	96	288597	100.0	106.4	
75 Ethyl methacrylate	69	9.348	9.345	0.003	92	276463	100.0	110.8	
76 1,1,2-Trichloroethane	97	9.494	9.491	0.003	92	186391	100.0	103.8	
77 Tetrachloroethene	164	9.567	9.564	0.003	95	185546	100.0	105.1	
78 1,3-Dichloropropane	76	9.646	9.650	-0.004	94	350761	100.0	105.1	
79 2-Hexanone	43	9.689	9.692	-0.004	97	272392	200.0	218.8	
81 Chlorodibromomethane	129	9.871	9.869	0.002	91	164399	100.0	107.9	
82 Ethylene Dibromide	107	9.987	9.984	0.003	98	173425	100.0	106.2	
83 3-Chlorobenzotrifluoride	180	10.431	10.428	0.003	93	343534	100.0	99.9	
84 Chlorobenzene	112	10.467	10.471	-0.004	90	654919	100.0	106.1	
85 4-Chlorobenzotrifluoride	180	10.522	10.520	0.002	97	321428	100.0	100.4	
87 Ethylbenzene	106	10.565	10.568	-0.003	98	393435	100.0	106.2	
86 1,1,1,2-Tetrachloroethane	131	10.565	10.562	0.003	90	235848	100.0	110.8	
88 m-Xylene & p-Xylene	106	10.698	10.702	-0.004	98	495166	100.0	108.3	
89 o-Xylene	106	11.082	11.079	0.003	97	507675	100.0	108.1	
90 Styrene	104	11.100	11.098	0.002	93	743239	100.0	107.5	
91 Bromoform	173	11.288	11.292	-0.004	94	85273	100.0	104.5	
92 2-Chlorobenzotrifluoride	180	11.337	11.341	-0.004	96	373509	100.0	104.1	
93 Isopropylbenzene	105	11.447	11.444	0.003	98	1262379	100.0	109.0	
96 1,1,2,2-Tetrachloroethane	83	11.757	11.755	0.002	96	254135	100.0	105.3	
95 Bromobenzene	156	11.763	11.767	-0.004	98	278729	100.0	104.5	
97 trans-1,4-Dichloro-2-buten	53	11.787	11.791	-0.004	73	77586	100.0	103.4	
98 1,2,3-Trichloropropane	110	11.812	11.815	-0.003	86	81476	100.0	104.3	
99 N-Propylbenzene	120	11.866	11.864	0.002	98	331379	100.0	104.0	
100 2-Chlorotoluene	126	11.958	11.955	0.003	95	293005	100.0	104.3	
101 3-Chlorotoluene	126	12.018	12.022	-0.004	96	292985	100.0	99.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.049	12.047	0.002	94	1105314	100.0	107.9	
103 4-Chlorotoluene	126	12.079	12.083	-0.004	99	300726	100.0	104.3	
104 tert-Butylbenzene	119	12.365	12.363	0.002	92	842934	100.0	105.7	
106 1,2,4-Trimethylbenzene	105	12.426	12.424	0.002	99	1135474	100.0	107.1	
107 1,2-dichloro-4-(trifluorom	214	12.456	12.460	-0.004	97	301633	100.0	101.8	
108 sec-Butylbenzene	105	12.584	12.588	-0.004	96	1323132	100.0	107.3	
109 1,3-Dichlorobenzene	146	12.712	12.710	0.002	95	545480	100.0	104.4	
110 4-Isopropyltoluene	119	12.742	12.740	0.002	95	1069888	100.0	107.0	
111 1,4-Dichlorobenzene	146	12.815	12.813	0.002	90	558588	100.0	103.3	
113 2,4-Dichloro-1-(triflourom	214	12.828	12.831	-0.003	96	295903	100.0	99.5	
114 2,5-Dichlorobenzotrifluori	214	12.870	12.868	0.002	98	347814	100.0	106.1	
116 n-Butylbenzene	91	13.150	13.154	-0.004	96	1045083	100.0	108.7	
117 1,2-Dichlorobenzene	146	13.168	13.166	0.002	93	540869	100.0	103.5	
118 1,2-Dibromo-3-Chloropropan	75	13.953	13.963	-0.010	75	42357	100.0	101.5	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.105	14.103	0.002	98	1526957	300.0	311.3	
121 2,3- & 3,4- Dichlorotoluen	125	14.519	14.516	0.003	99	1109689	200.0	207.1	
122 1,2,4-Trichlorobenzene	180	14.786	14.784	0.002	93	428696	100.0	105.9	
123 Hexachlorobutadiene	225	14.932	14.930	0.002	96	168186	100.0	106.2	
124 Naphthalene	128	15.048	15.052	-0.004	98	746148	100.0	107.3	
125 1,2,3-Trichlorobenzene	180	15.279	15.277	0.002	95	359783	100.0	106.3	
126 2,4,5-Trichlorotoluene	159	16.046	16.049	-0.003	0	253456	100.0	101.7	
127 2,3,6-Trichlorotoluene	159	16.143	16.147	-0.004	93	223585	100.0	100.7	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		200.0	213.8	
S 131 Xylenes, Total	106				0		200.0	216.4	
S 132 1,3-Dichloropropene, Total	1				0		200.0	214.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00029	Amount Added:	4.00	Units: uL	
voaWeemixpri_00001	Amount Added:	4.00	Units: uL	
voaWVApri Res_00001	Amount Added:	4.00	Units: uL	
VOAKETONEPRI_00003	Amount Added:	4.00	Units: uL	
VOA8260VOAPRI_00097	Amount Added:	4.00	Units: uL	
voaWAcropri R_00006	Amount Added:	8.00	Units: uL	
VOA8260INT_00027	Amount Added:	2.00	Units: uL	Run Reagent

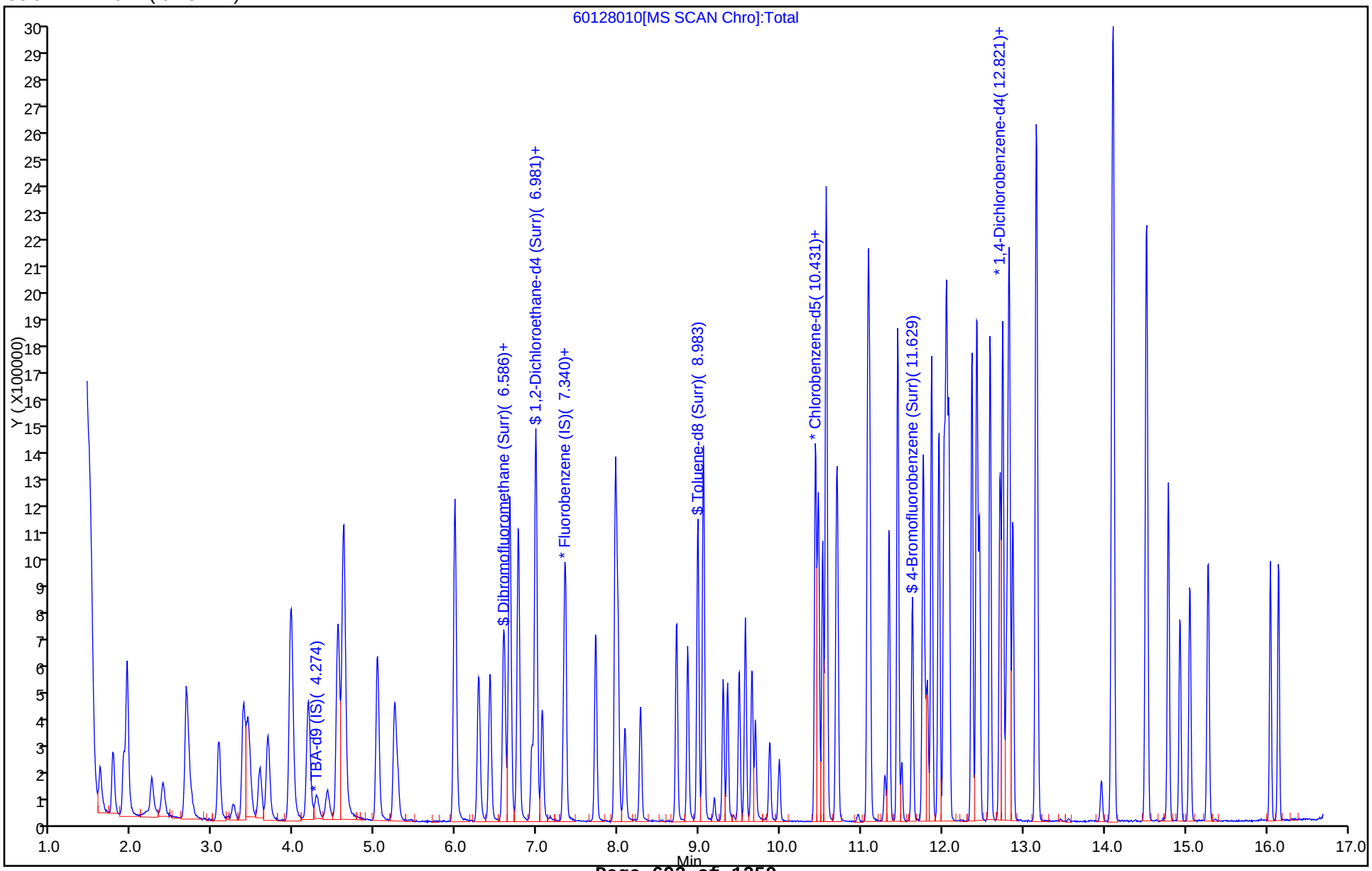
Report Date: 29-Jan-2015 12:59:13 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128010.D

Injection Date:	28-Jan-2015 15:33:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD20			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

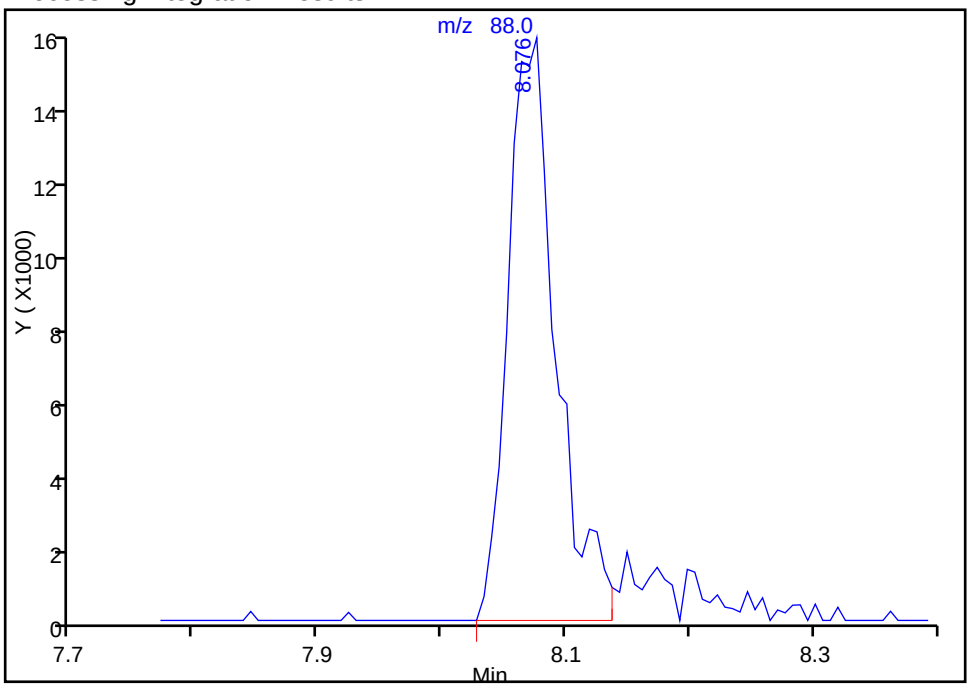
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128010.D				
Injection Date:	28-Jan-2015 15:33:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD20				
Client ID:					
Operator ID:	001562	ALS Bottle#:	8	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

65 1,4-Dioxane, CAS: 123-91-1

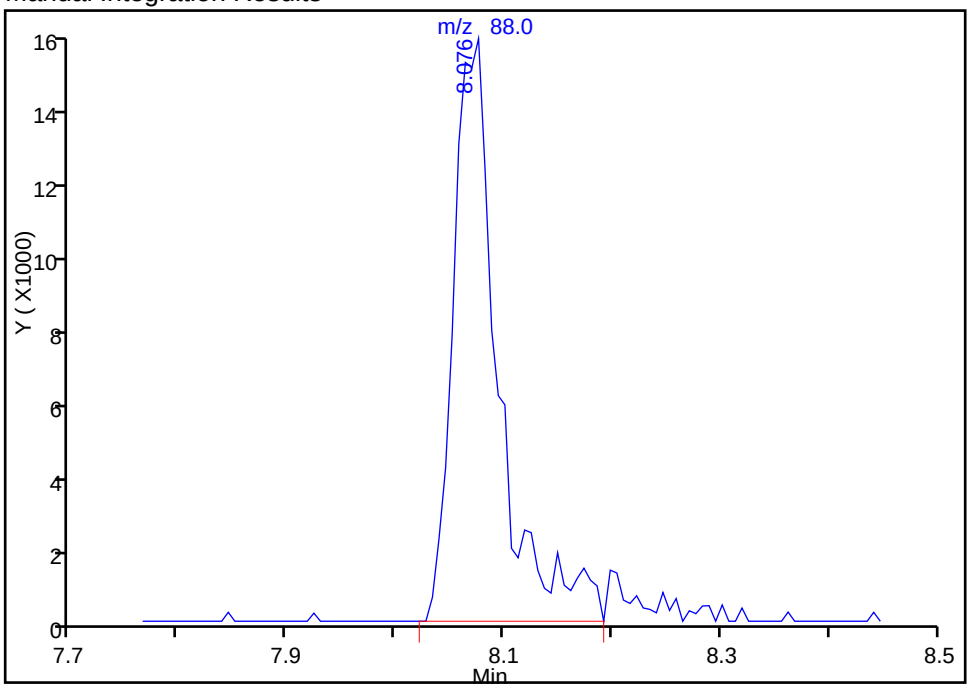
Processing Integration Results

RT: 8.08
Area: 41652
Amount: 2341.8822
Amount Units: ng



Manual Integration Results

RT: 8.08
Area: 44901
Amount: 2487.6456
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:53:28
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128011.D
Lims ID: IC VSTD35
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 28-Jan-2015 15:57:30 ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD35
Misc. Info.: 180-0005450-011
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:14 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 29-Jan-2015 10:59:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.280	4.278	0.002	94	166250	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.328	7.326	0.002	98	444059	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.436	10.440	-0.004	91	106771	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.791	12.789	0.002	95	156653	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.598	6.596	0.002	93	356892	175.0	177.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.975	6.973	0.002	71	492507	175.0	171.3	
$ 7 Toluene-d8 (Surr)	98	8.982	8.980	0.002	93	1290581	175.0	153.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.629	11.627	0.002	83	562972	175.0	157.2	
11 Dichlorodifluoromethane	85	1.609	1.607	0.002	100	399376	175.0	169.7	
12 Chloromethane	50	1.767	1.759	0.008	99	623186	175.0	172.2	
13 Vinyl chloride	62	1.895	1.893	0.002	97	551705	175.0	172.0	
14 Butadiene	39	1.938	1.936	0.002	89	555574	175.0	162.3	
15 Bromomethane	94	2.242	2.240	0.002	91	214591	175.0	166.7	
16 Chloroethane	64	2.382	2.380	0.002	99	335043	175.0	170.4	
17 Dichlorofluoromethane	67	2.662	2.666	-0.004	97	781500	175.0	166.7	
18 Trichlorofluoromethane	101	2.680	2.684	-0.004	97	608185	175.0	165.8	
20 Ethyl ether	59	3.069	3.067	0.002	95	482160	175.0	172.4	
21 Acrolein	56	3.252	3.244	0.008	97	103226	225.0	232.5	
22 1,1-Dichloroethene	96	3.373	3.365	0.008	94	430377	175.0	172.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.428	3.426	0.002	96	437728	175.0	173.6	
24 Acetone	43	3.453	3.451	0.002	100	280558	350.0	357.2	
25 Iodomethane	142	3.580	3.578	0.002	98	651846	175.0	176.5	
26 Carbon disulfide	76	3.678	3.676	0.002	100	1309070	175.0	177.3	
29 3-Chloro-1-propene	76	3.957	3.956	0.001	73	292881	175.0	180.9	
30 Methyl acetate	43	3.964	3.962	0.002	97	1703104	875.0	885.9	
31 Methylene Chloride	84	4.170	4.175	-0.005	98	585012	175.0	160.5	
32 2-Methyl-2-propanol	59	4.408	4.412	-0.004	96	335472	1750.0	1785.6	
33 Acrylonitrile	53	4.541	4.540	0.001	98	1763284	1750.0	1758.9	
34 trans-1,2-Dichloroethene	96	4.614	4.613	0.001	74	523513	175.0	174.4	
35 Methyl tert-butyl ether	73	4.614	4.613	0.001	98	1446119	175.0	183.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.028	5.026	0.002	93	739493	175.0	171.2	
37 1,1-Dichloroethane	63	5.241	5.239	0.002	96	1008065	175.0	173.6	
38 Vinyl acetate	43	5.278	5.276	0.002	97	509076	175.0	168.6	
44 2-Butanone (MEK)	43	5.983	5.975	0.008	50	363723	350.0	361.2	
43 cis-1,2-Dichloroethene	96	5.983	5.981	0.002	84	557043	175.0	175.0	
42 2,2-Dichloropropane	77	5.983	5.987	-0.004	65	582789	175.0	177.0	
49 Tetrahydrofuran	42	6.287	6.279	0.008	93	245422	350.0	339.2	
48 Chlorobromomethane	128	6.275	6.279	-0.004	92	225087	175.0	177.6	
50 Chloroform	83	6.415	6.419	-0.004	94	891515	175.0	178.3	
51 1,1,1-Trichloroethane	97	6.586	6.584	0.002	97	690974	175.0	181.4	
52 Cyclohexane	56	6.659	6.657	0.002	95	1042561	175.0	169.9	
53 Carbon tetrachloride	117	6.762	6.760	0.002	96	533960	175.0	179.1	
54 1,1-Dichloropropene	75	6.774	6.766	0.008	95	650661	175.0	171.2	
55 Isobutyl alcohol	41	6.938	6.936	0.002	94	280190	4375.0	4743.2	
56 Benzene	78	6.987	6.985	0.002	99	1858516	175.0	168.6	
57 1,2-Dichloroethane	62	7.066	7.058	0.008	96	620987	175.0	171.5	
59 n-Heptane	43	7.346	7.350	-0.004	93	583751	175.0	166.2	
61 Trichloroethene	130	7.723	7.721	0.002	95	416102	175.0	165.7	
63 Methylcyclohexane	83	7.966	7.965	0.001	95	840990	175.0	170.0	
64 1,2-Dichloropropane	63	7.997	7.995	0.002	88	511401	175.0	175.3	
65 1,4-Dioxane	88	8.076	8.074	0.002	42	66654	3500.0	3652.0	M
67 Dibromomethane	93	8.082	8.080	0.002	96	236358	175.0	181.3	
68 Dichlorobromomethane	83	8.277	8.275	0.002	98	552260	175.0	180.6	
71 cis-1,3-Dichloropropene	75	8.721	8.719	0.002	92	638776	175.0	182.0	
72 4-Methyl-2-pentanone (MIBK	43	8.861	8.853	0.008	96	833434	350.0	346.0	
73 Toluene	91	9.049	9.047	0.002	96	1693226	175.0	155.1	
74 trans-1,3-Dichloropropene	75	9.293	9.291	0.002	97	519690	175.0	173.6	
75 Ethyl methacrylate	69	9.347	9.345	0.002	91	469489	175.0	170.4	
76 1,1,2-Trichloroethane	97	9.493	9.491	0.002	93	318177	175.0	160.5	
77 Tetrachloroethene	164	9.566	9.564	0.002	94	297552	175.0	152.6	
78 1,3-Dichloropropane	76	9.652	9.650	0.002	95	590770	175.0	160.3	
79 2-Hexanone	43	9.694	9.692	0.002	96	471926	350.0	343.4	
81 Chlorodibromomethane	129	9.871	9.869	0.002	92	296438	175.0	176.2	
82 Ethylene Dibromide	107	9.986	9.984	0.002	98	302375	175.0	167.7	
83 3-Chlorobenzotrifluoride	180	10.430	10.428	0.002	93	590382	175.0	155.5	
84 Chlorobenzene	112	10.473	10.471	0.002	89	1077548	175.0	158.2	
85 4-Chlorobenzotrifluoride	180	10.522	10.520	0.002	96	561945	175.0	159.0	
86 1,1,1,2-Tetrachloroethane	131	10.564	10.562	0.002	92	418399	175.0	178.1	
87 Ethylbenzene	106	10.570	10.568	0.002	97	656339	175.0	160.6	
88 m-Xylene & p-Xylene	106	10.698	10.702	-0.004	97	839112	175.0	166.3	
89 o-Xylene	106	11.081	11.079	0.002	97	860280	175.0	165.9	
90 Styrene	104	11.099	11.098	0.001	94	1273143	175.0	166.7	
91 Bromoform	173	11.294	11.292	0.002	95	168078	175.0	186.5	
92 2-Chlorobenzotrifluoride	180	11.343	11.341	0.002	95	622262	175.0	157.1	
93 Isopropylbenzene	105	11.452	11.444	0.008	98	2002206	175.0	156.6	
96 1,1,2,2-Tetrachloroethane	83	11.756	11.755	0.001	95	440302	175.0	165.2	
95 Bromobenzene	156	11.769	11.767	0.002	98	477179	175.0	174.0	
97 trans-1,4-Dichloro-2-buten	53	11.793	11.791	0.002	78	137653	175.0	178.5	
98 1,2,3-Trichloropropane	110	11.817	11.815	0.002	86	139161	175.0	173.4	
99 N-Propylbenzene	120	11.866	11.864	0.002	97	563113	175.0	171.9	
100 2-Chlorotoluene	126	11.957	11.955	0.002	95	493158	175.0	170.8	
101 3-Chlorotoluene	126	12.024	12.022	0.002	95	525597	175.0	174.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.048	12.047	0.001	95	1783600	175.0	169.4	
103 4-Chlorotoluene	126	12.079	12.083	-0.004	99	491693	175.0	165.9	
104 tert-Butylbenzene	119	12.365	12.363	0.002	92	1396912	175.0	170.4	
106 1,2,4-Trimethylbenzene	105	12.426	12.424	0.002	98	1838518	175.0	168.7	
107 1,2-dichloro-4-(trifluorom	214	12.456	12.460	-0.004	97	521070	175.0	171.1	
108 sec-Butylbenzene	105	12.590	12.588	0.002	96	2082501	175.0	164.3	
109 1,3-Dichlorobenzene	146	12.712	12.710	0.002	94	914665	175.0	170.3	
110 4-Isopropyltoluene	119	12.748	12.740	0.008	94	1743713	175.0	169.6	
111 1,4-Dichlorobenzene	146	12.815	12.813	0.002	91	944630	175.0	170.0	
113 2,4-Dichloro-1-(triflourom	214	12.827	12.831	-0.004	97	499776	175.0	163.5	
114 2,5-Dichlorobenzotrifluori	214	12.870	12.868	0.002	98	618602	175.0	183.7	
116 n-Butylbenzene	91	13.156	13.154	0.002	96	1667227	175.0	168.7	
117 1,2-Dichlorobenzene	146	13.168	13.166	0.002	94	923690	175.0	172.0	
118 1,2-Dibromo-3-Chloropropan	75	13.965	13.963	0.002	79	82124	175.0	191.6	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.105	14.103	0.002	96	2518550	525.0	499.6	
121 2,3- & 3,4- Dichlorotoluen	125	14.518	14.516	0.002	97	1844544	350.0	335.0	
122 1,2,4-Trichlorobenzene	180	14.786	14.784	0.002	94	726984	175.0	174.7	
123 Hexachlorobutadiene	225	14.932	14.930	0.002	95	282422	175.0	173.6	
124 Naphthalene	128	15.054	15.052	0.002	98	1297115	175.0	181.4	
125 1,2,3-Trichlorobenzene	180	15.279	15.277	0.002	94	609774	175.0	175.2	
126 2,4,5-Trichlorotoluene	159	16.045	16.049	-0.004	0	451216	175.0	176.2	
127 2,3,6-Trichlorotoluene	159	16.143	16.147	-0.004	94	400428	175.0	175.4	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		350.0	349.4	
S 131 Xylenes, Total	106				0		350.0	332.2	
S 132 1,3-Dichloropropene, Total	1				0		350.0	355.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00029	Amount Added:	7.00	Units: uL	
voaWeemixpri_00001	Amount Added:	7.00	Units: uL	
voaWVApri Res_00001	Amount Added:	7.00	Units: uL	
VOAKETONEPRI_00003	Amount Added:	7.00	Units: uL	
VOA8260VOAPRI_00097	Amount Added:	7.00	Units: uL	
voaWAcropri R_00006	Amount Added:	9.00	Units: uL	
VOA8260INT_00027	Amount Added:	2.00	Units: uL	Run Reagent

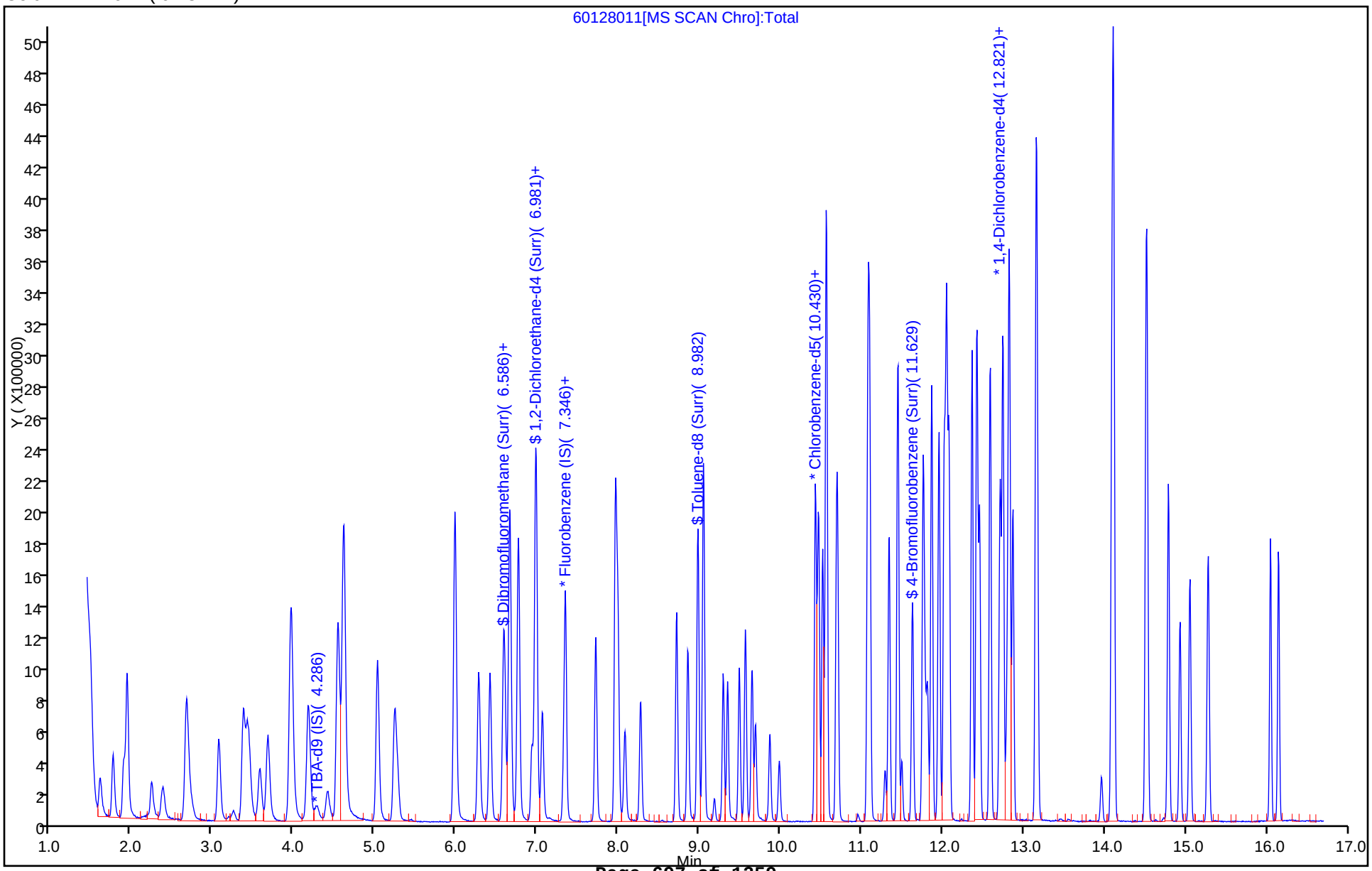
Report Date: 29-Jan-2015 12:59:14 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128011.D

Injection Date:	28-Jan-2015 15:57:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD35			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

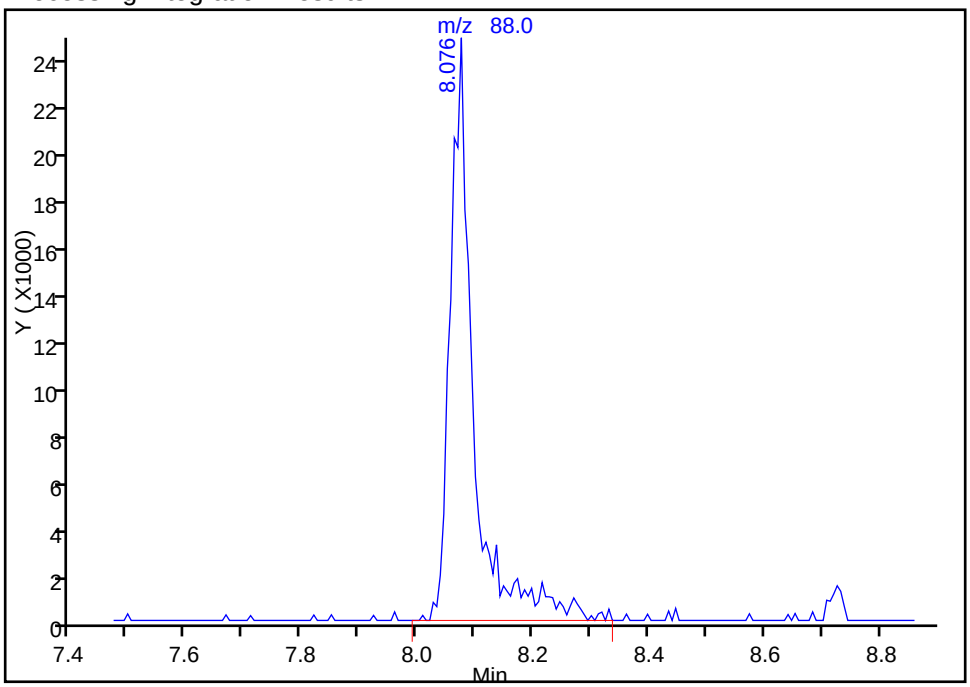
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128011.D				
Injection Date:	28-Jan-2015 15:57:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD35				
Client ID:					
Operator ID:	001562	ALS Bottle#:	9	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

65 1,4-Dioxane, CAS: 123-91-1

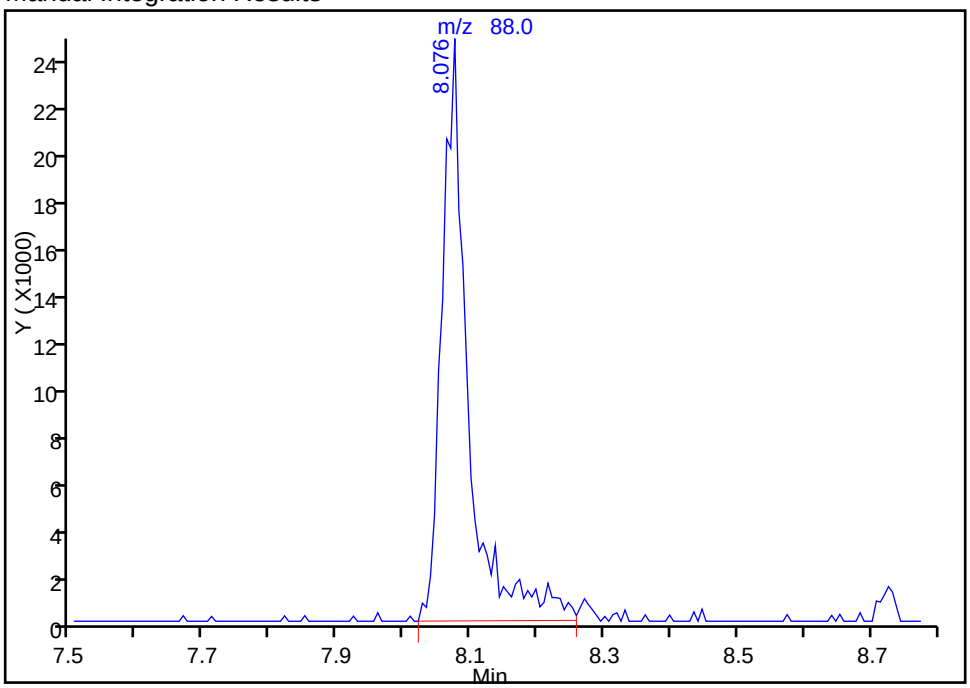
Processing Integration Results

RT: 8.08
Area: 68578
Amount: 3642.8098
Amount Units: ng



Manual Integration Results

RT: 8.08
Area: 66654
Amount: 3651.9598
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:59:52
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128012.D
Lims ID: IC VSTD40
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 28-Jan-2015 16:21:30 ALS Bottle#: 10 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD40
Misc. Info.: 180-0005450-012
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:16 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 29-Jan-2015 11:05:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.279	4.278	0.001	95	156228	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.327	7.326	0.001	98	431028	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.442	10.440	0.002	89	102756	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.796	12.789	0.007	96	156005	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.603	6.596	0.007	93	387858	200.0	198.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.974	6.973	0.001	69	549644	200.0	197.0	
$ 7 Toluene-d8 (Surr)	98	8.982	8.980	0.002	94	1388779	200.0	171.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.628	11.627	0.001	83	623752	200.0	181.0	
11 Dichlorodifluoromethane	85	1.609	1.607	0.002	99	466774	200.0	204.4	
12 Chloromethane	50	1.773	1.759	0.014	98	698118	200.0	198.7	
13 Vinyl chloride	62	1.901	1.893	0.008	98	630878	200.0	202.7	
14 Butadiene	39	1.943	1.936	0.007	92	663356	200.0	199.6	
15 Bromomethane	94	2.247	2.240	0.007	92	238802	200.0	191.1	
16 Chloroethane	64	2.393	2.380	0.013	100	381411	200.0	199.8	
17 Dichlorofluoromethane	67	2.673	2.666	0.007	97	918274	200.0	201.8	
18 Trichlorofluoromethane	101	2.685	2.684	0.001	98	732912	200.0	205.8	
20 Ethyl ether	59	3.069	3.067	0.002	94	557320	200.0	205.3	
21 Acrolein	56	3.251	3.244	0.007	99	114431	250.0	265.5	
22 1,1-Dichloroethene	96	3.379	3.365	0.014	95	500308	200.0	206.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.434	3.426	0.008	94	494476	200.0	202.0	
24 Acetone	43	3.458	3.451	0.007	100	309648	400.0	406.1	
25 Iodomethane	142	3.580	3.578	0.002	99	740212	200.0	206.5	
26 Carbon disulfide	76	3.677	3.676	0.001	100	1529475	200.0	213.4	
29 3-Chloro-1-propene	76	3.963	3.956	0.007	91	336687	200.0	214.2	
30 Methyl acetate	43	3.969	3.962	0.007	98	1911445	1000.0	1024.3	
31 Methylene Chloride	84	4.182	4.175	0.007	97	657192	200.0	185.7	
32 2-Methyl-2-propanol	59	4.407	4.412	-0.005	96	373469	2000.0	2115.4	
33 Acrylonitrile	53	4.541	4.540	0.001	99	2023857	2000.0	2079.9	
34 trans-1,2-Dichloroethene	96	4.614	4.613	0.001	79	603714	200.0	207.2	
35 Methyl tert-butyl ether	73	4.614	4.613	0.001	98	1583536	200.0	206.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.028	5.026	0.002	93	851374	200.0	203.1	
37 1,1-Dichloroethane	63	5.241	5.239	0.001	96	1157116	200.0	205.3	
38 Vinyl acetate	43	5.277	5.276	0.001	97	631938	200.0	215.6	
44 2-Butanone (MEK)	43	5.977	5.975	0.002	54	404756	400.0	414.1	
43 cis-1,2-Dichloroethene	96	5.983	5.981	0.002	84	638509	200.0	206.6	
42 2,2-Dichloropropane	77	5.983	5.987	-0.004	85	681588	200.0	213.3	
49 Tetrahydrofuran	42	6.287	6.279	0.008	82	271171	400.0	386.1	
48 Chlorobromomethane	128	6.269	6.279	-0.010	92	257539	200.0	209.4	
50 Chloroform	83	6.415	6.419	-0.004	95	995734	200.0	205.2	
51 1,1,1-Trichloroethane	97	6.579	6.584	-0.005	97	785027	200.0	212.3	
52 Cyclohexane	56	6.664	6.657	0.007	95	1203343	200.0	202.1	
53 Carbon tetrachloride	117	6.761	6.760	0.001	96	614377	200.0	212.3	
54 1,1-Dichloropropene	75	6.767	6.766	0.001	94	759338	200.0	205.8	
55 Isobutyl alcohol	41	6.932	6.936	-0.004	95	309707	5000.0	5401.4	
56 Benzene	78	6.986	6.985	0.001	99	2127915	200.0	198.8	
57 1,2-Dichloroethane	62	7.066	7.058	0.008	96	719730	200.0	204.8	
59 n-Heptane	43	7.345	7.350	-0.005	93	681180	200.0	199.8	
61 Trichloroethene	130	7.723	7.721	0.002	95	498060	200.0	204.3	
63 Methylcyclohexane	83	7.966	7.965	0.001	94	996383	200.0	207.4	
64 1,2-Dichloropropane	63	7.996	7.995	0.001	91	576307	200.0	203.5	
65 1,4-Dioxane	88	8.063	8.074	-0.011	95	73473	4000.0	4147.3	M
67 Dibromomethane	93	8.082	8.080	0.002	95	275521	200.0	217.7	
68 Dichlorobromomethane	83	8.276	8.275	0.001	98	647525	200.0	218.1	
71 cis-1,3-Dichloropropene	75	8.714	8.719	-0.005	92	759439	200.0	222.9	
72 4-Methyl-2-pentanone (MIBK	43	8.854	8.853	0.001	97	963310	400.0	415.5	
73 Toluene	91	9.049	9.047	0.002	96	1948278	200.0	185.5	
74 trans-1,3-Dichloropropene	75	9.292	9.291	0.001	96	613591	200.0	213.0	
75 Ethyl methacrylate	69	9.347	9.345	0.002	92	558436	200.0	210.7	
76 1,1,2-Trichloroethane	97	9.493	9.491	0.002	93	370798	200.0	194.4	
77 Tetrachloroethene	164	9.566	9.564	0.002	94	362836	200.0	193.4	
78 1,3-Dichloropropane	76	9.651	9.650	0.001	95	698175	200.0	196.9	
79 2-Hexanone	43	9.694	9.692	0.002	97	548903	400.0	415.0	
81 Chlorodibromomethane	129	9.870	9.869	0.001	91	355583	200.0	219.6	
82 Ethylene Dibromide	107	9.986	9.984	0.002	99	357378	200.0	206.0	
83 3-Chlorobenzotrifluoride	180	10.430	10.428	0.002	93	686787	200.0	187.9	
84 Chlorobenzene	112	10.472	10.471	0.001	89	1247688	200.0	190.3	
85 4-Chlorobenzotrifluoride	180	10.521	10.520	0.001	96	648765	200.0	190.7	
86 1,1,1,2-Tetrachloroethane	131	10.564	10.562	0.002	92	474135	200.0	209.7	
87 Ethylbenzene	106	10.570	10.568	0.002	98	755113	200.0	191.9	
88 m-Xylene & p-Xylene	106	10.697	10.702	-0.005	97	942705	200.0	194.2	
89 o-Xylene	106	11.081	11.079	0.002	96	966416	200.0	193.7	
90 Styrene	104	11.099	11.098	0.001	93	1466119	200.0	199.5	
91 Bromoform	173	11.287	11.292	-0.005	94	195103	200.0	225.0	
92 2-Chlorobenzotrifluoride	180	11.342	11.341	0.001	95	731138	200.0	191.8	
93 Isopropylbenzene	105	11.446	11.444	0.002	99	2269536	200.0	184.5	
96 1,1,2,2-Tetrachloroethane	83	11.756	11.755	0.001	95	506563	200.0	197.5	
95 Bromobenzene	156	11.768	11.767	0.001	97	550534	200.0	201.6	
97 trans-1,4-Dichloro-2-buten	53	11.792	11.791	0.001	76	166844	200.0	217.3	
98 1,2,3-Trichloropropane	110	11.817	11.815	0.002	86	157512	200.0	197.1	
99 N-Propylbenzene	120	11.865	11.864	0.001	97	647166	200.0	198.4	
100 2-Chlorotoluene	126	11.957	11.955	0.002	95	574430	200.0	199.8	
101 3-Chlorotoluene	126	12.018	12.022	-0.004	95	580756	200.0	193.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.048	12.047	0.001	96	2008176	200.0	191.5	
103 4-Chlorotoluene	126	12.078	12.083	-0.005	98	596461	200.0	202.1	
104 tert-Butylbenzene	119	12.364	12.363	0.001	92	1597317	200.0	195.7	
106 1,2,4-Trimethylbenzene	105	12.425	12.424	0.001	98	2073941	200.0	191.1	
107 1,2-dichloro-4-(trifluorom	214	12.456	12.460	-0.004	97	595281	200.0	196.3	
108 sec-Butylbenzene	105	12.589	12.588	0.001	96	2342860	200.0	185.7	
109 1,3-Dichlorobenzene	146	12.711	12.710	0.001	93	1029314	200.0	192.4	
110 4-Isopropyltoluene	119	12.741	12.740	0.001	94	1972986	200.0	192.7	
111 1,4-Dichlorobenzene	146	12.814	12.813	0.001	85	1071549	200.0	193.6	
113 2,4-Dichloro-1-(triflourom	214	12.827	12.831	-0.004	97	570286	200.0	187.4	
114 2,5-Dichlorobenzotrifluori	214	12.869	12.868	0.001	98	695499	200.0	207.4	
116 n-Butylbenzene	91	13.155	13.154	0.001	95	1901534	200.0	193.2	
117 1,2-Dichlorobenzene	146	13.167	13.166	0.001	91	1036802	200.0	193.9	
118 1,2-Dibromo-3-Chloropropan	75	13.958	13.963	-0.005	77	90830	200.0	212.8	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.104	14.103	0.001	95	2764683	600.0	550.7	
121 2,3- & 3,4- Dichlorotoluen	125	14.518	14.516	0.002	96	2037341	400.0	371.6	
122 1,2,4-Trichlorobenzene	180	14.785	14.784	0.001	94	817434	200.0	197.3	
123 Hexachlorobutadiene	225	14.931	14.930	0.001	96	320466	200.0	197.8	
124 Naphthalene	128	15.053	15.052	0.001	98	1444669	200.0	202.9	
125 1,2,3-Trichlorobenzene	180	15.278	15.277	0.001	94	688354	200.0	198.6	
126 2,4,5-Trichlorotoluene	159	16.045	16.049	-0.004	0	504552	200.0	197.8	
127 2,3,6-Trichlorotoluene	159	16.148	16.147	0.001	94	455993	200.0	200.6	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		400.0	413.8	
S 131 Xylenes, Total	106				0		400.0	387.8	
S 132 1,3-Dichloropropene, Total	1				0		400.0	435.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00029	Amount Added:	8.00	Units: uL	
voaWeemixpri_00001	Amount Added:	8.00	Units: uL	
voaWVApri Res_00001	Amount Added:	8.00	Units: uL	
VOAKETONEPRI_00003	Amount Added:	8.00	Units: uL	
VOA8260VOAPRI_00097	Amount Added:	8.00	Units: uL	
voaWAcropri R_00006	Amount Added:	10.00	Units: uL	
VOA8260INT_00027	Amount Added:	2.00	Units: uL	Run Reagent

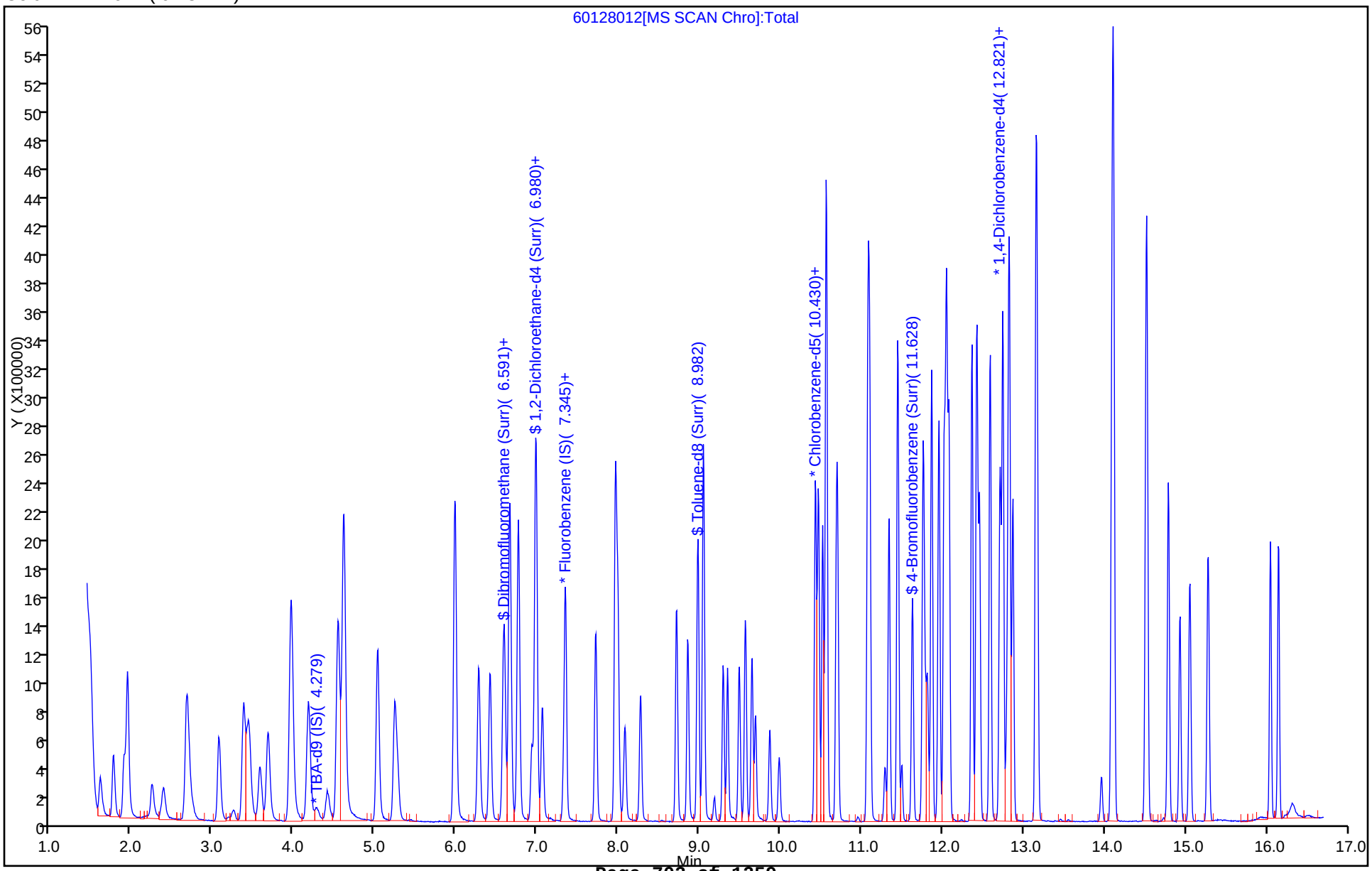
Report Date: 29-Jan-2015 12:59:16 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128012.D

Injection Date:	28-Jan-2015 16:21:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD40			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

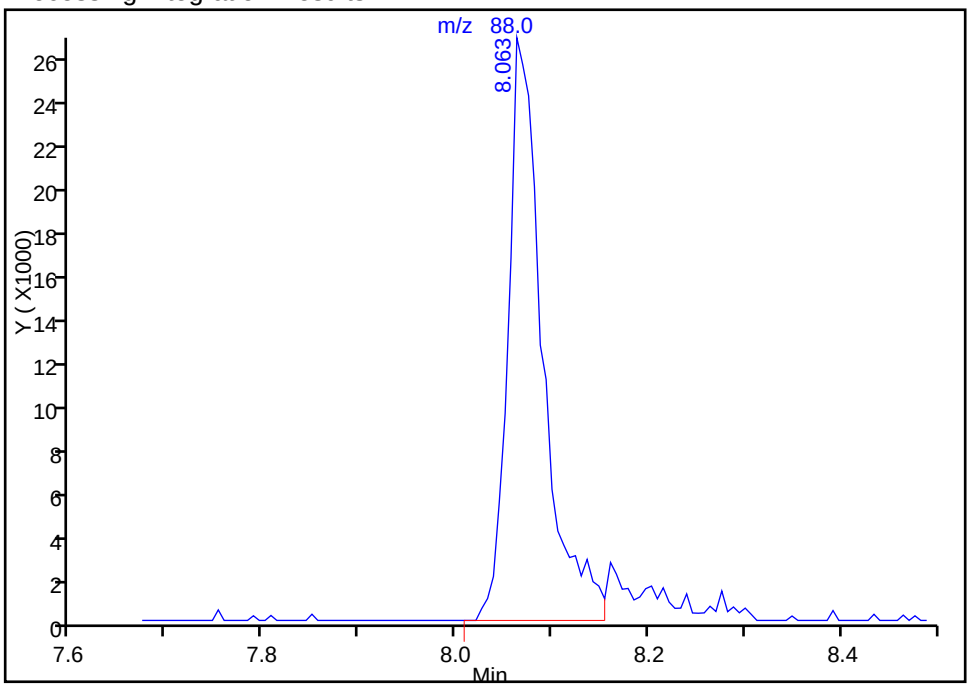
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128012.D
Injection Date: 28-Jan-2015 16:21:30 Instrument ID: CHHP6
Lims ID: IC VSTD40
Client ID:
Operator ID: 001562 ALS Bottle#: 10 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

65 1,4-Dioxane, CAS: 123-91-1

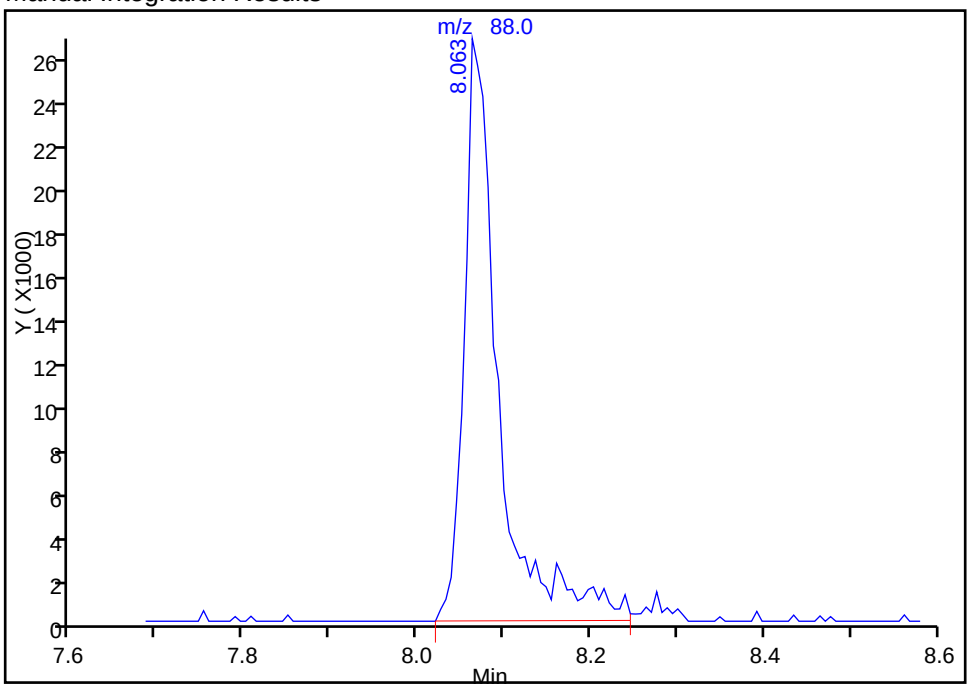
Processing Integration Results

RT: 8.06
Area: 66981
Amount: 3712.8569
Amount Units: ng



Manual Integration Results

RT: 8.06
Area: 73473
Amount: 4147.2741
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 11:12:56
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D
Lims ID: IC VSTD50
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 28-Jan-2015 16:44:30 ALS Bottle#: 11 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD50
Misc. Info.: 180-0005450-013
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:17 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 29-Jan-2015 11:15:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.278	4.278	0.000	97	165623	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.326	7.326	0.000	98	445145	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.435	10.440	-0.005	89	112267	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.789	12.789	0.000	93	160396	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.596	6.596	0.000	93	498125	250.0	247.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.973	6.973	0.000	70	706731	250.0	245.2	
$ 7 Toluene-d8 (Surr)	98	8.981	8.980	0.001	94	1782119	250.0	201.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.627	11.627	0.000	83	804742	250.0	213.8	
11 Dichlorodifluoromethane	85	1.608	1.607	0.001	98	543864	250.0	230.6	
12 Chloromethane	50	1.766	1.759	0.007	99	847288	250.0	233.6	
13 Vinyl chloride	62	1.900	1.893	0.007	98	750079	250.0	233.3	
14 Butadiene	39	1.942	1.936	0.006	90	797079	250.0	232.2	
15 Bromomethane	94	2.247	2.240	0.007	90	267917	250.0	207.6	
16 Chloroethane	64	2.387	2.380	0.007	100	453830	250.0	230.2	
17 Dichlorofluoromethane	67	2.672	2.666	0.006	98	1104334	250.0	235.0	
18 Trichlorofluoromethane	101	2.685	2.684	0.001	98	854688	250.0	232.4	
20 Ethyl ether	59	3.074	3.067	0.007	94	701385	250.0	250.1	
21 Acrolein	56	3.244	3.244	0.000	99	125821	275.0	282.7	
22 1,1-Dichloroethene	96	3.372	3.365	0.007	96	603276	250.0	241.4	
23 1,1,2-Trichloro-1,2,2-trif	101	3.433	3.426	0.007	95	600973	250.0	237.7	
24 Acetone	43	3.457	3.451	0.006	100	400973	500.0	509.2	
25 Iodomethane	142	3.579	3.578	0.001	99	932274	250.0	251.8	
26 Carbon disulfide	76	3.676	3.676	0.000	100	1916453	250.0	258.9	
29 3-Chloro-1-propene	76	3.956	3.956	0.000	90	417234	250.0	257.0	
30 Methyl acetate	43	3.968	3.962	0.006	98	2346689	1250.0	1217.6	
31 Methylene Chloride	84	4.175	4.175	0.000	97	837610	250.0	229.2	
32 2-Methyl-2-propanol	59	4.412	4.412	0.000	96	475572	2500.0	2540.9	
33 Acrylonitrile	53	4.540	4.540	0.000	97	2458471	2500.0	2446.4	
34 trans-1,2-Dichloroethene	96	4.613	4.613	0.000	74	746155	250.0	248.0	
35 Methyl tert-butyl ether	73	4.613	4.613	0.000	98	1999816	250.0	252.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.027	5.026	0.001	94	1057585	250.0	244.3	
37 1,1-Dichloroethane	63	5.240	5.239	0.001	96	1421566	250.0	244.2	
38 Vinyl acetate	43	5.276	5.276	0.000	97	777050	250.0	256.8	
44 2-Butanone (MEK)	43	5.982	5.975	0.007	50	502816	500.0	498.1	
43 cis-1,2-Dichloroethene	96	5.982	5.981	0.001	84	802357	250.0	251.4	
42 2,2-Dichloropropane	77	5.982	5.987	-0.005	66	842775	250.0	255.3	
49 Tetrahydrofuran	42	6.286	6.279	0.007	91	346093	500.0	477.1	
48 Chlorobromomethane	128	6.280	6.279	0.001	93	324697	250.0	255.6	
50 Chloroform	83	6.414	6.419	-0.005	94	1224156	250.0	244.3	
51 1,1,1-Trichloroethane	97	6.584	6.584	0.000	96	966056	250.0	253.0	
52 Cyclohexane	56	6.663	6.657	0.006	95	1475197	250.0	239.9	
53 Carbon tetrachloride	117	6.761	6.760	0.001	95	766964	250.0	256.7	
54 1,1-Dichloropropene	75	6.773	6.766	0.007	94	930038	250.0	244.1	
55 Isobutyl alcohol	41	6.931	6.936	-0.005	94	377064	6250.0	6367.6	
56 Benzene	78	6.986	6.985	0.001	99	2568317	250.0	232.4	
57 1,2-Dichloroethane	62	7.065	7.058	0.007	97	895039	250.0	246.6	
59 n-Heptane	43	7.345	7.350	-0.005	94	839502	250.0	238.4	
61 Trichloroethene	130	7.722	7.721	0.001	94	593184	250.0	235.6	
63 Methylcyclohexane	83	7.965	7.965	0.000	94	1205068	250.0	242.9	
64 1,2-Dichloropropane	63	7.995	7.995	0.000	89	735181	250.0	251.4	
65 1,4-Dioxane	88	8.075	8.074	0.001	35	86605	5000.0	4733.5	
67 Dibromomethane	93	8.081	8.080	0.001	95	334892	250.0	256.2	
68 Dichlorobromomethane	83	8.275	8.275	0.000	98	803958	250.0	262.2	
71 cis-1,3-Dichloropropene	75	8.719	8.719	0.000	92	940779	250.0	267.4	
72 4-Methyl-2-pentanone (MIBK	43	8.859	8.853	0.006	96	1165825	500.0	460.3	
73 Toluene	91	9.048	9.047	0.001	96	2335981	250.0	203.5	
74 trans-1,3-Dichloropropene	75	9.291	9.291	0.000	96	756557	250.0	240.3	
75 Ethyl methacrylate	69	9.346	9.345	0.001	91	703298	250.0	242.8	
76 1,1,2-Trichloroethane	97	9.492	9.491	0.001	93	457078	250.0	219.3	
77 Tetrachloroethene	164	9.565	9.564	0.001	93	439818	250.0	214.6	
78 1,3-Dichloropropane	76	9.650	9.650	0.000	95	854230	250.0	220.4	
79 2-Hexanone	43	9.693	9.692	0.001	95	682982	500.0	472.6	
81 Chlorodibromomethane	129	9.869	9.869	0.000	90	439418	250.0	248.4	
82 Ethylene Dibromide	107	9.985	9.984	0.001	99	439262	250.0	231.7	
83 3-Chlorobenzotrifluoride	180	10.429	10.428	0.001	94	827969	250.0	207.4	
84 Chlorobenzene	112	10.471	10.471	0.000	89	1544665	250.0	215.6	
85 4-Chlorobenzotrifluoride	180	10.520	10.520	0.000	97	789851	250.0	212.6	
86 1,1,1,2-Tetrachloroethane	131	10.563	10.562	0.001	92	607735	250.0	246.1	
87 Ethylbenzene	106	10.569	10.568	0.001	97	946322	250.0	220.2	
88 m-Xylene & p-Xylene	106	10.697	10.702	-0.005	96	1173036	250.0	221.1	
89 o-Xylene	106	11.080	11.079	0.001	96	1190653	250.0	218.4	
90 Styrene	104	11.098	11.098	0.000	93	1790733	250.0	223.1	
91 Bromoform	173	11.293	11.292	0.001	95	250089	250.0	264.0	
92 2-Chlorobenzotrifluoride	180	11.341	11.341	0.000	94	883499	250.0	212.1	
93 Isopropylbenzene	105	11.451	11.444	0.007	99	2696635	250.0	200.6	
96 1,1,2,2-Tetrachloroethane	83	11.755	11.755	0.000	95	640819	250.0	228.7	
95 Bromobenzene	156	11.767	11.767	0.000	98	690860	250.0	246.1	
97 trans-1,4-Dichloro-2-buten	53	11.792	11.791	0.001	82	201266	250.0	254.9	
98 1,2,3-Trichloropropane	110	11.816	11.815	0.001	85	203260	250.0	247.4	
99 N-Propylbenzene	120	11.865	11.864	0.001	97	796757	250.0	237.5	
100 2-Chlorotoluene	126	11.956	11.955	0.001	95	719388	250.0	243.4	
101 3-Chlorotoluene	126	12.023	12.022	0.001	95	730727	250.0	236.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.047	12.047	0.000	94	2421330	250.0	224.6	
103 4-Chlorotoluene	126	12.077	12.083	-0.006	98	726677	250.0	239.5	
104 tert-Butylbenzene	119	12.363	12.363	0.000	92	1918630	250.0	228.6	
106 1,2,4-Trimethylbenzene	105	12.424	12.424	0.000	98	2489630	250.0	223.2	
107 1,2-dichloro-4-(trifluorom	214	12.455	12.460	-0.005	96	725838	250.0	232.8	
108 sec-Butylbenzene	105	12.589	12.588	0.000	96	2762118	250.0	212.9	
109 1,3-Dichlorobenzene	146	12.710	12.710	0.000	93	1280853	250.0	232.9	
110 4-Isopropyltoluene	119	12.747	12.740	0.007	93	2335695	250.0	221.9	
111 1,4-Dichlorobenzene	146	12.820	12.813	0.007	86	1322179	250.0	232.4	
113 2,4-Dichloro-1-(triflourom	214	12.832	12.831	0.001	96	757959	250.0	242.3	
114 2,5-Dichlorobenzotrifluori	214	12.868	12.868	0.000	97	791743	250.0	229.6	
116 n-Butylbenzene	91	13.154	13.154	0.000	94	2252239	250.0	222.5	
117 1,2-Dichlorobenzene	146	13.166	13.166	0.000	91	1288639	250.0	234.4	
118 1,2-Dibromo-3-Chloropropan	75	13.963	13.963	0.000	77	111534	250.0	254.1	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.103	14.103	0.000	94	3312790	750.0	641.9	
121 2,3- & 3,4- Dichlorotoluen	125	14.517	14.516	0.001	95	2461660	500.0	436.7	
122 1,2,4-Trichlorobenzene	180	14.785	14.784	0.001	94	1004110	250.0	235.7	
123 Hexachlorobutadiene	225	14.931	14.930	0.001	96	388561	250.0	233.2	
124 Naphthalene	128	15.052	15.052	0.000	98	1745866	250.0	238.5	
125 1,2,3-Trichlorobenzene	180	15.277	15.277	0.000	93	854020	250.0	239.7	
126 2,4,5-Trichlorotoluene	159	16.044	16.049	-0.005	0	629698	250.0	240.1	
127 2,3,6-Trichlorotoluene	159	16.147	16.147	0.000	93	566962	250.0	242.6	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		500.0	499.4	
S 131 Xylenes, Total	106				0		500.0	439.5	
S 132 1,3-Dichloropropene, Total	1				0		500.0	507.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260SURR_00029	Amount Added:	10.00	Units: uL	
voaWeemixpri_00001	Amount Added:	10.00	Units: uL	
voaWVApri Res_00001	Amount Added:	10.00	Units: uL	
VOAKETONEPRI_00003	Amount Added:	10.00	Units: uL	
VOA8260VOAPRI_00097	Amount Added:	10.00	Units: uL	
voaWAcropri R_00006	Amount Added:	11.00	Units: uL	
VOA8260INT_00027	Amount Added:	2.00	Units: uL	Run Reagent

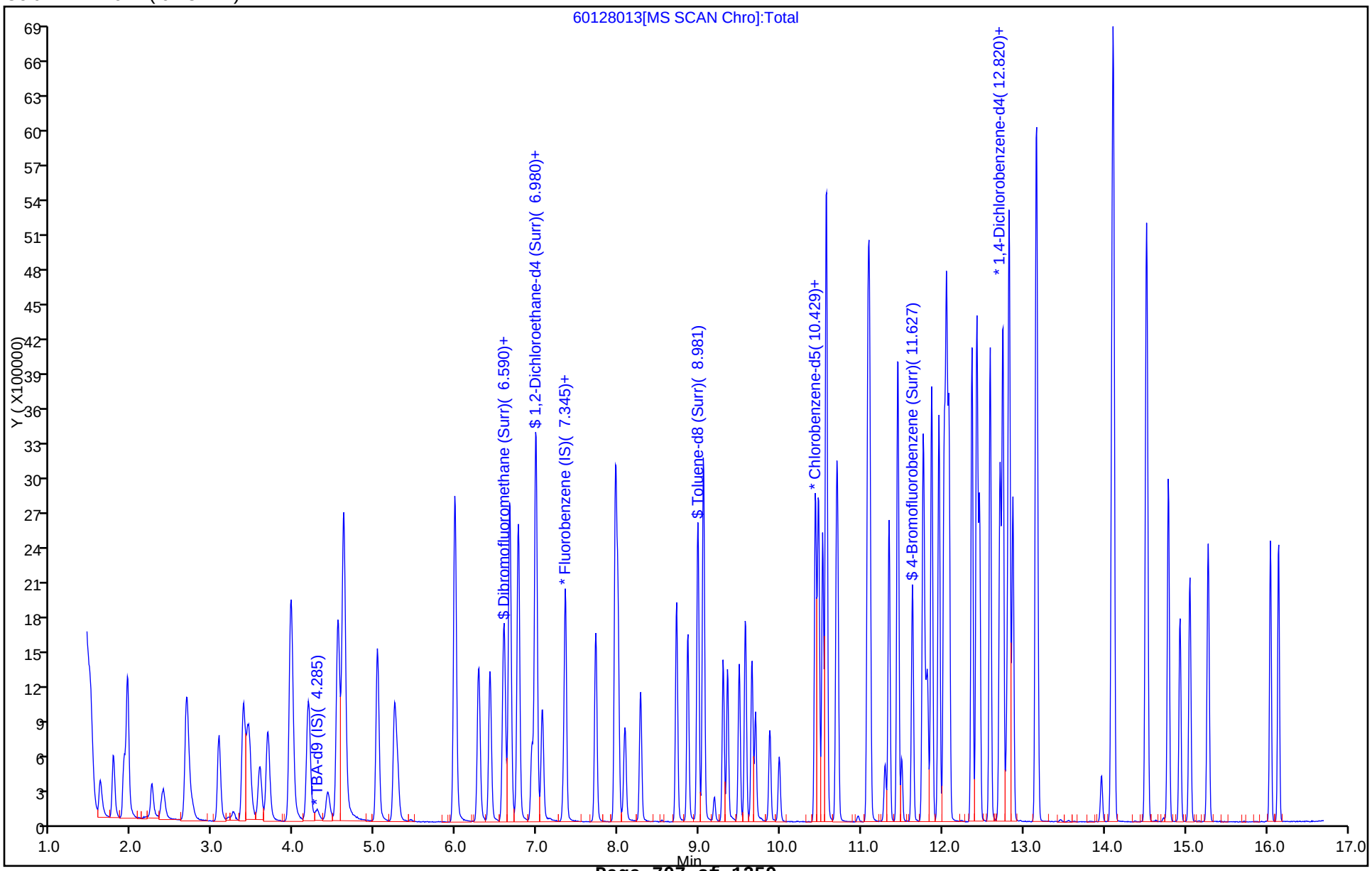
Report Date: 29-Jan-2015 12:59:17 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Injection Date:	28-Jan-2015 16:44:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD50			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCVIS 180-136954/2 Calibration Date: 03/30/2015 11:52

Instrument ID: CHHP5 Calib Start Date: 03/16/2015 12:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2015 16:17

Lab File ID: 50330002.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	0.2143	0.2428	0.1000	11.3	10.0	13.3	20.0
Chloromethane	Ave	0.2958	0.3015	0.1000	10.2	10.0	1.9	20.0
Vinyl chloride	Ave	0.3306	0.3704	0.1000	11.2	10.0	12.0	20.0
Bromomethane	Lin2		0.1885	0.0500	10.6	10.0	5.8	20.0
Chloroethane	Ave	0.2287	0.2733	0.0500	11.9	10.0	19.5	20.0
Dichlorofluoromethane	Ave	0.5222	0.6270	0.0100	12.0	10.0	20.1*	20.0
Trichlorofluoromethane	Ave	0.3966	0.4357	0.1000	11.0	10.0	9.9	20.0
Ethyl ether	Ave	0.2615	0.2952	0.0100	11.3	10.0	12.9	20.0
Acrolein	Ave	0.0318	0.0283	0.0100	26.7	30.0	-11.1	20.0
1,1-Dichloroethene	Ave	0.2883	0.2779	0.1000	9.64	10.0	-3.6	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2916	0.3142	0.1000	10.8	10.0	7.7	20.0
Acetone	Ave	0.1024	0.1284	0.0500	25.1	20.0	25.3*	20.0
Iodomethane	Ave	0.4005	0.4112	0.0100	10.3	10.0	2.7	20.0
Carbon disulfide	Ave	0.7051	0.5479	0.1000	7.77	10.0	-22.3*	20.0
Allyl chloride	Ave	0.1524	0.1403	0.0100	9.21	10.0	-7.9	20.0
Methyl acetate	Ave	0.2396	0.2323	0.1000	48.5	50.0	-3.1	20.0
Methylene Chloride	Ave	0.3335	0.3407	0.1000	10.2	10.0	2.2	20.0
tert-Butyl alcohol	Ave	1.178	1.103	0.0100	93.6	100	-6.4	20.0
Acrylonitrile	Ave	0.1233	0.1213	0.0100	98.4	100	-1.6	20.0
trans-1,2-Dichloroethene	Ave	0.2982	0.3048	0.1000	10.2	10.0	2.2	20.0
Methyl tert-butyl ether	Ave	0.6593	0.6762	0.1000	10.3	10.0	2.6	20.0
Hexane	Ave	0.4764	0.4280	0.0100	8.98	10.0	-10.2	20.0
1,1-Dichloroethane	Ave	0.5323	0.5437	0.2000	10.2	10.0	2.1	20.0
Vinyl acetate	Ave	0.3776	0.3350	0.0100	8.87	10.0	-11.3	20.0
2,2-Dichloropropane	Ave	0.1331	0.1543	0.0100	11.6	10.0	15.9	20.0
cis-1,2-Dichloroethene	Ave	0.3142	0.3132	0.1000	9.97	10.0	-0.3	20.0
2-Butanone (MEK)	Ave	0.1638	0.1327	0.0500	16.2	20.0	-18.9	20.0
Bromochloromethane	Ave	0.1360	0.1401	0.0100	10.3	10.0	3.0	20.0
Tetrahydrofuran	Ave	0.1026	0.0853	0.0100	16.6	20.0	-16.8	20.0
Chloroform	Ave	0.4836	0.5057	0.2000	10.5	10.0	4.6	20.0
1,1,1-Trichloroethane	Ave	0.3088	0.3224	0.1000	10.4	10.0	4.4	20.0
Cyclohexane	Ave	0.5929	0.5576	0.1000	9.41	10.0	-5.9	20.0
Carbon tetrachloride	Ave	0.2478	0.2545	0.1000	10.3	10.0	2.7	20.0
1,1-Dichloropropene	Ave	0.4011	0.3898	0.0100	9.72	10.0	-2.8	20.0
Isobutyl alcohol	Ave	0.0067	0.0055*	0.0100	207	250	-17.2	20.0
Benzene	Ave	1.185	1.226	0.5000	10.4	10.0	3.5	20.0
1,2-Dichloroethane	Ave	0.3880	0.4216	0.1000	10.9	10.0	8.7	20.0
n-Heptane	Ave	0.4071	0.3661	0.0100	8.99	10.0	-10.1	20.0
Trichloroethene	Ave	0.2969	0.2816	0.2000	9.49	10.0	-5.1	20.0
Methylcyclohexane	Ave	0.5297	0.5082	0.1000	9.60	10.0	-4.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCVIS 180-136954/2 Calibration Date: 03/30/2015 11:52

Instrument ID: CHHP5 Calib Start Date: 03/16/2015 12:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2015 16:17

Lab File ID: 50330002.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	0.2931	0.2922	0.1000	9.97	10.0	-0.3	20.0
Dibromomethane	Ave	0.1578	0.1560	0.0100	9.89	10.0	-1.1	20.0
1,4-Dioxane	Ave	0.0031	0.0024*	0.0100	157	200	-21.6*	20.0
Bromodichloromethane	Ave	0.3220	0.3038	0.2000	9.43	10.0	-5.7	20.0
cis-1,3-Dichloropropene	Ave	0.3107	0.2870	0.2000	9.24	10.0	-7.6	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.353	1.204	0.1000	17.8	20.0	-11.0	20.0
Toluene	Ave	5.124	5.530	0.4000	10.8	10.0	7.9	20.0
trans-1,3-Dichloropropene	Ave	0.9254	0.8913	0.1000	9.63	10.0	-3.7	20.0
Ethyl methacrylate	Ave	1.207	1.087	0.0100	9.00	10.0	-10.0	20.0
1,1,2-Trichloroethane	Ave	0.9609	0.9821	0.1000	10.2	10.0	2.2	20.0
Tetrachloroethene	Ave	1.002	1.015	0.2000	10.1	10.0	1.3	20.0
1,3-Dichloropropane	Ave	1.786	1.878	0.0100	10.5	10.0	5.1	20.0
2-Hexanone	Ave	1.034	0.9845	0.1000	19.0	20.0	-4.8	20.0
Dibromochloromethane	Ave	0.7670	0.7421	0.1000	9.68	10.0	-3.2	20.0
1,2-Dibromoethane (EDB)	Ave	0.9169	0.9638	0.1000	10.5	10.0	5.1	20.0
3-Chlorobenzotrifluoride	Ave	1.955	1.970	0.0100	10.1	10.0	0.8	20.0
Chlorobenzene	Ave	3.246	3.458	0.5000	10.7	10.0	6.5	20.0
4-Chlorobenzotrifluoride	Ave	1.890	1.831	0.0100	9.69	10.0	-3.1	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8382	0.8728	0.0100	10.4	10.0	4.1	20.0
Ethylbenzene	Ave	1.863	1.961	0.1000	10.5	10.0	5.3	20.0
m-Xylene & p-Xylene	Ave	2.278	2.339	0.1000	10.3	10.0	2.7	20.0
o-Xylene	Ave	2.228	2.356	0.3000	10.6	10.0	5.7	20.0
Styrene	Ave	3.591	3.748	0.3000	10.4	10.0	4.4	20.0
Bromoform	Ave	0.4737	0.4114	0.1000	8.68	10.0	-13.2	20.0
2-Chlorobenzotrifluoride	Ave	1.952	1.915	0.0100	9.81	10.0	-1.9	20.0
Isopropylbenzene	Ave	5.560	5.821	0.1000	10.5	10.0	4.7	20.0
1,1,2,2-Tetrachloroethane	Ave	1.378	1.430	0.3000	10.4	10.0	3.8	20.0
Bromobenzene	Ave	0.9254	0.8932	0.0100	9.65	10.0	-3.5	20.0
1,2,3-Trichloropropane	Ave	0.3041	0.2933	0.0100	9.64	10.0	-3.6	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2528	0.2351	0.0100	9.30	10.0	-7.0	20.0
N-Propylbenzene	Ave	1.142	1.048	0.0100	9.18	10.0	-8.2	20.0
2-Chlorotoluene	Ave	0.9591	0.9306	0.0100	9.70	10.0	-3.0	20.0
3-Chlorotoluene	Ave	1.072	1.052	0.0100	9.82	10.0	-1.8	20.0
1,3,5-Trimethylbenzene	Ave	3.183	3.243	0.0100	10.2	10.0	1.9	20.0
4-Chlorotoluene	Ave	1.038	1.030	0.0100	9.92	10.0	-0.8	20.0
tert-Butylbenzene	Ave	2.758	2.614	0.0100	9.48	10.0	-5.2	20.0
1,2,4-Trimethylbenzene	Ave	3.267	3.289	0.0100	10.1	10.0	0.7	20.0
3,4-Dichlorobenzotrifluoride	Ave	1.032	0.9732	0.0100	9.43	10.0	-5.7	20.0
sec-Butylbenzene	Ave	3.881	3.860	0.0100	9.94	10.0	-0.6	20.0
1,3-Dichlorobenzene	Ave	1.705	1.711	0.6000	10.0	10.0	0.4	20.0
4-Isopropyltoluene	Ave	3.204	3.185	0.0100	9.94	10.0	-0.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCVIS 180-136954/2 Calibration Date: 03/30/2015 11:52

Instrument ID: CHHP5 Calib Start Date: 03/16/2015 12:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2015 16:17

Lab File ID: 50330002.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.741	1.728	0.5000	9.92	10.0	-0.8	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.9669	0.8922	0.0100	9.23	10.0	-7.7	20.0
2,5-Dichlorobenzotrifluoride	Ave	1.082	1.021	0.0100	9.44	10.0	-5.6	20.0
n-Butylbenzene	Ave	2.918	2.864	0.0100	9.82	10.0	-1.8	20.0
1,2-Dichlorobenzene	Ave	1.579	1.583	0.4000	10.0	10.0	0.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1292	0.1010	0.0500	7.82	10.0	-21.8*	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.194	1.130	0.0100	28.4	30.0	-5.3	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.161	1.044	0.0100	18.0	20.0	-10.0	20.0
1,2,4-Trichlorobenzene	Ave	0.8219	0.7176	0.2000	8.73	10.0	-12.7	20.0
Hexachlorobutadiene	Ave	0.3941	0.3513	0.0100	8.91	10.0	-10.9	20.0
Naphthalene	Ave	2.158	1.677	0.0100	7.77	10.0	-22.3*	20.0
1,2,3-Trichlorobenzene	Ave	0.6740	0.5460	0.0100	8.10	10.0	-19.0	20.0
2,4,5-Trichlorotoluene	Ave	0.3624	0.2269	0.0100	6.26	10.0	-37.4*	20.0
2,3,6-Trichlorotoluene	Ave	0.3273	0.2280	0.0100	6.96	10.0	-30.4*	20.0
Dibromofluoromethane (Surr)	Ave	0.2274	0.1977		8.69	10.0	-13.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2998	0.2865		9.56	10.0	-4.4	20.0
Toluene-d8 (Surr)	Ave	3.986	3.685		9.24	10.0	-7.6	20.0
4-Bromofluorobenzene (Surr)	Ave	1.436	1.278		8.90	10.0	-11.0	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 30-Mar-2015 11:52:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006238-002
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub11

Method: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 30-Mar-2015 13:15:00 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: fergusond Date: 30-Mar-2015 12:20:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.321	4.321	0.000	97	135548	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.278	7.278	0.000	99	489209	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.368	10.368	0.000	99	107368	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.686	12.686	0.000	96	162989	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.535	6.535	0.000	96	96709	50.0	43.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.900	0.000	99	140149	50.0	47.8	
$ 7 Toluene-d8 (Surr)	98	8.926	8.926	0.000	100	395673	50.0	46.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.536	11.536	0.000	95	137207	50.0	44.5	
11 Dichlorodifluoromethane	85	1.626	1.626	0.000	99	118782	50.0	56.6	
12 Chloromethane	50	1.784	1.784	0.000	100	147475	50.0	51.0	
13 Vinyl chloride	62	1.912	1.912	0.000	100	181214	50.0	56.0	
14 Butadiene	39	1.955	1.955	0.000	99	199464	50.0	54.0	
15 Bromomethane	94	2.259	2.259	0.000	100	92210	50.0	52.9	
16 Chloroethane	64	2.399	2.399	0.000	99	133719	50.0	59.7	
17 Dichlorofluoromethane	67	2.666	2.666	0.000	100	306718	50.0	60.0	
18 Trichlorofluoromethane	101	2.727	2.727	0.000	99	213148	50.0	54.9	
20 Ethyl ether	59	3.086	3.086	0.000	100	144435	50.0	56.4	
21 Acrolein	56	3.256	3.256	0.000	96	41456	150.0	133.4	
22 1,1-Dichloroethene	96	3.390	3.390	0.000	98	135950	50.0	48.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.439	3.439	0.000	97	153688	50.0	53.9	
24 Acetone	43	3.506	3.506	0.000	99	125587	100.0	125.3	
25 Iodomethane	142	3.567	3.567	0.000	99	201153	50.0	51.3	
26 Carbon disulfide	76	3.658	3.658	0.000	100	268024	50.0	38.9	
28 3-Chloro-1-propene	76	3.950	3.950	0.000	98	68637	50.0	46.0	
30 Methyl acetate	43	4.017	4.017	0.000	100	568252	250.0	242.4	
31 Methylene Chloride	84	4.151	4.151	0.000	97	166683	50.0	51.1	
32 2-Methyl-2-propanol	59	4.443	4.443	0.000	97	74759	500.0	468.2	
33 Acrylonitrile	53	4.552	4.552	0.000	100	593198	500.0	491.9	
34 trans-1,2-Dichloroethene	96	4.570	4.570	0.000	89	149113	50.0	51.1	
35 Methyl tert-butyl ether	73	4.595	4.595	0.000	100	330815	50.0	51.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.990	4.990	0.000	98	209402	50.0	44.9	
37 1,1-Dichloroethane	63	5.173	5.173	0.000	99	265965	50.0	51.1	
38 Vinyl acetate	43	5.294	5.294	0.000	100	163874	50.0	44.4	
44 2,2-Dichloropropane	77	5.927	5.927	0.000	97	75460	50.0	58.0	
45 cis-1,2-Dichloroethene	96	5.939	5.939	0.000	97	153197	50.0	49.8	
46 2-Butanone (MEK)	43	5.994	5.994	0.000	100	129870	100.0	81.1	
49 Chlorobromomethane	128	6.231	6.231	0.000	99	68528	50.0	51.5	
51 Tetrahydrofuran	42	6.286	6.286	0.000	96	83478	100.0	83.2	
52 Chloroform	83	6.347	6.347	0.000	100	247410	50.0	52.3	
53 1,1,1-Trichloroethane	97	6.535	6.535	0.000	96	157700	50.0	52.2	
54 Cyclohexane	56	6.590	6.590	0.000	98	272792	50.0	47.0	
56 Carbon tetrachloride	117	6.718	6.718	0.000	99	124522	50.0	51.4	
55 1,1-Dichloropropene	75	6.724	6.724	0.000	99	190690	50.0	48.6	
57 Isobutyl alcohol	41	6.943	6.943	0.000	98	67597	1250.0	1035.2	
58 Benzene	78	6.955	6.955	0.000	99	599946	50.0	51.8	
59 1,2-Dichloroethane	62	6.986	6.986	0.000	98	206246	50.0	54.3	
62 n-Heptane	43	7.278	7.278	0.000	81	179116	50.0	45.0	
64 Trichloroethene	130	7.667	7.667	0.000	100	137766	50.0	47.4	
66 Methylcyclohexane	83	7.862	7.862	0.000	99	248634	50.0	48.0	
67 1,2-Dichloropropane	63	7.904	7.904	0.000	97	142959	50.0	49.9	
68 Dibromomethane	93	8.026	8.026	0.000	96	76333	50.0	49.4	
70 1,4-Dioxane	88	8.062	8.062	0.000	97	23674	1000.0	784.1	M
71 Dichlorobromomethane	83	8.196	8.196	0.000	99	148596	50.0	47.2	
73 2-Chloroethyl vinyl ether	63	8.525	8.525	0.000	98	140970	100.0	87.2	
74 cis-1,3-Dichloropropene	75	8.659	8.659	0.000	98	140416	50.0	46.2	
75 4-Methyl-2-pentanone (MIBK	43	8.823	8.823	0.000	100	258488	100.0	89.0	
76 Toluene	91	8.993	8.993	0.000	100	593713	50.0	54.0	
77 trans-1,3-Dichloropropene	75	9.218	9.218	0.000	98	95692	50.0	48.2	
78 Ethyl methacrylate	69	9.316	9.316	0.000	99	116658	50.0	45.0	
79 1,1,2-Trichloroethane	97	9.401	9.401	0.000	97	105447	50.0	51.1	
80 Tetrachloroethene	164	9.541	9.541	0.000	98	108974	50.0	50.6	
81 1,3-Dichloropropane	76	9.565	9.565	0.000	98	201589	50.0	52.6	
82 2-Hexanone	43	9.662	9.662	0.000	100	211398	100.0	95.2	
84 Chlorodibromomethane	129	9.796	9.796	0.000	99	79681	50.0	48.4	
85 Ethylene Dibromide	107	9.900	9.900	0.000	98	103479	50.0	52.6	
86 3-Chlorobenzotrifluoride	180	10.374	10.374	0.000	98	211493	50.0	50.4	
87 Chlorobenzene	112	10.392	10.392	0.000	99	371264	50.0	53.3	
88 4-Chlorobenzotrifluoride	180	10.429	10.429	0.000	99	196548	50.0	48.4	
89 1,1,1,2-Tetrachloroethane	131	10.478	10.478	0.000	99	93706	50.0	52.1	
90 Ethylbenzene	106	10.502	10.502	0.000	100	210543	50.0	52.6	
91 m-Xylene & p-Xylene	106	10.624	10.624	0.000	100	251128	50.0	51.3	
92 o-Xylene	106	11.013	11.013	0.000	100	252927	50.0	52.9	
93 Styrene	104	11.025	11.025	0.000	99	402449	50.0	52.2	
94 Bromoform	173	11.208	11.208	0.000	99	44168	50.0	43.4	
96 2-Chlorobenzotrifluoride	180	11.274	11.274	0.000	99	205621	50.0	49.0	
97 Isopropylbenzene	105	11.378	11.378	0.000	100	625014	50.0	52.3	
99 1,1,2,2-Tetrachloroethane	83	11.676	11.676	0.000	97	153551	50.0	51.9	
100 Bromobenzene	156	11.682	11.682	0.000	100	145584	50.0	48.3	
101 1,2,3-Trichloropropane	110	11.725	11.725	0.000	97	47804	50.0	48.2	
102 trans-1,4-Dichloro-2-buten	53	11.731	11.731	0.000	97	38311	50.0	46.5	
103 N-Propylbenzene	120	11.792	11.792	0.000	100	170745	50.0	45.9	
104 2-Chlorotoluene	126	11.877	11.877	0.000	100	151681	50.0	48.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.938	11.938	0.000	99	171538	50.0	49.1	
106 1,3,5-Trimethylbenzene	105	11.962	11.962	0.000	100	528576	50.0	50.9	
107 4-Chlorotoluene	126	11.986	11.986	0.000	97	167930	50.0	49.6	
108 tert-Butylbenzene	119	12.290	12.290	0.000	99	425987	50.0	47.4	
110 1,2,4-Trimethylbenzene	105	12.339	12.339	0.000	99	536106	50.0	50.3	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.400	0.000	99	158614	50.0	47.1	
112 sec-Butylbenzene	105	12.509	12.509	0.000	100	629103	50.0	49.7	
113 1,3-Dichlorobenzene	146	12.619	12.619	0.000	99	278951	50.0	50.2	
114 4-Isopropyltoluene	119	12.655	12.655	0.000	100	519048	50.0	49.7	
115 1,4-Dichlorobenzene	146	12.710	12.710	0.000	99	281606	50.0	49.6	
116 2,4-Dichloro-1-(triflourom	214	12.759	12.759	0.000	98	145414	50.0	46.1	
118 2,5-Dichlorobenzotrifluori	214	12.808	12.808	0.000	99	166438	50.0	47.2	
120 n-Butylbenzene	91	13.063	13.063	0.000	100	466831	50.0	49.1	
121 1,2-Dichlorobenzene	146	13.081	13.081	0.000	99	257970	50.0	50.1	
122 1,2-Dibromo-3-Chloropropan	75	13.860	13.860	0.000	94	16461	50.0	39.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.006	14.006	0.000	99	552564	150.0	142.0	
124 1,3,5-Trichlorobenzene	180	14.073	14.073	0.000	98	157664	50.0	50.5	
125 2,3- & 3,4- Dichlorotoluen	125	14.426	14.426	0.000	99	340465	100.0	90.0	
126 1,2,4-Trichlorobenzene	180	14.693	14.693	0.000	98	116958	50.0	43.7	
127 Hexachlorobutadiene	225	14.864	14.864	0.000	97	57250	50.0	44.6	
128 Naphthalene	128	14.943	14.943	0.000	100	273390	50.0	38.9	
129 1,2,3-Trichlorobenzene	180	15.186	15.186	0.000	98	88997	50.0	40.5	
131 2,4,5-Trichlorotoluene	159	15.965	15.965	0.000	98	36977	50.0	31.3	
130 2,3,6-Trichlorotoluene	159	16.062	16.062	0.000	97	37154	50.0	34.8	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	100.9	
S 133 Xylenes, Total	106				0		100.0	104.2	
S 135 1,3-Dichloropropene, Total	1				0		100.0	94.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00108	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	2.00	Units: uL	
VOAACRPRI_00003	Amount Added:	6.00	Units: uL	
voaW1,3,5TCab_00001	Amount Added:	2.00	Units: uL	
VOAVAPRI_00005	Amount Added:	2.00	Units: uL	
voaW 2-cle pr_00001	Amount Added:	2.00	Units: uL	
voaWKet2 Rest_00002	Amount Added:	2.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

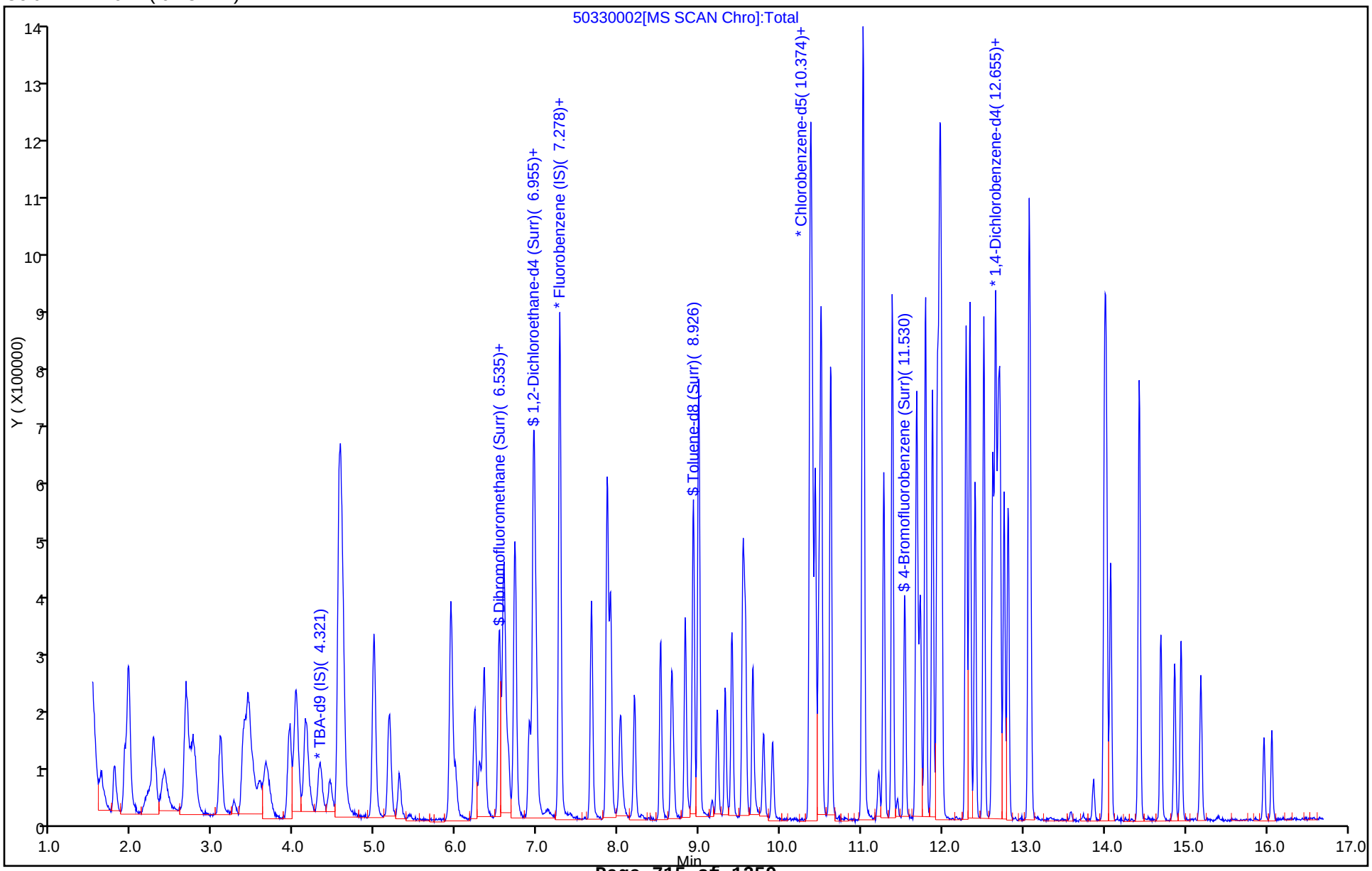
Report Date: 30-Mar-2015 13:15:00 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330002.D

Injection Date:	30-Mar-2015 11:52:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

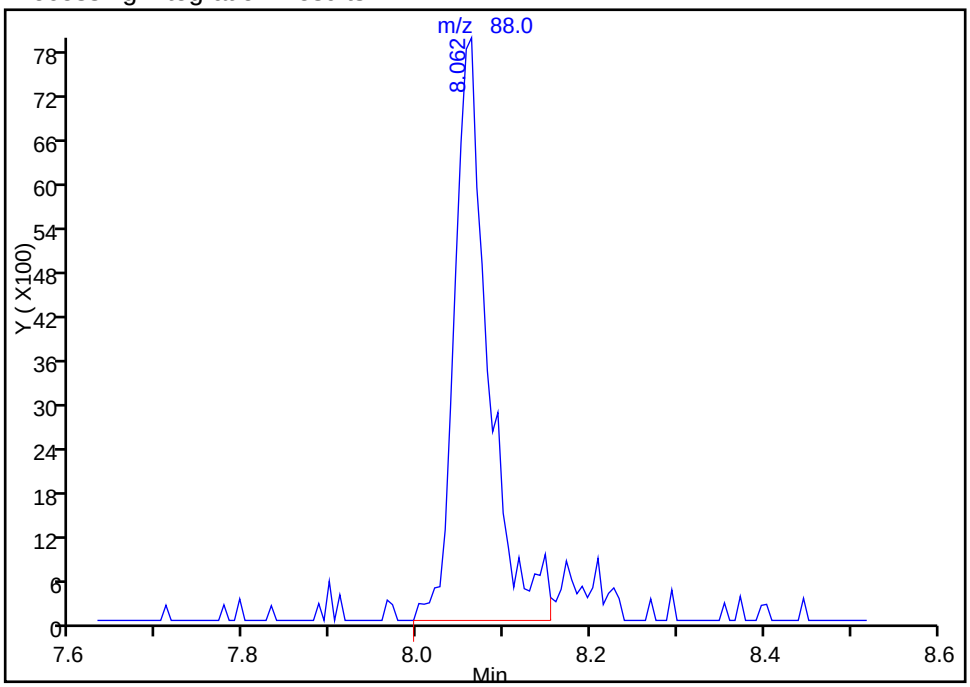
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330002.D				
Injection Date:	30-Mar-2015 11:52:30	Instrument ID:	CHHP5		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	001562	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

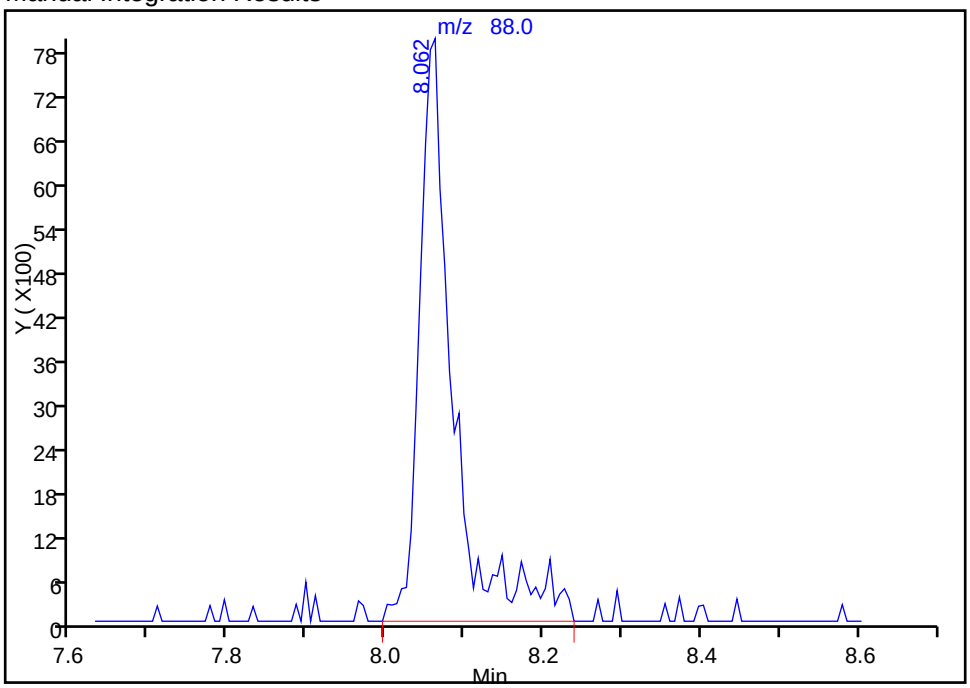
Processing Integration Results

RT: 8.06
Area: 21565
Amount: 714.2448
Amount Units: ng



Manual Integration Results

RT: 8.06
Area: 23674
Amount: 784.0961
Amount Units: ng



Reviewer: fergusond, 30-Mar-2015 12:20:07
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCVIS 180-136954/2 Calibration Date: 03/30/2015 11:52

Instrument ID: CHHP5 Calib Start Date: 03/18/2015 13:31

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/18/2015 16:19

Lab File ID: 50330002.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1652	0.1441	0.0100	17.4	20.0	-12.8	20.0
1,3,5-Trichlorobenzene	Ave	0.9577	0.9673	0.0100	10.1	10.0	1.0	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 30-Mar-2015 11:52:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006238-002
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub11

Method: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 30-Mar-2015 13:15:00 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: fergusond Date: 30-Mar-2015 12:20:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.321	4.321	0.000	97	135548	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.278	7.278	0.000	99	489209	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.368	10.368	0.000	99	107368	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.686	12.686	0.000	96	162989	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.535	6.535	0.000	96	96709	50.0	43.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.900	0.000	99	140149	50.0	47.8	
$ 7 Toluene-d8 (Surr)	98	8.926	8.926	0.000	100	395673	50.0	46.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.536	11.536	0.000	95	137207	50.0	44.5	
11 Dichlorodifluoromethane	85	1.626	1.626	0.000	99	118782	50.0	56.6	
12 Chloromethane	50	1.784	1.784	0.000	100	147475	50.0	51.0	
13 Vinyl chloride	62	1.912	1.912	0.000	100	181214	50.0	56.0	
14 Butadiene	39	1.955	1.955	0.000	99	199464	50.0	54.0	
15 Bromomethane	94	2.259	2.259	0.000	100	92210	50.0	52.9	
16 Chloroethane	64	2.399	2.399	0.000	99	133719	50.0	59.7	
17 Dichlorofluoromethane	67	2.666	2.666	0.000	100	306718	50.0	60.0	
18 Trichlorofluoromethane	101	2.727	2.727	0.000	99	213148	50.0	54.9	
20 Ethyl ether	59	3.086	3.086	0.000	100	144435	50.0	56.4	
21 Acrolein	56	3.256	3.256	0.000	96	41456	150.0	133.4	
22 1,1-Dichloroethene	96	3.390	3.390	0.000	98	135950	50.0	48.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.439	3.439	0.000	97	153688	50.0	53.9	
24 Acetone	43	3.506	3.506	0.000	99	125587	100.0	125.3	
25 Iodomethane	142	3.567	3.567	0.000	99	201153	50.0	51.3	
26 Carbon disulfide	76	3.658	3.658	0.000	100	268024	50.0	38.9	
28 3-Chloro-1-propene	76	3.950	3.950	0.000	98	68637	50.0	46.0	
30 Methyl acetate	43	4.017	4.017	0.000	100	568252	250.0	242.4	
31 Methylene Chloride	84	4.151	4.151	0.000	97	166683	50.0	51.1	
32 2-Methyl-2-propanol	59	4.443	4.443	0.000	97	74759	500.0	468.2	
33 Acrylonitrile	53	4.552	4.552	0.000	100	593198	500.0	491.9	
34 trans-1,2-Dichloroethene	96	4.570	4.570	0.000	89	149113	50.0	51.1	
35 Methyl tert-butyl ether	73	4.595	4.595	0.000	100	330815	50.0	51.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.990	4.990	0.000	98	209402	50.0	44.9	
37 1,1-Dichloroethane	63	5.173	5.173	0.000	99	265965	50.0	51.1	
38 Vinyl acetate	43	5.294	5.294	0.000	100	163874	50.0	44.4	
44 2,2-Dichloropropane	77	5.927	5.927	0.000	97	75460	50.0	58.0	
45 cis-1,2-Dichloroethene	96	5.939	5.939	0.000	97	153197	50.0	49.8	
46 2-Butanone (MEK)	43	5.994	5.994	0.000	100	129870	100.0	81.1	
49 Chlorobromomethane	128	6.231	6.231	0.000	99	68528	50.0	51.5	
51 Tetrahydrofuran	42	6.286	6.286	0.000	96	83478	100.0	83.2	
52 Chloroform	83	6.347	6.347	0.000	100	247410	50.0	52.3	
53 1,1,1-Trichloroethane	97	6.535	6.535	0.000	96	157700	50.0	52.2	
54 Cyclohexane	56	6.590	6.590	0.000	98	272792	50.0	47.0	
56 Carbon tetrachloride	117	6.718	6.718	0.000	99	124522	50.0	51.4	
55 1,1-Dichloropropene	75	6.724	6.724	0.000	99	190690	50.0	48.6	
57 Isobutyl alcohol	41	6.943	6.943	0.000	98	67597	1250.0	1035.2	
58 Benzene	78	6.955	6.955	0.000	99	599946	50.0	51.8	
59 1,2-Dichloroethane	62	6.986	6.986	0.000	98	206246	50.0	54.3	
62 n-Heptane	43	7.278	7.278	0.000	81	179116	50.0	45.0	
64 Trichloroethene	130	7.667	7.667	0.000	100	137766	50.0	47.4	
66 Methylcyclohexane	83	7.862	7.862	0.000	99	248634	50.0	48.0	
67 1,2-Dichloropropane	63	7.904	7.904	0.000	97	142959	50.0	49.9	
68 Dibromomethane	93	8.026	8.026	0.000	96	76333	50.0	49.4	
70 1,4-Dioxane	88	8.062	8.062	0.000	97	23674	1000.0	784.1	M
71 Dichlorobromomethane	83	8.196	8.196	0.000	99	148596	50.0	47.2	
73 2-Chloroethyl vinyl ether	63	8.525	8.525	0.000	98	140970	100.0	87.2	
74 cis-1,3-Dichloropropene	75	8.659	8.659	0.000	98	140416	50.0	46.2	
75 4-Methyl-2-pentanone (MIBK	43	8.823	8.823	0.000	100	258488	100.0	89.0	
76 Toluene	91	8.993	8.993	0.000	100	593713	50.0	54.0	
77 trans-1,3-Dichloropropene	75	9.218	9.218	0.000	98	95692	50.0	48.2	
78 Ethyl methacrylate	69	9.316	9.316	0.000	99	116658	50.0	45.0	
79 1,1,2-Trichloroethane	97	9.401	9.401	0.000	97	105447	50.0	51.1	
80 Tetrachloroethene	164	9.541	9.541	0.000	98	108974	50.0	50.6	
81 1,3-Dichloropropane	76	9.565	9.565	0.000	98	201589	50.0	52.6	
82 2-Hexanone	43	9.662	9.662	0.000	100	211398	100.0	95.2	
84 Chlorodibromomethane	129	9.796	9.796	0.000	99	79681	50.0	48.4	
85 Ethylene Dibromide	107	9.900	9.900	0.000	98	103479	50.0	52.6	
86 3-Chlorobenzotrifluoride	180	10.374	10.374	0.000	98	211493	50.0	50.4	
87 Chlorobenzene	112	10.392	10.392	0.000	99	371264	50.0	53.3	
88 4-Chlorobenzotrifluoride	180	10.429	10.429	0.000	99	196548	50.0	48.4	
89 1,1,1,2-Tetrachloroethane	131	10.478	10.478	0.000	99	93706	50.0	52.1	
90 Ethylbenzene	106	10.502	10.502	0.000	100	210543	50.0	52.6	
91 m-Xylene & p-Xylene	106	10.624	10.624	0.000	100	251128	50.0	51.3	
92 o-Xylene	106	11.013	11.013	0.000	100	252927	50.0	52.9	
93 Styrene	104	11.025	11.025	0.000	99	402449	50.0	52.2	
94 Bromoform	173	11.208	11.208	0.000	99	44168	50.0	43.4	
96 2-Chlorobenzotrifluoride	180	11.274	11.274	0.000	99	205621	50.0	49.0	
97 Isopropylbenzene	105	11.378	11.378	0.000	100	625014	50.0	52.3	
99 1,1,2,2-Tetrachloroethane	83	11.676	11.676	0.000	97	153551	50.0	51.9	
100 Bromobenzene	156	11.682	11.682	0.000	100	145584	50.0	48.3	
101 1,2,3-Trichloropropane	110	11.725	11.725	0.000	97	47804	50.0	48.2	
102 trans-1,4-Dichloro-2-buten	53	11.731	11.731	0.000	97	38311	50.0	46.5	
103 N-Propylbenzene	120	11.792	11.792	0.000	100	170745	50.0	45.9	
104 2-Chlorotoluene	126	11.877	11.877	0.000	100	151681	50.0	48.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.938	11.938	0.000	99	171538	50.0	49.1	
106 1,3,5-Trimethylbenzene	105	11.962	11.962	0.000	100	528576	50.0	50.9	
107 4-Chlorotoluene	126	11.986	11.986	0.000	97	167930	50.0	49.6	
108 tert-Butylbenzene	119	12.290	12.290	0.000	99	425987	50.0	47.4	
110 1,2,4-Trimethylbenzene	105	12.339	12.339	0.000	99	536106	50.0	50.3	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.400	0.000	99	158614	50.0	47.1	
112 sec-Butylbenzene	105	12.509	12.509	0.000	100	629103	50.0	49.7	
113 1,3-Dichlorobenzene	146	12.619	12.619	0.000	99	278951	50.0	50.2	
114 4-Isopropyltoluene	119	12.655	12.655	0.000	100	519048	50.0	49.7	
115 1,4-Dichlorobenzene	146	12.710	12.710	0.000	99	281606	50.0	49.6	
116 2,4-Dichloro-1-(triflourom	214	12.759	12.759	0.000	98	145414	50.0	46.1	
118 2,5-Dichlorobenzotrifluori	214	12.808	12.808	0.000	99	166438	50.0	47.2	
120 n-Butylbenzene	91	13.063	13.063	0.000	100	466831	50.0	49.1	
121 1,2-Dichlorobenzene	146	13.081	13.081	0.000	99	257970	50.0	50.1	
122 1,2-Dibromo-3-Chloropropan	75	13.860	13.860	0.000	94	16461	50.0	39.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.006	14.006	0.000	99	552564	150.0	142.0	
124 1,3,5-Trichlorobenzene	180	14.073	14.073	0.000	98	157664	50.0	50.5	
125 2,3- & 3,4- Dichlorotoluen	125	14.426	14.426	0.000	99	340465	100.0	90.0	
126 1,2,4-Trichlorobenzene	180	14.693	14.693	0.000	98	116958	50.0	43.7	
127 Hexachlorobutadiene	225	14.864	14.864	0.000	97	57250	50.0	44.6	
128 Naphthalene	128	14.943	14.943	0.000	100	273390	50.0	38.9	
129 1,2,3-Trichlorobenzene	180	15.186	15.186	0.000	98	88997	50.0	40.5	
131 2,4,5-Trichlorotoluene	159	15.965	15.965	0.000	98	36977	50.0	31.3	
130 2,3,6-Trichlorotoluene	159	16.062	16.062	0.000	97	37154	50.0	34.8	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	100.9	
S 133 Xylenes, Total	106				0		100.0	104.2	
S 135 1,3-Dichloropropene, Total	1				0		100.0	94.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00108	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	2.00	Units: uL	
VOAACRPRI_00003	Amount Added:	6.00	Units: uL	
voaW1,3,5TCab_00001	Amount Added:	2.00	Units: uL	
VOAVAPRI_00005	Amount Added:	2.00	Units: uL	
voaW 2-cle pr_00001	Amount Added:	2.00	Units: uL	
voaWKet2 Rest_00002	Amount Added:	2.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

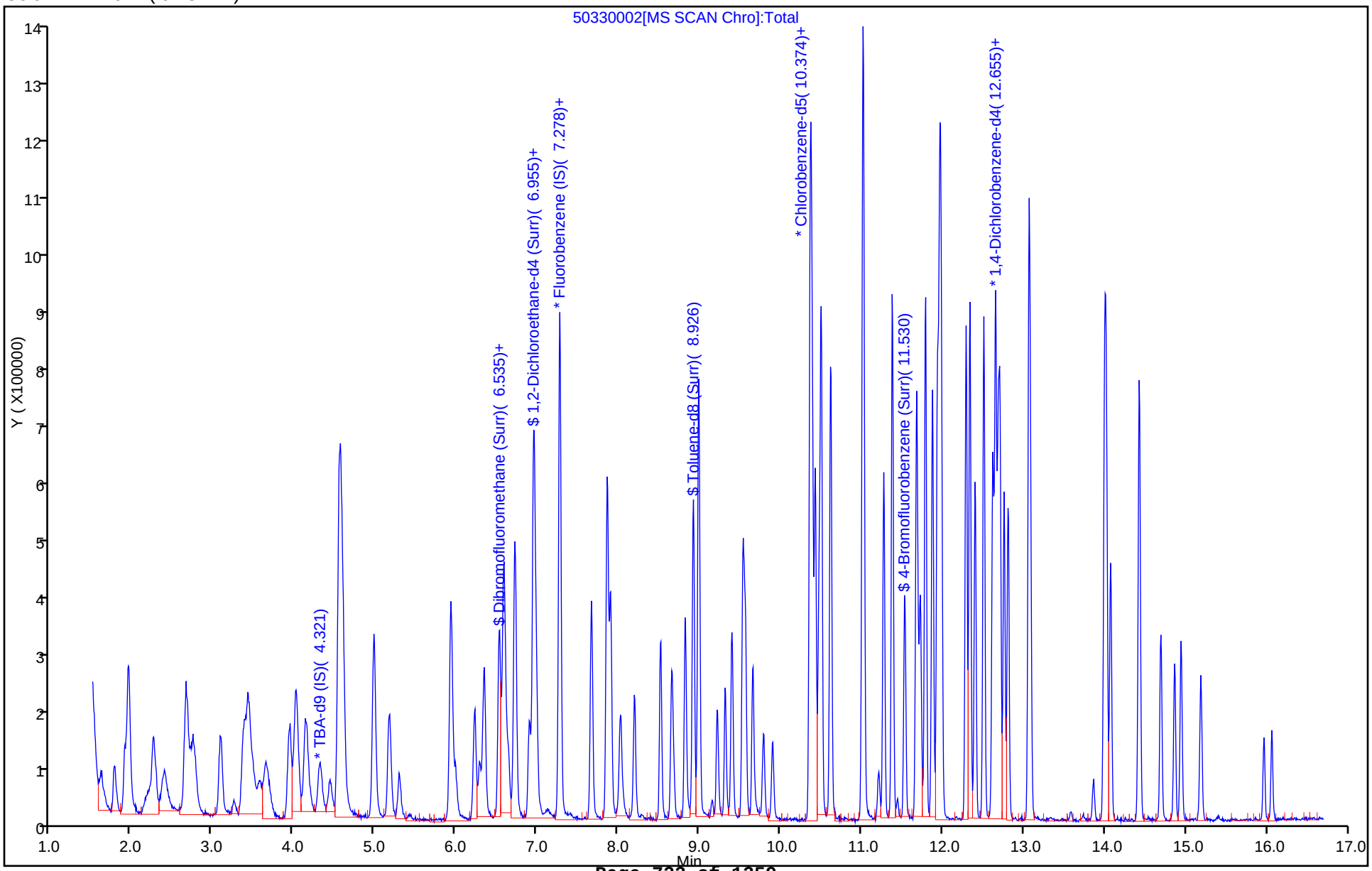
Report Date: 30-Mar-2015 13:15:00 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330002.D

Injection Date:	30-Mar-2015 11:52:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCVIS 180-137048/2 Calibration Date: 03/31/2015 10:08

Instrument ID: CHHP5 Calib Start Date: 03/16/2015 12:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2015 16:17

Lab File ID: 50331002.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	0.2143	0.2579	0.1000	12.0	10.0	20.3*	20.0
Chloromethane	Ave	0.2958	0.3082	0.1000	10.4	10.0	4.2	20.0
Vinyl chloride	Ave	0.3306	0.3748	0.1000	11.3	10.0	13.4	20.0
Bromomethane	Lin2		0.2040	0.0500	11.5	10.0	15.3	20.0
Chloroethane	Ave	0.2287	0.2939	0.0500	12.8	10.0	28.5*	20.0
Dichlorofluoromethane	Ave	0.5222	0.6749	0.0100	12.9	10.0	29.2*	20.0
Trichlorofluoromethane	Ave	0.3966	0.4407	0.1000	11.1	10.0	11.1	20.0
Ethyl ether	Ave	0.2615	0.3095	0.0100	11.8	10.0	18.3	20.0
Acrolein	Ave	0.0318	0.0319	0.0100	30.1	30.0	0.4	20.0
1,1-Dichloroethene	Ave	0.2883	0.3120	0.1000	10.8	10.0	8.2	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2916	0.3227	0.1000	11.1	10.0	10.6	20.0
Acetone	Ave	0.1024	0.1174	0.0500	22.9	20.0	14.6	20.0
Iodomethane	Ave	0.4005	0.4085	0.0100	10.2	10.0	2.0	20.0
Carbon disulfide	Ave	0.7051	0.5394	0.1000	7.65	10.0	-23.5*	20.0
Allyl chloride	Ave	0.1524	0.1367	0.0100	8.97	10.0	-10.3	20.0
Methyl acetate	Ave	0.2396	0.2543	0.1000	53.1	50.0	6.1	20.0
Methylene Chloride	Ave	0.3335	0.3518	0.1000	10.5	10.0	5.5	20.0
tert-Butyl alcohol	Ave	1.178	1.099	0.0100	93.3	100	-6.7	20.0
Acrylonitrile	Ave	0.1233	0.1286	0.0100	104	100	4.3	20.0
trans-1,2-Dichloroethene	Ave	0.2982	0.3225	0.1000	10.8	10.0	8.1	20.0
Methyl tert-butyl ether	Ave	0.6593	0.7012	0.1000	10.6	10.0	6.3	20.0
Hexane	Ave	0.4764	0.4871	0.0100	10.2	10.0	2.2	20.0
1,1-Dichloroethane	Ave	0.5323	0.5732	0.2000	10.8	10.0	7.7	20.0
Vinyl acetate	Ave	0.3776	0.3652	0.0100	9.67	10.0	-3.3	20.0
2,2-Dichloropropane	Ave	0.1331	0.1613	0.0100	12.1	10.0	21.2*	20.0
cis-1,2-Dichloroethene	Ave	0.3142	0.3196	0.1000	10.2	10.0	1.7	20.0
2-Butanone (MEK)	Ave	0.1638	0.1482	0.0500	18.1	20.0	-9.5	20.0
Bromochloromethane	Ave	0.1360	0.1338	0.0100	9.84	10.0	-1.6	20.0
Tetrahydrofuran	Ave	0.1026	0.0979	0.0100	19.1	20.0	-4.5	20.0
Chloroform	Ave	0.4836	0.5316	0.2000	11.0	10.0	9.9	20.0
1,1,1-Trichloroethane	Ave	0.3088	0.3378	0.1000	10.9	10.0	9.4	20.0
Cyclohexane	Ave	0.5929	0.5823	0.1000	9.82	10.0	-1.8	20.0
1,1-Dichloropropene	Ave	0.4011	0.3967	0.0100	9.89	10.0	-1.1	20.0
Carbon tetrachloride	Ave	0.2478	0.2697	0.1000	10.9	10.0	8.9	20.0
Isobutyl alcohol	Ave	0.0067	0.0063*	0.0100	234	250	-6.4	20.0
Benzene	Ave	1.185	1.326	0.5000	11.2	10.0	11.9	20.0
1,2-Dichloroethane	Ave	0.3880	0.4437	0.1000	11.4	10.0	14.4	20.0
n-Heptane	Ave	0.4071	0.4121	0.0100	10.1	10.0	1.2	20.0
Trichloroethene	Ave	0.2969	0.3029	0.2000	10.2	10.0	2.0	20.0
Methylcyclohexane	Ave	0.5297	0.5343	0.1000	10.1	10.0	0.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCVIS 180-137048/2 Calibration Date: 03/31/2015 10:08

Instrument ID: CHHP5 Calib Start Date: 03/16/2015 12:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2015 16:17

Lab File ID: 50331002.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	0.2931	0.3154	0.1000	10.8	10.0	7.6	20.0
Dibromomethane	Ave	0.1578	0.1652	0.0100	10.5	10.0	4.7	20.0
1,4-Dioxane	Ave	0.0031	0.0026*	0.0100	170	200	-15.2	20.0
Bromodichloromethane	Ave	0.3220	0.3531	0.2000	11.0	10.0	9.6	20.0
cis-1,3-Dichloropropene	Ave	0.3107	0.3233	0.2000	10.4	10.0	4.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.353	1.320	0.1000	19.5	20.0	-2.4	20.0
Toluene	Ave	5.124	6.115	0.4000	11.9	10.0	19.3	20.0
trans-1,3-Dichloropropene	Ave	0.9254	1.030	0.1000	11.1	10.0	11.3	20.0
Ethyl methacrylate	Ave	1.207	1.253	0.0100	10.4	10.0	3.8	20.0
1,1,2-Trichloroethane	Ave	0.9609	1.128	0.1000	11.7	10.0	17.4	20.0
Tetrachloroethene	Ave	1.002	1.117	0.2000	11.1	10.0	11.5	20.0
1,3-Dichloropropane	Ave	1.786	2.077	0.0100	11.6	10.0	16.3	20.0
2-Hexanone	Ave	1.034	1.121	0.1000	21.7	20.0	8.4	20.0
Dibromochloromethane	Ave	0.7670	0.8751	0.1000	11.4	10.0	14.1	20.0
1,2-Dibromoethane (EDB)	Ave	0.9169	1.064	0.1000	11.6	10.0	16.1	20.0
3-Chlorobenzotrifluoride	Ave	1.955	2.166	0.0100	11.1	10.0	10.8	20.0
Chlorobenzene	Ave	3.246	3.764	0.5000	11.6	10.0	15.9	20.0
4-Chlorobenzotrifluoride	Ave	1.890	2.025	0.0100	10.7	10.0	7.1	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8382	1.031	0.0100	12.3	10.0	23.0*	20.0
Ethylbenzene	Ave	1.863	2.086	0.1000	11.2	10.0	12.0	20.0
m-Xylene & p-Xylene	Ave	2.278	2.586	0.1000	11.4	10.0	13.5	20.0
o-Xylene	Ave	2.228	2.466	0.3000	11.1	10.0	10.7	20.0
Styrene	Ave	3.591	4.109	0.3000	11.4	10.0	14.4	20.0
Bromoform	Ave	0.4737	0.4735	0.1000	10.0	10.0	-0.0	20.0
2-Chlorobenzotrifluoride	Ave	1.952	2.088	0.0100	10.7	10.0	7.0	20.0
Isopropylbenzene	Ave	5.560	6.175	0.1000	11.1	10.0	11.1	20.0
1,1,2,2-Tetrachloroethane	Ave	1.378	1.521	0.3000	11.0	10.0	10.4	20.0
Bromobenzene	Ave	0.9254	0.9337	0.0100	10.1	10.0	0.9	20.0
1,2,3-Trichloropropane	Ave	0.3041	0.3099	0.0100	10.2	10.0	1.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2528	0.2470	0.0100	9.77	10.0	-2.3	20.0
N-Propylbenzene	Ave	1.142	1.122	0.0100	9.83	10.0	-1.7	20.0
2-Chlorotoluene	Ave	0.9591	0.9542	0.0100	9.95	10.0	-0.5	20.0
3-Chlorotoluene	Ave	1.072	1.068	0.0100	9.96	10.0	-0.4	20.0
1,3,5-Trimethylbenzene	Ave	3.183	3.377	0.0100	10.6	10.0	6.1	20.0
4-Chlorotoluene	Ave	1.038	1.112	0.0100	10.7	10.0	7.1	20.0
tert-Butylbenzene	Ave	2.758	2.649	0.0100	9.61	10.0	-3.9	20.0
1,2,4-Trimethylbenzene	Ave	3.267	3.300	0.0100	10.1	10.0	1.0	20.0
3,4-Dichlorobenzotrifluoride	Ave	1.032	1.014	0.0100	9.82	10.0	-1.8	20.0
sec-Butylbenzene	Ave	3.881	3.985	0.0100	10.3	10.0	2.7	20.0
1,3-Dichlorobenzene	Ave	1.705	1.706	0.6000	10.0	10.0	0.0	20.0
4-Isopropyltoluene	Ave	3.204	3.182	0.0100	9.93	10.0	-0.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCVIS 180-137048/2 Calibration Date: 03/31/2015 10:08

Instrument ID: CHHP5 Calib Start Date: 03/16/2015 12:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2015 16:17

Lab File ID: 50331002.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.741	1.774	0.5000	10.2	10.0	1.9	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.9669	0.9329	0.0100	9.65	10.0	-3.5	20.0
2,5-Dichlorobenzotrifluoride	Ave	1.082	1.022	0.0100	9.45	10.0	-5.5	20.0
n-Butylbenzene	Ave	2.918	2.851	0.0100	9.77	10.0	-2.3	20.0
1,2-Dichlorobenzene	Ave	1.579	1.585	0.4000	10.0	10.0	0.4	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1292	0.1061	0.0500	8.21	10.0	-17.9	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.194	1.143	0.0100	28.7	30.0	-4.2	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.161	1.068	0.0100	18.4	20.0	-8.0	20.0
1,2,4-Trichlorobenzene	Ave	0.8219	0.6861	0.2000	8.35	10.0	-16.5	20.0
Hexachlorobutadiene	Ave	0.3941	0.3373	0.0100	8.56	10.0	-14.4	20.0
Naphthalene	Ave	2.158	1.602	0.0100	7.42	10.0	-25.8*	20.0
1,2,3-Trichlorobenzene	Ave	0.6740	0.5616	0.0100	8.33	10.0	-16.7	20.0
2,4,5-Trichlorotoluene	Ave	0.3624	0.2257	0.0100	6.23	10.0	-37.7*	20.0
2,3,6-Trichlorotoluene	Ave	0.3273	0.2282	0.0100	6.97	10.0	-30.3*	20.0
Dibromofluoromethane (Surr)	Ave	0.2274	0.2327		10.2	10.0	2.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2998	0.3299		11.0	10.0	10.0	20.0
Toluene-d8 (Surr)	Ave	3.986	4.406		11.1	10.0	10.5	20.0
4-Bromofluorobenzene (Surr)	Ave	1.436	1.578		11.0	10.0	9.9	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 31-Mar-2015 10:08:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006255-002
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub11

Method: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 13:22:47 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 10:45:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.310	4.310	0.000	96	128979	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.273	7.273	0.000	96	451700	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.363	10.363	0.000	97	100479	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.687	12.687	0.000	90	156941	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.531	6.531	0.000	94	105091	50.0	51.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.896	6.896	0.000	59	149032	50.0	55.0	
$ 7 Toluene-d8 (Surr)	98	8.921	8.921	0.000	92	442721	50.0	55.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.531	11.531	0.000	98	158559	50.0	55.0	
11 Dichlorodifluoromethane	85	1.621	1.621	0.000	57	116501	50.0	60.2	
12 Chloromethane	50	1.779	1.779	0.000	89	139203	50.0	52.1	
13 Vinyl chloride	62	1.913	1.913	0.000	100	169285	50.0	56.7	
14 Butadiene	39	1.956	1.956	0.000	96	189110	50.0	55.4	
15 Bromomethane	94	2.260	2.260	0.000	94	92143	50.0	57.6	
16 Chloroethane	64	2.400	2.400	0.000	97	132746	50.0	64.2	
17 Dichlorofluoromethane	67	2.662	2.662	0.000	98	304868	50.0	64.6	
18 Trichlorofluoromethane	101	2.704	2.704	0.000	98	199051	50.0	55.6	
20 Ethyl ether	59	3.087	3.087	0.000	92	139779	50.0	59.2	
21 Acrolein	56	3.252	3.252	0.000	86	43235	150.0	150.6	
22 1,1-Dichloroethene	96	3.385	3.385	0.000	95	140909	50.0	54.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.428	3.428	0.000	91	145742	50.0	55.3	
24 Acetone	43	3.501	3.501	0.000	84	106043	100.0	114.6	
25 Iodomethane	142	3.580	3.580	0.000	99	184538	50.0	51.0	
26 Carbon disulfide	76	3.671	3.671	0.000	100	243659	50.0	38.3	
28 3-Chloro-1-propene	76	3.945	3.945	0.000	98	61756	50.0	44.9	
30 Methyl acetate	43	4.024	4.024	0.000	100	574294	250.0	265.3	
31 Methylene Chloride	84	4.140	4.140	0.000	95	158886	50.0	52.7	
32 2-Methyl-2-propanol	59	4.438	4.438	0.000	80	70866	500.0	466.4	
33 Acrylonitrile	53	4.547	4.547	0.000	97	580904	500.0	521.7	
34 trans-1,2-Dichloroethene	96	4.560	4.560	0.000	61	145663	50.0	54.1	
35 Methyl tert-butyl ether	73	4.596	4.596	0.000	99	316720	50.0	53.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.979	4.979	0.000	97	220010	50.0	51.1	
37 1,1-Dichloroethane	63	5.168	5.168	0.000	98	258921	50.0	53.8	
38 Vinyl acetate	43	5.296	5.296	0.000	100	164958	50.0	48.4	
44 2,2-Dichloropropane	77	5.928	5.928	0.000	96	72868	50.0	60.6	
45 cis-1,2-Dichloroethene	96	5.941	5.941	0.000	88	144363	50.0	50.9	
46 2-Butanone (MEK)	43	5.989	5.989	0.000	96	133886	100.0	90.5	
49 Chlorobromomethane	128	6.226	6.226	0.000	95	60429	50.0	49.2	
51 Tetrahydrofuran	42	6.287	6.287	0.000	94	88473	100.0	95.5	
52 Chloroform	83	6.342	6.342	0.000	98	240116	50.0	55.0	
53 1,1,1-Trichloroethane	97	6.531	6.531	0.000	94	152604	50.0	54.7	
54 Cyclohexane	56	6.585	6.585	0.000	92	263043	50.0	49.1	
56 Carbon tetrachloride	117	6.719	6.719	0.000	95	121838	50.0	54.4	
55 1,1-Dichloropropene	75	6.719	6.719	0.000	95	179183	50.0	49.5	
57 Isobutyl alcohol	41	6.950	6.950	0.000	98	70541	1250.0	1170.0	
58 Benzene	78	6.956	6.956	0.000	98	598865	50.0	55.9	
59 1,2-Dichloroethane	62	6.987	6.987	0.000	99	200411	50.0	57.2	
62 n-Heptane	43	7.279	7.279	0.000	82	186122	50.0	50.6	
64 Trichloroethene	130	7.668	7.668	0.000	98	136831	50.0	51.0	
66 Methylcyclohexane	83	7.863	7.863	0.000	95	241333	50.0	50.4	
67 1,2-Dichloropropane	63	7.905	7.905	0.000	98	142462	50.0	53.8	
68 Dibromomethane	93	8.021	8.021	0.000	95	74623	50.0	52.3	
70 1,4-Dioxane	88	8.058	8.058	0.000	86	23653	1000.0	848.5	M
71 Dichlorobromomethane	83	8.197	8.197	0.000	95	159473	50.0	54.8	
73 2-Chloroethyl vinyl ether	63	8.520	8.520	0.000	94	154856	100.0	103.8	
74 cis-1,3-Dichloropropene	75	8.654	8.654	0.000	98	146047	50.0	52.0	
75 4-Methyl-2-pentanone (MIBK	43	8.824	8.824	0.000	67	265279	100.0	97.6	
76 Toluene	91	8.988	8.988	0.000	100	614423	50.0	59.7	
77 trans-1,3-Dichloropropene	75	9.219	9.219	0.000	97	103481	50.0	55.6	
78 Ethyl methacrylate	69	9.317	9.317	0.000	91	125907	50.0	51.9	
79 1,1,2-Trichloroethane	97	9.402	9.402	0.000	96	113347	50.0	58.7	
80 Tetrachloroethene	164	9.536	9.536	0.000	97	112275	50.0	55.7	
81 1,3-Dichloropropane	76	9.566	9.566	0.000	96	208674	50.0	58.1	
82 2-Hexanone	43	9.658	9.658	0.000	99	225196	100.0	108.4	
84 Chlorodibromomethane	129	9.785	9.785	0.000	89	87930	50.0	57.0	
85 Ethylene Dibromide	107	9.901	9.901	0.000	98	106929	50.0	58.0	
86 3-Chlorobenzotrifluoride	180	10.369	10.369	0.000	89	217675	50.0	55.4	
87 Chlorobenzene	112	10.388	10.388	0.000	84	378224	50.0	58.0	
88 4-Chlorobenzotrifluoride	180	10.430	10.430	0.000	95	203459	50.0	53.6	
89 1,1,1,2-Tetrachloroethane	131	10.467	10.467	0.000	93	103571	50.0	61.5	
90 Ethylbenzene	106	10.503	10.503	0.000	99	209621	50.0	56.0	
91 m-Xylene & p-Xylene	106	10.619	10.619	0.000	100	259827	50.0	56.8	
92 o-Xylene	106	11.014	11.014	0.000	93	247820	50.0	55.3	
93 Styrene	104	11.026	11.026	0.000	92	412890	50.0	57.2	
94 Bromoform	173	11.209	11.209	0.000	84	47577	50.0	50.0	
96 2-Chlorobenzotrifluoride	180	11.270	11.270	0.000	97	209807	50.0	53.5	
97 Isopropylbenzene	105	11.379	11.379	0.000	100	620440	50.0	55.5	
99 1,1,2,2-Tetrachloroethane	83	11.671	11.671	0.000	84	152861	50.0	55.2	
100 Bromobenzene	156	11.683	11.683	0.000	95	146531	50.0	50.4	
101 1,2,3-Trichloropropane	110	11.726	11.726	0.000	71	48638	50.0	51.0	
102 trans-1,4-Dichloro-2-buten	53	11.732	11.732	0.000	54	38761	50.0	48.8	
103 N-Propylbenzene	120	11.787	11.787	0.000	85	176071	50.0	49.1	
104 2-Chlorotoluene	126	11.872	11.872	0.000	99	149752	50.0	49.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.933	11.933	0.000	84	167552	50.0	49.8	
106 1,3,5-Trimethylbenzene	105	11.963	11.963	0.000	98	530054	50.0	53.1	
107 4-Chlorotoluene	126	11.981	11.981	0.000	99	174446	50.0	53.5	
108 tert-Butylbenzene	119	12.286	12.286	0.000	67	415764	50.0	48.0	
110 1,2,4-Trimethylbenzene	105	12.334	12.334	0.000	96	517879	50.0	50.5	
111 1,2-dichloro-4-(trifluorom	214	12.401	12.401	0.000	97	159104	50.0	49.1	
112 sec-Butylbenzene	105	12.511	12.511	0.000	93	625331	50.0	51.3	
113 1,3-Dichlorobenzene	146	12.614	12.614	0.000	86	267765	50.0	50.0	
114 4-Isopropyltoluene	119	12.651	12.651	0.000	99	499421	50.0	49.7	
115 1,4-Dichlorobenzene	146	12.705	12.705	0.000	99	278335	50.0	50.9	
116 2,4-Dichloro-1-(triflourom	214	12.760	12.760	0.000	87	146414	50.0	48.2	
118 2,5-Dichlorobenzotrifluori	214	12.803	12.803	0.000	96	160416	50.0	47.3	
120 n-Butylbenzene	91	13.064	13.064	0.000	100	447494	50.0	48.9	
121 1,2-Dichlorobenzene	146	13.083	13.083	0.000	99	248696	50.0	50.2	
122 1,2-Dibromo-3-Chloropropan	75	13.861	13.861	0.000	87	16647	50.0	41.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.007	14.007	0.000	92	538052	150.0	143.6	
124 1,3,5-Trichlorobenzene	180	14.074	14.074	0.000	99	148240	50.0	49.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.427	14.427	0.000	98	335349	100.0	92.0	
126 1,2,4-Trichlorobenzene	180	14.695	14.695	0.000	97	107674	50.0	41.7	
127 Hexachlorobutadiene	225	14.859	14.859	0.000	91	52935	50.0	42.8	
128 Naphthalene	128	14.938	14.938	0.000	100	251457	50.0	37.1	
129 1,2,3-Trichlorobenzene	180	15.187	15.187	0.000	97	88141	50.0	41.7	
131 2,4,5-Trichlorotoluene	159	15.966	15.966	0.000	92	35422	50.0	31.1	
130 2,3,6-Trichlorotoluene	159	16.063	16.063	0.000	94	35820	50.0	34.9	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	104.9	
S 133 Xylenes, Total	106				0		100.0	112.1	
S 135 1,3-Dichloropropene, Total	1				0		100.0	107.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00108	Amount Added:	2.00	Units: uL	
voaW1,3,5TCab_00001	Amount Added:	2.00	Units: uL	
VOAVAPRI_00005	Amount Added:	2.00	Units: uL	
voaW 2-cle pr_00001	Amount Added:	2.00	Units: uL	
voaWKetpri Re_00004	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00004	Amount Added:	2.00	Units: uL	
VOAACRPRI_00005	Amount Added:	6.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

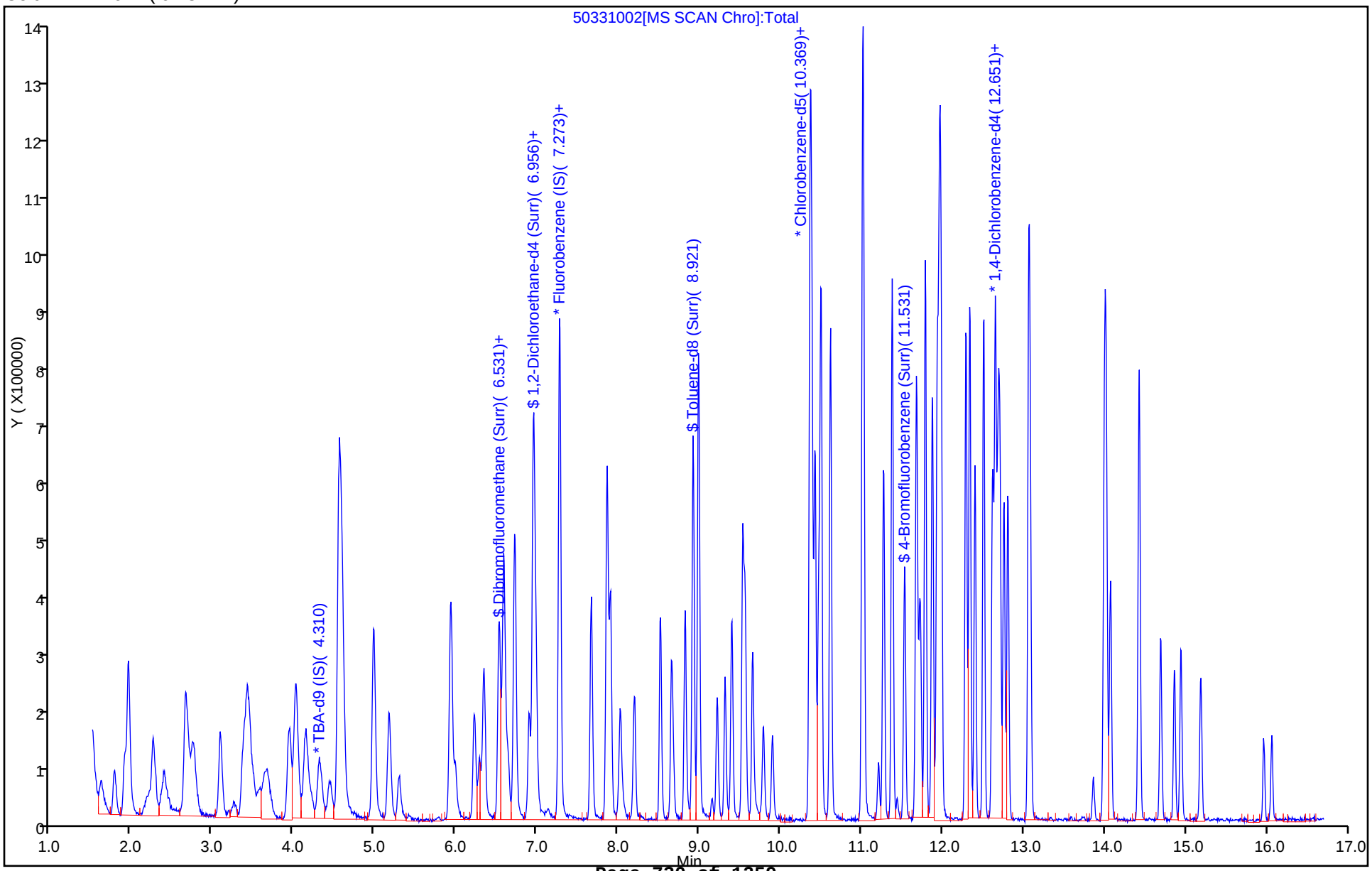
Report Date: 31-Mar-2015 13:22:48 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331002.D

Injection Date:	31-Mar-2015 10:08:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

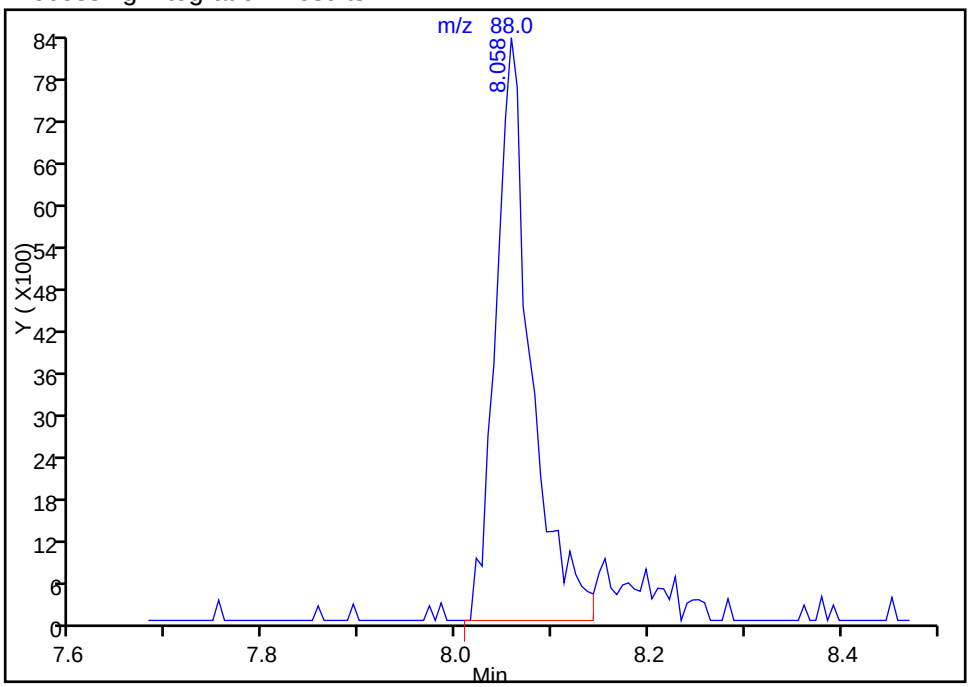
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331002.D
Injection Date: 31-Mar-2015 10:08:30 Instrument ID: CHHP5
Lims ID: CCVIS
Client ID:
Operator ID: 001562 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

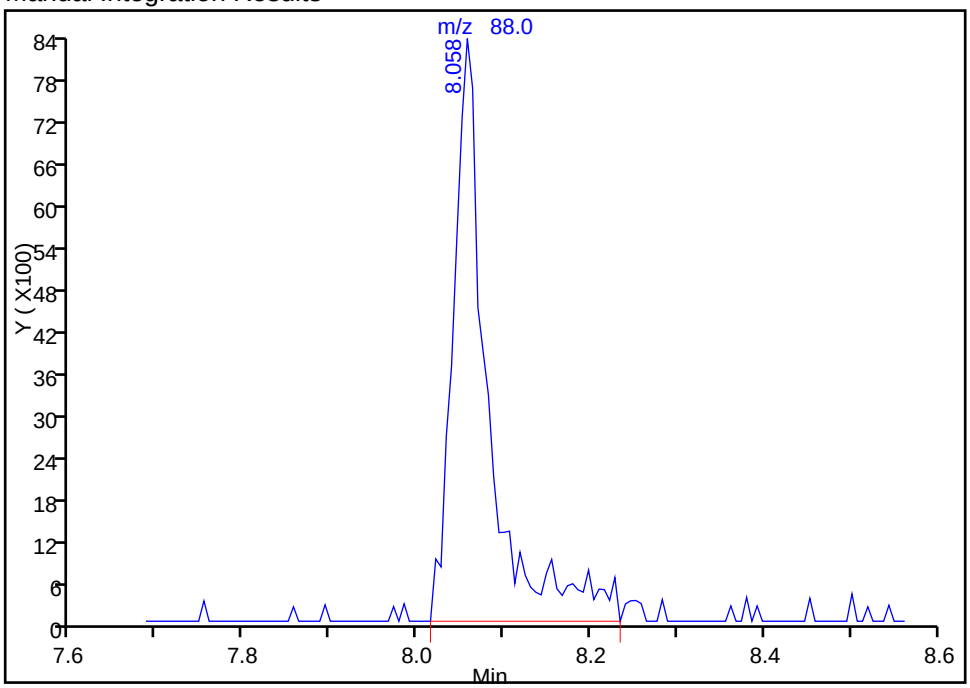
Processing Integration Results

RT: 8.06
Area: 21025
Amount: 754.1852
Amount Units: ng



Manual Integration Results

RT: 8.06
Area: 23653
Amount: 848.4538
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 10:45:04
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCVIS 180-137048/2 Calibration Date: 03/31/2015 10:08

Instrument ID: CHHP5 Calib Start Date: 03/18/2015 13:31

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/18/2015 16:19

Lab File ID: 50331002.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1652	0.1714	0.0100	20.8	20.0	3.8	20.0
1,3,5-Trichlorobenzene	Ave	0.9577	0.9446	0.0100	9.86	10.0	-1.4	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 31-Mar-2015 10:08:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006255-002
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub11

Method: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 13:22:47 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 10:45:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.310	4.310	0.000	96	128979	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.273	7.273	0.000	96	451700	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.363	10.363	0.000	97	100479	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.687	12.687	0.000	90	156941	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.531	6.531	0.000	94	105091	50.0	51.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.896	6.896	0.000	59	149032	50.0	55.0	
$ 7 Toluene-d8 (Surr)	98	8.921	8.921	0.000	92	442721	50.0	55.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.531	11.531	0.000	98	158559	50.0	55.0	
11 Dichlorodifluoromethane	85	1.621	1.621	0.000	57	116501	50.0	60.2	
12 Chloromethane	50	1.779	1.779	0.000	89	139203	50.0	52.1	
13 Vinyl chloride	62	1.913	1.913	0.000	100	169285	50.0	56.7	
14 Butadiene	39	1.956	1.956	0.000	96	189110	50.0	55.4	
15 Bromomethane	94	2.260	2.260	0.000	94	92143	50.0	57.6	
16 Chloroethane	64	2.400	2.400	0.000	97	132746	50.0	64.2	
17 Dichlorofluoromethane	67	2.662	2.662	0.000	98	304868	50.0	64.6	
18 Trichlorofluoromethane	101	2.704	2.704	0.000	98	199051	50.0	55.6	
20 Ethyl ether	59	3.087	3.087	0.000	92	139779	50.0	59.2	
21 Acrolein	56	3.252	3.252	0.000	86	43235	150.0	150.6	
22 1,1-Dichloroethene	96	3.385	3.385	0.000	95	140909	50.0	54.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.428	3.428	0.000	91	145742	50.0	55.3	
24 Acetone	43	3.501	3.501	0.000	84	106043	100.0	114.6	
25 Iodomethane	142	3.580	3.580	0.000	99	184538	50.0	51.0	
26 Carbon disulfide	76	3.671	3.671	0.000	100	243659	50.0	38.3	
28 3-Chloro-1-propene	76	3.945	3.945	0.000	98	61756	50.0	44.9	
30 Methyl acetate	43	4.024	4.024	0.000	100	574294	250.0	265.3	
31 Methylene Chloride	84	4.140	4.140	0.000	95	158886	50.0	52.7	
32 2-Methyl-2-propanol	59	4.438	4.438	0.000	80	70866	500.0	466.4	
33 Acrylonitrile	53	4.547	4.547	0.000	97	580904	500.0	521.7	
34 trans-1,2-Dichloroethene	96	4.560	4.560	0.000	61	145663	50.0	54.1	
35 Methyl tert-butyl ether	73	4.596	4.596	0.000	99	316720	50.0	53.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.979	4.979	0.000	97	220010	50.0	51.1	
37 1,1-Dichloroethane	63	5.168	5.168	0.000	98	258921	50.0	53.8	
38 Vinyl acetate	43	5.296	5.296	0.000	100	164958	50.0	48.4	
44 2,2-Dichloropropane	77	5.928	5.928	0.000	96	72868	50.0	60.6	
45 cis-1,2-Dichloroethene	96	5.941	5.941	0.000	88	144363	50.0	50.9	
46 2-Butanone (MEK)	43	5.989	5.989	0.000	96	133886	100.0	90.5	
49 Chlorobromomethane	128	6.226	6.226	0.000	95	60429	50.0	49.2	
51 Tetrahydrofuran	42	6.287	6.287	0.000	94	88473	100.0	95.5	
52 Chloroform	83	6.342	6.342	0.000	98	240116	50.0	55.0	
53 1,1,1-Trichloroethane	97	6.531	6.531	0.000	94	152604	50.0	54.7	
54 Cyclohexane	56	6.585	6.585	0.000	92	263043	50.0	49.1	
56 Carbon tetrachloride	117	6.719	6.719	0.000	95	121838	50.0	54.4	
55 1,1-Dichloropropene	75	6.719	6.719	0.000	95	179183	50.0	49.5	
57 Isobutyl alcohol	41	6.950	6.950	0.000	98	70541	1250.0	1170.0	
58 Benzene	78	6.956	6.956	0.000	98	598865	50.0	55.9	
59 1,2-Dichloroethane	62	6.987	6.987	0.000	99	200411	50.0	57.2	
62 n-Heptane	43	7.279	7.279	0.000	82	186122	50.0	50.6	
64 Trichloroethene	130	7.668	7.668	0.000	98	136831	50.0	51.0	
66 Methylcyclohexane	83	7.863	7.863	0.000	95	241333	50.0	50.4	
67 1,2-Dichloropropane	63	7.905	7.905	0.000	98	142462	50.0	53.8	
68 Dibromomethane	93	8.021	8.021	0.000	95	74623	50.0	52.3	
70 1,4-Dioxane	88	8.058	8.058	0.000	86	23653	1000.0	848.5	M
71 Dichlorobromomethane	83	8.197	8.197	0.000	95	159473	50.0	54.8	
73 2-Chloroethyl vinyl ether	63	8.520	8.520	0.000	94	154856	100.0	103.8	
74 cis-1,3-Dichloropropene	75	8.654	8.654	0.000	98	146047	50.0	52.0	
75 4-Methyl-2-pentanone (MIBK	43	8.824	8.824	0.000	67	265279	100.0	97.6	
76 Toluene	91	8.988	8.988	0.000	100	614423	50.0	59.7	
77 trans-1,3-Dichloropropene	75	9.219	9.219	0.000	97	103481	50.0	55.6	
78 Ethyl methacrylate	69	9.317	9.317	0.000	91	125907	50.0	51.9	
79 1,1,2-Trichloroethane	97	9.402	9.402	0.000	96	113347	50.0	58.7	
80 Tetrachloroethene	164	9.536	9.536	0.000	97	112275	50.0	55.7	
81 1,3-Dichloropropane	76	9.566	9.566	0.000	96	208674	50.0	58.1	
82 2-Hexanone	43	9.658	9.658	0.000	99	225196	100.0	108.4	
84 Chlorodibromomethane	129	9.785	9.785	0.000	89	87930	50.0	57.0	
85 Ethylene Dibromide	107	9.901	9.901	0.000	98	106929	50.0	58.0	
86 3-Chlorobenzotrifluoride	180	10.369	10.369	0.000	89	217675	50.0	55.4	
87 Chlorobenzene	112	10.388	10.388	0.000	84	378224	50.0	58.0	
88 4-Chlorobenzotrifluoride	180	10.430	10.430	0.000	95	203459	50.0	53.6	
89 1,1,1,2-Tetrachloroethane	131	10.467	10.467	0.000	93	103571	50.0	61.5	
90 Ethylbenzene	106	10.503	10.503	0.000	99	209621	50.0	56.0	
91 m-Xylene & p-Xylene	106	10.619	10.619	0.000	100	259827	50.0	56.8	
92 o-Xylene	106	11.014	11.014	0.000	93	247820	50.0	55.3	
93 Styrene	104	11.026	11.026	0.000	92	412890	50.0	57.2	
94 Bromoform	173	11.209	11.209	0.000	84	47577	50.0	50.0	
96 2-Chlorobenzotrifluoride	180	11.270	11.270	0.000	97	209807	50.0	53.5	
97 Isopropylbenzene	105	11.379	11.379	0.000	100	620440	50.0	55.5	
99 1,1,2,2-Tetrachloroethane	83	11.671	11.671	0.000	84	152861	50.0	55.2	
100 Bromobenzene	156	11.683	11.683	0.000	95	146531	50.0	50.4	
101 1,2,3-Trichloropropane	110	11.726	11.726	0.000	71	48638	50.0	51.0	
102 trans-1,4-Dichloro-2-buten	53	11.732	11.732	0.000	54	38761	50.0	48.8	
103 N-Propylbenzene	120	11.787	11.787	0.000	85	176071	50.0	49.1	
104 2-Chlorotoluene	126	11.872	11.872	0.000	99	149752	50.0	49.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.933	11.933	0.000	84	167552	50.0	49.8	
106 1,3,5-Trimethylbenzene	105	11.963	11.963	0.000	98	530054	50.0	53.1	
107 4-Chlorotoluene	126	11.981	11.981	0.000	99	174446	50.0	53.5	
108 tert-Butylbenzene	119	12.286	12.286	0.000	67	415764	50.0	48.0	
110 1,2,4-Trimethylbenzene	105	12.334	12.334	0.000	96	517879	50.0	50.5	
111 1,2-dichloro-4-(trifluorom	214	12.401	12.401	0.000	97	159104	50.0	49.1	
112 sec-Butylbenzene	105	12.511	12.511	0.000	93	625331	50.0	51.3	
113 1,3-Dichlorobenzene	146	12.614	12.614	0.000	86	267765	50.0	50.0	
114 4-Isopropyltoluene	119	12.651	12.651	0.000	99	499421	50.0	49.7	
115 1,4-Dichlorobenzene	146	12.705	12.705	0.000	99	278335	50.0	50.9	
116 2,4-Dichloro-1-(triflourom	214	12.760	12.760	0.000	87	146414	50.0	48.2	
118 2,5-Dichlorobenzotrifluori	214	12.803	12.803	0.000	96	160416	50.0	47.3	
120 n-Butylbenzene	91	13.064	13.064	0.000	100	447494	50.0	48.9	
121 1,2-Dichlorobenzene	146	13.083	13.083	0.000	99	248696	50.0	50.2	
122 1,2-Dibromo-3-Chloropropan	75	13.861	13.861	0.000	87	16647	50.0	41.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.007	14.007	0.000	92	538052	150.0	143.6	
124 1,3,5-Trichlorobenzene	180	14.074	14.074	0.000	99	148240	50.0	49.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.427	14.427	0.000	98	335349	100.0	92.0	
126 1,2,4-Trichlorobenzene	180	14.695	14.695	0.000	97	107674	50.0	41.7	
127 Hexachlorobutadiene	225	14.859	14.859	0.000	91	52935	50.0	42.8	
128 Naphthalene	128	14.938	14.938	0.000	100	251457	50.0	37.1	
129 1,2,3-Trichlorobenzene	180	15.187	15.187	0.000	97	88141	50.0	41.7	
131 2,4,5-Trichlorotoluene	159	15.966	15.966	0.000	92	35422	50.0	31.1	
130 2,3,6-Trichlorotoluene	159	16.063	16.063	0.000	94	35820	50.0	34.9	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	104.9	
S 133 Xylenes, Total	106				0		100.0	112.1	
S 135 1,3-Dichloropropene, Total	1				0		100.0	107.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00108	Amount Added:	2.00	Units: uL	
voaW1,3,5TCab_00001	Amount Added:	2.00	Units: uL	
VOAVAPRI_00005	Amount Added:	2.00	Units: uL	
voaW 2-cle pr_00001	Amount Added:	2.00	Units: uL	
voaWKetpri Re_00004	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00004	Amount Added:	2.00	Units: uL	
VOAACRPRI_00005	Amount Added:	6.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

