TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

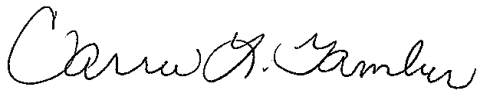
ANALYTICAL REPORT

Job Number: 180-59864-1

Job Description: Harley Davidson

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

Attention: Allan Miller



Approved for release.
Carrie L Gamber
Senior Project Manager
10/26/2016 2:14 PM

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10/26/2016

Table of Contents

Table of Contents

Qualifiers

GC/MS VOA

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

Glossary

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

CASE NARRATIVE

Client: Groundwater Sciences Corporation

Project: Harley Davidson

Report Number: 180-59864-1

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

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

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

RECEIPT

The samples were received on 10/15/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.3 C.

The client sample HD-MW-20M-0/1-0 (180-59864-7) did not have a sample time listed on the COC. The time was listed on the sample vials and was used for log in.

VOALTILES

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-59864-1

Client Sample ID: HD-QC7-0/1-2 — Lab Sample ID: 180-59864-1

No Detections.

Client Sample ID: HD-MW-20D-0/1-0 — Lab Sample ID: 180-59864-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.43	J	1.0	0.27	ug/L	1		8260C	Total/NA

Client Sample ID: HD-MW-18S-0/1-0 — Lab Sample ID: 180-59864-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.7		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	1.2		1.0	0.26	ug/L	1		8260C	Total/NA

Client Sample ID: HD-MW-142S-0/1-0 — Lab Sample ID: 180-59864-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.2	J	5.0	2.5	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	2.6		1.0	0.29	ug/L	1		8260C	Total/NA

Client Sample ID: HD-MW-20S-0/1-0 — Lab Sample ID: 180-59864-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.0		1.0	0.29	ug/L	1		8260C	Total/NA
Chloroform	1.6		1.0	0.27	ug/L	1		8260C	Total/NA
Trichloroethene	48		1.0	0.26	ug/L	1		8260C	Total/NA
Tetrachloroethene	4.3		1.0	0.27	ug/L	1		8260C	Total/NA

Client Sample ID: HD-MW-142D-0/1-0 — Lab Sample ID: 180-59864-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.0		5.0	2.5	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.78	J	1.0	0.29	ug/L	1		8260C	Total/NA

Client Sample ID: HD-MW-20M-0/1-0 — Lab Sample ID: 180-59864-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.7	J	5.0	2.5	ug/L	1		8260C	Total/NA
Chloroform	0.38	J	1.0	0.27	ug/L	1		8260C	Total/NA
Trichloroethene	4.6		1.0	0.26	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.52	J	1.0	0.27	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: HD-QC7-0/1-2
Date Collected: 10/13/16 12:00
Date Received: 10/15/16 09:05

Lab Sample ID: 180-59864-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			10/23/16 21:25	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			10/23/16 21:25	1
Bromomethane	1.0	U	1.0	0.36	ug/L			10/23/16 21:25	1
Chloroethane	1.0	U	1.0	0.26	ug/L			10/23/16 21:25	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/23/16 21:25	1
Acetone	5.0	U	5.0	2.5	ug/L			10/23/16 21:25	1
Carbon disulfide	1.0	U	1.0	0.18	ug/L			10/23/16 21:25	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/23/16 21:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/23/16 21:25	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			10/23/16 21:25	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			10/23/16 21:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/23/16 21:25	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			10/23/16 21:25	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			10/23/16 21:25	1
Chloroform	1.0	U	1.0	0.27	ug/L			10/23/16 21:25	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/23/16 21:25	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			10/23/16 21:25	1
Benzene	1.0	U	1.0	0.26	ug/L			10/23/16 21:25	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			10/23/16 21:25	1
Trichloroethene	1.0	U	1.0	0.26	ug/L			10/23/16 21:25	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			10/23/16 21:25	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			10/23/16 21:25	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			10/23/16 21:25	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			10/23/16 21:25	1
Toluene	1.0	U	1.0	0.28	ug/L			10/23/16 21:25	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			10/23/16 21:25	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			10/23/16 21:25	1
Tetrachloroethene	1.0	U	1.0	0.27	ug/L			10/23/16 21:25	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			10/23/16 21:25	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			10/23/16 21:25	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			10/23/16 21:25	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			10/23/16 21:25	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/23/16 21:25	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			10/23/16 21:25	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			10/23/16 21:25	1
Styrene	1.0	U	1.0	0.26	ug/L			10/23/16 21:25	1
Bromoform	1.0	U	1.0	0.29	ug/L			10/23/16 21:25	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			10/23/16 21:25	1
Acrylonitrile	20	U	20	2.8	ug/L			10/23/16 21:25	1
1,4-Dioxane	200	U	200	7.5	ug/L			10/23/16 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*72 - 134*		*10/23/16 21:25*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*10/23/16 21:25*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 120*		*10/23/16 21:25*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 127*		*10/23/16 21:25*	*1*

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

Client Sample ID: HD-MW-20D-0/1-0
Date Collected: 10/13/16 08:25
Date Received: 10/15/16 09:05

Lab Sample ID: 180-59864-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			10/23/16 20:36	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			10/23/16 20:36	1
Bromomethane	1.0	U	1.0	0.36	ug/L			10/23/16 20:36	1
Chloroethane	1.0	U	1.0	0.26	ug/L			10/23/16 20:36	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/23/16 20:36	1
Acetone	5.0	U	5.0	2.5	ug/L			10/23/16 20:36	1
Carbon disulfide	1.0	U	1.0	0.18	ug/L			10/23/16 20:36	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/23/16 20:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/23/16 20:36	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			10/23/16 20:36	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			10/23/16 20:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/23/16 20:36	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			10/23/16 20:36	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			10/23/16 20:36	1
Chloroform	**0.43**	**J**	1.0	0.27	ug/L			10/23/16 20:36	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/23/16 20:36	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			10/23/16 20:36	1
Benzene	1.0	U	1.0	0.26	ug/L			10/23/16 20:36	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			10/23/16 20:36	1
Trichloroethene	1.0	U	1.0	0.26	ug/L			10/23/16 20:36	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			10/23/16 20:36	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			10/23/16 20:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			10/23/16 20:36	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			10/23/16 20:36	1
Toluene	1.0	U	1.0	0.28	ug/L			10/23/16 20:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			10/23/16 20:36	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			10/23/16 20:36	1
Tetrachloroethene	1.0	U	1.0	0.27	ug/L			10/23/16 20:36	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			10/23/16 20:36	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			10/23/16 20:36	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			10/23/16 20:36	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			10/23/16 20:36	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/23/16 20:36	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			10/23/16 20:36	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			10/23/16 20:36	1
Styrene	1.0	U	1.0	0.26	ug/L			10/23/16 20:36	1
Bromoform	1.0	U	1.0	0.29	ug/L			10/23/16 20:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			10/23/16 20:36	1
Acrylonitrile	20	U	20	2.8	ug/L			10/23/16 20:36	1
1,4-Dioxane	200	U	200	7.5	ug/L			10/23/16 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*72 - 134*		*10/23/16 20:36*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*10/23/16 20:36*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 120*		*10/23/16 20:36*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 127*		*10/23/16 20:36*	*1*

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

Client Sample ID: HD-MW-18S-0/1-0
Date Collected: 10/13/16 08:15
Date Received: 10/15/16 09:05

Lab Sample ID: 180-59864-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			10/24/16 20:48	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			10/24/16 20:48	1
Bromomethane	1.0	U	1.0	0.36	ug/L			10/24/16 20:48	1
Chloroethane	1.0	U	1.0	0.26	ug/L			10/24/16 20:48	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/24/16 20:48	1
Acetone	5.0	U	5.0	2.5	ug/L			10/24/16 20:48	1
Carbon disulfide	1.0	U	1.0	0.18	ug/L			10/24/16 20:48	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/24/16 20:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/24/16 20:48	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			10/24/16 20:48	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			10/24/16 20:48	1
cis-1,2-Dichloroethene	**3.7**		1.0	0.29	ug/L			10/24/16 20:48	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			10/24/16 20:48	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			10/24/16 20:48	1
Chloroform	1.0	U	1.0	0.27	ug/L			10/24/16 20:48	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/24/16 20:48	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			10/24/16 20:48	1
Benzene	1.0	U	1.0	0.26	ug/L			10/24/16 20:48	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			10/24/16 20:48	1
Trichloroethene	**1.2**		1.0	0.26	ug/L			10/24/16 20:48	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			10/24/16 20:48	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			10/24/16 20:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			10/24/16 20:48	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			10/24/16 20:48	1
Toluene	1.0	U	1.0	0.28	ug/L			10/24/16 20:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			10/24/16 20:48	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			10/24/16 20:48	1
Tetrachloroethene	1.0	U	1.0	0.27	ug/L			10/24/16 20:48	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			10/24/16 20:48	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			10/24/16 20:48	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			10/24/16 20:48	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			10/24/16 20:48	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/24/16 20:48	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			10/24/16 20:48	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			10/24/16 20:48	1
Styrene	1.0	U	1.0	0.26	ug/L			10/24/16 20:48	1
Bromoform	1.0	U	1.0	0.29	ug/L			10/24/16 20:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			10/24/16 20:48	1
Acrylonitrile	20	U	20	2.8	ug/L			10/24/16 20:48	1
1,4-Dioxane	200	U	200	7.5	ug/L			10/24/16 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*72 - 134*		*10/24/16 20:48*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/24/16 20:48*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 120*		*10/24/16 20:48*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 127*		*10/24/16 20:48*	*1*

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

Client Sample ID: HD-MW-142S-0/1-0
Date Collected: 10/13/16 12:06
Date Received: 10/15/16 09:05

Lab Sample ID: 180-59864-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			10/23/16 21:49	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			10/23/16 21:49	1
Bromomethane	1.0	U	1.0	0.36	ug/L			10/23/16 21:49	1
Chloroethane	1.0	U	1.0	0.26	ug/L			10/23/16 21:49	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/23/16 21:49	1
Acetone	**4.2**	**J**	5.0	2.5	ug/L			10/23/16 21:49	1
Carbon disulfide	1.0	U	1.0	0.18	ug/L			10/23/16 21:49	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/23/16 21:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/23/16 21:49	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			10/23/16 21:49	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			10/23/16 21:49	1
cis-1,2-Dichloroethene	**2.6**		1.0	0.29	ug/L			10/23/16 21:49	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			10/23/16 21:49	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			10/23/16 21:49	1
Chloroform	1.0	U	1.0	0.27	ug/L			10/23/16 21:49	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/23/16 21:49	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			10/23/16 21:49	1
Benzene	1.0	U	1.0	0.26	ug/L			10/23/16 21:49	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			10/23/16 21:49	1
Trichloroethene	1.0	U	1.0	0.26	ug/L			10/23/16 21:49	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			10/23/16 21:49	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			10/23/16 21:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			10/23/16 21:49	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			10/23/16 21:49	1
Toluene	1.0	U	1.0	0.28	ug/L			10/23/16 21:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			10/23/16 21:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			10/23/16 21:49	1
Tetrachloroethene	1.0	U	1.0	0.27	ug/L			10/23/16 21:49	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			10/23/16 21:49	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			10/23/16 21:49	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			10/23/16 21:49	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			10/23/16 21:49	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/23/16 21:49	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			10/23/16 21:49	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			10/23/16 21:49	1
Styrene	1.0	U	1.0	0.26	ug/L			10/23/16 21:49	1
Bromoform	1.0	U	1.0	0.29	ug/L			10/23/16 21:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			10/23/16 21:49	1
Acrylonitrile	20	U	20	2.8	ug/L			10/23/16 21:49	1
1,4-Dioxane	200	U	200	7.5	ug/L			10/23/16 21:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*72 - 134*		*10/23/16 21:49*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*10/23/16 21:49*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 120*		*10/23/16 21:49*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 127*		*10/23/16 21:49*	*1*

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

Client Sample ID: HD-MW-20S-0/1-0
Date Collected: 10/13/16 10:50
Date Received: 10/15/16 09:05

Lab Sample ID: 180-59864-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			10/24/16 21:12	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			10/24/16 21:12	1
Bromomethane	1.0	U	1.0	0.36	ug/L			10/24/16 21:12	1
Chloroethane	1.0	U	1.0	0.26	ug/L			10/24/16 21:12	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/24/16 21:12	1
Acetone	5.0	U	5.0	2.5	ug/L			10/24/16 21:12	1
Carbon disulfide	1.0	U	1.0	0.18	ug/L			10/24/16 21:12	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/24/16 21:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/24/16 21:12	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			10/24/16 21:12	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			10/24/16 21:12	1
cis-1,2-Dichloroethene	**1.0**		1.0	0.29	ug/L			10/24/16 21:12	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			10/24/16 21:12	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			10/24/16 21:12	1
Chloroform	**1.6**		1.0	0.27	ug/L			10/24/16 21:12	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/24/16 21:12	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			10/24/16 21:12	1
Benzene	1.0	U	1.0	0.26	ug/L			10/24/16 21:12	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			10/24/16 21:12	1
Trichloroethene	**48**		1.0	0.26	ug/L			10/24/16 21:12	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			10/24/16 21:12	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			10/24/16 21:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			10/24/16 21:12	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			10/24/16 21:12	1
Toluene	1.0	U	1.0	0.28	ug/L			10/24/16 21:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			10/24/16 21:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			10/24/16 21:12	1
Tetrachloroethene	**4.3**		1.0	0.27	ug/L			10/24/16 21:12	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			10/24/16 21:12	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			10/24/16 21:12	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			10/24/16 21:12	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			10/24/16 21:12	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/24/16 21:12	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			10/24/16 21:12	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			10/24/16 21:12	1
Styrene	1.0	U	1.0	0.26	ug/L			10/24/16 21:12	1
Bromoform	1.0	U	1.0	0.29	ug/L			10/24/16 21:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			10/24/16 21:12	1
Acrylonitrile	20	U	20	2.8	ug/L			10/24/16 21:12	1
1,4-Dioxane	200	U	200	7.5	ug/L			10/24/16 21:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*72 - 134*		*10/24/16 21:12*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*10/24/16 21:12*	*1*
4-Bromofluorobenzene (Surr)	*102*		*72 - 120*		*10/24/16 21:12*	*1*
Dibromofluoromethane (Surr)	*108*		*77 - 127*		*10/24/16 21:12*	*1*

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

Client Sample ID: HD-MW-142D-0/1-0
Date Collected: 10/13/16 10:25
Date Received: 10/15/16 09:05

Lab Sample ID: 180-59864-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			10/24/16 20:24	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			10/24/16 20:24	1
Bromomethane	1.0	U	1.0	0.36	ug/L			10/24/16 20:24	1
Chloroethane	1.0	U	1.0	0.26	ug/L			10/24/16 20:24	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/24/16 20:24	1
Acetone	**5.0**		5.0	2.5	ug/L			10/24/16 20:24	1
Carbon disulfide	1.0	U	1.0	0.18	ug/L			10/24/16 20:24	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/24/16 20:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/24/16 20:24	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			10/24/16 20:24	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			10/24/16 20:24	1
cis-1,2-Dichloroethene	**0.78**	**J**	1.0	0.29	ug/L			10/24/16 20:24	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			10/24/16 20:24	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			10/24/16 20:24	1
Chloroform	1.0	U	1.0	0.27	ug/L			10/24/16 20:24	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/24/16 20:24	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			10/24/16 20:24	1
Benzene	1.0	U	1.0	0.26	ug/L			10/24/16 20:24	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			10/24/16 20:24	1
Trichloroethene	1.0	U	1.0	0.26	ug/L			10/24/16 20:24	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			10/24/16 20:24	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			10/24/16 20:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			10/24/16 20:24	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			10/24/16 20:24	1
Toluene	1.0	U	1.0	0.28	ug/L			10/24/16 20:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			10/24/16 20:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			10/24/16 20:24	1
Tetrachloroethene	1.0	U	1.0	0.27	ug/L			10/24/16 20:24	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			10/24/16 20:24	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			10/24/16 20:24	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			10/24/16 20:24	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			10/24/16 20:24	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/24/16 20:24	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			10/24/16 20:24	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			10/24/16 20:24	1
Styrene	1.0	U	1.0	0.26	ug/L			10/24/16 20:24	1
Bromoform	1.0	U	1.0	0.29	ug/L			10/24/16 20:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			10/24/16 20:24	1
Acrylonitrile	20	U	20	2.8	ug/L			10/24/16 20:24	1
1,4-Dioxane	200	U	200	7.5	ug/L			10/24/16 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*72 - 134*		*10/24/16 20:24*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/24/16 20:24*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 120*		*10/24/16 20:24*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 127*		*10/24/16 20:24*	*1*

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

Client Sample ID: HD-MW-20M-0/1-0
Date Collected: 10/14/16 08:00
Date Received: 10/15/16 09:05

Lab Sample ID: 180-59864-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			10/24/16 21:36	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			10/24/16 21:36	1
Bromomethane	1.0	U	1.0	0.36	ug/L			10/24/16 21:36	1
Chloroethane	1.0	U	1.0	0.26	ug/L			10/24/16 21:36	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/24/16 21:36	1
Acetone	**2.7**	**J**	5.0	2.5	ug/L			10/24/16 21:36	1
Carbon disulfide	1.0	U	1.0	0.18	ug/L			10/24/16 21:36	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/24/16 21:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/24/16 21:36	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			10/24/16 21:36	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			10/24/16 21:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/24/16 21:36	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			10/24/16 21:36	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			10/24/16 21:36	1
Chloroform	**0.38**	**J**	1.0	0.27	ug/L			10/24/16 21:36	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/24/16 21:36	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			10/24/16 21:36	1
Benzene	1.0	U	1.0	0.26	ug/L			10/24/16 21:36	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			10/24/16 21:36	1
Trichloroethene	**4.6**		1.0	0.26	ug/L			10/24/16 21:36	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			10/24/16 21:36	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			10/24/16 21:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			10/24/16 21:36	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			10/24/16 21:36	1
Toluene	1.0	U	1.0	0.28	ug/L			10/24/16 21:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			10/24/16 21:36	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			10/24/16 21:36	1
Tetrachloroethene	**0.52**	**J**	1.0	0.27	ug/L			10/24/16 21:36	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			10/24/16 21:36	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			10/24/16 21:36	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			10/24/16 21:36	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			10/24/16 21:36	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/24/16 21:36	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			10/24/16 21:36	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			10/24/16 21:36	1
Styrene	1.0	U	1.0	0.26	ug/L			10/24/16 21:36	1
Bromoform	1.0	U	1.0	0.29	ug/L			10/24/16 21:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			10/24/16 21:36	1
Acrylonitrile	20	U	20	2.8	ug/L			10/24/16 21:36	1
1,4-Dioxane	200	U	200	7.5	ug/L			10/24/16 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*72 - 134*		*10/24/16 21:36*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*10/24/16 21:36*	*1*
4-Bromofluorobenzene (Surr)	*108*		*72 - 120*		*10/24/16 21:36*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 127*		*10/24/16 21:36*	*1*

Default Detection Limits

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-59864-1

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

Analyte	RL	MDL	Units	Method
1,1,1,2-Tetrachloroethane	1.0	0.20	ug/L	8260C
1,1,1-Trichloroethane	1.0	0.22	ug/L	8260C
1,1,2,2-Tetrachloroethane	1.0	0.35	ug/L	8260C
1,1,2-Trichloroethane	1.0	0.35	ug/L	8260C
1,1-Dichloroethane	1.0	0.24	ug/L	8260C
1,1-Dichloroethene	1.0	0.29	ug/L	8260C
1,2-Dibromoethane (EDB)	1.0	0.29	ug/L	8260C
1,2-Dichloroethane	1.0	0.25	ug/L	8260C
1,2-Dichloropropane	1.0	0.23	ug/L	8260C
1,4-Dioxane	200	7.5	ug/L	8260C
2-Butanone (MEK)	5.0	1.2	ug/L	8260C
2-Hexanone	5.0	0.74	ug/L	8260C
4-Methyl-2-pentanone (MIBK)	5.0	0.59	ug/L	8260C
Acetone	5.0	2.5	ug/L	8260C
Acrylonitrile	20	2.8	ug/L	8260C
Benzene	1.0	0.26	ug/L	8260C
Bromochloromethane	1.0	0.38	ug/L	8260C
Bromodichloromethane	1.0	0.23	ug/L	8260C
Bromoform	1.0	0.29	ug/L	8260C
Bromomethane	1.0	0.36	ug/L	8260C
Carbon disulfide	1.0	0.18	ug/L	8260C
Carbon tetrachloride	1.0	0.24	ug/L	8260C
Chlorobenzene	1.0	0.31	ug/L	8260C
Chloroethane	1.0	0.26	ug/L	8260C
Chloroform	1.0	0.27	ug/L	8260C
Chloromethane	1.0	0.23	ug/L	8260C
cis-1,2-Dichloroethene	1.0	0.29	ug/L	8260C
cis-1,3-Dichloropropene	1.0	0.21	ug/L	8260C
Dibromochloromethane	1.0	0.40	ug/L	8260C
Ethylbenzene	1.0	0.27	ug/L	8260C
Methyl tert-butyl ether	1.0	0.24	ug/L	8260C
Methylene Chloride	1.0	0.36	ug/L	8260C
Styrene	1.0	0.26	ug/L	8260C
Tetrachloroethene	1.0	0.27	ug/L	8260C
Toluene	1.0	0.28	ug/L	8260C
trans-1,2-Dichloroethene	1.0	0.29	ug/L	8260C
trans-1,3-Dichloropropene	1.0	0.24	ug/L	8260C
Trichloroethene	1.0	0.26	ug/L	8260C
Vinyl chloride	1.0	0.32	ug/L	8260C
Xylenes, Total	2.0	0.48	ug/L	8260C

Surrogate Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-59864-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(72-134)	(80-120)	(72-120)	(77-127)
180-59864-1	HD-QC7-0/1-2	102	106	96	102
180-59864-2	HD-MW-20D-0/1-0	104	104	96	100
180-59864-3	HD-MW-18S-0/1-0	109	97	106	103
180-59864-4	HD-MW-142S-0/1-0	103	109	96	97
180-59864-5	HD-MW-20S-0/1-0	106	93	102	108
180-59864-6	HD-MW-142D-0/1-0	106	96	106	104
180-59864-7	HD-MW-20M-0/1-0	103	102	108	102
LCS 180-192068/14	Lab Control Sample	98	109	104	102
LCS 180-192156/8	Lab Control Sample	95	104	102	93
MB 180-192068/4	Method Blank	94	107	96	92
MB 180-192156/5	Method Blank	102	99	102	98

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Lab Sample ID: MB 180-192068/4
Matrix: Water
Analysis Batch: 192068

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	0.23	ug/L			10/23/16 12:36	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			10/23/16 12:36	1
Bromomethane	1.0	U	1.0	0.36	ug/L			10/23/16 12:36	1
Chloroethane	1.0	U	1.0	0.26	ug/L			10/23/16 12:36	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/23/16 12:36	1
Acetone	5.0	U	5.0	2.5	ug/L			10/23/16 12:36	1
Carbon disulfide	1.0	U	1.0	0.18	ug/L			10/23/16 12:36	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/23/16 12:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/23/16 12:36	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			10/23/16 12:36	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			10/23/16 12:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/23/16 12:36	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			10/23/16 12:36	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			10/23/16 12:36	1
Chloroform	1.0	U	1.0	0.27	ug/L			10/23/16 12:36	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/23/16 12:36	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			10/23/16 12:36	1
Benzene	1.0	U	1.0	0.26	ug/L			10/23/16 12:36	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			10/23/16 12:36	1
Trichloroethene	1.0	U	1.0	0.26	ug/L			10/23/16 12:36	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			10/23/16 12:36	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			10/23/16 12:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			10/23/16 12:36	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			10/23/16 12:36	1
Toluene	1.0	U	1.0	0.28	ug/L			10/23/16 12:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			10/23/16 12:36	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			10/23/16 12:36	1
Tetrachloroethene	1.0	U	1.0	0.27	ug/L			10/23/16 12:36	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			10/23/16 12:36	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			10/23/16 12:36	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			10/23/16 12:36	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			10/23/16 12:36	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/23/16 12:36	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			10/23/16 12:36	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			10/23/16 12:36	1
Styrene	1.0	U	1.0	0.26	ug/L			10/23/16 12:36	1
Bromoform	1.0	U	1.0	0.29	ug/L			10/23/16 12:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			10/23/16 12:36	1
Acrylonitrile	20	U	20	2.8	ug/L			10/23/16 12:36	1
1,4-Dioxane	200	U	200	7.5	ug/L			10/23/16 12:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*72 - 134*		*10/23/16 12:36*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*10/23/16 12:36*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 120*		*10/23/16 12:36*	*1*
Dibromofluoromethane (Surr)	*92*		*77 - 127*		*10/23/16 12:36*	*1*

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

Lab Sample ID: LCS 180-192068/14
Matrix: Water
Analysis Batch: 192068

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	9.96		ug/L		100	51 - 150
Vinyl chloride	10.0	9.76		ug/L		98	61 - 138
Bromomethane	10.0	10.9		ug/L		109	39 - 150
Chloroethane	10.0	9.43		ug/L		94	53 - 148
1,1-Dichloroethene	10.0	9.67		ug/L		97	71 - 122
Acetone	20.0	27.8		ug/L		139	10 - 150
Carbon disulfide	10.0	9.16		ug/L		92	57 - 137
Methylene Chloride	10.0	9.50		ug/L		95	71 - 129
trans-1,2-Dichloroethene	10.0	9.84		ug/L		98	80 - 121
Methyl tert-butyl ether	10.0	10.8		ug/L		108	68 - 124
1,1-Dichloroethane	10.0	9.91		ug/L		99	76 - 126
cis-1,2-Dichloroethene	10.0	9.85		ug/L		98	80 - 120
Bromochloromethane	10.0	9.71		ug/L		97	76 - 120
2-Butanone (MEK)	20.0	19.4		ug/L		97	41 - 150
Chloroform	10.0	9.76		ug/L		98	78 - 122
1,1,1-Trichloroethane	10.0	10.2		ug/L		102	57 - 128
Carbon tetrachloride	10.0	11.2		ug/L		112	59 - 145
Benzene	10.0	10.1		ug/L		101	80 - 121
1,2-Dichloroethane	10.0	9.98		ug/L		100	72 - 126
Trichloroethene	10.0	9.98		ug/L		100	79 - 120
1,2-Dichloropropane	10.0	9.59		ug/L		96	78 - 123
Bromodichloromethane	10.0	10.0		ug/L		100	72 - 124
cis-1,3-Dichloropropene	10.0	9.56		ug/L		96	67 - 127
4-Methyl-2-pentanone (MIBK)	20.0	12.3		ug/L		61	49 - 147
Toluene	10.0	10.5		ug/L		105	80 - 125
trans-1,3-Dichloropropene	10.0	9.85		ug/L		99	63 - 144
1,1,2-Trichloroethane	10.0	10.3		ug/L		103	77 - 127
Tetrachloroethene	10.0	10.2		ug/L		102	80 - 122
2-Hexanone	20.0	19.0		ug/L		95	40 - 150
Dibromochloromethane	10.0	9.72		ug/L		97	71 - 134
1,2-Dibromoethane (EDB)	10.0	10.6		ug/L		106	79 - 126
Chlorobenzene	10.0	10.4		ug/L		104	80 - 120
1,1,1,2-Tetrachloroethane	10.0	10.7		ug/L		107	75 - 135
Ethylbenzene	10.0	10.6		ug/L		106	80 - 123
Xylenes, Total	20.0	21.0		ug/L		105	80 - 123
Styrene	10.0	10.4		ug/L		104	80 - 125
Bromoform	10.0	9.00		ug/L		90	62 - 138
1,1,2,2-Tetrachloroethane	10.0	10.5		ug/L		105	78 - 135
Acrylonitrile	100	98.2		ug/L		98	66 - 146
1,4-Dioxane	200	120	J	ug/L		60	10 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 134*
Toluene-d8 (Surr)	*109*		*80 - 120*
4-Bromofluorobenzene (Surr)	*104*		*72 - 120*
Dibromofluoromethane (Surr)	*102*		*77 - 127*

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

Lab Sample ID: MB 180-192156/5
Matrix: Water
Analysis Batch: 192156

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	0.23	ug/L			10/24/16 12:05	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			10/24/16 12:05	1
Bromomethane	1.0	U	1.0	0.36	ug/L			10/24/16 12:05	1
Chloroethane	1.0	U	1.0	0.26	ug/L			10/24/16 12:05	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/24/16 12:05	1
Acetone	5.0	U	5.0	2.5	ug/L			10/24/16 12:05	1
Carbon disulfide	1.0	U	1.0	0.18	ug/L			10/24/16 12:05	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/24/16 12:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/24/16 12:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			10/24/16 12:05	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			10/24/16 12:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/24/16 12:05	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			10/24/16 12:05	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			10/24/16 12:05	1
Chloroform	1.0	U	1.0	0.27	ug/L			10/24/16 12:05	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/24/16 12:05	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			10/24/16 12:05	1
Benzene	1.0	U	1.0	0.26	ug/L			10/24/16 12:05	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			10/24/16 12:05	1
Trichloroethene	1.0	U	1.0	0.26	ug/L			10/24/16 12:05	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			10/24/16 12:05	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			10/24/16 12:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			10/24/16 12:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			10/24/16 12:05	1
Toluene	1.0	U	1.0	0.28	ug/L			10/24/16 12:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			10/24/16 12:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			10/24/16 12:05	1
Tetrachloroethene	1.0	U	1.0	0.27	ug/L			10/24/16 12:05	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			10/24/16 12:05	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			10/24/16 12:05	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			10/24/16 12:05	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			10/24/16 12:05	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/24/16 12:05	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			10/24/16 12:05	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			10/24/16 12:05	1
Styrene	1.0	U	1.0	0.26	ug/L			10/24/16 12:05	1
Bromoform	1.0	U	1.0	0.29	ug/L			10/24/16 12:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			10/24/16 12:05	1
Acrylonitrile	20	U	20	2.8	ug/L			10/24/16 12:05	1
1,4-Dioxane	200	U	200	7.5	ug/L			10/24/16 12:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*72 - 134*		*10/24/16 12:05*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/24/16 12:05*	*1*
4-Bromofluorobenzene (Surr)	*102*		*72 - 120*		*10/24/16 12:05*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 127*		*10/24/16 12:05*	*1*

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

Lab Sample ID: LCS 180-192156/8
Matrix: Water
Analysis Batch: 192156

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	9.46		ug/L		95	51 - 150
Vinyl chloride	10.0	9.60		ug/L		96	61 - 138
Bromomethane	10.0	10.1		ug/L		101	39 - 150
Chloroethane	10.0	10.6		ug/L		106	53 - 148
1,1-Dichloroethene	10.0	10.0		ug/L		100	71 - 122
Acetone	20.0	17.3		ug/L		87	10 - 150
Carbon disulfide	10.0	9.26		ug/L		93	57 - 137
Methylene Chloride	10.0	9.69		ug/L		97	71 - 129
trans-1,2-Dichloroethene	10.0	9.73		ug/L		97	80 - 121
Methyl tert-butyl ether	10.0	9.25		ug/L		92	68 - 124
1,1-Dichloroethane	10.0	9.83		ug/L		98	76 - 126
cis-1,2-Dichloroethene	10.0	9.70		ug/L		97	80 - 120
Bromochloromethane	10.0	9.96		ug/L		100	76 - 120
2-Butanone (MEK)	20.0	18.4		ug/L		92	41 - 150
Chloroform	10.0	9.83		ug/L		98	78 - 122
1,1,1-Trichloroethane	10.0	9.95		ug/L		100	57 - 128
Carbon tetrachloride	10.0	10.2		ug/L		102	59 - 145
Benzene	10.0	9.90		ug/L		99	80 - 121
1,2-Dichloroethane	10.0	9.61		ug/L		96	72 - 126
Trichloroethene	10.0	9.71		ug/L		97	79 - 120
1,2-Dichloropropane	10.0	9.49		ug/L		95	78 - 123
Bromodichloromethane	10.0	9.54		ug/L		95	72 - 124
cis-1,3-Dichloropropene	10.0	9.28		ug/L		93	67 - 127
4-Methyl-2-pentanone (MIBK)	20.0	19.2		ug/L		96	49 - 147
Toluene	10.0	10.6		ug/L		106	80 - 125
trans-1,3-Dichloropropene	10.0	9.50		ug/L		95	63 - 144
1,1,2-Trichloroethane	10.0	9.92		ug/L		99	77 - 127
Tetrachloroethene	10.0	10.4		ug/L		104	80 - 122
2-Hexanone	20.0	18.4		ug/L		92	40 - 150
Dibromochloromethane	10.0	9.67		ug/L		97	71 - 134
1,2-Dibromoethane (EDB)	10.0	9.77		ug/L		98	79 - 126
Chlorobenzene	10.0	10.5		ug/L		105	80 - 120
1,1,1,2-Tetrachloroethane	10.0	10.1		ug/L		101	75 - 135
Ethylbenzene	10.0	10.4		ug/L		104	80 - 123
Xylenes, Total	20.0	21.2		ug/L		106	80 - 123
Styrene	10.0	10.5		ug/L		105	80 - 125
Bromoform	10.0	9.01		ug/L		90	62 - 138
1,1,2,2-Tetrachloroethane	10.0	10.3		ug/L		103	78 - 135
Acrylonitrile	100	93.0		ug/L		93	66 - 146
1,4-Dioxane	200	164	J	ug/L		82	10 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 134*
Toluene-d8 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*102*		*72 - 120*
Dibromofluoromethane (Surr)	*93*		*77 - 127*

QC Association Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-59864-1

GC/MS VOA

Analysis Batch: 192068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-59864-1	HD-QC7-0/1-2	Total/NA	Water	8260C	
180-59864-2	HD-MW-20D-0/1-0	Total/NA	Water	8260C	
180-59864-4	HD-MW-142S-0/1-0	Total/NA	Water	8260C	
MB 180-192068/4	Method Blank	Total/NA	Water	8260C	
LCS 180-192068/14	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 192156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-59864-3	HD-MW-18S-0/1-0	Total/NA	Water	8260C	
180-59864-5	HD-MW-20S-0/1-0	Total/NA	Water	8260C	
180-59864-6	HD-MW-142D-0/1-0	Total/NA	Water	8260C	
180-59864-7	HD-MW-20M-0/1-0	Total/NA	Water	8260C	
MB 180-192156/5	Method Blank	Total/NA	Water	8260C	
LCS 180-192156/8	Lab Control Sample	Total/NA	Water	8260C	

Client Sample ID: HD-QC7-0/1-2
Date Collected: 10/13/16 12:00
Date Received: 10/15/16 09:05

Lab Sample ID: 180-59864-1
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	192068	10/23/16 21:25	DLF	TAL PIT
	Instrument ID: CHHP6									

Client Sample ID: HD-MW-20D-0/1-0
Date Collected: 10/13/16 08:25
Date Received: 10/15/16 09:05

Lab Sample ID: 180-59864-2
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	192068	10/23/16 20:36	DLF	TAL PIT
	Instrument ID: CHHP6									

Client Sample ID: HD-MW-18S-0/1-0
Date Collected: 10/13/16 08:15
Date Received: 10/15/16 09:05

Lab Sample ID: 180-59864-3
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	192156	10/24/16 20:48	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-MW-142S-0/1-0
Date Collected: 10/13/16 12:06
Date Received: 10/15/16 09:05

Lab Sample ID: 180-59864-4
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	192068	10/23/16 21:49	DLF	TAL PIT
	Instrument ID: CHHP6									

Client Sample ID: HD-MW-20S-0/1-0
Date Collected: 10/13/16 10:50
Date Received: 10/15/16 09:05

Lab Sample ID: 180-59864-5
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	192156	10/24/16 21:12	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-MW-142D-0/1-0
Date Collected: 10/13/16 10:25
Date Received: 10/15/16 09:05

Lab Sample ID: 180-59864-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	192156	10/24/16 20:24	DLF	TAL PIT
	Instrument ID: CHHP5									

Lab Chronicle

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-59864-1

Client Sample ID: HD-MW-20M-0/1-0

Date Collected: 10/14/16 08:00
Date Received: 10/15/16 09:05

Lab Sample ID: 180-59864-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	192156	10/24/16 21:36	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

Certification Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-59864-1

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	04-30-17

Method Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-59864-1

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: 180-59864-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-59864-1	HD-QC7-0/1-2	Water	10/13/16 12:00	10/15/16 09:05
180-59864-2	HD-MW-20D-0/1-0	Water	10/13/16 08:25	10/15/16 09:05
180-59864-3	HD-MW-18S-0/1-0	Water	10/13/16 08:15	10/15/16 09:05
180-59864-4	HD-MW-142S-0/1-0	Water	10/13/16 12:06	10/15/16 09:05
180-59864-5	HD-MW-20S-0/1-0	Water	10/13/16 10:50	10/15/16 09:05
180-59864-6	HD-MW-142D-0/1-0	Water	10/13/16 10:25	10/15/16 09:05
180-59864-7	HD-MW-20M-0/1-0	Water	10/14/16 08:00	10/15/16 09:05

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 192047

Lab Sample ID: IC 180-192047/3 Client Sample ID:

Date Analyzed: 10/22/16 14:57 Lab File ID: 51022003.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.67	Incomplete Integration	fergusond	10/23/16 09:39
2,2-Dichloropropane	5.93	Incomplete Integration	fergusond	10/23/16 09:39

Lab Sample ID: IC 180-192047/4 Client Sample ID:

Date Analyzed: 10/22/16 15:21 Lab File ID: 51022004.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.69	Incomplete Integration	fergusond	10/23/16 09:59

Lab Sample ID: ICIS 180-192047/5 Client Sample ID:

Date Analyzed: 10/22/16 15:45 Lab File ID: 51022005.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.66	Incomplete Integration	fergusond	10/23/16 13:13
1,4-Dioxane	8.02	Incomplete Integration	fergusond	10/23/16 13:13

Lab Sample ID: IC 180-192047/7 Client Sample ID:

Date Analyzed: 10/22/16 16:33 Lab File ID: 51022007.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.01	Incomplete Integration	fergusond	10/23/16 13:17

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 192156

Lab Sample ID: LCS 180-192156/8 Client Sample ID:

Date Analyzed: 10/24/16 13:33 Lab File ID: 51024008.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	10/24/16 14:10

Lab Sample ID: 180-59864-6 Client Sample ID: HD-MW-142D-0/1-0

Date Analyzed: 10/24/16 20:24 Lab File ID: 51024025.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.44	Incomplete Integration	fergusond	10/25/16 08:07
m-Xylene & p-Xylene	10.63	Incomplete Integration	fergusond	10/25/16 08:07

Lab Sample ID: 180-59864-5 Client Sample ID: HD-MW-20S-0/1-0

Date Analyzed: 10/24/16 21:12 Lab File ID: 51024027.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl tert-butyl ether	4.57	Incomplete Integration	fergusond	10/25/16 08:10

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 191498

Lab Sample ID: IC 180-191498/6 Client Sample ID:

Date Analyzed: 10/17/16 14:23 Lab File ID: 61017006.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorofluoromethane	2.59	Incomplete Integration	fergusond	10/18/16 09:55
Allyl chloride	3.80	Incomplete Integration	fergusond	10/18/16 09:55
Vinyl acetate	5.12	Incomplete Integration	fergusond	10/18/16 09:55
1,2-Dichloropropane	7.84	Incomplete Integration	fergusond	10/18/16 09:55
1,4-Dioxane	7.94	Poor chromatography	fergusond	10/18/16 09:55

Lab Sample ID: IC 180-191498/7 Client Sample ID:

Date Analyzed: 10/17/16 14:48 Lab File ID: 61017007.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.54	Poor chromatography	fergusond	10/18/16 10:03
Isobutyl alcohol	6.82	Incomplete Integration	fergusond	10/18/16 10:03
1,4-Dioxane	7.93	Incomplete Integration	fergusond	10/18/16 10:03

Lab Sample ID: IC 180-191498/10 Client Sample ID:

Date Analyzed: 10/17/16 16:01 Lab File ID: 61017010.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	7.93	Incomplete Integration	fergusond	10/18/16 10:09

Lab Sample ID: IC 180-191498/12 Client Sample ID:

Date Analyzed: 10/17/16 16:49 Lab File ID: 61017012.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	7.93	Incomplete Integration	fergusond	10/18/16 10:15

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 191498

Lab Sample ID: IC 180-191498/13 Client Sample ID:

Date Analyzed: 10/17/16 17:13 Lab File ID: 61017013.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	7.93	Incomplete Integration	fergusond	10/18/16 10:20

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 192068

Lab Sample ID: 180-59864-2 Client Sample ID: HD-MW-20D-0/1-0

Date Analyzed: 10/23/16 20:36 Lab File ID: 61023022.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.34	Missed Peak	fergusond	10/24/16 08:14
Trichloroethene	7.57	Incomplete Integration	fergusond	10/24/16 08:14

Lab Sample ID: 180-59864-4 Client Sample ID: HD-MW-142S-0/1-0

Date Analyzed: 10/23/16 21:49 Lab File ID: 61023025.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.34	Incomplete Integration	fergusond	10/24/16 08:17
Trichloroethene	7.57	Incomplete Integration	fergusond	10/24/16 08:17

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VOA8260INT_00062	11/11/16	10/11/16	Methanol, Lot 2019054	10 mL	VOA8260INTRES_00127	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_00127	08/31/20		Restek, Lot A0113246		(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_00060	11/11/16	10/11/16	Methanol, Lot 2019054	100 mL	VOA8260SURRES_00117	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_00117	07/31/20		Restek, Lot A0112455		(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_00210	10/29/16	10/22/16	Methanol, Lot 2019054	10 mL	VOA8260GAS2ND_00167	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOA2ND_00207	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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00167	11/30/18		Restek, Lot A0115484		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOA2ND_00207	11/04/16	10/04/16	Methanol, Lot 136118	10 mL	VOA8260MEGA2_00052	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
							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_00052	01/31/17		Restek, Lot A0118163		(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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane	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_00216	10/21/16	10/14/16	Methanol, Lot 136118	10 mL	VOA8260GAS1ST_00168	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Dichlorofluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00214	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2,4-Trimethylbenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3,5-Trimethylbenzene	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dichloropropane	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	500 ug/mL
							2,2-Dichloropropane	25 ug/mL
							2-Chlorotoluene	25 ug/mL
							2-Methyl-2-propanol	250 ug/mL
							3-Chloro-1-propene	25 ug/mL
							4-Chlorotoluene	25 ug/mL
							4-Isopropyltoluene	25 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromobenzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Dibromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00168	04/30/19		Restek, Lot A0118719		(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_00214	11/04/16	10/04/16	Methanol, Lot 136118	10 mL	VOA8260KET1ST_00079	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_00054	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	250 ug/mL
..VOA8260KET1ST_00079	11/30/18		Restek, Lot A0115554		(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_00054	03/31/18		Restek, Lot A0108177		(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
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
VOA8260VOAPRI_00217	10/29/16	10/22/16	Methanol, Lot 2019054	10 mL	VOA8260GAS1ST_00169	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Dichlorofluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00214	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethene	25 ug/mL
							1,1-Dichloropropene	25 ug/mL
							1,2,3-Trichlorobenzene	25 ug/mL
							1,2,3-Trichloropropane	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2,4-Trimethylbenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3,5-Trimethylbenzene	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dichloropropane	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	500 ug/mL
							2,2-Dichloropropane	25 ug/mL
							2-Chlorotoluene	25 ug/mL
							2-Methyl-2-propanol	250 ug/mL
							3-Chloro-1-propene	25 ug/mL
							4-Chlorotoluene	25 ug/mL
							4-Isopropyltoluene	25 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromobenzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Dibromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00169	04/30/19		Restek, Lot A0118719		(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_00214	11/04/16	10/04/16	Methanol, Lot 136118	10 mL	VOA8260KET1ST_00079	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_00054	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00079	11/30/18		Restek, Lot A0115554		(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_00054	03/31/18		Restek, Lot A0108177		(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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,2-Dichloroethene	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
VOA8260VOAPRI_00217	10/29/16	10/22/16	Methanol, Lot 2019054	10 mL	VOA8260VOAPRI_00214	1 mL	Xylenes, Total	50 ug/mL
.VOA8260VOAPRI_00214	11/04/16	10/04/16	Methanol, Lot 136118	10 mL	VOA8260MEGA1_00054	1 mL	Xylenes, Total	500 ug/mL
..VOA8260MEGA1_00054	03/31/18		Restek, Lot A0108177		(Purchased Reagent)		Xylenes, Total	5000 ug/mL
VOAACROPRI_00007	10/31/16	10/18/16	Methanol, Lot 136118	100 mL	VOAACRORES_00103	0.125 mL	Acrolein	25 ug/mL
.VOAACRORES_00103	10/31/16		Restek, Lot A0119846		(Purchased Reagent)		Acrolein	20000 ug/mL
voaW2cleveRes_00002	10/24/16	10/17/16	Methanol, Lot 2019056	10 mL	VOACEVERES2ND_00067	0.2 mL	2-Chloroethyl vinyl ether	50 ug/mL
.VOACEVERES2ND_00067	11/30/18		Restek, Lot A0115500		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
voaWacro2ndRe_00007	10/20/16	09/20/16	Methanol, Lot 2019052	100 mL	VOAACRRES2ND_00091	0.125 mL	Acrolein	25 ug/mL
.VOAACRRES2ND_00091	10/31/16		Restek, Lot A0119844		(Purchased Reagent)		Acrolein	20000 ug/mL
voaWEEmixRest_00001	10/27/16	09/27/16	Methanol, Lot 2019056	25 mL	VOARESEE1ST_00035	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4- & 2,5- & 2,6-Dichlorotoluene	75 ug/mL
							2,4-Dichloro-1-(triflouromethyl)-benzene	25 ug/mL
							2,5-Dichlorobenzotrifluoride	25 ug/mL
							2-Chlorobenzotrifluoride	25 ug/mL
							3-Chlorobenzotrifluoride	25 ug/mL
							3-Chlorotoluene	25 ug/mL
							4-Chlorobenzotrifluoride	25 ug/mL
.VOARESEE1ST_00035	01/01/18		Restek, Lot A0120234		(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-(triflouromethyl)-benzene	5000 ug/mL
							2,5-Dichlorobenzotrifluoride	5000 ug/mL
							2-Chlorobenzotrifluoride	5000 ug/mL
							3-Chlorobenzotrifluoride	5000 ug/mL
							3-Chlorotoluene	5000 ug/mL
							4-Chlorobenzotrifluoride	5000 ug/mL
voaWKet2ndRes_00014	11/23/16	10/23/16	Methanol, Lot 2019067	50 mL	VOA8260KET2ND_00080	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_00080	11/30/18		Restek, Lot A0115554		(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
voaWKetPriRes_00002	10/26/16	09/26/16	Methanol, Lot 2019054	50 mL	VOA8260KET1ST_00075	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_00075	11/30/18		Restek, Lot A0115554		(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
voaWVA1stRest_00009	11/18/16	10/18/16	Methanol, Lot 2019056	25 mL	VOA8260VARES_00071	0.125 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES_00071	11/30/16		Restek, Lot A0118255		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
voaWva2ndRest_00007	10/20/16	09/20/16	Methanol, Lot 2019052	25 mL	VOA8260VARES2_00076	0.125 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES2_00076	11/30/16		Restek, Lot A0119399		(Purchased Reagent)		Vinyl acetate	5000 ug/mL

Reagent

VOA8260GAS1ST_00168

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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.:** A0118719

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, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L., K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 **Purity** 99%	(Lot Q167-08)	2,504.2	µg/mL	+/- 18.7109 +/- 140.8995 +/- 144.1737	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 **Purity** 99%	(Lot SHBG1480V)	2,500.6	µg/mL	+/- 18.9897 +/- 140.7385 +/- 144.0070	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 **Purity** 99%	(Lot 25LPST)	2,499.8	µg/mL	+/- 20.8058 +/- 140.9486 +/- 144.2103	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 **Purity** 99%	(Lot SHBF3387V)	2,500.6	µg/mL	+/- 21.2874 +/- 141.0663 +/- 144.3274	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 **Purity** 99%	(Lot 101604)	2,500.1	µg/mL	+/- 22.8576 +/- 141.2859 +/- 144.5409	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 **Purity** 99%	(Lot SHBD1717V)	2,500.3	µg/mL	+/- 19.5969 +/- 140.8062 +/- 144.0725	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 **Purity** 99%	(Lot Q9B-58)	2,504.7	µg/mL	+/- 19.5937 +/- 141.0449 +/- 144.3170	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,524.5	µg/mL	+/-	16.8928	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot Q12B-59)			+/-	141.7952	µg/mL	Unstressed
	Purity 99%				+/-	145.1017	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)

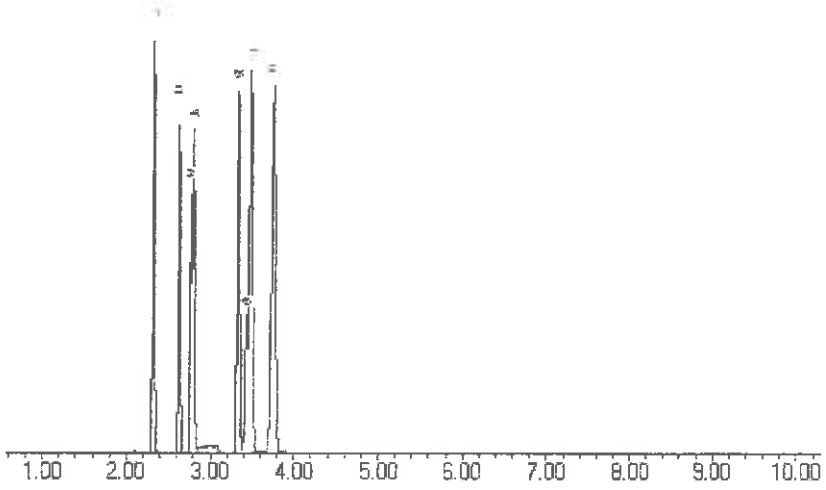
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

Lane Klbe - Mix Technician

Date Mixed: 17-Nov-2015 **Balance:** 1127510105

Jennifer L. Pollino - QC Analyst

Date Passed: 10-Dec-2015

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

Reagent

VOA8260GAS1ST_00169

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Catalog No. : 569722 **Lot No.:** A0118719

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, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L., K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 **Purity** 99%	(Lot Q167-08)	2,504.2	µg/mL	+/- 18.7109 +/- 140.8995 +/- 144.1737	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 **Purity** 99%	(Lot SHBG1480V)	2,500.6	µg/mL	+/- 18.9897 +/- 140.7385 +/- 144.0070	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 **Purity** 99%	(Lot 25LPST)	2,499.8	µg/mL	+/- 20.8058 +/- 140.9486 +/- 144.2103	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 **Purity** 99%	(Lot SHBF3387V)	2,500.6	µg/mL	+/- 21.2874 +/- 141.0663 +/- 144.3274	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 **Purity** 99%	(Lot 101604)	2,500.1	µg/mL	+/- 22.8576 +/- 141.2859 +/- 144.5409	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 **Purity** 99%	(Lot SHBD1717V)	2,500.3	µg/mL	+/- 19.5969 +/- 140.8062 +/- 144.0725	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 **Purity** 99%	(Lot Q9B-58)	2,504.7	µg/mL	+/- 19.5937 +/- 141.0449 +/- 144.3170	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2.524.5	µg/mL	+/-	16.8928	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot Q12B-59)			+/-	141.7952	µg/mL	Unstressed
	Purity 99%				+/-	145.1017	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)

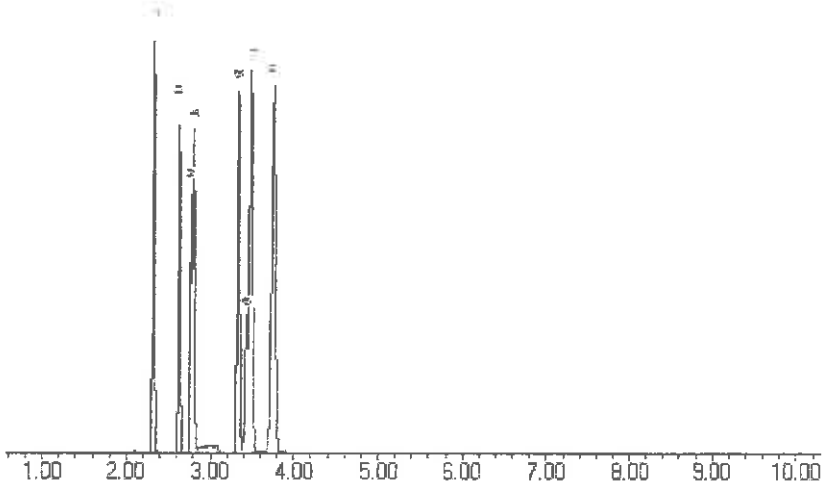
Carrier Gas:
helium–constant flow 2.0 mL/min.

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.

Lane Klbe - Mix Technician

Date Mixed: 17-Nov-2015 **Balance:** 1127510105

Jennifer L. Pollino - QC Analyst

Date Passed: 10-Dec-2015

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Catalog No. : 569722.sec **Lot No.:** A0115484

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 : November 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) CAS # 75-71-8.SEC (Lot 22274) Purity 99%	2,505.6 µg/mL	+/- 16.6251 +/- 140.7169 +/- 143.9990	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3.SEC (Lot 18343) Purity 99%	2,517.3 µg/mL	+/- 17.3796 +/- 141.4522 +/- 144.7477	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride CAS # 75-01-4.SEC (Lot MKBK6872V) Purity 99%	2,510.2 µg/mL	+/- 16.6342 +/- 140.9727 +/- 144.2609	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene CAS # 106-99-0.SEC (Lot 22331) Purity 99%	2,516.5 µg/mL	+/- 17.4874 +/- 141.4240 +/- 144.7182	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) CAS # 74-83-9.SEC (Lot Q119-46) Purity 99%	2,511.5 µg/mL	+/- 16.8310 +/- 141.0664 +/- 144.3557	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) CAS # 75-00-3.SEC (Lot 00004202) Purity 99%	2,504.8 µg/mL	+/- 16.4341 +/- 140.6469 +/- 143.9283	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) CAS # 75-43-4.SEC (Lot SHBC0858V) Purity 99%	2,500.5 µg/mL	+/- 16.1659 +/- 140.3776 +/- 143.6540	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,524.5	µg/mL	+/-	16.8928	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot Q12B-59)			+/-	141.7952	µg/mL	Unstressed
	Purity 99%				+/-	145.1017	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)

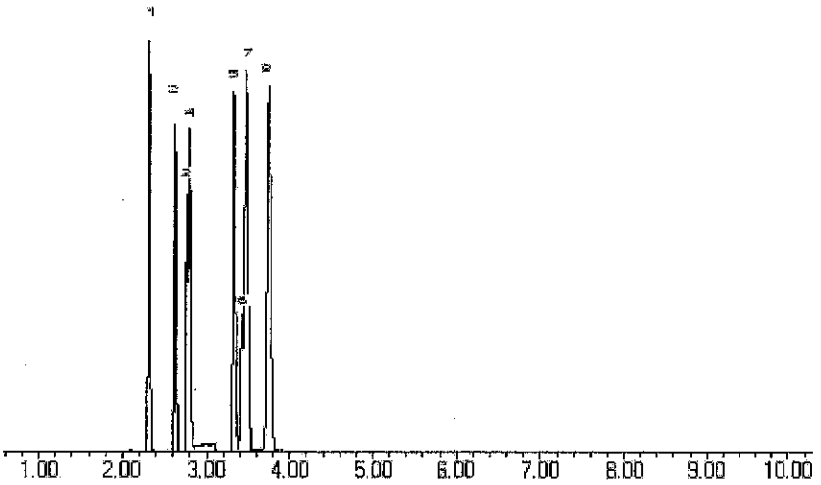
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

Lane Kibe - Mix Technician

Date Mixed: 17-Nov-2015 **Balance:** 1127510105

Jennifer L. Pollino - QC Analyst

Date Passed: 10-Dec-2015

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568718 **Lot No.:** A0113246

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 : August 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 I201P18)	5,000.4 µg/mL	+/- 29.0712 µg/mL +/- 106.0450 µg/mL +/- 106.5155 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone-d5 **CAS #** 24313-50-6 **Purity** 99% (Lot M276P24)	1,250.2 µg/mL	+/- 7.2688 µg/mL +/- 26.5135 µg/mL +/- 26.6311 µg/mL	Gravimetric Unstressed Stressed
3	Fluorobenzene **CAS #** 462-06-6 **Purity** 99% (Lot BCBK8171V)	250.2 µg/mL	+/- 1.4580 µg/mL +/- 5.3070 µg/mL +/- 5.3305 µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 **Purity** 98% (Lot I-19073)	5,000.6 µg/mL	+/- 29.0727 µg/mL +/- 106.0502 µg/mL +/- 106.5208 µg/mL	Gravimetric Unstressed Stressed
5	Chlorobenzene-d5 **CAS #** 3114-55-4 **Purity** 99% (Lot PR-23926)	250.4 µg/mL	+/- 1.4592 µg/mL +/- 5.3113 µg/mL +/- 5.3348 µg/mL	Gravimetric Unstressed Stressed
6	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 **Purity** 99% (Lot PR-18488)	250.0 µg/mL	+/- 1.4569 µg/mL +/- 5.3028 µg/mL +/- 5.3263 µg/mL	Gravimetric Unstressed Stressed

Reagent

VOA8260KET1ST_00075

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Catalog No. : 569721 **Lot No.:** A0115554

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 : November 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 **CAS #** 67-64-1 **Purity** 99%	(Lot 07196AK)	12,501.8 µg/mL	+/- 72.6865 µg/mL +/- 754.2890 µg/mL +/- 756.0798 µg/mL		Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 **Purity** 98%	(Lot SHBG0444V)	12,499.7 µg/mL	+/- 72.6744 µg/mL +/- 754.1625 µg/mL +/- 755.9530 µg/mL		Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 **Purity** 99%	(Lot SHBF9556V)	12,500.6 µg/mL	+/- 72.6796 µg/mL +/- 754.2166 µg/mL +/- 756.0072 µg/mL		Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 **Purity** 99%	(Lot MKBT3158V)	12,502.4 µg/mL	+/- 72.6900 µg/mL +/- 754.3252 µg/mL +/- 756.1161 µg/mL		Gravimetric Unstressed Stressed

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

Reagent

VOA8260MEGA1_00054

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Catalog No. : 569720 **Lot No.:** A0118177

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 : March 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBG1462V) **Purity** 99%	2,503.5 µg/mL	+/- 14.5556 µg/mL +/- 151.0472 µg/mL +/- 151.4059 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00004562) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 150.8361 µg/mL +/- 151.1942 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethane **CAS #** 75-34-3 (Lot 00008621) **Purity** 99%	2,500.1 µg/mL	+/- 14.5359 µg/mL +/- 150.8436 µg/mL +/- 151.2017 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBD0362V) **Purity** 99%	25,033.4 µg/mL	+/- 145.5386 µg/mL +/- 1,510.3737 µg/mL +/- 1,513.9596 µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBF2149V) **Purity** 98%	2,502.9 µg/mL	+/- 14.5522 µg/mL +/- 151.0123 µg/mL +/- 151.3708 µg/mL	Gravimetric Unstressed Stressed
6	Methyl acetate **CAS #** 79-20-9 (Lot SHBD7134V) **Purity** 98%	12,508.6 µg/mL	+/- 72.7223 µg/mL +/- 754.6987 µg/mL +/- 756.4905 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot SHBF8133V) **Purity** 99%	2,500.0 µg/mL	+/- 19.2743 µg/mL +/- 151.3663 µg/mL +/- 151.7231 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBF9870V)	2,521.4	µg/mL	+/- 14.6595 +/- 152.1257 +/- 152.4869	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot S20A856)	2,516.0	µg/mL	+/- 14.6282 +/- 151.8014 +/- 152.1618	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot J08Z057)	25,001.3	µg/mL	+/- 145.3518 +/- 1,508.4355 +/- 1,512.0167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 98%	(Lot MKBV2831V)	2,507.8	µg/mL	+/- 14.5807 +/- 151.3079 +/- 151.6671	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBF7674V)	2,512.4	µg/mL	+/- 14.6072 +/- 151.5827 +/- 151.9426	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	1,1-dichloroethene **CAS #** 75-35-4 **Purity** 99%	(Lot 73896KMV)	2,508.1	µg/mL	+/- 14.5825 +/- 151.3263 +/- 151.6856	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 99%	(Lot BCBL9720V)	2,507.6	µg/mL	+/- 14.5795 +/- 151.2961 +/- 151.6553	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot MKBH9850V)	2,509.8	µg/mL	+/- 14.5919 +/- 151.4243 +/- 151.7838	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBD1647V)	62,815.4	µg/mL	+/- 365.1949 +/- 3,789.9281 +/- 3,798.9260	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot MKBV2134V)	2,510.0	µg/mL	+/- 14.5934 +/- 151.4394 +/- 151.7990	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Bromochloromethane **CAS #** 74-97-5 **Purity** 99%	(Lot 00004559)	2,507.0	µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBG2910V)	5,025.3	µg/mL	+/- 29.2172 +/- 303.1956 +/- 303.9154	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15MW0705)	2,508.9	µg/mL	+/- 14.5868 +/- 151.3715 +/- 151.7309	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKBV3194V)	2,503.4	µg/mL	+/- 14.5548 +/- 151.0397 +/- 151.3983	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot PR09161302)	2,507.4	µg/mL	+/- 14.5781 +/- 151.2810 +/- 151.6402	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBG1763V)	2,505.9	µg/mL	+/- 14.5694 +/- 151.1905 +/- 151.5495	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot MKBV6176V)	2,510.8	µg/mL	+/- +/- +/-	14.5977 151.4847 151.8443	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot MKBV4565V)	2,511.1	µg/mL	+/- +/- +/-	14.5999 151.5073 151.8670	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBG1169V)	2,502.9	µg/mL	+/- +/- +/-	14.5519 151.0095 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBF0943V)	2,500.4	µg/mL	+/- +/- +/-	14.5374 150.8587 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Methylcyclohexane **CAS #** 108-87-2 **Purity** 99%	(Lot 50996APV)	2,503.9	µg/mL	+/- +/- +/-	14.5577 151.0699 151.4285	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot 01113D0V)	2,523.5	µg/mL	+/- +/- +/-	14.6718 152.2539 152.6154	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	bromodichloromethane **CAS #** 75-27-4 **Purity** 98%	(Lot MKBL1617V)	2,509.0	µg/mL	+/- +/- +/-	14.5878 151.3818 151.7412	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBG6312V)	50,018.1	µg/mL	+/- +/- +/-	290.7945 3,017.8137 3,024.9785	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 98%	(Lot 10183283)	2,511.4	µg/mL	+/- +/- +/-	14.6013 151.5222 151.8820	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 22622)	2,506.0	µg/mL	+/- +/- +/-	14.5701 151.1981 151.5571	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot MKBV5601V)	2,515.5	µg/mL	+/- +/- +/-	14.6253 151.7713 152.1316	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot SHBD9190V)	2,503.1	µg/mL	+/- +/- +/-	14.5534 151.0246 151.3832	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 99%	(Lot C584177)	2,508.0	µg/mL	+/- +/- +/-	14.5817 151.3188 151.6780	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,508.4	µg/mL	+/- +/- +/-	14.5839 151.3414 151.7007	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,522.8	µg/mL	+/- +/- +/-	14.6675 152.2087 152.5701	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBD9374V)	2,518.9	µg/mL	+/- +/- +/-	14.6450 151.9749 152.3357	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,505.4	µg/mL	+/-	14.5664	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKBQ6577V)			+/-	151.1601	µg/mL	Unstressed
	Purity 98%				+/-	151.5190	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,505.1	µg/mL	+/-	14.5650	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	151.1453	µg/mL	Unstressed
	Purity 99%				+/-	151.5041	µg/mL	Stressed
42	Chlorobenzene		2,505.6	µg/mL	+/-	14.5679	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBF0505V)			+/-	151.1755	µg/mL	Unstressed
	Purity 99%				+/-	151.5344	µg/mL	Stressed
43	1,1,2,2-Tetrachloroethane		2,505.1	µg/mL	+/-	14.5650	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	151.1453	µg/mL	Unstressed
	Purity 99%				+/-	151.5041	µg/mL	Stressed
44	Ethylbenzene		2,506.1	µg/mL	+/-	14.5708	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBG5920V)			+/-	151.2056	µg/mL	Unstressed
	Purity 99%				+/-	151.5646	µg/mL	Stressed
45	m-Xylene		1,254.4	µg/mL	+/-	7.2930	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBF8095V)			+/-	75.6820	µg/mL	Unstressed
	Purity 99%				+/-	75.8617	µg/mL	Stressed
46	p-Xylene		1,250.0	µg/mL	+/-	7.2676	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBF3427V)			+/-	75.4180	µg/mL	Unstressed
	Purity 99%				+/-	75.5971	µg/mL	Stressed
47	o-Xylene		2,506.3	µg/mL	+/-	14.5716	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBF7003V)			+/-	151.2132	µg/mL	Unstressed
	Purity 99%				+/-	151.5722	µg/mL	Stressed
48	Styrene		2,503.9	µg/mL	+/-	14.5577	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKBS7097V)			+/-	151.0699	µg/mL	Unstressed
	Purity 99%				+/-	151.4285	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,509.4	µg/mL	+/-	14.5897	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)			+/-	151.4017	µg/mL	Unstressed
	Purity 99%				+/-	151.7612	µg/mL	Stressed
50	bromoform		2,503.3	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBC3410V)			+/-	151.0322	µg/mL	Unstressed
	Purity 99%				+/-	151.3907	µg/mL	Stressed
51	1,1,1,2-Tetrachloroethane		2,505.0	µg/mL	+/-	14.5643	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	151.1378	µg/mL	Unstressed
	Purity 99%				+/-	151.4966	µg/mL	Stressed
52	chloroform		2,507.8	µg/mL	+/-	14.5803	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot MKBV2089V)			+/-	151.3037	µg/mL	Unstressed
	Purity 99%				+/-	151.6629	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,504.8	µg/mL	+/-	14.5628	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	151.1227	µg/mL	Unstressed
	Purity 99%				+/-	151.4815	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,499.7	µg/mL	+/-	14.5334	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBP6041V)			+/-	150.8172	µg/mL	Unstressed
	Purity 95%				+/-	151.1753	µg/mL	Stressed
55	n-Propylbenzene		2,507.5	µg/mL	+/-	14.5788	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot MKBJ0332V)			+/-	151.2886	µg/mL	Unstressed
	Purity 99%				+/-	151.6478	µg/mL	Stressed

56	Bromobenzene		2,515.1	µg/mL	+/-	14.6232	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot MKBD4032V)			+/-	151.7486	µg/mL	Unstressed
	Purity 99%				+/-	152.1089	µg/mL	Stressed
57	1,2,4-Trimethylbenzene		2,503.7	µg/mL	+/-	14.5565	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBJ6229V)			+/-	151.0566	µg/mL	Unstressed
	Purity 98%				+/-	151.4152	µg/mL	Stressed
58	2-Chlorotoluene		2,502.1	µg/mL	+/-	14.5476	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBH8892V)			+/-	150.9643	µg/mL	Unstressed
	Purity 99%				+/-	151.3227	µg/mL	Stressed
59	4-Chlorotoluene		2,512.6	µg/mL	+/-	14.6086	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)			+/-	151.5978	µg/mL	Unstressed
	Purity 99%				+/-	151.9577	µg/mL	Stressed
60	tert-Butylbenzene		2,507.8	µg/mL	+/-	14.5803	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot S52237V)			+/-	151.3037	µg/mL	Unstressed
	Purity 99%				+/-	151.6629	µg/mL	Stressed
61	1,3,5-Trimethylbenzene		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBJ6245V)			+/-	150.9869	µg/mL	Unstressed
	Purity 99%				+/-	151.3454	µg/mL	Stressed
62	sec-Butylbenzene		2,521.8	µg/mL	+/-	14.6617	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBK3151V)			+/-	152.1484	µg/mL	Unstressed
	Purity 99%				+/-	152.5096	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,502.6	µg/mL	+/-	14.5505	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKBK4439V)			+/-	150.9945	µg/mL	Unstressed
	Purity 99%				+/-	151.3529	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,505.8	µg/mL	+/-	14.5686	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBM5751V)			+/-	151.1830	µg/mL	Unstressed
	Purity 99%				+/-	151.5419	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,504.1	µg/mL	+/-	14.5592	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS1350V)			+/-	151.0850	µg/mL	Unstressed
	Purity 99%				+/-	151.4437	µg/mL	Stressed
66	n-Butylbenzene		2,503.3	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09418JJV)			+/-	151.0322	µg/mL	Unstressed
	Purity 99%				+/-	151.3907	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,505.5	µg/mL	+/-	14.5672	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBD7331V)			+/-	151.1679	µg/mL	Unstressed
	Purity 99%				+/-	151.5268	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,508.6	µg/mL	+/-	14.5854	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01-JM)			+/-	151.3565	µg/mL	Unstressed
	Purity 99%				+/-	151.7158	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,518.6	µg/mL	+/-	14.6435	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot 26896BM)			+/-	151.9598	µg/mL	Unstressed
	Purity 99%				+/-	152.3206	µg/mL	Stressed
70	Hexachlorobutadiene		2,499.9	µg/mL	+/-	14.5344	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	150.8275	µg/mL	Unstressed
	Purity 98%				+/-	151.1856	µg/mL	Stressed
71	Naphthalene		2,514.9	µg/mL	+/-	14.6217	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBH4351V)			+/-	151.7336	µg/mL	Unstressed
	Purity 99%				+/-	152.0938	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,502.0 µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBS4859V)		+/-	150.9567	µg/mL	Unstressed
	Purity 99%			+/-	151.3151	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)

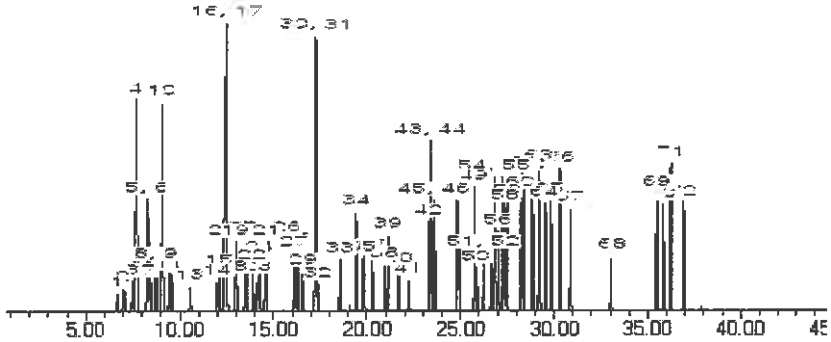
Carrier Gas:
helium-constant pressure 30 psi

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.

