

ANALYTICAL REPORT

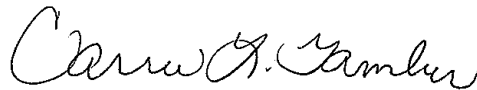
Job Number: 180-48564-1

Job Description: Harley Davidson

For:

Groundwater Sciences Corporation
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Attention: Allan Miller



Approved for release.
Carrie L. Gamber
Senior Project Manager
11/19/2015 8:15 AM

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11/19/2015
Revision: 1

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Definitions/Glossary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
^c	CCV Recovery is outside acceptance 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 is outside acceptance limits.

Glossary

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

CASE NARRATIVE

Client: Groundwater Sciences Corporation

Project: Harley Davidson

Report Number: 180-48564-1 REVISED

NOTE: This report has been revised to update the report formatting.

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 10/8/2015 8:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° C.

VOLATILES

The following samples were diluted to bring the concentration of target analytes within the calibration range: HD-CW-3-0/1-0 (180-48564-4), HD-CW-7A-0/1-0 (180-48564-9), and HD-QC5-0/1-1 (180-48564-11). Elevated reporting limits (RLs) are provided.

cis-1,2-Dichloroethene, Tetrachloroethene and Trichloroethene failed the recovery criteria for the MS and/or MSD of sample HD-CW-6-0/1-0 (180-48564-7) in batch 180-157127.

Internal standard (ISTD) response for TBA-d9 for the following sample was outside acceptance criteria: HD-CW-7-0/1-0 (180-48564-8). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

The continuing calibration verification (CCV) analyzed in batch 157127 was outside the method criteria for the following analytes: 1,4-Dioxane, Acetone, Chloroethane, Vinyl chloride, and Bromomethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 157249 was outside the method criteria for the following analytes: Vinyl chloride, Bromomethane, Chloromethane, Trichlorofluoromethane, Acrolein, Iodomethane and Chlorobromomethane. A Low Level CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 157327 was outside the method criteria for the following analyte(s): Acetone and Chlorobromomethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 157435 was outside the method criteria for the following analytes: Bromomethane, Chloroethane, and Vinyl chloride. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Lab Sample ID: 180-48564-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.2		1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	1.1		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.19	J	1.0	0.15	ug/L	1		8260C	Total/NA

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

Lab Sample ID: 180-48564-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.31	J	1.0	0.17	ug/L	1		8260C	Total/NA
Trichloroethene	28		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	1.9		1.0	0.15	ug/L	1		8260C	Total/NA

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

Lab Sample ID: 180-48564-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.78	J	1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	4.9		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	3.2		1.0	0.15	ug/L	1		8260C	Total/NA

Client Sample ID: HD-CW-3-0/1-0

Lab Sample ID: 180-48564-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromomethane	0.55	J ^c	1.0	0.31	ug/L	1		8260C	Total/NA
Acetone	490	E	5.0	2.5	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	1.8		1.0	0.17	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	36		1.0	0.24	ug/L	1		8260C	Total/NA
Dibromochloromethane	1.7		1.0	0.14	ug/L	1		8260C	Total/NA
Bromoform	12		1.0	0.19	ug/L	1		8260C	Total/NA
Acetone - DL	460	^c	100	50	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene - DL	30		20	4.7	ug/L	20		8260C	Total/NA
Bromoform - DL	8.8	J	20	3.8	ug/L	20		8260C	Total/NA

Client Sample ID: HD-CW-4-0/1-0

Lab Sample ID: 180-48564-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.30	J	1.0	0.28	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	31		1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	3.5		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.86	J	1.0	0.15	ug/L	1		8260C	Total/NA

Client Sample ID: HD-CW-5-0/1-0

Lab Sample ID: 180-48564-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.6		1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	5.3		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	15		1.0	0.15	ug/L	1		8260C	Total/NA

Client Sample ID: HD-CW-6-0/1-0

Lab Sample ID: 180-48564-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	24	F1	1.0	0.24	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pittsburgh

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

Client Sample ID: HD-CW-6-0/1-0 (Continued)

Lab Sample ID: 180-48564-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	7.5	F1	1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	40	F1	1.0	0.15	ug/L	1		8260C	Total/NA

Client Sample ID: HD-CW-7-0/1-0

Lab Sample ID: 180-48564-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.28	J	1.0	0.28	ug/L	1		8260C	Total/NA
Chloroform	0.83	J	1.0	0.17	ug/L	1		8260C	Total/NA
Trichloroethene	0.76	J	1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	1.0		1.0	0.15	ug/L	1		8260C	Total/NA

Client Sample ID: HD-CW-7A-0/1-0

Lab Sample ID: 180-48564-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.0		1.0	0.24	ug/L	1		8260C	Total/NA
Chloroform	1.4		1.0	0.17	ug/L	1		8260C	Total/NA
Trichloroethene	140	E	1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	8.6		1.0	0.15	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene - DL	1.8	J	5.0	1.2	ug/L	5		8260C	Total/NA
Chloroform - DL	1.2	J	5.0	0.85	ug/L	5		8260C	Total/NA
Trichloroethene - DL	130		5.0	0.72	ug/L	5		8260C	Total/NA
Tetrachloroethene - DL	7.4		5.0	0.74	ug/L	5		8260C	Total/NA

Client Sample ID: HD-QC-16-0/1-2

Lab Sample ID: 180-48564-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.5	J ^c	5.0	2.5	ug/L	1		8260C	Total/NA

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

Lab Sample ID: 180-48564-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.0		1.0	0.24	ug/L	1		8260C	Total/NA
Chloroform	1.3		1.0	0.17	ug/L	1		8260C	Total/NA
Trichloroethene	140	E	1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	9.2		1.0	0.15	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene - DL	1.6	J	5.0	1.2	ug/L	5		8260C	Total/NA
Chloroform - DL	1.1	J	5.0	0.85	ug/L	5		8260C	Total/NA
Trichloroethene - DL	120		5.0	0.72	ug/L	5		8260C	Total/NA
Tetrachloroethene - DL	6.4		5.0	0.74	ug/L	5		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pittsburgh

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

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

Date Collected: 10/06/15 09:15

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			10/16/15 19:58	1
Vinyl chloride	1.0	U ^c	1.0	0.23	ug/L			10/16/15 19:58	1
Bromomethane	1.0	U ^c	1.0	0.31	ug/L			10/16/15 19:58	1
Chloroethane	1.0	U ^c	1.0	0.21	ug/L			10/16/15 19:58	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/16/15 19:58	1
Acetone	5.0	U	5.0	2.5	ug/L			10/16/15 19:58	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			10/16/15 19:58	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			10/16/15 19:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/16/15 19:58	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			10/16/15 19:58	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			10/16/15 19:58	1
cis-1,2-Dichloroethene	1.2		1.0	0.24	ug/L			10/16/15 19:58	1
Bromochloromethane	1.0	U ^c	1.0	0.18	ug/L			10/16/15 19:58	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			10/16/15 19:58	1
Chloroform	1.0	U	1.0	0.17	ug/L			10/16/15 19:58	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			10/16/15 19:58	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			10/16/15 19:58	1
Benzene	1.0	U	1.0	0.11	ug/L			10/16/15 19:58	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/16/15 19:58	1
Trichloroethene	1.1		1.0	0.14	ug/L			10/16/15 19:58	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			10/16/15 19:58	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			10/16/15 19:58	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/16/15 19:58	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			10/16/15 19:58	1
Toluene	1.0	U	1.0	0.15	ug/L			10/16/15 19:58	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			10/16/15 19:58	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/16/15 19:58	1
Tetrachloroethene	0.19	J	1.0	0.15	ug/L			10/16/15 19:58	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			10/16/15 19:58	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			10/16/15 19:58	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			10/16/15 19:58	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/16/15 19:58	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			10/16/15 19:58	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			10/16/15 19:58	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			10/16/15 19:58	1
Styrene	1.0	U	1.0	0.097	ug/L			10/16/15 19:58	1
Bromoform	1.0	U	1.0	0.19	ug/L			10/16/15 19:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/16/15 19:58	1
Acrylonitrile	20	U	20	0.55	ug/L			10/16/15 19:58	1
1,4-Dioxane	200	U	200	34	ug/L			10/16/15 19:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		64 - 135		10/16/15 19:58	1
Toluene-d8 (Surr)	108		71 - 118		10/16/15 19:58	1
4-Bromofluorobenzene (Surr)	94		70 - 118		10/16/15 19:58	1
Dibromofluoromethane (Surr)	92		70 - 128		10/16/15 19:58	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

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

Date Collected: 10/06/15 08:05

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			10/16/15 20:23	1
Vinyl chloride	1.0	U ^c	1.0	0.23	ug/L			10/16/15 20:23	1
Bromomethane	1.0	U ^c	1.0	0.31	ug/L			10/16/15 20:23	1
Chloroethane	1.0	U ^c	1.0	0.21	ug/L			10/16/15 20:23	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/16/15 20:23	1
Acetone	5.0	U	5.0	2.5	ug/L			10/16/15 20:23	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			10/16/15 20:23	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			10/16/15 20:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/16/15 20:23	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			10/16/15 20:23	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			10/16/15 20:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/16/15 20:23	1
Bromochloromethane	1.0	U ^c	1.0	0.18	ug/L			10/16/15 20:23	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			10/16/15 20:23	1
Chloroform	0.31	J	1.0	0.17	ug/L			10/16/15 20:23	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			10/16/15 20:23	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			10/16/15 20:23	1
Benzene	1.0	U	1.0	0.11	ug/L			10/16/15 20:23	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/16/15 20:23	1
Trichloroethene	28		1.0	0.14	ug/L			10/16/15 20:23	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			10/16/15 20:23	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			10/16/15 20:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/16/15 20:23	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			10/16/15 20:23	1
Toluene	1.0	U	1.0	0.15	ug/L			10/16/15 20:23	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			10/16/15 20:23	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/16/15 20:23	1
Tetrachloroethene	1.9		1.0	0.15	ug/L			10/16/15 20:23	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			10/16/15 20:23	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			10/16/15 20:23	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			10/16/15 20:23	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/16/15 20:23	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			10/16/15 20:23	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			10/16/15 20:23	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			10/16/15 20:23	1
Styrene	1.0	U	1.0	0.097	ug/L			10/16/15 20:23	1
Bromoform	1.0	U	1.0	0.19	ug/L			10/16/15 20:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/16/15 20:23	1
Acrylonitrile	20	U	20	0.55	ug/L			10/16/15 20:23	1
1,4-Dioxane	200	U	200	34	ug/L			10/16/15 20:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		64 - 135		10/16/15 20:23	1
Toluene-d8 (Surr)	109		71 - 118		10/16/15 20:23	1
4-Bromofluorobenzene (Surr)	90		70 - 118		10/16/15 20:23	1
Dibromofluoromethane (Surr)	97		70 - 128		10/16/15 20:23	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

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

Date Collected: 10/07/15 07:25

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			10/16/15 20:47	1
Vinyl chloride	1.0	U ^c	1.0	0.23	ug/L			10/16/15 20:47	1
Bromomethane	1.0	U ^c	1.0	0.31	ug/L			10/16/15 20:47	1
Chloroethane	1.0	U ^c	1.0	0.21	ug/L			10/16/15 20:47	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/16/15 20:47	1
Acetone	5.0	U	5.0	2.5	ug/L			10/16/15 20:47	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			10/16/15 20:47	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			10/16/15 20:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/16/15 20:47	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			10/16/15 20:47	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			10/16/15 20:47	1
cis-1,2-Dichloroethene	0.78	J	1.0	0.24	ug/L			10/16/15 20:47	1
Bromochloromethane	1.0	U ^c	1.0	0.18	ug/L			10/16/15 20:47	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			10/16/15 20:47	1
Chloroform	1.0	U	1.0	0.17	ug/L			10/16/15 20:47	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			10/16/15 20:47	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			10/16/15 20:47	1
Benzene	1.0	U	1.0	0.11	ug/L			10/16/15 20:47	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/16/15 20:47	1
Trichloroethene	4.9		1.0	0.14	ug/L			10/16/15 20:47	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			10/16/15 20:47	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			10/16/15 20:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/16/15 20:47	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			10/16/15 20:47	1
Toluene	1.0	U	1.0	0.15	ug/L			10/16/15 20:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			10/16/15 20:47	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/16/15 20:47	1
Tetrachloroethene	3.2		1.0	0.15	ug/L			10/16/15 20:47	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			10/16/15 20:47	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			10/16/15 20:47	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			10/16/15 20:47	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/16/15 20:47	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			10/16/15 20:47	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			10/16/15 20:47	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			10/16/15 20:47	1
Styrene	1.0	U	1.0	0.097	ug/L			10/16/15 20:47	1
Bromoform	1.0	U	1.0	0.19	ug/L			10/16/15 20:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/16/15 20:47	1
Acrylonitrile	20	U	20	0.55	ug/L			10/16/15 20:47	1
1,4-Dioxane	200	U	200	34	ug/L			10/16/15 20:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		64 - 135		10/16/15 20:47	1
Toluene-d8 (Surr)	103		71 - 118		10/16/15 20:47	1
4-Bromofluorobenzene (Surr)	91		70 - 118		10/16/15 20:47	1
Dibromofluoromethane (Surr)	97		70 - 128		10/16/15 20:47	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Client Sample ID: HD-CW-3-0/1-0

Date Collected: 10/06/15 09:20

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			10/16/15 21:11	1
Vinyl chloride	1.0	U ^c	1.0	0.23	ug/L			10/16/15 21:11	1
Bromomethane	0.55	J ^c	1.0	0.31	ug/L			10/16/15 21:11	1
Chloroethane	1.0	U ^c	1.0	0.21	ug/L			10/16/15 21:11	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/16/15 21:11	1
Acetone	490	E	5.0	2.5	ug/L			10/16/15 21:11	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			10/16/15 21:11	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			10/16/15 21:11	1
trans-1,2-Dichloroethene	1.8		1.0	0.17	ug/L			10/16/15 21:11	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			10/16/15 21:11	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			10/16/15 21:11	1
cis-1,2-Dichloroethene	36		1.0	0.24	ug/L			10/16/15 21:11	1
Bromochloromethane	1.0	U ^c	1.0	0.18	ug/L			10/16/15 21:11	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			10/16/15 21:11	1
Chloroform	1.0	U	1.0	0.17	ug/L			10/16/15 21:11	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			10/16/15 21:11	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			10/16/15 21:11	1
Benzene	1.0	U	1.0	0.11	ug/L			10/16/15 21:11	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/16/15 21:11	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			10/16/15 21:11	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			10/16/15 21:11	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			10/16/15 21:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/16/15 21:11	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			10/16/15 21:11	1
Toluene	1.0	U	1.0	0.15	ug/L			10/16/15 21:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			10/16/15 21:11	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/16/15 21:11	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/16/15 21:11	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			10/16/15 21:11	1
Dibromochloromethane	1.7		1.0	0.14	ug/L			10/16/15 21:11	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			10/16/15 21:11	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/16/15 21:11	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			10/16/15 21:11	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			10/16/15 21:11	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			10/16/15 21:11	1
Styrene	1.0	U	1.0	0.097	ug/L			10/16/15 21:11	1
Bromoform	12		1.0	0.19	ug/L			10/16/15 21:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/16/15 21:11	1
Acrylonitrile	20	U	20	0.55	ug/L			10/16/15 21:11	1
1,4-Dioxane	200	U	200	34	ug/L			10/16/15 21:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	110		64 - 135		10/16/15 21:11	1
<i>Toluene-d8 (Surr)</i>	108		71 - 118		10/16/15 21:11	1
<i>4-Bromofluorobenzene (Surr)</i>	94		70 - 118		10/16/15 21:11	1
<i>Dibromofluoromethane (Surr)</i>	101		70 - 128		10/16/15 21:11	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Client Sample ID: HD-CW-4-0/1-0

Date Collected: 10/07/15 08:25

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.30	J	1.0	0.28	ug/L			10/16/15 21:35	1
Vinyl chloride	1.0	U ^c	1.0	0.23	ug/L			10/16/15 21:35	1
Bromomethane	1.0	U ^c	1.0	0.31	ug/L			10/16/15 21:35	1
Chloroethane	1.0	U ^c	1.0	0.21	ug/L			10/16/15 21:35	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/16/15 21:35	1
Acetone	5.0	U	5.0	2.5	ug/L			10/16/15 21:35	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			10/16/15 21:35	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			10/16/15 21:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/16/15 21:35	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			10/16/15 21:35	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			10/16/15 21:35	1
cis-1,2-Dichloroethene	31		1.0	0.24	ug/L			10/16/15 21:35	1
Bromochloromethane	1.0	U ^c	1.0	0.18	ug/L			10/16/15 21:35	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			10/16/15 21:35	1
Chloroform	1.0	U	1.0	0.17	ug/L			10/16/15 21:35	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			10/16/15 21:35	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			10/16/15 21:35	1
Benzene	1.0	U	1.0	0.11	ug/L			10/16/15 21:35	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/16/15 21:35	1
Trichloroethene	3.5		1.0	0.14	ug/L			10/16/15 21:35	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			10/16/15 21:35	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			10/16/15 21:35	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/16/15 21:35	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			10/16/15 21:35	1
Toluene	1.0	U	1.0	0.15	ug/L			10/16/15 21:35	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			10/16/15 21:35	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/16/15 21:35	1
Tetrachloroethene	0.86	J	1.0	0.15	ug/L			10/16/15 21:35	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			10/16/15 21:35	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			10/16/15 21:35	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			10/16/15 21:35	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/16/15 21:35	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			10/16/15 21:35	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			10/16/15 21:35	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			10/16/15 21:35	1
Styrene	1.0	U	1.0	0.097	ug/L			10/16/15 21:35	1
Bromoform	1.0	U	1.0	0.19	ug/L			10/16/15 21:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/16/15 21:35	1
Acrylonitrile	20	U	20	0.55	ug/L			10/16/15 21:35	1
1,4-Dioxane	200	U	200	34	ug/L			10/16/15 21:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		64 - 135		10/16/15 21:35	1
Toluene-d8 (Surr)	105		71 - 118		10/16/15 21:35	1
4-Bromofluorobenzene (Surr)	92		70 - 118		10/16/15 21:35	1
Dibromofluoromethane (Surr)	99		70 - 128		10/16/15 21:35	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Client Sample ID: HD-CW-5-0/1-0

Date Collected: 10/07/15 07:45

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			10/16/15 22:48	1
Vinyl chloride	1.0	U ^c	1.0	0.23	ug/L			10/16/15 22:48	1
Bromomethane	1.0	U ^c	1.0	0.31	ug/L			10/16/15 22:48	1
Chloroethane	1.0	U ^c	1.0	0.21	ug/L			10/16/15 22:48	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/16/15 22:48	1
Acetone	5.0	U	5.0	2.5	ug/L			10/16/15 22:48	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			10/16/15 22:48	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			10/16/15 22:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/16/15 22:48	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			10/16/15 22:48	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			10/16/15 22:48	1
cis-1,2-Dichloroethene	4.6		1.0	0.24	ug/L			10/16/15 22:48	1
Bromochloromethane	1.0	U ^c	1.0	0.18	ug/L			10/16/15 22:48	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			10/16/15 22:48	1
Chloroform	1.0	U	1.0	0.17	ug/L			10/16/15 22:48	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			10/16/15 22:48	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			10/16/15 22:48	1
Benzene	1.0	U	1.0	0.11	ug/L			10/16/15 22:48	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/16/15 22:48	1
Trichloroethene	5.3		1.0	0.14	ug/L			10/16/15 22:48	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			10/16/15 22:48	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			10/16/15 22:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/16/15 22:48	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			10/16/15 22:48	1
Toluene	1.0	U	1.0	0.15	ug/L			10/16/15 22:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			10/16/15 22:48	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/16/15 22:48	1
Tetrachloroethene	15		1.0	0.15	ug/L			10/16/15 22:48	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			10/16/15 22:48	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			10/16/15 22:48	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			10/16/15 22:48	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/16/15 22:48	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			10/16/15 22:48	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			10/16/15 22:48	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			10/16/15 22:48	1
Styrene	1.0	U	1.0	0.097	ug/L			10/16/15 22:48	1
Bromoform	1.0	U	1.0	0.19	ug/L			10/16/15 22:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/16/15 22:48	1
Acrylonitrile	20	U	20	0.55	ug/L			10/16/15 22:48	1
1,4-Dioxane	200	U	200	34	ug/L			10/16/15 22:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		64 - 135		10/16/15 22:48	1
Toluene-d8 (Surr)	97		71 - 118		10/16/15 22:48	1
4-Bromofluorobenzene (Surr)	84		70 - 118		10/16/15 22:48	1
Dibromofluoromethane (Surr)	101		70 - 128		10/16/15 22:48	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Client Sample ID: HD-CW-6-0/1-0

Date Collected: 10/07/15 07:35

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			10/15/15 15:35	1
Vinyl chloride	1.0	U ^c	1.0	0.23	ug/L			10/15/15 15:35	1
Bromomethane	1.0	U ^c	1.0	0.31	ug/L			10/15/15 15:35	1
Chloroethane	1.0	U ^c	1.0	0.21	ug/L			10/15/15 15:35	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/15/15 15:35	1
Acetone	5.0	U ^c	5.0	2.5	ug/L			10/15/15 15:35	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			10/15/15 15:35	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			10/15/15 15:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/15/15 15:35	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			10/15/15 15:35	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			10/15/15 15:35	1
cis-1,2-Dichloroethene	24	F1	1.0	0.24	ug/L			10/15/15 15:35	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			10/15/15 15:35	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			10/15/15 15:35	1
Chloroform	1.0	U	1.0	0.17	ug/L			10/15/15 15:35	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			10/15/15 15:35	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			10/15/15 15:35	1
Benzene	1.0	U	1.0	0.11	ug/L			10/15/15 15:35	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/15/15 15:35	1
Trichloroethene	7.5	F1	1.0	0.14	ug/L			10/15/15 15:35	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			10/15/15 15:35	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			10/15/15 15:35	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/15/15 15:35	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			10/15/15 15:35	1
Toluene	1.0	U	1.0	0.15	ug/L			10/15/15 15:35	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			10/15/15 15:35	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/15/15 15:35	1
Tetrachloroethene	40	F1	1.0	0.15	ug/L			10/15/15 15:35	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			10/15/15 15:35	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			10/15/15 15:35	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			10/15/15 15:35	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/15/15 15:35	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			10/15/15 15:35	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			10/15/15 15:35	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			10/15/15 15:35	1
Styrene	1.0	U	1.0	0.097	ug/L			10/15/15 15:35	1
Bromoform	1.0	U	1.0	0.19	ug/L			10/15/15 15:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/15/15 15:35	1
Acrylonitrile	20	U	20	0.55	ug/L			10/15/15 15:35	1
1,4-Dioxane	200	U ^c	200	34	ug/L			10/15/15 15:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		64 - 135		10/15/15 15:35	1
Toluene-d8 (Surr)	104		71 - 118		10/15/15 15:35	1
4-Bromofluorobenzene (Surr)	88		70 - 118		10/15/15 15:35	1
Dibromofluoromethane (Surr)	97		70 - 128		10/15/15 15:35	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Client Sample ID: HD-CW-7-0/1-0

Date Collected: 10/07/15 07:30

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.28	J	1.0	0.28	ug/L			10/19/15 14:17	1
Vinyl chloride	1.0	U ^c	1.0	0.23	ug/L			10/19/15 14:17	1
Bromomethane	1.0	U ^c	1.0	0.31	ug/L			10/19/15 14:17	1
Chloroethane	1.0	U ^c	1.0	0.21	ug/L			10/19/15 14:17	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/19/15 14:17	1
Acetone	5.0	U	5.0	2.5	ug/L			10/19/15 14:17	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			10/19/15 14:17	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			10/19/15 14:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/19/15 14:17	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			10/19/15 14:17	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			10/19/15 14:17	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/19/15 14:17	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			10/19/15 14:17	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			10/19/15 14:17	1
Chloroform	0.83	J	1.0	0.17	ug/L			10/19/15 14:17	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			10/19/15 14:17	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			10/19/15 14:17	1
Benzene	1.0	U	1.0	0.11	ug/L			10/19/15 14:17	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/19/15 14:17	1
Trichloroethene	0.76	J	1.0	0.14	ug/L			10/19/15 14:17	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			10/19/15 14:17	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			10/19/15 14:17	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/19/15 14:17	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			10/19/15 14:17	1
Toluene	1.0	U	1.0	0.15	ug/L			10/19/15 14:17	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			10/19/15 14:17	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/19/15 14:17	1
Tetrachloroethene	1.0		1.0	0.15	ug/L			10/19/15 14:17	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			10/19/15 14:17	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			10/19/15 14:17	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			10/19/15 14:17	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/19/15 14:17	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			10/19/15 14:17	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			10/19/15 14:17	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			10/19/15 14:17	1
Styrene	1.0	U	1.0	0.097	ug/L			10/19/15 14:17	1
Bromoform	1.0	U	1.0	0.19	ug/L			10/19/15 14:17	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/19/15 14:17	1
Acrylonitrile	20	U	20	0.55	ug/L			10/19/15 14:17	1
1,4-Dioxane	200	U	200	34	ug/L			10/19/15 14:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		64 - 135		10/19/15 14:17	1
Toluene-d8 (Surr)	104		71 - 118		10/19/15 14:17	1
4-Bromofluorobenzene (Surr)	94		70 - 118		10/19/15 14:17	1
Dibromofluoromethane (Surr)	104		70 - 128		10/19/15 14:17	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Client Sample ID: HD-CW-7A-0/1-0

Date Collected: 10/06/15 07:50

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			10/19/15 20:43	1
Vinyl chloride	1.0	U ^c	1.0	0.23	ug/L			10/19/15 20:43	1
Bromomethane	1.0	U ^c	1.0	0.31	ug/L			10/19/15 20:43	1
Chloroethane	1.0	U ^c	1.0	0.21	ug/L			10/19/15 20:43	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/19/15 20:43	1
Acetone	5.0	U	5.0	2.5	ug/L			10/19/15 20:43	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			10/19/15 20:43	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			10/19/15 20:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/19/15 20:43	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			10/19/15 20:43	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			10/19/15 20:43	1
cis-1,2-Dichloroethene	2.0		1.0	0.24	ug/L			10/19/15 20:43	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			10/19/15 20:43	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			10/19/15 20:43	1
Chloroform	1.4		1.0	0.17	ug/L			10/19/15 20:43	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			10/19/15 20:43	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			10/19/15 20:43	1
Benzene	1.0	U	1.0	0.11	ug/L			10/19/15 20:43	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/19/15 20:43	1
Trichloroethene	140	E	1.0	0.14	ug/L			10/19/15 20:43	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			10/19/15 20:43	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			10/19/15 20:43	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/19/15 20:43	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			10/19/15 20:43	1
Toluene	1.0	U	1.0	0.15	ug/L			10/19/15 20:43	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			10/19/15 20:43	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/19/15 20:43	1
Tetrachloroethene	8.6		1.0	0.15	ug/L			10/19/15 20:43	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			10/19/15 20:43	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			10/19/15 20:43	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			10/19/15 20:43	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/19/15 20:43	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			10/19/15 20:43	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			10/19/15 20:43	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			10/19/15 20:43	1
Styrene	1.0	U	1.0	0.097	ug/L			10/19/15 20:43	1
Bromoform	1.0	U	1.0	0.19	ug/L			10/19/15 20:43	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/19/15 20:43	1
Acrylonitrile	20	U	20	0.55	ug/L			10/19/15 20:43	1
1,4-Dioxane	200	U	200	34	ug/L			10/19/15 20:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	122		64 - 135		10/19/15 20:43	1
Toluene-d8 (Surr)	99		71 - 118		10/19/15 20:43	1
4-Bromofluorobenzene (Surr)	90		70 - 118		10/19/15 20:43	1
Dibromofluoromethane (Surr)	105		70 - 128		10/19/15 20:43	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Client Sample ID: HD-QC-16-0/1-2

Date Collected: 10/06/15 12:00

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-10

Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		64 - 135		10/15/15 15:11	1
Toluene-d8 (Surr)	108		71 - 118		10/15/15 15:11	1
4-Bromofluorobenzene (Surr)	94		70 - 118		10/15/15 15:11	1
Dibromofluoromethane (Surr)	93		70 - 128		10/15/15 15:11	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

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

Date Collected: 10/06/15 08:00

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-11

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			10/19/15 21:07	1
Vinyl chloride	1.0	U ^c	1.0	0.23	ug/L			10/19/15 21:07	1
Bromomethane	1.0	U ^c	1.0	0.31	ug/L			10/19/15 21:07	1
Chloroethane	1.0	U ^c	1.0	0.21	ug/L			10/19/15 21:07	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/19/15 21:07	1
Acetone	5.0	U	5.0	2.5	ug/L			10/19/15 21:07	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			10/19/15 21:07	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			10/19/15 21:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/19/15 21:07	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			10/19/15 21:07	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			10/19/15 21:07	1
cis-1,2-Dichloroethene	2.0		1.0	0.24	ug/L			10/19/15 21:07	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			10/19/15 21:07	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			10/19/15 21:07	1
Chloroform	1.3		1.0	0.17	ug/L			10/19/15 21:07	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			10/19/15 21:07	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			10/19/15 21:07	1
Benzene	1.0	U	1.0	0.11	ug/L			10/19/15 21:07	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/19/15 21:07	1
Trichloroethene	140	E	1.0	0.14	ug/L			10/19/15 21:07	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			10/19/15 21:07	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			10/19/15 21:07	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/19/15 21:07	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			10/19/15 21:07	1
Toluene	1.0	U	1.0	0.15	ug/L			10/19/15 21:07	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			10/19/15 21:07	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/19/15 21:07	1
Tetrachloroethene	9.2		1.0	0.15	ug/L			10/19/15 21:07	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			10/19/15 21:07	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			10/19/15 21:07	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			10/19/15 21:07	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/19/15 21:07	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			10/19/15 21:07	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			10/19/15 21:07	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			10/19/15 21:07	1
Styrene	1.0	U	1.0	0.097	ug/L			10/19/15 21:07	1
Bromoform	1.0	U	1.0	0.19	ug/L			10/19/15 21:07	1
1,1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/19/15 21:07	1
Acrylonitrile	20	U	20	0.55	ug/L			10/19/15 21:07	1
1,4-Dioxane	200	U	200	34	ug/L			10/19/15 21:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	126		64 - 135		10/19/15 21:07	1
Toluene-d8 (Surr)	100		71 - 118		10/19/15 21:07	1
4-Bromofluorobenzene (Surr)	96		70 - 118		10/19/15 21:07	1
Dibromofluoromethane (Surr)	109		70 - 128		10/19/15 21:07	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Client Sample ID: HD-CW-3-0/1-0

Date Collected: 10/06/15 09:20

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	20	U	20	5.7	ug/L			10/17/15 20:25	20
Vinyl chloride	20	U	20	4.5	ug/L			10/17/15 20:25	20
Bromomethane	20	U	20	6.3	ug/L			10/17/15 20:25	20
Chloroethane	20	U	20	4.3	ug/L			10/17/15 20:25	20
1,1-Dichloroethene	20	U	20	5.9	ug/L			10/17/15 20:25	20
Acetone	460	^c	100	50	ug/L			10/17/15 20:25	20
Carbon disulfide	20	U	20	4.2	ug/L			10/17/15 20:25	20
Methylene Chloride	20	U	20	2.5	ug/L			10/17/15 20:25	20
trans-1,2-Dichloroethene	20	U	20	3.4	ug/L			10/17/15 20:25	20
Methyl tert-butyl ether	20	U	20	3.7	ug/L			10/17/15 20:25	20
1,1-Dichloroethane	20	U	20	2.3	ug/L			10/17/15 20:25	20
cis-1,2-Dichloroethene	30		20	4.7	ug/L			10/17/15 20:25	20
Bromochloromethane	20	U ^c	20	3.6	ug/L			10/17/15 20:25	20
2-Butanone (MEK)	100	U	100	11	ug/L			10/17/15 20:25	20
Chloroform	20	U	20	3.4	ug/L			10/17/15 20:25	20
1,1,1-Trichloroethane	20	U	20	5.7	ug/L			10/17/15 20:25	20
Carbon tetrachloride	20	U	20	2.7	ug/L			10/17/15 20:25	20
Benzene	20	U	20	2.1	ug/L			10/17/15 20:25	20
1,2-Dichloroethane	20	U	20	4.2	ug/L			10/17/15 20:25	20
Trichloroethene	20	U	20	2.9	ug/L			10/17/15 20:25	20
1,2-Dichloropropane	20	U	20	1.9	ug/L			10/17/15 20:25	20
Bromodichloromethane	20	U	20	2.6	ug/L			10/17/15 20:25	20
cis-1,3-Dichloropropene	20	U	20	3.7	ug/L			10/17/15 20:25	20
4-Methyl-2-pentanone (MIBK)	100	U	100	11	ug/L			10/17/15 20:25	20
Toluene	20	U	20	3.0	ug/L			10/17/15 20:25	20
trans-1,3-Dichloropropene	20	U	20	3.0	ug/L			10/17/15 20:25	20
1,1,2-Trichloroethane	20	U	20	4.0	ug/L			10/17/15 20:25	20
Tetrachloroethene	20	U	20	3.0	ug/L			10/17/15 20:25	20
2-Hexanone	100	U	100	3.2	ug/L			10/17/15 20:25	20
Dibromochloromethane	20	U	20	2.7	ug/L			10/17/15 20:25	20
1,2-Dibromoethane (EDB)	20	U	20	3.6	ug/L			10/17/15 20:25	20
Chlorobenzene	20	U	20	2.7	ug/L			10/17/15 20:25	20
1,1,1,2-Tetrachloroethane	20	U	20	5.5	ug/L			10/17/15 20:25	20
Ethylbenzene	20	U	20	4.5	ug/L			10/17/15 20:25	20
Xylenes, Total	60	U	60	9.8	ug/L			10/17/15 20:25	20
Styrene	20	U	20	1.9	ug/L			10/17/15 20:25	20
Bromoform	8.8	J	20	3.8	ug/L			10/17/15 20:25	20
1,1,2,2-Tetrachloroethane	20	U	20	4.0	ug/L			10/17/15 20:25	20
Acrylonitrile	400	U	400	11	ug/L			10/17/15 20:25	20
1,4-Dioxane	4000	U	4000	690	ug/L			10/17/15 20:25	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		64 - 135		10/17/15 20:25	20
Toluene-d8 (Surr)	103		71 - 118		10/17/15 20:25	20
4-Bromofluorobenzene (Surr)	92		70 - 118		10/17/15 20:25	20
Dibromofluoromethane (Surr)	103		70 - 128		10/17/15 20:25	20

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Client Sample ID: HD-CW-7A-0/1-0

Date Collected: 10/06/15 07:50

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	5.0	U	5.0	1.4	ug/L			10/19/15 15:05	5
Vinyl chloride	5.0	U ^c	5.0	1.1	ug/L			10/19/15 15:05	5
Bromomethane	5.0	U ^c	5.0	1.6	ug/L			10/19/15 15:05	5
Chloroethane	5.0	U ^c	5.0	1.1	ug/L			10/19/15 15:05	5
1,1-Dichloroethene	5.0	U	5.0	1.5	ug/L			10/19/15 15:05	5
Acetone	25	U	25	13	ug/L			10/19/15 15:05	5
Carbon disulfide	5.0	U	5.0	1.1	ug/L			10/19/15 15:05	5
Methylene Chloride	5.0	U	5.0	0.63	ug/L			10/19/15 15:05	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.85	ug/L			10/19/15 15:05	5
Methyl tert-butyl ether	5.0	U	5.0	0.92	ug/L			10/19/15 15:05	5
1,1-Dichloroethane	5.0	U	5.0	0.58	ug/L			10/19/15 15:05	5
cis-1,2-Dichloroethene	1.8	J	5.0	1.2	ug/L			10/19/15 15:05	5
Bromochloromethane	5.0	U	5.0	0.90	ug/L			10/19/15 15:05	5
2-Butanone (MEK)	25	U	25	2.7	ug/L			10/19/15 15:05	5
Chloroform	1.2	J	5.0	0.85	ug/L			10/19/15 15:05	5
1,1,1-Trichloroethane	5.0	U	5.0	1.4	ug/L			10/19/15 15:05	5
Carbon tetrachloride	5.0	U	5.0	0.68	ug/L			10/19/15 15:05	5
Benzene	5.0	U	5.0	0.53	ug/L			10/19/15 15:05	5
1,2-Dichloroethane	5.0	U	5.0	1.1	ug/L			10/19/15 15:05	5
Trichloroethene	130		5.0	0.72	ug/L			10/19/15 15:05	5
1,2-Dichloropropane	5.0	U	5.0	0.47	ug/L			10/19/15 15:05	5
Bromodichloromethane	5.0	U	5.0	0.65	ug/L			10/19/15 15:05	5
cis-1,3-Dichloropropene	5.0	U	5.0	0.93	ug/L			10/19/15 15:05	5
4-Methyl-2-pentanone (MIBK)	25	U	25	2.6	ug/L			10/19/15 15:05	5
Toluene	5.0	U	5.0	0.75	ug/L			10/19/15 15:05	5
trans-1,3-Dichloropropene	5.0	U	5.0	0.74	ug/L			10/19/15 15:05	5
1,1,2-Trichloroethane	5.0	U	5.0	1.0	ug/L			10/19/15 15:05	5
Tetrachloroethene	7.4		5.0	0.74	ug/L			10/19/15 15:05	5
2-Hexanone	25	U	25	0.80	ug/L			10/19/15 15:05	5
Dibromochloromethane	5.0	U	5.0	0.68	ug/L			10/19/15 15:05	5
1,2-Dibromoethane (EDB)	5.0	U	5.0	0.90	ug/L			10/19/15 15:05	5
Chlorobenzene	5.0	U	5.0	0.68	ug/L			10/19/15 15:05	5
1,1,1,2-Tetrachloroethane	5.0	U	5.0	1.4	ug/L			10/19/15 15:05	5
Ethylbenzene	5.0	U	5.0	1.1	ug/L			10/19/15 15:05	5
Xylenes, Total	15	U	15	2.4	ug/L			10/19/15 15:05	5
Styrene	5.0	U	5.0	0.48	ug/L			10/19/15 15:05	5
Bromoform	5.0	U	5.0	0.96	ug/L			10/19/15 15:05	5
1,1,1,2-Tetrachloroethane	5.0	U	5.0	1.0	ug/L			10/19/15 15:05	5
Acrylonitrile	100	U	100	2.7	ug/L			10/19/15 15:05	5
1,4-Dioxane	1000	U	1000	170	ug/L			10/19/15 15:05	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		64 - 135		10/19/15 15:05	5
Toluene-d8 (Surr)	106		71 - 118		10/19/15 15:05	5
4-Bromofluorobenzene (Surr)	98		70 - 118		10/19/15 15:05	5
Dibromofluoromethane (Surr)	106		70 - 128		10/19/15 15:05	5

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

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

Date Collected: 10/06/15 08:00

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-11

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	5.0	U	5.0	1.4	ug/L			10/19/15 15:29	5
Vinyl chloride	5.0	U ^c	5.0	1.1	ug/L			10/19/15 15:29	5
Bromomethane	5.0	U ^c	5.0	1.6	ug/L			10/19/15 15:29	5
Chloroethane	5.0	U ^c	5.0	1.1	ug/L			10/19/15 15:29	5
1,1-Dichloroethene	5.0	U	5.0	1.5	ug/L			10/19/15 15:29	5
Acetone	25	U	25	13	ug/L			10/19/15 15:29	5
Carbon disulfide	5.0	U	5.0	1.1	ug/L			10/19/15 15:29	5
Methylene Chloride	5.0	U	5.0	0.63	ug/L			10/19/15 15:29	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.85	ug/L			10/19/15 15:29	5
Methyl tert-butyl ether	5.0	U	5.0	0.92	ug/L			10/19/15 15:29	5
1,1-Dichloroethane	5.0	U	5.0	0.58	ug/L			10/19/15 15:29	5
cis-1,2-Dichloroethene	1.6	J	5.0	1.2	ug/L			10/19/15 15:29	5
Bromochloromethane	5.0	U	5.0	0.90	ug/L			10/19/15 15:29	5
2-Butanone (MEK)	25	U	25	2.7	ug/L			10/19/15 15:29	5
Chloroform	1.1	J	5.0	0.85	ug/L			10/19/15 15:29	5
1,1,1-Trichloroethane	5.0	U	5.0	1.4	ug/L			10/19/15 15:29	5
Carbon tetrachloride	5.0	U	5.0	0.68	ug/L			10/19/15 15:29	5
Benzene	5.0	U	5.0	0.53	ug/L			10/19/15 15:29	5
1,2-Dichloroethane	5.0	U	5.0	1.1	ug/L			10/19/15 15:29	5
Trichloroethene	120		5.0	0.72	ug/L			10/19/15 15:29	5
1,2-Dichloropropane	5.0	U	5.0	0.47	ug/L			10/19/15 15:29	5
Bromodichloromethane	5.0	U	5.0	0.65	ug/L			10/19/15 15:29	5
cis-1,3-Dichloropropene	5.0	U	5.0	0.93	ug/L			10/19/15 15:29	5
4-Methyl-2-pentanone (MIBK)	25	U	25	2.6	ug/L			10/19/15 15:29	5
Toluene	5.0	U	5.0	0.75	ug/L			10/19/15 15:29	5
trans-1,3-Dichloropropene	5.0	U	5.0	0.74	ug/L			10/19/15 15:29	5
1,1,2-Trichloroethane	5.0	U	5.0	1.0	ug/L			10/19/15 15:29	5
Tetrachloroethene	6.4		5.0	0.74	ug/L			10/19/15 15:29	5
2-Hexanone	25	U	25	0.80	ug/L			10/19/15 15:29	5
Dibromochloromethane	5.0	U	5.0	0.68	ug/L			10/19/15 15:29	5
1,2-Dibromoethane (EDB)	5.0	U	5.0	0.90	ug/L			10/19/15 15:29	5
Chlorobenzene	5.0	U	5.0	0.68	ug/L			10/19/15 15:29	5
1,1,1,2-Tetrachloroethane	5.0	U	5.0	1.4	ug/L			10/19/15 15:29	5
Ethylbenzene	5.0	U	5.0	1.1	ug/L			10/19/15 15:29	5
Xylenes, Total	15	U	15	2.4	ug/L			10/19/15 15:29	5
Styrene	5.0	U	5.0	0.48	ug/L			10/19/15 15:29	5
Bromoform	5.0	U	5.0	0.96	ug/L			10/19/15 15:29	5
1,1,1,2-Tetrachloroethane	5.0	U	5.0	1.0	ug/L			10/19/15 15:29	5
Acrylonitrile	100	U	100	2.7	ug/L			10/19/15 15:29	5
1,4-Dioxane	1000	U	1000	170	ug/L			10/19/15 15:29	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		64 - 135		10/19/15 15:29	5
Toluene-d8 (Surr)	105		71 - 118		10/19/15 15:29	5
4-Bromofluorobenzene (Surr)	95		70 - 118		10/19/15 15:29	5
Dibromofluoromethane (Surr)	105		70 - 128		10/19/15 15:29	5

Default Detection Limits

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Surrogate Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (64-135)	TOL (71-118)	BFB (70-118)	DBFM (70-128)
180-48564-1	HD-CW-1-0/1-0	108	108	94	92
180-48564-2	HD-CW-1A-0/1-0	105	109	90	97
180-48564-3	HD-CW-2-0/1-0	108	103	91	97
180-48564-4	HD-CW-3-0/1-0	110	108	94	101
180-48564-4 - DL	HD-CW-3-0/1-0	113	103	92	103
180-48564-5	HD-CW-4-0/1-0	103	105	92	99
180-48564-6	HD-CW-5-0/1-0	104	97	84	101
180-48564-7	HD-CW-6-0/1-0	99	104	88	97
180-48564-7 MS	HD-CW-6-0/1-0	89	103	95	82
180-48564-7 MSD	HD-CW-6-0/1-0	102	116	106	95
180-48564-8	HD-CW-7-0/1-0	115	104	94	104
180-48564-9 - DL	HD-CW-7A-0/1-0	119	106	98	106
180-48564-9	HD-CW-7A-0/1-0	122	99	90	105
180-48564-10	HD-QC-16-0/1-2	102	108	94	93
180-48564-11 - DL	HD-QC5-0/1-1	117	105	95	105
180-48564-11	HD-QC5-0/1-1	126	100	96	109
LCS 180-157127/10	Lab Control Sample	99	112	104	87
LCS 180-157249/15	Lab Control Sample	96	104	93	86
LCS 180-157327/12	Lab Control Sample	97	113	108	94
LCS 180-157435/7	Lab Control Sample	97	102	100	87
MB 180-157127/6	Method Blank	101	103	95	93
MB 180-157249/12	Method Blank	100	97	88	92
MB 180-157327/5	Method Blank	88	97	85	85
MB 180-157435/4	Method Blank	117	100	93	99

Surrogate Legend

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

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

QC Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Lab Sample ID: MB 180-157127/6

Matrix: Water

Analysis Batch: 157127

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloromethane	1.0	U	1.0	0.28	ug/L			10/15/15 14:08	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			10/15/15 14:08	1
Bromomethane	1.0	U	1.0	0.31	ug/L			10/15/15 14:08	1
Chloroethane	1.0	U	1.0	0.21	ug/L			10/15/15 14:08	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/15/15 14:08	1
Acetone	5.0	U	5.0	2.5	ug/L			10/15/15 14:08	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			10/15/15 14:08	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			10/15/15 14:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/15/15 14:08	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			10/15/15 14:08	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			10/15/15 14:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/15/15 14:08	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			10/15/15 14:08	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			10/15/15 14:08	1
Chloroform	1.0	U	1.0	0.17	ug/L			10/15/15 14:08	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			10/15/15 14:08	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			10/15/15 14:08	1
Benzene	1.0	U	1.0	0.11	ug/L			10/15/15 14:08	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/15/15 14:08	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			10/15/15 14:08	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			10/15/15 14:08	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			10/15/15 14:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/15/15 14:08	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			10/15/15 14:08	1
Toluene	1.0	U	1.0	0.15	ug/L			10/15/15 14:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			10/15/15 14:08	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/15/15 14:08	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/15/15 14:08	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			10/15/15 14:08	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			10/15/15 14:08	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			10/15/15 14:08	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/15/15 14:08	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			10/15/15 14:08	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			10/15/15 14:08	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			10/15/15 14:08	1
Styrene	1.0	U	1.0	0.097	ug/L			10/15/15 14:08	1
Bromoform	1.0	U	1.0	0.19	ug/L			10/15/15 14:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/15/15 14:08	1
Acrylonitrile	20	U	20	0.55	ug/L			10/15/15 14:08	1
1,4-Dioxane	200	U	200	34	ug/L			10/15/15 14:08	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	101		64 - 135		10/15/15 14:08	1
Toluene-d8 (Surr)	103		71 - 118		10/15/15 14:08	1
4-Bromofluorobenzene (Surr)	95		70 - 118		10/15/15 14:08	1
Dibromofluoromethane (Surr)	93		70 - 128		10/15/15 14:08	1

TestAmerica Pittsburgh

QC Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Lab Sample ID: LCS 180-157127/10

Matrix: Water

Analysis Batch: 157127

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	10.0	9.71		ug/L		97	50 - 139
Vinyl chloride	10.0	8.06		ug/L		81	53 - 138
Bromomethane	10.0	8.03		ug/L		80	33 - 150
Chloroethane	10.0	7.31		ug/L		73	36 - 142
1,1-Dichloroethene	10.0	9.39		ug/L		94	65 - 136
Acetone	20.0	19.9		ug/L		99	22 - 150
Carbon disulfide	10.0	10.0		ug/L		100	54 - 132
Methylene Chloride	10.0	9.92		ug/L		99	63 - 129
trans-1,2-Dichloroethene	10.0	9.68		ug/L		97	73 - 126
Methyl tert-butyl ether	10.0	9.53		ug/L		95	64 - 123
1,1-Dichloroethane	10.0	9.61		ug/L		96	73 - 126
cis-1,2-Dichloroethene	10.0	9.55		ug/L		96	70 - 120
Bromochloromethane	10.0	8.75		ug/L		88	70 - 127
2-Butanone (MEK)	20.0	19.4		ug/L		97	39 - 138
Chloroform	10.0	9.41		ug/L		94	72 - 127
1,1,1-Trichloroethane	10.0	9.64		ug/L		96	63 - 133
Carbon tetrachloride	10.0	9.66		ug/L		97	55 - 150
Benzene	10.0	10.2		ug/L		102	80 - 120
1,2-Dichloroethane	10.0	9.87		ug/L		99	68 - 132
Trichloroethene	10.0	9.16		ug/L		92	73 - 120
1,2-Dichloropropane	10.0	9.92		ug/L		99	76 - 124
Bromodichloromethane	10.0	9.80		ug/L		98	66 - 130
cis-1,3-Dichloropropene	10.0	8.94		ug/L		89	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	18.6		ug/L		93	45 - 145
Toluene	10.0	11.0		ug/L		110	80 - 123
trans-1,3-Dichloropropene	10.0	9.97		ug/L		100	65 - 125
1,1,2-Trichloroethane	10.0	10.7		ug/L		107	77 - 127
Tetrachloroethene	10.0	10.8		ug/L		108	70 - 135
2-Hexanone	20.0	18.1		ug/L		90	25 - 132
Dibromochloromethane	10.0	9.40		ug/L		94	60 - 140
1,2-Dibromoethane (EDB)	10.0	10.2		ug/L		102	74 - 123
Chlorobenzene	10.0	10.3		ug/L		103	80 - 120
1,1,1,2-Tetrachloroethane	10.0	9.76		ug/L		98	63 - 140
Ethylbenzene	10.0	10.7		ug/L		107	72 - 126
Xylenes, Total	20.0	21.4		ug/L		107	76 - 128
Styrene	10.0	11.4		ug/L		114	71 - 127
Bromoform	10.0	10.7		ug/L		107	46 - 150
1,1,2,2-Tetrachloroethane	10.0	11.7		ug/L		117	62 - 125
Acrylonitrile	100	112		ug/L		112	30 - 140
1,4-Dioxane	200	287		ug/L		144	10 - 160

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		64 - 135
Toluene-d8 (Surr)	112		71 - 118
4-Bromofluorobenzene (Surr)	104		70 - 118
Dibromofluoromethane (Surr)	87		70 - 128

QC Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Lab Sample ID: 180-48564-7 MS

Matrix: Water

Analysis Batch: 157127

Client Sample ID: HD-CW-6-0/1-0

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier		Added	Result				
Chloromethane	1.0	U	10.0	8.88		ug/L		89	50 - 139
Vinyl chloride	1.0	U ^c	10.0	7.85		ug/L		78	53 - 138
Bromomethane	1.0	U ^c	10.0	7.55		ug/L		75	33 - 150
Chloroethane	1.0	U ^c	10.0	7.29		ug/L		73	36 - 142
1,1-Dichloroethene	1.0	U	10.0	9.18		ug/L		92	65 - 136
Acetone	5.0	U ^c	20.0	19.0		ug/L		95	22 - 150
Carbon disulfide	1.0	U	10.0	9.66		ug/L		97	54 - 132
Methylene Chloride	1.0	U	10.0	9.14		ug/L		91	63 - 129
trans-1,2-Dichloroethene	1.0	U	10.0	9.15		ug/L		91	73 - 126
Methyl tert-butyl ether	1.0	U	10.0	9.31		ug/L		93	64 - 123
1,1-Dichloroethane	1.0	U	10.0	9.15		ug/L		92	73 - 126
cis-1,2-Dichloroethene	24	F1	10.0	27.8	F1	ug/L		43	70 - 120
Bromochloromethane	1.0	U	10.0	8.03		ug/L		80	70 - 127
2-Butanone (MEK)	5.0	U	20.0	19.9		ug/L		99	39 - 138
Chloroform	1.0	U	10.0	9.05		ug/L		91	72 - 127
1,1,1-Trichloroethane	1.0	U	10.0	8.97		ug/L		90	63 - 133
Carbon tetrachloride	1.0	U	10.0	8.99		ug/L		90	55 - 150
Benzene	1.0	U	10.0	9.73		ug/L		97	80 - 120
1,2-Dichloroethane	1.0	U	10.0	9.42		ug/L		94	68 - 132
Trichloroethene	7.5	F1	10.0	14.5	F1	ug/L		70	73 - 120
1,2-Dichloropropane	1.0	U	10.0	9.72		ug/L		97	76 - 124
Bromodichloromethane	1.0	U	10.0	9.05		ug/L		91	66 - 130
cis-1,3-Dichloropropene	1.0	U	10.0	9.15		ug/L		92	66 - 120
4-Methyl-2-pentanone (MIBK)	5.0	U	20.0	18.7		ug/L		93	45 - 145
Toluene	1.0	U	10.0	10.3		ug/L		103	80 - 123
trans-1,3-Dichloropropene	1.0	U	10.0	9.24		ug/L		92	65 - 125
1,1,2-Trichloroethane	1.0	U	10.0	10.2		ug/L		102	77 - 127
Tetrachloroethene	40	F1	10.0	39.9	F1	ug/L		0.3	70 - 135
2-Hexanone	5.0	U	20.0	18.6		ug/L		93	25 - 132
Dibromochloromethane	1.0	U	10.0	9.07		ug/L		91	60 - 140
1,2-Dibromoethane (EDB)	1.0	U	10.0	10.0		ug/L		100	74 - 123
Chlorobenzene	1.0	U	10.0	9.71		ug/L		97	80 - 120
1,1,1,2-Tetrachloroethane	1.0	U	10.0	9.13		ug/L		91	63 - 140
Ethylbenzene	1.0	U	10.0	10.4		ug/L		104	72 - 126
Xylenes, Total	3.0	U	20.0	20.3		ug/L		102	76 - 128
Styrene	1.0	U	10.0	10.4		ug/L		104	71 - 127
Bromoform	1.0	U	10.0	9.64		ug/L		96	46 - 150
1,1,2,2-Tetrachloroethane	1.0	U	10.0	10.6		ug/L		106	62 - 125
Acrylonitrile	20	U	100	109		ug/L		109	30 - 140
1,4-Dioxane	200	U ^c	200	260		ug/L		130	10 - 160
		MS		MS					
Surrogate		%Recovery		Qualifier					Limits
1,2-Dichloroethane-d4 (Surr)		89							64 - 135
Toluene-d8 (Surr)		103							71 - 118
4-Bromofluorobenzene (Surr)		95							70 - 118
Dibromofluoromethane (Surr)		82							70 - 128

QC Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Lab Sample ID: 180-48564-7 MSD

Matrix: Water

Analysis Batch: 157127

Client Sample ID: HD-CW-6-0/1-0

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
Chloromethane	1.0	U	10.0	9.65		ug/L		97	50 - 139	8	35
Vinyl chloride	1.0	U ^c	10.0	8.29		ug/L		83	53 - 138	6	35
Bromomethane	1.0	U ^c	10.0	7.89		ug/L		79	33 - 150	4	35
Chloroethane	1.0	U ^c	10.0	6.88		ug/L		69	36 - 142	6	35
1,1-Dichloroethene	1.0	U	10.0	9.97		ug/L		100	65 - 136	8	35
Acetone	5.0	U ^c	20.0	22.7		ug/L		113	22 - 150	18	35
Carbon disulfide	1.0	U	10.0	10.3		ug/L		103	54 - 132	7	35
Methylene Chloride	1.0	U	10.0	11.0		ug/L		110	63 - 129	19	35
trans-1,2-Dichloroethene	1.0	U	10.0	9.82		ug/L		98	73 - 126	7	35
Methyl tert-butyl ether	1.0	U	10.0	10.6		ug/L		106	64 - 123	13	35
1,1-Dichloroethane	1.0	U	10.0	10.1		ug/L		101	73 - 126	10	35
cis-1,2-Dichloroethene	24	F1	10.0	31.5		ug/L		80	70 - 120	12	35
Bromochloromethane	1.0	U	10.0	9.48		ug/L		95	70 - 127	17	35
2-Butanone (MEK)	5.0	U	20.0	24.9		ug/L		124	39 - 138	22	35
Chloroform	1.0	U	10.0	9.93		ug/L		99	72 - 127	9	35
1,1,1-Trichloroethane	1.0	U	10.0	9.62		ug/L		96	63 - 133	7	35
Carbon tetrachloride	1.0	U	10.0	9.14		ug/L		91	55 - 150	2	35
Benzene	1.0	U	10.0	10.6		ug/L		106	80 - 120	9	32
1,2-Dichloroethane	1.0	U	10.0	10.3		ug/L		103	68 - 132	9	32
Trichloroethene	7.5	F1	10.0	15.9		ug/L		83	73 - 120	9	35
1,2-Dichloropropane	1.0	U	10.0	10.6		ug/L		106	76 - 124	9	34
Bromodichloromethane	1.0	U	10.0	9.80		ug/L		98	66 - 130	8	35
cis-1,3-Dichloropropene	1.0	U	10.0	10.2		ug/L		102	66 - 120	11	35
4-Methyl-2-pentanone (MIBK)	5.0	U	20.0	22.0		ug/L		110	45 - 145	16	35
Toluene	1.0	U	10.0	11.2		ug/L		112	80 - 123	9	35
trans-1,3-Dichloropropene	1.0	U	10.0	10.7		ug/L		107	65 - 125	14	35
1,1,2-Trichloroethane	1.0	U	10.0	11.4		ug/L		114	77 - 127	11	35
Tetrachloroethene	40	F1	10.0	43.4	F1	ug/L		36	70 - 135	8	35
2-Hexanone	5.0	U	20.0	22.2		ug/L		111	25 - 132	17	35
Dibromochloromethane	1.0	U	10.0	10.2		ug/L		102	60 - 140	11	35
1,2-Dibromoethane (EDB)	1.0	U	10.0	11.4		ug/L		114	74 - 123	13	35
Chlorobenzene	1.0	U	10.0	10.9		ug/L		109	80 - 120	11	29
1,1,1,2-Tetrachloroethane	1.0	U	10.0	9.87		ug/L		99	63 - 140	8	34
Ethylbenzene	1.0	U	10.0	11.2		ug/L		112	72 - 126	7	33
Xylenes, Total	3.0	U	20.0	22.2		ug/L		111	76 - 128	9	32
Styrene	1.0	U	10.0	11.5		ug/L		115	71 - 127	11	34
Bromoform	1.0	U	10.0	10.7		ug/L		107	46 - 150	10	35
1,1,2,2-Tetrachloroethane	1.0	U	10.0	12.2		ug/L		122	62 - 125	14	35
Acrylonitrile	20	U	100	127		ug/L		127	30 - 140	15	35
1,4-Dioxane	200	U ^c	200	314		ug/L		157	10 - 160	19	35
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	102		64 - 135								
Toluene-d8 (Surr)	116		71 - 118								
4-Bromofluorobenzene (Surr)	106		70 - 118								
Dibromofluoromethane (Surr)	95		70 - 128								

QC Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Lab Sample ID: MB 180-157249/12
Matrix: Water
Analysis Batch: 157249

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			10/16/15 16:19	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			10/16/15 16:19	1
Bromomethane	1.0	U	1.0	0.31	ug/L			10/16/15 16:19	1
Chloroethane	1.0	U	1.0	0.21	ug/L			10/16/15 16:19	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/16/15 16:19	1
Acetone	5.0	U	5.0	2.5	ug/L			10/16/15 16:19	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			10/16/15 16:19	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			10/16/15 16:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/16/15 16:19	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			10/16/15 16:19	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			10/16/15 16:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/16/15 16:19	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			10/16/15 16:19	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			10/16/15 16:19	1
Chloroform	1.0	U	1.0	0.17	ug/L			10/16/15 16:19	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			10/16/15 16:19	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			10/16/15 16:19	1
Benzene	1.0	U	1.0	0.11	ug/L			10/16/15 16:19	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/16/15 16:19	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			10/16/15 16:19	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			10/16/15 16:19	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			10/16/15 16:19	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/16/15 16:19	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			10/16/15 16:19	1
Toluene	1.0	U	1.0	0.15	ug/L			10/16/15 16:19	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			10/16/15 16:19	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/16/15 16:19	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/16/15 16:19	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			10/16/15 16:19	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			10/16/15 16:19	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			10/16/15 16:19	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/16/15 16:19	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			10/16/15 16:19	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			10/16/15 16:19	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			10/16/15 16:19	1
Styrene	1.0	U	1.0	0.097	ug/L			10/16/15 16:19	1
Bromoform	1.0	U	1.0	0.19	ug/L			10/16/15 16:19	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/16/15 16:19	1
Acrylonitrile	20	U	20	0.55	ug/L			10/16/15 16:19	1
1,4-Dioxane	200	U	200	34	ug/L			10/16/15 16:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		64 - 135		10/16/15 16:19	1
Toluene-d8 (Surr)	97		71 - 118		10/16/15 16:19	1
4-Bromofluorobenzene (Surr)	88		70 - 118		10/16/15 16:19	1
Dibromofluoromethane (Surr)	92		70 - 128		10/16/15 16:19	1

QC Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Lab Sample ID: LCS 180-157249/15
Matrix: Water
Analysis Batch: 157249

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	8.57		ug/L		86	50 - 139
Vinyl chloride	10.0	7.45		ug/L		74	53 - 138
Bromomethane	10.0	7.06		ug/L		71	33 - 150
Chloroethane	10.0	6.01		ug/L		60	36 - 142
1,1-Dichloroethene	10.0	8.72		ug/L		87	65 - 136
Acetone	20.0	17.6		ug/L		88	22 - 150
Carbon disulfide	10.0	8.81		ug/L		88	54 - 132
Methylene Chloride	10.0	9.36		ug/L		94	63 - 129
trans-1,2-Dichloroethene	10.0	9.47		ug/L		95	73 - 126
Methyl tert-butyl ether	10.0	9.11		ug/L		91	64 - 123
1,1-Dichloroethane	10.0	9.31		ug/L		93	73 - 126
cis-1,2-Dichloroethene	10.0	9.52		ug/L		95	70 - 120
Bromochloromethane	10.0	8.80		ug/L		88	70 - 127
2-Butanone (MEK)	20.0	21.2		ug/L		106	39 - 138
Chloroform	10.0	9.50		ug/L		95	72 - 127
1,1,1-Trichloroethane	10.0	8.99		ug/L		90	63 - 133
Carbon tetrachloride	10.0	8.67		ug/L		87	55 - 150
Benzene	10.0	9.87		ug/L		99	80 - 120
1,2-Dichloroethane	10.0	10.0		ug/L		100	68 - 132
Trichloroethene	10.0	8.75		ug/L		87	73 - 120
1,2-Dichloropropane	10.0	9.75		ug/L		98	76 - 124
Bromodichloromethane	10.0	9.55		ug/L		96	66 - 130
cis-1,3-Dichloropropene	10.0	9.38		ug/L		94	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	19.0		ug/L		95	45 - 145
Toluene	10.0	10.8		ug/L		108	80 - 123
trans-1,3-Dichloropropene	10.0	10.1		ug/L		101	65 - 125
1,1,2-Trichloroethane	10.0	10.7		ug/L		107	77 - 127
Tetrachloroethene	10.0	10.4		ug/L		104	70 - 135
2-Hexanone	20.0	19.1		ug/L		96	25 - 132
Dibromochloromethane	10.0	9.86		ug/L		99	60 - 140
1,2-Dibromoethane (EDB)	10.0	11.0		ug/L		110	74 - 123
Chlorobenzene	10.0	9.83		ug/L		98	80 - 120
1,1,1,2-Tetrachloroethane	10.0	9.68		ug/L		97	63 - 140
Ethylbenzene	10.0	10.1		ug/L		101	72 - 126
Xylenes, Total	20.0	20.2		ug/L		101	76 - 128
Styrene	10.0	10.8		ug/L		108	71 - 127
Bromoform	10.0	10.4		ug/L		104	46 - 150
1,1,2,2-Tetrachloroethane	10.0	10.4		ug/L		104	62 - 125
Acrylonitrile	100	94.5		ug/L		94	30 - 140
1,4-Dioxane	200	187	J	ug/L		93	10 - 160

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		64 - 135
Toluene-d8 (Surr)	104		71 - 118
4-Bromofluorobenzene (Surr)	93		70 - 118
Dibromofluoromethane (Surr)	86		70 - 128

QC Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Lab Sample ID: MB 180-157327/5

Matrix: Water

Analysis Batch: 157327

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			10/17/15 11:40	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			10/17/15 11:40	1
Bromomethane	1.0	U	1.0	0.31	ug/L			10/17/15 11:40	1
Chloroethane	1.0	U	1.0	0.21	ug/L			10/17/15 11:40	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/17/15 11:40	1
Acetone	5.0	U	5.0	2.5	ug/L			10/17/15 11:40	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			10/17/15 11:40	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			10/17/15 11:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/17/15 11:40	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			10/17/15 11:40	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			10/17/15 11:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/17/15 11:40	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			10/17/15 11:40	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			10/17/15 11:40	1
Chloroform	1.0	U	1.0	0.17	ug/L			10/17/15 11:40	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			10/17/15 11:40	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			10/17/15 11:40	1
Benzene	1.0	U	1.0	0.11	ug/L			10/17/15 11:40	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/17/15 11:40	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			10/17/15 11:40	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			10/17/15 11:40	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			10/17/15 11:40	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/17/15 11:40	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			10/17/15 11:40	1
Toluene	1.0	U	1.0	0.15	ug/L			10/17/15 11:40	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			10/17/15 11:40	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/17/15 11:40	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/17/15 11:40	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			10/17/15 11:40	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			10/17/15 11:40	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			10/17/15 11:40	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/17/15 11:40	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			10/17/15 11:40	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			10/17/15 11:40	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			10/17/15 11:40	1
Styrene	1.0	U	1.0	0.097	ug/L			10/17/15 11:40	1
Bromoform	1.0	U	1.0	0.19	ug/L			10/17/15 11:40	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/17/15 11:40	1
Acrylonitrile	20	U	20	0.55	ug/L			10/17/15 11:40	1
1,4-Dioxane	200	U	200	34	ug/L			10/17/15 11:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		64 - 135		10/17/15 11:40	1
Toluene-d8 (Surr)	97		71 - 118		10/17/15 11:40	1
4-Bromofluorobenzene (Surr)	85		70 - 118		10/17/15 11:40	1
Dibromofluoromethane (Surr)	85		70 - 128		10/17/15 11:40	1

QC Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Lab Sample ID: LCS 180-157327/12
Matrix: Water
Analysis Batch: 157327

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	8.88		ug/L		89	50 - 139
Vinyl chloride	10.0	7.83		ug/L		78	53 - 138
Bromomethane	10.0	6.75		ug/L		67	33 - 150
Chloroethane	10.0	6.25		ug/L		63	36 - 142
1,1-Dichloroethene	10.0	9.63		ug/L		96	65 - 136
Acetone	20.0	17.7		ug/L		88	22 - 150
Carbon disulfide	10.0	10.5		ug/L		105	54 - 132
Methylene Chloride	10.0	10.5		ug/L		105	63 - 129
trans-1,2-Dichloroethene	10.0	9.55		ug/L		96	73 - 126
Methyl tert-butyl ether	10.0	10.1		ug/L		101	64 - 123
1,1-Dichloroethane	10.0	10.1		ug/L		101	73 - 126
cis-1,2-Dichloroethene	10.0	9.52		ug/L		95	70 - 120
Bromochloromethane	10.0	9.37		ug/L		94	70 - 127
2-Butanone (MEK)	20.0	18.7		ug/L		93	39 - 138
Chloroform	10.0	9.78		ug/L		98	72 - 127
1,1,1-Trichloroethane	10.0	9.47		ug/L		95	63 - 133
Carbon tetrachloride	10.0	9.32		ug/L		93	55 - 150
Benzene	10.0	9.79		ug/L		98	80 - 120
1,2-Dichloroethane	10.0	10.1		ug/L		101	68 - 132
Trichloroethene	10.0	8.86		ug/L		89	73 - 120
1,2-Dichloropropane	10.0	9.57		ug/L		96	76 - 124
Bromodichloromethane	10.0	9.99		ug/L		100	66 - 130
cis-1,3-Dichloropropene	10.0	8.63		ug/L		86	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	22.6		ug/L		113	45 - 145
Toluene	10.0	11.5		ug/L		115	80 - 123
trans-1,3-Dichloropropene	10.0	10.5		ug/L		105	65 - 125
1,1,2-Trichloroethane	10.0	10.4		ug/L		104	77 - 127
Tetrachloroethene	10.0	11.2		ug/L		112	70 - 135
2-Hexanone	20.0	20.3		ug/L		102	25 - 132
Dibromochloromethane	10.0	9.90		ug/L		99	60 - 140
1,2-Dibromoethane (EDB)	10.0	10.9		ug/L		109	74 - 123
Chlorobenzene	10.0	10.5		ug/L		105	80 - 120
1,1,1,2-Tetrachloroethane	10.0	11.0		ug/L		110	63 - 140
Ethylbenzene	10.0	11.0		ug/L		110	72 - 126
Xylenes, Total	20.0	22.0		ug/L		110	76 - 128
Styrene	10.0	11.5		ug/L		115	71 - 127
Bromoform	10.0	10.1		ug/L		101	46 - 150
1,1,2,2-Tetrachloroethane	10.0	11.7		ug/L		117	62 - 125
Acrylonitrile	100	102		ug/L		102	30 - 140
1,4-Dioxane	200	126	J	ug/L		63	10 - 160

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		64 - 135
Toluene-d8 (Surr)	113		71 - 118
4-Bromofluorobenzene (Surr)	108		70 - 118
Dibromofluoromethane (Surr)	94		70 - 128

QC Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Lab Sample ID: MB 180-157435/4
Matrix: Water
Analysis Batch: 157435

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			10/19/15 11:11	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			10/19/15 11:11	1
Bromomethane	1.0	U	1.0	0.31	ug/L			10/19/15 11:11	1
Chloroethane	1.0	U	1.0	0.21	ug/L			10/19/15 11:11	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/19/15 11:11	1
Acetone	5.0	U	5.0	2.5	ug/L			10/19/15 11:11	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			10/19/15 11:11	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			10/19/15 11:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/19/15 11:11	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			10/19/15 11:11	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			10/19/15 11:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/19/15 11:11	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			10/19/15 11:11	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			10/19/15 11:11	1
Chloroform	1.0	U	1.0	0.17	ug/L			10/19/15 11:11	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			10/19/15 11:11	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			10/19/15 11:11	1
Benzene	1.0	U	1.0	0.11	ug/L			10/19/15 11:11	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/19/15 11:11	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			10/19/15 11:11	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			10/19/15 11:11	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			10/19/15 11:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/19/15 11:11	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			10/19/15 11:11	1
Toluene	1.0	U	1.0	0.15	ug/L			10/19/15 11:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			10/19/15 11:11	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/19/15 11:11	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/19/15 11:11	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			10/19/15 11:11	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			10/19/15 11:11	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			10/19/15 11:11	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/19/15 11:11	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			10/19/15 11:11	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			10/19/15 11:11	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			10/19/15 11:11	1
Styrene	1.0	U	1.0	0.097	ug/L			10/19/15 11:11	1
Bromoform	1.0	U	1.0	0.19	ug/L			10/19/15 11:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/19/15 11:11	1
Acrylonitrile	20	U	20	0.55	ug/L			10/19/15 11:11	1
1,4-Dioxane	200	U	200	34	ug/L			10/19/15 11:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		64 - 135		10/19/15 11:11	1
Toluene-d8 (Surr)	100		71 - 118		10/19/15 11:11	1
4-Bromofluorobenzene (Surr)	93		70 - 118		10/19/15 11:11	1
Dibromofluoromethane (Surr)	99		70 - 128		10/19/15 11:11	1

QC Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Lab Sample ID: LCS 180-157435/7
Matrix: Water
Analysis Batch: 157435

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	8.15		ug/L		82	50 - 139
Vinyl chloride	10.0	7.17		ug/L		72	53 - 138
Bromomethane	10.0	6.92		ug/L		69	33 - 150
Chloroethane	10.0	6.25		ug/L		63	36 - 142
1,1-Dichloroethene	10.0	9.66		ug/L		97	65 - 136
Acetone	20.0	21.2		ug/L		106	22 - 150
Carbon disulfide	10.0	10.1		ug/L		101	54 - 132
Methylene Chloride	10.0	9.28		ug/L		93	63 - 129
trans-1,2-Dichloroethene	10.0	9.69		ug/L		97	73 - 126
Methyl tert-butyl ether	10.0	9.34		ug/L		93	64 - 123
1,1-Dichloroethane	10.0	9.53		ug/L		95	73 - 126
cis-1,2-Dichloroethene	10.0	9.41		ug/L		94	70 - 120
Bromochloromethane	10.0	8.74		ug/L		87	70 - 127
2-Butanone (MEK)	20.0	20.7		ug/L		103	39 - 138
Chloroform	10.0	9.99		ug/L		100	72 - 127
1,1,1-Trichloroethane	10.0	10.2		ug/L		102	63 - 133
Carbon tetrachloride	10.0	11.2		ug/L		112	55 - 150
Benzene	10.0	9.72		ug/L		97	80 - 120
1,2-Dichloroethane	10.0	10.7		ug/L		107	68 - 132
Trichloroethene	10.0	9.32		ug/L		93	73 - 120
1,2-Dichloropropane	10.0	9.67		ug/L		97	76 - 124
Bromodichloromethane	10.0	10.2		ug/L		102	66 - 130
cis-1,3-Dichloropropene	10.0	9.58		ug/L		96	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	20.3		ug/L		102	45 - 145
Toluene	10.0	11.0		ug/L		110	80 - 123
trans-1,3-Dichloropropene	10.0	10.1		ug/L		101	65 - 125
1,1,2-Trichloroethane	10.0	10.4		ug/L		104	77 - 127
Tetrachloroethene	10.0	11.3		ug/L		113	70 - 135
2-Hexanone	20.0	18.8		ug/L		94	25 - 132
Dibromochloromethane	10.0	9.66		ug/L		97	60 - 140
1,2-Dibromoethane (EDB)	10.0	10.7		ug/L		107	74 - 123
Chlorobenzene	10.0	10.1		ug/L		101	80 - 120
1,1,1,2-Tetrachloroethane	10.0	10.2		ug/L		102	63 - 140
Ethylbenzene	10.0	10.7		ug/L		107	72 - 126
Xylenes, Total	20.0	21.2		ug/L		106	76 - 128
Styrene	10.0	11.1		ug/L		111	71 - 127
Bromoform	10.0	10.6		ug/L		106	46 - 150
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	62 - 125
Acrylonitrile	100	97.6		ug/L		98	30 - 140
1,4-Dioxane	200	165	J	ug/L		83	10 - 160

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		64 - 135
Toluene-d8 (Surr)	102		71 - 118
4-Bromofluorobenzene (Surr)	100		70 - 118
Dibromofluoromethane (Surr)	87		70 - 128

QC Association Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

GC/MS VOA

Analysis Batch: 157127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-48564-7	HD-CW-6-0/1-0	Total/NA	Water	8260C	
180-48564-7 MS	HD-CW-6-0/1-0	Total/NA	Water	8260C	
180-48564-7 MSD	HD-CW-6-0/1-0	Total/NA	Water	8260C	
180-48564-10	HD-QC-16-0/1-2	Total/NA	Water	8260C	
LCS 180-157127/10	Lab Control Sample	Total/NA	Water	8260C	
MB 180-157127/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 157249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-48564-1	HD-CW-1-0/1-0	Total/NA	Water	8260C	
180-48564-2	HD-CW-1A-0/1-0	Total/NA	Water	8260C	
180-48564-3	HD-CW-2-0/1-0	Total/NA	Water	8260C	
180-48564-4	HD-CW-3-0/1-0	Total/NA	Water	8260C	
180-48564-5	HD-CW-4-0/1-0	Total/NA	Water	8260C	
180-48564-6	HD-CW-5-0/1-0	Total/NA	Water	8260C	
LCS 180-157249/15	Lab Control Sample	Total/NA	Water	8260C	
MB 180-157249/12	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 157327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-48564-4 - DL	HD-CW-3-0/1-0	Total/NA	Water	8260C	
LCS 180-157327/12	Lab Control Sample	Total/NA	Water	8260C	
MB 180-157327/5	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 157435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-48564-8	HD-CW-7-0/1-0	Total/NA	Water	8260C	
180-48564-9 - DL	HD-CW-7A-0/1-0	Total/NA	Water	8260C	
180-48564-9	HD-CW-7A-0/1-0	Total/NA	Water	8260C	
180-48564-11 - DL	HD-QC5-0/1-1	Total/NA	Water	8260C	
180-48564-11	HD-QC5-0/1-1	Total/NA	Water	8260C	
LCS 180-157435/7	Lab Control Sample	Total/NA	Water	8260C	
MB 180-157435/4	Method Blank	Total/NA	Water	8260C	

Lab Chronicle

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Date Collected: 10/06/15 09:15

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	157249	10/16/15 19:58	PJJ	TAL PIT
Instrument ID: CHHP5										

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

Date Collected: 10/06/15 08:05

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	157249	10/16/15 20:23	PJJ	TAL PIT
Instrument ID: CHHP5										

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

Date Collected: 10/07/15 07:25

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	157249	10/16/15 20:47	PJJ	TAL PIT
Instrument ID: CHHP5										

Client Sample ID: HD-CW-3-0/1-0

Date Collected: 10/06/15 09:20

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	157249	10/16/15 21:11	PJJ	TAL PIT
Instrument ID: CHHP5										
Total/NA	Analysis	8260C	DL	20	5 mL	5 mL	157327	10/17/15 20:25	PJJ	TAL PIT
Instrument ID: CHHP5										

Client Sample ID: HD-CW-4-0/1-0

Date Collected: 10/07/15 08:25

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	157249	10/16/15 21:35	PJJ	TAL PIT
Instrument ID: CHHP5										

Lab Chronicle

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

Client Sample ID: HD-CW-5-0/1-0

Lab Sample ID: 180-48564-6

Date Collected: 10/07/15 07:45

Matrix: Water

Date Received: 10/08/15 08:45

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	157249	10/16/15 22:48	PJJ	TAL PIT
Instrument ID: CHHP5										

Client Sample ID: HD-CW-6-0/1-0

Lab Sample ID: 180-48564-7

Date Collected: 10/07/15 07:35

Matrix: Water

Date Received: 10/08/15 08:45

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	157127	10/15/15 15:35	DLF	TAL PIT
Instrument ID: CHHP5										

Client Sample ID: HD-CW-7-0/1-0

Lab Sample ID: 180-48564-8

Date Collected: 10/07/15 07:30

Matrix: Water

Date Received: 10/08/15 08:45

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	157435	10/19/15 14:17	DLF	TAL PIT
Instrument ID: CHHP5										

Client Sample ID: HD-CW-7A-0/1-0

Lab Sample ID: 180-48564-9

Date Collected: 10/06/15 07:50

Matrix: Water

Date Received: 10/08/15 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	5	5 mL	5 mL	157435	10/19/15 15:05	DLF	TAL PIT
Instrument ID: CHHP5										
Total/NA	Analysis	8260C		1	5 mL	5 mL	157435	10/19/15 20:43	DLF	TAL PIT
Instrument ID: CHHP5										

Client Sample ID: HD-QC-16-0/1-2

Lab Sample ID: 180-48564-10

Date Collected: 10/06/15 12:00

Matrix: Water

Date Received: 10/08/15 08:45

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	157127	10/15/15 15:11	DLF	TAL PIT
Instrument ID: CHHP5										

Lab Chronicle

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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

Date Collected: 10/06/15 08:00

Date Received: 10/08/15 08:45

Lab Sample ID: 180-48564-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	5	5 mL	5 mL	157435	10/19/15 15:29	DLF	TAL PIT
		Instrument ID: CHHP5								
Total/NA	Analysis	8260C		1	5 mL	5 mL	157435	10/19/15 21:07	DLF	TAL PIT
		Instrument ID: CHHP5								

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: Analysis

DLF = Donald Ferguson

PJJ = Patrick Journet

Certification Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

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	04-30-16

Method Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48564-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT

Protocol References:

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: 180-48564-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-48564-1	HD-CW-1-0/1-0	Water	10/06/15 09:15	10/08/15 08:45
180-48564-2	HD-CW-1A-0/1-0	Water	10/06/15 08:05	10/08/15 08:45
180-48564-3	HD-CW-2-0/1-0	Water	10/07/15 07:25	10/08/15 08:45
180-48564-4	HD-CW-3-0/1-0	Water	10/06/15 09:20	10/08/15 08:45
180-48564-5	HD-CW-4-0/1-0	Water	10/07/15 08:25	10/08/15 08:45
180-48564-6	HD-CW-5-0/1-0	Water	10/07/15 07:45	10/08/15 08:45
180-48564-7	HD-CW-6-0/1-0	Water	10/07/15 07:35	10/08/15 08:45
180-48564-8	HD-CW-7-0/1-0	Water	10/07/15 07:30	10/08/15 08:45
180-48564-9	HD-CW-7A-0/1-0	Water	10/06/15 07:50	10/08/15 08:45
180-48564-10	HD-QC-16-0/1-2	Water	10/06/15 12:00	10/08/15 08:45
180-48564-11	HD-QC5-0/1-1	Water	10/06/15 08:00	10/08/15 08:45

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1

SDG No.: _____

Instrument ID: CHHP5 Analysis Batch Number: 151868Lab Sample ID: IC 180-151868/6 Client Sample ID: _____Date Analyzed: 08/26/15 15:04 Lab File ID: 50826006.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.65	Incomplete Integration	fergusond	08/27/15 10:07
Acetone	3.45	Peak Tail	fergusond	08/27/15 10:07

Lab Sample ID: IC 180-151868/12 Client Sample ID: _____Date Analyzed: 08/26/15 17:04 Lab File ID: 50826012.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.03	Incomplete Integration	fergusond	08/27/15 10:34

Lab Sample ID: IC 180-151868/14 Client Sample ID: _____Date Analyzed: 08/26/15 17:52 Lab File ID: 50826014.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.70	Incomplete Integration	fergusond	08/27/15 10:43

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1

SDG No.: _____

Instrument ID: CHHP5 Analysis Batch Number: 157127

Lab Sample ID: CCVIS 180-157127/2 Client Sample ID: _____

Date Analyzed: 10/15/15 12:56 Lab File ID: 51015002.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.70	Incomplete Integration	fergusond	10/15/15 13:45
1,4-Dioxane	8.03	Incomplete Integration	fergusond	10/15/15 13:45

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1

SDG No.: _____

Instrument ID: CHHP5 Analysis Batch Number: 157249Lab Sample ID: CCVIS 180-157249/4 Client Sample ID: _____Date Analyzed: 10/16/15 15:06 Lab File ID: 51016004.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.71	Incomplete Integration	fergusond	10/16/15 15:36
Acrolein	3.23	Incomplete Integration	fergusond	10/16/15 15:36
1,4-Dioxane	8.03	Incomplete Integration	fergusond	10/16/15 15:36

Lab Sample ID: LCS 180-157249/15 Client Sample ID: _____Date Analyzed: 10/16/15 17:58 Lab File ID: 51016015.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.04	Incomplete Integration	fergusond	10/16/15 18:19

Lab Sample ID: 180-48564-4 Client Sample ID: HD-CW-3-0/1-0Date Analyzed: 10/16/15 21:11 Lab File ID: 51016023.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.76	Poor chromatography	journetp	10/17/15 12:14

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1

SDG No.: _____

Instrument ID: CHHP5 Analysis Batch Number: 157327

Lab Sample ID: CCVIS 180-157327/2 Client Sample ID: _____

Date Analyzed: 10/17/15 10:09 Lab File ID: 51017002.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TBA-d9 (IS)	4.26	Poor chromatography	journetp	10/17/15 10:34
2-Butanone (MEK)	5.96	Poor chromatography	journetp	10/17/15 10:34
1,4-Dioxane	8.03	Poor chromatography	journetp	10/17/15 10:34

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1

SDG No.: _____

Instrument ID: CHHP5 Analysis Batch Number: 157435Lab Sample ID: CCVIS 180-157435/2 Client Sample ID: _____Date Analyzed: 10/19/15 10:09 Lab File ID: 51019002.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.02	Incomplete Integration	fergusond	10/19/15 10:47

Lab Sample ID: 180-48564-8 Client Sample ID: HD-CW-7-0/1-0Date Analyzed: 10/19/15 14:17 Lab File ID: 51019011.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.76	Incomplete Integration	fergusond	10/19/15 14:30
Methyl tert-butyl ether	4.60	Incomplete Integration	fergusond	10/19/15 14:30

Lab Sample ID: 180-48564-9 DL Client Sample ID: HD-CW-7A-0/1-0 DLDate Analyzed: 10/19/15 15:05 Lab File ID: 51019013.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.40	Incomplete Integration	fergusond	10/19/15 15:20

Lab Sample ID: 180-48564-11 DL Client Sample ID: HD-QC5-0/1-1 DLDate Analyzed: 10/19/15 15:29 Lab File ID: 51019014.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.39	Incomplete Integration	fergusond	10/19/15 15:39

Lab Sample ID: 180-48564-9 Client Sample ID: HD-CW-7A-0/1-0Date Analyzed: 10/19/15 20:43 Lab File ID: 51019027.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.45	Incomplete Integration	fergusond	10/20/15 08:30

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration				
					Reagent ID	Volume Added						
VOA8260INT_00040	09/03/15	08/03/15	Methanol, Lot 85233	10 mL	VOA8260INTRES_00088	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_00088	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				
VOA8260INT_00043	10/24/15	09/24/15	Methanol, Lot 99494	10 mL	VOA8260INTRES_00104	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_00104	05/31/20		Restek, Lot A0110961		(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_00040	09/03/15	08/03/15	Methanol, Lot 85233	100 mL	VOA8260SURRES_00067	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_00067	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				
VOA8260SURR_00043	10/24/15	09/24/15	Methanol, Lot 99494	100 mL	VOA8260SURRES_00081	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_00081	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				
VOA8260VOA2ND_00147	10/19/15	10/12/15	Methanol, Lot 99494	10 mL	VOA8260GAS2ND_00116	0.1 mL	Bromomethane	25 ug/mL				
							Chloroethane	25 ug/mL				
							Chloromethane	25 ug/mL				
							Vinyl chloride	25 ug/mL				
					VOA8260VOA2ND_00145					1 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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00116	04/30/18		Restek, Lot A0111273			(Purchased Reagent)	Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOA2ND_00145	10/25/15	09/25/15	Methanol, Lot 99494	10 mL	VOA8260MEGA2_00037	1 mL	1,1,1,2-Tetrachloroethane	250 ug/mL
							1,1,1-Trichloroethane	250 ug/mL
							1,1,2,2-Tetrachloroethane	250 ug/mL
							1,1,2-Trichloroethane	250 ug/mL
							1,1-Dichloroethane	250 ug/mL
							1,1-Dichloroethene	250 ug/mL
							1,2-Dibromoethane (EDB)	250 ug/mL
							1,2-Dichloroethane	250 ug/mL
							1,2-Dichloropropane	250 ug/mL
							1,4-Dioxane	5000 ug/mL
							Acrylonitrile	2500 ug/mL
							Benzene	250 ug/mL
							Bromochloromethane	250 ug/mL
							Bromodichloromethane	250 ug/mL
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chloroform	250 ug/mL
							cis-1,2-Dichloroethene	250 ug/mL
							cis-1,3-Dichloropropene	250 ug/mL
							Dibromochloromethane	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	250 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylene Chloride	250 ug/mL
							Styrene	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Toluene	250 ug/mL
							trans-1,2-Dichloroethene	250 ug/mL
							trans-1,3-Dichloropropene	250 ug/mL
							Trichloroethene	250 ug/mL
							Xylenes, Total	500 ug/mL
..VOA8260MEGA2_00037	01/31/17		Restek, Lot A0108163		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2-Dibromoethane (EDB)	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VOA8260VOAPRI_00139	09/01/15	08/25/15	Methanol, Lot 85233	10 mL	VOA8260GAS1ST_00113	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorofluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00136	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00113	04/30/18		Restek, Lot A0110070			(Purchased Reagent)	Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00136	09/06/15	08/06/15	Methanol, Lot 85233	10 mL	VOA8260KET1ST_00048	0.2 mL	2-Butanone (MEK)	250 ug/mL
							2-Hexanone	250 ug/mL
							4-Methyl-2-pentanone (MIBK)	250 ug/mL
							Acetone	250 ug/mL
					VOA8260MEGA1_00032	1 mL	1,1,1,2-Tetrachloroethane	250 ug/mL
							1,1,1-Trichloroethane	250 ug/mL
							1,1,2,2-Tetrachloroethane	250 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloroethane	250 ug/mL
							1,1-Dichloroethane	250 ug/mL
							1,1-Dichloroethene	250 ug/mL
							1,1-Dichloropropene	250 ug/mL
							1,2,3-Trichlorobenzene	250 ug/mL
							1,2,3-Trichloropropane	250 ug/mL
							1,2,4-Trichlorobenzene	250 ug/mL
							1,2,4-Trimethylbenzene	250 ug/mL
							1,2-Dibromo-3-Chloropropane	250 ug/mL
							1,2-Dibromoethane (EDB)	250 ug/mL
							1,2-Dichlorobenzene	250 ug/mL
							1,2-Dichloroethane	250 ug/mL
							1,2-Dichloropropane	250 ug/mL
							1,3,5-Trimethylbenzene	250 ug/mL
							1,3-Dichlorobenzene	250 ug/mL
							1,3-Dichloropropane	250 ug/mL
							1,4-Dichlorobenzene	250 ug/mL
							1,4-Dioxane	5000 ug/mL
							2,2-Dichloropropane	250 ug/mL
							2-Chlorotoluene	250 ug/mL
							2-Methyl-2-propanol	2500 ug/mL
							3-Chloro-1-propene	250 ug/mL
							4-Chlorotoluene	250 ug/mL
							4-Isopropyltoluene	250 ug/mL
							Acrylonitrile	2500 ug/mL
							Benzene	250 ug/mL
							Bromobenzene	250 ug/mL
							Bromochloromethane	250 ug/mL
							Bromodichloromethane	250 ug/mL
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chloroform	250 ug/mL
							cis-1,2-Dichloroethene	250 ug/mL
							cis-1,3-Dichloropropene	250 ug/mL
							Cyclohexane	250 ug/mL
							Dibromochloromethane	250 ug/mL
							Dibromomethane	250 ug/mL
							Ethyl ether	250 ug/mL
							Ethyl methacrylate	250 ug/mL
							Ethylbenzene	250 ug/mL
							Hexachlorobutadiene	250 ug/mL
							Hexane	250 ug/mL
							Iodomethane	250 ug/mL
							Isobutyl alcohol	6250 ug/mL
							Isopropylbenzene	250 ug/mL
							m-Xylene & p-Xylene	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl acetate	1250 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylcyclohexane	250 ug/mL
							Methylene Chloride	250 ug/mL
							n-Butylbenzene	250 ug/mL
							n-Heptane	250 ug/mL
							N-Propylbenzene	250 ug/mL
							Naphthalene	250 ug/mL
							o-Xylene	250 ug/mL
							sec-Butylbenzene	250 ug/mL
							Styrene	250 ug/mL
							tert-Butylbenzene	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Tetrahydrofuran	500 ug/mL
							Toluene	250 ug/mL
							trans-1,2-Dichloroethene	250 ug/mL
							trans-1,3-Dichloropropene	250 ug/mL
							trans-1,4-Dichloro-2-butene	250 ug/mL
							Trichloroethene	250 ug/mL
..VOA8260KET1ST_00048	04/30/18		Restek, Lot A0110400		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VOA8260MEGA1_00032	02/28/16		Restek, Lot A0108166		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane (EDB)	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	12500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration					
					Reagent ID	Volume Added							
VOA8260VOAPRI_00148	10/19/15	10/12/15	Methanol, Lot 99494	10 mL	VOA8260GAS1ST_00119	0.1 mL	Bromomethane	25 ug/mL					
							Chloroethane	25 ug/mL					
							Chloromethane	25 ug/mL					
							Vinyl chloride	25 ug/mL					
					VOA8260VOAPRI_00146						1 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_00119	04/30/18		Restek, Lot A0110070				(Purchased Reagent)	Bromomethane	2500 ug/mL				
								Chloroethane	2500 ug/mL				
								Chloromethane	2500 ug/mL				
								Vinyl chloride	2500 ug/mL				
.VOA8260VOAPRI_00146	10/25/15	09/25/15	Methanol, Lot 99494	10 mL	VOA8260MEGA1_00034	1 mL	1,1,1,2-Tetrachloroethane	250 ug/mL					
							1,1,1-Trichloroethane	250 ug/mL					
							1,1,2,2-Tetrachloroethane	250 ug/mL					
							1,1,2-Trichloroethane	250 ug/mL					
							1,1-Dichloroethane	250 ug/mL					
							1,1-Dichloroethene	250 ug/mL					
							1,2-Dibromoethane (EDB)	250 ug/mL					
1,2-Dichloroethane	250 ug/mL												

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloropropane	250 ug/mL
							1,4-Dioxane	5000 ug/mL
							Acrylonitrile	2500 ug/mL
							Benzene	250 ug/mL
							Bromochloromethane	250 ug/mL
							Bromodichloromethane	250 ug/mL
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chloroform	250 ug/mL
							cis-1,2-Dichloroethene	250 ug/mL
							cis-1,3-Dichloropropene	250 ug/mL
							Dibromochloromethane	250 ug/mL
							Ethylbenzene	250 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylene Chloride	250 ug/mL
							Styrene	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Toluene	250 ug/mL
							trans-1,2-Dichloroethene	250 ug/mL
							trans-1,3-Dichloropropene	250 ug/mL
							Trichloroethene	250 ug/mL
							Xylenes, Total	500 ug/mL
..VOA8260MEGA1_00034	02/28/16		Restek, Lot A0108166		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2-Dibromoethane (EDB)	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylene Chloride	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VOAACROLEINPR_00006	09/11/15	08/11/15	Methanol, Lot 85233	100 mL	VOAACRORES_00077	0.125 mL	Acrolein	25 ug/mL
.VOAACRORES_00077	09/30/15		Restek, Lot A0111006		(Purchased Reagent)		Acrolein	20000 ug/mL
VOAVAPRI_00006	08/31/15	08/25/15	Methanol, Lot 85233	50 mL	VOA8260VARES_00054	0.25 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES_00054	08/31/15		Restek, Lot A0109190		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
voaWEE1stRest_00001	09/21/15	08/21/15	Methanol, Lot 85233	25 mL	VOARESEE1ST_00021	0.125 mL	1,2-dichloro-4-(trifluoromethyl)benzene	25 ug/mL
							2,3,6-Trichlorotoluene	25 ug/mL
							2,3- & 3,4- Dichlorotoluene	50 ug/mL
							2,4,5-Trichlorotoluene	25 ug/mL
							2,4- & 2,5- & 2,6-Dichlorotoluene	75 ug/mL
							2,4-Dichloro-1-(trifluoromethyl)-benzene	25 ug/mL
							2,5-Dichlorobenzotrifluoride	25 ug/mL
							2-Chlorobenzotrifluoride	25 ug/mL
							3-Chlorobenzotrifluoride	25 ug/mL
							3-Chlorotoluene	25 ug/mL
							4-Chlorobenzotrifluoride	25 ug/mL
.VOARESEE1ST_00021	09/30/16		Restek, Lot A0109701		(Purchased Reagent)		1,2-dichloro-4-(trifluoromethyl)benzene	5000 ug/mL
							2,3,6-Trichlorotoluene	5000 ug/mL
							2,3- & 3,4- Dichlorotoluene	10000 ug/mL
							2,4,5-Trichlorotoluene	5000 ug/mL
							2,4- & 2,5- & 2,6-Dichlorotoluene	15000 ug/mL
							2,4-Dichloro-1-(trifluoromethyl)-benzene	5000 ug/mL
							2,5-Dichlorobenzotrifluoride	5000 ug/mL
							2-Chlorobenzotrifluoride	5000 ug/mL
							3-Chlorobenzotrifluoride	5000 ug/mL
							3-Chlorotoluene	5000 ug/mL
							4-Chlorobenzotrifluoride	5000 ug/mL
voaWKet1 Rest_00001	09/11/15	08/11/15	Methanol, Lot 85233	50 mL	VOA8260KET1ST_00049	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_00049	04/30/18		Restek, Lot A0110400		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetone	12500 ug/mL
voaKetmix2nd_00002	10/22/15	09/22/15	Methanol, Lot 99494	50 mL	VOA8260KET2ND_00054	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_00054	05/31/18		Restek, Lot A0110970		(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

Reagent

VOA8260GAS1ST_00113



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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.:** A0110070

Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : April 30, 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)	2,499.9 µg/mL	+/-	17.9502	µg/mL Gravimetric
	CAS # 75-71-8 (Lot Q167-08)		+/-	30.0934	µg/mL Unstressed
	Purity 99%		+/-	34.1055	µg/mL Stressed
2	Chloromethane (methyl chloride)	2,500.1 µg/mL	+/-	17.2963	µg/mL Gravimetric
	CAS # 74-87-3 (Lot SHBC8470V)		+/-	29.7101	µg/mL Unstressed
	Purity 99%		+/-	33.7686	µg/mL Stressed
3	Vinyl chloride	2,500.2 µg/mL	+/-	16.5642	µg/mL Gravimetric
	CAS # 75-01-4 (Lot 17542)		+/-	29.2906	µg/mL Unstressed
	Purity 99%		+/-	33.4004	µg/mL Stressed
4	1,3-Butadiene	2,500.0 µg/mL	+/-	17.0072	µg/mL Gravimetric
	CAS # 106-99-0 (Lot SHBF3387V)		+/-	29.5416	µg/mL Unstressed
	Purity 99%		+/-	33.6200	µg/mL Stressed
5	Bromomethane (methyl bromide)	2,499.8 µg/mL	+/-	18.9451	µg/mL Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/-	30.6969	µg/mL Unstressed
	Purity 99%		+/-	34.6391	µg/mL Stressed
6	Chloroethane (ethyl chloride)	2,500.3 µg/mL	+/-	17.6395	µg/mL Gravimetric
	CAS # 75-00-3 (Lot SHBD1717V)		+/-	29.9122	µg/mL Unstressed
	Purity 99%		+/-	33.9470	µg/mL Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.2 µg/mL	+/-	16.7318	µg/mL Gravimetric
	CAS # 75-43-4 (Lot Q9B-58)		+/-	29.3854	µg/mL Unstressed
	Purity 99%		+/-	33.4835	µg/mL Stressed

8	Trichlorofluoromethane (CFC-11)	2,500.3 µg/mL	+/- 16.5866	µg/mL	Gravimetric
	CAS # 75-69-4 (Lot SHBD5121V)		+/- 29.3037	µg/mL	Unstressed
	Purity 99%		+/- 33.4120	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)

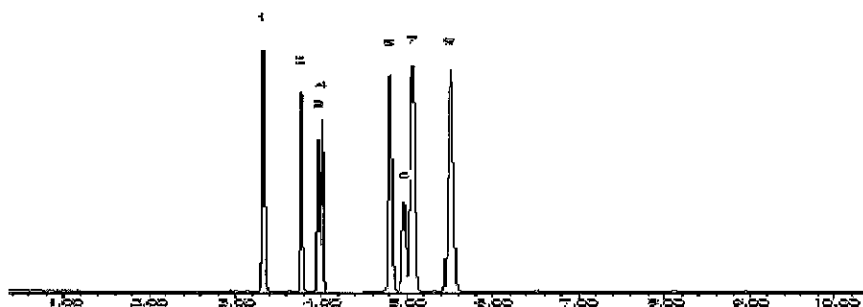
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

[Signature]
F. Joseph Tallon - Mix Technician

Date Mixed: 02-Apr-2015 **Balance:** B251644995

[Signature]
Tyler Brown - QA Analyst

Date Passed: 08-Apr-2015

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

Reagent

VOA8260GAS1ST_00119



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Catalog No. : 569722 **Lot No.:** A0110070

Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : April 30, 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)	2,499.9 µg/mL	+/-	17.9502	µg/mL Gravimetric
	CAS # 75-71-8 (Lot Q167-08)		+/-	30.0934	µg/mL Unstressed
	Purity 99%		+/-	34.1055	µg/mL Stressed
2	Chloromethane (methyl chloride)	2,500.1 µg/mL	+/-	17.2963	µg/mL Gravimetric
	CAS # 74-87-3 (Lot SHBC8470V)		+/-	29.7101	µg/mL Unstressed
	Purity 99%		+/-	33.7686	µg/mL Stressed
3	Vinyl chloride	2,500.2 µg/mL	+/-	16.5642	µg/mL Gravimetric
	CAS # 75-01-4 (Lot 17542)		+/-	29.2906	µg/mL Unstressed
	Purity 99%		+/-	33.4004	µg/mL Stressed
4	1,3-Butadiene	2,500.0 µg/mL	+/-	17.0072	µg/mL Gravimetric
	CAS # 106-99-0 (Lot SHBF3387V)		+/-	29.5416	µg/mL Unstressed
	Purity 99%		+/-	33.6200	µg/mL Stressed
5	Bromomethane (methyl bromide)	2,499.8 µg/mL	+/-	18.9451	µg/mL Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/-	30.6969	µg/mL Unstressed
	Purity 99%		+/-	34.6391	µg/mL Stressed
6	Chloroethane (ethyl chloride)	2,500.3 µg/mL	+/-	17.6395	µg/mL Gravimetric
	CAS # 75-00-3 (Lot SHBD1717V)		+/-	29.9122	µg/mL Unstressed
	Purity 99%		+/-	33.9470	µg/mL Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.2 µg/mL	+/-	16.7318	µg/mL Gravimetric
	CAS # 75-43-4 (Lot Q9B-58)		+/-	29.3854	µg/mL Unstressed
	Purity 99%		+/-	33.4835	µg/mL Stressed

8	Trichlorofluoromethane (CFC-11)	2,500.3 $\mu\text{g/mL}$	+/- 16.5866	$\mu\text{g/mL}$	Gravimetric
	CAS # 75-69-4 (Lot SHBD5121V)		+/- 29.3037	$\mu\text{g/mL}$	Unstressed
	Purity 99%		+/- 33.4120	$\mu\text{g/mL}$	Stressed

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

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

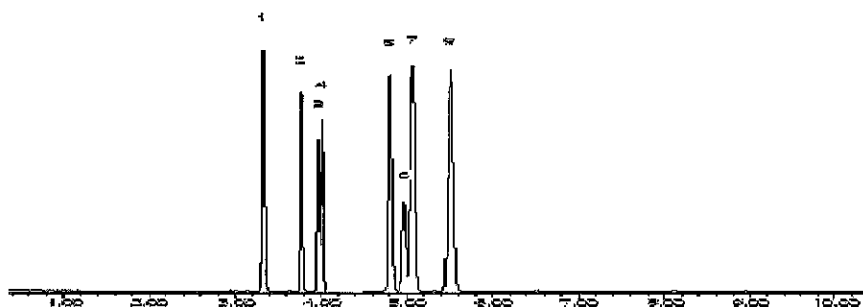
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

[Signature]
F. Joseph Tallon - Mix Technician

Date Mixed: 02-Apr-2015 **Balance:** B251644995

[Signature]
Tyler Brown - QA Analyst

Date Passed: 08-Apr-2015

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

Reagent

VOA8260GAS2ND_00116



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Catalog No. : 569722.SEC Lot No.: A0111273

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : May 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)	2,497.6 µg/mL	+/-	24.0984	µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 21773)		+/-	34.1039	µg/mL	Unstressed
	Purity 99%		+/-	37.6853	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,503.8 µg/mL	+/-	21.5368	µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/-	32.3897	µg/mL	Unstressed
	Purity 99%		+/-	36.1592	µg/mL	Stressed
3	Vinyl chloride	2,492.0 µg/mL	+/-	23.1023	µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/-	33.3685	µg/mL	Unstressed
	Purity 99%		+/-	37.0056	µg/mL	Stressed
4	1,3-Butadiene	2,488.6 µg/mL	+/-	19.2643	µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 18349)		+/-	30.8102	µg/mL	Unstressed
	Purity 99%		+/-	34.7063	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,491.9 µg/mL	+/-	20.7776	µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/-	31.8022	µg/mL	Unstressed
	Purity 99%		+/-	35.5993	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,516.0 µg/mL	+/-	19.4764	µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/-	31.1495	µg/mL	Unstressed
	Purity 99%		+/-	35.0885	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,503.3 µg/mL	+/-	18.8823	µg/mL	Gravimetric
	CAS # 75-43-4.SEC (Lot SHBC0858V)		+/-	30.6846	µg/mL	Unstressed
	Purity 99%		+/-	34.6386	µg/mL	Stressed

Reagent

VOA8260INTRES_00088



CERTIFIED REFERENCE MATERIAL

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

CERTIFIED VALUES

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

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

Reagent

VOA8260INTRES_00104



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Catalog No. : 568718 **Lot No.:** A0110961

Description : 8260 Internal Standard 2014
8260 Internal Standard 2014 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul

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

Expiration Date : May 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol CAS # 25725-11-5 Purity 99% (Lot I201P13)	5,001.6 µg/mL	+/- 29.0797	µg/mL	Gravimetric
			+/- 106.0709	µg/mL	Unstressed
			+/- 106.5415	µg/mL	Stressed
2	2-Butanone-d5 CAS # 24313-50-6 Purity 99% (Lot M276P20)	1,250.0 µg/mL	+/- 7.2844	µg/mL	Gravimetric
			+/- 26.5138	µg/mL	Unstressed
			+/- 26.6314	µg/mL	Stressed
3	Fluorobenzene CAS # 462-06-6 Purity 99% (Lot 1380033)	250.4 µg/mL	+/- 1.4771	µg/mL	Gravimetric
			+/- 5.3162	µg/mL	Unstressed
			+/- 5.3397	µg/mL	Stressed
4	1,4-Dioxane-d8 CAS # 17647-74-4 Purity 99% (Lot 1-19073)	5,000.4 µg/mL	+/- 29.0728	µg/mL	Gravimetric
			+/- 106.0454	µg/mL	Unstressed
			+/- 106.5159	µg/mL	Stressed
5	Chlorobenzene-d5 CAS # 3114-55-4 Purity 99% (Lot PR-23926)	250.6 µg/mL	+/- 1.4783	µg/mL	Gravimetric
			+/- 5.3205	µg/mL	Unstressed
			+/- 5.3440	µg/mL	Stressed
6	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 Purity 99% (Lot PR-18488)	250.6 µg/mL	+/- 1.4783	µg/mL	Gravimetric
			+/- 5.3205	µg/mL	Unstressed
			+/- 5.3440	µg/mL	Stressed

Reagent

VOA8260KET1ST_00048

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Catalog No. : 569721 **Lot No.:** A0110400
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 : April 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone	12,506.8 µg/mL	+/-	73.2301	µg/mL	Gravimetric
	CAS # 67-64-1 (Lot 07196AK)		+/-	665.6407	µg/mL	Unstressed
	Purity 99%		+/-	666.3747	µg/mL	Stressed
2	2-Butanone (MEK)	12,504.8 µg/mL	+/-	73.2184	µg/mL	Gravimetric
	CAS # 78-93-3 (Lot BCBH7802V)		+/-	665.5343	µg/mL	Unstressed
	Purity 99%		+/-	666.2681	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,509.2 µg/mL	+/-	73.2441	µg/mL	Gravimetric
	CAS # 108-10-1 (Lot SHBF5332V)		+/-	665.7684	µg/mL	Unstressed
	Purity 99%		+/-	666.5025	µg/mL	Stressed
4	2-Hexanone	12,501.6 µg/mL	+/-	73.1996	µg/mL	Gravimetric
	CAS # 591-78-6 (Lot MKBN7380V)		+/-	665.3640	µg/mL	Unstressed
	Purity 99%		+/-	666.0976	µg/mL	Stressed

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

Reagent

VOA8260KET1ST_00049

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Catalog No. : 569721 **Lot No.:** A0110400
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 : April 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone	12,506.8 µg/mL	+/-	73.2301	µg/mL	Gravimetric
	CAS # 67-64-1 (Lot 07196AK)		+/-	665.6407	µg/mL	Unstressed
	Purity 99%		+/-	666.3747	µg/mL	Stressed
2	2-Butanone (MEK)	12,504.8 µg/mL	+/-	73.2184	µg/mL	Gravimetric
	CAS # 78-93-3 (Lot BCBH7802V)		+/-	665.5343	µg/mL	Unstressed
	Purity 99%		+/-	666.2681	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,509.2 µg/mL	+/-	73.2441	µg/mL	Gravimetric
	CAS # 108-10-1 (Lot SHBF5332V)		+/-	665.7684	µg/mL	Unstressed
	Purity 99%		+/-	666.5025	µg/mL	Stressed
4	2-Hexanone	12,501.6 µg/mL	+/-	73.1996	µg/mL	Gravimetric
	CAS # 591-78-6 (Lot MKBN7380V)		+/-	665.3640	µg/mL	Unstressed
	Purity 99%		+/-	666.0976	µg/mL	Stressed

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

Reagent

VOA8260KET2ND_00054



CERTIFIED REFERENCE MATERIAL

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Catalog No. : 569721.sec **Lot No.:** A0110970
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 : May 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	12,528.0 µg/mL	+/-	73.3542	µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot P14A572)		+/-	666.7690	µg/mL	Unstressed
	Purity 99%		+/-	667.5042	µg/mL	Stressed
2	2-Butanone (MEK)	12,530.0 µg/mL	+/-	73.3659	µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot RA58J)		+/-	666.8755	µg/mL	Unstressed
	Purity 99%		+/-	667.6108	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,585.0 µg/mL	+/-	73.6879	µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/-	669.8027	µg/mL	Unstressed
	Purity 99%		+/-	670.5412	µg/mL	Stressed
4	2-Hexanone	12,516.0 µg/mL	+/-	73.2839	µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot ZSVCD-FF)		+/-	666.1304	µg/mL	Unstressed
	Purity 99%		+/-	666.8648	µg/mL	Stressed

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

Reagent

VOA8260MEGA1_00032



CERTIFIED REFERENCE MATERIAL

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Catalog No. : 569720 **Lot No.:** A0108166
Description : 8260 List 1 / Std #1 MegaMix (2015)
8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : January 31, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether)	2,521.3 µg/mL	+/-	14.6588	µg/mL	Gravimetric
	CAS # 60-29-7 (Lot SHBF3466V)		+/-	134.1754	µg/mL	Unstressed
	Purity 99%		+/-	134.3233	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,522.5 µg/mL	+/-	14.6660	µg/mL	Gravimetric
	CAS # 76-13-1 (Lot 00001135)		+/-	134.2419	µg/mL	Unstressed
	Purity 99%		+/-	134.3899	µg/mL	Stressed
3	1,1-Dichloroethane	2,499.5 µg/mL	+/-	14.5323	µg/mL	Gravimetric
	CAS # 75-34-3 (Lot Q179-33)		+/-	133.0173	µg/mL	Unstressed
	Purity 98%		+/-	133.1640	µg/mL	Stressed
4	tert-Butanol (TBA)	25,002.4 µg/mL	+/-	145.3584	µg/mL	Gravimetric
	CAS # 75-65-0 (Lot SHBC6893V)		+/-	1,330.5704	µg/mL	Unstressed
	Purity 99%		+/-	1,332.0378	µg/mL	Stressed
5	Iodomethane (methyl iodide)	2,510.0 µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS # 74-88-4 (Lot SHBC7288V)		+/-	133.5767	µg/mL	Unstressed
	Purity 99%		+/-	133.7240	µg/mL	Stressed
6	Methyl acetate	12,505.4 µg/mL	+/-	72.7037	µg/mL	Gravimetric
	CAS # 79-20-9 (Lot SHBD7134V)		+/-	665.5101	µg/mL	Unstressed
	Purity 98%		+/-	666.2440	µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	2,500.0 µg/mL	+/-	19.2743	µg/mL	Gravimetric
	CAS # 107-05-1 (Lot MKBG5777V)		+/-	133.6453	µg/mL	Unstressed
	Purity 99%		+/-	133.7914	µg/mL	Stressed

8	Methylene chloride (dichloromethane)		2,511.3	µg/mL	+/-	14.6006	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBD4974V)			+/-	133.6432	µg/mL	Unstressed
	Purity 99%				+/-	133.7906	µg/mL	Stressed
9	Carbon disulfide		2,511.7	µg/mL	+/-	14.6035	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot C30Y997)			+/-	133.6693	µg/mL	Unstressed
	Purity 98%				+/-	133.8167	µg/mL	Stressed
10	Acrylonitrile		25,017.1	µg/mL	+/-	145.4441	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot 10172706)			+/-	1,331.3554	µg/mL	Unstressed
	Purity 99%				+/-	1,332.8236	µg/mL	Stressed
11	cis-1,2-Dichloroethene		2,503.9	µg/mL	+/-	14.5577	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBG8424V)			+/-	133.2507	µg/mL	Unstressed
	Purity 99%				+/-	133.3977	µg/mL	Stressed
12	n-Hexane (C6)		2,511.9	µg/mL	+/-	14.6043	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBF0293V)			+/-	133.6764	µg/mL	Unstressed
	Purity 99%				+/-	133.8239	µg/mL	Stressed
13	1,1-dichloroethene		2,521.3	µg/mL	+/-	14.6588	µg/mL	Gravimetric
	CAS # 75-35-4	(Lot SHBD6170V)			+/-	134.1754	µg/mL	Unstressed
	Purity 99%				+/-	134.3233	µg/mL	Stressed
14	2,2-Dichloropropane		2,500.0	µg/mL	+/-	14.5351	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBH9246V)			+/-	133.0434	µg/mL	Unstressed
	Purity 98%				+/-	133.1901	µg/mL	Stressed
15	trans-1,2-Dichloroethene		2,505.0	µg/mL	+/-	14.5643	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	133.3106	µg/mL	Unstressed
	Purity 99%				+/-	133.4576	µg/mL	Stressed
16	Isobutanol (2-Methyl-1-propanol)		62,553.8	µg/mL	+/-	363.6739	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBF2852V)			+/-	3,328.9705	µg/mL	Unstressed
	Purity 99%				+/-	3,332.6417	µg/mL	Stressed
17	Methyl-tert-butyl ether (MTBE)		2,504.6	µg/mL	+/-	14.5621	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBF1193V)			+/-	133.2906	µg/mL	Unstressed
	Purity 99%				+/-	133.4376	µg/mL	Stressed
18	Bromochloromethane		2,505.1	µg/mL	+/-	14.5650	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00004559)			+/-	133.3172	µg/mL	Unstressed
	Purity 99%				+/-	133.4642	µg/mL	Stressed
19	Tetrahydrofuran		5,000.7	µg/mL	+/-	29.0746	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBF2660V)			+/-	266.1270	µg/mL	Unstressed
	Purity 97%				+/-	266.4204	µg/mL	Stressed
20	1,1,1-trichloroethane		2,508.1	µg/mL	+/-	14.5825	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B14Z1114)			+/-	133.4769	µg/mL	Unstressed
	Purity 99%				+/-	133.6241	µg/mL	Stressed
21	Cyclohexane		2,504.0	µg/mL	+/-	14.5585	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot SHBD7873V)			+/-	133.2574	µg/mL	Unstressed
	Purity 99%				+/-	133.4043	µg/mL	Stressed
22	1,1-Dichloropropene		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot PR09161302)			+/-	133.1738	µg/mL	Unstressed
	Purity 98%				+/-	133.3207	µg/mL	Stressed
23	carbon tetrachloride		2,505.3	µg/mL	+/-	14.5657	µg/mL	Gravimetric
	CAS # 56-23-5	(Lot SHBC1410V)			+/-	133.3239	µg/mL	Unstressed
	Purity 99%				+/-	133.4709	µg/mL	Stressed

24	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SHBF2321V)	2,501.4 µg/mL	+/- 14.5432 +/- 133.1177 +/- 133.2645	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot SHBC6595V)	2,501.6 µg/mL	+/- 14.5447 +/- 133.1310 +/- 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBD4617V)	2,509.1 µg/mL	+/- 14.5883 +/- 133.5301 +/- 133.6774	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBF0943V)	2,504.8 µg/mL	+/- 14.5628 +/- 133.2973 +/- 133.4443	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Methylcyclohexane CAS # 108-87-2 Purity 99%	(Lot 50996APV)	2,502.5 µg/mL	+/- 14.5498 +/- 133.1775 +/- 133.3244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot 01113D0V)	2,502.4 µg/mL	+/- 14.5490 +/- 133.1709 +/- 133.3177	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	bromodichloromethane CAS # 75-27-4 Purity 98%	(Lot MKBL1617V)	2,507.9 µg/mL	+/- 14.5814 +/- 133.4672 +/- 133.6144	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1 Purity 99%	(Lot SHBF2002V)	50,001.4 µg/mL	+/- 290.6971 +/- 2,660.9612 +/- 2,663.8957	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10169264)	2,508.1 µg/mL	+/- 14.5825 +/- 133.4769 +/- 133.6241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 20936)	2,507.0 µg/mL	+/- 14.5759 +/- 133.4170 +/- 133.5641	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBF2730V)	2,502.4 µg/mL	+/- 14.5490 +/- 133.1709 +/- 133.3177	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot 69796APV)	2,500.9 µg/mL	+/- 14.5403 +/- 133.0911 +/- 133.2378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 99%	(Lot C363110)	2,502.1 µg/mL	+/- 14.5476 +/- 133.1576 +/- 133.3044	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	2,507.5 µg/mL	+/- 14.5788 +/- 133.4436 +/- 133.5908	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	2,505.3 µg/mL	+/- 14.5657 +/- 133.3239 +/- 133.4709	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBD2073V)	2,506.5 µg/mL	+/- 14.5730 +/- 133.3904 +/- 133.5375	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane CAS # 124-48-1 Purity 98%	(Lot MKBP0459V)	2,503.2	µg/mL	+/-	14.5536	µg/mL	Gravimetric
					+/-	133.2129	µg/mL	Unstressed
					+/-	133.3598	µg/mL	Stressed
41	1,2-Dibromoethane (EDB) CAS # 106-93-4 Purity 99%	(Lot BCBH3877V)	2,504.3	µg/mL	+/-	14.5599	µg/mL	Gravimetric
					+/-	133.2707	µg/mL	Unstressed
					+/-	133.4176	µg/mL	Stressed
42	Chlorobenzene CAS # 108-90-7 Purity 99%	(Lot SHBD3200V)	2,510.8	µg/mL	+/-	14.5977	µg/mL	Gravimetric
					+/-	133.6166	µg/mL	Unstressed
					+/-	133.7639	µg/mL	Stressed
43	1,1,2,2-Tetrachloroethane CAS # 79-34-5 Purity 99%	(Lot CFA4D)	2,502.9	µg/mL	+/-	14.5519	µg/mL	Gravimetric
					+/-	133.1975	µg/mL	Unstressed
					+/-	133.3444	µg/mL	Stressed
44	Ethylbenzene CAS # 100-41-4 Purity 99%	(Lot SHBC9001V)	2,509.6	µg/mL	+/-	14.5912	µg/mL	Gravimetric
					+/-	133.5567	µg/mL	Unstressed
					+/-	133.7040	µg/mL	Stressed
45	m-Xylene CAS # 108-38-3 Purity 99%	(Lot SHBF1720V)	1,252.6	µg/mL	+/-	7.2829	µg/mL	Gravimetric
					+/-	66.6619	µg/mL	Unstressed
					+/-	66.7355	µg/mL	Stressed
46	o-Xylene CAS # 95-47-6 Purity 98%	(Lot SHBC8668V)	2,503.7	µg/mL	+/-	14.5565	µg/mL	Gravimetric
					+/-	133.2390	µg/mL	Unstressed
					+/-	133.3859	µg/mL	Stressed
47	p-Xylene CAS # 106-42-3 Purity 99%	(Lot SHBF3427V)	1,253.3	µg/mL	+/-	7.2865	µg/mL	Gravimetric
					+/-	66.6952	µg/mL	Unstressed
					+/-	66.7688	µg/mL	Stressed
48	Styrene CAS # 100-42-5 Purity 99%	(Lot 10182421)	2,503.5	µg/mL	+/-	14.5556	µg/mL	Gravimetric
					+/-	133.2307	µg/mL	Unstressed
					+/-	133.3777	µg/mL	Stressed
49	Isopropylbenzene (cumene) CAS # 98-82-8 Purity 99%	(Lot 10169400)	2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
					+/-	133.1775	µg/mL	Unstressed
					+/-	133.3244	µg/mL	Stressed
50	bromoform CAS # 75-25-2 Purity 99%	(Lot SHBC3410V)	2,507.8	µg/mL	+/-	14.5803	µg/mL	Gravimetric
					+/-	133.4569	µg/mL	Unstressed
					+/-	133.6041	µg/mL	Stressed
51	1,1,1,2-Tetrachloroethane CAS # 630-20-6 Purity 99%	(Lot MKBS3769V)	2,510.3	µg/mL	+/-	14.5948	µg/mL	Gravimetric
					+/-	133.5900	µg/mL	Unstressed
					+/-	133.7373	µg/mL	Stressed
52	chloroform CAS # 67-66-3 Purity 99%	(Lot SHBB7498V)	2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
					+/-	133.1110	µg/mL	Unstressed
					+/-	133.2578	µg/mL	Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4 Purity 99%	(Lot 1428739V)	2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
					+/-	133.1775	µg/mL	Unstressed
					+/-	133.3244	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene CAS # 110-57-6 Purity 96%	(Lot MKBP5371V)	2,499.5	µg/mL	+/-	14.5322	µg/mL	Gravimetric
					+/-	133.0168	µg/mL	Unstressed
					+/-	133.1635	µg/mL	Stressed
55	n-Propylbenzene CAS # 103-65-1 Purity 99%	(Lot MKBQ8049V)	2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
					+/-	133.0578	µg/mL	Unstressed
					+/-	133.2045	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot MKBD4032V)	2,501.1 µg/mL	+/- 14.5418 +/- 133.1044 +/- 133.2511	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 98%	(Lot MKBJ1732V)	2,501.6 µg/mL	+/- 14.5444 +/- 133.1282 +/- 133.2750	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBH8892V)	2,500.3 µg/mL	+/- 14.5367 +/- 133.0578 +/- 133.2045	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBB7205V)	2,506.4 µg/mL	+/- 14.5723 +/- 133.3837 +/- 133.5308	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot S52237V)	2,500.1 µg/mL	+/- 14.5359 +/- 133.0511 +/- 133.1979	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBJ3305V)	2,503.1 µg/mL	+/- 14.5534 +/- 133.2108 +/- 133.3577	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBK3151V)	2,504.0 µg/mL	+/- 14.5585 +/- 133.2574 +/- 133.4043	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBK4439V)	2,501.1 µg/mL	+/- 14.5418 +/- 133.1044 +/- 133.2511	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBC1891V)	2,506.1 µg/mL	+/- 14.5708 +/- 133.3704 +/- 133.5175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBL3891V)	2,507.0 µg/mL	+/- 14.5759 +/- 133.4170 +/- 133.5641	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09418JIV)	2,502.6 µg/mL	+/- 14.5505 +/- 133.1842 +/- 133.3311	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot 68996CMV)	2,501.6 µg/mL	+/- 14.5447 +/- 133.1310 +/- 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	2,505.9 µg/mL	+/- 14.5694 +/- 133.3571 +/- 133.5042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot 26896BM)	2,501.5 µg/mL	+/- 14.5439 +/- 133.1243 +/- 133.2711	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 98%	(Lot K22W009)	2,501.6 µg/mL	+/- 14.5444 +/- 133.1282 +/- 133.2750	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBH4351V)	2,502.6 µg/mL	+/- 14.5505 +/- 133.1842 +/- 133.3311	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,503.4 µg/mL	+/- 14.5548	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot 12912PFV)		+/- 133.2241	µg/mL	Unstressed
	Purity 99%			+/- 133.3710	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)

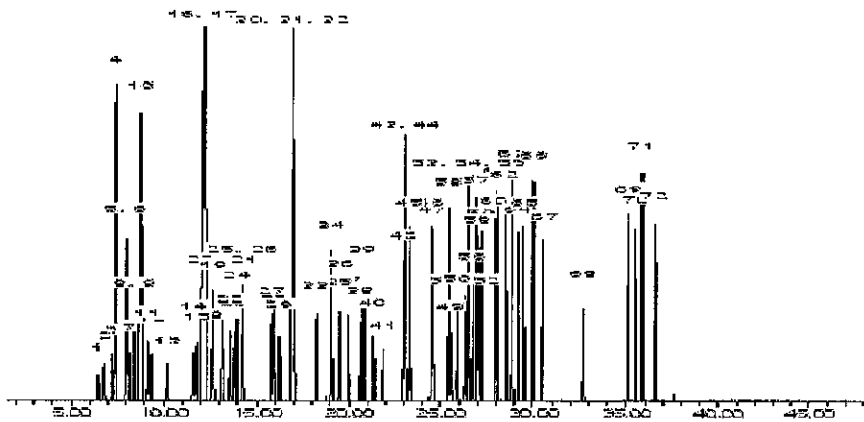
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

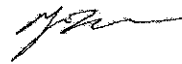
Det. Type:
MSD



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: 07-Jan-2015 **Balance:** 1125113331


Tyler Brown - QA Analyst

Date Passed: 14-Jan-2015

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

VOA8260MEGA1_00034



CERTIFIED REFERENCE MATERIAL

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

Certificate of Analysis

www.restek.com



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569720 **Lot No.:** A0108166
Description : 8260 List 1 / Std #1 MegaMix (2015)
8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : January 31, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether)	2,521.3 µg/mL	+/-	14.6588	µg/mL	Gravimetric
	CAS # 60-29-7 (Lot SHBF3466V)		+/-	134.1754	µg/mL	Unstressed
	Purity 99%		+/-	134.3233	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,522.5 µg/mL	+/-	14.6660	µg/mL	Gravimetric
	CAS # 76-13-1 (Lot 00001135)		+/-	134.2419	µg/mL	Unstressed
	Purity 99%		+/-	134.3899	µg/mL	Stressed
3	1,1-Dichloroethane	2,499.5 µg/mL	+/-	14.5323	µg/mL	Gravimetric
	CAS # 75-34-3 (Lot Q179-33)		+/-	133.0173	µg/mL	Unstressed
	Purity 98%		+/-	133.1640	µg/mL	Stressed
4	tert-Butanol (TBA)	25,002.4 µg/mL	+/-	145.3584	µg/mL	Gravimetric
	CAS # 75-65-0 (Lot SHBC6893V)		+/-	1,330.5704	µg/mL	Unstressed
	Purity 99%		+/-	1,332.0378	µg/mL	Stressed
5	Iodomethane (methyl iodide)	2,510.0 µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS # 74-88-4 (Lot SHBC7288V)		+/-	133.5767	µg/mL	Unstressed
	Purity 99%		+/-	133.7240	µg/mL	Stressed
6	Methyl acetate	12,505.4 µg/mL	+/-	72.7037	µg/mL	Gravimetric
	CAS # 79-20-9 (Lot SHBD7134V)		+/-	665.5101	µg/mL	Unstressed
	Purity 98%		+/-	666.2440	µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	2,500.0 µg/mL	+/-	19.2743	µg/mL	Gravimetric
	CAS # 107-05-1 (Lot MKBG5777V)		+/-	133.6453	µg/mL	Unstressed
	Purity 99%		+/-	133.7914	µg/mL	Stressed

8	Methylene chloride (dichloromethane)		2,511.3	µg/mL	+/-	14.6006	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBD4974V)			+/-	133.6432	µg/mL	Unstressed
	Purity 99%				+/-	133.7906	µg/mL	Stressed
9	Carbon disulfide		2,511.7	µg/mL	+/-	14.6035	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot C30Y997)			+/-	133.6693	µg/mL	Unstressed
	Purity 98%				+/-	133.8167	µg/mL	Stressed
10	Acrylonitrile		25,017.1	µg/mL	+/-	145.4441	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot 10172706)			+/-	1,331.3554	µg/mL	Unstressed
	Purity 99%				+/-	1,332.8236	µg/mL	Stressed
11	cis-1,2-Dichloroethene		2,503.9	µg/mL	+/-	14.5577	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBG8424V)			+/-	133.2507	µg/mL	Unstressed
	Purity 99%				+/-	133.3977	µg/mL	Stressed
12	n-Hexane (C6)		2,511.9	µg/mL	+/-	14.6043	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBF0293V)			+/-	133.6764	µg/mL	Unstressed
	Purity 99%				+/-	133.8239	µg/mL	Stressed
13	1,1-dichloroethene		2,521.3	µg/mL	+/-	14.6588	µg/mL	Gravimetric
	CAS # 75-35-4	(Lot SHBD6170V)			+/-	134.1754	µg/mL	Unstressed
	Purity 99%				+/-	134.3233	µg/mL	Stressed
14	2,2-Dichloropropane		2,500.0	µg/mL	+/-	14.5351	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBH9246V)			+/-	133.0434	µg/mL	Unstressed
	Purity 98%				+/-	133.1901	µg/mL	Stressed
15	trans-1,2-Dichloroethene		2,505.0	µg/mL	+/-	14.5643	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	133.3106	µg/mL	Unstressed
	Purity 99%				+/-	133.4576	µg/mL	Stressed
16	Isobutanol (2-Methyl-1-propanol)		62,553.8	µg/mL	+/-	363.6739	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBF2852V)			+/-	3,328.9705	µg/mL	Unstressed
	Purity 99%				+/-	3,332.6417	µg/mL	Stressed
17	Methyl-tert-butyl ether (MTBE)		2,504.6	µg/mL	+/-	14.5621	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBF1193V)			+/-	133.2906	µg/mL	Unstressed
	Purity 99%				+/-	133.4376	µg/mL	Stressed
18	Bromochloromethane		2,505.1	µg/mL	+/-	14.5650	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00004559)			+/-	133.3172	µg/mL	Unstressed
	Purity 99%				+/-	133.4642	µg/mL	Stressed
19	Tetrahydrofuran		5,000.7	µg/mL	+/-	29.0746	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBF2660V)			+/-	266.1270	µg/mL	Unstressed
	Purity 97%				+/-	266.4204	µg/mL	Stressed
20	1,1,1-trichloroethane		2,508.1	µg/mL	+/-	14.5825	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B14Z1114)			+/-	133.4769	µg/mL	Unstressed
	Purity 99%				+/-	133.6241	µg/mL	Stressed
21	Cyclohexane		2,504.0	µg/mL	+/-	14.5585	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot SHBD7873V)			+/-	133.2574	µg/mL	Unstressed
	Purity 99%				+/-	133.4043	µg/mL	Stressed
22	1,1-Dichloropropene		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot PR09161302)			+/-	133.1738	µg/mL	Unstressed
	Purity 98%				+/-	133.3207	µg/mL	Stressed
23	carbon tetrachloride		2,505.3	µg/mL	+/-	14.5657	µg/mL	Gravimetric
	CAS # 56-23-5	(Lot SHBC1410V)			+/-	133.3239	µg/mL	Unstressed
	Purity 99%				+/-	133.4709	µg/mL	Stressed

24	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SHBF2321V)	2,501.4 µg/mL	+/- 14.5432 +/- 133.1177 +/- 133.2645	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot SHBC6595V)	2,501.6 µg/mL	+/- 14.5447 +/- 133.1310 +/- 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBD4617V)	2,509.1 µg/mL	+/- 14.5883 +/- 133.5301 +/- 133.6774	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBF0943V)	2,504.8 µg/mL	+/- 14.5628 +/- 133.2973 +/- 133.4443	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Methylcyclohexane CAS # 108-87-2 Purity 99%	(Lot 50996APV)	2,502.5 µg/mL	+/- 14.5498 +/- 133.1775 +/- 133.3244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot 01113D0V)	2,502.4 µg/mL	+/- 14.5490 +/- 133.1709 +/- 133.3177	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	bromodichloromethane CAS # 75-27-4 Purity 98%	(Lot MKBL1617V)	2,507.9 µg/mL	+/- 14.5814 +/- 133.4672 +/- 133.6144	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1 Purity 99%	(Lot SHBF2002V)	50,001.4 µg/mL	+/- 290.6971 +/- 2,660.9612 +/- 2,663.8957	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10169264)	2,508.1 µg/mL	+/- 14.5825 +/- 133.4769 +/- 133.6241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 20936)	2,507.0 µg/mL	+/- 14.5759 +/- 133.4170 +/- 133.5641	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBF2730V)	2,502.4 µg/mL	+/- 14.5490 +/- 133.1709 +/- 133.3177	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot 69796APV)	2,500.9 µg/mL	+/- 14.5403 +/- 133.0911 +/- 133.2378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 99%	(Lot C363110)	2,502.1 µg/mL	+/- 14.5476 +/- 133.1576 +/- 133.3044	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	2,507.5 µg/mL	+/- 14.5788 +/- 133.4436 +/- 133.5908	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	2,505.3 µg/mL	+/- 14.5657 +/- 133.3239 +/- 133.4709	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBD2073V)	2,506.5 µg/mL	+/- 14.5730 +/- 133.3904 +/- 133.5375	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,503.2	µg/mL	+/-	14.5536	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKBP0459V)			+/-	133.2129	µg/mL	Unstressed
	Purity 98%				+/-	133.3598	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,504.3	µg/mL	+/-	14.5599	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	133.2707	µg/mL	Unstressed
	Purity 99%				+/-	133.4176	µg/mL	Stressed
42	Chlorobenzene		2,510.8	µg/mL	+/-	14.5977	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBD3200V)			+/-	133.6166	µg/mL	Unstressed
	Purity 99%				+/-	133.7639	µg/mL	Stressed
43	1,1,2,2-Tetrachloroethane		2,502.9	µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	133.1975	µg/mL	Unstressed
	Purity 99%				+/-	133.3444	µg/mL	Stressed
44	Ethylbenzene		2,509.6	µg/mL	+/-	14.5912	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBC9001V)			+/-	133.5567	µg/mL	Unstressed
	Purity 99%				+/-	133.7040	µg/mL	Stressed
45	m-Xylene		1,252.6	µg/mL	+/-	7.2829	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBF1720V)			+/-	66.6619	µg/mL	Unstressed
	Purity 99%				+/-	66.7355	µg/mL	Stressed
46	o-Xylene		2,503.7	µg/mL	+/-	14.5565	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBC8668V)			+/-	133.2390	µg/mL	Unstressed
	Purity 98%				+/-	133.3859	µg/mL	Stressed
47	p-Xylene		1,253.3	µg/mL	+/-	7.2865	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBF3427V)			+/-	66.6952	µg/mL	Unstressed
	Purity 99%				+/-	66.7688	µg/mL	Stressed
48	Styrene		2,503.5	µg/mL	+/-	14.5556	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot 10182421)			+/-	133.2307	µg/mL	Unstressed
	Purity 99%				+/-	133.3777	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10169400)			+/-	133.1775	µg/mL	Unstressed
	Purity 99%				+/-	133.3244	µg/mL	Stressed
50	bromoform		2,507.8	µg/mL	+/-	14.5803	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBC3410V)			+/-	133.4569	µg/mL	Unstressed
	Purity 99%				+/-	133.6041	µg/mL	Stressed
51	1,1,1,2-Tetrachloroethane		2,510.3	µg/mL	+/-	14.5948	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	133.5900	µg/mL	Unstressed
	Purity 99%				+/-	133.7373	µg/mL	Stressed
52	chloroform		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBB7498V)			+/-	133.1110	µg/mL	Unstressed
	Purity 99%				+/-	133.2578	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot 1428739V)			+/-	133.1775	µg/mL	Unstressed
	Purity 99%				+/-	133.3244	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,499.5	µg/mL	+/-	14.5322	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBP5371V)			+/-	133.0168	µg/mL	Unstressed
	Purity 96%				+/-	133.1635	µg/mL	Stressed
55	n-Propylbenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot MKBQ8049V)			+/-	133.0578	µg/mL	Unstressed
	Purity 99%				+/-	133.2045	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot MKBD4032V)	2,501.1 µg/mL	+/- 14.5418 +/- 133.1044 +/- 133.2511	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 98%	(Lot MKBJ1732V)	2,501.6 µg/mL	+/- 14.5444 +/- 133.1282 +/- 133.2750	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBH8892V)	2,500.3 µg/mL	+/- 14.5367 +/- 133.0578 +/- 133.2045	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBB7205V)	2,506.4 µg/mL	+/- 14.5723 +/- 133.3837 +/- 133.5308	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot S52237V)	2,500.1 µg/mL	+/- 14.5359 +/- 133.0511 +/- 133.1979	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBJ3305V)	2,503.1 µg/mL	+/- 14.5534 +/- 133.2108 +/- 133.3577	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBK3151V)	2,504.0 µg/mL	+/- 14.5585 +/- 133.2574 +/- 133.4043	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBK4439V)	2,501.1 µg/mL	+/- 14.5418 +/- 133.1044 +/- 133.2511	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBC1891V)	2,506.1 µg/mL	+/- 14.5708 +/- 133.3704 +/- 133.5175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBL3891V)	2,507.0 µg/mL	+/- 14.5759 +/- 133.4170 +/- 133.5641	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09418JIV)	2,502.6 µg/mL	+/- 14.5505 +/- 133.1842 +/- 133.3311	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot 68996CMV)	2,501.6 µg/mL	+/- 14.5447 +/- 133.1310 +/- 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	2,505.9 µg/mL	+/- 14.5694 +/- 133.3571 +/- 133.5042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot 26896BM)	2,501.5 µg/mL	+/- 14.5439 +/- 133.1243 +/- 133.2711	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 98%	(Lot K22W009)	2,501.6 µg/mL	+/- 14.5444 +/- 133.1282 +/- 133.2750	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBH4351V)	2,502.6 µg/mL	+/- 14.5505 +/- 133.1842 +/- 133.3311	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,503.4 µg/mL	+/-	14.5548	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot 12912PFV)		+/-	133.2241	µg/mL	Unstressed
	Purity 99%			+/-	133.3710	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)

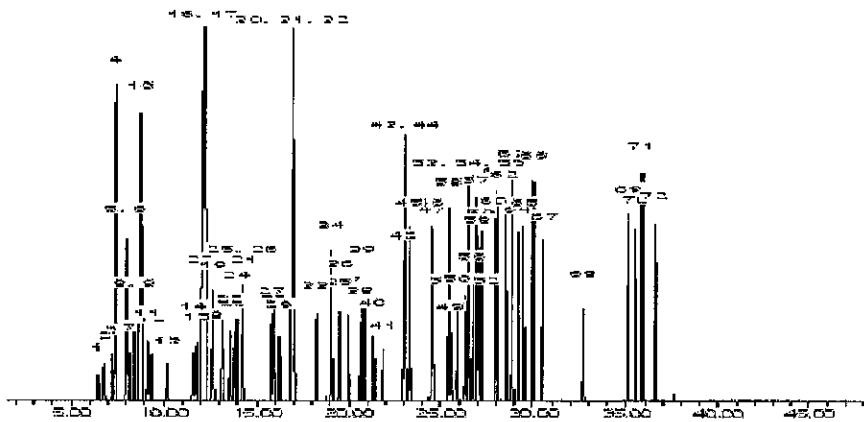
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

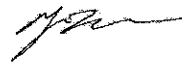
Det. Type:
MSD



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: 07-Jan-2015 **Balance:** 1125113331


Tyler Brown - QA Analyst

Date Passed: 14-Jan-2015

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

Reagent

VOA8260MEGA2_00037

8	Methylene chloride (dichloromethane)		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	133.1177	µg/mL	Unstressed
	Purity 99%				+/-	133.2645	µg/mL	Stressed
9	Carbon disulfide		2,501.2	µg/mL	+/-	14.5422	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	133.1086	µg/mL	Unstressed
	Purity 98%				+/-	133.2554	µg/mL	Stressed
10	Acrylonitrile		25,002.1	µg/mL	+/-	145.3569	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot CCFKL)			+/-	1,330.5571	µg/mL	Unstressed
	Purity 99%				+/-	1,332.0244	µg/mL	Stressed
11	cis-1,2-Dichloroethene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	133.0578	µg/mL	Unstressed
	Purity 99%				+/-	133.2045	µg/mL	Stressed
12	n-Hexane (C6)		2,500.1	µg/mL	+/-	14.5358	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot K24W001)			+/-	133.0499	µg/mL	Unstressed
	Purity 98%				+/-	133.1967	µg/mL	Stressed
13	1,1-Dichloroethane		2,503.0	µg/mL	+/-	14.5527	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 2663100)			+/-	133.2041	µg/mL	Unstressed
	Purity 99%				+/-	133.3510	µg/mL	Stressed
14	2,2-Dichloropropane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot GI01)			+/-	133.0844	µg/mL	Unstressed
	Purity 99%				+/-	133.2312	µg/mL	Stressed
15	trans-1,2-Dichloroethene		2,500.2	µg/mL	+/-	14.5362	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TS5UB)			+/-	133.0538	µg/mL	Unstressed
	Purity 97%				+/-	133.2005	µg/mL	Stressed
16	Isobutanol (2-Methyl-1-propanol)		62,501.3	µg/mL	+/-	363.3687	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot PH2XK)			+/-	3,326.1766	µg/mL	Unstressed
	Purity 99%				+/-	3,329.8447	µg/mL	Stressed
17	Methyl-tert-butyl ether (MTBE)		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZAQTA-MS)			+/-	133.0711	µg/mL	Unstressed
	Purity 99%				+/-	133.2178	µg/mL	Stressed
18	Bromochloromethane		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 345600)			+/-	133.0777	µg/mL	Unstressed
	Purity 99%				+/-	133.2245	µg/mL	Stressed
19	Tetrahydrofuran		5,002.3	µg/mL	+/-	29.0835	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot XWFLA)			+/-	266.2087	µg/mL	Unstressed
	Purity 99%				+/-	266.5023	µg/mL	Stressed
20	1,1,1-Trichloroethane		2,501.9	µg/mL	+/-	14.5461	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot 1103200)			+/-	133.1443	µg/mL	Unstressed
	Purity 99%				+/-	133.2911	µg/mL	Stressed
21	Cyclohexane		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	133.1243	µg/mL	Unstressed
	Purity 99%				+/-	133.2711	µg/mL	Stressed
22	1,1-Dichloropropene		2,501.1	µg/mL	+/-	14.5419	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 2028500)			+/-	133.1054	µg/mL	Unstressed
	Purity 97%				+/-	133.2522	µg/mL	Stressed
23	Carbon tetrachloride		2,501.9	µg/mL	+/-	14.5465	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	133.1477	µg/mL	Unstressed
	Purity 98%				+/-	133.2946	µg/mL	Stressed

24	n-Heptane (C7) CAS # 142-82-5.SEC Purity 99%	(Lot OGM01)	2,500.4 µg/mL	+/- 14.5374 +/- 133.0644 +/- 133.2112	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1,2-Dichloroethane CAS # 107-06-2.SEC Purity 99%	(Lot FO6PK)	2,501.9 µg/mL	+/- 14.5461 +/- 133.1443 +/- 133.2911	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Benzene CAS # 71-43-2.SEC Purity 99%	(Lot B28Y008)	2,500.9 µg/mL	+/- 14.5403 +/- 133.0911 +/- 133.2378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Trichloroethene CAS # 79-01-6.SEC Purity 98%	(Lot H04X050)	2,500.6 µg/mL	+/- 14.5387 +/- 133.0760 +/- 133.2228	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Methylcyclohexane CAS # 108-87-2.SEC Purity 99%	(Lot 24MSD-CD)	2,500.5 µg/mL	+/- 14.5381 +/- 133.0711 +/- 133.2178	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1,2-Dichloropropane CAS # 78-87-5.SEC Purity 99%	(Lot OGG01)	2,500.0 µg/mL	+/- 14.5352 +/- 133.0445 +/- 133.1912	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	Bromodichloromethane CAS # 75-27-4.SEC Purity 99%	(Lot 10171168)	2,501.5 µg/mL	+/- 14.5439 +/- 133.1243 +/- 133.2711	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1.SEC Purity 99%	(Lot CHA4A)	50,000.8 µg/mL	+/- 290.6935 +/- 2,660.9280 +/- 2,663.8624	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3.SEC Purity 99%	(Lot FGI01-OICH)	2,500.6 µg/mL	+/- 14.5388 +/- 133.0777 +/- 133.2245	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5.SEC Purity 99%	(Lot 7ZLXI-TJ)	2,501.0 µg/mL	+/- 14.5410 +/- 133.0977 +/- 133.2445	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3.SEC Purity 99%	(Lot YND2B-BD)	2,500.1 µg/mL	+/- 14.5359 +/- 133.0511 +/- 133.1979	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2.SEC Purity 99%	(Lot MLWYK-LS)	2,500.8 µg/mL	+/- 14.5396 +/- 133.0844 +/- 133.2312	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6.SEC Purity 98%	(Lot 2ECIC-NM)	2,501.6 µg/mL	+/- 14.5444 +/- 133.1282 +/- 133.2750	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5.SEC Purity 99%	(Lot 732700)	2,501.0 µg/mL	+/- 14.5410 +/- 133.0977 +/- 133.2445	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9.SEC Purity 99%	(Lot AGN01-EFPC)	2,500.8 µg/mL	+/- 14.5396 +/- 133.0844 +/- 133.2312	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4.SEC Purity 99%	(Lot F09W014)	2,500.0 µg/mL	+/- 14.5352 +/- 133.0445 +/- 133.1912	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane		2,501.8	µg/mL	+/-	14.5454	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot I13W021)			+/-	133.1377	µg/mL	Unstressed
	Purity 97%				+/-	133.2845	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,502.1	µg/mL	+/-	14.5472	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 1368400)			+/-	133.1542	µg/mL	Unstressed
	Purity 98%				+/-	133.3011	µg/mL	Stressed
42	Chlorobenzene		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot H161936)			+/-	133.1310	µg/mL	Unstressed
	Purity 99%				+/-	133.2778	µg/mL	Stressed
43	1,1,1,2-Tetrachloroethane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01-QSHR)			+/-	133.0844	µg/mL	Unstressed
	Purity 99%				+/-	133.2312	µg/mL	Stressed
44	Ethylbenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE-GR)			+/-	133.0578	µg/mL	Unstressed
	Purity 99%				+/-	133.2045	µg/mL	Stressed
45	m-Xylene		1,250.4	µg/mL	+/-	7.2698	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)			+/-	66.5422	µg/mL	Unstressed
	Purity 99%				+/-	66.6156	µg/mL	Stressed
46	o-Xylene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01-KTPK)			+/-	133.1110	µg/mL	Unstressed
	Purity 99%				+/-	133.2578	µg/mL	Stressed
47	p-Xylene		1,251.6	µg/mL	+/-	7.2771	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)			+/-	66.6087	µg/mL	Unstressed
	Purity 99%				+/-	66.6822	µg/mL	Stressed
48	Styrene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)			+/-	133.0911	µg/mL	Unstressed
	Purity 99%				+/-	133.2378	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot 2PHXG-IH)			+/-	133.1110	µg/mL	Unstressed
	Purity 99%				+/-	133.2578	µg/mL	Stressed
50	Bromoform		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 1039300)			+/-	133.1243	µg/mL	Unstressed
	Purity 99%				+/-	133.2711	µg/mL	Stressed
51	1,1,2,2-Tetrachloroethane		2,502.9	µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)			+/-	133.1975	µg/mL	Unstressed
	Purity 99%				+/-	133.3444	µg/mL	Stressed
52	Chloroform		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	133.1310	µg/mL	Unstressed
	Purity 99%				+/-	133.2778	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.9	µg/mL	+/-	14.5465	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot OGI01)			+/-	133.1477	µg/mL	Unstressed
	Purity 98%				+/-	133.2946	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,502.7	µg/mL	+/-	14.5510	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot 100700-2)			+/-	133.1893	µg/mL	Unstressed
	Purity 97%				+/-	133.3362	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC-IT)			+/-	133.0445	µg/mL	Unstressed
	Purity 99%				+/-	133.1912	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1.SEC Purity 99%	(Lot 2FUHG-EM)	2,501.6 µg/mL	+/- +/- +/-	14.5447 133.1310 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,2,4-Trimethylbenzene CAS # 95-63-6.SEC Purity 99%	(Lot SC7LO-QA)	2,502.4 µg/mL	+/- +/- +/-	14.5490 133.1709 133.3177	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8.SEC Purity 99%	(Lot SW8QG-AO)	2,500.5 µg/mL	+/- +/- +/-	14.5381 133.0711 133.2178	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4.SEC Purity 99%	(Lot P4XHJ-AO)	2,500.3 µg/mL	+/- +/- +/-	14.5367 133.0578 133.2045	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6.SEC Purity 99%	(Lot OGN01)	2,501.6 µg/mL	+/- +/- +/-	14.5447 133.1310 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,3,5-Trimethylbenzene CAS # 108-67-8.SEC Purity 99%	(Lot FGH02-CMLN)	2,500.3 µg/mL	+/- +/- +/-	14.5367 133.0578 133.2045	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8.SEC Purity 99%	(Lot OGN01)	2,500.1 µg/mL	+/- +/- +/-	14.5359 133.0511 133.1979	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	4-Isopropyltoluene (p-cymene) CAS # 99-87-6.SEC Purity 99%	(Lot 1721700)	2,501.6 µg/mL	+/- +/- +/-	14.5447 133.1310 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	(Lot FMDFD-KA)	2,501.5 µg/mL	+/- +/- +/-	14.5439 133.1243 133.2711	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	(Lot YWKDC-MK)	2,500.3 µg/mL	+/- +/- +/-	14.5367 133.0578 133.2045	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8.SEC Purity 99%	(Lot OGN01)	2,500.6 µg/mL	+/- +/- +/-	14.5388 133.0777 133.2245	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	(Lot 4NRGF-OT)	2,500.0 µg/mL	+/- +/- +/-	14.5352 133.0445 133.1912	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8.SEC Purity 97%	(Lot LC00408V)	2,500.5 µg/mL	+/- +/- +/-	14.5383 133.0732 133.2199	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	(Lot OGO01)	2,501.0 µg/mL	+/- +/- +/-	14.5410 133.0977 133.2445	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 97%	(Lot 2009400)	2,501.0 µg/mL	+/- +/- +/-	14.5412 133.0990 133.2458	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3.SEC Purity 99%	(Lot 4KW3H-OO)	2,500.5 µg/mL	+/- +/- +/-	14.5381 133.0711 133.2178	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.4	µg/mL	+/-	14.5490	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)			+/-	133.1709	µg/mL	Unstressed
	Purity 99%				+/-	133.3177	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)

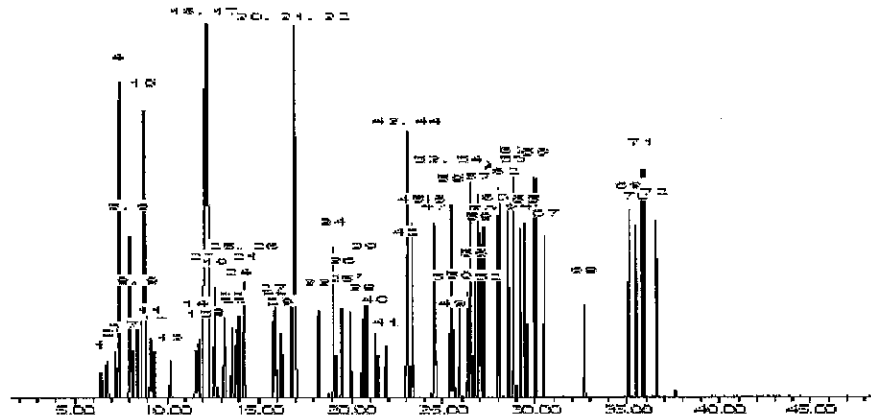
Carrier Gas:
helium-constant pressure 30 psi

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



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 Mage

Date Mixed: 07-Jan-2015 **Balance:** 1127510105

Tyler Brown

Tyler Brown - QA Analyst

Date Passed: 14-Jan-2015

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

VOA8260SURRES_00067



CERTIFIED REFERENCE MATERIAL

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

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 Purity 99% (Lot 022012)	2,502.2 µg/mL	+/- 14.5480	µg/mL	Gravimetric
			+/- 28.2159	µg/mL	Unstressed
			+/- 32.4683	µg/mL	Stressed
2	1,2-Dichloroethane-d4 CAS # 17060-07-0 Purity 99% (Lot 12K-027)	2,501.2 µg/mL	+/- 14.5422	µg/mL	Gravimetric
			+/- 28.2046	µg/mL	Unstressed
			+/- 32.4554	µg/mL	Stressed
3	Toluene-d8 CAS # 2037-26-5 Purity 99% (Lot 13I-050)	2,500.8 µg/mL	+/- 14.5399	µg/mL	Gravimetric
			+/- 28.2001	µg/mL	Unstressed
			+/- 32.4502	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 Purity 99% (Lot 01127COV)	2,501.4 µg/mL	+/- 14.5434	µg/mL	Gravimetric
			+/- 28.2069	µg/mL	Unstressed
			+/- 32.4580	µg/mL	Stressed

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

Reagent

VOA8260SURRES_00081

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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_00054



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate CAS # 108-05-4 Purity 99%	5,023.0 µg/mL (Lot STBC8935V)	+/- 29.4778	µg/mL	Gravimetric
			+/- 267.3430	µg/mL	Unstressed
			+/- 267.6378	µg/mL	Stressed

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

Tech Tips:

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

Reagent

VOAACRORES_00077



CERTIFIED REFERENCE MATERIAL

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Bellefonte, PA 16823-8812
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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568720 Lot No.: A0111006

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 : September 30, 2015 Storage: 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acrolein CAS # 107-02-8 Purity 99% (Lot 150115JLM)	19,748.0 µg/mL	+/-	115.8923	µg/mL	Gravimetric
			+/-	633.2311	µg/mL	Unstressed
			+/-	736.0474	µg/mL	Stressed

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

Reagent

VOARESEE1ST_00021



CERTIFIED REFERENCE MATERIAL



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

Container Size : 2 mL Pkg Amt: > 1 mL

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

CERTIFIED VALUES

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

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

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

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.: 180-48564-1

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-CW-1-0/1-0	180-48564-1	92	108	108	94
HD-CW-1A-0/1-0	180-48564-2	97	105	109	90
HD-CW-2-0/1-0	180-48564-3	97	108	103	91
HD-CW-3-0/1-0	180-48564-4	101	110	108	94
HD-CW-3-0/1-0 DL	180-48564-4 DL	103	113	103	92
HD-CW-4-0/1-0	180-48564-5	99	103	105	92
HD-CW-5-0/1-0	180-48564-6	101	104	97	84
HD-CW-6-0/1-0	180-48564-7	97	99	104	88
HD-CW-7-0/1-0	180-48564-8	104	115	104	94
HD-CW-7A-0/1-0	180-48564-9	105	122	99	90
HD-CW-7A-0/1-0 DL	180-48564-9 DL	106	119	106	98
HD-QC-16-0/1-2	180-48564-10	93	102	108	94
HD-QC5-0/1-1	180-48564-11	109	126	100	96
HD-QC5-0/1-1 DL	180-48564-11 DL	105	117	105	95
	MB 180-157127/6	93	101	103	95
	MB 180-157249/12	92	100	97	88
	MB 180-157327/5	85	88	97	85
	MB 180-157435/4	99	117	100	93
	LCS 180-157127/10	87	99	112	104
	LCS 180-157249/15	86	96	104	93
	LCS 180-157327/12	94	97	113	108
	LCS 180-157435/7	87	97	102	100
HD-CW-6-0/1-0 MS	180-48564-7 MS	82	89	103	95
HD-CW-6-0/1-0 MSD	180-48564-7 MSD	95	102	116	106

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

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

Column to be used to flag recovery values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: 51015010.D

Lab ID: LCS 180-157127/10

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	9.71	97	50-139	
Vinyl chloride	10.0	8.06	81	53-138	
Bromomethane	10.0	8.03	80	33-150	
Chloroethane	10.0	7.31	73	36-142	
1,1-Dichloroethene	10.0	9.39	94	65-136	
Acetone	20.0	19.9	99	22-150	
Carbon disulfide	10.0	10.0	100	54-132	
Methylene Chloride	10.0	9.92	99	63-129	
trans-1,2-Dichloroethene	10.0	9.68	97	73-126	
Methyl tert-butyl ether	10.0	9.53	95	64-123	
1,1-Dichloroethane	10.0	9.61	96	73-126	
cis-1,2-Dichloroethene	10.0	9.55	96	70-120	
Bromochloromethane	10.0	8.75	88	70-127	
2-Butanone (MEK)	20.0	19.4	97	39-138	
Chloroform	10.0	9.41	94	72-127	
1,1,1-Trichloroethane	10.0	9.64	96	63-133	
Carbon tetrachloride	10.0	9.66	97	55-150	
Benzene	10.0	10.2	102	80-120	
1,2-Dichloroethane	10.0	9.87	99	68-132	
Trichloroethene	10.0	9.16	92	73-120	
1,2-Dichloropropane	10.0	9.92	99	76-124	
Bromodichloromethane	10.0	9.80	98	66-130	
cis-1,3-Dichloropropene	10.0	8.94	89	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	18.6	93	45-145	
Toluene	10.0	11.0	110	80-123	
trans-1,3-Dichloropropene	10.0	9.97	100	65-125	
1,1,2-Trichloroethane	10.0	10.7	107	77-127	
Tetrachloroethene	10.0	10.8	108	70-135	
2-Hexanone	20.0	18.1	90	25-132	
Dibromochloromethane	10.0	9.40	94	60-140	
1,2-Dibromoethane (EDB)	10.0	10.2	102	74-123	
Chlorobenzene	10.0	10.3	103	80-120	
1,1,1,2-Tetrachloroethane	10.0	9.76	98	63-140	
Ethylbenzene	10.0	10.7	107	72-126	
Xylenes, Total	20.0	21.4	107	76-128	
Styrene	10.0	11.4	114	71-127	
Bromoform	10.0	10.7	107	46-150	
1,1,2,2-Tetrachloroethane	10.0	11.7	117	62-125	
Acrylonitrile	100	112	112	30-140	
1,4-Dioxane	200	287	144	10-160	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: 51016015.D