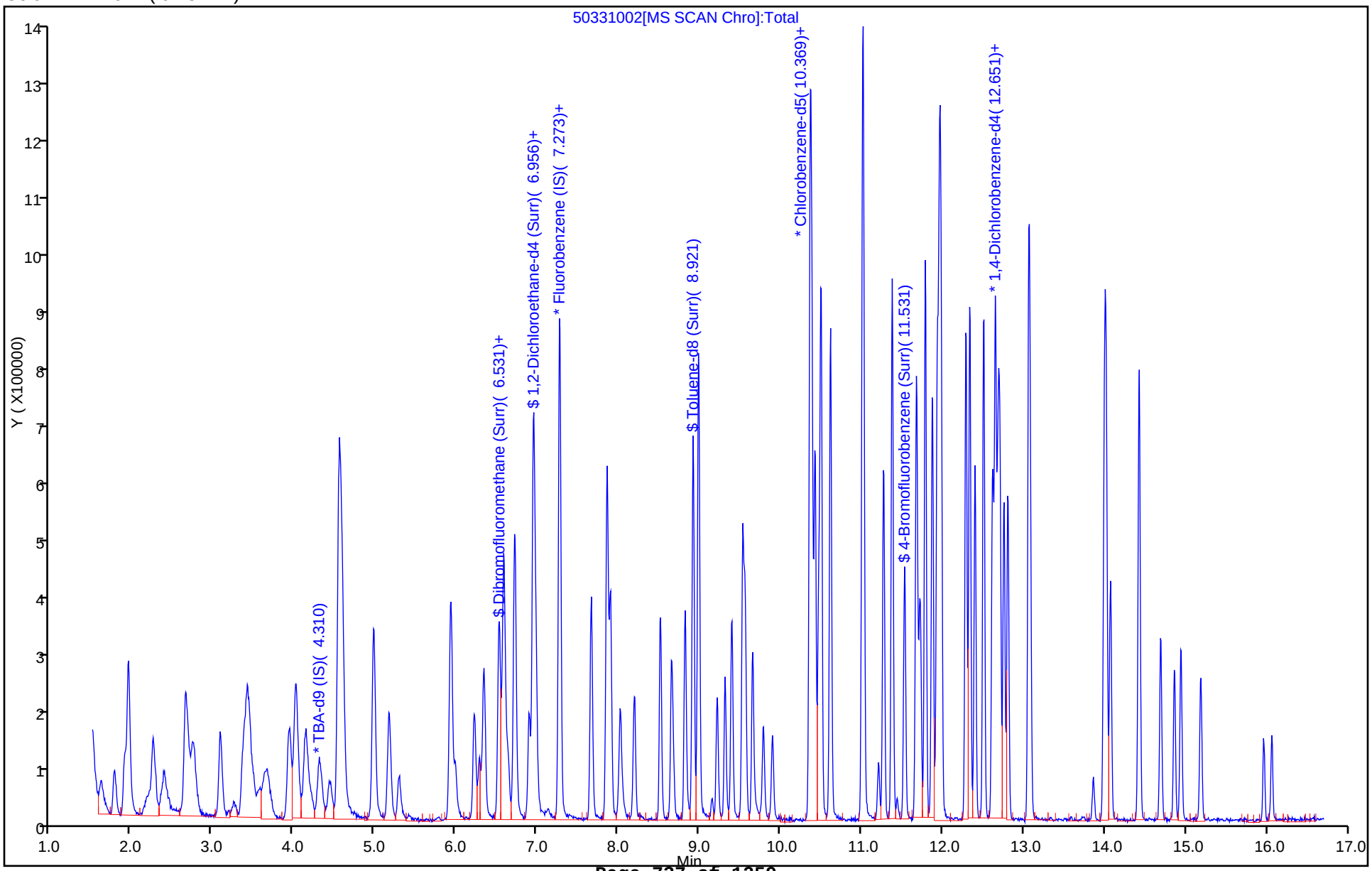
Report Date: 31-Mar-2015 13:22:48 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331002.D

Injection Date:	31-Mar-2015 10:08:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCVIS 180-137218/2 Calibration Date: 04/01/2015 11:25

Instrument ID: CHHP5 Calib Start Date: 03/16/2015 12:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2015 16:17

Lab File ID: 50401002.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	0.2143	0.2426	0.1000	11.3	10.0	13.2	20.0
Chloromethane	Ave	0.2958	0.2982	0.1000	10.1	10.0	0.8	20.0
Vinyl chloride	Ave	0.3306	0.3644	0.1000	11.0	10.0	10.2	20.0
Bromomethane	Lin2		0.2024	0.0500	11.4	10.0	14.3	20.0
Chloroethane	Ave	0.2287	0.2885	0.0500	12.6	10.0	26.1*	20.0
Dichlorofluoromethane	Ave	0.5222	0.6579	0.0100	12.6	10.0	26.0*	20.0
Trichlorofluoromethane	Ave	0.3966	0.4472	0.1000	11.3	10.0	12.8	20.0
Ethyl ether	Ave	0.2615	0.2846	0.0100	10.9	10.0	8.8	20.0
Acrolein	Ave	0.0318	0.0286	0.0100	27.0	30.0	-10.1	20.0
1,1-Dichloroethene	Ave	0.2883	0.3018	0.1000	10.5	10.0	4.7	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2916	0.3227	0.1000	11.1	10.0	10.6	20.0
Acetone	Ave	0.1024	0.1273	0.0500	24.9	20.0	24.3*	20.0
Iodomethane	Ave	0.4005	0.4065	0.0100	10.1	10.0	1.5	20.0
Carbon disulfide	Ave	0.7051	0.5006	0.1000	7.10	10.0	-29.0*	20.0
Allyl chloride	Ave	0.1524	0.1433	0.0100	9.40	10.0	-6.0	20.0
Methyl acetate	Ave	0.2396	0.2463	0.1000	51.4	50.0	2.8	20.0
Methylene Chloride	Ave	0.3335	0.3269	0.1000	9.80	10.0	-2.0	20.0
tert-Butyl alcohol	Ave	1.178	1.128	0.0100	95.7	100	-4.3	20.0
Acrylonitrile	Ave	0.1233	0.1218	0.0100	98.8	100	-1.2	20.0
trans-1,2-Dichloroethene	Ave	0.2982	0.3069	0.1000	10.3	10.0	2.9	20.0
Methyl tert-butyl ether	Ave	0.6593	0.6649	0.1000	10.1	10.0	0.8	20.0
Hexane	Ave	0.4764	0.4755	0.0100	9.98	10.0	-0.2	20.0
1,1-Dichloroethane	Ave	0.5323	0.5699	0.2000	10.7	10.0	7.1	20.0
Vinyl acetate	Ave	0.3776	0.2876	0.0100	7.62	10.0	-23.8*	20.0
2,2-Dichloropropane	Ave	0.1331	0.1628	0.0100	12.2	10.0	22.3*	20.0
cis-1,2-Dichloroethene	Ave	0.3142	0.3295	0.1000	10.5	10.0	4.9	20.0
2-Butanone (MEK)	Ave	0.1638	0.1636	0.0500	20.0	20.0	-0.1	20.0
Bromochloromethane	Ave	0.1360	0.1385	0.0100	10.2	10.0	1.9	20.0
Tetrahydrofuran	Ave	0.1026	0.0915	0.0100	17.8	20.0	-10.8	20.0
Chloroform	Ave	0.4836	0.5204	0.2000	10.8	10.0	7.6	20.0
1,1,1-Trichloroethane	Ave	0.3088	0.3453	0.1000	11.2	10.0	11.8	20.0
Cyclohexane	Ave	0.5929	0.5833	0.1000	9.84	10.0	-1.6	20.0
1,1-Dichloropropene	Ave	0.4011	0.4069	0.0100	10.1	10.0	1.4	20.0
Carbon tetrachloride	Ave	0.2478	0.2780	0.1000	11.2	10.0	12.2	20.0
Isobutyl alcohol	Ave	0.0067	0.0060*	0.0100	226	250	-9.7	20.0
Benzene	Ave	1.185	1.279	0.5000	10.8	10.0	7.9	20.0
1,2-Dichloroethane	Ave	0.3880	0.4206	0.1000	10.8	10.0	8.4	20.0
n-Heptane	Ave	0.4071	0.3981	0.0100	9.78	10.0	-2.2	20.0
Trichloroethene	Ave	0.2969	0.2963	0.2000	9.98	10.0	-0.2	20.0
Methylcyclohexane	Ave	0.5297	0.5252	0.1000	9.92	10.0	-0.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCVIS 180-137218/2 Calibration Date: 04/01/2015 11:25

Instrument ID: CHHP5 Calib Start Date: 03/16/2015 12:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2015 16:17

Lab File ID: 50401002.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	0.2931	0.2945	0.1000	10.0	10.0	0.5	20.0
Dibromomethane	Ave	0.1578	0.1607	0.0100	10.2	10.0	1.8	20.0
1,4-Dioxane	Ave	0.0031	0.0025*	0.0100	162	200	-18.8	20.0
Bromodichloromethane	Ave	0.3220	0.3077	0.2000	9.56	10.0	-4.4	20.0
cis-1,3-Dichloropropene	Ave	0.3107	0.3046	0.2000	9.80	10.0	-2.0	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.353	1.241	0.1000	18.3	20.0	-8.3	20.0
Toluene	Ave	5.124	5.794	0.4000	11.3	10.0	13.1	20.0
trans-1,3-Dichloropropene	Ave	0.9254	0.9563	0.1000	10.3	10.0	3.3	20.0
Ethyl methacrylate	Ave	1.207	1.152	0.0100	9.55	10.0	-4.5	20.0
1,1,2-Trichloroethane	Ave	0.9609	1.036	0.1000	10.8	10.0	7.8	20.0
Tetrachloroethene	Ave	1.002	1.053	0.2000	10.5	10.0	5.1	20.0
1,3-Dichloropropane	Ave	1.786	1.846	0.0100	10.3	10.0	3.4	20.0
2-Hexanone	Ave	1.034	1.086	0.1000	21.0	20.0	5.1	20.0
Dibromochloromethane	Ave	0.7670	0.7553	0.1000	9.85	10.0	-1.5	20.0
1,2-Dibromoethane (EDB)	Ave	0.9169	0.9415	0.1000	10.3	10.0	2.7	20.0
3-Chlorobenzotrifluoride	Ave	1.955	2.023	0.0100	10.3	10.0	3.5	20.0
Chlorobenzene	Ave	3.246	3.521	0.5000	10.8	10.0	8.5	20.0
4-Chlorobenzotrifluoride	Ave	1.890	1.900	0.0100	10.1	10.0	0.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8382	0.9038	0.0100	10.8	10.0	7.8	20.0
Ethylbenzene	Ave	1.863	1.965	0.1000	10.6	10.0	5.5	20.0
m-Xylene & p-Xylene	Ave	2.278	2.444	0.1000	10.7	10.0	7.3	20.0
o-Xylene	Ave	2.228	2.373	0.3000	10.6	10.0	6.5	20.0
Styrene	Ave	3.591	3.819	0.3000	10.6	10.0	6.4	20.0
Bromoform	Ave	0.4737	0.4246	0.1000	8.96	10.0	-10.4	20.0
2-Chlorobenzotrifluoride	Ave	1.952	1.933	0.0100	9.90	10.0	-1.0	20.0
Isopropylbenzene	Ave	5.560	5.960	0.1000	10.7	10.0	7.2	20.0
1,1,2,2-Tetrachloroethane	Ave	1.378	1.384	0.3000	10.0	10.0	0.4	20.0
Bromobenzene	Ave	0.9254	0.8938	0.0100	9.66	10.0	-3.4	20.0
1,2,3-Trichloropropane	Ave	0.3041	0.2914	0.0100	9.58	10.0	-4.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2528	0.2145	0.0100	8.48	10.0	-15.2	20.0
N-Propylbenzene	Ave	1.142	1.108	0.0100	9.71	10.0	-2.9	20.0
2-Chlorotoluene	Ave	0.9591	0.8896	0.0100	9.28	10.0	-7.2	20.0
3-Chlorotoluene	Ave	1.072	1.022	0.0100	9.54	10.0	-4.6	20.0
1,3,5-Trimethylbenzene	Ave	3.183	3.254	0.0100	10.2	10.0	2.2	20.0
4-Chlorotoluene	Ave	1.038	1.061	0.0100	10.2	10.0	2.2	20.0
tert-Butylbenzene	Ave	2.758	2.648	0.0100	9.60	10.0	-4.0	20.0
1,2,4-Trimethylbenzene	Ave	3.267	3.189	0.0100	9.76	10.0	-2.4	20.0
3,4-Dichlorobenzotrifluoride	Ave	1.032	0.9570	0.0100	9.27	10.0	-7.3	20.0
sec-Butylbenzene	Ave	3.881	3.897	0.0100	10.0	10.0	0.4	20.0
1,3-Dichlorobenzene	Ave	1.705	1.672	0.6000	9.81	10.0	-1.9	20.0
4-Isopropyltoluene	Ave	3.204	3.144	0.0100	9.81	10.0	-1.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCVIS 180-137218/2 Calibration Date: 04/01/2015 11:25

Instrument ID: CHHP5 Calib Start Date: 03/16/2015 12:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2015 16:17

Lab File ID: 50401002.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.741	1.754	0.5000	10.1	10.0	0.7	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.9669	0.9106	0.0100	9.42	10.0	-5.8	20.0
2,5-Dichlorobenzotrifluoride	Ave	1.082	0.9694	0.0100	8.96	10.0	-10.4	20.0
n-Butylbenzene	Ave	2.918	2.907	0.0100	9.96	10.0	-0.4	20.0
1,2-Dichlorobenzene	Ave	1.579	1.583	0.4000	10.0	10.0	0.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1292	0.0970	0.0500	7.51	10.0	-24.9*	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.194	1.039	0.0100	26.1	30.0	-13.0	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.161	0.9579	0.0100	16.5	20.0	-17.5	20.0
1,2,4-Trichlorobenzene	Ave	0.8219	0.6446	0.2000	7.84	10.0	-21.6*	20.0
Hexachlorobutadiene	Ave	0.3941	0.3277	0.0100	8.31	10.0	-16.9	20.0
Naphthalene	Ave	2.158	1.463	0.0100	6.78	10.0	-32.2*	20.0
1,2,3-Trichlorobenzene	Ave	0.6740	0.4860	0.0100	7.21	10.0	-27.9*	20.0
2,4,5-Trichlorotoluene	Ave	0.3624	0.1902	0.0100	5.25	10.0	-47.5*	20.0
2,3,6-Trichlorotoluene	Ave	0.3273	0.1889	0.0100	5.77	10.0	-42.3*	20.0
Dibromofluoromethane (Surr)	Ave	0.2274	0.2099		9.23	10.0	-7.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2998	0.3027		10.1	10.0	0.9	20.0
Toluene-d8 (Surr)	Ave	3.986	4.104		10.3	10.0	3.0	20.0
4-Bromofluorobenzene (Surr)	Ave	1.436	1.400		9.75	10.0	-2.5	20.0

Report Date: 01-Apr-2015 14:42:50 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 01-Apr-2015 11:25:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006280-002
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub11

Method: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Apr-2015 14:42:50 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: fergusond Date: 01-Apr-2015 12:03:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.322	4.322	0.000	97	128318	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.272	7.272	0.000	99	490823	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.363	10.363	0.000	98	110088	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.680	12.680	0.000	96	166638	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.524	6.524	0.000	95	102997	50.0	46.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.895	6.895	0.000	98	148550	50.0	50.5	
$ 7 Toluene-d8 (Surr)	98	8.921	8.921	0.000	100	451806	50.0	51.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.531	11.531	0.000	98	154151	50.0	48.8	
11 Dichlorodifluoromethane	85	1.627	1.627	0.000	100	119073	50.0	56.6	
12 Chloromethane	50	1.779	1.779	0.000	99	146364	50.0	50.4	
13 Vinyl chloride	62	1.907	1.907	0.000	100	178866	50.0	55.1	
14 Butadiene	39	1.955	1.955	0.000	99	205489	50.0	55.4	
15 Bromomethane	94	2.259	2.259	0.000	98	99340	50.0	57.2	
16 Chloroethane	64	2.393	2.393	0.000	97	141593	50.0	63.1	
17 Dichlorofluoromethane	67	2.655	2.655	0.000	99	322922	50.0	63.0	
18 Trichlorofluoromethane	101	2.722	2.722	0.000	94	219510	50.0	56.4	
20 Ethyl ether	59	3.081	3.081	0.000	98	139709	50.0	54.4	
21 Acrolein	56	3.251	3.251	0.000	96	42075	150.0	134.9	M
22 1,1-Dichloroethene	96	3.385	3.385	0.000	94	148135	50.0	52.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.440	3.440	0.000	98	158364	50.0	55.3	
24 Acetone	43	3.494	3.494	0.000	100	124952	100.0	124.3	
25 Iodomethane	142	3.567	3.567	0.000	99	199540	50.0	50.7	
26 Carbon disulfide	76	3.671	3.671	0.000	100	245695	50.0	35.5	
28 3-Chloro-1-propene	76	3.945	3.945	0.000	98	70346	50.0	47.0	
30 Methyl acetate	43	4.018	4.018	0.000	100	604356	250.0	256.9	
31 Methylene Chloride	84	4.151	4.151	0.000	97	160445	50.0	49.0	
32 2-Methyl-2-propanol	59	4.437	4.437	0.000	98	72340	500.0	478.6	
33 Acrylonitrile	53	4.547	4.547	0.000	99	597968	500.0	494.2	
34 trans-1,2-Dichloroethene	96	4.565	4.565	0.000	93	150610	50.0	51.4	
35 Methyl tert-butyl ether	73	4.596	4.596	0.000	100	326360	50.0	50.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.985	4.985	0.000	98	233405	50.0	49.9	
37 1,1-Dichloroethane	63	5.173	5.173	0.000	100	279738	50.0	53.5	
38 Vinyl acetate	43	5.295	5.295	0.000	100	141153	50.0	38.1	
44 2,2-Dichloropropane	77	5.928	5.928	0.000	97	79884	50.0	61.2	
45 cis-1,2-Dichloroethene	96	5.934	5.934	0.000	97	161745	50.0	52.4	
46 2-Butanone (MEK)	43	5.989	5.989	0.000	99	160568	100.0	99.9	
49 Chlorobromomethane	128	6.226	6.226	0.000	98	67989	50.0	50.9	
51 Tetrahydrofuran	42	6.281	6.281	0.000	99	89786	100.0	89.2	
52 Chloroform	83	6.341	6.341	0.000	100	255403	50.0	53.8	
53 1,1,1-Trichloroethane	97	6.536	6.536	0.000	95	169478	50.0	55.9	
54 Cyclohexane	56	6.591	6.591	0.000	98	286271	50.0	49.2	
56 Carbon tetrachloride	117	6.725	6.725	0.000	99	136468	50.0	56.1	
55 1,1-Dichloropropene	75	6.725	6.725	0.000	99	199719	50.0	50.7	
57 Isobutyl alcohol	41	6.938	6.938	0.000	97	73927	1250.0	1128.4	
58 Benzene	78	6.956	6.956	0.000	99	627529	50.0	54.0	
59 1,2-Dichloroethane	62	6.986	6.986	0.000	100	206447	50.0	54.2	
62 n-Heptane	43	7.278	7.278	0.000	83	195403	50.0	48.9	
64 Trichloroethene	130	7.668	7.668	0.000	99	145436	50.0	49.9	
66 Methylcyclohexane	83	7.862	7.862	0.000	98	257795	50.0	49.6	
67 1,2-Dichloropropane	63	7.899	7.899	0.000	96	144549	50.0	50.2	
68 Dibromomethane	93	8.021	8.021	0.000	96	78860	50.0	50.9	
70 1,4-Dioxane	88	8.057	8.057	0.000	97	24610	1000.0	812.4	
71 Dichlorobromomethane	83	8.191	8.191	0.000	99	151029	50.0	47.8	
73 2-Chloroethyl vinyl ether	63	8.519	8.519	0.000	99	152722	100.0	94.2	
74 cis-1,3-Dichloropropene	75	8.659	8.659	0.000	99	149491	50.0	49.0	
75 4-Methyl-2-pentanone (MIBK	43	8.824	8.824	0.000	100	273235	100.0	91.7	
76 Toluene	91	8.988	8.988	0.000	100	637881	50.0	56.5	
77 trans-1,3-Dichloropropene	75	9.219	9.219	0.000	97	105279	50.0	51.7	
78 Ethyl methacrylate	69	9.316	9.316	0.000	98	126855	50.0	47.7	
79 1,1,2-Trichloroethane	97	9.401	9.401	0.000	98	114044	50.0	53.9	
80 Tetrachloroethene	164	9.535	9.535	0.000	98	115936	50.0	52.5	
81 1,3-Dichloropropane	76	9.566	9.566	0.000	99	203218	50.0	51.7	
82 2-Hexanone	43	9.651	9.651	0.000	100	239149	100.0	105.1	
84 Chlorodibromomethane	129	9.791	9.791	0.000	99	83154	50.0	49.2	
85 Ethylene Dibromide	107	9.900	9.900	0.000	99	103650	50.0	51.3	
86 3-Chlorobenzotrifluoride	180	10.369	10.369	0.000	98	222741	50.0	51.7	
87 Chlorobenzene	112	10.387	10.387	0.000	99	387640	50.0	54.2	
88 4-Chlorobenzotrifluoride	180	10.430	10.430	0.000	98	209175	50.0	50.3	
89 1,1,1,2-Tetrachloroethane	131	10.472	10.472	0.000	97	99498	50.0	53.9	
90 Ethylbenzene	106	10.503	10.503	0.000	100	216348	50.0	52.8	
91 m-Xylene & p-Xylene	106	10.618	10.618	0.000	100	269027	50.0	53.6	
92 o-Xylene	106	11.014	11.014	0.000	100	261192	50.0	53.2	
93 Styrene	104	11.026	11.026	0.000	99	420414	50.0	53.2	
94 Bromoform	173	11.214	11.214	0.000	97	46738	50.0	44.8	
96 2-Chlorobenzotrifluoride	180	11.275	11.275	0.000	99	212789	50.0	49.5	
97 Isopropylbenzene	105	11.379	11.379	0.000	100	656148	50.0	53.6	
99 1,1,2,2-Tetrachloroethane	83	11.677	11.677	0.000	98	152331	50.0	50.2	
100 Bromobenzene	156	11.683	11.683	0.000	99	148945	50.0	48.3	
101 1,2,3-Trichloropropane	110	11.719	11.719	0.000	99	48552	50.0	47.9	
102 trans-1,4-Dichloro-2-buten	53	11.731	11.731	0.000	98	35736	50.0	42.4	
103 N-Propylbenzene	120	11.786	11.786	0.000	100	184620	50.0	48.5	
104 2-Chlorotoluene	126	11.871	11.871	0.000	100	148240	50.0	46.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.932	11.932	0.000	99	170382	50.0	47.7	
106 1,3,5-Trimethylbenzene	105	11.963	11.963	0.000	99	542306	50.0	51.1	
107 4-Chlorotoluene	126	11.981	11.981	0.000	98	176878	50.0	51.1	
108 tert-Butylbenzene	119	12.285	12.285	0.000	100	441325	50.0	48.0	
110 1,2,4-Trimethylbenzene	105	12.334	12.334	0.000	97	531480	50.0	48.8	
111 1,2-dichloro-4-(trifluorom	214	12.401	12.401	0.000	99	159464	50.0	46.3	
112 sec-Butylbenzene	105	12.510	12.510	0.000	100	649353	50.0	50.2	
113 1,3-Dichlorobenzene	146	12.620	12.620	0.000	99	278591	50.0	49.0	
114 4-Isopropyltoluene	119	12.650	12.650	0.000	99	523884	50.0	49.1	
115 1,4-Dichlorobenzene	146	12.705	12.705	0.000	99	292285	50.0	50.4	
116 2,4-Dichloro-1-(triflourom	214	12.760	12.760	0.000	98	151738	50.0	47.1	
118 2,5-Dichlorobenzotrifluori	214	12.808	12.808	0.000	98	161545	50.0	44.8	
120 n-Butylbenzene	91	13.064	13.064	0.000	100	484476	50.0	49.8	
121 1,2-Dichlorobenzene	146	13.082	13.082	0.000	98	263832	50.0	50.1	
122 1,2-Dibromo-3-Chloropropan	75	13.861	13.861	0.000	95	16170	50.0	37.6	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.007	14.007	0.000	99	519341	150.0	130.6	
124 1,3,5-Trichlorobenzene	180	14.074	14.074	0.000	98	142166	50.0	44.5	
125 2,3- & 3,4- Dichlorotoluen	125	14.426	14.426	0.000	100	319251	100.0	82.5	
126 1,2,4-Trichlorobenzene	180	14.694	14.694	0.000	99	107415	50.0	39.2	
127 Hexachlorobutadiene	225	14.858	14.858	0.000	97	54608	50.0	41.6	
128 Naphthalene	128	14.944	14.944	0.000	100	243768	50.0	33.9	
129 1,2,3-Trichlorobenzene	180	15.187	15.187	0.000	99	80977	50.0	36.0	
131 2,4,5-Trichlorotoluene	159	15.966	15.966	0.000	96	31702	50.0	26.2	
130 2,3,6-Trichlorotoluene	159	16.057	16.057	0.000	98	31479	50.0	28.9	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	103.9	
S 133 Xylenes, Total	106				0		100.0	106.9	
S 135 1,3-Dichloropropene, Total	1				0		100.0	100.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00108	Amount Added:	2.00	Units: uL	
voaW1,3,5TCab_00001	Amount Added:	2.00	Units: uL	
VOAVAPRI_00005	Amount Added:	2.00	Units: uL	
voaW 2-cle pr_00001	Amount Added:	2.00	Units: uL	
voaWKetpri Re_00004	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00004	Amount Added:	2.00	Units: uL	
VOAACRPRI_00005	Amount Added:	6.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

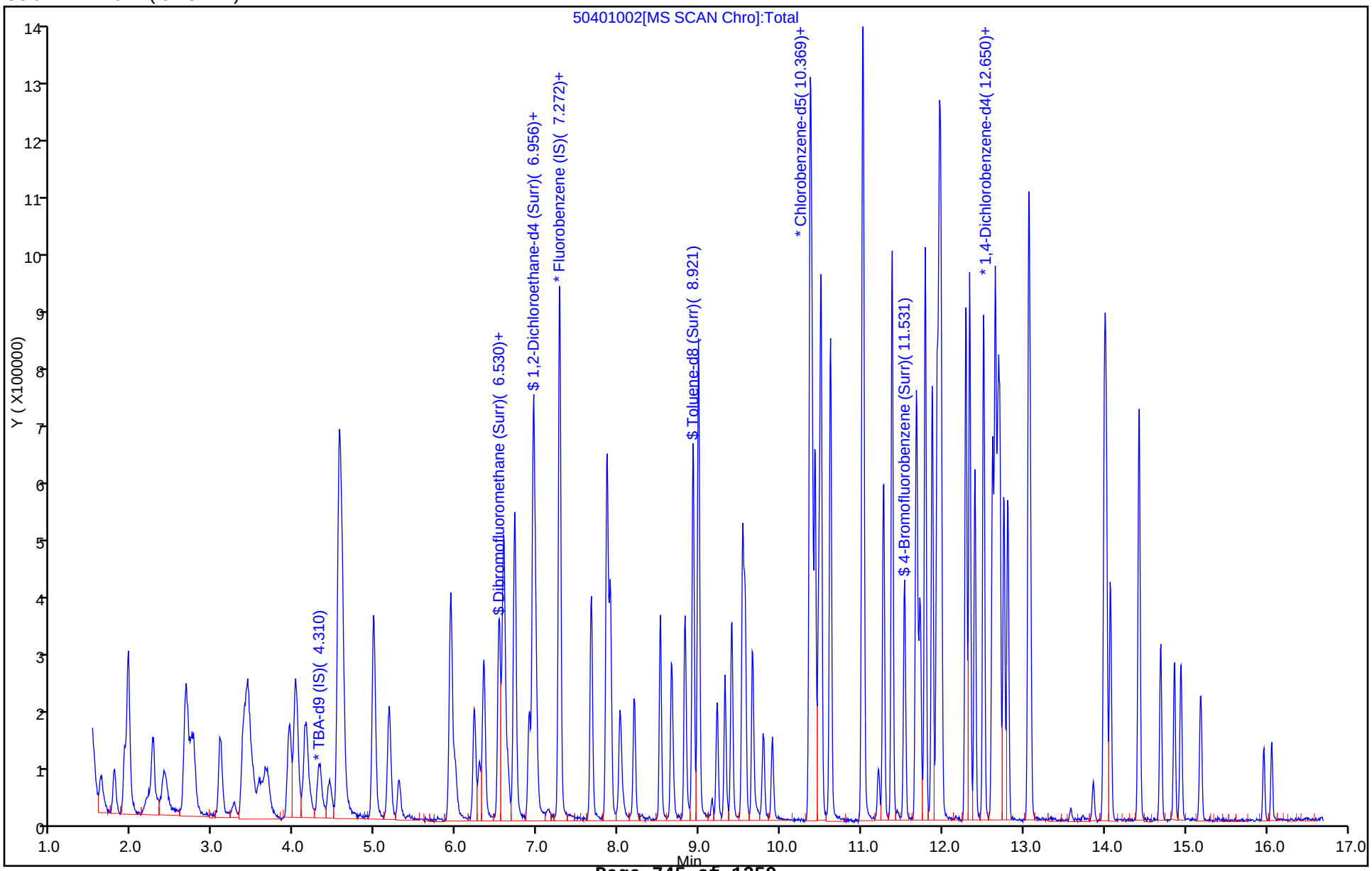
Report Date: 01-Apr-2015 14:42:51 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401002.D

Injection Date:	01-Apr-2015 11:25:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

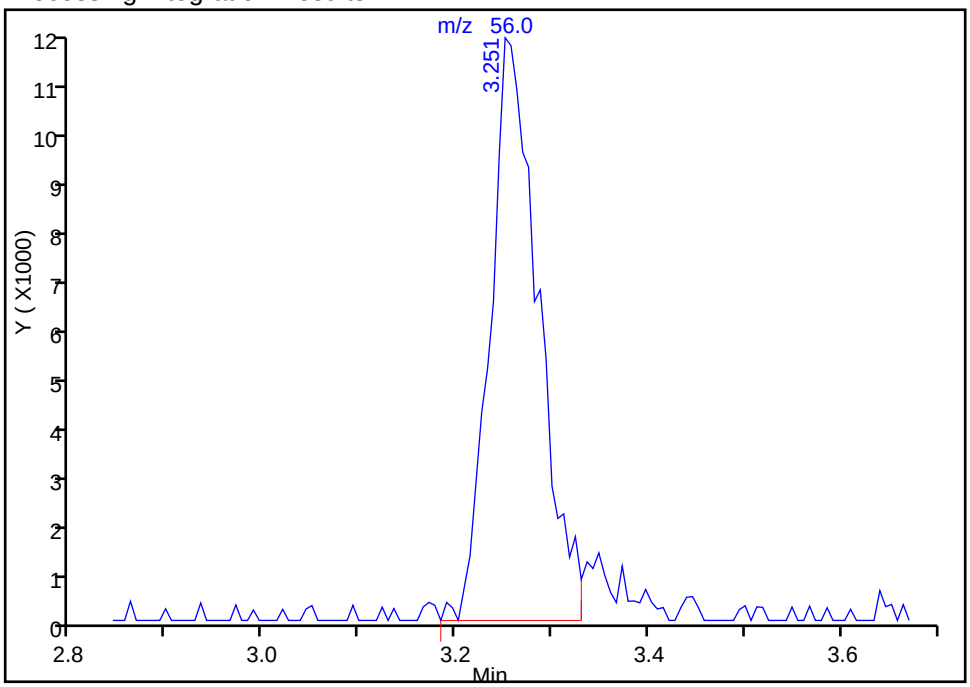
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401002.D
Injection Date: 01-Apr-2015 11:25:30 Instrument ID: CHHP5
Lims ID: CCVIS
Client ID:
Operator ID: 001562 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

21 Acrolein, CAS: 107-02-8

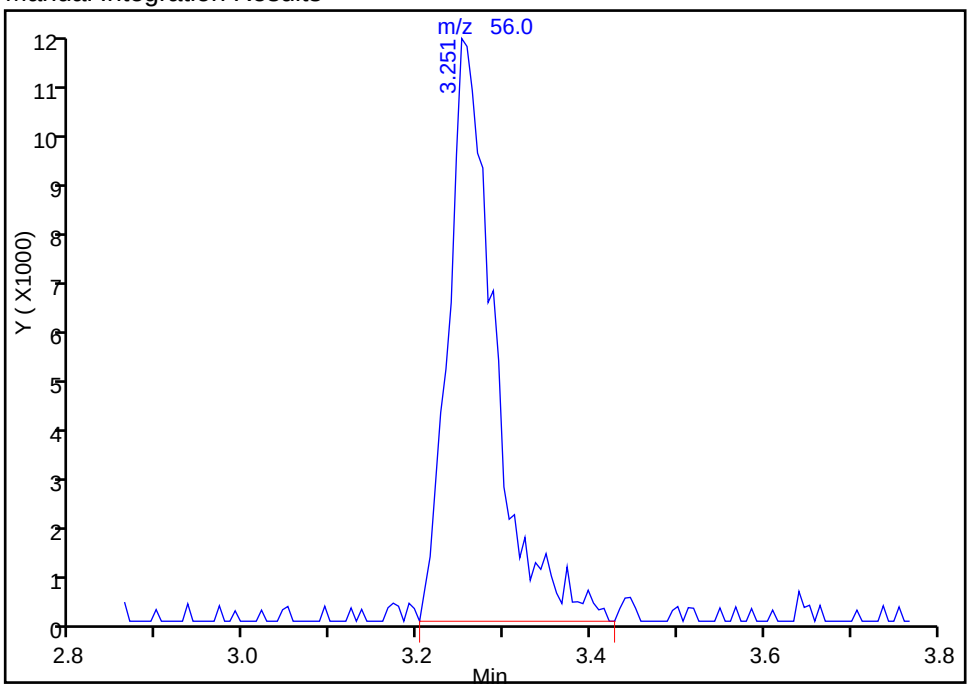
Processing Integration Results

RT: 3.25
Area: 39100
Amount: 125.3711
Amount Units: ng



Manual Integration Results

RT: 3.25
Area: 42075
Amount: 134.9102
Amount Units: ng



Reviewer: fergusond, 01-Apr-2015 12:03:49
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCVIS 180-137218/2 Calibration Date: 04/01/2015 11:25

Instrument ID: CHHP5 Calib Start Date: 03/18/2015 13:31

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/18/2015 16:19

Lab File ID: 50401002.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1652	0.1556	0.0100	18.8	20.0	-5.8	20.0
1,3,5-Trichlorobenzene	Ave	0.9577	0.8531	0.0100	8.91	10.0	-10.9	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 01-Apr-2015 11:25:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006280-002
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub11

Method: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Apr-2015 14:42:50 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: fergusond Date: 01-Apr-2015 12:03:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.322	4.322	0.000	97	128318	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.272	7.272	0.000	99	490823	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.363	10.363	0.000	98	110088	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.680	12.680	0.000	96	166638	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.524	6.524	0.000	95	102997	50.0	46.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.895	6.895	0.000	98	148550	50.0	50.5	
$ 7 Toluene-d8 (Surr)	98	8.921	8.921	0.000	100	451806	50.0	51.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.531	11.531	0.000	98	154151	50.0	48.8	
11 Dichlorodifluoromethane	85	1.627	1.627	0.000	100	119073	50.0	56.6	
12 Chloromethane	50	1.779	1.779	0.000	99	146364	50.0	50.4	
13 Vinyl chloride	62	1.907	1.907	0.000	100	178866	50.0	55.1	
14 Butadiene	39	1.955	1.955	0.000	99	205489	50.0	55.4	
15 Bromomethane	94	2.259	2.259	0.000	98	99340	50.0	57.2	
16 Chloroethane	64	2.393	2.393	0.000	97	141593	50.0	63.1	
17 Dichlorofluoromethane	67	2.655	2.655	0.000	99	322922	50.0	63.0	
18 Trichlorofluoromethane	101	2.722	2.722	0.000	94	219510	50.0	56.4	
20 Ethyl ether	59	3.081	3.081	0.000	98	139709	50.0	54.4	
21 Acrolein	56	3.251	3.251	0.000	96	42075	150.0	134.9	M
22 1,1-Dichloroethene	96	3.385	3.385	0.000	94	148135	50.0	52.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.440	3.440	0.000	98	158364	50.0	55.3	
24 Acetone	43	3.494	3.494	0.000	100	124952	100.0	124.3	
25 Iodomethane	142	3.567	3.567	0.000	99	199540	50.0	50.7	
26 Carbon disulfide	76	3.671	3.671	0.000	100	245695	50.0	35.5	
28 3-Chloro-1-propene	76	3.945	3.945	0.000	98	70346	50.0	47.0	
30 Methyl acetate	43	4.018	4.018	0.000	100	604356	250.0	256.9	
31 Methylene Chloride	84	4.151	4.151	0.000	97	160445	50.0	49.0	
32 2-Methyl-2-propanol	59	4.437	4.437	0.000	98	72340	500.0	478.6	
33 Acrylonitrile	53	4.547	4.547	0.000	99	597968	500.0	494.2	
34 trans-1,2-Dichloroethene	96	4.565	4.565	0.000	93	150610	50.0	51.4	
35 Methyl tert-butyl ether	73	4.596	4.596	0.000	100	326360	50.0	50.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.985	4.985	0.000	98	233405	50.0	49.9	
37 1,1-Dichloroethane	63	5.173	5.173	0.000	100	279738	50.0	53.5	
38 Vinyl acetate	43	5.295	5.295	0.000	100	141153	50.0	38.1	
44 2,2-Dichloropropane	77	5.928	5.928	0.000	97	79884	50.0	61.2	
45 cis-1,2-Dichloroethene	96	5.934	5.934	0.000	97	161745	50.0	52.4	
46 2-Butanone (MEK)	43	5.989	5.989	0.000	99	160568	100.0	99.9	
49 Chlorobromomethane	128	6.226	6.226	0.000	98	67989	50.0	50.9	
51 Tetrahydrofuran	42	6.281	6.281	0.000	99	89786	100.0	89.2	
52 Chloroform	83	6.341	6.341	0.000	100	255403	50.0	53.8	
53 1,1,1-Trichloroethane	97	6.536	6.536	0.000	95	169478	50.0	55.9	
54 Cyclohexane	56	6.591	6.591	0.000	98	286271	50.0	49.2	
56 Carbon tetrachloride	117	6.725	6.725	0.000	99	136468	50.0	56.1	
55 1,1-Dichloropropene	75	6.725	6.725	0.000	99	199719	50.0	50.7	
57 Isobutyl alcohol	41	6.938	6.938	0.000	97	73927	1250.0	1128.4	
58 Benzene	78	6.956	6.956	0.000	99	627529	50.0	54.0	
59 1,2-Dichloroethane	62	6.986	6.986	0.000	100	206447	50.0	54.2	
62 n-Heptane	43	7.278	7.278	0.000	83	195403	50.0	48.9	
64 Trichloroethene	130	7.668	7.668	0.000	99	145436	50.0	49.9	
66 Methylcyclohexane	83	7.862	7.862	0.000	98	257795	50.0	49.6	
67 1,2-Dichloropropane	63	7.899	7.899	0.000	96	144549	50.0	50.2	
68 Dibromomethane	93	8.021	8.021	0.000	96	78860	50.0	50.9	
70 1,4-Dioxane	88	8.057	8.057	0.000	97	24610	1000.0	812.4	
71 Dichlorobromomethane	83	8.191	8.191	0.000	99	151029	50.0	47.8	
73 2-Chloroethyl vinyl ether	63	8.519	8.519	0.000	99	152722	100.0	94.2	
74 cis-1,3-Dichloropropene	75	8.659	8.659	0.000	99	149491	50.0	49.0	
75 4-Methyl-2-pentanone (MIBK	43	8.824	8.824	0.000	100	273235	100.0	91.7	
76 Toluene	91	8.988	8.988	0.000	100	637881	50.0	56.5	
77 trans-1,3-Dichloropropene	75	9.219	9.219	0.000	97	105279	50.0	51.7	
78 Ethyl methacrylate	69	9.316	9.316	0.000	98	126855	50.0	47.7	
79 1,1,2-Trichloroethane	97	9.401	9.401	0.000	98	114044	50.0	53.9	
80 Tetrachloroethene	164	9.535	9.535	0.000	98	115936	50.0	52.5	
81 1,3-Dichloropropane	76	9.566	9.566	0.000	99	203218	50.0	51.7	
82 2-Hexanone	43	9.651	9.651	0.000	100	239149	100.0	105.1	
84 Chlorodibromomethane	129	9.791	9.791	0.000	99	83154	50.0	49.2	
85 Ethylene Dibromide	107	9.900	9.900	0.000	99	103650	50.0	51.3	
86 3-Chlorobenzotrifluoride	180	10.369	10.369	0.000	98	222741	50.0	51.7	
87 Chlorobenzene	112	10.387	10.387	0.000	99	387640	50.0	54.2	
88 4-Chlorobenzotrifluoride	180	10.430	10.430	0.000	98	209175	50.0	50.3	
89 1,1,1,2-Tetrachloroethane	131	10.472	10.472	0.000	97	99498	50.0	53.9	
90 Ethylbenzene	106	10.503	10.503	0.000	100	216348	50.0	52.8	
91 m-Xylene & p-Xylene	106	10.618	10.618	0.000	100	269027	50.0	53.6	
92 o-Xylene	106	11.014	11.014	0.000	100	261192	50.0	53.2	
93 Styrene	104	11.026	11.026	0.000	99	420414	50.0	53.2	
94 Bromoform	173	11.214	11.214	0.000	97	46738	50.0	44.8	
96 2-Chlorobenzotrifluoride	180	11.275	11.275	0.000	99	212789	50.0	49.5	
97 Isopropylbenzene	105	11.379	11.379	0.000	100	656148	50.0	53.6	
99 1,1,2,2-Tetrachloroethane	83	11.677	11.677	0.000	98	152331	50.0	50.2	
100 Bromobenzene	156	11.683	11.683	0.000	99	148945	50.0	48.3	
101 1,2,3-Trichloropropane	110	11.719	11.719	0.000	99	48552	50.0	47.9	
102 trans-1,4-Dichloro-2-buten	53	11.731	11.731	0.000	98	35736	50.0	42.4	
103 N-Propylbenzene	120	11.786	11.786	0.000	100	184620	50.0	48.5	
104 2-Chlorotoluene	126	11.871	11.871	0.000	100	148240	50.0	46.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.932	11.932	0.000	99	170382	50.0	47.7	
106 1,3,5-Trimethylbenzene	105	11.963	11.963	0.000	99	542306	50.0	51.1	
107 4-Chlorotoluene	126	11.981	11.981	0.000	98	176878	50.0	51.1	
108 tert-Butylbenzene	119	12.285	12.285	0.000	100	441325	50.0	48.0	
110 1,2,4-Trimethylbenzene	105	12.334	12.334	0.000	97	531480	50.0	48.8	
111 1,2-dichloro-4-(trifluorom	214	12.401	12.401	0.000	99	159464	50.0	46.3	
112 sec-Butylbenzene	105	12.510	12.510	0.000	100	649353	50.0	50.2	
113 1,3-Dichlorobenzene	146	12.620	12.620	0.000	99	278591	50.0	49.0	
114 4-Isopropyltoluene	119	12.650	12.650	0.000	99	523884	50.0	49.1	
115 1,4-Dichlorobenzene	146	12.705	12.705	0.000	99	292285	50.0	50.4	
116 2,4-Dichloro-1-(triflourom	214	12.760	12.760	0.000	98	151738	50.0	47.1	
118 2,5-Dichlorobenzotrifluori	214	12.808	12.808	0.000	98	161545	50.0	44.8	
120 n-Butylbenzene	91	13.064	13.064	0.000	100	484476	50.0	49.8	
121 1,2-Dichlorobenzene	146	13.082	13.082	0.000	98	263832	50.0	50.1	
122 1,2-Dibromo-3-Chloropropan	75	13.861	13.861	0.000	95	16170	50.0	37.6	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.007	14.007	0.000	99	519341	150.0	130.6	
124 1,3,5-Trichlorobenzene	180	14.074	14.074	0.000	98	142166	50.0	44.5	
125 2,3- & 3,4- Dichlorotoluen	125	14.426	14.426	0.000	100	319251	100.0	82.5	
126 1,2,4-Trichlorobenzene	180	14.694	14.694	0.000	99	107415	50.0	39.2	
127 Hexachlorobutadiene	225	14.858	14.858	0.000	97	54608	50.0	41.6	
128 Naphthalene	128	14.944	14.944	0.000	100	243768	50.0	33.9	
129 1,2,3-Trichlorobenzene	180	15.187	15.187	0.000	99	80977	50.0	36.0	
131 2,4,5-Trichlorotoluene	159	15.966	15.966	0.000	96	31702	50.0	26.2	
130 2,3,6-Trichlorotoluene	159	16.057	16.057	0.000	98	31479	50.0	28.9	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	103.9	
S 133 Xylenes, Total	106				0		100.0	106.9	
S 135 1,3-Dichloropropene, Total	1				0		100.0	100.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00108	Amount Added:	2.00	Units: uL	
voaW1,3,5TCab_00001	Amount Added:	2.00	Units: uL	
VOAVAPRI_00005	Amount Added:	2.00	Units: uL	
voaW 2-cle pr_00001	Amount Added:	2.00	Units: uL	
voaWKetpri Re_00004	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00004	Amount Added:	2.00	Units: uL	
VOAACRPRI_00005	Amount Added:	6.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

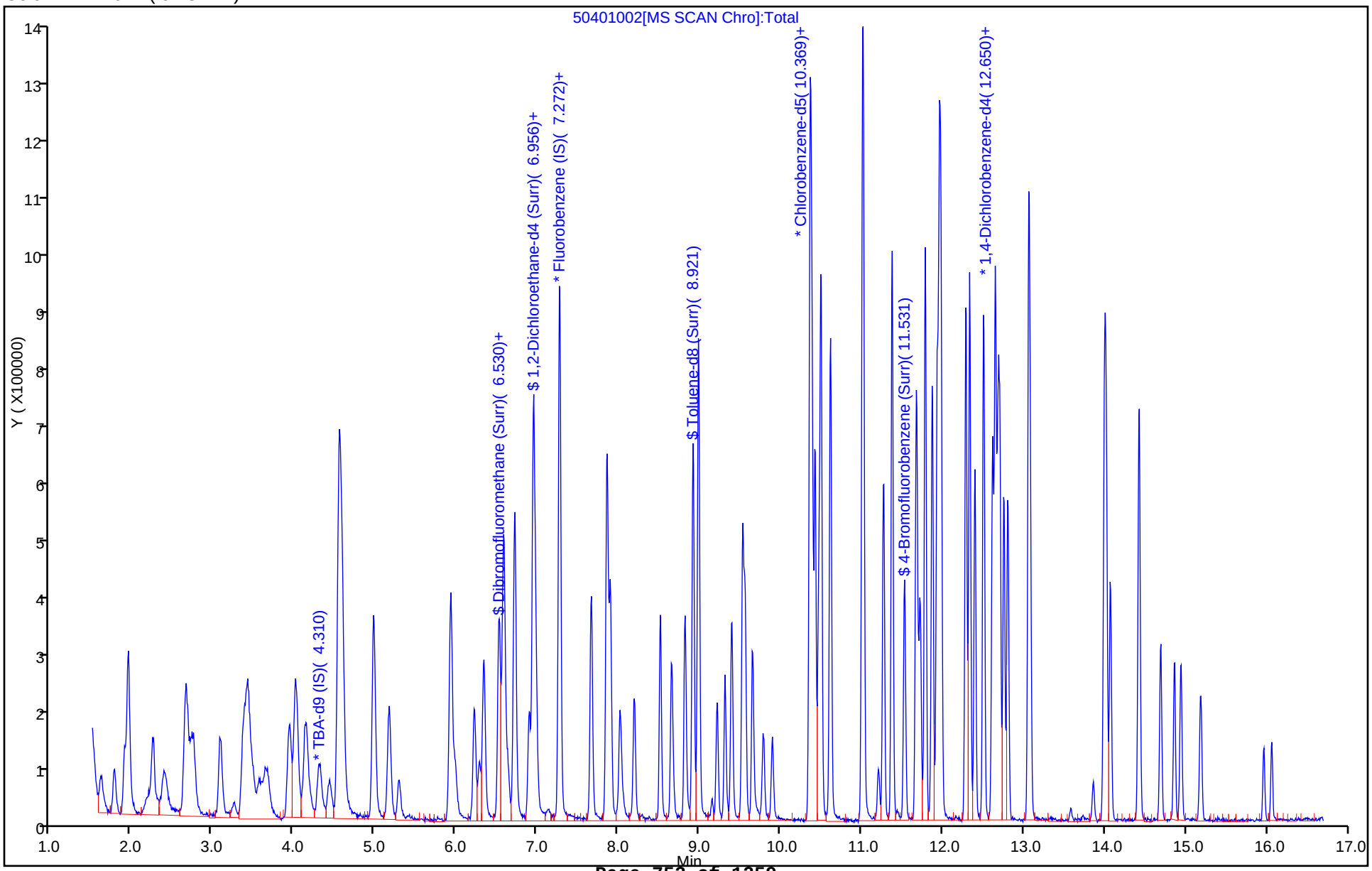
Report Date: 01-Apr-2015 14:42:51 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401002.D

Injection Date:	01-Apr-2015 11:25:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCVIS 180-136938/2 Calibration Date: 03/30/2015 10:12

Instrument ID: CHHP6 Calib Start Date: 09/11/2014 11:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/11/2014 13:46

Lab File ID: 60330002.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-Dibromo-3-Chloropropane	Ave	0.1419	0.1846	0.0500	13.5	10.0	30.1*	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 30-Mar-2015 10:12:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006236-002
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 30-Mar-2015 12:55:18 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: fergusond Date: 30-Mar-2015 10:45:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.284	4.284	0.000	92	229623	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.332	7.332	0.000	97	505716	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.440	10.440	0.000	91	107308	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.795	12.795	0.000	95	167539	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.596	6.596	0.000	94	115432	50.0	50.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.973	6.973	0.000	70	189937	50.0	58.0	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	94	447392	50.0	52.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.627	11.627	0.000	82	183399	50.0	51.0	
11 Dichlorodifluoromethane	85	1.632	1.632	0.000	96	115503	50.0	43.1	
12 Chloromethane	50	1.765	1.765	0.000	99	160281	50.0	38.9	
13 Vinyl chloride	62	1.899	1.899	0.000	98	145532	50.0	39.8	
14 Butadiene	39	1.942	1.942	0.000	90	154310	50.0	39.6	
15 Bromomethane	94	2.246	2.246	0.000	92	71448	50.0	48.7	
16 Chloroethane	64	2.392	2.392	0.000	98	101838	50.0	45.5	
17 Dichlorofluoromethane	67	2.672	2.672	0.000	97	269214	50.0	50.4	
18 Trichlorofluoromethane	101	2.714	2.714	0.000	81	222408	50.0	53.2	
20 Ethyl ether	59	3.061	3.061	0.000	96	163401	50.0	51.3	
21 Acrolein	56	3.244	3.244	0.000	94	47834	150.0	94.6	
22 1,1-Dichloroethene	96	3.371	3.371	0.000	93	142948	50.0	50.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.432	3.432	0.000	96	152322	50.0	53.0	
24 Acetone	43	3.451	3.451	0.000	96	128733	100.0	143.9	
25 Iodomethane	142	3.584	3.584	0.000	97	182725	50.0	43.4	
26 Carbon disulfide	76	3.682	3.682	0.000	99	363482	50.0	43.2	
29 3-Chloro-1-propene	76	3.962	3.962	0.000	60	89201	50.0	48.4	
30 Methyl acetate	43	3.968	3.968	0.000	98	676422	250.0	308.9	
31 Methylene Chloride	84	4.168	4.168	0.000	98	177457	50.0	42.7	
32 2-Methyl-2-propanol	59	4.412	4.412	0.000	93	147622	500.0	568.9	
33 Acrylonitrile	53	4.539	4.539	0.000	100	758843	500.0	664.7	
35 Methyl tert-butyl ether	73	4.606	4.606	0.000	98	463869	50.0	51.6	
34 trans-1,2-Dichloroethene	96	4.606	4.606	0.000	73	158707	50.0	46.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.026	5.026	0.000	93	223252	50.0	45.4	
37 1,1-Dichloroethane	63	5.239	5.239	0.000	96	304824	50.0	46.1	
38 Vinyl acetate	43	5.276	5.276	0.000	97	243125	50.0	70.7	
42 2,2-Dichloropropane	77	5.975	5.975	0.000	58	139214	50.0	37.1	
43 cis-1,2-Dichloroethene	96	5.981	5.981	0.000	84	172086	50.0	47.5	
44 2-Butanone (MEK)	43	5.987	5.987	0.000	59	127745	100.0	111.4	
48 Chlorobromomethane	128	6.273	6.273	0.000	91	69111	50.0	47.9	
49 Tetrahydrofuran	42	6.285	6.285	0.000	93	100559	100.0	122.0	
50 Chloroform	83	6.413	6.413	0.000	96	276673	50.0	48.6	
51 1,1,1-Trichloroethane	97	6.584	6.584	0.000	96	209978	50.0	48.4	
52 Cyclohexane	56	6.663	6.663	0.000	95	331508	50.0	47.4	
53 Carbon tetrachloride	117	6.760	6.760	0.000	95	156342	50.0	46.1	
54 1,1-Dichloropropene	75	6.766	6.766	0.000	95	219409	50.0	50.7	
55 Isobutyl alcohol	41	6.936	6.936	0.000	91	122610	1250.0	1822.5	
56 Benzene	78	6.985	6.985	0.000	98	650973	50.0	51.8	
57 1,2-Dichloroethane	62	7.058	7.058	0.000	98	251940	50.0	61.1	
59 n-Heptane	43	7.344	7.344	0.000	90	176958	50.0	44.2	
61 Trichloroethene	130	7.721	7.721	0.000	91	131704	50.0	46.1	
63 Methylcyclohexane	83	7.964	7.964	0.000	95	255851	50.0	45.4	
64 1,2-Dichloropropane	63	7.989	7.989	0.000	89	159226	50.0	47.9	
65 1,4-Dioxane	88	8.074	8.074	0.000	43	26985	1000.0	1298.2	
67 Dibromomethane	93	8.080	8.080	0.000	93	93240	50.0	62.8	
68 Dichlorobromomethane	83	8.275	8.275	0.000	98	183918	50.0	52.8	
71 cis-1,3-Dichloropropene	75	8.719	8.719	0.000	91	200499	50.0	50.2	
72 4-Methyl-2-pentanone (MIBK	43	8.859	8.859	0.000	97	262287	100.0	108.3	
73 Toluene	91	9.047	9.047	0.000	98	602533	50.0	54.9	
74 trans-1,3-Dichloropropene	75	9.297	9.297	0.000	95	158215	50.0	52.6	
75 Ethyl methacrylate	69	9.345	9.345	0.000	91	167339	50.0	60.4	
76 1,1,2-Trichloroethane	97	9.485	9.485	0.000	95	117527	50.0	59.0	
77 Tetrachloroethene	164	9.571	9.571	0.000	93	107630	50.0	54.9	
78 1,3-Dichloropropane	76	9.650	9.650	0.000	94	231866	50.0	62.6	
79 2-Hexanone	43	9.692	9.692	0.000	96	209781	100.0	151.9	
81 Chlorodibromomethane	129	9.863	9.863	0.000	89	97546	50.0	57.7	
82 Ethylene Dibromide	107	9.984	9.984	0.000	99	107986	50.0	59.6	
83 3-Chlorobenzotrifluoride	180	10.428	10.428	0.000	90	196382	50.0	51.5	
84 Chlorobenzene	112	10.471	10.471	0.000	91	371531	50.0	54.3	
85 4-Chlorobenzotrifluoride	180	10.520	10.520	0.000	96	185352	50.0	52.2	
86 1,1,1,2-Tetrachloroethane	131	10.562	10.562	0.000	89	114183	50.0	48.4	
87 Ethylbenzene	106	10.568	10.568	0.000	99	198410	50.0	48.3	
88 m-Xylene & p-Xylene	106	10.696	10.696	0.000	100	246171	50.0	48.6	
89 o-Xylene	106	11.079	11.079	0.000	97	247242	50.0	47.4	
90 Styrene	104	11.104	11.104	0.000	94	416029	50.0	54.2	
91 Bromoform	173	11.292	11.292	0.000	92	50246	50.0	55.5	
92 2-Chlorobenzotrifluoride	180	11.341	11.341	0.000	96	208858	50.0	52.5	
93 Isopropylbenzene	105	11.444	11.444	0.000	98	634772	50.0	49.4	
96 1,1,2,2-Tetrachloroethane	83	11.754	11.754	0.000	96	171331	50.0	64.0	
95 Bromobenzene	156	11.767	11.767	0.000	95	139120	50.0	47.4	
97 trans-1,4-Dichloro-2-buten	53	11.797	11.797	0.000	77	50617	50.0	61.4	
98 1,2,3-Trichloropropane	110	11.815	11.815	0.000	84	53004	50.0	61.8	
99 N-Propylbenzene	120	11.864	11.864	0.000	99	172549	50.0	49.2	
100 2-Chlorotoluene	126	11.955	11.955	0.000	95	147603	50.0	47.8	
101 3-Chlorotoluene	126	12.016	12.016	0.000	97	157247	50.0	48.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.046	12.046	0.000	94	569179	50.0	50.5	
103 4-Chlorotoluene	126	12.077	12.077	0.000	98	152955	50.0	48.3	
104 tert-Butylbenzene	119	12.363	12.363	0.000	92	429155	50.0	49.0	
106 1,2,4-Trimethylbenzene	105	12.424	12.424	0.000	98	593695	50.0	50.9	
107 1,2-dichloro-4-(trifluorom	214	12.454	12.454	0.000	98	173492	50.0	53.3	
108 sec-Butylbenzene	105	12.588	12.588	0.000	96	641847	50.0	47.4	
109 1,3-Dichlorobenzene	146	12.710	12.710	0.000	95	288835	50.0	50.3	
110 4-Isopropyltoluene	119	12.746	12.746	0.000	96	538894	50.0	49.0	
111 1,4-Dichlorobenzene	146	12.819	12.819	0.000	89	299346	50.0	50.4	
113 2,4-Dichloro-1-(triflourom	214	12.831	12.831	0.000	92	172910	50.0	52.9	
114 2,5-Dichlorobenzotrifluori	214	12.868	12.868	0.000	98	185416	50.0	51.5	
116 n-Butylbenzene	91	13.154	13.154	0.000	99	521351	50.0	49.3	
117 1,2-Dichlorobenzene	146	13.166	13.166	0.000	91	290040	50.0	50.5	
118 1,2-Dibromo-3-Chloropropan	75	13.957	13.957	0.000	68	30935	50.0	67.5	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.103	14.103	0.000	99	819804	150.0	152.1	
121 2,3- & 3,4- Dichlorotoluen	125	14.516	14.516	0.000	98	612586	100.0	104.0	
122 1,2,4-Trichlorobenzene	180	14.784	14.784	0.000	94	216183	50.0	48.6	
123 Hexachlorobutadiene	225	14.930	14.930	0.000	92	84225	50.0	48.4	
124 Naphthalene	128	15.052	15.052	0.000	98	490042	50.0	64.1	
125 1,2,3-Trichlorobenzene	180	15.277	15.277	0.000	95	199431	50.0	53.6	
126 2,4,5-Trichlorotoluene	159	16.049	16.049	0.000	0	119873	50.0	43.8	
127 2,3,6-Trichlorotoluene	159	16.147	16.147	0.000	90	110299	50.0	45.2	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		100.0	93.9	
S 131 Xylenes, Total	106				0		100.0	96.0	
S 132 1,3-Dichloropropene, Total	1				0		100.0	102.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260VOAPRI_00108	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	2.00	Units: uL	
VOAACRPRI_00003	Amount Added:	6.00	Units: uL	
VOAVAPRI_00005	Amount Added:	2.00	Units: uL	
voaWKet2 Rest_00002	Amount Added:	2.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

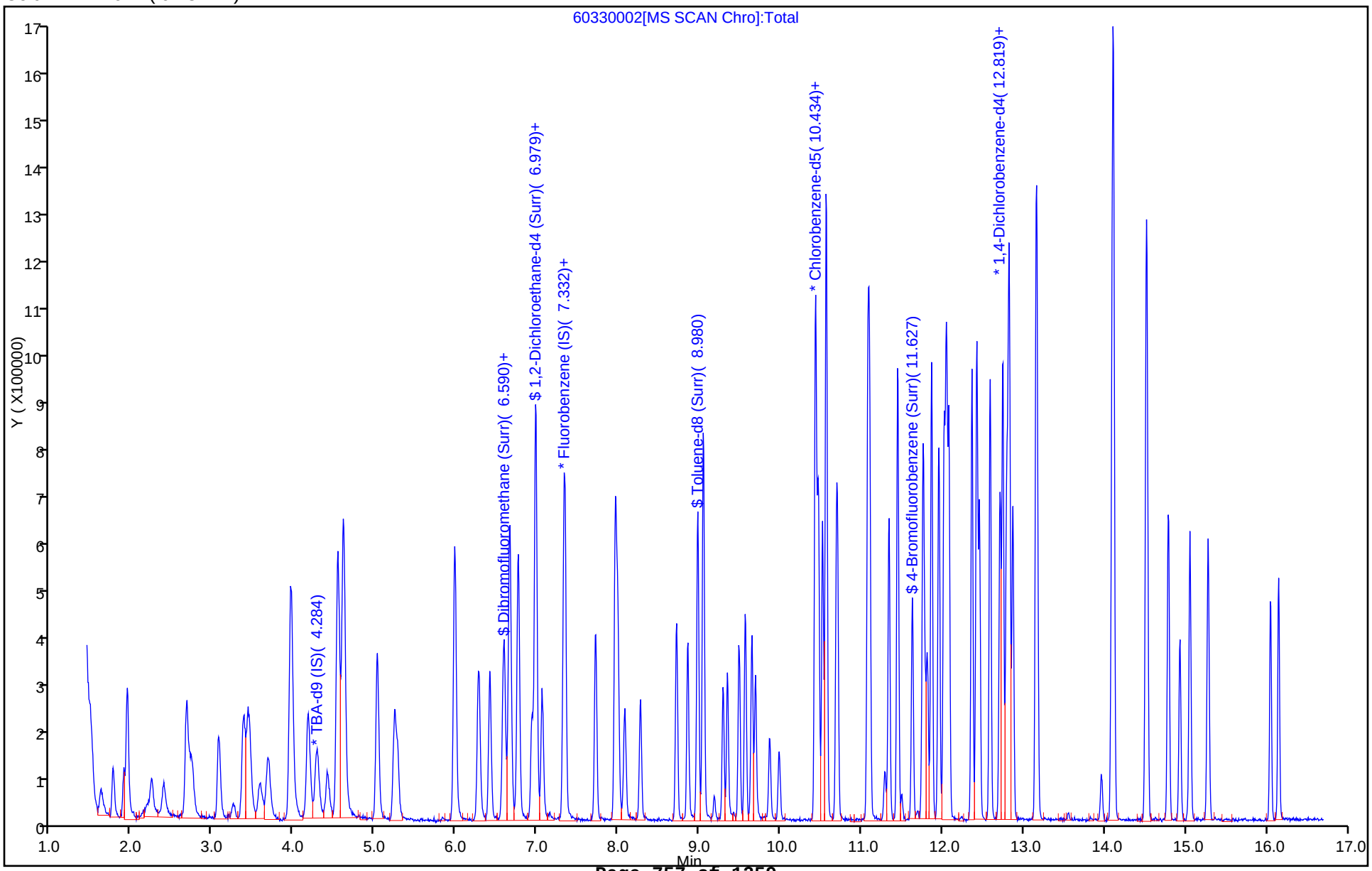
Report Date: 30-Mar-2015 12:55:19 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330002.D

Injection Date:	30-Mar-2015 10:12:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCVIS 180-136938/2 Calibration Date: 03/30/2015 10:12

Instrument ID: CHHP6 Calib Start Date: 01/28/2015 13:58

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/28/2015 16:44

Lab File ID: 60330002.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	0.2650	0.2284	0.1000	8.62	10.0	-13.8	20.0
Chloromethane	Ave	0.4075	0.3169	0.1000	7.78	10.0	-22.2*	20.0
Vinyl chloride	Ave	0.3611	0.2878	0.1000	7.97	10.0	-20.3*	20.0
Bromomethane	Ave	0.1449	0.1413	0.0500	9.75	10.0	-2.5	20.0
Chloroethane	Ave	0.2214	0.2014	0.0500	9.09	10.0	-9.1	20.0
Dichlorofluoromethane	Ave	0.5279	0.5323	0.0100	10.1	10.0	0.9	20.0
Trichlorofluoromethane	Ave	0.4130	0.4398	0.1000	10.6	10.0	6.5	20.0
Ethyl ether	Ave	0.3150	0.3231	0.0100	10.3	10.0	2.6	20.0
Acrolein	Ave	0.0500	0.0315	0.0100	18.9	30.0	-36.9*	20.0
1,1-Dichloroethene	Ave	0.2807	0.2827	0.1000	10.1	10.0	0.7	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2839	0.3012	0.1000	10.6	10.0	6.1	20.0
Acetone	Ave	0.0884	0.1273	0.0500	28.8	20.0	43.9*	20.0
Iodomethane	Ave	0.4159	0.3613	0.0100	8.69	10.0	-13.1	20.0
Carbon disulfide	Ave	0.8315	0.7188	0.1000	8.64	10.0	-13.6	20.0
Allyl chloride	Ave	0.1823	0.1764	0.0100	9.67	10.0	-3.3	20.0
Methyl acetate	Ave	0.2165	0.2675	0.1000	61.8	50.0	23.6*	20.0
Methylene Chloride	Ave	0.4104	0.3509	0.1000	8.55	10.0	-14.5	20.0
tert-Butyl alcohol	Ave	1.130	1.286	0.0100	114	100	13.8	20.0
Acrylonitrile	Ave	0.1129	0.1501	0.0100	133	100	32.9*	20.0
Methyl tert-butyl ether	Ave	0.8884	0.9173	0.1000	10.3	10.0	3.2	20.0
trans-1,2-Dichloroethene	Ave	0.3380	0.3138	0.1000	9.28	10.0	-7.2	20.0
Hexane	Ave	0.4863	0.4415	0.0100	9.08	10.0	-9.2	20.0
1,1-Dichloroethane	Ave	0.6538	0.6028	0.2000	9.22	10.0	-7.8	20.0
Vinyl acetate	Ave	0.3399	0.4808	0.0100	14.1	10.0	41.4*	20.0
2,2-Dichloropropane	Ave	0.3707	0.2753	0.0100	7.43	10.0	-25.7*	20.0
cis-1,2-Dichloroethene	Ave	0.3585	0.3403	0.1000	9.49	10.0	-5.1	20.0
2-Butanone (MEK)	Ave	0.1134	0.1263	0.0500	22.3	20.0	11.4	20.0
Bromochloromethane	Ave	0.1427	0.1367	0.0100	9.58	10.0	-4.2	20.0
Tetrahydrofuran	Ave	0.0815	0.0994	0.0100	24.4	20.0	22.0*	20.0
Chloroform	Ave	0.5629	0.5471	0.2000	9.72	10.0	-2.8	20.0
1,1,1-Trichloroethane	Ave	0.4288	0.4152	0.1000	9.68	10.0	-3.2	20.0
Cyclohexane	Ave	0.6908	0.6555	0.1000	9.49	10.0	-5.1	20.0
Carbon tetrachloride	Ave	0.3357	0.3092	0.1000	9.21	10.0	-7.9	20.0
1,1-Dichloropropene	Ave	0.4279	0.4339	0.0100	10.1	10.0	1.4	20.0
Isobutyl alcohol	Ave	0.0067	0.0097*	0.0100	365	250	45.8*	20.0
Benzene	Ave	1.242	1.287	0.5000	10.4	10.0	3.7	20.0
1,2-Dichloroethane	Ave	0.4076	0.4982	0.1000	12.2	10.0	22.2*	20.0
n-Heptane	Ave	0.3955	0.3499	0.0100	8.85	10.0	-11.5	20.0
Trichloroethene	Ave	0.2828	0.2604	0.2000	9.21	10.0	-7.9	20.0
Methylcyclohexane	Ave	0.5572	0.5059	0.1000	9.08	10.0	-9.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCVIS 180-136938/2 Calibration Date: 03/30/2015 10:12

Instrument ID: CHHP6 Calib Start Date: 01/28/2015 13:58

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/28/2015 16:44

Lab File ID: 60330002.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	0.3285	0.3149	0.1000	9.58	10.0	-4.2	20.0
1,4-Dioxane	Ave	0.0021	0.0027*	0.0100	260	200	29.8*	20.0
Dibromomethane	Ave	0.1468	0.1844	0.0100	12.6	10.0	25.6*	20.0
Bromodichloromethane	Ave	0.3444	0.3637	0.2000	10.6	10.0	5.6	20.0
cis-1,3-Dichloropropene	Ave	0.3952	0.3965	0.2000	10.0	10.0	0.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.128	1.222	0.1000	21.7	20.0	8.3	20.0
Toluene	Ave	5.112	5.615	0.4000	11.0	10.0	9.8	20.0
trans-1,3-Dichloropropene	Ave	1.402	1.474	0.1000	10.5	10.0	5.2	20.0
Ethyl methacrylate	Ave	1.290	1.559	0.0100	12.1	10.0	20.9*	20.0
1,1,2-Trichloroethane	Ave	0.9282	1.095	0.1000	11.8	10.0	18.0	20.0
Tetrachloroethene	Ave	0.9129	1.003	0.2000	11.0	10.0	9.9	20.0
1,3-Dichloropropane	Ave	1.726	2.161	0.0100	12.5	10.0	25.2*	20.0
2-Hexanone	Ave	0.6436	0.9775	0.1000	30.4	20.0	51.9*	20.0
Dibromochloromethane	Ave	0.7880	0.9090	0.1000	11.5	10.0	15.4	20.0
1,2-Dibromoethane (EDB)	Ave	0.8444	1.006	0.1000	11.9	10.0	19.2	20.0
3-Chlorobenzotrifluoride	Ave	1.778	1.830	0.0100	10.3	10.0	2.9	20.0
Chlorobenzene	Ave	3.190	3.462	0.5000	10.9	10.0	8.5	20.0
4-Chlorobenzotrifluoride	Ave	1.655	1.727	0.0100	10.4	10.0	4.4	20.0
1,1,1,2-Tetrachloroethane	Ave	1.100	1.064	0.0100	9.67	10.0	-3.3	20.0
Ethylbenzene	Ave	1.914	1.849	0.1000	9.66	10.0	-3.4	20.0
m-Xylene & p-Xylene	Ave	2.363	2.294	0.1000	9.71	10.0	-2.9	20.0
o-Xylene	Ave	2.428	2.304	0.3000	9.49	10.0	-5.1	20.0
Styrene	Ave	3.575	3.877	0.3000	10.8	10.0	8.4	20.0
Bromoform	Ave	0.4220	0.4682	0.1000	11.1	10.0	11.0	20.0
2-Chlorobenzotrifluoride	Ave	1.855	1.946	0.0100	10.5	10.0	4.9	20.0
Isopropylbenzene	Ave	5.986	5.915	0.1000	9.88	10.0	-1.2	20.0
1,1,2,2-Tetrachloroethane	Ave	1.248	1.597	0.3000	12.8	10.0	27.9*	20.0
Bromobenzene	Ave	0.8752	0.8304	0.0100	9.49	10.0	-5.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2461	0.3021	0.0100	12.3	10.0	22.8*	20.0
1,2,3-Trichloropropane	Ave	0.2561	0.3164	0.0100	12.4	10.0	23.5*	20.0
N-Propylbenzene	Ave	1.046	1.030	0.0100	9.85	10.0	-1.5	20.0
2-Chlorotoluene	Ave	0.9215	0.8810	0.0100	9.56	10.0	-4.4	20.0
3-Chlorotoluene	Ave	0.9634	0.9386	0.0100	9.74	10.0	-2.6	20.0
1,3,5-Trimethylbenzene	Ave	3.361	3.397	0.0100	10.1	10.0	1.1	20.0
4-Chlorotoluene	Ave	0.9458	0.9130	0.0100	9.65	10.0	-3.5	20.0
tert-Butylbenzene	Ave	2.616	2.562	0.0100	9.79	10.0	-2.1	20.0
1,2,4-Trimethylbenzene	Ave	3.478	3.544	0.0100	10.2	10.0	1.9	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.9718	1.036	0.0100	10.7	10.0	6.6	20.0
sec-Butylbenzene	Ave	4.045	3.831	0.0100	9.47	10.0	-5.3	20.0
1,3-Dichlorobenzene	Ave	1.715	1.724	0.6000	10.1	10.0	0.5	20.0
4-Isopropyltoluene	Ave	3.281	3.217	0.0100	9.80	10.0	-2.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCVIS 180-136938/2 Calibration Date: 03/30/2015 10:12

Instrument ID: CHHP6 Calib Start Date: 01/28/2015 13:58

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/28/2015 16:44

Lab File ID: 60330002.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.774	1.787	0.5000	10.1	10.0	0.7	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.9753	1.032	0.0100	10.6	10.0	5.8	20.0
2,5-Dichlorobenzotrifluoride	Ave	1.075	1.107	0.0100	10.3	10.0	3.0	20.0
n-Butylbenzene	Ave	3.155	3.112	0.0100	9.86	10.0	-1.4	20.0
1,2-Dichlorobenzene	Ave	1.714	1.731	0.4000	10.1	10.0	1.0	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.609	1.631	0.0100	30.4	30.0	1.4	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.757	1.828	0.0100	20.8	20.0	4.0	20.0
1,2,4-Trichlorobenzene	Ave	1.328	1.290	0.2000	9.72	10.0	-2.8	20.0
Hexachlorobutadiene	Ave	0.5193	0.5027	0.0100	9.68	10.0	-3.2	20.0
Naphthalene	Ave	2.282	2.925	0.0100	12.8	10.0	28.2*	20.0
1,2,3-Trichlorobenzene	Ave	1.111	1.190	0.0100	10.7	10.0	7.2	20.0
2,4,5-Trichlorotoluene	Ave	0.8175	0.7155	0.0100	8.75	10.0	-12.5	20.0
2,3,6-Trichlorotoluene	Ave	0.7286	0.6584	0.0100	9.04	10.0	-9.6	20.0
Dibromofluoromethane (Surr)	Ave	0.2262	0.2283		10.1	10.0	0.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3237	0.3756		11.6	10.0	16.0	20.0
Toluene-d8 (Surr)	Ave	3.941	4.169		10.6	10.0	5.8	20.0
4-Bromofluorobenzene (Surr)	Ave	1.677	1.709		10.2	10.0	1.9	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 30-Mar-2015 10:12:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006236-002
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 30-Mar-2015 12:55:18 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: fergusond Date: 30-Mar-2015 10:45:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.284	4.284	0.000	92	229623	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.332	7.332	0.000	97	505716	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.440	10.440	0.000	91	107308	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.795	12.795	0.000	95	167539	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.596	6.596	0.000	94	115432	50.0	50.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.973	6.973	0.000	70	189937	50.0	58.0	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	94	447392	50.0	52.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.627	11.627	0.000	82	183399	50.0	51.0	
11 Dichlorodifluoromethane	85	1.632	1.632	0.000	96	115503	50.0	43.1	
12 Chloromethane	50	1.765	1.765	0.000	99	160281	50.0	38.9	
13 Vinyl chloride	62	1.899	1.899	0.000	98	145532	50.0	39.8	
14 Butadiene	39	1.942	1.942	0.000	90	154310	50.0	39.6	
15 Bromomethane	94	2.246	2.246	0.000	92	71448	50.0	48.7	
16 Chloroethane	64	2.392	2.392	0.000	98	101838	50.0	45.5	
17 Dichlorofluoromethane	67	2.672	2.672	0.000	97	269214	50.0	50.4	
18 Trichlorofluoromethane	101	2.714	2.714	0.000	81	222408	50.0	53.2	
20 Ethyl ether	59	3.061	3.061	0.000	96	163401	50.0	51.3	
21 Acrolein	56	3.244	3.244	0.000	94	47834	150.0	94.6	
22 1,1-Dichloroethene	96	3.371	3.371	0.000	93	142948	50.0	50.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.432	3.432	0.000	96	152322	50.0	53.0	
24 Acetone	43	3.451	3.451	0.000	96	128733	100.0	143.9	
25 Iodomethane	142	3.584	3.584	0.000	97	182725	50.0	43.4	
26 Carbon disulfide	76	3.682	3.682	0.000	99	363482	50.0	43.2	
29 3-Chloro-1-propene	76	3.962	3.962	0.000	60	89201	50.0	48.4	
30 Methyl acetate	43	3.968	3.968	0.000	98	676422	250.0	308.9	
31 Methylene Chloride	84	4.168	4.168	0.000	98	177457	50.0	42.7	
32 2-Methyl-2-propanol	59	4.412	4.412	0.000	93	147622	500.0	568.9	
33 Acrylonitrile	53	4.539	4.539	0.000	100	758843	500.0	664.7	
35 Methyl tert-butyl ether	73	4.606	4.606	0.000	98	463869	50.0	51.6	
34 trans-1,2-Dichloroethene	96	4.606	4.606	0.000	73	158707	50.0	46.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.026	5.026	0.000	93	223252	50.0	45.4	
37 1,1-Dichloroethane	63	5.239	5.239	0.000	96	304824	50.0	46.1	
38 Vinyl acetate	43	5.276	5.276	0.000	97	243125	50.0	70.7	
42 2,2-Dichloropropane	77	5.975	5.975	0.000	58	139214	50.0	37.1	
43 cis-1,2-Dichloroethene	96	5.981	5.981	0.000	84	172086	50.0	47.5	
44 2-Butanone (MEK)	43	5.987	5.987	0.000	59	127745	100.0	111.4	
48 Chlorobromomethane	128	6.273	6.273	0.000	91	69111	50.0	47.9	
49 Tetrahydrofuran	42	6.285	6.285	0.000	93	100559	100.0	122.0	
50 Chloroform	83	6.413	6.413	0.000	96	276673	50.0	48.6	
51 1,1,1-Trichloroethane	97	6.584	6.584	0.000	96	209978	50.0	48.4	
52 Cyclohexane	56	6.663	6.663	0.000	95	331508	50.0	47.4	
53 Carbon tetrachloride	117	6.760	6.760	0.000	95	156342	50.0	46.1	
54 1,1-Dichloropropene	75	6.766	6.766	0.000	95	219409	50.0	50.7	
55 Isobutyl alcohol	41	6.936	6.936	0.000	91	122610	1250.0	1822.5	
56 Benzene	78	6.985	6.985	0.000	98	650973	50.0	51.8	
57 1,2-Dichloroethane	62	7.058	7.058	0.000	98	251940	50.0	61.1	
59 n-Heptane	43	7.344	7.344	0.000	90	176958	50.0	44.2	
61 Trichloroethene	130	7.721	7.721	0.000	91	131704	50.0	46.1	
63 Methylcyclohexane	83	7.964	7.964	0.000	95	255851	50.0	45.4	
64 1,2-Dichloropropane	63	7.989	7.989	0.000	89	159226	50.0	47.9	
65 1,4-Dioxane	88	8.074	8.074	0.000	43	26985	1000.0	1298.2	
67 Dibromomethane	93	8.080	8.080	0.000	93	93240	50.0	62.8	
68 Dichlorobromomethane	83	8.275	8.275	0.000	98	183918	50.0	52.8	
71 cis-1,3-Dichloropropene	75	8.719	8.719	0.000	91	200499	50.0	50.2	
72 4-Methyl-2-pentanone (MIBK	43	8.859	8.859	0.000	97	262287	100.0	108.3	
73 Toluene	91	9.047	9.047	0.000	98	602533	50.0	54.9	
74 trans-1,3-Dichloropropene	75	9.297	9.297	0.000	95	158215	50.0	52.6	
75 Ethyl methacrylate	69	9.345	9.345	0.000	91	167339	50.0	60.4	
76 1,1,2-Trichloroethane	97	9.485	9.485	0.000	95	117527	50.0	59.0	
77 Tetrachloroethene	164	9.571	9.571	0.000	93	107630	50.0	54.9	
78 1,3-Dichloropropane	76	9.650	9.650	0.000	94	231866	50.0	62.6	
79 2-Hexanone	43	9.692	9.692	0.000	96	209781	100.0	151.9	
81 Chlorodibromomethane	129	9.863	9.863	0.000	89	97546	50.0	57.7	
82 Ethylene Dibromide	107	9.984	9.984	0.000	99	107986	50.0	59.6	
83 3-Chlorobenzotrifluoride	180	10.428	10.428	0.000	90	196382	50.0	51.5	
84 Chlorobenzene	112	10.471	10.471	0.000	91	371531	50.0	54.3	
85 4-Chlorobenzotrifluoride	180	10.520	10.520	0.000	96	185352	50.0	52.2	
86 1,1,1,2-Tetrachloroethane	131	10.562	10.562	0.000	89	114183	50.0	48.4	
87 Ethylbenzene	106	10.568	10.568	0.000	99	198410	50.0	48.3	
88 m-Xylene & p-Xylene	106	10.696	10.696	0.000	100	246171	50.0	48.6	
89 o-Xylene	106	11.079	11.079	0.000	97	247242	50.0	47.4	
90 Styrene	104	11.104	11.104	0.000	94	416029	50.0	54.2	
91 Bromoform	173	11.292	11.292	0.000	92	50246	50.0	55.5	
92 2-Chlorobenzotrifluoride	180	11.341	11.341	0.000	96	208858	50.0	52.5	
93 Isopropylbenzene	105	11.444	11.444	0.000	98	634772	50.0	49.4	
96 1,1,2,2-Tetrachloroethane	83	11.754	11.754	0.000	96	171331	50.0	64.0	
95 Bromobenzene	156	11.767	11.767	0.000	95	139120	50.0	47.4	
97 trans-1,4-Dichloro-2-buten	53	11.797	11.797	0.000	77	50617	50.0	61.4	
98 1,2,3-Trichloropropane	110	11.815	11.815	0.000	84	53004	50.0	61.8	
99 N-Propylbenzene	120	11.864	11.864	0.000	99	172549	50.0	49.2	
100 2-Chlorotoluene	126	11.955	11.955	0.000	95	147603	50.0	47.8	
101 3-Chlorotoluene	126	12.016	12.016	0.000	97	157247	50.0	48.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.046	12.046	0.000	94	569179	50.0	50.5	
103 4-Chlorotoluene	126	12.077	12.077	0.000	98	152955	50.0	48.3	
104 tert-Butylbenzene	119	12.363	12.363	0.000	92	429155	50.0	49.0	
106 1,2,4-Trimethylbenzene	105	12.424	12.424	0.000	98	593695	50.0	50.9	
107 1,2-dichloro-4-(trifluorom	214	12.454	12.454	0.000	98	173492	50.0	53.3	
108 sec-Butylbenzene	105	12.588	12.588	0.000	96	641847	50.0	47.4	
109 1,3-Dichlorobenzene	146	12.710	12.710	0.000	95	288835	50.0	50.3	
110 4-Isopropyltoluene	119	12.746	12.746	0.000	96	538894	50.0	49.0	
111 1,4-Dichlorobenzene	146	12.819	12.819	0.000	89	299346	50.0	50.4	
113 2,4-Dichloro-1-(triflourom	214	12.831	12.831	0.000	92	172910	50.0	52.9	
114 2,5-Dichlorobenzotrifluori	214	12.868	12.868	0.000	98	185416	50.0	51.5	
116 n-Butylbenzene	91	13.154	13.154	0.000	99	521351	50.0	49.3	
117 1,2-Dichlorobenzene	146	13.166	13.166	0.000	91	290040	50.0	50.5	
118 1,2-Dibromo-3-Chloropropan	75	13.957	13.957	0.000	68	30935	50.0	67.5	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.103	14.103	0.000	99	819804	150.0	152.1	
121 2,3- & 3,4- Dichlorotoluen	125	14.516	14.516	0.000	98	612586	100.0	104.0	
122 1,2,4-Trichlorobenzene	180	14.784	14.784	0.000	94	216183	50.0	48.6	
123 Hexachlorobutadiene	225	14.930	14.930	0.000	92	84225	50.0	48.4	
124 Naphthalene	128	15.052	15.052	0.000	98	490042	50.0	64.1	
125 1,2,3-Trichlorobenzene	180	15.277	15.277	0.000	95	199431	50.0	53.6	
126 2,4,5-Trichlorotoluene	159	16.049	16.049	0.000	0	119873	50.0	43.8	
127 2,3,6-Trichlorotoluene	159	16.147	16.147	0.000	90	110299	50.0	45.2	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		100.0	93.9	
S 131 Xylenes, Total	106				0		100.0	96.0	
S 132 1,3-Dichloropropene, Total	1				0		100.0	102.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260VOAPRI_00108	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	2.00	Units: uL	
VOAACRPRI_00003	Amount Added:	6.00	Units: uL	
VOAVAPRI_00005	Amount Added:	2.00	Units: uL	
voaWKet2 Rest_00002	Amount Added:	2.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

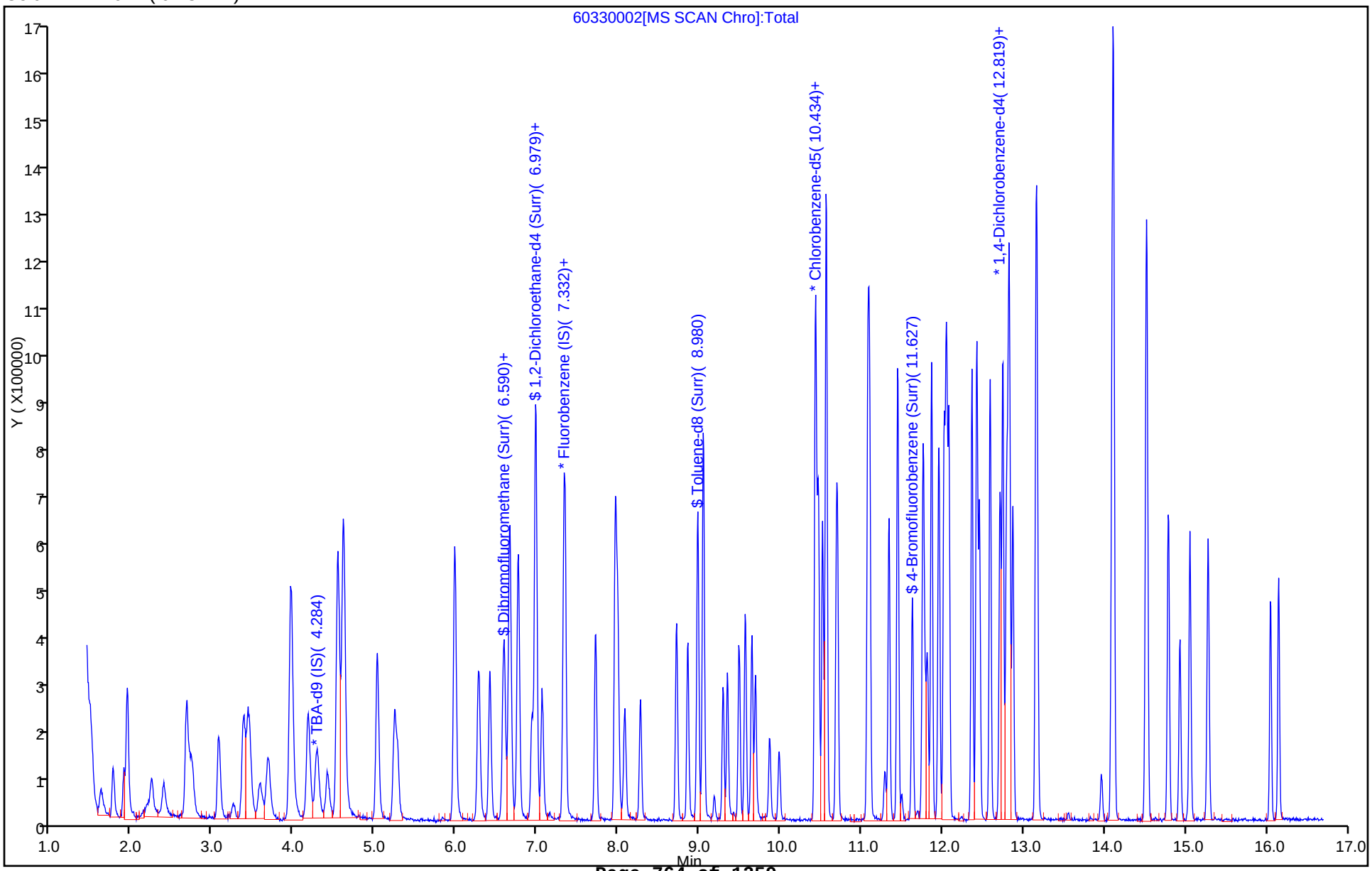
Report Date: 30-Mar-2015 12:55:19 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330002.D

Injection Date:	30-Mar-2015 10:12:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316001.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 16-Mar-2015 10:49:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0006031-001
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:24 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 16-Mar-2015 11:15:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.341	8.341	0.000	0	133980	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

VOA BFB 25_00001 Amount Added: 1.00 Units: uL

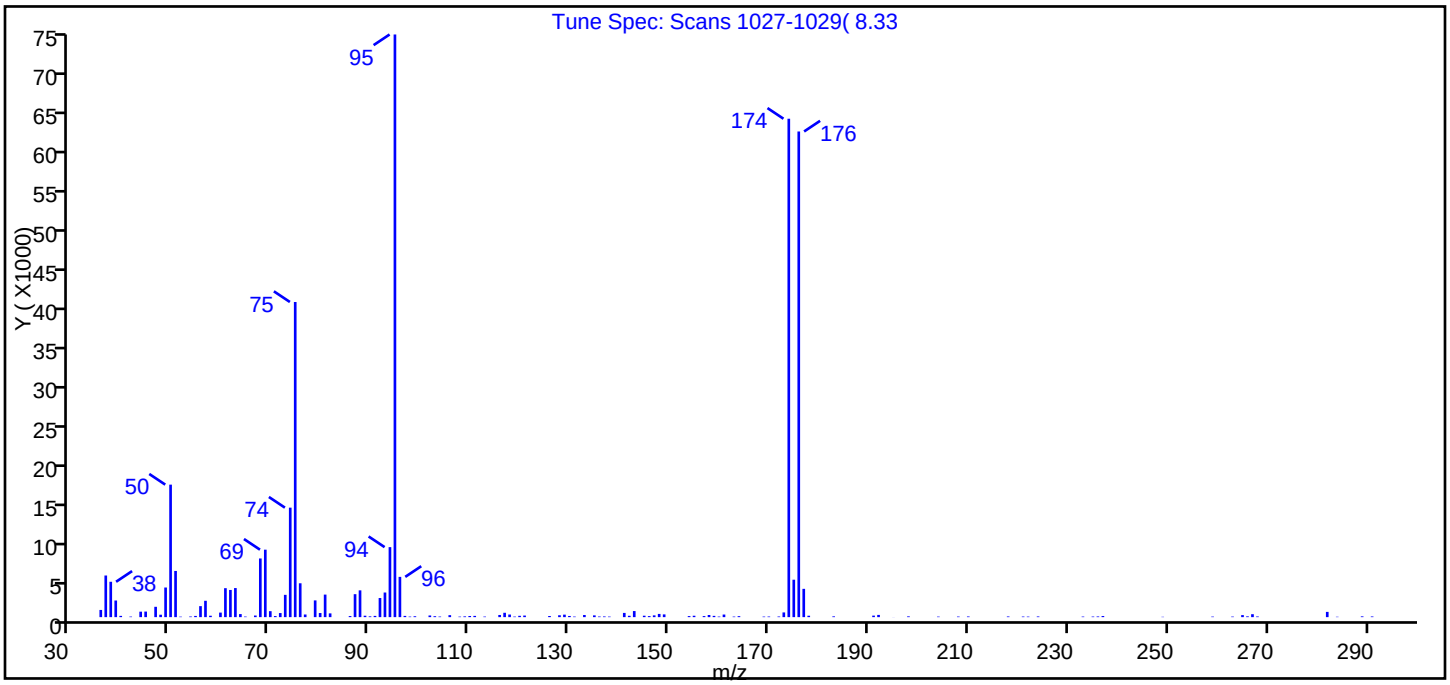
Report Date: 17-Mar-2015 10:59:25 Chrom Revision: 2.2 15-Jan-2015 13:05:58

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316001.D
Injection Date: 16-Mar-2015 10:49:30 Instrument ID: CHHP5
Lims ID: BFB
Client ID:
Operator ID: 001562 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.7
75	30 to 60% of m/z 95	54.1
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.8 (0.9)
174	50 to 120% of m/z 95	85.5
175	5 to 9% of m/z 174	6.4 (7.5)
176	Greater than 95% but less than 101% of m/z 174	83.4 (97.4)
177	5 to 9% of m/z 176	4.9 (5.8)

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316001.D\MSVOA_LL_CHHP5.rslt\spectra.d
Injection Date: 16-Mar-2015 10:49:30
Spectrum: Tune Spec: Scans 1027-1029(8.33
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 132

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	922	75.00	40336	119.00	71	173.00	604
37.00	5329	76.00	4335	120.00	170	174.00	63792
38.00	4528	77.00	339	121.00	203	175.00	4791
39.00	2130	79.00	2142	126.00	145	176.00	62160
40.00	163	80.00	527	128.00	241	177.00	3622
42.00	71	81.00	2886	129.00	320	178.00	182
44.00	700	82.00	482	130.00	150	183.00	99
45.00	713	86.00	138	131.00	72	191.00	196
47.00	1323	87.00	2939	133.00	273	192.00	286
48.00	310	88.00	3429	135.00	226	195.00	9
49.00	3792	89.00	182	136.00	81	198.00	98
50.00	16960	90.00	101	137.00	87	204.00	68
51.00	5912	91.00	160	138.00	71	208.00	75
52.00	63	92.00	2448	141.00	541	210.00	85
54.00	83	93.00	3152	142.00	172	218.00	87
55.00	155	94.00	8961	143.00	779	221.00	76
56.00	1409	95.00	74576	145.00	182	222.00	70
57.00	2093	96.00	5155	146.00	133	224.00	88
58.00	180	97.00	159	147.00	227	233.00	73
60.00	582	98.00	71	148.00	412	235.00	76
61.00	3707	99.00	112	149.00	352	236.00	88
62.00	3479	102.00	212	154.00	135	237.00	141
63.00	3721	103.00	120	155.00	179	249.00	43
64.00	392	104.00	75	157.00	135	259.00	70
65.00	71	106.00	253	158.00	274	263.00	71
67.00	207	108.00	68	159.00	163	265.00	262
68.00	7510	109.00	97	160.00	73	266.00	100
69.00	8635	110.00	146	161.00	334	267.00	377
70.00	764	111.00	161	163.00	71	268.00	85
71.00	139	113.00	71	164.00	125	282.00	672
72.00	524	116.00	278	169.00	70	284.00	50
73.00	2854	117.00	558	170.00	78	289.00	99
74.00	14015	118.00	332	172.00	82	291.00	87

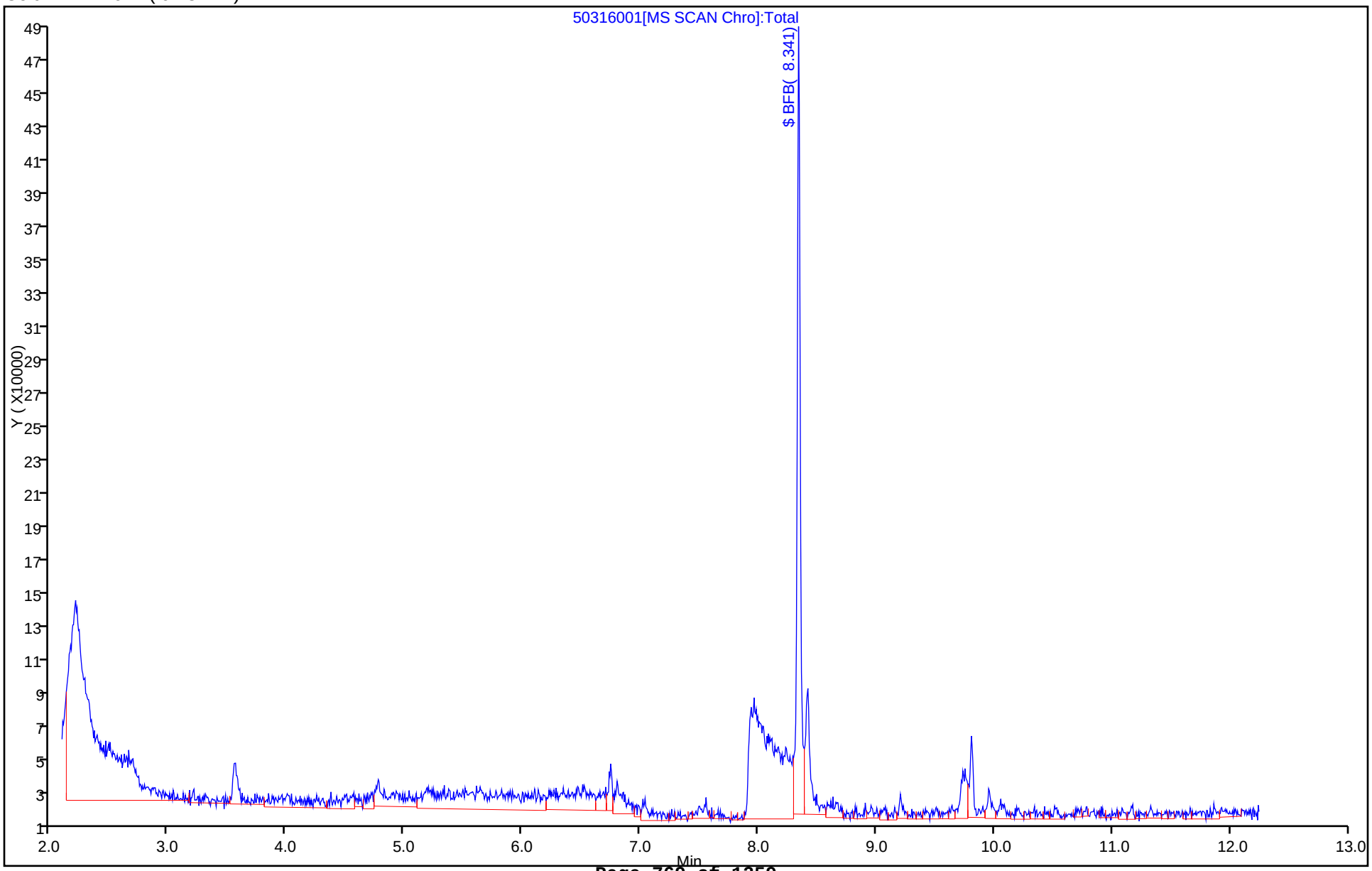
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	922	75.00	40336	119.00	71	173.00	604
37.00	5329	76.00	4335	120.00	170	174.00	63792
38.00	4528	77.00	339	121.00	203	175.00	4791
39.00	2130	79.00	2142	126.00	145	176.00	62160
40.00	163	80.00	527	128.00	241	177.00	3622
42.00	71	81.00	2886	129.00	320	178.00	182
44.00	700	82.00	482	130.00	150	183.00	99
45.00	713	86.00	138	131.00	72	191.00	196
47.00	1323	87.00	2939	133.00	273	192.00	286
48.00	310	88.00	3429	135.00	226	195.00	9
49.00	3792	89.00	182	136.00	81	198.00	98
50.00	16960	90.00	101	137.00	87	204.00	68
51.00	5912	91.00	160	138.00	71	208.00	75
52.00	63	92.00	2448	141.00	541	210.00	85
54.00	83	93.00	3152	142.00	172	218.00	87
55.00	155	94.00	8961	143.00	779	221.00	76
56.00	1409	95.00	74576	145.00	182	222.00	70
57.00	2093	96.00	5155	146.00	133	224.00	88
58.00	180	97.00	159	147.00	227	233.00	73
60.00	582	98.00	71	148.00	412	235.00	76
61.00	3707	99.00	112	149.00	352	236.00	88
62.00	3479	102.00	212	154.00	135	237.00	141
63.00	3721	103.00	120	155.00	179	249.00	43
64.00	392	104.00	75	157.00	135	259.00	70
65.00	71	106.00	253	158.00	274	263.00	71
67.00	207	108.00	68	159.00	163	265.00	262
68.00	7510	109.00	97	160.00	73	266.00	100
69.00	8635	110.00	146	161.00	334	267.00	377
70.00	764	111.00	161	163.00	71	268.00	85
71.00	139	113.00	71	164.00	125	282.00	672
72.00	524	116.00	278	169.00	70	284.00	50
73.00	2854	117.00	558	170.00	78	289.00	99
74.00	14015	118.00	332	172.00	82	291.00	87

Report Date: 17-Mar-2015 10:59:25 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316001.D				
Injection Date:	16-Mar-2015 10:49:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330005.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 30-Mar-2015 11:14:30 ALS Bottle#: 1 Worklist Smp#: 5
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0006238-005
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 30-Mar-2015 13:14:58 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: fergusond Date: 30-Mar-2015 11:28:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.337	8.337	0.000	0	159377	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

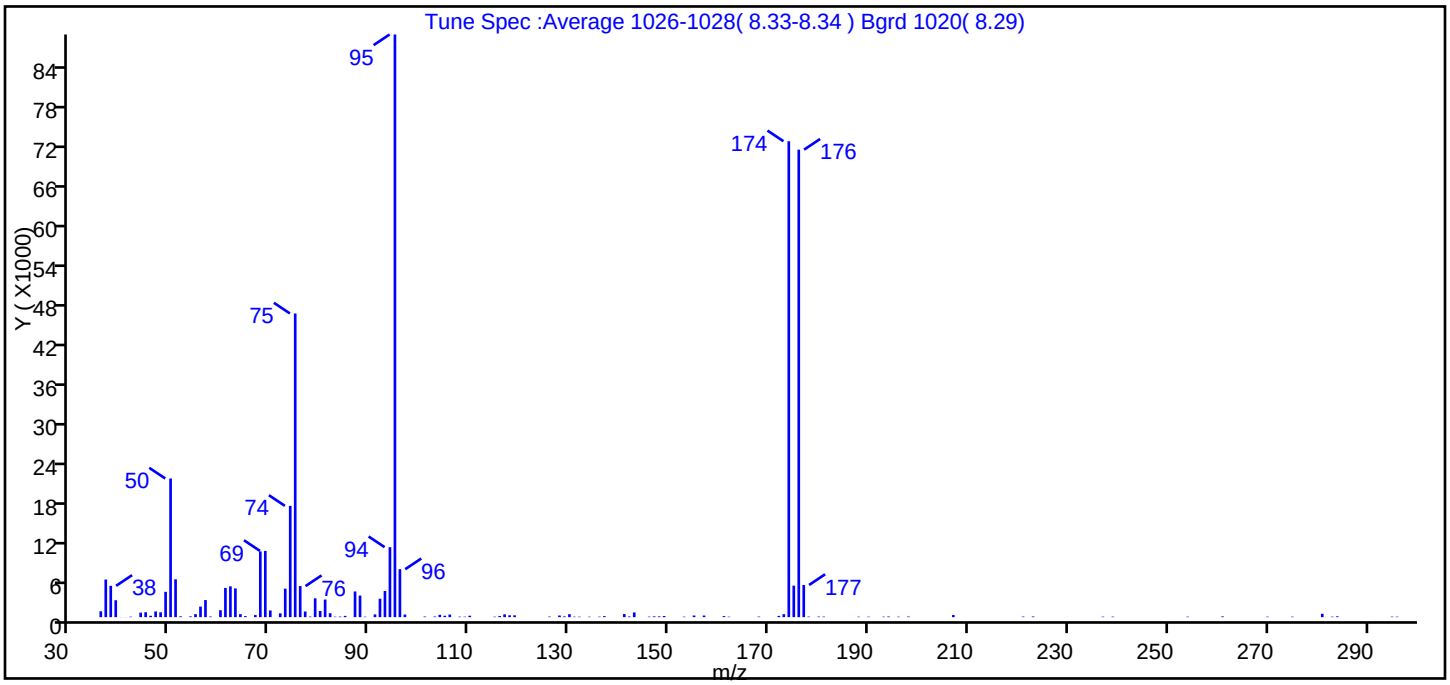
VOABFB25_00059 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330005.D				
Injection Date:	30-Mar-2015 11:14:30	Instrument ID:	CHHP5		
Lims ID:	BFB				
Client ID:					
Operator ID:	001562	ALS Bottle#:	1	Worklist Smp#:	5
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Tune Method:	BFB Method 8260				

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.8
75	30 to 60% of m/z 95	52.1
96	5 to 9% of m/z 95	8.2
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	81.7
175	5 to 9% of m/z 174	5.4 (6.6)
176	Greater than 95% but less than 101% of m/z 174	80.2 (98.2)
177	5 to 9% of m/z 176	5.5 (6.9)

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330005.D\MSVOA_LL_CHHP5.rslt\spectra.d
Injection Date: 30-Mar-2015 11:14:30
Spectrum: Tune Spec :Average 1026-1028(8.33-8.34) Bgrd 1020(8.29)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 119

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	895	70.00	1018	108.00	73	172.00	191
37.00	5725	72.00	578	109.00	70	173.00	451
38.00	4767	73.00	4337	110.00	216	174.00	72464
39.00	2576	74.00	16944	115.00	68	175.00	4798
40.00	16	75.00	46240	116.00	170	176.00	71184
41.00	13	76.00	4729	117.00	421	177.00	4900
42.00	71	77.00	863	118.00	281	178.00	82
44.00	685	78.00	88	119.00	278	180.00	86
45.00	743	79.00	2868	126.00	88	181.00	79
46.00	206	80.00	936	128.00	249	188.00	69
47.00	867	81.00	2681	129.00	112	190.00	70
48.00	738	82.00	595	130.00	445	193.00	72
49.00	3855	83.00	68	131.00	68	194.00	98
50.00	21112	84.00	86	132.00	71	196.00	71
51.00	5761	85.00	193	134.00	69	198.00	91
52.00	126	87.00	3912	136.00	72	207.00	317
54.00	112	88.00	3283	137.00	152	221.00	86
55.00	458	89.00	70	141.00	471	223.00	102
56.00	1605	91.00	417	142.00	102	237.00	75
57.00	2602	92.00	2805	143.00	720	239.00	77
58.00	96	93.00	3979	146.00	75	254.00	73
60.00	1050	94.00	10657	147.00	115	261.00	110
61.00	4450	95.00	88720	148.00	113	270.00	72
62.00	4695	96.00	7301	149.00	175	275.00	73
63.00	4375	97.00	396	153.00	73	281.00	514
64.00	456	101.00	92	155.00	247	283.00	71
65.00	159	103.00	98	157.00	244	284.00	123
67.00	316	104.00	358	161.00	155	295.00	76
68.00	10004	105.00	213	162.00	68	296.00	72
69.00	10082	106.00	393	168.00	84		

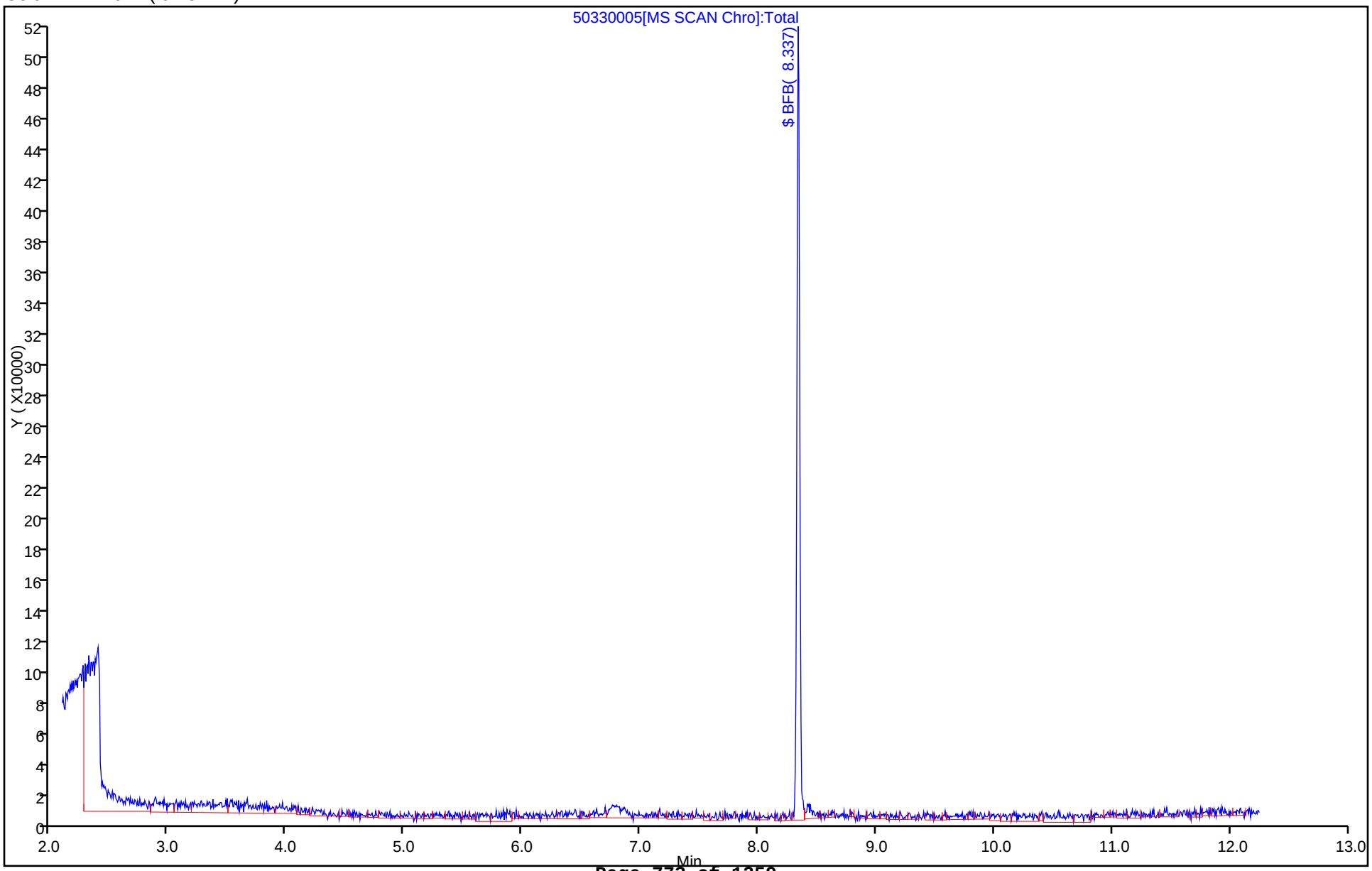
Report Date: 30-Mar-2015 13:14:59 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330005.D

Injection Date:	30-Mar-2015 11:14:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331004.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 31-Mar-2015 09:26:30 ALS Bottle#: 1 Worklist Smp#: 4
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0006255-004
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 13:22:46 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 09:57:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.335	8.335	0.000	0	168525	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

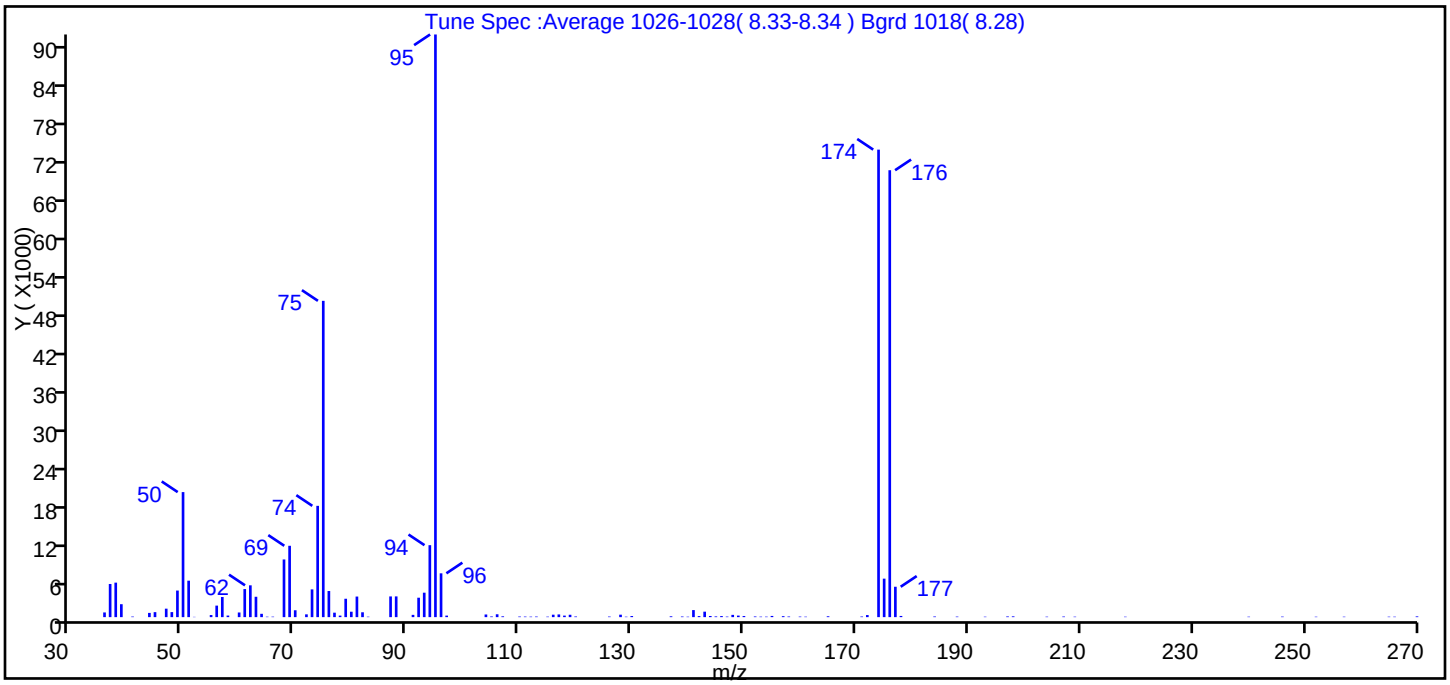
VOABFB25_00059 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331004.D				
Injection Date:	31-Mar-2015 09:26:30	Instrument ID:	CHHP5		
Lims ID:	BFB				
Client ID:					
Operator ID:	001562	ALS Bottle#:	1	Worklist Smp#:	4
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Tune Method:	BFB Method 8260				

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.5
75	30 to 60% of m/z 95	54.3
96	5 to 9% of m/z 95	7.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	80.2
175	5 to 9% of m/z 174	6.6 (8.2)
176	Greater than 95% but less than 101% of m/z 174	76.7 (95.6)
177	5 to 9% of m/z 176	5.2 (6.8)

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331004.D\MSVOA_LL_CHHP5.rslt\spectra.d
Injection Date: 31-Mar-2015 09:26:30
Spectrum: Tune Spec :Average 1026-1028(8.33-8.34) Bgrd 1018(8.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	742	73.00	4380	115.00	77	158.00	98
37.00	5230	74.00	17560	116.00	387	160.00	88
38.00	5444	75.00	49904	117.00	427	161.00	73
39.00	2042	76.00	4122	118.00	243	165.00	135
41.00	90	77.00	705	119.00	376	171.00	97
44.00	670	78.00	243	120.00	102	172.00	328
45.00	789	79.00	2902	126.00	93	174.00	73760
47.00	1337	80.00	857	128.00	387	175.00	6073
48.00	794	81.00	3249	129.00	70	176.00	70512
49.00	4195	82.00	768	130.00	172	177.00	4796
50.00	19728	83.00	72	137.00	131	178.00	188
51.00	5753	87.00	3268	139.00	98	184.00	102
52.00	43	88.00	3273	140.00	70	188.00	86
55.00	332	91.00	360	141.00	1114	193.00	70
56.00	1819	92.00	3066	142.00	164	197.00	110
57.00	3175	93.00	3859	143.00	863	198.00	123
58.00	250	94.00	11354	144.00	181	204.00	74
60.00	734	95.00	91928	145.00	116	207.00	95
61.00	4430	96.00	6913	146.00	167	209.00	73
62.00	5020	97.00	243	147.00	86	218.00	68
63.00	3214	104.00	420	148.00	358	240.00	71
64.00	526	105.00	107	149.00	245	246.00	84
65.00	71	106.00	453	150.00	172	252.00	68
66.00	76	107.00	128	152.00	106	257.00	70
68.00	9102	110.00	95	153.00	79	265.00	73
69.00	11258	111.00	88	154.00	78	266.00	71
70.00	1086	112.00	79	155.00	190	270.00	119
72.00	442	113.00	93	157.00	150		

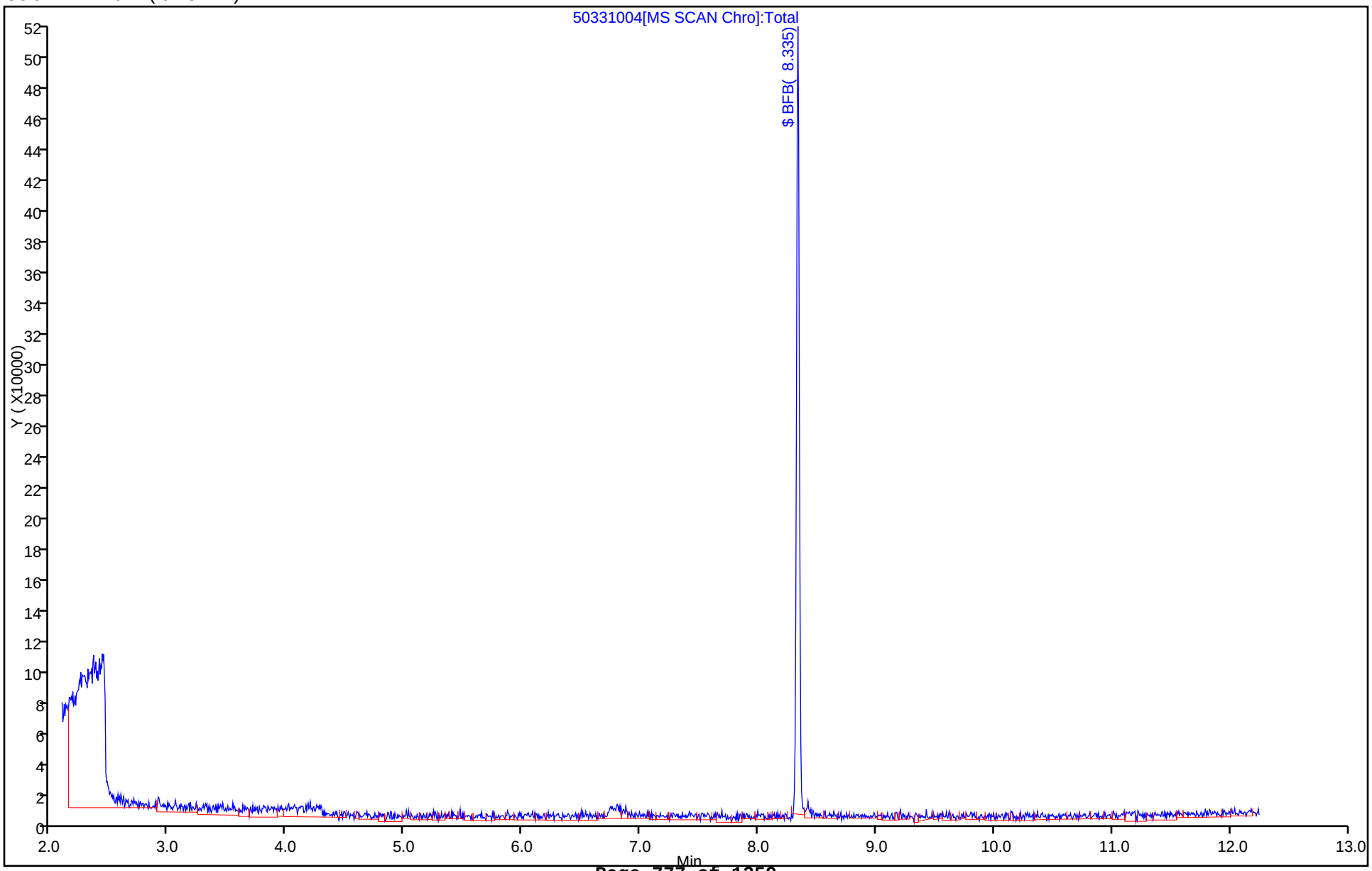
Report Date: 31-Mar-2015 13:22:46 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331004.D

Injection Date:	31-Mar-2015 09:26:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401004.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 01-Apr-2015 10:42:30 ALS Bottle#: 1 Worklist Smp#: 4
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0006280-004
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Apr-2015 14:42:48 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: fergusond Date: 01-Apr-2015 10:57:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.334	8.334	0.000	0	260723	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

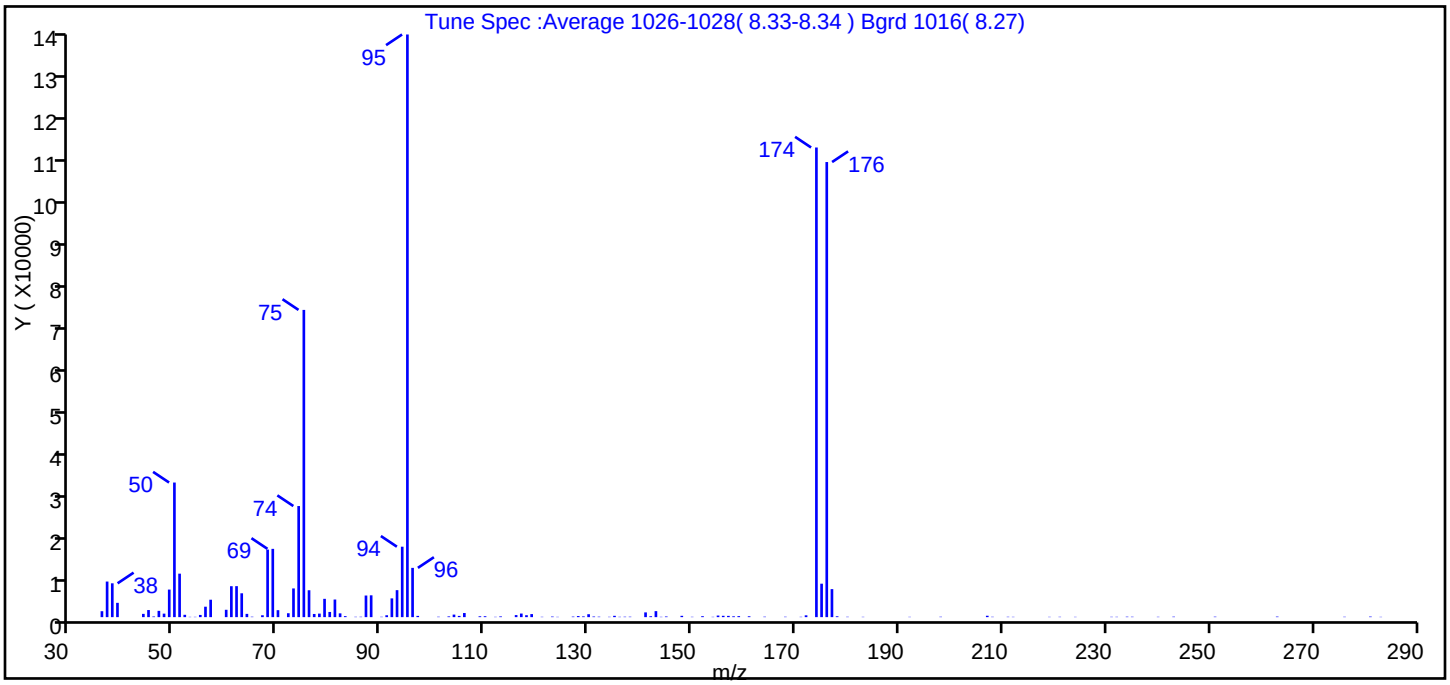
VOABFB25_00059 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401004.D
Injection Date: 01-Apr-2015 10:42:30 Instrument ID: CHHP5
Lims ID: BFB
Client ID:
Operator ID: 001562 ALS Bottle#: 1 Worklist Smp#: 4
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.1
75	30 to 60% of m/z 95	52.7
96	5 to 9% of m/z 95	8.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	80.6
175	5 to 9% of m/z 174	5.7 (7.1)
176	Greater than 95% but less than 101% of m/z 174	78.1 (96.9)
177	5 to 9% of m/z 176	4.8 (6.2)

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401004.D\MSVOA_LL_CHHP5.rslt\spectra.d
Injection Date: 01-Apr-2015 10:42:30
Spectrum: Tune Spec :Average 1026-1028(8.33-8.34) Bgrd 1016(8.27)
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	1363	76.00	6168	119.00	704	171.00	77
37.00	8163	77.00	729	121.00	77	172.00	418
38.00	7759	78.00	812	123.00	131	174.00	107712
39.00	3281	79.00	4200	124.00	67	175.00	7671
44.00	751	80.00	1190	127.00	125	176.00	104376
45.00	1628	81.00	4042	128.00	248	177.00	6427
46.00	148	82.00	869	129.00	167	178.00	196
47.00	1444	83.00	231	130.00	671	180.00	84
48.00	804	85.00	81	131.00	141	183.00	72
49.00	6323	86.00	92	132.00	107	192.00	69
50.00	30872	87.00	4957	134.00	78	198.00	92
51.00	9973	88.00	5006	135.00	305	207.00	319
52.00	536	90.00	84	136.00	78	208.00	84
53.00	67	91.00	433	137.00	99	211.00	85
54.00	69	92.00	4302	138.00	101	212.00	71
55.00	504	93.00	6189	141.00	1089	219.00	69
56.00	2394	94.00	16156	142.00	206	221.00	80
57.00	3995	95.00	133632	143.00	1378	224.00	68
60.00	1688	96.00	11300	144.00	74	231.00	79
61.00	7096	97.00	288	145.00	150	232.00	78
62.00	7109	101.00	93	148.00	304	234.00	106
63.00	5471	103.00	169	150.00	78	235.00	93
64.00	749	104.00	585	152.00	214	240.00	79
65.00	100	105.00	282	154.00	71	243.00	108
67.00	431	106.00	945	155.00	366	251.00	107
68.00	15492	109.00	196	156.00	305	263.00	127
69.00	15661	110.00	209	157.00	291	276.00	85
70.00	1600	112.00	72	158.00	189	281.00	130
72.00	897	113.00	167	159.00	231	283.00	67
73.00	6583	116.00	472	161.00	198		
74.00	25480	117.00	826	164.00	103		
75.00	70464	118.00	445	168.00	93		

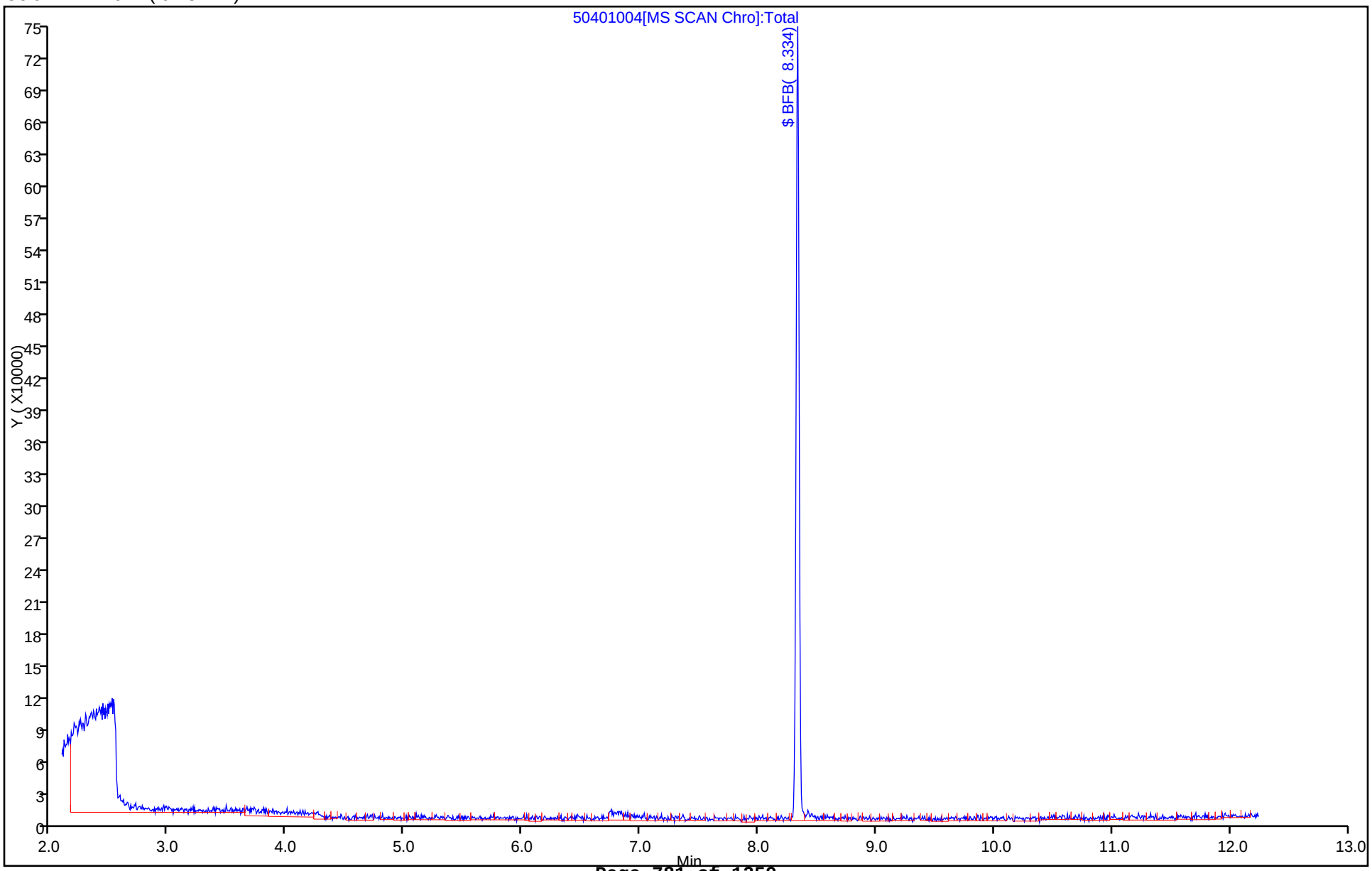
Report Date: 01-Apr-2015 14:42:49 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401004.D

Injection Date:	01-Apr-2015 10:42:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128004.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 28-Jan-2015 11:55:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0005450-004
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:04 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 28-Jan-2015 12:11:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.412	8.412	0.000	0	199884	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

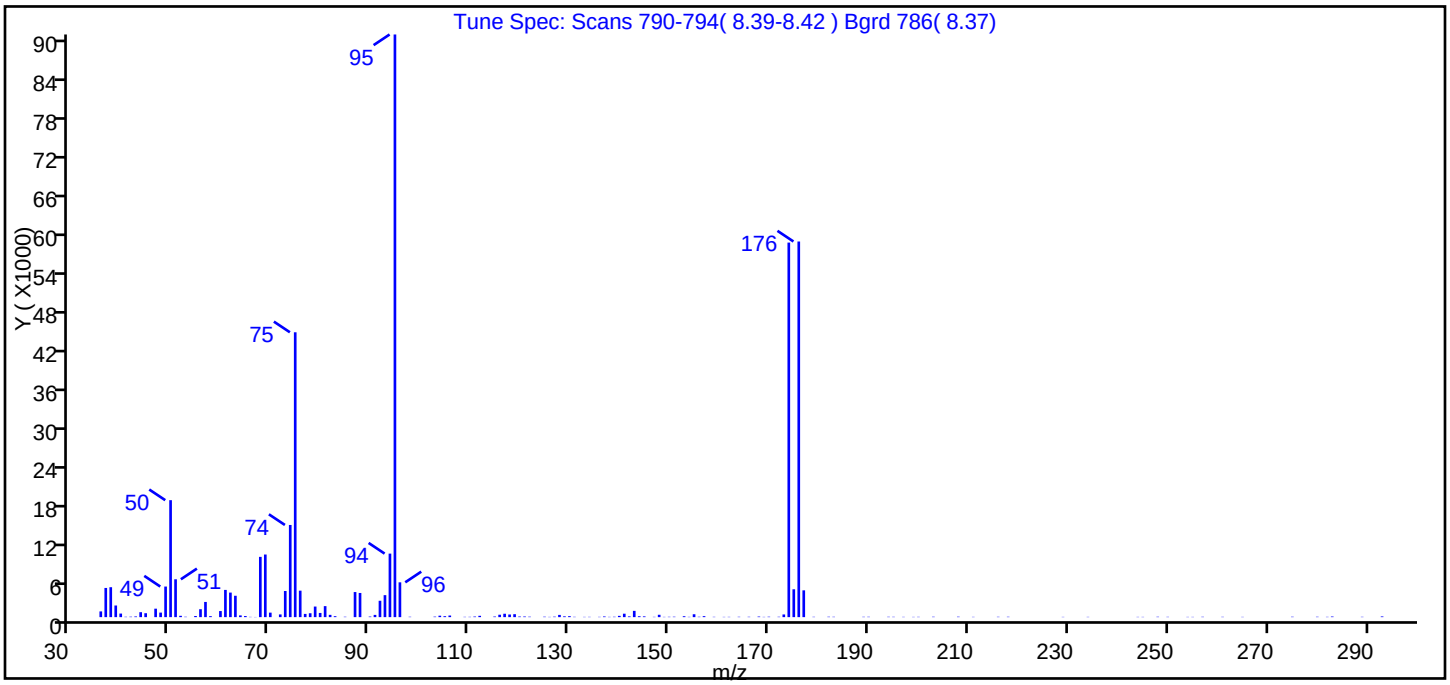
VOABFB25_00058 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128004.D
Injection Date: 28-Jan-2015 11:55:30 Instrument ID: CHHP6
Lims ID: BFB
Client ID:
Operator ID: 001562 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.1
75	30 to 60% of m/z 95	48.9
96	5 to 9% of m/z 95	6.0
173	Less than 2% of m/z 174	0.5 (0.7)
174	50 to 120% of m/z 95	64.3
175	5 to 9% of m/z 174	4.8 (7.4)
176	Greater than 95% but less than 101% of m/z 174	64.5 (100.3)
177	5 to 9% of m/z 176	4.6 (7.1)

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128004.D\MSVOA_LL_CHHP6.rslt\spectra.d
Injection Date: 28-Jan-2015 11:55:30
Spectrum: Tune Spec: Scans 790-794(8.39-8.42) Bgrd 786(8.37)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 146

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	891	77.00	502	128.00	348	175.00	4324
37.00	4531	78.00	605	129.00	124	176.00	58296
38.00	4646	79.00	1644	130.00	152	177.00	4160
39.00	1807	80.00	651	131.00	50	179.00	52
40.00	555	81.00	1709	133.00	41	182.00	63
41.00	56	82.00	356	134.00	46	183.00	55
42.00	70	83.00	146	136.00	46	189.00	53
43.00	107	85.00	61	137.00	103	190.00	57
44.00	769	87.00	3894	138.00	43	194.00	56
45.00	610	88.00	3751	139.00	61	195.00	52
47.00	1314	90.00	90	140.00	200	197.00	43
48.00	705	91.00	349	141.00	534	199.00	40
49.00	4748	92.00	2541	142.00	114	200.00	48
50.00	18152	93.00	3413	143.00	975	203.00	62
51.00	5876	94.00	9860	144.00	138	208.00	68
52.00	208	95.00	90424	145.00	118	211.00	43
53.00	59	96.00	5404	147.00	46	216.00	55
55.00	176	98.00	59	148.00	368	218.00	59
56.00	1231	103.00	79	149.00	41	229.00	40
57.00	2359	104.00	225	150.00	55	234.00	42
58.00	152	105.00	149	151.00	67	244.00	41
60.00	945	106.00	249	153.00	140	245.00	40
61.00	4225	109.00	47	154.00	45	248.00	60
62.00	3811	110.00	49	155.00	450	250.00	48
63.00	3318	111.00	93	156.00	59	254.00	40
64.00	267	112.00	207	157.00	151	255.00	40
65.00	170	115.00	95	159.00	49	257.00	56
66.00	41	116.00	375	161.00	40	261.00	50
67.00	26	117.00	527	162.00	45	265.00	41
68.00	9355	118.00	409	164.00	56	275.00	63
69.00	9719	119.00	460	166.00	56	280.00	60
70.00	700	120.00	94	168.00	91	282.00	47
72.00	421	121.00	98	169.00	40	283.00	95

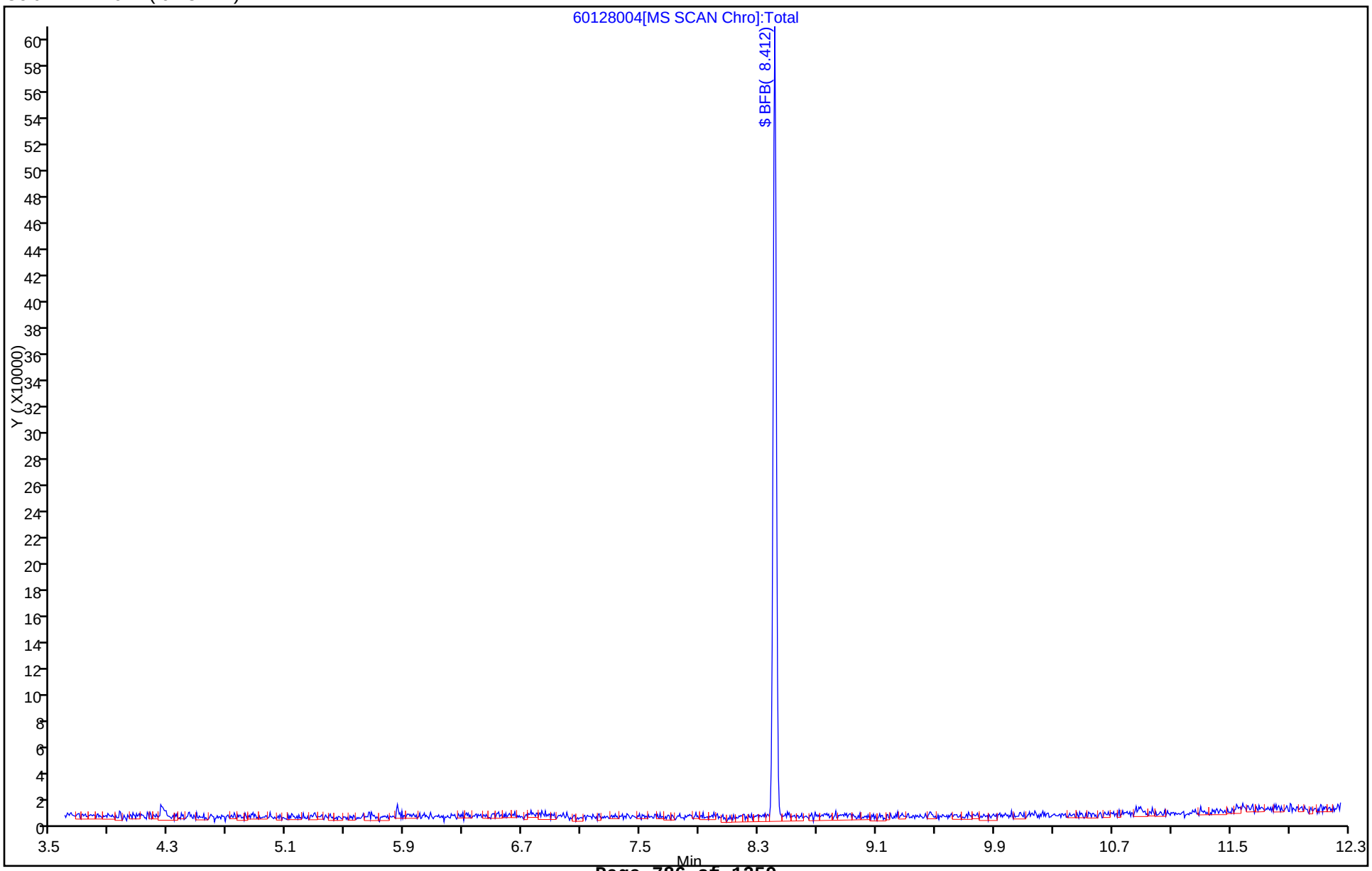
Report Date: 29-Jan-2015 12:59:04 Chrom Revision: 2.2 15-Jan-2015 13:05:58
Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128004.D\MSVOA_LL_CHHP6.rslt\spectra.d
Injection Date: 28-Jan-2015 11:55:30
Spectrum: Tune Spec: Scans 790-794(8.39-8.42) Bgrd 786(8.37)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 146

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	4056	122.00	70	170.00	67	289.00	51
74.00	14305	125.00	68	172.00	59	293.00	109
75.00	44208	126.00	40	173.00	418		
76.00	4109	127.00	76	174.00	58128		

Report Date: 29-Jan-2015 12:59:04 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128004.D				
Injection Date:	28-Jan-2015 11:55:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column: DB-624 (0.18 mm)					



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330001.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 30-Mar-2015 09:31:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0006236-001
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 30-Mar-2015 12:55:17 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: fergusond Date: 30-Mar-2015 09:42:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.414	8.414	0.000	0	117640	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

VOABFB25_00059 Amount Added: 1.00 Units: uL

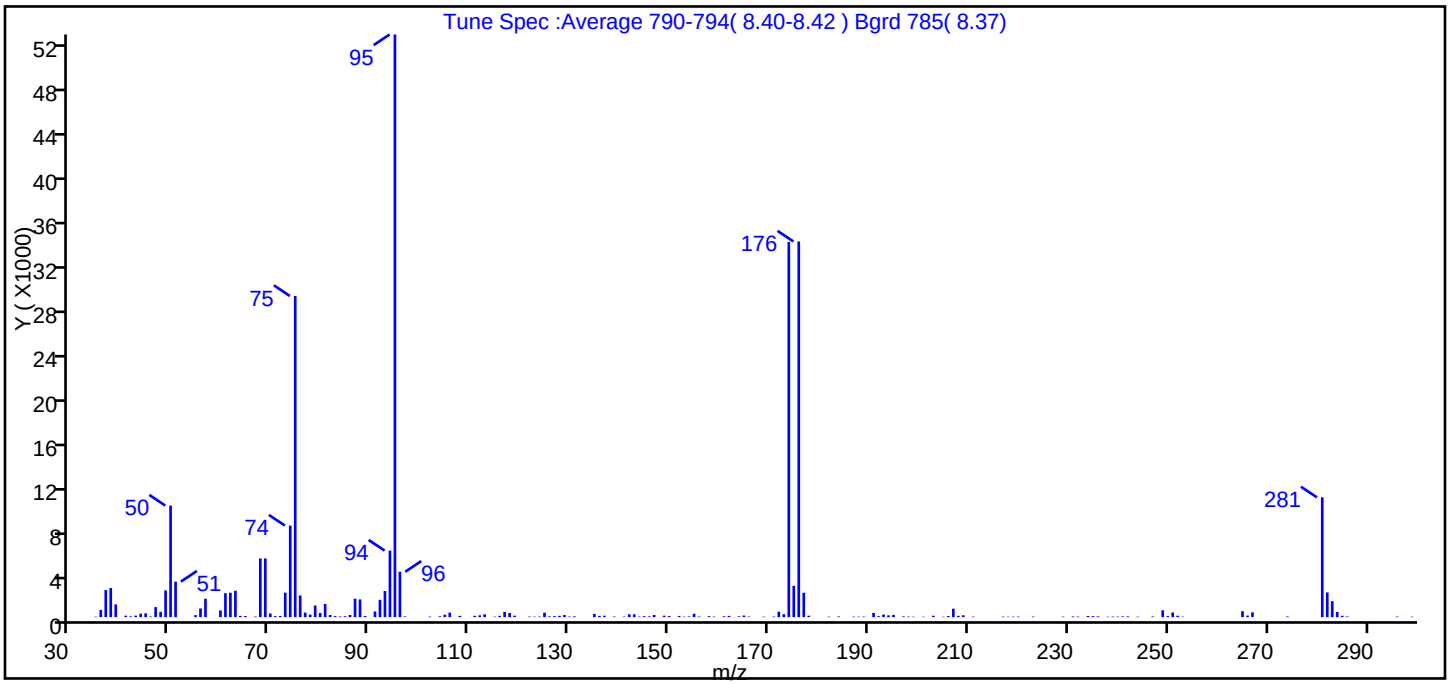
Report Date: 30-Mar-2015 12:55:18 Chrom Revision: 2.2 13-Mar-2015 11:20:44

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330001.D				
Injection Date:	30-Mar-2015 09:31:30	Instrument ID:	CHHP6		
Lims ID:	BFB				
Client ID:					
Operator ID:	001562	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Tune Method:	BFB Method 8260				

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.2
75	30 to 60% of m/z 95	55.1
96	5 to 9% of m/z 95	7.8
173	Less than 2% of m/z 174	0.5 (0.8)
174	50 to 120% of m/z 95	64.4
175	5 to 9% of m/z 174	5.4 (8.3)
176	Greater than 95% but less than 101% of m/z 174	64.5 (100.1)
177	5 to 9% of m/z 176	4.2 (6.5)

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330001.D\MSVOA_LL_CHHP6.rslt\spectra.d
Injection Date: 30-Mar-2015 09:31:30
Spectrum: Tune Spec :Average 790-794(8.40-8.42) Bgrd 785(8.37)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 169

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	44	85.00	82	145.00	86	206.00	99
36.00	659	86.00	196	146.00	67	207.00	770
37.00	2457	87.00	1677	147.00	197	208.00	119
38.00	2650	88.00	1611	149.00	136	209.00	170
39.00	1156	89.00	106	150.00	100	211.00	52
41.00	135	91.00	517	152.00	101	217.00	48
42.00	68	92.00	1574	153.00	43	218.00	40
43.00	138	93.00	2377	154.00	63	219.00	45
44.00	314	94.00	6046	155.00	311	220.00	49
45.00	345	95.00	52936	156.00	56	223.00	56
46.00	57	96.00	4123	158.00	91	229.00	48
47.00	911	97.00	65	159.00	48	231.00	63
48.00	483	102.00	48	161.00	79	232.00	52
49.00	2432	104.00	76	162.00	112	234.00	108
50.00	10140	105.00	220	163.00	10	235.00	91
51.00	3226	106.00	414	164.00	71	236.00	70
55.00	181	108.00	114	165.00	147	238.00	40
56.00	793	111.00	119	166.00	54	239.00	50
57.00	1670	112.00	165	169.00	46	240.00	46
60.00	610	113.00	254	171.00	52	241.00	68
61.00	2176	115.00	42	172.00	499	242.00	69
62.00	2219	116.00	119	173.00	265	244.00	42
63.00	2397	117.00	476	174.00	34088	247.00	62
64.00	116	118.00	374	175.00	2843	249.00	623
65.00	105	119.00	138	176.00	34128	250.00	90
67.00	53	122.00	54	177.00	2215	251.00	424
68.00	5337	123.00	44	178.00	132	252.00	129
69.00	5338	124.00	51	182.00	46	253.00	41
70.00	333	125.00	406	184.00	63	265.00	542
71.00	91	126.00	70	187.00	47	266.00	139
72.00	105	127.00	89	188.00	46	267.00	438
73.00	2225	128.00	118	189.00	51	274.00	64
74.00	8318	129.00	191	191.00	383	281.00	10883