Rebecca Sawyer

Date Mixed: 21-Mar-2016 **Balance:** 1125113331

Jodi E. Breon

Jodi E. Breon - QA Analyst

Date Passed: 28-Mar-2016

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

Reagent

VOA8260MEGA2_00052

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569720.sec **Lot No.:** A0108163

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) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 133.1044 µg/mL +/- 133.2511 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 133.1044 µg/mL +/- 133.2511 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 903000) **Purity** 99%	2,502.8 µg/mL	+/- 14.5512 µg/mL +/- 133.1908 µg/mL +/- 133.3377 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,000.5 µg/mL	+/- 145.3477 µg/mL +/- 1,330.4725 µg/mL +/- 1,331.9397 µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot A13Y016) **Purity** 97%	2,500.5 µg/mL	+/- 14.5383 µg/mL +/- 133.0732 µg/mL +/- 133.2199 µg/mL	Gravimetric Unstressed Stressed
6	Methyl acetate **CAS #** 79-20-9.SEC (Lot YDGVD) **Purity** 99%	12,500.6 µg/mL	+/- 72.6759 µg/mL +/- 665.2553 µg/mL +/- 665.9889 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot 5MNOA-DQ) **Purity** 99%	2,501.3 µg/mL	+/- 14.5425 µg/mL +/- 133.1110 µg/mL +/- 133.2578 µg/mL	Gravimetric Unstressed Stressed

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)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot OGM01)			+/-	133.0644	µg/mL	Unstressed
	Purity 99%				+/-	133.2112	µg/mL	Stressed
25	1,2-Dichloroethane		2,501.9	µg/mL	+/-	14.5461	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot FO6PK)			+/-	133.1443	µg/mL	Unstressed
	Purity 99%				+/-	133.2911	µg/mL	Stressed
26	Benzene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	133.0911	µg/mL	Unstressed
	Purity 99%				+/-	133.2378	µg/mL	Stressed
27	Trichloroethene		2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	133.0760	µg/mL	Unstressed
	Purity 98%				+/-	133.2228	µg/mL	Stressed
28	Methylcyclohexane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 108-87-2.SEC	(Lot 24MSD-CD)			+/-	133.0711	µg/mL	Unstressed
	Purity 99%				+/-	133.2178	µg/mL	Stressed
29	1,2-Dichloropropane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot OGG01)			+/-	133.0445	µg/mL	Unstressed
	Purity 99%				+/-	133.1912	µg/mL	Stressed
30	Bromodichloromethane		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 10171168)			+/-	133.1243	µg/mL	Unstressed
	Purity 99%				+/-	133.2711	µg/mL	Stressed
31	1,4-Dioxane		50,000.8	µg/mL	+/-	290.6935	µg/mL	Gravimetric
	CAS # 123-91-1.SEC	(Lot CHA4A)			+/-	2,660.9280	µg/mL	Unstressed
	Purity 99%				+/-	2,663.8624	µg/mL	Stressed
32	Dibromomethane		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot FGI01-OICH)			+/-	133.0777	µg/mL	Unstressed
	Purity 99%				+/-	133.2245	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 7ZLXJ-TJ)			+/-	133.0977	µg/mL	Unstressed
	Purity 99%				+/-	133.2445	µg/mL	Stressed
34	Toluene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	133.0511	µg/mL	Unstressed
	Purity 99%				+/-	133.1979	µg/mL	Stressed
35	Ethyl methacrylate		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 97-63-2.SEC	(Lot MLWYK-LS)			+/-	133.0844	µg/mL	Unstressed
	Purity 99%				+/-	133.2312	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,501.6	µg/mL	+/-	14.5444	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot 2ECIC-NM)			+/-	133.1282	µg/mL	Unstressed
	Purity 98%				+/-	133.2750	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 732700)			+/-	133.0977	µg/mL	Unstressed
	Purity 99%				+/-	133.2445	µg/mL	Stressed
38	1,3-Dichloropropane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)			+/-	133.0844	µg/mL	Unstressed
	Purity 99%				+/-	133.2312	µg/mL	Stressed
39	Tetrachloroethene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	133.0445	µg/mL	Unstressed
	Purity 99%				+/-	133.1912	µg/mL	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 1161936)			+/-	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)

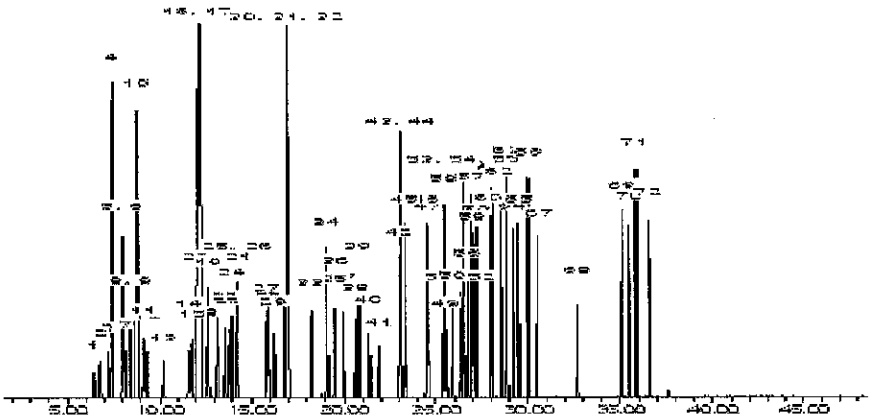
Carrier Gas:
helium-constant pressure 30 psi

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 J Maye

Tyler Brown - QA Analyst

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

Date Passed: 14-Jan-2015

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

Reagent

VOA8260SURRES_00117

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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.:** A0112455

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 : July 31, 2020 **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)	2,509.6 µg/mL	+/- 14.5910 µg/mL +/- 28.2993 µg/mL +/- 32.5644 µg/mL		Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 **Purity** 99%	(Lot 14C-191)	2,507.5 µg/mL	+/- 14.5788 µg/mL +/- 28.2757 µg/mL +/- 32.5371 µg/mL		Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 **Purity** 99%	(Lot PR-26282)	2,509.0 µg/mL	+/- 14.5875 µg/mL +/- 28.2926 µg/mL +/- 32.5566 µg/mL		Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 **Purity** 99%	(Lot 20401KOV)	2,506.0 µg/mL	+/- 14.5701 µg/mL +/- 28.2587 µg/mL +/- 32.5176 µg/mL		Gravimetric Unstressed Stressed

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

Reagent

VOA8260VARES2_00076

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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.sec **Lot No.:** A0119399

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 : November 30, 2016 **Storage:** 0°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	Vinyl acetate **CAS #** 108-05-4.SEC **Purity** 99%	(Lot F3Z5C)	5,009.0	µg/mL	+/- 29.3956 +/- 302.2416 +/- 302.9590	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

Tech Tips:

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

Reagent

VOAACRORES_00103

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568720 **Lot No.:** A0119846

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 : October 31, 2016 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acrolein	19,873.0 µg/mL	+/- 116.3608 µg/mL	Gravimetric
	CAS # 107-02-8 (Lot 160518JLM)		+/- 637.1909 µg/mL	Unstressed
	Purity 99%		+/- 740.6647 µg/mL	Stressed

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

Reagent

VOAACRRES2ND_00091

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568720.sec **Lot No.:** A0119844

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 : October 31, 2016 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	19.778.4 µg/mL	+/- 115.8066	µg/mL	Gravimetric
	CAS # 107-02-8.SEC (Lot 5050900)		+/- 634.1564	µg/mL	Unstressed
	Purity 98%		+/- 737.1374	µg/mL	Stressed

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

Reagent

VOACEVERES2ND_00067

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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. : 569723.sec **Lot No.:** A0115500

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether **CAS #** 110-75-8.SEC (Lot BQZ2K-QD) **Purity** 99%	2,501.5 µg/mL	+/- 14.5439 +/- 53.5574 +/- 55.1144	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VOARESEE1ST_00035

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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.:** A0120234

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	3-Chlorobenzotrifluoride **CAS #** 98-15-7 (Lot 21324DO) **Purity** 99%	5,025.0 µg/mL	+/- 29.4895 +/- 281.7753 +/- 288.3671	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	4-Chlorobenzotrifluoride **CAS #** 98-56-6 (Lot 08507BO) **Purity** 99%	5,031.0 µg/mL	+/- 29.5247 +/- 282.1117 +/- 288.7115	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	2-Chlorobenzotrifluoride **CAS #** 88-16-4 (Lot I0316DQ) **Purity** 99%	5,011.0 µg/mL	+/- 29.4074 +/- 280.9902 +/- 287.5637	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	3-Chlorotoluene **CAS #** 108-41-8 (Lot 13528LX) **Purity** 99%	5,046.0 µg/mL	+/- 29.6128 +/- 282.9528 +/- 289.5723	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	2,4-Dichlorobenzotrifluoride **CAS #** 320-60-5 (Lot MKBL3552V) **Purity** 99%	5,018.0 µg/mL	+/- 29.4484 +/- 281.3828 +/- 287.9654	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	3,4-Dichlorobenzotrifluoride **CAS #** 328-84-7 (Lot 11105EJV) **Purity** 99%	5,031.0 µg/mL	+/- 29.5247 +/- 282.1117 +/- 288.7115	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	2,5-Dichlorobenzotrifluoride **CAS #** 320-50-3 (Lot 04415DSV) **Purity** 99%	5,047.0 µg/mL	+/- 29.6186 +/- 283.0089 +/- 289.6296	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	2,4-Dichlorotoluene **CAS #** 95-73-8 **Purity** 99%	(Lot 4194700)	5,036.0 µg/mL	+/- 29.5541 +/- 282.3921 +/- 288.9984	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	2,5-Dichlorotoluene **CAS #** 19398-61-9 **Purity** 99%	(Lot 1381346V)	5,016.0 µg/mL	+/- 29.4367 +/- 281.2706 +/- 287.8507	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	2,6-Dichlorotoluene **CAS #** 118-69-4 **Purity** 99%	(Lot MKBG8583V)	5,027.0 µg/mL	+/- 29.5013 +/- 281.8874 +/- 288.4819	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	3,4-Dichlorotoluene **CAS #** 95-75-0 **Purity** 99%	(Lot 09419AS)	5,021.0 µg/mL	+/- 29.4660 +/- 281.5510 +/- 288.1376	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	2,3-Dichlorotoluene **CAS #** 32768-54-0 **Purity** 99%	(Lot 41215)	5,031.0 µg/mL	+/- 29.5247 +/- 282.1117 +/- 288.7115	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	2,4,5-Trichlorotoluene **CAS #** 6639-30-1 **Purity** 99%	(Lot 5150700)	5,041.0 µg/mL	+/- 29.5834 +/- 282.6725 +/- 289.2853	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	2,3,6-Trichlorotoluene **CAS #** 2077-46-5 **Purity** 99%	(Lot NT054179)	5,003.0 µg/mL	+/- 29.3604 +/- 280.5416 +/- 287.1046	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.: 180-59864-1

SDG No.:

Matrix: Water Level: Low

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

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
HD-QC7-0/1-2	180-59864-1	102	102	106	96
HD-MW-20D-0/1-0	180-59864-2	100	104	104	96
HD-MW-18S-0/1-0	180-59864-3	103	109	97	106
HD-MW-142S-0/1-0	180-59864-4	97	103	109	96
HD-MW-20S-0/1-0	180-59864-5	108	106	93	102
HD-MW-142D-0/1-0	180-59864-6	104	106	96	106
HD-MW-20M-0/1-0	180-59864-7	102	103	102	108
	MB 180-192068/4	92	94	107	96
	MB 180-192156/5	98	102	99	102
	LCS 180-192068/14	102	98	109	104
	LCS 180-192156/8	93	95	104	102

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	77-127
DCA = 1,2-Dichloroethane-d4 (Surr)	72-134
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	72-120

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 61023014.D

Lab ID: LCS 180-192068/14 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	9.96	100	51-150	
Vinyl chloride	10.0	9.76	98	61-138	
Bromomethane	10.0	10.9	109	39-150	
Chloroethane	10.0	9.43	94	53-148	
1,1-Dichloroethene	10.0	9.67	97	71-122	
Acetone	20.0	27.8	139	10-150	
Carbon disulfide	10.0	9.16	92	57-137	
Methylene Chloride	10.0	9.50	95	71-129	
trans-1,2-Dichloroethene	10.0	9.84	98	80-121	
Methyl tert-butyl ether	10.0	10.8	108	68-124	
1,1-Dichloroethane	10.0	9.91	99	76-126	
cis-1,2-Dichloroethene	10.0	9.85	98	80-120	
Bromochloromethane	10.0	9.71	97	76-120	
2-Butanone (MEK)	20.0	19.4	97	41-150	
Chloroform	10.0	9.76	98	78-122	
1,1,1-Trichloroethane	10.0	10.2	102	57-128	
Carbon tetrachloride	10.0	11.2	112	59-145	
Benzene	10.0	10.1	101	80-121	
1,2-Dichloroethane	10.0	9.98	100	72-126	
Trichloroethene	10.0	9.98	100	79-120	
1,2-Dichloropropane	10.0	9.59	96	78-123	
Bromodichloromethane	10.0	10.0	100	72-124	
cis-1,3-Dichloropropene	10.0	9.56	96	67-127	
4-Methyl-2-pentanone (MIBK)	20.0	12.3	61	49-147	
Toluene	10.0	10.5	105	80-125	
trans-1,3-Dichloropropene	10.0	9.85	99	63-144	
1,1,2-Trichloroethane	10.0	10.3	103	77-127	
Tetrachloroethene	10.0	10.2	102	80-122	
2-Hexanone	20.0	19.0	95	40-150	
Dibromochloromethane	10.0	9.72	97	71-134	
1,2-Dibromoethane (EDB)	10.0	10.6	106	79-126	
Chlorobenzene	10.0	10.4	104	80-120	
1,1,1,2-Tetrachloroethane	10.0	10.7	107	75-135	
Ethylbenzene	10.0	10.6	106	80-123	
Xylenes, Total	20.0	21.0	105	80-123	
Styrene	10.0	10.4	104	80-125	
Bromoform	10.0	9.00	90	62-138	
1,1,2,2-Tetrachloroethane	10.0	10.5	105	78-135	
Acrylonitrile	100	98.2	98	66-146	
1,4-Dioxane	200	120 J	60	10-150	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 51024008.D

Lab ID: LCS 180-192156/8 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	9.46	95	51-150	
Vinyl chloride	10.0	9.60	96	61-138	
Bromomethane	10.0	10.1	101	39-150	
Chloroethane	10.0	10.6	106	53-148	
1,1-Dichloroethene	10.0	10.0	100	71-122	
Acetone	20.0	17.3	87	10-150	
Carbon disulfide	10.0	9.26	93	57-137	
Methylene Chloride	10.0	9.69	97	71-129	
trans-1,2-Dichloroethene	10.0	9.73	97	80-121	
Methyl tert-butyl ether	10.0	9.25	92	68-124	
1,1-Dichloroethane	10.0	9.83	98	76-126	
cis-1,2-Dichloroethene	10.0	9.70	97	80-120	
Bromochloromethane	10.0	9.96	100	76-120	
2-Butanone (MEK)	20.0	18.4	92	41-150	
Chloroform	10.0	9.83	98	78-122	
1,1,1-Trichloroethane	10.0	9.95	100	57-128	
Carbon tetrachloride	10.0	10.2	102	59-145	
Benzene	10.0	9.90	99	80-121	
1,2-Dichloroethane	10.0	9.61	96	72-126	
Trichloroethene	10.0	9.71	97	79-120	
1,2-Dichloropropane	10.0	9.49	95	78-123	
Bromodichloromethane	10.0	9.54	95	72-124	
cis-1,3-Dichloropropene	10.0	9.28	93	67-127	
4-Methyl-2-pentanone (MIBK)	20.0	19.2	96	49-147	
Toluene	10.0	10.6	106	80-125	
trans-1,3-Dichloropropene	10.0	9.50	95	63-144	
1,1,2-Trichloroethane	10.0	9.92	99	77-127	
Tetrachloroethene	10.0	10.4	104	80-122	
2-Hexanone	20.0	18.4	92	40-150	
Dibromochloromethane	10.0	9.67	97	71-134	
1,2-Dibromoethane (EDB)	10.0	9.77	98	79-126	
Chlorobenzene	10.0	10.5	105	80-120	
1,1,1,2-Tetrachloroethane	10.0	10.1	101	75-135	
Ethylbenzene	10.0	10.4	104	80-123	
Xylenes, Total	20.0	21.2	106	80-123	
Styrene	10.0	10.5	105	80-125	
Bromoform	10.0	9.01	90	62-138	
1,1,2,2-Tetrachloroethane	10.0	10.3	103	78-135	
Acrylonitrile	100	93.0	93	66-146	
1,4-Dioxane	200	164 J	82	10-150	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Lab File ID: 61023004.D Lab Sample ID: MB 180-192068/4

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

Instrument ID: CHHP6 Date Analyzed: 10/23/2016 12:36

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 180-192068/14	61023014.D	10/23/2016 17:22
HD-MW-20D-0/1-0	180-59864-2	61023022.D	10/23/2016 20:36
HD-QC7-0/1-2	180-59864-1	61023024.D	10/23/2016 21:25
HD-MW-142S-0/1-0	180-59864-4	61023025.D	10/23/2016 21:49

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Lab File ID: 51024005.D Lab Sample ID: MB 180-192156/5

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

Instrument ID: CHHP5 Date Analyzed: 10/24/2016 12:05

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-192156/8	51024008.D	10/24/2016 13:33
HD-MW-142D-0/1-0	180-59864-6	51024025.D	10/24/2016 20:24
HD-MW-18S-0/1-0	180-59864-3	51024026.D	10/24/2016 20:48
HD-MW-20S-0/1-0	180-59864-5	51024027.D	10/24/2016 21:12
HD-MW-20M-0/1-0	180-59864-7	51024028.D	10/24/2016 21:36

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Lab File ID: 51022001.D BFB Injection Date: 10/22/2016

Instrument ID: CHHP5 BFB Injection Time: 12:45

Analysis Batch No.: 192047

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	29.4	
75	30.0 - 60.0 % of mass 95	57.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.5	(0.6) 1
174	50.0 - 120.00 % of mass 95	84.0	
175	5.0 - 9.0 % of mass 174	6.1	(7.3) 1
176	95.0 - 101.0 % of mass 174	81.7	(97.3) 1
177	5.0 - 9.0 % of mass 176	5.7	(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
	IC 180-192047/3	51022003.D	10/22/2016	14:57
	IC 180-192047/4	51022004.D	10/22/2016	15:21
	ICIS 180-192047/5	51022005.D	10/22/2016	15:45
	IC 180-192047/6	51022006.D	10/22/2016	16:09
	IC 180-192047/7	51022007.D	10/22/2016	16:33
	IC 180-192047/8	51022008.D	10/22/2016	16:57
	IC 180-192047/9	51022009.D	10/22/2016	17:22
	IC 180-192047/10	51022010.D	10/22/2016	17:46

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Lab File ID: 51024004.D BFB Injection Date: 10/24/2016

Instrument ID: CHHP5 BFB Injection Time: 10:29

Analysis Batch No.: 192156

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	28.7	
75	30.0 - 60.0 % of mass 95	51.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.3	
173	Less than 2.0 % of mass 174	0.8	(1.1) 1
174	50.0 - 120.00 % of mass 95	76.5	
175	5.0 - 9.0 % of mass 174	5.5	(7.2) 1
176	95.0 - 101.0 % of mass 174	75.8	(99.2) 1
177	5.0 - 9.0 % of mass 176	6.2	(8.2) 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 180-192156/2	51024002.D	10/24/2016	11:05
	MB 180-192156/5	51024005.D	10/24/2016	12:05
	LCS 180-192156/8	51024008.D	10/24/2016	13:33
HD-MW-142D-0/1-0	180-59864-6	51024025.D	10/24/2016	20:24
HD-MW-18S-0/1-0	180-59864-3	51024026.D	10/24/2016	20:48
HD-MW-20S-0/1-0	180-59864-5	51024027.D	10/24/2016	21:12
HD-MW-20M-0/1-0	180-59864-7	51024028.D	10/24/2016	21:36

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Lab File ID: 61017001.D BFB Injection Date: 10/17/2016

Instrument ID: CHHP6 BFB Injection Time: 11:29

Analysis Batch No.: 191498

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.0	
75	30.0 - 60.0 % of mass 95	48.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.4	(0.4) 1
174	50.0 - 120.00 % of mass 95	80.8	
175	5.0 - 9.0 % of mass 174	5.7	(7.0) 1
176	95.0 - 101.0 % of mass 174	81.2	(100.4) 1
177	5.0 - 9.0 % of mass 176	5.6	(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
	IC 180-191498/6	61017006.D	10/17/2016	14:23
	IC 180-191498/7	61017007.D	10/17/2016	14:48
	ICIS 180-191498/8	61017008.D	10/17/2016	15:12
	IC 180-191498/9	61017009.D	10/17/2016	15:36
	IC 180-191498/10	61017010.D	10/17/2016	16:01
	IC 180-191498/12	61017012.D	10/17/2016	16:49
	IC 180-191498/13	61017013.D	10/17/2016	17:13

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Lab File ID: 61023001.D BFB Injection Date: 10/23/2016

Instrument ID: CHHP6 BFB Injection Time: 10:53

Analysis Batch No.: 192068

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.2	
75	30.0 - 60.0 % of mass 95	48.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.4	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	50.0 - 120.00 % of mass 95	82.3	
175	5.0 - 9.0 % of mass 174	5.2	(6.3) 1
176	95.0 - 101.0 % of mass 174	78.3	(95.1) 1
177	5.0 - 9.0 % of mass 176	5.4	(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 180-192068/2	61023002.D	10/23/2016	11:32
	MB 180-192068/4	61023004.D	10/23/2016	12:36
	LCS 180-192068/14	61023014.D	10/23/2016	17:22
HD-MW-20D-0/1-0	180-59864-2	61023022.D	10/23/2016	20:36
HD-QC7-0/1-2	180-59864-1	61023024.D	10/23/2016	21:25
HD-MW-142S-0/1-0	180-59864-4	61023025.D	10/23/2016	21:49

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Sample No.: CCVIS 180-192156/2 Date Analyzed: 10/24/2016 11:05

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 51024002.D Heated Purge: (Y/N) N

Calibration ID: 33332

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		115230	4.27	388826	7.27	91950	10.37
UPPER LIMIT		230460	4.77	777652	7.77	183900	10.87
LOWER LIMIT		57615	3.77	194413	6.77	45975	9.87
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-192156/5		115527	4.27	362365	7.27	88488	10.37
LCS 180-192156/8		96312	4.28	375272	7.27	90984	10.37
180-59864-6	HD-MW-142D-0/1-0	111624	4.26	339506	7.27	85397	10.37
180-59864-3	HD-MW-18S-0/1-0	134648	4.27	324670	7.27	82481	10.37
180-59864-5	HD-MW-20S-0/1-0	135593	4.27	327552	7.27	84767	10.37
180-59864-7	HD-MW-20M-0/1-0	121010	4.27	334799	7.27	82332	10.37

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Sample No.: CCVIS 180-192156/2 Date Analyzed: 10/24/2016 11:05

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 51024002.D Heated Purge: (Y/N) N

Calibration ID: 33332

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		135718	12.72				
UPPER LIMIT		271436	13.22				
LOWER LIMIT		67859	12.22				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-192156/5		138117	12.72				
LCS 180-192156/8		136125	12.72				
180-59864-6	HD-MW-142D-0/1-0	132919	12.72				
180-59864-3	HD-MW-18S-0/1-0	128965	12.72				
180-59864-5	HD-MW-20S-0/1-0	131155	12.72				
180-59864-7	HD-MW-20M-0/1-0	133656	12.72				

DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Sample No.: CCVIS 180-192068/2 Date Analyzed: 10/23/2016 11:32

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 61023002.D Heated Purge: (Y/N) N

Calibration ID: 33286

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		107438	4.14	402886	7.18	101362	10.29
UPPER LIMIT		214876	4.64	805772	7.68	202724	10.79
LOWER LIMIT		53719	3.64	201443	6.68	50681	9.79
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-192068/4		81668	4.13	390892	7.18	89898	10.29
LCS 180-192068/14		107111	4.13	437385	7.18	109143	10.29
180-59864-2	HD-MW-20D-0/1-0	78944	4.13	363483	7.18	89431	10.29
180-59864-1	HD-QC7-0/1-2	73961	4.14	359071	7.19	86208	10.29
180-59864-4	HD-MW-142S-0/1-0	77483	4.13	368213	7.18	84926	10.30

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Sample No.: CCVIS 180-192068/2 Date Analyzed: 10/23/2016 11:32

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 61023002.D Heated Purge: (Y/N) N

Calibration ID: 33286

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		163672	12.64				
UPPER LIMIT		327344	13.14				
LOWER LIMIT		81836	12.14				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-192068/4		133323	12.64				
LCS 180-192068/14		172810	12.63				
180-59864-2	HD-MW-20D-0/1-0	128694	12.63				
180-59864-1	HD-QC7-0/1-2	126748	12.64				
180-59864-4	HD-MW-142S-0/1-0	124198	12.64				

DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: HD-QC7-0/1-2 | Lab Sample ID: 180-59864-1

Matrix: Water | Lab File ID: 61023024.D

Analysis Method: 8260C | Date Collected: 10/13/2016 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/23/2016 21:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 192068 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	1.0	U	1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	1.0	U	1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: HD-QC7-0/1-2 | Lab Sample ID: 180-59864-1

Matrix: Water | Lab File ID: 61023024.D

Analysis Method: 8260C | Date Collected: 10/13/2016 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/23/2016 21:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 192068 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		72-134
2037-26-5	Toluene-d8 (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		72-120
1868-53-7	Dibromofluoromethane (Surr)	102		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023024.D
Lims ID: 180-59864-A-1
Client ID: HD-QC7-0/1-2
Sample Type: Client
Inject. Date: 23-Oct-2016 21:25:30 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013999-024
Misc. Info.: 180-59864-A-1
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 24-Oct-2016 08:16:30 Calib Date: 17-Oct-2016 17:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: fergusond Date: 24-Oct-2016 08:16:30

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.138	4.144	-0.006	89	73961	1000.0	
*	2 Fluorobenzene (IS)	96	7.186	7.180	0.006	99	359071	50.0	
*	3 Chlorobenzene-d5	119	10.288	10.289	-0.001	86	86208	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.636	12.637	-0.001	97	126748	50.0	
$	5 Dibromofluoromethane (Surr	113	6.456	6.444	0.012	94	78190	51.0	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.827	6.821	0.006	69	105915	51.1	
$	7 Toluene-d8 (Surr)	98	8.840	8.835	0.005	93	333233	52.8	
$	8 4-Bromofluorobenzene (Surr	95	11.474	11.475	-0.001	87	114368	48.2	
	12 Chloromethane	50		1.699				ND	
	13 Vinyl chloride	62		1.833				ND	
	15 Bromomethane	94		2.167				ND	
	16 Chloroethane	64		2.301				ND	
	22 1,1-Dichloroethene	96		3.226				ND	
	24 Acetone	43	3.329	3.317	0.012	63	2514	5.87	
	26 Carbon disulfide	76		3.500				ND	
	31 Methylene Chloride	84		3.998				ND	
	33 Acrylonitrile	53		4.388				ND	
	34 trans-1,2-Dichloroethene	96		4.430				ND	
	35 Methyl tert-butyl ether	73		4.449				ND	
	37 1,1-Dichloroethane	63		5.075				ND	
	43 cis-1,2-Dichloroethene	96		5.830				ND	
	44 2-Butanone (MEK)	43		5.842				ND	
	48 Chlorobromomethane	128		6.122				ND	
	50 Chloroform	83		6.268				ND	
	51 1,1,1-Trichloroethane	97		6.426				ND	
	53 Carbon tetrachloride	117		6.596				ND	
	56 Benzene	78		6.827				ND	
	57 1,2-Dichloroethane	62		6.906				ND	
	61 Trichloroethene	130		7.569				ND	
	64 1,2-Dichloropropane	63		7.843				ND	
	65 1,4-Dioxane	88		7.928				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.129				ND	
71 cis-1,3-Dichloropropene	75		8.573				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.731				ND	
73 Toluene	91		8.902				ND	
74 trans-1,3-Dichloropropene	75		9.157				ND	
76 1,1,2-Trichloroethane	97		9.346				ND	
77 Tetrachloroethene	164		9.419				ND	
79 2-Hexanone	43		9.565				ND	
81 Chlorodibromomethane	129		9.717				ND	
82 Ethylene Dibromide	107		9.826				ND	
84 Chlorobenzene	112		10.319				ND	
86 1,1,1,2-Tetrachloroethane	131		10.417				ND	
87 Ethylbenzene	106		10.423				ND	
88 m-Xylene & p-Xylene	106		10.550				ND	
89 o-Xylene	106		10.934				ND	
90 Styrene	104		10.958				ND	
91 Bromoform	173		11.134				ND	
96 1,1,2,2-Tetrachloroethane	83		11.615				ND	
S 131 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent

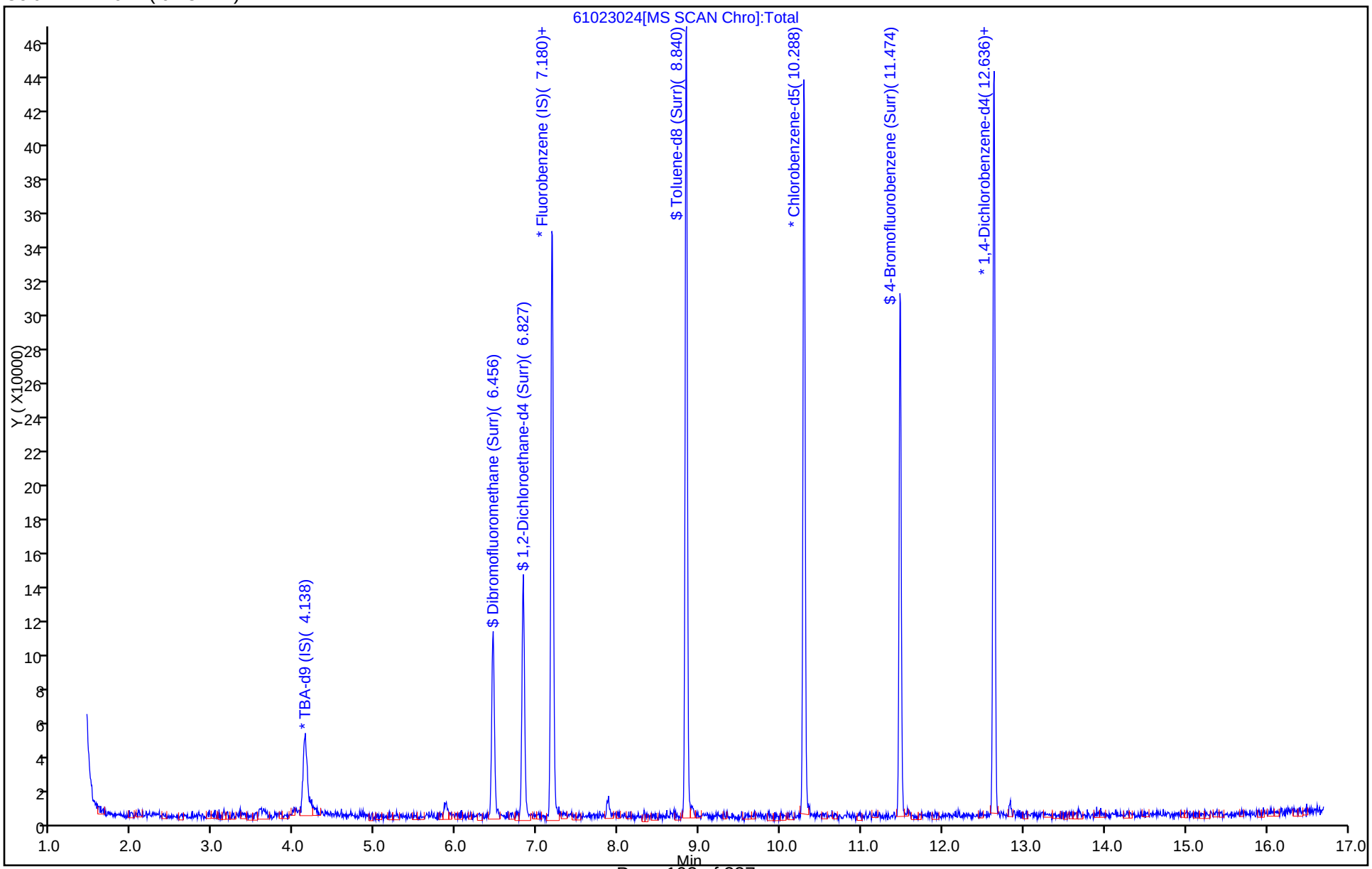
Report Date: 24-Oct-2016 08:16:31 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023024.D

Injection Date:	23-Oct-2016 21:25:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-59864-A-1	Lab Sample ID:	180-59864-1	Worklist Smp#:	24
Client ID:	HD-QC7-0/1-2				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023024.D				
Lims ID:	180-59864-A-1				
Client ID:	HD-QC7-0/1-2				
Sample Type:	Client				
Inject. Date:	23-Oct-2016 21:25:30	ALS Bottle#:	24	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	180-0013999-024				
Misc. Info.:	180-59864-A-1				
Operator ID:	001562	Instrument ID:	CHHP6		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\MSVOA_LL_CHHP6.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	24-Oct-2016 08:16:30	Calib Date:	17-Oct-2016 17:13:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK006				

First Level Reviewer: fergusond Date: 24-Oct-2016 08:16:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.0	101.99
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	51.1	102.11
$ 7 Toluene-d8 (Surr)	50.0	52.8	105.69
$ 8 4-Bromofluorobenzene (Surr)	50.0	48.2	96.36

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: HD-MW-20D-0/1-0 | Lab Sample ID: 180-59864-2

Matrix: Water | Lab File ID: 61023022.D

Analysis Method: 8260C | Date Collected: 10/13/2016 08:25

Sample wt/vol: 5(mL) | Date Analyzed: 10/23/2016 20:36

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.: 192068 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	0.43	J	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	1.0	U	1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	1.0	U	1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: HD-MW-20D-0/1-0 | Lab Sample ID: 180-59864-2

Matrix: Water | Lab File ID: 61023022.D

Analysis Method: 8260C | Date Collected: 10/13/2016 08:25

Sample wt/vol: 5(mL) | Date Analyzed: 10/23/2016 20:36

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.: 192068 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		72-134
2037-26-5	Toluene-d8 (Surr)	104		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		72-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023022.D
Lims ID: 180-59864-B-2
Client ID: HD-MW-20D-0/1-0
Sample Type: Client
Inject. Date: 23-Oct-2016 20:36:30 ALS Bottle#: 22 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013999-022
Misc. Info.: 180-59864-B-2
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 24-Oct-2016 08:14:44 Calib Date: 17-Oct-2016 17:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: fergusond Date: 24-Oct-2016 08:14:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.126	4.144	-0.018	86	78944	1000.0	
* 2 Fluorobenzene (IS)	96	7.180	7.180	0.000	99	363483	50.0	
* 3 Chlorobenzene-d5	119	10.289	10.289	0.000	86	89431	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.631	12.637	-0.006	96	128694	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.456	6.444	0.012	93	77374	49.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.827	6.821	0.006	69	108861	51.8	
$ 7 Toluene-d8 (Surr)	98	8.835	8.835	0.000	93	341787	52.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.475	11.475	0.000	89	118687	48.2	
12 Chloromethane	50		1.699				ND	
13 Vinyl chloride	62		1.833				ND	
15 Bromomethane	94		2.167				ND	
16 Chloroethane	64		2.301				ND	
22 1,1-Dichloroethene	96		3.226				ND	
24 Acetone	43	3.335	3.317	0.018	63	2966	6.84	M
26 Carbon disulfide	76		3.500				ND	
31 Methylene Chloride	84		3.998				ND	
33 Acrylonitrile	53		4.388				ND	
34 trans-1,2-Dichloroethene	96		4.430				ND	
35 Methyl tert-butyl ether	73		4.449				ND	
37 1,1-Dichloroethane	63		5.075				ND	
43 cis-1,2-Dichloroethene	96		5.830				ND	
44 2-Butanone (MEK)	43		5.842				ND	
48 Chlorobromomethane	128		6.122				ND	
50 Chloroform	83	6.268	6.268	0.000	91	6683	2.15	
51 1,1,1-Trichloroethane	97		6.426				ND	
53 Carbon tetrachloride	117		6.596				ND	
56 Benzene	78		6.827				ND	
57 1,2-Dichloroethane	62		6.906				ND	
61 Trichloroethene	130	7.569	7.569	0.000	11	894	0.4533	M
64 1,2-Dichloropropane	63		7.843				ND	
65 1,4-Dioxane	88		7.928				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.129				ND	
71 cis-1,3-Dichloropropene	75		8.573				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.731				ND	
73 Toluene	91		8.902				ND	
74 trans-1,3-Dichloropropene	75		9.157				ND	
76 1,1,2-Trichloroethane	97		9.346				ND	
77 Tetrachloroethene	164		9.419				ND	
79 2-Hexanone	43		9.565				ND	
81 Chlorodibromomethane	129		9.717				ND	
82 Ethylene Dibromide	107		9.826				ND	
84 Chlorobenzene	112		10.319				ND	
86 1,1,1,2-Tetrachloroethane	131		10.417				ND	
87 Ethylbenzene	106		10.423				ND	
88 m-Xylene & p-Xylene	106		10.550				ND	
89 o-Xylene	106		10.934				ND	
90 Styrene	104		10.958				ND	
91 Bromoform	173		11.134				ND	
96 1,1,2,2-Tetrachloroethane	83		11.615				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent

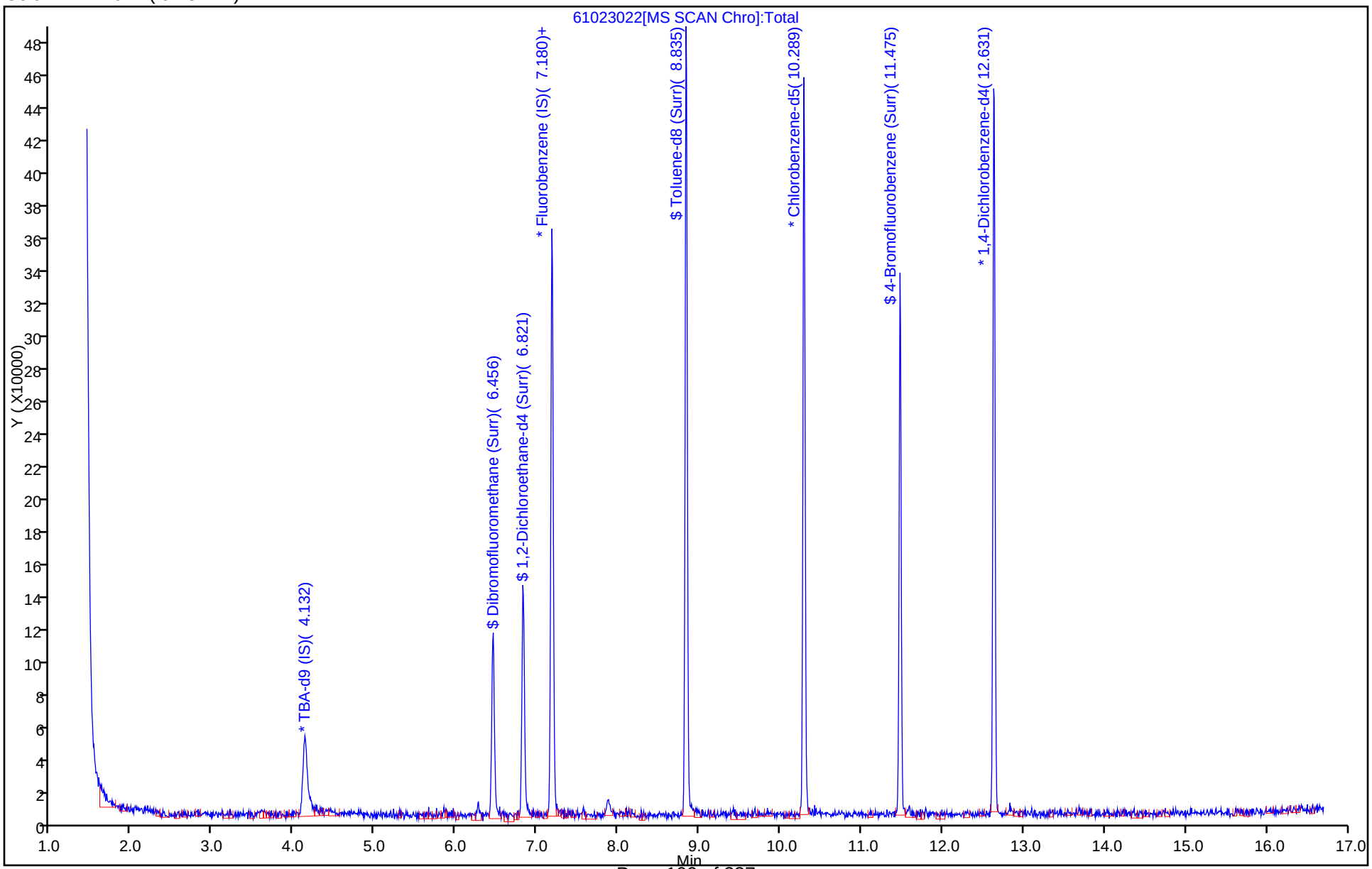
Report Date: 24-Oct-2016 08:14:45 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023022.D

Injection Date:	23-Oct-2016 20:36:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-59864-B-2	Lab Sample ID:	180-59864-2	Worklist Smp#:	22
Client ID:	HD-MW-20D-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023022.D
Lims ID: 180-59864-B-2
Client ID: HD-MW-20D-0/1-0
Sample Type: Client
Inject. Date: 23-Oct-2016 20:36:30 ALS Bottle#: 22 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013999-022
Misc. Info.: 180-59864-B-2
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 24-Oct-2016 08:14:44 Calib Date: 17-Oct-2016 17:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: fergusond Date: 24-Oct-2016 08:14:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	49.8	99.70
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	51.8	103.67
$ 7 Toluene-d8 (Surr)	50.0	52.2	104.50
$ 8 4-Bromofluorobenzene (Surr)	50.0	48.2	96.40

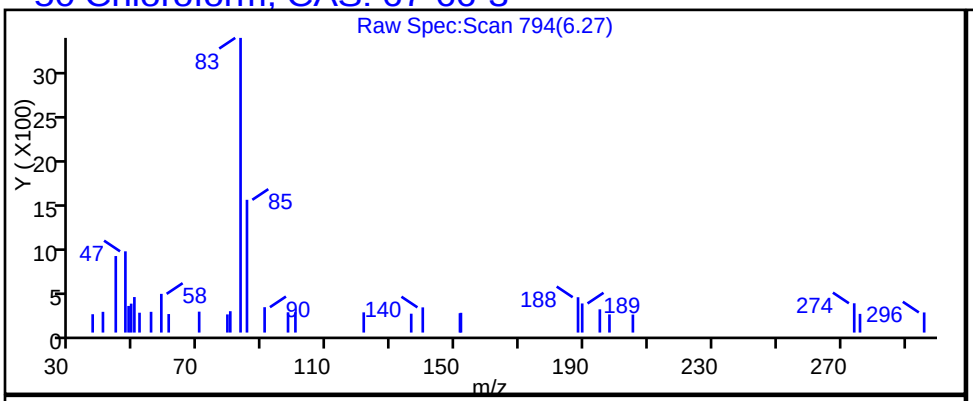
Report Date: 24-Oct-2016 08:14:45 Chrom Revision: 2.2 17-Oct-2016 09:27:18

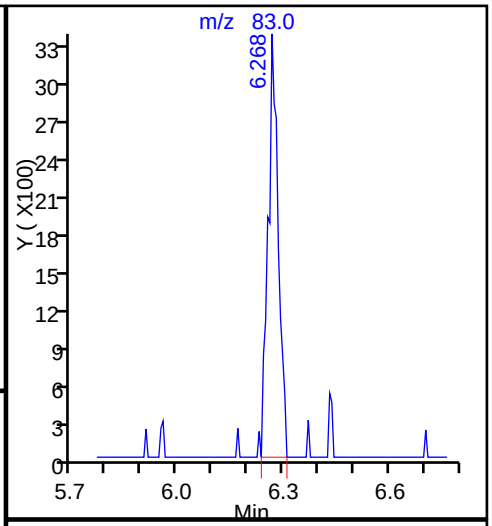
TestAmerica Pittsburgh

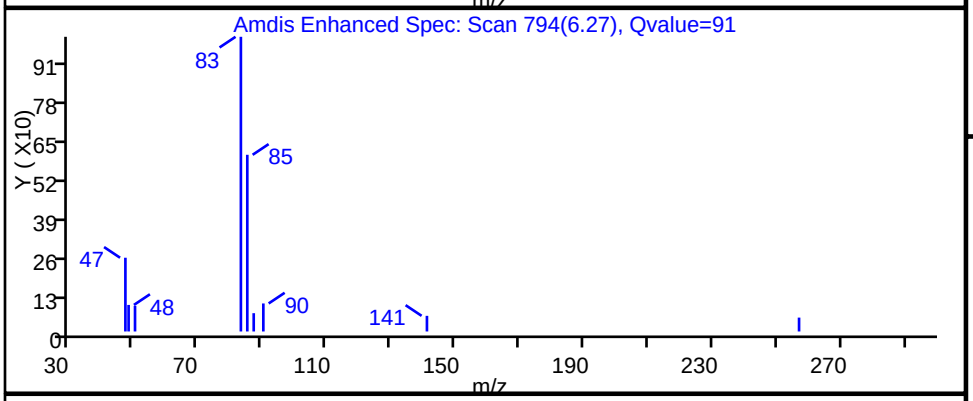
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023022.D

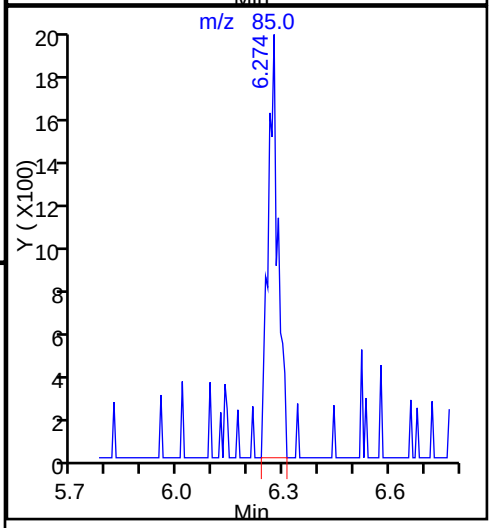
Injection Date:	23-Oct-2016 20:36:30	Instrument ID:	CHHP6		
Lims ID:	180-59864-B-2	Lab Sample ID:	180-59864-2		
Client ID:	HD-MW-20D-0/1-0				
Operator ID:	001562	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

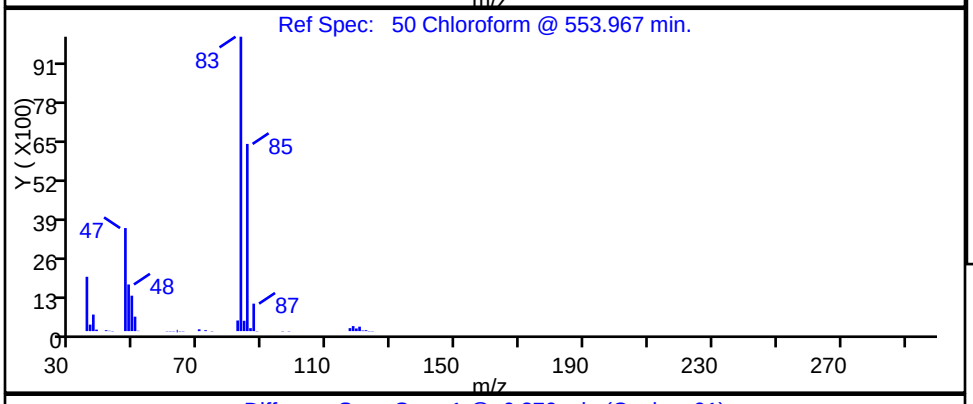
50 Chloroform, CAS: 67-66-3

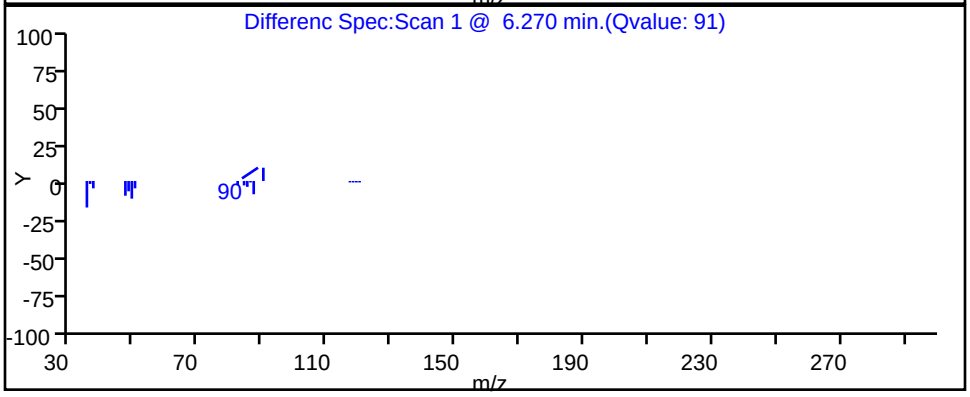












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

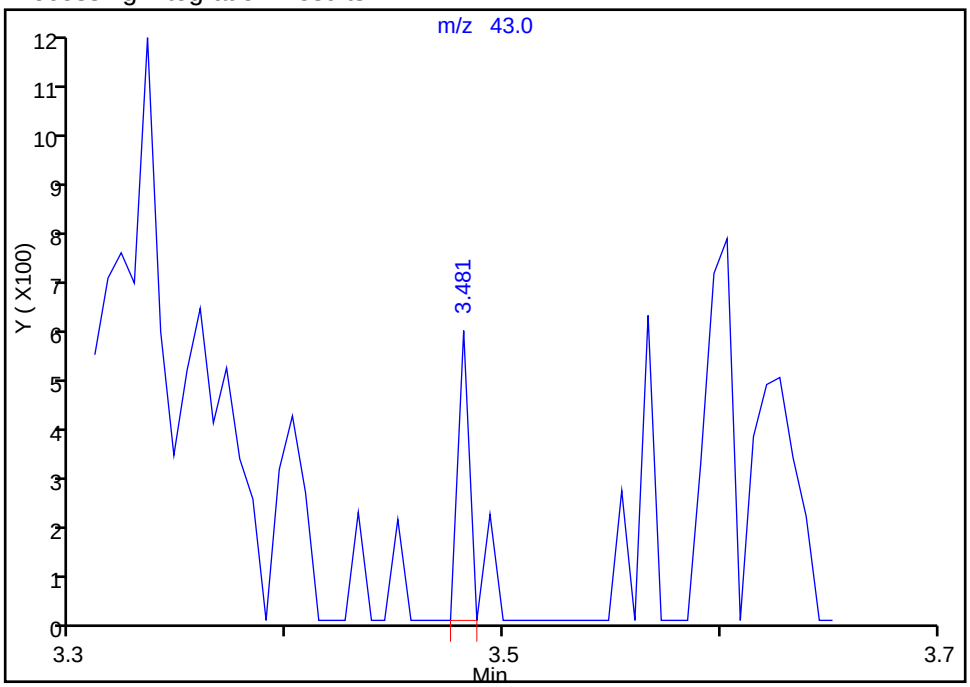
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023022.D				
Injection Date:	23-Oct-2016 20:36:30	Instrument ID:	CHHP6		
Lims ID:	180-59864-B-2	Lab Sample ID:	180-59864-2		
Client ID:	HD-MW-20D-0/1-0				
Operator ID:	001562	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

Signal: 1

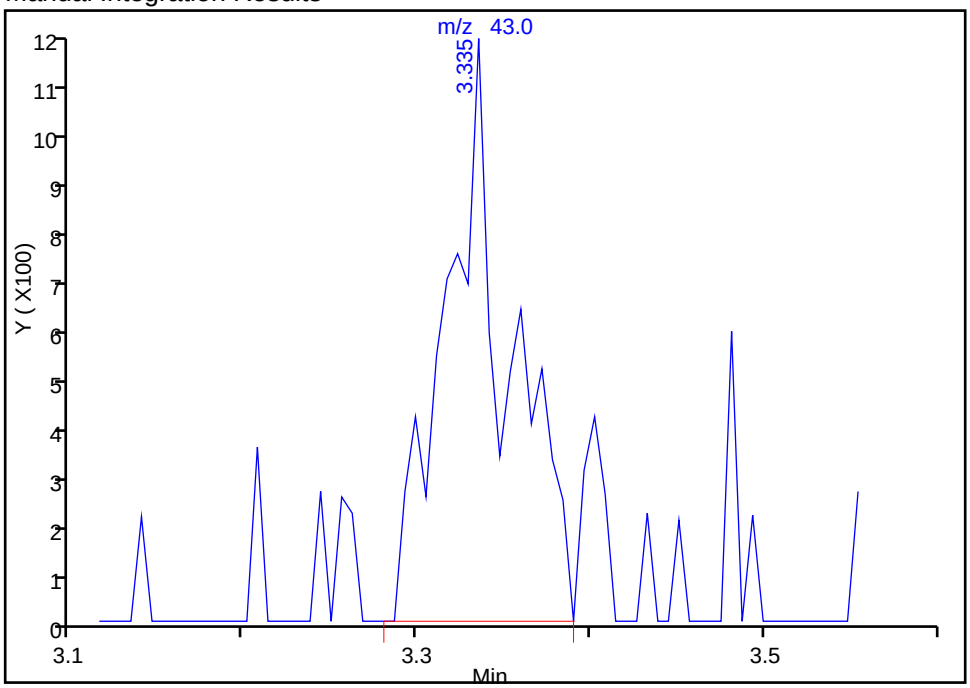
Processing Integration Results

RT: 3.48
Area: 210
Amount: 0.484121
Amount Units: ng



Manual Integration Results

RT: 3.34
Area: 2966
Amount: 6.837629
Amount Units: ng



Reviewer: fergusond, 24-Oct-2016 08:14:44

Audit Action: Manually Integrated Audit Reason: Missed Peak

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

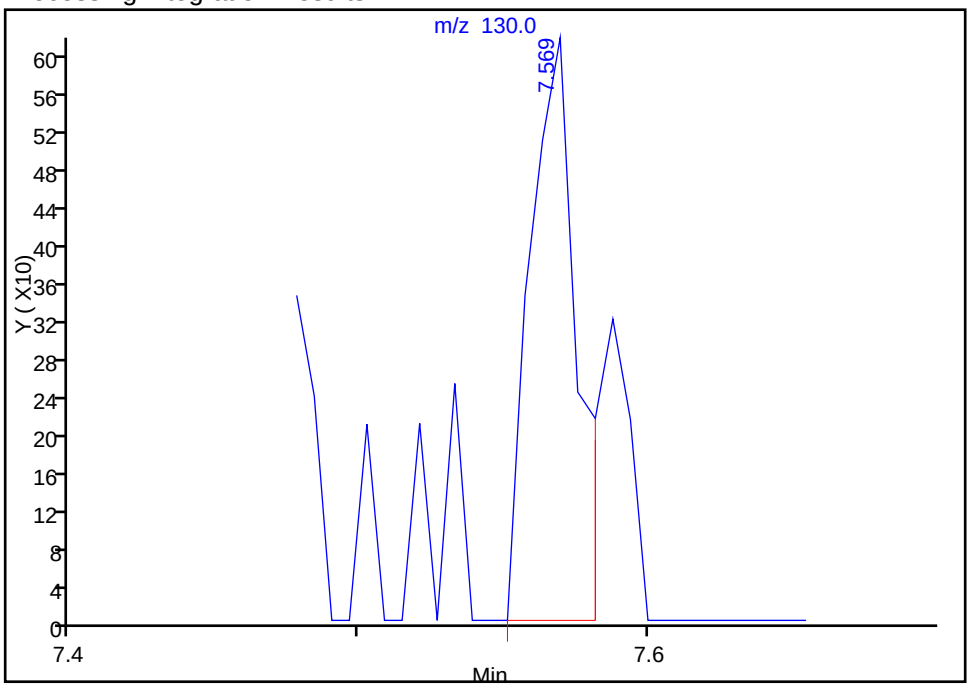
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023022.D				
Injection Date:	23-Oct-2016 20:36:30	Instrument ID:	CHHP6		
Lims ID:	180-59864-B-2	Lab Sample ID:	180-59864-2		
Client ID:	HD-MW-20D-0/1-0				
Operator ID:	001562	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

61 Trichloroethene, CAS: 79-01-6

Signal: 1

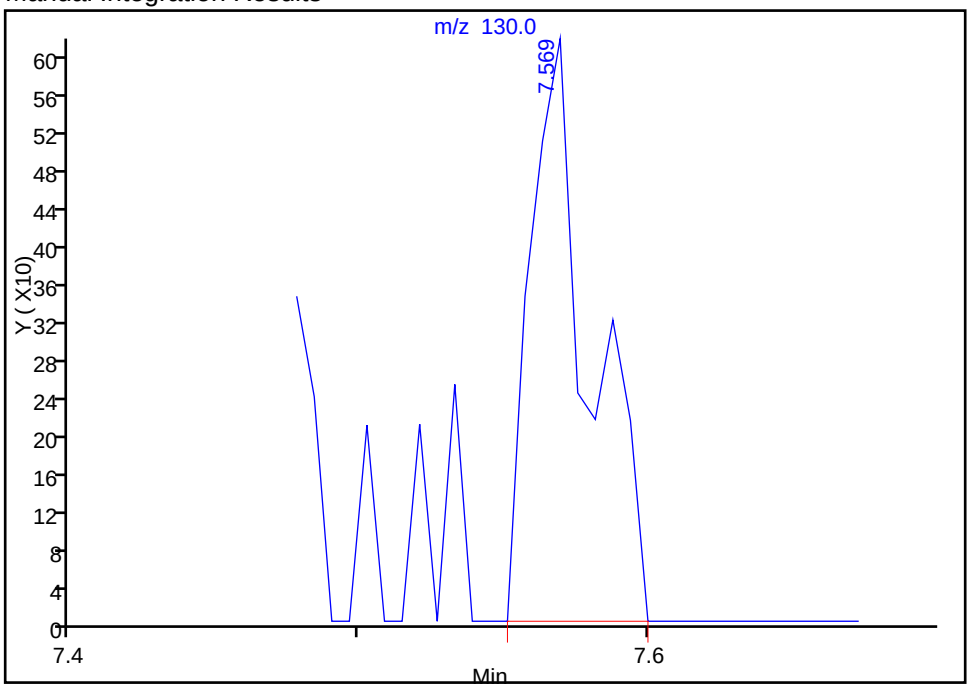
Processing Integration Results

RT: 7.57
Area: 701
Amount: 0.355465
Amount Units: ng



Manual Integration Results

RT: 7.57
Area: 894
Amount: 0.453332
Amount Units: ng



Reviewer: fergusond, 24-Oct-2016 08:14:44

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: HD-MW-18S-0/1-0 | Lab Sample ID: 180-59864-3

Matrix: Water | Lab File ID: 51024026.D

Analysis Method: 8260C | Date Collected: 10/13/2016 08:15

Sample wt/vol: 5(mL) | Date Analyzed: 10/24/2016 20:48

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.: 192156 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	3.7		1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	1.2		1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	1.0	U	1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: HD-MW-18S-0/1-0 | Lab Sample ID: 180-59864-3

Matrix: Water | Lab File ID: 51024026.D

Analysis Method: 8260C | Date Collected: 10/13/2016 08:15

Sample wt/vol: 5(mL) | Date Analyzed: 10/24/2016 20:48

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.: 192156 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		72-134
2037-26-5	Toluene-d8 (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	106		72-120
1868-53-7	Dibromofluoromethane (Surr)	103		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024026.D
Lims ID: 180-59864-A-3
Client ID: HD-MW-18S-0/1-0
Sample Type: Client
Inject. Date: 24-Oct-2016 20:48:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014019-026
Misc. Info.: 180-59864-A-3
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 25-Oct-2016 08:08:26 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: fergusond Date: 25-Oct-2016 08:08:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.266	4.272	-0.006	0	134648	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.271	0.000	96	324670	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	91	82481	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.716	12.722	-0.006	97	128965	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.547	6.547	0.000	94	80091	51.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.918	0.000	0	122552	54.6	
$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	95	302005	48.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	85	133531	53.1	
12 Chloromethane	50		1.766				ND	
13 Vinyl chloride	62		1.912				ND	
15 Bromomethane	94		2.234				ND	
16 Chloroethane	64		2.374				ND	
22 1,1-Dichloroethene	96		3.323				ND	
24 Acetone	43	3.439	3.445	-0.006	84	8412	10.1	
26 Carbon disulfide	76		3.615				ND	
31 Methylene Chloride	84	4.138	4.126	0.012	52	817	0.3978	
33 Acrylonitrile	53		4.509				ND	
34 trans-1,2-Dichloroethene	96		4.552				ND	
35 Methyl tert-butyl ether	73		4.570				ND	
37 1,1-Dichloroethane	63		5.185				ND	
45 cis-1,2-Dichloroethene	96	5.933	5.927	0.006	84	36356	18.4	
46 2-Butanone (MEK)	43		5.945				ND	
49 Chlorobromomethane	128		6.219				ND	
52 Chloroform	83		6.359				ND	
53 1,1,1-Trichloroethane	97		6.517				ND	
56 Carbon tetrachloride	117		6.693				ND	
58 Benzene	78		6.924				ND	
59 1,2-Dichloroethane	62		7.004				ND	
64 Trichloroethene	130	7.655	7.661	-0.006	93	10566	5.82	
67 1,2-Dichloropropane	63		7.934				ND	
70 1,4-Dioxane	88		8.019				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.214				ND	
74 cis-1,3-Dichloropropene	75		8.658				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.816				ND	
76 Toluene	91		8.993				ND	
77 trans-1,3-Dichloropropene	75		9.236				ND	
79 1,1,2-Trichloroethane	97		9.431				ND	
80 Tetrachloroethene	164		9.504				ND	
82 2-Hexanone	43		9.650				ND	
84 Chlorodibromomethane	129		9.802				ND	
85 Ethylene Dibromide	107		9.917				ND	
87 Chlorobenzene	112		10.404				ND	
89 1,1,1,2-Tetrachloroethane	131		10.495				ND	
90 Ethylbenzene	106		10.502				ND	
91 m-Xylene & p-Xylene	106		10.635				ND	
92 o-Xylene	106		11.013				ND	
93 Styrene	104		11.037				ND	
94 Bromoform	173		11.219				ND	
99 1,1,2,2-Tetrachloroethane	83		11.700				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

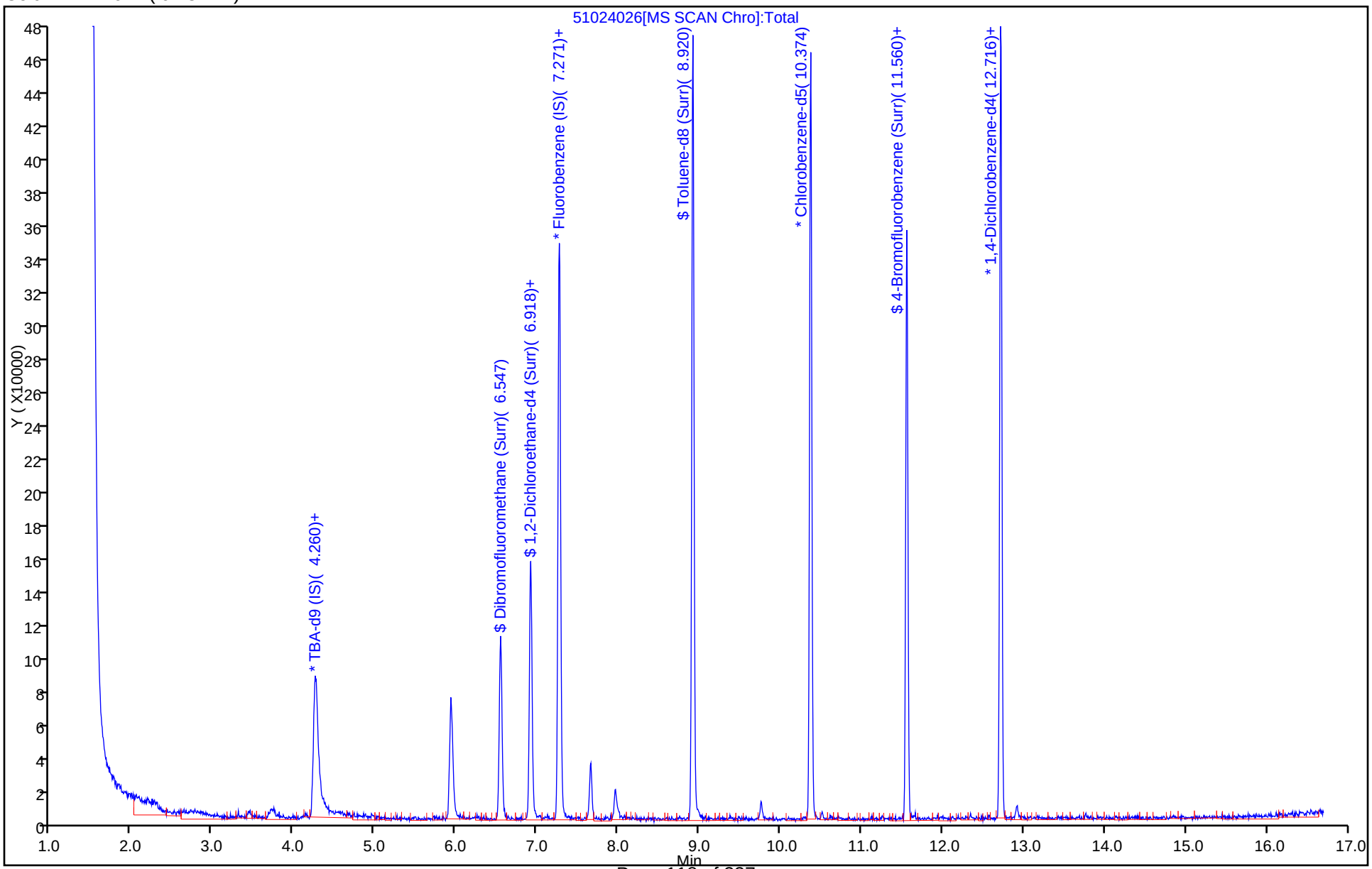
Report Date: 25-Oct-2016 08:08:27 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024026.D

Injection Date:	24-Oct-2016 20:48:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-59864-A-3	Lab Sample ID:	180-59864-3	Worklist Smp#:	26
Client ID:	HD-MW-18S-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024026.D
Lims ID: 180-59864-A-3
Client ID: HD-MW-18S-0/1-0
Sample Type: Client
Inject. Date: 24-Oct-2016 20:48:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014019-026
Misc. Info.: 180-59864-A-3
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 25-Oct-2016 08:08:26 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: fergusond Date: 25-Oct-2016 08:08:26

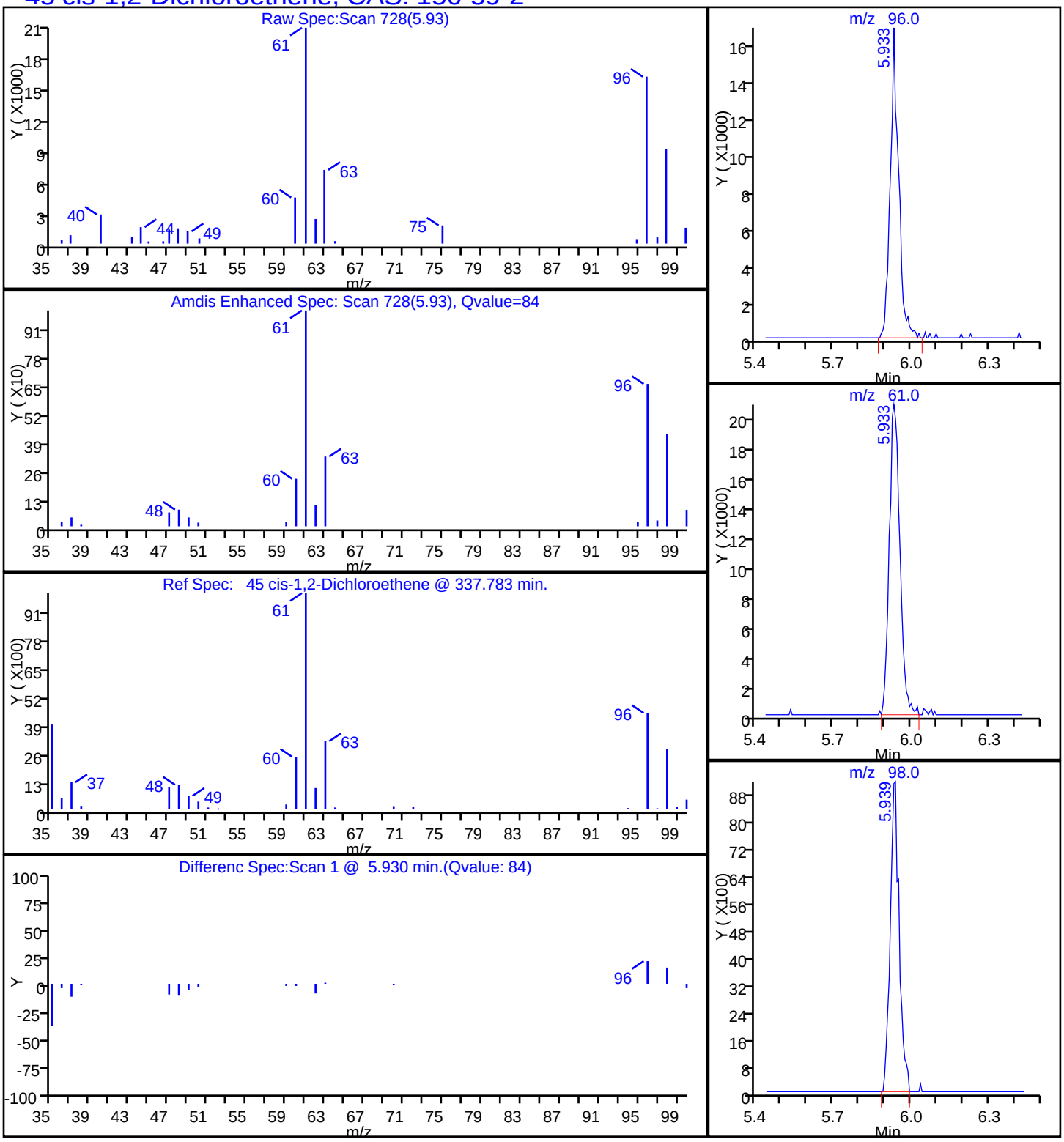
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.6	103.12
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	54.6	109.30
$ 7 Toluene-d8 (Surr)	50.0	48.5	97.03
$ 8 4-Bromofluorobenzene (Surr)	50.0	53.1	106.11

Report Date: 25-Oct-2016 08:08:27 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024026.D				
Injection Date:	24-Oct-2016 20:48:30	Instrument ID:	CHHP5		
Lims ID:	180-59864-A-3	Lab Sample ID:	180-59864-3		
Client ID:	HD-MW-18S-0/1-0				
Operator ID:	001562	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



Report Date: 25-Oct-2016 08:08:27 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024026.D

Injection Date: 24-Oct-2016 20:48:30 Instrument ID: CHHP5

Lims ID: 180-59864-A-3 Lab Sample ID: 180-59864-3

Client ID: HD-MW-18S-0/1-0

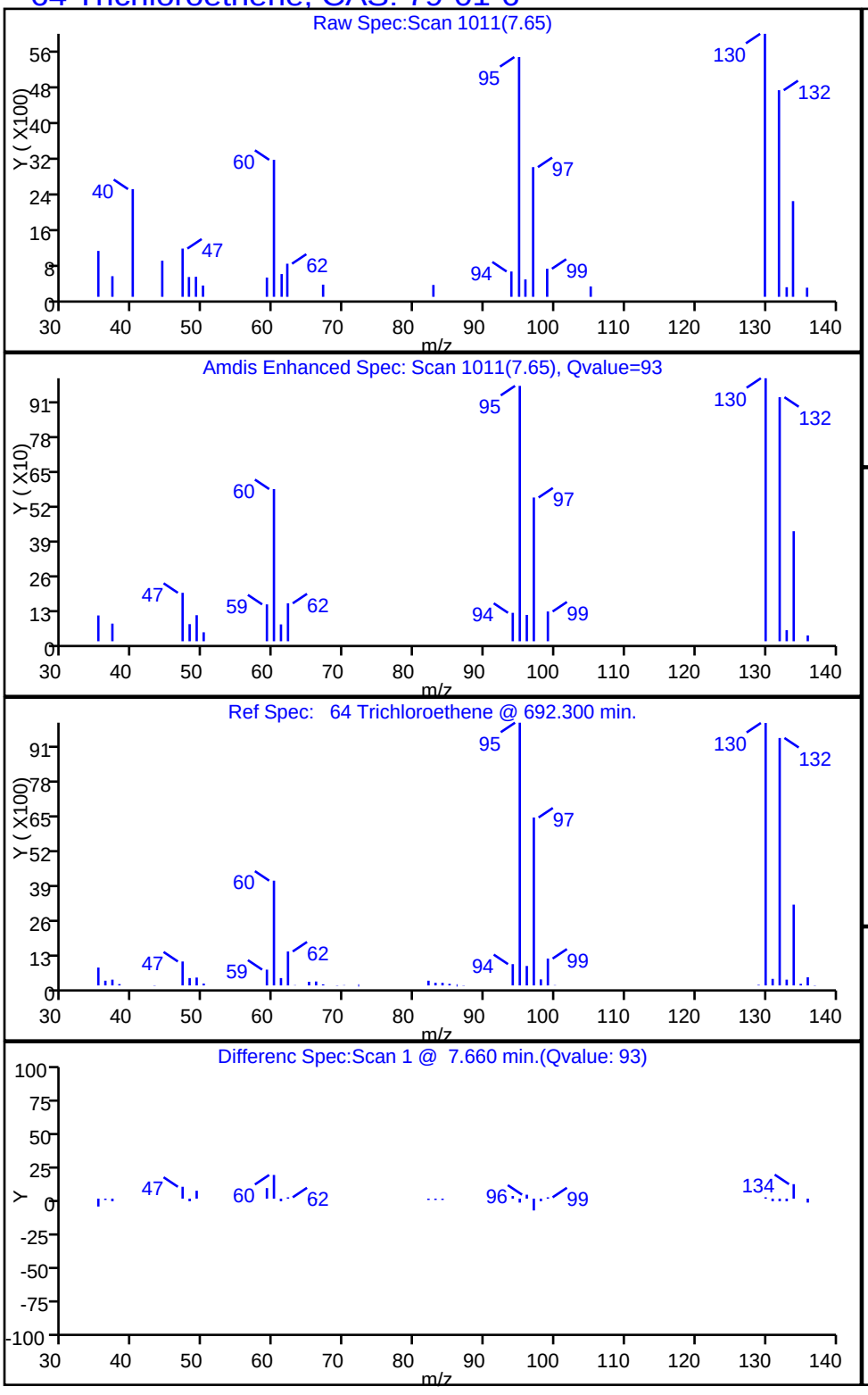
Operator ID: 001562 ALS Bottle#: 25 Worklist Smp#: 26