Lab ID: LCS 180-157249/15

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	8.57	86	50-139	
Vinyl chloride	10.0	7.45	74	53-138	
Bromomethane	10.0	7.06	71	33-150	
Chloroethane	10.0	6.01	60	36-142	
1,1-Dichloroethene	10.0	8.72	87	65-136	
Acetone	20.0	17.6	88	22-150	
Carbon disulfide	10.0	8.81	88	54-132	
Methylene Chloride	10.0	9.36	94	63-129	
trans-1,2-Dichloroethene	10.0	9.47	95	73-126	
Methyl tert-butyl ether	10.0	9.11	91	64-123	
1,1-Dichloroethane	10.0	9.31	93	73-126	
cis-1,2-Dichloroethene	10.0	9.52	95	70-120	
Bromochloromethane	10.0	8.80	88	70-127	
2-Butanone (MEK)	20.0	21.2	106	39-138	
Chloroform	10.0	9.50	95	72-127	
1,1,1-Trichloroethane	10.0	8.99	90	63-133	
Carbon tetrachloride	10.0	8.67	87	55-150	
Benzene	10.0	9.87	99	80-120	
1,2-Dichloroethane	10.0	10.0	100	68-132	
Trichloroethene	10.0	8.75	87	73-120	
1,2-Dichloropropane	10.0	9.75	98	76-124	
Bromodichloromethane	10.0	9.55	96	66-130	
cis-1,3-Dichloropropene	10.0	9.38	94	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	19.0	95	45-145	
Toluene	10.0	10.8	108	80-123	
trans-1,3-Dichloropropene	10.0	10.1	101	65-125	
1,1,2-Trichloroethane	10.0	10.7	107	77-127	
Tetrachloroethene	10.0	10.4	104	70-135	
2-Hexanone	20.0	19.1	96	25-132	
Dibromochloromethane	10.0	9.86	99	60-140	
1,2-Dibromoethane (EDB)	10.0	11.0	110	74-123	
Chlorobenzene	10.0	9.83	98	80-120	
1,1,1,2-Tetrachloroethane	10.0	9.68	97	63-140	
Ethylbenzene	10.0	10.1	101	72-126	
Xylenes, Total	20.0	20.2	101	76-128	
Styrene	10.0	10.8	108	71-127	
Bromoform	10.0	10.4	104	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.4	104	62-125	
Acrylonitrile	100	94.5	94	30-140	
1,4-Dioxane	200	187 J	93	10-160	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: 51017012.D

Lab ID: LCS 180-157327/12

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	8.88	89	50-139	
Vinyl chloride	10.0	7.83	78	53-138	
Bromomethane	10.0	6.75	67	33-150	
Chloroethane	10.0	6.25	63	36-142	
1,1-Dichloroethene	10.0	9.63	96	65-136	
Acetone	20.0	17.7	88	22-150	
Carbon disulfide	10.0	10.5	105	54-132	
Methylene Chloride	10.0	10.5	105	63-129	
trans-1,2-Dichloroethene	10.0	9.55	96	73-126	
Methyl tert-butyl ether	10.0	10.1	101	64-123	
1,1-Dichloroethane	10.0	10.1	101	73-126	
cis-1,2-Dichloroethene	10.0	9.52	95	70-120	
Bromochloromethane	10.0	9.37	94	70-127	
2-Butanone (MEK)	20.0	18.7	93	39-138	
Chloroform	10.0	9.78	98	72-127	
1,1,1-Trichloroethane	10.0	9.47	95	63-133	
Carbon tetrachloride	10.0	9.32	93	55-150	
Benzene	10.0	9.79	98	80-120	
1,2-Dichloroethane	10.0	10.1	101	68-132	
Trichloroethene	10.0	8.86	89	73-120	
1,2-Dichloropropane	10.0	9.57	96	76-124	
Bromodichloromethane	10.0	9.99	100	66-130	
cis-1,3-Dichloropropene	10.0	8.63	86	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	22.6	113	45-145	
Toluene	10.0	11.5	115	80-123	
trans-1,3-Dichloropropene	10.0	10.5	105	65-125	
1,1,2-Trichloroethane	10.0	10.4	104	77-127	
Tetrachloroethene	10.0	11.2	112	70-135	
2-Hexanone	20.0	20.3	102	25-132	
Dibromochloromethane	10.0	9.90	99	60-140	
1,2-Dibromoethane (EDB)	10.0	10.9	109	74-123	
Chlorobenzene	10.0	10.5	105	80-120	
1,1,1,2-Tetrachloroethane	10.0	11.0	110	63-140	
Ethylbenzene	10.0	11.0	110	72-126	
Xylenes, Total	20.0	22.0	110	76-128	
Styrene	10.0	11.5	115	71-127	
Bromoform	10.0	10.1	101	46-150	
1,1,2,2-Tetrachloroethane	10.0	11.7	117	62-125	
Acrylonitrile	100	102	102	30-140	
1,4-Dioxane	200	126 J	63	10-160	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: 51019007.D

Lab ID: LCS 180-157435/7

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	8.15	82	50-139	
Vinyl chloride	10.0	7.17	72	53-138	
Bromomethane	10.0	6.92	69	33-150	
Chloroethane	10.0	6.25	63	36-142	
1,1-Dichloroethene	10.0	9.66	97	65-136	
Acetone	20.0	21.2	106	22-150	
Carbon disulfide	10.0	10.1	101	54-132	
Methylene Chloride	10.0	9.28	93	63-129	
trans-1,2-Dichloroethene	10.0	9.69	97	73-126	
Methyl tert-butyl ether	10.0	9.34	93	64-123	
1,1-Dichloroethane	10.0	9.53	95	73-126	
cis-1,2-Dichloroethene	10.0	9.41	94	70-120	
Bromochloromethane	10.0	8.74	87	70-127	
2-Butanone (MEK)	20.0	20.7	103	39-138	
Chloroform	10.0	9.99	100	72-127	
1,1,1-Trichloroethane	10.0	10.2	102	63-133	
Carbon tetrachloride	10.0	11.2	112	55-150	
Benzene	10.0	9.72	97	80-120	
1,2-Dichloroethane	10.0	10.7	107	68-132	
Trichloroethene	10.0	9.32	93	73-120	
1,2-Dichloropropane	10.0	9.67	97	76-124	
Bromodichloromethane	10.0	10.2	102	66-130	
cis-1,3-Dichloropropene	10.0	9.58	96	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	20.3	102	45-145	
Toluene	10.0	11.0	110	80-123	
trans-1,3-Dichloropropene	10.0	10.1	101	65-125	
1,1,2-Trichloroethane	10.0	10.4	104	77-127	
Tetrachloroethene	10.0	11.3	113	70-135	
2-Hexanone	20.0	18.8	94	25-132	
Dibromochloromethane	10.0	9.66	97	60-140	
1,2-Dibromoethane (EDB)	10.0	10.7	107	74-123	
Chlorobenzene	10.0	10.1	101	80-120	
1,1,1,2-Tetrachloroethane	10.0	10.2	102	63-140	
Ethylbenzene	10.0	10.7	107	72-126	
Xylenes, Total	20.0	21.2	106	76-128	
Styrene	10.0	11.1	111	71-127	
Bromoform	10.0	10.6	106	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.2	102	62-125	
Acrylonitrile	100	97.6	98	30-140	
1,4-Dioxane	200	165 J	83	10-160	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: 51015011.D

Lab ID: 180-48564-7 MS

Client ID: HD-CW-6-0/1-0 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	8.88	89	50-139	
Vinyl chloride	10.0	1.0 U	7.85	78	53-138	
Bromomethane	10.0	1.0 U	7.55	75	33-150	
Chloroethane	10.0	1.0 U	7.29	73	36-142	
1,1-Dichloroethene	10.0	1.0 U	9.18	92	65-136	
Acetone	20.0	5.0 U	19.0	95	22-150	
Carbon disulfide	10.0	1.0 U	9.66	97	54-132	
Methylene Chloride	10.0	1.0 U	9.14	91	63-129	
trans-1,2-Dichloroethene	10.0	1.0 U	9.15	91	73-126	
Methyl tert-butyl ether	10.0	1.0 U	9.31	93	64-123	
1,1-Dichloroethane	10.0	1.0 U	9.15	92	73-126	
cis-1,2-Dichloroethene	10.0	24	27.8	43	70-120	F1
Bromochloromethane	10.0	1.0 U	8.03	80	70-127	
2-Butanone (MEK)	20.0	5.0 U	19.9	99	39-138	
Chloroform	10.0	1.0 U	9.05	91	72-127	
1,1,1-Trichloroethane	10.0	1.0 U	8.97	90	63-133	
Carbon tetrachloride	10.0	1.0 U	8.99	90	55-150	
Benzene	10.0	1.0 U	9.73	97	80-120	
1,2-Dichloroethane	10.0	1.0 U	9.42	94	68-132	
Trichloroethene	10.0	7.5	14.5	70	73-120	F1
1,2-Dichloropropane	10.0	1.0 U	9.72	97	76-124	
Bromodichloromethane	10.0	1.0 U	9.05	91	66-130	
cis-1,3-Dichloropropene	10.0	1.0 U	9.15	92	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	5.0 U	18.7	93	45-145	
Toluene	10.0	1.0 U	10.3	103	80-123	
trans-1,3-Dichloropropene	10.0	1.0 U	9.24	92	65-125	
1,1,2-Trichloroethane	10.0	1.0 U	10.2	102	77-127	
Tetrachloroethene	10.0	40	39.9	0.3	70-135	F1
2-Hexanone	20.0	5.0 U	18.6	93	25-132	
Dibromochloromethane	10.0	1.0 U	9.07	91	60-140	
1,2-Dibromoethane (EDB)	10.0	1.0 U	10.0	100	74-123	
Chlorobenzene	10.0	1.0 U	9.71	97	80-120	
1,1,1,2-Tetrachloroethane	10.0	1.0 U	9.13	91	63-140	
Ethylbenzene	10.0	1.0 U	10.4	104	72-126	
Xylenes, Total	20.0	3.0 U	20.3	102	76-128	
Styrene	10.0	1.0 U	10.4	104	71-127	
Bromoform	10.0	1.0 U	9.64	96	46-150	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	10.6	106	62-125	
Acrylonitrile	100	20 U	109	109	30-140	
1,4-Dioxane	200	200 U	260	130	10-160	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: 51015012.D

Lab ID: 180-48564-7 MSD

Client ID: HD-CW-6-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Chloromethane	10.0	9.65	97	8	35	50-139	
Vinyl chloride	10.0	8.29	83	6	35	53-138	
Bromomethane	10.0	7.89	79	4	35	33-150	
Chloroethane	10.0	6.88	69	6	35	36-142	
1,1-Dichloroethene	10.0	9.97	100	8	35	65-136	
Acetone	20.0	22.7	113	18	35	22-150	
Carbon disulfide	10.0	10.3	103	7	35	54-132	
Methylene Chloride	10.0	11.0	110	19	35	63-129	
trans-1,2-Dichloroethene	10.0	9.82	98	7	35	73-126	
Methyl tert-butyl ether	10.0	10.6	106	13	35	64-123	
1,1-Dichloroethane	10.0	10.1	101	10	35	73-126	
cis-1,2-Dichloroethene	10.0	31.5	80	12	35	70-120	
Bromochloromethane	10.0	9.48	95	17	35	70-127	
2-Butanone (MEK)	20.0	24.9	124	22	35	39-138	
Chloroform	10.0	9.93	99	9	35	72-127	
1,1,1-Trichloroethane	10.0	9.62	96	7	35	63-133	
Carbon tetrachloride	10.0	9.14	91	2	35	55-150	
Benzene	10.0	10.6	106	9	32	80-120	
1,2-Dichloroethane	10.0	10.3	103	9	32	68-132	
Trichloroethene	10.0	15.9	83	9	35	73-120	
1,2-Dichloropropane	10.0	10.6	106	9	34	76-124	
Bromodichloromethane	10.0	9.80	98	8	35	66-130	
cis-1,3-Dichloropropene	10.0	10.2	102	11	35	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	22.0	110	16	35	45-145	
Toluene	10.0	11.2	112	9	35	80-123	
trans-1,3-Dichloropropene	10.0	10.7	107	14	35	65-125	
1,1,2-Trichloroethane	10.0	11.4	114	11	35	77-127	
Tetrachloroethene	10.0	43.4	36	8	35	70-135	F1
2-Hexanone	20.0	22.2	111	17	35	25-132	
Dibromochloromethane	10.0	10.2	102	11	35	60-140	
1,2-Dibromoethane (EDB)	10.0	11.4	114	13	35	74-123	
Chlorobenzene	10.0	10.9	109	11	29	80-120	
1,1,1,2-Tetrachloroethane	10.0	9.87	99	8	34	63-140	
Ethylbenzene	10.0	11.2	112	7	33	72-126	
Xylenes, Total	20.0	22.2	111	9	32	76-128	
Styrene	10.0	11.5	115	11	34	71-127	
Bromoform	10.0	10.7	107	10	35	46-150	
1,1,2,2-Tetrachloroethane	10.0	12.2	122	14	35	62-125	
Acrylonitrile	100	127	127	15	35	30-140	
1,4-Dioxane	200	314	157	19	35	10-160	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab File ID: 51015006.D Lab Sample ID: MB 180-157127/6
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: CHHP5 Date Analyzed: 10/15/2015 14:08
 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-QC-16-0/1-2	180-48564-10	51015008.D	10/15/2015 15:11
HD-CW-6-0/1-0	180-48564-7	51015009.D	10/15/2015 15:35
	LCS 180-157127/10	51015010.D	10/15/2015 15:59
HD-CW-6-0/1-0 MS	180-48564-7 MS	51015011.D	10/15/2015 16:23
HD-CW-6-0/1-0 MSD	180-48564-7 MSD	51015012.D	10/15/2015 16:47

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
SDG No.: _____
Lab File ID: 51016012.D Lab Sample ID: MB 180-157249/12
Matrix: Water Heated Purge: (Y/N) N
Instrument ID: CHHP5 Date Analyzed: 10/16/2015 16:19
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 180-157249/15	51016015.D	10/16/2015 17:58
HD-CW-1-0/1-0	180-48564-1	51016020.D	10/16/2015 19:58
HD-CW-1A-0/1-0	180-48564-2	51016021.D	10/16/2015 20:23
HD-CW-2-0/1-0	180-48564-3	51016022.D	10/16/2015 20:47
HD-CW-3-0/1-0	180-48564-4	51016023.D	10/16/2015 21:11
HD-CW-4-0/1-0	180-48564-5	51016024.D	10/16/2015 21:35
HD-CW-5-0/1-0	180-48564-6	51016027.D	10/16/2015 22:48

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab File ID: 51017005.D Lab Sample ID: MB 180-157327/5
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: CHHP5 Date Analyzed: 10/17/2015 11:40
 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 180-157327/12	51017012.D	10/17/2015 16:00
HD-CW-3-0/1-0 DL	180-48564-4 DL	51017023.D	10/17/2015 20:25

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
SDG No.: _____
Lab File ID: 51019004.D Lab Sample ID: MB 180-157435/4
Matrix: Water Heated Purge: (Y/N) N
Instrument ID: CHHP5 Date Analyzed: 10/19/2015 11:11
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 180-157435/7	51019007.D	10/19/2015 12:40
HD-CW-7-0/1-0	180-48564-8	51019011.D	10/19/2015 14:17
HD-CW-7A-0/1-0 DL	180-48564-9 DL	51019013.D	10/19/2015 15:05
HD-QC5-0/1-1 DL	180-48564-11 DL	51019014.D	10/19/2015 15:29
HD-CW-7A-0/1-0	180-48564-9	51019027.D	10/19/2015 20:43
HD-QC5-0/1-1	180-48564-11	51019028.D	10/19/2015 21:07

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab File ID: 50826007.D BFB Injection Date: 08/26/2015
 Instrument ID: CHHP5 BFB Injection Time: 14:01
 Analysis Batch No.: 151868

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	23.5
75	30.0 - 60.0 % of mass 95	49.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.6
173	Less than 2.0 % of mass 174	0.4 (0.5)1
174	50.0 - 120.00 % of mass 95	77.9
175	5.0 - 9.0 % of mass 174	6.1 (7.9)1
176	95.0 - 101.0 % of mass 174	75.2 (96.6)1
177	5.0 - 9.0 % of mass 176	4.9 (6.6)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 180-151868/6	50826006.D	08/26/2015	15:04
	IC 180-151868/8	50826008.D	08/26/2015	15:28
	ICIS 180-151868/9	50826009.D	08/26/2015	15:52
	IC 180-151868/10	50826010.D	08/26/2015	16:16
	IC 180-151868/11	50826011.D	08/26/2015	16:40
	IC 180-151868/12	50826012.D	08/26/2015	17:04
	IC 180-151868/13	50826013.D	08/26/2015	17:28
	IC 180-151868/14	50826014.D	08/26/2015	17:52

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab File ID: 51015004.D BFB Injection Date: 10/15/2015
 Instrument ID: CHHP5 BFB Injection Time: 12:12
 Analysis Batch No.: 157127

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	26.6
75	30.0 - 60.0 % of mass 95	49.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.9
173	Less than 2.0 % of mass 174	0.2 (0.3)1
174	50.0 - 120.00 % of mass 95	75.8
175	5.0 - 9.0 % of mass 174	6.6 (8.7)1
176	95.0 - 101.0 % of mass 174	75.0 (99.0)1
177	5.0 - 9.0 % of mass 176	5.2 (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 180-157127/2	51015002.D	10/15/2015	12:56
	MB 180-157127/6	51015006.D	10/15/2015	14:08
HD-QC-16-0/1-2	180-48564-10	51015008.D	10/15/2015	15:11
HD-CW-6-0/1-0	180-48564-7	51015009.D	10/15/2015	15:35
	LCS 180-157127/10	51015010.D	10/15/2015	15:59
HD-CW-6-0/1-0 MS	180-48564-7 MS	51015011.D	10/15/2015	16:23
HD-CW-6-0/1-0 MSD	180-48564-7 MSD	51015012.D	10/15/2015	16:47

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab File ID: 51016011.D BFB Injection Date: 10/16/2015
 Instrument ID: CHHP5 BFB Injection Time: 14:25
 Analysis Batch No.: 157249

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	24.5
75	30.0 - 60.0 % of mass 95	49.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.2
173	Less than 2.0 % of mass 174	1.0 (1.4)1
174	50.0 - 120.00 % of mass 95	72.3
175	5.0 - 9.0 % of mass 174	5.4 (7.5)1
176	95.0 - 101.0 % of mass 174	71.5 (98.8)1
177	5.0 - 9.0 % of mass 176	3.6 (5.1)2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-157249/4	51016004.D	10/16/2015	15:06
	CCV 180-157249/5	51016005.D	10/16/2015	15:30
	MB 180-157249/12	51016012.D	10/16/2015	16:19
	LCS 180-157249/15	51016015.D	10/16/2015	17:58
HD-CW-1-0/1-0	180-48564-1	51016020.D	10/16/2015	19:58
HD-CW-1A-0/1-0	180-48564-2	51016021.D	10/16/2015	20:23
HD-CW-2-0/1-0	180-48564-3	51016022.D	10/16/2015	20:47
HD-CW-3-0/1-0	180-48564-4	51016023.D	10/16/2015	21:11
HD-CW-4-0/1-0	180-48564-5	51016024.D	10/16/2015	21:35
HD-CW-5-0/1-0	180-48564-6	51016027.D	10/16/2015	22:48

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab File ID: 51017001.D BFB Injection Date: 10/17/2015
 Instrument ID: CHHP5 BFB Injection Time: 09:32
 Analysis Batch No.: 157327

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	26.9
75	30.0 - 60.0 % of mass 95	51.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.2
173	Less than 2.0 % of mass 174	0.0 (0.0)1
174	50.0 - 120.00 % of mass 95	77.2
175	5.0 - 9.0 % of mass 174	5.9 (7.6)1
176	95.0 - 101.0 % of mass 174	74.6 (96.6)1
177	5.0 - 9.0 % of mass 176	5.0 (6.6)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 180-157327/2	51017002.D	10/17/2015	10:09
	CCV 180-157327/3	51017003.D	10/17/2015	10:52
	MB 180-157327/5	51017005.D	10/17/2015	11:40
	LCS 180-157327/12	51017012.D	10/17/2015	16:00
HD-CW-3-0/1-0 DL	180-48564-4 DL	51017023.D	10/17/2015	20:25

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab File ID: 51019001.D BFB Injection Date: 10/19/2015
 Instrument ID: CHHP5 BFB Injection Time: 09:26
 Analysis Batch No.: 157435

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	24.7
75	30.0 - 60.0 % of mass 95	48.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.1
173	Less than 2.0 % of mass 174	1.2 (1.3)1
174	50.0 - 120.00 % of mass 95	87.0
175	5.0 - 9.0 % of mass 174	6.6 (7.6)1
176	95.0 - 101.0 % of mass 174	83.3 (95.7)1
177	5.0 - 9.0 % of mass 176	6.0 (7.2)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 180-157435/2	51019002.D	10/19/2015	10:09
	MB 180-157435/4	51019004.D	10/19/2015	11:11
	LCS 180-157435/7	51019007.D	10/19/2015	12:40
HD-CW-7-0/1-0	180-48564-8	51019011.D	10/19/2015	14:17
HD-CW-7A-0/1-0 DL	180-48564-9 DL	51019013.D	10/19/2015	15:05
HD-QC5-0/1-1 DL	180-48564-11 DL	51019014.D	10/19/2015	15:29
HD-CW-7A-0/1-0	180-48564-9	51019027.D	10/19/2015	20:43
HD-QC5-0/1-1	180-48564-11	51019028.D	10/19/2015	21:07

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Sample No.: CCVIS 180-157127/2 Date Analyzed: 10/15/2015 12:56
 Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 51015002.D Heated Purge: (Y/N) N
 Calibration ID: 25113

	TBA		FB		CBZ		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	155406	4.27	379251	7.29	82633	10.39	
UPPER LIMIT	310812	4.77	758502	7.79	165266	10.89	
LOWER LIMIT	77703	3.77	189626	6.79	41317	9.89	
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-157127/6		166634	4.27	345393	7.29	77841	10.39
180-48564-10	HD-QC-16-0/1-2	159608	4.27	334169	7.29	71629	10.39
180-48564-7	HD-CW-6-0/1-0	149704	4.27	336873	7.29	76547	10.39
LCS 180-157127/10		156359	4.28	369647	7.29	81657	10.39
180-48564-7 MS	HD-CW-6-0/1-0 MS	158623	4.28	385658	7.29	88863	10.39
180-48564-7 MSD	HD-CW-6-0/1-0 MSD	167199	4.28	338265	7.29	75857	10.39

TBA = TBA-d9 (IS)
 FB = Fluorobenzene (IS)
 CBZ = Chlorobenzene-d5

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

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Sample No.: CCVIS 180-157127/2 Date Analyzed: 10/15/2015 12:56
 Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 51015002.D Heated Purge: (Y/N) N
 Calibration ID: 25113

	DCB					
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	127710	12.74				
UPPER LIMIT	255420	13.24				
LOWER LIMIT	63855	12.24				
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 180-157127/6		106606	12.73			
180-48564-10	HD-QC-16-0/1-2	98732	12.73			
180-48564-7	HD-CW-6-0/1-0	97026	12.74			
LCS 180-157127/10		128850	12.73			
180-48564-7 MS	HD-CW-6-0/1-0 MS	127061	12.73			
180-48564-7 MSD	HD-CW-6-0/1-0 MSD	114189	12.73			

DCB = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Sample No.: CCVIS 180-157249/4 Date Analyzed: 10/16/2015 15:06
 Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 51016004.D Heated Purge: (Y/N) N
 Calibration ID: 25113

	TBA		FB		CBZ		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	130084	4.26	469261	7.29	102658	10.39	
UPPER LIMIT	260168	4.76	938522	7.79	205316	10.89	
LOWER LIMIT	65042	3.76	234631	6.79	51329	9.89	
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-157249/5		136973	4.27	425237	7.29	94694	10.39
MB 180-157249/12		95470	4.27	400795	7.29	94373	10.39
LCS 180-157249/15		107445	4.27	406759	7.29	91211	10.39
180-48564-1	HD-CW-1-0/1-0	106660	4.26	371724	7.29	80065	10.39
180-48564-2	HD-CW-1A-0/1-0	123677	4.26	373331	7.29	82262	10.39
180-48564-3	HD-CW-2-0/1-0	113109	4.25	390167	7.29	88548	10.39
180-48564-4	HD-CW-3-0/1-0	98439	4.26	363026	7.29	80072	10.39
180-48564-5	HD-CW-4-0/1-0	100186	4.27	389231	7.29	84760	10.39
180-48564-6	HD-CW-5-0/1-0	74768	4.25	364667	7.29	87325	10.39

TBA = TBA-d9 (IS)

FB = Fluorobenzene (IS)

CBZ = Chlorobenzene-d5

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

RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Sample No.: CCVIS 180-157249/4 Date Analyzed: 10/16/2015 15:06
 Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 51016004.D Heated Purge: (Y/N) N
 Calibration ID: 25113

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		146674	12.73				
UPPER LIMIT		293348	13.23				
LOWER LIMIT		73337	12.23				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-157249/5		113554	12.73				
MB 180-157249/12		120395	12.73				
LCS 180-157249/15		128169	12.73				
180-48564-1	HD-CW-1-0/1-0	105345	12.73				
180-48564-2	HD-CW-1A-0/1-0	104648	12.73				
180-48564-3	HD-CW-2-0/1-0	116662	12.73				
180-48564-4	HD-CW-3-0/1-0	107963	12.73				
180-48564-5	HD-CW-4-0/1-0	113407	12.74				
180-48564-6	HD-CW-5-0/1-0	114678	12.73				

DCB = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Sample No.: CCVIS 180-157327/2 Date Analyzed: 10/17/2015 10:09
 Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 51017002.D Heated Purge: (Y/N) N
 Calibration ID: 25113

	TBA		FB		CBZ		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	122820	4.26	461537	7.29	100060	10.39	
UPPER LIMIT	245640	4.76	923074	7.79	200120	10.89	
LOWER LIMIT	61410	3.76	230769	6.79	50030	9.89	
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-157327/3	79651	4.27	463569	7.29	100189	10.39	
MB 180-157327/5	96893	4.27	510411	7.29	110695	10.39	
LCS 180-157327/12	94965	4.28	367634	7.29	78305	10.39	
180-48564-4 DL	HD-CW-3-0/1-0 DL	122355	4.26	346176	7.29	77855	10.39

TBA = TBA-d9 (IS)

FB = Fluorobenzene (IS)

CBZ = Chlorobenzene-d5

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

RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Sample No.: CCVIS 180-157327/2 Date Analyzed: 10/17/2015 10:09
 Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 51017002.D Heated Purge: (Y/N) N
 Calibration ID: 25113

	DCB					
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	131704	12.73				
UPPER LIMIT	263408	13.23				
LOWER LIMIT	65852	12.23				
LAB SAMPLE ID	CLIENT SAMPLE ID					
CCV 180-157327/3		124173	12.73			
MB 180-157327/5		139550	12.73			
LCS 180-157327/12		126056	12.73			
180-48564-4 DL	HD-CW-3-0/1-0 DL	102085	12.73			

DCB = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Sample No.: CCVIS 180-157435/2 Date Analyzed: 10/19/2015 10:09
 Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 51019002.D Heated Purge: (Y/N) N
 Calibration ID: 25113

	TBA		FB		CBZ		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	105084	4.27	335302	7.28	74792	10.39	
UPPER LIMIT	210168	4.77	670604	7.78	149584	10.89	
LOWER LIMIT	52542	3.77	167651	6.78	37396	9.89	
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-157435/4		139430	4.27	312691	7.29	73826	10.39
LCS 180-157435/7		95604	4.27	360181	7.29	80512	10.39
180-48564-8	HD-CW-7-0/1-0	233954*	4.26	312589	7.29	70539	10.39
180-48564-9 DL	HD-CW-7A-0/1-0 DL	110583	4.26	288754	7.29	64107	10.39
180-48564-11 DL	HD-QC5-0/1-1 DL	110407	4.26	295877	7.29	66034	10.39
180-48564-9	HD-CW-7A-0/1-0	108242	4.27	271745	7.29	62207	10.39
180-48564-11	HD-QC5-0/1-1	100958	4.26	278932	7.29	64231	10.39

TBA = TBA-d9 (IS)

FB = Fluorobenzene (IS)

CBZ = Chlorobenzene-d5

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

RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Sample No.: CCVIS 180-157435/2 Date Analyzed: 10/19/2015 10:09
 Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 51019002.D Heated Purge: (Y/N) N
 Calibration ID: 25113

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		113437	12.73				
UPPER LIMIT		226874	13.23				
LOWER LIMIT		56719	12.23				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-157435/4		106690	12.73				
LCS 180-157435/7		119755	12.73				
180-48564-8	HD-CW-7-0/1-0	104614	12.73				
180-48564-9 DL	HD-CW-7A-0/1-0 DL	92792	12.73				
180-48564-11 DL	HD-QC5-0/1-1 DL	93788	12.73				
180-48564-9	HD-CW-7A-0/1-0	91871	12.73				
180-48564-11	HD-QC5-0/1-1	92899	12.74				

DCB = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-1-0/1-0 Lab Sample ID: 180-48564-1
 Matrix: Water Lab File ID: 51016020.D
 Analysis Method: 8260C Date Collected: 10/06/2015 09:15
 Sample wt/vol: 5 (mL) Date Analyzed: 10/16/2015 19:58
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157249 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 ^c	1.0	0.23
74-83-9	Bromomethane	1.0	U ^c	1.0	0.31
75-00-3	Chloroethane	1.0	U ^c	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	1.2		1.0	0.24
74-97-5	Bromochloromethane	1.0	U ^c	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	1.1		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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-1-0/1-0 Lab Sample ID: 180-48564-1
 Matrix: Water Lab File ID: 51016020.D
 Analysis Method: 8260C Date Collected: 10/06/2015 09:15
 Sample wt/vol: 5 (mL) Date Analyzed: 10/16/2015 19:58
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157249 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		64-135
2037-26-5	Toluene-d8 (Surr)	108		71-118
460-00-4	4-Bromofluorobenzene (Surr)	94		70-118
1868-53-7	Dibromofluoromethane (Surr)	92		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016020.D
 Lims ID: 180-48564-A-1 Lab Sample ID: 180-48564-1
 Client ID: HD-CW-1-0/1-0
 Sample Type: Client
 Inject. Date: 16-Oct-2015 19:58:30 ALS Bottle#: 15 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-48564-A-1
 Misc. Info.: 180-0009043-020
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 17-Oct-2015 13:01:22 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: journeyep

Date: 17-Oct-2015 11:53:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.260	4.271	-0.011	0	106660	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.289	0.001	97	371724	50.0	
* 3 Chlorobenzene-d5	119	10.392	10.391	0.001	90	80065	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.734	12.733	0.001	98	105345	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.566	6.560	0.006	93	84356	46.2	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.937	6.931	0.006	0	135252	53.9	
\$ 7 Toluene-d8 (Surr)	98	8.938	8.939	-0.001	94	332709	53.9	
\$ 8 4-Bromofluorobenzene (Surr	95	11.573	11.573	0.000	88	109634	47.1	
12 Chloromethane	50		1.760				ND	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.247				ND	
16 Chloroethane	64		2.387				ND	
22 1,1-Dichloroethene	96		3.354				ND	
24 Acetone	43		3.433				ND	
26 Carbon disulfide	76		3.646				ND	
31 Methylene Chloride	84		4.139				ND	
33 Acrylonitrile	53		4.522				ND	
34 trans-1,2-Dichloroethene	96		4.565				ND	
35 Methyl tert-butyl ether	73		4.583				ND	
37 1,1-Dichloroethane	63		5.198				ND	
45 cis-1,2-Dichloroethene	96	5.964	5.946	0.018	87	13822	5.76	
46 2-Butanone (MEK)	43		5.958				ND	
49 Chlorobromomethane	128		6.232				ND	
52 Chloroform	83		6.384				ND	
53 1,1,1-Trichloroethane	97		6.542				ND	
56 Carbon tetrachloride	117		6.712				ND	
58 Benzene	78		6.943				ND	
59 1,2-Dichloroethane	62		7.016				ND	
64 Trichloroethene	130	7.679	7.674	0.005	91	12762	5.69	
67 1,2-Dichloropropane	63		7.947				ND	
70 1,4-Dioxane	88		8.032				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.233				ND	
74 cis-1,3-Dichloropropene	75		8.677				ND	
75 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
76 Toluene	91		9.006				ND	
77 trans-1,3-Dichloropropene	75		9.249				ND	
79 1,1,2-Trichloroethane	97		9.444				ND	
80 Tetrachloroethene	164	9.516	9.517	-0.001	68	1495	0.9716	
82 2-Hexanone	43		9.657				ND	
84 Chlorodibromomethane	129		9.815				ND	
85 Ethylene Dibromide	107		9.930				ND	
87 Chlorobenzene	112		10.417				ND	
89 1,1,1,2-Tetrachloroethane	131		10.508				ND	
90 Ethylbenzene	106		10.514				ND	
91 m-Xylene & p-Xylene	106		10.648				ND	
92 o-Xylene	106		11.032				ND	
93 Styrene	104		11.050				ND	
94 Bromoform	173		11.232				ND	
99 1,1,2,2-Tetrachloroethane	83		11.707				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016020.D

Injection Date: 16-Oct-2015 19:58:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48564-A-1

Lab Sample ID: 180-48564-1

Worklist Smp#: 20

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

Purge Vol: 5.000 mL

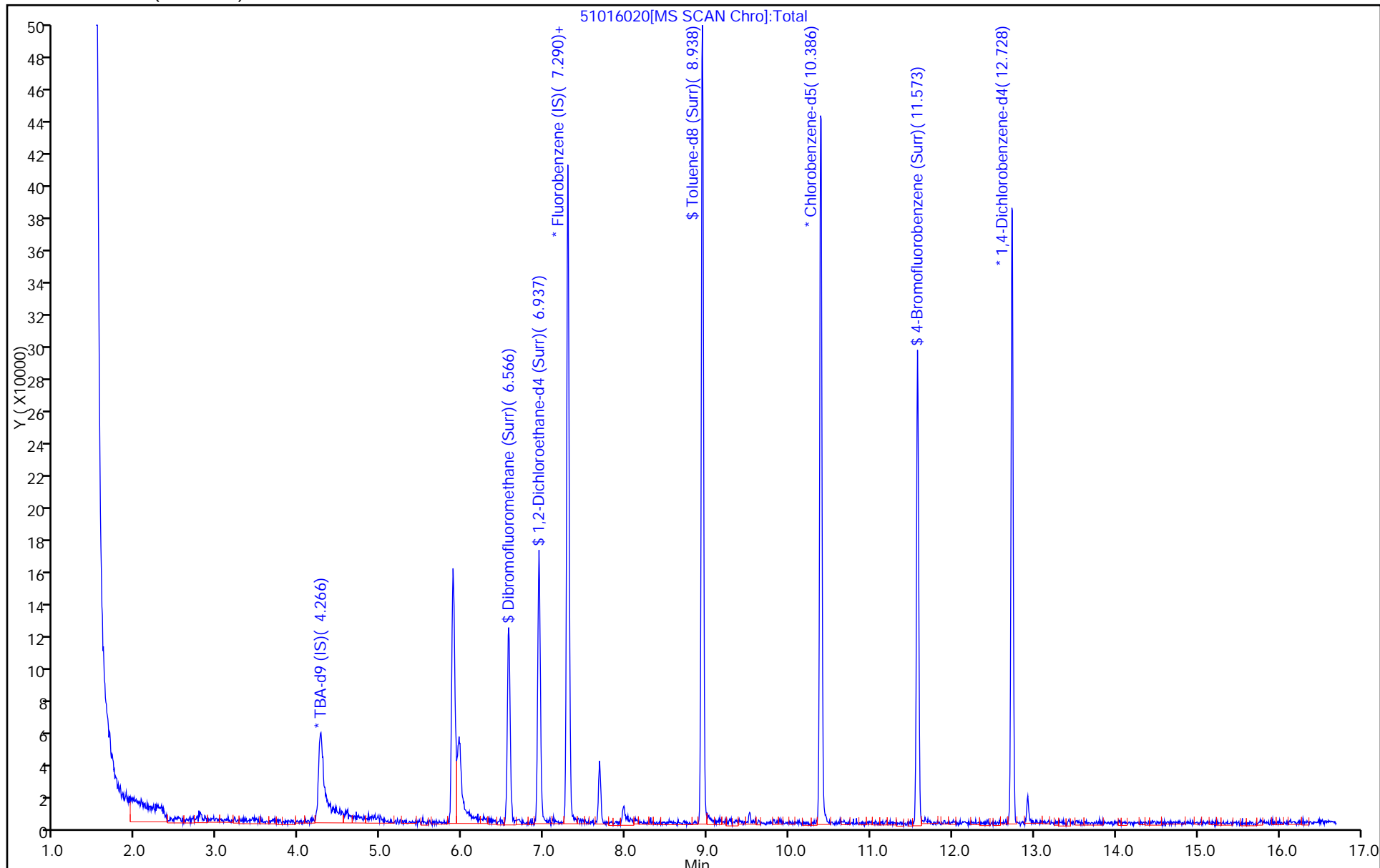
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016020.D

Injection Date: 16-Oct-2015 19:58:30

Instrument ID: CHHP5

Lims ID: 180-48564-A-1

Lab Sample ID: 180-48564-1

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

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

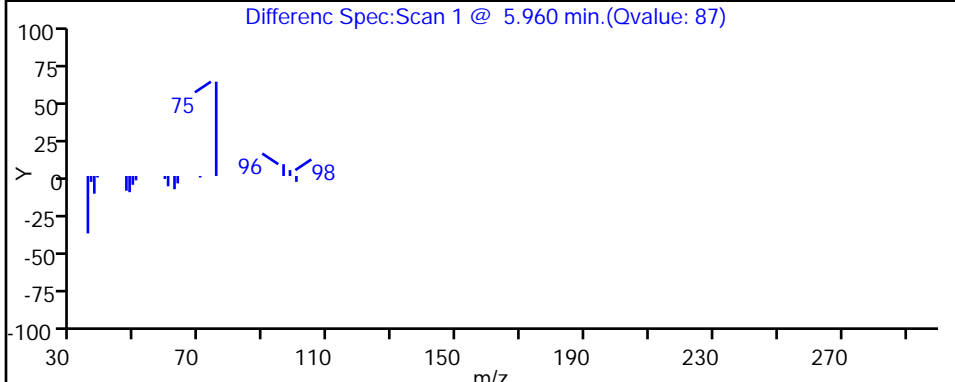
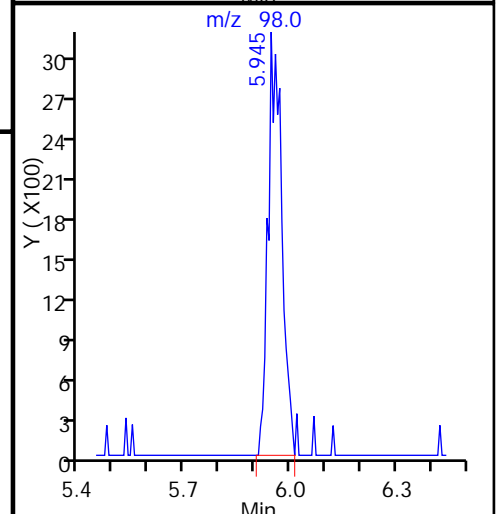
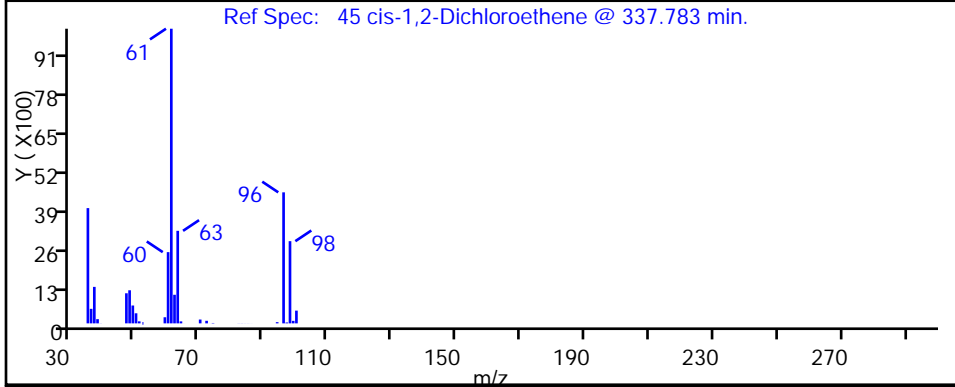
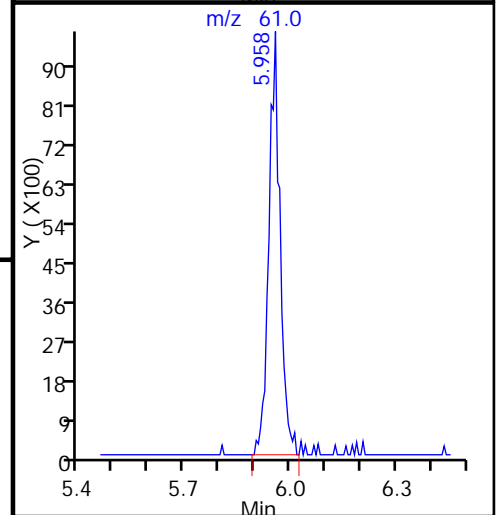
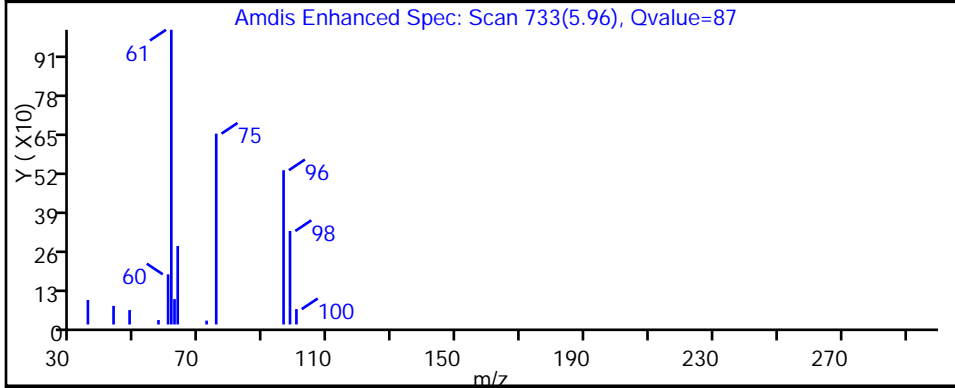
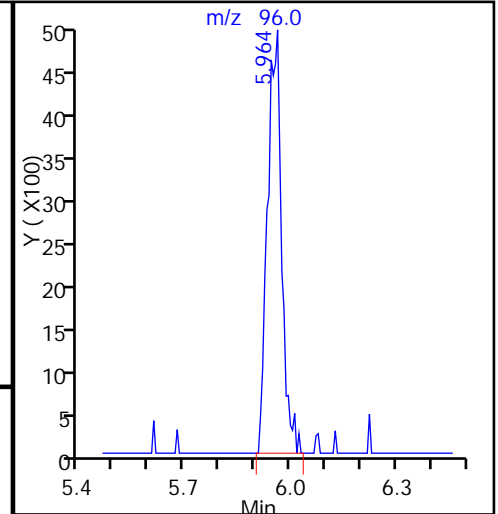
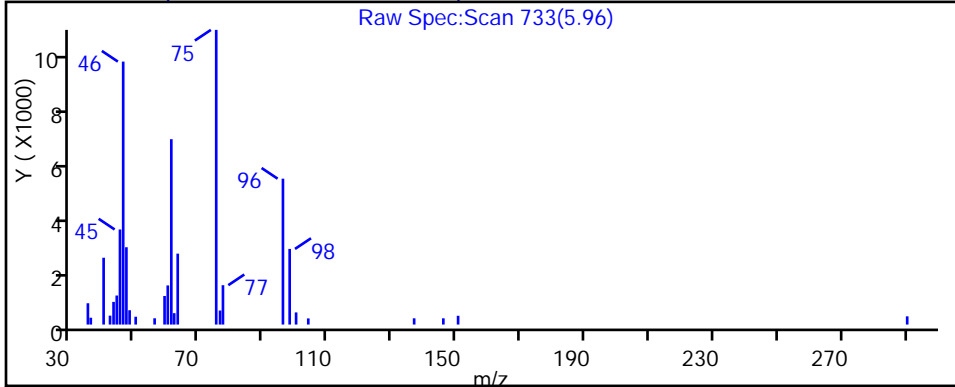
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016020.D

Injection Date: 16-Oct-2015 19:58:30

Instrument ID: CHHP5

Lims ID: 180-48564-A-1

Lab Sample ID: 180-48564-1

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

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

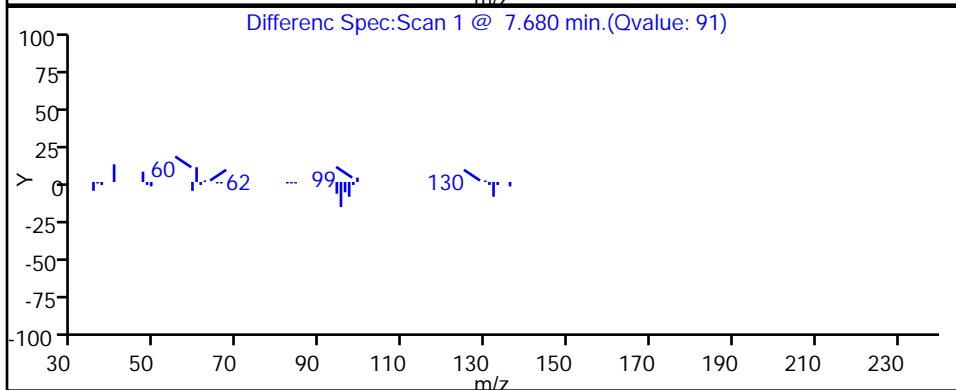
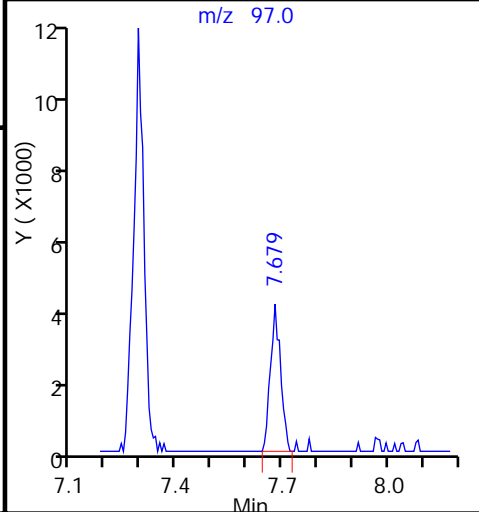
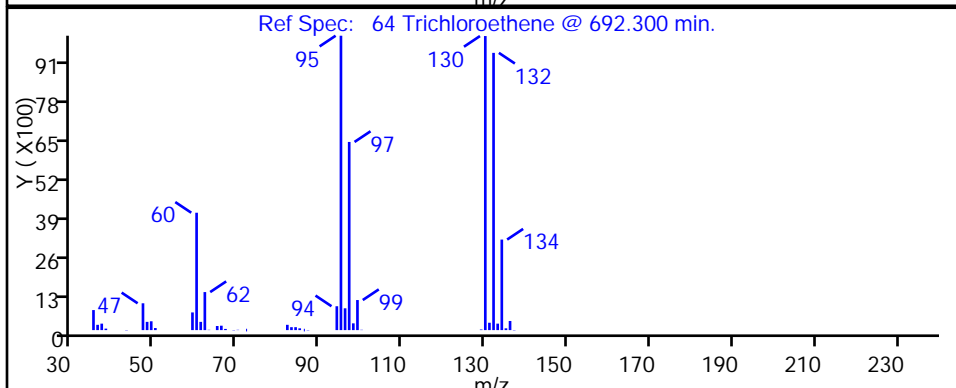
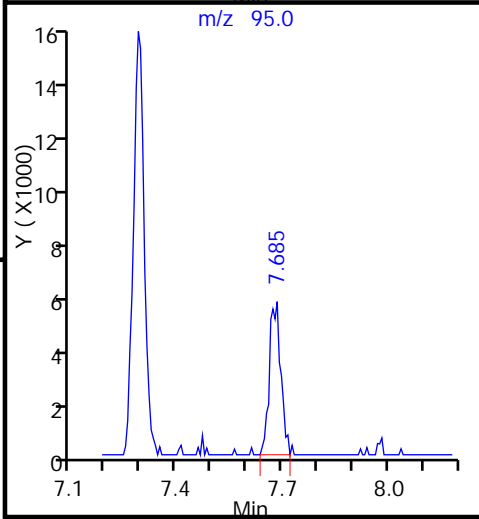
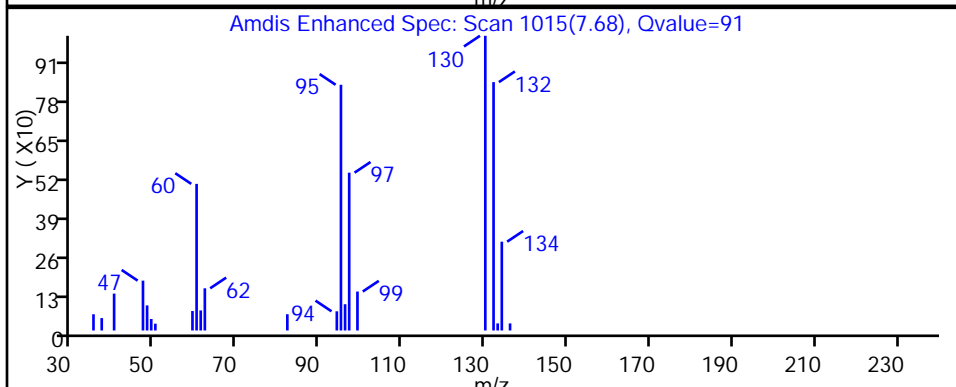
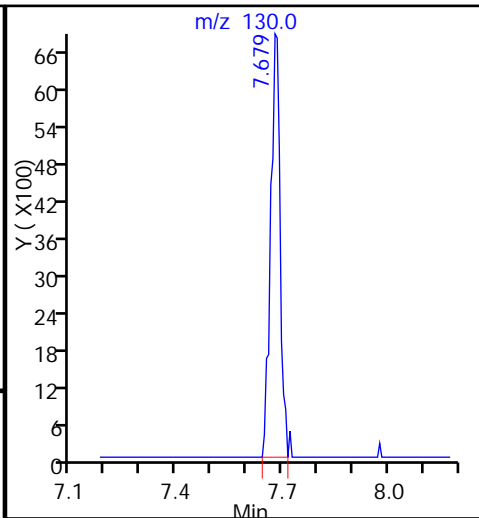
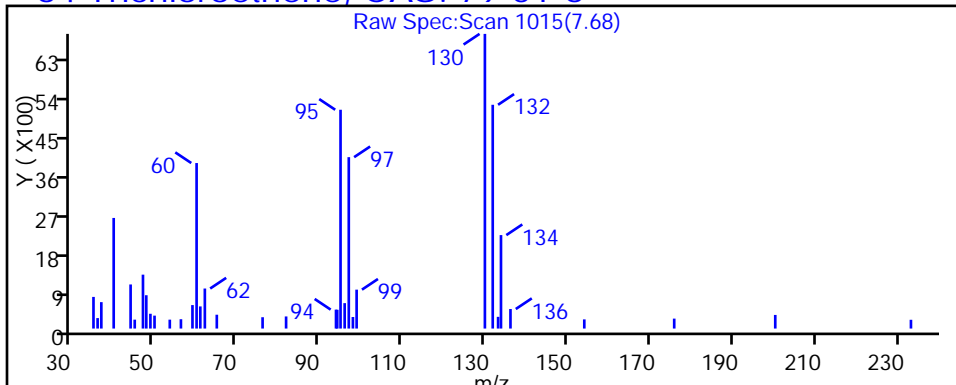
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016020.D

Injection Date: 16-Oct-2015 19:58:30

Instrument ID: CHHP5

Lims ID: 180-48564-A-1

Lab Sample ID: 180-48564-1

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

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

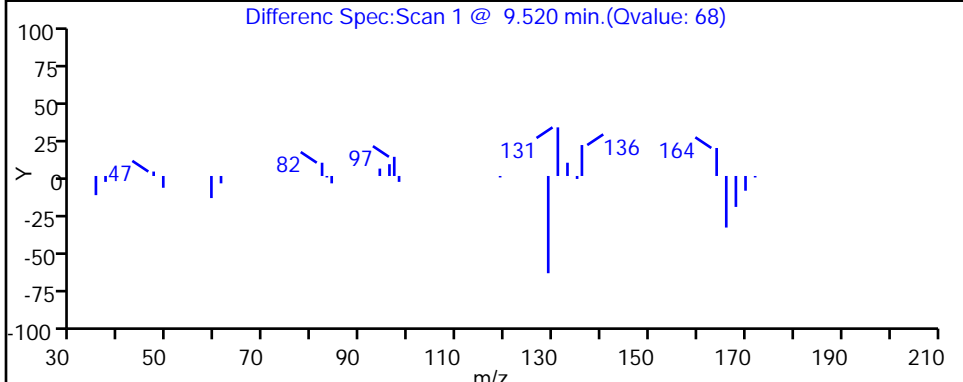
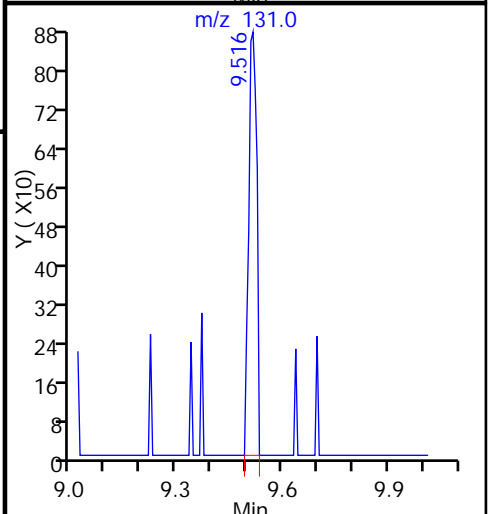
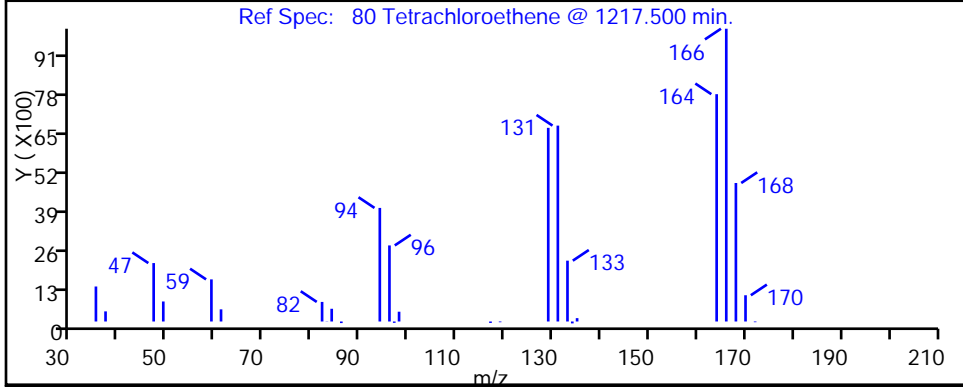
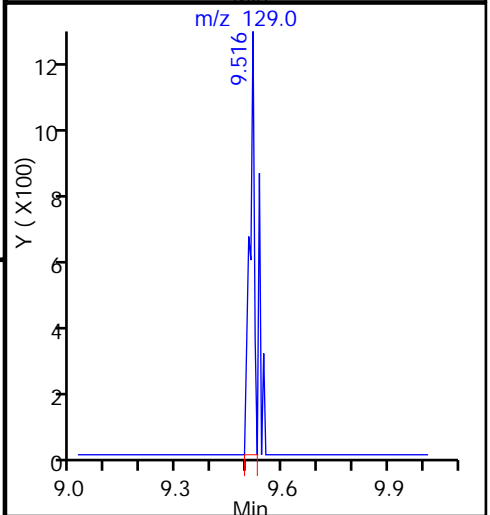
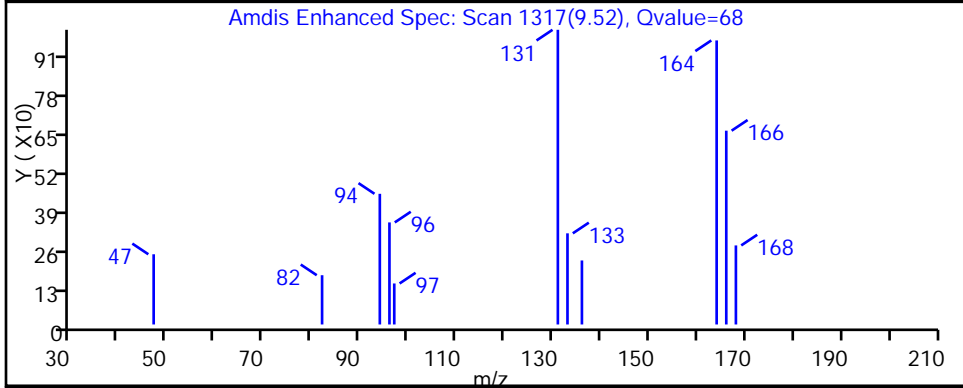
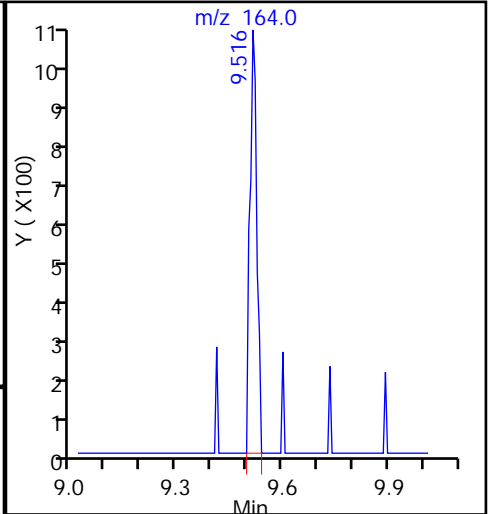
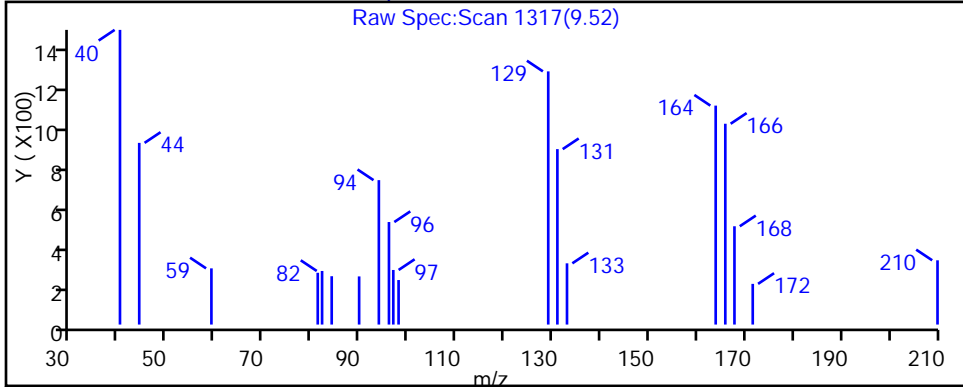
Method: MSVOA_LL_CHHP5

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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-1A-0/1-0 Lab Sample ID: 180-48564-2
 Matrix: Water Lab File ID: 51016021.D
 Analysis Method: 8260C Date Collected: 10/06/2015 08:05
 Sample wt/vol: 5 (mL) Date Analyzed: 10/16/2015 20:23
 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.: 157249 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 ^c	1.0	0.23
74-83-9	Bromomethane	1.0	U ^c	1.0	0.31
75-00-3	Chloroethane	1.0	U ^c	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 ^c	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	0.31	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	28		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	1.9		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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-1A-0/1-0 Lab Sample ID: 180-48564-2
 Matrix: Water Lab File ID: 51016021.D
 Analysis Method: 8260C Date Collected: 10/06/2015 08:05
 Sample wt/vol: 5 (mL) Date Analyzed: 10/16/2015 20:23
 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.: 157249 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)	105		64-135
2037-26-5	Toluene-d8 (Surr)	109		71-118
460-00-4	4-Bromofluorobenzene (Surr)	90		70-118
1868-53-7	Dibromofluoromethane (Surr)	97		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016021.D
 Lims ID: 180-48564-B-2 Lab Sample ID: 180-48564-2
 Client ID: HD-CW-1A-0/1-0
 Sample Type: Client
 Inject. Date: 16-Oct-2015 20:23:30 ALS Bottle#: 16 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-48564-B-2
 Misc. Info.: 180-0009043-021
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 17-Oct-2015 13:01:22 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: journeyep

Date: 17-Oct-2015 12:12:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.262	4.271	-0.009	0	123677	1000.0	
* 2 Fluorobenzene (IS)	96	7.292	7.289	0.003	98	373331	50.0	
* 3 Chlorobenzene-d5	119	10.388	10.391	-0.003	90	82262	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.730	12.733	-0.003	97	104648	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.562	6.560	0.002	94	89029	48.6	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.939	6.931	0.008	0	132692	52.7	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.939	0.001	95	344636	54.3	
\$ 8 4-Bromofluorobenzene (Surr	95	11.575	11.573	0.002	89	107332	44.8	
12 Chloromethane	50	1.768	1.760	0.008	1	2789	0.9006	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.247				ND	
16 Chloroethane	64		2.387				ND	
22 1,1-Dichloroethene	96		3.354				ND	
24 Acetone	43		3.433				ND	
26 Carbon disulfide	76		3.646				ND	
31 Methylene Chloride	84		4.139				ND	
33 Acrylonitrile	53		4.522				ND	
34 trans-1,2-Dichloroethene	96		4.565				ND	
35 Methyl tert-butyl ether	73		4.583				ND	
37 1,1-Dichloroethane	63		5.198				ND	
45 cis-1,2-Dichloroethene	96		5.946				ND	
46 2-Butanone (MEK)	43		5.958				ND	
49 Chlorobromomethane	128		6.232				ND	
52 Chloroform	83	6.385	6.384	0.001	93	5978	1.56	
53 1,1,1-Trichloroethane	97		6.542				ND	
56 Carbon tetrachloride	117		6.712				ND	
58 Benzene	78		6.943				ND	
59 1,2-Dichloroethane	62		7.016				ND	
64 Trichloroethene	130	7.681	7.674	0.007	96	314356	139.6	
67 1,2-Dichloropropane	63		7.947				ND	
70 1,4-Dioxane	88		8.032				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.233				ND	
74 cis-1,3-Dichloropropene	75		8.677				ND	
75 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
76 Toluene	91		9.006				ND	
77 trans-1,3-Dichloropropene	75		9.249				ND	
79 1,1,2-Trichloroethane	97		9.444				ND	
80 Tetrachloroethene	164	9.518	9.517	0.001	94	15292	9.67	
82 2-Hexanone	43		9.657				ND	
84 Chlorodibromomethane	129		9.815				ND	
85 Ethylene Dibromide	107		9.930				ND	
87 Chlorobenzene	112		10.417				ND	
89 1,1,1,2-Tetrachloroethane	131		10.508				ND	
90 Ethylbenzene	106		10.514				ND	
91 m-Xylene & p-Xylene	106		10.648				ND	
92 o-Xylene	106		11.032				ND	
93 Styrene	104		11.050				ND	
94 Bromoform	173		11.232				ND	
99 1,1,2,2-Tetrachloroethane	83		11.707				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016021.D

Injection Date: 16-Oct-2015 20:23:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48564-B-2

Lab Sample ID: 180-48564-2

Worklist Smp#: 21

Client ID: HD-CW-1A-0/1-0

Purge Vol: 5.000 mL

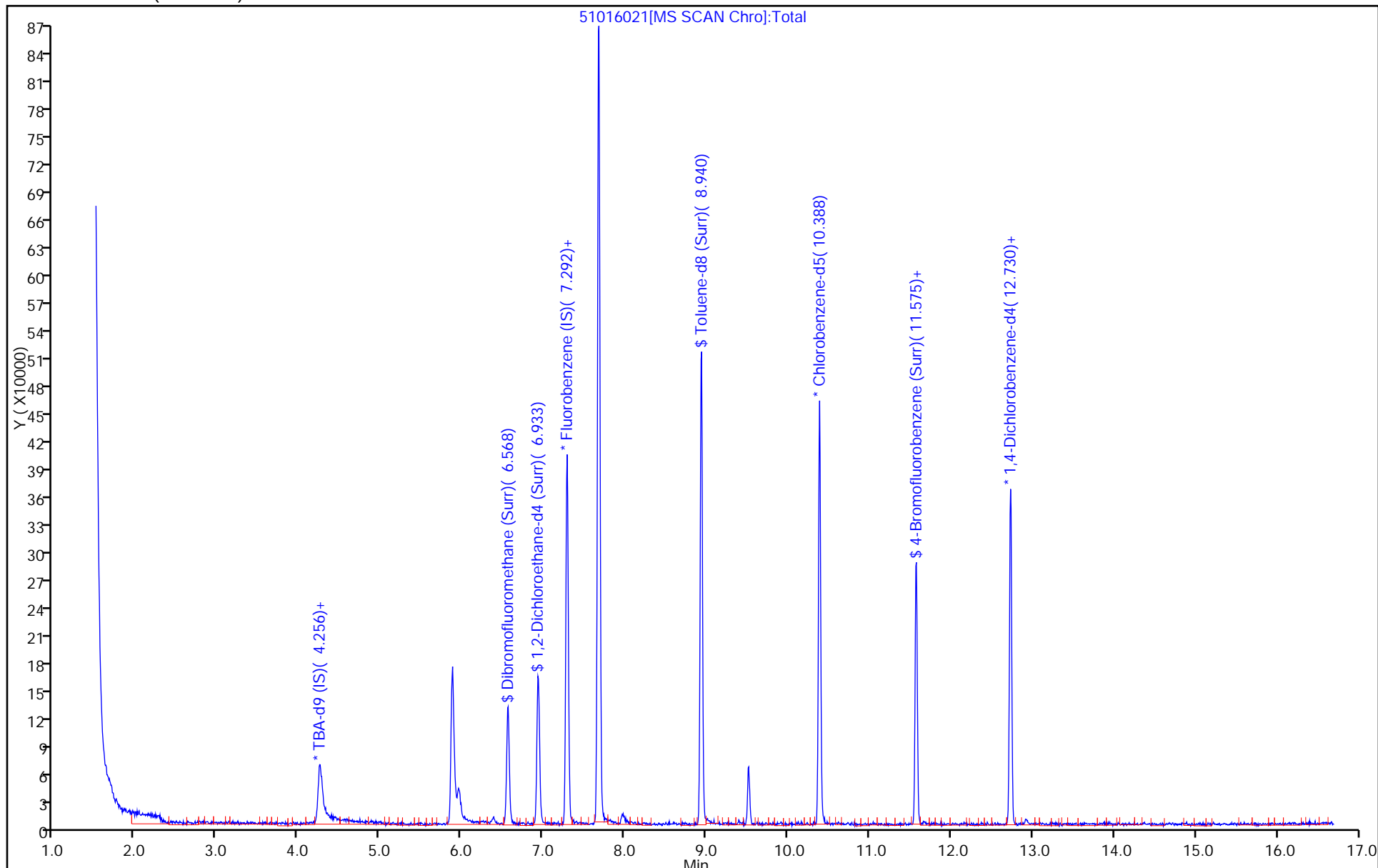
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016021.D

Injection Date: 16-Oct-2015 20:23:30

Instrument ID: CHHP5

Lims ID: 180-48564-B-2

Lab Sample ID: 180-48564-2

Client ID: HD-CW-1A-0/1-0

Operator ID: 001562

ALS Bottle#: 16

Worklist Smp#: 21

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

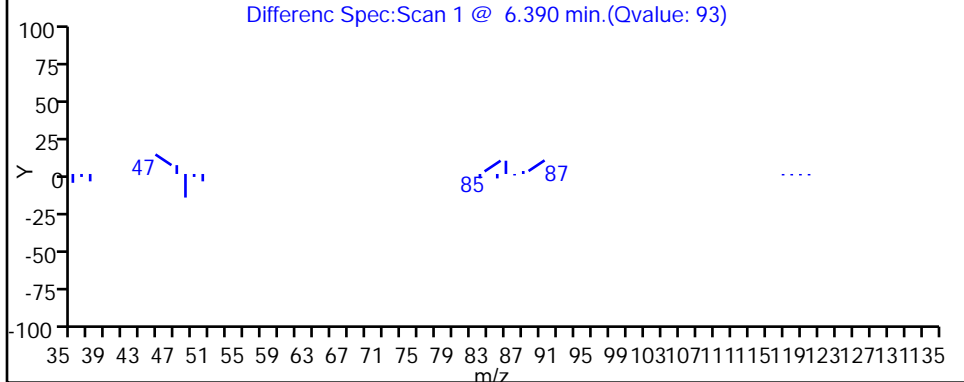
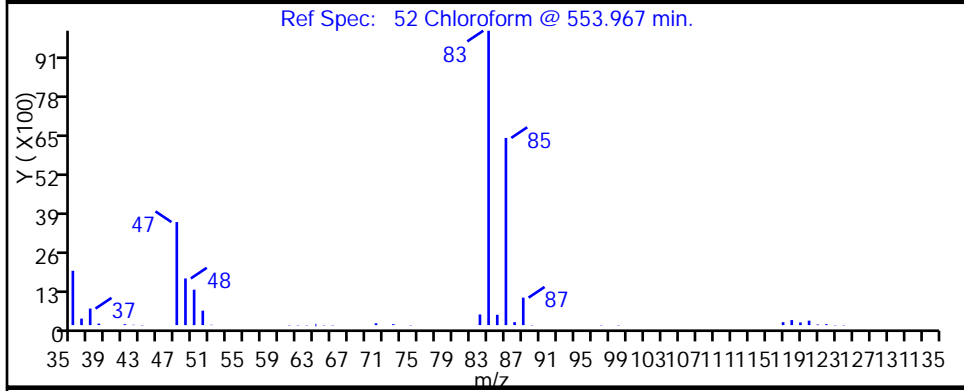
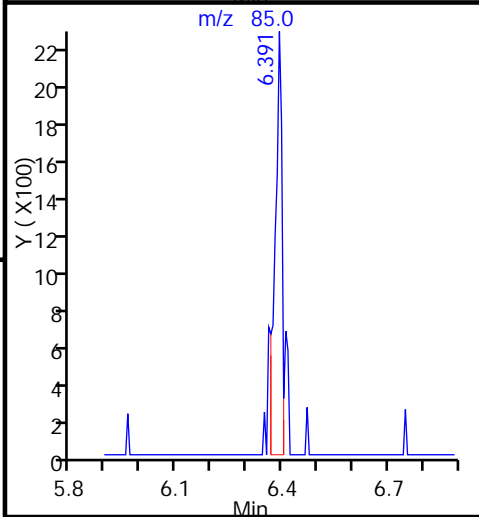
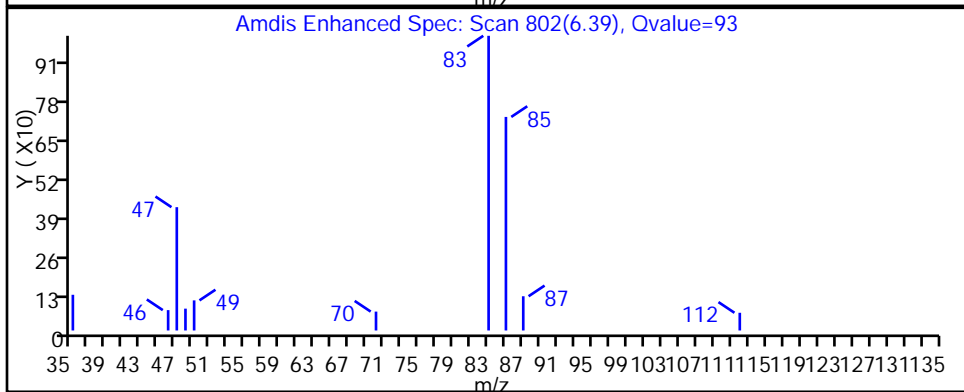
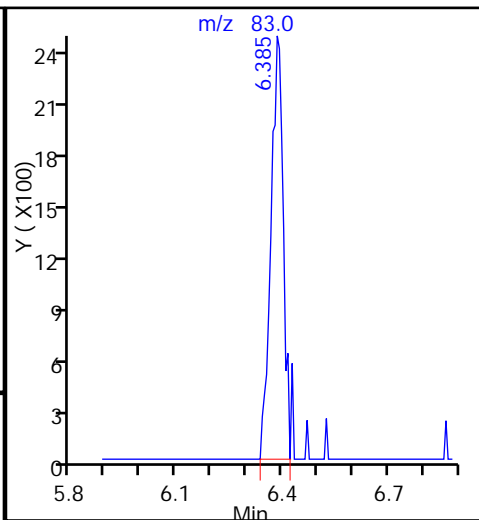
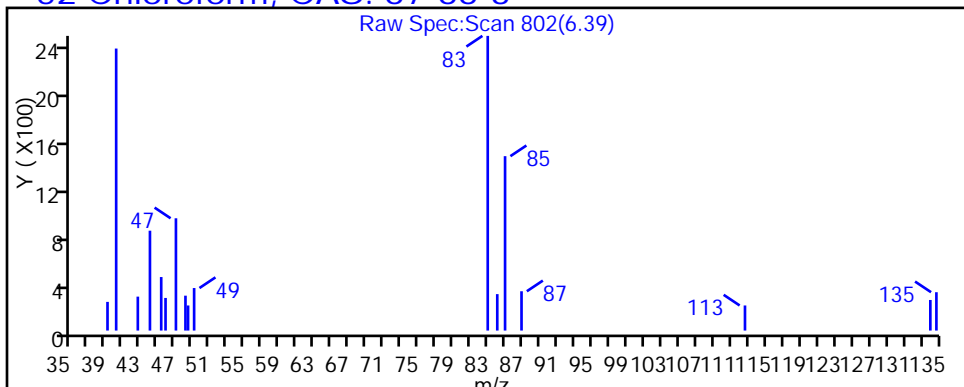
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

52 Chloroform, CAS: 67-66-3



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016021.D

Injection Date: 16-Oct-2015 20:23:30

Instrument ID: CHHP5

Lims ID: 180-48564-B-2

Lab Sample ID: 180-48564-2

Client ID: HD-CW-1A-0/1-0

Operator ID: 001562

ALS Bottle#: 16

Worklist Smp#: 21

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

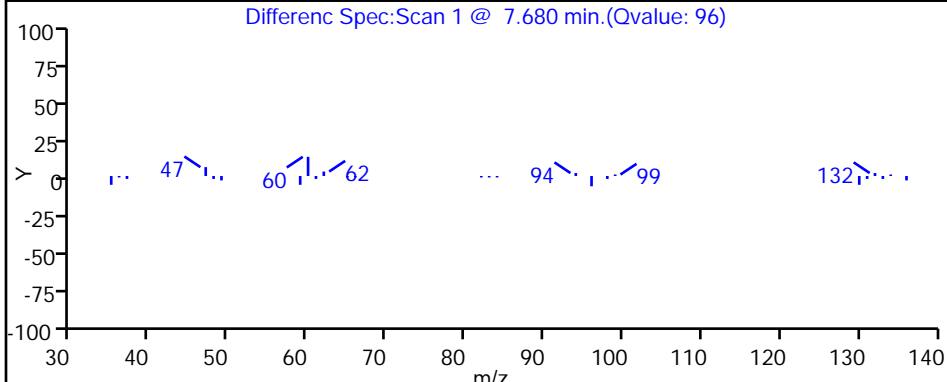
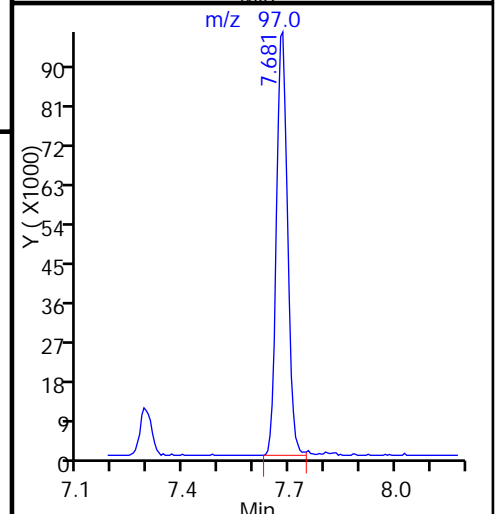
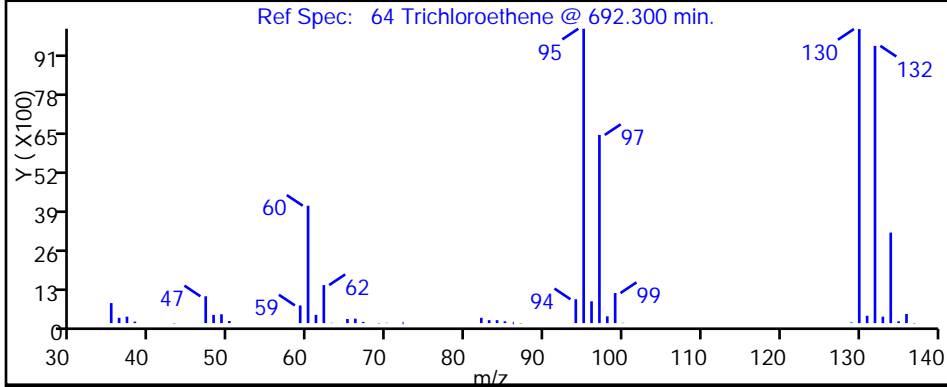
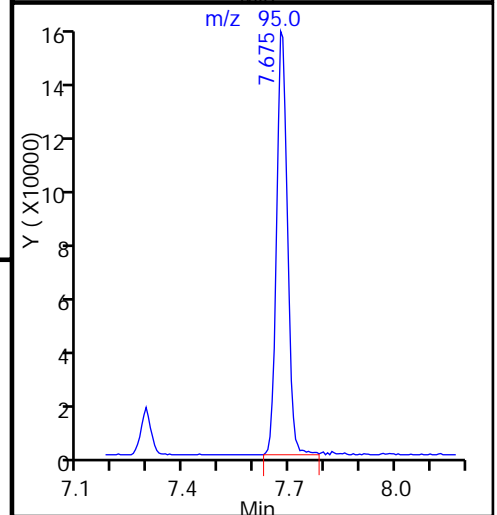
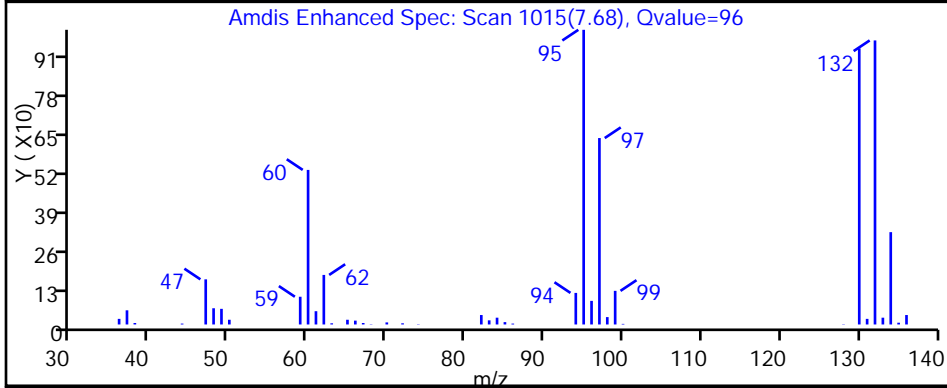
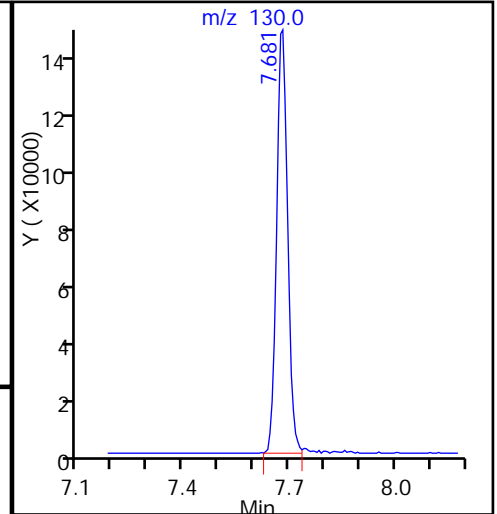
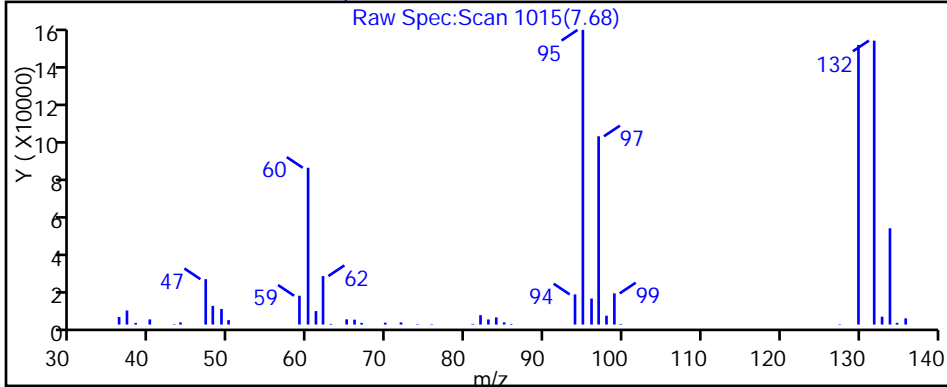
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016021.D

Injection Date: 16-Oct-2015 20:23:30

Instrument ID: CHHP5

Lims ID: 180-48564-B-2

Lab Sample ID: 180-48564-2

Client ID: HD-CW-1A-0/1-0

Operator ID: 001562

ALS Bottle#: 16

Worklist Smp#: 21

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

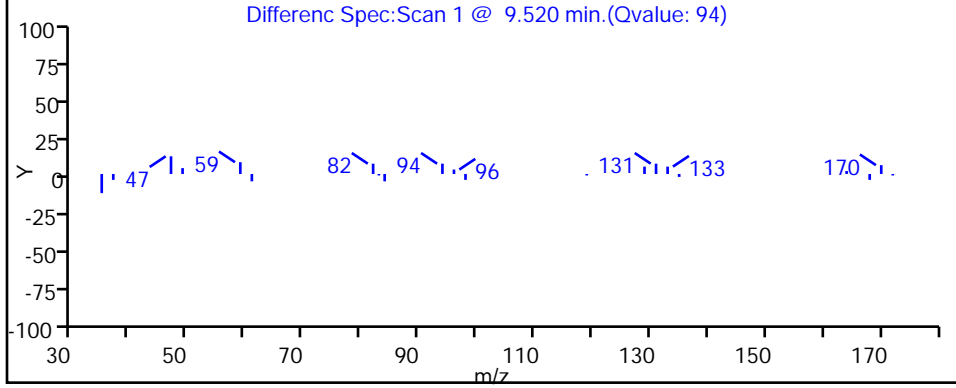
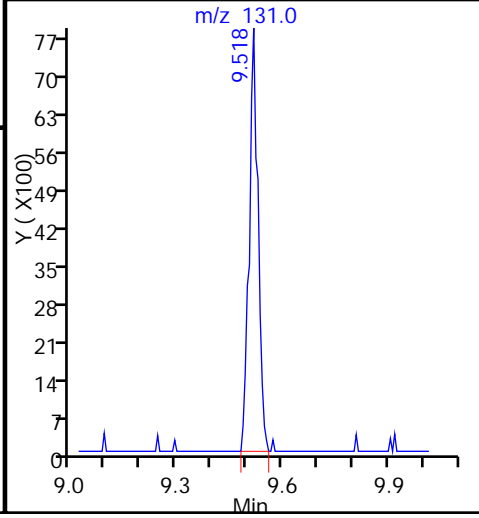
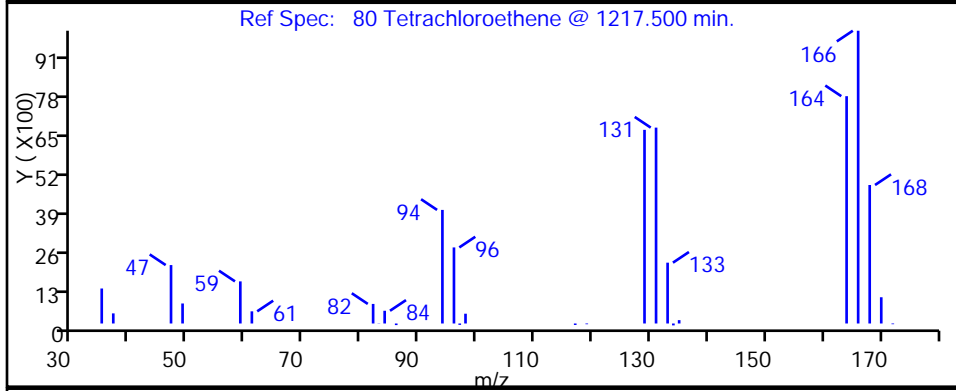
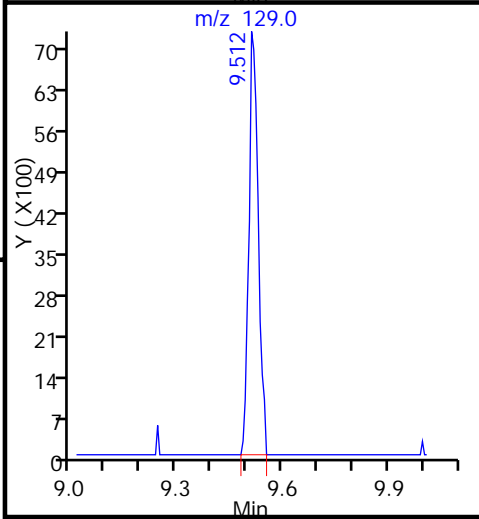
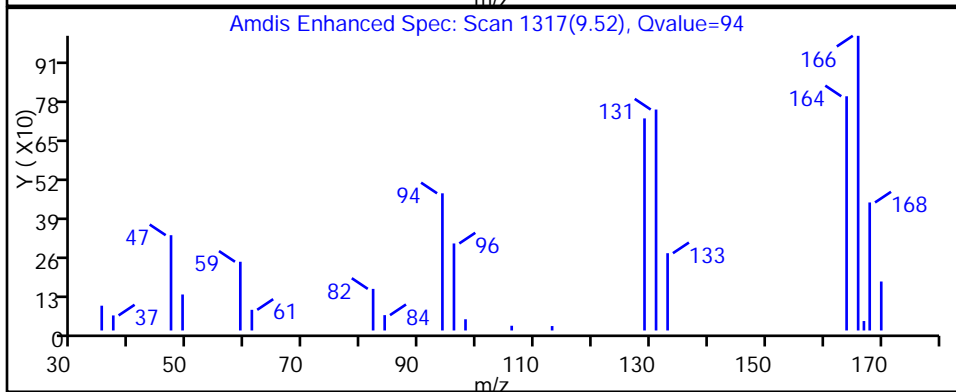
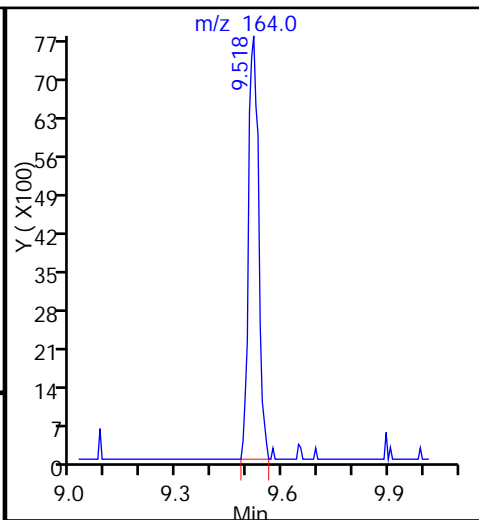
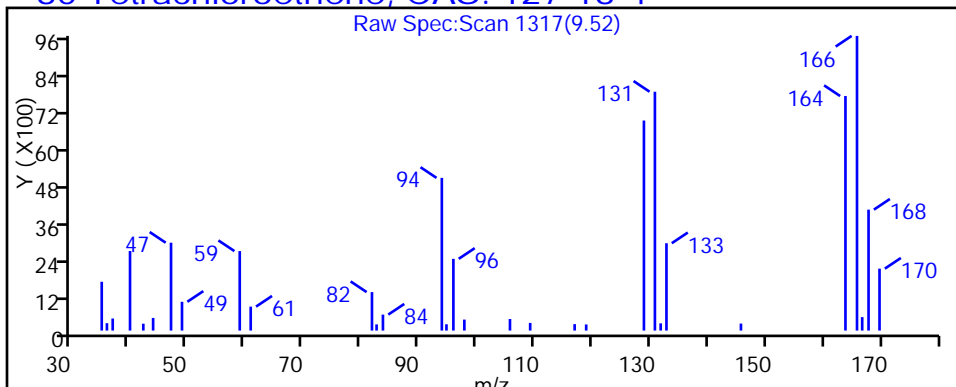
Method: MSVOA_LL_CHHP5

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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-2-0/1-0 Lab Sample ID: 180-48564-3
 Matrix: Water Lab File ID: 51016022.D
 Analysis Method: 8260C Date Collected: 10/07/2015 07:25
 Sample wt/vol: 5 (mL) Date Analyzed: 10/16/2015 20:47
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157249 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 ^c	1.0	0.23
74-83-9	Bromomethane	1.0	U ^c	1.0	0.31
75-00-3	Chloroethane	1.0	U ^c	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	0.78	J	1.0	0.24
74-97-5	Bromochloromethane	1.0	U ^c	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	4.9		1.0	0.14
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.095
75-27-4	Bromodichloromethane	1.0	U	1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53
108-88-3	Toluene	1.0	U	1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.15
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
127-18-4	Tetrachloroethene	3.2		1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.16
124-48-1	Dibromochloromethane	1.0	U	1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
100-41-4	Ethylbenzene	1.0	U	1.0	0.23
1330-20-7	Xylenes, Total	3.0	U	3.0	0.49
100-42-5	Styrene	1.0	U	1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-2-0/1-0 Lab Sample ID: 180-48564-3
 Matrix: Water Lab File ID: 51016022.D
 Analysis Method: 8260C Date Collected: 10/07/2015 07:25
 Sample wt/vol: 5 (mL) Date Analyzed: 10/16/2015 20:47
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157249 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		64-135
2037-26-5	Toluene-d8 (Surr)	103		71-118
460-00-4	4-Bromofluorobenzene (Surr)	91		70-118
1868-53-7	Dibromofluoromethane (Surr)	97		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016022.D
 Lims ID: 180-48564-A-3 Lab Sample ID: 180-48564-3
 Client ID: HD-CW-2-0/1-0
 Sample Type: Client
 Inject. Date: 16-Oct-2015 20:47:30 ALS Bottle#: 17 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-48564-A-3
 Misc. Info.: 180-0009043-022
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 17-Oct-2015 13:01:22 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: journeyt

Date: 17-Oct-2015 12:13:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.254	4.271	-0.017	0	113109	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.289	0.001	97	390167	50.0	
* 3 Chlorobenzene-d5	119	10.386	10.391	-0.005	91	88548	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.734	12.733	0.001	97	116662	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.566	6.560	0.006	93	92963	48.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	0	141875	53.9	
\$ 7 Toluene-d8 (Surr)	98	8.938	8.939	-0.001	95	351936	51.5	
\$ 8 4-Bromofluorobenzene (Surr	95	11.572	11.573	-0.001	86	117352	45.5	
12 Chloromethane	50	1.772	1.760	0.012	1	2921	0.9025	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.247				ND	
16 Chloroethane	64		2.387				ND	
22 1,1-Dichloroethene	96		3.354				ND	
24 Acetone	43	3.481	3.433	0.048	34	1194	1.52	
26 Carbon disulfide	76		3.646				ND	
31 Methylene Chloride	84		4.139				ND	
33 Acrylonitrile	53		4.522				ND	
34 trans-1,2-Dichloroethene	96		4.565				ND	
35 Methyl tert-butyl ether	73		4.583				ND	
37 1,1-Dichloroethane	63		5.198				ND	
45 cis-1,2-Dichloroethene	96	5.970	5.946	0.024	83	9787	3.88	
46 2-Butanone (MEK)	43		5.958				ND	
49 Chlorobromomethane	128		6.232				ND	
52 Chloroform	83	6.383	6.384	-0.001	15	625	0.1556	
53 1,1,1-Trichloroethane	97		6.542				ND	
56 Carbon tetrachloride	117		6.712				ND	
58 Benzene	78		6.943				ND	
59 1,2-Dichloroethane	62		7.016				ND	
64 Trichloroethene	130	7.679	7.674	0.005	96	57469	24.4	
67 1,2-Dichloropropane	63		7.947				ND	
70 1,4-Dioxane	88		8.032				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.233				ND	
74 cis-1,3-Dichloropropene	75		8.677				ND	
75 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
76 Toluene	91		9.006				ND	
77 trans-1,3-Dichloropropene	75		9.249				ND	
79 1,1,2-Trichloroethane	97		9.444				ND	
80 Tetrachloroethene	164	9.522	9.517	0.005	94	27079	15.9	
82 2-Hexanone	43		9.657				ND	
84 Chlorodibromomethane	129		9.815				ND	
85 Ethylene Dibromide	107		9.930				ND	
87 Chlorobenzene	112		10.417				ND	
89 1,1,1,2-Tetrachloroethane	131		10.508				ND	
90 Ethylbenzene	106		10.514				ND	
91 m-Xylene & p-Xylene	106		10.648				ND	
92 o-Xylene	106		11.032				ND	
93 Styrene	104		11.050				ND	
94 Bromoform	173		11.232				ND	
99 1,1,2,2-Tetrachloroethane	83		11.707				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016022.D

Injection Date: 16-Oct-2015 20:47:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48564-A-3

Lab Sample ID: 180-48564-3

Worklist Smp#: 22

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

Purge Vol: 5.000 mL

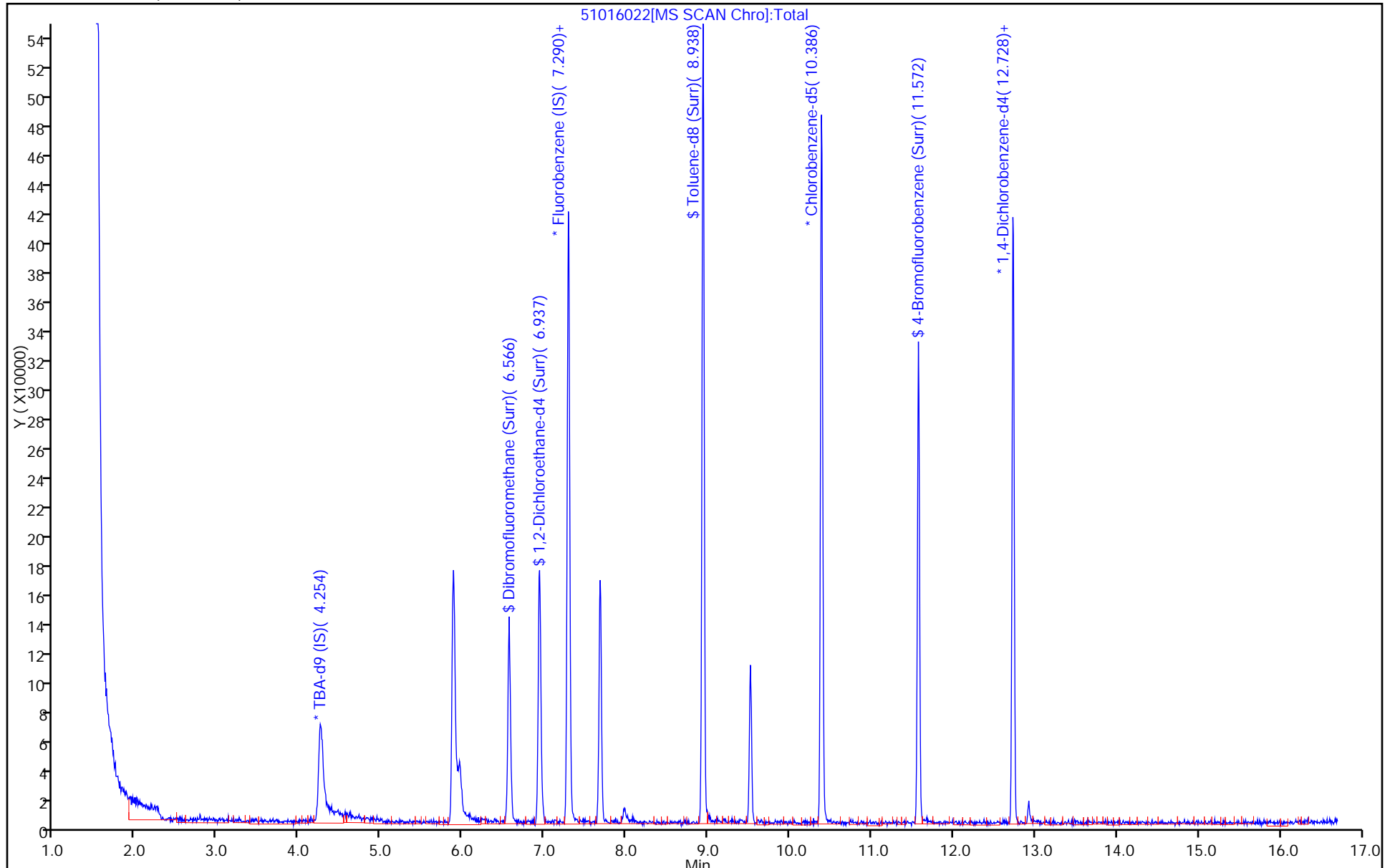
Dil. Factor: 1.0000

ALS Bottle#: 17

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016022.D

Injection Date: 16-Oct-2015 20:47:30

Instrument ID: CHHP5

Lims ID: 180-48564-A-3

Lab Sample ID: 180-48564-3

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

Operator ID: 001562

ALS Bottle#: 17

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

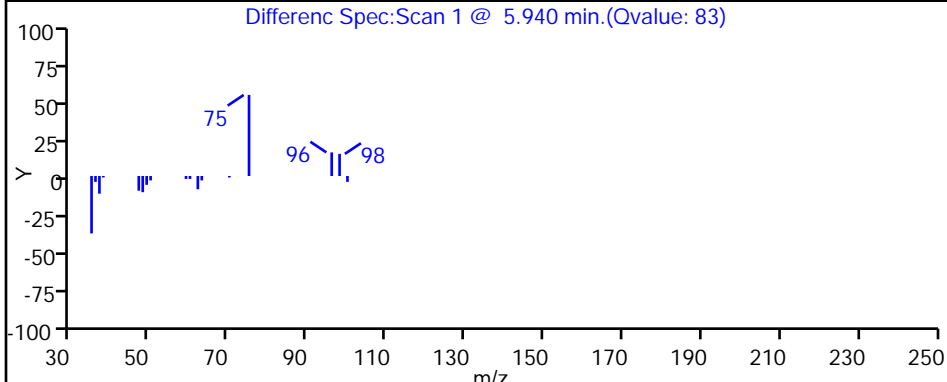
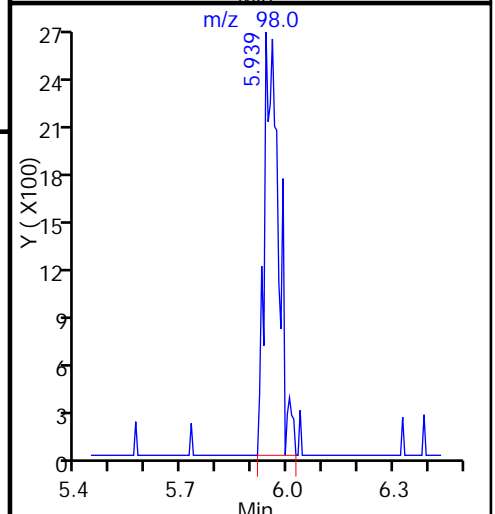
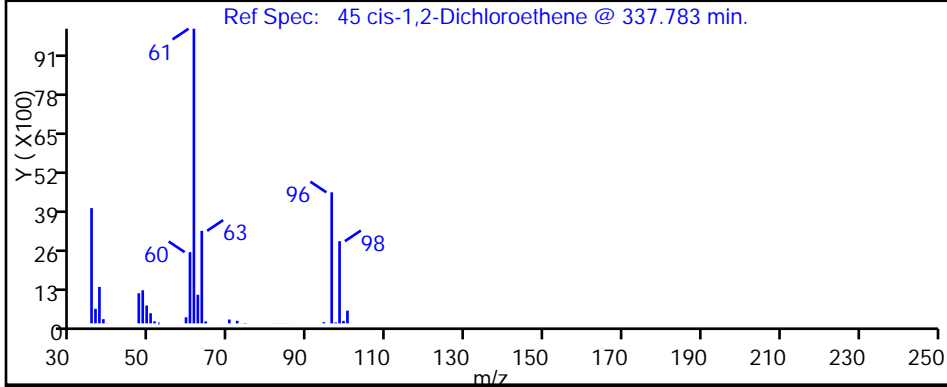
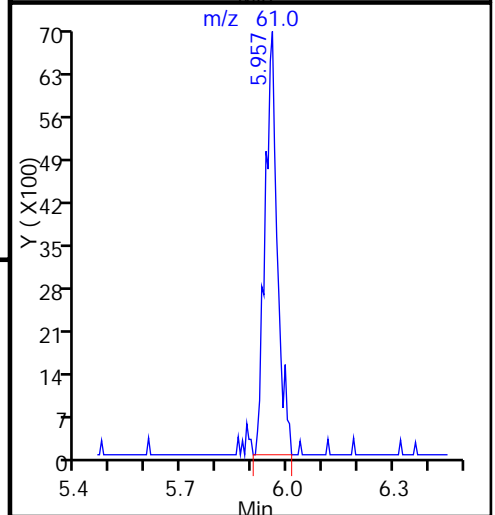
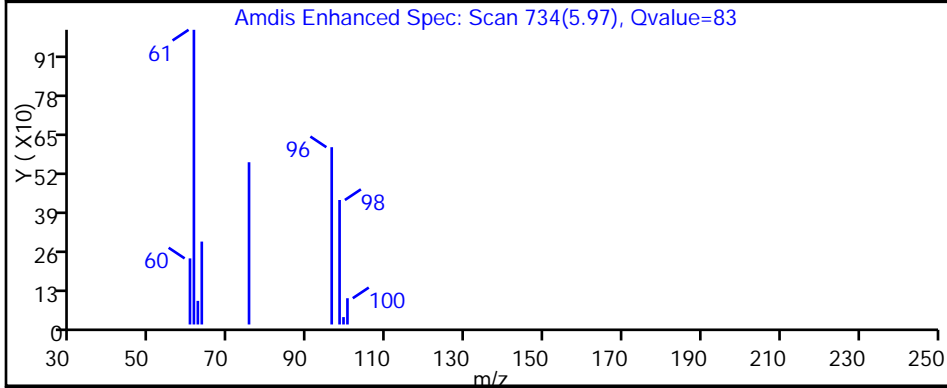
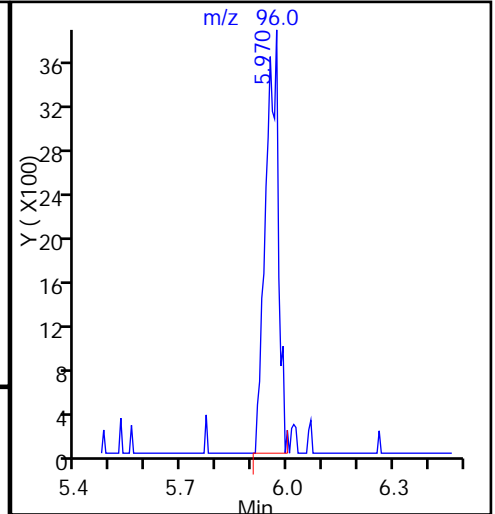
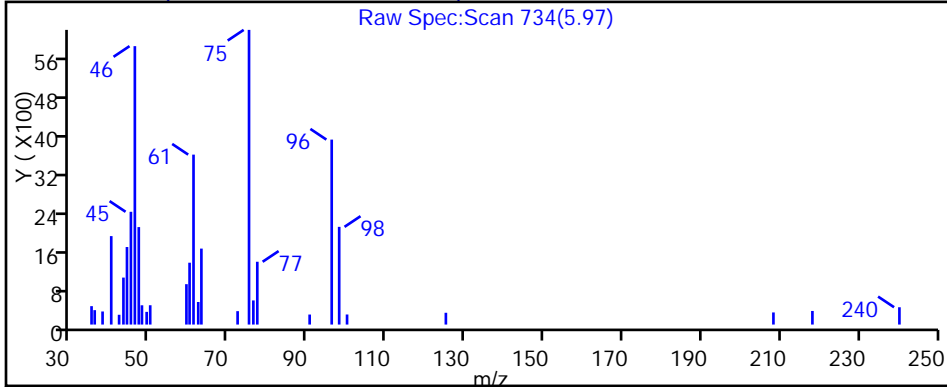
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016022.D

Injection Date: 16-Oct-2015 20:47:30

Instrument ID: CHHP5

Lims ID: 180-48564-A-3

Lab Sample ID: 180-48564-3

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

Operator ID: 001562

ALS Bottle#: 17

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

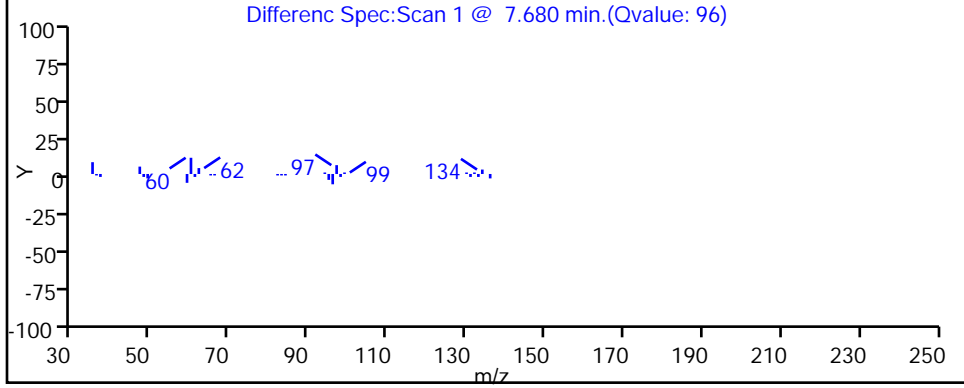
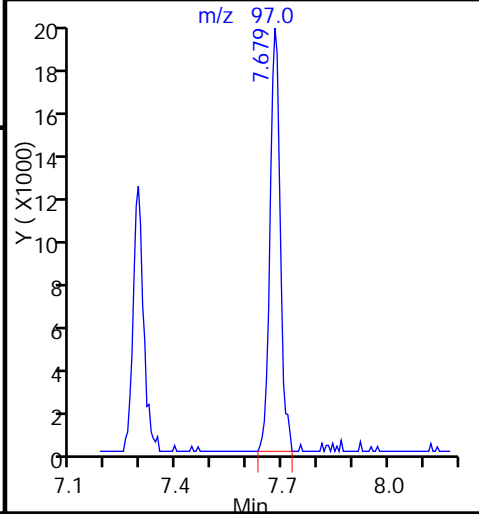
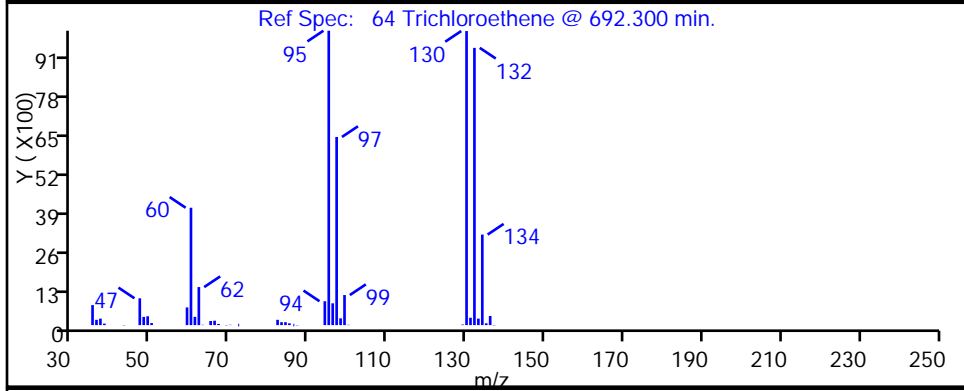
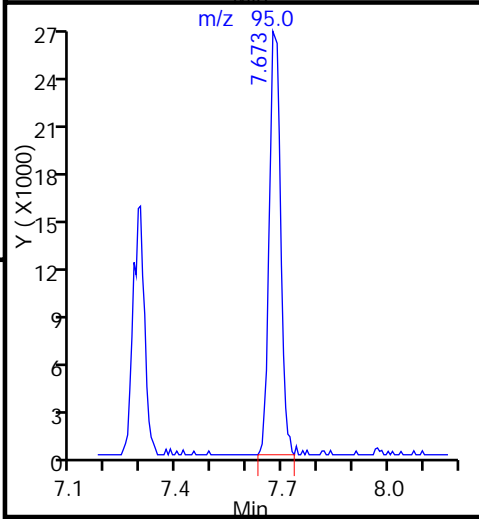
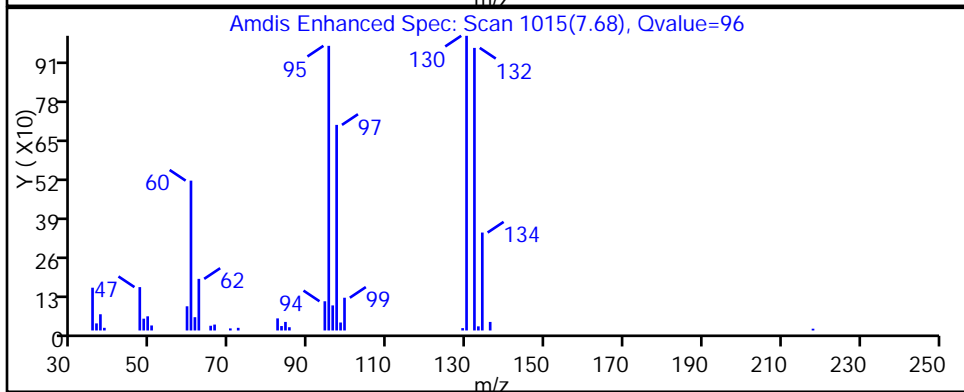
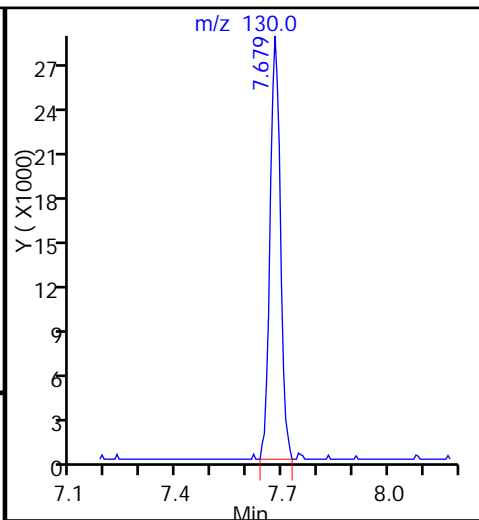
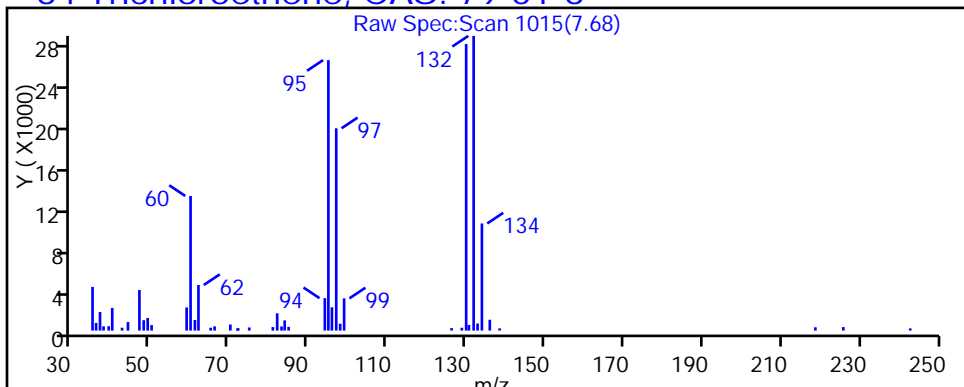
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016022.D

Injection Date: 16-Oct-2015 20:47:30

Instrument ID: CHHP5

Lims ID: 180-48564-A-3

Lab Sample ID: 180-48564-3

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

Operator ID: 001562

ALS Bottle#: 17

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

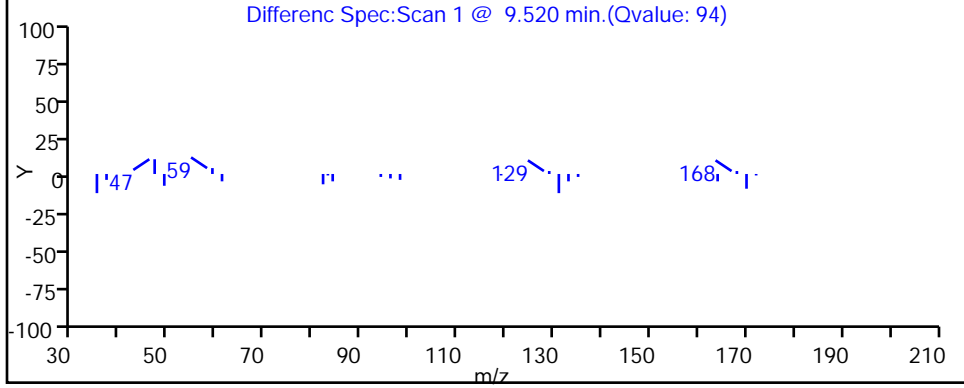
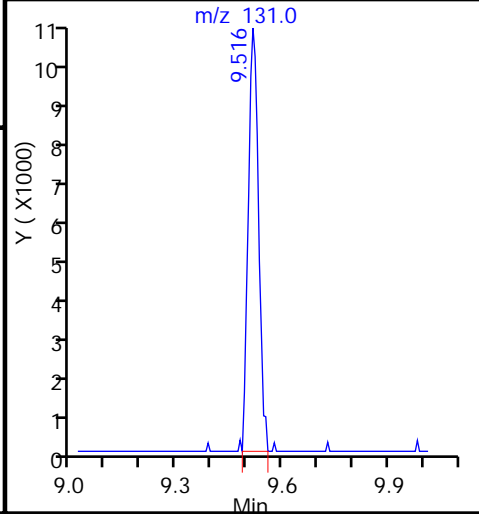
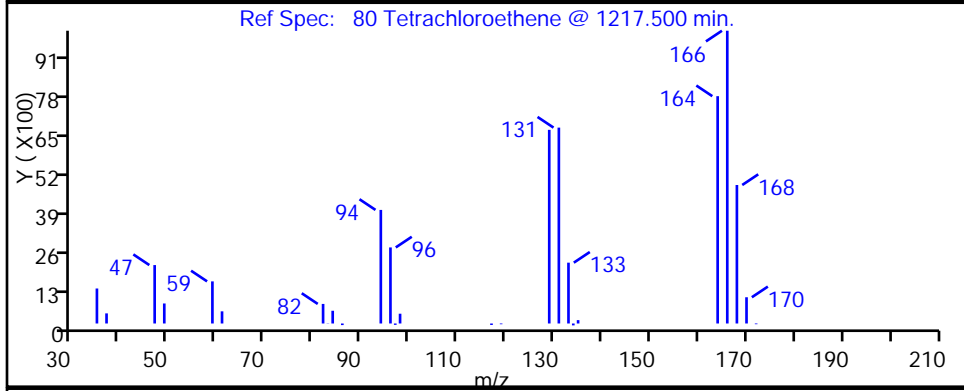
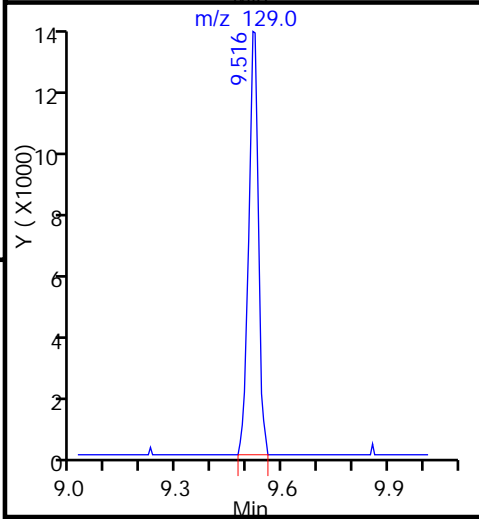
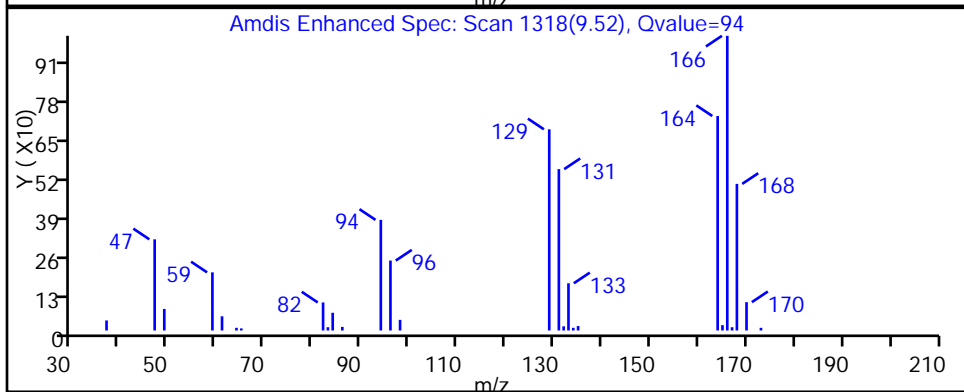
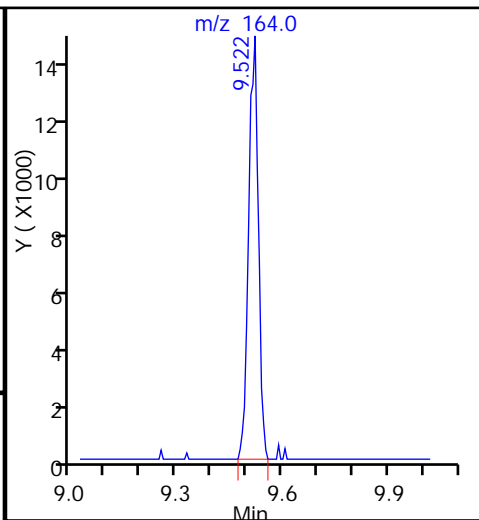
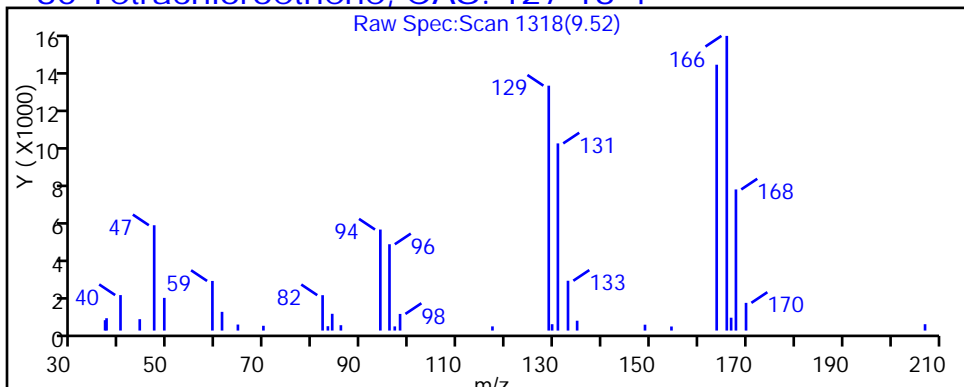
Method: MSVOA_LL_CHHP5

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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-3-0/1-0 Lab Sample ID: 180-48564-4
 Matrix: Water Lab File ID: 51016023.D
 Analysis Method: 8260C Date Collected: 10/06/2015 09:20
 Sample wt/vol: 5 (mL) Date Analyzed: 10/16/2015 21:11
 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.: 157249 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 ^c	1.0	0.23
74-83-9	Bromomethane	0.55	J ^c	1.0	0.31
75-00-3	Chloroethane	1.0	U ^c	1.0	0.21
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.30
67-64-1	Acetone	490	E	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	1.8		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	36		1.0	0.24
74-97-5	Bromochloromethane	1.0	U ^c	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	1.7		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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-3-0/1-0 Lab Sample ID: 180-48564-4
 Matrix: Water Lab File ID: 51016023.D
 Analysis Method: 8260C Date Collected: 10/06/2015 09:20
 Sample wt/vol: 5 (mL) Date Analyzed: 10/16/2015 21:11
 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.: 157249 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	12		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)	110		64-135
2037-26-5	Toluene-d8 (Surr)	108		71-118
460-00-4	4-Bromofluorobenzene (Surr)	94		70-118
1868-53-7	Dibromofluoromethane (Surr)	101		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016023.D
 Lims ID: 180-48564-C-4 Lab Sample ID: 180-48564-4
 Client ID: HD-CW-3-0/1-0
 Sample Type: Client
 Inject. Date: 16-Oct-2015 21:11:30 ALS Bottle#: 18 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-48564-C-4
 Misc. Info.: 180-0009043-023
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 17-Oct-2015 13:01:22 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: journey

Date: 17-Oct-2015 11:24:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.261	4.271	-0.010	0	98439	1000.0	
* 2 Fluorobenzene (IS)	96	7.291	7.289	0.002	97	363026	50.0	
* 3 Chlorobenzene-d5	119	10.387	10.391	-0.004	91	80072	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.730	12.733	-0.003	97	107963	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.567	6.560	0.007	93	89633	50.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.938	6.931	0.007	0	134347	54.9	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.939	0.001	95	333521	54.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.574	11.573	0.001	85	109099	46.8	
12 Chloromethane	50	1.761	1.760	0.001	17	3819	1.27	M
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94	2.260	2.247	0.013	36	2988	2.75	
16 Chloroethane	64		2.387				ND	
22 1,1-Dichloroethene	96		3.354				ND	
24 Acetone	43	3.440	3.433	0.007	99	1784423	2436.1	E
26 Carbon disulfide	76		3.646				ND	
31 Methylene Chloride	84		4.139				ND	
33 Acrylonitrile	53		4.522				ND	
34 trans-1,2-Dichloroethene	96	4.578	4.565	0.013	91	19585	8.92	
35 Methyl tert-butyl ether	73		4.583				ND	
37 1,1-Dichloroethane	63		5.198				ND	
45 cis-1,2-Dichloroethene	96	5.953	5.946	0.007	86	426469	181.8	
46 2-Butanone (MEK)	43		5.958				ND	
49 Chlorobromomethane	128	6.251	6.232	0.019	34	691	0.6710	
52 Chloroform	83		6.384				ND	
53 1,1,1-Trichloroethane	97		6.542				ND	
56 Carbon tetrachloride	117		6.712				ND	
58 Benzene	78		6.943				ND	
59 1,2-Dichloroethane	62		7.016				ND	
64 Trichloroethene	130		7.674				ND	
67 1,2-Dichloropropane	63		7.947				ND	
70 1,4-Dioxane	88		8.032				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.233				ND	
74 cis-1,3-Dichloropropene	75		8.677				ND	
75 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
76 Toluene	91		9.006				ND	
77 trans-1,3-Dichloropropene	75		9.249				ND	
79 1,1,2-Trichloroethane	97		9.444				ND	
80 Tetrachloroethene	164	9.511	9.517	-0.006	0	1053	0.6843	
82 2-Hexanone	43		9.657				ND	
84 Chlorodibromomethane	129	9.816	9.815	0.001	90	11270	8.63	
85 Ethylene Dibromide	107		9.930				ND	
87 Chlorobenzene	112		10.417				ND	
89 1,1,1,2-Tetrachloroethane	131		10.508				ND	
90 Ethylbenzene	106		10.514				ND	
91 m-Xylene & p-Xylene	106		10.648				ND	
92 o-Xylene	106		11.032				ND	
93 Styrene	104		11.050				ND	
94 Bromoform	173	11.227	11.232	-0.005	96	45811	61.5	
99 1,1,2,2-Tetrachloroethane	83		11.707				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016023.D

Injection Date: 16-Oct-2015 21:11:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48564-C-4

Lab Sample ID: 180-48564-4

Worklist Smp#: 23

Client ID: HD-CW-3-0/1-0

Purge Vol: 5.000 mL

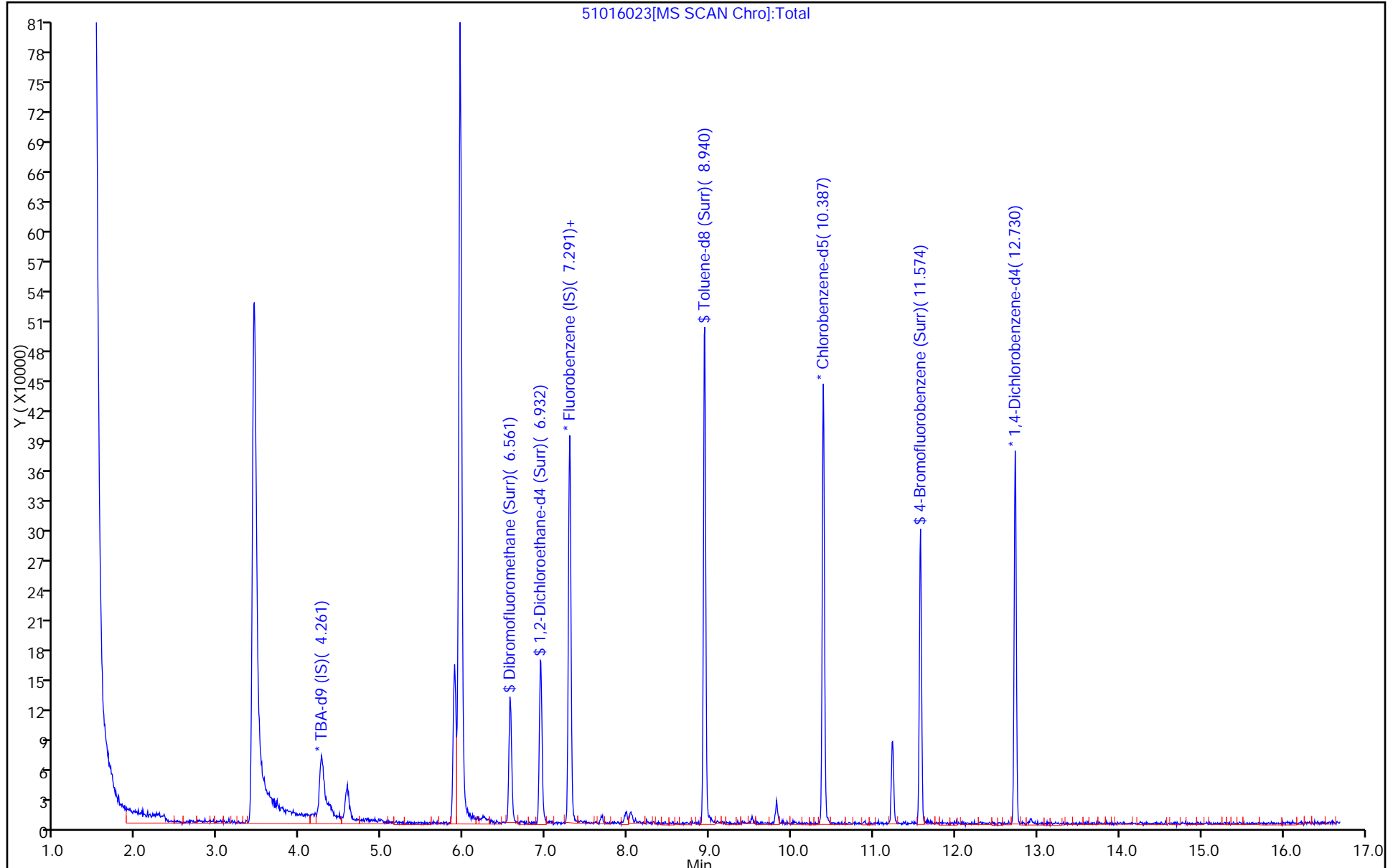
Dil. Factor: 1.0000

ALS Bottle#: 18

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

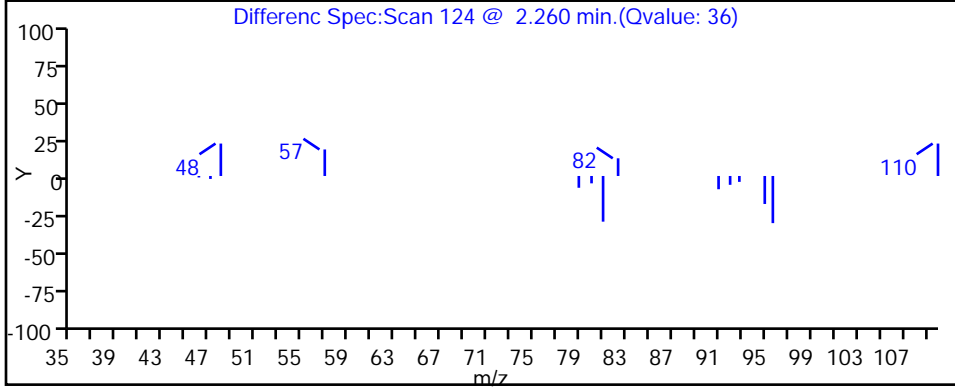
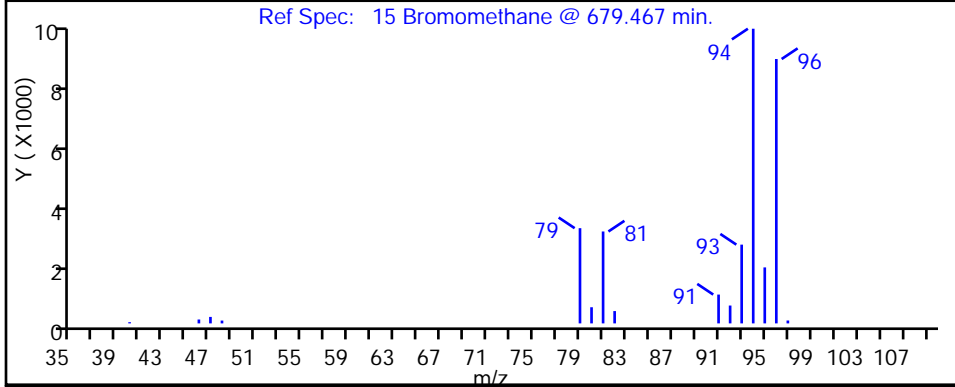
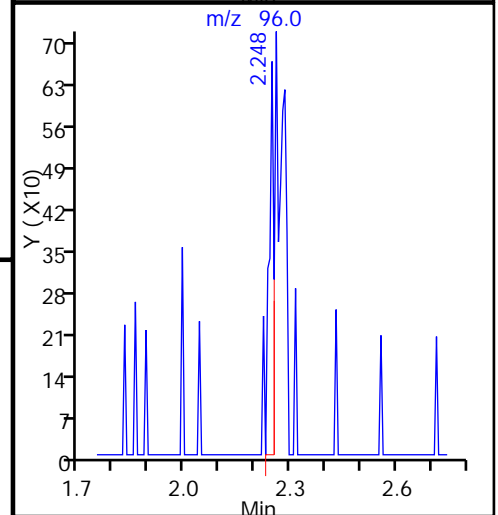
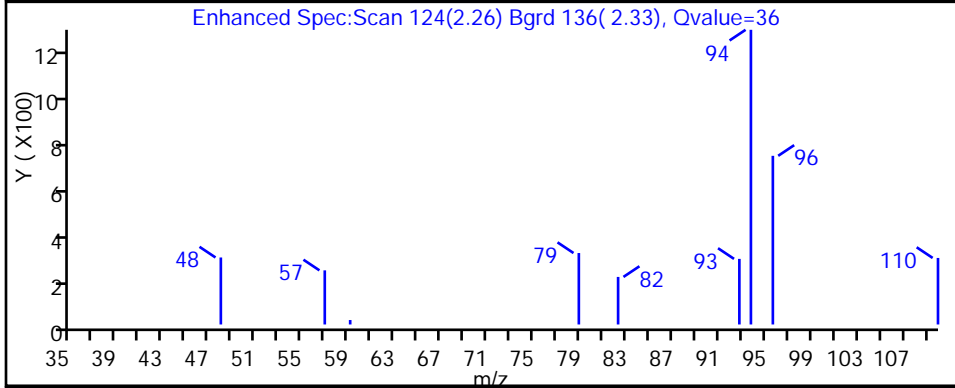
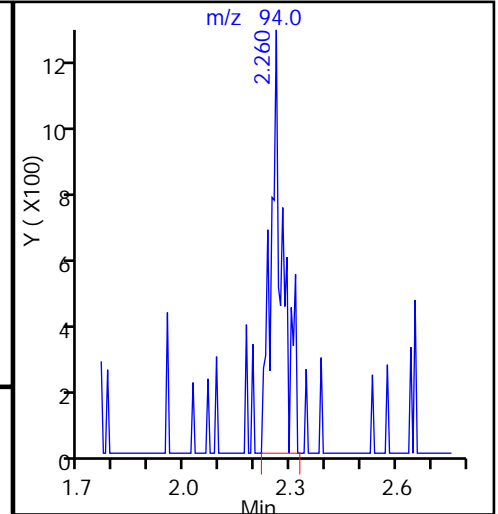
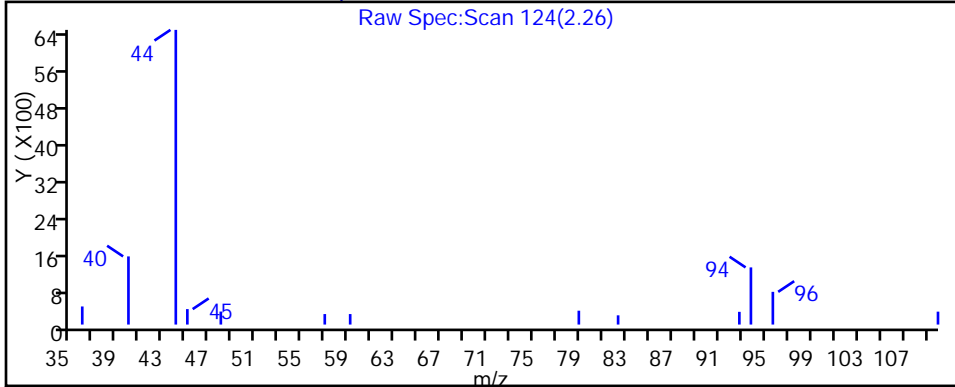
Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016023.D
Injection Date: 16-Oct-2015 21:11:30 Instrument ID: CHHP5
Lims ID: 180-48564-C-4 Lab Sample ID: 180-48564-4
Client ID: HD-CW-3-0/1-0
Operator ID: 001562 ALS Bottle#: 18 Worklist Smp#: 23
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



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016023.D

Injection Date: 16-Oct-2015 21:11:30

Instrument ID: CHHP5

Lims ID: 180-48564-C-4

Lab Sample ID: 180-48564-4

Client ID: HD-CW-3-0/1-0

Operator ID: 001562

ALS Bottle#: 18

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

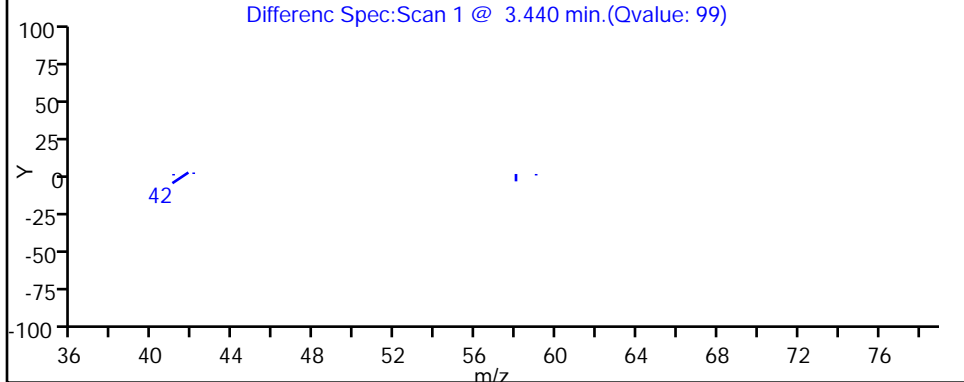
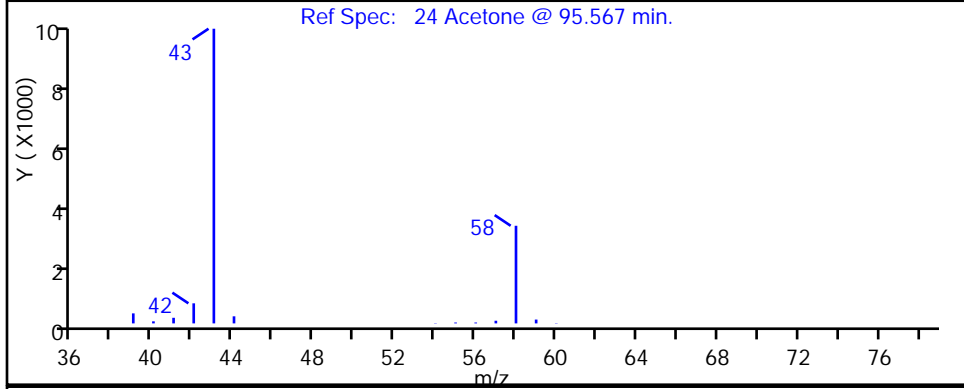
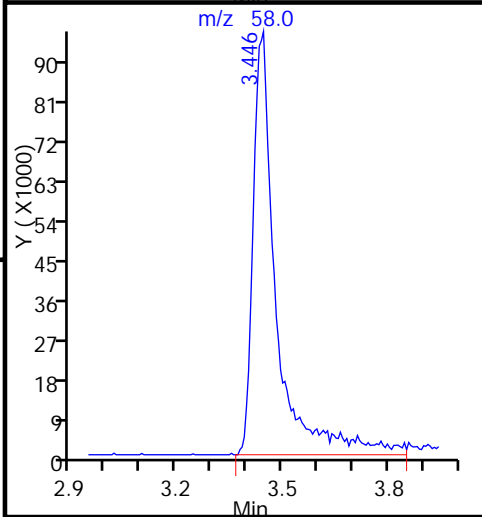
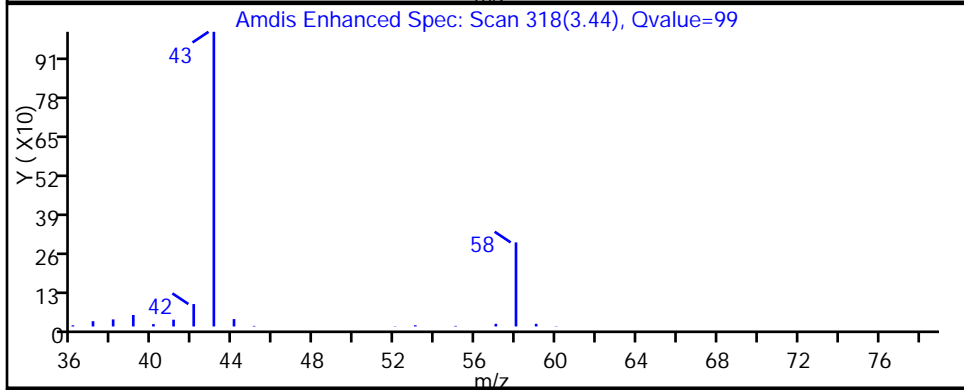
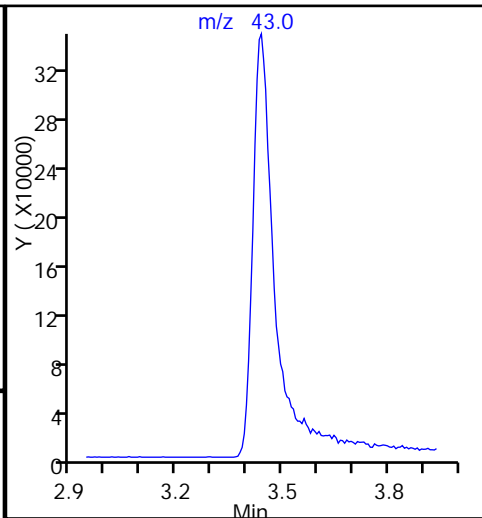
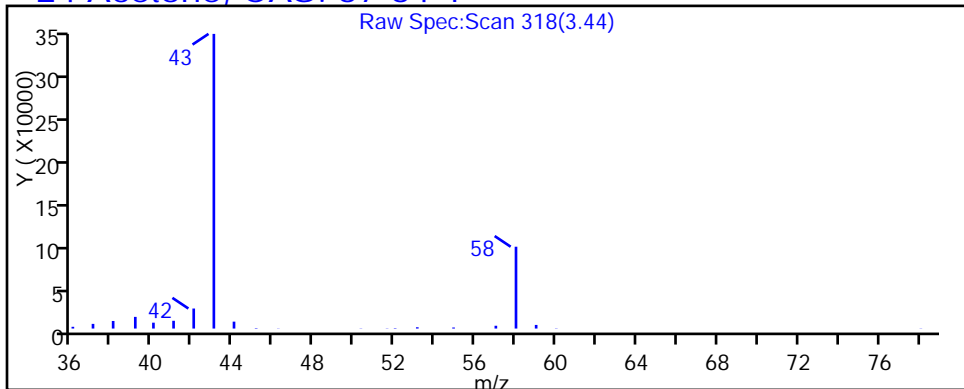
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016023.D

Injection Date: 16-Oct-2015 21:11:30

Instrument ID: CHHP5

Lims ID: 180-48564-C-4

Lab Sample ID: 180-48564-4

Client ID: HD-CW-3-0/1-0

Operator ID: 001562

ALS Bottle#: 18

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

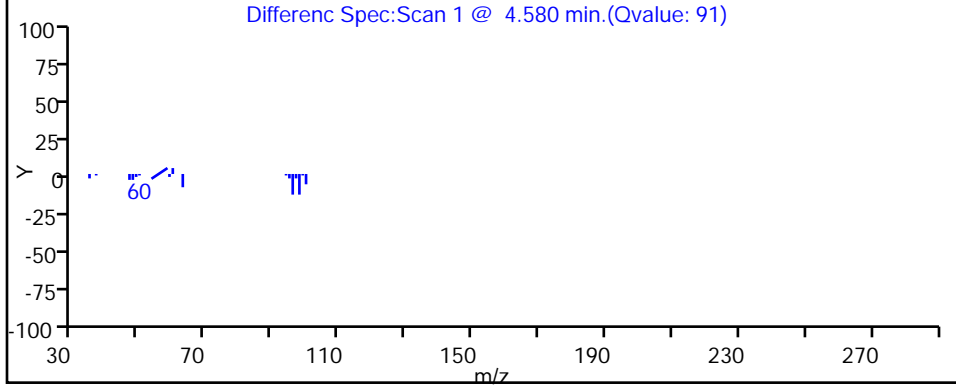
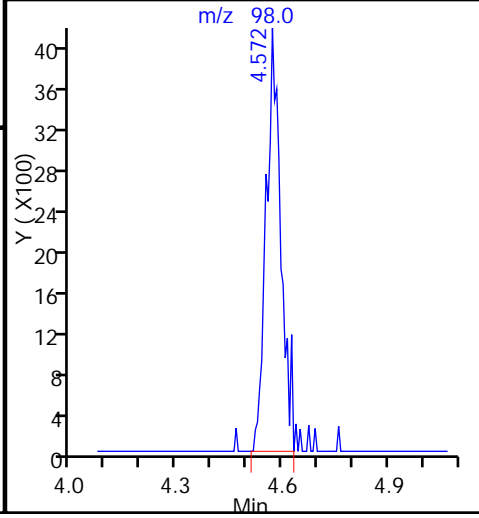
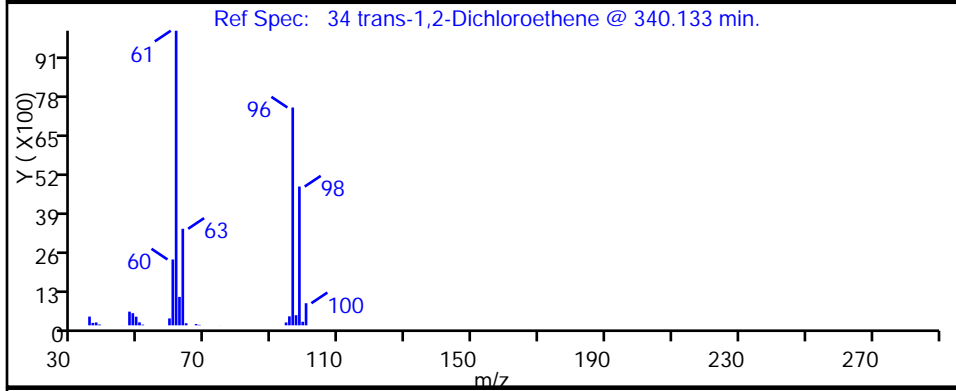
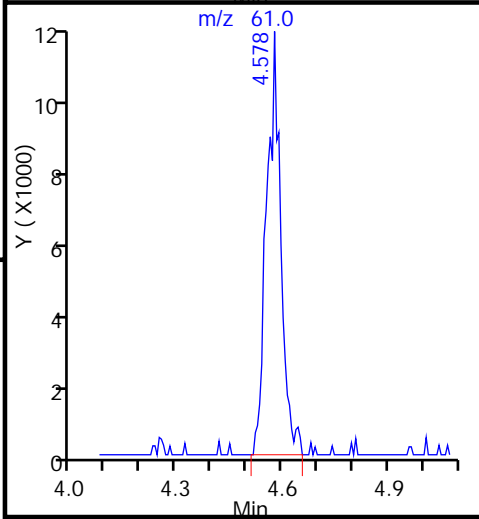
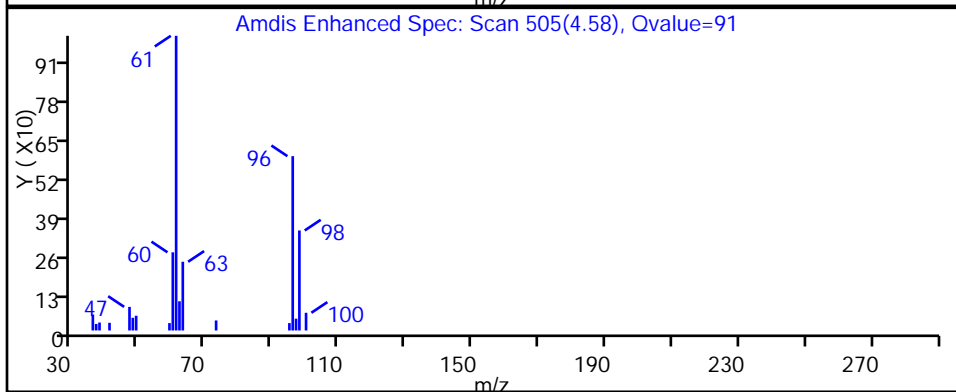
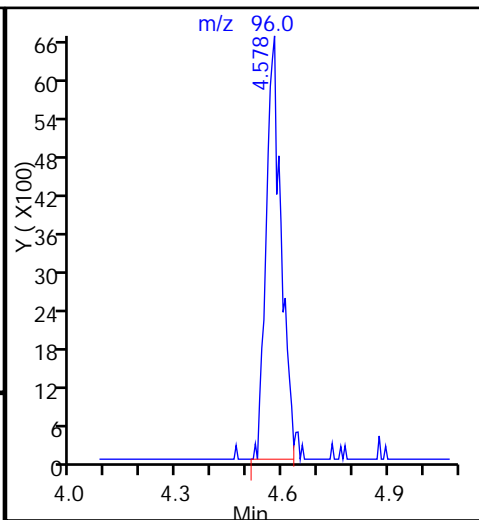
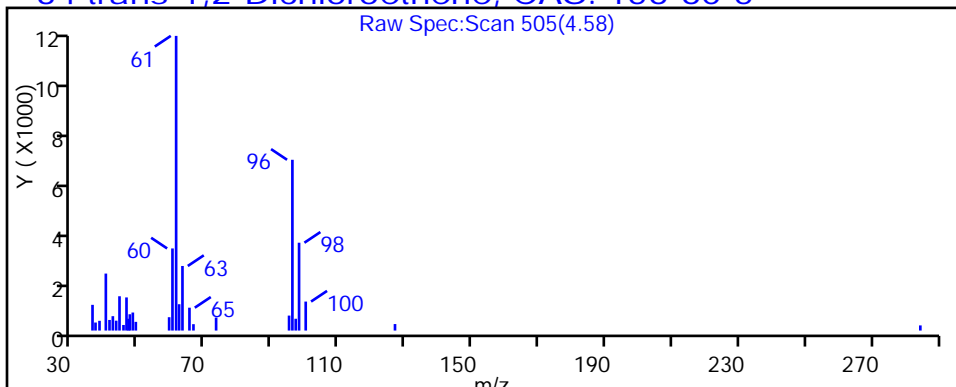
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016023.D

Injection Date: 16-Oct-2015 21:11:30

Instrument ID: CHHP5

Lims ID: 180-48564-C-4

Lab Sample ID: 180-48564-4

Client ID: HD-CW-3-0/1-0

Operator ID: 001562

ALS Bottle#: 18

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

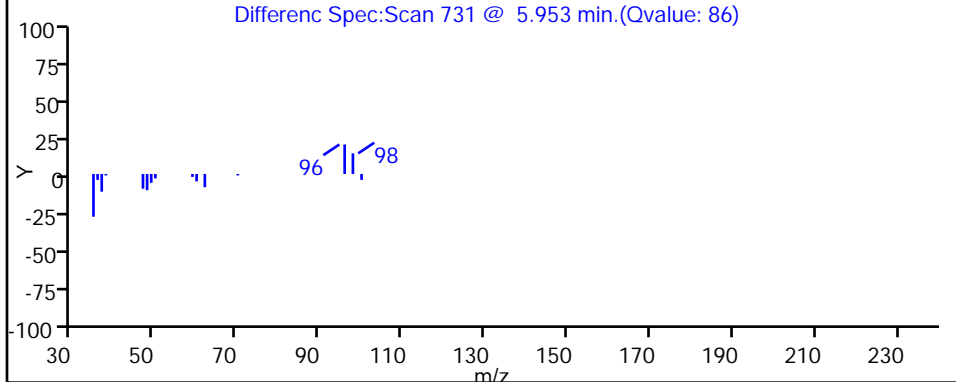
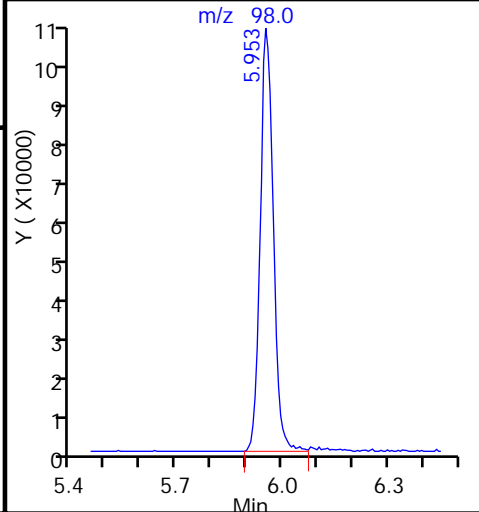
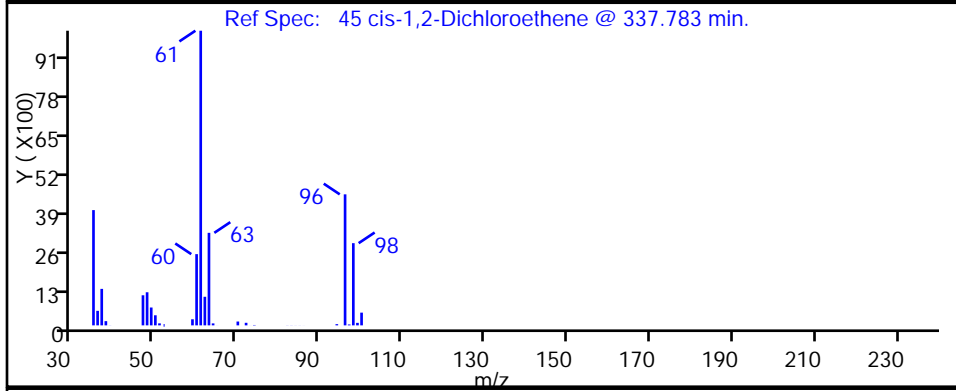
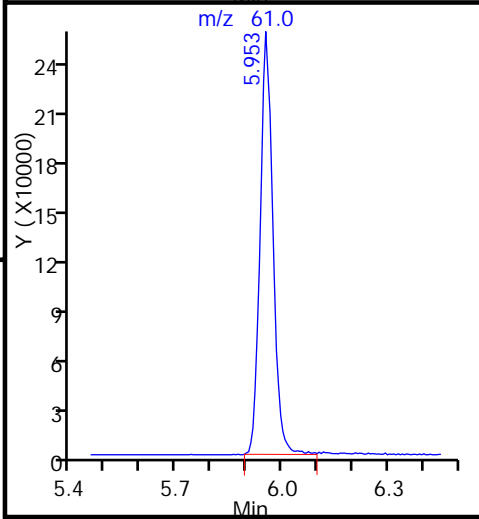
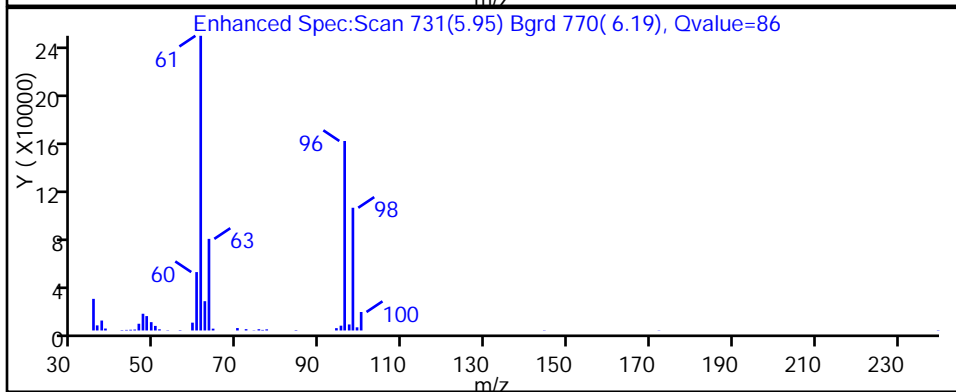
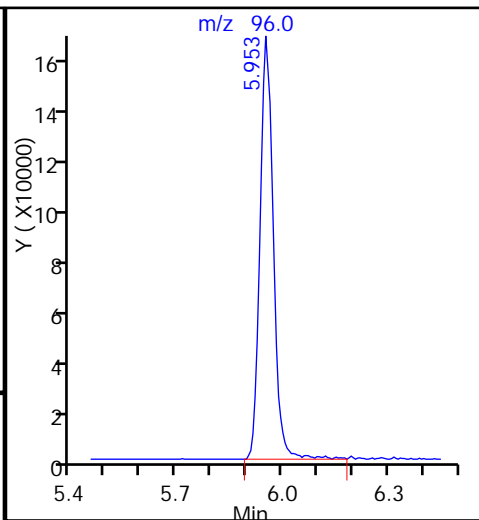
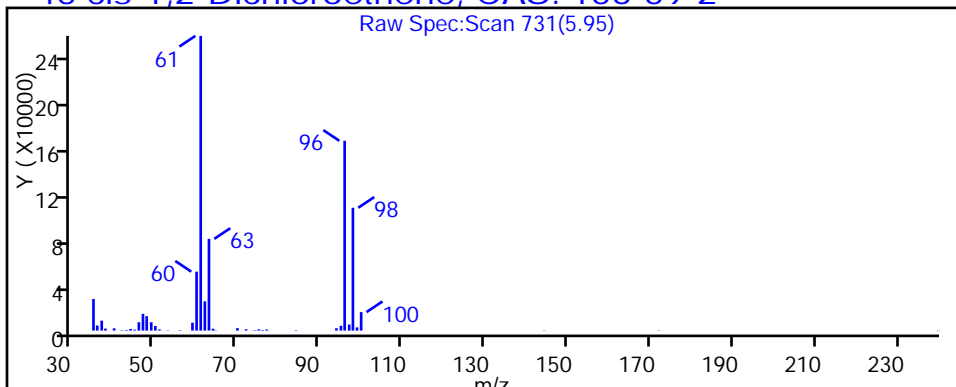
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016023.D