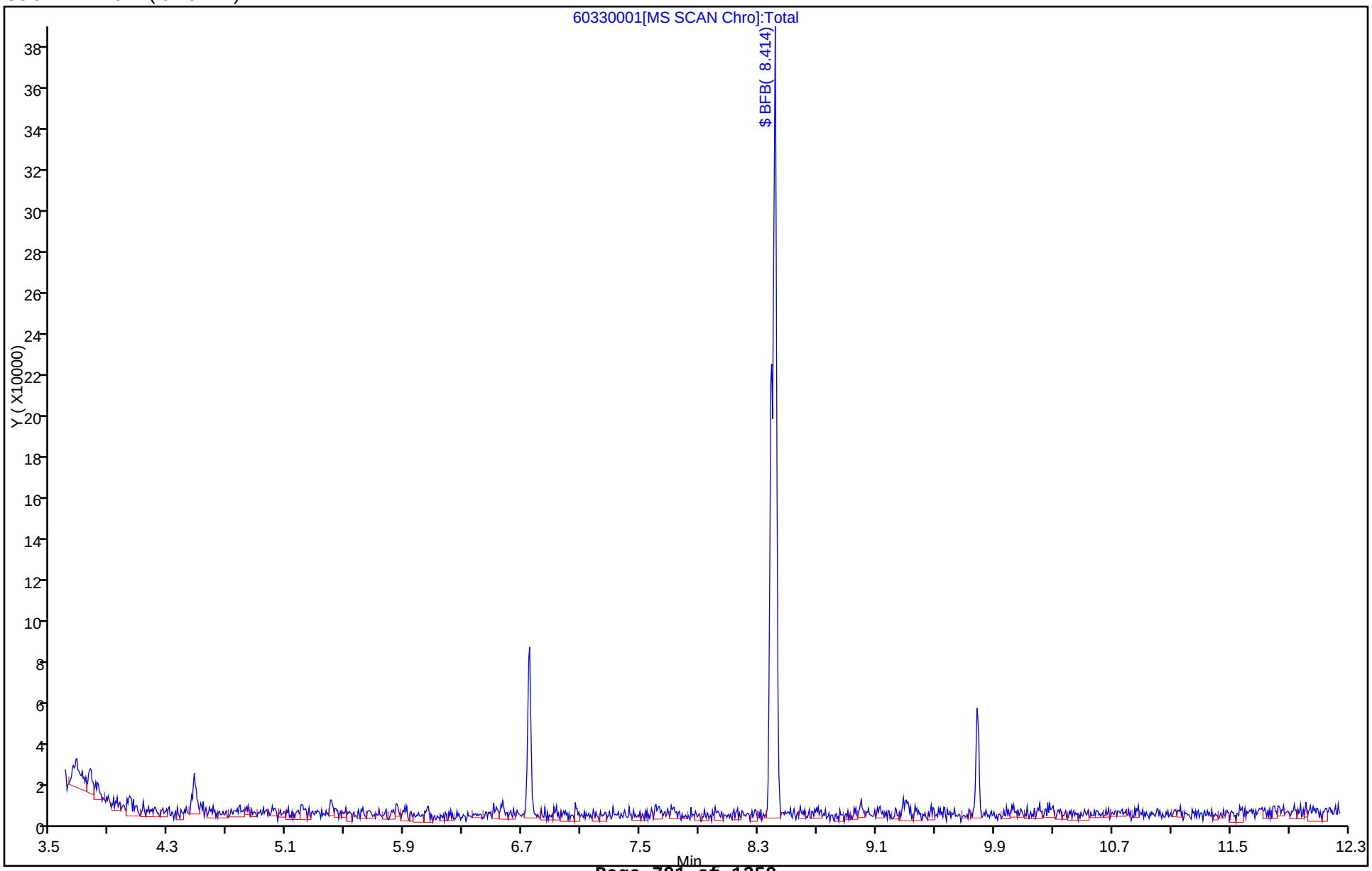
Report Date: 30-Mar-2015 12:55:18 Chrom Revision: 2.2 13-Mar-2015 11:20:44
Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330001.D\MSVOA_LL_CHHP6.rslt\spectra.d
Injection Date: 30-Mar-2015 09:31:30
Spectrum: Tune Spec :Average 790-794(8.40-8.42) Bgrd 785(8.37)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 169

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	29176	130.00	48	192.00	84	282.00	2245
76.00	1971	131.00	73	193.00	237	283.00	1451
77.00	414	135.00	292	194.00	166	284.00	473
78.00	232	136.00	111	195.00	214	285.00	121
79.00	1060	137.00	130	197.00	70	286.00	59
80.00	378	139.00	55	198.00	49	296.00	56
81.00	1203	141.00	44	199.00	40	299.00	44
82.00	196	142.00	259	201.00	44		
83.00	94	143.00	264	203.00	125		
84.00	60	144.00	49	205.00	39		

Report Date: 30-Mar-2015 12:55:18 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330001.D				
Injection Date:	30-Mar-2015 09:31:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column: DB-624 (0.18 mm)					



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-136938/5

Matrix: Water Lab File ID: 60330005.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 11:37

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.: 136938 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.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-136938/5

Matrix: Water Lab File ID: 60330005.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 11:37

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.: 136938 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)	121		64-135
2037-26-5	Toluene-d8 (Surr)	106		71-118
460-00-4	4-Bromofluorobenzene (Surr)	98		70-118
1868-53-7	Dibromofluoromethane (Surr)	104		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330005.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 30-Mar-2015 11:37:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 180-0006236-005
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 30-Mar-2015 13:01:37 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: fergusond Date: 30-Mar-2015 13:01:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.265	4.284	-0.019	92	271835	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.325	7.332	-0.007	97	594166	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.434	10.440	-0.006	93	117363	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.794	12.795	-0.001	97	187859	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.601	6.596	0.005	93	140245	50.0	52.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.973	6.973	0.000	71	233200	50.0	60.6	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	94	488700	50.0	52.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.626	11.627	-0.001	81	193032	50.0	49.0	
11 Dichlorodifluoromethane	85		1.632					ND	
12 Chloromethane	50		1.765					ND	
13 Vinyl chloride	62		1.899					ND	
14 Butadiene	39		1.942					ND	
15 Bromomethane	94		2.246					ND	
16 Chloroethane	64		2.392					ND	
17 Dichlorofluoromethane	67		2.672					ND	
18 Trichlorofluoromethane	101		2.714					ND	
19 Ethanol	45		2.949					ND	
20 Ethyl ether	59		3.061					ND	
21 Acrolein	56		3.244					ND	
22 1,1-Dichloroethene	96		3.371					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.432					ND	
24 Acetone	43		3.451					ND	
25 Iodomethane	142		3.584					ND	
26 Carbon disulfide	76		3.682					ND	
27 Isopropyl alcohol	45		3.727					ND	
28 Acetonitrile	40		3.879					ND	
29 3-Chloro-1-propene	76		3.962					ND	
30 Methyl acetate	43		3.968					ND	
31 Methylene Chloride	84		4.168					ND	
32 2-Methyl-2-propanol	59		4.412					ND	
33 Acrylonitrile	53		4.539					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		4.606					ND	
34 trans-1,2-Dichloroethene	96		4.606					ND	
36 Hexane	57		5.026					ND	
37 1,1-Dichloroethane	63		5.239					ND	
38 Vinyl acetate	43		5.276					ND	
40 Isopropyl ether	45		5.333					ND	
39 2-Chloro-1,3-butadiene	53		5.339					ND	
41 Tert-butyl ethyl ether	59		5.808					ND	
42 2,2-Dichloropropane	77		5.975					ND	
43 cis-1,2-Dichloroethene	96		5.981					ND	
44 2-Butanone (MEK)	43		5.987					ND	
45 Propionitrile	54		6.051					ND	
46 Ethyl acetate	43		6.063					ND	
47 Methacrylonitrile	41		6.234					ND	
48 Chlorobromomethane	128		6.273					ND	
49 Tetrahydrofuran	42		6.285					ND	
50 Chloroform	83		6.413					ND	
51 1,1,1-Trichloroethane	97		6.584					ND	
52 Cyclohexane	56		6.663					ND	
53 Carbon tetrachloride	117		6.760					ND	
54 1,1-Dichloropropene	75		6.766					ND	
55 Isobutyl alcohol	41		6.936					ND	
56 Benzene	78		6.985					ND	
57 1,2-Dichloroethane	62		7.058					ND	
58 Tert-amyl methyl ether	73		7.158					ND	
59 n-Heptane	43		7.344					ND	
60 n-Butanol	56		7.639					ND	
61 Trichloroethene	130		7.721					ND	
62 Ethyl acrylate	55		7.828					ND	
63 Methylcyclohexane	83		7.964					ND	
64 1,2-Dichloropropane	63		7.989					ND	
66 Methyl methacrylate	69		8.065					ND	
65 1,4-Dioxane	88		8.074					ND	
67 Dibromomethane	93		8.080					ND	
68 Dichlorobromomethane	83		8.275					ND	
69 2-Nitropropane	41		8.485					ND	
70 2-Chloroethyl vinyl ether	63		8.570					ND	
71 cis-1,3-Dichloropropene	75		8.719					ND	
72 4-Methyl-2-pentanone (MIBK	43		8.859					ND	
73 Toluene	91	9.053	9.047	0.006	44	4899		0.4083	
74 trans-1,3-Dichloropropene	75		9.297					ND	
75 Ethyl methacrylate	69		9.345					ND	
76 1,1,2-Trichloroethane	97		9.485					ND	
77 Tetrachloroethene	164		9.571					ND	
78 1,3-Dichloropropane	76		9.650					ND	
79 2-Hexanone	43		9.692					ND	
80 n-Butyl acetate	43		9.817					ND	
81 Chlorodibromomethane	129		9.863					ND	
82 Ethylene Dibromide	107		9.984					ND	
83 3-Chlorobenzotrifluoride	180		10.428					ND	
84 Chlorobenzene	112		10.471					ND	
85 4-Chlorobenzotrifluoride	180		10.520					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 1,1,1,2-Tetrachloroethane	131		10.562					ND	
87 Ethylbenzene	106		10.568					ND	
88 m-Xylene & p-Xylene	106		10.696					ND	
89 o-Xylene	106		11.079					ND	
90 Styrene	104		11.104					ND	
129 Cyclohexanol	57		11.289					ND	
91 Bromoform	173		11.292					ND	
92 2-Chlorobenzotrifluoride	180		11.341					ND	
93 Isopropylbenzene	105		11.444					ND	
94 Cyclohexanone	55		11.526					ND	
96 1,1,2,2-Tetrachloroethane	83		11.754					ND	
95 Bromobenzene	156		11.767					ND	
97 trans-1,4-Dichloro-2-buten	53		11.797					ND	
98 1,2,3-Trichloropropane	110		11.815					ND	
99 N-Propylbenzene	120		11.864					ND	
100 2-Chlorotoluene	126		11.955					ND	
101 3-Chlorotoluene	126		12.016					ND	
102 1,3,5-Trimethylbenzene	105		12.046					ND	
103 4-Chlorotoluene	126		12.077					ND	
104 tert-Butylbenzene	119		12.363					ND	
105 Pentachloroethane	167		12.402					ND	
106 1,2,4-Trimethylbenzene	105		12.424					ND	
107 1,2-dichloro-4-(trifluorom	214		12.454					ND	
108 sec-Butylbenzene	105		12.588					ND	
109 1,3-Dichlorobenzene	146		12.710					ND	
110 4-Isopropyltoluene	119		12.746					ND	
111 1,4-Dichlorobenzene	146		12.819					ND	
113 2,4-Dichloro-1-(triflourom	214		12.831					ND	
112 1,2,3-Trimethylbenzene	105		12.834					ND	
114 2,5-Dichlorobenzotrifluori	214		12.868					ND	
115 Benzyl chloride	91		12.926					ND	
116 n-Butylbenzene	91		13.154					ND	
117 1,2-Dichlorobenzene	146		13.166					ND	
118 1,2-Dibromo-3-Chloropropan	75		13.957					ND	
119 2,4- & 2,5- & 2,6- Dichlor	125		14.103					ND	
120 1,3,5-Trichlorobenzene	180		14.154					ND	
121 2,3- & 3,4- Dichlorotoluen	125		14.516					ND	
122 1,2,4-Trichlorobenzene	180		14.784					ND	
123 Hexachlorobutadiene	225		14.930					ND	
124 Naphthalene	128		15.052					ND	
125 1,2,3-Trichlorobenzene	180		15.277					ND	
126 2,4,5-Trichlorotoluene	159		16.049					ND	
127 2,3,6-Trichlorotoluene	159		16.147					ND	
128 2-Methylnaphthalene	142		16.186					ND	
144 2,4-Dichlorotoluene	1		0.000					ND	
146 3,4-Dichlorotoluene	1		0.000					ND	
147 2,6-Dichlorotoluene	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	
153 1,2 Epoxybutane TIC	1		0.000					ND	
143 2,5-Dichlorotoluene	1		0.000					ND	
151 Tert-amyl methyl ether (TI	1		0.000					ND	
148 Isooctane	57		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
145 2,3-Dichlorotoluene	1		0.000					ND	
150 Tert-butyl ethyl ether (TI	1		0.000					ND	
149 Isopropyl ether TIC	1		0.000					ND	
S 130 1,2-Dichloroethene, Total	96		1.000					ND	
S 131 Xylenes, Total	106		1.000					ND	
S 132 1,3-Dichloropropene, Total	1		0.000					ND	
T 133 Tetrahydrofuran TIC	42		0.000					ND	
T 134 Methyl n-amyl ketone TIC	43		0.000					ND	
T 135 Mesityl oxide TIC	83		0.000					ND	

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

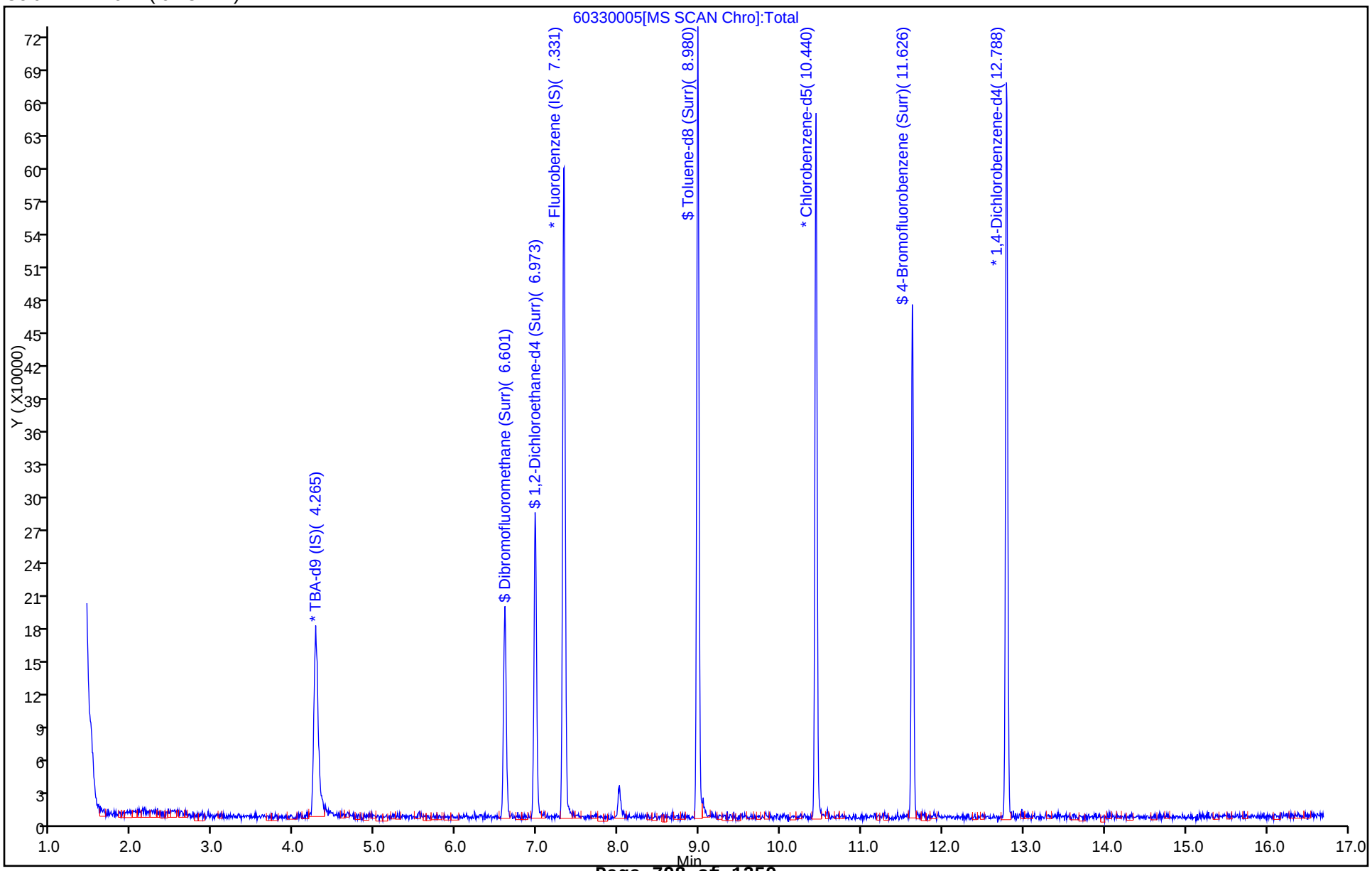
Report Date: 30-Mar-2015 13:01:37 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330005.D

Injection Date:	30-Mar-2015 11:37:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	MB			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42353-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-136954/7

Matrix: Water | Lab File ID: 50330007.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/30/2015 13:04

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.: 136954 | 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.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-136954/7

Matrix: Water Lab File ID: 50330007.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 13:04

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.: 136954 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)	113		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)	102		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330007.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 30-Mar-2015 13:04:30 ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 180-0006238-007
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 30-Mar-2015 14:49:57 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: fergusond Date: 30-Mar-2015 14:49:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.303	4.301	0.002	98	141937	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.283	7.282	0.001	100	488254	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.362	10.367	-0.005	97	106640	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.686	12.684	0.002	94	152504	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.541	6.535	0.006	55	112948	50.0	50.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.900	0.000	97	165049	50.0	56.4	
$ 7 Toluene-d8 (Surr)	98	8.926	8.926	0.000	100	471749	50.0	55.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.536	11.536	0.000	97	153094	50.0	50.0	
11 Dichlorodifluoromethane	85		1.626					ND	
12 Chloromethane	50		1.784					ND	
13 Vinyl chloride	62		1.912					ND	
14 Butadiene	39	1.954	1.955	-0.001	1	453		0.1228	
15 Bromomethane	94		2.259					ND	
16 Chloroethane	64		2.399					ND	
17 Dichlorofluoromethane	67		2.666					ND	
18 Trichlorofluoromethane	101		2.727					ND	
19 Ethanol	45		3.006					ND	
20 Ethyl ether	59		3.086					ND	
21 Acrolein	56		3.256					ND	
22 1,1-Dichloroethene	96		3.390					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.439					ND	
24 Acetone	43		3.506					ND	
25 Iodomethane	142		3.567					ND	
26 Carbon disulfide	76		3.658					ND	
27 Isopropyl alcohol	45		3.796					ND	
28 3-Chloro-1-propene	76		3.950					ND	
29 Acetonitrile	40		3.955					ND	
30 Methyl acetate	43		4.017					ND	
31 Methylene Chloride	84		4.151					ND	
32 2-Methyl-2-propanol	59		4.443					ND	
33 Acrylonitrile	53		4.552					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
34 trans-1,2-Dichloroethene	96		4.570					ND	
35 Methyl tert-butyl ether	73		4.595					ND	
36 Hexane	57		4.990					ND	
37 1,1-Dichloroethane	63		5.173					ND	
38 Vinyl acetate	43		5.294					ND	
39 2-Chloro-1,3-butadiene	53		5.311					ND	
41 Isopropyl ether	45		5.330					ND	
40 Isopropyl ether TIC	45		5.409					ND	
42 Tert-butyl ethyl ether	59		5.798					ND	
44 2,2-Dichloropropane	77		5.927					ND	
45 cis-1,2-Dichloroethene	96		5.939					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
46 2-Butanone (MEK)	43		5.994					ND	
47 Propionitrile	54		6.066					ND	
48 Ethyl acetate	43		6.090					ND	
49 Chlorobromomethane	128		6.231					ND	
50 Methacrylonitrile	41		6.242					ND	
51 Tetrahydrofuran	42		6.286					ND	
52 Chloroform	83		6.347					ND	
53 1,1,1-Trichloroethane	97		6.535					ND	
54 Cyclohexane	56		6.590					ND	
56 Carbon tetrachloride	117		6.718					ND	
55 1,1-Dichloropropene	75		6.724					ND	
57 Isobutyl alcohol	41		6.943					ND	
58 Benzene	78		6.955					ND	
59 1,2-Dichloroethane	62		6.986					ND	
61 Tert-amyl methyl ether	73		7.112					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
62 n-Heptane	43	7.429	7.278	0.151	1	250		0.0629	
63 n-Butanol	56		7.659					ND	
64 Trichloroethene	130		7.667					ND	
65 Ethyl acrylate	55		7.818					ND	
66 Methylcyclohexane	83		7.862					ND	
67 1,2-Dichloropropane	63		7.904					ND	
68 Dibromomethane	93		8.026					ND	
69 Methyl methacrylate	69		8.055					ND	
70 1,4-Dioxane	88		8.062					ND	
71 Dichlorobromomethane	83		8.196					ND	
72 2-Nitropropane	41	8.585	8.444	0.141	2	100		0.2152	
73 2-Chloroethyl vinyl ether	63		8.525					ND	
74 cis-1,3-Dichloropropene	75		8.659					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.823					ND	
76 Toluene	91		8.993					ND	
77 trans-1,3-Dichloropropene	75		9.218					ND	
78 Ethyl methacrylate	69		9.316					ND	
79 1,1,2-Trichloroethane	97		9.401					ND	
80 Tetrachloroethene	164		9.541					ND	
81 1,3-Dichloropropane	76		9.565					ND	
82 2-Hexanone	43		9.662					ND	
83 n-Butyl acetate	43		9.789					ND	
84 Chlorodibromomethane	129		9.796					ND	
85 Ethylene Dibromide	107		9.900					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.374					ND	
87 Chlorobenzene	112		10.392					ND	
88 4-Chlorobenzotrifluoride	180		10.429					ND	
89 1,1,1,2-Tetrachloroethane	131		10.478					ND	
90 Ethylbenzene	106		10.502					ND	
91 m-Xylene & p-Xylene	106		10.624					ND	
92 o-Xylene	106		11.013					ND	
93 Styrene	104		11.025					ND	
94 Bromoform	173		11.208					ND	
96 2-Chlorobenzotrifluoride	180		11.274					ND	
95 Cyclohexanol	57	11.219	11.280	-0.061	1	77			NC
97 Isopropylbenzene	105		11.378					ND	
98 Cyclohexanone	55		11.480					ND	
99 1,1,2,2-Tetrachloroethane	83		11.676					ND	
100 Bromobenzene	156		11.682					ND	
101 1,2,3-Trichloropropane	110		11.725					ND	
102 trans-1,4-Dichloro-2-buten	53		11.731					ND	
103 N-Propylbenzene	120		11.792					ND	
104 2-Chlorotoluene	126		11.877					ND	
105 3-Chlorotoluene	126		11.938					ND	
106 1,3,5-Trimethylbenzene	105		11.962					ND	
107 4-Chlorotoluene	126		11.986					ND	
108 tert-Butylbenzene	119		12.290					ND	
109 Pentachloroethane	167		12.307					ND	
110 1,2,4-Trimethylbenzene	105		12.339					ND	
111 1,2-dichloro-4-(trifluorom	214		12.400					ND	
112 sec-Butylbenzene	105		12.509					ND	
113 1,3-Dichlorobenzene	146		12.619					ND	
114 4-Isopropyltoluene	119		12.655					ND	
115 1,4-Dichlorobenzene	146		12.710					ND	
116 2,4-Dichloro-1-(triflourom	214		12.759					ND	
117 1,2,3-Trimethylbenzene	105		12.764					ND	
118 2,5-Dichlorobenzotrifluori	214		12.808					ND	
119 Benzyl chloride	91		12.849					ND	
120 n-Butylbenzene	91		13.063					ND	
121 1,2-Dichlorobenzene	146		13.081					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.860					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.006					ND	
124 1,3,5-Trichlorobenzene	180		14.071					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.426					ND	
126 1,2,4-Trichlorobenzene	180		14.693					ND	
127 Hexachlorobutadiene	225		14.864					ND	
128 Naphthalene	128		14.943					ND	
129 1,2,3-Trichlorobenzene	180		15.186					ND	
131 2,4,5-Trichlorotoluene	159		15.965					ND	
130 2,3,6-Trichlorotoluene	159		16.062					ND	
132 2-Methylnaphthalene	142		16.079					ND	
148 2,3-Dichlorotoluene	1		0.000					ND	
147 2,4-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
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 153 1,2 Epoxybutane TIC	42		0.000					ND	
T 136 Mesityl oxide TIC	83		0.000					ND	
T 137 Tetrahydrofuran TIC	42		0.000					ND	
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

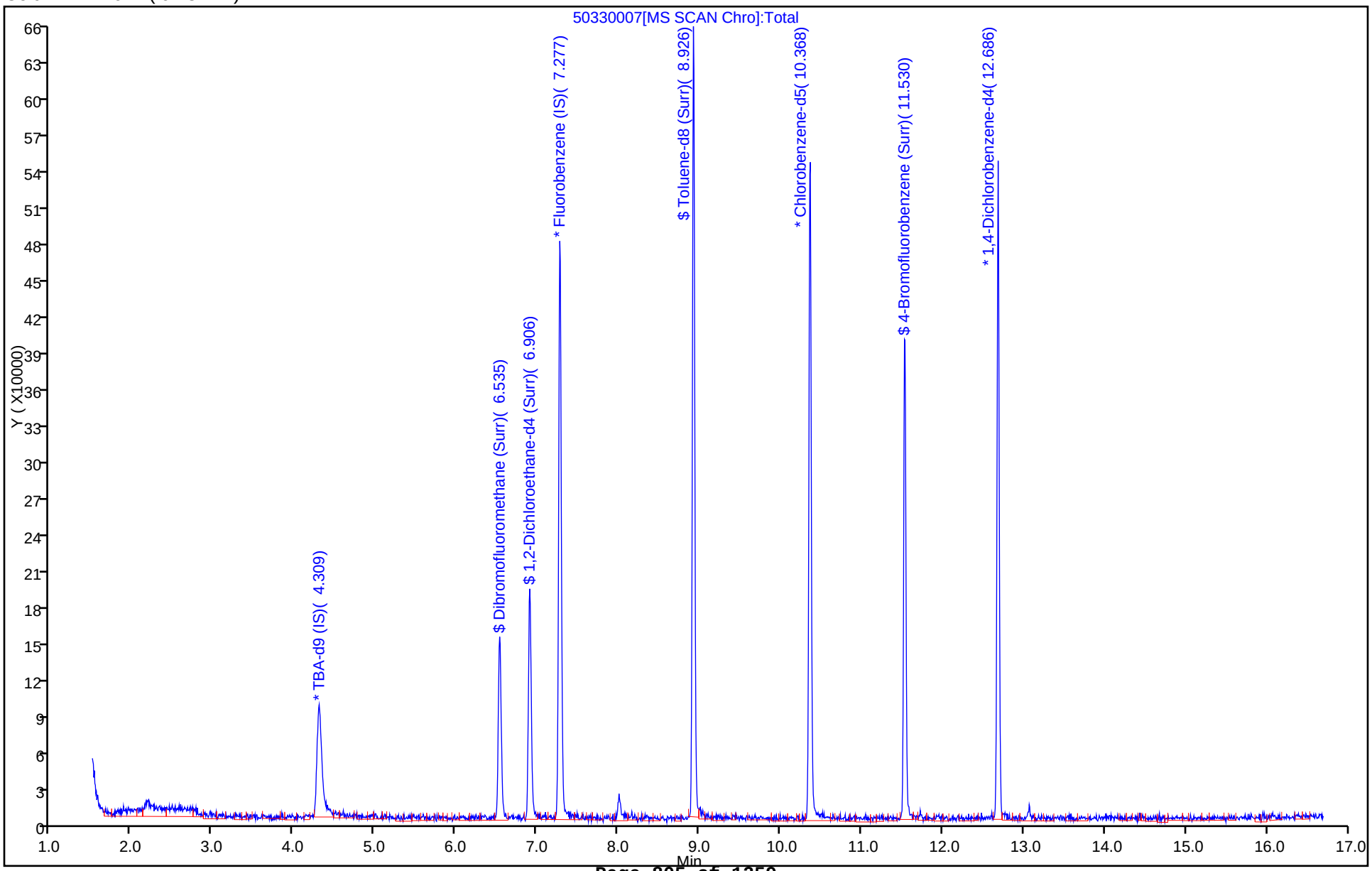
Report Date: 30-Mar-2015 14:49:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330007.D

Injection Date:	30-Mar-2015 13:04:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-137048/6

Matrix: Water Lab File ID: 50331006.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2015 11:21

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.: 137048 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.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-137048/6

Matrix: Water Lab File ID: 50331006.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2015 11:21

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.: 137048 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)	112		64-135
2037-26-5	Toluene-d8 (Surr)	106		71-118
460-00-4	4-Bromofluorobenzene (Surr)	97		70-118
1868-53-7	Dibromofluoromethane (Surr)	104		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331006.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 31-Mar-2015 11:21:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 180-0006255-006
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 11:58:04 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 14:04:13

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.314	4.297	0.017	97	128657	1000.0	1000.0	
*	2 Fluorobenzene (IS)	96	7.277	7.271	0.006	100	444816	50.0	50.0	
*	3 Chlorobenzene-d5	119	10.361	10.362	-0.001	99	96987	50.0	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.685	12.686	-0.001	93	137224	50.0	50.0	
$	5 Dibromofluoromethane (Surr	113	6.529	6.531	-0.002	56	105606	50.0	52.2	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.906	6.896	0.010	96	149092	50.0	55.9	
$	7 Toluene-d8 (Surr)	98	8.926	8.921	0.005	100	408432	50.0	52.8	
$	8 4-Bromofluorobenzene (Surr	95	11.535	11.531	0.004	98	135534	50.0	48.7	
	11 Dichlorodifluoromethane	85		1.621					ND	
	12 Chloromethane	50		1.779					ND	
	13 Vinyl chloride	62		1.913					ND	
	14 Butadiene	39		1.956					ND	
	15 Bromomethane	94		2.260					ND	
	16 Chloroethane	64		2.400					ND	
	17 Dichlorofluoromethane	67		2.662					ND	
	18 Trichlorofluoromethane	101		2.704					ND	
	19 Ethanol	45		3.013					ND	
	20 Ethyl ether	59		3.087					ND	
	21 Acrolein	56		3.252					ND	
	22 1,1-Dichloroethene	96		3.385					ND	
	23 1,1,2-Trichloro-1,2,2-trif	101		3.428					ND	
	24 Acetone	43		3.501					ND	
	25 Iodomethane	142		3.580					ND	
	26 Carbon disulfide	76		3.671					ND	
	27 Isopropyl alcohol	45		3.767					ND	
	29 Acetonitrile	40		3.932					ND	
	28 3-Chloro-1-propene	76		3.945					ND	
	30 Methyl acetate	43		4.024					ND	
	31 Methylene Chloride	84		4.140					ND	
	32 2-Methyl-2-propanol	59		4.438					ND	
	33 Acrylonitrile	53		4.547					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
34 trans-1,2-Dichloroethene	96		4.560					ND	
35 Methyl tert-butyl ether	73		4.596					ND	
36 Hexane	57		4.979					ND	
37 1,1-Dichloroethane	63		5.168					ND	
38 Vinyl acetate	43		5.296					ND	
39 2-Chloro-1,3-butadiene	53		5.306					ND	
41 Isopropyl ether	45		5.325					ND	
40 Isopropyl ether TIC	45		5.409					ND	
42 Tert-butyl ethyl ether	59		5.793					ND	
44 2,2-Dichloropropane	77		5.928					ND	
45 cis-1,2-Dichloroethene	96		5.941					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
46 2-Butanone (MEK)	43		5.989					ND	
47 Propionitrile	54		6.061					ND	
48 Ethyl acetate	43		6.091					ND	
49 Chlorobromomethane	128		6.226					ND	
50 Methacrylonitrile	41		6.237					ND	
51 Tetrahydrofuran	42		6.287					ND	
52 Chloroform	83		6.342					ND	
53 1,1,1-Trichloroethane	97		6.531					ND	
54 Cyclohexane	56		6.585					ND	
55 1,1-Dichloropropene	75		6.719					ND	
56 Carbon tetrachloride	117		6.719					ND	
57 Isobutyl alcohol	41		6.950					ND	
58 Benzene	78		6.956					ND	
59 1,2-Dichloroethane	62		6.987					ND	
61 Tert-amyl methyl ether	73		7.113					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
62 n-Heptane	43		7.279					ND	
63 n-Butanol	56		7.655					ND	
64 Trichloroethene	130		7.668					ND	
65 Ethyl acrylate	55		7.813					ND	
66 Methylcyclohexane	83		7.863					ND	
67 1,2-Dichloropropane	63		7.905					ND	
68 Dibromomethane	93		8.021					ND	
69 Methyl methacrylate	69		8.050					ND	
70 1,4-Dioxane	88		8.058					ND	
71 Dichlorobromomethane	83		8.197					ND	
72 2-Nitropropane	41		8.445					ND	
73 2-Chloroethyl vinyl ether	63		8.520					ND	
74 cis-1,3-Dichloropropene	75		8.654					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.824					ND	
76 Toluene	91		8.988					ND	
77 trans-1,3-Dichloropropene	75		9.219					ND	
78 Ethyl methacrylate	69		9.317					ND	
79 1,1,2-Trichloroethane	97		9.402					ND	
80 Tetrachloroethene	164		9.536					ND	
81 1,3-Dichloropropane	76		9.566					ND	
82 2-Hexanone	43		9.658					ND	
84 Chlorodibromomethane	129		9.785					ND	
83 n-Butyl acetate	43		9.790					ND	
85 Ethylene Dibromide	107		9.901					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.369					ND	
87 Chlorobenzene	112		10.388					ND	
88 4-Chlorobenzotrifluoride	180		10.430					ND	
89 1,1,1,2-Tetrachloroethane	131		10.467					ND	
90 Ethylbenzene	106		10.503					ND	
91 m-Xylene & p-Xylene	106		10.619					ND	
92 o-Xylene	106		11.014					ND	
93 Styrene	104		11.026					ND	
94 Bromoform	173		11.209					ND	
96 2-Chlorobenzotrifluoride	180		11.270					ND	
95 Cyclohexanol	57		11.280					ND	
97 Isopropylbenzene	105		11.379					ND	
98 Cyclohexanone	55		11.475					ND	
99 1,1,2,2-Tetrachloroethane	83		11.671					ND	
100 Bromobenzene	156		11.683					ND	
101 1,2,3-Trichloropropane	110		11.726					ND	
102 trans-1,4-Dichloro-2-buten	53		11.732					ND	
103 N-Propylbenzene	120		11.787					ND	
104 2-Chlorotoluene	126		11.872					ND	
105 3-Chlorotoluene	126		11.933					ND	
106 1,3,5-Trimethylbenzene	105		11.963					ND	
107 4-Chlorotoluene	126		11.981					ND	
108 tert-Butylbenzene	119		12.286					ND	
109 Pentachloroethane	167		12.302					ND	
110 1,2,4-Trimethylbenzene	105		12.334					ND	
111 1,2-dichloro-4-(trifluorom	214		12.401					ND	
112 sec-Butylbenzene	105		12.511					ND	
113 1,3-Dichlorobenzene	146		12.614					ND	
114 4-Isopropyltoluene	119		12.651					ND	
115 1,4-Dichlorobenzene	146		12.705					ND	
117 1,2,3-Trimethylbenzene	105		12.759					ND	
116 2,4-Dichloro-1-(triflourom	214		12.760					ND	
118 2,5-Dichlorobenzotrifluori	214		12.803					ND	
119 Benzyl chloride	91		12.844					ND	
120 n-Butylbenzene	91		13.064					ND	
121 1,2-Dichlorobenzene	146		13.083					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.861					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.007					ND	
124 1,3,5-Trichlorobenzene	180		14.073					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.427					ND	
126 1,2,4-Trichlorobenzene	180		14.695					ND	
127 Hexachlorobutadiene	225		14.859					ND	
128 Naphthalene	128		14.938					ND	
129 1,2,3-Trichlorobenzene	180		15.187					ND	
131 2,4,5-Trichlorotoluene	159		15.966					ND	
130 2,3,6-Trichlorotoluene	159		16.063					ND	
132 2-Methylnaphthalene	142		16.074					ND	
146 2,5-Dichlorotoluene	1		0.000					ND	
150 2,6-Dichlorotoluene	1		0.000					ND	
151 Isooctane	57		0.000					ND	
149 3,4-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
148 2,3-Dichlorotoluene	1		0.000					ND	
147 2,4-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 153 1,2 Epoxybutane TIC	42		0.000					ND	
T 136 Mesityl oxide TIC	83		0.000					ND	
T 137 Tetrahydrofuran TIC	42		0.000					ND	
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

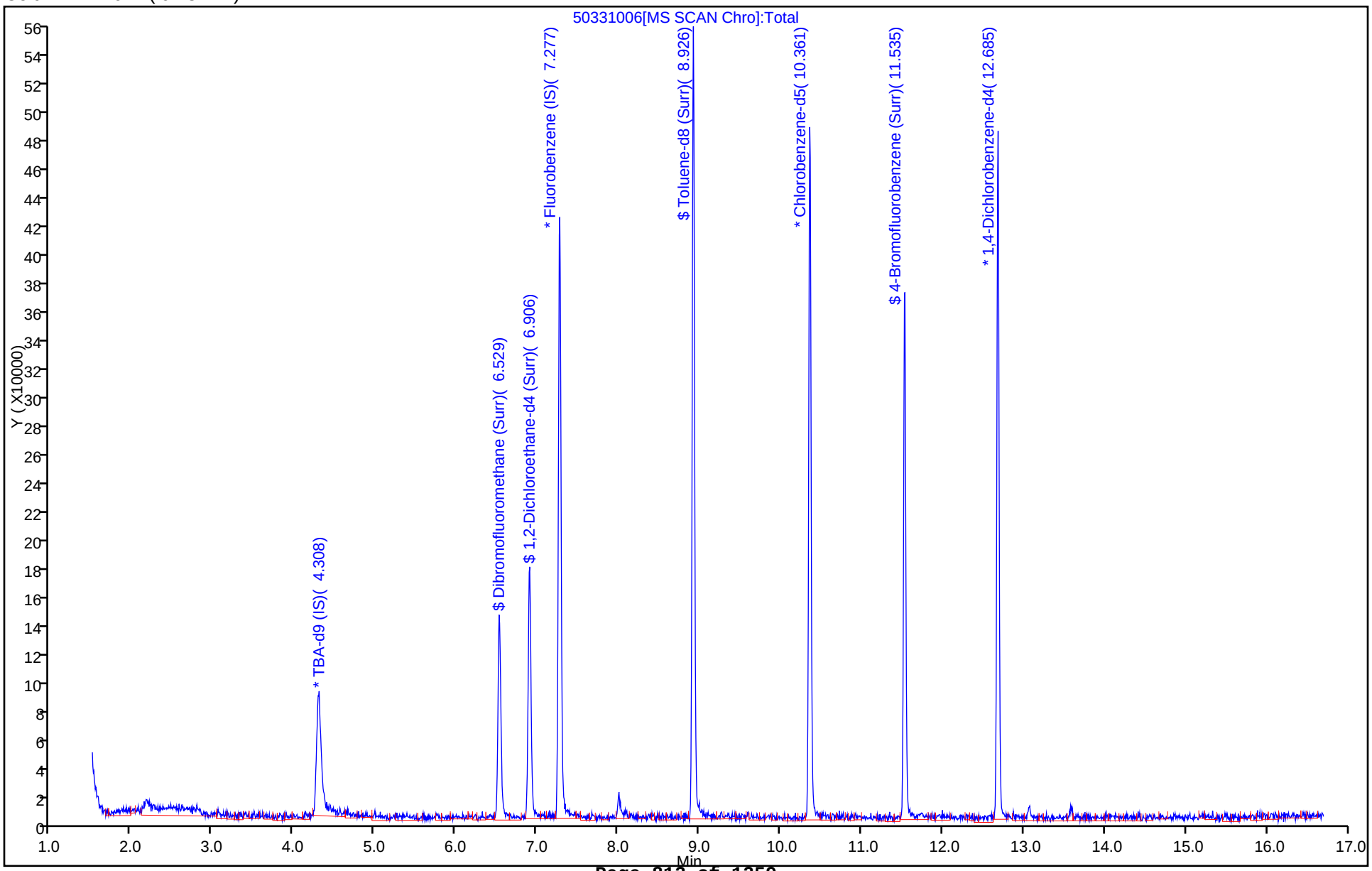
Report Date: 31-Mar-2015 14:04:14 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331006.D

Injection Date:	31-Mar-2015 11:21:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-137218/6

Matrix: Water Lab File ID: 50401006.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2015 12:40

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.: 137218 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.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-137218/6

Matrix: Water Lab File ID: 50401006.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2015 12:40

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.: 137218 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)	116		64-135
2037-26-5	Toluene-d8 (Surr)	102		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\CHHP5\20150401-6280.b\50401006.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 01-Apr-2015 12:40:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 180-0006280-006
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Apr-2015 14:47:42 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: fergusond Date: 01-Apr-2015 14:47:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.303	4.303	0.000	98	122009	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.278	7.278	0.000	100	436499	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.363	10.362	0.001	99	98509	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.686	12.680	0.006	94	139944	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.530	6.524	0.006	54	107229	50.0	54.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.907	6.895	0.012	96	151976	50.0	58.1	
$ 7 Toluene-d8 (Surr)	98	8.927	8.921	0.006	100	399648	50.0	50.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.531	11.531	0.000	97	137762	50.0	48.7	
11 Dichlorodifluoromethane	85		1.627					ND	
12 Chloromethane	50		1.779					ND	
13 Vinyl chloride	62		1.907					ND	
14 Butadiene	39		1.955					ND	
15 Bromomethane	94		2.259					ND	
16 Chloroethane	64		2.393					ND	
17 Dichlorofluoromethane	67		2.655					ND	
18 Trichlorofluoromethane	101		2.722					ND	
19 Ethanol	45		3.019					ND	
20 Ethyl ether	59		3.081					ND	
21 Acrolein	56		3.251					ND	
22 1,1-Dichloroethene	96		3.385					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.440					ND	
24 Acetone	43		3.494					ND	
25 Iodomethane	142		3.567					ND	
26 Carbon disulfide	76		3.671					ND	
27 Isopropyl alcohol	45		3.786					ND	
28 3-Chloro-1-propene	76		3.945					ND	
29 Acetonitrile	40		3.950					ND	
30 Methyl acetate	43		4.018					ND	
31 Methylene Chloride	84	4.133	4.151	-0.018	31	1650		0.5668	
32 2-Methyl-2-propanol	59		4.437					ND	
33 Acrylonitrile	53		4.547					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
34 trans-1,2-Dichloroethene	96		4.565					ND	
35 Methyl tert-butyl ether	73		4.596					ND	
36 Hexane	57		4.985					ND	
37 1,1-Dichloroethane	63		5.173					ND	
38 Vinyl acetate	43		5.295					ND	
39 2-Chloro-1,3-butadiene	53		5.300					ND	
41 Isopropyl ether	45		5.325					ND	
40 Isopropyl ether TIC	45		5.409					ND	
42 Tert-butyl ethyl ether	59		5.793					ND	
44 2,2-Dichloropropane	77		5.928					ND	
45 cis-1,2-Dichloroethene	96		5.934					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
46 2-Butanone (MEK)	43		5.989					ND	
47 Propionitrile	54		6.067					ND	
48 Ethyl acetate	43		6.085					ND	
49 Chlorobromomethane	128		6.226					ND	
50 Methacrylonitrile	41		6.237					ND	
51 Tetrahydrofuran	42		6.281					ND	
52 Chloroform	83		6.341					ND	
53 1,1,1-Trichloroethane	97		6.536					ND	
54 Cyclohexane	56		6.591					ND	
56 Carbon tetrachloride	117		6.725					ND	
55 1,1-Dichloropropene	75		6.725					ND	
57 Isobutyl alcohol	41		6.938					ND	
58 Benzene	78		6.956					ND	
59 1,2-Dichloroethane	62		6.986					ND	
61 Tert-amyl methyl ether	73		7.107					ND	
60 Tert-amyl methyl ether (TI	73	7.272	7.262	0.010	0	6115		0.7005	
62 n-Heptane	43		7.278					ND	
63 n-Butanol	56		7.655					ND	
64 Trichloroethene	130		7.668					ND	
65 Ethyl acrylate	55		7.813					ND	
66 Methylcyclohexane	83		7.862					ND	
67 1,2-Dichloropropane	63		7.899					ND	
68 Dibromomethane	93		8.021					ND	
69 Methyl methacrylate	69		8.050					ND	
70 1,4-Dioxane	88		8.057					ND	
71 Dichlorobromomethane	83		8.191					ND	
72 2-Nitropropane	41		8.440					ND	
73 2-Chloroethyl vinyl ether	63		8.519					ND	
74 cis-1,3-Dichloropropene	75		8.659					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.824					ND	
76 Toluene	91		8.988					ND	
77 trans-1,3-Dichloropropene	75		9.219					ND	
78 Ethyl methacrylate	69		9.316					ND	
79 1,1,2-Trichloroethane	97		9.401					ND	
80 Tetrachloroethene	164		9.535					ND	
81 1,3-Dichloropropane	76		9.566					ND	
82 2-Hexanone	43		9.651					ND	
83 n-Butyl acetate	43		9.784					ND	
84 Chlorodibromomethane	129		9.791					ND	
85 Ethylene Dibromide	107		9.900					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.369					ND	
87 Chlorobenzene	112		10.387					ND	
88 4-Chlorobenzotrifluoride	180		10.430					ND	
89 1,1,1,2-Tetrachloroethane	131		10.472					ND	
90 Ethylbenzene	106		10.503					ND	
91 m-Xylene & p-Xylene	106		10.618					ND	
92 o-Xylene	106		11.014					ND	
93 Styrene	104		11.026					ND	
94 Bromoform	173		11.214					ND	
96 2-Chlorobenzotrifluoride	180		11.275					ND	
95 Cyclohexanol	57		11.280					ND	
97 Isopropylbenzene	105		11.379					ND	
98 Cyclohexanone	55		11.475					ND	
99 1,1,2,2-Tetrachloroethane	83		11.677					ND	
100 Bromobenzene	156		11.683					ND	
101 1,2,3-Trichloropropane	110		11.719					ND	
102 trans-1,4-Dichloro-2-buten	53		11.731					ND	
103 N-Propylbenzene	120		11.786					ND	
104 2-Chlorotoluene	126		11.871					ND	
105 3-Chlorotoluene	126		11.932					ND	
106 1,3,5-Trimethylbenzene	105		11.963					ND	
107 4-Chlorotoluene	126		11.981					ND	
108 tert-Butylbenzene	119		12.285					ND	
109 Pentachloroethane	167		12.309					ND	
110 1,2,4-Trimethylbenzene	105		12.334					ND	
111 1,2-dichloro-4-(trifluorom	214		12.401					ND	
112 sec-Butylbenzene	105		12.510					ND	
113 1,3-Dichlorobenzene	146		12.620					ND	
114 4-Isopropyltoluene	119		12.650					ND	
115 1,4-Dichlorobenzene	146		12.705					ND	
117 1,2,3-Trimethylbenzene	105		12.759					ND	
116 2,4-Dichloro-1-(triflourom	214		12.760					ND	
118 2,5-Dichlorobenzotrifluori	214		12.808					ND	
119 Benzyl chloride	91		12.844					ND	
120 n-Butylbenzene	91		13.064					ND	
121 1,2-Dichlorobenzene	146		13.082					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.861					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.007					ND	
124 1,3,5-Trichlorobenzene	180		14.073					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.426					ND	
126 1,2,4-Trichlorobenzene	180		14.694					ND	
127 Hexachlorobutadiene	225		14.858					ND	
128 Naphthalene	128		14.944					ND	
129 1,2,3-Trichlorobenzene	180		15.187					ND	
131 2,4,5-Trichlorotoluene	159		15.966					ND	
130 2,3,6-Trichlorotoluene	159		16.057					ND	
132 2-Methylnaphthalene	142		16.080					ND	
151 Isooctane	57		0.000					ND	
149 3,4-Dichlorotoluene	1		0.000					ND	
148 2,3-Dichlorotoluene	1		0.000					ND	
147 2,4-Dichlorotoluene	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
146 2,5-Dichlorotoluene	1		0.000					ND	
150 2,6-Dichlorotoluene	1		0.000					ND	
S 133 Xylenes, Total	106		1.000					ND	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	
T 153 1,2 Epoxybutane TIC	42		0.000					ND	
T 136 Mesityl oxide TIC	83		0.000					ND	
T 137 Tetrahydrofuran TIC	42		0.000					ND	
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

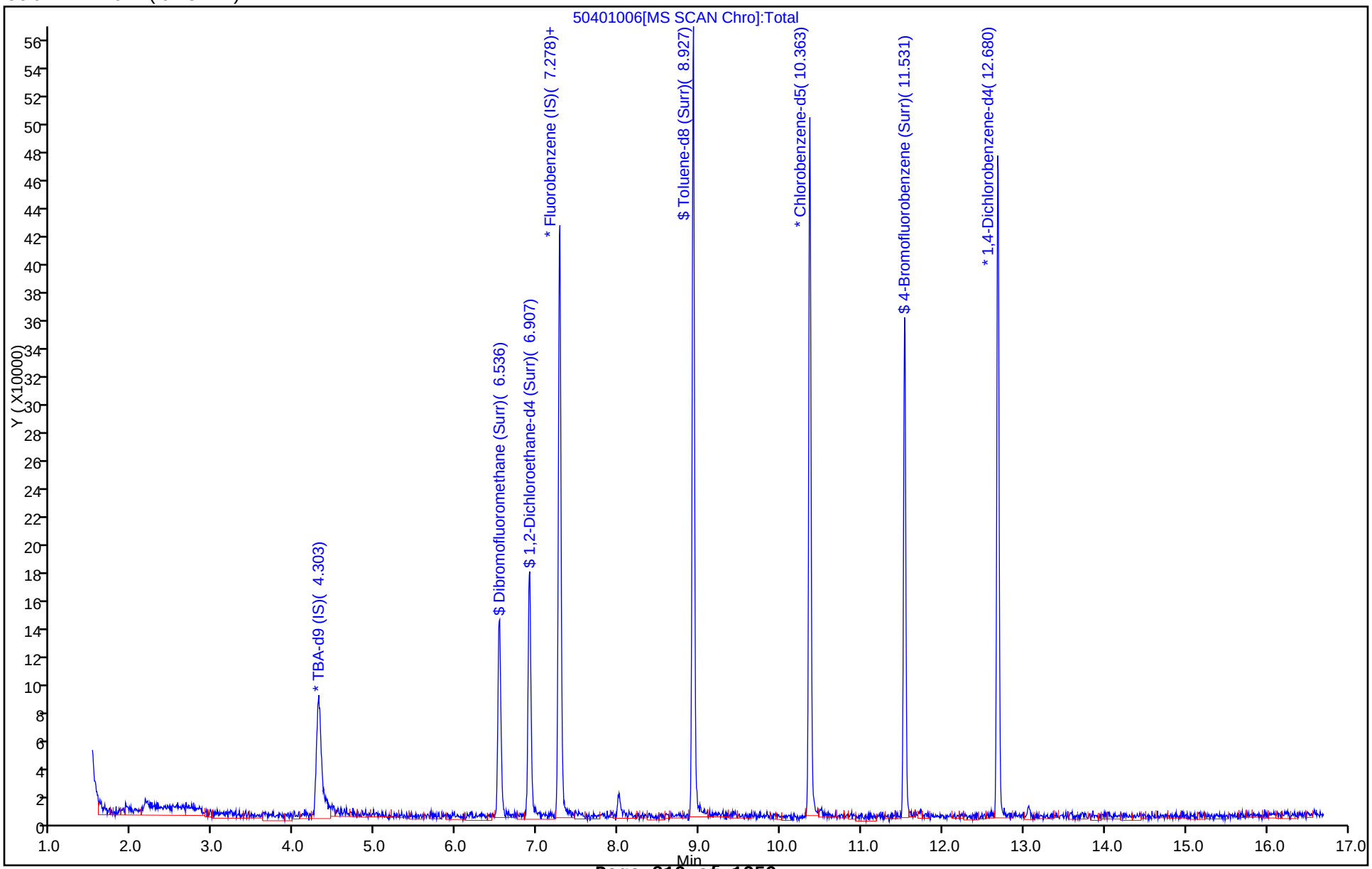
Report Date: 01-Apr-2015 14:47:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401006.D

Injection Date:	01-Apr-2015 12:40:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-136938/8

Matrix: Water Lab File ID: 60330008.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 13:03

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.: 136938 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	8.62		1.0	0.28
75-01-4	Vinyl chloride	9.46		1.0	0.23
74-83-9	Bromomethane	11.2		1.0	0.31
75-00-3	Chloroethane	8.96		1.0	0.21
75-35-4	1,1-Dichloroethene	9.02		1.0	0.30
67-64-1	Acetone	25.3		5.0	2.5
75-15-0	Carbon disulfide	7.01		1.0	0.21
75-09-2	Methylene Chloride	8.28		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.06		1.0	0.17
1634-04-4	Methyl tert-butyl ether	9.88		1.0	0.18
75-34-3	1,1-Dichloroethane	8.96		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	9.00		1.0	0.24
74-97-5	Bromochloromethane	9.63		1.0	0.18
78-93-3	2-Butanone (MEK)	22.2		5.0	0.55
67-66-3	Chloroform	9.75		1.0	0.17
71-55-6	1,1,1-Trichloroethane	8.59		1.0	0.29
56-23-5	Carbon tetrachloride	8.23		1.0	0.14
71-43-2	Benzene	10.1		1.0	0.11
107-06-2	1,2-Dichloroethane	11.9		1.0	0.21
79-01-6	Trichloroethene	9.14		1.0	0.14
78-87-5	1,2-Dichloropropane	9.50		1.0	0.095
75-27-4	Bromodichloromethane	9.93		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	9.21		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	19.2		5.0	0.53
108-88-3	Toluene	10.7		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	10.8		1.0	0.15
79-00-5	1,1,2-Trichloroethane	11.9		1.0	0.20
127-18-4	Tetrachloroethene	9.91		1.0	0.15
591-78-6	2-Hexanone	21.7		5.0	0.16
124-48-1	Dibromochloromethane	10.2		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	12.2		1.0	0.18
108-90-7	Chlorobenzene	10.8		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.51		1.0	0.28
100-41-4	Ethylbenzene	9.37		1.0	0.23
1330-20-7	Xylenes, Total	18.6		3.0	0.49
100-42-5	Styrene	10.8		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42353-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-136938/8

Matrix: Water | Lab File ID: 60330008.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/30/2015 13:03

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.: 136938 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	11.5		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	13.6		1.0	0.20
107-13-1	Acrylonitrile	137		20	0.55
123-91-1	1,4-Dioxane	286		200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	121		64-135
2037-26-5	Toluene-d8 (Surr)	100		71-118
460-00-4	4-Bromofluorobenzene (Surr)	101		70-118
1868-53-7	Dibromofluoromethane (Surr)	100		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330008.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 30-Mar-2015 13:03:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 180-0006236-008
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 30-Mar-2015 13:59:34 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: fergusond Date: 30-Mar-2015 13:59:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.280	4.284	-0.004	91	253324	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.328	7.332	-0.004	98	529801	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.443	10.440	0.003	91	113057	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.791	12.795	-0.004	94	175872	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.604	6.596	0.008	93	119747	50.0	50.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.975	6.973	0.002	54	206886	50.0	60.3	
$ 7 Toluene-d8 (Surr)	98	8.983	8.980	0.003	94	447345	50.0	50.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.629	11.627	0.002	80	191129	50.0	50.4	
11 Dichlorodifluoromethane	85	1.616	1.632	-0.016	98	152938	50.0	54.5	
12 Chloromethane	50	1.768	1.765	0.003	99	186114	50.0	43.1	
13 Vinyl chloride	62	1.901	1.899	0.002	97	180974	50.0	47.3	
14 Butadiene	39	1.944	1.942	0.002	90	174561	50.0	42.7	
15 Bromomethane	94	2.260	2.246	0.014	91	85972	50.0	56.0	
16 Chloroethane	64	2.400	2.392	0.008	96	105073	50.0	44.8	
17 Dichlorofluoromethane	67	2.674	2.672	0.002	97	295461	50.0	52.8	
18 Trichlorofluoromethane	101	2.729	2.714	0.015	92	240273	50.0	54.9	
20 Ethyl ether	59	3.069	3.061	0.008	94	175662	50.0	52.6	
21 Acrolein	56	3.258	3.244	0.014	95	50947	150.0	96.2	
22 1,1-Dichloroethene	96	3.374	3.371	0.003	95	134131	50.0	45.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.447	3.432	0.015	94	140264	50.0	46.6	
24 Acetone	43	3.465	3.451	0.014	99	118333	100.0	126.3	
25 Iodomethane	142	3.581	3.584	-0.004	96	182443	50.0	41.4	
26 Carbon disulfide	76	3.696	3.682	0.014	99	308967	50.0	35.1	
29 3-Chloro-1-propene	76	3.958	3.962	-0.004	88	72123	50.0	37.3	
30 Methyl acetate	43	3.970	3.968	0.002	99	765166	250.0	333.6	
31 Methylene Chloride	84	4.177	4.168	0.009	98	180077	50.0	41.4	
32 2-Methyl-2-propanol	59	4.414	4.412	0.002	91	151037	500.0	527.6	
33 Acrylonitrile	53	4.542	4.539	0.003	100	817423	500.0	683.4	
35 Methyl tert-butyl ether	73	4.621	4.606	0.015	98	465018	50.0	49.4	
34 trans-1,2-Dichloroethene	96	4.609	4.606	0.003	68	162321	50.0	45.3	
36 Hexane	57	5.034	5.026	0.008	92	213078	50.0	41.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.247	5.239	0.008	97	310387	50.0	44.8	
38 Vinyl acetate	43	5.278	5.276	0.002	97	233039	50.0	64.7	
42 2,2-Dichloropropane	77	5.983	5.975	0.008	56	127794	50.0	32.5	
43 cis-1,2-Dichloroethene	96	5.983	5.981	0.002	84	170831	50.0	45.0	
44 2-Butanone (MEK)	43	5.983	5.987	-0.004	57	133494	100.0	111.1	
48 Chlorobromomethane	128	6.275	6.273	0.002	90	72791	50.0	48.1	
49 Tetrahydrofuran	42	6.282	6.285	-0.003	85	109347	100.0	126.7	
50 Chloroform	83	6.415	6.413	0.002	95	290662	50.0	48.7	
51 1,1,1-Trichloroethane	97	6.586	6.584	0.002	96	195096	50.0	42.9	
52 Cyclohexane	56	6.665	6.663	0.002	93	295862	50.0	40.4	
53 Carbon tetrachloride	117	6.756	6.760	-0.004	82	146281	50.0	41.1	
54 1,1-Dichloropropene	75	6.768	6.766	0.002	93	224761	50.0	49.6	
55 Isobutyl alcohol	41	6.932	6.936	-0.004	92	132100	1250.0	1874.3	
56 Benzene	78	6.981	6.985	-0.004	97	665976	50.0	50.6	
57 1,2-Dichloroethane	62	7.066	7.058	0.008	97	256859	50.0	59.5	
59 n-Heptane	43	7.346	7.344	0.002	89	160740	50.0	38.4	
61 Trichloroethene	130	7.723	7.721	0.002	92	136947	50.0	45.7	
63 Methylcyclohexane	83	7.967	7.964	0.003	94	244447	50.0	41.4	
64 1,2-Dichloropropane	63	7.997	7.989	0.008	88	165402	50.0	47.5	
65 1,4-Dioxane	88	8.070	8.074	-0.004	92	31098	1000.0	1428.1	
67 Dibromomethane	93	8.082	8.080	0.002	94	93679	50.0	60.2	
68 Dichlorobromomethane	83	8.271	8.275	-0.004	98	181218	50.0	49.7	
71 cis-1,3-Dichloropropene	75	8.721	8.719	0.002	93	192934	50.0	46.1	
72 4-Methyl-2-pentanone (MIBK	43	8.855	8.859	-0.004	97	244816	100.0	96.0	
73 Toluene	91	9.050	9.047	0.003	98	620633	50.0	53.7	
74 trans-1,3-Dichloropropene	75	9.293	9.297	-0.004	95	171363	50.0	54.1	
75 Ethyl methacrylate	69	9.348	9.345	0.003	91	180867	50.0	62.0	
76 1,1,2-Trichloroethane	97	9.494	9.485	0.009	94	124819	50.0	59.5	
77 Tetrachloroethene	164	9.567	9.571	-0.004	95	102316	50.0	49.6	
78 1,3-Dichloropropane	76	9.646	9.650	-0.004	93	245339	50.0	62.9	
79 2-Hexanone	43	9.694	9.692	0.002	97	157642	100.0	108.3	
81 Chlorodibromomethane	129	9.871	9.863	0.008	91	91059	50.0	51.1	
82 Ethylene Dibromide	107	9.980	9.984	-0.004	99	116275	50.0	60.9	
83 3-Chlorobenzotrifluoride	180	10.430	10.428	0.002	93	219486	50.0	54.6	
84 Chlorobenzene	112	10.467	10.471	-0.004	91	390029	50.0	54.1	
85 4-Chlorobenzotrifluoride	180	10.522	10.520	0.002	95	201923	50.0	54.0	
86 1,1,1,2-Tetrachloroethane	131	10.564	10.562	0.002	85	118301	50.0	47.6	
87 Ethylbenzene	106	10.564	10.568	-0.004	100	202808	50.0	46.9	
88 m-Xylene & p-Xylene	106	10.698	10.696	0.002	99	253273	50.0	47.4	
89 o-Xylene	106	11.075	11.079	-0.004	98	251480	50.0	45.8	
90 Styrene	104	11.100	11.104	-0.004	94	438555	50.0	54.2	
91 Bromoform	173	11.294	11.292	0.002	96	54639	50.0	57.3	
92 2-Chlorobenzotrifluoride	180	11.337	11.341	-0.004	94	219629	50.0	52.4	
93 Isopropylbenzene	105	11.446	11.444	0.002	98	665304	50.0	49.2	
96 1,1,2,2-Tetrachloroethane	83	11.757	11.754	0.003	95	192533	50.0	68.2	
95 Bromobenzene	156	11.769	11.767	0.002	96	141596	50.0	46.0	
97 trans-1,4-Dichloro-2-buten	53	11.793	11.797	-0.004	71	54338	50.0	62.8	
98 1,2,3-Trichloropropane	110	11.818	11.815	0.003	84	62320	50.0	69.2	
99 N-Propylbenzene	120	11.866	11.864	0.002	99	170789	50.0	46.4	
100 2-Chlorotoluene	126	11.951	11.955	-0.004	94	151212	50.0	46.7	
101 3-Chlorotoluene	126	12.018	12.016	0.002	97	180800	50.0	53.4	
102 1,3,5-Trimethylbenzene	105	12.049	12.046	0.003	93	589197	50.0	49.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
103 4-Chlorotoluene	126	12.079	12.077	0.002	99	156056	50.0	46.9	
104 tert-Butylbenzene	119	12.359	12.363	-0.004	92	447407	50.0	48.6	
106 1,2,4-Trimethylbenzene	105	12.420	12.424	-0.004	99	615316	50.0	50.3	
107 1,2-dichloro-4-(trifluorom	214	12.456	12.454	0.002	97	184749	50.0	54.0	
108 sec-Butylbenzene	105	12.584	12.588	-0.004	97	682757	50.0	48.0	
109 1,3-Dichlorobenzene	146	12.706	12.710	-0.004	94	295210	50.0	48.9	
110 4-Isopropyltoluene	119	12.742	12.746	-0.004	95	565254	50.0	49.0	
111 1,4-Dichlorobenzene	146	12.815	12.819	-0.004	88	310426	50.0	49.8	
113 2,4-Dichloro-1-(triflourom	214	12.827	12.831	-0.004	95	180056	50.0	52.5	
114 2,5-Dichlorobenzotrifluori	214	12.870	12.868	0.002	97	215353	50.0	57.0	
116 n-Butylbenzene	91	13.150	13.154	-0.004	98	544015	50.0	49.0	
117 1,2-Dichlorobenzene	146	13.168	13.166	0.002	91	303362	50.0	50.3	
118 1,2-Dibromo-3-Chloropropan	75	13.965	13.957	0.008	70	32312	50.0	67.1	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.105	14.103	0.002	98	916415	150.0	161.9	
121 2,3- & 3,4- Dichlorotoluen	125	14.519	14.516	0.003	98	687114	100.0	111.2	
122 1,2,4-Trichlorobenzene	180	14.786	14.784	0.002	92	229277	50.0	49.1	
123 Hexachlorobutadiene	225	14.926	14.930	-0.004	95	84043	50.0	46.0	
124 Naphthalene	128	15.054	15.052	0.002	99	540099	50.0	67.3	
125 1,2,3-Trichlorobenzene	180	15.273	15.277	-0.004	94	207510	50.0	53.1	
126 2,4,5-Trichlorotoluene	159	16.046	16.049	-0.003	0	125699	50.0	43.7	
127 2,3,6-Trichlorotoluene	159	16.149	16.147	0.002	94	119215	50.0	46.5	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		100.0	90.3	
S 131 Xylenes, Total	106				0		100.0	93.2	
S 132 1,3-Dichloropropene, Total	1				0		100.0	100.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260VOA2ND_00109	Amount Added:	2.00	Units: uL		
VOAEE2ND_00001	Amount Added:	2.00	Units: uL		
voaWVA2nd Res_00006	Amount Added:	2.00	Units: uL		
voaWKet2 Rest_00002	Amount Added:	2.00	Units: uL		
VOAACRPRI_00003	Amount Added:	6.00	Units: uL		
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent	

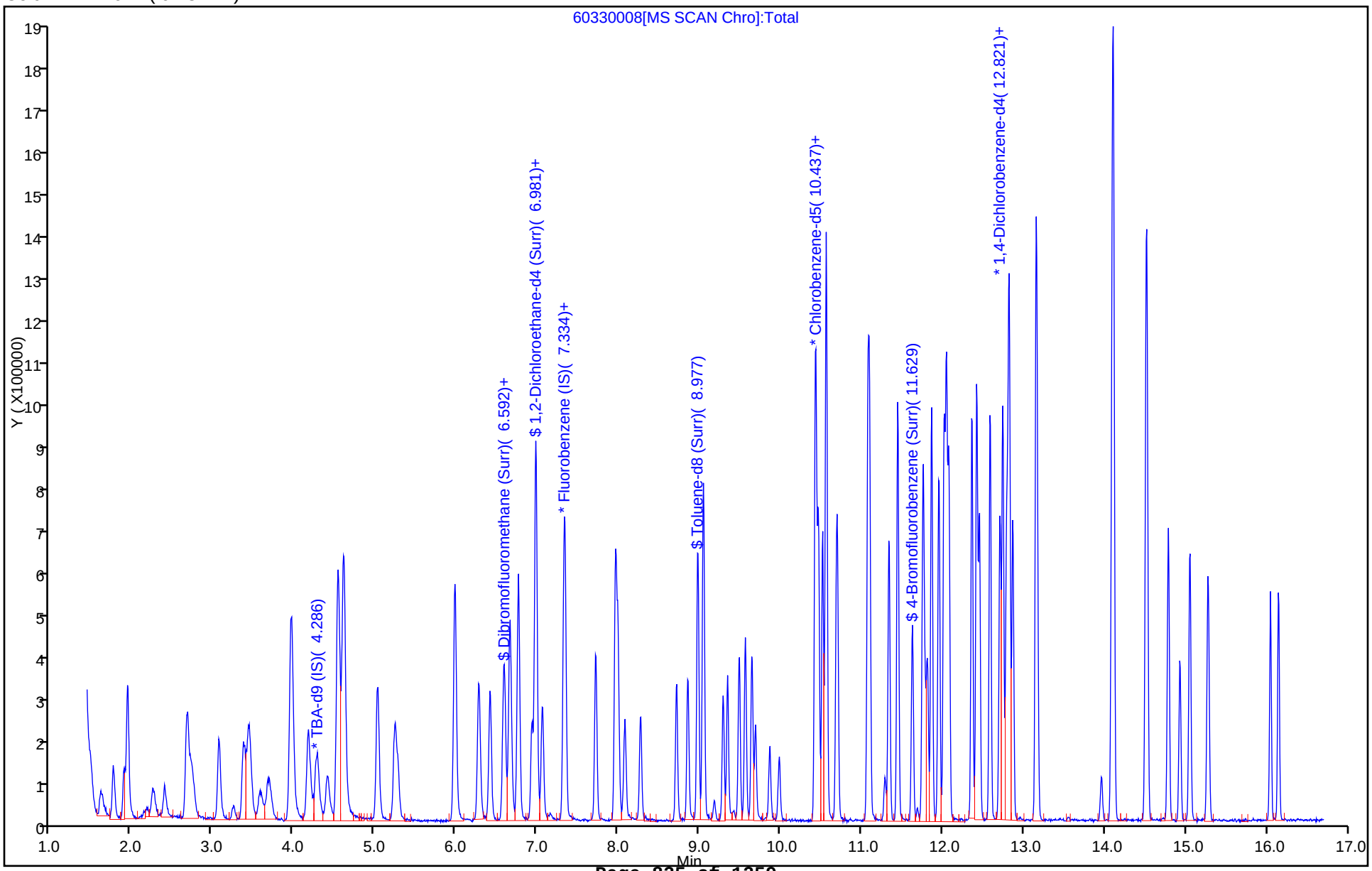
Report Date: 30-Mar-2015 13:59:41 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150330-6236.b\60330008.D

Injection Date:	30-Mar-2015 13:03:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	LCS			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42353-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-136954/10

Matrix: Water | Lab File ID: 50330010.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/30/2015 14:33

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.: 136954 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	10.2		1.0	0.28
75-01-4	Vinyl chloride	11.3		1.0	0.23
74-83-9	Bromomethane	12.6		1.0	0.31
75-00-3	Chloroethane	12.0		1.0	0.21
75-35-4	1,1-Dichloroethene	8.64		1.0	0.30
67-64-1	Acetone	22.6		5.0	2.5
75-15-0	Carbon disulfide	6.37		1.0	0.21
75-09-2	Methylene Chloride	8.67		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.21		1.0	0.17
1634-04-4	Methyl tert-butyl ether	9.43		1.0	0.18
75-34-3	1,1-Dichloroethane	9.68		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	9.05		1.0	0.24
74-97-5	Bromochloromethane	9.20		1.0	0.18
78-93-3	2-Butanone (MEK)	16.0		5.0	0.55
67-66-3	Chloroform	10.1		1.0	0.17
71-55-6	1,1,1-Trichloroethane	9.92		1.0	0.29
56-23-5	Carbon tetrachloride	10.7		1.0	0.14
71-43-2	Benzene	9.47		1.0	0.11
107-06-2	1,2-Dichloroethane	10.2		1.0	0.21
79-01-6	Trichloroethene	9.33		1.0	0.14
78-87-5	1,2-Dichloropropane	9.49		1.0	0.095
75-27-4	Bromodichloromethane	9.58		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	9.81		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	16.4		5.0	0.53
108-88-3	Toluene	10.0		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	11.2		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.4		1.0	0.20
127-18-4	Tetrachloroethene	9.42		1.0	0.15
591-78-6	2-Hexanone	14.8		5.0	0.16
124-48-1	Dibromochloromethane	10.3		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	9.87		1.0	0.18
108-90-7	Chlorobenzene	10.2		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	11.1		1.0	0.28
100-41-4	Ethylbenzene	9.71		1.0	0.23
1330-20-7	Xylenes, Total	19.5		3.0	0.49
100-42-5	Styrene	9.94		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-136954/10

Matrix: Water Lab File ID: 50330010.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/30/2015 14:33

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.: 136954 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.53		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.2		1.0	0.20
107-13-1	Acrylonitrile	92.6		20	0.55
123-91-1	1,4-Dioxane	153	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		64-135
2037-26-5	Toluene-d8 (Surr)	96		71-118
460-00-4	4-Bromofluorobenzene (Surr)	95		70-118
1868-53-7	Dibromofluoromethane (Surr)	93		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330010.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 30-Mar-2015 14:33:30 ALS Bottle#: 8 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 180-0006238-010
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 30-Mar-2015 14:58:16 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: fergusond Date: 30-Mar-2015 14:58:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.314	4.301	0.013	97	127652	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.277	7.282	-0.005	99	464370	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.368	10.367	0.001	99	105827	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.685	12.684	0.001	97	161688	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.529	6.535	-0.006	98	97839	50.0	46.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.900	0.000	99	141227	50.0	50.7	
$ 7 Toluene-d8 (Surr)	98	8.926	8.926	0.000	100	403175	50.0	47.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.536	11.536	0.000	98	144281	50.0	47.5	
11 Dichlorodifluoromethane	85	1.626	1.626	0.000	99	128514	50.0	64.6	
12 Chloromethane	50	1.790	1.784	0.006	100	140109	50.0	51.0	
13 Vinyl chloride	62	1.918	1.912	0.006	100	172893	50.0	56.3	
14 Butadiene	39	1.954	1.955	-0.001	98	198933	50.0	56.7	
15 Bromomethane	94	2.270	2.259	0.011	100	102527	50.0	62.8	
16 Chloroethane	64	2.410	2.399	0.011	98	127287	50.0	59.9	
17 Dichlorofluoromethane	67	2.666	2.666	0.000	100	292525	50.0	60.3	
18 Trichlorofluoromethane	101	2.715	2.727	-0.013	99	197201	50.0	53.5	
20 Ethyl ether	59	3.086	3.086	0.000	99	124167	50.0	51.1	
21 Acrolein	56	3.274	3.256	0.018	96	38610	150.0	130.9	
22 1,1-Dichloroethene	96	3.396	3.390	0.006	98	115644	50.0	43.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.451	3.439	0.012	98	122733	50.0	45.3	
24 Acetone	43	3.505	3.506	-0.001	99	107690	100.0	113.2	
25 Iodomethane	142	3.627	3.567	0.060	99	166738	50.0	44.8	
26 Carbon disulfide	76	3.664	3.658	0.006	100	208522	50.0	31.8	
28 3-Chloro-1-propene	76	3.949	3.950	-0.001	99	51996	50.0	36.7	
30 Methyl acetate	43	4.029	4.017	0.012	100	504786	250.0	226.8	
31 Methylene Chloride	84	4.156	4.151	0.005	97	134176	50.0	43.3	
32 2-Methyl-2-propanol	59	4.448	4.443	0.005	98	69867	500.0	464.7	
33 Acrylonitrile	53	4.558	4.552	0.006	100	530129	500.0	463.1	
34 trans-1,2-Dichloroethene	96	4.570	4.570	0.000	86	127608	50.0	46.1	
35 Methyl tert-butyl ether	73	4.600	4.595	0.005	100	288743	50.0	47.2	
36 Hexane	57	4.984	4.990	-0.006	98	177746	50.0	40.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.178	5.173	0.005	100	239202	50.0	48.4	
38 Vinyl acetate	43	5.300	5.294	0.006	100	158834	50.0	45.3	
44 2,2-Dichloropropane	77	5.927	5.927	0.000	97	69019	50.0	55.8	
45 cis-1,2-Dichloroethene	96	5.945	5.939	0.006	97	132046	50.0	45.3	
46 2-Butanone (MEK)	43	5.993	5.994	-0.001	99	121754	100.0	80.0	
49 Chlorobromomethane	128	6.231	6.231	0.000	98	58069	50.0	46.0	
51 Tetrahydrofuran	42	6.285	6.286	-0.001	96	73129	100.0	76.8	
52 Chloroform	83	6.346	6.347	-0.001	100	226455	50.0	50.4	
53 1,1,1-Trichloroethane	97	6.535	6.535	0.000	98	142277	50.0	49.6	
54 Cyclohexane	56	6.584	6.590	-0.006	96	217871	50.0	39.6	
56 Carbon tetrachloride	117	6.724	6.718	0.006	99	123540	50.0	53.7	
55 1,1-Dichloropropene	75	6.724	6.724	0.000	99	176007	50.0	47.2	
57 Isobutyl alcohol	41	6.949	6.943	0.006	99	69179	1250.0	1116.1	
58 Benzene	78	6.961	6.955	0.006	99	521335	50.0	47.4	
59 1,2-Dichloroethane	62	6.985	6.986	-0.001	99	182890	50.0	50.8	
62 n-Heptane	43	7.283	7.278	0.005	77	145220	50.0	38.4	
64 Trichloroethene	130	7.673	7.667	0.006	98	128649	50.0	46.7	
66 Methylcyclohexane	83	7.867	7.862	0.005	99	204498	50.0	41.6	
67 1,2-Dichloropropane	63	7.904	7.904	0.000	97	129210	50.0	47.5	
68 Dibromomethane	93	8.031	8.026	0.005	97	72055	50.0	49.2	
70 1,4-Dioxane	88	8.062	8.062	0.000	95	21895	1000.0	764.0	M
71 Dichlorobromomethane	83	8.196	8.196	0.000	99	143234	50.0	47.9	
73 2-Chloroethyl vinyl ether	63	8.524	8.525	-0.001	98	136980	100.0	89.3	
74 cis-1,3-Dichloropropene	75	8.658	8.659	-0.001	99	141607	50.0	49.1	
75 4-Methyl-2-pentanone (MIBK	43	8.828	8.823	0.005	99	234932	100.0	82.0	
76 Toluene	91	8.993	8.993	0.000	99	543873	50.0	50.1	
77 trans-1,3-Dichloropropene	75	9.218	9.218	0.000	98	109456	50.0	55.9	
78 Ethyl methacrylate	69	9.321	9.316	0.005	97	120684	50.0	47.2	
79 1,1,2-Trichloroethane	97	9.400	9.401	-0.001	98	106037	50.0	52.1	
80 Tetrachloroethene	164	9.534	9.541	-0.007	98	99883	50.0	47.1	
81 1,3-Dichloropropane	76	9.571	9.565	0.006	98	187299	50.0	49.5	
82 2-Hexanone	43	9.662	9.662	0.000	99	161673	100.0	73.9	
84 Chlorodibromomethane	129	9.790	9.796	-0.006	99	83204	50.0	51.3	
85 Ethylene Dibromide	107	9.905	9.900	0.005	99	95740	50.0	49.3	
86 3-Chlorobenzotrifluoride	180	10.374	10.374	0.000	95	224618	50.0	54.3	
87 Chlorobenzene	112	10.392	10.392	0.000	100	349640	50.0	50.9	
88 4-Chlorobenzotrifluoride	180	10.428	10.429	-0.001	99	203755	50.0	50.9	
89 1,1,1,2-Tetrachloroethane	131	10.477	10.478	-0.001	96	98541	50.0	55.5	
90 Ethylbenzene	106	10.501	10.502	-0.001	100	191408	50.0	48.6	
91 m-Xylene & p-Xylene	106	10.617	10.624	-0.007	100	235547	50.0	48.9	
92 o-Xylene	106	11.012	11.013	-0.001	97	228826	50.0	48.5	
93 Styrene	104	11.025	11.025	-0.001	96	377563	50.0	49.7	
94 Bromoform	173	11.207	11.208	-0.001	99	47788	50.0	47.7	
96 2-Chlorobenzotrifluoride	180	11.274	11.274	0.000	99	219778	50.0	53.2	
97 Isopropylbenzene	105	11.377	11.378	-0.001	100	589226	50.0	50.1	
99 1,1,2,2-Tetrachloroethane	83	11.675	11.676	-0.001	97	148404	50.0	50.9	
100 Bromobenzene	156	11.682	11.682	0.000	99	140180	50.0	46.8	
101 1,2,3-Trichloropropane	110	11.724	11.725	-0.001	97	49607	50.0	50.4	
102 trans-1,4-Dichloro-2-buten	53	11.736	11.731	0.005	97	35530	50.0	43.5	
103 N-Propylbenzene	120	11.791	11.792	-0.001	100	169450	50.0	45.9	
104 2-Chlorotoluene	126	11.876	11.877	-0.001	100	144101	50.0	46.5	
105 3-Chlorotoluene	126	11.937	11.938	-0.001	99	183109	50.0	52.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.961	11.962	-0.001	100	496988	50.0	48.3	
107 4-Chlorotoluene	126	11.980	11.986	-0.006	97	157842	50.0	47.0	
108 tert-Butylbenzene	119	12.290	12.290	0.000	99	405071	50.0	45.4	
110 1,2,4-Trimethylbenzene	105	12.339	12.339	0.000	99	497440	50.0	47.1	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.400	-0.001	99	167617	50.0	50.2	
112 sec-Butylbenzene	105	12.509	12.509	0.000	100	598962	50.0	47.7	
113 1,3-Dichlorobenzene	146	12.618	12.619	-0.001	99	255711	50.0	46.4	
114 4-Isopropyltoluene	119	12.655	12.655	0.000	100	480898	50.0	46.4	
115 1,4-Dichlorobenzene	146	12.710	12.710	0.000	100	272296	50.0	48.4	
116 2,4-Dichloro-1-(triflourom	214	12.758	12.759	-0.001	98	154006	50.0	49.3	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.808	-0.001	99	173190	50.0	49.5	
120 n-Butylbenzene	91	13.062	13.063	-0.001	99	444311	50.0	47.1	
121 1,2-Dichlorobenzene	146	13.081	13.081	0.000	99	249993	50.0	49.0	
122 1,2-Dibromo-3-Chloropropan	75	13.865	13.860	0.005	97	17809	50.0	42.6	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.005	14.006	-0.001	99	564410	150.0	146.2	
124 1,3,5-Trichlorobenzene	180	14.072	14.071	0.001	97	142328	50.0	46.0	
125 2,3- & 3,4- Dichlorotoluen	125	14.425	14.426	-0.001	100	357395	100.0	95.2	
126 1,2,4-Trichlorobenzene	180	14.693	14.693	0.000	98	106475	50.0	40.1	
127 Hexachlorobutadiene	225	14.863	14.864	-0.001	97	52389	50.0	41.1	
128 Naphthalene	128	14.942	14.943	-0.001	100	260583	50.0	37.3	
129 1,2,3-Trichlorobenzene	180	15.192	15.186	0.006	98	83793	50.0	38.4	
131 2,4,5-Trichlorotoluene	159	15.964	15.965	-0.001	98	38120	50.0	32.5	
130 2,3,6-Trichlorotoluene	159	16.062	16.062	0.000	97	34826	50.0	32.9	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	97.4	
S 134 1,2-Dichloroethene, Total	96				0		100.0	91.3	
S 135 1,3-Dichloropropene, Total	1				0		100.0	105.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00109	Amount Added:	2.00	Units: uL	
VOAEE2ND_00001	Amount Added:	2.00	Units: uL	
voaWVA2nd Res_00006	Amount Added:	2.00	Units: uL	
voaW1,3,5TCab_00001	Amount Added:	2.00	Units: uL	
voaW 2-cle pr_00001	Amount Added:	2.00	Units: uL	
voaWKet2 Rest_00002	Amount Added:	2.00	Units: uL	
VOAACRPRI_00003	Amount Added:	6.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

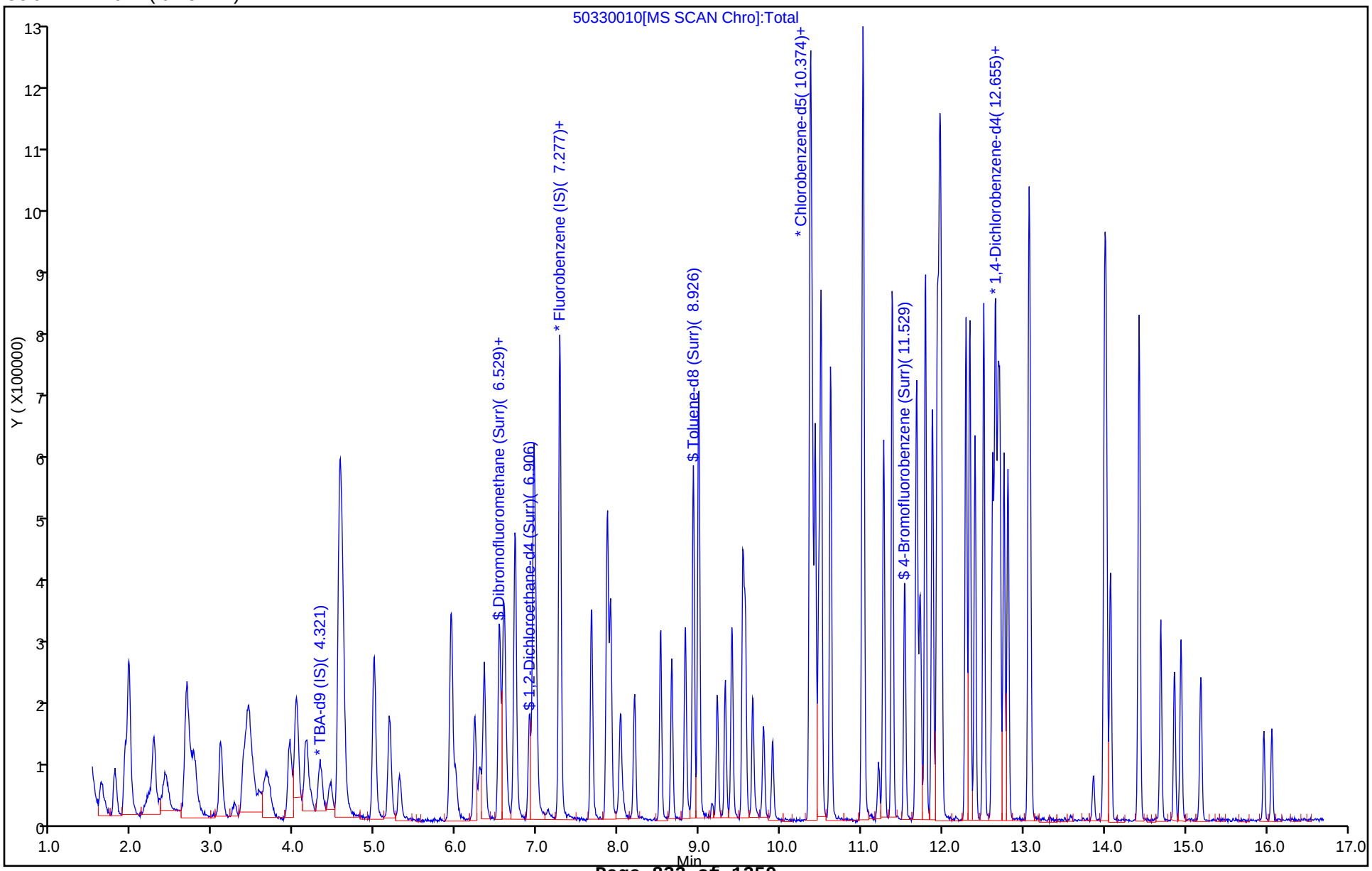
Report Date: 30-Mar-2015 14:58:16 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330010.D

Injection Date:	30-Mar-2015 14:33:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	LCS			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

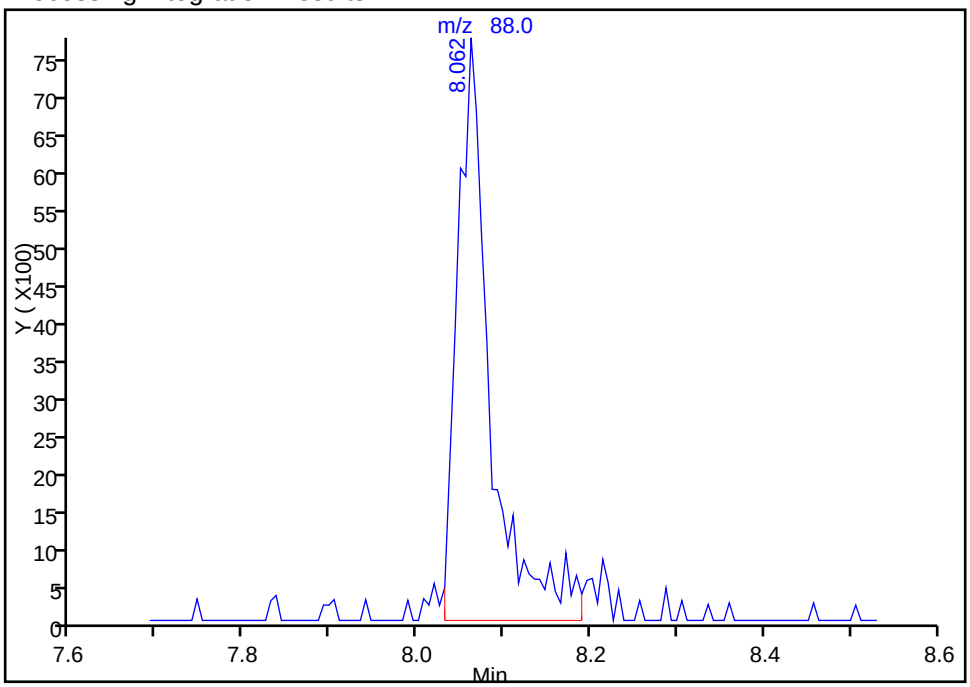
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150330-6238.b\50330010.D				
Injection Date:	30-Mar-2015 14:33:30	Instrument ID:	CHHP5		
Lims ID:	LCS				
Client ID:					
Operator ID:	001562	ALS Bottle#:	8	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

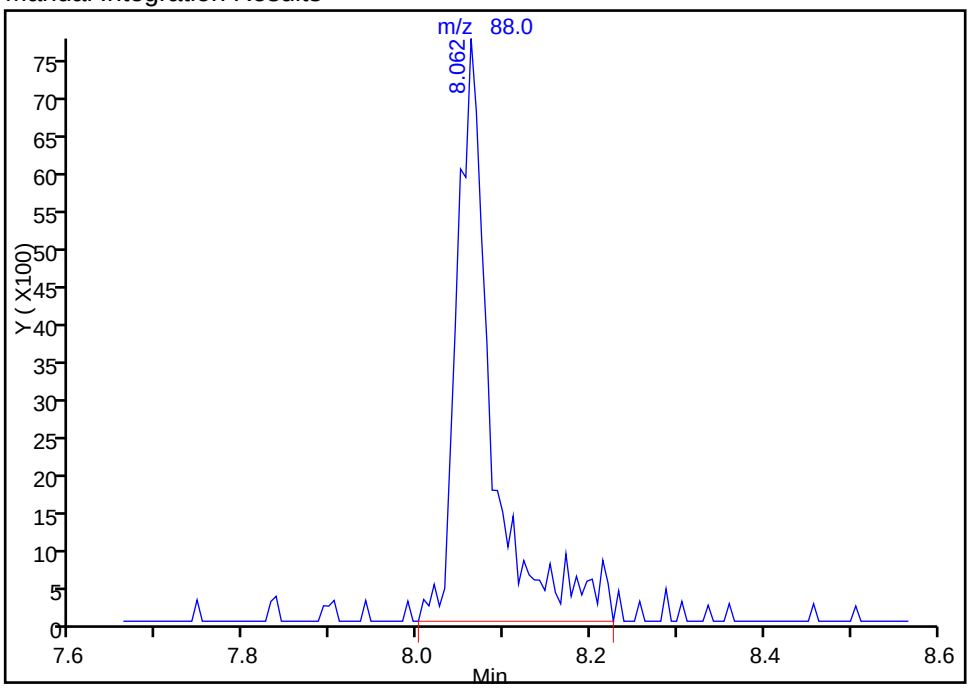
Processing Integration Results

RT: 8.06
Area: 20497
Amount: 715.1847
Amount Units: ng



Manual Integration Results

RT: 8.06
Area: 21895
Amount: 763.9639
Amount Units: ng



Reviewer: fergusond, 30-Mar-2015 14:58:16
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-137048/9

Matrix: Water Lab File ID: 50331009.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2015 12:53

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.: 137048 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	10.0		1.0	0.28
75-01-4	Vinyl chloride	11.0		1.0	0.23
74-83-9	Bromomethane	13.3		1.0	0.31
75-00-3	Chloroethane	12.1		1.0	0.21
75-35-4	1,1-Dichloroethene	9.56		1.0	0.30
67-64-1	Acetone	20.8		5.0	2.5
75-15-0	Carbon disulfide	7.90		1.0	0.21
75-09-2	Methylene Chloride	9.55		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.98		1.0	0.17
1634-04-4	Methyl tert-butyl ether	9.94		1.0	0.18
75-34-3	1,1-Dichloroethane	10.4		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	9.74		1.0	0.24
74-97-5	Bromochloromethane	9.80		1.0	0.18
78-93-3	2-Butanone (MEK)	15.6		5.0	0.55
67-66-3	Chloroform	10.7		1.0	0.17
71-55-6	1,1,1-Trichloroethane	11.2		1.0	0.29
56-23-5	Carbon tetrachloride	12.0		1.0	0.14
71-43-2	Benzene	10.5		1.0	0.11
107-06-2	1,2-Dichloroethane	10.9		1.0	0.21
79-01-6	Trichloroethene	9.63		1.0	0.14
78-87-5	1,2-Dichloropropane	9.45		1.0	0.095
75-27-4	Bromodichloromethane	9.90		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	10.0		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	15.8		5.0	0.53
108-88-3	Toluene	10.3		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	10.0		1.0	0.15
79-00-5	1,1,2-Trichloroethane	9.82		1.0	0.20
127-18-4	Tetrachloroethene	9.84		1.0	0.15
591-78-6	2-Hexanone	13.4		5.0	0.16
124-48-1	Dibromochloromethane	10.4		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	10.1		1.0	0.18
108-90-7	Chlorobenzene	10.0		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	11.1		1.0	0.28
100-41-4	Ethylbenzene	9.79		1.0	0.23
1330-20-7	Xylenes, Total	19.8		3.0	0.49
100-42-5	Styrene	10.2		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-137048/9

Matrix: Water Lab File ID: 50331009.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2015 12:53

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.: 137048 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	10.1		1.0	0.20
107-13-1	Acrylonitrile	93.9		20	0.55
123-91-1	1,4-Dioxane	132	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		64-135
2037-26-5	Toluene-d8 (Surr)	105		71-118
460-00-4	4-Bromofluorobenzene (Surr)	103		70-118
1868-53-7	Dibromofluoromethane (Surr)	102		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331009.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 31-Mar-2015 12:53:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 180-0006255-009
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 14:08:52 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 14:09:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.308	4.297	0.011	80	104283	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.277	7.271	0.006	96	426522	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.361	10.362	-0.001	97	96127	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.685	12.686	-0.001	87	150879	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.535	6.531	0.004	94	98970	50.0	51.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.896	0.004	61	141731	50.0	55.4	
$ 7 Toluene-d8 (Surr)	98	8.926	8.921	0.005	90	401812	50.0	52.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.529	11.531	-0.002	95	141916	50.0	51.4	
11 Dichlorodifluoromethane	85	1.625	1.621	0.004	51	98824	50.0	54.1	
12 Chloromethane	50	1.790	1.779	0.011	86	126504	50.0	50.1	
13 Vinyl chloride	62	1.911	1.913	-0.002	97	155252	50.0	55.1	
14 Butadiene	39	1.960	1.956	0.004	97	170066	50.0	52.8	
15 Bromomethane	94	2.258	2.260	-0.002	97	99490	50.0	66.6	
16 Chloroethane	64	2.410	2.400	0.010	97	118298	50.0	60.6	
17 Dichlorofluoromethane	67	2.666	2.662	0.004	99	267374	50.0	60.0	
18 Trichlorofluoromethane	101	2.733	2.704	0.029	96	191924	50.0	56.7	
20 Ethyl ether	59	3.098	3.087	0.011	98	124537	50.0	55.8	
21 Acrolein	56	3.280	3.252	0.028	67	32027	150.0	118.2	
22 1,1-Dichloroethene	96	3.402	3.385	0.017	94	117569	50.0	47.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.444	3.428	0.016	97	127892	50.0	51.4	
24 Acetone	43	3.511	3.501	0.010	83	91063	100.0	104.2	
25 Iodomethane	142	3.603	3.580	0.023	97	166426	50.0	48.7	
26 Carbon disulfide	76	3.682	3.671	0.011	99	237592	50.0	39.5	
28 3-Chloro-1-propene	76	3.955	3.945	0.010	88	61090	50.0	47.0	
30 Methyl acetate	43	4.028	4.024	0.004	100	485492	250.0	237.5	
31 Methylene Chloride	84	4.150	4.140	0.010	96	135822	50.0	47.7	
32 2-Methyl-2-propanol	59	4.448	4.438	0.010	80	54768	500.0	445.9	
33 Acrylonitrile	53	4.558	4.547	0.011	97	493763	500.0	469.6	
34 trans-1,2-Dichloroethene	96	4.570	4.560	0.010	64	126903	50.0	49.9	
35 Methyl tert-butyl ether	73	4.600	4.596	0.004	99	279535	50.0	49.7	
36 Hexane	57	4.990	4.979	0.011	97	180310	50.0	44.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.184	5.168	0.016	98	237209	50.0	52.2	
38 Vinyl acetate	43	5.306	5.296	0.010	100	139434	50.0	43.3	
44 2,2-Dichloropropane	77	5.933	5.928	0.005	90	70679	50.0	62.3	
45 cis-1,2-Dichloroethene	96	5.945	5.941	0.005	91	130573	50.0	48.7	
46 2-Butanone (MEK)	43	5.993	5.989	0.004	75	108768	100.0	77.9	
49 Chlorobromomethane	128	6.225	6.226	-0.001	72	56831	50.0	49.0	
51 Tetrahydrofuran	42	6.291	6.287	0.004	96	68192	100.0	77.9	
52 Chloroform	83	6.346	6.342	0.004	100	220211	50.0	53.4	
53 1,1,1-Trichloroethane	97	6.535	6.531	0.004	97	147786	50.0	56.1	
54 Cyclohexane	56	6.590	6.585	0.005	76	244579	50.0	48.4	
55 1,1-Dichloropropene	75	6.729	6.719	0.010	98	167689	50.0	49.0	
56 Carbon tetrachloride	117	6.723	6.719	0.004	93	127096	50.0	60.1	
57 Isobutyl alcohol	41	6.948	6.950	-0.002	98	62696	1250.0	1101.2	
58 Benzene	78	6.961	6.956	0.005	99	529916	50.0	52.4	
59 1,2-Dichloroethane	62	6.991	6.987	0.004	98	180584	50.0	54.6	
62 n-Heptane	43	7.283	7.279	0.004	78	144842	50.0	41.7	
64 Trichloroethene	130	7.666	7.668	-0.002	98	121931	50.0	48.1	
66 Methylcyclohexane	83	7.867	7.863	0.004	95	210712	50.0	46.6	
67 1,2-Dichloropropane	63	7.910	7.905	0.005	95	118140	50.0	47.3	
68 Dibromomethane	93	8.025	8.021	0.004	96	65882	50.0	48.9	
70 1,4-Dioxane	88	8.062	8.058	0.004	78	17402	1000.0	661.1	M
71 Dichlorobromomethane	83	8.196	8.197	-0.001	99	135954	50.0	49.5	
73 2-Chloroethyl vinyl ether	63	8.524	8.520	0.004	86	128722	100.0	91.3	
74 cis-1,3-Dichloropropene	75	8.658	8.654	0.004	98	133156	50.0	50.2	
75 4-Methyl-2-pentanone (MIBK	43	8.822	8.824	-0.002	96	206045	100.0	79.2	
76 Toluene	91	8.993	8.988	0.004	100	507238	50.0	51.5	
77 trans-1,3-Dichloropropene	75	9.218	9.219	-0.001	95	89026	50.0	50.0	
78 Ethyl methacrylate	69	9.315	9.317	-0.002	75	101866	50.0	43.9	
79 1,1,2-Trichloroethane	97	9.406	9.402	0.004	96	90748	50.0	49.1	
80 Tetrachloroethene	164	9.540	9.536	0.004	95	94832	50.0	49.2	
81 1,3-Dichloropropane	76	9.564	9.566	-0.002	96	175096	50.0	51.0	
82 2-Hexanone	43	9.656	9.658	-0.002	97	133198	100.0	67.0	
84 Chlorodibromomethane	129	9.789	9.785	0.004	98	76797	50.0	52.1	
85 Ethylene Dibromide	107	9.905	9.901	0.004	99	88933	50.0	50.5	
86 3-Chlorobenzotrifluoride	180	10.373	10.369	0.004	96	204290	50.0	54.4	
87 Chlorobenzene	112	10.392	10.388	0.004	89	312653	50.0	50.1	
88 4-Chlorobenzotrifluoride	180	10.428	10.430	-0.002	91	200580	50.0	55.2	
89 1,1,1,2-Tetrachloroethane	131	10.477	10.467	0.010	94	89624	50.0	55.6	
90 Ethylbenzene	106	10.501	10.503	-0.002	100	175271	50.0	48.9	
91 m-Xylene & p-Xylene	106	10.617	10.619	-0.002	100	218548	50.0	49.9	
92 o-Xylene	106	11.012	11.014	-0.002	94	210851	50.0	49.2	
93 Styrene	104	11.024	11.026	-0.002	93	353574	50.0	51.2	
94 Bromoform	173	11.213	11.209	0.004	87	42953	50.0	47.2	
96 2-Chlorobenzotrifluoride	180	11.274	11.270	0.004	98	212966	50.0	56.7	
97 Isopropylbenzene	105	11.377	11.379	-0.002	99	547404	50.0	51.2	
99 1,1,2,2-Tetrachloroethane	83	11.675	11.671	0.004	79	134297	50.0	50.7	
100 Bromobenzene	156	11.681	11.683	-0.002	96	125565	50.0	45.0	
101 1,2,3-Trichloropropane	110	11.718	11.726	-0.008	65	40582	50.0	44.2	
102 trans-1,4-Dichloro-2-buten	53	11.736	11.732	0.004	39	31699	50.0	41.5	
103 N-Propylbenzene	120	11.785	11.787	-0.002	99	151451	50.0	44.0	
104 2-Chlorotoluene	126	11.876	11.872	0.004	99	133070	50.0	46.0	
105 3-Chlorotoluene	126	11.931	11.933	-0.002	92	175376	50.0	54.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.961	11.963	-0.002	98	455453	50.0	47.4	
107 4-Chlorotoluene	126	11.979	11.981	-0.002	97	144046	50.0	46.0	
108 tert-Butylbenzene	119	12.290	12.286	0.004	72	366848	50.0	44.1	
110 1,2,4-Trimethylbenzene	105	12.338	12.334	0.004	99	469417	50.0	47.6	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.401	-0.002	98	160873	50.0	51.6	
112 sec-Butylbenzene	105	12.509	12.511	-0.002	99	547745	50.0	46.8	
113 1,3-Dichlorobenzene	146	12.618	12.614	0.004	84	241956	50.0	47.0	
114 4-Isopropyltoluene	119	12.649	12.651	-0.002	99	432020	50.0	44.7	
115 1,4-Dichlorobenzene	146	12.710	12.705	0.005	98	251306	50.0	47.8	
116 2,4-Dichloro-1-(triflourom	214	12.758	12.760	-0.002	95	146601	50.0	50.2	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.803	0.004	98	165064	50.0	50.6	
120 n-Butylbenzene	91	13.062	13.064	-0.002	99	398920	50.0	45.3	
121 1,2-Dichlorobenzene	146	13.081	13.083	-0.001	99	222792	50.0	46.8	
122 1,2-Dibromo-3-Chloropropan	75	13.859	13.861	-0.002	87	16334	50.0	41.9	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.005	14.007	-0.002	95	548142	150.0	152.2	
124 1,3,5-Trichlorobenzene	180	14.072	14.073	-0.001	98	137364	50.0	47.5	
125 2,3- & 3,4- Dichlorotoluen	125	14.425	14.427	-0.002	99	340846	100.0	97.3	
126 1,2,4-Trichlorobenzene	180	14.693	14.695	-0.002	95	98753	50.0	39.8	
127 Hexachlorobutadiene	225	14.863	14.859	0.004	93	47343	50.0	39.8	
128 Naphthalene	128	14.942	14.938	0.004	99	227494	50.0	34.9	
129 1,2,3-Trichlorobenzene	180	15.185	15.187	-0.002	95	76755	50.0	37.7	
131 2,4,5-Trichlorotoluene	159	15.964	15.966	-0.002	95	37810	50.0	34.6	
130 2,3,6-Trichlorotoluene	159	16.062	16.063	-0.002	94	34328	50.0	34.8	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	99.1	
S 134 1,2-Dichloroethene, Total	96				0		100.0	98.6	
S 135 1,3-Dichloropropene, Total	1				0		100.0	100.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00109	Amount Added:	2.00	Units: uL	
voaWKet2 Rest_00002	Amount Added:	2.00	Units: uL	
voaWVA2nd Res_00006	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00004	Amount Added:	2.00	Units: uL	
voaW 2-cle pr_00001	Amount Added:	2.00	Units: uL	
voaW1,3,5TCab_00001	Amount Added:	2.00	Units: uL	
VOAACRO2ND_00007	Amount Added:	6.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

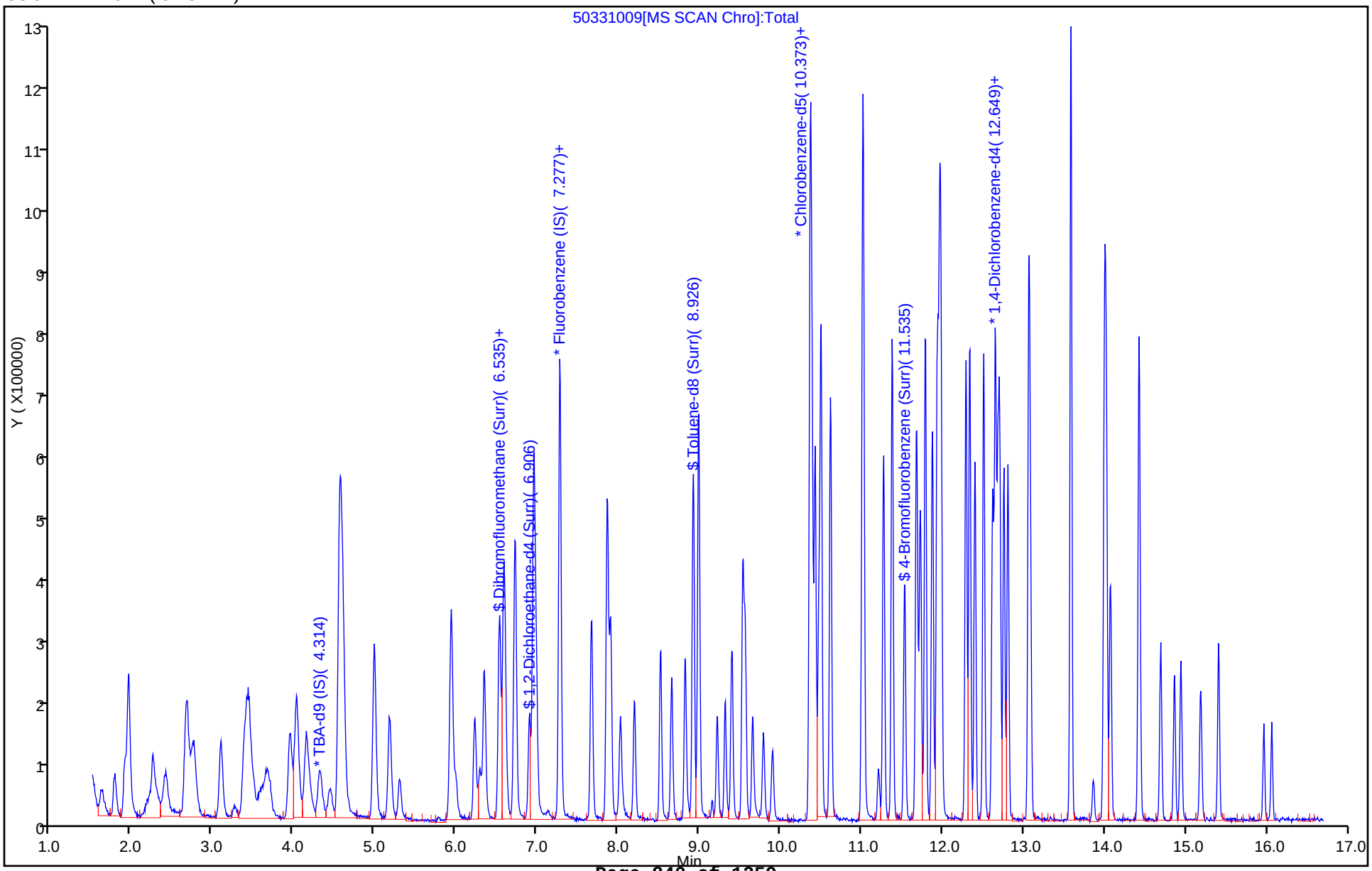
Report Date: 31-Mar-2015 14:09:04 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331009.D

Injection Date:	31-Mar-2015 12:53:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	LCS			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

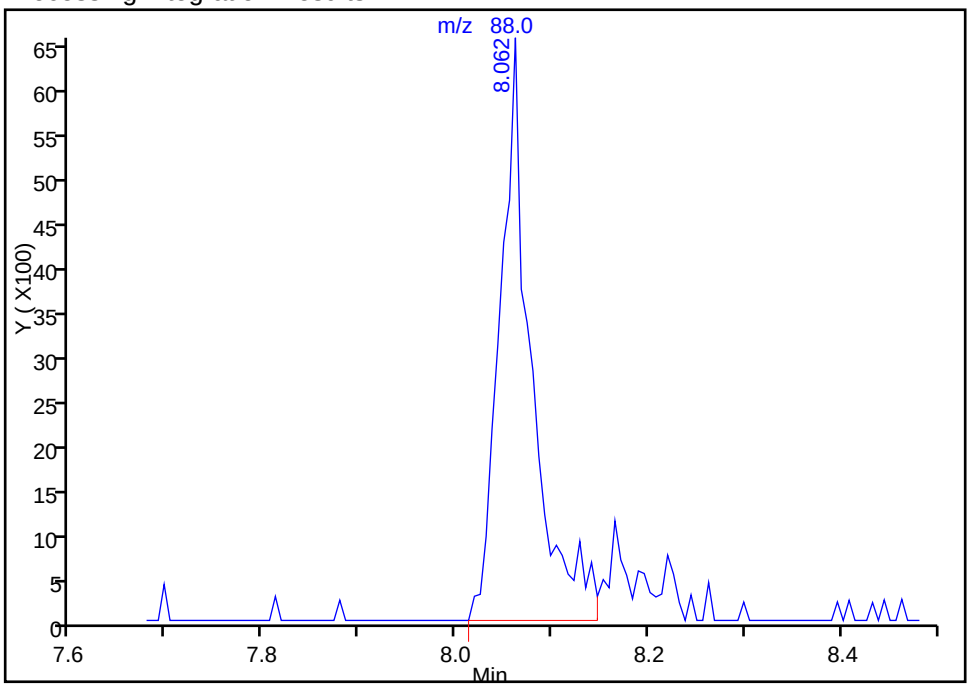
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331009.D				
Injection Date:	31-Mar-2015 12:53:30	Instrument ID:	CHHP5		
Lims ID:	LCS				
Client ID:					
Operator ID:	001562	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

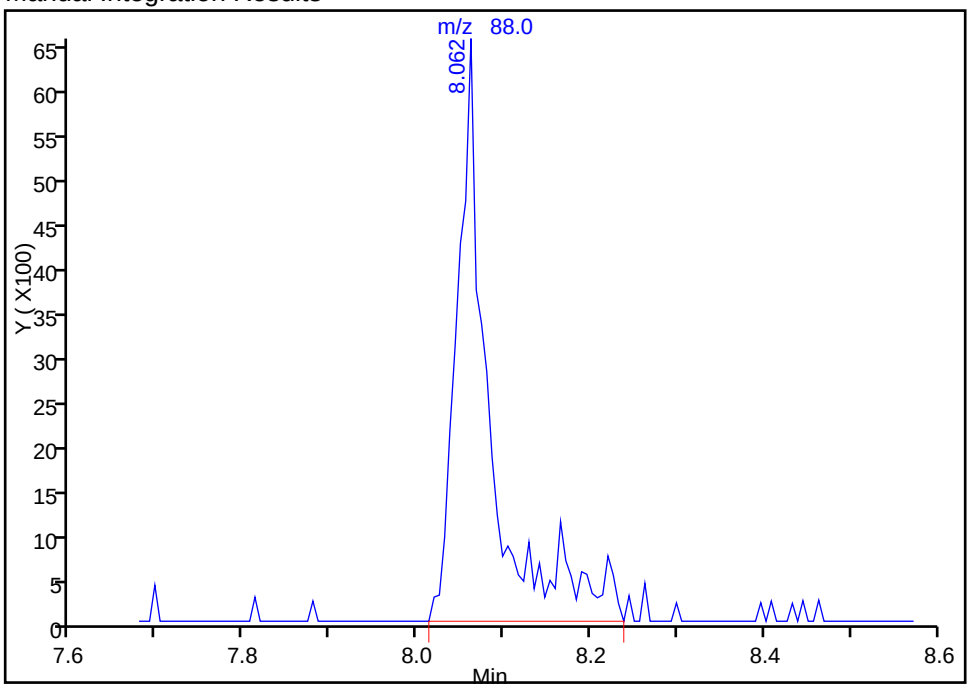
Processing Integration Results

RT: 8.06
Area: 14911
Amount: 566.4445
Amount Units: ng



Manual Integration Results

RT: 8.06
Area: 17402
Amount: 661.0736
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 13:50:05
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42353-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-137218/9

Matrix: Water | Lab File ID: 50401009.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/01/2015 14:11

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.: 137218 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	11.3		1.0	0.28
75-01-4	Vinyl chloride	12.8		1.0	0.23
74-83-9	Bromomethane	15.5		1.0	0.31
75-00-3	Chloroethane	13.8		1.0	0.21
75-35-4	1,1-Dichloroethene	8.92		1.0	0.30
67-64-1	Acetone	18.4		5.0	2.5
75-15-0	Carbon disulfide	7.69		1.0	0.21
75-09-2	Methylene Chloride	9.47		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.65		1.0	0.17
1634-04-4	Methyl tert-butyl ether	9.74		1.0	0.18
75-34-3	1,1-Dichloroethane	10.2		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	9.99		1.0	0.24
74-97-5	Bromochloromethane	9.87		1.0	0.18
78-93-3	2-Butanone (MEK)	15.3		5.0	0.55
67-66-3	Chloroform	11.0		1.0	0.17
71-55-6	1,1,1-Trichloroethane	10.8		1.0	0.29
56-23-5	Carbon tetrachloride	11.1		1.0	0.14
71-43-2	Benzene	10.1		1.0	0.11
107-06-2	1,2-Dichloroethane	11.0		1.0	0.21
79-01-6	Trichloroethene	9.67		1.0	0.14
78-87-5	1,2-Dichloropropane	10.3		1.0	0.095
75-27-4	Bromodichloromethane	10.5		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	10.3		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	16.0		5.0	0.53
108-88-3	Toluene	11.4		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	12.9		1.0	0.15
79-00-5	1,1,2-Trichloroethane	11.3		1.0	0.20
127-18-4	Tetrachloroethene	10.4		1.0	0.15
591-78-6	2-Hexanone	13.6		5.0	0.16
124-48-1	Dibromochloromethane	11.5		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	10.8		1.0	0.18
108-90-7	Chlorobenzene	11.2		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	12.0		1.0	0.28
100-41-4	Ethylbenzene	10.9		1.0	0.23
1330-20-7	Xylenes, Total	21.4		3.0	0.49
100-42-5	Styrene	10.9		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-137218/9

Matrix: Water Lab File ID: 50401009.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2015 14:11

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.: 137218 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	11.3		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	11.3		1.0	0.20
107-13-1	Acrylonitrile	96.8		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)	103		64-135
2037-26-5	Toluene-d8 (Surr)	100		71-118
460-00-4	4-Bromofluorobenzene (Surr)	97		70-118
1868-53-7	Dibromofluoromethane (Surr)	100		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401009.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Apr-2015 14:11:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 180-0006280-009
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Apr-2015 16:20:47 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: journetp Date: 01-Apr-2015 16:21:13

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.314	4.303	0.011	96	122335	1000.0	1000.0	
*	2 Fluorobenzene (IS)	96	7.270	7.278	-0.008	99	436378	50.0	50.0	
*	3 Chlorobenzene-d5	119	10.367	10.362	0.005	99	96732	50.0	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.679	12.680	-0.001	95	156165	50.0	50.0	
$	5 Dibromofluoromethane (Surr	113	6.534	6.524	0.010	97	98857	50.0	49.8	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.899	6.895	0.004	100	134196	50.0	51.3	
$	7 Toluene-d8 (Surr)	98	8.925	8.921	0.004	100	385545	50.0	50.0	
$	8 4-Bromofluorobenzene (Surr	95	11.529	11.531	-0.002	97	134390	50.0	48.4	
	11 Dichlorodifluoromethane	85	1.625	1.627	-0.002	98	124781	50.0	66.7	
	12 Chloromethane	50	1.783	1.779	0.004	100	145899	50.0	56.5	
	13 Vinyl chloride	62	1.917	1.907	0.010	100	184903	50.0	64.1	
	14 Butadiene	39	1.960	1.955	0.005	99	208085	50.0	63.1	
	15 Bromomethane	94	2.270	2.259	0.011	98	117005	50.0	77.3	
	16 Chloroethane	64	2.416	2.393	0.023	99	137749	50.0	69.0	
	17 Dichlorofluoromethane	67	2.671	2.655	0.016	100	313281	50.0	68.7	
	18 Trichlorofluoromethane	101	2.726	2.722	0.004	99	203337	50.0	58.7	
	20 Ethyl ether	59	3.097	3.081	0.016	98	114521	50.0	50.2	
	21 Acrolein	56	3.261	3.251	0.010	99	28988	150.0	104.5	
	22 1,1-Dichloroethene	96	3.401	3.385	0.016	96	112243	50.0	44.6	
	23 1,1,2-Trichloro-1,2,2-trif	101	3.444	3.440	0.004	97	124149	50.0	48.8	
	24 Acetone	43	3.499	3.494	0.005	99	82324	100.0	92.1	
	25 Iodomethane	142	3.620	3.567	0.053	99	169889	50.0	48.6	
	26 Carbon disulfide	76	3.669	3.671	-0.002	100	236578	50.0	38.4	
	28 3-Chloro-1-propene	76	3.943	3.945	-0.002	99	54903	50.0	41.3	
	30 Methyl acetate	43	4.022	4.018	0.004	100	520069	250.0	248.7	
	31 Methylene Chloride	84	4.150	4.151	-0.001	98	137828	50.0	47.4	
	32 2-Methyl-2-propanol	59	4.429	4.437	-0.008	96	65918	500.0	457.4	
	33 Acrylonitrile	53	4.551	4.547	0.004	100	520714	500.0	484.0	
	34 trans-1,2-Dichloroethene	96	4.575	4.565	0.010	74	125546	50.0	48.2	
	35 Methyl tert-butyl ether	73	4.600	4.596	0.004	100	280364	50.0	48.7	
	36 Hexane	57	4.989	4.985	0.004	98	170620	50.0	41.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.172	5.173	-0.001	100	236328	50.0	50.9	
38 Vinyl acetate	43	5.299	5.295	0.004	100	126639	50.0	38.4	
44 2,2-Dichloropropane	77	5.932	5.928	0.004	97	66135	50.0	56.9	
45 cis-1,2-Dichloroethene	96	5.938	5.934	0.004	97	136903	50.0	49.9	
46 2-Butanone (MEK)	43	5.987	5.989	-0.002	100	109357	100.0	76.5	
49 Chlorobromomethane	128	6.224	6.226	-0.002	98	58561	50.0	49.4	
51 Tetrahydrofuran	42	6.285	6.281	0.004	94	72498	100.0	81.0	
52 Chloroform	83	6.346	6.341	0.005	100	232957	50.0	55.2	
53 1,1,1-Trichloroethane	97	6.528	6.536	-0.008	97	145125	50.0	53.9	
54 Cyclohexane	56	6.595	6.591	0.004	95	217311	50.0	42.0	
56 Carbon tetrachloride	117	6.717	6.725	-0.008	98	120357	50.0	55.7	
55 1,1-Dichloropropene	75	6.729	6.725	0.004	98	174526	50.0	49.9	
57 Isobutyl alcohol	41	6.942	6.938	0.004	99	67947	1250.0	1166.5	
58 Benzene	78	6.954	6.956	-0.002	99	524388	50.0	50.7	
59 1,2-Dichloroethane	62	6.984	6.986	-0.002	99	186322	50.0	55.0	
62 n-Heptane	43	7.283	7.278	0.005	79	140281	50.0	39.5	
64 Trichloroethene	130	7.672	7.668	0.004	99	125227	50.0	48.3	
66 Methylcyclohexane	83	7.860	7.862	-0.002	98	203059	50.0	43.9	
67 1,2-Dichloropropane	63	7.903	7.899	0.004	97	131868	50.0	51.6	
68 Dibromomethane	93	8.019	8.021	-0.002	99	72407	50.0	52.6	
70 1,4-Dioxane	88	8.055	8.057	-0.002	94	21494	1000.0	798.1	M
71 Dichlorobromomethane	83	8.195	8.191	0.004	99	147661	50.0	52.5	
73 2-Chloroethyl vinyl ether	63	8.518	8.519	-0.001	98	129394	100.0	89.7	
74 cis-1,3-Dichloropropene	75	8.657	8.659	-0.002	98	140320	50.0	51.7	
75 4-Methyl-2-pentanone (MIBK	43	8.822	8.824	-0.002	99	209725	100.0	80.1	
76 Toluene	91	8.992	8.988	0.004	100	564039	50.0	56.9	
77 trans-1,3-Dichloropropene	75	9.217	9.219	-0.002	98	115300	50.0	64.4	
78 Ethyl methacrylate	69	9.314	9.316	-0.002	97	120561	50.0	51.6	
79 1,1,2-Trichloroethane	97	9.400	9.401	-0.001	98	105290	50.0	56.6	
80 Tetrachloroethene	164	9.533	9.535	-0.002	98	100810	50.0	52.0	
81 1,3-Dichloropropane	76	9.564	9.566	-0.002	98	192665	50.0	55.8	
82 2-Hexanone	43	9.661	9.651	0.010	99	136255	100.0	68.1	
84 Chlorodibromomethane	129	9.789	9.791	-0.002	98	85631	50.0	57.7	
85 Ethylene Dibromide	107	9.898	9.900	-0.002	99	96123	50.0	54.2	
86 3-Chlorobenzotrifluoride	180	10.373	10.369	0.004	96	199831	50.0	52.8	
87 Chlorobenzene	112	10.391	10.387	0.004	100	350739	50.0	55.8	
88 4-Chlorobenzotrifluoride	180	10.428	10.430	-0.002	99	201681	50.0	55.2	
89 1,1,1,2-Tetrachloroethane	131	10.470	10.472	-0.002	95	97412	50.0	60.1	
90 Ethylbenzene	106	10.501	10.503	-0.002	100	195960	50.0	54.4	
91 m-Xylene & p-Xylene	106	10.616	10.618	-0.002	99	235843	50.0	53.5	
92 o-Xylene	106	11.012	11.014	-0.002	99	231164	50.0	53.6	
93 Styrene	104	11.024	11.026	-0.002	99	377224	50.0	54.3	
94 Bromoform	173	11.206	11.214	-0.008	96	51684	50.0	56.4	
96 2-Chlorobenzotrifluoride	180	11.273	11.275	-0.002	100	202146	50.0	53.5	
97 Isopropylbenzene	105	11.377	11.379	-0.002	100	605866	50.0	56.3	
99 1,1,2,2-Tetrachloroethane	83	11.675	11.677	-0.002	97	150627	50.0	56.5	
100 Bromobenzene	156	11.681	11.683	-0.002	99	137440	50.0	47.6	
101 1,2,3-Trichloropropane	110	11.717	11.719	-0.002	98	48000	50.0	50.5	
102 trans-1,4-Dichloro-2-buten	53	11.736	11.731	0.005	97	32693	50.0	41.4	
103 N-Propylbenzene	120	11.790	11.786	0.004	100	163367	50.0	45.8	
104 2-Chlorotoluene	126	11.876	11.871	0.005	100	145419	50.0	48.5	
105 3-Chlorotoluene	126	11.936	11.932	0.004	99	177567	50.0	53.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.961	11.963	-0.002	100	487481	50.0	49.0	
107 4-Chlorotoluene	126	11.985	11.981	0.004	96	154349	50.0	47.6	
108 tert-Butylbenzene	119	12.289	12.285	0.004	99	403273	50.0	46.8	
110 1,2,4-Trimethylbenzene	105	12.332	12.334	-0.002	99	495043	50.0	48.5	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.401	-0.002	99	155861	50.0	48.3	
112 sec-Butylbenzene	105	12.508	12.510	-0.002	100	581904	50.0	48.0	
113 1,3-Dichlorobenzene	146	12.618	12.620	-0.002	99	263307	50.0	49.4	
114 4-Isopropyltoluene	119	12.648	12.650	-0.002	100	477711	50.0	47.7	
115 1,4-Dichlorobenzene	146	12.703	12.705	-0.002	99	271598	50.0	49.9	
116 2,4-Dichloro-1-(triflourom	214	12.758	12.760	-0.002	97	142094	50.0	47.1	
118 2,5-Dichlorobenzotrifluori	214	12.806	12.808	-0.002	99	157990	50.0	46.8	
120 n-Butylbenzene	91	13.062	13.064	-0.002	100	432621	50.0	47.5	
121 1,2-Dichlorobenzene	146	13.080	13.082	-0.002	99	245555	50.0	49.8	
122 1,2-Dibromo-3-Chloropropan	75	13.865	13.861	0.004	96	18700	50.0	46.3	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.011	14.007	0.004	99	519759	150.0	139.4	
124 1,3,5-Trichlorobenzene	180	14.072	14.073	-0.001	99	131801	50.0	44.1	
125 2,3- & 3,4- Dichlorotoluen	125	14.425	14.426	-0.001	100	326658	100.0	90.1	
126 1,2,4-Trichlorobenzene	180	14.692	14.694	-0.002	98	99184	50.0	38.6	
127 Hexachlorobutadiene	225	14.863	14.858	0.005	98	48954	50.0	39.8	
128 Naphthalene	128	14.942	14.944	-0.002	100	235900	50.0	35.0	
129 1,2,3-Trichlorobenzene	180	15.185	15.187	-0.002	98	74838	50.0	35.5	
131 2,4,5-Trichlorotoluene	159	15.964	15.966	-0.002	97	33413	50.0	29.5	
130 2,3,6-Trichlorotoluene	159	16.061	16.057	0.004	97	29948	50.0	29.3	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	107.1	
S 134 1,2-Dichloroethene, Total	96				0		100.0	98.2	
S 135 1,3-Dichloropropene, Total	1				0		100.0	116.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00109	Amount Added:	2.00	Units: uL	
voaWKet2 Rest_00002	Amount Added:	2.00	Units: uL	
voaWVA2nd Res_00006	Amount Added:	2.00	Units: uL	
voaW1,3,5TCab_00001	Amount Added:	2.00	Units: uL	
voaW 2-cle pr_00001	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00004	Amount Added:	2.00	Units: uL	
VOAACRO2ND_00007	Amount Added:	6.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

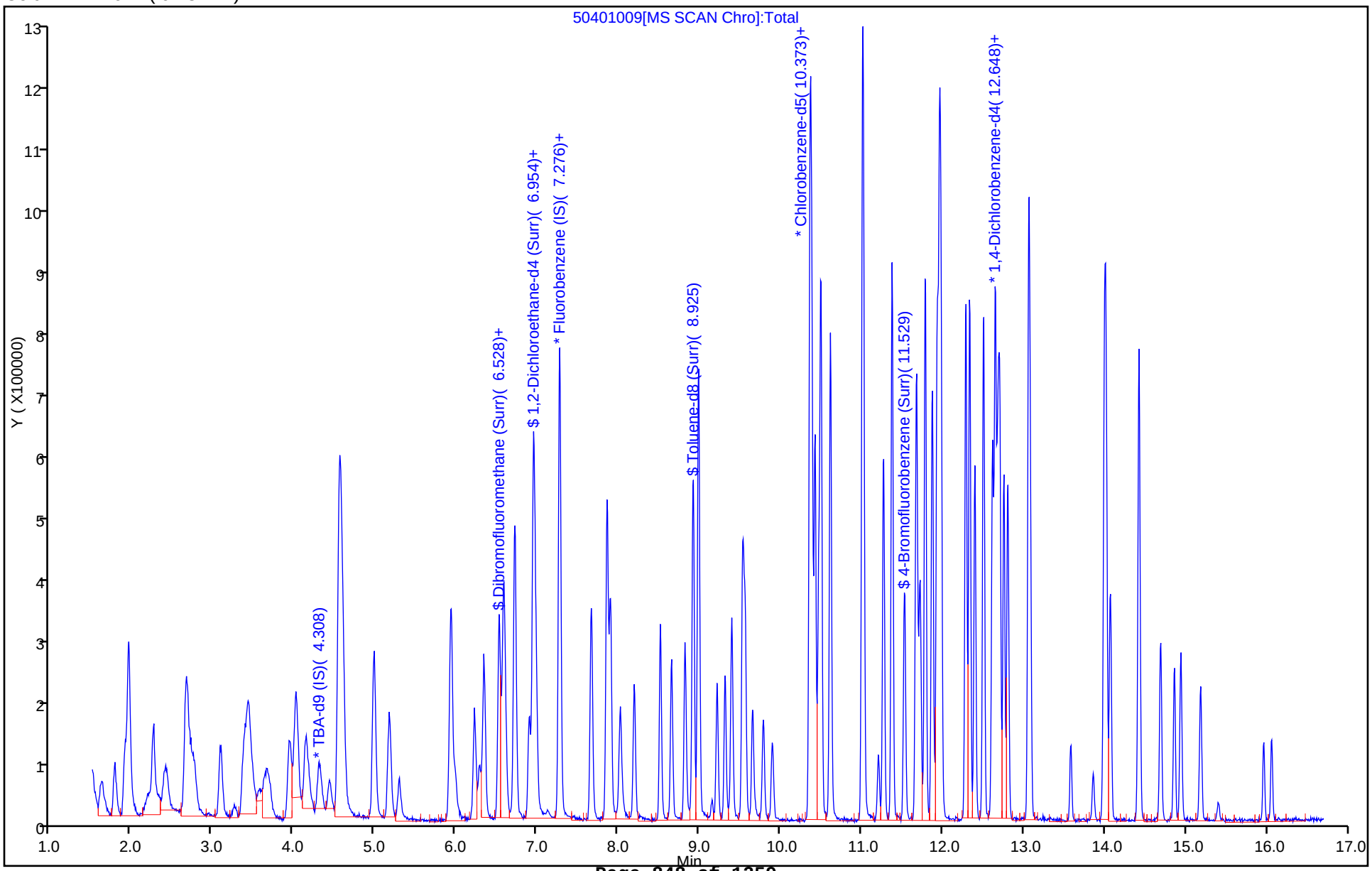
Report Date: 01-Apr-2015 16:21:14 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401009.D

Injection Date:	01-Apr-2015 14:11:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	LCS			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

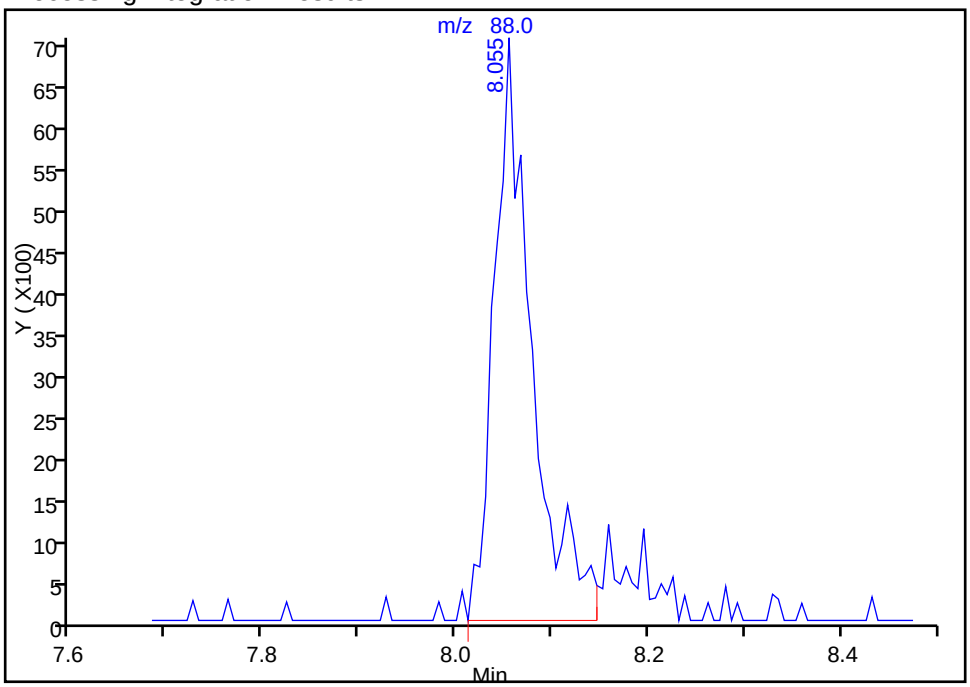
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150401-6280.b\50401009.D				
Injection Date:	01-Apr-2015 14:11:30	Instrument ID:	CHHP5		
Lims ID:	LCS				
Client ID:					
Operator ID:	001562	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

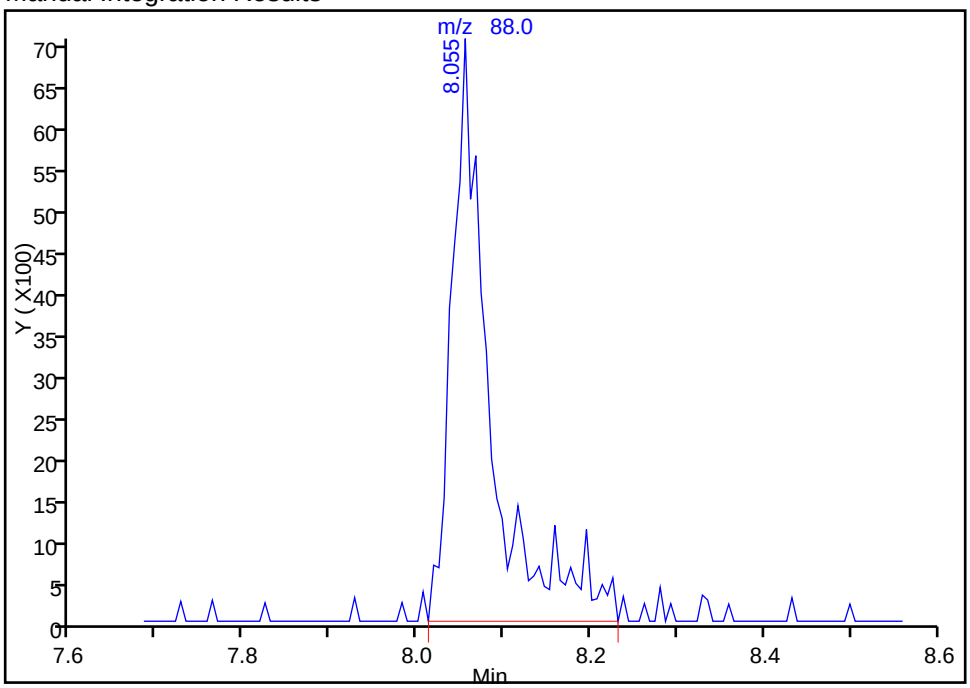
Processing Integration Results

RT: 8.06
Area: 18994
Amount: 705.2542
Amount Units: ng



Manual Integration Results

RT: 8.06
Area: 21494
Amount: 798.0801
Amount Units: ng



Reviewer: fergusond, 01-Apr-2015 14:45:21
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-99S-0/1-0 MS Lab Sample ID: 180-42353-20 MS

Matrix: Water Lab File ID: 50331010.D

Analysis Method: 8260C Date Collected: 03/24/2015 09:15

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2015 13:17

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.: 137048 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	11.4		1.0	0.28
75-01-4	Vinyl chloride	12.2		1.0	0.23
74-83-9	Bromomethane	13.9		1.0	0.31
75-00-3	Chloroethane	13.3		1.0	0.21
75-35-4	1,1-Dichloroethene	11.2		1.0	0.30
67-64-1	Acetone	19.8		5.0	2.5
75-15-0	Carbon disulfide	6.55		1.0	0.21
75-09-2	Methylene Chloride	9.51		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.72		1.0	0.17
1634-04-4	Methyl tert-butyl ether	10.1		1.0	0.18
75-34-3	1,1-Dichloroethane	11.6		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	40.1		1.0	0.24
74-97-5	Bromochloromethane	9.85		1.0	0.18
78-93-3	2-Butanone (MEK)	17.0		5.0	0.55
67-66-3	Chloroform	11.0		1.0	0.17
71-55-6	1,1,1-Trichloroethane	15.6		1.0	0.29
56-23-5	Carbon tetrachloride	11.0		1.0	0.14
71-43-2	Benzene	9.98		1.0	0.11
107-06-2	1,2-Dichloroethane	10.8		1.0	0.21
79-01-6	Trichloroethene	37.9		1.0	0.14
78-87-5	1,2-Dichloropropane	9.64		1.0	0.095
75-27-4	Bromodichloromethane	10.6		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	10.2		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	17.2		5.0	0.53
108-88-3	Toluene	10.4		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	11.5		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.5		1.0	0.20
127-18-4	Tetrachloroethene	29.5		1.0	0.15
591-78-6	2-Hexanone	15.0		5.0	0.16
124-48-1	Dibromochloromethane	10.5		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	10.2		1.0	0.18
108-90-7	Chlorobenzene	10.7		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	11.5		1.0	0.28
100-41-4	Ethylbenzene	10.1		1.0	0.23
1330-20-7	Xylenes, Total	20.4		3.0	0.49
100-42-5	Styrene	10.2		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-99S-0/1-0 MS Lab Sample ID: 180-42353-20 MS

Matrix: Water Lab File ID: 50331010.D

Analysis Method: 8260C Date Collected: 03/24/2015 09:15

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2015 13:17

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.: 137048 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10.1		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.8		1.0	0.20
107-13-1	Acrylonitrile	100		20	0.55
123-91-1	1,4-Dioxane	144	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		64-135
2037-26-5	Toluene-d8 (Surr)	102		71-118
460-00-4	4-Bromofluorobenzene (Surr)	101		70-118
1868-53-7	Dibromofluoromethane (Surr)	101		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331010.D
Lims ID: 180-42353-D-20 MS
Client ID: HD-MW-99S-0/1-0
Sample Type: MS
Inject. Date: 31-Mar-2015 13:17:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-D-20 MS
Misc. Info.: 180-0006255-010
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 14:11:15 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 14:11:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.308	4.297	0.011	87	119579	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.277	7.271	0.006	97	442274	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.367	10.362	0.005	98	101067	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.685	12.686	-0.001	88	153896	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.535	6.531	0.004	90	101880	50.0	50.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.906	6.896	0.010	60	144833	50.0	54.6	
$ 7 Toluene-d8 (Surr)	98	8.925	8.921	0.004	100	410203	50.0	50.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.529	11.531	-0.002	95	145933	50.0	50.3	
11 Dichlorodifluoromethane	85	1.631	1.621	0.010	15	121171	50.0	63.9	
12 Chloromethane	50	1.795	1.779	0.016	94	149218	50.0	57.0	
13 Vinyl chloride	62	1.917	1.913	0.004	100	178527	50.0	61.0	
14 Butadiene	39	1.960	1.956	0.004	97	194949	50.0	58.4	
15 Bromomethane	94	2.276	2.260	0.016	96	107620	50.0	69.7	
16 Chloroethane	64	2.416	2.400	0.016	96	134707	50.0	66.6	
17 Dichlorofluoromethane	67	2.665	2.662	0.003	99	279608	50.0	60.5	
18 Trichlorofluoromethane	101	2.720	2.704	0.016	95	195160	50.0	55.6	
20 Ethyl ether	59	3.097	3.087	0.010	96	120700	50.0	52.2	
21 Acrolein	56	3.274	3.252	0.022	67	35738	150.0	127.2	
22 1,1-Dichloroethene	96	3.408	3.385	0.023	96	142575	50.0	55.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.450	3.428	0.022	95	122080	50.0	47.3	
24 Acetone	43	3.499	3.501	-0.002	82	89815	100.0	99.1	
25 Iodomethane	142	3.621	3.580	0.041	100	170510	50.0	48.1	
26 Carbon disulfide	76	3.681	3.671	0.010	99	204192	50.0	32.7	
28 3-Chloro-1-propene	76	3.943	3.945	-0.002	97	56899	50.0	42.2	
30 Methyl acetate	43	4.034	4.024	0.010	100	535998	250.0	252.9	
31 Methylene Chloride	84	4.162	4.140	0.022	82	140267	50.0	47.6	
32 2-Methyl-2-propanol	59	4.448	4.438	0.010	85	76848	500.0	545.6	
33 Acrylonitrile	53	4.563	4.547	0.016	99	547074	500.0	501.8	
34 trans-1,2-Dichloroethene	96	4.582	4.560	0.022	72	128223	50.0	48.6	
35 Methyl tert-butyl ether	73	4.606	4.596	0.010	97	293903	50.0	50.4	
36 Hexane	57	4.989	4.979	0.010	94	178590	50.0	42.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.184	5.168	0.016	100	274129	50.0	58.2	
38 Vinyl acetate	43	5.300	5.296	0.004	100	131987	50.0	39.5	
44 2,2-Dichloropropane	77	5.932	5.928	0.004	84	66987	50.0	56.9	
45 cis-1,2-Dichloroethene	96	5.944	5.941	0.004	81	557072	50.0	200.4	
46 2-Butanone (MEK)	43	5.987	5.989	-0.002	93	123011	100.0	84.9	
49 Chlorobromomethane	128	6.236	6.226	0.010	75	59205	50.0	49.2	
51 Tetrahydrofuran	42	6.291	6.287	0.004	98	76284	100.0	84.1	
52 Chloroform	83	6.352	6.342	0.010	99	236254	50.0	55.2	
53 1,1,1-Trichloroethane	97	6.535	6.531	0.004	90	212894	50.0	77.9	
54 Cyclohexane	56	6.589	6.585	0.004	97	217844	50.0	41.5	
55 1,1-Dichloropropene	75	6.729	6.719	0.010	97	175933	50.0	49.6	
56 Carbon tetrachloride	117	6.723	6.719	0.004	95	120933	50.0	55.2	
57 Isobutyl alcohol	41	6.948	6.950	-0.002	96	77573	1250.0	1314.0	
58 Benzene	78	6.960	6.956	0.004	98	523188	50.0	49.9	
59 1,2-Dichloroethane	62	6.991	6.987	0.004	97	184584	50.0	53.8	
62 n-Heptane	43	7.283	7.279	0.004	76	143819	50.0	39.9	
64 Trichloroethene	130	7.672	7.668	0.004	99	497234	50.0	189.4	
66 Methylcyclohexane	83	7.861	7.863	-0.002	94	202546	50.0	43.2	
67 1,2-Dichloropropane	63	7.903	7.905	-0.002	95	125020	50.0	48.2	
68 Dibromomethane	93	8.025	8.021	0.004	95	70976	50.0	50.8	
70 1,4-Dioxane	88	8.068	8.058	0.010	76	19715	1000.0	722.3	M
71 Dichlorobromomethane	83	8.195	8.197	-0.002	96	151553	50.0	53.2	
74 cis-1,3-Dichloropropene	75	8.658	8.654	0.004	97	139612	50.0	50.8	
75 4-Methyl-2-pentanone (MIBK	43	8.822	8.824	-0.002	70	234566	100.0	85.8	
76 Toluene	91	8.992	8.988	0.004	100	538758	50.0	52.0	
77 trans-1,3-Dichloropropene	75	9.223	9.219	0.004	91	107799	50.0	57.6	
78 Ethyl methacrylate	69	9.321	9.317	0.004	73	125330	50.0	51.4	
79 1,1,2-Trichloroethane	97	9.400	9.402	-0.002	97	102381	50.0	52.7	
80 Tetrachloroethene	164	9.540	9.536	0.004	97	299219	50.0	147.7	
81 1,3-Dichloropropane	76	9.564	9.566	-0.002	95	183350	50.0	50.8	
82 2-Hexanone	43	9.655	9.658	-0.003	98	156717	100.0	75.0	
84 Chlorodibromomethane	129	9.795	9.785	0.010	95	81204	50.0	52.4	
85 Ethylene Dibromide	107	9.899	9.901	-0.002	98	94768	50.0	51.1	
86 3-Chlorobenzotrifluoride	180	10.373	10.369	0.004	95	204006	50.0	51.6	
87 Chlorobenzene	112	10.391	10.388	0.003	89	351860	50.0	53.6	
88 4-Chlorobenzotrifluoride	180	10.428	10.430	-0.002	89	203045	50.0	53.1	
89 1,1,1,2-Tetrachloroethane	131	10.477	10.467	0.010	96	97607	50.0	57.6	
90 Ethylbenzene	106	10.501	10.503	-0.002	100	190170	50.0	50.5	
91 m-Xylene & p-Xylene	106	10.617	10.619	-0.002	99	234888	50.0	51.0	
92 o-Xylene	106	11.012	11.014	-0.002	94	229842	50.0	51.0	
93 Styrene	104	11.024	11.026	-0.002	93	369945	50.0	51.0	
94 Bromoform	173	11.213	11.209	0.004	89	48557	50.0	50.7	
96 2-Chlorobenzotrifluoride	180	11.274	11.270	0.004	95	208844	50.0	52.9	
97 Isopropylbenzene	105	11.377	11.379	-0.002	100	589618	50.0	52.5	
99 1,1,2,2-Tetrachloroethane	83	11.675	11.671	0.004	79	150183	50.0	53.9	
100 Bromobenzene	156	11.681	11.683	-0.002	97	137408	50.0	48.2	
101 1,2,3-Trichloropropane	110	11.718	11.726	-0.008	77	48279	50.0	51.6	
102 trans-1,4-Dichloro-2-buten	53	11.730	11.732	-0.002	79	32742	50.0	42.1	
103 N-Propylbenzene	120	11.791	11.787	0.004	85	160555	50.0	45.7	
104 2-Chlorotoluene	126	11.876	11.872	0.004	99	142079	50.0	48.1	
105 3-Chlorotoluene	126	11.937	11.933	0.004	81	175769	50.0	53.3	
106 1,3,5-Trimethylbenzene	105	11.961	11.963	-0.002	99	490058	50.0	50.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 4-Chlorotoluene	126	11.979	11.981	-0.002	98	155367	50.0	48.6	
108 tert-Butylbenzene	119	12.289	12.286	0.003	84	394004	50.0	46.4	
110 1,2,4-Trimethylbenzene	105	12.338	12.334	0.004	96	495767	50.0	49.3	
111 1,2-dichloro-4-(trifluorom	214	12.405	12.401	0.004	97	153920	50.0	48.4	
112 sec-Butylbenzene	105	12.508	12.511	-0.003	98	580126	50.0	48.6	
113 1,3-Dichlorobenzene	146	12.618	12.614	0.004	86	262771	50.0	50.1	
114 4-Isopropyltoluene	119	12.654	12.651	0.003	99	474846	50.0	48.1	
115 1,4-Dichlorobenzene	146	12.703	12.705	-0.002	97	270437	50.0	50.5	
116 2,4-Dichloro-1-(triflourom	214	12.758	12.760	-0.002	92	148137	50.0	49.8	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.803	0.004	97	162012	50.0	48.7	
120 n-Butylbenzene	91	13.062	13.064	-0.002	99	423908	50.0	47.2	
121 1,2-Dichlorobenzene	146	13.080	13.083	-0.002	99	243426	50.0	50.1	
122 1,2-Dibromo-3-Chloropropan	75	13.859	13.861	-0.002	90	17692	50.0	44.5	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.005	14.007	-0.002	99	543682	150.0	148.0	
125 2,3- & 3,4- Dichlorotoluen	125	14.425	14.427	-0.002	99	333498	100.0	93.3	
126 1,2,4-Trichlorobenzene	180	14.692	14.695	-0.003	97	108771	50.0	43.0	
127 Hexachlorobutadiene	225	14.863	14.859	0.004	95	52088	50.0	42.9	
128 Naphthalene	128	14.942	14.938	0.004	100	255345	50.0	38.4	
129 1,2,3-Trichlorobenzene	180	15.191	15.187	0.004	94	81546	50.0	39.3	
131 2,4,5-Trichlorotoluene	159	15.964	15.966	-0.002	93	35706	50.0	32.0	
130 2,3,6-Trichlorotoluene	159	16.061	16.063	-0.002	90	35927	50.0	35.7	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	102.0	
S 134 1,2-Dichloroethene, Total	96				0		100.0	249.1	
S 135 1,3-Dichloropropene, Total	1				0		100.0	108.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRO2ND_00007	Amount Added:	6.00	Units: uL	
voaWVA2nd Res_00006	Amount Added:	2.00	Units: uL	
voaWKet2 Rest_00002	Amount Added:	2.00	Units: uL	
VOA8260VOA2ND_00109	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00004	Amount Added:	2.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

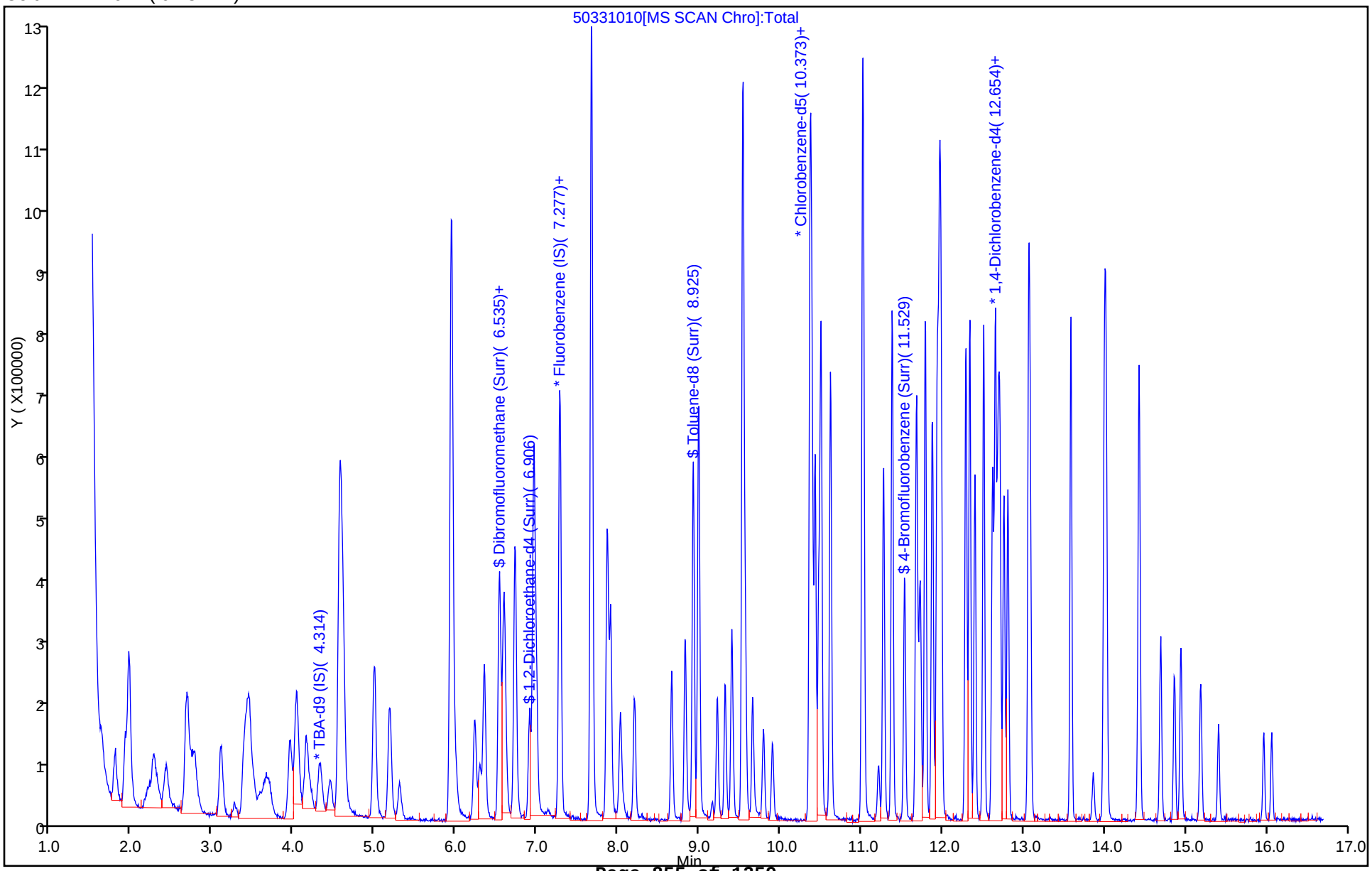
Report Date: 31-Mar-2015 14:11:15 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331010.D