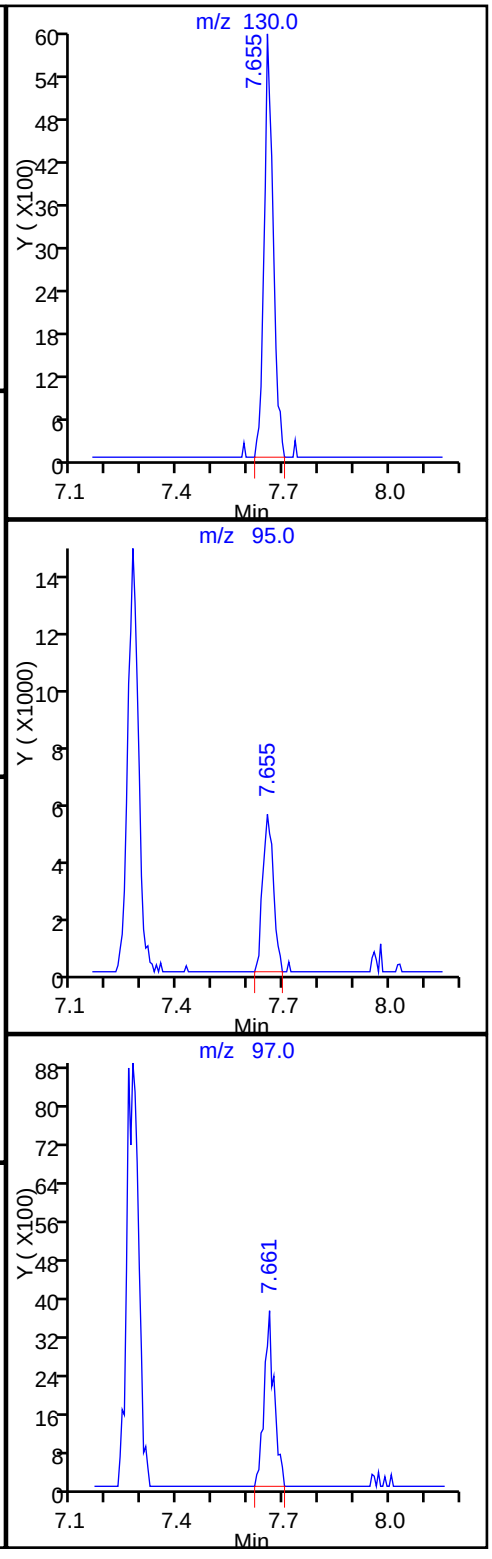
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm) Detector MS SCAN

64 Trichloroethene, CAS: 79-01-6





FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: HD-MW-142S-0/1-0 | Lab Sample ID: 180-59864-4

Matrix: Water | Lab File ID: 61023025.D

Analysis Method: 8260C | Date Collected: 10/13/2016 12:06

Sample wt/vol: 5(mL) | Date Analyzed: 10/23/2016 21:49

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.: 192068 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	4.2	J	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	2.6		1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	1.0	U	1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	1.0	U	1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: HD-MW-142S-0/1-0 | Lab Sample ID: 180-59864-4

Matrix: Water | Lab File ID: 61023025.D

Analysis Method: 8260C | Date Collected: 10/13/2016 12:06

Sample wt/vol: 5(mL) | Date Analyzed: 10/23/2016 21:49

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.: 192068 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		72-134
2037-26-5	Toluene-d8 (Surr)	109		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		72-120
1868-53-7	Dibromofluoromethane (Surr)	97		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023025.D
Lims ID: 180-59864-A-4
Client ID: HD-MW-142S-0/1-0
Sample Type: Client
Inject. Date: 23-Oct-2016 21:49:30 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013999-025
Misc. Info.: 180-59864-A-4
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 24-Oct-2016 08:17:53 Calib Date: 17-Oct-2016 17:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: fergusond Date: 24-Oct-2016 08:17:53

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.134	4.144	-0.010	89	77483	1000.0	
*	2 Fluorobenzene (IS)	96	7.182	7.180	0.002	99	368213	50.0	
*	3 Chlorobenzene-d5	119	10.297	10.289	0.008	86	84926	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.639	12.637	0.002	97	124198	50.0	
$	5 Dibromofluoromethane (Surr	113	6.452	6.444	0.008	93	75881	48.3	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.829	6.821	0.008	69	109393	51.4	
$	7 Toluene-d8 (Surr)	98	8.837	8.835	0.002	93	337336	54.3	
$	8 4-Bromofluorobenzene (Surr	95	11.477	11.475	0.002	88	111738	47.8	
	12 Chloromethane	50		1.699				ND	
	13 Vinyl chloride	62		1.833				ND	
	15 Bromomethane	94		2.167				ND	
	16 Chloroethane	64		2.301				ND	
	22 1,1-Dichloroethene	96		3.226				ND	
	24 Acetone	43	3.337	3.317	0.020	82	9166	20.9	M
	26 Carbon disulfide	76		3.500				ND	
	31 Methylene Chloride	84		3.998				ND	
	33 Acrylonitrile	53		4.388				ND	
	34 trans-1,2-Dichloroethene	96		4.430				ND	
	35 Methyl tert-butyl ether	73		4.449				ND	
	37 1,1-Dichloroethane	63		5.075				ND	
	43 cis-1,2-Dichloroethene	96	5.838	5.830	0.008	79	29896	13.1	
	44 2-Butanone (MEK)	43		5.842				ND	
	48 Chlorobromomethane	128		6.122				ND	
	50 Chloroform	83		6.268				ND	
	51 1,1,1-Trichloroethane	97		6.426				ND	
	53 Carbon tetrachloride	117		6.596				ND	
	56 Benzene	78		6.827				ND	
	57 1,2-Dichloroethane	62		6.906				ND	
	61 Trichloroethene	130	7.571	7.569	0.002	1	1004	0.5026	M
	64 1,2-Dichloropropane	63		7.843				ND	
	65 1,4-Dioxane	88		7.928				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.129				ND	
71 cis-1,3-Dichloropropene	75		8.573				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.731				ND	
73 Toluene	91	8.904	8.902	0.002	44	2044	0.2681	
74 trans-1,3-Dichloropropene	75		9.157				ND	
76 1,1,2-Trichloroethane	97		9.346				ND	
77 Tetrachloroethene	164		9.419				ND	
79 2-Hexanone	43		9.565				ND	
81 Chlorodibromomethane	129		9.717				ND	
82 Ethylene Dibromide	107		9.826				ND	
84 Chlorobenzene	112		10.319				ND	
86 1,1,1,2-Tetrachloroethane	131		10.417				ND	
87 Ethylbenzene	106		10.423				ND	
88 m-Xylene & p-Xylene	106		10.550				ND	
89 o-Xylene	106		10.934				ND	
90 Styrene	104		10.958				ND	
91 Bromoform	173		11.134				ND	
96 1,1,2,2-Tetrachloroethane	83		11.615				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent

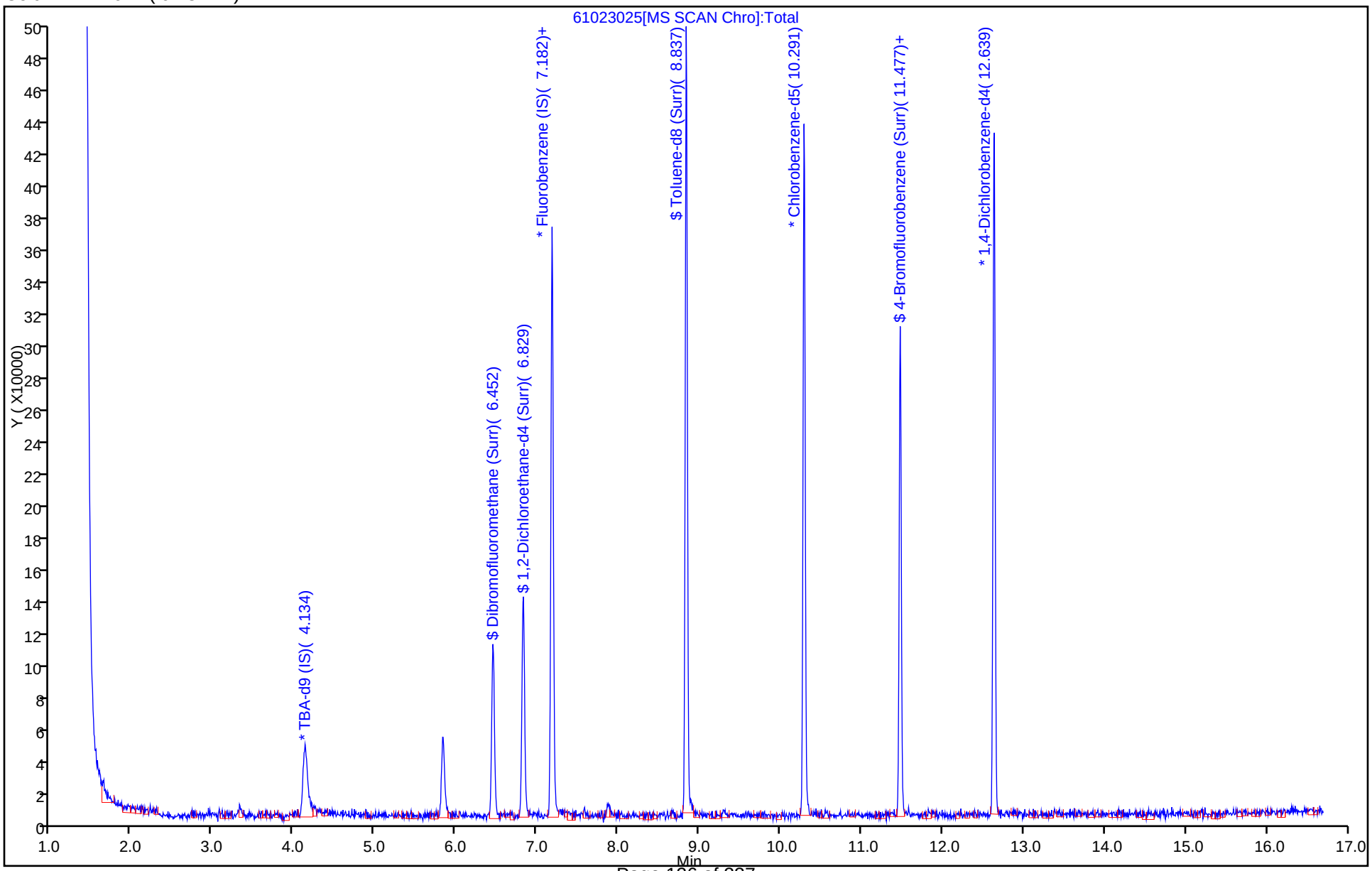
Report Date: 24-Oct-2016 08:17:54 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023025.D

Injection Date:	23-Oct-2016 21:49:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-59864-A-4	Lab Sample ID:	180-59864-4	Worklist Smp#:	25
Client ID:	HD-MW-142S-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023025.D				
Lims ID:	180-59864-A-4				
Client ID:	HD-MW-142S-0/1-0				
Sample Type:	Client				
Inject. Date:	23-Oct-2016 21:49:30	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	180-0013999-025				
Misc. Info.:	180-59864-A-4				
Operator ID:	001562	Instrument ID:	CHHP6		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\MSVOA_LL_CHHP6.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	24-Oct-2016 08:17:53	Calib Date:	17-Oct-2016 17:13:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK006				

First Level Reviewer: fergusond Date: 24-Oct-2016 08:17:53

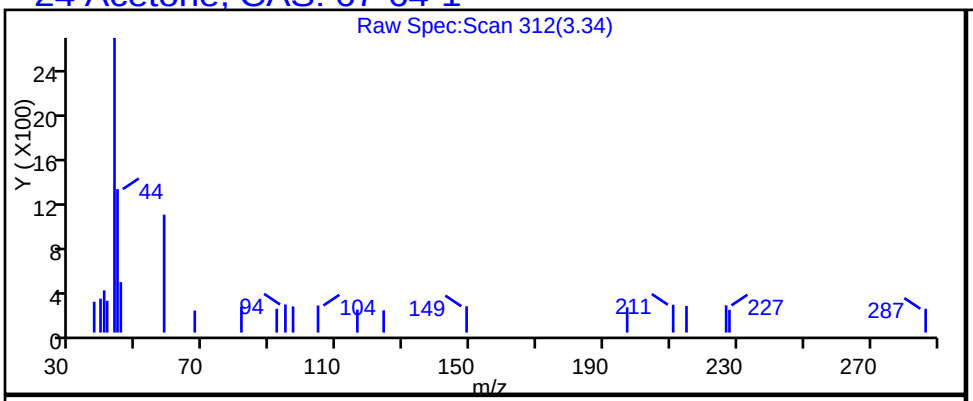
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.3	96.52
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	51.4	102.84
$ 7 Toluene-d8 (Surr)	50.0	54.3	108.61
$ 8 4-Bromofluorobenzene (Surr)	50.0	47.8	95.57

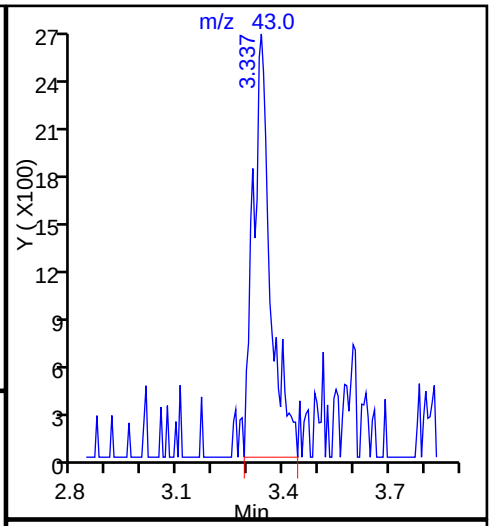
Report Date: 24-Oct-2016 08:17:54 Chrom Revision: 2.2 17-Oct-2016 09:27:18

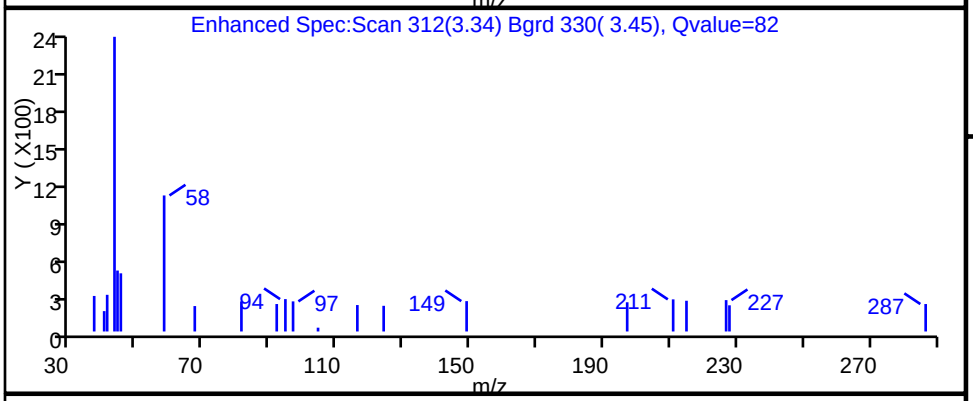
TestAmerica Pittsburgh

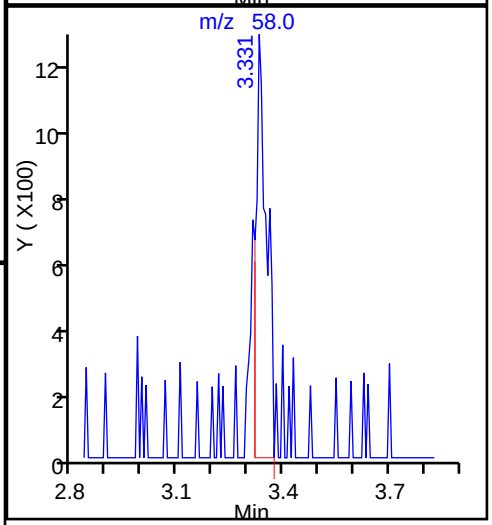
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023025.D				
Injection Date:	23-Oct-2016 21:49:30	Instrument ID:	CHHP6		
Lims ID:	180-59864-A-4	Lab Sample ID:	180-59864-4		
Client ID:	HD-MW-142S-0/1-0				
Operator ID:	001562	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

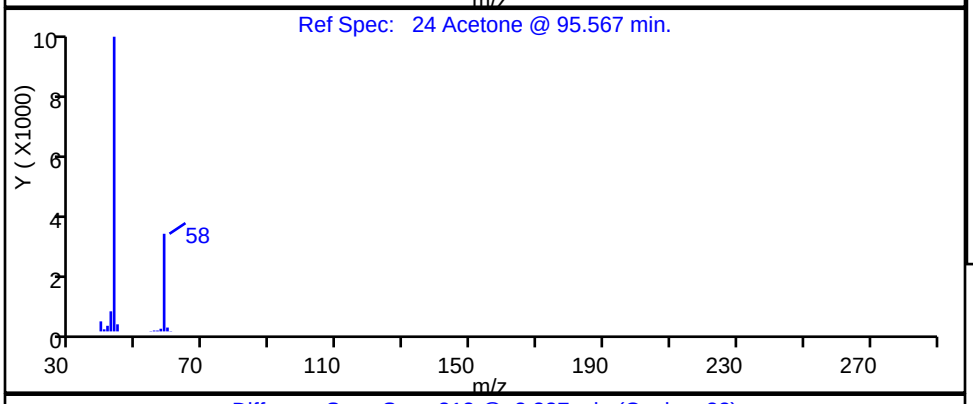
24 Acetone, CAS: 67-64-1

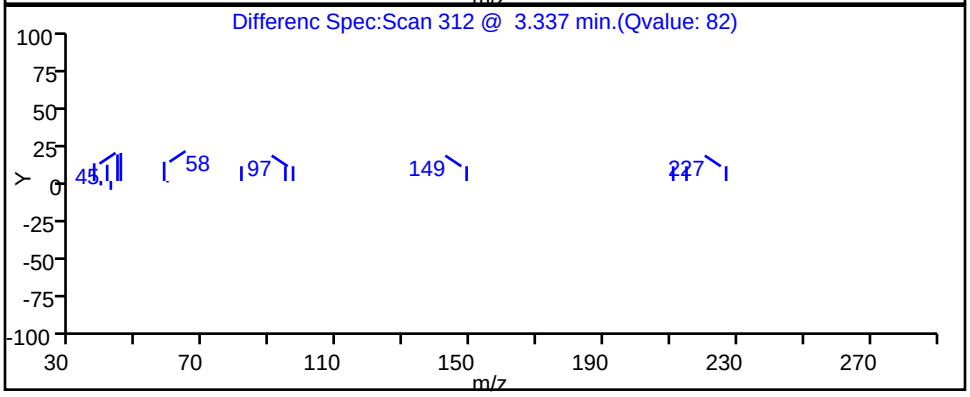










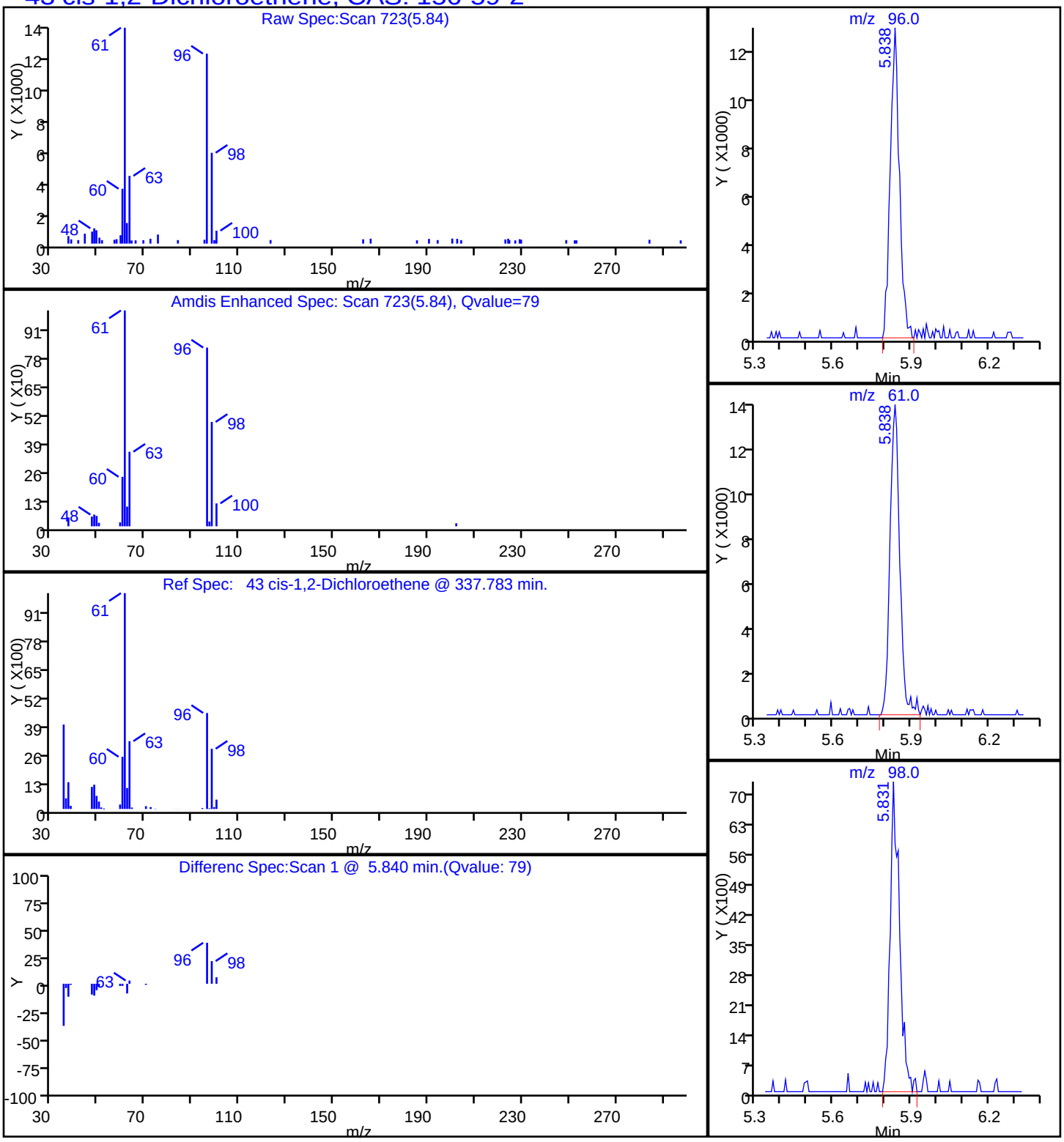


Report Date: 24-Oct-2016 08:17:54 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023025.D				
Injection Date:	23-Oct-2016 21:49:30	Instrument ID:	CHHP6		
Lims ID:	180-59864-A-4	Lab Sample ID:	180-59864-4		
Client ID:	HD-MW-142S-0/1-0				
Operator ID:	001562	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

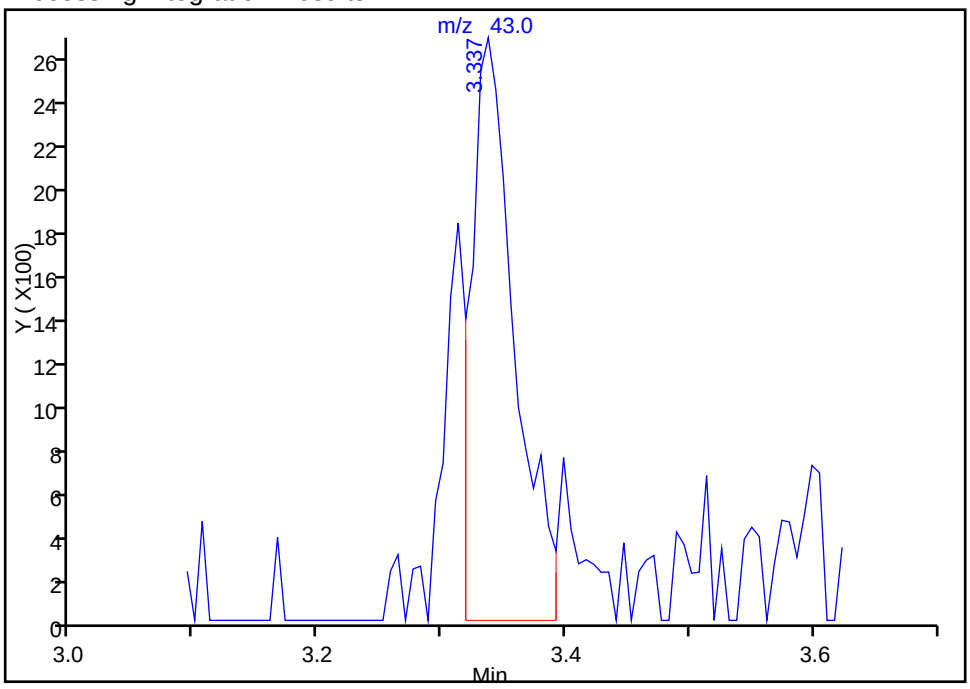
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023025.D				
Injection Date:	23-Oct-2016 21:49:30	Instrument ID:	CHHP6		
Lims ID:	180-59864-A-4	Lab Sample ID:	180-59864-4		
Client ID:	HD-MW-142S-0/1-0				
Operator ID:	001562	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

Signal: 1

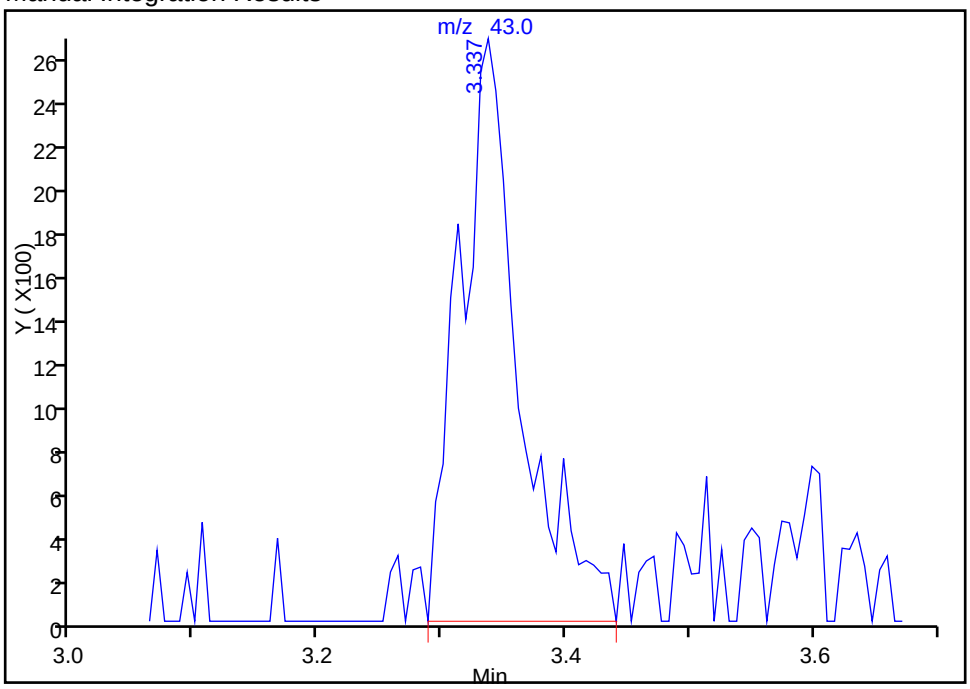
Processing Integration Results

RT: 3.34
Area: 6604
Amount: 15.028873
Amount Units: ng



Manual Integration Results

RT: 3.34
Area: 9166
Amount: 20.859275
Amount Units: ng



Reviewer: fergusond, 24-Oct-2016 08:17:53

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

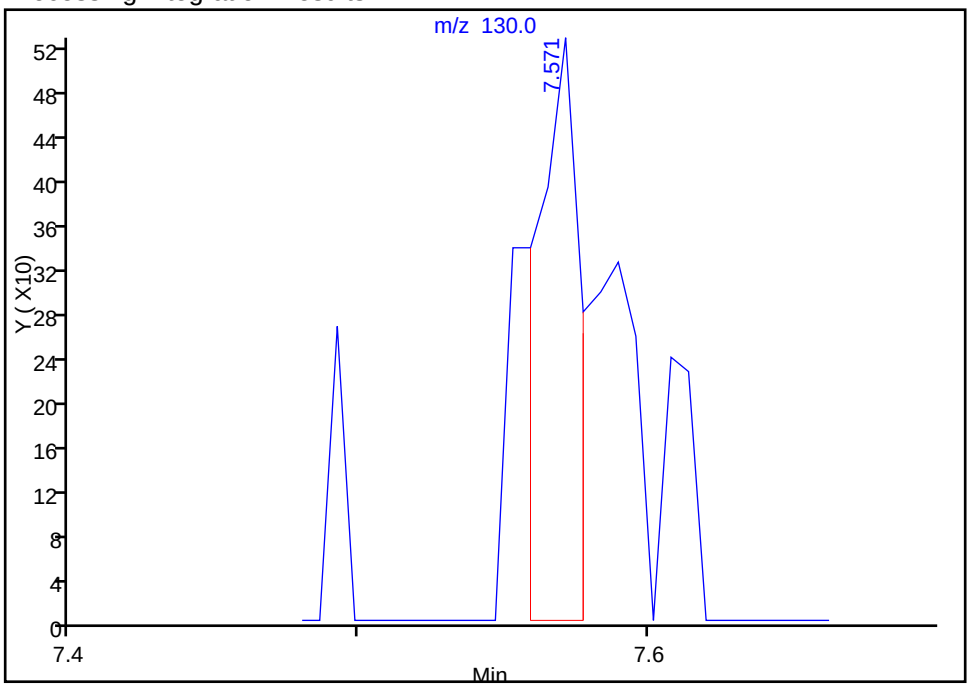
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023025.D				
Injection Date:	23-Oct-2016 21:49:30	Instrument ID:	CHHP6		
Lims ID:	180-59864-A-4	Lab Sample ID:	180-59864-4		
Client ID:	HD-MW-142S-0/1-0				
Operator ID:	001562	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

61 Trichloroethene, CAS: 79-01-6

Signal: 1

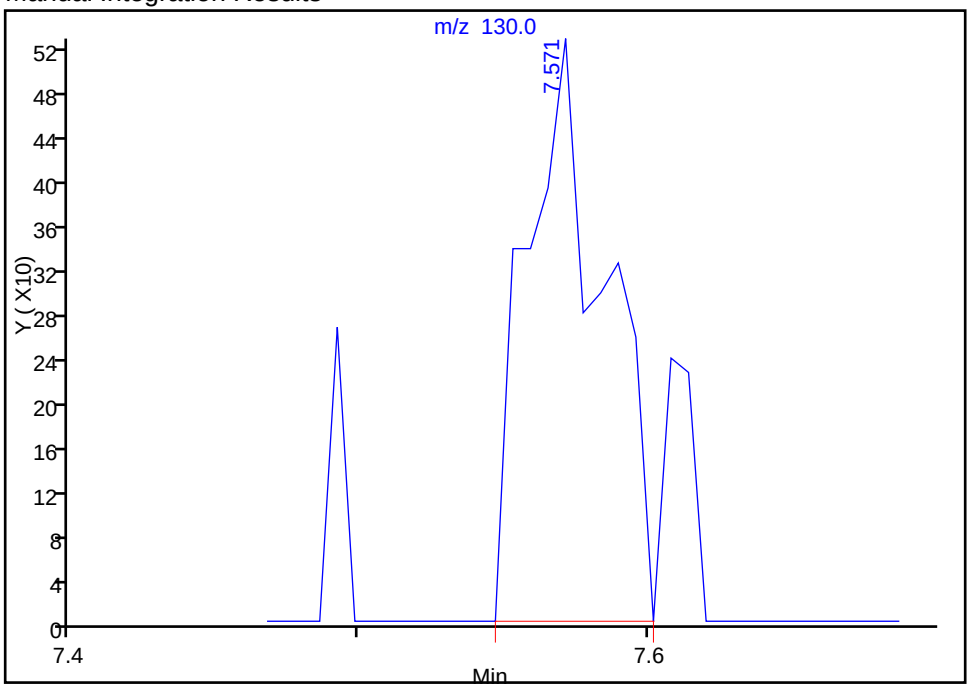
Processing Integration Results

RT: 7.57
Area: 560
Amount: 0.280319
Amount Units: ng



Manual Integration Results

RT: 7.57
Area: 1004
Amount: 0.502572
Amount Units: ng



Reviewer: fergusond, 24-Oct-2016 08:17:53

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: HD-MW-20S-0/1-0 | Lab Sample ID: 180-59864-5

Matrix: Water | Lab File ID: 51024027.D

Analysis Method: 8260C | Date Collected: 10/13/2016 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/24/2016 21:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 192156 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	1.0		1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	1.6		1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	48		1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	4.3		1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: HD-MW-20S-0/1-0 | Lab Sample ID: 180-59864-5

Matrix: Water | Lab File ID: 51024027.D

Analysis Method: 8260C | Date Collected: 10/13/2016 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/24/2016 21:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 192156 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		72-134
2037-26-5	Toluene-d8 (Surr)	93		80-120
460-00-4	4-Bromofluorobenzene (Surr)	102		72-120
1868-53-7	Dibromofluoromethane (Surr)	108		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024027.D
Lims ID: 180-59864-B-5
Client ID: HD-MW-20S-0/1-0
Sample Type: Client
Inject. Date: 24-Oct-2016 21:12:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014019-027
Misc. Info.: 180-59864-B-5
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 25-Oct-2016 08:10:10 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: fergusond Date: 25-Oct-2016 08:10:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.266	4.272	-0.006	0	135593	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.271	0.000	96	327552	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	91	84767	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.716	12.722	-0.006	97	131155	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.547	6.547	0.000	94	84327	53.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.918	0.000	0	119624	52.9	
$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	95	298121	46.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	86	131311	50.8	
12 Chloromethane	50		1.766				ND	
13 Vinyl chloride	62		1.912				ND	
15 Bromomethane	94		2.234				ND	
16 Chloroethane	64		2.374				ND	
22 1,1-Dichloroethene	96		3.323				ND	
24 Acetone	43	3.439	3.445	-0.006	67	4633	5.49	
26 Carbon disulfide	76		3.615				ND	
31 Methylene Chloride	84		4.126				ND	
33 Acrylonitrile	53		4.509				ND	
34 trans-1,2-Dichloroethene	96		4.552				ND	
35 Methyl tert-butyl ether	73	4.570	4.570	0.000	40	2575	0.5498	M
37 1,1-Dichloroethane	63		5.185				ND	
45 cis-1,2-Dichloroethene	96	5.933	5.927	0.006	87	10434	5.24	
46 2-Butanone (MEK)	43		5.945				ND	
49 Chlorobromomethane	128		6.219				ND	
52 Chloroform	83	6.365	6.359	0.006	94	24987	7.81	
53 1,1,1-Trichloroethane	97		6.517				ND	
56 Carbon tetrachloride	117		6.693				ND	
58 Benzene	78		6.924				ND	
59 1,2-Dichloroethane	62		7.004				ND	
64 Trichloroethene	130	7.661	7.661	0.000	95	441584	241.1	
67 1,2-Dichloropropane	63		7.934				ND	
70 1,4-Dioxane	88		8.019				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.214				ND	
74 cis-1,3-Dichloropropene	75		8.658				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.816				ND	
76 Toluene	91		8.993				ND	
77 trans-1,3-Dichloropropene	75		9.236				ND	
79 1,1,2-Trichloroethane	97		9.431				ND	
80 Tetrachloroethene	164	9.498	9.504	-0.006	95	32614	21.3	
82 2-Hexanone	43		9.650				ND	
84 Chlorodibromomethane	129		9.802				ND	
85 Ethylene Dibromide	107		9.917				ND	
87 Chlorobenzene	112		10.404				ND	
89 1,1,1,2-Tetrachloroethane	131		10.495				ND	
90 Ethylbenzene	106		10.502				ND	
91 m-Xylene & p-Xylene	106		10.635				ND	
92 o-Xylene	106		11.013				ND	
93 Styrene	104		11.037				ND	
94 Bromoform	173		11.219				ND	
99 1,1,2,2-Tetrachloroethane	83		11.700				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

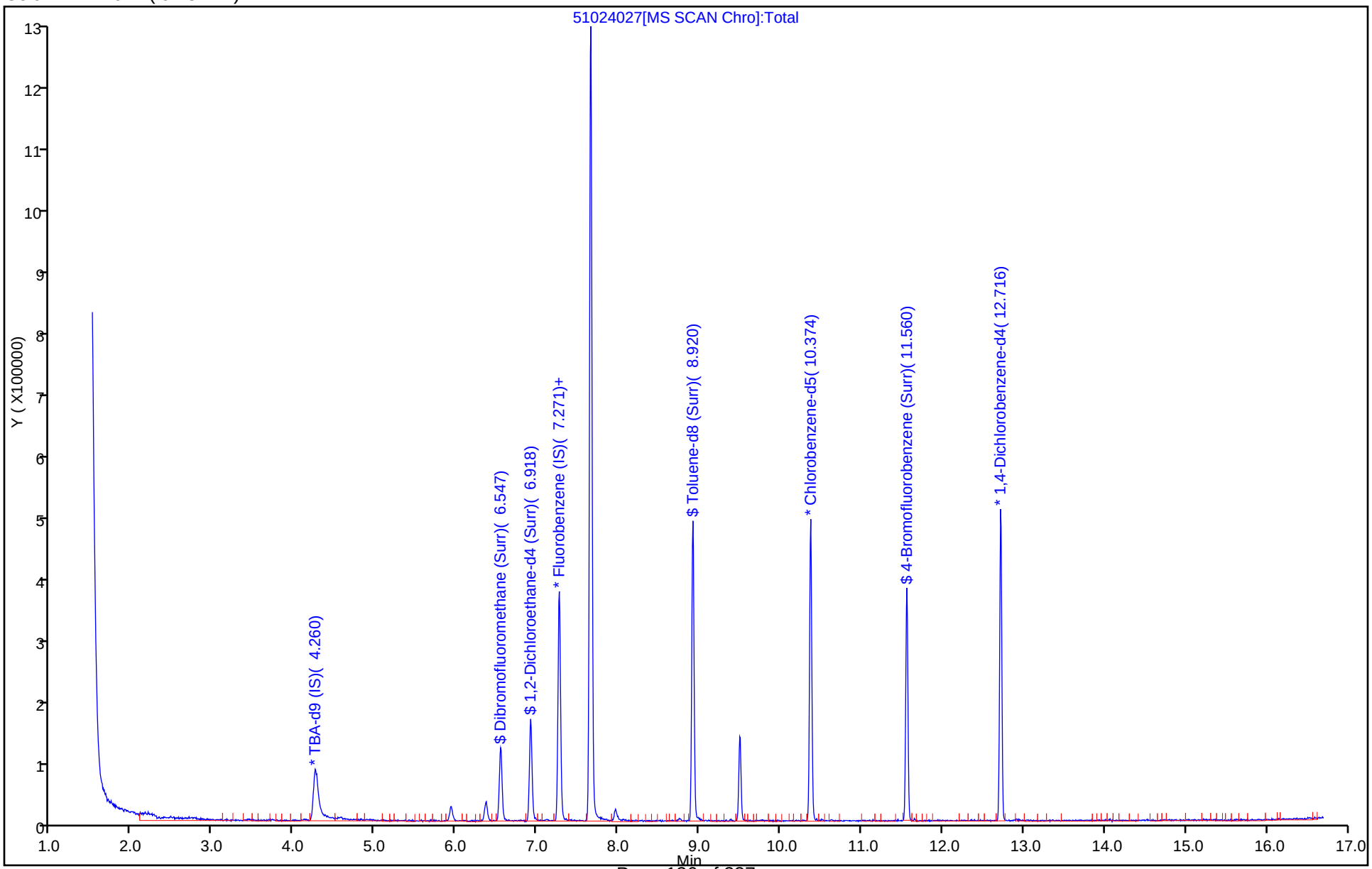
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 25-Oct-2016 08:10:11 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024027.D				
Injection Date:	24-Oct-2016 21:12:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-59864-B-5	Lab Sample ID:	180-59864-5	Worklist Smp#:	27
Client ID:	HD-MW-20S-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024027.D
Lims ID: 180-59864-B-5
Client ID: HD-MW-20S-0/1-0
Sample Type: Client
Inject. Date: 24-Oct-2016 21:12:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014019-027
Misc. Info.: 180-59864-B-5
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 25-Oct-2016 08:10:10 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: fergusond Date: 25-Oct-2016 08:10:10

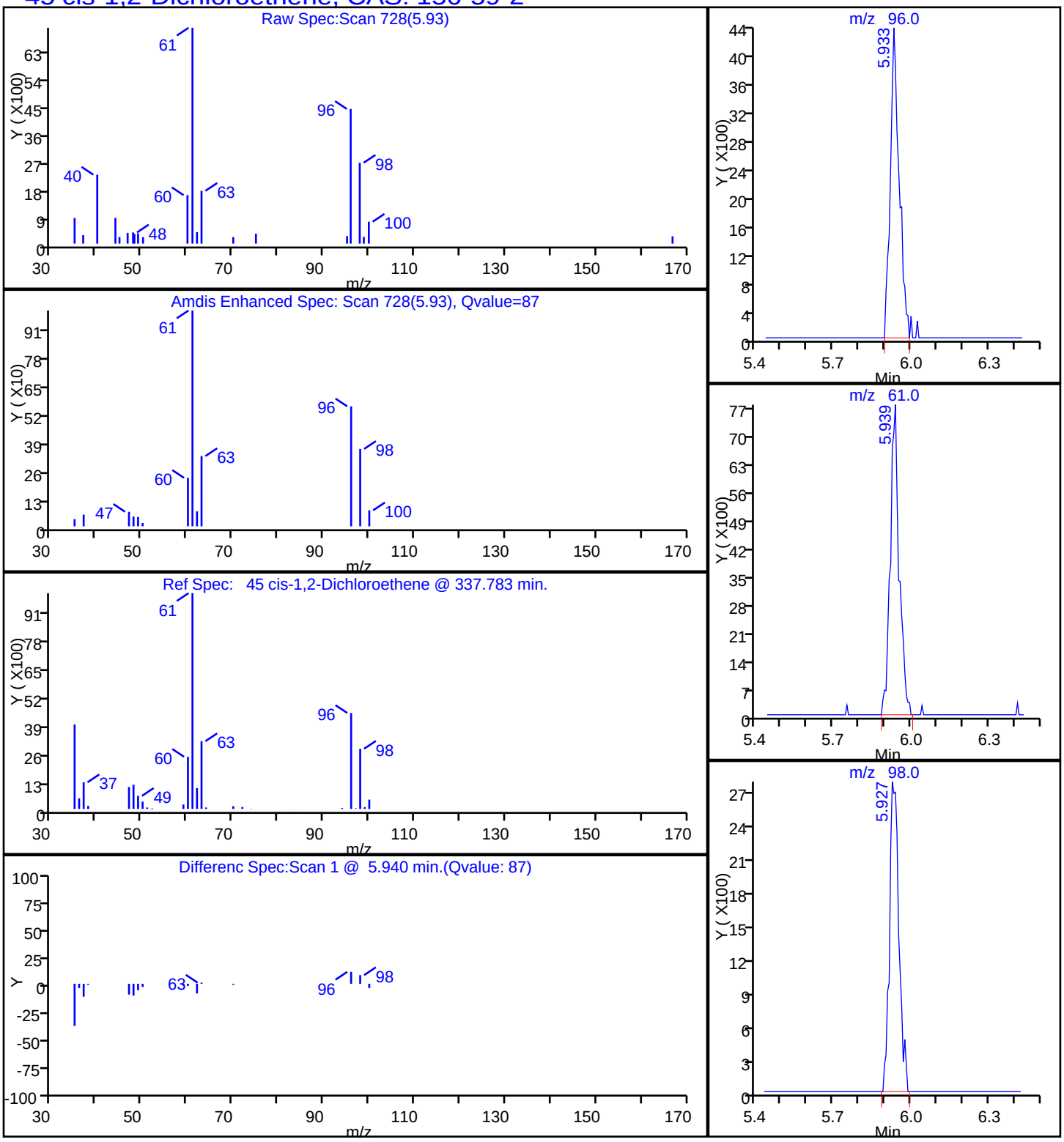
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	53.8	107.62
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	52.9	105.75
$ 7 Toluene-d8 (Surr)	50.0	46.6	93.19
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.8	101.53

Report Date: 25-Oct-2016 08:10:11 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024027.D				
Injection Date:	24-Oct-2016 21:12:30	Instrument ID:	CHHP5		
Lims ID:	180-59864-B-5	Lab Sample ID:	180-59864-5		
Client ID:	HD-MW-20S-0/1-0				
Operator ID:	001562	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

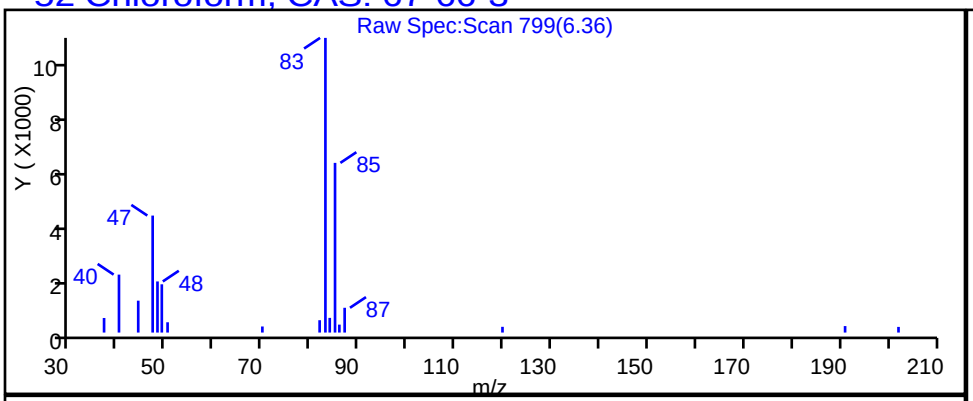


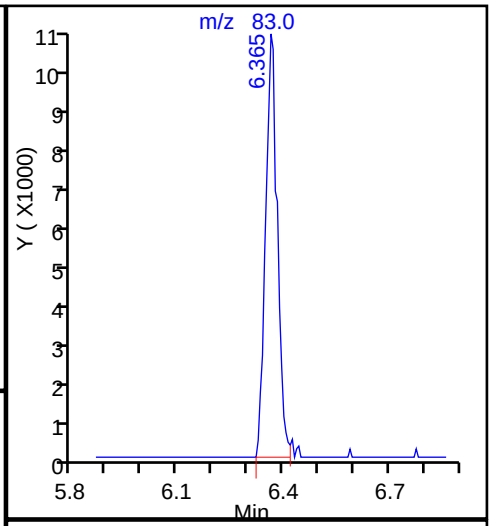
Report Date: 25-Oct-2016 08:10:11 Chrom Revision: 2.2 17-Oct-2016 09:27:18

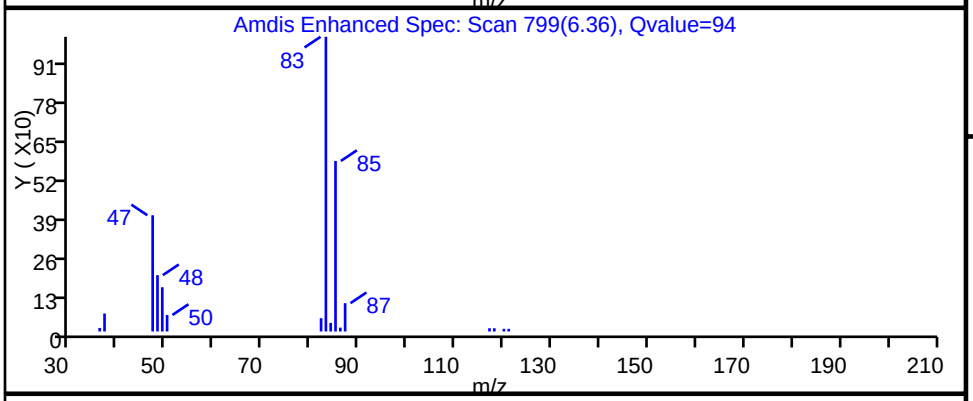
TestAmerica Pittsburgh

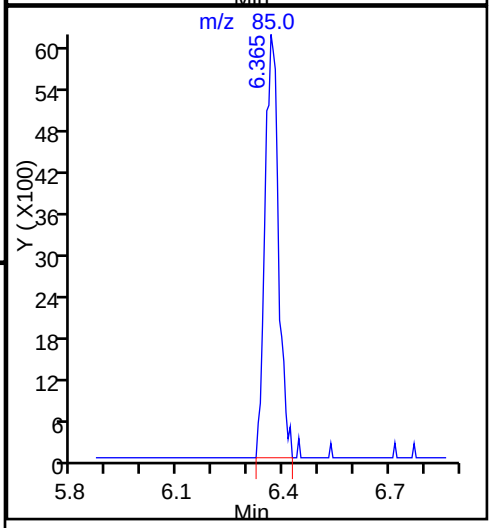
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024027.D		
Injection Date:	24-Oct-2016 21:12:30	Instrument ID:	CHHP5
Lims ID:	180-59864-B-5	Lab Sample ID:	180-59864-5
Client ID:	HD-MW-20S-0/1-0		
Operator ID:	001562	ALS Bottle#:	26 Worklist Smp#: 27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

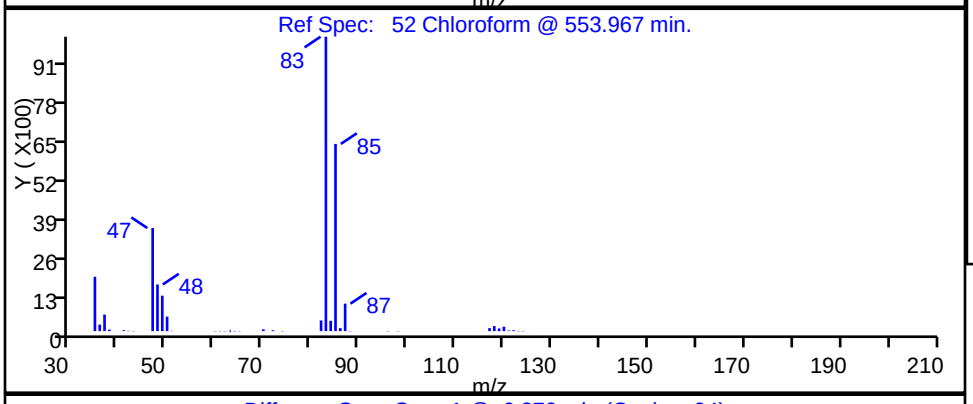
52 Chloroform, CAS: 67-66-3

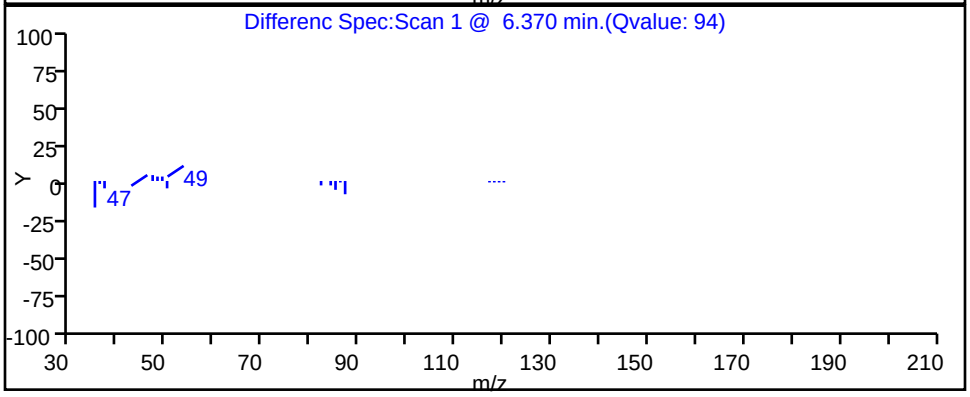










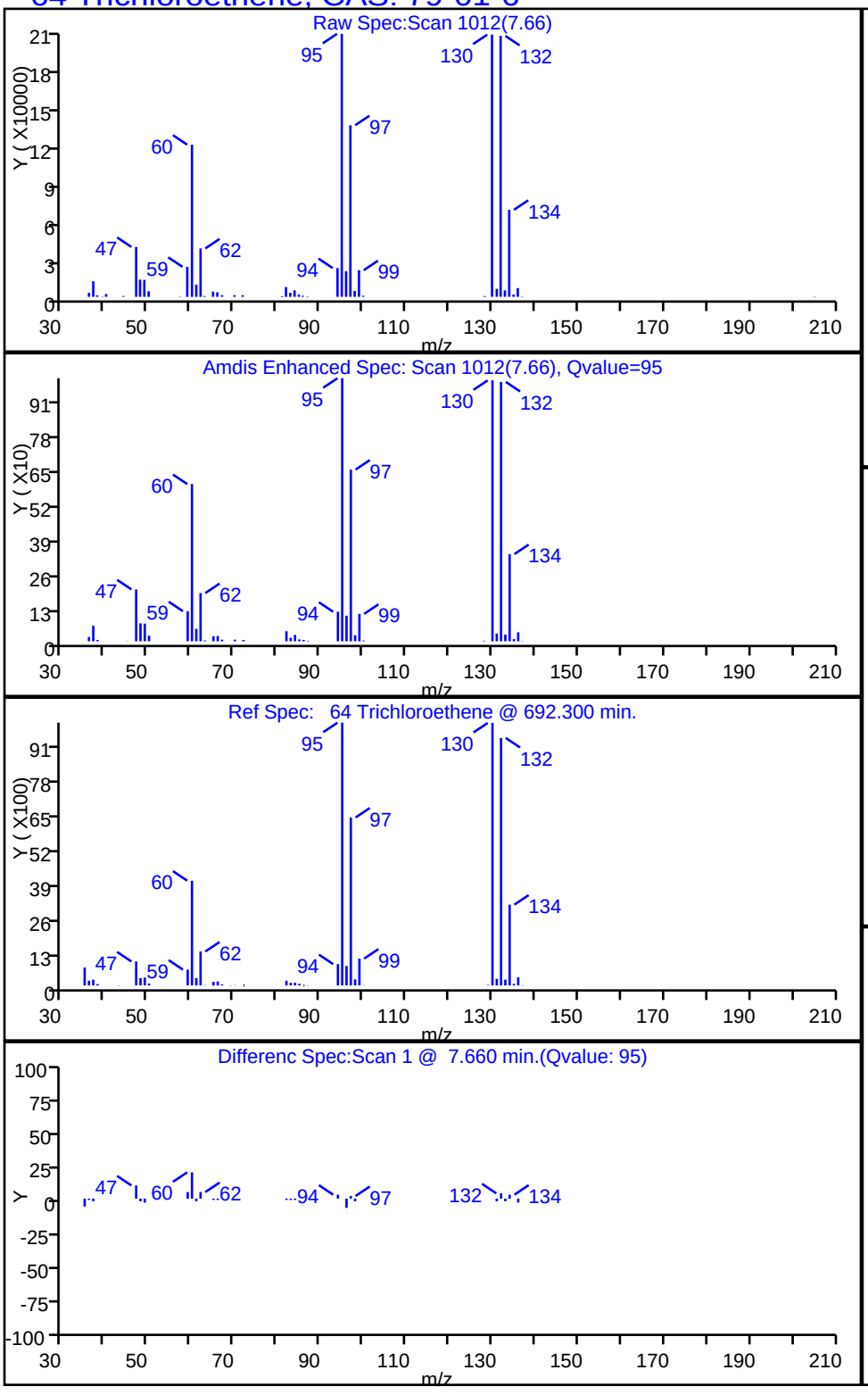


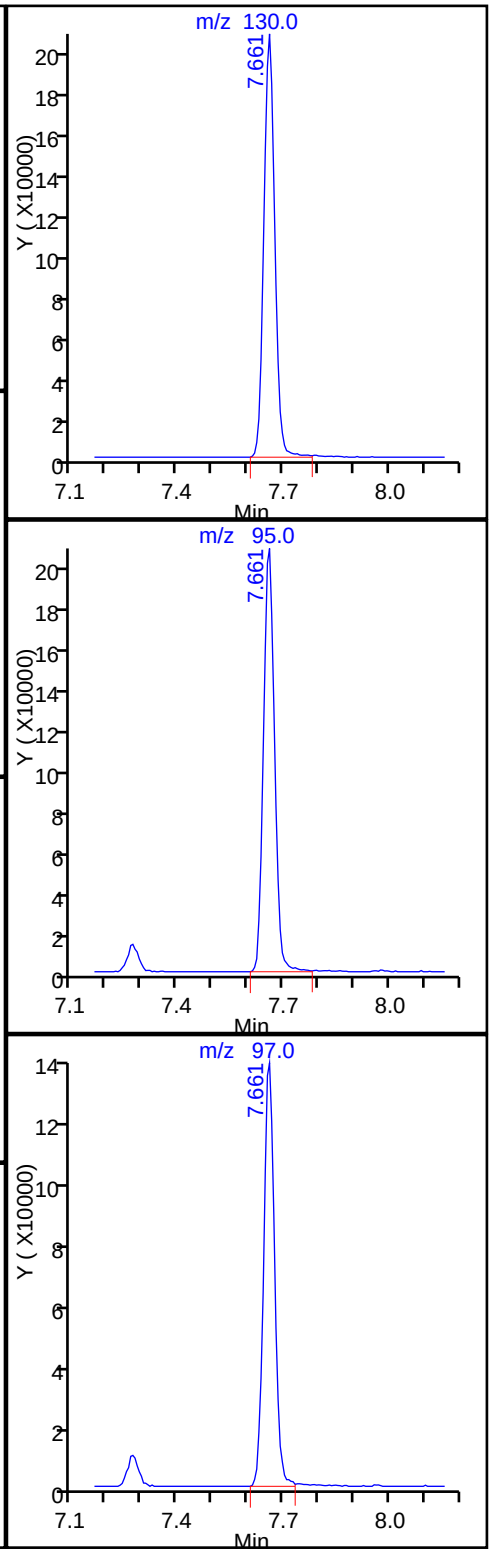
Report Date: 25-Oct-2016 08:10:11 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024027.D		
Injection Date:	24-Oct-2016 21:12:30	Instrument ID:	CHHP5
Lims ID:	180-59864-B-5	Lab Sample ID:	180-59864-5
Client ID:	HD-MW-20S-0/1-0		
Operator ID:	001562	ALS Bottle#:	26 Worklist Smp#: 27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

64 Trichloroethene, CAS: 79-01-6



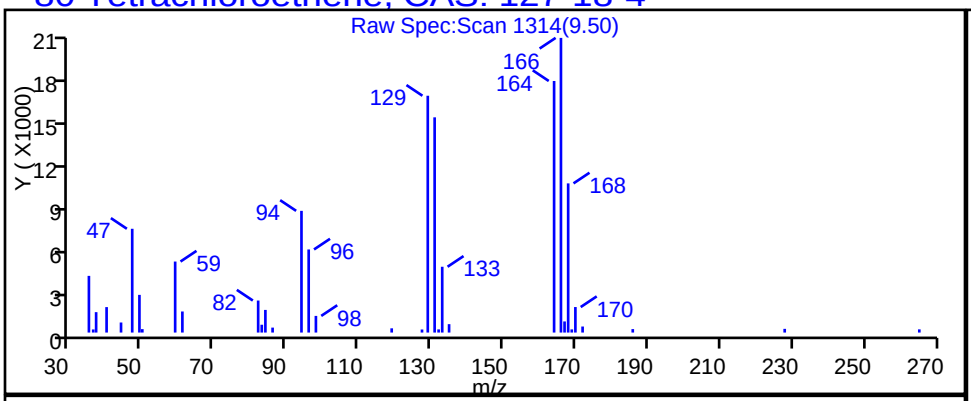


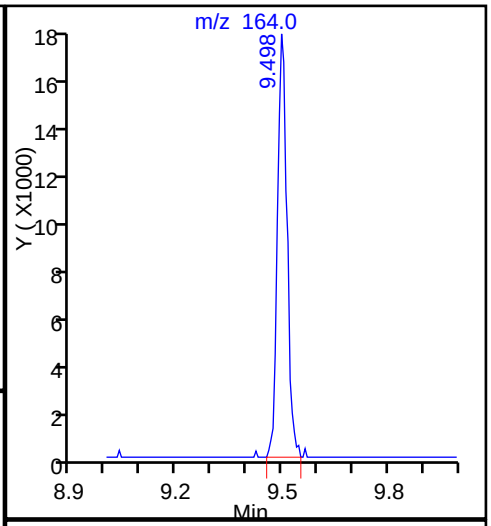
Report Date: 25-Oct-2016 08:10:11 Chrom Revision: 2.2 17-Oct-2016 09:27:18

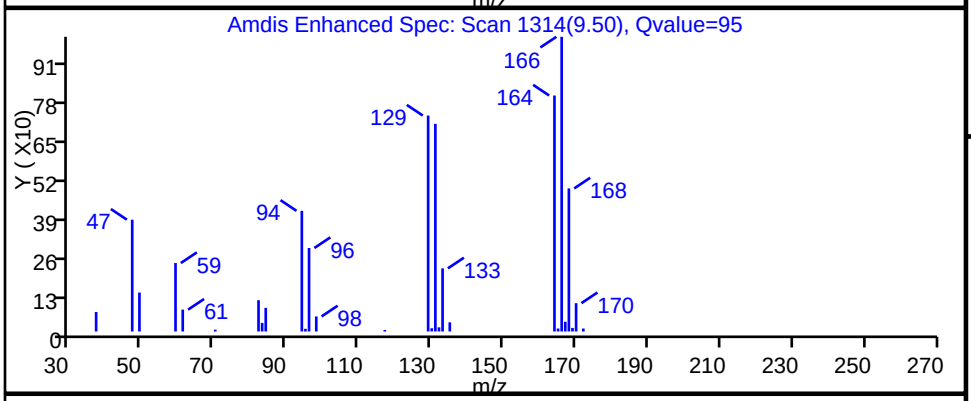
TestAmerica Pittsburgh

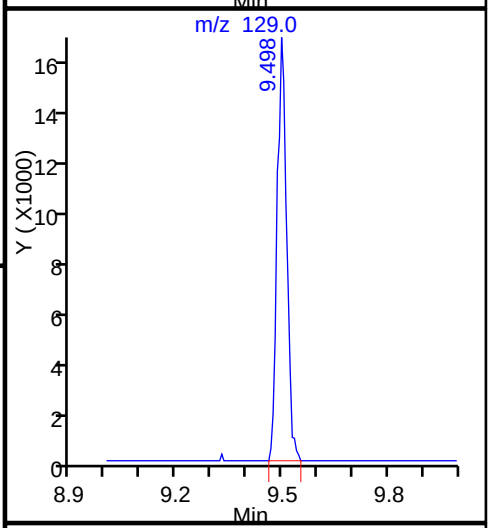
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024027.D		
Injection Date:	24-Oct-2016 21:12:30	Instrument ID:	CHHP5
Lims ID:	180-59864-B-5	Lab Sample ID:	180-59864-5
Client ID:	HD-MW-20S-0/1-0		
Operator ID:	001562	ALS Bottle#:	26 Worklist Smp#: 27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

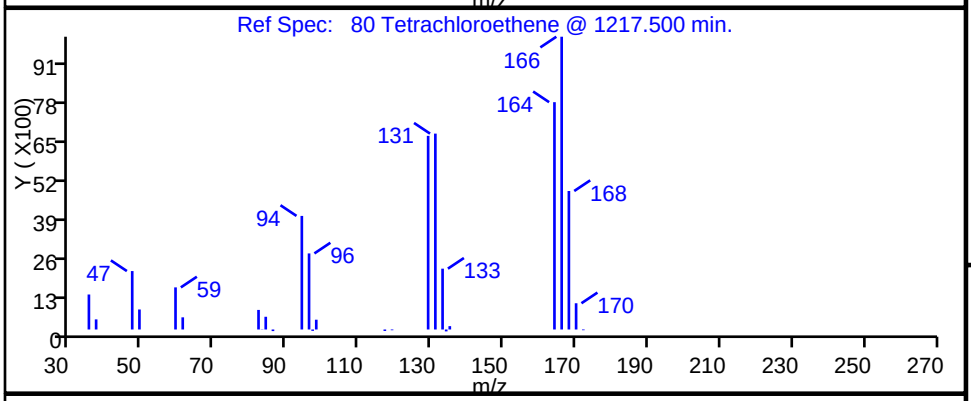
80 Tetrachloroethene, CAS: 127-18-4

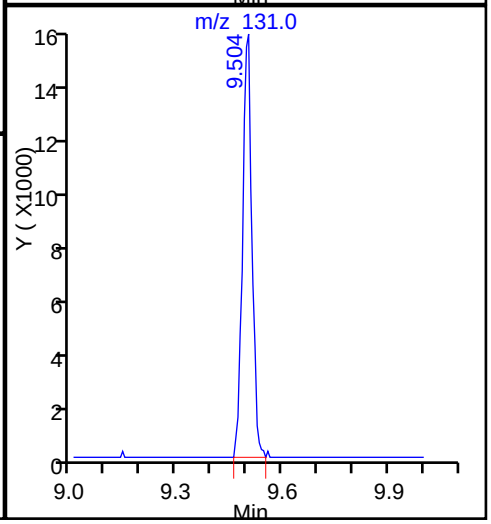


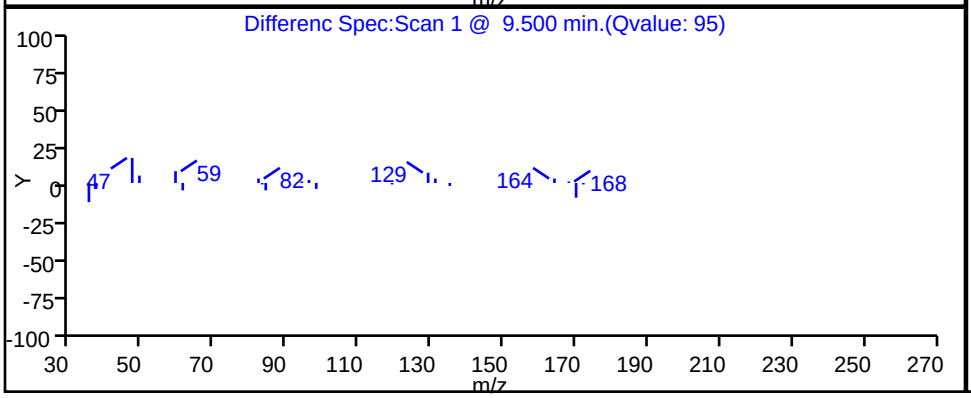












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

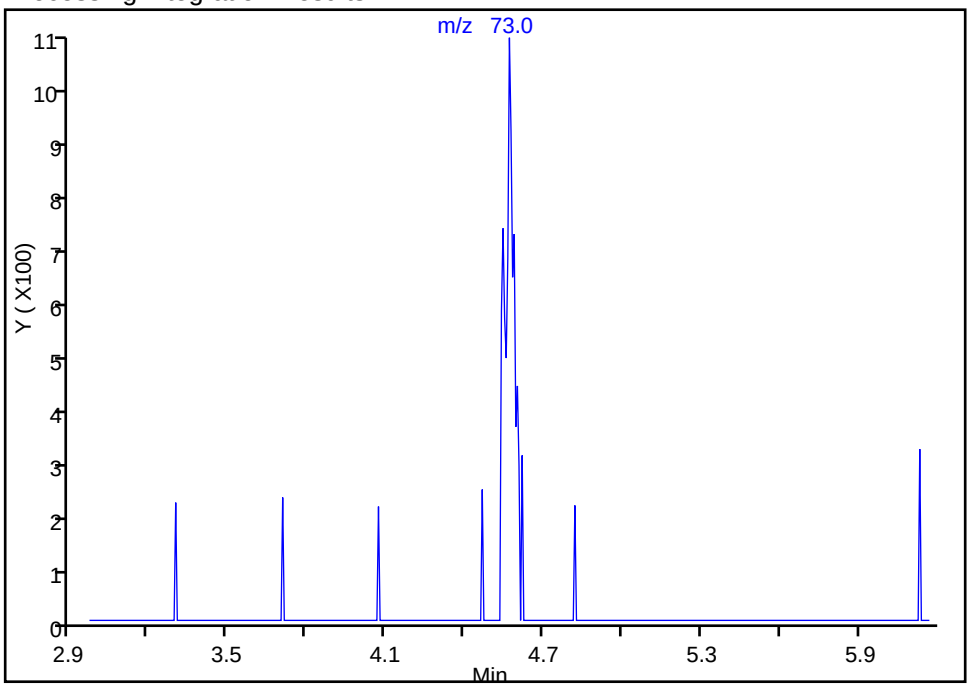
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024027.D				
Injection Date:	24-Oct-2016 21:12:30	Instrument ID:	CHHP5		
Lims ID:	180-59864-B-5	Lab Sample ID:	180-59864-5		
Client ID:	HD-MW-20S-0/1-0				
Operator ID:	001562	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

Signal: 1

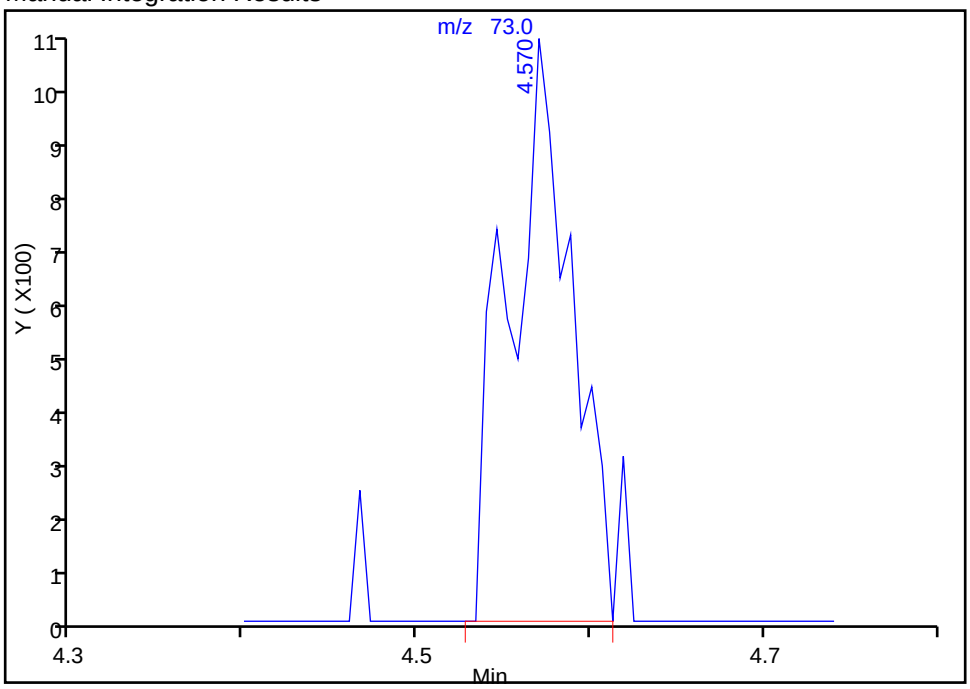
Processing Integration Results

Not Detected
Expected RT: 4.57



Manual Integration Results

RT: 4.57
Area: 2575
Amount: 0.549811
Amount Units: ng



Reviewer: fergusond, 25-Oct-2016 08:10:10
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