Injection Date: 16-Oct-2015 21:11:30

Instrument ID: CHHP5

Lims ID: 180-48564-C-4

Lab Sample ID: 180-48564-4

Client ID: HD-CW-3-0/1-0

Operator ID: 001562

ALS Bottle#: 18

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

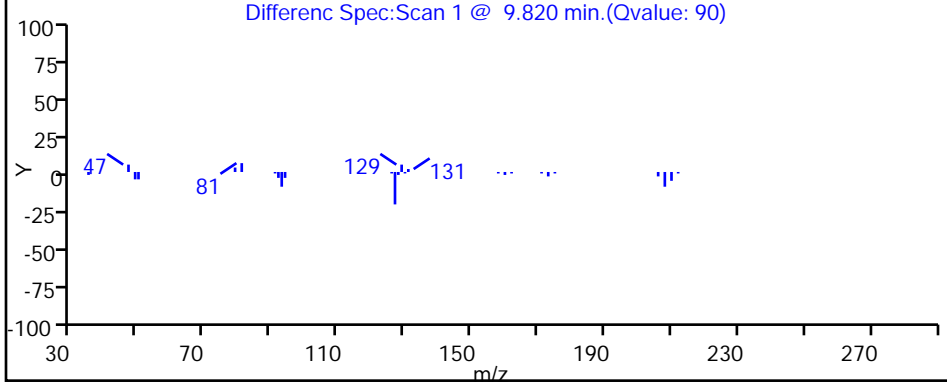
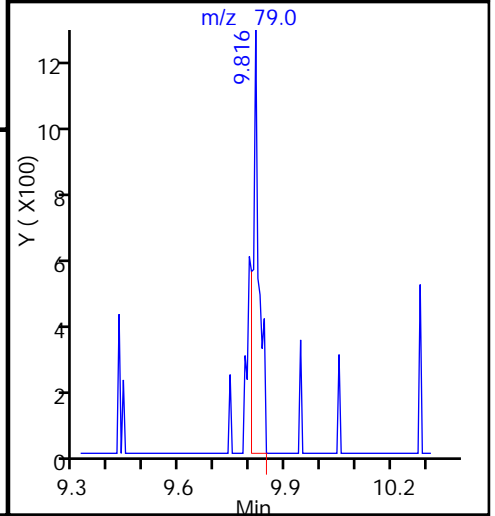
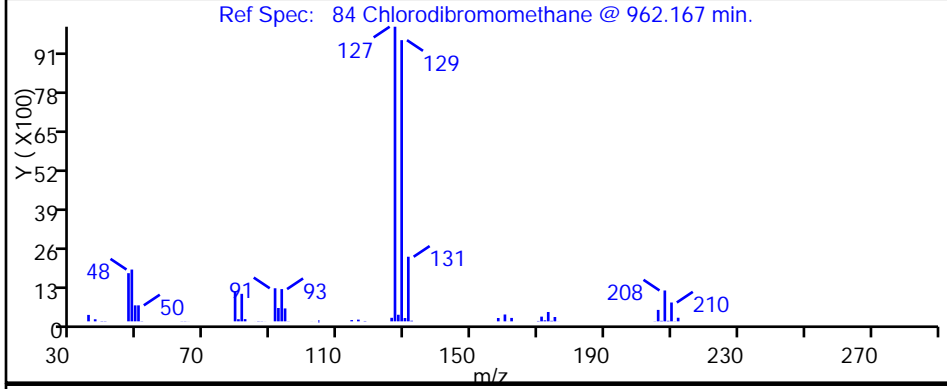
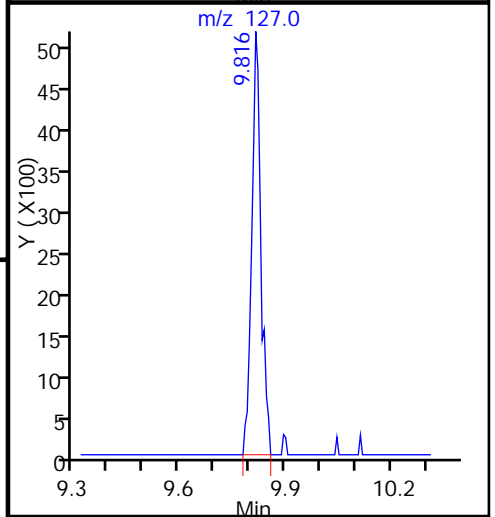
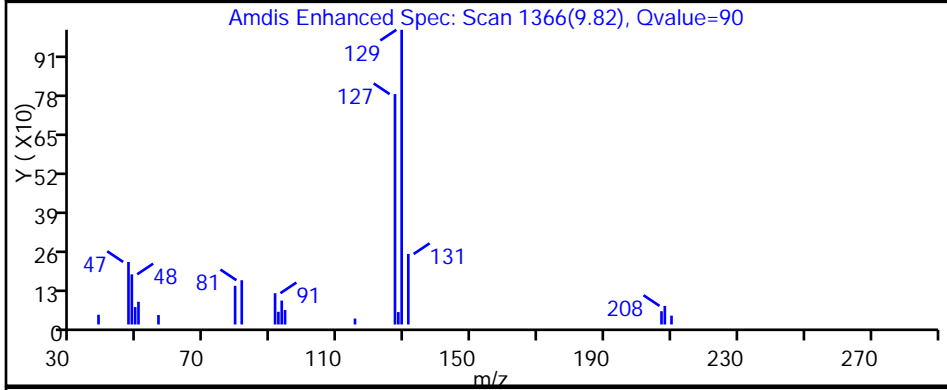
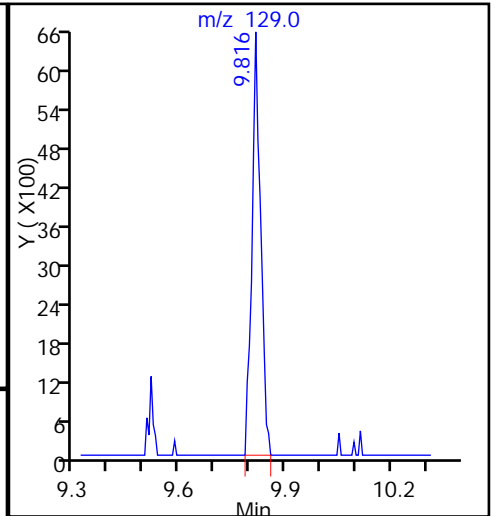
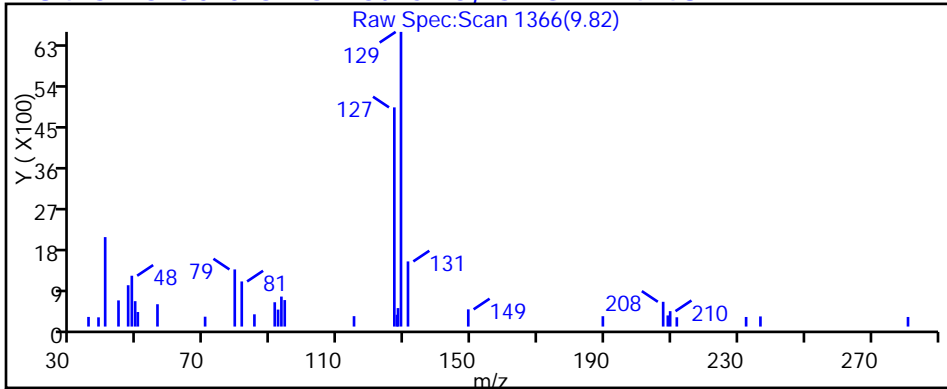
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016023.D

Injection Date: 16-Oct-2015 21:11:30

Instrument ID: CHHP5

Lims ID: 180-48564-C-4

Lab Sample ID: 180-48564-4

Client ID: HD-CW-3-0/1-0

Operator ID: 001562

ALS Bottle#: 18

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

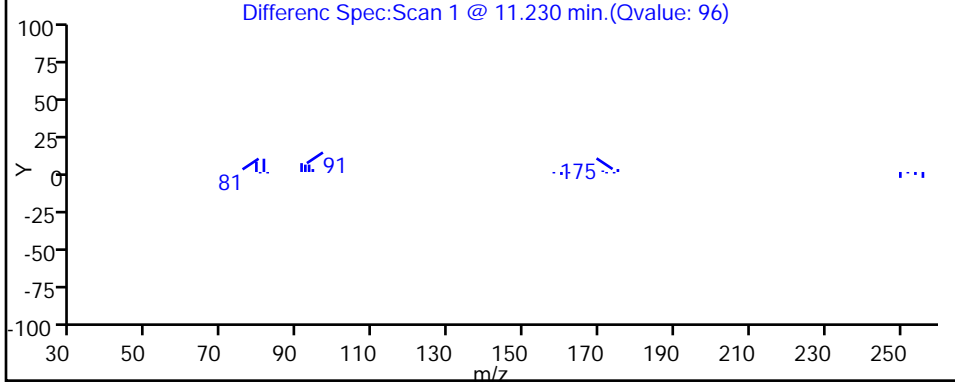
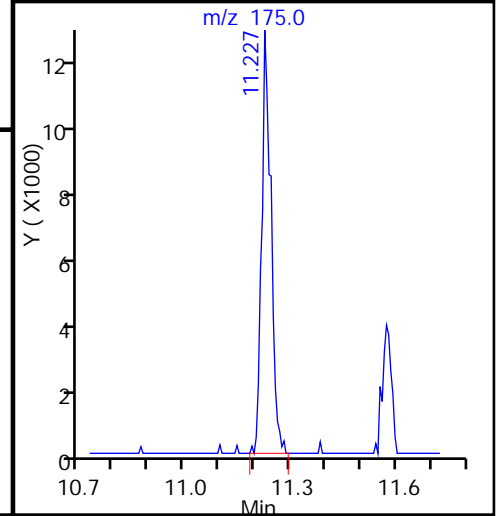
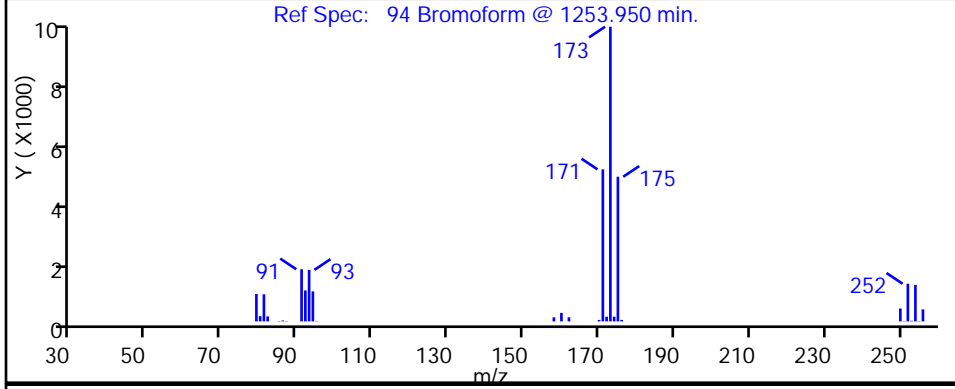
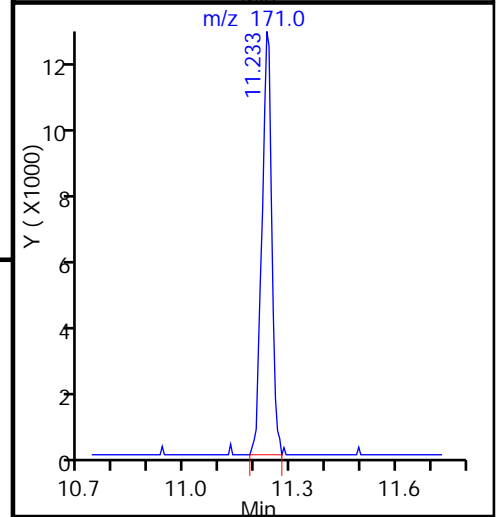
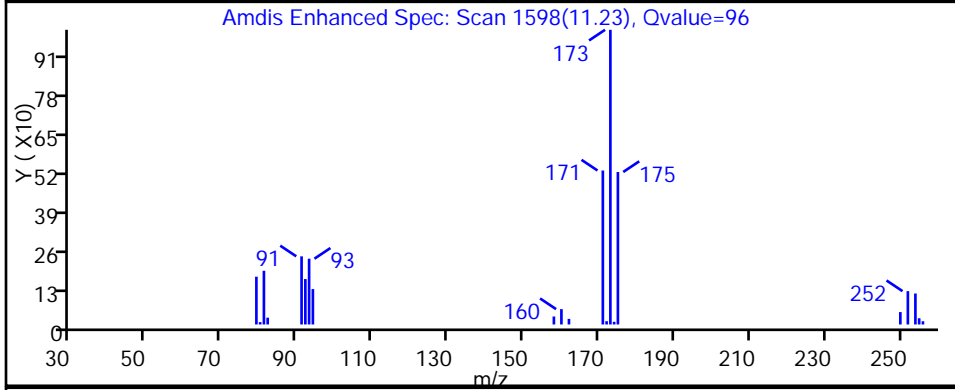
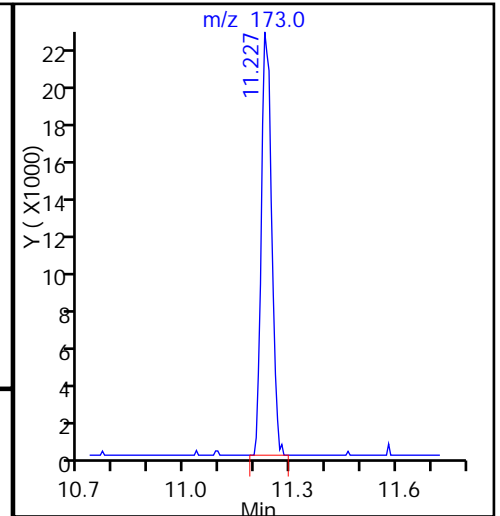
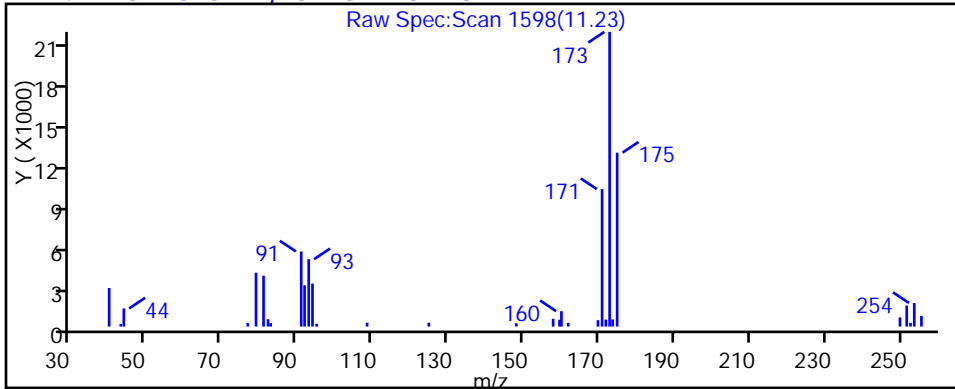
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

94 Bromoform, CAS: 75-25-2



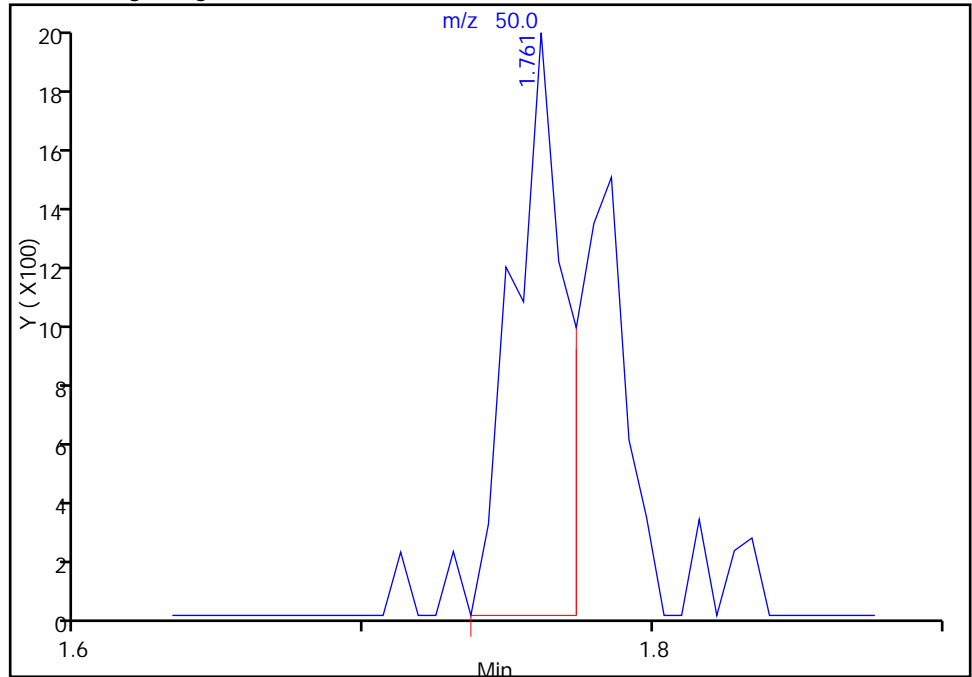
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016023.D
Injection Date: 16-Oct-2015 21:11:30 Instrument ID: CHHP5
Lims ID: 180-48564-C-4 Lab Sample ID: 180-48564-4
Client ID: HD-CW-3-0/1-0
Operator ID: 001562 ALS Bottle#: 18 Worklist Smp#: 23
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

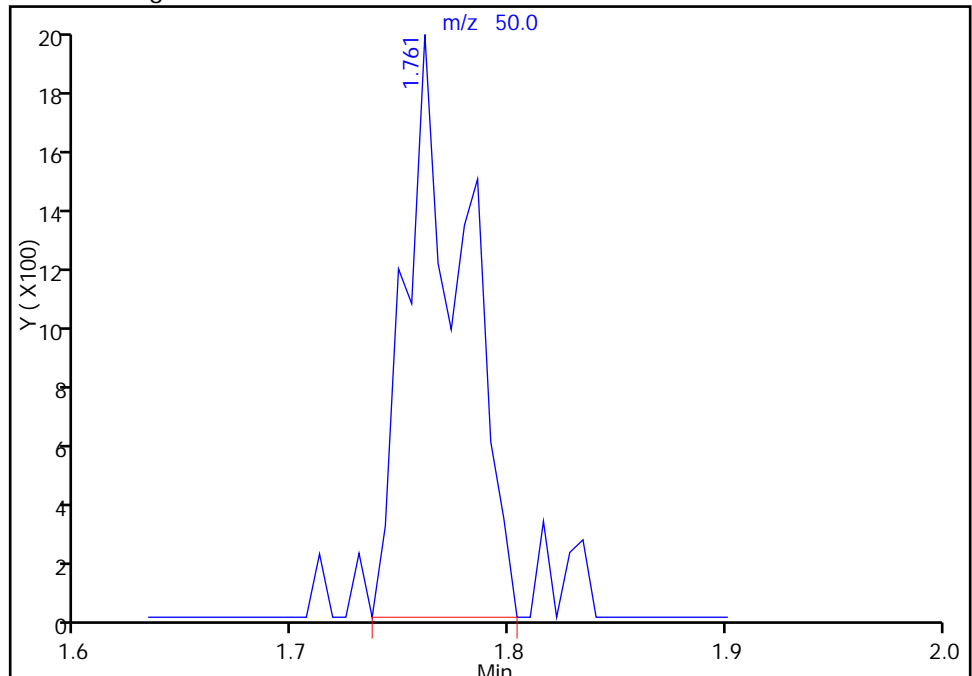
RT: 1.76
Area: 2452
Amount: 0.814243
Amount Units: ng

Processing Integration Results



RT: 1.76
Area: 3819
Amount: 1.268187
Amount Units: ng

Manual Integration Results



Reviewer: journetp, 17-Oct-2015 12:14:31
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-3-0/1-0 DL Lab Sample ID: 180-48564-4 DL
 Matrix: Water Lab File ID: 51017023.D
 Analysis Method: 8260C Date Collected: 10/06/2015 09:20
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2015 20:25
 Soil Aliquot Vol: _____ Dilution Factor: 20
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157327 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	20	U	20	5.7
75-01-4	Vinyl chloride	20	U	20	4.5
74-83-9	Bromomethane	20	U	20	6.3
75-00-3	Chloroethane	20	U	20	4.3
75-35-4	1,1-Dichloroethene	20	U	20	5.9
67-64-1	Acetone	460	^c	100	50
75-15-0	Carbon disulfide	20	U	20	4.2
75-09-2	Methylene Chloride	20	U	20	2.5
156-60-5	trans-1,2-Dichloroethene	20	U	20	3.4
1634-04-4	Methyl tert-butyl ether	20	U	20	3.7
75-34-3	1,1-Dichloroethane	20	U	20	2.3
156-59-2	cis-1,2-Dichloroethene	30		20	4.7
74-97-5	Bromochloromethane	20	U ^c	20	3.6
78-93-3	2-Butanone (MEK)	100	U	100	11
67-66-3	Chloroform	20	U	20	3.4
71-55-6	1,1,1-Trichloroethane	20	U	20	5.7
56-23-5	Carbon tetrachloride	20	U	20	2.7
71-43-2	Benzene	20	U	20	2.1
107-06-2	1,2-Dichloroethane	20	U	20	4.2
79-01-6	Trichloroethene	20	U	20	2.9
78-87-5	1,2-Dichloropropane	20	U	20	1.9
75-27-4	Bromodichloromethane	20	U	20	2.6
10061-01-5	cis-1,3-Dichloropropene	20	U	20	3.7
108-10-1	4-Methyl-2-pentanone (MIBK)	100	U	100	11
108-88-3	Toluene	20	U	20	3.0
10061-02-6	trans-1,3-Dichloropropene	20	U	20	3.0
79-00-5	1,1,2-Trichloroethane	20	U	20	4.0
127-18-4	Tetrachloroethene	20	U	20	3.0
591-78-6	2-Hexanone	100	U	100	3.2
124-48-1	Dibromochloromethane	20	U	20	2.7
106-93-4	1,2-Dibromoethane (EDB)	20	U	20	3.6
108-90-7	Chlorobenzene	20	U	20	2.7
630-20-6	1,1,1,2-Tetrachloroethane	20	U	20	5.5
100-41-4	Ethylbenzene	20	U	20	4.5
1330-20-7	Xylenes, Total	60	U	60	9.8
100-42-5	Styrene	20	U	20	1.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-3-0/1-0 DL Lab Sample ID: 180-48564-4 DL
 Matrix: Water Lab File ID: 51017023.D
 Analysis Method: 8260C Date Collected: 10/06/2015 09:20
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2015 20:25
 Soil Aliquot Vol: _____ Dilution Factor: 20
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157327 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	<i>Bromoform</i>	8.8	J	20	3.8
79-34-5	<i>1,1,2,2-Tetrachloroethane</i>	20	U	20	4.0
107-13-1	<i>Acrylonitrile</i>	400	U	400	11
123-91-1	<i>1,4-Dioxane</i>	4000	U	4000	690

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		64-135
2037-26-5	Toluene-d8 (Surr)	103		71-118
460-00-4	4-Bromofluorobenzene (Surr)	92		70-118
1868-53-7	Dibromofluoromethane (Surr)	103		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017023.D
 Lims ID: 180-48564-B-4 Lab Sample ID: 180-48564-4
 Client ID: HD-CW-3-0/1-0
 Sample Type: Client
 Inject. Date: 17-Oct-2015 20:25:30 ALS Bottle#: 13 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 20.0000
 Sample Info: 180-48564-B-4, 20x
 Misc. Info.: 180-0009055-023
 Operator ID: 034635 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 18-Oct-2015 08:47:14 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK017

First Level Reviewer: fergusond

Date: 18-Oct-2015 08:47:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.256	4.260	-0.004	0	122355	1000.0	
* 2 Fluorobenzene (IS)	96	7.292	7.289	0.003	97	346176	50.0	
* 3 Chlorobenzene-d5	119	10.388	10.392	-0.004	91	77855	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.730	12.734	-0.004	97	102085	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.562	6.559	0.003	92	87362	51.4	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.939	6.936	0.003	0	131755	56.4	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.938	0.002	95	308599	51.4	
\$ 8 4-Bromofluorobenzene (Surr	95	11.568	11.572	-0.004	89	104173	46.0	
12 Chloromethane	50		1.766				ND	
13 Vinyl chloride	62		1.893				ND	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.386				ND	
22 1,1-Dichloroethene	96		3.347				ND	
24 Acetone	43	3.447	3.432	0.015	98	80619	115.4	
26 Carbon disulfide	76		3.627				ND	
31 Methylene Chloride	84		4.132				ND	
33 Acrylonitrile	53		4.515				ND	
34 trans-1,2-Dichloroethene	96		4.564				ND	
35 Methyl tert-butyl ether	73		4.570				ND	
37 1,1-Dichloroethane	63		5.203				ND	
45 cis-1,2-Dichloroethene	96	5.953	5.951	0.002	85	16788	7.51	
46 2-Butanone (MEK)	43		5.957				ND	
49 Chlorobromomethane	128		6.237				ND	
52 Chloroform	83		6.383				ND	
53 1,1,1-Trichloroethane	97		6.541				ND	
56 Carbon tetrachloride	117		6.717				ND	
58 Benzene	78		6.943				ND	
59 1,2-Dichloroethane	62		7.022				ND	
64 Trichloroethene	130		7.679				ND	
67 1,2-Dichloropropane	63		7.952				ND	
70 1,4-Dioxane	88		8.031				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.226				ND	
74 cis-1,3-Dichloropropene	75		8.676				ND	
75 4-Methyl-2-pentanone (MIBK)	43		8.828				ND	
76 Toluene	91		9.005				ND	
77 trans-1,3-Dichloropropene	75		9.248				ND	
79 1,1,2-Trichloroethane	97		9.449				ND	
80 Tetrachloroethene	164		9.516				ND	
82 2-Hexanone	43		9.656				ND	
84 Chlorodibromomethane	129		9.814				ND	
85 Ethylene Dibromide	107		9.930				ND	
87 Chlorobenzene	112		10.416				ND	
89 1,1,1,2-Tetrachloroethane	131		10.507				ND	
90 Ethylbenzene	106		10.520				ND	
91 m-Xylene & p-Xylene	106		10.647				ND	
92 o-Xylene	106		11.031				ND	
93 Styrene	104		11.049				ND	
94 Bromoform	173	11.228	11.231	-0.003	1	1598	2.21	
99 1,1,2,2-Tetrachloroethane	83		11.712				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017023.D

Injection Date: 17-Oct-2015 20:25:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-48564-B-4

Lab Sample ID: 180-48564-4

Worklist Smp#: 23

Client ID: HD-CW-3-0/1-0

Purge Vol: 5.000 mL

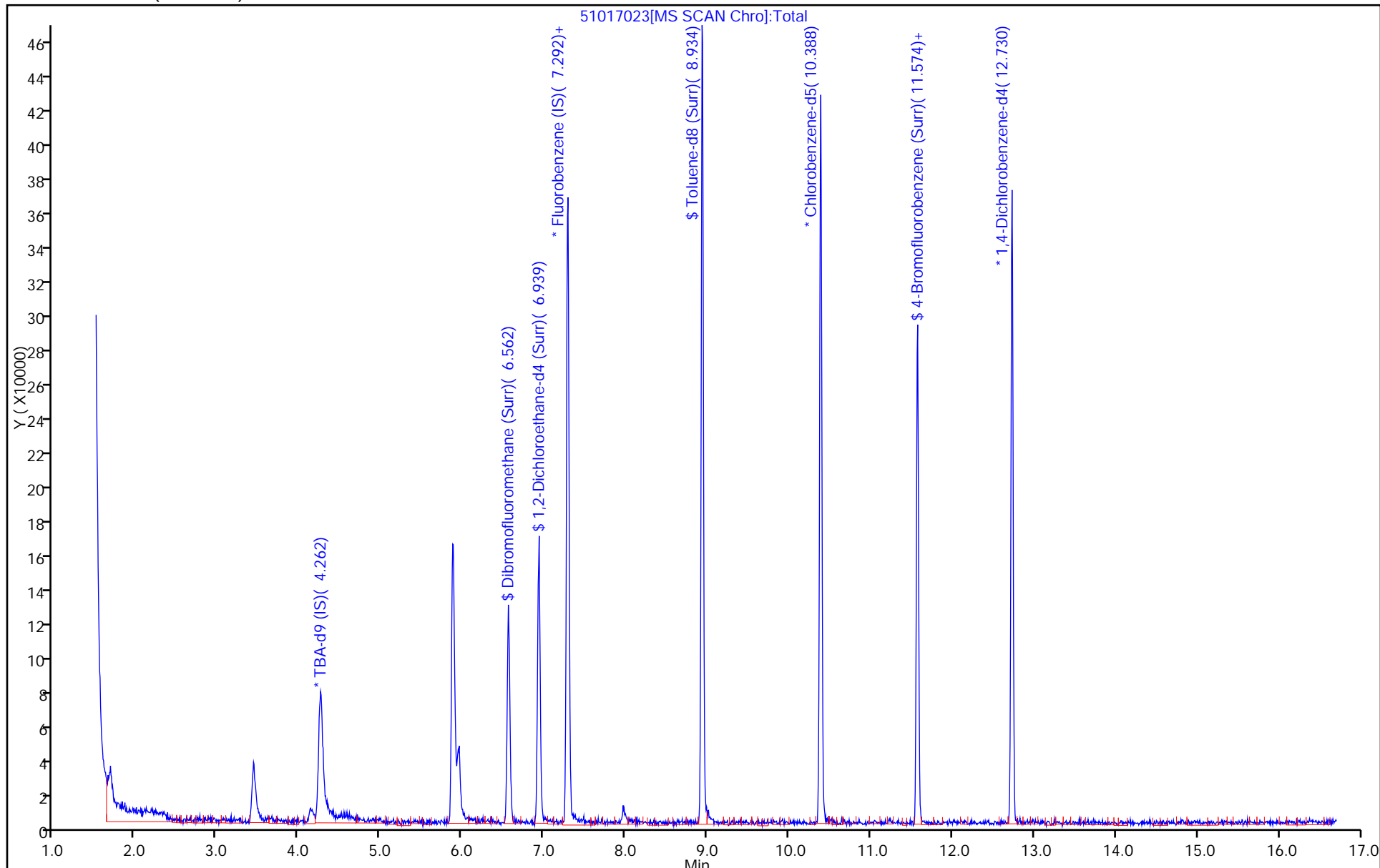
Dil. Factor: 20.0000

ALS Bottle#: 13

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017023.D

Injection Date: 17-Oct-2015 20:25:30

Instrument ID: CHHP5

Lims ID: 180-48564-B-4

Lab Sample ID: 180-48564-4

Client ID: HD-CW-3-0/1-0

Operator ID: 034635

ALS Bottle#: 13

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 20.0000

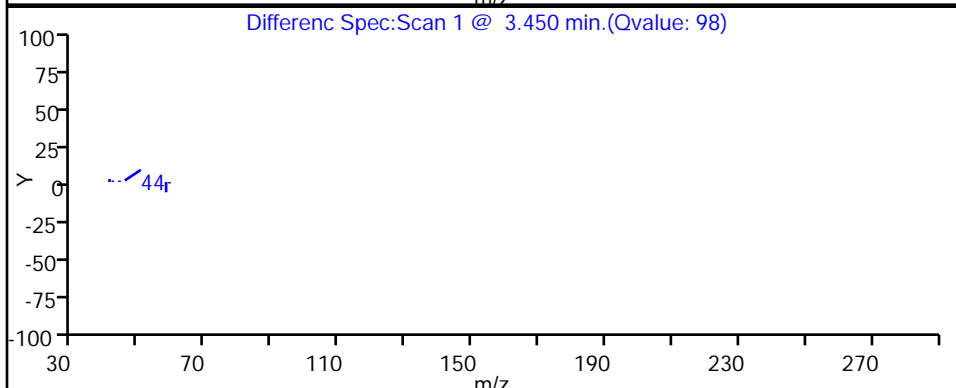
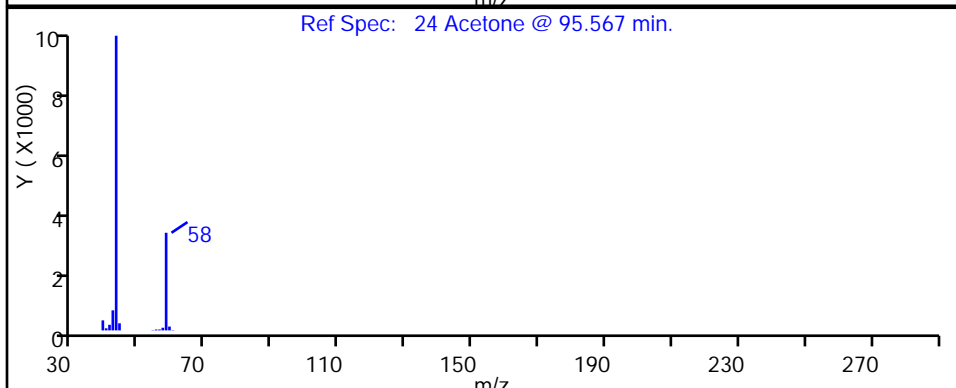
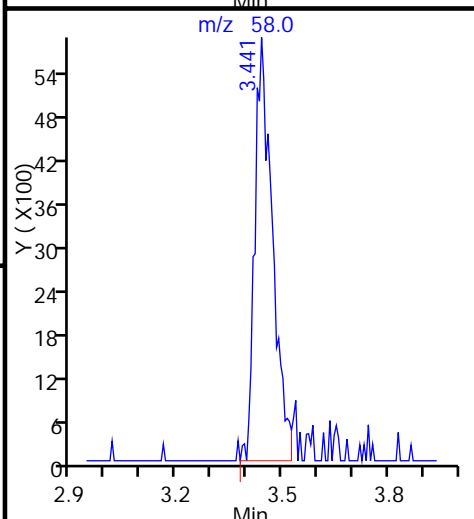
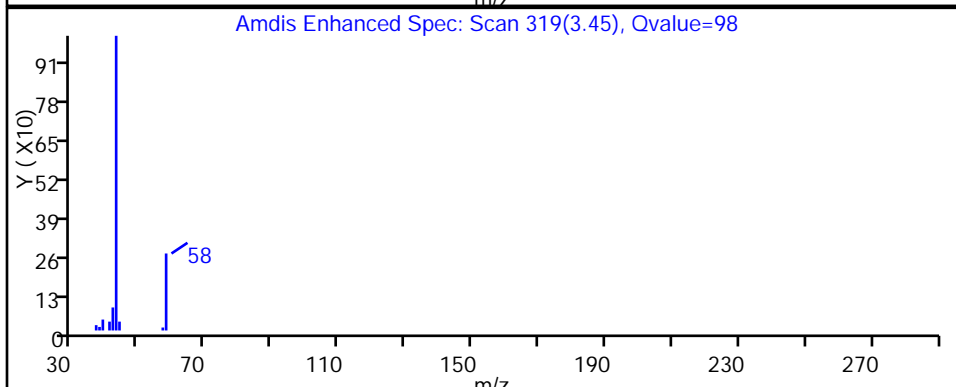
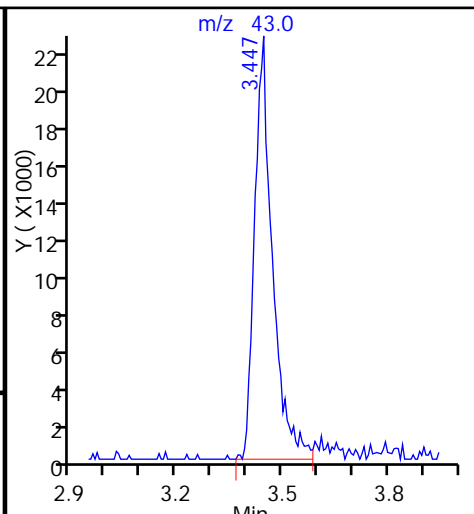
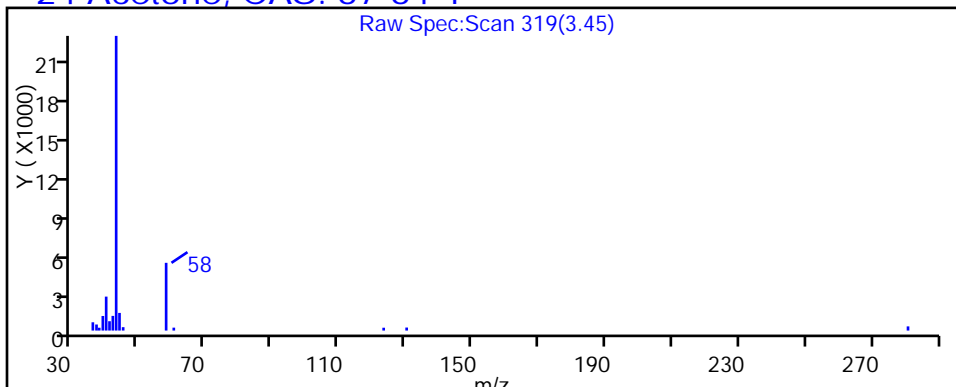
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017023.D

Injection Date: 17-Oct-2015 20:25:30

Instrument ID: CHHP5

Lims ID: 180-48564-B-4

Lab Sample ID: 180-48564-4

Client ID: HD-CW-3-0/1-0

Operator ID: 034635

ALS Bottle#: 13

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 20.0000

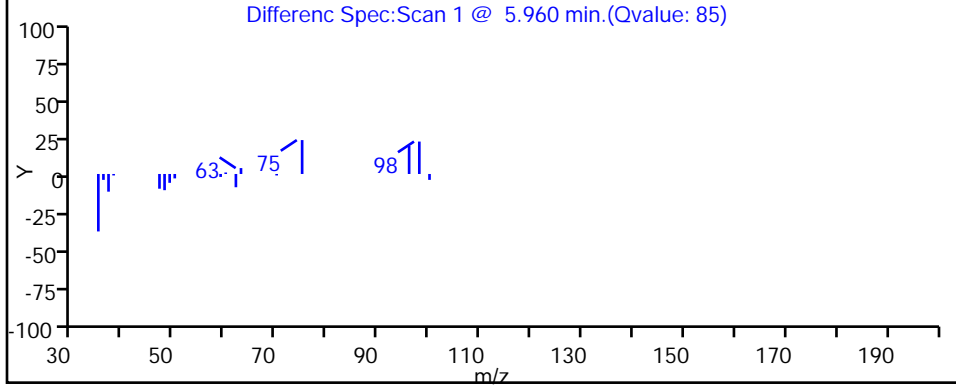
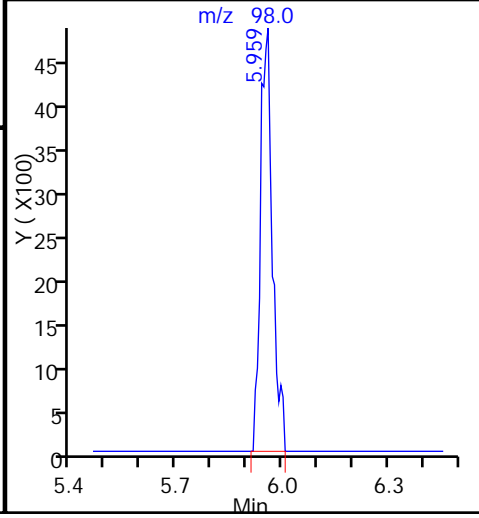
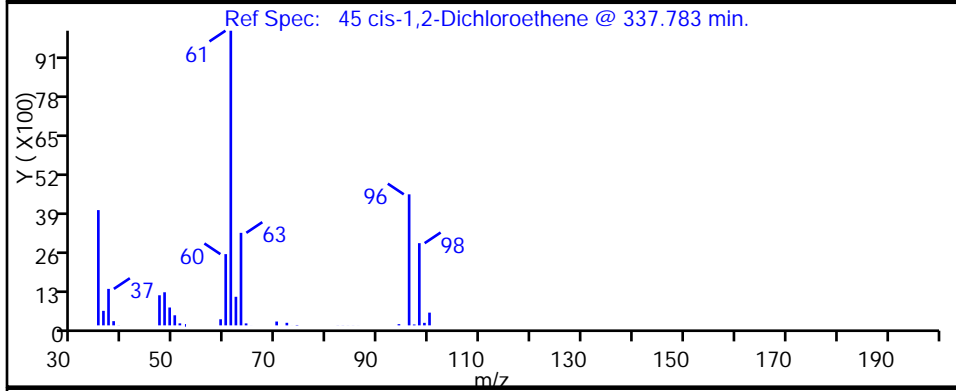
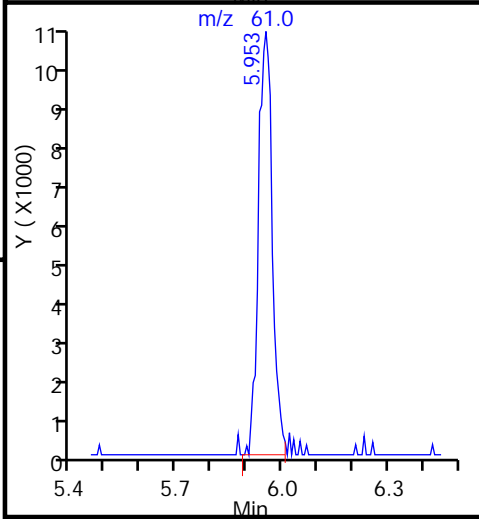
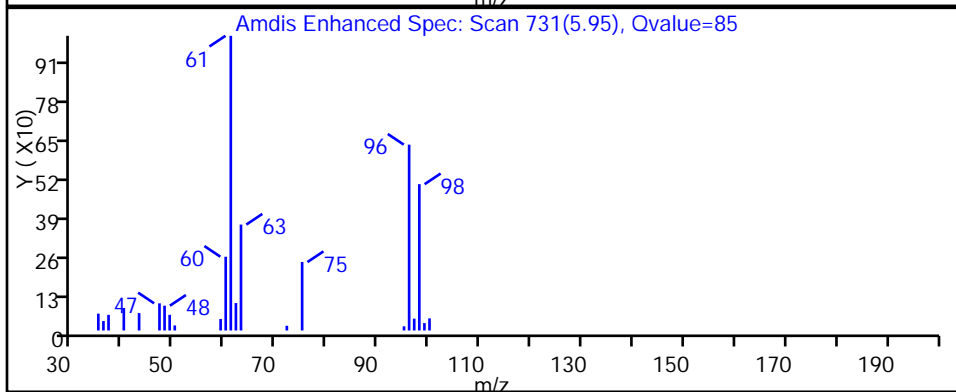
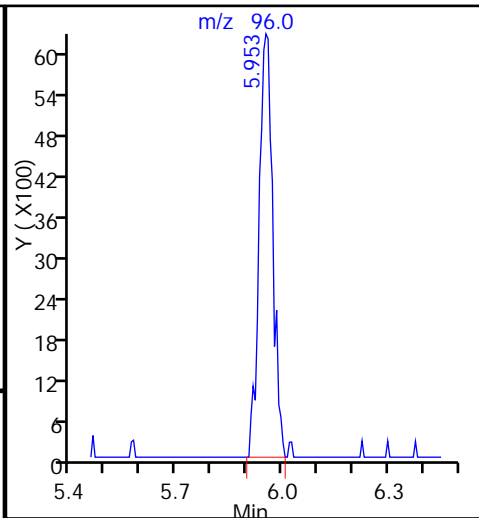
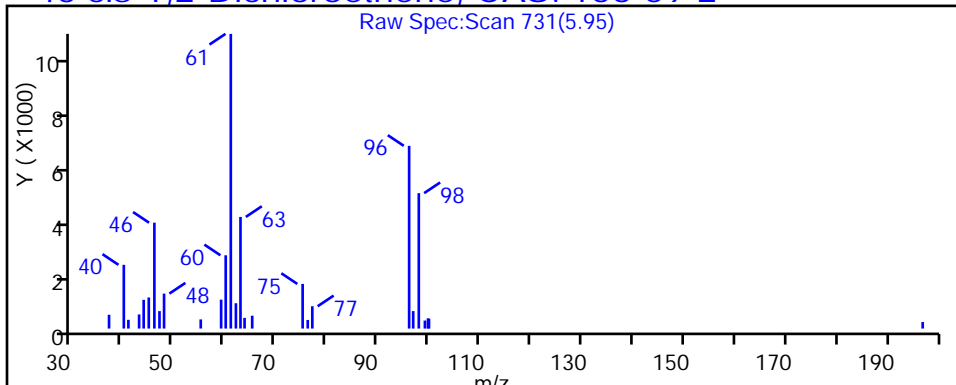
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017023.D

Injection Date: 17-Oct-2015 20:25:30

Instrument ID: CHHP5

Lims ID: 180-48564-B-4

Lab Sample ID: 180-48564-4

Client ID: HD-CW-3-0/1-0

Operator ID: 034635

ALS Bottle#: 13

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 20.0000

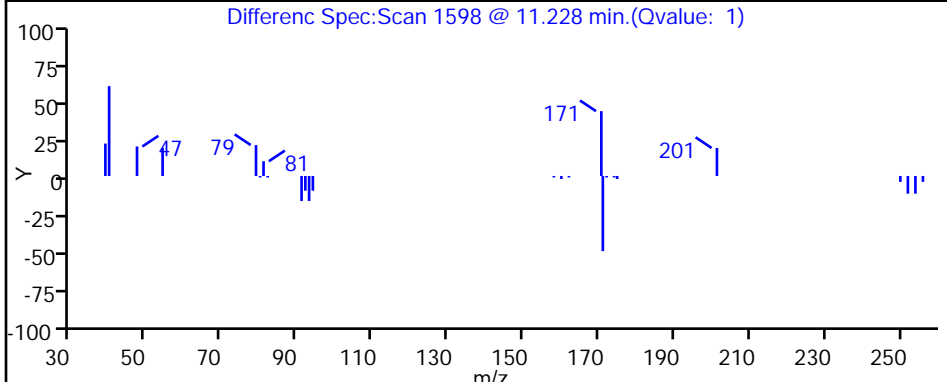
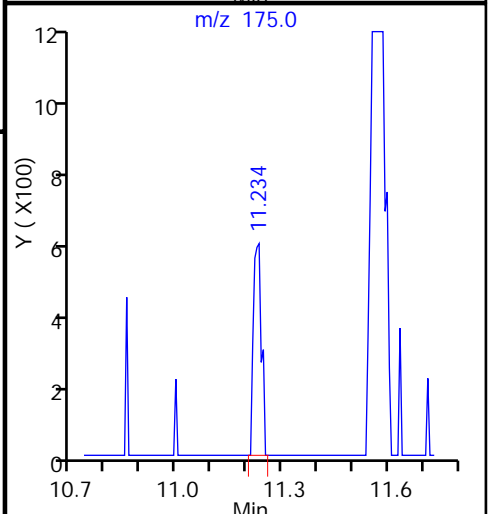
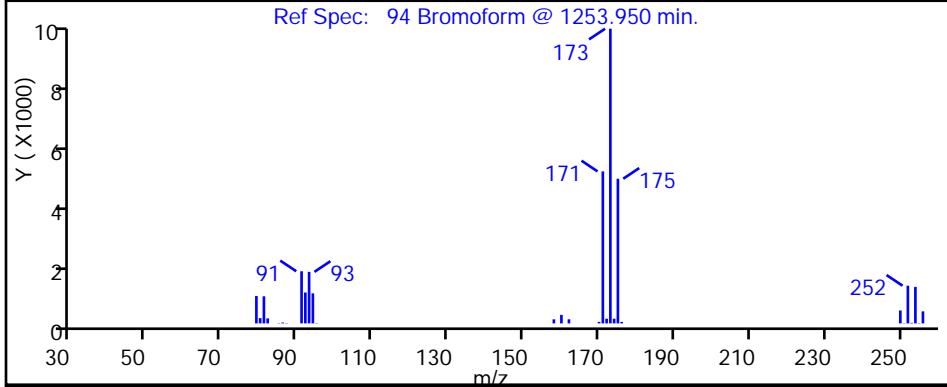
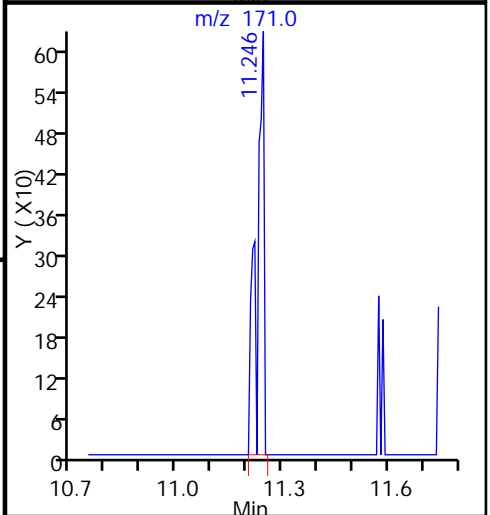
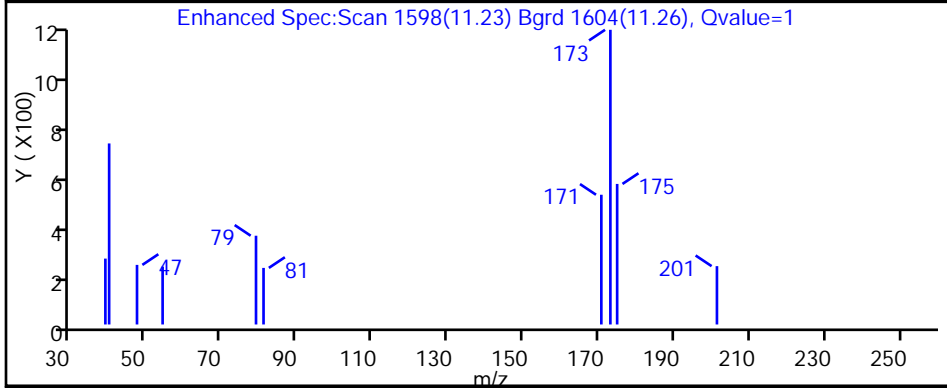
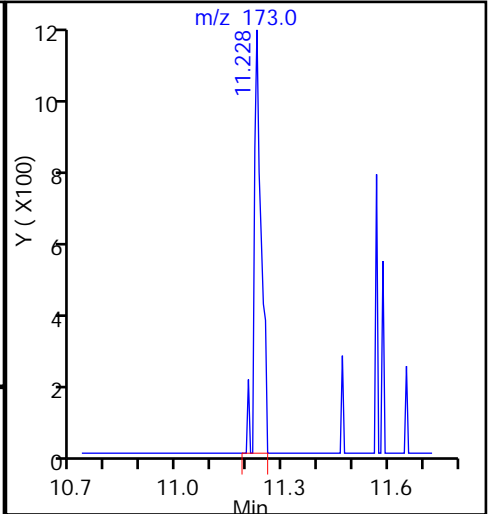
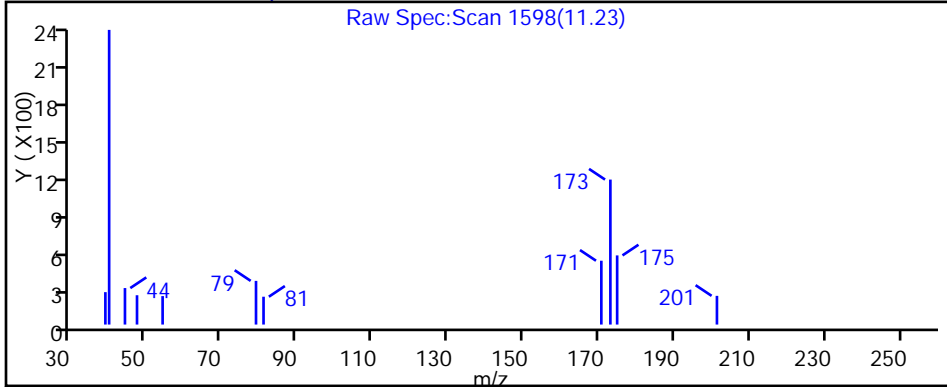
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

94 Bromoform, CAS: 75-25-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-4-0/1-0 Lab Sample ID: 180-48564-5
 Matrix: Water Lab File ID: 51016024.D
 Analysis Method: 8260C Date Collected: 10/07/2015 08:25
 Sample wt/vol: 5 (mL) Date Analyzed: 10/16/2015 21:35
 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.: 157249 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	0.30	J	1.0	0.28
75-01-4	Vinyl chloride	1.0	U ^c	1.0	0.23
74-83-9	Bromomethane	1.0	U ^c	1.0	0.31
75-00-3	Chloroethane	1.0	U ^c	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	31		1.0	0.24
74-97-5	Bromochloromethane	1.0	U ^c	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	0.86	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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-4-0/1-0 Lab Sample ID: 180-48564-5
 Matrix: Water Lab File ID: 51016024.D
 Analysis Method: 8260C Date Collected: 10/07/2015 08:25
 Sample wt/vol: 5 (mL) Date Analyzed: 10/16/2015 21:35
 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.: 157249 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)	103		64-135
2037-26-5	Toluene-d8 (Surr)	105		71-118
460-00-4	4-Bromofluorobenzene (Surr)	92		70-118
1868-53-7	Dibromofluoromethane (Surr)	99		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016024.D
 Lims ID: 180-48564-C-5 Lab Sample ID: 180-48564-5
 Client ID: HD-CW-4-0/1-0
 Sample Type: Client
 Inject. Date: 16-Oct-2015 21:35:30 ALS Bottle#: 19 Worklist Smp#: 24
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-48564-C-5
 Misc. Info.: 180-0009043-024
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 17-Oct-2015 13:01:22 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: journey

Date: 17-Oct-2015 12:15:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.266	4.271	-0.005	0	100186	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.289	0.001	98	389231	50.0	
* 3 Chlorobenzene-d5	119	10.386	10.391	-0.005	90	84760	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.735	12.733	0.002	96	113407	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.566	6.560	0.006	93	94568	49.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	0	135830	51.7	
\$ 7 Toluene-d8 (Surr)	98	8.939	8.939	0.000	96	343964	52.6	
\$ 8 4-Bromofluorobenzene (Surr	95	11.573	11.573	0.000	88	113979	46.2	
12 Chloromethane	50	1.766	1.760	0.006	22	4826	1.49	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.247				ND	
16 Chloroethane	64		2.387				ND	
22 1,1-Dichloroethene	96		3.354				ND	
24 Acetone	43		3.433				ND	
26 Carbon disulfide	76		3.646				ND	
31 Methylene Chloride	84		4.139				ND	
33 Acrylonitrile	53		4.522				ND	
34 trans-1,2-Dichloroethene	96		4.565				ND	
35 Methyl tert-butyl ether	73	4.577	4.583	-0.006	9	1449	0.2660	
37 1,1-Dichloroethane	63		5.198				ND	
45 cis-1,2-Dichloroethene	96	5.958	5.946	0.012	84	385109	153.1	
46 2-Butanone (MEK)	43		5.958				ND	
49 Chlorobromomethane	128		6.232				ND	
52 Chloroform	83		6.384				ND	
53 1,1,1-Trichloroethane	97		6.542				ND	
56 Carbon tetrachloride	117		6.712				ND	
58 Benzene	78		6.943				ND	
59 1,2-Dichloroethane	62		7.016				ND	
64 Trichloroethene	130	7.673	7.674	-0.001	94	40683	17.3	
67 1,2-Dichloropropane	63		7.947				ND	
70 1,4-Dioxane	88		8.032				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.233				ND	
74 cis-1,3-Dichloropropene	75		8.677				ND	
75 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
76 Toluene	91		9.006				ND	
77 trans-1,3-Dichloropropene	75		9.249				ND	
79 1,1,2-Trichloroethane	97		9.444				ND	
80 Tetrachloroethene	164	9.523	9.517	0.006	92	6965	4.28	
82 2-Hexanone	43		9.657				ND	
84 Chlorodibromomethane	129		9.815				ND	
85 Ethylene Dibromide	107		9.930				ND	
87 Chlorobenzene	112		10.417				ND	
89 1,1,1,2-Tetrachloroethane	131		10.508				ND	
90 Ethylbenzene	106		10.514				ND	
91 m-Xylene & p-Xylene	106		10.648				ND	
92 o-Xylene	106		11.032				ND	
93 Styrene	104		11.050				ND	
94 Bromoform	173		11.232				ND	
99 1,1,2,2-Tetrachloroethane	83		11.707				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016024.D

Injection Date: 16-Oct-2015 21:35:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48564-C-5

Lab Sample ID: 180-48564-5

Worklist Smp#: 24

Client ID: HD-CW-4-0/1-0

Purge Vol: 5.000 mL

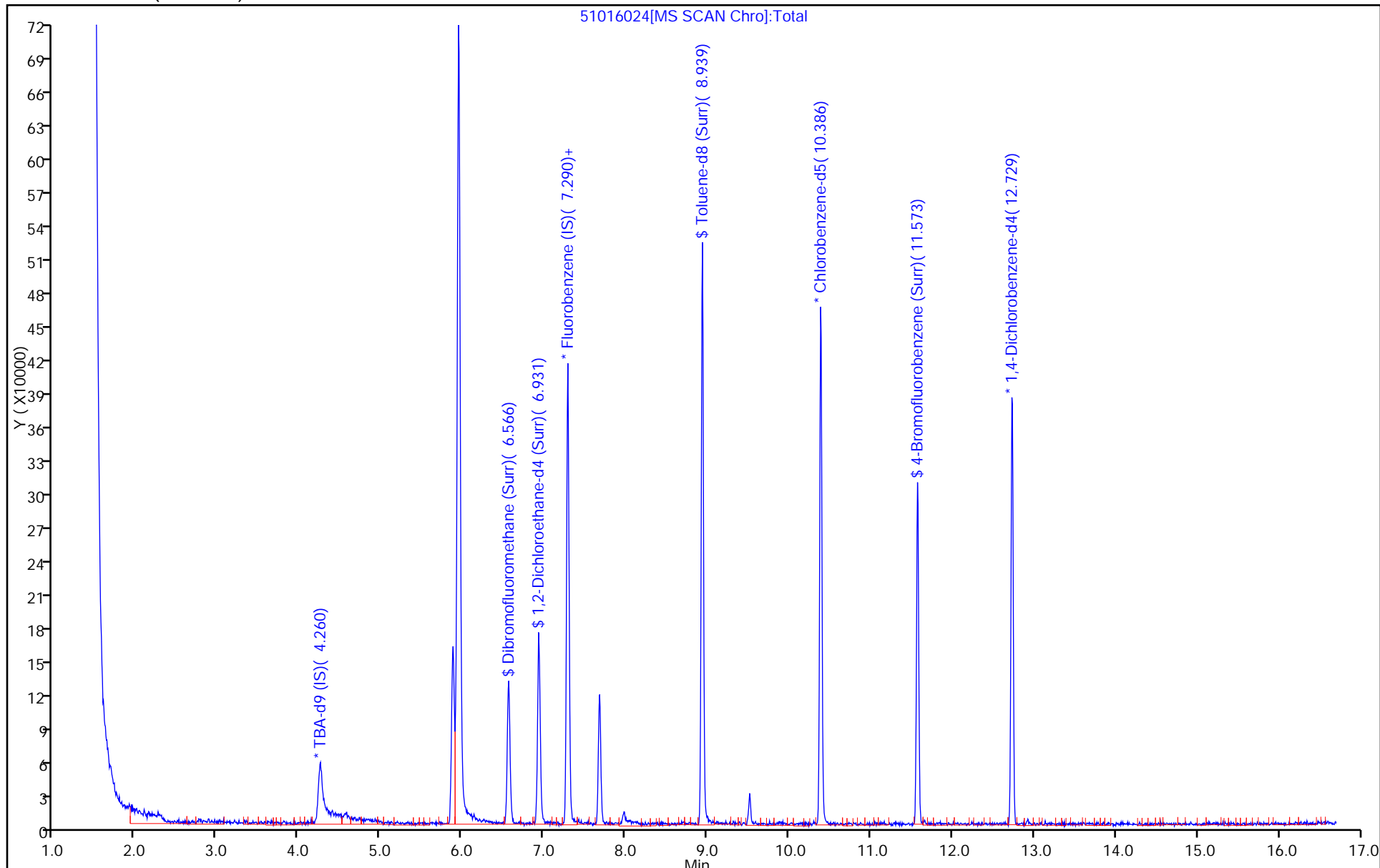
Dil. Factor: 1.0000

ALS Bottle#: 19

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016024.D

Injection Date: 16-Oct-2015 21:35:30

Instrument ID: CHHP5

Lims ID: 180-48564-C-5

Lab Sample ID: 180-48564-5

Client ID: HD-CW-4-0/1-0

Operator ID: 001562

ALS Bottle#: 19

Worklist Smp#: 24

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

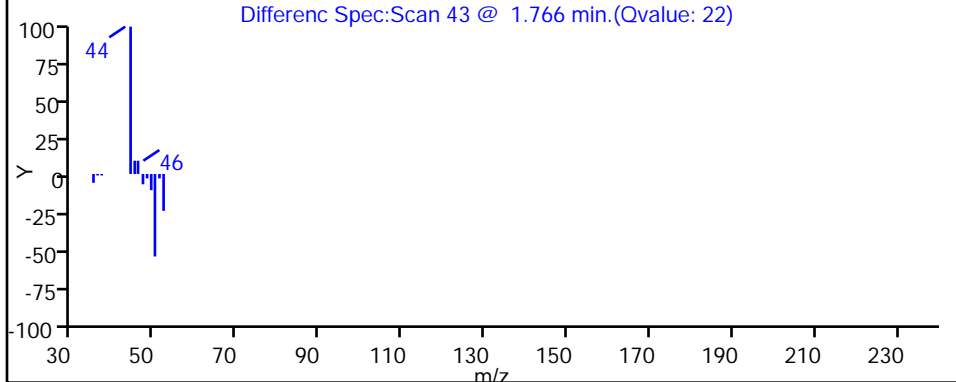
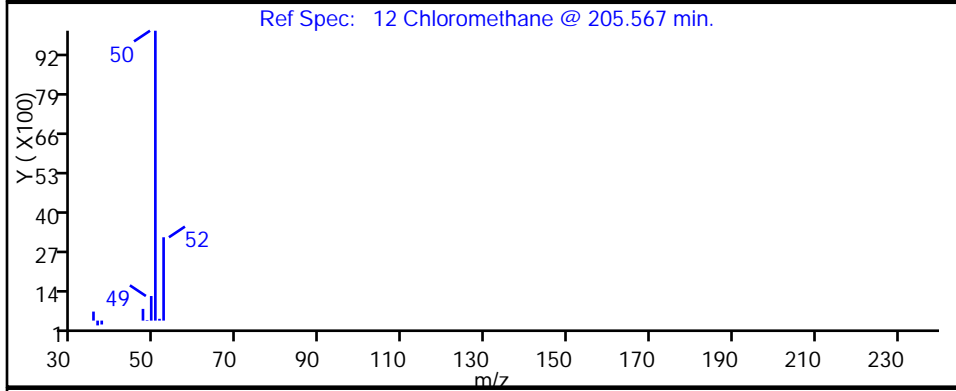
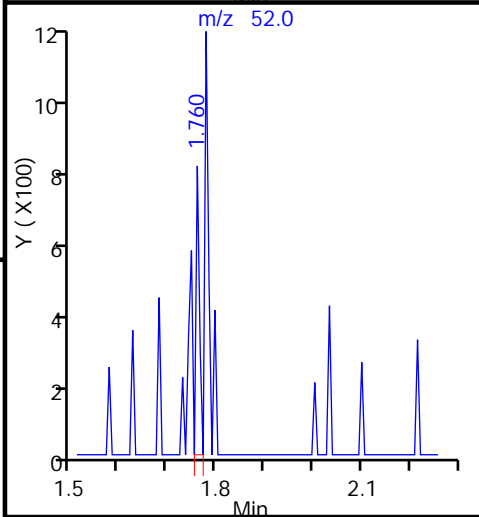
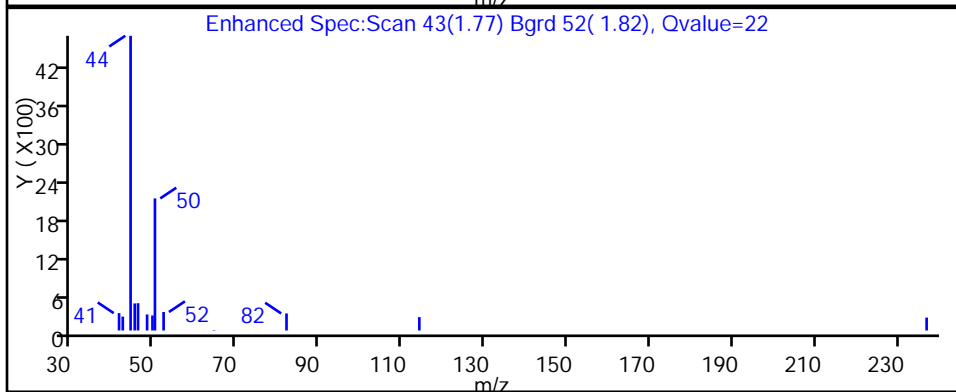
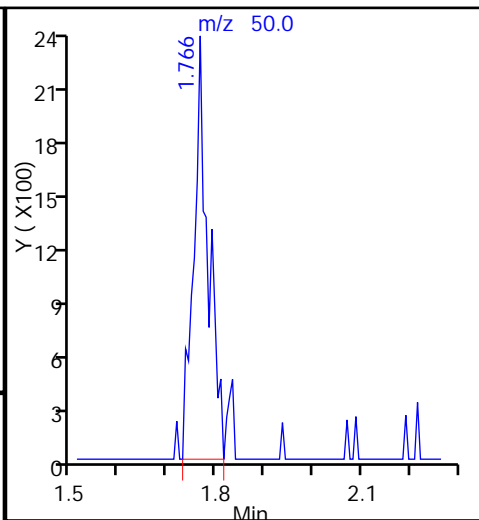
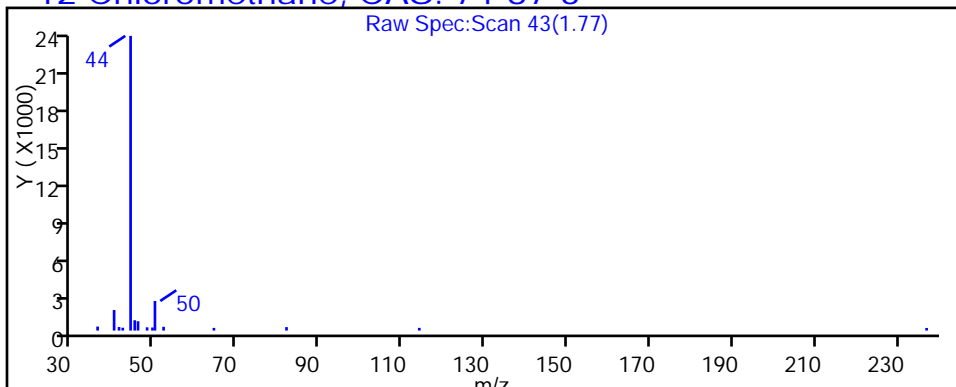
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

12 Chloromethane, CAS: 74-87-3



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016024.D

Injection Date: 16-Oct-2015 21:35:30

Instrument ID: CHHP5

Lims ID: 180-48564-C-5

Lab Sample ID: 180-48564-5

Client ID: HD-CW-4-0/1-0

Operator ID: 001562

ALS Bottle#: 19

Worklist Smp#: 24

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

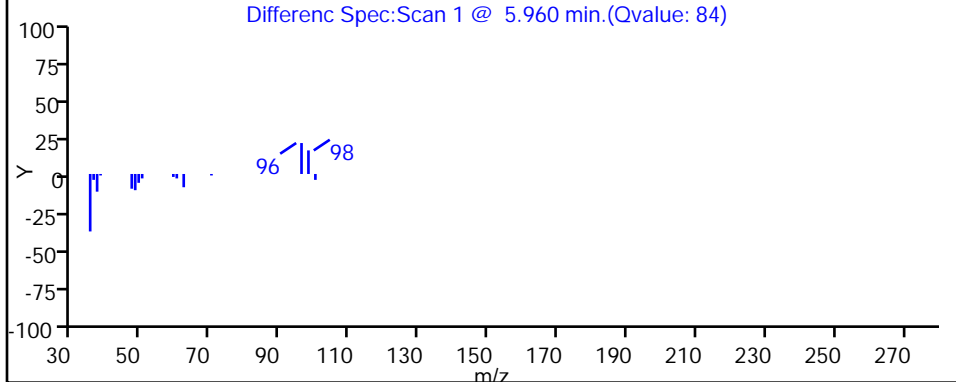
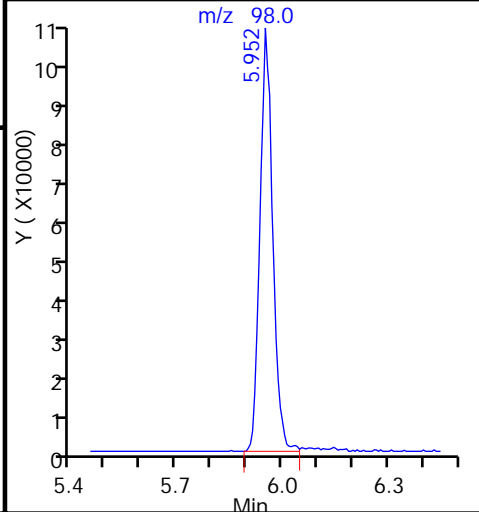
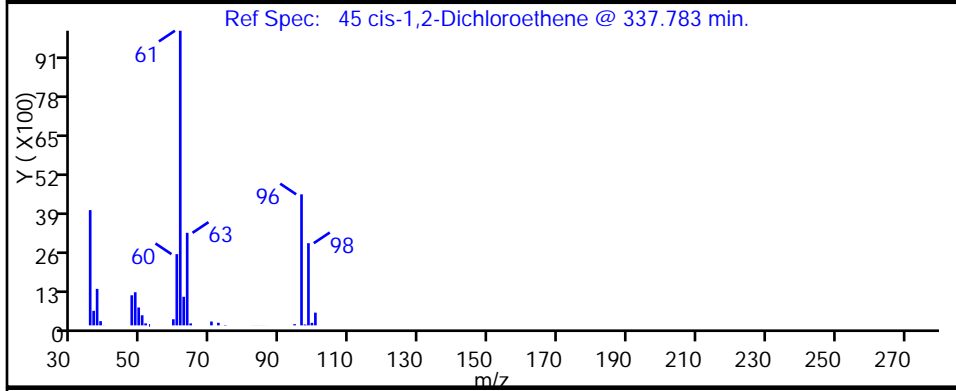
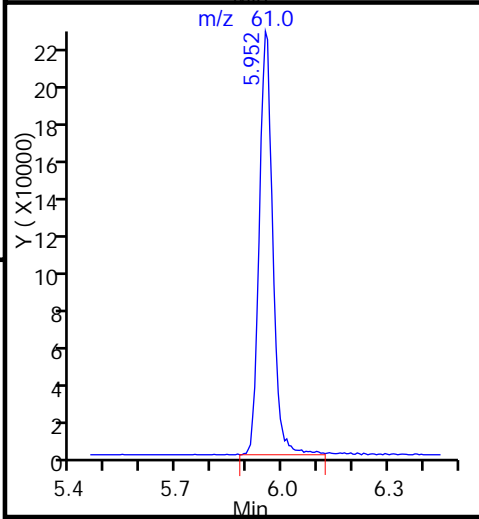
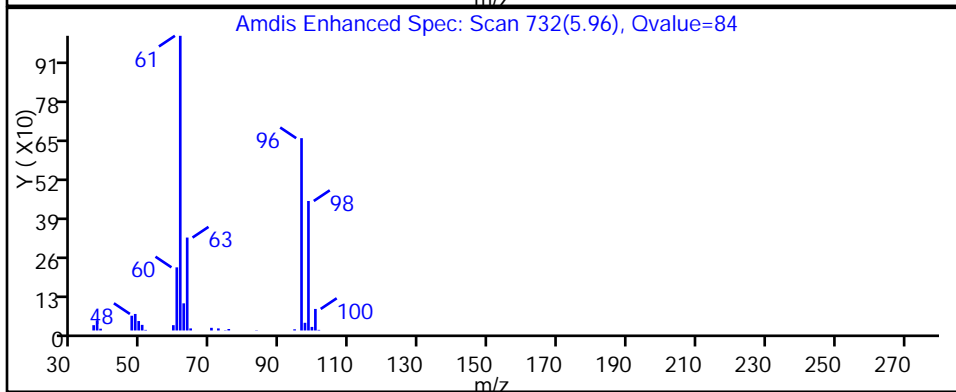
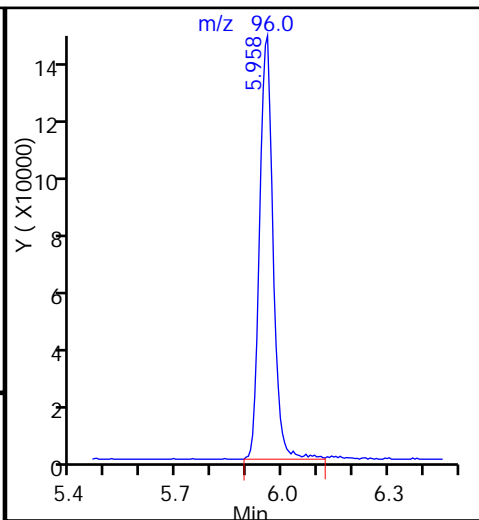
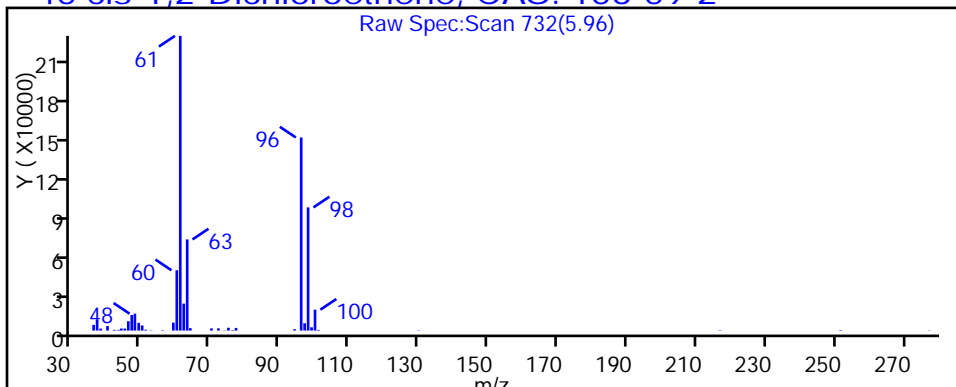
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016024.D

Injection Date: 16-Oct-2015 21:35:30

Instrument ID: CHHP5

Lims ID: 180-48564-C-5

Lab Sample ID: 180-48564-5

Client ID: HD-CW-4-0/1-0

Operator ID: 001562

ALS Bottle#: 19

Worklist Smp#: 24

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

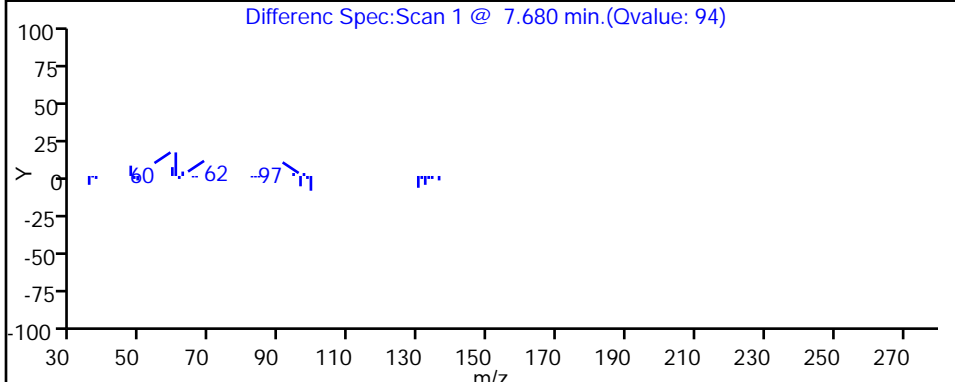
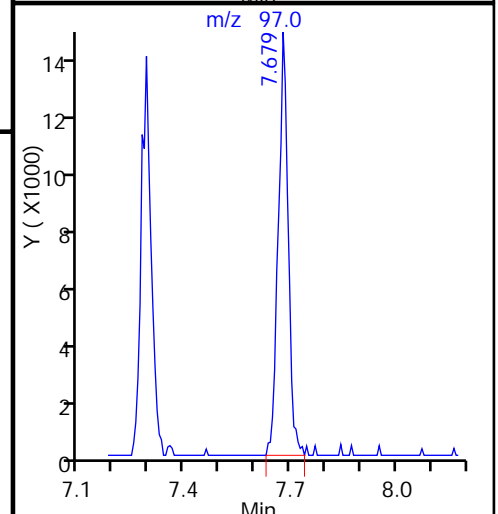
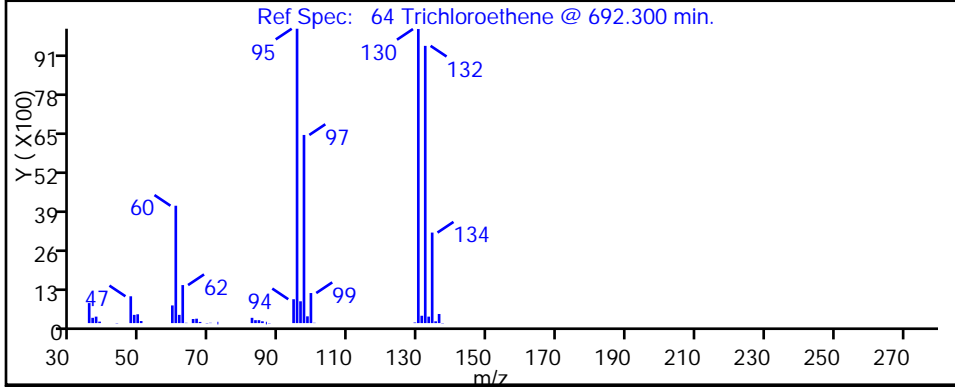
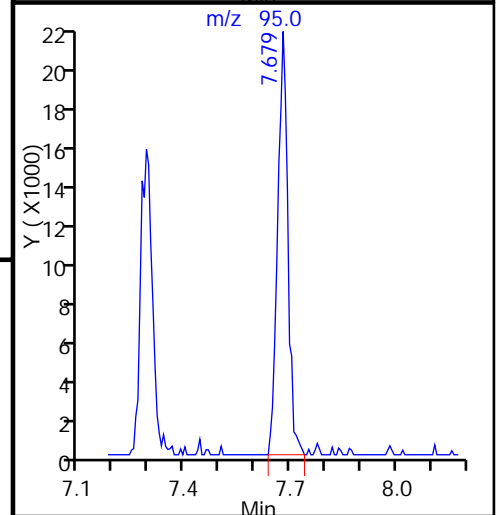
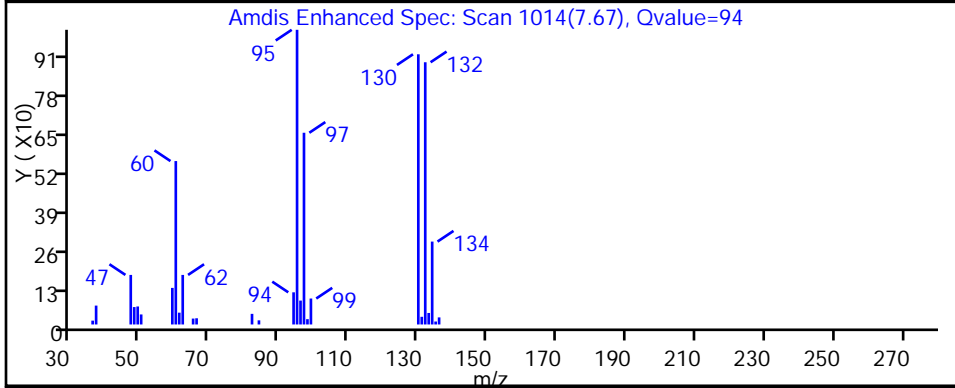
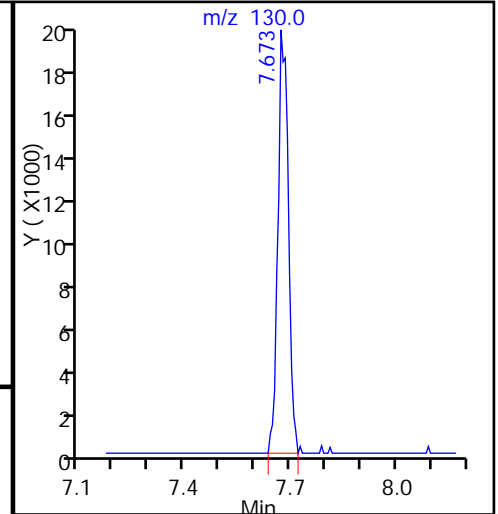
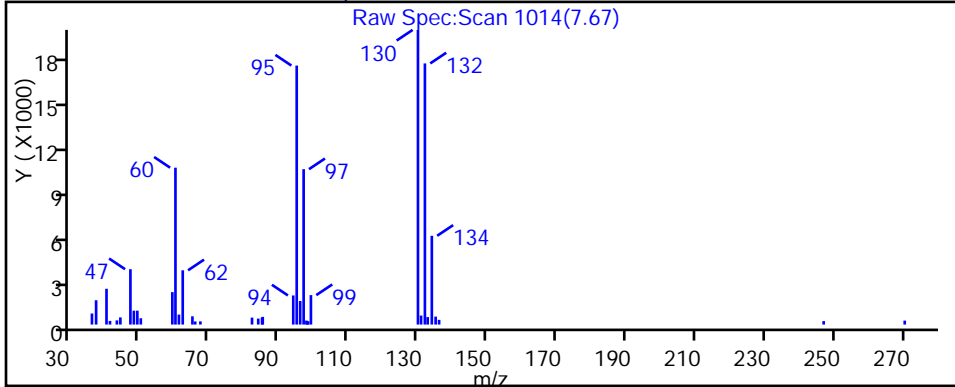
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016024.D

Injection Date: 16-Oct-2015 21:35:30

Instrument ID: CHHP5

Lims ID: 180-48564-C-5

Lab Sample ID: 180-48564-5

Client ID: HD-CW-4-0/1-0

Operator ID: 001562

ALS Bottle#: 19 Worklist Smp#: 24

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

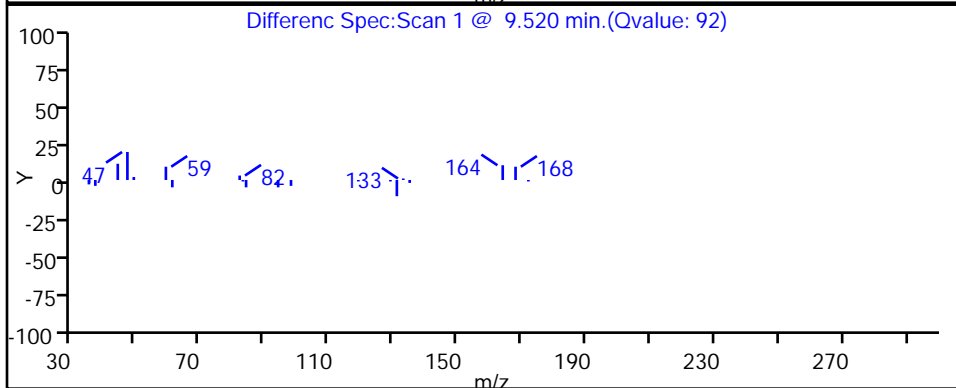
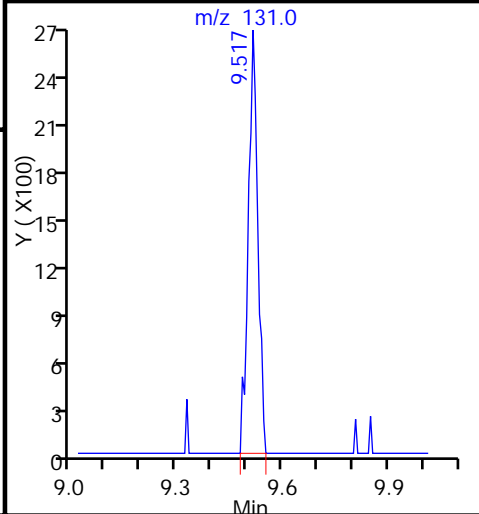
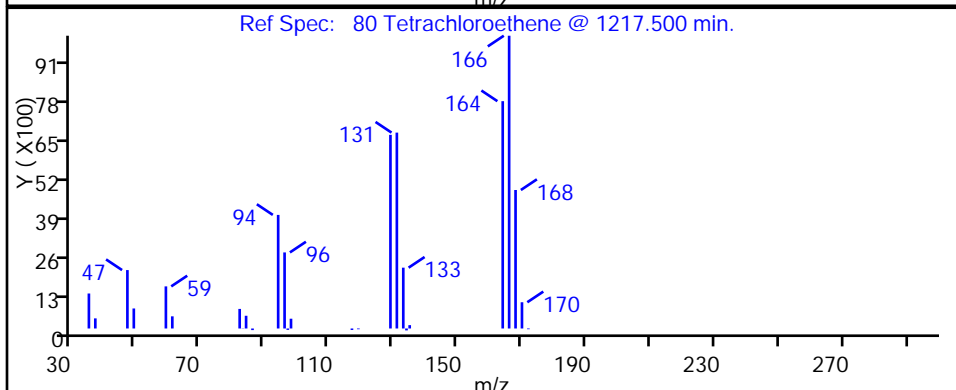
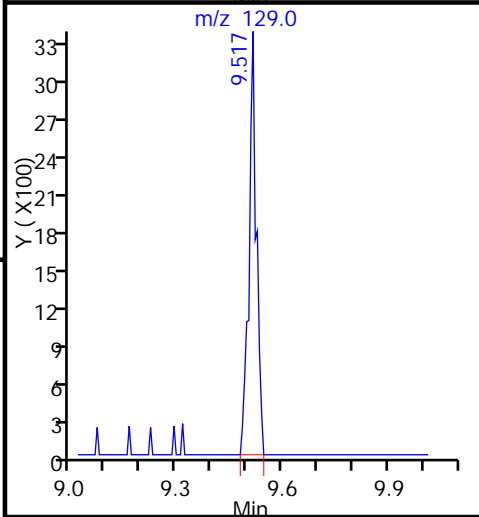
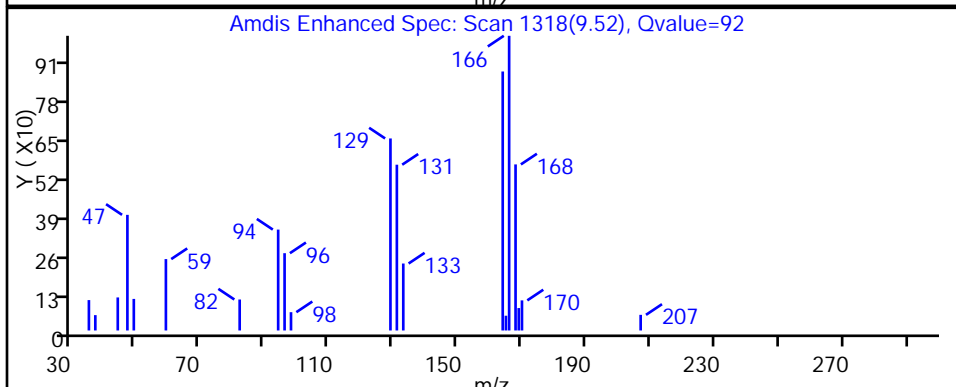
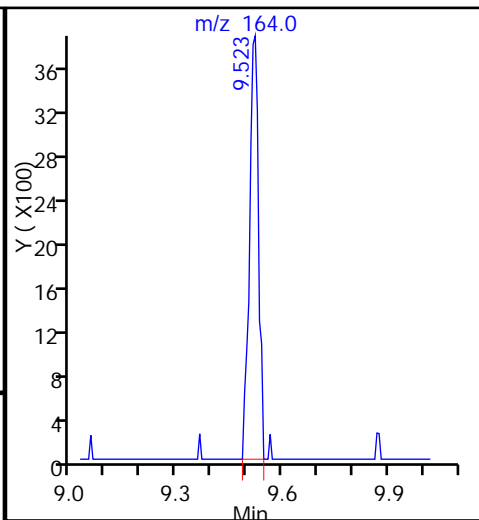
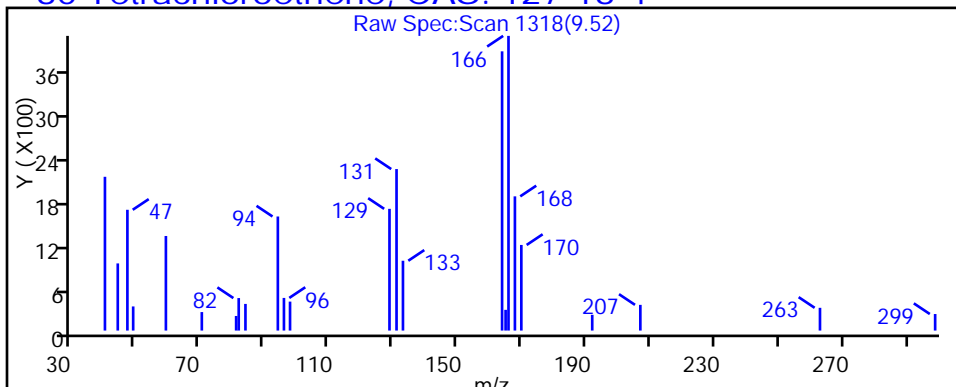
Method: MSVOA_LL_CHHP5

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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-5-0/1-0 Lab Sample ID: 180-48564-6
 Matrix: Water Lab File ID: 51016027.D
 Analysis Method: 8260C Date Collected: 10/07/2015 07:45
 Sample wt/vol: 5 (mL) Date Analyzed: 10/16/2015 22:48
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157249 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 ^c	1.0	0.23
74-83-9	Bromomethane	1.0	U ^c	1.0	0.31
75-00-3	Chloroethane	1.0	U ^c	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	4.6		1.0	0.24
74-97-5	Bromochloromethane	1.0	U ^c	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	5.3		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	15		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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-5-0/1-0 Lab Sample ID: 180-48564-6
 Matrix: Water Lab File ID: 51016027.D
 Analysis Method: 8260C Date Collected: 10/07/2015 07:45
 Sample wt/vol: 5 (mL) Date Analyzed: 10/16/2015 22:48
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157249 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		64-135
2037-26-5	Toluene-d8 (Surr)	97		71-118
460-00-4	4-Bromofluorobenzene (Surr)	84		70-118
1868-53-7	Dibromofluoromethane (Surr)	101		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016027.D
 Lims ID: 180-48564-B-6 Lab Sample ID: 180-48564-6
 Client ID: HD-CW-5-0/1-0
 Sample Type: Client
 Inject. Date: 16-Oct-2015 22:48:30 ALS Bottle#: 22 Worklist Smp#: 27
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-48564-B-6
 Misc. Info.: 180-0009043-027
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 17-Oct-2015 13:01:22 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: journeyep

Date: 17-Oct-2015 12:18:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.253	4.271	-0.018	0	74768	1000.0	
* 2 Fluorobenzene (IS)	96	7.289	7.289	0.000	97	364667	50.0	
* 3 Chlorobenzene-d5	119	10.392	10.391	0.001	91	87325	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.728	12.733	-0.005	97	114678	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.559	6.560	-0.001	92	90276	50.4	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.936	6.931	0.005	0	127611	51.9	
\$ 7 Toluene-d8 (Surr)	98	8.938	8.939	-0.001	95	327724	48.6	
\$ 8 4-Bromofluorobenzene (Surr	95	11.572	11.573	-0.001	88	106935	42.1	
12 Chloromethane	50		1.760				ND	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.247				ND	
16 Chloroethane	64		2.387				ND	
22 1,1-Dichloroethene	96		3.354				ND	
24 Acetone	43		3.433				ND	
26 Carbon disulfide	76		3.646				ND	
31 Methylene Chloride	84		4.139				ND	
33 Acrylonitrile	53		4.522				ND	
34 trans-1,2-Dichloroethene	96		4.565				ND	
35 Methyl tert-butyl ether	73		4.583				ND	
37 1,1-Dichloroethane	63		5.198				ND	
45 cis-1,2-Dichloroethene	96	5.957	5.946	0.011	85	53698	22.8	
46 2-Butanone (MEK)	43		5.958				ND	
49 Chlorobromomethane	128		6.232				ND	
52 Chloroform	83		6.384				ND	
53 1,1,1-Trichloroethane	97		6.542				ND	
56 Carbon tetrachloride	117		6.712				ND	
58 Benzene	78		6.943				ND	
59 1,2-Dichloroethane	62		7.016				ND	
64 Trichloroethene	130	7.678	7.674	0.004	96	58390	26.5	
67 1,2-Dichloropropane	63		7.947				ND	
70 1,4-Dioxane	88		8.032				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.233				ND	
74 cis-1,3-Dichloropropene	75		8.677				ND	
75 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
76 Toluene	91		9.006				ND	
77 trans-1,3-Dichloropropene	75		9.249				ND	
79 1,1,2-Trichloroethane	97		9.444				ND	
80 Tetrachloroethene	164	9.522	9.517	0.005	96	124435	74.1	
82 2-Hexanone	43		9.657				ND	
84 Chlorodibromomethane	129		9.815				ND	
85 Ethylene Dibromide	107		9.930				ND	
87 Chlorobenzene	112		10.417				ND	
89 1,1,1,2-Tetrachloroethane	131		10.508				ND	
90 Ethylbenzene	106		10.514				ND	
91 m-Xylene & p-Xylene	106		10.648				ND	
92 o-Xylene	106		11.032				ND	
93 Styrene	104		11.050				ND	
94 Bromoform	173		11.232				ND	
99 1,1,2,2-Tetrachloroethane	83		11.707				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016027.D

Injection Date: 16-Oct-2015 22:48:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48564-B-6

Lab Sample ID: 180-48564-6

Worklist Smp#: 27

Client ID: HD-CW-5-0/1-0

Purge Vol: 5.000 mL

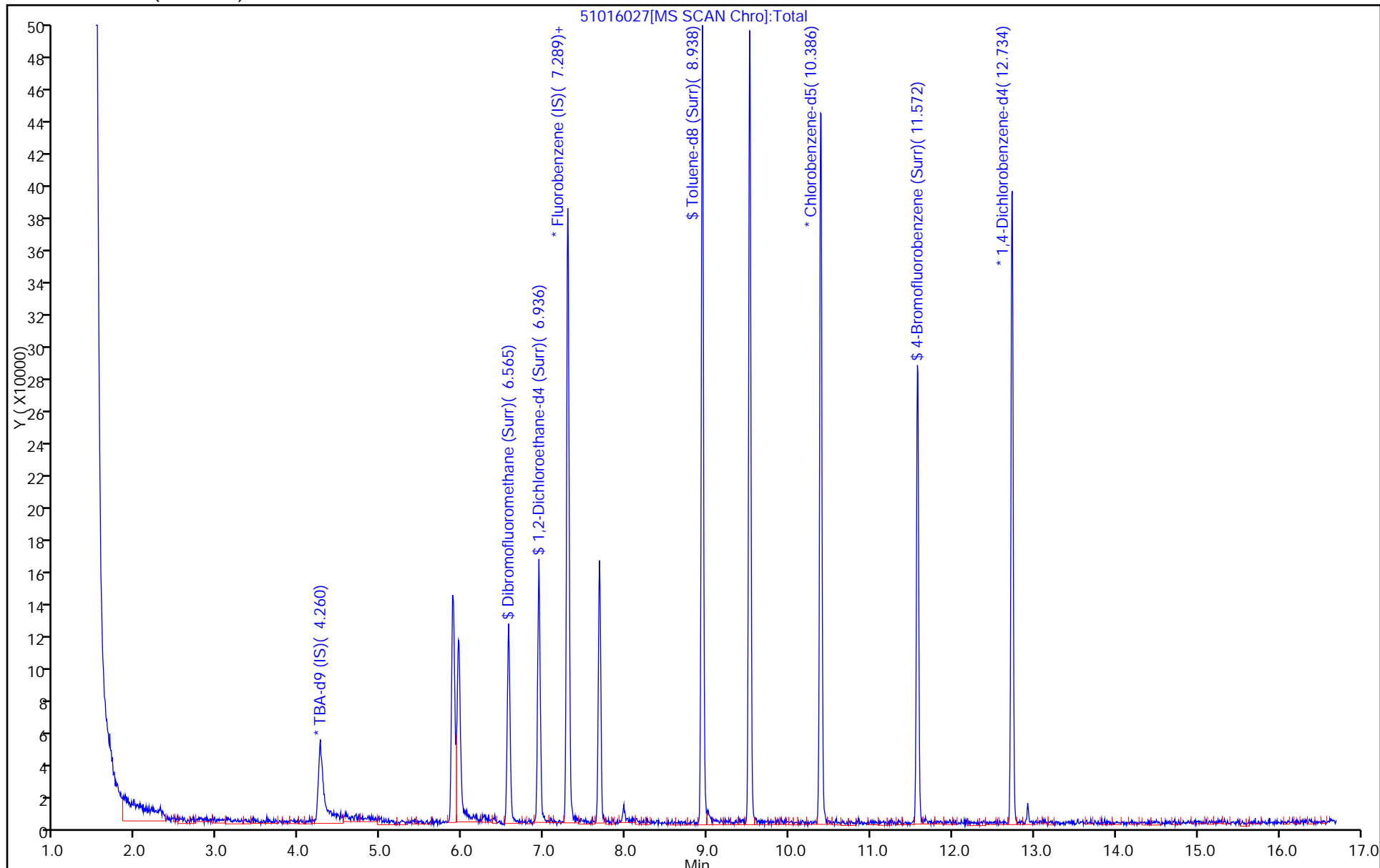
Dil. Factor: 1.0000

ALS Bottle#: 22

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016027.D

Injection Date: 16-Oct-2015 22:48:30

Instrument ID: CHHP5

Lims ID: 180-48564-B-6

Lab Sample ID: 180-48564-6

Client ID: HD-CW-5-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

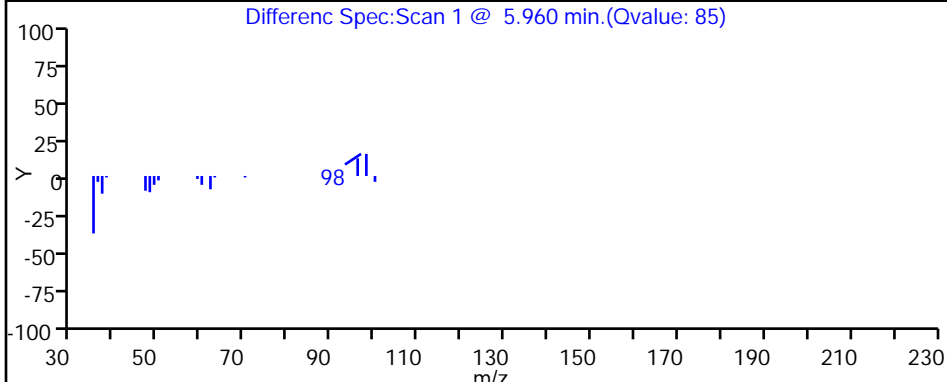
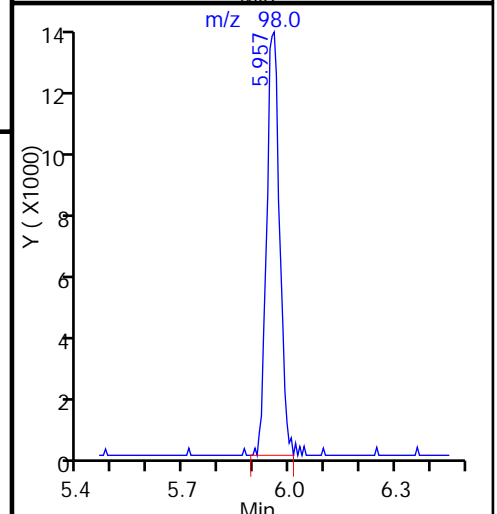
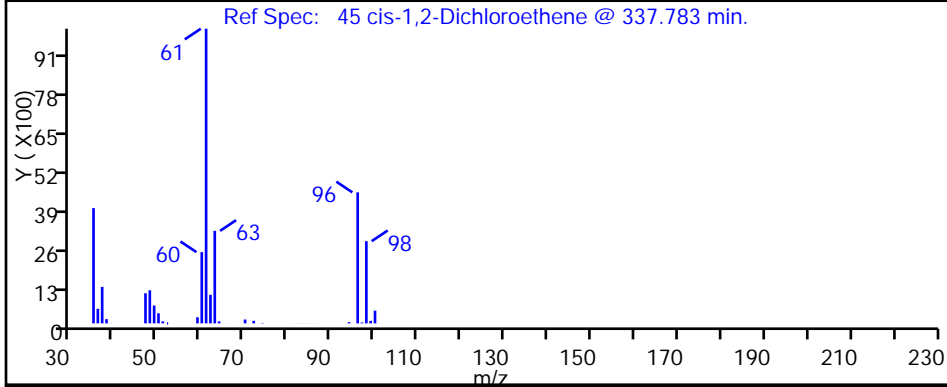
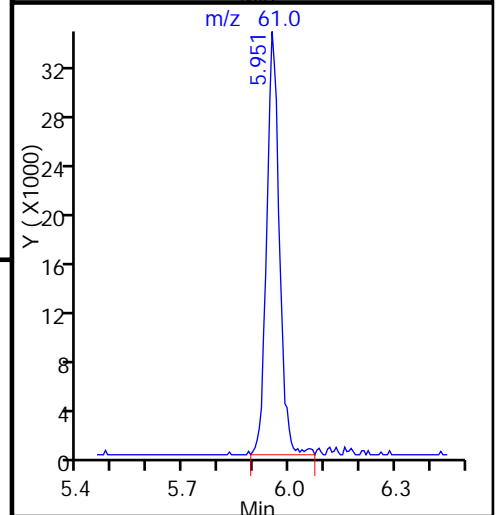
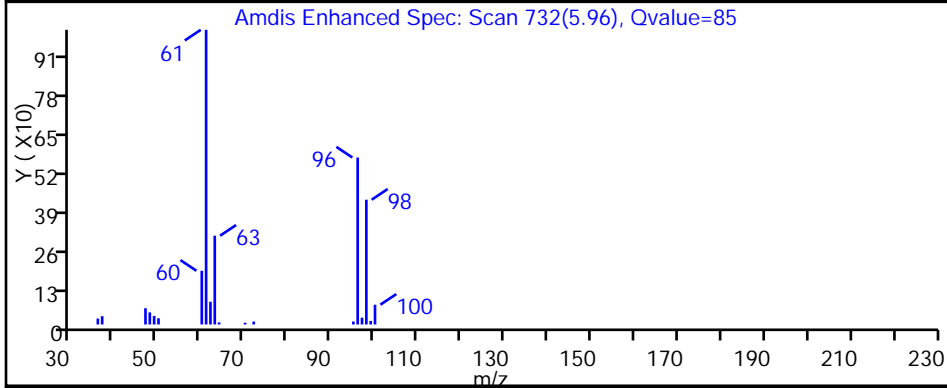
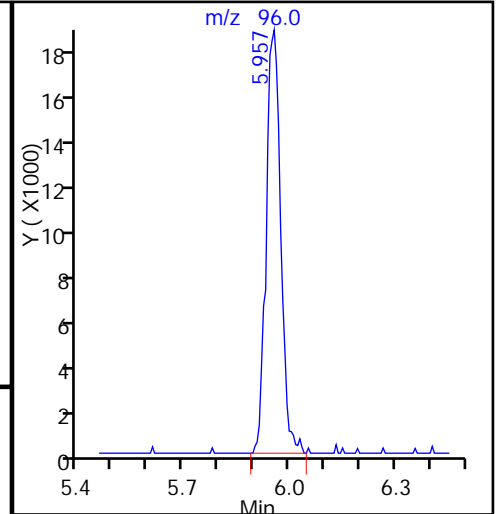
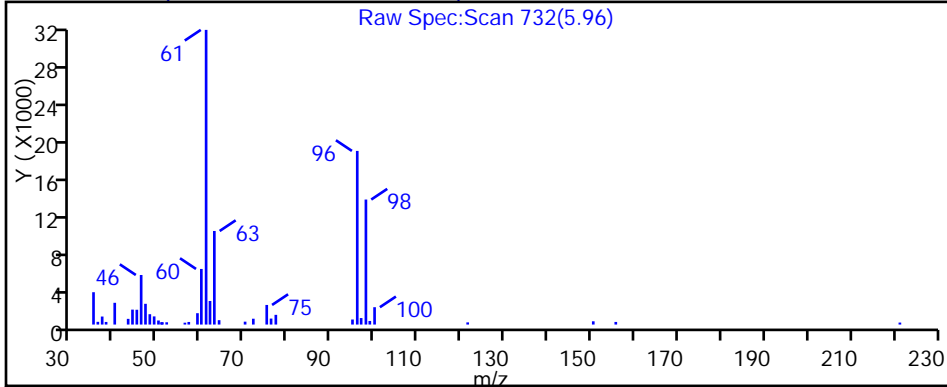
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016027.D

Injection Date: 16-Oct-2015 22:48:30

Instrument ID: CHHP5

Lims ID: 180-48564-B-6

Lab Sample ID: 180-48564-6

Client ID: HD-CW-5-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

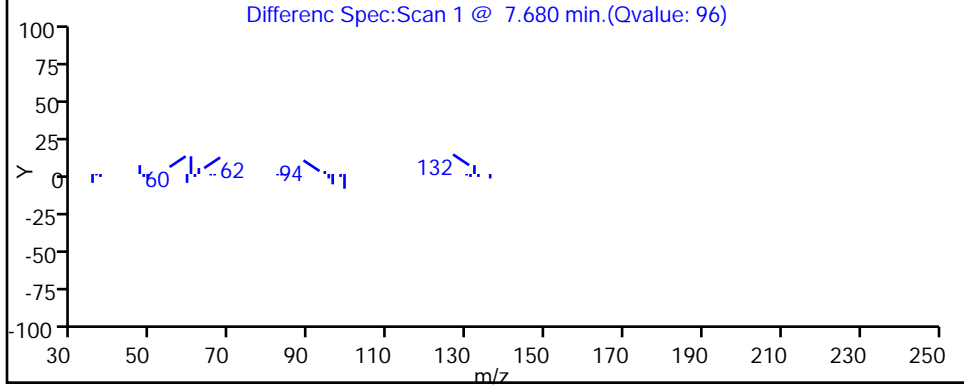
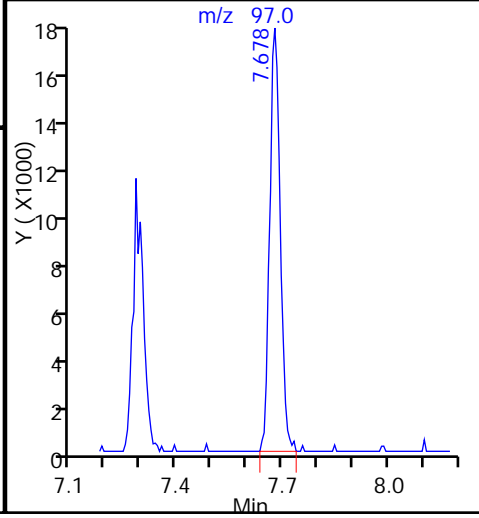
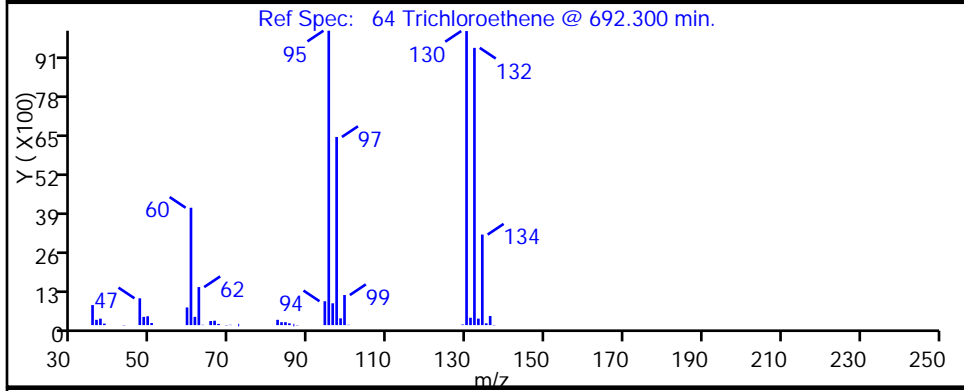
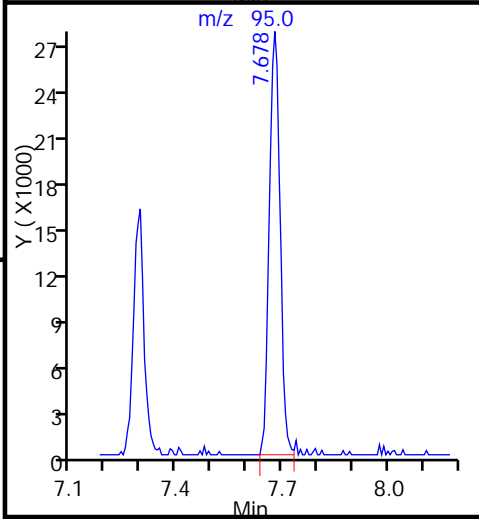
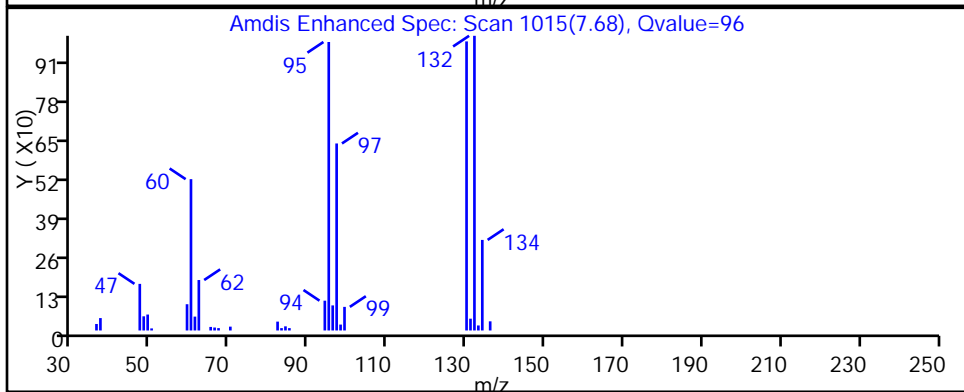
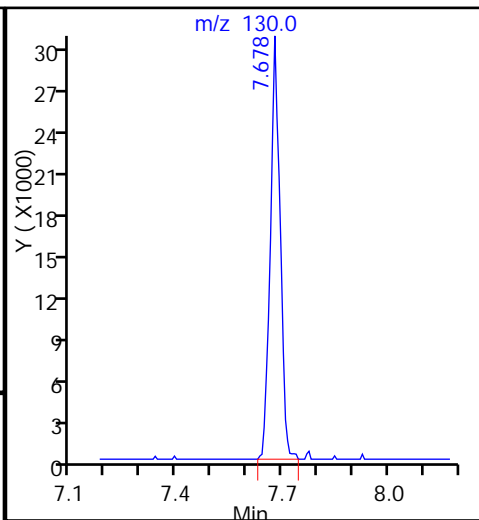
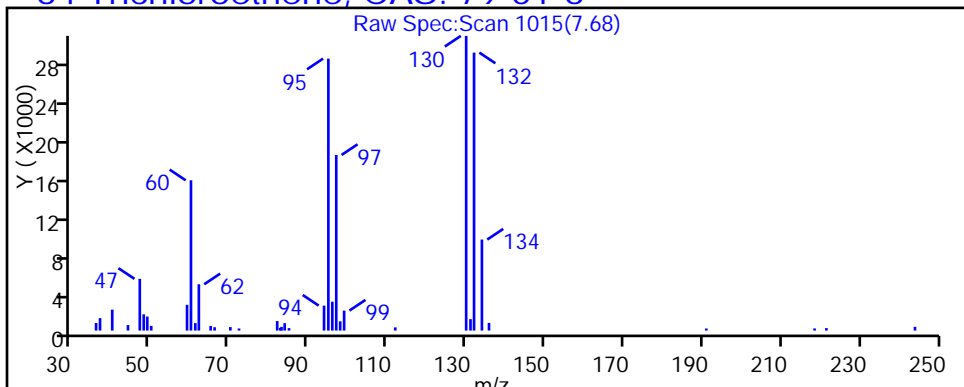
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016027.D

Injection Date: 16-Oct-2015 22:48:30

Instrument ID: CHHP5

Lims ID: 180-48564-B-6

Lab Sample ID: 180-48564-6

Client ID: HD-CW-5-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

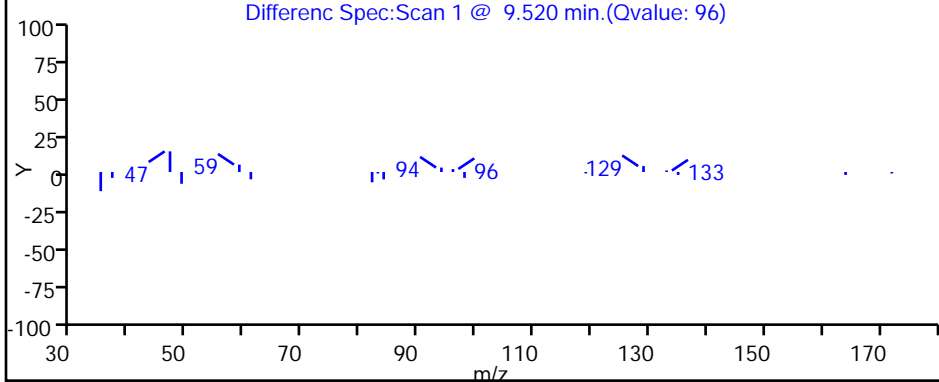
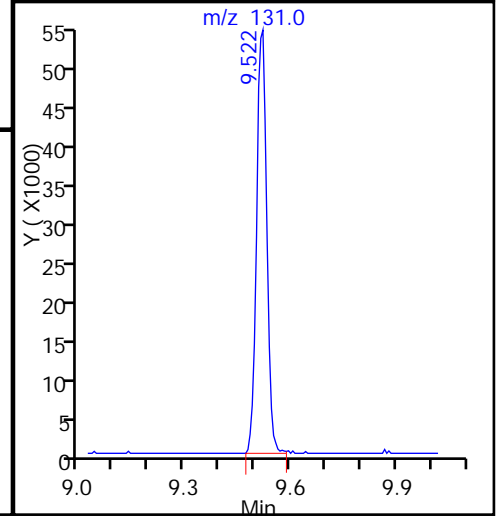
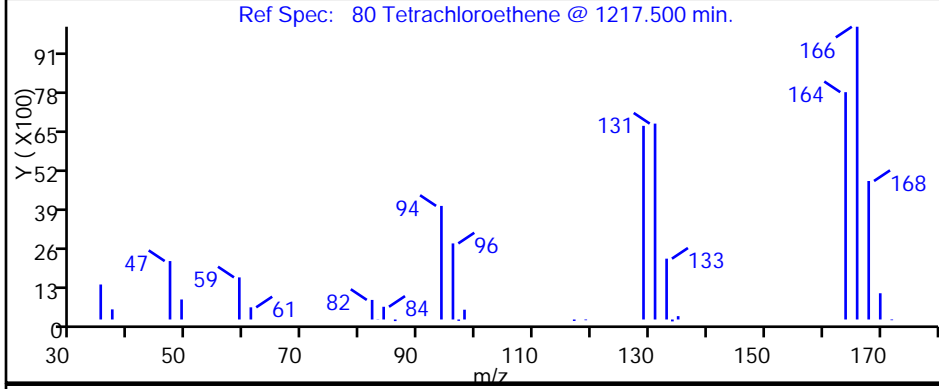
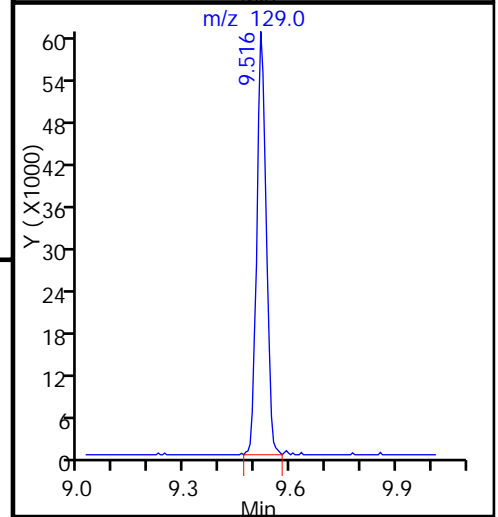
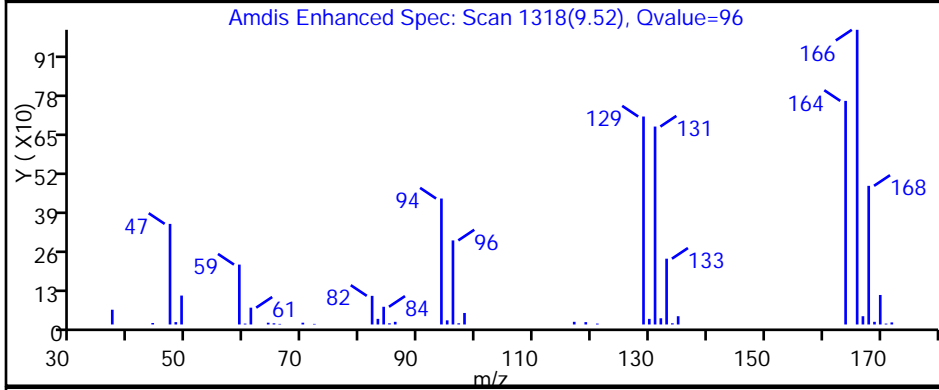
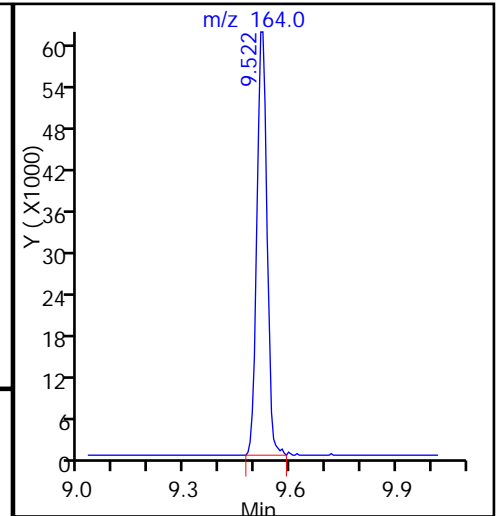
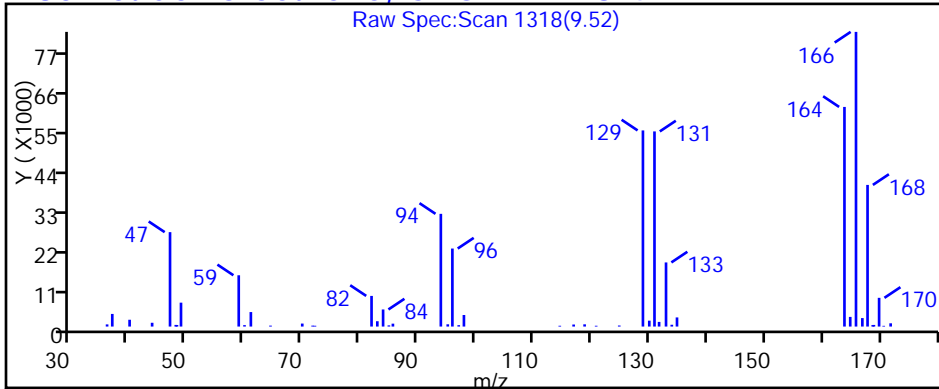
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-6-0/1-0 Lab Sample ID: 180-48564-7
 Matrix: Water Lab File ID: 51015009.D
 Analysis Method: 8260C Date Collected: 10/07/2015 07:35
 Sample wt/vol: 5 (mL) Date Analyzed: 10/15/2015 15:35
 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.: 157127 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 ^c	1.0	0.23
74-83-9	Bromomethane	1.0	U ^c	1.0	0.31
75-00-3	Chloroethane	1.0	U ^c	1.0	0.21
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.30
67-64-1	Acetone	5.0	U ^c	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	24	F1	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	7.5	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	40	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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-6-0/1-0 Lab Sample ID: 180-48564-7
 Matrix: Water Lab File ID: 51015009.D
 Analysis Method: 8260C Date Collected: 10/07/2015 07:35
 Sample wt/vol: 5 (mL) Date Analyzed: 10/15/2015 15:35
 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.: 157127 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 ^c	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		64-135
2037-26-5	Toluene-d8 (Surr)	104		71-118
460-00-4	4-Bromofluorobenzene (Surr)	88		70-118
1868-53-7	Dibromofluoromethane (Surr)	97		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015009.D
 Lims ID: 180-48564-A-7 Lab Sample ID: 180-48564-7
 Client ID: HD-CW-6-0/1-0
 Sample Type: Client
 Inject. Date: 15-Oct-2015 15:35:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-48564-A-7
 Misc. Info.: 180-0009022-009
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 15-Oct-2015 15:53:37 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK008

First Level Reviewer: fergusond

Date: 15-Oct-2015 15:53:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.268	4.273	-0.005	0	149704	1000.0	
* 2 Fluorobenzene (IS)	96	7.292	7.290	0.002	98	336873	50.0	
* 3 Chlorobenzene-d5	119	10.388	10.386	0.002	90	76547	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.736	12.729	0.007	96	97026	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.568	6.554	0.014	94	79916	48.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.933	6.931	0.002	0	112920	49.7	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.939	0.001	96	306194	51.9	
\$ 8 4-Bromofluorobenzene (Surr	95	11.574	11.573	0.001	89	97762	43.9	
11 Dichlorodifluoromethane	85		1.596				ND	
12 Chloromethane	50	1.774	1.772	0.002	29	2631	0.9415	
13 Vinyl chloride	62		1.912				ND	
14 Butadiene	39		1.943				ND	
15 Bromomethane	94		2.241				ND	
16 Chloroethane	64		2.399				ND	
17 Dichlorofluoromethane	67		2.667				ND	
18 Trichlorofluoromethane	101		2.703				ND	
19 Ethanol	45		2.954				ND	
20 Ethyl ether	59		3.038				ND	
21 Acrolein	56		3.220				ND	
22 1,1-Dichloroethene	96		3.330				ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.415				ND	
24 Acetone	43		3.439				ND	
25 Iodomethane	142		3.537				ND	
26 Carbon disulfide	76		3.640				ND	
27 Isopropyl alcohol	45		3.727				ND	
29 Acetonitrile	40		3.873				ND	
28 3-Chloro-1-propene	76		3.914				ND	
30 Methyl acetate	43		3.938				ND	
31 Methylene Chloride	84		4.139				ND	
32 2-Methyl-2-propanol	59		4.394				ND	
33 Acrylonitrile	53		4.522				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
34 trans-1,2-Dichloroethene	96		4.559				ND	
35 Methyl tert-butyl ether	73		4.577				ND	
36 Hexane	57		4.984				ND	
37 1,1-Dichloroethane	63		5.197				ND	
38 Vinyl acetate	43		5.246				ND	
39 2-Chloro-1,3-butadiene	53		5.302				ND	
41 Isopropyl ether	45		5.302				ND	
40 Isopropyl ether TIC	45		5.409				ND	
42 Tert-butyl ethyl ether	59		5.777				ND	
44 2,2-Dichloropropane	77		5.946				ND	
45 cis-1,2-Dichloroethene	96	5.953	5.946	0.007	83	255992	117.6	
46 2-Butanone (MEK)	43		5.952				ND	
43 Tert-butyl ethyl ether (TI	59		5.961				ND	
47 Propionitrile	54		6.032				ND	
48 Ethyl acetate	43		6.032				ND	
50 Methacrylonitrile	41		6.215				ND	
49 Chlorobromomethane	128		6.231				ND	
51 Tetrahydrofuran	42		6.250				ND	
52 Chloroform	83		6.377				ND	
53 1,1,1-Trichloroethane	97		6.536				ND	
54 Cyclohexane	56		6.609				ND	
56 Carbon tetrachloride	117		6.718				ND	
55 1,1-Dichloropropene	75		6.724				ND	
57 Isobutyl alcohol	41		6.925				ND	
58 Benzene	78		6.943				ND	
59 1,2-Dichloroethane	62		7.016				ND	
61 Tert-amyl methyl ether	73		7.128				ND	
60 Tert-amyl methyl ether (TI	73		7.262				ND	
62 n-Heptane	43		7.302				ND	
63 n-Butanol	56		7.639				ND	
64 Trichloroethene	130	7.681	7.673	0.008	95	76472	37.6	
65 Ethyl acrylate	55		7.803				ND	
66 Methylcyclohexane	83		7.917				ND	
67 1,2-Dichloropropane	63		7.947				ND	
70 1,4-Dioxane	88		8.026				ND	
68 Dibromomethane	93		8.032				ND	
69 Methyl methacrylate	69		8.034				ND	
71 Dichlorobromomethane	83		8.233				ND	
72 2-Nitropropane	41		8.454				ND	
73 2-Chloroethyl vinyl ether	63		8.531				ND	
74 cis-1,3-Dichloropropene	75		8.671				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.823				ND	
76 Toluene	91		9.006				ND	
77 trans-1,3-Dichloropropene	75		9.255				ND	
78 Ethyl methacrylate	69		9.310				ND	
79 1,1,2-Trichloroethane	97		9.444				ND	
80 Tetrachloroethene	164	9.518	9.517	0.001	96	293146	199.3	
81 1,3-Dichloropropane	76		9.602				ND	
82 2-Hexanone	43		9.663				ND	
83 n-Butyl acetate	43		9.780				ND	
84 Chlorodibromomethane	129		9.815				ND	
85 Ethylene Dibromide	107		9.930				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.393				ND	
87 Chlorobenzene	112		10.417				ND	
88 4-Chlorobenzotrifluoride	180		10.478				ND	
89 1,1,1,2-Tetrachloroethane	131		10.514				ND	
90 Ethylbenzene	106		10.520				ND	
91 m-Xylene & p-Xylene	106		10.654				ND	
92 o-Xylene	106		11.031				ND	
93 Styrene	104		11.050				ND	
94 Bromoform	173		11.232				ND	
95 Cyclohexanol	57		11.250				ND	
96 2-Chlorobenzotrifluoride	180		11.299				ND	
97 Isopropylbenzene	105		11.396				ND	
98 Cyclohexanone	55		11.483				ND	
99 1,1,2,2-Tetrachloroethane	83		11.707				ND	
100 Bromobenzene	156		11.707				ND	
102 trans-1,4-Dichloro-2-buten	53		11.743				ND	
101 1,2,3-Trichloropropane	110		11.767				ND	
103 N-Propylbenzene	120		11.816				ND	
104 2-Chlorotoluene	126		11.901				ND	
105 3-Chlorotoluene	126		11.968				ND	
106 1,3,5-Trimethylbenzene	105		11.999				ND	
107 4-Chlorotoluene	126		12.029				ND	
108 tert-Butylbenzene	119		12.309				ND	
109 Pentachloroethane	167		12.341				ND	
110 1,2,4-Trimethylbenzene	105		12.370				ND	
111 1,2-dichloro-4-(trifluorom	214		12.412				ND	
112 sec-Butylbenzene	105		12.534				ND	
113 1,3-Dichlorobenzene	146		12.650				ND	
114 4-Isopropyltoluene	119		12.692				ND	
115 1,4-Dichlorobenzene	146		12.753				ND	
117 1,2,3-Trimethylbenzene	105		12.779				ND	
116 2,4-Dichloro-1-(triflourom	214		12.783				ND	
118 2,5-Dichlorobenzotrifluori	214		12.820				ND	
119 Benzyl chloride	91		12.870				ND	
120 n-Butylbenzene	91		13.100				ND	
121 1,2-Dichlorobenzene	146		13.112				ND	
122 1,2-Dibromo-3-Chloropropan	75		13.903				ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.043				ND	
124 1,3,5-Trichlorobenzene	180		14.091				ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.469				ND	
126 1,2,4-Trichlorobenzene	180		14.724				ND	
127 Hexachlorobutadiene	225		14.876				ND	
128 Naphthalene	128		14.992				ND	
129 1,2,3-Trichlorobenzene	180		15.217				ND	
131 2,4,5-Trichlorotoluene	159		15.995				ND	
130 2,3,6-Trichlorotoluene	159		16.099				ND	
132 2-Methylnaphthalene	142		16.137				ND	
150 2,6-Dichlorotoluene	1		0.000				ND	
152 Formaldehyde TIC	1		0.000				ND	
149 3,4-Dichlorotoluene	1		0.000				ND	
151 Isooctane	57		0.000				ND	
146 2,5-Dichlorotoluene	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
147 2,4-Dichlorotoluene	1		0.000				ND	
148 2,3-Dichlorotoluene	1		0.000				ND	
S 133 Xylenes, Total	106		1.000				ND	
S 134 1,2-Dichloroethene, Total	96				0		117.6	
S 135 1,3-Dichloropropene, Total	1		0.000				ND	
T 136 Mesityl oxide TIC	83		0.000				ND	
T 138 Methyl n-amyl ketone TIC	43		0.000				ND	
T 137 Tetrahydrofuran TIC	42		6.253				ND	
T 153 1,2 Epoxybutane TIC	42		6.253				ND	

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015009.D

Injection Date: 15-Oct-2015 15:35:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48564-A-7

Lab Sample ID: 180-48564-7

Worklist Smp#: 9

Client ID: HD-CW-6-0/1-0

Purge Vol: 5.000 mL

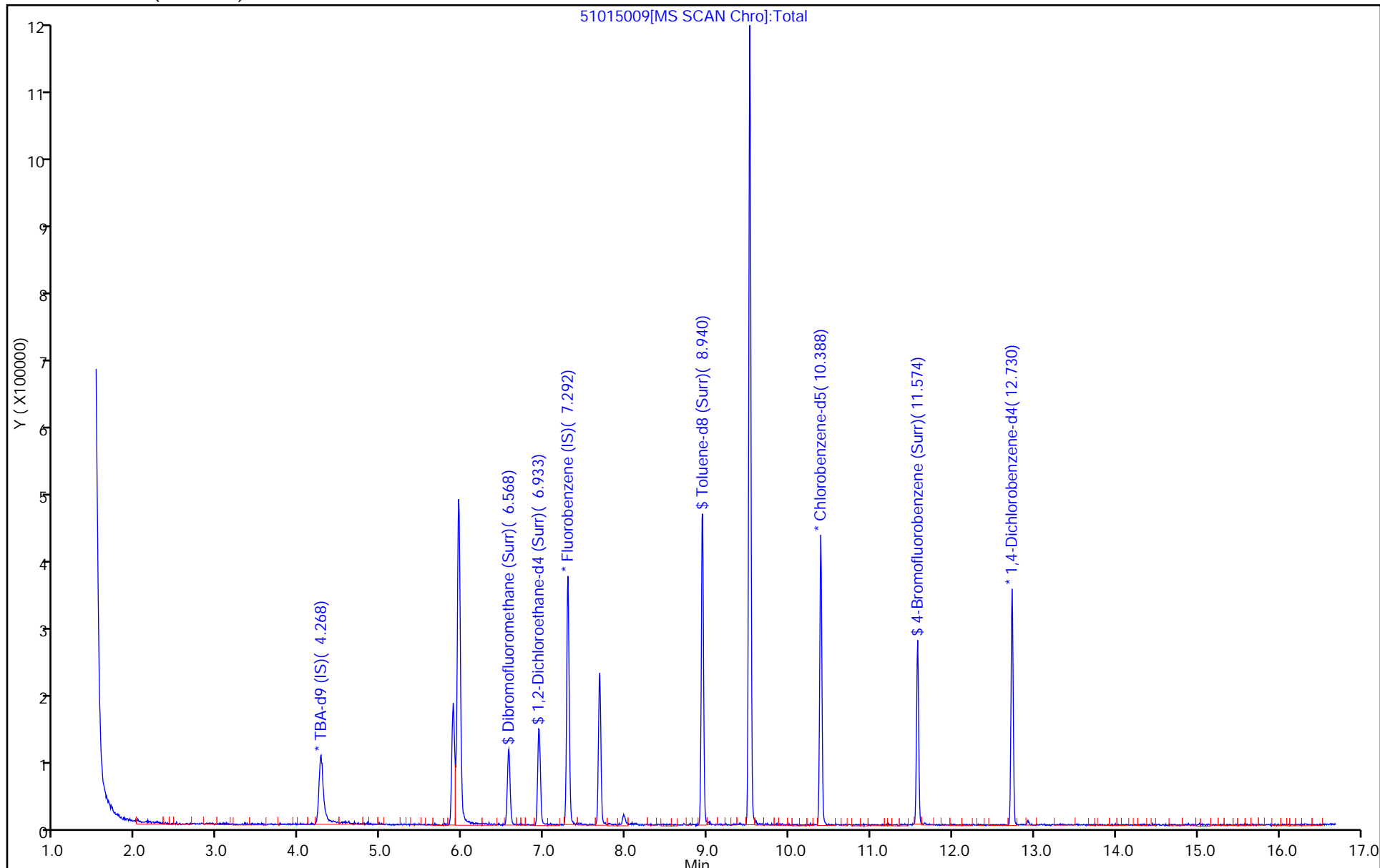
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015009.D

Injection Date: 15-Oct-2015 15:35:30

Instrument ID: CHHP5

Lims ID: 180-48564-A-7

Lab Sample ID: 180-48564-7

Client ID: HD-CW-6-0/1-0

Operator ID: 001562

ALS Bottle#: 8

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

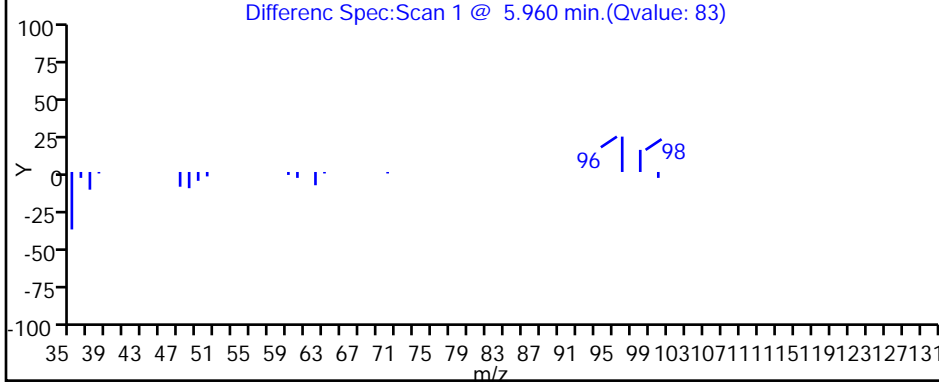
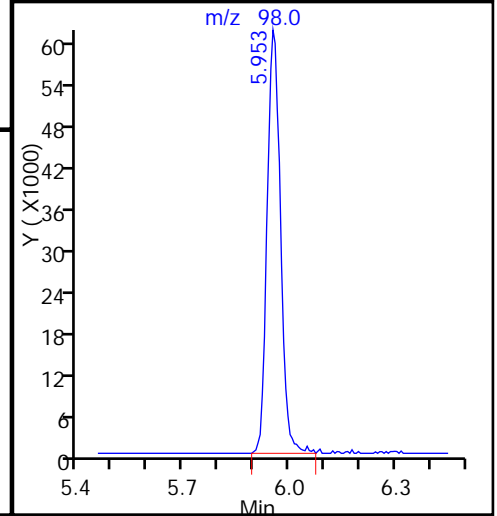
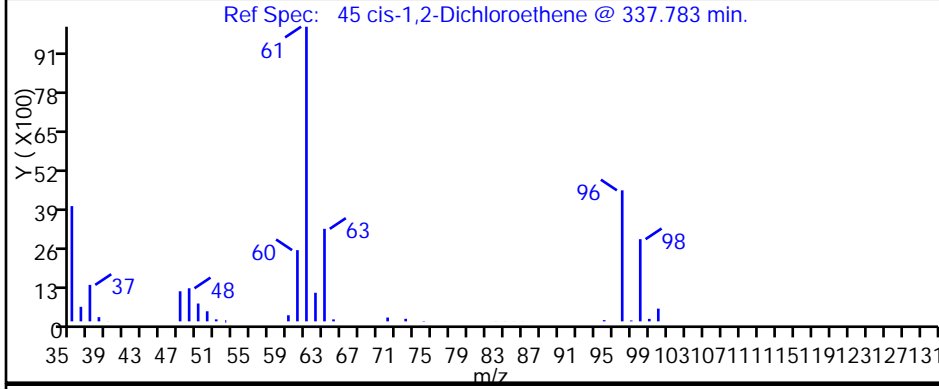
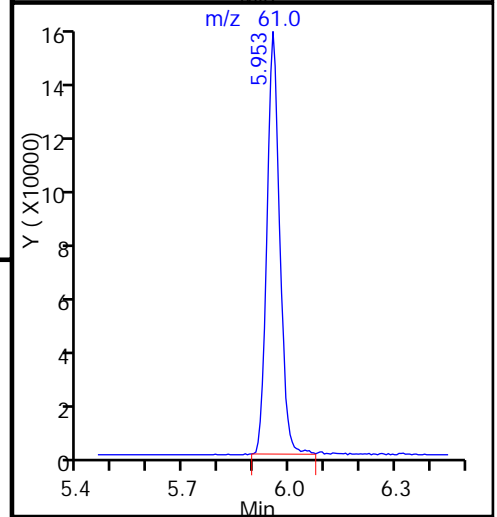
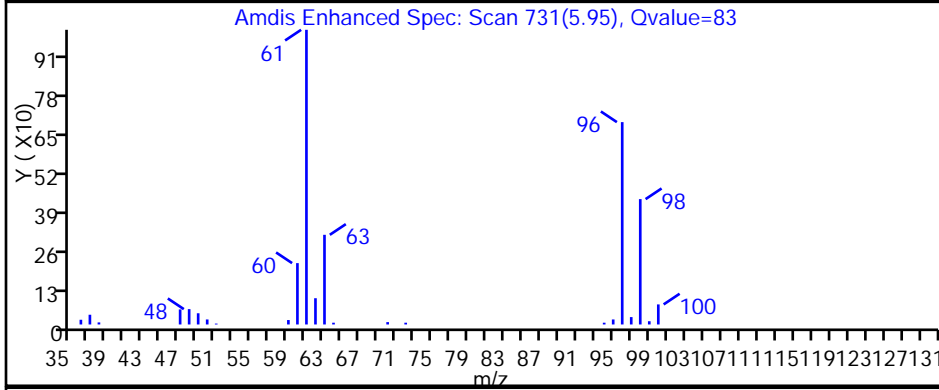
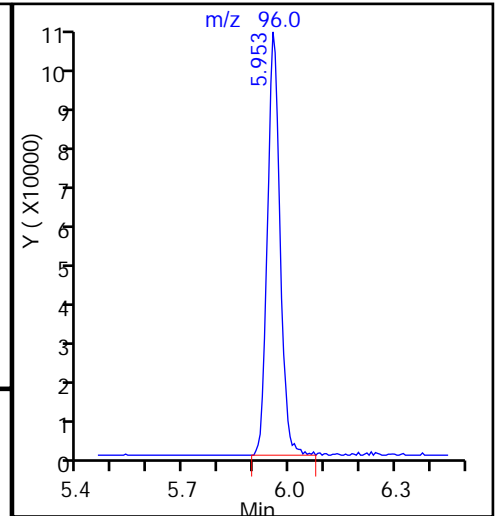
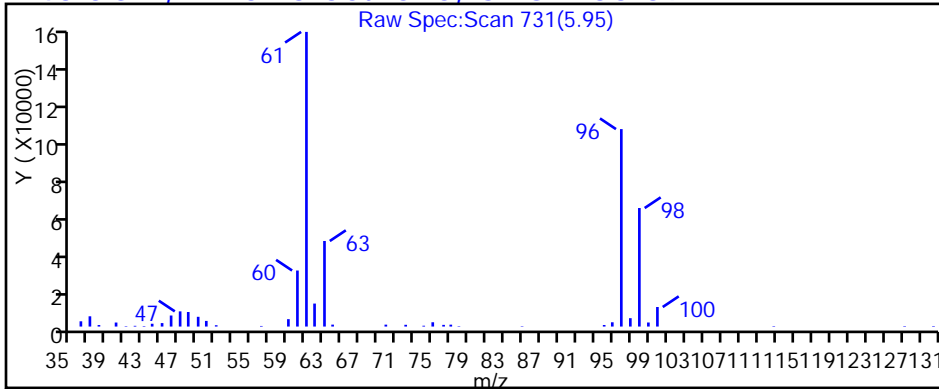
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015009.D

Injection Date: 15-Oct-2015 15:35:30

Instrument ID: CHHP5

Lims ID: 180-48564-A-7

Lab Sample ID: 180-48564-7

Client ID: HD-CW-6-0/1-0

Operator ID: 001562

ALS Bottle#: 8

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

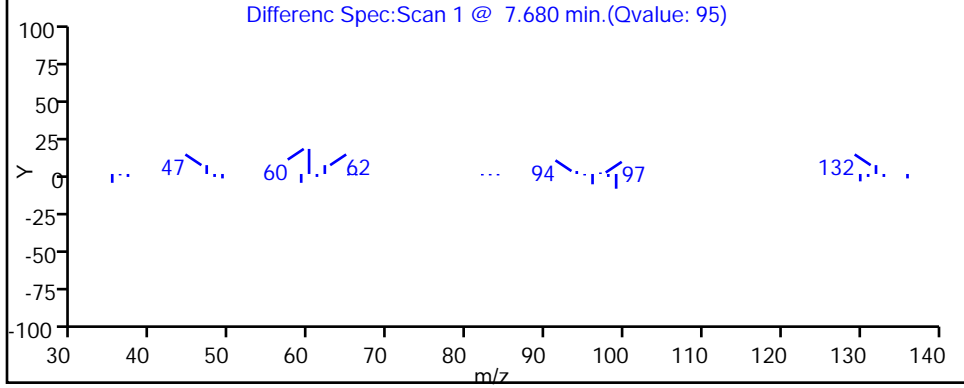
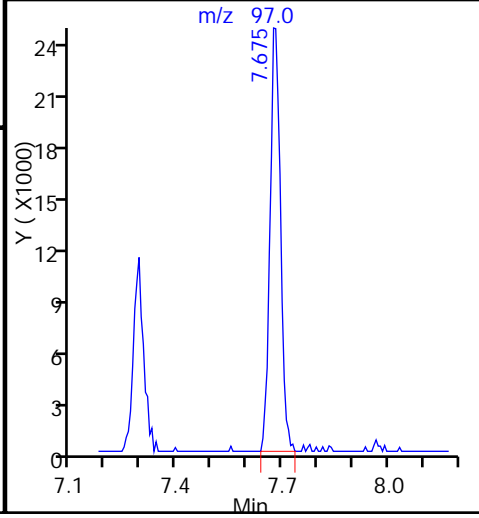
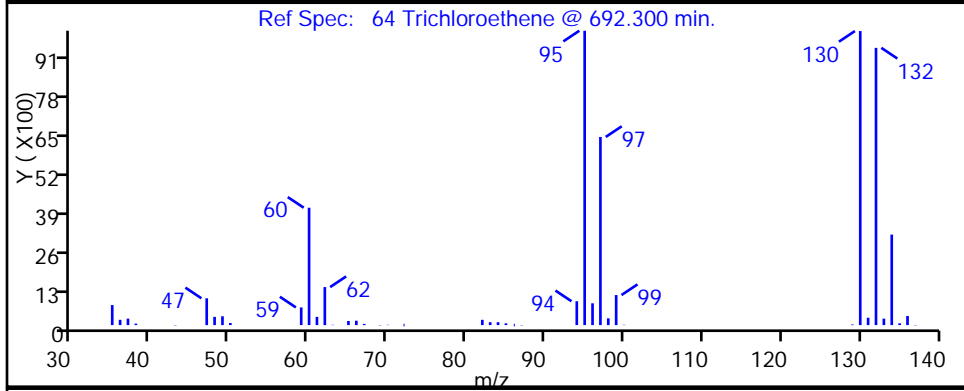
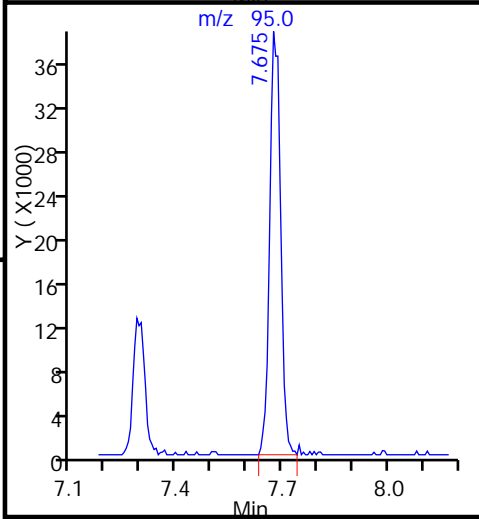
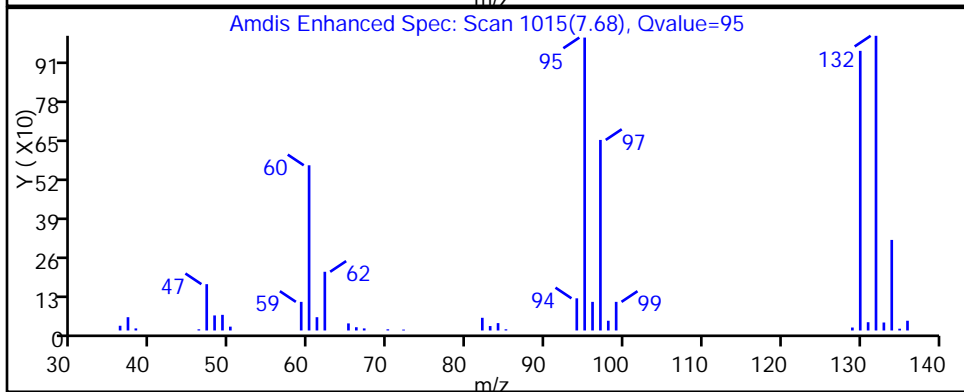
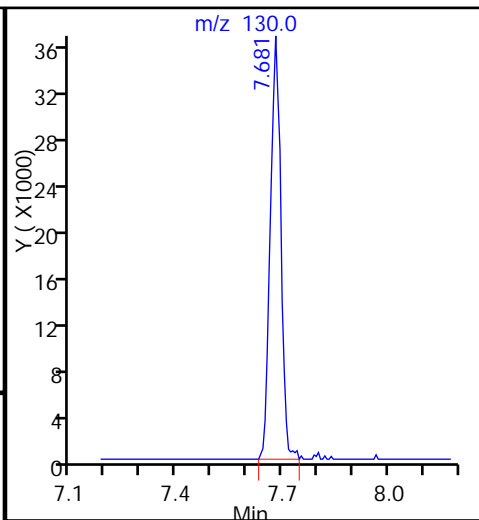
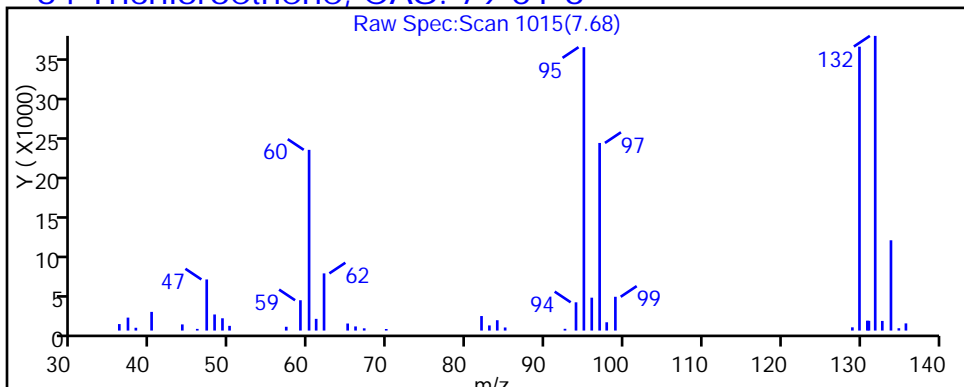
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015009.D

Injection Date: 15-Oct-2015 15:35:30

Instrument ID: CHHP5

Lims ID: 180-48564-A-7

Lab Sample ID: 180-48564-7

Client ID: HD-CW-6-0/1-0

Operator ID: 001562

ALS Bottle#: 8

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

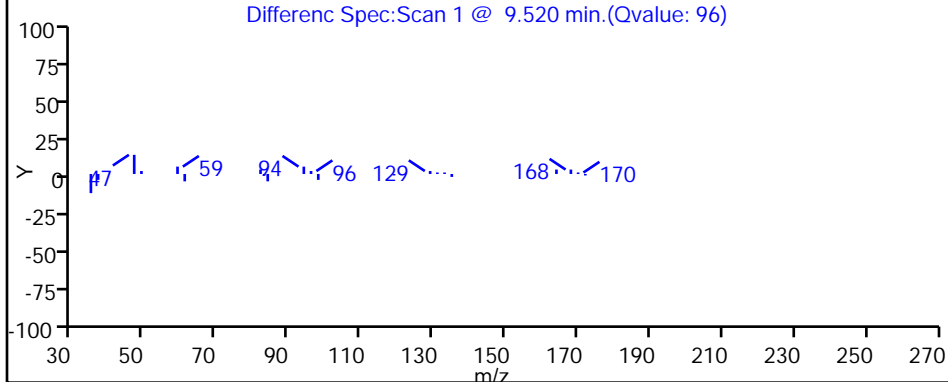
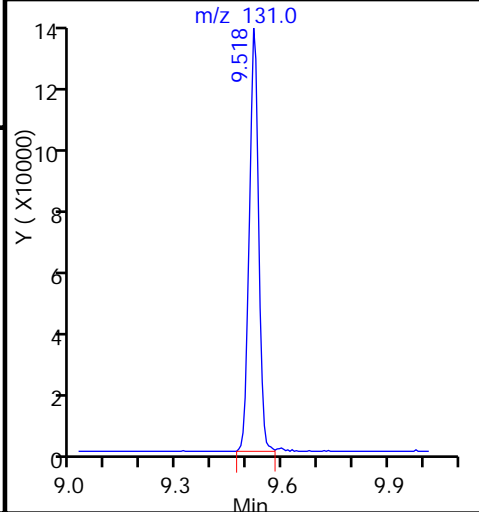
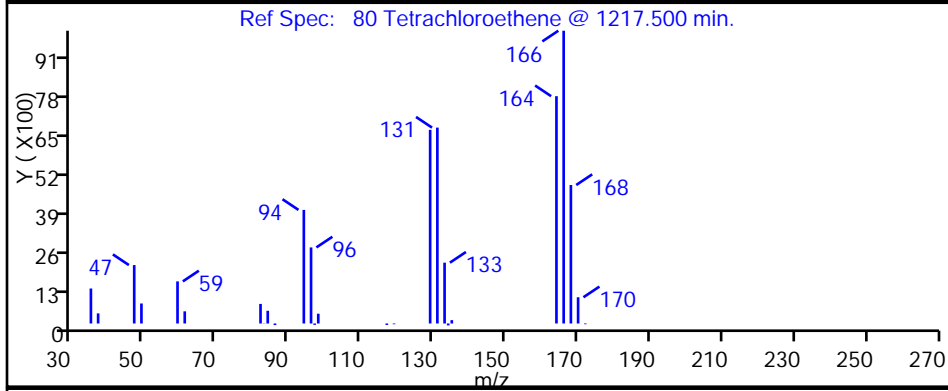
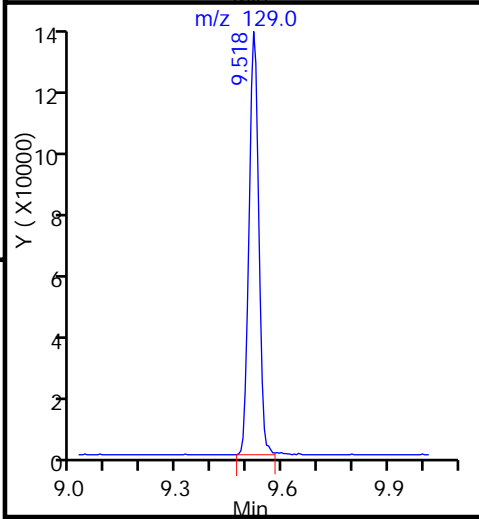
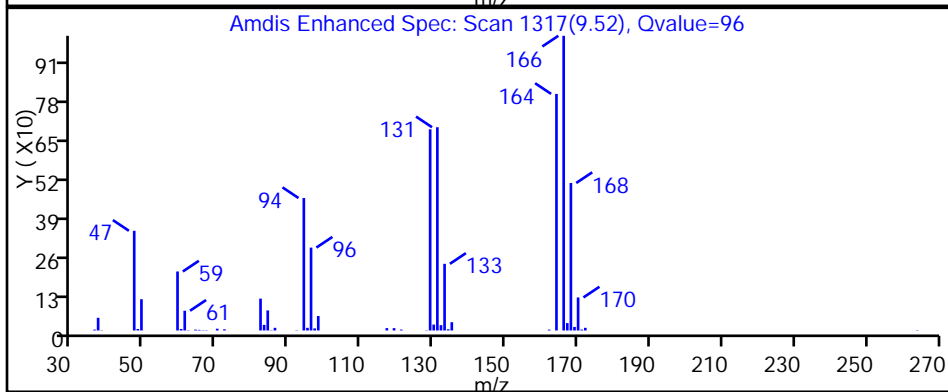
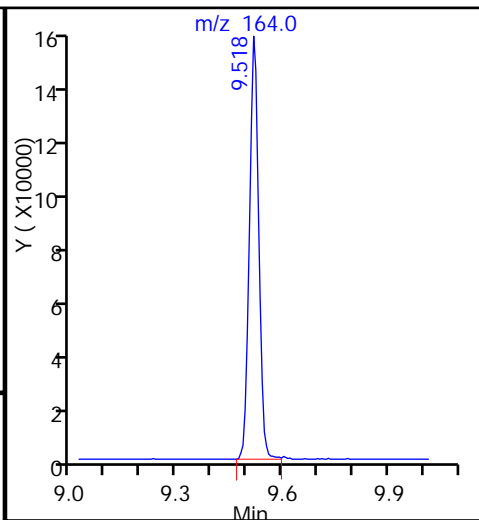
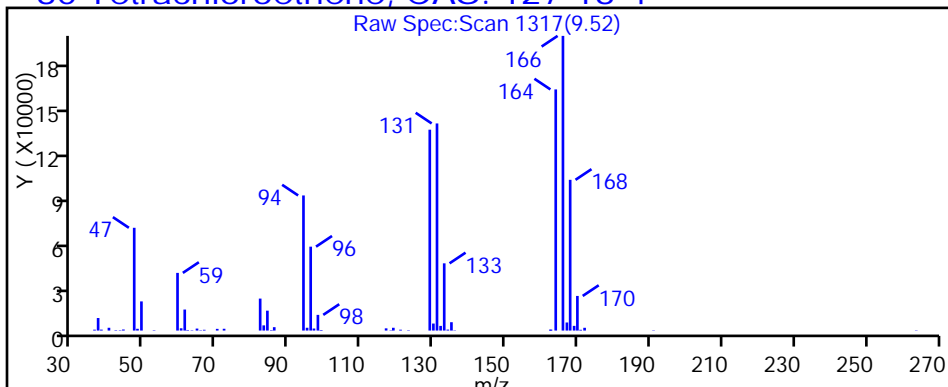
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-7-0/1-0 Lab Sample ID: 180-48564-8
 Matrix: Water Lab File ID: 51019011.D
 Analysis Method: 8260C Date Collected: 10/07/2015 07:30
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2015 14:17
 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.: 157435 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	0.28	J	1.0	0.28
75-01-4	Vinyl chloride	1.0	U ^c	1.0	0.23
74-83-9	Bromomethane	1.0	U ^c	1.0	0.31
75-00-3	Chloroethane	1.0	U ^c	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	0.83	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	0.76	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		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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-7-0/1-0 Lab Sample ID: 180-48564-8
 Matrix: Water Lab File ID: 51019011.D
 Analysis Method: 8260C Date Collected: 10/07/2015 07:30
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2015 14:17
 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.: 157435 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)	104		71-118
460-00-4	4-Bromofluorobenzene (Surr)	94		70-118
1868-53-7	Dibromofluoromethane (Surr)	104		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019011.D
 Lims ID: 180-48564-A-8 Lab Sample ID: 180-48564-8
 Client ID: HD-CW-7-0/1-0
 Sample Type: Client
 Inject. Date: 19-Oct-2015 14:17:30 ALS Bottle#: 11 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-48564-A-8
 Misc. Info.: 180-0009083-011
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 19-Oct-2015 14:30:03 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK002