Injection Date:	31-Mar-2015 13:17:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-42353-D-20 MS			Worklist Smp#:	10
Client ID:	HD-MW-99S-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

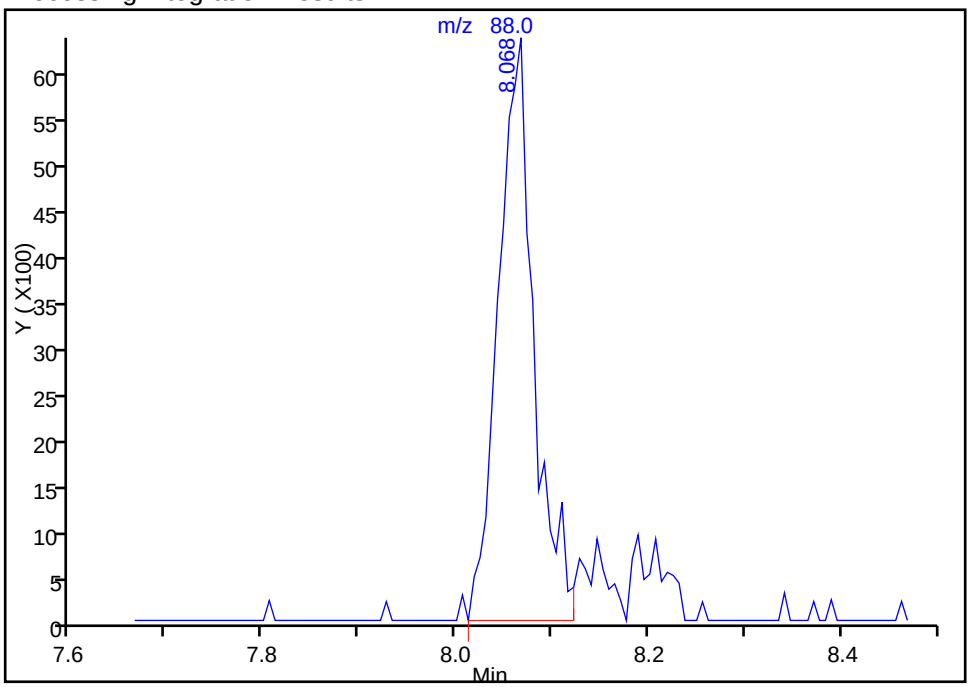
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331010.D				
Injection Date:	31-Mar-2015 13:17:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-D-20 MS				
Client ID:	HD-MW-99S-0/1-0				
Operator ID:	001562	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

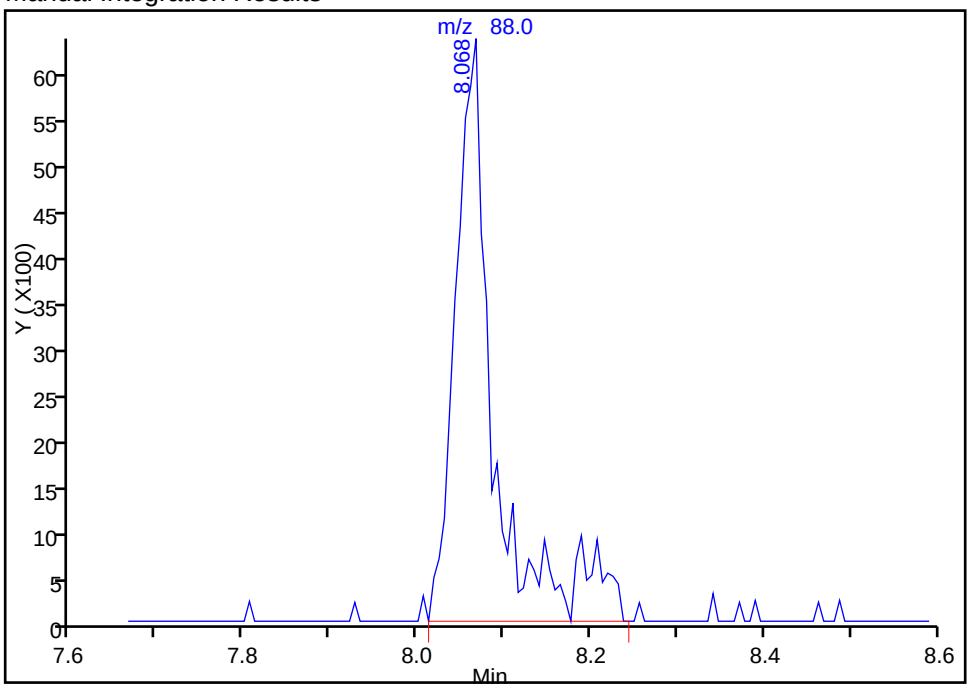
Processing Integration Results

RT: 8.07
Area: 16306
Amount: 597.3764
Amount Units: ng



Manual Integration Results

RT: 8.07
Area: 19715
Amount: 722.2664
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 14:11:15
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-99S-0/1-0 MSD | Lab Sample ID: 180-42353-20 MSD

Matrix: Water | Lab File ID: 50331011.D

Analysis Method: 8260C | Date Collected: 03/24/2015 09:15

Sample wt/vol: 5(mL) | Date Analyzed: 03/31/2015 13:41

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.: 137048 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	11.3		1.0	0.28
75-01-4	Vinyl chloride	11.4		1.0	0.23
74-83-9	Bromomethane	13.9		1.0	0.31
75-00-3	Chloroethane	12.4		1.0	0.21
75-35-4	1,1-Dichloroethene	10.6		1.0	0.30
67-64-1	Acetone	19.1		5.0	2.5
75-15-0	Carbon disulfide	6.35		1.0	0.21
75-09-2	Methylene Chloride	9.39		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.22		1.0	0.17
1634-04-4	Methyl tert-butyl ether	10.2		1.0	0.18
75-34-3	1,1-Dichloroethane	11.3		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	39.5		1.0	0.24
74-97-5	Bromochloromethane	9.53		1.0	0.18
78-93-3	2-Butanone (MEK)	16.3		5.0	0.55
67-66-3	Chloroform	10.2		1.0	0.17
71-55-6	1,1,1-Trichloroethane	14.8		1.0	0.29
56-23-5	Carbon tetrachloride	10.8		1.0	0.14
71-43-2	Benzene	9.73		1.0	0.11
107-06-2	1,2-Dichloroethane	10.5		1.0	0.21
79-01-6	Trichloroethene	36.0		1.0	0.14
78-87-5	1,2-Dichloropropane	10.0		1.0	0.095
75-27-4	Bromodichloromethane	10.2		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	9.61		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	16.7		5.0	0.53
108-88-3	Toluene	9.90		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	11.6		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.6		1.0	0.20
127-18-4	Tetrachloroethene	27.4		1.0	0.15
591-78-6	2-Hexanone	14.5		5.0	0.16
124-48-1	Dibromochloromethane	10.2		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	10.3		1.0	0.18
108-90-7	Chlorobenzene	10.0		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	11.2		1.0	0.28
100-41-4	Ethylbenzene	9.62		1.0	0.23
1330-20-7	Xylenes, Total	19.4		3.0	0.49
100-42-5	Styrene	9.78		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-99S-0/1-0 MSD Lab Sample ID: 180-42353-20 MSD

Matrix: Water Lab File ID: 50331011.D

Analysis Method: 8260C Date Collected: 03/24/2015 09:15

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2015 13:41

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.: 137048 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.72		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.4		1.0	0.20
107-13-1	Acrylonitrile	95.5		20	0.55
123-91-1	1,4-Dioxane	138	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		64-135
2037-26-5	Toluene-d8 (Surr)	102		71-118
460-00-4	4-Bromofluorobenzene (Surr)	100		70-118
1868-53-7	Dibromofluoromethane (Surr)	101		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331011.D
Lims ID: 180-42353-E-20 MSD
Client ID: HD-MW-99S-0/1-0
Sample Type: MSD
Inject. Date: 31-Mar-2015 13:41:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42353-E-20 MSD
Misc. Info.: 180-0006255-011
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 14:13:34 Calib Date: 18-Mar-2015 16:19:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150318-6071.b\50318010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: fergusond Date: 31-Mar-2015 14:13:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.312	4.297	0.015	93	118602	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.280	7.271	0.009	97	459104	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.365	10.362	0.003	95	105546	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.683	12.686	-0.003	89	157478	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.532	6.531	0.001	91	105869	50.0	50.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.903	6.896	0.007	61	149673	50.0	54.4	
$ 7 Toluene-d8 (Surr)	98	8.923	8.921	0.002	100	429290	50.0	51.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.533	11.531	0.002	94	151283	50.0	49.9	
11 Dichlorodifluoromethane	85	1.629	1.621	0.008	13	116526	50.0	59.2	
12 Chloromethane	50	1.781	1.779	0.002	79	153529	50.0	56.5	
13 Vinyl chloride	62	1.915	1.913	0.002	99	173745	50.0	57.2	
14 Butadiene	39	1.957	1.956	0.001	98	197706	50.0	57.0	
15 Bromomethane	94	2.268	2.260	0.008	99	111276	50.0	69.4	
16 Chloroethane	64	2.414	2.400	0.014	99	130416	50.0	62.1	
17 Dichlorofluoromethane	67	2.663	2.662	0.001	99	297895	50.0	62.1	
18 Trichlorofluoromethane	101	2.736	2.704	0.032	98	208656	50.0	57.3	
20 Ethyl ether	59	3.089	3.087	0.002	93	124857	50.0	52.0	
21 Acrolein	56	3.278	3.252	0.026	65	35030	150.0	120.1	
22 1,1-Dichloroethene	96	3.393	3.385	0.008	96	140974	50.0	53.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.454	3.428	0.026	89	118999	50.0	44.4	
24 Acetone	43	3.503	3.501	0.002	84	90010	100.0	95.7	
25 Iodomethane	142	3.612	3.580	0.032	98	172985	50.0	47.0	
26 Carbon disulfide	76	3.679	3.671	0.008	99	205637	50.0	31.8	
28 3-Chloro-1-propene	76	3.959	3.945	0.014	93	55107	50.0	39.4	
30 Methyl acetate	43	4.038	4.024	0.014	99	535246	250.0	243.3	
31 Methylene Chloride	84	4.166	4.140	0.026	85	143813	50.0	47.0	
32 2-Methyl-2-propanol	59	4.440	4.438	0.002	80	65166	500.0	466.5	
33 Acrylonitrile	53	4.567	4.547	0.020	99	540589	500.0	477.6	
34 trans-1,2-Dichloroethene	96	4.573	4.560	0.013	64	126171	50.0	46.1	
35 Methyl tert-butyl ether	73	4.610	4.596	0.014	99	309364	50.0	51.1	
36 Hexane	57	4.993	4.979	0.014	96	167235	50.0	38.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.176	5.168	0.008	99	275551	50.0	56.4	
38 Vinyl acetate	43	5.297	5.296	0.001	100	145298	50.0	41.9	
44 2,2-Dichloropropane	77	5.930	5.928	0.002	85	67676	50.0	55.4	
45 cis-1,2-Dichloroethene	96	5.942	5.941	0.002	83	569729	50.0	197.5	
46 2-Butanone (MEK)	43	5.991	5.989	0.002	97	122415	100.0	81.4	
49 Chlorobromomethane	128	6.234	6.226	0.008	74	59471	50.0	47.6	
51 Tetrahydrofuran	42	6.295	6.287	0.008	96	78791	100.0	83.7	
52 Chloroform	83	6.344	6.342	0.002	99	227344	50.0	51.2	
53 1,1,1-Trichloroethane	97	6.532	6.531	0.001	91	209848	50.0	74.0	
54 Cyclohexane	56	6.587	6.585	0.002	92	210914	50.0	38.7	
55 1,1-Dichloropropene	75	6.727	6.719	0.008	95	170754	50.0	46.4	
56 Carbon tetrachloride	117	6.721	6.719	0.002	92	122626	50.0	53.9	
57 Isobutyl alcohol	41	6.940	6.950	-0.010	93	69413	1250.0	1132.7	
58 Benzene	78	6.958	6.956	0.002	99	529306	50.0	48.7	
59 1,2-Dichloroethane	62	6.988	6.987	0.001	95	187082	50.0	52.5	
62 n-Heptane	43	7.280	7.279	0.001	73	139208	50.0	37.2	
64 Trichloroethene	130	7.670	7.668	0.002	99	491133	50.0	180.2	
66 Methylcyclohexane	83	7.871	7.863	0.008	95	197313	50.0	40.6	
67 1,2-Dichloropropane	63	7.907	7.905	0.002	96	134573	50.0	50.0	
68 Dibromomethane	93	8.023	8.021	0.002	94	74695	50.0	51.6	
70 1,4-Dioxane	88	8.059	8.058	0.001	71	19579	1000.0	691.0	M
71 Dichlorobromomethane	83	8.199	8.197	0.002	99	151179	50.0	51.1	
74 cis-1,3-Dichloropropene	75	8.661	8.654	0.007	99	137056	50.0	48.0	
75 4-Methyl-2-pentanone (MIBK	43	8.826	8.824	0.002	72	238351	100.0	83.5	
76 Toluene	91	8.990	8.988	0.002	100	535224	50.0	49.5	
77 trans-1,3-Dichloropropene	75	9.221	9.219	0.002	95	113041	50.0	57.9	
78 Ethyl methacrylate	69	9.312	9.317	-0.005	77	125144	50.0	49.1	
79 1,1,2-Trichloroethane	97	9.404	9.402	0.002	93	107630	50.0	53.1	
80 Tetrachloroethene	164	9.537	9.536	0.001	98	290018	50.0	137.1	
81 1,3-Dichloropropane	76	9.568	9.566	0.002	91	189756	50.0	50.3	
82 2-Hexanone	43	9.659	9.658	0.001	99	157923	100.0	72.4	
84 Chlorodibromomethane	129	9.793	9.785	0.008	96	82960	50.0	51.2	
85 Ethylene Dibromide	107	9.902	9.901	0.001	99	99751	50.0	51.5	
86 3-Chlorobenzotrifluoride	180	10.371	10.369	0.002	88	207076	50.0	50.2	
87 Chlorobenzene	112	10.389	10.388	0.001	96	342668	50.0	50.0	
88 4-Chlorobenzotrifluoride	180	10.432	10.430	0.002	97	201000	50.0	50.4	
89 1,1,1,2-Tetrachloroethane	131	10.474	10.467	0.007	93	99089	50.0	56.0	
90 Ethylbenzene	106	10.499	10.503	-0.004	100	189138	50.0	48.1	
91 m-Xylene & p-Xylene	106	10.620	10.619	0.001	99	227569	50.0	47.3	
92 o-Xylene	106	11.010	11.014	-0.004	95	232797	50.0	49.5	
93 Styrene	104	11.028	11.026	0.002	94	370738	50.0	48.9	
94 Bromoform	173	11.210	11.209	0.001	89	48600	50.0	48.6	
96 2-Chlorobenzotrifluoride	180	11.271	11.270	0.001	89	215060	50.0	52.2	
97 Isopropylbenzene	105	11.381	11.379	0.002	99	585258	50.0	49.9	
99 1,1,2,2-Tetrachloroethane	83	11.673	11.671	0.002	69	151371	50.0	52.0	
100 Bromobenzene	156	11.679	11.683	-0.004	97	140151	50.0	48.1	
101 1,2,3-Trichloropropane	110	11.715	11.726	-0.011	64	48543	50.0	50.7	
102 trans-1,4-Dichloro-2-buten	53	11.728	11.732	-0.004	58	36285	50.0	45.6	
103 N-Propylbenzene	120	11.788	11.787	0.001	100	163073	50.0	45.4	
104 2-Chlorotoluene	126	11.874	11.872	0.002	99	137856	50.0	45.6	
105 3-Chlorotoluene	126	11.934	11.933	0.001	92	176738	50.0	52.3	
106 1,3,5-Trimethylbenzene	105	11.959	11.963	-0.004	99	494749	50.0	49.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 4-Chlorotoluene	126	11.983	11.981	0.002	94	160414	50.0	49.1	
108 tert-Butylbenzene	119	12.287	12.286	0.001	62	394222	50.0	45.4	
110 1,2,4-Trimethylbenzene	105	12.336	12.334	0.002	99	489875	50.0	47.6	
111 1,2-dichloro-4-(trifluorom	214	12.403	12.401	0.002	97	155395	50.0	47.8	
112 sec-Butylbenzene	105	12.506	12.511	-0.005	99	579151	50.0	47.4	
113 1,3-Dichlorobenzene	146	12.616	12.614	0.002	85	268340	50.0	50.0	
114 4-Isopropyltoluene	119	12.652	12.651	0.001	99	466767	50.0	46.3	
115 1,4-Dichlorobenzene	146	12.707	12.705	0.002	96	282976	50.0	51.6	
116 2,4-Dichloro-1-(triflourom	214	12.762	12.760	0.002	93	147214	50.0	48.3	
118 2,5-Dichlorobenzotrifluori	214	12.810	12.803	0.007	95	169538	50.0	49.8	
120 n-Butylbenzene	91	13.060	13.064	-0.004	99	422190	50.0	45.9	
121 1,2-Dichlorobenzene	146	13.078	13.083	-0.004	99	252159	50.0	50.7	
122 1,2-Dibromo-3-Chloropropan	75	13.857	13.861	-0.004	87	18324	50.0	45.0	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.009	14.007	0.002	99	545467	150.0	145.1	
125 2,3- & 3,4- Dichlorotoluen	125	14.422	14.427	-0.005	99	344830	100.0	94.3	
126 1,2,4-Trichlorobenzene	180	14.690	14.695	-0.005	96	105604	50.0	40.8	
127 Hexachlorobutadiene	225	14.860	14.859	0.001	92	49333	50.0	39.7	
128 Naphthalene	128	14.940	14.938	0.002	99	254110	50.0	37.4	
129 1,2,3-Trichlorobenzene	180	15.183	15.187	-0.004	96	82306	50.0	38.8	
131 2,4,5-Trichlorotoluene	159	15.962	15.966	-0.004	95	36926	50.0	32.3	
130 2,3,6-Trichlorotoluene	159	16.065	16.063	0.002	95	35026	50.0	34.0	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	96.8	
S 134 1,2-Dichloroethene, Total	96				0		100.0	243.6	
S 135 1,3-Dichloropropene, Total	1				0		100.0	105.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRO2ND_00007	Amount Added:	6.00	Units: uL	
voaWVA2nd Res_00006	Amount Added:	2.00	Units: uL	
voaWKet2 Rest_00002	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00004	Amount Added:	2.00	Units: uL	
VOA8260VOA2ND_00109	Amount Added:	2.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

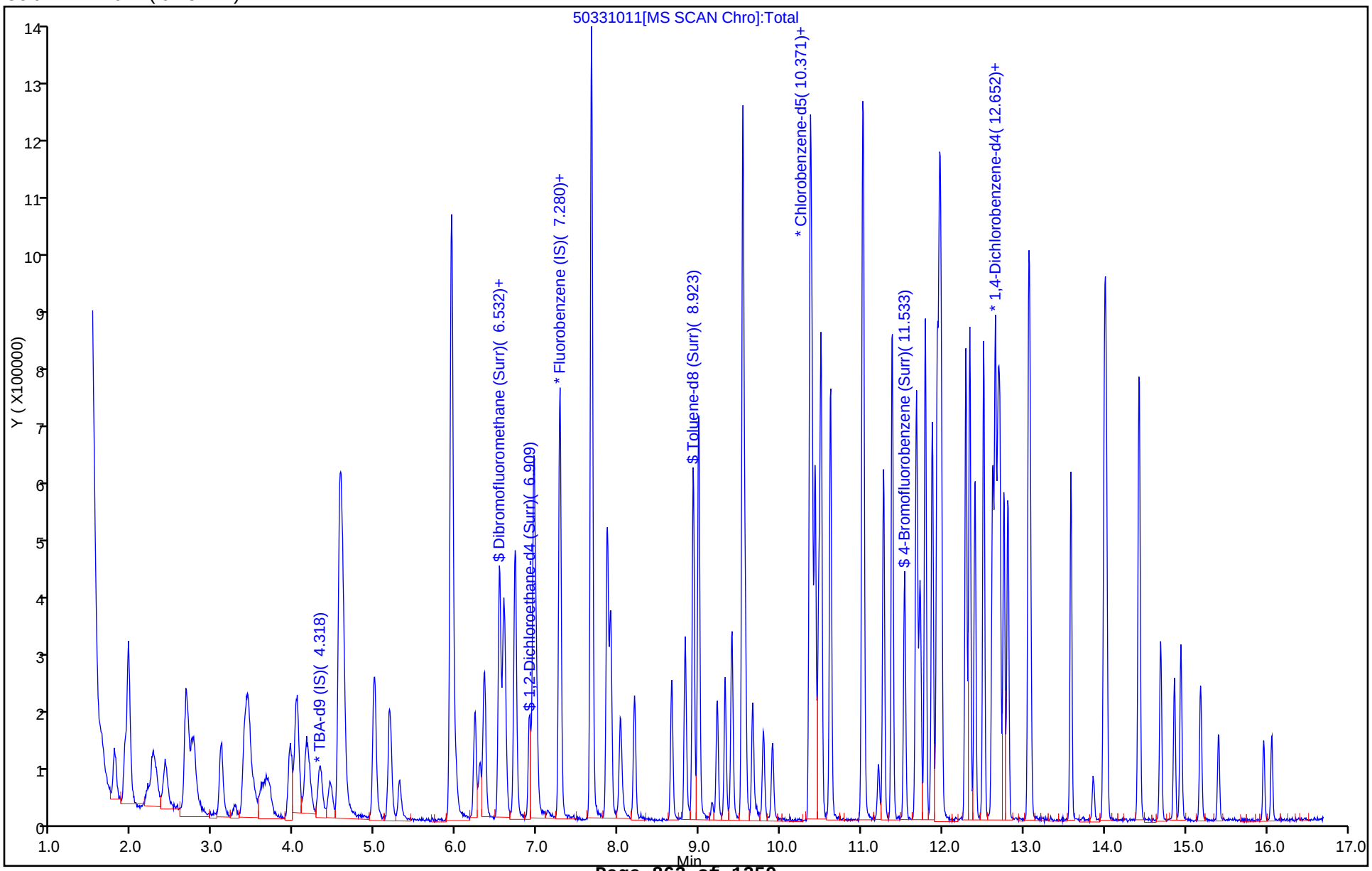
Report Date: 31-Mar-2015 14:13:34 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331011.D

Injection Date:	31-Mar-2015 13:41:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-42353-E-20 MSD			Worklist Smp#:	11
Client ID:	HD-MW-99S-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

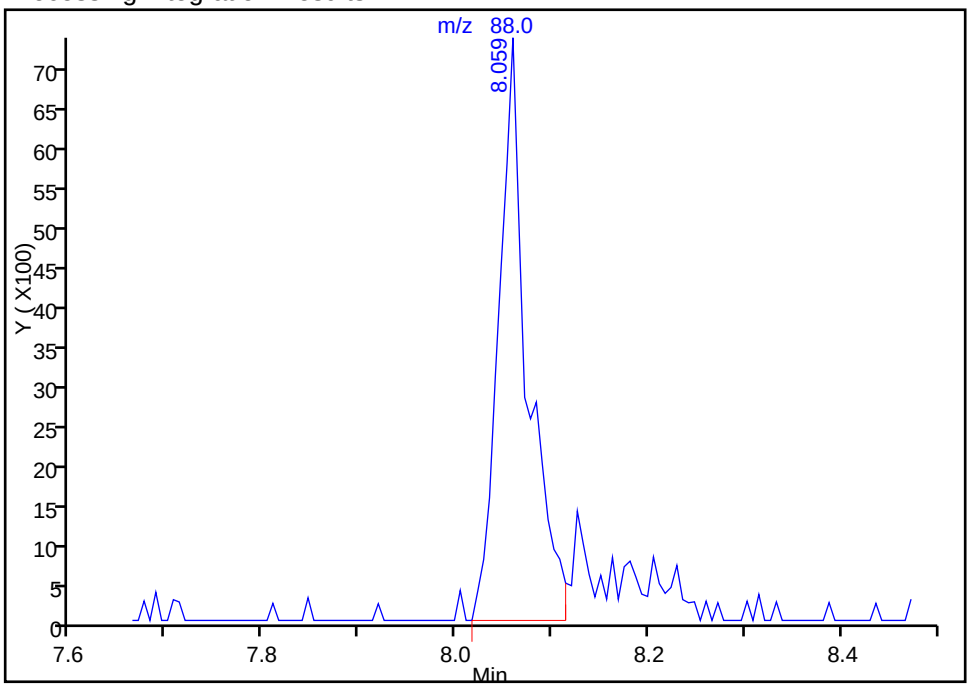
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150331-6255.b\50331011.D				
Injection Date:	31-Mar-2015 13:41:30	Instrument ID:	CHHP5		
Lims ID:	180-42353-E-20 MSD				
Client ID:	HD-MW-99S-0/1-0				
Operator ID:	001562	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

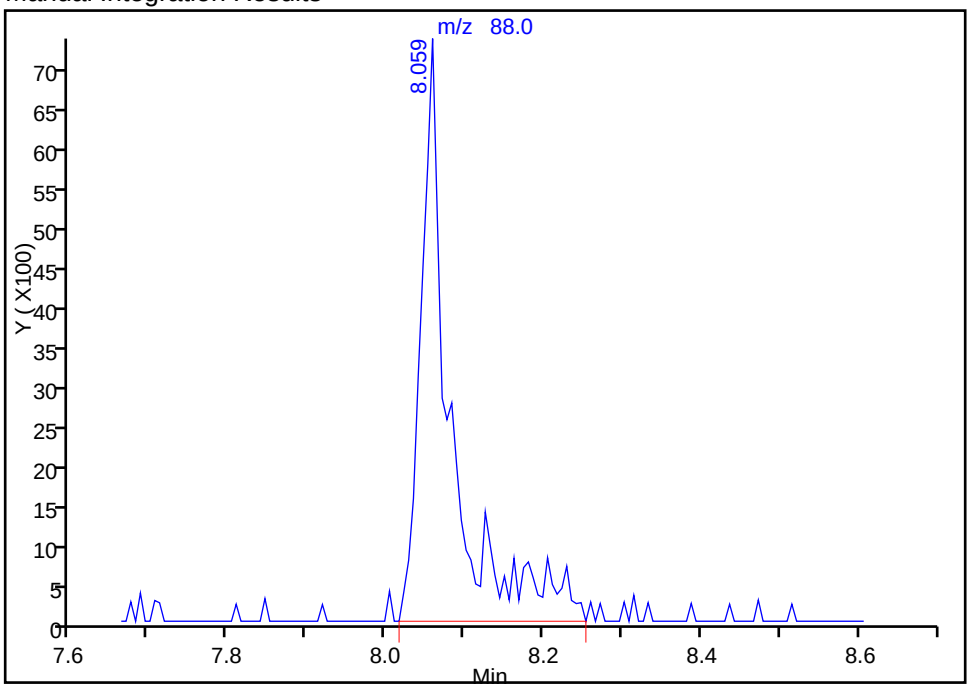
Processing Integration Results

RT: 8.06
Area: 15337
Amount: 541.2793
Amount Units: ng



Manual Integration Results

RT: 8.06
Area: 19579
Amount: 690.9896
Amount Units: ng



Reviewer: fergusond, 31-Mar-2015 14:13:34
Audit Action: Manually Integrated
Audit Reason: Peak Tail

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHHP6 Start Date: 01/28/2015 11:55

Analysis Batch Number: 131929 End Date: 01/28/2015 18:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-131929/4		01/28/2015 11:55	1	60128004.D	DB-624 0.18(mm)
IC 180-131929/6		01/28/2015 13:58	1	60128006.D	DB-624 0.18(mm)
IC 180-131929/7		01/28/2015 14:21	1	60128007.D	DB-624 0.18(mm)
ICIS 180-131929/8		01/28/2015 14:45	1	60128008.D	DB-624 0.18(mm)
IC 180-131929/9		01/28/2015 15:09	1	60128009.D	DB-624 0.18(mm)
IC 180-131929/10		01/28/2015 15:33	1	60128010.D	DB-624 0.18(mm)
IC 180-131929/11		01/28/2015 15:57	1	60128011.D	DB-624 0.18(mm)
IC 180-131929/12		01/28/2015 16:21	1	60128012.D	DB-624 0.18(mm)
IC 180-131929/13		01/28/2015 16:44	1	60128013.D	DB-624 0.18(mm)
ICV 180-131929/18		01/28/2015 18:43	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHHP5 Start Date: 03/16/2015 10:49

Analysis Batch Number: 135593 End Date: 03/16/2015 17:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-135593/1		03/16/2015 10:49	1	50316001.D	DB-624 0.18(mm)
IC 180-135593/4		03/16/2015 12:41	1	50316004.D	DB-624 0.18(mm)
ICIS 180-135593/5		03/16/2015 13:05	1	50316005.D	DB-624 0.18(mm)
IC 180-135593/6		03/16/2015 13:29	1	50316006.D	DB-624 0.18(mm)
IC 180-135593/7		03/16/2015 13:53	1	50316007.D	DB-624 0.18(mm)
IC 180-135593/8		03/16/2015 14:17	1	50316008.D	DB-624 0.18(mm)
IC 180-135593/9		03/16/2015 14:41	1	50316009.D	DB-624 0.18(mm)
IC 180-135593/10		03/16/2015 15:05	1	50316010.D	DB-624 0.18(mm)
IC 180-135593/13		03/16/2015 16:17	1	50316013.D	DB-624 0.18(mm)
ICV 180-135593/15		03/16/2015 17:05	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHHP6 Start Date: 03/30/2015 09:31

Analysis Batch Number: 136938 End Date: 03/30/2015 21:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-136938/1		03/30/2015 09:31	1	60330001.D	DB-624 0.18(mm)
CCVIS 180-136938/2		03/30/2015 10:12	1	60330002.D	DB-624 0.18(mm)
MB 180-136938/5		03/30/2015 11:37	1	60330005.D	DB-624 0.18(mm)
ZZZZZ		03/30/2015 12:14	1		DB-624 0.18(mm)
ZZZZZ		03/30/2015 12:38	1		DB-624 0.18(mm)
LCS 180-136938/8		03/30/2015 13:03	1	60330008.D	DB-624 0.18(mm)
ZZZZZ		03/30/2015 13:27	1		DB-624 0.18(mm)
ZZZZZ		03/30/2015 13:51	1		DB-624 0.18(mm)
ZZZZZ		03/30/2015 14:39	1		DB-624 0.18(mm)
ZZZZZ		03/30/2015 15:03	1		DB-624 0.18(mm)
ZZZZZ		03/30/2015 15:27	1		DB-624 0.18(mm)
ZZZZZ		03/30/2015 15:51	1		DB-624 0.18(mm)
ZZZZZ		03/30/2015 16:15	1		DB-624 0.18(mm)
180-42353-1	HD-COD-SW-7-0/1-0	03/30/2015 16:39	1	60330017.D	DB-624 0.18(mm)
180-42353-2	HD-COD-SW-6-0/1-0	03/30/2015 17:03	1	60330018.D	DB-624 0.18(mm)
180-42353-3	HD-COD-SW-8-0/1-0	03/30/2015 17:27	1	60330019.D	DB-624 0.18(mm)
180-42353-4	HD-COD-SW-9-0/1-0	03/30/2015 17:51	1	60330020.D	DB-624 0.18(mm)
180-42353-5	HD-COD-SW-10-0/1-0	03/30/2015 18:15	1	60330021.D	DB-624 0.18(mm)
180-42353-6	HD-COD-SW-11-0/1-0	03/30/2015 18:39	1	60330022.D	DB-624 0.18(mm)
180-42353-7	HD-COD-SW-12-0/1-0	03/30/2015 19:03	1	60330023.D	DB-624 0.18(mm)
180-42353-8	HD-COD-SW-13-0/1-0	03/30/2015 19:27	1	60330024.D	DB-624 0.18(mm)
180-42353-9	HD-COD-SW-15-0/1-0	03/30/2015 19:51	1	60330025.D	DB-624 0.18(mm)
180-42353-10	HD-COD-SW-16-0/1-0	03/30/2015 20:14	1	60330026.D	DB-624 0.18(mm)
180-42353-12	HD-COD-SW-20-0/1-0	03/30/2015 21:02	1	60330028.D	DB-624 0.18(mm)
180-42353-13	HD-COD-SW-26-0/1-0	03/30/2015 21:27	1	60330029.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHHP5 Start Date: 03/30/2015 11:14

Analysis Batch Number: 136954 End Date: 03/30/2015 23:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-136954/5		03/30/2015 11:14	1	50330005.D	DB-624 0.18(mm)
CCVIS 180-136954/2		03/30/2015 11:52	1	50330002.D	DB-624 0.18(mm)
ZZZZZ		03/30/2015 11:52	1		DB-624 0.18(mm)
CCV 180-136954/3		03/30/2015 12:16	1	50330003.D	DB-624 0.18(mm)
MB 180-136954/7		03/30/2015 13:04	1	50330007.D	DB-624 0.18(mm)
ZZZZZ		03/30/2015 13:45	1		DB-624 0.18(mm)
ZZZZZ		03/30/2015 14:09	1		DB-624 0.18(mm)
LCS 180-136954/10		03/30/2015 14:33	1	50330010.D	DB-624 0.18(mm)
ZZZZZ		03/30/2015 14:58	1		DB-624 0.18(mm)
ZZZZZ		03/30/2015 15:22	1		DB-624 0.18(mm)
ZZZZZ		03/30/2015 16:58	1		DB-624 0.18(mm)
ZZZZZ		03/30/2015 17:22	1		DB-624 0.18(mm)
ZZZZZ		03/30/2015 17:46	1		DB-624 0.18(mm)
ZZZZZ		03/30/2015 18:10	1		DB-624 0.18(mm)
ZZZZZ		03/30/2015 18:35	1		DB-624 0.18(mm)
ZZZZZ		03/30/2015 18:59	1		DB-624 0.18(mm)
180-42353-17	HD-QC1-0/1-2	03/30/2015 19:23	1	50330022.D	DB-624 0.18(mm)
ZZZZZ		03/30/2015 19:47	1		DB-624 0.18(mm)
ZZZZZ		03/30/2015 20:11	1		DB-624 0.18(mm)
180-42353-14	HD-COD-SW-27-0/1-0	03/30/2015 20:35	1	50330025.D	DB-624 0.18(mm)
180-42353-15	HD-COD-SW-28-0/1-0	03/30/2015 21:00	1	50330026.D	DB-624 0.18(mm)
180-42353-16	HD-COD-SW-29-0/1-0	03/30/2015 21:24	1	50330027.D	DB-624 0.18(mm)
180-42353-18	HD-QC2-0/1-2	03/30/2015 22:12	1	50330029.D	DB-624 0.18(mm)
ZZZZZ		03/30/2015 22:36	1		DB-624 0.18(mm)
180-42353-21	HD-MW-99D-0/1-0	03/30/2015 23:01	5	50330031.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHHP5 Start Date: 03/31/2015 09:26

Analysis Batch Number: 137048 End Date: 03/31/2015 21:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-137048/4		03/31/2015 09:26	1	50331004.D	DB-624 0.18(mm)
CCVIS 180-137048/2		03/31/2015 10:08	1	50331002.D	DB-624 0.18(mm)
ZZZZZ		03/31/2015 10:08	1		DB-624 0.18(mm)
CCV 180-137048/3		03/31/2015 10:32	1	50331003.D	DB-624 0.18(mm)
MB 180-137048/6		03/31/2015 11:21	1	50331006.D	DB-624 0.18(mm)
180-42353-20	HD-MW-99S-0/1-0	03/31/2015 12:04	1	50331007.D	DB-624 0.18(mm)
LCS 180-137048/9		03/31/2015 12:53	1	50331009.D	DB-624 0.18(mm)
180-42353-20 MS	HD-MW-99S-0/1-0 MS	03/31/2015 13:17	1	50331010.D	DB-624 0.18(mm)
180-42353-20 MSD	HD-MW-99S-0/1-0 MSD	03/31/2015 13:41	1	50331011.D	DB-624 0.18(mm)
ZZZZZ		03/31/2015 14:29	2		DB-624 0.18(mm)
180-42353-19	HD-QC1-0/1-1	03/31/2015 14:53	1	50331014.D	DB-624 0.18(mm)
180-42353-11	HD-COD-SW-17-0/1-0	03/31/2015 15:17	1	50331015.D	DB-624 0.18(mm)
180-42353-23	HD-MW-100S-0/1-0	03/31/2015 16:30	5	50331018.D	DB-624 0.18(mm)
180-42353-24	HD-MW-100I-0/1-0	03/31/2015 16:54	1	50331019.D	DB-624 0.18(mm)
ZZZZZ		03/31/2015 17:43	1		DB-624 0.18(mm)
180-42353-26	HD-MW-93D-0/1-0	03/31/2015 18:06	10	50331022.D	DB-624 0.18(mm)
ZZZZZ		03/31/2015 18:31	1		DB-624 0.18(mm)
ZZZZZ		03/31/2015 18:55	1		DB-624 0.18(mm)
ZZZZZ		03/31/2015 19:19	1		DB-624 0.18(mm)
ZZZZZ		03/31/2015 19:43	1		DB-624 0.18(mm)
ZZZZZ		03/31/2015 20:07	1		DB-624 0.18(mm)
ZZZZZ		03/31/2015 20:32	1		DB-624 0.18(mm)
ZZZZZ		03/31/2015 20:56	1		DB-624 0.18(mm)
ZZZZZ		03/31/2015 21:20	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHHP5 Start Date: 04/01/2015 10:42

Analysis Batch Number: 137218 End Date: 04/01/2015 16:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-137218/4		04/01/2015 10:42	1	50401004.D	DB-624 0.18(mm)
CCVIS 180-137218/2		04/01/2015 11:25	1	50401002.D	DB-624 0.18(mm)
ZZZZZ		04/01/2015 11:25	1		DB-624 0.18(mm)
CCV 180-137218/3		04/01/2015 11:49	1	50401003.D	DB-624 0.18(mm)
MB 180-137218/6		04/01/2015 12:40	1	50401006.D	DB-624 0.18(mm)
LCS 180-137218/9		04/01/2015 14:11	1	50401009.D	DB-624 0.18(mm)
180-42353-11 DL	HD-COD-SW-17-0/1-0 DL	04/01/2015 16:11	3	50401014.D	DB-624 0.18(mm)
180-42353-22	HD-MW-145A-0/1-0	04/01/2015 16:35	1	50401015.D	DB-624 0.18(mm)
180-42353-25	HD-MW-93S-0/1-0	04/01/2015 16:59	2	50401016.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.: 180-42353-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A-ICS2100 A 03-25-2015-5.d

Lab ID: LCS 180-136546/5 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Nitrate as N	2.50	2.55	102	90-110	
Chloride	50.0	48.5	97	90-110	
Sulfate	50.0	48.5	97	90-110	

Column to be used to flag recovery and RPD values

FORM III 300.0

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A-ICS2100 A 03-25-2015-45.d

Lab ID: LCS 180-136546/45 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Nitrate as N	2.50	2.59	103	90-110	
Chloride	50.0	49.3	99	90-110	
Sulfate	50.0	49.2	98	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.: 180-42353-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A-ICS2100 A 03-25-2015-37.d

Lab ID: 180-42353-20 MS Client ID: HD-MW-99S-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	2.8	4.12	103	80-120	
Chloride	25.0	87	112	102	80-120	
Sulfate	25.0	29	54.2	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.: 180-42353-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A-ICS2100 A 03-25-2015-54.d

Lab ID: 180-42353-21 MS Client ID: HD-MW-99D-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	2.3	3.39	90	80-120	
Chloride	25.0	58	78.1	78	80-120	F1
Sulfate	25.0	26	48.1	87	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.: 180-42353-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A-ICS2100 A 03-25-2015-66.d

Lab ID: 180-42353-24 MS Client ID: HD-MW-100I-0/1-0 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Nitrate as N	1.25	3.6	4.80	95	80-120	
Chloride	25.0	110	134	89	80-120	4
Sulfate	25.0	33	56.1	91	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.: 180-42353-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A-ICS2100 A 03-25-2015-38.d

Lab ID: 180-42353-20 MSD Client ID: HD-MW-99S-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	3.96	90	4	20	80-120	
Chloride	25.0	108	85	4	20	80-120	
Sulfate	25.0	51.6	89	5	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.: 180-42353-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A-ICS2100 A 03-25-2015-55.d

Lab ID: 180-42353-21 MSD Client ID: HD-MW-99D-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	3.34	86	1	20	80-120	
Chloride	25.0	78.8	81	1	20	80-120	
Sulfate	25.0	48.5	88	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.: 180-42353-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A-ICS2100 A 03-25-2015-67.d

Lab ID: 180-42353-24 MSD Client ID: HD-MW-100I-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	5.02	114	5	20	80-120	
Chloride	25.0	140	113	4	20	80-120	4
Sulfate	25.0	58.8	102	5	20	80-120	

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.: 180-42353-1

SDG No.:

Lab File ID: A-ICS2100 A 03-25-2015-6.d Lab Sample ID: MB 180-136546/6

Matrix: Water Date Extracted:

Instrument ID: CHIC2100A Date Analyzed: 03/25/2015 12:58

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
HD-QC1-0/1-1	180-42353-19	A-ICS2100 A 03-25-2015-12.d	03/25/2015 14:34
HD-COD-SW-29-0/1-0	180-42353-16	A-ICS2100 A 03-25-2015-13.d	03/25/2015 14:49
HD-COD-SW-8-0/1-0	180-42353-3	A-ICS2100 A 03-25-2015-14.d	03/25/2015 15:06
HD-COD-SW-6-0/1-0	180-42353-2	A-ICS2100 A 03-25-2015-21.d	03/25/2015 17:00
HD-COD-SW-13-0/1-0	180-42353-8	A-ICS2100 A 03-25-2015-22.d	03/25/2015 17:17
HD-COD-SW-16-0/1-0	180-42353-10	A-ICS2100 A 03-25-2015-23.d	03/25/2015 17:35
HD-COD-SW-20-0/1-0	180-42353-12	A-ICS2100 A 03-25-2015-24.d	03/25/2015 17:52
HD-COD-SW-26-0/1-0	180-42353-13	A-ICS2100 A 03-25-2015-25.d	03/25/2015 18:09
HD-COD-SW-7-0/1-0	180-42353-1	A-ICS2100 A 03-25-2015-26.d	03/25/2015 18:27
HD-MW-99S-0/1-0	180-42353-20	A-ICS2100 A 03-25-2015-36.d	03/25/2015 21:20
HD-MW-99S-0/1-0 MS	180-42353-20 MS	A-ICS2100 A 03-25-2015-37.d	03/25/2015 21:37
HD-MW-99S-0/1-0 MSD	180-42353-20 MSD	A-ICS2100 A 03-25-2015-38.d	03/25/2015 21:55
HD-COD-SW-11-0/1-0	180-42353-6	A-ICS2100 A 03-25-2015-41.d	03/25/2015 22:47
HD-MW-93D-0/1-0	180-42353-26	A-ICS2100 A 03-25-2015-42.d	03/25/2015 23:04

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab File ID: A-ICS2100 A 03-25-2015-46.d Lab Sample ID: MB 180-136546/46

Matrix: Water Date Extracted:

Instrument ID: CHIC2100A Date Analyzed: 03/26/2015 00:13

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	CCB 180-136546/4	A-ICS2100 A 03-25-2015-4.d	03/25/2015 12:23
	LCS 180-136546/5	A-ICS2100 A 03-25-2015-5.d	03/25/2015 12:40
	CCB 180-136546/16	A-ICS2100 A 03-25-2015-16.d	03/25/2015 15:39
	CCB 180-136546/28	A-ICS2100 A 03-25-2015-28.d	03/25/2015 19:01
	CCB 180-136546/40	A-ICS2100 A 03-25-2015-40.d	03/25/2015 22:29
	LCS 180-136546/45	A-ICS2100 A 03-25-2015-45.d	03/25/2015 23:56
HD-COD-SW-9-0/1-0	180-42353-4	A-ICS2100 A 03-25-2015-47.d	03/26/2015 00:31
HD-COD-SW-10-0/1-0	180-42353-5	A-ICS2100 A 03-25-2015-48.d	03/26/2015 00:48
HD-COD-SW-12-0/1-0	180-42353-7	A-ICS2100 A 03-25-2015-49.d	03/26/2015 01:05
HD-COD-SW-27-0/1-0	180-42353-14	A-ICS2100 A 03-25-2015-50.d	03/26/2015 01:22
	CCB 180-136546/52	A-ICS2100 A 03-25-2015-52.d	03/26/2015 01:57
HD-MW-99D-0/1-0	180-42353-21	A-ICS2100 A 03-25-2015-53.d	03/26/2015 02:14
HD-MW-99D-0/1-0 MS	180-42353-21 MS	A-ICS2100 A 03-25-2015-54.d	03/26/2015 02:32
HD-MW-99D-0/1-0 MSD	180-42353-21 MSD	A-ICS2100 A 03-25-2015-55.d	03/26/2015 02:49
HD-COD-SW-28-0/1-0	180-42353-15	A-ICS2100 A 03-25-2015-56.d	03/26/2015 03:06

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab File ID: A-ICS2100 A 03-25-2015-46.d Lab Sample ID: MB 180-136546/46

Matrix: Water Date Extracted:

Instrument ID: CHIC2100A Date Analyzed: 03/26/2015 00:13

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
HD-MW-145A-0/1-0	180-42353-22	A-ICS2100 A 03-25-2015-57.d	03/26/2015 03:24
HD-MW-100S-0/1-0	180-42353-23	A-ICS2100 A 03-25-2015-58.d	03/26/2015 03:41
HD-COD-SW-15-0/1-0	180-42353-9	A-ICS2100 A 03-25-2015-59.d	03/26/2015 03:58
HD-COD-SW-17-0/1-0	180-42353-11	A-ICS2100 A 03-25-2015-61.d	03/26/2015 04:33
	CCB 180-136546/64	A-ICS2100 A 03-25-2015-64.d	03/26/2015 05:25
HD-MW-100I-0/1-0	180-42353-24	A-ICS2100 A 03-25-2015-65.d	03/26/2015 05:42
HD-MW-100I-0/1-0 MS	180-42353-24 MS	A-ICS2100 A 03-25-2015-66.d	03/26/2015 05:59
HD-MW-100I-0/1-0 MSD	180-42353-24 MSD	A-ICS2100 A 03-25-2015-67.d	03/26/2015 06:17
HD-MW-93S-0/1-0	180-42353-25	A-ICS2100 A 03-25-2015-68.d	03/26/2015 06:34
	CCB 180-136546/75	A-ICS2100 A 03-25-2015-75.d	03/26/2015 08:31

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 180-42353-1

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-26.d

Analysis Method: 300.0 Date Collected: 03/24/2015 12:05

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 18:27

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.6	B	0.10	0.0062
16887-00-6	Chloride	81	B	1.0	0.20
14808-79-8	Sulfate	34		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

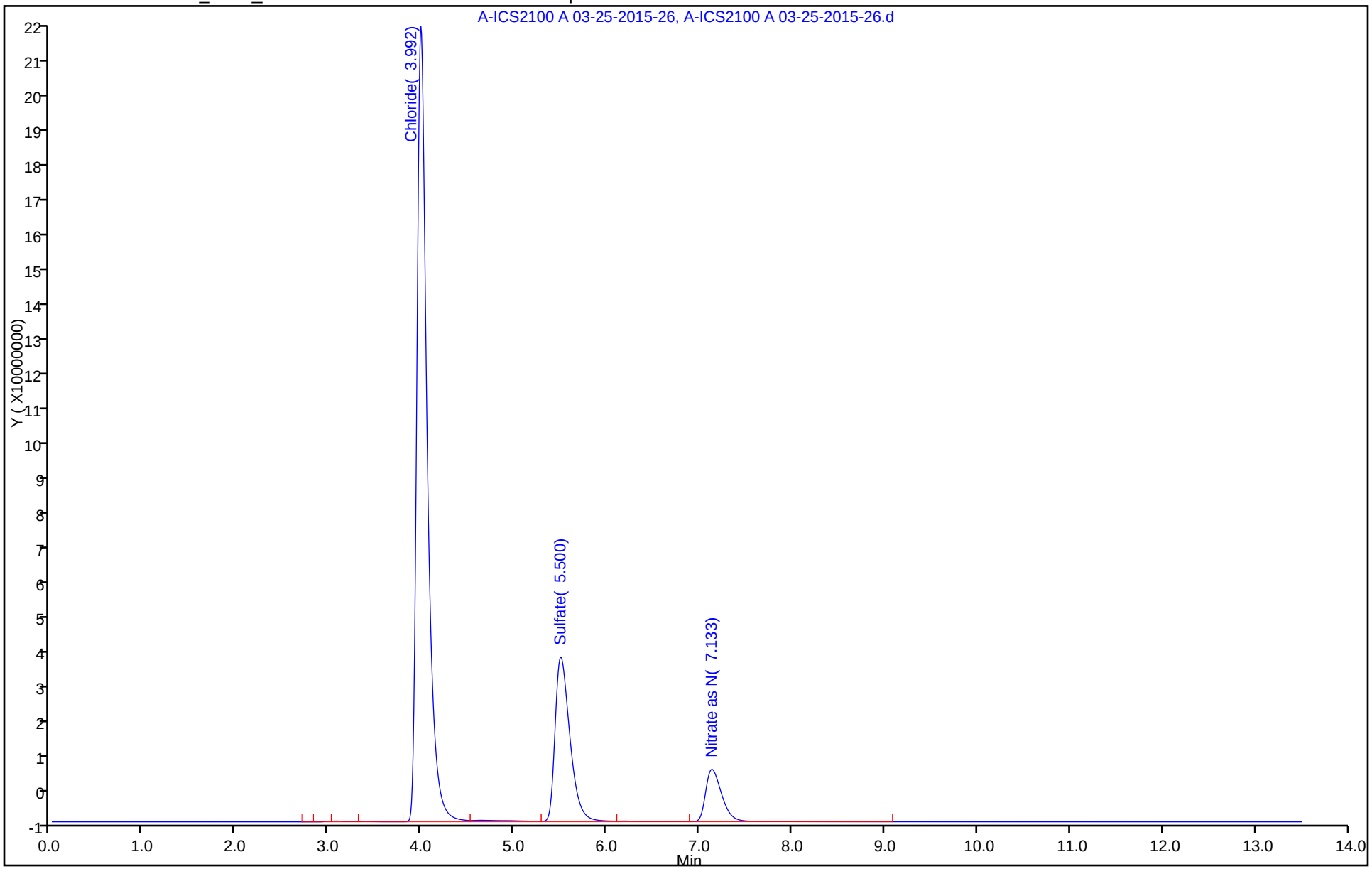
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-26.d				
Lims ID:	180-42353-A-1	Lab Sample ID:	180-42353-1		
Client ID:	HD-COD-SW-6-0/1-0				
Sample Type:	Client				
Inject. Date:	25-Mar-2015 18:27:00	ALS Bottle#:	0	Worklist Smp#:	26
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006176-026				
Misc. Info.:	26 180-42353-A-1				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	26-Mar-2015 11:13:39	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:	XAWRK012				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.000	-0.008	1688436269	81.3	
3 Sulfate	5.500	5.483	0.017	502315375	33.6	
5 Nitrate as N	7.133	7.150	-0.017	175522646	3.59	

Report Date: 26-Mar-2015 11:13:45 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-26.d				
Injection Date:	25-Mar-2015 18:27:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-1	Lab Sample ID:	180-42353-1	Worklist Smp#:	26
Client ID:	HD-COD-SW-6-0/1-0				
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 180-42353-2

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-21.d

Analysis Method: 300.0 Date Collected: 03/24/2015 10:40

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 17:00

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.4	B	0.10	0.0062
16887-00-6	Chloride	140	B	1.0	0.20
14808-79-8	Sulfate	19		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-21.d
Lims ID: 180-42353-A-2 Lab Sample ID: 180-42353-2
Client ID: HD-COD-SW-7-0/1-0
Sample Type: Client
Inject. Date: 25-Mar-2015 17:00:00 ALS Bottle#: 0 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-021
Misc. Info.: 21 180-42353-A-2
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:39 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

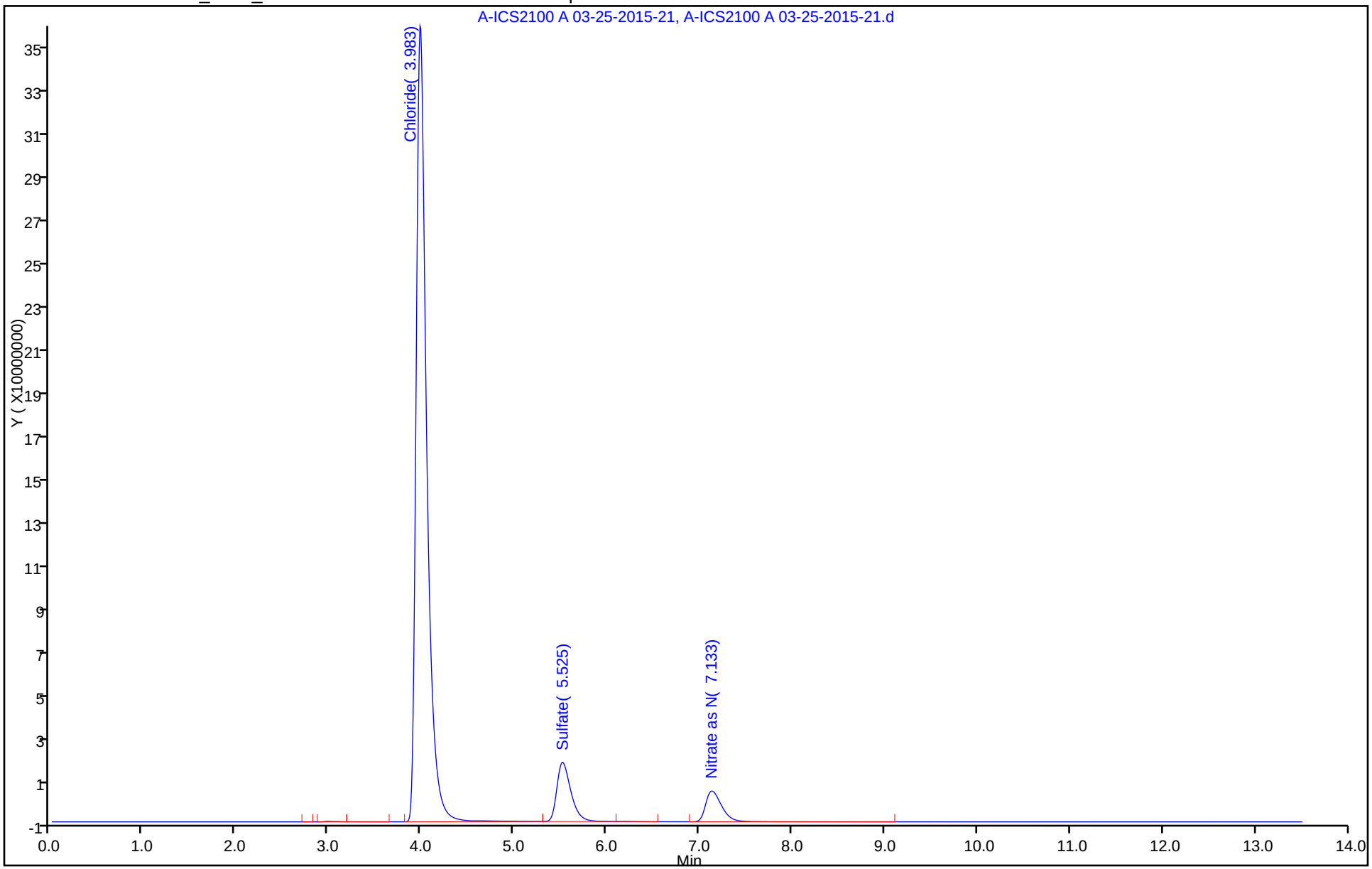
Column 1 : Det: 0008
Process Host: XAWRK012

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.983	4.000	-0.017	2809930813	135.1	
3 Sulfate	5.525	5.483	0.042	277768356	18.6	
5 Nitrate as N	7.133	7.150	-0.017	165678097	3.39	

Report Date: 26-Mar-2015 11:13:42 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-21.d				
Injection Date:	25-Mar-2015 17:00:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-2	Lab Sample ID:	180-42353-2	Worklist Smp#:	21
Client ID:	HD-COD-SW-7-0/1-0				
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 180-42353-3

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-14.d

Analysis Method: 300.0 Date Collected: 03/24/2015 09:10

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 15:06

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.6	B	0.10	0.0062
16887-00-6	Chloride	71	B	1.0	0.20
14808-79-8	Sulfate	30		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

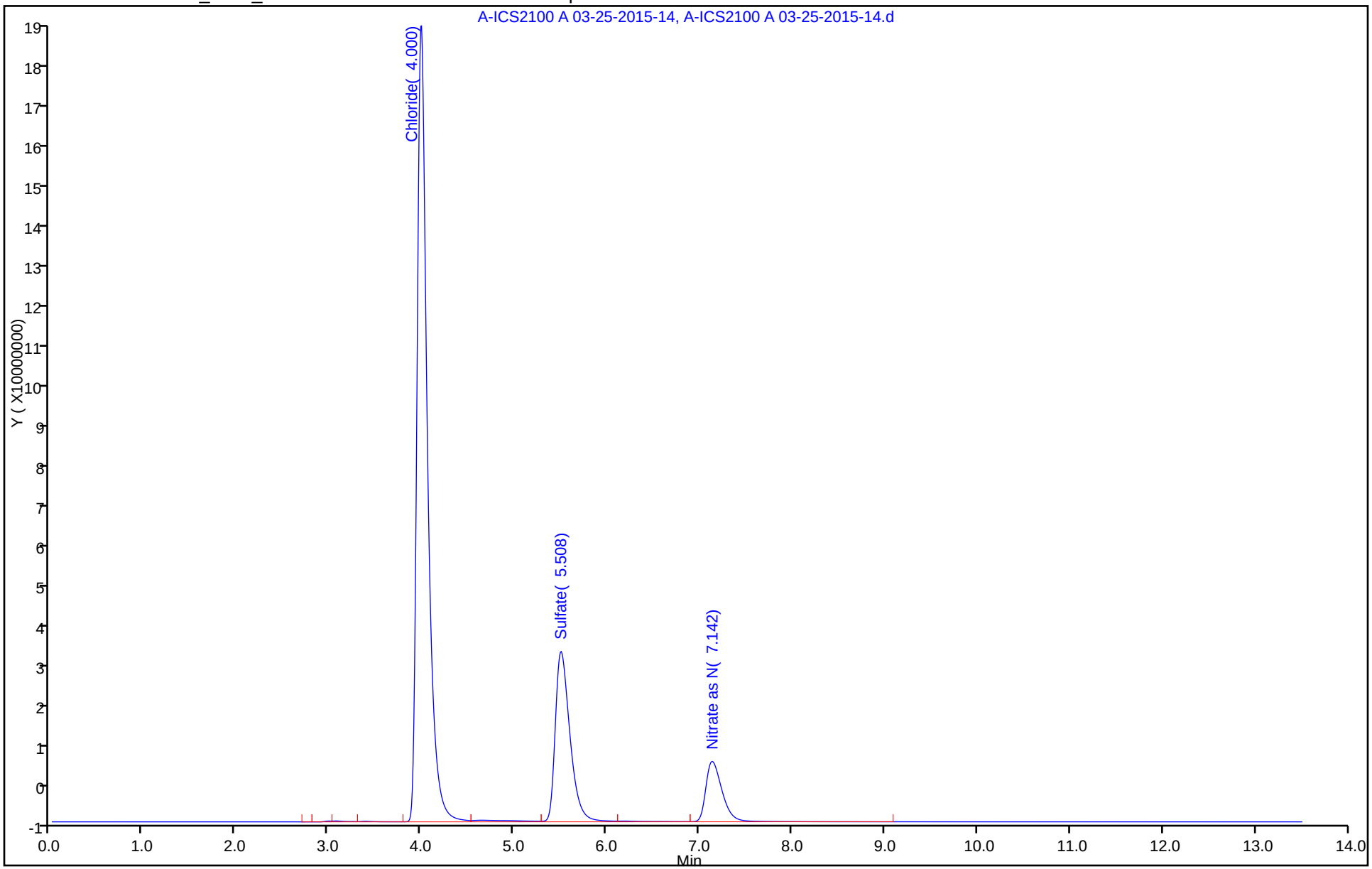
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-14.d				
Lims ID:	180-42353-A-3	Lab Sample ID:	180-42353-3		
Client ID:	HD-COD-SW-8-0/1-0				
Sample Type:	Client				
Inject. Date:	25-Mar-2015 15:06:00	ALS Bottle#:	0	Worklist Smp#:	14
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006176-014				
Misc. Info.:	14 180-42353-A-3				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	26-Mar-2015 11:13:31	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:	XAWRK012				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.000	3.992	0.008	1473375091	71.0	
3 Sulfate	5.508	5.492	0.016	445648087	29.9	
5 Nitrate as N	7.142	7.150	-0.008	176144172	3.60	

Report Date: 26-Mar-2015 11:13:39 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-14.d				
Injection Date:	25-Mar-2015 15:06:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-3	Lab Sample ID:	180-42353-3	Worklist Smp#:	14
Client ID:	HD-COD-SW-8-0/1-0				
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 180-42353-4

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-47.d

Analysis Method: 300.0 Date Collected: 03/24/2015 12:20

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 00:31

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	4.3	B	0.10	0.0062
16887-00-6	Chloride	100	B	1.0	0.20
14808-79-8	Sulfate	31		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

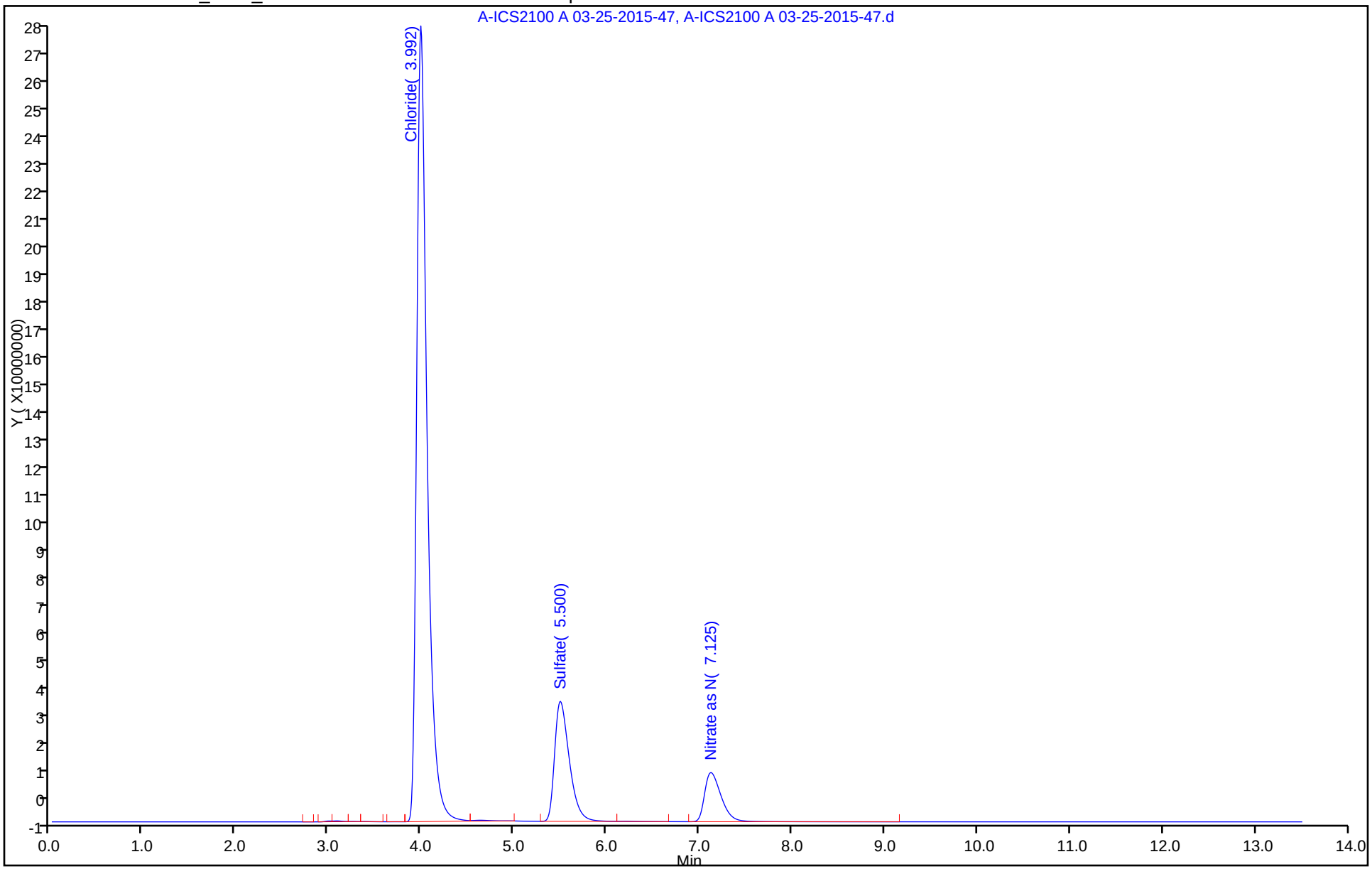
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-47.d				
Lims ID:	180-42353-A-4	Lab Sample ID:	180-42353-4		
Client ID:	HD-COD-SW-9-0/1-0				
Sample Type:	Client				
Inject. Date:	26-Mar-2015 00:31:00	ALS Bottle#:	0	Worklist Smp#:	47
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006176-047				
Misc. Info.:	47 180-42353-a-4				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	26-Mar-2015 11:13:49	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:	XAWRK012				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.000	-0.008	2170585938	104.4	
3 Sulfate	5.500	5.483	0.017	461155001	30.9	
5 Nitrate as N	7.125	7.150	-0.025	212629683	4.34	

Report Date: 26-Mar-2015 11:13:53 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-47.d				
Injection Date:	26-Mar-2015 00:31:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-4	Lab Sample ID:	180-42353-4	Worklist Smp#:	47
Client ID:	HD-COD-SW-9-0/1-0				
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-10-0/1-0 Lab Sample ID: 180-42353-5

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-48.d

Analysis Method: 300.0 Date Collected: 03/24/2015 09:41

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 00:48

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.1	B	0.10	0.0062
16887-00-6	Chloride	130	B	1.0	0.20
14808-79-8	Sulfate	27		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-48.d
Lims ID: 180-42353-A-5 Lab Sample ID: 180-42353-5
Client ID: HD-COD-SW-10-0/1-0
Sample Type: Client
Inject. Date: 26-Mar-2015 00:48:00 ALS Bottle#: 0 Worklist Smp#: 48
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-048
Misc. Info.: 48 180-42353-a-5
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:49 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

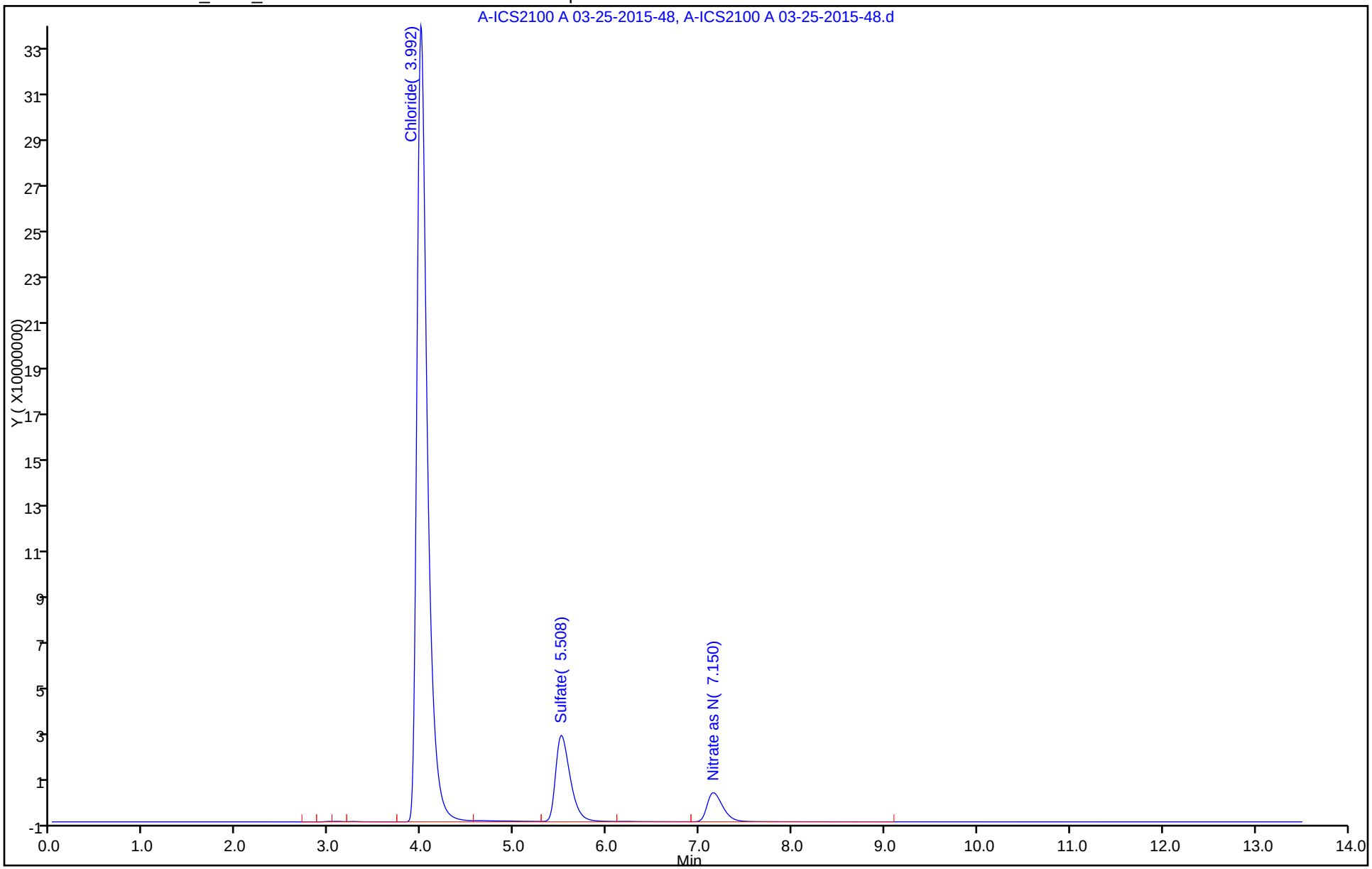
Column 1 : Det: 0008
Process Host: XAWRK012

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.000	-0.008	2674765369	128.6	
3 Sulfate	5.508	5.483	0.025	407603927	27.3	
5 Nitrate as N	7.150	7.150	0.000	150638006	3.08	

Report Date: 26-Mar-2015 11:13:53 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-48.d				
Injection Date:	26-Mar-2015 00:48:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-5	Lab Sample ID:	180-42353-5	Worklist Smp#:	48
Client ID:	HD-COD-SW-10-0/1-0				
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-11-0/1-0 Lab Sample ID: 180-42353-6

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-41.d

Analysis Method: 300.0 Date Collected: 03/24/2015 13:15

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 22:47

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	4.1	B	0.10	0.0062
16887-00-6	Chloride	88	B	1.0	0.20
14808-79-8	Sulfate	20		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

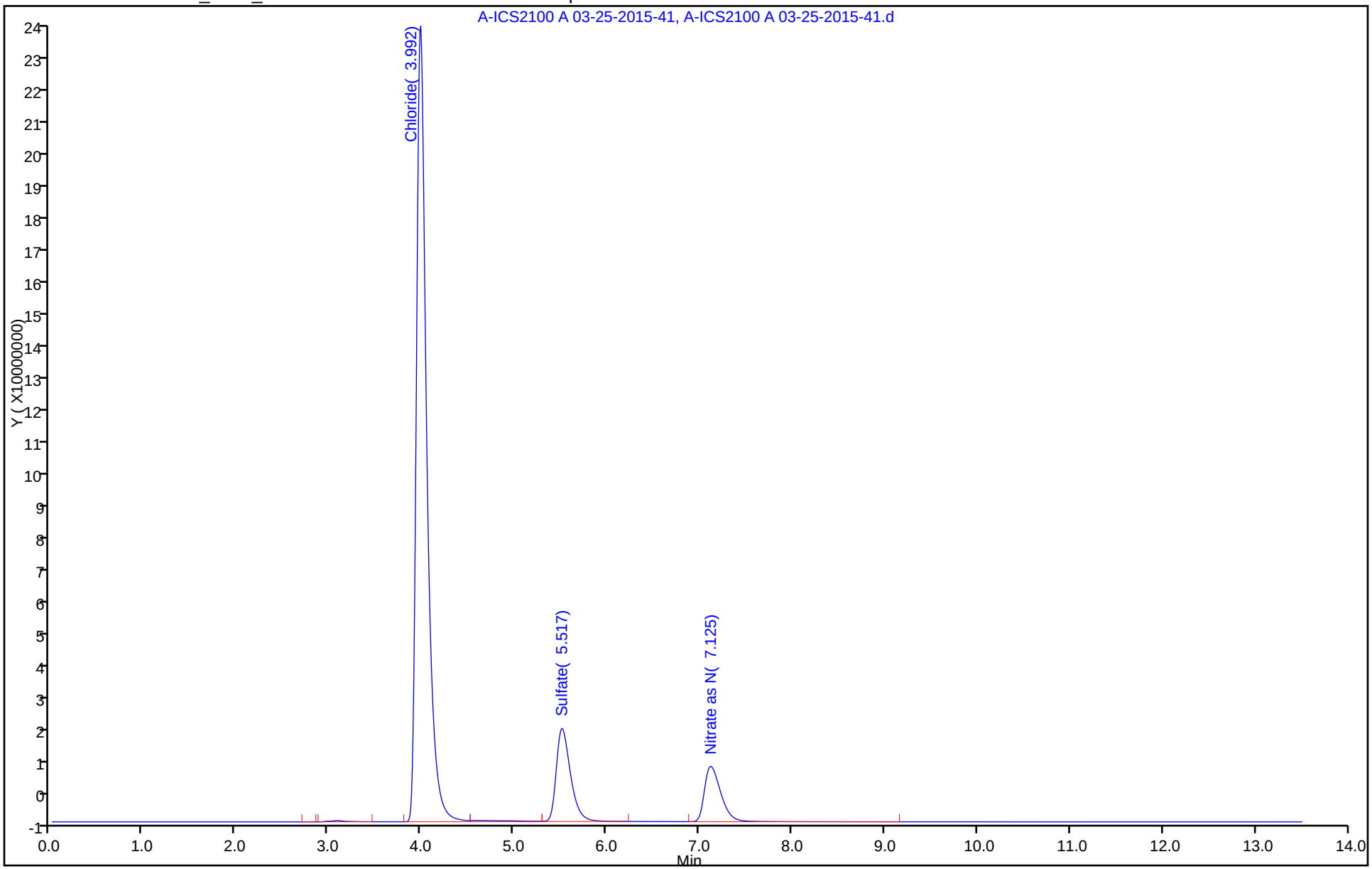
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-41.d				
Lims ID:	180-42353-A-6	Lab Sample ID:	180-42353-6		
Client ID:	HD-COD-SW-11-0/1-0				
Sample Type:	Client				
Inject. Date:	25-Mar-2015 22:47:00	ALS Bottle#:	0	Worklist Smp#:	41
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006176-041				
Misc. Info.:	41 180-42353-A-6				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	26-Mar-2015 11:13:49	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:	XAWRK012				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.000	-0.008	1837683418	88.5	
3 Sulfate	5.517	5.483	0.034	296052219	19.8	
5 Nitrate as N	7.125	7.150	-0.025	202009366	4.12	

Report Date: 26-Mar-2015 11:13:50 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-41.d				
Injection Date:	25-Mar-2015 22:47:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-6	Lab Sample ID:	180-42353-6	Worklist Smp#:	41
Client ID:	HD-COD-SW-11-0/1-0				
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-12-0/1-0 Lab Sample ID: 180-42353-7

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-49.d

Analysis Method: 300.0 Date Collected: 03/24/2015 13:25

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 01:05

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	5.6	B	0.10	0.0062
16887-00-6	Chloride	160	B	1.0	0.20
14808-79-8	Sulfate	37		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

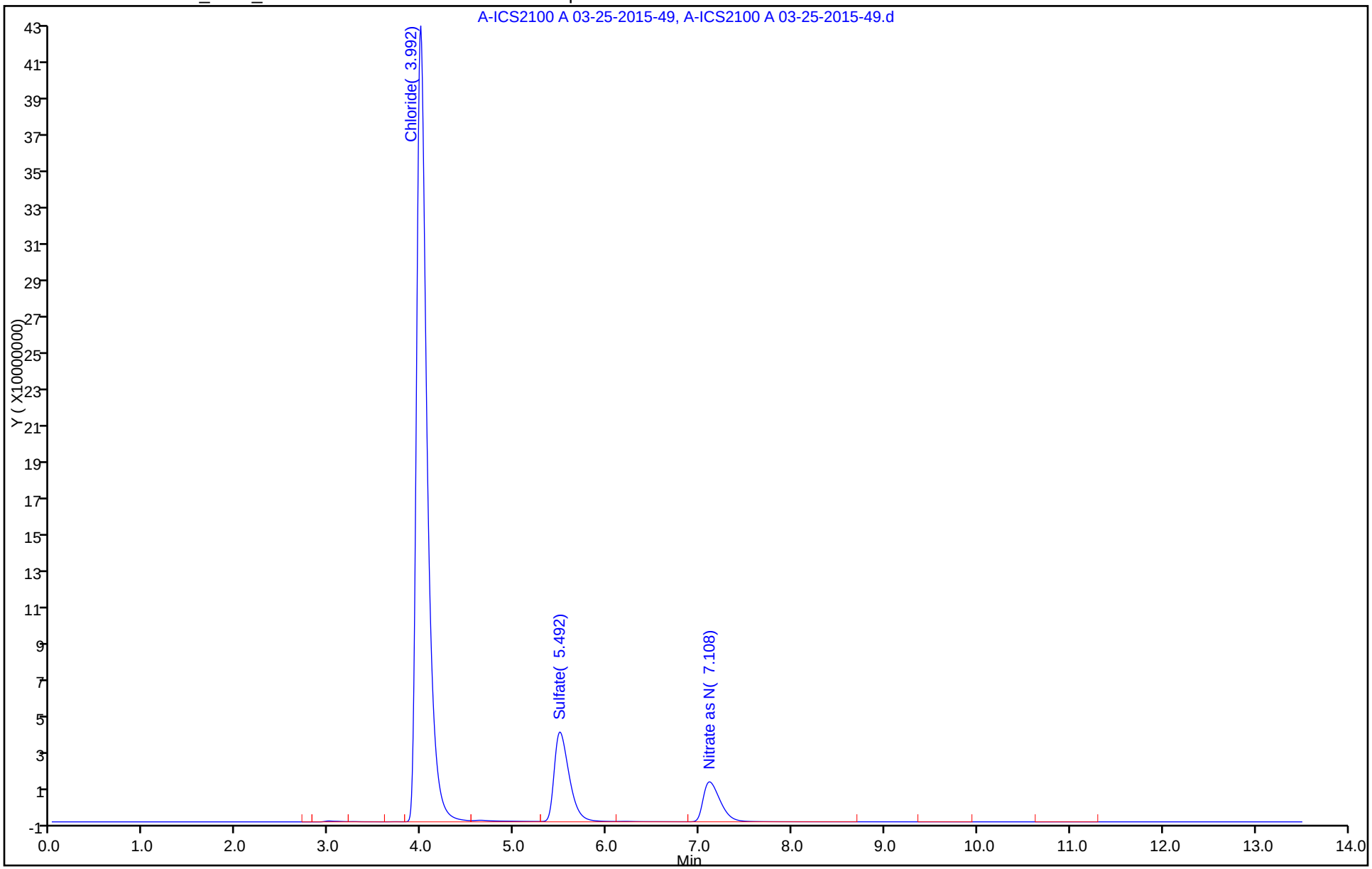
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-49.d				
Lims ID:	180-42353-A-7	Lab Sample ID:	180-42353-7		
Client ID:	HD-COD-SW-12-0/1-0				
Sample Type:	Client				
Inject. Date:	26-Mar-2015 01:05:00	ALS Bottle#:	0	Worklist Smp#:	49
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006176-049				
Misc. Info.:	49 180-42353-a-7				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	26-Mar-2015 11:13:49	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:	XAWRK012				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.000	-0.008	3383455144	162.6	
3 Sulfate	5.492	5.483	0.009	545834605	36.6	
5 Nitrate as N	7.108	7.150	-0.042	277129111	5.65	

Report Date: 26-Mar-2015 11:13:53 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-49.d				
Injection Date:	26-Mar-2015 01:05:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-7	Lab Sample ID:	180-42353-7	Worklist Smp#:	49
Client ID:	HD-COD-SW-12-0/1-0				
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 180-42353-8

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-22.d

Analysis Method: 300.0 Date Collected: 03/24/2015 09:32

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 17:17

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.5	B	0.10	0.0062
16887-00-6	Chloride	77	B	1.0	0.20
14808-79-8	Sulfate	30		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

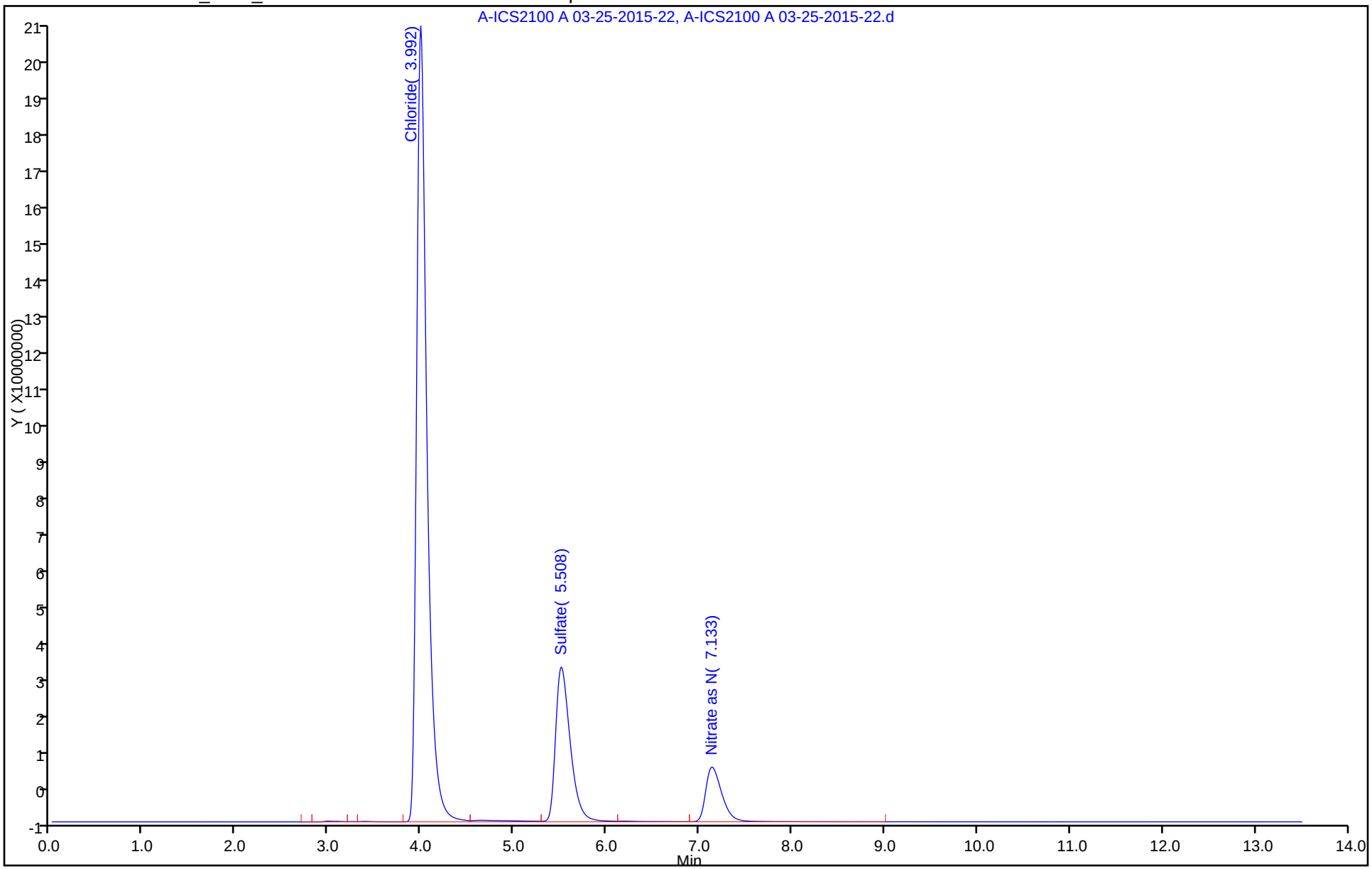
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-22.d				
Lims ID:	180-42353-A-8	Lab Sample ID:	180-42353-8		
Client ID:	HD-COD-SW-13-0/1-0				
Sample Type:	Client				
Inject. Date:	25-Mar-2015 17:17:00	ALS Bottle#:	0	Worklist Smp#:	22
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006176-022				
Misc. Info.:	22 180-42353-A-8				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	26-Mar-2015 11:13:39	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:	XAWRK012				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.000	-0.008	1596163423	76.9	
3 Sulfate	5.508	5.483	0.025	441025458	29.5	
5 Nitrate as N	7.133	7.150	-0.017	172615769	3.53	

Report Date: 26-Mar-2015 11:13:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-22.d				
Injection Date:	25-Mar-2015 17:17:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-8	Lab Sample ID:	180-42353-8	Worklist Smp#:	22
Client ID:	HD-COD-SW-13-0/1-0				
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 180-42353-9

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-59.d

Analysis Method: 300.0 Date Collected: 03/24/2015 13:45

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 03:58

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.8	B	0.10	0.0062
16887-00-6	Chloride	160	B	1.0	0.20
14808-79-8	Sulfate	33		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-59.d
Lims ID: 180-42353-A-9 Lab Sample ID: 180-42353-9
Client ID: HD-COD-SW-15-0/1-0
Sample Type: Client
Inject. Date: 26-Mar-2015 03:58:00 ALS Bottle#: 0 Worklist Smp#: 59
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-059
Misc. Info.: 59 180-42353-a-9
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:54 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

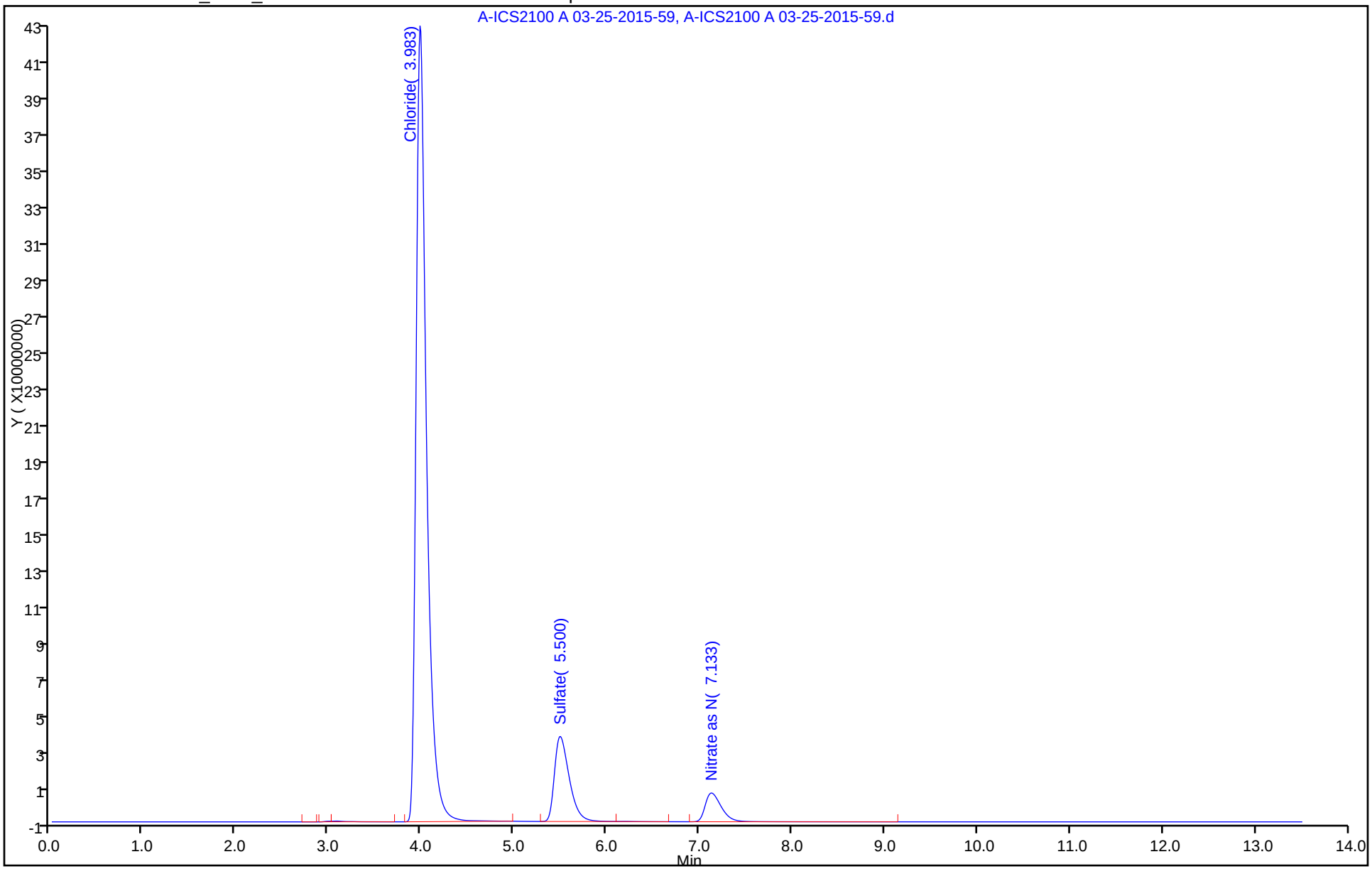
Column 1 : Det: 0008
Process Host: XAWRK012

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.983	4.000	-0.017	3303218766	158.8	
3 Sulfate	5.500	5.483	0.017	499445671	33.5	
5 Nitrate as N	7.133	7.150	-0.017	184643502	3.77	

Report Date: 26-Mar-2015 11:13:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-59.d				
Injection Date:	26-Mar-2015 03:58:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-9	Lab Sample ID:	180-42353-9	Worklist Smp#:	59
Client ID:	HD-COD-SW-15-0/1-0				
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 180-42353-10

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-23.d

Analysis Method: 300.0 Date Collected: 03/24/2015 10:05

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 17:35

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.6	B	0.10	0.0062
16887-00-6	Chloride	72	B	1.0	0.20
14808-79-8	Sulfate	29		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-23.d
Lims ID: 180-42353-A-10 Lab Sample ID: 180-42353-10
Client ID: HD-COD-SW-16-0/1-0
Sample Type: Client
Inject. Date: 25-Mar-2015 17:35:00 ALS Bottle#: 0 Worklist Smp#: 23
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-023
Misc. Info.: 23 180-42353-A-10
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:39 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

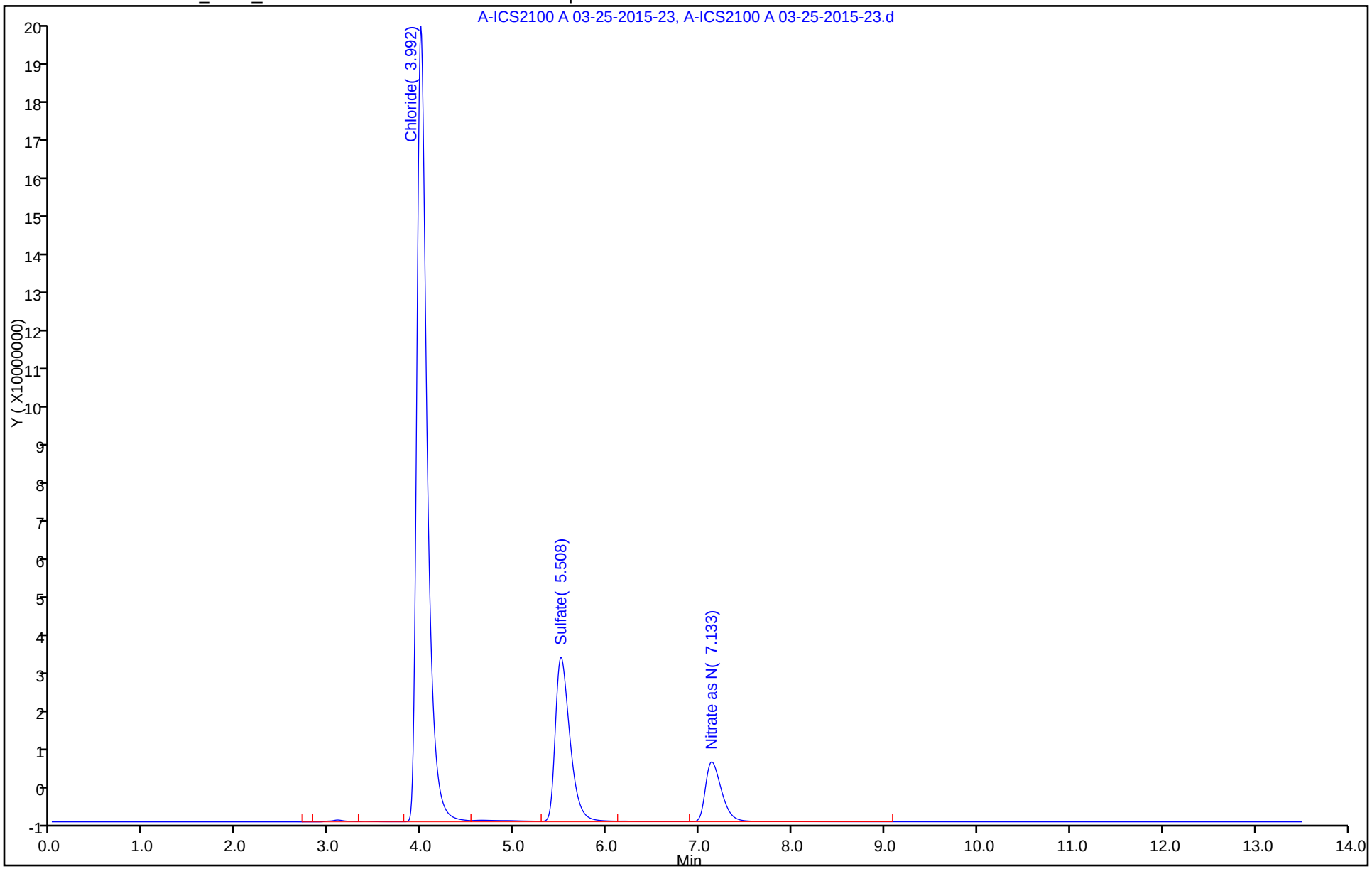
Column 1 : Det: 0008
Process Host: XAWRK012

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.000	-0.008	1496600961	72.1	
3 Sulfate	5.508	5.483	0.025	439045494	29.4	
5 Nitrate as N	7.133	7.150	-0.017	178057213	3.64	

Report Date: 26-Mar-2015 11:13:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-23.d				
Injection Date:	25-Mar-2015 17:35:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-10	Lab Sample ID:	180-42353-10	Worklist Smp#:	23
Client ID:	HD-COD-SW-16-0/1-0				
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 180-42353-11

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-61.d

Analysis Method: 300.0 Date Collected: 03/24/2015 10:15

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 04:33

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.7	B	0.10	0.0062
16887-00-6	Chloride	140	B	1.0	0.20
14808-79-8	Sulfate	32		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

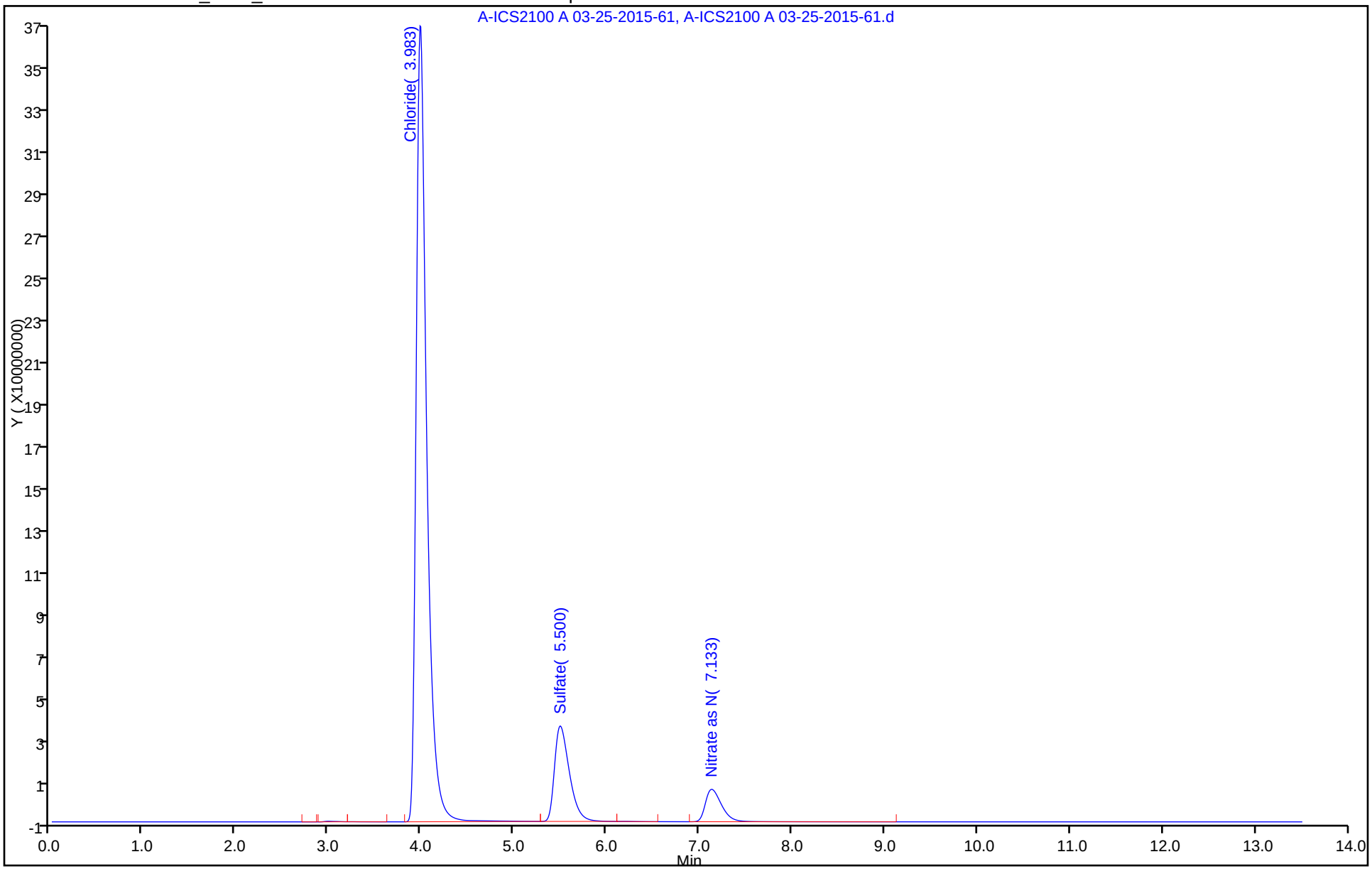
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-61.d				
Lims ID:	180-42353-A-11	Lab Sample ID:	180-42353-11		
Client ID:	HD-COD-SW-17-0/1-0				
Sample Type:	Client				
Inject. Date:	26-Mar-2015 04:33:00	ALS Bottle#:	0	Worklist Smp#:	61
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006176-061				
Misc. Info.:	61 180-42353-a-11				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	26-Mar-2015 11:13:54	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:	XAWRK012				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.983	4.000	-0.017	2868577280	137.9	
3 Sulfate	5.500	5.483	0.017	483658804	32.4	
5 Nitrate as N	7.133	7.150	-0.017	179406852	3.67	

Report Date: 26-Mar-2015 11:13:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-61.d				
Injection Date:	26-Mar-2015 04:33:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-11	Lab Sample ID:	180-42353-11	Worklist Smp#:	61
Client ID:	HD-COD-SW-17-0/1-0				
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-20-0/1-0 Lab Sample ID: 180-42353-12

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-24.d

Analysis Method: 300.0 Date Collected: 03/24/2015 10:50

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 17:52

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.4	B	0.10	0.0062
16887-00-6	Chloride	130	B	1.0	0.20
14808-79-8	Sulfate	18		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

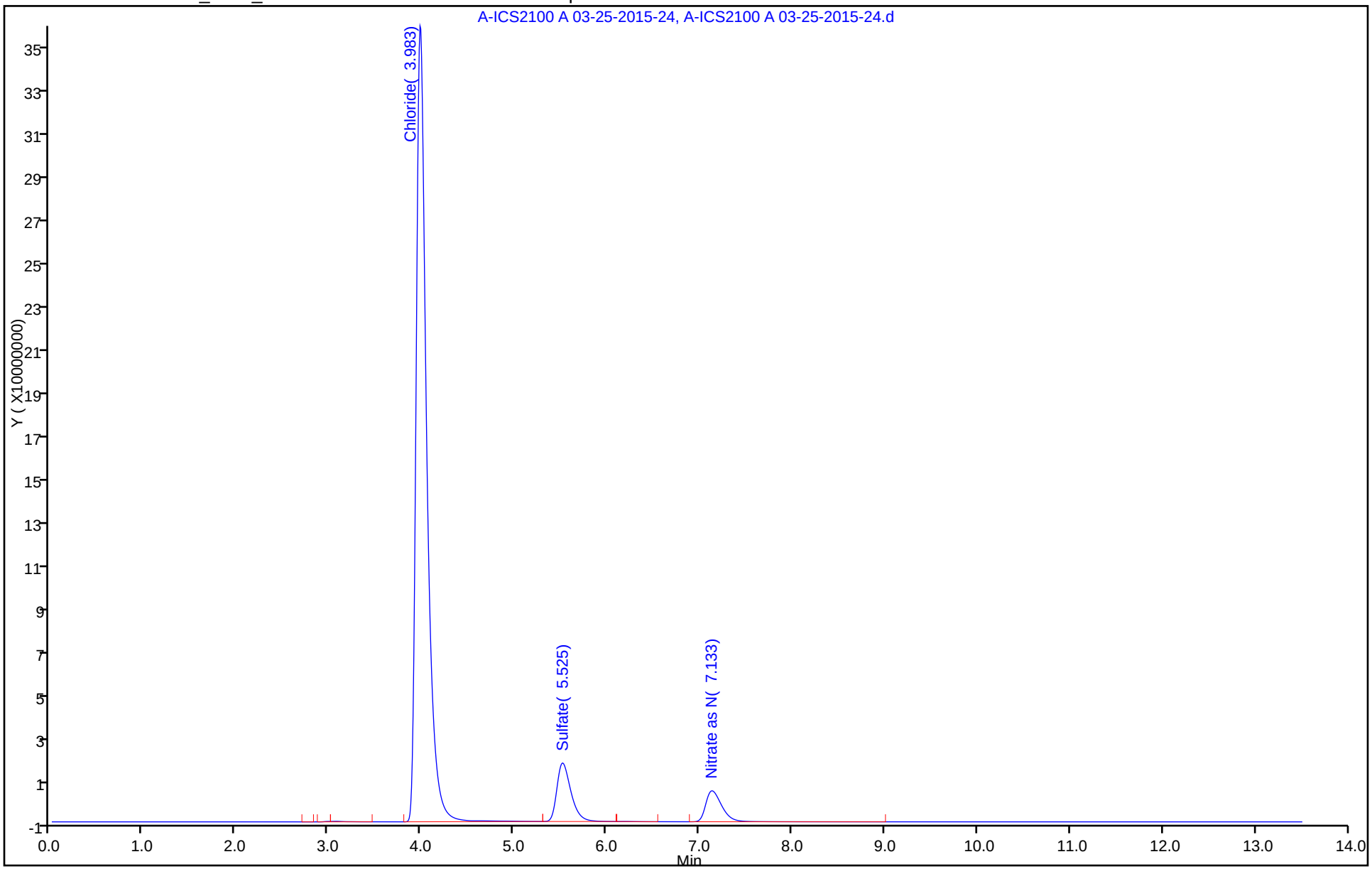
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-24.d				
Lims ID:	180-42353-A-12	Lab Sample ID:	180-42353-12		
Client ID:	HD-COD-SW-20-0/1-0				
Sample Type:	Client				
Inject. Date:	25-Mar-2015 17:52:00	ALS Bottle#:	0	Worklist Smp#:	24
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006176-024				
Misc. Info.:	24 180-42353-A-12				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	26-Mar-2015 11:13:39	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:	XAWRK012				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.983	4.000	-0.017	2782526124	133.8	
3 Sulfate	5.525	5.483	0.042	272404550	18.2	
5 Nitrate as N	7.133	7.150	-0.017	164846619	3.37	

Report Date: 26-Mar-2015 11:13:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-24.d				
Injection Date:	25-Mar-2015 17:52:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-12	Lab Sample ID:	180-42353-12	Worklist Smp#:	24
Client ID:	HD-COD-SW-20-0/1-0				
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 180-42353-13

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-25.d

Analysis Method: 300.0 Date Collected: 03/24/2015 11:45

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 18:09

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.7	B	0.10	0.0062
16887-00-6	Chloride	120	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\20150325-6176.b\A-ICS2100 A 03-25-2015-25.d
Lims ID: 180-42353-A-13 Lab Sample ID: 180-42353-13
Client ID: HD-COD-SW-26-0/1-0
Sample Type: Client
Inject. Date: 25-Mar-2015 18:09:00 ALS Bottle#: 0 Worklist Smp#: 25
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-025
Misc. Info.: 25 180-42353-A-13
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:39 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: XAWRK012

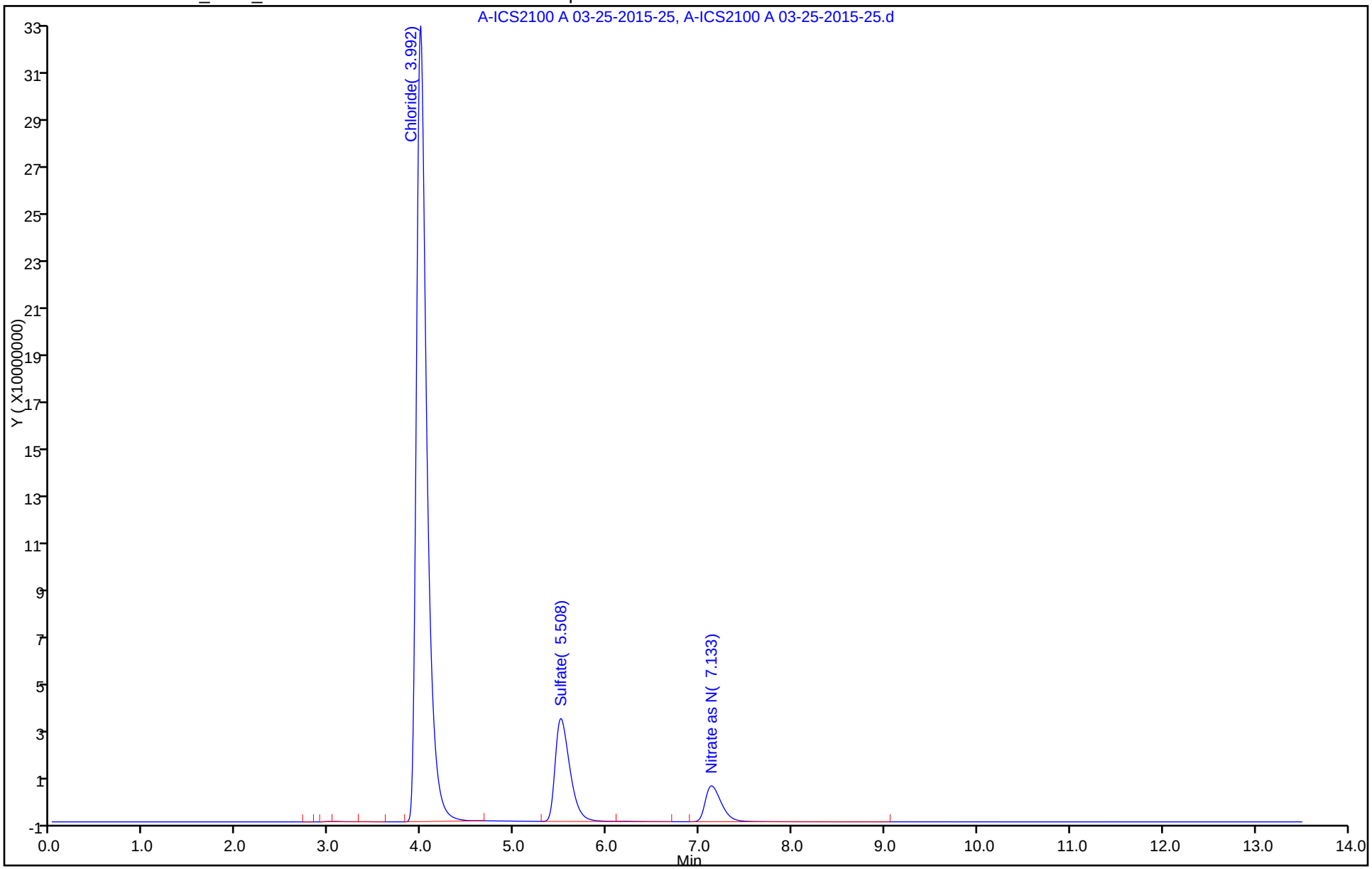
First Level Reviewer: hartmanm Date: 25-Mar-2015 18:44:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.000	-0.008	2591461686	124.6	
3 Sulfate	5.508	5.483	0.025	471932784	31.6	
5 Nitrate as N	7.133	7.150	-0.017	181436446	3.71	

Report Date: 26-Mar-2015 11:13:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-25.d				
Injection Date:	25-Mar-2015 18:09:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-13	Lab Sample ID:	180-42353-13	Worklist Smp#:	25
Client ID:	HD-COD-SW-26-0/1-0				
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 180-42353-14

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-50.d

Analysis Method: 300.0 Date Collected: 03/24/2015 13:55

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 01:22

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.6	B	0.10	0.0062
16887-00-6	Chloride	110	B	1.0	0.20
14808-79-8	Sulfate	32		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

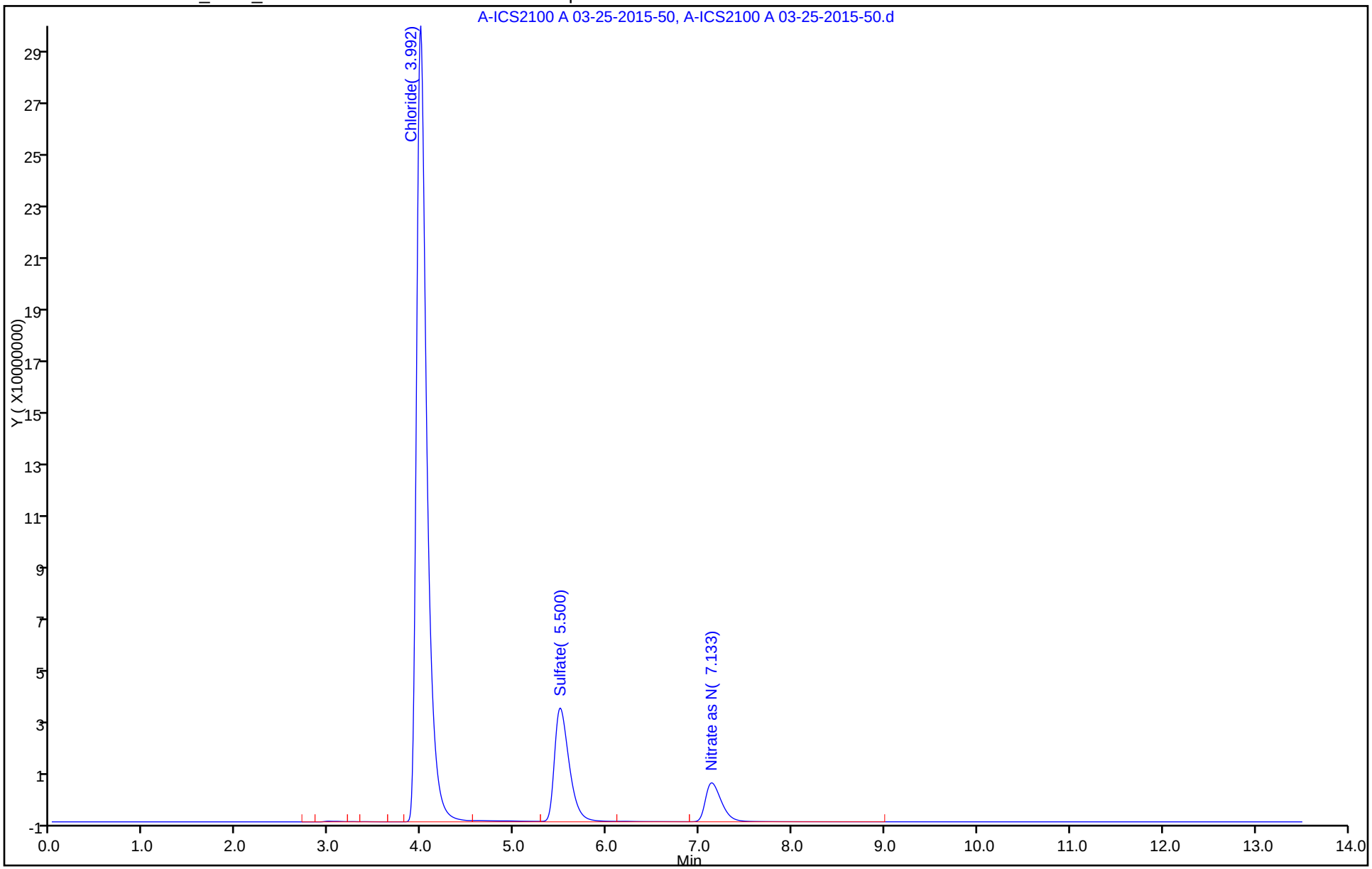
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-50.d				
Lims ID:	180-42353-A-14	Lab Sample ID:	180-42353-14		
Client ID:	HD-COD-SW-27-0/1-0				
Sample Type:	Client				
Inject. Date:	26-Mar-2015 01:22:00	ALS Bottle#:	0	Worklist Smp#:	50
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006176-050				
Misc. Info.:	50 180-42353-a-14				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	26-Mar-2015 11:13:49	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:	XAWRK012				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.000	-0.008	2313652119	111.3	
3 Sulfate	5.500	5.483	0.017	472460991	31.6	
5 Nitrate as N	7.133	7.150	-0.017	178414738	3.65	

Report Date: 26-Mar-2015 11:13:54 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-50.d				
Injection Date:	26-Mar-2015 01:22:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-14	Lab Sample ID:	180-42353-14	Worklist Smp#:	50
Client ID:	HD-COD-SW-27-0/1-0				
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 180-42353-15

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-56.d

Analysis Method: 300.0 Date Collected: 03/24/2015 13:00

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 03:06

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	4.4	B	0.10	0.0062
16887-00-6	Chloride	100	B	1.0	0.20
14808-79-8	Sulfate	27		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

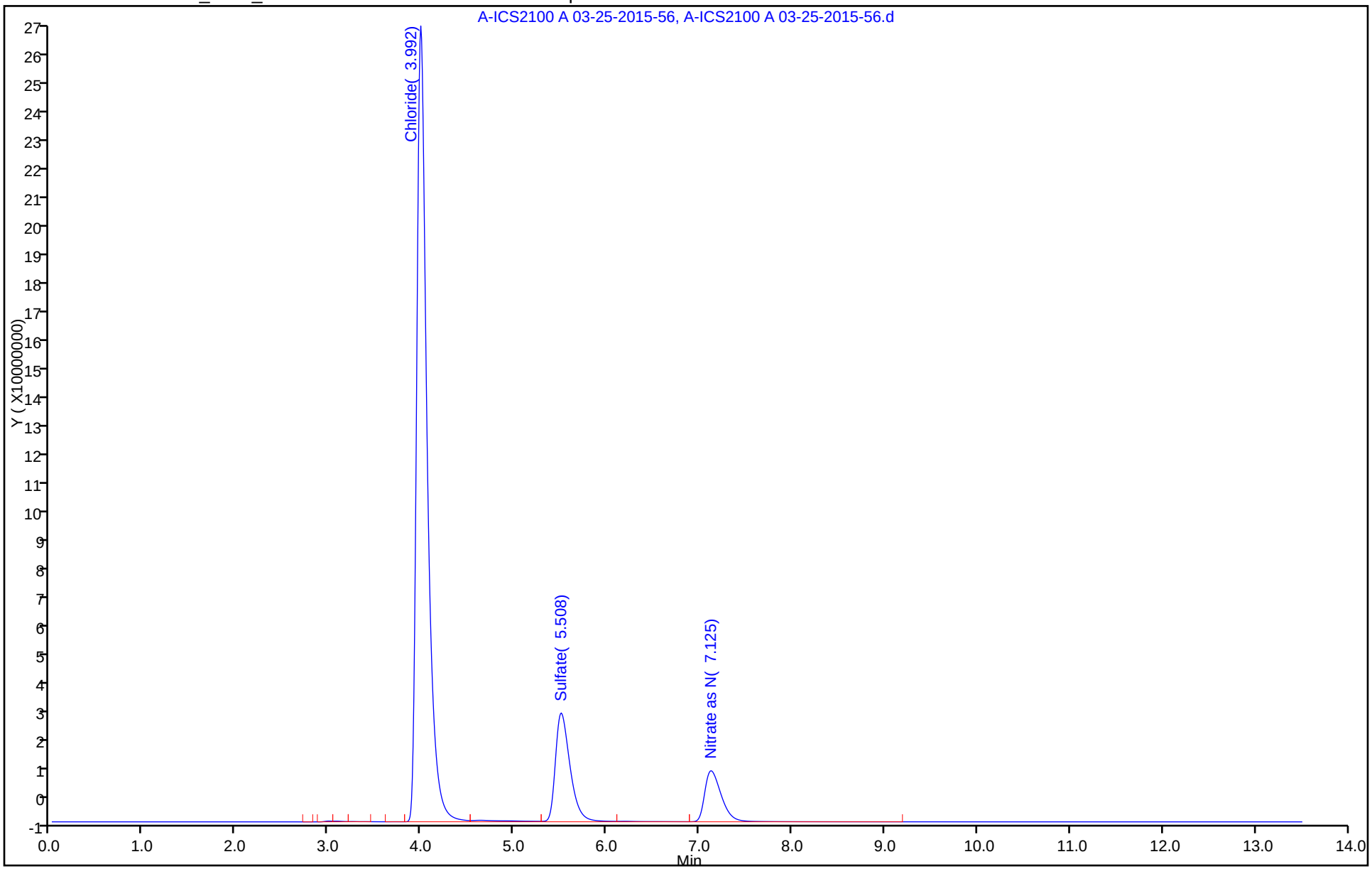
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-56.d				
Lims ID:	180-42353-A-15	Lab Sample ID:	180-42353-15		
Client ID:	HD-COD-SW-28-0/1-0				
Sample Type:	Client				
Inject. Date:	26-Mar-2015 03:06:00	ALS Bottle#:	0	Worklist Smp#:	56
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006176-056				
Misc. Info.:	56 180-42353-a-15				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	26-Mar-2015 11:13:54	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:	XAWRK012				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.000	-0.008	2086848303	100.4	
3 Sulfate	5.508	5.483	0.025	401064035	26.9	
5 Nitrate as N	7.125	7.150	-0.025	213774195	4.36	

Report Date: 26-Mar-2015 11:13:56 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-56.d				
Injection Date:	26-Mar-2015 03:06:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-15	Lab Sample ID:	180-42353-15	Worklist Smp#:	56
Client ID:	HD-COD-SW-28-0/1-0				
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 180-42353-16

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-13.d

Analysis Method: 300.0 Date Collected: 03/24/2015 09:00

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 14:49

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.5	B	0.10	0.0062
16887-00-6	Chloride	67	B	1.0	0.20
14808-79-8	Sulfate	30		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

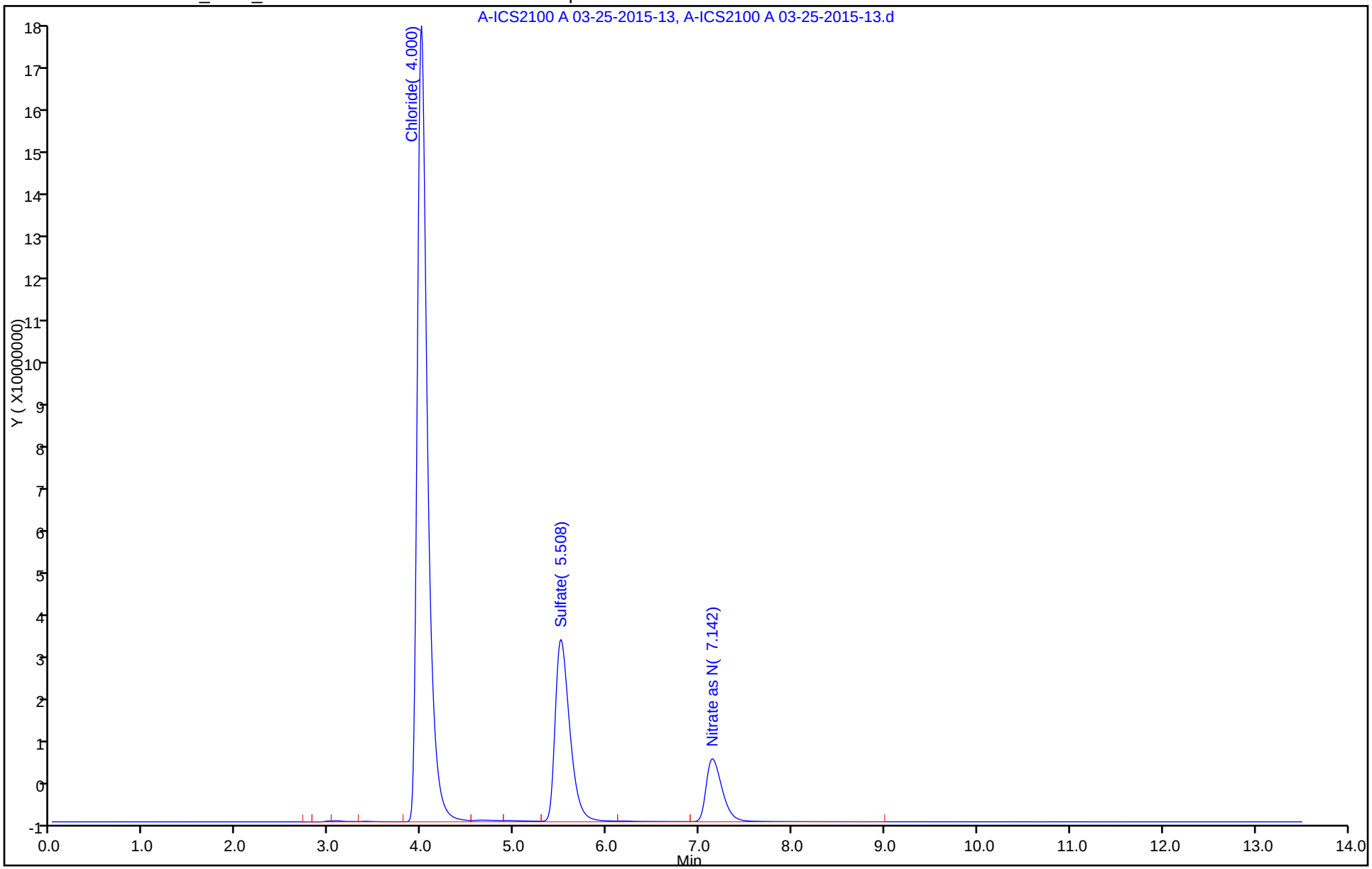
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-13.d				
Lims ID:	180-42353-A-16	Lab Sample ID:	180-42353-16		
Client ID:	HD-COD-SW-29-0/1-0				
Sample Type:	Client				
Inject. Date:	25-Mar-2015 14:49:00	ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006176-013				
Misc. Info.:	13 180-42353-A-16				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	26-Mar-2015 11:13:31	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:	XAWRK012				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.000	3.992	0.008	1387543840	66.9	
3 Sulfate	5.508	5.492	0.016	451622182	30.3	
5 Nitrate as N	7.142	7.150	-0.008	172839194	3.53	

Report Date: 26-Mar-2015 11:13:38 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-13.d				
Injection Date:	25-Mar-2015 14:49:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-16	Lab Sample ID:	180-42353-16	Worklist Smp#:	13
Client ID:	HD-COD-SW-29-0/1-0				
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 180-42353-19

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-12.d

Analysis Method: 300.0 Date Collected: 03/24/2015 08:00

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 14:34

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.9	B	0.10	0.0062
16887-00-6	Chloride	120	B	1.0	0.20
14808-79-8	Sulfate	37		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-12.d
Lims ID: 180-42353-A-19 Lab Sample ID: 180-42353-19
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 25-Mar-2015 14:34:00 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-012
Misc. Info.: 12 180-42353-A-19
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:31 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: XAWRK012

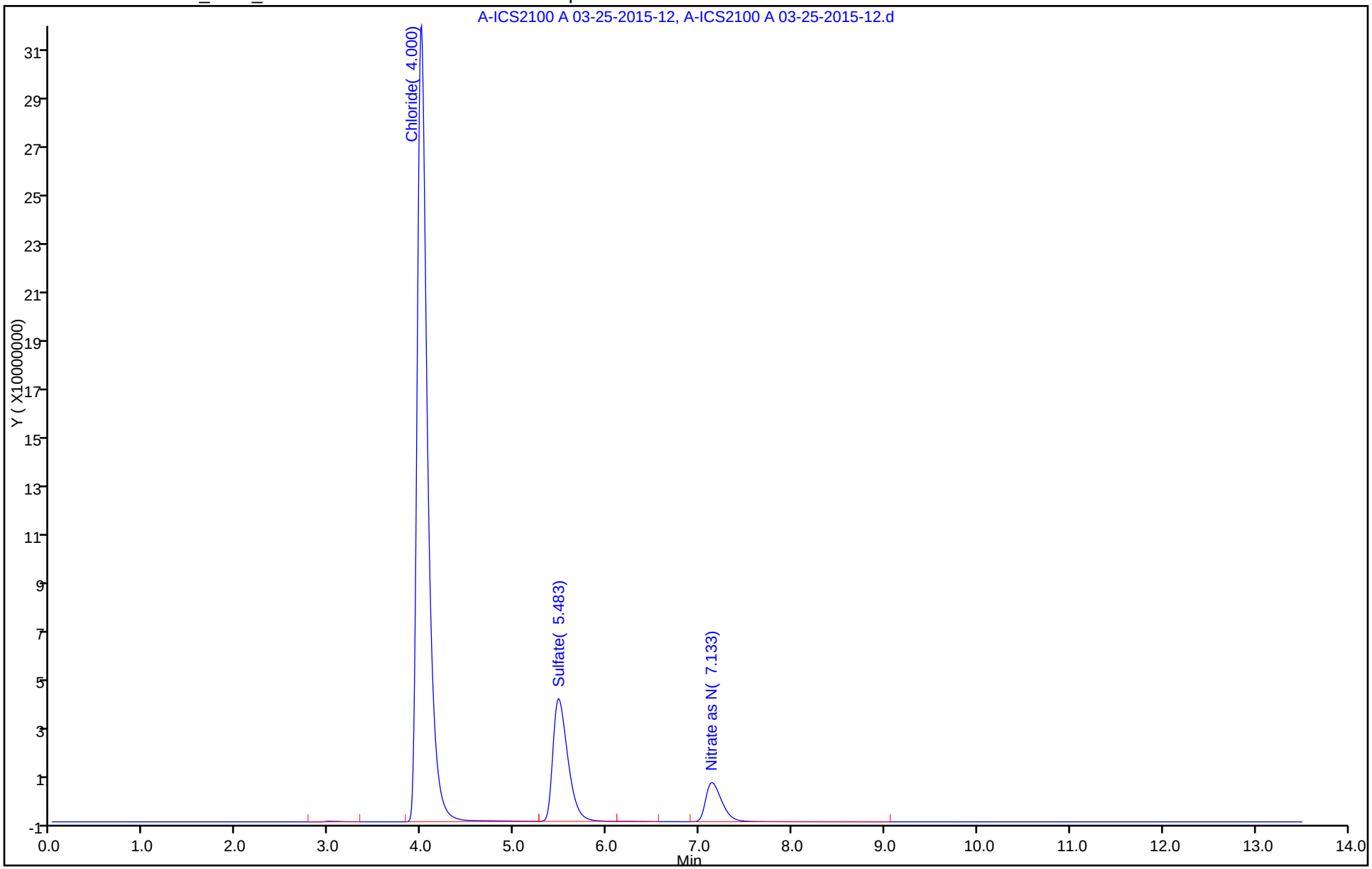
First Level Reviewer: hartmanm Date: 25-Mar-2015 15:40:52

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.000	3.992	0.008	2478443056	119.2	
3 Sulfate	5.483	5.492	-0.009	545444021	36.5	
5 Nitrate as N	7.133	7.150	-0.017	188879673	3.86	

Report Date: 26-Mar-2015 11:13:38 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-12.d				
Injection Date:	25-Mar-2015 14:34:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-19	Lab Sample ID:	180-42353-19	Worklist Smp#:	12
Client ID:	HD-QC1-0/1-1				
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-99S-0/1-0 Lab Sample ID: 180-42353-20

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-36.d

Analysis Method: 300.0 Date Collected: 03/24/2015 09:15

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 21:20

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	2.8	B	0.10	0.0062
16887-00-6	Chloride	87	B	1.0	0.20
14808-79-8	Sulfate	29		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-36.d
Lims ID: 180-42353-A-20 Lab Sample ID: 180-42353-20
Client ID: HD-MW-99S-0/1-0
Sample Type: Client
Inject. Date: 25-Mar-2015 21:20:00 ALS Bottle#: 0 Worklist Smp#: 36
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-036
Misc. Info.: 36 180-42353-A-20
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:45 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

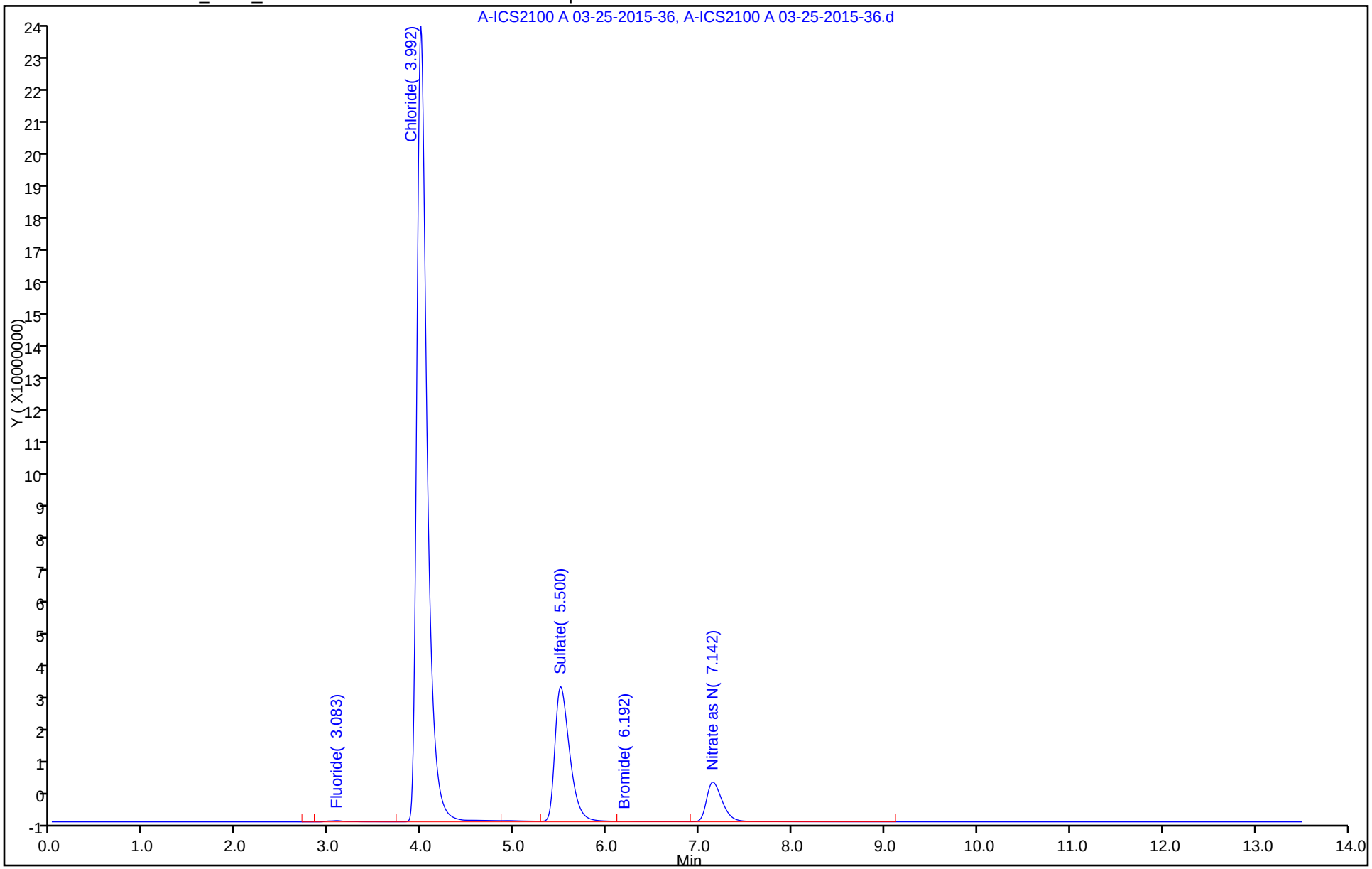
Column 1 : Det: 0008
Process Host: XAWRK012

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.083	3.000	0.083	5590273	0.1725	
2 Chloride	3.992	4.000	-0.008	1797969971	86.6	
7 Nitrite as N		4.675			ND	
3 Sulfate	5.500	5.483	0.017	437938573	29.3	
4 Bromide	6.192	6.200	-0.008	4871780	0.5144	
5 Nitrate as N	7.142	7.150	-0.008	138622006	2.84	
6 Orthophosphate as P		10.250			ND	

Report Date: 26-Mar-2015 11:13:48 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-36.d				
Injection Date:	25-Mar-2015 21:20:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-20	Lab Sample ID:	180-42353-20	Worklist Smp#:	36
Client ID:	HD-MW-99S-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.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-99D-0/1-0 Lab Sample ID: 180-42353-21

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-53.d

Analysis Method: 300.0 Date Collected: 03/24/2015 13:05

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 02:14

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 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	58	B F1	1.0	0.20
14808-79-8	Sulfate	26		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-53.d
Lims ID: 180-42353-A-21 Lab Sample ID: 180-42353-21
Client ID: HD-MW-99D-0/1-0
Sample Type: Client
Inject. Date: 26-Mar-2015 02:14:00 ALS Bottle#: 0 Worklist Smp#: 53
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-053
Misc. Info.: 53 180-42353-a-21
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:54 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

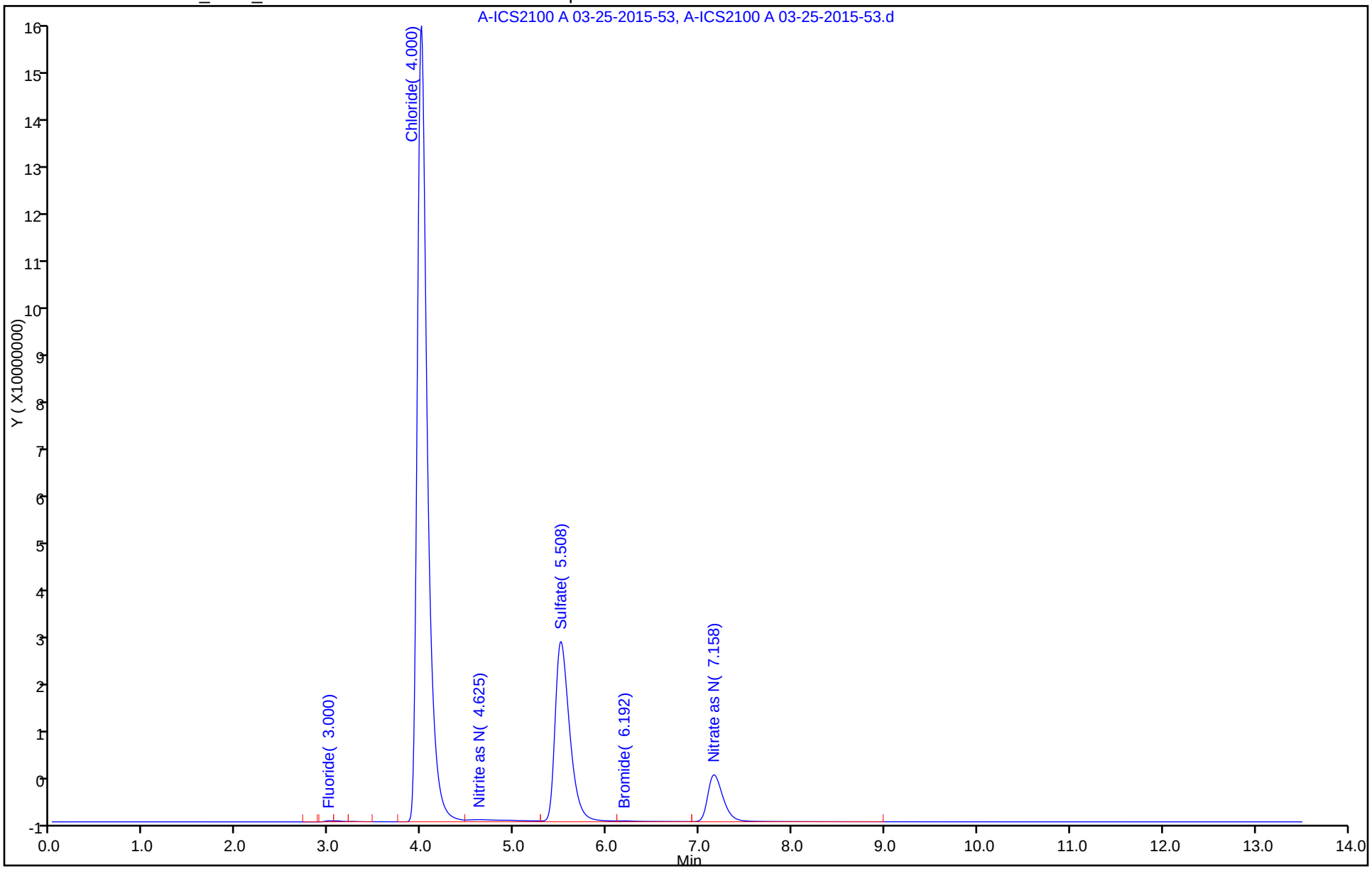
Column 1 : Det: 0008
Process Host: XAWRK012

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.000	3.000	0.000	1150807	0.0355	
2 Chloride	4.000	4.000	0.000	1212702180	58.5	
7 Nitrite as N	4.625	4.675	-0.050	14835778	0.3287	
3 Sulfate	5.508	5.483	0.025	394717022	26.4	
4 Bromide	6.192	6.192	0.000	4067398	0.4295	
5 Nitrate as N	7.158	7.150	0.008	110454342	2.27	
6 Orthophosphate as P		10.258			ND	

Report Date: 26-Mar-2015 11:13:54 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-53.d				
Injection Date:	26-Mar-2015 02:14:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-21	Lab Sample ID:	180-42353-21	Worklist Smp#:	53
Client ID:	HD-MW-99D-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.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-145A-0/1-0 Lab Sample ID: 180-42353-22

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-57.d

Analysis Method: 300.0 Date Collected: 03/24/2015 10:20

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 03:24

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.6	B	0.10	0.0062
16887-00-6	Chloride	150	B	1.0	0.20
14808-79-8	Sulfate	34		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

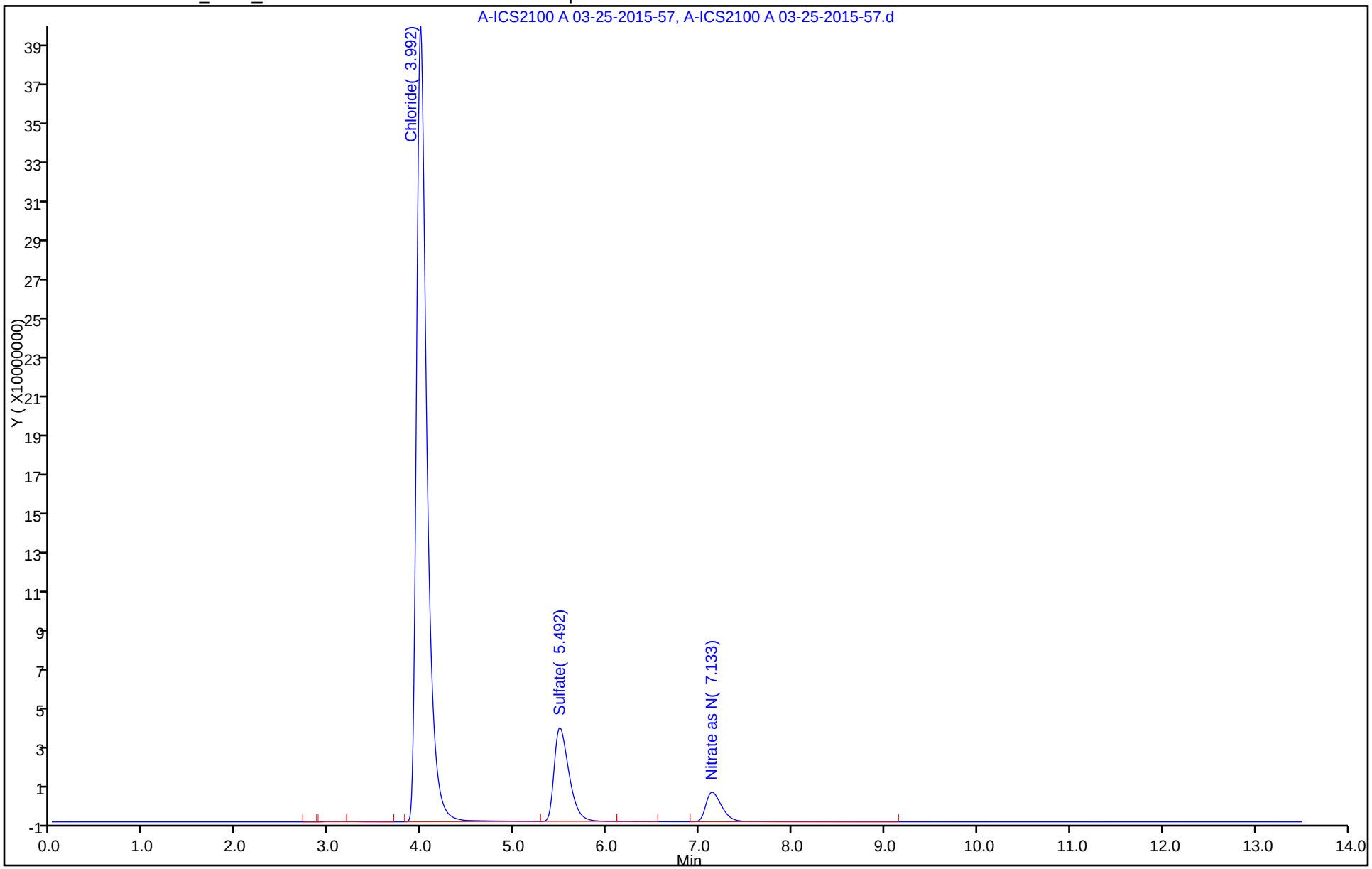
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-57.d				
Lims ID:	180-42353-A-22	Lab Sample ID:	180-42353-22		
Client ID:	HD-MW-145A-0/1-0				
Sample Type:	Client				
Inject. Date:	26-Mar-2015 03:24:00	ALS Bottle#:	0	Worklist Smp#:	57
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006176-057				
Misc. Info.:	57 180-42353-a-22				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	26-Mar-2015 11:13:54	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:	XAWRK012				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.000	-0.008	3079115932	148.0	
3 Sulfate	5.492	5.483	0.009	514493665	34.5	
5 Nitrate as N	7.133	7.150	-0.017	175893047	3.59	

Report Date: 26-Mar-2015 11:13:56 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-57.d				
Injection Date:	26-Mar-2015 03:24:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-22	Lab Sample ID:	180-42353-22	Worklist Smp#:	57
Client ID:	HD-MW-145A-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.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-100S-0/1-0 Lab Sample ID: 180-42353-23

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-58.d

Analysis Method: 300.0 Date Collected: 03/24/2015 14:45

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 03:41

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.6	B	0.10	0.0062
16887-00-6	Chloride	100	B	1.0	0.20
14808-79-8	Sulfate	34		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

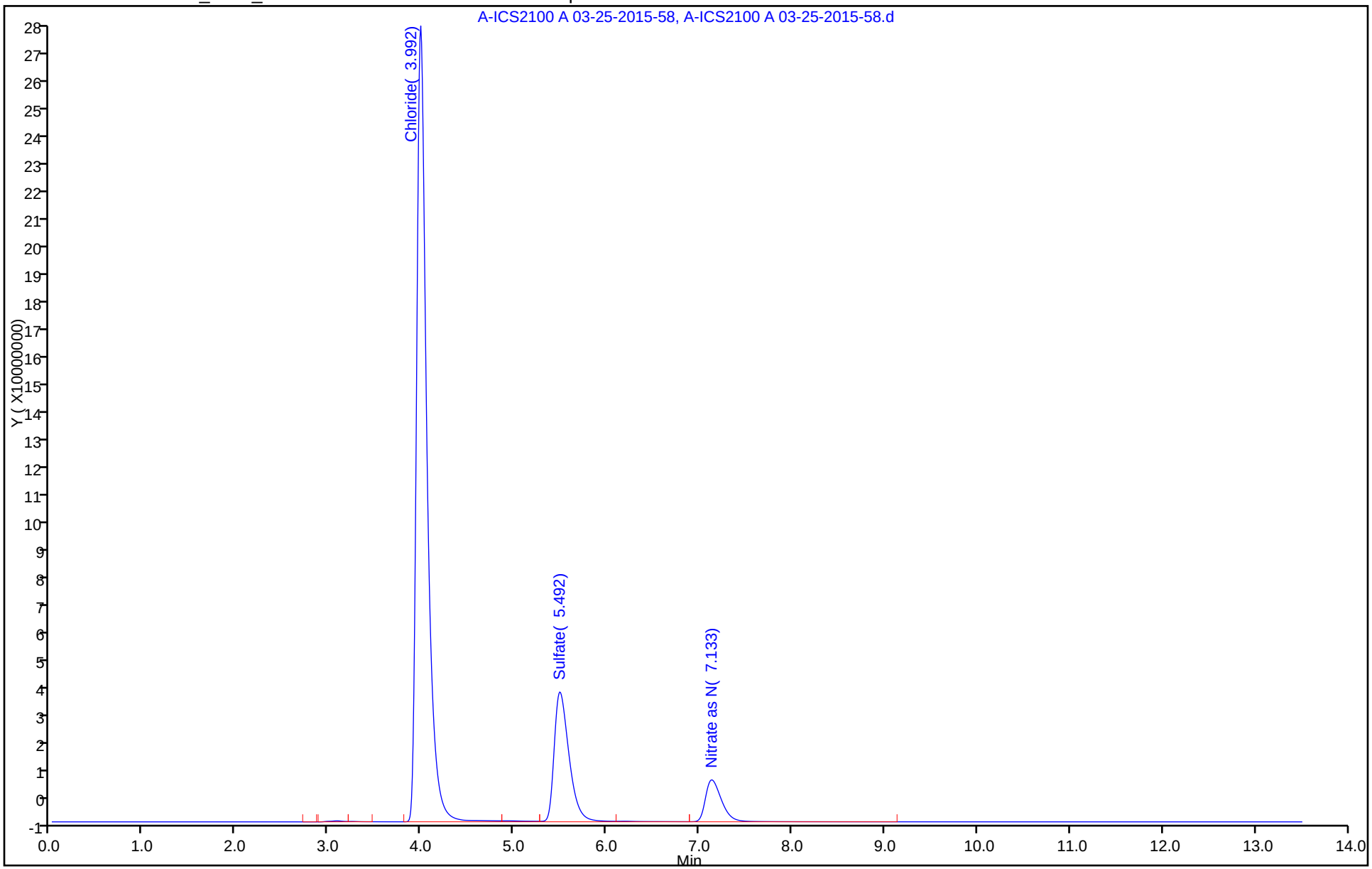
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-58.d				
Lims ID:	180-42353-A-23	Lab Sample ID:	180-42353-23		
Client ID:	HD-MW-100S-0/1-0				
Sample Type:	Client				
Inject. Date:	26-Mar-2015 03:41:00	ALS Bottle#:	0	Worklist Smp#:	58
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006176-058				
Misc. Info.:	58 180-42353-a-23				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	26-Mar-2015 11:13:54	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:	XAWRK012				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.000	-0.008	2134227404	102.7	
3 Sulfate	5.492	5.483	0.009	501647254	33.6	
5 Nitrate as N	7.133	7.150	-0.017	176639028	3.61	