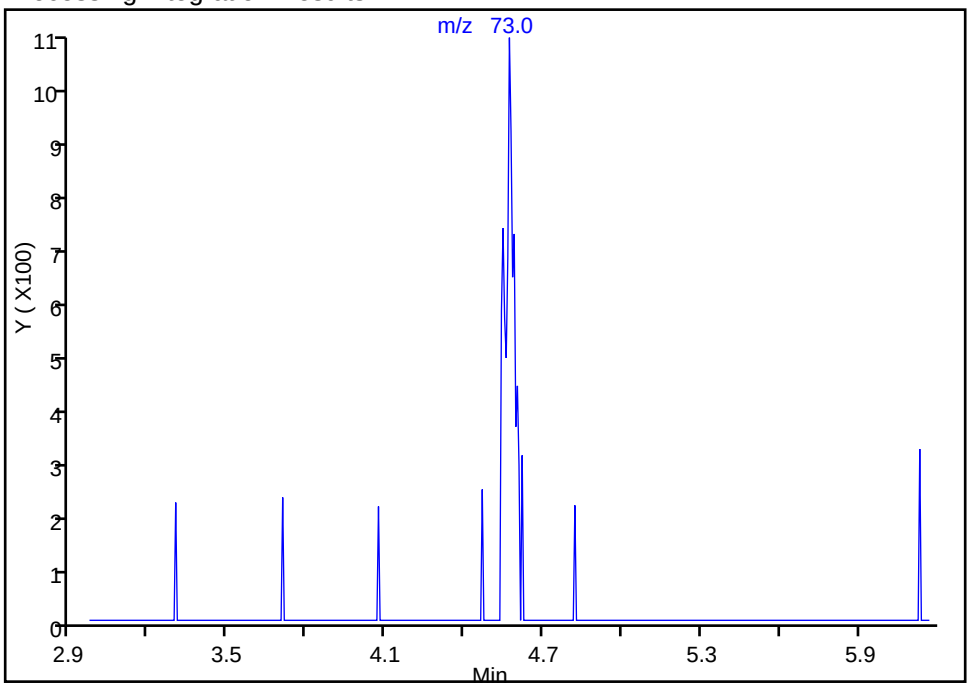
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024027.D				
Injection Date:	24-Oct-2016 21:12:30	Instrument ID:	CHHP5		
Lims ID:	180-59864-B-5	Lab Sample ID:	180-59864-5		
Client ID:	HD-MW-20S-0/1-0				
Operator ID:	001562	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

Signal: 1

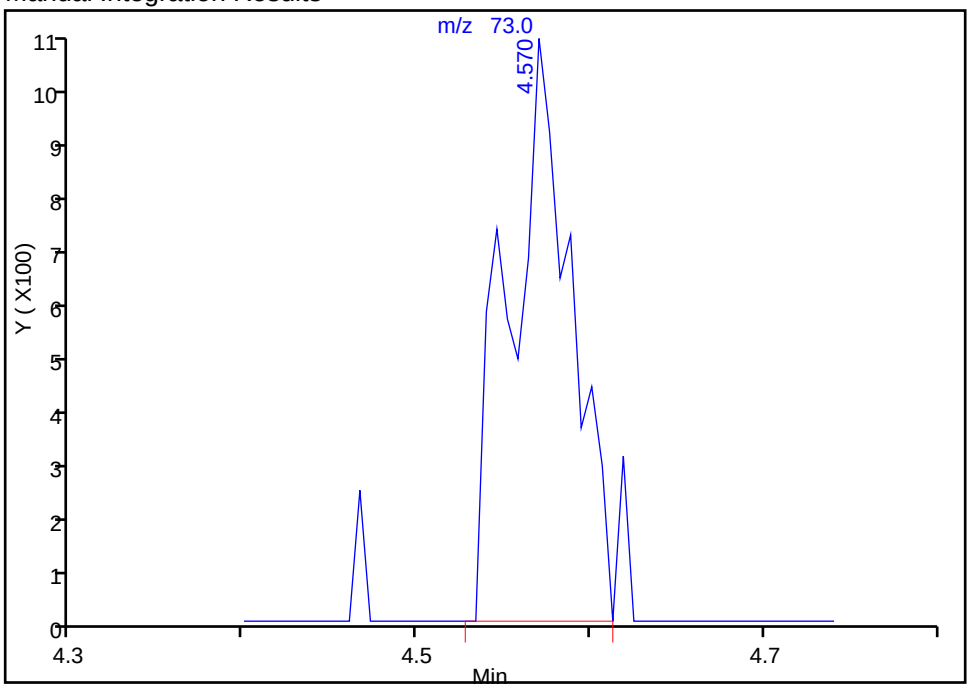
Processing Integration Results

Not Detected
Expected RT: 4.57



Manual Integration Results

RT: 4.57
Area: 2575
Amount: 0.549811
Amount Units: ng



Reviewer: fergusond, 25-Oct-2016 08:10:10
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: HD-MW-142D-0/1-0 | Lab Sample ID: 180-59864-6

Matrix: Water | Lab File ID: 51024025.D

Analysis Method: 8260C | Date Collected: 10/13/2016 10:25

Sample wt/vol: 5(mL) | Date Analyzed: 10/24/2016 20:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 192156 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	5.0		5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	0.78	J	1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	1.0	U	1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	1.0	U	1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: HD-MW-142D-0/1-0 | Lab Sample ID: 180-59864-6

Matrix: Water | Lab File ID: 51024025.D

Analysis Method: 8260C | Date Collected: 10/13/2016 10:25

Sample wt/vol: 5(mL) | Date Analyzed: 10/24/2016 20:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 192156 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		72-134
2037-26-5	Toluene-d8 (Surr)	96		80-120
460-00-4	4-Bromofluorobenzene (Surr)	106		72-120
1868-53-7	Dibromofluoromethane (Surr)	104		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024025.D
Lims ID: 180-59864-A-6
Client ID: HD-MW-142D-0/1-0
Sample Type: Client
Inject. Date: 24-Oct-2016 20:24:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014019-025
Misc. Info.: 180-59864-A-6
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 25-Oct-2016 08:07:08 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: fergusond Date: 25-Oct-2016 08:07:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.256	4.272	-0.016	0	111624	1000.0	
* 2 Fluorobenzene (IS)	96	7.274	7.271	0.003	97	339506	50.0	
* 3 Chlorobenzene-d5	119	10.370	10.374	-0.004	92	85397	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.719	12.722	-0.004	97	132919	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.550	6.547	0.003	92	84289	51.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.921	6.918	0.003	0	124750	53.2	
$ 7 Toluene-d8 (Surr)	98	8.922	8.920	0.002	95	310351	48.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.563	11.560	0.003	85	138444	53.1	
12 Chloromethane	50		1.766				ND	
13 Vinyl chloride	62		1.912				ND	
15 Bromomethane	94		2.234				ND	
16 Chloroethane	64		2.374				ND	
22 1,1-Dichloroethene	96		3.323				ND	
24 Acetone	43	3.435	3.445	-0.010	98	21686	24.8	M
26 Carbon disulfide	76		3.615				ND	
31 Methylene Chloride	84		4.126				ND	
33 Acrylonitrile	53		4.509				ND	
34 trans-1,2-Dichloroethene	96		4.552				ND	
35 Methyl tert-butyl ether	73		4.570				ND	
37 1,1-Dichloroethane	63		5.185				ND	
45 cis-1,2-Dichloroethene	96	5.935	5.927	0.008	87	8091	3.92	
46 2-Butanone (MEK)	43		5.945				ND	
49 Chlorobromomethane	128		6.219				ND	
52 Chloroform	83		6.359				ND	
53 1,1,1-Trichloroethane	97		6.517				ND	
56 Carbon tetrachloride	117		6.693				ND	
58 Benzene	78		6.924				ND	
59 1,2-Dichloroethane	62		7.004				ND	
64 Trichloroethene	130		7.661				ND	
67 1,2-Dichloropropane	63		7.934				ND	
70 1,4-Dioxane	88		8.019				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.214				ND	
74 cis-1,3-Dichloropropene	75		8.658				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.816				ND	
76 Toluene	91	8.989	8.993	-0.004	94	2914	0.3718	
77 trans-1,3-Dichloropropene	75		9.236				ND	
79 1,1,2-Trichloroethane	97		9.431				ND	
80 Tetrachloroethene	164		9.504				ND	
82 2-Hexanone	43		9.650				ND	
84 Chlorodibromomethane	129		9.802				ND	
85 Ethylene Dibromide	107		9.917				ND	
87 Chlorobenzene	112		10.404				ND	
89 1,1,1,2-Tetrachloroethane	131		10.495				ND	
90 Ethylbenzene	106		10.502				ND	
91 m-Xylene & p-Xylene	106	10.632	10.635	-0.003	0	768	0.2126	M
92 o-Xylene	106		11.013				ND	
93 Styrene	104		11.037				ND	
94 Bromoform	173		11.219				ND	
99 1,1,2,2-Tetrachloroethane	83		11.700				ND	
S 133 Xylenes, Total	106				0		0.2126	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

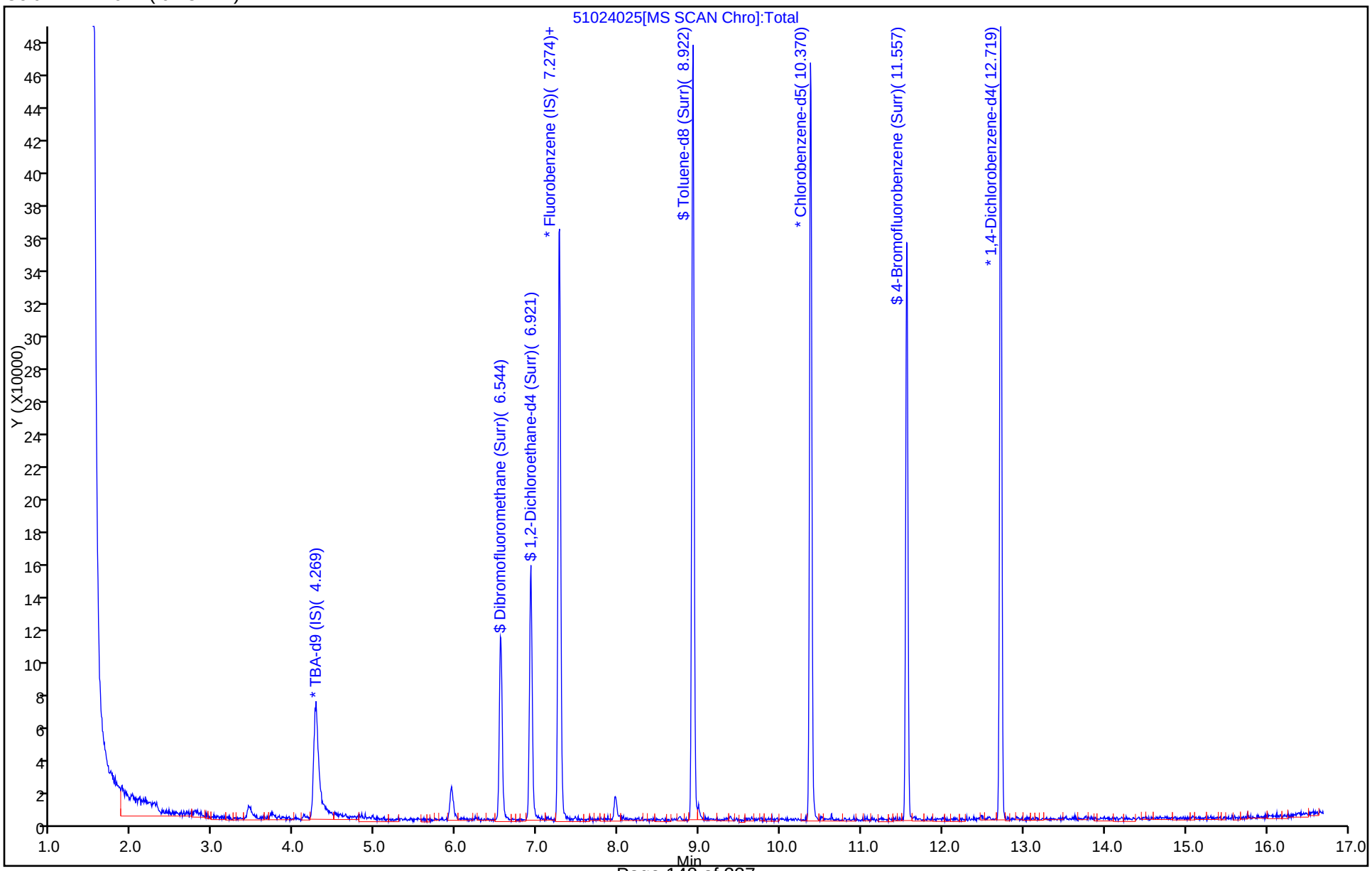
Report Date: 25-Oct-2016 08:07:08 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024025.D

Injection Date:	24-Oct-2016 20:24:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-59864-A-6	Lab Sample ID:	180-59864-6	Worklist Smp#:	25
Client ID:	HD-MW-142D-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024025.D
Lims ID: 180-59864-A-6
Client ID: HD-MW-142D-0/1-0
Sample Type: Client
Inject. Date: 24-Oct-2016 20:24:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014019-025
Misc. Info.: 180-59864-A-6
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 25-Oct-2016 08:07:08 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: fergusond Date: 25-Oct-2016 08:07:08

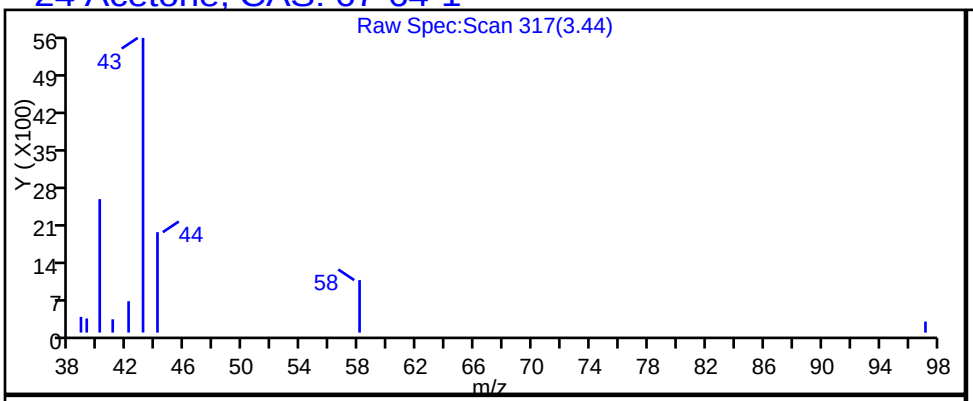
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.9	103.78
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	53.2	106.40
$ 7 Toluene-d8 (Surr)	50.0	48.2	96.30
$ 8 4-Bromofluorobenzene (Surr)	50.0	53.1	106.26

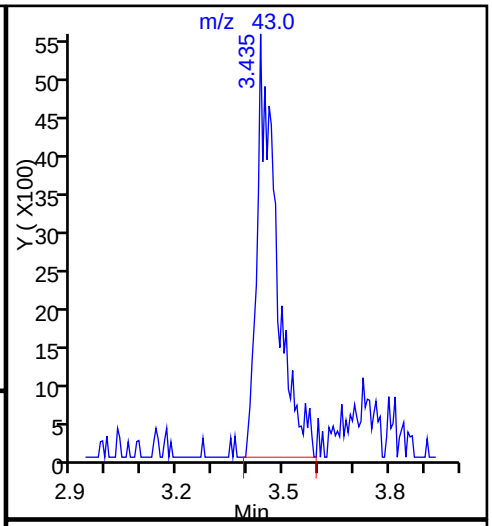
Report Date: 25-Oct-2016 08:07:08 Chrom Revision: 2.2 17-Oct-2016 09:27:18

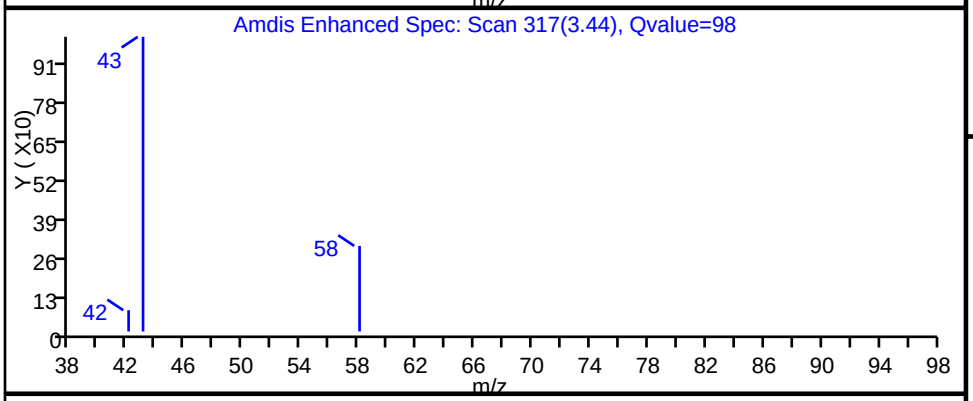
TestAmerica Pittsburgh

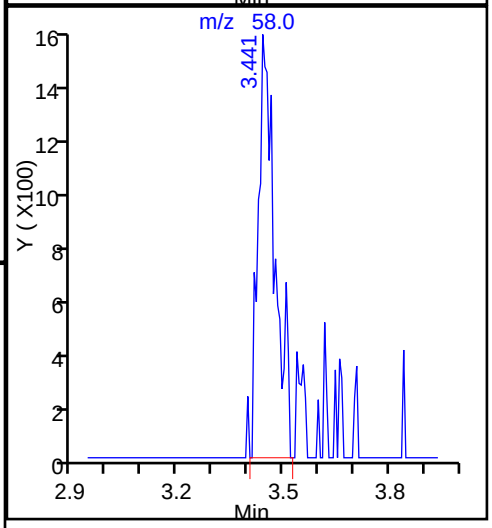
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024025.D		
Injection Date:	24-Oct-2016 20:24:30	Instrument ID:	CHHP5
Lims ID:	180-59864-A-6	Lab Sample ID:	180-59864-6
Client ID:	HD-MW-142D-0/1-0		
Operator ID:	001562	ALS Bottle#:	24 Worklist Smp#: 25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

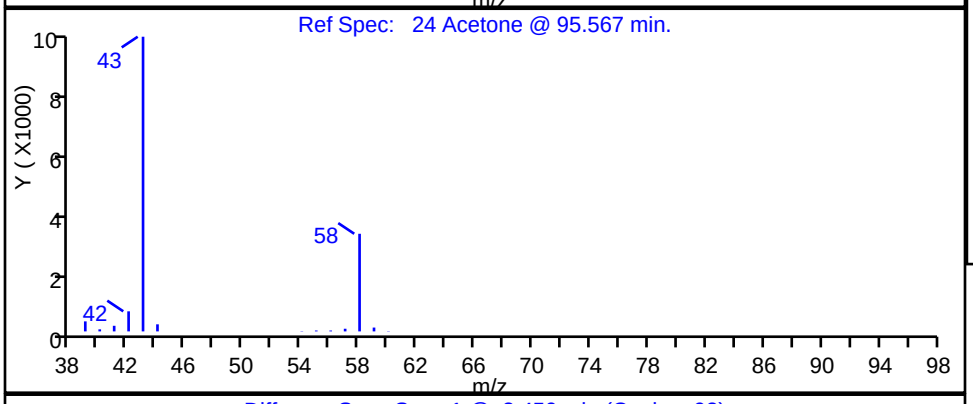
24 Acetone, CAS: 67-64-1

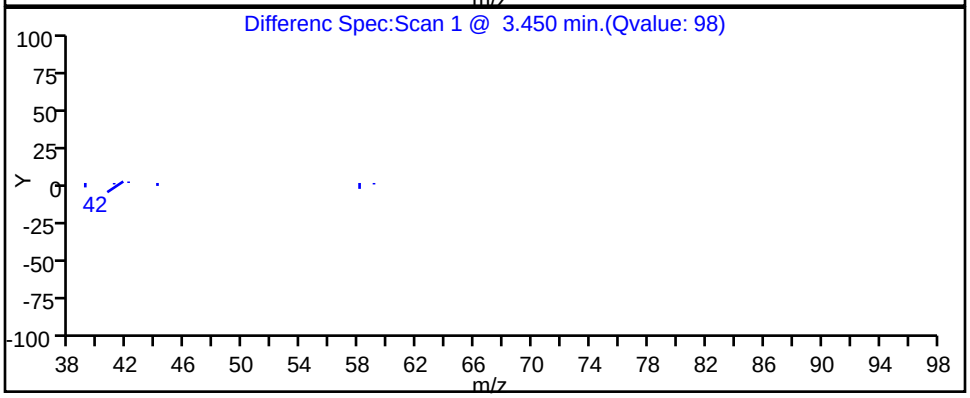










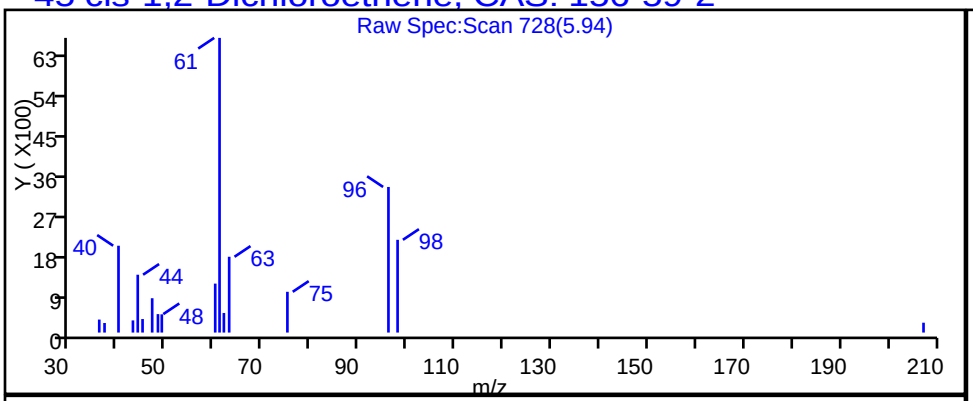


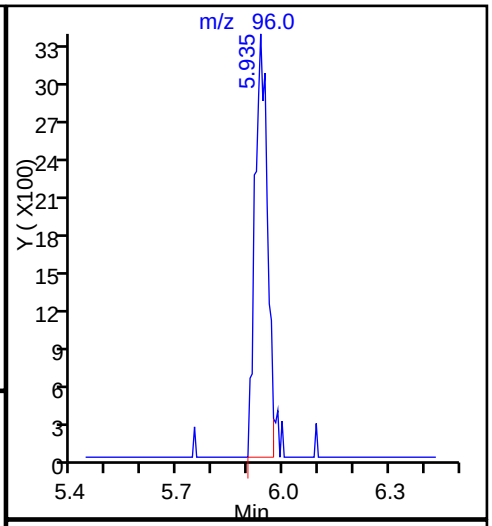
Report Date: 25-Oct-2016 08:07:08 Chrom Revision: 2.2 17-Oct-2016 09:27:18

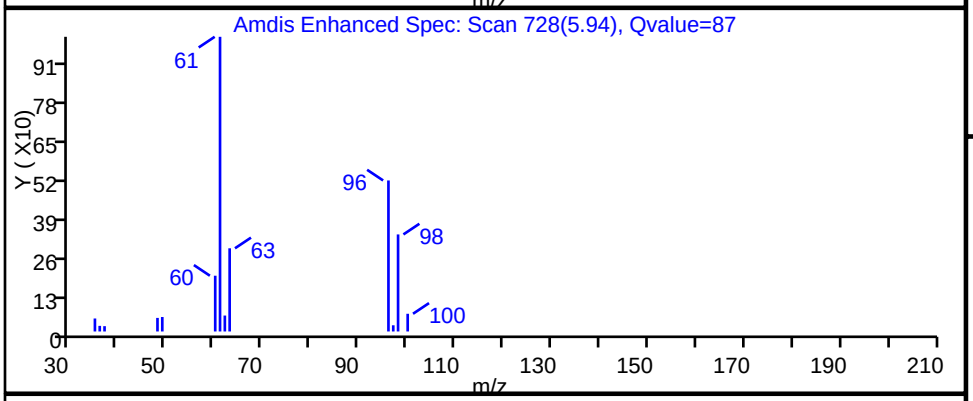
TestAmerica Pittsburgh

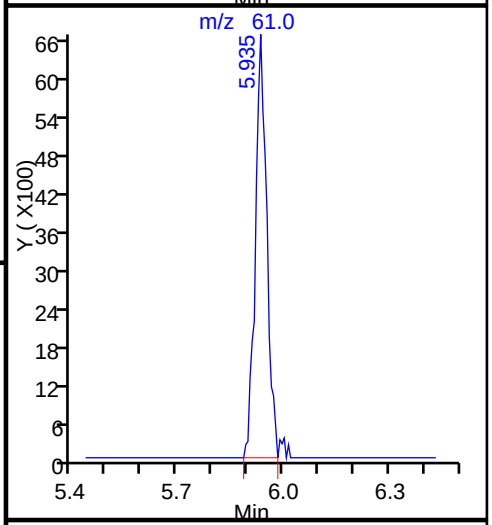
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024025.D		
Injection Date:	24-Oct-2016 20:24:30	Instrument ID:	CHHP5
Lims ID:	180-59864-A-6	Lab Sample ID:	180-59864-6
Client ID:	HD-MW-142D-0/1-0		
Operator ID:	001562	ALS Bottle#:	24 Worklist Smp#: 25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

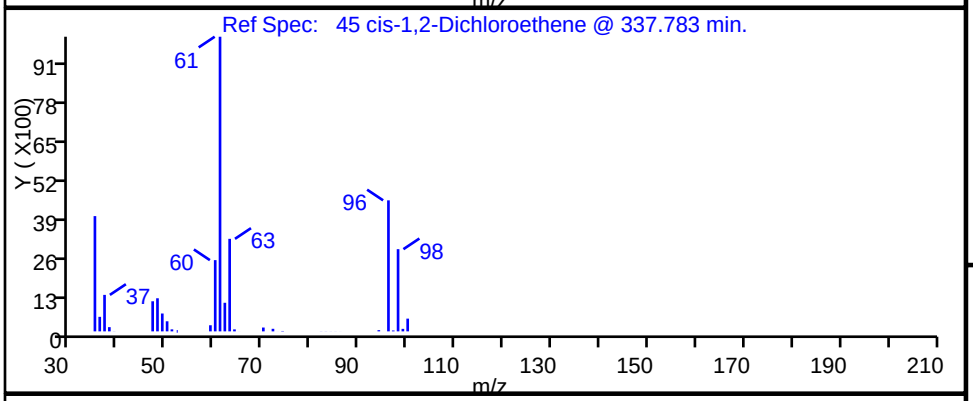
45 cis-1,2-Dichloroethene, CAS: 156-59-2

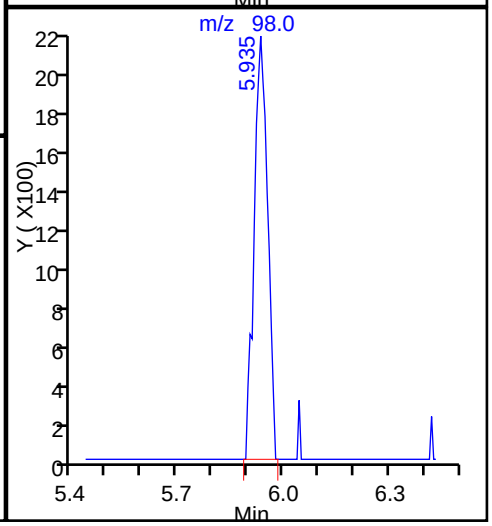


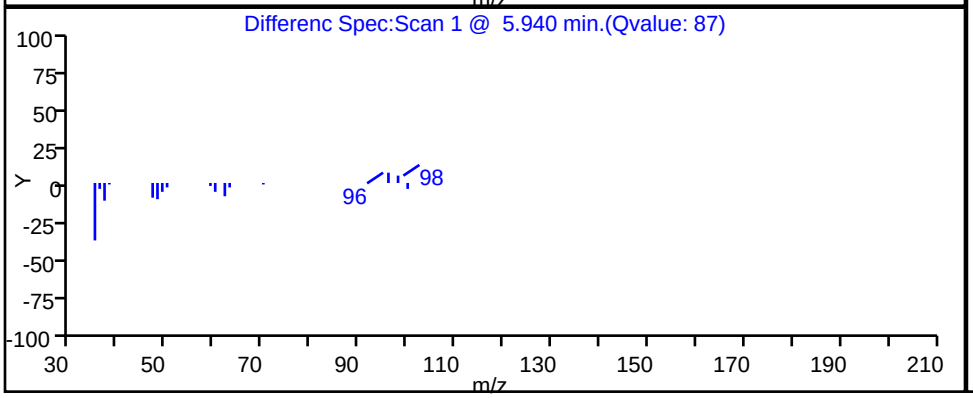












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

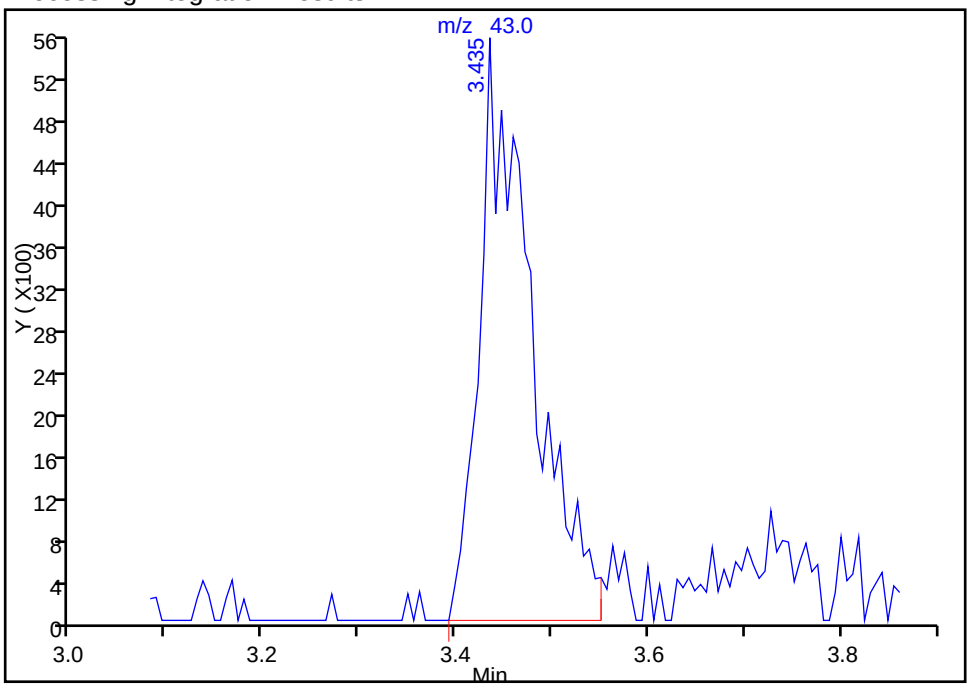
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024025.D				
Injection Date:	24-Oct-2016 20:24:30	Instrument ID:	CHHP5		
Lims ID:	180-59864-A-6	Lab Sample ID:	180-59864-6		
Client ID:	HD-MW-142D-0/1-0				
Operator ID:	001562	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

Signal: 1

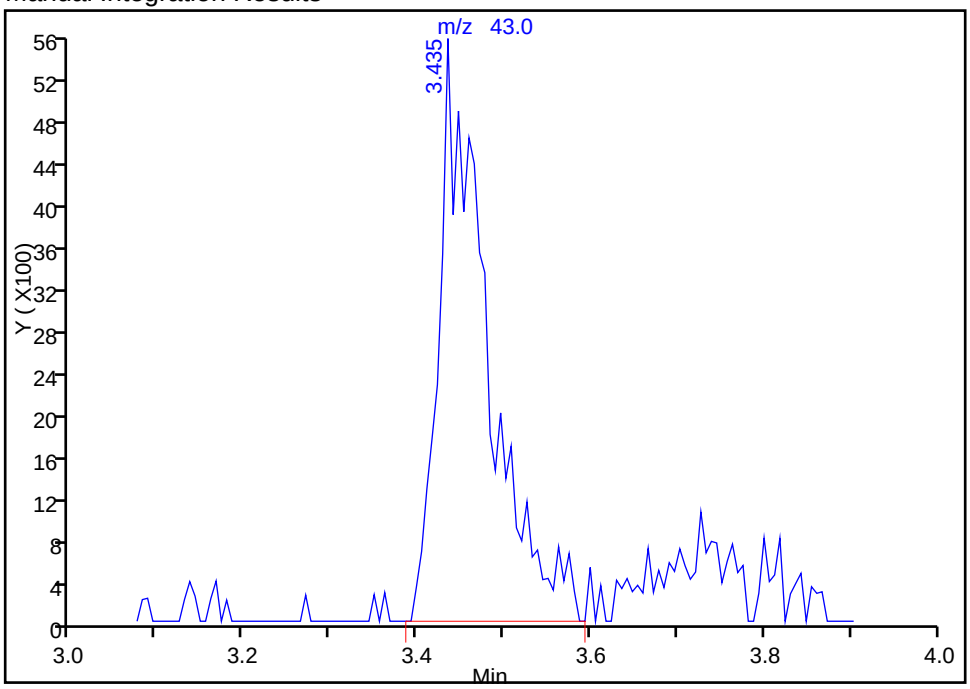
Processing Integration Results

RT: 3.44
Area: 20837
Amount: 23.842996
Amount Units: ng



Manual Integration Results

RT: 3.44
Area: 21686
Amount: 24.814475
Amount Units: ng



Reviewer: fergusond, 25-Oct-2016 08:07:08

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

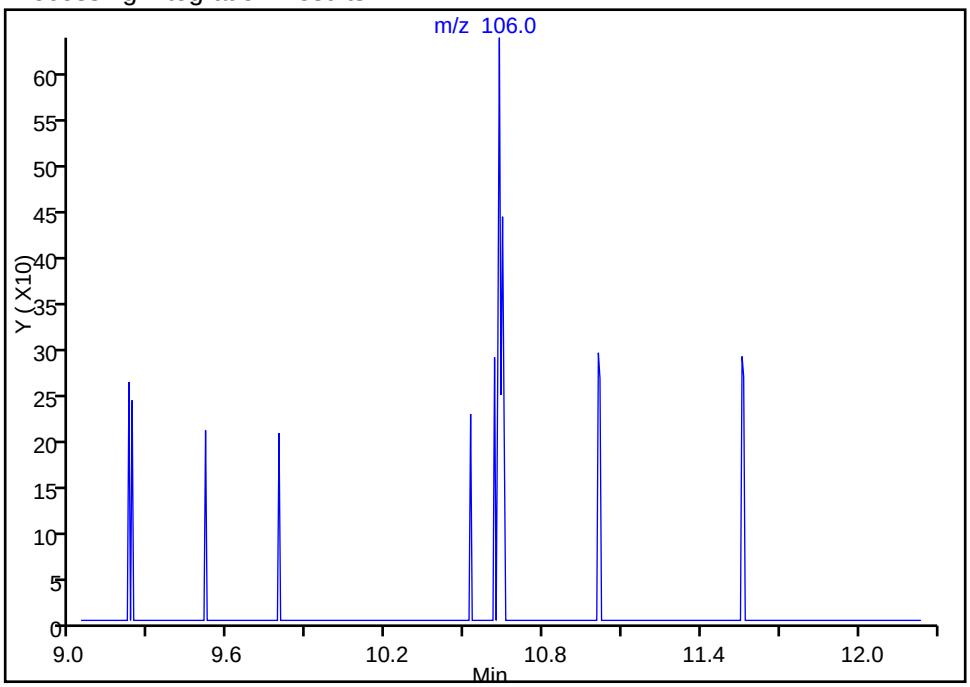
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024025.D				
Injection Date:	24-Oct-2016 20:24:30	Instrument ID:	CHHP5		
Lims ID:	180-59864-A-6	Lab Sample ID:	180-59864-6		
Client ID:	HD-MW-142D-0/1-0				
Operator ID:	001562	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

91 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

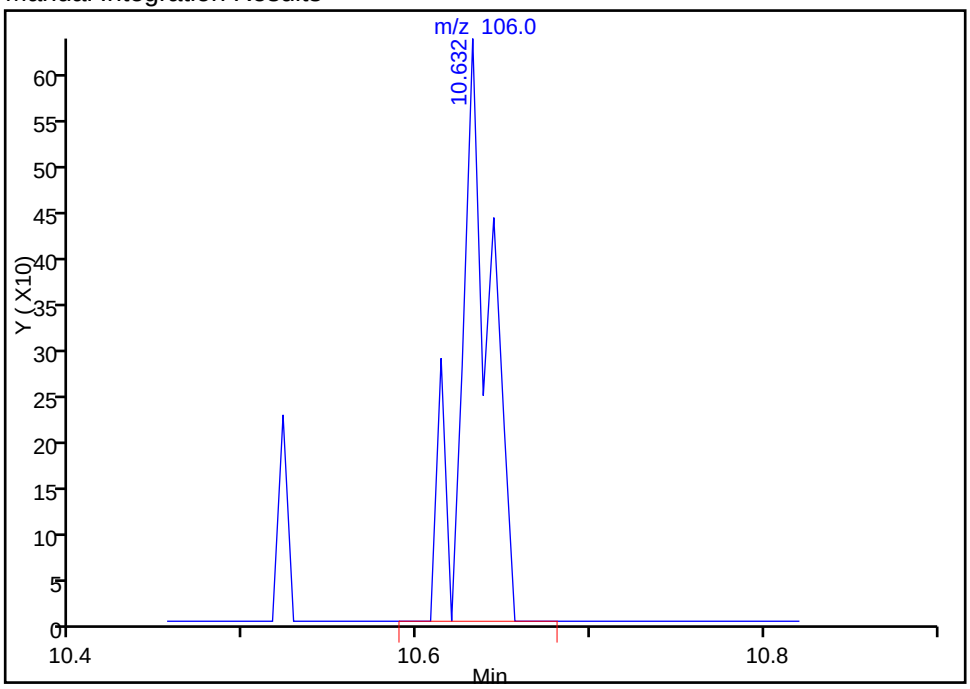
Not Detected
Expected RT: 10.64

Processing Integration Results



Manual Integration Results

RT: 10.63
Area: 768
Amount: 0.212648
Amount Units: ng



Reviewer: fergusond, 25-Oct-2016 08:07:08
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: HD-MW-20M-0/1-0 | Lab Sample ID: 180-59864-7

Matrix: Water | Lab File ID: 51024028.D

Analysis Method: 8260C | Date Collected: 10/14/2016 08:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/24/2016 21:36

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.: 192156 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	2.7	J	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	0.38	J	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	4.6		1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	0.52	J	1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: HD-MW-20M-0/1-0 | Lab Sample ID: 180-59864-7

Matrix: Water | Lab File ID: 51024028.D

Analysis Method: 8260C | Date Collected: 10/14/2016 08:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/24/2016 21:36

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.: 192156 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		72-134
2037-26-5	Toluene-d8 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	108		72-120
1868-53-7	Dibromofluoromethane (Surr)	102		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024028.D
Lims ID: 180-59864-C-7
Client ID: HD-MW-20M-0/1-0
Sample Type: Client
Inject. Date: 24-Oct-2016 21:36:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014019-028
Misc. Info.: 180-59864-C-7
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 25-Oct-2016 08:11:11 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: fergusond Date: 25-Oct-2016 08:11:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.266	4.272	-0.006	0	121010	1000.0	
* 2 Fluorobenzene (IS)	96	7.272	7.271	0.001	96	334799	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	91	82332	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.716	12.722	-0.006	97	133656	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.548	6.547	0.001	93	81983	51.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.919	6.918	0.001	0	118735	51.3	
$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	96	315820	50.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	84	135294	53.9	
12 Chloromethane	50		1.766				ND	
13 Vinyl chloride	62		1.912				ND	
15 Bromomethane	94		2.234				ND	
16 Chloroethane	64		2.374				ND	
22 1,1-Dichloroethene	96		3.323				ND	
24 Acetone	43	3.445	3.445	0.000	90	11776	13.7	
26 Carbon disulfide	76		3.615				ND	
31 Methylene Chloride	84	4.114	4.126	-0.012	28	1384	0.6534	
33 Acrylonitrile	53		4.509				ND	
34 trans-1,2-Dichloroethene	96		4.552				ND	
35 Methyl tert-butyl ether	73		4.570				ND	
37 1,1-Dichloroethane	63		5.185				ND	
45 cis-1,2-Dichloroethene	96		5.927				ND	
46 2-Butanone (MEK)	43		5.945				ND	
49 Chlorobromomethane	128		6.219				ND	
52 Chloroform	83	6.365	6.359	0.006	93	6212	1.90	
53 1,1,1-Trichloroethane	97		6.517				ND	
56 Carbon tetrachloride	117		6.693				ND	
58 Benzene	78		6.924				ND	
59 1,2-Dichloroethane	62		7.004				ND	
64 Trichloroethene	130	7.661	7.661	0.000	95	43277	23.1	
67 1,2-Dichloropropane	63		7.934				ND	
70 1,4-Dioxane	88		8.019				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.214				ND	
74 cis-1,3-Dichloropropene	75		8.658				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.816				ND	
76 Toluene	91		8.993				ND	
77 trans-1,3-Dichloropropene	75		9.236				ND	
79 1,1,2-Trichloroethane	97		9.431				ND	
80 Tetrachloroethene	164	9.498	9.504	-0.006	89	3830	2.58	
82 2-Hexanone	43		9.650				ND	
84 Chlorodibromomethane	129		9.802				ND	
85 Ethylene Dibromide	107		9.917				ND	
87 Chlorobenzene	112		10.404				ND	
89 1,1,1,2-Tetrachloroethane	131		10.495				ND	
90 Ethylbenzene	106		10.502				ND	
91 m-Xylene & p-Xylene	106		10.635				ND	
92 o-Xylene	106		11.013				ND	
93 Styrene	104		11.037				ND	
94 Bromoform	173		11.219				ND	
99 1,1,2,2-Tetrachloroethane	83		11.700				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

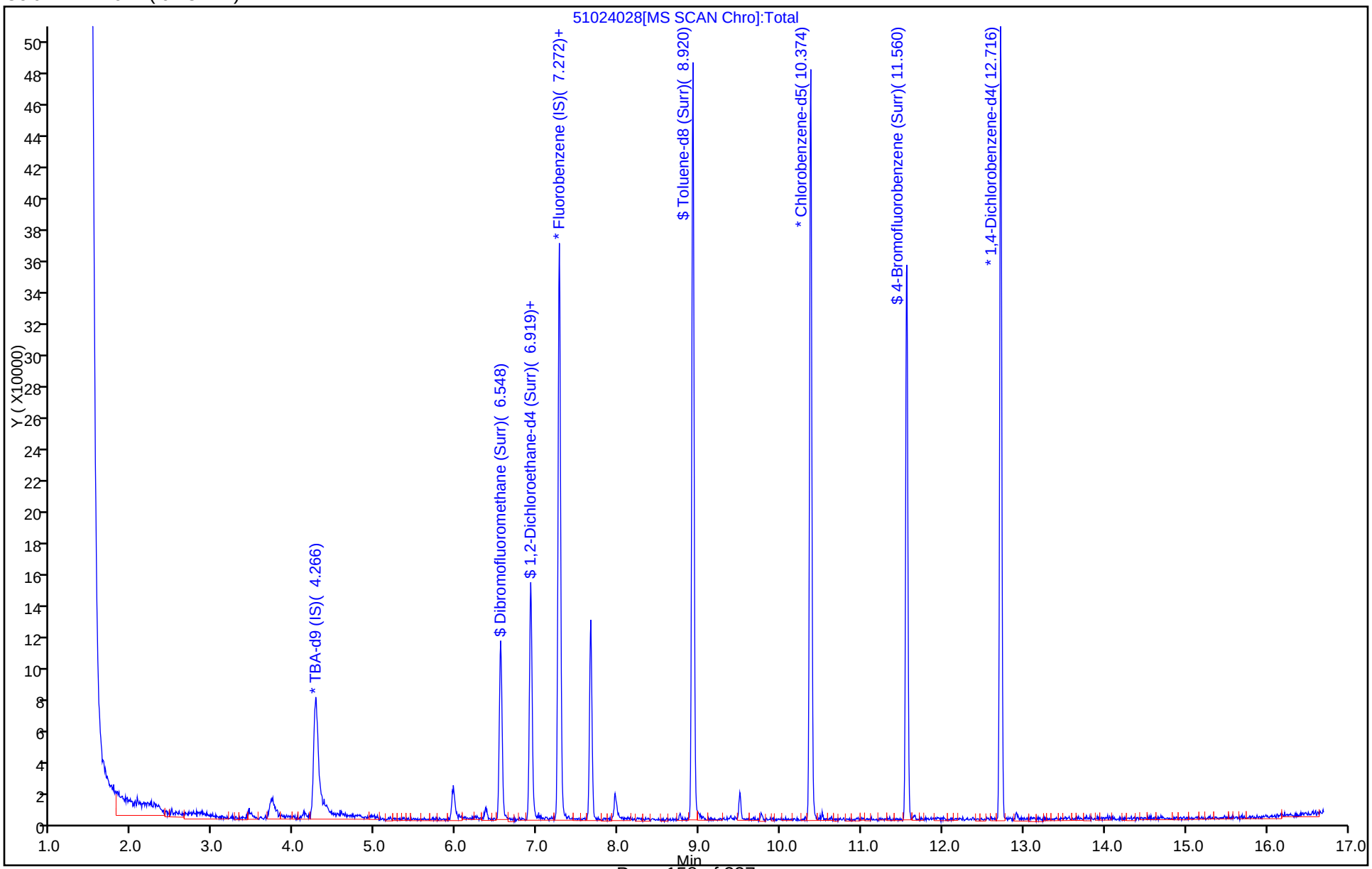
Report Date: 25-Oct-2016 08:11:12 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024028.D

Injection Date:	24-Oct-2016 21:36:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-59864-C-7	Lab Sample ID:	180-59864-7	Worklist Smp#:	28
Client ID:	HD-MW-20M-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
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024028.D
Lims ID: 180-59864-C-7
Client ID: HD-MW-20M-0/1-0
Sample Type: Client
Inject. Date: 24-Oct-2016 21:36:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014019-028
Misc. Info.: 180-59864-C-7
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 25-Oct-2016 08:11:11 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: fergusond Date: 25-Oct-2016 08:11:11

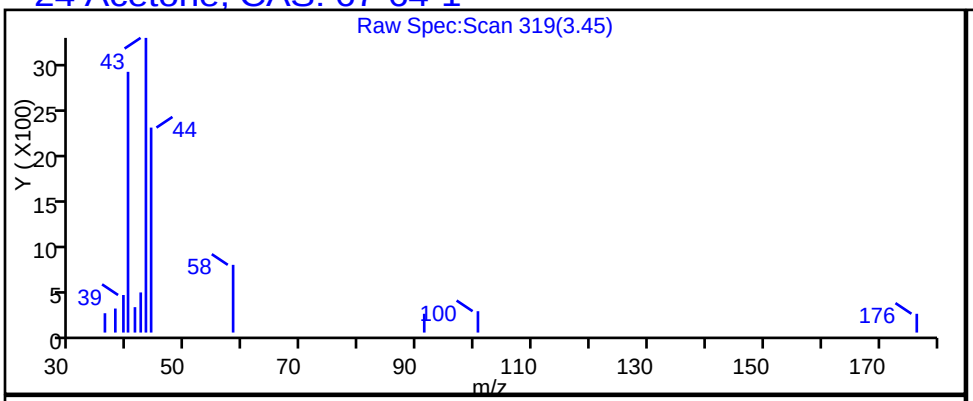
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.2	102.36
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	51.3	102.69
$ 7 Toluene-d8 (Surr)	50.0	50.8	101.65
$ 8 4-Bromofluorobenzene (Surr)	50.0	53.9	107.71

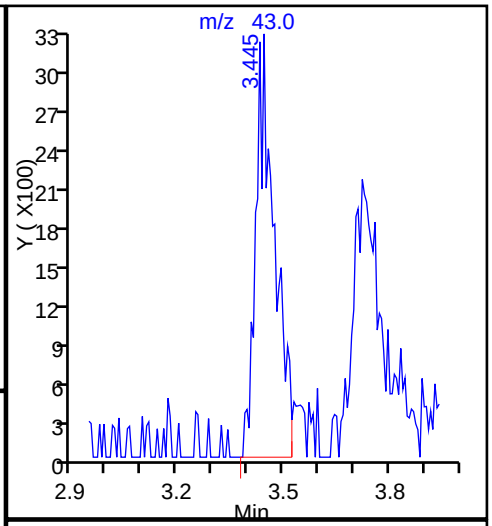
Report Date: 25-Oct-2016 08:11:12 Chrom Revision: 2.2 17-Oct-2016 09:27:18

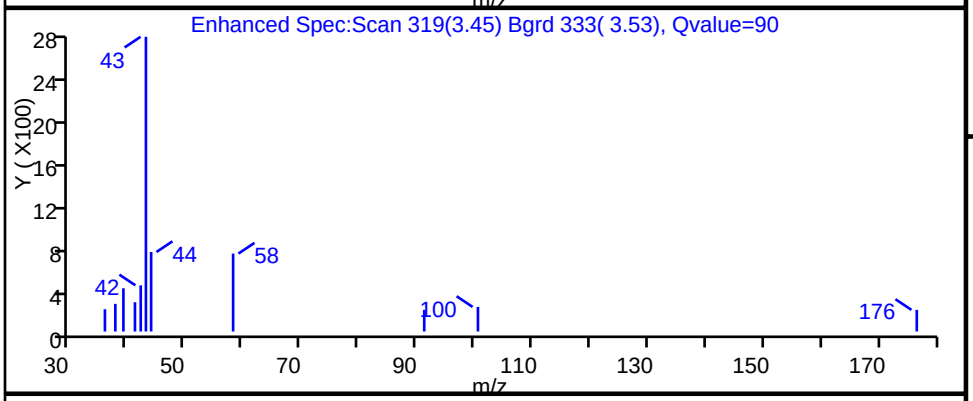
TestAmerica Pittsburgh

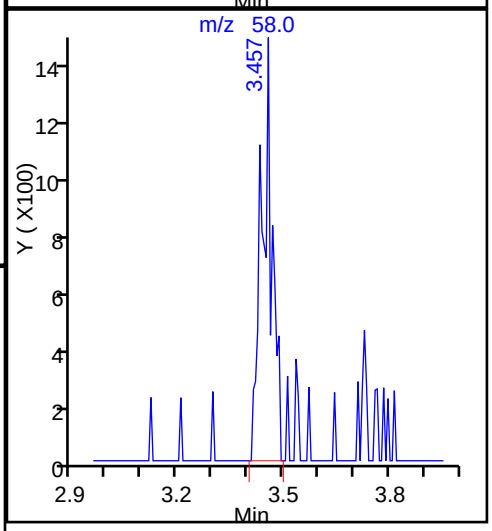
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024028.D				
Injection Date:	24-Oct-2016 21:36:30	Instrument ID:	CHHP5		
Lims ID:	180-59864-C-7	Lab Sample ID:	180-59864-7		
Client ID:	HD-MW-20M-0/1-0				
Operator ID:	001562	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

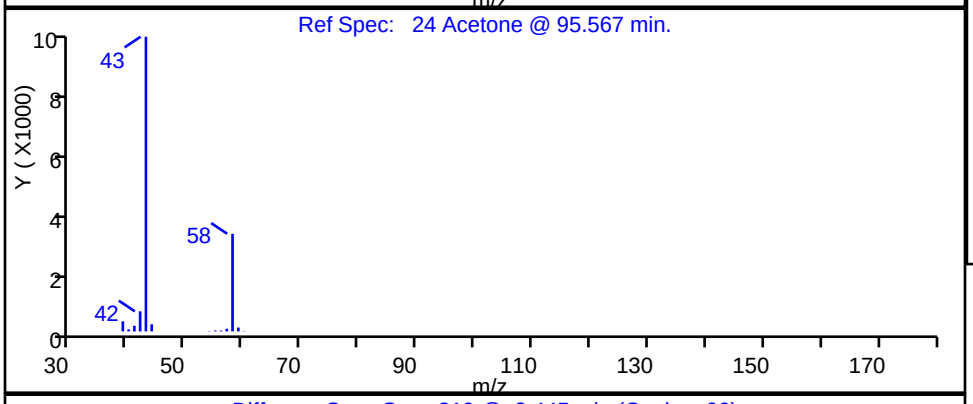
24 Acetone, CAS: 67-64-1

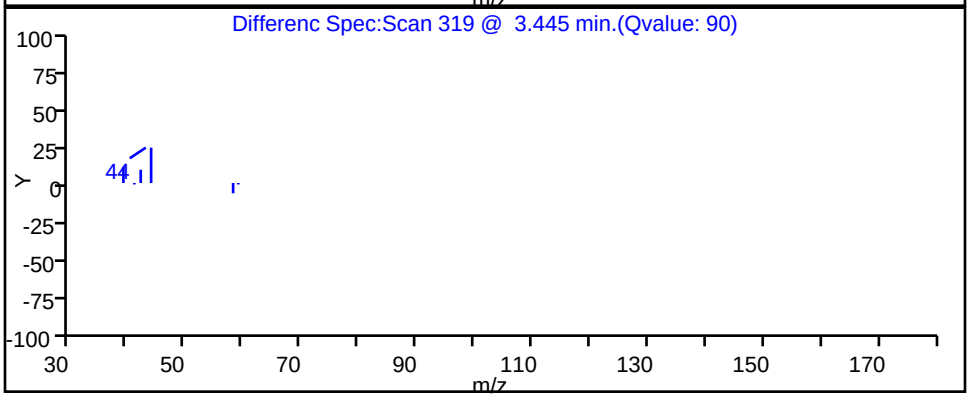










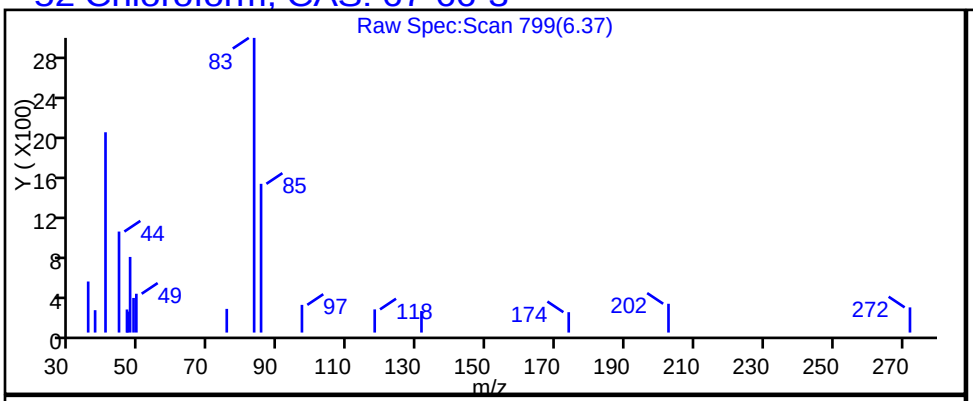


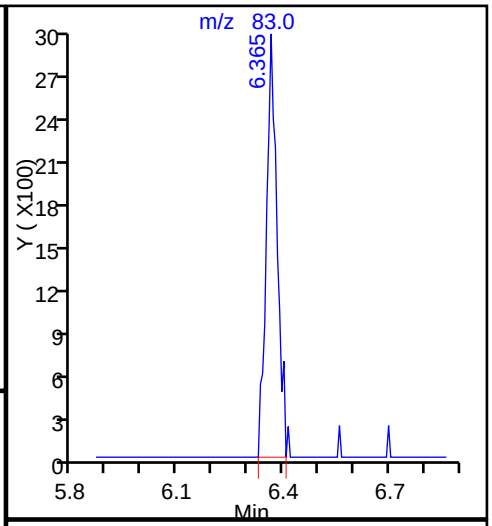
Report Date: 25-Oct-2016 08:11:12 Chrom Revision: 2.2 17-Oct-2016 09:27:18

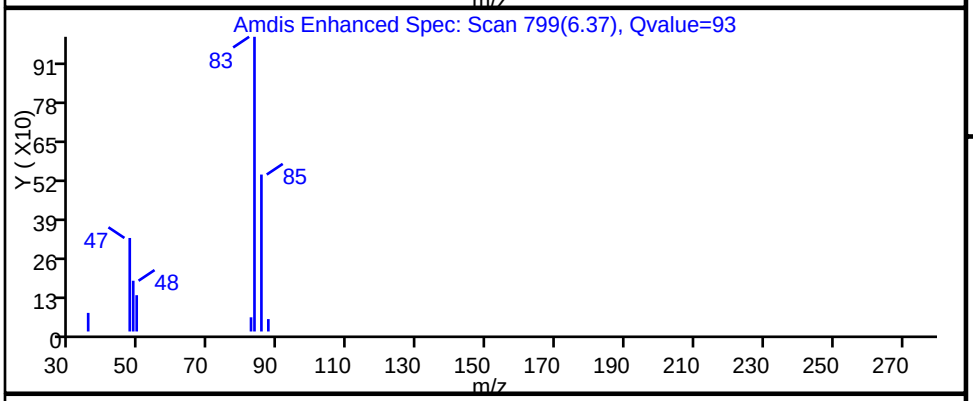
TestAmerica Pittsburgh

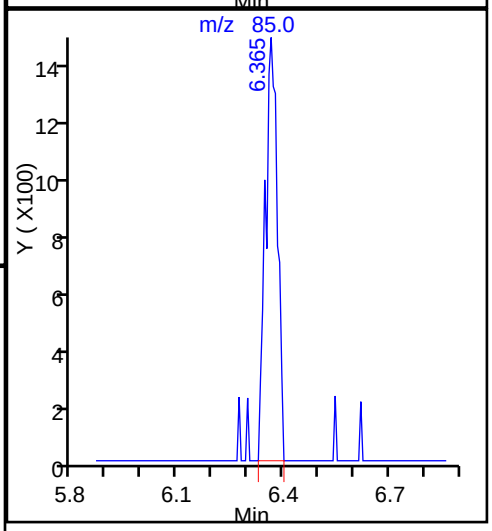
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024028.D		
Injection Date:	24-Oct-2016 21:36:30	Instrument ID:	CHHP5
Lims ID:	180-59864-C-7	Lab Sample ID:	180-59864-7
Client ID:	HD-MW-20M-0/1-0		
Operator ID:	001562	ALS Bottle#:	27 Worklist Smp#: 28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

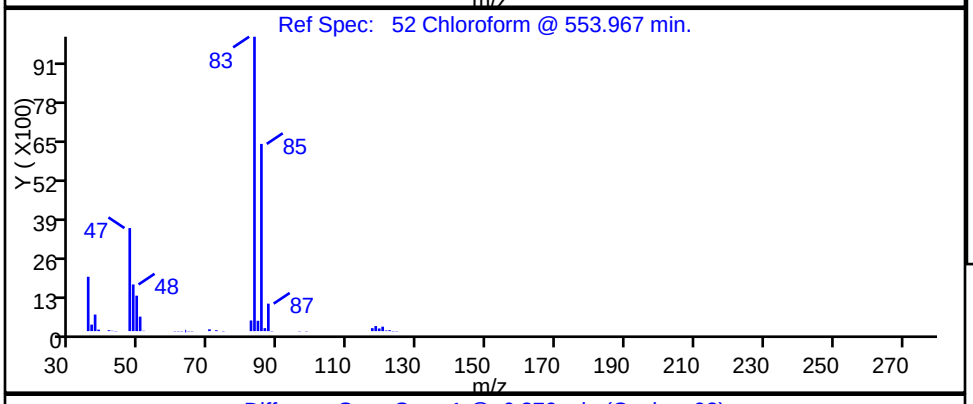
52 Chloroform, CAS: 67-66-3

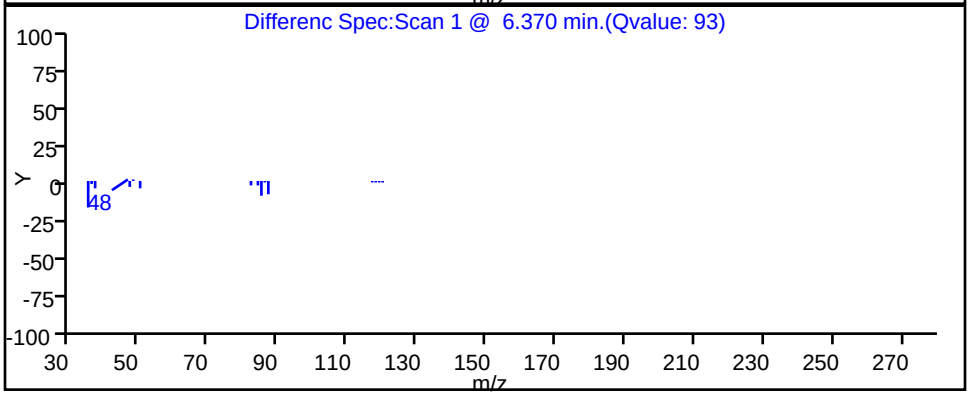












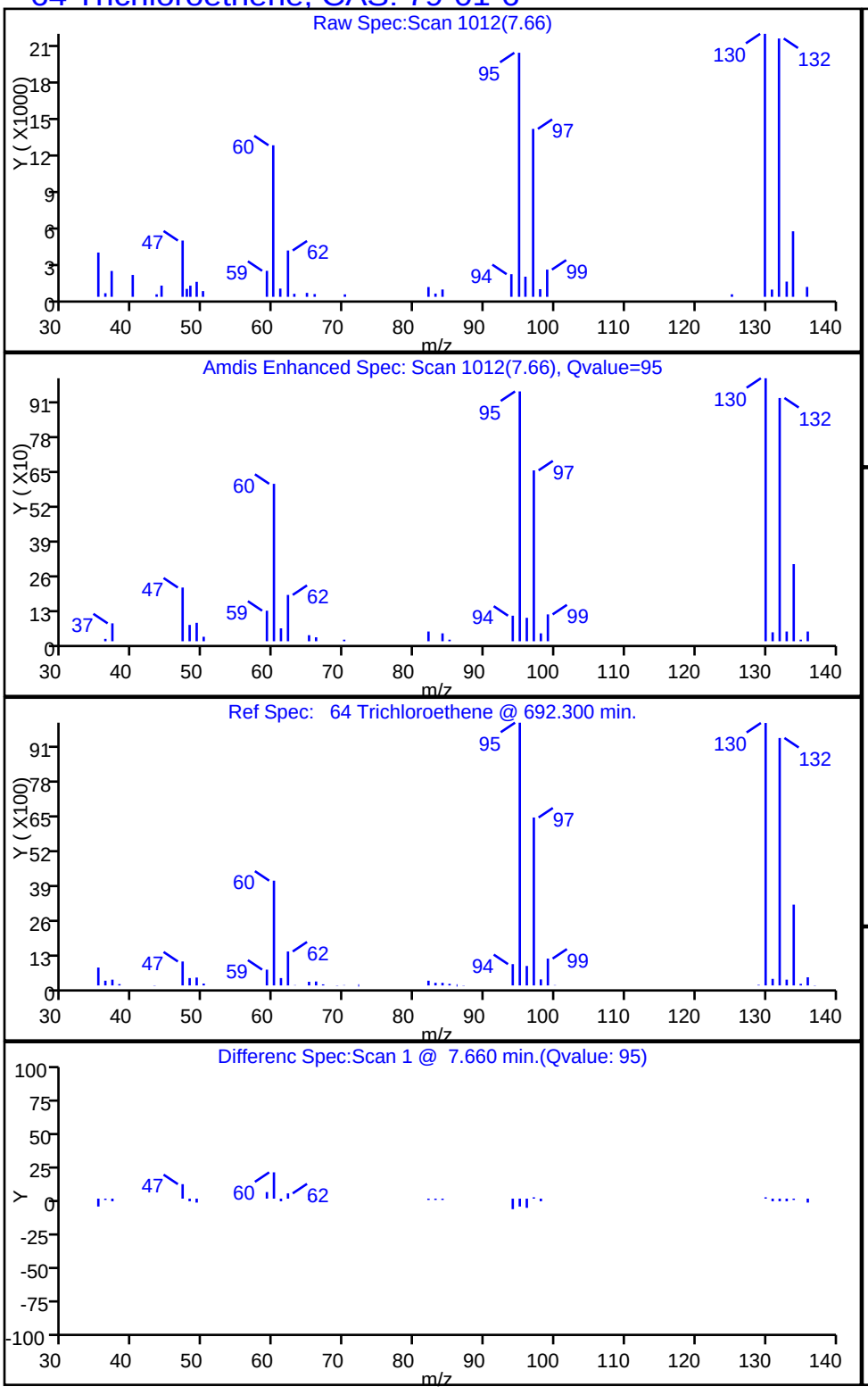
Report Date: 25-Oct-2016 08:11:12 Chrom Revision: 2.2 17-Oct-2016 09:27:18

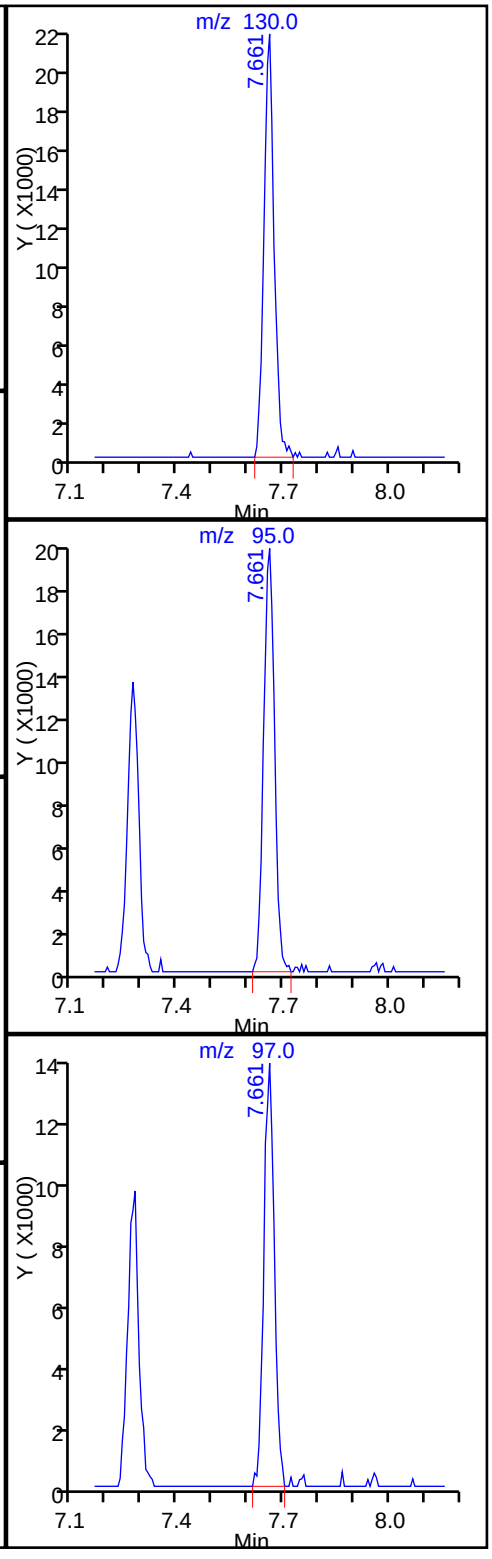
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024028.D

Injection Date:	24-Oct-2016 21:36:30	Instrument ID:	CHHP5		
Lims ID:	180-59864-C-7	Lab Sample ID:	180-59864-7		
Client ID:	HD-MW-20M-0/1-0				
Operator ID:	001562	ALS Bottle#:	27	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





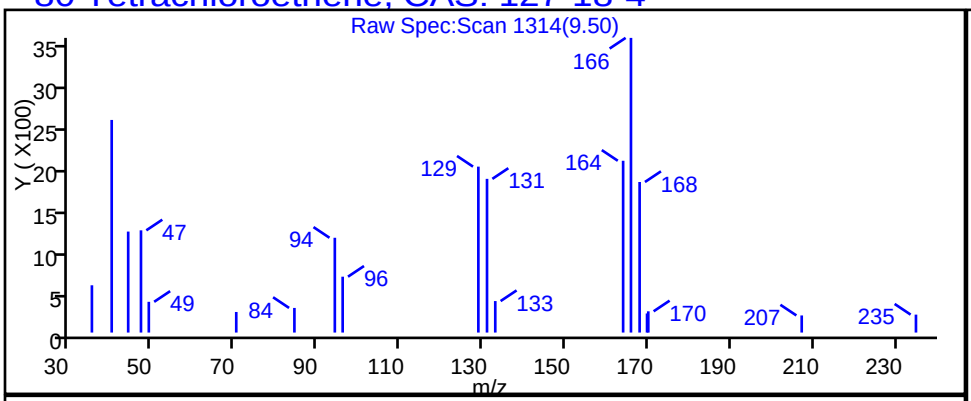
Report Date: 25-Oct-2016 08:11:12 Chrom Revision: 2.2 17-Oct-2016 09:27:18

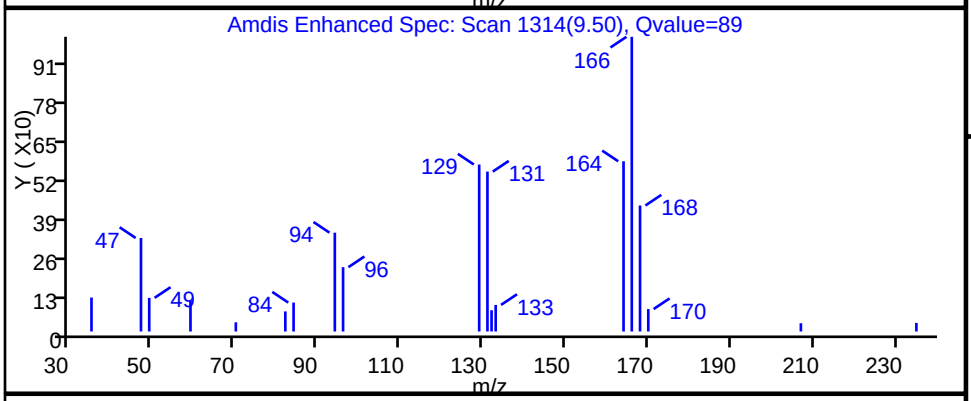
TestAmerica Pittsburgh

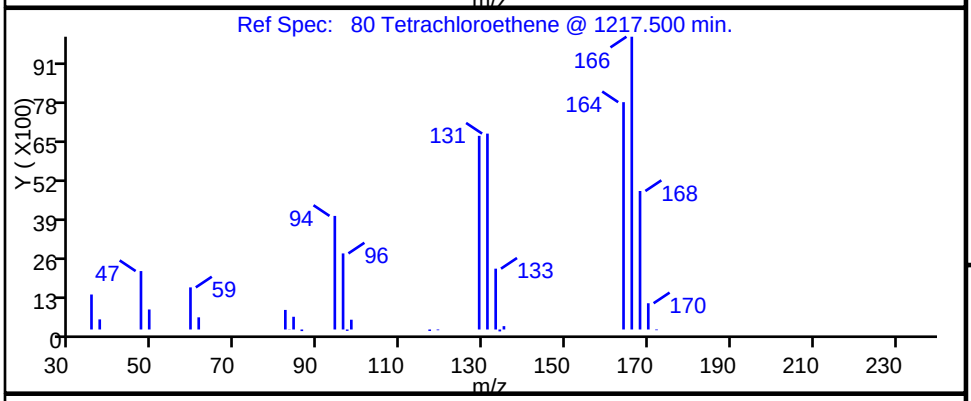
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024028.D