First Level Reviewer: fergusond

Date: 19-Oct-2015 14:30:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.262	4.273	-0.011	0	233954	1000.0	s
* 2 Fluorobenzene (IS)	96	7.291	7.284	0.007	97	312589	50.0	
* 3 Chlorobenzene-d5	119	10.388	10.387	0.001	93	70539	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.730	12.729	0.001	96	104614	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.567	6.554	0.013	93	80015	52.1	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.932	6.931	0.001	0	121546	57.6	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.939	0.001	95	282860	52.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.574	11.573	0.001	88	96828	47.2	
12 Chloromethane	50	1.762	1.766	-0.004	1	3628	1.40	M
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.253				ND	
16 Chloroethane	64		2.387				ND	
22 1,1-Dichloroethene	96		3.354				ND	
24 Acetone	43	3.453	3.433	0.020	66	5841	9.26	
26 Carbon disulfide	76		3.634				ND	
31 Methylene Chloride	84		4.145				ND	
33 Acrylonitrile	53		4.522				ND	
34 trans-1,2-Dichloroethene	96		4.571				ND	
35 Methyl tert-butyl ether	73	4.603	4.583	0.019	11	2099	0.4797	M
37 1,1-Dichloroethane	63		5.204				ND	
45 cis-1,2-Dichloroethene	96		5.946				ND	
46 2-Butanone (MEK)	43		5.958				ND	
49 Chlorobromomethane	128		6.232				ND	
52 Chloroform	83	6.379	6.384	-0.005	92	13348	4.15	
53 1,1,1-Trichloroethane	97		6.548				ND	
56 Carbon tetrachloride	117		6.718				ND	
58 Benzene	78		6.943				ND	
59 1,2-Dichloroethane	62		7.023				ND	
64 Trichloroethene	130	7.681	7.680	0.001	95	7182	3.81	
67 1,2-Dichloropropane	63		7.947				ND	
70 1,4-Dioxane	88		8.020				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.227				ND	
74 cis-1,3-Dichloropropene	75		8.671				ND	
75 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
76 Toluene	91		9.006				ND	
77 trans-1,3-Dichloropropene	75		9.255				ND	
79 1,1,2-Trichloroethane	97		9.444				ND	
80 Tetrachloroethene	164	9.518	9.517	0.001	90	6880	5.08	
82 2-Hexanone	43		9.657				ND	
84 Chlorodibromomethane	129		9.821				ND	
85 Ethylene Dibromide	107		9.930				ND	
87 Chlorobenzene	112		10.417				ND	
90 Ethylbenzene	106		10.514				ND	
89 1,1,1,2-Tetrachloroethane	131		10.514				ND	
91 m-Xylene & p-Xylene	106		10.648				ND	
92 o-Xylene	106		11.032				ND	
93 Styrene	104		11.050				ND	
94 Bromoform	173		11.232				ND	
99 1,1,2,2-Tetrachloroethane	83		11.713				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019011.D

Injection Date: 19-Oct-2015 14:17:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48564-A-8

Lab Sample ID: 180-48564-8

Worklist Smp#: 11

Client ID: HD-CW-7-0/1-0

Purge Vol: 5.000 mL

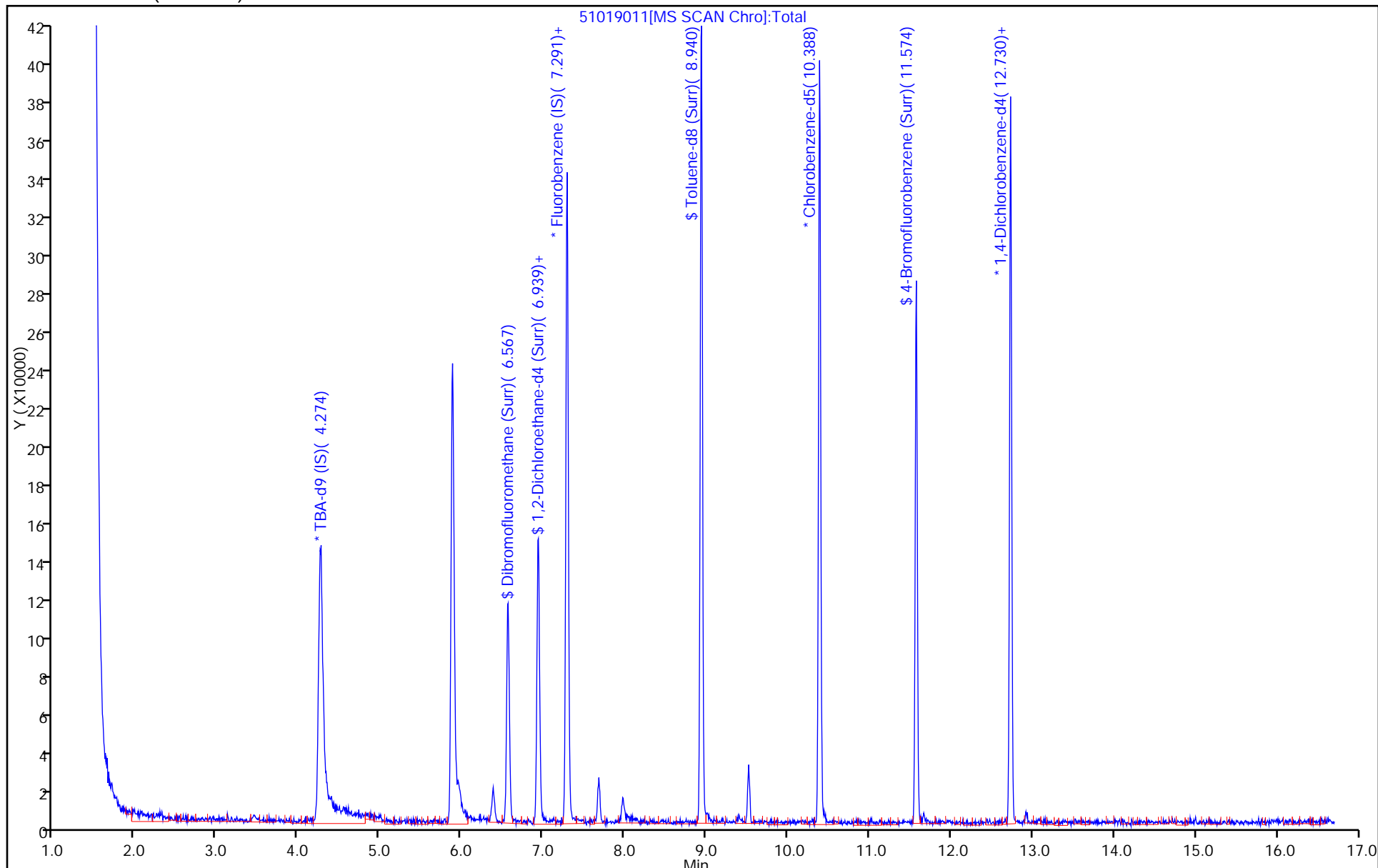
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019011.D

Injection Date: 19-Oct-2015 14:17:30

Instrument ID: CHHP5

Lims ID: 180-48564-A-8

Lab Sample ID: 180-48564-8

Client ID: HD-CW-7-0/1-0

Operator ID: 001562

ALS Bottle#: 11

Worklist Smp#: 11

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

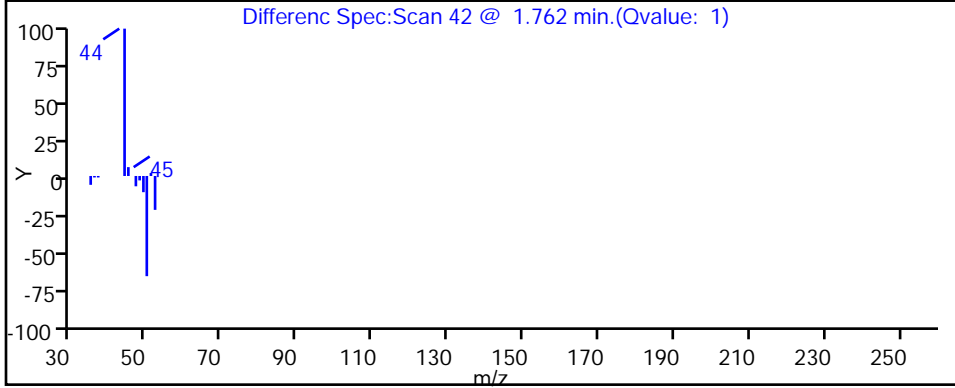
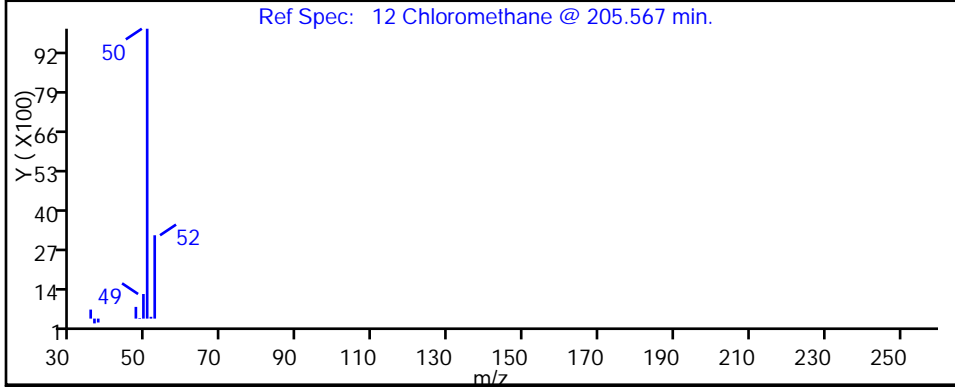
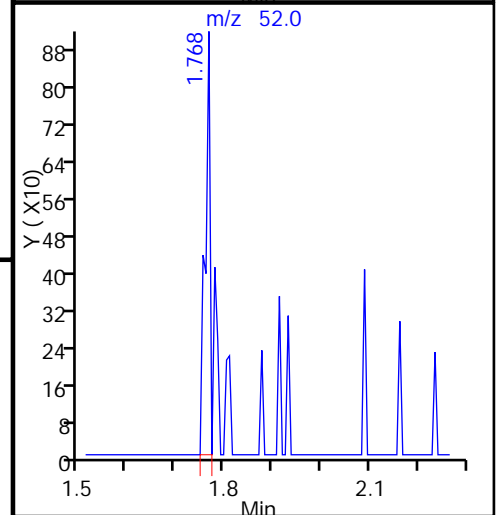
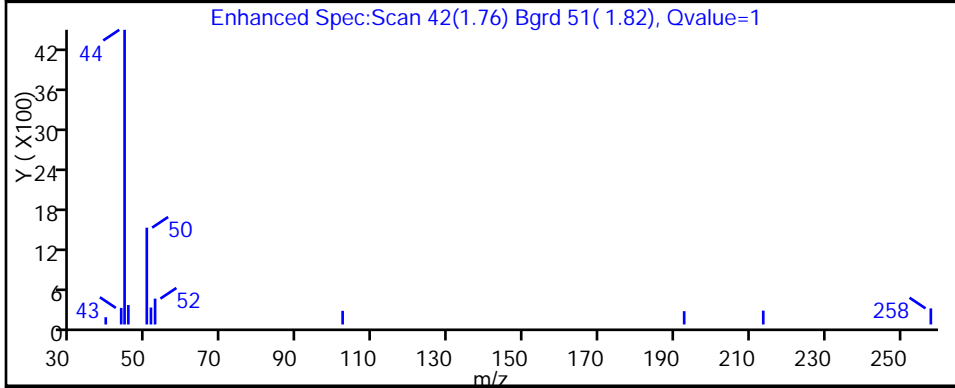
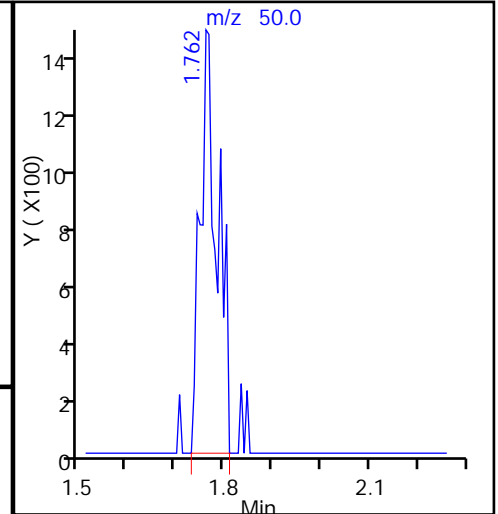
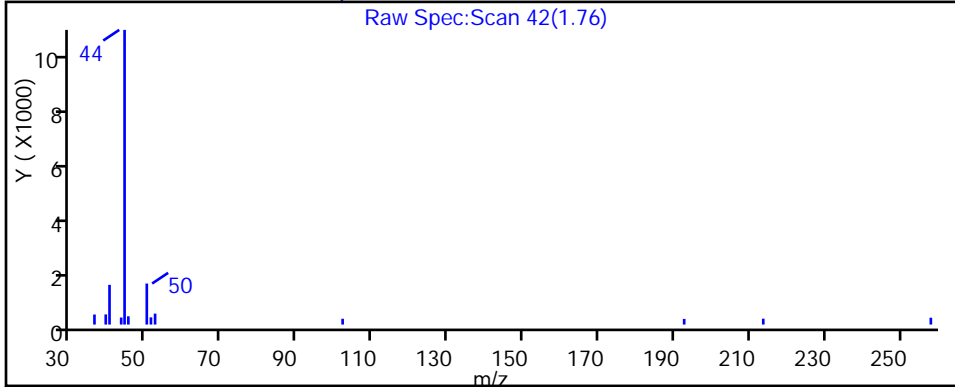
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

12 Chloromethane, CAS: 74-87-3



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019011.D

Injection Date: 19-Oct-2015 14:17:30

Instrument ID: CHHP5

Lims ID: 180-48564-A-8

Lab Sample ID: 180-48564-8

Client ID: HD-CW-7-0/1-0

Operator ID: 001562

ALS Bottle#: 11

Worklist Smp#: 11

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

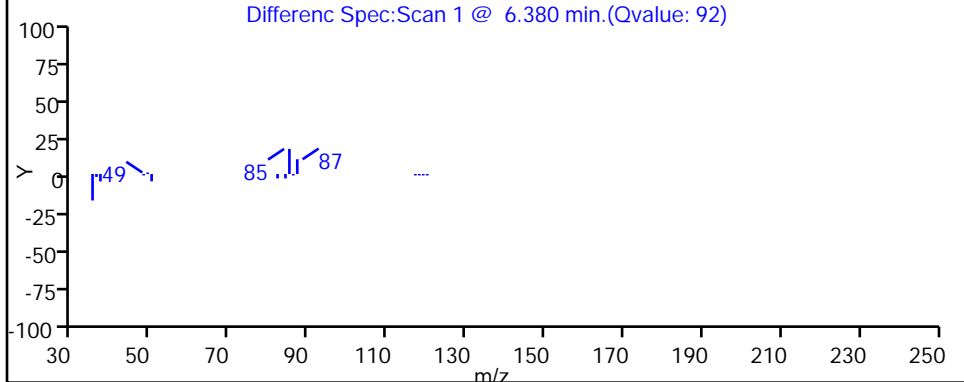
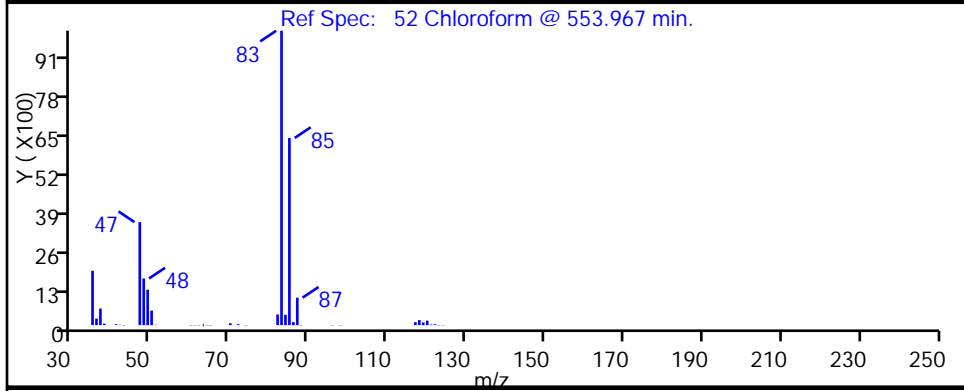
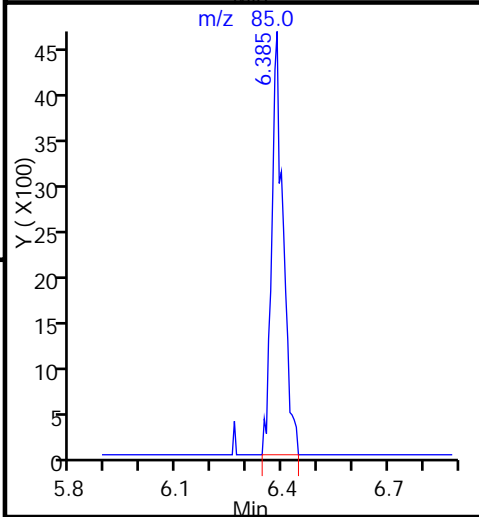
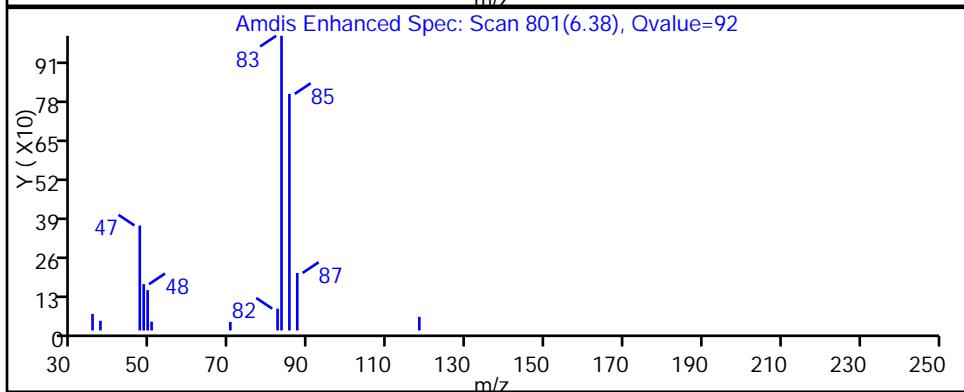
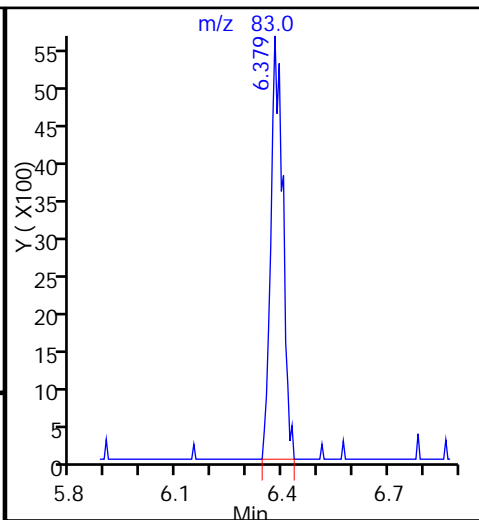
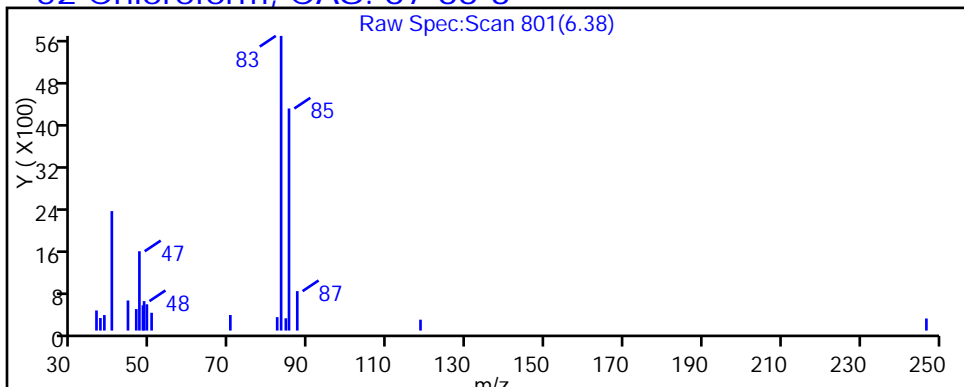
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

52 Chloroform, CAS: 67-66-3



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019011.D

Injection Date: 19-Oct-2015 14:17:30

Instrument ID: CHHP5

Lims ID: 180-48564-A-8

Lab Sample ID: 180-48564-8

Client ID: HD-CW-7-0/1-0

Operator ID: 001562

ALS Bottle#: 11

Worklist Smp#: 11

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

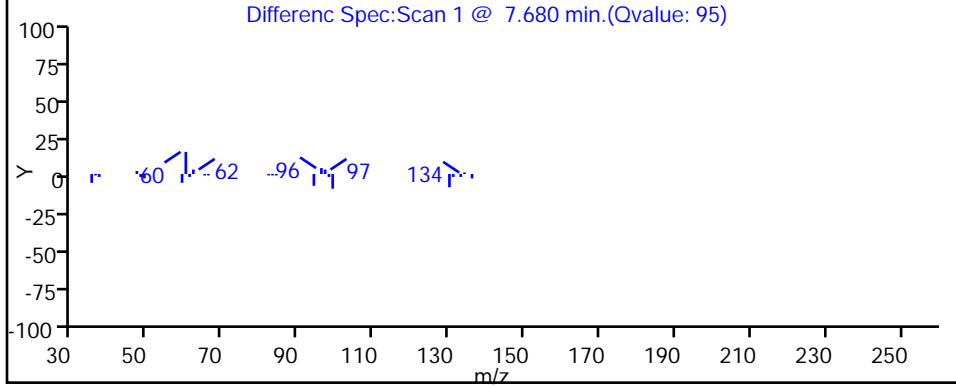
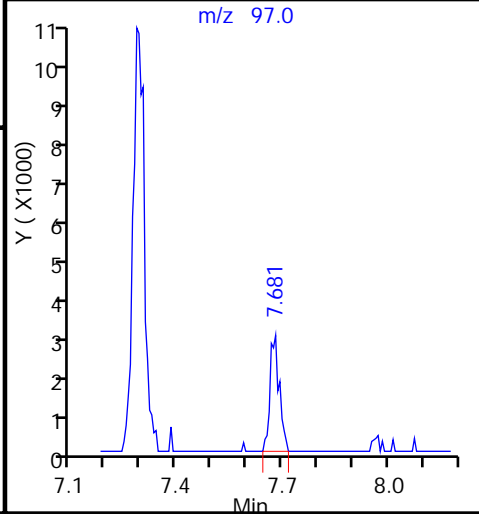
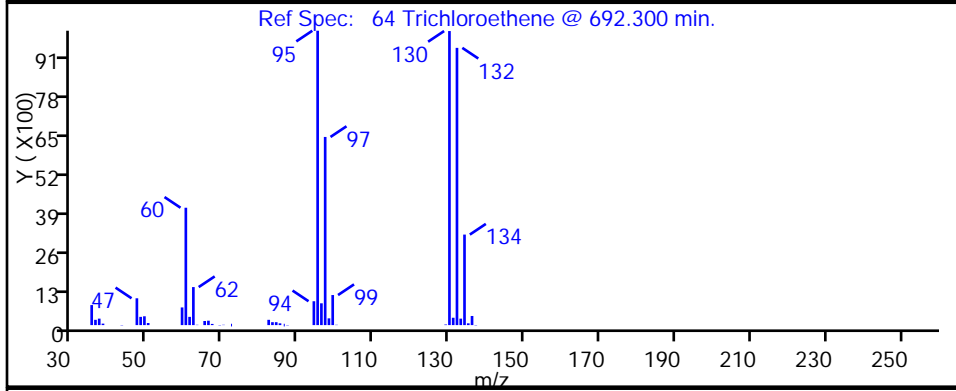
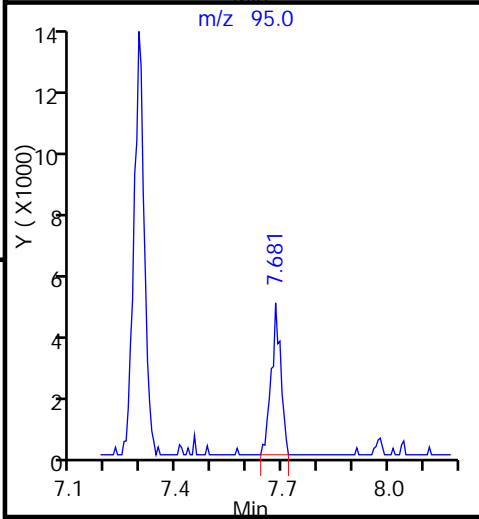
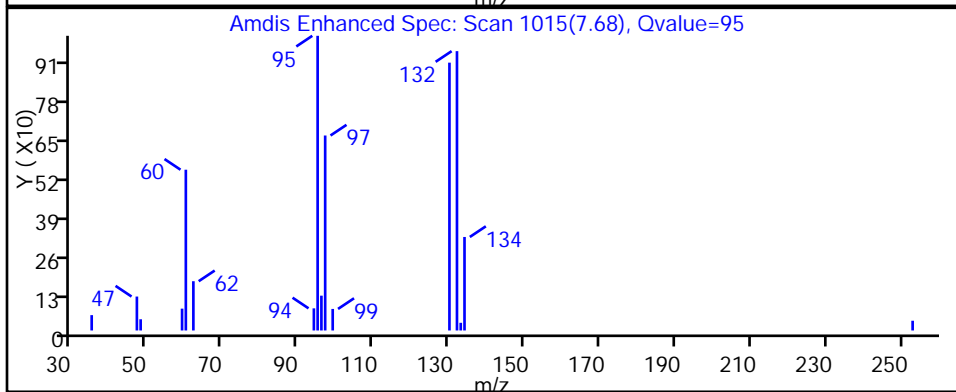
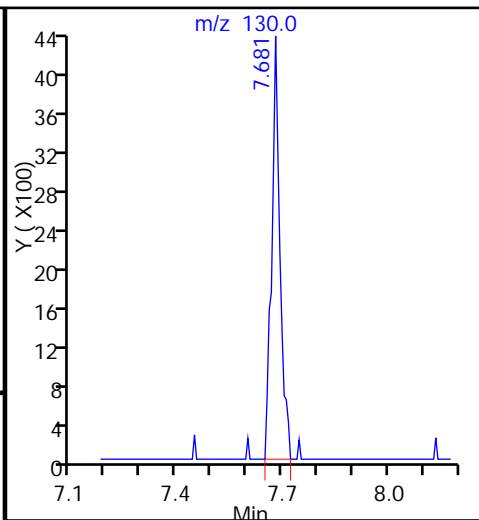
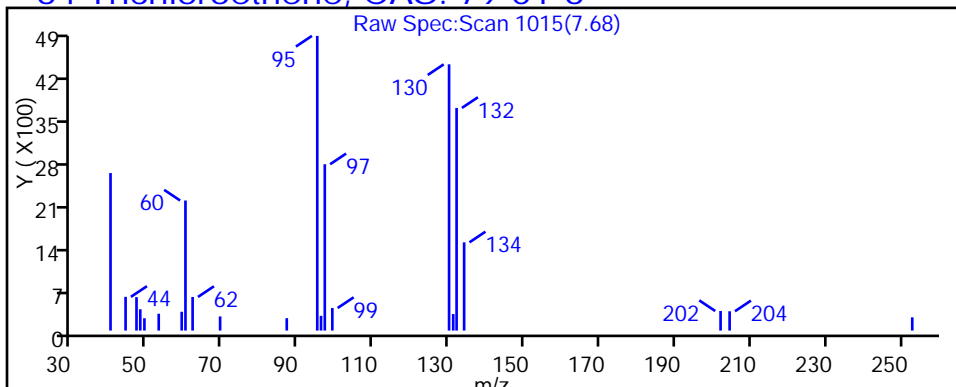
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019011.D

Injection Date: 19-Oct-2015 14:17:30

Instrument ID: CHHP5

Lims ID: 180-48564-A-8

Lab Sample ID: 180-48564-8

Client ID: HD-CW-7-0/1-0

Operator ID: 001562

ALS Bottle#: 11 Worklist Smp#: 11

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

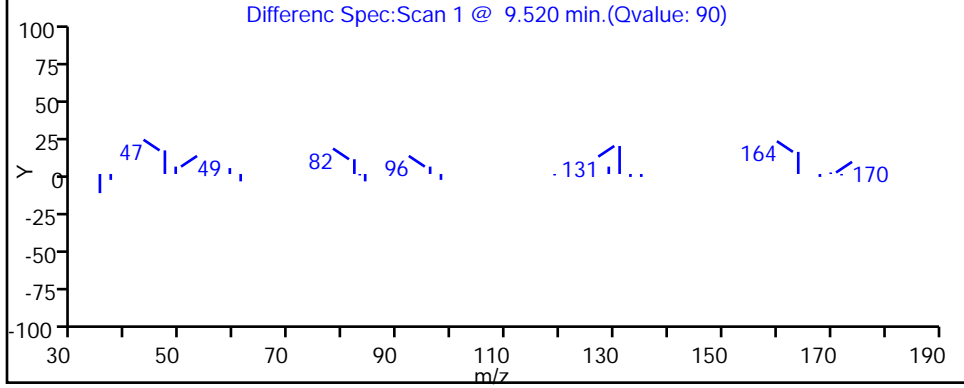
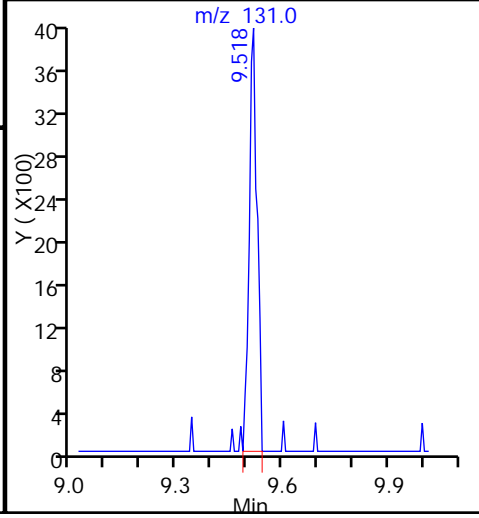
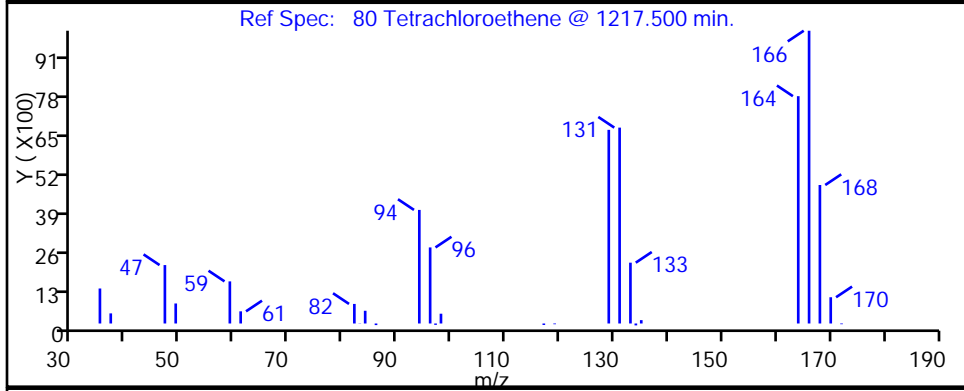
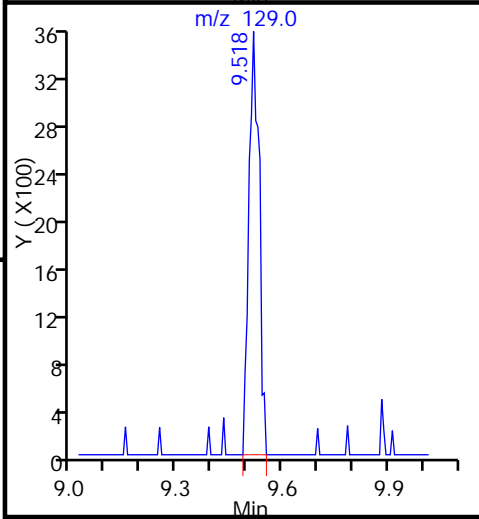
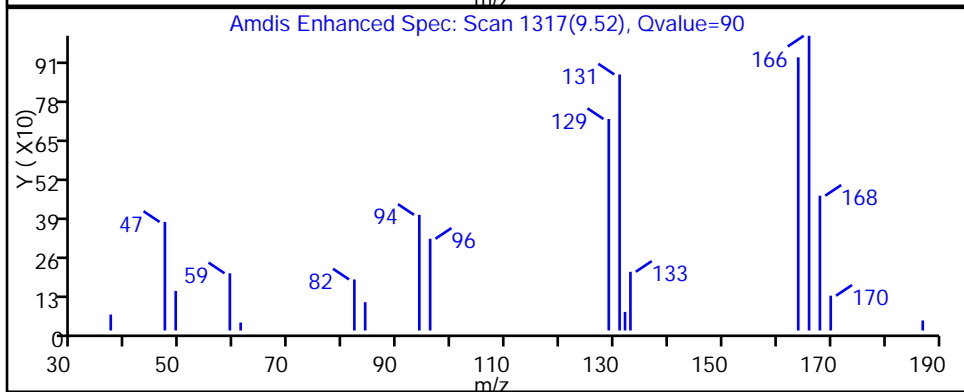
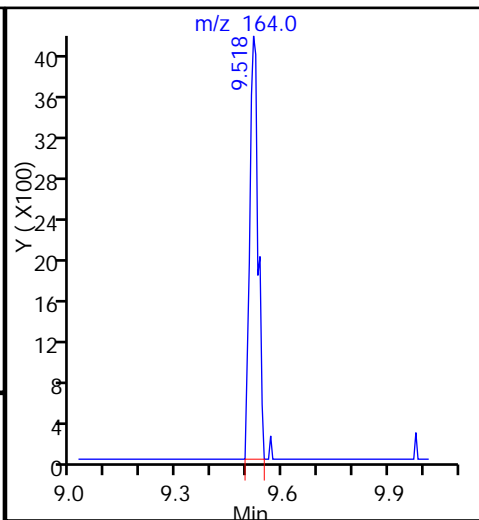
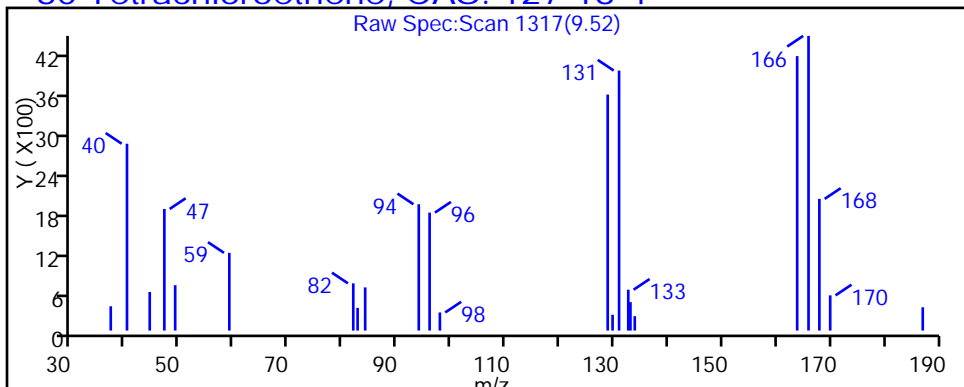
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4



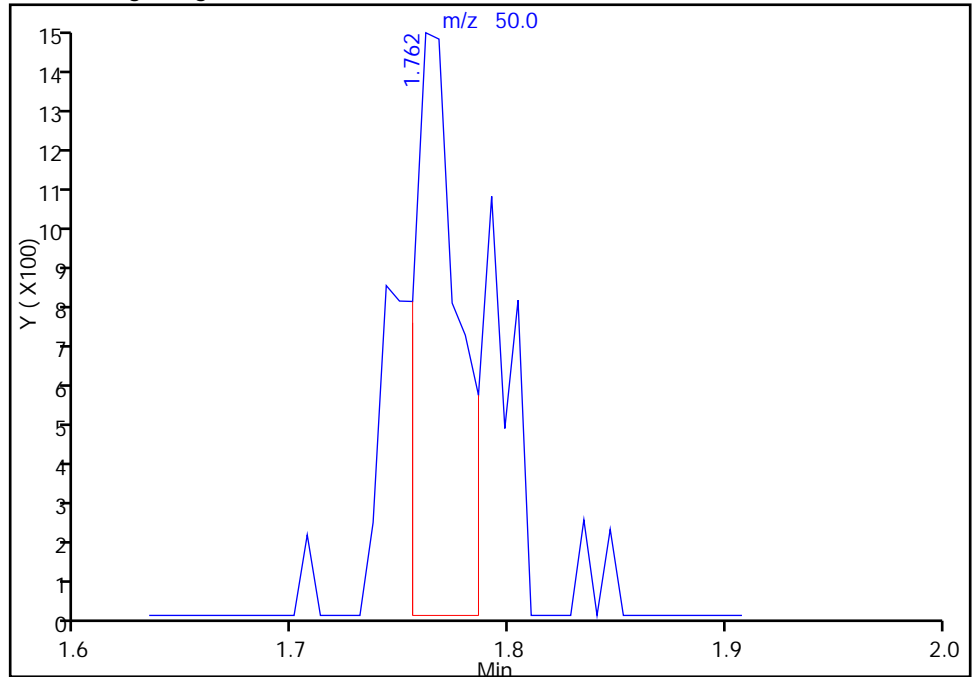
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019011.D
Injection Date: 19-Oct-2015 14:17:30 Instrument ID: CHHP5
Lims ID: 180-48564-A-8 Lab Sample ID: 180-48564-8
Client ID: HD-CW-7-0/1-0
Operator ID: 001562 ALS Bottle#: 11 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

12 Chloromethane, CAS: 74-87-3

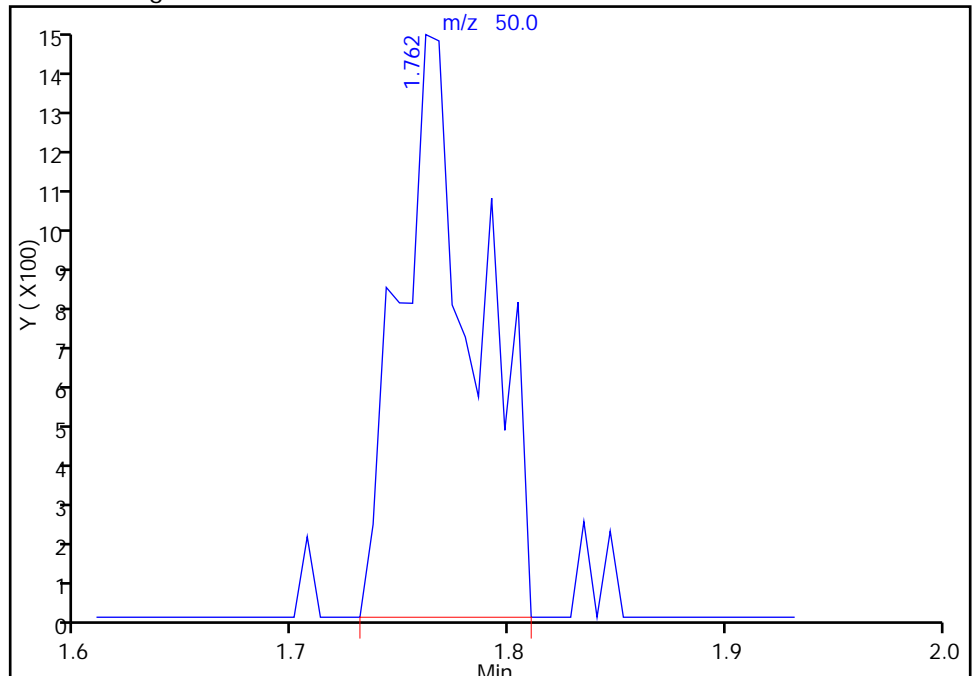
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Area: 2102
Amount: 0.810644
Amount Units: ng

Processing Integration Results



RT: 1.76
Area: 3628
Amount: 1.399152
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 19-Oct-2015 14:30:03
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

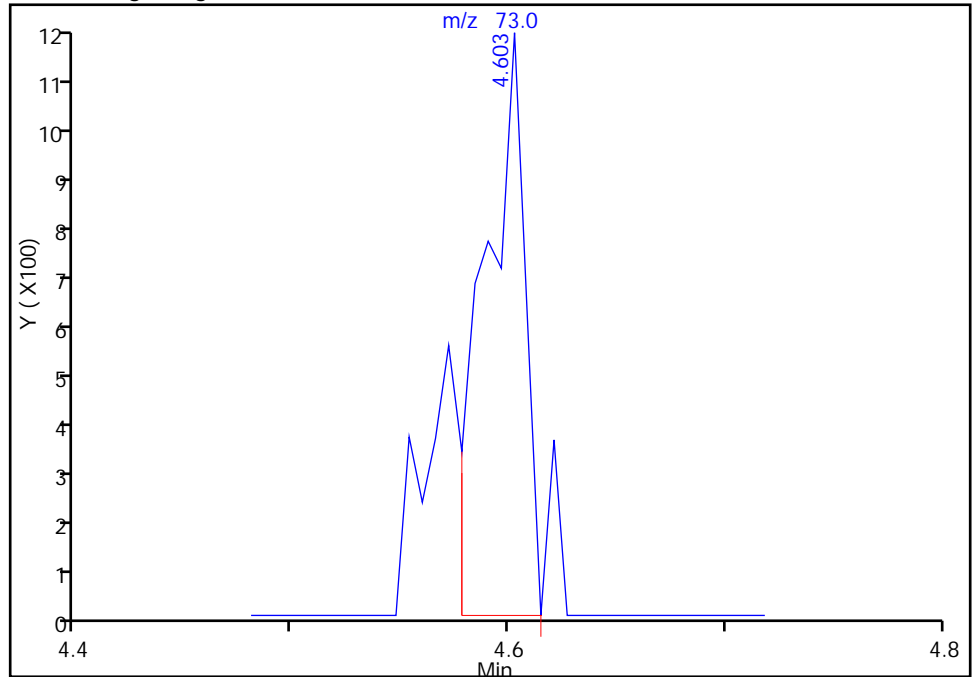
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019011.D
Injection Date: 19-Oct-2015 14:17:30 Instrument ID: CHHP5
Lims ID: 180-48564-A-8 Lab Sample ID: 180-48564-8
Client ID: HD-CW-7-0/1-0
Operator ID: 001562 ALS Bottle#: 11 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

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

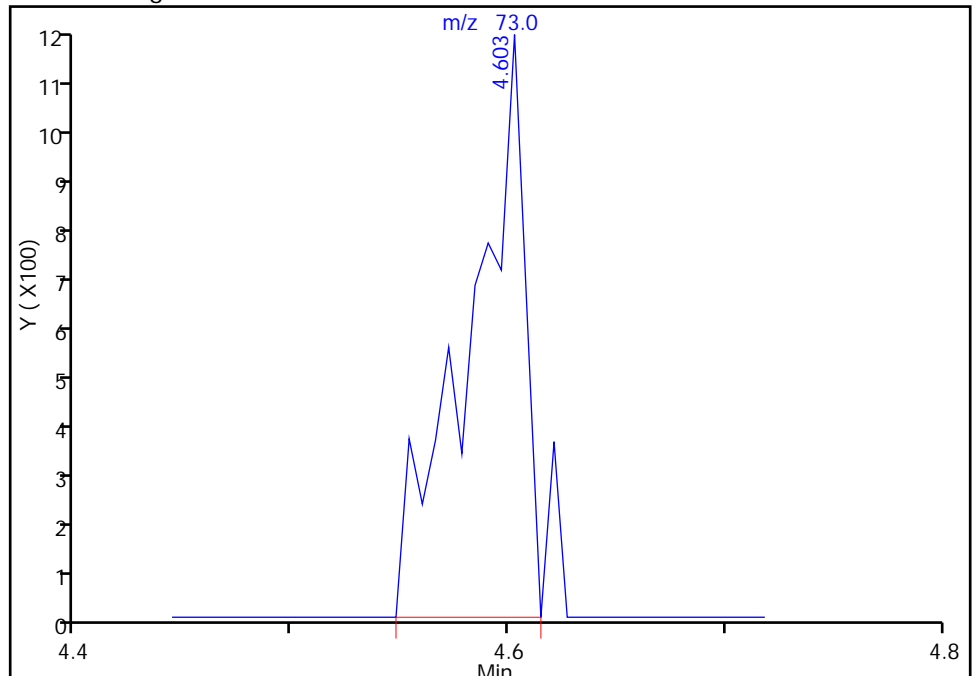
RT: 4.60
Area: 1551
Amount: 0.354482
Amount Units: ng

Processing Integration Results



RT: 4.60
Area: 2099
Amount: 0.479728
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 19-Oct-2015 14:30:03
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-7A-0/1-0 Lab Sample ID: 180-48564-9
 Matrix: Water Lab File ID: 51019027.D
 Analysis Method: 8260C Date Collected: 10/06/2015 07:50
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2015 20:43
 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.: 157435 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 ^c	1.0	0.23
74-83-9	Bromomethane	1.0	U ^c	1.0	0.31
75-00-3	Chloroethane	1.0	U ^c	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	2.0		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	1.4		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	140	E	1.0	0.14
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.095
75-27-4	Bromodichloromethane	1.0	U	1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53
108-88-3	Toluene	1.0	U	1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.15
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
127-18-4	Tetrachloroethene	8.6		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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-7A-0/1-0 Lab Sample ID: 180-48564-9
 Matrix: Water Lab File ID: 51019027.D
 Analysis Method: 8260C Date Collected: 10/06/2015 07:50
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2015 20:43
 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.: 157435 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)	99		71-118
460-00-4	4-Bromofluorobenzene (Surr)	90		70-118
1868-53-7	Dibromofluoromethane (Surr)	105		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019027.D
 Lims ID: 180-48564-B-9 Lab Sample ID: 180-48564-9
 Client ID: HD-CW-7A-0/1-0
 Sample Type: Client
 Inject. Date: 19-Oct-2015 20:43:30 ALS Bottle#: 27 Worklist Smp#: 27
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-48564-B-9
 Misc. Info.: 180-0009083-027
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 20-Oct-2015 08:30:44 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: fergusond

Date: 20-Oct-2015 08:30:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.266	4.273	-0.007	0	108242	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.284	0.006	97	271745	50.0	
* 3 Chlorobenzene-d5	119	10.386	10.387	-0.001	92	62207	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.729	12.729	0.000	97	91871	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.566	6.554	0.012	91	70209	52.6	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	0	111860	61.0	
\$ 7 Toluene-d8 (Surr)	98	8.939	8.939	0.000	94	238282	49.7	
\$ 8 4-Bromofluorobenzene (Surr	95	11.573	11.573	0.000	87	81589	45.1	
12 Chloromethane	50		1.766				ND	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.253				ND	
16 Chloroethane	64		2.387				ND	
22 1,1-Dichloroethene	96		3.354				ND	
24 Acetone	43	3.445	3.433	0.012	57	2261	4.12	M
26 Carbon disulfide	76		3.634				ND	
31 Methylene Chloride	84		4.145				ND	
33 Acrylonitrile	53		4.522				ND	
34 trans-1,2-Dichloroethene	96		4.571				ND	
35 Methyl tert-butyl ether	73		4.583				ND	
37 1,1-Dichloroethane	63		5.204				ND	
45 cis-1,2-Dichloroethene	96	5.952	5.946	0.006	80	17740	10.1	
46 2-Butanone (MEK)	43		5.958				ND	
49 Chlorobromomethane	128		6.232				ND	
52 Chloroform	83	6.384	6.384	0.000	94	20063	7.17	
53 1,1,1-Trichloroethane	97		6.548				ND	
56 Carbon tetrachloride	117		6.718				ND	
58 Benzene	78		6.943				ND	
59 1,2-Dichloroethane	62		7.023				ND	
64 Trichloroethene	130	7.679	7.680	-0.001	94	1165285	710.9	E
67 1,2-Dichloropropane	63		7.947				ND	
70 1,4-Dioxane	88		8.020				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.227				ND	
74 cis-1,3-Dichloropropene	75		8.671				ND	
75 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
76 Toluene	91		9.006				ND	
77 trans-1,3-Dichloropropene	75		9.255				ND	
79 1,1,2-Trichloroethane	97		9.444				ND	
80 Tetrachloroethene	164	9.517	9.517	0.000	95	51370	43.0	
82 2-Hexanone	43		9.657				ND	
84 Chlorodibromomethane	129		9.821				ND	
85 Ethylene Dibromide	107		9.930				ND	
87 Chlorobenzene	112		10.417				ND	
89 1,1,1,2-Tetrachloroethane	131		10.514				ND	
90 Ethylbenzene	106		10.514				ND	
91 m-Xylene & p-Xylene	106		10.648				ND	
92 o-Xylene	106		11.032				ND	
93 Styrene	104		11.050				ND	
94 Bromoform	173		11.232				ND	
99 1,1,2,2-Tetrachloroethane	83		11.713				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019027.D

Injection Date: 19-Oct-2015 20:43:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48564-B-9

Lab Sample ID: 180-48564-9

Worklist Smp#: 27

Client ID: HD-CW-7A-0/1-0

Purge Vol: 5.000 mL

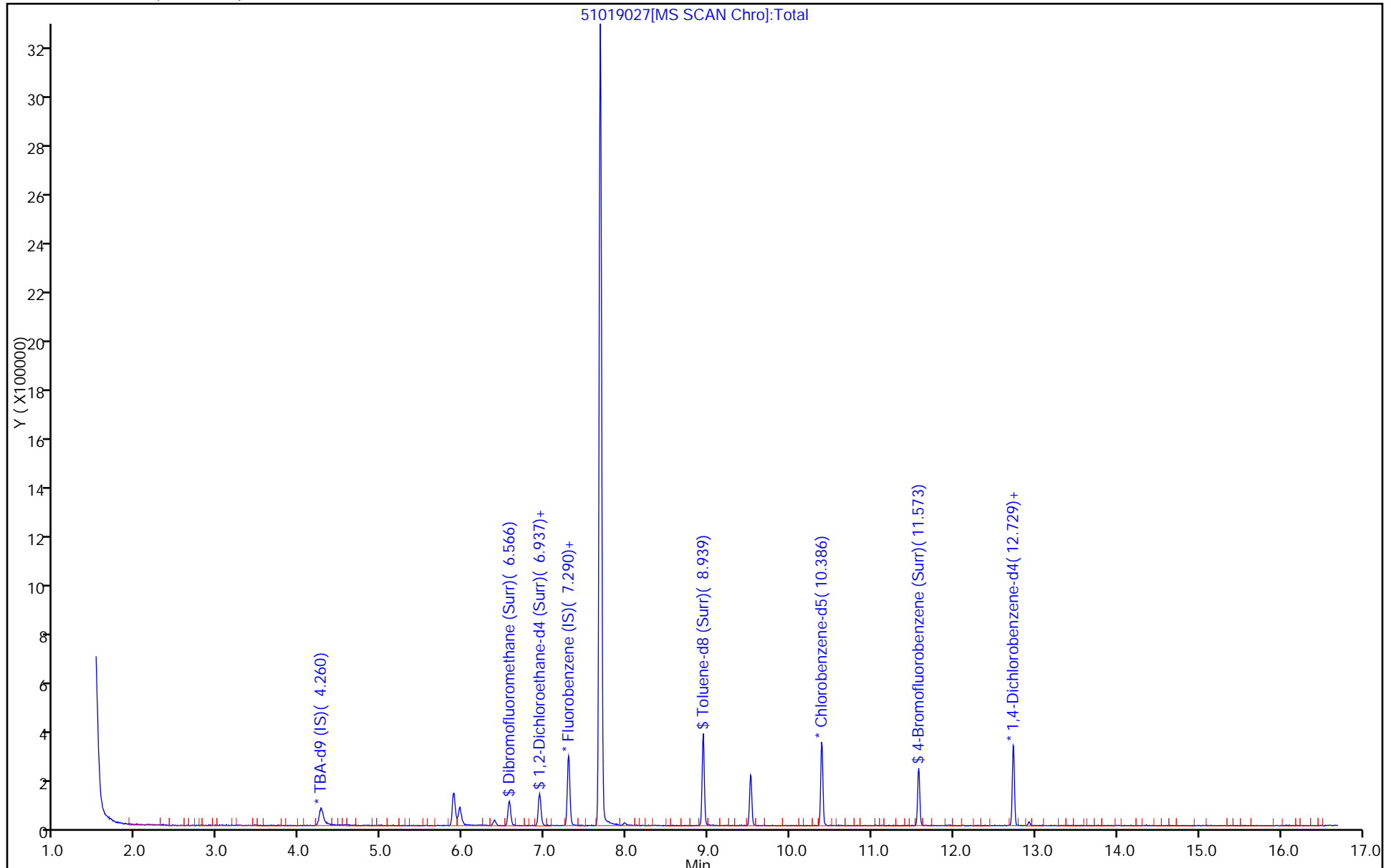
Dil. Factor: 1.0000

ALS Bottle#: 27

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019027.D

Injection Date: 19-Oct-2015 20:43:30

Instrument ID: CHHP5

Lims ID: 180-48564-B-9

Lab Sample ID: 180-48564-9

Client ID: HD-CW-7A-0/1-0

Operator ID: 001562

ALS Bottle#: 27

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

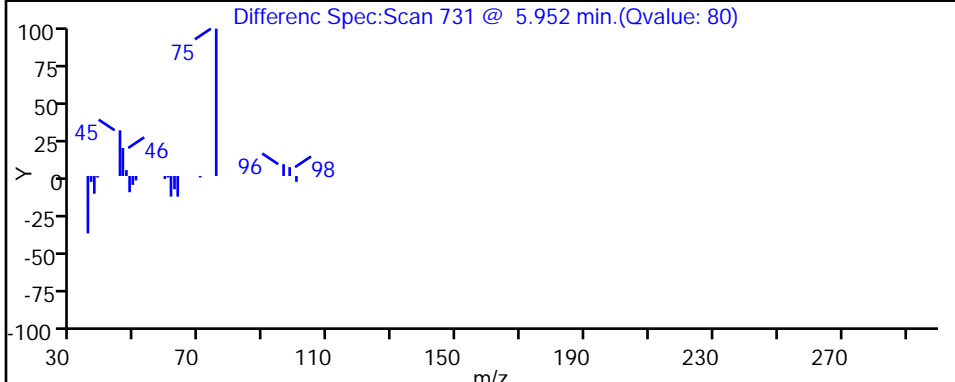
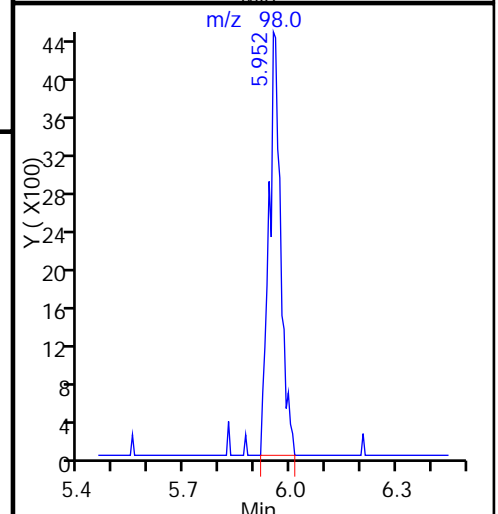
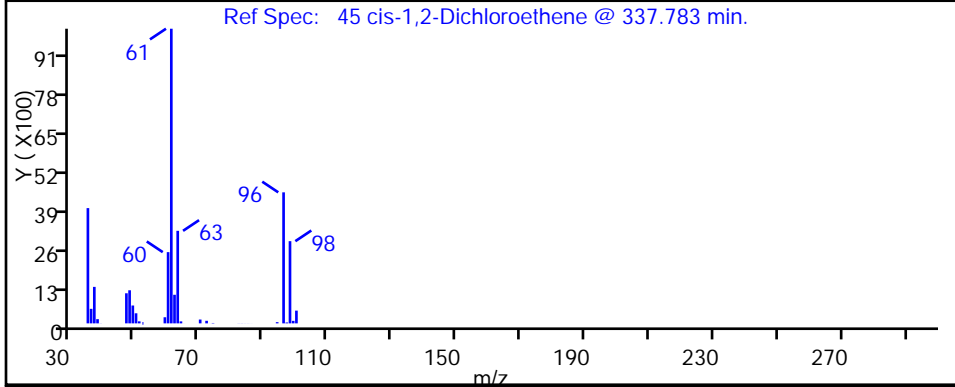
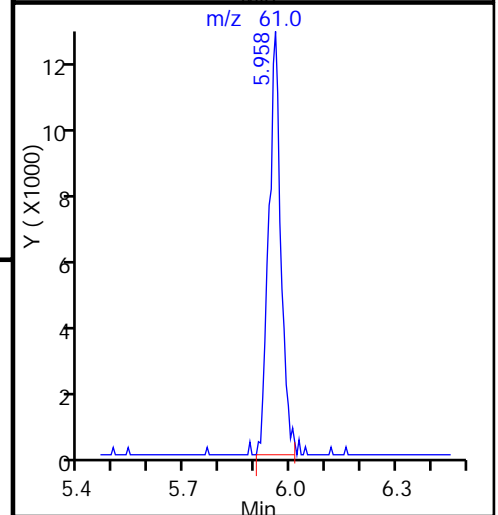
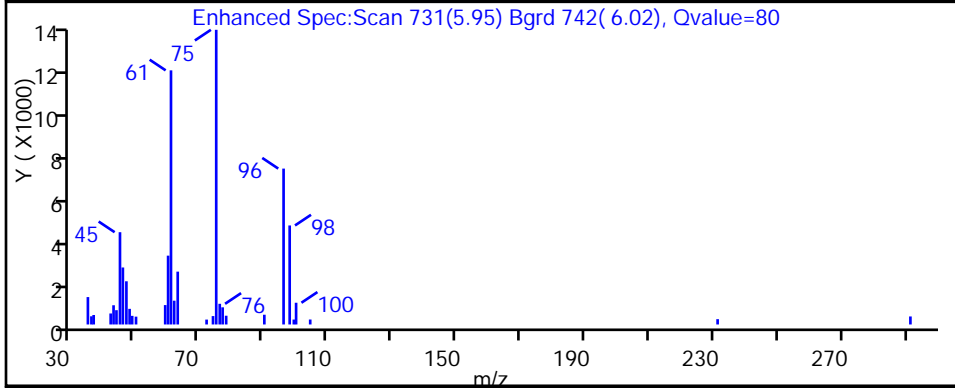
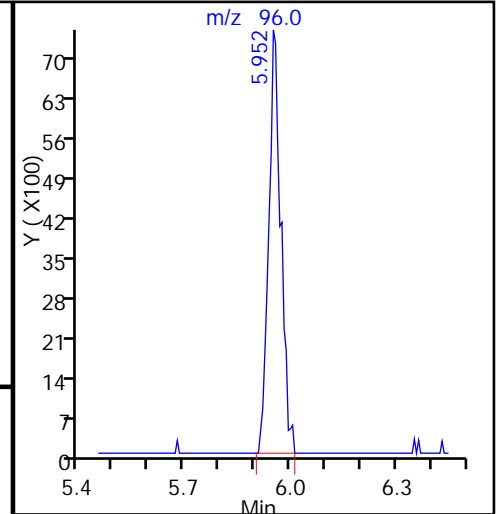
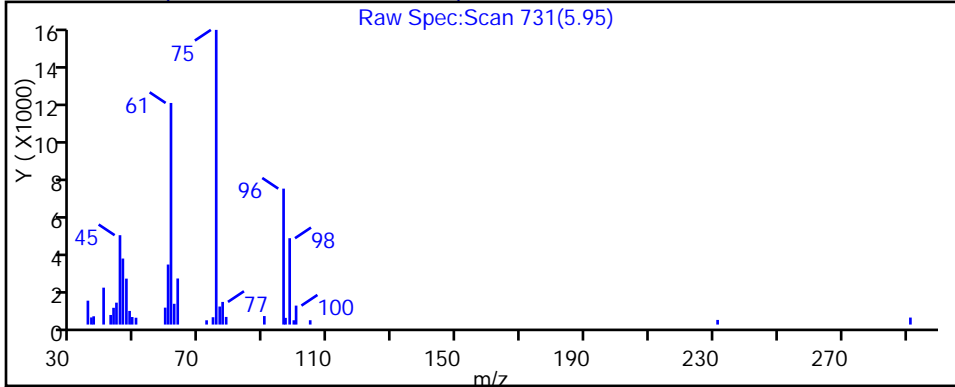
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019027.D

Injection Date: 19-Oct-2015 20:43:30

Instrument ID: CHHP5

Lims ID: 180-48564-B-9

Lab Sample ID: 180-48564-9

Client ID: HD-CW-7A-0/1-0

Operator ID: 001562

ALS Bottle#: 27

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

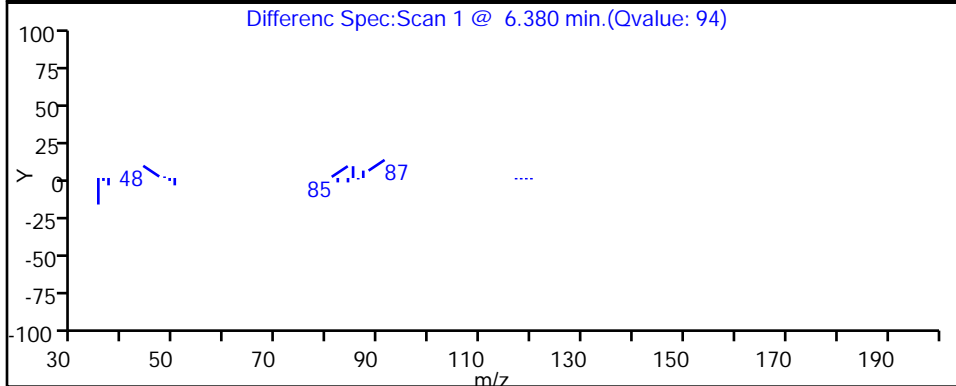
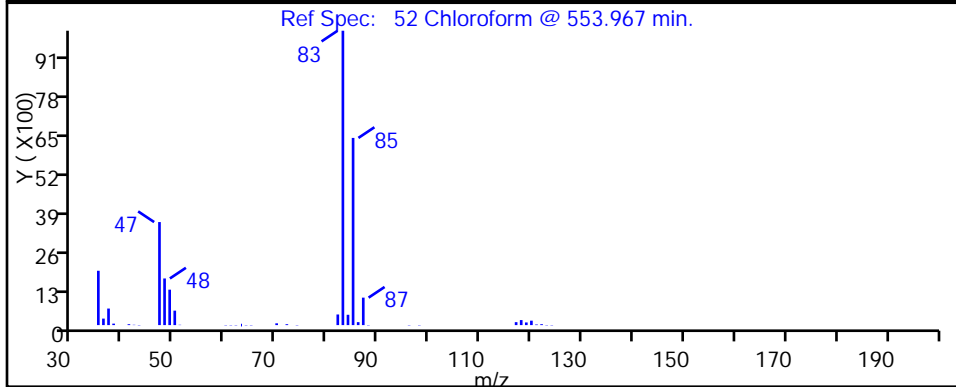
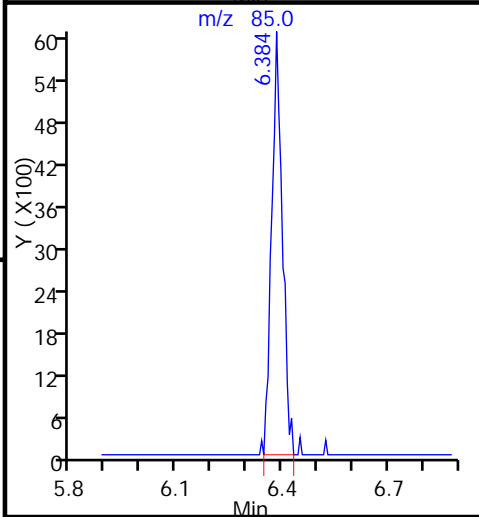
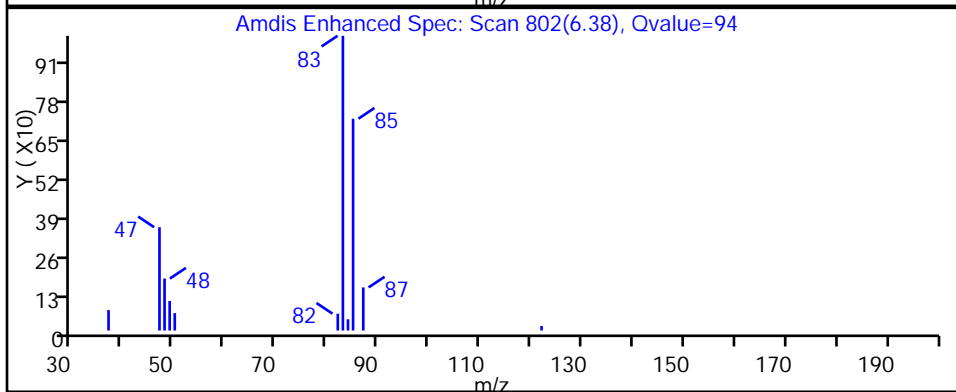
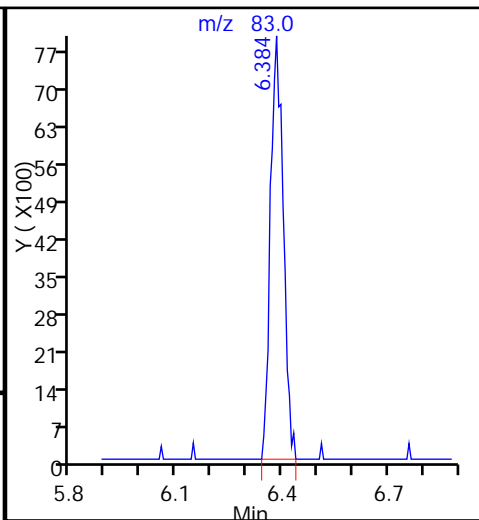
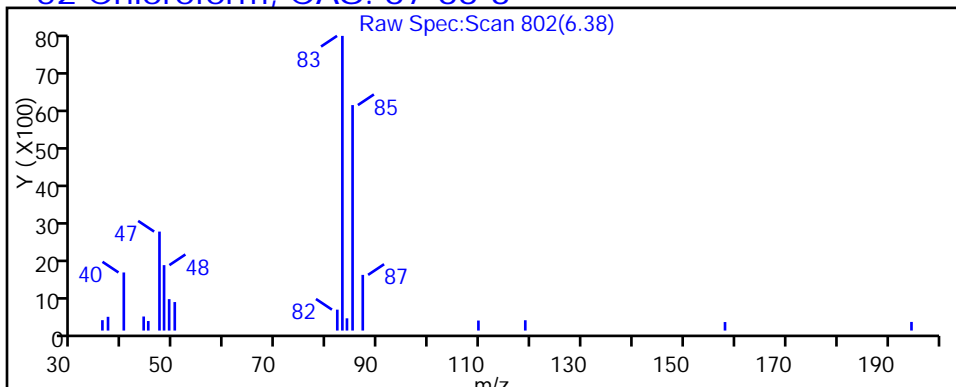
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

52 Chloroform, CAS: 67-66-3



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019027.D

Injection Date: 19-Oct-2015 20:43:30

Instrument ID: CHHP5

Lims ID: 180-48564-B-9

Lab Sample ID: 180-48564-9

Client ID: HD-CW-7A-0/1-0

Operator ID: 001562

ALS Bottle#: 27

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

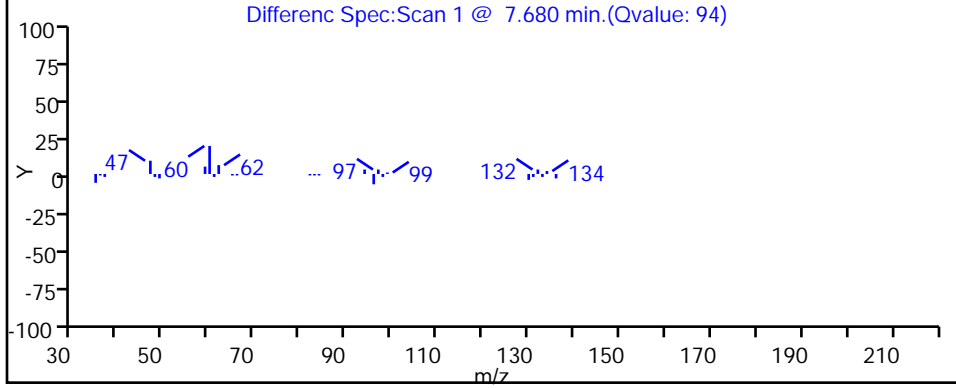
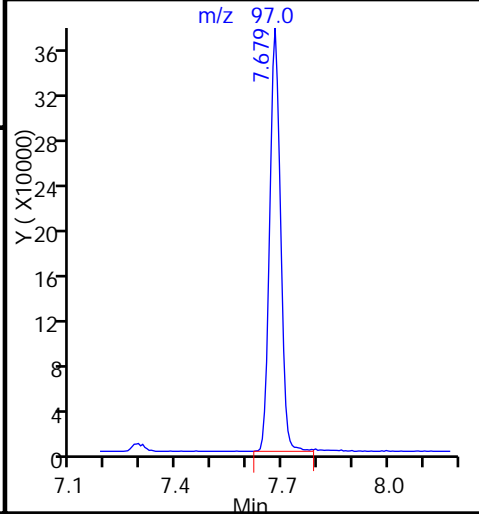
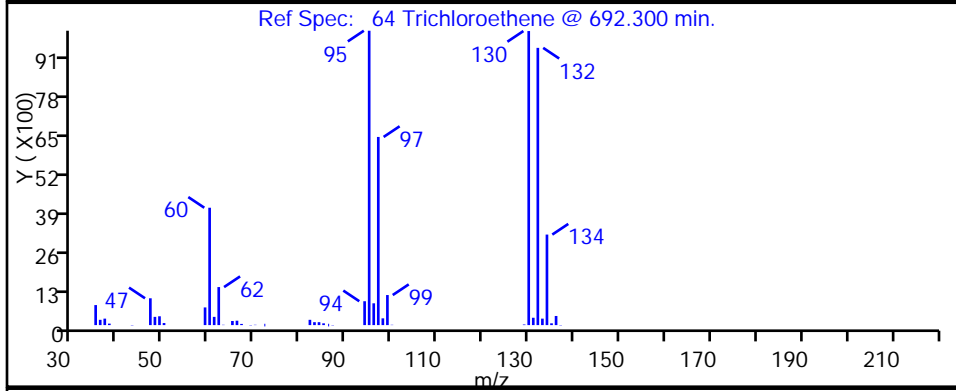
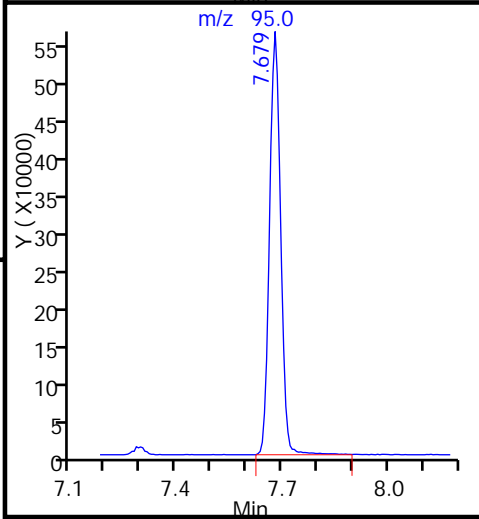
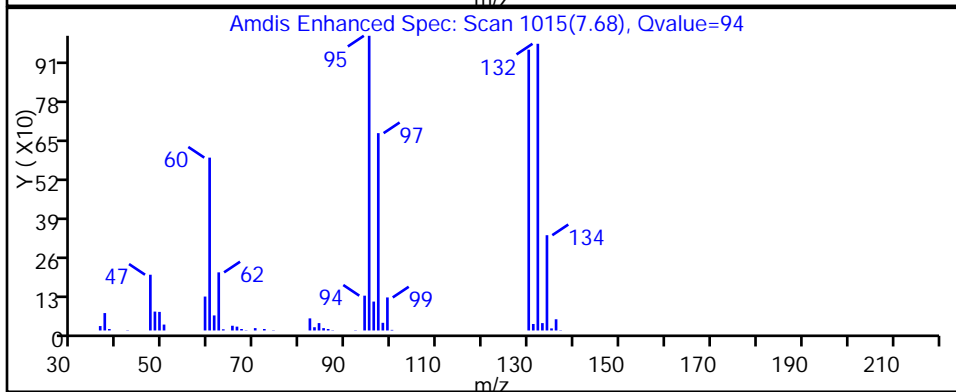
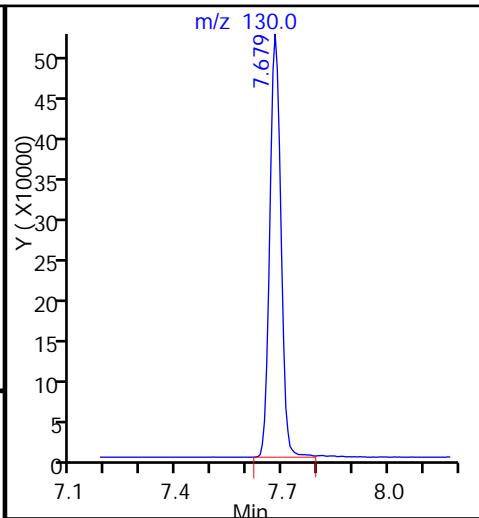
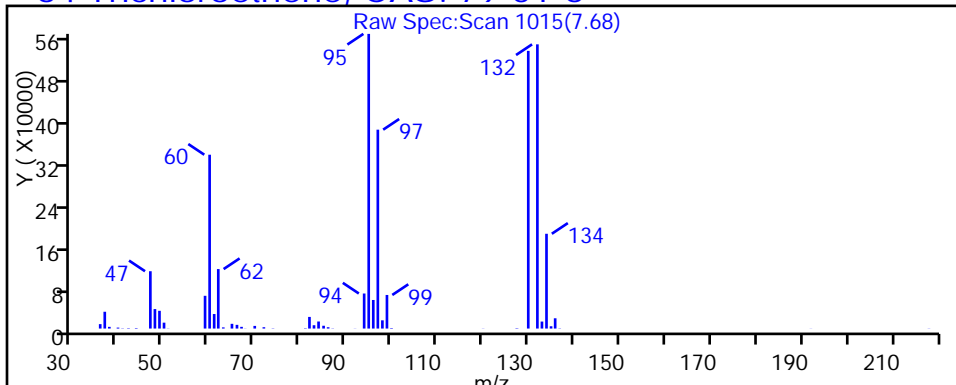
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019027.D

Injection Date: 19-Oct-2015 20:43:30

Instrument ID: CHHP5

Lims ID: 180-48564-B-9

Lab Sample ID: 180-48564-9

Client ID: HD-CW-7A-0/1-0

Operator ID: 001562

ALS Bottle#: 27

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

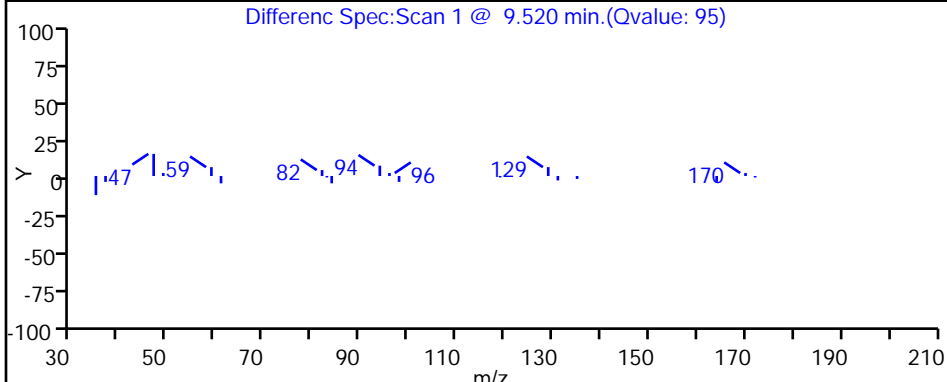
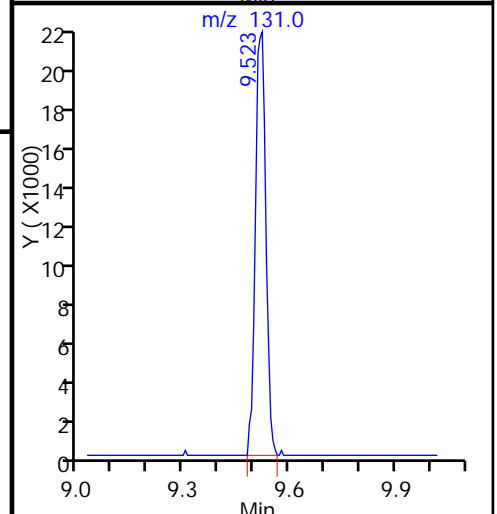
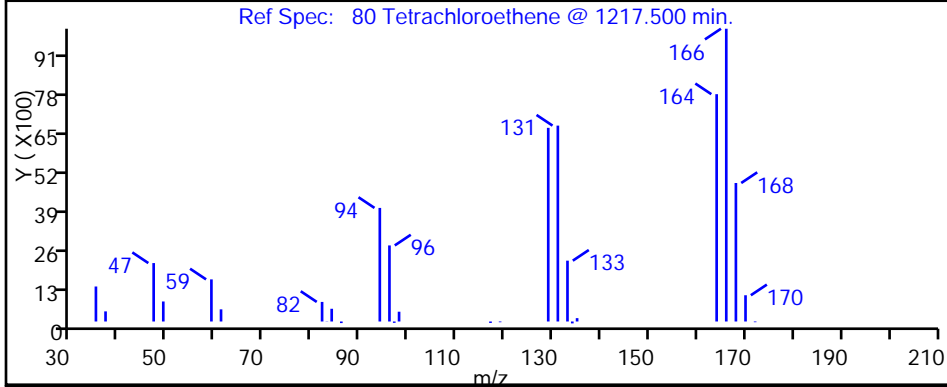
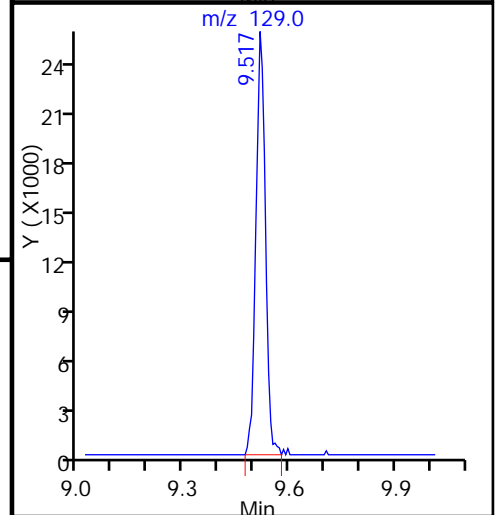
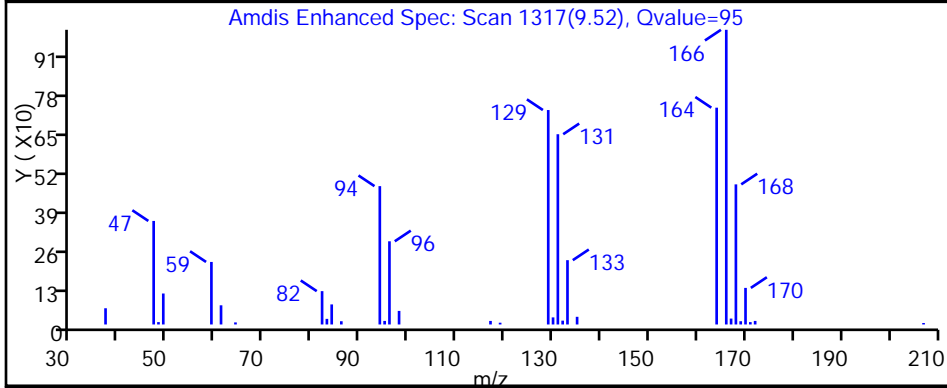
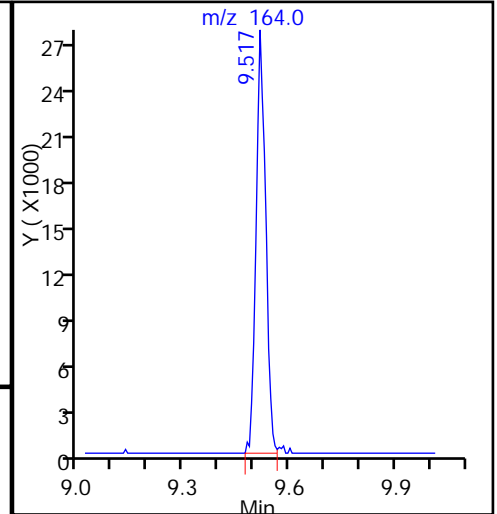
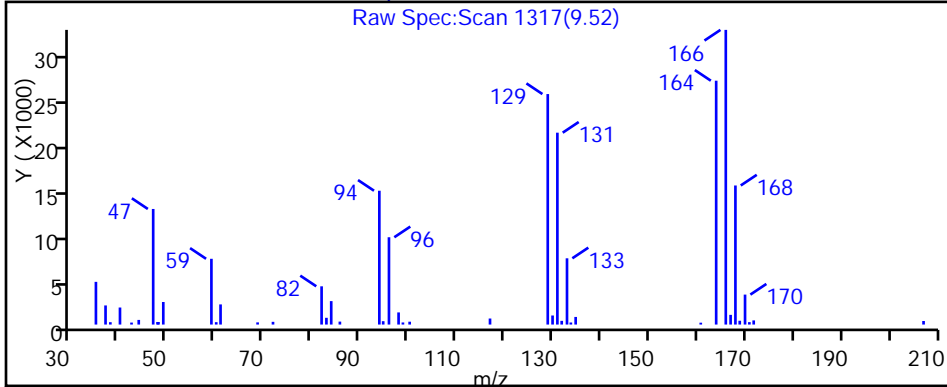
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4



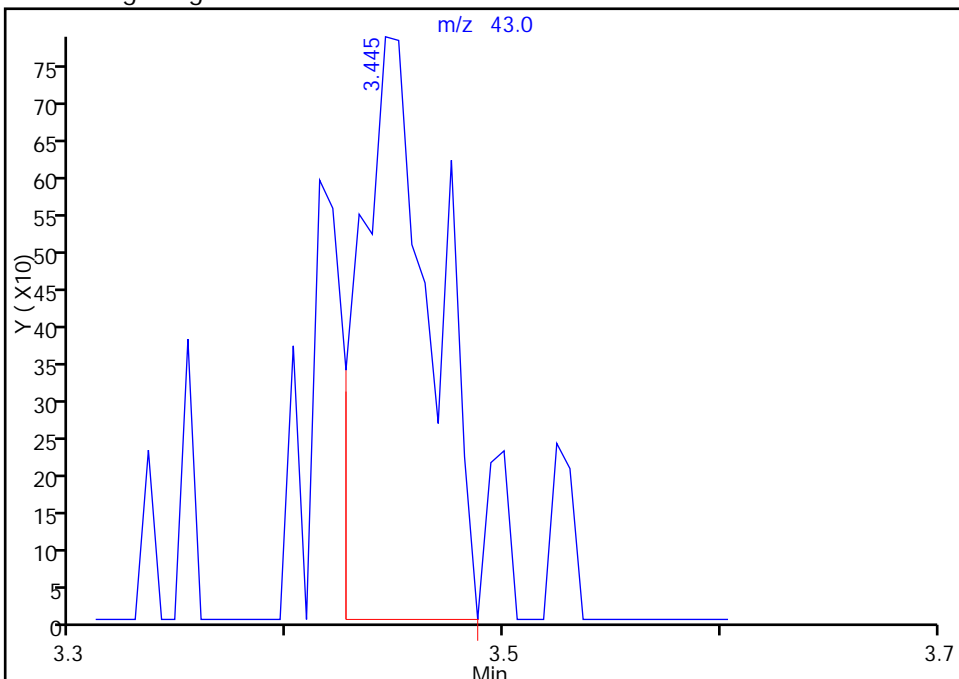
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019027.D
Injection Date: 19-Oct-2015 20:43:30 Instrument ID: CHHP5
Lims ID: 180-48564-B-9 Lab Sample ID: 180-48564-9
Client ID: HD-CW-7A-0/1-0
Operator ID: 001562 ALS Bottle#: 27 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

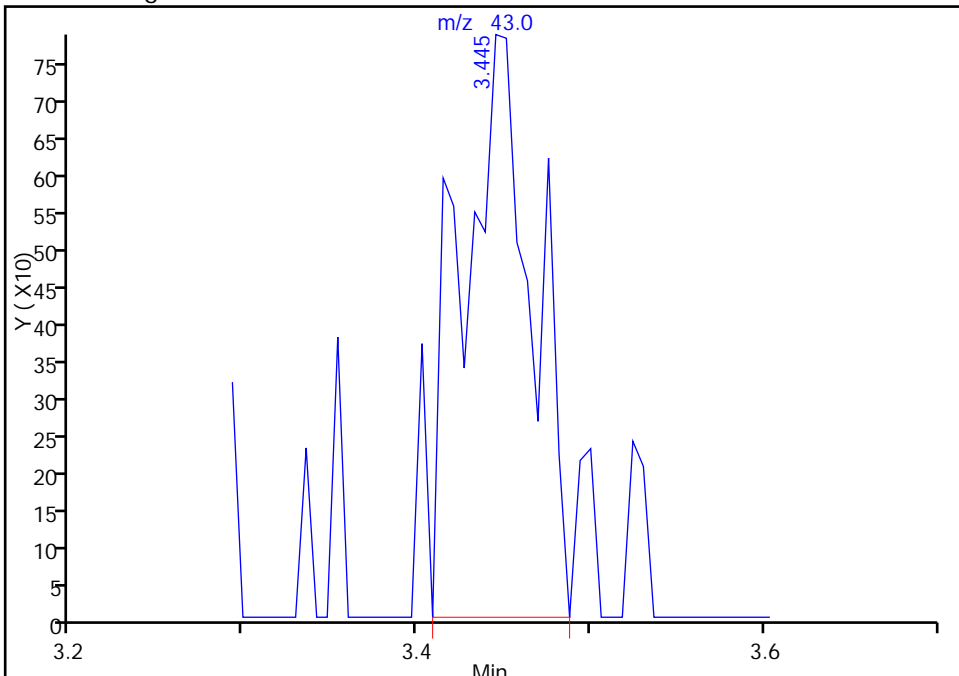
RT: 3.45
Area: 1841
Amount: 3.357542
Amount Units: ng

Processing Integration Results



RT: 3.45
Area: 2261
Amount: 4.123521
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 20-Oct-2015 08:30:44
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-7A-0/1-0 DL Lab Sample ID: 180-48564-9 DL
 Matrix: Water Lab File ID: 51019013.D
 Analysis Method: 8260C Date Collected: 10/06/2015 07:50
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2015 15:05
 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.: 157435 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 ^c	5.0	1.1
74-83-9	Bromomethane	5.0	U ^c	5.0	1.6
75-00-3	Chloroethane	5.0	U ^c	5.0	1.1
75-35-4	1,1-Dichloroethene	5.0	U	5.0	1.5
67-64-1	Acetone	25	U	25	13
75-15-0	Carbon disulfide	5.0	U	5.0	1.1
75-09-2	Methylene Chloride	5.0	U	5.0	0.63
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.85
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.92
75-34-3	1,1-Dichloroethane	5.0	U	5.0	0.58
156-59-2	cis-1,2-Dichloroethene	1.8	J	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	1.2	J	5.0	0.85
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	1.4
56-23-5	Carbon tetrachloride	5.0	U	5.0	0.68
71-43-2	Benzene	5.0	U	5.0	0.53
107-06-2	1,2-Dichloroethane	5.0	U	5.0	1.1
79-01-6	Trichloroethene	130		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	7.4		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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-7A-0/1-0 DL Lab Sample ID: 180-48564-9 DL
 Matrix: Water Lab File ID: 51019013.D
 Analysis Method: 8260C Date Collected: 10/06/2015 07:50
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2015 15:05
 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.: 157435 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	<i>Bromoform</i>	5.0	U	5.0	0.96
79-34-5	<i>1,1,2,2-Tetrachloroethane</i>	5.0	U	5.0	1.0
107-13-1	<i>Acrylonitrile</i>	100	U	100	2.7
123-91-1	<i>1,4-Dioxane</i>	1000	U	1000	170

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		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)	106		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019013.D
 Lims ID: 180-48564-C-9 Lab Sample ID: 180-48564-9
 Client ID: HD-CW-7A-0/1-0
 Sample Type: Client
 Inject. Date: 19-Oct-2015 15:05:30 ALS Bottle#: 13 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 5.0000
 Sample Info: 180-48564-C-9, 5x
 Misc. Info.: 180-0009083-013
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 19-Oct-2015 15:20:31 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK002

First Level Reviewer: fergusond

Date: 19-Oct-2015 15:20:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.259	4.273	-0.014	0	110583	1000.0	
* 2 Fluorobenzene (IS)	96	7.289	7.284	0.005	96	288754	50.0	
* 3 Chlorobenzene-d5	119	10.392	10.387	0.005	92	64107	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.734	12.729	0.005	97	92792	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.571	6.554	0.017	93	75302	53.1	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.936	6.931	0.005	0	115595	59.3	
\$ 7 Toluene-d8 (Surr)	98	8.938	8.939	-0.001	96	262140	53.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.572	11.573	-0.001	87	91819	49.2	
12 Chloromethane	50		1.766				ND	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.253				ND	
16 Chloroethane	64		2.387				ND	
22 1,1-Dichloroethene	96		3.354				ND	
24 Acetone	43		3.433				ND	
26 Carbon disulfide	76		3.634				ND	
31 Methylene Chloride	84		4.145				ND	
33 Acrylonitrile	53		4.522				ND	
34 trans-1,2-Dichloroethene	96		4.571				ND	
35 Methyl tert-butyl ether	73		4.583				ND	
37 1,1-Dichloroethane	63		5.204				ND	
45 cis-1,2-Dichloroethene	96	5.951	5.946	0.005	63	3321	1.78	
46 2-Butanone (MEK)	43		5.958				ND	
49 Chlorobromomethane	128		6.232				ND	
52 Chloroform	83	6.395	6.384	0.011	20	3708	1.25	M
53 1,1,1-Trichloroethane	97		6.548				ND	
56 Carbon tetrachloride	117		6.718				ND	
58 Benzene	78		6.943				ND	
59 1,2-Dichloroethane	62		7.023				ND	
64 Trichloroethene	130	7.678	7.680	-0.002	96	220757	126.7	
67 1,2-Dichloropropane	63		7.947				ND	
70 1,4-Dioxane	88		8.020				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.227				ND	
74 cis-1,3-Dichloropropene	75		8.671				ND	
75 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
76 Toluene	91		9.006				ND	
77 trans-1,3-Dichloropropene	75		9.255				ND	
79 1,1,2-Trichloroethane	97		9.444				ND	
80 Tetrachloroethene	164	9.522	9.517	0.005	93	9059	7.35	
82 2-Hexanone	43		9.657				ND	
84 Chlorodibromomethane	129		9.821				ND	
85 Ethylene Dibromide	107		9.930				ND	
87 Chlorobenzene	112		10.417				ND	
90 Ethylbenzene	106		10.514				ND	
89 1,1,1,2-Tetrachloroethane	131		10.514				ND	
91 m-Xylene & p-Xylene	106		10.648				ND	
92 o-Xylene	106		11.032				ND	
93 Styrene	104		11.050				ND	
94 Bromoform	173		11.232				ND	
99 1,1,2,2-Tetrachloroethane	83		11.713				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019013.D

Injection Date: 19-Oct-2015 15:05:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48564-C-9

Lab Sample ID: 180-48564-9

Worklist Smp#: 13

Client ID: HD-CW-7A-0/1-0

Purge Vol: 5.000 mL

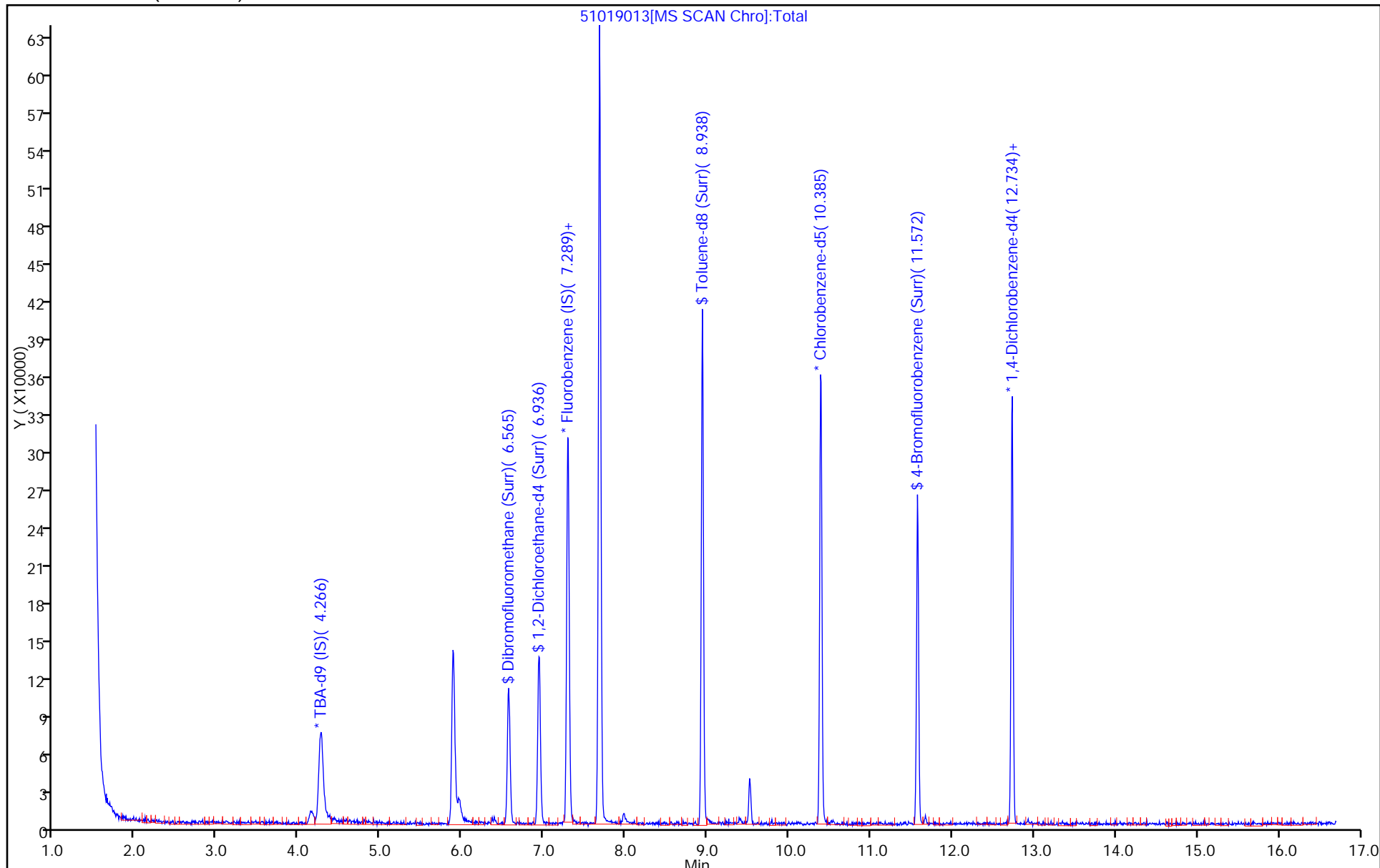
Dil. Factor: 5.0000

ALS Bottle#: 13

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019013.D

Injection Date: 19-Oct-2015 15:05:30

Instrument ID: CHHP5

Lims ID: 180-48564-C-9

Lab Sample ID: 180-48564-9

Client ID: HD-CW-7A-0/1-0

Operator ID: 001562

ALS Bottle#: 13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

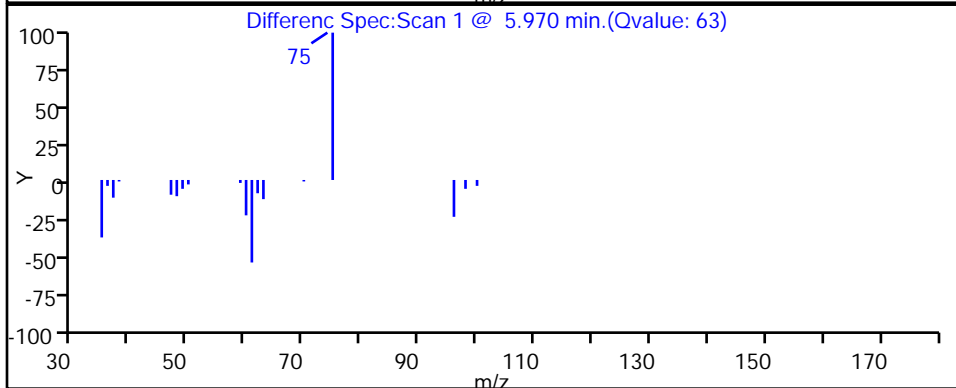
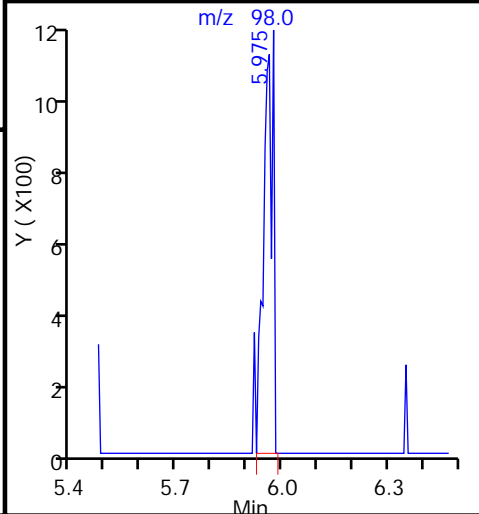
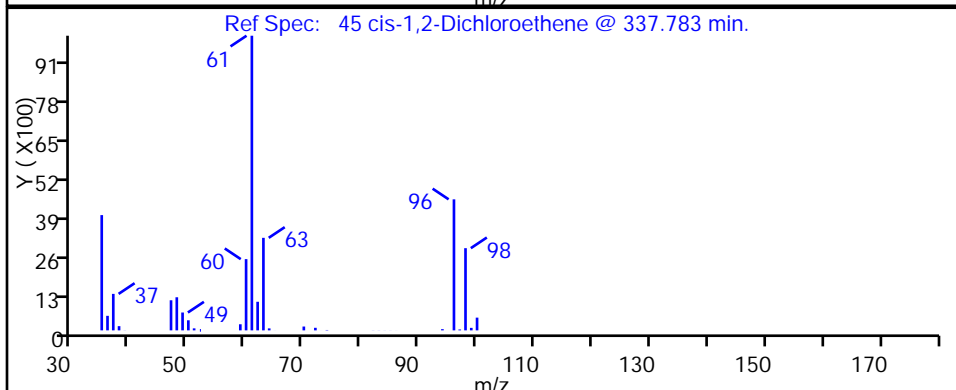
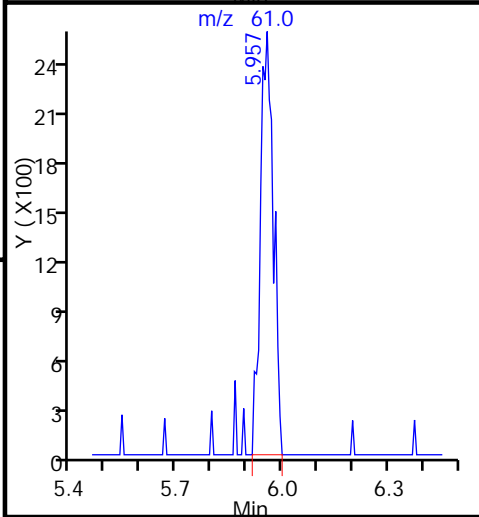
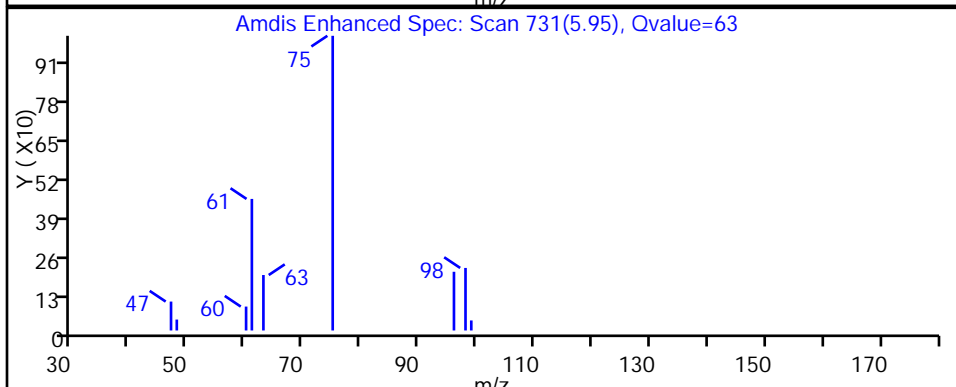
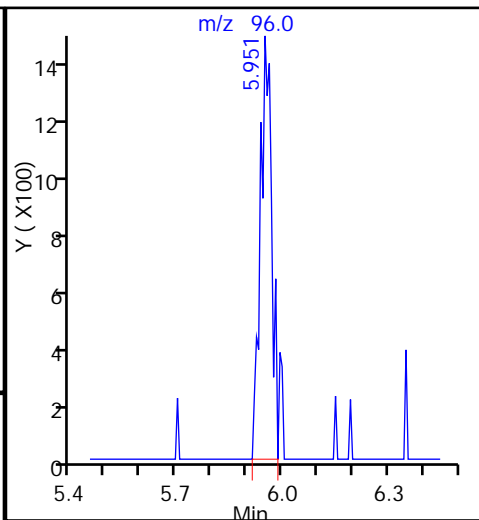
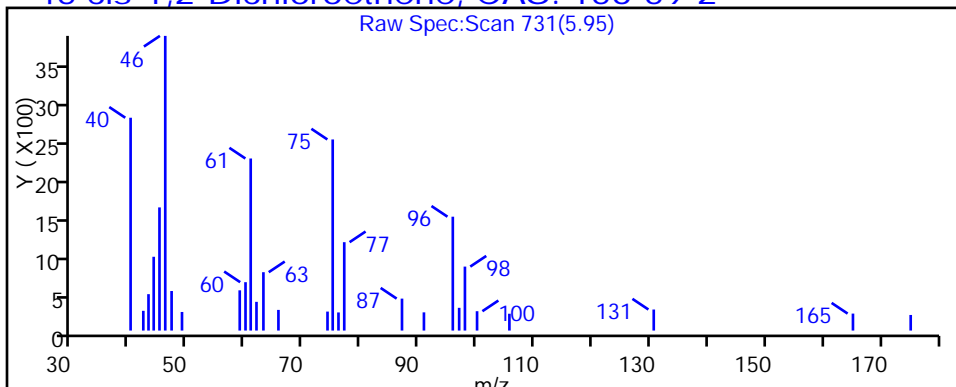
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019013.D

Injection Date: 19-Oct-2015 15:05:30

Instrument ID: CHHP5

Lims ID: 180-48564-C-9

Lab Sample ID: 180-48564-9

Client ID: HD-CW-7A-0/1-0

Operator ID: 001562

ALS Bottle#: 13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

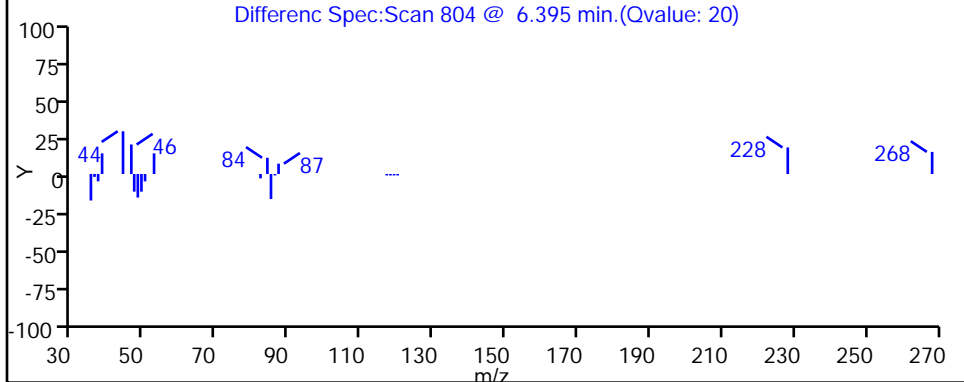
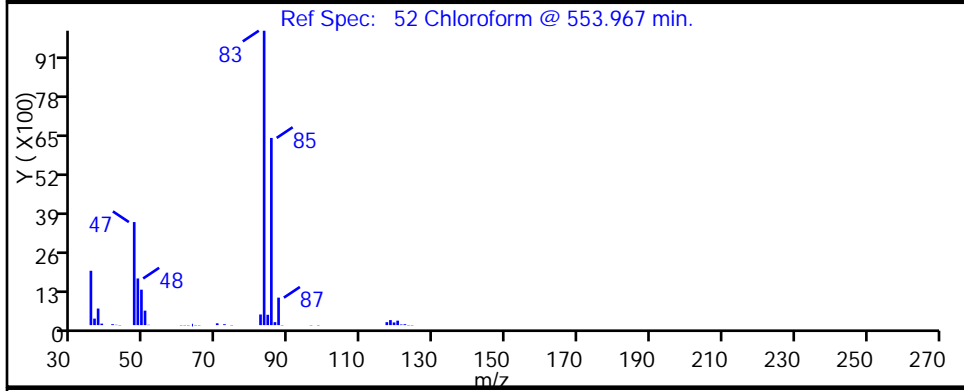
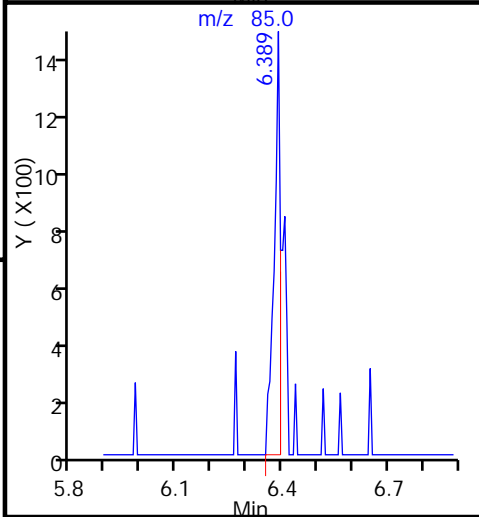
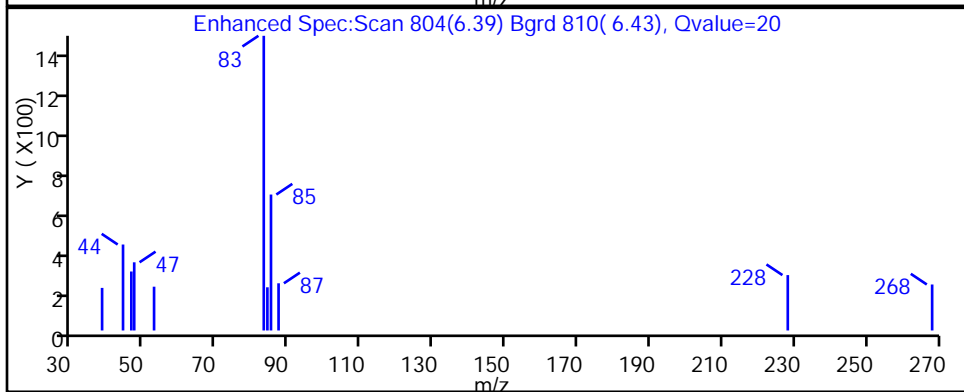
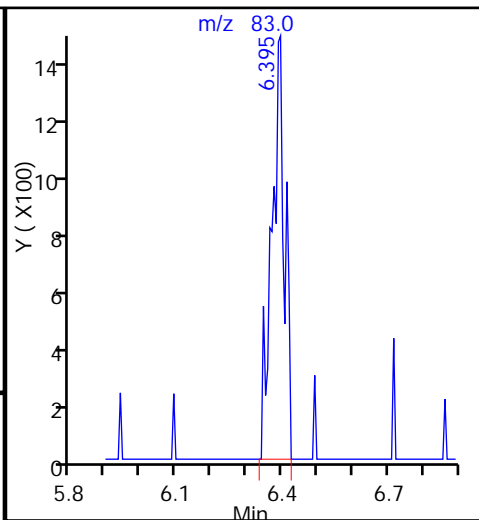
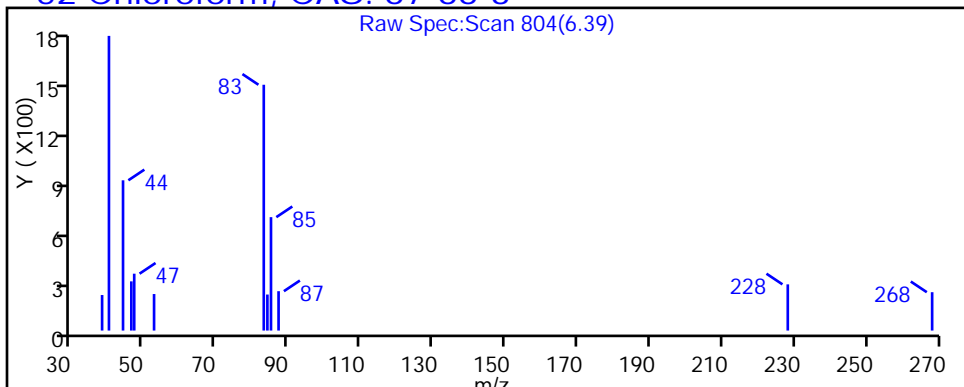
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

52 Chloroform, CAS: 67-66-3



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019013.D

Injection Date: 19-Oct-2015 15:05:30

Instrument ID: CHHP5

Lims ID: 180-48564-C-9

Lab Sample ID: 180-48564-9

Client ID: HD-CW-7A-0/1-0

Operator ID: 001562

ALS Bottle#: 13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

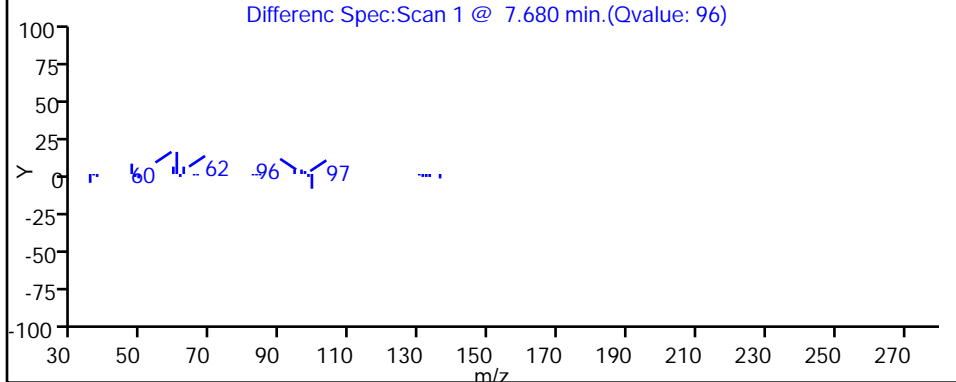
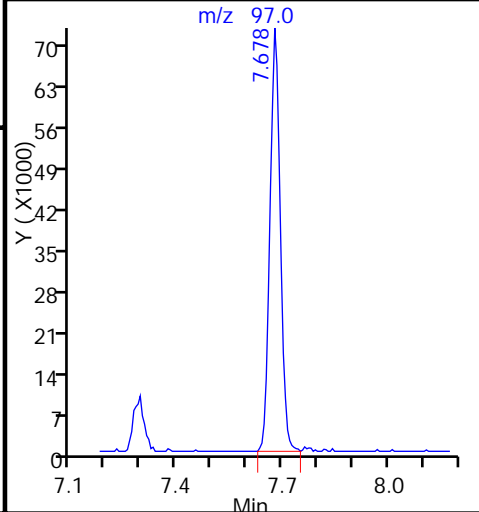
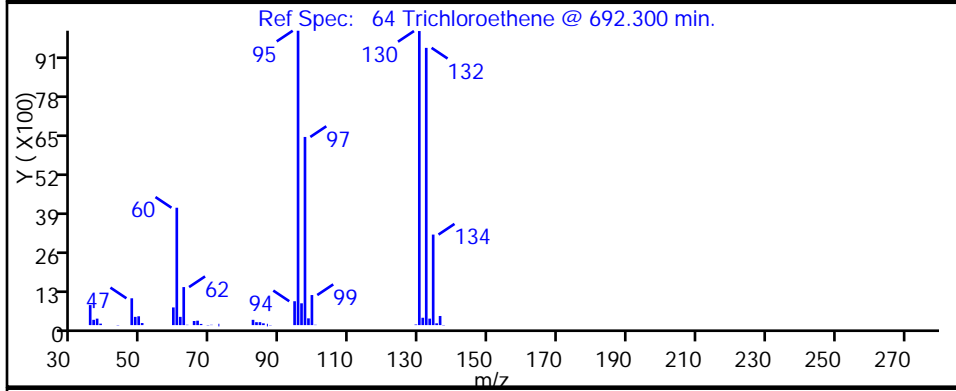
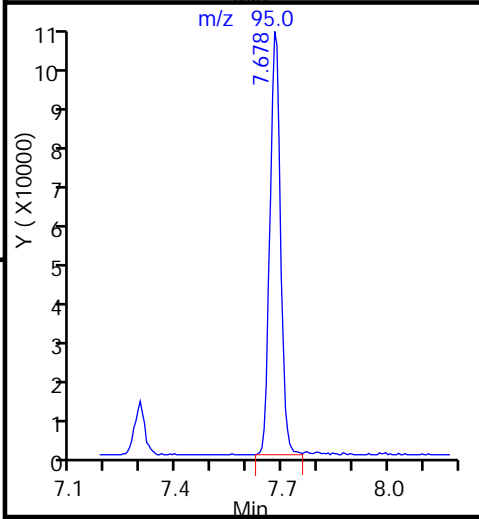
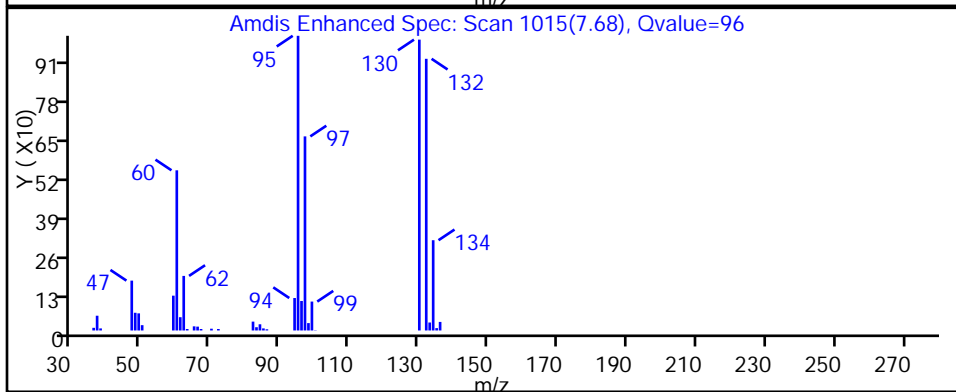
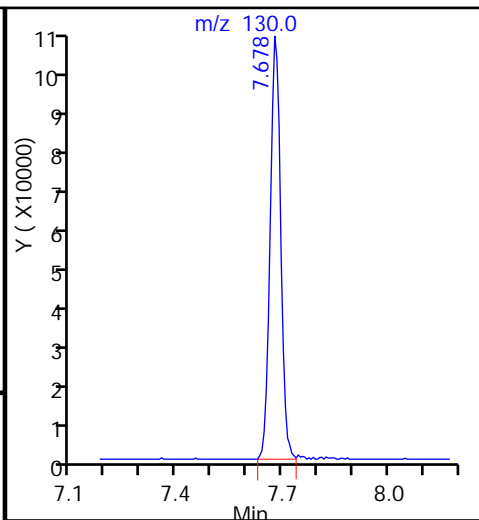
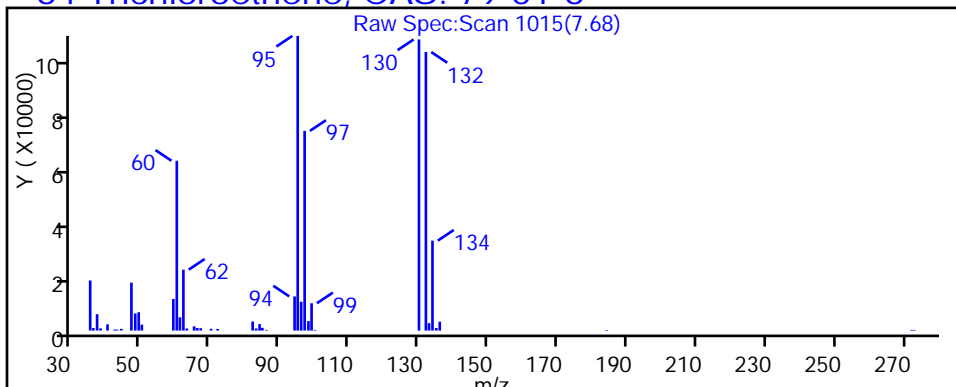
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019013.D

Injection Date: 19-Oct-2015 15:05:30

Instrument ID: CHHP5

Lims ID: 180-48564-C-9

Lab Sample ID: 180-48564-9

Client ID: HD-CW-7A-0/1-0

Operator ID: 001562

ALS Bottle#: 13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

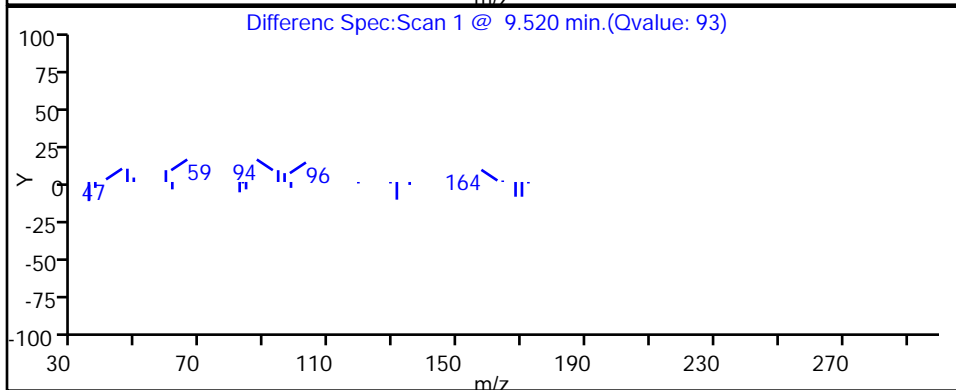
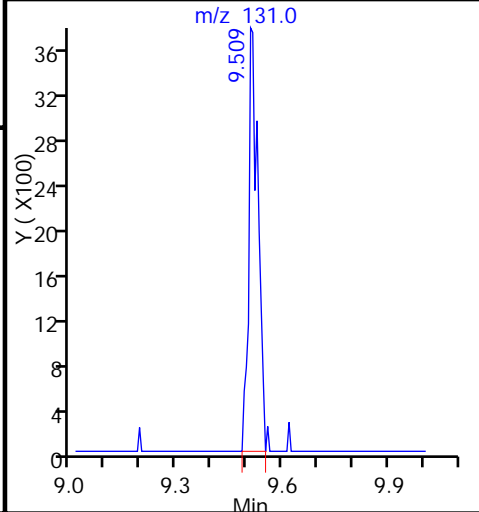
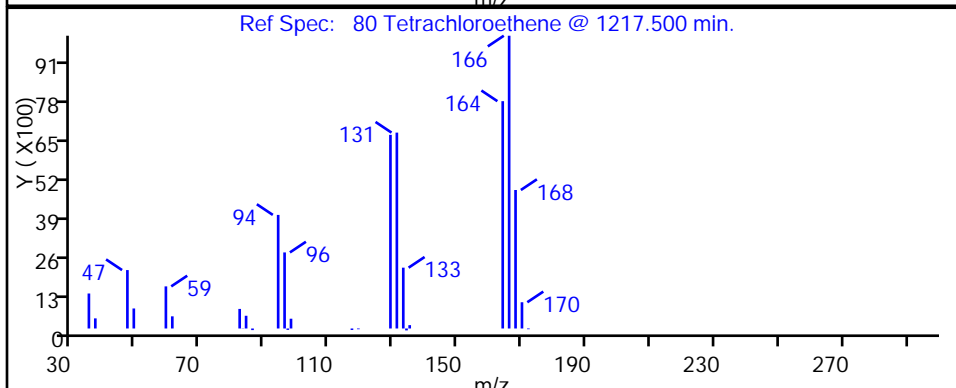
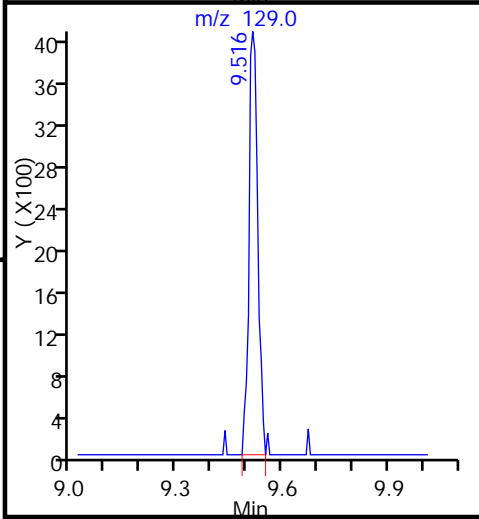
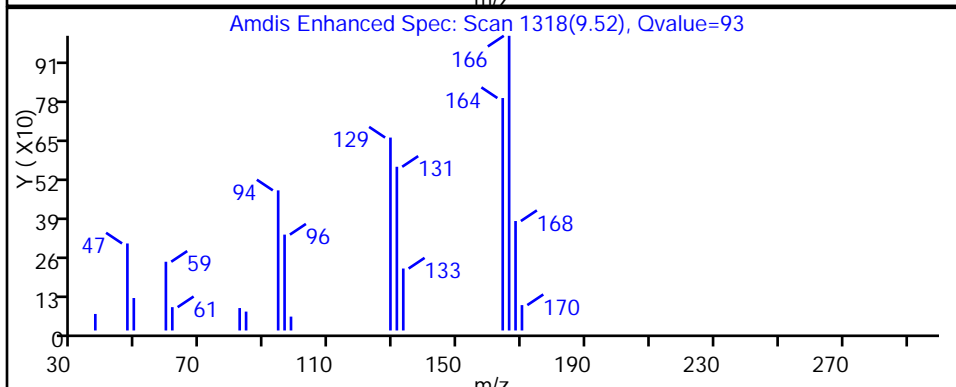
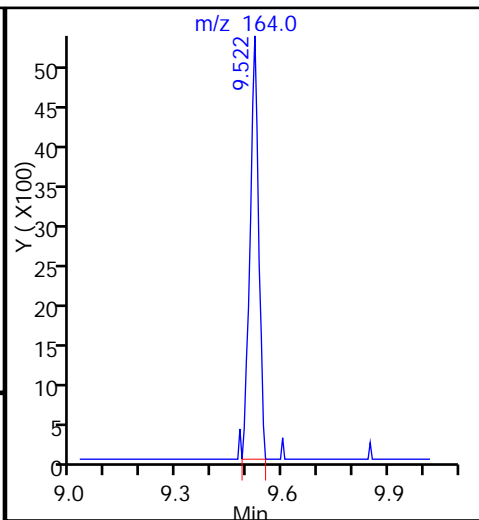
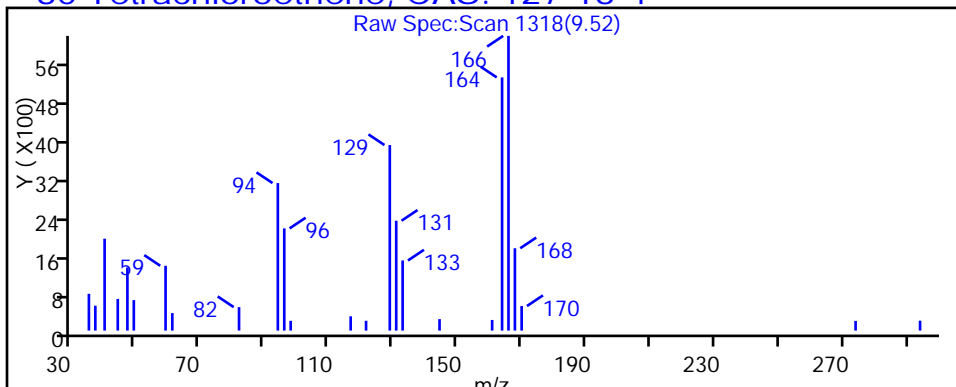
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4



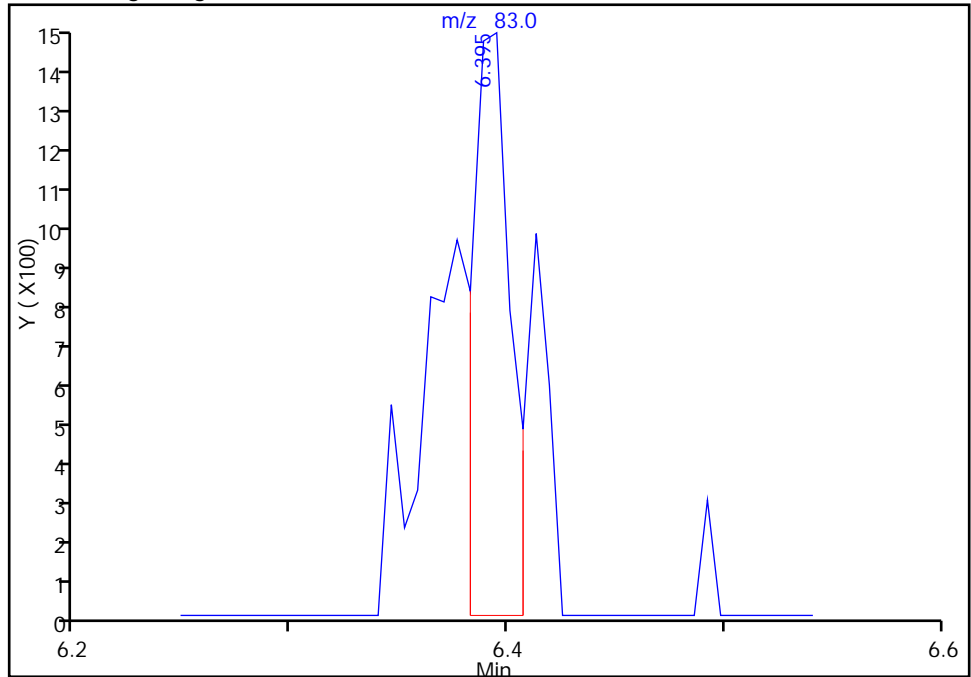
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019013.D
Injection Date: 19-Oct-2015 15:05:30 Instrument ID: CHHP5
Lims ID: 180-48564-C-9 Lab Sample ID: 180-48564-9
Client ID: HD-CW-7A-0/1-0
Operator ID: 001562 ALS Bottle#: 13 Worklist Smp#: 13
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

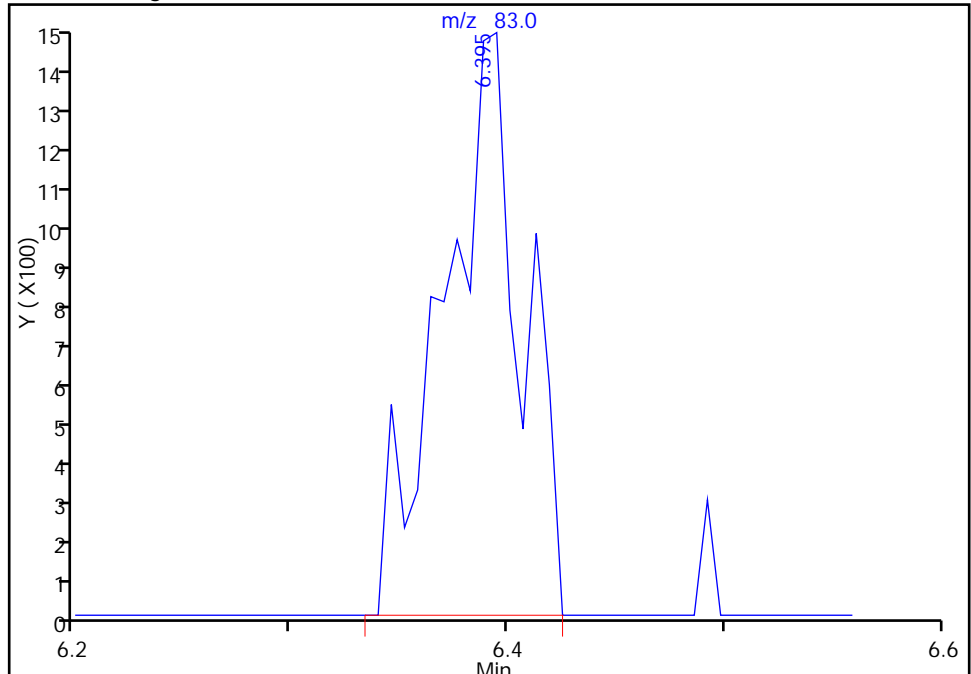
RT: 6.39
Area: 1823
Amount: 0.613396
Amount Units: ng

Processing Integration Results



RT: 6.39
Area: 3708
Amount: 1.247654
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 19-Oct-2015 15:20:31
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-QC-16-0/1-2 Lab Sample ID: 180-48564-10
 Matrix: Water Lab File ID: 51015008.D
 Analysis Method: 8260C Date Collected: 10/06/2015 12:00
 Sample wt/vol: 5 (mL) Date Analyzed: 10/15/2015 15:11
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157127 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 ^c	1.0	0.23
74-83-9	Bromomethane	1.0	U ^c	1.0	0.31
75-00-3	Chloroethane	1.0	U ^c	1.0	0.21
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.30
67-64-1	Acetone	2.5	J ^c	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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-QC-16-0/1-2 Lab Sample ID: 180-48564-10
 Matrix: Water Lab File ID: 51015008.D
 Analysis Method: 8260C Date Collected: 10/06/2015 12:00
 Sample wt/vol: 5 (mL) Date Analyzed: 10/15/2015 15:11
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157127 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 ^c	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		64-135
2037-26-5	Toluene-d8 (Surr)	108		71-118
460-00-4	4-Bromofluorobenzene (Surr)	94		70-118
1868-53-7	Dibromofluoromethane (Surr)	93		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015008.D
 Lims ID: 180-48564-A-10 Lab Sample ID: 180-48564-10
 Client ID: HD-QC-16-0/1-2
 Sample Type: Client
 Inject. Date: 15-Oct-2015 15:11:30 ALS Bottle#: 7 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-48564-A-10
 Misc. Info.: 180-0009022-008
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 15-Oct-2015 15:51:48 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK008

First Level Reviewer: fergusond

Date: 15-Oct-2015 15:51:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.274	4.273	0.001	0	159608	1000.0	
* 2 Fluorobenzene (IS)	96	7.292	7.290	0.002	98	334169	50.0	
* 3 Chlorobenzene-d5	119	10.388	10.386	0.002	92	71629	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.730	12.729	0.001	97	98732	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.562	6.554	0.008	92	76311	46.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.939	6.931	0.008	0	115064	51.0	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.939	0.001	95	298141	54.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.574	11.573	0.001	87	98058	47.0	
12 Chloromethane	50		1.772				ND	
13 Vinyl chloride	62		1.912				ND	
15 Bromomethane	94		2.241				ND	
16 Chloroethane	64		2.399				ND	
22 1,1-Dichloroethene	96		3.330				ND	
24 Acetone	43	3.447	3.439	0.008	67	8566	12.7	
26 Carbon disulfide	76		3.640				ND	
31 Methylene Chloride	84		4.139				ND	
33 Acrylonitrile	53		4.522				ND	
34 trans-1,2-Dichloroethene	96		4.559				ND	
35 Methyl tert-butyl ether	73		4.577				ND	
37 1,1-Dichloroethane	63		5.197				ND	
45 cis-1,2-Dichloroethene	96		5.946				ND	
46 2-Butanone (MEK)	43		5.952				ND	
49 Chlorobromomethane	128		6.231				ND	
52 Chloroform	83		6.377				ND	
53 1,1,1-Trichloroethane	97		6.536				ND	
56 Carbon tetrachloride	117		6.718				ND	
58 Benzene	78		6.943				ND	
59 1,2-Dichloroethane	62		7.016				ND	
64 Trichloroethene	130		7.673				ND	
67 1,2-Dichloropropane	63		7.947				ND	
70 1,4-Dioxane	88		8.026				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.233				ND	
74 cis-1,3-Dichloropropene	75		8.671				ND	
75 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
76 Toluene	91		9.006				ND	
77 trans-1,3-Dichloropropene	75		9.255				ND	
79 1,1,2-Trichloroethane	97		9.444				ND	
80 Tetrachloroethene	164		9.517				ND	
82 2-Hexanone	43		9.663				ND	
84 Chlorodibromomethane	129		9.815				ND	
85 Ethylene Dibromide	107		9.930				ND	
87 Chlorobenzene	112		10.417				ND	
89 1,1,1,2-Tetrachloroethane	131		10.514				ND	
90 Ethylbenzene	106		10.520				ND	
91 m-Xylene & p-Xylene	106		10.654				ND	
92 o-Xylene	106		11.031				ND	
93 Styrene	104		11.050				ND	
94 Bromoform	173		11.232				ND	
99 1,1,2,2-Tetrachloroethane	83		11.707				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015008.D

Injection Date: 15-Oct-2015 15:11:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48564-A-10

Lab Sample ID: 180-48564-10

Worklist Smp#: 8

Client ID: HD-QC-16-0/1-2

Purge Vol: 5.000 mL

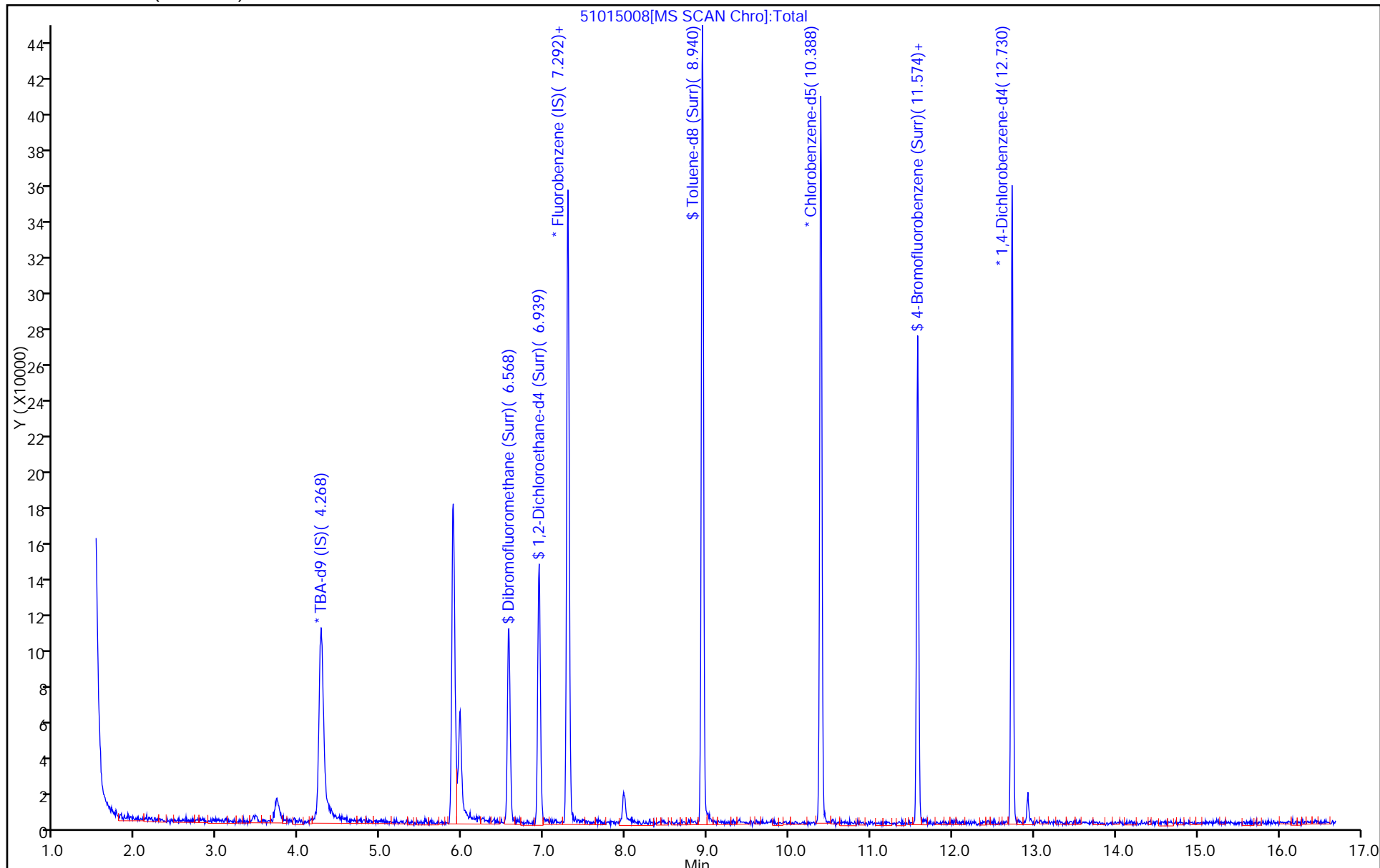
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015008.D

Injection Date: 15-Oct-2015 15:11:30

Instrument ID: CHHP5

Lims ID: 180-48564-A-10

Lab Sample ID: 180-48564-10

Client ID: HD-QC-16-0/1-2

Operator ID: 001562

ALS Bottle#: 7 Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

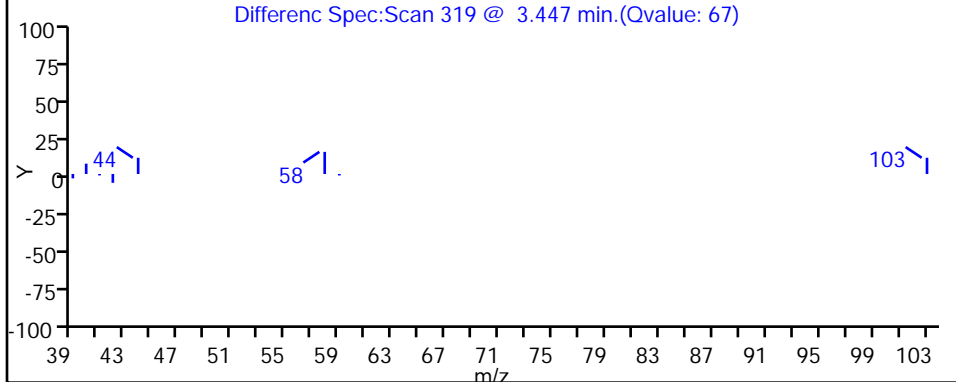
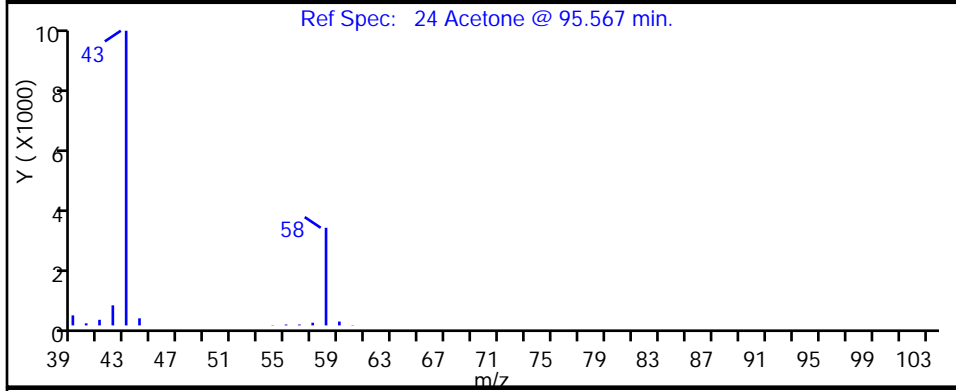
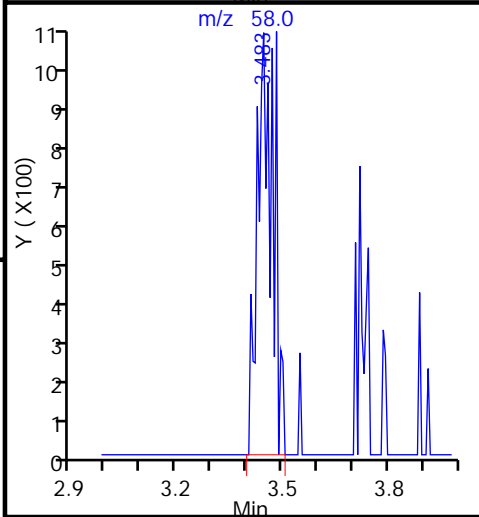
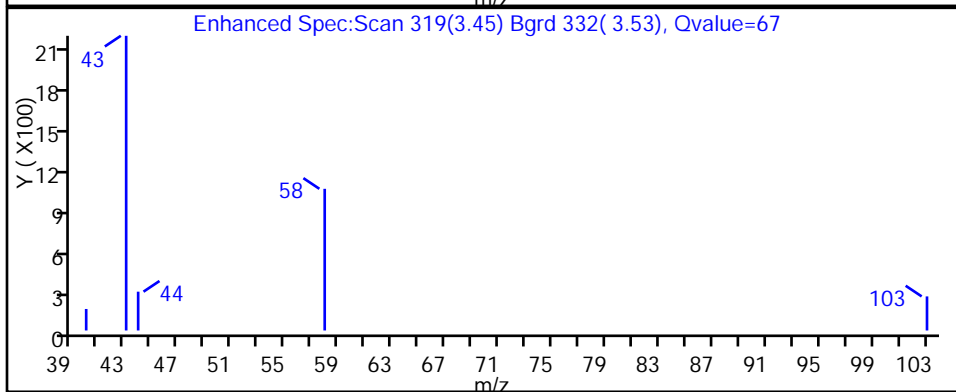
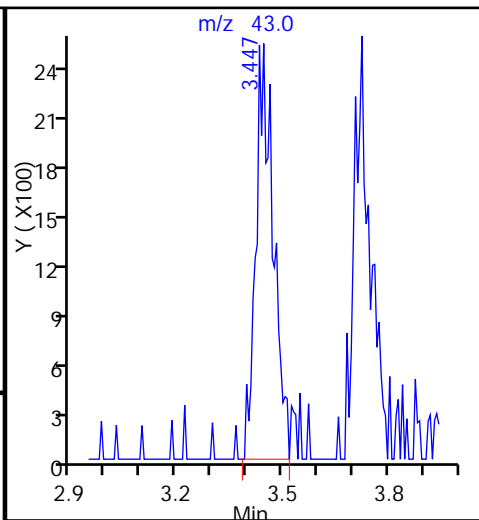
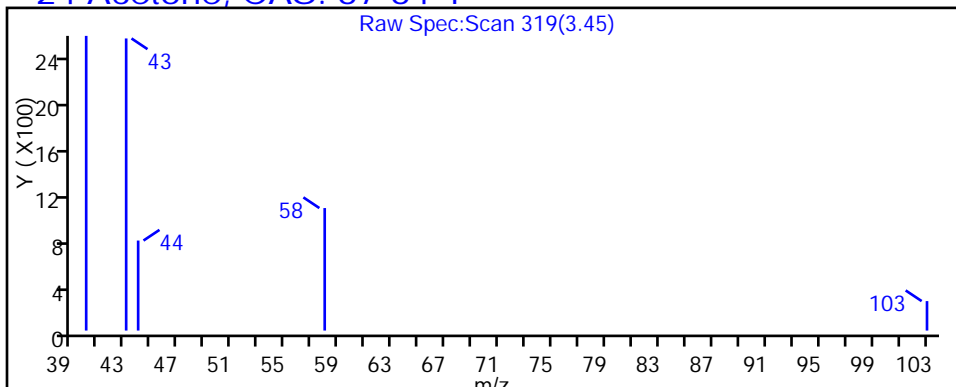
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-QC5-0/1-1 Lab Sample ID: 180-48564-11
 Matrix: Water Lab File ID: 51019028.D
 Analysis Method: 8260C Date Collected: 10/06/2015 08:00
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2015 21:07
 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.: 157435 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 ^c	1.0	0.23
74-83-9	Bromomethane	1.0	U ^c	1.0	0.31
75-00-3	Chloroethane	1.0	U ^c	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	2.0		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	1.3		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	140	E	1.0	0.14
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.095
75-27-4	Bromodichloromethane	1.0	U	1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53
108-88-3	Toluene	1.0	U	1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.15
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
127-18-4	Tetrachloroethene	9.2		1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.16
124-48-1	Dibromochloromethane	1.0	U	1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
100-41-4	Ethylbenzene	1.0	U	1.0	0.23
1330-20-7	Xylenes, Total	3.0	U	3.0	0.49
100-42-5	Styrene	1.0	U	1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-QC5-0/1-1 Lab Sample ID: 180-48564-11
 Matrix: Water Lab File ID: 51019028.D
 Analysis Method: 8260C Date Collected: 10/06/2015 08:00
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2015 21:07
 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.: 157435 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)	126		64-135
2037-26-5	Toluene-d8 (Surr)	100		71-118
460-00-4	4-Bromofluorobenzene (Surr)	96		70-118
1868-53-7	Dibromofluoromethane (Surr)	109		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019028.D
 Lims ID: 180-48564-A-11 Lab Sample ID: 180-48564-11
 Client ID: HD-QC5-0/1-1
 Sample Type: Client
 Inject. Date: 19-Oct-2015 21:07:30 ALS Bottle#: 28 Worklist Smp#: 28
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-48564-A-11
 Misc. Info.: 180-0009083-028
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 20-Oct-2015 08:31:56 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: fergusond

Date: 20-Oct-2015 08:31:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.255	4.273	-0.018	0	100958	1000.0	
* 2 Fluorobenzene (IS)	96	7.291	7.284	0.007	98	278932	50.0	
* 3 Chlorobenzene-d5	119	10.387	10.387	0.000	92	64231	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.736	12.729	0.007	98	92899	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.567	6.554	0.013	92	74496	54.4	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.938	6.931	0.007	0	118245	62.8	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.939	0.001	96	246954	49.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.574	11.573	0.001	88	89972	48.1	
12 Chloromethane	50		1.766				ND	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.253				ND	
16 Chloroethane	64		2.387				ND	
22 1,1-Dichloroethene	96		3.354				ND	
24 Acetone	43		3.433				ND	
26 Carbon disulfide	76		3.634				ND	
31 Methylene Chloride	84		4.145				ND	
33 Acrylonitrile	53		4.522				ND	
34 trans-1,2-Dichloroethene	96		4.571				ND	
35 Methyl tert-butyl ether	73		4.583				ND	
37 1,1-Dichloroethane	63		5.204				ND	
45 cis-1,2-Dichloroethene	96	5.953	5.946	0.007	88	18334	10.2	
46 2-Butanone (MEK)	43		5.958				ND	
49 Chlorobromomethane	128		6.232				ND	
52 Chloroform	83	6.385	6.384	0.001	96	18051	6.29	
53 1,1,1-Trichloroethane	97		6.548				ND	
56 Carbon tetrachloride	117		6.718				ND	
58 Benzene	78		6.943				ND	
59 1,2-Dichloroethane	62		7.023				ND	
64 Trichloroethene	130	7.680	7.680	0.000	94	1178408	700.3	E
67 1,2-Dichloropropane	63		7.947				ND	
70 1,4-Dioxane	88		8.020				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.227				ND	
74 cis-1,3-Dichloropropene	75		8.671				ND	
75 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
76 Toluene	91		9.006				ND	
77 trans-1,3-Dichloropropene	75		9.255				ND	
79 1,1,2-Trichloroethane	97		9.444				ND	
80 Tetrachloroethene	164	9.518	9.517	0.001	96	56836	46.0	
82 2-Hexanone	43		9.657				ND	
84 Chlorodibromomethane	129		9.821				ND	
85 Ethylene Dibromide	107		9.930				ND	
87 Chlorobenzene	112		10.417				ND	
89 1,1,1,2-Tetrachloroethane	131		10.514				ND	
90 Ethylbenzene	106		10.514				ND	
91 m-Xylene & p-Xylene	106		10.648				ND	
92 o-Xylene	106		11.032				ND	
93 Styrene	104		11.050				ND	
94 Bromoform	173		11.232				ND	
99 1,1,2,2-Tetrachloroethane	83		11.713				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019028.D

Injection Date: 19-Oct-2015 21:07:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48564-A-11

Lab Sample ID: 180-48564-11

Worklist Smp#: 28

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

Purge Vol: 5.000 mL

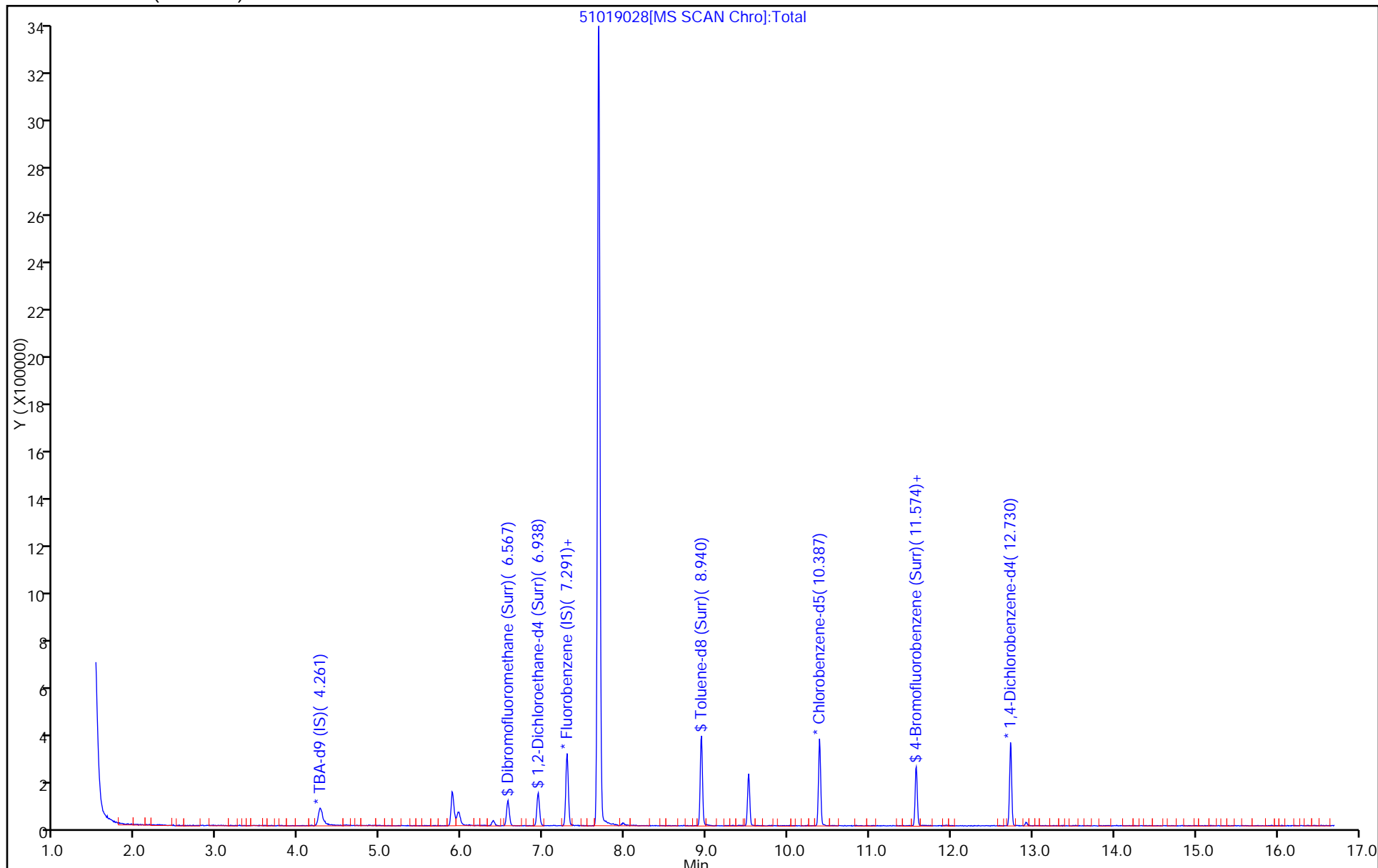
Dil. Factor: 1.0000

ALS Bottle#: 28

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019028.D

Injection Date: 19-Oct-2015 21:07:30

Instrument ID: CHHP5

Lims ID: 180-48564-A-11

Lab Sample ID: 180-48564-11

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

Operator ID: 001562

ALS Bottle#: 28

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

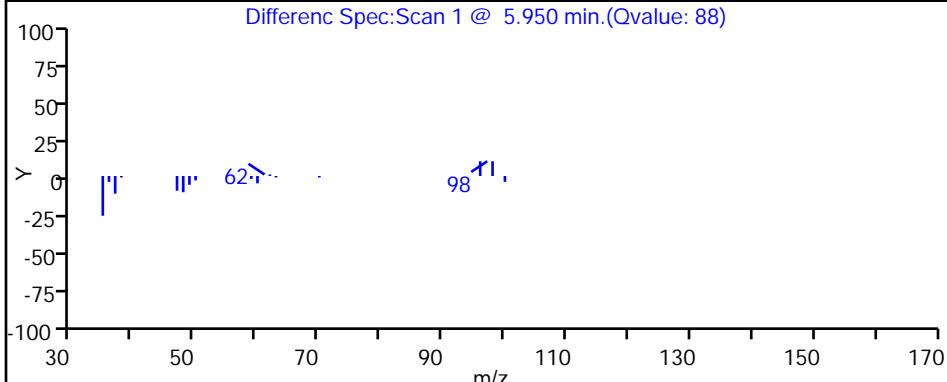
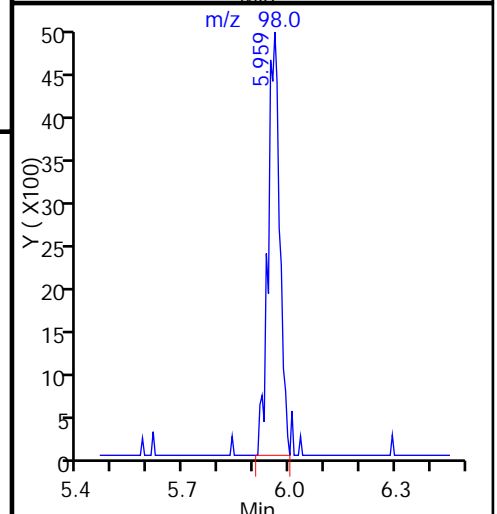
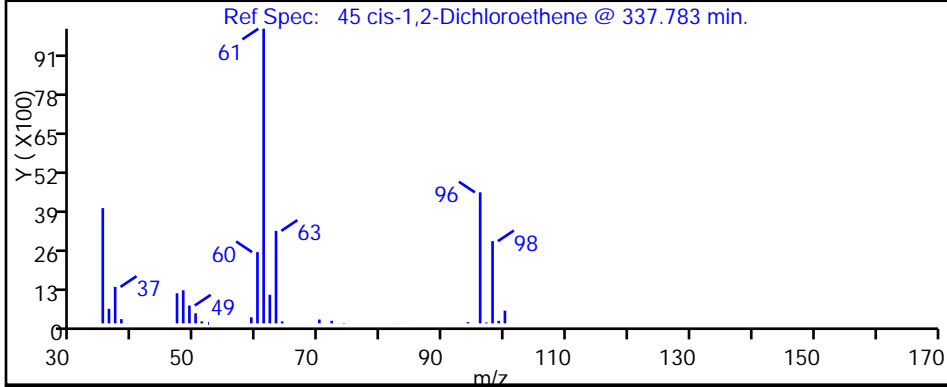
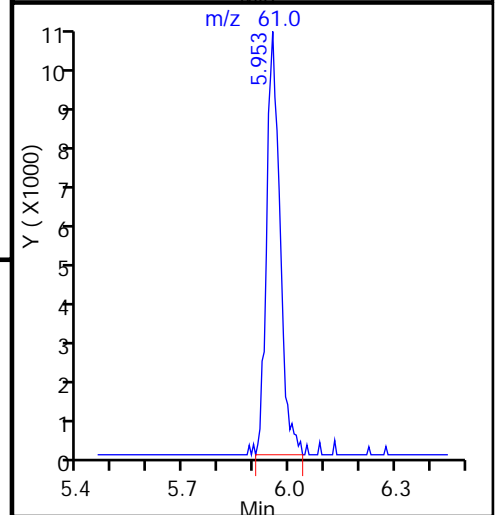
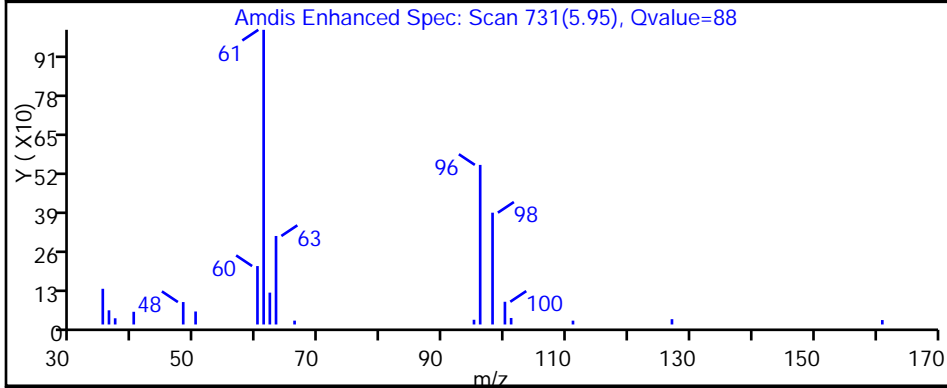
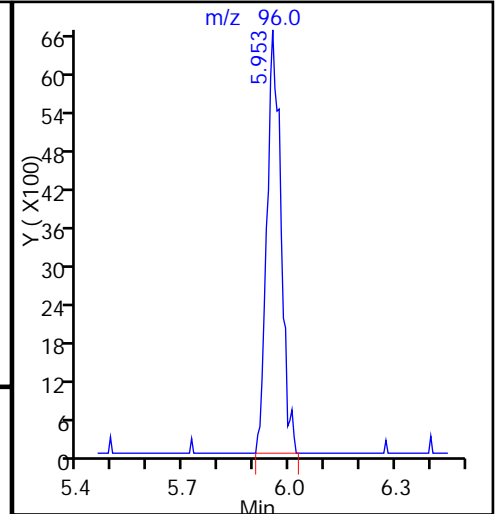
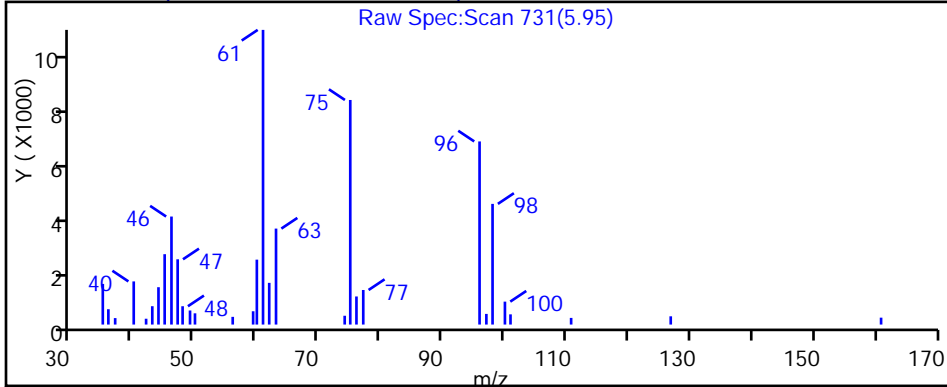
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019028.D