Report Date: 26-Mar-2015 11:13:56 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-58.d				
Injection Date:	26-Mar-2015 03:41:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-23	Lab Sample ID:	180-42353-23	Worklist Smp#:	58
Client ID:	HD-MW-100S-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.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-100I-0/1-0 Lab Sample ID: 180-42353-24

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-65.d

Analysis Method: 300.0 Date Collected: 03/24/2015 14:00

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 05:42

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.6	B	0.10	0.0062
16887-00-6	Chloride	110	B	1.0	0.20
14808-79-8	Sulfate	33		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-65.d
Lims ID: 180-42353-A-24 Lab Sample ID: 180-42353-24
Client ID: HD-MW-100I-0/1-0
Sample Type: Client
Inject. Date: 26-Mar-2015 05:42:00 ALS Bottle#: 0 Worklist Smp#: 65
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-065
Misc. Info.: 65 180-42353-a-24
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:58 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

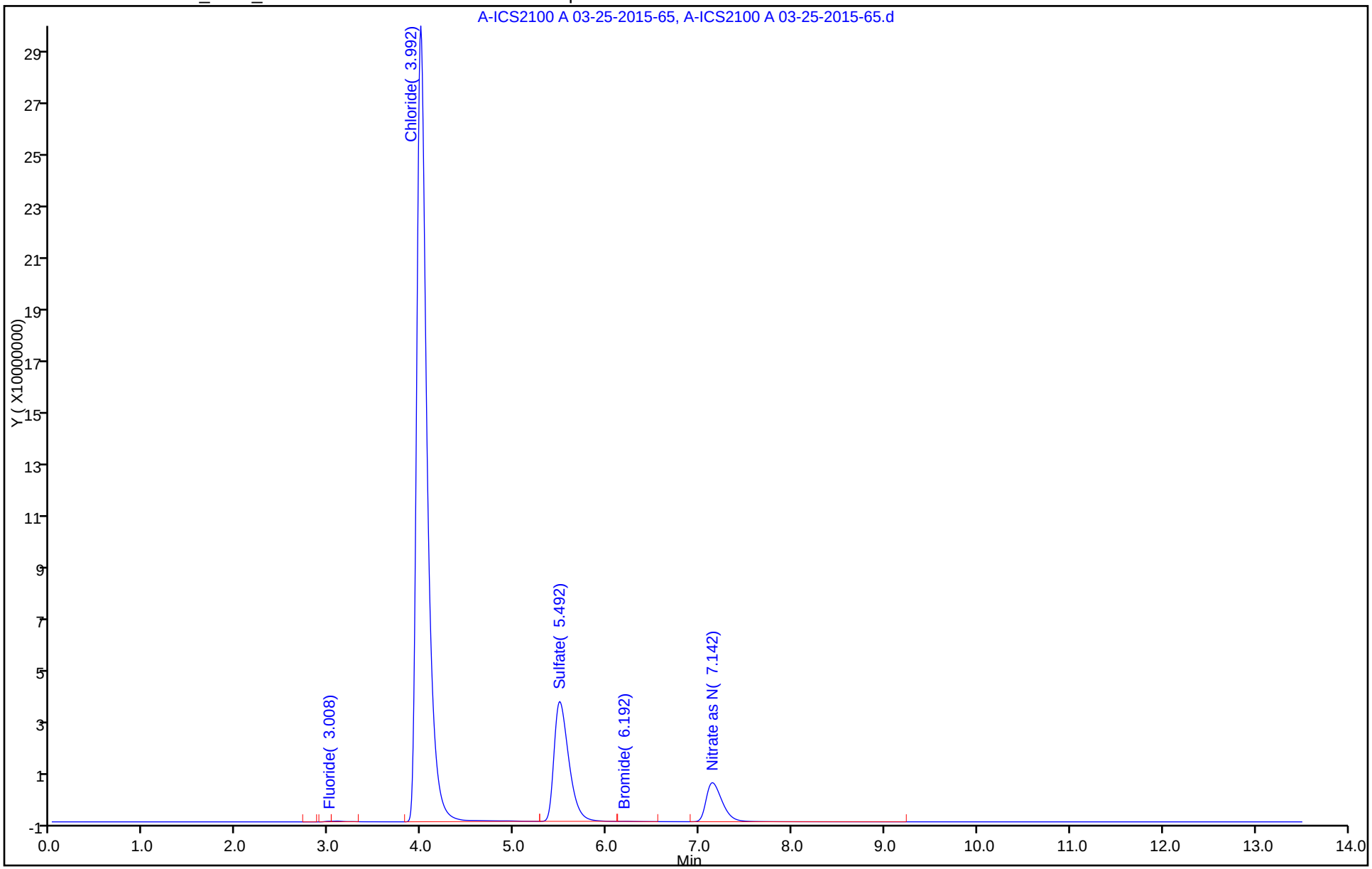
Column 1 : Det: 0008
Process Host: XAWRK012

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.008	3.000	0.008	843547	0.0260	
2 Chloride	3.992	4.000	-0.008	2314342984	111.3	
7 Nitrite as N		4.675			ND	
3 Sulfate	5.492	5.483	0.009	495983518	33.2	
4 Bromide	6.192	6.200	-0.008	424735	0.0448	
5 Nitrate as N	7.142	7.150	-0.008	176431471	3.61	
6 Orthophosphate as P		10.283			ND	

Report Date: 26-Mar-2015 11:13:59 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-65.d				
Injection Date:	26-Mar-2015 05:42:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-24	Lab Sample ID:	180-42353-24	Worklist Smp#:	65
Client ID:	HD-MW-100I-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.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-93S-0/1-0 Lab Sample ID: 180-42353-25

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-68.d

Analysis Method: 300.0 Date Collected: 03/24/2015 14:35

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 06:34

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	1.1	B	0.10	0.0062
16887-00-6	Chloride	170	B	1.0	0.20
14808-79-8	Sulfate	27		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-68.d
Lims ID: 180-42353-A-25 Lab Sample ID: 180-42353-25
Client ID: HD-MW-93S-0/1-0
Sample Type: Client
Inject. Date: 26-Mar-2015 06:34:00 ALS Bottle#: 0 Worklist Smp#: 68
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-068
Misc. Info.: 68 180-42353-a-25
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:58 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

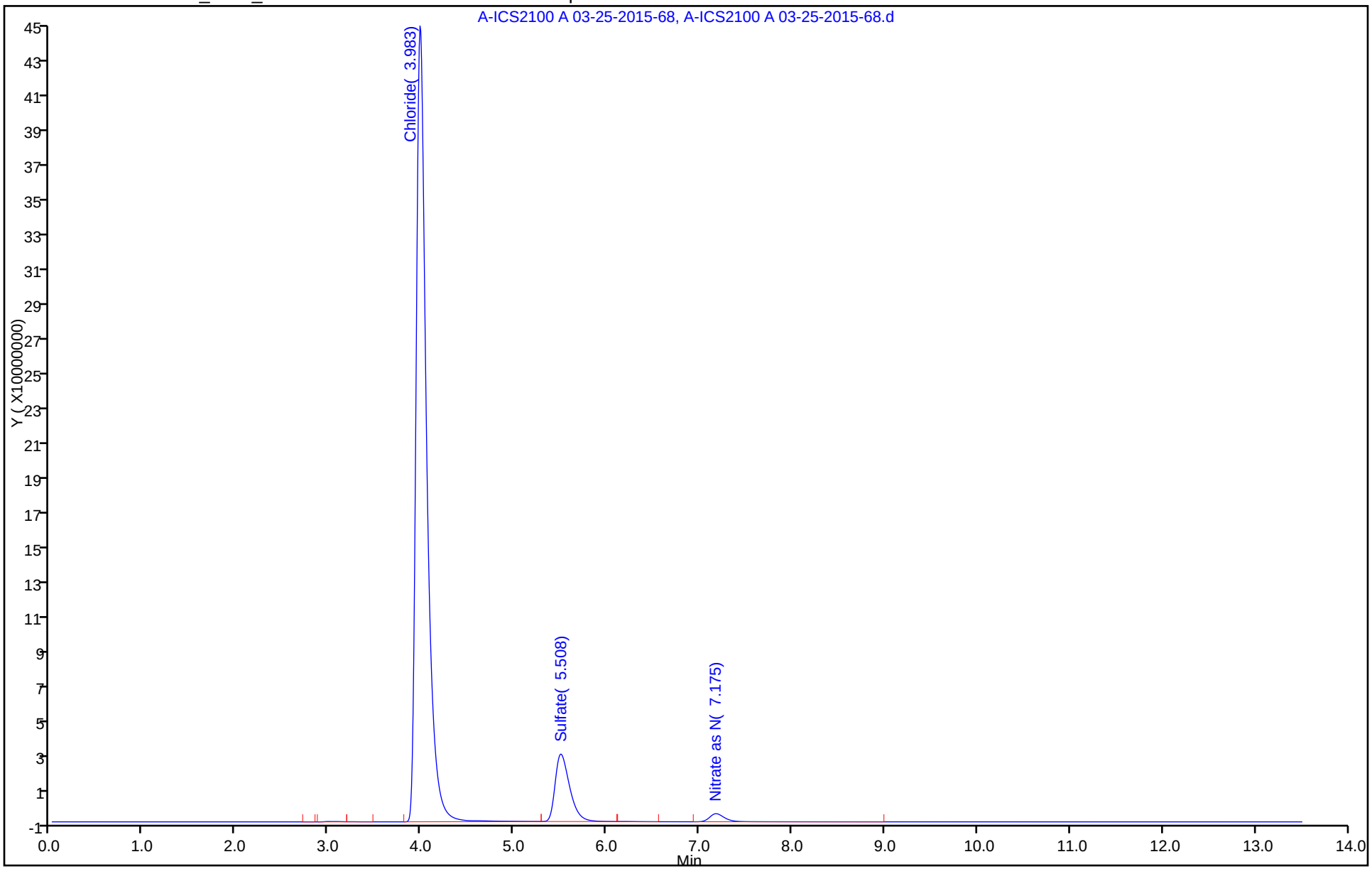
Column 1 : Det: 0008
Process Host: XAWRK012

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.983	4.000	-0.017	3505759192	168.5	
3 Sulfate	5.508	5.483	0.025	409313047	27.4	
5 Nitrate as N	7.175	7.150	0.025	51333517	1.07	

Report Date: 26-Mar-2015 11:14:00 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-68.d				
Injection Date:	26-Mar-2015 06:34:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-25	Lab Sample ID:	180-42353-25	Worklist Smp#:	68
Client ID:	HD-MW-93S-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.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-93D-0/1-0 Lab Sample ID: 180-42353-26

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-42.d

Analysis Method: 300.0 Date Collected: 03/24/2015 11:22

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 23:04

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.33	B	0.10	0.0062
16887-00-6	Chloride	95	B	1.0	0.20
14808-79-8	Sulfate	29		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

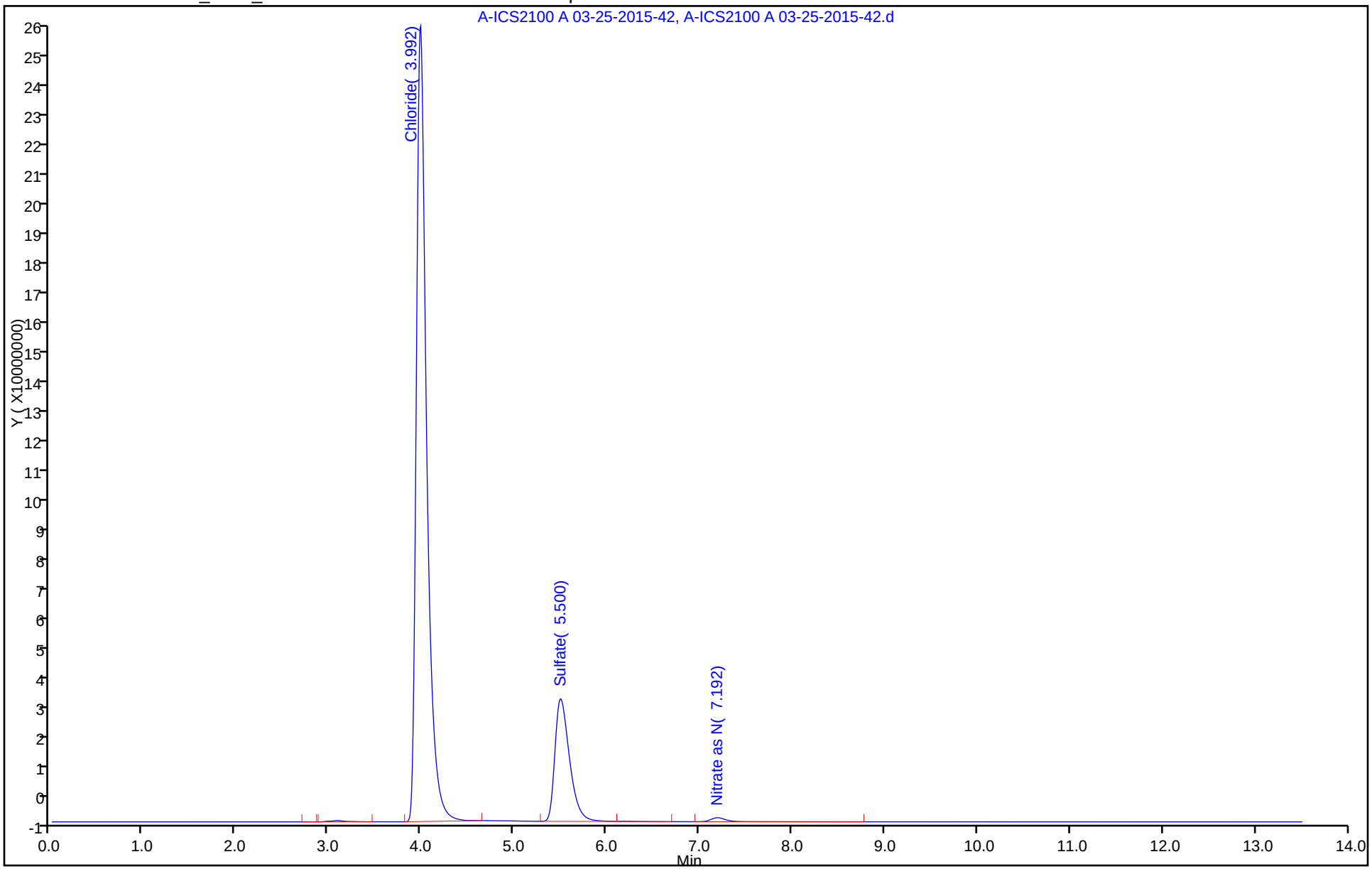
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-42.d				
Lims ID:	180-42353-A-26	Lab Sample ID:	180-42353-26		
Client ID:	HD-MW-93D-0/1-0				
Sample Type:	Client				
Inject. Date:	25-Mar-2015 23:04:00	ALS Bottle#:	0	Worklist Smp#:	42
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006176-042				
Misc. Info.:	42 180-42353-A-26				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	26-Mar-2015 11:13:49	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:	XAWRK012				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.000	-0.008	1968789073	94.8	
3 Sulfate	5.500	5.483	0.017	429272665	28.8	
5 Nitrate as N	7.192	7.150	0.042	14893900	0.3298	

Report Date: 26-Mar-2015 11:13:51 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-42.d				
Injection Date:	25-Mar-2015 23:04:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-26	Lab Sample ID:	180-42353-26	Worklist Smp#:	42
Client ID:	HD-MW-93D-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.: 180-42353-1 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.: 180-42353-1 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.: 180-42353-1 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

Report Date: 18-Mar-2015 18:15:51 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 03-18-2015-2.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:

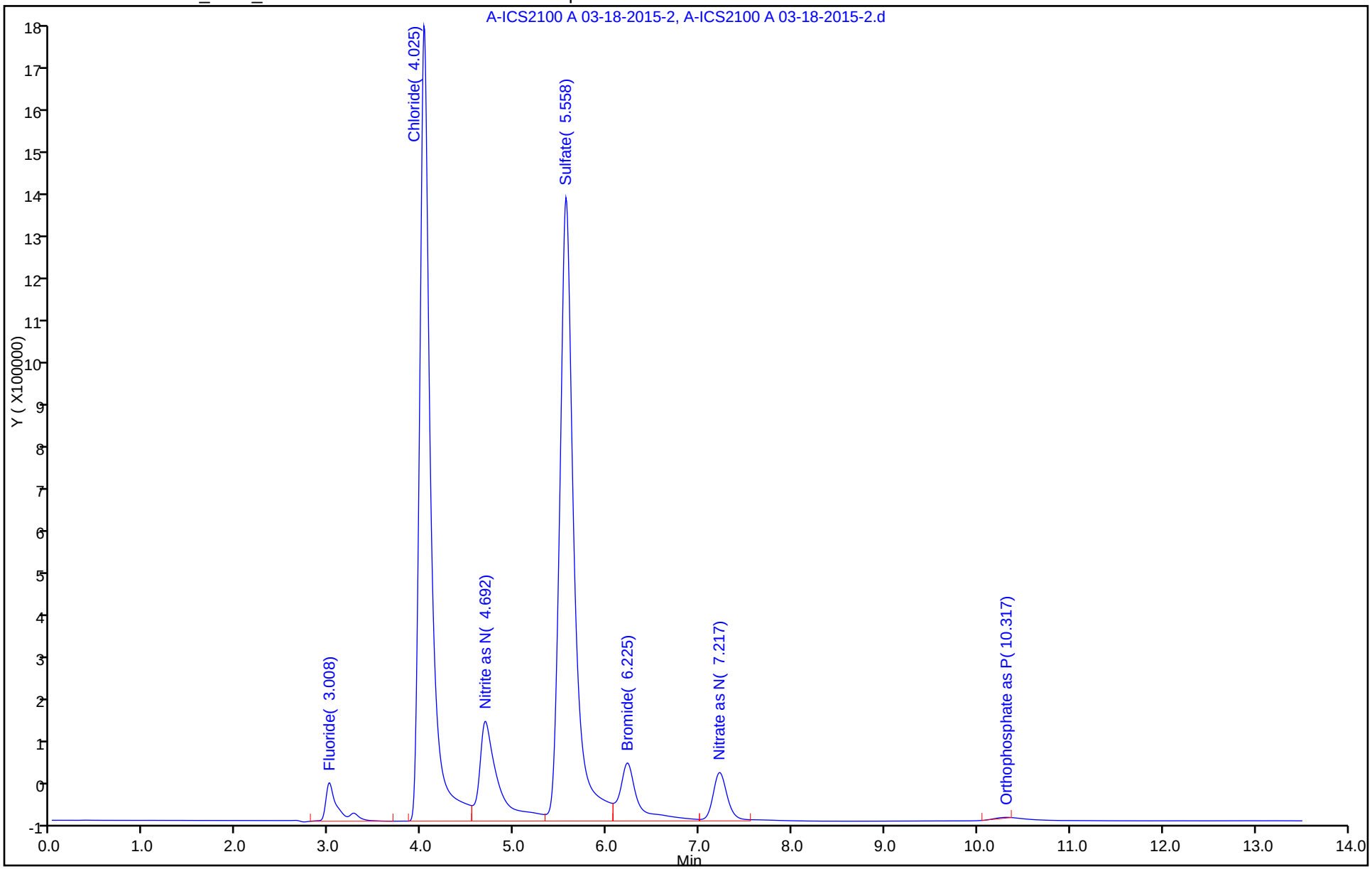
ICSTDL2_00160 Amount Added: 1.00 Units: mL

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

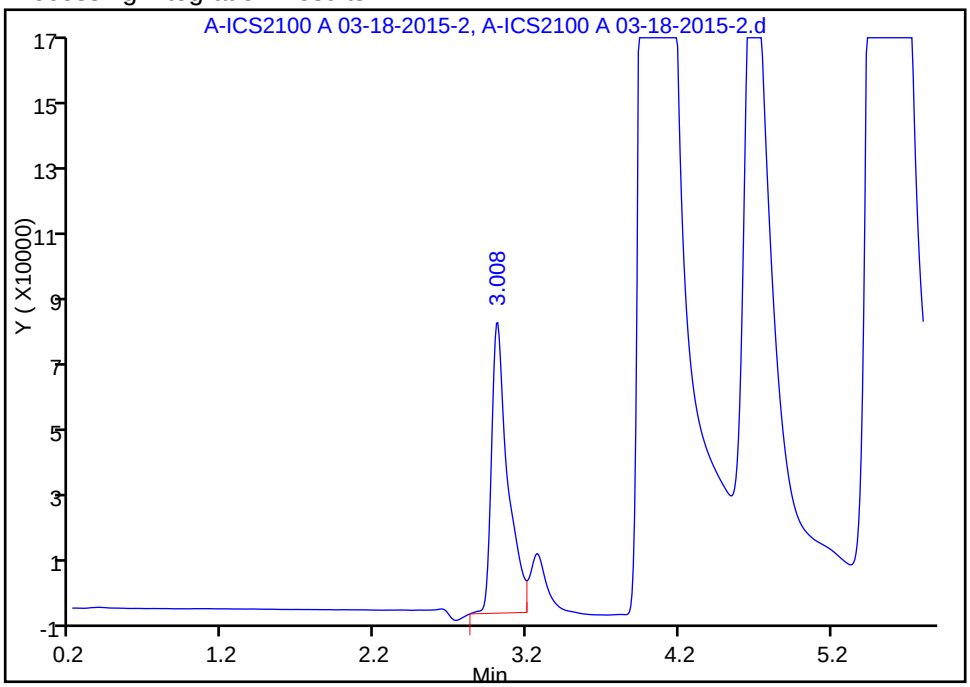
TestAmerica Pittsburgh

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

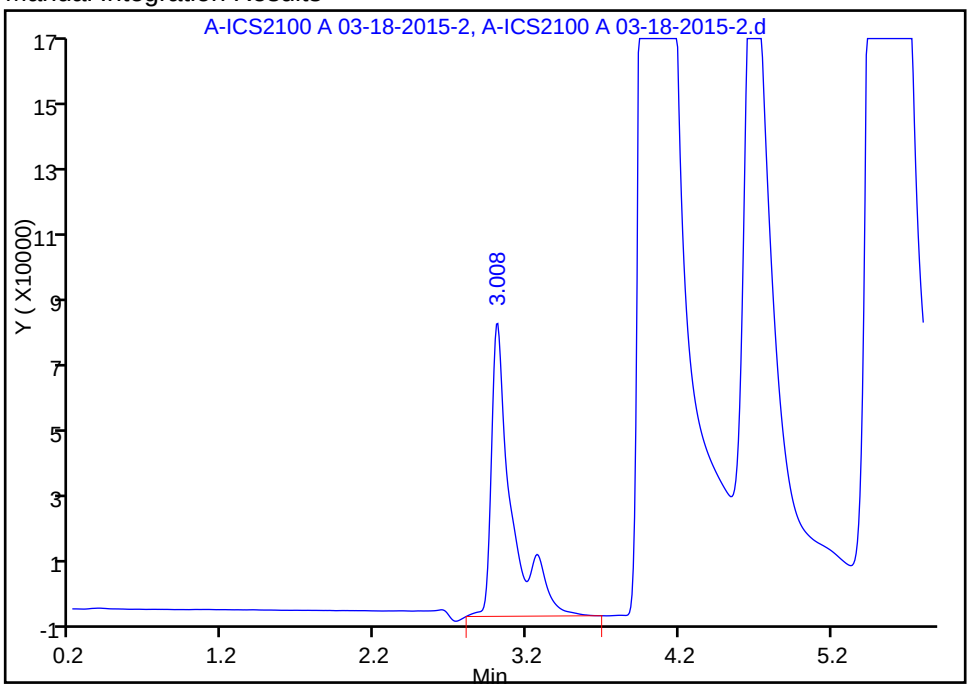
Processing Integration Results

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

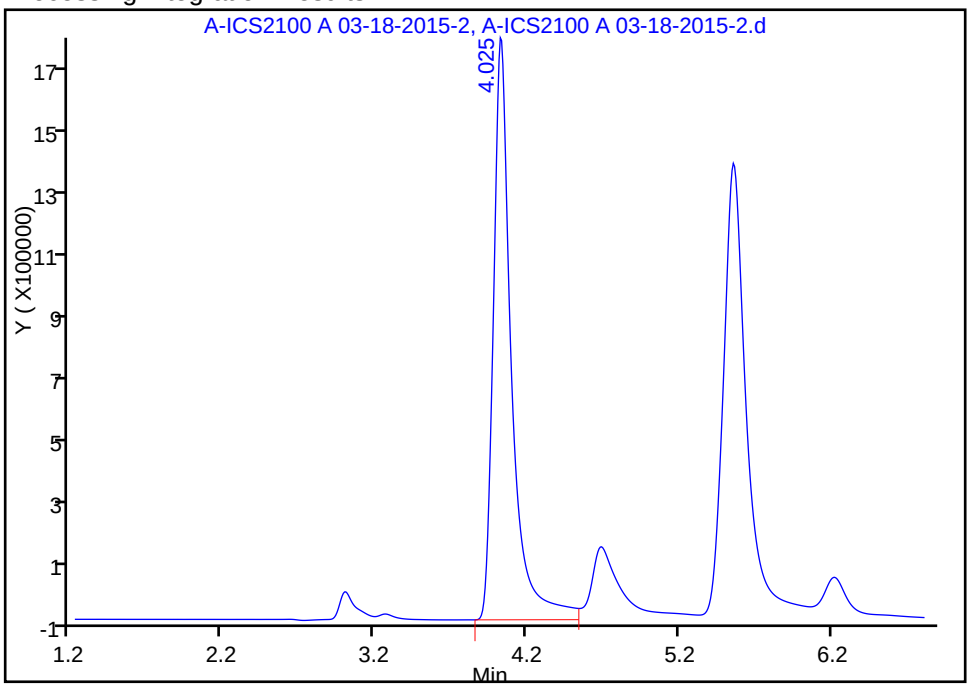
TestAmerica Pittsburgh

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

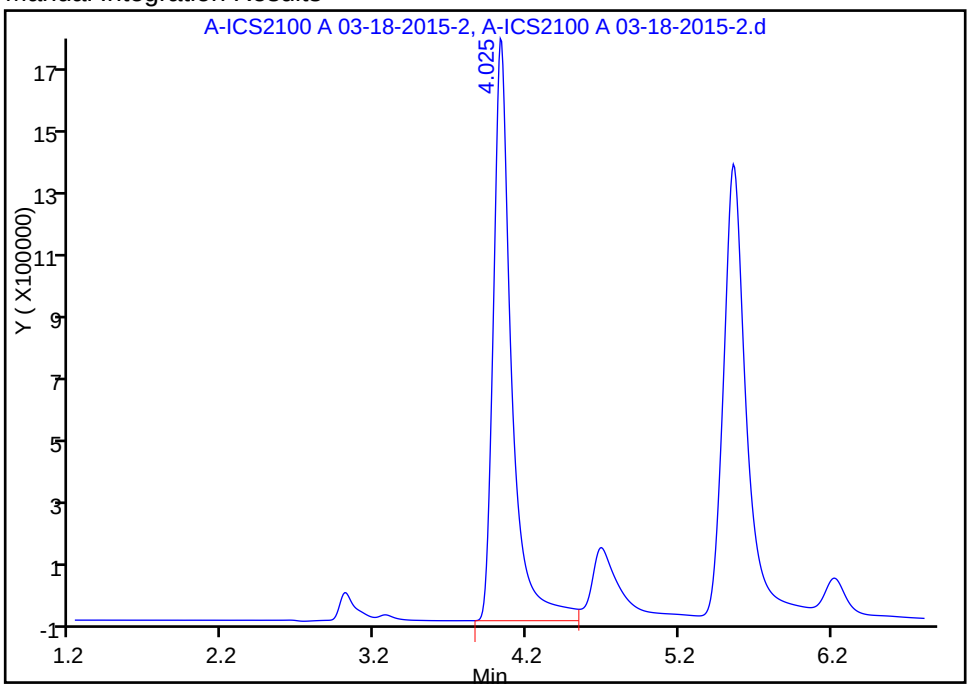
Processing Integration Results

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

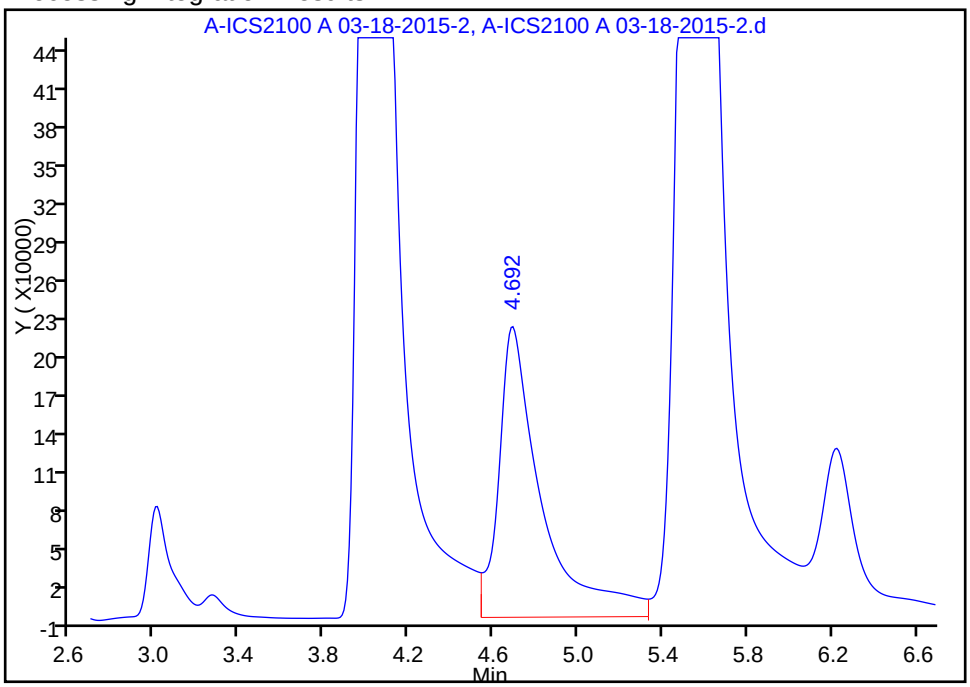
TestAmerica Pittsburgh

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

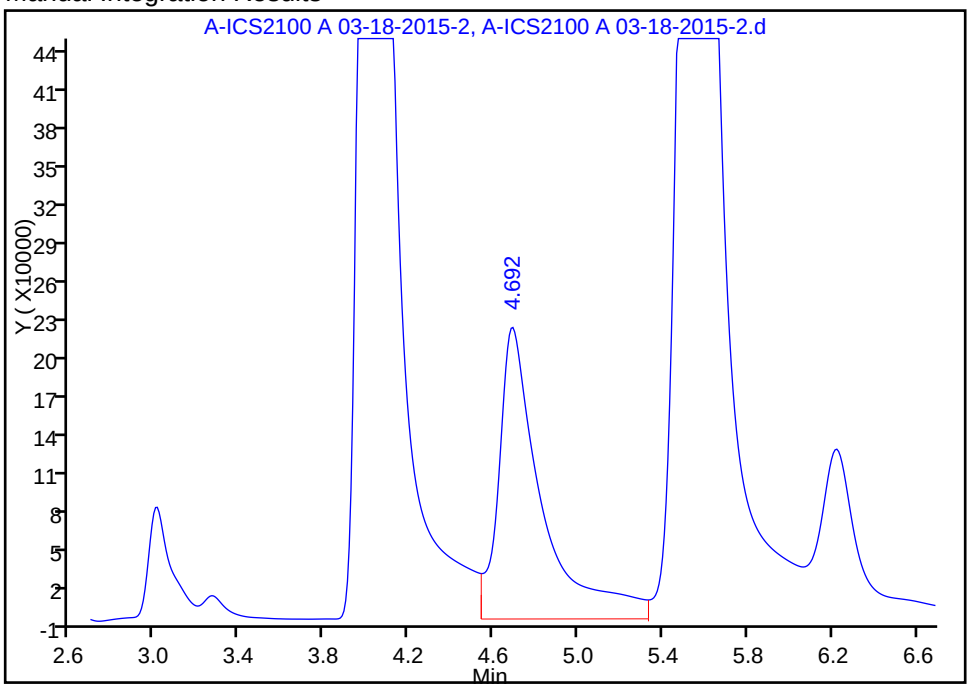
Processing Integration Results

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

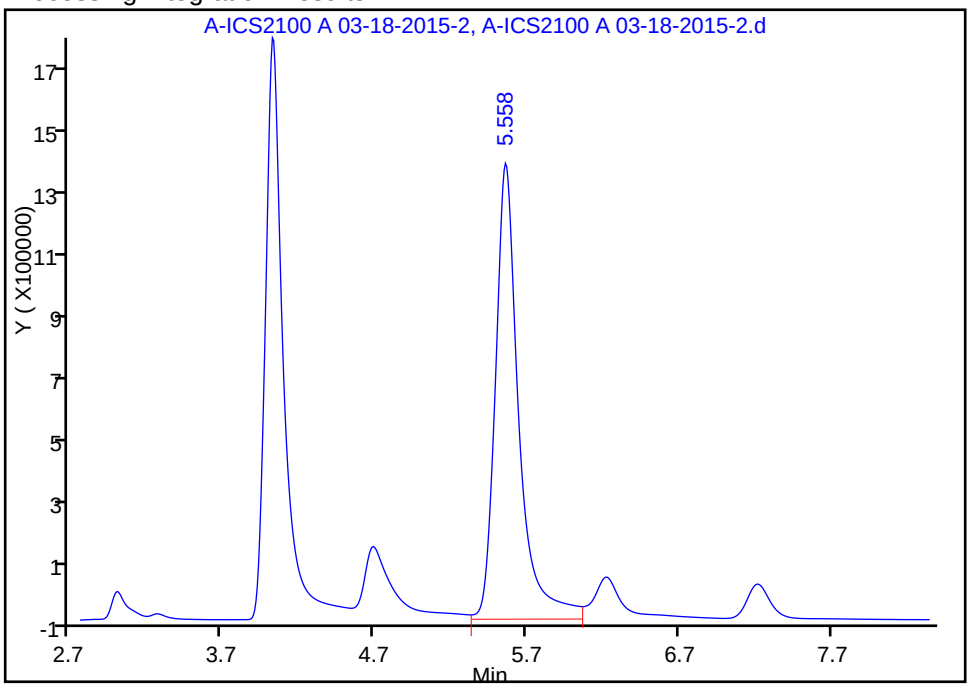
TestAmerica Pittsburgh

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

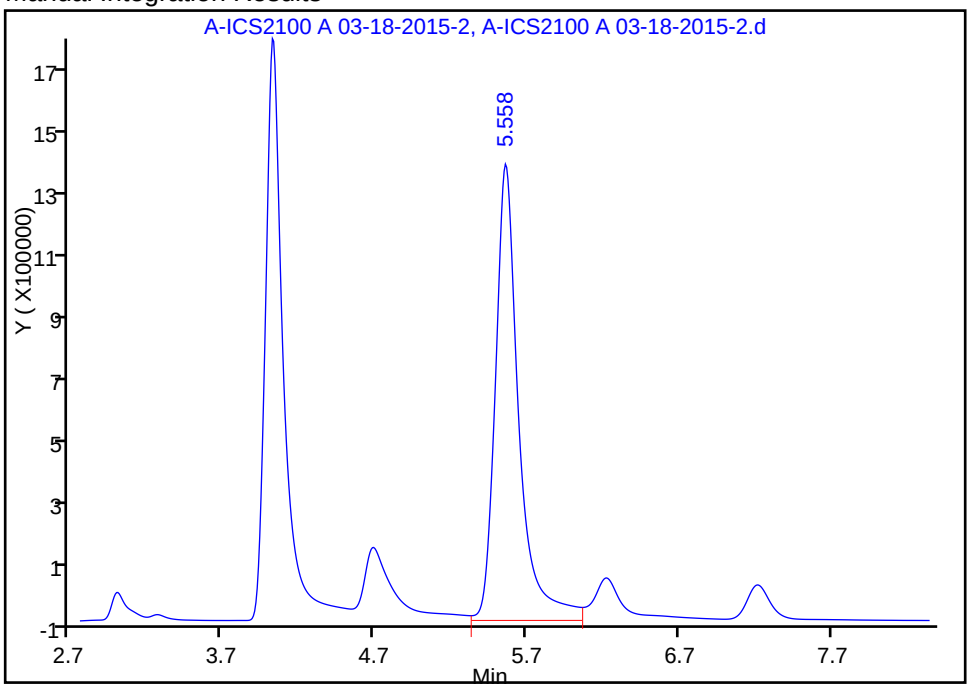
Processing Integration Results

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

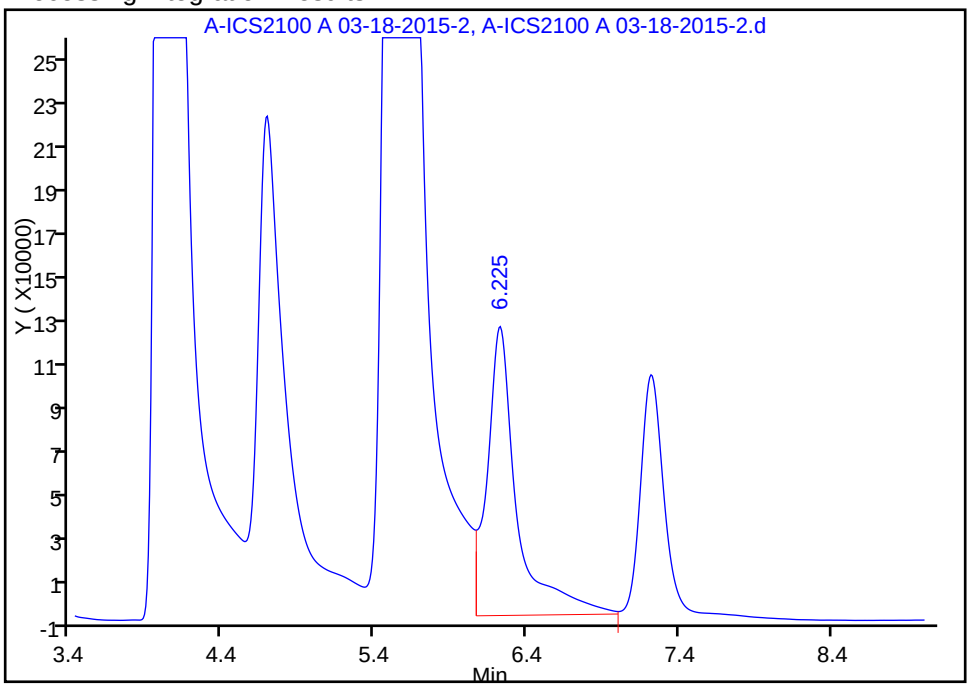
TestAmerica Pittsburgh

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

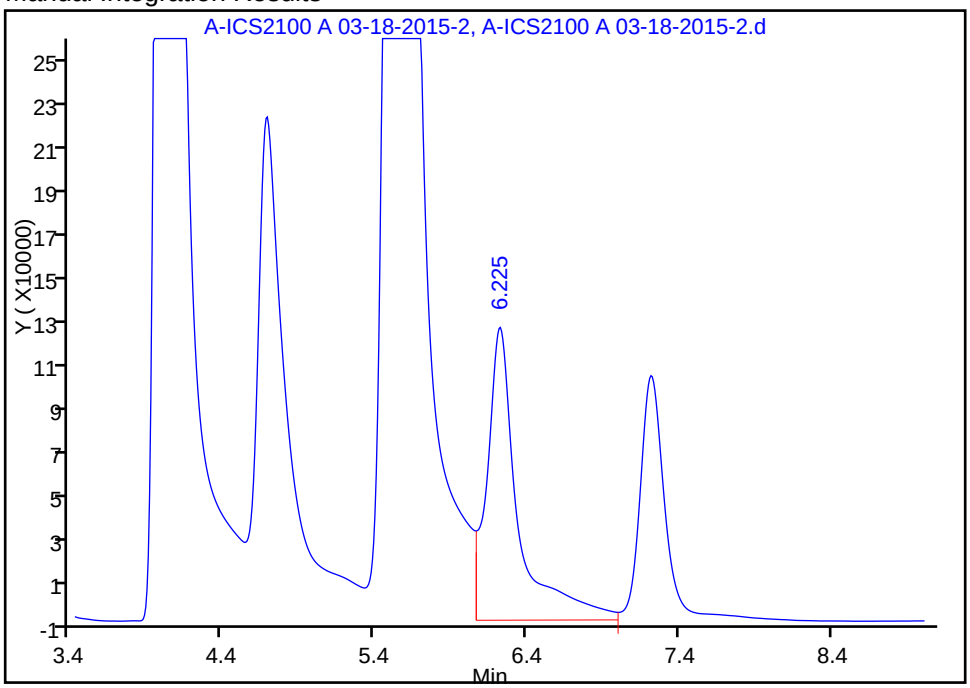
Processing Integration Results

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

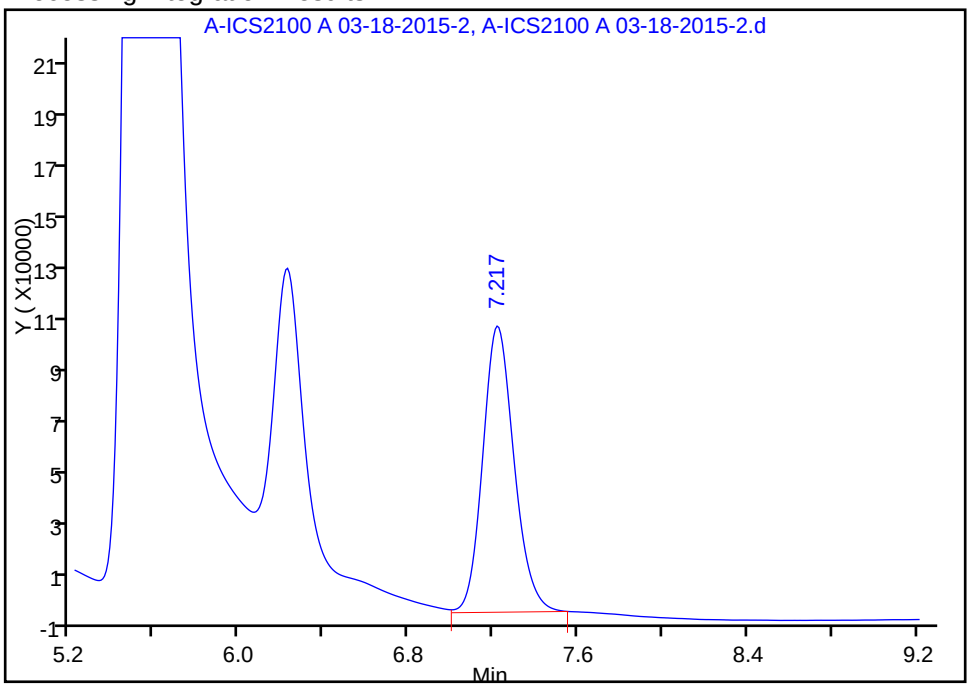
TestAmerica Pittsburgh

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

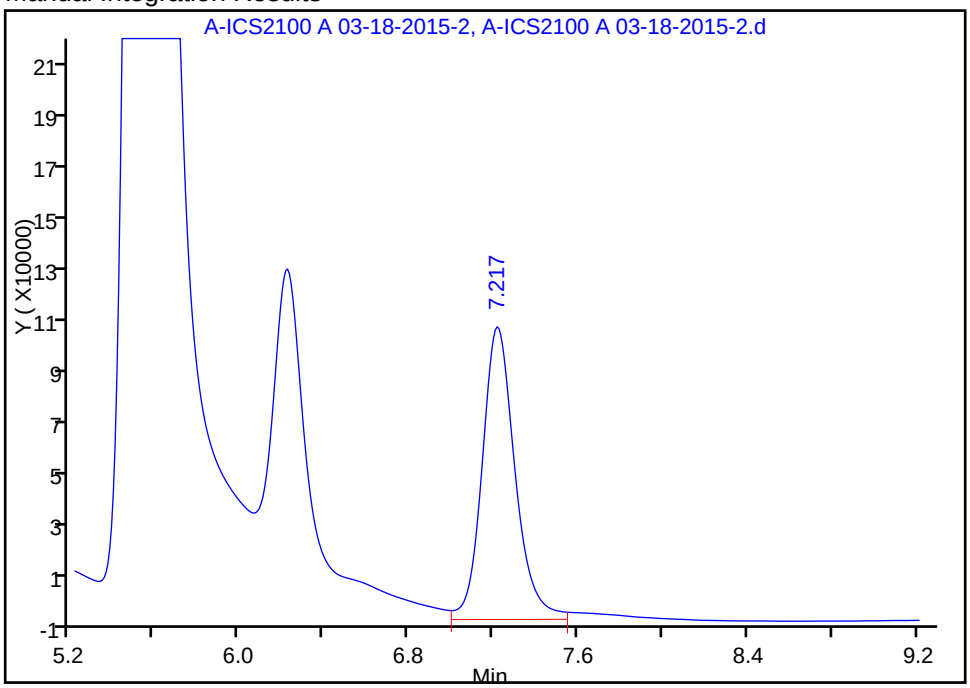
Processing Integration Results

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:

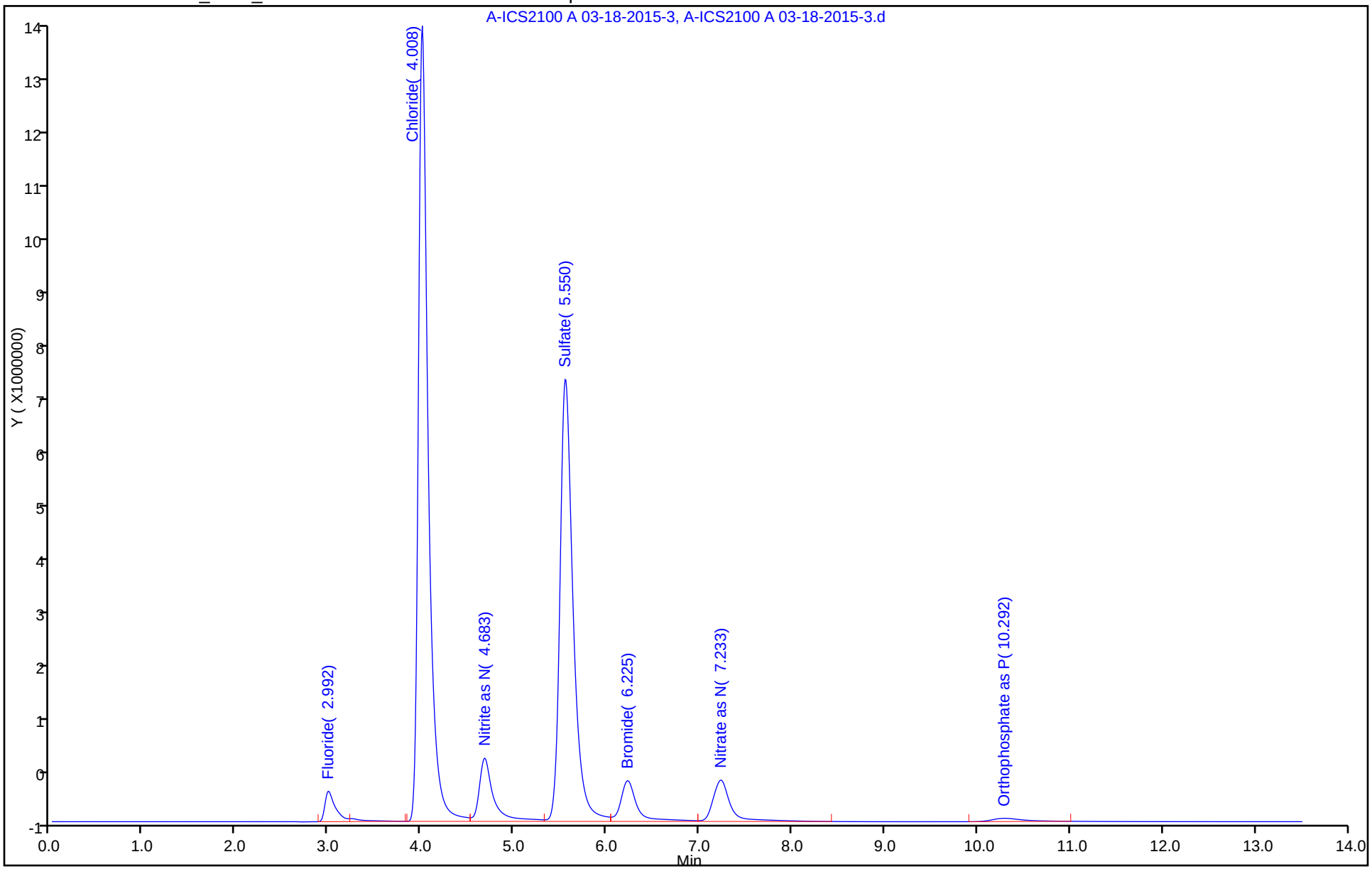
ICSTDL3_00200 Amount Added: 1.00 Units: mL

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

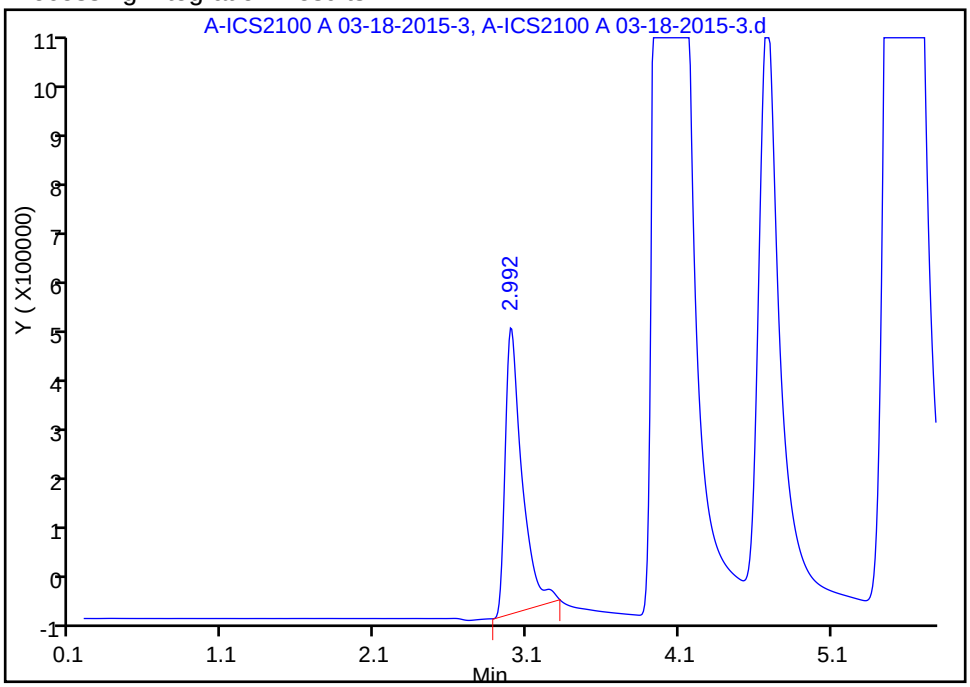
TestAmerica Pittsburgh

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

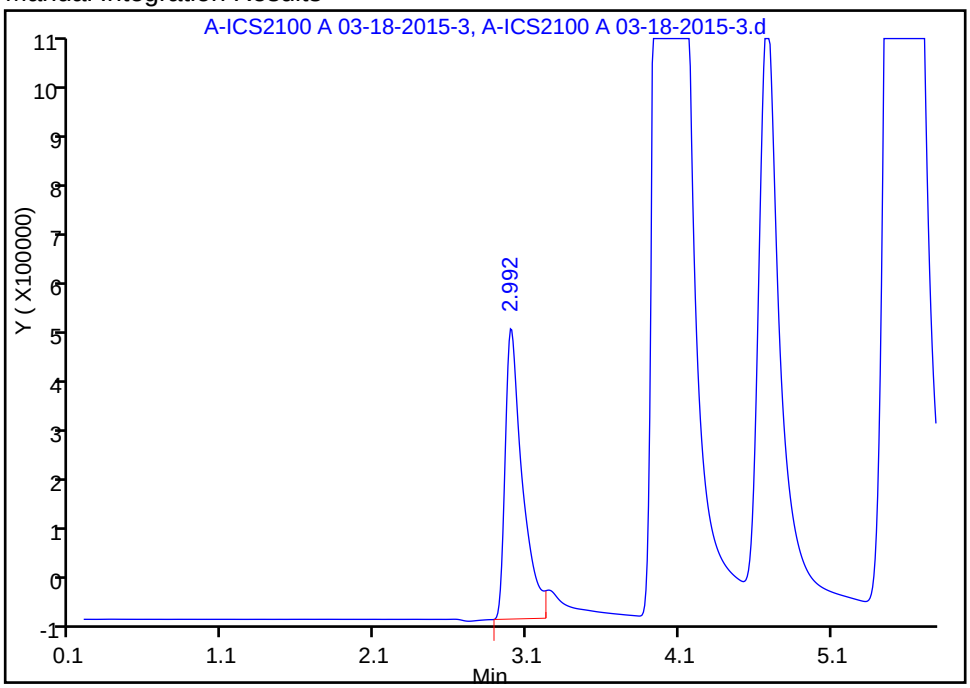
Processing Integration Results

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

Report Date: 18-Mar-2015 18:07:28 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 03-18-2015-4.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	

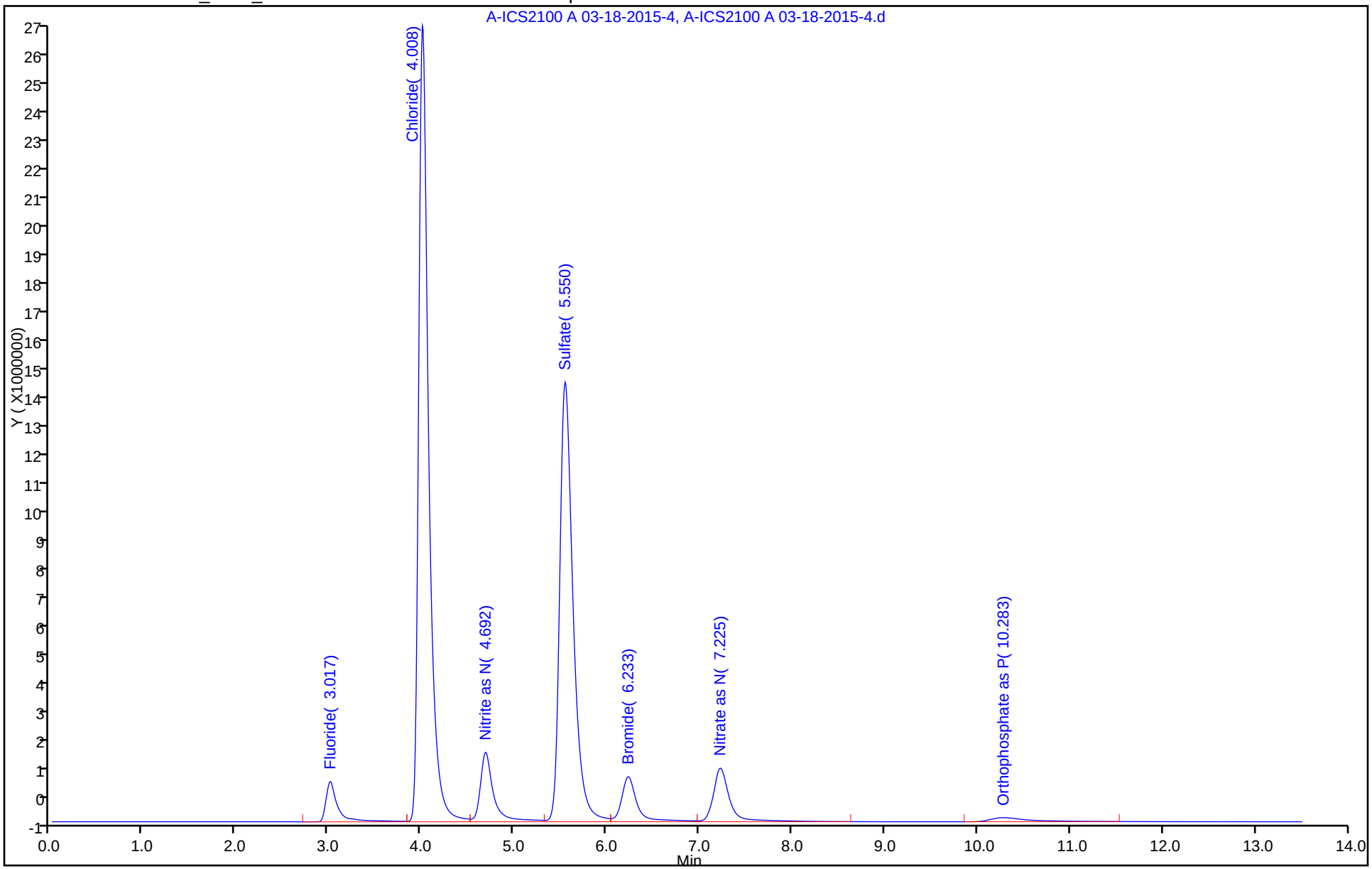
Reagents:

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		



Report Date: 18-Mar-2015 18:08:48 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 03-18-2015-5.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:

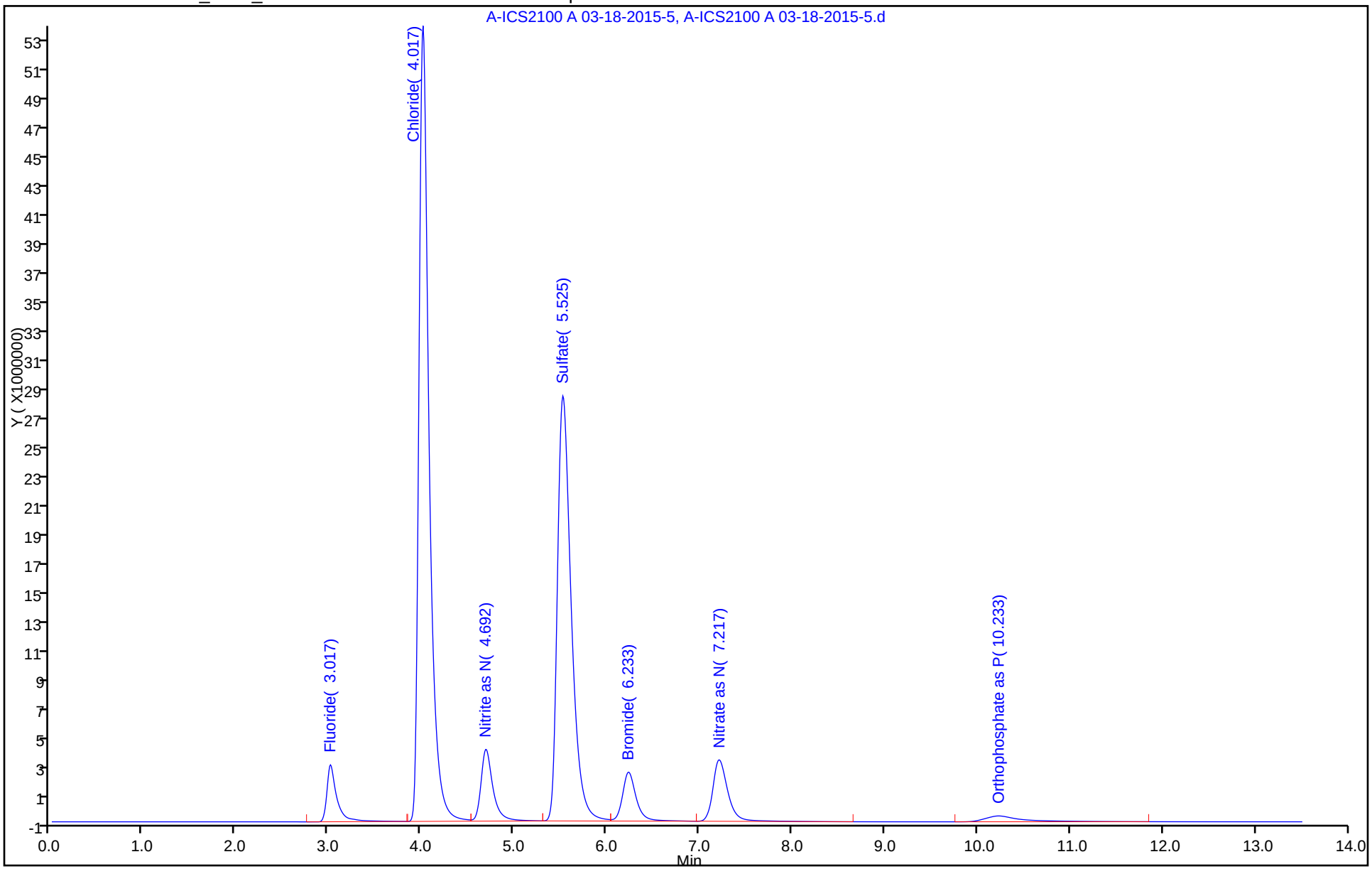
ICSTDL5_00136 Amount Added: 1.00 Units: mL

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:

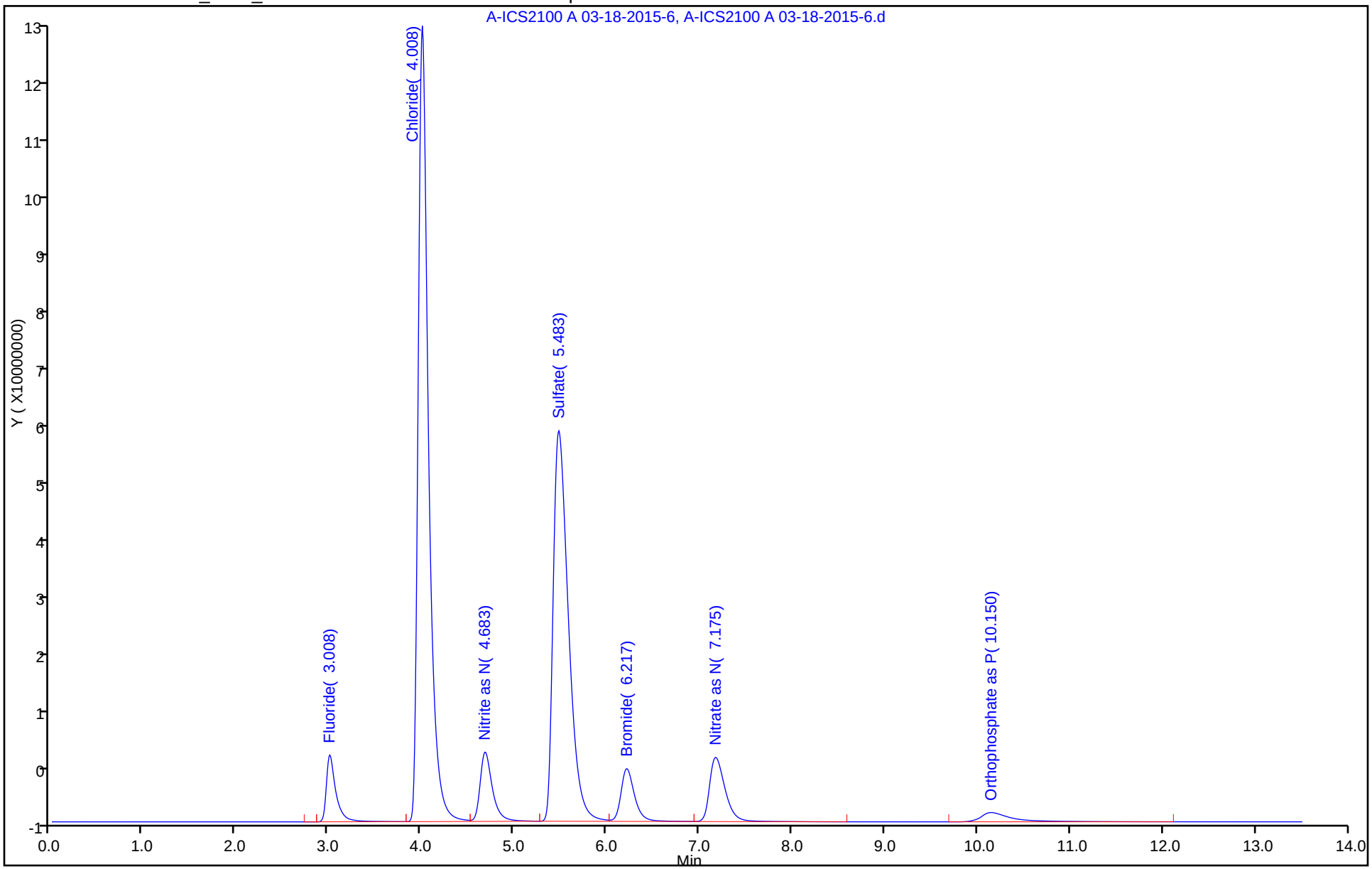
ICSTDL6_00201 Amount Added: 1.00 Units: mL

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:

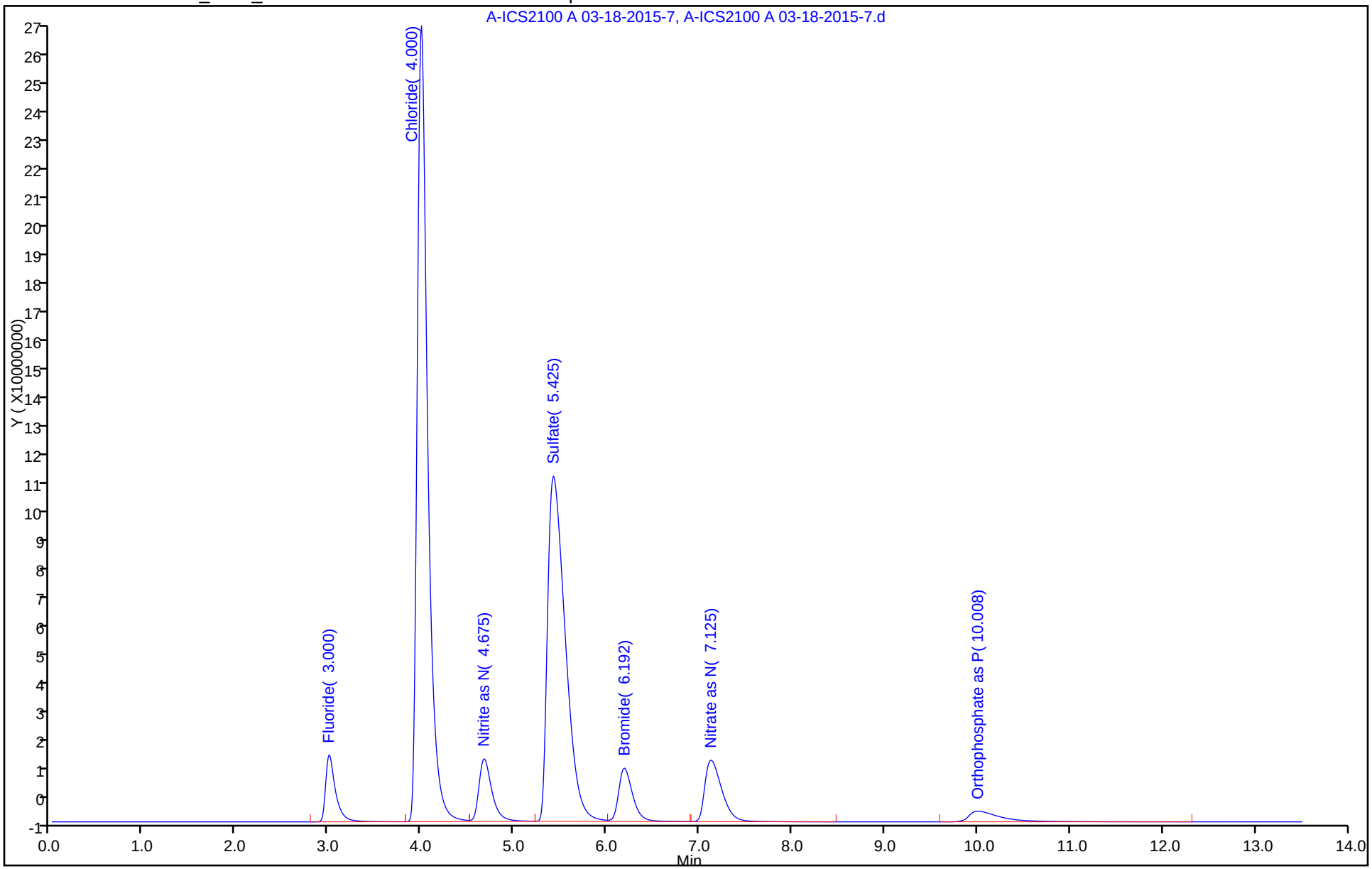
ICSTDL7_00132 Amount Added: 1.00 Units: mL

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:

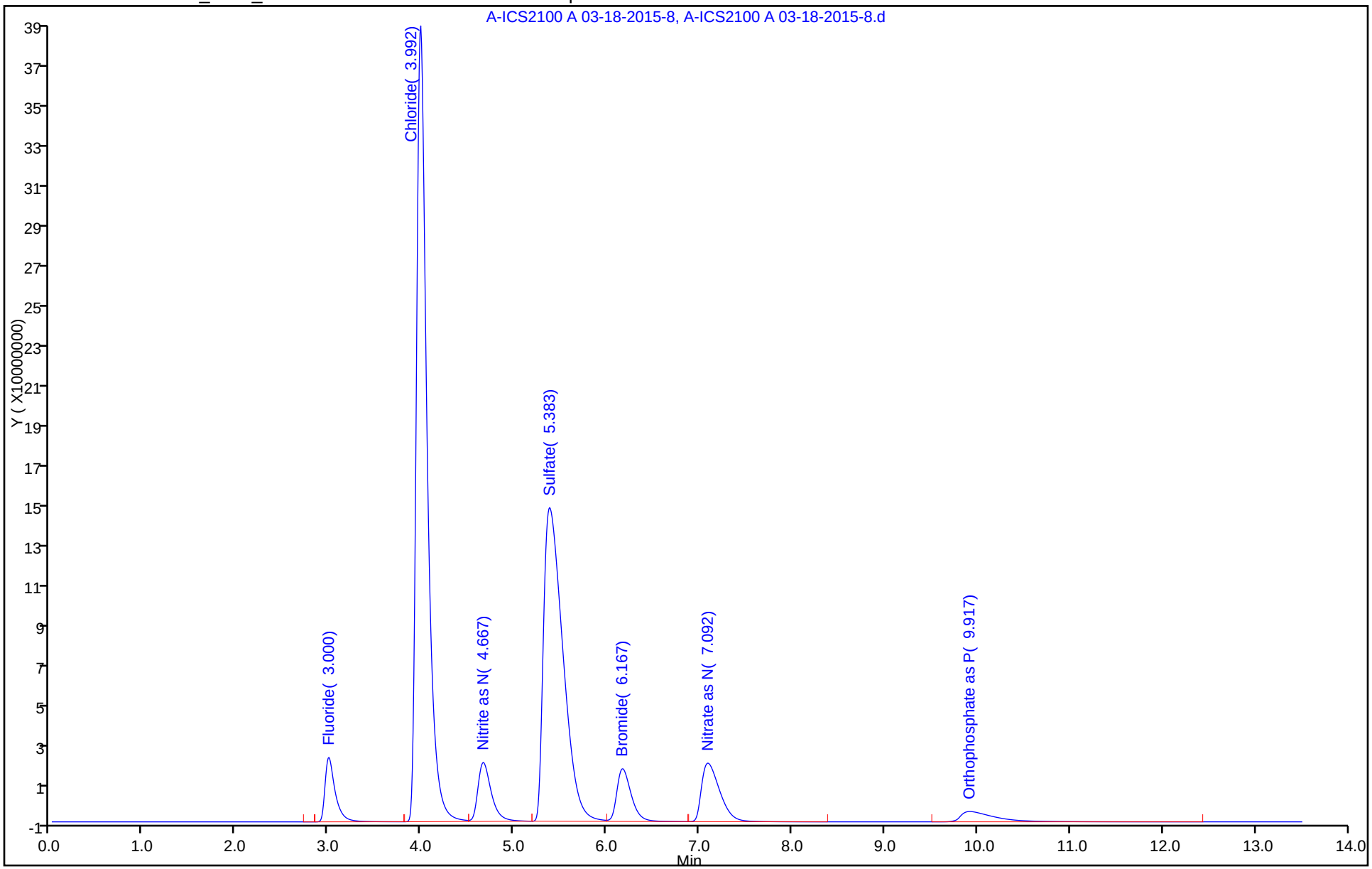
ICSTDL8_00102 Amount Added: 1.00 Units: mL

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:

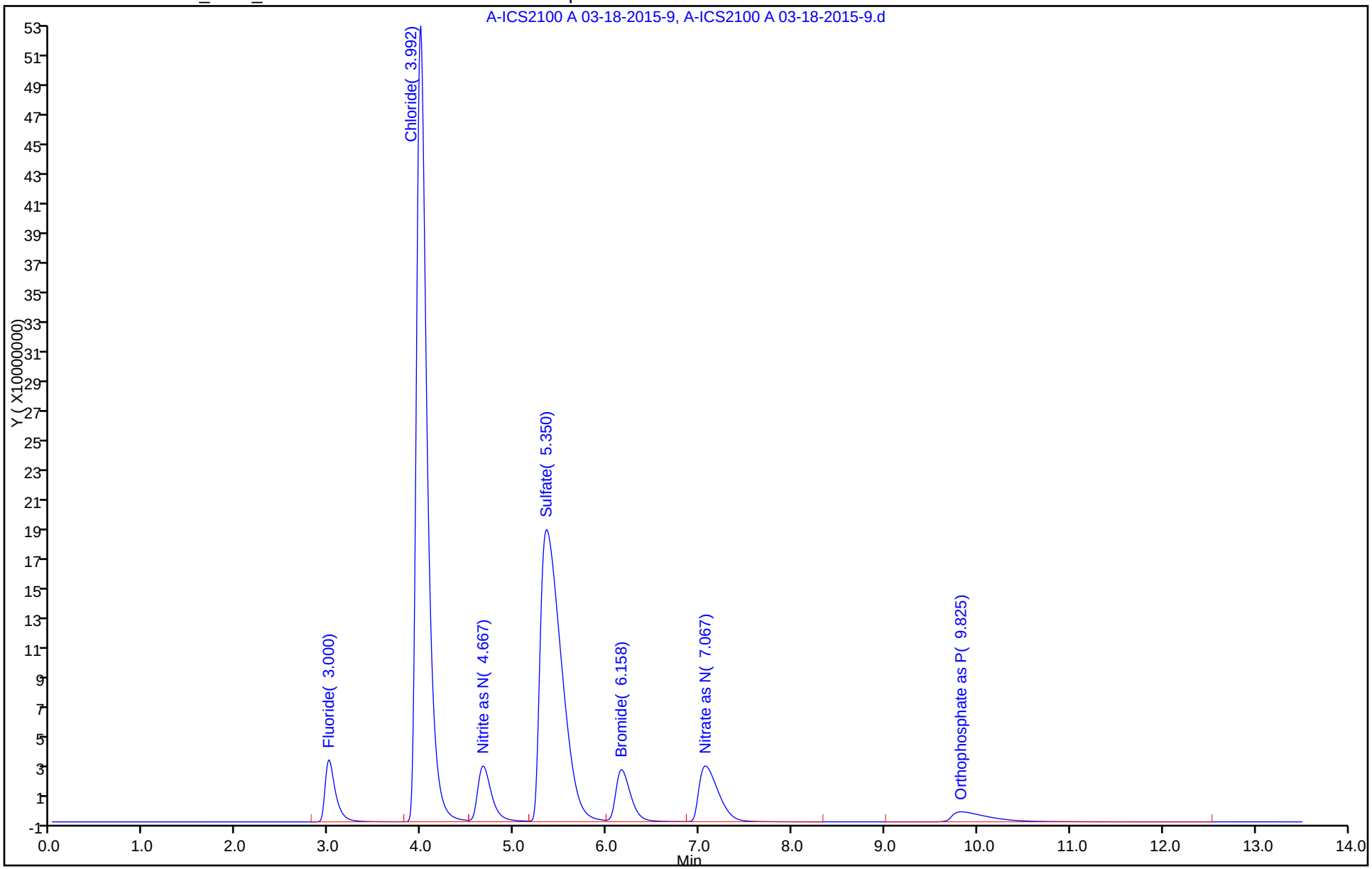
ICSTDL9_00107 Amount Added: 1.00 Units: mL

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.: 180-42353-1

SDG No.:

Lab Sample ID: ICV 180-136546/2 Calibration Date: 03/25/2015 11:50

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 03-25-2015-2.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	LinF		35955819		3.33	3.00	10.9*	10.0
Chloride	Lin2		21749516		62.9	60.0	4.8	10.0
Nitrite as N	Lin2		44723766		3.18	3.00	6.1	10.0
Sulfate	Lin2		15975232		64.2	60.0	7.0	10.0
Bromide	LinF		9652974		12.2	12.0	1.9	10.0
Nitrate as N	Lin2		53123211		3.26	3.00	8.7	10.0
Orthophosphate as P	Lin2		17650463		3.30	3.00	9.9	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: ICV 180-136546/2 Calibration Date: 03/25/2015 11:50

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 03-25-2015-2.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.00	2.65	3.35
Chloride	4.00	3.64	4.34
Nitrite as N	4.66	4.42	4.92
Sulfate	5.47	5.13	5.83
Bromide	6.19	5.84	6.54
Nitrate as N	7.14	6.89	7.39
Orthophosphate as P	10.12	9.94	10.44

Report Date: 26-Mar-2015 11:15:22 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-2.d
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 25-Mar-2015 11:50:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-002
Misc. Info.: 2 ICV
Operator ID: Instrument ID: CHIC2100A
Sublist:

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:15:15 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: XAWRK012

First Level Reviewer: hartmanm Date: 26-Mar-2015 11:15:22

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	107867456	3.00	3.33	
2 Chloride	4.000	3.992	0.008	1304970961	60.0	62.9	
7 Nitrite as N	4.658	4.667	-0.009	134224968	3.00	3.18	
3 Sulfate	5.467	5.483	-0.016	958513905	60.0	64.2	
4 Bromide	6.192	6.192	0.000	115835683	12.0	12.2	
5 Nitrate as N	7.142	7.142	0.000	159369633	3.00	3.26	
6 Orthophosphate as P	10.117	10.192	-0.075	52951390	3.00	3.30	

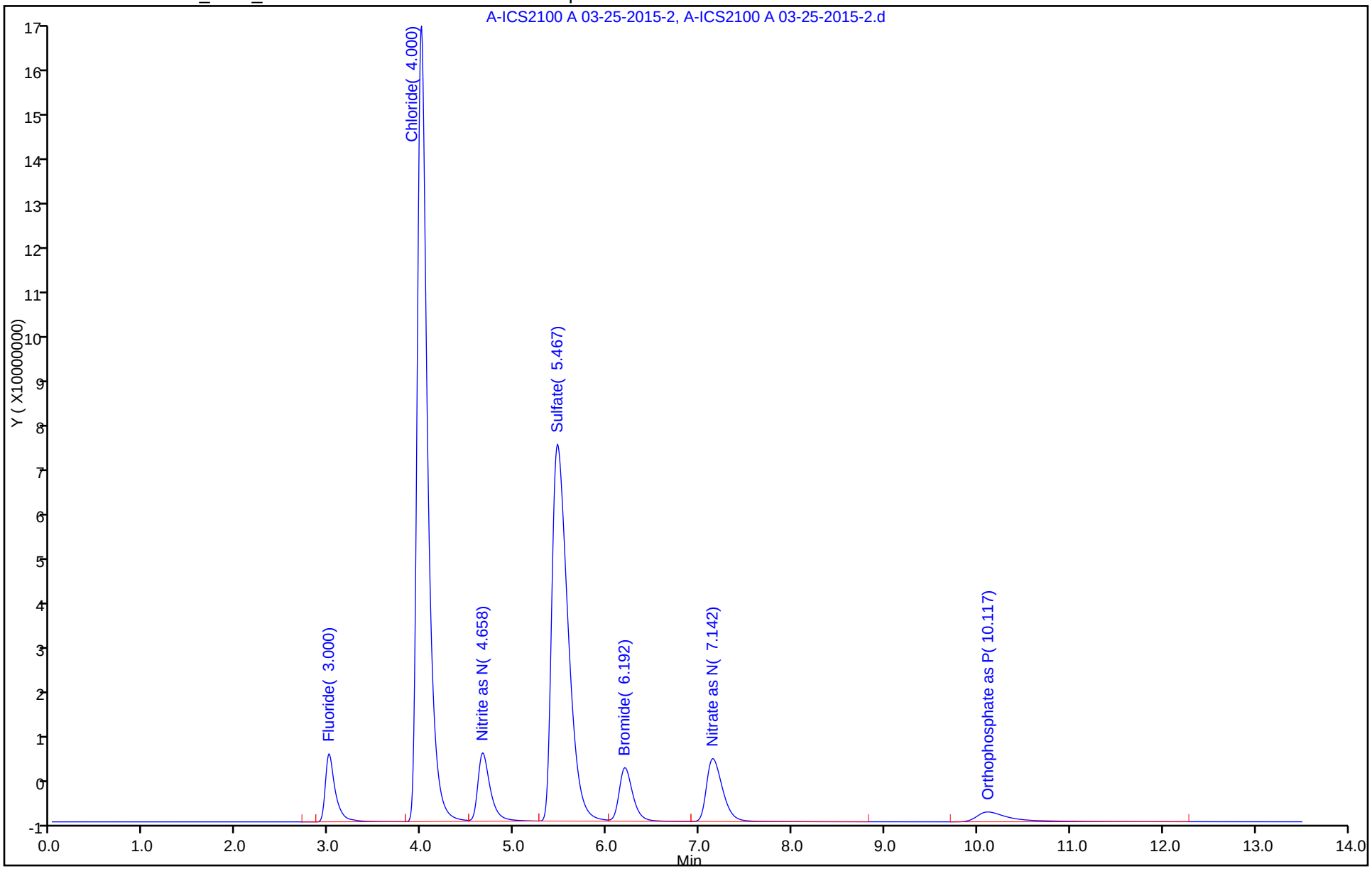
Reagents:

icicv_01230 Amount Added: 1.00 Units: mL

Report Date: 26-Mar-2015 11:15:22 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-2.d				
Injection Date:	25-Mar-2015 11:50:00	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.: 180-42353-1

SDG No.:

Lab Sample ID: CCV 180-136546/3 Calibration Date: 03/25/2015 12:06

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 03-25-2015-3.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	LinF		32482390		2.51	2.50	0.2	10.0
Chloride	Lin2		20063614		48.4	50.0	-3.2	10.0
Nitrite as N	Lin2		43733164		2.59	2.50	3.6	10.0
Sulfate	Lin2		14450775		48.4	50.0	-3.2	10.0
Bromide	LinF		8846921		9.34	10.0	-6.6	10.0
Nitrate as N	Lin2		49549136		2.54	2.50	1.6	10.0
Orthophosphate as P	Lin2		16083877		2.58	2.50	3.1	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCV 180-136546/3 Calibration Date: 03/25/2015 12:06

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 03-25-2015-3.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.00	2.65	3.35
Chloride	3.99	3.64	4.34
Nitrite as N	4.68	4.43	4.93
Sulfate	5.49	5.14	5.84
Bromide	6.20	5.85	6.55
Nitrate as N	7.15	6.90	7.40
Orthophosphate as P	10.17	9.92	10.42

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-3.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 25-Mar-2015 12:06:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-003
Misc. Info.: 3 CCV
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:31 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: XAWRK012

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	81205976	2.50	2.51	
2 Chloride	3.992	3.992	0.000	1003180716	50.0	48.4	
7 Nitrite as N	4.675	4.675	0.000	109332911	2.50	2.59	
3 Sulfate	5.492	5.492	0.000	722538760	50.0	48.4	
4 Bromide	6.200	6.200	0.000	88469206	10.0	9.34	
5 Nitrate as N	7.150	7.150	0.000	123872839	2.50	2.54	
6 Orthophosphate as P	10.167	10.167	0.000	40209692	2.50	2.58	

Reagents:

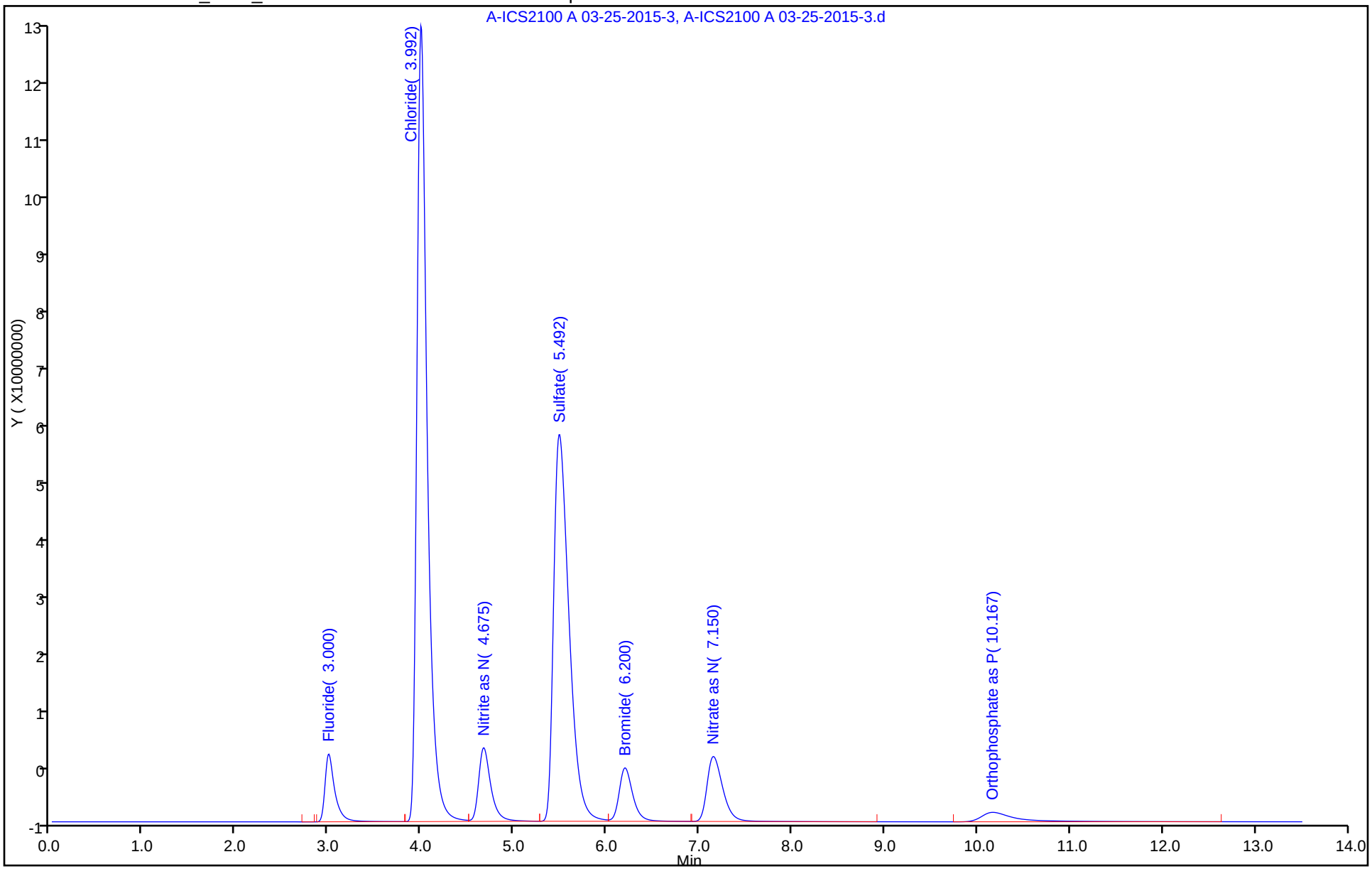
icccv_01200 Amount Added: 1.00 Units: mL

Report Date: 26-Mar-2015 11:13:31 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-3.d

Injection Date:	25-Mar-2015 12:06:00	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.: 180-42353-1

SDG No.:

Lab Sample ID: CCV 180-136546/15 Calibration Date: 03/25/2015 15:24

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 03-25-2015-15.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	LinF		32781051		2.53	2.50	1.1	10.0
Chloride	Lin2		20297658		49.0	50.0	-2.0	10.0
Nitrite as N	Lin2		43936059		2.60	2.50	4.0	10.0
Sulfate	Lin2		14658750		49.1	50.0	-1.8	10.0
Bromide	LinF		8913456		9.41	10.0	-5.9	10.0
Nitrate as N	Lin2		50116670		2.57	2.50	2.7	10.0
Orthophosphate as P	Lin2		14786080		2.39	2.50	-4.2	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCV 180-136546/15 Calibration Date: 03/25/2015 15:24

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 03-25-2015-15.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	6.20	5.85	6.55
Nitrate as N	7.15	6.90	7.40
Orthophosphate as P	10.19	9.94	10.44

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-15.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 25-Mar-2015 15:24:00 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-015
Misc. Info.: 15 ccv
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:39 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: XAWRK012

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	81952628	2.50	2.53	
2 Chloride	4.000	4.000	0.000	1014882880	50.0	49.0	
7 Nitrite as N	4.675	4.675	0.000	109840147	2.50	2.60	
3 Sulfate	5.483	5.483	0.000	732937501	50.0	49.1	
4 Bromide	6.200	6.200	0.000	89134557	10.0	9.41	
5 Nitrate as N	7.150	7.150	0.000	125291676	2.50	2.57	
6 Orthophosphate as P	10.192	10.192	0.000	36965199	2.50	2.39	

Reagents:

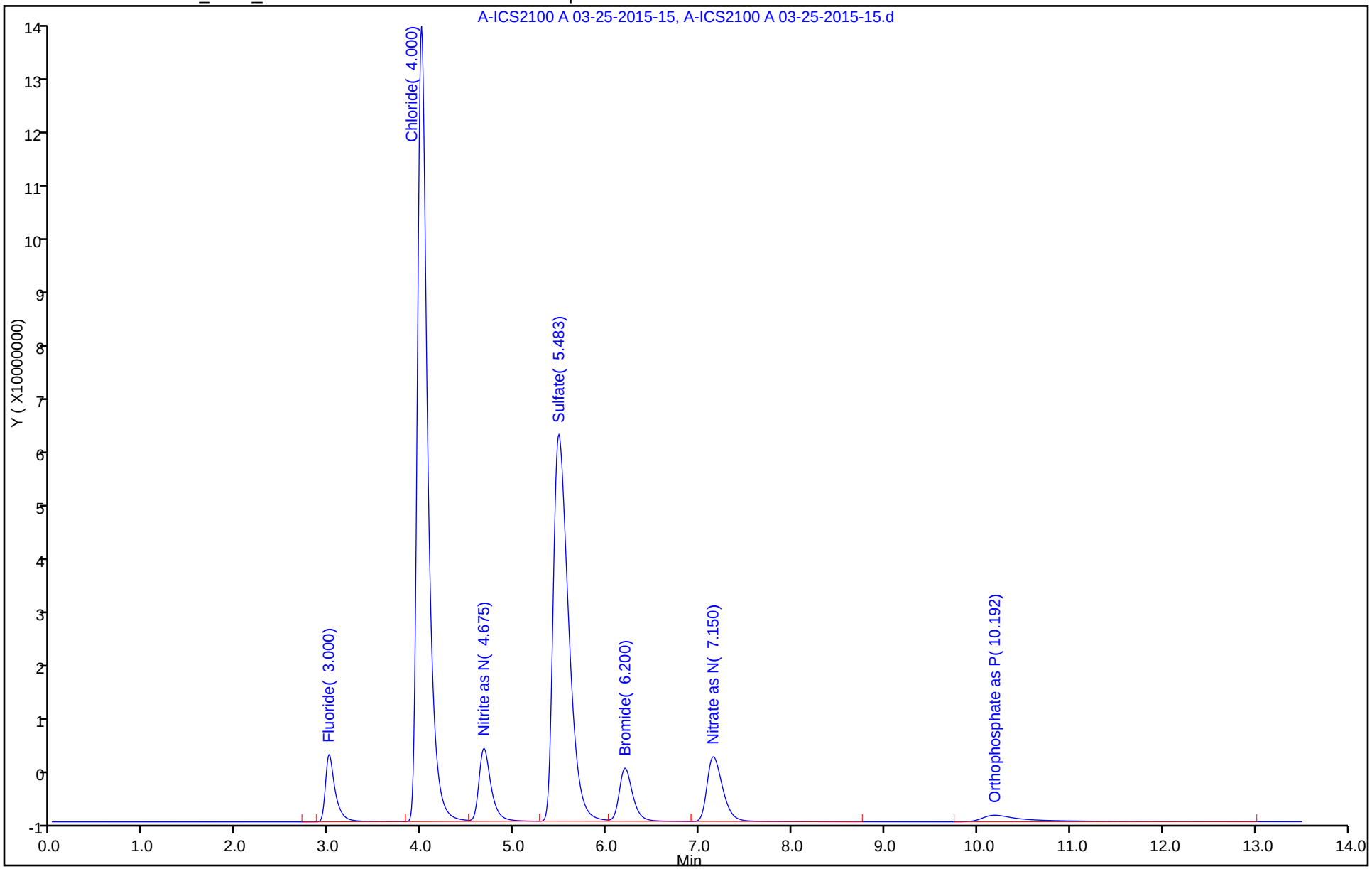
icccv_01200 Amount Added: 1.00 Units: mL

Report Date: 26-Mar-2015 11:13:39 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-15.d

Injection Date:	25-Mar-2015 15:24:00	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.: 180-42353-1

SDG No.:

Lab Sample ID: CCV 180-136546/27 Calibration Date: 03/25/2015 18:44

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 03-25-2015-27.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	LinF		32894344		2.54	2.50	1.5	10.0
Chloride	Lin2		20400256		49.2	50.0	-1.5	10.0
Nitrite as N	Lin2		44043417		2.61	2.50	4.3	10.0
Sulfate	Lin2		14681767		49.2	50.0	-1.6	10.0
Bromide	LinF		8964781		9.47	10.0	-5.3	10.0
Nitrate as N	Lin2		50348849		2.58	2.50	3.2	10.0
Orthophosphate as P	Lin2		14062547		2.29	2.50	-8.3	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCV 180-136546/27 Calibration Date: 03/25/2015 18:44

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 03-25-2015-27.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	6.20	5.85	6.55
Nitrate as N	7.15	6.90	7.40
Orthophosphate as P	10.25	10.00	10.50

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-27.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 25-Mar-2015 18:44:00 ALS Bottle#: 0 Worklist Smp#: 27
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-027
Misc. Info.: 27 ccv
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:45 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: XAWRK012

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	82235860	2.50	2.54	
2 Chloride	4.000	4.000	0.000	1020012824	50.0	49.2	
7 Nitrite as N	4.675	4.675	0.000	110108543	2.50	2.61	
3 Sulfate	5.483	5.483	0.000	734088327	50.0	49.2	
4 Bromide	6.200	6.200	0.000	89647806	10.0	9.47	
5 Nitrate as N	7.150	7.150	0.000	125872123	2.50	2.58	
6 Orthophosphate as P	10.250	10.250	0.000	35156367	2.50	2.29	

Reagents:

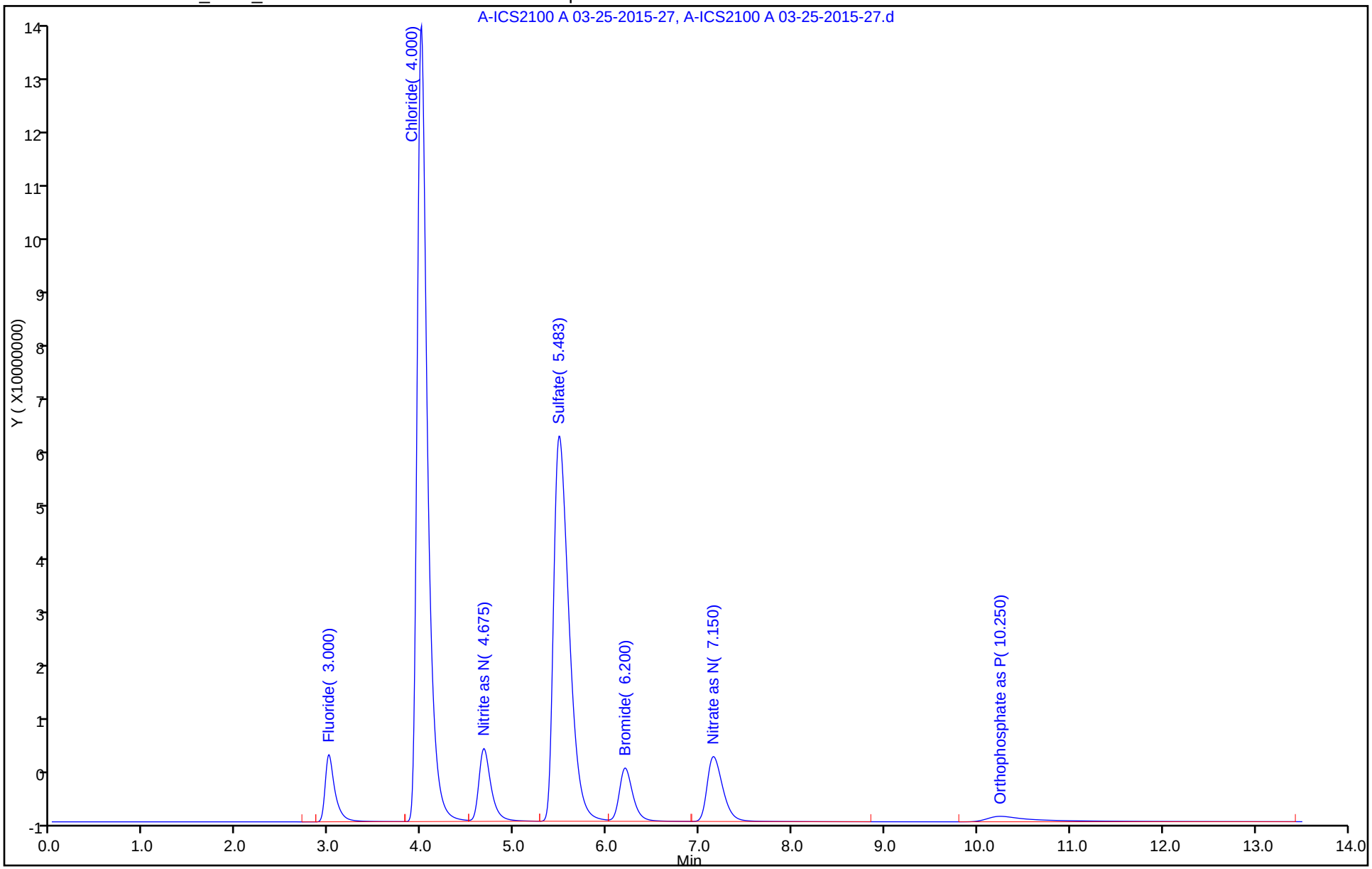
icccv_01200 Amount Added: 1.00 Units: mL

Report Date: 26-Mar-2015 11:13:45 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-27.d

Injection Date:	25-Mar-2015 18:44:00	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.: 180-42353-1

SDG No.:

Lab Sample ID: CCV 180-136546/39 Calibration Date: 03/25/2015 22:12

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 03-25-2015-39.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	LinF		32394630		2.50	2.50	-0.0	10.0
Chloride	Lin2		20128182		48.6	50.0	-2.8	10.0
Nitrite as N	Lin2		43385535		2.57	2.50	2.7	10.0
Sulfate	Lin2		14469424		48.5	50.0	-3.1	10.0
Bromide	LinF		8838522		9.33	10.0	-6.7	10.0
Nitrate as N	Lin2		49627065		2.54	2.50	1.7	10.0
Orthophosphate as P	Lin2		13202703		2.17	2.50	-13.2*	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCV 180-136546/39 Calibration Date: 03/25/2015 22:12

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 03-25-2015-39.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	6.20	5.85	6.55
Nitrate as N	7.15	6.90	7.40
Orthophosphate as P	10.28	10.03	10.53

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-39.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 25-Mar-2015 22:12:00 ALS Bottle#: 0 Worklist Smp#: 39
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-039
Misc. Info.: 39 ccv
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:49 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: XAWRK012

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	80986575	2.50	2.50	
2 Chloride	4.000	4.000	0.000	1006409116	50.0	48.6	
7 Nitrite as N	4.675	4.675	0.000	108463837	2.50	2.57	
3 Sulfate	5.483	5.483	0.000	723471188	50.0	48.5	
4 Bromide	6.200	6.200	0.000	88385223	10.0	9.33	
5 Nitrate as N	7.150	7.150	0.000	124067663	2.50	2.54	
6 Orthophosphate as P	10.275	10.275	0.000	33006757	2.50	2.17	

Reagents:

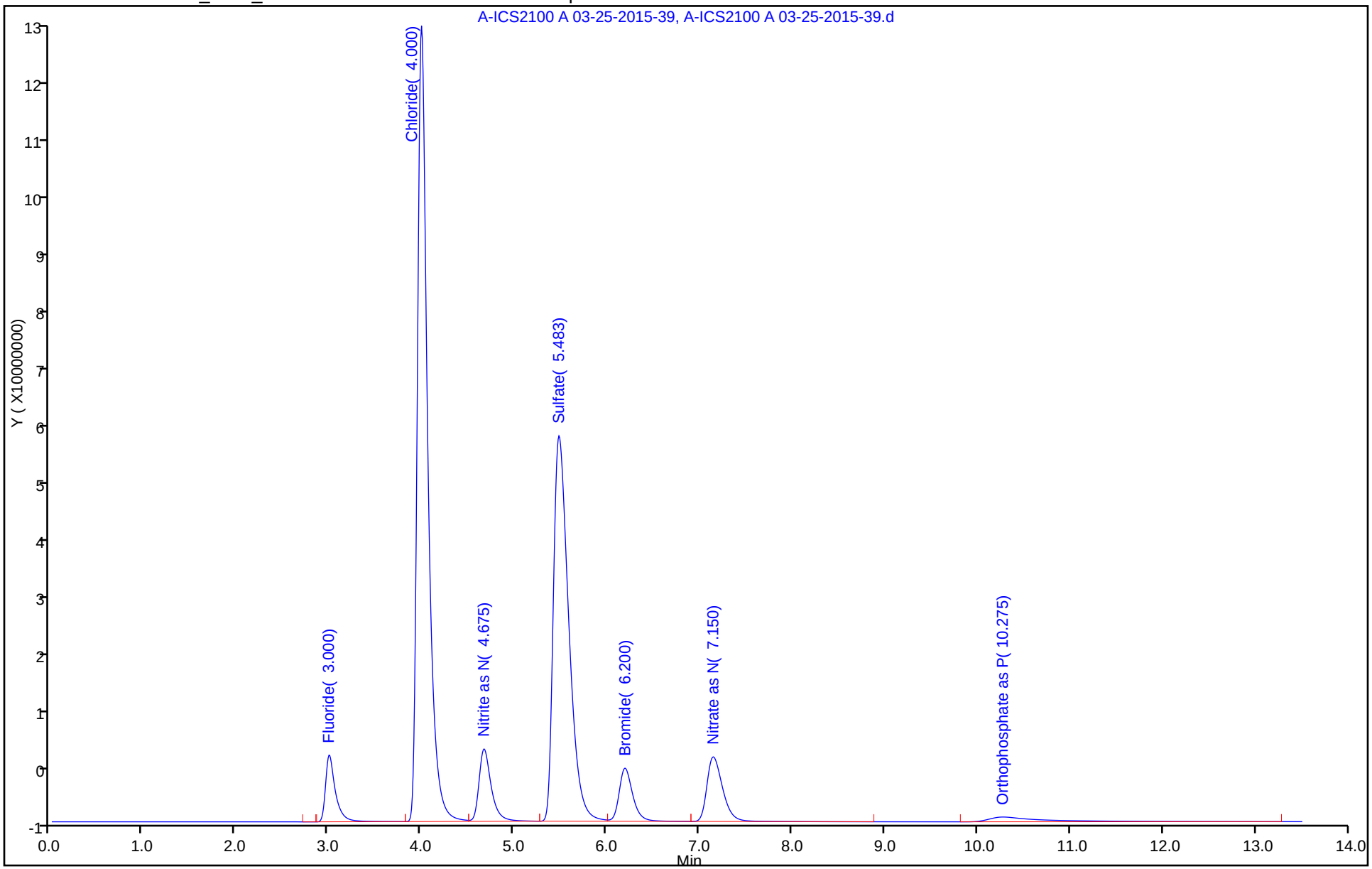
icccv_01200 Amount Added: 1.00 Units: mL

Report Date: 26-Mar-2015 11:13:49 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-39.d

Injection Date:	25-Mar-2015 22:12:00	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 VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCV 180-136546/51 Calibration Date: 03/26/2015 01:40

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 03-25-2015-51.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	LinF		32232913		2.49	2.50	-0.5	10.0
Chloride	Lin2		20114558		48.5	50.0	-2.9	10.0
Nitrite as N	Lin2		43241628		2.56	2.50	2.4	10.0
Sulfate	Lin2		14413968		48.3	50.0	-3.4	10.0
Bromide	LinF		8814058		9.31	10.0	-6.9	10.0
Nitrate as N	Lin2		49516883		2.54	2.50	1.5	10.0
Orthophosphate as P	Lin2		13104744		2.16	2.50	-13.7*	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCV 180-136546/51 Calibration Date: 03/26/2015 01:40

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 03-25-2015-51.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	10.26	10.01	10.51

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-51.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 26-Mar-2015 01:40:00 ALS Bottle#: 0 Worklist Smp#: 51
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-051
Misc. Info.: 51 ccv
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:54 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: XAWRK012

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	80582283	2.50	2.49	
2 Chloride	4.000	4.000	0.000	1005727910	50.0	48.5	
7 Nitrite as N	4.675	4.675	0.000	108104069	2.50	2.56	
3 Sulfate	5.483	5.483	0.000	720698416	50.0	48.3	
4 Bromide	6.192	6.192	0.000	88140576	10.0	9.31	
5 Nitrate as N	7.150	7.150	0.000	123792208	2.50	2.54	
6 Orthophosphate as P	10.258	10.258	0.000	32761859	2.50	2.16	

Reagents:

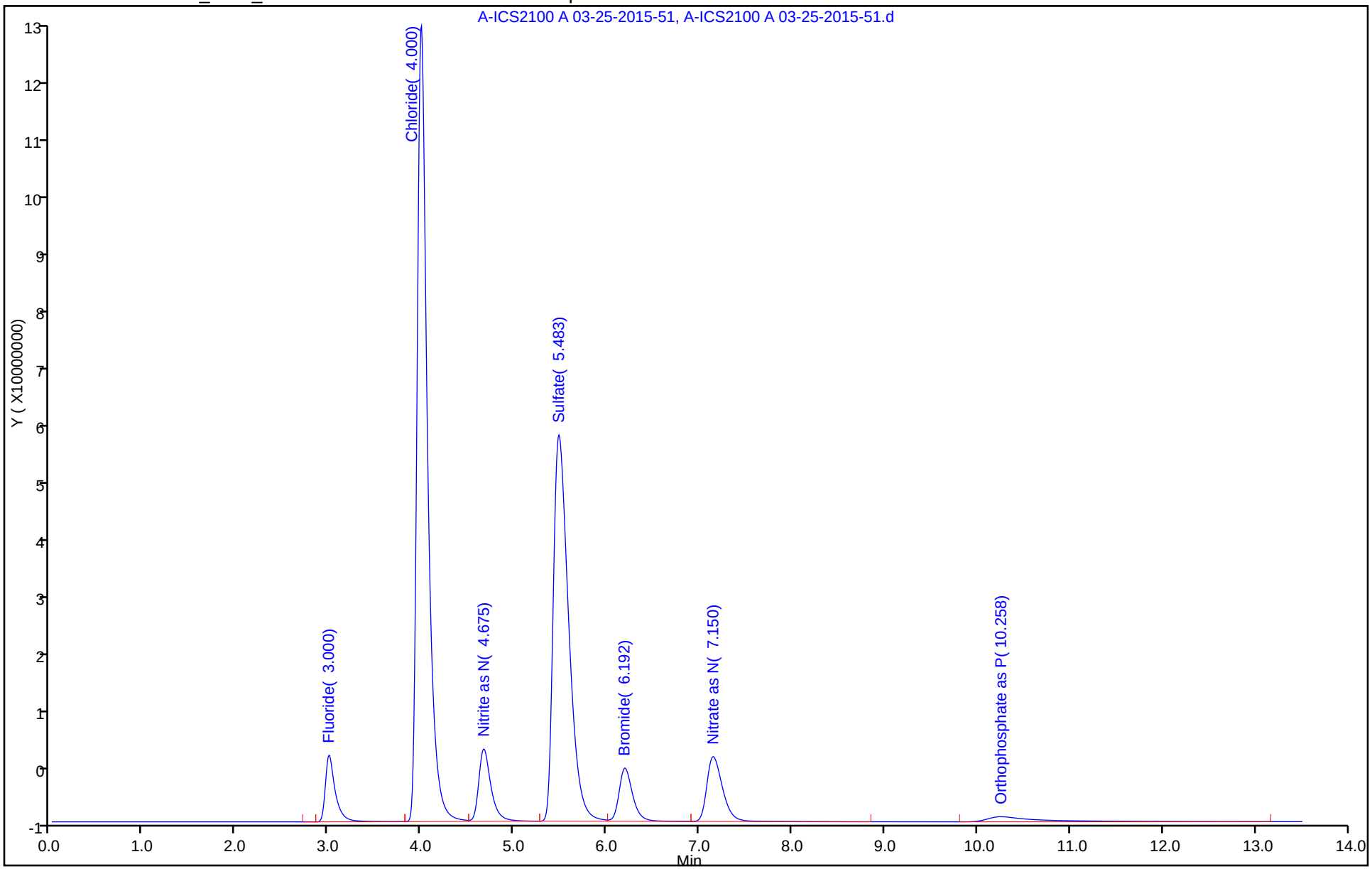
icccv_01200 Amount Added: 1.00 Units: mL

Report Date: 26-Mar-2015 11:13:54 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-51.d

Injection Date:	26-Mar-2015 01:40:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	CCV			Worklist Smp#:	51
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.: 180-42353-1

SDG No.:

Lab Sample ID: CCV 180-136546/63 Calibration Date: 03/26/2015 05:08

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 03-25-2015-63.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	LinF		31387286		2.42	2.50	-3.2	10.0
Chloride	Lin2		19613922		47.3	50.0	-5.3	10.0
Nitrite as N	Lin2		42139030		2.49	2.50	-0.3	10.0
Sulfate	Lin2		14068904		47.1	50.0	-5.7	10.0
Bromide	LinF		8576747		9.06	10.0	-9.4	10.0
Nitrate as N	Lin2		48241027		2.47	2.50	-1.1	10.0
Orthophosphate as P	Lin2		12435840		2.06	2.50	-17.5*	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCV 180-136546/63 Calibration Date: 03/26/2015 05:08

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 03-25-2015-63.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	6.20	5.85	6.55
Nitrate as N	7.15	6.90	7.40
Orthophosphate as P	10.28	10.03	10.53

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-63.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 26-Mar-2015 05:08:00 ALS Bottle#: 0 Worklist Smp#: 63
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-063
Misc. Info.: 63 ccv
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:58 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: XAWRK012

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	78468216	2.50	2.42	
2 Chloride	4.000	4.000	0.000	980696088	50.0	47.3	
7 Nitrite as N	4.675	4.675	0.000	105347575	2.50	2.49	
3 Sulfate	5.483	5.483	0.000	703445193	50.0	47.1	
4 Bromide	6.200	6.200	0.000	85767470	10.0	9.06	
5 Nitrate as N	7.150	7.150	0.000	120602568	2.50	2.47	
6 Orthophosphate as P	10.283	10.283	0.000	31089600	2.50	2.06	

Reagents:

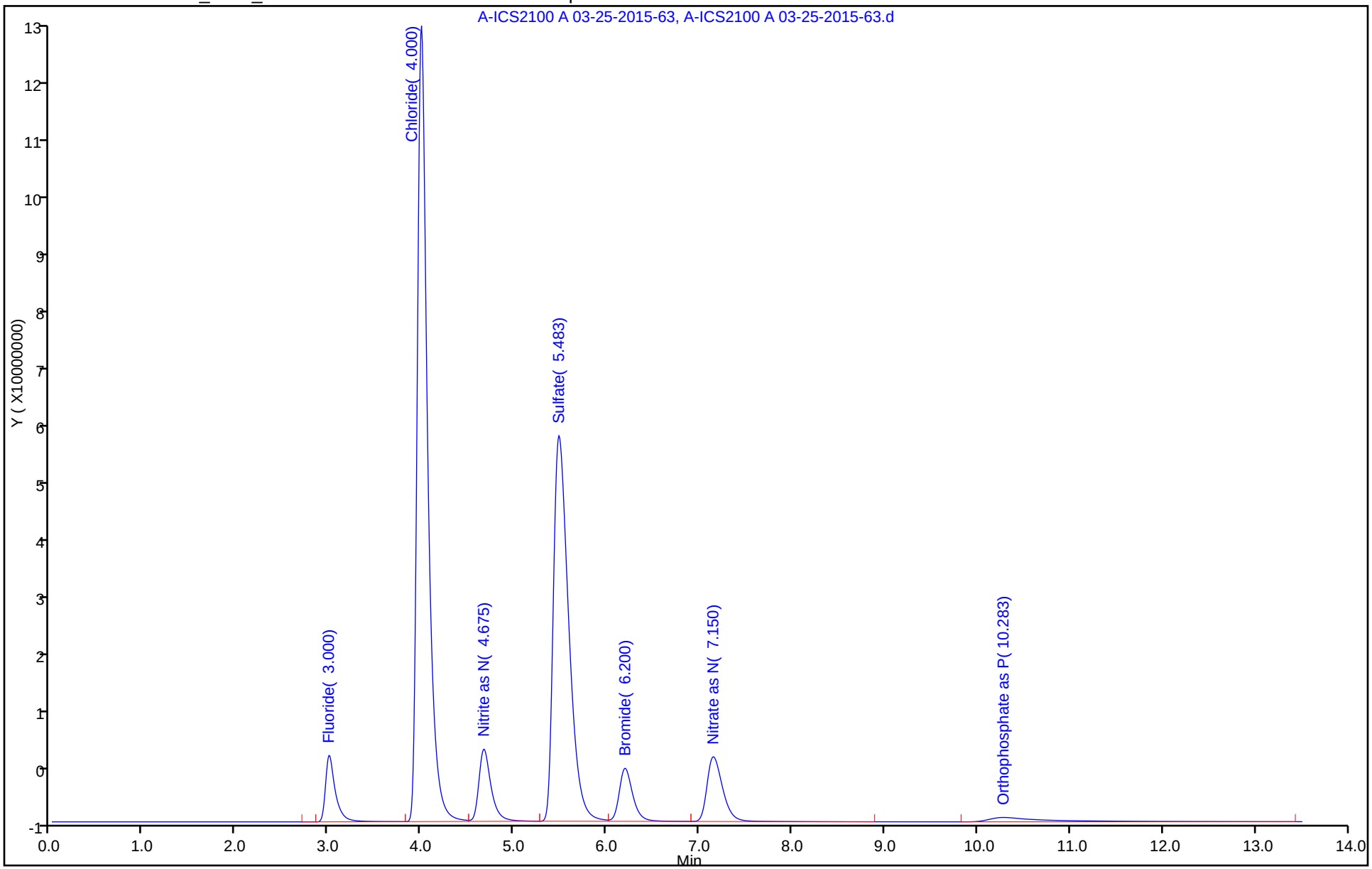
icccv_01200 Amount Added: 1.00 Units: mL

Report Date: 26-Mar-2015 11:13:58 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-63.d

Injection Date:	26-Mar-2015 05:08:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	CCV			Worklist Smp#:	63
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.: 180-42353-1

SDG No.:

Lab Sample ID: CCV 180-136546/74 Calibration Date: 03/26/2015 08:14

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 03-25-2015-74.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	LinF		30994428		2.39	2.50	-4.4	10.0
Chloride	Lin2		19325244		46.6	50.0	-6.7	10.0
Nitrite as N	Lin2		41414657		2.45	2.50	-2.0	10.0
Sulfate	Lin2		13871527		46.5	50.0	-7.1	10.0
Bromide	LinF		8453550		8.93	10.0	-10.7*	10.0
Nitrate as N	Lin2		47564241		2.44	2.50	-2.4	10.0
Orthophosphate as P	Lin2		13088430		2.15	2.50	-13.8*	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: CCV 180-136546/74 Calibration Date: 03/26/2015 08:14

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 03-25-2015-74.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.00	2.65	3.35
Chloride	3.99	3.64	4.34
Nitrite as N	4.67	4.42	4.92
Sulfate	5.48	5.13	5.83
Bromide	6.19	5.84	6.54
Nitrate as N	7.14	6.89	7.39
Orthophosphate as P	10.23	9.98	10.48

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-74.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 26-Mar-2015 08:14:00 ALS Bottle#: 0 Worklist Smp#: 74
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-074
Misc. Info.: 75 ccv
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:14:02 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: XAWRK012

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	77486070	2.50	2.39	
2 Chloride	3.992	3.992	0.000	966262175	50.0	46.6	
7 Nitrite as N	4.667	4.667	0.000	103536642	2.50	2.45	
3 Sulfate	5.475	5.475	0.000	693576343	50.0	46.5	
4 Bromide	6.192	6.192	0.000	84535503	10.0	8.93	
5 Nitrate as N	7.142	7.142	0.000	118910602	2.50	2.44	
6 Orthophosphate as P	10.225	10.225	0.000	32721076	2.50	2.15	

Reagents:

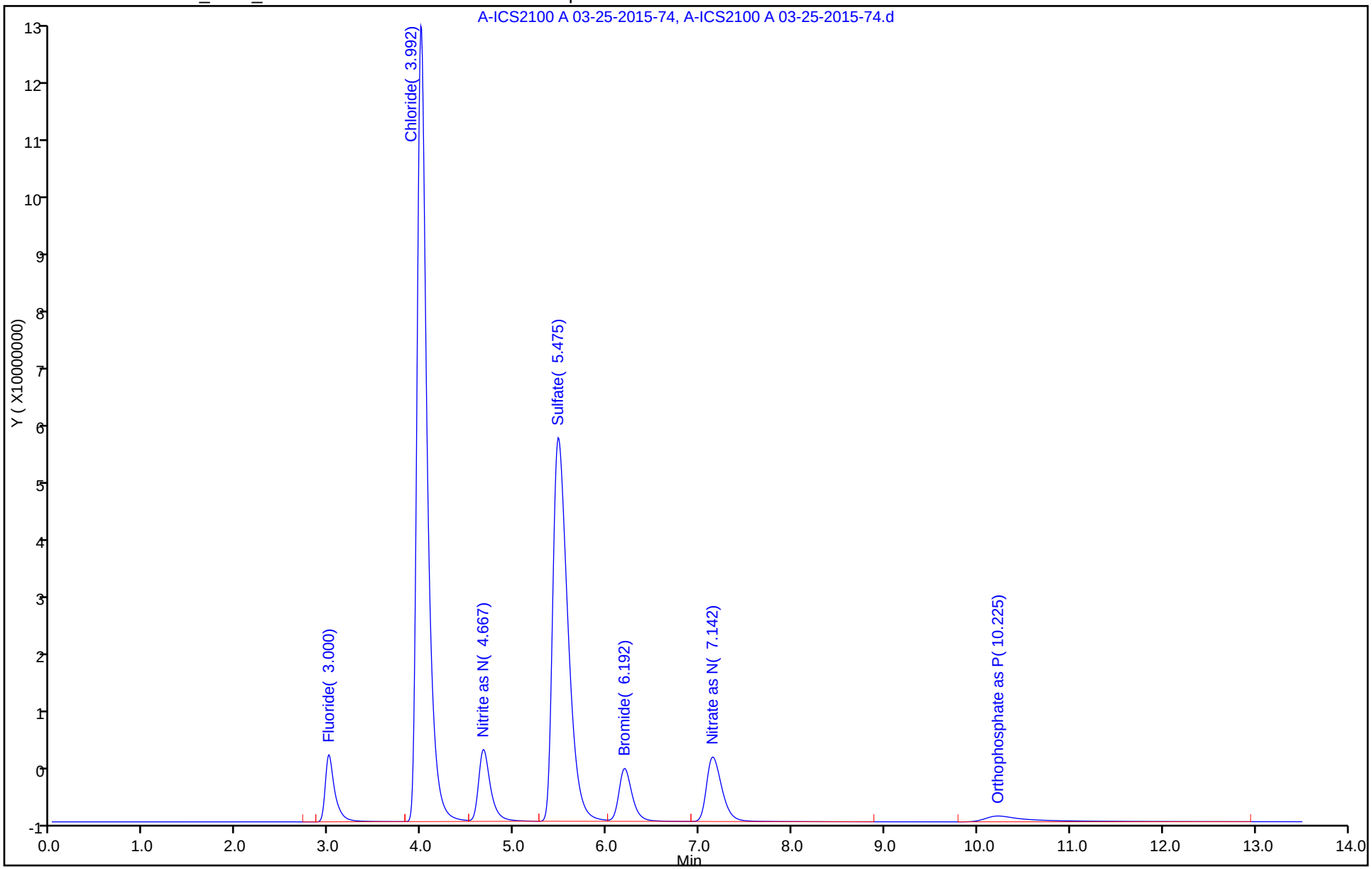
icccv_01200 Amount Added: 1.00 Units: mL

Report Date: 26-Mar-2015 11:14:02 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-74.d

Injection Date:	26-Mar-2015 08:14:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	CCV			Worklist Smp#:	74
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.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-136546/6

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-6.d

Analysis Method: 300.0 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 12:58

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.0304	J	0.10	0.0062
16887-00-6	Chloride	0.358	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\20150325-6176.b\A-ICS2100 A 03-25-2015-6.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 25-Mar-2015 12:58:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-006
Misc. Info.: 6 MB
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:31 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

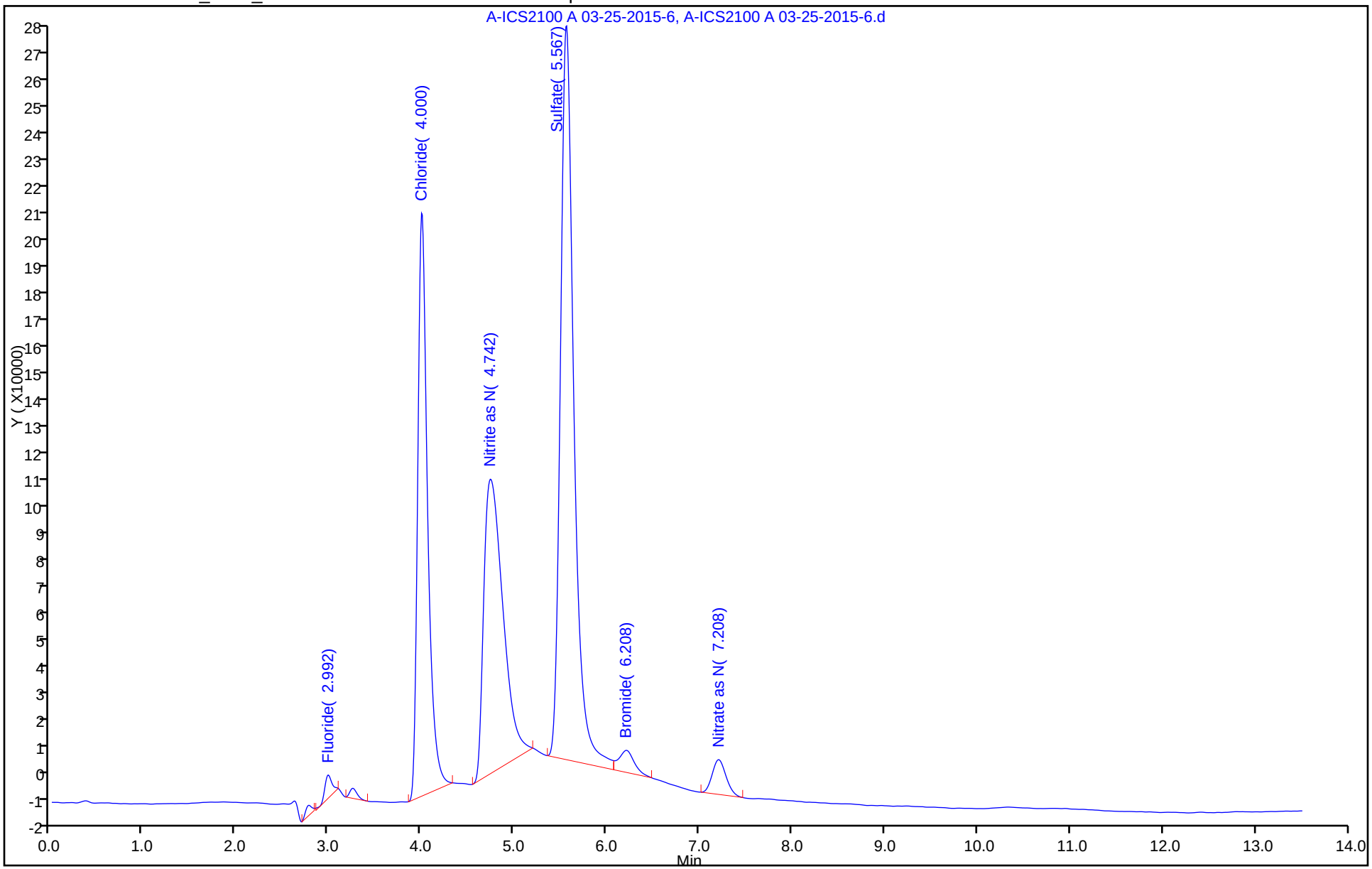
Column 1 : Det: 0008
Process Host: XAWRK012

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.992	3.000	-0.008	44092		0.001360	
2 Chloride	4.000	3.992	0.008	1536537		0.3580	
7 Nitrite as N	4.742	4.675	0.067	1500827		0.009728	
3 Sulfate	5.567	5.492	0.075	2638641		0.1699	
4 Bromide	6.208	6.200	0.008	90434		0.009549	
5 Nitrate as N	7.208	7.150	0.058	128222		0.0304	
6 Orthophosphate as P		10.167				ND	

Report Date: 26-Mar-2015 11:13:33 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-6.d				
Injection Date:	25-Mar-2015 12:58:00	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.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-136546/46

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-46.d

Analysis Method: 300.0 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 00:13

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.0307	J	0.10	0.0062
16887-00-6	Chloride	0.386	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\20150325-6176.b\A-ICS2100 A 03-25-2015-46.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 26-Mar-2015 00:13:00 ALS Bottle#: 0 Worklist Smp#: 46
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-046
Misc. Info.: 46 MB
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:49 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: XAWRK012

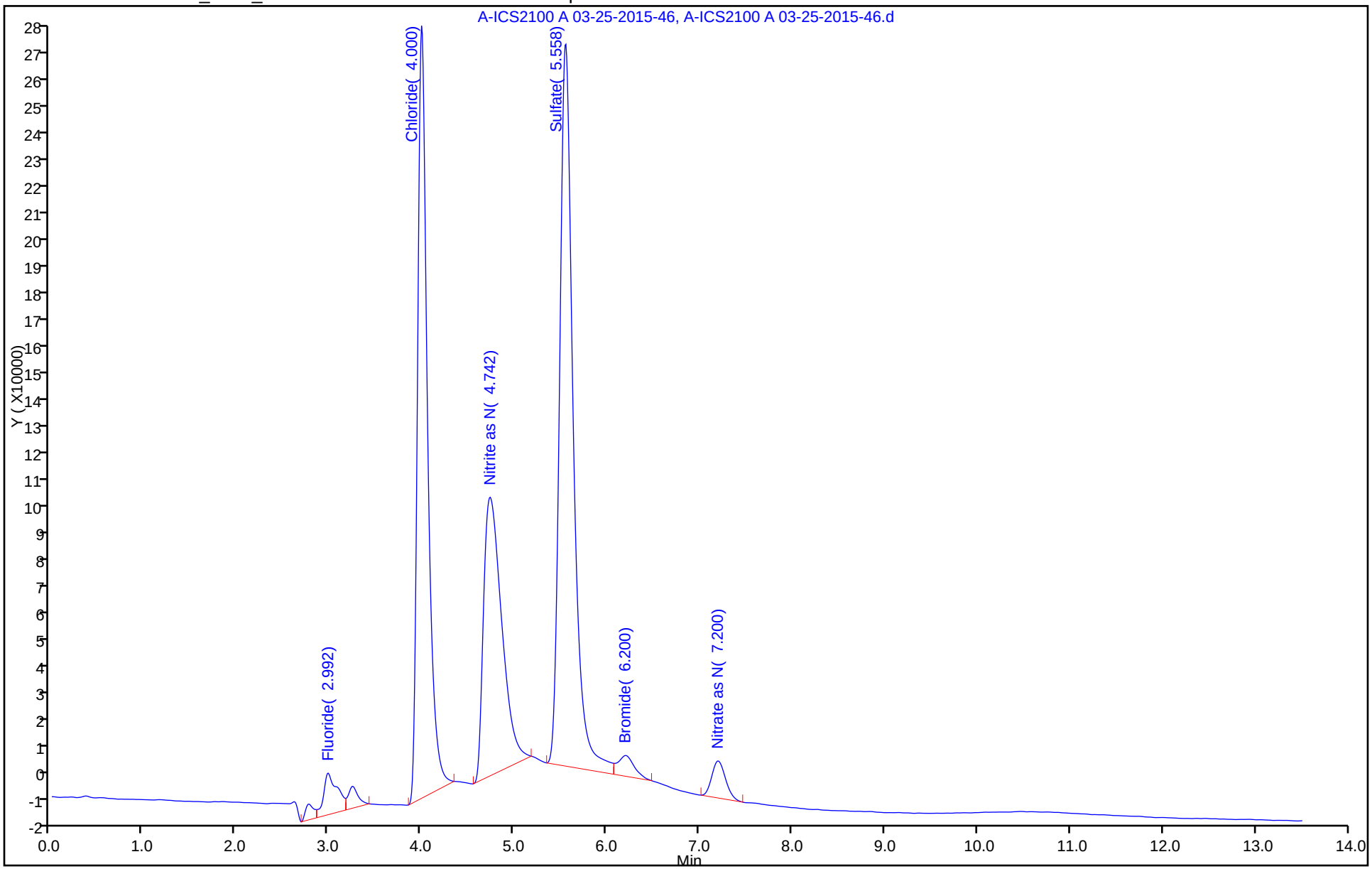
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.992	3.000	-0.008	158364		0.004886	
2 Chloride	4.000	4.000	0.000	2126575		0.3863	
7 Nitrite as N	4.742	4.675	0.067	1396270		0.007227	
3 Sulfate	5.558	5.483	0.075	2710647		0.1747	
4 Bromide	6.200	6.200	0.000	93702		0.009894	
5 Nitrate as N	7.200	7.150	0.050	140344		0.0307	
6 Orthophosphate as P		10.275				ND	

Report Date: 26-Mar-2015 11:13:52 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-46.d

Injection Date:	26-Mar-2015 00:13:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	mb			Worklist Smp#:	46
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.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: CCB 180-136546/4

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-4.d

Analysis Method: 300.0 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 12:23

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.0314	J	0.10	0.0062
16887-00-6	Chloride	0.384	J	1.0	0.20
14808-79-8	Sulfate	0.220	J	1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-4.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 25-Mar-2015 12:23:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-004
Misc. Info.: 4 CCB
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:31 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: XAWRK012

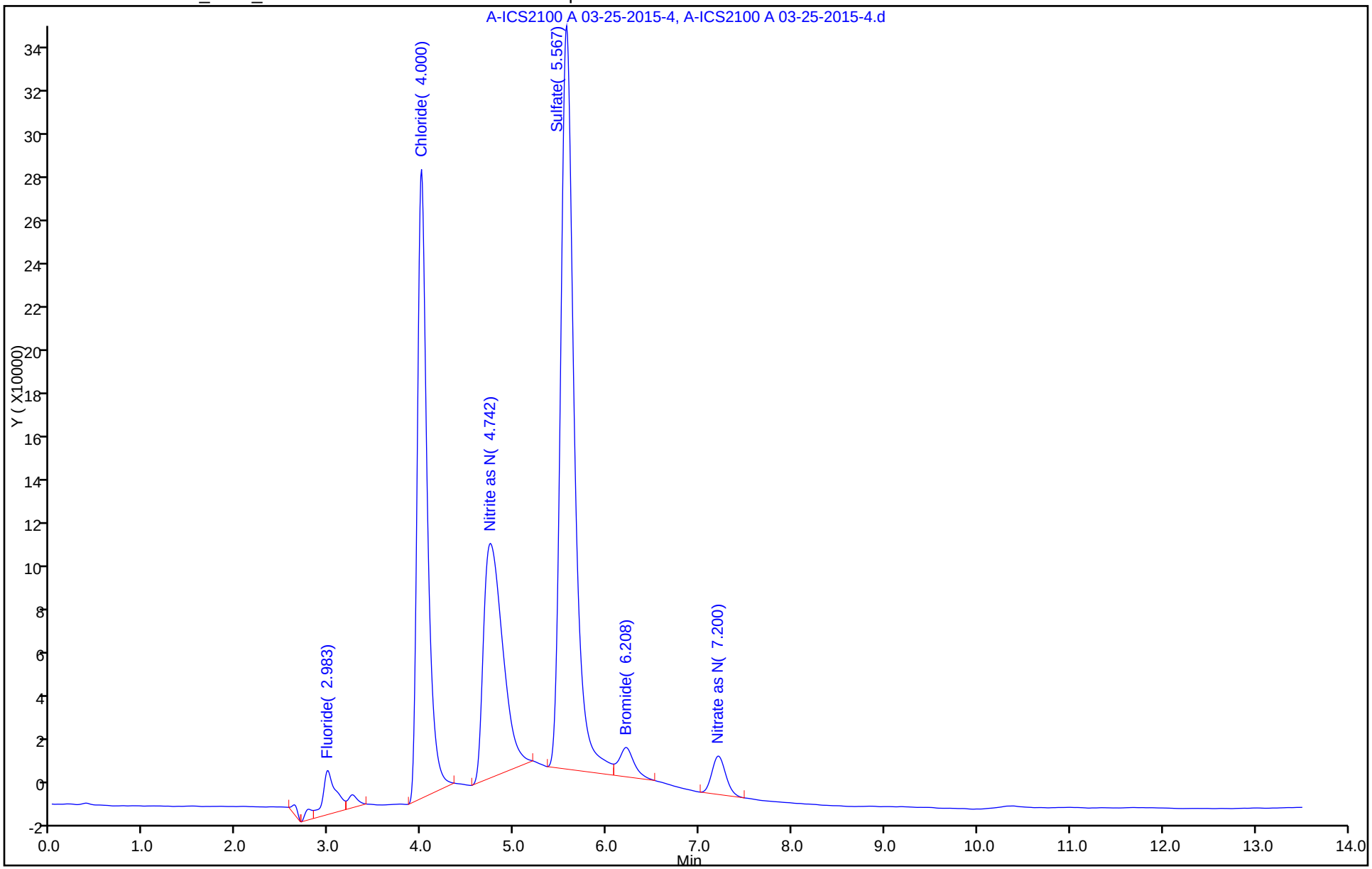
First Level Reviewer: hartmanm Date: 25-Mar-2015 13:08:27

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.983	3.000	-0.017	189751		0.005855	
2 Chloride	4.000	3.992	0.008	2085150		0.3843	
7 Nitrite as N	4.742	4.675	0.067	1509412		0.0099	
3 Sulfate	5.567	5.492	0.075	3386733		0.2200	
4 Bromide	6.208	6.200	0.008	149713		0.0158	
5 Nitrate as N	7.200	7.150	0.050	177296		0.0314	
6 Orthophosphate as P		10.167				ND	

Report Date: 26-Mar-2015 11:13:32 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-4.d				
Injection Date:	25-Mar-2015 12:23:00	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.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: CCB 180-136546/16

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-16.d

Analysis Method: 300.0 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 15:39

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.0311	J	0.10	0.0062
16887-00-6	Chloride	0.387	J	1.0	0.20
14808-79-8	Sulfate	0.292	J	1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-16.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 25-Mar-2015 15:39:00 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-016
Misc. Info.: 16 ccb
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:39 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

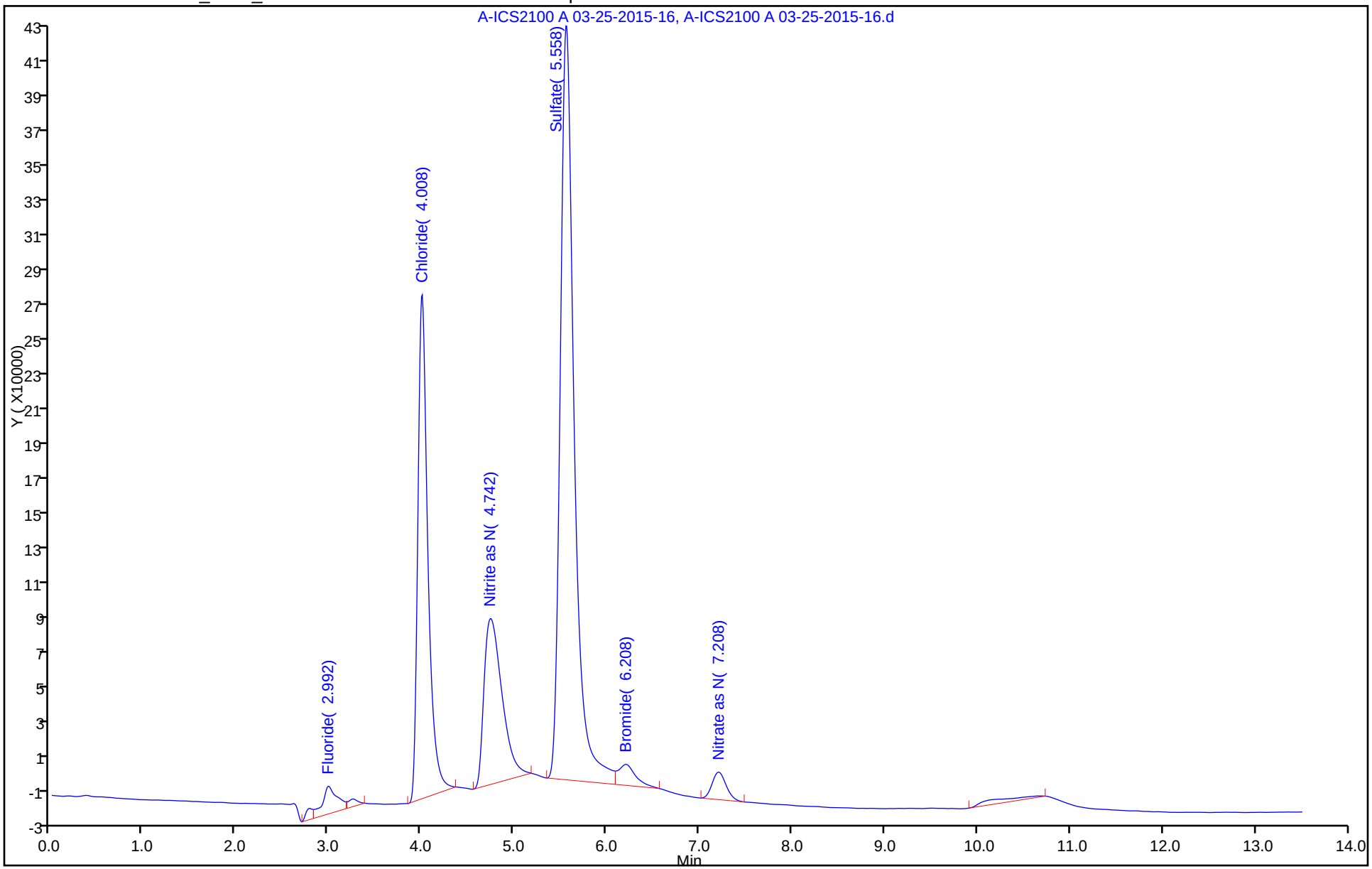
Column 1 : Det: 0008
Process Host: XAWRK012

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.992	3.000	-0.008	175472		0.005414	
2 Chloride	4.008	4.000	0.008	2144799		0.3872	
7 Nitrite as N	4.742	4.675	0.067	1264667		0.004079	
3 Sulfate	5.558	5.483	0.075	4462630		0.2921	
4 Bromide	6.208	6.200	0.008	154819		0.0163	
5 Nitrate as N	7.208	7.150	0.058	163504		0.0311	
6 Orthophosphate as P		10.192				ND	

Report Date: 26-Mar-2015 11:13:40 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-16.d				
Injection Date:	25-Mar-2015 15:39:00	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.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: CCB 180-136546/28

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-28.d

Analysis Method: 300.0 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 19:01

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.0312	J	0.10	0.0062
16887-00-6	Chloride	0.409	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\20150325-6176.b\A-ICS2100 A 03-25-2015-28.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 25-Mar-2015 19:01:00 ALS Bottle#: 0 Worklist Smp#: 28
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-028
Misc. Info.: 28 ccb
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:45 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: XAWRK012

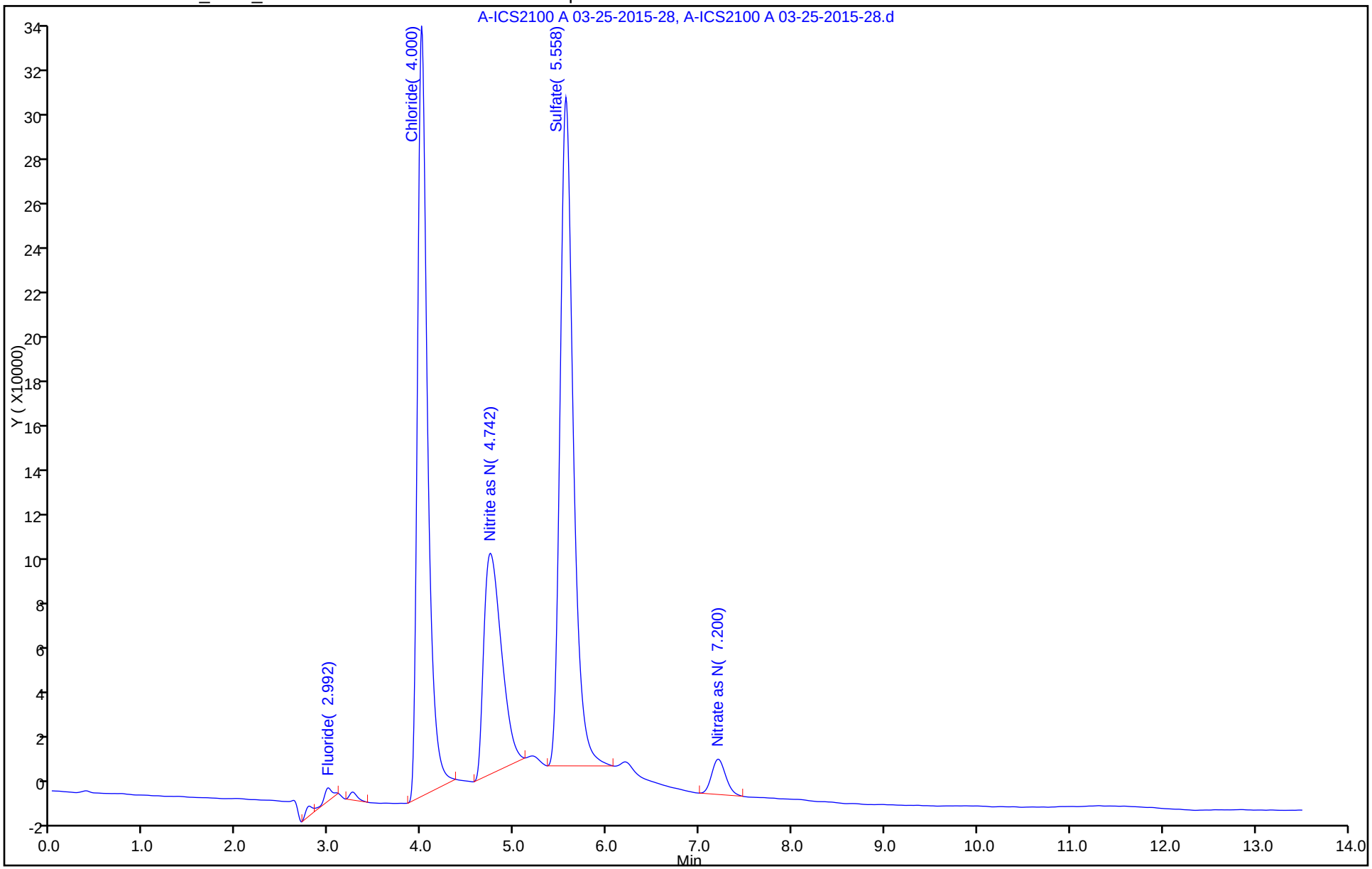
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.992	3.000	-0.008	36050		0.001112	
2 Chloride	4.000	4.000	0.000	2602745		0.4092	
7 Nitrite as N	4.742	4.675	0.067	1305110		0.005046	
3 Sulfate	5.558	5.483	0.075	2971038		0.1921	
4 Bromide		6.200				ND	
5 Nitrate as N	7.200	7.150	0.050	166135		0.0312	
6 Orthophosphate as P		10.250				ND	

Report Date: 26-Mar-2015 11:13:45 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-28.d

Injection Date:	25-Mar-2015 19:01:00	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.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: CCB 180-136546/40

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-40.d

Analysis Method: 300.0 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 22:29

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 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	0.405	J	1.0	0.20
14808-79-8	Sulfate	0.222	J	1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-40.d
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 25-Mar-2015 22:29:00 ALS Bottle#: 0 Worklist Smp#: 40
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-040
Misc. Info.: 40 ccb
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:49 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

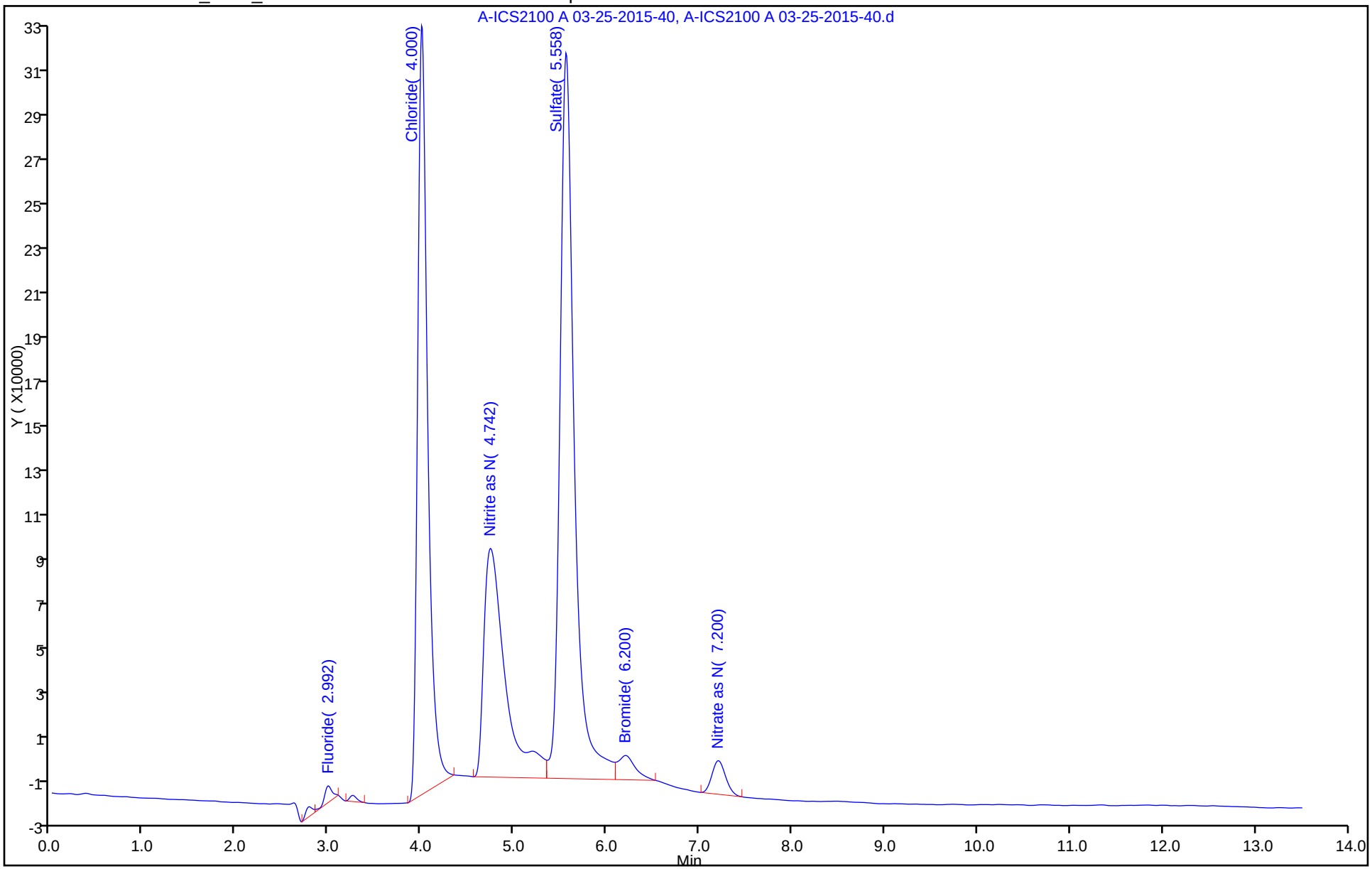
Column 1 : Det: 0008
Process Host: XAWRK012

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.992	3.000	-0.008	41385		0.001277	
2 Chloride	4.000	4.000	0.000	2521699		0.4053	
7 Nitrite as N	4.742	4.675	0.067	1599416		0.0121	
3 Sulfate	5.558	5.483	0.075	3422552		0.2224	
4 Bromide	6.200	6.200	0.000	138685		0.0146	
5 Nitrate as N	7.200	7.150	0.050	150181		0.0309	
6 Orthophosphate as P		10.275				ND	

Report Date: 26-Mar-2015 11:13:50 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-40.d				
Injection Date:	25-Mar-2015 22:29:00	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.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: CCB 180-136546/52

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-52.d

Analysis Method: 300.0 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 01:57

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.0316	J	0.10	0.0062
16887-00-6	Chloride	0.429	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\20150325-6176.b\A-ICS2100 A 03-25-2015-52.d
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 26-Mar-2015 01:57:00 ALS Bottle#: 0 Worklist Smp#: 52
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-052
Misc. Info.: 52 ccb
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:54 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