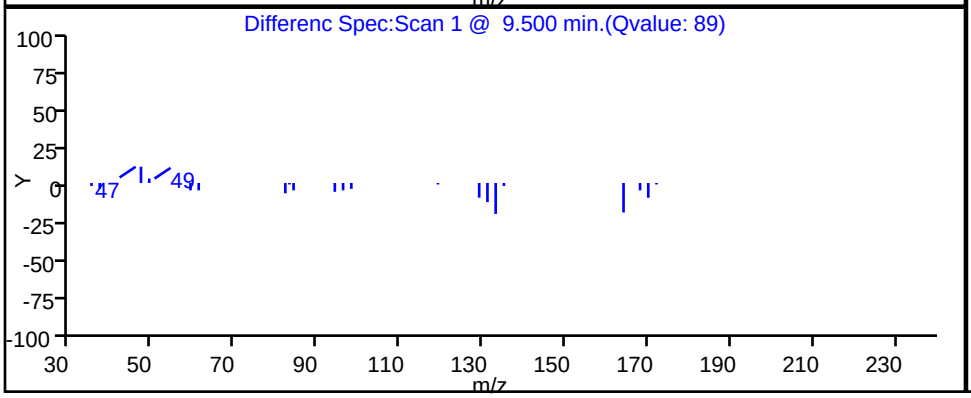
Injection Date:	24-Oct-2016 21:36:30	Instrument ID:	CHHP5		
Lims ID:	180-59864-C-7	Lab Sample ID:	180-59864-7		
Client ID:	HD-MW-20M-0/1-0				
Operator ID:	001562	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

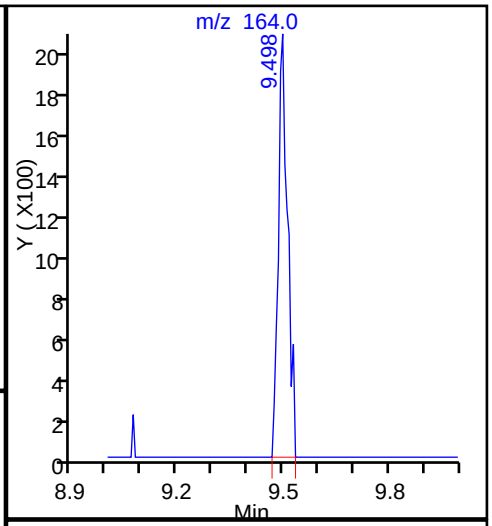
80 Tetrachloroethene, CAS: 127-18-4

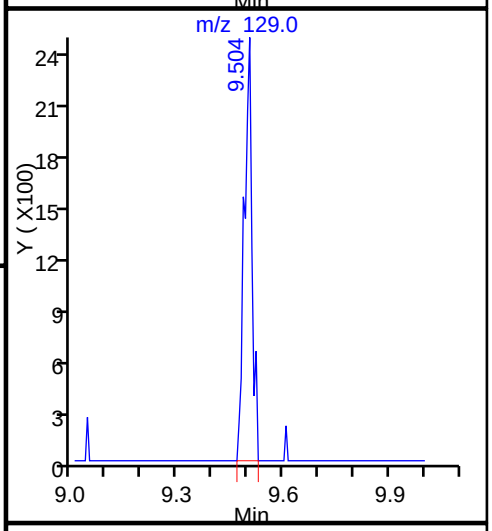


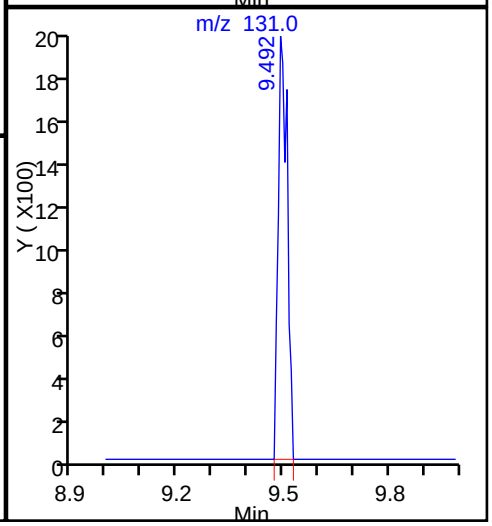












FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-192047/3	51022003.D
Level 2	IC 180-192047/4	51022004.D
Level 3	ICIS 180-192047/5	51022005.D
Level 4	IC 180-192047/6	51022006.D
Level 5	IC 180-192047/7	51022007.D
Level 6	IC 180-192047/8	51022008.D
Level 7	IC 180-192047/9	51022009.D
Level 8	IC 180-192047/10	51022010.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3396 0.2989	0.2868 0.2937	0.2917 0.2822	0.2979	0.2871	Ave		0.2972			0.1000	6.1		20.0			
Chloromethane	0.6342 0.5716	0.5501 0.5684	0.5598 0.5533	0.6068	0.5705	Ave		0.5769			0.1000	5.0		20.0			
Vinyl chloride	0.4349 0.3874	0.3643 0.3864	0.3705 0.3653	0.3847	0.3648	Ave		0.3823			0.1000	6.2		20.0			
1,3-Butadiene	0.7121 0.5487	0.5383 0.5382	0.5514 0.5289	0.5682	0.5357	Ave		0.5652			0.0100	10.7		20.0			
Bromomethane	0.1150 0.0890	0.0961 0.0936	0.0962 0.0792	0.1057	0.0888	Ave		0.0955			0.0500	11.5		20.0			
Chloroethane	0.1982 0.1648	0.1722 0.1581	0.1780 0.1388	0.1829	0.1707	Ave		0.1705			0.0500	10.3		20.0			
Dichlorofluoromethane	0.4658 0.4066	0.3780 0.4041	0.3902 0.3822	0.4435	0.3901	Ave		0.4075			0.0100	7.7		20.0			
Trichlorofluoromethane	0.3453 0.3244	0.3056 0.3222	0.3292 0.3061	0.3289	0.3235	Ave		0.3231			0.1000	4.0		20.0			
Ethyl ether	0.3264 0.3146	0.3181 0.3215	0.3217 0.3002	0.3460	0.3219	Ave		0.3213			0.0100	4.0		20.0			
Acrolein	0.0761 0.0756	0.0700 0.0757	0.0753 0.0776	0.0816	0.0718	Ave		0.0755			0.0100	4.6		20.0			
1,1-Dichloroethene	0.2754 0.2606	0.2172 0.2610	0.2469 0.2499	0.2524	0.2576	Ave		0.2526			0.1000	6.6		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.3118 0.2758	0.2556 0.2716	0.2697 0.2710	0.2852	0.2625	Ave		0.2754			0.1000	6.2		20.0			
Acetone	0.1398 0.1314	0.1300 0.1317	0.1226 0.1275	0.1255	0.1212	Ave		0.1287			0.0500	4.6		20.0			
Iodomethane	0.3667 0.3752	0.3603 0.3850	0.3729 0.3661	0.4050	0.3751	Ave		0.3758			0.0100	3.7		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.: 180-59864-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.7277 0.6790	0.5932 0.6842	0.6293 0.6615	0.6792	0.6369	Ave		0.6614			0.1000	6.2		20.0			
Allyl chloride	0.1618 0.1619	0.1327 0.1688	0.1507 0.1631	0.1574	0.1596	Ave		0.1570			0.0100	7.1		20.0			
Methyl acetate	0.3415 0.3299	0.3139 0.3375	0.3202 0.3263	0.3560	0.3391	Ave		0.3331			0.1000	4.0		20.0			
Methylene Chloride	0.4428 0.2898	0.2966 0.2989	0.2962 0.2846	0.3219	0.2998	Ave		0.3163			0.1000	16.5		20.0			
tert-Butyl alcohol	1.2280 1.1962	1.1839 1.1425	1.0694 1.3883	1.1975	1.4199	Ave		1.2282			0.0100	9.7		20.0			
Acrylonitrile	0.1591 0.1614	0.1523 0.1626	0.1534 0.1570	0.1682	0.1597	Ave		0.1592			0.0100	3.2		20.0			
trans-1,2-Dichloroethene	0.2879 0.2754	0.2586 0.2774	0.2754 0.2709	0.2859	0.2705	Ave		0.2752			0.1000	3.4		20.0			
Methyl tert-butyl ether	0.7186 0.7197	0.6489 0.7564	0.6960 0.7036	0.7593	0.7169	Ave		0.7149			0.1000	4.9		20.0			
Hexane	0.5903 0.5908	0.5055 0.5964	0.5817 0.5821	0.5902	0.5681	Ave		0.5756			0.0100	5.1		20.0			
1,1-Dichloroethane	0.6483 0.6049	0.5845 0.6244	0.6067 0.5978	0.6400	0.6084	Ave		0.6144			0.2000	3.5		20.0			
Vinyl acetate	0.6046 0.7435	0.5972 0.7342	0.6801 0.7000	0.7176	0.6815	Ave		0.6823			0.0100	8.1		20.0			
2,2-Dichloropropane	0.0559 0.0521	0.0453 0.0527	0.0480 0.0531	0.0518	0.0507	Ave		0.0512			0.0100	6.4		20.0			
cis-1,2-Dichloroethene	0.3118 0.3036	0.2848 0.3075	0.2987 0.2967	0.3289	0.2991	Ave		0.3039			0.1000	4.3		20.0			
2-Butanone (MEK)	0.1913 0.2076	0.2012 0.2118	0.1937 0.2039	0.2199	0.2108	Ave		0.2050			0.0500	4.7		20.0			
Bromochloromethane	0.1292 0.1318	0.1176 0.1319	0.1276 0.1260	0.1337	0.1289	Ave		0.1283			0.0100	3.9		20.0			
Tetrahydrofuran	0.1665 0.1401	0.1187 0.1421	0.1336 0.1384	0.1498	0.1342	Ave		0.1404			0.0100	9.8		20.0			
Chloroform	0.5274 0.4762	0.4633 0.4870	0.4858 0.4686	0.5191	0.4792	Ave		0.4883			0.2000	4.7		20.0			
1,1,1-Trichloroethane	0.3693 0.3496	0.3168 0.3541	0.3350 0.3368	0.3552	0.3322	Ave		0.3436			0.1000	4.8		20.0			
Cyclohexane	0.8084 0.7701	0.6800 0.7668	0.7439 0.7546	0.7709	0.7423	Ave		0.7546			0.1000	4.9		20.0			
Carbon tetrachloride	0.3014 0.2994	0.2607 0.3031	0.2727 0.2877	0.2954	0.2808	Ave		0.2876			0.1000	5.3		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.: 180-59864-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	0.4299 0.4124	0.3740 0.4160	0.3936 0.4046	0.4117	0.4025	Ave		0.4056			0.0100	4.1		20.0			
Benzene	1.2535 1.1427	1.0908 1.1701	1.1744 1.1167	1.2329	1.1615	Ave		1.1678			0.5000	4.7		20.0			
Isobutyl alcohol	0.0082 0.0106	0.0082 0.0106	0.0086 0.0108	0.0101	0.0102	Ave		0.0097		*	0.0100	11.8		20.0			
1,2-Dichloroethane	0.4615 0.4331	0.4170 0.4395	0.4378 0.4196	0.4717	0.4332	Ave		0.4392			0.1000	4.3		20.0			
n-Heptane	0.6083 0.5839	0.5082 0.5788	0.5598 0.5772	0.5692	0.5456	Ave		0.5664			0.0100	5.3		20.0			
Trichloroethene	0.2951 0.2802	0.2609 0.2839	0.2784 0.2770	0.2862	0.2753	Ave		0.2796			0.2000	3.5		20.0			
Methylcyclohexane	0.4646 0.5024	0.4142 0.5093	0.4769 0.4895	0.5061	0.4777	Ave		0.4801			0.1000	6.4		20.0			
1,2-Dichloropropane	0.3849 0.3449	0.3181 0.3575	0.3386 0.3457	0.3645	0.3525	Ave		0.3508			0.1000	5.6		20.0			
Dibromomethane	0.1355 0.1464	0.1397 0.1568	0.1456 0.1470	0.1642	0.1534	Ave		0.1486			0.0100	6.2		20.0			
1,4-Dioxane	0.0025 0.0029	0.0024 0.0029	0.0026 0.0031	0.0031	0.0029	Ave		0.0028		*	0.0100	9.5		20.0			
Bromodichloromethane	0.3390 0.3211	0.2844 0.3368	0.3185 0.3202	0.3417	0.3147	Ave		0.3221			0.2000	5.7		20.0			
2-Chloroethyl vinyl ether	0.1520 0.1868	0.1636 0.2012	0.1847 0.1926	0.1980	0.1927	Ave		0.1839			0.0100	9.4		20.0			
cis-1,3-Dichloropropene	0.3434 0.4049	0.3244 0.4217	0.3659 0.4042	0.4020	0.3836	Ave		0.3813			0.2000	8.9		20.0			
4-Methyl-2-pentanone (MIBK)	1.3337 1.5938	1.4333 1.5432	1.5183 1.5597	1.6973	1.5781	Ave		1.5322			0.1000	7.1		20.0			
Toluene	5.2711 4.4434	4.6335 4.2134	4.5477 4.1515	4.9189	4.5306	Ave		4.5888			0.4000	8.0		20.0			
trans-1,3-Dichloropropene	1.0919 1.2314	1.0010 1.2291	1.0768 1.2390	1.2405	1.1978	Ave		1.1634			0.1000	8.0		20.0			
Ethyl methacrylate	1.0004 1.3464	1.0798 1.3138	1.1802 1.3430	1.3761	1.3357	Ave		1.2469			0.0100	11.4		20.0			
1,1,2-Trichloroethane	0.9042 0.8392	0.9140 0.8083	0.8366 0.8223	0.9083	0.8707	Ave		0.8630			0.1000	4.9		20.0			
Tetrachloroethene	1.0441 0.8859	0.8849 0.8441	0.8770 0.8511	0.9540	0.8849	Ave		0.9033			0.2000	7.3		20.0			
1,3-Dichloropropane	1.7938 1.6308	1.6509 1.5905	1.6277 1.5764	1.7695	1.6617	Ave		1.6627			0.0100	4.7		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.9625 1.2204	1.0823 1.1836	1.1235 1.1903	1.2807	1.2516	Ave		1.1618			0.1000	8.9		20.0			
Dibromochloromethane	0.7827 0.7972	0.7732 0.7711	0.7522 0.7692	0.8430	0.7806	Ave		0.7837			0.1000	3.5		20.0			
1,2-Dibromoethane (EDB)	0.9879 0.8808	0.8848 0.8541	0.8553 0.8552	0.9460	0.8890	Ave		0.8942			0.1000	5.4		20.0			
3-Chlorobenzotrifluoride	1.9157 1.7261	1.6827 1.6878	1.6583 1.5672	1.8126	1.6624	Ave		1.7141			0.0100	6.2		20.0			
Chlorobenzene	3.4137 2.9353	2.9493 2.8119	2.9482 2.7968	3.2426	2.9840	Ave		3.0102			0.5000	7.1		20.0			
4-Chlorobenzotrifluoride	1.7275 1.6178	1.5244 1.5687	1.5274 1.4758	1.6607	1.5504	Ave		1.5816			0.0100	5.2		20.0			
1,1,1,2-Tetrachloroethane	0.9467 0.9296	0.8738 0.8699	0.8606 0.8862	0.9570	0.9080	Ave		0.9040			0.0100	4.1		20.0			
Ethylbenzene	1.6892 1.7026	1.6675 1.6484	1.6675 1.6286	1.8596	1.7003	Ave		1.6955			0.1000	4.2		20.0			
m-Xylene & p-Xylene	2.0807 2.1462	2.0968 2.0426	2.0837 2.0391	2.3051	2.1227	Ave		2.1146			0.1000	4.0		20.0			
o-Xylene	1.9470 2.0584	1.9598 1.9600	1.9876 1.9373	2.2213	2.0352	Ave		2.0133			0.3000	4.7		20.0			
Styrene	3.2744 3.4065	3.3740 3.2744	3.4152 3.2151	3.8196	3.4682	Ave		3.4059			0.3000	5.5		20.0			
Bromoform	0.4539 0.4966	0.4322 0.4805	0.4310 0.4824	0.5173	0.4868	Ave		0.4726			0.1000	6.5		20.0			
2-Chlorobenzotrifluoride	1.8818 1.6787	1.6471 1.6389	1.5983 1.5325	1.7815	1.5827	Ave		1.6677			0.0100	6.8		20.0			
Isopropylbenzene	5.4383 5.1298	5.1766 4.8056	5.1640 4.7236	5.7043	5.2035	Ave		5.1682			0.1000	6.1		20.0			
1,1,2,2-Tetrachloroethane	1.3065 1.2328	1.2039 1.1849	1.1389 1.1758	1.3085	1.2120	Ave		1.2204			0.3000	5.0		20.0			
Bromobenzene	0.8467 0.8393	0.7965 0.8491	0.8594 0.8240	0.9054	0.8347	Ave		0.8444			0.0100	3.7		20.0			
trans-1,4-Dichloro-2-butene	0.2767 0.3099	0.2357 0.3152	0.2812 0.3171	0.3036	0.2878	Ave		0.2909			0.0100	9.3		20.0			
1,2,3-Trichloropropane	0.2857 0.2758	0.2635 0.2734	0.2736 0.2718	0.2972	0.2658	Ave		0.2759			0.0100	4.0		20.0			
N-Propylbenzene	0.9880 0.9920	0.9397 0.9774	0.9730 0.9983	1.0148	0.9434	Ave		0.9783			0.0100	2.7		20.0			
2-Chlorotoluene	0.8774 0.8331	0.8213 0.8319	0.8003 0.8214	0.9075	0.8038	Ave		0.8371			0.0100	4.4		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
3-Chlorotoluene	0.9618 0.8983	0.8516 0.9075	0.8736 0.8636	0.9354	0.8434	Ave		0.8919			0.0100	4.7		20.0			
1,3,5-Trimethylbenzene	3.0649 2.9182	2.8725 2.8638	3.0008 2.8251	3.2027	2.8961	Ave		2.9555			0.0100	4.3		20.0			
4-Chlorotoluene	0.9124 0.8913	0.8557 0.9055	0.8888 0.8942	0.9640	0.8552	Ave		0.8959			0.0100	3.9		20.0			
tert-Butylbenzene	2.4259 2.4211	2.2521 2.3815	2.4044 2.3509	2.6281	2.3647	Ave		2.4036			0.0100	4.4		20.0			
1,2,4-Trimethylbenzene	2.9530 2.9989	2.9332 2.9414	3.0648 2.8662	3.2794	2.9337	Ave		2.9963			0.0100	4.3		20.0			
3,4-Dichlorobenzotrifluoride	0.8682 0.8456	0.7917 0.8590	0.8153 0.8242	0.8648	0.7785	Ave		0.8309			0.0100	4.1		20.0			
sec-Butylbenzene	3.6596 3.4346	3.3643 3.3822	3.5845 3.3147	3.6875	3.3843	Ave		3.4765			0.0100	4.2		20.0			
1,3-Dichlorobenzene	1.7603 1.5701	1.5326 1.5590	1.6148 1.5601	1.6959	1.5565	Ave		1.6062			0.6000	5.0		20.0			
4-Isopropyltoluene	2.8431 2.9394	2.7443 2.8745	2.9210 2.8115	3.1308	2.8590	Ave		2.8904			0.0100	4.0		20.0			
1,4-Dichlorobenzene	1.7952 1.6182	1.5639 1.5848	1.6147 1.5901	1.7615	1.5995	Ave		1.6410			0.5000	5.3		20.0			
2,4-Dichlorobenzotrifluoride	0.8456 0.7964	0.7893 0.8050	0.7576 0.7647	0.8073	0.7396	Ave		0.7882			0.0100	4.3		20.0			
2,5-Dichlorobenzotrifluoride	1.0173 0.9043	0.8344 0.9241	0.8702 0.8522	0.9510	0.8357	Ave		0.8986			0.0100	7.1		20.0			
n-Butylbenzene	2.4853 2.5372	2.2717 2.5074	2.4977 2.4722	2.6399	2.4590	Ave		2.4838			0.0100	4.1		20.0			
1,2-Dichlorobenzene	1.5509 1.4674	1.4031 1.4529	1.4782 1.4481	1.5859	1.4465	Ave		1.4791			0.4000	4.1		20.0			
1,2-Dibromo-3-Chloropropane	0.1541 0.1371	0.1189 0.1387	0.1142 0.1384	0.1410	0.1255	Ave		0.1335			0.0500	9.8		20.0			
2,4- & 2,5- & 2,6- Dichlorotoluene	1.0072 1.0615	0.9833 1.0735	1.0273 1.0076	1.1136	1.0120	Ave		1.0357			0.0100	4.2		20.0			
2,3- & 3,4- Dichlorotoluene	0.8882 1.0429	0.9420 1.0817	1.0259 1.0091	1.0936	0.9854	Ave		1.0086			0.0100	6.9		20.0			
1,2,4-Trichlorobenzene	0.7501 0.7508	0.6469 0.7573	0.6874 0.7373	0.7870	0.7257	Ave		0.7303			0.2000	6.0		20.0			
Hexachlorobutadiene	0.3398 0.3198	0.2903 0.3156	0.3060 0.3130	0.3250	0.2942	Ave		0.3130			0.0100	5.2		20.0			
Naphthalene	1.3750 1.9792	1.5958 1.9659	1.7582 1.9476	2.0386	1.8631	Ave		1.8154			0.0100	12.6		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.: 180-59864-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trichlorobenzene	0.4946 0.5988	0.5115 0.6141	0.5587 0.5824	0.6166	0.5682	Ave		0.5681			0.0100	8.0		20.0			
2,4,5-Trichlorotoluene	0.1263 0.2205	0.1579 +++++	0.1841 +++++	0.2057	0.1876	Ave		0.1803			0.0100	18.8		20.0			
2,3,6-Trichlorotoluene	0.1585 0.2044	0.1426 0.2257	0.1679 0.2115	0.1998	0.1810	Ave		0.1864			0.0100	15.4		20.0			
Dibromofluoromethane (Surr)	0.2655 0.2344	0.2342 0.2353	0.2475 0.2218	0.2496	0.2254	Ave		0.2392				6.0		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3671 0.3325	0.3495 0.3399	0.3636 0.3183	0.3634	0.3286	Ave		0.3454				5.3		20.0			
Toluene-d8 (Surr)	4.4374 3.6414	3.9342 3.4262	3.8388 3.3349	4.0018	3.5754	Ave		3.7738				9.5		20.0			
4-Bromofluorobenzene (Surr)	1.7010 1.5162	1.5759 1.4352	1.5292 1.3822	1.6175	1.4485	Ave		1.5257				6.9		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
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-192047/3	51022003.D
Level 2	IC 180-192047/4	51022004.D
Level 3	ICIS 180-192047/5	51022005.D
Level 4	IC 180-192047/6	51022006.D
Level 5	IC 180-192047/7	51022007.D
Level 6	IC 180-192047/8	51022008.D
Level 7	IC 180-192047/9	51022009.D
Level 8	IC 180-192047/10	51022010.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	13031 387646	53788 429182	109895 528854	153504	215461	5.00 175	25.0 200	50.0 250	75.0	100
Chloromethane	FB	Ave	24338 741257	103169 830573	210870 1036936	312655	428182	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl chloride	FB	Ave	16691 502328	68313 564533	139567 684522	198206	273768	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Butadiene	FB	Ave	27329 711589	100950 786444	207700 991146	292779	402090	5.00 175	25.0 200	50.0 250	75.0	100
Bromomethane	FB	Ave	4415 115398	18023 136780	36244 148486	54487	66676	5.00 175	25.0 200	50.0 250	75.0	100
Chloroethane	FB	Ave	7605 213775	32300 231064	67056 260074	94249	128149	5.00 175	25.0 200	50.0 250	75.0	100
Dichlorofluoromethane	FB	Ave	17875 527240	70880 590488	146976 716202	228494	292782	5.00 175	25.0 200	50.0 250	75.0	100
Trichlorofluoromethane	FB	Ave	13250 420691	57303 470795	123993 573682	169474	242761	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl ether	FB	Ave	12525 407915	59659 469809	121171 562470	178296	241616	5.00 175	25.0 200	50.0 250	75.0	100
Acrolein	FB	Ave	58441 126054	65675 138202	85057 159873	98109	107734	100 225	125 250	150 275	175	200
1,1-Dichloroethene	FB	Ave	10570 337941	40740 381419	92995 468351	130074	193304	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	11965 357669	47934 396910	101601 507801	146948	197014	5.00 175	25.0 200	50.0 250	75.0	100
Acetone	FB	Ave	26826 340715	48746 384850	92348 478009	129287	181978	25.0 350	50.0 400	100 500	150	200
Iodomethane	FB	Ave	14073 486595	67567 562493	140487 686097	208665	281549	5.00 175	25.0 200	50.0 250	75.0	100
Carbon disulfide	FB	Ave	27927 880574	111241 999685	237079 1239529	349970	478017	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.: 180-59864-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Allyl chloride	FB	Ave	6211 209891	24893 246656	56753 305567	81119	119809	5.00 175	25.0 200	50.0 250	75.0	100
Methyl acetate	FB	Ave	65534 2139103	294366 2465695	603025 3057092	917155	1272643	25.0 875	125 1000	250 1250	375	500
Methylene Chloride	FB	Ave	16993 375770	55631 436687	111596 533332	165834	225032	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butyl alcohol	TBAd9	Ave	6491 262285	33341 300575	65650 480778	107688	174156	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	61065 2092798	285590 2376180	577960 2943037	866579	1198880	50.0 1750	250 2000	500 2500	750	1000
trans-1,2-Dichloroethene	FB	Ave	11047 357112	48499 405331	103732 507564	147333	202984	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	27578 933266	121688 1105174	262198 1318423	391228	538029	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	22652 766179	94805 871474	219125 1090775	304104	426391	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	24880 784476	109614 912372	228544 1120170	329739	456615	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl acetate	FB	Ave	23202 964118	111997 1072697	256186 1311690	369725	511473	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Ave	2147 67579	8504 77067	18068 99511	26675	38082	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,2-Dichloroethene	FB	Ave	11966 393767	53404 449345	112534 555908	169464	224503	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	36705 538326	75482 619027	145907 764110	226627	316479	25.0 350	50.0 400	100 500	150	200
Bromochloromethane	FB	Ave	4959 170915	22047 192697	48054 236063	68912	96736	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Ave	12780 363332	44526 415338	100632 518694	154418	201495	10.0 350	50.0 400	100 500	150	200
Chloroform	FB	Ave	20238 617527	86882 711575	182998 878210	267440	359653	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	14174 453368	59420 517321	126207 631074	183039	249353	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	31025 998701	127529 1120418	280237 1414113	397193	557095	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	11566 388240	48891 442875	102720 539131	152202	210724	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	16498 534817	70145 607876	148289 758129	212138	302113	5.00 175	25.0 200	50.0 250	75.0	100
Benzene	FB	Ave	48106 1481843	204563 1709623	442388 2092563	635243	871727	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.: 180-59864-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

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
Isobutyl alcohol	FB	Ave	7842 344432	38336 387004	81233 506048	130706	192078	125 4375	625 5000	1250 6250	1875	2500
1,2-Dichloroethane	FB	Ave	17709 561654	78202 642222	164925 786249	243043	325151	5.00 175	25.0 200	50.0 250	75.0	100
n-Heptane	FB	Ave	23346 757194	95302 845753	210895 1081576	293294	409522	5.00 175	25.0 200	50.0 250	75.0	100
Trichloroethene	FB	Ave	11325 363296	48922 414767	104866 519062	147466	206655	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	17831 651506	77679 744113	179654 917304	260774	358556	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	14770 447322	59648 522348	127539 647909	187825	264588	5.00 175	25.0 200	50.0 250	75.0	100
Dibromomethane	FB	Ave	5199 189826	26191 229137	54833 275422	84591	115152	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Ave	1884 74760	8964 84058	19666 114687	31890	43028	100 3500	500 4000	1000 5000	1500	2000
Bromodichloromethane	FB	Ave	13009 416437	53335 492086	119981 600131	176068	236201	5.00 175	25.0 200	50.0 250	75.0	100
2-Chloroethyl vinyl ether	FB	Ave	11668 484364	61357 587972	139172 721849	204021	289200	10.0 350	50.0 400	100 500	150	200
cis-1,3-Dichloropropene	FB	Ave	13177 525078	60832 616111	137855 757503	207121	287940	5.00 175	25.0 200	50.0 250	75.0	100
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	60345 1071790	128845 1255774	299144 1562723	446448	614369	25.0 350	50.0 400	100 500	150	200
Toluene	CBNZ d5	Ave	47701 1493978	208264 1714356	447990 2079772	646939	881918	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,3-Dichloropropene	CBNZ d5	Ave	9881 414030	44992 500081	106076 620726	163144	233154	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl methacrylate	CBNZ d5	Ave	9053 452684	48533 534579	116263 672788	180987	260008	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloroethane	CBNZ d5	Ave	8183 282152	41081 328867	82417 411935	119460	169494	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBNZ d5	Ave	9449 297871	39774 343465	86393 426359	125468	172257	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBNZ d5	Ave	16233 548319	74206 647160	160344 789714	232723	323471	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBNZ d5	Ave	43550 820647	97293 963136	221352 1192579	336871	487269	25.0 350	50.0 400	100 500	150	200
Dibromochloromethane	CBNZ d5	Ave	7083 268037	34755 313753	74102 385352	110875	151944	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromoethane (EDB)	CBNZ d5	Ave	8940 296148	39770 347518	84260 428449	124423	173047	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.: 180-59864-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

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-Chlorobenzotrifluoride	CBNZ d5	Ave	17336 580353	75635 686732	163361 785098	238396	323599	5.00 175	25.0 200	50.0 250	75.0	100
Chlorobenzene	CBNZ d5	Ave	30892 986925	132564 1144110	290427 1401132	426466	580865	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorobenzotrifluoride	CBNZ d5	Ave	15633 543962	68517 638282	150461 739313	218415	301799	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	8567 312552	39274 353938	84776 443976	125859	176750	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBNZ d5	Ave	15286 572466	74948 670720	164268 815861	244573	330980	5.00 175	25.0 200	50.0 250	75.0	100
m-Xylene & p-Xylene	CBNZ d5	Ave	18829 721601	94244 831099	205264 1021507	303162	413204	5.00 175	25.0 200	50.0 250	75.0	100
o-Xylene	CBNZ d5	Ave	17619 692079	88088 797469	195801 970548	292141	396170	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBNZ d5	Ave	29632 1145359	151654 1332303	336427 1610677	502358	675122	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBNZ d5	Ave	4108 166982	19425 195502	42456 241663	68040	94753	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorobenzotrifluoride	CBNZ d5	Ave	17029 564416	74032 666819	157447 767761	234305	308077	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBNZ d5	Ave	49214 1724768	232676 1955310	508707 2366385	750229	1012899	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	11823 414517	54112 482112	112189 589029	172092	235918	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCBd 4	Ave	10864 405838	53105 483285	118874 569568	174267	238406	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	3550 149838	15715 179384	38901 219200	58424	82199	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichloropropane	DCBd 4	Ave	3666 133377	17572 155618	37848 187868	57210	75921	5.00 175	25.0 200	50.0 250	75.0	100
N-Propylbenzene	DCBd 4	Ave	12678 479706	62656 556273	134580 690007	195314	269458	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCBd 4	Ave	11258 402855	54765 473480	110690 567755	174662	229591	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorotoluene	DCBd 4	Ave	12341 434398	56784 516505	120831 596946	180033	240888	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCBd 4	Ave	39328 1411132	191530 1629974	415056 1952749	616418	827180	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCBd 4	Ave	11707 430992	57056 515374	122940 618106	185529	244260	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCBd 4	Ave	31128 1170728	150165 1355432	332570 1624983	505812	675400	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.: 180-59864-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	DCBd 4	Ave	37892 1450154	195574 1674135	423909 1981171	631181	837908	5.00 175	25.0 200	50.0 250	75.0	100
3,4-Dichlorobenzotrifluoride	DCBd 4	Ave	11140 408895	52787 488889	112772 569684	166454	222355	5.00 175	25.0 200	50.0 250	75.0	100
sec-Butylbenzene	DCBd 4	Ave	46959 1660807	224321 1925023	495792 2291141	709717	966624	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichlorobenzene	DCBd 4	Ave	22587 759244	102187 887299	223357 1078386	326397	444553	5.00 175	25.0 200	50.0 250	75.0	100
4-Isopropyltoluene	DCBd 4	Ave	36482 1421342	182983 1636065	404023 1943351	602571	816569	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dichlorobenzene	DCBd 4	Ave	23035 782506	104279 902000	223333 1099124	339028	456853	5.00 175	25.0 200	50.0 250	75.0	100
2,4-Dichlorobenzotrifluoride	DCBd 4	Ave	10850 385108	52627 458166	104791 528566	155381	211243	5.00 175	25.0 200	50.0 250	75.0	100
2,5-Dichlorobenzotrifluoride	DCBd 4	Ave	13053 437274	55632 525934	120365 589060	183028	238687	5.00 175	25.0 200	50.0 250	75.0	100
n-Butylbenzene	DCBd 4	Ave	31891 1226876	151470 1427132	345469 1708798	508098	702329	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichlorobenzene	DCBd 4	Ave	19901 709578	93554 826915	204460 1000919	305229	413142	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1977 66283	7931 78936	15791 95655	27147	35855	5.00 175	25.0 200	50.0 250	75.0	100
2,4- & 2,5- & 2,6- Dichlorotoluene	DCBd 4	Ave	38771 1539823	196684 1832958	426263 2089504	643007	867174	15.0 525	75.0 600	150 750	225	300
2,3- & 3,4- Dichlorotoluene	DCBd 4	Ave	22793 1008562	125614 1231331	283810 1395064	420945	562883	10.0 350	50.0 400	100 500	150	200
1,2,4-Trichlorobenzene	DCBd 4	Ave	9625 363075	43136 431004	95083 509601	151471	207275	5.00 175	25.0 200	50.0 250	75.0	100
Hexachlorobutadiene	DCBd 4	Ave	4360 154651	19359 179638	42328 216370	62543	84030	5.00 175	25.0 200	50.0 250	75.0	100
Naphthalene	DCBd 4	Ave	17643 957033	106400 1118920	243193 1346243	392356	532144	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichlorobenzene	DCBd 4	Ave	6346 289565	34103 349524	77279 402589	118676	162280	5.00 175	25.0 200	50.0 250	75.0	100
2,4,5-Trichlorotoluene	DCBd 4	Ave	1621 106630	10527 +++++	25468 +++++	39585	53573	5.00 175	25.0 +++++	50.0 +++++	75.0	100
2,3,6-Trichlorotoluene	DCBd 4	Ave	2034 98818	9509 128474	23217 146221	38449	51697	5.00 175	25.0 200	50.0 250	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	10190 303965	43928 343798	93249 415623	128589	169199	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	14089 431135	65548 496655	136959 596400	187235	246609	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.: 180-59864-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

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
Toluene-d8 (Surr)	CBNZ d5	Ave	40156 1224337	176832 1394043	378163 1670672	526313	695986	5.00 175	25.0 200	50.0 250	75.0	100
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	15393 509793	70832 583947	150646 692444	212729	281954	5.00 175	25.0 200	50.0 250	75.0	100

Curve Type Legend:
Ave = Average ISTD

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022003.D
Lims ID: IC VSTD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 22-Oct-2016 14:57:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013995-003
Misc. Info.: IC VSTD1
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 13:13:26 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

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

First Level Reviewer: fergusond Date: 23-Oct-2016 08:55:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.278	4.278	0.000	0	105715	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.265	7.265	0.000	97	383762	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.373	10.373	0.000	92	90495	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.722	0.000	97	128316	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.541	6.541	0.000	90	10190	5.00	5.55	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.918	0.000	0	14089	5.00	5.32	
$ 7 Toluene-d8 (Surr)	98	8.919	8.919	0.000	96	40156	5.00	5.88	
$ 8 4-Bromofluorobenzene (Surr	95	11.554	11.554	0.000	84	15393	5.00	5.57	
11 Dichlorodifluoromethane	85	1.607	1.607	0.000	95	13031	5.00	5.71	
12 Chloromethane	50	1.771	1.771	0.000	99	24338	5.00	5.50	
13 Vinyl chloride	62	1.899	1.899	0.000	94	16691	5.00	5.69	
14 Butadiene	39	1.929	1.929	0.000	97	27329	5.00	6.30	
15 Bromomethane	94	2.228	2.228	0.000	55	4415	5.00	6.02	
16 Chloroethane	64	2.374	2.374	0.000	92	7605	5.00	5.81	
17 Dichlorofluoromethane	67	2.659	2.659	0.000	95	17875	5.00	5.71	
18 Trichlorofluoromethane	101	2.672	2.672	0.000	51	13250	5.00	5.34	M
20 Ethyl ether	59	3.043	3.043	0.000	90	12525	5.00	5.08	
21 Acrolein	56	3.225	3.225	0.000	98	58441	100.0	100.9	
22 1,1-Dichloroethene	96	3.329	3.329	0.000	89	10570	5.00	5.45	
23 1,1,2-Trichloro-1,2,2-trif	101	3.389	3.389	0.000	72	11965	5.00	5.66	
24 Acetone	43	3.438	3.438	0.000	88	26826	25.0	27.2	
25 Iodomethane	142	3.517	3.517	0.000	94	14073	5.00	4.88	
26 Carbon disulfide	76	3.608	3.608	0.000	99	27927	5.00	5.50	
28 3-Chloro-1-propene	76	3.913	3.913	0.000	86	6211	5.00	5.15	
30 Methyl acetate	43	3.937	3.937	0.000	99	65534	25.0	25.6	
31 Methylene Chloride	84	4.132	4.132	0.000	92	16993	5.00	7.00	
32 2-Methyl-2-propanol	59	4.405	4.405	0.000	48	6491	50.0	50.0	
33 Acrylonitrile	53	4.521	4.521	0.000	99	61065	50.0	50.0	
34 trans-1,2-Dichloroethene	96	4.545	4.545	0.000	92	11047	5.00	5.23	
35 Methyl tert-butyl ether	73	4.570	4.570	0.000	90	27578	5.00	5.03	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.959	4.959	0.000	87	22652	5.00	5.13	
37 1,1-Dichloroethane	63	5.184	5.184	0.000	95	24880	5.00	5.28	
38 Vinyl acetate	43	5.233	5.233	0.000	97	23202	5.00	4.43	
44 2,2-Dichloropropane	97	5.926	5.926	0.000	56	2147	5.00	5.46	M
45 cis-1,2-Dichloroethene	96	5.932	5.932	0.000	87	11966	5.00	5.13	
46 2-Butanone (MEK)	43	5.951	5.951	0.000	97	36705	25.0	23.3	
49 Chlorobromomethane	128	6.218	6.218	0.000	86	4959	5.00	5.03	
51 Tetrahydrofuran	42	6.237	6.237	0.000	93	12780	10.0	11.9	
52 Chloroform	83	6.364	6.364	0.000	97	20238	5.00	5.40	
53 1,1,1-Trichloroethane	97	6.522	6.522	0.000	92	14174	5.00	5.37	
54 Cyclohexane	56	6.595	6.595	0.000	97	31025	5.00	5.36	
56 Carbon tetrachloride	117	6.699	6.699	0.000	93	11566	5.00	5.24	
55 1,1-Dichloropropene	75	6.705	6.705	0.000	85	16498	5.00	5.30	
58 Benzene	78	6.924	6.924	0.000	92	48106	5.00	5.37	
57 Isobutyl alcohol	41	6.924	6.924	0.000	41	7842	125.0	119.6	
59 1,2-Dichloroethane	62	7.003	7.003	0.000	94	17709	5.00	5.25	
62 n-Heptane	43	7.283	7.283	0.000	42	23346	5.00	5.37	
64 Trichloroethene	130	7.660	7.660	0.000	90	11325	5.00	5.28	
66 Methylcyclohexane	83	7.885	7.885	0.000	93	17831	5.00	4.84	
67 1,2-Dichloropropane	63	7.934	7.934	0.000	90	14770	5.00	5.48	
70 1,4-Dioxane	88	8.037	8.037	0.000	41	1884	100.0	89.1	
68 Dibromomethane	93	8.025	8.025	0.000	92	5199	5.00	4.56	
71 Dichlorobromomethane	83	8.220	8.220	0.000	92	13009	5.00	5.26	
73 2-Chloroethyl vinyl ether	63	8.506	8.506	0.000	85	11668	10.0	8.26	
74 cis-1,3-Dichloropropene	75	8.664	8.664	0.000	84	13177	5.00	4.50	
75 4-Methyl-2-pentanone (MIBK	43	8.816	8.816	0.000	98	60345	25.0	21.8	
76 Toluene	91	8.992	8.992	0.000	95	47701	5.00	5.74	
77 trans-1,3-Dichloropropene	75	9.242	9.242	0.000	93	9881	5.00	4.69	
78 Ethyl methacrylate	69	9.303	9.303	0.000	91	9053	5.00	4.01	
79 1,1,2-Trichloroethane	97	9.430	9.430	0.000	95	8183	5.00	5.24	
80 Tetrachloroethene	164	9.497	9.497	0.000	92	9449	5.00	5.78	
81 1,3-Dichloropropane	76	9.589	9.589	0.000	91	16233	5.00	5.39	
82 2-Hexanone	43	9.649	9.649	0.000	96	43550	25.0	20.7	
84 Chlorodibromomethane	129	9.801	9.801	0.000	90	7083	5.00	4.99	
85 Ethylene Dibromide	107	9.911	9.911	0.000	93	8940	5.00	5.52	
86 3-Chlorobenzotrifluoride	180	10.373	10.373	0.000	56	17336	5.00	5.59	
87 Chlorobenzene	112	10.404	10.404	0.000	89	30892	5.00	5.67	
88 4-Chlorobenzotrifluoride	180	10.465	10.465	0.000	95	15633	5.00	5.46	
89 1,1,1,2-Tetrachloroethane	131	10.495	10.495	0.000	42	8567	5.00	5.24	
90 Ethylbenzene	106	10.501	10.501	0.000	98	15286	5.00	4.98	
91 m-Xylene & p-Xylene	106	10.635	10.635	0.000	0	18829	5.00	4.92	
92 o-Xylene	106	11.012	11.012	0.000	98	17619	5.00	4.84	
93 Styrene	104	11.030	11.030	0.000	89	29632	5.00	4.81	
94 Bromoform	173	11.219	11.219	0.000	93	4108	5.00	4.80	
96 2-Chlorobenzotrifluoride	180	11.286	11.286	0.000	97	17029	5.00	5.64	
97 Isopropylbenzene	105	11.383	11.383	0.000	96	49214	5.00	5.26	
100 Bromobenzene	156	11.700	11.700	0.000	95	10864	5.00	5.01	
99 1,1,2,2-Tetrachloroethane	83	11.693	11.693	0.000	73	11823	5.00	5.35	
102 trans-1,4-Dichloro-2-buten	53	11.736	11.736	0.000	61	3550	5.00	4.76	
101 1,2,3-Trichloropropane	110	11.754	11.754	0.000	91	3666	5.00	5.18	
103 N-Propylbenzene	120	11.797	11.797	0.000	99	12678	5.00	5.05	
104 2-Chlorotoluene	126	11.882	11.882	0.000	94	11258	5.00	5.24	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.949	11.949	0.000	97	12341	5.00	5.39	
106 1,3,5-Trimethylbenzene	105	11.985	11.985	0.000	92	39328	5.00	5.19	
107 4-Chlorotoluene	126	12.010	12.010	0.000	99	11707	5.00	5.09	
108 tert-Butylbenzene	119	12.302	12.302	0.000	93	31128	5.00	5.05	
110 1,2,4-Trimethylbenzene	105	12.357	12.357	0.000	98	37892	5.00	4.93	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.399	0.000	93	11140	5.00	5.22	
112 sec-Butylbenzene	105	12.521	12.521	0.000	95	46959	5.00	5.26	
113 1,3-Dichlorobenzene	146	12.642	12.642	0.000	96	22587	5.00	5.48	
114 4-Isopropyltoluene	119	12.673	12.673	0.000	97	36482	5.00	4.92	
115 1,4-Dichlorobenzene	146	12.740	12.740	0.000	94	23035	5.00	5.47	
116 2,4-Dichloro-1-(triflourom	214	12.776	12.776	0.000	92	10850	5.00	5.36	
118 2,5-Dichlorobenzotrifluori	214	12.813	12.813	0.000	0	13053	5.00	5.66	
120 n-Butylbenzene	91	13.087	13.087	0.000	99	31891	5.00	5.00	
121 1,2-Dichlorobenzene	146	13.099	13.099	0.000	92	19901	5.00	5.24	
122 1,2-Dibromo-3-Chloropropan	75	13.896	13.896	0.000	65	1977	5.00	5.77	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.036	14.036	0.000	0	38771	15.0	14.6	
125 2,3- & 3,4- Dichlorotoluen	125	14.455	14.455	0.000	0	22793	10.0	8.81	
126 1,2,4-Trichlorobenzene	180	14.717	14.717	0.000	91	9625	5.00	5.14	
127 Hexachlorobutadiene	225	14.857	14.857	0.000	91	4360	5.00	5.43	
128 Naphthalene	128	14.979	14.979	0.000	98	17643	5.00	3.79	
129 1,2,3-Trichlorobenzene	180	15.210	15.210	0.000	93	6346	5.00	4.35	
131 2,4,5-Trichlorotoluene	159	15.988	15.988	0.000	0	1621	5.00	3.50	
130 2,3,6-Trichlorotoluene	159	16.080	16.080	0.000	85	2034	5.00	4.25	
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		10.0	10.4	
S 133 Xylenes, Total	106				0		10.0	9.75	
S 135 1,3-Dichloropropene, Total	1				0		10.0	9.20	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00217	Amount Added:	0.20	Units: uL	
voaWKetPriRes_00002	Amount Added:	0.80	Units: uL	
voaWEEmixRest_00001	Amount Added:	0.20	Units: uL	
voaW2cleveRes_00002	Amount Added:	0.20	Units: uL	
voaWVA1stRest_00009	Amount Added:	0.20	Units: uL	
VOAACROPRI_00007	Amount Added:	4.00	Units: uL	
VOA8260SURR_00060	Amount Added:	0.20	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

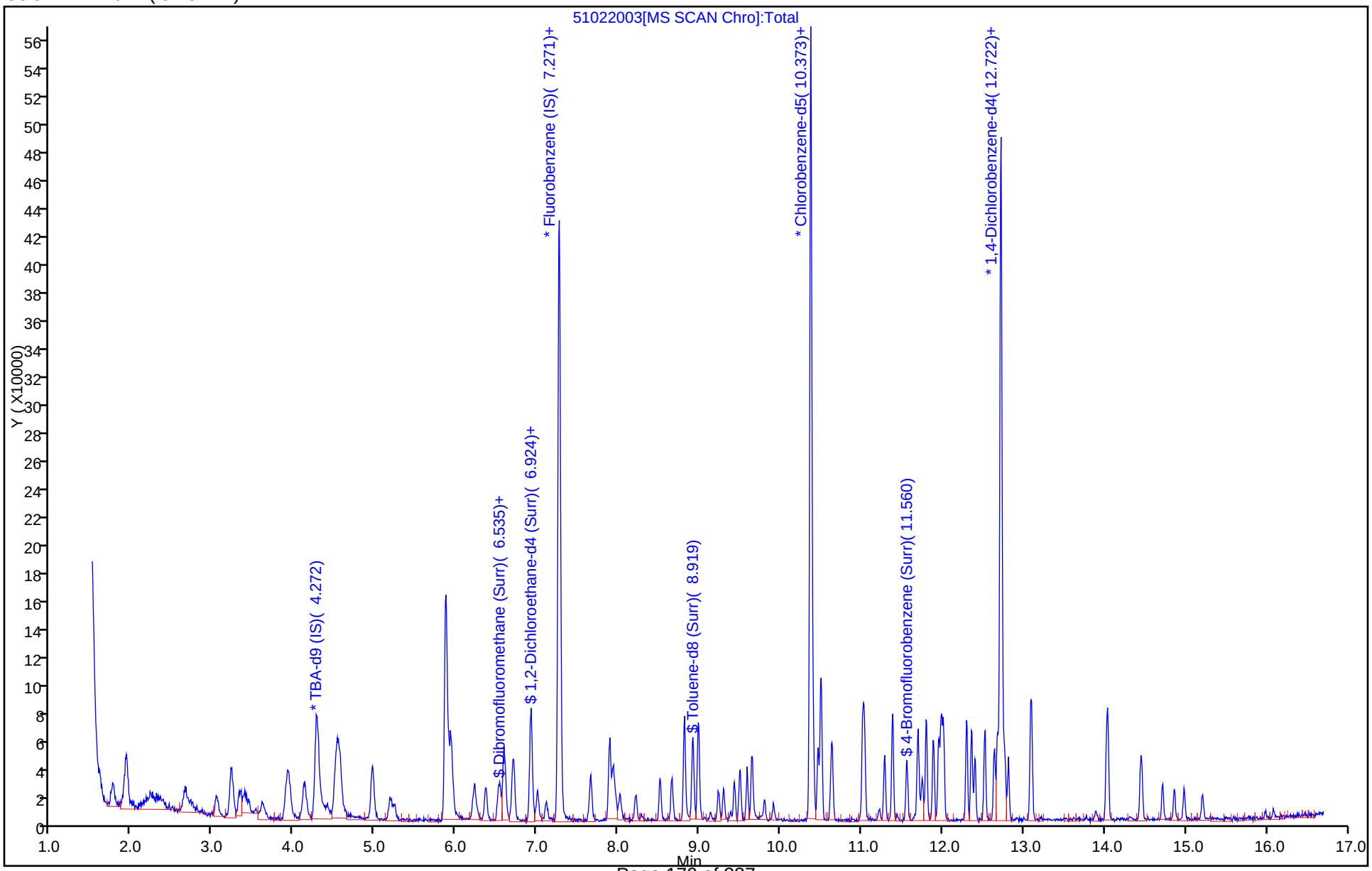
Report Date: 23-Oct-2016 13:13:27 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022003.D

Injection Date:	22-Oct-2016 14:57:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD1			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

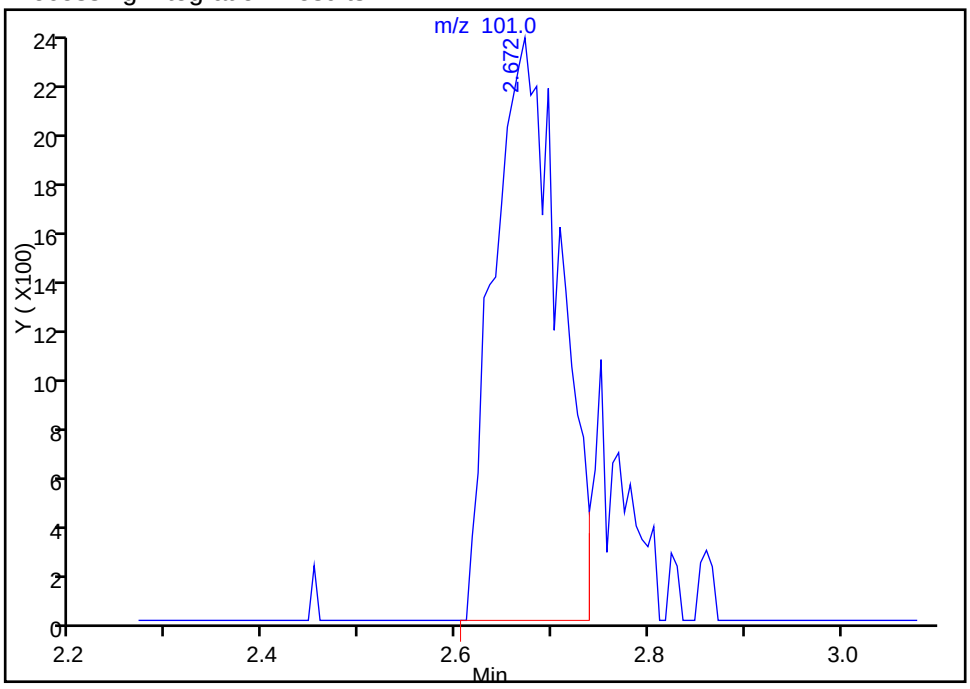
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022003.D				
Injection Date:	22-Oct-2016 14:57:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

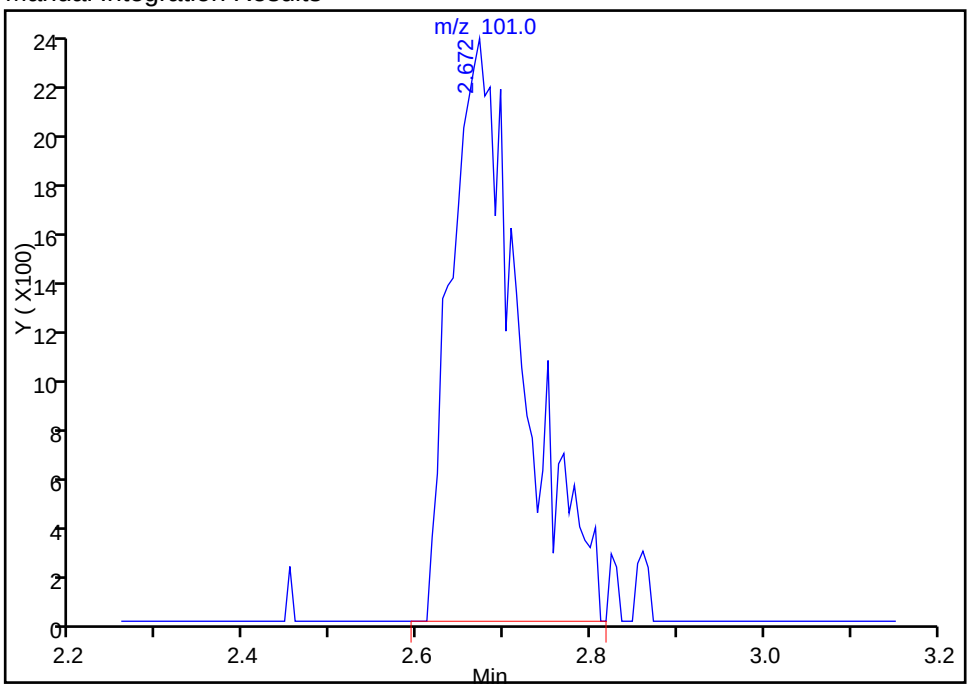
Processing Integration Results

RT: 2.67
Area: 11192
Amount: 4.623871
Amount Units: ng



Manual Integration Results

RT: 2.67
Area: 13250
Amount: 5.342390
Amount Units: ng



Reviewer: fergusond, 23-Oct-2016 09:39:58

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

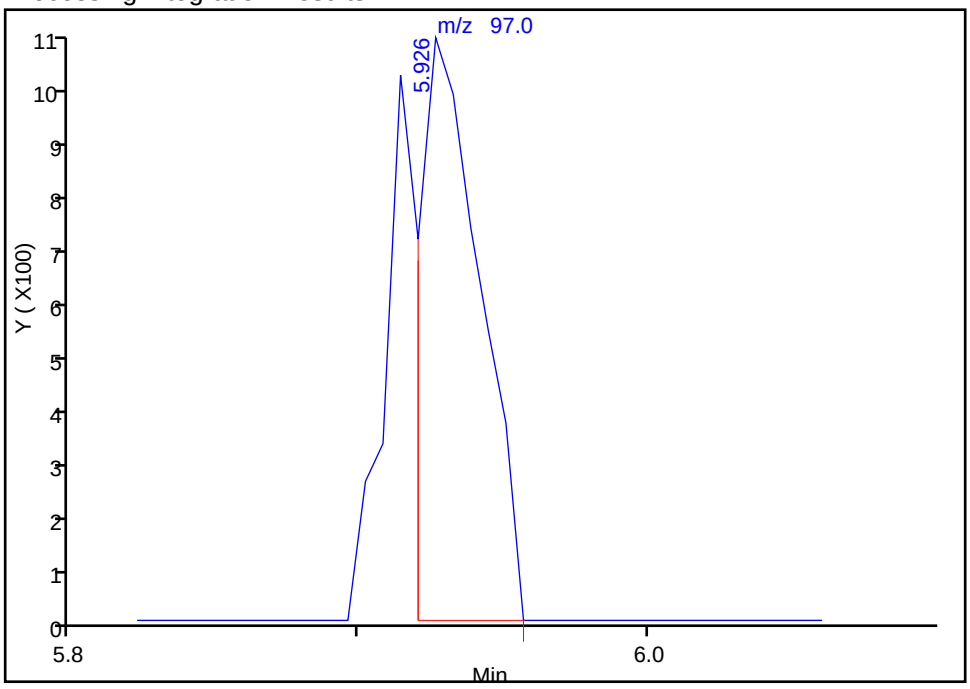
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022003.D
Injection Date: 22-Oct-2016 14:57:30 Instrument ID: CHHP5
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

44 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

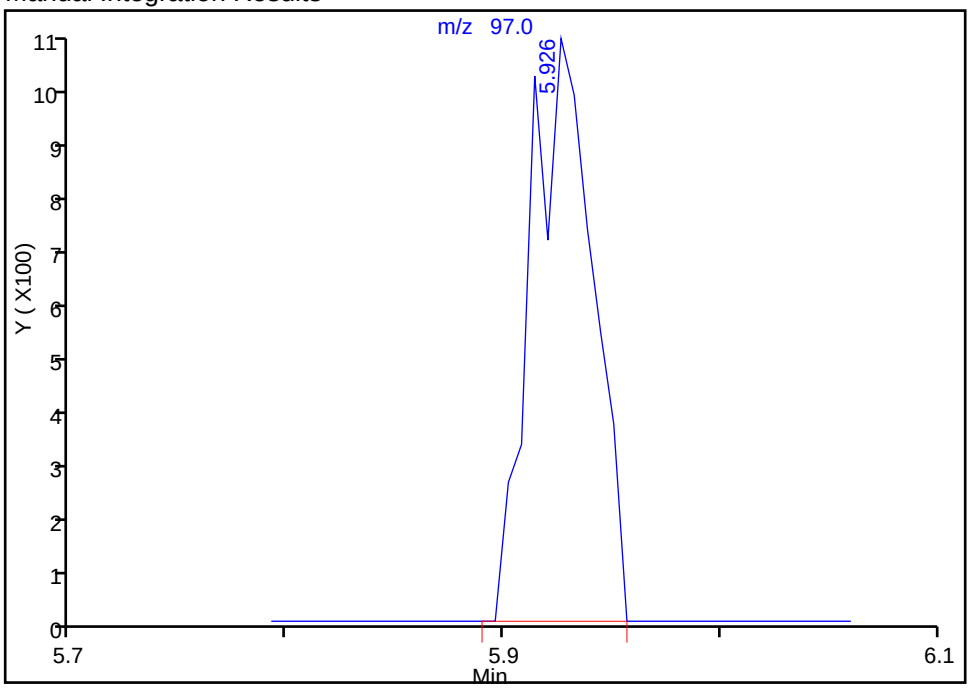
Processing Integration Results

RT: 5.93
Area: 1575
Amount: 4.157934
Amount Units: ng



Manual Integration Results

RT: 5.93
Area: 2147
Amount: 5.461800
Amount Units: ng



Reviewer: fergusond, 23-Oct-2016 09:39:58
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022004.D
Lims ID: IC VSTD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 22-Oct-2016 15:21:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013995-004
Misc. Info.: IC VSTD5
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 13:13:28 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

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

First Level Reviewer: fergusond Date: 23-Oct-2016 09:41:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.287	4.278	0.009	0	112651	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.267	7.265	0.002	96	375068	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.376	10.373	0.003	91	89895	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.718	12.722	-0.004	96	133354	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.544	6.541	0.003	93	43928	25.0	24.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.921	6.918	0.003	0	65548	25.0	25.3	
$ 7 Toluene-d8 (Surr)	98	8.916	8.919	-0.003	96	176832	25.0	26.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.562	11.554	0.008	85	70832	25.0	25.8	
11 Dichlorodifluoromethane	85	1.604	1.607	-0.003	98	53788	25.0	24.1	
12 Chloromethane	50	1.768	1.771	-0.003	99	103169	25.0	23.8	
13 Vinyl chloride	62	1.902	1.899	0.003	97	68313	25.0	23.8	
14 Butadiene	39	1.932	1.929	0.003	99	100950	25.0	23.8	
15 Bromomethane	94	2.230	2.228	0.002	91	18023	25.0	25.2	
16 Chloroethane	64	2.376	2.374	0.002	95	32300	25.0	25.3	
17 Dichlorofluoromethane	67	2.656	2.659	-0.003	96	70880	25.0	23.2	
18 Trichlorofluoromethane	101	2.687	2.672	0.015	77	57303	25.0	23.6	M
20 Ethyl ether	59	3.039	3.043	-0.004	98	59659	25.0	24.8	
21 Acrolein	56	3.228	3.225	0.003	100	65675	125.0	116.0	
22 1,1-Dichloroethene	96	3.325	3.329	-0.004	91	40740	25.0	21.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.398	3.389	0.009	95	47934	25.0	23.2	
24 Acetone	43	3.441	3.438	0.003	95	48746	50.0	50.5	
25 Iodomethane	142	3.538	3.517	0.021	98	67567	25.0	24.0	
26 Carbon disulfide	76	3.611	3.608	0.003	100	111241	25.0	22.4	
28 3-Chloro-1-propene	76	3.903	3.913	-0.010	86	24893	25.0	21.1	
30 Methyl acetate	43	3.934	3.937	-0.003	100	294366	125.0	117.8	
31 Methylene Chloride	84	4.122	4.132	-0.010	92	55631	25.0	23.4	
32 2-Methyl-2-propanol	59	4.414	4.405	0.009	86	33341	250.0	241.0	
33 Acrylonitrile	53	4.512	4.521	-0.009	99	285590	250.0	239.1	
34 trans-1,2-Dichloroethene	96	4.548	4.545	0.003	91	48499	25.0	23.5	
35 Methyl tert-butyl ether	73	4.572	4.570	0.002	94	121688	25.0	22.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.968	4.959	0.009	95	94805	25.0	22.0	
37 1,1-Dichloroethane	63	5.181	5.184	-0.003	97	109614	25.0	23.8	
38 Vinyl acetate	43	5.229	5.233	-0.004	97	111997	25.0	21.9	
44 2,2-Dichloropropane	97	5.929	5.926	0.003	54	8504	25.0	22.1	
45 cis-1,2-Dichloroethene	96	5.935	5.932	0.003	88	53404	25.0	23.4	
46 2-Butanone (MEK)	43	5.947	5.951	-0.004	92	75482	50.0	49.1	
49 Chlorobromomethane	128	6.221	6.218	0.003	84	22047	25.0	22.9	
51 Tetrahydrofuran	42	6.239	6.237	0.002	93	44526	50.0	42.3	
52 Chloroform	83	6.367	6.364	0.003	96	86882	25.0	23.7	
53 1,1,1-Trichloroethane	97	6.519	6.522	-0.003	93	59420	25.0	23.1	
54 Cyclohexane	56	6.592	6.595	-0.003	96	127529	25.0	22.5	
56 Carbon tetrachloride	117	6.690	6.699	-0.009	92	48891	25.0	22.7	
55 1,1-Dichloropropene	75	6.708	6.705	0.003	85	70145	25.0	23.1	
58 Benzene	78	6.921	6.924	-0.003	93	204563	25.0	23.4	
57 Isobutyl alcohol	41	6.927	6.924	0.003	49	38336	625.0	598.2	
59 1,2-Dichloroethane	62	7.006	7.003	0.003	95	78202	25.0	23.7	
62 n-Heptane	43	7.286	7.283	0.003	97	95302	25.0	22.4	
64 Trichloroethene	130	7.657	7.660	-0.003	97	48922	25.0	23.3	
66 Methylcyclohexane	83	7.894	7.885	0.009	96	77679	25.0	21.6	
67 1,2-Dichloropropane	63	7.931	7.934	-0.003	93	59648	25.0	22.7	
70 1,4-Dioxane	88	8.016	8.037	-0.021	49	8964	500.0	433.7	
68 Dibromomethane	93	8.016	8.025	-0.009	92	26191	25.0	23.5	
71 Dichlorobromomethane	83	8.210	8.220	-0.010	96	53335	25.0	22.1	
73 2-Chloroethyl vinyl ether	63	8.521	8.506	0.015	86	61357	50.0	44.5	
74 cis-1,3-Dichloropropene	75	8.661	8.664	-0.003	85	60832	25.0	21.3	
75 4-Methyl-2-pentanone (MIBK	43	8.813	8.816	-0.003	98	128845	50.0	46.8	
76 Toluene	91	8.989	8.992	-0.003	96	208264	25.0	25.2	
77 trans-1,3-Dichloropropene	75	9.239	9.242	-0.004	91	44992	25.0	21.5	
78 Ethyl methacrylate	69	9.299	9.303	-0.004	92	48533	25.0	21.6	
79 1,1,2-Trichloroethane	97	9.433	9.430	0.003	93	41081	25.0	26.5	
80 Tetrachloroethene	164	9.500	9.497	0.003	97	39774	25.0	24.5	
81 1,3-Dichloropropane	76	9.591	9.589	0.002	94	74206	25.0	24.8	
82 2-Hexanone	43	9.646	9.649	-0.003	97	97293	50.0	46.6	
84 Chlorodibromomethane	129	9.804	9.801	0.003	88	34755	25.0	24.7	
85 Ethylene Dibromide	107	9.914	9.911	0.003	97	39770	25.0	24.7	
86 3-Chlorobenzotrifluoride	180	10.376	10.373	0.003	68	75635	25.0	24.5	
87 Chlorobenzene	112	10.400	10.404	-0.004	91	132564	25.0	24.5	
88 4-Chlorobenzotrifluoride	180	10.461	10.465	-0.004	96	68517	25.0	24.1	
89 1,1,1,2-Tetrachloroethane	131	10.498	10.495	0.003	88	39274	25.0	24.2	
90 Ethylbenzene	106	10.504	10.501	0.003	99	74948	25.0	24.6	
91 m-Xylene & p-Xylene	106	10.638	10.635	0.003	0	94244	25.0	24.8	
92 o-Xylene	106	11.015	11.012	0.003	98	88088	25.0	24.3	
93 Styrene	104	11.039	11.030	0.009	93	151654	25.0	24.8	
94 Bromoform	173	11.222	11.219	0.003	94	19425	25.0	22.9	
96 2-Chlorobenzotrifluoride	180	11.283	11.286	-0.003	95	74032	25.0	24.7	
97 Isopropylbenzene	105	11.386	11.383	0.003	97	232676	25.0	25.0	
100 Bromobenzene	156	11.696	11.700	-0.004	95	53105	25.0	23.6	
99 1,1,2,2-Tetrachloroethane	83	11.696	11.693	0.003	75	54112	25.0	24.7	
102 trans-1,4-Dichloro-2-buten	53	11.733	11.736	-0.003	60	15715	25.0	20.3	
101 1,2,3-Trichloropropane	110	11.751	11.754	-0.003	90	17572	25.0	23.9	
103 N-Propylbenzene	120	11.800	11.797	0.003	99	62656	25.0	24.0	
104 2-Chlorotoluene	126	11.885	11.882	0.003	95	54765	25.0	24.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.952	11.949	0.003	97	56784	25.0	23.9	
106 1,3,5-Trimethylbenzene	105	11.982	11.985	-0.003	94	191530	25.0	24.3	
107 4-Chlorotoluene	126	12.013	12.010	0.003	98	57056	25.0	23.9	
108 tert-Butylbenzene	119	12.298	12.302	-0.004	96	150165	25.0	23.4	
110 1,2,4-Trimethylbenzene	105	12.359	12.357	0.002	98	195574	25.0	24.5	
111 1,2-dichloro-4-(trifluorom	214	12.402	12.399	0.003	97	52787	25.0	23.8	
112 sec-Butylbenzene	105	12.524	12.521	0.003	95	224321	25.0	24.2	
113 1,3-Dichlorobenzene	146	12.639	12.642	-0.003	96	102187	25.0	23.9	
114 4-Isopropyltoluene	119	12.676	12.673	0.003	98	182983	25.0	23.7	
115 1,4-Dichlorobenzene	146	12.743	12.740	0.003	93	104279	25.0	23.8	
116 2,4-Dichloro-1-(triflourom	214	12.773	12.776	-0.003	95	52627	25.0	25.0	
118 2,5-Dichlorobenzotrifluori	214	12.810	12.813	-0.003	0	55632	25.0	23.2	
120 n-Butylbenzene	91	13.089	13.087	0.002	97	151470	25.0	22.9	
121 1,2-Dichlorobenzene	146	13.102	13.099	0.003	94	93554	25.0	23.7	
122 1,2-Dibromo-3-Chloropropan	75	13.886	13.896	-0.010	69	7931	25.0	22.3	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.032	14.036	-0.004	0	196684	75.0	71.2	
125 2,3- & 3,4- Dichlorotoluen	125	14.452	14.455	-0.003	0	125614	50.0	46.7	
126 1,2,4-Trichlorobenzene	180	14.714	14.717	-0.003	94	43136	25.0	22.1	
127 Hexachlorobutadiene	225	14.860	14.857	0.003	96	19359	25.0	23.2	
128 Naphthalene	128	14.981	14.979	0.003	97	106400	25.0	22.0	
129 1,2,3-Trichlorobenzene	180	15.206	15.210	-0.004	95	34103	25.0	22.5	
131 2,4,5-Trichlorotoluene	159	15.985	15.988	-0.003	0	10527	25.0	21.9	
130 2,3,6-Trichlorotoluene	159	16.082	16.080	0.002	94	9509	25.0	19.1	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-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		50.0	46.9	
S 133 Xylenes, Total	106				0		50.0	49.1	
S 135 1,3-Dichloropropene, Total	1				0		50.0	42.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00060	Amount Added:	1.00	Units: uL	
VOA8260VOAPRI_00217	Amount Added:	1.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	1.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	1.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	1.00	Units: uL	
voaWVA1stRest_00009	Amount Added:	1.00	Units: uL	
VOAACROPRI_00007	Amount Added:	5.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

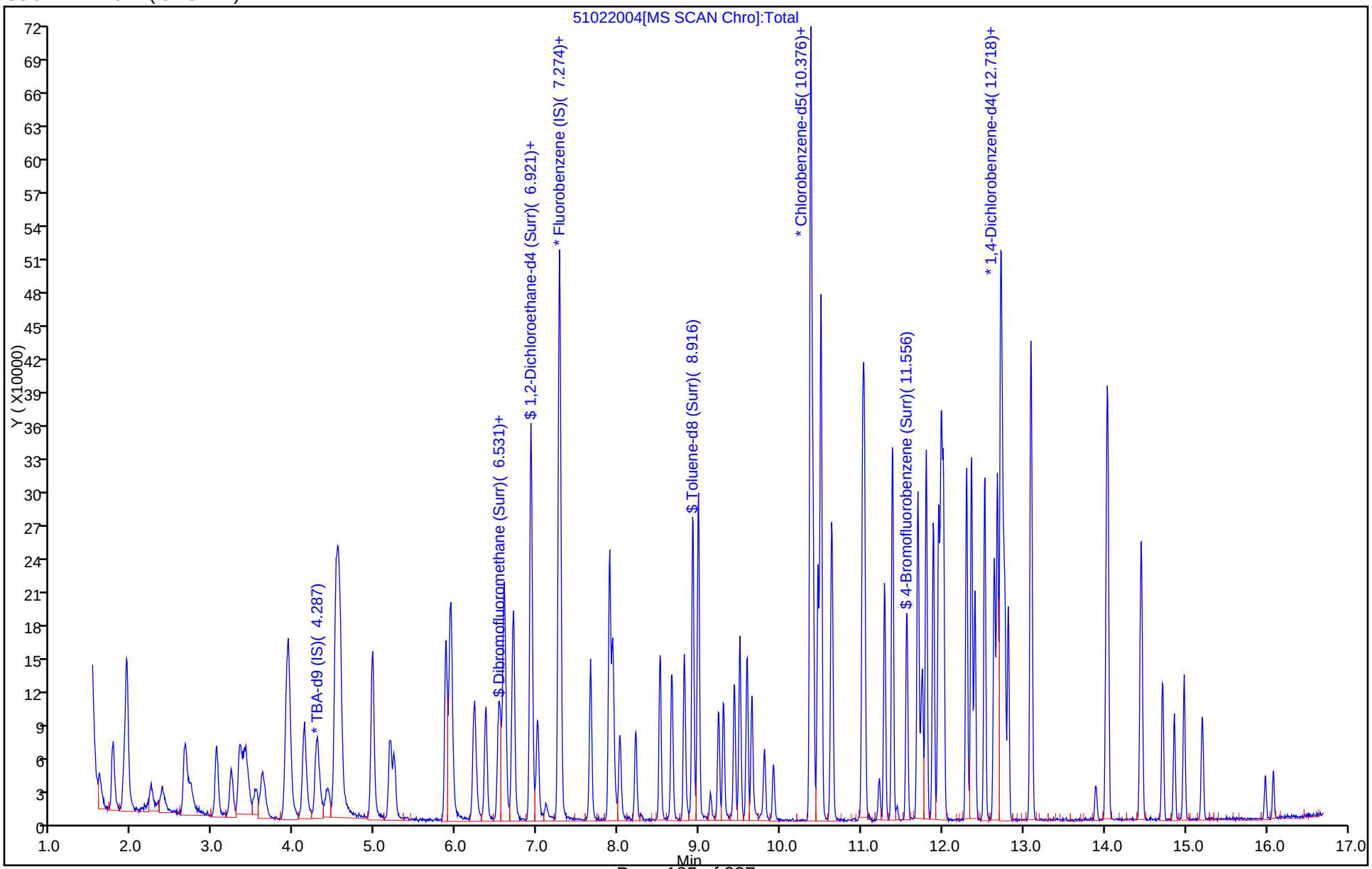
Report Date: 23-Oct-2016 13:13:29 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022004.D