Injection Date: 19-Oct-2015 21:07:30

Instrument ID: CHHP5

Lims ID: 180-48564-A-11

Lab Sample ID: 180-48564-11

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

Operator ID: 001562

ALS Bottle#: 28

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

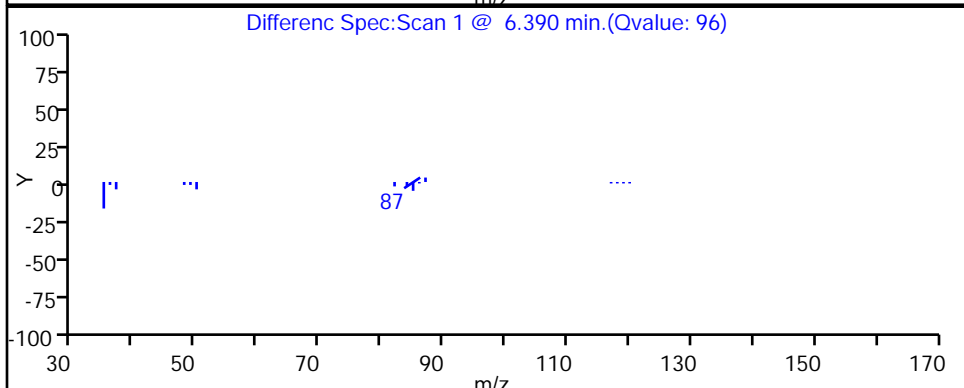
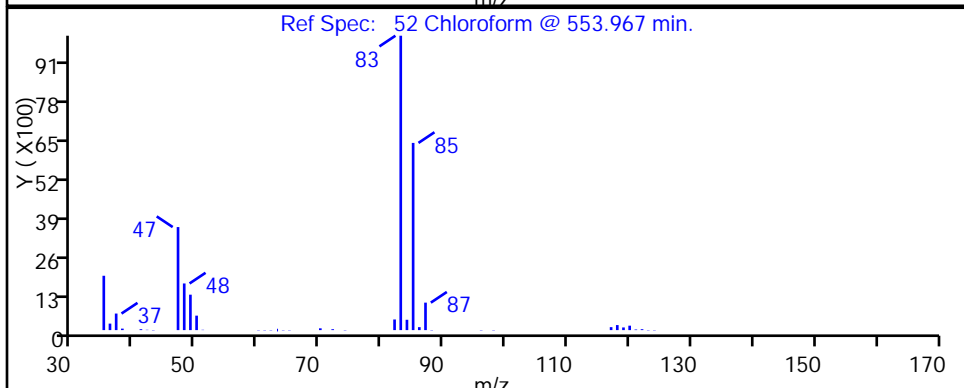
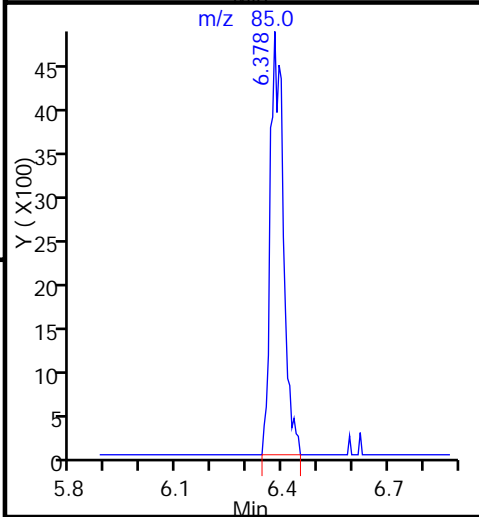
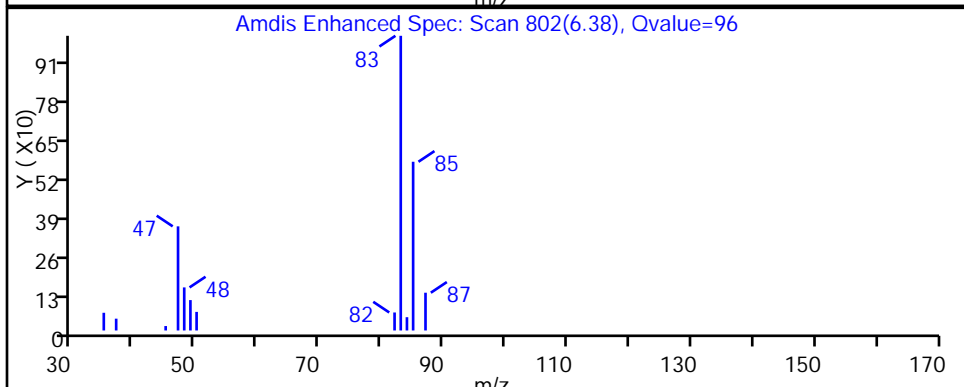
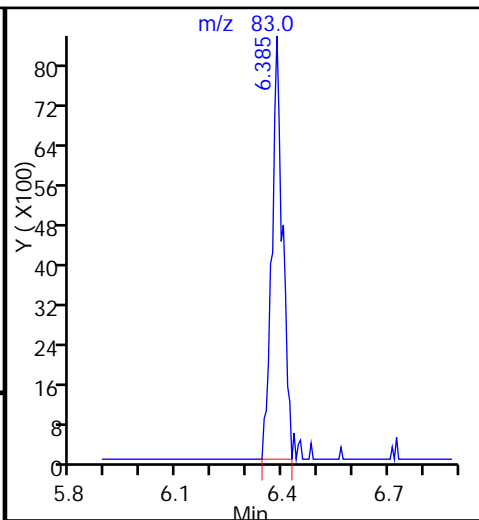
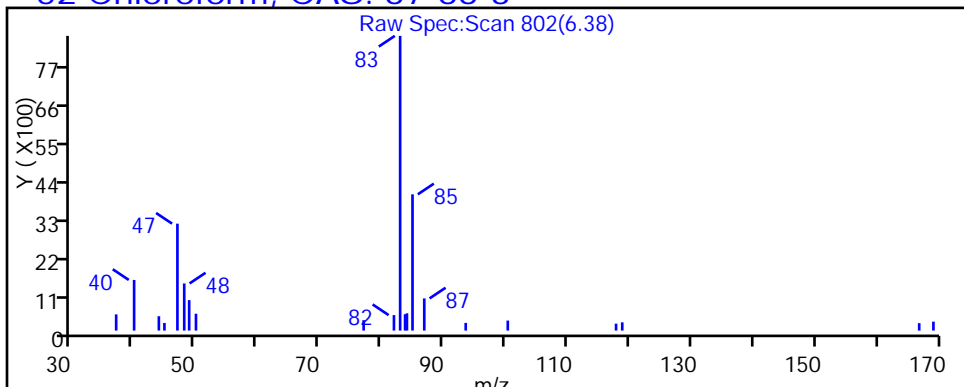
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

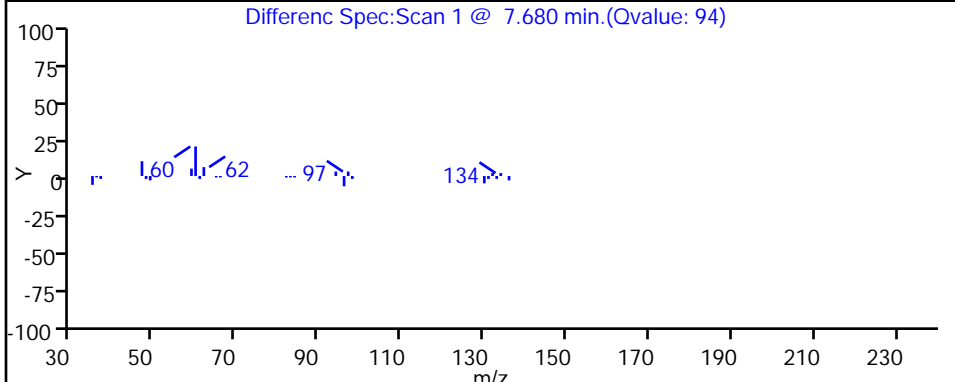
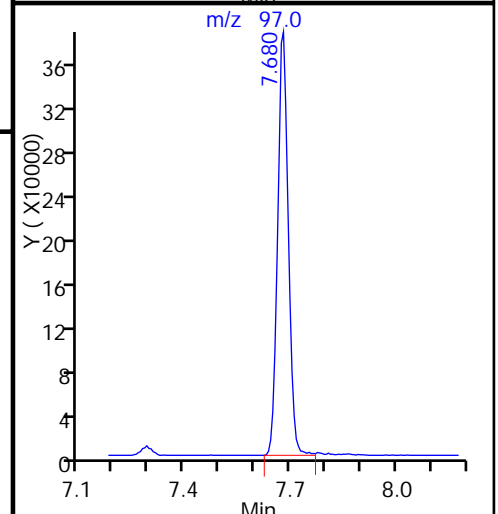
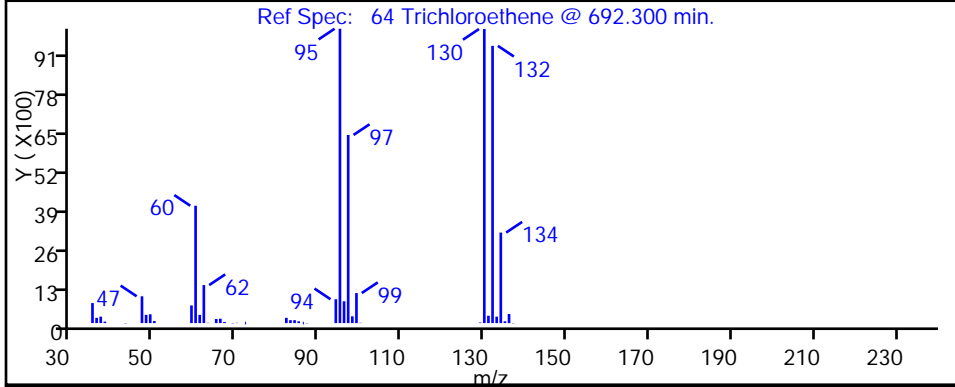
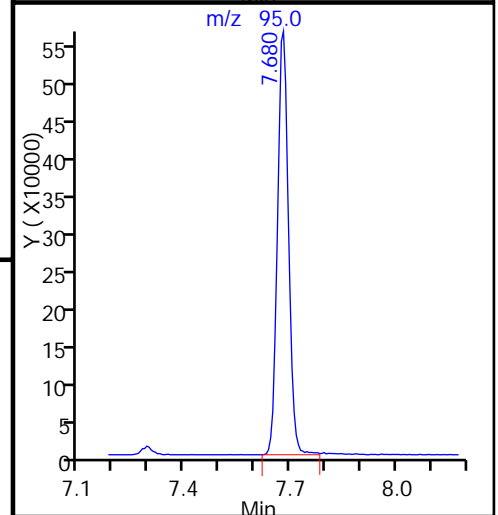
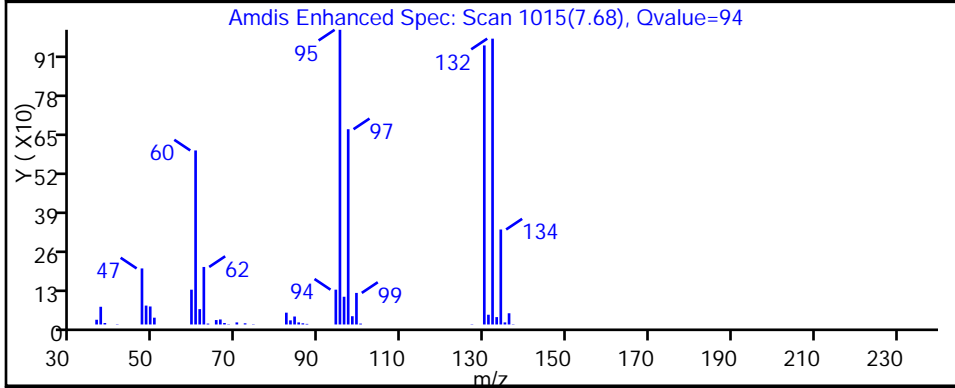
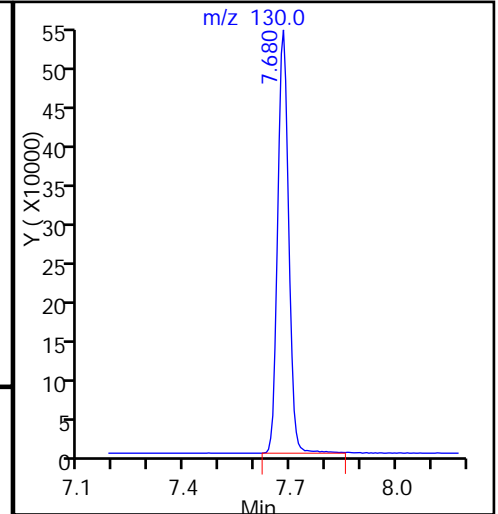
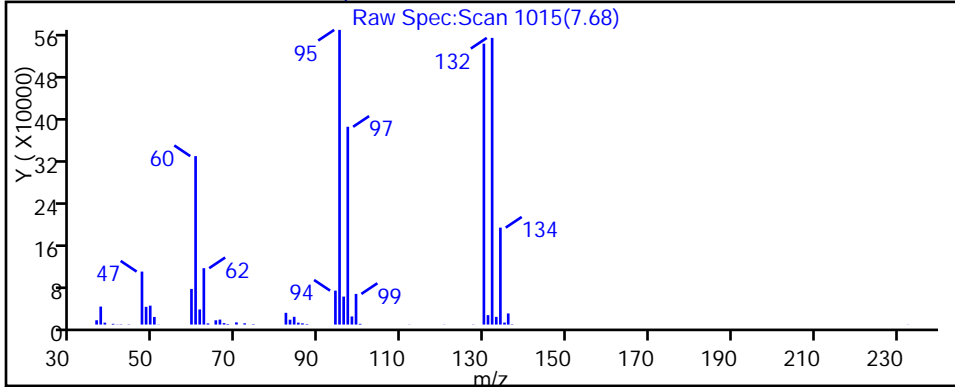
52 Chloroform, CAS: 67-66-3



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019028.D
Injection Date: 19-Oct-2015 21:07:30 Instrument ID: CHHP5
Lims ID: 180-48564-A-11 Lab Sample ID: 180-48564-11
Client ID: HD-QC5-0/1-1
Operator ID: 001562 ALS Bottle#: 28 Worklist Smp#: 28
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



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019028.D

Injection Date: 19-Oct-2015 21:07:30

Instrument ID: CHHP5

Lims ID: 180-48564-A-11

Lab Sample ID: 180-48564-11

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

Operator ID: 001562

ALS Bottle#: 28

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

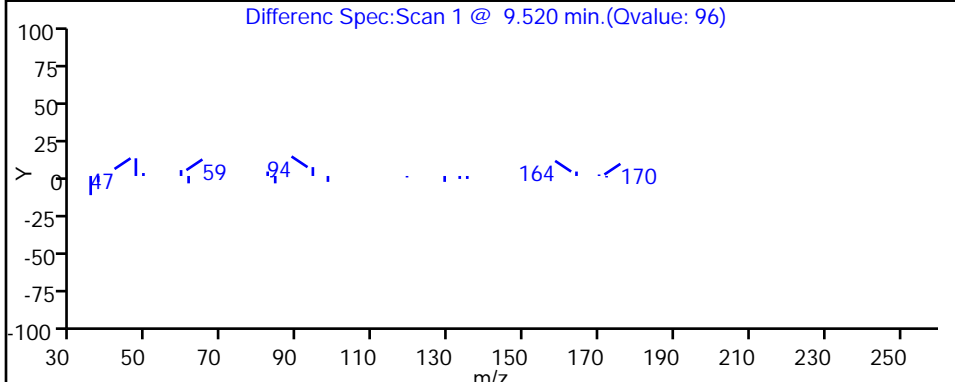
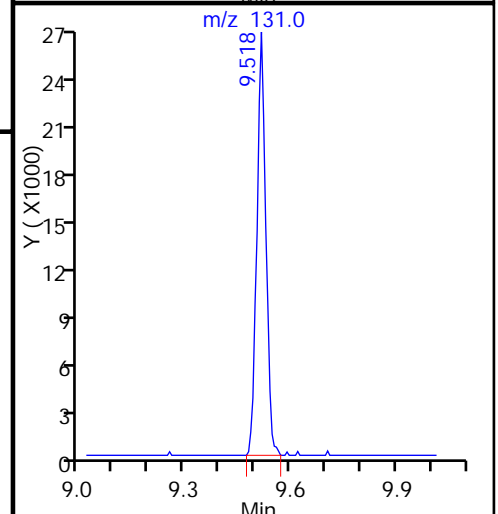
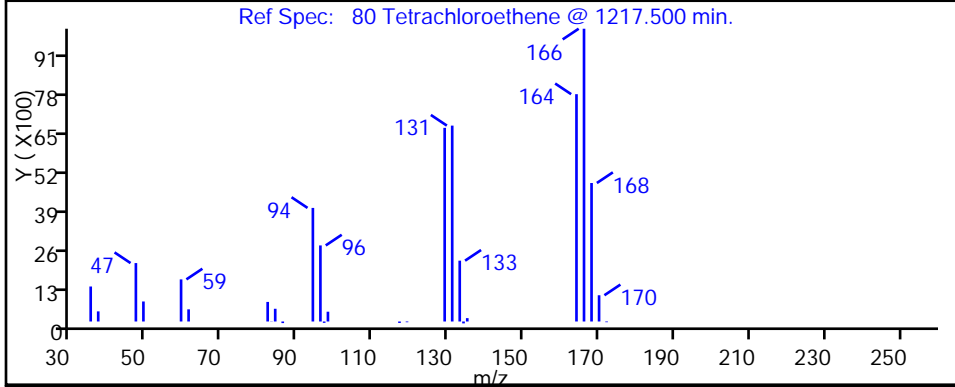
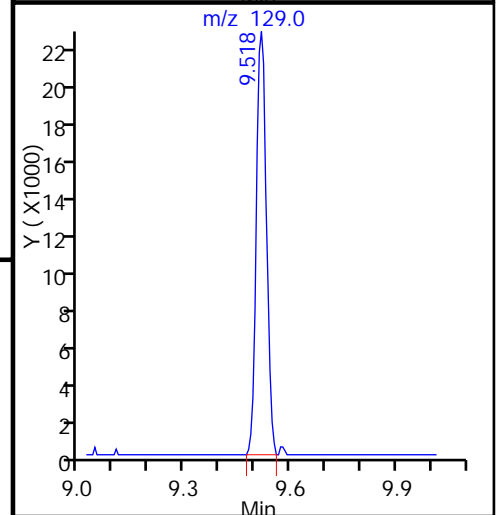
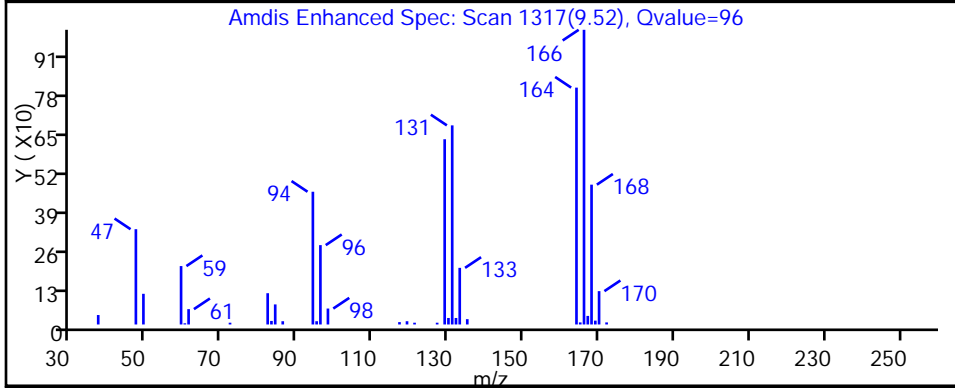
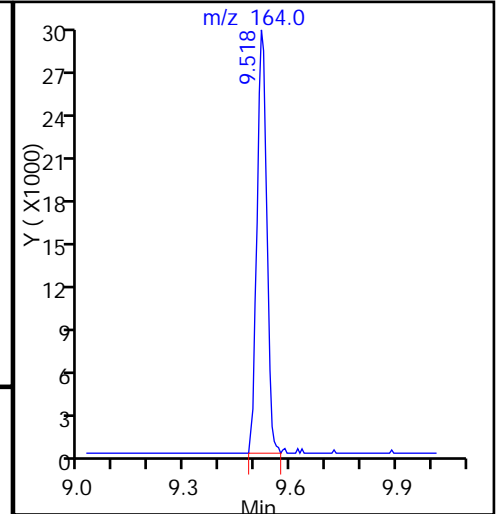
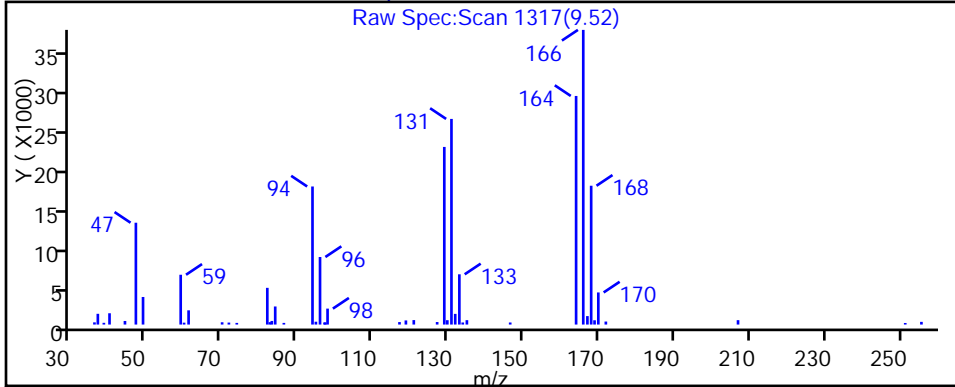
Method: MSVOA_LL_CHHP5

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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-QC5-0/1-1 DL Lab Sample ID: 180-48564-11 DL
 Matrix: Water Lab File ID: 51019014.D
 Analysis Method: 8260C Date Collected: 10/06/2015 08:00
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2015 15:29
 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.: 157435 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 ^c	5.0	1.1
74-83-9	Bromomethane	5.0	U ^c	5.0	1.6
75-00-3	Chloroethane	5.0	U ^c	5.0	1.1
75-35-4	1,1-Dichloroethene	5.0	U	5.0	1.5
67-64-1	Acetone	25	U	25	13
75-15-0	Carbon disulfide	5.0	U	5.0	1.1
75-09-2	Methylene Chloride	5.0	U	5.0	0.63
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.85
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.92
75-34-3	1,1-Dichloroethane	5.0	U	5.0	0.58
156-59-2	cis-1,2-Dichloroethene	1.6	J	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	1.1	J	5.0	0.85
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	1.4
56-23-5	Carbon tetrachloride	5.0	U	5.0	0.68
71-43-2	Benzene	5.0	U	5.0	0.53
107-06-2	1,2-Dichloroethane	5.0	U	5.0	1.1
79-01-6	Trichloroethene	120		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	6.4		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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-QC5-0/1-1 DL Lab Sample ID: 180-48564-11 DL
 Matrix: Water Lab File ID: 51019014.D
 Analysis Method: 8260C Date Collected: 10/06/2015 08:00
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2015 15:29
 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.: 157435 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	<i>Bromoform</i>	5.0	U	5.0	0.96
79-34-5	<i>1,1,2,2-Tetrachloroethane</i>	5.0	U	5.0	1.0
107-13-1	<i>Acrylonitrile</i>	100	U	100	2.7
123-91-1	<i>1,4-Dioxane</i>	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)	105		71-118
460-00-4	4-Bromofluorobenzene (Surr)	95		70-118
1868-53-7	Dibromofluoromethane (Surr)	105		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019014.D
 Lims ID: 180-48564-C-11 Lab Sample ID: 180-48564-11
 Client ID: HD-QC5-0/1-1
 Sample Type: Client
 Inject. Date: 19-Oct-2015 15:29:30 ALS Bottle#: 14 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 5.0000
 Sample Info: 180-48564-C-11, 5x
 Misc. Info.: 180-0009083-014
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 19-Oct-2015 15:39:12 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK002

First Level Reviewer: fergusond

Date: 19-Oct-2015 15:39:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.257	4.273	-0.016	0	110407	1000.0	
* 2 Fluorobenzene (IS)	96	7.293	7.284	0.009	97	295877	50.0	
* 3 Chlorobenzene-d5	119	10.389	10.387	0.002	92	66034	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.731	12.729	0.002	97	93788	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.563	6.554	0.009	93	76176	52.4	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.940	6.931	0.009	0	116456	58.4	
\$ 7 Toluene-d8 (Surr)	98	8.935	8.939	-0.004	96	268084	52.6	
\$ 8 4-Bromofluorobenzene (Surr	95	11.575	11.573	0.002	90	90970	47.3	
12 Chloromethane	50		1.766				ND	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.253				ND	
16 Chloroethane	64		2.387				ND	
22 1,1-Dichloroethene	96		3.354				ND	
24 Acetone	43		3.433				ND	
26 Carbon disulfide	76		3.634				ND	
31 Methylene Chloride	84		4.145				ND	
33 Acrylonitrile	53		4.522				ND	
34 trans-1,2-Dichloroethene	96		4.571				ND	
35 Methyl tert-butyl ether	73		4.583				ND	
37 1,1-Dichloroethane	63		5.204				ND	
45 cis-1,2-Dichloroethene	96	5.960	5.946	0.014	47	3040	1.59	
46 2-Butanone (MEK)	43		5.958				ND	
49 Chlorobromomethane	128		6.232				ND	
52 Chloroform	83	6.392	6.384	0.008	38	3361	1.10	M
53 1,1,1-Trichloroethane	97		6.548				ND	
56 Carbon tetrachloride	117		6.718				ND	
58 Benzene	78		6.943				ND	
59 1,2-Dichloroethane	62		7.023				ND	
64 Trichloroethene	130	7.682	7.680	0.002	95	211173	118.3	
67 1,2-Dichloropropane	63		7.947				ND	
70 1,4-Dioxane	88		8.020				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.227				ND	
74 cis-1,3-Dichloropropene	75		8.671				ND	
75 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
76 Toluene	91		9.006				ND	
77 trans-1,3-Dichloropropene	75		9.255				ND	
79 1,1,2-Trichloroethane	97		9.444				ND	
80 Tetrachloroethene	164	9.519	9.517	0.002	93	8134	6.41	
82 2-Hexanone	43		9.657				ND	
84 Chlorodibromomethane	129		9.821				ND	
85 Ethylene Dibromide	107		9.930				ND	
87 Chlorobenzene	112		10.417				ND	
90 Ethylbenzene	106		10.514				ND	
89 1,1,1,2-Tetrachloroethane	131		10.514				ND	
91 m-Xylene & p-Xylene	106		10.648				ND	
92 o-Xylene	106		11.032				ND	
93 Styrene	104		11.050				ND	
94 Bromoform	173		11.232				ND	
99 1,1,2,2-Tetrachloroethane	83		11.713				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019014.D

Injection Date: 19-Oct-2015 15:29:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48564-C-11

Lab Sample ID: 180-48564-11

Worklist Smp#: 14

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

Purge Vol: 5.000 mL

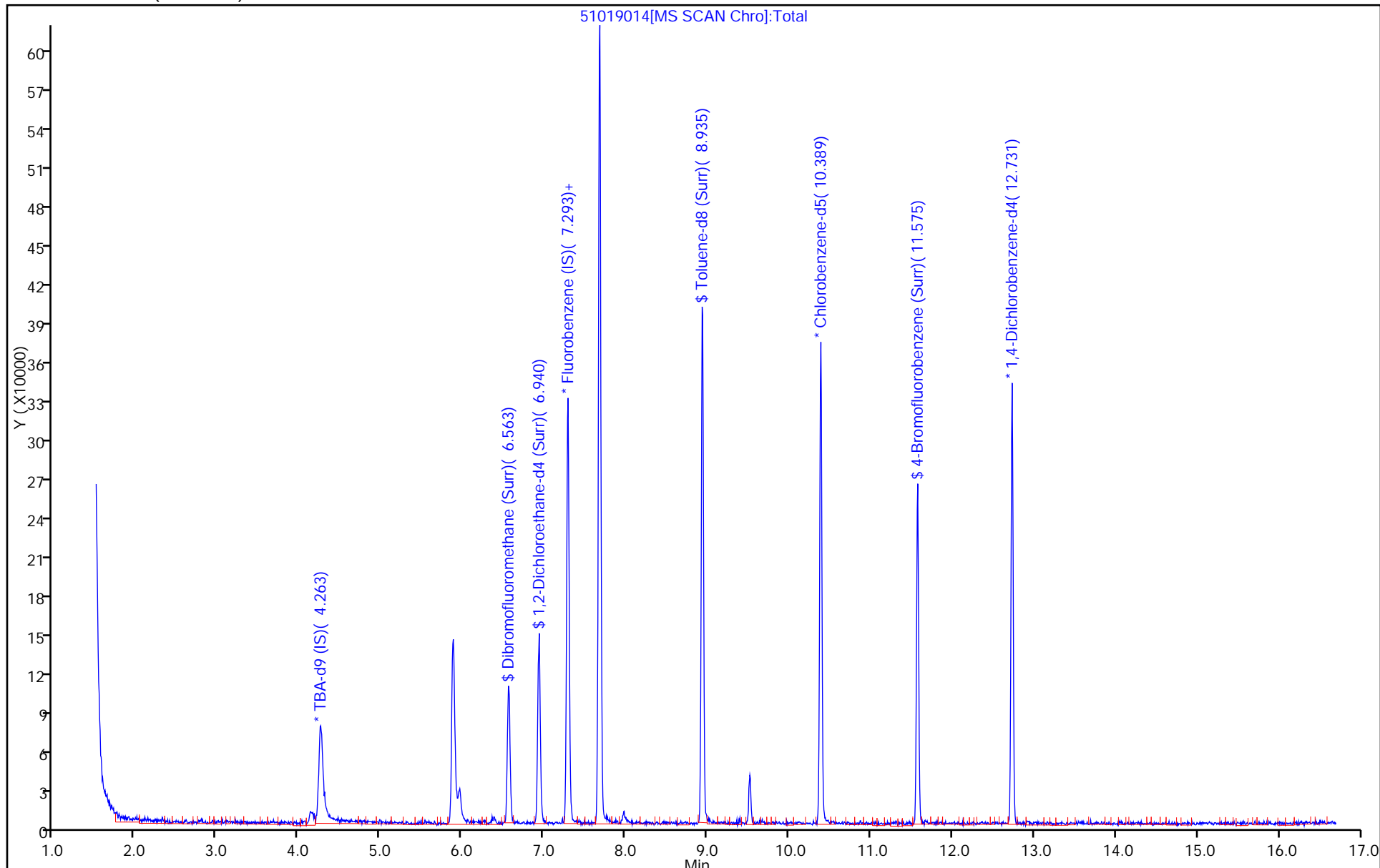
Dil. Factor: 5.0000

ALS Bottle#: 14

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019014.D

Injection Date: 19-Oct-2015 15:29:30

Instrument ID: CHHP5

Lims ID: 180-48564-C-11

Lab Sample ID: 180-48564-11

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

Operator ID: 001562

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

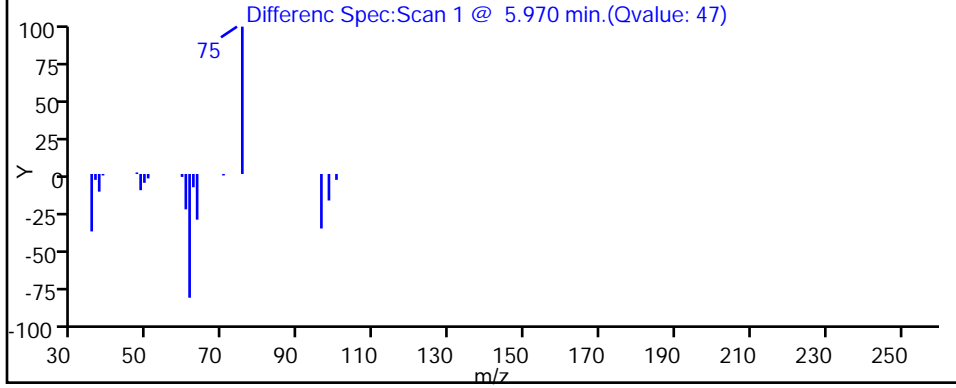
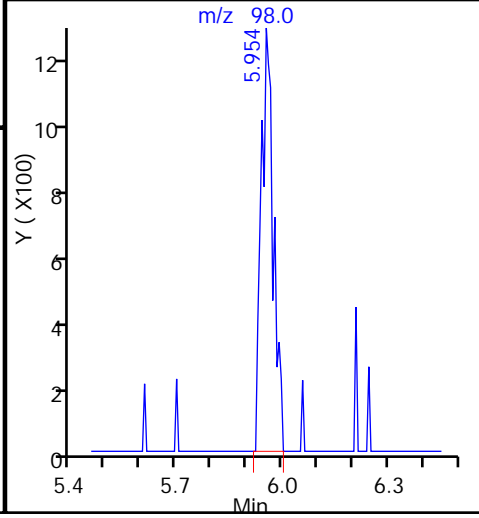
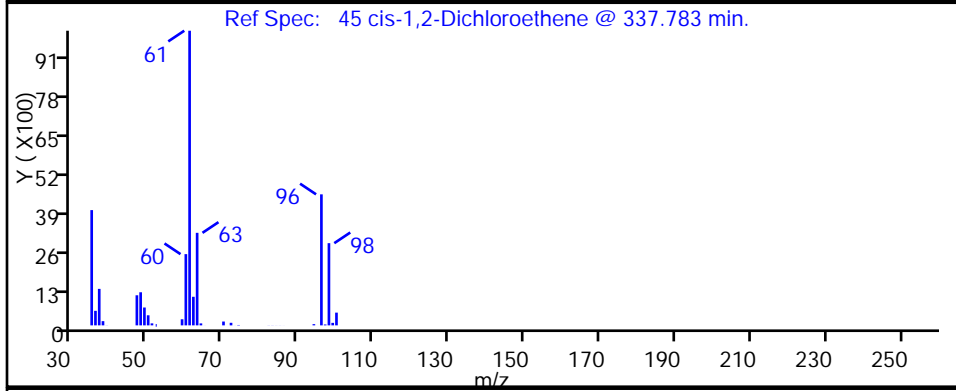
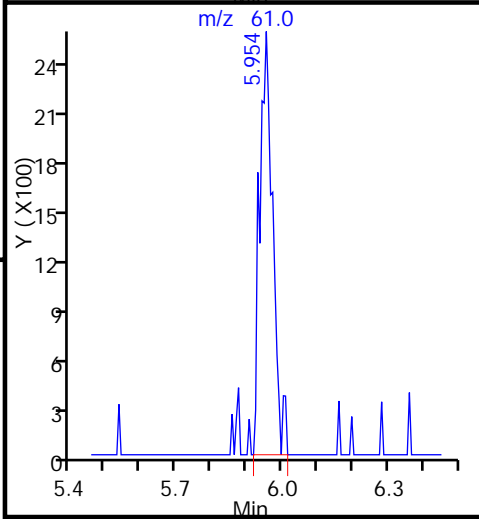
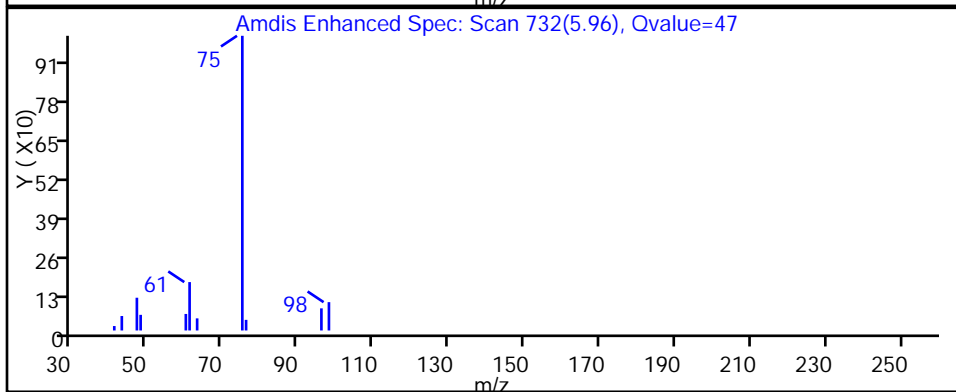
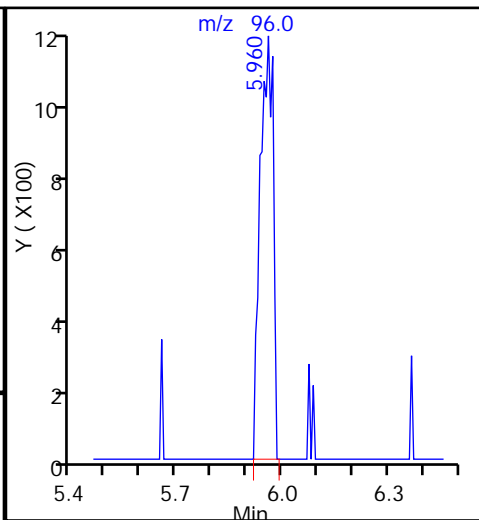
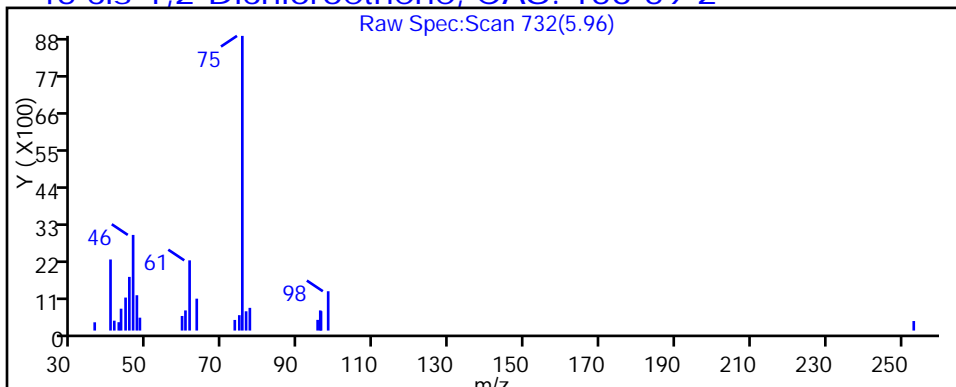
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019014.D

Injection Date: 19-Oct-2015 15:29:30

Instrument ID: CHHP5

Lims ID: 180-48564-C-11

Lab Sample ID: 180-48564-11

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

Operator ID: 001562

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

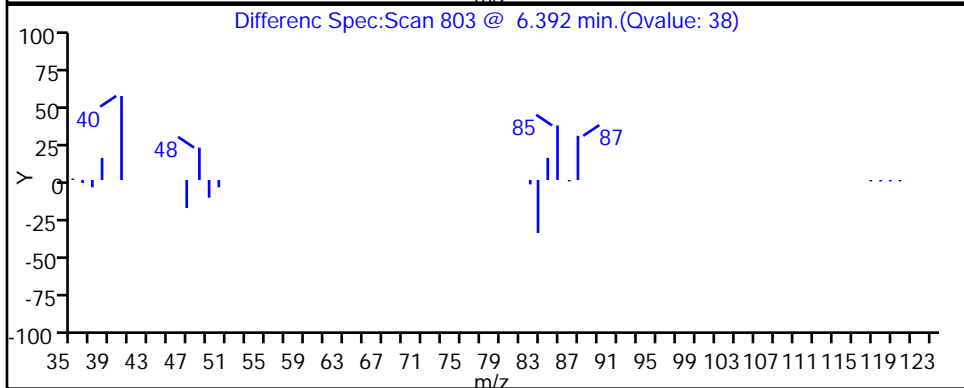
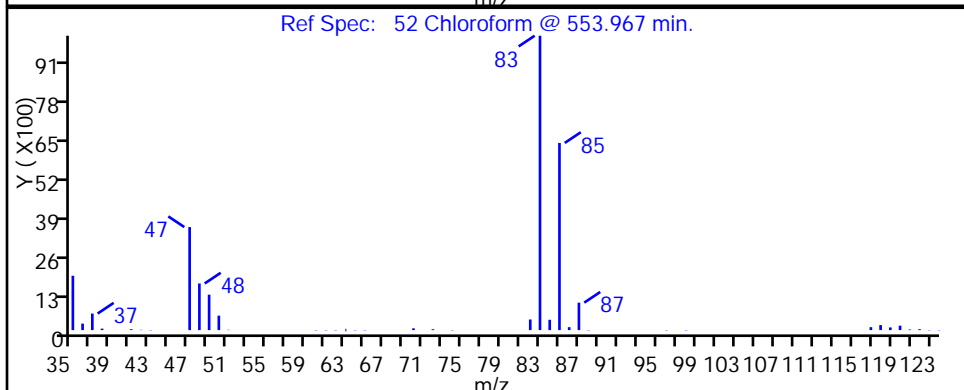
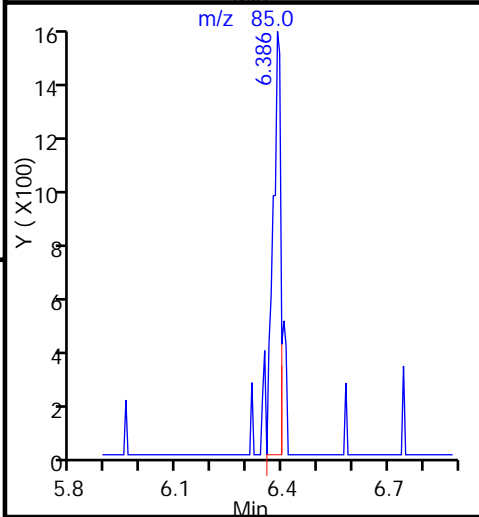
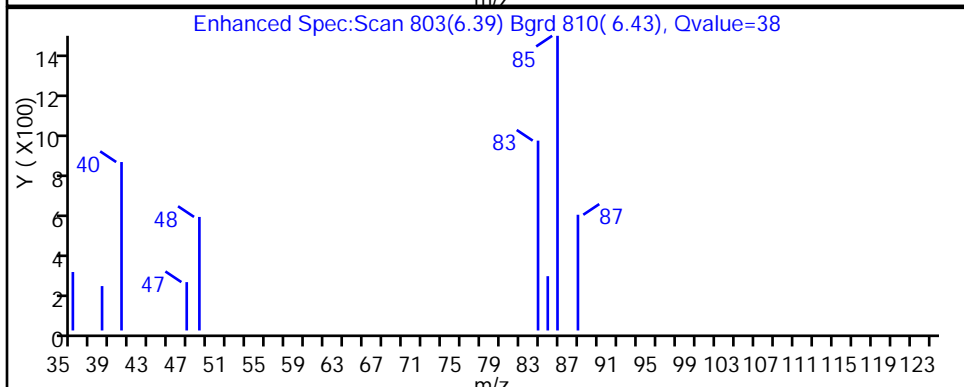
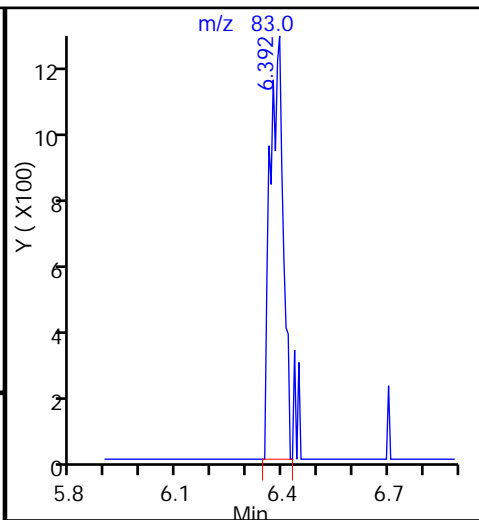
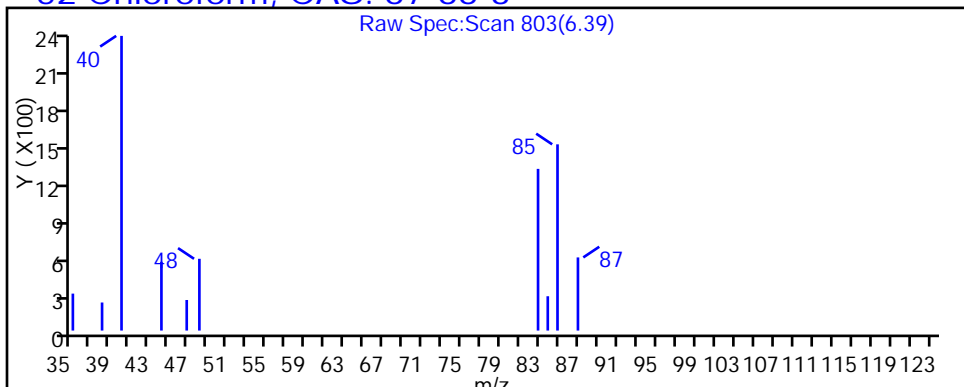
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

52 Chloroform, CAS: 67-66-3



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019014.D

Injection Date: 19-Oct-2015 15:29:30

Instrument ID: CHHP5

Lims ID: 180-48564-C-11

Lab Sample ID: 180-48564-11

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

Operator ID: 001562

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

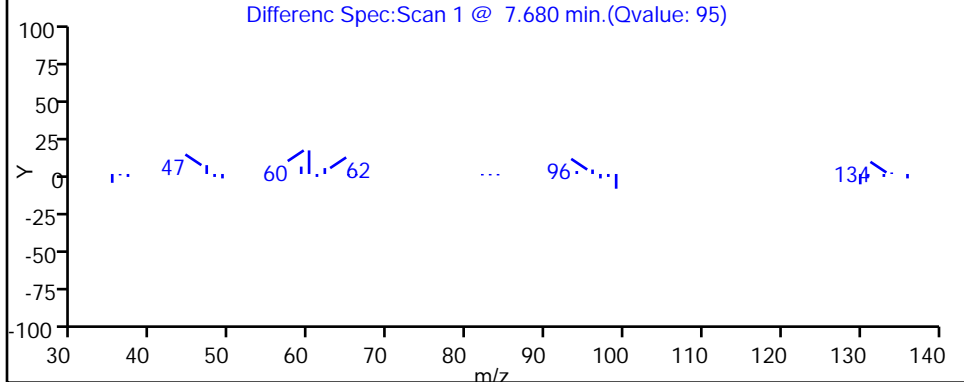
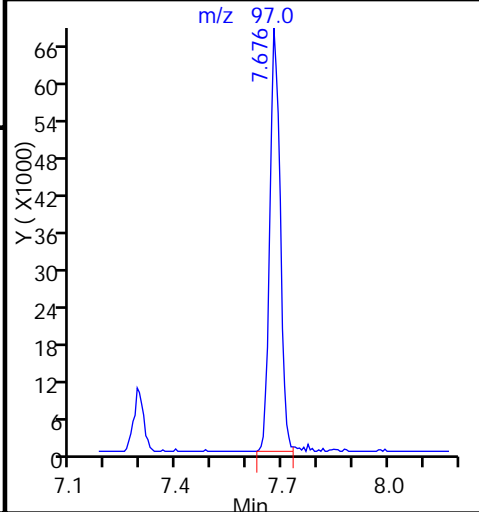
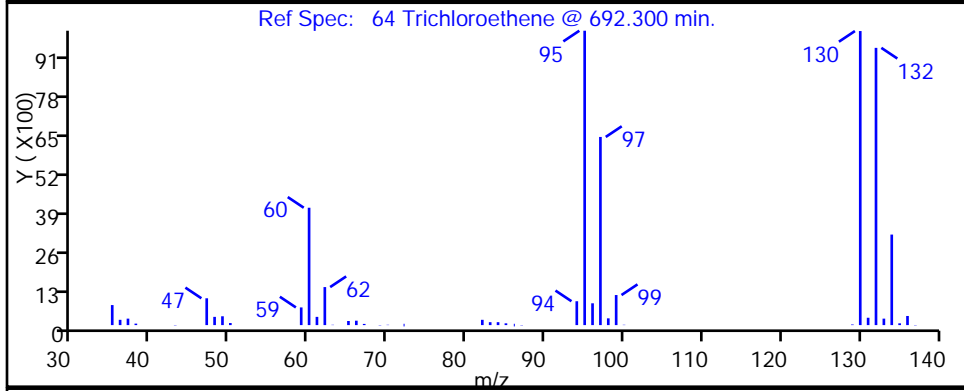
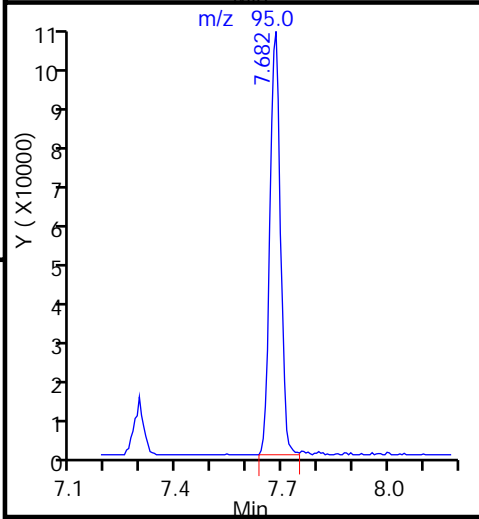
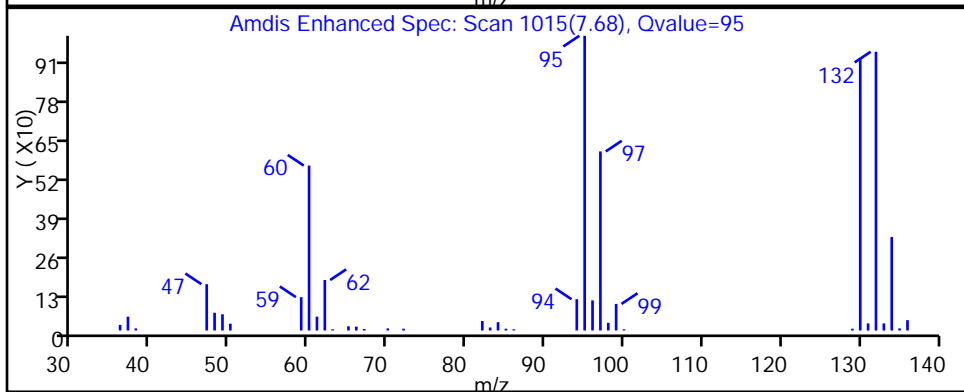
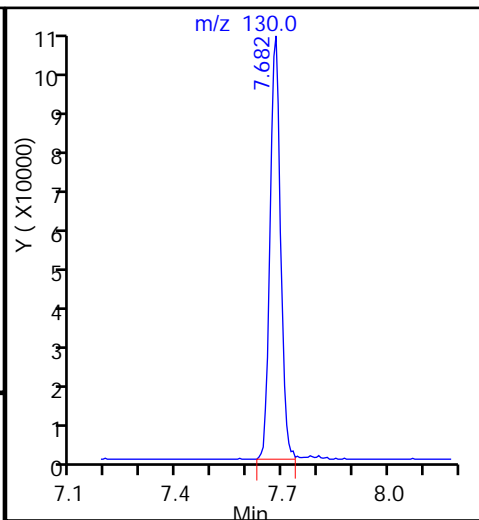
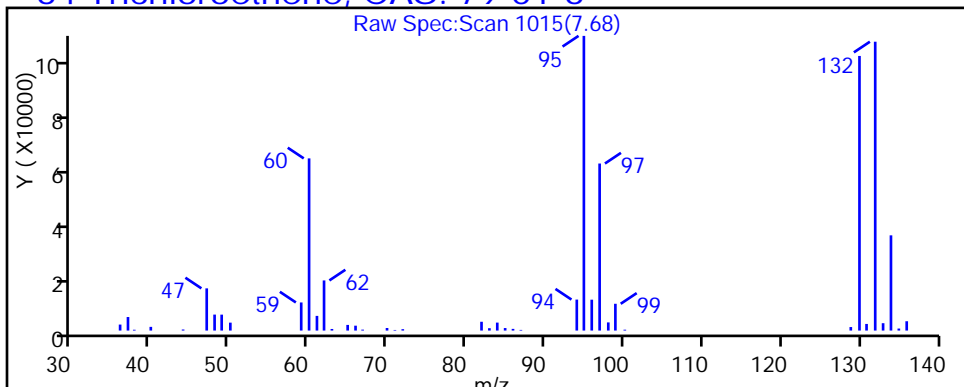
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019014.D

Injection Date: 19-Oct-2015 15:29:30

Instrument ID: CHHP5

Lims ID: 180-48564-C-11

Lab Sample ID: 180-48564-11

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

Operator ID: 001562

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

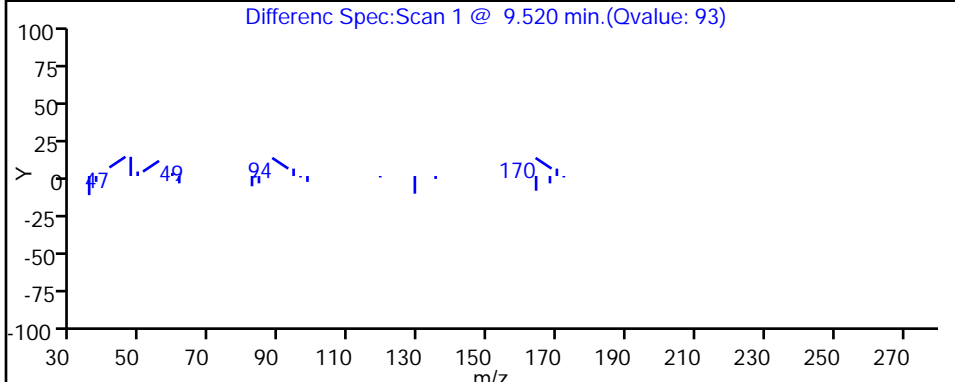
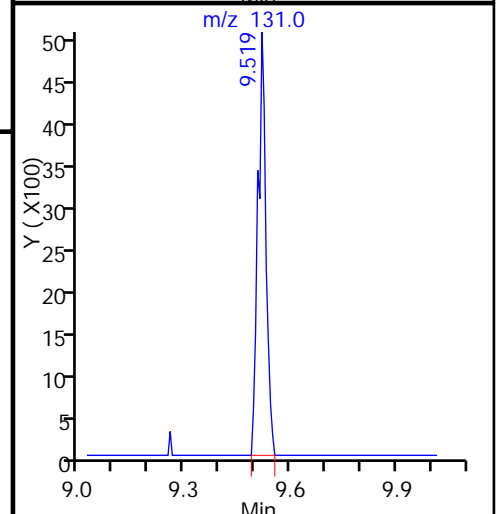
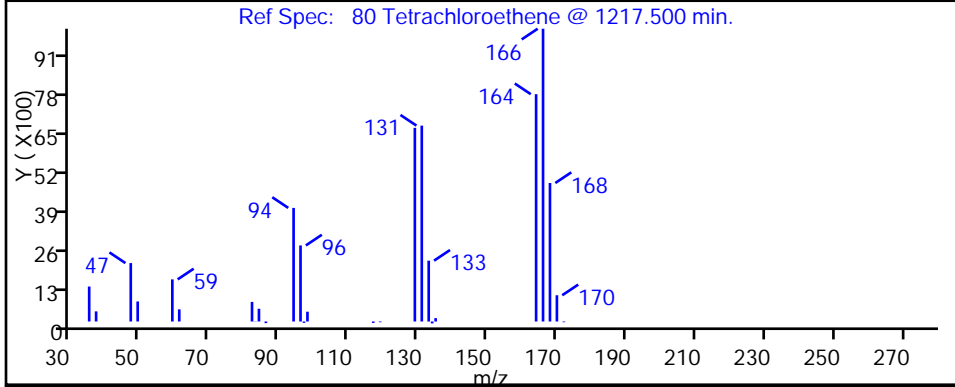
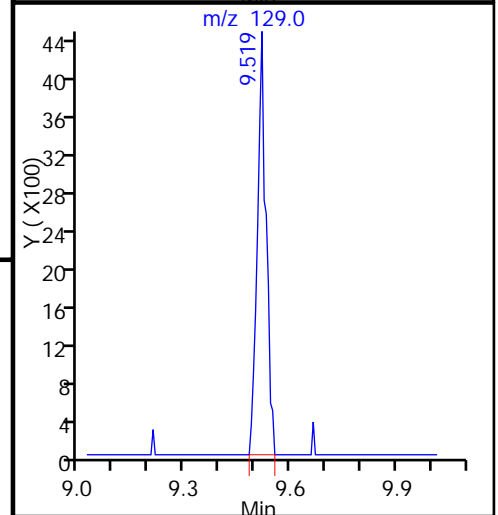
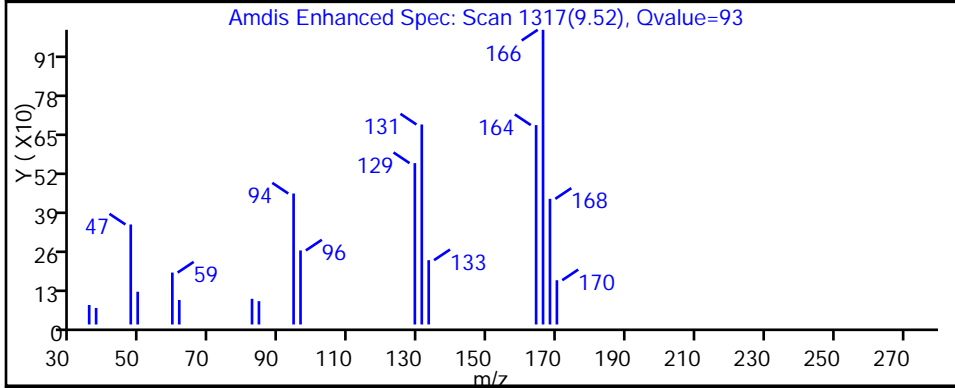
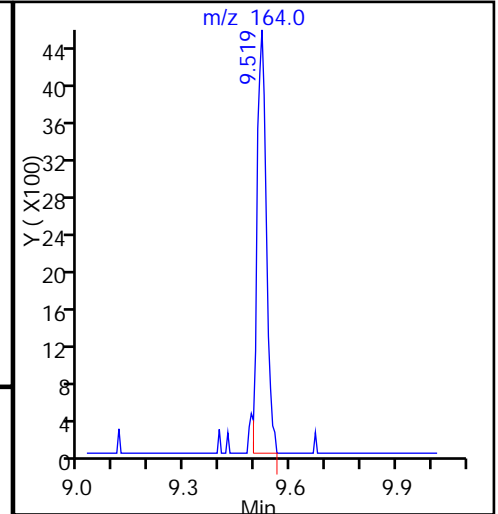
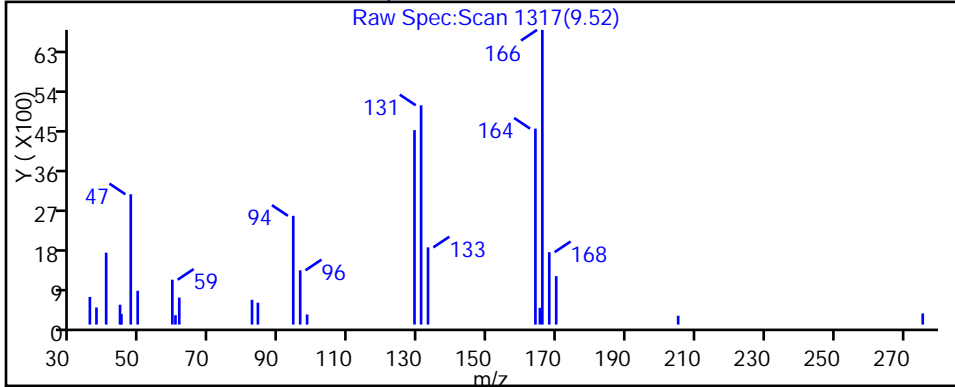
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4



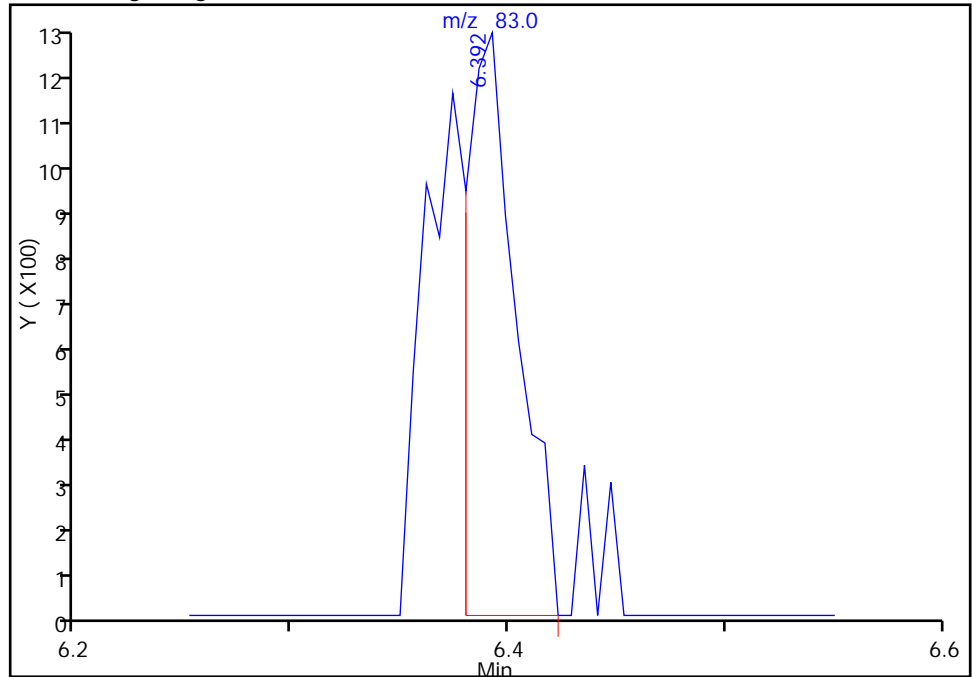
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019014.D
Injection Date: 19-Oct-2015 15:29:30 Instrument ID: CHHP5
Lims ID: 180-48564-C-11 Lab Sample ID: 180-48564-11
Client ID: HD-QC5-0/1-1
Operator ID: 001562 ALS Bottle#: 14 Worklist Smp#: 14
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

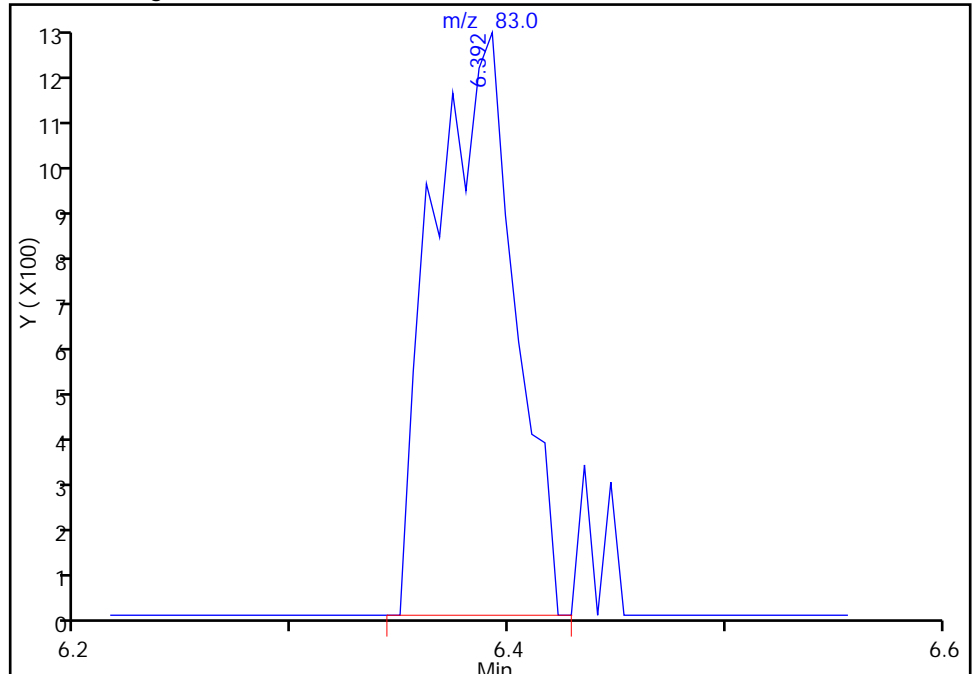
RT: 6.39
Area: 2087
Amount: 0.685321
Amount Units: ng

Processing Integration Results



RT: 6.39
Area: 3361
Amount: 1.103671
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 19-Oct-2015 15:39:12
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1 Analy Batch No.: 151868

SDG No.: _____

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

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-151868/6	50826006.D
Level 2	IC 180-151868/8	50826008.D
Level 3	ICIS 180-151868/9	50826009.D
Level 4	IC 180-151868/10	50826010.D
Level 5	IC 180-151868/11	50826011.D
Level 6	IC 180-151868/12	50826012.D
Level 7	IC 180-151868/13	50826013.D
Level 8	IC 180-151868/14	50826014.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
Dichlorodifluoromethane	0.3287 0.2623	0.2973 0.2575	0.3036 0.2768	0.2652	0.2686	Ave		0.2825		0.1000	8.8		20.0				
Chloromethane	0.5129 0.3809	0.4550 0.3728	0.4119 0.4194	0.3793	0.3858	Ave		0.4148		0.1000	11.6		20.0				
Vinyl chloride	0.4001 0.3434	0.3977 0.3372	0.3943 0.3699	0.3444	0.3565	Ave		0.3679		0.1000	7.2		20.0				
1,3-Butadiene	0.5239 0.3986	0.4751 0.3875	0.4623 0.4226	0.3955	0.4108	Ave		0.4345		0.0100	11.0		20.0				
Bromomethane	0.1691 0.1521	0.1576 0.1241	0.1270 0.1576	0.1608	0.1494	Ave		0.1497		0.0500	10.7		20.0				
Chloroethane	0.2791 0.2041	0.2380 0.2011	0.2154 0.2199	0.2110	0.2070	Ave		0.2220		0.0500	11.6		20.0				
Dichlorofluoromethane	0.5546 0.4260	0.5213 0.4285	0.5031 0.4664	0.4321	0.4354	Ave		0.4709		0.0100	10.5		20.0				
Trichlorofluoromethane	0.3948 0.3299	0.3814 0.3233	0.3774 0.3496	0.3273	0.3345	Ave		0.3523		0.1000	8.0		20.0				
Ethyl ether	0.4234 0.2964	0.3324 0.2960	0.3164 0.3549	0.2973	0.2952	Ave		0.3265		0.0100	13.7		20.0				
Acrolein	0.0512 0.0479	0.0489 0.0478	0.0480 0.0550	0.0441	0.0462	Ave		0.0486		0.0100	6.7		20.0				
1,1-Dichloroethene	0.2946 0.2694	0.2816 0.2624	0.2875 0.2968	0.2618	0.2736	Ave		0.2785		0.1000	5.0		20.0				
1,1,2-Trichloro-1,2,2-trifluoroethane	0.3300 0.2776	0.3157 0.2707	0.3079 0.2975	0.2771	0.2839	Ave		0.2951		0.1000	7.2		20.0				
Acetone	0.1264 0.0944	0.1213 0.0888	0.0958 0.1083	0.0854	0.0868	Ave		0.1009		0.0500	15.8		20.0				
Iodomethane	0.4682 0.3963	0.4179 0.3889	0.4130 0.4559	0.3863	0.3938	Ave		0.4150		0.0100	7.5		20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

Analy Batch No.: 151868

SDG No.: _____

Instrument ID: CHHP5

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2015 15:04

Calibration End Date: 08/26/2015 17:52

Calibration ID: 25113

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 8	LVL 5												
Carbon disulfide	0.6362 0.6697	0.5938 0.6592	0.6262 0.7601	0.5915	0.6365	Ave		0.6466			0.1000	8.3	20.0				
Allyl chloride	0.1392 0.1626	0.1500 0.1654	0.1522 0.1887	0.1471	0.1566	Ave		0.1577			0.0100	9.6	20.0				
Methyl acetate	0.3337 0.2890	0.3263 0.2857	0.2882 0.3263	0.2787	0.2836	Ave		0.3015			0.1000	7.6	20.0				
Methylene Chloride	0.6517 0.2904	0.3723 0.2913	0.3258 0.3382	0.3056	0.2911	Lin2	1.8054	0.2910			0.1000			0.9950		0.9900	
tert-Butyl alcohol	1.3524 1.1479	1.0348 1.0778	1.0400 1.1523	1.0913	1.1079	Ave		1.1255			0.0100	9.0	20.0				
Acrylonitrile	0.1618 0.1395	0.1545 0.1388	0.1504 0.1578	0.1327	0.1347	Ave		0.1463			0.0100	7.7	20.0				
trans-1,2-Dichloroethene	0.3383 0.2905	0.3111 0.2805	0.3070 0.3253	0.2770	0.2891	Ave		0.3024			0.1000	7.2	20.0				
Methyl tert-butyl ether	0.7340 0.6851	0.6905 0.6950	0.6558 0.8276	0.6473	0.6637	Ave		0.6999			0.1000	8.3	20.0				
Hexane	0.5487 0.5062	0.5124 0.4822	0.5150 0.5325	0.4707	0.4929	Ave		0.5076			0.0100	5.1	20.0				
1,1-Dichloroethane	0.6731 0.5678	0.6009 0.5615	0.5929 0.6517	0.5533	0.5641	Ave		0.5957			0.2000	7.5	20.0				
Vinyl acetate	0.4658 0.4559	0.4321 0.4509	0.4142 0.5072	0.4114	0.4375	Ave		0.4469			0.0100	6.9	20.0				
2,2-Dichloropropane	0.2543 0.2353	0.2294 0.2294	0.2373 0.2670	0.2227	0.2344	Ave		0.2387			0.0100	6.1	20.0				
cis-1,2-Dichloroethene	0.3560 0.3133	0.3276 0.3052	0.3171 0.3596	0.3029	0.3027	Ave		0.3230			0.1000	7.1	20.0				
2-Butanone (MEK)	0.1700 0.1465	0.1604 0.1446	0.1482 0.1652	0.1430	0.1348	Ave		0.1516			0.0500	8.1	20.0				
Bromochloromethane	0.1549 0.1331	0.1498 0.1336	0.1364 0.1592	0.1347	0.1330	Ave		0.1418			0.0100	7.7	20.0				
Tetrahydrofuran	0.1584 0.1188	0.1210 0.1173	0.1165 0.1328	0.1044	0.1035	Ave		0.1216			0.0100	14.4	20.0				
Chloroform	0.6121 0.4769	0.5334 0.4687	0.5043 0.5518	0.4874	0.4825	Ave		0.5146			0.2000	9.5	20.0				
1,1,1-Trichloroethane	0.3907 0.3764	0.3802 0.3610	0.3863 0.4248	0.3588	0.3661	Ave		0.3805			0.1000	5.6	20.0				
Cyclohexane	0.6174 0.6347	0.6332 0.6154	0.6564 0.6862	0.6129	0.6374	Ave		0.6367			0.1000	3.9	20.0				
Carbon tetrachloride	0.3208 0.3222	0.3255 0.3130	0.3231 0.3616	0.3071	0.3191	Ave		0.3240			0.1000	5.0	20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1 Analy Batch No.: 151868

SDG No.: _____

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

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
1,1-Dichloropropene	0.4109 0.4177	0.4291 0.3991	0.4295 0.4615	0.4010	0.4176	Ave		0.4208			0.0100	4.7	20.0				
Isobutyl alcohol	0.0095 0.0095	0.0091 0.0100	0.0099 0.0111	0.0081	0.0090	Ave		0.0095		*	0.0100	9.4	20.0				
Benzene	1.3619 1.1379	1.3471 1.1166	1.2583 1.2803	1.1865	1.1745	Ave		1.2329			0.5000	7.6	20.0				
1,2-Dichloroethane	0.4741 0.4037	0.4480 0.4008	0.4163 0.4668	0.4018	0.3996	Ave		0.4264			0.1000	7.4	20.0				
n-Heptane	0.4905 0.4664	0.4584 0.4370	0.4667 0.4920	0.4330	0.4446	Ave		0.4611			0.0100	4.9	20.0				
Trichloroethene	0.3438 0.2884	0.3023 0.2830	0.3001 0.3282	0.2819	0.2852	Ave		0.3016			0.2000	7.6	20.0				
Methylcyclohexane	0.4249 0.4931	0.4566 0.4767	0.4833 0.5272	0.4569	0.4841	Ave		0.4753			0.1000	6.4	20.0				
1,2-Dichloropropane	0.3806 0.3114	0.3166 0.3023	0.3142 0.3619	0.2970	0.3041	Ave		0.3235			0.1000	9.5	20.0				
1,4-Dioxane	0.0018 0.0024	0.0022 0.0023	0.0022 0.0026	0.0021	0.0022	Ave		0.0022		*	0.0100	11.0	20.0				
Dibromomethane	0.1726 0.1580	0.1745 0.1564	0.1618 0.1826	0.1547	0.1528	Ave		0.1642			0.0100	6.7	20.0				
Bromodichloromethane	0.3187 0.3277	0.3165 0.3275	0.3067 0.3841	0.3076	0.3105	Ave		0.3249			0.2000	7.8	20.0				
cis-1,3-Dichloropropene	0.3262 0.4065	0.3324 0.4128	0.3462 0.4886	0.3587	0.3740	Ave		0.3807			0.2000	14.2	20.0				
4-Methyl-2-pentanone (MIBK)	1.0903 1.2759	1.2109 1.2196	1.2320 1.3578	1.2204	1.2490	Ave		1.2320			0.1000	6.0	20.0				
Toluene	5.5703 4.5203	5.5571 4.1167	5.4822 4.5535	4.9121	4.8891	Ave		4.9502			0.4000	11.0	20.0				
trans-1,3-Dichloropropene	1.1012 1.3656	1.2222 1.3022	1.2566 1.5136	1.2587	1.3145	Ave		1.2918			0.1000	9.2	20.0				
Ethyl methacrylate	1.0084 1.3290	1.1451 1.2693	1.2245 1.4637	1.2645	1.2889	Ave		1.2492			0.0100	10.7	20.0				
1,1,2-Trichloroethane	0.9854 0.8899	1.0921 0.8150	0.9726 0.9474	0.9168	0.9135	Ave		0.9416			0.1000	8.6	20.0				
Tetrachloroethene	1.1379 0.8860	1.0568 0.8108	1.0252 0.9003	0.9316	0.9384	Ave		0.9609			0.2000	11.0	20.0				
1,3-Dichloropropane	1.9919 1.6394	1.8881 1.5526	1.7977 1.7492	1.7044	1.6621	Ave		1.7482			0.0100	8.1	20.0				
2-Hexanone	0.8243 0.9047	0.9086 0.8711	0.9027 0.9534	0.8729	0.8767	Ave		0.8893			0.1000	4.2	20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1 Analy Batch No.: 151868

SDG No.: _____

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

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
Dibromochloromethane	0.7656 0.8311	0.7604 0.7903	0.8248 0.9219	0.8043	0.8232	Ave		0.8152			0.1000	6.2	20.0				
1,2-Dibromoethane (EDB)	0.9759 0.8616	0.9872 0.8306	0.9279 0.9400	0.8704	0.8651	Ave		0.9073			0.1000	6.4	20.0				
3-Chlorobenzotrifluoride	1.9141 1.5139	1.7300 1.3853	1.7441 1.3810	1.5596	1.4979	Ave		1.5907			0.0100	11.9	20.0				
Chlorobenzene	3.7359 2.9360	3.5057 2.7547	3.3592 3.0452	3.0983	3.0632	Ave		3.1873			0.5000	10.1	20.0				
4-Chlorobenzotrifluoride	1.7602 1.4166	1.6482 1.3106	1.6401 1.3278	1.5024	1.4249	Ave		1.5038			0.0100	10.9	20.0				
1,1,1,2-Tetrachloroethane	1.1225 0.9996	1.0966 0.9489	1.0413 1.0904	1.0057	1.0062	Ave		1.0389			0.0100	5.7	20.0				
Ethylbenzene	1.6196 1.6672	1.7534 1.5472	1.8359 1.7000	1.6962	1.6973	Ave		1.6896			0.1000	5.1	20.0				
m-Xylene & p-Xylene	1.9469 2.0590	2.1320 1.8861	2.2561 2.1036	2.0873	2.1024	Ave		2.0717			0.1000	5.5	20.0				
o-Xylene	1.7875 1.9631	1.9618 1.8192	2.1700 2.0438	2.0181	1.9885	Ave		1.9690			0.3000	6.2	20.0				
Styrene	2.9089 3.2190	3.4288 3.0069	3.5226 3.3091	3.3907	3.3066	Ave		3.2616			0.3000	6.4	20.0				
Bromoform	0.4690 0.4795	0.4313 0.4703	0.4499 0.5395	0.4346	0.4474	Ave		0.4652			0.1000	7.4	20.0				
2-Chlorobenzotrifluoride	1.7885 1.4787	1.7489 1.3827	1.7033 1.3749	1.5707	1.4741	Ave		1.5652			0.0100	10.5	20.0				
Isopropylbenzene	4.3653 4.6596	5.1113 4.2808	5.5491 4.6316	4.9755	5.0001	Ave		4.8217			0.1000	8.7	20.0				
1,1,2,2-Tetrachloroethane	1.4661 1.1699	1.3993 1.1182	1.3725 1.2326	1.2215	1.1808	Ave		1.2701			0.3000	9.9	20.0				
Bromobenzene	0.9000 0.8558	0.8314 0.8194	0.8380 0.9507	0.8287	0.8423	Ave		0.8583			0.0100	5.2	20.0				
trans-1,4-Dichloro-2-butene	0.2917 0.3299	0.2806 0.3207	0.2875 0.3711	0.2997	0.3010	Ave		0.3103			0.0100	9.5	20.0				
1,2,3-Trichloropropane	0.3063 0.2797	0.2926 0.2700	0.2690 0.3158	0.2674	0.2639	Ave		0.2831			0.0100	6.9	20.0				
N-Propylbenzene	0.8996 1.0031	0.9330 0.9647	1.0104 1.0875	0.9757	0.9863	Ave		0.9825			0.0100	5.7	20.0				
2-Chlorotoluene	0.7422 0.8347	0.8275 0.8182	0.8534 0.9287	0.8318	0.8446	Ave		0.8351			0.0100	6.1	20.0				
3-Chlorotoluene	0.8266 0.8699	0.8669 0.8353	0.8759 0.8984	0.8585	0.8348	Ave		0.8583			0.0100	2.9	20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

Analy Batch No.: 151868

SDG No.: _____

Instrument ID: CHHP5

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2015 15:04

Calibration End Date: 08/26/2015 17:52

Calibration ID: 25113

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
1,3,5-Trimethylbenzene	2.3645 2.7734	2.8908 2.6232	2.9957 2.8967	2.8185	2.8452	Ave		2.7760			0.0100	7.1	20.0				
4-Chlorotoluene	0.8633 0.9172	0.9746 0.8728	0.9234 0.9963	0.8946	0.9096	Ave		0.9190			0.0100	5.0	20.0				
tert-Butylbenzene	1.8741 2.3430	2.1778 2.2068	2.3521 2.4799	2.2754	2.3463	Ave		2.2569			0.0100	8.0	20.0				
1,2,4-Trimethylbenzene	2.3075 2.7925	2.8627 2.6520	2.9863 2.9459	2.8624	2.8401	Ave		2.7812			0.0100	7.8	20.0				
3,4-Dichlorobenzotrifluoride	0.9332 0.7629	0.7706 0.7120	0.8114 0.7421	0.7469	0.7246	Ave		0.7754			0.0100	9.1	20.0				
sec-Butylbenzene	2.7780 3.1978	3.2532 3.0155	3.5024 3.2789	3.1902	3.2760	Ave		3.1865			0.0100	6.7	20.0				
1,3-Dichlorobenzene	1.5731 1.4773	1.6002 1.4395	1.5858 1.6167	1.4673	1.4672	Ave		1.5284			0.6000	4.7	20.0				
4-Isopropyltoluene	2.1994 2.7400	2.7068 2.6136	2.9233 2.8630	2.7523	2.7684	Ave		2.6959			0.0100	8.2	20.0				
1,4-Dichlorobenzene	1.8395 1.4959	1.6730 1.4568	1.6062 1.6474	1.5057	1.4918	Ave		1.5895			0.5000	8.1	20.0				
2,4-Dichlorobenzotrifluoride	0.8167 0.7142	0.7458 0.6499	0.7804 0.6801	0.6991	0.6616	Ave		0.7185			0.0100	8.2	20.0				
2,5-Dichlorobenzotrifluoride	0.8953 0.7661	0.7731 0.7682	0.8004 0.7491	0.7462	0.7137	Ave		0.7765			0.0100	7.0	20.0				
n-Butylbenzene	1.9548 2.3709	2.2758 2.2727	2.5056 2.4426	2.2735	2.3594	Ave		2.3069			0.0100	7.2	20.0				
1,2-Dichlorobenzene	1.6347 1.3388	1.5012 1.3288	1.4944 1.4525	1.3452	1.3303	Ave		1.4282			0.4000	7.8	20.0				
1,2-Dibromo-3-Chloropropane	0.1072 0.1191	0.1212 0.1226	0.1194 0.1351	0.1034	0.1102	Ave		0.1173			0.0500	8.6	20.0				
2,4- & 2,5- & 2,6- Dichlorotoluene	0.7554 0.8278	0.7846 0.8399	0.9569 0.8065	0.7811	0.7733	Ave		0.8157			0.0100	7.8	20.0				
2,3- & 3,4- Dichlorotoluene	0.7045 0.7833	0.7591 0.8096	0.9510 0.7804	0.7194	0.7151	Ave		0.7778			0.0100	10.2	20.0				
1,2,4-Trichlorobenzene	0.5337 0.5349	0.5713 0.5698	0.6897 0.5692	0.4840	0.4928	Ave		0.5557			0.2000	11.5	20.0				
Hexachlorobutadiene	0.2789 0.2527	0.2957 0.2535	0.3393 0.2508	0.2366	0.2338	Ave		0.2677			0.0100	13.3	20.0				
Naphthalene	1.2233 1.4724	1.2705 1.5865	1.7478 1.5810	1.2452	1.2988	Ave		1.4282			0.0100	13.7	20.0				
1,2,3-Trichlorobenzene	0.4915 0.4124	0.4501 0.4480	0.5796 0.4500	0.3828	0.3844	Ave		0.4498			0.0100	14.2	20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1 Analy Batch No.: 151868

SDG No.: _____

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

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
2,4,5-Trichlorotoluene	0.1695 0.1581	0.1451 0.1827	0.2185 0.1750	0.1232	0.1263	Ave		0.1623		0.0100	19.4		20.0				
2,3,6-Trichlorotoluene	0.1057 +++++	0.1323 +++++	0.2120 +++++	0.1162	0.1265	Ave		0.1496		0.0100	24.0	*	20.0				
Dibromofluoromethane (Surr)	0.2897 0.2274	0.2548 0.2230	0.2447 0.2662	0.2287	0.2299	Ave		0.2455			9.5		20.0				
1,2-Dichloroethane-d4 (Surr)	0.4203 0.3099	0.3560 0.3035	0.3369 0.3556	0.3100	0.3058	Ave		0.3373			11.9		20.0				
Toluene-d8 (Surr)	4.5689 3.4832	4.1450 3.1902	4.3481 3.5716	3.8169	3.7347	Ave		3.8573			12.1		20.0				
4-Bromofluorobenzene (Surr)	1.6296 1.3602	1.5022 1.2884	1.5824 1.4505	1.4462	1.3812	Ave		1.4551			7.8		20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1 Analy Batch No.: 151868

SDG No.: _____

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

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-151868/6	50826006.D
Level 2	IC 180-151868/8	50826008.D
Level 3	ICIS 180-151868/9	50826009.D
Level 4	IC 180-151868/10	50826010.D
Level 5	IC 180-151868/11	50826011.D
Level 6	IC 180-151868/12	50826012.D
Level 7	IC 180-151868/13	50826013.D
Level 8	IC 180-151868/14	50826014.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8			LVL 6	LVL 7	LVL 8		
Dichlorodifluoromethane	FB	Ave	13335 461015	63359 506611	139988 585297	195493	268740	5.00 175	25.0 200	50.0 250	75.0	100
Chloromethane	FB	Ave	20806 669660	96975 733518	189967 886889	279657	386017	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl chloride	FB	Ave	16232 603655	84746 663498	181809 782206	253941	356745	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Butadiene	FB	Ave	21253 700624	101243 762590	213171 893578	291582	411077	5.00 175	25.0 200	50.0 250	75.0	100
Bromomethane	FB	Ave	6860 267454	33586 244127	58568 333317	118541	149495	5.00 175	25.0 200	50.0 250	75.0	100
Chloroethane	FB	Ave	11321 358728	50718 395735	99329 465079	155578	207155	5.00 175	25.0 200	50.0 250	75.0	100
Dichlorofluoromethane	FB	Ave	22499 748877	111107 843233	232009 986298	318608	435665	5.00 175	25.0 200	50.0 250	75.0	100
Trichlorofluoromethane	FB	Ave	16013 579992	81291 636269	174036 739174	241309	334740	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl ether	FB	Ave	17175 521056	70836 582513	145899 750491	219194	295395	5.00 175	25.0 200	50.0 250	75.0	100
Acrolein	FB	Ave	41531 108307	52087 117496	66358 127965	75936	92519	100 225	125 250	150 275	175	200
1,1-Dichloroethene	FB	Ave	11952 473565	60024 516257	132602 627614	192998	273818	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	13388 488054	67283 532678	141996 629046	204297	284081	5.00 175	25.0 200	50.0 250	75.0	100
Acetone	FB	Ave	25628 332039	51703 349354	88342 457819	125942	173687	25.0 350	50.0 400	100 500	150	200
Iodomethane	FB	Ave	18992 696716	89056 765249	190440 963985	284793	394076	5.00 175	25.0 200	50.0 250	75.0	100
Carbon disulfide	FB	Ave	25807 1177201	126552 1297173	288788 1607306	436105	636866	5.00 175	25.0 200	50.0 250	75.0	100

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

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

Analy Batch No.: 151868

SDG No.: _____

Instrument ID: CHHP5

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2015 15:04

Calibration End Date: 08/26/2015 17:52

Calibration ID: 25113

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8			LVL 6	LVL 7	LVL 8		
Allyl chloride	FB	Ave	5646 285911	31974 325399	70192 399041	108440	156677	5.00 175	25.0 200	50.0 250	75.0	100
Methyl acetate	FB	Ave	67684 2539904	347746 2811173	664608 3450277	1027560	1419018	25.0 875	125 1000	250 1250	375	500
Methylene Chloride	FB	Lin2	26437 510471	79338 573290	150258 715184	225319	291271	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butyl alcohol	TBA	Ave	9257 352268	39038 410928	81932 514360	122262	185374	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	65631 2452551	329204 2730347	693478 3337347	978697	1347643	50.0 1750	250 2000	500 2500	750	1000
trans-1,2-Dichloroethene	FB	Ave	13723 510637	66301 552053	141577 687878	204201	289331	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	29774 1204325	147150 1367672	302403 1750025	477236	664089	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	22257 889892	109198 948868	237492 1125958	347025	493203	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	27303 998105	128072 1104940	273423 1377944	407919	564450	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl acetate	FB	Ave	18896 801339	92081 887283	191017 1072494	303320	437799	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Ave	10315 413686	48880 451339	109416 564524	164171	234514	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,2-Dichloroethene	FB	Ave	14442 550789	69819 600559	146208 760457	223289	302874	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	34471 514894	68384 569128	136667 698551	210830	269779	25.0 350	50.0 400	100 500	150	200
Bromochloromethane	FB	Ave	6284 234034	31931 262832	62915 336595	99282	133128	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Ave	12850 417684	51589 461621	107444 561739	153971	207145	10.0 350	50.0 400	100 500	150	200
Chloroform	FB	Ave	24828 838419	113670 922240	232542 1166838	359318	482795	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	15850 661680	81030 710348	178131 898258	264507	366328	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	25044 1115710	134937 1210903	302702 1451032	451893	637776	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	13013 566329	69375 616016	148991 764597	226405	319309	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	16668 734207	91438 785333	198075 975802	295676	417880	5.00 175	25.0 200	50.0 250	75.0	100
Isobutyl alcohol	FB	Ave	9663 417725	48239 492768	113924 588608	149085	224262	125 4375	625 5000	1250 6250	1875	2500

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

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

Analy Batch No.: 151868

SDG No.: _____

Instrument ID: CHHP5

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2015 15:04

Calibration End Date: 08/26/2015 17:52

Calibration ID: 25113

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	55246 2000326	287091 2197241	580241 2707324	874781	1175215	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane	FB	Ave	19231 709743	95482 788760	191991 987010	296218	399895	5.00 175	25.0 200	50.0 250	75.0	100
n-Heptane	FB	Ave	19899 819932	97699 859948	215218 1040377	319252	444901	5.00 175	25.0 200	50.0 250	75.0	100
Trichloroethene	FB	Ave	13948 506964	64418 556980	138404 693909	207852	285365	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	17237 866758	97305 937977	222858 1114866	336831	484430	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	15440 547361	67479 594824	144895 765352	218947	304322	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Ave	1429 82622	9374 91547	20164 111802	31691	44562	100 3500	500 4000	1000 5000	1500	2000
Dibromomethane	FB	Ave	7003 277699	37187 307857	74626 386058	114083	152946	5.00 175	25.0 200	50.0 250	75.0	100
Bromodichloromethane	FB	Ave	12926 576102	67441 644471	141423 812136	226806	310676	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,3-Dichloropropene	FB	Ave	13234 714562	70847 812298	159644 1033255	264451	374197	5.00 175	25.0 200	50.0 250	75.0	100
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	52387 1157588	122590 1320471	267134 1599371	434749	614019	25.0 350	50.0 400	100 500	150	200
Toluene	CBZ	Ave	53527 2050607	281285 2228576	594334 2681762	874948	1201786	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,3-Dichloropropene	CBZ	Ave	10582 619485	61867 704918	136231 891401	224205	323125	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl methacrylate	CBZ	Ave	9690 602921	57962 687101	132749 862044	225233	316812	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloroethane	CBZ	Ave	9469 403722	55277 441190	105440 557982	163298	224541	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBZ	Ave	10935 401915	53495 438898	111146 530215	165929	230665	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBZ	Ave	19141 743698	95569 840507	194887 1030200	303582	408560	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBZ	Ave	39604 820858	91984 943138	195734 1123041	310969	430988	25.0 350	50.0 400	100 500	150	200
Dibromochloromethane	CBZ	Ave	7357 377032	38492 427847	89414 542940	143257	202349	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromoethane (EDB)	CBZ	Ave	9378 390862	49971 449617	100600 553588	155041	212653	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorobenzotrifluoride	CBZ	Ave	18393 686777	87568 749898	189078 813323	277802	368187	5.00 175	25.0 200	50.0 250	75.0	100

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

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48564-1

Analy Batch No.: 151868

SDG No.: _____

Instrument ID: CHHP5

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2015 15:04

Calibration End Date: 08/26/2015 17:52

Calibration ID: 25113

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	35900 1331912	177451 1491257	364174 1793475	551865	752971	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorobenzotrifluoride	CBZ	Ave	16914 642626	83430 709487	177807 781989	267607	350243	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBZ	Ave	10787 453483	55507 513686	112884 642159	179137	247335	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBZ	Ave	15563 756322	88753 837593	199030 1001210	302122	417206	5.00 175	25.0 200	50.0 250	75.0	100
m-Xylene & p-Xylene	CBZ	Ave	18709 934055	107918 1021032	244588 1238884	371799	516778	5.00 175	25.0 200	50.0 250	75.0	100
o-Xylene	CBZ	Ave	17177 890574	99302 984811	235252 1203666	359461	488783	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBZ	Ave	27953 1460286	173558 1627751	381888 1948876	603962	812783	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBZ	Ave	4507 217546	21829 254607	48771 317730	77411	109983	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorobenzotrifluoride	CBZ	Ave	17186 670799	88525 748529	184654 809757	279773	362334	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBZ	Ave	41948 2113845	258721 2317406	601591 2727755	886244	1229067	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBZ	Ave	14088 530728	70831 605346	148796 725938	217578	290248	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCB	Ave	12648 543146	66130 609774	144660 743219	218069	300450	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,4-Dichloro-2-butene	DCB	Ave	4099 209384	22318 238659	49630 290130	78865	107372	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichloropropane	DCB	Ave	4305 177490	23273 200908	46443 246872	70373	94129	5.00 175	25.0 200	50.0 250	75.0	100
N-Propylbenzene	DCB	Ave	12643 636587	74204 717909	174426 850210	256762	351814	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCB	Ave	10430 529736	65813 608876	147328 726063	218909	301246	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorotoluene	DCB	Ave	11617 552058	68954 621607	151211 702342	225916	297767	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCB	Ave	33229 1760059	229921 1952122	517168 2264532	741712	1014826	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCB	Ave	12133 582109	77519 649501	159410 778860	235437	324433	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCB	Ave	26338 1486960	173217 1642231	406052 1938716	598804	836893	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trimethylbenzene	DCB	Ave	32428 1772230	227690 1973541	515539 2303042	753282	1013032	5.00 175	25.0 200	50.0 250	75.0	100

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1 Analy Batch No.: 151868

SDG No.: _____

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

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

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	13115 484133	61289 529814	140073 580120	196559	258438	5.00 175	25.0 200	50.0 250	75.0	100
sec-Butylbenzene	DCB	Ave	39041 2029430	258745 2244027	604638 2563359	839536	1168492	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichlorobenzene	DCB	Ave	22108 937539	127273 1071203	273757 1263925	386149	523315	5.00 175	25.0 200	50.0 250	75.0	100
4-Isopropyltoluene	DCB	Ave	30909 1738859	215293 1944911	504672 2238219	724310	987448	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dichlorobenzene	DCB	Ave	25851 949324	133066 1084086	277292 1287906	396239	532103	5.00 175	25.0 200	50.0 250	75.0	100
2,4-Dichlorobenzotrifluoride	DCB	Ave	11477 453275	59316 483618	134729 531698	183967	235991	5.00 175	25.0 200	50.0 250	75.0	100
2,5-Dichlorobenzotrifluoride	DCB	Ave	12582 486163	61489 571654	138171 585601	196358	254571	5.00 175	25.0 200	50.0 250	75.0	100
n-Butylbenzene	DCB	Ave	27472 1504673	181007 1691227	432555 1909580	598297	841574	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichlorobenzene	DCB	Ave	22973 849612	119403 988861	257985 1135542	354012	474503	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromo-3-Chloropropane	DCB	Ave	1507 75555	9637 91242	20608 105625	27203	39315	5.00 175	25.0 200	50.0 250	75.0	100
2,4- & 2,5- & 2,6- Dichlorotoluene	DCB	Ave	31847 1576122	187206 1875036	495585 1891413	616649	827426	15.0 525	75.0 600	150 750	225	300
2,3- & 3,4- Dichlorotoluene	DCB	Ave	19801 994231	120746 1204899	328345 1220209	378630	510138	10.0 350	50.0 400	100 500	150	200
1,2,4-Trichlorobenzene	DCB	Ave	7500 339446	45439 424061	119069 445017	127381	175776	5.00 175	25.0 200	50.0 250	75.0	100
Hexachlorobutadiene	DCB	Ave	3919 160392	23516 188644	58574 196056	62268	83392	5.00 175	25.0 200	50.0 250	75.0	100
Naphthalene	DCB	Ave	17192 934428	101055 1180622	301738 1235965	327683	463258	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichlorobenzene	DCB	Ave	6907 261711	35802 333363	100055 351787	100749	137103	5.00 175	25.0 200	50.0 250	75.0	100
2,4,5-Trichlorotoluene	DCB	Ave	2382 100325	11540 135933	37716 136778	32434	45065	5.00 175	25.0 200	50.0 250	75.0	100
2,3,6-Trichlorotoluene	DCB	Ave	1485 +++++	10524 +++++	36592 +++++	30574	45128	5.00 +++++	25.0 +++++	50.0 +++++	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	11752 399678	54310 438908	112824 562879	168602	230039	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	17051 544829	75876 597233	155346 751925	228530	306020	5.00 175	25.0 200	50.0 250	75.0	100
Toluene-d8 (Surr)	CBZ	Ave	43904 1580158	209810 1727014	471382 2103482	679876	918031	5.00 175	25.0 200	50.0 250	75.0	100

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1 Analy Batch No.: 151868

SDG No.: _____

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

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8			LVL 6	LVL 7	LVL 8		
4-Bromofluorobenzene (Surr)	CBZ	Ave	15659 617045	76038 697446	171548 854277	257596	339508	5.00 175	25.0 200	50.0 250	75.0	100

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1 Analy Batch No.: 151868

SDG No.: _____

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

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-151868/6	50826006.D
Level 2	IC 180-151868/8	50826008.D
Level 3	ICIS 180-151868/9	50826009.D
Level 4	IC 180-151868/10	50826010.D
Level 5	IC 180-151868/11	50826011.D
Level 6	IC 180-151868/12	50826012.D
Level 7	IC 180-151868/13	50826013.D
Level 8	IC 180-151868/14	50826014.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
	LVL 7 #	LVL 8 #					LVL 7	LVL 8				
Methylene Chloride	-0.1	3.1	-0.5	-3.3	-6.2	-3.8	40	40	40	40	40	40
	-3.0	13.7					40	40				

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826006.D
 Lims ID: IC VSTD1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 26-Aug-2015 15:04:30 ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD1
 Misc. Info.: 180-0008300-006
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub4
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Aug-2015 12:16:48 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK048

First Level Reviewer: fergusond Date: 27-Aug-2015 12:16:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.266	4.274	-0.008	0	136898	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.291	-0.001	98	405648	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.386	10.387	-0.001	88	96094	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.728	12.730	-0.002	97	140534	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.566	6.567	-0.001	89	11752	5.00	5.90	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.937	6.938	-0.001	0	17051	5.00	6.23	
\$ 7 Toluene-d8 (Surr)	98	8.938	8.933	0.005	95	43904	5.00	5.92	
\$ 8 4-Bromofluorobenzene (Surr	95	11.572	11.574	-0.002	84	15659	5.00	5.60	
11 Dichlorodifluoromethane	85	1.608	1.627	-0.019	94	13335	5.00	5.82	
12 Chloromethane	50	1.760	1.761	-0.001	98	20806	5.00	6.18	
13 Vinyl chloride	62	1.906	1.901	0.005	72	16232	5.00	5.44	
14 Butadiene	39	1.930	1.931	-0.001	96	21253	5.00	6.03	
15 Bromomethane	94	2.228	2.236	-0.008	92	6860	5.00	5.65	
16 Chloroethane	64	2.386	2.376	0.010	96	11321	5.00	6.29	
17 Dichlorofluoromethane	67	2.660	2.661	-0.001	95	22499	5.00	5.89	
18 Trichlorofluoromethane	101	2.648	2.661	-0.013	71	16013	5.00	5.60	M
20 Ethyl ether	59	3.049	3.051	-0.002	97	17175	5.00	6.48	
21 Acrolein	56	3.220	3.233	-0.013	99	41531	100.0	105.2	
22 1,1-Dichloroethene	96	3.335	3.355	-0.020	78	11952	5.00	5.29	
23 1,1,2-Trichloro-1,2,2-trif	101	3.402	3.416	-0.014	66	13388	5.00	5.59	
24 Acetone	43	3.451	3.452	-0.001	99	25628	25.0	31.3	M
25 Iodomethane	142	3.536	3.556	-0.020	100	18992	5.00	5.64	
26 Carbon disulfide	76	3.627	3.635	-0.008	99	25807	5.00	4.92	
28 3-Chloro-1-propene	76	3.913	3.921	-0.008	88	5646	5.00	4.41	
30 Methyl acetate	43	3.938	3.945	-0.007	100	67684	25.0	27.7	
31 Methylene Chloride	84	4.126	4.152	-0.026	96	26437	5.00	4.99	
32 2-Methyl-2-propanol	59	4.406	4.413	-0.007	90	9257	50.0	60.1	
33 Acrylonitrile	53	4.515	4.517	-0.002	99	65631	50.0	55.3	
34 trans-1,2-Dichloroethene	96	4.558	4.566	-0.008	90	13723	5.00	5.59	
35 Methyl tert-butyl ether	73	4.576	4.584	-0.008	92	29774	5.00	5.24	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.990	4.991	-0.001	93	22257	5.00	5.40	
37 1,1-Dichloroethane	63	5.203	5.198	0.005	96	27303	5.00	5.65	
38 Vinyl acetate	43	5.252	5.253	-0.001	98	18896	5.00	5.21	
45 cis-1,2-Dichloroethene	96	5.951	5.953	-0.002	85	14442	5.00	5.51	
44 2,2-Dichloropropane	77	5.939	5.946	-0.007	60	10315	5.00	5.33	
46 2-Butanone (MEK)	43	5.963	5.959	0.004	97	34471	25.0	28.0	
49 Chlorobromomethane	128	6.237	6.238	-0.001	92	6284	5.00	5.46	
51 Tetrahydrofuran	42	6.249	6.257	-0.008	93	12850	10.0	13.0	
52 Chloroform	83	6.389	6.385	0.005	74	24828	5.00	5.95	
53 1,1,1-Trichloroethane	97	6.535	6.549	-0.014	91	15850	5.00	5.13	
54 Cyclohexane	56	6.614	6.616	-0.002	96	25044	5.00	4.85	
56 Carbon tetrachloride	117	6.718	6.719	-0.001	94	13013	5.00	4.95	
55 1,1-Dichloropropene	75	6.724	6.731	-0.007	91	16668	5.00	4.88	
57 Isobutyl alcohol	41	6.918	6.926	-0.008	70	9663	125.0	125.1	
58 Benzene	78	6.943	6.944	-0.001	97	55246	5.00	5.52	
59 1,2-Dichloroethane	62	7.022	7.023	-0.001	95	19231	5.00	5.56	
62 n-Heptane	43	7.314	7.309	0.005	93	19899	5.00	5.32	
64 Trichloroethene	130	7.679	7.674	0.005	92	13948	5.00	5.70	
66 Methylcyclohexane	83	7.916	7.918	-0.002	93	17237	5.00	4.47	
67 1,2-Dichloropropane	63	7.947	7.954	-0.007	90	15440	5.00	5.88	
70 1,4-Dioxane	88	8.026	8.027	-0.001	42	1429	100.0	79.0	
68 Dibromomethane	93	8.026	8.039	-0.013	95	7003	5.00	5.26	
71 Dichlorobromomethane	83	8.232	8.234	-0.002	93	12926	5.00	4.90	
74 cis-1,3-Dichloropropene	75	8.664	8.678	-0.014	65	13234	5.00	4.29	
75 4-Methyl-2-pentanone (MIBK)	43	8.823	8.830	-0.007	97	52387	25.0	22.1	
76 Toluene	91	9.005	9.006	-0.001	97	53527	5.00	5.63	
77 trans-1,3-Dichloropropene	75	9.248	9.250	-0.002	96	10582	5.00	4.26	
78 Ethyl methacrylate	69	9.315	9.311	0.004	94	9690	5.00	4.04	
79 1,1,2-Trichloroethane	97	9.449	9.444	0.005	93	9469	5.00	5.23	
80 Tetrachloroethene	164	9.522	9.517	0.005	93	10935	5.00	5.92	
81 1,3-Dichloropropane	76	9.607	9.603	0.004	99	19141	5.00	5.70	
82 2-Hexanone	43	9.662	9.657	0.005	97	39604	25.0	23.2	
84 Chlorodibromomethane	129	9.814	9.816	-0.002	89	7357	5.00	4.70	
85 Ethylene Dibromide	107	9.930	9.931	-0.001	99	9378	5.00	5.38	
86 3-Chlorobenzotrifluoride	180	10.392	10.387	0.005	56	18393	5.00	6.02	
87 Chlorobenzene	112	10.416	10.418	-0.002	94	35900	5.00	5.86	
88 4-Chlorobenzotrifluoride	180	10.477	10.479	-0.002	96	16914	5.00	5.85	
89 1,1,1,2-Tetrachloroethane	131	10.508	10.509	-0.001	87	10787	5.00	5.40	
90 Ethylbenzene	106	10.514	10.515	-0.001	98	15563	5.00	4.79	
91 m-Xylene & p-Xylene	106	10.648	10.649	-0.001	0	18709	5.00	4.70	
92 o-Xylene	106	11.025	11.026	-0.001	97	17177	5.00	4.54	
93 Styrene	104	11.049	11.051	-0.002	93	27953	5.00	4.46	
94 Bromoform	173	11.226	11.233	-0.007	96	4507	5.00	5.04	
96 2-Chlorobenzotrifluoride	180	11.305	11.294	0.011	92	17186	5.00	5.71	
97 Isopropylbenzene	105	11.396	11.397	-0.001	96	41948	5.00	4.53	
100 Bromobenzene	156	11.712	11.708	0.004	96	12648	5.00	5.24	
99 1,1,2,2-Tetrachloroethane	83	11.712	11.708	0.004	82	14088	5.00	5.77	
102 trans-1,4-Dichloro-2-buten	53	11.749	11.744	0.005	58	4099	5.00	4.70	
101 1,2,3-Trichloropropane	110	11.761	11.762	-0.001	85	4305	5.00	5.41	
103 N-Propylbenzene	120	11.810	11.811	-0.001	99	12643	5.00	4.58	
104 2-Chlorotoluene	126	11.895	11.902	-0.007	95	10430	5.00	4.44	
105 3-Chlorotoluene	126	11.968	11.963	0.005	96	11617	5.00	4.82	

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	11.992	11.993	-0.001	95	33229	5.00	4.26	
107 4-Chlorotoluene	126	12.022	12.024	-0.002	98	12133	5.00	4.70	
108 tert-Butylbenzene	119	12.308	12.310	-0.002	96	26338	5.00	4.15	
110 1,2,4-Trimethylbenzene	105	12.369	12.371	-0.002	96	32428	5.00	4.15	
111 1,2-dichloro-4-(trifluorom	214	12.406	12.413	-0.007	95	13115	5.00	6.02	
112 sec-Butylbenzene	105	12.533	12.535	-0.002	96	39041	5.00	4.36	
113 1,3-Dichlorobenzene	146	12.655	12.650	0.005	94	22108	5.00	5.15	
114 4-Isopropyltoluene	119	12.692	12.687	0.005	94	30909	5.00	4.08	
115 1,4-Dichlorobenzene	146	12.752	12.754	-0.002	94	25851	5.00	5.79	
116 2,4-Dichloro-1-(trifluorom	214	12.783	12.778	0.005	92	11477	5.00	5.68	
118 2,5-Dichlorobenzotrifluori	214	12.825	12.821	0.004	0	12582	5.00	5.77	
120 n-Butylbenzene	91	13.099	13.101	-0.002	98	27472	5.00	4.24	
121 1,2-Dichlorobenzene	146	13.111	13.113	-0.002	97	22973	5.00	5.72	
122 1,2-Dibromo-3-Chloropropan	75	13.920	13.904	0.016	1	1507	5.00	4.57	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.048	14.044	0.004	0	31847	15.0	13.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.462	14.463	-0.001	0	19801	10.0	9.06	
126 1,2,4-Trichlorobenzene	180	14.723	14.725	-0.002	94	7500	5.00	4.80	
127 Hexachlorobutadiene	225	14.876	14.871	0.005	90	3919	5.00	5.21	
128 Naphthalene	128	14.991	14.993	-0.002	96	17192	5.00	4.28	
129 1,2,3-Trichlorobenzene	180	15.216	15.218	-0.002	92	6907	5.00	5.46	
131 2,4,5-Trichlorotoluene	159	15.989	15.990	-0.001	0	2382	5.00	5.22	
130 2,3,6-Trichlorotoluene	159	16.092	16.094	-0.002	87	1485	5.00	3.53	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		10.0	9.24	
S 134 1,2-Dichloroethene, Total	96				0		10.0	11.1	
S 135 1,3-Dichloropropene, Total	1				0		10.0	8.55	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00139	Amount Added: 0.20	Units: uL	
voaWEE1stRest_00001	Amount Added: 0.20	Units: uL	
VOAVAPRI_00006	Amount Added: 0.20	Units: uL	
voaWKet1 Rest_00001	Amount Added: 0.80	Units: uL	
VOAACROLEINPR_00006	Amount Added: 4.00	Units: uL	
VOA8260SURRE_00040	Amount Added: 0.20	Units: uL	
VOA8260INT_00040	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826006.D

Injection Date: 26-Aug-2015 15:04:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD1

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

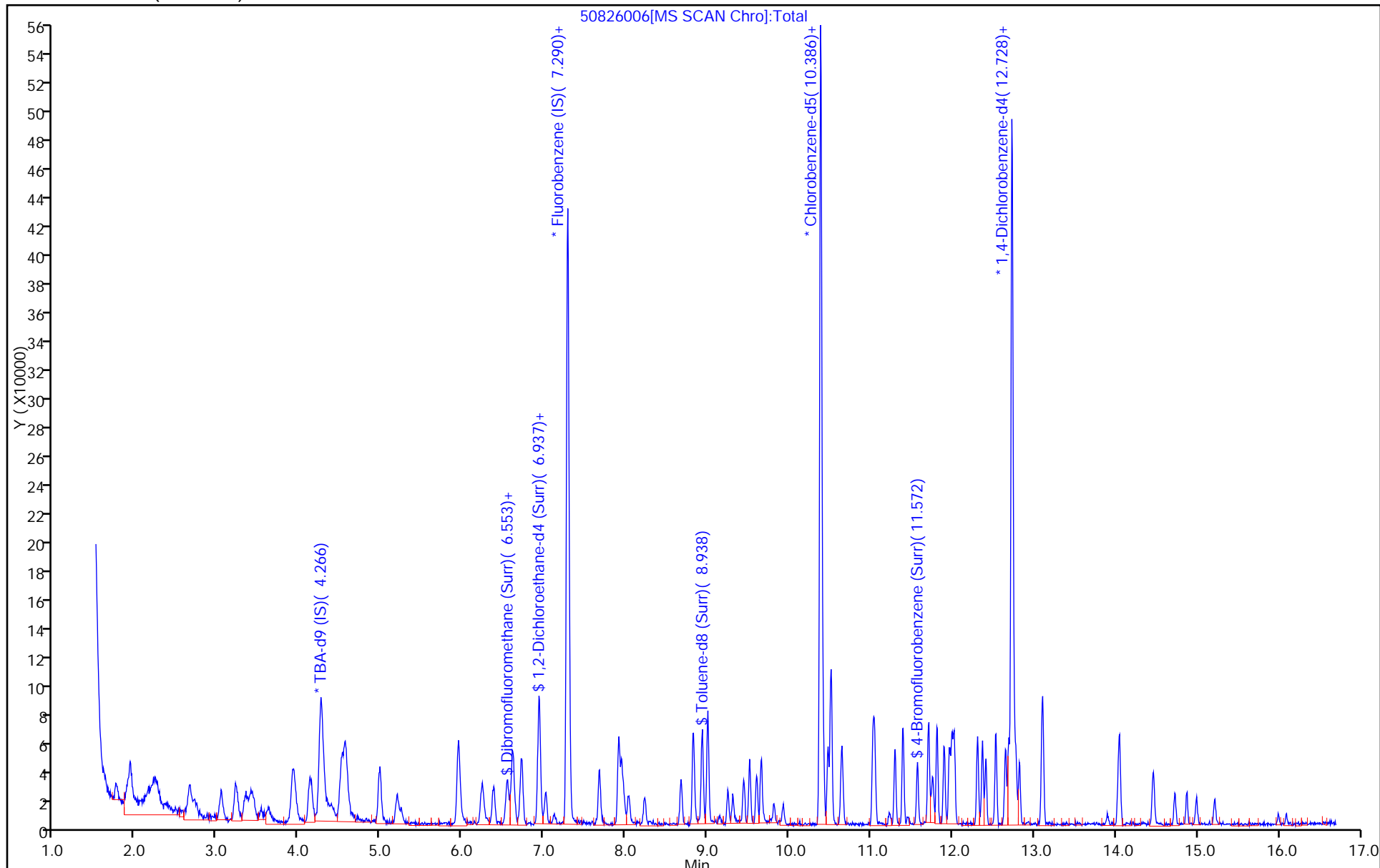
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



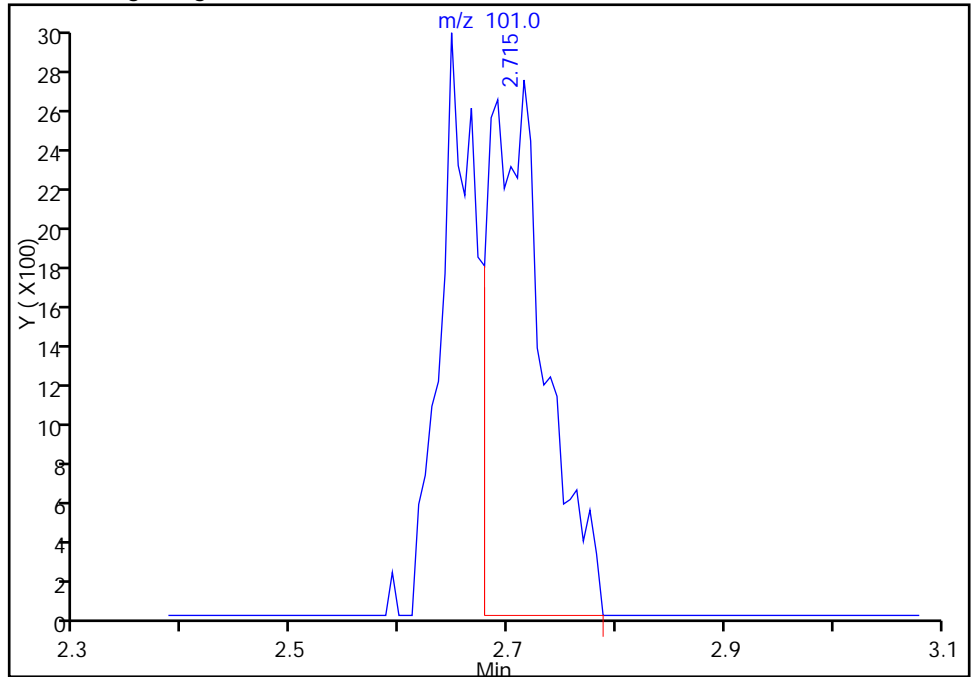
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826006.D
Injection Date: 26-Aug-2015 15:04:30 Instrument ID: CHHP5
Lims ID: IC VSTD1
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

18 Trichlorofluoromethane, CAS: 75-69-4

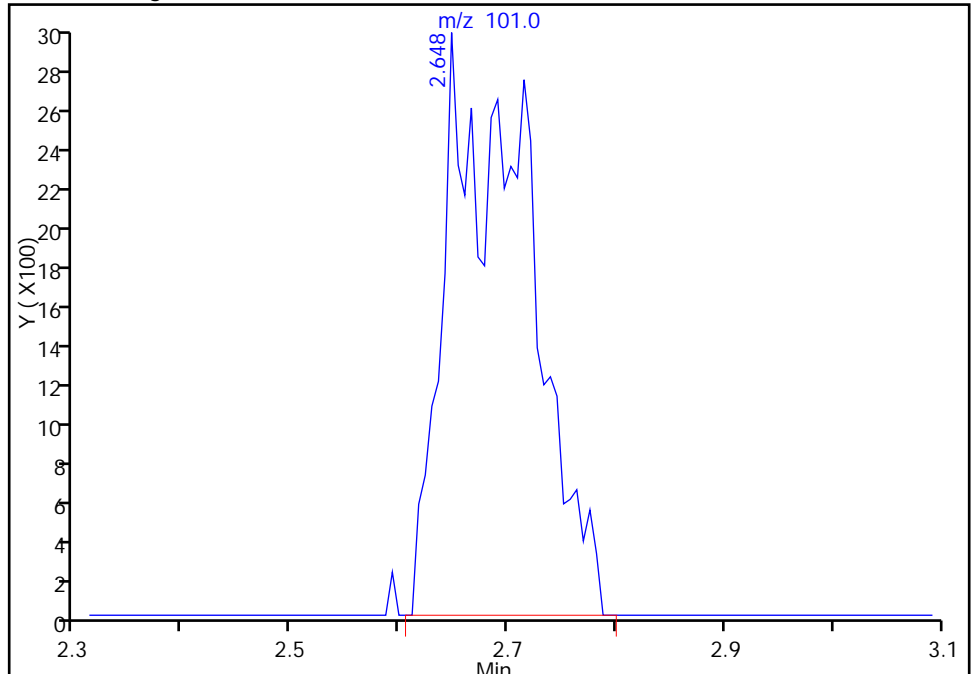
RT: 2.71
Area: 9760
Amount: 4.111403
Amount Units: ng

Processing Integration Results



RT: 2.65
Area: 16013
Amount: 5.602773
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 27-Aug-2015 10:07:27
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

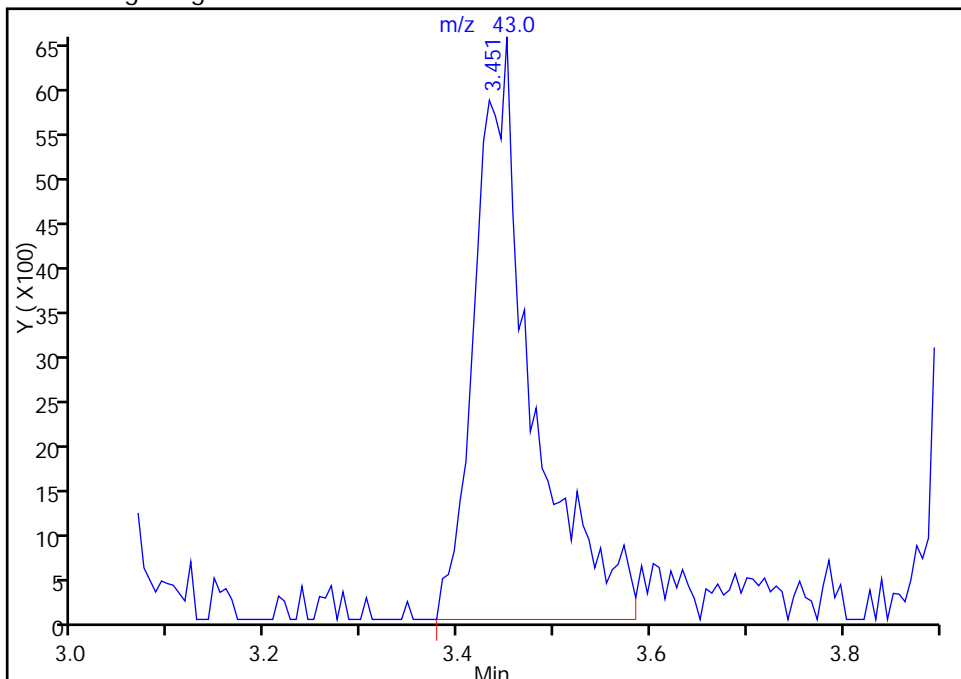
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826006.D
Injection Date: 26-Aug-2015 15:04:30 Instrument ID: CHHP5
Lims ID: IC VSTD1
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

24 Acetone, CAS: 67-64-1

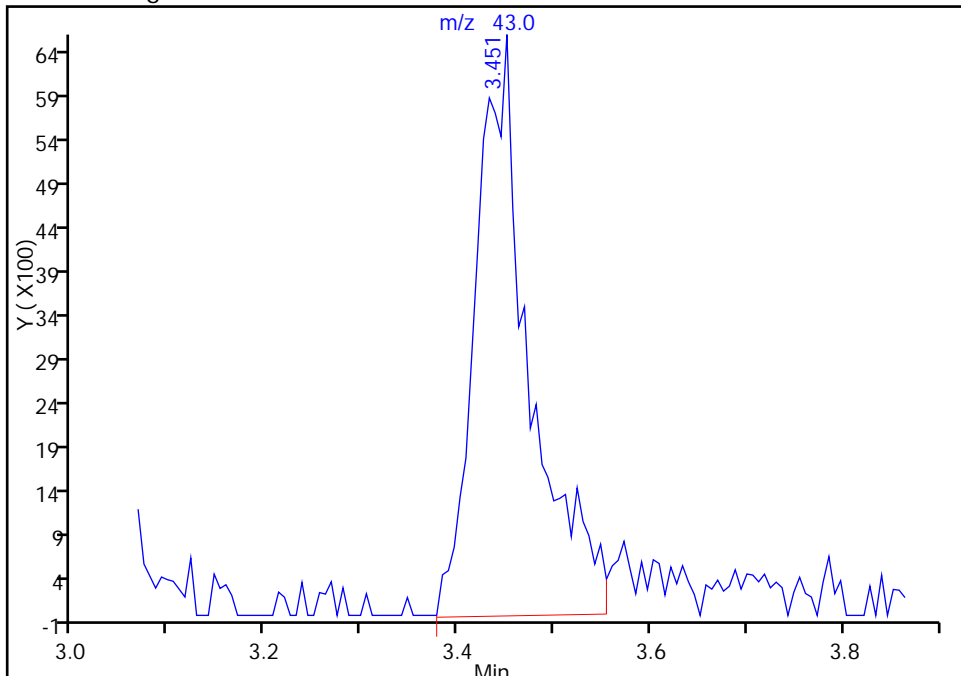
RT: 3.45
Area: 26617
Amount: 32.323853
Amount Units: ng

Processing Integration Results



RT: 3.45
Area: 25628
Amount: 31.310834
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 27-Aug-2015 10:07:27
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826008.D
 Lims ID: IC VSTD5
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 26-Aug-2015 15:28:30 ALS Bottle#: 7 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD5
 Misc. Info.: 180-0008300-008
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub4
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Aug-2015 11:47:16 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK048

First Level Reviewer: fergusond

Date: 27-Aug-2015 10:07:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.260	4.267	-0.007	0	150907	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.290	0.000	97	426232	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.386	10.387	-0.001	89	101235	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.728	12.729	-0.001	96	159073	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.566	6.560	0.006	92	54310	25.0	25.9	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	0	75876	25.0	26.4	
\$ 7 Toluene-d8 (Surr)	98	8.938	8.939	-0.001	95	209810	25.0	26.9	
\$ 8 4-Bromofluorobenzene (Surr	95	11.572	11.573	-0.001	85	76038	25.0	25.8	
11 Dichlorodifluoromethane	85	1.608	1.614	-0.006	99	63359	25.0	26.3	
12 Chloromethane	50	1.760	1.766	-0.006	99	96975	25.0	27.4	
13 Vinyl chloride	62	1.893	1.894	-0.001	97	84746	25.0	27.0	
14 Butadiene	39	1.930	1.937	-0.007	97	101243	25.0	27.3	
15 Bromomethane	94	2.234	2.247	-0.013	88	33586	25.0	26.3	
16 Chloroethane	64	2.386	2.387	-0.001	99	50718	25.0	26.8	
17 Dichlorofluoromethane	67	2.660	2.661	-0.001	97	111107	25.0	27.7	
18 Trichlorofluoromethane	101	2.690	2.667	0.023	87	81291	25.0	27.1	
20 Ethyl ether	59	3.043	3.050	-0.007	93	70836	25.0	25.5	
21 Acrolein	56	3.226	3.232	-0.006	99	52087	125.0	125.6	
22 1,1-Dichloroethene	96	3.347	3.348	-0.001	93	60024	25.0	25.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.414	3.403	0.011	94	67283	25.0	26.7	
24 Acetone	43	3.451	3.445	0.006	100	51703	50.0	60.1	
25 Iodomethane	142	3.536	3.543	-0.007	98	89056	25.0	25.2	
26 Carbon disulfide	76	3.627	3.628	-0.001	100	126552	25.0	23.0	
28 3-Chloro-1-propene	76	3.913	3.920	-0.007	86	31974	25.0	23.8	
30 Methyl acetate	43	3.938	3.938	0.000	99	347746	125.0	135.3	
31 Methylene Chloride	84	4.144	4.139	0.005	97	79338	25.0	25.8	
32 2-Methyl-2-propanol	59	4.400	4.407	-0.007	87	39038	250.0	229.8	
33 Acrylonitrile	53	4.522	4.522	0.000	100	329204	250.0	264.0	
34 trans-1,2-Dichloroethene	96	4.564	4.565	-0.001	97	66301	25.0	25.7	
35 Methyl tert-butyl ether	73	4.576	4.577	-0.001	95	147150	25.0	24.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.990	4.997	-0.007	95	109198	25.0	25.2	
37 1,1-Dichloroethane	63	5.203	5.204	-0.001	96	128072	25.0	25.2	
38 Vinyl acetate	43	5.252	5.252	0.000	97	92081	25.0	24.2	
45 cis-1,2-Dichloroethene	96	5.951	5.952	-0.001	86	69819	25.0	25.4	
44 2,2-Dichloropropane	77	5.945	5.952	-0.007	58	48880	25.0	24.0	
46 2-Butanone (MEK)	43	5.957	5.964	-0.007	66	68384	50.0	52.9	
49 Chlorobromomethane	128	6.237	6.238	-0.001	91	31931	25.0	26.4	
51 Tetrahydrofuran	42	6.255	6.250	0.005	91	51589	50.0	49.8	
52 Chloroform	83	6.377	6.384	-0.007	96	113670	25.0	25.9	
53 1,1,1-Trichloroethane	97	6.541	6.542	-0.001	95	81030	25.0	25.0	
54 Cyclohexane	56	6.614	6.615	-0.001	96	134937	25.0	24.9	
56 Carbon tetrachloride	117	6.712	6.718	-0.006	95	69375	25.0	25.1	
55 1,1-Dichloropropene	75	6.730	6.730	0.000	91	91438	25.0	25.5	
57 Isobutyl alcohol	41	6.925	6.925	-0.001	78	48239	625.0	594.3	
58 Benzene	78	6.943	6.943	0.000	98	287091	25.0	27.3	
59 1,2-Dichloroethane	62	7.022	7.022	0.000	96	95482	25.0	26.3	
62 n-Heptane	43	7.308	7.308	0.000	93	97699	25.0	24.9	
64 Trichloroethene	130	7.673	7.679	-0.006	96	64418	25.0	25.1	
66 Methylcyclohexane	83	7.916	7.917	-0.001	96	97305	25.0	24.0	
67 1,2-Dichloropropane	63	7.953	7.947	0.006	94	67479	25.0	24.5	
70 1,4-Dioxane	88	8.032	8.026	0.006	40	9374	500.0	493.0	
68 Dibromomethane	93	8.038	8.038	0.000	94	37187	25.0	26.6	
71 Dichlorobromomethane	83	8.232	8.233	-0.001	97	67441	25.0	24.4	
74 cis-1,3-Dichloropropene	75	8.677	8.677	0.000	88	70847	25.0	21.8	
75 4-Methyl-2-pentanone (MIBK)	43	8.829	8.829	0.000	99	122590	50.0	49.1	
76 Toluene	91	9.005	9.006	-0.001	98	281285	25.0	28.1	
77 trans-1,3-Dichloropropene	75	9.248	9.249	-0.001	99	61867	25.0	23.7	
78 Ethyl methacrylate	69	9.309	9.310	-0.001	91	57962	25.0	22.9	
79 1,1,2-Trichloroethane	97	9.443	9.444	-0.001	94	55277	25.0	29.0	
80 Tetrachloroethene	164	9.516	9.517	-0.001	96	53495	25.0	27.5	
81 1,3-Dichloropropane	76	9.601	9.602	-0.001	98	95569	25.0	27.0	
82 2-Hexanone	43	9.656	9.657	-0.001	98	91984	50.0	51.1	
84 Chlorodibromomethane	129	9.814	9.815	-0.001	91	38492	25.0	23.3	
85 Ethylene Dibromide	107	9.930	9.930	0.000	95	49971	25.0	27.2	
86 3-Chlorobenzotrifluoride	180	10.386	10.387	-0.001	69	87568	25.0	27.2	
87 Chlorobenzene	112	10.416	10.417	-0.001	94	177451	25.0	27.5	
88 4-Chlorobenzotrifluoride	180	10.477	10.478	-0.001	96	83430	25.0	27.4	
89 1,1,1,2-Tetrachloroethane	131	10.508	10.508	0.000	89	55507	25.0	26.4	
90 Ethylbenzene	106	10.514	10.514	0.000	99	88753	25.0	25.9	
91 m-Xylene & p-Xylene	106	10.648	10.648	0.000	0	107918	25.0	25.7	
92 o-Xylene	106	11.031	11.025	0.006	98	99302	25.0	24.9	
93 Styrene	104	11.049	11.050	-0.001	94	173558	25.0	26.3	
94 Bromoform	173	11.232	11.232	0.000	95	21829	25.0	23.2	
96 2-Chlorobenzotrifluoride	180	11.299	11.299	0.000	97	88525	25.0	27.9	
97 Isopropylbenzene	105	11.396	11.396	0.000	97	258721	25.0	26.5	
100 Bromobenzene	156	11.712	11.707	0.005	96	66130	25.0	24.2	
99 1,1,2,2-Tetrachloroethane	83	11.706	11.707	-0.001	78	70831	25.0	27.5	
102 trans-1,4-Dichloro-2-buten	53	11.743	11.743	0.000	69	22318	25.0	22.6	
101 1,2,3-Trichloropropane	110	11.761	11.762	-0.001	87	23273	25.0	25.8	
103 N-Propylbenzene	120	11.810	11.810	0.000	99	74204	25.0	23.7	
104 2-Chlorotoluene	126	11.895	11.901	-0.006	95	65813	25.0	24.8	
105 3-Chlorotoluene	126	11.962	11.968	-0.006	95	68954	25.0	25.3	

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	11.992	11.993	-0.001	95	229921	25.0	26.0	
107 4-Chlorotoluene	126	12.022	12.023	-0.001	98	77519	25.0	26.5	
108 tert-Butylbenzene	119	12.308	12.309	-0.001	95	173217	25.0	24.1	
110 1,2,4-Trimethylbenzene	105	12.369	12.370	-0.001	98	227690	25.0	25.7	
111 1,2-dichloro-4-(trifluorom	214	12.412	12.412	0.000	98	61289	25.0	24.8	
112 sec-Butylbenzene	105	12.533	12.534	-0.001	95	258745	25.0	25.5	
113 1,3-Dichlorobenzene	146	12.649	12.650	-0.001	96	127273	25.0	26.2	
114 4-Isopropyltoluene	119	12.692	12.692	0.000	97	215293	25.0	25.1	
115 1,4-Dichlorobenzene	146	12.752	12.753	-0.001	95	133066	25.0	26.3	
116 2,4-Dichloro-1-(trifluorom	214	12.777	12.777	0.000	93	59316	25.0	25.9	
118 2,5-Dichlorobenzotrifluori	214	12.819	12.820	-0.001	0	61489	25.0	24.9	
120 n-Butylbenzene	91	13.099	13.100	-0.001	98	181007	25.0	24.7	
121 1,2-Dichlorobenzene	146	13.111	13.112	-0.001	95	119403	25.0	26.3	
122 1,2-Dibromo-3-Chloropropan	75	13.902	13.897	0.005	70	9637	25.0	25.8	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.042	14.049	-0.007	0	187206	75.0	72.1	
125 2,3- & 3,4- Dichlorotoluen	125	14.462	14.463	-0.001	0	120746	50.0	48.8	
126 1,2,4-Trichlorobenzene	180	14.730	14.724	0.006	92	45439	25.0	25.7	
127 Hexachlorobutadiene	225	14.870	14.870	0.000	95	23516	25.0	27.6	
128 Naphthalene	128	14.991	14.992	-0.001	98	101055	25.0	22.2	
129 1,2,3-Trichlorobenzene	180	15.210	15.217	-0.007	93	35802	25.0	25.0	
131 2,4,5-Trichlorotoluene	159	15.995	15.990	0.005	0	11540	25.0	22.3	
130 2,3,6-Trichlorotoluene	159	16.092	16.093	-0.001	92	10524	25.0	22.1	
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	50.6	
S 134 1,2-Dichloroethene, Total	96				0		50.0	51.1	
S 135 1,3-Dichloropropene, Total	1				0		50.0	45.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260SURR_00040	Amount Added: 1.00	Units: uL	
VOA8260VOAPRI_00139	Amount Added: 1.00	Units: uL	
voaWEE1stRest_00001	Amount Added: 1.00	Units: uL	
voaWKet1 Rest_00001	Amount Added: 1.00	Units: uL	
VOAACROLEINPR_00006	Amount Added: 5.00	Units: uL	
VOAVAPRI_00006	Amount Added: 1.00	Units: uL	
VOA8260INT_00040	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826008.D

Injection Date: 26-Aug-2015 15:28:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD5

Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL

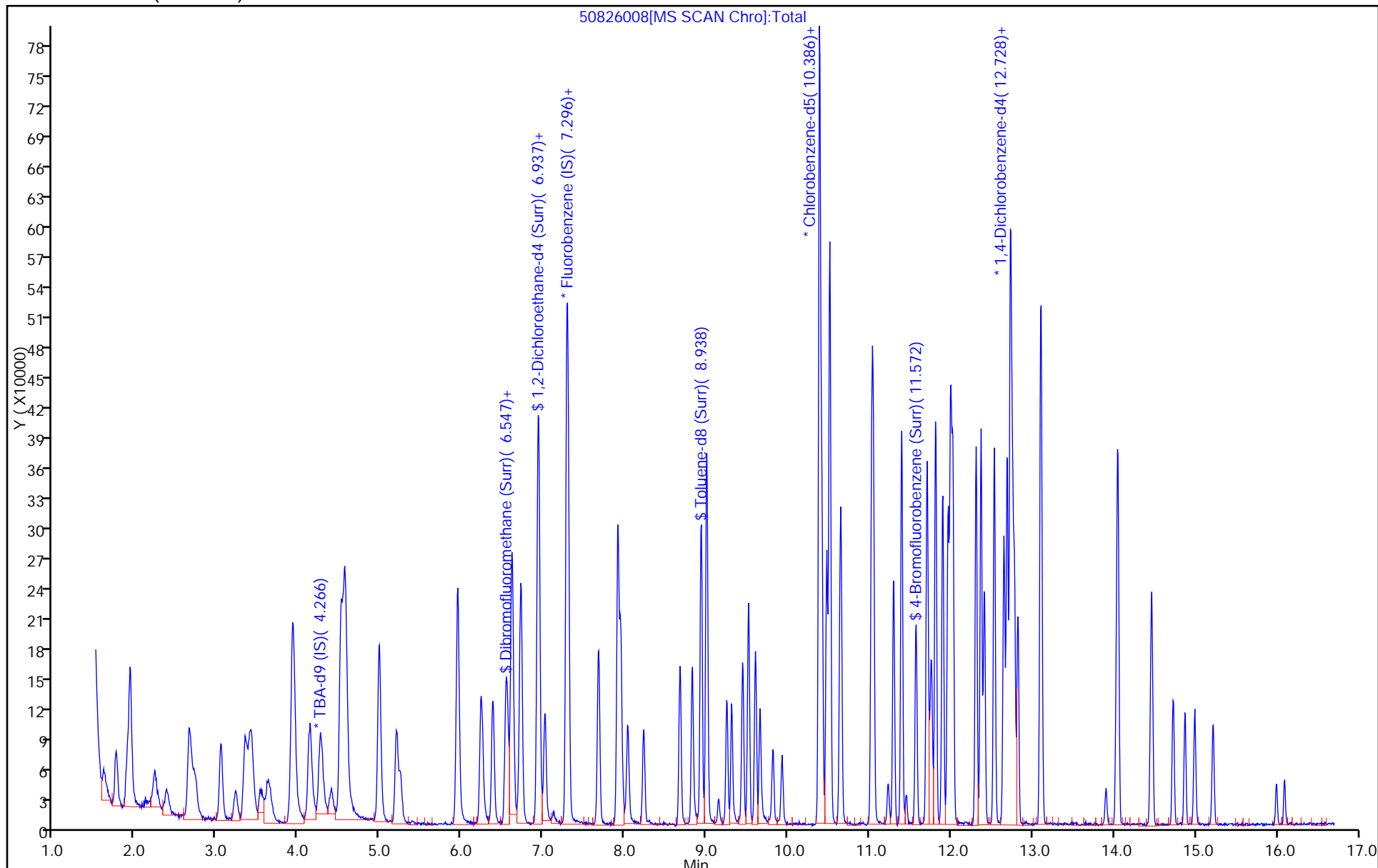
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826009.D
 Lims ID: ICIS VSTD10
 Client ID:
 Sample Type: ICIS Calib Level: 3
 Inject. Date: 26-Aug-2015 15:52:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ICIS VSTD10
 Misc. Info.: 180-0008300-009
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub4
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Aug-2015 12:15:57 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK048

First Level Reviewer: fergusond

Date: 27-Aug-2015 08:52:40

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	4.274	0.000	0	157569	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.291	7.291	0.000	98	461146	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.387	10.387	0.000	88	108412	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.730	12.730	0.000	96	172635	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.567	6.567	0.000	94	112824	50.0	49.8	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.938	6.938	0.000	0	155346	50.0	49.9	
\$ 7 Toluene-d8 (Surr)	98	8.933	8.933	0.000	94	471382	50.0	56.4	
\$ 8 4-Bromofluorobenzene (Surr	95	11.574	11.574	0.000	86	171548	50.0	54.4	
11 Dichlorodifluoromethane	85	1.627	1.627	0.000	99	139988	50.0	53.7	
12 Chloromethane	50	1.761	1.761	0.000	100	189967	50.0	49.7	
13 Vinyl chloride	62	1.901	1.901	0.000	97	181809	50.0	53.6	
14 Butadiene	39	1.931	1.931	0.000	97	213171	50.0	53.2	
15 Bromomethane	94	2.236	2.236	0.000	92	58568	50.0	42.4	
16 Chloroethane	64	2.376	2.376	0.000	99	99329	50.0	48.5	
17 Dichlorofluoromethane	67	2.661	2.661	0.000	97	232009	50.0	53.4	
18 Trichlorofluoromethane	101	2.661	2.661	0.000	43	174036	50.0	53.6	
20 Ethyl ether	59	3.051	3.051	0.000	97	145899	50.0	48.5	
21 Acrolein	56	3.233	3.233	0.000	98	66358	150.0	147.9	
22 1,1-Dichloroethene	96	3.355	3.355	0.000	95	132602	50.0	51.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.416	3.416	0.000	94	141996	50.0	52.2	
24 Acetone	43	3.452	3.452	0.000	99	88342	100.0	94.9	
25 Iodomethane	142	3.556	3.556	0.000	98	190440	50.0	49.8	
26 Carbon disulfide	76	3.635	3.635	0.000	100	288788	50.0	48.4	
28 3-Chloro-1-propene	76	3.921	3.921	0.000	88	70192	50.0	48.3	
30 Methyl acetate	43	3.945	3.945	0.000	99	664608	250.0	239.0	
31 Methylene Chloride	84	4.152	4.152	0.000	97	150258	50.0	49.8	
32 2-Methyl-2-propanol	59	4.413	4.413	0.000	87	81932	500.0	462.0	
33 Acrylonitrile	53	4.517	4.517	0.000	99	693478	500.0	514.1	
34 trans-1,2-Dichloroethene	96	4.566	4.566	0.000	96	141577	50.0	50.8	
35 Methyl tert-butyl ether	73	4.584	4.584	0.000	95	302403	50.0	46.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.991	4.991	0.000	95	237492	50.0	50.7	
37 1,1-Dichloroethane	63	5.198	5.198	0.000	96	273423	50.0	49.8	
38 Vinyl acetate	43	5.253	5.253	0.000	97	191017	50.0	46.3	
45 cis-1,2-Dichloroethene	96	5.953	5.953	0.000	86	146208	50.0	49.1	
44 2,2-Dichloropropane	77	5.946	5.946	0.000	60	109416	50.0	49.7	
46 2-Butanone (MEK)	43	5.959	5.959	0.000	73	136667	100.0	97.8	
49 Chlorobromomethane	128	6.238	6.238	0.000	91	62915	50.0	48.1	
51 Tetrahydrofuran	42	6.257	6.257	0.000	94	107444	100.0	95.8	
52 Chloroform	83	6.385	6.385	0.000	96	232542	50.0	49.0	
53 1,1,1-Trichloroethane	97	6.549	6.549	0.000	96	178131	50.0	50.8	
54 Cyclohexane	56	6.616	6.616	0.000	96	302702	50.0	51.5	
56 Carbon tetrachloride	117	6.719	6.719	0.000	95	148991	50.0	49.9	
55 1,1-Dichloropropene	75	6.731	6.731	0.000	91	198075	50.0	51.0	
57 Isobutyl alcohol	41	6.926	6.926	0.000	79	113924	1250.0	1297.3	
58 Benzene	78	6.944	6.944	0.000	98	580241	50.0	51.0	
59 1,2-Dichloroethane	62	7.023	7.023	0.000	96	191991	50.0	48.8	
62 n-Heptane	43	7.309	7.309	0.000	96	215218	50.0	50.6	
64 Trichloroethene	130	7.674	7.674	0.000	97	138404	50.0	49.8	
66 Methylcyclohexane	83	7.918	7.918	0.000	96	222858	50.0	50.8	
67 1,2-Dichloropropane	63	7.954	7.954	0.000	95	144895	50.0	48.6	
70 1,4-Dioxane	88	8.027	8.027	0.000	48	20164	1000.0	980.3	
68 Dibromomethane	93	8.039	8.039	0.000	96	74626	50.0	49.3	
71 Dichlorobromomethane	83	8.234	8.234	0.000	98	141423	50.0	47.2	
74 cis-1,3-Dichloropropene	75	8.678	8.678	0.000	90	159644	50.0	45.5	
75 4-Methyl-2-pentanone (MIBK)	43	8.830	8.830	0.000	99	267134	100.0	100.0	
76 Toluene	91	9.006	9.006	0.000	98	594334	50.0	55.4	
77 trans-1,3-Dichloropropene	75	9.250	9.250	0.000	98	136231	50.0	48.6	
78 Ethyl methacrylate	69	9.311	9.311	0.000	94	132749	50.0	49.0	
79 1,1,2-Trichloroethane	97	9.444	9.444	0.000	94	105440	50.0	51.6	
80 Tetrachloroethene	164	9.517	9.517	0.000	95	111146	50.0	53.3	
81 1,3-Dichloropropane	76	9.603	9.603	0.000	98	194887	50.0	51.4	
82 2-Hexanone	43	9.657	9.657	0.000	99	195734	100.0	101.5	
84 Chlorodibromomethane	129	9.816	9.816	0.000	89	89414	50.0	50.6	
85 Ethylene Dibromide	107	9.931	9.931	0.000	100	100600	50.0	51.1	
86 3-Chlorobenzotrifluoride	180	10.387	10.387	0.000	86	189078	50.0	54.8	
87 Chlorobenzene	112	10.418	10.418	0.000	93	364174	50.0	52.7	
88 4-Chlorobenzotrifluoride	180	10.479	10.479	0.000	96	177807	50.0	54.5	
89 1,1,1,2-Tetrachloroethane	131	10.509	10.509	0.000	91	112884	50.0	50.1	
90 Ethylbenzene	106	10.515	10.515	0.000	99	199030	50.0	54.3	
91 m-Xylene & p-Xylene	106	10.649	10.649	0.000	0	244588	50.0	54.5	
92 o-Xylene	106	11.026	11.026	0.000	97	235252	50.0	55.1	
93 Styrene	104	11.051	11.051	0.000	95	381888	50.0	54.0	
94 Bromoform	173	11.233	11.233	0.000	96	48771	50.0	48.4	
96 2-Chlorobenzotrifluoride	180	11.294	11.294	0.000	96	184654	50.0	54.4	
97 Isopropylbenzene	105	11.397	11.397	0.000	97	601591	50.0	57.5	
100 Bromobenzene	156	11.708	11.708	0.000	94	144660	50.0	48.8	
99 1,1,2,2-Tetrachloroethane	83	11.708	11.708	0.000	77	148796	50.0	54.0	
102 trans-1,4-Dichloro-2-buten	53	11.744	11.744	0.000	79	49630	50.0	46.3	
101 1,2,3-Trichloropropane	110	11.762	11.762	0.000	88	46443	50.0	47.5	
103 N-Propylbenzene	120	11.811	11.811	0.000	99	174426	50.0	51.4	
104 2-Chlorotoluene	126	11.902	11.902	0.000	96	147328	50.0	51.1	
105 3-Chlorotoluene	126	11.963	11.963	0.000	96	151211	50.0	51.0	

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	11.993	11.993	0.000	95	517168	50.0	54.0	
107 4-Chlorotoluene	126	12.024	12.024	0.000	98	159410	50.0	50.2	
108 tert-Butylbenzene	119	12.310	12.310	0.000	95	406052	50.0	52.1	
110 1,2,4-Trimethylbenzene	105	12.371	12.371	0.000	98	515539	50.0	53.7	
111 1,2-dichloro-4-(trifluorom	214	12.413	12.413	0.000	98	140073	50.0	52.3	
112 sec-Butylbenzene	105	12.535	12.535	0.000	95	604638	50.0	55.0	
113 1,3-Dichlorobenzene	146	12.650	12.650	0.000	98	273757	50.0	51.9	
114 4-Isopropyltoluene	119	12.687	12.687	0.000	97	504672	50.0	54.2	
115 1,4-Dichlorobenzene	146	12.754	12.754	0.000	93	277292	50.0	50.5	
116 2,4-Dichloro-1-(trifluorom	214	12.778	12.778	0.000	96	134729	50.0	54.3	
118 2,5-Dichlorobenzotrifluori	214	12.821	12.821	0.000	0	138171	50.0	51.5	
120 n-Butylbenzene	91	13.101	13.101	0.000	98	432555	50.0	54.3	
121 1,2-Dichlorobenzene	146	13.113	13.113	0.000	95	257985	50.0	52.3	
122 1,2-Dibromo-3-Chloropropan	75	13.904	13.904	0.000	76	20608	50.0	50.9	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.044	14.044	0.000	0	495585	150.0	176.0	
125 2,3- & 3,4- Dichlorotoluen	125	14.463	14.463	0.000	0	328345	100.0	122.3	
126 1,2,4-Trichlorobenzene	180	14.725	14.725	0.000	93	119069	50.0	62.1	
127 Hexachlorobutadiene	225	14.871	14.871	0.000	97	58574	50.0	63.4	
128 Naphthalene	128	14.993	14.993	0.000	97	301738	50.0	61.2	
129 1,2,3-Trichlorobenzene	180	15.218	15.218	0.000	95	100055	50.0	64.4	
131 2,4,5-Trichlorotoluene	159	15.990	15.990	0.000	0	37716	50.0	67.3	
130 2,3,6-Trichlorotoluene	159	16.094	16.094	0.000	94	36592	50.0	70.8	
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	109.6	
S 134 1,2-Dichloroethene, Total	96				0		100.0	99.8	
S 135 1,3-Dichloropropene, Total	1				0		100.0	94.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOAACROLEINPR_00006	Amount Added: 6.00	Units: uL	
VOAVAPRI_00006	Amount Added: 2.00	Units: uL	
VOA8260SURR_00040	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00139	Amount Added: 2.00	Units: uL	
voaWEE1stRest_00001	Amount Added: 2.00	Units: uL	
voaWKet1 Rest_00001	Amount Added: 2.00	Units: uL	
VOA8260INT_00040	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826009.D

Injection Date: 26-Aug-2015 15:52:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: ICIS VSTD10

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

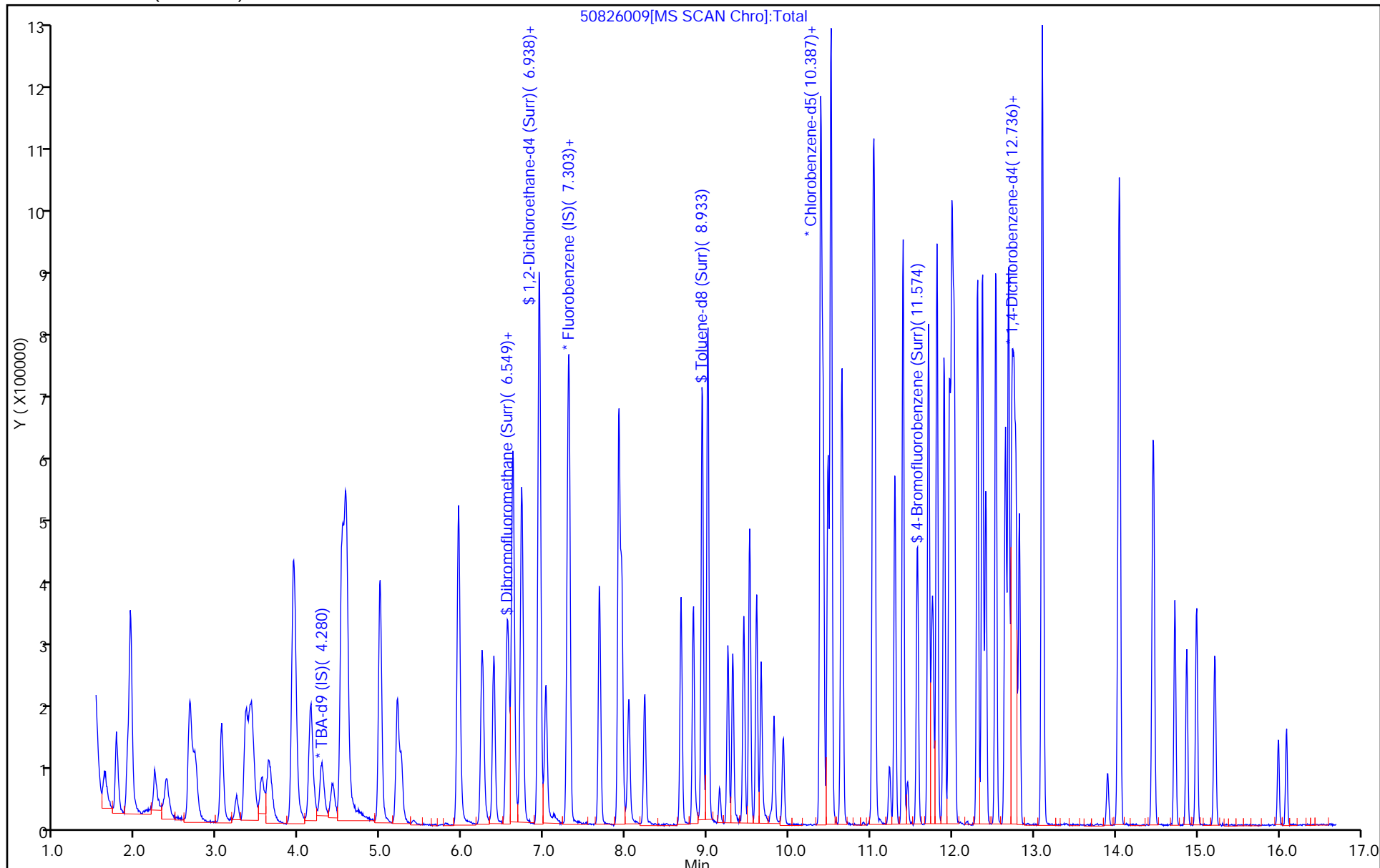
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826010.D
 Lims ID: IC VSTD15
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 26-Aug-2015 16:16:30 ALS Bottle#: 9 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD15
 Misc. Info.: 180-0008300-010
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub4
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Aug-2015 11:49:37 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK048