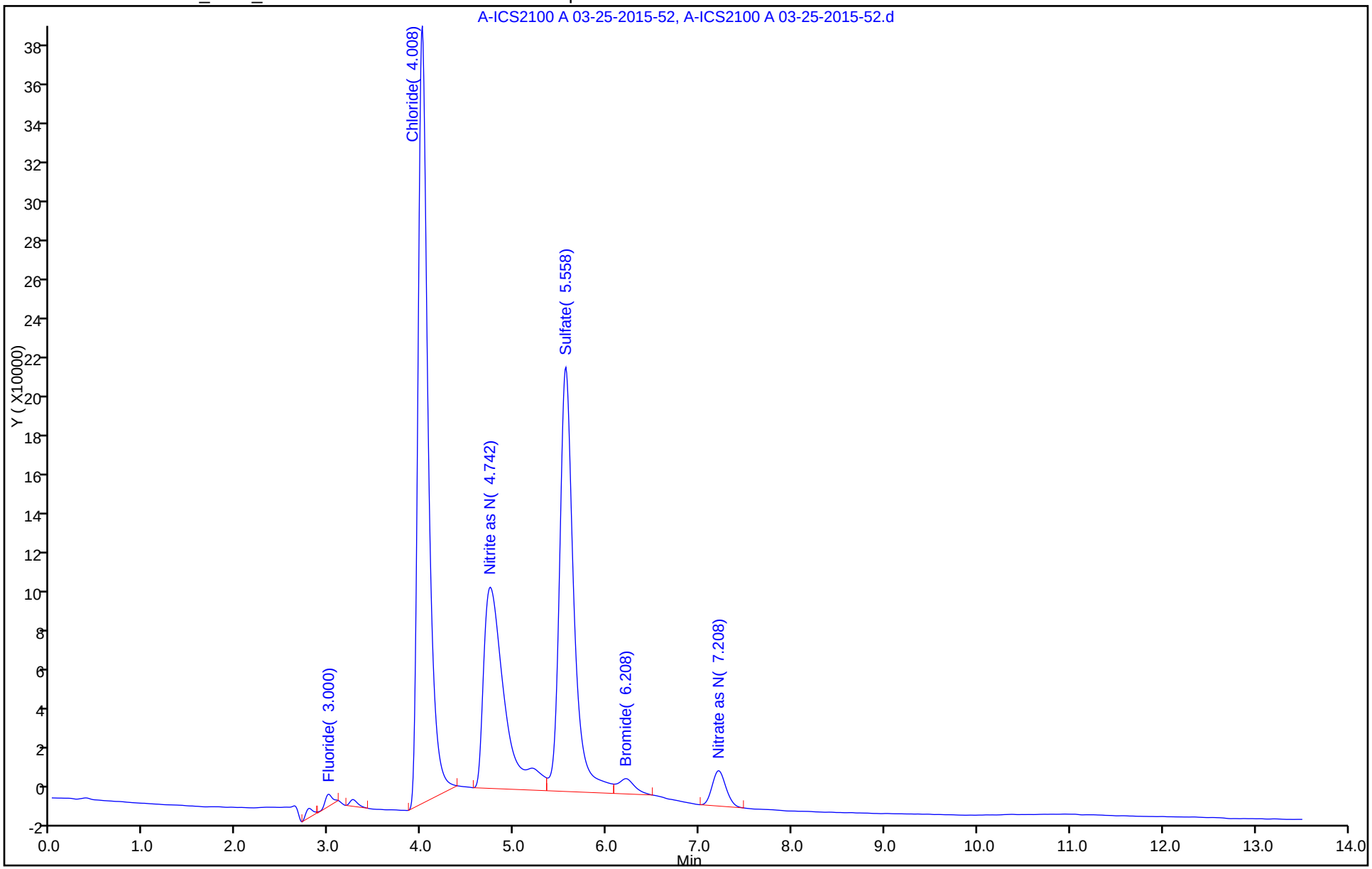
Column 1 : Det: 0008
Process Host: XAWRK012

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	33390		0.001030	
2 Chloride	4.008	4.000	0.008	3020425		0.4292	
7 Nitrite as N	4.742	4.675	0.067	1610779		0.0124	
3 Sulfate	5.558	5.483	0.075	2312652		0.1480	
4 Bromide	6.208	6.192	0.016	99729		0.0105	
5 Nitrate as N	7.208	7.150	0.058	185527		0.0316	
6 Orthophosphate as P		10.258				ND	

Report Date: 26-Mar-2015 11:13:54 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-52.d				
Injection Date:	26-Mar-2015 01:57:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	CCB			Worklist Smp#:	52
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.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: CCB 180-136546/64

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-64.d

Analysis Method: 300.0 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 05:25

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.0320	J	0.10	0.0062
16887-00-6	Chloride	0.441	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\20150325-6176.b\A-ICS2100 A 03-25-2015-64.d
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 26-Mar-2015 05:25:00 ALS Bottle#: 0 Worklist Smp#: 64
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-064
Misc. Info.: 64 ccb
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:58 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

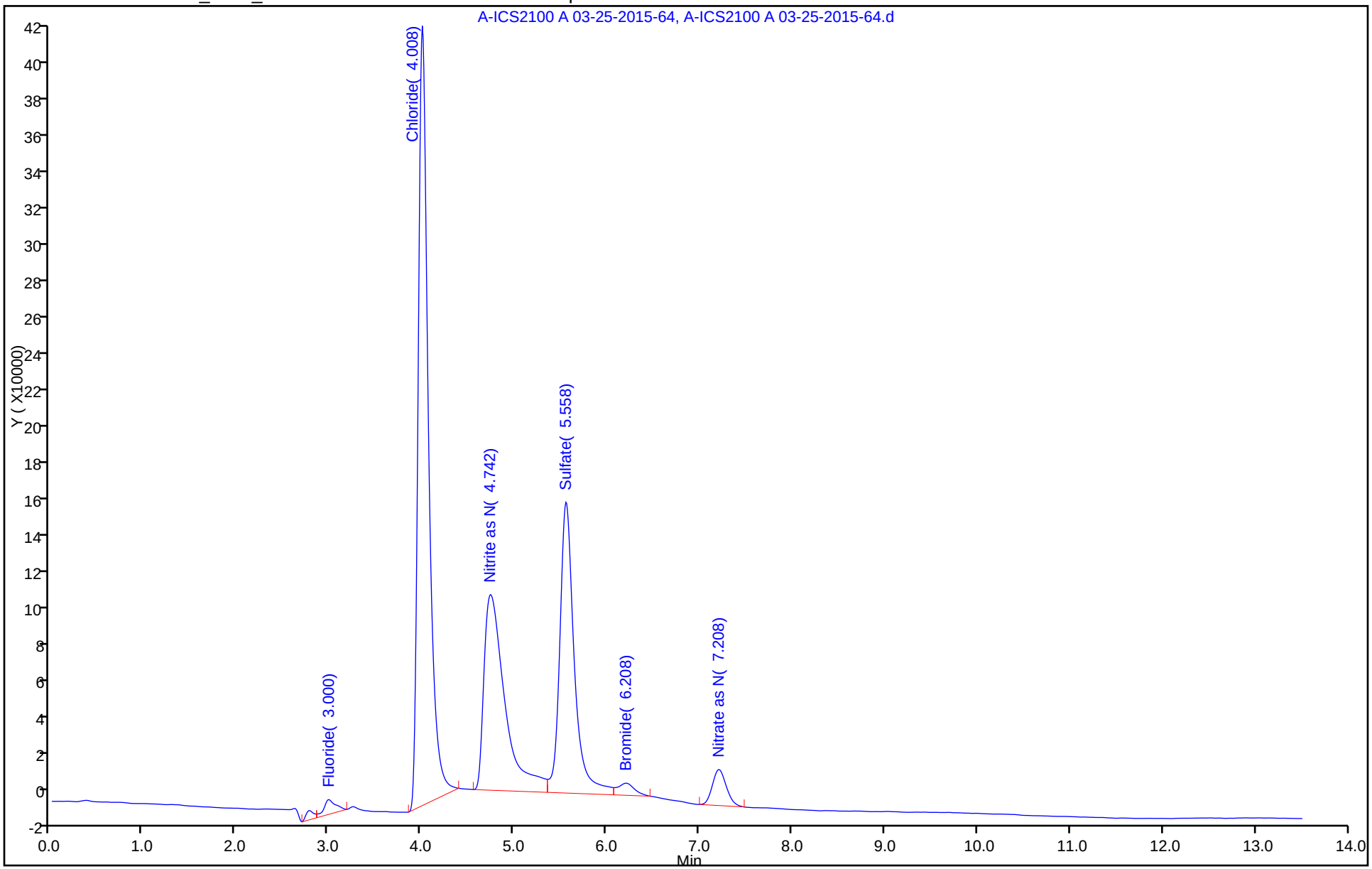
Column 1 : Det: 0008
Process Host: XAWRK012

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	71657		0.002211	
2 Chloride	4.008	4.000	0.008	3258047		0.4406	
7 Nitrite as N	4.742	4.675	0.067	1673701		0.0139	
3 Sulfate	5.558	5.483	0.075	1723370		0.1085	
4 Bromide	6.208	6.200	0.008	82938		0.008758	
5 Nitrate as N	7.208	7.150	0.058	204404		0.0320	
6 Orthophosphate as P		10.283				ND	

Report Date: 26-Mar-2015 11:13:58 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-64.d				
Injection Date:	26-Mar-2015 05:25:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	CCB			Worklist Smp#:	64
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.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: CCB 180-136546/75

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-75.d

Analysis Method: 300.0 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 08:31

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.0313	J	0.10	0.0062
16887-00-6	Chloride	0.413	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\20150325-6176.b\A-ICS2100 A 03-25-2015-75.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 26-Mar-2015 08:31:00 ALS Bottle#: 0 Worklist Smp#: 75
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-075
Misc. Info.: 76 ccb
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:14:02 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

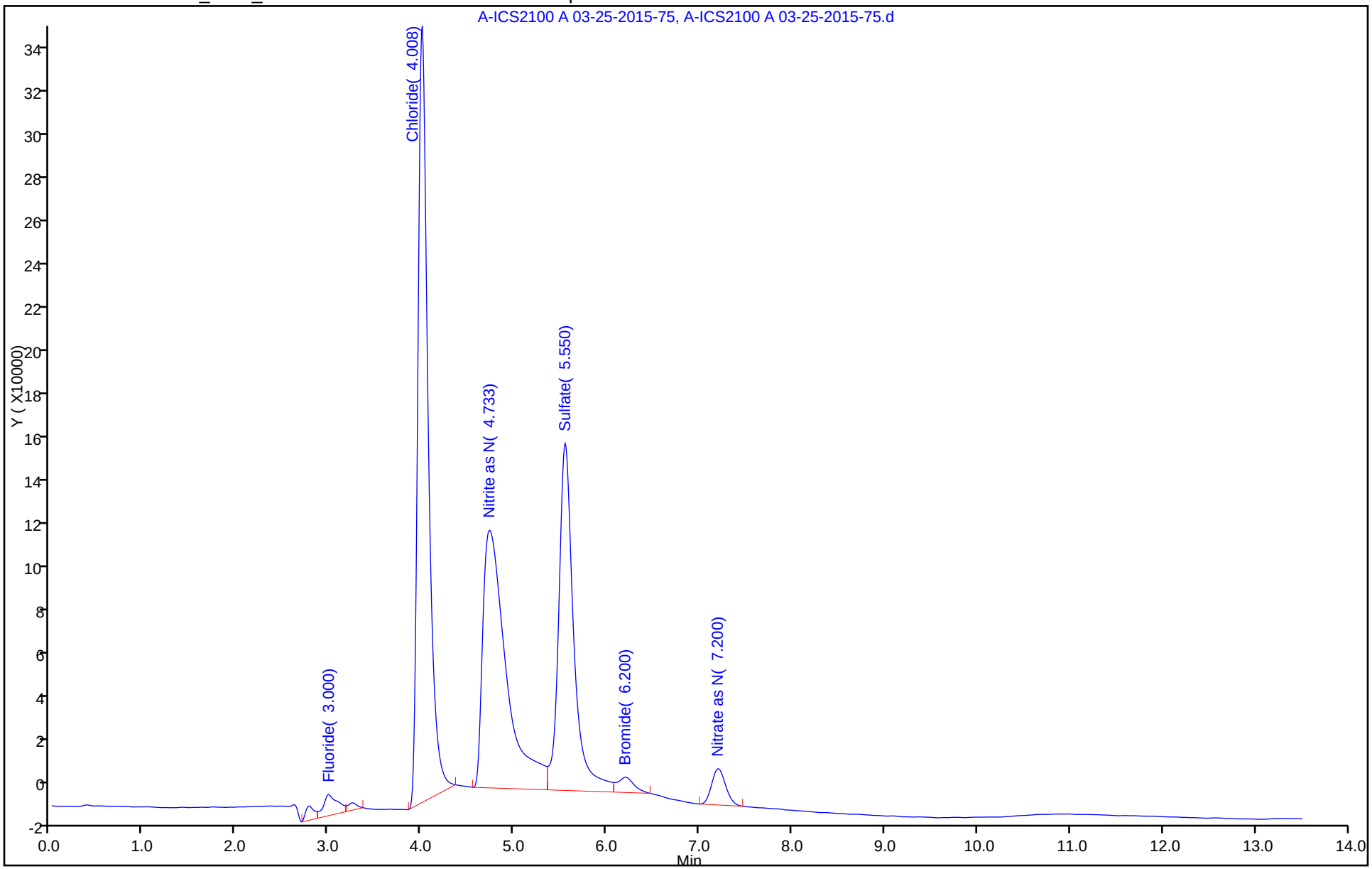
Column 1 : Det: 0008
Process Host: XAWRK012

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	101489		0.003132	
2 Chloride	4.008	3.992	0.016	2681719		0.4130	
7 Nitrite as N	4.733	4.667	0.066	2032409		0.0224	
3 Sulfate	5.550	5.475	0.075	1750255		0.1103	
4 Bromide	6.200	6.192	0.008	84419		0.008914	
5 Nitrate as N	7.200	7.142	0.058	170011		0.0313	
6 Orthophosphate as P		10.225				ND	

Report Date: 26-Mar-2015 11:14:03 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-75.d				
Injection Date:	26-Mar-2015 08:31:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	75
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.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-136546/5

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-5.d

Analysis Method: 300.0 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 12:40

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	2.55		0.10	0.0062
16887-00-6	Chloride	48.5		1.0	0.20
14808-79-8	Sulfate	48.5		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-5.d
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 25-Mar-2015 12:40:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006156-005
Misc. Info.: 5 LCS
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:31 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: XAWRK012

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	81488818	2.50	2.51	
2 Chloride	4.000	3.992	0.008	1005491152	50.0	48.5	
7 Nitrite as N	4.675	4.675	0.000	109679847	2.50	2.60	
3 Sulfate	5.492	5.492	0.000	723986874	50.0	48.5	
4 Bromide	6.200	6.200	0.000	88574649	10.0	9.35	
5 Nitrate as N	7.150	7.150	0.000	124167965	2.50	2.55	
6 Orthophosphate as P	10.175	10.167	0.008	40329435	2.50	2.58	

Reagents:

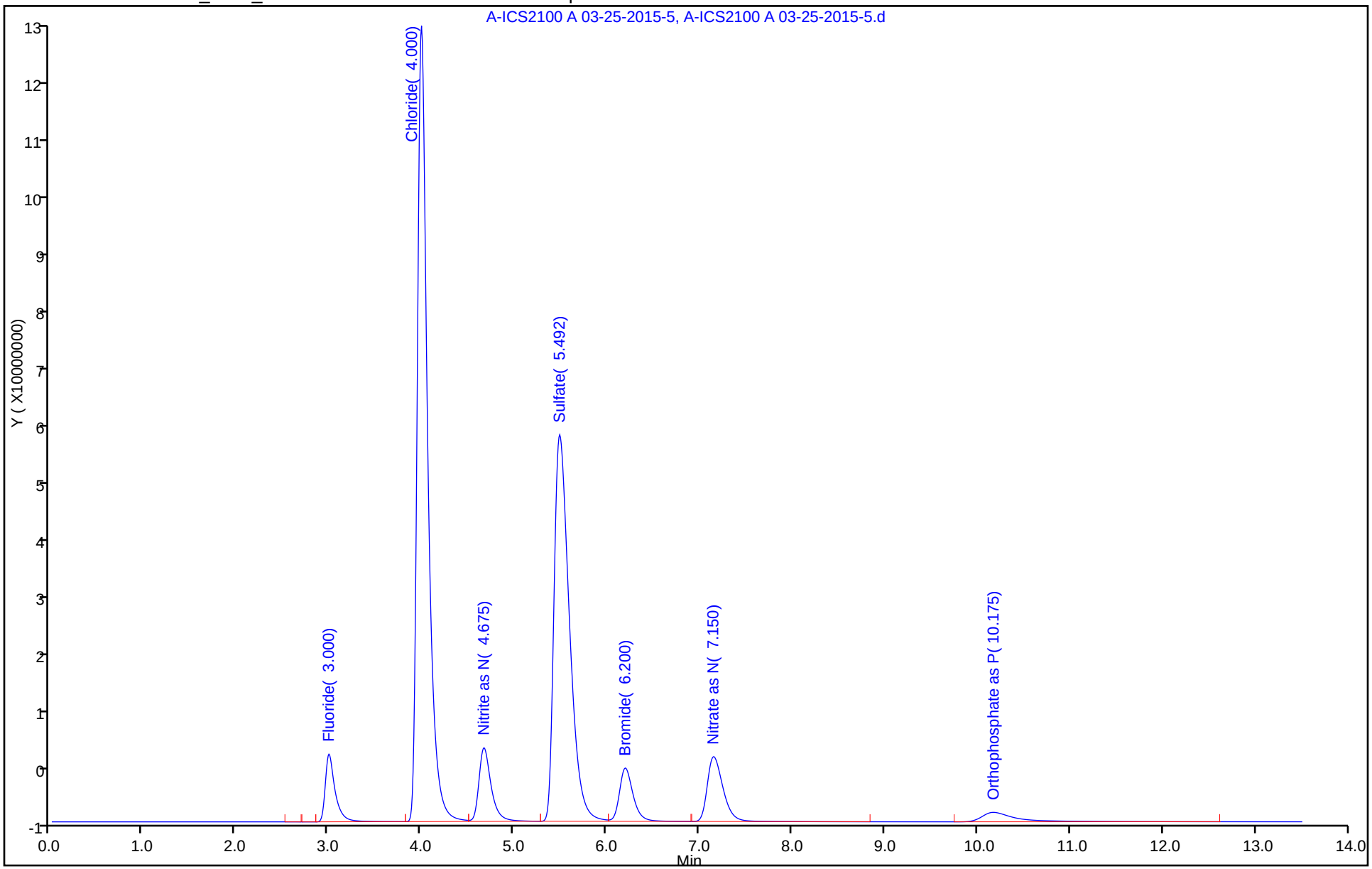
icccv_01200 Amount Added: 1.00 Units: mL

Report Date: 26-Mar-2015 11:13:33 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-5.d

Injection Date:	25-Mar-2015 12:40:00	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.: 180-42353-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-136546/45

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-45.d

Analysis Method: 300.0 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 23:56

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	2.59		0.10	0.0062
16887-00-6	Chloride	49.3		1.0	0.20
14808-79-8	Sulfate	49.2		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-45.d
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 25-Mar-2015 23:56:00 ALS Bottle#: 0 Worklist Smp#: 45
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-045
Misc. Info.: 45 LCS
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:49 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: XAWRK012

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.008	3.000	0.008	82217603	2.50	2.54	
2 Chloride	4.008	4.000	0.008	1022064512	50.0	49.3	
7 Nitrite as N	4.675	4.675	0.000	110083815	2.50	2.61	
3 Sulfate	5.483	5.483	0.000	735064528	50.0	49.2	
4 Bromide	6.200	6.200	0.000	89945775	10.0	9.50	
5 Nitrate as N	7.158	7.150	0.008	126215955	2.50	2.59	
6 Orthophosphate as P	10.242	10.275	-0.033	34786478	2.50	2.27	

Reagents:

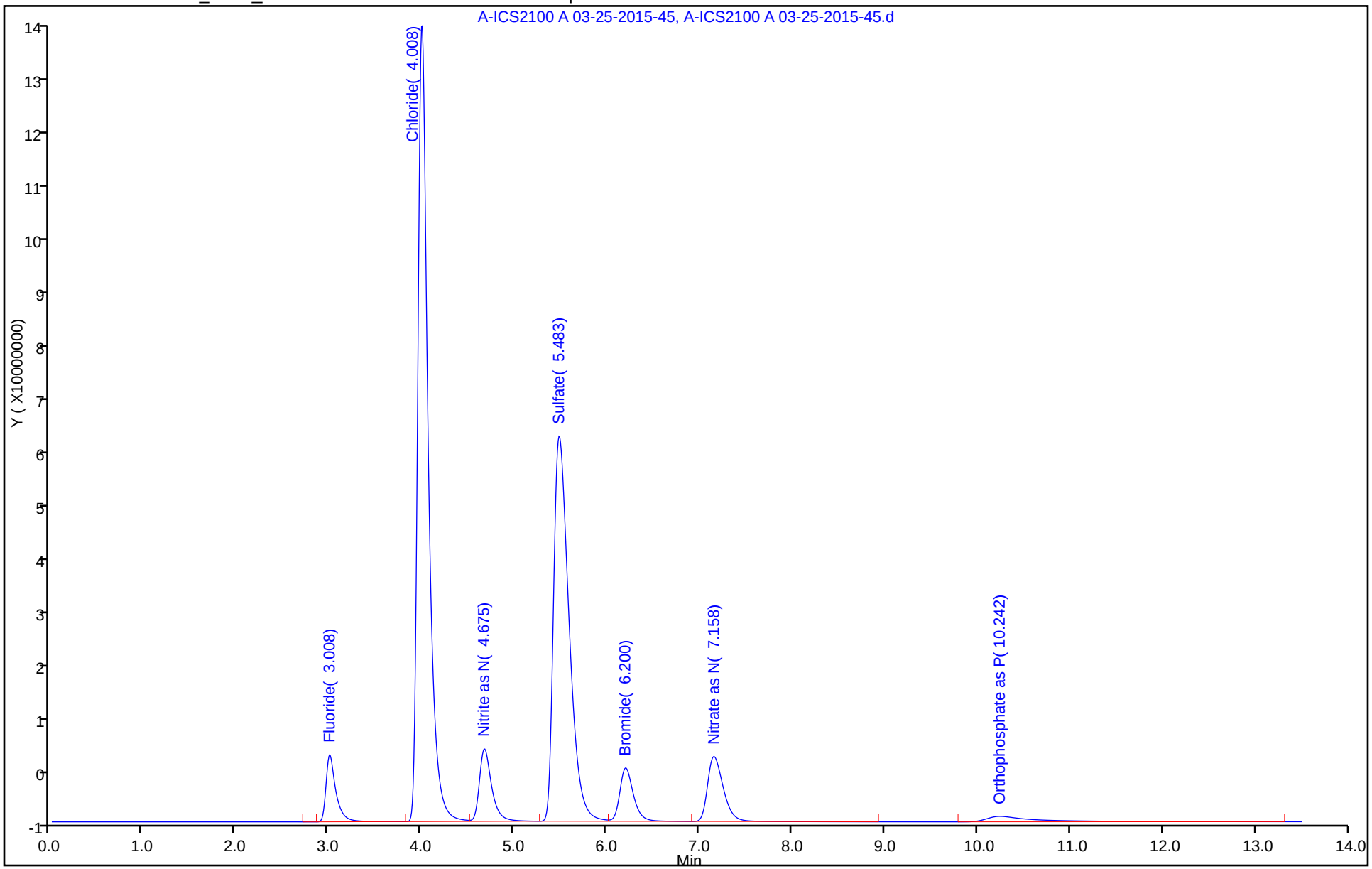
icccv_01200 Amount Added: 1.00 Units: mL

Report Date: 26-Mar-2015 11:13:52 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-45.d

Injection Date:	25-Mar-2015 23:56:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	lcs			Worklist Smp#:	45
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-99S-0/1-0 MS Lab Sample ID: 180-42353-20 MS

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-37.d

Analysis Method: 300.0 Date Collected: 03/24/2015 09:15

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 21:37

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	4.12		0.10	0.0062
16887-00-6	Chloride	112		1.0	0.20
14808-79-8	Sulfate	54.2		1.0	0.21

Report Date: 26-Mar-2015 11:13:49 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-37.d
Lims ID: 180-42353-A-20 MS
Client ID: HD-MW-99S-0/1-0
Sample Type: MS
Inject. Date: 25-Mar-2015 21:37:00 ALS Bottle#: 0 Worklist Smp#: 37
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-037
Misc. Info.: 37 180-42353-A-20 MS
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:45 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: XAWRK012

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	44632968	1.25	1.38	
2 Chloride	3.983	4.000	-0.017	2331776288	25.0	112.2	
7 Nitrite as N		4.675				ND	
3 Sulfate	5.467	5.483	-0.016	808666929	25.0	54.2	
4 Bromide	6.200	6.200	0.000	45047956	5.00	4.76	
5 Nitrate as N	7.125	7.150	-0.025	201827392	1.25	4.12	
6 Orthophosphate as P		10.250			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

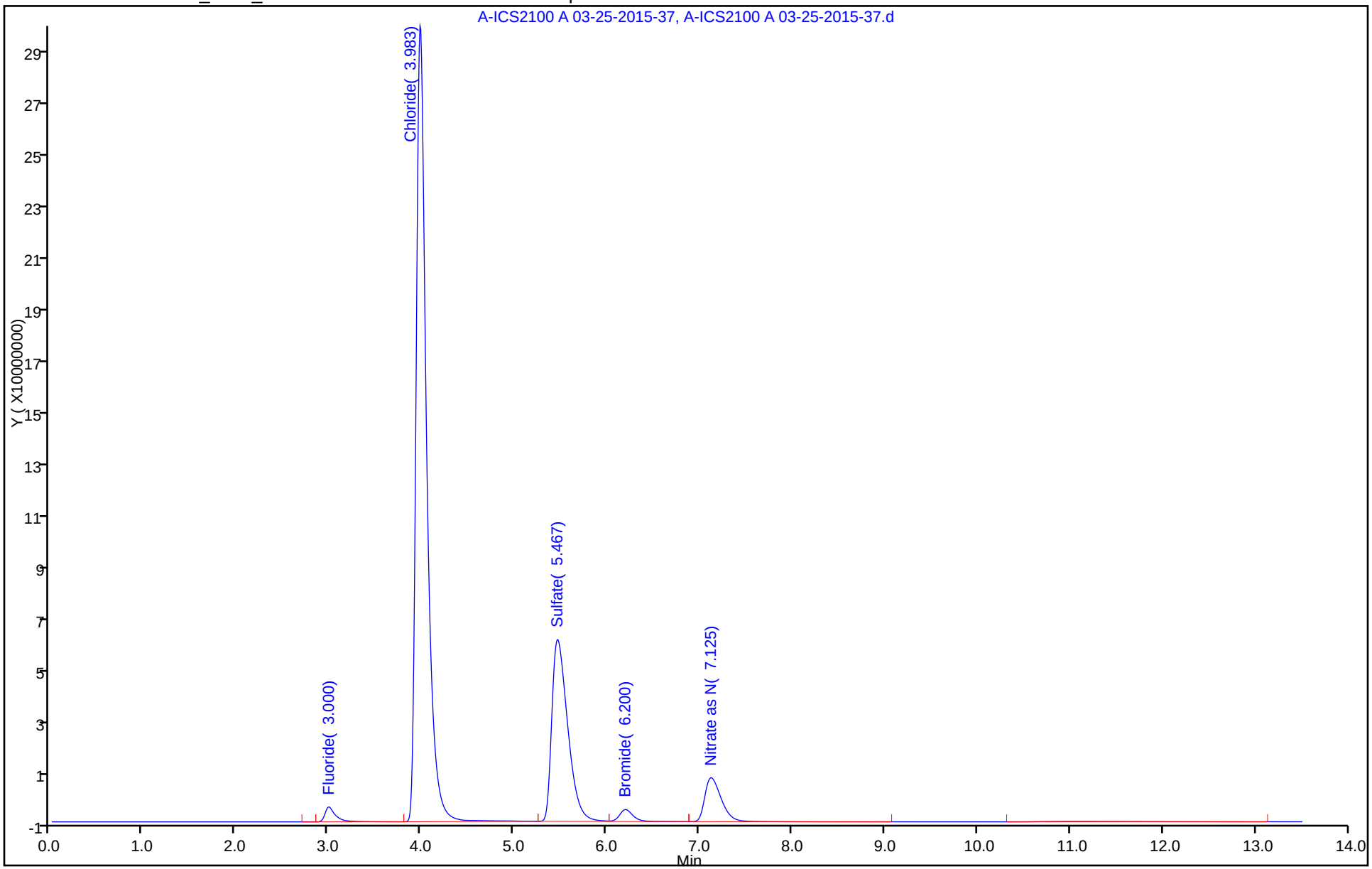
Reagents:

ICPRIMARYSTA_00006 Amount Added: 0.15 Units: mL

Report Date: 26-Mar-2015 11:13:49 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-37.d				
Injection Date:	25-Mar-2015 21:37:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-20 MS			Worklist Smp#:	37
Client ID:	HD-MW-99S-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.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-99D-0/1-0 MS Lab Sample ID: 180-42353-21 MS

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-54.d

Analysis Method: 300.0 Date Collected: 03/24/2015 13:05

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 02:32

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.39		0.10	0.0062
16887-00-6	Chloride	78.1		1.0	0.20
14808-79-8	Sulfate	48.1		1.0	0.21

Report Date: 26-Mar-2015 11:13:55 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-54.d
Lims ID: 180-42353-A-21 MS
Client ID:
Sample Type: MS
Inject. Date: 26-Mar-2015 02:32:00 ALS Bottle#: 0 Worklist Smp#: 54
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-054
Misc. Info.: 54 180-42353-a-21 ms
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:54 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: XAWRK012

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	40324195	1.25	1.24	
2 Chloride	3.992	4.000	-0.008	1621546228	25.0	78.1	
7 Nitrite as N	4.617	4.675	-0.058	13917144		0.3067	
3 Sulfate	5.475	5.483	-0.008	717876521	25.0	48.1	
4 Bromide	6.208	6.192	0.016	46362127	5.00	4.90	
5 Nitrate as N	7.142	7.150	-0.008	165841950	1.25	3.39	
6 Orthophosphate as P		10.258			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

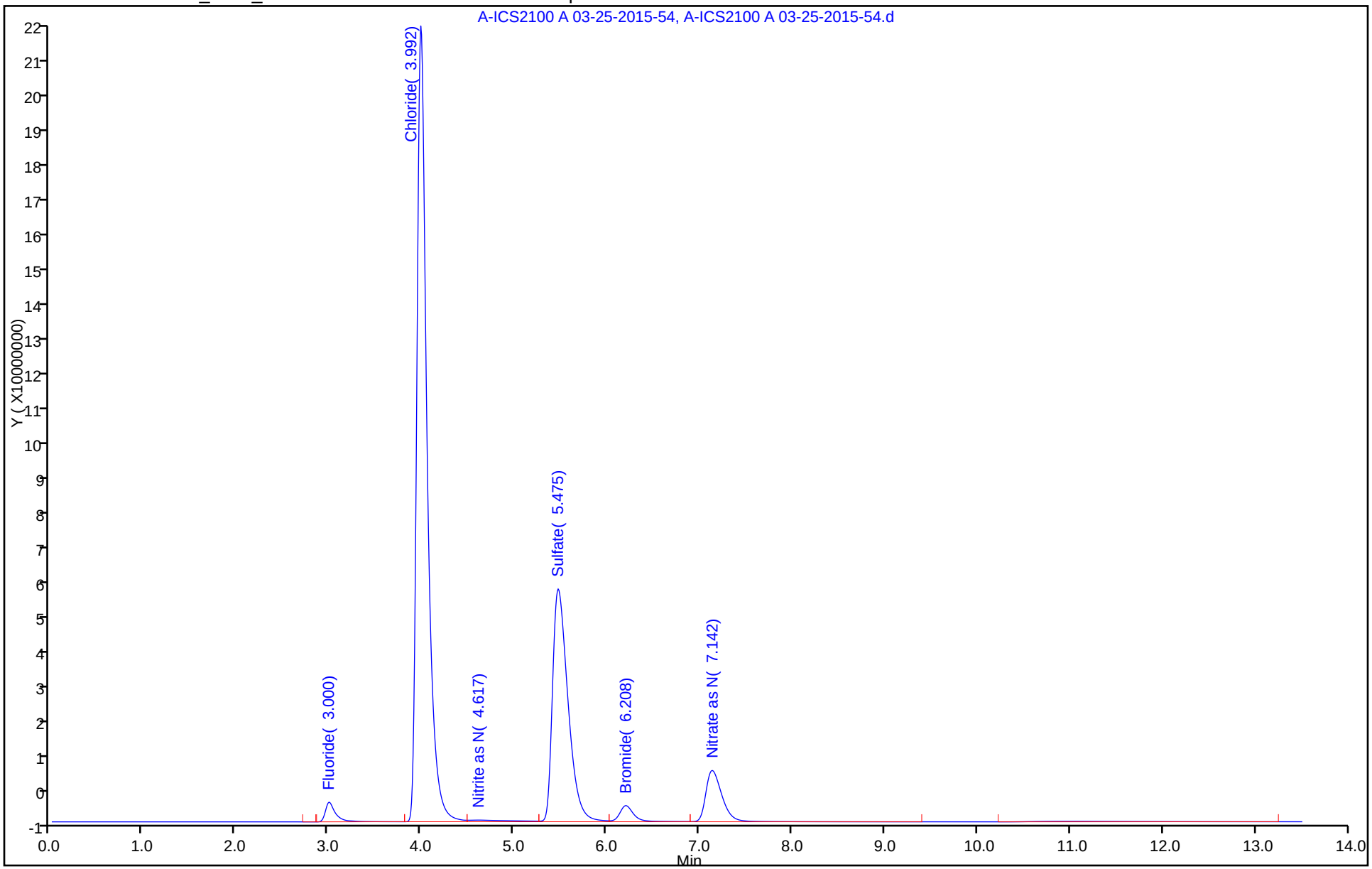
ICPRIMARYSTA_00006 Amount Added: 0.15 Units: mL

Report Date: 26-Mar-2015 11:13:55 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-54.d

Injection Date:	26-Mar-2015 02:32:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-21 MS			Worklist Smp#:	54
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-100I-0/1-0 MS Lab Sample ID: 180-42353-24 MS

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-66.d

Analysis Method: 300.0 Date Collected: 03/24/2015 14:00

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 05:59

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	4.80		0.10	0.0062
16887-00-6	Chloride	134		1.0	0.20
14808-79-8	Sulfate	56.1		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-66.d
Lims ID: 180-42353-A-24 MS
Client ID:
Sample Type: MS
Inject. Date: 26-Mar-2015 05:59:00 ALS Bottle#: 0 Worklist Smp#: 66
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-066
Misc. Info.: 66 180-42353-a-24 ms
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:58 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: XAWRK012

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	40719026	1.25	1.26	
2 Chloride	3.983	4.000	-0.017	2777900936	25.0	133.6	
7 Nitrite as N		4.675				ND	
3 Sulfate	5.467	5.483	-0.016	836919412	25.0	56.1	
4 Bromide	6.200	6.200	0.000	42310503	5.00	4.47	
5 Nitrate as N	7.117	7.150	-0.033	235285756	1.25	4.80	
6 Orthophosphate as P		10.283			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

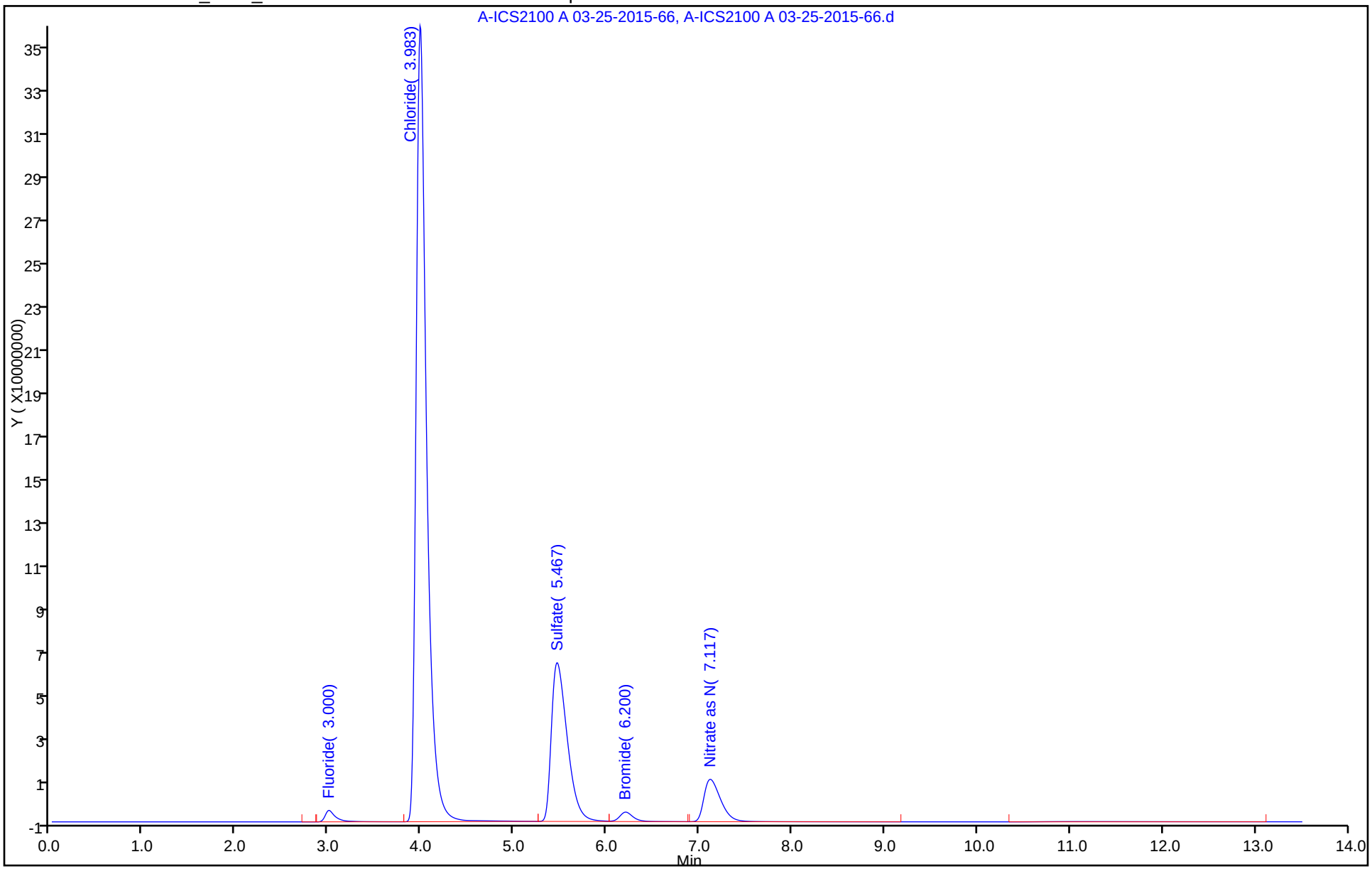
Reagents:

ICPRIMARYSTA_00006 Amount Added: 0.15 Units: mL

Report Date: 26-Mar-2015 11:13:59 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-66.d				
Injection Date:	26-Mar-2015 05:59:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-24 MS			Worklist Smp#:	66
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-99S-0/1-0 MSD Lab Sample ID: 180-42353-20 MSD

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-38.d

Analysis Method: 300.0 Date Collected: 03/24/2015 09:15

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/25/2015 21:55

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.96		0.10	0.0062
16887-00-6	Chloride	108		1.0	0.20
14808-79-8	Sulfate	51.6		1.0	0.21

Report Date: 26-Mar-2015 11:13:49 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-38.d
Lims ID: 180-42353-A-20 MSD
Client ID: HD-MW-99S-0/1-0
Sample Type: MSD
Inject. Date: 25-Mar-2015 21:55:00 ALS Bottle#: 0 Worklist Smp#: 38
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-038
Misc. Info.: 38 180-42353-A-20 MSD
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:45 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: XAWRK012

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	41678330	1.25	1.29	
2 Chloride	3.992	4.000	-0.008	2243114228	25.0	107.9	
7 Nitrite as N		4.675				ND	
3 Sulfate	5.475	5.483	-0.008	769836898	25.0	51.6	
4 Bromide	6.200	6.200	0.000	43153284	5.00	4.56	
5 Nitrate as N	7.125	7.150	-0.025	193863166	1.25	3.96	
6 Orthophosphate as P		10.250			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

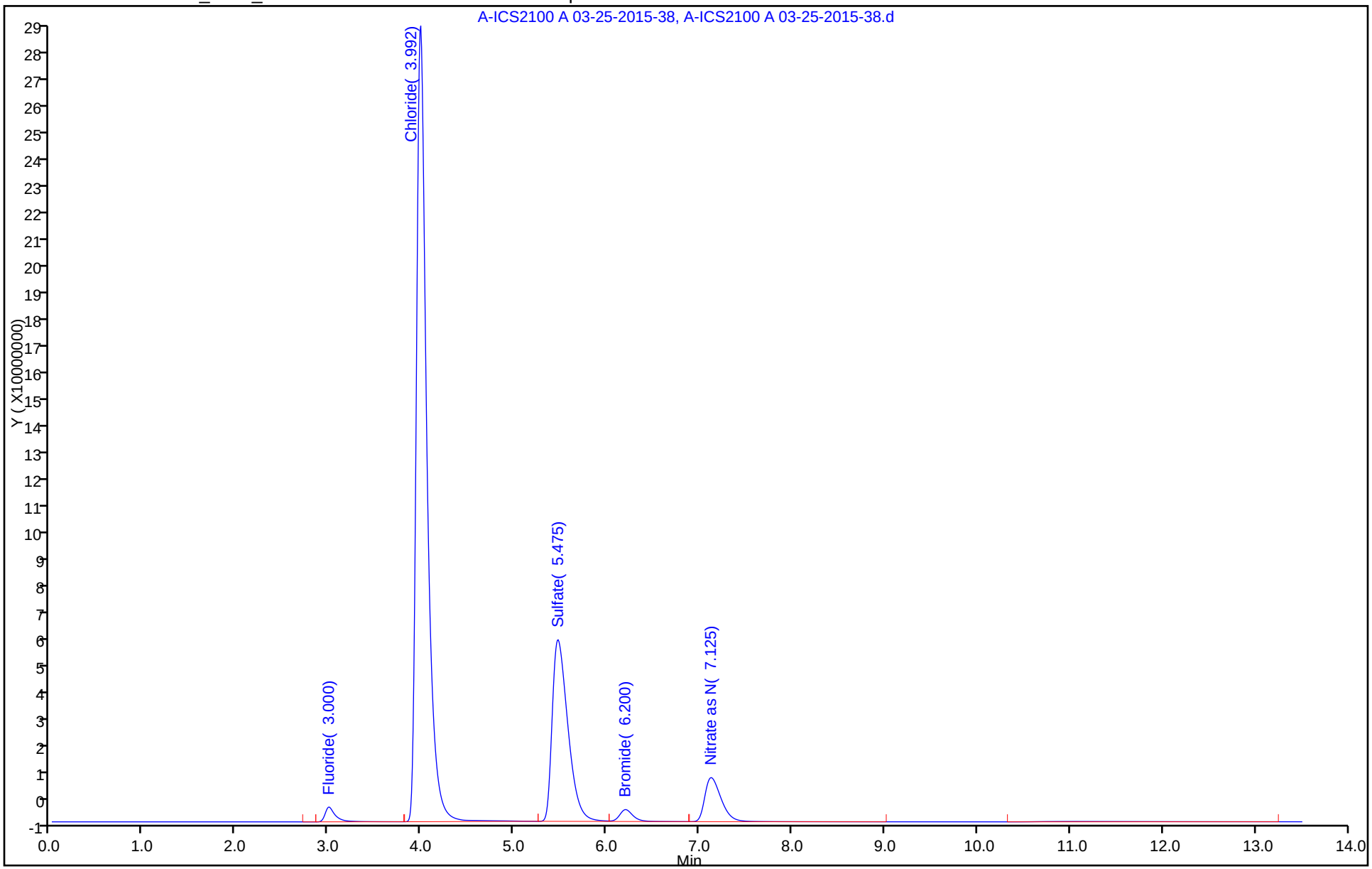
Reagents:

ICPRIMARYSTA_00006 Amount Added: 0.15 Units: mL

Report Date: 26-Mar-2015 11:13:49 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-38.d				
Injection Date:	25-Mar-2015 21:55:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-20 MSD			Worklist Smp#:	38
Client ID:	HD-MW-99S-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.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-99D-0/1-0 MSD Lab Sample ID: 180-42353-21 MSD

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-55.d

Analysis Method: 300.0 Date Collected: 03/24/2015 13:05

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 02:49

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.34		0.10	0.0062
16887-00-6	Chloride	78.8		1.0	0.20
14808-79-8	Sulfate	48.5		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-55.d
Lims ID: 180-42353-A-21 MSD
Client ID:
Sample Type: MSD
Inject. Date: 26-Mar-2015 02:49:00 ALS Bottle#: 0 Worklist Smp#: 55
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-055
Misc. Info.: 55 180-42353-a-21 msd
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:54 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: XAWRK012

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	41583336	1.25	1.28	
2 Chloride	3.992	4.000	-0.008	1635639969	25.0	78.8	
7 Nitrite as N	4.617	4.675	-0.058	12818386		0.2804	
3 Sulfate	5.467	5.483	-0.016	724486775	25.0	48.5	
4 Bromide	6.200	6.192	0.008	44125713	5.00	4.66	
5 Nitrate as N	7.133	7.150	-0.017	163541456	1.25	3.34	
6 Orthophosphate as P		10.258			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

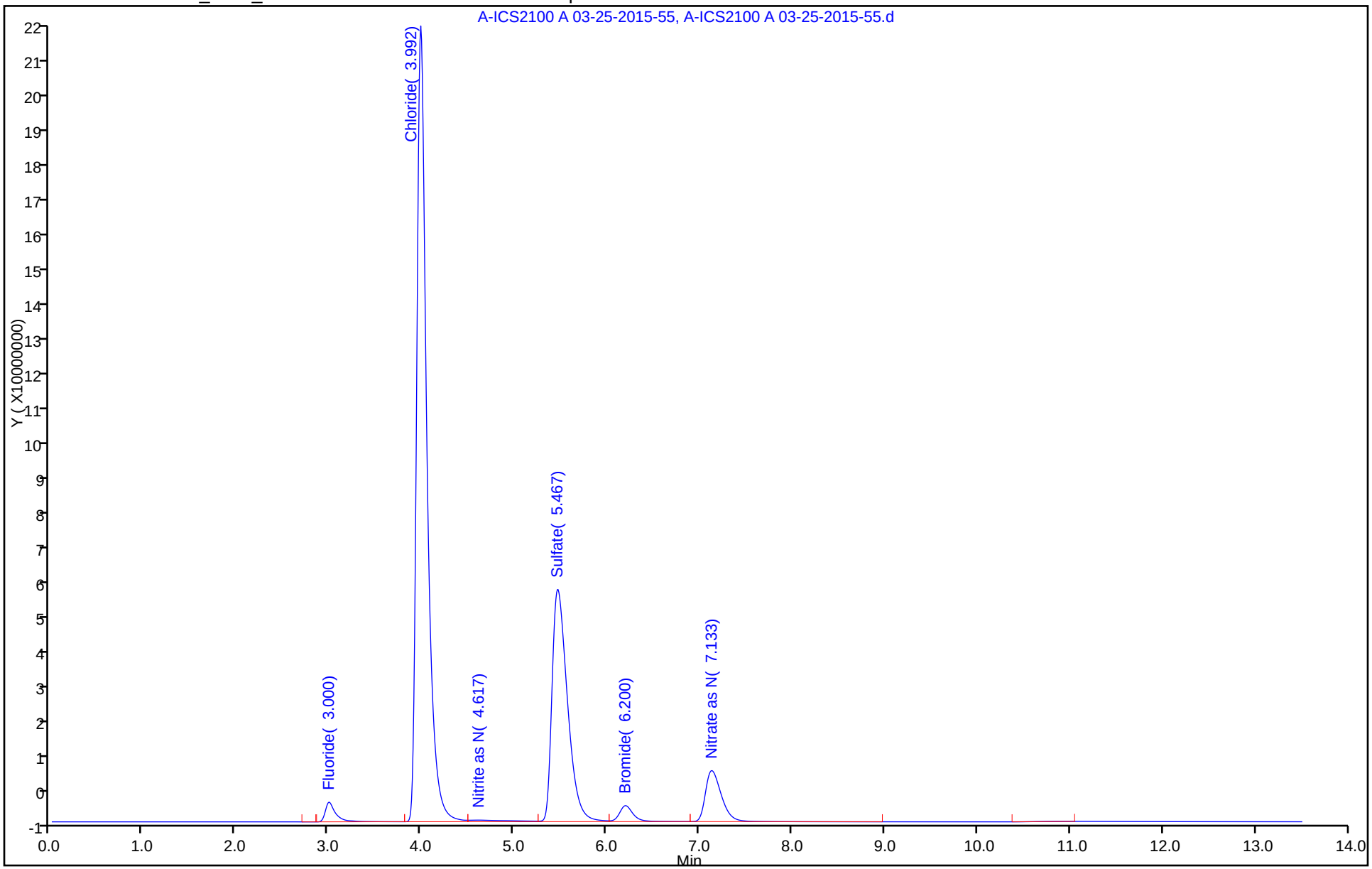
Reagents:

ICPRIMARYSTA_00006 Amount Added: 0.15 Units: mL

Report Date: 26-Mar-2015 11:13:55 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-55.d				
Injection Date:	26-Mar-2015 02:49:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-21 MSD			Worklist Smp#:	55
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.: 180-42353-1

SDG No.:

Client Sample ID: HD-MW-100I-0/1-0 MSD Lab Sample ID: 180-42353-24 MSD

Matrix: Water Lab File ID: A-ICS2100 A 03-25-2015-67.d

Analysis Method: 300.0 Date Collected: 03/24/2015 14:00

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2015 06:17

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136546 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	5.02		0.10	0.0062
16887-00-6	Chloride	140		1.0	0.20
14808-79-8	Sulfate	58.8		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-67.d
Lims ID: 180-42353-A-24 MSD
Client ID:
Sample Type: MSD
Inject. Date: 26-Mar-2015 06:17:00 ALS Bottle#: 0 Worklist Smp#: 67
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006176-067
Misc. Info.: 67 180-42353-a-24 msd
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 26-Mar-2015 11:13:58 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: XAWRK012

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.008	3.000	0.008	42024900	1.25	1.30	
2 Chloride	3.992	4.000	-0.008	2904147444	25.0	139.6	
7 Nitrite as N		4.675				ND	
3 Sulfate	5.467	5.483	-0.016	877490738	25.0	58.8	
4 Bromide	6.208	6.200	0.008	44438331	5.00	4.69	
5 Nitrate as N	7.117	7.150	-0.033	246420347	1.25	5.02	
6 Orthophosphate as P		10.283			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

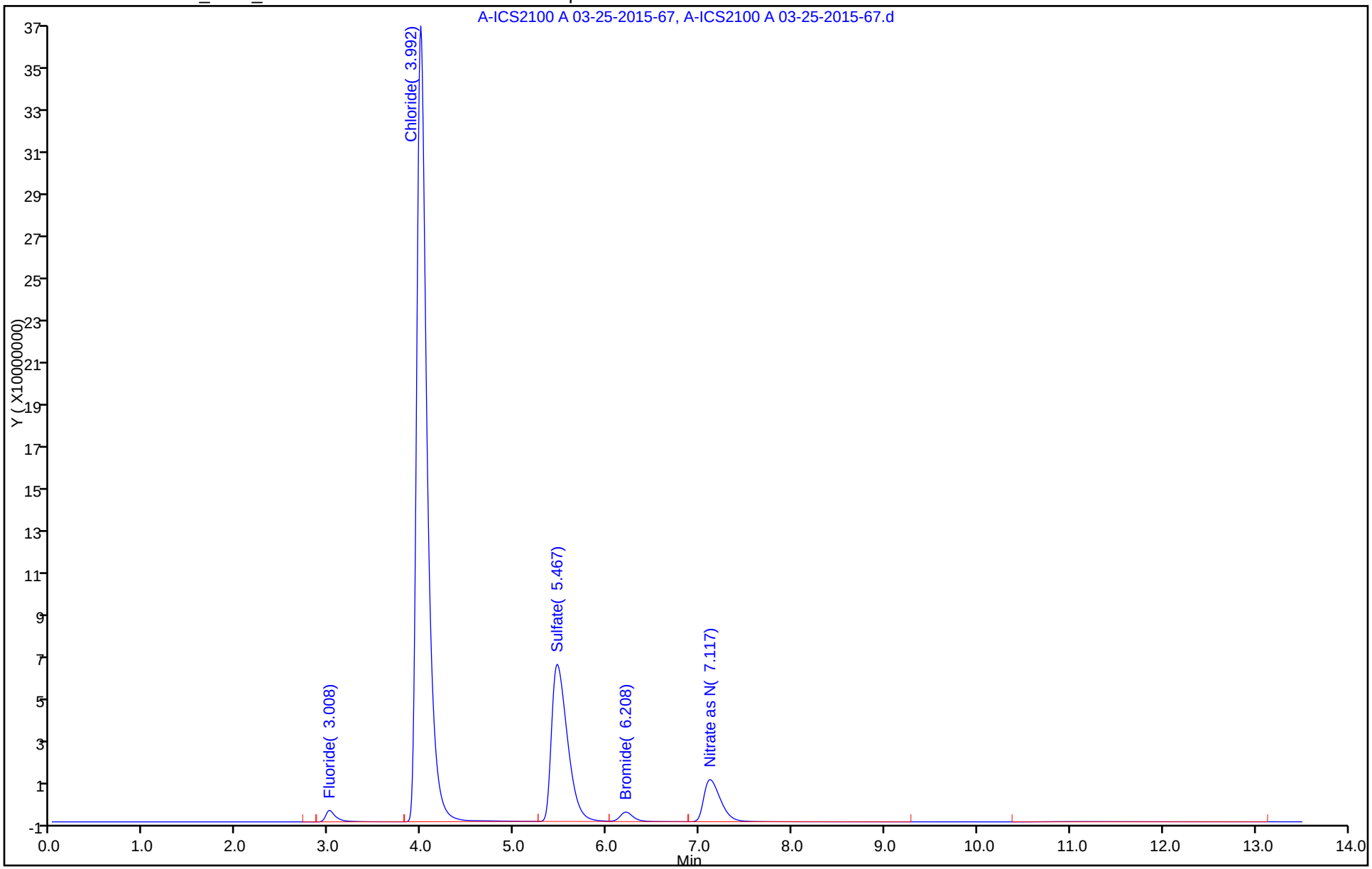
Reagents:

ICPRIMARYSTA_00006 Amount Added: 0.15 Units: mL

Report Date: 26-Mar-2015 11:13:59 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150325-6176.b\A-ICS2100 A 03-25-2015-67.d				
Injection Date:	26-Mar-2015 06:17:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42353-A-24 MSD			Worklist Smp#:	67
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.: 180-42353-1

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.: 180-42353-1

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.: 180-42353-1

SDG No.:

Instrument ID: CHIC2100A Start Date: 03/25/2015 11:35

Analysis Batch Number: 136546 End Date: 03/26/2015 10:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		03/25/2015 11:35	1		AS-18
ICV 180-136546/2		03/25/2015 11:50	1	A-ICS2100 A 03-25-2015-2.d	AS-18
CCV 180-136546/3		03/25/2015 12:06	1	A-ICS2100 A 03-25-2015-3.d	AS-18
CCB 180-136546/4		03/25/2015 12:23	1	A-ICS2100 A 03-25-2015-4.d	AS-18
LCS 180-136546/5		03/25/2015 12:40	1	A-ICS2100 A 03-25-2015-5.d	AS-18
MB 180-136546/6		03/25/2015 12:58	1	A-ICS2100 A 03-25-2015-6.d	AS-18
ZZZZZ		03/25/2015 13:15	1		AS-18
ZZZZZ		03/25/2015 13:32	1		AS-18
ZZZZZ		03/25/2015 13:48	1		AS-18
ZZZZZ		03/25/2015 14:03	1		AS-18
ZZZZZ		03/25/2015 14:18	1		AS-18
180-42353-19	HD-QC1-0/1-1	03/25/2015 14:34	1	A-ICS2100 A 03-25-2015-12.d	AS-18
180-42353-16	HD-COD-SW-29-0/1-0	03/25/2015 14:49	1	A-ICS2100 A 03-25-2015-13.d	AS-18
180-42353-3	HD-COD-SW-8-0/1-0	03/25/2015 15:06	1	A-ICS2100 A 03-25-2015-14.d	AS-18
CCV 180-136546/15		03/25/2015 15:24	1	A-ICS2100 A 03-25-2015-15.d	AS-18
CCB 180-136546/16		03/25/2015 15:39	1	A-ICS2100 A 03-25-2015-16.d	AS-18
ZZZZZ		03/25/2015 15:54	1		AS-18
ZZZZZ		03/25/2015 16:10	1		AS-18
ZZZZZ		03/25/2015 16:25	1		AS-18
ZZZZZ		03/25/2015 16:43	5		AS-18
180-42353-2	HD-COD-SW-6-0/1-0	03/25/2015 17:00	1	A-ICS2100 A 03-25-2015-21.d	AS-18
180-42353-8	HD-COD-SW-13-0/1-0	03/25/2015 17:17	1	A-ICS2100 A 03-25-2015-22.d	AS-18
180-42353-10	HD-COD-SW-16-0/1-0	03/25/2015 17:35	1	A-ICS2100 A 03-25-2015-23.d	AS-18
180-42353-12	HD-COD-SW-20-0/1-0	03/25/2015 17:52	1	A-ICS2100 A 03-25-2015-24.d	AS-18
180-42353-13	HD-COD-SW-26-0/1-0	03/25/2015 18:09	1	A-ICS2100 A 03-25-2015-25.d	AS-18
180-42353-1	HD-COD-SW-7-0/1-0	03/25/2015 18:27	1	A-ICS2100 A 03-25-2015-26.d	AS-18
CCV 180-136546/27		03/25/2015 18:44	1	A-ICS2100 A 03-25-2015-27.d	AS-18
CCB 180-136546/28		03/25/2015 19:01	1	A-ICS2100 A 03-25-2015-28.d	AS-18
ZZZZZ		03/25/2015 19:19	1		AS-18
ZZZZZ		03/25/2015 19:36	5		AS-18
ZZZZZ		03/25/2015 19:53	1		AS-18
ZZZZZ		03/25/2015 20:11	5		AS-18
ZZZZZ		03/25/2015 20:28	5		AS-18
ZZZZZ		03/25/2015 20:45	5		AS-18
ZZZZZ		03/25/2015 21:03	5		AS-18
180-42353-20	HD-MW-99S-0/1-0	03/25/2015 21:20	1	A-ICS2100 A 03-25-2015-36.d	AS-18

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHIC2100A Start Date: 03/25/2015 11:35

Analysis Batch Number: 136546 End Date: 03/26/2015 10:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
180-42353-20 MS	HD-MW-99S-0/1-0 MS	03/25/2015 21:37	1	A-ICS2100 A 03-25-2015-37.d	AS-18
180-42353-20 MSD	HD-MW-99S-0/1-0 MSD	03/25/2015 21:55	1	A-ICS2100 A 03-25-2015-38.d	AS-18
CCV 180-136546/39		03/25/2015 22:12	1	A-ICS2100 A 03-25-2015-39.d	AS-18
CCB 180-136546/40		03/25/2015 22:29	1	A-ICS2100 A 03-25-2015-40.d	AS-18
180-42353-6	HD-COD-SW-11-0/1-0	03/25/2015 22:47	1	A-ICS2100 A 03-25-2015-41.d	AS-18
180-42353-26	HD-MW-93D-0/1-0	03/25/2015 23:04	1	A-ICS2100 A 03-25-2015-42.d	AS-18
ZZZZZ		03/25/2015 23:21	5		AS-18
ZZZZZ		03/25/2015 23:39	5		AS-18
LCS 180-136546/45		03/25/2015 23:56	1	A-ICS2100 A 03-25-2015-45.d	AS-18
MB 180-136546/46		03/26/2015 00:13	1	A-ICS2100 A 03-25-2015-46.d	AS-18
180-42353-4	HD-COD-SW-9-0/1-0	03/26/2015 00:31	1	A-ICS2100 A 03-25-2015-47.d	AS-18
180-42353-5	HD-COD-SW-10-0/1-0	03/26/2015 00:48	1	A-ICS2100 A 03-25-2015-48.d	AS-18
180-42353-7	HD-COD-SW-12-0/1-0	03/26/2015 01:05	1	A-ICS2100 A 03-25-2015-49.d	AS-18
180-42353-14	HD-COD-SW-27-0/1-0	03/26/2015 01:22	1	A-ICS2100 A 03-25-2015-50.d	AS-18
CCV 180-136546/51		03/26/2015 01:40	1	A-ICS2100 A 03-25-2015-51.d	AS-18
CCB 180-136546/52		03/26/2015 01:57	1	A-ICS2100 A 03-25-2015-52.d	AS-18
180-42353-21	HD-MW-99D-0/1-0	03/26/2015 02:14	1	A-ICS2100 A 03-25-2015-53.d	AS-18
180-42353-21 MS	HD-MW-99D-0/1-0 MS	03/26/2015 02:32	1	A-ICS2100 A 03-25-2015-54.d	AS-18
180-42353-21 MSD	HD-MW-99D-0/1-0 MSD	03/26/2015 02:49	1	A-ICS2100 A 03-25-2015-55.d	AS-18
180-42353-15	HD-COD-SW-28-0/1-0	03/26/2015 03:06	1	A-ICS2100 A 03-25-2015-56.d	AS-18
180-42353-22	HD-MW-145A-0/1-0	03/26/2015 03:24	1	A-ICS2100 A 03-25-2015-57.d	AS-18
180-42353-23	HD-MW-100S-0/1-0	03/26/2015 03:41	1	A-ICS2100 A 03-25-2015-58.d	AS-18
180-42353-9	HD-COD-SW-15-0/1-0	03/26/2015 03:58	1	A-ICS2100 A 03-25-2015-59.d	AS-18
180-42353-9	HD-COD-SW-15-0/1-0	03/26/2015 04:16	5	A-ICS2100 A 03-25-2015-60.d	AS-18
180-42353-11	HD-COD-SW-17-0/1-0	03/26/2015 04:33	1	A-ICS2100 A 03-25-2015-61.d	AS-18
180-42353-11	HD-COD-SW-17-0/1-0	03/26/2015 04:50	5	A-ICS2100 A 03-25-2015-62.d	AS-18
CCV 180-136546/63		03/26/2015 05:08	1	A-ICS2100 A 03-25-2015-63.d	AS-18
CCB 180-136546/64		03/26/2015 05:25	1	A-ICS2100 A 03-25-2015-64.d	AS-18
180-42353-24	HD-MW-100I-0/1-0	03/26/2015 05:42	1	A-ICS2100 A 03-25-2015-65.d	AS-18
180-42353-24 MS	HD-MW-100I-0/1-0 MS	03/26/2015 05:59	1	A-ICS2100 A 03-25-2015-66.d	AS-18
180-42353-24 MSD	HD-MW-100I-0/1-0 MSD	03/26/2015 06:17	1	A-ICS2100 A 03-25-2015-67.d	AS-18
180-42353-25	HD-MW-93S-0/1-0	03/26/2015 06:34	1	A-ICS2100 A 03-25-2015-68.d	AS-18

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: CHIC2100A Start Date: 03/25/2015 11:35

Analysis Batch Number: 136546 End Date: 03/26/2015 10:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		03/26/2015 06:49	1		AS-18
ZZZZZ		03/26/2015 07:05	1		AS-18
ZZZZZ		03/26/2015 07:22	5		AS-18
ZZZZZ		03/26/2015 07:39	1		AS-18
ZZZZZ		03/26/2015 07:56	5		AS-18
CCV 180-136546/74		03/26/2015 08:14	1	A-ICS2100 A 03-25-2015-74.d	AS-18
CCB 180-136546/75		03/26/2015 08:31	1	A-ICS2100 A 03-25-2015-75.d	AS-18
ZZZZZ		03/26/2015 08:48	2.5		AS-18
ZZZZZ		03/26/2015 09:06	25		AS-18
ZZZZZ		03/26/2015 09:23	2.5		AS-18
ZZZZZ		03/26/2015 09:40	25		AS-18
CCV 180-136546/80		03/26/2015 09:58	1		AS-18
CCB 180-136546/81		03/26/2015 10:15	1		AS-18

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 180-42353-1

SDG No.:

Project: Harley Davidson

Client Sample ID	Lab Sample ID
HD-COD-SW-7-0/1-0	180-42353-1
HD-COD-SW-6-0/1-0	180-42353-2
HD-COD-SW-8-0/1-0	180-42353-3
HD-COD-SW-9-0/1-0	180-42353-4
HD-COD-SW-10-0/1-0	180-42353-5
HD-COD-SW-11-0/1-0	180-42353-6
HD-COD-SW-12-0/1-0	180-42353-7
HD-COD-SW-13-0/1-0	180-42353-8
HD-COD-SW-15-0/1-0	180-42353-9
HD-COD-SW-16-0/1-0	180-42353-10
HD-COD-SW-17-0/1-0	180-42353-11
HD-COD-SW-20-0/1-0	180-42353-12
HD-COD-SW-26-0/1-0	180-42353-13
HD-COD-SW-27-0/1-0	180-42353-14
HD-COD-SW-28-0/1-0	180-42353-15
HD-COD-SW-29-0/1-0	180-42353-16
HD-QC1-0/1-1	180-42353-19
HD-MW-99S-0/1-0	180-42353-20
HD-MW-99D-0/1-0	180-42353-21
HD-MW-145A-0/1-0	180-42353-22
HD-MW-100S-0/1-0	180-42353-23
HD-MW-100I-0/1-0	180-42353-24
HD-MW-93S-0/1-0	180-42353-25
HD-MW-93D-0/1-0	180-42353-26

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 180-42353-1

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 12:05

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	45000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	4300	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	11000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	45000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 180-42353-2

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 10:40

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	54000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	2900	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	10000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	59000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 180-42353-3

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 09:10

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	38000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	4300	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	8500	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-COD-SW-9-0/1-0 Lab Sample ID: 180-42353-4

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 12:20

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	58000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	7900	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	12000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	56000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-COD-SW-10-0/1-0 Lab Sample ID: 180-42353-5

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 09:41

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	83000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	8300	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	14000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	54000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-COD-SW-11-0/1-0 Lab Sample ID: 180-42353-6

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 13:15

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	75000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	2200	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	17000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	40000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-COD-SW-12-0/1-0 Lab Sample ID: 180-42353-7

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 13:25

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	69000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	16000	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	12000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	84000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 180-42353-8

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 09:32

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	55000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	5400	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	11000	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-COD-SW-15-0/1-0 Lab Sample ID: 180-42353-9

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 13:45

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	96000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	6200	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	19000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	78000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 180-42353-10

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 10:05

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	36000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	4000	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	8200	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-COD-SW-17-0/1-0 Lab Sample ID: 180-42353-11

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 10:15

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	97000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	6100	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	19000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	69000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-COD-SW-20-0/1-0 Lab Sample ID: 180-42353-12

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 10:50

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	55000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	2900	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	10000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	61000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 180-42353-13

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 11:45

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	61000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	3600	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	14000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	58000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 180-42353-14

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 13:55

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	70000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	5700	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	15000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	60000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 180-42353-15

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 13:00

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	64000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	6400	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	14000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	52000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 180-42353-16

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 09:00

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	71000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	6300	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	21000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	41000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 180-42353-19

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 08:00

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	92000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	4600	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	18000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	52000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-MW-99S-0/1-0 Lab Sample ID: 180-42353-20

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 09:15

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	110000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	3800	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	14000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	37000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-MW-99D-0/1-0 Lab Sample ID: 180-42353-21

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 13:05

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	91000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	3000	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	13000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	24000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-MW-145A-0/1-0 Lab Sample ID: 180-42353-22

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 10:20

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	95000	100	2.8	ug/L			1	6020A
7440-09-7	Potassium	5600	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	18000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	68000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-MW-100S-0/1-0 Lab Sample ID: 180-42353-23

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 14:45

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	93000	100	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	4300	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	18000	100	1.2	ug/L			1	6020A
7440-23-5	Sodium	48000	100	3.8	ug/L			1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-MW-100I-0/1-0 Lab Sample ID: 180-42353-24

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 14:00

Reporting Basis: WET Date Received: 03/25/2015 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	4700	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	19000	100	1.2	ug/L			1	6020A
7440-23-5	Sodium	54000	100	3.8	ug/L			1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-MW-93S-0/1-0 Lab Sample ID: 180-42353-25

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 14:35

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	69000	100	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	9700	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	17000	100	1.2	ug/L			1	6020A
7440-23-5	Sodium	94000	100	3.8	ug/L			1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-MW-93D-0/1-0 Lab Sample ID: 180-42353-26

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 11:22

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	72000	100	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	5400	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	15000	100	1.2	ug/L			1	6020A
7440-23-5	Sodium	43000	100	3.8	ug/L			1	6020A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

ICV Source: MICVX_00030 Concentration Units: ug/L

CCV Source: MCCV1X_00073

Analyte	ICV 180-137424/5 04/02/2015 13:52				CCV 180-137424/10 04/02/2015 14:20				CCV 180-137424/22 04/02/2015 15:15			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	39000		40000	98	49300		50000	99	50800		50000	102
Magnesium	37100		40000	93	47800		50000	96	47200		50000	94
Potassium	38600		40000	97	50400		50000	101	49700		50000	99
Sodium	38200		40000	96	50000		50000	100	48800		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.: 180-42353-1

SDG No.:

ICV Source: MICVX_00030 Concentration Units: ug/L

CCV Source: MCCV1X_00073

Analyte	CCV 180-137424/34 04/02/2015 16:09				CCV 180-137424/46 04/02/2015 17:04				CCV 180-137424/58 04/02/2015 18:01			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	50900		50000	102	50900		50000	102	51000		50000	102
Magnesium	47100		50000	94	47300		50000	95	47600		50000	95
Potassium	49900		50000	100	50500		50000	101	50800		50000	102
Sodium	48600		50000	97	49100		50000	98	49100		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.: 180-42353-1

SDG No.:

ICV Source: MICVX_00030 Concentration Units: ug/L

CCV Source: MCCV1X_00073

Analyte	CCV 180-137424/70 04/02/2015 18:56											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	51400		50000	103								
Magnesium	48100		50000	96								
Potassium	51600		50000	103								
Sodium	50000		50000	100								

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.: 180-42353-1

SDG No.:

Method: 6020A Instrument ID: X

Lab Sample ID: CRI 180-137424/7 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00063

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Calcium	100	110		110	70-130
Potassium	100	123		123	70-130
Magnesium	100	99.6	J	100	70-130
Sodium	100	124		124	70-130

Lab Sample ID: CRI 180-137424/80 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00063

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Calcium	100	127		127	70-130
Potassium	100	93.9	J	94	70-130
Magnesium	100	102		102	70-130
Sodium	100	104		104	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.: 180-42353-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 180-137424/6 04/02/2015 14:00		CCB1 180-137424/11 04/02/2015 14:28		CCB2 180-137424/23 04/02/2015 15:22		CCB3 180-137424/35 04/02/2015 16:17	
		Found	C	Found	C	Found	C	Found	C
Calcium	100	100	U	3.00	J	8.27	J	8.07	J
Magnesium	100	100	U	4.64	J	5.22	J	6.10	J
Potassium	100	25.0	J	39.4	J	100	U	100	U
Sodium	100	22.3	J	49.7	J	44.6	J	16.9	J

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB4 180-137424/47 04/02/2015 17:11		CCB5 180-137424/59 04/02/2015 18:09		CCB6 180-137424/71 04/02/2015 19:03			
		Found	C	Found	C	Found	C	Found	C
Calcium	100	10.1	J	14.8	J	18.0	J		
Magnesium	100	7.78	J	8.74	J	10.1	J		
Potassium	100	100	U	100	U	100	U		
Sodium	100	14.1	J	15.5	J	18.1	J		

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 180-136963/1-A

Instrument Code: X Batch No.: 137424

CAS No.	Analyte	Concentration	C	Q	Method
7440-70-2	Calcium	100	U		6020A
7440-09-7	Potassium	100	U		6020A
7439-95-4	Magnesium	1.44	J		6020A
7440-23-5	Sodium	34.2	J		6020A

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 180-137092/1-A

Instrument Code: X Batch No.: 137424

CAS No.	Analyte	Concentration	C	Q	Method
7440-70-2	Calcium	4.19	J		6020A
7440-09-7	Potassium	100	U		6020A
7439-95-4	Magnesium	100	U		6020A
7440-23-5	Sodium	100	U		6020A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Lab Sample ID: ICSA 180-137424/8 Instrument ID: X

Lab File ID: X50402A.xml ICS Source: MICSAX_00064

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Calcium	**100000**	**100500**	**101**
Magnesium	**100000**	**95120**	**95**
Potassium	**100000**	**99160**	**99**
Sodium	**100000**	**98950**	**99**
Aluminum	*100000*	*94410*	*94*
Antimony		*-0.693*	
Arsenic		*-0.198*	
Barium		*0.210*	
Beryllium		*0.203*	
Boron		*0.0010*	
Cadmium		*2.33*	
Chromium		*0.523*	
Cobalt		*0.147*	
Copper		*2.88*	
Iron	*100000*	*97090*	*97*
Lead		*0.279*	
Manganese		*0.979*	
Molybdenum	*2000*	*2252*	*113*
Nickel		*0.0380*	
Selenium		*0.685*	
Silicon		*24.6*	
Silver		*0.0050*	
Strontium		*0.745*	
Thallium		*0.0210*	
Tin		*-2.11*	
Titanium	*2000*	*2147*	*107*
Vanadium		*-0.389*	
Zinc		*6.12*	

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.: 180-42353-1

SDG No.:

Lab Sample ID: ICSAB 180-137424/9 Instrument ID: X

Lab File ID: X50402A.xml ICS Source: MICSABX_00068

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Calcium	**100000**	**99227**	**99**
Magnesium	**100000**	**92637**	**93**
Potassium	**100000**	**97483**	**97**
Sodium	**100000**	**97777**	**98**
Aluminum	*100000*	*92247*	*92*
Antimony	*20.0*	*18.6*	*93*
Arsenic	*20.0*	*20.6*	*103*
Barium	*20.0*	*18.6*	*93*
Beryllium	*20.0*	*19.1*	*96*
Boron	*50.0*	*47.2*	*94*
Cadmium	*20.0*	*21.0*	*105*
Chromium	*20.0*	*18.8*	*94*
Cobalt	*20.0*	*18.7*	*93*
Copper	*20.0*	*21.0*	*105*
Iron	*100000*	*95617*	*96*
Lead	*20.0*	*19.6*	*98*
Manganese	*22.5*	*19.4*	*86*
Molybdenum	*2000*	*2263*	*113*
Nickel	*20.0*	*18.3*	*92*
Selenium	*50.0*	*52.4*	*105*
Silicon	*500*	*488*	*98*
Silver	*20.0*	*17.9*	*90*
Strontium	*25.0*	*20.5*	*82*
Thallium	*20.0*	*19.0*	*95*
Tin	*100*	*94.8*	*95*
Titanium	*2000*	*2084*	*104*
Vanadium	*20.0*	*17.9*	*89*
Zinc	*25.0*	*21.9*	*87*

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

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: HD-MW-99S-0/1-0 MS
Lab ID: 180-42353-20 MS
Lab Name: TestAmerica Pittsburgh
Job No.: 180-42353-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Calcium	157000		110000		50000	101	75-125		6020A
Potassium	53100		3800		50000	98	75-125		6020A
Magnesium	56700		14000		50000	85	75-125		6020A
Sodium	83900		37000		50000	94	75-125		6020A

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: HD-MW-100S-0/1-0 MS Lab ID: 180-42353-23 MS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Matrix: Water Concentration Units: ug/L

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Calcium	140000		93000		50000	95	75-125		6020A
Potassium	52000		4300		50000	95	75-125		6020A
Magnesium	59300		18000		50000	82	75-125		6020A
Sodium	93900		48000		50000	91	75-125		6020A

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: HD-MW-99S-0/1-0 MSD Lab ID: 180-42353-20 MSD

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Matrix: Water Concentration Units: ug/L

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Calcium	156000		50000	99	75-125	1	20		6020A
Potassium	52800		50000	98	75-125	1	20		6020A
Magnesium	56000		50000	84	75-125	1	20		6020A
Sodium	83500		50000	93	75-125	0	20		6020A

SDR = Sample Duplicate Result

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

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: HD-MW-100S-0/1-0 MSD Lab ID: 180-42353-23 MSD

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Matrix: Water Concentration Units: ug/L

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Calcium	145000		50000	104	75-125	3	20		6020A
Potassium	53600		50000	99	75-125	3	20		6020A
Magnesium	60400		50000	84	75-125	2	20		6020A
Sodium	95600		50000	95	75-125	2	20		6020A

SDR = Sample Duplicate Result

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

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: HD-MW-99S-0/1-0 PDS Lab ID: 180-42353-20 PDS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Matrix: Water Concentration Units: ug/L

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Calcium	157000		110000		50000	100	75-125		6020A
Potassium	54500		3800		50000	101	75-125		6020A
Magnesium	56900		14000		50000	86	75-125		6020A
Sodium	83800		37000		50000	94	75-125		6020A

SSR = Spiked Sample Result

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

FORM VB - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: HD-MW-100S-0/1-0 PDS Lab ID: 180-42353-23 PDS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Matrix: Water Concentration Units: ug/L

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Calcium	143000		93000		50000	101	75-125		6020A
Potassium	55500		4300		50000	102	75-125		6020A
Magnesium	61400		18000		50000	86	75-125		6020A
Sodium	94800		48000		50000	93	75-125		6020A

SSR = Spiked Sample Result

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

FORM VB - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 180-136963/2-A

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

Sample Matrix: Water LCS Source: MTAPITTMSA_00023

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Calcium	50000	47700		95	80	120		6020A
Potassium	50000	46900		94	80	120		6020A
Magnesium	50000	41000		82	80	120		6020A
Sodium	50000	44400		89	80	120		6020A

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 180-137092/2-A

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

Sample Matrix: Water LCS Source: MTAPITTMSA_00023

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Calcium	50000	49900		100	80	120		6020A
Potassium	50000	49100		98	80	120		6020A
Magnesium	50000	43000		86	80	120		6020A
Sodium	50000	46700		93	80	120		6020A

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

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 180-42353-20

SDG No:

Lab Name: TestAmerica Pittsburgh Job No: 180-42353-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Calcium	110000		98500		7.5		6020A
Potassium	3800		3670		4.5		6020A
Magnesium	14000		13200		6.2		6020A
Sodium	37000		37200		0.60		6020A

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

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 180-42353-23

SDG No:

Lab Name: TestAmerica Pittsburgh Job No: 180-42353-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Calcium	93000		84800		8.4		6020A
Potassium	4300		4130		4.5		6020A
Magnesium	18000		17100		7.3		6020A
Sodium	48000		48900		1.2		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: 180-42353-1

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: 180-42353-1

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: 180-42353-1

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.: 180-42353-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-136963/1-A	03/30/2015 11:21	136963		50	50
LCS 180-136963/2-A	03/30/2015 11:21	136963		50	50
180-42353-1	03/30/2015 11:21	136963		50	50
180-42353-2	03/30/2015 11:21	136963		50	50
180-42353-3	03/30/2015 11:21	136963		50	50
180-42353-4	03/30/2015 11:21	136963		50	50
180-42353-5	03/30/2015 11:21	136963		50	50
180-42353-6	03/30/2015 11:21	136963		50	50
180-42353-7	03/30/2015 11:21	136963		50	50
180-42353-8	03/30/2015 11:21	136963		50	50
180-42353-9	03/30/2015 11:21	136963		50	50
180-42353-10	03/30/2015 11:21	136963		50	50
180-42353-11	03/30/2015 11:21	136963		50	50
180-42353-12	03/30/2015 11:21	136963		50	50
180-42353-13	03/30/2015 11:21	136963		50	50
180-42353-14	03/30/2015 11:21	136963		50	50
180-42353-15	03/30/2015 11:21	136963		50	50
180-42353-16	03/30/2015 11:21	136963		50	50
180-42353-19	03/30/2015 11:21	136963		50	50
180-42353-20	03/30/2015 11:21	136963		50	50
180-42353-20 MS	03/30/2015 11:21	136963		50	50
180-42353-20 MSD	03/30/2015 11:21	136963		50	50
180-42353-21	03/30/2015 11:21	136963		50	50
180-42353-22	03/30/2015 11:21	136963		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-137092/1-A	03/31/2015 11:18	137092		50	50
LCS 180-137092/2-A	03/31/2015 11:18	137092		50	50
180-42353-23	03/31/2015 11:18	137092		50	50
180-42353-23 MS	03/31/2015 11:18	137092		50	50
180-42353-23 MSD	03/31/2015 11:18	137092		50	50
180-42353-24	03/31/2015 11:18	137092		50	50
180-42353-25	03/31/2015 11:18	137092		50	50
180-42353-26	03/31/2015 11:18	137092		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: X Analysis Method: 6020A

Start Date: 04/02/2015 13:13 End Date: 04/02/2015 20:01

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ca	K	Mg	Na																							
ITUNE 180-137424/1			13:13																											
STD1 180-137424/2 IC	1		13:40	X	X	X	X																							
STD2 180-137424/3 IC	1		13:44	X	X	X	X																							
STD3 180-137424/4 IC	1		13:48	X	X	X	X																							
ICV 180-137424/5	1		13:52	X	X	X	X																							
ICB 180-137424/6	1		14:00	X	X	X	X																							
CRI 180-137424/7	1		14:04	X	X	X	X																							
ICSA 180-137424/8	1		14:08	X	X	X	X																							
ICSAB 180-137424/9	1		14:13	X	X	X	X																							
CCV 180-137424/10	1		14:20	X	X	X	X																							
CCB1 180-137424/11	1		14:28	X	X	X	X																							
ZZZZZZ			14:32																											
ZZZZZZ			14:36																											
ZZZZZZ			14:41																											
ZZZZZZ			14:45																											
ZZZZZZ			14:49																											
ZZZZZZ			14:53																											
ZZZZZZ			14:58																											
ZZZZZZ			15:02																											
ZZZZZZ			15:06																											
ZZZZZZ			15:10																											
CCV 180-137424/22	1		15:15	X	X	X	X																							
CCB2 180-137424/23	1		15:22	X	X	X	X																							
MB 180-136963/1-A	1	R	15:26	X	X	X	X																							
LCS 180-136963/2-A	1	R	15:31	X	X	X	X																							
180-42353-1	1	T	15:35	X	X	X	X																							
180-42353-2	1	T	15:39	X	X	X	X																							
180-42353-3	1	T	15:44	X	X	X	X																							
180-42353-4	1	T	15:48	X	X	X	X																							
180-42353-5	1	T	15:52	X	X	X	X																							
180-42353-6	1	T	15:56	X	X	X	X																							
180-42353-7	1	T	16:01	X	X	X	X																							
180-42353-8	1	T	16:05	X	X	X	X																							
CCV 180-137424/34	1		16:09	X	X	X	X																							
CCB3 180-137424/35	1		16:17	X	X	X	X																							
180-42353-9	1	T	16:21	X	X	X	X																							
180-42353-10	1	T	16:25	X	X	X	X																							
180-42353-11	1	T	16:30	X	X	X	X																							
180-42353-12	1	T	16:34	X	X	X	X																							
180-42353-13	1	T	16:38	X	X	X	X																							
180-42353-14	1	T	16:42	X	X	X	X																							
180-42353-15	1	T	16:47	X	X	X	X																							

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: X Analysis Method: 6020A

Start Date: 04/02/2015 13:13 End Date: 04/02/2015 20:01

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ca	K	Mg	Na																						
180-42353-16	1	T	16:51	X	X	X	X																						
180-42353-19	1	T	16:55	X	X	X	X																						
180-42353-20	1	T	16:59	X	X	X	X																						
CCV 180-137424/46	1		17:04	X	X	X	X																						
CCB4 180-137424/47	1		17:11	X	X	X	X																						
180-42353-20 SD	5	T	17:15	X	X	X	X																						
180-42353-20 MS	1	T	17:20	X	X	X	X																						
180-42353-20 MSD	1	T	17:24	X	X	X	X																						
180-42353-20 PDS	1	T	17:28	X	X	X	X																						
180-42353-21	1	T	17:32	X	X	X	X																						
180-42353-22	1	T	17:37	X	X	X	X																						
MB 180-137092/1-A	1	R	17:44	X	X	X	X																						
LCS 180-137092/2-A	1	R	17:49	X	X	X	X																						
180-42353-23	1	T	17:53	X	X	X	X																						
180-42353-23 SD	5	T	17:57	X	X	X	X																						
CCV 180-137424/58	1		18:01	X	X	X	X																						
CCB5 180-137424/59	1		18:09	X	X	X	X																						
180-42353-23 MS	1	T	18:13	X	X	X	X																						
180-42353-23 MSD	1	T	18:17	X	X	X	X																						
180-42353-23 PDS	1	T	18:22	X	X	X	X																						
180-42353-24	1	T	18:26	X	X	X	X																						
180-42353-25	1	T	18:30	X	X	X	X																						
180-42353-26	1	T	18:35	X	X	X	X																						
ZZZZZZ			18:39																										
ZZZZZZ			18:43																										
ZZZZZZ			18:47																										
ZZZZZZ			18:52																										
CCV 180-137424/70	1		18:56	X	X	X	X																						
CCB6 180-137424/71	1		19:03	X	X	X	X																						
ZZZZZZ			19:08																										
ZZZZZZ			19:12																										
ZZZZZZ			19:16																										
ZZZZZZ			19:20																										
ZZZZZZ			19:25																										
ZZZZZZ			19:29																										
ZZZZZZ			19:33																										
ZZZZZZ			19:38																										
CRI 180-137424/80	1		19:49	X	X	X	X																						
CCV 180-137424/81			19:54																										
CCB7 180-137424/82			20:01																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: X Analysis Method: 6020A

Start Date: 04/02/2015 13:13 End Date: 04/02/2015 20:01

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ca	K	Mg	Na																					

Prep Types:
R = Total Recoverable
T = Total/NA

FORM XIII-IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

ICP-MS Instrument ID: X Start Date: 04/02/2015 End Date: 04/02/2015

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 180-137424/2 IC	13:40	100		100		100		100		100	
STD2 180-137424/3 IC	13:44	89		90		89		86		86	
STD3 180-137424/4 IC	13:48	93		92		92		91		92	
ICV 180-137424/5	13:52	91		95		97		95		98	
ICB 180-137424/6	14:00	97		102		102		101		102	
CRI 180-137424/7	14:04	98		105		110		110		97	
ICSA 180-137424/8	14:08	77		85		90		88		90	
ICSAB 180-137424/9	14:13	76		86		85		88		92	
CCV 180-137424/10	14:20	86		99		104		101		105	
CCB1 180-137424/11	14:28	96		109		113		111		115	
CCV 180-137424/22	15:15	77		79		82		89		83	
CCB2 180-137424/23	15:22	83		84		90		94		93	
MB 180-136963/1-A	15:26	84		84		91		94		94	
LCS 180-136963/2-A	15:31	79		75		80		83		80	
180-42353-1	15:35	82		78		87		87		89	
180-42353-2	15:39	82		79		89		88		90	
180-42353-3	15:44	80		76		80		84		80	
180-42353-4	15:48	81		78		85		89		87	
180-42353-5	15:52	80		78		85		86		87	
180-42353-6	15:56	81		77		81		85		82	
180-42353-7	16:01	78		78		82		86		82	
180-42353-8	16:05	74		74		90		88		85	
CCV 180-137424/34	16:09	76		75		78		84		80	
CCB3 180-137424/35	16:17	81		82		87		91		91	
180-42353-9	16:21	76		75		84		88		86	
180-42353-10	16:25	79		76		79		83		80	
180-42353-11	16:30	78		77		85		89		85	
180-42353-12	16:34	80		79		86		88		88	
180-42353-13	16:38	78		79		80		83		81	
180-42353-14	16:42	77		77		83		87		86	
180-42353-15	16:47	79		80		86		87		88	
180-42353-16	16:51	71		74		96		82		80	
180-42353-19	16:55	75		75		79		83		81	
180-42353-20	16:59	77		78		86		90		88	
CCV 180-137424/46	17:04	74		75		81		88		82	
CCB4 180-137424/47	17:11	81		79		84		90		87	
180-42353-20 SD	17:15	70		71		79		88		83	
180-42353-20 MS	17:20	72		72		77		78		76	
180-42353-20 MSD	17:24	73		73		78		81		78	
180-42353-20 PDS	17:28	72		73		83		85		82	
180-42353-21	17:32	74		73		83		88		85	
180-42353-22	17:37	73		73		78		80		79	

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

ICP-MS Instrument ID: X Start Date: 04/02/2015 End Date: 04/02/2015

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
MB 180-137092/1-A	17:44	79		77		83		90		87	
LCS 180-137092/2-A	17:49	73		72		80		85		81	
180-42353-23	17:53	72		71		76		79		77	
180-42353-23 SD	17:57	72		72		77		85		80	
CCV 180-137424/58	18:01	72		72		78		86		81	
CCB5 180-137424/59	18:09	79		76		79		86		82	
180-42353-23 MS	18:13					75		77		74	
180-42353-23 MSD	18:17	71		73		82		85		81	
180-42353-23 PDS	18:22	70		71		79		83		79	
180-42353-24	18:26	71		70		74		77		76	
180-42353-25	18:30	71		72		78		81		80	
180-42353-26	18:35	71		73		79		84		81	
CCV 180-137424/70	18:56			71		77		84		79	
CCB6 180-137424/71	19:03	75		72		76		85		79	
CRI 180-137424/80	19:49	75		72		74		82			

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

ICP-MS Instrument ID: X Start Date: 04/02/2015 End Date: 04/02/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 180-137424/2 IC	13:40	100		100		100					
STD2 180-137424/3 IC	13:44	91		91		86					
STD3 180-137424/4 IC	13:48	94		94		93					
ICV 180-137424/5	13:52	101		101		101					
ICB 180-137424/6	14:00	102		102		103					
CRI 180-137424/7	14:04	103		113		116					
ICSA 180-137424/8	14:08	97		99		98					
ICSAB 180-137424/9	14:13	97		99		94					
CCV 180-137424/10	14:20	109		110		108					
CCB1 180-137424/11	14:28	113		114		117					
CCV 180-137424/22	15:15	90		92		92					
CCB2 180-137424/23	15:22	99		100		105					
MB 180-136963/1-A	15:26	100		100		107					
LCS 180-136963/2-A	15:31	89		90		83					
180-42353-1	15:35	97		98		94					
180-42353-2	15:39	98		101		97					
180-42353-3	15:44	88		89		82					
180-42353-4	15:48	93		95		91					
180-42353-5	15:52	94		97		93					
180-42353-6	15:56	88		90		85					
180-42353-7	16:01	91		91		85					
180-42353-8	16:05	95		97		93					
CCV 180-137424/34	16:09	87		88		86					
CCB3 180-137424/35	16:17	96		97		105					
180-42353-9	16:21	94		96		93					
180-42353-10	16:25	86		87		81					
180-42353-11	16:30	94		96		91					
180-42353-12	16:34	95		98		95					
180-42353-13	16:38	86		88		82					
180-42353-14	16:42	92		94		90					
180-42353-15	16:47	97		98		95					
180-42353-16	16:51	91		92		87					
180-42353-19	16:55	88		89		84					
180-42353-20	16:59	96		100		96					
CCV 180-137424/46	17:04	91		93		92					
CCB4 180-137424/47	17:11	93		94		102					
180-42353-20 SD	17:15	93		95		99					
180-42353-20 MS	17:20	86		87		81					
180-42353-20 MSD	17:24	88		90		85					
180-42353-20 PDS	17:28	94		95		91					
180-42353-21	17:32	95		96		94					
180-42353-22	17:37	85		87		84					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

ICP-MS Instrument ID: X Start Date: 04/02/2015 End Date: 04/02/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
MB 180-137092/1-A	17:44	93		95		101					
LCS 180-137092/2-A	17:49	93		95		91					
180-42353-23	17:53	84		87		82					
180-42353-23 SD	17:57	87		89		91					
CCV 180-137424/58	18:01	89		92		94					
CCB5 180-137424/59	18:09	88		89		97					
180-42353-23 MS	18:13	84		86		82					
180-42353-23 MSD	18:17	94		95		91					
180-42353-23 PDS	18:22	92		94		89					
180-42353-24	18:26	83		84		81					
180-42353-25	18:30	88		90		87					
180-42353-26	18:35	90		93		91					
CCV 180-137424/70	18:56	89		91		93					
CCB6 180-137424/71	19:03	85		87		96					
CRI 180-137424/80	19:49	75		84		91					

Dilution Corrected Concentrations

STD1 1501659 4/2/2015 1:40:45 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:41:11	100.134%	-0.099	-0.326	0.063	0.000	-0.304	0.062	-0.053
2	13:41:38	99.202%	0.109	0.413	0.004	0.000	0.778	0.233	-0.098
3	13:42:05	100.664%	-0.010	-0.087	-0.067	0.000	-0.474	-0.295	0.151
x		100.000%	-0.000	-0.000	-0.000	0.000	-0.000	-0.000	-0.000
σ		0.741%	0.104	0.377	0.065	0.000	0.679	0.269	0.133
%RSD		0.741	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	13:41:11	-0.062	0.390	0.000	0.035	-3.685	-0.484	99.382%	-0.054
2	13:41:38	0.020	0.307	0.000	-1.369	4.910	0.684	100.299%	-0.081
3	13:42:05	0.042	-0.697	0.000	1.334	-1.225	-0.201	100.319%	0.135
x		0.000	0.000	0.000	-0.000	-0.000	-0.000	100.000%	-0.000
σ		0.055	0.605	0.000	1.352	4.427	0.609	0.536%	0.118
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.536	0.000

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:41:11	-0.018	0.016	0.004	1.542	-1.156	-0.000	-0.013	-0.053
2	13:41:38	-0.042	-0.012	-0.003	-0.671	1.012	0.004	0.034	0.057
3	13:42:05	0.060	-0.005	-0.001	-0.871	0.144	-0.004	-0.021	-0.004
x		0.000	0.000	0.000	-0.000	0.000	-0.000	0.000	0.000
σ		0.054	0.015	0.003	1.339	1.091	0.004	0.030	0.055
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:41:11	-0.066	0.052	-0.012	-0.008	0.270	0.082	0.000	-0.000
2	13:41:38	0.055	-0.028	-0.052	0.015	-0.160	-0.171	0.000	0.002
3	13:42:05	0.010	-0.024	0.064	-0.007	-0.110	0.088	0.000	-0.002
x		0.000	-0.000	-0.000	0.000	0.000	0.000	0.000	0.000
σ		0.061	0.045	0.059	0.013	0.235	0.148	0.000	0.002
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:41:11	99.679%	0.026	0.010	99.875%	0.011	-0.001	0.006	-0.035
2	13:41:38	99.841%	0.025	-0.001	100.120%	-0.008	-0.014	0.003	-0.011
3	13:42:05	100.479%	-0.050	-0.008	100.005%	-0.003	0.014	-0.009	0.047
x		100.000%	-0.000	-0.000	100.000%	0.000	-0.000	-0.000	0.000
σ		0.423%	0.044	0.009	0.123%	0.010	0.014	0.008	0.042
%RSD		0.423	0.000	0.000	0.123	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	13:41:11	98.538%	-0.060	-0.035	-0.056	0.004	-0.023	99.456%	99.201%
2	13:41:38	101.109%	-0.215	0.013	-0.012	-0.005	0.011	100.615%	100.563%
3	13:42:05	100.353%	0.275	0.022	0.068	0.001	0.012	99.928%	100.236%
x		100.000%	0.000	0.000	0.000	-0.000	0.000	100.000%	100.000%
σ		1.322%	0.251	0.031	0.063	0.005	0.020	0.583%	0.711%
%RSD		1.322	0.000	0.000	0.000	0.000	0.000	0.583	0.711

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:41:11	0.000	0.001	-0.010	-0.005	-0.004	100.745%
2	13:41:38	0.000	-0.002	0.007	-0.001	0.002	101.443%
3	13:42:05	-0.001	0.001	0.003	0.007	0.002	97.812%
x		0.000	-0.000	-0.000	-0.000	0.000	100.000%
σ		0.001	0.002	0.009	0.006	0.003	1.927%
%RSD		0.000	0.000	0.000	0.000	0.000	1.927

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:44	87.845%	201.100	0.728	1.365	0.000	99920.000	100200.000	99740.000
2	13:45:11	89.606%	197.500	1.716	0.609	0.000	99720.000	99940.000	99810.000
3	13:45:37	89.465%	201.400	0.934	1.017	0.000	100400.000	99910.000	100400.000
x		88.972%	200.000	1.126	0.997	0.000	100000.000	100000.000	100000.000
σ		0.979%	2.185	0.521	0.378	0.000	323.600	130.500	384.800
%RSD		1.100	1.092	46.290	37.940	0.000	0.324	0.131	0.385
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:44	996.600	5.047	0.000	98890.000	98600.000	98660.000	89.293%	-0.094
2	13:45:11	998.000	4.627	0.000	100800.000	101800.000	101600.000	89.640%	-0.024
3	13:45:37	1005.000	5.006	0.000	100300.000	99600.000	99700.000	90.409%	0.040
x		1000.000	4.894	0.000	100000.000	100000.000	100000.000	89.781%	-0.026
σ		4.698	0.231	0.000	987.600	1638.000	1518.000	0.571%	0.067
%RSD		0.470	4.729	0.000	0.988	1.638	1.518	0.636	255.200
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:44	198.500	199.100	999.200	49720.000	49660.000	199.500	199.800	199.300
2	13:45:11	199.500	200.500	1003.000	50350.000	50160.000	200.700	200.600	200.700
3	13:45:37	202.100	200.400	998.200	49930.000	50170.000	199.800	199.600	200.100
x		200.000	200.000	1000.000	50000.000	50000.000	200.000	200.000	200.000
σ		1.852	0.791	2.278	323.100	290.400	0.594	0.512	0.709
%RSD		0.926	0.395	0.228	0.646	0.581	0.297	0.256	0.354
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:44	199.200	198.500	198.700	198.600	199.700	199.200	0.000	198.800
2	13:45:11	199.000	199.700	198.600	200.900	200.000	201.300	0.000	199.200
3	13:45:37	201.800	201.800	202.700	200.500	200.300	199.500	0.000	202.100
x		200.000	200.000	200.000	200.000	200.000	200.000	0.000	200.000
σ		1.557	1.658	2.309	1.217	0.306	1.158	0.000	1.793
%RSD		0.778	0.829	1.154	0.608	0.153	0.579	0.000	0.897
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:44	87.438%	-0.005	-0.096	84.923%	200.600	200.200	199.200	199.300
2	13:45:11	88.500%	-0.125	0.038	85.591%	200.800	201.700	201.300	204.800
3	13:45:37	89.575%	-0.010	-0.022	86.375%	198.500	198.100	199.500	195.900
x		88.504%	-0.046	-0.027	85.630%	200.000	200.000	200.000	200.000
σ		1.069%	0.068	0.067	0.727%	1.266	1.781	1.142	4.479
%RSD		1.207	145.900	250.800	0.849	0.633	0.890	0.571	2.239
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:44	84.965%	-1.124	-0.167	-0.175	198.600	199.500	89.852%	90.229%
2	13:45:11	85.404%	-0.963	-0.153	-0.144	200.700	200.700	92.396%	91.231%
3	13:45:37	87.444%	-0.753	-0.167	-0.134	200.700	199.900	90.264%	92.641%
x		85.938%	-0.947	-0.163	-0.151	200.000	200.000	90.837%	91.367%
σ		1.323%	0.186	0.008	0.022	1.219	0.603	1.365%	1.212%
%RSD		1.539	19.670	4.989	14.320	0.610	0.301	1.503	1.326
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:44:44	194.500	194.400	193.500	194.600	193.500	87.656%		
2	13:45:11	203.000	202.700	204.700	201.900	204.900	84.177%		
3	13:45:37	202.400	203.000	201.800	203.500	201.700	84.749%		
x		200.000	200.000	200.000	200.000	200.000	85.527%		
σ		4.736	4.868	5.849	4.768	5.880	1.866%		
%RSD		2.368	2.434	2.924	2.384	2.940	2.182		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:59	92.831%	0.263	195.300	198.100	0.000	107.800	70.250	74.980
2	13:49:25	93.025%	0.077	203.300	201.400	0.000	110.500	77.330	74.320
3	13:49:52	93.320%	0.091	201.400	200.500	0.000	108.200	75.660	74.560
x		93.059%	0.144	200.000	200.000	0.000	108.800	74.410	74.620
σ		0.246%	0.103	4.219	1.691	0.000	1.425	3.701	0.338
%RSD		0.265	71.850	2.110	0.845	0.000	1.309	4.974	0.453
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:59	8.233	9929.000	0.000	103.900	114.300	168.100	91.736%	195.200
2	13:49:25	8.313	10060.000	0.000	98.170	97.690	166.800	91.735%	204.200
3	13:49:52	8.061	10010.000	0.000	90.460	96.800	167.700	93.231%	200.500
x		8.203	10000.000	0.000	97.530	102.900	167.500	92.234%	200.000
σ		0.129	65.910	0.000	6.767	9.851	0.697	0.863%	4.533
%RSD		1.571	0.659	0.000	6.939	9.571	0.416	0.936	2.266
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:59	0.200	0.195	1.008	81.240	83.650	0.207	0.208	0.421
2	13:49:25	0.093	0.219	1.013	70.190	64.330	0.130	0.146	0.274
3	13:49:52	0.056	0.212	1.021	62.580	54.700	0.165	0.129	0.437
x		0.116	0.209	1.014	71.340	67.560	0.167	0.161	0.377
σ		0.075	0.013	0.007	9.381	14.740	0.039	0.042	0.090
%RSD		64.390	6.070	0.643	13.150	21.820	23.140	26.010	23.840
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:59	0.368	0.948	0.939	0.037	1.018	0.282	0.000	0.312
2	13:49:25	0.435	1.046	1.008	0.069	0.249	-0.533	0.000	0.295
3	13:49:52	0.349	0.981	0.862	0.104	-0.333	0.475	0.000	0.342
x		0.384	0.991	0.937	0.070	0.311	0.075	0.000	0.316
σ		0.045	0.050	0.073	0.033	0.677	0.535	0.000	0.024
%RSD		11.800	5.041	7.805	47.360	217.600	716.800	0.000	7.617
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:59	90.170%	195.000	194.100	90.095%	0.424	0.387	0.363	4.395
2	13:49:25	91.763%	203.200	201.600	90.866%	0.435	0.422	0.403	-0.650
3	13:49:52	92.653%	201.700	204.200	92.015%	0.391	0.420	0.376	-0.479
x		91.529%	200.000	200.000	90.992%	0.417	0.410	0.381	1.089
σ		1.258%	4.364	5.245	0.966%	0.023	0.019	0.020	2.864
%RSD		1.374	2.182	2.623	1.061	5.435	4.720	5.222	263.100
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:59	89.492%	199.500	198.100	199.500	0.154	0.500	93.345%	91.504%
2	13:49:25	93.772%	199.400	200.100	198.700	0.352	0.498	93.369%	95.279%
3	13:49:52	94.022%	201.000	201.700	201.800	0.264	0.461	94.807%	95.406%
x		92.429%	200.000	200.000	200.000	0.256	0.486	93.840%	94.063%
σ		2.546%	0.905	1.802	1.597	0.099	0.022	0.838%	2.217%
%RSD		2.755	0.453	0.901	0.799	38.720	4.447	0.893	2.357
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:48:59	0.194	0.186	0.215	0.203	0.213	91.969%		
2	13:49:25	0.168	0.159	0.201	0.165	0.196	93.572%		
3	13:49:52	0.192	0.159	0.215	0.203	0.207	92.546%		
x		0.184	0.168	0.210	0.190	0.205	92.696%		
σ		0.014	0.016	0.008	0.022	0.008	0.812%		
%RSD		7.780	9.516	3.764	11.640	4.107	0.876		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:14	90.033%	76.870	85.030	85.160	0.000	38010.000	36970.000	36800.000
2	13:53:41	92.229%	77.440	77.880	85.070	0.000	38360.000	37490.000	37340.000
3	13:54:07	92.010%	77.270	85.020	83.440	0.000	38240.000	37410.000	37300.000
x		91.424%	96.495%	103.301%	105.696%	0.000	95.506%	93.227%	92.862%
σ		1.210%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.323	0.378	4.993	1.143	0.000	0.462	0.749	0.809

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:14	368.100	4377.000	0.000	38030.000	37100.000	38190.000	93.224%	77.570
2	13:53:41	376.000	4500.000	0.000	39060.000	38620.000	39460.000	95.285%	78.650
3	13:54:07	374.700	4533.000	0.000	38770.000	37900.000	39390.000	96.197%	78.990
x		93.230%	111.749%	0.000	96.549%	94.687%	97.535%	94.902%	98.001%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.523%	n/a
%RSD		1.144	1.835	0.000	1.375	2.008	1.828	1.605	0.948

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:14	74.580	76.520	384.200	18480.000	19330.000	73.810	75.100	74.810
2	13:53:41	75.950	77.430	395.500	19020.000	19790.000	75.180	77.260	76.970
3	13:54:07	78.120	77.430	396.500	19050.000	20110.000	75.670	77.770	76.480
x		95.269%	96.406%	98.018%	94.251%	98.719%	93.608%	95.887%	95.109%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.341	0.680	1.745	1.681	1.990	1.287	1.845	1.484

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:14	74.820	75.300	73.790	74.170	75.660	76.920	0.000	72.990
2	13:53:41	76.320	74.470	76.010	78.010	76.750	77.450	0.000	76.080
3	13:54:07	76.870	76.090	77.240	75.630	78.530	78.300	0.000	75.640
x		95.004%	94.109%	94.601%	94.922%	96.226%	96.949%	0.000	93.634%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.397	1.074	2.313	2.556	1.880	0.894	0.000	2.232

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:14	94.808%	76.910	78.390	91.723%	75.250	75.690	74.380	72.920
2	13:53:41	97.094%	79.190	79.030	95.902%	76.780	76.770	77.750	75.430
3	13:54:07	99.346%	81.890	81.190	97.162%	76.060	76.050	77.650	73.990
x		97.083%	99.163%	99.419%	94.929%	95.040%	95.213%	95.739%	92.637%
σ		2.269%	n/a	n/a	2.847%	n/a	n/a	n/a	n/a
%RSD		2.337	3.138	1.844	2.999	1.007	0.724	2.504	1.700

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:14	95.545%	74.740	76.430	75.660	74.840	74.150	98.751%	97.841%
2	13:53:41	96.669%	79.360	77.080	78.480	77.770	77.010	101.337%	101.453%
3	13:54:07	100.927%	77.040	76.960	77.330	76.770	75.770	102.229%	104.828%
x		97.714%	96.308%	96.030%	96.446%	95.578%	94.554%	100.772%	101.374%
σ		2.839%	n/a	n/a	n/a	n/a	n/a	1.807%	3.494%
%RSD		2.905	2.995	0.451	1.835	1.949	1.890	1.793	3.447

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:14	74.790	75.810	74.040	72.120	72.730	100.264%
2	13:53:41	80.060	80.460	79.480	76.620	77.560	99.448%
3	13:54:07	77.920	79.440	78.060	76.640	76.520	103.165%
x		96.989%	98.212%	96.488%	93.908%	94.508%	100.959%
σ		n/a	n/a	n/a	n/a	n/a	1.954%
%RSD		3.419	3.109	3.652	3.469	3.362	1.935

ICB 4/2/2015 2:00:19 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:46	96.671%	0.126	-0.295	-0.453	0.000	21.930	0.291	0.782
2	14:01:12	96.244%	-0.047	-0.280	-0.505	0.000	22.210	-0.020	0.721
3	14:01:39	97.154%	-0.148	-0.044	-0.680	0.000	22.880	0.552	0.531
x		96.690%	-0.023	-0.206	-0.546	0.000	22.340	0.274	0.678
σ		0.455%	0.139	0.141	0.119	0.000	0.486	0.286	0.131
%RSD		0.471	608.700	68.140	21.740	0.000	2.176	104.300	19.320

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:46	-0.746	-0.236	0.000	25.970	19.420	0.788	101.280%	-0.768
2	14:01:12	-0.691	-0.089	0.000	26.520	1.011	-0.945	101.826%	-0.754
3	14:01:39	-0.815	-1.691	0.000	22.500	4.034	0.534	101.733%	-0.688
x		-0.751	-0.672	0.000	25.000	8.154	0.126	101.613%	-0.737
σ		0.062	0.886	0.000	2.183	9.870	0.936	0.292%	0.042
%RSD		8.263	131.800	0.000	8.734	121.100	745.100	0.287	5.761

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:46	0.011	0.055	0.036	2.620	4.523	0.007	-0.002	0.031
2	14:01:12	-0.034	-0.048	-0.015	1.577	3.409	0.004	-0.040	-0.040
3	14:01:39	0.061	0.005	-0.001	1.572	1.228	0.004	-0.056	0.107
x		0.013	0.004	0.007	1.923	3.053	0.005	-0.033	0.033
σ		0.048	0.052	0.026	0.604	1.676	0.002	0.028	0.073
%RSD		377.800	1247.000	376.000	31.390	54.880	35.290	84.660	225.100

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:46	-0.154	0.091	-0.017	0.004	0.738	-0.049	0.000	0.003
2	14:01:12	-0.093	0.060	0.020	-0.409	-0.144	-0.685	0.000	0.004
3	14:01:39	0.046	0.014	-0.092	-0.123	0.289	-0.262	0.000	-0.001
x		-0.067	0.055	-0.030	-0.176	0.294	-0.332	0.000	0.002
σ		0.103	0.039	0.057	0.211	0.441	0.323	0.000	0.003
%RSD		153.400	70.870	192.800	120.200	149.900	97.390	0.000	158.800

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:46	99.400%	-0.128	-0.128	99.446%	-0.063	-0.051	-0.055	-0.070
2	14:01:12	101.641%	-0.141	-0.156	101.545%	-0.055	-0.052	-0.028	0.014
3	14:01:39	103.949%	-0.088	-0.146	102.830%	-0.081	-0.055	0.025	-0.004
x		101.664%	-0.119	-0.144	101.274%	-0.067	-0.053	-0.020	-0.020
σ		2.275%	0.028	0.014	1.709%	0.013	0.002	0.041	0.044
%RSD		2.237	23.290	9.769	1.687	20.090	4.146	208.600	218.400

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:46	99.506%	-2.330	-0.760	-0.790	-0.029	-0.006	99.907%	99.876%
2	14:01:12	102.468%	-2.374	-0.767	-0.788	-0.064	0.004	101.914%	101.931%
3	14:01:39	103.721%	-2.285	-0.776	-0.769	-0.021	0.036	103.878%	104.712%
x		101.898%	-2.330	-0.768	-0.782	-0.038	0.012	101.900%	102.173%
σ		2.164%	0.045	0.008	0.011	0.023	0.022	1.986%	2.427%
%RSD		2.124	1.911	1.053	1.415	60.370	190.900	1.949	2.375

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:46	0.013	0.005	-0.021	-0.009	-0.012	101.786%
2	14:01:12	0.008	0.002	-0.009	-0.029	-0.009	102.209%
3	14:01:39	-0.003	-0.002	-0.019	-0.014	-0.007	103.738%
x		0.006	0.002	-0.016	-0.017	-0.009	102.577%
σ		0.008	0.004	0.007	0.010	0.003	1.027%
%RSD		129.400	234.500	41.470	60.600	27.390	1.001

CRI 1519288 4/2/2015 2:04:37 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:03	96.540%	0.829	3.591	4.532	0.000	123.500	100.800	100.700
2	14:05:30	98.259%	0.819	5.771	4.123	0.000	123.300	101.800	97.490
3	14:05:56	98.690%	0.938	4.755	4.463	0.000	123.900	102.000	100.500
x		97.830%	86.181%	94.113%	87.448%	0.000	154.464%	101.527%	99.576%
σ		1.138%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.163	7.670	23.170	5.010	0.000	0.256	0.617	1.816
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:03	30.470	479.300	0.000	118.300	141.200	107.300	103.723%	4.383
2	14:05:30	31.490	476.900	0.000	123.700	117.200	114.100	104.765%	4.341
3	14:05:56	31.270	479.300	0.000	127.200	109.700	107.100	104.905%	4.887
x		103.579%	95.695%	0.000	123.097%	122.716%	109.507%	104.464%	90.745%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.646%	n/a
%RSD		1.726	0.290	0.000	3.655	13.430	3.636	0.618	6.691
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:03	1.071	2.034	5.027	53.370	55.860	0.547	1.071	1.922
2	14:05:30	1.110	2.039	5.271	54.400	55.810	0.542	0.904	2.225
3	14:05:56	0.949	1.999	5.206	54.440	54.880	0.533	0.995	2.199
x		104.351%	101.188%	103.356%	108.138%	111.031%	108.179%	98.976%	105.772%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		8.027	1.081	2.439	1.114	0.996	1.256	8.456	7.948
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:03	1.894	5.607	5.858	0.866	5.039	4.545	0.000	4.869
2	14:05:30	2.188	5.797	5.563	0.923	6.356	4.492	0.000	4.901
3	14:05:56	1.939	5.246	6.155	0.776	5.133	3.365	0.000	4.975
x		100.345%	111.007%	117.174%	85.513%	110.185%	82.678%	0.000	98.300%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		7.897	5.044	5.048	8.668	13.330	16.120	0.000	1.103
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:03	107.841%	4.641	4.574	109.057%	0.899	0.971	0.971	1.141
2	14:05:30	109.998%	4.651	4.837	109.983%	0.990	1.021	1.145	1.029
3	14:05:56	111.584%	4.674	4.742	110.546%	1.017	1.016	1.203	1.092
x		109.808%	93.106%	94.349%	109.862%	96.848%	100.252%	110.615%	108.729%
σ		1.879%	n/a	n/a	0.752%	n/a	n/a	n/a	n/a
%RSD		1.711	0.367	2.826	0.684	6.404	2.715	10.940	5.172
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:03	96.267%	3.734	1.447	1.403	11.150	10.960	101.102%	111.303%
2	14:05:30	97.897%	3.956	1.394	1.447	11.670	11.300	103.167%	113.380%
3	14:05:56	97.742%	4.197	1.535	1.356	11.170	11.710	105.243%	114.330%
x		97.302%	79.249%	72.921%	70.103%	113.307%	113.240%	103.171%	113.004%
σ		0.900%	n/a	n/a	n/a	n/a	n/a	2.071%	1.548%
%RSD		0.925	5.837	4.881	3.226	2.559	3.347	2.007	1.370
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:05:03	1.048	1.023	0.929	0.880	0.911	116.499%		
2	14:05:30	1.026	0.995	0.999	1.023	1.023	117.149%		
3	14:05:56	1.018	0.994	1.053	0.999	1.038	115.417%		
x		103.071%	100.389%	99.369%	96.725%	99.072%	116.355%		
σ		n/a	n/a	n/a	n/a	n/a	0.875%		
%RSD		1.538	1.625	6.266	7.932	7.031	0.752		

ICSA 1501693 4/2/2015 2:08:57 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	14:09:24	76.434%	0.249	1.556	-0.148	0.000	98360.000	94660.000	94040.000
2	14:09:51	76.486%	0.168	0.068	0.392	0.000	99360.000	96120.000	95880.000
3	14:10:17	77.980%	0.193	0.215	-0.242	0.000	99140.000	95600.000	95460.000
x		76.967%	0.203	0.613	0.001	0.000	98950.000	95460.000	95120.000
σ		0.878%	0.042	0.820	0.343	0.000	524.300	739.600	963.600
%RSD		1.140	20.570	133.800	64080.000	0.000	0.530	0.775	1.013
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:24	92340.000	24.570	0.000	97920.000	96080.000	98120.000	84.436%	2104.000
2	14:09:51	95310.000	24.310	0.000	99110.000	99410.000	101200.000	85.271%	2155.000
3	14:10:17	95570.000	25.030	0.000	100500.000	100900.000	102100.000	85.113%	2183.000
x		94410.000	24.640	0.000	99160.000	98790.000	100500.000	84.940%	2147.000
σ		1794.000	0.368	0.000	1269.000	2463.000	2102.000	0.444%	39.810
%RSD		1.900	1.492	0.000	1.279	2.493	2.092	0.522	1.854
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:24	-0.194	0.482	0.938	95270.000	96270.000	0.142	0.089	1.965
2	14:09:51	-0.458	0.585	0.968	97800.000	98930.000	0.159	0.043	1.940
3	14:10:17	-0.517	0.503	1.030	98220.000	98760.000	0.141	-0.019	2.109
x		-0.389	0.523	0.979	97090.000	97990.000	0.147	0.038	2.004
σ		0.172	0.054	0.047	1598.000	1488.000	0.010	0.054	0.091
%RSD		44.200	10.400	4.775	1.646	1.518	6.901	143.900	4.548
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:24	2.967	6.023	4.919	0.028	0.252	-0.047	0.000	0.767
2	14:09:51	2.733	6.564	4.855	-0.447	0.536	-0.402	0.000	0.750
3	14:10:17	2.934	5.780	4.930	-0.174	1.269	-0.092	0.000	0.717
x		2.878	6.122	4.901	-0.198	0.685	-0.180	0.000	0.745
σ		0.127	0.401	0.041	0.238	0.525	0.193	0.000	0.025
%RSD		4.396	6.552	0.832	120.500	76.590	107.000	0.000	3.417
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:24	90.332%	2106.000	2213.000	86.289%	0.018	-0.015	2.172	0.515
2	14:09:51	90.609%	2130.000	2205.000	93.486%	-0.006	0.009	2.377	0.331
3	14:10:17	89.867%	2224.000	2338.000	85.260%	0.002	0.014	2.442	5.455
x		90.269%	2153.000	2252.000	88.345%	0.005	0.003	2.331	2.100
σ		0.375%	62.450	74.580	4.482%	0.012	0.015	0.141	2.906
%RSD		0.415	2.900	3.311	5.074	255.300	511.700	6.052	138.400
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:24	91.320%	-2.150	-0.695	-0.705	0.111	0.206	96.663%	99.272%
2	14:09:51	91.014%	-2.115	-0.720	-0.658	0.123	0.225	96.618%	99.562%
3	14:10:17	88.916%	-2.049	-0.662	-0.655	0.150	0.200	96.496%	97.289%
x		90.417%	-2.105	-0.693	-0.672	0.128	0.210	96.592%	98.708%
σ		1.309%	0.051	0.029	0.028	0.020	0.013	0.086%	1.237%
%RSD		1.447	2.436	4.189	4.182	15.700	6.192	0.089	1.253
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:09:24	0.021	0.024	0.255	0.233	0.267	104.729%		
2	14:09:51	0.034	0.020	0.273	0.269	0.278	98.237%		
3	14:10:17	0.027	0.017	0.281	0.283	0.291	90.200%		
x		0.027	0.021	0.270	0.261	0.279	97.722%		
σ		0.007	0.003	0.014	0.026	0.012	7.278%		
%RSD		24.100	16.310	5.079	9.808	4.403	7.448		

ICSAB 1501694 4/2/2015 2:13:17 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:13:44	75.213%	19.110	47.850	49.230	0.000	97740.000	92780.000	91990.000
2	14:14:11	75.817%	19.240	44.020	47.210	0.000	97870.000	93500.000	93180.000
3	14:14:37	76.217%	19.090	47.960	45.250	0.000	97720.000	92630.000	92740.000
x		75.749%	95.726%	93.221%	94.457%	0.000	97.777%	92.969%	92.638%
σ		0.505%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.667	0.436	4.811	4.218	0.000	0.087	0.499	0.648
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:13:44	91110.000	489.900	0.000	96750.000	95410.000	97600.000	85.458%	2039.000
2	14:14:11	92940.000	491.500	0.000	98120.000	98120.000	98880.000	85.607%	2117.000
3	14:14:37	92690.000	482.900	0.000	97580.000	98130.000	101200.000	86.577%	2097.000
x		92.248%	97.618%	0.000	97.481%	97.219%	99.210%	85.881%	104.218%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.607%	n/a
%RSD		1.074	0.927	0.000	0.709	1.610	1.813	0.707	1.932
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:13:44	17.620	18.390	18.900	93580.000	95140.000	18.230	18.040	19.630
2	14:14:11	18.060	18.930	19.560	96600.000	98010.000	18.970	18.610	20.270
3	14:14:37	17.960	19.060	19.790	96670.000	98130.000	18.800	18.360	20.060
x		89.394%	93.968%	97.076%	95.614%	97.093%	93.327%	91.674%	99.947%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.293	1.898	2.387	1.847	1.741	2.076	1.569	1.627
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:13:44	20.590	21.660	20.500	21.710	50.170	53.890	0.000	19.890
2	14:14:11	20.770	22.260	21.260	20.360	53.970	51.320	0.000	20.860
3	14:14:37	21.620	21.650	20.950	19.630	53.000	52.280	0.000	20.780
x		104.956%	87.424%	83.620%	102.834%	104.760%	104.994%	0.000	102.567%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.614	1.612	1.838	5.119	3.765	2.481	0.000	2.618
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:13:44	83.595%	2123.000	2221.000	84.326%	18.090	17.960	20.600	18.270
2	14:14:11	84.966%	2162.000	2189.000	94.115%	17.190	17.240	20.490	17.980
3	14:14:37	86.003%	2255.000	2379.000	86.157%	18.420	17.940	21.930	18.470
x		84.855%	109.017%	113.152%	88.199%	89.506%	88.560%	105.032%	91.195%
σ		1.208%	n/a	n/a	5.204%	n/a	n/a	n/a	n/a
%RSD		1.423	3.114	4.494	5.900	3.538	2.332	3.823	1.330
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:13:44	90.291%	91.680	18.310	18.050	18.940	18.490	95.574%	96.527%
2	14:14:11	92.258%	96.150	18.560	18.880	19.260	18.790	96.343%	98.712%
3	14:14:37	93.056%	96.440	18.950	18.780	18.860	18.620	99.229%	101.601%
x		91.868%	94.758%	93.039%	92.838%	95.096%	93.151%	97.049%	98.947%
σ		1.423%	n/a	n/a	n/a	n/a	n/a	1.927%	2.545%
%RSD		1.549	2.814	1.722	2.449	1.114	0.811	1.985	2.572
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:13:44	18.160	18.200	19.000	19.300	18.910	93.760%		
2	14:14:11	19.340	19.140	20.030	20.220	19.930	92.622%		
3	14:14:37	19.370	19.600	19.990	20.400	19.880	94.737%		
x		94.778%	94.898%	98.379%	99.850%	97.865%	93.706%		
σ		n/a	n/a	n/a	n/a	n/a	1.058%		
%RSD		3.624	3.767	2.966	2.957	2.957	1.130		

CCV 1487954 4/2/2015 2:20:46 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:21:12	87.036%	95.830	98.210	97.430	0.000	48580.000	46720.000	46240.000
2	14:21:39	84.869%	102.500	101.000	101.000	0.000	50690.000	48700.000	48530.000
3	14:22:06	85.846%	104.400	101.400	103.500	0.000	50810.000	49000.000	48610.000
x		85.917%	100.888%	100.196%	100.636%	0.000	100.054%	96.279%	95.583%
σ		1.085%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.263	4.444	1.737	3.040	0.000	2.500	2.571	2.815
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:21:12	482.900	4881.000	0.000	49690.000	47620.000	48350.000	98.558%	99.090
2	14:21:39	501.100	5020.000	0.000	50390.000	49300.000	50010.000	98.953%	102.500
3	14:22:06	502.600	5010.000	0.000	51000.000	49530.000	49550.000	99.520%	99.460
x		99.110%	99.413%	0.000	100.719%	97.635%	98.611%	99.010%	100.351%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.483%	n/a
%RSD		2.212	1.562	0.000	1.308	2.134	1.739	0.488	1.863
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:21:12	94.350	93.160	495.600	23360.000	24930.000	92.670	93.810	92.570
2	14:21:39	98.190	97.990	516.300	24120.000	26120.000	94.750	95.880	97.190
3	14:22:06	98.000	97.450	515.800	24560.000	26120.000	95.520	97.320	97.020
x		96.848%	96.200%	101.847%	96.052%	102.880%	94.316%	95.669%	95.594%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.239	2.747	2.324	2.524	2.668	1.563	1.847	2.742
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:21:12	93.120	95.490	95.620	96.430	98.280	96.100	0.000	95.950
2	14:21:39	97.490	99.120	100.800	98.920	99.420	100.900	0.000	100.000
3	14:22:06	97.670	98.520	99.460	98.480	103.900	100.400	0.000	100.200
x		96.094%	97.712%	98.624%	97.941%	100.538%	99.123%	0.000	98.721%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.686	1.989	2.718	1.358	2.963	2.652	0.000	2.435
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:21:12	103.886%	97.660	98.320	100.424%	98.950	98.090	97.510	94.840
2	14:21:39	104.479%	103.000	104.100	100.756%	99.310	99.570	100.300	95.160
3	14:22:06	104.096%	105.000	106.900	100.670%	101.000	100.000	100.900	97.630
x		104.154%	101.882%	103.091%	100.617%	99.758%	99.221%	99.574%	95.875%
σ		0.300%	n/a	n/a	0.172%	n/a	n/a	n/a	n/a
%RSD		0.288	3.727	4.224	0.171	1.101	1.008	1.820	1.595
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:21:12	103.273%	95.690	96.750	97.820	96.390	95.220	108.487%	108.830%
2	14:21:39	106.582%	96.420	98.780	97.830	98.660	98.780	108.351%	111.565%
3	14:22:06	104.277%	99.840	100.900	101.100	98.900	99.840	108.708%	109.837%
x		104.711%	97.316%	98.797%	98.926%	97.983%	97.946%	108.515%	110.078%
σ		1.696%	n/a	n/a	n/a	n/a	n/a	0.180%	1.383%
%RSD		1.620	2.279	2.079	1.925	1.413	2.470	0.166	1.257
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:21:12	96.620	98.100	96.410	96.910	95.840	110.016%		
2	14:21:39	99.190	100.500	98.430	101.000	98.580	109.970%		
3	14:22:06	103.200	103.800	104.100	104.900	103.900	104.458%		
x		99.672%	100.799%	99.662%	100.945%	99.429%	108.148%		
σ		n/a	n/a	n/a	n/a	n/a	3.196%		
%RSD		3.331	2.835	4.025	3.972	4.106	2.955		

CCB1 4/2/2015 2:28:12 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:28:39	95.483%	-0.029	-0.546	-0.584	0.000	49.750	5.246	5.664
2	14:29:06	96.775%	0.090	-0.867	-0.748	0.000	48.620	3.948	4.253
3	14:29:32	95.743%	-0.063	-0.015	-1.125	0.000	50.620	4.161	4.010
x		96.000%	-0.001	-0.476	-0.819	0.000	49.660	4.451	4.643
σ		0.684%	0.080	0.430	0.277	0.000	1.004	0.696	0.893
%RSD		0.712	10510.000	90.410	33.850	0.000	2.022	15.640	19.240
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:28:39	0.254	-0.911	0.000	41.350	4.637	2.190	107.757%	-0.592
2	14:29:06	0.077	-3.719	0.000	35.360	-1.944	2.408	109.251%	-0.616
3	14:29:32	0.192	-3.186	0.000	41.380	-4.537	4.413	108.926%	-0.584
x		0.175	-2.605	0.000	39.360	-0.615	3.004	108.645%	-0.597
σ		0.090	1.491	0.000	3.466	4.729	1.225	0.786%	0.016
%RSD		51.490	57.230	0.000	8.804	769.300	40.780	0.723	2.743
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:28:39	0.041	0.055	0.090	9.655	3.199	-0.001	-0.048	-0.086
2	14:29:06	-0.039	0.023	0.059	8.955	5.353	0.005	-0.038	-0.105
3	14:29:32	0.002	0.001	0.062	7.767	3.112	0.014	-0.022	-0.013
x		0.001	0.026	0.070	8.792	3.888	0.006	-0.036	-0.068
σ		0.040	0.027	0.017	0.954	1.269	0.008	0.013	0.049
%RSD		2980.000	102.300	24.580	10.850	32.640	130.600	35.500	71.650
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:28:39	-0.270	0.002	0.049	-0.228	-0.071	-0.755	0.000	0.019
2	14:29:06	-0.072	-0.010	0.017	-0.397	-0.215	-0.629	0.000	0.027
3	14:29:32	-0.006	0.105	0.011	-0.279	-0.259	-1.043	0.000	0.020
x		-0.116	0.032	0.026	-0.301	-0.182	-0.809	0.000	0.022
σ		0.137	0.063	0.020	0.086	0.098	0.213	0.000	0.004
%RSD		118.200	195.300	78.860	28.680	54.160	26.270	0.000	20.250
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:28:39	110.648%	0.160	0.216	109.369%	-0.085	-0.082	-0.029	-0.066
2	14:29:06	113.053%	0.228	0.281	111.556%	-0.071	-0.081	-0.016	-0.041
3	14:29:32	116.249%	0.214	0.214	113.158%	-0.068	-0.100	-0.021	-0.062
x		113.317%	0.201	0.237	111.361%	-0.075	-0.088	-0.022	-0.056
σ		2.810%	0.036	0.038	1.902%	0.009	0.011	0.006	0.013
%RSD		2.480	18.010	15.900	1.708	12.340	12.210	29.390	23.990
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:28:39	112.561%	-2.689	-0.789	-0.807	-0.057	-0.007	110.124%	111.012%
2	14:29:06	115.278%	-2.722	-0.785	-0.800	-0.006	-0.008	114.054%	114.713%
3	14:29:32	117.093%	-2.555	-0.817	-0.812	-0.009	0.011	115.999%	116.110%
x		114.977%	-2.655	-0.797	-0.806	-0.024	-0.001	113.392%	113.945%
σ		2.281%	0.088	0.018	0.006	0.028	0.011	2.993%	2.634%
%RSD		1.984	3.332	2.238	0.786	117.400	846.000	2.640	2.312
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:28:39	0.005	0.005	-0.012	-0.013	-0.005	116.437%		
2	14:29:06	0.000	0.001	-0.011	-0.003	-0.001	117.231%		
3	14:29:32	0.009	0.007	-0.017	-0.011	0.000	116.517%		
x		0.005	0.004	-0.013	-0.009	-0.002	116.728%		
σ		0.005	0.003	0.003	0.005	0.003	0.437%		
%RSD		95.210	64.020	24.430	57.680	144.700	0.375		

MB 180-137094/1-A 4/2/2015 2:32:33 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:59	97.428%	-0.010	-0.713	-0.858	0.000	46.100	1.954	2.552
2	14:33:26	97.621%	0.020	-0.989	-0.921	0.000	46.320	3.477	2.503
3	14:33:52	98.745%	-0.097	-0.412	-1.151	0.000	45.690	2.467	1.999
x		97.932%	-0.029	-0.704	-0.976	0.000	46.040	2.632	2.351
σ		0.711%	0.061	0.289	0.154	0.000	0.316	0.775	0.306
%RSD		0.726	209.200	40.970	15.770	0.000	0.687	29.430	13.010
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:59	0.230	-2.308	0.000	36.910	8.566	4.619	110.302%	-0.666
2	14:33:26	0.301	-2.221	0.000	38.510	2.546	3.676	111.074%	-0.565
3	14:33:52	0.314	-1.970	0.000	34.370	18.050	4.671	112.469%	-0.440
x		0.282	-2.166	0.000	36.600	9.721	4.322	111.282%	-0.557
σ		0.045	0.175	0.000	2.086	7.816	0.560	1.098%	0.114
%RSD		16.040	8.090	0.000	5.699	80.410	12.950	0.987	20.380
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:59	0.005	0.009	0.048	3.637	0.574	0.005	-0.019	-0.089
2	14:33:26	0.059	0.024	0.066	3.209	-0.456	-0.002	-0.089	-0.062
3	14:33:52	0.016	-0.008	0.012	1.456	1.459	-0.001	-0.062	-0.093
x		0.027	0.008	0.042	2.767	0.526	0.001	-0.056	-0.081
σ		0.029	0.016	0.027	1.156	0.958	0.004	0.035	0.017
%RSD		107.700	194.800	65.040	41.760	182.200	427.600	61.950	21.090
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:59	-0.169	0.164	0.108	-0.308	0.644	-0.728	0.000	0.005
2	14:33:26	-0.114	0.122	0.070	-0.272	0.482	-1.151	0.000	0.013
3	14:33:52	-0.078	0.056	0.040	-0.296	0.653	-0.685	0.000	0.008
x		-0.120	0.114	0.072	-0.292	0.593	-0.854	0.000	0.008
σ		0.046	0.054	0.034	0.018	0.096	0.258	0.000	0.004
%RSD		38.190	47.550	46.970	6.253	16.250	30.160	0.000	47.870
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:59	114.785%	0.018	-0.018	113.234%	-0.070	-0.076	-0.039	0.006
2	14:33:26	117.651%	0.078	0.048	115.308%	-0.074	-0.074	-0.036	-0.060
3	14:33:52	119.582%	0.086	0.101	115.882%	-0.059	-0.069	-0.046	-0.034
x		117.340%	0.061	0.044	114.808%	-0.068	-0.073	-0.040	-0.029
σ		2.414%	0.037	0.060	1.393%	0.007	0.003	0.005	0.033
%RSD		2.057	60.720	137.400	1.213	10.970	4.631	11.720	114.200
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:59	115.219%	-2.623	-0.815	-0.832	-0.013	0.019	117.045%	116.463%
2	14:33:26	116.813%	-2.515	-0.822	-0.839	-0.020	0.025	118.683%	118.247%
3	14:33:52	120.182%	-2.583	-0.806	-0.844	-0.036	-0.009	119.420%	118.914%
x		117.405%	-2.573	-0.815	-0.838	-0.023	0.012	118.383%	117.875%
σ		2.534%	0.055	0.008	0.006	0.012	0.018	1.216%	1.267%
%RSD		2.158	2.121	0.985	0.720	52.030	155.600	1.027	1.075
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:32:59	0.003	-0.004	0.037	0.034	0.044	118.948%		
2	14:33:26	-0.001	0.001	0.059	0.028	0.053	117.948%		
3	14:33:52	0.007	-0.003	0.045	0.015	0.038	119.972%		
x		0.003	-0.002	0.047	0.026	0.045	118.956%		
σ		0.004	0.002	0.011	0.010	0.007	1.012%		
%RSD		126.400	110.600	23.900	38.690	16.660	0.851		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:37:14	93.154%	41.880	866.500	853.500	0.000	43250.000	39770.000	39930.000
2	14:37:40	94.743%	41.090	861.800	849.600	0.000	43400.000	40100.000	40420.000
3	14:38:07	94.596%	42.970	902.100	865.900	0.000	44370.000	40690.000	41110.000
x		94.164%	41.980	876.800	856.400	0.000	43670.000	40190.000	40490.000
σ		0.878%	0.943	22.060	8.489	0.000	611.900	467.000	597.300
%RSD		0.933	2.246	2.515	0.991	0.000	1.401	1.162	1.475
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:37:14	1704.000	8484.000	0.000	46290.000	45700.000	47860.000	85.366%	954.800
2	14:37:40	1745.000	8545.000	0.000	46400.000	46700.000	48910.000	89.168%	958.800
3	14:38:07	1786.000	8694.000	0.000	46630.000	47030.000	49010.000	89.851%	972.800
x		1745.000	8574.000	0.000	46440.000	46470.000	48590.000	88.128%	962.100
σ		41.090	107.900	0.000	173.900	692.700	635.600	2.417%	9.466
%RSD		2.355	1.258	0.000	0.375	1.491	1.308	2.742	0.984
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:37:14	483.700	185.900	467.600	993.300	1035.000	451.900	445.400	223.800
2	14:37:40	484.200	186.600	474.000	941.200	1058.000	458.000	451.100	227.900
3	14:38:07	494.800	189.300	482.700	955.500	1067.000	454.400	446.100	225.300
x		487.600	187.300	474.700	963.400	1053.000	454.700	447.500	225.600
σ		6.286	1.790	7.565	26.930	16.160	3.041	3.127	2.091
%RSD		1.289	0.956	1.593	2.796	1.534	0.669	0.699	0.927
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:37:14	225.200	451.300	451.000	34.510	10.340	9.374	0.000	894.700
2	14:37:40	230.600	460.900	463.300	35.880	9.665	8.837	0.000	925.800
3	14:38:07	228.500	455.600	463.000	39.530	9.566	9.384	0.000	927.100
x		228.100	455.900	459.100	36.640	9.857	9.199	0.000	915.900
σ		2.705	4.830	6.994	2.595	0.422	0.313	0.000	18.350
%RSD		1.186	1.059	1.523	7.083	4.276	3.403	0.000	2.004
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:37:14	89.953%	970.400	993.700	86.309%	46.080	45.280	47.290	46.760
2	14:37:40	92.413%	1003.000	1031.000	87.841%	46.030	45.770	48.110	38.210
3	14:38:07	94.945%	1005.000	1033.000	89.202%	45.480	45.710	48.540	39.060
x		92.437%	992.600	1019.000	87.784%	45.860	45.590	47.980	41.350
σ		2.496%	19.220	22.270	1.448%	0.333	0.267	0.638	4.711
%RSD		2.700	1.937	2.185	1.649	0.727	0.586	1.329	11.390
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:37:14	87.756%	1936.000	485.500	478.700	1802.000	1857.000	94.473%	94.870%
2	14:37:40	91.207%	1968.000	493.600	486.500	1842.000	1899.000	94.442%	96.174%
3	14:38:07	93.469%	1942.000	491.000	483.600	1848.000	1894.000	94.602%	97.673%
x		90.811%	1949.000	490.100	483.000	1831.000	1883.000	94.506%	96.239%
σ		2.877%	16.840	4.116	3.952	24.650	22.380	0.085%	1.403%
%RSD		3.168	0.864	0.840	0.818	1.347	1.188	0.090	1.458
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:37:14	46.910	46.800	19.580	19.700	19.510	85.557%		
2	14:37:40	48.640	48.450	20.000	20.070	19.760	85.781%		
3	14:38:07	47.760	47.980	19.670	19.970	19.440	87.891%		
x		47.770	47.740	19.750	19.920	19.570	86.410%		
σ		0.868	0.850	0.220	0.189	0.167	1.288%		
%RSD		1.817	1.781	1.115	0.949	0.855	1.491		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:41:29	95.432%	42.670	872.400	850.200	0.000	43750.000	39850.000	40210.000
2	14:41:56	95.424%	42.860	898.600	874.200	0.000	44290.000	40500.000	41050.000
3	14:42:22	96.367%	43.880	893.900	866.200	0.000	44090.000	40380.000	40940.000
x		95.741%	43.140	888.300	863.500	0.000	44040.000	40240.000	40730.000
σ		0.542%	0.650	13.960	12.180	0.000	272.300	348.500	458.600
%RSD		0.566	1.506	1.572	1.410	0.000	0.618	0.866	1.126
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:41:29	1730.000	8555.000	0.000	47130.000	47200.000	49000.000	89.858%	955.300
2	14:41:56	1790.000	8600.000	0.000	47700.000	47940.000	49500.000	92.947%	978.600
3	14:42:22	1798.000	8603.000	0.000	46150.000	45970.000	47550.000	95.928%	954.000
x		1773.000	8586.000	0.000	46990.000	47040.000	48690.000	92.911%	962.700
σ		37.280	26.880	0.000	780.200	996.900	1013.000	3.036%	13.870
%RSD		2.103	0.313	0.000	1.660	2.119	2.080	3.267	1.441
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:41:29	494.200	187.800	471.800	932.600	1027.000	450.400	440.100	222.500
2	14:41:56	500.300	189.400	478.700	939.700	1169.000	454.900	443.800	224.600
3	14:42:22	490.200	188.900	476.600	923.600	1057.000	447.400	437.200	220.200
x		494.900	188.700	475.700	932.000	1084.000	450.900	440.400	222.400
σ		5.111	0.800	3.528	8.086	74.580	3.763	3.302	2.176
%RSD		1.033	0.424	0.742	0.868	6.879	0.835	0.750	0.978
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:41:29	224.200	453.400	454.800	37.620	8.694	8.735	0.000	916.600
2	14:41:56	224.700	457.200	458.900	37.940	9.006	9.081	0.000	939.600
3	14:42:22	224.000	454.800	461.000	36.320	9.599	9.488	0.000	944.800
x		224.300	455.100	458.200	37.300	9.100	9.101	0.000	933.700
σ		0.377	1.949	3.156	0.856	0.460	0.377	0.000	15.000
%RSD		0.168	0.428	0.689	2.294	5.049	4.143	0.000	1.606
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:41:29	96.998%	982.200	1015.000	93.292%	45.420	45.340	47.620	37.280
2	14:41:56	100.772%	1015.000	1039.000	95.525%	45.880	45.660	47.220	39.440
3	14:42:22	102.314%	1025.000	1056.000	97.004%	45.630	44.990	48.960	38.510
x		100.028%	1007.000	1037.000	95.274%	45.640	45.330	47.940	38.410
σ		2.735%	22.290	20.590	1.869%	0.231	0.335	0.912	1.081
%RSD		2.734	2.213	1.986	1.961	0.507	0.739	1.901	2.814
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:41:29	95.085%	1942.000	488.800	482.600	1845.000	1884.000	100.712%	101.592%
2	14:41:56	99.084%	1977.000	499.300	493.700	1864.000	1952.000	102.242%	105.508%
3	14:42:22	103.324%	1927.000	486.100	482.400	1864.000	1903.000	105.703%	107.802%
x		99.164%	1949.000	491.400	486.200	1858.000	1913.000	102.886%	104.967%
σ		4.120%	25.730	6.980	6.470	10.860	35.020	2.557%	3.140%
%RSD		4.155	1.320	1.420	1.331	0.585	1.830	2.486	2.992
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:41:29	47.090	47.780	19.940	20.000	19.890	92.049%		
2	14:41:56	48.900	49.340	20.570	20.700	20.380	94.272%		
3	14:42:22	47.800	48.240	19.740	20.010	19.720	98.605%		
x		47.930	48.450	20.080	20.240	20.000	94.976%		
σ		0.914	0.803	0.435	0.396	0.343	3.334%		
%RSD		1.907	1.658	2.164	1.958	1.715	3.510		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:45:45	90.815%	0.945	117.000	112.100	0.000	32910.000	33940.000	34230.000
2	14:46:11	89.416%	1.070	120.800	112.900	0.000	34010.000	35120.000	35580.000
3	14:46:38	89.561%	1.602	118.500	113.800	0.000	34700.000	36100.000	36350.000
x		89.931%	1.206	118.800	112.900	0.000	33870.000	35060.000	35390.000
σ		0.769%	0.349	1.915	0.865	0.000	903.300	1083.000	1071.000
%RSD		0.855	28.910	1.612	0.766	0.000	2.667	3.090	3.027

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:45:45	3117.000	5650.000	0.000	18140.000	160600.000	162700.000	92.442%	1.900
2	14:46:11	3235.000	5845.000	0.000	18450.000	166100.000	165300.000	94.421%	1.695
3	14:46:38	3327.000	5909.000	0.000	18960.000	167700.000	167700.000	94.218%	1.613
x		3226.000	5801.000	0.000	18520.000	164800.000	165200.000	93.694%	1.736
σ		105.500	134.900	0.000	414.000	3737.000	2484.000	1.089%	0.148
%RSD		3.270	2.325	0.000	2.236	2.268	1.503	1.162	8.522

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:45:45	4.126	8.020	2216.000	179.600	657.500	54.680	102.400	5.310
2	14:46:11	10.260	8.358	2253.000	182.800	661.200	56.220	105.500	5.713
3	14:46:38	14.390	8.492	2289.000	187.800	652.000	56.730	106.300	5.860
x		9.594	8.290	2253.000	183.400	656.900	55.880	104.700	5.628
σ		5.165	0.244	36.630	4.137	4.637	1.064	2.076	0.285
%RSD		53.840	2.937	1.626	2.255	0.706	1.904	1.982	5.062

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:45:45	6.228	161.400	160.700	1.745	0.453	0.864	0.000	1882.000
2	14:46:11	6.374	162.900	162.400	5.565	0.700	0.731	0.000	1903.000
3	14:46:38	6.615	164.800	163.600	1.487	1.404	0.322	0.000	1944.000
x		6.405	163.000	162.200	2.932	0.852	0.639	0.000	1909.000
σ		0.196	1.688	1.418	2.284	0.493	0.282	0.000	31.400
%RSD		3.056	1.035	0.874	77.880	57.870	44.180	0.000	1.644

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:45:45	115.093%	4.138	4.339	95.242%	-0.045	-0.030	1.210	1.127
2	14:46:11	118.082%	3.515	3.450	96.276%	-0.056	-0.048	1.143	0.938
3	14:46:38	118.070%	2.838	2.862	97.435%	-0.041	-0.048	1.141	1.022
x		117.082%	3.497	3.550	96.318%	-0.047	-0.042	1.165	1.029
σ		1.722%	0.650	0.743	1.097%	0.008	0.010	0.039	0.095
%RSD		1.471	18.590	20.940	1.139	16.740	23.670	3.370	9.217

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:45:45	98.864%	2.415	-0.508	-0.376	30.870	31.370	106.251%	107.593%
2	14:46:11	100.540%	1.537	-0.467	-0.397	32.980	32.160	108.277%	109.060%
3	14:46:38	101.144%	1.019	-0.489	-0.310	32.330	31.680	107.862%	109.520%
x		100.182%	1.657	-0.488	-0.361	32.060	31.740	107.464%	108.724%
σ		1.182%	0.706	0.020	0.046	1.078	0.397	1.070%	1.006%
%RSD		1.179	42.610	4.199	12.630	3.363	1.249	0.996	0.925

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:45:45	0.503	0.511	0.386	0.347	0.373	99.379%
2	14:46:11	0.425	0.445	0.401	0.341	0.367	99.695%
3	14:46:38	0.402	0.382	0.378	0.351	0.360	104.055%
x		0.443	0.446	0.388	0.346	0.366	101.043%
σ		0.053	0.064	0.011	0.005	0.006	2.613%
%RSD		12.010	14.460	2.900	1.506	1.732	2.586