Injection Date:	22-Oct-2016 15:21:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD5			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

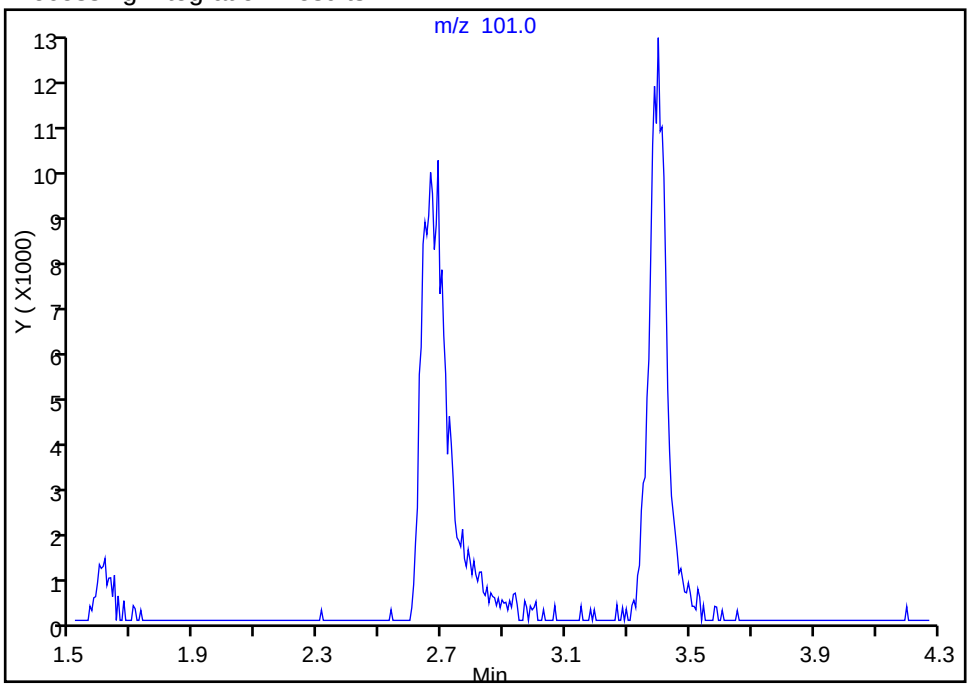
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022004.D				
Injection Date:	22-Oct-2016 15:21:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD5				
Client ID:					
Operator ID:	001562	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

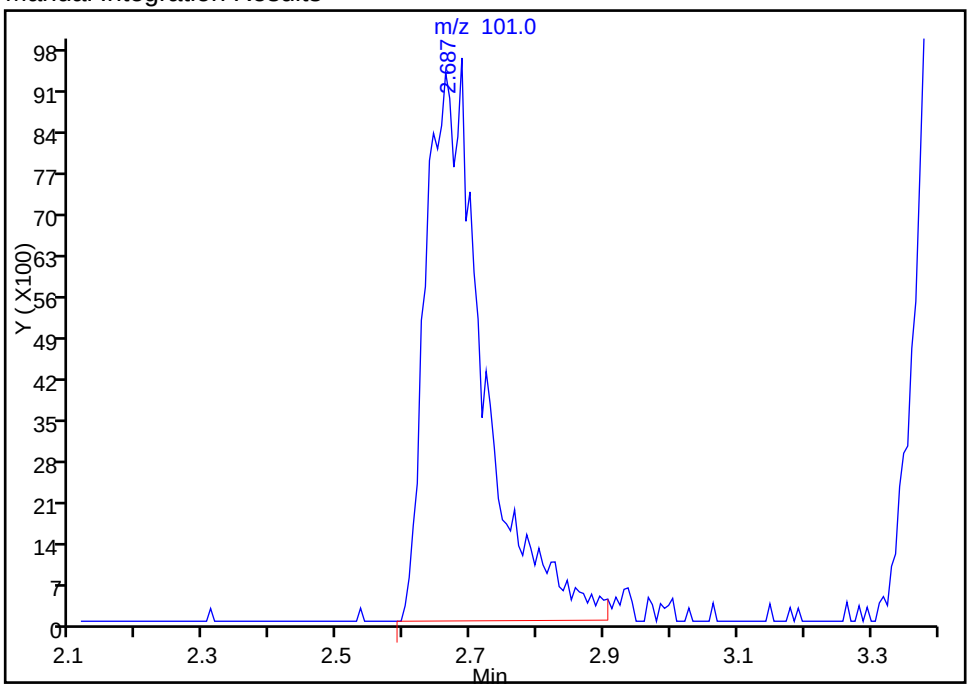
Not Detected
Expected RT: 2.67

Processing Integration Results



Manual Integration Results

RT: 2.69
Area: 57303
Amount: 23.640086
Amount Units: ng



Reviewer: fergusond, 23-Oct-2016 09:59:09
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

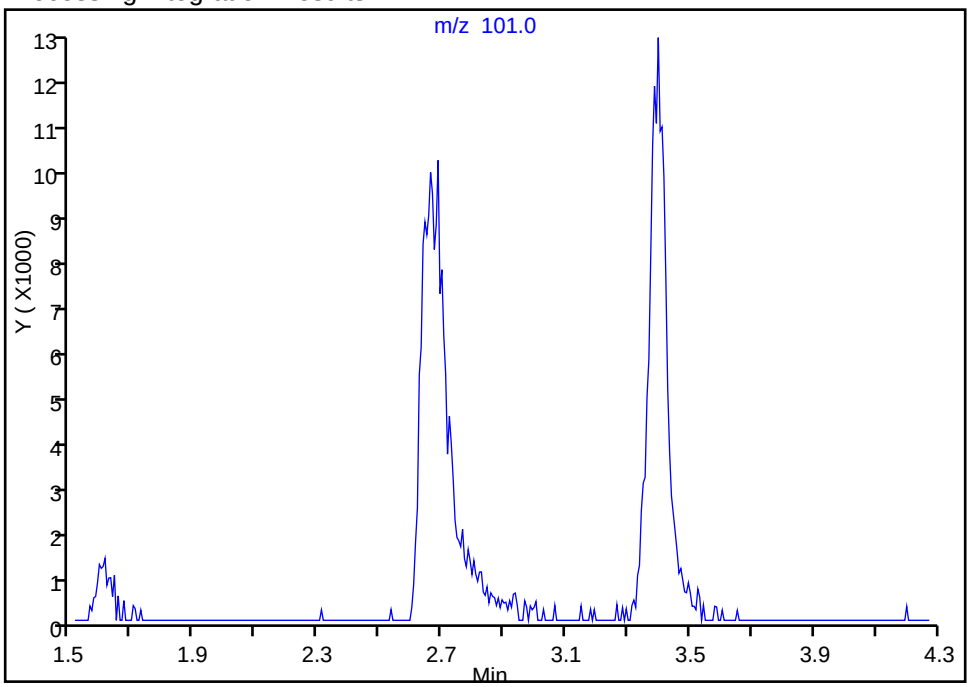
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022004.D
Injection Date: 22-Oct-2016 15:21:30 Instrument ID: CHHP5
Lims ID: IC VSTD5
Client ID:
Operator ID: 001562 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

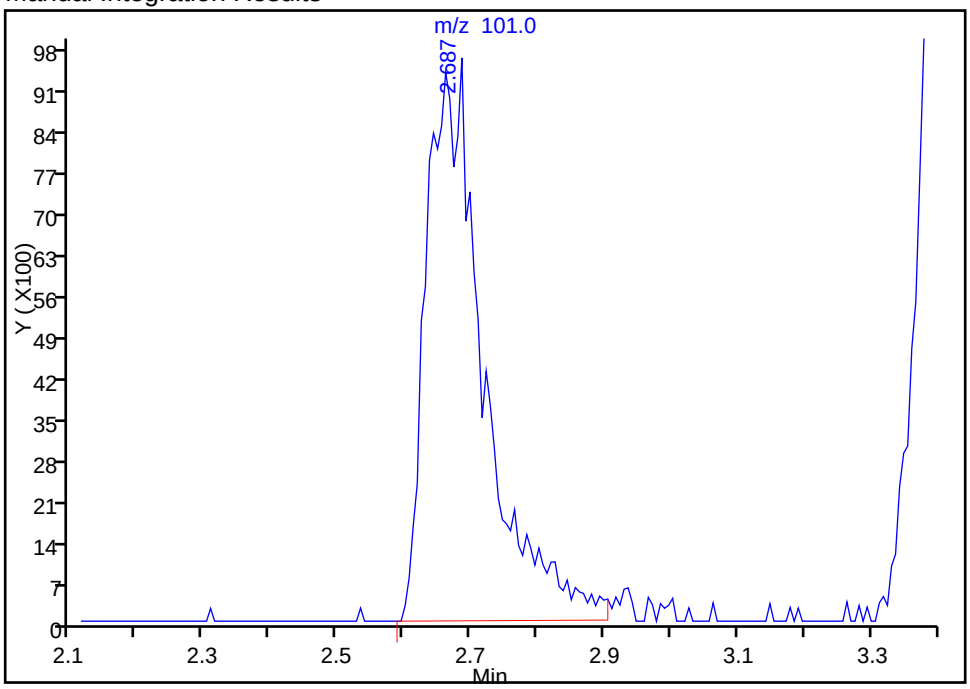
Not Detected
Expected RT: 2.67

Processing Integration Results



Manual Integration Results

RT: 2.69
Area: 57303
Amount: 23.640086
Amount Units: ng



Reviewer: fergusond, 23-Oct-2016 09:59:09
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022005.D
Lims ID: ICIS VSTD10
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 22-Oct-2016 15:45:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013995-005
Misc. Info.: ICIS VSTD10
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 13:33:19 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

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

First Level Reviewer: fergusond Date: 23-Oct-2016 13:27:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.278	4.278	0.000	0	122774	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.271	0.000	95	376706	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	91	98510	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.716	12.716	0.000	94	138316	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.541	6.541	0.000	93	93249	50.0	51.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.919	6.919	0.000	0	136959	50.0	52.6	
$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	96	378163	50.0	50.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	86	150646	50.0	50.1	
11 Dichlorodifluoromethane	85	1.602	1.602	0.000	98	109895	50.0	49.1	
12 Chloromethane	50	1.766	1.766	0.000	99	210870	50.0	48.5	
13 Vinyl chloride	62	1.912	1.912	0.000	98	139567	50.0	48.5	
14 Butadiene	39	1.936	1.936	0.000	96	207700	50.0	48.8	
15 Bromomethane	94	2.234	2.234	0.000	89	36244	50.0	50.4	
16 Chloroethane	64	2.374	2.374	0.000	98	67056	50.0	52.2	
17 Dichlorofluoromethane	67	2.660	2.660	0.000	97	146976	50.0	47.9	
18 Trichlorofluoromethane	101	2.660	2.660	0.000	60	123993	50.0	50.9	M
20 Ethyl ether	59	3.043	3.043	0.000	96	121171	50.0	50.1	
21 Acrolein	56	3.220	3.220	0.000	97	85057	150.0	149.6	
22 1,1-Dichloroethene	96	3.329	3.329	0.000	92	92995	50.0	48.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.408	3.408	0.000	93	101601	50.0	49.0	
24 Acetone	43	3.451	3.451	0.000	97	92348	100.0	95.2	
25 Iodomethane	142	3.530	3.530	0.000	98	140487	50.0	49.6	
26 Carbon disulfide	76	3.615	3.615	0.000	98	237079	50.0	47.6	
28 3-Chloro-1-propene	76	3.901	3.901	0.000	87	56753	50.0	48.0	
30 Methyl acetate	43	3.938	3.938	0.000	100	603025	250.0	240.3	
31 Methylene Chloride	84	4.126	4.126	0.000	91	111596	50.0	46.8	
32 2-Methyl-2-propanol	59	4.406	4.406	0.000	84	65650	500.0	435.4	
33 Acrylonitrile	53	4.516	4.516	0.000	97	577960	500.0	481.8	
34 trans-1,2-Dichloroethene	96	4.552	4.552	0.000	92	103732	50.0	50.0	
35 Methyl tert-butyl ether	73	4.570	4.570	0.000	93	262198	50.0	48.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.966	4.966	0.000	97	219125	50.0	50.5	
37 1,1-Dichloroethane	63	5.191	5.191	0.000	97	228544	50.0	49.4	
38 Vinyl acetate	43	5.239	5.239	0.000	97	256186	50.0	49.8	
45 cis-1,2-Dichloroethene	96	5.933	5.933	0.000	87	112534	50.0	49.2	
44 2,2-Dichloropropane	97	5.933	5.933	0.000	55	18068	50.0	46.8	
46 2-Butanone (MEK)	43	5.945	5.945	0.000	97	145907	100.0	94.5	
49 Chlorobromomethane	128	6.219	6.219	0.000	85	48054	50.0	49.7	
51 Tetrahydrofuran	42	6.237	6.237	0.000	95	100632	100.0	95.1	
52 Chloroform	83	6.365	6.365	0.000	99	182998	50.0	49.7	
53 1,1,1-Trichloroethane	97	6.523	6.523	0.000	94	126207	50.0	48.7	
54 Cyclohexane	56	6.590	6.590	0.000	96	280237	50.0	49.3	
56 Carbon tetrachloride	117	6.693	6.693	0.000	95	102720	50.0	47.4	
55 1,1-Dichloropropene	75	6.706	6.706	0.000	84	148289	50.0	48.5	
58 Benzene	78	6.925	6.925	0.000	94	442388	50.0	50.3	
57 Isobutyl alcohol	41	6.925	6.925	0.000	44	81233	1250.0	1114.7	
59 1,2-Dichloroethane	62	7.004	7.004	0.000	95	164925	50.0	49.8	
62 n-Heptane	43	7.284	7.284	0.000	97	210895	50.0	49.4	
64 Trichloroethene	130	7.661	7.661	0.000	95	104866	50.0	49.8	
66 Methylcyclohexane	83	7.892	7.892	0.000	97	179654	50.0	49.7	
67 1,2-Dichloropropane	63	7.934	7.934	0.000	96	127539	50.0	48.2	
68 Dibromomethane	93	8.020	8.020	0.000	94	54833	50.0	49.0	
70 1,4-Dioxane	88	8.020	8.020	0.000	46	19666	1000.0	939.2	M
71 Dichlorobromomethane	83	8.214	8.214	0.000	96	119981	50.0	49.4	
73 2-Chloroethyl vinyl ether	63	8.518	8.518	0.000	86	139172	100.0	100.4	
74 cis-1,3-Dichloropropene	75	8.658	8.658	0.000	85	137855	50.0	48.0	
75 4-Methyl-2-pentanone (MIBK	43	8.817	8.817	0.000	98	299144	100.0	99.1	
76 Toluene	91	8.987	8.987	0.000	97	447990	50.0	49.6	
77 trans-1,3-Dichloropropene	75	9.236	9.236	0.000	92	106076	50.0	46.3	
78 Ethyl methacrylate	69	9.297	9.297	0.000	91	116263	50.0	47.3	
79 1,1,2-Trichloroethane	97	9.431	9.431	0.000	94	82417	50.0	48.5	
80 Tetrachloroethene	164	9.504	9.504	0.000	97	86393	50.0	48.5	
81 1,3-Dichloropropane	76	9.589	9.589	0.000	93	160344	50.0	48.9	
82 2-Hexanone	43	9.644	9.644	0.000	98	221352	100.0	96.7	
84 Chlorodibromomethane	129	9.802	9.802	0.000	89	74102	50.0	48.0	
85 Ethylene Dibromide	107	9.912	9.912	0.000	98	84260	50.0	47.8	
86 3-Chlorobenzotrifluoride	180	10.380	10.380	0.000	92	163361	50.0	48.4	
87 Chlorobenzene	112	10.398	10.398	0.000	90	290427	50.0	49.0	
88 4-Chlorobenzotrifluoride	180	10.465	10.465	0.000	96	150461	50.0	48.3	
89 1,1,1,2-Tetrachloroethane	131	10.496	10.496	0.000	88	84776	50.0	47.6	
90 Ethylbenzene	106	10.502	10.502	0.000	98	164268	50.0	49.2	
91 m-Xylene & p-Xylene	106	10.636	10.636	0.000	0	205264	50.0	49.3	
92 o-Xylene	106	11.013	11.013	0.000	98	195801	50.0	49.4	
93 Styrene	104	11.037	11.037	0.000	93	336427	50.0	50.1	
94 Bromoform	173	11.220	11.220	0.000	96	42456	50.0	45.6	
96 2-Chlorobenzotrifluoride	180	11.286	11.286	0.000	97	157447	50.0	47.9	
97 Isopropylbenzene	105	11.384	11.384	0.000	97	508707	50.0	50.0	
99 1,1,2,2-Tetrachloroethane	83	11.700	11.700	0.000	95	112189	50.0	46.7	
100 Bromobenzene	156	11.694	11.694	0.000	97	118874	50.0	50.9	
102 trans-1,4-Dichloro-2-buten	53	11.731	11.731	0.000	60	38901	50.0	48.3	
101 1,2,3-Trichloropropane	110	11.755	11.755	0.000	92	37848	50.0	49.6	
103 N-Propylbenzene	120	11.804	11.804	0.000	99	134580	50.0	49.7	
104 2-Chlorotoluene	126	11.889	11.889	0.000	95	110690	50.0	47.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.950	11.950	0.000	97	120831	50.0	49.0	
106 1,3,5-Trimethylbenzene	105	11.980	11.980	0.000	95	415056	50.0	50.8	
107 4-Chlorotoluene	126	12.010	12.010	0.000	99	122940	50.0	49.6	
108 tert-Butylbenzene	119	12.296	12.296	0.000	96	332570	50.0	50.0	
110 1,2,4-Trimethylbenzene	105	12.357	12.357	0.000	98	423909	50.0	51.1	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.400	0.000	96	112772	50.0	49.1	
112 sec-Butylbenzene	105	12.521	12.521	0.000	95	495792	50.0	51.6	
113 1,3-Dichlorobenzene	146	12.637	12.637	0.000	97	223357	50.0	50.3	
114 4-Isopropyltoluene	119	12.680	12.680	0.000	97	404023	50.0	50.5	
115 1,4-Dichlorobenzene	146	12.746	12.746	0.000	93	223333	50.0	49.2	
116 2,4-Dichloro-1-(triflourom	214	12.771	12.771	0.000	95	104791	50.0	48.1	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.807	0.000	0	120365	50.0	48.4	
120 n-Butylbenzene	91	13.087	13.087	0.000	98	345469	50.0	50.3	
121 1,2-Dichlorobenzene	146	13.099	13.099	0.000	97	204460	50.0	50.0	
122 1,2-Dibromo-3-Chloropropan	75	13.890	13.890	0.000	73	15791	50.0	42.8	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.030	14.030	0.000	0	426263	150.0	148.8	
125 2,3- & 3,4- Dichlorotoluen	125	14.450	14.450	0.000	0	283810	100.0	101.7	
126 1,2,4-Trichlorobenzene	180	14.711	14.711	0.000	93	95083	50.0	47.1	
127 Hexachlorobutadiene	225	14.864	14.864	0.000	95	42328	50.0	48.9	
128 Naphthalene	128	14.985	14.985	0.000	97	243193	50.0	48.4	
129 1,2,3-Trichlorobenzene	180	15.204	15.204	0.000	95	77279	50.0	49.2	
131 2,4,5-Trichlorotoluene	159	15.983	15.983	0.000	0	25468	50.0	51.0	
130 2,3,6-Trichlorotoluene	159	16.080	16.080	0.000	92	23217	50.0	45.0	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-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		100.0	98.6	
S 134 1,2-Dichloroethene, Total	96				0		100.0	99.2	
S 135 1,3-Dichloropropene, Total	1				0		100.0	94.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACROPRI_00007	Amount Added:	6.00	Units: uL	
VOA8260VOAPRI_00217	Amount Added:	2.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	2.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	2.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	2.00	Units: uL	
voaWVA1stRest_00009	Amount Added:	2.00	Units: uL	
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

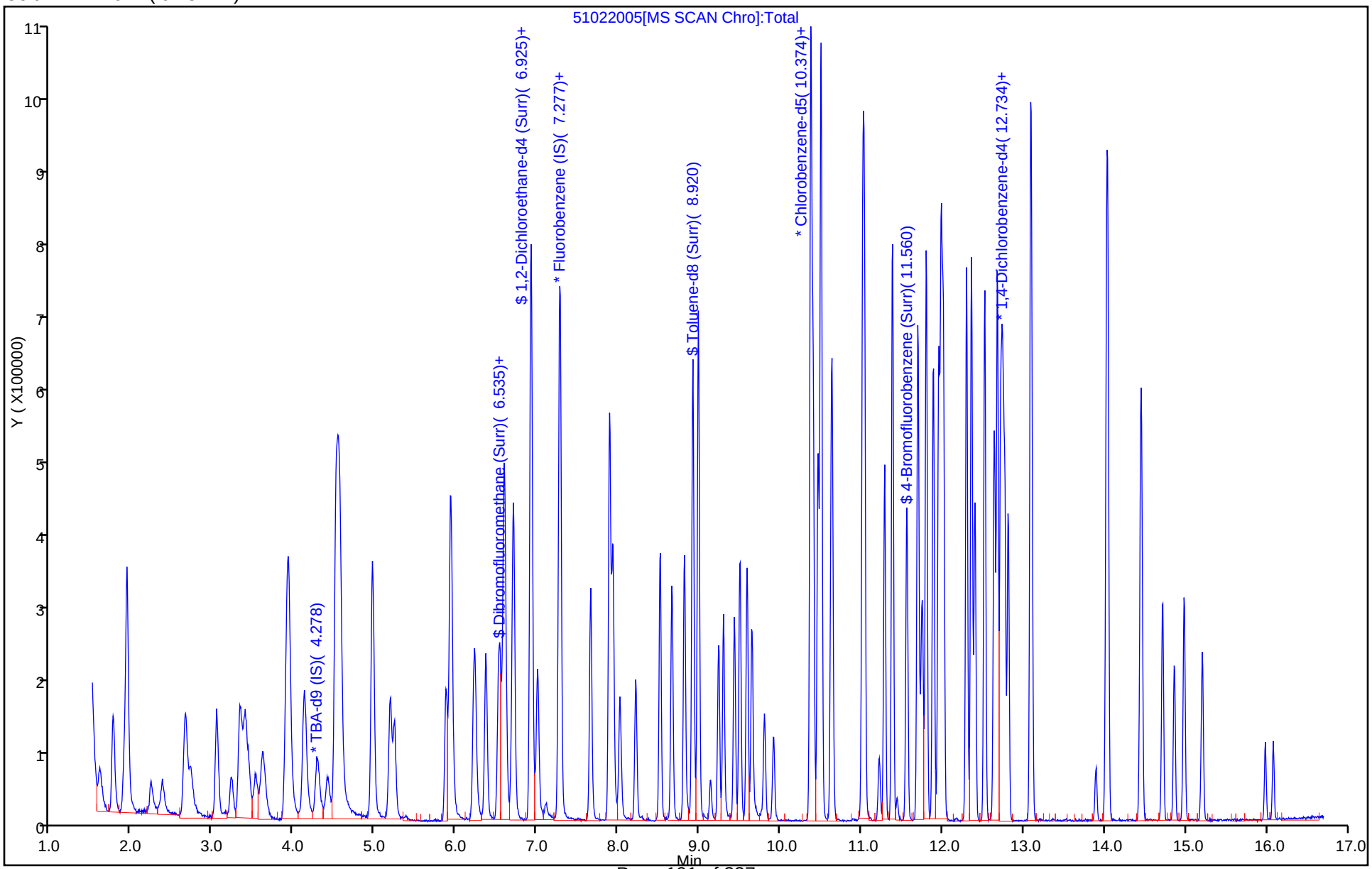
Report Date: 23-Oct-2016 13:33:20 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022005.D

Injection Date:	22-Oct-2016 15:45:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	ICIS VSTD10			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

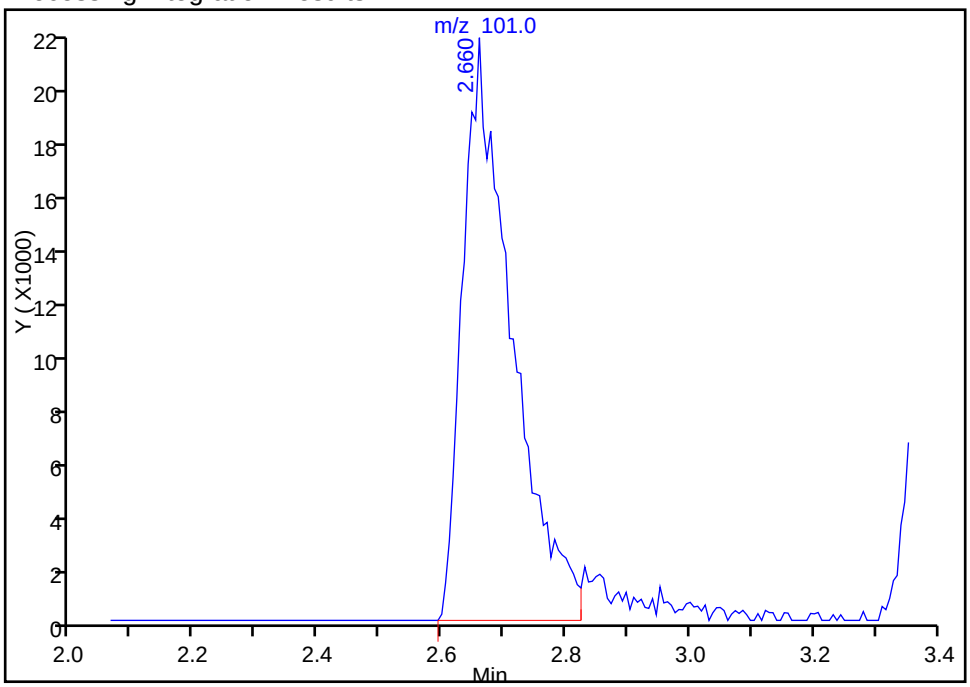
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022005.D				
Injection Date:	22-Oct-2016 15:45:30	Instrument ID:	CHHP5		
Lims ID:	ICIS VSTD10				
Client ID:					
Operator ID:	001562	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

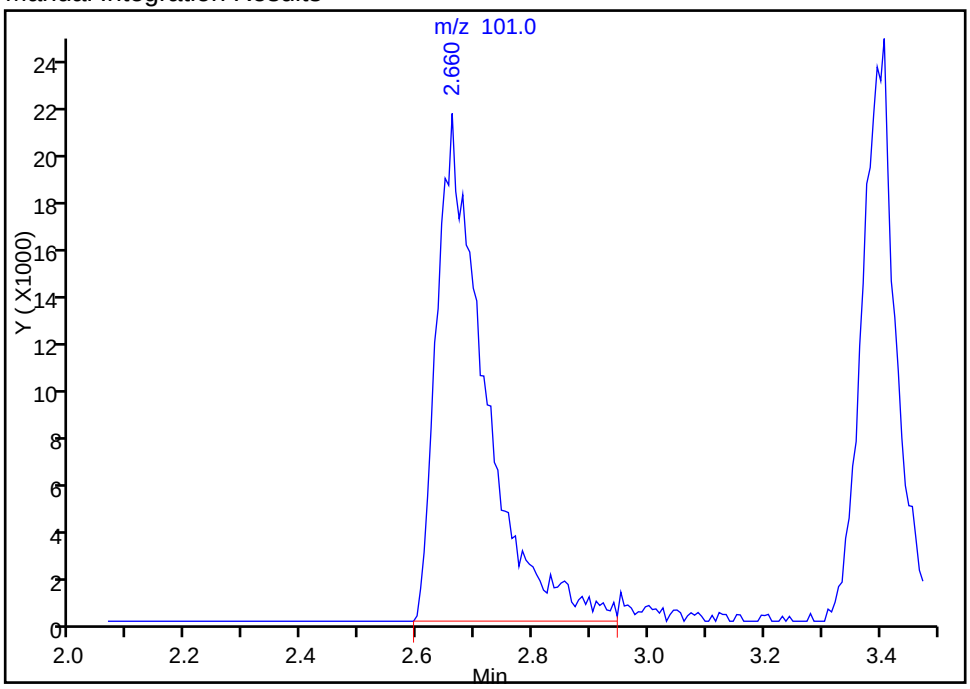
Processing Integration Results

RT: 2.66
Area: 117069
Amount: 48.430616
Amount Units: ng



Manual Integration Results

RT: 2.66
Area: 123993
Amount: 50.930312
Amount Units: ng



Reviewer: fergusond, 23-Oct-2016 13:13:22

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

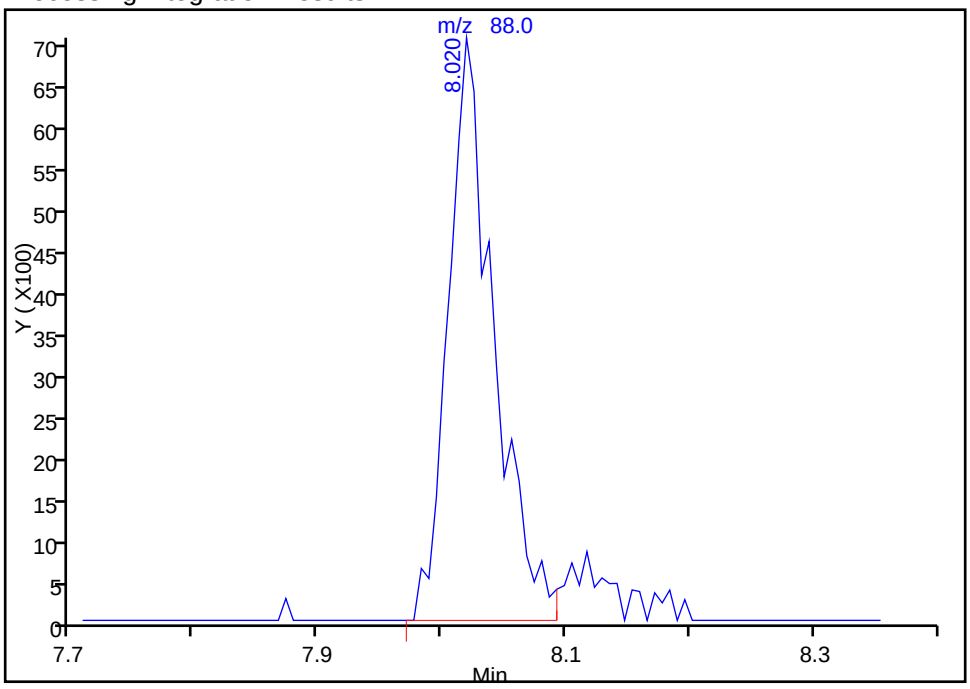
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022005.D				
Injection Date:	22-Oct-2016 15:45:30	Instrument ID:	CHHP5		
Lims ID:	ICIS VSTD10				
Client ID:					
Operator ID:	001562	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

Signal: 1

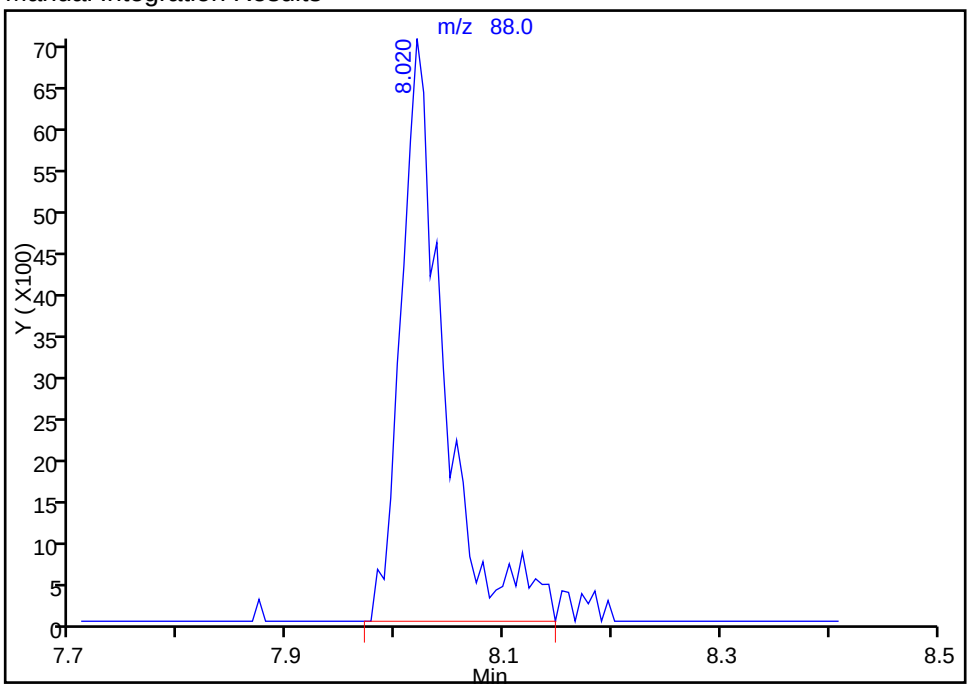
Processing Integration Results

RT: 8.02
Area: 18131
Amount: 881.6129
Amount Units: ng



Manual Integration Results

RT: 8.02
Area: 19666
Amount: 939.1522
Amount Units: ng



Reviewer: fergusond, 23-Oct-2016 13:13:22

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022006.D
Lims ID: IC VSTD15
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 22-Oct-2016 16:09:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013995-006
Misc. Info.: IC VSTD15
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 13:15:26 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

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

First Level Reviewer: fergusond Date: 23-Oct-2016 13:15:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.284	4.284	0.000	0	119902	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.271	0.000	96	343498	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	90	87680	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.716	12.716	0.000	96	128311	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.548	6.548	0.000	94	128589	75.0	78.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.919	6.919	0.000	0	187235	75.0	78.9	
$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	95	526313	75.0	79.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	87	212729	75.0	79.5	
11 Dichlorodifluoromethane	85	1.602	1.602	0.000	98	153504	75.0	75.2	
12 Chloromethane	50	1.766	1.766	0.000	99	312655	75.0	78.9	
13 Vinyl chloride	62	1.912	1.912	0.000	97	198206	75.0	75.5	
14 Butadiene	39	1.936	1.936	0.000	99	292779	75.0	75.4	
15 Bromomethane	94	2.234	2.234	0.000	91	54487	75.0	83.1	
16 Chloroethane	64	2.368	2.368	0.000	96	94249	75.0	80.5	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	96	228494	75.0	81.6	
18 Trichlorofluoromethane	101	2.654	2.654	0.000	65	169474	75.0	76.3	
20 Ethyl ether	59	3.043	3.043	0.000	97	178296	75.0	80.8	
21 Acrolein	56	3.226	3.226	0.000	96	98109	175.0	189.3	
22 1,1-Dichloroethene	96	3.335	3.335	0.000	92	130074	75.0	74.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.390	3.390	0.000	94	146948	75.0	77.7	
24 Acetone	43	3.451	3.451	0.000	98	129287	150.0	146.2	
25 Iodomethane	142	3.524	3.524	0.000	98	208665	75.0	80.8	
26 Carbon disulfide	76	3.615	3.615	0.000	99	349970	75.0	77.0	
28 3-Chloro-1-propene	76	3.907	3.907	0.000	88	81119	75.0	75.2	
30 Methyl acetate	43	3.932	3.932	0.000	100	917155	375.0	400.8	
31 Methylene Chloride	84	4.132	4.132	0.000	92	165834	75.0	76.3	
32 2-Methyl-2-propanol	59	4.418	4.418	0.000	89	107688	750.0	731.3	
33 Acrylonitrile	53	4.522	4.522	0.000	97	866579	750.0	792.2	
34 trans-1,2-Dichloroethene	96	4.546	4.546	0.000	91	147333	75.0	77.9	
35 Methyl tert-butyl ether	73	4.570	4.570	0.000	93	391228	75.0	79.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.972	4.972	0.000	96	304104	75.0	76.9	
37 1,1-Dichloroethane	63	5.185	5.185	0.000	97	329739	75.0	78.1	
38 Vinyl acetate	43	5.240	5.240	0.000	97	369725	75.0	78.9	
44 2,2-Dichloropropane	97	5.927	5.927	0.000	68	26675	75.0	75.8	
45 cis-1,2-Dichloroethene	96	5.927	5.927	0.000	88	169464	75.0	81.2	
46 2-Butanone (MEK)	43	5.951	5.951	0.000	97	226627	150.0	160.9	
49 Chlorobromomethane	128	6.225	6.225	0.000	85	68912	75.0	78.2	
51 Tetrahydrofuran	42	6.237	6.237	0.000	93	154418	150.0	160.1	
52 Chloroform	83	6.365	6.365	0.000	96	267440	75.0	79.7	
53 1,1,1-Trichloroethane	97	6.517	6.517	0.000	94	183039	75.0	77.5	
54 Cyclohexane	56	6.590	6.590	0.000	97	397193	75.0	76.6	
56 Carbon tetrachloride	117	6.694	6.694	0.000	93	152202	75.0	77.0	
55 1,1-Dichloropropene	75	6.712	6.712	0.000	86	212138	75.0	76.1	
58 Benzene	78	6.925	6.925	0.000	96	635243	75.0	79.2	
57 Isobutyl alcohol	41	6.925	6.925	0.000	63	130706	1875.0	1967.0	
59 1,2-Dichloroethane	62	7.004	7.004	0.000	96	243043	75.0	80.6	
62 n-Heptane	43	7.284	7.284	0.000	97	293294	75.0	75.4	
64 Trichloroethene	130	7.661	7.661	0.000	95	147466	75.0	76.8	
66 Methylcyclohexane	83	7.892	7.892	0.000	97	260774	75.0	79.1	
67 1,2-Dichloropropane	63	7.935	7.935	0.000	95	187825	75.0	77.9	
68 Dibromomethane	93	8.020	8.020	0.000	96	84591	75.0	82.9	
70 1,4-Dioxane	88	8.020	8.020	0.000	54	31890	1500.0	1684.8	
71 Dichlorobromomethane	83	8.220	8.220	0.000	96	176068	75.0	79.6	
73 2-Chloroethyl vinyl ether	63	8.512	8.512	0.000	87	204021	150.0	161.5	
74 cis-1,3-Dichloropropene	75	8.658	8.658	0.000	85	207121	75.0	79.1	
75 4-Methyl-2-pentanone (MIBK	43	8.817	8.817	0.000	98	446448	150.0	166.2	
76 Toluene	91	8.987	8.987	0.000	97	646939	75.0	80.4	
77 trans-1,3-Dichloropropene	75	9.236	9.236	0.000	93	163144	75.0	80.0	
78 Ethyl methacrylate	69	9.297	9.297	0.000	91	180987	75.0	82.8	
79 1,1,2-Trichloroethane	97	9.431	9.431	0.000	94	119460	75.0	78.9	
80 Tetrachloroethene	164	9.504	9.504	0.000	96	125468	75.0	79.2	
81 1,3-Dichloropropane	76	9.589	9.589	0.000	95	232723	75.0	79.8	
82 2-Hexanone	43	9.650	9.650	0.000	98	336871	150.0	165.3	
84 Chlorodibromomethane	129	9.802	9.802	0.000	89	110875	75.0	80.7	
85 Ethylene Dibromide	107	9.912	9.912	0.000	97	124423	75.0	79.4	
86 3-Chlorobenzotrifluoride	180	10.374	10.374	0.000	93	238396	75.0	79.3	
87 Chlorobenzene	112	10.404	10.404	0.000	90	426466	75.0	80.8	
88 4-Chlorobenzotrifluoride	180	10.465	10.465	0.000	96	218415	75.0	78.8	
89 1,1,1,2-Tetrachloroethane	131	10.502	10.502	0.000	89	125859	75.0	79.4	
90 Ethylbenzene	106	10.502	10.502	0.000	98	244573	75.0	82.3	
91 m-Xylene & p-Xylene	106	10.630	10.630	0.000	0	303162	75.0	81.8	
92 o-Xylene	106	11.013	11.013	0.000	97	292141	75.0	82.7	
93 Styrene	104	11.037	11.037	0.000	94	502358	75.0	84.1	
94 Bromoform	173	11.220	11.220	0.000	96	68040	75.0	82.1	
96 2-Chlorobenzotrifluoride	180	11.287	11.287	0.000	96	234305	75.0	80.1	
97 Isopropylbenzene	105	11.384	11.384	0.000	97	750229	75.0	82.8	
99 1,1,2,2-Tetrachloroethane	83	11.694	11.694	0.000	95	172092	75.0	80.4	
100 Bromobenzene	156	11.700	11.700	0.000	96	174267	75.0	80.4	
102 trans-1,4-Dichloro-2-buten	53	11.737	11.737	0.000	72	58424	75.0	78.3	
101 1,2,3-Trichloropropane	110	11.749	11.749	0.000	90	57210	75.0	80.8	
103 N-Propylbenzene	120	11.798	11.798	0.000	99	195314	75.0	77.8	
104 2-Chlorotoluene	126	11.889	11.889	0.000	95	174662	75.0	81.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.956	11.956	0.000	96	180033	75.0	78.7	
106 1,3,5-Trimethylbenzene	105	11.986	11.986	0.000	96	616418	75.0	81.3	
107 4-Chlorotoluene	126	12.010	12.010	0.000	99	185529	75.0	80.7	
108 tert-Butylbenzene	119	12.296	12.296	0.000	96	505812	75.0	82.0	
110 1,2,4-Trimethylbenzene	105	12.357	12.357	0.000	98	631181	75.0	82.1	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.400	0.000	98	166454	75.0	78.1	
112 sec-Butylbenzene	105	12.521	12.521	0.000	96	709717	75.0	79.6	
113 1,3-Dichlorobenzene	146	12.637	12.637	0.000	96	326397	75.0	79.2	
114 4-Isopropyltoluene	119	12.680	12.680	0.000	97	602571	75.0	81.2	
115 1,4-Dichlorobenzene	146	12.747	12.747	0.000	93	339028	75.0	80.5	
116 2,4-Dichloro-1-(triflourom	214	12.771	12.771	0.000	95	155381	75.0	76.8	
118 2,5-Dichlorobenzotrifluori	214	12.813	12.813	0.000	0	183028	75.0	79.4	
120 n-Butylbenzene	91	13.087	13.087	0.000	97	508098	75.0	79.7	
121 1,2-Dichlorobenzene	146	13.099	13.099	0.000	97	305229	75.0	80.4	
122 1,2-Dibromo-3-Chloropropan	75	13.890	13.890	0.000	70	27147	75.0	79.2	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.030	14.030	0.000	0	643007	225.0	241.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.450	14.450	0.000	0	420945	150.0	162.6	
126 1,2,4-Trichlorobenzene	180	14.718	14.718	0.000	94	151471	75.0	80.8	
127 Hexachlorobutadiene	225	14.858	14.858	0.000	96	62543	75.0	77.9	
128 Naphthalene	128	14.979	14.979	0.000	97	392356	75.0	84.2	
129 1,2,3-Trichlorobenzene	180	15.204	15.204	0.000	96	118676	75.0	81.4	
131 2,4,5-Trichlorotoluene	159	15.983	15.983	0.000	0	39585	75.0	85.5	
130 2,3,6-Trichlorotoluene	159	16.080	16.080	0.000	94	38449	75.0	80.4	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		150.0	159.1	
S 133 Xylenes, Total	106				0		150.0	164.5	
S 135 1,3-Dichloropropene, Total	1				0		150.0	159.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260VOAPRI_00217	Amount Added:	3.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	3.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	3.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	3.00	Units: uL	
voaWVA1stRest_00009	Amount Added:	3.00	Units: uL	
VOA8260SURR_00060	Amount Added:	3.00	Units: uL	
VOAACROPRI_00007	Amount Added:	7.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

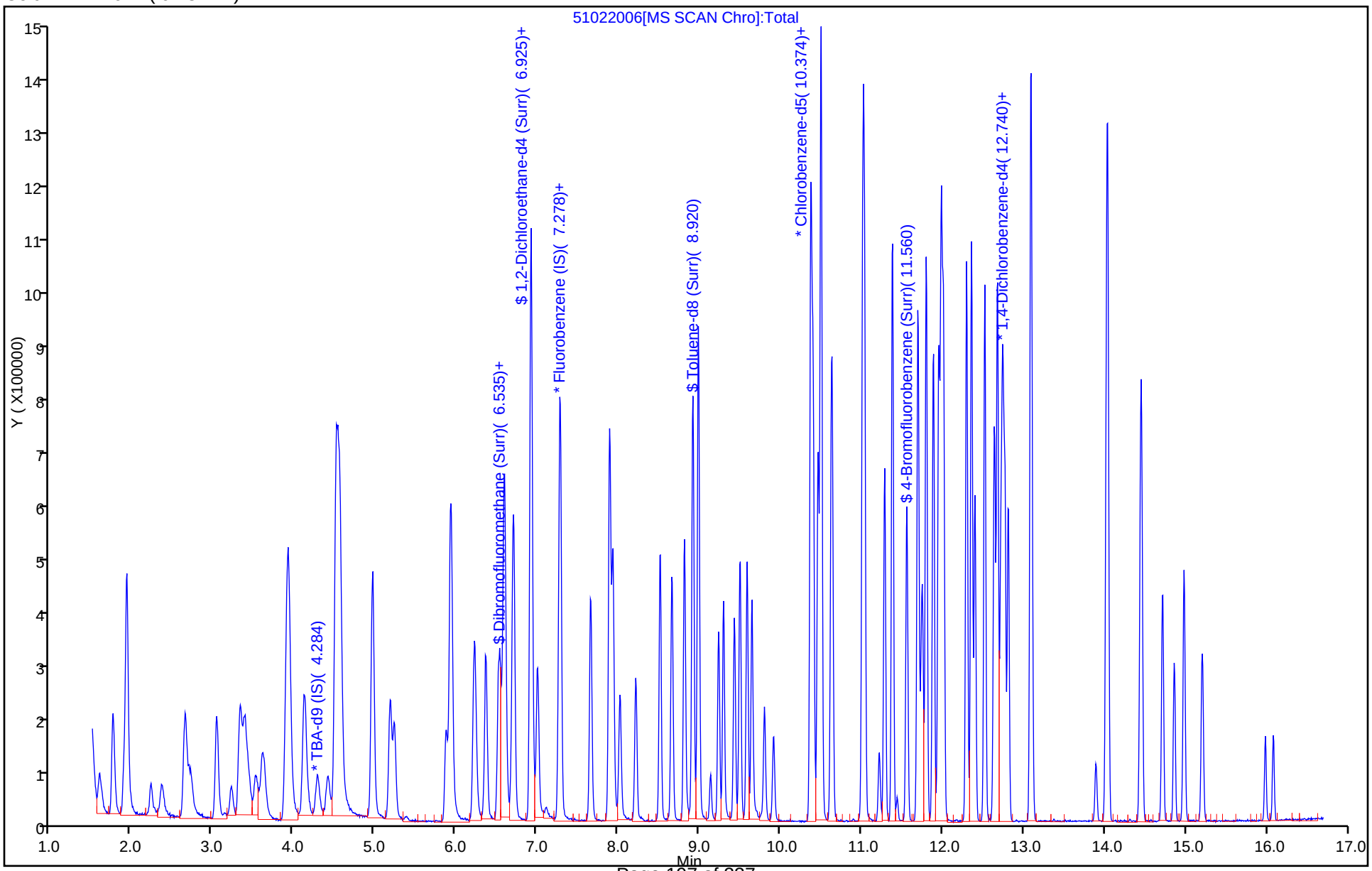
Report Date: 23-Oct-2016 13:15:29 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022006.D

Injection Date:	22-Oct-2016 16:09:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD15			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022007.D
Lims ID: IC VSTD20
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 22-Oct-2016 16:33:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013995-007
Misc. Info.: IC VSTD20
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 13:17:19 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

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

First Level Reviewer: fergusond Date: 23-Oct-2016 13:17:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.291	4.284	0.007	0	122658	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.272	7.271	0.001	97	375267	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	91	97329	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.716	12.716	0.000	93	142809	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.548	6.548	0.000	94	169199	100.0	94.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.919	6.919	0.000	0	246609	100.0	95.1	
$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	95	695986	100.0	94.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	85	281954	100.0	94.9	
11 Dichlorodifluoromethane	85	1.596	1.602	-0.006	98	215461	100.0	96.6	
12 Chloromethane	50	1.766	1.766	0.000	99	428182	100.0	98.9	
13 Vinyl chloride	62	1.906	1.912	-0.006	98	273768	100.0	95.4	
14 Butadiene	39	1.936	1.936	0.000	98	402090	100.0	94.8	
15 Bromomethane	94	2.235	2.234	0.000	90	66676	100.0	93.0	
16 Chloroethane	64	2.374	2.368	0.006	98	128149	100.0	100.2	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	96	292782	100.0	95.7	
18 Trichlorofluoromethane	101	2.660	2.654	0.006	55	242761	100.0	100.1	
20 Ethyl ether	59	3.044	3.043	0.001	94	241616	100.0	100.2	
21 Acrolein	56	3.226	3.226	0.000	99	107734	200.0	190.2	
22 1,1-Dichloroethene	96	3.330	3.335	-0.005	93	193304	100.0	101.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.403	3.390	0.013	94	197014	100.0	95.3	
24 Acetone	43	3.451	3.451	0.000	98	181978	200.0	188.4	
25 Iodomethane	142	3.530	3.524	0.006	98	281549	100.0	99.8	
26 Carbon disulfide	76	3.615	3.615	0.000	99	478017	100.0	96.3	
28 3-Chloro-1-propene	76	3.907	3.907	0.000	88	119809	100.0	101.7	
30 Methyl acetate	43	3.938	3.932	0.006	100	1272643	500.0	509.1	
31 Methylene Chloride	84	4.120	4.132	-0.012	93	225032	100.0	94.8	
32 2-Methyl-2-propanol	59	4.412	4.418	-0.006	87	174156	1000.0	1156.0	
33 Acrylonitrile	53	4.522	4.522	0.000	98	1198880	1000.0	1003.2	
34 trans-1,2-Dichloroethene	96	4.546	4.546	0.000	92	202984	100.0	98.3	
35 Methyl tert-butyl ether	73	4.564	4.570	-0.006	92	538029	100.0	100.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.966	4.972	-0.006	97	426391	100.0	98.7	
37 1,1-Dichloroethane	63	5.185	5.185	0.000	97	456615	100.0	99.0	
38 Vinyl acetate	43	5.240	5.240	0.000	97	511473	100.0	99.9	
45 cis-1,2-Dichloroethene	96	5.933	5.927	0.006	88	224503	100.0	98.4	
44 2,2-Dichloropropane	97	5.927	5.927	0.000	73	38082	100.0	99.1	
46 2-Butanone (MEK)	43	5.952	5.951	0.001	98	316479	200.0	205.7	
49 Chlorobromomethane	128	6.219	6.225	-0.006	86	96736	100.0	100.4	
51 Tetrahydrofuran	42	6.244	6.237	0.007	94	201495	200.0	191.2	
52 Chloroform	83	6.365	6.365	0.000	97	359653	100.0	98.1	
53 1,1,1-Trichloroethane	97	6.517	6.517	0.000	95	249353	100.0	96.7	
54 Cyclohexane	56	6.590	6.590	0.000	96	557095	100.0	98.4	
56 Carbon tetrachloride	117	6.694	6.694	0.000	94	210724	100.0	97.6	
55 1,1-Dichloropropene	75	6.706	6.712	-0.006	86	302113	100.0	99.2	
58 Benzene	78	6.925	6.925	0.000	95	871727	100.0	99.5	
57 Isobutyl alcohol	41	6.919	6.925	-0.006	48	192078	2500.0	2645.8	
59 1,2-Dichloroethane	62	7.004	7.004	0.000	95	325151	100.0	98.6	
62 n-Heptane	43	7.284	7.284	0.000	97	409522	100.0	96.3	
64 Trichloroethene	130	7.661	7.661	0.000	96	206655	100.0	98.5	
66 Methylcyclohexane	83	7.892	7.892	0.000	97	358556	100.0	99.5	
67 1,2-Dichloropropane	63	7.929	7.935	-0.006	97	264588	100.0	100.5	
68 Dibromomethane	93	8.020	8.020	0.000	96	115152	100.0	103.3	
70 1,4-Dioxane	88	8.014	8.020	-0.006	49	43028	2000.0	2062.7	M
71 Dichlorobromomethane	83	8.215	8.220	-0.005	96	236201	100.0	97.7	
73 2-Chloroethyl vinyl ether	63	8.513	8.512	0.001	86	289200	200.0	209.5	
74 cis-1,3-Dichloropropene	75	8.659	8.658	0.001	85	287940	100.0	100.6	
75 4-Methyl-2-pentanone (MIBK	43	8.817	8.817	0.000	99	614369	200.0	206.0	
76 Toluene	91	8.987	8.987	0.000	97	881918	100.0	98.7	
77 trans-1,3-Dichloropropene	75	9.237	9.236	0.001	94	233154	100.0	103.0	
78 Ethyl methacrylate	69	9.297	9.297	0.000	92	260008	100.0	107.1	
79 1,1,2-Trichloroethane	97	9.431	9.431	0.000	95	169494	100.0	100.9	
80 Tetrachloroethene	164	9.498	9.504	-0.006	96	172257	100.0	98.0	
81 1,3-Dichloropropane	76	9.589	9.589	0.000	94	323471	100.0	99.9	
82 2-Hexanone	43	9.650	9.650	0.000	98	487269	200.0	215.5	
84 Chlorodibromomethane	129	9.802	9.802	0.000	90	151944	100.0	99.6	
85 Ethylene Dibromide	107	9.918	9.912	0.006	98	173047	100.0	99.4	
86 3-Chlorobenzotrifluoride	180	10.374	10.374	0.000	92	323599	100.0	97.0	
87 Chlorobenzene	112	10.405	10.404	0.001	91	580865	100.0	99.1	
88 4-Chlorobenzotrifluoride	180	10.465	10.465	0.000	96	301799	100.0	98.0	
89 1,1,1,2-Tetrachloroethane	131	10.496	10.502	-0.006	90	176750	100.0	100.4	
90 Ethylbenzene	106	10.502	10.502	0.000	98	330980	100.0	100.3	
91 m-Xylene & p-Xylene	106	10.636	10.630	0.006	0	413204	100.0	100.4	
92 o-Xylene	106	11.013	11.013	0.000	98	396170	100.0	101.1	
93 Styrene	104	11.037	11.037	0.000	93	675122	100.0	101.8	
94 Bromoform	173	11.220	11.220	0.000	96	94753	100.0	103.0	
96 2-Chlorobenzotrifluoride	180	11.287	11.287	0.000	96	308077	100.0	94.9	
97 Isopropylbenzene	105	11.384	11.384	0.000	97	1012899	100.0	100.7	
100 Bromobenzene	156	11.694	11.700	-0.006	96	238406	100.0	98.9	
99 1,1,2,2-Tetrachloroethane	83	11.694	11.694	0.000	92	235918	100.0	99.3	
102 trans-1,4-Dichloro-2-buten	53	11.731	11.737	-0.006	71	82199	100.0	98.9	
101 1,2,3-Trichloropropane	110	11.755	11.749	0.006	92	75921	100.0	96.4	
103 N-Propylbenzene	120	11.798	11.798	0.000	99	269458	100.0	96.4	
104 2-Chlorotoluene	126	11.889	11.889	0.000	95	229591	100.0	96.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.956	11.956	0.000	96	240888	100.0	94.6	
106 1,3,5-Trimethylbenzene	105	11.980	11.986	-0.006	94	827180	100.0	98.0	
107 4-Chlorotoluene	126	12.011	12.010	0.001	98	244260	100.0	95.5	
108 tert-Butylbenzene	119	12.297	12.296	0.001	96	675400	100.0	98.4	
110 1,2,4-Trimethylbenzene	105	12.357	12.357	0.000	99	837908	100.0	97.9	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.400	0.000	97	222355	100.0	93.7	
112 sec-Butylbenzene	105	12.522	12.521	0.001	96	966624	100.0	97.3	
113 1,3-Dichlorobenzene	146	12.637	12.637	0.000	96	444553	100.0	96.9	
114 4-Isopropyltoluene	119	12.674	12.680	-0.006	97	816569	100.0	98.9	
115 1,4-Dichlorobenzene	146	12.741	12.747	-0.006	93	456853	100.0	97.5	
116 2,4-Dichloro-1-(triflourom	214	12.771	12.771	0.000	95	211243	100.0	93.8	
118 2,5-Dichlorobenzotrifluori	214	12.814	12.813	0.001	0	238687	100.0	93.0	
120 n-Butylbenzene	91	13.087	13.087	0.000	98	702329	100.0	99.0	
121 1,2-Dichlorobenzene	146	13.100	13.099	0.001	95	413142	100.0	97.8	
122 1,2-Dibromo-3-Chloropropan	75	13.890	13.890	0.000	72	35855	100.0	94.0	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.030	14.030	0.000	0	867174	300.0	293.1	
125 2,3- & 3,4- Dichlorotoluen	125	14.450	14.450	0.000	0	562883	200.0	195.4	
126 1,2,4-Trichlorobenzene	180	14.712	14.718	-0.006	94	207275	100.0	99.4	
127 Hexachlorobutadiene	225	14.864	14.858	0.006	96	84030	100.0	94.0	
128 Naphthalene	128	14.979	14.979	0.000	98	532144	100.0	102.6	
129 1,2,3-Trichlorobenzene	180	15.204	15.204	0.000	95	162280	100.0	100.0	
131 2,4,5-Trichlorotoluene	159	15.983	15.983	0.000	0	53573	100.0	104.0	
130 2,3,6-Trichlorotoluene	159	16.080	16.080	0.000	95	51697	100.0	97.1	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-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		200.0	201.5	
S 134 1,2-Dichloroethene, Total	96				0		200.0	196.7	
S 135 1,3-Dichloropropene, Total	1				0		200.0	203.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACROPRI_00007	Amount Added:	8.00	Units: uL	
VOA8260SURR_00060	Amount Added:	4.00	Units: uL	
VOA8260VOAPRI_00217	Amount Added:	4.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	4.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	4.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	4.00	Units: uL	
voaWVA1stRest_00009	Amount Added:	4.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

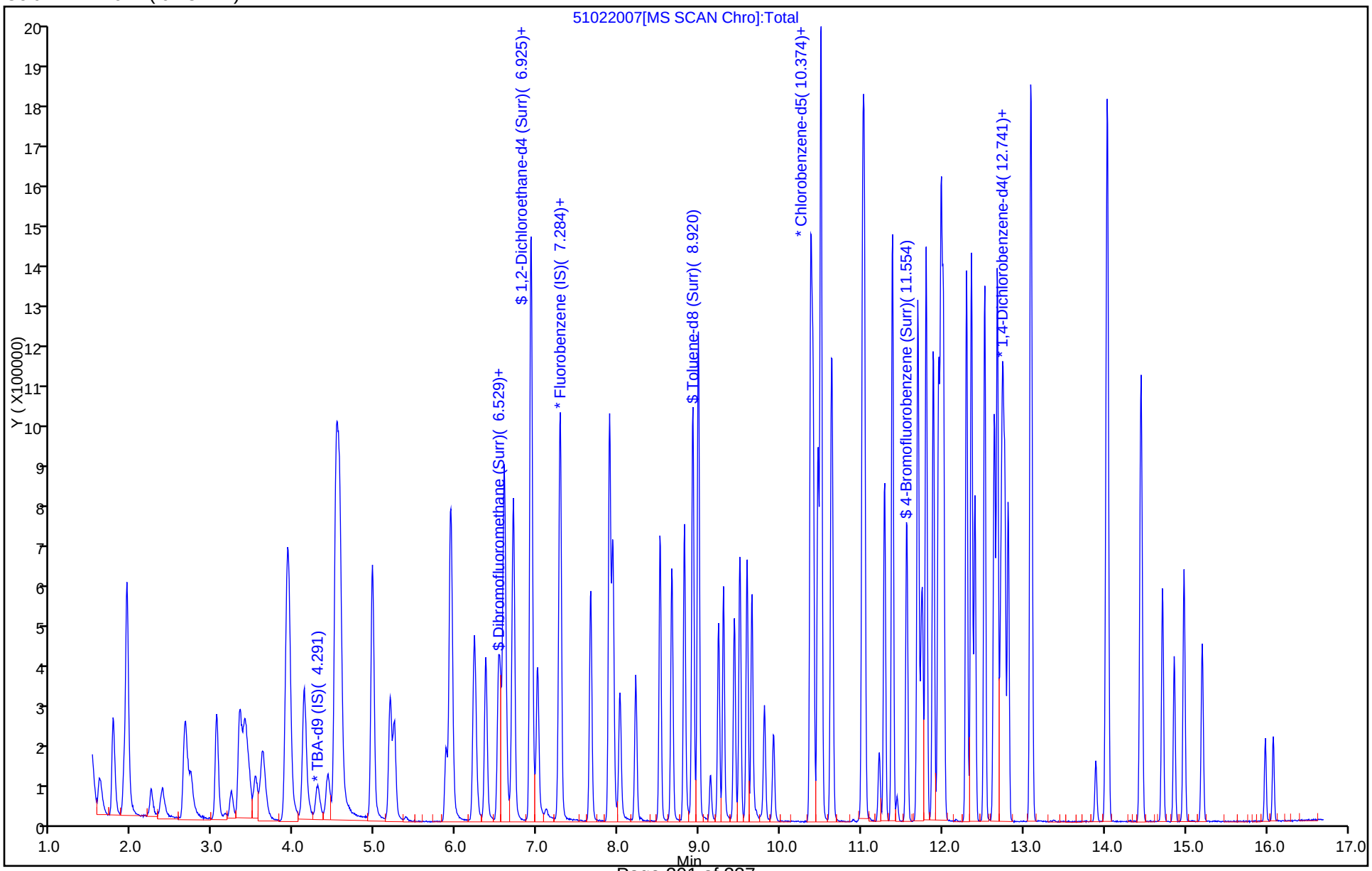
Report Date: 23-Oct-2016 13:17:20 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022007.D

Injection Date:	22-Oct-2016 16:33:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD20			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

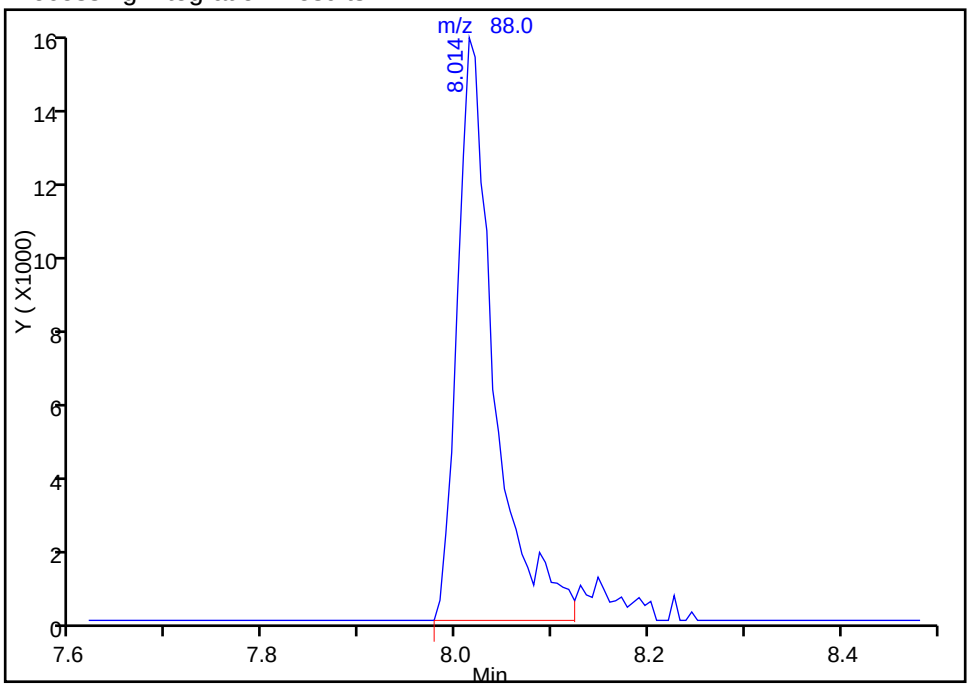
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022007.D				
Injection Date:	22-Oct-2016 16:33:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD20				
Client ID:					
Operator ID:	001562	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

Signal: 1

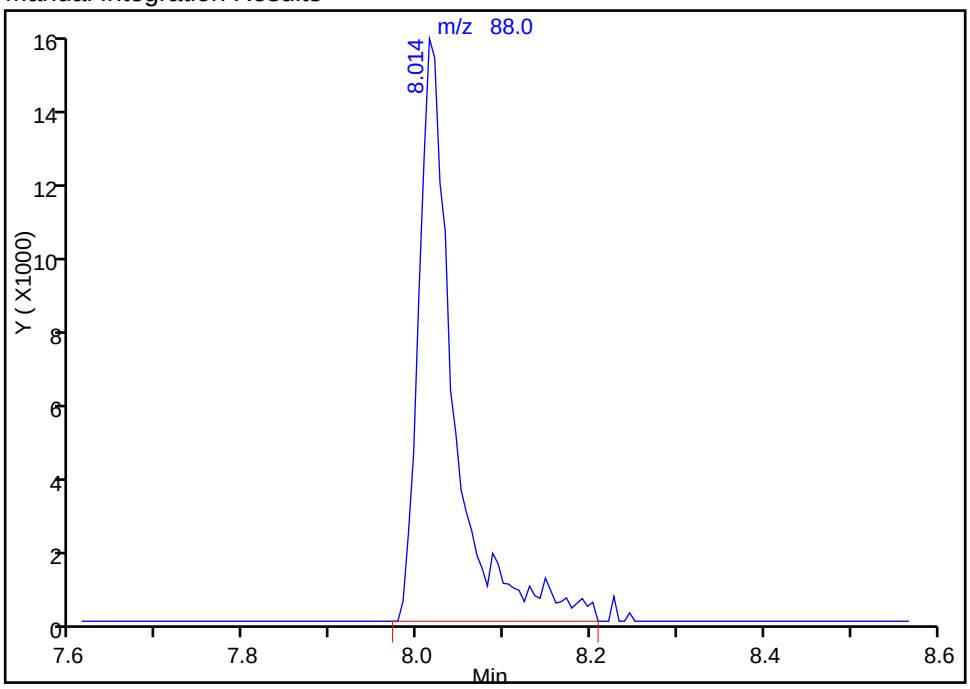
Processing Integration Results

RT: 8.01
Area: 40118
Amount: 1940.1017
Amount Units: ng



Manual Integration Results

RT: 8.01
Area: 43028
Amount: 2062.6867
Amount Units: ng



Reviewer: fergusond, 23-Oct-2016 13:17:18

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022008.D
Lims ID: IC VSTD35
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 22-Oct-2016 16:57:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013995-008
Misc. Info.: IC VSTD35
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 13:18:46 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