First Level Reviewer: fergusond

Date: 27-Aug-2015 10:26:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.267	4.267	0.000	0	149384	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.290	0.000	98	491519	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.387	10.387	0.000	87	118747	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.729	12.729	0.000	96	175441	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.560	6.560	0.000	93	168602	75.0	69.8	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	0	228530	75.0	68.9	
\$ 7 Toluene-d8 (Surr)	98	8.939	8.939	0.000	95	679876	75.0	74.2	
\$ 8 4-Bromofluorobenzene (Surr	95	11.573	11.573	0.000	87	257596	75.0	74.5	
11 Dichlorodifluoromethane	85	1.614	1.614	0.000	99	195493	75.0	70.4	
12 Chloromethane	50	1.766	1.766	0.000	99	279657	75.0	68.6	
13 Vinyl chloride	62	1.894	1.894	0.000	98	253941	75.0	70.2	
14 Butadiene	39	1.937	1.937	0.000	95	291582	75.0	68.3	
15 Bromomethane	94	2.247	2.247	0.000	90	118541	75.0	80.5	
16 Chloroethane	64	2.387	2.387	0.000	99	155578	75.0	71.3	
17 Dichlorofluoromethane	67	2.661	2.661	0.000	99	318608	75.0	68.8	
18 Trichlorofluoromethane	101	2.667	2.667	0.000	59	241309	75.0	69.7	
20 Ethyl ether	59	3.050	3.050	0.000	98	219194	75.0	68.3	
21 Acrolein	56	3.232	3.232	0.000	99	75936	175.0	158.8	
22 1,1-Dichloroethene	96	3.348	3.348	0.000	94	192998	75.0	70.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.403	3.403	0.000	94	204297	75.0	70.4	
24 Acetone	43	3.445	3.445	0.000	98	125942	150.0	127.0	
25 Iodomethane	142	3.543	3.543	0.000	99	284793	75.0	69.8	
26 Carbon disulfide	76	3.628	3.628	0.000	100	436105	75.0	68.6	
28 3-Chloro-1-propene	76	3.920	3.920	0.000	88	108440	75.0	69.9	
30 Methyl acetate	43	3.938	3.938	0.000	99	1027560	375.0	346.7	
31 Methylene Chloride	84	4.139	4.139	0.000	97	225319	75.0	72.5	
32 2-Methyl-2-propanol	59	4.407	4.407	0.000	87	122262	750.0	727.2	
33 Acrylonitrile	53	4.522	4.522	0.000	98	978697	750.0	680.6	
34 trans-1,2-Dichloroethene	96	4.565	4.565	0.000	95	204201	75.0	68.7	
35 Methyl tert-butyl ether	73	4.577	4.577	0.000	96	477236	75.0	69.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.997	4.997	0.000	96	347025	75.0	69.5	
37 1,1-Dichloroethane	63	5.204	5.204	0.000	97	407919	75.0	69.7	
38 Vinyl acetate	43	5.252	5.252	0.000	97	303320	75.0	69.0	
45 cis-1,2-Dichloroethene	96	5.952	5.952	0.000	84	223289	75.0	70.3	
44 2,2-Dichloropropane	77	5.952	5.952	0.000	58	164171	75.0	70.0	
46 2-Butanone (MEK)	43	5.964	5.964	0.000	78	210830	150.0	141.5	
49 Chlorobromomethane	128	6.238	6.238	0.000	92	99282	75.0	71.2	
51 Tetrahydrofuran	42	6.250	6.250	0.000	91	153971	150.0	128.8	
52 Chloroform	83	6.384	6.384	0.000	97	359318	75.0	71.0	
53 1,1,1-Trichloroethane	97	6.542	6.542	0.000	96	264507	75.0	70.7	
54 Cyclohexane	56	6.615	6.615	0.000	97	451893	75.0	72.2	
56 Carbon tetrachloride	117	6.718	6.718	0.000	96	226405	75.0	71.1	
55 1,1-Dichloropropene	75	6.730	6.730	0.000	92	295676	75.0	71.5	
57 Isobutyl alcohol	41	6.925	6.925	0.000	92	149085	1875.0	1592.8	
58 Benzene	78	6.943	6.943	0.000	98	874781	75.0	72.2	
59 1,2-Dichloroethane	62	7.022	7.022	0.000	97	296218	75.0	70.7	
62 n-Heptane	43	7.308	7.308	0.000	96	319252	75.0	70.4	
64 Trichloroethene	130	7.679	7.679	0.000	97	207852	75.0	70.1	
66 Methylcyclohexane	83	7.917	7.917	0.000	96	336831	75.0	72.1	
67 1,2-Dichloropropane	63	7.947	7.947	0.000	94	218947	75.0	68.8	
70 1,4-Dioxane	88	8.026	8.026	0.000	39	31691	1500.0	1445.4	
68 Dibromomethane	93	8.038	8.038	0.000	96	114083	75.0	70.7	
71 Dichlorobromomethane	83	8.233	8.233	0.000	98	226806	75.0	71.0	
74 cis-1,3-Dichloropropene	75	8.677	8.677	0.000	91	264451	75.0	70.7	
75 4-Methyl-2-pentanone (MIBK)	43	8.829	8.829	0.000	99	434749	150.0	148.6	
76 Toluene	91	9.006	9.006	0.000	98	874948	75.0	74.4	
77 trans-1,3-Dichloropropene	75	9.249	9.249	0.000	99	224205	75.0	73.1	
78 Ethyl methacrylate	69	9.310	9.310	0.000	93	225233	75.0	75.9	
79 1,1,2-Trichloroethane	97	9.444	9.444	0.000	94	163298	75.0	73.0	
80 Tetrachloroethene	164	9.517	9.517	0.000	95	165929	75.0	72.7	
81 1,3-Dichloropropane	76	9.602	9.602	0.000	98	303582	75.0	73.1	
82 2-Hexanone	43	9.657	9.657	0.000	99	310969	150.0	147.2	
84 Chlorodibromomethane	129	9.815	9.815	0.000	91	143257	75.0	74.0	
85 Ethylene Dibromide	107	9.930	9.930	0.000	99	155041	75.0	71.9	
86 3-Chlorobenzotrifluoride	180	10.387	10.387	0.000	91	277802	75.0	73.5	
87 Chlorobenzene	112	10.417	10.417	0.000	93	551865	75.0	72.9	
88 4-Chlorobenzotrifluoride	180	10.478	10.478	0.000	95	267607	75.0	74.9	
89 1,1,1,2-Tetrachloroethane	131	10.508	10.508	0.000	92	179137	75.0	72.6	
90 Ethylbenzene	106	10.514	10.514	0.000	99	302122	75.0	75.3	
91 m-Xylene & p-Xylene	106	10.648	10.648	0.000	0	371799	75.0	75.6	
92 o-Xylene	106	11.025	11.025	0.000	97	359461	75.0	76.9	
93 Styrene	104	11.050	11.050	0.000	95	603962	75.0	78.0	
94 Bromoform	173	11.232	11.232	0.000	96	77411	75.0	70.1	
96 2-Chlorobenzotrifluoride	180	11.299	11.299	0.000	96	279773	75.0	75.3	
97 Isopropylbenzene	105	11.396	11.396	0.000	97	886244	75.0	77.4	
100 Bromobenzene	156	11.707	11.707	0.000	95	218069	75.0	72.4	
99 1,1,2,2-Tetrachloroethane	83	11.707	11.707	0.000	76	217578	75.0	72.1	
102 trans-1,4-Dichloro-2-buten	53	11.743	11.743	0.000	72	78865	75.0	72.4	
101 1,2,3-Trichloropropane	110	11.762	11.762	0.000	88	70373	75.0	70.8	
103 N-Propylbenzene	120	11.810	11.810	0.000	99	256762	75.0	74.5	
104 2-Chlorotoluene	126	11.901	11.901	0.000	96	218909	75.0	74.7	
105 3-Chlorotoluene	126	11.968	11.968	0.000	96	225916	75.0	75.0	

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	11.993	11.993	0.000	94	741712	75.0	76.1	
107 4-Chlorotoluene	126	12.023	12.023	0.000	98	235437	75.0	73.0	
108 tert-Butylbenzene	119	12.309	12.309	0.000	94	598804	75.0	75.6	
110 1,2,4-Trimethylbenzene	105	12.370	12.370	0.000	98	753282	75.0	77.2	
111 1,2-dichloro-4-(trifluorom	214	12.412	12.412	0.000	98	196559	75.0	72.2	
112 sec-Butylbenzene	105	12.534	12.534	0.000	95	839536	75.0	75.1	
113 1,3-Dichlorobenzene	146	12.650	12.650	0.000	97	386149	75.0	72.0	
114 4-Isopropyltoluene	119	12.692	12.692	0.000	97	724310	75.0	76.6	
115 1,4-Dichlorobenzene	146	12.753	12.753	0.000	93	396239	75.0	71.0	
116 2,4-Dichloro-1-(trifluorom	214	12.777	12.777	0.000	96	183967	75.0	73.0	
118 2,5-Dichlorobenzotrifluori	214	12.820	12.820	0.000	0	196358	75.0	72.1	
120 n-Butylbenzene	91	13.100	13.100	0.000	98	598297	75.0	73.9	
121 1,2-Dichlorobenzene	146	13.112	13.112	0.000	95	354012	75.0	70.6	
122 1,2-Dibromo-3-Chloropropan	75	13.897	13.897	0.000	77	27203	75.0	66.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.049	14.049	0.000	0	616649	225.0	215.5	
125 2,3- & 3,4- Dichlorotoluen	125	14.463	14.463	0.000	0	378630	150.0	138.7	
126 1,2,4-Trichlorobenzene	180	14.724	14.724	0.000	95	127381	75.0	65.3	
127 Hexachlorobutadiene	225	14.870	14.870	0.000	96	62268	75.0	66.3	
128 Naphthalene	128	14.992	14.992	0.000	98	327683	75.0	65.4	
129 1,2,3-Trichlorobenzene	180	15.217	15.217	0.000	94	100749	75.0	63.8	
131 2,4,5-Trichlorotoluene	159	15.990	15.990	0.000	0	32434	75.0	57.0	
130 2,3,6-Trichlorotoluene	159	16.093	16.093	0.000	92	30574	75.0	58.2	
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 134 1,2-Dichloroethene, Total	96				0		150.0	139.0	
S 133 Xylenes, Total	106				0		150.0	152.4	
S 135 1,3-Dichloropropene, Total	1				0		150.0	143.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOAVAPRI_00006	Amount Added: 3.00	Units: uL	
voaWKet1 Rest_00001	Amount Added: 3.00	Units: uL	
voaWEE1stRest_00001	Amount Added: 3.00	Units: uL	
VOA8260VOAPRI_00139	Amount Added: 3.00	Units: uL	
VOA8260SURR_00040	Amount Added: 3.00	Units: uL	
VOAACROLEINPR_00006	Amount Added: 7.00	Units: uL	
VOA8260INT_00040	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826010.D

Injection Date: 26-Aug-2015 16:16:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD15

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

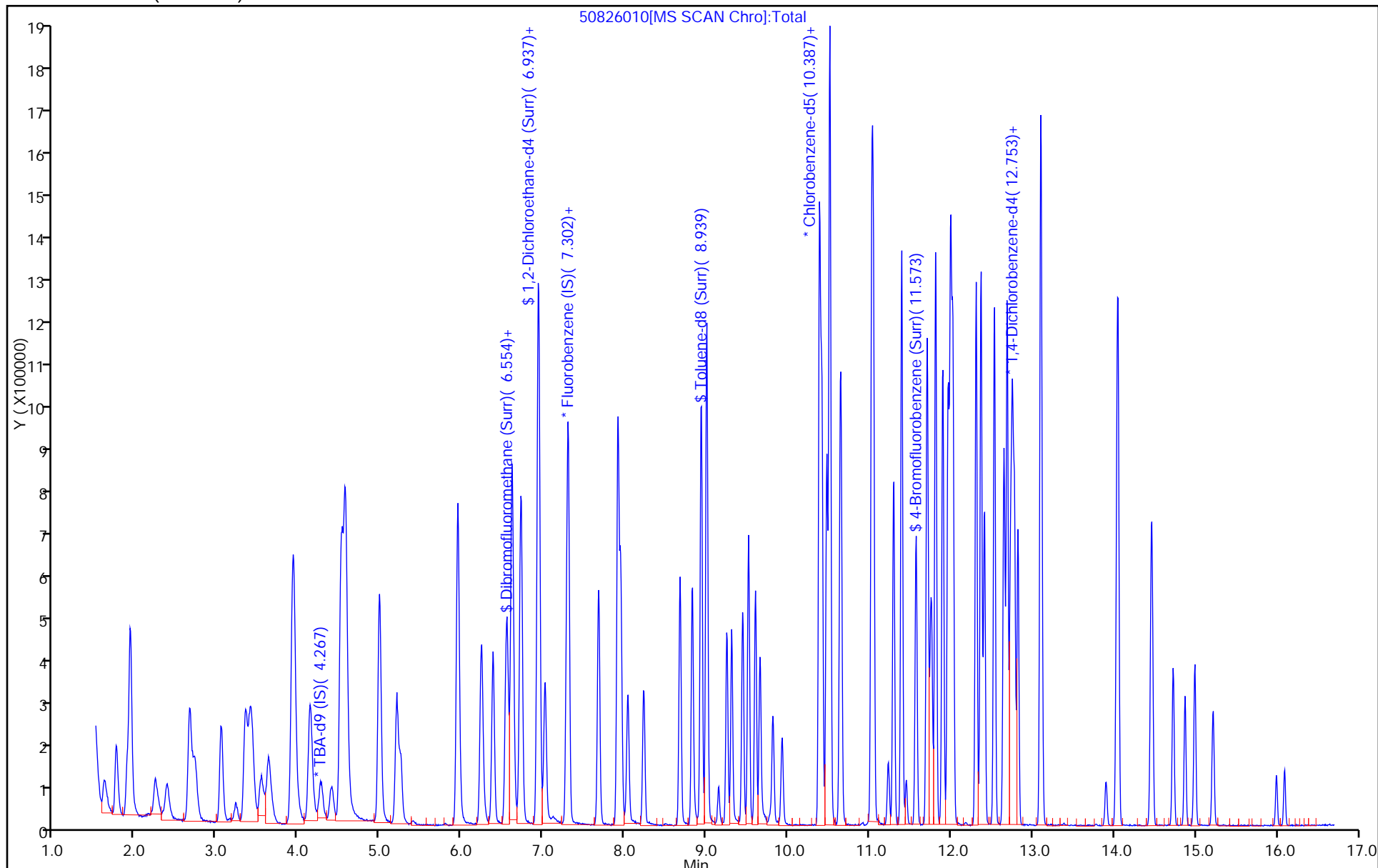
Dil. Factor: 1.0000

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: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826011.D
 Lims ID: IC VSTD20
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 26-Aug-2015 16:40:30 ALS Bottle#: 10 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD20
 Misc. Info.: 180-0008300-011
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub4
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Aug-2015 11:44:05 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK048

First Level Reviewer: fergusond

Date: 27-Aug-2015 10:30:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.272	4.267	0.005	0	167321	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.289	7.290	-0.001	98	500323	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.386	10.387	-0.001	85	122904	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.728	12.729	-0.001	95	178343	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.566	6.560	0.006	94	230039	100.0	93.6	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.937	6.931	0.006	0	306020	100.0	90.7	
\$ 7 Toluene-d8 (Surr)	98	8.938	8.939	-0.001	95	918031	100.0	96.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.572	11.573	-0.001	86	339508	100.0	94.9	
11 Dichlorodifluoromethane	85	1.614	1.614	0.000	99	268740	100.0	95.1	
12 Chloromethane	50	1.766	1.766	0.000	99	386017	100.0	93.0	
13 Vinyl chloride	62	1.900	1.894	0.006	98	356745	100.0	96.9	
14 Butadiene	39	1.936	1.937	-0.001	97	411077	100.0	94.5	
15 Bromomethane	94	2.240	2.247	-0.007	90	149495	100.0	99.8	
16 Chloroethane	64	2.386	2.387	-0.001	99	207155	100.0	93.3	
17 Dichlorofluoromethane	67	2.666	2.661	0.005	97	435665	100.0	92.4	
18 Trichlorofluoromethane	101	2.715	2.667	0.048	97	334740	100.0	95.0	
20 Ethyl ether	59	3.049	3.050	-0.001	97	295395	100.0	90.4	
21 Acrolein	56	3.226	3.232	-0.006	98	92519	200.0	190.1	
22 1,1-Dichloroethene	96	3.353	3.348	0.005	95	273818	100.0	98.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.414	3.403	0.011	93	284081	100.0	96.2	
24 Acetone	43	3.439	3.445	-0.006	99	173687	200.0	172.0	
25 Iodomethane	142	3.536	3.543	-0.007	98	394076	100.0	94.9	
26 Carbon disulfide	76	3.627	3.628	-0.001	100	636866	100.0	98.4	
28 3-Chloro-1-propene	76	3.925	3.920	0.005	88	156677	100.0	99.3	
30 Methyl acetate	43	3.938	3.938	0.000	99	1419018	500.0	470.4	
31 Methylene Chloride	84	4.138	4.139	-0.001	97	291271	100.0	93.8	
32 2-Methyl-2-propanol	59	4.406	4.407	-0.001	90	185374	1000.0	984.3	
33 Acrylonitrile	53	4.522	4.522	0.000	99	1347643	1000.0	920.7	
34 trans-1,2-Dichloroethene	96	4.564	4.565	-0.001	95	289331	100.0	95.6	
35 Methyl tert-butyl ether	73	4.582	4.577	0.005	96	664089	100.0	94.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.990	4.997	-0.007	97	493203	100.0	97.1	
37 1,1-Dichloroethane	63	5.203	5.204	-0.001	96	564450	100.0	94.7	
38 Vinyl acetate	43	5.252	5.252	0.000	97	437799	100.0	97.9	
44 2,2-Dichloropropane	77	5.945	5.952	-0.007	78	234514	100.0	98.2	
45 cis-1,2-Dichloroethene	96	5.951	5.952	-0.001	85	302874	100.0	93.7	
46 2-Butanone (MEK)	43	5.957	5.964	-0.007	62	269779	200.0	177.9	
49 Chlorobromomethane	128	6.237	6.238	-0.001	92	133128	100.0	93.8	
51 Tetrahydrofuran	42	6.249	6.250	-0.001	91	207145	200.0	170.2	
52 Chloroform	83	6.383	6.384	-0.001	96	482795	100.0	93.8	
53 1,1,1-Trichloroethane	97	6.541	6.542	-0.001	97	366328	100.0	96.2	
54 Cyclohexane	56	6.614	6.615	-0.001	96	637776	100.0	100.1	
56 Carbon tetrachloride	117	6.718	6.718	0.000	94	319309	100.0	98.5	
55 1,1-Dichloropropene	75	6.730	6.730	0.000	91	417880	100.0	99.2	
57 Isobutyl alcohol	41	6.924	6.925	-0.001	92	224262	2500.0	2353.8	
58 Benzene	78	6.943	6.943	0.000	98	1175215	100.0	95.3	
59 1,2-Dichloroethane	62	7.022	7.022	0.000	96	399895	100.0	93.7	
62 n-Heptane	43	7.308	7.308	0.000	97	444901	100.0	96.4	
64 Trichloroethene	130	7.679	7.679	0.000	96	285365	100.0	94.6	
66 Methylcyclohexane	83	7.916	7.917	-0.001	96	484430	100.0	101.8	
67 1,2-Dichloropropane	63	7.947	7.947	-0.001	94	304322	100.0	94.0	
70 1,4-Dioxane	88	8.026	8.026	0.000	40	44562	2000.0	1996.7	
68 Dibromomethane	93	8.038	8.038	0.000	97	152946	100.0	93.1	
71 Dichlorobromomethane	83	8.232	8.233	-0.001	97	310676	100.0	95.6	
74 cis-1,3-Dichloropropene	75	8.677	8.677	0.000	90	374197	100.0	98.2	
75 4-Methyl-2-pentanone (MIBK)	43	8.829	8.829	0.000	99	614019	200.0	202.8	
76 Toluene	91	9.005	9.006	-0.001	98	1201786	100.0	98.8	
77 trans-1,3-Dichloropropene	75	9.254	9.249	0.005	99	323125	100.0	101.8	
78 Ethyl methacrylate	69	9.309	9.310	-0.001	94	316812	100.0	103.2	
79 1,1,2-Trichloroethane	97	9.443	9.444	-0.001	94	224541	100.0	97.0	
80 Tetrachloroethene	164	9.516	9.517	-0.001	95	230665	100.0	97.7	
81 1,3-Dichloropropane	76	9.601	9.602	-0.001	98	408560	100.0	95.1	
82 2-Hexanone	43	9.656	9.657	-0.001	99	430988	200.0	197.2	
84 Chlorodibromomethane	129	9.820	9.815	0.005	89	202349	100.0	101.0	
85 Ethylene Dibromide	107	9.930	9.930	0.000	100	212653	100.0	95.3	
86 3-Chlorobenzotrifluoride	180	10.386	10.387	-0.001	91	368187	100.0	94.2	
87 Chlorobenzene	112	10.416	10.417	-0.001	93	752971	100.0	96.1	
88 4-Chlorobenzotrifluoride	180	10.477	10.478	-0.001	96	350243	100.0	94.7	
89 1,1,1,2-Tetrachloroethane	131	10.508	10.508	0.000	91	247335	100.0	96.9	
90 Ethylbenzene	106	10.520	10.514	0.006	99	417206	100.0	100.5	
91 m-Xylene & p-Xylene	106	10.648	10.648	0.000	0	516778	100.0	101.5	
92 o-Xylene	106	11.031	11.025	0.006	97	488783	100.0	101.0	
93 Styrene	104	11.049	11.050	-0.001	95	812783	100.0	101.4	
94 Bromoform	173	11.232	11.232	0.000	96	109983	100.0	96.2	
96 2-Chlorobenzotrifluoride	180	11.299	11.299	-0.001	95	362334	100.0	94.2	
97 Isopropylbenzene	105	11.396	11.396	0.000	97	1229067	100.0	103.7	
100 Bromobenzene	156	11.706	11.707	-0.001	95	300450	100.0	98.1	
99 1,1,2,2-Tetrachloroethane	83	11.706	11.707	-0.001	76	290248	100.0	93.0	
102 trans-1,4-Dichloro-2-buten	53	11.743	11.743	0.000	75	107372	100.0	97.0	
101 1,2,3-Trichloropropane	110	11.767	11.762	0.005	84	94129	100.0	93.2	
103 N-Propylbenzene	120	11.816	11.810	0.006	99	351814	100.0	100.4	
104 2-Chlorotoluene	126	11.901	11.901	0.000	96	301246	100.0	101.1	
105 3-Chlorotoluene	126	11.968	11.968	0.000	95	297767	100.0	97.3	

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	11.992	11.993	-0.001	94	1014826	100.0	102.5	
107 4-Chlorotoluene	126	12.022	12.023	-0.001	98	324433	100.0	99.0	
108 tert-Butylbenzene	119	12.308	12.309	-0.001	94	836893	100.0	104.0	
110 1,2,4-Trimethylbenzene	105	12.369	12.370	-0.001	98	1013032	100.0	102.1	
111 1,2-dichloro-4-(trifluorom	214	12.412	12.412	0.000	98	258438	100.0	93.4	
112 sec-Butylbenzene	105	12.533	12.534	-0.001	95	1168492	100.0	102.8	
113 1,3-Dichlorobenzene	146	12.649	12.650	-0.001	97	523315	100.0	96.0	
114 4-Isopropyltoluene	119	12.692	12.692	0.000	96	987448	100.0	102.7	
115 1,4-Dichlorobenzene	146	12.752	12.753	-0.001	94	532103	100.0	93.9	
116 2,4-Dichloro-1-(trifluorom	214	12.777	12.777	0.000	95	235991	100.0	92.1	
118 2,5-Dichlorobenzotrifluori	214	12.819	12.820	-0.001	0	254571	100.0	91.9	
120 n-Butylbenzene	91	13.099	13.100	-0.001	98	841574	100.0	102.3	
121 1,2-Dichlorobenzene	146	13.111	13.112	-0.001	94	474503	100.0	93.1	
122 1,2-Dibromo-3-Chloropropan	75	13.902	13.897	0.005	77	39315	100.0	94.0	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.042	14.049	-0.007	0	827426	300.0	284.4	
125 2,3- & 3,4- Dichlorotoluen	125	14.462	14.463	-0.001	0	510138	200.0	183.9	
126 1,2,4-Trichlorobenzene	180	14.723	14.724	-0.001	94	175776	100.0	88.7	
127 Hexachlorobutadiene	225	14.869	14.870	-0.001	97	83392	100.0	87.3	
128 Naphthalene	128	14.991	14.992	-0.001	98	463258	100.0	90.9	
129 1,2,3-Trichlorobenzene	180	15.210	15.217	-0.007	96	137103	100.0	85.4	
131 2,4,5-Trichlorotoluene	159	15.995	15.990	0.005	0	45065	100.0	77.8	
130 2,3,6-Trichlorotoluene	159	16.092	16.093	-0.001	97	45128	100.0	84.5	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		200.0	189.3	
S 133 Xylenes, Total	106				0		200.0	202.5	
S 135 1,3-Dichloropropene, Total	1				0		200.0	200.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOAACROLEINPR_00006	Amount Added: 8.00	Units: uL	
VOAVAPRI_00006	Amount Added: 4.00	Units: uL	
voaWKet1 Rest_00001	Amount Added: 4.00	Units: uL	
voaWEE1stRest_00001	Amount Added: 4.00	Units: uL	
VOA8260VOAPRI_00139	Amount Added: 4.00	Units: uL	
VOA8260SURR_00040	Amount Added: 4.00	Units: uL	
VOA8260INT_00040	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826011.D

Injection Date: 26-Aug-2015 16:40:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD20

Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL

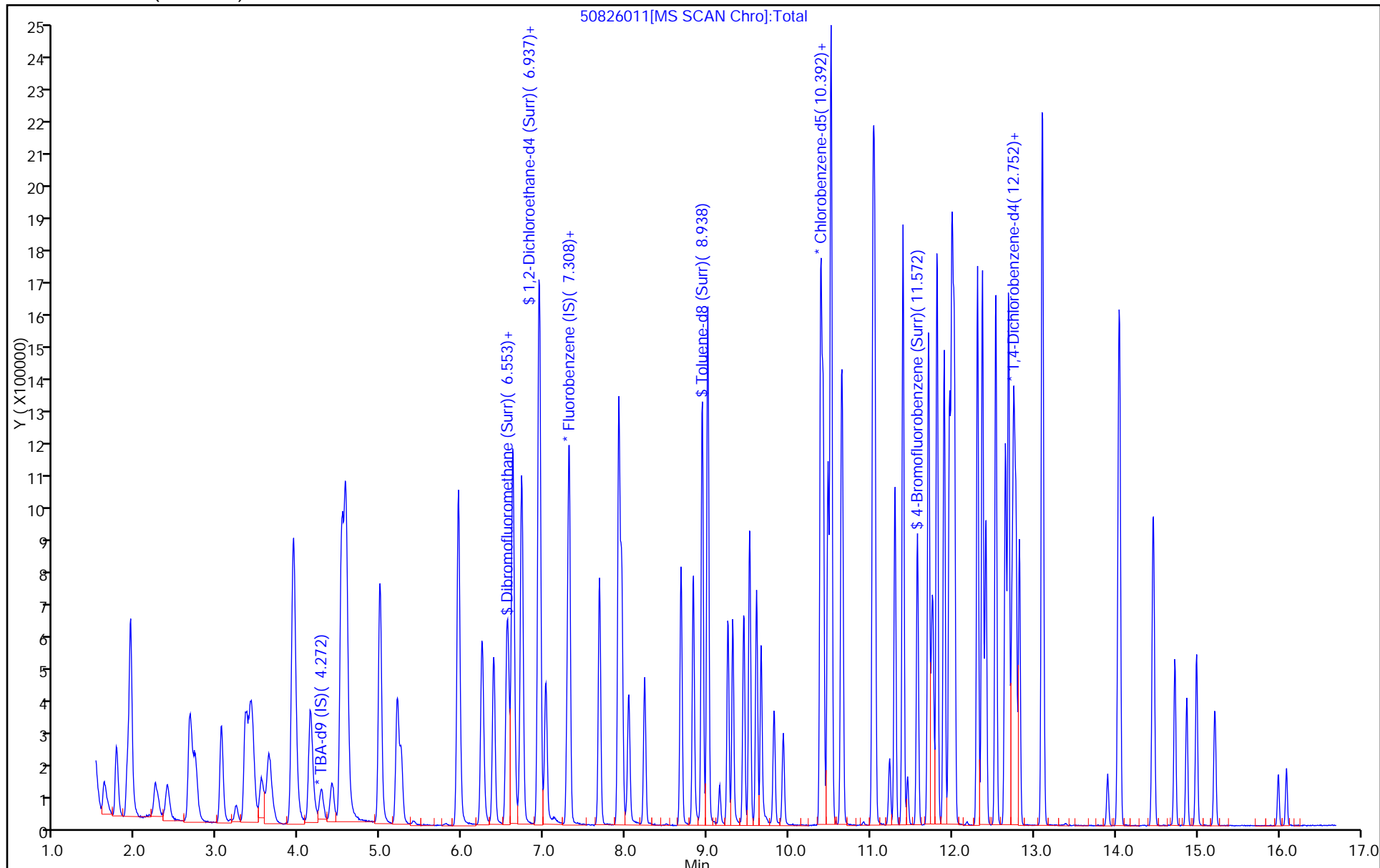
Dil. Factor: 1.0000

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: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826012.D
 Lims ID: IC VSTD35
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 26-Aug-2015 17:04:30 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD35
 Misc. Info.: 180-0008300-012
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub4
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Aug-2015 11:50:05 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK048

First Level Reviewer: fergusond

Date: 27-Aug-2015 11:50:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.278	4.267	0.011	0	175358	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.289	7.290	-0.001	98	502256	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.385	10.387	-0.002	63	129614	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.727	12.729	-0.002	95	181323	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.559	6.560	-0.001	93	399678	175.0	162.0	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.930	6.931	-0.001	0	544829	175.0	160.8	
\$ 7 Toluene-d8 (Surr)	98	8.937	8.939	-0.002	94	1580158	175.0	158.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.572	11.573	-0.001	87	617045	175.0	163.6	
11 Dichlorodifluoromethane	85	1.619	1.614	0.005	99	461015	175.0	162.5	
12 Chloromethane	50	1.765	1.766	-0.001	99	669660	175.0	160.7	
13 Vinyl chloride	62	1.905	1.894	0.011	98	603655	175.0	163.3	
14 Butadiene	39	1.935	1.937	-0.002	94	700624	175.0	160.5	
15 Bromomethane	94	2.233	2.247	-0.014	90	267454	175.0	177.8	
16 Chloroethane	64	2.379	2.387	-0.008	99	358728	175.0	160.9	
17 Dichlorofluoromethane	67	2.659	2.661	-0.002	98	748877	175.0	158.3	
18 Trichlorofluoromethane	101	2.708	2.667	0.041	98	579992	175.0	163.9	
20 Ethyl ether	59	3.049	3.050	-0.001	97	521056	175.0	158.9	
21 Acrolein	56	3.231	3.232	-0.001	99	108307	225.0	221.7	
22 1,1-Dichloroethene	96	3.347	3.348	-0.001	95	473565	175.0	169.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.408	3.403	0.005	94	488054	175.0	164.7	
24 Acetone	43	3.438	3.445	-0.007	98	332039	350.0	327.6	
25 Iodomethane	142	3.547	3.543	0.004	98	696716	175.0	167.1	
26 Carbon disulfide	76	3.633	3.628	0.005	100	1177201	175.0	181.2	
28 3-Chloro-1-propene	76	3.919	3.920	-0.001	89	285911	175.0	180.5	
30 Methyl acetate	43	3.937	3.938	-0.001	99	2539904	875.0	838.7	
31 Methylene Chloride	84	4.138	4.139	-0.001	97	510471	175.0	168.4	
32 2-Methyl-2-propanol	59	4.411	4.407	0.004	90	352268	1750.0	1784.8	
33 Acrylonitrile	53	4.521	4.522	-0.001	99	2452551	1750.0	1669.2	
34 trans-1,2-Dichloroethene	96	4.570	4.565	0.005	95	510637	175.0	168.1	
35 Methyl tert-butyl ether	73	4.582	4.577	0.005	97	1204325	175.0	171.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.989	4.997	-0.008	96	889892	175.0	174.5	
37 1,1-Dichloroethane	63	5.202	5.204	-0.002	96	998105	175.0	166.8	
38 Vinyl acetate	43	5.251	5.252	-0.001	97	801339	175.0	178.5	
44 2,2-Dichloropropane	77	5.944	5.952	-0.008	79	413686	175.0	172.5	
45 cis-1,2-Dichloroethene	96	5.950	5.952	-0.002	86	550789	175.0	169.7	
46 2-Butanone (MEK)	43	5.957	5.964	-0.007	98	514894	350.0	338.2	
49 Chlorobromomethane	128	6.236	6.238	-0.002	92	234034	175.0	164.3	
51 Tetrahydrofuran	42	6.249	6.250	-0.001	91	417684	350.0	342.0	
52 Chloroform	83	6.382	6.384	-0.002	96	838419	175.0	162.2	
53 1,1,1-Trichloroethane	97	6.541	6.542	-0.001	97	661680	175.0	173.1	
54 Cyclohexane	56	6.614	6.615	-0.001	96	1115710	175.0	174.4	
56 Carbon tetrachloride	117	6.717	6.718	-0.001	96	566329	175.0	174.0	
55 1,1-Dichloropropene	75	6.729	6.730	-0.001	91	734207	175.0	173.7	
57 Isobutyl alcohol	41	6.924	6.925	-0.001	94	417725	4375.0	4367.4	
58 Benzene	78	6.942	6.943	-0.001	98	2000326	175.0	161.5	
59 1,2-Dichloroethane	62	7.021	7.022	-0.001	97	709743	175.0	165.7	
62 n-Heptane	43	7.307	7.308	-0.001	96	819932	175.0	177.0	
64 Trichloroethene	130	7.678	7.679	-0.001	97	506964	175.0	167.3	
66 Methylcyclohexane	83	7.915	7.917	-0.002	96	866758	175.0	181.5	
67 1,2-Dichloropropane	63	7.946	7.947	-0.001	94	547361	175.0	168.4	
70 1,4-Dioxane	88	8.025	8.026	-0.001	46	82622	3500.0	3687.8	M
68 Dibromomethane	93	8.037	8.038	-0.001	96	277699	175.0	168.4	
71 Dichlorobromomethane	83	8.232	8.233	-0.001	98	576102	175.0	176.5	
74 cis-1,3-Dichloropropene	75	8.676	8.677	-0.001	90	714562	175.0	186.9	
75 4-Methyl-2-pentanone (MIBK)	43	8.828	8.829	-0.001	98	1157588	350.0	362.5	
76 Toluene	91	9.004	9.006	-0.002	97	2050607	175.0	159.8	
77 trans-1,3-Dichloropropene	75	9.248	9.249	-0.001	98	619485	175.0	185.0	
78 Ethyl methacrylate	69	9.309	9.310	-0.001	94	602921	175.0	186.2	
79 1,1,2-Trichloroethane	97	9.442	9.444	-0.002	93	403722	175.0	165.4	
80 Tetrachloroethene	164	9.515	9.517	-0.002	95	401915	175.0	161.4	
81 1,3-Dichloropropane	76	9.601	9.602	-0.001	98	743698	175.0	164.1	
82 2-Hexanone	43	9.655	9.657	-0.002	99	820858	350.0	356.1	
84 Chlorodibromomethane	129	9.813	9.815	-0.002	91	377032	175.0	178.4	
85 Ethylene Dibromide	107	9.929	9.930	-0.001	99	390862	175.0	166.2	
86 3-Chlorobenzotrifluoride	180	10.385	10.387	-0.002	92	686777	175.0	166.5	
87 Chlorobenzene	112	10.416	10.417	-0.001	91	1331912	175.0	161.2	
88 4-Chlorobenzotrifluoride	180	10.477	10.478	-0.001	96	642626	175.0	164.8	
89 1,1,1,2-Tetrachloroethane	131	10.507	10.508	-0.001	93	453483	175.0	168.4	
90 Ethylbenzene	106	10.513	10.514	-0.001	98	756322	175.0	172.7	
91 m-Xylene & p-Xylene	106	10.647	10.648	-0.001	0	934055	175.0	173.9	
92 o-Xylene	106	11.030	11.025	0.005	95	890574	175.0	174.5	
93 Styrene	104	11.048	11.050	-0.002	95	1460286	175.0	172.7	
94 Bromoform	173	11.231	11.232	-0.001	96	217546	175.0	180.4	
96 2-Chlorobenzotrifluoride	180	11.298	11.299	-0.001	95	670799	175.0	165.3	
97 Isopropylbenzene	105	11.395	11.396	-0.001	97	2113845	175.0	169.1	
100 Bromobenzene	156	11.712	11.707	0.005	95	543146	175.0	174.5	
99 1,1,2,2-Tetrachloroethane	83	11.705	11.707	-0.002	77	530728	175.0	161.2	
102 trans-1,4-Dichloro-2-buten	53	11.742	11.743	-0.001	78	209384	175.0	186.1	
101 1,2,3-Trichloropropane	110	11.760	11.762	-0.002	87	177490	175.0	172.9	
103 N-Propylbenzene	120	11.815	11.810	0.005	97	636587	175.0	178.7	
104 2-Chlorotoluene	126	11.900	11.901	-0.001	95	529736	175.0	174.9	
105 3-Chlorotoluene	126	11.967	11.968	-0.001	95	552058	175.0	177.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.997	11.993	0.004	95	1760059	175.0	174.8	
107 4-Chlorotoluene	126	12.022	12.023	-0.001	98	582109	175.0	174.7	
108 tert-Butylbenzene	119	12.308	12.309	-0.001	94	1486960	175.0	181.7	
110 1,2,4-Trimethylbenzene	105	12.369	12.370	-0.001	98	1772230	175.0	175.7	
111 1,2-dichloro-4-(trifluorom	214	12.411	12.412	-0.001	98	484133	175.0	172.2	
112 sec-Butylbenzene	105	12.533	12.534	-0.001	96	2029430	175.0	175.6	
113 1,3-Dichlorobenzene	146	12.648	12.650	-0.002	97	937539	175.0	169.2	
114 4-Isopropyltoluene	119	12.691	12.692	-0.001	96	1738859	175.0	177.9	
115 1,4-Dichlorobenzene	146	12.752	12.753	-0.001	93	949324	175.0	164.7	
116 2,4-Dichloro-1-(trifluorom	214	12.782	12.777	0.005	95	453275	175.0	174.0	
118 2,5-Dichlorobenzotrifluori	214	12.819	12.820	-0.001	0	486163	175.0	172.6	
120 n-Butylbenzene	91	13.099	13.100	-0.001	97	1504673	175.0	179.9	
121 1,2-Dichlorobenzene	146	13.111	13.112	-0.001	96	849612	175.0	164.0	
122 1,2-Dibromo-3-Chloropropan	75	13.902	13.897	0.005	79	75555	175.0	177.7	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.048	14.049	-0.001	0	1576122	525.0	532.8	
125 2,3- & 3,4- Dichlorotoluen	125	14.461	14.463	-0.002	0	994231	350.0	352.5	
126 1,2,4-Trichlorobenzene	180	14.723	14.724	-0.001	94	339446	175.0	168.4	
127 Hexachlorobutadiene	225	14.869	14.870	-0.001	97	160392	175.0	165.2	
128 Naphthalene	128	14.990	14.992	-0.002	98	934428	175.0	180.4	
129 1,2,3-Trichlorobenzene	180	15.216	15.217	-0.001	94	261711	175.0	160.4	
131 2,4,5-Trichlorotoluene	159	15.988	15.990	-0.002	0	100325	175.0	170.5	
130 2,3,6-Trichlorotoluene	159	16.092	16.093	-0.001	94	99793	175.0	185.2	
148 2,3-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	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		350.0	348.4	
S 134 1,2-Dichloroethene, Total	96				0		350.0	337.9	
S 135 1,3-Dichloropropene, Total	1				0		350.0	371.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00040	Amount Added: 7.00	Units: uL	
VOA8260VOAPRI_00139	Amount Added: 7.00	Units: uL	
voaWEE1stRest_00001	Amount Added: 7.00	Units: uL	
voaWKet1 Rest_00001	Amount Added: 7.00	Units: uL	
VOAVAPRI_00006	Amount Added: 7.00	Units: uL	
VOAACROLEINPR_00006	Amount Added: 9.00	Units: uL	
VOA8260INT_00040	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826012.D

Injection Date: 26-Aug-2015 17:04:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD35

Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL

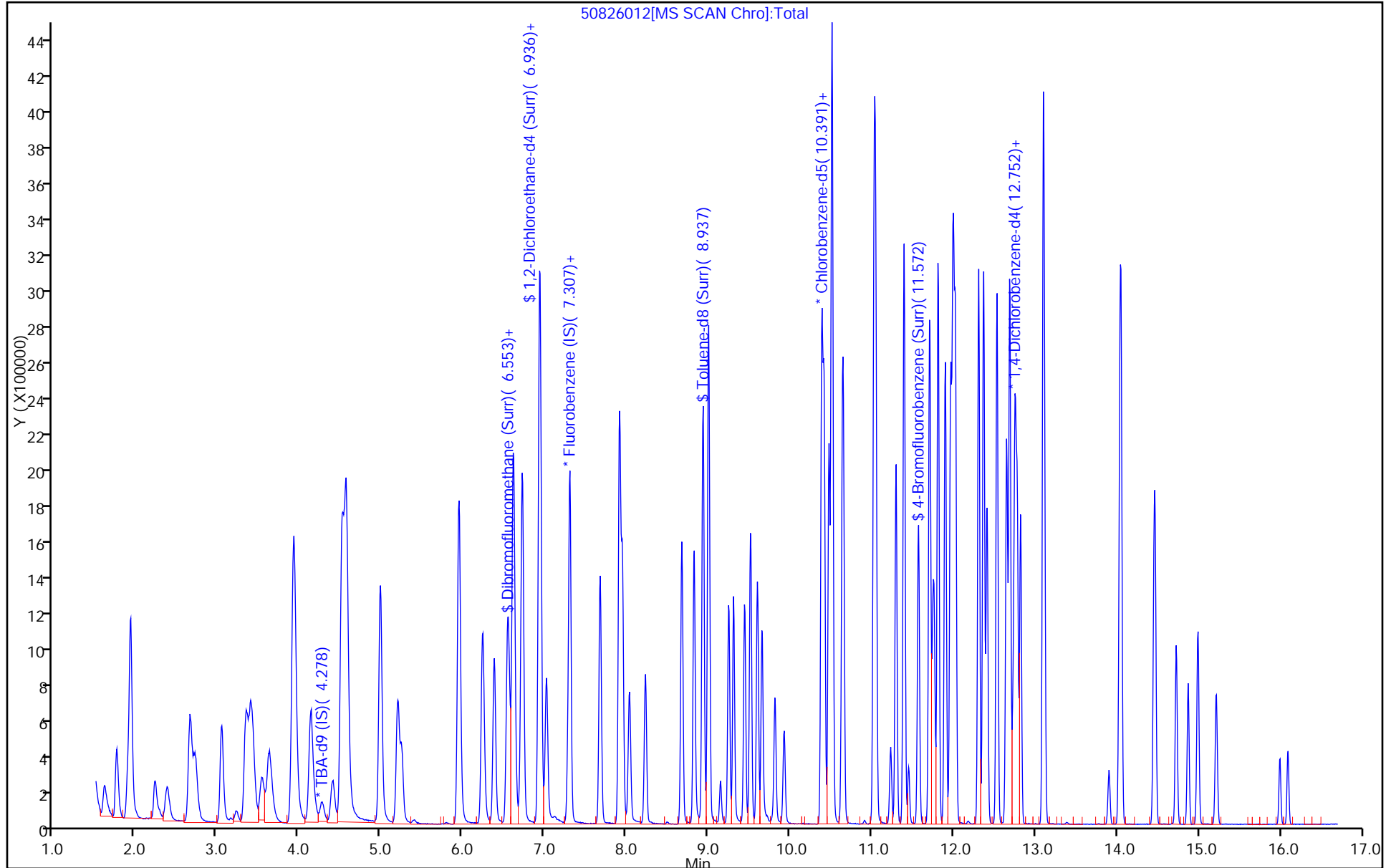
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



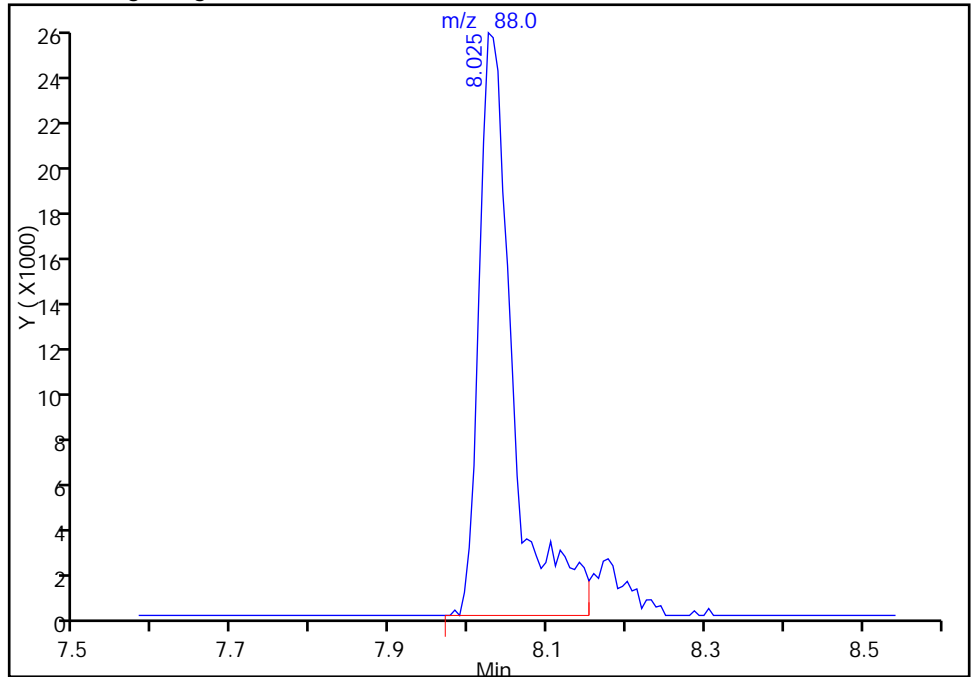
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826012.D
Injection Date: 26-Aug-2015 17:04:30 Instrument ID: CHHP5
Lims ID: IC VSTD35
Client ID:
Operator ID: 001562 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

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

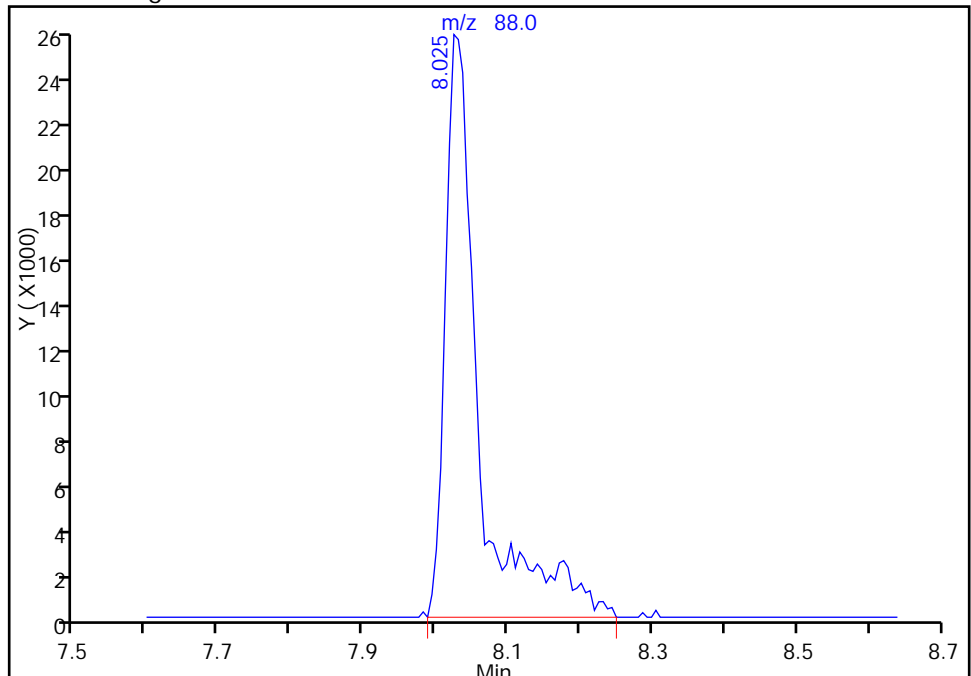
RT: 8.02
Area: 75762
Amount: 3419.0350
Amount Units: ng

Processing Integration Results



RT: 8.02
Area: 82622
Amount: 3687.8427
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 27-Aug-2015 10:34:42
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826013.D
 Lims ID: IC VSTD40
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 26-Aug-2015 17:28:30 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD40
 Misc. Info.: 180-0008300-013
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub4
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Aug-2015 11:50:23 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK048

First Level Reviewer: fergusond

Date: 27-Aug-2015 10:38:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.274	4.267	0.007	0	190633	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.285	7.290	-0.005	98	491948	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.388	10.387	0.001	59	135336	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.730	12.729	0.001	94	186041	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.562	6.560	0.002	94	438908	200.0	181.7	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.933	6.931	0.002	0	597233	200.0	180.0	
\$ 7 Toluene-d8 (Surr)	98	8.934	8.939	-0.005	94	1727014	200.0	165.4	
\$ 8 4-Bromofluorobenzene (Surr	95	11.568	11.573	-0.005	86	697446	200.0	177.1	
11 Dichlorodifluoromethane	85	1.616	1.614	0.002	98	506611	200.0	182.3	
12 Chloromethane	50	1.762	1.766	-0.004	99	733518	200.0	179.7	
13 Vinyl chloride	62	1.902	1.894	0.008	98	663498	200.0	183.3	
14 Butadiene	39	1.938	1.937	0.001	95	762590	200.0	178.4	
15 Bromomethane	94	2.230	2.247	-0.017	91	244127	200.0	165.7	
16 Chloroethane	64	2.382	2.387	-0.005	99	395735	200.0	181.2	
17 Dichlorofluoromethane	67	2.662	2.661	0.001	98	843233	200.0	182.0	
18 Trichlorofluoromethane	101	2.711	2.667	0.044	98	636269	200.0	183.6	
20 Ethyl ether	59	3.045	3.050	-0.005	97	582513	200.0	181.3	
21 Acrolein	56	3.228	3.232	-0.004	99	117496	250.0	245.5	
22 1,1-Dichloroethene	96	3.343	3.348	-0.005	94	516257	200.0	188.4	
23 1,1,2-Trichloro-1,2,2-trif	101	3.410	3.403	0.007	93	532678	200.0	183.5	
24 Acetone	43	3.435	3.445	-0.010	99	349354	400.0	351.9	
25 Iodomethane	142	3.538	3.543	-0.005	98	765249	200.0	187.4	
26 Carbon disulfide	76	3.629	3.628	0.001	100	1297173	200.0	203.9	
28 3-Chloro-1-propene	76	3.921	3.920	0.001	89	325399	200.0	209.7	
30 Methyl acetate	43	3.940	3.938	0.002	99	2811173	1000.0	947.8	
31 Methylene Chloride	84	4.134	4.139	-0.005	97	573290	200.0	194.0	
32 2-Methyl-2-propanol	59	4.408	4.407	0.001	90	410928	2000.0	1915.2	
33 Acrylonitrile	53	4.517	4.522	-0.005	98	2730347	2000.0	1897.2	
34 trans-1,2-Dichloroethene	96	4.560	4.565	-0.005	95	552053	200.0	185.6	
35 Methyl tert-butyl ether	73	4.578	4.577	0.001	97	1367672	200.0	198.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.986	4.997	-0.011	97	948868	200.0	190.0	
37 1,1-Dichloroethane	63	5.199	5.204	-0.005	97	1104940	200.0	188.5	
38 Vinyl acetate	43	5.247	5.252	-0.005	97	887283	200.0	201.8	
45 cis-1,2-Dichloroethene	96	5.947	5.952	-0.005	84	600559	200.0	188.9	
44 2,2-Dichloropropane	77	5.947	5.952	-0.005	84	451339	200.0	192.2	
46 2-Butanone (MEK)	43	5.953	5.964	-0.011	90	569128	400.0	381.6	
49 Chlorobromomethane	128	6.239	6.238	0.001	92	262832	200.0	188.3	
51 Tetrahydrofuran	42	6.245	6.250	-0.005	95	461621	400.0	385.8	
52 Chloroform	83	6.379	6.384	-0.005	95	922240	200.0	182.1	
53 1,1,1-Trichloroethane	97	6.543	6.542	0.001	96	710348	200.0	189.7	
54 Cyclohexane	56	6.610	6.615	-0.005	96	1210903	200.0	193.3	
56 Carbon tetrachloride	117	6.714	6.718	-0.004	95	616016	200.0	193.2	
55 1,1-Dichloropropene	75	6.726	6.730	-0.004	93	785333	200.0	189.7	
57 Isobutyl alcohol	41	6.927	6.925	0.002	94	492768	5000.0	5259.9	
58 Benzene	78	6.939	6.943	-0.004	98	2197241	200.0	181.1	
59 1,2-Dichloroethane	62	7.018	7.022	-0.004	96	788760	200.0	188.0	
62 n-Heptane	43	7.310	7.308	0.002	96	859948	200.0	189.6	
64 Trichloroethene	130	7.675	7.679	-0.004	96	556980	200.0	187.7	
66 Methylcyclohexane	83	7.912	7.917	-0.005	96	937977	200.0	200.6	
67 1,2-Dichloropropane	63	7.949	7.947	0.002	94	594824	200.0	186.9	
70 1,4-Dioxane	88	8.034	8.026	0.008	41	91547	4000.0	4171.8	
68 Dibromomethane	93	8.034	8.038	-0.004	97	307857	200.0	190.6	
71 Dichlorobromomethane	83	8.228	8.233	-0.005	98	644471	200.0	201.6	
74 cis-1,3-Dichloropropene	75	8.672	8.677	-0.005	91	812298	200.0	216.9	
75 4-Methyl-2-pentanone (MIBK)	43	8.825	8.829	-0.004	98	1320471	400.0	396.0	
76 Toluene	91	9.001	9.006	-0.005	97	2228576	200.0	166.3	
77 trans-1,3-Dichloropropene	75	9.250	9.249	0.001	98	704918	200.0	201.6	
78 Ethyl methacrylate	69	9.311	9.310	0.001	94	687101	200.0	203.2	
79 1,1,2-Trichloroethane	97	9.445	9.444	0.001	94	441190	200.0	173.1	
80 Tetrachloroethene	164	9.518	9.517	0.001	95	438898	200.0	168.8	
81 1,3-Dichloropropane	76	9.603	9.602	0.001	98	840507	200.0	177.6	
82 2-Hexanone	43	9.658	9.657	0.001	98	943138	400.0	391.8	
84 Chlorodibromomethane	129	9.816	9.815	0.001	91	427847	200.0	193.9	
85 Ethylene Dibromide	107	9.926	9.930	-0.004	98	449617	200.0	183.1	
86 3-Chlorobenzotrifluoride	180	10.388	10.387	0.001	93	749898	200.0	174.2	
87 Chlorobenzene	112	10.412	10.417	-0.005	92	1491257	200.0	172.9	
88 4-Chlorobenzotrifluoride	180	10.473	10.478	-0.005	96	709487	200.0	174.3	
89 1,1,1,2-Tetrachloroethane	131	10.510	10.508	0.002	94	513686	200.0	182.7	
90 Ethylbenzene	106	10.516	10.514	0.002	98	837593	200.0	183.2	
91 m-Xylene & p-Xylene	106	10.650	10.648	0.002	0	1021032	200.0	182.1	
92 o-Xylene	106	11.027	11.025	0.002	97	984811	200.0	184.8	
93 Styrene	104	11.051	11.050	0.001	94	1627751	200.0	184.4	
94 Bromoform	173	11.234	11.232	0.002	96	254607	200.0	202.2	
96 2-Chlorobenzotrifluoride	180	11.294	11.299	-0.005	95	748529	200.0	176.7	
97 Isopropylbenzene	105	11.392	11.396	-0.004	97	2317406	200.0	177.6	
100 Bromobenzene	156	11.708	11.707	0.001	95	609774	200.0	190.9	
99 1,1,2,2-Tetrachloroethane	83	11.708	11.707	0.001	78	605346	200.0	176.1	
102 trans-1,4-Dichloro-2-buten	53	11.745	11.743	0.002	43	238659	200.0	206.7	
101 1,2,3-Trichloropropane	110	11.763	11.762	0.001	86	200908	200.0	190.7	
103 N-Propylbenzene	120	11.812	11.810	0.002	97	717909	200.0	196.4	
104 2-Chlorotoluene	126	11.897	11.901	-0.004	96	608876	200.0	195.9	
105 3-Chlorotoluene	126	11.964	11.968	-0.004	95	621607	200.0	194.6	

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	11.994	11.993	0.001	95	1952122	200.0	189.0	
107 4-Chlorotoluene	126	12.024	12.023	0.001	98	649501	200.0	189.9	
108 tert-Butylbenzene	119	12.310	12.309	0.001	94	1642231	200.0	195.6	
110 1,2,4-Trimethylbenzene	105	12.365	12.370	-0.005	98	1973541	200.0	190.7	
111 1,2-dichloro-4-(trifluorom	214	12.408	12.412	-0.004	97	529814	200.0	183.6	
112 sec-Butylbenzene	105	12.529	12.534	-0.005	96	2244027	200.0	189.3	
113 1,3-Dichlorobenzene	146	12.651	12.650	0.001	96	1071203	200.0	188.4	
114 4-Isopropyltoluene	119	12.688	12.692	-0.004	97	1944911	200.0	193.9	
115 1,4-Dichlorobenzene	146	12.754	12.753	0.001	94	1084086	200.0	183.3	
116 2,4-Dichloro-1-(trifluorom	214	12.779	12.777	0.002	95	483618	200.0	180.9	
118 2,5-Dichlorobenzotrifluori	214	12.821	12.820	0.001	0	571654	200.0	197.9	
120 n-Butylbenzene	91	13.095	13.100	-0.005	98	1691227	200.0	197.0	
121 1,2-Dichlorobenzene	146	13.107	13.112	-0.005	94	988861	200.0	186.1	
122 1,2-Dibromo-3-Chloropropan	75	13.904	13.897	0.007	78	91242	200.0	209.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.044	14.049	-0.005	0	1875036	600.0	617.8	
125 2,3- & 3,4- Dichlorotoluen	125	14.458	14.463	-0.005	0	1204899	400.0	416.3	
126 1,2,4-Trichlorobenzene	180	14.726	14.724	0.002	94	424061	200.0	205.1	
127 Hexachlorobutadiene	225	14.872	14.870	0.002	97	188644	200.0	189.4	
128 Naphthalene	128	14.987	14.992	-0.005	98	1180622	200.0	222.2	
129 1,2,3-Trichlorobenzene	180	15.212	15.217	-0.005	95	333363	200.0	199.2	
131 2,4,5-Trichlorotoluene	159	15.991	15.990	0.001	0	135933	200.0	225.1	
130 2,3,6-Trichlorotoluene	159	16.088	16.093	-0.005	95	131306	200.0	242.0	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-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		400.0	374.5	
S 133 Xylenes, Total	106				0		400.0	366.9	
S 135 1,3-Dichloropropene, Total	1				0		400.0	418.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOAACROLEINPR_00006	Amount Added: 10.00	Units: uL	
VOAVAPRI_00006	Amount Added: 8.00	Units: uL	
voaWKet1 Rest_00001	Amount Added: 8.00	Units: uL	
voaWEE1stRest_00001	Amount Added: 8.00	Units: uL	
VOA8260VOAPRI_00139	Amount Added: 8.00	Units: uL	
VOA8260SURR_00040	Amount Added: 8.00	Units: uL	
VOA8260INT_00040	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826013.D

Injection Date: 26-Aug-2015 17:28:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD40

Worklist Smp#: 13

Client ID:

Purge Vol: 5.000 mL

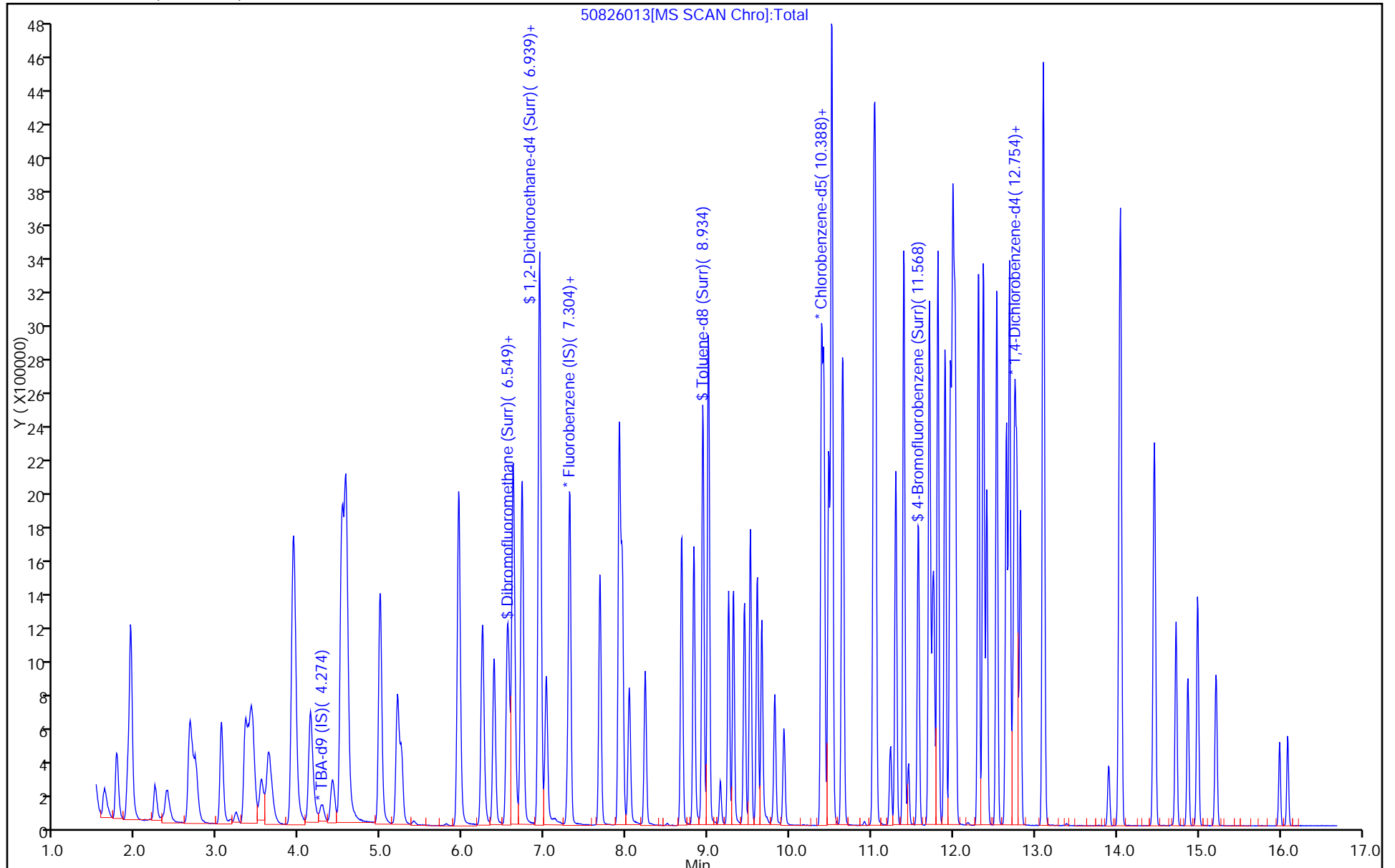
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Lims ID: IC VSTD50
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 26-Aug-2015 17:52:30 ALS Bottle#: 13 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD50
 Misc. Info.: 180-0008300-014
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub4
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Aug-2015 11:50:43 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK048

First Level Reviewer: fergusond

Date: 27-Aug-2015 10:43:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.271	4.267	0.004	0	178553	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.289	7.290	-0.001	98	422908	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.385	10.387	-0.002	56	117789	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.728	12.729	-0.001	92	156354	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.559	6.560	-0.001	93	562879	250.0	271.0	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.936	6.931	0.005	0	751925	250.0	263.6	
\$ 7 Toluene-d8 (Surr)	98	8.938	8.939	-0.001	94	2103482	250.0	231.5	
\$ 8 4-Bromofluorobenzene (Surr	95	11.572	11.573	-0.001	86	854277	250.0	249.2	
11 Dichlorodifluoromethane	85	1.619	1.614	0.005	99	585297	250.0	245.0	
12 Chloromethane	50	1.765	1.766	-0.001	99	886889	250.0	252.8	
13 Vinyl chloride	62	1.905	1.894	0.011	99	782206	250.0	251.3	
14 Butadiene	39	1.935	1.937	-0.002	96	893578	250.0	243.1	
15 Bromomethane	94	2.234	2.247	-0.013	90	333317	250.0	263.2	
16 Chloroethane	64	2.380	2.387	-0.007	99	465079	250.0	247.7	
17 Dichlorofluoromethane	67	2.665	2.661	0.004	98	986298	250.0	247.6	
18 Trichlorofluoromethane	101	2.702	2.667	0.035	96	739174	250.0	248.1	M
20 Ethyl ether	59	3.043	3.050	-0.007	97	750491	250.0	271.8	
21 Acrolein	56	3.225	3.232	-0.007	99	127965	275.0	311.1	
22 1,1-Dichloroethene	96	3.341	3.348	-0.007	95	627614	250.0	266.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.408	3.403	0.005	93	629046	250.0	252.1	
24 Acetone	43	3.438	3.445	-0.007	99	457819	500.0	536.5	
25 Iodomethane	142	3.535	3.543	-0.008	99	963985	250.0	274.6	
26 Carbon disulfide	76	3.627	3.628	-0.001	100	1607306	250.0	293.9	
28 3-Chloro-1-propene	76	3.913	3.920	-0.007	89	399041	250.0	299.1	
30 Methyl acetate	43	3.937	3.938	-0.001	98	3450277	1250.0	1353.2	
31 Methylene Chloride	84	4.132	4.139	-0.007	98	715184	250.0	284.3	
32 2-Methyl-2-propanol	59	4.405	4.407	-0.002	91	514360	2500.0	2559.4	
33 Acrylonitrile	53	4.521	4.522	-0.001	97	3337347	2500.0	2697.5	
34 trans-1,2-Dichloroethene	96	4.563	4.565	-0.002	95	687878	250.0	269.0	
35 Methyl tert-butyl ether	73	4.576	4.577	-0.001	98	1750025	250.0	295.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.989	4.997	-0.008	97	1125958	250.0	262.3	
37 1,1-Dichloroethane	63	5.202	5.204	-0.002	96	1377944	250.0	273.5	
38 Vinyl acetate	43	5.245	5.252	-0.007	97	1072494	250.0	283.7	
45 cis-1,2-Dichloroethene	96	5.951	5.952	-0.001	85	760457	250.0	278.3	
44 2,2-Dichloropropane	77	5.944	5.952	-0.008	84	564524	250.0	279.6	
46 2-Butanone (MEK)	43	5.957	5.964	-0.007	99	698551	500.0	544.9	
49 Chlorobromomethane	128	6.236	6.238	-0.002	92	336595	250.0	280.6	
51 Tetrahydrofuran	42	6.249	6.250	-0.001	93	561739	500.0	546.2	
52 Chloroform	83	6.382	6.384	-0.002	96	1166838	250.0	268.1	
53 1,1,1-Trichloroethane	97	6.541	6.542	-0.001	97	898258	250.0	279.1	
54 Cyclohexane	56	6.614	6.615	-0.001	96	1451032	250.0	269.4	
56 Carbon tetrachloride	117	6.711	6.718	-0.007	95	764597	250.0	279.0	
55 1,1-Dichloropropene	75	6.729	6.730	-0.001	91	975802	250.0	274.2	
57 Isobutyl alcohol	41	6.924	6.925	-0.001	94	588608	6250.0	7308.6	
58 Benzene	78	6.942	6.943	-0.001	99	2707324	250.0	259.6	
59 1,2-Dichloroethane	62	7.021	7.022	-0.001	96	987010	250.0	273.7	
62 n-Heptane	43	7.307	7.308	-0.001	96	1040377	250.0	266.8	
64 Trichloroethene	130	7.678	7.679	-0.001	97	693909	250.0	272.0	
66 Methylcyclohexane	83	7.915	7.917	-0.002	95	1114866	250.0	277.3	
67 1,2-Dichloropropane	63	7.946	7.947	-0.001	94	765352	250.0	279.7	
70 1,4-Dioxane	88	8.031	8.026	0.005	42	111802	5000.0	5926.6	
68 Dibromomethane	93	8.037	8.038	-0.001	97	386058	250.0	278.0	
71 Dichlorobromomethane	83	8.232	8.233	-0.001	98	812136	250.0	295.5	
74 cis-1,3-Dichloropropene	75	8.676	8.677	-0.001	91	1033255	250.0	320.9	
75 4-Methyl-2-pentanone (MIBK)	43	8.828	8.829	-0.001	98	1599371	500.0	551.1	
76 Toluene	91	9.004	9.006	-0.002	96	2681762	250.0	230.0	
77 trans-1,3-Dichloropropene	75	9.248	9.249	-0.001	99	891401	250.0	292.9	
78 Ethyl methacrylate	69	9.309	9.310	-0.001	94	862044	250.0	292.9	
79 1,1,2-Trichloroethane	97	9.442	9.444	-0.002	94	557982	250.0	251.6	
80 Tetrachloroethene	164	9.515	9.517	-0.002	94	530215	250.0	234.2	
81 1,3-Dichloropropane	76	9.601	9.602	-0.001	98	1030200	250.0	250.2	
82 2-Hexanone	43	9.655	9.657	-0.002	98	1123041	500.0	536.1	
84 Chlorodibromomethane	129	9.814	9.815	-0.001	91	542940	250.0	282.7	
85 Ethylene Dibromide	107	9.929	9.930	-0.001	98	553588	250.0	259.0	
86 3-Chlorobenzotrifluoride	180	10.391	10.387	0.004	92	813323	250.0	217.0	
87 Chlorobenzene	112	10.416	10.417	-0.001	91	1793475	250.0	238.9	
88 4-Chlorobenzotrifluoride	180	10.477	10.478	-0.001	96	781989	250.0	220.7	
89 1,1,1,2-Tetrachloroethane	131	10.507	10.508	-0.001	93	642159	250.0	262.4	
90 Ethylbenzene	106	10.519	10.514	0.005	97	1001210	250.0	251.5	
91 m-Xylene & p-Xylene	106	10.647	10.648	-0.001	0	1238884	250.0	253.8	
92 o-Xylene	106	11.030	11.025	0.005	97	1203666	250.0	259.5	
93 Styrene	104	11.048	11.050	-0.002	94	1948876	250.0	253.6	
94 Bromoform	173	11.231	11.232	-0.001	95	317730	250.0	289.9	
96 2-Chlorobenzotrifluoride	180	11.298	11.299	-0.001	94	809757	250.0	219.6	
97 Isopropylbenzene	105	11.395	11.396	-0.001	98	2727755	250.0	240.1	
100 Bromobenzene	156	11.705	11.707	-0.002	95	743219	250.0	276.9	
99 1,1,2,2-Tetrachloroethane	83	11.705	11.707	-0.002	77	725938	250.0	242.6	
102 trans-1,4-Dichloro-2-buten	53	11.742	11.743	-0.001	77	290130	250.0	299.0	
101 1,2,3-Trichloropropane	110	11.766	11.762	0.004	87	246872	250.0	278.9	
103 N-Propylbenzene	120	11.809	11.810	-0.001	97	850210	250.0	276.7	
104 2-Chlorotoluene	126	11.900	11.901	-0.001	95	726063	250.0	278.0	
105 3-Chlorotoluene	126	11.967	11.968	-0.001	95	702342	250.0	261.7	

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	11.997	11.993	0.004	95	2264532	250.0	260.9	
107 4-Chlorotoluene	126	12.022	12.023	-0.001	98	778860	250.0	271.0	
108 tert-Butylbenzene	119	12.308	12.309	-0.001	94	1938716	250.0	274.7	
110 1,2,4-Trimethylbenzene	105	12.369	12.370	-0.001	98	2303042	250.0	264.8	
111 1,2-dichloro-4-(trifluorom	214	12.411	12.412	-0.001	97	580120	250.0	239.2	
112 sec-Butylbenzene	105	12.533	12.534	-0.001	96	2563359	250.0	257.3	
113 1,3-Dichlorobenzene	146	12.648	12.650	-0.002	96	1263925	250.0	264.5	
114 4-Isopropyltoluene	119	12.691	12.692	-0.001	95	2238219	250.0	265.5	
115 1,4-Dichlorobenzene	146	12.758	12.753	0.005	91	1287906	250.0	259.1	
116 2,4-Dichloro-1-(trifluorom	214	12.782	12.777	0.005	96	531698	250.0	236.7	
118 2,5-Dichlorobenzotrifluori	214	12.819	12.820	-0.001	0	585601	250.0	241.2	
120 n-Butylbenzene	91	13.099	13.100	-0.001	96	1909580	250.0	264.7	
121 1,2-Dichlorobenzene	146	13.111	13.112	-0.001	94	1135542	250.0	254.3	
122 1,2-Dibromo-3-Chloropropan	75	13.902	13.897	0.005	92	105625	250.0	288.0	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.048	14.049	-0.001	0	1891413	750.0	741.5	
125 2,3- & 3,4- Dichlorotoluen	125	14.461	14.463	-0.002	0	1220209	500.0	501.7	
126 1,2,4-Trichlorobenzene	180	14.723	14.724	-0.001	94	445017	250.0	256.1	
127 Hexachlorobutadiene	225	14.869	14.870	-0.001	98	196056	250.0	234.2	
128 Naphthalene	128	14.991	14.992	-0.001	98	1235965	250.0	276.7	
129 1,2,3-Trichlorobenzene	180	15.216	15.217	-0.001	94	351787	250.0	250.1	
131 2,4,5-Trichlorotoluene	159	15.994	15.990	0.004	0	136778	250.0	269.5	
130 2,3,6-Trichlorotoluene	159	16.092	16.093	-0.001	96	133555	250.0	291.3	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		500.0	513.3	
S 134 1,2-Dichloroethene, Total	96				0		500.0	547.3	
S 135 1,3-Dichloropropene, Total	1				0		500.0	613.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00040	Amount Added: 10.00	Units: uL	
VOA8260VOAPRI_00139	Amount Added: 10.00	Units: uL	
voaWEE1stRest_00001	Amount Added: 10.00	Units: uL	
voaWKet1 Rest_00001	Amount Added: 10.00	Units: uL	
VOAVAPRI_00006	Amount Added: 10.00	Units: uL	
VOAACROLEINPR_00006	Amount Added: 11.00	Units: uL	
VOA8260INT_00040	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D

Injection Date: 26-Aug-2015 17:52:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD50

Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL

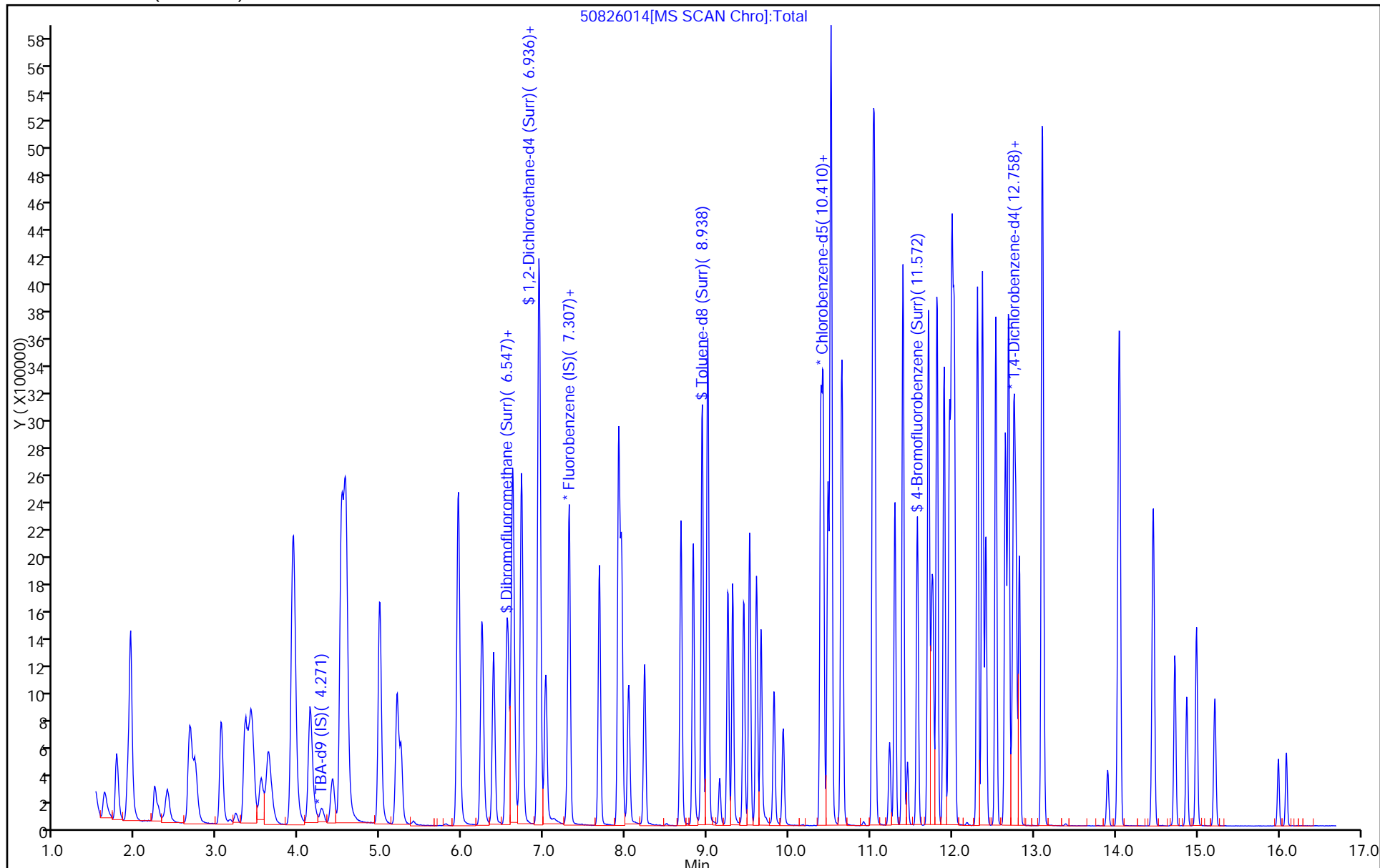
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



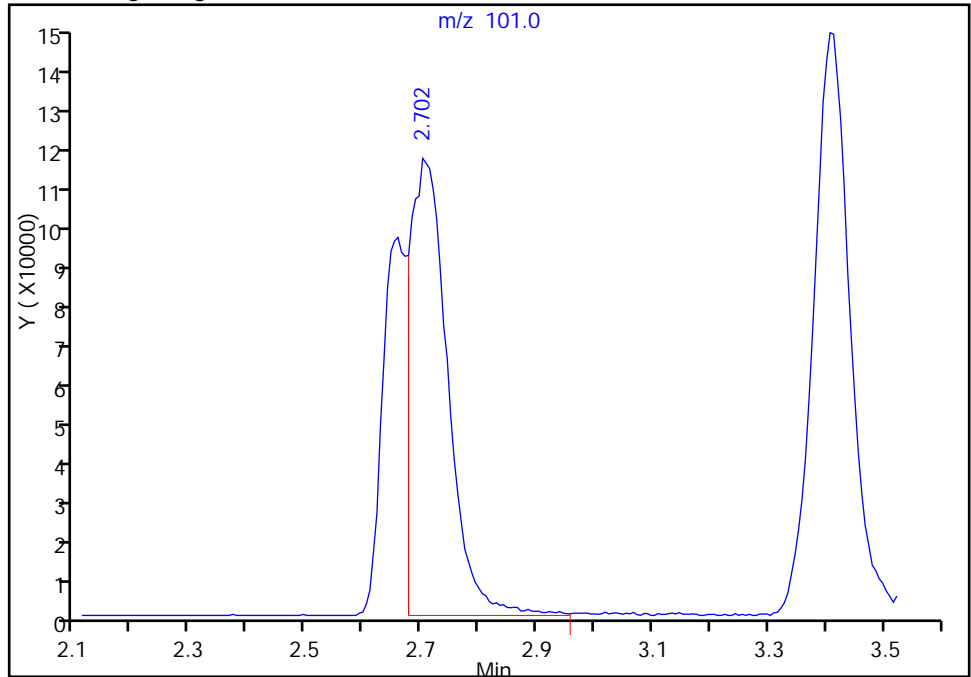
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
Injection Date: 26-Aug-2015 17:52:30 Instrument ID: CHHP5
Lims ID: IC VSTD50
Client ID:
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

18 Trichlorofluoromethane, CAS: 75-69-4

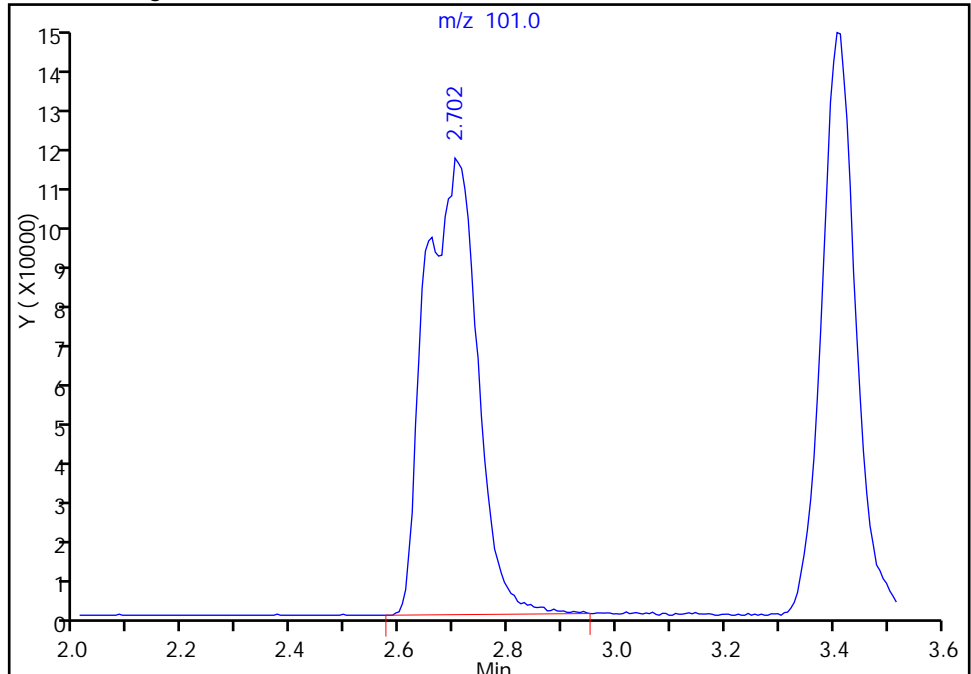
RT: 2.70
Area: 496107
Amount: 173.5779
Amount Units: ng

Processing Integration Results



RT: 2.70
Area: 739174
Amount: 248.0735
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 27-Aug-2015 10:43:05
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-157127/2 Calibration Date: 10/15/2015 12:56
 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: 51015002.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	0.1567	0.0100	19.0	20.0	-5.1	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015002.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 15-Oct-2015 12:56:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 180-0009022-002
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub12
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 15-Oct-2015 13:56:13 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK008

First Level Reviewer: fergusond

Date: 15-Oct-2015 13:45:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.273	4.273	0.000	0	155406	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.290	0.000	98	379251	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.386	10.386	0.000	89	82633	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.735	12.735	0.000	94	127710	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.554	6.554	0.000	93	81725	50.0	43.9	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	0	117004	50.0	45.7	
\$ 7 Toluene-d8 (Surr)	98	8.939	8.939	0.000	95	355461	50.0	55.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.573	11.573	0.000	84	126197	50.0	52.5	
11 Dichlorodifluoromethane	85	1.596	1.596	0.000	98	129386	50.0	60.4	
12 Chloromethane	50	1.772	1.772	0.000	99	148687	50.0	47.3	
13 Vinyl chloride	62	1.912	1.912	0.000	98	111416	50.0	39.9	
14 Butadiene	39	1.943	1.943	0.000	98	153207	50.0	46.5	
15 Bromomethane	94	2.241	2.241	0.000	92	37648	50.0	33.2	
16 Chloroethane	64	2.399	2.399	0.000	98	58341	50.0	34.7	
17 Dichlorofluoromethane	67	2.667	2.667	0.000	97	146358	50.0	41.0	
18 Trichlorofluoromethane	101	2.703	2.703	0.000	83	124282	50.0	46.5	M
20 Ethyl ether	59	3.038	3.038	0.000	98	108422	50.0	43.8	
21 Acrolein	56	3.220	3.220	0.000	98	50008	150.0	135.5	
22 1,1-Dichloroethene	96	3.330	3.330	0.000	93	99242	50.0	47.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.415	3.415	0.000	93	107768	50.0	48.2	
24 Acetone	43	3.439	3.439	0.000	99	94511	100.0	123.5	
25 Iodomethane	142	3.537	3.537	0.000	98	135354	50.0	43.0	
26 Carbon disulfide	76	3.640	3.640	0.000	100	247744	50.0	50.5	
28 3-Chloro-1-propene	76	3.914	3.914	0.000	89	58242	50.0	48.7	
30 Methyl acetate	43	3.938	3.938	0.000	100	627408	250.0	274.4	
31 Methylene Chloride	84	4.139	4.139	0.000	95	119062	50.0	47.7	
32 2-Methyl-2-propanol	59	4.394	4.394	0.000	92	100001	500.0	571.7	
33 Acrylonitrile	53	4.522	4.522	0.000	99	583774	500.0	526.2	
34 trans-1,2-Dichloroethene	96	4.559	4.559	0.000	93	105441	50.0	46.0	
35 Methyl tert-butyl ether	73	4.577	4.577	0.000	94	236391	50.0	44.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.984	4.984	0.000	96	206806	50.0	53.7	
37 1,1-Dichloroethane	63	5.197	5.197	0.000	97	212242	50.0	47.0	
38 Vinyl acetate	43	5.246	5.246	0.000	97	173652	50.0	51.2	
44 2,2-Dichloropropane	77	5.946	5.946	0.000	54	83728	50.0	46.2	
45 cis-1,2-Dichloroethene	96	5.946	5.946	0.000	85	112217	50.0	45.8	
46 2-Butanone (MEK)	43	5.952	5.952	0.000	73	131824	100.0	114.7	
49 Chlorobromomethane	128	6.231	6.231	0.000	87	44049	50.0	40.9	
51 Tetrahydrofuran	42	6.250	6.250	0.000	94	100194	100.0	108.6	
52 Chloroform	83	6.377	6.377	0.000	95	176887	50.0	45.3	
53 1,1,1-Trichloroethane	97	6.536	6.536	0.000	94	127859	50.0	44.3	
54 Cyclohexane	56	6.609	6.609	0.000	97	248392	50.0	51.4	
56 Carbon tetrachloride	117	6.718	6.718	0.000	96	105393	50.0	42.9	
55 1,1-Dichloropropene	75	6.724	6.724	0.000	92	157946	50.0	49.5	
57 Isobutyl alcohol	41	6.925	6.925	0.000	67	112236	1250.0	1554.0	
58 Benzene	78	6.943	6.943	0.000	96	458935	50.0	49.1	
59 1,2-Dichloroethane	62	7.016	7.016	0.000	97	150757	50.0	46.6	
62 n-Heptane	43	7.302	7.302	0.000	97	200317	50.0	57.3	
64 Trichloroethene	130	7.673	7.673	0.000	97	98559	50.0	43.1	
66 Methylcyclohexane	83	7.917	7.917	0.000	98	176662	50.0	49.0	
67 1,2-Dichloropropane	63	7.947	7.947	0.000	95	114484	50.0	46.7	
70 1,4-Dioxane	88	8.026	8.026	0.000	50	22603	1000.0	1336.1	M
68 Dibromomethane	93	8.032	8.032	0.000	98	56311	50.0	45.2	
71 Dichlorobromomethane	83	8.233	8.233	0.000	96	113911	50.0	46.2	
73 2-Chloroethyl vinyl ether	63	8.531	8.531	0.000	89	118857	100.0	94.9	
74 cis-1,3-Dichloropropene	75	8.671	8.671	0.000	89	131950	50.0	45.7	
75 4-Methyl-2-pentanone (MIBK)	43	8.823	8.823	0.000	99	202241	100.0	99.3	
76 Toluene	91	9.006	9.006	0.000	98	449632	50.0	55.0	
77 trans-1,3-Dichloropropene	75	9.255	9.255	0.000	98	109574	50.0	51.3	
78 Ethyl methacrylate	69	9.310	9.310	0.000	94	116569	50.0	56.5	
79 1,1,2-Trichloroethane	97	9.444	9.444	0.000	93	80200	50.0	51.5	
80 Tetrachloroethene	164	9.517	9.517	0.000	94	85746	50.0	54.0	
81 1,3-Dichloropropane	76	9.602	9.602	0.000	98	155424	50.0	53.8	
82 2-Hexanone	43	9.663	9.663	0.000	98	165460	100.0	112.6	
84 Chlorodibromomethane	129	9.815	9.815	0.000	93	62302	50.0	46.2	
85 Ethylene Dibromide	107	9.930	9.930	0.000	99	76506	50.0	51.0	
86 3-Chlorobenzotrifluoride	180	10.393	10.393	0.000	85	145014	50.0	55.2	
87 Chlorobenzene	112	10.417	10.417	0.000	91	268779	50.0	51.0	
88 4-Chlorobenzotrifluoride	180	10.478	10.478	0.000	96	132111	50.0	53.2	
89 1,1,1,2-Tetrachloroethane	131	10.514	10.514	0.000	91	78866	50.0	45.9	
90 Ethylbenzene	106	10.520	10.520	0.000	99	149399	50.0	53.5	
91 m-Xylene & p-Xylene	106	10.654	10.654	0.000	0	186929	50.0	54.6	
92 o-Xylene	106	11.031	11.031	0.000	98	175439	50.0	53.9	
93 Styrene	104	11.050	11.050	0.000	95	298841	50.0	55.4	
94 Bromoform	173	11.232	11.232	0.000	94	39720	50.0	51.7	
96 2-Chlorobenzotrifluoride	180	11.299	11.299	0.000	96	139926	50.0	54.1	
97 Isopropylbenzene	105	11.396	11.396	0.000	97	448622	50.0	56.3	
99 1,1,2,2-Tetrachloroethane	83	11.707	11.707	0.000	92	114599	50.0	54.6	
100 Bromobenzene	156	11.707	11.707	0.000	96	101975	50.0	46.5	
102 trans-1,4-Dichloro-2-buten	53	11.743	11.743	0.000	70	26010	50.0	32.8	
101 1,2,3-Trichloropropane	110	11.767	11.767	0.000	88	34781	50.0	48.1	
103 N-Propylbenzene	120	11.816	11.816	0.000	99	126127	50.0	50.3	
104 2-Chlorotoluene	126	11.901	11.901	0.000	95	103376	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	11.968	11.968	0.000	96	107401	50.0	49.0	
106 1,3,5-Trimethylbenzene	105	11.999	11.999	0.000	94	381085	50.0	53.7	
107 4-Chlorotoluene	126	12.029	12.029	0.000	98	112144	50.0	47.8	
108 tert-Butylbenzene	119	12.309	12.309	0.000	95	292935	50.0	50.8	
110 1,2,4-Trimethylbenzene	105	12.370	12.370	0.000	98	374928	50.0	52.8	
111 1,2-dichloro-4-(trifluorom	214	12.412	12.412	0.000	98	106366	50.0	53.7	
112 sec-Butylbenzene	105	12.534	12.534	0.000	95	451092	50.0	55.4	
113 1,3-Dichlorobenzene	146	12.650	12.650	0.000	96	199555	50.0	51.1	
114 4-Isopropyltoluene	119	12.692	12.692	0.000	97	363709	50.0	52.8	
115 1,4-Dichlorobenzene	146	12.753	12.753	0.000	92	208531	50.0	51.4	
116 2,4-Dichloro-1-(trifluorom	214	12.783	12.783	0.000	96	98210	50.0	53.5	
118 2,5-Dichlorobenzotrifluori	214	12.820	12.820	0.000	0	109394	50.0	55.2	
120 n-Butylbenzene	91	13.100	13.100	0.000	98	329345	50.0	55.9	
121 1,2-Dichlorobenzene	146	13.112	13.112	0.000	95	186793	50.0	51.2	
122 1,2-Dibromo-3-Chloropropan	75	13.903	13.903	0.000	74	15863	50.0	53.0	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.043	14.043	0.000	0	358127	150.0	171.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.469	14.469	0.000	0	223680	100.0	112.6	
126 1,2,4-Trichlorobenzene	180	14.724	14.724	0.000	94	83313	50.0	58.7	
127 Hexachlorobutadiene	225	14.876	14.876	0.000	95	44532	50.0	65.1	
128 Naphthalene	128	14.992	14.992	0.000	98	212098	50.0	58.1	
129 1,2,3-Trichlorobenzene	180	15.217	15.217	0.000	95	69657	50.0	60.6	
131 2,4,5-Trichlorotoluene	159	15.995	15.995	0.000	0	26435	50.0	63.8	
130 2,3,6-Trichlorotoluene	159	16.099	16.099	0.000	89	23832	50.0	62.4	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	108.5	
S 134 1,2-Dichloroethene, Total	96				0		100.0	91.8	
S 135 1,3-Dichloropropene, Total	1				0		100.0	97.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWAcro1stRe_00001	Amount Added: 6.00	Units: uL	
voaWEEpri Res_00006	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00148	Amount Added: 2.00	Units: uL	
voaWVA1stRest_00001	Amount Added: 2.00	Units: uL	
voaW2-Clepri_00003	Amount Added: 2.00	Units: uL	
voaWKetmix2nd_00002	Amount Added: 2.00	Units: uL	
VOA8260INT_00043	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00043	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015002.D

Injection Date: 15-Oct-2015 12:56:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

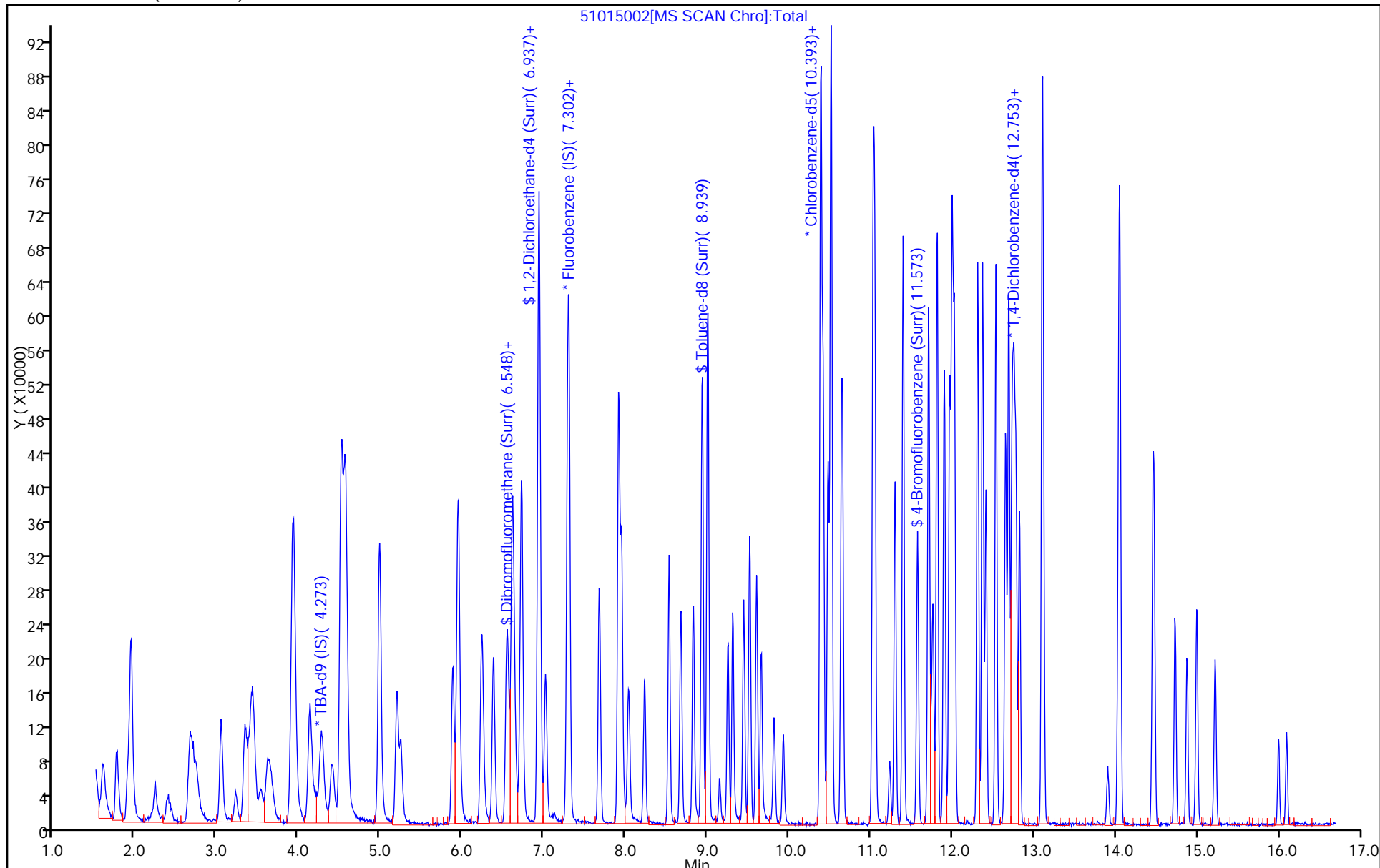
Dil. Factor: 1.0000

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.: 180-48564-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-157127/2 Calibration Date: 10/15/2015 12:56
 Instrument ID: CHHP5 Calib Start Date: 08/26/2015 15:04
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/26/2015 17:52
 Lab File ID: 51015002.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	0.2825	0.3412	0.1000	12.1	10.0	20.8*	20.0
Chloromethane	Ave	0.4148	0.3921	0.1000	9.45	10.0	-5.5	20.0
Vinyl chloride	Ave	0.3679	0.2938	0.1000	7.98	10.0	-20.2*	20.0
1,3-Butadiene	Ave	0.4345	0.4040	0.0100	9.30	10.0	-7.0	20.0
Bromomethane	Ave	0.1497	0.0993	0.0500	6.63	10.0	-33.7*	20.0
Chloroethane	Ave	0.2220	0.1538	0.0500	6.93	10.0	-30.7*	20.0
Dichlorofluoromethane	Ave	0.4709	0.3859	0.0100	8.19	10.0	-18.1	20.0
Trichlorofluoromethane	Ave	0.3523	0.3277	0.1000	9.30	10.0	-7.0	20.0
Ethyl ether	Ave	0.3265	0.2859	0.0100	8.76	10.0	-12.4	20.0
Acrolein	Ave	0.0486	0.0440	0.0100	27.1	30.0	-9.6	20.0
1,1-Dichloroethene	Ave	0.2785	0.2617	0.1000	9.40	10.0	-6.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2951	0.2842	0.1000	9.63	10.0	-3.7	20.0
Acetone	Ave	0.1009	0.1246	0.0500	24.7	20.0	23.5*	20.0
Iodomethane	Ave	0.4150	0.3569	0.0100	8.60	10.0	-14.0	20.0
Carbon disulfide	Ave	0.6466	0.6533	0.1000	10.1	10.0	1.0	20.0
Allyl chloride	Ave	0.1577	0.1536	0.0100	9.74	10.0	-2.6	20.0
Methyl acetate	Ave	0.3015	0.3309	0.1000	54.9	50.0	9.8	20.0
Methylene Chloride	Lin2		0.3139	0.1000	9.55	10.0	-4.5	20.0
tert-Butyl alcohol	Ave	1.126	1.287	0.0100	114	100	14.3	20.0
Acrylonitrile	Ave	0.1463	0.1539	0.0100	105	100	5.2	20.0
trans-1,2-Dichloroethene	Ave	0.3024	0.2780	0.1000	9.20	10.0	-8.0	20.0
Methyl tert-butyl ether	Ave	0.6999	0.6233	0.1000	8.91	10.0	-10.9	20.0
Hexane	Ave	0.5076	0.5453	0.0100	10.7	10.0	7.4	20.0
1,1-Dichloroethane	Ave	0.5957	0.5596	0.2000	9.40	10.0	-6.0	20.0
Vinyl acetate	Ave	0.4469	0.4579	0.0100	10.2	10.0	2.5	20.0
2,2-Dichloropropane	Ave	0.2387	0.2208	0.0100	9.25	10.0	-7.5	20.0
cis-1,2-Dichloroethene	Ave	0.3230	0.2959	0.1000	9.16	10.0	-8.4	20.0
2-Butanone (MEK)	Ave	0.1516	0.1738	0.0500	22.9	20.0	14.7	20.0
Bromochloromethane	Ave	0.1418	0.1162	0.0100	8.19	10.0	-18.1	20.0
Tetrahydrofuran	Ave	0.1216	0.1321	0.0100	21.7	20.0	8.6	20.0
Chloroform	Ave	0.5146	0.4664	0.2000	9.06	10.0	-9.4	20.0
1,1,1-Trichloroethane	Ave	0.3805	0.3371	0.1000	8.86	10.0	-11.4	20.0
Cyclohexane	Ave	0.6367	0.6550	0.1000	10.3	10.0	2.9	20.0
Carbon tetrachloride	Ave	0.3240	0.2779	0.1000	8.58	10.0	-14.2	20.0
1,1-Dichloropropene	Ave	0.4208	0.4165	0.0100	9.90	10.0	-1.0	20.0
Isobutyl alcohol	Ave	0.0095	0.0118	0.0100	311	250	24.3*	20.0
Benzene	Ave	1.233	1.210	0.5000	9.82	10.0	-1.8	20.0
1,2-Dichloroethane	Ave	0.4264	0.3975	0.1000	9.32	10.0	-6.8	20.0
n-Heptane	Ave	0.4611	0.5282	0.0100	11.5	10.0	14.6	20.0
Trichloroethene	Ave	0.3016	0.2599	0.2000	8.62	10.0	-13.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-157127/2 Calibration Date: 10/15/2015 12:56
 Instrument ID: CHHP5 Calib Start Date: 08/26/2015 15:04
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/26/2015 17:52
 Lab File ID: 51015002.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
Methylcyclohexane	Ave	0.4753	0.4658	0.1000	9.80	10.0	-2.0	20.0
1,2-Dichloropropane	Ave	0.3235	0.3019	0.1000	9.33	10.0	-6.7	20.0
1,4-Dioxane	Ave	0.0022	0.0030*	0.0100	267	200	33.6*	20.0
Dibromomethane	Ave	0.1642	0.1485	0.0100	9.04	10.0	-9.6	20.0
Bromodichloromethane	Ave	0.3249	0.3004	0.2000	9.24	10.0	-7.6	20.0
cis-1,3-Dichloropropene	Ave	0.3807	0.3479	0.2000	9.14	10.0	-8.6	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.232	1.224	0.1000	19.9	20.0	-0.7	20.0
Toluene	Ave	4.950	5.441	0.4000	11.0	10.0	9.9	20.0
trans-1,3-Dichloropropene	Ave	1.292	1.326	0.1000	10.3	10.0	2.6	20.0
Ethyl methacrylate	Ave	1.249	1.411	0.0100	11.3	10.0	12.9	20.0
1,1,2-Trichloroethane	Ave	0.9416	0.9706	0.1000	10.3	10.0	3.1	20.0
Tetrachloroethene	Ave	0.9609	1.038	0.2000	10.8	10.0	8.0	20.0
1,3-Dichloropropane	Ave	1.748	1.881	0.0100	10.8	10.0	7.6	20.0
2-Hexanone	Ave	0.8893	1.001	0.1000	22.5	20.0	12.6	20.0
Dibromochloromethane	Ave	0.8152	0.7540	0.1000	9.25	10.0	-7.5	20.0
1,2-Dibromoethane (EDB)	Ave	0.9073	0.9259	0.1000	10.2	10.0	2.0	20.0
3-Chlorobenzotrifluoride	Ave	1.591	1.755	0.0100	11.0	10.0	10.3	20.0
Chlorobenzene	Ave	3.187	3.253	0.5000	10.2	10.0	2.1	20.0
4-Chlorobenzotrifluoride	Ave	1.504	1.599	0.0100	10.6	10.0	6.3	20.0
1,1,1,2-Tetrachloroethane	Ave	1.039	0.9544	0.0100	9.19	10.0	-8.1	20.0
Ethylbenzene	Ave	1.690	1.808	0.1000	10.7	10.0	7.0	20.0
m-Xylene & p-Xylene	Ave	2.072	2.262	0.1000	10.9	10.0	9.2	20.0
o-Xylene	Ave	1.969	2.123	0.3000	10.8	10.0	7.8	20.0
Styrene	Ave	3.262	3.616	0.3000	11.1	10.0	10.9	20.0
Bromoform	Ave	0.4652	0.4807	0.1000	10.3	10.0	3.3	20.0
2-Chlorobenzotrifluoride	Ave	1.565	1.693	0.0100	10.8	10.0	8.2	20.0
Isopropylbenzene	Ave	4.822	5.429	0.1000	11.3	10.0	12.6	20.0
1,1,2,2-Tetrachloroethane	Ave	1.270	1.387	0.3000	10.9	10.0	9.2	20.0
Bromobenzene	Ave	0.8583	0.7985	0.0100	9.30	10.0	-7.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3103	0.2037	0.0100	6.56	10.0	-34.4*	20.0
1,2,3-Trichloropropane	Ave	0.2831	0.2723	0.0100	9.62	10.0	-3.8	20.0
N-Propylbenzene	Ave	0.9825	0.9876	0.0100	10.1	10.0	0.5	20.0
2-Chlorotoluene	Ave	0.8351	0.8095	0.0100	9.69	10.0	-3.1	20.0
3-Chlorotoluene	Ave	0.8583	0.8410	0.0100	9.80	10.0	-2.0	20.0
1,3,5-Trimethylbenzene	Ave	2.776	2.984	0.0100	10.7	10.0	7.5	20.0
4-Chlorotoluene	Ave	0.9190	0.8781	0.0100	9.56	10.0	-4.4	20.0
tert-Butylbenzene	Ave	2.257	2.294	0.0100	10.2	10.0	1.6	20.0
1,2,4-Trimethylbenzene	Ave	2.781	2.936	0.0100	10.6	10.0	5.6	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.7754	0.8329	0.0100	10.7	10.0	7.4	20.0
sec-Butylbenzene	Ave	3.187	3.532	0.0100	11.1	10.0	10.8	20.0
1,3-Dichlorobenzene	Ave	1.528	1.563	0.6000	10.2	10.0	2.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-157127/2 Calibration Date: 10/15/2015 12:56
 Instrument ID: CHHP5 Calib Start Date: 08/26/2015 15:04
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/26/2015 17:52
 Lab File ID: 51015002.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
4-Isopropyltoluene	Ave	2.696	2.848	0.0100	10.6	10.0	5.6	20.0
1,4-Dichlorobenzene	Ave	1.590	1.633	0.5000	10.3	10.0	2.7	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7185	0.7690	0.0100	10.7	10.0	7.0	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.7765	0.8566	0.0100	11.0	10.0	10.3	20.0
n-Butylbenzene	Ave	2.307	2.579	0.0100	11.2	10.0	11.8	20.0
1,2-Dichlorobenzene	Ave	1.428	1.463	0.4000	10.2	10.0	2.4	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1173	0.1242	0.0500	10.6	10.0	5.9	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	0.8157	0.9347	0.0100	34.4	30.0	14.6	20.0
2,3- & 3,4- Dichlorotoluene	Ave	0.7778	0.8757	0.0100	22.5	20.0	12.6	20.0
1,2,4-Trichlorobenzene	Ave	0.5557	0.6524	0.2000	11.7	10.0	17.4	20.0
Hexachlorobutadiene	Ave	0.2677	0.3487	0.0100	13.0	10.0	30.3*	20.0
Naphthalene	Ave	1.428	1.661	0.0100	11.6	10.0	16.3	20.0
1,2,3-Trichlorobenzene	Ave	0.4498	0.5454	0.0100	12.1	10.0	21.2*	20.0
2,4,5-Trichlorotoluene	Ave	0.1623	0.2070	0.0100	12.8	10.0	27.5*	20.0
2,3,6-Trichlorotoluene	Ave	0.1496	0.1866	0.0100	12.5	10.0	24.7*	20.0
Dibromofluoromethane (Surr)	Ave	0.2455	0.2155		8.78	10.0	-12.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3373	0.3085		9.15	10.0	-8.5	20.0
Toluene-d8 (Surr)	Ave	3.857	4.302		11.2	10.0	11.5	20.0
4-Bromofluorobenzene (Surr)	Ave	1.455	1.527		10.5	10.0	5.0	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015002.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 15-Oct-2015 12:56:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 180-0009022-002
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub12
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 15-Oct-2015 13:56:13 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK008

First Level Reviewer: fergusond

Date: 15-Oct-2015 13:45:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.273	4.273	0.000	0	155406	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.290	0.000	98	379251	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.386	10.386	0.000	89	82633	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.735	12.735	0.000	94	127710	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.554	6.554	0.000	93	81725	50.0	43.9	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	0	117004	50.0	45.7	
\$ 7 Toluene-d8 (Surr)	98	8.939	8.939	0.000	95	355461	50.0	55.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.573	11.573	0.000	84	126197	50.0	52.5	
11 Dichlorodifluoromethane	85	1.596	1.596	0.000	98	129386	50.0	60.4	
12 Chloromethane	50	1.772	1.772	0.000	99	148687	50.0	47.3	
13 Vinyl chloride	62	1.912	1.912	0.000	98	111416	50.0	39.9	
14 Butadiene	39	1.943	1.943	0.000	98	153207	50.0	46.5	
15 Bromomethane	94	2.241	2.241	0.000	92	37648	50.0	33.2	
16 Chloroethane	64	2.399	2.399	0.000	98	58341	50.0	34.7	
17 Dichlorofluoromethane	67	2.667	2.667	0.000	97	146358	50.0	41.0	
18 Trichlorofluoromethane	101	2.703	2.703	0.000	83	124282	50.0	46.5	M
20 Ethyl ether	59	3.038	3.038	0.000	98	108422	50.0	43.8	
21 Acrolein	56	3.220	3.220	0.000	98	50008	150.0	135.5	
22 1,1-Dichloroethene	96	3.330	3.330	0.000	93	99242	50.0	47.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.415	3.415	0.000	93	107768	50.0	48.2	
24 Acetone	43	3.439	3.439	0.000	99	94511	100.0	123.5	
25 Iodomethane	142	3.537	3.537	0.000	98	135354	50.0	43.0	
26 Carbon disulfide	76	3.640	3.640	0.000	100	247744	50.0	50.5	
28 3-Chloro-1-propene	76	3.914	3.914	0.000	89	58242	50.0	48.7	
30 Methyl acetate	43	3.938	3.938	0.000	100	627408	250.0	274.4	
31 Methylene Chloride	84	4.139	4.139	0.000	95	119062	50.0	47.7	
32 2-Methyl-2-propanol	59	4.394	4.394	0.000	92	100001	500.0	571.7	
33 Acrylonitrile	53	4.522	4.522	0.000	99	583774	500.0	526.2	
34 trans-1,2-Dichloroethene	96	4.559	4.559	0.000	93	105441	50.0	46.0	
35 Methyl tert-butyl ether	73	4.577	4.577	0.000	94	236391	50.0	44.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.984	4.984	0.000	96	206806	50.0	53.7	
37 1,1-Dichloroethane	63	5.197	5.197	0.000	97	212242	50.0	47.0	
38 Vinyl acetate	43	5.246	5.246	0.000	97	173652	50.0	51.2	
44 2,2-Dichloropropane	77	5.946	5.946	0.000	54	83728	50.0	46.2	
45 cis-1,2-Dichloroethene	96	5.946	5.946	0.000	85	112217	50.0	45.8	
46 2-Butanone (MEK)	43	5.952	5.952	0.000	73	131824	100.0	114.7	
49 Chlorobromomethane	128	6.231	6.231	0.000	87	44049	50.0	40.9	
51 Tetrahydrofuran	42	6.250	6.250	0.000	94	100194	100.0	108.6	
52 Chloroform	83	6.377	6.377	0.000	95	176887	50.0	45.3	
53 1,1,1-Trichloroethane	97	6.536	6.536	0.000	94	127859	50.0	44.3	
54 Cyclohexane	56	6.609	6.609	0.000	97	248392	50.0	51.4	
56 Carbon tetrachloride	117	6.718	6.718	0.000	96	105393	50.0	42.9	
55 1,1-Dichloropropene	75	6.724	6.724	0.000	92	157946	50.0	49.5	
57 Isobutyl alcohol	41	6.925	6.925	0.000	67	112236	1250.0	1554.0	
58 Benzene	78	6.943	6.943	0.000	96	458935	50.0	49.1	
59 1,2-Dichloroethane	62	7.016	7.016	0.000	97	150757	50.0	46.6	
62 n-Heptane	43	7.302	7.302	0.000	97	200317	50.0	57.3	
64 Trichloroethene	130	7.673	7.673	0.000	97	98559	50.0	43.1	
66 Methylcyclohexane	83	7.917	7.917	0.000	98	176662	50.0	49.0	
67 1,2-Dichloropropane	63	7.947	7.947	0.000	95	114484	50.0	46.7	
70 1,4-Dioxane	88	8.026	8.026	0.000	50	22603	1000.0	1336.1	M
68 Dibromomethane	93	8.032	8.032	0.000	98	56311	50.0	45.2	
71 Dichlorobromomethane	83	8.233	8.233	0.000	96	113911	50.0	46.2	
73 2-Chloroethyl vinyl ether	63	8.531	8.531	0.000	89	118857	100.0	94.9	
74 cis-1,3-Dichloropropene	75	8.671	8.671	0.000	89	131950	50.0	45.7	
75 4-Methyl-2-pentanone (MIBK)	43	8.823	8.823	0.000	99	202241	100.0	99.3	
76 Toluene	91	9.006	9.006	0.000	98	449632	50.0	55.0	
77 trans-1,3-Dichloropropene	75	9.255	9.255	0.000	98	109574	50.0	51.3	
78 Ethyl methacrylate	69	9.310	9.310	0.000	94	116569	50.0	56.5	
79 1,1,2-Trichloroethane	97	9.444	9.444	0.000	93	80200	50.0	51.5	
80 Tetrachloroethene	164	9.517	9.517	0.000	94	85746	50.0	54.0	
81 1,3-Dichloropropane	76	9.602	9.602	0.000	98	155424	50.0	53.8	
82 2-Hexanone	43	9.663	9.663	0.000	98	165460	100.0	112.6	
84 Chlorodibromomethane	129	9.815	9.815	0.000	93	62302	50.0	46.2	
85 Ethylene Dibromide	107	9.930	9.930	0.000	99	76506	50.0	51.0	
86 3-Chlorobenzotrifluoride	180	10.393	10.393	0.000	85	145014	50.0	55.2	
87 Chlorobenzene	112	10.417	10.417	0.000	91	268779	50.0	51.0	
88 4-Chlorobenzotrifluoride	180	10.478	10.478	0.000	96	132111	50.0	53.2	
89 1,1,1,2-Tetrachloroethane	131	10.514	10.514	0.000	91	78866	50.0	45.9	
90 Ethylbenzene	106	10.520	10.520	0.000	99	149399	50.0	53.5	
91 m-Xylene & p-Xylene	106	10.654	10.654	0.000	0	186929	50.0	54.6	
92 o-Xylene	106	11.031	11.031	0.000	98	175439	50.0	53.9	
93 Styrene	104	11.050	11.050	0.000	95	298841	50.0	55.4	
94 Bromoform	173	11.232	11.232	0.000	94	39720	50.0	51.7	
96 2-Chlorobenzotrifluoride	180	11.299	11.299	0.000	96	139926	50.0	54.1	
97 Isopropylbenzene	105	11.396	11.396	0.000	97	448622	50.0	56.3	
99 1,1,2,2-Tetrachloroethane	83	11.707	11.707	0.000	92	114599	50.0	54.6	
100 Bromobenzene	156	11.707	11.707	0.000	96	101975	50.0	46.5	
102 trans-1,4-Dichloro-2-buten	53	11.743	11.743	0.000	70	26010	50.0	32.8	
101 1,2,3-Trichloropropane	110	11.767	11.767	0.000	88	34781	50.0	48.1	
103 N-Propylbenzene	120	11.816	11.816	0.000	99	126127	50.0	50.3	
104 2-Chlorotoluene	126	11.901	11.901	0.000	95	103376	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	11.968	11.968	0.000	96	107401	50.0	49.0	
106 1,3,5-Trimethylbenzene	105	11.999	11.999	0.000	94	381085	50.0	53.7	
107 4-Chlorotoluene	126	12.029	12.029	0.000	98	112144	50.0	47.8	
108 tert-Butylbenzene	119	12.309	12.309	0.000	95	292935	50.0	50.8	
110 1,2,4-Trimethylbenzene	105	12.370	12.370	0.000	98	374928	50.0	52.8	
111 1,2-dichloro-4-(trifluorom	214	12.412	12.412	0.000	98	106366	50.0	53.7	
112 sec-Butylbenzene	105	12.534	12.534	0.000	95	451092	50.0	55.4	
113 1,3-Dichlorobenzene	146	12.650	12.650	0.000	96	199555	50.0	51.1	
114 4-Isopropyltoluene	119	12.692	12.692	0.000	97	363709	50.0	52.8	
115 1,4-Dichlorobenzene	146	12.753	12.753	0.000	92	208531	50.0	51.4	
116 2,4-Dichloro-1-(trifluorom	214	12.783	12.783	0.000	96	98210	50.0	53.5	
118 2,5-Dichlorobenzotrifluori	214	12.820	12.820	0.000	0	109394	50.0	55.2	
120 n-Butylbenzene	91	13.100	13.100	0.000	98	329345	50.0	55.9	
121 1,2-Dichlorobenzene	146	13.112	13.112	0.000	95	186793	50.0	51.2	
122 1,2-Dibromo-3-Chloropropan	75	13.903	13.903	0.000	74	15863	50.0	53.0	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.043	14.043	0.000	0	358127	150.0	171.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.469	14.469	0.000	0	223680	100.0	112.6	
126 1,2,4-Trichlorobenzene	180	14.724	14.724	0.000	94	83313	50.0	58.7	
127 Hexachlorobutadiene	225	14.876	14.876	0.000	95	44532	50.0	65.1	
128 Naphthalene	128	14.992	14.992	0.000	98	212098	50.0	58.1	
129 1,2,3-Trichlorobenzene	180	15.217	15.217	0.000	95	69657	50.0	60.6	
131 2,4,5-Trichlorotoluene	159	15.995	15.995	0.000	0	26435	50.0	63.8	
130 2,3,6-Trichlorotoluene	159	16.099	16.099	0.000	89	23832	50.0	62.4	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	108.5	
S 134 1,2-Dichloroethene, Total	96				0		100.0	91.8	
S 135 1,3-Dichloropropene, Total	1				0		100.0	97.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWAcro1stRe_00001	Amount Added: 6.00	Units: uL	
voaWEEpri Res_00006	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00148	Amount Added: 2.00	Units: uL	
voaWVA1stRest_00001	Amount Added: 2.00	Units: uL	
voaW2-Clepri_00003	Amount Added: 2.00	Units: uL	
voaWKetmix2nd_00002	Amount Added: 2.00	Units: uL	
VOA8260INT_00043	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00043	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015002.D

Injection Date: 15-Oct-2015 12:56:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

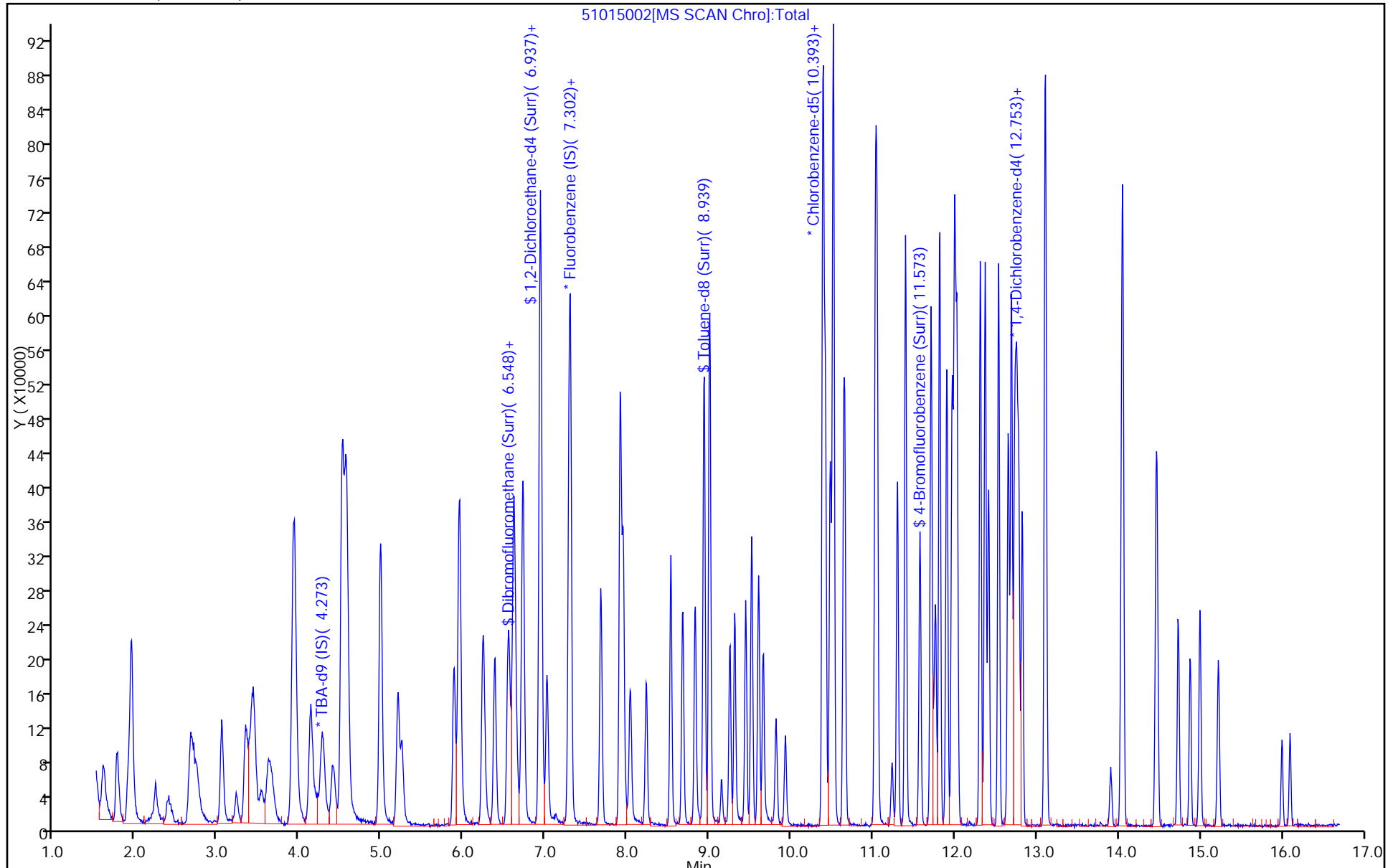
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



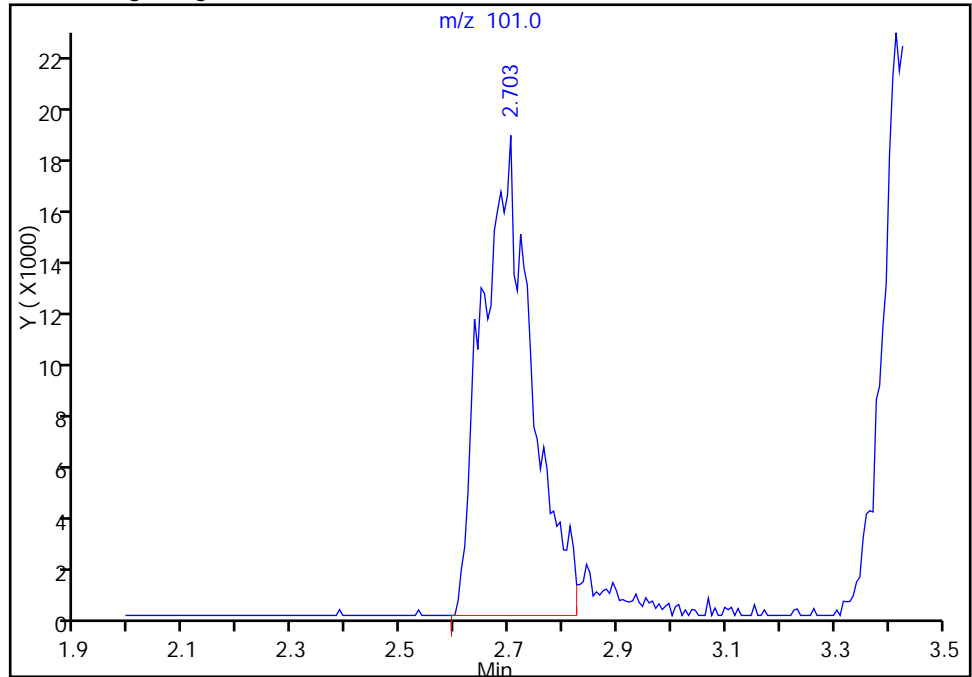
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015002.D
Injection Date: 15-Oct-2015 12:56:30 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

18 Trichlorofluoromethane, CAS: 75-69-4

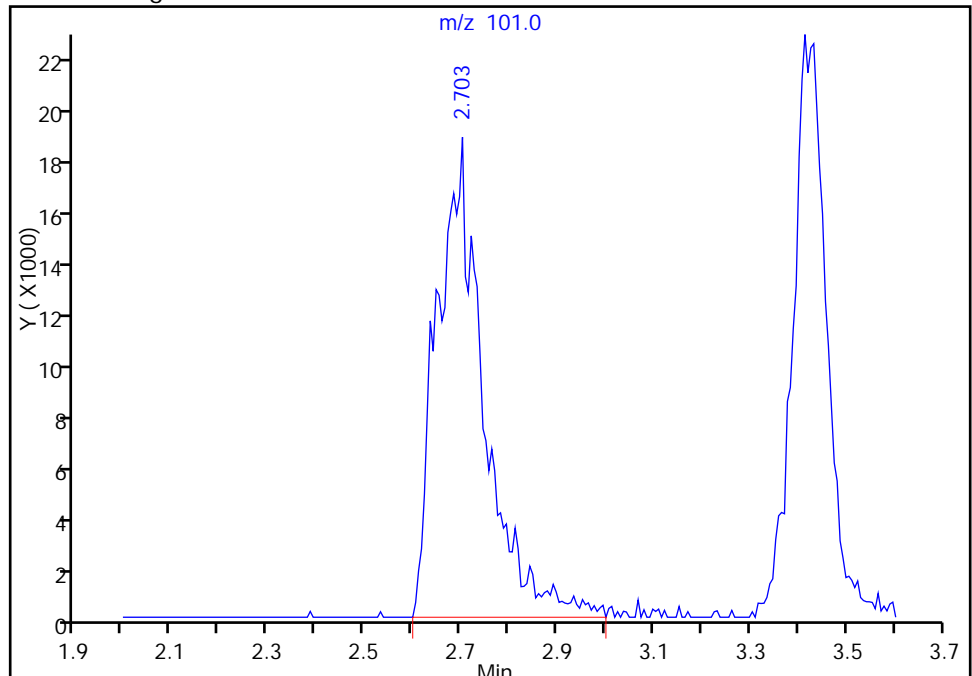
RT: 2.70
Area: 116453
Amount: 43.581645
Amount Units: ng

Processing Integration Results



RT: 2.70
Area: 124282
Amount: 46.511588
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 15-Oct-2015 13:45:14
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

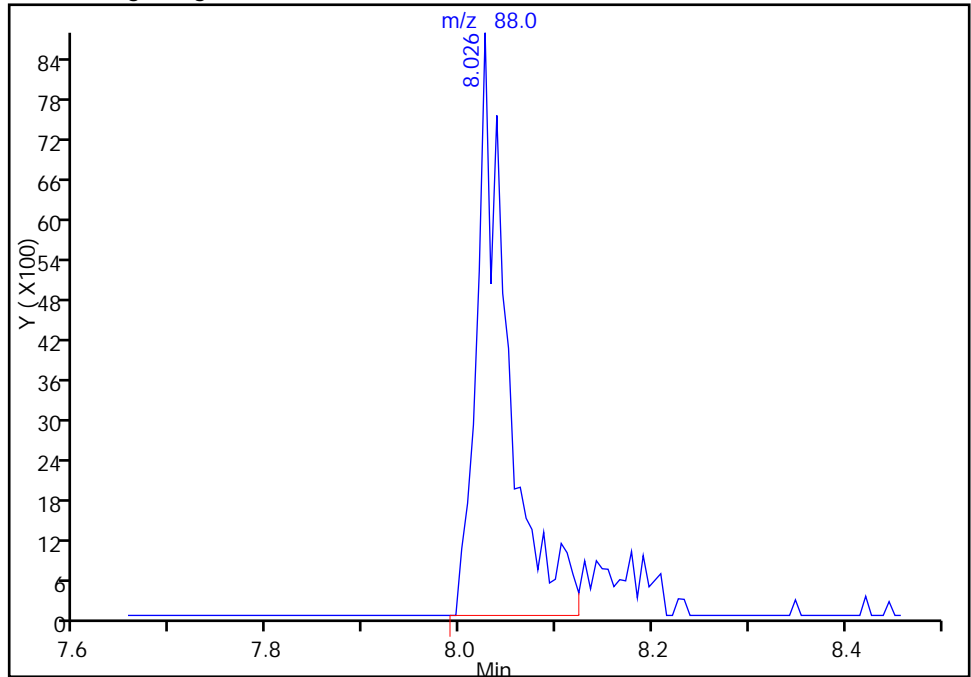
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015002.D
Injection Date: 15-Oct-2015 12:56:30 Instrument ID: CHHP5
Lims ID: CCVIS
Client ID:
Operator ID: 001562 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

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

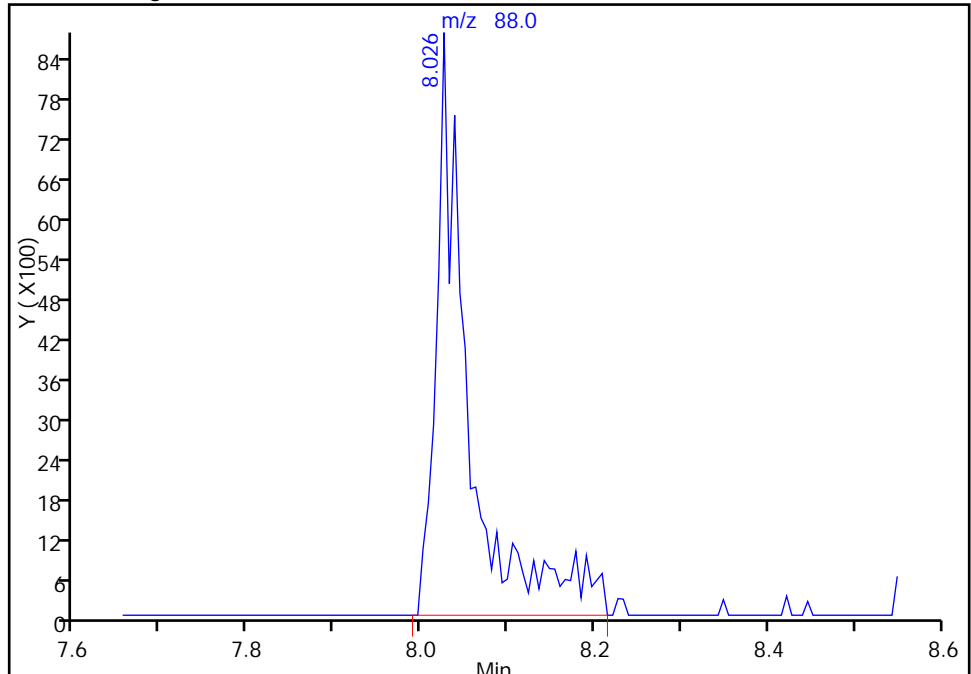
RT: 8.03
Area: 19457
Amount: 1150.1407
Amount Units: ng

Processing Integration Results



RT: 8.03
Area: 22603
Amount: 1336.1068
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 15-Oct-2015 13:45:14
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-157249/4 Calibration Date: 10/16/2015 15:06
 Instrument ID: CHHP5 Calib Start Date: 08/26/2015 15:04
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/26/2015 17:52
 Lab File ID: 51016004.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	0.2825	0.2940	0.1000	10.4	10.0	4.1	20.0
Chloromethane	Ave	0.4148	0.3480	0.1000	8.39	10.0	-16.1	20.0
Vinyl chloride	Ave	0.3679	0.2838	0.1000	7.71	10.0	-22.9*	20.0
1,3-Butadiene	Ave	0.4345	0.3553	0.0100	8.18	10.0	-18.2	20.0
Bromomethane	Ave	0.1497	0.1031	0.0500	6.88	10.0	-31.2*	20.0
Chloroethane	Ave	0.2220	0.1460	0.0500	6.58	10.0	-34.2*	20.0
Dichlorofluoromethane	Ave	0.4709	0.3642	0.0100	7.73	10.0	-22.7*	20.0
Trichlorofluoromethane	Ave	0.3523	0.2713	0.1000	7.70	10.0	-23.0*	20.0
Ethyl ether	Ave	0.3265	0.2739	0.0100	8.39	10.0	-16.1	20.0
Acrolein	Ave	0.0486	0.0330	0.0100	20.4	30.0	-32.1*	20.0
1,1-Dichloroethene	Ave	0.2785	0.2597	0.1000	9.33	10.0	-6.7	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2951	0.2655	0.1000	9.00	10.0	-10.0	20.0
Acetone	Ave	0.1009	0.0906	0.0500	18.0	20.0	-10.2	20.0
Iodomethane	Ave	0.4150	0.3315	0.0100	7.99	10.0	-20.1*	20.0
Carbon disulfide	Ave	0.6466	0.5768	0.1000	8.92	10.0	-10.8	20.0
Allyl chloride	Ave	0.1577	0.1367	0.0100	8.66	10.0	-13.4	20.0
Methyl acetate	Ave	0.3015	0.2837	0.1000	47.1	50.0	-5.9	20.0
Methylene Chloride	Lin2		0.3116	0.1000	9.46	10.0	-5.4	20.0
tert-Butyl alcohol	Ave	1.126	1.164	0.0100	103	100	3.4	20.0
Acrylonitrile	Ave	0.1463	0.1358	0.0100	92.9	100	-7.1	20.0
trans-1,2-Dichloroethene	Ave	0.3024	0.2734	0.1000	9.04	10.0	-9.6	20.0
Methyl tert-butyl ether	Ave	0.6999	0.5818	0.1000	8.31	10.0	-16.9	20.0
Hexane	Ave	0.5076	0.5330	0.0100	10.5	10.0	5.0	20.0
1,1-Dichloroethane	Ave	0.5957	0.5455	0.2000	9.16	10.0	-8.4	20.0
Vinyl acetate	Ave	0.4469	0.4302	0.0100	9.63	10.0	-3.7	20.0
2,2-Dichloropropane	Ave	0.2387	0.2182	0.0100	9.14	10.0	-8.6	20.0
cis-1,2-Dichloroethene	Ave	0.3230	0.2826	0.1000	8.75	10.0	-12.5	20.0
2-Butanone (MEK)	Ave	0.1516	0.1417	0.0500	18.7	20.0	-6.5	20.0
Bromochloromethane	Ave	0.1418	0.1121	0.0100	7.90	10.0	-21.0*	20.0
Tetrahydrofuran	Ave	0.1216	0.1101	0.0100	18.1	20.0	-9.5	20.0
Chloroform	Ave	0.5146	0.4538	0.2000	8.82	10.0	-11.8	20.0
1,1,1-Trichloroethane	Ave	0.3805	0.3187	0.1000	8.37	10.0	-16.3	20.0
Cyclohexane	Ave	0.6367	0.6309	0.1000	9.91	10.0	-0.9	20.0
Carbon tetrachloride	Ave	0.3240	0.2647	0.1000	8.17	10.0	-18.3	20.0
1,1-Dichloropropene	Ave	0.4208	0.3879	0.0100	9.22	10.0	-7.8	20.0
Isobutyl alcohol	Ave	0.0095	0.0087*	0.0100	229	250	-8.5	20.0
Benzene	Ave	1.233	1.156	0.5000	9.37	10.0	-6.3	20.0
1,2-Dichloroethane	Ave	0.4264	0.3843	0.1000	9.01	10.0	-9.9	20.0
n-Heptane	Ave	0.4611	0.5018	0.0100	10.9	10.0	8.8	20.0
Trichloroethene	Ave	0.3016	0.2572	0.2000	8.53	10.0	-14.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-157249/4 Calibration Date: 10/16/2015 15:06
 Instrument ID: CHHP5 Calib Start Date: 08/26/2015 15:04
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/26/2015 17:52
 Lab File ID: 51016004.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
Methylcyclohexane	Ave	0.4753	0.4534	0.1000	9.54	10.0	-4.6	20.0
1,2-Dichloropropane	Ave	0.3235	0.2930	0.1000	9.06	10.0	-9.4	20.0
1,4-Dioxane	Ave	0.0022	0.0018*	0.0100	161	200	-19.4	20.0
Dibromomethane	Ave	0.1642	0.1332	0.0100	8.11	10.0	-18.9	20.0
Bromodichloromethane	Ave	0.3249	0.2821	0.2000	8.68	10.0	-13.2	20.0
cis-1,3-Dichloropropene	Ave	0.3807	0.3173	0.2000	8.34	10.0	-16.6	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.232	1.092	0.1000	17.7	20.0	-11.4	20.0
Toluene	Ave	4.950	5.204	0.4000	10.5	10.0	5.1	20.0
trans-1,3-Dichloropropene	Ave	1.292	1.199	0.1000	9.28	10.0	-7.2	20.0
Ethyl methacrylate	Ave	1.249	1.212	0.0100	9.70	10.0	-3.0	20.0
1,1,2-Trichloroethane	Ave	0.9416	0.9652	0.1000	10.3	10.0	2.5	20.0
Tetrachloroethene	Ave	0.9609	1.054	0.2000	11.0	10.0	9.7	20.0
1,3-Dichloropropane	Ave	1.748	1.733	0.0100	9.91	10.0	-0.9	20.0
2-Hexanone	Ave	0.8893	0.7998	0.1000	18.0	20.0	-10.1	20.0
Dibromochloromethane	Ave	0.8152	0.7240	0.1000	8.88	10.0	-11.2	20.0
1,2-Dibromoethane (EDB)	Ave	0.9073	0.9024	0.1000	9.95	10.0	-0.5	20.0
3-Chlorobenzotrifluoride	Ave	1.591	1.753	0.0100	11.0	10.0	10.2	20.0
Chlorobenzene	Ave	3.187	3.052	0.5000	9.57	10.0	-4.3	20.0
4-Chlorobenzotrifluoride	Ave	1.504	1.691	0.0100	11.2	10.0	12.5	20.0
1,1,1,2-Tetrachloroethane	Ave	1.039	0.9427	0.0100	9.07	10.0	-9.3	20.0
Ethylbenzene	Ave	1.690	1.716	0.1000	10.2	10.0	1.6	20.0
m-Xylene & p-Xylene	Ave	2.072	2.158	0.1000	10.4	10.0	4.2	20.0
o-Xylene	Ave	1.969	2.008	0.3000	10.2	10.0	2.0	20.0
Styrene	Ave	3.262	3.357	0.3000	10.3	10.0	2.9	20.0
Bromoform	Ave	0.4652	0.4053	0.1000	8.71	10.0	-12.9	20.0
2-Chlorobenzotrifluoride	Ave	1.565	1.687	0.0100	10.8	10.0	7.8	20.0
Isopropylbenzene	Ave	4.822	5.123	0.1000	10.6	10.0	6.2	20.0
1,1,2,2-Tetrachloroethane	Ave	1.270	1.213	0.3000	9.55	10.0	-4.5	20.0
Bromobenzene	Ave	0.8583	0.8381	0.0100	9.76	10.0	-2.4	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3103	0.3093	0.0100	9.97	10.0	-0.3	20.0
1,2,3-Trichloropropane	Ave	0.2831	0.2750	0.0100	9.72	10.0	-2.8	20.0
N-Propylbenzene	Ave	0.9825	1.008	0.0100	10.3	10.0	2.6	20.0
2-Chlorotoluene	Ave	0.8351	0.8414	0.0100	10.1	10.0	0.8	20.0
3-Chlorotoluene	Ave	0.8583	0.8875	0.0100	10.3	10.0	3.4	20.0
1,3,5-Trimethylbenzene	Ave	2.776	2.995	0.0100	10.8	10.0	7.9	20.0
4-Chlorotoluene	Ave	0.9190	0.8691	0.0100	9.46	10.0	-5.4	20.0
tert-Butylbenzene	Ave	2.257	2.310	0.0100	10.2	10.0	2.4	20.0
1,2,4-Trimethylbenzene	Ave	2.781	2.953	0.0100	10.6	10.0	6.2	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.7754	0.8941	0.0100	11.5	10.0	15.3	20.0
sec-Butylbenzene	Ave	3.187	3.521	0.0100	11.0	10.0	10.5	20.0
1,3-Dichlorobenzene	Ave	1.528	1.567	0.6000	10.3	10.0	2.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-157249/4 Calibration Date: 10/16/2015 15:06
 Instrument ID: CHHP5 Calib Start Date: 08/26/2015 15:04
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/26/2015 17:52
 Lab File ID: 51016004.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
4-Isopropyltoluene	Ave	2.696	2.805	0.0100	10.4	10.0	4.0	20.0
1,4-Dichlorobenzene	Ave	1.590	1.576	0.5000	9.91	10.0	-0.9	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7185	0.8159	0.0100	11.4	10.0	13.6	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.7765	0.9068	0.0100	11.7	10.0	16.8	20.0
n-Butylbenzene	Ave	2.307	2.454	0.0100	10.6	10.0	6.4	20.0
1,2-Dichlorobenzene	Ave	1.428	1.410	0.4000	9.87	10.0	-1.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1173	0.0991	0.0500	8.45	10.0	-15.5	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	0.8157	0.8499	0.0100	31.3	30.0	4.2	20.0
2,3- & 3,4- Dichlorotoluene	Ave	0.7778	0.7567	0.0100	19.5	20.0	-2.7	20.0
1,2,4-Trichlorobenzene	Ave	0.5557	0.5367	0.2000	9.66	10.0	-3.4	20.0
Hexachlorobutadiene	Ave	0.2677	0.3165	0.0100	11.8	10.0	18.3	20.0
Naphthalene	Ave	1.428	1.263	0.0100	8.84	10.0	-11.6	20.0
1,2,3-Trichlorobenzene	Ave	0.4498	0.4236	0.0100	9.42	10.0	-5.8	20.0
2,4,5-Trichlorotoluene	Ave	0.1623	0.1562	0.0100	9.62	10.0	-3.8	20.0
2,3,6-Trichlorotoluene	Ave	0.1496	0.1528	0.0100	10.2	10.0	2.1	20.0
Dibromofluoromethane (Surr)	Ave	0.2455	0.2012		8.19	10.0	-18.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3373	0.2941		8.72	10.0	-12.8	20.0
Toluene-d8 (Surr)	Ave	3.857	4.149		10.8	10.0	7.6	20.0
4-Bromofluorobenzene (Surr)	Ave	1.455	1.434		9.85	10.0	-1.5	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016004.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 16-Oct-2015 15:06:30 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 180-0009043-004
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub4
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 16-Oct-2015 16:14:29 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK003

First Level Reviewer: fergusond

Date: 16-Oct-2015 15:36:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.261	4.261	0.000	0	130084	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.290	0.000	97	469261	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.393	10.393	0.000	90	102658	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.729	12.729	0.000	97	146674	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.560	6.560	0.000	94	94405	50.0	41.0	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	0	138027	50.0	43.6	
\$ 7 Toluene-d8 (Surr)	98	8.939	8.939	0.000	94	425933	50.0	53.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.573	11.573	0.000	87	147173	50.0	49.3	
11 Dichlorodifluoromethane	85	1.614	1.614	0.000	98	137953	50.0	52.0	
12 Chloromethane	50	1.760	1.760	0.000	99	163297	50.0	42.0	
13 Vinyl chloride	62	1.900	1.900	0.000	82	133168	50.0	38.6	
14 Butadiene	39	1.937	1.937	0.000	98	166727	50.0	40.9	
15 Bromomethane	94	2.247	2.247	0.000	92	48355	50.0	34.4	
16 Chloroethane	64	2.387	2.387	0.000	98	68516	50.0	32.9	
17 Dichlorofluoromethane	67	2.667	2.667	0.000	97	170918	50.0	38.7	
18 Trichlorofluoromethane	101	2.709	2.709	0.000	0	127331	50.0	38.5	M
20 Ethyl ether	59	3.050	3.050	0.000	99	128526	50.0	41.9	
21 Acrolein	56	3.233	3.233	0.000	98	46466	150.0	101.8	M
22 1,1-Dichloroethene	96	3.354	3.354	0.000	94	121860	50.0	46.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.415	3.415	0.000	94	124591	50.0	45.0	
24 Acetone	43	3.433	3.433	0.000	99	84989	100.0	89.8	
25 Iodomethane	142	3.543	3.543	0.000	98	155560	50.0	39.9	
26 Carbon disulfide	76	3.646	3.646	0.000	99	270684	50.0	44.6	
28 3-Chloro-1-propene	76	3.914	3.914	0.000	89	64133	50.0	43.3	
30 Methyl acetate	43	3.938	3.938	0.000	100	665651	250.0	235.3	
31 Methylene Chloride	84	4.139	4.139	0.000	94	146196	50.0	47.3	
32 2-Methyl-2-propanol	59	4.395	4.395	0.000	92	75721	500.0	517.2	
33 Acrylonitrile	53	4.522	4.522	0.000	97	637458	500.0	464.4	
34 trans-1,2-Dichloroethene	96	4.565	4.565	0.000	95	128292	50.0	45.2	
35 Methyl tert-butyl ether	73	4.583	4.583	0.000	95	273023	50.0	41.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.991	4.991	0.000	95	250095	50.0	52.5	
37 1,1-Dichloroethane	63	5.198	5.198	0.000	97	255978	50.0	45.8	
38 Vinyl acetate	43	5.246	5.246	0.000	97	201872	50.0	48.1	
44 2,2-Dichloropropane	77	5.946	5.946	0.000	69	102410	50.0	45.7	
45 cis-1,2-Dichloroethene	96	5.946	5.946	0.000	84	132622	50.0	43.7	
46 2-Butanone (MEK)	43	5.958	5.958	0.000	99	132980	100.0	93.5	
49 Chlorobromomethane	128	6.232	6.232	0.000	89	52610	50.0	39.5	
51 Tetrahydrofuran	42	6.250	6.250	0.000	90	103310	100.0	90.5	
52 Chloroform	83	6.384	6.384	0.000	96	212963	50.0	44.1	
53 1,1,1-Trichloroethane	97	6.542	6.542	0.000	93	149550	50.0	41.9	
54 Cyclohexane	56	6.615	6.615	0.000	97	296051	50.0	49.5	
56 Carbon tetrachloride	117	6.712	6.712	0.000	94	124212	50.0	40.8	
55 1,1-Dichloropropene	75	6.724	6.724	0.000	90	182040	50.0	46.1	
57 Isobutyl alcohol	41	6.919	6.919	0.000	92	102223	1250.0	1143.9	
58 Benzene	78	6.943	6.943	0.000	98	542314	50.0	46.9	
59 1,2-Dichloroethane	62	7.016	7.016	0.000	95	180343	50.0	45.1	
62 n-Heptane	43	7.309	7.309	0.000	96	235465	50.0	54.4	
64 Trichloroethene	130	7.674	7.674	0.000	94	120672	50.0	42.6	
66 Methylcyclohexane	83	7.917	7.917	0.000	95	212750	50.0	47.7	
67 1,2-Dichloropropane	63	7.947	7.947	0.000	94	137506	50.0	45.3	
70 1,4-Dioxane	88	8.032	8.032	0.000	40	16879	1000.0	806.4	M
68 Dibromomethane	93	8.039	8.039	0.000	94	62506	50.0	40.6	
71 Dichlorobromomethane	83	8.233	8.233	0.000	97	132364	50.0	43.4	
74 cis-1,3-Dichloropropene	75	8.677	8.677	0.000	88	148910	50.0	41.7	
75 4-Methyl-2-pentanone (MIBK)	43	8.823	8.823	0.000	98	224151	100.0	88.6	
76 Toluene	91	9.006	9.006	0.000	98	534242	50.0	52.6	
77 trans-1,3-Dichloropropene	75	9.249	9.249	0.000	98	123101	50.0	46.4	
78 Ethyl methacrylate	69	9.310	9.310	0.000	96	124418	50.0	48.5	
79 1,1,2-Trichloroethane	97	9.444	9.444	0.000	92	99089	50.0	51.3	
80 Tetrachloroethene	164	9.517	9.517	0.000	97	108166	50.0	54.8	
81 1,3-Dichloropropane	76	9.602	9.602	0.000	98	177870	50.0	49.6	
82 2-Hexanone	43	9.657	9.657	0.000	99	164210	100.0	89.9	
84 Chlorodibromomethane	129	9.815	9.815	0.000	89	74319	50.0	44.4	
85 Ethylene Dibromide	107	9.930	9.930	0.000	96	92637	50.0	49.7	
86 3-Chlorobenzotrifluoride	180	10.393	10.393	0.000	86	179946	50.0	55.1	
87 Chlorobenzene	112	10.417	10.417	0.000	90	313266	50.0	47.9	
88 4-Chlorobenzotrifluoride	180	10.478	10.478	0.000	96	173610	50.0	56.2	
89 1,1,1,2-Tetrachloroethane	131	10.508	10.508	0.000	90	96779	50.0	45.4	
90 Ethylbenzene	106	10.514	10.514	0.000	99	176184	50.0	50.8	
91 m-Xylene & p-Xylene	106	10.648	10.648	0.000	0	221542	50.0	52.1	
92 o-Xylene	106	11.032	11.032	0.000	98	206154	50.0	51.0	
93 Styrene	104	11.050	11.050	0.000	95	344594	50.0	51.5	
94 Bromoform	173	11.232	11.232	0.000	95	41606	50.0	43.6	
96 2-Chlorobenzotrifluoride	180	11.299	11.299	0.000	97	173210	50.0	53.9	
97 Isopropylbenzene	105	11.397	11.397	0.000	97	525908	50.0	53.1	
99 1,1,2,2-Tetrachloroethane	83	11.707	11.707	0.000	84	124515	50.0	47.7	
100 Bromobenzene	156	11.707	11.707	0.000	97	122926	50.0	48.8	
102 trans-1,4-Dichloro-2-buten	53	11.743	11.743	0.000	72	45372	50.0	49.8	
101 1,2,3-Trichloropropane	110	11.768	11.768	0.000	86	40341	50.0	48.6	
103 N-Propylbenzene	120	11.816	11.816	0.000	99	147808	50.0	51.3	
104 2-Chlorotoluene	126	11.902	11.902	0.000	95	123415	50.0	50.4	
105 3-Chlorotoluene	126	11.968	11.968	0.000	96	130173	50.0	51.7	

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	11.999	11.999	0.000	96	439306	50.0	53.9	
107 4-Chlorotoluene	126	12.023	12.023	0.000	99	127478	50.0	47.3	
108 tert-Butylbenzene	119	12.315	12.315	0.000	95	338816	50.0	51.2	
110 1,2,4-Trimethylbenzene	105	12.370	12.370	0.000	98	433169	50.0	53.1	
111 1,2-dichloro-4-(trifluorom	214	12.413	12.413	0.000	97	131144	50.0	57.7	
112 sec-Butylbenzene	105	12.534	12.534	0.000	95	516375	50.0	55.2	
113 1,3-Dichlorobenzene	146	12.650	12.650	0.000	98	229799	50.0	51.3	
114 4-Isopropyltoluene	119	12.692	12.692	0.000	97	411359	50.0	52.0	
115 1,4-Dichlorobenzene	146	12.753	12.753	0.000	93	231138	50.0	49.6	
116 2,4-Dichloro-1-(triflourom	214	12.784	12.784	0.000	97	119672	50.0	56.8	
118 2,5-Dichlorobenzotrifluori	214	12.820	12.820	0.000	0	133005	50.0	58.4	
120 n-Butylbenzene	91	13.100	13.100	0.000	98	359891	50.0	53.2	
121 1,2-Dichlorobenzene	146	13.112	13.112	0.000	94	206839	50.0	49.4	
122 1,2-Dibromo-3-Chloropropan	75	13.909	13.909	0.000	76	14529	50.0	42.2	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.049	14.049	0.000	0	373994	150.0	156.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.463	14.463	0.000	0	221964	100.0	97.3	
126 1,2,4-Trichlorobenzene	180	14.730	14.730	0.000	94	78719	50.0	48.3	
127 Hexachlorobutadiene	225	14.876	14.876	0.000	95	46424	50.0	59.1	
128 Naphthalene	128	14.992	14.992	0.000	97	185250	50.0	44.2	
129 1,2,3-Trichlorobenzene	180	15.223	15.223	0.000	94	62133	50.0	47.1	
131 2,4,5-Trichlorotoluene	159	15.996	15.996	0.000	0	22904	50.0	48.1	
130 2,3,6-Trichlorotoluene	159	16.093	16.093	0.000	94	22405	50.0	51.0	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	89.0	
S 133 Xylenes, Total	106				0		100.0	103.1	
S 135 1,3-Dichloropropene, Total	1				0		100.0	88.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWAcro1stRe_00001	Amount Added: 6.00	Units: uL	
voaWEEpri Res_00006	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00148	Amount Added: 2.00	Units: uL	
voaWVA1stRest_00001	Amount Added: 2.00	Units: uL	
voaWKetmix2nd_00002	Amount Added: 2.00	Units: uL	
VOA8260INT_00043	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00043	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016004.D

Injection Date: 16-Oct-2015 15:06:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: CCVIS

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

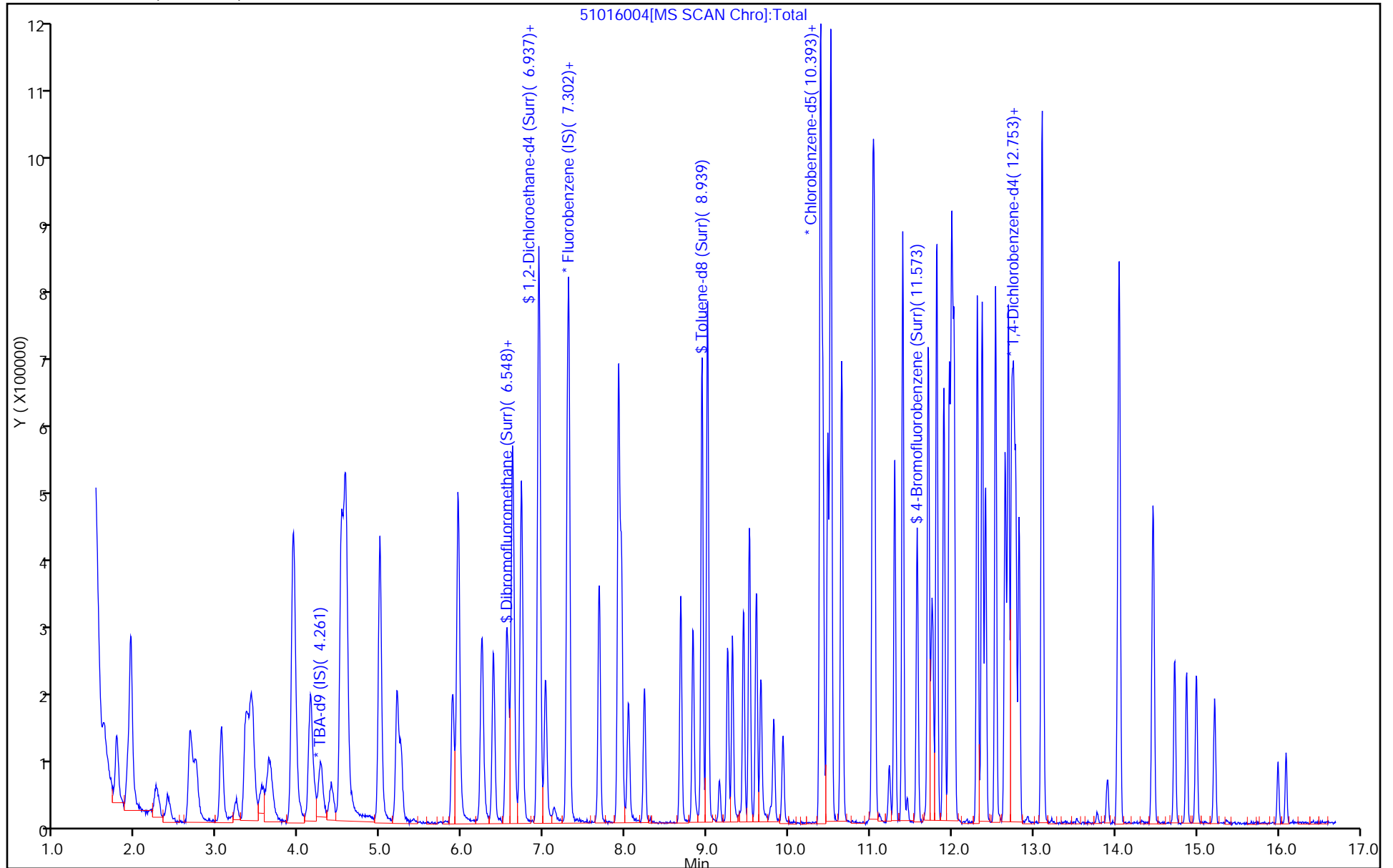
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