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:49:59	81.916%	2.715	157.800	157.800	0.000	51920.000	41500.000	42020.000
2	14:50:26	82.908%	2.139	163.000	162.900	0.000	52420.000	42390.000	42740.000
3	14:50:52	82.518%	2.259	164.800	163.400	0.000	52130.000	42430.000	42840.000
x		82.447%	2.371	161.800	161.400	0.000	52160.000	42110.000	42530.000
σ		0.500%	0.304	3.644	3.073	0.000	253.600	527.700	448.200
%RSD		0.606	12.820	2.252	1.904	0.000	0.486	1.253	1.054
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:49:59	4839.000	7748.000	0.000	20410.000	181700.000	182700.000	86.801%	1.370
2	14:50:26	4951.000	7836.000	0.000	21260.000	190000.000	190400.000	86.240%	0.657
3	14:50:52	4971.000	7824.000	0.000	21100.000	186800.000	186200.000	87.857%	1.300
x		4920.000	7803.000	0.000	20920.000	186200.000	186400.000	86.966%	1.109
σ		71.280	47.700	0.000	450.700	4231.000	3827.000	0.821%	0.393
%RSD		1.449	0.611	0.000	2.154	2.273	2.053	0.944	35.430
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:49:59	8.665	7.274	1602.000	125.400	662.900	68.510	125.400	13.660
2	14:50:26	6.988	7.245	1648.000	130.400	679.600	71.450	128.500	13.800
3	14:50:52	3.869	7.006	1623.000	126.400	654.800	71.660	129.300	13.760
x		6.508	7.175	1624.000	127.400	665.800	70.540	127.700	13.740
σ		2.434	0.147	22.760	2.619	12.650	1.758	2.026	0.074
%RSD		37.400	2.048	1.401	2.056	1.899	2.493	1.586	0.541
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:49:59	13.950	169.400	167.800	1.209	-1.046	-1.352	0.000	1781.000
2	14:50:26	15.090	173.600	173.200	2.281	-1.128	-2.457	0.000	1826.000
3	14:50:52	14.990	171.900	173.000	-0.206	-1.002	-2.206	0.000	1818.000
x		14.680	171.700	171.300	1.095	-1.058	-2.005	0.000	1808.000
σ		0.630	2.141	3.069	1.248	0.064	0.579	0.000	24.040
%RSD		4.294	1.248	1.791	113.900	6.039	28.880	0.000	1.330
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:49:59	115.254%	0.143	0.355	90.797%	-0.081	-0.069	1.008	0.909
2	14:50:26	117.032%	0.270	0.373	85.117%	-0.040	-0.064	0.984	0.951
3	14:50:52	118.323%	0.196	0.300	93.764%	-0.044	-0.063	0.918	0.904
x		116.870%	0.203	0.343	89.893%	-0.055	-0.065	0.970	0.921
σ		1.541%	0.064	0.038	4.394%	0.023	0.003	0.047	0.026
%RSD		1.318	31.470	11.070	4.888	41.210	5.016	4.828	2.788
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:49:59	88.083%	-1.582	-0.702	-0.592	9.496	9.524	93.863%	95.355%
2	14:50:26	87.973%	-1.438	-0.715	-0.576	9.356	9.462	95.467%	96.677%
3	14:50:52	90.150%	-1.461	-0.712	-0.590	9.538	9.067	94.713%	97.624%
x		88.735%	-1.494	-0.710	-0.586	9.463	9.351	94.681%	96.552%
σ		1.226%	0.077	0.007	0.009	0.095	0.248	0.802%	1.140%
%RSD		1.382	5.179	0.953	1.456	1.003	2.654	0.847	1.181
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:49:59	0.967	0.923	0.792	0.702	0.730	85.548%		
2	14:50:26	0.963	0.939	0.819	0.801	0.810	83.638%		
3	14:50:52	0.922	0.980	0.769	0.750	0.771	85.679%		
x		0.951	0.948	0.793	0.751	0.770	84.955%		
σ		0.025	0.029	0.025	0.049	0.040	1.143%		
%RSD		2.632	3.102	3.198	6.568	5.181	1.345		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:17	82.100%	0.586	165.600	165.000	0.000	56010.000	43160.000	43330.000
2	14:54:43	82.721%	0.838	163.400	165.700	0.000	56310.000	43710.000	43840.000
3	14:55:10	82.147%	0.697	166.300	161.900	0.000	56420.000	44110.000	44010.000
x		82.322%	0.707	165.100	164.200	0.000	56250.000	43660.000	43730.000
σ		0.346%	0.126	1.528	2.035	0.000	209.400	477.600	355.200
%RSD		0.420	17.840	0.925	1.239	0.000	0.372	1.094	0.812
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:17	861.800	7266.000	0.000	13370.000	170800.000	172900.000	85.206%	1.194
2	14:54:43	877.100	7320.000	0.000	13570.000	176000.000	178700.000	86.330%	0.740
3	14:55:10	878.200	7272.000	0.000	13640.000	177900.000	179100.000	86.568%	0.867
x		872.300	7286.000	0.000	13520.000	174900.000	176900.000	86.035%	0.934
σ		9.142	29.450	0.000	140.400	3679.000	3501.000	0.728%	0.235
%RSD		1.048	0.404	0.000	1.038	2.104	1.979	0.846	25.140
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:17	3.615	7.784	1740.000	435.900	947.000	36.620	97.830	1.406
2	14:54:43	6.567	8.071	1776.000	449.400	955.300	37.510	98.910	1.448
3	14:55:10	10.700	8.033	1787.000	450.300	955.100	37.450	98.900	1.492
x		6.960	7.963	1768.000	445.200	952.500	37.190	98.550	1.449
σ		3.557	0.156	24.330	8.053	4.748	0.498	0.616	0.043
%RSD		51.110	1.961	1.376	1.809	0.499	1.339	0.625	2.975
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:17	2.268	119.600	119.300	0.172	-0.813	-0.562	0.000	2429.000
2	14:54:43	2.300	120.500	121.200	3.673	-1.987	-0.504	0.000	2462.000
3	14:55:10	2.228	121.200	123.100	3.373	-1.179	-1.373	0.000	2435.000
x		2.265	120.400	121.200	2.406	-1.326	-0.813	0.000	2442.000
σ		0.036	0.825	1.897	1.940	0.601	0.486	0.000	17.500
%RSD		1.610	0.685	1.565	80.640	45.310	59.800	0.000	0.716
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:17	101.487%	0.094	0.197	86.454%	-0.060	-0.076	0.505	0.560
2	14:54:43	104.483%	0.133	0.226	88.112%	-0.065	-0.087	0.478	0.497
3	14:55:10	107.072%	0.150	0.220	90.134%	-0.076	-0.071	0.470	0.515
x		104.347%	0.126	0.214	88.233%	-0.067	-0.078	0.485	0.524
σ		2.795%	0.029	0.015	1.843%	0.009	0.008	0.018	0.032
%RSD		2.679	23.120	7.061	2.089	12.760	10.500	3.759	6.197
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:17	91.754%	-2.250	-0.698	-0.656	21.080	22.310	94.408%	96.992%
2	14:54:43	93.715%	-2.077	-0.709	-0.608	22.810	22.650	98.115%	100.013%
3	14:55:10	95.602%	-2.143	-0.684	-0.543	22.290	22.420	102.041%	103.289%
x		93.690%	-2.157	-0.697	-0.602	22.060	22.460	98.188%	100.098%
σ		1.924%	0.087	0.013	0.056	0.886	0.171	3.817%	3.150%
%RSD		2.054	4.051	1.806	9.363	4.018	0.762	3.887	3.147
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:54:17	0.232	0.218	0.060	0.049	0.073	90.881%		
2	14:54:43	0.228	0.224	0.082	0.081	0.083	93.155%		
3	14:55:10	0.217	0.202	0.080	0.074	0.075	96.201%		
x		0.225	0.215	0.074	0.068	0.077	93.412%		
σ		0.008	0.012	0.012	0.017	0.005	2.669%		
%RSD		3.454	5.450	16.480	24.750	6.806	2.857		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:31	76.382%	1.705	161.400	156.900	0.000	57310.000	45700.000	45690.000
2	14:58:58	77.607%	1.587	165.600	159.600	0.000	57270.000	46050.000	46650.000
3	14:59:25	77.041%	1.322	170.600	156.200	0.000	57460.000	46280.000	46540.000
x		77.010%	1.538	165.900	157.600	0.000	57350.000	46010.000	46290.000
σ		0.613%	0.196	4.610	1.787	0.000	101.300	292.300	524.100
%RSD		0.796	12.740	2.779	1.134	0.000	0.177	0.635	1.132
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:31	3554.000	8891.000	0.000	16050.000	193300.000	194700.000	81.976%	1.278
2	14:58:58	3628.000	9008.000	0.000	16170.000	198400.000	200100.000	83.935%	1.575
3	14:59:25	3616.000	8996.000	0.000	16200.000	198400.000	199300.000	83.995%	1.082
x		3599.000	8965.000	0.000	16140.000	196700.000	198100.000	83.302%	1.312
σ		39.840	64.140	0.000	82.060	2937.000	2895.000	1.149%	0.248
%RSD		1.107	0.715	0.000	0.509	1.493	1.462	1.379	18.940
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:31	6.403	11.290	2277.000	1959.000	2460.000	66.990	118.900	9.892
2	14:58:58	10.160	10.740	2308.000	1992.000	2513.000	68.730	118.400	9.905
3	14:59:25	10.120	10.400	2316.000	2009.000	2520.000	68.310	121.500	9.595
x		8.894	10.810	2301.000	1987.000	2498.000	68.010	119.600	9.797
σ		2.157	0.449	20.420	25.440	32.620	0.908	1.640	0.175
%RSD		24.260	4.157	0.888	1.280	1.306	1.334	1.371	1.789
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:31	10.620	177.000	178.200	3.593	-0.496	-1.043	0.000	2580.000
2	14:58:58	10.770	181.400	182.500	1.575	-1.353	-1.713	0.000	2639.000
3	14:59:25	11.120	182.300	183.900	7.288	-1.008	-1.394	0.000	2649.000
x		10.840	180.200	181.500	4.152	-0.952	-1.384	0.000	2623.000
σ		0.257	2.800	2.973	2.897	0.431	0.335	0.000	37.310
%RSD		2.367	1.554	1.638	69.780	45.260	24.230	0.000	1.423
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:31	108.929%	-0.038	-0.002	87.973%	-0.075	-0.083	0.535	0.544
2	14:58:58	111.430%	0.004	-0.005	88.068%	-0.079	-0.083	0.526	-0.605
3	14:59:25	111.146%	-0.025	0.032	89.222%	-0.062	-0.070	0.488	0.520
x		110.502%	-0.020	0.008	88.421%	-0.072	-0.078	0.516	0.153
σ		1.370%	0.022	0.021	0.695%	0.009	0.008	0.025	0.657
%RSD		1.239	110.500	251.300	0.786	12.090	9.629	4.925	430.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:31	91.563%	-2.283	-0.745	-0.604	9.188	9.491	100.678%	101.896%
2	14:58:58	91.495%	-2.018	-0.732	-0.552	9.876	9.930	101.891%	103.398%
3	14:59:25	93.156%	-2.156	-0.722	-0.571	10.080	9.835	99.173%	103.924%
x		92.071%	-2.153	-0.733	-0.576	9.716	9.752	100.581%	103.073%
σ		0.940%	0.133	0.012	0.026	0.469	0.231	1.362%	1.053%
%RSD		1.021	6.154	1.584	4.591	4.826	2.370	1.354	1.021
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:58:31	0.728	0.697	0.251	0.242	0.233	93.658%		
2	14:58:58	0.720	0.732	0.213	0.232	0.238	94.601%		
3	14:59:25	0.693	0.715	0.226	0.244	0.237	96.173%		
x		0.714	0.714	0.230	0.239	0.236	94.811%		
σ		0.018	0.018	0.020	0.006	0.003	1.271%		
%RSD		2.557	2.486	8.490	2.625	1.215	1.341		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:02:47	84.208%	-0.065	11.820	13.550	0.000	185.900	14.150	13.460
2	15:03:13	84.250%	0.046	12.120	12.820	0.000	186.200	14.410	13.590
3	15:03:40	85.536%	0.054	13.230	13.200	0.000	182.000	10.860	12.970
x		84.665%	0.012	12.390	13.190	0.000	184.700	13.140	13.340
σ		0.755%	0.066	0.744	0.364	0.000	2.358	1.981	0.327
%RSD		0.892	574.000	6.007	2.758	0.000	1.277	15.080	2.449
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:02:47	1.484	174.800	0.000	12.260	67.200	78.050	79.490%	0.813
2	15:03:13	1.311	179.400	0.000	8.600	53.380	79.890	79.801%	0.740
3	15:03:40	1.247	177.800	0.000	7.706	71.340	83.740	80.388%	0.769
x		1.347	177.300	0.000	9.523	63.970	80.560	79.893%	0.774
σ		0.123	2.376	0.000	2.414	9.402	2.904	0.456%	0.037
%RSD		9.111	1.340	0.000	25.350	14.700	3.605	0.571	4.723
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:02:47	7.661	7.837	1.581	17.260	9.565	0.035	0.240	1.158
2	15:03:13	6.937	7.312	1.519	14.420	9.504	0.035	0.337	1.228
3	15:03:40	0.163	7.271	1.469	12.960	5.258	0.043	0.135	1.394
x		4.920	7.473	1.523	14.880	8.109	0.038	0.237	1.260
σ		4.136	0.316	0.056	2.188	2.469	0.004	0.101	0.121
%RSD		84.060	4.224	3.657	14.710	30.450	11.520	42.540	9.608
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:02:47	1.119	2.404	2.125	-0.885	-0.425	-0.642	0.000	0.722
2	15:03:13	1.201	2.312	2.196	3.201	-0.793	-0.363	0.000	0.693
3	15:03:40	1.284	2.333	2.343	2.242	-0.167	-1.073	0.000	0.607
x		1.201	2.350	2.221	1.520	-0.462	-0.693	0.000	0.674
σ		0.083	0.048	0.112	2.137	0.315	0.358	0.000	0.060
%RSD		6.869	2.037	5.020	140.600	68.230	51.660	0.000	8.922
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:02:47	82.732%	-0.149	0.022	91.975%	-0.073	-0.069	0.021	-0.092
2	15:03:13	85.247%	-0.119	0.021	91.607%	-0.085	-0.078	-0.016	-0.081
3	15:03:40	84.328%	-0.144	0.157	91.742%	-0.074	-0.084	0.038	0.004
x		84.102%	-0.137	0.067	91.775%	-0.077	-0.077	0.014	-0.056
σ		1.272%	0.016	0.079	0.186%	0.007	0.007	0.028	0.053
%RSD		1.513	11.680	117.600	0.203	8.668	9.553	193.500	93.660
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:02:47	87.476%	-1.941	-0.791	-0.802	0.216	0.192	90.663%	91.710%
2	15:03:13	85.703%	-1.772	-0.781	-0.776	0.229	0.231	89.723%	90.773%
3	15:03:40	85.342%	-1.893	-0.758	-0.782	0.362	0.228	89.539%	91.120%
x		86.174%	-1.868	-0.777	-0.787	0.269	0.217	89.975%	91.201%
σ		1.142%	0.087	0.017	0.014	0.081	0.022	0.603%	0.473%
%RSD		1.326	4.658	2.154	1.764	30.150	9.917	0.670	0.519
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	15:02:47	0.023	0.019	0.019	0.001	0.015	91.039%		
2	15:03:13	0.020	0.007	0.029	0.008	0.024	86.701%		
3	15:03:40	0.022	0.009	0.015	0.011	0.013	87.289%		
x		0.022	0.012	0.021	0.007	0.017	88.343%		
σ		0.001	0.006	0.007	0.005	0.006	2.353%		
%RSD		6.229	54.560	32.550	77.760	32.750	2.664		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:05	78.534%	-0.261	2.021	2.340	0.000	42.880	3.352	3.205
2	15:07:31	78.230%	0.017	2.485	2.104	0.000	42.840	3.069	2.919
3	15:07:58	79.367%	-0.129	2.398	2.022	0.000	45.690	2.216	2.945
x		78.710%	-0.124	2.301	2.156	0.000	43.800	2.879	3.023
σ		0.589%	0.139	0.247	0.165	0.000	1.638	0.591	0.158
%RSD		0.748	111.900	10.720	7.659	0.000	3.739	20.530	5.230
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:05	0.236	35.040	0.000	-6.977	31.340	23.590	77.780%	-0.474
2	15:07:31	0.125	36.010	0.000	-5.027	39.930	26.800	78.717%	-0.482
3	15:07:58	0.191	35.580	0.000	-5.742	5.209	21.850	78.543%	-0.248
x		0.184	35.540	0.000	-5.915	25.490	24.080	78.346%	-0.401
σ		0.056	0.489	0.000	0.986	18.080	2.512	0.498%	0.133
%RSD		30.280	1.375	0.000	16.670	70.930	10.430	0.636	33.070
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:05	-0.149	1.878	0.206	3.644	-0.889	0.019	0.004	0.261
2	15:07:31	1.242	1.965	0.203	3.543	-3.723	0.015	-0.031	0.340
3	15:07:58	0.710	1.892	0.255	3.016	-2.682	0.021	-0.019	0.297
x		0.601	1.912	0.221	3.401	-2.431	0.018	-0.015	0.299
σ		0.702	0.047	0.029	0.337	1.433	0.003	0.018	0.040
%RSD		116.700	2.442	13.280	9.918	58.960	17.140	118.000	13.280
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:05	0.232	5.211	5.299	1.973	-1.582	-1.279	0.000	0.148
2	15:07:31	0.192	5.536	5.415	0.376	-0.418	-0.334	0.000	0.108
3	15:07:58	0.253	5.535	5.676	-1.925	-0.361	-0.031	0.000	0.124
x		0.226	5.427	5.463	0.141	-0.787	-0.548	0.000	0.127
σ		0.031	0.187	0.193	1.960	0.689	0.651	0.000	0.020
%RSD		13.630	3.448	3.532	1387.000	87.550	118.900	0.000	15.910
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:05	82.725%	-0.273	-0.250	92.109%	-0.079	-0.093	0.033	-0.049
2	15:07:31	84.569%	-0.241	-0.214	87.889%	-0.094	-0.075	-0.003	-0.011
3	15:07:58	85.946%	-0.198	-0.198	89.013%	-0.081	-0.094	-0.009	1.182
x		84.413%	-0.237	-0.221	89.670%	-0.085	-0.087	0.007	0.374
σ		1.617%	0.038	0.027	2.185%	0.008	0.011	0.023	0.700
%RSD		1.915	15.990	12.080	2.437	9.257	12.070	306.500	187.300
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:05	85.100%	-2.613	-0.842	-0.880	-0.028	0.066	89.642%	92.122%
2	15:07:31	88.732%	-2.678	-0.844	-0.876	-0.005	0.057	92.391%	94.884%
3	15:07:58	89.383%	-2.697	-0.857	-0.883	0.002	0.040	95.720%	95.944%
x		87.738%	-2.663	-0.848	-0.880	-0.011	0.054	92.584%	94.317%
σ		2.308%	0.044	0.008	0.004	0.016	0.013	3.044%	1.973%
%RSD		2.631	1.665	0.970	0.431	149.400	23.600	3.287	2.092
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	15:07:05	0.011	0.003	0.032	0.044	0.043	93.305%		
2	15:07:31	0.011	0.002	0.019	0.041	0.036	95.280%		
3	15:07:58	0.002	0.000	0.038	0.018	0.032	96.753%		
x		0.008	0.002	0.030	0.034	0.037	95.113%		
σ		0.005	0.001	0.010	0.014	0.005	1.730%		
%RSD		63.580	76.150	33.840	41.590	14.210	1.819		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:11:23	79.616%	-0.171	19.960	20.210	0.000	163800.000	85.830	85.130
2	15:11:49	78.904%	0.147	20.510	20.940	0.000	169300.000	86.890	85.620
3	15:12:15	79.187%	-0.013	20.730	20.650	0.000	169200.000	88.560	87.690
x		79.236%	-0.012	20.400	20.600	0.000	167400.000	87.090	86.150
σ		0.358%	0.159	0.395	0.365	0.000	3112.000	1.376	1.360
%RSD		0.452	1282.000	1.937	1.771	0.000	1.859	1.579	1.578

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:11:23	4.444	104.400	0.000	385.700	12050.000	11750.000	82.377%	-0.210
2	15:11:49	4.568	108.900	0.000	398.700	12800.000	12340.000	82.027%	-0.430
3	15:12:15	4.671	106.100	0.000	401.800	12820.000	12310.000	82.801%	-0.577
x		4.561	106.500	0.000	395.400	12550.000	12130.000	82.402%	-0.406
σ		0.114	2.290	0.000	8.561	439.600	329.900	0.388%	0.185
%RSD		2.491	2.150	0.000	2.165	3.502	2.719	0.471	45.600

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:11:23	1.612	0.395	1.023	6.175	41.340	0.054	1.604	1.157
2	15:11:49	1.814	0.445	0.946	6.244	50.760	0.050	1.775	1.147
3	15:12:15	1.582	0.332	0.986	6.313	44.640	0.046	1.808	1.307
x		1.669	0.391	0.985	6.244	45.580	0.050	1.729	1.204
σ		0.126	0.057	0.039	0.069	4.780	0.004	0.110	0.090
%RSD		7.533	14.480	3.925	1.103	10.490	8.031	6.341	7.464

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:11:23	0.796	12.070	12.170	-0.451	-0.342	-0.348	0.000	14.430
2	15:11:49	0.924	12.550	12.290	-0.170	-0.598	-0.185	0.000	15.180
3	15:12:15	0.839	12.530	12.340	0.823	-1.111	-0.662	0.000	15.080
x		0.853	12.380	12.270	0.067	-0.684	-0.399	0.000	14.900
σ		0.065	0.272	0.082	0.669	0.392	0.243	0.000	0.406
%RSD		7.654	2.194	0.671	992.000	57.300	60.850	0.000	2.726

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:11:23	88.014%	0.664	0.644	87.659%	-0.064	-0.082	-0.012	-0.004
2	15:11:49	89.137%	0.860	0.668	88.407%	-0.070	-0.065	-0.001	-0.063
3	15:12:15	89.833%	0.767	0.766	89.198%	-0.074	-0.087	0.020	-0.005
x		88.995%	0.763	0.693	88.422%	-0.069	-0.078	0.002	-0.024
σ		0.918%	0.098	0.065	0.770%	0.005	0.011	0.016	0.034
%RSD		1.031	12.840	9.368	0.871	7.275	14.600	721.900	143.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:11:23	88.273%	-2.764	-0.826	-0.828	2.891	2.666	97.803%	98.998%
2	15:11:49	92.193%	-2.708	-0.821	-0.828	2.771	2.826	98.225%	100.494%
3	15:12:15	94.152%	-2.784	-0.819	-0.846	2.913	2.849	100.429%	102.184%
x		91.540%	-2.752	-0.822	-0.834	2.858	2.781	98.819%	100.559%
σ		2.993%	0.039	0.004	0.010	0.076	0.100	1.410%	1.594%
%RSD		3.270	1.425	0.447	1.223	2.673	3.586	1.427	1.585

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:11:23	0.007	0.009	0.038	0.062	0.061	98.859%
2	15:11:49	0.002	0.004	0.044	0.059	0.048	100.289%
3	15:12:15	0.016	0.001	0.012	0.050	0.047	100.729%
x		0.008	0.005	0.031	0.057	0.052	99.959%
σ		0.007	0.004	0.017	0.006	0.008	0.978%
%RSD		85.320	83.600	53.770	11.320	14.780	0.978

CCV 1487954 4/2/2015 3:15:13 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:15:40	75.977%	101.300	101.000	101.900	0.000	48530.000	46850.000	46470.000
2	15:16:06	77.067%	95.700	92.200	101.300	0.000	48700.000	47340.000	47160.000
3	15:16:33	77.337%	100.500	96.630	101.400	0.000	49100.000	48170.000	47820.000
x		76.794%	99.146%	96.612%	101.537%	0.000	97.553%	94.909%	94.303%
σ		0.720%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.938	3.040	4.561	0.334	0.000	0.600	1.410	1.437
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:15:40	472.000	5293.000	0.000	49730.000	47650.000	49430.000	78.513%	97.980
2	15:16:06	484.100	5354.000	0.000	49120.000	49180.000	51150.000	79.018%	99.420
3	15:16:33	493.100	5449.000	0.000	50150.000	50100.000	51740.000	78.369%	106.400
x		96.605%	107.303%	0.000	99.333%	97.951%	101.543%	78.633%	101.272%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.340%	n/a
%RSD		2.190	1.465	0.000	1.038	2.525	2.367	0.433	4.450
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:15:40	96.750	95.980	498.200	24080.000	25240.000	95.630	95.200	95.910
2	15:16:06	99.830	98.840	516.400	24580.000	26030.000	97.210	98.320	98.340
3	15:16:33	99.420	99.280	520.400	25130.000	26400.000	97.810	99.100	100.000
x		98.668%	98.034%	102.328%	98.389%	103.565%	96.885%	97.538%	98.090%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.697	1.825	2.317	2.125	2.298	1.160	2.114	2.103
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:15:40	95.980	97.700	98.920	94.530	100.700	99.460	0.000	94.760
2	15:16:06	98.630	99.770	99.820	96.610	97.500	100.800	0.000	100.000
3	15:16:33	98.460	101.400	100.900	97.290	100.000	97.210	0.000	98.000
x		97.690%	99.634%	99.886%	96.143%	99.389%	99.144%	0.000	97.601%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.519	1.881	0.995	1.499	1.680	1.810	0.000	2.732
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:15:40	82.707%	90.060	88.500	90.200%	92.890	94.830	94.650	95.700
2	15:16:06	82.003%	97.490	96.050	88.644%	92.320	93.770	97.630	95.110
3	15:16:33	81.163%	98.260	97.210	87.004%	93.420	95.150	98.560	97.920
x		81.958%	95.269%	93.919%	88.616%	92.877%	94.585%	96.948%	96.242%
σ		0.773%	n/a	n/a	1.599%	n/a	n/a	n/a	n/a
%RSD		0.943	4.754	5.032	1.804	0.592	0.762	2.108	1.538
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:15:40	82.857%	97.450	98.250	98.820	94.600	96.620	91.319%	92.952%
2	15:16:06	85.080%	95.470	99.840	99.940	97.600	96.360	90.283%	93.124%
3	15:16:33	81.555%	100.300	101.100	100.700	99.530	98.380	88.445%	90.682%
x		83.164%	97.725%	99.741%	99.829%	97.247%	97.121%	90.016%	92.253%
σ		1.782%	n/a	n/a	n/a	n/a	n/a	1.456%	1.363%
%RSD		2.143	2.463	1.454	0.964	2.554	1.134	1.617	1.477
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	15:15:40	96.960	98.290	97.060	96.930	96.080	94.745%		
2	15:16:06	98.280	99.320	98.480	99.960	98.340	94.264%		
3	15:16:33	101.300	101.700	102.300	103.000	102.300	87.145%		
x		98.849%	99.753%	99.288%	99.949%	98.894%	92.051%		
σ		n/a	n/a	n/a	n/a	n/a	4.256%		
%RSD		2.254	1.727	2.742	3.017	3.164	4.623		

CCB2 4/2/2015 3:22:40 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:06	82.324%	-0.111	0.324	-0.720	0.000	45.300	6.261	5.623
2	15:23:33	82.852%	-0.077	-0.765	-1.009	0.000	43.180	5.487	4.898
3	15:23:59	83.274%	0.032	-1.098	-0.901	0.000	45.380	4.931	5.139
x		82.817%	-0.052	-0.513	-0.876	0.000	44.620	5.559	5.220
σ		0.476%	0.075	0.744	0.146	0.000	1.248	0.668	0.369
%RSD		0.575	143.200	145.000	16.660	0.000	2.797	12.020	7.066
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:06	0.542	-3.207	0.000	4.328	-0.868	7.631	83.612%	-0.443
2	15:23:33	0.467	-4.732	0.000	1.224	-11.950	6.935	83.829%	-0.545
3	15:23:59	0.500	-4.104	0.000	9.292	22.400	10.240	83.969%	-0.506
x		0.503	-4.014	0.000	4.948	3.195	8.269	83.803%	-0.498
σ		0.038	0.767	0.000	4.070	17.530	1.742	0.180%	0.051
%RSD		7.488	19.100	0.000	82.250	548.800	21.070	0.215	10.290
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:06	-0.017	-0.011	0.089	0.248	6.305	0.028	0.122	-0.042
2	15:23:33	0.027	-0.022	0.087	-0.113	6.827	0.012	-0.071	-0.022
3	15:23:59	0.031	0.056	0.091	-0.926	6.081	0.025	-0.032	-0.119
x		0.014	0.008	0.089	-0.264	6.404	0.021	0.007	-0.061
σ		0.026	0.042	0.002	0.601	0.383	0.008	0.102	0.051
%RSD		192.100	528.900	2.660	227.800	5.975	38.980	1560.000	83.340
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:06	-0.042	0.062	0.107	-0.486	-0.019	-0.781	0.000	0.035
2	15:23:33	-0.020	0.059	0.095	-0.351	-0.030	-0.925	0.000	0.032
3	15:23:59	-0.144	0.090	0.063	-0.259	1.028	-0.178	0.000	0.043
x		-0.069	0.071	0.088	-0.365	0.326	-0.628	0.000	0.037
σ		0.066	0.017	0.023	0.114	0.608	0.397	0.000	0.006
%RSD		96.450	24.230	25.930	31.290	186.300	63.170	0.000	16.470
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:06	89.262%	-0.061	-0.032	92.116%	-0.064	-0.095	-0.008	-0.894
2	15:23:33	90.416%	-0.015	-0.084	93.528%	-0.068	-0.090	0.032	-0.040
3	15:23:59	90.967%	-0.088	-0.062	95.047%	-0.049	-0.073	0.031	0.000
x		90.215%	-0.055	-0.059	93.563%	-0.060	-0.086	0.018	-0.311
σ		0.870%	0.037	0.026	1.466%	0.010	0.012	0.023	0.505
%RSD		0.964	67.390	43.540	1.567	16.220	13.830	122.500	162.300
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:06	92.132%	-2.738	-0.798	-0.800	-0.008	0.022	96.914%	98.598%
2	15:23:33	93.739%	-2.674	-0.789	-0.823	-0.000	0.017	98.488%	100.300%
3	15:23:59	93.114%	-2.668	-0.792	-0.816	-0.050	0.010	100.298%	101.735%
x		92.995%	-2.693	-0.793	-0.813	-0.020	0.016	98.566%	100.211%
σ		0.810%	0.039	0.005	0.012	0.027	0.006	1.693%	1.570%
%RSD		0.871	1.440	0.597	1.455	137.400	37.140	1.718	1.567
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	15:23:06	0.011	0.005	0.006	-0.009	-0.000	105.779%		
2	15:23:33	0.019	0.004	0.003	-0.012	0.006	104.927%		
3	15:23:59	0.016	0.010	-0.017	-0.005	-0.002	104.879%		
x		0.015	0.006	-0.003	-0.009	0.001	105.195%		
σ		0.004	0.003	0.012	0.003	0.004	0.506%		
%RSD		25.830	48.940	470.200	36.300	297.100	0.481		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:23	85.334%	-0.238	-0.445	-0.710	0.000	34.030	1.794	2.085
2	15:27:50	82.783%	-0.207	0.305	-0.680	0.000	34.680	1.797	1.458
3	15:28:17	83.876%	-0.139	-0.595	-0.797	0.000	33.960	1.458	0.778
x		83.998%	-0.195	-0.245	-0.729	0.000	34.230	1.683	1.440
σ		1.280%	0.051	0.482	0.061	0.000	0.398	0.195	0.654
%RSD		1.524	26.000	196.800	8.315	0.000	1.164	11.580	45.390
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:23	-0.056	-3.948	0.000	-0.412	20.830	5.717	83.620%	-0.662
2	15:27:50	0.011	-3.972	0.000	1.863	-2.145	2.765	82.841%	-0.719
3	15:28:17	-0.073	-4.303	0.000	-1.526	-6.624	-0.429	83.955%	-0.705
x		-0.039	-4.074	0.000	-0.025	4.019	2.685	83.472%	-0.695
σ		0.044	0.199	0.000	1.727	14.730	3.073	0.572%	0.029
%RSD		112.700	4.875	0.000	6892.000	366.400	114.500	0.685	4.217
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:23	-0.134	-0.010	0.085	-6.498	1.791	0.019	-0.029	-0.037
2	15:27:50	0.103	-0.014	0.037	-6.358	2.011	0.011	-0.030	-0.054
3	15:28:17	0.099	-0.015	0.017	-8.243	-1.708	0.017	-0.016	-0.068
x		0.023	-0.013	0.046	-7.033	0.698	0.016	-0.025	-0.053
σ		0.136	0.003	0.035	1.050	2.087	0.004	0.008	0.016
%RSD		590.800	22.980	74.690	14.930	298.800	27.810	32.000	29.820
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:23	-0.031	0.019	0.129	-0.377	-0.919	-0.424	0.000	0.084
2	15:27:50	-0.195	0.081	-0.060	-0.273	-0.795	-0.908	0.000	0.031
3	15:28:17	-0.145	0.043	-0.153	-0.332	-0.094	-1.315	0.000	0.024
x		-0.124	0.047	-0.028	-0.327	-0.603	-0.882	0.000	0.046
σ		0.084	0.031	0.144	0.052	0.445	0.446	0.000	0.033
%RSD		67.650	66.010	512.400	15.870	73.830	50.560	0.000	70.710
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:23	88.974%	-0.155	-0.204	93.072%	-0.071	-0.094	-0.017	-0.013
2	15:27:50	91.787%	-0.215	-0.227	93.909%	-0.078	-0.080	0.030	-0.014
3	15:28:17	92.497%	-0.134	-0.226	94.622%	-0.103	-0.088	-0.016	0.005
x		91.086%	-0.168	-0.219	93.868%	-0.084	-0.087	-0.001	-0.007
σ		1.863%	0.042	0.013	0.776%	0.016	0.007	0.027	0.010
%RSD		2.046	25.070	5.934	0.827	19.600	8.451	3959.000	140.300
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:23	91.325%	-2.720	-0.836	-0.876	-0.001	-0.018	96.256%	98.468%
2	15:27:50	94.511%	-2.710	-0.847	-0.841	-0.047	-0.031	101.820%	101.461%
3	15:28:17	95.220%	-2.765	-0.826	-0.861	-0.058	-0.016	101.289%	101.276%
x		93.685%	-2.732	-0.836	-0.859	-0.035	-0.022	99.788%	100.402%
σ		2.074%	0.030	0.011	0.017	0.030	0.008	3.071%	1.677%
%RSD		2.214	1.082	1.282	2.033	85.840	36.890	3.077	1.670
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	15:27:23	0.011	-0.001	0.013	0.012	0.019	107.367%		
2	15:27:50	0.007	0.001	0.008	0.008	0.021	107.969%		
3	15:28:17	0.012	-0.002	0.010	0.009	0.022	106.449%		
x		0.010	-0.001	0.011	0.010	0.020	107.262%		
σ		0.003	0.001	0.002	0.002	0.002	0.765%		
%RSD		29.410	159.200	20.570	18.780	7.843	0.713		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:41	77.932%	43.870	892.000	871.200	0.000	43740.000	39950.000	40030.000
2	15:32:08	78.904%	44.210	925.100	884.100	0.000	44540.000	40830.000	41340.000
3	15:32:34	78.858%	44.880	931.600	916.700	0.000	45010.000	41150.000	41600.000
x		78.565%	44.320	916.300	890.700	0.000	44430.000	40640.000	40990.000
σ		0.548%	0.515	21.260	23.450	0.000	644.700	621.100	840.300
%RSD		0.698	1.162	2.320	2.632	0.000	1.451	1.528	2.050

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:41	1699.000	8469.000	0.000	46110.000	45480.000	46440.000	72.729%	941.300
2	15:32:08	1769.000	8644.000	0.000	47100.000	47370.000	48250.000	75.229%	953.200
3	15:32:34	1780.000	8693.000	0.000	47610.000	47660.000	48340.000	77.004%	963.700
x		1749.000	8602.000	0.000	46940.000	46840.000	47680.000	74.987%	952.700
σ		44.050	117.700	0.000	762.700	1182.000	1072.000	2.148%	11.180
%RSD		2.518	1.368	0.000	1.625	2.525	2.249	2.865	1.174

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:41	475.300	184.600	469.200	966.500	1050.000	448.400	436.900	220.800
2	15:32:08	488.700	189.600	483.900	996.500	1079.000	462.300	451.000	229.200
3	15:32:34	491.700	191.200	485.800	1016.000	1058.000	463.300	451.600	228.400
x		485.200	188.500	479.700	993.200	1062.000	458.000	446.500	226.200
σ		8.748	3.420	9.071	25.140	15.100	8.332	8.321	4.644
%RSD		1.803	1.814	1.891	2.531	1.421	1.819	1.864	2.054

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:41	224.800	465.000	465.100	38.530	8.947	9.255	0.000	929.800
2	15:32:08	232.800	476.400	480.500	36.550	8.596	7.957	0.000	958.300
3	15:32:34	231.800	472.500	481.500	37.480	9.308	9.638	0.000	957.100
x		229.800	471.300	475.700	37.520	8.950	8.950	0.000	948.400
σ		4.354	5.797	9.188	0.988	0.356	0.881	0.000	16.120
%RSD		1.895	1.230	1.931	2.633	3.976	9.844	0.000	1.699

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:41	77.729%	943.700	953.900	80.388%	43.480	44.410	47.370	35.940
2	15:32:08	80.298%	985.900	986.700	83.437%	44.380	44.740	48.620	39.410
3	15:32:34	82.070%	988.600	999.700	85.572%	44.460	45.000	49.640	39.470
x		80.033%	972.700	980.100	83.132%	44.110	44.720	48.540	38.280
σ		2.183%	25.190	23.600	2.605%	0.544	0.291	1.138	2.022
%RSD		2.727	2.589	2.408	3.134	1.233	0.651	2.344	5.283

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:41	78.756%	2070.000	484.400	479.600	1805.000	1827.000	86.326%	88.176%
2	15:32:08	79.553%	2060.000	514.600	499.300	1884.000	1917.000	88.672%	90.017%
3	15:32:34	80.749%	2075.000	513.900	503.500	1887.000	1937.000	90.479%	91.807%
x		79.686%	2068.000	504.300	494.100	1859.000	1894.000	88.492%	90.000%
σ		1.003%	7.391	17.220	12.750	46.460	58.710	2.082%	1.816%
%RSD		1.259	0.357	3.414	2.580	2.500	3.100	2.353	2.017

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:41	46.990	47.770	20.020	20.360	20.000	81.800%
2	15:32:08	49.320	49.400	20.260	20.810	20.370	83.910%
3	15:32:34	50.320	49.800	20.920	21.020	20.920	83.616%
x		48.880	48.990	20.400	20.730	20.430	83.109%
σ		1.708	1.076	0.464	0.336	0.464	1.143%
%RSD		3.493	2.196	2.272	1.621	2.273	1.375

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:59	79.740%	0.006	16.900	17.030	0.000	45290.000	11080.000	11230.000
2	15:36:25	82.411%	-0.128	18.580	16.920	0.000	45040.000	11110.000	11340.000
3	15:36:52	82.359%	-0.109	15.900	16.450	0.000	45480.000	11240.000	11430.000
x		81.503%	-0.077	17.130	16.800	0.000	45270.000	11140.000	11330.000
σ		1.527%	0.073	1.354	0.307	0.000	219.200	89.790	99.530
%RSD		1.874	94.680	7.907	1.829	0.000	0.484	0.806	0.878
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:59	270.500	2037.000	0.000	4258.000	42830.000	44160.000	76.689%	6.345
2	15:36:25	273.400	2042.000	0.000	4317.000	44090.000	44990.000	78.860%	6.117
3	15:36:52	259.600	2051.000	0.000	4320.000	44190.000	45160.000	79.224%	6.100
x		267.800	2043.000	0.000	4298.000	43700.000	44770.000	78.258%	6.187
σ		7.259	6.890	0.000	34.950	761.400	533.200	1.371%	0.137
%RSD		2.710	0.337	0.000	0.813	1.742	1.191	1.751	2.211
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:59	5.424	6.469	53.290	438.700	557.400	0.505	0.872	2.468
2	15:36:25	6.536	6.143	53.470	441.400	562.800	0.501	0.669	2.584
3	15:36:52	4.171	6.314	54.940	451.400	566.700	0.490	0.596	2.606
x		5.377	6.309	53.900	443.800	562.300	0.498	0.712	2.553
σ		1.183	0.163	0.903	6.714	4.675	0.008	0.143	0.074
%RSD		22.010	2.588	1.675	1.513	0.831	1.621	20.110	2.915
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:59	2.457	7.806	7.680	1.899	-0.305	-0.305	0.000	119.700
2	15:36:25	2.503	7.752	7.636	2.276	-0.633	-0.734	0.000	121.000
3	15:36:52	2.303	7.298	7.454	2.106	-0.543	-0.944	0.000	120.900
x		2.421	7.619	7.590	2.093	-0.494	-0.661	0.000	120.600
σ		0.105	0.279	0.120	0.189	0.169	0.325	0.000	0.726
%RSD		4.326	3.664	1.576	9.020	34.240	49.210	0.000	0.602
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:59	85.233%	4.735	4.328	90.478%	-0.079	-0.104	0.045	-0.078
2	15:36:25	87.533%	3.659	3.914	85.006%	-0.077	-0.083	0.019	-0.012
3	15:36:52	89.312%	2.982	3.157	86.651%	-0.092	-0.068	0.111	0.039
x		87.359%	3.792	3.799	87.378%	-0.083	-0.085	0.058	-0.017
σ		2.045%	0.884	0.594	2.807%	0.008	0.018	0.048	0.059
%RSD		2.341	23.310	15.630	3.213	9.868	21.240	81.930	351.400
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:59	88.454%	1.057	-0.622	-0.650	38.870	38.080	94.597%	96.125%
2	15:36:25	88.513%	0.056	-0.632	-0.628	39.420	39.390	97.312%	97.877%
3	15:36:52	91.018%	-0.635	-0.645	-0.657	39.320	39.430	97.942%	99.689%
x		89.328%	0.159	-0.633	-0.645	39.210	38.960	96.617%	97.897%
σ		1.464%	0.851	0.011	0.015	0.290	0.769	1.778%	1.782%
%RSD		1.639	534.700	1.808	2.313	0.741	1.973	1.840	1.820
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	15:35:59	0.211	0.218	1.278	1.161	1.209	92.546%		
2	15:36:25	0.113	0.120	1.271	1.131	1.212	93.175%		
3	15:36:52	0.095	0.080	1.306	1.235	1.227	94.990%		
x		0.140	0.139	1.285	1.176	1.216	93.570%		
σ		0.063	0.071	0.019	0.054	0.009	1.269%		
%RSD		44.750	51.160	1.447	4.556	0.766	1.356		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:40:14	81.515%	0.221	15.460	14.660	0.000	58590.000	9828.000	9919.000
2	15:40:41	81.586%	0.029	16.280	15.200	0.000	59570.000	10220.000	10270.000
3	15:41:07	82.413%	0.022	15.660	15.330	0.000	59730.000	10250.000	10380.000
x		81.838%	0.091	15.800	15.060	0.000	59290.000	10100.000	10190.000
σ		0.499%	0.113	0.426	0.356	0.000	618.000	234.200	240.000
%RSD		0.610	124.300	2.693	2.364	0.000	1.042	2.320	2.355

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:40:14	13.430	1102.000	0.000	2851.000	50720.000	52130.000	78.438%	1.089
2	15:40:41	14.980	1127.000	0.000	2864.000	52620.000	54840.000	79.628%	0.845
3	15:41:07	14.890	1122.000	0.000	2892.000	52450.000	54550.000	79.586%	1.095
x		14.430	1117.000	0.000	2869.000	51930.000	53840.000	79.217%	1.010
σ		0.869	13.290	0.000	21.150	1050.000	1492.000	0.675%	0.143
%RSD		6.022	1.190	0.000	0.737	2.022	2.771	0.852	14.130

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:40:14	7.503	6.115	15.170	54.120	223.100	0.174	0.418	2.161
2	15:40:41	6.642	5.968	15.490	55.030	226.800	0.194	0.298	2.164
3	15:41:07	6.233	5.792	15.200	55.640	224.500	0.205	0.327	2.234
x		6.793	5.958	15.290	54.930	224.800	0.191	0.347	2.186
σ		0.648	0.162	0.178	0.763	1.875	0.016	0.063	0.041
%RSD		9.546	2.718	1.164	1.390	0.834	8.338	18.030	1.894

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:40:14	2.029	10.120	10.620	4.060	-1.403	-0.668	0.000	160.800
2	15:40:41	2.130	10.980	11.090	0.855	-0.044	0.205	0.000	163.700
3	15:41:07	2.126	10.510	10.650	3.887	-0.247	-0.940	0.000	164.200
x		2.095	10.540	10.790	2.934	-0.565	-0.468	0.000	162.900
σ		0.057	0.427	0.264	1.803	0.733	0.598	0.000	1.816
%RSD		2.713	4.054	2.443	61.450	129.800	127.900	0.000	1.115

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:40:14	86.299%	0.376	0.687	86.349%	-0.077	-0.081	-0.025	-0.079
2	15:40:41	89.117%	0.575	0.721	88.653%	-0.080	-0.081	0.010	0.011
3	15:41:07	90.881%	0.512	0.618	88.556%	-0.085	-0.082	0.018	-0.061
x		88.766%	0.488	0.676	87.852%	-0.081	-0.081	0.001	-0.043
σ		2.311%	0.102	0.052	1.303%	0.004	0.000	0.023	0.048
%RSD		2.604	20.860	7.753	1.483	5.304	0.258	2283.000	111.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:40:14	87.404%	-2.096	-0.629	-0.643	43.710	44.110	94.762%	98.528%
2	15:40:41	90.328%	-1.956	-0.661	-0.652	44.200	43.940	99.162%	100.981%
3	15:41:07	91.356%	-2.045	-0.652	-0.667	45.280	45.230	100.286%	102.990%
x		89.696%	-2.032	-0.647	-0.654	44.390	44.430	98.070%	100.833%
σ		2.050%	0.071	0.016	0.012	0.804	0.702	2.920%	2.234%
%RSD		2.286	3.508	2.505	1.842	1.812	1.581	2.977	2.216

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:40:14	0.041	0.031	0.256	0.254	0.259	94.254%
2	15:40:41	0.033	0.021	0.224	0.212	0.232	97.694%
3	15:41:07	0.038	0.028	0.252	0.225	0.239	98.398%
x		0.038	0.027	0.244	0.230	0.243	96.782%
σ		0.004	0.005	0.017	0.021	0.014	2.217%
%RSD		10.670	18.270	7.138	9.337	5.695	2.291

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:44:29	79.164%	0.111	14.750	15.220	0.000	41650.000	8207.000	8346.000
2	15:44:55	80.740%	-0.078	13.280	16.020	0.000	41610.000	8294.000	8472.000
3	15:45:22	79.380%	-0.148	15.310	15.740	0.000	42040.000	8450.000	8619.000
x		79.761%	-0.038	14.450	15.660	0.000	41770.000	8317.000	8479.000
σ		0.854%	0.134	1.047	0.409	0.000	235.400	123.100	136.800
%RSD		1.071	349.200	7.250	2.614	0.000	0.564	1.479	1.613

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:44:29	327.900	2119.000	0.000	4272.000	38000.000	37580.000	74.726%	6.403
2	15:44:55	312.700	2114.000	0.000	4286.000	38590.000	38450.000	76.087%	6.511
3	15:45:22	347.700	2182.000	0.000	4338.000	38360.000	38750.000	76.886%	6.579
x		329.400	2138.000	0.000	4299.000	38320.000	38260.000	75.900%	6.498
σ		17.540	37.440	0.000	34.880	301.600	604.800	1.092%	0.089
%RSD		5.325	1.751	0.000	0.812	0.787	1.581	1.439	1.373

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:44:29	1.089	6.272	51.510	502.000	612.300	0.500	0.790	2.805
2	15:44:55	4.056	6.332	53.160	520.300	627.700	0.544	0.912	2.935
3	15:45:22	5.563	6.523	52.860	513.900	630.600	0.471	0.829	2.911
x		3.569	6.375	52.510	512.100	623.500	0.505	0.844	2.883
σ		2.276	0.131	0.878	9.279	9.864	0.037	0.062	0.069
%RSD		63.770	2.051	1.671	1.812	1.582	7.367	7.377	2.400

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:44:29	2.891	9.151	8.862	4.952	-1.314	-0.057	0.000	108.300
2	15:44:55	2.612	9.507	9.348	0.552	-1.012	0.578	0.000	112.100
3	15:45:22	2.461	9.133	9.024	-0.183	-0.707	0.243	0.000	113.100
x		2.655	9.264	9.078	1.774	-1.011	0.255	0.000	111.200
σ		0.218	0.211	0.247	2.777	0.304	0.318	0.000	2.538
%RSD		8.217	2.280	2.724	156.600	30.050	124.800	0.000	2.282

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:44:29	79.044%	0.702	0.902	83.096%	-0.092	-0.083	0.096	0.024
2	15:44:55	79.627%	0.727	0.861	83.681%	-0.063	-0.082	-0.013	0.054
3	15:45:22	81.411%	0.956	0.885	84.968%	-0.078	-0.099	-0.005	0.022
x		80.027%	0.795	0.883	83.915%	-0.078	-0.088	0.026	0.033
σ		1.233%	0.140	0.021	0.958%	0.015	0.010	0.061	0.018
%RSD		1.541	17.600	2.361	1.141	18.700	10.830	231.700	54.540

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:44:29	78.622%	-2.368	-0.740	-0.734	37.340	39.490	86.435%	86.936%
2	15:44:55	80.104%	-2.263	-0.700	-0.718	39.710	39.210	88.016%	88.713%
3	15:45:22	82.397%	-2.236	-0.693	-0.686	39.200	39.810	88.120%	90.075%
x		80.374%	-2.289	-0.711	-0.713	38.750	39.500	87.524%	88.575%
σ		1.902%	0.070	0.026	0.024	1.246	0.297	0.944%	1.574%
%RSD		2.366	3.050	3.608	3.391	3.215	0.753	1.079	1.777

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:44:29	0.020	0.016	1.167	1.112	1.120	79.531%
2	15:44:55	0.020	0.016	1.161	1.123	1.139	81.602%
3	15:45:22	0.035	0.018	1.142	1.034	1.078	83.730%
x		0.025	0.017	1.157	1.090	1.112	81.621%
σ		0.009	0.001	0.013	0.049	0.031	2.099%
%RSD		35.580	6.382	1.159	4.473	2.826	2.572

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:44	80.043%	-0.092	44.280	42.220	0.000	55460.000	11680.000	11890.000
2	15:49:11	80.798%	0.017	41.420	43.450	0.000	56440.000	12150.000	12350.000
3	15:49:37	80.598%	-0.213	44.970	43.050	0.000	56460.000	12160.000	12320.000
x		80.480%	-0.096	43.560	42.910	0.000	56120.000	12000.000	12190.000
σ		0.391%	0.115	1.880	0.628	0.000	570.500	273.200	255.500
%RSD		0.486	119.600	4.317	1.463	0.000	1.017	2.277	2.097
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:44	271.200	2771.000	0.000	7853.000	55870.000	58600.000	75.673%	6.406
2	15:49:11	277.800	2816.000	0.000	7860.000	57530.000	58630.000	77.933%	5.397
3	15:49:37	282.100	2829.000	0.000	7911.000	56390.000	57810.000	78.826%	17.160
x		277.000	2805.000	0.000	7874.000	56600.000	58350.000	77.477%	9.653
σ		5.447	30.370	0.000	31.520	850.200	470.000	1.625%	6.517
%RSD		1.966	1.083	0.000	0.400	1.502	0.805	2.097	67.520
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:44	1.828	6.241	46.460	495.800	668.900	0.590	0.944	5.121
2	15:49:11	9.601	6.496	47.750	507.900	677.000	0.537	0.757	4.975
3	15:49:37	5.213	6.363	47.760	530.100	665.700	0.585	1.006	5.213
x		5.547	6.367	47.320	511.200	670.500	0.571	0.902	5.103
σ		3.897	0.128	0.749	17.400	5.860	0.029	0.130	0.120
%RSD		70.250	2.006	1.583	3.403	0.874	5.068	14.370	2.348
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:44	4.963	16.090	15.710	-0.276	0.244	-0.883	0.000	130.600
2	15:49:11	5.218	15.720	15.600	0.701	-0.363	-0.667	0.000	135.500
3	15:49:37	5.253	16.200	16.830	3.439	-0.262	-0.564	0.000	138.100
x		5.145	16.000	16.050	1.288	-0.127	-0.705	0.000	134.700
σ		0.158	0.253	0.681	1.926	0.325	0.163	0.000	3.812
%RSD		3.076	1.579	4.247	149.500	256.400	23.100	0.000	2.829
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:44	83.116%	11.190	11.410	86.351%	-0.067	-0.079	0.012	0.017
2	15:49:11	85.095%	11.280	11.580	88.827%	-0.066	-0.072	0.157	0.032
3	15:49:37	85.341%	11.810	11.490	91.354%	-0.066	-0.055	0.048	0.007
x		84.517%	11.430	11.490	88.844%	-0.066	-0.069	0.072	0.019
σ		1.220%	0.336	0.082	2.502%	0.001	0.012	0.075	0.012
%RSD		1.443	2.941	0.711	2.816	0.866	17.550	104.100	67.100
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:44	84.687%	-2.444	-0.680	-0.626	36.170	36.870	90.558%	91.828%
2	15:49:11	88.364%	-2.485	-0.639	-0.660	38.000	36.820	93.127%	94.818%
3	15:49:37	88.914%	-2.303	-0.616	-0.619	37.670	37.980	93.853%	97.328%
x		87.322%	-2.411	-0.645	-0.635	37.280	37.220	92.513%	94.658%
σ		2.298%	0.095	0.032	0.022	0.973	0.656	1.732%	2.753%
%RSD		2.632	3.956	5.010	3.430	2.610	1.763	1.872	2.909
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	15:48:44	0.021	0.011	1.884	1.685	1.803	88.264%		
2	15:49:11	0.028	0.012	1.818	1.827	1.825	91.543%		
3	15:49:37	0.012	0.010	1.944	1.843	1.878	92.603%		
x		0.020	0.011	1.882	1.785	1.835	90.803%		
σ		0.008	0.001	0.063	0.087	0.039	2.262%		
%RSD		40.700	10.090	3.343	4.875	2.102	2.491		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:52:59	79.960%	0.005	35.090	33.480	0.000	53740.000	13440.000	13580.000
2	15:53:25	79.394%	-0.207	35.730	37.420	0.000	54800.000	13890.000	14110.000
3	15:53:52	80.076%	0.158	36.030	36.890	0.000	54630.000	13850.000	14150.000
x		79.810%	-0.015	35.620	35.930	0.000	54390.000	13720.000	13950.000
σ		0.365%	0.183	0.479	2.141	0.000	565.600	248.000	321.600
%RSD		0.457	1251.000	1.345	5.960	0.000	1.040	1.807	2.306
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:52:59	17.270	3388.000	0.000	8232.000	79460.000	81600.000	76.412%	2.217
2	15:53:25	18.310	3586.000	0.000	8290.000	82250.000	83540.000	77.432%	1.699
3	15:53:52	19.900	3603.000	0.000	8381.000	81170.000	82850.000	78.510%	1.553
x		18.490	3525.000	0.000	8301.000	80960.000	82670.000	77.452%	1.823
σ		1.323	119.700	0.000	75.270	1406.000	983.800	1.049%	0.349
%RSD		7.154	3.396	0.000	0.907	1.737	1.190	1.355	19.140
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:52:59	3.536	12.270	22.140	34.340	303.800	0.314	0.955	1.335
2	15:53:25	2.757	12.600	23.100	35.140	305.700	0.315	1.033	1.291
3	15:53:52	6.632	12.580	22.810	34.880	292.400	0.342	0.981	1.383
x		4.309	12.480	22.680	34.790	300.600	0.323	0.989	1.336
σ		2.050	0.188	0.491	0.405	7.226	0.016	0.040	0.046
%RSD		47.580	1.503	2.164	1.165	2.404	4.854	4.014	3.436
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:52:59	1.245	6.455	6.231	1.064	-0.447	-0.841	0.000	196.000
2	15:53:25	1.245	6.885	6.896	3.675	-1.105	-0.877	0.000	203.500
3	15:53:52	1.524	6.975	6.939	-1.198	-1.424	0.964	0.000	203.400
x		1.338	6.772	6.689	1.180	-0.992	-0.251	0.000	201.000
σ		0.161	0.278	0.397	2.439	0.498	1.053	0.000	4.330
%RSD		12.020	4.106	5.940	206.600	50.230	419.200	0.000	2.154
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:52:59	83.692%	0.467	0.495	89.778%	-0.084	-0.104	0.440	0.386
2	15:53:25	84.991%	0.507	0.597	83.308%	-0.083	-0.083	0.418	0.396
3	15:53:52	86.680%	0.554	0.590	85.258%	-0.065	-0.100	0.476	0.395
x		85.121%	0.509	0.561	86.115%	-0.077	-0.096	0.445	0.392
σ		1.499%	0.044	0.057	3.319%	0.011	0.011	0.029	0.005
%RSD		1.761	8.560	10.100	3.854	13.920	11.840	6.554	1.355
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:52:59	84.119%	-2.416	-0.712	-0.739	54.670	55.870	94.313%	95.409%
2	15:53:25	87.777%	-2.502	-0.735	-0.736	57.860	57.210	94.466%	97.488%
3	15:53:52	88.230%	-2.277	-0.705	-0.745	57.510	57.630	94.304%	99.004%
x		86.708%	-2.398	-0.717	-0.740	56.680	56.910	94.361%	97.300%
σ		2.254%	0.114	0.016	0.005	1.749	0.921	0.091%	1.805%
%RSD		2.600	4.733	2.209	0.625	3.086	1.618	0.096	1.855
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	15:52:59	0.024	0.006	0.087	0.074	0.104	90.143%		
2	15:53:25	0.021	0.016	0.081	0.123	0.104	94.248%		
3	15:53:52	0.013	0.012	0.144	0.086	0.111	93.480%		
x		0.019	0.011	0.104	0.094	0.107	92.624%		
σ		0.006	0.005	0.035	0.025	0.004	2.182%		
%RSD		29.380	44.440	33.270	26.770	3.649	2.356		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:13	80.131%	-0.287	9.983	9.826	0.000	39550.000	16600.000	16870.000
2	15:57:40	80.220%	0.022	9.840	8.903	0.000	40380.000	17120.000	17440.000
3	15:58:06	81.847%	-0.067	8.603	9.166	0.000	40280.000	17030.000	17640.000
x		80.732%	-0.111	9.475	9.298	0.000	40070.000	16920.000	17320.000
σ		0.966%	0.159	0.759	0.475	0.000	453.000	281.900	398.600
%RSD		1.197	143.900	8.010	5.112	0.000	1.130	1.666	2.302

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:13	24.960	2161.000	0.000	2139.000	81620.000	73270.000	75.907%	1.650
2	15:57:40	26.190	2213.000	0.000	2214.000	73750.000	74890.000	76.808%	1.706
3	15:58:06	25.730	2216.000	0.000	2189.000	74660.000	75610.000	77.424%	1.016
x		25.630	2197.000	0.000	2181.000	76680.000	74590.000	76.713%	1.457
σ		0.624	31.450	0.000	38.190	4307.000	1199.000	0.763%	0.383
%RSD		2.436	1.432	0.000	1.751	5.617	1.608	0.995	26.290

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:13	2.165	7.304	4.485	33.350	280.100	0.139	-0.060	1.598
2	15:57:40	6.046	7.648	4.547	34.770	271.000	0.163	-0.017	1.519
3	15:58:06	6.188	7.581	4.508	35.750	266.800	0.185	-0.272	1.826
x		4.800	7.511	4.513	34.620	272.600	0.162	-0.117	1.648
σ		2.283	0.182	0.032	1.207	6.794	0.023	0.137	0.160
%RSD		47.560	2.429	0.699	3.487	2.492	14.000	117.400	9.704

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:13	1.538	2.802	2.609	2.475	-1.758	-0.933	0.000	114.500
2	15:57:40	1.550	2.699	2.790	4.221	-1.857	0.238	0.000	118.400
3	15:58:06	1.664	3.203	2.867	2.377	-0.806	0.148	0.000	119.600
x		1.584	2.901	2.755	3.024	-1.474	-0.182	0.000	117.500
σ		0.070	0.266	0.133	1.037	0.581	0.652	0.000	2.663
%RSD		4.392	9.169	4.811	34.310	39.400	357.800	0.000	2.266

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:13	81.377%	0.000	0.041	85.117%	-0.094	-0.088	0.058	-0.054
2	15:57:40	80.873%	0.060	0.131	84.650%	-0.088	-0.104	-0.016	0.014
3	15:58:06	81.081%	0.042	0.128	84.831%	-0.098	-0.116	0.007	-0.039
x		81.110%	0.034	0.100	84.866%	-0.093	-0.103	0.016	-0.026
σ		0.253%	0.031	0.051	0.236%	0.005	0.014	0.038	0.036
%RSD		0.312	89.300	51.450	0.278	5.302	13.260	230.700	135.500

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:13	81.608%	-2.618	-0.804	-0.783	32.090	31.980	87.960%	89.841%
2	15:57:40	82.975%	-2.574	-0.815	-0.823	31.760	32.230	87.928%	89.982%
3	15:58:06	81.035%	-2.424	-0.755	-0.775	32.360	33.030	88.281%	89.270%
x		81.873%	-2.539	-0.791	-0.794	32.070	32.420	88.056%	89.697%
σ		0.997%	0.101	0.032	0.026	0.299	0.548	0.195%	0.377%
%RSD		1.218	3.988	4.044	3.254	0.933	1.690	0.221	0.420

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:13	0.012	0.004	0.093	0.105	0.115	85.987%
2	15:57:40	0.004	0.006	0.114	0.084	0.101	84.892%
3	15:58:06	0.012	0.003	0.130	0.111	0.113	82.869%
x		0.010	0.004	0.112	0.100	0.109	84.583%
σ		0.005	0.002	0.019	0.014	0.008	1.581%
%RSD		49.550	44.020	16.580	13.810	7.044	1.870

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:29	78.273%	0.036	97.830	95.270	0.000	81650.000	11800.000	12020.000
2	16:01:55	76.116%	-0.005	101.800	102.200	0.000	85980.000	12570.000	12820.000
3	16:02:22	79.271%	0.127	103.900	94.730	0.000	83860.000	12350.000	12630.000
x		77.886%	0.053	101.200	97.410	0.000	83830.000	12240.000	12490.000
σ		1.613%	0.067	3.076	4.180	0.000	2169.000	399.500	420.300
%RSD		2.071	128.000	3.040	4.291	0.000	2.587	3.264	3.365
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:29	8.864	3418.000	0.000	15440.000	64000.000	65860.000	78.960%	1.928
2	16:01:55	9.746	3644.000	0.000	16430.000	69570.000	70100.000	76.239%	1.811
3	16:02:22	9.370	3578.000	0.000	16280.000	69440.000	70500.000	77.549%	1.482
x		9.327	3546.000	0.000	16050.000	67670.000	68820.000	77.583%	1.740
σ		0.443	116.300	0.000	535.200	3178.000	2573.000	1.361%	0.231
%RSD		4.744	3.279	0.000	3.335	4.697	3.738	1.754	13.260
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:29	1.420	5.892	25.390	65.090	291.600	0.457	0.914	3.577
2	16:01:55	4.092	6.171	26.800	70.580	298.100	0.485	1.453	3.843
3	16:02:22	-0.012	6.150	27.110	70.770	287.200	0.414	0.933	3.773
x		1.833	6.071	26.430	68.810	292.300	0.452	1.100	3.731
σ		2.083	0.155	0.914	3.227	5.447	0.036	0.306	0.138
%RSD		113.600	2.558	3.458	4.690	1.863	7.921	27.850	3.703
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:29	3.429	26.740	26.830	2.211	-0.288	0.049	0.000	167.300
2	16:01:55	3.804	28.330	28.160	4.454	-0.062	-0.058	0.000	174.400
3	16:02:22	3.630	27.910	28.810	0.848	0.243	-0.620	0.000	173.000
x		3.621	27.660	27.940	2.504	-0.035	-0.210	0.000	171.500
σ		0.188	0.825	1.012	1.821	0.266	0.360	0.000	3.753
%RSD		5.180	2.981	3.624	72.710	752.800	171.600	0.000	2.188
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:29	80.282%	31.350	31.160	83.868%	-0.064	-0.072	0.018	-0.007
2	16:01:55	82.708%	32.130	32.150	87.008%	-0.073	-0.054	0.081	-0.020
3	16:02:22	83.416%	32.770	33.190	86.953%	-0.076	-0.078	0.023	0.004
x		82.135%	32.090	32.160	85.943%	-0.071	-0.068	0.041	-0.008
σ		1.644%	0.711	1.015	1.797%	0.006	0.013	0.035	0.012
%RSD		2.001	2.215	3.157	2.091	8.961	18.560	86.670	156.800
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:29	80.768%	-2.407	-0.534	-0.521	31.580	31.240	87.903%	89.408%
2	16:01:55	82.226%	-2.432	-0.447	-0.512	31.750	31.750	91.231%	91.783%
3	16:02:22	84.183%	-2.193	-0.468	-0.521	31.460	31.800	92.363%	92.913%
x		82.392%	-2.344	-0.483	-0.518	31.600	31.600	90.499%	91.368%
σ		1.713%	0.131	0.045	0.005	0.148	0.307	2.318%	1.789%
%RSD		2.080	5.601	9.402	1.001	0.467	0.972	2.562	1.958
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:01:29	0.008	0.001	1.069	1.036	1.018	83.441%		
2	16:01:55	0.017	-0.001	1.156	1.076	1.070	85.725%		
3	16:02:22	0.011	-0.002	1.155	1.014	1.054	87.066%		
x		0.012	-0.001	1.127	1.042	1.047	85.410%		
σ		0.004	0.002	0.050	0.031	0.027	1.833%		
%RSD		36.720	194.300	4.442	3.019	2.549	2.146		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:46	73.617%	0.123	16.810	19.220	0.000	42080.000	10990.000	11090.000
2	16:06:13	74.195%	0.388	22.430	18.860	0.000	42320.000	11120.000	11270.000
3	16:06:40	74.706%	0.422	19.300	17.680	0.000	42500.000	11200.000	11370.000
x		74.172%	0.311	19.510	18.590	0.000	42300.000	11100.000	11240.000
σ		0.545%	0.164	2.814	0.807	0.000	211.900	103.300	142.400
%RSD		0.735	52.550	14.420	4.341	0.000	0.501	0.930	1.266
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:46	4947.000	6842.000	0.000	5341.000	52040.000	54520.000	72.506%	71.760
2	16:06:13	4996.000	6885.000	0.000	5443.000	52720.000	55190.000	74.121%	72.360
3	16:06:40	5030.000	6861.000	0.000	5426.000	52610.000	55790.000	74.713%	73.200
x		4991.000	6863.000	0.000	5403.000	52460.000	55170.000	73.780%	72.440
σ		41.770	21.460	0.000	54.750	366.100	637.000	1.142%	0.720
%RSD		0.837	0.313	0.000	1.013	0.698	1.155	1.548	0.993
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:46	16.030	15.310	728.300	8908.000	8861.000	8.277	9.826	25.310
2	16:06:13	14.910	15.250	730.800	8976.000	8996.000	8.577	9.654	25.980
3	16:06:40	15.610	14.790	740.800	8943.000	9040.000	8.480	9.502	25.130
x		15.520	15.120	733.300	8942.000	8966.000	8.444	9.661	25.470
σ		0.567	0.285	6.591	33.680	93.260	0.153	0.162	0.447
%RSD		3.654	1.883	0.899	0.377	1.040	1.813	1.680	1.756
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:46	25.150	99.390	101.300	6.049	-1.217	-1.080	0.000	126.400
2	16:06:13	25.840	100.700	100.900	2.464	-1.375	-0.665	0.000	127.300
3	16:06:40	25.550	101.700	103.800	1.033	-1.758	-1.521	0.000	125.500
x		25.510	100.600	102.000	3.182	-1.450	-1.089	0.000	126.400
σ		0.345	1.148	1.584	2.584	0.278	0.428	0.000	0.909
%RSD		1.351	1.141	1.552	81.200	19.180	39.290	0.000	0.719
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:46	87.317%	0.617	0.732	86.415%	-0.076	-0.066	1.786	1.773
2	16:06:13	90.368%	0.534	0.697	89.347%	-0.064	-0.059	1.819	2.001
3	16:06:40	91.125%	0.444	0.657	89.407%	-0.053	-0.055	1.821	1.736
x		89.603%	0.532	0.695	88.390%	-0.064	-0.060	1.809	1.837
σ		2.016%	0.087	0.038	1.710%	0.012	0.006	0.020	0.144
%RSD		2.250	16.320	5.399	1.935	18.220	9.287	1.096	7.818
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:46	82.733%	-1.814	-0.450	-0.490	113.000	115.200	93.624%	95.699%
2	16:06:13	84.453%	-1.874	-0.431	-0.395	115.600	116.600	95.689%	97.968%
3	16:06:40	86.825%	-1.823	-0.482	-0.495	116.500	116.800	96.157%	98.259%
x		84.670%	-1.837	-0.455	-0.460	115.000	116.200	95.156%	97.309%
σ		2.054%	0.033	0.026	0.056	1.817	0.902	1.347%	1.402%
%RSD		2.426	1.778	5.645	12.220	1.580	0.777	1.416	1.441
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:05:46	0.073	0.072	50.480	47.210	48.180	89.727%		
2	16:06:13	0.084	0.082	50.360	46.310	48.060	93.472%		
3	16:06:40	0.059	0.074	48.850	45.860	46.810	96.740%		
x		0.072	0.076	49.900	46.460	47.680	93.313%		
σ		0.012	0.006	0.906	0.688	0.760	3.509%		
%RSD		17.340	7.264	1.815	1.480	1.594	3.761		

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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	16:10:02	75.671%	96.770	96.540	99.950	0.000	47570.000	46030.000	45700.000
2	16:10:29	74.935%	103.600	99.490	103.500	0.000	49500.000	48240.000	47890.000
3	16:10:56	77.229%	98.930	102.600	99.740	0.000	48790.000	47930.000	47720.000
x		75.945%	99.763%	99.545%	101.053%	0.000	97.245%	94.800%	94.207%
σ		1.171%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.542	3.490	3.045	2.071	0.000	2.005	2.526	2.591
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:02	465.200	5178.000	0.000	49170.000	47890.000	49530.000	74.899%	100.700
2	16:10:29	487.000	5387.000	0.000	50880.000	49330.000	51390.000	74.487%	102.500
3	16:10:56	485.400	5334.000	0.000	49630.000	48260.000	51890.000	74.914%	104.300
x		95.841%	106.000%	0.000	99.786%	96.986%	101.874%	74.767%	102.476%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.242%	n/a
%RSD		2.537	2.052	0.000	1.765	1.549	2.437	0.324	1.745
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:02	95.750	96.310	497.200	24070.000	25100.000	95.400	95.960	95.450
2	16:10:29	100.700	100.600	521.300	25260.000	26170.000	97.790	99.420	100.000
3	16:10:56	100.900	100.800	525.100	25160.000	26460.000	98.090	98.990	99.370
x		99.130%	99.235%	102.912%	99.331%	103.646%	97.095%	98.125%	98.281%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.956	2.554	2.940	2.671	2.762	1.518	1.923	2.520
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:02	96.200	98.140	97.670	94.700	93.440	99.160	0.000	95.460
2	16:10:29	98.910	101.800	102.100	100.400	96.750	100.400	0.000	98.730
3	16:10:56	101.300	103.100	100.300	97.930	100.200	101.000	0.000	99.080
x		98.795%	101.012%	100.012%	97.675%	96.788%	100.193%	0.000	97.756%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.570	2.531	2.230	2.921	3.476	0.934	0.000	2.045
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:02	78.914%	91.090	88.660	85.649%	93.190	94.580	94.710	94.390
2	16:10:29	78.136%	98.320	95.730	84.936%	94.970	97.390	99.710	98.180
3	16:10:56	78.058%	98.410	99.110	82.306%	93.490	93.730	97.660	96.440
x		78.369%	95.943%	94.502%	84.297%	93.879%	95.234%	97.360%	96.336%
σ		0.474%	n/a	n/a	1.761%	n/a	n/a	n/a	n/a
%RSD		0.605	4.380	5.644	2.089	1.015	2.009	2.587	1.972
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:02	80.521%	96.620	97.560	98.340	94.770	94.620	87.526%	89.365%
2	16:10:29	78.262%	101.600	101.600	102.200	98.480	99.720	86.336%	87.715%
3	16:10:56	80.575%	97.490	99.170	98.040	95.830	96.030	86.844%	87.506%
x		79.786%	98.557%	99.431%	99.531%	96.361%	96.791%	86.902%	88.196%
σ		1.320%	n/a	n/a	n/a	n/a	n/a	0.597%	1.018%
%RSD		1.654	2.670	2.022	2.332	1.985	2.720	0.687	1.155
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:10:02	101.100	102.200	99.850	100.800	99.800	88.849%		
2	16:10:29	105.300	104.600	105.400	105.400	105.200	85.018%		
3	16:10:56	100.700	103.700	102.900	103.500	102.600	84.737%		
x		102.376%	103.488%	102.693%	103.230%	102.512%	86.201%		
σ		n/a	n/a	n/a	n/a	n/a	2.297%		
%RSD		2.443	1.166	2.684	2.249	2.612	2.665		

CCB3 4/2/2015 4:17:07 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:33	80.659%	-0.234	0.101	-0.796	0.000	16.920	5.576	6.832
2	16:18:00	80.440%	0.056	-0.768	-1.105	0.000	17.470	6.498	6.090
3	16:18:26	82.804%	-0.076	-1.074	-1.352	0.000	16.290	6.685	5.371
x		81.301%	-0.085	-0.580	-1.084	0.000	16.890	6.253	6.098
σ		1.306%	0.145	0.610	0.278	0.000	0.593	0.594	0.730
%RSD		1.606	171.100	105.000	25.670	0.000	3.507	9.495	11.980
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:33	0.581	-3.412	0.000	-2.545	-0.446	8.408	80.708%	-0.561
2	16:18:00	0.616	-4.275	0.000	0.585	19.180	4.415	81.836%	-0.509
3	16:18:26	0.555	-4.712	0.000	-7.368	15.110	11.400	82.074%	-0.572
x		0.584	-4.133	0.000	-3.109	11.280	8.074	81.539%	-0.547
σ		0.031	0.661	0.000	4.006	10.360	3.503	0.730%	0.034
%RSD		5.246	16.010	0.000	128.800	91.820	43.390	0.895	6.175
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:33	0.441	0.072	0.103	1.316	8.412	0.010	0.054	-0.018
2	16:18:00	0.057	0.082	0.115	0.016	4.000	0.012	0.066	0.027
3	16:18:26	0.022	0.134	0.094	-0.660	9.525	0.026	0.022	0.056
x		0.174	0.096	0.104	0.224	7.312	0.016	0.048	0.022
σ		0.232	0.033	0.010	1.004	2.922	0.009	0.023	0.037
%RSD		133.800	34.390	9.988	448.400	39.960	53.880	47.930	171.300
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:33	0.034	0.139	0.079	-0.228	-1.198	-0.777	0.000	0.056
2	16:18:00	-0.163	0.050	-0.020	0.119	-0.486	-0.520	0.000	0.043
3	16:18:26	-0.140	0.204	-0.024	-0.474	-0.808	-1.206	0.000	0.051
x		-0.090	0.131	0.012	-0.195	-0.831	-0.834	0.000	0.050
σ		0.108	0.077	0.058	0.298	0.356	0.347	0.000	0.007
%RSD		120.300	58.670	505.200	153.300	42.900	41.580	0.000	13.200
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:33	85.416%	-0.048	-0.107	89.994%	-0.099	-0.110	0.001	-0.013
2	16:18:00	87.294%	-0.085	-0.095	91.091%	-0.094	-0.077	0.047	0.008
3	16:18:26	88.761%	-0.117	-0.071	92.686%	-0.103	-0.100	0.000	-0.031
x		87.157%	-0.083	-0.091	91.257%	-0.099	-0.096	0.016	-0.012
σ		1.677%	0.034	0.018	1.354%	0.004	0.017	0.027	0.019
%RSD		1.924	41.290	19.910	1.483	4.282	17.520	166.500	159.600
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:33	89.005%	-2.835	-0.813	-0.795	-0.058	0.034	91.954%	94.434%
2	16:18:00	90.042%	-2.720	-0.800	-0.825	0.033	0.048	97.852%	97.858%
3	16:18:26	93.316%	-2.730	-0.808	-0.842	-0.065	0.046	97.368%	99.873%
x		90.788%	-2.762	-0.807	-0.821	-0.030	0.042	95.725%	97.388%
σ		2.250%	0.064	0.006	0.024	0.055	0.008	3.274%	2.749%
%RSD		2.478	2.303	0.800	2.903	182.400	17.960	3.421	2.823
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:17:33	0.013	0.006	-0.008	-0.010	0.002	104.081%		
2	16:18:00	0.014	0.006	-0.002	-0.009	0.008	103.334%		
3	16:18:26	0.010	0.006	0.008	-0.011	0.005	106.515%		
x		0.013	0.006	-0.001	-0.010	0.005	104.644%		
σ		0.002	0.000	0.008	0.001	0.003	1.663%		
%RSD		17.010	4.356	1327.000	8.953	62.930	1.590		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:21:53	74.502%	-0.094	44.140	47.160	0.000	77250.000	18600.000	18880.000
2	16:22:20	77.318%	0.026	47.880	46.830	0.000	77840.000	19020.000	19450.000
3	16:22:46	77.301%	0.025	46.400	45.130	0.000	78410.000	19070.000	19680.000
x		76.374%	-0.014	46.140	46.370	0.000	77840.000	18900.000	19340.000
σ		1.621%	0.069	1.882	1.091	0.000	578.400	261.800	409.100
%RSD		2.122	494.300	4.079	2.353	0.000	0.743	1.385	2.116
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:21:53	23.050	4143.000	0.000	6160.000	92190.000	94710.000	73.033%	2.007
2	16:22:20	22.860	4179.000	0.000	6115.000	93550.000	97000.000	75.370%	1.687
3	16:22:46	23.140	4261.000	0.000	6203.000	94240.000	97190.000	77.100%	1.710
x		23.020	4194.000	0.000	6159.000	93330.000	96300.000	75.168%	1.801
σ		0.140	60.740	0.000	44.110	1044.000	1379.000	2.041%	0.179
%RSD		0.607	1.448	0.000	0.716	1.118	1.432	2.715	9.924
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:21:53	1.321	10.030	19.470	43.250	356.300	0.231	0.184	1.551
2	16:22:20	4.810	10.570	19.950	43.530	361.500	0.239	0.038	1.576
3	16:22:46	5.598	10.790	20.340	44.450	357.800	0.203	0.146	1.754
x		3.910	10.460	19.920	43.740	358.500	0.224	0.123	1.627
σ		2.276	0.390	0.438	0.625	2.674	0.019	0.076	0.111
%RSD		58.220	3.732	2.198	1.430	0.746	8.420	61.890	6.807
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:21:53	1.246	4.242	4.693	3.052	-1.263	-0.589	0.000	202.000
2	16:22:20	1.602	4.551	4.367	3.133	0.186	-0.326	0.000	208.200
3	16:22:46	1.605	4.473	4.647	-0.601	0.327	-0.192	0.000	210.700
x		1.485	4.422	4.569	1.861	-0.250	-0.369	0.000	207.000
σ		0.206	0.161	0.176	2.133	0.880	0.202	0.000	4.454
%RSD		13.900	3.643	3.857	114.600	352.200	54.720	0.000	2.152
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:21:53	81.375%	9.629	9.749	85.325%	-0.077	-0.072	0.148	0.083
2	16:22:20	84.624%	10.160	9.807	88.761%	-0.073	-0.098	0.137	0.120
3	16:22:46	85.945%	10.180	9.805	90.790%	-0.084	-0.077	0.111	0.144
x		83.981%	9.988	9.787	88.292%	-0.078	-0.082	0.132	0.116
σ		2.352%	0.311	0.033	2.762%	0.006	0.014	0.019	0.030
%RSD		2.800	3.114	0.341	3.128	7.509	16.760	14.530	26.280
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:21:53	82.860%	-2.290	-0.646	-0.664	45.140	45.820	91.642%	93.560%
2	16:22:20	86.432%	-2.428	-0.652	-0.714	46.080	46.060	95.444%	96.888%
3	16:22:46	88.950%	-2.345	-0.689	-0.714	46.340	46.010	95.634%	98.691%
x		86.081%	-2.354	-0.662	-0.698	45.850	45.960	94.240%	96.380%
σ		3.060%	0.069	0.023	0.029	0.630	0.126	2.252%	2.603%
%RSD		3.555	2.945	3.501	4.144	1.373	0.274	2.389	2.700
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:21:53	0.018	0.008	0.171	0.175	0.174	89.680%		
2	16:22:20	0.024	0.006	0.161	0.189	0.187	93.422%		
3	16:22:46	0.011	0.006	0.205	0.198	0.205	94.746%		
x		0.018	0.007	0.179	0.187	0.189	92.616%		
σ		0.007	0.001	0.023	0.012	0.016	2.628%		
%RSD		37.690	14.830	12.830	6.362	8.389	2.837		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:11	78.666%	-0.083	18.230	12.790	0.000	41110.000	7870.000	8003.000
2	16:26:38	79.130%	-0.047	13.500	14.430	0.000	41880.000	8102.000	8239.000
3	16:27:06	79.577%	-0.012	11.710	13.410	0.000	41840.000	8165.000	8250.000
x		79.124%	-0.047	14.480	13.540	0.000	41610.000	8046.000	8164.000
σ		0.455%	0.035	3.370	0.831	0.000	431.400	155.600	139.800
%RSD		0.575	74.590	23.270	6.137	0.000	1.037	1.934	1.712
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:11	159.100	1865.000	0.000	3967.000	35620.000	35650.000	74.577%	3.251
2	16:26:38	162.200	1861.000	0.000	4107.000	36930.000	36910.000	75.763%	2.758
3	16:27:06	164.600	1853.000	0.000	4069.000	37320.000	36770.000	77.065%	5.875
x		162.000	1860.000	0.000	4048.000	36620.000	36440.000	75.802%	3.961
σ		2.724	6.197	0.000	72.230	891.000	691.600	1.245%	1.675
%RSD		1.682	0.333	0.000	1.784	2.433	1.898	1.642	42.290
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:11	1.711	5.912	41.940	272.300	389.400	0.325	0.413	2.361
2	16:26:38	0.204	6.118	42.480	277.300	392.800	0.347	0.552	2.641
3	16:27:06	6.118	6.191	42.680	277.000	386.900	0.401	0.610	2.789
x		2.678	6.074	42.370	275.500	389.700	0.358	0.525	2.597
σ		3.073	0.145	0.385	2.806	2.957	0.039	0.101	0.218
%RSD		114.800	2.382	0.910	1.019	0.759	10.900	19.260	8.379
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:11	2.277	16.450	16.400	-2.433	-0.640	0.246	0.000	107.300
2	16:26:38	2.710	15.990	16.980	3.594	-0.743	-0.015	0.000	107.000
3	16:27:06	2.873	17.670	16.800	4.603	-1.064	0.249	0.000	110.300
x		2.620	16.700	16.730	1.922	-0.816	0.160	0.000	108.200
σ		0.308	0.865	0.300	3.805	0.222	0.152	0.000	1.819
%RSD		11.750	5.178	1.797	198.000	27.160	94.970	0.000	1.681
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:11	76.092%	0.561	0.700	79.761%	-0.093	-0.083	0.062	0.045
2	16:26:38	79.530%	0.545	0.612	83.847%	-0.094	-0.093	0.079	-0.005
3	16:27:06	80.139%	0.710	0.648	85.240%	-0.076	-0.093	0.087	0.022
x		78.587%	0.605	0.653	82.949%	-0.088	-0.090	0.076	0.021
σ		2.182%	0.091	0.044	2.848%	0.010	0.006	0.013	0.025
%RSD		2.777	14.970	6.799	3.433	11.950	6.508	16.660	119.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:11	78.056%	-2.381	-0.705	-0.721	36.150	35.060	84.419%	84.902%
2	16:26:38	78.972%	-2.514	-0.727	-0.718	35.970	36.820	86.688%	86.984%
3	16:27:06	82.608%	-2.471	-0.701	-0.708	36.160	36.490	86.162%	88.845%
x		79.878%	-2.455	-0.711	-0.715	36.090	36.120	85.756%	86.910%
σ		2.407%	0.068	0.014	0.007	0.106	0.937	1.188%	1.973%
%RSD		3.014	2.766	1.977	0.947	0.295	2.594	1.385	2.270
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:26:11	0.016	0.009	0.479	0.502	0.477	79.831%		
2	16:26:38	0.009	-0.003	0.495	0.471	0.498	79.609%		
3	16:27:06	0.007	0.014	0.515	0.478	0.481	83.179%		
x		0.010	0.007	0.496	0.484	0.485	80.873%		
σ		0.005	0.008	0.018	0.016	0.011	2.000%		
%RSD		46.780	124.100	3.647	3.386	2.338	2.473		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:30:31	78.583%	-0.142	42.370	42.550	0.000	66990.000	18400.000	18620.000
2	16:30:57	76.846%	0.009	48.730	44.870	0.000	69550.000	19240.000	19820.000
3	16:31:24	77.667%	-0.078	44.360	45.280	0.000	69720.000	19440.000	19960.000
x		77.699%	-0.070	45.150	44.240	0.000	68750.000	19020.000	19470.000
σ		0.869%	0.076	3.255	1.472	0.000	1529.000	552.500	737.200
%RSD		1.118	108.000	7.210	3.327	0.000	2.224	2.904	3.787
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:30:31	515.100	4669.000	0.000	6018.000	91170.000	94690.000	75.951%	9.844
2	16:30:57	553.200	4870.000	0.000	6163.000	95470.000	98290.000	77.126%	13.140
3	16:31:24	550.400	4894.000	0.000	6198.000	96720.000	98870.000	77.370%	10.470
x		539.600	4811.000	0.000	6126.000	94450.000	97280.000	76.816%	11.150
σ		21.260	123.500	0.000	95.790	2910.000	2265.000	0.759%	1.752
%RSD		3.941	2.566	0.000	1.564	3.081	2.329	0.988	15.710
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:30:31	5.691	9.848	40.160	923.200	1178.000	0.780	0.619	3.799
2	16:30:57	4.393	10.280	41.940	983.400	1210.000	0.729	0.917	3.822
3	16:31:24	4.007	10.630	42.060	1001.000	1222.000	0.736	0.684	3.944
x		4.697	10.250	41.390	969.300	1203.000	0.748	0.740	3.855
σ		0.882	0.393	1.064	40.890	22.930	0.027	0.157	0.078
%RSD		18.780	3.829	2.570	4.219	1.906	3.657	21.170	2.021
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:30:31	3.591	11.640	11.270	4.785	-0.794	0.418	0.000	205.100
2	16:30:57	3.914	12.190	11.110	0.104	-0.976	0.206	0.000	209.000
3	16:31:24	4.147	12.210	11.960	3.003	-0.446	-0.553	0.000	210.300
x		3.884	12.010	11.450	2.630	-0.739	0.024	0.000	208.100
σ		0.279	0.328	0.455	2.363	0.270	0.510	0.000	2.728
%RSD		7.181	2.733	3.977	89.820	36.490	2146.000	0.000	1.311
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:30:31	82.619%	6.051	6.403	86.532%	-0.084	-0.087	0.038	0.078
2	16:30:57	85.289%	6.353	6.284	89.113%	-0.053	-0.091	0.187	0.015
3	16:31:24	86.695%	6.343	6.288	91.518%	-0.064	-0.078	0.013	0.090
x		84.868%	6.249	6.325	89.054%	-0.067	-0.085	0.079	0.061
σ		2.071%	0.172	0.067	2.494%	0.016	0.006	0.094	0.040
%RSD		2.440	2.744	1.067	2.800	23.320	7.480	118.600	65.700
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:30:31	83.777%	-2.514	-0.743	-0.746	51.610	50.970	90.510%	93.906%
2	16:30:57	85.889%	-2.521	-0.727	-0.734	53.050	52.840	95.189%	96.632%
3	16:31:24	86.360%	-2.370	-0.720	-0.752	52.540	53.200	96.434%	97.988%
x		85.342%	-2.468	-0.730	-0.744	52.400	52.340	94.044%	96.175%
σ		1.375%	0.085	0.012	0.009	0.730	1.196	3.124%	2.079%
%RSD		1.612	3.450	1.591	1.226	1.394	2.285	3.321	2.162
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:30:31	0.025	0.017	3.699	3.604	3.626	89.688%		
2	16:30:57	0.020	0.015	3.983	3.598	3.748	91.191%		
3	16:31:24	0.030	0.014	3.998	3.675	3.771	92.150%		
x		0.025	0.015	3.893	3.626	3.715	91.010%		
σ		0.005	0.002	0.169	0.042	0.078	1.241%		
%RSD		19.960	10.390	4.333	1.168	2.106	1.363		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:49	79.942%	-0.132	14.290	14.590	0.000	59970.000	10090.000	10200.000
2	16:35:16	80.780%	-0.118	17.470	14.790	0.000	61230.000	10360.000	10560.000
3	16:35:42	79.761%	-0.229	14.480	14.630	0.000	61160.000	10420.000	10610.000
x		80.161%	-0.160	15.420	14.670	0.000	60790.000	10290.000	10460.000
σ		0.544%	0.061	1.786	0.106	0.000	710.800	179.200	225.900
%RSD		0.678	37.940	11.590	0.720	0.000	1.169	1.742	2.161
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:49	36.070	1205.000	0.000	2867.000	50620.000	53820.000	77.494%	1.119
2	16:35:16	36.660	1230.000	0.000	2892.000	52360.000	55030.000	78.498%	1.088
3	16:35:42	38.130	1227.000	0.000	2923.000	53140.000	55330.000	80.008%	1.316
x		36.950	1221.000	0.000	2894.000	52040.000	54730.000	78.667%	1.174
σ		1.063	13.310	0.000	27.900	1290.000	801.200	1.265%	0.123
%RSD		2.877	1.091	0.000	0.964	2.479	1.464	1.609	10.510
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:49	4.988	5.885	17.250	88.420	262.000	0.184	0.510	2.094
2	16:35:16	6.377	5.936	17.560	89.690	266.600	0.198	0.528	2.123
3	16:35:42	2.893	6.013	17.220	88.290	263.400	0.235	0.526	2.000
x		4.752	5.945	17.350	88.800	264.000	0.206	0.521	2.073
σ		1.754	0.065	0.188	0.775	2.384	0.026	0.010	0.064
%RSD		36.900	1.087	1.086	0.873	0.903	12.870	1.901	3.096
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:49	1.993	11.810	11.830	0.013	-1.196	-1.130	0.000	162.100
2	16:35:16	1.875	12.090	12.180	2.905	-1.361	-0.850	0.000	168.200
3	16:35:42	2.000	12.080	12.510	1.873	-1.226	-0.656	0.000	168.400
x		1.956	11.990	12.170	1.597	-1.261	-0.878	0.000	166.300
σ		0.070	0.161	0.337	1.466	0.088	0.238	0.000	3.598
%RSD		3.589	1.341	2.769	91.790	6.953	27.120	0.000	2.164
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:49	83.489%	0.008	0.137	89.810%	-0.089	-0.086	0.009	-0.019
2	16:35:16	85.478%	0.100	0.128	85.926%	-0.080	-0.095	0.023	0.028
3	16:35:42	87.453%	0.063	0.169	87.510%	-0.072	-0.083	0.030	0.015
x		85.473%	0.057	0.145	87.748%	-0.080	-0.088	0.021	0.008
σ		1.982%	0.046	0.022	1.953%	0.009	0.006	0.011	0.024
%RSD		2.319	81.350	14.980	2.226	10.740	7.279	53.410	296.400
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:49	86.302%	-2.620	-0.711	-0.704	43.560	43.930	94.134%	95.989%
2	16:35:16	88.284%	-2.577	-0.692	-0.723	45.290	45.960	94.398%	98.376%
3	16:35:42	89.685%	-2.707	-0.721	-0.697	45.520	45.140	96.263%	99.794%
x		88.090%	-2.635	-0.708	-0.708	44.790	45.010	94.931%	98.053%
σ		1.700%	0.066	0.015	0.014	1.067	1.019	1.160%	1.923%
%RSD		1.930	2.501	2.055	1.923	2.382	2.264	1.222	1.961
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:34:49	0.008	0.002	0.302	0.298	0.297	92.589%		
2	16:35:16	0.002	-0.002	0.311	0.308	0.300	94.669%		
3	16:35:42	0.001	0.005	0.323	0.295	0.303	96.119%		
x		0.004	0.002	0.312	0.300	0.300	94.459%		
σ		0.004	0.003	0.011	0.007	0.003	1.774%		
%RSD		105.500	184.200	3.410	2.188	0.929	1.878		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:39:06	77.050%	0.047	16.040	15.680	0.000	57490.000	13160.000	13390.000
2	16:39:33	78.053%	0.117	17.910	14.610	0.000	58220.000	13500.000	13670.000
3	16:39:59	79.990%	-0.017	16.850	14.560	0.000	57930.000	13450.000	13650.000
x		78.364%	0.049	16.930	14.950	0.000	57880.000	13370.000	13570.000
σ		1.495%	0.067	0.939	0.635	0.000	364.800	182.900	154.800
%RSD		1.908	137.100	5.546	4.246	0.000	0.630	1.368	1.141
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:39:06	156.200	2354.000	0.000	3621.000	58330.000	59890.000	78.157%	3.908
2	16:39:33	162.100	2411.000	0.000	3627.000	59160.000	61230.000	79.285%	3.476
3	16:39:59	160.300	2390.000	0.000	3674.000	60810.000	61690.000	80.115%	3.447
x		159.500	2385.000	0.000	3641.000	59430.000	60940.000	79.186%	3.610
σ		2.991	28.960	0.000	29.200	1265.000	937.000	0.983%	0.259
%RSD		1.875	1.214	0.000	0.802	2.129	1.538	1.241	7.159
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:39:06	5.010	6.045	38.290	278.400	475.900	0.344	0.566	2.724
2	16:39:33	2.863	6.177	39.220	285.100	472.500	0.363	0.454	2.544
3	16:39:59	-0.724	6.278	39.130	287.600	479.800	0.348	0.569	2.833
x		2.383	6.167	38.880	283.700	476.100	0.352	0.530	2.700
σ		2.897	0.117	0.513	4.728	3.649	0.010	0.066	0.146
%RSD		121.500	1.893	1.320	1.666	0.767	2.838	12.370	5.416
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:39:06	2.543	6.018	5.360	5.474	-0.981	0.221	0.000	130.300
2	16:39:33	2.558	6.229	6.440	1.089	0.071	0.947	0.000	133.500
3	16:39:59	2.356	6.452	6.176	5.269	0.030	-0.929	0.000	134.000
x		2.486	6.233	5.992	3.944	-0.293	0.080	0.000	132.600
σ		0.113	0.217	0.563	2.474	0.596	0.946	0.000	1.989
%RSD		4.532	3.482	9.399	62.740	203.200	1189.000	0.000	1.500
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:39:06	77.809%	0.489	0.537	81.430%	-0.088	-0.106	0.016	0.010
2	16:39:33	79.675%	0.383	0.374	82.827%	-0.073	-0.097	0.049	0.010
3	16:39:59	80.976%	0.396	0.574	83.783%	-0.079	-0.095	-0.045	-0.049
x		79.487%	0.423	0.495	82.680%	-0.080	-0.099	0.007	-0.010
σ		1.592%	0.058	0.106	1.183%	0.007	0.006	0.048	0.034
%RSD		2.002	13.660	21.470	1.431	8.859	6.141	712.700	349.100
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:39:06	79.131%	-2.452	-0.740	-0.744	38.040	38.070	85.620%	86.631%
2	16:39:33	81.345%	-2.282	-0.726	-0.738	38.560	38.660	86.367%	87.387%
3	16:39:59	81.846%	-2.234	-0.721	-0.732	38.960	40.030	87.322%	89.354%
x		80.774%	-2.322	-0.729	-0.738	38.520	38.920	86.436%	87.791%
σ		1.445%	0.114	0.010	0.006	0.460	1.007	0.853%	1.405%
%RSD		1.788	4.926	1.349	0.801	1.195	2.588	0.987	1.601
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:39:06	0.019	0.007	0.785	0.675	0.718	81.251%		
2	16:39:33	0.014	0.010	0.733	0.617	0.687	81.864%		
3	16:39:59	0.002	0.005	0.697	0.657	0.703	82.386%		
x		0.012	0.007	0.739	0.650	0.702	81.834%		
σ		0.009	0.003	0.044	0.029	0.016	0.568%		
%RSD		76.090	35.870	6.004	4.515	2.220	0.694		

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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	16:43:21	76.446%	0.013	31.710	31.010	0.000	59770.000	14620.000	14840.000
2	16:43:47	77.651%	0.102	33.270	29.800	0.000	60560.000	14980.000	15240.000
3	16:44:14	77.449%	-0.216	30.270	30.330	0.000	60890.000	15010.000	15470.000
x		77.182%	-0.033	31.750	30.380	0.000	60400.000	14870.000	15180.000
σ		0.645%	0.164	1.499	0.606	0.000	574.700	213.800	318.700
%RSD		0.836	491.500	4.722	1.995	0.000	0.952	1.438	2.099

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:43:21	135.700	3090.000	0.000	5623.000	66870.000	68670.000	75.213%	2.937
2	16:43:47	138.900	3123.000	0.000	5666.000	67920.000	69990.000	77.176%	3.802
3	16:44:14	139.700	3137.000	0.000	5789.000	69020.000	69870.000	77.554%	2.811
x		138.100	3117.000	0.000	5692.000	67940.000	69510.000	76.648%	3.183
σ		2.103	24.410	0.000	86.050	1080.000	731.300	1.257%	0.539
%RSD		1.523	0.783	0.000	1.512	1.590	1.052	1.640	16.940

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:43:21	-0.237	7.476	49.330	242.600	462.500	0.503	0.810	2.964
2	16:43:47	5.899	7.439	50.510	250.700	466.700	0.518	0.695	3.149
3	16:44:14	6.060	7.495	50.680	253.700	463.000	0.495	0.745	3.135
x		3.907	7.470	50.170	249.000	464.100	0.506	0.750	3.083
σ		3.590	0.028	0.735	5.734	2.267	0.011	0.058	0.103
%RSD		91.870	0.377	1.465	2.303	0.488	2.254	7.730	3.353

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:43:21	3.155	6.654	6.810	0.349	-0.986	0.363	0.000	149.900
2	16:43:47	2.827	6.934	7.282	3.260	-1.396	0.423	0.000	151.200
3	16:44:14	3.230	6.740	7.240	0.729	-1.102	-0.406	0.000	153.500
x		3.071	6.776	7.110	1.446	-1.161	0.127	0.000	151.600
σ		0.214	0.143	0.261	1.582	0.212	0.462	0.000	1.816
%RSD		6.967	2.116	3.676	109.400	18.230	364.800	0.000	1.198

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:43:21	81.329%	5.614	5.618	84.975%	-0.088	-0.086	0.105	0.028
2	16:43:47	84.071%	5.935	5.766	87.537%	-0.084	-0.075	0.060	0.035
3	16:44:14	84.889%	5.770	5.737	89.291%	-0.089	-0.097	0.081	-0.035
x		83.430%	5.773	5.707	87.267%	-0.087	-0.086	0.082	0.009
σ		1.864%	0.161	0.079	2.171%	0.003	0.011	0.023	0.038
%RSD		2.235	2.786	1.379	2.487	3.052	12.990	27.720	423.500

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:43:21	83.947%	-2.545	-0.699	-0.748	40.360	39.270	89.645%	91.512%
2	16:43:47	85.923%	-2.534	-0.728	-0.722	41.060	40.140	92.052%	93.882%
3	16:44:14	87.020%	-2.664	-0.749	-0.692	41.060	40.630	92.727%	94.960%
x		85.630%	-2.581	-0.725	-0.721	40.830	40.010	91.475%	93.451%
σ		1.557%	0.072	0.025	0.028	0.404	0.686	1.620%	1.764%
%RSD		1.818	2.798	3.439	3.891	0.989	1.715	1.771	1.888

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:43:21	0.016	0.002	0.545	0.446	0.511	87.589%
2	16:43:47	0.010	0.008	0.497	0.490	0.511	90.282%
3	16:44:14	0.022	0.007	0.511	0.472	0.496	91.058%
x		0.016	0.006	0.518	0.469	0.506	89.643%
σ		0.006	0.003	0.025	0.022	0.009	1.821%
%RSD		37.850	55.370	4.779	4.720	1.725	2.031

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:47:37	78.289%	-0.143	37.120	33.420	0.000	51620.000	13280.000	13410.000
2	16:48:03	78.846%	-0.126	33.860	35.940	0.000	52840.000	13750.000	13890.000
3	16:48:30	78.690%	-0.105	34.640	32.640	0.000	52800.000	13780.000	14150.000
x		78.608%	-0.125	35.210	34.000	0.000	52420.000	13600.000	13820.000
σ		0.287%	0.019	1.700	1.726	0.000	693.900	280.500	377.700
%RSD		0.365	15.100	4.829	5.077	0.000	1.324	2.062	2.733

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:47:37	84.980	2472.000	0.000	6258.000	60380.000	61580.000	79.938%	3.239
2	16:48:03	86.590	2500.000	0.000	6359.000	62260.000	64100.000	79.608%	2.628
3	16:48:30	91.680	2566.000	0.000	6525.000	63010.000	65740.000	78.807%	2.809
x		87.750	2513.000	0.000	6381.000	61880.000	63810.000	79.451%	2.892
σ		3.496	47.890	0.000	134.700	1354.000	2096.000	0.581%	0.314
%RSD		3.984	1.906	0.000	2.112	2.189	3.285	0.732	10.840

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:47:37	9.706	6.602	25.270	156.200	371.900	0.391	0.541	2.271
2	16:48:03	4.058	6.812	26.260	162.100	368.100	0.389	0.375	2.698
3	16:48:30	7.148	6.854	26.260	166.600	369.000	0.432	0.690	2.792
x		6.971	6.756	25.930	161.600	369.700	0.404	0.535	2.587
σ		2.828	0.135	0.572	5.200	1.969	0.024	0.158	0.278
%RSD		40.570	2.002	2.207	3.218	0.533	6.047	29.460	10.730

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:47:37	2.563	11.190	11.280	0.285	-0.983	-0.776	0.000	129.000
2	16:48:03	2.333	11.960	10.760	2.826	-0.912	-0.184	0.000	132.900
3	16:48:30	2.304	11.470	11.660	5.435	-1.005	-0.566	0.000	134.300
x		2.400	11.540	11.230	2.849	-0.967	-0.508	0.000	132.100
σ		0.142	0.392	0.449	2.575	0.049	0.300	0.000	2.748
%RSD		5.919	3.393	4.002	90.400	5.071	59.000	0.000	2.080

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:47:37	84.911%	8.892	8.691	89.217%	-0.095	-0.087	-0.030	0.016
2	16:48:03	84.991%	9.182	9.415	84.929%	-0.086	-0.099	0.058	0.049
3	16:48:30	86.978%	9.541	9.534	86.221%	-0.061	-0.079	0.070	-0.045
x		85.627%	9.205	9.213	86.789%	-0.081	-0.088	0.033	0.006
σ		1.171%	0.325	0.456	2.200%	0.017	0.010	0.054	0.048
%RSD		1.367	3.532	4.954	2.534	21.480	11.380	166.200	740.900

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:47:37	85.543%	-2.408	-0.670	-0.721	33.880	33.700	95.061%	96.363%
2	16:48:03	88.241%	-2.399	-0.687	-0.685	33.660	34.400	97.885%	98.197%
3	16:48:30	89.870%	-2.401	-0.686	-0.707	34.270	33.970	97.416%	100.400%
x		87.885%	-2.402	-0.681	-0.704	33.940	34.030	96.787%	98.320%
σ		2.185%	0.005	0.010	0.018	0.309	0.352	1.514%	2.021%
%RSD		2.486	0.196	1.397	2.564	0.912	1.035	1.564	2.056

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:47:37	0.020	0.010	0.675	0.664	0.651	92.879%
2	16:48:03	0.018	0.012	0.657	0.668	0.656	95.338%
3	16:48:30	0.025	0.010	0.690	0.632	0.671	96.328%
x		0.021	0.010	0.674	0.655	0.660	94.848%
σ		0.003	0.001	0.016	0.020	0.011	1.776%
%RSD		15.150	9.990	2.438	2.998	1.619	1.873

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:51	69.770%	1.112	24.820	21.350	0.000	40060.000	19780.000	20200.000
2	16:52:18	71.738%	0.810	24.380	20.830	0.000	40650.000	20380.000	20930.000
3	16:52:45	72.569%	0.880	22.640	20.420	0.000	40960.000	20570.000	21020.000
x		71.359%	0.934	23.950	20.870	0.000	40560.000	20240.000	20720.000
σ		1.437%	0.158	1.156	0.465	0.000	453.900	408.900	448.700
%RSD		2.014	16.930	4.827	2.227	0.000	1.119	2.020	2.166

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:51	16050.000	17820.000	0.000	6078.000	66090.000	67920.000	74.339%	198.600
2	16:52:18	16610.000	18270.000	0.000	6349.000	69990.000	71830.000	73.403%	206.100
3	16:52:45	16740.000	18470.000	0.000	6335.000	70980.000	71740.000	73.262%	210.200
x		16470.000	18190.000	0.000	6254.000	69020.000	70500.000	73.668%	205.000
σ		364.600	333.200	0.000	152.400	2586.000	2230.000	0.585%	5.861
%RSD		2.214	1.832	0.000	2.437	3.747	3.163	0.795	2.859

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:51	35.730	32.830	1683.000	27380.000	28180.000	23.820	25.740	74.300
2	16:52:18	35.960	33.980	1757.000	28430.000	29390.000	24.430	27.590	75.110
3	16:52:45	39.140	34.720	1784.000	29240.000	30240.000	24.430	27.800	76.870
x		36.940	33.840	1741.000	28350.000	29270.000	24.230	27.040	75.420
σ		1.905	0.952	52.470	931.700	1036.000	0.354	1.131	1.312
%RSD		5.156	2.812	3.013	3.286	3.541	1.460	4.182	1.740

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:51	73.550	338.400	342.600	6.965	-1.068	-1.066	0.000	128.800
2	16:52:18	74.930	351.800	348.800	7.097	-2.348	-1.399	0.000	128.400
3	16:52:45	76.860	349.200	352.300	5.042	-0.674	-0.268	0.000	130.900
x		75.110	346.400	347.900	6.368	-1.363	-0.911	0.000	129.400
σ		1.661	7.081	4.893	1.150	0.875	0.581	0.000	1.365
%RSD		2.211	2.044	1.406	18.060	64.200	63.790	0.000	1.055

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:51	94.821%	1.820	1.923	82.434%	0.153	0.134	2.810	2.823
2	16:52:18	97.535%	1.861	1.929	83.229%	0.119	0.122	2.697	2.874
3	16:52:45	95.933%	1.749	2.014	81.293%	0.173	0.121	2.630	2.882
x		96.096%	1.810	1.955	82.319%	0.148	0.126	2.712	2.860
σ		1.364%	0.057	0.051	0.973%	0.027	0.007	0.091	0.032
%RSD		1.420	3.139	2.620	1.182	18.200	5.628	3.343	1.129

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:51	79.997%	1.082	-0.025	-0.040	255.800	253.000	90.634%	93.082%
2	16:52:18	81.239%	1.036	-0.059	0.016	255.900	255.000	90.912%	92.810%
3	16:52:45	80.043%	1.112	-0.042	-0.123	255.000	259.100	90.031%	91.381%
x		80.427%	1.077	-0.042	-0.049	255.600	255.700	90.526%	92.425%
σ		0.704%	0.038	0.017	0.070	0.458	3.110	0.450%	0.914%
%RSD		0.875	3.514	40.770	143.300	0.179	1.216	0.497	0.989

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:51	0.233	0.207	225.000	207.900	217.300	87.745%
2	16:52:18	0.213	0.204	226.600	210.500	218.400	88.011%
3	16:52:45	0.182	0.225	226.100	211.000	218.200	85.427%
x		0.209	0.212	225.900	209.800	218.000	87.061%
σ		0.026	0.012	0.813	1.657	0.591	1.421%
%RSD		12.250	5.479	0.360	0.790	0.271	1.633

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:06	72.311%	0.158	49.010	41.920	0.000	51850.000	17530.000	17860.000
2	16:56:33	76.093%	-0.045	40.220	42.740	0.000	51740.000	17750.000	18260.000
3	16:56:59	75.508%	-0.123	48.110	42.460	0.000	52480.000	17920.000	18390.000
x		74.637%	-0.003	45.780	42.370	0.000	52020.000	17730.000	18170.000
σ		2.036%	0.145	4.835	0.419	0.000	400.800	197.000	275.300
%RSD		2.728	4343.000	10.560	0.989	0.000	0.770	1.111	1.515

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:06	1.742	4510.000	0.000	4509.000	87110.000	89770.000	72.673%	0.655
2	16:56:33	1.471	4530.000	0.000	4551.000	89860.000	92800.000	74.740%	1.293
3	16:56:59	2.108	4620.000	0.000	4602.000	90520.000	93180.000	76.394%	0.890
x		1.773	4554.000	0.000	4554.000	89170.000	91920.000	74.602%	0.946
σ		0.320	58.560	0.000	46.400	1806.000	1872.000	1.865%	0.323
%RSD		18.030	1.286	0.000	1.019	2.026	2.036	2.499	34.110

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:06	1.472	9.281	2.125	20.610	315.100	0.181	0.033	1.244
2	16:56:33	4.014	9.370	2.135	10.680	304.400	0.182	-0.182	1.278
3	16:56:59	3.771	9.865	2.151	8.057	296.200	0.152	-0.134	1.242
x		3.086	9.505	2.137	13.120	305.200	0.172	-0.094	1.255
σ		1.403	0.315	0.013	6.623	9.498	0.017	0.113	0.021
%RSD		45.470	3.310	0.613	50.490	3.112	9.872	119.800	1.636

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:06	1.274	1.662	1.671	1.350	-0.853	0.455	0.000	195.200
2	16:56:33	1.261	1.948	1.709	5.742	-0.276	0.215	0.000	202.200
3	16:56:59	1.149	1.564	1.752	-1.947	-0.533	-0.352	0.000	201.000
x		1.228	1.725	1.711	1.715	-0.554	0.106	0.000	199.500
σ		0.068	0.200	0.040	3.857	0.289	0.414	0.000	3.747
%RSD		5.565	11.570	2.364	224.900	52.170	390.600	0.000	1.879

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:06	75.976%	3.830	3.481	79.497%	-0.077	-0.109	0.029	-0.076
2	16:56:33	80.026%	3.609	3.756	82.783%	-0.105	-0.109	-0.008	-0.078
3	16:56:59	82.253%	3.902	3.857	85.636%	-0.081	-0.104	-0.027	0.007
x		79.418%	3.780	3.698	82.639%	-0.088	-0.107	-0.002	-0.049
σ		3.182%	0.153	0.195	3.072%	0.015	0.003	0.028	0.048
%RSD		4.007	4.040	5.267	3.717	17.120	2.881	1468.000	98.210

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:06	78.530%	-2.631	-0.800	-0.804	40.940	40.930	85.908%	86.976%
2	16:56:33	81.458%	-2.643	-0.782	-0.814	42.200	42.540	88.061%	89.518%
3	16:56:59	83.260%	-2.785	-0.798	-0.794	43.020	42.750	90.769%	91.567%
x		81.083%	-2.686	-0.793	-0.804	42.050	42.070	88.246%	89.354%
σ		2.387%	0.086	0.010	0.010	1.044	0.994	2.436%	2.300%
%RSD		2.944	3.184	1.264	1.267	2.483	2.363	2.760	2.574

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:06	0.019	0.008	0.049	0.044	0.054	81.835%
2	16:56:33	0.011	0.004	0.055	0.058	0.050	84.132%
3	16:56:59	0.024	0.004	0.053	0.050	0.049	86.075%
x		0.018	0.005	0.052	0.050	0.051	84.014%
σ		0.007	0.002	0.003	0.007	0.003	2.123%
%RSD		37.060	45.180	6.245	14.120	5.219	2.527

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:21	75.349%	0.001	37.490	31.880	0.000	36740.000	13490.000	13780.000
2	17:00:48	76.127%	-0.108	33.920	32.340	0.000	37420.000	13960.000	14260.000
3	17:01:15	78.172%	-0.240	31.940	32.780	0.000	36670.000	13770.000	14150.000
x		76.549%	-0.116	34.450	32.330	0.000	36940.000	13740.000	14060.000
σ		1.458%	0.121	2.814	0.448	0.000	415.800	241.400	249.700
%RSD		1.905	104.700	8.167	1.386	0.000	1.126	1.757	1.776
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:21	12.110	5392.000	0.000	3818.000	102800.000	105600.000	76.292%	1.000
2	17:00:48	12.250	5522.000	0.000	3829.000	103200.000	106700.000	77.550%	0.900
3	17:01:15	12.530	5467.000	0.000	3875.000	104700.000	107000.000	79.032%	1.555
x		12.290	5460.000	0.000	3841.000	103600.000	106400.000	77.625%	1.151
σ		0.212	65.220	0.000	30.330	1004.000	713.000	1.371%	0.353
%RSD		1.728	1.195	0.000	0.790	0.969	0.670	1.767	30.680
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:21	1.929	8.977	7.095	47.050	391.500	0.192	0.114	1.534
2	17:00:48	4.174	9.154	7.461	47.420	379.300	0.205	-0.055	1.355
3	17:01:15	-1.040	9.253	7.446	45.780	371.700	0.199	-0.043	1.438
x		1.688	9.128	7.334	46.750	380.800	0.199	0.005	1.442
σ		2.616	0.140	0.207	0.861	9.990	0.007	0.094	0.090
%RSD		155.000	1.529	2.819	1.842	2.623	3.449	1749.000	6.216
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:21	1.526	10.920	12.060	-0.151	-0.433	-0.684	0.000	197.100
2	17:00:48	1.171	11.230	11.240	1.232	-0.707	0.041	0.000	203.500
3	17:01:15	1.658	11.020	11.740	1.192	0.453	-0.208	0.000	205.000
x		1.452	11.060	11.680	0.758	-0.229	-0.284	0.000	201.800
σ		0.252	0.158	0.416	0.787	0.606	0.368	0.000	4.198
%RSD		17.360	1.432	3.564	103.900	264.400	129.900	0.000	2.080
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:21	84.652%	1.653	1.589	90.375%	-0.083	-0.093	-0.034	-0.012
2	17:00:48	86.421%	1.798	1.810	85.900%	-0.094	-0.096	-0.012	-0.049
3	17:01:15	87.857%	1.790	1.557	94.139%	-0.104	-0.108	0.012	-0.020
x		86.310%	1.747	1.652	90.138%	-0.094	-0.099	-0.011	-0.027
σ		1.605%	0.081	0.138	4.124%	0.010	0.008	0.023	0.019
%RSD		1.860	4.641	8.325	4.576	11.200	8.340	202.000	72.130
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:21	84.513%	-2.609	-0.810	-0.829	40.930	42.280	95.037%	96.948%
2	17:00:48	88.945%	-2.575	-0.835	-0.827	42.110	42.320	94.803%	100.234%
3	17:01:15	90.429%	-2.724	-0.801	-0.818	41.750	42.120	97.197%	101.462%
x		87.962%	-2.636	-0.815	-0.825	41.600	42.240	95.679%	99.548%
σ		3.078%	0.078	0.018	0.006	0.609	0.103	1.320%	2.334%
%RSD		3.499	2.958	2.156	0.713	1.463	0.243	1.379	2.344
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:00:21	0.004	0.009	0.085	0.042	0.074	92.065%		
2	17:00:48	0.010	0.004	0.067	0.068	0.067	96.388%		
3	17:01:15	0.012	0.006	0.063	0.066	0.068	100.148%		
x		0.008	0.006	0.071	0.059	0.070	96.200%		
σ		0.004	0.002	0.012	0.014	0.004	4.045%		
%RSD		47.860	34.610	16.230	24.110	5.356	4.204		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:37	73.955%	98.810	101.800	100.400	0.000	48460.000	46930.000	46470.000
2	17:05:03	73.177%	100.300	109.900	98.870	0.000	49450.000	48350.000	47880.000
3	17:05:30	74.371%	101.900	98.390	102.400	0.000	49470.000	48300.000	47650.000
x		73.834%	100.316%	103.366%	100.532%	0.000	98.252%	95.718%	94.671%
σ		0.606%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.821	1.526	5.713	1.749	0.000	1.176	1.689	1.597
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:37	471.400	5267.000	0.000	49950.000	48030.000	49780.000	74.317%	98.580
2	17:05:03	486.900	5376.000	0.000	50910.000	49160.000	51150.000	75.245%	102.100
3	17:05:30	486.400	5354.000	0.000	50650.000	49930.000	51670.000	74.692%	103.100
x		96.314%	106.646%	0.000	101.012%	98.080%	101.730%	74.752%	101.244%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.467%	n/a
%RSD		1.829	1.077	0.000	0.980	1.947	1.917	0.624	2.334
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:37	97.590	96.410	500.800	24320.000	25110.000	94.970	95.530	96.630
2	17:05:03	99.370	100.400	510.800	24920.000	25770.000	96.860	98.560	98.030
3	17:05:30	100.200	101.500	521.100	25300.000	26110.000	97.420	99.860	98.970
x		99.053%	99.448%	102.181%	99.381%	102.643%	96.415%	97.982%	97.876%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.345	2.706	1.987	1.985	1.985	1.332	2.266	1.200
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:37	95.040	97.670	97.250	94.570	98.370	98.260	0.000	95.290
2	17:05:03	100.300	101.200	100.700	97.040	95.780	97.870	0.000	97.530
3	17:05:30	98.240	102.200	103.000	97.300	99.020	98.990	0.000	98.420
x		97.857%	100.360%	100.316%	96.304%	97.724%	98.370%	0.000	97.081%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.701	2.372	2.878	1.569	1.750	0.577	0.000	1.662
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:37	80.197%	89.720	90.290	87.046%	93.440	93.020	94.670	95.200
2	17:05:03	80.909%	98.640	95.350	88.332%	93.860	94.020	97.760	97.190
3	17:05:30	80.962%	97.760	97.010	88.309%	94.520	95.010	98.060	97.140
x		80.689%	95.373%	94.214%	87.896%	93.939%	94.015%	96.827%	96.512%
σ		0.427%	n/a	n/a	0.736%	n/a	n/a	n/a	n/a
%RSD		0.529	5.155	3.715	0.837	0.583	1.062	1.937	1.174
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:37	81.447%	95.650	98.610	97.860	94.740	94.830	90.202%	91.571%
2	17:05:03	83.017%	98.970	99.800	100.900	98.230	99.400	90.854%	92.465%
3	17:05:30	82.555%	98.300	100.000	100.400	98.030	100.100	91.388%	93.571%
x		82.340%	97.637%	99.485%	99.702%	97.001%	98.101%	90.815%	92.536%
σ		0.807%	n/a	n/a	n/a	n/a	n/a	0.594%	1.002%
%RSD		0.980	1.797	0.768	1.621	2.024	2.904	0.654	1.082
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:04:37	99.840	100.900	99.060	100.600	99.530	91.820%		
2	17:05:03	102.100	103.000	102.400	103.700	102.500	92.574%		
3	17:05:30	102.900	104.900	104.900	105.000	104.500	91.235%		
x		101.640%	102.943%	102.121%	103.081%	102.171%	91.876%		
σ		n/a	n/a	n/a	n/a	n/a	0.671%		
%RSD		1.585	1.949	2.857	2.193	2.429	0.730		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:00	80.794%	-0.061	-1.095	-0.888	0.000	14.550	8.399	8.737
2	17:12:26	80.877%	-0.196	-1.319	-1.320	0.000	13.920	7.077	7.840
3	17:12:53	80.862%	-0.157	-1.319	-1.392	0.000	13.730	6.045	6.758
x		80.845%	-0.138	-1.244	-1.200	0.000	14.070	7.174	7.778
σ		0.044%	0.070	0.129	0.272	0.000	0.433	1.180	0.991
%RSD		0.054	50.550	10.390	22.700	0.000	3.075	16.450	12.740

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:00	0.750	-4.162	0.000	-5.303	-2.705	11.840	78.685%	-0.481
2	17:12:26	0.756	-4.553	0.000	-2.860	2.557	8.401	79.320%	-0.530
3	17:12:53	0.691	-4.742	0.000	-7.054	17.640	9.977	79.572%	-0.615
x		0.732	-4.485	0.000	-5.072	5.831	10.070	79.192%	-0.542
σ		0.036	0.296	0.000	2.106	10.560	1.720	0.457%	0.068
%RSD		4.913	6.597	0.000	41.530	181.100	17.080	0.577	12.550

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:00	0.104	0.124	0.118	2.437	7.669	0.048	-0.027	0.027
2	17:12:26	0.186	0.159	0.147	0.742	9.627	0.016	-0.070	0.016
3	17:12:53	0.231	0.107	0.108	0.172	8.381	0.043	-0.016	0.056
x		0.174	0.130	0.124	1.117	8.559	0.036	-0.038	0.033
σ		0.065	0.027	0.020	1.179	0.991	0.017	0.028	0.021
%RSD		37.120	20.510	16.260	105.500	11.580	49.000	75.610	63.080

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:00	-0.096	0.063	-0.014	-0.344	-0.307	-0.673	0.000	0.075
2	17:12:26	0.007	0.115	-0.086	-0.418	0.673	-0.281	0.000	0.040
3	17:12:53	-0.169	0.068	0.117	-0.540	-0.874	-0.095	0.000	0.048
x		-0.086	0.082	0.006	-0.434	-0.169	-0.350	0.000	0.054
σ		0.089	0.029	0.103	0.099	0.783	0.295	0.000	0.019
%RSD		103.000	35.240	1823.000	22.820	462.000	84.400	0.000	34.020

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:00	81.743%	-0.042	-0.113	92.189%	-0.085	-0.101	0.013	0.099
2	17:12:26	85.511%	-0.057	-0.108	88.208%	-0.088	-0.074	-0.031	0.064
3	17:12:53	85.550%	-0.117	-0.093	89.857%	-0.088	-0.071	-0.032	0.021
x		84.268%	-0.072	-0.105	90.085%	-0.087	-0.082	-0.017	0.061
σ		2.186%	0.040	0.011	2.000%	0.002	0.017	0.026	0.039
%RSD		2.595	55.580	10.160	2.220	1.882	20.350	155.900	63.530

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:00	85.444%	-2.808	-0.786	-0.825	0.038	0.045	89.224%	92.197%
2	17:12:26	87.908%	-2.827	-0.788	-0.812	0.064	0.040	93.636%	94.560%
3	17:12:53	88.331%	-2.713	-0.801	-0.802	-0.054	0.022	95.957%	96.347%
x		87.228%	-2.783	-0.792	-0.813	0.016	0.036	92.939%	94.368%
σ		1.559%	0.061	0.008	0.012	0.062	0.012	3.420%	2.082%
%RSD		1.788	2.207	1.061	1.417	388.000	34.570	3.680	2.206

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:00	0.017	0.013	0.006	-0.005	0.010	101.704%
2	17:12:26	0.014	0.007	0.001	-0.004	0.009	100.479%
3	17:12:53	0.011	0.014	0.017	-0.015	0.008	102.261%
x		0.014	0.011	0.008	-0.008	0.009	101.482%
σ		0.003	0.004	0.009	0.006	0.001	0.912%
%RSD		21.460	34.640	106.600	79.090	11.570	0.899

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:17	70.458%	-0.041	5.486	5.809	0.000	7290.000	2594.000	2590.000
2	17:16:44	69.667%	0.100	6.102	5.629	0.000	7534.000	2713.000	2666.000
3	17:17:11	70.867%	-0.306	5.311	5.551	0.000	7471.000	2684.000	2660.000
x		70.331%	-0.083	5.633	5.663	0.000	7432.000	2664.000	2639.000
σ		0.610%	0.206	0.416	0.133	0.000	126.800	62.440	42.740
%RSD		0.868	249.700	7.381	2.340	0.000	1.706	2.344	1.620
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:17	2.756	969.500	0.000	717.900	19740.000	19310.000	70.971%	0.015
2	17:16:44	2.827	1003.000	0.000	740.700	20480.000	19790.000	70.167%	-0.233
3	17:17:11	2.377	988.800	0.000	741.900	20140.000	19960.000	70.931%	-0.431
x		2.653	987.000	0.000	733.500	20120.000	19690.000	70.690%	-0.216
σ		0.242	16.720	0.000	13.510	368.900	341.200	0.453%	0.223
%RSD		9.127	1.694	0.000	1.842	1.834	1.733	0.641	103.200
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:17	0.697	1.399	1.343	2.816	79.960	0.050	-0.083	0.194
2	17:16:44	1.740	1.543	1.456	3.522	74.930	0.035	-0.034	0.295
3	17:17:11	0.834	1.437	1.469	4.388	77.830	0.057	-0.029	0.248
x		1.090	1.460	1.423	3.575	77.570	0.047	-0.049	0.245
σ		0.567	0.075	0.069	0.787	2.528	0.011	0.030	0.051
%RSD		51.990	5.111	4.868	22.010	3.259	22.950	61.420	20.600
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:17	0.447	2.415	2.376	-0.052	-1.015	-1.092	0.000	37.420
2	17:16:44	0.354	2.764	2.773	-1.658	-0.435	-0.727	0.000	38.840
3	17:17:11	0.188	3.016	2.529	0.446	-0.554	-0.091	0.000	39.060
x		0.330	2.732	2.559	-0.421	-0.668	-0.637	0.000	38.440
σ		0.131	0.302	0.201	1.100	0.306	0.507	0.000	0.888
%RSD		39.840	11.040	7.837	261.000	45.880	79.590	0.000	2.311
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:17	78.608%	-0.005	0.097	86.207%	-0.085	-0.082	0.011	-0.049
2	17:16:44	79.237%	0.116	0.112	87.706%	-0.102	-0.093	0.014	-0.018
3	17:17:11	80.194%	0.213	0.144	90.135%	-0.067	-0.090	-0.009	0.060
x		79.346%	0.108	0.117	88.016%	-0.084	-0.088	0.005	-0.002
σ		0.799%	0.110	0.024	1.982%	0.018	0.005	0.012	0.056
%RSD		1.007	101.600	20.420	2.252	20.850	5.982	239.400	2398.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:17	81.732%	-2.709	-0.814	-0.836	8.267	8.155	92.362%	93.572%
2	17:16:44	82.854%	-2.731	-0.818	-0.831	7.983	8.639	92.060%	94.331%
3	17:17:11	83.936%	-2.720	-0.822	-0.821	8.701	8.638	93.238%	95.537%
x		82.840%	-2.720	-0.818	-0.830	8.317	8.478	92.553%	94.480%
σ		1.102%	0.011	0.004	0.008	0.362	0.279	0.612%	0.991%
%RSD		1.330	0.406	0.485	0.914	4.352	3.295	0.661	1.049
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:16:17	0.004	-0.000	0.055	0.043	0.054	99.767%		
2	17:16:44	0.001	-0.002	0.060	0.067	0.063	97.972%		
3	17:17:11	0.010	-0.001	0.073	0.044	0.064	97.910%		
x		0.005	-0.001	0.063	0.051	0.061	98.550%		
σ		0.005	0.001	0.010	0.014	0.006	1.055%		
%RSD		90.710	80.510	15.170	26.740	9.199	1.070		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:35	70.076%	46.790	1004.000	981.600	0.000	83690.000	55850.000	55950.000
2	17:21:02	72.672%	48.070	1009.000	977.700	0.000	83930.000	56360.000	56700.000
3	17:21:28	73.599%	46.600	983.700	982.300	0.000	83980.000	56810.000	57550.000
x		72.116%	47.150	999.000	980.500	0.000	83870.000	56340.000	56730.000
σ		1.826%	0.802	13.460	2.503	0.000	153.000	476.000	800.900
%RSD		2.532	1.700	1.348	0.255	0.000	0.182	0.845	1.412

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:35	1832.000	14170.000	0.000	52660.000	148500.000	154700.000	70.693%	983.800
2	17:21:02	1870.000	14140.000	0.000	53080.000	153400.000	156700.000	72.204%	1010.000
3	17:21:28	1896.000	14350.000	0.000	53400.000	156600.000	159000.000	72.190%	1026.000
x		1866.000	14220.000	0.000	53050.000	152800.000	156800.000	71.696%	1007.000
σ		32.180	111.200	0.000	370.700	4108.000	2131.000	0.868%	21.400
%RSD		1.725	0.782	0.000	0.699	2.687	1.359	1.211	2.126

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:35	493.700	195.600	493.200	1047.000	1443.000	464.700	453.200	228.400
2	17:21:02	509.300	200.700	507.300	1079.000	1473.000	477.300	466.700	236.400
3	17:21:28	524.900	204.500	510.600	1105.000	1501.000	480.300	469.200	236.900
x		509.300	200.300	503.700	1077.000	1472.000	474.100	463.000	233.900
σ		15.590	4.458	9.253	29.230	28.770	8.243	8.632	4.793
%RSD		3.062	2.226	1.837	2.713	1.954	1.739	1.864	2.049

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:35	229.800	472.900	476.700	38.030	7.126	9.739	0.000	1176.000
2	17:21:02	235.100	488.600	489.100	41.980	9.502	10.390	0.000	1197.000
3	17:21:28	239.100	489.600	494.300	37.160	10.840	9.182	0.000	1203.000
x		234.600	483.700	486.700	39.060	9.157	9.771	0.000	1192.000
σ		4.668	9.365	9.031	2.567	1.882	0.605	0.000	14.330
%RSD		1.990	1.936	1.856	6.572	20.550	6.194	0.000	1.202

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:35	76.477%	989.000	1023.000	77.071%	46.280	46.640	49.880	39.340
2	17:21:02	77.282%	1031.000	1049.000	78.558%	45.970	47.010	50.010	40.560
3	17:21:28	78.268%	1042.000	1060.000	79.011%	46.620	47.240	51.180	39.740
x		77.343%	1020.000	1044.000	78.213%	46.290	46.970	50.360	39.880
σ		0.897%	27.840	19.090	1.015%	0.327	0.301	0.718	0.622
%RSD		1.160	2.728	1.829	1.297	0.706	0.640	1.425	1.559

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:35	74.849%	2122.000	518.900	509.100	1927.000	1973.000	86.430%	87.101%
2	17:21:02	75.823%	2176.000	543.100	521.300	1991.000	2039.000	86.308%	87.340%
3	17:21:28	76.419%	2195.000	543.400	518.400	2005.000	2054.000	86.218%	86.938%
x		75.697%	2164.000	535.200	516.300	1975.000	2022.000	86.319%	87.126%
σ		0.792%	37.710	14.050	6.359	41.510	43.210	0.106%	0.202%
%RSD		1.047	1.742	2.625	1.232	2.102	2.137	0.123	0.232

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:35	49.470	50.070	20.800	21.110	20.750	80.524%
2	17:21:02	50.500	50.720	20.920	21.170	21.100	81.577%
3	17:21:28	51.700	51.090	21.240	21.520	21.130	81.017%
x		50.560	50.630	20.990	21.270	20.990	81.039%
σ		1.116	0.520	0.226	0.222	0.214	0.527%
%RSD		2.207	1.027	1.075	1.046	1.019	0.650

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:24:50	70.947%	47.290	985.000	978.900	0.000	83370.000	55340.000	55260.000
2	17:25:17	72.649%	47.550	1015.000	966.200	0.000	83290.000	55470.000	56210.000
3	17:25:44	74.036%	44.990	1004.000	968.900	0.000	83800.000	56030.000	56560.000
x		72.544%	46.610	1001.000	971.300	0.000	83480.000	55620.000	56010.000
σ		1.547%	1.409	15.210	6.677	0.000	273.300	367.200	671.900
%RSD		2.133	3.024	1.519	0.687	0.000	0.327	0.660	1.200

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:24:50	1794.000	14110.000	0.000	52960.000	149400.000	153900.000	70.466%	989.100
2	17:25:17	1842.000	14080.000	0.000	52300.000	150300.000	154200.000	73.519%	997.200
3	17:25:44	1871.000	14150.000	0.000	53060.000	153700.000	159500.000	73.673%	998.200
x		1836.000	14120.000	0.000	52770.000	151200.000	155900.000	72.553%	994.900
σ		38.820	36.490	0.000	416.600	2267.000	3170.000	1.809%	4.996
%RSD		2.115	0.259	0.000	0.789	1.500	2.034	2.493	0.502

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:24:50	488.800	195.100	486.400	1050.000	1476.000	460.500	450.800	227.400
2	17:25:17	500.800	197.600	499.800	1075.000	1463.000	465.500	456.700	228.600
3	17:25:44	508.400	199.800	507.900	1089.000	1481.000	472.000	459.100	231.400
x		499.300	197.500	498.000	1071.000	1474.000	466.000	455.600	229.100
σ		9.883	2.341	10.850	19.620	9.277	5.744	4.295	2.056
%RSD		1.979	1.185	2.179	1.831	0.630	1.233	0.943	0.897

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:24:50	230.700	468.400	473.300	40.760	9.219	9.726	0.000	1171.000
2	17:25:17	233.000	486.300	484.700	40.130	8.590	9.832	0.000	1219.000
3	17:25:44	230.900	483.900	486.800	39.900	8.171	10.360	0.000	1197.000
x		231.500	479.500	481.600	40.260	8.660	9.974	0.000	1195.000
σ		1.295	9.728	7.245	0.447	0.528	0.341	0.000	24.100
%RSD		0.559	2.028	1.504	1.109	6.094	3.418	0.000	2.016

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:24:50	75.935%	990.500	1014.000	78.356%	45.890	46.190	50.000	38.490
2	17:25:17	77.557%	1035.000	1047.000	80.740%	45.360	45.310	49.080	37.580
3	17:25:44	80.320%	1026.000	1060.000	82.886%	45.700	46.190	49.750	39.550
x		77.937%	1017.000	1041.000	80.661%	45.650	45.890	49.610	38.540
σ		2.217%	23.590	23.840	2.266%	0.268	0.508	0.475	0.986
%RSD		2.845	2.318	2.291	2.809	0.586	1.106	0.958	2.557

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:24:50	73.290%	2157.000	515.000	511.700	1914.000	1981.000	85.301%	86.335%
2	17:25:17	80.944%	2091.000	506.400	493.500	1943.000	1964.000	88.429%	90.546%
3	17:25:44	79.495%	2178.000	534.300	523.100	2000.000	2042.000	91.172%	91.687%
x		77.909%	2142.000	518.500	509.400	1953.000	1996.000	88.301%	89.523%
σ		4.066%	45.890	14.280	14.900	43.620	41.030	2.938%	2.819%
%RSD		5.219	2.142	2.753	2.924	2.234	2.056	3.327	3.149

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:24:50	49.820	49.760	20.830	20.800	20.710	80.078%
2	17:25:17	49.310	50.240	20.200	20.730	20.350	86.200%
3	17:25:44	49.420	50.450	20.550	20.850	20.530	87.692%
x		49.520	50.150	20.530	20.790	20.530	84.657%
σ		0.267	0.355	0.315	0.061	0.180	4.035%
%RSD		0.538	0.708	1.536	0.292	0.877	4.767

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:07	70.830%	46.330	995.900	973.100	0.000	83170.000	55620.000	55970.000
2	17:29:34	72.742%	47.830	1007.000	976.300	0.000	83390.000	56280.000	57030.000
3	17:30:01	73.240%	47.660	987.100	985.600	0.000	84750.000	57130.000	57630.000
x		72.271%	47.270	996.700	978.300	0.000	83770.000	56340.000	56880.000
σ		1.272%	0.822	9.989	6.512	0.000	855.400	754.200	837.700
%RSD		1.760	1.739	1.002	0.666	0.000	1.021	1.339	1.473

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:07	1771.000	14400.000	0.000	54080.000	147600.000	153900.000	71.413%	1057.000
2	17:29:34	1829.000	14450.000	0.000	54030.000	150200.000	156900.000	74.449%	1069.000
3	17:30:01	1859.000	14710.000	0.000	55280.000	154300.000	158800.000	73.856%	1090.000
x		1819.000	14520.000	0.000	54460.000	150700.000	156600.000	73.239%	1072.000
σ		44.650	166.600	0.000	709.700	3349.000	2467.000	1.609%	16.800
%RSD		2.454	1.147	0.000	1.303	2.222	1.576	2.197	1.567

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:07	497.300	193.700	485.000	1043.000	1452.000	454.600	439.900	224.100
2	17:29:34	506.400	195.700	496.000	1067.000	1467.000	461.400	452.700	228.700
3	17:30:01	514.500	201.800	508.200	1110.000	1489.000	471.000	462.200	232.300
x		506.100	197.100	496.400	1073.000	1469.000	462.300	451.600	228.400
σ		8.640	4.199	11.580	33.820	18.280	8.210	11.210	4.135
%RSD		1.707	2.131	2.333	3.152	1.244	1.776	2.482	1.811

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:07	227.500	470.000	474.900	34.160	8.101	9.250	0.000	1163.000
2	17:29:34	228.700	475.900	479.600	38.080	9.196	9.419	0.000	1201.000
3	17:30:01	233.500	486.000	493.100	37.610	9.171	9.619	0.000	1205.000
x		229.900	477.300	482.500	36.620	8.823	9.429	0.000	1190.000
σ		3.137	8.101	9.425	2.141	0.626	0.185	0.000	23.370
%RSD		1.365	1.697	1.953	5.848	7.090	1.959	0.000	1.964

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:07	81.496%	1066.000	1088.000	84.005%	43.300	43.010	49.090	38.640
2	17:29:34	82.633%	1113.000	1141.000	85.254%	43.740	43.540	49.550	40.100
3	17:30:01	83.292%	1121.000	1142.000	86.565%	44.760	45.280	50.660	40.900
x		82.474%	1100.000	1124.000	85.275%	43.930	43.940	49.770	39.880
σ		0.909%	29.830	31.190	1.280%	0.746	1.186	0.805	1.144
%RSD		1.102	2.713	2.776	1.501	1.698	2.699	1.617	2.869

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:07	80.823%	2231.000	543.900	541.600	1902.000	1951.000	93.829%	94.058%
2	17:29:34	83.298%	2251.000	560.000	548.100	1971.000	2024.000	94.511%	96.356%
3	17:30:01	81.511%	2359.000	564.700	570.000	2031.000	2111.000	93.507%	95.674%
x		81.877%	2281.000	556.200	553.200	1968.000	2029.000	93.949%	95.363%
σ		1.278%	68.870	10.890	14.860	64.250	80.210	0.513%	1.180%
%RSD		1.560	3.020	1.959	2.687	3.265	3.954	0.546	1.237

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:07	49.170	50.150	20.120	20.710	20.270	89.873%
2	17:29:34	50.700	51.740	20.560	20.820	20.480	92.175%
3	17:30:01	52.550	52.950	21.510	21.330	21.350	89.608%
x		50.800	51.610	20.730	20.950	20.700	90.552%
σ		1.692	1.401	0.711	0.330	0.572	1.412%
%RSD		3.331	2.715	3.430	1.574	2.761	1.559

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:33:26	73.301%	-0.064	29.180	29.680	0.000	23790.000	12360.000	12560.000
2	17:33:52	74.315%	-0.030	26.600	29.460	0.000	24080.000	12610.000	12950.000
3	17:34:19	73.899%	-0.090	29.550	27.770	0.000	24050.000	12610.000	12940.000
x		73.838%	-0.061	28.440	28.970	0.000	23970.000	12530.000	12820.000
σ		0.510%	0.030	1.605	1.046	0.000	160.000	142.800	222.500
%RSD		0.691	49.710	5.643	3.611	0.000	0.667	1.140	1.736
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:33:26	7.156	4958.000	0.000	3012.000	85910.000	88560.000	71.973%	1.590
2	17:33:52	7.309	5047.000	0.000	3088.000	89040.000	91470.000	72.610%	1.634
3	17:34:19	7.235	5055.000	0.000	3048.000	88450.000	91570.000	74.130%	1.262
x		7.233	5020.000	0.000	3049.000	87800.000	90530.000	72.904%	1.495
σ		0.077	53.790	0.000	38.480	1667.000	1705.000	1.108%	0.203
%RSD		1.060	1.071	0.000	1.262	1.898	1.884	1.520	13.580
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:33:26	3.997	7.599	5.703	15.080	297.600	0.256	-0.173	1.395
2	17:33:52	-0.742	6.973	5.829	13.230	306.100	0.184	-0.040	1.541
3	17:34:19	6.311	7.282	5.799	11.730	290.600	0.225	-0.079	1.525
x		3.189	7.285	5.777	13.350	298.100	0.222	-0.097	1.487
σ		3.595	0.313	0.066	1.677	7.785	0.036	0.069	0.080
%RSD		112.700	4.299	1.137	12.560	2.612	16.380	70.480	5.385
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:33:26	1.422	4.271	4.269	3.770	-1.184	-0.804	0.000	181.800
2	17:33:52	1.386	4.544	4.291	5.381	-0.864	-0.980	0.000	189.500
3	17:34:19	1.467	4.453	4.334	1.044	-1.179	-0.035	0.000	188.200
x		1.425	4.423	4.298	3.398	-1.075	-0.606	0.000	186.500
σ		0.040	0.139	0.033	2.192	0.183	0.503	0.000	4.109
%RSD		2.840	3.146	0.767	64.510	17.050	82.900	0.000	2.203
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:33:26	81.706%	5.282	5.324	86.139%	-0.108	-0.095	-0.042	-0.033
2	17:33:52	82.769%	4.519	4.346	88.089%	-0.111	-0.097	0.007	-0.042
3	17:34:19	84.542%	3.586	3.795	89.489%	-0.103	-0.081	0.038	-0.018
x		83.006%	4.462	4.488	87.906%	-0.107	-0.091	0.001	-0.031
σ		1.433%	0.850	0.775	1.682%	0.004	0.009	0.040	0.012
%RSD		1.726	19.040	17.260	1.914	3.560	9.527	3820.000	39.500
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:33:26	83.071%	1.564	0.708	0.872	24.950	25.130	91.445%	94.381%
2	17:33:52	84.290%	0.533	0.348	0.343	24.950	25.850	95.923%	96.508%
3	17:34:19	86.191%	-0.414	0.123	0.107	25.290	25.170	97.094%	97.363%
x		84.518%	0.561	0.393	0.441	25.060	25.380	94.821%	96.084%
σ		1.572%	0.989	0.295	0.392	0.198	0.402	2.982%	1.535%
%RSD		1.860	176.300	75.050	88.950	0.792	1.585	3.144	1.598
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:33:26	0.104	0.087	0.159	0.163	0.155	91.862%		
2	17:33:52	0.079	0.065	0.144	0.127	0.147	92.791%		
3	17:34:19	0.055	0.058	0.134	0.131	0.141	97.063%		
x		0.079	0.070	0.146	0.140	0.148	93.905%		
σ		0.025	0.015	0.013	0.020	0.007	2.774%		
%RSD		31.290	21.210	8.638	13.980	4.568	2.954		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:43	72.619%	-0.123	48.500	46.810	0.000	67090.000	17520.000	17670.000
2	17:38:10	72.790%	-0.209	50.780	46.390	0.000	69490.000	18210.000	18730.000
3	17:38:37	73.888%	-0.153	50.970	42.900	0.000	68420.000	18050.000	18540.000
x		73.099%	-0.162	50.080	45.370	0.000	68330.000	17930.000	18310.000
σ		0.689%	0.044	1.378	2.148	0.000	1207.000	360.800	565.700
%RSD		0.942	27.170	2.751	4.734	0.000	1.766	2.012	3.090
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:43	154.900	4282.000	0.000	5518.000	89250.000	91930.000	72.014%	4.769
2	17:38:10	159.600	4416.000	0.000	5646.000	93310.000	96040.000	72.362%	4.504
3	17:38:37	159.100	4367.000	0.000	5584.000	92270.000	95960.000	74.152%	5.020
x		157.900	4355.000	0.000	5583.000	91610.000	94640.000	72.843%	4.765
σ		2.584	67.970	0.000	63.860	2110.000	2347.000	1.147%	0.258
%RSD		1.637	1.561	0.000	1.144	2.303	2.480	1.575	5.416
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:43	2.428	11.430	22.840	758.700	1018.000	0.603	0.710	5.771
2	17:38:10	4.875	11.490	23.620	790.600	1033.000	0.651	0.667	5.977
3	17:38:37	7.905	11.500	23.180	783.100	1024.000	0.651	0.926	5.710
x		5.069	11.470	23.210	777.500	1025.000	0.635	0.768	5.820
σ		2.744	0.035	0.391	16.670	7.558	0.028	0.139	0.140
%RSD		54.120	0.309	1.683	2.144	0.737	4.398	18.070	2.401
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:43	5.888	5.592	6.194	-0.690	-0.434	1.119	0.000	201.600
2	17:38:10	6.132	6.658	6.120	3.968	-1.074	0.762	0.000	203.200
3	17:38:37	5.630	5.879	6.237	0.468	-1.306	-0.688	0.000	206.000
x		5.883	6.043	6.184	1.249	-0.938	0.398	0.000	203.600
σ		0.251	0.552	0.059	2.425	0.452	0.957	0.000	2.201
%RSD		4.264	9.132	0.957	194.200	48.170	240.600	0.000	1.081
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:43	75.673%	7.307	7.467	79.061%	0.677	0.589	0.008	-0.057
2	17:38:10	77.789%	8.093	7.767	79.432%	0.672	0.740	0.045	-0.005
3	17:38:37	79.116%	7.894	8.191	80.335%	0.698	0.698	0.006	-0.055
x		77.526%	7.764	7.808	79.609%	0.682	0.676	0.019	-0.039
σ		1.737%	0.409	0.364	0.656%	0.013	0.078	0.022	0.030
%RSD		2.240	5.265	4.659	0.823	1.977	11.500	114.100	75.540
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:43	78.510%	-2.013	-0.571	-0.618	41.960	40.010	83.593%	86.216%
2	17:38:10	79.031%	-2.123	-0.608	-0.613	41.950	41.510	85.510%	87.956%
3	17:38:37	79.574%	-2.084	-0.596	-0.610	42.250	42.700	86.357%	87.784%
x		79.038%	-2.073	-0.592	-0.614	42.050	41.410	85.153%	87.319%
σ		0.532%	0.056	0.018	0.004	0.172	1.347	1.416%	0.959%
%RSD		0.673	2.686	3.122	0.685	0.410	3.254	1.663	1.098
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:37:43	0.039	0.031	0.320	0.374	0.346	84.765%		
2	17:38:10	0.042	0.032	0.363	0.347	0.346	83.796%		
3	17:38:37	0.031	0.021	0.399	0.332	0.372	83.482%		
x		0.037	0.028	0.361	0.351	0.355	84.014%		
σ		0.006	0.006	0.039	0.021	0.015	0.669%		
%RSD		15.760	21.600	10.910	6.064	4.270	0.796		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:45:15	78.211%	-0.021	0.249	-0.047	0.000	-1.341	0.062	-0.097
2	17:45:42	78.705%	-0.203	0.446	-0.502	0.000	-1.517	-0.386	-0.144
3	17:46:08	79.251%	-0.206	-0.364	-0.564	0.000	-1.378	-0.221	-0.022
x		78.722%	-0.143	0.110	-0.371	0.000	-1.412	-0.182	-0.088
σ		0.521%	0.106	0.422	0.282	0.000	0.093	0.226	0.062
%RSD		0.661	73.620	383.700	76.180	0.000	6.574	124.400	70.400
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:45:15	-0.011	-5.752	0.000	-15.470	-1.245	4.400	76.963%	-0.574
2	17:45:42	-0.005	-4.997	0.000	-17.630	-5.373	6.500	77.171%	-0.814
3	17:46:08	-0.052	-5.995	0.000	-18.590	-11.420	1.679	77.345%	-0.513
x		-0.022	-5.581	0.000	-17.230	-6.013	4.193	77.160%	-0.634
σ		0.026	0.521	0.000	1.595	5.118	2.417	0.191%	0.159
%RSD		114.000	9.330	0.000	9.259	85.120	57.650	0.248	25.090
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:45:15	0.620	0.341	0.006	3.055	1.523	0.018	-0.060	0.043
2	17:45:42	-0.182	0.243	-0.018	1.733	2.814	-0.003	0.005	0.118
3	17:46:08	0.416	0.250	0.006	1.647	1.999	0.009	-0.108	-0.002
x		0.285	0.278	-0.002	2.145	2.112	0.008	-0.054	0.053
σ		0.417	0.055	0.014	0.789	0.653	0.011	0.057	0.060
%RSD		146.600	19.710	690.600	36.800	30.930	134.600	104.400	113.500
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:45:15	-0.151	0.108	0.090	-0.317	-1.574	-1.424	0.000	0.008
2	17:45:42	-0.049	-0.039	0.092	0.219	-1.139	-0.671	0.000	0.004
3	17:46:08	-0.090	-0.015	0.070	0.081	-0.491	-0.335	0.000	0.009
x		-0.097	0.018	0.084	-0.006	-1.068	-0.810	0.000	0.007
σ		0.052	0.079	0.012	0.278	0.545	0.557	0.000	0.003
%RSD		53.290	439.200	14.510	4934.000	51.040	68.810	0.000	38.280
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:45:15	80.896%	-0.182	-0.231	92.976%	-0.105	-0.108	-0.026	-0.036
2	17:45:42	83.831%	-0.165	-0.190	87.697%	-0.105	-0.104	-0.011	-0.008
3	17:46:08	83.469%	-0.170	-0.166	88.962%	-0.099	-0.101	0.023	0.018
x		82.732%	-0.172	-0.196	89.878%	-0.103	-0.104	-0.005	-0.008
σ		1.600%	0.008	0.033	2.756%	0.004	0.003	0.025	0.027
%RSD		1.934	4.873	17.040	3.066	3.552	3.175	536.600	324.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:45:15	85.172%	-2.802	-0.844	-0.860	-0.023	-0.033	90.628%	93.304%
2	17:45:42	86.882%	-2.685	-0.849	-0.870	-0.022	0.018	93.817%	94.292%
3	17:46:08	87.341%	-2.600	-0.858	-0.843	-0.081	-0.019	93.716%	95.769%
x		86.465%	-2.695	-0.850	-0.858	-0.042	-0.011	92.720%	94.455%
σ		1.144%	0.102	0.007	0.014	0.034	0.026	1.813%	1.240%
%RSD		1.323	3.770	0.868	1.617	79.990	229.100	1.955	1.313
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:45:15	0.012	0.003	0.007	0.003	0.014	100.756%		
2	17:45:42	0.014	0.005	0.000	-0.003	0.015	101.418%		
3	17:46:08	0.010	0.010	0.008	0.011	0.018	101.410%		
x		0.012	0.006	0.005	0.003	0.016	101.195%		
σ		0.002	0.004	0.004	0.007	0.002	0.380%		
%RSD		16.980	65.480	86.180	209.500	11.410	0.375		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:30	72.002%	48.390	967.800	936.300	0.000	46250.000	42180.000	42320.000
2	17:49:55	73.645%	47.280	954.400	941.600	0.000	46410.000	42800.000	43200.000
3	17:50:22	72.587%	48.810	967.200	943.900	0.000	47310.000	43420.000	43580.000
x		72.744%	48.160	963.100	940.600	0.000	46660.000	42800.000	43030.000
σ		0.833%	0.792	7.588	3.885	0.000	574.200	621.100	646.800
%RSD		1.145	1.645	0.788	0.413	0.000	1.231	1.451	1.503

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:30	1757.000	9004.000	0.000	48710.000	47320.000	48840.000	70.892%	965.300
2	17:49:55	1811.000	9032.000	0.000	49140.000	49220.000	49890.000	72.028%	1001.000
3	17:50:22	1827.000	9126.000	0.000	49340.000	48440.000	50890.000	73.412%	1021.000
x		1798.000	9054.000	0.000	49060.000	48330.000	49880.000	72.110%	995.500
σ		36.730	64.120	0.000	319.000	956.700	1024.000	1.262%	28.010
%RSD		2.042	0.708	0.000	0.650	1.980	2.052	1.750	2.813

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:30	488.000	191.100	480.500	987.400	1082.000	460.300	448.200	227.400
2	17:49:55	510.200	196.500	491.800	1016.000	1101.000	471.300	458.500	233.500
3	17:50:22	508.400	198.500	494.000	1024.000	1083.000	471.900	460.200	229.600
x		502.200	195.400	488.700	1009.000	1089.000	467.800	455.600	230.200
σ		12.320	3.797	7.250	19.290	10.890	6.534	6.511	3.064
%RSD		2.453	1.943	1.483	1.911	1.000	1.397	1.429	1.331

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:30	231.700	470.800	473.000	36.480	8.252	8.209	0.000	984.400
2	17:49:55	233.800	479.400	488.700	38.220	8.356	9.800	0.000	995.100
3	17:50:22	233.000	488.700	483.100	40.490	8.565	9.294	0.000	1008.000
x		232.800	479.600	481.600	38.400	8.391	9.101	0.000	995.700
σ		1.037	8.934	7.928	2.010	0.159	0.813	0.000	11.610
%RSD		0.446	1.863	1.646	5.234	1.897	8.936	0.000	1.166

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:30	78.327%	987.300	1005.000	82.761%	45.210	45.510	49.060	37.960
2	17:49:55	80.466%	1017.000	1022.000	85.919%	45.900	46.670	50.160	40.500
3	17:50:22	81.478%	1027.000	1043.000	87.177%	45.780	46.330	49.870	40.670
x		80.090%	1010.000	1023.000	85.286%	45.630	46.170	49.700	39.710
σ		1.609%	20.450	18.920	2.275%	0.367	0.594	0.573	1.518
%RSD		2.009	2.024	1.849	2.668	0.805	1.286	1.153	3.824

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:30	79.808%	2065.000	512.700	498.800	1875.000	1929.000	91.065%	92.095%
2	17:49:55	80.477%	2130.000	533.900	512.900	1945.000	1999.000	92.514%	96.561%
3	17:50:22	83.149%	2132.000	517.400	518.000	1942.000	1986.000	93.841%	96.552%
x		81.145%	2109.000	521.300	509.900	1921.000	1972.000	92.473%	95.069%
σ		1.767%	38.020	11.100	9.953	39.240	37.480	1.388%	2.576%
%RSD		2.178	1.803	2.129	1.952	2.043	1.901	1.501	2.709

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:30	47.860	48.650	20.090	20.290	20.160	89.500%
2	17:49:55	50.300	50.960	21.090	20.960	20.850	90.974%
3	17:50:22	50.480	51.070	20.900	21.010	20.910	92.619%
x		49.550	50.230	20.700	20.760	20.640	91.031%
σ		1.465	1.369	0.531	0.404	0.413	1.561%
%RSD		2.956	2.725	2.565	1.948	2.001	1.714