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

First Level Reviewer: fergusond Date: 23-Oct-2016 13:18:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.297	4.284	0.013	0	125294	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.265	7.271	-0.006	97	370510	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.368	10.374	-0.006	90	96065	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.716	0.006	92	138159	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.541	6.548	-0.007	94	303965	175.0	171.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.912	6.919	-0.007	0	431135	175.0	168.5	
$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	95	1224337	175.0	168.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	86	509793	175.0	173.9	
11 Dichlorodifluoromethane	85	1.602	1.602	0.000	98	387646	175.0	176.0	
12 Chloromethane	50	1.766	1.766	0.000	100	741257	175.0	173.4	
13 Vinyl chloride	62	1.912	1.912	0.000	98	502328	175.0	177.3	
14 Butadiene	39	1.936	1.936	0.000	98	711589	175.0	169.9	
15 Bromomethane	94	2.234	2.234	0.000	90	115398	175.0	163.1	
16 Chloroethane	64	2.356	2.368	-0.012	98	213775	175.0	169.2	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	97	527240	175.0	174.6	
18 Trichlorofluoromethane	101	2.654	2.654	0.000	92	420691	175.0	175.7	
20 Ethyl ether	59	3.043	3.043	0.000	95	407915	175.0	171.3	
21 Acrolein	56	3.220	3.226	-0.006	99	126054	225.0	225.4	
22 1,1-Dichloroethene	96	3.323	3.335	-0.012	92	337941	175.0	180.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.390	3.390	0.000	94	357669	175.0	175.3	
24 Acetone	43	3.439	3.451	-0.012	98	340715	350.0	357.2	
25 Iodomethane	142	3.518	3.524	-0.006	98	486595	175.0	174.7	
26 Carbon disulfide	76	3.609	3.615	-0.006	99	880574	175.0	179.7	
28 3-Chloro-1-propene	76	3.895	3.907	-0.012	87	209891	175.0	180.4	
30 Methyl acetate	43	3.932	3.932	0.000	100	2139103	875.0	866.7	
31 Methylene Chloride	84	4.126	4.132	-0.006	92	375770	175.0	160.3	
32 2-Methyl-2-propanol	59	4.424	4.418	0.006	85	262285	1750.0	1704.4	
33 Acrylonitrile	53	4.516	4.522	-0.006	98	2092798	1750.0	1773.7	
34 trans-1,2-Dichloroethene	96	4.546	4.546	0.000	92	357112	175.0	175.1	
35 Methyl tert-butyl ether	73	4.570	4.570	0.000	93	933266	175.0	176.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.966	4.972	-0.006	96	766179	175.0	179.6	
37 1,1-Dichloroethane	63	5.179	5.185	-0.006	96	784476	175.0	172.3	
38 Vinyl acetate	43	5.233	5.240	-0.007	97	964118	175.0	190.7	
44 2,2-Dichloropropane	97	5.927	5.927	0.000	66	67579	175.0	178.1	
45 cis-1,2-Dichloroethene	96	5.933	5.927	0.006	88	393767	175.0	174.9	
46 2-Butanone (MEK)	43	5.951	5.951	0.000	97	538326	350.0	354.3	
49 Chlorobromomethane	128	6.213	6.225	-0.012	86	170915	175.0	179.7	
51 Tetrahydrofuran	42	6.237	6.237	0.000	94	363332	350.0	349.1	
52 Chloroform	83	6.365	6.365	0.000	96	617527	175.0	170.7	
53 1,1,1-Trichloroethane	97	6.523	6.517	0.006	95	453368	175.0	178.0	
54 Cyclohexane	56	6.590	6.590	0.000	97	998701	175.0	178.6	
56 Carbon tetrachloride	117	6.693	6.694	-0.001	93	388240	175.0	182.1	
55 1,1-Dichloropropene	75	6.706	6.712	-0.006	86	534817	175.0	177.9	
58 Benzene	78	6.925	6.925	0.000	96	1481843	175.0	171.2	
57 Isobutyl alcohol	41	6.925	6.925	0.000	51	344432	4375.0	4805.4	
59 1,2-Dichloroethane	62	7.004	7.004	0.000	96	561654	175.0	172.6	
62 n-Heptane	43	7.284	7.284	0.000	98	757194	175.0	180.4	
64 Trichloroethene	130	7.655	7.661	-0.006	96	363296	175.0	175.3	
66 Methylcyclohexane	83	7.892	7.892	0.000	96	651506	175.0	183.1	
67 1,2-Dichloropropane	63	7.934	7.935	-0.001	95	447322	175.0	172.1	
70 1,4-Dioxane	88	8.014	8.020	-0.006	47	74760	3500.0	3629.9	
68 Dibromomethane	93	8.014	8.020	-0.006	97	189826	175.0	172.4	
71 Dichlorobromomethane	83	8.214	8.220	-0.006	96	416437	175.0	174.5	
73 2-Chloroethyl vinyl ether	63	8.512	8.512	0.000	87	484364	350.0	355.4	
74 cis-1,3-Dichloropropene	75	8.658	8.658	0.000	86	525078	175.0	185.9	
75 4-Methyl-2-pentanone (MIBK	43	8.817	8.817	0.000	99	1071790	350.0	364.1	
76 Toluene	91	8.987	8.987	0.000	97	1493978	175.0	169.5	
77 trans-1,3-Dichloropropene	75	9.236	9.236	0.000	93	414030	175.0	185.2	
78 Ethyl methacrylate	69	9.297	9.297	0.000	91	452684	175.0	189.0	
79 1,1,2-Trichloroethane	97	9.431	9.431	0.000	95	282152	175.0	170.2	
80 Tetrachloroethene	164	9.498	9.504	-0.006	96	297871	175.0	171.6	
81 1,3-Dichloropropane	76	9.589	9.589	0.000	93	548319	175.0	171.6	
82 2-Hexanone	43	9.650	9.650	0.000	98	820647	350.0	367.6	
84 Chlorodibromomethane	129	9.802	9.802	0.000	90	268037	175.0	178.0	
85 Ethylene Dibromide	107	9.918	9.912	0.006	98	296148	175.0	172.4	
86 3-Chlorobenzotrifluoride	180	10.374	10.374	0.000	93	580353	175.0	176.2	
87 Chlorobenzene	112	10.404	10.404	0.000	90	986925	175.0	170.6	
88 4-Chlorobenzotrifluoride	180	10.465	10.465	0.000	96	543962	175.0	179.0	
90 Ethylbenzene	106	10.502	10.502	0.000	98	572466	175.0	175.7	
89 1,1,1,2-Tetrachloroethane	131	10.496	10.502	-0.006	91	312552	175.0	180.0	
91 m-Xylene & p-Xylene	106	10.636	10.630	0.006	0	721601	175.0	177.6	
92 o-Xylene	106	11.013	11.013	0.000	97	692079	175.0	178.9	
93 Styrene	104	11.037	11.037	0.000	93	1145359	175.0	175.0	
94 Bromoform	173	11.220	11.220	0.000	95	166982	175.0	183.9	
96 2-Chlorobenzotrifluoride	180	11.286	11.287	-0.001	96	564416	175.0	176.2	
97 Isopropylbenzene	105	11.384	11.384	0.000	97	1724768	175.0	173.7	
99 1,1,2,2-Tetrachloroethane	83	11.694	11.694	0.000	95	414517	175.0	176.8	
100 Bromobenzene	156	11.694	11.700	-0.006	96	405838	175.0	173.9	
102 trans-1,4-Dichloro-2-buten	53	11.737	11.737	0.000	71	149838	175.0	186.4	
101 1,2,3-Trichloropropane	110	11.755	11.749	0.006	91	133377	175.0	175.0	
103 N-Propylbenzene	120	11.797	11.798	-0.001	98	479706	175.0	177.5	
104 2-Chlorotoluene	126	11.889	11.889	0.000	95	402855	175.0	174.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.950	11.956	-0.006	96	434398	175.0	176.3	
106 1,3,5-Trimethylbenzene	105	11.986	11.986	0.000	94	1411132	175.0	172.8	
107 4-Chlorotoluene	126	12.010	12.010	0.000	98	430992	175.0	174.1	
108 tert-Butylbenzene	119	12.296	12.296	0.000	95	1170728	175.0	176.3	
110 1,2,4-Trimethylbenzene	105	12.357	12.357	0.000	98	1450154	175.0	175.2	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.400	0.000	97	408895	175.0	178.1	
112 sec-Butylbenzene	105	12.521	12.521	0.000	96	1660807	175.0	172.9	
113 1,3-Dichlorobenzene	146	12.637	12.637	0.000	96	759244	175.0	171.1	
114 4-Isopropyltoluene	119	12.680	12.680	0.000	97	1421342	175.0	178.0	
115 1,4-Dichlorobenzene	146	12.740	12.747	-0.007	91	782506	175.0	172.6	
116 2,4-Dichloro-1-(triflourom	214	12.771	12.771	0.000	97	385108	175.0	176.8	
118 2,5-Dichlorobenzotrifluori	214	12.813	12.813	0.000	0	437274	175.0	176.1	
120 n-Butylbenzene	91	13.087	13.087	0.000	96	1226876	175.0	178.8	
121 1,2-Dichlorobenzene	146	13.099	13.099	0.000	94	709578	175.0	173.6	
122 1,2-Dibromo-3-Chloropropan	75	13.890	13.890	0.000	73	66283	175.0	179.7	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.030	14.030	0.000	0	1539823	525.0	538.0	
125 2,3- & 3,4- Dichlorotoluen	125	14.450	14.450	0.000	0	1008562	350.0	361.9	
126 1,2,4-Trichlorobenzene	180	14.718	14.718	0.000	94	363075	175.0	179.9	
127 Hexachlorobutadiene	225	14.857	14.858	-0.001	96	154651	175.0	178.8	
128 Naphthalene	128	14.979	14.979	0.000	98	957033	175.0	190.8	
129 1,2,3-Trichlorobenzene	180	15.204	15.204	0.000	94	289565	175.0	184.5	
131 2,4,5-Trichlorotoluene	159	15.983	15.983	0.000	0	106630	175.0	214.0	
130 2,3,6-Trichlorotoluene	159	16.080	16.080	0.000	93	98818	175.0	191.8	
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 134 1,2-Dichloroethene, Total	96				0		350.0	350.0	
S 133 Xylenes, Total	106				0		350.0	356.5	
S 135 1,3-Dichloropropene, Total	1				0		350.0	371.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260VOAPRI_00217	Amount Added:	7.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	7.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	7.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	7.00	Units: uL	
voaWVA1stRest_00009	Amount Added:	7.00	Units: uL	
VOA8260SURR_00060	Amount Added:	7.00	Units: uL	
VOAACROPRI_00007	Amount Added:	9.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

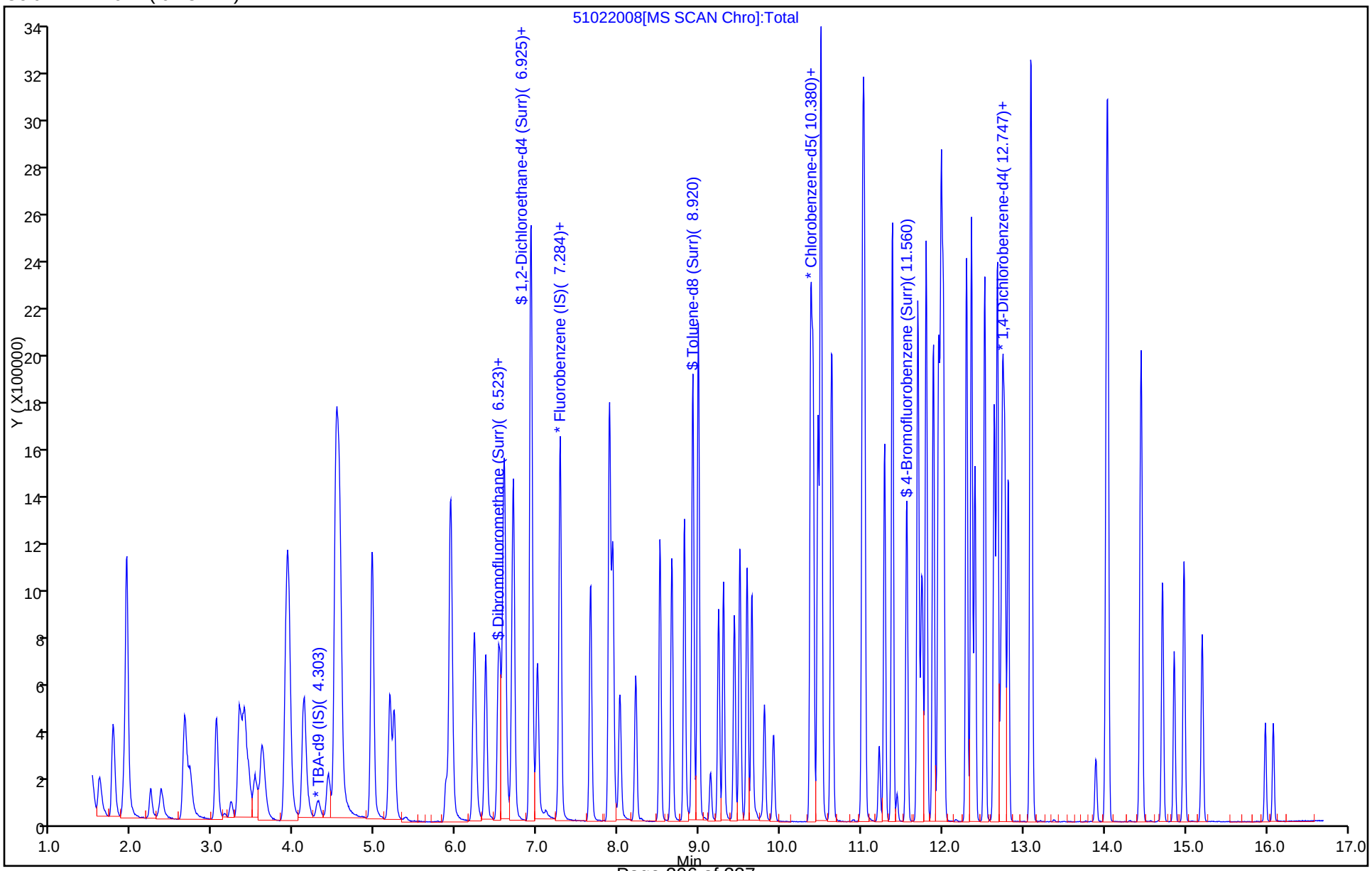
Report Date: 23-Oct-2016 13:18:47 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022008.D

Injection Date:	22-Oct-2016 16:57:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD35			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022009.D
Lims ID: IC VSTD40
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 22-Oct-2016 17:22:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013995-009
Misc. Info.: IC VSTD40
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 13:21:08 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

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

First Level Reviewer: fergusond Date: 23-Oct-2016 13:21:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.302	4.284	0.018	0	131542	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.271	0.000	91	365282	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	89	101720	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.716	12.716	0.000	93	142290	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.547	6.548	-0.001	94	343798	200.0	196.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.919	-0.001	0	496655	200.0	196.8	
$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	95	1394043	200.0	181.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	86	583947	200.0	188.1	
11 Dichlorodifluoromethane	85	1.601	1.602	-0.001	98	429182	200.0	197.6	
12 Chloromethane	50	1.766	1.766	0.000	99	830573	200.0	197.1	
13 Vinyl chloride	62	1.912	1.912	0.000	98	564533	200.0	202.1	
14 Butadiene	39	1.936	1.936	0.000	97	786444	200.0	190.5	
15 Bromomethane	94	2.228	2.234	-0.006	91	136780	200.0	196.1	
16 Chloroethane	64	2.356	2.368	-0.012	98	231064	200.0	185.5	
17 Dichlorofluoromethane	67	2.648	2.654	-0.006	97	590488	200.0	198.3	
18 Trichlorofluoromethane	101	2.654	2.654	0.000	58	470795	200.0	199.4	
20 Ethyl ether	59	3.043	3.043	0.000	96	469809	200.0	200.2	
21 Acrolein	56	3.232	3.226	0.006	99	138202	250.0	250.7	
22 1,1-Dichloroethene	96	3.329	3.335	-0.006	92	381419	200.0	206.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.378	3.390	-0.012	93	396910	200.0	197.3	
24 Acetone	43	3.445	3.451	-0.006	98	384850	400.0	409.3	
25 Iodomethane	142	3.524	3.524	0.000	98	562493	200.0	204.9	
26 Carbon disulfide	76	3.609	3.615	-0.006	99	999685	200.0	206.9	
28 3-Chloro-1-propene	76	3.901	3.907	-0.006	88	246656	200.0	215.0	
30 Methyl acetate	43	3.937	3.932	0.005	100	2465695	1000.0	1013.4	
31 Methylene Chloride	84	4.126	4.132	-0.006	92	436687	200.0	189.0	
32 2-Methyl-2-propanol	59	4.424	4.418	0.006	86	300575	2000.0	1860.4	
33 Acrylonitrile	53	4.515	4.522	-0.007	97	2376180	2000.0	2042.7	
34 trans-1,2-Dichloroethene	96	4.546	4.546	0.000	92	405331	200.0	201.6	
35 Methyl tert-butyl ether	73	4.570	4.570	0.000	94	1105174	200.0	211.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.959	4.972	-0.013	97	871474	200.0	207.2	
37 1,1-Dichloroethane	63	5.185	5.185	-0.001	96	912372	200.0	203.3	
38 Vinyl acetate	43	5.233	5.240	-0.007	97	1072697	200.0	215.2	
45 cis-1,2-Dichloroethene	96	5.933	5.927	0.006	88	449345	200.0	202.4	
44 2,2-Dichloropropane	97	5.933	5.927	0.006	72	77067	200.0	206.0	
46 2-Butanone (MEK)	43	5.951	5.951	0.000	97	619027	400.0	413.3	
49 Chlorobromomethane	128	6.219	6.225	-0.006	85	192697	200.0	205.5	
51 Tetrahydrofuran	42	6.237	6.237	0.000	94	415338	400.0	404.8	
52 Chloroform	83	6.365	6.365	0.000	97	711575	200.0	199.5	
53 1,1,1-Trichloroethane	97	6.517	6.517	0.000	94	517321	200.0	206.1	
54 Cyclohexane	56	6.590	6.590	0.000	97	1120418	200.0	203.2	
56 Carbon tetrachloride	117	6.693	6.694	-0.001	93	442875	200.0	210.8	
55 1,1-Dichloropropene	75	6.705	6.712	-0.007	86	607876	200.0	205.1	
58 Benzene	78	6.924	6.925	-0.001	96	1709623	200.0	200.4	
57 Isobutyl alcohol	41	6.924	6.925	-0.001	51	387004	5000.0	5476.6	
59 1,2-Dichloroethane	62	7.003	7.004	-0.001	95	642222	200.0	200.2	
62 n-Heptane	43	7.283	7.284	-0.001	98	845753	200.0	204.4	
64 Trichloroethene	130	7.660	7.661	-0.001	95	414767	200.0	203.0	
66 Methylcyclohexane	83	7.892	7.892	0.000	96	744113	200.0	212.2	
67 1,2-Dichloropropane	63	7.934	7.935	-0.001	95	522348	200.0	203.8	
68 Dibromomethane	93	8.019	8.020	-0.001	97	229137	200.0	211.1	
70 1,4-Dioxane	88	8.019	8.020	-0.001	47	84058	4000.0	4139.7	
71 Dichlorobromomethane	83	8.214	8.220	-0.006	96	492086	200.0	209.1	
73 2-Chloroethyl vinyl ether	63	8.512	8.512	0.000	87	587972	400.0	437.5	
74 cis-1,3-Dichloropropene	75	8.658	8.658	0.000	86	616111	200.0	221.2	
75 4-Methyl-2-pentanone (MIBK	43	8.816	8.817	-0.001	99	1255774	400.0	402.9	
76 Toluene	91	8.987	8.987	0.000	97	1714356	200.0	183.6	
77 trans-1,3-Dichloropropene	75	9.236	9.236	0.000	93	500081	200.0	211.3	
78 Ethyl methacrylate	69	9.297	9.297	0.000	91	534579	200.0	210.7	
79 1,1,2-Trichloroethane	97	9.431	9.431	0.000	95	328867	200.0	187.3	
80 Tetrachloroethene	164	9.498	9.504	-0.006	96	343465	200.0	186.9	
81 1,3-Dichloropropane	76	9.589	9.589	0.000	93	647160	200.0	191.3	
82 2-Hexanone	43	9.650	9.650	0.000	99	963136	400.0	407.5	
84 Chlorodibromomethane	129	9.802	9.802	0.000	90	313753	200.0	196.8	
85 Ethylene Dibromide	107	9.911	9.912	-0.001	98	347518	200.0	191.0	
86 3-Chlorobenzotrifluoride	180	10.374	10.374	0.000	95	686732	200.0	196.9	
87 Chlorobenzene	112	10.404	10.404	0.000	92	1144110	200.0	186.8	
88 4-Chlorobenzotrifluoride	180	10.465	10.465	0.000	95	638282	200.0	198.4	
89 1,1,1,2-Tetrachloroethane	131	10.495	10.502	-0.007	91	353938	200.0	192.5	
90 Ethylbenzene	106	10.501	10.502	-0.001	97	670720	200.0	194.5	
91 m-Xylene & p-Xylene	106	10.635	10.630	0.005	0	831099	200.0	193.2	
92 o-Xylene	106	11.012	11.013	-0.001	97	797469	200.0	194.7	
93 Styrene	104	11.037	11.037	0.000	93	1332303	200.0	192.3	
94 Bromoform	173	11.219	11.220	-0.001	96	195502	200.0	203.3	
96 2-Chlorobenzotrifluoride	180	11.286	11.287	-0.001	96	666819	200.0	196.5	
97 Isopropylbenzene	105	11.384	11.384	0.000	97	1955310	200.0	186.0	
99 1,1,2,2-Tetrachloroethane	83	11.694	11.694	0.000	94	482112	200.0	194.2	
100 Bromobenzene	156	11.694	11.700	-0.006	96	483285	200.0	201.1	
102 trans-1,4-Dichloro-2-buten	53	11.736	11.737	-0.001	68	179384	200.0	216.7	
101 1,2,3-Trichloropropane	110	11.755	11.749	0.006	91	155618	200.0	198.2	
103 N-Propylbenzene	120	11.797	11.798	-0.001	98	556273	200.0	199.8	
104 2-Chlorotoluene	126	11.888	11.889	-0.001	95	473480	200.0	198.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.955	11.956	-0.001	96	516505	200.0	203.5	
106 1,3,5-Trimethylbenzene	105	11.986	11.986	0.000	95	1629974	200.0	193.8	
107 4-Chlorotoluene	126	12.010	12.010	0.000	98	515374	200.0	202.1	
108 tert-Butylbenzene	119	12.296	12.296	0.000	95	1355432	200.0	198.2	
110 1,2,4-Trimethylbenzene	105	12.357	12.357	0.000	98	1674135	200.0	196.3	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.400	-0.001	98	488889	200.0	206.8	
112 sec-Butylbenzene	105	12.521	12.521	0.000	96	1925023	200.0	194.6	
113 1,3-Dichlorobenzene	146	12.637	12.637	0.000	96	887299	200.0	194.1	
114 4-Isopropyltoluene	119	12.679	12.680	-0.001	96	1636065	200.0	198.9	
115 1,4-Dichlorobenzene	146	12.740	12.747	-0.007	92	902000	200.0	193.2	
116 2,4-Dichloro-1-(triflourom	214	12.771	12.771	0.000	95	458166	200.0	204.3	
118 2,5-Dichlorobenzotrifluori	214	12.813	12.813	0.000	0	525934	200.0	205.7	
120 n-Butylbenzene	91	13.087	13.087	0.000	97	1427132	200.0	201.9	
121 1,2-Dichlorobenzene	146	13.099	13.099	0.000	94	826915	200.0	196.5	
122 1,2-Dibromo-3-Chloropropan	75	13.896	13.890	0.006	75	78936	200.0	207.8	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.036	14.030	0.006	0	1832958	600.0	621.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.450	14.450	0.000	0	1231331	400.0	429.0	
126 1,2,4-Trichlorobenzene	180	14.717	14.718	-0.001	95	431004	200.0	207.4	
127 Hexachlorobutadiene	225	14.857	14.858	-0.001	97	179638	200.0	201.7	
128 Naphthalene	128	14.979	14.979	0.000	98	1118920	200.0	216.6	
129 1,2,3-Trichlorobenzene	180	15.204	15.204	0.000	96	349524	200.0	216.2	
131 2,4,5-Trichlorotoluene	159	15.983	15.983	0.000	0	141484	200.0	275.7	
130 2,3,6-Trichlorotoluene	159	16.086	16.080	0.006	96	128474	200.0	242.2	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-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		400.0	387.9	
S 134 1,2-Dichloroethene, Total	96				0		400.0	404.0	
S 135 1,3-Dichloropropene, Total	1				0		400.0	432.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOAACROPRI_00007	Amount Added:	10.00	Units: uL	
VOA8260VOAPRI_00217	Amount Added:	8.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	8.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	8.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	8.00	Units: uL	
voaWVA1stRest_00009	Amount Added:	8.00	Units: uL	
VOA8260SURR_00060	Amount Added:	8.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

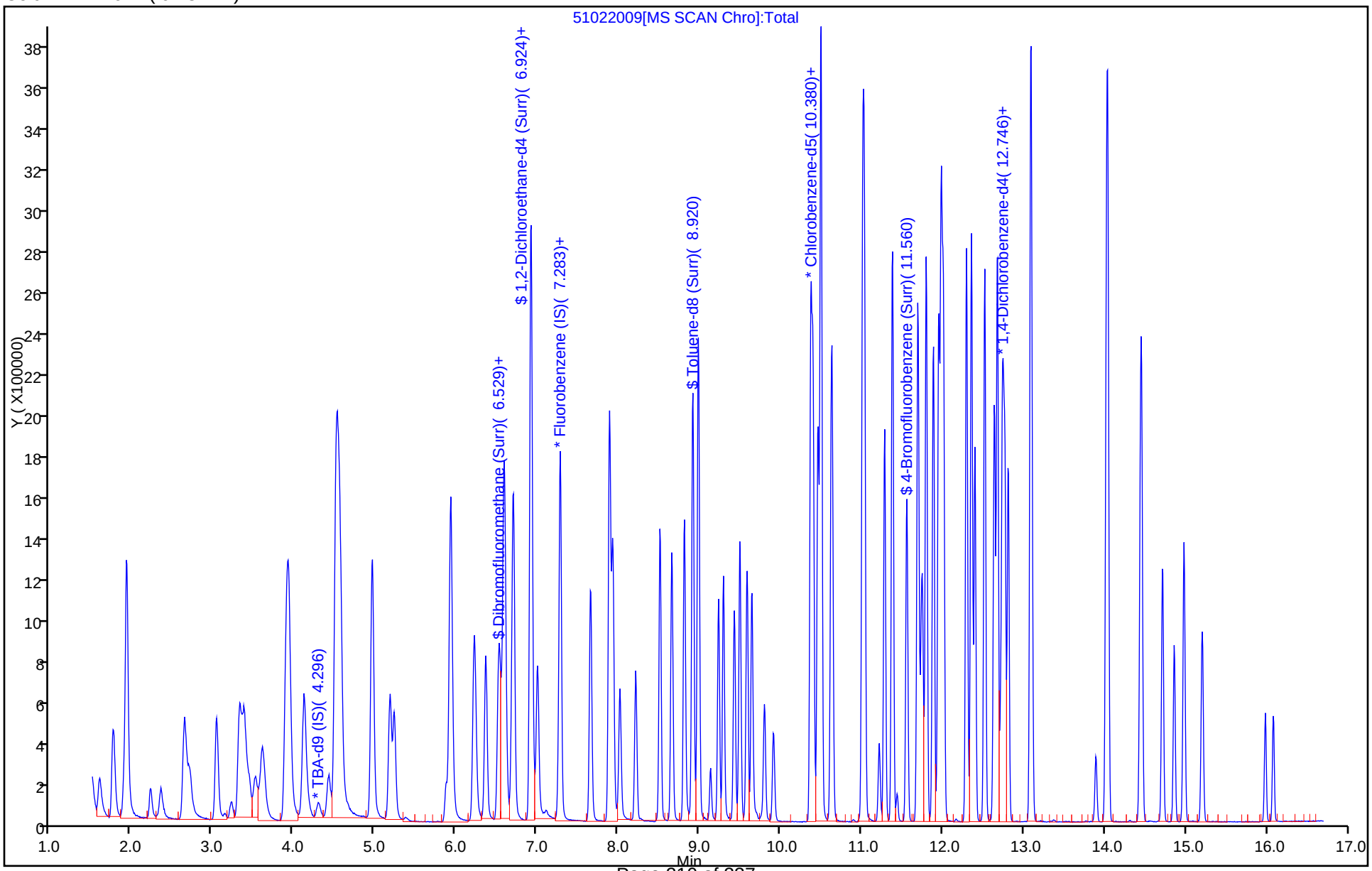
Report Date: 23-Oct-2016 13:21:08 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022009.D

Injection Date:	22-Oct-2016 17:22:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD40			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D
Lims ID: IC VSTD50
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 22-Oct-2016 17:46:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013995-010
Misc. Info.: IC VSTD50
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 13:25:10 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

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

First Level Reviewer: fergusond Date: 23-Oct-2016 13:25:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.310	4.284	0.026	0	138520	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.266	7.271	-0.005	92	374790	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.369	10.374	-0.005	56	100194	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.717	12.716	0.001	92	138243	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.543	6.548	-0.005	93	415623	250.0	231.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.914	6.919	-0.005	0	596400	250.0	230.4	
$ 7 Toluene-d8 (Surr)	98	8.921	8.920	0.001	95	1670672	250.0	220.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.555	11.560	-0.005	86	692444	250.0	226.5	
11 Dichlorodifluoromethane	85	1.597	1.602	-0.005	98	528854	250.0	237.4	
12 Chloromethane	50	1.767	1.766	0.001	99	1036936	250.0	239.8	
13 Vinyl chloride	62	1.913	1.912	0.001	98	684522	250.0	238.9	
14 Butadiene	39	1.937	1.936	0.001	97	991146	250.0	233.9	
15 Bromomethane	94	2.229	2.234	-0.005	91	148486	250.0	207.5	
16 Chloroethane	64	2.357	2.368	-0.011	98	260074	250.0	203.5	
17 Dichlorofluoromethane	67	2.643	2.654	-0.011	96	716202	250.0	234.4	
18 Trichlorofluoromethane	101	2.643	2.654	-0.011	57	573682	250.0	236.8	
20 Ethyl ether	59	3.038	3.043	-0.005	96	562470	250.0	233.5	
21 Acrolein	56	3.221	3.226	-0.005	100	159873	275.0	282.7	
22 1,1-Dichloroethene	96	3.318	3.335	-0.017	93	468351	250.0	247.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.385	3.390	-0.005	94	507801	250.0	246.0	
24 Acetone	43	3.452	3.451	0.001	99	478009	500.0	495.5	
25 Iodomethane	142	3.513	3.524	-0.011	98	686097	250.0	243.6	
26 Carbon disulfide	76	3.598	3.615	-0.017	99	1239529	250.0	250.0	
28 3-Chloro-1-propene	76	3.896	3.907	-0.011	88	305567	250.0	259.6	
30 Methyl acetate	43	3.933	3.932	0.001	100	3057092	1250.0	1224.5	
31 Methylene Chloride	84	4.121	4.132	-0.011	92	533332	250.0	224.9	
32 2-Methyl-2-propanol	59	4.432	4.418	0.014	85	480778	2500.0	2825.9	
33 Acrylonitrile	53	4.517	4.522	-0.005	97	2943037	2500.0	2465.8	
34 trans-1,2-Dichloroethene	96	4.541	4.546	-0.005	92	507564	250.0	246.0	
35 Methyl tert-butyl ether	73	4.565	4.570	-0.005	94	1318423	250.0	246.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.961	4.972	-0.011	97	1090775	250.0	252.8	
37 1,1-Dichloroethane	63	5.180	5.185	-0.005	96	1120170	250.0	243.2	
38 Vinyl acetate	43	5.235	5.240	-0.005	97	1311690	250.0	256.5	
45 cis-1,2-Dichloroethene	96	5.928	5.927	0.001	88	555908	250.0	244.0	
44 2,2-Dichloropropane	97	5.922	5.927	-0.005	73	99511	250.0	259.2	
46 2-Butanone (MEK)	43	5.946	5.951	-0.005	97	764110	500.0	497.2	
49 Chlorobromomethane	128	6.214	6.225	-0.011	86	236063	250.0	245.4	
51 Tetrahydrofuran	42	6.238	6.237	0.001	94	518694	500.0	492.7	
52 Chloroform	83	6.360	6.365	-0.005	96	878210	250.0	239.9	
53 1,1,1-Trichloroethane	97	6.518	6.517	0.001	96	631074	250.0	245.0	
54 Cyclohexane	56	6.585	6.590	-0.005	97	1414113	250.0	250.0	
56 Carbon tetrachloride	117	6.689	6.694	-0.005	93	539131	250.0	250.1	
55 1,1-Dichloropropene	75	6.707	6.712	-0.005	87	758129	250.0	249.4	
58 Benzene	78	6.920	6.925	-0.005	94	2092563	250.0	239.0	
57 Isobutyl alcohol	41	6.926	6.925	0.001	95	506048	6250.0	6979.6	
59 1,2-Dichloroethane	62	7.005	7.004	0.001	95	786249	250.0	238.8	
62 n-Heptane	43	7.285	7.284	0.001	98	1081576	250.0	254.8	
64 Trichloroethene	130	7.656	7.661	-0.005	95	519062	250.0	247.7	
66 Methylcyclohexane	83	7.893	7.892	0.001	97	917304	250.0	254.9	
67 1,2-Dichloropropane	63	7.930	7.935	-0.005	96	647909	250.0	246.4	
68 Dibromomethane	93	8.015	8.020	-0.005	97	275422	250.0	247.3	
70 1,4-Dioxane	88	8.021	8.020	0.001	48	114687	5000.0	5504.9	
71 Dichlorobromomethane	83	8.215	8.220	-0.005	96	600131	250.0	248.6	
73 2-Chloroethyl vinyl ether	63	8.514	8.512	0.002	87	721849	500.0	523.5	
74 cis-1,3-Dichloropropene	75	8.660	8.658	0.002	87	757503	250.0	265.1	
75 4-Methyl-2-pentanone (MIBK	43	8.812	8.817	-0.005	99	1562723	500.0	509.0	
76 Toluene	91	8.988	8.987	0.001	96	2079772	250.0	226.2	
77 trans-1,3-Dichloropropene	75	9.238	9.236	0.002	93	620726	250.0	266.3	
78 Ethyl methacrylate	69	9.298	9.297	0.001	92	672788	250.0	269.3	
79 1,1,2-Trichloroethane	97	9.432	9.431	0.001	95	411935	250.0	238.2	
80 Tetrachloroethene	164	9.499	9.504	-0.005	96	426359	250.0	235.6	
81 1,3-Dichloropropane	76	9.590	9.589	0.001	94	789714	250.0	237.0	
82 2-Hexanone	43	9.645	9.650	-0.005	99	1192579	500.0	512.2	
84 Chlorodibromomethane	129	9.803	9.802	0.001	89	385352	250.0	245.4	
85 Ethylene Dibromide	107	9.913	9.912	0.001	100	428449	250.0	239.1	
86 3-Chlorobenzotrifluoride	180	10.375	10.374	0.001	93	785098	250.0	228.6	
87 Chlorobenzene	112	10.399	10.404	-0.005	89	1401132	250.0	232.3	
88 4-Chlorobenzotrifluoride	180	10.460	10.465	-0.005	96	739313	250.0	233.3	
89 1,1,1,2-Tetrachloroethane	131	10.497	10.502	-0.005	91	443976	250.0	245.1	
90 Ethylbenzene	106	10.503	10.502	0.001	97	815861	250.0	240.1	
91 m-Xylene & p-Xylene	106	10.631	10.630	0.001	0	1021507	250.0	241.1	
92 o-Xylene	106	11.014	11.013	0.001	95	970548	250.0	240.6	
93 Styrene	104	11.038	11.037	0.001	92	1610677	250.0	236.0	
94 Bromoform	173	11.221	11.220	0.001	96	241663	250.0	255.2	
96 2-Chlorobenzotrifluoride	180	11.288	11.287	0.001	96	767761	250.0	229.7	
97 Isopropylbenzene	105	11.379	11.384	-0.005	98	2366385	250.0	228.5	
99 1,1,2,2-Tetrachloroethane	83	11.695	11.694	0.001	96	589029	250.0	240.9	
100 Bromobenzene	156	11.695	11.700	-0.005	96	569568	250.0	244.0	
102 trans-1,4-Dichloro-2-buten	53	11.732	11.737	-0.005	72	219200	250.0	272.5	
101 1,2,3-Trichloropropane	110	11.750	11.749	0.001	90	187868	250.0	246.3	
103 N-Propylbenzene	120	11.799	11.798	0.001	97	690007	250.0	255.1	
104 2-Chlorotoluene	126	11.890	11.889	0.001	95	567755	250.0	245.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.951	11.956	-0.005	97	596946	250.0	242.1	
106 1,3,5-Trimethylbenzene	105	11.981	11.986	-0.005	96	1952749	250.0	239.0	
107 4-Chlorotoluene	126	12.012	12.010	0.002	98	618106	250.0	249.5	
108 tert-Butylbenzene	119	12.297	12.296	0.001	95	1624983	250.0	244.5	
110 1,2,4-Trimethylbenzene	105	12.358	12.357	0.001	98	1981171	250.0	239.1	
111 1,2-dichloro-4-(trifluorom	214	12.401	12.400	0.001	97	569684	250.0	248.0	
112 sec-Butylbenzene	105	12.523	12.521	0.002	96	2291141	250.0	238.4	
113 1,3-Dichlorobenzene	146	12.638	12.637	0.001	96	1078386	250.0	242.8	
114 4-Isopropyltoluene	119	12.675	12.680	-0.005	96	1943351	250.0	243.2	
115 1,4-Dichlorobenzene	146	12.742	12.747	-0.005	91	1099124	250.0	242.3	
116 2,4-Dichloro-1-(triflourom	214	12.772	12.771	0.001	95	528566	250.0	242.5	
118 2,5-Dichlorobenzotrifluori	214	12.808	12.813	-0.005	0	589060	250.0	237.1	
120 n-Butylbenzene	91	13.088	13.087	0.001	96	1708798	250.0	248.8	
121 1,2-Dichlorobenzene	146	13.101	13.099	0.001	94	1000919	250.0	244.8	
122 1,2-Dibromo-3-Chloropropan	75	13.891	13.890	0.001	72	95655	250.0	259.2	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.031	14.030	0.001	0	2089504	750.0	729.7	
125 2,3- & 3,4- Dichlorotoluen	125	14.451	14.450	0.001	0	1395064	500.0	500.3	
126 1,2,4-Trichlorobenzene	180	14.713	14.718	-0.005	94	509601	250.0	252.4	
127 Hexachlorobutadiene	225	14.859	14.858	0.001	97	216370	250.0	250.0	
128 Naphthalene	128	14.980	14.979	0.001	98	1346243	250.0	268.2	
129 1,2,3-Trichlorobenzene	180	15.205	15.204	0.001	95	402589	250.0	256.3	
131 2,4,5-Trichlorotoluene	159	15.984	15.983	0.001	0	155278	250.0	311.4	
130 2,3,6-Trichlorotoluene	159	16.081	16.080	0.001	95	146221	250.0	283.7	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-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		500.0	481.6	
S 134 1,2-Dichloroethene, Total	96				0		500.0	490.1	
S 135 1,3-Dichloropropene, Total	1				0		500.0	531.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

voaWKetPriRes_00002	Amount Added:	10.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	10.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	10.00	Units: uL	
voaWVA1stRest_00009	Amount Added:	10.00	Units: uL	
VOA8260SURR_00060	Amount Added:	10.00	Units: uL	
VOA8260VOAPRI_00217	Amount Added:	10.00	Units: uL	
VOAACROPRI_00007	Amount Added:	11.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

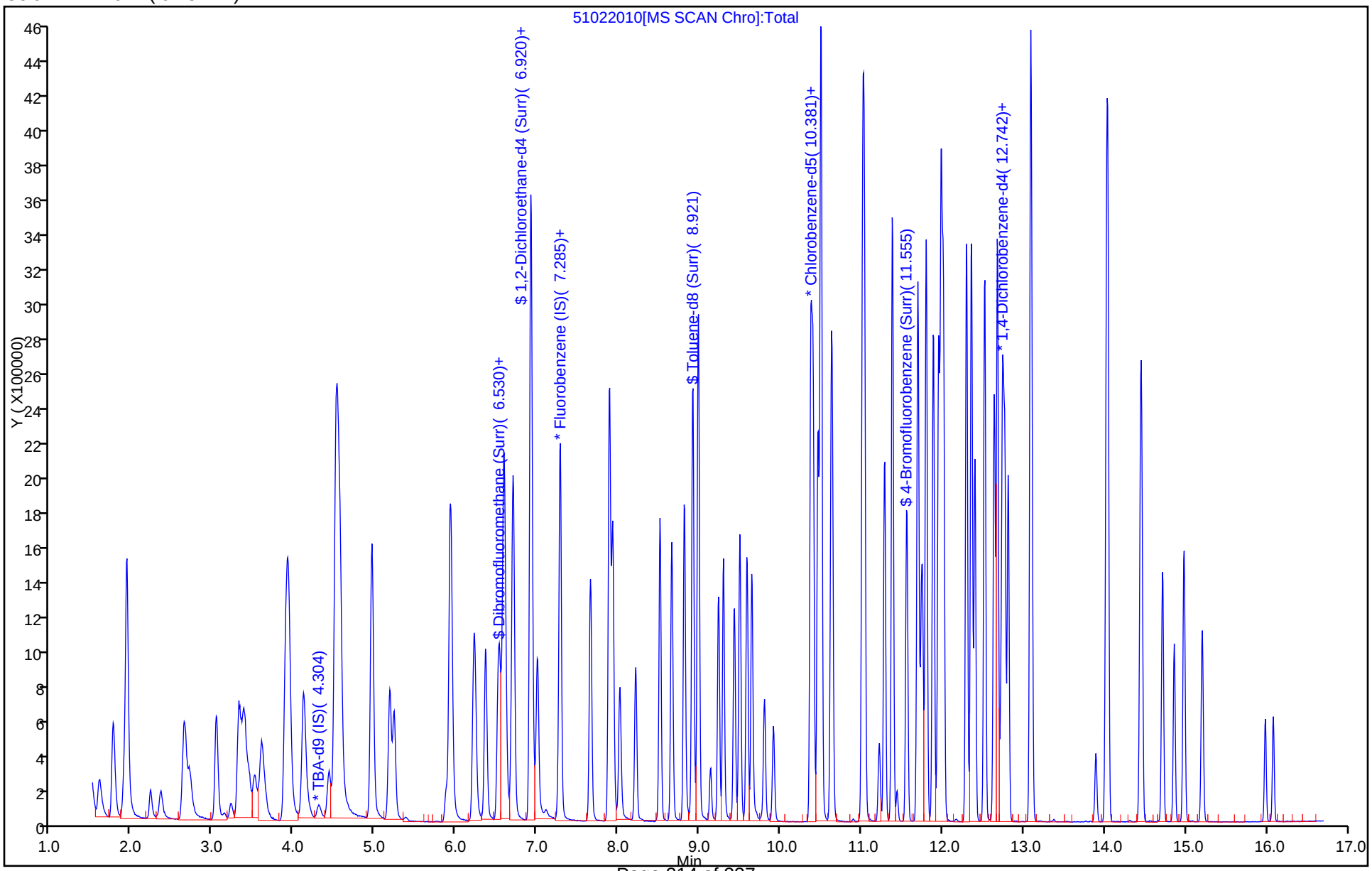
Report Date: 23-Oct-2016 13:25:10 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Injection Date:	22-Oct-2016 17:46:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD50			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1 Analy Batch No.: 191498

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2016 14:23 Calibration End Date: 10/17/2016 17:13 Calibration ID: 33286

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-191498/6	61017006.D
Level 2	IC 180-191498/7	61017007.D
Level 3	ICIS 180-191498/8	61017008.D
Level 4	IC 180-191498/9	61017009.D
Level 5	IC 180-191498/10	61017010.D
Level 6	IC 180-191498/12	61017012.D
Level 7	IC 180-191498/13	61017013.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2681 0.2202	0.2286 0.1980	0.2287	0.2284	0.2209	Ave		0.2275			0.1000	9.2		20.0			
Chloromethane	0.3335 0.2861	0.2996 0.2658	0.2921	0.2838	0.2815	Ave		0.2918			0.1000	7.2		20.0			
Vinyl chloride	0.3246 0.2481	0.2559 0.2341	0.2751	0.2678	0.2597	Ave		0.2665			0.1000	10.8		20.0			
1,3-Butadiene	0.3415 0.2583	0.2804 0.2426	0.2763	0.2772	0.2758	Ave		0.2789			0.0100	11.0		20.0			
Bromomethane	0.1771 0.1061	0.1259 0.0956	0.1277	0.1225	0.1151	Lin2	0.3447	0.1099			0.0500				0.9920		0.9900
Chloroethane	0.2042 0.1647	0.1652 0.1507	0.1724	0.1649	0.1594	Ave		0.1688			0.0500	10.1		20.0			
Dichlorofluoromethane	0.4257 0.3763	0.3997 0.3580	0.3905	0.3812	0.3714	Ave		0.3861			0.0100	5.7		20.0			
Trichlorofluoromethane	0.3699 0.2945	0.3255 0.2693	0.3323	0.3277	0.3174	Ave		0.3195			0.1000	9.9		20.0			
Ethyl ether	0.3358 0.2471	0.2692 0.2249	0.2592	0.2367	0.2514	Ave		0.2606			0.0100	13.9		20.0			
Acrolein	0.0563 0.0582	0.0528 0.0593	0.0548	0.0533	0.0551	Ave		0.0557			0.0100	4.4		20.0			
1,1-Dichloroethene	0.2620 0.2469	0.2471 0.2385	0.2423	0.2443	0.2390	Ave		0.2457			0.1000	3.2		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2798 0.2387	0.2484 0.2317	0.2493	0.2479	0.2461	Ave		0.2488			0.1000	6.1		20.0			
Acetone	0.0736 0.0621	0.0541 0.0638	0.0562	0.0528	0.0551	Ave		0.0597			0.0500	12.4		20.0			
Iodomethane	0.3999 0.3713	0.3583 0.3745	0.3614	0.3557	0.3586	Ave		0.3685			0.0100	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.: 180-59864-1 Analy Batch No.: 191498

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2016 14:23 Calibration End Date: 10/17/2016 17:13 Calibration ID: 33286

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.5066 0.6216	0.4418 0.6202	0.5076	0.5513	0.5815	Ave		0.5472			0.1000	12.1		20.0			
Allyl chloride	0.1369 0.1524	0.1088 0.1583	0.1244	0.1347	0.1396	Ave		0.1364			0.0100	12.2		20.0			
Methyl acetate	0.2442 0.2130	0.1975 0.2090	0.2018	0.1928	0.1986	Ave		0.2081			0.1000	8.3		20.0			
Methylene Chloride	0.5207 0.3122	0.3346 0.3084	0.3001	0.2928	0.3005	Lin2	1.1385	0.2909			0.1000				0.9980		0.9900
tert-Butyl alcohol	1.1241 1.0355	0.8468 1.0052	0.9798	1.1145	1.0055	Ave		1.0159			0.0100	9.2		20.0			
Acrylonitrile	0.1189 0.1136	0.1067 0.1098	0.1107	0.1057	0.1076	Ave		0.1104			0.0100	4.2		20.0			
trans-1,2-Dichloroethene	0.3071 0.2781	0.2595 0.2668	0.2766	0.2726	0.2722	Ave		0.2761			0.1000	5.4		20.0			
Methyl tert-butyl ether	0.5683 0.6103	0.4810 0.5967	0.5390	0.5640	0.5604	Ave		0.5600			0.1000	7.5		20.0			
Hexane	0.4445 0.3967	0.3878 0.3817	0.4039	0.4022	0.3930	Ave		0.4014			0.0100	5.1		20.0			
1,1-Dichloroethane	0.4889 0.4748	0.4306 0.4683	0.4554	0.4583	0.4504	Ave		0.4610			0.2000	4.1		20.0			
Vinyl acetate	0.3613 0.4941	0.3549 0.5076	0.3865	0.4029	0.4401	Ave		0.4211			0.0100	14.6		20.0			
2,2-Dichloropropane	0.0441 0.0510	0.0439 0.0532	0.0458	0.0503	0.0477	Ave		0.0480			0.0100	7.5		20.0			
cis-1,2-Dichloroethene	0.3233 0.3146	0.3023 0.3118	0.3058	0.3012	0.3040	Ave		0.3090			0.1000	2.6		20.0			
2-Butanone (MEK)	0.1226 0.1162	0.1185 0.1150	0.1126	0.1021	0.1065	Ave		0.1134			0.0500	6.2		20.0			
Bromochloromethane	0.1451 0.1458	0.1324 0.1460	0.1336	0.1302	0.1384	Ave		0.1388			0.0100	4.9		20.0			
Tetrahydrofuran	0.1095 0.0939	0.0804 0.0890	0.0839	0.0780	0.0815	Ave		0.0880			0.0100	12.4		20.0			
Chloroform	0.4595 0.4312	0.4224 0.4247	0.4217	0.4168	0.4188	Ave		0.4279			0.2000	3.4		20.0			
1,1,1-Trichloroethane	0.2478 0.2737	0.2385 0.2759	0.2420	0.2688	0.2598	Ave		0.2581			0.1000	6.0		20.0			
Cyclohexane	0.4818 0.4786	0.4604 0.4478	0.4762	0.4796	0.4731	Ave		0.4711			0.1000	2.6		20.0			
Carbon tetrachloride	0.1579 0.1960	0.1428 0.1982	0.1589	0.1755	0.1775	Ave		0.1724			0.1000	11.9		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.: 180-59864-1 Analy Batch No.: 191498

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2016 14:23 Calibration End Date: 10/17/2016 17:13 Calibration ID: 33286

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	0.3527 0.3480	0.3391 0.3413	0.3463	0.3500	0.3472	Ave		0.3464			0.0100	1.4		20.0			
Isobutyl alcohol	0.0057 0.0072	0.0048 0.0074	0.0052	0.0051	0.0058	Ave		0.0059		*	0.0100	17.3		20.0			
Benzene	1.2471 1.0724	1.1399 1.0104	1.1407	1.0936	1.0802	Ave		1.1120			0.5000	6.7		20.0			
1,2-Dichloroethane	0.3902 0.3621	0.3505 0.3626	0.3368	0.3359	0.3409	Ave		0.3541			0.1000	5.5		20.0			
n-Heptane	0.3504 0.3342	0.3271 0.3097	0.3378	0.3210	0.3223	Ave		0.3289			0.0100	4.0		20.0			
Trichloroethene	0.2924 0.2753	0.2671 0.2661	0.2678	0.2631	0.2671	Ave		0.2713			0.2000	3.7		20.0			
Methylcyclohexane	0.4614 0.4576	0.4445 0.4287	0.4596	0.4607	0.4537	Ave		0.4523			0.1000	2.6		20.0			
1,2-Dichloropropane	0.3326 0.3085	0.2853 0.2977	0.2798	0.2803	0.2802	Ave		0.2949			0.1000	6.7		20.0			
Dibromomethane	0.1454 0.1678	0.1522 0.1705	0.1562	0.1537	0.1532	Ave		0.1570			0.0100	5.7		20.0			
1,4-Dioxane	0.0031 0.0032	0.0028 0.0032	0.0028	0.0026	0.0028	Ave		0.0029		*	0.0100	8.9		20.0			
Bromodichloromethane	0.2208 0.2761	0.2017 0.2823	0.2104	0.2239	0.2407	Ave		0.2366			0.2000	13.3		20.0			
2-Chloroethyl vinyl ether	0.1583 0.2016	0.1617 0.1965	0.1751	0.1696	0.1750	Ave		0.1768			0.0100	9.3		20.0			
cis-1,3-Dichloropropene	0.2455 0.4014	0.2645 0.4020	0.3133	0.3145	0.3522	Ave		0.3276			0.2000	18.8		20.0			
4-Methyl-2-pentanone (MIBK)	0.8392 0.9788	0.9022 0.9621	0.9163	0.9349	0.9577	Ave		0.9273			0.1000	5.1		20.0			
Toluene	5.1370 4.0927	4.7300 3.7373	4.6378	4.6342	4.4520	Ave		4.4887			0.4000	10.1		20.0			
trans-1,3-Dichloropropene	0.8011 1.2632	0.7860 1.2770	0.9261	1.0392	1.0947	Ave		1.0268			0.1000	19.6		20.0			
Ethyl methacrylate	0.9136 1.4494	1.0256 1.4190	1.1656	1.2514	1.3478	Ave		1.2246			0.0100	16.5		20.0			
1,1,2-Trichloroethane	0.9877 0.9617	0.9736 0.9269	0.9510	0.9513	0.9633	Ave		0.9594			0.1000	2.0		20.0			
Tetrachloroethene	1.0486 0.7960	0.8803 0.7482	0.8553	0.8728	0.8422	Ave		0.8633			0.2000	10.9		20.0			
1,3-Dichloropropane	1.9771 1.7485	1.8144 1.6832	1.7611	1.7518	1.7553	Ave		1.7845			0.0100	5.2		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.: 180-59864-1 Analy Batch No.: 191498

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2016 14:23 Calibration End Date: 10/17/2016 17:13 Calibration ID: 33286

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.5145 0.6138	0.5237 0.5893	0.5321	0.5625	0.5518	Ave		0.5554			0.1000	6.5		20.0			
Dibromochloromethane	0.5176 0.7080	0.5017 0.7375	0.5379	0.5915	0.6414	Ave		0.6051			0.1000	15.5		20.0			
1,2-Dibromoethane (EDB)	0.7699 0.9218	0.7847 0.9108	0.8740	0.8816	0.8989	Ave		0.8631			0.1000	7.1		20.0			
3-Chlorobenzotrifluoride	1.7650 1.4116	1.4848 1.2370	1.5102	1.5098	1.4973	Ave		1.4879			0.0100	10.5		20.0			
Chlorobenzene	3.4285 2.8316	3.1420 2.6302	3.1660	3.1199	3.0008	Ave		3.0456			0.5000	8.4		20.0			
4-Chlorobenzotrifluoride	1.5797 1.3438	1.3528 1.1996	1.4114	1.4297	1.4049	Ave		1.3888			0.0100	8.2		20.0			
1,1,1,2-Tetrachloroethane	0.5329 0.7899	0.5610 0.7876	0.6216	0.7219	0.7301	Ave		0.6779			0.0100	15.6		20.0			
Ethylbenzene	1.7419 1.5742	1.6499 1.4801	1.6743	1.7079	1.6529	Ave		1.6402			0.1000	5.4		20.0			
m-Xylene & p-Xylene	1.9335 1.9470	2.0492 1.8233	2.0184	2.1172	2.0570	Ave		1.9922			0.1000	4.9		20.0			
o-Xylene	1.7869 1.9142	1.9990 1.7680	1.9410	2.0583	2.0066	Ave		1.9249			0.3000	5.8		20.0			
Styrene	2.8763 3.1787	3.2121 2.9476	3.3478	3.4002	3.3884	Ave		3.1930			0.3000	6.6		20.0			
Bromoform	0.2242 0.3991	0.2635 0.4177	0.2793	0.3169	0.3415	Qua	-1.185	0.3002	0.0004992		0.1000				1.0000		0.9900
2-Chlorobenzotrifluoride	1.5167 1.4249	1.4211 1.2603	1.4515	1.5239	1.4516	Ave		1.4357			0.0100	6.1		20.0			
Isopropylbenzene	4.8945 4.2499	4.7219 3.8043	4.8433	4.9164	4.7024	Ave		4.5904			0.1000	9.0		20.0			
Bromobenzene	0.8180 0.8523	0.8070 0.8119	0.7686	0.7952	0.8121	Ave		0.8093			0.0100	3.1		20.0			
1,1,2,2-Tetrachloroethane	1.2378 1.2310	1.2021 1.1841	1.1773	1.2357	1.2149	Ave		1.2118			0.3000	2.0		20.0			
trans-1,4-Dichloro-2-butene	0.1861 0.2439	0.1822 0.2480	0.2022	0.1970	0.2089	Ave		0.2098			0.0100	12.6		20.0			
1,2,3-Trichloropropane	0.2640 0.2975	0.2569 0.2837	0.2702	0.2605	0.2707	Ave		0.2719			0.0100	5.2		20.0			
N-Propylbenzene	0.9079 0.9802	0.9053 0.9190	0.9322	0.9729	0.9564	Ave		0.9391			0.0100	3.3		20.0			
2-Chlorotoluene	0.7984 0.8682	0.7791 0.8063	0.8309	0.8171	0.8430	Ave		0.8204			0.0100	3.6		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.: 180-59864-1 Analy Batch No.: 191498

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2016 14:23 Calibration End Date: 10/17/2016 17:13 Calibration ID: 33286

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chlorotoluene	0.8966 0.9518	0.8273 0.8461	0.9140	0.8899	0.8978	Ave		0.8891			0.0100	4.7		20.0			
1,3,5-Trimethylbenzene	2.5598 2.5745	2.6068 2.3608	2.6685	2.6867	2.6433	Ave		2.5858			0.0100	4.2		20.0			
4-Chlorotoluene	0.9068 0.9238	0.9075 0.8739	0.8667	0.8806	0.9074	Ave		0.8952			0.0100	2.4		20.0			
tert-Butylbenzene	2.1581 2.1848	2.1711 2.0435	2.2512	2.2750	2.2546	Ave		2.1912			0.0100	3.6		20.0			
1,2,4-Trimethylbenzene	2.6136 2.6966	2.6989 2.4952	2.8071	2.7564	2.7309	Ave		2.6855			0.0100	3.8		20.0			
3,4-Dichlorobenzotrifluoride	0.8111 0.7770	0.7496 0.6990	0.7584	0.7580	0.7561	Ave		0.7585			0.0100	4.4		20.0			
sec-Butylbenzene	3.2584 3.0576	3.2718 2.8097	3.3325	3.3528	3.2515	Ave		3.1906			0.0100	6.1		20.0			
1,3-Dichlorobenzene	1.7325 1.5798	1.5216 1.4914	1.5651	1.5476	1.5633	Ave		1.5716			0.6000	4.9		20.0			
4-Isopropyltoluene	2.6824 2.6796	2.7056 2.4747	2.8379	2.8387	2.7436	Ave		2.7089			0.0100	4.5		20.0			
1,4-Dichlorobenzene	1.8655 1.6428	1.6142 1.5429	1.6293	1.6221	1.6048	Ave		1.6460			0.5000	6.2		20.0			
2,4-Dichlorobenzotrifluoride	0.8404 0.7630	0.7257 0.6770	0.7288	0.7078	0.7430	Ave		0.7408			0.0100	7.0		20.0			
2,5-Dichlorobenzotrifluoride	1.0089 0.8499	0.8213 0.7769	0.8092	0.8558	0.8237	Ave		0.8494			0.0100	8.8		20.0			
n-Butylbenzene	2.5358 2.4272	2.3921 2.2289	2.5000	2.5613	2.5069	Ave		2.4503			0.0100	4.7		20.0			
1,2-Dichlorobenzene	1.6872 1.5457	1.5663 1.4359	1.5338	1.5208	1.5299	Ave		1.5457			0.4000	4.8		20.0			
1,2-Dibromo-3-Chloropropane	0.0793 +++++	0.0694 +++++	0.0648	0.0768	0.0849	Ave		0.0751			0.0500	10.6		20.0			
2,4- & 2,5- & 2,6- Dichlorotoluene	1.2262 1.2297	1.2264 1.1097	1.2587	1.2514	1.2460	Ave		1.2212			0.0100	4.2		20.0			
2,3- & 3,4- Dichlorotoluene	1.3155 1.3877	1.3023 1.2848	1.3855	1.3675	1.3765	Ave		1.3457			0.0100	3.2		20.0			
1,2,4-Trichlorobenzene	1.0513 1.1139	0.9769 1.0574	1.0267	1.0400	1.0503	Ave		1.0452			0.2000	3.9		20.0			
Hexachlorobutadiene	0.3954 0.3662	0.3309 0.3567	0.3472	0.3554	0.3418	Ave		0.3562			0.0100	5.8		20.0			
Naphthalene	2.2156 2.6832	2.3053 2.5324	2.5274	2.5620	2.6081	Ave		2.4906			0.0100	6.7		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.: 180-59864-1 Analy Batch No.: 191498

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2016 14:23 Calibration End Date: 10/17/2016 17:13 Calibration ID: 33286

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trichlorobenzene	0.8808 0.9752	0.8736 0.9587	0.8985	0.9172	0.9287	Ave		0.9190			0.0100	4.2		20.0			
2,4,5-Trichlorotoluene	0.3495 0.4988	0.3459 0.4824	0.4355	0.4287	0.4833	Ave		0.4320			0.0100	14.6		20.0			
2,3,6-Trichlorotoluene	0.3628 0.4532	0.3385 0.4374	0.3877	0.4077	0.4310	Ave		0.4026			0.0100	10.4		20.0			
Dibromofluoromethane (Surr)	0.2325 0.2182	0.2142 0.2070	0.2196	0.1974	0.2056	Ave		0.2135				5.4		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3297 0.2837	0.3003 0.2788	0.2953	0.2634	0.2711	Ave		0.2889				7.6		20.0			
Toluene-d8 (Surr)	4.3877 3.3068	3.9706 2.8945	3.9346	3.4918	3.6155	Ave		3.6573				13.4		20.0			
4-Bromofluorobenzene (Surr)	1.4457 1.3680	1.3543 1.2495	1.4506	1.3490	1.4201	Ave		1.3767				5.1		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.: 180-59864-1 Analy Batch No.: 191498

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2016 14:23 Calibration End Date: 10/17/2016 17:13 Calibration ID: 33286

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-191498/6	61017006.D
Level 2	IC 180-191498/7	61017007.D
Level 3	ICIS 180-191498/8	61017008.D
Level 4	IC 180-191498/9	61017009.D
Level 5	IC 180-191498/10	61017010.D
Level 6	IC 180-191498/12	61017012.D
Level 7	IC 180-191498/13	61017013.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	10818 378244	48460 437808	100117	155219	199392	5.00 200	25.0 250	50.0	75.0	100
Chloromethane	FB	Ave	13459 491486	63508 587869	127917	192863	254110	5.00 200	25.0 250	50.0	75.0	100
Vinyl chloride	FB	Ave	13101 426204	54262 517628	120442	182050	234479	5.00 200	25.0 250	50.0	75.0	100
1,3-Butadiene	FB	Ave	13781 443777	59455 536408	120959	188411	249033	5.00 200	25.0 250	50.0	75.0	100
Bromomethane	FB	Lin2	7149 182317	26701 211399	55898	83276	103957	5.00 200	25.0 250	50.0	75.0	100
Chloroethane	FB	Ave	8242 282905	35030 333168	75481	112107	143903	5.00 200	25.0 250	50.0	75.0	100
Dichlorofluoromethane	FB	Ave	17179 646552	84730 791623	170966	259098	335318	5.00 200	25.0 250	50.0	75.0	100
Trichlorofluoromethane	FB	Ave	14928 505956	69000 595629	145521	222716	286516	5.00 200	25.0 250	50.0	75.0	100
Ethyl ether	FB	Ave	13550 424510	57079 497445	113477	160856	226945	5.00 200	25.0 250	50.0	75.0	100
Acrolein	FB	Ave	45478 124997	55967 144221	71951	84463	99424	100 250	125 275	150	175	200
1,1-Dichloroethene	FB	Ave	10573 424212	52383 527379	106083	166080	215759	5.00 200	25.0 250	50.0	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	11291 410013	52668 512442	109175	168464	222211	5.00 200	25.0 250	50.0	75.0	100
Acetone	FB	Ave	14853 213338	22945 282151	49176	71745	99571	25.0 400	50.0 500	100	150	200
Iodomethane	FB	Ave	16137 637925	75958 828161	158249	241740	323779	5.00 200	25.0 250	50.0	75.0	100
Carbon disulfide	FB	Ave	20445 1067872	93668 1371596	222248	374705	525000	5.00 200	25.0 250	50.0	75.0	100

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1 Analy Batch No.: 191498

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2016 14:23 Calibration End Date: 10/17/2016 17:13 Calibration ID: 33286

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Allyl chloride	FB	Ave	5524 261792	23057 350147	54473	91556	126033	5.00 200	25.0 250	50.0	75.0	100
Methyl acetate	FB	Ave	49270 1829691	209350 2310919	441720	655356	896631	25.0 1000	125 1250	250	375	500
Methylene Chloride	FB	Lin2	21013 536396	70928 682055	131380	199037	271253	5.00 200	25.0 250	50.0	75.0	100
tert-Butyl alcohol	TBAd9	Ave	5964 301487	26121 393228	59253	100509	139826	50.0 2000	250 2500	500	750	1000
Acrylonitrile	FB	Ave	47987 1951122	226233 2428773	484811	718162	971547	50.0 2000	250 2500	500	750	1000
trans-1,2-Dichloroethene	FB	Ave	12392 477780	55007 590066	121103	185288	245768	5.00 200	25.0 250	50.0	75.0	100
Methyl tert-butyl ether	FB	Ave	22934 1048549	101976 1319612	235982	383369	505912	5.00 200	25.0 250	50.0	75.0	100
Hexane	FB	Ave	17937 681626	82220 844165	176837	273365	354786	5.00 200	25.0 250	50.0	75.0	100
1,1-Dichloroethane	FB	Ave	19730 815765	91288 1035587	199401	311510	406664	5.00 200	25.0 250	50.0	75.0	100
Vinyl acetate	FB	Ave	14579 848933	75241 1122396	169247	273838	397309	5.00 200	25.0 250	50.0	75.0	100
2,2-Dichloropropane	FB	Ave	1778 87561	9317 117742	20074	34180	43091	5.00 200	25.0 250	50.0	75.0	100
cis-1,2-Dichloroethene	FB	Ave	13048 540467	64079 689543	133878	204711	274481	5.00 200	25.0 250	50.0	75.0	100
2-Butanone (MEK)	FB	Ave	24730 399161	50228 508836	98637	138742	192377	25.0 400	50.0 500	100	150	200
Bromochloromethane	FB	Ave	5856 250455	28077 322793	58511	88514	124956	5.00 200	25.0 250	50.0	75.0	100
Tetrahydrofuran	FB	Ave	8841 322508	34090 393583	73436	106077	147123	10.0 400	50.0 500	100	150	200
Chloroform	FB	Ave	18543 740796	89560 939276	184655	283319	378117	5.00 200	25.0 250	50.0	75.0	100
1,1,1-Trichloroethane	FB	Ave	10002 470282	50565 610188	105969	182669	234557	5.00 200	25.0 250	50.0	75.0	100
Cyclohexane	FB	Ave	19444 822246	97597 990348	208511	325971	427162	5.00 200	25.0 250	50.0	75.0	100
Carbon tetrachloride	FB	Ave	6374 336776	30269 438205	69572	119292	160232	5.00 200	25.0 250	50.0	75.0	100
1,1-Dichloropropene	FB	Ave	14232 597892	71901 754822	151638	237861	313440	5.00 200	25.0 250	50.0	75.0	100
Isobutyl alcohol	FB	Ave	5799 307377	25495 410540	56651	87228	130717	125 5000	625 6250	1250	1875	2500

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1 Analy Batch No.: 191498

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2016 14:23 Calibration End Date: 10/17/2016 17:13 Calibration ID: 33286

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	50329 1842451	241667 2234343	499441	743305	975189	5.00 200	25.0 250	50.0	75.0	100
1,2-Dichloroethane	FB	Ave	15748 622020	74303 801768	147481	228341	307797	5.00 200	25.0 250	50.0	75.0	100
n-Heptane	FB	Ave	14142 574146	69355 684814	147894	218210	290989	5.00 200	25.0 250	50.0	75.0	100
Trichloroethene	FB	Ave	11801 472890	56636 588427	117267	178793	241168	5.00 200	25.0 250	50.0	75.0	100
Methylcyclohexane	FB	Ave	18620 786142	94227 947928	201240	313111	409562	5.00 200	25.0 250	50.0	75.0	100
1,2-Dichloropropane	FB	Ave	13422 530080	60485 658421	122498	190484	253000	5.00 200	25.0 250	50.0	75.0	100
Dibromomethane	FB	Ave	5867 288225	32261 377143	68394	104463	138282	5.00 200	25.0 250	50.0	75.0	100
1,4-Dioxane	FB	Ave	2539 110995	11953 143535	24213	35340	49945	100 4000	500 5000	1000	1500	2000
Bromodichloromethane	FB	Ave	8911 474319	42759 624230	92125	152191	217329	5.00 200	25.0 250	50.0	75.0	100
2-Chloroethyl vinyl ether	FB	Ave	12773 692602	68565 868925	153301	230498	316024	10.0 400	50.0 500	100	150	200
cis-1,3-Dichloropropene	FB	Ave	9906 689681	56067 888989	137183	213785	317933	5.00 200	25.0 250	50.0	75.0	100
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	40945 917167	93433 1182012	203212	312902	437594	25.0 400	50.0 500	100	150	200
Toluene	CBNZ d5	Ave	50125 1917420	244909 2295736	514268	775485	1017095	5.00 200	25.0 250	50.0	75.0	100
trans-1,3-Dichloropropene	CBNZ d5	Ave	7817 591828	40698 784438	102686	173904	250101	5.00 200	25.0 250	50.0	75.0	100
Ethyl methacrylate	CBNZ d5	Ave	8915 679063	53103 871674	129247	209411	307910	5.00 200	25.0 250	50.0	75.0	100
1,1,2-Trichloroethane	CBNZ d5	Ave	9638 450576	50412 569382	105449	159194	220068	5.00 200	25.0 250	50.0	75.0	100
Tetrachloroethene	CBNZ d5	Ave	10232 372914	45578 459589	94839	146050	192418	5.00 200	25.0 250	50.0	75.0	100
1,3-Dichloropropane	CBNZ d5	Ave	19292 819178	93947 1033930	195279	293152	401017	5.00 200	25.0 250	50.0	75.0	100
2-Hexanone	CBNZ d5	Ave	25103 575173	54228 723957	118005	188267	252132	25.0 400	50.0 500	100	150	200
Dibromochloromethane	CBNZ d5	Ave	5051 331692	25976 453002	59642	98975	146523	5.00 200	25.0 250	50.0	75.0	100
1,2-Dibromoethane (EDB)	CBNZ d5	Ave	7512 431843	40628 559480	96912	147522	205355	5.00 200	25.0 250	50.0	75.0	100

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1 Analy Batch No.: 191498

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2016 14:23 Calibration End Date: 10/17/2016 17:13 Calibration ID: 33286

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
3-Chlorobenzotrifluoride	CBNZ d5	Ave	17222 661345	76878 759861	167458	252642	342084	5.00 200	25.0 250	50.0	75.0	100
Chlorobenzene	CBNZ d5	Ave	33454 1326603	162687 1615675	351065	522084	685552	5.00 200	25.0 250	50.0	75.0	100
4-Chlorobenzotrifluoride	CBNZ d5	Ave	15414 629550	70044 736864	156509	239254	320957	5.00 200	25.0 250	50.0	75.0	100
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	5200 370091	29046 483803	68924	120798	166796	5.00 200	25.0 250	50.0	75.0	100
Ethylbenzene	CBNZ d5	Ave	16997 737491	85428 909219	185657	285802	377626	5.00 200	25.0 250	50.0	75.0	100
m-Xylene & p-Xylene	CBNZ d5	Ave	18866 912180	106102 1120035	223813	354287	469943	5.00 200	25.0 250	50.0	75.0	100
o-Xylene	CBNZ d5	Ave	17436 896798	103504 1086046	215235	344432	458418	5.00 200	25.0 250	50.0	75.0	100
Styrene	CBNZ d5	Ave	28066 1489206	166314 1810645	371224	568991	774114	5.00 200	25.0 250	50.0	75.0	100
Bromoform	CBNZ d5	Qua	2188 186999	13641 256599	30972	53037	78027	5.00 200	25.0 250	50.0	75.0	100
2-Chlorobenzotrifluoride	CBNZ d5	Ave	14799 667562	73584 774175	160946	255008	331627	5.00 200	25.0 250	50.0	75.0	100
Isopropylbenzene	CBNZ d5	Ave	47759 1991060	244492 2336935	537055	822705	1074317	5.00 200	25.0 250	50.0	75.0	100
Bromobenzene	DCBd 4	Ave	11826 557168	64111 687578	129517	203563	278887	5.00 200	25.0 250	50.0	75.0	100
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	12078 576728	62244 727352	130544	206777	277556	5.00 200	25.0 250	50.0	75.0	100
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	2690 159455	14475 210068	34064	50425	71740	5.00 200	25.0 250	50.0	75.0	100
1,2,3-Trichloropropane	DCBd 4	Ave	3816 194495	20409 240309	45534	66695	92976	5.00 200	25.0 250	50.0	75.0	100
N-Propylbenzene	DCBd 4	Ave	13125 640794	71921 778345	157081	249041	328458	5.00 200	25.0 250	50.0	75.0	100
2-Chlorotoluene	DCBd 4	Ave	11542 567599	61895 682833	140007	209155	289491	5.00 200	25.0 250	50.0	75.0	100
3-Chlorotoluene	DCBd 4	Ave	12962 622267	65719 716597	154015	227793	308307	5.00 200	25.0 250	50.0	75.0	100
1,3,5-Trimethylbenzene	DCBd 4	Ave	37007 1683074	207086 1999367	449655	687756	907748	5.00 200	25.0 250	50.0	75.0	100
4-Chlorotoluene	DCBd 4	Ave	13109 603912	72096 740089	146040	225430	311605	5.00 200	25.0 250	50.0	75.0	100
tert-Butylbenzene	DCBd 4	Ave	31200 1428342	172473 1730663	379337	582378	774274	5.00 200	25.0 250	50.0	75.0	100

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1 Analy Batch No.: 191498

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2016 14:23 Calibration End Date: 10/17/2016 17:13 Calibration ID: 33286

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,2,4-Trimethylbenzene	DCBd 4	Ave	37784 1762909	214402 2113255	473012	705609	937826	5.00 200	25.0 250	50.0	75.0	100
3,4-Dichlorobenzotrifluoride	DCBd 4	Ave	11726 507998	59549 592020	127792	194039	259663	5.00 200	25.0 250	50.0	75.0	100
sec-Butylbenzene	DCBd 4	Ave	47106 1998910	259914 2379583	561548	858280	1116611	5.00 200	25.0 250	50.0	75.0	100
1,3-Dichlorobenzene	DCBd 4	Ave	25047 1032823	120874 1263061	263725	396160	536874	5.00 200	25.0 250	50.0	75.0	100
4-Isopropyltoluene	DCBd 4	Ave	38779 1751779	214936 2095851	478196	726665	942198	5.00 200	25.0 250	50.0	75.0	100
1,4-Dichlorobenzene	DCBd 4	Ave	26969 1074021	128236 1306720	274551	415232	551119	5.00 200	25.0 250	50.0	75.0	100
2,4-Dichlorobenzotrifluoride	DCBd 4	Ave	12149 498793	57652 573367	122814	181186	255147	5.00 200	25.0 250	50.0	75.0	100
2,5-Dichlorobenzotrifluoride	DCBd 4	Ave	14585 555657	65243 657948	136355	219078	282871	5.00 200	25.0 250	50.0	75.0	100
n-Butylbenzene	DCBd 4	Ave	36660 1586792	190031 1887735	421270	655671	860909	5.00 200	25.0 250	50.0	75.0	100
1,2-Dichlorobenzene	DCBd 4	Ave	24392 1010481	124427 1216119	258446	389316	525389	5.00 200	25.0 250	50.0	75.0	100
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1147 +++++	5517 +++++	10924	19664	29140	5.00 +++++	25.0 +++++	50.0	75.0	100
2,4- & 2,5- & 2,6- Dichlorotoluene	DCBd 4	Ave	53182 2411828	292268 2819474	636315	961021	1283654	15.0 600	75.0 750	150	225	300
2,3- & 3,4- Dichlorotoluene	DCBd 4	Ave	38035 1814435	206911 2176172	466935	700132	945407	10.0 400	50.0 500	100	150	200
1,2,4-Trichlorobenzene	DCBd 4	Ave	15198 728230	77607 895565	173002	266234	360686	5.00 200	25.0 250	50.0	75.0	100
Hexachlorobutadiene	DCBd 4	Ave	5716 239421	26287 302126	58500	90990	117388	5.00 200	25.0 250	50.0	75.0	100
Naphthalene	DCBd 4	Ave	32031 1754190	183134 2144730	425875	655837	895652	5.00 200	25.0 250	50.0	75.0	100
1,2,3-Trichlorobenzene	DCBd 4	Ave	12734 637531	69399 811942	151403	234780	318943	5.00 200	25.0 250	50.0	75.0	100
2,4,5-Trichlorotoluene	DCBd 4	Ave	5053 326073	27475 408566	73389	109739	165986	5.00 200	25.0 250	50.0	75.0	100
2,3,6-Trichlorotoluene	DCBd 4	Ave	5245 296296	26892 370449	65323	104364	148017	5.00 200	25.0 250	50.0	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	9384 374833	45418 457863	96169	134162	185587	5.00 200	25.0 250	50.0	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	13304 487373	63663 616626	129293	179010	244733	5.00 200	25.0 250	50.0	75.0	100

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1 Analy Batch No.: 191498

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2016 14:23 Calibration End Date: 10/17/2016 17:13 Calibration ID: 33286