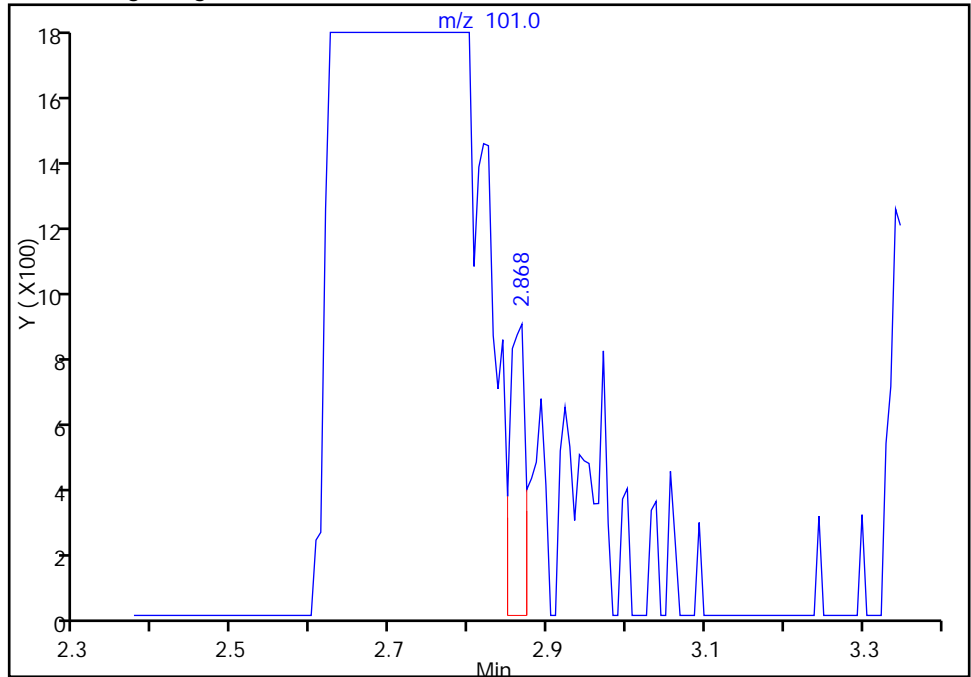
TestAmerica Pittsburgh

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Injection Date: 16-Oct-2015 15:06:30 Instrument ID: CHHP5
Lims ID: CCVIS
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

18 Trichlorofluoromethane, CAS: 75-69-4

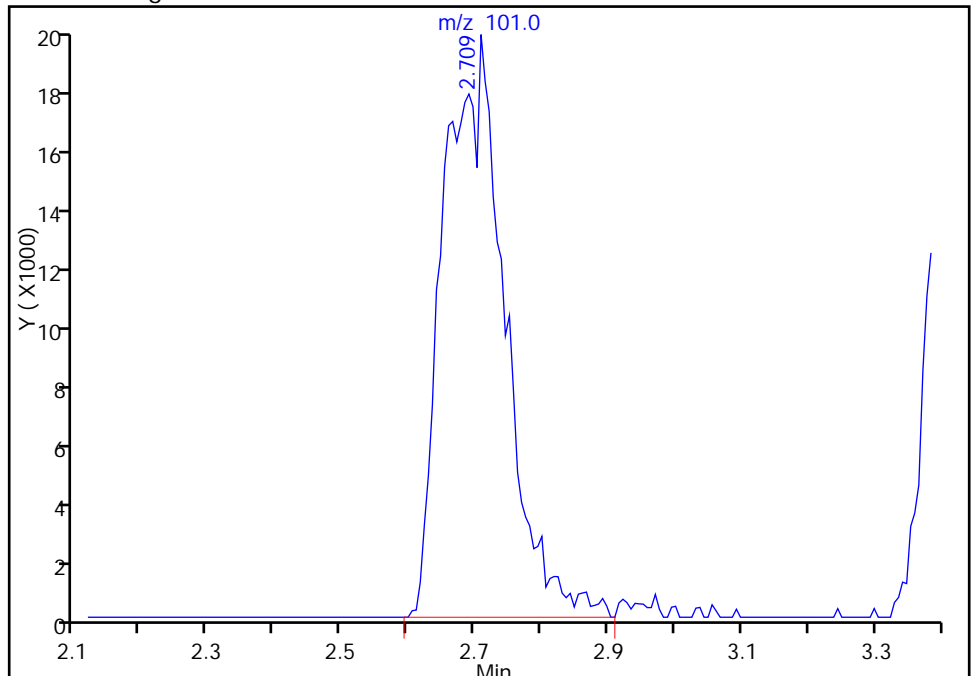
RT: 2.87
Area: 1166
Amount: 0.352666
Amount Units: ng

Processing Integration Results



RT: 2.71
Area: 127331
Amount: 38.512291
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 16-Oct-2015 15:36:15
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

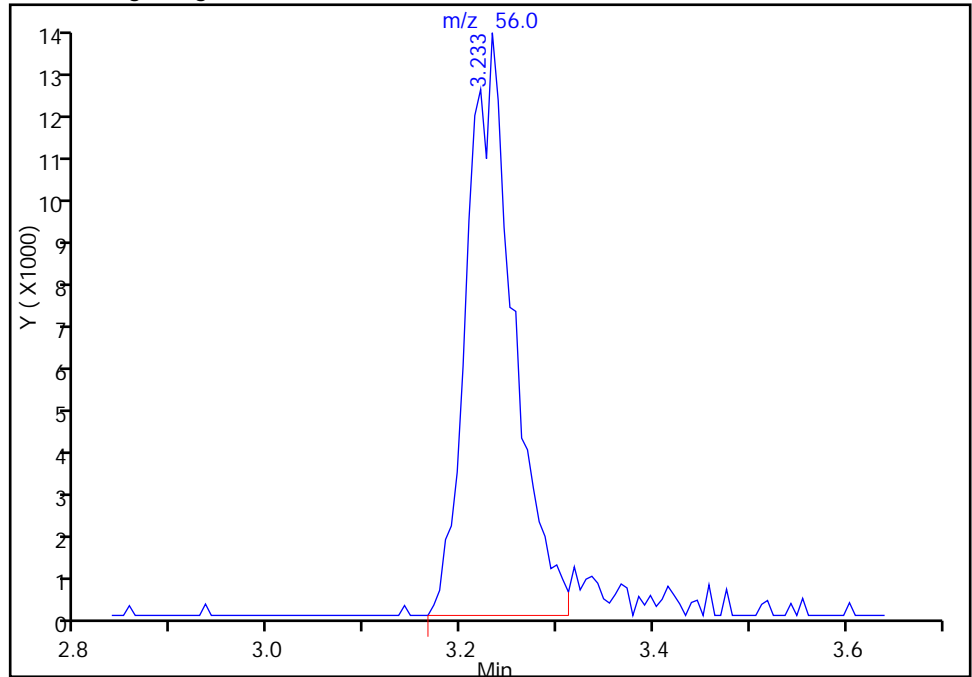
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016004.D
Injection Date: 16-Oct-2015 15:06:30 Instrument ID: CHHP5
Lims ID: CCVIS
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

21 Acrolein, CAS: 107-02-8

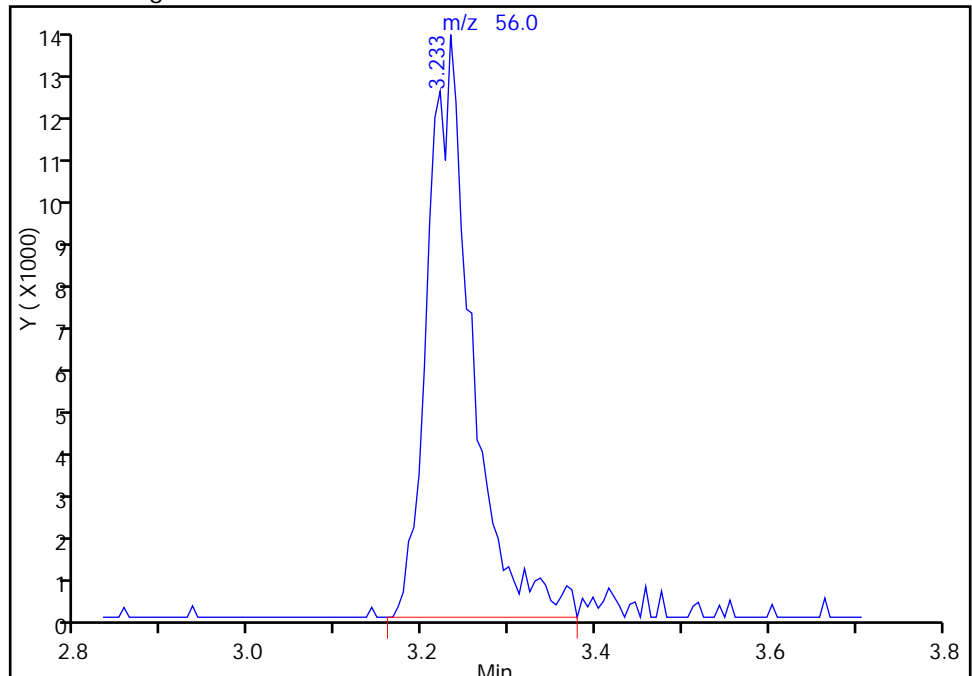
RT: 3.23
Area: 44082
Amount: 96.567837
Amount Units: ng

Processing Integration Results



RT: 3.23
Area: 46466
Amount: 101.7903
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 16-Oct-2015 15:36:15
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

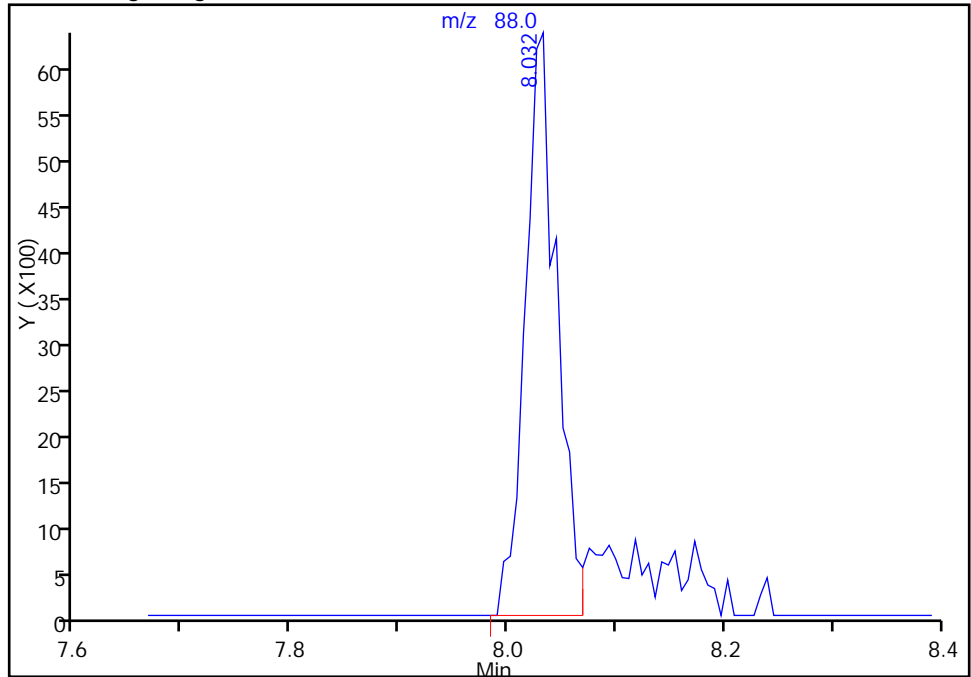
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016004.D
Injection Date: 16-Oct-2015 15:06:30 Instrument ID: CHHP5
Lims ID: CCVIS
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

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

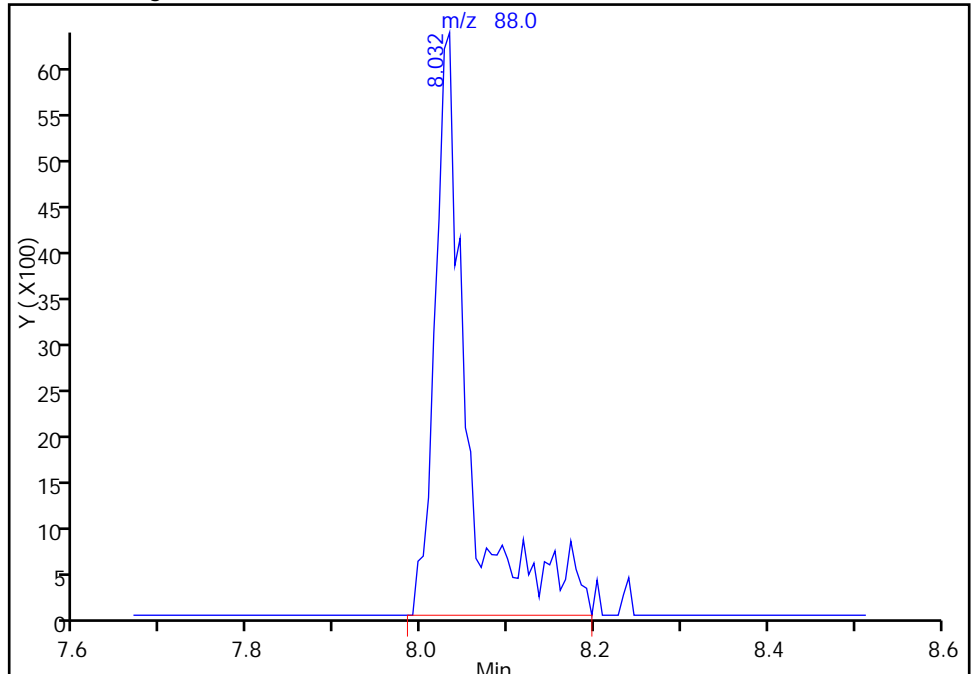
RT: 8.03
Area: 12954
Amount: 618.8583
Amount Units: ng

Processing Integration Results



RT: 8.03
Area: 16879
Amount: 806.3695
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 16-Oct-2015 15:36:15
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-157327/2 Calibration Date: 10/17/2015 10:09
 Instrument ID: CHHP5 Calib Start Date: 08/26/2015 15:04
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/26/2015 17:52
 Lab File ID: 51017002.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	0.2825	0.3598	0.1000	12.7	10.0	27.4*	20.0
Chloromethane	Ave	0.4148	0.4153	0.1000	10.0	10.0	0.1	20.0
Vinyl chloride	Ave	0.3679	0.3432	0.1000	9.33	10.0	-6.7	20.0
1,3-Butadiene	Ave	0.4345	0.4240	0.0100	9.76	10.0	-2.4	20.0
Bromomethane	Ave	0.1497	0.1319	0.0500	8.81	10.0	-11.9	20.0
Chloroethane	Ave	0.2220	0.1866	0.0500	8.41	10.0	-15.9	20.0
Dichlorofluoromethane	Ave	0.4709	0.5040	0.0100	10.7	10.0	7.0	20.0
Trichlorofluoromethane	Ave	0.3523	0.4135	0.1000	11.7	10.0	17.4	20.0
Ethyl ether	Ave	0.3265	0.2829	0.0100	8.66	10.0	-13.4	20.0
Acrolein	Ave	0.0486	0.0333	0.0100	20.5	30.0	-31.5*	20.0
1,1-Dichloroethene	Ave	0.2785	0.2490	0.1000	8.94	10.0	-10.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2951	0.2605	0.1000	8.83	10.0	-11.7	20.0
Acetone	Ave	0.1009	0.0697	0.0500	13.8	20.0	-30.9*	20.0
Iodomethane	Ave	0.4150	0.3447	0.0100	8.30	10.0	-17.0	20.0
Carbon disulfide	Ave	0.6466	0.6437	0.1000	9.95	10.0	-0.5	20.0
Allyl chloride	Ave	0.1577	0.1449	0.0100	9.19	10.0	-8.1	20.0
Methyl acetate	Ave	0.3015	0.2917	0.1000	48.4	50.0	-3.2	20.0
Methylene Chloride	Lin2		0.2819	0.1000	8.45	10.0	-15.5	20.0
tert-Butyl alcohol	Ave	1.126	0.9891	0.0100	87.9	100	-12.1	20.0
Acrylonitrile	Ave	0.1463	0.1354	0.0100	92.6	100	-7.4	20.0
trans-1,2-Dichloroethene	Ave	0.3024	0.2673	0.1000	8.84	10.0	-11.6	20.0
Methyl tert-butyl ether	Ave	0.6999	0.6102	0.1000	8.72	10.0	-12.8	20.0
Hexane	Ave	0.5076	0.5558	0.0100	11.0	10.0	9.5	20.0
1,1-Dichloroethane	Ave	0.5957	0.5457	0.2000	9.16	10.0	-8.4	20.0
2,2-Dichloropropane	Ave	0.2387	0.2754	0.0100	11.5	10.0	15.4	20.0
cis-1,2-Dichloroethene	Ave	0.3230	0.2825	0.1000	8.75	10.0	-12.5	20.0
2-Butanone (MEK)	Ave	0.1516	0.1237	0.0500	16.3	20.0	-18.4	20.0
Bromochloromethane	Ave	0.1418	0.1098	0.0100	7.74	10.0	-22.6*	20.0
Tetrahydrofuran	Ave	0.1216	0.1150	0.0100	18.9	20.0	-5.4	20.0
Chloroform	Ave	0.5146	0.4459	0.2000	8.66	10.0	-13.4	20.0
1,1,1-Trichloroethane	Ave	0.3805	0.3513	0.1000	9.23	10.0	-7.7	20.0
Cyclohexane	Ave	0.6367	0.6920	0.1000	10.9	10.0	8.7	20.0
Carbon tetrachloride	Ave	0.3240	0.2897	0.1000	8.94	10.0	-10.6	20.0
1,1-Dichloropropene	Ave	0.4208	0.4011	0.0100	9.53	10.0	-4.7	20.0
Isobutyl alcohol	Ave	0.0095	0.0082*	0.0100	215	250	-14.1	20.0
Benzene	Ave	1.233	1.173	0.5000	9.52	10.0	-4.8	20.0
1,2-Dichloroethane	Ave	0.4264	0.3897	0.1000	9.14	10.0	-8.6	20.0
n-Heptane	Ave	0.4611	0.5265	0.0100	11.4	10.0	14.2	20.0
Trichloroethene	Ave	0.3016	0.2606	0.2000	8.64	10.0	-13.6	20.0
Methylcyclohexane	Ave	0.4753	0.4899	0.1000	10.3	10.0	3.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-157327/2 Calibration Date: 10/17/2015 10:09
 Instrument ID: CHHP5 Calib Start Date: 08/26/2015 15:04
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/26/2015 17:52
 Lab File ID: 51017002.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	0.3235	0.2946	0.1000	9.11	10.0	-8.9	20.0
1,4-Dioxane	Ave	0.0022	0.0021*	0.0100	187	200	-6.6	20.0
Dibromomethane	Ave	0.1642	0.1368	0.0100	8.33	10.0	-16.7	20.0
Bromodichloromethane	Ave	0.3249	0.2965	0.2000	9.12	10.0	-8.8	20.0
cis-1,3-Dichloropropene	Ave	0.3807	0.3519	0.2000	9.24	10.0	-7.6	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.232	1.202	0.1000	19.5	20.0	-2.5	20.0
Toluene	Ave	4.950	5.334	0.4000	10.8	10.0	7.8	20.0
trans-1,3-Dichloropropene	Ave	1.292	1.395	0.1000	10.8	10.0	8.0	20.0
Ethyl methacrylate	Ave	1.249	1.390	0.0100	11.1	10.0	11.3	20.0
1,1,2-Trichloroethane	Ave	0.9416	0.9548	0.1000	10.1	10.0	1.4	20.0
Tetrachloroethene	Ave	0.9609	1.043	0.2000	10.9	10.0	8.6	20.0
1,3-Dichloropropane	Ave	1.748	1.823	0.0100	10.4	10.0	4.3	20.0
2-Hexanone	Ave	0.8893	0.7555	0.1000	17.0	20.0	-15.0	20.0
Dibromochloromethane	Ave	0.8152	0.8310	0.1000	10.2	10.0	1.9	20.0
1,2-Dibromoethane (EDB)	Ave	0.9073	0.9182	0.1000	10.1	10.0	1.2	20.0
3-Chlorobenzotrifluoride	Ave	1.591	1.777	0.0100	11.2	10.0	11.7	20.0
Chlorobenzene	Ave	3.187	3.131	0.5000	9.82	10.0	-1.8	20.0
4-Chlorobenzotrifluoride	Ave	1.504	1.654	0.0100	11.0	10.0	10.0	20.0
1,1,1,2-Tetrachloroethane	Ave	1.039	0.9657	0.0100	9.30	10.0	-7.0	20.0
Ethylbenzene	Ave	1.690	1.772	0.1000	10.5	10.0	4.9	20.0
m-Xylene & p-Xylene	Ave	2.072	2.187	0.1000	10.6	10.0	5.6	20.0
o-Xylene	Ave	1.969	2.096	0.3000	10.6	10.0	6.5	20.0
Styrene	Ave	3.262	3.507	0.3000	10.8	10.0	7.5	20.0
Bromoform	Ave	0.4652	0.4746	0.1000	10.2	10.0	2.0	20.0
2-Chlorobenzotrifluoride	Ave	1.565	1.565	0.0100	10.0	10.0	-0.0	20.0
Isopropylbenzene	Ave	4.822	5.230	0.1000	10.8	10.0	8.5	20.0
1,1,2,2-Tetrachloroethane	Ave	1.270	1.272	0.3000	10.0	10.0	0.2	20.0
Bromobenzene	Ave	0.8583	0.8887	0.0100	10.4	10.0	3.5	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3103	0.3607	0.0100	11.6	10.0	16.2	20.0
1,2,3-Trichloropropane	Ave	0.2831	0.3126	0.0100	11.0	10.0	10.4	20.0
N-Propylbenzene	Ave	0.9825	1.073	0.0100	10.9	10.0	9.2	20.0
2-Chlorotoluene	Ave	0.8351	0.8891	0.0100	10.6	10.0	6.5	20.0
3-Chlorotoluene	Ave	0.8583	0.8908	0.0100	10.4	10.0	3.8	20.0
1,3,5-Trimethylbenzene	Ave	2.776	3.161	0.0100	11.4	10.0	13.9	20.0
4-Chlorotoluene	Ave	0.9190	0.9467	0.0100	10.3	10.0	3.0	20.0
tert-Butylbenzene	Ave	2.257	2.483	0.0100	11.0	10.0	10.0	20.0
1,2,4-Trimethylbenzene	Ave	2.781	3.159	0.0100	11.4	10.0	13.6	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.7754	0.9085	0.0100	11.7	10.0	17.2	20.0
sec-Butylbenzene	Ave	3.187	3.686	0.0100	11.6	10.0	15.7	20.0
1,3-Dichlorobenzene	Ave	1.528	1.621	0.6000	10.6	10.0	6.0	20.0
4-Isopropyltoluene	Ave	2.696	2.960	0.0100	11.0	10.0	9.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-157327/2 Calibration Date: 10/17/2015 10:09
 Instrument ID: CHHP5 Calib Start Date: 08/26/2015 15:04
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/26/2015 17:52
 Lab File ID: 51017002.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	1.590	1.648	0.5000	10.4	10.0	3.7	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7185	0.7500	0.0100	10.4	10.0	4.4	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.7765	0.8696	0.0100	11.2	10.0	12.0	20.0
n-Butylbenzene	Ave	2.307	2.425	0.0100	10.5	10.0	5.1	20.0
1,2-Dichlorobenzene	Ave	1.428	1.415	0.4000	9.90	10.0	-1.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1173	0.1200	0.0500	10.2	10.0	2.3	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	0.8157	0.7063	0.0100	26.0	30.0	-13.4	20.0
2,3- & 3,4- Dichlorotoluene	Ave	0.7778	0.6521	0.0100	16.8	20.0	-16.2	20.0
1,2,4-Trichlorobenzene	Ave	0.5557	0.5021	0.2000	9.04	10.0	-9.6	20.0
Hexachlorobutadiene	Ave	0.2677	0.2699	0.0100	10.1	10.0	0.8	20.0
Naphthalene	Ave	1.428	1.191	0.0100	8.34	10.0	-16.6	20.0
1,2,3-Trichlorobenzene	Ave	0.4498	0.3867	0.0100	8.60	10.0	-14.0	20.0
2,4,5-Trichlorotoluene	Ave	0.1623	0.1390	0.0100	8.56	10.0	-14.4	20.0
2,3,6-Trichlorotoluene	Ave	0.1496	0.1493	0.0100	9.97	10.0	-0.3	20.0
Dibromofluoromethane (Surr)	Ave	0.2455	0.2025		8.25	10.0	-17.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3373	0.2863		8.49	10.0	-15.1	20.0
Toluene-d8 (Surr)	Ave	3.857	4.162		10.8	10.0	7.9	20.0
4-Bromofluorobenzene (Surr)	Ave	1.455	1.576		10.8	10.0	8.3	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017002.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 17-Oct-2015 10:09:30 ALS Bottle#: 1 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 180-0009055-002
 Operator ID: 034635 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub21
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 17-Oct-2015 17:48:19 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: journetp

Date: 17-Oct-2015 10:29:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.260	4.260	0.000	0	122820	1000.0	1000.0	M
* 2 Fluorobenzene (IS)	96	7.289	7.289	0.000	98	461537	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.392	10.392	0.000	90	100060	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.734	12.734	0.000	94	131704	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.559	6.559	0.000	94	93450	50.0	41.2	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.936	6.936	0.000	0	132134	50.0	42.4	
\$ 7 Toluene-d8 (Surr)	98	8.938	8.938	0.000	95	416454	50.0	53.9	
\$ 8 4-Bromofluorobenzene (Surr	95	11.572	11.572	0.000	87	157669	50.0	54.1	
11 Dichlorodifluoromethane	85	1.607	1.607	0.000	98	166063	50.0	63.7	
12 Chloromethane	50	1.766	1.766	0.000	99	191696	50.0	50.1	
13 Vinyl chloride	62	1.893	1.893	0.000	98	158417	50.0	46.6	
14 Butadiene	39	1.936	1.936	0.000	96	195697	50.0	48.8	
15 Bromomethane	94	2.246	2.246	0.000	91	60863	50.0	44.0	
16 Chloroethane	64	2.386	2.386	0.000	98	86140	50.0	42.0	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	96	232633	50.0	53.5	
18 Trichlorofluoromethane	101	2.702	2.702	0.000	97	190829	50.0	58.7	
20 Ethyl ether	59	3.043	3.043	0.000	97	130565	50.0	43.3	
21 Acrolein	56	3.232	3.232	0.000	95	46132	150.0	102.7	
22 1,1-Dichloroethene	96	3.347	3.347	0.000	93	114928	50.0	44.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.414	3.414	0.000	94	120214	50.0	44.1	
24 Acetone	43	3.432	3.432	0.000	97	64328	100.0	69.1	
25 Iodomethane	142	3.542	3.542	0.000	98	159076	50.0	41.5	
26 Carbon disulfide	76	3.627	3.627	0.000	99	297106	50.0	49.8	
28 3-Chloro-1-propene	76	3.913	3.913	0.000	89	66880	50.0	45.9	
30 Methyl acetate	43	3.937	3.937	0.000	100	673150	250.0	241.9	
31 Methylene Chloride	84	4.132	4.132	0.000	94	130127	50.0	42.2	
32 2-Methyl-2-propanol	59	4.400	4.400	0.000	86	60740	500.0	439.4	
33 Acrylonitrile	53	4.515	4.515	0.000	99	625017	500.0	462.9	
34 trans-1,2-Dichloroethene	96	4.564	4.564	0.000	88	123389	50.0	44.2	
35 Methyl tert-butyl ether	73	4.570	4.570	0.000	95	281622	50.0	43.6	

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	96	256517	50.0	54.8	
37 1,1-Dichloroethane	63	5.203	5.203	0.000	97	251876	50.0	45.8	
44 2,2-Dichloropropane	77	5.945	5.945	0.000	60	127122	50.0	57.7	
45 cis-1,2-Dichloroethene	96	5.951	5.951	0.000	85	130387	50.0	43.7	
46 2-Butanone (MEK)	43	5.957	5.957	0.000	76	114174	100.0	81.6	M
49 Chlorobromomethane	128	6.237	6.237	0.000	88	50663	50.0	38.7	
51 Tetrahydrofuran	42	6.243	6.243	0.000	81	106137	100.0	94.6	
52 Chloroform	83	6.383	6.383	0.000	97	205802	50.0	43.3	
53 1,1,1-Trichloroethane	97	6.541	6.541	0.000	95	162128	50.0	46.2	
54 Cyclohexane	56	6.614	6.614	0.000	97	319363	50.0	54.3	
56 Carbon tetrachloride	117	6.717	6.717	0.000	96	133702	50.0	44.7	
55 1,1-Dichloropropene	75	6.724	6.724	0.000	92	185102	50.0	47.7	
57 Isobutyl alcohol	41	6.918	6.918	0.000	93	94409	1250.0	1074.1	
58 Benzene	78	6.943	6.943	0.000	97	541479	50.0	47.6	
59 1,2-Dichloroethane	62	7.022	7.022	0.000	97	179865	50.0	45.7	
62 n-Heptane	43	7.308	7.308	0.000	97	243001	50.0	57.1	
64 Trichloroethene	130	7.679	7.679	0.000	96	120252	50.0	43.2	
66 Methylcyclohexane	83	7.916	7.916	0.000	96	226125	50.0	51.5	
67 1,2-Dichloropropane	63	7.952	7.952	0.000	94	135986	50.0	45.5	
68 Dibromomethane	93	8.031	8.031	0.000	96	63129	50.0	41.7	
70 1,4-Dioxane	88	8.031	8.031	0.000	35	19235	1000.0	934.3	M
71 Dichlorobromomethane	83	8.226	8.226	0.000	97	136830	50.0	45.6	
74 cis-1,3-Dichloropropene	75	8.676	8.676	0.000	89	162432	50.0	46.2	
75 4-Methyl-2-pentanone (MIBK)	43	8.828	8.828	0.000	99	240444	100.0	97.5	
76 Toluene	91	9.005	9.005	0.000	98	533748	50.0	53.9	
77 trans-1,3-Dichloropropene	75	9.248	9.248	0.000	99	139552	50.0	54.0	
78 Ethyl methacrylate	69	9.309	9.309	0.000	95	139081	50.0	55.6	
79 1,1,2-Trichloroethane	97	9.449	9.449	0.000	94	95535	50.0	50.7	
80 Tetrachloroethene	164	9.516	9.516	0.000	97	104377	50.0	54.3	
81 1,3-Dichloropropane	76	9.601	9.601	0.000	96	182371	50.0	52.1	
82 2-Hexanone	43	9.656	9.656	0.000	98	151194	100.0	85.0	
84 Chlorodibromomethane	129	9.814	9.814	0.000	90	83154	50.0	51.0	
85 Ethylene Dibromide	107	9.930	9.930	0.000	97	91875	50.0	50.6	
86 3-Chlorobenzotrifluoride	180	10.392	10.392	0.000	87	177792	50.0	55.9	
87 Chlorobenzene	112	10.416	10.416	0.000	91	313260	50.0	49.1	
88 4-Chlorobenzotrifluoride	180	10.477	10.477	0.000	95	165521	50.0	55.0	
89 1,1,1,2-Tetrachloroethane	131	10.507	10.507	0.000	91	96629	50.0	46.5	
90 Ethylbenzene	106	10.520	10.520	0.000	99	177315	50.0	52.4	
91 m-Xylene & p-Xylene	106	10.647	10.647	0.000	0	218861	50.0	52.8	
92 o-Xylene	106	11.031	11.031	0.000	97	209765	50.0	53.2	
93 Styrene	104	11.049	11.049	0.000	95	350895	50.0	53.8	
94 Bromoform	173	11.231	11.231	0.000	96	47486	50.0	51.0	
96 2-Chlorobenzotrifluoride	180	11.298	11.298	0.000	94	156555	50.0	50.0	
97 Isopropylbenzene	105	11.396	11.396	0.000	98	523302	50.0	54.2	
99 1,1,2,2-Tetrachloroethane	83	11.712	11.712	0.000	75	127311	50.0	50.1	
100 Bromobenzene	156	11.712	11.712	0.000	97	117050	50.0	51.8	
102 trans-1,4-Dichloro-2-buten	53	11.742	11.742	0.000	68	47500	50.0	58.1	
101 1,2,3-Trichloropropane	110	11.767	11.767	0.000	87	41169	50.0	55.2	
103 N-Propylbenzene	120	11.815	11.815	0.000	99	141270	50.0	54.6	
104 2-Chlorotoluene	126	11.901	11.901	0.000	95	117103	50.0	53.2	
105 3-Chlorotoluene	126	11.967	11.967	0.000	96	117324	50.0	51.9	
106 1,3,5-Trimethylbenzene	105	11.998	11.998	0.000	95	416316	50.0	56.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 4-Chlorotoluene	126	12.022	12.022	0.000	98	124686	50.0	51.5	
108 tert-Butylbenzene	119	12.308	12.308	0.000	95	327022	50.0	55.0	
110 1,2,4-Trimethylbenzene	105	12.369	12.369	0.000	99	416104	50.0	56.8	
111 1,2-dichloro-4-(trifluorom	214	12.412	12.412	0.000	98	119647	50.0	58.6	
112 sec-Butylbenzene	105	12.533	12.533	0.000	95	485489	50.0	57.8	
113 1,3-Dichlorobenzene	146	12.649	12.649	0.000	95	213468	50.0	53.0	
114 4-Isopropyltoluene	119	12.691	12.691	0.000	97	389865	50.0	54.9	
115 1,4-Dichlorobenzene	146	12.758	12.758	0.000	93	217018	50.0	51.8	
116 2,4-Dichloro-1-(triflourom	214	12.783	12.783	0.000	96	98775	50.0	52.2	
118 2,5-Dichlorobenzotrifluori	214	12.825	12.825	0.000	0	114534	50.0	56.0	
120 n-Butylbenzene	91	13.099	13.099	0.000	98	319344	50.0	52.6	
121 1,2-Dichlorobenzene	146	13.111	13.111	0.000	94	186305	50.0	49.5	
122 1,2-Dibromo-3-Chloropropan	75	13.902	13.902	0.000	78	15798	50.0	51.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.048	14.048	0.000	0	279048	150.0	129.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.468	14.468	0.000	0	171763	100.0	83.8	
126 1,2,4-Trichlorobenzene	180	14.729	14.729	0.000	93	66126	50.0	45.2	
127 Hexachlorobutadiene	225	14.875	14.875	0.000	94	35549	50.0	50.4	
128 Naphthalene	128	14.991	14.991	0.000	97	156896	50.0	41.7	
129 1,2,3-Trichlorobenzene	180	15.216	15.216	0.000	94	50926	50.0	43.0	
131 2,4,5-Trichlorotoluene	159	15.995	15.995	0.000	0	18306	50.0	42.8	
130 2,3,6-Trichlorotoluene	159	16.092	16.092	0.000	91	19657	50.0	49.9	
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	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	87.9	
S 133 Xylenes, Total	106				0		100.0	106.0	
S 135 1,3-Dichloropropene, Total	1				0		100.0	100.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWAcro1stRe_00002	Amount Added: 6.00	Units: uL	
voaWEEpri Res_00006	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00148	Amount Added: 2.00	Units: uL	
voaWKetmix2nd_00002	Amount Added: 2.00	Units: uL	
VOA8260INT_00043	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00043	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017002.D

Injection Date: 17-Oct-2015 10:09:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

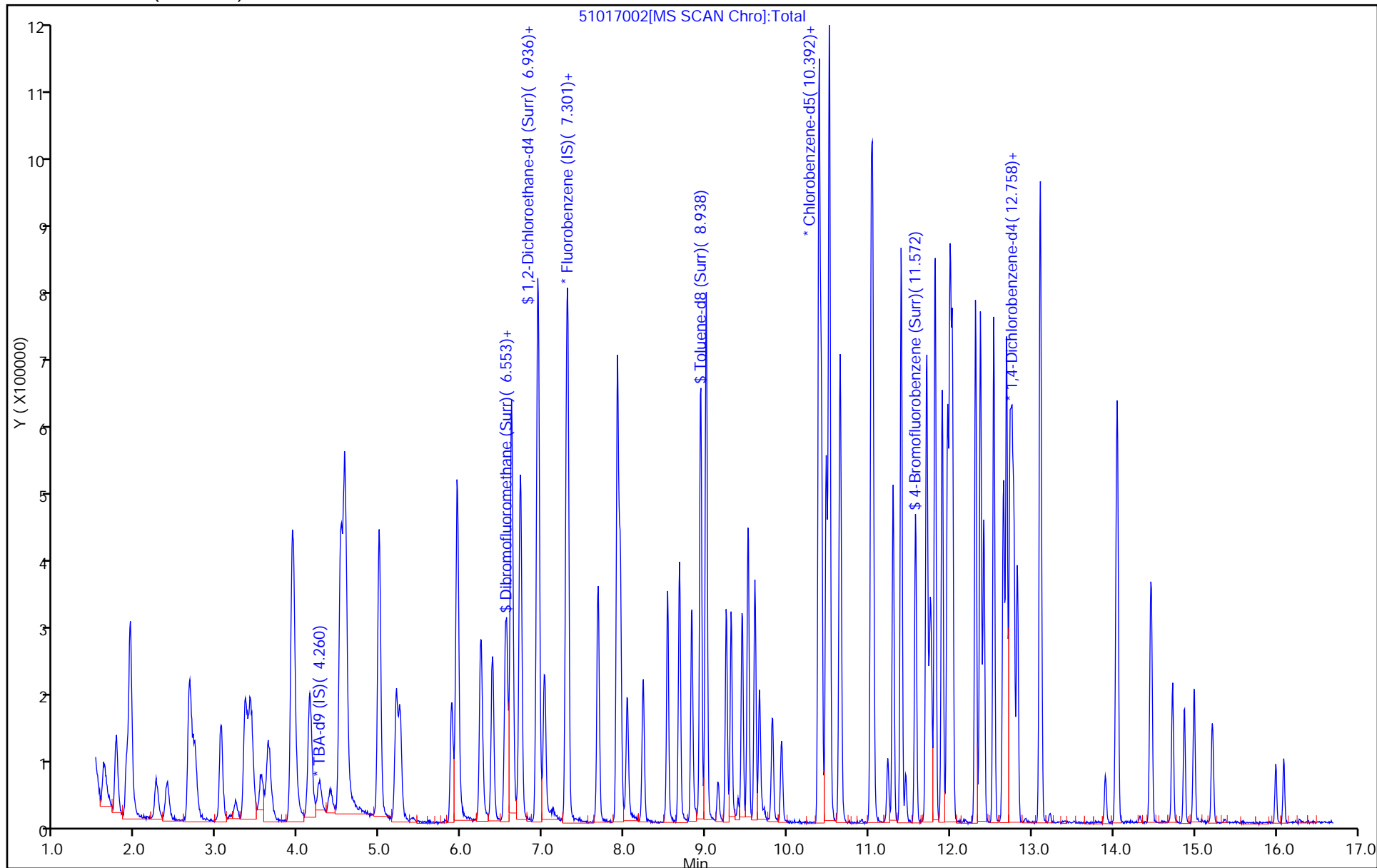
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



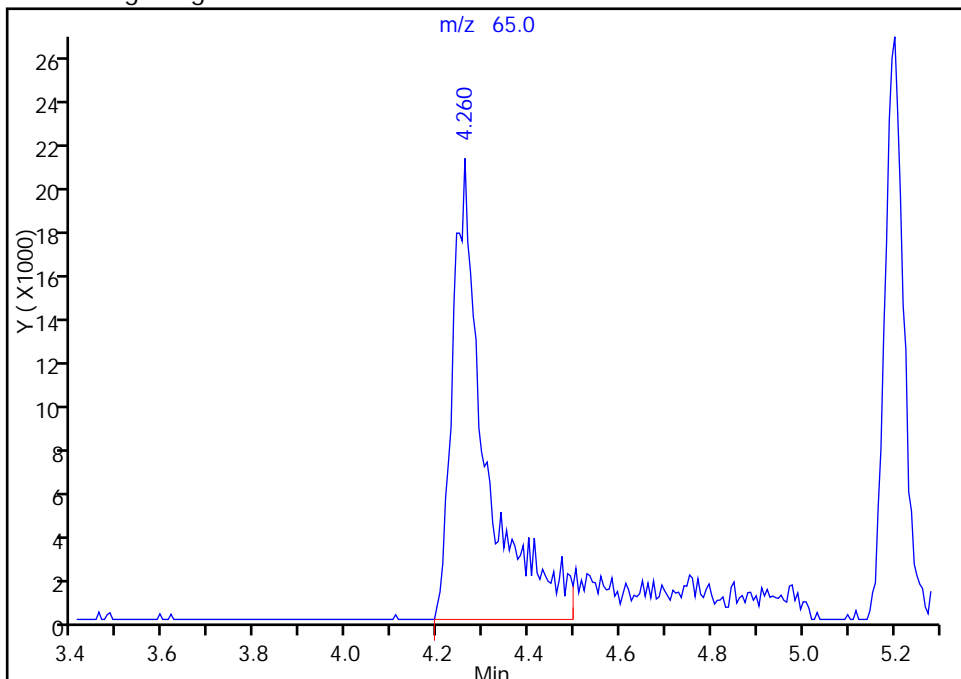
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017002.D
Injection Date: 17-Oct-2015 10:09:30 Instrument ID: CHHP5
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 1 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

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

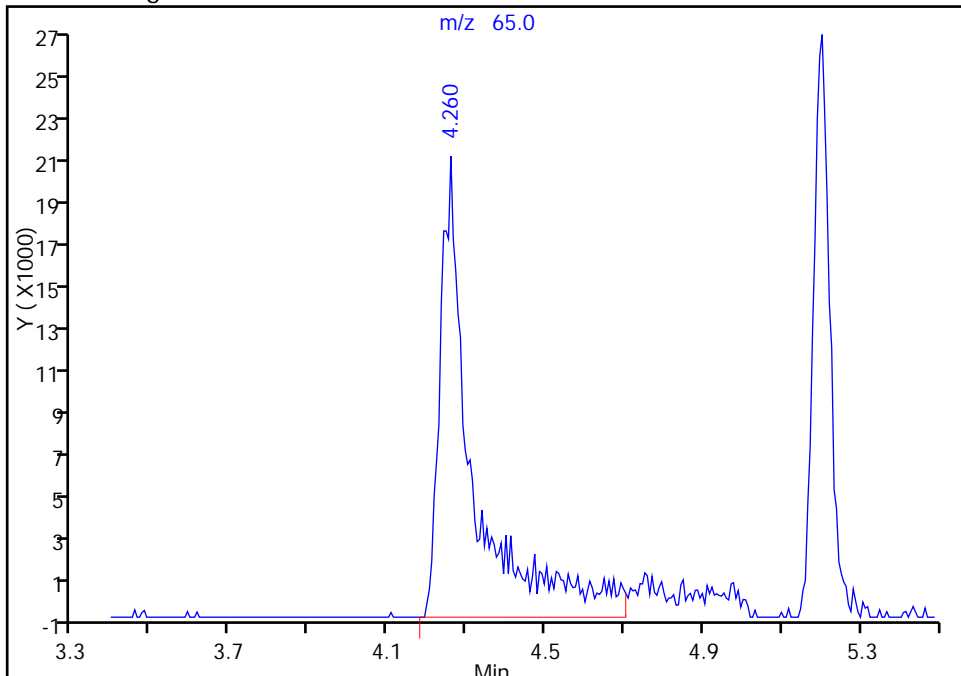
RT: 4.26
Area: 105436
Amount: 1000.0000
Amount Units: ng

Processing Integration Results



RT: 4.26
Area: 122820
Amount: 1000.0000
Amount Units: ng

Manual Integration Results



Reviewer: journetp, 17-Oct-2015 10:34:04
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

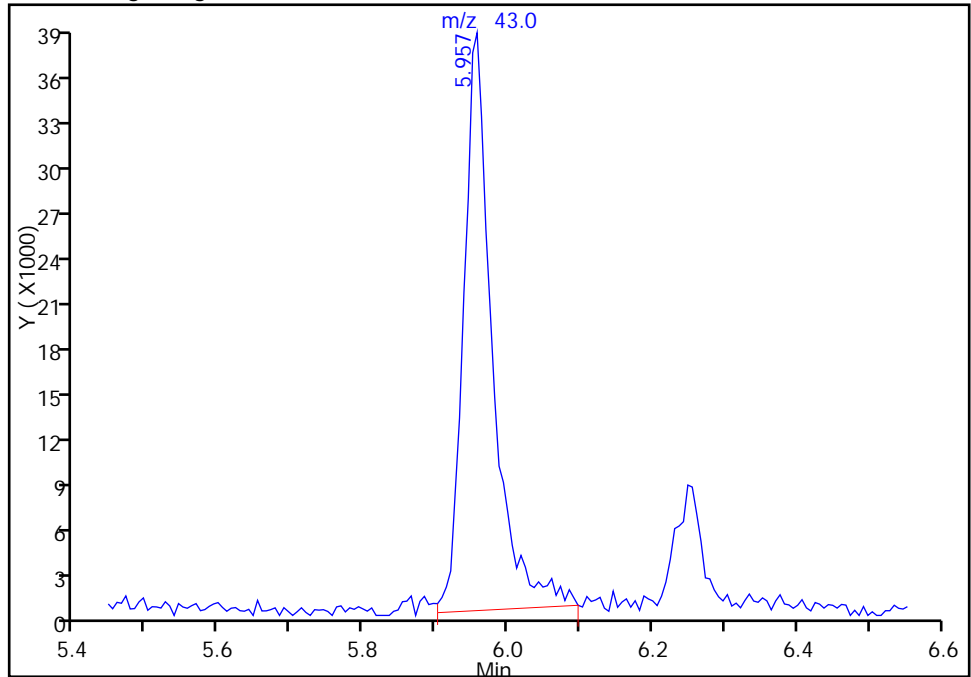
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017002.D
Injection Date: 17-Oct-2015 10:09:30 Instrument ID: CHHP5
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 1 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

46 2-Butanone (MEK), CAS: 78-93-3

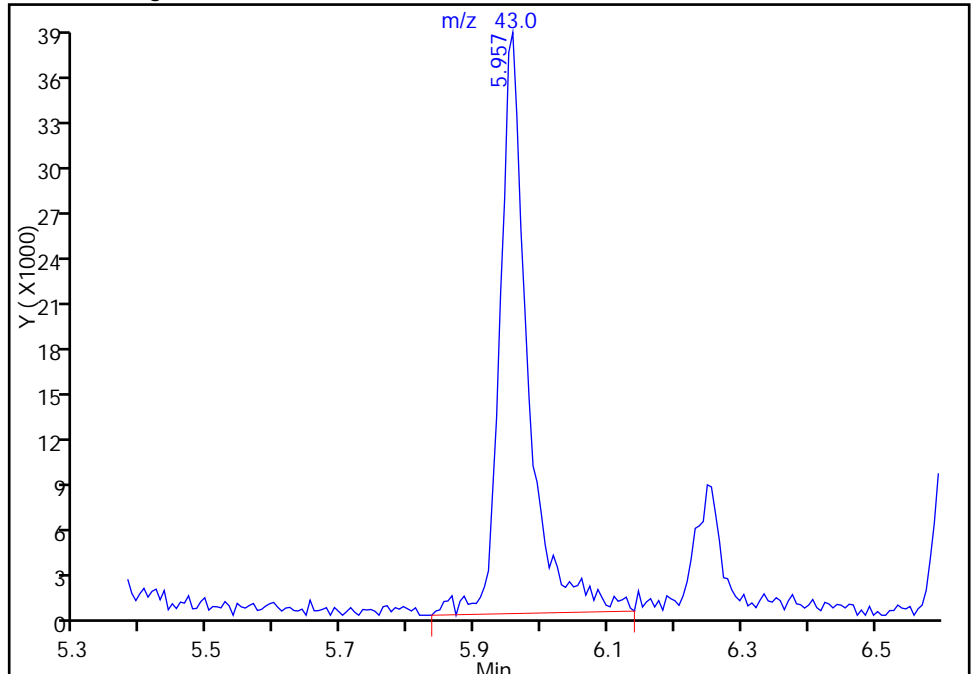
RT: 5.96
Area: 106772
Amount: 76.312258
Amount Units: ng

Processing Integration Results



RT: 5.96
Area: 114174
Amount: 81.602627
Amount Units: ng

Manual Integration Results



Reviewer: journetp, 17-Oct-2015 10:34:04
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

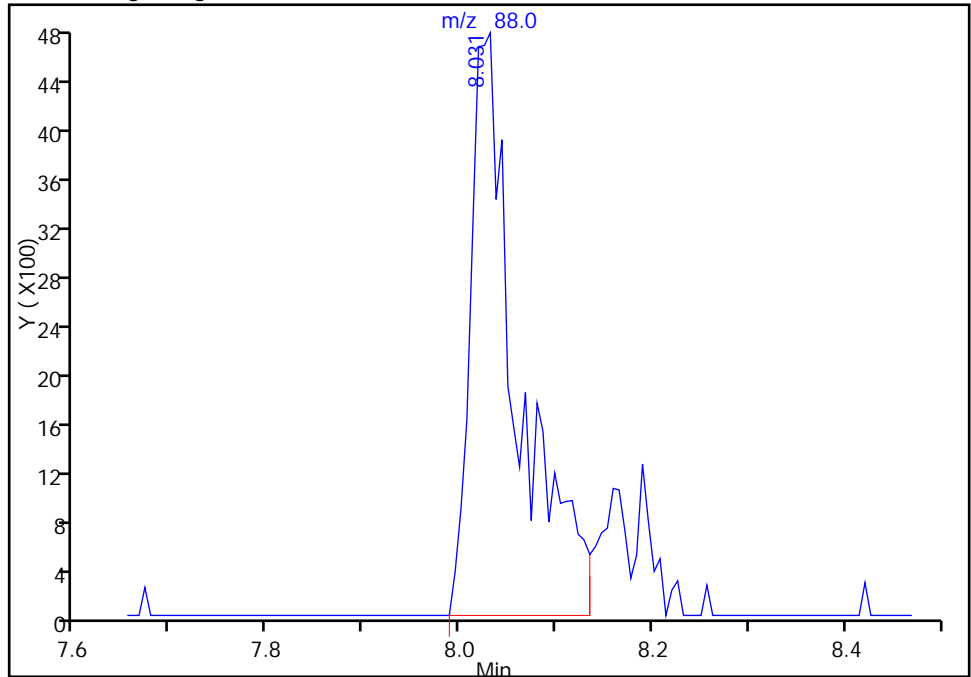
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017002.D
Injection Date: 17-Oct-2015 10:09:30 Instrument ID: CHHP5
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

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

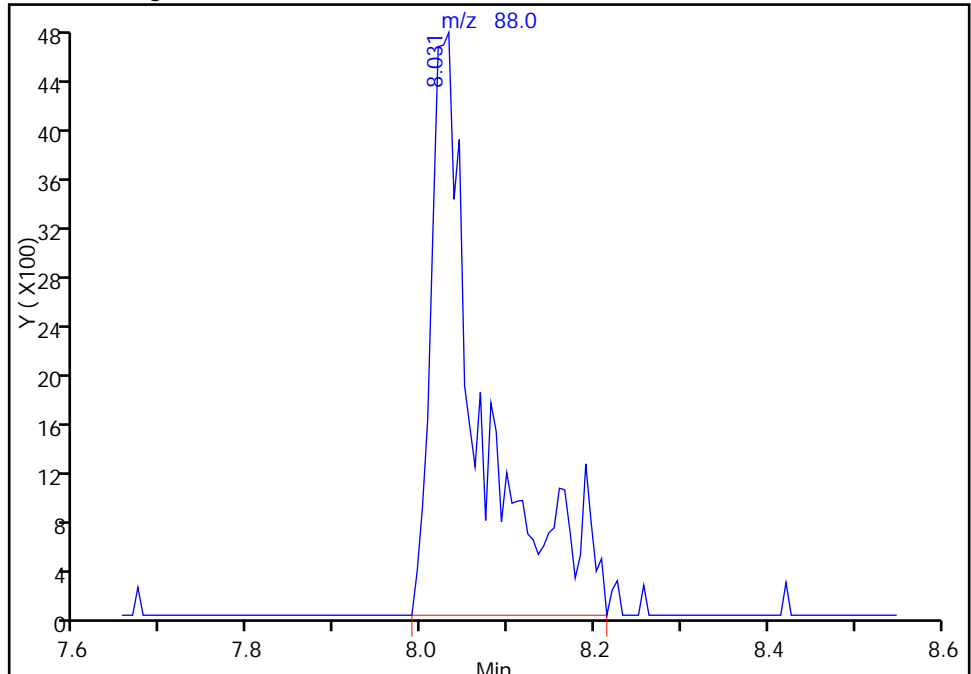
RT: 8.03
Area: 16190
Amount: 786.3975
Amount Units: ng

Processing Integration Results



RT: 8.03
Area: 19235
Amount: 934.3024
Amount Units: ng

Manual Integration Results



Reviewer: journetp, 17-Oct-2015 10:34:04
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-157435/2 Calibration Date: 10/19/2015 10:09
 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: 51019002.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	0.1551	0.0100	18.8	20.0	-6.1	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019002.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 19-Oct-2015 10:09:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 180-0009083-002
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub12
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 19-Oct-2015 11:26:49 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK002

First Level Reviewer: fergusond

Date: 19-Oct-2015 10:47:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.273	4.273	0.000	0	105084	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.284	7.284	0.000	97	335302	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.387	10.387	0.000	91	74792	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.729	12.729	0.000	95	113437	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.554	6.554	0.000	94	83375	50.0	50.6	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	0	126236	50.0	55.8	
\$ 7 Toluene-d8 (Surr)	98	8.939	8.939	0.000	95	335242	50.0	58.1	
\$ 8 4-Bromofluorobenzene (Surr	95	11.573	11.573	0.000	89	116628	50.0	53.6	
11 Dichlorodifluoromethane	85	1.614	1.614	0.000	99	96371	50.0	50.9	
12 Chloromethane	50	1.766	1.766	0.000	98	111957	50.0	40.3	
13 Vinyl chloride	62	1.900	1.900	0.000	82	96224	50.0	39.0	
14 Butadiene	39	1.937	1.937	0.000	98	124912	50.0	42.9	
15 Bromomethane	94	2.253	2.253	0.000	91	37913	50.0	37.8	
16 Chloroethane	64	2.387	2.387	0.000	98	50599	50.0	34.0	
17 Dichlorofluoromethane	67	2.661	2.661	0.000	95	133780	50.0	42.4	
18 Trichlorofluoromethane	101	2.697	2.697	0.000	79	124845	50.0	52.8	
20 Ethyl ether	59	3.044	3.044	0.000	95	91973	50.0	42.0	
21 Acrolein	56	3.233	3.233	0.000	96	45497	150.0	139.5	
22 1,1-Dichloroethene	96	3.354	3.354	0.000	95	92061	50.0	49.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.409	3.409	0.000	93	94528	50.0	47.8	
24 Acetone	43	3.433	3.433	0.000	97	71265	100.0	105.3	
25 Iodomethane	142	3.537	3.537	0.000	98	139514	50.0	50.1	
26 Carbon disulfide	76	3.634	3.634	0.000	100	245114	50.0	56.5	
28 3-Chloro-1-propene	76	3.932	3.932	0.000	87	52073	50.0	49.2	
30 Methyl acetate	43	3.944	3.944	0.000	100	518338	250.0	256.4	
31 Methylene Chloride	84	4.145	4.145	0.000	94	105079	50.0	47.6	
32 2-Methyl-2-propanol	59	4.407	4.407	0.000	88	66170	500.0	559.5	
33 Acrylonitrile	53	4.522	4.522	0.000	98	496849	500.0	506.5	
34 trans-1,2-Dichloroethene	96	4.571	4.571	0.000	87	102318	50.0	50.5	
35 Methyl tert-butyl ether	73	4.583	4.583	0.000	93	230013	50.0	49.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.991	4.991	0.000	94	177227	50.0	52.1	
37 1,1-Dichloroethane	63	5.204	5.204	0.000	97	196144	50.0	49.1	
38 Vinyl acetate	43	5.246	5.246	0.000	97	171683	50.0	57.3	
44 2,2-Dichloropropane	77	5.940	5.940	0.000	65	93623	50.0	58.5	
45 cis-1,2-Dichloroethene	96	5.946	5.946	0.000	86	103087	50.0	47.6	
46 2-Butanone (MEK)	43	5.958	5.958	0.000	69	109242	100.0	107.5	
49 Chlorobromomethane	128	6.232	6.232	0.000	88	44080	50.0	46.3	
51 Tetrahydrofuran	42	6.250	6.250	0.000	87	72720	100.0	89.2	
52 Chloroform	83	6.384	6.384	0.000	97	178668	50.0	51.8	
53 1,1,1-Trichloroethane	97	6.548	6.548	0.000	95	136487	50.0	53.5	
54 Cyclohexane	56	6.621	6.621	0.000	95	216305	50.0	50.7	
56 Carbon tetrachloride	117	6.718	6.718	0.000	95	119709	50.0	55.1	
55 1,1-Dichloropropene	75	6.724	6.724	0.000	88	143776	50.0	51.0	
57 Isobutyl alcohol	41	6.925	6.925	0.000	82	83526	1250.0	1308.1	
58 Benzene	78	6.943	6.943	0.000	97	410729	50.0	49.7	
59 1,2-Dichloroethane	62	7.023	7.023	0.000	96	156796	50.0	54.8	
62 n-Heptane	43	7.308	7.308	0.000	96	169914	50.0	55.0	
64 Trichloroethene	130	7.680	7.680	0.000	96	95516	50.0	47.2	
66 Methylcyclohexane	83	7.917	7.917	0.000	98	157998	50.0	49.6	
67 1,2-Dichloropropane	63	7.947	7.947	0.000	92	105396	50.0	48.6	
70 1,4-Dioxane	88	8.020	8.020	0.000	84	13214	1000.0	883.5	M
68 Dibromomethane	93	8.038	8.038	0.000	94	50672	50.0	46.0	
71 Dichlorobromomethane	83	8.227	8.227	0.000	97	119294	50.0	54.8	
73 2-Chloroethyl vinyl ether	63	8.525	8.525	0.000	91	104001	100.0	93.9	
74 cis-1,3-Dichloropropene	75	8.671	8.671	0.000	86	126308	50.0	49.5	
75 4-Methyl-2-pentanone (MIBK)	43	8.823	8.823	0.000	99	206504	100.0	112.1	
76 Toluene	91	9.006	9.006	0.000	97	411714	50.0	55.6	
77 trans-1,3-Dichloropropene	75	9.255	9.255	0.000	96	104952	50.0	54.3	
78 Ethyl methacrylate	69	9.310	9.310	0.000	92	94132	50.0	50.4	
79 1,1,2-Trichloroethane	97	9.444	9.444	0.000	95	74973	50.0	53.2	
80 Tetrachloroethene	164	9.517	9.517	0.000	96	81904	50.0	57.0	
81 1,3-Dichloropropane	76	9.602	9.602	0.000	97	136215	50.0	52.1	
82 2-Hexanone	43	9.657	9.657	0.000	98	158510	100.0	119.2	
84 Chlorodibromomethane	129	9.821	9.821	0.000	92	65008	50.0	53.3	
85 Ethylene Dibromide	107	9.930	9.930	0.000	100	72431	50.0	53.4	
86 3-Chlorobenzotrifluoride	180	10.387	10.387	0.000	87	137905	50.0	58.0	
87 Chlorobenzene	112	10.417	10.417	0.000	91	244808	50.0	51.3	
88 4-Chlorobenzotrifluoride	180	10.478	10.478	0.000	96	136352	50.0	60.6	
89 1,1,1,2-Tetrachloroethane	131	10.514	10.514	0.000	92	84344	50.0	54.3	
90 Ethylbenzene	106	10.514	10.514	0.000	99	134038	50.0	53.0	
91 m-Xylene & p-Xylene	106	10.648	10.648	0.000	0	170971	50.0	55.2	
92 o-Xylene	106	11.032	11.032	0.000	98	149655	50.0	50.8	
93 Styrene	104	11.050	11.050	0.000	93	280150	50.0	57.4	
94 Bromoform	173	11.232	11.232	0.000	95	40857	50.0	58.7	
96 2-Chlorobenzotrifluoride	180	11.299	11.299	0.000	95	137387	50.0	58.7	
97 Isopropylbenzene	105	11.397	11.397	0.000	97	421802	50.0	58.5	
99 1,1,2,2-Tetrachloroethane	83	11.713	11.713	0.000	76	99448	50.0	52.3	
100 Bromobenzene	156	11.713	11.713	0.000	94	102311	50.0	52.5	
102 trans-1,4-Dichloro-2-buten	53	11.749	11.749	0.000	70	31118	50.0	44.2	
101 1,2,3-Trichloropropane	110	11.768	11.768	0.000	90	35728	50.0	55.6	
103 N-Propylbenzene	120	11.816	11.816	0.000	99	110907	50.0	49.8	
104 2-Chlorotoluene	126	11.901	11.901	0.000	94	97921	50.0	51.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.968	11.968	0.000	96	100489	50.0	51.6	
106 1,3,5-Trimethylbenzene	105	11.999	11.999	0.000	96	354465	50.0	56.3	
107 4-Chlorotoluene	126	12.029	12.029	0.000	98	100532	50.0	48.2	
108 tert-Butylbenzene	119	12.309	12.309	0.000	94	271094	50.0	52.9	
110 1,2,4-Trimethylbenzene	105	12.370	12.370	0.000	99	353175	50.0	56.0	
111 1,2-dichloro-4-(trifluorom	214	12.412	12.412	0.000	98	111821	50.0	63.6	
112 sec-Butylbenzene	105	12.534	12.534	0.000	96	404037	50.0	55.9	
113 1,3-Dichlorobenzene	146	12.650	12.650	0.000	97	187801	50.0	54.2	
114 4-Isopropyltoluene	119	12.692	12.692	0.000	97	334260	50.0	54.7	
115 1,4-Dichlorobenzene	146	12.759	12.759	0.000	95	193600	50.0	53.7	
116 2,4-Dichloro-1-(trifluorom	214	12.777	12.777	0.000	96	98946	50.0	60.7	
118 2,5-Dichlorobenzotrifluori	214	12.826	12.826	0.000	0	108364	50.0	61.5	
120 n-Butylbenzene	91	13.100	13.100	0.000	99	278285	50.0	53.2	
121 1,2-Dichlorobenzene	146	13.112	13.112	0.000	94	167323	50.0	51.6	
122 1,2-Dibromo-3-Chloropropan	75	13.903	13.903	0.000	75	15147	50.0	56.9	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.049	14.049	0.000	0	264798	150.0	143.1	
125 2,3- & 3,4- Dichlorotoluen	125	14.469	14.469	0.000	0	159201	100.0	90.2	
126 1,2,4-Trichlorobenzene	180	14.724	14.724	0.000	91	59133	50.0	46.9	
127 Hexachlorobutadiene	225	14.876	14.876	0.000	96	32570	50.0	53.6	
128 Naphthalene	128	14.992	14.992	0.000	98	126020	50.0	38.9	
129 1,2,3-Trichlorobenzene	180	15.217	15.217	0.000	92	49174	50.0	48.2	
131 2,4,5-Trichlorotoluene	159	15.996	15.996	0.000	0	14179	50.0	38.5	
130 2,3,6-Trichlorotoluene	159	16.093	16.093	0.000	97	14510	50.0	42.7	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-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 133 Xylenes, Total	106				0		100.0	106.0	
S 134 1,2-Dichloroethene, Total	96				0		100.0	98.0	
S 135 1,3-Dichloropropene, Total	1				0		100.0	103.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWAcro1stRe_00002	Amount Added: 6.00	Units: uL	
voaWEEpri Res_00006	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00148	Amount Added: 2.00	Units: uL	
voaWKetmix2nd_00002	Amount Added: 2.00	Units: uL	
voaWVA1stRest_00001	Amount Added: 2.00	Units: uL	
voaW2-Clepri_00003	Amount Added: 2.00	Units: uL	
VOA8260INT_00043	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00043	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019002.D

Injection Date: 19-Oct-2015 10:09:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

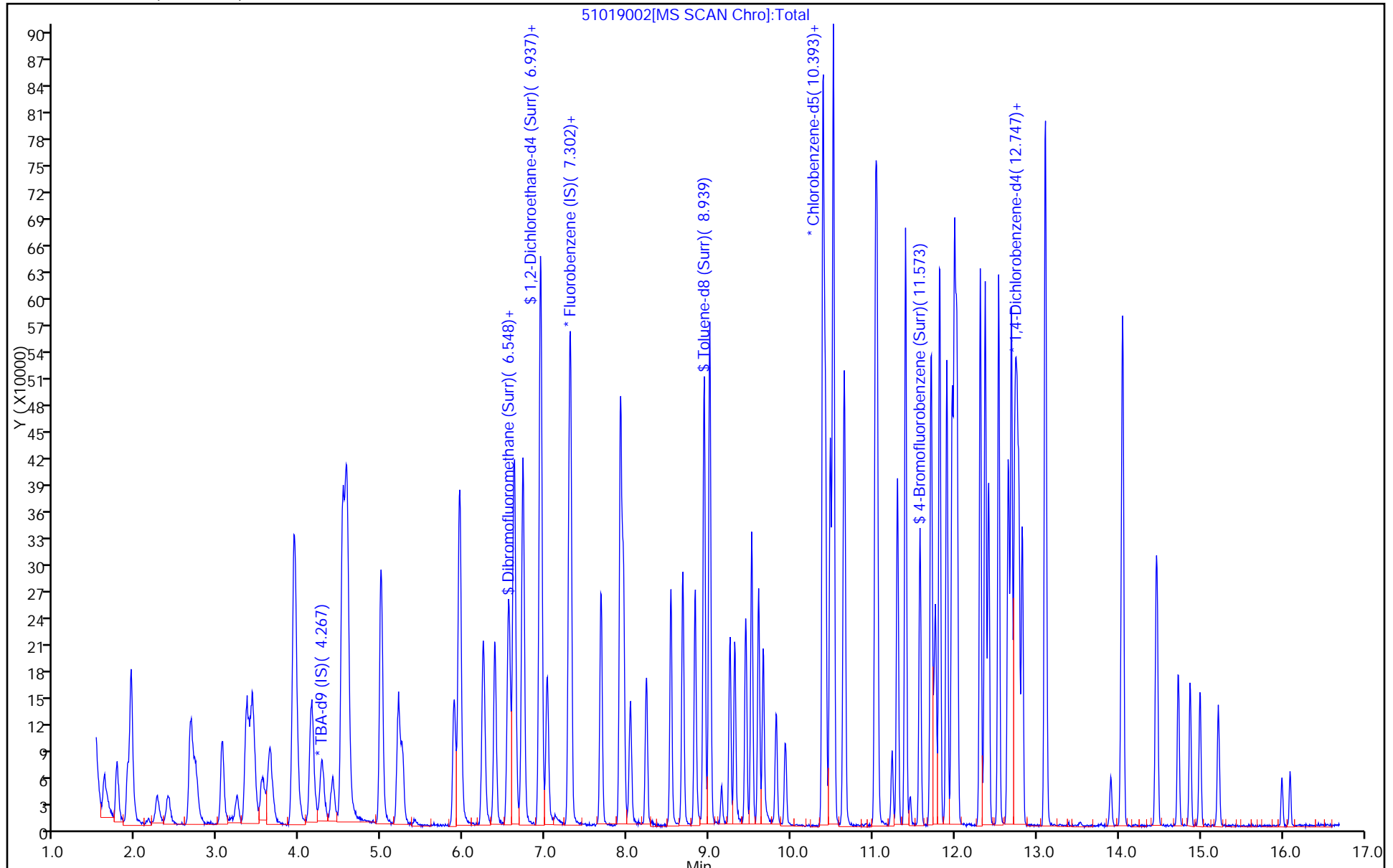
Dil. Factor: 1.0000

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.: 180-48564-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-157435/2 Calibration Date: 10/19/2015 10:09
 Instrument ID: CHHP5 Calib Start Date: 08/26/2015 15:04
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/26/2015 17:52
 Lab File ID: 51019002.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	0.2825	0.2874	0.1000	10.2	10.0	1.7	20.0
Chloromethane	Ave	0.4148	0.3339	0.1000	8.05	10.0	-19.5	20.0
Vinyl chloride	Ave	0.3679	0.2870	0.1000	7.80	10.0	-22.0*	20.0
1,3-Butadiene	Ave	0.4345	0.3725	0.0100	8.57	10.0	-14.3	20.0
Bromomethane	Ave	0.1497	0.1131	0.0500	7.55	10.0	-24.5*	20.0
Chloroethane	Ave	0.2220	0.1509	0.0500	6.80	10.0	-32.0*	20.0
Dichlorofluoromethane	Ave	0.4709	0.3990	0.0100	8.47	10.0	-15.3	20.0
Trichlorofluoromethane	Ave	0.3523	0.3723	0.1000	10.6	10.0	5.7	20.0
Ethyl ether	Ave	0.3265	0.2743	0.0100	8.40	10.0	-16.0	20.0
Acrolein	Ave	0.0486	0.0452	0.0100	27.9	30.0	-7.0	20.0
1,1-Dichloroethene	Ave	0.2785	0.2746	0.1000	9.86	10.0	-1.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2951	0.2819	0.1000	9.55	10.0	-4.5	20.0
Acetone	Ave	0.1009	0.1063	0.0500	21.1	20.0	5.3	20.0
Iodomethane	Ave	0.4150	0.4161	0.0100	10.0	10.0	0.3	20.0
Carbon disulfide	Ave	0.6466	0.7310	0.1000	11.3	10.0	13.0	20.0
Allyl chloride	Ave	0.1577	0.1553	0.0100	9.85	10.0	-1.5	20.0
Methyl acetate	Ave	0.3015	0.3092	0.1000	51.3	50.0	2.6	20.0
Methylene Chloride	Lin2		0.3134	0.1000	9.53	10.0	-4.7	20.0
tert-Butyl alcohol	Ave	1.126	1.259	0.0100	112	100	11.9	20.0
Acrylonitrile	Ave	0.1463	0.1482	0.0100	101	100	1.3	20.0
trans-1,2-Dichloroethene	Ave	0.3024	0.3052	0.1000	10.1	10.0	0.9	20.0
Methyl tert-butyl ether	Ave	0.6999	0.6860	0.1000	9.80	10.0	-2.0	20.0
Hexane	Ave	0.5076	0.5286	0.0100	10.4	10.0	4.1	20.0
1,1-Dichloroethane	Ave	0.5957	0.5850	0.2000	9.82	10.0	-1.8	20.0
Vinyl acetate	Ave	0.4469	0.5120	0.0100	11.5	10.0	14.6	20.0
2,2-Dichloropropane	Ave	0.2387	0.2792	0.0100	11.7	10.0	17.0	20.0
cis-1,2-Dichloroethene	Ave	0.3230	0.3075	0.1000	9.52	10.0	-4.8	20.0
2-Butanone (MEK)	Ave	0.1516	0.1629	0.0500	21.5	20.0	7.5	20.0
Bromochloromethane	Ave	0.1418	0.1315	0.0100	9.27	10.0	-7.3	20.0
Tetrahydrofuran	Ave	0.1216	0.1084	0.0100	17.8	20.0	-10.8	20.0
Chloroform	Ave	0.5146	0.5329	0.2000	10.4	10.0	3.5	20.0
1,1,1-Trichloroethane	Ave	0.3805	0.4071	0.1000	10.7	10.0	7.0	20.0
Cyclohexane	Ave	0.6367	0.6451	0.1000	10.1	10.0	1.3	20.0
Carbon tetrachloride	Ave	0.3240	0.3570	0.1000	11.0	10.0	10.2	20.0
1,1-Dichloropropene	Ave	0.4208	0.4288	0.0100	10.2	10.0	1.9	20.0
Isobutyl alcohol	Ave	0.0095	0.0100	0.0100	262	250	4.6	20.0
Benzene	Ave	1.233	1.225	0.5000	9.94	10.0	-0.6	20.0
1,2-Dichloroethane	Ave	0.4264	0.4676	0.1000	11.0	10.0	9.7	20.0
n-Heptane	Ave	0.4611	0.5068	0.0100	11.0	10.0	9.9	20.0
Trichloroethene	Ave	0.3016	0.2849	0.2000	9.44	10.0	-5.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-157435/2 Calibration Date: 10/19/2015 10:09
 Instrument ID: CHHP5 Calib Start Date: 08/26/2015 15:04
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/26/2015 17:52
 Lab File ID: 51019002.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
Methylcyclohexane	Ave	0.4753	0.4712	0.1000	9.91	10.0	-0.9	20.0
1,2-Dichloropropane	Ave	0.3235	0.3143	0.1000	9.72	10.0	-2.8	20.0
1,4-Dioxane	Ave	0.0022	0.0020*	0.0100	177	200	-11.7	20.0
Dibromomethane	Ave	0.1642	0.1511	0.0100	9.20	10.0	-8.0	20.0
Bromodichloromethane	Ave	0.3249	0.3558	0.2000	11.0	10.0	9.5	20.0
cis-1,3-Dichloropropene	Ave	0.3807	0.3767	0.2000	9.90	10.0	-1.0	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.232	1.381	0.1000	22.4	20.0	12.1	20.0
Toluene	Ave	4.950	5.505	0.4000	11.1	10.0	11.2	20.0
trans-1,3-Dichloropropene	Ave	1.292	1.403	0.1000	10.9	10.0	8.6	20.0
Ethyl methacrylate	Ave	1.249	1.259	0.0100	10.1	10.0	0.8	20.0
1,1,2-Trichloroethane	Ave	0.9416	1.002	0.1000	10.6	10.0	6.5	20.0
Tetrachloroethene	Ave	0.9609	1.095	0.2000	11.4	10.0	14.0	20.0
1,3-Dichloropropane	Ave	1.748	1.821	0.0100	10.4	10.0	4.2	20.0
2-Hexanone	Ave	0.8893	1.060	0.1000	23.8	20.0	19.2	20.0
Dibromochloromethane	Ave	0.8152	0.8692	0.1000	10.7	10.0	6.6	20.0
1,2-Dibromoethane (EDB)	Ave	0.9073	0.9684	0.1000	10.7	10.0	6.7	20.0
3-Chlorobenzotrifluoride	Ave	1.591	1.844	0.0100	11.6	10.0	15.9	20.0
Chlorobenzene	Ave	3.187	3.273	0.5000	10.3	10.0	2.7	20.0
4-Chlorobenzotrifluoride	Ave	1.504	1.823	0.0100	12.1	10.0	21.2*	20.0
1,1,1,2-Tetrachloroethane	Ave	1.039	1.128	0.0100	10.9	10.0	8.5	20.0
Ethylbenzene	Ave	1.690	1.792	0.1000	10.6	10.0	6.1	20.0
m-Xylene & p-Xylene	Ave	2.072	2.286	0.1000	11.0	10.0	10.3	20.0
o-Xylene	Ave	1.969	2.001	0.3000	10.2	10.0	1.6	20.0
Styrene	Ave	3.262	3.746	0.3000	11.5	10.0	14.8	20.0
Bromoform	Ave	0.4652	0.5463	0.1000	11.7	10.0	17.4	20.0
2-Chlorobenzotrifluoride	Ave	1.565	1.837	0.0100	11.7	10.0	17.4	20.0
Isopropylbenzene	Ave	4.822	5.640	0.1000	11.7	10.0	17.0	20.0
1,1,2,2-Tetrachloroethane	Ave	1.270	1.330	0.3000	10.5	10.0	4.7	20.0
Bromobenzene	Ave	0.8583	0.9019	0.0100	10.5	10.0	5.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3103	0.2743	0.0100	8.84	10.0	-11.6	20.0
1,2,3-Trichloropropane	Ave	0.2831	0.3150	0.0100	11.1	10.0	11.3	20.0
N-Propylbenzene	Ave	0.9825	0.9777	0.0100	9.95	10.0	-0.5	20.0
2-Chlorotoluene	Ave	0.8351	0.8632	0.0100	10.3	10.0	3.4	20.0
3-Chlorotoluene	Ave	0.8583	0.8859	0.0100	10.3	10.0	3.2	20.0
1,3,5-Trimethylbenzene	Ave	2.776	3.125	0.0100	11.3	10.0	12.6	20.0
4-Chlorotoluene	Ave	0.9190	0.8862	0.0100	9.64	10.0	-3.6	20.0
tert-Butylbenzene	Ave	2.257	2.390	0.0100	10.6	10.0	5.9	20.0
1,2,4-Trimethylbenzene	Ave	2.781	3.113	0.0100	11.2	10.0	11.9	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.7754	0.9858	0.0100	12.7	10.0	27.1*	20.0
sec-Butylbenzene	Ave	3.187	3.562	0.0100	11.2	10.0	11.8	20.0
1,3-Dichlorobenzene	Ave	1.528	1.656	0.6000	10.8	10.0	8.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-157435/2 Calibration Date: 10/19/2015 10:09
 Instrument ID: CHHP5 Calib Start Date: 08/26/2015 15:04
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/26/2015 17:52
 Lab File ID: 51019002.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
4-Isopropyltoluene	Ave	2.696	2.947	0.0100	10.9	10.0	9.3	20.0
1,4-Dichlorobenzene	Ave	1.590	1.707	0.5000	10.7	10.0	7.4	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7185	0.8723	0.0100	12.1	10.0	21.4*	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.7765	0.9553	0.0100	12.3	10.0	23.0*	20.0
n-Butylbenzene	Ave	2.307	2.453	0.0100	10.6	10.0	6.3	20.0
1,2-Dichlorobenzene	Ave	1.428	1.475	0.4000	10.3	10.0	3.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1173	0.1335	0.0500	11.4	10.0	13.9	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	0.8157	0.7781	0.0100	28.6	30.0	-4.6	20.0
2,3- & 3,4- Dichlorotoluene	Ave	0.7778	0.7017	0.0100	18.0	20.0	-9.8	20.0
1,2,4-Trichlorobenzene	Ave	0.5557	0.5213	0.2000	9.38	10.0	-6.2	20.0
Hexachlorobutadiene	Ave	0.2677	0.2871	0.0100	10.7	10.0	7.3	20.0
Naphthalene	Ave	1.428	1.111	0.0100	7.78	10.0	-22.2*	20.0
1,2,3-Trichlorobenzene	Ave	0.4498	0.4335	0.0100	9.64	10.0	-3.6	20.0
2,4,5-Trichlorotoluene	Ave	0.1623	0.1250	0.0100	7.70	10.0	-23.0*	20.0
2,3,6-Trichlorotoluene	Ave	0.1496	0.1279	0.0100	8.55	10.0	-14.5	20.0
Dibromofluoromethane (Surr)	Ave	0.2455	0.2487		10.1	10.0	1.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3373	0.3765		11.2	10.0	11.6	20.0
Toluene-d8 (Surr)	Ave	3.857	4.482		11.6	10.0	16.2	20.0
4-Bromofluorobenzene (Surr)	Ave	1.455	1.559		10.7	10.0	7.2	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019002.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 19-Oct-2015 10:09:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 180-0009083-002
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub12
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 19-Oct-2015 11:26:49 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK002

First Level Reviewer: fergusond

Date: 19-Oct-2015 10:47:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.273	4.273	0.000	0	105084	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.284	7.284	0.000	97	335302	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.387	10.387	0.000	91	74792	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.729	12.729	0.000	95	113437	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.554	6.554	0.000	94	83375	50.0	50.6	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	0	126236	50.0	55.8	
\$ 7 Toluene-d8 (Surr)	98	8.939	8.939	0.000	95	335242	50.0	58.1	
\$ 8 4-Bromofluorobenzene (Surr	95	11.573	11.573	0.000	89	116628	50.0	53.6	
11 Dichlorodifluoromethane	85	1.614	1.614	0.000	99	96371	50.0	50.9	
12 Chloromethane	50	1.766	1.766	0.000	98	111957	50.0	40.3	
13 Vinyl chloride	62	1.900	1.900	0.000	82	96224	50.0	39.0	
14 Butadiene	39	1.937	1.937	0.000	98	124912	50.0	42.9	
15 Bromomethane	94	2.253	2.253	0.000	91	37913	50.0	37.8	
16 Chloroethane	64	2.387	2.387	0.000	98	50599	50.0	34.0	
17 Dichlorofluoromethane	67	2.661	2.661	0.000	95	133780	50.0	42.4	
18 Trichlorofluoromethane	101	2.697	2.697	0.000	79	124845	50.0	52.8	
20 Ethyl ether	59	3.044	3.044	0.000	95	91973	50.0	42.0	
21 Acrolein	56	3.233	3.233	0.000	96	45497	150.0	139.5	
22 1,1-Dichloroethene	96	3.354	3.354	0.000	95	92061	50.0	49.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.409	3.409	0.000	93	94528	50.0	47.8	
24 Acetone	43	3.433	3.433	0.000	97	71265	100.0	105.3	
25 Iodomethane	142	3.537	3.537	0.000	98	139514	50.0	50.1	
26 Carbon disulfide	76	3.634	3.634	0.000	100	245114	50.0	56.5	
28 3-Chloro-1-propene	76	3.932	3.932	0.000	87	52073	50.0	49.2	
30 Methyl acetate	43	3.944	3.944	0.000	100	518338	250.0	256.4	
31 Methylene Chloride	84	4.145	4.145	0.000	94	105079	50.0	47.6	
32 2-Methyl-2-propanol	59	4.407	4.407	0.000	88	66170	500.0	559.5	
33 Acrylonitrile	53	4.522	4.522	0.000	98	496849	500.0	506.5	
34 trans-1,2-Dichloroethene	96	4.571	4.571	0.000	87	102318	50.0	50.5	
35 Methyl tert-butyl ether	73	4.583	4.583	0.000	93	230013	50.0	49.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.991	4.991	0.000	94	177227	50.0	52.1	
37 1,1-Dichloroethane	63	5.204	5.204	0.000	97	196144	50.0	49.1	
38 Vinyl acetate	43	5.246	5.246	0.000	97	171683	50.0	57.3	
44 2,2-Dichloropropane	77	5.940	5.940	0.000	65	93623	50.0	58.5	
45 cis-1,2-Dichloroethene	96	5.946	5.946	0.000	86	103087	50.0	47.6	
46 2-Butanone (MEK)	43	5.958	5.958	0.000	69	109242	100.0	107.5	
49 Chlorobromomethane	128	6.232	6.232	0.000	88	44080	50.0	46.3	
51 Tetrahydrofuran	42	6.250	6.250	0.000	87	72720	100.0	89.2	
52 Chloroform	83	6.384	6.384	0.000	97	178668	50.0	51.8	
53 1,1,1-Trichloroethane	97	6.548	6.548	0.000	95	136487	50.0	53.5	
54 Cyclohexane	56	6.621	6.621	0.000	95	216305	50.0	50.7	
56 Carbon tetrachloride	117	6.718	6.718	0.000	95	119709	50.0	55.1	
55 1,1-Dichloropropene	75	6.724	6.724	0.000	88	143776	50.0	51.0	
57 Isobutyl alcohol	41	6.925	6.925	0.000	82	83526	1250.0	1308.1	
58 Benzene	78	6.943	6.943	0.000	97	410729	50.0	49.7	
59 1,2-Dichloroethane	62	7.023	7.023	0.000	96	156796	50.0	54.8	
62 n-Heptane	43	7.308	7.308	0.000	96	169914	50.0	55.0	
64 Trichloroethene	130	7.680	7.680	0.000	96	95516	50.0	47.2	
66 Methylcyclohexane	83	7.917	7.917	0.000	98	157998	50.0	49.6	
67 1,2-Dichloropropane	63	7.947	7.947	0.000	92	105396	50.0	48.6	
70 1,4-Dioxane	88	8.020	8.020	0.000	84	13214	1000.0	883.5	M
68 Dibromomethane	93	8.038	8.038	0.000	94	50672	50.0	46.0	
71 Dichlorobromomethane	83	8.227	8.227	0.000	97	119294	50.0	54.8	
73 2-Chloroethyl vinyl ether	63	8.525	8.525	0.000	91	104001	100.0	93.9	
74 cis-1,3-Dichloropropene	75	8.671	8.671	0.000	86	126308	50.0	49.5	
75 4-Methyl-2-pentanone (MIBK)	43	8.823	8.823	0.000	99	206504	100.0	112.1	
76 Toluene	91	9.006	9.006	0.000	97	411714	50.0	55.6	
77 trans-1,3-Dichloropropene	75	9.255	9.255	0.000	96	104952	50.0	54.3	
78 Ethyl methacrylate	69	9.310	9.310	0.000	92	94132	50.0	50.4	
79 1,1,2-Trichloroethane	97	9.444	9.444	0.000	95	74973	50.0	53.2	
80 Tetrachloroethene	164	9.517	9.517	0.000	96	81904	50.0	57.0	
81 1,3-Dichloropropane	76	9.602	9.602	0.000	97	136215	50.0	52.1	
82 2-Hexanone	43	9.657	9.657	0.000	98	158510	100.0	119.2	
84 Chlorodibromomethane	129	9.821	9.821	0.000	92	65008	50.0	53.3	
85 Ethylene Dibromide	107	9.930	9.930	0.000	100	72431	50.0	53.4	
86 3-Chlorobenzotrifluoride	180	10.387	10.387	0.000	87	137905	50.0	58.0	
87 Chlorobenzene	112	10.417	10.417	0.000	91	244808	50.0	51.3	
88 4-Chlorobenzotrifluoride	180	10.478	10.478	0.000	96	136352	50.0	60.6	
89 1,1,1,2-Tetrachloroethane	131	10.514	10.514	0.000	92	84344	50.0	54.3	
90 Ethylbenzene	106	10.514	10.514	0.000	99	134038	50.0	53.0	
91 m-Xylene & p-Xylene	106	10.648	10.648	0.000	0	170971	50.0	55.2	
92 o-Xylene	106	11.032	11.032	0.000	98	149655	50.0	50.8	
93 Styrene	104	11.050	11.050	0.000	93	280150	50.0	57.4	
94 Bromoform	173	11.232	11.232	0.000	95	40857	50.0	58.7	
96 2-Chlorobenzotrifluoride	180	11.299	11.299	0.000	95	137387	50.0	58.7	
97 Isopropylbenzene	105	11.397	11.397	0.000	97	421802	50.0	58.5	
99 1,1,2,2-Tetrachloroethane	83	11.713	11.713	0.000	76	99448	50.0	52.3	
100 Bromobenzene	156	11.713	11.713	0.000	94	102311	50.0	52.5	
102 trans-1,4-Dichloro-2-buten	53	11.749	11.749	0.000	70	31118	50.0	44.2	
101 1,2,3-Trichloropropane	110	11.768	11.768	0.000	90	35728	50.0	55.6	
103 N-Propylbenzene	120	11.816	11.816	0.000	99	110907	50.0	49.8	
104 2-Chlorotoluene	126	11.901	11.901	0.000	94	97921	50.0	51.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.968	11.968	0.000	96	100489	50.0	51.6	
106 1,3,5-Trimethylbenzene	105	11.999	11.999	0.000	96	354465	50.0	56.3	
107 4-Chlorotoluene	126	12.029	12.029	0.000	98	100532	50.0	48.2	
108 tert-Butylbenzene	119	12.309	12.309	0.000	94	271094	50.0	52.9	
110 1,2,4-Trimethylbenzene	105	12.370	12.370	0.000	99	353175	50.0	56.0	
111 1,2-dichloro-4-(trifluorom	214	12.412	12.412	0.000	98	111821	50.0	63.6	
112 sec-Butylbenzene	105	12.534	12.534	0.000	96	404037	50.0	55.9	
113 1,3-Dichlorobenzene	146	12.650	12.650	0.000	97	187801	50.0	54.2	
114 4-Isopropyltoluene	119	12.692	12.692	0.000	97	334260	50.0	54.7	
115 1,4-Dichlorobenzene	146	12.759	12.759	0.000	95	193600	50.0	53.7	
116 2,4-Dichloro-1-(trifluorom	214	12.777	12.777	0.000	96	98946	50.0	60.7	
118 2,5-Dichlorobenzotrifluori	214	12.826	12.826	0.000	0	108364	50.0	61.5	
120 n-Butylbenzene	91	13.100	13.100	0.000	99	278285	50.0	53.2	
121 1,2-Dichlorobenzene	146	13.112	13.112	0.000	94	167323	50.0	51.6	
122 1,2-Dibromo-3-Chloropropan	75	13.903	13.903	0.000	75	15147	50.0	56.9	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.049	14.049	0.000	0	264798	150.0	143.1	
125 2,3- & 3,4- Dichlorotoluen	125	14.469	14.469	0.000	0	159201	100.0	90.2	
126 1,2,4-Trichlorobenzene	180	14.724	14.724	0.000	91	59133	50.0	46.9	
127 Hexachlorobutadiene	225	14.876	14.876	0.000	96	32570	50.0	53.6	
128 Naphthalene	128	14.992	14.992	0.000	98	126020	50.0	38.9	
129 1,2,3-Trichlorobenzene	180	15.217	15.217	0.000	92	49174	50.0	48.2	
131 2,4,5-Trichlorotoluene	159	15.996	15.996	0.000	0	14179	50.0	38.5	
130 2,3,6-Trichlorotoluene	159	16.093	16.093	0.000	97	14510	50.0	42.7	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-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 133 Xylenes, Total	106				0		100.0	106.0	
S 134 1,2-Dichloroethene, Total	96				0		100.0	98.0	
S 135 1,3-Dichloropropene, Total	1				0		100.0	103.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWAcro1stRe_00002	Amount Added: 6.00	Units: uL	
voaWEEpri Res_00006	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00148	Amount Added: 2.00	Units: uL	
voaWKetmix2nd_00002	Amount Added: 2.00	Units: uL	
voaWVA1stRest_00001	Amount Added: 2.00	Units: uL	
voaW2-Clepri_00003	Amount Added: 2.00	Units: uL	
VOA8260INT_00043	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00043	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019002.D

Injection Date: 19-Oct-2015 10:09:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

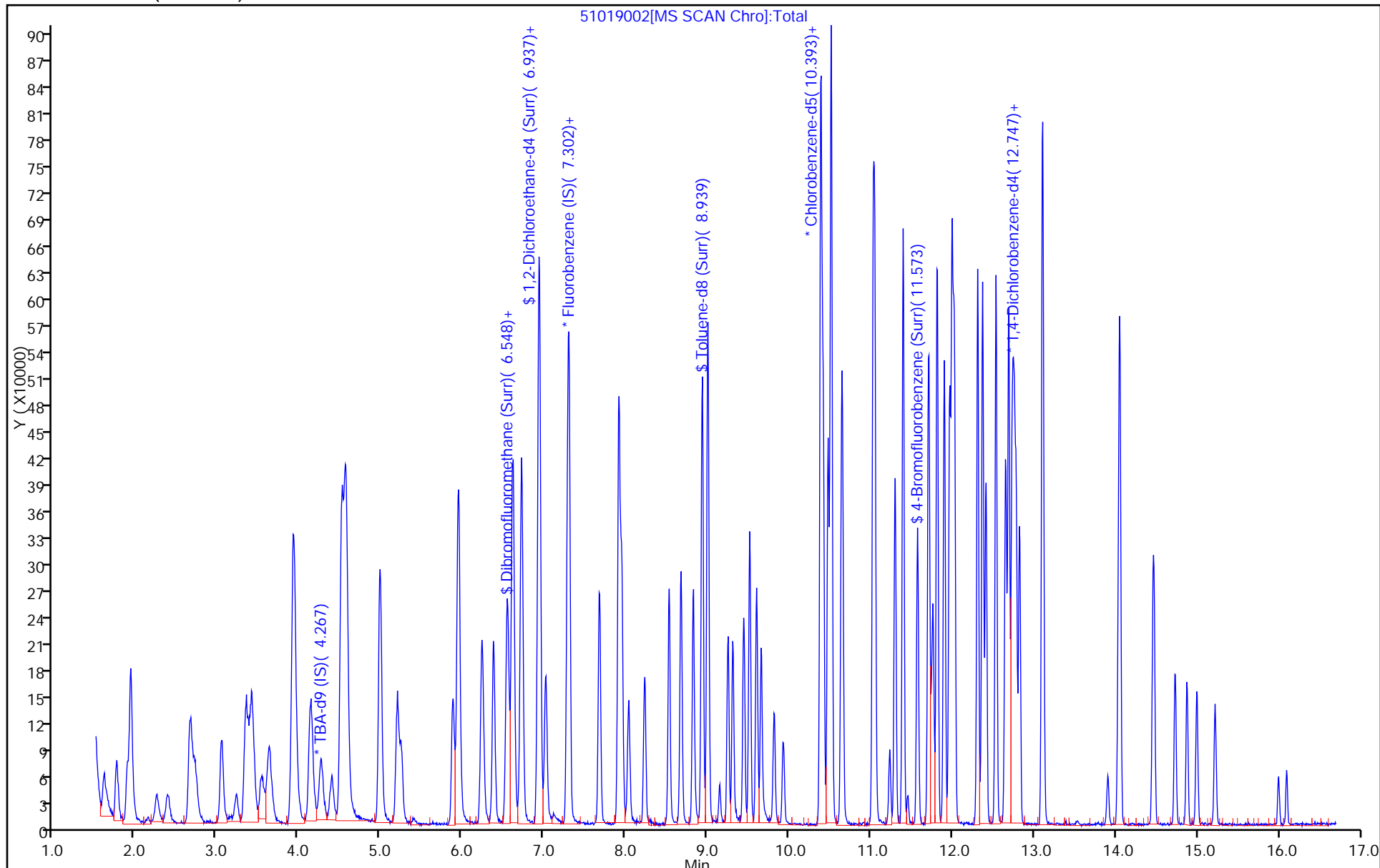
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



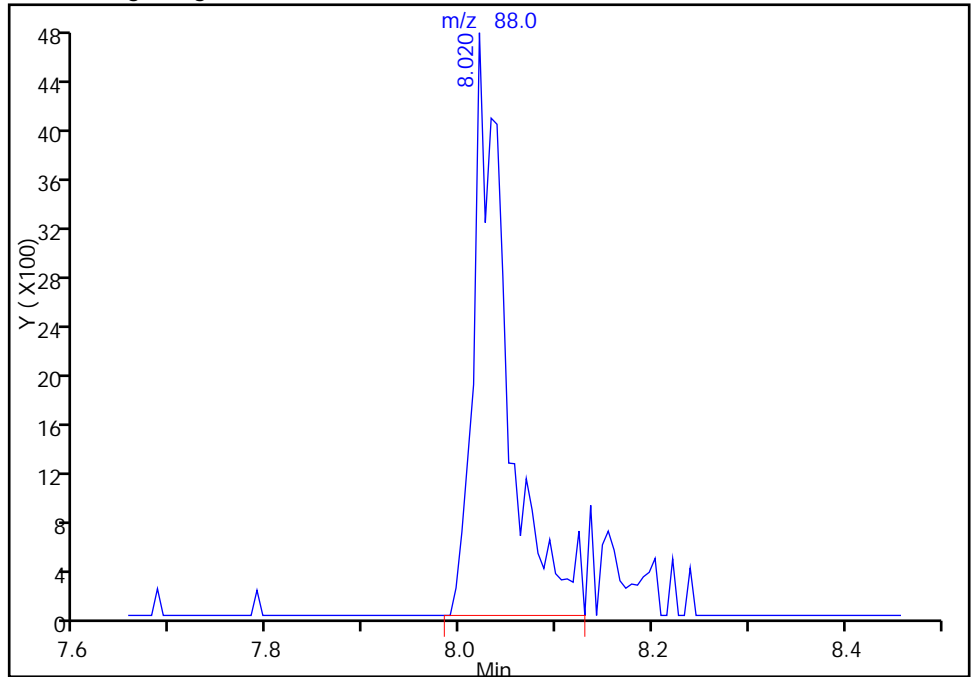
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019002.D
Injection Date: 19-Oct-2015 10:09:30 Instrument ID: CHHP5
Lims ID: CCVIS
Client ID:
Operator ID: 001562 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

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

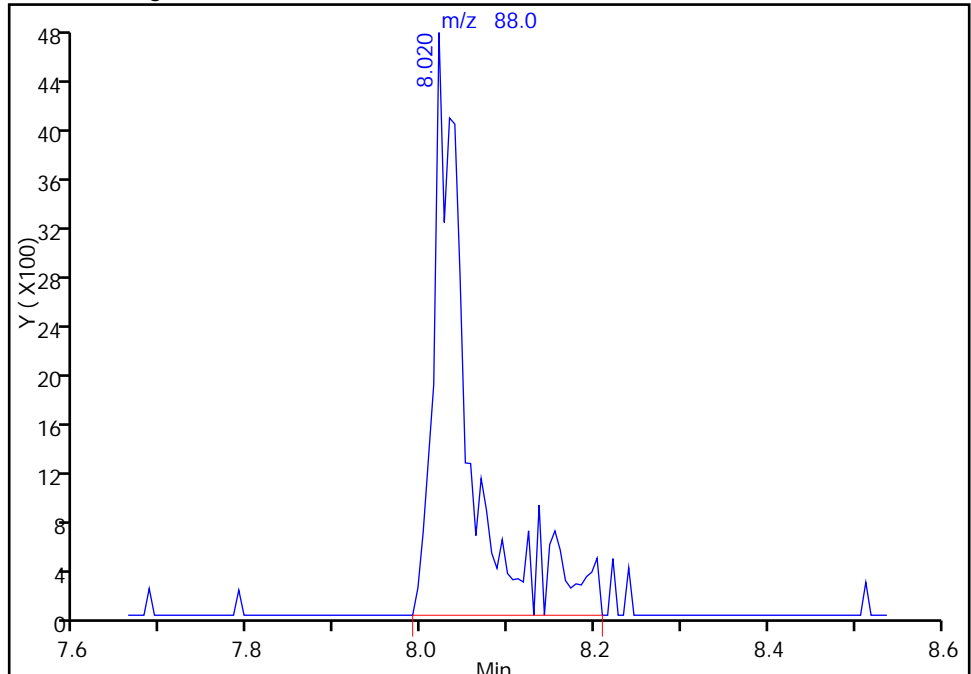
RT: 8.02
Area: 11447
Amount: 765.3452
Amount Units: ng

Processing Integration Results



RT: 8.02
Area: 13214
Amount: 883.4866
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 19-Oct-2015 10:47:22
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826007.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 26-Aug-2015 14:01:30 ALS Bottle#: 4 Worklist Smp#: 7
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: BFB
 Misc. Info.: 180-0008300-007
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Aug-2015 11:26:53 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK048

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
\$ 10 BFB	95	8.366	8.366	0.000	0	128431	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

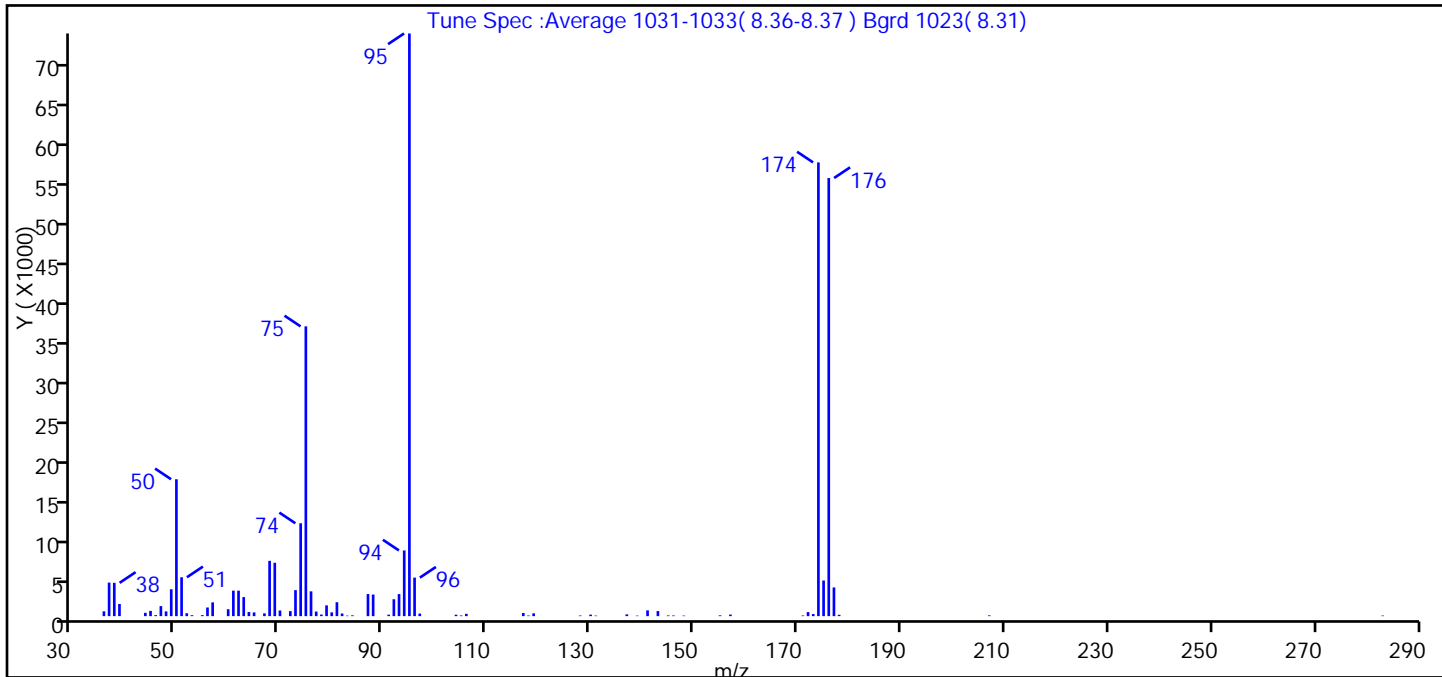
Reagents:

VOABFB25_00065 Amount Added: 1.00 Units: uL

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826007.D
 Injection Date: 26-Aug-2015 14:01:30 Instrument ID: CHHP5
 Lims ID: BFB
 Client ID:
 Operator ID: 001562 ALS Bottle#: 4 Worklist Smp#: 7
 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	23.5
75	30 to 60% of m/z 95	49.7
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	77.9
175	5 to 9% of m/z 174	6.1 (7.9)
176	Greater than 95% but less than 101% of m/z 174	75.2 (96.6)
177	5 to 9% of m/z 176	4.9 (6.6)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826007.D\MSVOA_LL_CHHP5.rsl\spectr
 Injection Date: 26-Aug-2015 14:01:30
 Spectrum: Tune Spec :Average 1031-1033(8.36-8.37) Bgrd 1023(8.31)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 77

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	611	63.00	2411	87.00	2793	141.00	728
37.00	4245	64.00	518	88.00	2731	143.00	645
38.00	4214	65.00	470	91.00	185	145.00	90
39.00	1541	67.00	350	92.00	2139	146.00	83
44.00	422	68.00	6998	93.00	2793	148.00	69
45.00	664	69.00	6752	94.00	8313	155.00	103
46.00	131	70.00	715	95.00	73720	157.00	200
47.00	1270	72.00	635	96.00	4875	171.00	82
48.00	602	73.00	3289	97.00	325	172.00	516
49.00	3402	74.00	11753	104.00	180	173.00	266
50.00	17320	75.00	36664	105.00	86	174.00	57408
51.00	4919	76.00	3139	106.00	295	175.00	4509
52.00	366	77.00	580	117.00	395	176.00	55432
53.00	119	78.00	199	118.00	78	177.00	3632
55.00	129	79.00	1363	119.00	354	178.00	170
56.00	1095	80.00	480	128.00	80	207.00	97
57.00	1741	81.00	1763	130.00	191	283.00	74
60.00	873	82.00	333	131.00	68		
61.00	3226	83.00	66	137.00	226		
62.00	3220	84.00	102	139.00	67		

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826007.D

Injection Date: 26-Aug-2015 14:01:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: BFB

Worklist Smp#: 7

Client ID:

Injection Vol: 5.0 mL

Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015004.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 15-Oct-2015 12:12:30 ALS Bottle#: 1 Worklist Smp#: 4
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: BFB
 Misc. Info.: 180-0009022-004
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 15-Oct-2015 13:56:12 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK008

First Level Reviewer: fergusond Date: 15-Oct-2015 12:24:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
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\$ 10 BFB	95	8.368	8.368	0.000	0	124424	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

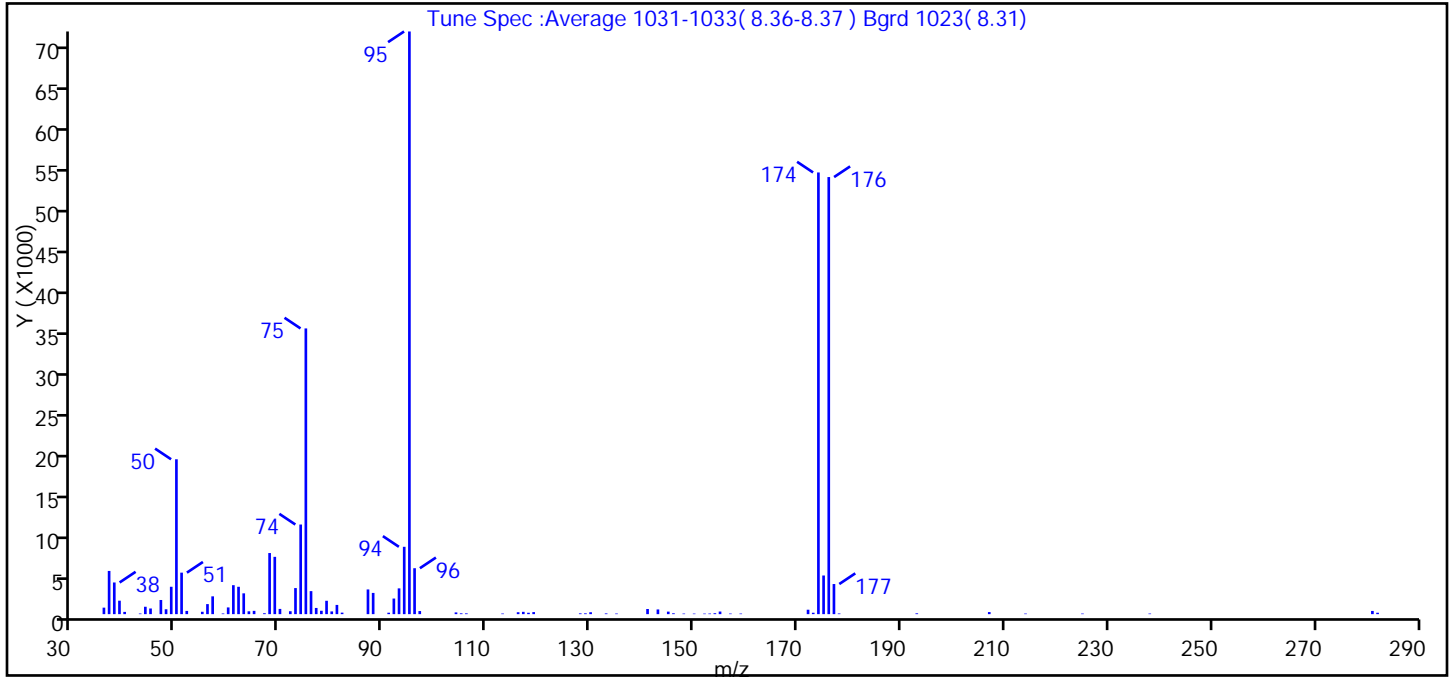
Reagents:

VOABFB25_00067 Amount Added: 1.00 Units: uL

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015004.D
 Injection Date: 15-Oct-2015 12:12:30 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	26.6
75	30 to 60% of m/z 95	49.0
96	5 to 9% of m/z 95	7.9
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	75.8
175	5 to 9% of m/z 174	6.6 (8.7)
176	Greater than 95% but less than 101% of m/z 174	75.0 (99.0)
177	5 to 9% of m/z 176	5.2 (6.9)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015004.D\MSVOA_LL_CHHP5.rsl\spectr
Injection Date: 15-Oct-2015 12:12:30
Spectrum: Tune Spec :Average 1031-1033(8.36-8.37) Bgrd 1023(8.31)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 87

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	800	64.00	350	94.00	8297	150.00	67
37.00	5323	65.00	406	95.00	71784	152.00	67
38.00	3901	67.00	113	96.00	5658	153.00	75
39.00	1658	68.00	7528	97.00	381	154.00	115
40.00	278	69.00	7060	104.00	213	155.00	321
43.00	78	70.00	644	105.00	102	157.00	73
44.00	910	72.00	358	106.00	95	159.00	72
45.00	697	73.00	3211	113.00	76	172.00	545
47.00	1744	74.00	11041	116.00	236	173.00	173
48.00	602	75.00	35200	117.00	285	174.00	54416
49.00	3372	76.00	2836	118.00	172	175.00	4761
50.00	19080	77.00	763	119.00	252	176.00	53848
51.00	5113	78.00	416	128.00	97	177.00	3710
52.00	396	79.00	1646	129.00	101	178.00	83
55.00	292	80.00	336	130.00	235	193.00	101
56.00	1237	81.00	1136	133.00	90	207.00	255
57.00	2193	82.00	187	135.00	75	214.00	71
59.00	82	87.00	3043	141.00	633	225.00	71
60.00	828	88.00	2615	143.00	579	238.00	73
61.00	3568	91.00	176	145.00	311	281.00	394
62.00	3371	92.00	1922	146.00	107	282.00	173
63.00	2563	93.00	3175	148.00	71		

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015004.D

Injection Date: 15-Oct-2015 12:12:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: BFB

Worklist Smp#: 4

Client ID:

Injection Vol: 5.0 mL

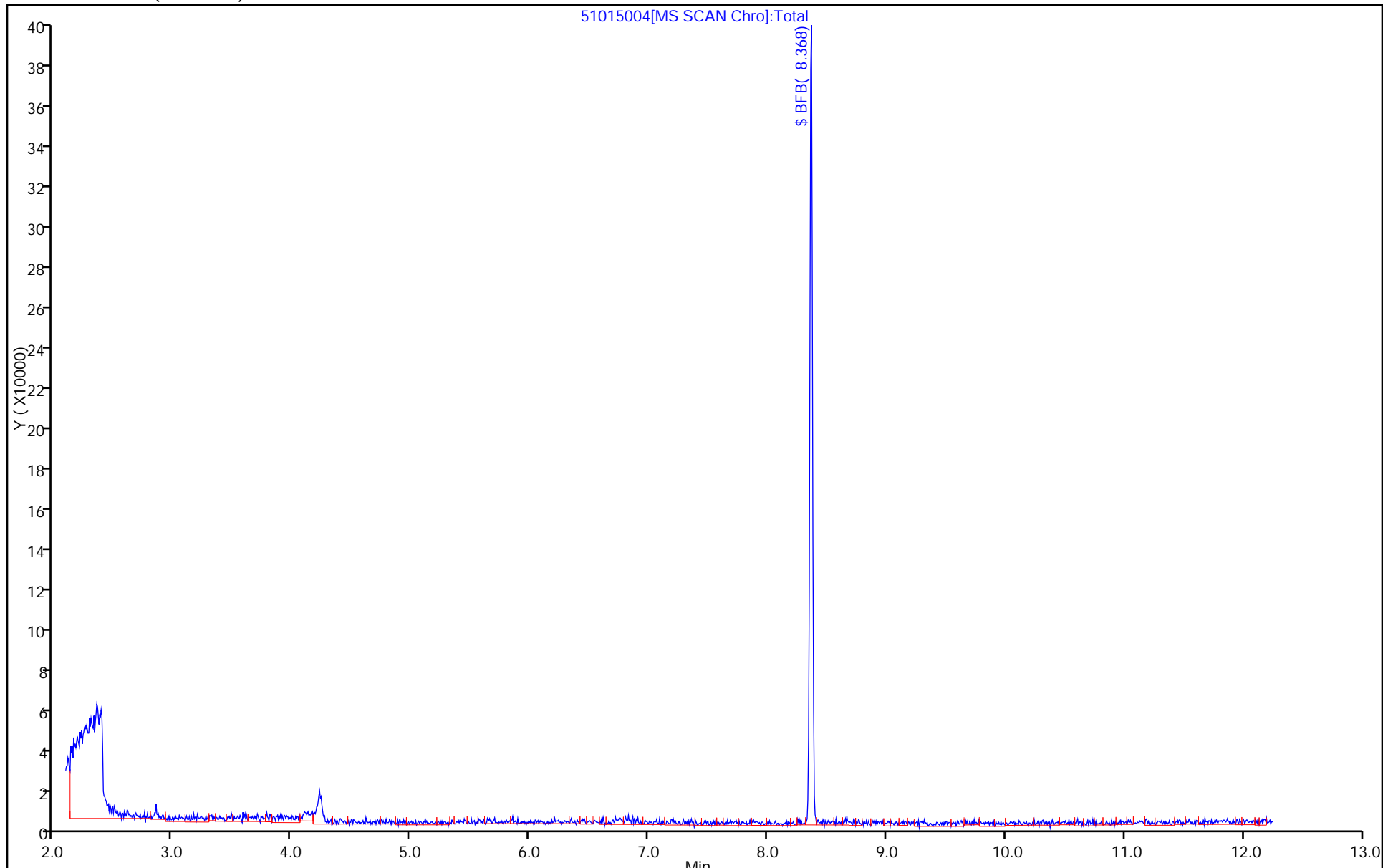
Dil. Factor: 1.0000

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: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016011.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 16-Oct-2015 14:25:30 ALS Bottle#: 3 Worklist Smp#: 11
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: BFB
 Misc. Info.: 180-0009043-011
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 16-Oct-2015 15:36:18 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK003

First Level Reviewer: fergusond Date: 16-Oct-2015 14:52:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
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\$ 10 BFB	95	8.366	8.366	0.000	0	80288	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

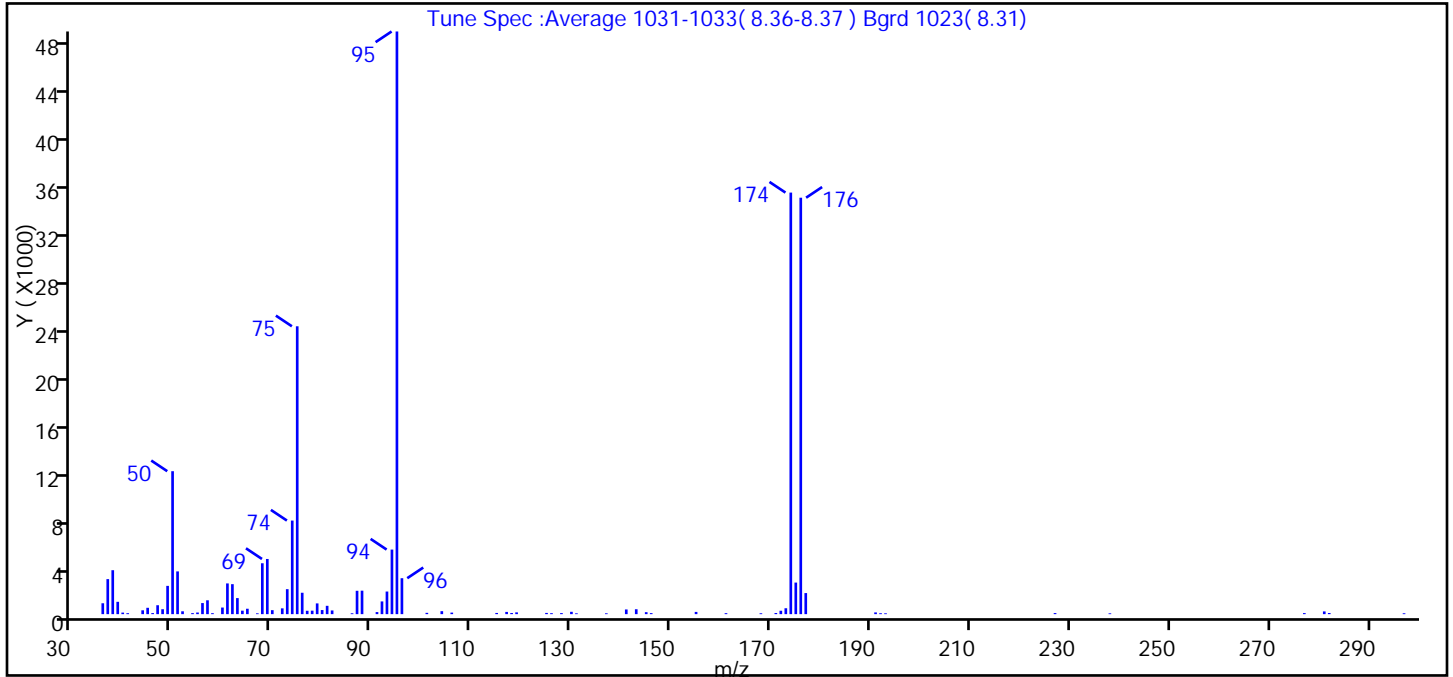
Reagents:

VOABFB25_00067 Amount Added: 1.00 Units: uL

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016011.D
 Injection Date: 16-Oct-2015 14:25:30 Instrument ID: CHHP5
 Lims ID: BFB
 Client ID:
 Operator ID: 001562 ALS Bottle#: 3 Worklist Smp#: 11
 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	24.5
75	30 to 60% of m/z 95	49.4
96	5 to 9% of m/z 95	6.2
173	Less than 2% of m/z 174	1.0 (1.4)
174	50 to 120% of m/z 95	72.3
175	5 to 9% of m/z 174	5.4 (7.5)
176	Greater than 95% but less than 101% of m/z 174	71.5 (98.8)
177	5 to 9% of m/z 176	3.6 (5.1)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016011.D\MSVOA_LL_CHHP5.rsl\spectr
Injection Date: 16-Oct-2015 14:25:30
Spectrum: Tune Spec :Average 1031-1033(8.36-8.37) Bgrd 1023(8.31)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 86

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	902	62.00	2484	91.00	172	146.00	86
37.00	2903	63.00	1331	92.00	1054	155.00	185
38.00	3641	64.00	288	93.00	1874	161.00	81
39.00	1021	65.00	448	94.00	5351	168.00	72
40.00	128	67.00	68	95.00	48288	171.00	95
41.00	79	68.00	4217	96.00	2978	172.00	282
44.00	318	69.00	4572	101.00	108	173.00	489
45.00	526	70.00	330	104.00	247	174.00	34936
46.00	89	72.00	480	106.00	128	175.00	2616
47.00	739	73.00	2070	115.00	99	176.00	34512
48.00	408	74.00	7755	117.00	185	177.00	1746
49.00	2343	75.00	23856	118.00	96	191.00	143
50.00	11846	76.00	1773	119.00	148	192.00	76
51.00	3542	77.00	279	125.00	101	193.00	69
52.00	237	78.00	289	126.00	81	227.00	89
54.00	85	79.00	890	128.00	87	238.00	68
55.00	135	80.00	339	130.00	194	277.00	87
56.00	918	81.00	690	131.00	68	281.00	226
57.00	1148	82.00	307	137.00	69	282.00	94
58.00	81	86.00	72	141.00	389	297.00	72
60.00	547	87.00	1935	143.00	407		
61.00	2546	88.00	1945	145.00	164		

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016011.D

Injection Date: 16-Oct-2015 14:25:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: BFB

Worklist Smp#: 11

Client ID:

Injection Vol: 5.0 mL

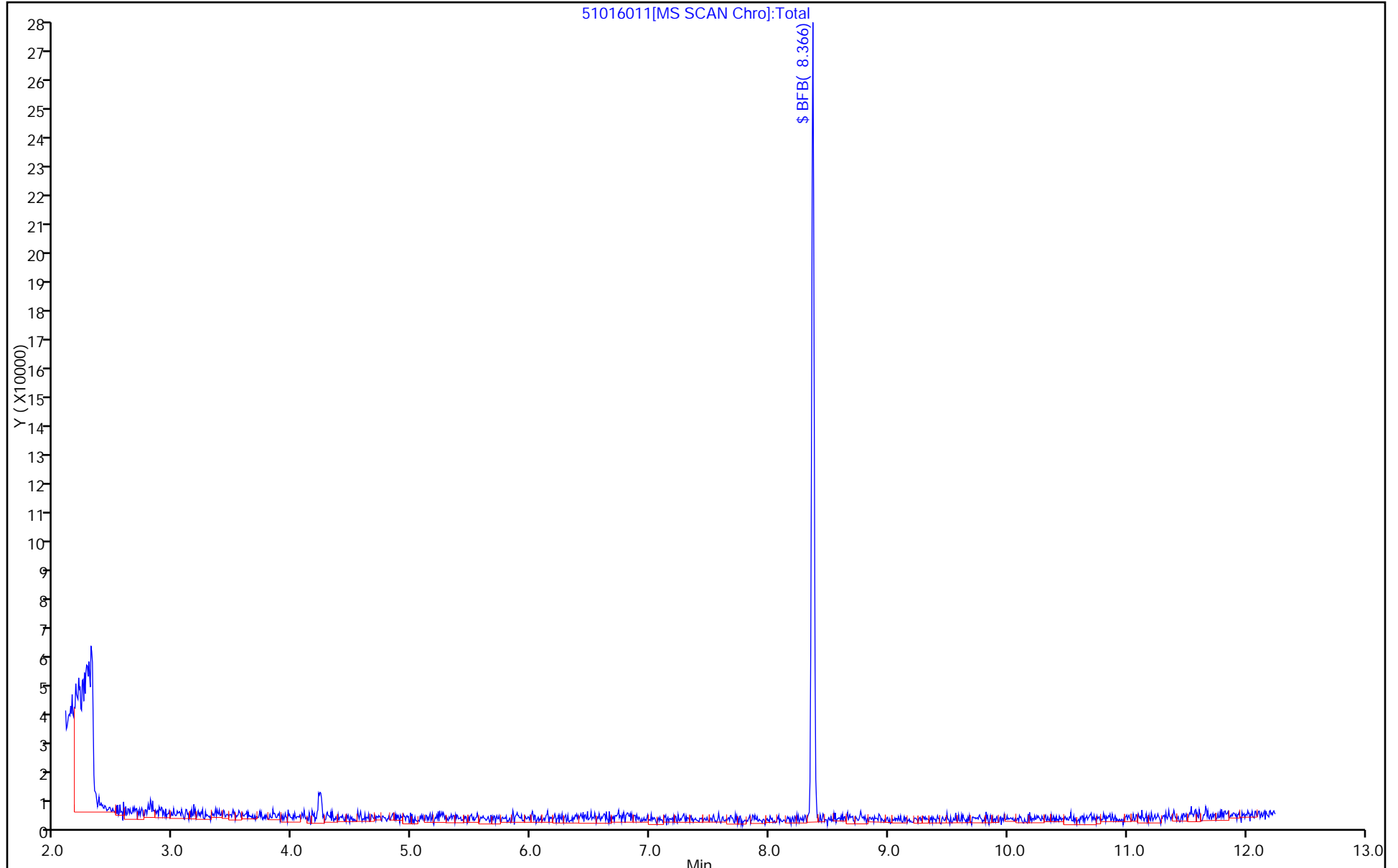
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017001.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 17-Oct-2015 09:32:30 ALS Bottle#: 31 Worklist Smp#: 1
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: BFB
 Misc. Info.: 180-0009055-001
 Operator ID: 034635 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 17-Oct-2015 17:48:23 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK051

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
\$ 10 BFB	95	8.368	8.368	0.000	0	559875	NR	NR	

QC Flag Legend

Processing Flags
 NR - Missing Quant Standard

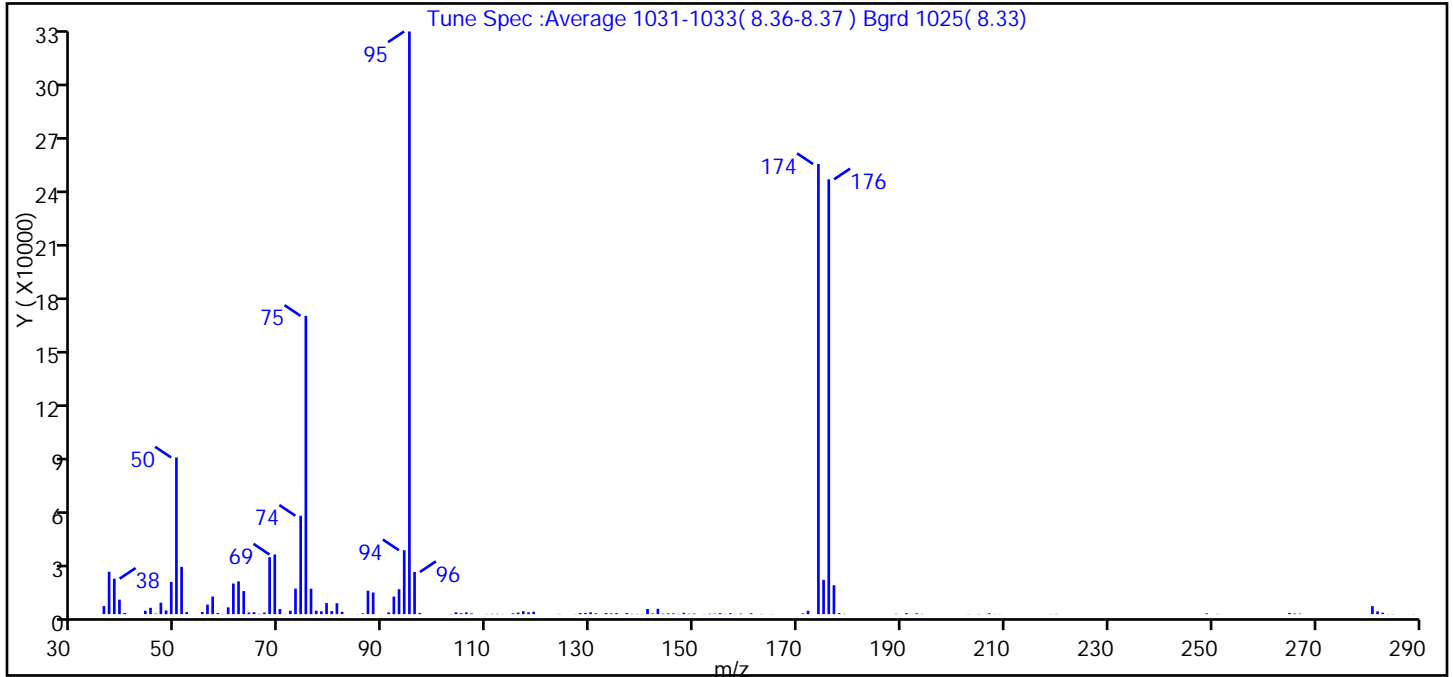
Reagents:

VOABFB25_00067 Amount Added: 1.00 Units: uL

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017001.D
 Injection Date: 17-Oct-2015 09:32:30 Instrument ID: CHHP5
 Lims ID: BFB
 Client ID:
 Operator ID: 034635 ALS Bottle#: 31 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	26.9
75	30 to 60% of m/z 95	51.2
96	5 to 9% of m/z 95	7.2
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	77.2
175	5 to 9% of m/z 174	5.9 (7.6)
176	Greater than 95% but less than 101% of m/z 174	74.6 (96.6)
177	5 to 9% of m/z 176	5.0 (6.6)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017001.D\MSVOA_LL_CHHP5.rsl\spectr
Injection Date: 17-Oct-2015 09:32:30
Spectrum: Tune Spec :Average 1031-1033(8.36-8.37) Bgrd 1025(8.33)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 133

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4486	74.00	54928	124.00	119	171.00	433
37.00	23664	75.00	166464	127.00	75	172.00	1901
38.00	19784	76.00	14192	128.00	648	174.00	251200
39.00	8081	77.00	1884	129.00	659	175.00	19144
40.00	639	78.00	1589	130.00	1019	176.00	242688
44.00	1874	79.00	6165	131.00	489	177.00	16120
45.00	3542	80.00	1710	133.00	612	178.00	553
46.00	306	81.00	6086	134.00	381	179.00	182
47.00	6393	82.00	1308	135.00	561	189.00	180
48.00	2085	85.00	71	137.00	591	191.00	581
49.00	17992	86.00	433	138.00	172	192.00	71
50.00	87448	87.00	13102	139.00	157	193.00	492
51.00	26360	88.00	12080	140.00	133	194.00	153
52.00	1131	91.00	932	141.00	2876	203.00	89
53.00	46	92.00	9808	142.00	383	205.00	130
55.00	1172	93.00	13888	143.00	2999	207.00	492
56.00	5339	94.00	35680	144.00	260	208.00	95
57.00	9841	95.00	325184	145.00	453	209.00	72
58.00	626	96.00	23512	146.00	424	219.00	68
59.00	132	97.00	666	147.00	185	220.00	140
60.00	3785	103.00	124	148.00	767	249.00	448
61.00	17080	104.00	1042	149.00	238	251.00	126
62.00	18272	105.00	523	150.00	338	265.00	629
63.00	12881	106.00	979	152.00	96	266.00	328
64.00	887	107.00	412	153.00	234	267.00	272
65.00	1066	110.00	113	154.00	247	281.00	4477
66.00	181	111.00	164	155.00	568	282.00	1523
67.00	852	112.00	187	156.00	144	283.00	800
68.00	31792	113.00	92	157.00	542	284.00	86
69.00	33280	115.00	460	158.00	88	285.00	88
70.00	2868	116.00	863	159.00	305	289.00	77
71.00	120	117.00	1638	161.00	503		
72.00	1876	118.00	1026	163.00	99		

Report Date: 17-Oct-2015 17:48:25

Chrom Revision: 2.2 08-Sep-2015 13:41:46

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017001.D\MSVOA_LL_CHHP5.rslt\spectr

Injection Date: 17-Oct-2015 09:32:30

Spectrum: Tune Spec :Average 1031-1033(8.36-8.37) Bgrd 1025(8.33)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 133

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	14249	119.00	1376	165.00	83		

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017001.D

Injection Date: 17-Oct-2015 09:32:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL

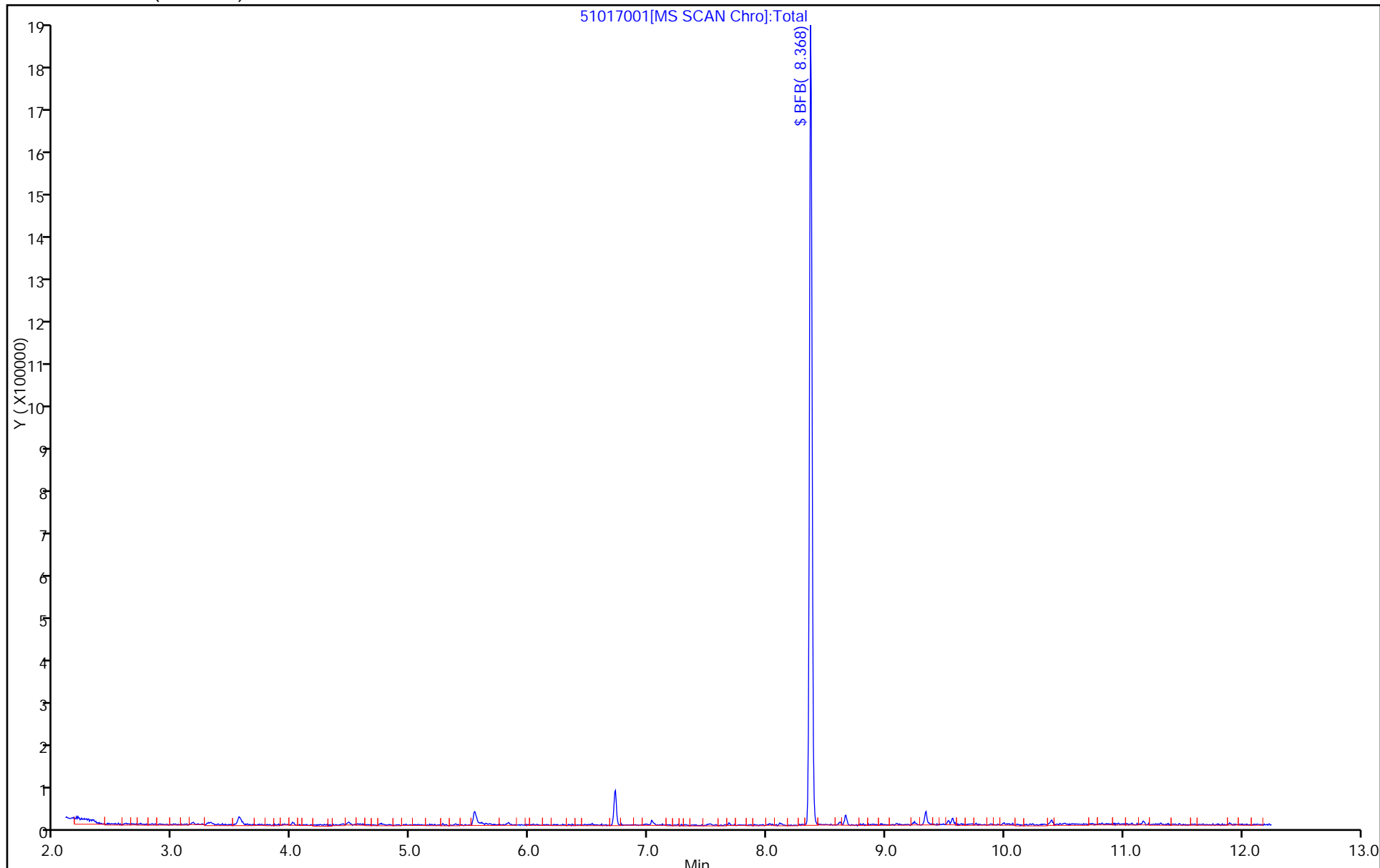
Dil. Factor: 1.0000

ALS Bottle#: 31

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019001.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 19-Oct-2015 09:26:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: BFB
 Misc. Info.: 180-0009083-001
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 19-Oct-2015 11:26:48 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK002

First Level Reviewer: fergusond Date: 19-Oct-2015 09:37:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
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\$ 10 BFB	95	8.374	8.374	0.000	0	45486	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

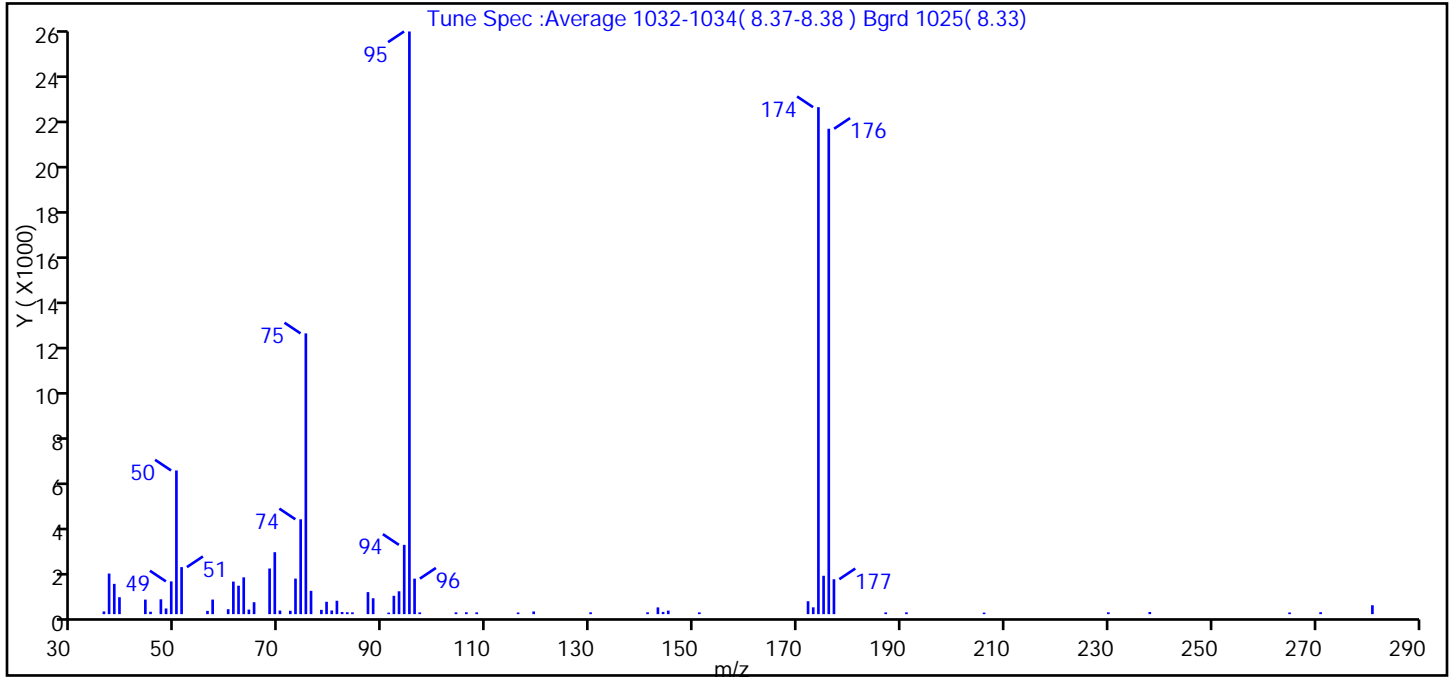
Reagents:

VOABFB25_00067 Amount Added: 1.00 Units: uL

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019001.D
 Injection Date: 19-Oct-2015 09:26:30 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	24.7
75	30 to 60% of m/z 95	48.2
96	5 to 9% of m/z 95	6.1
173	Less than 2% of m/z 174	1.2 (1.3)
174	50 to 120% of m/z 95	87.0
175	5 to 9% of m/z 174	6.6 (7.6)
176	Greater than 95% but less than 101% of m/z 174	83.3 (95.7)
177	5 to 9% of m/z 176	6.0 (7.2)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019001.D\MSVOA_LL_CHHP5.rsl\spectr

Injection Date: 19-Oct-2015 09:26:30

Spectrum: Tune Spec :Average 1032-1034(8.37-8.38) Bgrd 1025(8.33)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 68

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	118	64.00	199	87.00	964	144.00	98
37.00	1777	65.00	521	88.00	695	145.00	155
38.00	1325	68.00	1998	91.00	67	151.00	77
39.00	740	69.00	2711	92.00	803	172.00	565
44.00	636	70.00	158	93.00	1000	173.00	298
45.00	106	72.00	149	94.00	3032	174.00	22184
47.00	650	73.00	1556	95.00	25496	175.00	1679
48.00	248	74.00	4151	96.00	1554	176.00	21240
49.00	1433	75.00	12285	97.00	77	177.00	1528
50.00	6287	76.00	1020	104.00	77	187.00	77
51.00	2058	78.00	189	106.00	84	191.00	79
56.00	143	79.00	541	108.00	78	206.00	68
57.00	638	80.00	160	116.00	71	230.00	80
60.00	216	81.00	586	119.00	117	238.00	94
61.00	1424	82.00	94	130.00	79	265.00	73
62.00	1244	83.00	84	141.00	80	271.00	86
63.00	1611	84.00	78	143.00	295	281.00	389

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019001.D

Injection Date: 19-Oct-2015 09:26:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL

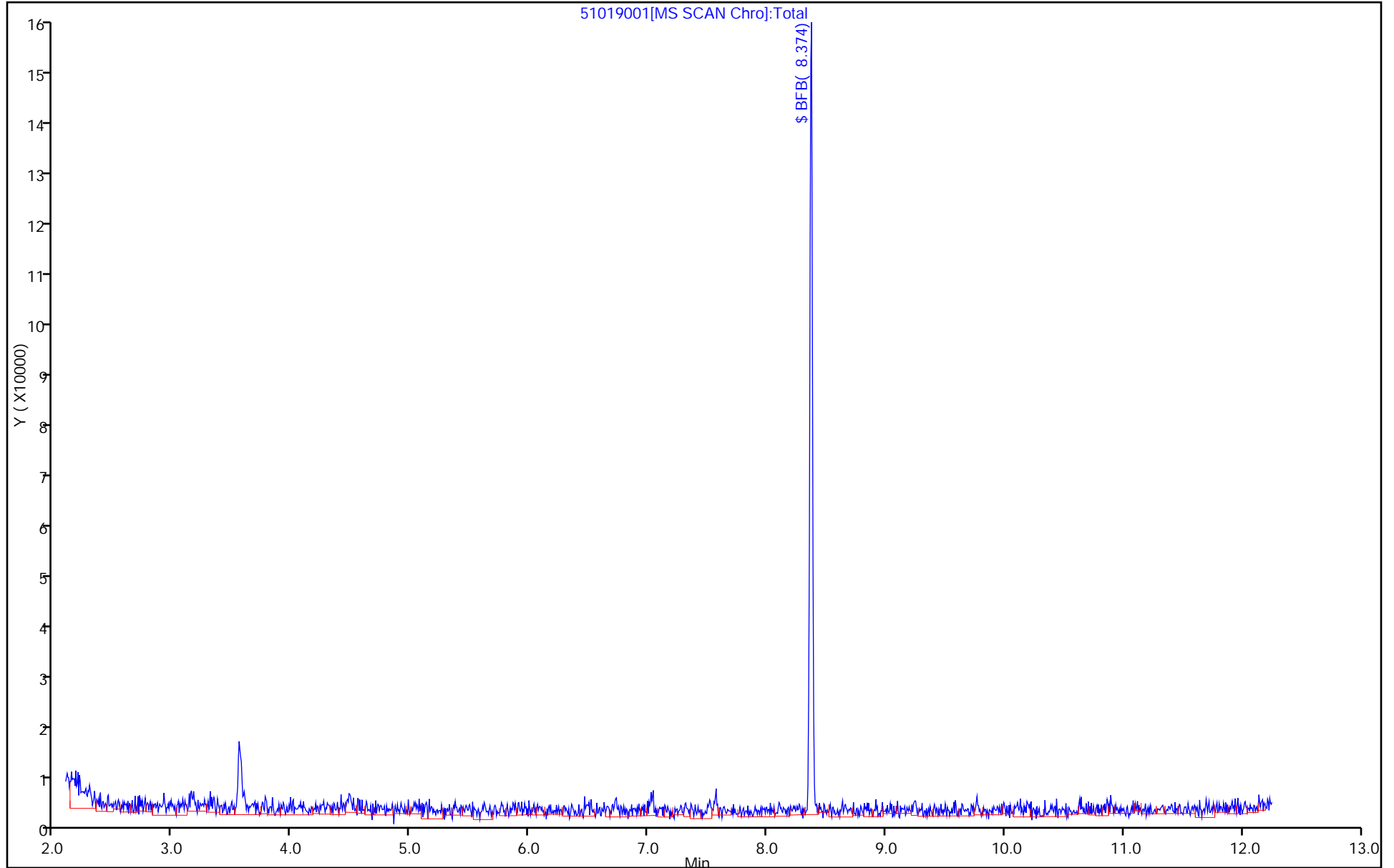
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-157127/6
 Matrix: Water Lab File ID: 51015006.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/15/2015 14:08
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157127 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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-157127/6
 Matrix: Water Lab File ID: 51015006.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/15/2015 14:08
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157127 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)	101		64-135
2037-26-5	Toluene-d8 (Surr)	103		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: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015006.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 15-Oct-2015 14:08:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: 180-0009022-006
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 15-Oct-2015 15:50:52 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK008

First Level Reviewer: fergusond

Date: 15-Oct-2015 15:50:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.271	4.273	-0.002	0	166634	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.294	7.290	0.004	97	345393	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.385	10.386	-0.001	90	77841	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.733	12.729	0.004	98	106606	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.564	6.554	0.010	93	79289	50.0	46.7	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.936	6.931	0.005	0	117965	50.0	50.6	
\$ 7 Toluene-d8 (Surr)	98	8.937	8.939	-0.002	95	310614	50.0	51.7	
\$ 8 4-Bromofluorobenzene (Surr	95	11.571	11.573	-0.002	86	107478	50.0	47.4	
11 Dichlorodifluoromethane	85		1.596					ND	
12 Chloromethane	50		1.772					ND	
13 Vinyl chloride	62		1.912					ND	
14 Butadiene	39		1.943					ND	
15 Bromomethane	94		2.241					ND	
16 Chloroethane	64		2.399					ND	
17 Dichlorofluoromethane	67		2.667					ND	
18 Trichlorofluoromethane	101		2.703					ND	
19 Ethanol	45		2.954					ND	
20 Ethyl ether	59		3.038					ND	
21 Acrolein	56		3.220					ND	
22 1,1-Dichloroethene	96		3.330					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.415					ND	
24 Acetone	43		3.439					ND	
25 Iodomethane	142		3.537					ND	
26 Carbon disulfide	76		3.640					ND	
27 Isopropyl alcohol	45		3.727					ND	
29 Acetonitrile	40		3.873					ND	
28 3-Chloro-1-propene	76		3.914					ND	
30 Methyl acetate	43		3.938					ND	
31 Methylene Chloride	84		4.139					ND	
32 2-Methyl-2-propanol	59		4.394					ND	
33 Acrylonitrile	53		4.522					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
34 trans-1,2-Dichloroethene	96		4.559					ND	
35 Methyl tert-butyl ether	73		4.577					ND	
36 Hexane	57		4.984					ND	
37 1,1-Dichloroethane	63		5.197					ND	
38 Vinyl acetate	43		5.246					ND	
39 2-Chloro-1,3-butadiene	53		5.302					ND	
41 Isopropyl ether	45		5.302					ND	
40 Isopropyl ether TIC	45		5.409					ND	
42 Tert-butyl ethyl ether	59		5.777					ND	
44 2,2-Dichloropropane	77		5.946					ND	
45 cis-1,2-Dichloroethene	96		5.946					ND	
46 2-Butanone (MEK)	43		5.952					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
47 Propionitrile	54		6.032					ND	
48 Ethyl acetate	43		6.032					ND	
50 Methacrylonitrile	41		6.215					ND	
49 Chlorobromomethane	128		6.231					ND	
51 Tetrahydrofuran	42		6.250					ND	
52 Chloroform	83		6.377					ND	
53 1,1,1-Trichloroethane	97		6.536					ND	
54 Cyclohexane	56		6.609					ND	
56 Carbon tetrachloride	117		6.718					ND	
55 1,1-Dichloropropene	75		6.724					ND	
57 Isobutyl alcohol	41		6.925					ND	
58 Benzene	78		6.943					ND	
59 1,2-Dichloroethane	62		7.016					ND	
61 Tert-amyl methyl ether	73		7.128					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
62 n-Heptane	43		7.302					ND	
63 n-Butanol	56		7.639					ND	
64 Trichloroethene	130		7.673					ND	
65 Ethyl acrylate	55		7.803					ND	
66 Methylcyclohexane	83		7.917					ND	
67 1,2-Dichloropropane	63		7.947					ND	
70 1,4-Dioxane	88		8.026					ND	
68 Dibromomethane	93		8.032					ND	
69 Methyl methacrylate	69		8.034					ND	
71 Dichlorobromomethane	83		8.233					ND	
72 2-Nitropropane	41		8.454					ND	
73 2-Chloroethyl vinyl ether	63		8.531					ND	
74 cis-1,3-Dichloropropene	75		8.671					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.823					ND	
76 Toluene	91		9.006					ND	
77 trans-1,3-Dichloropropene	75		9.255					ND	
78 Ethyl methacrylate	69		9.310					ND	
79 1,1,2-Trichloroethane	97		9.444					ND	
80 Tetrachloroethene	164		9.517					ND	
81 1,3-Dichloropropane	76		9.602					ND	
82 2-Hexanone	43		9.663					ND	
83 n-Butyl acetate	43		9.780					ND	
84 Chlorodibromomethane	129		9.815					ND	
85 Ethylene Dibromide	107		9.930					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.393					ND	
87 Chlorobenzene	112		10.417					ND	
88 4-Chlorobenzotrifluoride	180		10.478					ND	
89 1,1,1,2-Tetrachloroethane	131		10.514					ND	
90 Ethylbenzene	106		10.520					ND	
91 m-Xylene & p-Xylene	106		10.654					ND	
92 o-Xylene	106		11.031					ND	
93 Styrene	104		11.050					ND	
94 Bromoform	173		11.232					ND	
95 Cyclohexanol	57		11.250					ND	
96 2-Chlorobenzotrifluoride	180		11.299					ND	
97 Isopropylbenzene	105		11.396					ND	
98 Cyclohexanone	55		11.483					ND	
99 1,1,2,2-Tetrachloroethane	83		11.707					ND	
100 Bromobenzene	156		11.707					ND	
102 trans-1,4-Dichloro-2-buten	53		11.743					ND	
101 1,2,3-Trichloropropane	110		11.767					ND	
103 N-Propylbenzene	120		11.816					ND	
104 2-Chlorotoluene	126		11.901					ND	
105 3-Chlorotoluene	126		11.968					ND	
106 1,3,5-Trimethylbenzene	105		11.999					ND	
107 4-Chlorotoluene	126		12.029					ND	
108 tert-Butylbenzene	119		12.309					ND	
109 Pentachloroethane	167		12.341					ND	
110 1,2,4-Trimethylbenzene	105		12.370					ND	
111 1,2-dichloro-4-(trifluorom	214		12.412					ND	
112 sec-Butylbenzene	105		12.534					ND	
113 1,3-Dichlorobenzene	146		12.650					ND	
114 4-Isopropyltoluene	119		12.692					ND	
115 1,4-Dichlorobenzene	146		12.753					ND	
117 1,2,3-Trimethylbenzene	105		12.779					ND	
116 2,4-Dichloro-1-(triflourom	214		12.783					ND	
118 2,5-Dichlorobenzotrifluori	214		12.820					ND	
119 Benzyl chloride	91		12.870					ND	
120 n-Butylbenzene	91		13.100					ND	
121 1,2-Dichlorobenzene	146		13.112					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.903					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.043					ND	
124 1,3,5-Trichlorobenzene	180		14.091					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.469					ND	
126 1,2,4-Trichlorobenzene	180		14.724					ND	
127 Hexachlorobutadiene	225		14.876					ND	
128 Naphthalene	128		14.992					ND	
129 1,2,3-Trichlorobenzene	180		15.217					ND	
131 2,4,5-Trichlorotoluene	159		15.995					ND	
130 2,3,6-Trichlorotoluene	159		16.099					ND	
132 2-Methylnaphthalene	142		16.137					ND	
146 2,5-Dichlorotoluene	1		0.000					ND	
150 2,6-Dichlorotoluene	1		0.000					ND	
147 2,4-Dichlorotoluene	1		0.000					ND	
149 3,4-Dichlorotoluene	1		0.000					ND	
151 Isooctane	57		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
152 Formaldehyde TIC	1		0.000						ND
S 133 Xylenes, Total	106		1.000						ND
S 134 1,2-Dichloroethene, Total	96		1.000						ND
S 135 1,3-Dichloropropene, Total	1		0.000						ND
T 136 Mesityl oxide TIC	83		0.000						ND
T 138 Methyl n-amyl ketone TIC	43		0.000						ND
T 137 Tetrahydrofuran TIC	42		6.253						ND
T 153 1,2 Epoxybutane TIC	42		6.253						ND

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015006.D

Injection Date: 15-Oct-2015 14:08:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: MB

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

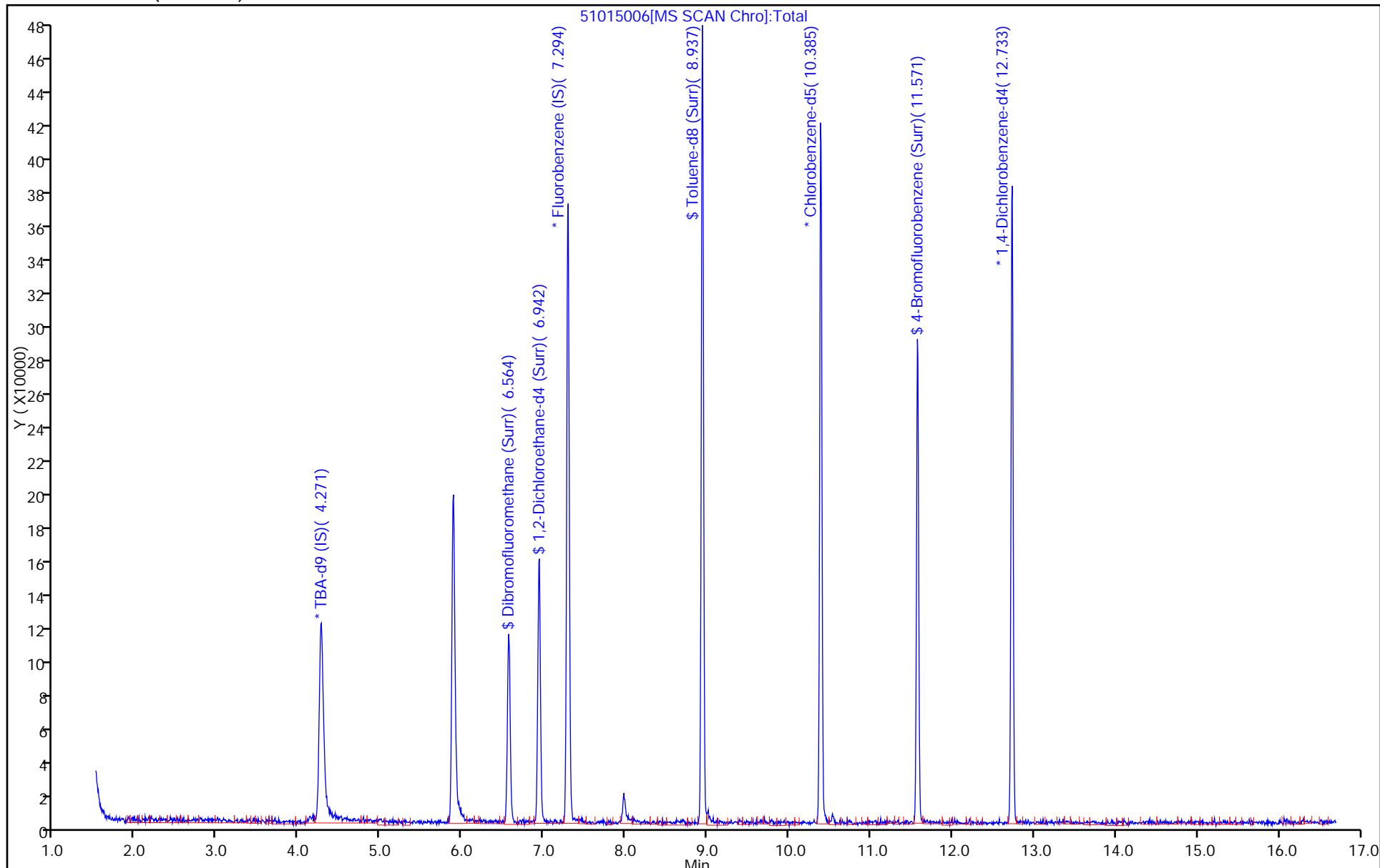
Dil. Factor: 1.0000

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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-157249/12
 Matrix: Water Lab File ID: 51016012.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/16/2015 16:19
 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.: 157249 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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-157249/12
 Matrix: Water Lab File ID: 51016012.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/16/2015 16:19
 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.: 157249 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		64-135
2037-26-5	Toluene-d8 (Surr)	97		71-118
460-00-4	4-Bromofluorobenzene (Surr)	88		70-118
1868-53-7	Dibromofluoromethane (Surr)	92		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016012.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 16-Oct-2015 16:19:30 ALS Bottle#: 7 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: 180-0009043-012
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 16-Oct-2015 16:43:34 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK003