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:53:45	71.972%	0.077	47.910	45.840	0.000	47330.000	17420.000	17920.000
2	17:54:12	72.042%	-0.226	48.230	47.100	0.000	49090.000	18090.000	18680.000
3	17:54:38	72.870%	-0.231	46.420	46.160	0.000	48500.000	18030.000	18740.000
x		72.295%	-0.126	47.520	46.370	0.000	48310.000	17850.000	18450.000
σ		0.499%	0.176	0.968	0.658	0.000	895.700	368.900	458.000
%RSD		0.690	139.100	2.036	1.419	0.000	1.854	2.067	2.483
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:53:45	3.328	4714.000	0.000	4263.000	86830.000	90260.000	70.796%	1.008
2	17:54:12	3.636	4858.000	0.000	4332.000	90300.000	94100.000	70.824%	1.335
3	17:54:38	3.277	4863.000	0.000	4390.000	90800.000	93290.000	71.718%	1.119
x		3.414	4812.000	0.000	4328.000	89310.000	92550.000	71.113%	1.154
σ		0.194	84.450	0.000	63.210	2163.000	2022.000	0.525%	0.166
%RSD		5.687	1.755	0.000	1.460	2.422	2.185	0.738	14.390
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:53:45	1.930	7.422	36.360	15.700	305.100	0.483	0.217	1.411
2	17:54:12	0.603	7.615	38.150	15.630	303.700	0.474	0.525	1.402
3	17:54:38	0.731	7.398	38.260	15.040	307.100	0.457	0.279	1.533
x		1.088	7.478	37.590	15.460	305.300	0.471	0.340	1.449
σ		0.732	0.119	1.066	0.361	1.683	0.013	0.163	0.073
%RSD		67.280	1.591	2.835	2.333	0.551	2.802	47.760	5.066
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:53:45	1.642	2.899	2.873	5.557	-1.140	-0.503	0.000	200.400
2	17:54:12	1.338	2.941	3.291	-1.591	-0.733	-0.962	0.000	201.000
3	17:54:38	1.650	2.933	3.148	2.007	-0.198	-0.915	0.000	205.900
x		1.543	2.924	3.104	1.991	-0.690	-0.794	0.000	202.500
σ		0.178	0.022	0.213	3.574	0.472	0.253	0.000	3.036
%RSD		11.520	0.767	6.845	179.500	68.390	31.830	0.000	1.500
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:53:45	75.137%	6.145	5.804	79.557%	-0.064	-0.081	0.053	0.049
2	17:54:12	76.584%	4.831	5.183	78.334%	-0.074	-0.095	0.044	-0.019
3	17:54:38	76.792%	4.333	4.144	79.861%	-0.070	-0.081	0.085	0.059
x		76.171%	5.103	5.044	79.251%	-0.069	-0.086	0.061	0.030
σ		0.902%	0.937	0.839	0.808%	0.005	0.008	0.022	0.043
%RSD		1.184	18.350	16.630	1.020	6.986	9.517	35.400	143.400
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:53:45	77.123%	1.118	-0.657	-0.683	38.600	39.340	84.114%	87.167%
2	17:54:12	76.089%	0.052	-0.680	-0.671	38.320	38.650	85.248%	86.267%
3	17:54:38	77.377%	-0.779	-0.697	-0.694	38.980	39.890	83.435%	86.046%
x		76.863%	0.131	-0.678	-0.682	38.630	39.290	84.266%	86.493%
σ		0.682%	0.951	0.020	0.012	0.331	0.621	0.916%	0.594%
%RSD		0.887	728.800	3.006	1.688	0.856	1.581	1.087	0.687
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:53:45	0.293	0.245	0.079	0.111	0.108	84.637%		
2	17:54:12	0.187	0.159	0.129	0.106	0.126	80.522%		
3	17:54:38	0.118	0.133	0.101	0.093	0.097	80.241%		
x		0.199	0.179	0.103	0.104	0.110	81.800%		
σ		0.089	0.059	0.025	0.009	0.014	2.461%		
%RSD		44.410	32.750	24.580	9.174	13.090	3.009		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:58:00	72.689%	-0.038	8.586	10.140	0.000	9599.000	3308.000	3328.000
2	17:58:26	71.293%	0.039	7.953	8.745	0.000	9917.000	3468.000	3488.000
3	17:58:53	72.834%	-0.167	10.260	9.703	0.000	9817.000	3433.000	3448.000
x		72.272%	-0.055	8.934	9.529	0.000	9778.000	3403.000	3421.000
σ		0.851%	0.104	1.194	0.713	0.000	162.500	84.070	83.080
%RSD		1.177	187.600	13.360	7.485	0.000	1.662	2.471	2.428

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:58:00	1.060	877.800	0.000	810.600	16800.000	16520.000	72.284%	-0.350
2	17:58:26	1.220	908.700	0.000	836.800	17760.000	16950.000	72.178%	-0.511
3	17:58:53	1.288	901.100	0.000	832.500	17530.000	17380.000	71.899%	-0.440
x		1.190	895.900	0.000	826.600	17360.000	16950.000	72.121%	-0.433
σ		0.117	16.110	0.000	14.060	498.700	427.700	0.199%	0.081
%RSD		9.835	1.798	0.000	1.701	2.872	2.524	0.276	18.680

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:58:00	1.843	2.275	7.118	7.191	61.140	0.039	0.101	0.467
2	17:58:26	2.887	2.233	7.518	7.063	60.170	0.065	-0.016	0.327
3	17:58:53	0.687	2.436	7.550	6.890	60.770	0.067	-0.013	0.417
x		1.805	2.315	7.396	7.048	60.690	0.057	0.024	0.404
σ		1.100	0.107	0.241	0.151	0.486	0.015	0.067	0.071
%RSD		60.950	4.613	3.256	2.142	0.800	27.070	281.000	17.600

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:58:00	0.390	0.838	0.684	0.406	-1.025	-1.186	0.000	38.220
2	17:58:26	0.411	0.549	0.675	-0.453	-1.371	-0.513	0.000	39.240
3	17:58:53	0.248	0.629	0.595	-0.120	-1.421	0.230	0.000	39.800
x		0.350	0.672	0.651	-0.056	-1.272	-0.490	0.000	39.090
σ		0.088	0.149	0.049	0.433	0.216	0.708	0.000	0.798
%RSD		25.300	22.160	7.476	778.400	16.980	144.600	0.000	2.041

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:58:00	74.612%	0.493	0.401	82.821%	-0.096	-0.100	-0.042	-0.016
2	17:58:26	77.158%	0.394	0.536	85.125%	-0.092	-0.091	-0.018	-0.007
3	17:58:53	78.128%	0.456	0.454	86.537%	-0.099	-0.101	-0.026	-0.085
x		76.633%	0.448	0.464	84.828%	-0.096	-0.098	-0.029	-0.036
σ		1.816%	0.050	0.068	1.876%	0.003	0.005	0.012	0.043
%RSD		2.370	11.200	14.750	2.212	3.401	5.490	43.020	118.400

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:58:00	77.636%	-2.515	-0.824	-0.835	7.802	7.543	83.601%	86.110%
2	17:58:26	79.461%	-2.487	-0.860	-0.855	7.547	7.837	86.901%	89.140%
3	17:58:53	82.247%	-2.544	-0.840	-0.852	7.791	7.376	89.059%	90.702%
x		79.781%	-2.515	-0.842	-0.847	7.713	7.585	86.520%	88.651%
σ		2.322%	0.028	0.018	0.011	0.144	0.234	2.748%	2.335%
%RSD		2.910	1.129	2.169	1.319	1.869	3.080	3.177	2.634

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:58:00	0.028	0.025	0.031	0.025	0.038	87.961%
2	17:58:26	0.038	0.023	0.043	0.025	0.038	90.765%
3	17:58:53	0.029	0.020	0.028	0.020	0.032	94.209%
x		0.031	0.022	0.034	0.023	0.036	90.978%
σ		0.006	0.003	0.008	0.003	0.004	3.129%
%RSD		17.650	11.580	22.380	11.310	9.929	3.440

CCV 1487954 4/2/2015 6:01:48 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	18:02:14	71.804%	97.680	105.400	100.200	0.000	48450.000	46650.000	46550.000
2	18:02:42	71.388%	103.800	101.100	103.600	0.000	49630.000	48530.000	48080.000
3	18:03:08	72.173%	98.170	93.140	101.300	0.000	49290.000	48250.000	48070.000
x		71.788%	99.877%	99.876%	101.721%	0.000	98.243%	95.620%	95.138%
σ		0.393%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.547	3.394	6.233	1.684	0.000	1.237	2.122	1.853

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:02:14	466.400	5222.000	0.000	50290.000	47990.000	49740.000	72.637%	99.390
2	18:02:42	484.600	5362.000	0.000	50980.000	50100.000	51740.000	71.736%	104.300
3	18:03:08	483.200	5337.000	0.000	51140.000	49700.000	51390.000	72.283%	105.100
x		95.616%	106.139%	0.000	101.608%	98.531%	101.912%	72.219%	102.939%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.454%	n/a
%RSD		2.118	1.406	0.000	0.892	2.274	2.088	0.629	3.010

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:02:14	97.910	96.460	497.300	24300.000	24910.000	95.060	94.700	95.210
2	18:02:42	102.400	100.900	520.100	25560.000	26230.000	97.710	98.790	99.480
3	18:03:08	99.740	100.100	522.000	25630.000	26240.000	98.910	100.900	100.600
x		100.008%	99.133%	102.626%	100.646%	103.171%	97.229%	98.115%	98.418%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.237	2.368	2.678	2.971	2.974	2.027	3.198	2.877

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:02:14	96.870	96.370	97.930	94.680	98.510	98.640	0.000	96.390
2	18:02:42	99.950	100.900	100.500	98.420	95.370	98.650	0.000	98.950
3	18:03:08	98.790	101.300	100.100	96.360	96.500	97.940	0.000	99.650
x		98.538%	99.513%	99.523%	96.484%	96.796%	98.408%	0.000	98.328%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.577	2.740	1.400	1.940	1.644	0.411	0.000	1.743

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:02:14	77.662%	93.130	91.750	84.369%	93.190	94.140	95.080	94.870
2	18:02:42	78.577%	98.150	95.920	85.754%	94.490	95.330	98.120	97.880
3	18:03:08	78.196%	100.500	98.020	86.290%	92.800	95.270	97.640	97.050
x		78.145%	97.265%	95.231%	85.471%	93.492%	94.913%	96.946%	96.600%
σ		0.460%	n/a	n/a	0.991%	n/a	n/a	n/a	n/a
%RSD		0.588	3.872	3.353	1.160	0.947	0.707	1.683	1.611

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:02:14	79.192%	96.890	98.130	98.450	94.980	95.830	88.034%	90.316%
2	18:02:42	81.045%	98.670	99.660	100.100	98.690	97.530	89.158%	92.355%
3	18:03:08	81.721%	99.020	100.000	100.600	97.070	97.680	90.427%	92.775%
x		80.653%	98.191%	99.273%	99.700%	96.914%	97.011%	89.206%	91.815%
σ		1.309%	n/a	n/a	n/a	n/a	n/a	1.197%	1.315%
%RSD		1.623	1.165	1.011	1.111	1.918	1.059	1.342	1.433

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:02:14	99.420	99.790	98.000	99.170	97.870	93.545%
2	18:02:42	100.900	101.500	100.600	102.500	101.100	93.911%
3	18:03:08	101.200	102.800	103.000	103.300	102.900	93.510%
x		100.502%	101.362%	100.531%	101.655%	100.639%	93.655%
σ		n/a	n/a	n/a	n/a	n/a	0.222%
%RSD		0.949	1.484	2.462	2.161	2.549	0.237

CCB5 4/2/2015 6:09:14 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	18:09:41	79.737%	-0.169	0.616	-0.426	0.000	15.500	8.189	9.234
2	18:10:07	79.430%	-0.285	-0.589	-0.370	0.000	15.230	9.310	8.489
3	18:10:34	78.405%	-0.181	-0.544	-0.614	0.000	15.860	9.011	8.499
x		79.191%	-0.211	-0.172	-0.470	0.000	15.530	8.836	8.741
σ		0.698%	0.064	0.683	0.128	0.000	0.316	0.581	0.427
%RSD		0.881	30.070	396.100	27.190	0.000	2.035	6.571	4.887
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:09:41	0.689	-4.050	0.000	-2.675	7.010	13.580	76.498%	-0.418
2	18:10:07	0.902	-4.947	0.000	-2.599	1.175	17.310	76.369%	-0.263
3	18:10:34	0.924	-4.451	0.000	-0.206	21.410	13.400	76.104%	-0.457
x		0.838	-4.483	0.000	-1.827	9.866	14.760	76.324%	-0.379
σ		0.130	0.449	0.000	1.404	10.420	2.206	0.201%	0.102
%RSD		15.490	10.020	0.000	76.840	105.600	14.950	0.263	26.980
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:09:41	0.339	0.110	0.140	2.246	7.118	0.036	-0.052	0.030
2	18:10:07	-0.132	0.115	0.159	1.563	7.741	0.034	0.019	0.051
3	18:10:34	0.188	0.011	0.195	1.045	4.032	0.021	-0.011	0.032
x		0.131	0.078	0.165	1.618	6.297	0.030	-0.015	0.038
σ		0.241	0.059	0.028	0.603	1.986	0.008	0.036	0.011
%RSD		183.100	74.800	17.010	37.260	31.540	26.630	242.800	29.780
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:09:41	-0.058	0.155	-0.027	0.100	-0.605	-0.883	0.000	0.055
2	18:10:07	-0.023	0.058	0.075	-0.676	-0.075	-0.869	0.000	0.073
3	18:10:34	0.078	0.025	0.339	-0.434	0.348	-0.486	0.000	0.066
x		-0.001	0.079	0.129	-0.337	-0.111	-0.746	0.000	0.065
σ		0.070	0.067	0.189	0.397	0.477	0.226	0.000	0.009
%RSD		5819.000	85.000	146.100	117.900	430.600	30.230	0.000	13.910
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:09:41	79.949%	0.056	-0.078	85.814%	-0.094	-0.093	0.039	0.065
2	18:10:07	79.679%	0.050	-0.016	89.116%	-0.073	-0.096	-0.027	-0.020
3	18:10:34	78.482%	0.018	-0.004	82.966%	-0.076	-0.086	0.008	-0.022
x		79.370%	0.042	-0.033	85.965%	-0.081	-0.092	0.007	0.007
σ		0.781%	0.020	0.040	3.078%	0.011	0.005	0.033	0.050
%RSD		0.984	48.840	121.300	3.580	13.830	5.516	507.200	665.400
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:09:41	83.386%	-2.699	-0.768	-0.814	0.011	0.037	89.402%	90.382%
2	18:10:07	82.707%	-2.636	-0.749	-0.804	-0.073	0.084	87.738%	89.605%
3	18:10:34	81.073%	-2.693	-0.791	-0.807	-0.020	0.069	86.404%	88.229%
x		82.389%	-2.676	-0.769	-0.808	-0.028	0.063	87.848%	89.405%
σ		1.189%	0.035	0.021	0.005	0.042	0.024	1.502%	1.091%
%RSD		1.443	1.291	2.750	0.630	152.900	38.100	1.710	1.220
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:09:41	0.021	0.017	-0.006	-0.002	0.005	101.270%		
2	18:10:07	0.028	0.025	0.012	-0.014	0.011	97.099%		
3	18:10:34	0.025	0.022	0.003	0.001	0.007	93.725%		
x		0.025	0.021	0.003	-0.005	0.008	97.365%		
σ		0.004	0.004	0.009	0.008	0.003	3.780%		
%RSD		15.120	18.970	277.200	150.600	35.580	3.882		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:13:58	65.952%	46.620	1002.000	985.400	0.000	93610.000	58220.000	58800.000
2	18:14:25	68.180%	46.490	1013.000	971.300	0.000	94310.000	58990.000	59550.000
3	18:14:52	70.564%	44.870	968.500	953.100	0.000	93630.000	58880.000	59400.000
x		68.232%	45.990	994.600	969.900	0.000	93850.000	58700.000	59250.000
σ		2.306%	0.977	23.270	16.160	0.000	397.600	415.000	397.900
%RSD		3.380	2.124	2.339	1.666	0.000	0.424	0.707	0.672
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:13:58	1731.000	13560.000	0.000	51610.000	132800.000	138100.000	66.651%	951.000
2	18:14:25	1769.000	13510.000	0.000	51830.000	135300.000	140800.000	69.694%	961.700
3	18:14:52	1779.000	13530.000	0.000	52570.000	138000.000	141700.000	70.495%	972.700
x		1760.000	13540.000	0.000	52000.000	135400.000	140200.000	68.947%	961.800
σ		25.160	26.600	0.000	499.000	2609.000	1886.000	2.028%	10.840
%RSD		1.430	0.197	0.000	0.960	1.927	1.345	2.941	1.127
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:13:58	472.800	185.800	501.800	959.700	1321.000	443.900	436.000	220.800
2	18:14:25	485.900	190.000	517.200	986.300	1362.000	451.000	438.900	222.100
3	18:14:52	491.900	193.000	518.900	988.800	1358.000	457.800	442.500	225.200
x		483.500	189.600	512.600	978.300	1347.000	450.900	439.100	222.700
σ		9.723	3.615	9.418	16.140	22.870	6.931	3.224	2.255
%RSD		2.011	1.906	1.837	1.650	1.698	1.537	0.734	1.012
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:13:58	221.900	448.200	455.400	35.760	9.293	8.927	0.000	1159.000
2	18:14:25	224.000	459.400	460.400	34.570	7.281	9.749	0.000	1164.000
3	18:14:52	227.100	457.500	467.600	38.900	9.642	9.357	0.000	1190.000
x		224.300	455.000	461.100	36.410	8.739	9.344	0.000	1171.000
σ		2.629	5.993	6.130	2.236	1.275	0.411	0.000	16.750
%RSD		1.172	1.317	1.329	6.143	14.590	4.403	0.000	1.431
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:13:58	71.055%	966.800	972.500	73.367%	44.590	44.450	46.890	35.110
2	18:14:25	75.516%	997.300	1009.000	76.914%	44.260	44.870	47.130	39.080
3	18:14:52	77.092%	998.600	1017.000	79.845%	43.660	44.920	49.490	37.910
x		74.554%	987.600	999.700	76.709%	44.170	44.750	47.830	37.370
σ		3.131%	18.010	23.870	3.244%	0.470	0.256	1.435	2.040
%RSD		4.200	1.824	2.387	4.229	1.063	0.573	3.000	5.460
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:13:58	71.382%	2112.000	491.300	490.500	1846.000	1876.000	80.406%	82.849%
2	18:14:25	74.737%	2088.000	500.400	498.200	1896.000	1930.000	84.705%	86.562%
3	18:14:52	76.638%	2124.000	508.300	503.000	1915.000	1967.000	86.752%	89.698%
x		74.252%	2108.000	500.000	497.200	1886.000	1924.000	83.954%	86.369%
σ		2.662%	18.400	8.476	6.270	35.610	46.020	3.239%	3.428%
%RSD		3.584	0.873	1.695	1.261	1.889	2.391	3.858	3.970
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:13:58	46.350	46.360	19.740	19.730	19.530	78.565%		
2	18:14:25	47.600	48.730	20.160	20.340	20.130	82.261%		
3	18:14:52	49.100	49.350	20.080	20.660	20.130	84.748%		
x		47.680	48.150	20.000	20.240	19.930	81.858%		
σ		1.376	1.579	0.222	0.474	0.343	3.111%		
%RSD		2.885	3.279	1.108	2.342	1.722	3.800		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:18:16	71.471%	47.990	992.800	977.800	0.000	94730.000	58880.000	59090.000
2	18:18:43	71.143%	47.540	1015.000	992.700	0.000	95960.000	60110.000	60830.000
3	18:19:09	71.117%	49.880	1017.000	997.700	0.000	96100.000	60510.000	61120.000
x		71.244%	48.470	1008.000	989.400	0.000	95600.000	59830.000	60350.000
σ		0.197%	1.244	13.290	10.360	0.000	749.000	846.200	1100.000
%RSD		0.277	2.566	1.318	1.047	0.000	0.784	1.414	1.823
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:18:16	1778.000	13580.000	0.000	53530.000	136800.000	142900.000	71.279%	982.500
2	18:18:43	1837.000	13780.000	0.000	53720.000	139400.000	145000.000	73.006%	1005.000
3	18:19:09	1842.000	13920.000	0.000	53520.000	140500.000	145800.000	73.900%	1007.000
x		1819.000	13760.000	0.000	53590.000	138900.000	144600.000	72.728%	998.100
σ		35.640	170.600	0.000	112.700	1901.000	1510.000	1.332%	13.490
%RSD		1.959	1.240	0.000	0.210	1.368	1.044	1.832	1.352
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:18:16	497.300	192.600	522.200	1178.000	1542.000	455.500	442.600	224.000
2	18:18:43	501.500	196.600	530.800	1183.000	1562.000	460.400	451.700	227.400
3	18:19:09	496.300	196.200	526.100	1180.000	1574.000	462.700	450.700	226.700
x		498.400	195.100	526.400	1180.000	1559.000	459.500	448.300	226.000
σ		2.762	2.214	4.284	2.790	15.830	3.693	4.994	1.784
%RSD		0.554	1.135	0.814	0.236	1.015	0.804	1.114	0.790
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:18:16	225.000	461.200	466.200	36.260	9.848	9.054	0.000	1194.000
2	18:18:43	230.700	474.200	478.700	36.300	7.632	8.563	0.000	1220.000
3	18:19:09	230.100	471.600	480.400	41.630	8.238	8.657	0.000	1226.000
x		228.600	469.000	475.100	38.060	8.572	8.758	0.000	1213.000
σ		3.156	6.891	7.751	3.088	1.145	0.261	0.000	16.960
%RSD		1.381	1.469	1.632	8.113	13.360	2.979	0.000	1.398
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:18:16	79.928%	1005.000	1017.000	83.431%	45.490	45.710	49.100	39.210
2	18:18:43	82.124%	1029.000	1041.000	85.962%	45.790	45.820	50.630	40.250
3	18:19:09	83.082%	1031.000	1049.000	86.674%	45.680	45.980	48.840	39.330
x		81.711%	1022.000	1036.000	85.356%	45.650	45.840	49.520	39.600
σ		1.617%	14.730	16.920	1.704%	0.153	0.135	0.969	0.570
%RSD		1.979	1.442	1.634	1.997	0.334	0.294	1.957	1.439
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:18:16	80.481%	2136.000	514.700	512.000	1946.000	1964.000	92.172%	94.085%
2	18:18:43	81.171%	2186.000	519.800	516.200	1966.000	2031.000	94.403%	95.450%
3	18:19:09	82.104%	2162.000	538.100	514.700	1981.000	2039.000	95.087%	96.790%
x		81.252%	2161.000	524.200	514.300	1965.000	2011.000	93.887%	95.441%
σ		0.815%	25.050	12.310	2.143	17.500	41.300	1.524%	1.353%
%RSD		1.002	1.159	2.348	0.417	0.891	2.053	1.624	1.417
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:18:16	49.340	50.210	20.950	21.110	20.620	89.340%		
2	18:18:43	50.620	50.990	20.660	21.000	20.860	91.232%		
3	18:19:09	50.600	51.130	20.840	20.750	20.560	92.533%		
x		50.190	50.780	20.820	20.950	20.680	91.035%		
σ		0.731	0.492	0.147	0.182	0.156	1.605%		
%RSD		1.457	0.969	0.705	0.870	0.752	1.764		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:33	70.182%	47.520	1030.000	1003.000	0.000	94140.000	60410.000	60720.000
2	18:23:00	70.067%	47.650	1012.000	1027.000	0.000	95760.000	61340.000	61730.000
3	18:23:25	70.859%	48.960	1030.000	993.100	0.000	94600.000	60770.000	61630.000
x		70.369%	48.040	1024.000	1008.000	0.000	94830.000	60840.000	61360.000
σ		0.428%	0.796	10.530	17.380	0.000	833.400	470.700	553.300
%RSD		0.608	1.657	1.029	1.725	0.000	0.879	0.774	0.902
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:33	1801.000	13830.000	0.000	54700.000	135000.000	139200.000	69.423%	1012.000
2	18:23:00	1857.000	14040.000	0.000	55610.000	136600.000	143800.000	70.779%	1030.000
3	18:23:25	1857.000	13910.000	0.000	56080.000	141000.000	146400.000	71.397%	1037.000
x		1838.000	13920.000	0.000	55460.000	137500.000	143100.000	70.533%	1026.000
σ		32.390	106.200	0.000	701.900	3100.000	3605.000	1.009%	13.140
%RSD		1.762	0.763	0.000	1.266	2.254	2.519	1.431	1.280
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:33	507.800	196.000	530.000	1024.000	1414.000	469.400	456.600	229.100
2	18:23:00	516.000	200.000	543.300	1054.000	1424.000	476.500	466.600	232.400
3	18:23:25	521.500	201.300	540.800	1062.000	1426.000	479.200	464.400	235.900
x		515.100	199.100	538.000	1047.000	1421.000	475.000	462.500	232.500
σ		6.906	2.764	7.030	20.240	6.344	5.050	5.290	3.386
%RSD		1.341	1.388	1.307	1.934	0.446	1.063	1.144	1.456
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:33	234.600	472.100	476.800	38.080	9.017	9.047	0.000	1222.000
2	18:23:00	236.000	471.500	487.600	37.130	8.703	9.889	0.000	1208.000
3	18:23:25	238.400	478.900	485.100	38.400	8.994	8.705	0.000	1232.000
x		236.300	474.200	483.100	37.870	8.905	9.214	0.000	1220.000
σ		1.946	4.124	5.640	0.663	0.175	0.609	0.000	12.140
%RSD		0.824	0.870	1.167	1.752	1.963	6.613	0.000	0.995
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:33	76.408%	1048.000	1053.000	80.922%	44.320	44.600	49.960	37.390
2	18:23:00	79.369%	1060.000	1078.000	83.378%	44.420	44.350	51.000	40.020
3	18:23:25	80.142%	1072.000	1084.000	84.616%	44.670	44.500	50.300	40.640
x		78.640%	1060.000	1072.000	82.972%	44.470	44.480	50.420	39.350
σ		1.971%	12.470	16.490	1.880%	0.180	0.126	0.533	1.725
%RSD		2.507	1.177	1.538	2.266	0.404	0.283	1.058	4.385
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:33	77.851%	2222.000	521.000	519.900	1965.000	2015.000	89.568%	91.451%
2	18:23:00	79.623%	2223.000	538.000	531.200	1994.000	2051.000	92.519%	93.475%
3	18:23:25	80.229%	2232.000	542.400	538.600	2011.000	2075.000	94.333%	95.772%
x		79.234%	2226.000	533.800	529.900	1990.000	2047.000	92.140%	93.566%
σ		1.235%	5.059	11.320	9.415	23.610	30.090	2.405%	2.162%
%RSD		1.559	0.227	2.121	1.777	1.187	1.470	2.610	2.311
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:22:33	50.820	51.450	20.750	21.020	20.750	87.222%		
2	18:23:00	50.920	51.450	20.890	21.210	20.930	89.950%		
3	18:23:25	51.570	52.480	21.140	21.430	21.340	90.239%		
x		51.100	51.800	20.930	21.220	21.010	89.137%		
σ		0.411	0.596	0.200	0.206	0.304	1.665%		
%RSD		0.803	1.151	0.957	0.968	1.446	1.868		

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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	18:26:51	71.921%	-0.159	45.860	48.640	0.000	52720.000	17650.000	18140.000
2	18:27:18	69.107%	-0.097	51.240	48.680	0.000	54540.000	18470.000	18940.000
3	18:27:45	71.885%	-0.290	50.410	48.630	0.000	54070.000	18260.000	18800.000
x		70.971%	-0.182	49.170	48.650	0.000	53770.000	18130.000	18630.000
σ		1.614%	0.098	2.898	0.027	0.000	947.200	422.100	426.700
%RSD		2.275	54.050	5.895	0.056	0.000	1.761	2.329	2.290

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:26:51	4.145	4582.000	0.000	4658.000	90010.000	93880.000	69.238%	1.250
2	18:27:18	4.376	4738.000	0.000	4732.000	91610.000	95070.000	70.910%	1.382
3	18:27:45	4.310	4687.000	0.000	4759.000	92430.000	96020.000	70.964%	0.863
x		4.277	4669.000	0.000	4716.000	91350.000	94990.000	70.370%	1.165
σ		0.119	79.570	0.000	52.140	1232.000	1076.000	0.981%	0.270
%RSD		2.777	1.704	0.000	1.106	1.349	1.132	1.394	23.180

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:26:51	3.074	10.250	2.274	9.885	311.500	0.208	0.071	0.976
2	18:27:18	3.731	10.250	2.310	8.601	309.900	0.191	-0.015	1.122
3	18:27:45	2.611	10.250	2.285	8.107	305.600	0.250	0.087	1.110
x		3.138	10.250	2.290	8.864	309.000	0.216	0.048	1.069
σ		0.563	0.004	0.018	0.918	3.066	0.031	0.055	0.081
%RSD		17.940	0.036	0.794	10.360	0.992	14.130	114.400	7.572

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:26:51	0.973	2.832	2.429	5.787	-1.056	-1.062	0.000	199.000
2	18:27:18	1.007	2.763	3.168	0.743	-1.280	0.165	0.000	208.400
3	18:27:45	1.067	2.706	3.107	1.475	-0.399	-0.493	0.000	207.400
x		1.016	2.767	2.901	2.669	-0.912	-0.463	0.000	204.900
σ		0.047	0.063	0.410	2.725	0.458	0.614	0.000	5.175
%RSD		4.665	2.282	14.130	102.100	50.240	132.600	0.000	2.525

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:26:51	73.794%	8.096	7.926	76.075%	-0.077	-0.090	0.030	-0.075
2	18:27:18	74.225%	7.044	7.233	77.014%	-0.090	-0.093	0.017	0.002
3	18:27:45	75.013%	6.472	6.590	78.322%	-0.078	-0.092	0.004	0.005
x		74.344%	7.204	7.250	77.137%	-0.082	-0.091	0.017	-0.023
σ		0.618%	0.824	0.668	1.128%	0.007	0.002	0.013	0.045
%RSD		0.831	11.440	9.211	1.463	8.293	2.042	76.100	199.900

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:26:51	75.115%	0.772	0.369	0.331	42.460	42.040	82.013%	83.515%
2	18:27:18	76.092%	-0.009	-0.078	-0.062	44.070	43.340	83.400%	85.166%
3	18:27:45	77.071%	-0.712	-0.192	-0.188	42.870	43.860	83.905%	84.656%
x		76.093%	0.017	0.033	0.027	43.130	43.080	83.106%	84.446%
σ		0.978%	0.742	0.296	0.270	0.838	0.934	0.980%	0.845%
%RSD		1.286	4349.000	894.300	991.500	1.942	2.167	1.179	1.001

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:26:51	0.092	0.096	0.058	0.040	0.064	80.848%
2	18:27:18	0.085	0.074	0.046	0.057	0.058	81.358%
3	18:27:45	0.079	0.065	0.051	0.046	0.054	81.912%
x		0.086	0.079	0.052	0.048	0.059	81.373%
σ		0.007	0.016	0.006	0.009	0.005	0.532%
%RSD		7.771	20.500	11.600	18.080	8.909	0.654

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:09	70.091%	0.007	51.100	47.480	0.000	93220.000	16390.000	16710.000
2	18:31:36	71.058%	-0.155	53.610	45.450	0.000	94850.000	17010.000	17350.000
3	18:32:02	70.490%	0.022	43.710	47.100	0.000	93370.000	16760.000	17140.000
x		70.546%	-0.042	49.470	46.680	0.000	93810.000	16720.000	17070.000
σ		0.486%	0.098	5.146	1.081	0.000	898.600	309.200	329.000
%RSD		0.688	232.400	10.400	2.315	0.000	0.958	1.849	1.928

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:09	15.040	4191.000	0.000	9783.000	66580.000	68330.000	70.242%	1.165
2	18:31:36	15.270	4263.000	0.000	9912.000	69360.000	70990.000	70.606%	1.081
3	18:32:02	14.900	4161.000	0.000	9502.000	65700.000	68010.000	75.706%	0.757
x		15.070	4205.000	0.000	9732.000	67220.000	69110.000	72.185%	1.001
σ		0.188	52.610	0.000	209.600	1912.000	1637.000	3.055%	0.216
%RSD		1.248	1.251	0.000	2.153	2.845	2.368	4.232	21.540

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:09	-0.806	8.979	0.588	8.400	228.400	0.256	0.277	1.157
2	18:31:36	5.306	9.025	0.632	8.835	232.800	0.272	0.278	1.363
3	18:32:02	1.832	8.471	0.576	5.102	211.300	0.252	0.283	1.335
x		2.111	8.825	0.599	7.446	224.100	0.260	0.279	1.285
σ		3.066	0.307	0.030	2.041	11.360	0.011	0.003	0.111
%RSD		145.300	3.478	4.985	27.420	5.067	4.151	1.229	8.673

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:09	1.087	3.194	3.403	2.602	-0.384	0.479	0.000	144.600
2	18:31:36	1.239	3.253	2.893	1.075	-0.130	0.427	0.000	147.600
3	18:32:02	1.093	3.096	3.463	3.138	-0.774	-0.666	0.000	150.100
x		1.140	3.181	3.253	2.271	-0.429	0.080	0.000	147.400
σ		0.086	0.079	0.313	1.070	0.324	0.647	0.000	2.753
%RSD		7.559	2.491	9.624	47.120	75.540	806.500	0.000	1.867

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:09	76.748%	0.958	1.080	79.571%	-0.093	-0.115	-0.014	0.038
2	18:31:36	78.423%	1.172	1.038	81.335%	-0.096	-0.113	0.021	-0.033
3	18:32:02	80.040%	0.979	1.086	83.054%	-0.113	-0.094	0.034	-0.008
x		78.403%	1.036	1.068	81.320%	-0.100	-0.107	0.014	-0.001
σ		1.646%	0.118	0.026	1.742%	0.011	0.011	0.025	0.036
%RSD		2.100	11.410	2.442	2.142	10.520	10.670	182.700	4113.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:09	78.147%	-2.101	-0.203	-0.226	40.530	40.440	85.442%	87.444%
2	18:31:36	79.625%	-2.080	-0.250	-0.224	41.750	41.220	87.698%	89.506%
3	18:32:02	81.184%	-2.285	-0.221	-0.281	42.320	42.590	89.625%	92.076%
x		79.652%	-2.155	-0.225	-0.243	41.530	41.420	87.588%	89.675%
σ		1.518%	0.113	0.024	0.032	0.915	1.086	2.093%	2.321%
%RSD		1.906	5.243	10.510	13.210	2.203	2.621	2.390	2.588

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:09	0.025	0.021	0.049	0.045	0.056	84.926%
2	18:31:36	0.026	0.021	0.089	0.047	0.063	87.555%
3	18:32:02	0.032	0.028	0.077	0.048	0.071	89.453%
x		0.028	0.023	0.072	0.047	0.063	87.311%
σ		0.004	0.004	0.021	0.002	0.008	2.274%
%RSD		13.590	15.520	29.020	3.378	12.260	2.604

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:35:26	69.722%	0.250	56.420	54.150	0.000	41950.000	13810.000	13910.000
2	18:35:53	71.103%	-0.308	55.390	53.870	0.000	43840.000	14570.000	14910.000
3	18:36:19	72.158%	-0.162	55.520	55.120	0.000	43600.000	14550.000	14900.000
x		70.994%	-0.073	55.780	54.380	0.000	43130.000	14310.000	14570.000
σ		1.221%	0.289	0.560	0.657	0.000	1029.000	435.900	572.600
%RSD		1.720	395.700	1.005	1.209	0.000	2.385	3.046	3.929
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:35:26	11.350	3834.000	0.000	5140.000	64790.000	67670.000	74.549%	1.258
2	18:35:53	11.950	4025.000	0.000	5517.000	71880.000	74200.000	71.083%	1.089
3	18:36:19	12.440	4026.000	0.000	5472.000	71540.000	74480.000	71.871%	1.733
x		11.910	3962.000	0.000	5377.000	69410.000	72120.000	72.501%	1.360
σ		0.544	110.300	0.000	205.800	3998.000	3851.000	1.817%	0.334
%RSD		4.571	2.784	0.000	3.827	5.760	5.340	2.506	24.570
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:35:26	4.727	5.315	190.700	33.190	258.200	0.469	0.576	1.556
2	18:35:53	1.664	5.823	207.200	38.220	283.200	0.512	0.643	1.708
3	18:36:19	1.884	5.798	208.800	37.930	273.300	0.521	0.622	1.860
x		2.758	5.645	202.200	36.450	271.600	0.501	0.613	1.708
σ		1.708	0.286	10.020	2.824	12.590	0.028	0.034	0.152
%RSD		61.940	5.073	4.952	7.746	4.635	5.631	5.568	8.893
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:35:26	1.620	5.464	5.539	4.757	0.070	-0.781	0.000	175.900
2	18:35:53	1.651	5.535	5.825	0.485	-0.807	-1.011	0.000	180.400
3	18:36:19	1.610	5.614	5.897	0.330	-0.780	-0.003	0.000	180.500
x		1.627	5.538	5.754	1.857	-0.506	-0.599	0.000	178.900
σ		0.022	0.075	0.190	2.512	0.499	0.528	0.000	2.633
%RSD		1.321	1.359	3.295	135.300	98.720	88.220	0.000	1.472
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:35:26	77.770%	0.274	0.250	82.686%	-0.102	-0.103	0.020	0.031
2	18:35:53	78.836%	0.319	0.263	83.477%	-0.113	-0.099	0.013	0.014
3	18:36:19	81.063%	0.315	0.267	84.840%	-0.102	-0.095	-0.010	-0.042
x		79.223%	0.302	0.260	83.668%	-0.105	-0.099	0.008	0.001
σ		1.680%	0.025	0.009	1.090%	0.006	0.004	0.016	0.038
%RSD		2.121	8.297	3.364	1.302	5.924	3.832	204.100	3424.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:35:26	80.023%	-2.336	-0.548	-0.527	36.660	36.210	89.091%	90.993%
2	18:35:53	80.832%	-2.312	-0.590	-0.631	37.200	38.090	90.205%	92.875%
3	18:36:19	82.203%	-2.387	-0.568	-0.490	37.480	38.560	91.532%	93.746%
x		81.019%	-2.345	-0.569	-0.549	37.110	37.620	90.276%	92.538%
σ		1.102%	0.039	0.021	0.073	0.419	1.246	1.222%	1.407%
%RSD		1.361	1.648	3.694	13.320	1.130	3.311	1.353	1.521
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:35:26	0.036	0.035	0.167	0.151	0.175	90.159%		
2	18:35:53	0.051	0.025	0.202	0.166	0.190	91.204%		
3	18:36:19	0.034	0.030	0.171	0.168	0.186	91.466%		
x		0.041	0.030	0.180	0.162	0.184	90.943%		
σ		0.009	0.005	0.019	0.009	0.007	0.692%		
%RSD		23.110	15.720	10.590	5.528	4.041	0.760		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:39:44	71.610%	-0.310	47.400	46.010	0.000	90060.000	22000.000	20770.000
2	18:40:11	71.939%	0.033	46.710	46.600	0.000	90800.000	22700.000	21280.000
3	18:40:38	71.674%	-0.160	50.730	44.370	0.000	91270.000	22800.000	21440.000
x		71.741%	-0.146	48.280	45.660	0.000	90710.000	22500.000	21160.000
σ		0.174%	0.172	2.150	1.152	0.000	610.000	437.900	352.800
%RSD		0.243	117.800	4.453	2.523	0.000	0.672	1.946	1.667

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:39:44	6.921	3366.000	0.000	18270.000	90180.000	93790.000	70.977%	0.928
2	18:40:11	7.866	3429.000	0.000	18510.000	92400.000	95700.000	72.426%	1.137
3	18:40:38	8.530	3423.000	0.000	18490.000	91660.000	96620.000	73.397%	1.401
x		7.772	3406.000	0.000	18420.000	91410.000	95370.000	72.267%	1.155
σ		0.809	34.900	0.000	133.400	1132.000	1443.000	1.218%	0.237
%RSD		10.410	1.024	0.000	0.724	1.239	1.514	1.685	20.510

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:39:44	3.184	10.940	2.534	16.840	320.200	0.189	-0.027	2.720
2	18:40:11	2.625	11.170	2.434	16.250	322.100	0.215	0.003	2.848
3	18:40:38	1.504	11.410	2.519	16.820	316.400	0.210	-0.188	2.774
x		2.438	11.180	2.496	16.640	319.600	0.204	-0.071	2.781
σ		0.856	0.236	0.054	0.335	2.922	0.014	0.103	0.064
%RSD		35.100	2.112	2.152	2.011	0.914	6.742	145.800	2.308

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:39:44	2.717	8.692	8.768	1.796	-0.995	0.376	0.000	193.000
2	18:40:11	2.665	8.640	9.271	5.232	0.068	-0.134	0.000	198.400
3	18:40:38	2.801	9.045	9.537	1.586	-0.128	-0.724	0.000	201.300
x		2.728	8.792	9.192	2.871	-0.352	-0.161	0.000	197.600
σ		0.069	0.220	0.391	2.047	0.566	0.550	0.000	4.212
%RSD		2.514	2.503	4.251	71.300	160.900	342.700	0.000	2.132

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:39:44	79.510%	0.392	0.318	84.068%	-0.094	-0.101	-0.004	0.001
2	18:40:11	81.790%	0.353	0.335	86.322%	-0.083	-0.099	0.018	-0.077
3	18:40:38	83.253%	0.323	0.366	88.096%	-0.092	-0.094	-0.020	-0.022
x		81.518%	0.356	0.340	86.162%	-0.089	-0.098	-0.002	-0.032
σ		1.886%	0.034	0.024	2.019%	0.006	0.004	0.019	0.040
%RSD		2.314	9.654	7.180	2.343	6.450	3.723	1031.000	123.700

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:39:44	81.698%	-2.449	-0.614	-0.603	73.000	72.840	90.835%	92.821%
2	18:40:11	83.960%	-2.566	-0.594	-0.617	75.550	73.140	93.299%	95.619%
3	18:40:38	85.895%	-2.573	-0.607	-0.607	73.870	74.230	95.385%	97.632%
x		83.851%	-2.529	-0.605	-0.609	74.140	73.400	93.173%	95.357%
σ		2.101%	0.070	0.010	0.007	1.297	0.732	2.277%	2.416%
%RSD		2.505	2.772	1.669	1.123	1.749	0.997	2.444	2.534

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:39:44	0.013	0.014	0.187	0.157	0.186	91.279%
2	18:40:11	0.016	0.011	0.177	0.211	0.189	93.444%
3	18:40:38	0.024	0.017	0.206	0.192	0.194	95.254%
x		0.018	0.014	0.190	0.187	0.190	93.326%
σ		0.006	0.003	0.015	0.027	0.004	1.990%
%RSD		33.170	20.110	7.836	14.510	2.080	2.133

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:44:01	70.413%	-0.172	47.550	47.550	0.000	55580.000	18060.000	18490.000
2	18:44:28	70.283%	-0.039	52.500	51.650	0.000	56920.000	18730.000	19360.000
3	18:44:54	70.658%	-0.218	53.250	49.840	0.000	56920.000	18990.000	19420.000
x		70.451%	-0.143	51.100	49.680	0.000	56470.000	18590.000	19090.000
σ		0.190%	0.093	3.096	2.055	0.000	773.000	476.700	524.500
%RSD		0.270	65.190	6.058	4.136	0.000	1.369	2.564	2.747
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:44:01	1.100	4879.000	0.000	14740.000	117100.000	121500.000	69.486%	0.884
2	18:44:28	1.317	5036.000	0.000	15030.000	121800.000	127700.000	69.821%	1.254
3	18:44:54	1.215	5080.000	0.000	15000.000	123000.000	127600.000	70.985%	1.353
x		1.211	4998.000	0.000	14920.000	120600.000	125600.000	70.097%	1.164
σ		0.109	105.700	0.000	160.800	3137.000	3566.000	0.787%	0.247
%RSD		8.962	2.114	0.000	1.077	2.600	2.839	1.123	21.250
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:44:01	-1.193	17.200	94.470	10.590	412.100	0.361	2.694	1.887
2	18:44:28	2.781	17.680	97.390	9.830	416.500	0.413	2.752	1.666
3	18:44:54	1.717	17.640	97.610	9.040	416.200	0.394	2.987	1.710
x		1.102	17.510	96.490	9.819	414.900	0.389	2.811	1.754
σ		2.057	0.264	1.750	0.773	2.453	0.026	0.155	0.117
%RSD		186.700	1.509	1.814	7.869	0.591	6.799	5.519	6.683
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:44:01	1.996	10.390	10.860	2.727	-0.672	-0.070	0.000	312.200
2	18:44:28	1.820	11.030	11.490	3.457	-0.222	0.592	0.000	321.100
3	18:44:54	1.990	11.460	11.330	3.664	-0.582	0.025	0.000	323.900
x		1.936	10.960	11.220	3.283	-0.492	0.182	0.000	319.100
σ		0.100	0.537	0.329	0.492	0.238	0.358	0.000	6.077
%RSD		5.183	4.897	2.933	14.990	48.410	196.200	0.000	1.904
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:44:01	72.161%	0.000	0.030	75.562%	-0.101	-0.082	-0.007	0.046
2	18:44:28	74.064%	0.028	0.045	76.174%	-0.088	-0.074	0.081	-0.076
3	18:44:54	76.554%	0.081	0.071	77.876%	-0.098	-0.085	0.011	-0.021
x		74.260%	0.036	0.049	76.537%	-0.096	-0.081	0.028	-0.017
σ		2.203%	0.041	0.021	1.199%	0.007	0.006	0.046	0.061
%RSD		2.967	112.400	42.750	1.567	7.364	7.242	163.200	358.300
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:44:01	73.050%	-2.429	-0.738	-0.776	68.370	67.890	81.523%	83.141%
2	18:44:28	75.478%	-2.374	-0.772	-0.764	68.870	68.160	83.287%	84.332%
3	18:44:54	76.172%	-2.466	-0.737	-0.726	70.730	70.250	82.216%	85.085%
x		74.900%	-2.423	-0.749	-0.755	69.320	68.770	82.342%	84.186%
σ		1.639%	0.046	0.020	0.026	1.241	1.290	0.889%	0.980%
%RSD		2.189	1.911	2.654	3.428	1.790	1.876	1.079	1.165
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:44:01	0.029	0.028	0.437	0.398	0.413	77.925%		
2	18:44:28	0.036	0.024	0.454	0.420	0.425	79.678%		
3	18:44:54	0.036	0.020	0.392	0.353	0.378	84.072%		
x		0.034	0.024	0.428	0.390	0.405	80.558%		
σ		0.004	0.004	0.032	0.034	0.024	3.167%		
%RSD		12.260	15.890	7.438	8.739	6.005	3.931		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:19	66.013%	0.069	50.130	42.420	0.000	94910.000	23220.000	21890.000
2	18:48:45	67.997%	-0.043	45.250	42.350	0.000	93560.000	22940.000	21640.000
3	18:49:12	68.435%	-0.047	41.450	41.280	0.000	93580.000	22940.000	21550.000
x		67.482%	-0.007	45.610	42.020	0.000	94020.000	23030.000	21690.000
σ		1.291%	0.066	4.350	0.639	0.000	775.800	163.300	174.700
%RSD		1.913	933.100	9.538	1.520	0.000	0.825	0.709	0.805

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:19	1.178	5245.000	0.000	14920.000	182600.000	188200.000	69.423%	1.433
2	18:48:45	0.956	5181.000	0.000	15040.000	181000.000	185800.000	70.666%	1.479
3	18:49:12	0.986	5152.000	0.000	15120.000	182800.000	187600.000	71.482%	1.448
x		1.040	5193.000	0.000	15030.000	182200.000	187200.000	70.524%	1.453
σ		0.120	47.560	0.000	96.590	966.600	1286.000	1.037%	0.023
%RSD		11.570	0.916	0.000	0.643	0.531	0.687	1.470	1.615

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:19	3.762	5.852	321.400	27.640	618.100	10.430	11.340	19.320
2	18:48:45	4.119	5.670	320.200	26.320	610.400	10.350	12.150	19.640
3	18:49:12	4.162	5.695	320.000	25.100	604.500	10.340	11.720	19.550
x		4.014	5.739	320.500	26.350	611.000	10.380	11.730	19.500
σ		0.220	0.099	0.755	1.273	6.862	0.049	0.405	0.164
%RSD		5.475	1.719	0.236	4.831	1.123	0.469	3.454	0.842

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:19	19.670	37.630	37.180	4.461	-0.518	0.568	0.000	358.800
2	18:48:45	20.150	36.280	38.040	1.879	-0.663	-0.894	0.000	361.200
3	18:49:12	20.480	36.550	37.000	3.143	-0.390	1.062	0.000	366.400
x		20.100	36.820	37.410	3.161	-0.524	0.245	0.000	362.100
σ		0.408	0.715	0.555	1.291	0.137	1.018	0.000	3.865
%RSD		2.029	1.941	1.484	40.850	26.100	414.700	0.000	1.067

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:19	75.638%	0.017	-0.033	78.663%	-0.074	-0.072	0.099	0.052
2	18:48:45	78.508%	-0.034	-0.049	81.771%	-0.051	-0.070	0.078	0.131
3	18:49:12	79.715%	-0.033	-0.036	83.685%	-0.040	-0.055	0.125	0.063
x		77.954%	-0.017	-0.039	81.373%	-0.055	-0.066	0.101	0.082
σ		2.094%	0.029	0.009	2.535%	0.017	0.009	0.023	0.043
%RSD		2.687	173.500	21.780	3.115	31.720	13.980	23.220	52.070

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:19	76.289%	-2.495	-0.802	-0.763	97.740	96.980	86.301%	87.182%
2	18:48:45	80.301%	-2.673	-0.799	-0.770	98.490	96.430	86.940%	91.198%
3	18:49:12	79.850%	-2.593	-0.776	-0.760	98.900	99.850	89.310%	91.819%
x		78.814%	-2.587	-0.792	-0.764	98.380	97.750	87.517%	90.067%
σ		2.198%	0.089	0.014	0.005	0.584	1.836	1.585%	2.517%
%RSD		2.788	3.444	1.773	0.709	0.593	1.879	1.811	2.795

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:19	0.049	0.043	1.149	1.056	1.102	84.679%
2	18:48:45	0.045	0.032	1.148	1.059	1.092	88.010%
3	18:49:12	0.044	0.040	1.283	1.084	1.119	88.537%
x		0.046	0.038	1.193	1.067	1.104	87.076%
σ		0.003	0.006	0.078	0.015	0.014	2.092%
%RSD		5.510	15.340	6.495	1.422	1.239	2.402

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:34	72.731%	0.006	50.630	46.120	0.000	38810.000	10950.000	11120.000
2	18:53:01	71.891%	-0.268	51.000	45.860	0.000	39230.000	11130.000	11380.000
3	18:53:27	70.340%	-0.129	51.490	48.820	0.000	39970.000	11300.000	11550.000
x		71.654%	-0.130	51.040	46.930	0.000	39340.000	11130.000	11350.000
σ		1.213%	0.137	0.430	1.638	0.000	586.500	175.000	215.200
%RSD		1.693	105.200	0.843	3.490	0.000	1.491	1.572	1.895
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:34	1.574	4614.000	0.000	5566.000	102000.000	108600.000	70.143%	1.048
2	18:53:01	1.375	4675.000	0.000	5649.000	103600.000	107400.000	71.111%	0.666
3	18:53:27	1.316	4732.000	0.000	5659.000	103400.000	107300.000	72.511%	1.067
x		1.422	4674.000	0.000	5624.000	103000.000	107800.000	71.255%	0.927
σ		0.135	59.300	0.000	51.140	885.100	738.300	1.190%	0.226
%RSD		9.508	1.269	0.000	0.909	0.859	0.685	1.671	24.360
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:34	3.640	15.760	4.683	6.347	352.300	0.279	5.217	2.514
2	18:53:01	3.469	15.790	4.799	6.490	349.500	0.307	4.949	2.565
3	18:53:27	3.169	15.680	4.482	5.193	337.500	0.329	4.858	2.633
x		3.426	15.750	4.654	6.010	346.400	0.305	5.008	2.571
σ		0.238	0.056	0.161	0.711	7.845	0.025	0.186	0.060
%RSD		6.954	0.356	3.451	11.830	2.265	8.237	3.719	2.322
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:34	2.472	16.520	16.860	0.886	-0.568	-0.008	0.000	187.900
2	18:53:01	2.594	16.380	15.970	2.612	-0.390	-0.711	0.000	187.900
3	18:53:27	2.657	16.080	15.590	0.611	-0.841	-0.280	0.000	190.200
x		2.574	16.330	16.140	1.370	-0.600	-0.333	0.000	188.700
σ		0.094	0.225	0.652	1.085	0.228	0.355	0.000	1.295
%RSD		3.647	1.379	4.042	79.190	37.940	106.500	0.000	0.686
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:34	78.410%	0.636	0.654	82.308%	-0.073	-0.099	0.061	-0.065
2	18:53:01	79.859%	0.774	0.621	84.379%	-0.090	-0.099	0.035	0.015
3	18:53:27	81.210%	0.565	0.661	86.561%	-0.098	-0.099	0.050	-0.101
x		79.826%	0.658	0.646	84.416%	-0.087	-0.099	0.049	-0.050
σ		1.400%	0.106	0.022	2.127%	0.013	0.000	0.013	0.060
%RSD		1.754	16.160	3.336	2.520	14.630	0.331	26.450	118.400
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:34	80.825%	-2.631	-0.809	-0.796	40.300	39.800	90.391%	91.815%
2	18:53:01	83.257%	-2.533	-0.811	-0.800	40.150	40.170	91.689%	93.685%
3	18:53:27	82.867%	-2.493	-0.810	-0.809	41.300	40.170	90.849%	94.597%
x		82.316%	-2.552	-0.810	-0.802	40.580	40.050	90.976%	93.366%
σ		1.306%	0.071	0.001	0.007	0.625	0.216	0.658%	1.418%
%RSD		1.587	2.791	0.103	0.846	1.539	0.539	0.724	1.519
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:52:34	0.016	0.019	0.587	0.626	0.588	91.459%		
2	18:53:01	0.004	0.014	0.585	0.602	0.577	93.760%		
3	18:53:27	0.039	0.010	0.578	0.514	0.562	94.428%		
x		0.019	0.014	0.583	0.580	0.576	93.216%		
σ		0.018	0.004	0.005	0.059	0.013	1.558%		
%RSD		91.710	28.660	0.777	10.110	2.226	1.671		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:50	69.732%	100.100	99.930	101.000	0.000	49530.000	48190.000	47630.000
2	18:57:16	69.005%	100.600	110.200	104.100	0.000	50060.000	48580.000	48190.000
3	18:57:43	68.520%	101.800	103.600	103.100	0.000	50290.000	49010.000	48490.000
x		69.086%	100.822%	104.576%	102.725%	0.000	99.918%	97.194%	96.210%
σ		0.610%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.883	0.846	4.976	1.573	0.000	0.781	0.847	0.905

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:50	477.800	5284.000	0.000	51230.000	49610.000	50960.000	70.846%	101.300
2	18:57:16	484.600	5341.000	0.000	51670.000	50450.000	51640.000	70.873%	105.400
3	18:57:43	489.500	5370.000	0.000	51840.000	50590.000	51640.000	70.274%	103.000
x		96.798%	106.628%	0.000	103.158%	100.435%	102.828%	70.664%	103.246%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.338%	n/a
%RSD		1.219	0.818	0.000	0.613	1.051	0.764	0.479	1.996

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:50	98.650	98.410	507.000	25130.000	25630.000	96.580	97.610	98.740
2	18:57:16	101.100	100.800	518.000	25570.000	26170.000	97.440	97.890	100.000
3	18:57:43	101.600	101.300	522.700	25810.000	26380.000	97.930	100.400	100.200
x		100.449%	100.167%	103.184%	102.029%	104.243%	97.315%	98.626%	99.664%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.568	1.543	1.567	1.356	1.473	0.701	1.539	0.811

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:50	97.920	99.150	98.250	96.680	98.450	97.600	0.000	97.400
2	18:57:16	99.400	99.980	101.200	100.200	100.100	102.200	0.000	98.230
3	18:57:43	99.420	102.200	102.000	99.710	97.090	98.080	0.000	100.300
x		98.914%	100.456%	100.481%	98.863%	98.541%	99.284%	0.000	98.640%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.872	1.588	1.956	1.924	1.525	2.532	0.000	1.510

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:50	76.466%	95.150	93.120	83.525%	94.230	95.290	96.620	97.450
2	18:57:16	77.691%	99.550	97.100	84.425%	94.920	96.530	100.200	98.500
3	18:57:43	77.596%	100.900	99.620	85.351%	95.230	96.200	99.790	100.600
x		77.251%	98.517%	96.615%	84.434%	94.792%	96.008%	98.879%	98.845%
σ		0.682%	n/a	n/a	0.913%	n/a	n/a	n/a	n/a
%RSD		0.882	3.029	3.394	1.081	0.539	0.669	1.989	1.607

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:50	78.762%	98.540	98.590	100.300	96.430	96.940	87.644%	89.482%
2	18:57:16	79.297%	100.800	102.300	101.400	97.900	97.870	89.150%	91.204%
3	18:57:43	79.902%	101.200	103.300	101.200	99.560	98.260	90.448%	92.951%
x		79.320%	100.180%	101.379%	100.977%	97.964%	97.691%	89.081%	91.212%
σ		0.570%	n/a	n/a	n/a	n/a	n/a	1.404%	1.735%
%RSD		0.719	1.437	2.439	0.587	1.598	0.693	1.576	1.902

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:50	100.300	101.900	101.500	102.200	101.300	91.910%
2	18:57:16	100.800	103.000	102.300	103.700	102.900	93.510%
3	18:57:43	105.000	105.400	105.100	106.000	105.000	92.072%
x		102.046%	103.441%	102.978%	103.984%	103.087%	92.497%
σ		n/a	n/a	n/a	n/a	n/a	0.881%
%RSD		2.498	1.723	1.833	1.849	1.806	0.952

CCB6 4/2/2015 7:03:49 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:04:16	74.104%	-0.069	-0.559	-0.497	0.000	17.670	11.790	10.760
2	19:04:42	75.600%	-0.142	-0.629	0.001	0.000	18.450	9.669	10.110
3	19:05:09	73.842%	-0.110	0.163	-0.053	0.000	18.030	10.220	9.443
x		74.516%	-0.107	-0.342	-0.183	0.000	18.050	10.560	10.100
σ		0.948%	0.036	0.438	0.274	0.000	0.394	1.101	0.657
%RSD		1.272	34.020	128.200	149.600	0.000	2.182	10.430	6.506
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:04:16	0.833	-4.510	0.000	-1.602	28.900	18.090	71.709%	-0.529
2	19:04:42	0.928	-5.283	0.000	-3.910	53.460	19.180	72.182%	-0.441
3	19:05:09	0.772	-5.722	0.000	-6.092	42.030	16.800	72.911%	-0.449
x		0.844	-5.172	0.000	-3.868	41.460	18.020	72.267%	-0.473
σ		0.079	0.614	0.000	2.245	12.290	1.192	0.606%	0.049
%RSD		9.298	11.860	0.000	58.050	29.640	6.611	0.838	10.260
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:04:16	0.624	0.155	0.174	2.518	11.080	0.040	-0.041	0.093
2	19:04:42	0.378	0.160	0.167	1.589	8.732	0.027	-0.011	0.033
3	19:05:09	0.086	0.126	0.170	0.284	8.432	0.023	-0.014	0.157
x		0.363	0.147	0.171	1.464	9.414	0.030	-0.022	0.094
σ		0.269	0.018	0.004	1.122	1.449	0.009	0.017	0.062
%RSD		74.210	12.340	2.090	76.670	15.390	29.520	75.700	65.650
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:04:16	0.128	0.210	0.112	-0.671	-1.088	-0.427	0.000	0.072
2	19:04:42	0.011	0.182	0.074	-0.122	0.178	-0.246	0.000	0.071
3	19:05:09	0.071	0.135	0.215	-0.324	-1.534	-0.595	0.000	0.074
x		0.070	0.176	0.134	-0.372	-0.815	-0.423	0.000	0.072
σ		0.059	0.038	0.073	0.278	0.888	0.174	0.000	0.001
%RSD		83.900	21.530	54.360	74.600	109.000	41.240	0.000	2.060
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:04:16	73.986%	-0.115	-0.111	81.927%	-0.077	-0.101	-0.014	0.067
2	19:04:42	75.648%	-0.102	-0.087	84.626%	-0.068	-0.089	0.048	0.022
3	19:05:09	77.083%	-0.014	-0.094	87.021%	-0.081	-0.090	-0.051	-0.025
x		75.573%	-0.077	-0.097	84.525%	-0.075	-0.094	-0.006	0.021
σ		1.550%	0.055	0.013	2.548%	0.006	0.007	0.050	0.046
%RSD		2.051	70.940	13.070	3.015	8.516	7.256	871.000	215.900
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:04:16	77.265%	-2.709	-0.750	-0.834	-0.039	0.088	83.327%	84.939%
2	19:04:42	78.106%	-2.565	-0.797	-0.781	0.037	0.111	84.677%	85.830%
3	19:05:09	80.404%	-2.652	-0.801	-0.814	-0.027	0.041	87.482%	88.616%
x		78.592%	-2.642	-0.783	-0.810	-0.010	0.080	85.162%	86.462%
σ		1.625%	0.073	0.028	0.027	0.041	0.036	2.120%	1.918%
%RSD		2.067	2.759	3.596	3.300	424.000	44.720	2.489	2.219
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:04:16	0.031	0.017	0.003	0.027	0.017	95.378%		
2	19:04:42	0.015	0.016	0.017	-0.008	0.009	96.087%		
3	19:05:09	0.014	0.023	0.008	-0.003	0.012	95.992%		
x		0.020	0.019	0.009	0.005	0.013	95.819%		
σ		0.009	0.003	0.007	0.019	0.004	0.385%		
%RSD		46.230	18.170	72.960	366.500	31.680	0.402		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:08:33	65.784%	0.026	35.570	39.670	0.000	70570.000	18510.000	18690.000
2	19:08:59	68.130%	0.116	40.620	37.180	0.000	70970.000	18920.000	19270.000
3	19:09:26	69.784%	-0.012	36.510	37.380	0.000	71820.000	19170.000	19650.000
x		67.900%	0.043	37.570	38.080	0.000	71120.000	18870.000	19200.000
σ		2.010%	0.066	2.689	1.383	0.000	635.200	333.400	483.400
%RSD		2.960	151.300	7.157	3.632	0.000	0.893	1.767	2.518
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:08:33	1.986	3877.000	0.000	7547.000	86350.000	89250.000	66.580%	1.715
2	19:08:59	2.188	3945.000	0.000	7568.000	88850.000	91280.000	69.211%	1.536
3	19:09:26	2.147	4018.000	0.000	7675.000	89800.000	93370.000	69.193%	1.316
x		2.107	3947.000	0.000	7597.000	88330.000	91300.000	68.328%	1.522
σ		0.107	70.290	0.000	68.420	1783.000	2060.000	1.514%	0.200
%RSD		5.083	1.781	0.000	0.901	2.018	2.257	2.216	13.130
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:08:33	2.530	13.160	3.330	2.205	294.300	0.223	6.489	30.780
2	19:08:59	3.687	14.040	3.463	3.507	296.600	0.185	6.786	31.570
3	19:09:26	4.003	14.630	3.621	4.329	290.000	0.196	6.943	31.650
x		3.406	13.940	3.471	3.347	293.600	0.202	6.740	31.330
σ		0.776	0.742	0.146	1.071	3.334	0.020	0.230	0.483
%RSD		22.770	5.317	4.200	32.000	1.135	9.736	3.418	1.542
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:08:33	31.300	137.900	137.100	0.044	-1.070	-0.460	0.000	215.200
2	19:08:59	32.740	138.200	140.600	-2.592	-1.180	0.717	0.000	227.600
3	19:09:26	31.880	140.700	143.500	1.817	-0.891	-0.069	0.000	226.400
x		31.970	138.900	140.400	-0.244	-1.047	0.063	0.000	223.100
σ		0.728	1.546	3.204	2.219	0.146	0.600	0.000	6.843
%RSD		2.277	1.112	2.282	909.600	13.910	958.900	0.000	3.068
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:08:33	75.078%	0.554	0.521	79.267%	-0.085	-0.086	0.044	-0.032
2	19:08:59	76.407%	0.504	0.577	81.298%	-0.073	-0.078	0.015	0.060
3	19:09:26	79.174%	0.636	0.528	82.882%	-0.054	-0.078	0.087	-0.002
x		76.886%	0.565	0.542	81.149%	-0.071	-0.081	0.049	0.009
σ		2.090%	0.066	0.031	1.812%	0.016	0.005	0.036	0.047
%RSD		2.718	11.750	5.691	2.233	22.530	5.682	74.580	539.500
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:08:33	75.912%	-2.126	-0.629	-0.659	56.280	54.920	87.817%	89.643%
2	19:08:59	80.191%	-2.311	-0.649	-0.673	56.550	56.920	88.788%	91.365%
3	19:09:26	80.646%	-2.314	-0.696	-0.669	56.860	57.990	90.296%	92.990%
x		78.916%	-2.250	-0.658	-0.667	56.560	56.610	88.967%	91.333%
σ		2.612%	0.108	0.035	0.007	0.292	1.561	1.249%	1.674%
%RSD		3.310	4.785	5.278	1.113	0.516	2.758	1.404	1.833
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:08:33	0.020	0.017	3.072	2.951	2.997	89.059%		
2	19:08:59	0.013	0.012	3.088	2.926	3.023	91.346%		
3	19:09:26	0.009	0.003	3.273	2.904	3.053	91.993%		
x		0.014	0.011	3.144	2.927	3.024	90.799%		
σ		0.006	0.007	0.112	0.023	0.028	1.541%		
%RSD		39.030	66.250	3.560	0.802	0.922	1.697		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:12:48	68.284%	-0.089	47.400	43.820	0.000	58270.000	17620.000	17870.000
2	19:13:15	70.651%	-0.041	45.910	43.140	0.000	58090.000	17660.000	18080.000
3	19:13:41	70.298%	-0.105	44.090	44.760	0.000	58480.000	17990.000	18420.000
x		69.744%	-0.078	45.800	43.910	0.000	58280.000	17760.000	18120.000
σ		1.277%	0.033	1.661	0.814	0.000	195.100	204.700	276.300
%RSD		1.831	42.300	3.626	1.854	0.000	0.335	1.153	1.525

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:12:48	6.393	4362.000	0.000	4740.000	88430.000	92990.000	68.534%	0.857
2	19:13:15	7.639	4412.000	0.000	4762.000	90540.000	94650.000	69.275%	1.577
3	19:13:41	6.836	4356.000	0.000	4806.000	91470.000	95580.000	69.926%	1.456
x		6.956	4377.000	0.000	4769.000	90140.000	94410.000	69.245%	1.297
σ		0.632	30.490	0.000	33.460	1558.000	1309.000	0.697%	0.385
%RSD		9.079	0.697	0.000	0.702	1.728	1.386	1.006	29.730

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:12:48	3.966	9.289	24.290	24.280	326.700	0.559	0.186	1.469
2	19:13:15	-1.419	9.484	25.470	26.040	322.800	0.535	0.371	1.623
3	19:13:41	3.055	9.572	25.670	26.060	328.200	0.533	0.397	1.656
x		1.867	9.448	25.150	25.460	325.900	0.542	0.318	1.582
σ		2.882	0.145	0.747	1.021	2.781	0.014	0.115	0.100
%RSD		154.300	1.531	2.969	4.011	0.853	2.636	36.230	6.300

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:12:48	1.440	3.602	3.781	2.446	-1.008	0.623	0.000	194.000
2	19:13:15	1.291	3.983	3.965	3.754	-0.912	0.893	0.000	199.500
3	19:13:41	1.306	4.256	4.082	3.213	-1.065	0.322	0.000	202.700
x		1.346	3.947	3.942	3.138	-0.995	0.613	0.000	198.700
σ		0.082	0.328	0.151	0.658	0.078	0.285	0.000	4.411
%RSD		6.092	8.321	3.837	20.960	7.808	46.580	0.000	2.220

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:12:48	77.020%	3.896	4.072	81.191%	-0.102	-0.108	0.028	-0.044
2	19:13:15	79.473%	4.258	4.326	82.882%	-0.088	-0.110	0.013	0.039
3	19:13:41	80.527%	4.486	4.220	84.203%	-0.089	-0.097	0.006	0.074
x		79.007%	4.213	4.206	82.758%	-0.093	-0.105	0.016	0.023
σ		1.800%	0.298	0.128	1.510%	0.008	0.007	0.011	0.061
%RSD		2.278	7.067	3.038	1.824	8.572	6.429	71.130	264.100

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:12:48	78.621%	-2.624	-0.661	-0.659	42.200	41.180	88.068%	90.560%
2	19:13:15	81.065%	-2.636	-0.640	-0.706	41.640	41.810	90.866%	93.127%
3	19:13:41	82.098%	-2.706	-0.681	-0.651	42.430	42.140	93.497%	94.479%
x		80.595%	-2.655	-0.661	-0.672	42.090	41.710	90.810%	92.722%
σ		1.786%	0.044	0.021	0.030	0.408	0.487	2.715%	1.991%
%RSD		2.215	1.661	3.141	4.408	0.970	1.168	2.990	2.147

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:12:48	0.013	0.016	0.115	0.151	0.122	90.484%
2	19:13:15	0.020	0.013	0.115	0.122	0.125	92.495%
3	19:13:41	0.010	0.017	0.096	0.106	0.107	94.045%
x		0.014	0.015	0.109	0.126	0.118	92.341%
σ		0.005	0.002	0.011	0.023	0.009	1.786%
%RSD		37.180	12.880	10.010	18.080	7.990	1.934

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:03	70.753%	-0.085	46.720	49.620	0.000	74220.000	18180.000	18600.000
2	19:17:30	70.157%	0.029	50.390	44.910	0.000	76340.000	18730.000	19340.000
3	19:17:57	71.291%	-0.003	48.160	46.620	0.000	75720.000	18790.000	19160.000
x		70.734%	-0.020	48.420	47.050	0.000	75430.000	18560.000	19030.000
σ		0.567%	0.059	1.846	2.381	0.000	1089.000	337.400	385.800
%RSD		0.802	298.300	3.813	5.060	0.000	1.444	1.817	2.027
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:03	2.178	4137.000	0.000	5982.000	91750.000	95330.000	67.650%	1.209
2	19:17:30	2.319	4307.000	0.000	6074.000	95520.000	98050.000	69.100%	1.352
3	19:17:57	2.432	4272.000	0.000	6009.000	95250.000	98300.000	70.200%	1.193
x		2.310	4239.000	0.000	6022.000	94170.000	97230.000	68.983%	1.251
σ		0.127	90.090	0.000	47.320	2103.000	1645.000	1.279%	0.087
%RSD		5.516	2.125	0.000	0.786	2.233	1.692	1.854	6.991
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:03	3.578	11.500	0.883	68.490	377.500	0.157	0.165	1.584
2	19:17:30	-0.914	11.590	0.901	70.360	377.300	0.203	-0.079	1.651
3	19:17:57	-0.562	11.700	0.989	68.300	370.500	0.193	-0.085	1.720
x		0.701	11.600	0.924	69.050	375.100	0.184	0.000	1.651
σ		2.498	0.103	0.056	1.142	3.973	0.024	0.143	0.068
%RSD		356.500	0.889	6.105	1.654	1.059	13.190	255600.000	4.110
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:03	1.295	14.340	14.580	1.943	0.657	0.416	0.000	200.900
2	19:17:30	1.467	14.500	14.990	1.584	-0.601	0.543	0.000	208.900
3	19:17:57	1.387	13.890	14.810	1.834	-0.588	0.447	0.000	207.600
x		1.383	14.240	14.790	1.787	-0.178	0.469	0.000	205.800
σ		0.086	0.315	0.202	0.184	0.723	0.066	0.000	4.319
%RSD		6.219	2.210	1.364	10.270	407.000	14.160	0.000	2.099
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:03	71.344%	8.386	8.434	74.532%	-0.109	-0.077	0.083	-0.012
2	19:17:30	72.992%	8.989	8.968	76.107%	-0.110	-0.114	-0.003	0.021
3	19:17:57	74.667%	8.839	8.735	76.812%	-0.082	-0.107	0.047	-0.016
x		73.001%	8.738	8.712	75.817%	-0.100	-0.099	0.042	-0.002
σ		1.662%	0.314	0.268	1.167%	0.016	0.020	0.043	0.020
%RSD		2.276	3.594	3.071	1.539	15.600	19.750	102.100	816.200
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:03	72.126%	-2.599	-0.732	-0.791	41.340	42.040	80.155%	82.864%
2	19:17:30	74.601%	-2.682	-0.766	-0.730	42.520	43.630	81.274%	83.820%
3	19:17:57	75.068%	-2.661	-0.734	-0.771	42.530	43.440	83.167%	83.954%
x		73.932%	-2.647	-0.744	-0.764	42.130	43.040	81.532%	83.546%
σ		1.581%	0.043	0.019	0.031	0.684	0.868	1.522%	0.594%
%RSD		2.138	1.621	2.603	4.022	1.623	2.016	1.867	0.711
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:17:03	0.017	0.020	0.053	0.049	0.053	77.014%		
2	19:17:30	0.036	0.018	0.048	0.070	0.058	80.899%		
3	19:17:57	0.029	0.021	0.054	0.037	0.061	78.474%		
x		0.027	0.020	0.052	0.052	0.057	78.796%		
σ		0.010	0.002	0.003	0.017	0.004	1.962%		
%RSD		35.610	9.238	6.204	32.070	6.289	2.490		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:21:21	70.426%	-0.128	48.050	49.000	0.000	61790.000	17450.000	17880.000
2	19:21:48	69.676%	-0.057	46.810	48.410	0.000	63110.000	18250.000	18580.000
3	19:22:14	69.881%	-0.125	52.480	49.950	0.000	62680.000	18210.000	18710.000
x		69.994%	-0.103	49.110	49.120	0.000	62520.000	17970.000	18390.000
σ		0.388%	0.040	2.984	0.777	0.000	673.600	454.600	445.500
%RSD		0.554	39.150	6.076	1.583	0.000	1.077	2.530	2.423
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:21:21	137.300	4342.000	0.000	5984.000	81850.000	85360.000	69.402%	4.044
2	19:21:48	144.200	4335.000	0.000	6028.000	82800.000	86870.000	70.794%	4.599
3	19:22:14	148.500	4459.000	0.000	6021.000	82960.000	87150.000	72.029%	3.853
x		143.300	4379.000	0.000	6011.000	82540.000	86460.000	70.742%	4.165
σ		5.618	69.300	0.000	23.550	596.800	964.900	1.314%	0.388
%RSD		3.921	1.583	0.000	0.392	0.723	1.116	1.858	9.304
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:21:21	4.459	7.517	36.540	440.300	684.300	0.730	1.177	1.816
2	19:21:48	2.516	7.598	37.450	456.100	710.200	0.620	1.124	1.994
3	19:22:14	3.602	7.629	37.210	455.800	703.800	0.664	1.146	1.793
x		3.526	7.581	37.070	450.700	699.400	0.671	1.149	1.868
σ		0.974	0.058	0.470	9.036	13.500	0.056	0.027	0.110
%RSD		27.620	0.763	1.267	2.005	1.930	8.274	2.314	5.881
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:21:21	1.730	18.110	18.240	2.992	-0.495	-0.426	0.000	196.000
2	19:21:48	1.763	18.360	18.500	1.145	-0.707	-0.489	0.000	206.700
3	19:22:14	1.866	18.300	18.430	1.785	-1.495	-0.843	0.000	206.600
x		1.787	18.260	18.390	1.974	-0.899	-0.586	0.000	203.100
σ		0.071	0.128	0.135	0.938	0.527	0.225	0.000	6.124
%RSD		3.960	0.699	0.736	47.520	58.670	38.320	0.000	3.015
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:21:21	77.020%	0.159	0.239	78.725%	-0.096	-0.082	-0.023	-0.011
2	19:21:48	78.546%	0.397	0.303	82.180%	-0.070	-0.109	0.064	-0.088
3	19:22:14	80.054%	0.283	0.300	83.750%	-0.074	-0.095	0.060	0.008
x		78.540%	0.280	0.281	81.551%	-0.080	-0.095	0.034	-0.031
σ		1.517%	0.119	0.036	2.571%	0.014	0.013	0.049	0.051
%RSD		1.931	42.690	12.930	3.152	17.880	14.170	146.600	166.800
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:21:21	76.537%	-2.409	-0.697	-0.704	37.630	36.970	85.784%	87.138%
2	19:21:48	82.523%	-2.663	-0.711	-0.739	37.470	37.050	87.863%	90.446%
3	19:22:14	80.907%	-2.528	-0.701	-0.682	37.950	37.880	91.000%	92.398%
x		79.989%	-2.533	-0.703	-0.708	37.680	37.300	88.216%	89.994%
σ		3.097%	0.127	0.007	0.029	0.245	0.504	2.626%	2.659%
%RSD		3.871	5.015	1.050	4.061	0.651	1.351	2.977	2.955
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:21:21	0.019	0.014	0.464	0.438	0.449	85.548%		
2	19:21:48	0.019	0.014	0.505	0.448	0.466	90.305%		
3	19:22:14	0.010	0.016	0.483	0.497	0.470	90.649%		
x		0.016	0.015	0.484	0.461	0.462	88.834%		
σ		0.005	0.001	0.021	0.032	0.011	2.851%		
%RSD		33.500	9.272	4.249	6.867	2.438	3.209		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:36	71.068%	-0.176	49.260	45.520	0.000	108400.000	19460.000	19780.000
2	19:26:02	70.150%	0.115	47.140	44.290	0.000	109400.000	19520.000	20060.000
3	19:26:29	70.044%	-0.061	46.070	47.010	0.000	110600.000	19720.000	20120.000
x		70.420%	-0.041	47.490	45.610	0.000	109500.000	19570.000	19990.000
σ		0.563%	0.147	1.625	1.363	0.000	1064.000	134.500	182.600
%RSD		0.799	361.400	3.423	2.988	0.000	0.972	0.688	0.913
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:36	557.200	3925.000	0.000	7776.000	82590.000	86460.000	70.636%	11.060
2	19:26:02	560.300	3877.000	0.000	7742.000	83720.000	86210.000	72.274%	12.300
3	19:26:29	530.100	3951.000	0.000	7770.000	83290.000	87340.000	72.488%	12.330
x		549.200	3918.000	0.000	7763.000	83200.000	86670.000	71.799%	11.890
σ		16.610	37.710	0.000	18.370	570.600	593.900	1.013%	0.723
%RSD		3.025	0.962	0.000	0.237	0.686	0.685	1.411	6.082
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:36	2.769	11.470	53.440	1397.000	1602.000	1.092	3.396	2.763
2	19:26:02	4.399	11.610	54.010	1388.000	1606.000	1.110	3.149	2.413
3	19:26:29	5.288	12.050	53.930	1384.000	1589.000	1.146	3.508	2.539
x		4.152	11.710	53.800	1390.000	1599.000	1.116	3.351	2.572
σ		1.277	0.302	0.307	6.328	8.930	0.027	0.184	0.177
%RSD		30.760	2.580	0.571	0.455	0.558	2.434	5.477	6.896
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:36	2.659	11.640	11.280	5.436	-1.903	-0.741	0.000	176.700
2	19:26:02	2.523	11.010	11.510	2.575	-0.463	-0.409	0.000	176.000
3	19:26:29	2.435	11.200	11.460	2.040	-0.575	-0.341	0.000	179.800
x		2.539	11.280	11.420	3.350	-0.981	-0.497	0.000	177.500
σ		0.113	0.327	0.119	1.826	0.801	0.214	0.000	2.014
%RSD		4.450	2.894	1.043	54.500	81.720	43.000	0.000	1.135
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:36	79.249%	1.594	1.685	82.067%	-0.082	-0.082	0.069	0.010
2	19:26:02	81.660%	1.783	1.654	84.769%	-0.081	-0.078	0.058	-0.054
3	19:26:29	81.617%	1.464	1.576	84.795%	-0.077	-0.071	-0.006	-0.041
x		80.842%	1.614	1.639	83.877%	-0.080	-0.077	0.040	-0.028
σ		1.380%	0.161	0.056	1.567%	0.003	0.006	0.040	0.034
%RSD		1.707	9.941	3.413	1.868	3.428	7.384	99.430	118.800
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:36	79.522%	-2.613	-0.337	-0.321	59.090	59.520	89.724%	92.232%
2	19:26:02	81.500%	-2.709	-0.392	-0.461	60.780	60.510	90.673%	93.363%
3	19:26:29	83.061%	-2.648	-0.324	-0.359	59.000	59.460	92.499%	94.473%
x		81.361%	-2.657	-0.351	-0.380	59.620	59.830	90.965%	93.356%
σ		1.773%	0.048	0.036	0.073	1.004	0.591	1.410%	1.120%
%RSD		2.179	1.823	10.320	19.110	1.685	0.987	1.550	1.200
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:25:36	0.029	0.012	0.969	0.916	0.977	89.746%		
2	19:26:02	0.019	0.022	1.023	0.907	0.994	91.057%		
3	19:26:29	0.020	0.013	0.999	0.934	0.957	94.068%		
x		0.022	0.015	0.997	0.919	0.976	91.624%		
σ		0.006	0.005	0.027	0.014	0.019	2.216%		
%RSD		25.220	35.100	2.716	1.477	1.905	2.419		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:53	68.147%	-0.135	43.890	40.750	0.000	63930.000	20600.000	20970.000
2	19:30:20	68.930%	0.151	39.260	37.580	0.000	64330.000	20620.000	21120.000
3	19:30:46	69.726%	0.009	45.370	38.870	0.000	64380.000	20830.000	21260.000
x		68.934%	0.009	42.840	39.070	0.000	64210.000	20680.000	21120.000
σ		0.790%	0.143	3.186	1.592	0.000	249.300	130.500	148.400
%RSD		1.145	1651.000	7.437	4.076	0.000	0.388	0.631	0.703
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:53	460.000	3764.000	0.000	23330.000	77650.000	80980.000	70.281%	6.368
2	19:30:20	473.900	3816.000	0.000	23780.000	80170.000	83770.000	71.196%	8.975
3	19:30:46	474.600	3833.000	0.000	23770.000	81760.000	84050.000	71.067%	7.407
x		469.500	3804.000	0.000	23630.000	79860.000	82930.000	70.848%	7.583
σ		8.220	35.720	0.000	256.500	2074.000	1695.000	0.495%	1.312
%RSD		1.751	0.939	0.000	1.086	2.597	2.044	0.699	17.310
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:53	1.244	10.010	24.020	738.800	976.300	0.553	1.315	2.186
2	19:30:20	6.790	10.360	24.660	751.100	989.700	0.608	1.303	2.148
3	19:30:46	3.494	10.440	25.130	779.500	980.700	0.595	1.321	2.344
x		3.843	10.270	24.610	756.500	982.200	0.586	1.313	2.226
σ		2.789	0.231	0.558	20.890	6.837	0.029	0.009	0.104
%RSD		72.580	2.252	2.267	2.762	0.696	4.971	0.680	4.662
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:53	2.300	35.250	36.230	2.355	-0.636	-0.460	0.000	148.100
2	19:30:20	2.205	34.680	36.600	3.761	-2.085	-0.649	0.000	148.200
3	19:30:46	1.996	35.930	36.510	0.225	-0.759	-0.717	0.000	152.300
x		2.167	35.290	36.450	2.114	-1.160	-0.609	0.000	149.600
σ		0.156	0.630	0.193	1.781	0.803	0.133	0.000	2.379
%RSD		7.180	1.785	0.529	84.240	69.260	21.860	0.000	1.591
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:53	78.244%	0.149	0.171	84.353%	-0.096	-0.107	0.061	-0.031
2	19:30:20	80.412%	0.122	0.196	83.567%	-0.092	-0.097	-0.020	0.017
3	19:30:46	79.263%	0.218	0.196	82.095%	-0.095	-0.099	-0.002	-0.032
x		79.306%	0.163	0.188	83.339%	-0.094	-0.101	0.013	-0.015
σ		1.085%	0.050	0.014	1.146%	0.002	0.005	0.042	0.028
%RSD		1.368	30.460	7.606	1.375	1.977	5.319	319.600	184.300
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:53	79.868%	-2.547	-0.686	-0.591	53.870	53.130	90.487%	91.889%
2	19:30:20	82.289%	-2.523	-0.693	-0.647	52.400	53.000	89.891%	92.213%
3	19:30:46	80.386%	-2.530	-0.607	-0.652	53.610	53.120	89.593%	91.325%
x		80.848%	-2.533	-0.662	-0.630	53.290	53.080	89.990%	91.809%
σ		1.275%	0.013	0.048	0.034	0.789	0.072	0.455%	0.450%
%RSD		1.577	0.500	7.242	5.400	1.481	0.136	0.506	0.490
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:29:53	0.018	0.008	1.046	0.930	0.975	90.114%		
2	19:30:20	0.003	0.010	1.086	0.932	1.011	92.164%		
3	19:30:46	0.021	0.012	1.062	0.879	0.942	90.281%		
x		0.014	0.010	1.065	0.914	0.976	90.853%		
σ		0.009	0.002	0.020	0.030	0.035	1.139%		
%RSD		67.370	20.610	1.905	3.274	3.556	1.253		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:34:09	67.172%	0.059	67.280	64.570	0.000	25750.000	7525.000	7620.000
2	19:34:35	69.259%	-0.141	63.550	68.260	0.000	25910.000	7668.000	7792.000
3	19:35:02	69.780%	0.077	65.580	66.720	0.000	26060.000	7751.000	7898.000
x		68.737%	-0.002	65.470	66.510	0.000	25900.000	7648.000	7770.000
σ		1.380%	0.121	1.866	1.854	0.000	154.500	114.100	140.000
%RSD		2.008	7323.000	2.851	2.788	0.000	0.596	1.492	1.802
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:34:09	356.800	4958.000	0.000	2966.000	98010.000	103400.000	67.100%	7.824
2	19:34:35	405.200	4998.000	0.000	3028.000	103900.000	107100.000	68.372%	9.217
3	19:35:02	412.600	5058.000	0.000	3013.000	103500.000	109300.000	68.786%	8.257
x		391.500	5005.000	0.000	3002.000	101800.000	106600.000	68.086%	8.433
σ		30.300	50.340	0.000	32.090	3297.000	2968.000	0.879%	0.713
%RSD		7.740	1.006	0.000	1.069	3.238	2.784	1.291	8.455
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:34:09	0.857	6.945	374.000	1316.000	1555.000	1.349	2.255	2.159
2	19:34:35	3.191	7.082	389.400	1364.000	1906.000	1.349	1.979	2.114
3	19:35:02	4.545	7.005	396.100	1381.000	1655.000	1.367	1.916	2.141
x		2.864	7.010	386.500	1354.000	1705.000	1.355	2.050	2.138
σ		1.866	0.069	11.320	33.580	181.100	0.010	0.181	0.023
%RSD		65.140	0.978	2.929	2.480	10.620	0.763	8.807	1.055
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:34:09	2.332	32.000	31.850	-0.602	-1.203	-1.555	0.000	164.100
2	19:34:35	2.232	32.750	31.970	5.254	-1.137	-1.007	0.000	171.800
3	19:35:02	2.034	32.250	33.150	3.383	0.599	-0.250	0.000	175.200
x		2.199	32.330	32.320	2.678	-0.580	-0.937	0.000	170.400
σ		0.152	0.380	0.717	2.991	1.022	0.655	0.000	5.672
%RSD		6.893	1.176	2.218	111.700	176.100	69.920	0.000	3.329
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:34:09	73.193%	0.145	0.089	74.585%	-0.086	-0.104	0.079	-0.026
2	19:34:35	74.166%	0.026	0.116	76.779%	-0.093	-0.099	0.026	0.011
3	19:35:02	75.009%	0.182	0.155	76.966%	-0.090	-0.099	0.122	0.012
x		74.123%	0.118	0.120	76.110%	-0.090	-0.101	0.076	-0.001
σ		0.909%	0.081	0.034	1.324%	0.003	0.003	0.048	0.022
%RSD		1.226	69.120	27.930	1.739	3.902	2.861	63.440	2078.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:34:09	74.012%	-2.646	-0.802	-0.796	38.800	38.630	80.677%	82.147%
2	19:34:35	73.952%	-2.750	-0.800	-0.791	40.260	40.680	82.305%	83.880%
3	19:35:02	77.056%	-2.747	-0.793	-0.785	40.350	40.340	82.691%	86.339%
x		75.006%	-2.714	-0.798	-0.791	39.800	39.880	81.891%	84.122%
σ		1.775%	0.059	0.005	0.005	0.871	1.099	1.069%	2.107%
%RSD		2.366	2.186	0.612	0.667	2.187	2.755	1.305	2.504
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:34:09	0.021	0.009	1.176	1.004	1.075	80.394%		
2	19:34:35	0.017	0.011	1.125	1.037	1.083	80.252%		
3	19:35:02	0.014	0.008	1.052	0.990	1.012	88.316%		
x		0.017	0.009	1.118	1.010	1.057	82.987%		
σ		0.003	0.002	0.062	0.024	0.039	4.616%		
%RSD		18.340	17.590	5.565	2.386	3.687	5.562		

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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	19:38:29	66.292%	-0.260	66.950	67.610	0.000	60750.000	11040.000	11170.000
2	19:38:55	67.845%	-0.155	68.360	66.000	0.000	60530.000	11000.000	11160.000
3	19:39:22	67.357%	0.008	63.480	65.530	0.000	60920.000	11090.000	11280.000
x		67.164%	-0.136	66.270	66.380	0.000	60740.000	11040.000	11200.000
σ		0.794%	0.136	2.509	1.088	0.000	194.700	42.460	63.710
%RSD		1.182	99.830	3.786	1.640	0.000	0.321	0.385	0.569
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:29	148.000	2703.000	0.000	34520.000	96910.000	101300.000	69.525%	4.657
2	19:38:55	152.600	2700.000	0.000	34330.000	97540.000	103200.000	70.453%	4.692
3	19:39:22	152.200	2705.000	0.000	35010.000	98770.000	103000.000	70.639%	4.984
x		150.900	2703.000	0.000	34620.000	97740.000	102500.000	70.206%	4.778
σ		2.516	2.187	0.000	352.700	946.800	1019.000	0.597%	0.179
%RSD		1.667	0.081	0.000	1.019	0.969	0.994	0.850	3.753
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:29	0.537	70.710	6.182	223.900	547.300	0.780	1.914	4.312
2	19:38:55	3.610	70.160	6.370	221.300	543.900	0.713	1.951	4.259
3	19:39:22	2.972	71.010	6.330	223.300	535.000	0.746	1.727	4.189
x		2.373	70.630	6.294	222.900	542.000	0.746	1.864	4.253
σ		1.622	0.434	0.099	1.345	6.332	0.033	0.120	0.061
%RSD		68.350	0.614	1.576	0.604	1.168	4.444	6.421	1.443
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:29	4.326	8.011	8.030	-1.635	-0.266	-0.827	0.000	264.400
2	19:38:55	4.122	8.185	8.352	0.320	-1.197	-0.286	0.000	264.500
3	19:39:22	3.960	8.001	8.551	4.835	-0.969	-1.333	0.000	265.400
x		4.136	8.066	8.311	1.173	-0.810	-0.816	0.000	264.800
σ		0.183	0.103	0.263	3.318	0.485	0.524	0.000	0.526
%RSD		4.432	1.278	3.168	282.800	59.910	64.210	0.000	0.199
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:29	76.979%	8.502	8.308	81.090%	-0.090	-0.098	-0.001	0.013
2	19:38:55	80.007%	8.051	8.492	82.953%	-0.088	-0.107	0.021	0.024
3	19:39:22	79.830%	8.187	8.729	83.900%	-0.085	-0.088	0.017	0.009
x		78.939%	8.247	8.510	82.648%	-0.088	-0.097	0.013	0.015
σ		1.699%	0.231	0.211	1.429%	0.003	0.009	0.012	0.008
%RSD		2.153	2.801	2.479	1.730	3.358	9.557	92.060	51.090
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:29	80.010%	-2.778	-0.751	-0.724	58.460	58.250	86.427%	89.803%
2	19:38:55	83.080%	-2.690	-0.719	-0.752	58.330	56.390	91.517%	92.275%
3	19:39:22	81.496%	-2.586	-0.720	-0.763	59.380	58.570	91.050%	93.236%
x		81.528%	-2.685	-0.730	-0.747	58.720	57.740	89.665%	91.771%
σ		1.535%	0.096	0.018	0.020	0.571	1.178	2.813%	1.771%
%RSD		1.883	3.583	2.496	2.677	0.972	2.040	3.138	1.930
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:38:29	0.030	0.026	1.040	0.934	0.984	89.728%		
2	19:38:55	0.029	0.020	1.038	0.979	0.989	92.798%		
3	19:39:22	0.016	0.022	1.000	0.980	0.983	95.066%		
x		0.025	0.023	1.026	0.964	0.985	92.531%		
σ		0.008	0.003	0.022	0.026	0.004	2.679%		
%RSD		30.840	12.650	2.172	2.735	0.369	2.895		

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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	19:50:18	74.049%	0.645	4.336	4.562	0.000	104.200	102.700	102.800
2	19:50:44	75.597%	1.238	4.759	4.585	0.000	102.100	99.310	101.500
3	19:51:11	73.900%	1.108	7.206	4.277	0.000	105.800	102.200	102.800
x		74.516%	99.703%	108.674%	89.492%	0.000	130.007%	101.409%	102.357%
σ		0.940%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.261	31.260	28.520	3.828	0.000	1.781	1.816	0.723

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:18	31.490	476.900	0.000	94.920	144.500	128.100	71.311%	4.810
2	19:50:44	31.130	477.000	0.000	95.150	133.000	124.300	71.538%	4.768
3	19:51:11	32.080	479.500	0.000	91.570	138.100	129.200	72.083%	4.602
x		105.221%	95.559%	0.000	93.879%	138.517%	127.211%	71.644%	94.536%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.397%	n/a
%RSD		1.515	0.313	0.000	2.138	4.144	2.004	0.554	2.327

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:18	1.110	2.447	5.331	58.430	61.290	0.556	0.830	2.163
2	19:50:44	1.068	2.314	5.525	59.860	58.550	0.627	1.185	2.326
3	19:51:11	1.272	2.391	5.450	58.570	64.360	0.640	0.851	2.320
x		114.998%	119.207%	108.706%	117.904%	122.804%	121.502%	95.506%	113.481%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		9.359	2.815	1.801	1.340	4.735	7.453	20.850	4.070

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:18	2.286	6.074	5.461	1.540	2.954	4.910	0.000	4.942
2	19:50:44	2.482	5.833	5.971	0.614	4.229	3.797	0.000	5.056
3	19:51:11	2.195	5.999	5.947	0.763	4.615	4.392	0.000	5.167
x		116.048%	119.371%	115.860%	97.255%	78.657%	87.331%	0.000	101.097%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		6.304	2.070	4.969	51.140	22.110	12.760	0.000	2.224

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:18	73.242%	4.343	4.296	80.601%	0.830	0.934	1.150	1.197
2	19:50:44	73.382%	4.510	4.465	82.158%	0.847	0.891	1.102	1.131
3	19:51:11	75.493%	4.413	4.403	84.591%	0.962	0.908	1.066	1.185
x		74.039%	88.440%	87.756%	82.450%	87.966%	91.093%	110.608%	117.119%
σ		1.261%	n/a	n/a	2.011%	n/a	n/a	n/a	n/a
%RSD		1.704	1.901	1.954	2.439	8.206	2.424	3.779	3.028

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:18	64.436%	3.800	1.451	1.427	11.450	11.400	74.680%	82.843%
2	19:50:44	66.948%	3.825	1.456	1.350	11.500	11.640	74.582%	83.477%
3	19:51:11	68.049%	3.344	1.336	1.469	11.170	11.630	76.300%	85.681%
x		66.478%	73.128%	70.695%	70.774%	113.727%	115.574%	75.187%	84.000%
σ		1.852%	n/a	n/a	n/a	n/a	n/a	0.965%	1.490%
%RSD		2.786	7.397	4.801	4.281	1.568	1.163	1.283	1.773

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:18	0.977	0.926	0.973	0.927	0.967	88.477%
2	19:50:44	0.974	0.972	1.033	0.969	0.992	91.179%
3	19:51:11	0.960	0.944	1.030	1.016	0.997	93.055%
x		97.025%	94.741%	101.230%	97.068%	98.550%	90.904%
σ		n/a	n/a	n/a	n/a	n/a	2.301%
%RSD		0.958	2.419	3.354	4.602	1.636	2.532

CCV 1487954 4/2/2015 7:54:09 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:54:35	71.093%	100.100	105.600	98.070	0.000	48650.000	47680.000	47070.000
2	19:55:02	71.019%	97.980	108.900	97.450	0.000	49550.000	48480.000	48150.000
3	19:55:29	71.205%	96.720	102.900	102.500	0.000	49210.000	48390.000	48110.000
x		71.105%	98.253%	105.796%	99.351%	0.000	98.264%	96.369%	95.553%
σ		0.094%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.132	1.719	2.817	2.785	0.000	0.925	0.909	1.285
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:54:35	471.400	5265.000	0.000	50800.000	48410.000	49460.000	70.652%	99.810
2	19:55:02	483.500	5353.000	0.000	52060.000	49450.000	51790.000	70.234%	104.700
3	19:55:29	485.500	5299.000	0.000	51820.000	50070.000	51680.000	70.965%	105.800
x		96.024%	106.113%	0.000	103.122%	98.617%	101.955%	70.617%	103.452%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.367%	n/a
%RSD		1.590	0.834	0.000	1.299	1.703	2.580	0.519	3.098
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:54:35	97.610	97.110	501.600	24820.000	25250.000	94.740	96.540	97.810
2	19:55:02	101.900	100.500	518.000	25860.000	26280.000	98.940	99.920	100.300
3	19:55:29	100.400	100.300	520.200	25800.000	26300.000	98.430	99.170	98.630
x		99.968%	99.305%	102.657%	101.978%	103.774%	97.371%	98.543%	98.904%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.188	1.915	1.986	2.278	2.303	2.351	1.800	1.268
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:54:35	96.140	97.210	96.450	94.740	99.020	97.990	0.000	96.790
2	19:55:02	100.500	101.500	102.000	99.730	98.190	101.800	0.000	99.880
3	19:55:29	99.660	100.200	102.500	96.300	95.090	98.260	0.000	99.200
x		98.757%	99.622%	100.319%	96.922%	97.434%	99.335%	0.000	98.623%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.328	2.203	3.347	2.633	2.123	2.119	0.000	1.647
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:54:35	76.285%	92.760	90.680	82.178%	93.210	93.650	94.100	94.240
2	19:55:02	76.165%	98.970	97.180	83.129%	95.280	95.280	99.420	99.140
3	19:55:29	77.337%	101.300	98.410	83.867%	94.800	95.730	98.250	97.890
x		76.596%	97.673%	95.423%	83.058%	94.433%	94.886%	97.257%	97.091%
σ		0.645%	n/a	n/a	0.847%	n/a	n/a	n/a	n/a
%RSD		0.842	4.515	4.349	1.019	1.147	1.150	2.874	2.624
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:54:35	78.887%	95.270	97.770	97.410	94.370	93.650	86.158%	88.689%
2	19:55:02	78.187%	98.950	100.600	101.400	99.380	98.570	87.211%	89.720%
3	19:55:29	79.011%	100.500	100.400	101.700	98.710	98.460	87.916%	90.401%
x		78.695%	98.246%	99.580%	100.197%	97.489%	96.891%	87.095%	89.603%
σ		0.444%	n/a	n/a	n/a	n/a	n/a	0.885%	0.862%
%RSD		0.565	2.741	1.572	2.410	2.790	2.899	1.016	0.962
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:54:35	91.330	92.310	89.210	91.820	89.610	99.896%		
2	19:55:02	95.550	96.380	96.200	96.560	95.740	97.755%		
3	19:55:29	97.660	98.050	97.670	98.430	97.980	97.129%		
x		94.850%	95.583%	94.357%	95.603%	94.445%	98.260%		
σ		n/a	n/a	n/a	n/a	n/a	1.451%		
%RSD		3.398	3.090	4.791	3.562	4.591	1.476		

CCB7 4/2/2015 8:01:35 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

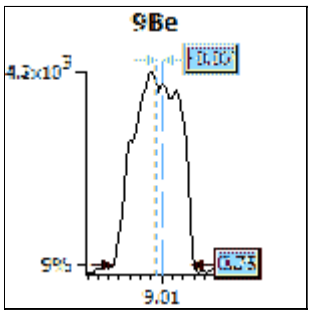
Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:02:02	75.350%	-0.080	0.188	-0.691	0.000	18.470	13.540	12.460
2	20:02:28	75.990%	-0.145	-0.188	-0.600	0.000	18.390	11.540	11.650
3	20:02:55	74.248%	-0.176	0.019	-0.948	0.000	19.830	11.660	11.490
x		75.196%	-0.134	0.006	-0.746	0.000	18.900	12.250	11.870
σ		0.881%	0.049	0.188	0.180	0.000	0.809	1.122	0.523
%RSD		1.172	36.620	3054.000	24.140	0.000	4.282	9.158	4.406
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:02:02	0.930	-3.287	0.000	0.321	29.470	26.420	74.539%	-0.420
2	20:02:28	0.941	-5.342	0.000	2.397	55.610	18.930	73.443%	-0.523
3	20:02:55	0.902	-3.974	0.000	-0.588	18.520	24.830	73.398%	-0.636
x		0.924	-4.201	0.000	0.710	34.530	23.390	73.793%	-0.526
σ		0.020	1.046	0.000	1.530	19.060	3.950	0.646%	0.108
%RSD		2.186	24.910	0.000	215.500	55.190	16.880	0.875	20.440
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:02:02	0.184	0.086	0.166	2.121	8.759	0.056	-0.067	0.104
2	20:02:28	0.044	0.100	0.205	1.749	13.290	0.053	-0.045	0.162
3	20:02:55	0.255	0.156	0.176	0.945	9.787	0.035	-0.029	0.027
x		0.161	0.114	0.182	1.605	10.610	0.048	-0.047	0.098
σ		0.107	0.037	0.020	0.601	2.378	0.012	0.019	0.068
%RSD		66.630	32.620	11.150	37.450	22.400	24.070	40.030	69.180
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:02:02	0.041	0.147	0.129	-0.755	-0.698	-1.524	0.000	0.062
2	20:02:28	0.027	0.202	0.186	-0.140	-1.295	-1.141	0.000	0.100
3	20:02:55	0.041	0.061	-0.002	0.263	-0.907	-0.013	0.000	0.073
x		0.036	0.136	0.105	-0.211	-0.967	-0.893	0.000	0.078
σ		0.008	0.071	0.096	0.513	0.303	0.786	0.000	0.020
%RSD		21.960	51.870	92.050	243.300	31.370	87.950	0.000	25.020
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:02:02	79.265%	-0.098	-0.095	89.440%	-0.084	-0.094	-0.037	0.048
2	20:02:28	79.211%	-0.077	-0.132	88.604%	-0.100	-0.093	-0.032	-0.008
3	20:02:55	77.730%	-0.119	-0.109	86.663%	-0.093	-0.096	0.054	-0.053
x		78.735%	-0.098	-0.112	88.236%	-0.092	-0.094	-0.005	-0.004
σ		0.871%	0.021	0.018	1.424%	0.008	0.002	0.051	0.051
%RSD		1.107	21.610	16.530	1.614	8.612	1.986	1034.000	1221.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:02:02	81.531%	-2.701	-0.808	-0.818	-0.030	0.041	89.925%	91.455%
2	20:02:28	81.952%	-2.799	-0.812	-0.808	0.032	0.024	88.889%	90.070%
3	20:02:55	80.239%	-2.642	-0.803	-0.800	0.006	0.106	86.380%	88.350%
x		81.241%	-2.714	-0.808	-0.809	0.002	0.057	88.398%	89.958%
σ		0.892%	0.079	0.005	0.009	0.031	0.043	1.823%	1.556%
%RSD		1.098	2.918	0.571	1.084	1282.000	75.070	2.062	1.729
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:02:02	0.017	0.021	0.006	0.005	0.016	103.538%		
2	20:02:28	0.016	0.020	0.003	-0.011	0.002	100.899%		
3	20:02:55	0.017	0.011	0.015	-0.010	0.013	97.881%		
x		0.017	0.017	0.008	-0.005	0.011	100.773%		
σ		0.001	0.006	0.006	0.009	0.007	2.831%		
%RSD		3.242	32.330	81.510	175.700	69.510	2.809		

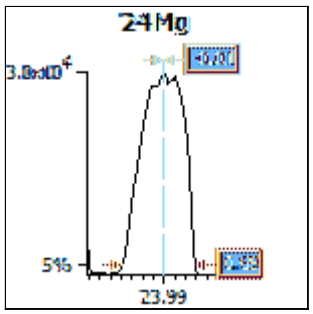
Performance Report

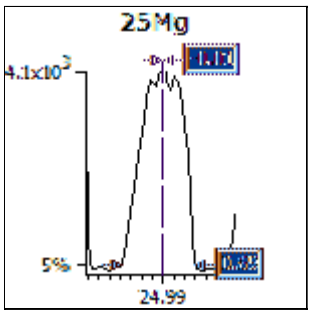
Sample details
Sample name : ITUNE
Acquired at : 4/2/2015 1:13:24 PM
Report name : EPA ILM05.2 / 6020A 2.1 [8/10/2014 1:06:06 PM]

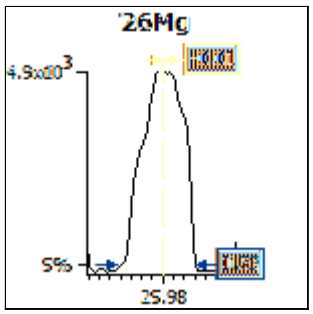
Mass Calibration verification

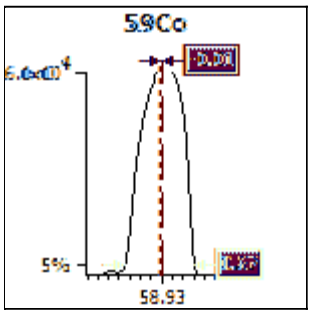
Acquisition parameters
Sweeps : 50
Dwell : 1.0 mSecs
Point spacing : 0.02 amu
Peak width measured at 5% of the peak maximum

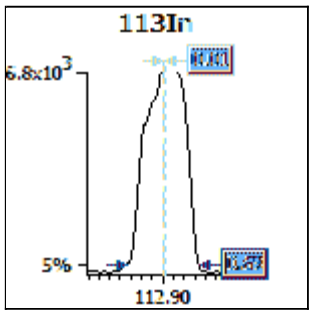


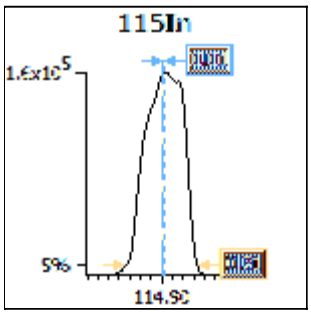


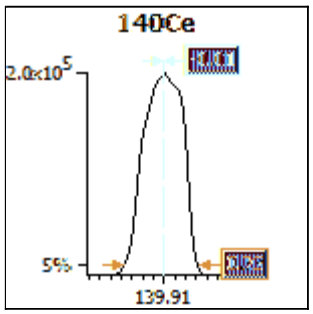


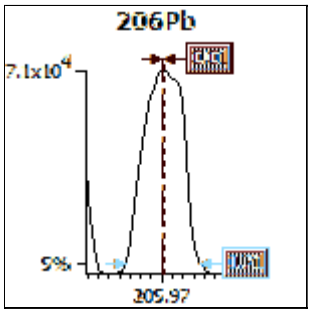


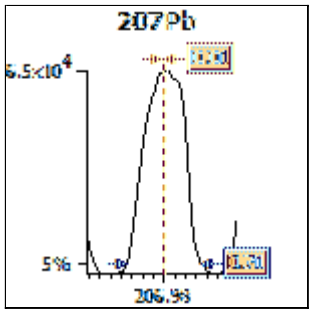


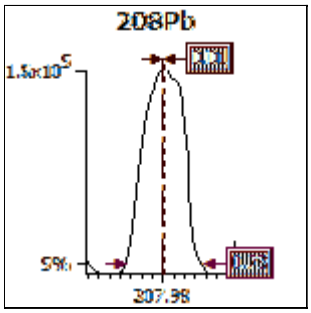












Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.90	0.40	0.10	0.75	-0.07
24Mg	0.90	0.40	0.10	0.69	-0.01
25Mg	0.90	0.40	0.10	0.69	-0.01
26Mg	0.90	0.40	0.10	0.73	-0.01
59Co	0.90	0.40	0.10	0.67	-0.01
113In	0.90	0.40	0.10	0.69	0.01
115In	0.90	0.40	0.10	0.71	0.01
140Ce	0.90	0.40	0.10	0.73	-0.01
206Pb	0.90	0.40	0.10	0.71	0.01
207Pb	0.90	0.40	0.10	0.71	0.01
208Pb	0.90	0.40	0.10	0.73	0.01

Sample details
Sample name : ITUNE
Acquired at : 4/2/2015 1:13:24 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	1:14:10 PM	90	3887	30492	4202	4893	66863	7051	162381
2	1:15:22 PM	90	3902	30600	4173	4924	67151	7055	161899
3	1:16:34 PM	91	4000	30822	4230	5021	67073	7096	161676
4	1:17:47 PM	86	4034	31038	4193	4813	66929	6988	158874
5	1:18:59 PM	84	3993	31077	4254	4959	66589	6892	158592
x		88	3963	30806	4211	4922	66921	7016	160684
σ		2.86	64.68	259.32	31.67	77.47	217.98	79.60	1801.95
%RSD		3.249	1.632	0.842	0.752	1.574	0.326	1.135	1.121

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	1:14:10 PM	204861	3781	71714	64982	153471	88
2	1:15:22 PM	203075	3784	70460	64169	152715	84
3	1:16:34 PM	202462	3709	70015	63442	151712	84
4	1:17:47 PM	199883	3668	69434	63189	150541	86
5	1:18:59 PM	199371	3735	68503	62262	148665	85
x		201931	3735	70025	63609	151421	85
σ		2287.08	49.15	1194.41	1026.59	1892.85	1.71
%RSD		1.133	1.316	1.706	1.614	1.250	2.006

Ratio results

Run	Time	156Ce O/140Ce
Ratio limits		<0.0600
1	1:14:10 PM	0
2	1:15:22 PM	0
3	1:16:34 PM	0
4	1:17:47 PM	0
5	1:18:59 PM	0
x		0.0185
σ		0.00
%RSD		0.9709

Result : The performance report passed.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Batch Number: 136963 Batch Start Date: 03/30/15 12:40 Batch Analyst: Baikadi, Ashwin

Batch Method: 3005A Batch End Date: 03/30/15 16:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAPITTICPMS 00020	MTAPITTMSA 00023	MTAPITTMSC 00029	
MB 180-136963/1		3005A, 6020A		50 mL	50 mL				
LCS 180-136963/2		3005A, 6020A		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-42353-B-1	HD-COD-SW-7-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-2	HD-COD-SW-6-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-3	HD-COD-SW-8-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-4	HD-COD-SW-9-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-5	HD-COD-SW-10-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-6	HD-COD-SW-11-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-7	HD-COD-SW-12-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-8	HD-COD-SW-13-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-9	HD-COD-SW-15-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-10	HD-COD-SW-16-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-11	HD-COD-SW-17-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-12	HD-COD-SW-20-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-13	HD-COD-SW-26-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-14	HD-COD-SW-27-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-15	HD-COD-SW-28-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-16	HD-COD-SW-29-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-19	HD-QC1-0/1-1	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-20	HD-MW-99S-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-20 MS	HD-MW-99S-0/1-0	3005A, 6020A	T	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-42353-B-20 MSD	HD-MW-99S-0/1-0	3005A, 6020A	T	50 mL	50 mL	0.5 mL	0.5 mL	0.5 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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Batch Number: 136963 Batch Start Date: 03/30/15 12:40 Batch Analyst: Baikadi, Ashwin

Batch Method: 3005A Batch End Date: 03/30/15 16:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAPITTICPMS 00020	MTAPITTMSA 00023	MTAPITTMSC 00029	
180-42353-B-21	HD-MW-99D-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-22	HD-MW-145A-0/1-0	3005A, 6020A	T	50 mL	50 mL				

Batch Notes	
Batch Comment	Metals A5
First End time	16:40
Lot # of hydrochloric acid	2.5 ml 1452459
Lot # of Nitric Acid	1.0 ml 1513887
Hot Block ID number	#1
Oven, Bath or Block Temperature 1	95
Pipette ID	L1201611U
Person who witnessed spiking	AB
First Start time	12:40
ID number of the thermometer	IP1-14 CF=0.0 C4
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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Batch Number: 137092 Batch Start Date: 03/31/15 12:05 Batch Analyst: Baikadi, Ashwin

Batch Method: 3005A Batch End Date: 03/31/15 16:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAPITTICPMS 00020	MTAPITTMSA 00023	MTAPITTMSC 00029	
MB 180-137092/1		3005A, 6020A		50 mL	50 mL				
LCS 180-137092/2		3005A, 6020A		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-42353-B-23	HD-MW-100S-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-23 MS	HD-MW-100S-0/1-0	3005A, 6020A	T	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-42353-B-23 MSD	HD-MW-100S-0/1-0	3005A, 6020A	T	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-42353-B-24	HD-MW-100I-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-25	HD-MW-93S-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42353-B-26	HD-MW-93D-0/1-0	3005A, 6020A	T	50 mL	50 mL				

Batch Notes	
Batch Comment	Metals A5
First End time	16:05
Lot # of hydrochloric acid	2.5 ml 1513884
Lot # of Nitric Acid	1.0 ml 1513887
Hot Block ID number	#1
Oven, Bath or Block Temperature 1	95
Oven, Bath or Block Temperature 2	95
Pipette ID	L1201611U
Person who witnessed spiking	AB
First Start time	12:05
ID number of the thermometer	IP1-14 CF=0.0 C4
Digestion Tube/Cup Lot #	1408268
Uncorrected Temperature	95 Celsius
Uncorrected Temperature 2	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: 180-42353-1

SDG No.:

Project: Harley Davidson

Client Sample ID	Lab Sample ID
HD-COD-SW-7-0/1-0	180-42353-1
HD-COD-SW-6-0/1-0	180-42353-2
HD-COD-SW-8-0/1-0	180-42353-3
HD-COD-SW-9-0/1-0	180-42353-4
HD-COD-SW-10-0/1-0	180-42353-5
HD-COD-SW-11-0/1-0	180-42353-6
HD-COD-SW-12-0/1-0	180-42353-7
HD-COD-SW-13-0/1-0	180-42353-8
HD-COD-SW-15-0/1-0	180-42353-9
HD-COD-SW-16-0/1-0	180-42353-10
HD-COD-SW-17-0/1-0	180-42353-11
HD-COD-SW-20-0/1-0	180-42353-12
HD-COD-SW-26-0/1-0	180-42353-13
HD-COD-SW-27-0/1-0	180-42353-14
HD-COD-SW-28-0/1-0	180-42353-15
HD-COD-SW-29-0/1-0	180-42353-16
HD-QC1-0/1-1	180-42353-19
HD-MW-99S-0/1-0	180-42353-20
HD-MW-99D-0/1-0	180-42353-21
HD-MW-145A-0/1-0	180-42353-22
HD-MW-100S-0/1-0	180-42353-23
HD-MW-100I-0/1-0	180-42353-24
HD-MW-93S-0/1-0	180-42353-25
HD-MW-93D-0/1-0	180-42353-26

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 180-42353-1

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 12:05

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	110	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	110	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-COD-SW-6-0/1-0 Lab Sample ID: 180-42353-2

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 10:40

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	110	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	110	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-COD-SW-8-0/1-0 Lab Sample ID: 180-42353-3

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 09:10

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	110	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	110	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-COD-SW-9-0/1-0 Lab Sample ID: 180-42353-4

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 12:20

Reporting Basis: WET Date Received: 03/25/2015 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-COD-SW-10-0/1-0 Lab Sample ID: 180-42353-5

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 09:41

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	190	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	190	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-COD-SW-11-0/1-0 Lab Sample ID: 180-42353-6

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 13:15

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	190	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	190	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-COD-SW-12-0/1-0 Lab Sample ID: 180-42353-7

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 13:25

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	180	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	180	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-COD-SW-13-0/1-0 Lab Sample ID: 180-42353-8

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 09:32

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	120	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	120	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-COD-SW-15-0/1-0 Lab Sample ID: 180-42353-9

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 13:45

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	240	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	240	5.0	0.41	mg/L		B	1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	0.41	mg/L	U		1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 180-42353-10

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 10:05

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	87	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	87	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-COD-SW-17-0/1-0 Lab Sample ID: 180-42353-11

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 10:15

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	190	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	190	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-COD-SW-20-0/1-0 Lab Sample ID: 180-42353-12

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 10:50

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	120	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	120	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-COD-SW-26-0/1-0 Lab Sample ID: 180-42353-13

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 11:45

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	180	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	180	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-COD-SW-27-0/1-0 Lab Sample ID: 180-42353-14

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 13:55

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	170	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	170	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-COD-SW-28-0/1-0 Lab Sample ID: 180-42353-15

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 13:00

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	180	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	180	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-COD-SW-29-0/1-0 Lab Sample ID: 180-42353-16

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 09:00

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	120	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	120	5.0	0.41	mg/L		B	1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	0.41	mg/L	U		1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 180-42353-19

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 08:00

Reporting Basis: WET Date Received: 03/25/2015 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-99S-0/1-0 Lab Sample ID: 180-42353-20

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 09:15

Reporting Basis: WET Date Received: 03/25/2015 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-99D-0/1-0 Lab Sample ID: 180-42353-21

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 13:05

Reporting Basis: WET Date Received: 03/25/2015 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-145A-0/1-0 Lab Sample ID: 180-42353-22

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 10:20

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	240	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	240	5.0	0.41	mg/L		B	1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	0.41	mg/L	U		1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: HD-MW-100S-0/1-0 Lab Sample ID: 180-42353-23

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 14:45

Reporting Basis: WET Date Received: 03/25/2015 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-100I-0/1-0 Lab Sample ID: 180-42353-24

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 14:00

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	290	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	290	5.0	0.41	mg/L		B	1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	0.41	mg/L	U		1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: HD-MW-93S-0/1-0 Lab Sample ID: 180-42353-25

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 14:35

Reporting Basis: WET Date Received: 03/25/2015 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-MW-93D-0/1-0 Lab Sample ID: 180-42353-26

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG ID.:

Matrix: Water Date Sampled: 03/24/2015 11:22

Reporting Basis: WET Date Received: 03/25/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	190	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	190	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.: 180-42353-1

SDG No.:

Analyst: CLL Batch Start Date: 03/31/2015

Reporting Units: mg/L Analytical Batch No.: 137006

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
13	CCV	05:18	Total Alkalinity as CaCO3 to pH 4.5	134	125	107	80-120		WALK125PPMCCV_00082
14	CCB	05:18	Total Alkalinity as CaCO3 to pH 4.5	2.06				J	
			Bicarbonate Alkalinity as CaCO3	2.06				J	
			Carbonate Alkalinity as CaCO3	5.0				U	
24	CCV	05:18	Total Alkalinity as CaCO3 to pH 4.5	134	125	107	80-120		WALK125PPMCCV_00082
25	CCB	05:18	Total Alkalinity as CaCO3 to pH 4.5	2.06				J	
			Bicarbonate Alkalinity as CaCO3	2.06				J	
			Carbonate Alkalinity as CaCO3	5.0				U	
36	CCV	05:51	Total Alkalinity as CaCO3 to pH 4.5	134	125	107	80-120		WALK125PPMCCV_00082
37	CCB	05:51	Total Alkalinity as CaCO3 to pH 4.5	2.06				J	
			Bicarbonate Alkalinity as CaCO3	2.06				J	
			Carbonate Alkalinity as CaCO3	5.0				U	

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

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 137006 Date: 03/31/2015 05:18							
SM 2320B	MB 180-137006/2	Total Alkalinity as CaCO3 to pH 4.5	4.12	J	mg/L	5.0	1
SM 2320B	MB 180-137006/2	Bicarbonate Alkalinity as CaCO3	4.12	J	mg/L	5.0	1
SM 2320B	MB 180-137006/2	Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	1
Batch ID: 137006 Date: 03/31/2015 05:18							
SM 2320B	MB 180-137006/27	Total Alkalinity as CaCO3 to pH 4.5	4.12	J	mg/L	5.0	1
SM 2320B	MB 180-137006/27	Bicarbonate Alkalinity as CaCO3	4.12	J	mg/L	5.0	1
SM 2320B	MB 180-137006/27	Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	1

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 137006 Date: 03/31/2015 05:18								
SM 2320B	HD-COD-SW-6-0/1-0	180-42353-2	Total Alkalinity as CaCO3 to pH 4.5	110	mg/L			
SM 2320B	HD-COD-SW-6-0/1-0	180-42353-2 DU	Total Alkalinity as CaCO3 to pH 4.5	101	mg/L	4	20	
SM 2320B	HD-COD-SW-6-0/1-0	180-42353-2	Bicarbonate Alkalinity as CaCO3	110	mg/L			
SM 2320B	HD-COD-SW-6-0/1-0	180-42353-2 DU	Bicarbonate Alkalinity as CaCO3	101	mg/L	4	20	
SM 2320B	HD-COD-SW-6-0/1-0	180-42353-2	Carbonate Alkalinity as CaCO3	5.0	mg/L			U
SM 2320B	HD-COD-SW-6-0/1-0	180-42353-2 DU	Carbonate Alkalinity as CaCO3	5.0	mg/L	NC	20	U
Batch ID: 137006 Date: 03/31/2015 05:18								
SM 2320B	HD-COD-SW-17-0/1-0	180-42353-11	Total Alkalinity as CaCO3 to pH 4.5	190	mg/L			
SM 2320B	HD-COD-SW-17-0/1-0	180-42353-11 DU	Total Alkalinity as CaCO3 to pH 4.5	190	mg/L	1	20	
SM 2320B	HD-COD-SW-17-0/1-0	180-42353-11	Bicarbonate Alkalinity as CaCO3	190	mg/L			
SM 2320B	HD-COD-SW-17-0/1-0	180-42353-11 DU	Bicarbonate Alkalinity as CaCO3	190	mg/L	1	20	
SM 2320B	HD-COD-SW-17-0/1-0	180-42353-11	Carbonate Alkalinity as CaCO3	5.0	mg/L			U
SM 2320B	HD-COD-SW-17-0/1-0	180-42353-11 DU	Carbonate Alkalinity as CaCO3	5.0	mg/L	NC	20	U
Batch ID: 137006 Date: 03/31/2015 05:18								
SM 2320B	HD-MW-99S-0/1-0	180-42353-20	Total Alkalinity as CaCO3 to pH 4.5	270	mg/L			
SM 2320B	HD-MW-99S-0/1-0	180-42353-20 DU	Total Alkalinity as CaCO3 to pH 4.5	272	mg/L	0	20	
SM 2320B	HD-MW-99S-0/1-0	180-42353-20	Bicarbonate Alkalinity as CaCO3	270	mg/L			
SM 2320B	HD-MW-99S-0/1-0	180-42353-20 DU	Bicarbonate Alkalinity as CaCO3	272	mg/L	0	20	
SM 2320B	HD-MW-99S-0/1-0	180-42353-20	Carbonate Alkalinity as CaCO3	5.0	mg/L			U
SM 2320B	HD-MW-99S-0/1-0	180-42353-20 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.: 180-42353-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 137006	Date: 03/31/2015 05:18										
						LCS Source: WALK250PPMPi_00091					
SM 2320B	LCS 180-137006/1	Total Alkalinity as CaCO3 to pH 4.5	251		mg/L	250	101	80-120			
Batch ID: 137006	Date: 03/31/2015 05:18										
						LCS Source: WALK250PPMPi_00091					
SM 2320B	LCS 180-137006/26	Total Alkalinity as CaCO3 to pH 4.5	249		mg/L	250	100	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: 180-42353-1

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: 180-42353-1

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.: 180-42353-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: SM 2320B

Start Date: 03/31/2015 05:18 End Date: 03/31/2015 05:51

Lab Sample Id	D/F	Type	Time	Analytes																												
				Alk	BALKCC	CarAlk																										
LCS 180-137006/1	1	T	05:18	X																												
MB 180-137006/2	1	T	05:18	X	X	X																										
180-42353-1	1	T	05:18	X	X	X																										
180-42353-2	1	T	05:18	X	X	X																										
180-42353-2 DU	1	T	05:18	X	X	X																										
180-42353-3	1	T	05:18	X	X	X																										
180-42353-4	1	T	05:18	X	X	X																										
180-42353-5	1	T	05:18	X	X	X																										
180-42353-6	1	T	05:18	X	X	X																										
180-42353-7	1	T	05:18	X	X	X																										
180-42353-8	1	T	05:18	X	X	X																										
180-42353-9	1	T	05:18	X	X	X																										
CCV 180-137006/13	1		05:18	X																												
CCB 180-137006/14	1		05:18	X	X	X																										
180-42353-10	1	T	05:18	X	X	X																										
180-42353-11	1	T	05:18	X	X	X																										
180-42353-11 DU	1	T	05:18	X	X	X																										
180-42353-12	1	T	05:18	X	X	X																										
180-42353-13	1	T	05:18	X	X	X																										
180-42353-14	1	T	05:18	X	X	X																										
180-42353-15	1	T	05:18	X	X	X																										
180-42353-16	1	T	05:18	X	X	X																										
180-42353-19	1	T	05:18	X	X	X																										
CCV 180-137006/24	1		05:18	X																												
CCB 180-137006/25	1		05:18	X	X	X																										
LCS 180-137006/26	1	T	05:18	X																												
MB 180-137006/27	1	T	05:18	X	X	X																										
180-42353-20	1	T	05:18	X	X	X																										
180-42353-20 DU	1	T	05:18	X	X	X																										
180-42353-21	1	T	05:18	X	X	X																										
180-42353-22	1	T	05:51	X	X	X																										
180-42353-23	1	T	05:51	X	X	X																										
180-42353-24	1	T	05:51	X	X	X																										
180-42353-25	1	T	05:51	X	X	X																										
180-42353-26	1	T	05:51	X	X	X																										
CCV 180-137006/36	1		05:51	X																												
CCB 180-137006/37	1		05:51	X	X	X																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: SM 2320B

Start Date: 03/31/2015 05:18 End Date: 03/31/2015 05:51

Lab Sample Id	D/F	Type	Time	Analytes																										
				Alk	BALKCC	CarAlk																								

Prep Types:
T = Total/NA

FORM XIII-IN

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

PITTSBURGH
ALKALINITY LOGSHEET
Method 2320B
NB-2015-012

16#033115ALK

Analyst: CHaldeyd
Reviewed By: SelDRC
pH Meter ID: AccumetXL5/#9402132
pH 4 Start: 4.02

Date: 3-31-15
Date: ~~03~~ 3-31-15
AD Batch: 137006
pH 4 End: 4.02

Job Number(s): 42353

Calculations:

$$\text{Alkalinity as } CaCO_3 \text{ mg/L} = \frac{\text{(mL of } H_2SO_4\text{) (N)(50,000)}}{\text{mL of Sample}}$$

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-2015-012

Sample ID	pH	Sample Volume	mL to pH 8.3	Ttl mL pH 4.5	N	T	P	OH^-	CO_3^{2}	HCO_3
LCS	10.91	50	6.2	12.2	.0206	251.32				
MB	5.81		0	0.2		4.12				
180-42353-1	7.43		0	5.2		107.12				
2	7.80		0	5.1		105.06				
2X	7.84		0	4.9		100.94				
3	7.67		0	5.3		109.18				
4	7.71		0	6.9		142.14				
5	8.30		0	9.0		185.4				
6	8.29		0	9.3		191.58				
7	7.63		0	8.7		179.22				
8	7.66		0	6.0		123.6				
9	7.41		0	11.5		236.9				
CCV	10.67		3.3	6.5		133.9				
CCB	5.69		0	0.1		2.06				
180-42353-10	7.64		0	4.2		86.52				
11	7.37		0	9.1		187.46				
11X	7.44		0	9.2		189.52				
12	7.84		0	5.8		119.48				
13	7.73		0	8.5		175.1				
14	7.58		0	8.4		173.04				
15	7.84		0	8.6		177.16				
16	7.59		0	5.8		119.48				
19	7.49		0	12.4		255.44				
CCV	10.74		3.4	6.5		133.9				
CCB	5.56		0	0.1		2.06				
LCS	10.97		6.2	12.1		249.26				

5/31-15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Pittsburgh
ALKALINITY LOGSHEET
Method 2320B
NB-2015-012

Sample ID	pH	Sample Volume	mL to pH 8.3	Ttl mL pH 4.5	N	T	P	OH^-	CO_3^{2}	HCO_3
MB	5.69	50	0	0.2	.0206	4.12				
180-42353-20	7.55		0	13.2		271.92				
20X	7.53		0	13.2		271.92				
21	7.60		0	12.8		263.68				
22	7.45		0	11.7		241.02				
23	7.53		0	12.7		261.62				
24	7.46		0	13.9		286.34				
25	7.95		0	10.7		220.42				
26	7.55		0	9.4		193.64				
CCV	10.59		3.3	6.5		133.9				
CCB	5.49		0	0.1		2.06				

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42353-1

SDG No.:

Batch Number: 137006 Batch Start Date: 03/31/15 05:18 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 180-137006/1		SM 2320B		50 mL	10.91 SU	0 mL	6.2 mL	6.2 mL	0 mL
MB 180-137006/2		SM 2320B		50 mL	5.81 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-1	HD-COD-SW-7-0/1-0	SM 2320B	T	50 mL	7.43 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-2	HD-COD-SW-6-0/1-0	SM 2320B	T	50 mL	7.80 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-2 DU	HD-COD-SW-6-0/1-0	SM 2320B	T	50 mL	7.84 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-3	HD-COD-SW-8-0/1-0	SM 2320B	T	50 mL	7.67 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-4	HD-COD-SW-9-0/1-0	SM 2320B	T	50 mL	7.71 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-5	HD-COD-SW-10-0/1-0	SM 2320B	T	50 mL	8.30 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-6	HD-COD-SW-11-0/1-0	SM 2320B	T	50 mL	8.29 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-7	HD-COD-SW-12-0/1-0	SM 2320B	T	50 mL	7.63 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-8	HD-COD-SW-13-0/1-0	SM 2320B	T	50 mL	7.66 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-9	HD-COD-SW-15-0/1-0	SM 2320B	T	50 mL	7.41 SU	0 mL	0 mL	0 mL	0 mL
CCV 180-137006/13		SM 2320B		50 mL	10.67 SU	0 mL	3.3 mL	3.3 mL	0 mL
CCB 180-137006/14		SM 2320B		50 mL	5.69 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-10	HD-COD-SW-16-0/1-0	SM 2320B	T	50 mL	7.64 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-11	HD-COD-SW-17-0/1-0	SM 2320B	T	50 mL	7.37 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-11 DU	HD-COD-SW-17-0/1-0	SM 2320B	T	50 mL	7.44 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-12	HD-COD-SW-20-0/1-0	SM 2320B	T	50 mL	7.84 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-13	HD-COD-SW-26-0/1-0	SM 2320B	T	50 mL	7.73 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-14	HD-COD-SW-27-0/1-0	SM 2320B	T	50 mL	7.58 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-15	HD-COD-SW-28-0/1-0	SM 2320B	T	50 mL	7.84 SU	0 mL	0 mL	0 mL	0 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.: 180-42353-1

SDG No.:

Batch Number: 137006 Batch Start Date: 03/31/15 05:18 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
180-42353-A-16	HD-COD-SW-29-0/1-0	SM 2320B	T	50 mL	7.59 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-19	HD-QC1-0/1-1	SM 2320B	T	50 mL	7.49 SU	0 mL	0 mL	0 mL	0 mL
CCV 180-137006/24		SM 2320B		50 mL	10.74 SU	0 mL	3.4 mL	3.4 mL	0 mL
CCB 180-137006/25		SM 2320B		50 mL	5.56 SU	0 mL	0 mL	0 mL	0 mL
LCS 180-137006/26		SM 2320B		50 mL	10.97 SU	0 mL	6.2 mL	6.2 mL	0 mL
MB 180-137006/27		SM 2320B		50 mL	5.69 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-20	HD-MW-99S-0/1-0	SM 2320B	T	50 mL	7.55 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-20 DU	HD-MW-99S-0/1-0	SM 2320B	T	50 mL	7.53 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-21	HD-MW-99D-0/1-0	SM 2320B	T	50 mL	7.60 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-22	HD-MW-145A-0/1-0	SM 2320B	T	50 mL	7.45 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-23	HD-MW-100S-0/1-0	SM 2320B	T	50 mL	7.53 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-24	HD-MW-100I-0/1-0	SM 2320B	T	50 mL	7.46 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-25	HD-MW-93S-0/1-0	SM 2320B	T	50 mL	7.95 SU	0 mL	0 mL	0 mL	0 mL
180-42353-A-26	HD-MW-93D-0/1-0	SM 2320B	T	50 mL	7.55 SU	0 mL	0 mL	0 mL	0 mL
CCV 180-137006/36		SM 2320B		50 mL	10.59 SU	0 mL	3.3 mL	3.3 mL	0 mL
CCB 180-137006/37		SM 2320B		50 mL	5.49 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 180-137006/1		SM 2320B		6.0 mL	6 mL	Case 4	247.2 mg/L	4.12 mg/L	0 mg/L
MB 180-137006/2		SM 2320B		0.2 mL	0.2 mL	Case 1	0 mg/L	0 mg/L	4.12 mg/L
180-42353-A-1	HD-COD-SW-7-0/1-0	SM 2320B	T	5.2 mL	5.2 mL	Case 1	0 mg/L	0 mg/L	107.12 mg/L
180-42353-A-2	HD-COD-SW-6-0/1-0	SM 2320B	T	5.1 mL	5.1 mL	Case 1	0 mg/L	0 mg/L	105.06 mg/L
180-42353-A-2 DU	HD-COD-SW-6-0/1-0	SM 2320B	T	4.9 mL	4.9 mL	Case 1	0 mg/L	0 mg/L	100.94 mg/L
180-42353-A-3	HD-COD-SW-8-0/1-0	SM 2320B	T	5.3 mL	5.3 mL	Case 1	0 mg/L	0 mg/L	109.18 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.: 180-42353-1

SDG No.:

Batch Number: 137006 Batch Start Date: 03/31/15 05:18 Batch Analyst: Loheyde, Cheryl

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStop2	TitrantVolume2	CalcMsg	carb	hydr	bCarb
180-42353-A-4	HD-COD-SW-9-0/1-0	SM 2320B	T	6.9 mL	6.9 mL	Case 1	0 mg/L	0 mg/L	142.14 mg/L
180-42353-A-5	HD-COD-SW-10-0/1-0	SM 2320B	T	9.0 mL	9 mL	Case 1	0 mg/L	0 mg/L	185.4 mg/L
180-42353-A-6	HD-COD-SW-11-0/1-0	SM 2320B	T	9.3 mL	9.3 mL	Case 1	0 mg/L	0 mg/L	191.58 mg/L
180-42353-A-7	HD-COD-SW-12-0/1-0	SM 2320B	T	8.7 mL	8.7 mL	Case 1	0 mg/L	0 mg/L	179.22 mg/L
180-42353-A-8	HD-COD-SW-13-0/1-0	SM 2320B	T	6.0 mL	6 mL	Case 1	0 mg/L	0 mg/L	123.6 mg/L
180-42353-A-9	HD-COD-SW-15-0/1-0	SM 2320B	T	11.5 mL	11.5 mL	Case 1	0 mg/L	0 mg/L	236.9 mg/L
CCV 180-137006/13		SM 2320B		3.2 mL	3.2 mL	Case 4	131.84 mg/L	2.06 mg/L	0 mg/L
CCB 180-137006/14		SM 2320B		0.1 mL	0.1 mL	Case 1	0 mg/L	0 mg/L	2.06 mg/L
180-42353-A-10	HD-COD-SW-16-0/1-0	SM 2320B	T	4.2 mL	4.2 mL	Case 1	0 mg/L	0 mg/L	86.52 mg/L
180-42353-A-11	HD-COD-SW-17-0/1-0	SM 2320B	T	9.1 mL	9.1 mL	Case 1	0 mg/L	0 mg/L	187.46 mg/L
180-42353-A-11 DU	HD-COD-SW-17-0/1-0	SM 2320B	T	9.2 mL	9.2 mL	Case 1	0 mg/L	0 mg/L	189.52 mg/L
180-42353-A-12	HD-COD-SW-20-0/1-0	SM 2320B	T	5.8 mL	5.8 mL	Case 1	0 mg/L	0 mg/L	119.48 mg/L
180-42353-A-13	HD-COD-SW-26-0/1-0	SM 2320B	T	8.5 mL	8.5 mL	Case 1	0 mg/L	0 mg/L	175.1 mg/L
180-42353-A-14	HD-COD-SW-27-0/1-0	SM 2320B	T	8.4 mL	8.4 mL	Case 1	0 mg/L	0 mg/L	173.04 mg/L
180-42353-A-15	HD-COD-SW-28-0/1-0	SM 2320B	T	8.6 mL	8.6 mL	Case 1	0 mg/L	0 mg/L	177.16 mg/L
180-42353-A-16	HD-COD-SW-29-0/1-0	SM 2320B	T	5.8 mL	5.8 mL	Case 1	0 mg/L	0 mg/L	119.48 mg/L
180-42353-A-19	HD-QC1-0/1-1	SM 2320B	T	12.4 mL	12.4 mL	Case 1	0 mg/L	0 mg/L	255.44 mg/L
CCV 180-137006/24		SM 2320B		3.1 mL	3.1 mL	Case 4	127.72 mg/L	6.18000000000001 mg/L	0 mg/L
CCB 180-137006/25		SM 2320B		0.1 mL	0.1 mL	Case 1	0 mg/L	0 mg/L	2.06 mg/L
LCS 180-137006/26		SM 2320B		5.9 mL	5.9 mL	Case 4	243.08 mg/L	6.18000000000001 mg/L	0 mg/L
MB 180-137006/27		SM 2320B		0.2 mL	0.2 mL	Case 1	0 mg/L	0 mg/L	4.12 mg/L
180-42353-A-20	HD-MW-99S-0/1-0	SM 2320B	T	13.2 mL	13.2 mL	Case 1	0 mg/L	0 mg/L	271.92 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.: 180-42353-1

SDG No.:

Batch Number: 137006 Batch Start Date: 03/31/15 05:18 Batch Analyst: Loheyde, Cheryl

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStop2	TitrantVolume2	CalcMsg	carb	hydr	bCarb
180-42353-A-20 DU	HD-MW-99S-0/1-0	SM 2320B	T	13.2 mL	13.2 mL	Case 1	0 mg/L	0 mg/L	271.92 mg/L
180-42353-A-21	HD-MW-99D-0/1-0	SM 2320B	T	12.8 mL	12.8 mL	Case 1	0 mg/L	0 mg/L	263.68 mg/L
180-42353-A-22	HD-MW-145A-0/1-0	SM 2320B	T	11.7 mL	11.7 mL	Case 1	0 mg/L	0 mg/L	241.02 mg/L
180-42353-A-23	HD-MW-100S-0/1-0	SM 2320B	T	12.7 mL	12.7 mL	Case 1	0 mg/L	0 mg/L	261.62 mg/L
180-42353-A-24	HD-MW-100I-0/1-0	SM 2320B	T	13.9 mL	13.9 mL	Case 1	0 mg/L	0 mg/L	286.34 mg/L
180-42353-A-25	HD-MW-93S-0/1-0	SM 2320B	T	10.7 mL	10.7 mL	Case 1	0 mg/L	0 mg/L	220.42 mg/L
180-42353-A-26	HD-MW-93D-0/1-0	SM 2320B	T	9.4 mL	9.4 mL	Case 1	0 mg/L	0 mg/L	193.64 mg/L
CCV 180-137006/36		SM 2320B		3.2 mL	3.2 mL	Case 4	131.84 mg/L	2.06 mg/L	0 mg/L
CCB 180-137006/37		SM 2320B		0.1 mL	0.1 mL	Case 1	0 mg/L	0 mg/L	2.06 mg/L

Lab Sample ID	Client Sample ID	Method Chain	Basis	pAlk	tAlk	FinalAmount	WALK125PPMCCV 00082	WALK250PPMPi 00091	
LCS 180-137006/1		SM 2320B		127.72 mg/L	251.32 mg/L	50 mL		50 mL	
MB 180-137006/2		SM 2320B		0 mg/L	4.12 mg/L	50 mL			
180-42353-A-1	HD-COD-SW-7-0/1-0	SM 2320B	T	0 mg/L	107.12 mg/L	50 mL			
180-42353-A-2	HD-COD-SW-6-0/1-0	SM 2320B	T	0 mg/L	105.06 mg/L	50 mL			
180-42353-A-2 DU	HD-COD-SW-6-0/1-0	SM 2320B	T	0 mg/L	100.94 mg/L	50 mL			
180-42353-A-3	HD-COD-SW-8-0/1-0	SM 2320B	T	0 mg/L	109.18 mg/L	50 mL			
180-42353-A-4	HD-COD-SW-9-0/1-0	SM 2320B	T	0 mg/L	142.14 mg/L	50 mL			
180-42353-A-5	HD-COD-SW-10-0/1-0	SM 2320B	T	0 mg/L	185.4 mg/L	50 mL			
180-42353-A-6	HD-COD-SW-11-0/1-0	SM 2320B	T	0 mg/L	191.58 mg/L	50 mL			
180-42353-A-7	HD-COD-SW-12-0/1-0	SM 2320B	T	0 mg/L	179.22 mg/L	50 mL			
180-42353-A-8	HD-COD-SW-13-0/1-0	SM 2320B	T	0 mg/L	123.6 mg/L	50 mL			
180-42353-A-9	HD-COD-SW-15-0/1-0	SM 2320B	T	0 mg/L	236.9 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.: 180-42353-1

SDG No.:

Batch Number: 137006 Batch Start Date: 03/31/15 05:18 Batch Analyst: Loheyde, Cheryl

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	pAlk	tAlk	FinalAmount	WALK125PPMCCV 00082	WALK250PPMPi 00091	
CCV 180-137006/13		SM 2320B		67.98 mg/L	133.9 mg/L	50 mL	50 mL		
CCB 180-137006/14		SM 2320B		0 mg/L	2.06 mg/L	50 mL			
180-42353-A-10	HD-COD-SW-16-0/1-0	SM 2320B	T	0 mg/L	86.52 mg/L	50 mL			
180-42353-A-11	HD-COD-SW-17-0/1-0	SM 2320B	T	0 mg/L	187.46 mg/L	50 mL			
180-42353-A-11 DU	HD-COD-SW-17-0/1-0	SM 2320B	T	0 mg/L	189.52 mg/L	50 mL			
180-42353-A-12	HD-COD-SW-20-0/1-0	SM 2320B	T	0 mg/L	119.48 mg/L	50 mL			
180-42353-A-13	HD-COD-SW-26-0/1-0	SM 2320B	T	0 mg/L	175.1 mg/L	50 mL			
180-42353-A-14	HD-COD-SW-27-0/1-0	SM 2320B	T	0 mg/L	173.04 mg/L	50 mL			
180-42353-A-15	HD-COD-SW-28-0/1-0	SM 2320B	T	0 mg/L	177.16 mg/L	50 mL			
180-42353-A-16	HD-COD-SW-29-0/1-0	SM 2320B	T	0 mg/L	119.48 mg/L	50 mL			
180-42353-A-19	HD-QC1-0/1-1	SM 2320B	T	0 mg/L	255.44 mg/L	50 mL			
CCV 180-137006/24		SM 2320B		70.04 mg/L	133.9 mg/L	50 mL	50 mL		
CCB 180-137006/25		SM 2320B		0 mg/L	2.06 mg/L	50 mL			
LCS 180-137006/26		SM 2320B		127.72 mg/L	249.26 mg/L	50 mL		50 mL	
MB 180-137006/27		SM 2320B		0 mg/L	4.12 mg/L	50 mL			
180-42353-A-20	HD-MW-99S-0/1-0	SM 2320B	T	0 mg/L	271.92 mg/L	50 mL			
180-42353-A-20 DU	HD-MW-99S-0/1-0	SM 2320B	T	0 mg/L	271.92 mg/L	50 mL			
180-42353-A-21	HD-MW-99D-0/1-0	SM 2320B	T	0 mg/L	263.68 mg/L	50 mL			
180-42353-A-22	HD-MW-145A-0/1-0	SM 2320B	T	0 mg/L	241.02 mg/L	50 mL			
180-42353-A-23	HD-MW-100S-0/1-0	SM 2320B	T	0 mg/L	261.62 mg/L	50 mL			
180-42353-A-24	HD-MW-100I-0/1-0	SM 2320B	T	0 mg/L	286.34 mg/L	50 mL			
180-42353-A-25	HD-MW-93S-0/1-0	SM 2320B	T	0 mg/L	220.42 mg/L	50 mL			
180-42353-A-26	HD-MW-93D-0/1-0	SM 2320B	T	0 mg/L	193.64 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.: 180-42353-1

SDG No.:

Batch Number: 137006 Batch Start Date: 03/31/15 05:18 Batch Analyst: Loheyde, Cheryl

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	pAlk	tAlk	FinalAmount	WALK125PPMCCV 00082	WALK250PPMPi 00091	
CCV 180-137006/36		SM 2320B		67.98 mg/L	133.9 mg/L	50 mL	50 mL		
CCB 180-137006/37		SM 2320B		0 mg/L	2.06 mg/L	50 mL			

Batch Notes	
Batch Comment	PH 4 START: 4.02 PH 4 END: 4.02
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: 3/24/2015	COC No: TAP2015032401
Groundwater Sciences Corporation	Tel/Fax: 717-901-8181 / (717) 657-1611	Lab Contact: Carrie Gamber	Carrier: FEDEX	1 of 2 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			er 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			

180-42353 Chain of Custody

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)	Sample Specific Notes:
HD-COD-SW-6-0/1-0	3/24/15	10:40	Groundwater	Water	5	X	X	X	
HD-COD-SW-7-0/1-0	3/24/15	12:05	Groundwater	Water	5	X	X	X	
HD-COD-SW-8-0/1-0	3/24/15	9:10	Groundwater	Water	5	X	X	X	
HD-COD-SW-9-0/1-0	3/24/15	12:20	Groundwater	Water	5	X	X	X	
HD-COD-SW-10-0/1-0	3/24/15	9:41	Groundwater	Water	5	X	X	X	
HD-COD-SW-11-0/1-0	3/24/15	13:15	Groundwater	Water	5	X	X	X	
HD-COD-SW-12-0/1-0	3/24/15	13:25	Groundwater	Water	5	X	X	X	
HD-COD-SW-13-0/1-0	3/24/15	9:32	Groundwater	Water	5	X	X	X	
HD-COD-SW-15-0/1-0	3/24/15	13:45	Groundwater	Water	5	X	X	X	
HD-COD-SW-16-0/1-0	3/24/15	10:05	Groundwater	Water	5	X	X	X	
HD-COD-SW-17-0/1-0	3/24/15	10:15	Groundwater	Water	5	X	X	X	
HD-COD-SW-20-0/1-0	3/24/15	10:50	Groundwater	Water	5	X	X	X	
HD-COD-SW-26-0/1-0	3/24/15	11:45	Groundwater	Water	5	X	X	X	
HD-COD-SW-27-0/1-0	3/24/15	13:55	Groundwater	Water	5	X	X	X	
HD-COD-SW-28-0/1-0	3/24/15	13:00	Groundwater	Water	5	X	X	X	
HD-COD-SW-29-0/1-0	3/24/15	9:00	Groundwater	Water	5	X	X	X	
HD-QC1-0/1-2	3/24/15	12:00	Trip Blank	Water	2	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	

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* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: CLP Like Deliverables

Relinquished by (Print and Sign):	Company: GSC	Date/Time: 3/24/15 1530	Received by:	Company: FAKOP	Date/Time: 3/24/15 1530
Relinquished by:	Company: TA	Date/Time: 3/24/15 1730	Received by: Debbie Watson	Company: TAP	Date/Time: 3-25-15 8:30
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

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: 3/24/2015	COC No: TAP2015032402
Groundwater Sciences Corporation	Tel/Fax: 717-901-8181 / (717) 657-1611	Lab Contact: Carrie Gamber	Carrier: FEDEX	2 of 2 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. 2
(717) 657-1611 FAX	■ 2 weeks			SDG No.
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)	Sample Specific Notes:
HD-QC2-0/1-2	3/24/15	12:01	Groundwater	Water	2	X			
HD-QC1-0/1-1	3/24/15	8:00	Groundwater	Water	5	X	X	X	
HD-MW-99S-0/1-0	3/24/15	9:15	Groundwater	Water	5	X	X	X	
HD-MW-99D-0/1-0	3/24/15	13:05	Groundwater	Water	5	X	X	X	
HD-MW-145A-0/1-0	3/24/15	10:20	Groundwater	Water	5	X	X	X	
HD-MW-100S-0/1-0	3/24/15	14:45	Groundwater	Water	5	X	X	X	
HD-MW-100I-0/1-0	3/24/15	14:00	Groundwater	Water	5	X	X	X	
HD-MW-99S-0/1-0 MS	3/24/15	9:15	Groundwater	Water	5	X	X	X	
HD-MW-99S-0/1-0 MSD	3/24/15	9:15	Groundwater	Water	5	X	X	X	
HD-MW-93S-0/1-0	3/24/15	14:35	Groundwater	Water	5	X	X	X	
HD-MW-93D-0/1-0	3/24/15	11:22	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	

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* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **CLP Like Deliverables**

Relinquished by (Print and Sign):	Company: GSC	Date/Time: 3/24/15 1530	Received by:	Company: TA KOP	Date/Time: 3/24/15 1530
Relinquished by:	Company: TA	Date/Time: 3/24/15 1730	Received by: Debbie Watson	Company: TAP	Date/Time: 3-25-15 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: 24MAR15
ACTWGT: 51.0 LB
CAD: 8490299/INET3E

BILL RECIPIENT

180-42353 Waybill

TO SAMPLE RECEIPT
TEST AMERICA - PITTSBURGH
301 ALPHA DR

PITTSBURGH PA 15238
(412) 963-7058 REF:
INV:
PO: DEPT:

King of Prussia
450

FedEx Express

2 of 2
MPS# 0263 7732 0543 9210
Mstr# 7732 0543 9014

WED - 25 MAR 3:00P
STANDARD OVERNIGHT
0201

EV AGCA

15238
PA-US PIT

Uncorrected temp 1.2 °C
Thermometer ID 6
CF 0 Initials DW

PT-WI-SR-001 effective 7/26/13

Part # 156297-435 REV2 11/14

510) 337-9992

SHIP DATE: 24MAR15
ACTWGT: 55.0 LB
CAD: 8490299/INET3610

BILL RECIPIENT

PA 19406

UNITED STATES US

TO SAMPLE RECEIPT
TEST AMERICA - PITTSBURGH
301 ALPHA DR

PITTSBURGH PA 15238
(412) 963-7058 REF:
INV:
PO: DEPT:

FedEx Express

1 of 2
TRK# 0201 7732 0543 9014
MASTER

WED - 25 MAR 3:00P
STANDARD OVERNIGHT

EV AGCA

15238
PA-US PIT

Uncorrected temp 2.4 °C
Thermometer ID 6
CF 0 Initials DW

PT-WI-SR-001 effective 7/26/13

Part # 156297-435 REV2 11/14

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-42353-1

Login Number: 42353

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.	False	See narrative
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	