First Level Reviewer: fergusond

Date: 16-Oct-2015 16:43:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.268	4.271	-0.003	0	95470	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.291	7.289	0.002	97	400795	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.388	10.391	-0.003	90	94373	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.730	12.733	-0.003	97	120395	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.561	6.560	0.001	93	90572	50.0	46.0	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.938	6.931	0.007	0	135693	50.0	50.2	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.939	0.001	95	354917	50.0	48.7	
\$ 8 4-Bromofluorobenzene (Surr	95	11.574	11.573	0.001	87	120243	50.0	43.8	
11 Dichlorodifluoromethane	85		1.614					ND	
12 Chloromethane	50		1.760					ND	
13 Vinyl chloride	62		1.900					ND	
14 Butadiene	39		1.937					ND	
15 Bromomethane	94		2.247					ND	
16 Chloroethane	64		2.387					ND	
17 Dichlorofluoromethane	67		2.667					ND	
18 Trichlorofluoromethane	101		2.709					ND	
19 Ethanol	45		2.939					ND	
20 Ethyl ether	59		3.050					ND	
21 Acrolein	56		3.233					ND	
22 1,1-Dichloroethene	96		3.354					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.415					ND	
24 Acetone	43		3.433					ND	
25 Iodomethane	142		3.543					ND	
26 Carbon disulfide	76		3.646					ND	
27 Isopropyl alcohol	45		3.712					ND	
29 Acetonitrile	40		3.882					ND	
28 3-Chloro-1-propene	76		3.914					ND	
30 Methyl acetate	43		3.938					ND	
31 Methylene Chloride	84		4.139					ND	
32 2-Methyl-2-propanol	59		4.395					ND	
33 Acrylonitrile	53		4.522					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		4.583					ND	
36 Hexane	57		4.991					ND	
37 1,1-Dichloroethane	63		5.198					ND	
38 Vinyl acetate	43		5.246					ND	
39 2-Chloro-1,3-butadiene	53		5.299					ND	
41 Isopropyl ether	45		5.299					ND	
40 Isopropyl ether TIC	45		5.409					ND	
42 Tert-butyl ethyl ether	59		5.774					ND	
44 2,2-Dichloropropane	77		5.946					ND	
45 cis-1,2-Dichloroethene	96		5.946					ND	
46 2-Butanone (MEK)	43		5.958					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
47 Propionitrile	54		6.030					ND	
48 Ethyl acetate	43		6.042					ND	
50 Methacrylonitrile	41		6.212					ND	
49 Chlorobromomethane	128		6.232					ND	
51 Tetrahydrofuran	42		6.250					ND	
52 Chloroform	83		6.384					ND	
53 1,1,1-Trichloroethane	97		6.542					ND	
54 Cyclohexane	56		6.615					ND	
56 Carbon tetrachloride	117		6.712					ND	
55 1,1-Dichloropropene	75		6.724					ND	
57 Isobutyl alcohol	41		6.919					ND	
58 Benzene	78		6.943					ND	
59 1,2-Dichloroethane	62		7.016					ND	
61 Tert-amyl methyl ether	73		7.125					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
62 n-Heptane	43	7.322	7.309	0.014	1	78		0.0211	
63 n-Butanol	56		7.629					ND	
64 Trichloroethene	130		7.674					ND	
65 Ethyl acrylate	55		7.800					ND	
66 Methylcyclohexane	83		7.917					ND	
67 1,2-Dichloropropane	63		7.947					ND	
69 Methyl methacrylate	69		8.031					ND	
70 1,4-Dioxane	88		8.032					ND	
68 Dibromomethane	93		8.039					ND	
71 Dichlorobromomethane	83		8.233					ND	
72 2-Nitropropane	41		8.451					ND	
73 2-Chloroethyl vinyl ether	63		8.530					ND	
74 cis-1,3-Dichloropropene	75		8.677					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.823					ND	
76 Toluene	91		9.006					ND	
77 trans-1,3-Dichloropropene	75		9.249					ND	
78 Ethyl methacrylate	69		9.310					ND	
79 1,1,2-Trichloroethane	97		9.444					ND	
80 Tetrachloroethene	164		9.517					ND	
81 1,3-Dichloropropane	76		9.602					ND	
82 2-Hexanone	43		9.657					ND	
83 n-Butyl acetate	43		9.783					ND	
84 Chlorodibromomethane	129		9.815					ND	
85 Ethylene Dibromide	107		9.930					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.393					ND	
87 Chlorobenzene	112		10.417					ND	
88 4-Chlorobenzotrifluoride	180		10.478					ND	
89 1,1,1,2-Tetrachloroethane	131		10.508					ND	
90 Ethylbenzene	106		10.514					ND	
91 m-Xylene & p-Xylene	106		10.648					ND	
92 o-Xylene	106		11.032					ND	
93 Styrene	104		11.050					ND	
94 Bromoform	173		11.232					ND	
95 Cyclohexanol	57		11.250					ND	
96 2-Chlorobenzotrifluoride	180		11.299					ND	
97 Isopropylbenzene	105		11.397					ND	
98 Cyclohexanone	55		11.486					ND	
99 1,1,2,2-Tetrachloroethane	83		11.707					ND	
100 Bromobenzene	156		11.707					ND	
102 trans-1,4-Dichloro-2-buten	53		11.743					ND	
101 1,2,3-Trichloropropane	110		11.768					ND	
103 N-Propylbenzene	120		11.816					ND	
104 2-Chlorotoluene	126		11.902					ND	
105 3-Chlorotoluene	126		11.968					ND	
106 1,3,5-Trimethylbenzene	105		11.999					ND	
107 4-Chlorotoluene	126		12.023					ND	
108 tert-Butylbenzene	119		12.315					ND	
109 Pentachloroethane	167		12.338					ND	
110 1,2,4-Trimethylbenzene	105		12.370					ND	
111 1,2-dichloro-4-(trifluorom	214		12.413					ND	
112 sec-Butylbenzene	105		12.534					ND	
113 1,3-Dichlorobenzene	146		12.650					ND	
114 4-Isopropyltoluene	119		12.692					ND	
115 1,4-Dichlorobenzene	146		12.753					ND	
117 1,2,3-Trimethylbenzene	105		12.782					ND	
116 2,4-Dichloro-1-(triflourom	214		12.784					ND	
118 2,5-Dichlorobenzotrifluori	214		12.820					ND	
119 Benzyl chloride	91		12.867					ND	
120 n-Butylbenzene	91		13.100					ND	
121 1,2-Dichlorobenzene	146		13.112					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.909					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.049					ND	
124 1,3,5-Trichlorobenzene	180		14.096					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.463					ND	
126 1,2,4-Trichlorobenzene	180		14.730					ND	
127 Hexachlorobutadiene	225		14.876					ND	
128 Naphthalene	128		14.992					ND	
129 1,2,3-Trichlorobenzene	180		15.223					ND	
131 2,4,5-Trichlorotoluene	159		15.996					ND	
130 2,3,6-Trichlorotoluene	159		16.093					ND	
132 2-Methylnaphthalene	142		16.140					ND	
152 Formaldehyde TIC	1		0.000					ND	
148 2,3-Dichlorotoluene	1		0.000					ND	
151 Isooctane	57		0.000					ND	
146 2,5-Dichlorotoluene	1		0.000					ND	
150 2,6-Dichlorotoluene	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
149 3,4-Dichlorotoluene	1		0.000					ND	
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 136 Mesityl oxide TIC	83		0.000					ND	
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	
T 137 Tetrahydrofuran TIC	42	6.288	6.253	0.035	1	1283		0	
T 153 1,2 Epoxybutane TIC	42		6.253					ND	

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016012.D

Injection Date: 16-Oct-2015 16:19:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: MB

Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL

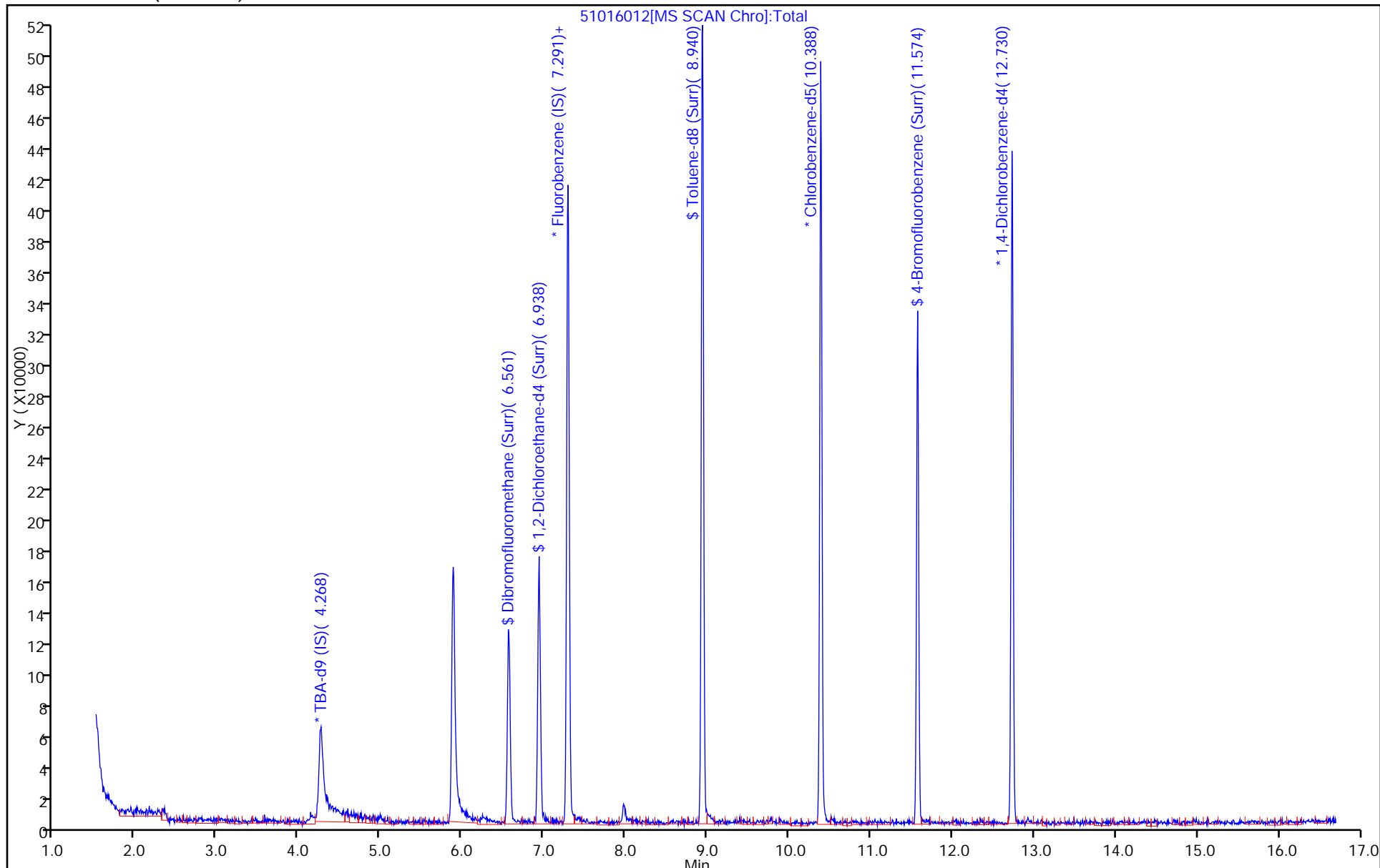
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-157327/5
 Matrix: Water Lab File ID: 51017005.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2015 11:40
 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.: 157327 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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-157327/5
 Matrix: Water Lab File ID: 51017005.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2015 11:40
 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.: 157327 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		64-135
2037-26-5	Toluene-d8 (Surr)	97		71-118
460-00-4	4-Bromofluorobenzene (Surr)	85		70-118
1868-53-7	Dibromofluoromethane (Surr)	85		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017005.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 17-Oct-2015 11:40:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: 180-0009055-005
 Operator ID: 034635 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 17-Oct-2015 17:47:02 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: journeyep

Date: 17-Oct-2015 11:54:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.266	4.266	0.000	0	96893	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.289	0.001	97	510411	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.386	10.392	-0.006	90	110695	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.734	12.734	0.000	97	139550	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.566	6.559	0.007	93	106501	50.0	42.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.937	6.936	0.001	0	151605	50.0	44.0	
\$ 7 Toluene-d8 (Surr)	98	8.938	8.938	0.000	94	414252	50.0	48.5	
\$ 8 4-Bromofluorobenzene (Surr	95	11.572	11.572	0.000	87	136693	50.0	42.4	
11 Dichlorodifluoromethane	85		1.607					ND	
12 Chloromethane	50		1.766					ND	
13 Vinyl chloride	62		1.893					ND	
14 Butadiene	39		1.936					ND	
15 Bromomethane	94		2.246					ND	
16 Chloroethane	64		2.386					ND	
17 Dichlorofluoromethane	67		2.654					ND	
18 Trichlorofluoromethane	101		2.702					ND	
19 Ethanol	45		2.952					ND	
20 Ethyl ether	59		3.043					ND	
21 Acrolein	56		3.232					ND	
22 1,1-Dichloroethene	96		3.347					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.414					ND	
24 Acetone	43		3.432					ND	
25 Iodomethane	142		3.542					ND	
26 Carbon disulfide	76		3.627					ND	
27 Isopropyl alcohol	45		3.706					ND	
29 Acetonitrile	40		3.846					ND	
28 3-Chloro-1-propene	76		3.913					ND	
30 Methyl acetate	43		3.937					ND	
31 Methylene Chloride	84		4.132					ND	
32 2-Methyl-2-propanol	59		4.400					ND	
33 Acrylonitrile	53		4.515					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		4.564					ND	
35 Methyl tert-butyl ether	73		4.570					ND	
36 Hexane	57		4.990					ND	
37 1,1-Dichloroethane	63		5.203					ND	
38 Vinyl acetate	43		5.294					ND	
39 2-Chloro-1,3-butadiene	53		5.300					ND	
41 Isopropyl ether	45		5.300					ND	
40 Isopropyl ether TIC	45		5.409					ND	
42 Tert-butyl ethyl ether	59		5.769					ND	
44 2,2-Dichloropropane	77		5.945					ND	
45 cis-1,2-Dichloroethene	96		5.951					ND	
46 2-Butanone (MEK)	43		5.957					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
48 Ethyl acetate	43		6.030					ND	
47 Propionitrile	54		6.030					ND	
50 Methacrylonitrile	41		6.213					ND	
49 Chlorobromomethane	128		6.237					ND	
51 Tetrahydrofuran	42		6.243					ND	
52 Chloroform	83		6.383					ND	
53 1,1,1-Trichloroethane	97		6.541					ND	
54 Cyclohexane	56		6.614					ND	
56 Carbon tetrachloride	117		6.717					ND	
55 1,1-Dichloropropene	75		6.724					ND	
57 Isobutyl alcohol	41		6.918					ND	
58 Benzene	78		6.943					ND	
59 1,2-Dichloroethane	62		7.022					ND	
61 Tert-amyl methyl ether	73		7.119					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
62 n-Heptane	43		7.308					ND	
63 n-Butanol	56		7.630					ND	
64 Trichloroethene	130		7.679					ND	
65 Ethyl acrylate	55		7.794					ND	
66 Methylcyclohexane	83		7.916					ND	
67 1,2-Dichloropropane	63		7.952					ND	
68 Dibromomethane	93		8.031					ND	
70 1,4-Dioxane	88		8.031					ND	
69 Methyl methacrylate	69		8.032					ND	
71 Dichlorobromomethane	83		8.226					ND	
72 2-Nitropropane	41		8.451					ND	
73 2-Chloroethyl vinyl ether	63		8.530					ND	
74 cis-1,3-Dichloropropene	75		8.676					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.828					ND	
76 Toluene	91		9.005					ND	
77 trans-1,3-Dichloropropene	75		9.248					ND	
78 Ethyl methacrylate	69		9.309					ND	
79 1,1,2-Trichloroethane	97		9.449					ND	
80 Tetrachloroethene	164		9.516					ND	
81 1,3-Dichloropropane	76		9.601					ND	
82 2-Hexanone	43		9.656					ND	
83 n-Butyl acetate	43		9.784					ND	
84 Chlorodibromomethane	129		9.814					ND	
85 Ethylene Dibromide	107		9.930					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.392					ND	
87 Chlorobenzene	112		10.416					ND	
88 4-Chlorobenzotrifluoride	180		10.477					ND	
89 1,1,1,2-Tetrachloroethane	131		10.507					ND	
90 Ethylbenzene	106		10.520					ND	
91 m-Xylene & p-Xylene	106		10.647					ND	
92 o-Xylene	106		11.031					ND	
93 Styrene	104		11.049					ND	
94 Bromoform	173		11.231					ND	
95 Cyclohexanol	57		11.250					ND	
96 2-Chlorobenzotrifluoride	180		11.298					ND	
97 Isopropylbenzene	105		11.396					ND	
98 Cyclohexanone	55		11.487					ND	
99 1,1,2,2-Tetrachloroethane	83		11.712					ND	
100 Bromobenzene	156		11.712					ND	
102 trans-1,4-Dichloro-2-buten	53		11.742					ND	
101 1,2,3-Trichloropropane	110		11.767					ND	
103 N-Propylbenzene	120		11.815					ND	
104 2-Chlorotoluene	126		11.901					ND	
105 3-Chlorotoluene	126		11.967					ND	
106 1,3,5-Trimethylbenzene	105		11.998					ND	
107 4-Chlorotoluene	126		12.022					ND	
108 tert-Butylbenzene	119		12.308					ND	
109 Pentachloroethane	167		12.345					ND	
110 1,2,4-Trimethylbenzene	105		12.369					ND	
111 1,2-dichloro-4-(trifluorom	214		12.412					ND	
112 sec-Butylbenzene	105		12.533					ND	
113 1,3-Dichlorobenzene	146		12.649					ND	
114 4-Isopropyltoluene	119		12.691					ND	
115 1,4-Dichlorobenzene	146		12.758					ND	
116 2,4-Dichloro-1-(triflourom	214		12.783					ND	
117 1,2,3-Trimethylbenzene	105		12.783					ND	
118 2,5-Dichlorobenzotrifluori	214		12.825					ND	
119 Benzyl chloride	91		12.874					ND	
120 n-Butylbenzene	91		13.099					ND	
121 1,2-Dichlorobenzene	146		13.111					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.902					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.048					ND	
124 1,3,5-Trichlorobenzene	180		14.097					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.468					ND	
126 1,2,4-Trichlorobenzene	180		14.729					ND	
127 Hexachlorobutadiene	225		14.875					ND	
128 Naphthalene	128		14.991					ND	
129 1,2,3-Trichlorobenzene	180		15.216					ND	
131 2,4,5-Trichlorotoluene	159		15.995					ND	
130 2,3,6-Trichlorotoluene	159		16.092					ND	
132 2-Methylnaphthalene	142		16.135					ND	
150 2,6-Dichlorotoluene	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	
149 3,4-Dichlorotoluene	1		0.000					ND	
151 Isooctane	57		0.000					ND	
146 2,5-Dichlorotoluene	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
147 2,4-Dichlorotoluene	1		0.000					ND	
148 2,3-Dichlorotoluene	1		0.000					ND	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 133 Xylenes, Total	106		1.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	
T 136 Mesityl oxide TIC	83		0.000					ND	
T 153 1,2 Epoxybutane TIC	42		6.253					ND	
T 137 Tetrahydrofuran TIC	42		6.253					ND	

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017005.D

Injection Date: 17-Oct-2015 11:40:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: MB

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

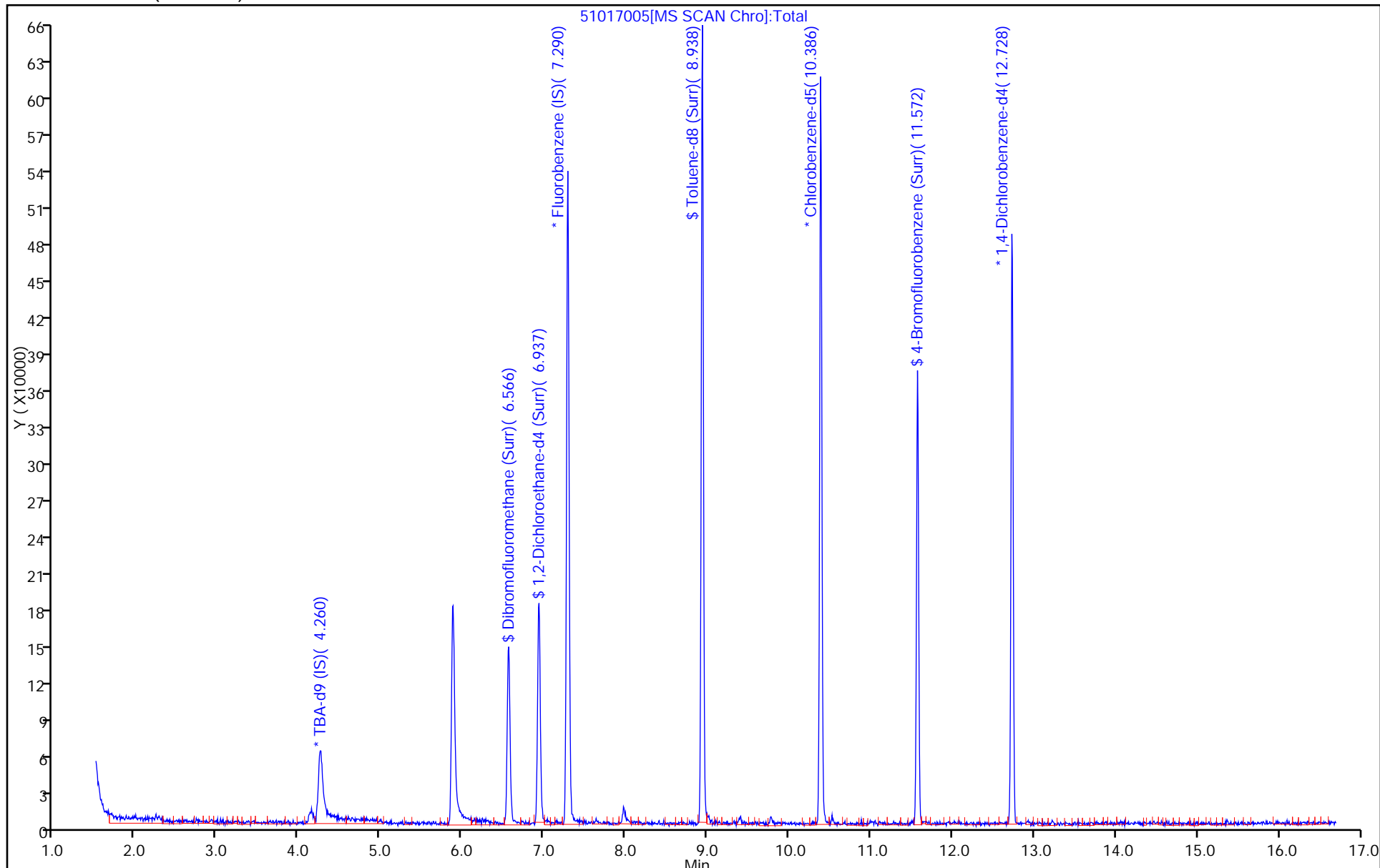
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-157435/4
 Matrix: Water Lab File ID: 51019004.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2015 11:11
 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.: 157435 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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-157435/4
 Matrix: Water Lab File ID: 51019004.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2015 11:11
 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.: 157435 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)	100		71-118
460-00-4	4-Bromofluorobenzene (Surr)	93		70-118
1868-53-7	Dibromofluoromethane (Surr)	99		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019004.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 19-Oct-2015 11:11:30 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: 180-0009083-004
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 19-Oct-2015 11:42:51 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK002

First Level Reviewer: fergusond

Date: 19-Oct-2015 11:42:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.272	4.273	-0.001	0	139430	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.289	7.284	0.005	97	312691	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.386	10.387	-0.001	90	73826	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.734	12.729	0.005	98	106690	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.565	6.554	0.011	94	76080	50.0	49.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.936	6.931	0.005	0	123504	50.0	58.6	
\$ 7 Toluene-d8 (Surr)	98	8.938	8.939	-0.001	95	283781	50.0	49.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.578	11.573	0.005	88	99803	50.0	46.5	
11 Dichlorodifluoromethane	85		1.614					ND	
12 Chloromethane	50		1.766					ND	
13 Vinyl chloride	62		1.900					ND	
14 Butadiene	39		1.937					ND	
15 Bromomethane	94		2.253					ND	
16 Chloroethane	64		2.387					ND	
17 Dichlorofluoromethane	67		2.661					ND	
18 Trichlorofluoromethane	101		2.697					ND	
19 Ethanol	45		2.952					ND	
20 Ethyl ether	59		3.044					ND	
21 Acrolein	56		3.233					ND	
22 1,1-Dichloroethene	96		3.354					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.409					ND	
24 Acetone	43		3.433					ND	
25 Iodomethane	142		3.537					ND	
26 Carbon disulfide	76		3.634					ND	
27 Isopropyl alcohol	45		3.706					ND	
29 Acetonitrile	40		3.846					ND	
28 3-Chloro-1-propene	76		3.932					ND	
30 Methyl acetate	43		3.944					ND	
31 Methylene Chloride	84		4.145					ND	
32 2-Methyl-2-propanol	59		4.407					ND	
33 Acrylonitrile	53		4.522					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		4.571					ND	
35 Methyl tert-butyl ether	73		4.583					ND	
36 Hexane	57		4.991					ND	
37 1,1-Dichloroethane	63		5.204					ND	
38 Vinyl acetate	43		5.246					ND	
39 2-Chloro-1,3-butadiene	53		5.300					ND	
41 Isopropyl ether	45		5.300					ND	
40 Isopropyl ether TIC	45		5.409					ND	
42 Tert-butyl ethyl ether	59		5.769					ND	
44 2,2-Dichloropropane	77		5.940					ND	
45 cis-1,2-Dichloroethene	96		5.946					ND	
46 2-Butanone (MEK)	43		5.958					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
48 Ethyl acetate	43		6.030					ND	
47 Propionitrile	54		6.030					ND	
50 Methacrylonitrile	41		6.213					ND	
49 Chlorobromomethane	128		6.232					ND	
51 Tetrahydrofuran	42		6.250					ND	
52 Chloroform	83		6.384					ND	
53 1,1,1-Trichloroethane	97		6.548					ND	
54 Cyclohexane	56		6.621					ND	
56 Carbon tetrachloride	117		6.718					ND	
55 1,1-Dichloropropene	75		6.724					ND	
57 Isobutyl alcohol	41		6.925					ND	
58 Benzene	78		6.943					ND	
59 1,2-Dichloroethane	62		7.023					ND	
61 Tert-amyl methyl ether	73		7.119					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
62 n-Heptane	43		7.308					ND	
63 n-Butanol	56		7.630					ND	
64 Trichloroethene	130		7.680					ND	
65 Ethyl acrylate	55		7.794					ND	
66 Methylcyclohexane	83		7.917					ND	
67 1,2-Dichloropropane	63		7.947					ND	
70 1,4-Dioxane	88		8.020					ND	
69 Methyl methacrylate	69		8.032					ND	
68 Dibromomethane	93		8.038					ND	
71 Dichlorobromomethane	83		8.227					ND	
72 2-Nitropropane	41		8.451					ND	
73 2-Chloroethyl vinyl ether	63		8.525					ND	
74 cis-1,3-Dichloropropene	75		8.671					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.823					ND	
76 Toluene	91		9.006					ND	
77 trans-1,3-Dichloropropene	75		9.255					ND	
78 Ethyl methacrylate	69		9.310					ND	
79 1,1,2-Trichloroethane	97		9.444					ND	
80 Tetrachloroethene	164		9.517					ND	
81 1,3-Dichloropropane	76		9.602					ND	
82 2-Hexanone	43		9.657					ND	
83 n-Butyl acetate	43		9.784					ND	
84 Chlorodibromomethane	129		9.821					ND	
85 Ethylene Dibromide	107		9.930					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.387					ND	
87 Chlorobenzene	112		10.417					ND	
88 4-Chlorobenzotrifluoride	180		10.478					ND	
90 Ethylbenzene	106		10.514					ND	
89 1,1,1,2-Tetrachloroethane	131		10.514					ND	
91 m-Xylene & p-Xylene	106		10.648					ND	
92 o-Xylene	106		11.032					ND	
93 Styrene	104		11.050					ND	
94 Bromoform	173		11.232					ND	
95 Cyclohexanol	57		11.252					ND	
96 2-Chlorobenzotrifluoride	180		11.299					ND	
97 Isopropylbenzene	105		11.397					ND	
98 Cyclohexanone	55		11.487					ND	
99 1,1,2,2-Tetrachloroethane	83		11.713					ND	
100 Bromobenzene	156		11.713					ND	
102 trans-1,4-Dichloro-2-buten	53		11.749					ND	
101 1,2,3-Trichloropropane	110		11.768					ND	
103 N-Propylbenzene	120		11.816					ND	
104 2-Chlorotoluene	126		11.901					ND	
105 3-Chlorotoluene	126		11.968					ND	
106 1,3,5-Trimethylbenzene	105		11.999					ND	
107 4-Chlorotoluene	126		12.029					ND	
108 tert-Butylbenzene	119		12.309					ND	
109 Pentachloroethane	167		12.345					ND	
110 1,2,4-Trimethylbenzene	105		12.370					ND	
111 1,2-dichloro-4-(trifluorom	214		12.412					ND	
112 sec-Butylbenzene	105		12.534					ND	
113 1,3-Dichlorobenzene	146		12.650					ND	
114 4-Isopropyltoluene	119		12.692					ND	
115 1,4-Dichlorobenzene	146		12.759					ND	
116 2,4-Dichloro-1-(triflourom	214		12.777					ND	
117 1,2,3-Trimethylbenzene	105		12.783					ND	
118 2,5-Dichlorobenzotrifluori	214		12.826					ND	
119 Benzyl chloride	91		12.874					ND	
120 n-Butylbenzene	91		13.100					ND	
121 1,2-Dichlorobenzene	146		13.112					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.903					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.049					ND	
124 1,3,5-Trichlorobenzene	180		14.099					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.469					ND	
126 1,2,4-Trichlorobenzene	180		14.724					ND	
127 Hexachlorobutadiene	225		14.876					ND	
128 Naphthalene	128		14.992					ND	
129 1,2,3-Trichlorobenzene	180		15.217					ND	
131 2,4,5-Trichlorotoluene	159		15.996					ND	
130 2,3,6-Trichlorotoluene	159		16.093					ND	
132 2-Methylnaphthalene	142		16.135					ND	
150 2,6-Dichlorotoluene	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	
149 3,4-Dichlorotoluene	1		0.000					ND	
151 Isooctane	57		0.000					ND	
146 2,5-Dichlorotoluene	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
147 2,4-Dichlorotoluene	1		0.000						ND
148 2,3-Dichlorotoluene	1		0.000						ND
S 134 1,2-Dichloroethene, Total	96		1.000						ND
S 133 Xylenes, Total	106		1.000						ND
S 135 1,3-Dichloropropene, Total	1		0.000						ND
T 138 Methyl n-amyl ketone TIC	43		0.000						ND
T 136 Mesityl oxide TIC	83		0.000						ND
T 153 1,2 Epoxybutane TIC	42		6.253						ND
T 137 Tetrahydrofuran TIC	42		6.253						ND

Reagents:

VOA8260INT_00043

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURRE_00043

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019004.D

Injection Date: 19-Oct-2015 11:11:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: MB

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

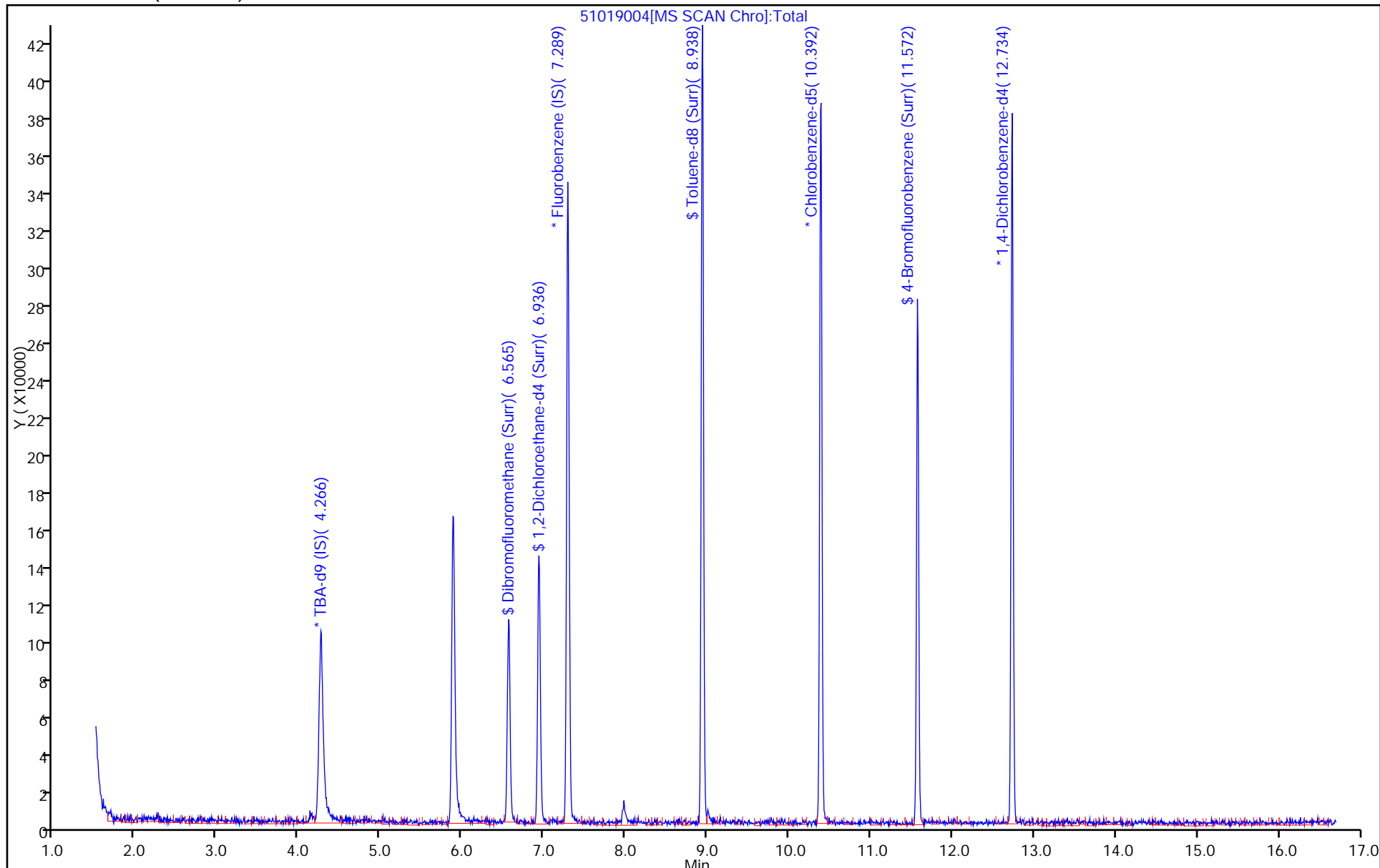
Dil. Factor: 1.0000

ALS Bottle#: 4

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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-157127/10
 Matrix: Water Lab File ID: 51015010.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/15/2015 15:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157127 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	9.71		1.0	0.28
75-01-4	Vinyl chloride	8.06		1.0	0.23
74-83-9	Bromomethane	8.03		1.0	0.31
75-00-3	Chloroethane	7.31		1.0	0.21
75-35-4	1,1-Dichloroethene	9.39		1.0	0.30
67-64-1	Acetone	19.9		5.0	2.5
75-15-0	Carbon disulfide	10.0		1.0	0.21
75-09-2	Methylene Chloride	9.92		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.68		1.0	0.17
1634-04-4	Methyl tert-butyl ether	9.53		1.0	0.18
75-34-3	1,1-Dichloroethane	9.61		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	9.55		1.0	0.24
74-97-5	Bromochloromethane	8.75		1.0	0.18
78-93-3	2-Butanone (MEK)	19.4		5.0	0.55
67-66-3	Chloroform	9.41		1.0	0.17
71-55-6	1,1,1-Trichloroethane	9.64		1.0	0.29
56-23-5	Carbon tetrachloride	9.66		1.0	0.14
71-43-2	Benzene	10.2		1.0	0.11
107-06-2	1,2-Dichloroethane	9.87		1.0	0.21
79-01-6	Trichloroethene	9.16		1.0	0.14
78-87-5	1,2-Dichloropropane	9.92		1.0	0.095
75-27-4	Bromodichloromethane	9.80		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	8.94		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	18.6		5.0	0.53
108-88-3	Toluene	11.0		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	9.97		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.7		1.0	0.20
127-18-4	Tetrachloroethene	10.8		1.0	0.15
591-78-6	2-Hexanone	18.1		5.0	0.16
124-48-1	Dibromochloromethane	9.40		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	10.2		1.0	0.18
108-90-7	Chlorobenzene	10.3		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.76		1.0	0.28
100-41-4	Ethylbenzene	10.7		1.0	0.23
1330-20-7	Xylenes, Total	21.4		3.0	0.49
100-42-5	Styrene	11.4		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-157127/10
 Matrix: Water Lab File ID: 51015010.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/15/2015 15:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157127 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10.7		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	11.7		1.0	0.20
107-13-1	Acrylonitrile	112		20	0.55
123-91-1	1,4-Dioxane	287		200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		64-135
2037-26-5	Toluene-d8 (Surr)	112		71-118
460-00-4	4-Bromofluorobenzene (Surr)	104		70-118
1868-53-7	Dibromofluoromethane (Surr)	87		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015010.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 15-Oct-2015 15:59:30 ALS Bottle#: 9 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Misc. Info.: 180-0009022-010
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 15-Oct-2015 16:13:11 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK008

First Level Reviewer: fergusond

Date: 15-Oct-2015 16:13:11

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.281	4.273	0.008	0	156359	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.292	7.290	0.002	97	369647	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.389	10.386	0.003	89	81657	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.731	12.729	0.002	94	128850	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.562	6.554	0.008	94	78949	50.0	43.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.939	6.931	0.008	0	122844	50.0	49.3	
\$ 7 Toluene-d8 (Surr)	98	8.935	8.939	-0.004	95	353122	50.0	56.1	
\$ 8 4-Bromofluorobenzene (Surr	95	11.575	11.573	0.002	86	123880	50.0	52.1	
11 Dichlorodifluoromethane	85	1.610	1.596	0.014	99	109399	50.0	52.4	
12 Chloromethane	50	1.775	1.772	0.003	99	148896	50.0	48.6	
13 Vinyl chloride	62	1.914	1.912	0.002	97	109652	50.0	40.3	
14 Butadiene	39	1.945	1.943	0.002	100	154127	50.0	48.0	
15 Bromomethane	94	2.249	2.241	0.008	91	44464	50.0	40.2	
16 Chloroethane	64	2.401	2.399	0.002	98	59963	50.0	36.5	
17 Dichlorofluoromethane	67	2.675	2.667	0.008	96	137114	50.0	39.4	
18 Trichlorofluoromethane	101	2.711	2.703	0.008	96	125150	50.0	48.1	
20 Ethyl ether	59	3.052	3.038	0.014	96	104035	50.0	43.1	
21 Acrolein	56	3.235	3.220	0.015	100	48357	150.0	134.5	
22 1,1-Dichloroethene	96	3.356	3.330	0.026	95	96649	50.0	46.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.423	3.415	0.008	93	106155	50.0	48.7	
24 Acetone	43	3.454	3.439	0.015	98	74137	100.0	99.4	
25 Iodomethane	142	3.539	3.537	0.002	99	139443	50.0	45.4	
26 Carbon disulfide	76	3.642	3.640	0.002	100	240197	50.0	50.2	
28 3-Chloro-1-propene	76	3.928	3.914	0.014	88	55306	50.0	47.4	
30 Methyl acetate	43	3.946	3.938	0.008	100	632656	250.0	283.9	
31 Methylene Chloride	84	4.147	4.139	0.008	95	120024	50.0	49.6	
32 2-Methyl-2-propanol	59	4.421	4.394	0.027	88	102911	500.0	584.8	
33 Acrylonitrile	53	4.530	4.522	0.008	96	606311	500.0	560.7	
34 trans-1,2-Dichloroethene	96	4.567	4.559	0.008	94	108210	50.0	48.4	
35 Methyl tert-butyl ether	73	4.591	4.577	0.014	94	246663	50.0	47.7	
36 Hexane	57	4.993	4.984	0.009	95	207159	50.0	55.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.206	5.197	0.009	96	211516	50.0	48.0	
38 Vinyl acetate	43	5.254	5.246	0.008	97	194277	50.0	58.8	
44 2,2-Dichloropropane	77	5.954	5.946	0.008	55	80056	50.0	45.4	
45 cis-1,2-Dichloroethene	96	5.954	5.946	0.008	86	114051	50.0	47.8	
46 2-Butanone (MEK)	43	5.960	5.952	0.008	68	108695	100.0	97.0	
49 Chlorobromomethane	128	6.246	6.231	0.015	88	45882	50.0	43.8	
51 Tetrahydrofuran	42	6.258	6.250	0.008	91	88834	100.0	98.8	
52 Chloroform	83	6.386	6.377	0.009	96	178970	50.0	47.0	
53 1,1,1-Trichloroethane	97	6.544	6.536	0.008	94	135612	50.0	48.2	
54 Cyclohexane	56	6.617	6.609	0.008	96	251927	50.0	53.5	
56 Carbon tetrachloride	117	6.714	6.718	-0.004	96	115697	50.0	48.3	
55 1,1-Dichloropropene	75	6.733	6.724	0.009	91	150788	50.0	48.5	
57 Isobutyl alcohol	41	6.933	6.925	0.008	93	116080	1250.0	1649.0	
58 Benzene	78	6.946	6.943	0.003	97	464073	50.0	50.9	
59 1,2-Dichloroethane	62	7.025	7.016	0.009	96	155567	50.0	49.3	
62 n-Heptane	43	7.311	7.302	0.009	97	186094	50.0	54.6	
64 Trichloroethene	130	7.676	7.673	0.003	96	102081	50.0	45.8	
66 Methylcyclohexane	83	7.919	7.917	0.002	97	179752	50.0	51.2	
67 1,2-Dichloropropane	63	7.955	7.947	0.008	94	118675	50.0	49.6	
70 1,4-Dioxane	88	8.034	8.026	0.008	42	23674	1000.0	1435.8	
68 Dibromomethane	93	8.034	8.032	0.002	95	55385	50.0	45.6	
71 Dichlorobromomethane	83	8.235	8.233	0.002	98	117707	50.0	49.0	
74 cis-1,3-Dichloropropene	75	8.679	8.671	0.008	89	125752	50.0	44.7	
75 4-Methyl-2-pentanone (MIBK)	43	8.825	8.823	0.002	98	187142	100.0	93.0	
76 Toluene	91	9.002	9.006	-0.004	97	445948	50.0	55.2	
77 trans-1,3-Dichloropropene	75	9.251	9.255	-0.004	98	105213	50.0	49.9	
78 Ethyl methacrylate	69	9.312	9.310	0.002	96	113420	50.0	55.6	
79 1,1,2-Trichloroethane	97	9.446	9.444	0.002	94	81991	50.0	53.3	
80 Tetrachloroethene	164	9.519	9.517	0.002	96	84907	50.0	54.1	
81 1,3-Dichloropropane	76	9.604	9.602	0.002	98	149085	50.0	52.2	
82 2-Hexanone	43	9.659	9.663	-0.004	99	131345	100.0	90.4	
84 Chlorodibromomethane	129	9.817	9.815	0.002	91	62580	50.0	47.0	
85 Ethylene Dibromide	107	9.926	9.930	-0.004	98	75501	50.0	51.0	
86 3-Chlorobenzotrifluoride	180	10.389	10.393	-0.004	84	140426	50.0	54.1	
87 Chlorobenzene	112	10.419	10.417	0.002	91	269320	50.0	51.7	
88 4-Chlorobenzotrifluoride	180	10.480	10.478	0.002	95	131743	50.0	53.6	
89 1,1,1,2-Tetrachloroethane	131	10.510	10.514	-0.004	88	82815	50.0	48.8	
90 Ethylbenzene	106	10.517	10.520	-0.003	99	147356	50.0	53.4	
91 m-Xylene & p-Xylene	106	10.650	10.654	-0.004	0	184341	50.0	54.5	
92 o-Xylene	106	11.028	11.031	-0.003	99	169174	50.0	52.6	
93 Styrene	104	11.046	11.050	-0.004	95	303948	50.0	57.1	
94 Bromoform	173	11.234	11.232	0.002	96	40549	50.0	53.4	
96 2-Chlorobenzotrifluoride	180	11.301	11.299	0.002	96	139469	50.0	54.6	
97 Isopropylbenzene	105	11.399	11.396	0.003	97	454485	50.0	57.7	
99 1,1,2,2-Tetrachloroethane	83	11.709	11.707	0.002	79	121571	50.0	58.6	
100 Bromobenzene	156	11.709	11.707	0.002	97	103061	50.0	46.6	
102 trans-1,4-Dichloro-2-buten	53	11.739	11.743	-0.004	61	11549	50.0	14.4	
101 1,2,3-Trichloropropane	110	11.764	11.767	-0.003	87	37885	50.0	51.9	
103 N-Propylbenzene	120	11.812	11.816	-0.004	99	124566	50.0	49.2	
104 2-Chlorotoluene	126	11.897	11.901	-0.004	95	103870	50.0	48.3	
105 3-Chlorotoluene	126	11.964	11.968	-0.004	96	104933	50.0	47.4	
106 1,3,5-Trimethylbenzene	105	11.995	11.999	-0.004	95	387864	50.0	54.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 4-Chlorotoluene	126	12.025	12.029	-0.004	99	111257	50.0	47.0	
108 tert-Butylbenzene	119	12.311	12.309	0.002	95	298870	50.0	51.4	
110 1,2,4-Trimethylbenzene	105	12.372	12.370	0.002	98	381323	50.0	53.2	
111 1,2-dichloro-4-(trifluorom	214	12.408	12.412	-0.004	98	104403	50.0	52.2	
112 sec-Butylbenzene	105	12.536	12.534	0.002	95	450288	50.0	54.8	
113 1,3-Dichlorobenzene	146	12.652	12.650	0.002	98	201008	50.0	51.0	
114 4-Isopropyltoluene	119	12.688	12.692	-0.004	97	366228	50.0	52.7	
115 1,4-Dichlorobenzene	146	12.755	12.753	0.002	93	210247	50.0	51.3	
116 2,4-Dichloro-1-(trifluorom	214	12.780	12.783	-0.003	96	91281	50.0	49.3	
118 2,5-Dichlorobenzotrifluori	214	12.822	12.820	0.002	0	113558	50.0	56.8	
120 n-Butylbenzene	91	13.096	13.100	-0.004	98	314724	50.0	52.9	
121 1,2-Dichlorobenzene	146	13.108	13.112	-0.004	96	186574	50.0	50.7	
122 1,2-Dibromo-3-Chloropropan	75	13.899	13.903	-0.004	75	17997	50.0	59.6	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.045	14.043	0.002	0	330926	150.0	157.4	
125 2,3- & 3,4- Dichlorotoluen	125	14.465	14.469	-0.003	0	209319	100.0	104.4	
126 1,2,4-Trichlorobenzene	180	14.726	14.724	0.002	92	76167	50.0	53.2	
127 Hexachlorobutadiene	225	14.878	14.876	0.002	95	42327	50.0	61.4	
128 Naphthalene	128	14.994	14.992	0.002	97	205825	50.0	55.9	
129 1,2,3-Trichlorobenzene	180	15.213	15.217	-0.004	94	63976	50.0	55.2	
131 2,4,5-Trichlorotoluene	159	15.992	15.995	-0.003	0	22567	50.0	54.0	
130 2,3,6-Trichlorotoluene	159	16.095	16.099	-0.004	95	21654	50.0	56.2	
148 2,3-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	
147 2,4-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	96.2	
S 135 1,3-Dichloropropene, Total	1				0		100.0	94.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

voaWAcro1stRe_00001	Amount Added: 6.00	Units: uL	
voaWEEpri Res_00006	Amount Added: 2.00	Units: uL	
voaWVA1stRest_00001	Amount Added: 2.00	Units: uL	
voaWKetmix2nd_00002	Amount Added: 2.00	Units: uL	
VOA8260VOA2ND_00147	Amount Added: 2.00	Units: uL	
VOA8260INT_00043	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00043	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015010.D

Injection Date: 15-Oct-2015 15:59:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: LCS

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

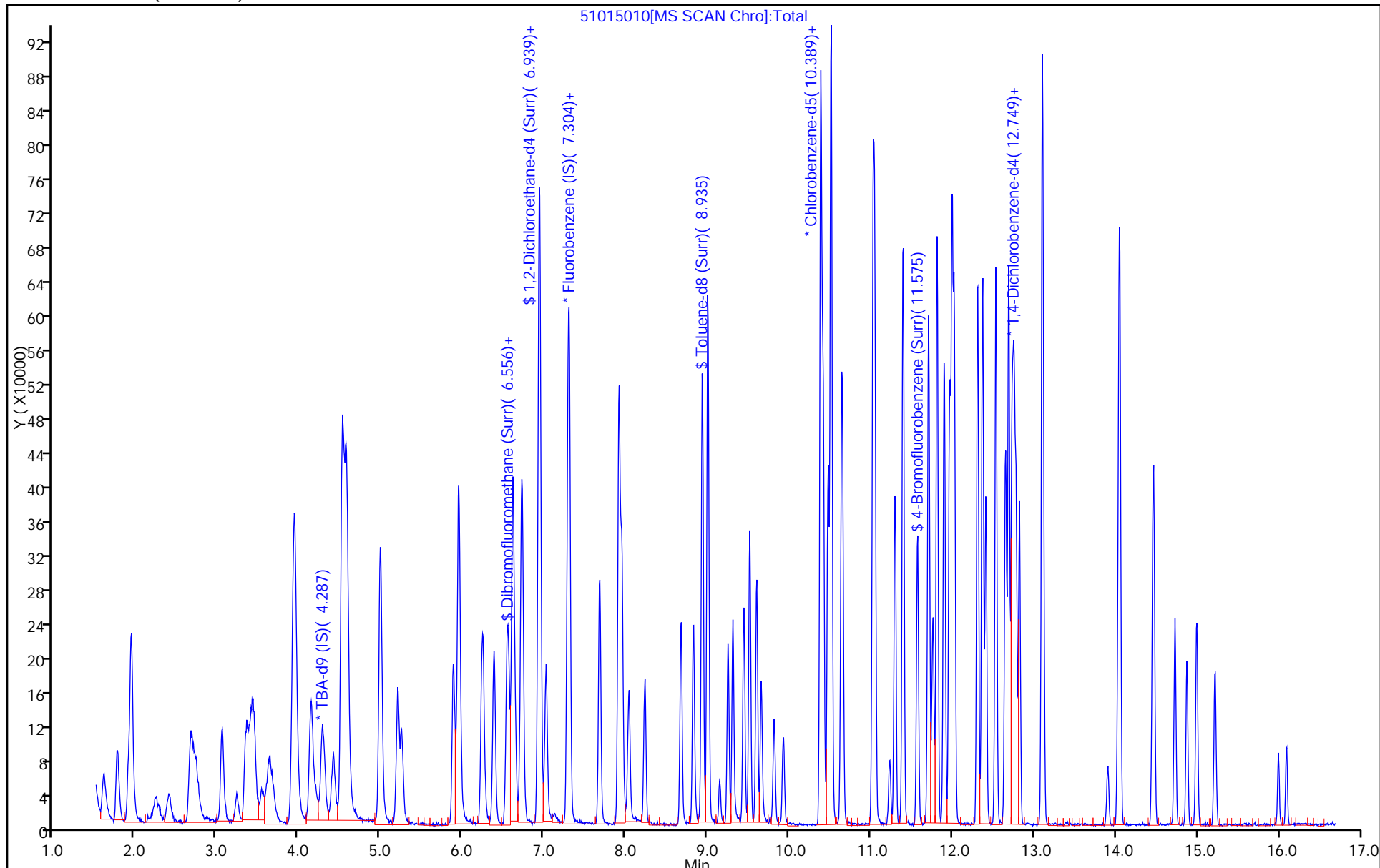
Dil. Factor: 1.0000

ALS Bottle#: 9

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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-157249/15
 Matrix: Water Lab File ID: 51016015.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/16/2015 17:58
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157249 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	8.57		1.0	0.28
75-01-4	Vinyl chloride	7.45		1.0	0.23
74-83-9	Bromomethane	7.06		1.0	0.31
75-00-3	Chloroethane	6.01		1.0	0.21
75-35-4	1,1-Dichloroethene	8.72		1.0	0.30
67-64-1	Acetone	17.6		5.0	2.5
75-15-0	Carbon disulfide	8.81		1.0	0.21
75-09-2	Methylene Chloride	9.36		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.47		1.0	0.17
1634-04-4	Methyl tert-butyl ether	9.11		1.0	0.18
75-34-3	1,1-Dichloroethane	9.31		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	9.52		1.0	0.24
74-97-5	Bromochloromethane	8.80		1.0	0.18
78-93-3	2-Butanone (MEK)	21.2		5.0	0.55
67-66-3	Chloroform	9.50		1.0	0.17
71-55-6	1,1,1-Trichloroethane	8.99		1.0	0.29
56-23-5	Carbon tetrachloride	8.67		1.0	0.14
71-43-2	Benzene	9.87		1.0	0.11
107-06-2	1,2-Dichloroethane	10.0		1.0	0.21
79-01-6	Trichloroethene	8.75		1.0	0.14
78-87-5	1,2-Dichloropropane	9.75		1.0	0.095
75-27-4	Bromodichloromethane	9.55		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	9.38		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	19.0		5.0	0.53
108-88-3	Toluene	10.8		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	10.1		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.7		1.0	0.20
127-18-4	Tetrachloroethene	10.4		1.0	0.15
591-78-6	2-Hexanone	19.1		5.0	0.16
124-48-1	Dibromochloromethane	9.86		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	11.0		1.0	0.18
108-90-7	Chlorobenzene	9.83		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.68		1.0	0.28
100-41-4	Ethylbenzene	10.1		1.0	0.23
1330-20-7	Xylenes, Total	20.2		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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-157249/15
 Matrix: Water Lab File ID: 51016015.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/16/2015 17:58
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157249 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10.4		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.4		1.0	0.20
107-13-1	Acrylonitrile	94.5		20	0.55
123-91-1	1,4-Dioxane	187	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		64-135
2037-26-5	Toluene-d8 (Surr)	104		71-118
460-00-4	4-Bromofluorobenzene (Surr)	93		70-118
1868-53-7	Dibromofluoromethane (Surr)	86		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016015.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 16-Oct-2015 17:58:30 ALS Bottle#: 10 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Misc. Info.: 180-0009043-015
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 16-Oct-2015 18:19:39 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK003

First Level Reviewer: fergusond

Date: 16-Oct-2015 18:19:39

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.268	4.271	-0.003	0	107445	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.292	7.289	0.003	97	406759	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.388	10.391	-0.003	90	91211	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.730	12.733	-0.003	96	128169	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.568	6.560	0.008	94	86331	50.0	43.2	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.939	6.931	0.008	0	131856	50.0	48.1	
\$ 7 Toluene-d8 (Surr)	98	8.934	8.939	-0.005	94	366913	50.0	52.1	
\$ 8 4-Bromofluorobenzene (Surr	95	11.574	11.573	0.001	87	122781	50.0	46.3	
11 Dichlorodifluoromethane	85	1.604	1.614	-0.010	99	108794	50.0	47.3	
12 Chloromethane	50	1.762	1.760	0.002	100	144538	50.0	42.8	
13 Vinyl chloride	62	1.902	1.900	0.002	97	111466	50.0	37.2	
14 Butadiene	39	1.932	1.937	-0.005	99	130896	50.0	37.0	
15 Bromomethane	94	2.254	2.247	0.007	92	43005	50.0	35.3	
16 Chloroethane	64	2.394	2.387	0.007	97	54272	50.0	30.1	
17 Dichlorofluoromethane	67	2.668	2.667	0.001	97	143915	50.0	37.6	
18 Trichlorofluoromethane	101	2.717	2.709	0.008	95	110834	50.0	38.7	
20 Ethyl ether	59	3.058	3.050	0.008	98	118816	50.0	44.7	
21 Acrolein	56	3.228	3.233	-0.005	97	47578	150.0	120.2	
22 1,1-Dichloroethene	96	3.356	3.354	0.002	93	98789	50.0	43.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.404	3.415	-0.011	94	102864	50.0	42.9	
24 Acetone	43	3.441	3.433	0.008	96	72204	100.0	88.0	
25 Iodomethane	142	3.550	3.543	0.007	99	150697	50.0	44.6	
26 Carbon disulfide	76	3.642	3.646	-0.004	100	231632	50.0	44.0	
28 3-Chloro-1-propene	76	3.927	3.914	0.013	90	60132	50.0	46.9	
30 Methyl acetate	43	3.946	3.938	0.008	100	613833	250.0	250.3	
31 Methylene Chloride	84	4.146	4.139	0.007	95	125463	50.0	46.8	
32 2-Methyl-2-propanol	59	4.408	4.395	0.013	87	59441	500.0	491.5	
33 Acrylonitrile	53	4.530	4.522	0.008	96	562177	500.0	472.4	
34 trans-1,2-Dichloroethene	96	4.566	4.565	0.001	96	116488	50.0	47.4	
35 Methyl tert-butyl ether	73	4.578	4.583	-0.005	93	259415	50.0	45.6	
36 Hexane	57	4.998	4.991	0.007	96	203752	50.0	49.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.205	5.198	0.007	96	225483	50.0	46.5	
38 Vinyl acetate	43	5.254	5.246	0.008	97	215925	50.0	59.4	
44 2,2-Dichloropropane	77	5.941	5.946	-0.005	79	92713	50.0	47.7	
45 cis-1,2-Dichloroethene	96	5.953	5.946	0.007	84	125086	50.0	47.6	
46 2-Butanone (MEK)	43	5.959	5.958	0.001	66	130613	100.0	105.9	
49 Chlorobromomethane	128	6.239	6.232	0.007	87	50785	50.0	44.0	
51 Tetrahydrofuran	42	6.251	6.250	0.001	92	91865	100.0	92.9	
52 Chloroform	83	6.385	6.384	0.001	96	198802	50.0	47.5	
53 1,1,1-Trichloroethane	97	6.543	6.542	0.001	93	139119	50.0	44.9	
54 Cyclohexane	56	6.622	6.615	0.007	97	244077	50.0	47.1	
56 Carbon tetrachloride	117	6.714	6.712	0.002	97	114327	50.0	43.4	
55 1,1-Dichloropropene	75	6.732	6.724	0.008	89	155518	50.0	45.4	
57 Isobutyl alcohol	41	6.927	6.919	0.008	92	94006	1250.0	1213.6	
58 Benzene	78	6.945	6.943	0.002	97	494748	50.0	49.3	
59 1,2-Dichloroethane	62	7.024	7.016	0.008	96	173431	50.0	50.0	
62 n-Heptane	43	7.310	7.309	0.002	96	184811	50.0	49.3	
64 Trichloroethene	130	7.675	7.674	0.001	96	107349	50.0	43.7	
66 Methylcyclohexane	83	7.918	7.917	0.001	97	175277	50.0	45.3	
67 1,2-Dichloropropane	63	7.949	7.947	0.002	94	128342	50.0	48.8	
70 1,4-Dioxane	88	8.040	8.032	0.008	33	16928	1000.0	933.0	M
68 Dibromomethane	93	8.040	8.039	0.001	95	64082	50.0	48.0	
71 Dichlorobromomethane	83	8.235	8.233	0.002	97	126209	50.0	47.8	
74 cis-1,3-Dichloropropene	75	8.679	8.677	0.002	89	145264	50.0	46.9	
75 4-Methyl-2-pentanone (MIBK)	43	8.825	8.823	0.002	99	213384	100.0	94.9	
76 Toluene	91	9.007	9.006	0.001	97	486369	50.0	53.9	
77 trans-1,3-Dichloropropene	75	9.250	9.249	0.001	97	119192	50.0	50.6	
78 Ethyl methacrylate	69	9.311	9.310	0.001	94	118418	50.0	52.0	
79 1,1,2-Trichloroethane	97	9.445	9.444	0.001	94	92023	50.0	53.6	
80 Tetrachloroethene	164	9.518	9.517	0.001	94	91139	50.0	52.0	
81 1,3-Dichloropropane	76	9.603	9.602	0.001	97	164551	50.0	51.6	
82 2-Hexanone	43	9.658	9.657	0.001	97	155249	100.0	95.7	
84 Chlorodibromomethane	129	9.816	9.815	0.001	90	73297	50.0	49.3	
85 Ethylene Dibromide	107	9.926	9.930	-0.004	99	90968	50.0	55.0	
86 3-Chlorobenzotrifluoride	180	10.388	10.393	-0.005	83	142081	50.0	49.0	
87 Chlorobenzene	112	10.418	10.417	0.001	91	285762	50.0	49.1	
88 4-Chlorobenzotrifluoride	180	10.479	10.478	0.001	96	133215	50.0	48.6	
89 1,1,1,2-Tetrachloroethane	131	10.510	10.508	0.002	88	91774	50.0	48.4	
90 Ethylbenzene	106	10.516	10.514	0.002	99	155271	50.0	50.4	
91 m-Xylene & p-Xylene	106	10.650	10.648	0.002	0	193158	50.0	51.1	
92 o-Xylene	106	11.033	11.032	0.001	98	179738	50.0	50.0	
93 Styrene	104	11.051	11.050	0.001	95	320237	50.0	53.8	
94 Bromoform	173	11.234	11.232	0.002	93	43973	50.0	51.8	
96 2-Chlorobenzotrifluoride	180	11.295	11.299	-0.005	94	132763	50.0	46.5	
97 Isopropylbenzene	105	11.398	11.397	0.001	98	448266	50.0	51.0	
99 1,1,2,2-Tetrachloroethane	83	11.708	11.707	0.001	80	120095	50.0	51.8	
100 Bromobenzene	156	11.708	11.707	0.001	97	110826	50.0	50.4	
102 trans-1,4-Dichloro-2-buten	53	11.745	11.743	0.002	81	44179	50.0	55.5	
101 1,2,3-Trichloropropane	110	11.763	11.768	-0.005	87	40713	50.0	56.1	
103 N-Propylbenzene	120	11.818	11.816	0.002	99	125722	50.0	49.9	
104 2-Chlorotoluene	126	11.897	11.902	-0.005	95	109646	50.0	51.2	
105 3-Chlorotoluene	126	11.964	11.968	-0.004	96	105178	50.0	47.8	
106 1,3,5-Trimethylbenzene	105	11.994	11.999	-0.005	95	376922	50.0	53.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 4-Chlorotoluene	126	12.025	12.023	0.002	99	118263	50.0	50.2	
108 tert-Butylbenzene	119	12.310	12.315	-0.005	95	288205	50.0	49.8	
110 1,2,4-Trimethylbenzene	105	12.365	12.370	-0.005	98	372887	50.0	52.3	
111 1,2-dichloro-4-(trifluorom	214	12.414	12.413	0.001	98	97405	50.0	49.0	
112 sec-Butylbenzene	105	12.529	12.534	-0.005	95	421466	50.0	51.6	
113 1,3-Dichlorobenzene	146	12.651	12.650	0.001	98	202882	50.0	51.8	
114 4-Isopropyltoluene	119	12.688	12.692	-0.004	97	343733	50.0	49.7	
115 1,4-Dichlorobenzene	146	12.755	12.753	0.002	94	209711	50.0	51.5	
116 2,4-Dichloro-1-(triflourom	214	12.779	12.784	-0.005	96	88732	50.0	48.2	
118 2,5-Dichlorobenzotrifluori	214	12.821	12.820	0.001	0	104097	50.0	52.3	
120 n-Butylbenzene	91	13.101	13.100	0.001	99	281572	50.0	47.6	
121 1,2-Dichlorobenzene	146	13.113	13.112	0.001	96	189439	50.0	51.7	
122 1,2-Dibromo-3-Chloropropan	75	13.898	13.909	-0.011	76	15193	50.0	50.5	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.044	14.049	-0.005	0	277948	150.0	132.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.458	14.463	-0.005	0	170573	100.0	85.6	
126 1,2,4-Trichlorobenzene	180	14.726	14.730	-0.004	93	67716	50.0	47.5	
127 Hexachlorobutadiene	225	14.872	14.876	-0.004	94	36712	50.0	53.5	
128 Naphthalene	128	14.993	14.992	0.001	97	157882	50.0	43.1	
129 1,2,3-Trichlorobenzene	180	15.218	15.223	-0.005	95	51986	50.0	45.1	
131 2,4,5-Trichlorotoluene	159	15.985	15.996	-0.011	0	15338	50.0	36.9	
130 2,3,6-Trichlorotoluene	159	16.088	16.093	-0.005	90	13776	50.0	35.9	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-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 133 Xylenes, Total	106				0		100.0	101.2	
S 134 1,2-Dichloroethene, Total	96				0		100.0	95.0	
S 135 1,3-Dichloropropene, Total	1				0		100.0	97.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWAcro1stRe_00001	Amount Added: 6.00	Units: uL	
VOA8260VOA2ND_00147	Amount Added: 2.00	Units: uL	
voaWKetmix2nd_00002	Amount Added: 2.00	Units: uL	
voaWVA1stRest_00001	Amount Added: 2.00	Units: uL	
voaWEEpri Res_00006	Amount Added: 2.00	Units: uL	
VOA8260INT_00043	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00043	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016015.D

Injection Date: 16-Oct-2015 17:58:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: LCS

Worklist Smp#: 15

Client ID:

Purge Vol: 5.000 mL

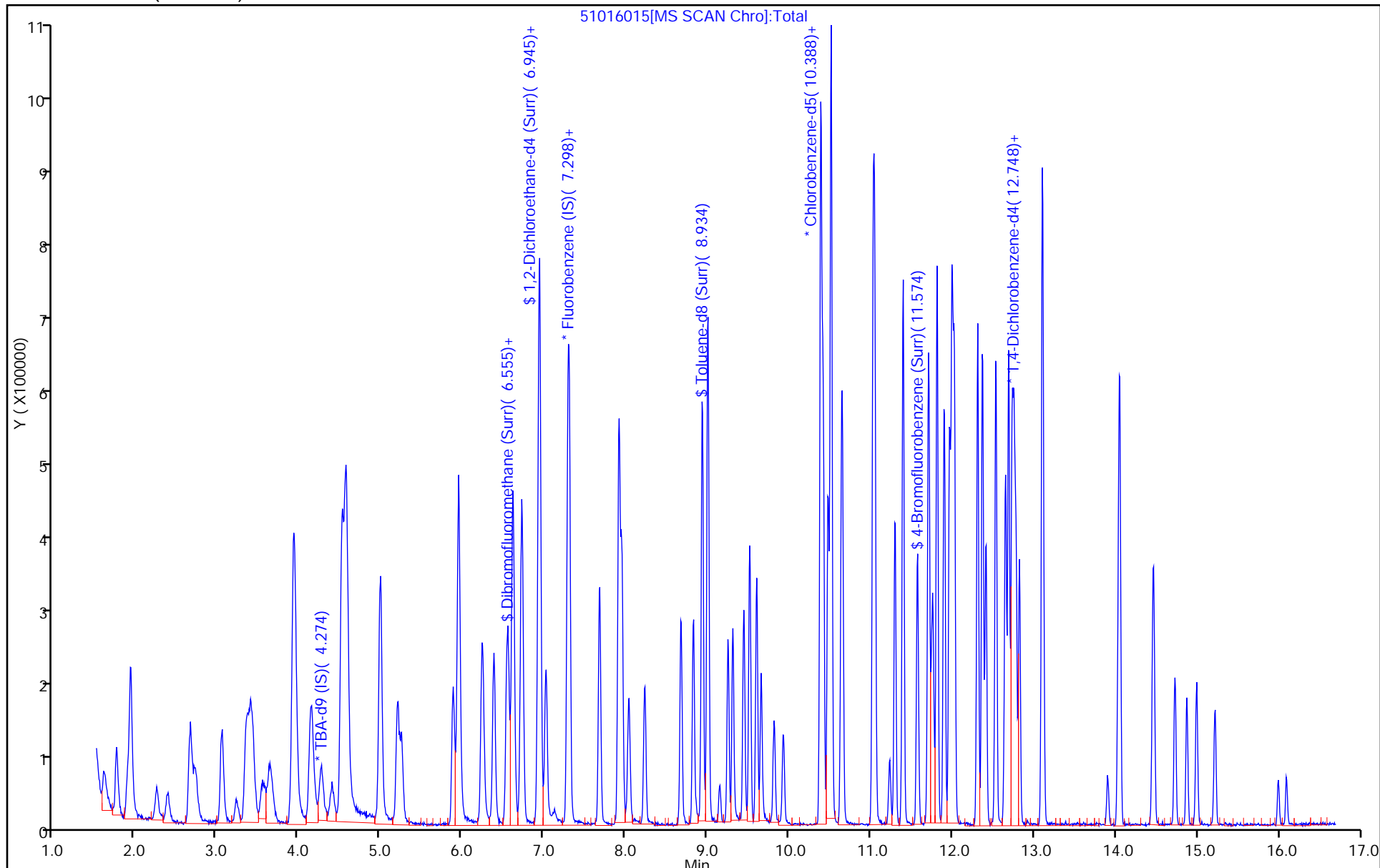
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



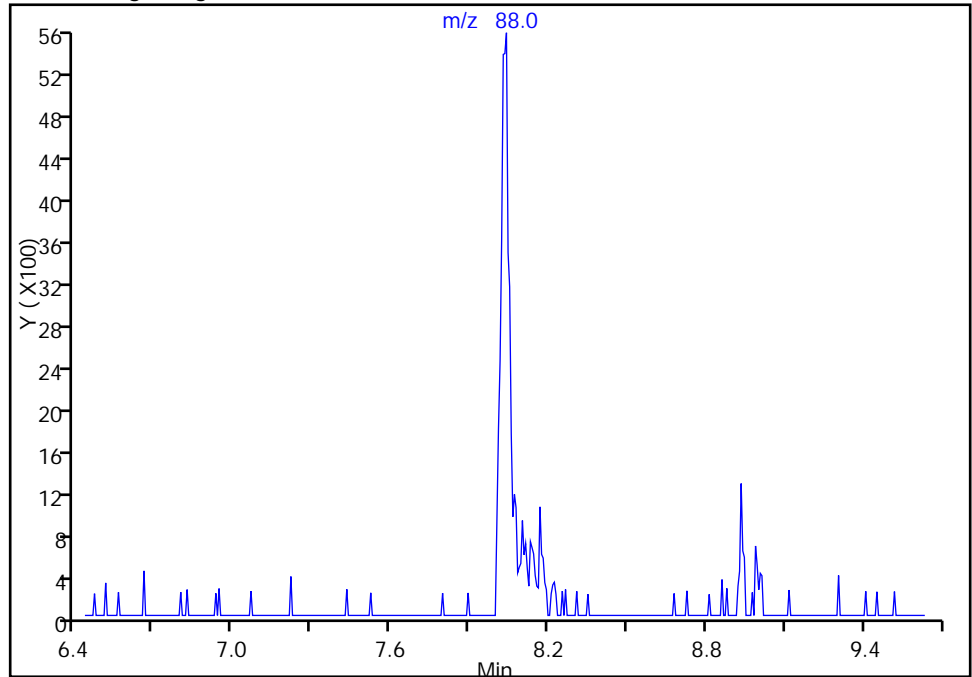
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151016-9043.b\51016015.D
Injection Date: 16-Oct-2015 17:58:30 Instrument ID: CHHP5
Lims ID: LCS
Client ID:
Operator ID: 001562 ALS Bottle#: 10 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

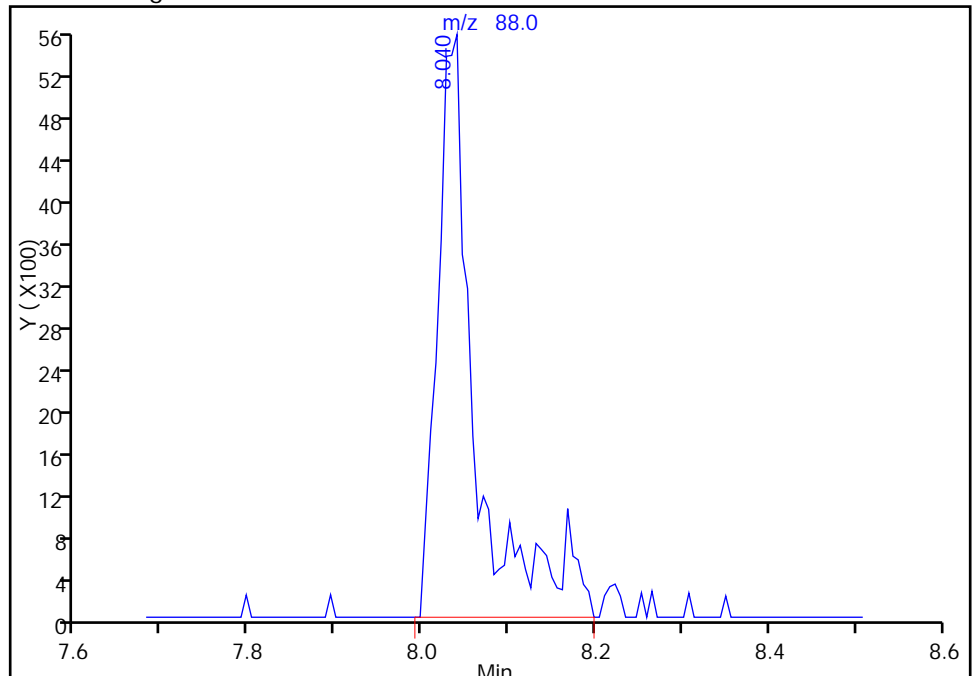
70 1,4-Dioxane, CAS: 123-91-1

Not Detected
Expected RT: 8.03

Processing Integration Results



Manual Integration Results



RT: 8.04
Area: 16928
Amount: 932.9756
Amount Units: ng

Reviewer: fergusond, 16-Oct-2015 18:19:39
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-157327/12
 Matrix: Water Lab File ID: 51017012.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2015 16:00
 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.: 157327 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	8.88		1.0	0.28
75-01-4	Vinyl chloride	7.83		1.0	0.23
74-83-9	Bromomethane	6.75		1.0	0.31
75-00-3	Chloroethane	6.25		1.0	0.21
75-35-4	1,1-Dichloroethene	9.63		1.0	0.30
67-64-1	Acetone	17.7		5.0	2.5
75-15-0	Carbon disulfide	10.5		1.0	0.21
75-09-2	Methylene Chloride	10.5		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.55		1.0	0.17
1634-04-4	Methyl tert-butyl ether	10.1		1.0	0.18
75-34-3	1,1-Dichloroethane	10.1		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	9.52		1.0	0.24
74-97-5	Bromochloromethane	9.37		1.0	0.18
78-93-3	2-Butanone (MEK)	18.7		5.0	0.55
67-66-3	Chloroform	9.78		1.0	0.17
71-55-6	1,1,1-Trichloroethane	9.47		1.0	0.29
56-23-5	Carbon tetrachloride	9.32		1.0	0.14
71-43-2	Benzene	9.79		1.0	0.11
107-06-2	1,2-Dichloroethane	10.1		1.0	0.21
79-01-6	Trichloroethene	8.86		1.0	0.14
78-87-5	1,2-Dichloropropane	9.57		1.0	0.095
75-27-4	Bromodichloromethane	9.99		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	8.63		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	22.6		5.0	0.53
108-88-3	Toluene	11.5		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	10.5		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.4		1.0	0.20
127-18-4	Tetrachloroethene	11.2		1.0	0.15
591-78-6	2-Hexanone	20.3		5.0	0.16
124-48-1	Dibromochloromethane	9.90		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	10.9		1.0	0.18
108-90-7	Chlorobenzene	10.5		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	11.0		1.0	0.28
100-41-4	Ethylbenzene	11.0		1.0	0.23
1330-20-7	Xylenes, Total	22.0		3.0	0.49
100-42-5	Styrene	11.5		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-157327/12
 Matrix: Water Lab File ID: 51017012.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2015 16:00
 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.: 157327 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	11.7		1.0	0.20
107-13-1	Acrylonitrile	102		20	0.55
123-91-1	1,4-Dioxane	126	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		64-135
2037-26-5	Toluene-d8 (Surr)	113		71-118
460-00-4	4-Bromofluorobenzene (Surr)	108		70-118
1868-53-7	Dibromofluoromethane (Surr)	94		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017012.D
 Lims ID: lcs
 Client ID:
 Sample Type: LCS
 Inject. Date: 17-Oct-2015 16:00:30 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-56257-B-1, 40x
 Misc. Info.: 180-0009055-012
 Operator ID: 034635 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 17-Oct-2015 17:47:02 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: journetp

Date: 17-Oct-2015 17:43:00

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	4.266	0.013	0	94965	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.289	0.001	97	367634	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.386	10.392	-0.006	90	78305	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.729	12.734	-0.005	96	126056	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.560	6.559	0.001	94	84666	50.0	46.9	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.936	-0.005	0	120796	50.0	48.7	
\$ 7 Toluene-d8 (Surr)	98	8.939	8.938	0.001	94	341937	50.0	56.6	
\$ 8 4-Bromofluorobenzene (Surr	95	11.573	11.572	0.001	86	122818	50.0	53.9	
11 Dichlorodifluoromethane	85	1.614	1.607	0.007	97	105716	5.00	50.9	
12 Chloromethane	50	1.766	1.766	0.000	99	135429	5.00	44.4	
13 Vinyl chloride	62	1.894	1.893	0.001	98	105971	5.00	39.2	
14 Butadiene	39	1.937	1.936	0.001	98	151534	5.00	47.4	
15 Bromomethane	94	2.247	2.246	0.001	91	37130	5.00	33.7	
16 Chloroethane	64	2.387	2.386	0.001	97	51021	5.00	31.3	
17 Dichlorofluoromethane	67	2.660	2.654	0.006	96	132555	5.00	38.3	
18 Trichlorofluoromethane	101	2.697	2.702	-0.005	91	110969	5.00	42.8	
20 Ethyl ether	59	3.050	3.043	0.007	97	109502	5.00	45.6	
21 Acrolein	56	3.226	3.232	-0.006	96	44255	15.0	123.7	
22 1,1-Dichloroethene	96	3.348	3.347	0.001	93	98582	5.00	48.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.409	3.414	-0.005	94	101610	5.00	46.8	
24 Acetone	43	3.451	3.432	0.019	98	65528	10.0	88.3	
25 Iodomethane	142	3.549	3.542	0.007	97	139849	5.00	45.8	
26 Carbon disulfide	76	3.634	3.627	0.007	100	249191	5.00	52.4	
28 3-Chloro-1-propene	76	3.920	3.913	0.007	88	49815	5.00	43.0	
30 Methyl acetate	43	3.938	3.937	0.001	100	605040	25.0	273.0	
31 Methylene Chloride	84	4.145	4.132	0.013	95	125298	5.00	52.3	
32 2-Methyl-2-propanol	59	4.400	4.400	0.000	89	64337	50.0	601.9	
33 Acrylonitrile	53	4.522	4.515	0.007	99	549961	50.0	511.4	
34 trans-1,2-Dichloroethene	96	4.565	4.564	0.001	95	106204	5.00	47.8	
35 Methyl tert-butyl ether	73	4.577	4.570	0.007	95	260675	5.00	50.7	
36 Hexane	57	4.997	4.990	0.007	97	201340	5.00	53.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.203	5.203	0.000	97	220474	5.00	50.3	
38 Vinyl acetate	43	5.252	5.294	-0.042	97	212444	5.00	64.7	
44 2,2-Dichloropropane	77	5.952	5.945	0.007	56	93743	5.00	53.4	
45 cis-1,2-Dichloroethene	96	5.946	5.951	-0.005	85	113063	5.00	47.6	
46 2-Butanone (MEK)	43	5.958	5.957	0.001	97	104094	10.0	93.4	
49 Chlorobromomethane	128	6.238	6.237	0.001	87	48847	5.00	46.8	
51 Tetrahydrofuran	42	6.250	6.243	0.007	91	90046	10.0	100.7	
52 Chloroform	83	6.384	6.383	0.001	96	185019	5.00	48.9	
53 1,1,1-Trichloroethane	97	6.542	6.541	0.001	95	132484	5.00	47.4	
54 Cyclohexane	56	6.615	6.614	0.001	97	248047	5.00	53.0	
56 Carbon tetrachloride	117	6.712	6.717	-0.005	90	110976	5.00	46.6	
55 1,1-Dichloropropene	75	6.730	6.724	0.006	88	148977	5.00	48.2	
57 Isobutyl alcohol	41	6.925	6.918	0.007	91	80123	125.0	1144.4	
58 Benzene	78	6.943	6.943	0.000	97	443513	5.00	48.9	
59 1,2-Dichloroethane	62	7.022	7.022	0.000	96	158626	5.00	50.6	
62 n-Heptane	43	7.308	7.308	0.000	97	192982	5.00	56.9	
64 Trichloroethene	130	7.679	7.679	0.000	95	98298	5.00	44.3	
66 Methylcyclohexane	83	7.917	7.916	0.001	96	175774	5.00	50.3	
67 1,2-Dichloropropane	63	7.953	7.952	0.001	93	113766	5.00	47.8	
68 Dibromomethane	93	8.038	8.031	0.007	93	57406	5.00	47.6	
70 1,4-Dioxane	88	8.032	8.031	0.001	35	10334	100.0	630.2	
71 Dichlorobromomethane	83	8.227	8.226	0.001	97	119325	5.00	50.0	
73 2-Chloroethyl vinyl ether	63	8.531	8.530	0.001	89	131323	10.0	108.1	
74 cis-1,3-Dichloropropene	75	8.671	8.676	-0.005	87	120824	5.00	43.2	
75 4-Methyl-2-pentanone (MIBK)	43	8.829	8.828	0.001	99	218095	10.0	113.0	
76 Toluene	91	9.006	9.005	0.001	97	447498	5.00	57.7	
77 trans-1,3-Dichloropropene	75	9.249	9.248	0.001	99	106016	5.00	52.4	
78 Ethyl methacrylate	69	9.310	9.309	0.001	96	108529	5.00	55.5	
79 1,1,2-Trichloroethane	97	9.450	9.449	0.001	93	76897	5.00	52.1	
80 Tetrachloroethene	164	9.517	9.516	0.001	96	84213	5.00	56.0	
81 1,3-Dichloropropane	76	9.602	9.601	0.001	97	155641	5.00	56.8	
82 2-Hexanone	43	9.656	9.656	0.000	99	141408	10.0	101.5	
84 Chlorodibromomethane	129	9.815	9.814	0.001	91	63210	5.00	49.5	
85 Ethylene Dibromide	107	9.930	9.930	0.000	98	77446	5.00	54.5	
86 3-Chlorobenzotrifluoride	180	10.393	10.392	0.001	88	152045	5.00	61.0	
87 Chlorobenzene	112	10.417	10.416	0.001	90	262460	5.00	52.6	
88 4-Chlorobenzotrifluoride	180	10.478	10.477	0.001	95	145071	5.00	61.6	
89 1,1,1,2-Tetrachloroethane	131	10.508	10.507	0.001	89	89107	5.00	54.8	
90 Ethylbenzene	106	10.514	10.520	-0.006	99	144952	5.00	54.8	
91 m-Xylene & p-Xylene	106	10.648	10.647	0.001	0	178390	5.00	55.0	
92 o-Xylene	106	11.025	11.031	-0.006	99	168893	5.00	54.8	
93 Styrene	104	11.050	11.049	0.001	95	293940	5.00	57.5	
94 Bromoform	173	11.226	11.231	-0.005	95	36752	5.00	50.4	
96 2-Chlorobenzotrifluoride	180	11.299	11.298	0.001	97	149440	5.00	61.0	
97 Isopropylbenzene	105	11.396	11.396	0.000	97	441788	5.00	58.5	
99 1,1,2,2-Tetrachloroethane	83	11.707	11.712	-0.005	77	116445	5.00	58.5	
100 Bromobenzene	156	11.707	11.712	-0.005	97	106337	5.00	49.1	
102 trans-1,4-Dichloro-2-buten	53	11.743	11.742	0.001	71	15339	5.00	19.6	
101 1,2,3-Trichloropropane	110	11.767	11.767	0.000	88	36307	5.00	50.9	
103 N-Propylbenzene	120	11.816	11.815	0.001	99	118938	5.00	48.0	
104 2-Chlorotoluene	126	11.901	11.901	0.000	95	102510	5.00	48.7	
105 3-Chlorotoluene	126	11.968	11.967	0.001	97	112645	5.00	52.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.999	11.998	0.001	95	378468	5.00	54.1	
107 4-Chlorotoluene	126	12.023	12.022	0.001	98	111182	5.00	48.0	
108 tert-Butylbenzene	119	12.309	12.308	0.001	94	283927	5.00	49.9	
110 1,2,4-Trimethylbenzene	105	12.370	12.369	0.001	98	377257	5.00	53.8	
111 1,2-dichloro-4-(trifluorom	214	12.412	12.412	0.000	98	114535	5.00	58.6	
112 sec-Butylbenzene	105	12.534	12.533	0.001	95	424822	5.00	52.9	
113 1,3-Dichlorobenzene	146	12.650	12.649	0.001	97	201795	5.00	52.4	
114 4-Isopropyltoluene	119	12.692	12.691	0.001	97	359885	5.00	53.0	
115 1,4-Dichlorobenzene	146	12.753	12.758	-0.005	95	200106	5.00	49.9	
116 2,4-Dichloro-1-(trifluorom	214	12.783	12.783	0.000	97	110282	5.00	60.9	
118 2,5-Dichlorobenzotrifluori	214	12.820	12.825	-0.005	0	110858	5.00	56.6	
120 n-Butylbenzene	91	13.100	13.099	0.001	99	296426	5.00	51.0	
121 1,2-Dichlorobenzene	146	13.112	13.111	0.001	95	175468	5.00	48.7	
122 1,2-Dibromo-3-Chloropropan	75	13.897	13.902	-0.005	75	16036	5.00	54.2	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.043	14.048	-0.005	0	291246	15.0	141.6	
125 2,3- & 3,4- Dichlorotoluen	125	14.462	14.468	-0.006	0	177936	10.0	90.7	
126 1,2,4-Trichlorobenzene	180	14.724	14.729	-0.005	94	61831	5.00	44.1	
127 Hexachlorobutadiene	225	14.870	14.875	-0.005	96	36604	5.00	54.2	
128 Naphthalene	128	14.992	14.991	0.001	97	141465	5.00	39.3	
129 1,2,3-Trichlorobenzene	180	15.217	15.216	0.001	92	47647	5.00	42.0	
131 2,4,5-Trichlorotoluene	159	15.989	15.995	-0.006	0	15218	5.00	37.2	
130 2,3,6-Trichlorotoluene	159	16.093	16.092	0.001	93	15455	5.00	41.0	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-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		10.0	95.4	
S 133 Xylenes, Total	106				0		10.0	109.8	
S 135 1,3-Dichloropropene, Total	1				0		10.0	95.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260VOA2ND_00147	Amount Added: 0.20	Units: uL	
voaWVA1stRest_00001	Amount Added: 0.20	Units: uL	
voaW2-Clepri_00003	Amount Added: 0.20	Units: uL	
voaWKetmix2nd_00002	Amount Added: 0.20	Units: uL	
voaWEEpri Res_00006	Amount Added: 0.20	Units: uL	
voaWAcro1stRe_00002	Amount Added: 0.60	Units: uL	
VOA8260INT_00043	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00043	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151017-9055.b\51017012.D

Injection Date: 17-Oct-2015 16:00:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: lcs

Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL

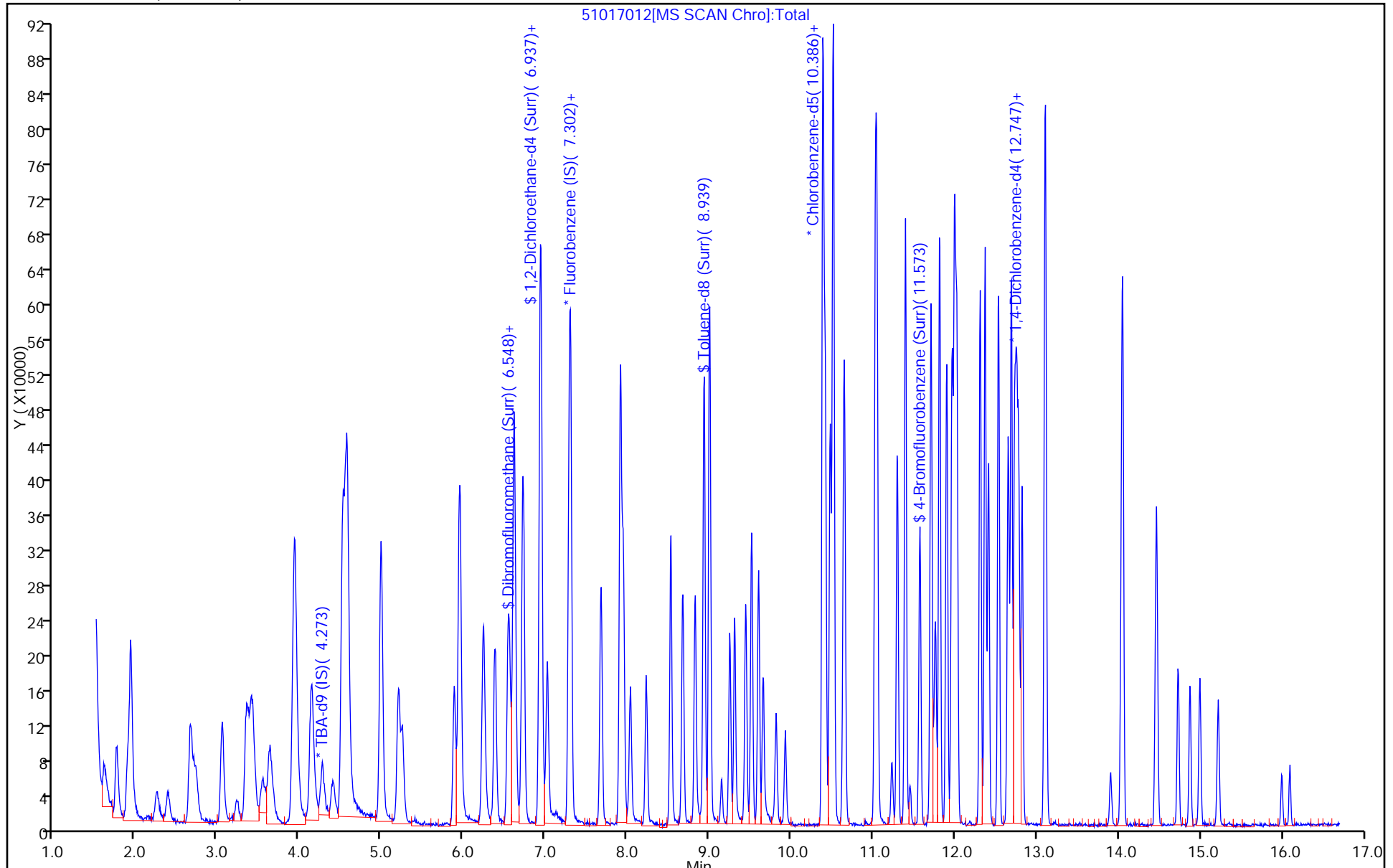
Dil. Factor: 1.0000

ALS Bottle#: 11

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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-157435/7
 Matrix: Water Lab File ID: 51019007.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2015 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.: 157435 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	8.15		1.0	0.28
75-01-4	Vinyl chloride	7.17		1.0	0.23
74-83-9	Bromomethane	6.92		1.0	0.31
75-00-3	Chloroethane	6.25		1.0	0.21
75-35-4	1,1-Dichloroethene	9.66		1.0	0.30
67-64-1	Acetone	21.2		5.0	2.5
75-15-0	Carbon disulfide	10.1		1.0	0.21
75-09-2	Methylene Chloride	9.28		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.69		1.0	0.17
1634-04-4	Methyl tert-butyl ether	9.34		1.0	0.18
75-34-3	1,1-Dichloroethane	9.53		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	9.41		1.0	0.24
74-97-5	Bromochloromethane	8.74		1.0	0.18
78-93-3	2-Butanone (MEK)	20.7		5.0	0.55
67-66-3	Chloroform	9.99		1.0	0.17
71-55-6	1,1,1-Trichloroethane	10.2		1.0	0.29
56-23-5	Carbon tetrachloride	11.2		1.0	0.14
71-43-2	Benzene	9.72		1.0	0.11
107-06-2	1,2-Dichloroethane	10.7		1.0	0.21
79-01-6	Trichloroethene	9.32		1.0	0.14
78-87-5	1,2-Dichloropropane	9.67		1.0	0.095
75-27-4	Bromodichloromethane	10.2		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	9.58		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	20.3		5.0	0.53
108-88-3	Toluene	11.0		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	10.1		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.4		1.0	0.20
127-18-4	Tetrachloroethene	11.3		1.0	0.15
591-78-6	2-Hexanone	18.8		5.0	0.16
124-48-1	Dibromochloromethane	9.66		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	10.7		1.0	0.18
108-90-7	Chlorobenzene	10.1		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	10.2		1.0	0.28
100-41-4	Ethylbenzene	10.7		1.0	0.23
1330-20-7	Xylenes, Total	21.2		3.0	0.49
100-42-5	Styrene	11.1		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-157435/7
 Matrix: Water Lab File ID: 51019007.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2015 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.: 157435 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10.6		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.2		1.0	0.20
107-13-1	Acrylonitrile	97.6		20	0.55
123-91-1	1,4-Dioxane	165	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		64-135
2037-26-5	Toluene-d8 (Surr)	102		71-118
460-00-4	4-Bromofluorobenzene (Surr)	100		70-118
1868-53-7	Dibromofluoromethane (Surr)	87		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019007.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 19-Oct-2015 12:40:30 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Misc. Info.: 180-0009083-007
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 19-Oct-2015 13:00:30 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK002

First Level Reviewer: fergusond

Date: 19-Oct-2015 13:00:29

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.272	4.273	-0.001	0	95604	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.284	0.006	97	360181	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.386	10.387	-0.001	90	80512	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.734	12.729	0.005	94	119755	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.566	6.554	0.012	59	77084	50.0	43.6	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.937	6.931	0.006	0	118433	50.0	48.7	
\$ 7 Toluene-d8 (Surr)	98	8.938	8.939	-0.001	95	317505	50.0	51.1	
\$ 8 4-Bromofluorobenzene (Surr	95	11.572	11.573	-0.001	87	116937	50.0	49.9	
11 Dichlorodifluoromethane	85	1.620	1.614	0.006	98	97271	50.0	47.8	
12 Chloromethane	50	1.772	1.766	0.006	99	121786	50.0	40.8	
13 Vinyl chloride	62	1.906	1.900	0.006	97	94970	50.0	35.8	
14 Butadiene	39	1.948	1.937	0.011	98	138313	50.0	44.2	
15 Bromomethane	94	2.277	2.253	0.024	92	37311	50.0	34.6	
16 Chloroethane	64	2.411	2.387	0.024	97	49998	50.0	31.3	
17 Dichlorofluoromethane	67	2.684	2.661	0.023	97	145802	50.0	43.0	
18 Trichlorofluoromethane	101	2.709	2.697	0.012	97	127992	50.0	50.4	
20 Ethyl ether	59	3.049	3.044	0.005	97	103466	50.0	44.0	
21 Acrolein	56	3.226	3.233	-0.007	98	50311	150.0	143.6	
22 1,1-Dichloroethene	96	3.354	3.354	0.000	91	96911	50.0	48.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.427	3.409	0.018	92	101181	50.0	47.6	
24 Acetone	43	3.439	3.433	0.006	98	77080	100.0	106.1	
25 Iodomethane	142	3.548	3.537	0.011	96	139421	50.0	46.6	
26 Carbon disulfide	76	3.633	3.634	-0.001	100	235210	50.0	50.5	
28 3-Chloro-1-propene	76	3.932	3.932	0.000	87	53872	50.0	47.4	
30 Methyl acetate	43	3.944	3.944	0.000	100	519222	250.0	239.1	
31 Methylene Chloride	84	4.151	4.145	0.006	95	110291	50.0	46.4	
32 2-Methyl-2-propanol	59	4.406	4.407	-0.001	93	67664	500.0	628.8	
33 Acrylonitrile	53	4.522	4.522	0.000	100	514421	500.0	488.2	
34 trans-1,2-Dichloroethene	96	4.570	4.571	-0.001	92	105556	50.0	48.5	
35 Methyl tert-butyl ether	73	4.582	4.583	-0.001	95	235374	50.0	46.7	
36 Hexane	57	4.990	4.991	-0.001	95	195001	50.0	53.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.209	5.204	0.005	97	204370	50.0	47.6	
38 Vinyl acetate	43	5.252	5.246	0.006	97	193015	50.0	60.0	
44 2,2-Dichloropropane	77	5.945	5.940	0.005	61	96958	50.0	56.4	
45 cis-1,2-Dichloroethene	96	5.951	5.946	0.005	86	109519	50.0	47.1	
46 2-Butanone (MEK)	43	5.957	5.958	-0.001	66	112925	100.0	103.4	
49 Chlorobromomethane	128	6.243	6.232	0.011	88	44642	50.0	43.7	
51 Tetrahydrofuran	42	6.255	6.250	0.005	91	79308	100.0	90.5	
52 Chloroform	83	6.383	6.384	-0.001	97	185195	50.0	50.0	
53 1,1,1-Trichloroethane	97	6.541	6.548	-0.007	94	139706	50.0	51.0	
54 Cyclohexane	56	6.614	6.621	-0.007	98	231088	50.0	50.4	
56 Carbon tetrachloride	117	6.718	6.718	0.000	97	130629	50.0	56.0	
55 1,1-Dichloropropene	75	6.730	6.724	0.006	88	150649	50.0	49.7	
57 Isobutyl alcohol	41	6.925	6.925	0.000	91	82372	1250.0	1200.9	
58 Benzene	78	6.943	6.943	0.000	96	431665	50.0	48.6	
59 1,2-Dichloroethane	62	7.022	7.023	-0.001	97	164240	50.0	53.5	
62 n-Heptane	43	7.308	7.308	0.000	96	176851	50.0	53.2	
64 Trichloroethene	130	7.679	7.680	-0.001	96	101250	50.0	46.6	
66 Methylcyclohexane	83	7.916	7.917	-0.001	97	165341	50.0	48.3	
67 1,2-Dichloropropane	63	7.953	7.947	0.006	95	112681	50.0	48.4	
70 1,4-Dioxane	88	8.026	8.020	0.006	41	13258	1000.0	825.2	
68 Dibromomethane	93	8.032	8.038	-0.006	94	53708	50.0	45.4	
71 Dichlorobromomethane	83	8.233	8.227	0.006	98	119940	50.0	51.2	
73 2-Chloroethyl vinyl ether	63	8.531	8.525	0.006	90	110992	100.0	93.3	
74 cis-1,3-Dichloropropene	75	8.677	8.671	0.006	87	131291	50.0	47.9	
75 4-Methyl-2-pentanone (MIBK)	43	8.823	8.823	0.000	99	201621	100.0	101.6	
76 Toluene	91	9.005	9.006	-0.001	97	438484	50.0	55.0	
77 trans-1,3-Dichloropropene	75	9.248	9.255	-0.007	98	104635	50.0	50.3	
78 Ethyl methacrylate	69	9.309	9.310	-0.001	95	99154	50.0	49.3	
79 1,1,2-Trichloroethane	97	9.449	9.444	0.005	94	78557	50.0	51.8	
80 Tetrachloroethene	164	9.522	9.517	0.005	97	87094	50.0	56.3	
81 1,3-Dichloropropane	76	9.601	9.602	-0.001	96	142534	50.0	50.6	
82 2-Hexanone	43	9.662	9.657	0.005	98	134927	100.0	94.2	
84 Chlorodibromomethane	129	9.820	9.821	-0.001	91	63432	50.0	48.3	
85 Ethylene Dibromide	107	9.930	9.930	0.000	96	77972	50.0	53.4	
86 3-Chlorobenzotrifluoride	180	10.392	10.387	0.005	87	144582	50.0	56.4	
87 Chlorobenzene	112	10.417	10.417	-0.001	90	258252	50.0	50.3	
88 4-Chlorobenzotrifluoride	180	10.477	10.478	-0.001	96	132383	50.0	54.7	
89 1,1,1,2-Tetrachloroethane	131	10.508	10.514	-0.006	90	85355	50.0	51.0	
90 Ethylbenzene	106	10.520	10.514	0.006	99	145112	50.0	53.3	
91 m-Xylene & p-Xylene	106	10.648	10.648	0.000	0	180595	50.0	54.1	
92 o-Xylene	106	11.031	11.032	-0.001	98	165405	50.0	52.2	
93 Styrene	104	11.049	11.050	-0.001	94	290225	50.0	55.3	
94 Bromoform	173	11.232	11.232	0.000	94	39719	50.0	53.0	
96 2-Chlorobenzotrifluoride	180	11.299	11.299	0.000	97	139396	50.0	55.3	
97 Isopropylbenzene	105	11.396	11.397	-0.001	98	454323	50.0	58.5	
99 1,1,2,2-Tetrachloroethane	83	11.712	11.713	-0.001	80	104034	50.0	50.9	
100 Bromobenzene	156	11.706	11.713	-0.007	96	105603	50.0	51.4	
102 trans-1,4-Dichloro-2-buten	53	11.743	11.749	-0.006	65	22011	50.0	29.6	
101 1,2,3-Trichloropropane	110	11.767	11.768	-0.001	89	34155	50.0	50.4	
103 N-Propylbenzene	120	11.816	11.816	0.000	99	120504	50.0	51.2	
104 2-Chlorotoluene	126	11.901	11.901	0.000	94	105391	50.0	52.7	
105 3-Chlorotoluene	126	11.968	11.968	0.000	97	102944	50.0	50.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.998	11.999	-0.001	96	380973	50.0	57.3	
107 4-Chlorotoluene	126	12.023	12.029	-0.006	99	109827	50.0	49.9	
108 tert-Butylbenzene	119	12.308	12.309	-0.001	94	286420	50.0	53.0	
110 1,2,4-Trimethylbenzene	105	12.369	12.370	-0.001	99	374874	50.0	56.3	
111 1,2-dichloro-4-(trifluorom	214	12.412	12.412	0.000	97	106659	50.0	57.4	
112 sec-Butylbenzene	105	12.534	12.534	0.000	96	427356	50.0	56.0	
113 1,3-Dichlorobenzene	146	12.649	12.650	-0.001	97	193413	50.0	52.8	
114 4-Isopropyltoluene	119	12.692	12.692	0.000	97	351027	50.0	54.4	
115 1,4-Dichlorobenzene	146	12.759	12.759	0.000	94	199437	50.0	52.4	
116 2,4-Dichloro-1-(trifluorom	214	12.783	12.777	0.006	95	98853	50.0	57.4	
118 2,5-Dichlorobenzotrifluori	214	12.826	12.826	0.000	0	108226	50.0	58.2	
120 n-Butylbenzene	91	13.099	13.100	-0.001	98	290935	50.0	52.7	
121 1,2-Dichlorobenzene	146	13.111	13.112	-0.001	95	173277	50.0	50.7	
122 1,2-Dibromo-3-Chloropropan	75	13.902	13.903	-0.001	74	13713	50.0	48.8	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.042	14.049	-0.007	0	274201	150.0	140.4	
125 2,3- & 3,4- Dichlorotoluen	125	14.462	14.469	-0.007	0	169890	100.0	91.2	
126 1,2,4-Trichlorobenzene	180	14.730	14.724	0.006	94	64695	50.0	48.6	
127 Hexachlorobutadiene	225	14.876	14.876	0.000	95	33510	50.0	52.3	
128 Naphthalene	128	14.997	14.992	0.005	98	139713	50.0	40.8	
129 1,2,3-Trichlorobenzene	180	15.216	15.217	-0.001	92	49387	50.0	45.8	
131 2,4,5-Trichlorotoluene	159	15.989	15.996	-0.007	0	15066	50.0	38.8	
130 2,3,6-Trichlorotoluene	159	16.092	16.093	-0.001	96	14798	50.0	41.3	
148 2,3-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	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	106.3	
S 134 1,2-Dichloroethene, Total	96				0		100.0	95.5	
S 135 1,3-Dichloropropene, Total	1				0		100.0	98.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260VOA2ND_00147	Amount Added: 2.00	Units: uL	
voaW2-Clepri_00003	Amount Added: 2.00	Units: uL	
voaWVA1stRest_00001	Amount Added: 2.00	Units: uL	
voaWKetmix2nd_00002	Amount Added: 2.00	Units: uL	
voaWEEpri Res_00006	Amount Added: 2.00	Units: uL	
voaWAcro1stRe_00002	Amount Added: 6.00	Units: uL	
VOA8260INT_00043	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00043	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151019-9083.b\51019007.D

Injection Date: 19-Oct-2015 12:40:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: LCS

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

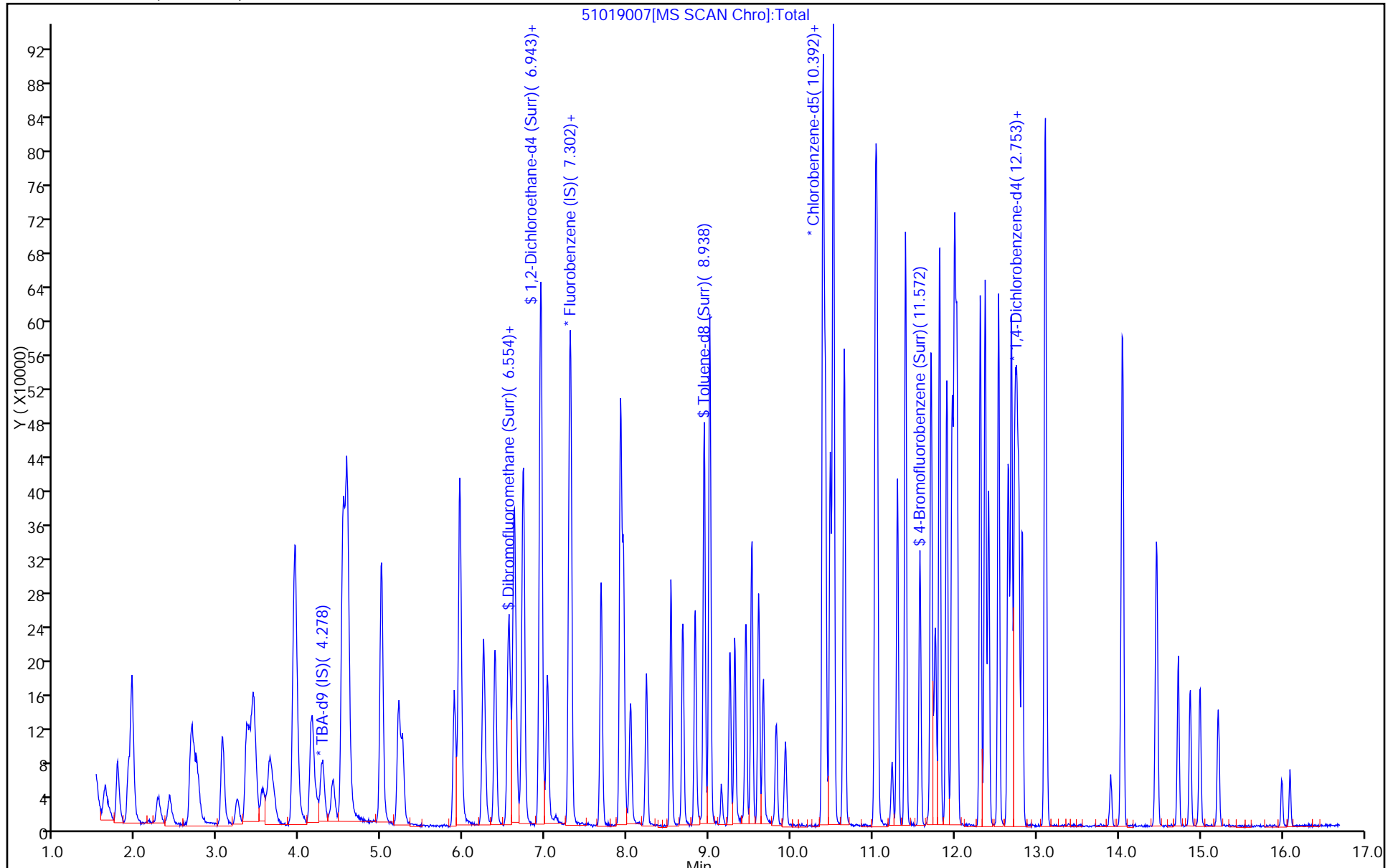
Dil. Factor: 1.0000

ALS Bottle#: 7

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.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-6-0/1-0 MS Lab Sample ID: 180-48564-7 MS
 Matrix: Water Lab File ID: 51015011.D
 Analysis Method: 8260C Date Collected: 10/07/2015 07:35
 Sample wt/vol: 5 (mL) Date Analyzed: 10/15/2015 16:23
 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.: 157127 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	8.88		1.0	0.28
75-01-4	Vinyl chloride	7.85		1.0	0.23
74-83-9	Bromomethane	7.55		1.0	0.31
75-00-3	Chloroethane	7.29		1.0	0.21
75-35-4	1,1-Dichloroethene	9.18		1.0	0.30
67-64-1	Acetone	19.0		5.0	2.5
75-15-0	Carbon disulfide	9.66		1.0	0.21
75-09-2	Methylene Chloride	9.14		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.15		1.0	0.17
1634-04-4	Methyl tert-butyl ether	9.31		1.0	0.18
75-34-3	1,1-Dichloroethane	9.15		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	27.8		1.0	0.24
74-97-5	Bromochloromethane	8.03		1.0	0.18
78-93-3	2-Butanone (MEK)	19.9		5.0	0.55
67-66-3	Chloroform	9.05		1.0	0.17
71-55-6	1,1,1-Trichloroethane	8.97		1.0	0.29
56-23-5	Carbon tetrachloride	8.99		1.0	0.14
71-43-2	Benzene	9.73		1.0	0.11
107-06-2	1,2-Dichloroethane	9.42		1.0	0.21
79-01-6	Trichloroethene	14.5		1.0	0.14
78-87-5	1,2-Dichloropropane	9.72		1.0	0.095
75-27-4	Bromodichloromethane	9.05		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	9.15		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	18.7		5.0	0.53
108-88-3	Toluene	10.3		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	9.24		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.2		1.0	0.20
127-18-4	Tetrachloroethene	39.9		1.0	0.15
591-78-6	2-Hexanone	18.6		5.0	0.16
124-48-1	Dibromochloromethane	9.07		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	10.0		1.0	0.18
108-90-7	Chlorobenzene	9.71		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.13		1.0	0.28
100-41-4	Ethylbenzene	10.4		1.0	0.23
1330-20-7	Xylenes, Total	20.3		3.0	0.49
100-42-5	Styrene	10.4		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-6-0/1-0 MS Lab Sample ID: 180-48564-7 MS
 Matrix: Water Lab File ID: 51015011.D
 Analysis Method: 8260C Date Collected: 10/07/2015 07:35
 Sample wt/vol: 5 (mL) Date Analyzed: 10/15/2015 16:23
 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.: 157127 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.64		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.6		1.0	0.20
107-13-1	Acrylonitrile	109		20	0.55
123-91-1	1,4-Dioxane	260		200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		64-135
2037-26-5	Toluene-d8 (Surr)	103		71-118
460-00-4	4-Bromofluorobenzene (Surr)	95		70-118
1868-53-7	Dibromofluoromethane (Surr)	82		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015011.D
 Lims ID: 180-48564-C-7 MS
 Client ID: HD-CW-6-0/1-0
 Sample Type: MS
 Inject. Date: 15-Oct-2015 16:23:30 ALS Bottle#: 10 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-48564-C-7 MS
 Misc. Info.: 180-0009022-011
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 16-Oct-2015 08:07:39 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK003

First Level Reviewer: fergusond

Date: 16-Oct-2015 08:07:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.280	4.273	0.007	0	158623	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.292	7.290	0.002	97	385658	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.388	10.386	0.002	91	88863	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.730	12.729	0.001	94	127061	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.562	6.554	0.008	92	77564	50.0	41.0	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.939	6.931	0.008	0	115928	50.0	44.6	
\$ 7 Toluene-d8 (Surr)	98	8.934	8.939	-0.005	95	354692	50.0	51.7	
\$ 8 4-Bromofluorobenzene (Surr	95	11.574	11.573	0.001	87	122515	50.0	47.4	
11 Dichlorodifluoromethane	85	1.598	1.596	0.002	97	110383	50.0	50.7	
12 Chloromethane	50	1.768	1.772	-0.004	99	142075	50.0	44.4	
13 Vinyl chloride	62	1.908	1.912	-0.004	97	111322	50.0	39.2	
14 Butadiene	39	1.944	1.943	0.001	100	159934	50.0	47.7	
15 Bromomethane	94	2.273	2.241	0.032	91	43567	50.0	37.7	
16 Chloroethane	64	2.401	2.399	0.002	98	62405	50.0	36.5	
17 Dichlorofluoromethane	67	2.668	2.667	0.001	98	137736	50.0	37.9	
18 Trichlorofluoromethane	101	2.717	2.703	0.014	97	123744	50.0	45.5	M
20 Ethyl ether	59	3.051	3.038	0.013	98	107250	50.0	42.6	
21 Acrolein	56	3.234	3.220	0.014	97	50061	150.0	133.4	
22 1,1-Dichloroethene	96	3.350	3.330	0.020	94	98578	50.0	45.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.429	3.415	0.014	94	111094	50.0	48.8	
24 Acetone	43	3.447	3.439	0.008	99	73991	100.0	95.1	
25 Iodomethane	142	3.593	3.537	0.056	96	138731	50.0	43.3	
26 Carbon disulfide	76	3.648	3.640	0.008	100	240920	50.0	48.3	
28 3-Chloro-1-propene	76	3.915	3.914	0.001	89	57853	50.0	47.6	
30 Methyl acetate	43	3.946	3.938	0.008	100	629484	250.0	270.7	
31 Methylene Chloride	84	4.134	4.139	-0.005	96	116532	50.0	45.7	
32 2-Methyl-2-propanol	59	4.408	4.394	0.014	91	94902	500.0	531.6	
33 Acrylonitrile	53	4.530	4.522	0.008	97	616401	500.0	546.4	
34 trans-1,2-Dichloroethene	96	4.566	4.559	0.007	96	106669	50.0	45.7	
35 Methyl tert-butyl ether	73	4.584	4.577	0.007	96	251191	50.0	46.5	
36 Hexane	57	4.992	4.984	0.008	97	210796	50.0	53.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.205	5.197	0.008	97	210234	50.0	45.8	
38 Vinyl acetate	43	5.254	5.246	0.008	97	201029	50.0	58.3	
44 2,2-Dichloropropane	77	5.953	5.946	0.007	36	80734	50.0	43.8	
45 cis-1,2-Dichloroethene	96	5.947	5.946	0.001	84	346472	50.0	139.1	
46 2-Butanone (MEK)	43	5.959	5.952	0.007	98	116079	100.0	99.3	
49 Chlorobromomethane	128	6.239	6.231	0.008	87	43932	50.0	40.2	
51 Tetrahydrofuran	42	6.251	6.250	0.001	94	97896	100.0	104.4	
52 Chloroform	83	6.379	6.377	0.002	96	179640	50.0	45.3	
53 1,1,1-Trichloroethane	97	6.543	6.536	0.007	95	131664	50.0	44.9	
54 Cyclohexane	56	6.616	6.609	0.007	96	253513	50.0	51.6	
56 Carbon tetrachloride	117	6.714	6.718	-0.004	96	112303	50.0	44.9	
55 1,1-Dichloropropene	75	6.732	6.724	0.008	89	151032	50.0	46.5	
57 Isobutyl alcohol	41	6.927	6.925	0.002	93	114049	1250.0	1552.9	
58 Benzene	78	6.945	6.943	0.002	97	462772	50.0	48.7	
59 1,2-Dichloroethane	62	7.018	7.016	0.002	96	154867	50.0	47.1	
62 n-Heptane	43	7.310	7.302	0.008	97	190994	50.0	53.7	
64 Trichloroethene	130	7.681	7.673	0.008	97	169011	50.0	72.6	
66 Methylcyclohexane	83	7.918	7.917	0.001	98	181796	50.0	49.6	
67 1,2-Dichloropropane	63	7.955	7.947	0.008	95	121308	50.0	48.6	
70 1,4-Dioxane	88	8.034	8.026	0.008	42	22380	1000.0	1300.9	
68 Dibromomethane	93	8.040	8.032	0.008	95	56530	50.0	44.6	
71 Dichlorobromomethane	83	8.235	8.233	0.002	96	113438	50.0	45.3	
74 cis-1,3-Dichloropropene	75	8.679	8.671	0.008	90	134335	50.0	45.8	
75 4-Methyl-2-pentanone (MIBK)	43	8.831	8.823	0.008	99	204426	100.0	93.4	
76 Toluene	91	9.007	9.006	0.001	98	452148	50.0	51.4	
77 trans-1,3-Dichloropropene	75	9.251	9.255	-0.004	98	106083	50.0	46.2	
78 Ethyl methacrylate	69	9.311	9.310	0.001	96	119362	50.0	53.8	
79 1,1,2-Trichloroethane	97	9.445	9.444	0.001	94	85713	50.0	51.2	
80 Tetrachloroethene	164	9.518	9.517	0.001	97	340584	50.0	199.4	
81 1,3-Dichloropropane	76	9.603	9.602	0.001	98	158255	50.0	50.9	
82 2-Hexanone	43	9.658	9.663	-0.005	98	147175	100.0	93.1	
84 Chlorodibromomethane	129	9.816	9.815	0.001	91	65678	50.0	45.3	
85 Ethylene Dibromide	107	9.926	9.930	-0.004	97	80870	50.0	50.1	
86 3-Chlorobenzotrifluoride	180	10.394	10.393	0.001	84	136125	50.0	48.1	
87 Chlorobenzene	112	10.419	10.417	0.002	92	275029	50.0	48.6	
88 4-Chlorobenzotrifluoride	180	10.479	10.478	0.001	95	128423	50.0	48.0	
89 1,1,1,2-Tetrachloroethane	131	10.510	10.514	-0.004	89	84280	50.0	45.6	
90 Ethylbenzene	106	10.516	10.520	-0.004	98	156671	50.0	52.2	
91 m-Xylene & p-Xylene	106	10.650	10.654	-0.004	0	188378	50.0	51.2	
92 o-Xylene	106	11.027	11.031	-0.004	98	177312	50.0	50.7	
93 Styrene	104	11.045	11.050	-0.005	95	300085	50.0	51.8	
94 Bromoform	173	11.234	11.232	0.002	96	39830	50.0	48.2	
96 2-Chlorobenzotrifluoride	180	11.301	11.299	0.002	98	136687	50.0	49.1	
97 Isopropylbenzene	105	11.398	11.396	0.002	98	451617	50.0	52.7	
99 1,1,2,2-Tetrachloroethane	83	11.708	11.707	0.001	78	120186	50.0	53.2	
100 Bromobenzene	156	11.708	11.707	0.001	97	102493	50.0	47.0	
102 trans-1,4-Dichloro-2-buten	53	11.745	11.743	0.002	64	9661	50.0	12.3	
101 1,2,3-Trichloropropane	110	11.763	11.767	-0.004	87	37430	50.0	52.0	
103 N-Propylbenzene	120	11.812	11.816	-0.004	99	120427	50.0	48.2	
104 2-Chlorotoluene	126	11.897	11.901	-0.004	95	100564	50.0	47.4	
105 3-Chlorotoluene	126	11.964	11.968	-0.004	96	100291	50.0	46.0	
106 1,3,5-Trimethylbenzene	105	11.994	11.999	-0.005	94	373330	50.0	52.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 4-Chlorotoluene	126	12.025	12.029	-0.004	98	113884	50.0	48.8	
108 tert-Butylbenzene	119	12.311	12.309	0.001	95	289025	50.0	50.4	
110 1,2,4-Trimethylbenzene	105	12.371	12.370	0.001	99	370958	50.0	52.5	
111 1,2-dichloro-4-(trifluorom	214	12.414	12.412	0.002	97	100291	50.0	50.9	
112 sec-Butylbenzene	105	12.536	12.534	0.002	95	430062	50.0	53.1	
113 1,3-Dichlorobenzene	146	12.651	12.650	0.001	98	197053	50.0	50.7	
114 4-Isopropyltoluene	119	12.688	12.692	-0.004	97	354518	50.0	51.7	
115 1,4-Dichlorobenzene	146	12.755	12.753	0.002	93	195867	50.0	48.5	
116 2,4-Dichloro-1-(trifluorom	214	12.779	12.783	-0.004	96	96906	50.0	53.1	
118 2,5-Dichlorobenzotrifluori	214	12.822	12.820	0.002	0	98723	50.0	50.0	
120 n-Butylbenzene	91	13.101	13.100	0.001	98	294712	50.0	50.3	
121 1,2-Dichlorobenzene	146	13.107	13.112	-0.005	96	178448	50.0	49.2	
122 1,2-Dibromo-3-Chloropropan	75	13.898	13.903	-0.005	73	19106	50.0	64.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.050	14.043	0.007	0	298896	150.0	144.2	
125 2,3- & 3,4- Dichlorotoluen	125	14.464	14.469	-0.004	0	188604	100.0	95.4	
126 1,2,4-Trichlorobenzene	180	14.726	14.724	0.002	94	76470	50.0	54.2	
127 Hexachlorobutadiene	225	14.872	14.876	-0.004	95	39355	50.0	57.9	
128 Naphthalene	128	14.993	14.992	0.001	98	206324	50.0	56.8	
129 1,2,3-Trichlorobenzene	180	15.218	15.217	0.001	95	61494	50.0	53.8	
131 2,4,5-Trichlorotoluene	159	15.997	15.995	0.002	0	19823	50.0	48.1	
130 2,3,6-Trichlorotoluene	159	16.094	16.099	-0.005	92	18705	50.0	49.2	
148 2,3-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	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	184.8	
S 133 Xylenes, Total	106				0		100.0	101.8	
S 135 1,3-Dichloropropene, Total	1				0		100.0	92.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00147	Amount Added: 2.00	Units: uL	
voaWKetmix2nd_00002	Amount Added: 2.00	Units: uL	
voaWVA1stRest_00001	Amount Added: 2.00	Units: uL	
voaWEEpri Res_00006	Amount Added: 2.00	Units: uL	
voaWAcro1stRe_00001	Amount Added: 6.00	Units: uL	
VOA8260INT_00043	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00043	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015011.D

Injection Date: 15-Oct-2015 16:23:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48564-C-7 MS

Worklist Smp#: 11

Client ID: HD-CW-6-0/1-0

Purge Vol: 5.000 mL

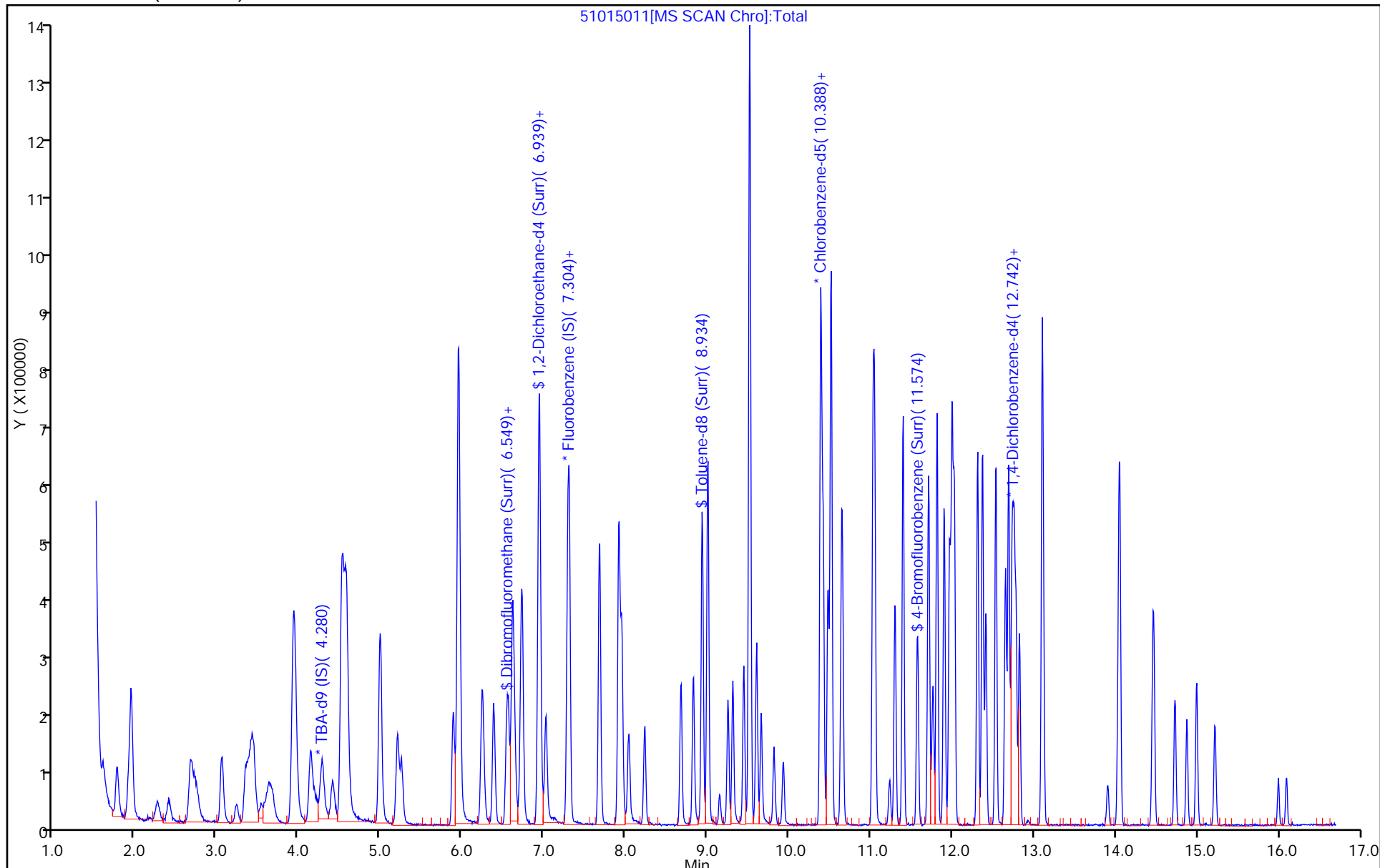
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-6-0/1-0 MSD Lab Sample ID: 180-48564-7 MSD
 Matrix: Water Lab File ID: 51015012.D
 Analysis Method: 8260C Date Collected: 10/07/2015 07:35
 Sample wt/vol: 5 (mL) Date Analyzed: 10/15/2015 16:47
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157127 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	9.65		1.0	0.28
75-01-4	Vinyl chloride	8.29		1.0	0.23
74-83-9	Bromomethane	7.89		1.0	0.31
75-00-3	Chloroethane	6.88		1.0	0.21
75-35-4	1,1-Dichloroethene	9.97		1.0	0.30
67-64-1	Acetone	22.7		5.0	2.5
75-15-0	Carbon disulfide	10.3		1.0	0.21
75-09-2	Methylene Chloride	11.0		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.82		1.0	0.17
1634-04-4	Methyl tert-butyl ether	10.6		1.0	0.18
75-34-3	1,1-Dichloroethane	10.1		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	31.5		1.0	0.24
74-97-5	Bromochloromethane	9.48		1.0	0.18
78-93-3	2-Butanone (MEK)	24.9		5.0	0.55
67-66-3	Chloroform	9.93		1.0	0.17
71-55-6	1,1,1-Trichloroethane	9.62		1.0	0.29
56-23-5	Carbon tetrachloride	9.14		1.0	0.14
71-43-2	Benzene	10.6		1.0	0.11
107-06-2	1,2-Dichloroethane	10.3		1.0	0.21
79-01-6	Trichloroethene	15.9		1.0	0.14
78-87-5	1,2-Dichloropropane	10.6		1.0	0.095
75-27-4	Bromodichloromethane	9.80		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)	22.0		5.0	0.53
108-88-3	Toluene	11.2		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	10.7		1.0	0.15
79-00-5	1,1,2-Trichloroethane	11.4		1.0	0.20
127-18-4	Tetrachloroethene	43.4		1.0	0.15
591-78-6	2-Hexanone	22.2		5.0	0.16
124-48-1	Dibromochloromethane	10.2		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	11.4		1.0	0.18
108-90-7	Chlorobenzene	10.9		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.87		1.0	0.28
100-41-4	Ethylbenzene	11.2		1.0	0.23
1330-20-7	Xylenes, Total	22.2		3.0	0.49
100-42-5	Styrene	11.5		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1
 SDG No.: _____
 Client Sample ID: HD-CW-6-0/1-0 MSD Lab Sample ID: 180-48564-7 MSD
 Matrix: Water Lab File ID: 51015012.D
 Analysis Method: 8260C Date Collected: 10/07/2015 07:35
 Sample wt/vol: 5 (mL) Date Analyzed: 10/15/2015 16:47
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 157127 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10.7		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	12.2		1.0	0.20
107-13-1	Acrylonitrile	127		20	0.55
123-91-1	1,4-Dioxane	314		200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		64-135
2037-26-5	Toluene-d8 (Surr)	116		71-118
460-00-4	4-Bromofluorobenzene (Surr)	106		70-118
1868-53-7	Dibromofluoromethane (Surr)	95		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015012.D
 Lims ID: 180-48564-C-7 MSD
 Client ID: HD-CW-6-0/1-0
 Sample Type: MSD
 Inject. Date: 15-Oct-2015 16:47:30 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-48564-C-7 MSD
 Misc. Info.: 180-0009022-012
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 16-Oct-2015 08:08:58 Calib Date: 26-Aug-2015 17:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK003

First Level Reviewer: fergusond

Date: 16-Oct-2015 08:08:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.279	4.273	0.006	0	167199	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.290	0.000	98	338265	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.387	10.386	0.000	90	75857	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.729	12.729	0.000	93	114189	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.560	6.554	0.006	93	78858	50.0	47.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.937	6.931	0.006	0	116676	50.0	51.1	
\$ 7 Toluene-d8 (Surr)	98	8.939	8.939	0.000	94	338597	50.0	57.9	
\$ 8 4-Bromofluorobenzene (Surr	95	11.573	11.573	0.000	88	117548	50.0	53.2	
11 Dichlorodifluoromethane	85	1.608	1.596	0.012	98	97872	50.0	51.2	
12 Chloromethane	50	1.778	1.772	0.006	98	135416	50.0	48.3	
13 Vinyl chloride	62	1.912	1.912	0.000	97	103177	50.0	41.4	
14 Butadiene	39	1.949	1.943	0.006	99	151526	50.0	51.5	
15 Bromomethane	94	2.277	2.241	0.036	90	39949	50.0	39.4	
16 Chloroethane	64	2.411	2.399	0.012	98	51631	50.0	34.4	
17 Dichlorofluoromethane	67	2.685	2.667	0.018	97	126144	50.0	39.6	
18 Trichlorofluoromethane	101	2.703	2.703	0.000	78	108408	50.0	45.5	
20 Ethyl ether	59	3.056	3.038	0.018	97	105697	50.0	47.9	
21 Acrolein	56	3.245	3.220	0.025	98	50515	150.0	153.5	
22 1,1-Dichloroethene	96	3.348	3.330	0.018	98	93897	50.0	49.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.433	3.415	0.018	94	93806	50.0	47.0	
24 Acetone	43	3.445	3.439	0.006	99	77385	100.0	113.4	
25 Iodomethane	142	3.543	3.537	0.006	95	137757	50.0	49.1	M
26 Carbon disulfide	76	3.646	3.640	0.006	100	225751	50.0	51.6	
28 3-Chloro-1-propene	76	3.920	3.914	0.006	89	52057	50.0	48.8	
30 Methyl acetate	43	3.950	3.938	0.012	99	629934	250.0	308.9	
31 Methylene Chloride	84	4.145	4.139	0.006	96	120882	50.0	55.2	
32 2-Methyl-2-propanol	59	4.413	4.394	0.019	88	104092	500.0	553.1	
33 Acrylonitrile	53	4.528	4.522	0.006	97	630141	500.0	636.8	
34 trans-1,2-Dichloroethene	96	4.565	4.559	0.006	93	100455	50.0	49.1	
35 Methyl tert-butyl ether	73	4.583	4.577	0.006	95	250964	50.0	53.0	
36 Hexane	57	4.990	4.984	0.006	97	190258	50.0	55.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.209	5.197	0.012	97	202941	50.0	50.4	
38 Vinyl acetate	43	5.252	5.246	0.006	97	198360	50.0	65.6	
44 2,2-Dichloropropane	77	5.952	5.946	0.006	36	80104	50.0	49.6	
45 cis-1,2-Dichloroethene	96	5.952	5.946	0.006	85	344182	50.0	157.5	
46 2-Butanone (MEK)	43	5.964	5.952	0.012	87	127422	100.0	124.3	
49 Chlorobromomethane	128	6.238	6.231	0.007	87	45502	50.0	47.4	
51 Tetrahydrofuran	42	6.250	6.250	0.000	94	102421	100.0	124.5	
52 Chloroform	83	6.384	6.377	0.007	96	172880	50.0	49.7	
53 1,1,1-Trichloroethane	97	6.548	6.536	0.012	95	123822	50.0	48.1	
54 Cyclohexane	56	6.615	6.609	0.006	96	226967	50.0	52.7	
56 Carbon tetrachloride	117	6.712	6.718	-0.006	97	100175	50.0	45.7	
55 1,1-Dichloropropene	75	6.736	6.724	0.012	90	142173	50.0	49.9	
57 Isobutyl alcohol	41	6.931	6.925	0.006	92	123475	1250.0	1916.8	
58 Benzene	78	6.949	6.943	0.006	97	442481	50.0	53.0	
59 1,2-Dichloroethane	62	7.022	7.016	0.006	95	149091	50.0	51.7	
62 n-Heptane	43	7.308	7.302	0.006	97	179253	50.0	57.5	
64 Trichloroethene	130	7.679	7.673	0.006	97	161933	50.0	79.4	
66 Methylcyclohexane	83	7.917	7.917	0.000	97	169214	50.0	52.6	
67 1,2-Dichloropropane	63	7.953	7.947	0.006	96	116068	50.0	53.0	
70 1,4-Dioxane	88	8.026	8.026	0.000	42	23705	1000.0	1571.0	
68 Dibromomethane	93	8.038	8.032	0.006	94	54775	50.0	49.3	
71 Dichlorobromomethane	83	8.233	8.233	0.000	97	107654	50.0	49.0	
74 cis-1,3-Dichloropropene	75	8.677	8.671	0.006	89	130935	50.0	50.8	
75 4-Methyl-2-pentanone (MIBK)	43	8.823	8.823	0.000	99	205817	100.0	110.1	
76 Toluene	91	9.006	9.006	0.000	98	420888	50.0	56.0	
77 trans-1,3-Dichloropropene	75	9.255	9.255	0.000	98	104508	50.0	53.3	
78 Ethyl methacrylate	69	9.310	9.310	0.000	96	116332	50.0	61.4	
79 1,1,2-Trichloroethane	97	9.450	9.444	0.006	92	81481	50.0	57.0	
80 Tetrachloroethene	164	9.517	9.517	0.000	97	316393	50.0	217.0	
81 1,3-Dichloropropane	76	9.602	9.602	0.000	99	151667	50.0	57.2	
82 2-Hexanone	43	9.656	9.663	-0.007	99	149602	100.0	110.9	
84 Chlorodibromomethane	129	9.821	9.815	0.006	91	62809	50.0	50.8	
85 Ethylene Dibromide	107	9.930	9.930	0.000	96	78734	50.0	57.2	
86 3-Chlorobenzotrifluoride	180	10.393	10.393	0.000	88	134075	50.0	55.6	
87 Chlorobenzene	112	10.417	10.417	0.000	91	262412	50.0	54.3	
88 4-Chlorobenzotrifluoride	180	10.478	10.478	0.000	96	127473	50.0	55.9	
89 1,1,1,2-Tetrachloroethane	131	10.508	10.514	-0.006	92	77810	50.0	49.4	
90 Ethylbenzene	106	10.520	10.520	0.000	98	143334	50.0	55.9	
91 m-Xylene & p-Xylene	106	10.648	10.654	-0.006	0	175632	50.0	55.9	
92 o-Xylene	106	11.031	11.031	0.000	97	164933	50.0	55.2	
93 Styrene	104	11.050	11.050	0.000	94	285361	50.0	57.7	
94 Bromoform	173	11.232	11.232	0.000	94	37684	50.0	53.4	
96 2-Chlorobenzotrifluoride	180	11.299	11.299	0.000	96	132551	50.0	55.8	
97 Isopropylbenzene	105	11.396	11.396	0.000	97	423079	50.0	57.8	
99 1,1,2,2-Tetrachloroethane	83	11.707	11.707	0.000	91	117572	50.0	61.0	
100 Bromobenzene	156	11.707	11.707	0.000	97	102272	50.0	52.2	
102 trans-1,4-Dichloro-2-buten	53	11.743	11.743	0.000	60	5703	50.0	8.05	
101 1,2,3-Trichloropropane	110	11.761	11.767	-0.006	87	37832	50.0	58.5	
103 N-Propylbenzene	120	11.816	11.816	0.000	100	112720	50.0	50.2	
104 2-Chlorotoluene	126	11.901	11.901	0.000	95	96852	50.0	50.8	
105 3-Chlorotoluene	126	11.968	11.968	0.000	96	103486	50.0	52.8	
106 1,3,5-Trimethylbenzene	105	11.999	11.999	0.000	95	357891	50.0	56.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 4-Chlorotoluene	126	12.023	12.029	-0.006	99	110343	50.0	52.6	
108 tert-Butylbenzene	119	12.309	12.309	0.000	95	274713	50.0	53.3	
110 1,2,4-Trimethylbenzene	105	12.370	12.370	0.000	98	352966	50.0	55.6	
111 1,2-dichloro-4-(trifluorom	214	12.412	12.412	0.000	97	103217	50.0	58.3	
112 sec-Butylbenzene	105	12.534	12.534	0.000	95	413288	50.0	56.8	
113 1,3-Dichlorobenzene	146	12.650	12.650	0.000	97	191033	50.0	54.7	
114 4-Isopropyltoluene	119	12.686	12.692	-0.006	97	330253	50.0	53.6	
115 1,4-Dichlorobenzene	146	12.753	12.753	0.000	95	198979	50.0	54.8	
116 2,4-Dichloro-1-(trifluorom	214	12.777	12.783	-0.006	95	95572	50.0	58.2	
118 2,5-Dichlorobenzotrifluori	214	12.820	12.820	0.000	0	98993	50.0	55.8	
120 n-Butylbenzene	91	13.100	13.100	0.000	98	289550	50.0	55.0	
121 1,2-Dichlorobenzene	146	13.112	13.112	0.000	95	174809	50.0	53.6	
122 1,2-Dibromo-3-Chloropropan	75	13.903	13.903	0.000	74	16839	50.0	62.9	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.043	14.043	0.000	0	315940	150.0	169.6	
125 2,3- & 3,4- Dichlorotoluen	125	14.462	14.469	-0.006	0	191247	100.0	107.7	
126 1,2,4-Trichlorobenzene	180	14.724	14.724	0.000	95	73668	50.0	58.0	
127 Hexachlorobutadiene	225	14.876	14.876	0.000	90	36348	50.0	59.5	
128 Naphthalene	128	14.992	14.992	0.000	98	197033	50.0	60.4	
129 1,2,3-Trichlorobenzene	180	15.217	15.217	0.000	94	57811	50.0	56.3	
131 2,4,5-Trichlorotoluene	159	15.995	15.995	0.000	0	21000	50.0	56.7	
130 2,3,6-Trichlorotoluene	159	16.087	16.099	-0.012	95	21703	50.0	63.5	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	206.6	
S 133 Xylenes, Total	106				0		100.0	111.1	
S 135 1,3-Dichloropropene, Total	1				0		100.0	104.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWAcro1stRe_00001	Amount Added: 6.00	Units: uL	
voaWEEpri Res_00006	Amount Added: 2.00	Units: uL	
voaWVA1stRest_00001	Amount Added: 2.00	Units: uL	
voaWKetmix2nd_00002	Amount Added: 2.00	Units: uL	
VOA8260VOA2ND_00147	Amount Added: 2.00	Units: uL	
VOA8260INT_00043	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00043	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151015-9022.b\51015012.D

Injection Date: 15-Oct-2015 16:47:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48564-C-7 MSD

Worklist Smp#: 12

Client ID: HD-CW-6-0/1-0

Purge Vol: 5.000 mL

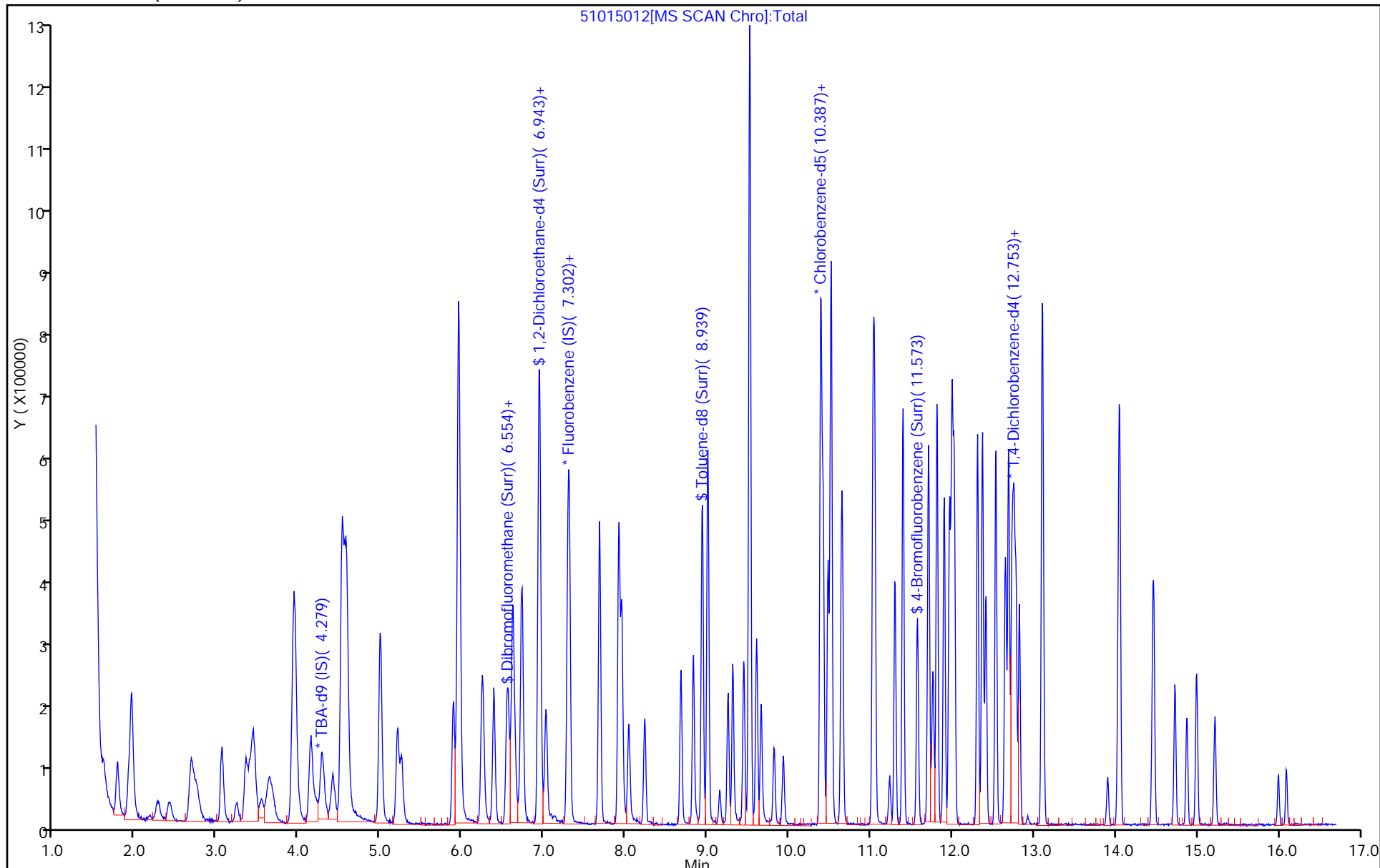
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1

SDG No.: _____

Instrument ID: CHHP5 Start Date: 08/26/2015 14:01Analysis Batch Number: 151868 End Date: 08/26/2015 20:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-151868/7		08/26/2015 14:01	1	50826007.D	DB-624 0.18 (mm)
IC 180-151868/6		08/26/2015 15:04	1	50826006.D	DB-624 0.18 (mm)
IC 180-151868/8		08/26/2015 15:28	1	50826008.D	DB-624 0.18 (mm)
ICIS 180-151868/9		08/26/2015 15:52	1	50826009.D	DB-624 0.18 (mm)
IC 180-151868/10		08/26/2015 16:16	1	50826010.D	DB-624 0.18 (mm)
IC 180-151868/11		08/26/2015 16:40	1	50826011.D	DB-624 0.18 (mm)
IC 180-151868/12		08/26/2015 17:04	1	50826012.D	DB-624 0.18 (mm)
IC 180-151868/13		08/26/2015 17:28	1	50826013.D	DB-624 0.18 (mm)
IC 180-151868/14		08/26/2015 17:52	1	50826014.D	DB-624 0.18 (mm)
ZZZZZ		08/26/2015 19:52	1		DB-624 0.18 (mm)
ICV 180-151868/20		08/26/2015 20:16	1		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1

SDG No.: _____

Instrument ID: CHHP5 Start Date: 10/15/2015 12:12Analysis Batch Number: 157127 End Date: 10/15/2015 23:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-157127/4		10/15/2015 12:12	1	51015004.D	DB-624 0.18 (mm)
CCVIS 180-157127/2		10/15/2015 12:56	1	51015002.D	DB-624 0.18 (mm)
ZZZZZ		10/15/2015 13:44	1		DB-624 0.18 (mm)
MB 180-157127/6		10/15/2015 14:08	1	51015006.D	DB-624 0.18 (mm)
180-48564-10	HD-QC-16-0/1-2	10/15/2015 15:11	1	51015008.D	DB-624 0.18 (mm)
180-48564-7	HD-CW-6-0/1-0	10/15/2015 15:35	1	51015009.D	DB-624 0.18 (mm)
LCS 180-157127/10		10/15/2015 15:59	1	51015010.D	DB-624 0.18 (mm)
180-48564-7 MS	HD-CW-6-0/1-0 MS	10/15/2015 16:23	1	51015011.D	DB-624 0.18 (mm)
180-48564-7 MSD	HD-CW-6-0/1-0 MSD	10/15/2015 16:47	1	51015012.D	DB-624 0.18 (mm)
ZZZZZ		10/15/2015 17:35	1		DB-624 0.18 (mm)
ZZZZZ		10/15/2015 17:59	1		DB-624 0.18 (mm)
ZZZZZ		10/15/2015 18:23	1		DB-624 0.18 (mm)
ZZZZZ		10/15/2015 19:12	25		DB-624 0.18 (mm)
ZZZZZ		10/15/2015 19:36	500		DB-624 0.18 (mm)
ZZZZZ		10/15/2015 20:25	5		DB-624 0.18 (mm)
ZZZZZ		10/15/2015 20:49	50		DB-624 0.18 (mm)
ZZZZZ		10/15/2015 21:13	1		DB-624 0.18 (mm)
ZZZZZ		10/15/2015 21:37	1		DB-624 0.18 (mm)
ZZZZZ		10/15/2015 22:01	1		DB-624 0.18 (mm)
ZZZZZ		10/15/2015 22:25	1		DB-624 0.18 (mm)
ZZZZZ		10/15/2015 22:49	1		DB-624 0.18 (mm)
ZZZZZ		10/15/2015 23:37	1		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1

SDG No.: _____

Instrument ID: CHHP5 Start Date: 10/16/2015 14:25

Analysis Batch Number: 157249 End Date: 10/17/2015 02:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-157249/11		10/16/2015 14:25	1	51016011.D	DB-624 0.18 (mm)
CCVIS 180-157249/4		10/16/2015 15:06	1	51016004.D	DB-624 0.18 (mm)
CCV 180-157249/5		10/16/2015 15:30	1	51016005.D	DB-624 0.18 (mm)
ZZZZZ		10/16/2015 15:55	1		DB-624 0.18 (mm)
MB 180-157249/12		10/16/2015 16:19	1	51016012.D	DB-624 0.18 (mm)
ZZZZZ		10/16/2015 17:10	1		DB-624 0.18 (mm)
ZZZZZ		10/16/2015 17:34	1		DB-624 0.18 (mm)
LCS 180-157249/15		10/16/2015 17:58	1	51016015.D	DB-624 0.18 (mm)
ZZZZZ		10/16/2015 18:22	1		DB-624 0.18 (mm)
ZZZZZ		10/16/2015 18:46	1		DB-624 0.18 (mm)
ZZZZZ		10/16/2015 19:34	20		DB-624 0.18 (mm)
180-48564-1	HD-CW-1-0/1-0	10/16/2015 19:58	1	51016020.D	DB-624 0.18 (mm)
180-48564-2	HD-CW-1A-0/1-0	10/16/2015 20:23	1	51016021.D	DB-624 0.18 (mm)
180-48564-3	HD-CW-2-0/1-0	10/16/2015 20:47	1	51016022.D	DB-624 0.18 (mm)
180-48564-4	HD-CW-3-0/1-0	10/16/2015 21:11	1	51016023.D	DB-624 0.18 (mm)
180-48564-5	HD-CW-4-0/1-0	10/16/2015 21:35	1	51016024.D	DB-624 0.18 (mm)
ZZZZZ		10/16/2015 21:59	1		DB-624 0.18 (mm)
ZZZZZ		10/16/2015 22:23	1		DB-624 0.18 (mm)
180-48564-6	HD-CW-5-0/1-0	10/16/2015 22:48	1	51016027.D	DB-624 0.18 (mm)
ZZZZZ		10/16/2015 23:12	1		DB-624 0.18 (mm)
ZZZZZ		10/16/2015 23:36	25		DB-624 0.18 (mm)
ZZZZZ		10/17/2015 00:00	25		DB-624 0.18 (mm)
ZZZZZ		10/17/2015 00:24	25		DB-624 0.18 (mm)
ZZZZZ		10/17/2015 00:48	50		DB-624 0.18 (mm)
ZZZZZ		10/17/2015 01:13	50		DB-624 0.18 (mm)
ZZZZZ		10/17/2015 01:37	50		DB-624 0.18 (mm)
ZZZZZ		10/17/2015 02:01	50		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-48564-1

SDG No.: _____

Instrument ID: CHHP5 Start Date: 10/17/2015 09:32

Analysis Batch Number: 157327 End Date: 10/17/2015 20:49

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-157327/1		10/17/2015 09:32	1	51017001.D	DB-624 0.18 (mm)
CCVIS 180-157327/2		10/17/2015 10:09	1	51017002.D	DB-624 0.18 (mm)
CCV 180-157327/3		10/17/2015 10:52	1	51017003.D	DB-624 0.18 (mm)
ZZZZZ		10/17/2015 11:16	1		DB-624 0.18 (mm)
MB 180-157327/5		10/17/2015 11:40	1	51017005.D	DB-624 0.18 (mm)
LCS 180-157327/12		10/17/2015 16:00	1	51017012.D	DB-624 0.18 (mm)
ZZZZZ		10/17/2015 16:24	40		DB-624 0.18 (mm)
180-48564-4 DL	HD-CW-3-0/1-0 DL	10/17/2015 20:25	20	51017023.D	DB-624 0.18 (mm)
ZZZZZ		10/17/2015 20:49	2		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica PittsburghJob No.: 180-48564-1

SDG No.: _____

Instrument ID: CHHP5Start Date: 10/19/2015 09:26Analysis Batch Number: 157435End Date: 10/19/2015 21:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-157435/1		10/19/2015 09:26	1	51019001.D	DB-624 0.18 (mm)
CCVIS 180-157435/2		10/19/2015 10:09	1	51019002.D	DB-624 0.18 (mm)
ZZZZZ		10/19/2015 10:09	1		DB-624 0.18 (mm)
ZZZZZ		10/19/2015 10:47	1		DB-624 0.18 (mm)
MB 180-157435/4		10/19/2015 11:11	1	51019004.D	DB-624 0.18 (mm)
ZZZZZ		10/19/2015 11:52	50		DB-624 0.18 (mm)
ZZZZZ		10/19/2015 12:16	1		DB-624 0.18 (mm)
LCS 180-157435/7		10/19/2015 12:40	1	51019007.D	DB-624 0.18 (mm)
ZZZZZ		10/19/2015 13:04	50		DB-624 0.18 (mm)
ZZZZZ		10/19/2015 13:28	50		DB-624 0.18 (mm)
180-48564-8	HD-CW-7-0/1-0	10/19/2015 14:17	1	51019011.D	DB-624 0.18 (mm)
ZZZZZ		10/19/2015 14:41	1		DB-624 0.18 (mm)
180-48564-9 DL	HD-CW-7A-0/1-0 DL	10/19/2015 15:05	5	51019013.D	DB-624 0.18 (mm)
180-48564-11 DL	HD-QC5-0/1-1 DL	10/19/2015 15:29	5	51019014.D	DB-624 0.18 (mm)
ZZZZZ		10/19/2015 15:53	50		DB-624 0.18 (mm)
ZZZZZ		10/19/2015 16:17	1		DB-624 0.18 (mm)
ZZZZZ		10/19/2015 16:41	200		DB-624 0.18 (mm)
ZZZZZ		10/19/2015 17:06	1		DB-624 0.18 (mm)
ZZZZZ		10/19/2015 17:30	1		DB-624 0.18 (mm)
ZZZZZ		10/19/2015 17:54	1		DB-624 0.18 (mm)
ZZZZZ		10/19/2015 18:18	10		DB-624 0.18 (mm)
ZZZZZ		10/19/2015 18:42	10		DB-624 0.18 (mm)
ZZZZZ		10/19/2015 19:06	40		DB-624 0.18 (mm)
ZZZZZ		10/19/2015 19:30	1		DB-624 0.18 (mm)
ZZZZZ		10/19/2015 19:54	1		DB-624 0.18 (mm)
ZZZZZ		10/19/2015 20:18	1		DB-624 0.18 (mm)
180-48564-9	HD-CW-7A-0/1-0	10/19/2015 20:43	1	51019027.D	DB-624 0.18 (mm)
180-48564-11	HD-QC5-0/1-1	10/19/2015 21:07	1	51019028.D	DB-624 0.18 (mm)

Shipping and Receiving Documents

TestAmerica Pittsburgh
 301 Alpha Drive
 Pittsburgh, PA 15238
 Phone 412-963-7058 Fax 412-963-2479

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING
 TestAmerica Laboratories, Inc.

Chain of Custody Record

Client Contact
 Groundwater Sciences Corporation
 2601 Market Place St. Suite 310
 Harrisburg, PA 17110
 (717) 901-8180 Phone
 (717) 657-1611 FAX

Project Name: 2015 Comprehensive Event
Site: Hanley-Davidson, York PA
Quote #: 18000657

Project Manager: Jennifer S. Reese
Tel/Fax: 717-901-8181 / (717) 657-1611

Analysis Turnaround Time
 Calendar (C) or Work Days (W)
 2 weeks
 1 week
 5 days
 1 day

Site Contact: Jennifer S. Reese
Lab Contact: Carrie Gamber

Date Submitted: FEDEX
Carrier:

Container No.:
SDG No.:

Sample Specific Notes:

Sample Identification

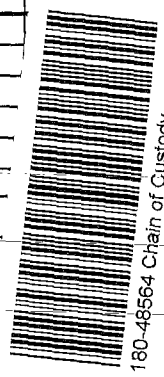
Sample ID	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.
HD-CW-1-0/1-0	10/6/15	0915	Groundwater	Water	3
HD-CW-1A-0/1-0	10/6/15	0805	Groundwater	Water	3
HD-CW-2-0/1-0	10/7/15	0735	Groundwater	Water	3
HD-CW-3-0/1-0	10/6/15	0420	Groundwater	Water	3
HD-CW-4-0/1-0	10/7/15	0835	Groundwater	Water	3
HD-CW-5-0/1-0	10/7/15	0745	Groundwater	Water	3
HD-CW-6-0/1-0	10/7/15	0735	Groundwater	Water	3
HD-CW-7-0/1-0	10/7/15	0730	Groundwater	Water	3
HD-CW-7A-0/1-0	10/6/15	0750	Groundwater	Water	3
HD-QC-16-0/1-2	10/4/15	1200	Trip Blank	Water	2
HD-QC5-0/1-1	10/6/15	0800	Groundwater	Water	3
HD-CW-6-0/1-0 MSD	10/7/15	0735	Ground-water	water	3
HD-CW-6-0/1-0 MSD	10/7/15	0735	Ground-water	water	3

Number of Containers:

Possible Hazard Identification:
 Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments: CLP Like Deliverables

Sample Disposal: (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Fe For Months



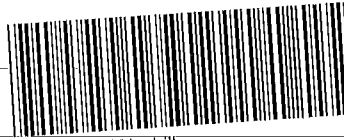
Received by: [Signature] **Company:** WOK
Date/Time: 10/7/15 1000

Received by: [Signature] **Company:** TAKOP
Date/Time: 10-7-15 1450

Received by: [Signature] **Company:** TAP
Date/Time: 10-8-15

ORIGIN ID: KPDA (610) 337-9992
SAMPLE RECEIPT
TEST AMERICA
1008 WEST 9TH AVE
KING OF PRUSSIA, PA 19406
UNITED STATES US

CD: 01



B 180-48564 Waybill

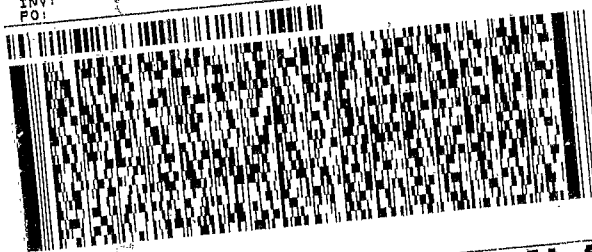
TO SAMPLE RECEIPT
TEST AMERICA - PITTSBURGH
301 ALPHA DR

PITTSBURGH PA 15238

(412) 963-7068
INV:
PO:

REF:

DEPT:



FedEx
Express



J15301568100L00

TRKH 7746 8862 4320
0201

THU - 08 OCT 3:00P
STANDARD OVERNIGHT

EV AGCA

15

PA-I

Uncorrected temp
Thermometer ID

21 °C

CF Initials

PT-WJ-ER-001 effective 7/26/13

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-48564-1

Login Number: 48564
List Number: 1
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	