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Toluene-d8 (Surr)	CBNZ d5	Ave	42813 1549248	205588 1778033	436290	584326	825990	5.00 200	25.0 250	50.0	75.0	100
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	14107 640890	70121 767526	160853	225747	324431	5.00 200	25.0 250	50.0	75.0	100

Curve Type Legend:

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1 Analy Batch No.: 191498

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2016 14:23 Calibration End Date: 10/17/2016 17:13 Calibration ID: 33286

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-191498/6	61017006.D
Level 2	IC 180-191498/7	61017007.D
Level 3	ICIS 180-191498/8	61017008.D
Level 4	IC 180-191498/9	61017009.D
Level 5	IC 180-191498/10	61017010.D
Level 6	IC 180-191498/12	61017012.D
Level 7	IC 180-191498/13	61017013.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Bromomethane	-1.6 -14.3	2.0	9.9	7.3	1.6	-5.0	40 40	40	40	40	40	40
Methylene Chloride	0.7 4.5	-0.7	-4.7	-4.6	-0.6	5.4	40 40	40	40	40	40	40
Bromoform	51.8 -0.5	-0.5	-6.3	-1.3	0.8	1.0	70 70	70	70	70	70	70

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017006.D
Lims ID: IC VSTD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 17-Oct-2016 14:23:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013909-006
Misc. Info.: IC VSTD1
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 18-Oct-2016 11:22:35 Calib Date: 17-Oct-2016 17:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: fergusond Date: 18-Oct-2016 09:24:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.151	4.150	0.001	88	106110	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.180	7.180	0.000	99	403562	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.289	10.294	-0.005	85	97576	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.637	12.630	0.007	96	144569	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.450	6.449	0.001	46	9384	5.00	5.45	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.828	6.821	0.007	53	13304	5.00	5.71	
$ 7 Toluene-d8 (Surr)	98	8.835	8.834	0.001	94	42813	5.00	6.00	
$ 8 4-Bromofluorobenzene (Surr	95	11.475	11.474	0.001	90	14107	5.00	5.25	
11 Dichlorodifluoromethane	85	1.541	1.546	-0.005	86	10818	5.00	5.89	
12 Chloromethane	50	1.705	1.698	0.007	98	13459	5.00	5.72	
13 Vinyl chloride	62	1.839	1.838	0.001	97	13101	5.00	6.09	
14 Butadiene	39	1.870	1.869	0.001	93	13781	5.00	6.12	
15 Bromomethane	94	2.168	2.167	0.001	67	7149	5.00	4.92	
16 Chloroethane	64	2.326	2.301	0.025	67	8242	5.00	6.05	
17 Dichlorofluoromethane	67	2.587	2.568	0.019	88	17179	5.00	5.51	M
18 Trichlorofluoromethane	101	2.594	2.586	0.008	69	14928	5.00	5.79	
20 Ethyl ether	59	2.959	2.945	0.014	94	13550	5.00	6.44	
21 Acrolein	56	3.129	3.122	0.007	98	45478	100.0	101.2	
22 1,1-Dichloroethene	96	3.238	3.231	0.007	94	10573	5.00	5.33	
23 1,1,2-Trichloro-1,2,2-trif	101	3.293	3.298	-0.005	68	11291	5.00	5.62	
24 Acetone	43	3.348	3.335	0.013	99	14853	25.0	30.8	
25 Iodomethane	142	3.421	3.420	0.001	98	16137	5.00	5.43	
26 Carbon disulfide	76	3.500	3.499	0.001	100	20445	5.00	4.63	
29 3-Chloro-1-propene	76	3.798	3.785	0.013	74	5524	5.00	5.02	M
30 Methyl acetate	43	3.816	3.809	0.007	96	49270	25.0	29.3	
31 Methylene Chloride	84	4.005	3.998	0.007	97	21013	5.00	5.04	
32 2-Methyl-2-propanol	59	4.291	4.290	0.001	65	5964	50.0	55.3	
33 Acrylonitrile	53	4.400	4.399	0.001	99	47987	50.0	53.8	
34 trans-1,2-Dichloroethene	96	4.443	4.424	0.019	95	12392	5.00	5.56	
35 Methyl tert-butyl ether	73	4.443	4.454	-0.011	84	22934	5.00	5.07	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.863	4.856	0.007	90	17937	5.00	5.54	
37 1,1-Dichloroethane	63	5.076	5.081	-0.005	96	19730	5.00	5.30	
38 Vinyl acetate	43	5.118	5.129	-0.011	98	14579	5.00	4.29	M
42 2,2-Dichloropropane	97	5.824	5.835	-0.011	52	1778	5.00	4.59	
43 cis-1,2-Dichloroethene	96	5.842	5.835	0.007	77	13048	5.00	5.23	
44 2-Butanone (MEK)	43	5.848	5.841	0.007	99	24730	25.0	27.0	
48 Chlorobromomethane	128	6.116	6.121	-0.005	96	5856	5.00	5.23	
49 Tetrahydrofuran	42	6.140	6.139	0.001	71	8841	10.0	12.4	
50 Chloroform	83	6.274	6.267	0.007	94	18543	5.00	5.37	
51 1,1,1-Trichloroethane	97	6.426	6.425	0.001	95	10002	5.00	4.80	
52 Cyclohexane	56	6.493	6.498	-0.005	94	19444	5.00	5.11	
53 Carbon tetrachloride	117	6.603	6.595	0.008	50	6374	5.00	4.58	
54 1,1-Dichloropropene	75	6.615	6.614	0.001	96	14232	5.00	5.09	
55 Isobutyl alcohol	41	6.822	6.827	-0.005	37	5799	125.0	122.0	
56 Benzene	78	6.834	6.833	0.001	96	50329	5.00	5.61	
57 1,2-Dichloroethane	62	6.913	6.912	0.001	97	15748	5.00	5.51	
59 n-Heptane	43	7.205	7.198	0.007	88	14142	5.00	5.33	
61 Trichloroethene	130	7.576	7.569	0.007	98	11801	5.00	5.39	
63 Methylcyclohexane	83	7.801	7.806	-0.005	86	18620	5.00	5.10	
64 1,2-Dichloropropane	63	7.837	7.843	-0.006	89	13422	5.00	5.64	M
67 Dibromomethane	93	7.935	7.928	0.007	94	5867	5.00	4.63	
65 1,4-Dioxane	88	7.935	7.934	0.001	47	2539	100.0	107.0	M
68 Dichlorobromomethane	83	8.123	8.129	-0.006	95	8911	5.00	4.67	
70 2-Chloroethyl vinyl ether	63	8.434	8.433	0.001	92	12773	10.0	8.95	
71 cis-1,3-Dichloropropene	75	8.574	8.579	-0.005	92	9906	5.00	3.75	
72 4-Methyl-2-pentanone (MIBK	43	8.732	8.731	0.001	95	40945	25.0	22.6	
73 Toluene	91	8.902	8.907	-0.005	98	50125	5.00	5.72	
74 trans-1,3-Dichloropropene	75	9.158	9.157	0.001	94	7817	5.00	3.90	
75 Ethyl methacrylate	69	9.224	9.217	0.007	87	8915	5.00	3.73	
76 1,1,2-Trichloroethane	97	9.352	9.345	0.007	89	9638	5.00	5.15	
77 Tetrachloroethene	164	9.419	9.418	0.001	94	10232	5.00	6.07	
78 1,3-Dichloropropane	76	9.504	9.509	-0.005	89	19292	5.00	5.54	
79 2-Hexanone	43	9.565	9.570	-0.005	95	25103	25.0	23.2	
81 Chlorodibromomethane	129	9.723	9.722	0.001	90	5051	5.00	4.28	
82 Ethylene Dibromide	107	9.833	9.832	0.001	97	7512	5.00	4.46	
83 3-Chlorobenzotrifluoride	180	10.301	10.300	0.001	58	17222	5.00	5.93	
84 Chlorobenzene	112	10.320	10.319	0.001	95	33454	5.00	5.63	
85 4-Chlorobenzotrifluoride	180	10.393	10.386	0.007	96	15414	5.00	5.69	
86 1,1,1,2-Tetrachloroethane	131	10.411	10.416	-0.005	40	5200	5.00	3.93	
87 Ethylbenzene	106	10.423	10.422	0.001	98	16997	5.00	5.31	
88 m-Xylene & p-Xylene	106	10.557	10.556	0.001	98	18866	5.00	4.85	
89 o-Xylene	106	10.934	10.933	0.001	96	17436	5.00	4.64	
90 Styrene	104	10.958	10.957	0.001	95	28066	5.00	4.50	
91 Bromoform	173	11.135	11.134	0.001	56	2188	5.00	7.59	
92 2-Chlorobenzotrifluoride	180	11.208	11.207	0.001	95	14799	5.00	5.28	
93 Isopropylbenzene	105	11.305	11.304	0.001	95	47759	5.00	5.33	
95 Bromobenzene	156	11.609	11.614	-0.005	94	11826	5.00	5.05	
96 1,1,2,2-Tetrachloroethane	83	11.621	11.614	0.007	76	12078	5.00	5.11	
97 trans-1,4-Dichloro-2-buten	53	11.646	11.651	-0.005	69	2690	5.00	4.44	
98 1,2,3-Trichloropropane	110	11.670	11.669	0.001	85	3816	5.00	4.85	
99 N-Propylbenzene	120	11.719	11.718	0.001	98	13125	5.00	4.83	
100 2-Chlorotoluene	126	11.804	11.803	0.001	96	11542	5.00	4.87	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.871	11.870	0.001	95	12962	5.00	5.04	
102 1,3,5-Trimethylbenzene	105	11.901	11.906	-0.005	96	37007	5.00	4.95	
103 4-Chlorotoluene	126	11.932	11.931	0.001	98	13109	5.00	5.06	
104 tert-Butylbenzene	119	12.211	12.217	-0.006	93	31200	5.00	4.92	
106 1,2,4-Trimethylbenzene	105	12.278	12.277	0.001	96	37784	5.00	4.87	
107 1,2-dichloro-4-(trifluorom	214	12.321	12.320	0.001	96	11726	5.00	5.35	
108 sec-Butylbenzene	105	12.437	12.436	0.001	94	47106	5.00	5.11	
109 1,3-Dichlorobenzene	146	12.552	12.551	0.001	97	25047	5.00	5.51	
110 4-Isopropyltoluene	119	12.595	12.594	0.001	95	38779	5.00	4.95	
111 1,4-Dichlorobenzene	146	12.662	12.661	0.001	93	26969	5.00	5.67	
113 2,4-Dichloro-1-(triflourom	214	12.686	12.691	-0.005	89	12149	5.00	5.67	
114 2,5-Dichlorobenzotrifluori	214	12.735	12.728	0.007	95	14585	5.00	5.94	
116 n-Butylbenzene	91	13.008	13.001	0.007	97	36660	5.00	5.17	
117 1,2-Dichlorobenzene	146	13.021	13.014	0.007	95	24392	5.00	5.46	
118 1,2-Dibromo-3-Chloropropan	75	13.793	13.804	-0.011	1	1147	5.00	5.29	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.939	13.944	-0.005	97	53182	15.0	15.1	
121 2,3- & 3,4- Dichlorotoluen	125	14.365	14.358	0.007	97	38035	10.0	9.78	
122 1,2,4-Trichlorobenzene	180	14.627	14.626	0.001	92	15198	5.00	5.03	
123 Hexachlorobutadiene	225	14.773	14.778	-0.005	93	5716	5.00	5.55	
124 Naphthalene	128	14.888	14.893	-0.005	95	32031	5.00	4.45	
125 1,2,3-Trichlorobenzene	180	15.113	15.112	0.001	92	12734	5.00	4.79	
126 2,4,5-Trichlorotoluene	159	15.898	15.897	0.001	0	5053	5.00	4.05	
127 2,3,6-Trichlorotoluene	159	16.008	16.001	0.007	93	5245	5.00	4.51	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		10.0	10.8	
S 131 Xylenes, Total	106				0		10.0	9.49	
S 132 1,3-Dichloropropene, Total	1				0		10.0	7.65	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00060	Amount Added:	0.20	Units: uL	
VOA8260VOAPRI_00216	Amount Added:	0.20	Units: uL	
voaWEEmixRest_00001	Amount Added:	0.20	Units: uL	
voaWva2ndRest_00007	Amount Added:	0.20	Units: uL	
voaW2cleveRes_00002	Amount Added:	0.20	Units: uL	
voaWKetPriRes_00002	Amount Added:	0.80	Units: uL	
voaWacro2ndRe_00007	Amount Added:	4.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

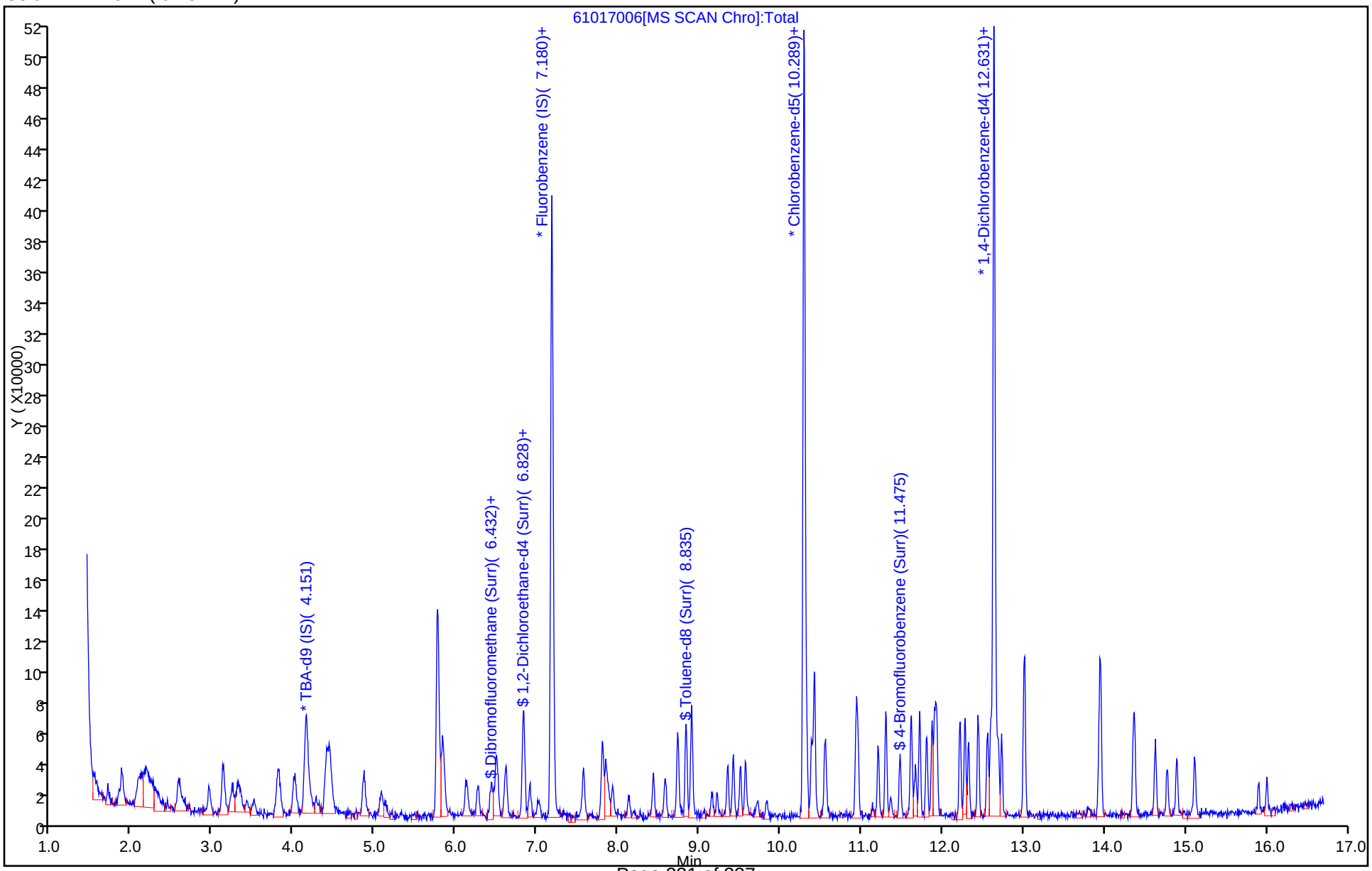
Report Date: 18-Oct-2016 11:22:39 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017006.D

Injection Date:	17-Oct-2016 14:23:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD1			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

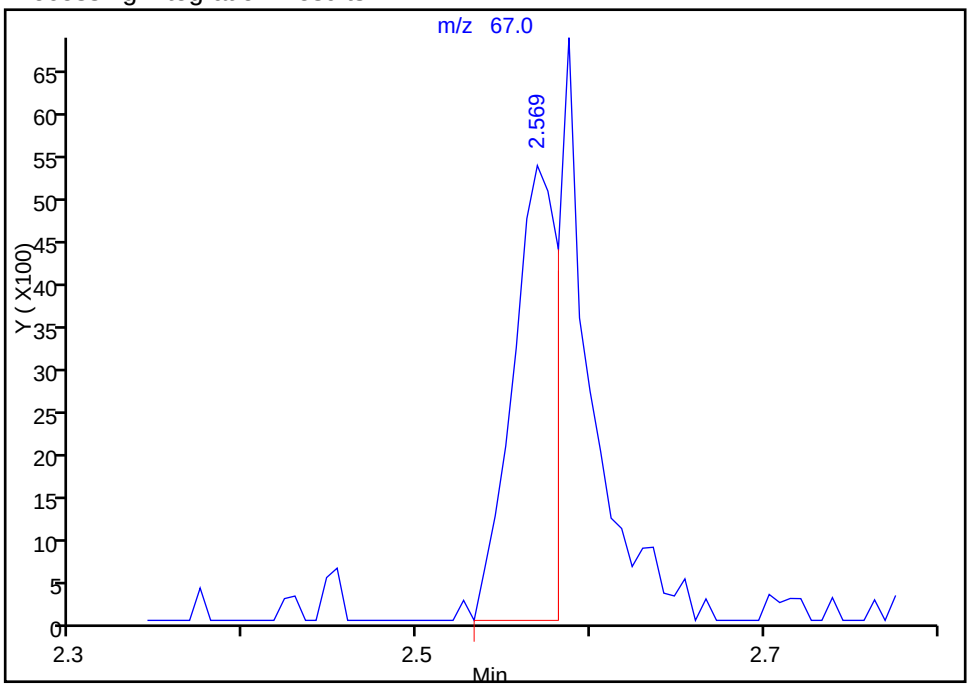
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017006.D				
Injection Date:	17-Oct-2016 14:23:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

17 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

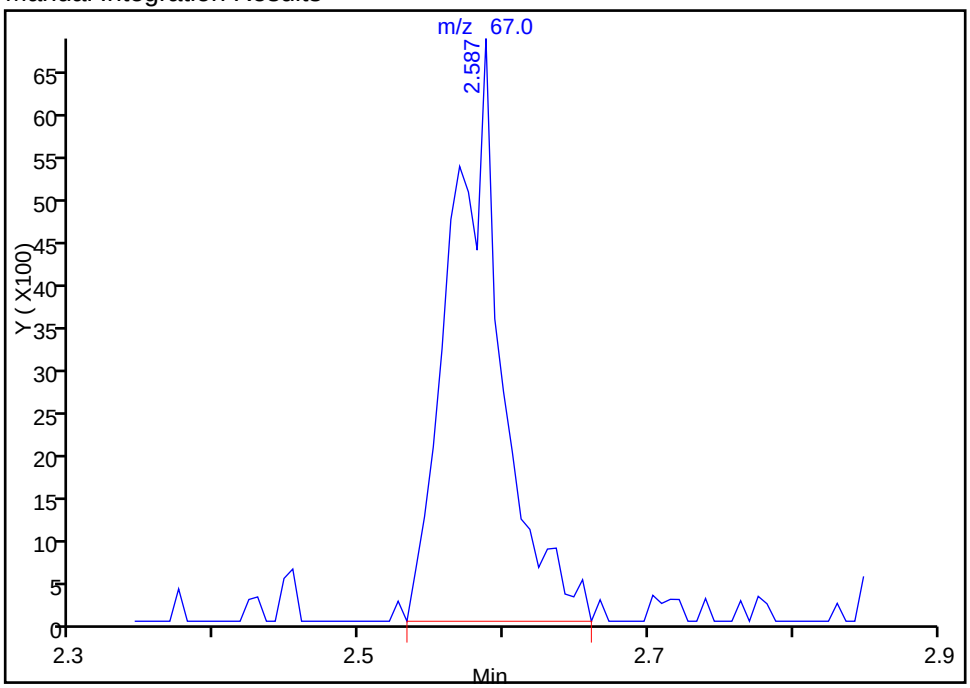
Processing Integration Results

RT: 2.57
Area: 9633
Amount: 4.895355
Amount Units: ng



Manual Integration Results

RT: 2.59
Area: 17179
Amount: 5.512545
Amount Units: ng



Reviewer: fergusond, 18-Oct-2016 09:55:22
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

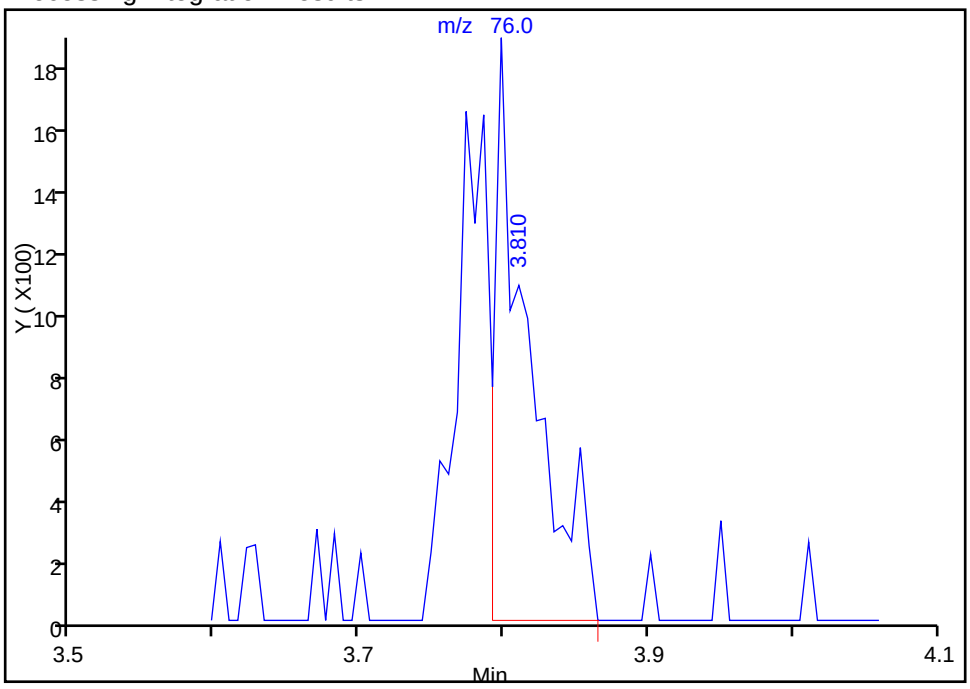
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017006.D				
Injection Date:	17-Oct-2016 14:23:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

29 3-Chloro-1-propene, CAS: 107-05-1

Signal: 1

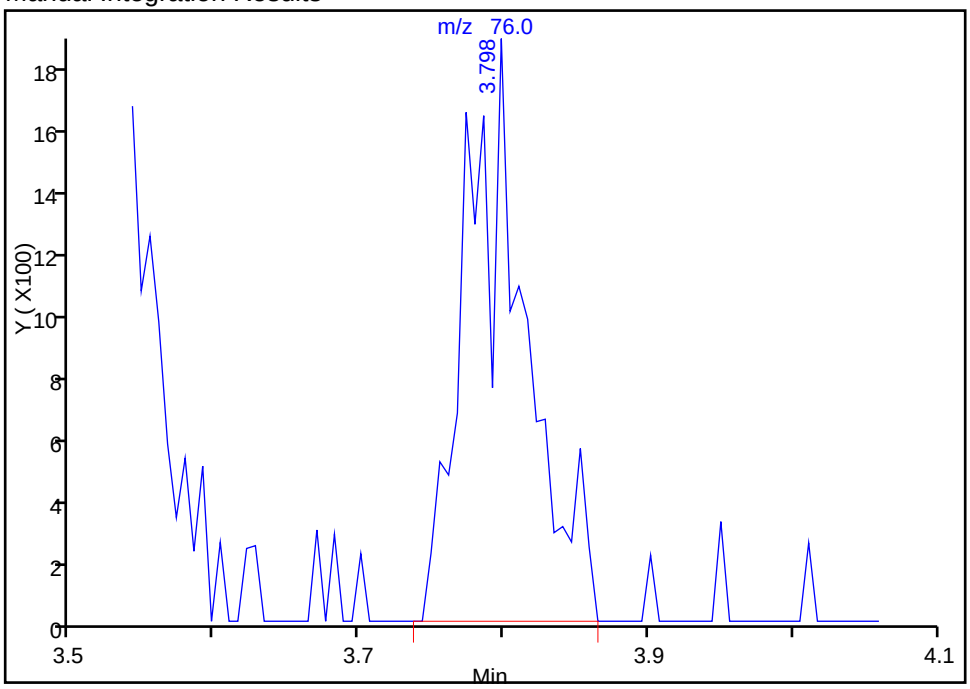
Processing Integration Results

RT: 3.81
Area: 3165
Amount: 5.163002
Amount Units: ng



Manual Integration Results

RT: 3.80
Area: 5524
Amount: 5.016222
Amount Units: ng



Reviewer: fergusond, 18-Oct-2016 09:55:22

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

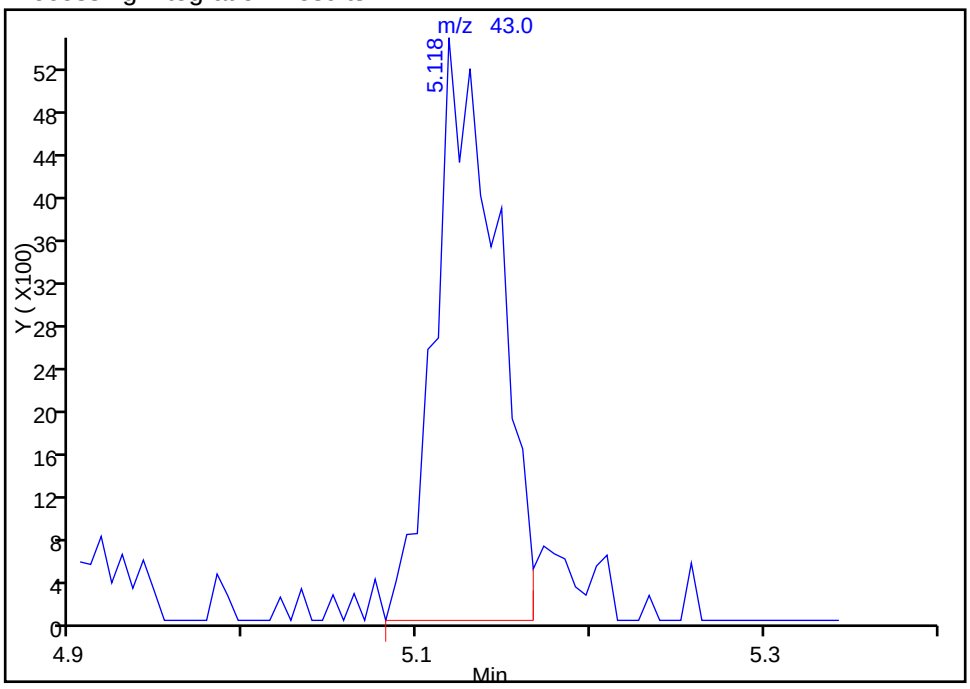
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017006.D				
Injection Date:	17-Oct-2016 14:23:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

38 Vinyl acetate, CAS: 108-05-4

Signal: 1

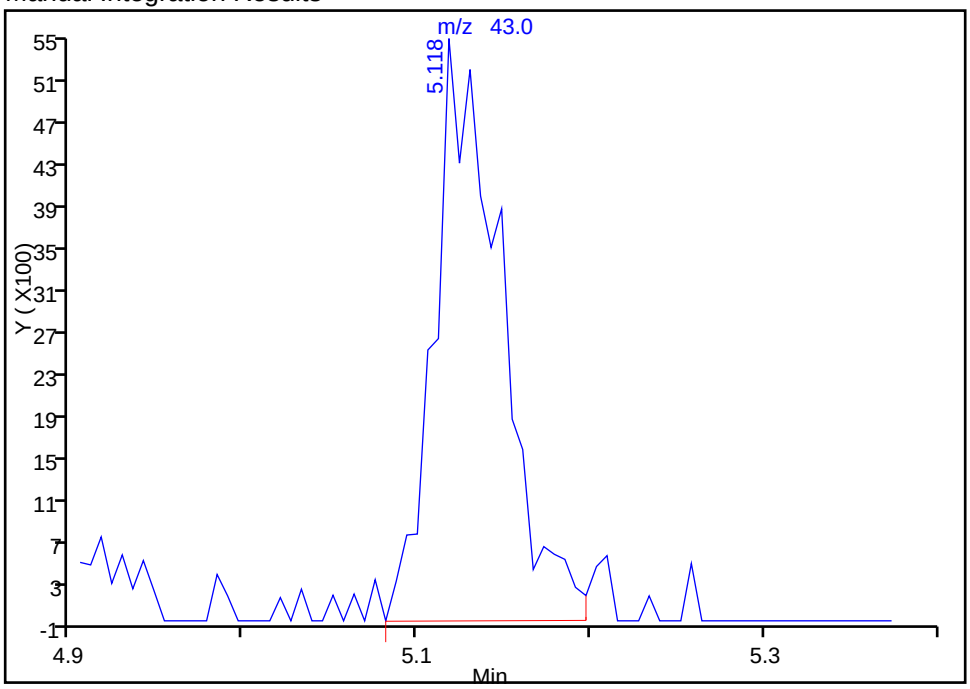
Processing Integration Results

RT: 5.12
Area: 13683
Amount: 6.753948
Amount Units: ng



Manual Integration Results

RT: 5.12
Area: 14579
Amount: 4.289962
Amount Units: ng



Reviewer: fergusond, 18-Oct-2016 09:55:22

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh

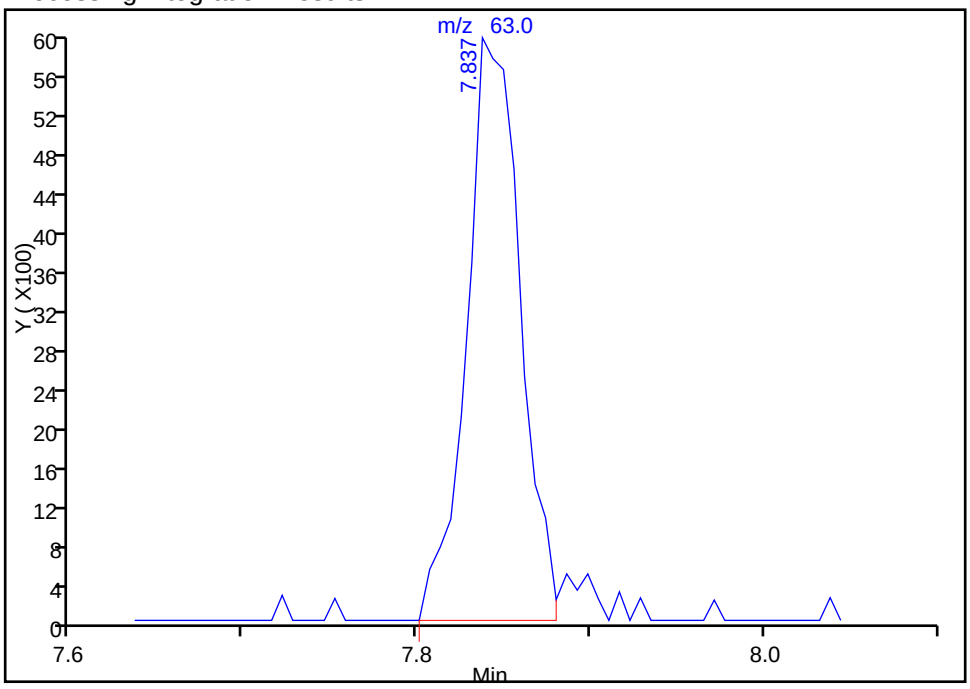
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017006.D
Injection Date: 17-Oct-2016 14:23:30 Instrument ID: CHHP6
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

64 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

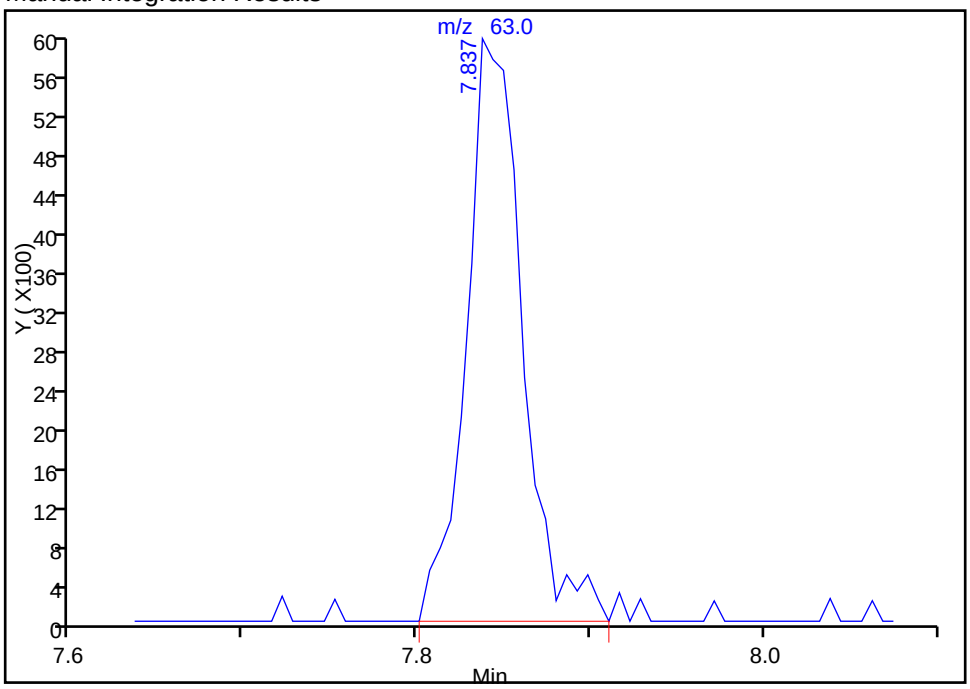
Processing Integration Results

RT: 7.84
Area: 12880
Amount: 5.446389
Amount Units: ng



Manual Integration Results

RT: 7.84
Area: 13422
Amount: 5.638654
Amount Units: ng



Reviewer: fergusond, 18-Oct-2016 09:55:22
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

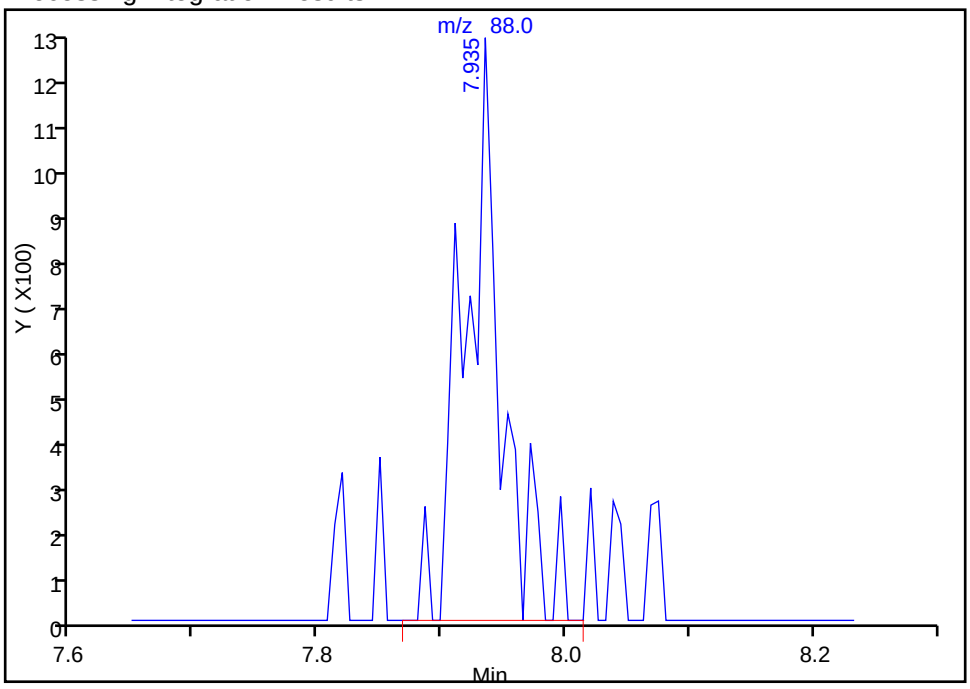
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017006.D				
Injection Date:	17-Oct-2016 14:23:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

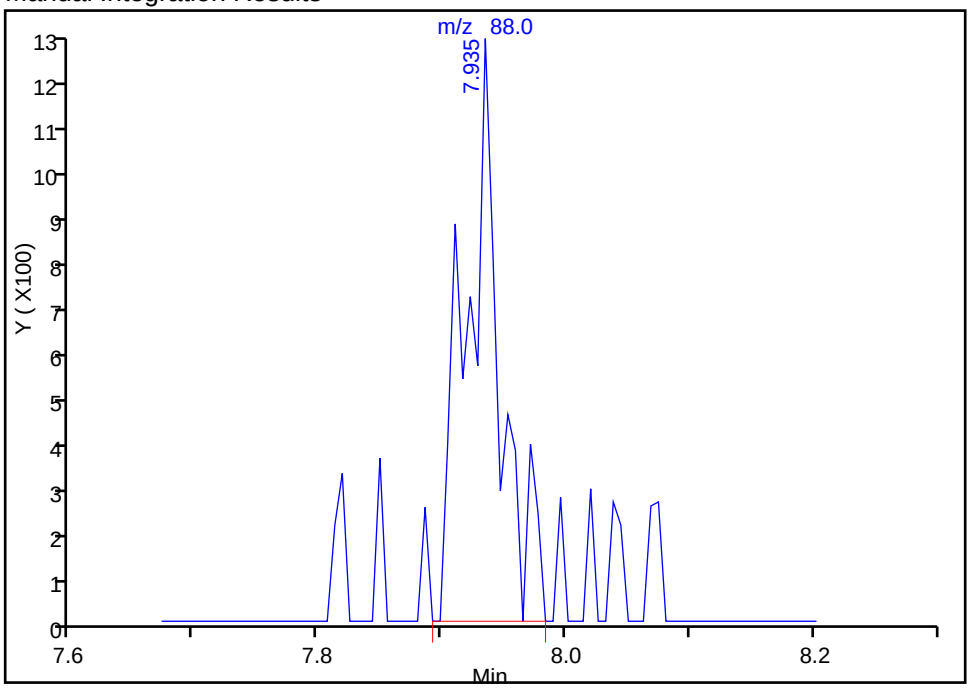
Processing Integration Results

RT: 7.93
Area: 2731
Amount: 137.7546
Amount Units: ng



Manual Integration Results

RT: 7.93
Area: 2539
Amount: 107.0435
Amount Units: ng



Reviewer: fergusond, 18-Oct-2016 09:55:22

Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017007.D
Lims ID: IC VSTD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 17-Oct-2016 14:48:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013909-007
Misc. Info.: IC VSTD5
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 18-Oct-2016 11:22:43 Calib Date: 17-Oct-2016 17:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: fergusond Date: 18-Oct-2016 10:03:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.139	4.150	-0.011	89	123386	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.181	7.180	0.001	98	424012	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.290	10.294	-0.004	86	103556	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.632	12.630	0.002	96	158882	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.451	6.449	0.002	93	45418	25.0	25.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.822	6.821	0.001	77	63663	25.0	26.0	
$ 7 Toluene-d8 (Surr)	98	8.836	8.834	0.002	93	205588	25.0	27.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.476	11.474	0.002	89	70121	25.0	24.6	
11 Dichlorodifluoromethane	85	1.536	1.546	-0.010	93	48460	25.0	25.1	M
12 Chloromethane	50	1.706	1.698	0.008	99	63508	25.0	25.7	
13 Vinyl chloride	62	1.834	1.838	-0.004	99	54262	25.0	24.0	
14 Butadiene	39	1.870	1.869	0.001	94	59455	25.0	25.1	
15 Bromomethane	94	2.168	2.167	0.001	94	26701	25.0	25.5	
16 Chloroethane	64	2.308	2.301	0.007	99	35030	25.0	24.5	
17 Dichlorofluoromethane	67	2.576	2.568	0.008	94	84730	25.0	25.9	
18 Trichlorofluoromethane	101	2.588	2.586	0.002	65	69000	25.0	25.5	
20 Ethyl ether	59	2.947	2.945	0.002	89	57079	25.0	25.8	
21 Acrolein	56	3.123	3.122	0.001	99	55967	125.0	118.5	
22 1,1-Dichloroethene	96	3.233	3.231	0.002	99	52383	25.0	25.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.294	3.298	-0.004	94	52668	25.0	25.0	
24 Acetone	43	3.318	3.335	-0.017	99	22945	50.0	45.3	
25 Iodomethane	142	3.421	3.420	0.001	96	75958	25.0	24.3	
26 Carbon disulfide	76	3.500	3.499	0.001	99	93668	25.0	20.2	
29 3-Chloro-1-propene	76	3.786	3.785	0.001	82	23057	25.0	19.9	
30 Methyl acetate	43	3.805	3.809	-0.004	97	209350	125.0	118.6	
31 Methylene Chloride	84	3.999	3.998	0.001	94	70928	25.0	24.8	
32 2-Methyl-2-propanol	59	4.273	4.290	-0.017	91	26121	250.0	208.4	
33 Acrylonitrile	53	4.395	4.399	-0.004	99	226233	250.0	241.6	
34 trans-1,2-Dichloroethene	96	4.425	4.424	0.001	98	55007	25.0	23.5	
35 Methyl tert-butyl ether	73	4.443	4.454	-0.011	96	101976	25.0	21.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.857	4.856	0.001	96	82220	25.0	24.2	
37 1,1-Dichloroethane	63	5.082	5.081	0.001	96	91288	25.0	23.4	
38 Vinyl acetate	43	5.125	5.129	-0.004	98	75241	25.0	21.1	
42 2,2-Dichloropropane	97	5.830	5.835	-0.005	52	9317	25.0	22.9	
43 cis-1,2-Dichloroethene	96	5.830	5.835	-0.005	82	64079	25.0	24.5	
44 2-Butanone (MEK)	43	5.849	5.841	0.008	92	50228	50.0	52.3	
48 Chlorobromomethane	128	6.116	6.121	-0.005	97	28077	25.0	23.9	
49 Tetrahydrofuran	42	6.129	6.139	-0.010	82	34090	50.0	45.7	
50 Chloroform	83	6.268	6.267	0.001	93	89560	25.0	24.7	
51 1,1,1-Trichloroethane	97	6.427	6.425	0.002	97	50565	25.0	23.1	
52 Cyclohexane	56	6.500	6.498	0.002	93	97597	25.0	24.4	
53 Carbon tetrachloride	117	6.597	6.595	0.002	94	30269	25.0	20.7	
54 1,1-Dichloropropene	75	6.615	6.614	0.001	97	71901	25.0	24.5	
55 Isobutyl alcohol	41	6.822	6.827	-0.005	84	25495	625.0	510.3	M
56 Benzene	78	6.828	6.833	-0.005	97	241667	25.0	25.6	
57 1,2-Dichloroethane	62	6.907	6.912	-0.005	97	74303	25.0	24.7	
59 n-Heptane	43	7.199	7.198	0.001	92	69355	25.0	24.9	
61 Trichloroethene	130	7.570	7.569	0.001	98	56636	25.0	24.6	
63 Methylcyclohexane	83	7.801	7.806	-0.005	88	94227	25.0	24.6	
64 1,2-Dichloropropane	63	7.844	7.843	0.001	95	60485	25.0	24.2	
67 Dibromomethane	93	7.929	7.928	0.001	94	32261	25.0	24.2	
65 1,4-Dioxane	88	7.929	7.934	-0.005	42	11953	500.0	479.6	M
68 Dichlorobromomethane	83	8.130	8.129	0.001	97	42759	25.0	21.3	
70 2-Chloroethyl vinyl ether	63	8.434	8.433	0.001	92	68565	50.0	45.7	
71 cis-1,3-Dichloropropene	75	8.574	8.579	-0.005	94	56067	25.0	20.2	
72 4-Methyl-2-pentanone (MIBK	43	8.732	8.731	0.001	97	93433	50.0	48.6	
73 Toluene	91	8.903	8.907	-0.004	99	244909	25.0	26.3	
74 trans-1,3-Dichloropropene	75	9.152	9.157	-0.005	95	40698	25.0	19.1	
75 Ethyl methacrylate	69	9.219	9.217	0.002	91	53103	25.0	20.9	
76 1,1,2-Trichloroethane	97	9.347	9.345	0.002	91	50412	25.0	25.4	
77 Tetrachloroethene	164	9.414	9.418	-0.004	95	45578	25.0	25.5	
78 1,3-Dichloropropane	76	9.505	9.509	-0.004	91	93947	25.0	25.4	
79 2-Hexanone	43	9.566	9.570	-0.004	95	54228	50.0	47.1	
81 Chlorodibromomethane	129	9.718	9.722	-0.004	88	25976	25.0	20.7	
82 Ethylene Dibromide	107	9.827	9.832	-0.005	100	40628	25.0	22.7	
83 3-Chlorobenzotrifluoride	180	10.296	10.300	-0.004	93	76878	25.0	24.9	
84 Chlorobenzene	112	10.320	10.319	0.001	95	162687	25.0	25.8	
85 4-Chlorobenzotrifluoride	180	10.387	10.386	0.001	96	70044	25.0	24.4	
86 1,1,1,2-Tetrachloroethane	131	10.411	10.416	-0.005	80	29046	25.0	20.7	
87 Ethylbenzene	106	10.423	10.422	0.001	98	85428	25.0	25.1	
88 m-Xylene & p-Xylene	106	10.551	10.556	-0.005	99	106102	25.0	25.7	
89 o-Xylene	106	10.934	10.933	0.001	95	103504	25.0	26.0	
90 Styrene	104	10.953	10.957	-0.004	96	166314	25.0	25.1	
91 Bromoform	173	11.141	11.134	0.007	95	13641	25.0	24.9	
92 2-Chlorobenzotrifluoride	180	11.208	11.207	0.001	95	73584	25.0	24.7	
93 Isopropylbenzene	105	11.306	11.304	0.002	96	244492	25.0	25.7	
95 Bromobenzene	156	11.616	11.614	0.002	94	64111	25.0	24.9	
96 1,1,2,2-Tetrachloroethane	83	11.616	11.614	0.002	77	62244	25.0	24.8	
97 trans-1,4-Dichloro-2-buten	53	11.646	11.651	-0.005	61	14475	25.0	21.7	
98 1,2,3-Trichloropropane	110	11.677	11.669	0.008	86	20409	25.0	23.6	
99 N-Propylbenzene	120	11.719	11.718	0.001	99	71921	25.0	24.1	
100 2-Chlorotoluene	126	11.804	11.803	0.001	96	61895	25.0	23.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.871	11.870	0.001	95	65719	25.0	23.3	
102 1,3,5-Trimethylbenzene	105	11.902	11.906	-0.004	96	207086	25.0	25.2	
103 4-Chlorotoluene	126	11.926	11.931	-0.005	97	72096	25.0	25.3	
104 tert-Butylbenzene	119	12.218	12.217	0.001	93	172473	25.0	24.8	
106 1,2,4-Trimethylbenzene	105	12.279	12.277	0.002	97	214402	25.0	25.1	
107 1,2-dichloro-4-(trifluorom	214	12.322	12.320	0.002	97	59549	25.0	24.7	
108 sec-Butylbenzene	105	12.437	12.436	0.001	94	259914	25.0	25.6	
109 1,3-Dichlorobenzene	146	12.553	12.551	0.002	96	120874	25.0	24.2	
110 4-Isopropyltoluene	119	12.595	12.594	0.001	97	214936	25.0	25.0	
111 1,4-Dichlorobenzene	146	12.656	12.661	-0.005	96	128236	25.0	24.5	
113 2,4-Dichloro-1-(triflourom	214	12.687	12.691	-0.005	95	57652	25.0	24.5	
114 2,5-Dichlorobenzotrifluori	214	12.729	12.728	0.001	96	65243	25.0	24.2	
116 n-Butylbenzene	91	13.003	13.001	0.002	97	190031	25.0	24.4	
117 1,2-Dichlorobenzene	146	13.015	13.014	0.001	98	124427	25.0	25.3	
118 1,2-Dibromo-3-Chloropropan	75	13.806	13.804	0.002	73	5517	25.0	23.1	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.946	13.944	0.002	98	292268	75.0	75.3	
121 2,3- & 3,4- Dichlorotoluen	125	14.366	14.358	0.008	97	206911	50.0	48.4	
122 1,2,4-Trichlorobenzene	180	14.621	14.626	-0.005	91	77607	25.0	23.4	
123 Hexachlorobutadiene	225	14.773	14.778	-0.005	96	26287	25.0	23.2	
124 Naphthalene	128	14.889	14.893	-0.004	97	183134	25.0	23.1	
125 1,2,3-Trichlorobenzene	180	15.108	15.112	-0.004	96	69399	25.0	23.8	
126 2,4,5-Trichlorotoluene	159	15.899	15.897	0.002	0	27475	25.0	20.0	
127 2,3,6-Trichlorotoluene	159	16.002	16.001	0.001	95	26892	25.0	21.0	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		50.0	47.9	
S 131 Xylenes, Total	106				0		50.0	51.7	
S 132 1,3-Dichloropropene, Total	1				0		50.0	39.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWacro2ndRe_00007	Amount Added:	5.00	Units: uL	
VOA8260VOAPRI_00216	Amount Added:	1.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	1.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	1.00	Units: uL	
voaWva2ndRest_00007	Amount Added:	1.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	1.00	Units: uL	
VOA8260SURR_00060	Amount Added:	1.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

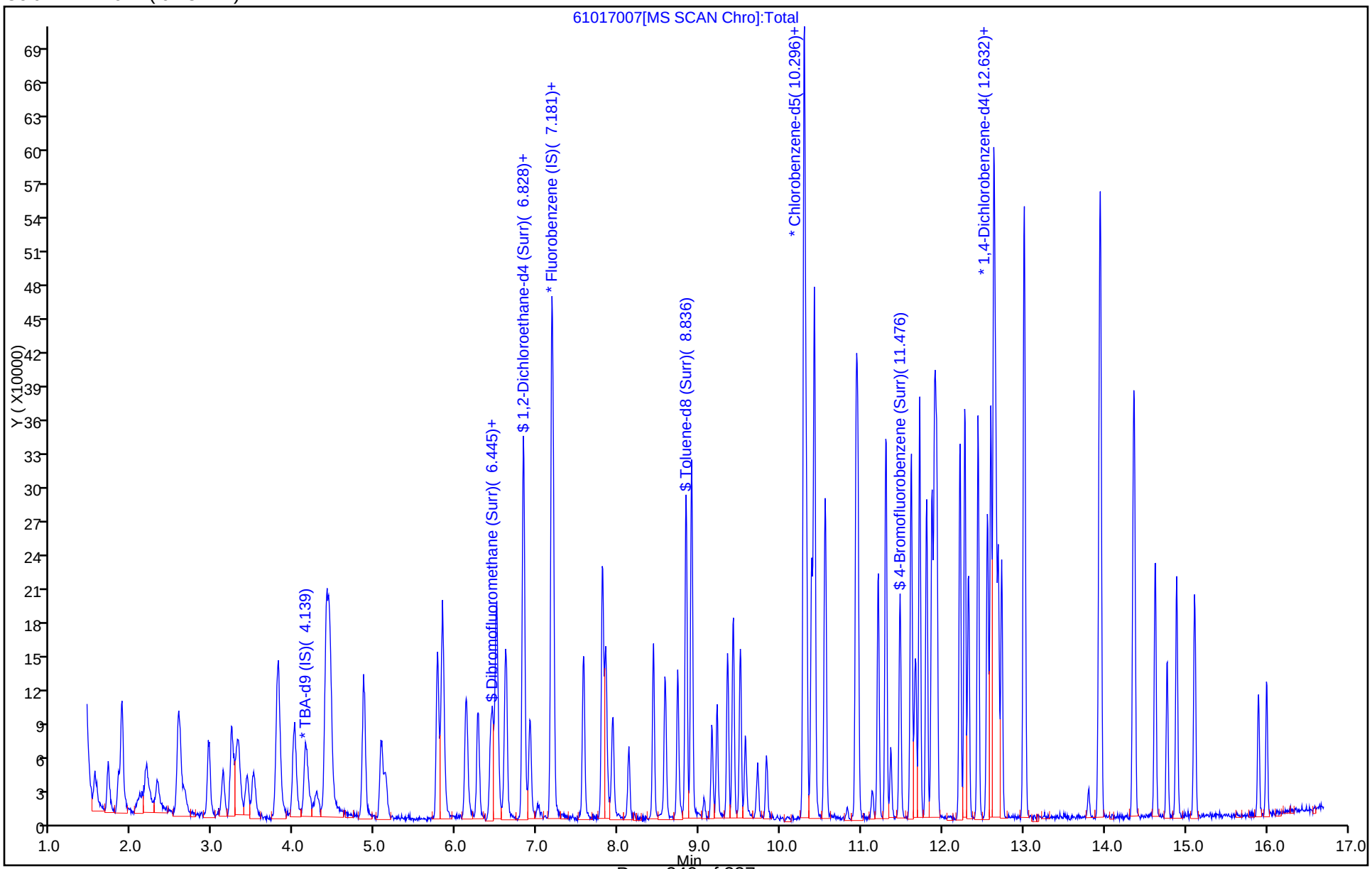
Report Date: 18-Oct-2016 11:22:45 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017007.D

Injection Date:	17-Oct-2016 14:48:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD5			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

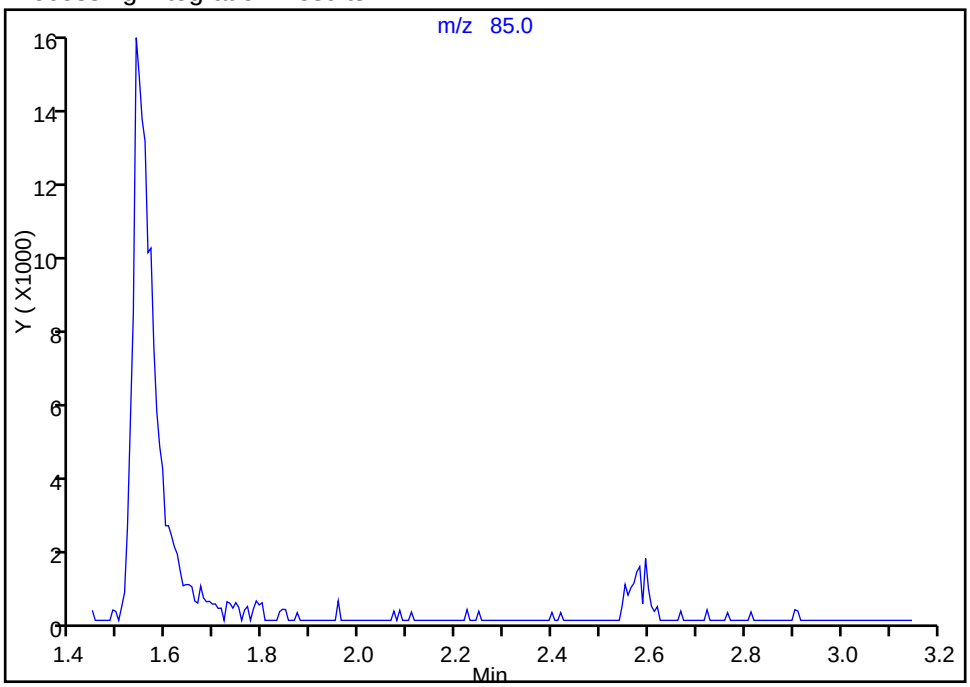
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017007.D				
Injection Date:	17-Oct-2016 14:48:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD5				
Client ID:					
Operator ID:	001562	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

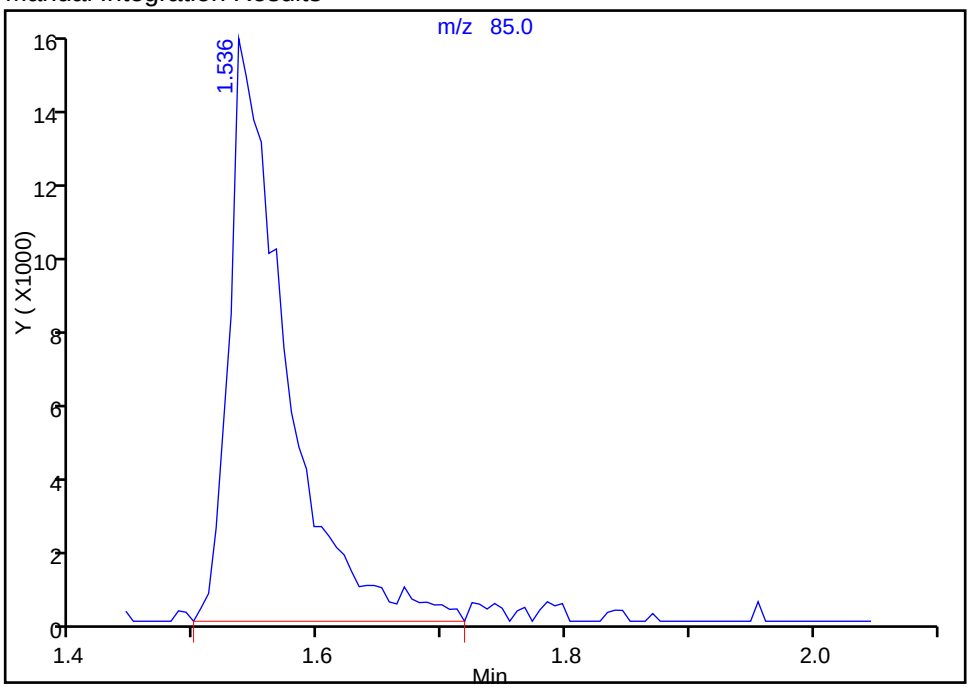
Processing Integration Results

Not Detected
Expected RT: 1.55



Manual Integration Results

RT: 1.54
Area: 48460
Amount: 25.115952
Amount Units: ng



Reviewer: fergusond, 18-Oct-2016 10:03:31
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

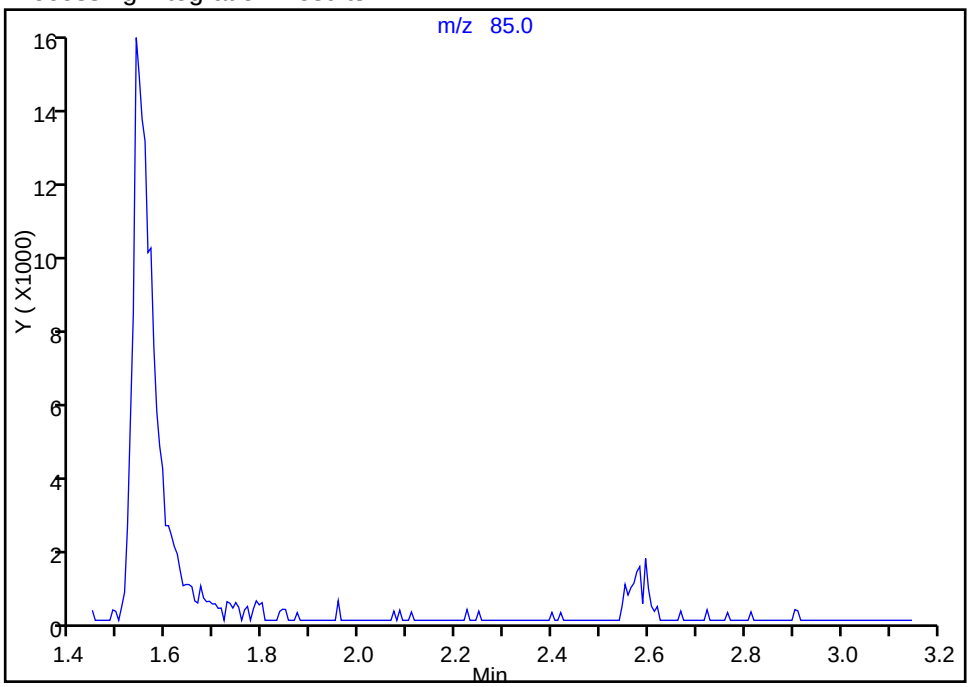
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017007.D				
Injection Date:	17-Oct-2016 14:48:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD5				
Client ID:					
Operator ID:	001562	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

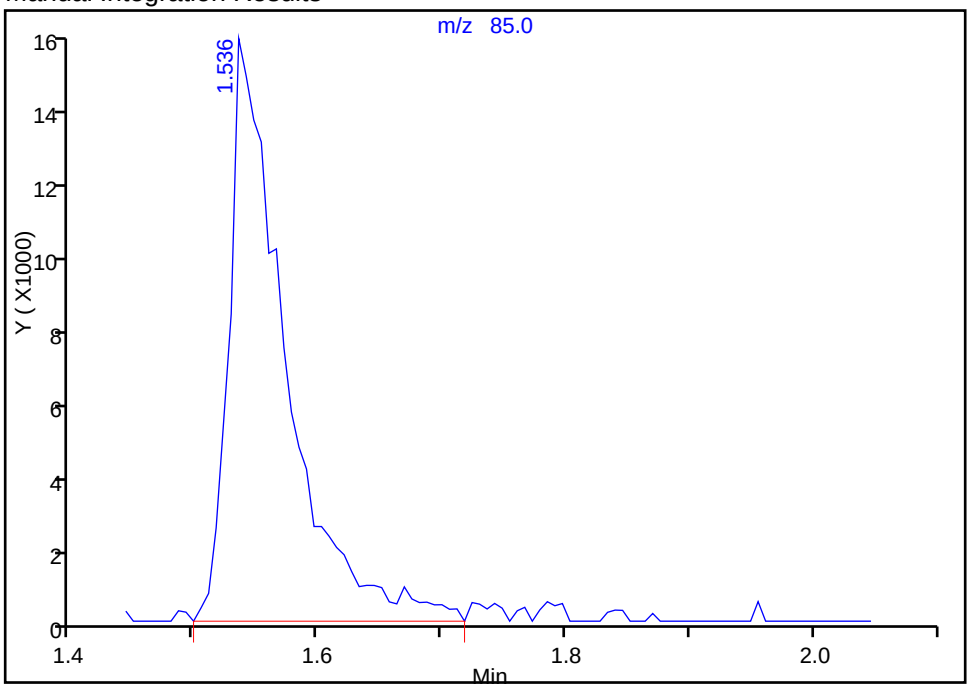
Processing Integration Results

Not Detected
Expected RT: 1.55



Manual Integration Results

RT: 1.54
Area: 48460
Amount: 25.115952
Amount Units: ng



Reviewer: fergusond, 18-Oct-2016 10:03:31
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

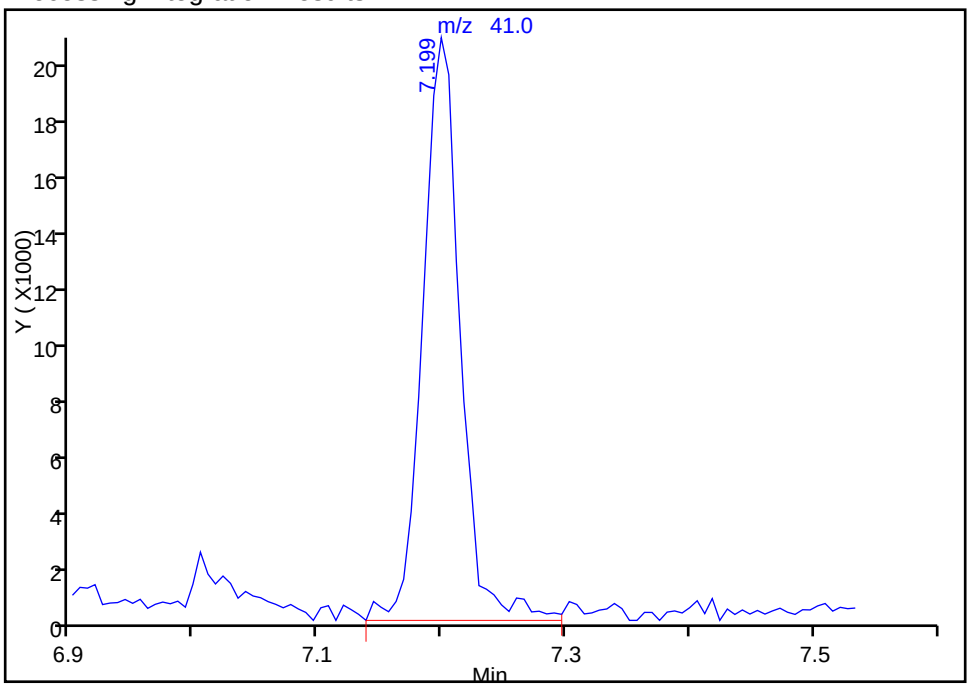
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017007.D
Injection Date: 17-Oct-2016 14:48:30 Instrument ID: CHHP6
Lims ID: IC VSTD5
Client ID:
Operator ID: 001562 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

55 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

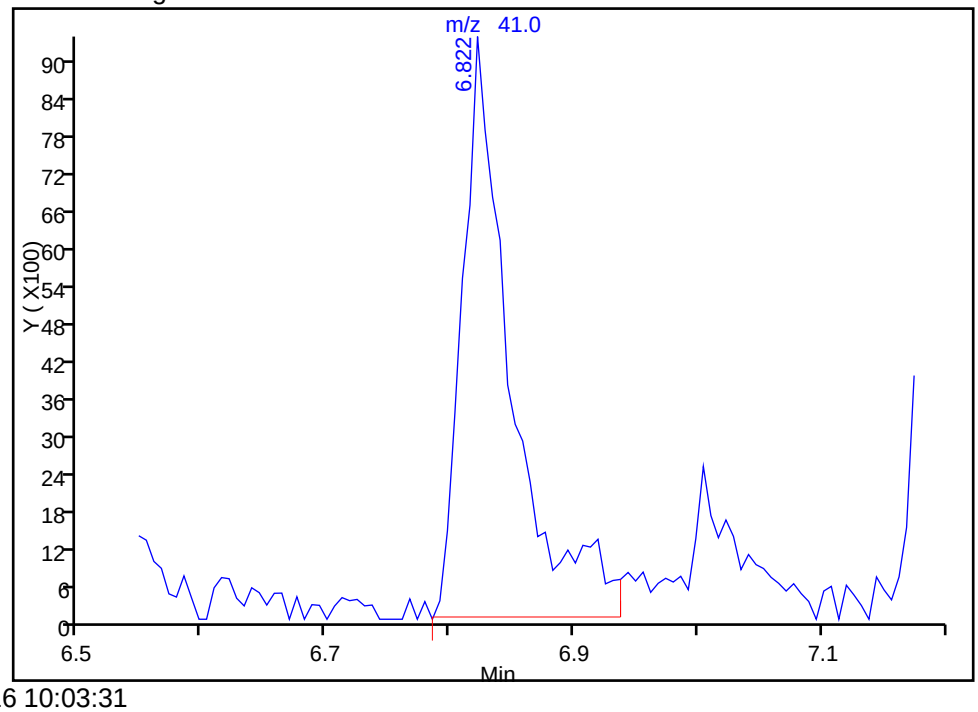
Processing Integration Results

RT: 7.20
Area: 44045
Amount: 865.8293
Amount Units: ng



Manual Integration Results

RT: 6.82
Area: 25495
Amount: 510.2903
Amount Units: ng



Reviewer: fergusond, 18-Oct-2016 10:03:31
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

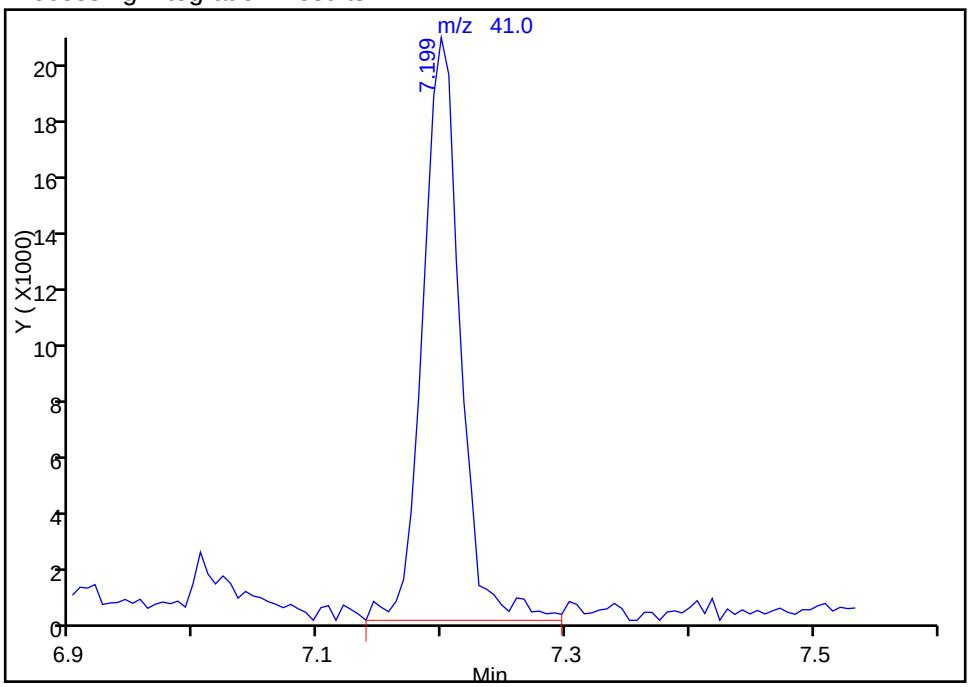
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017007.D
Injection Date: 17-Oct-2016 14:48:30 Instrument ID: CHHP6
Lims ID: IC VSTD5
Client ID:
Operator ID: 001562 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

55 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

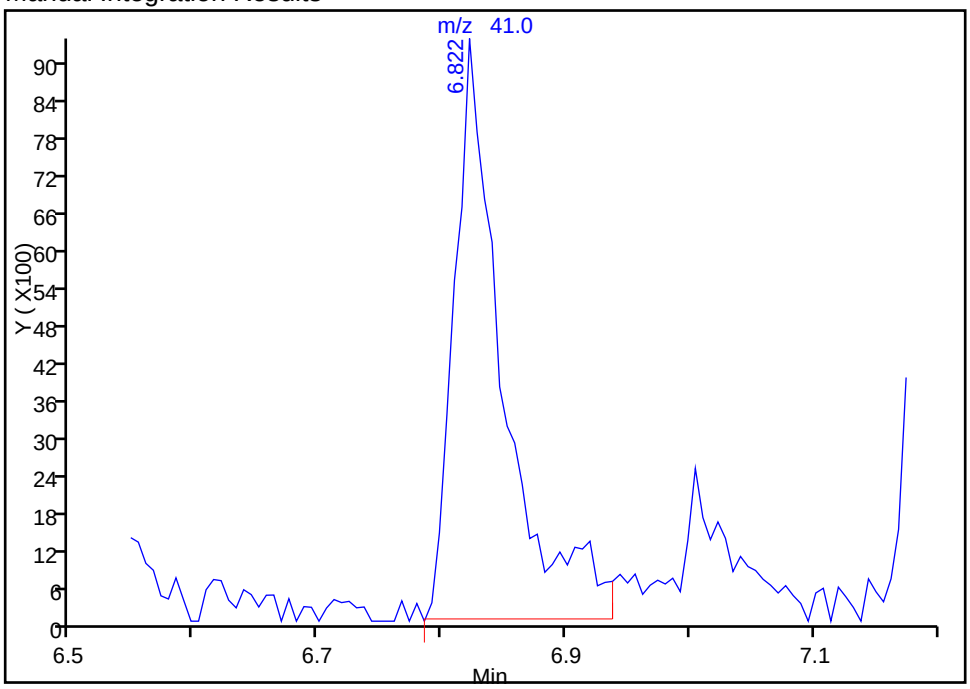
Processing Integration Results

RT: 7.20
Area: 44045
Amount: 865.8293
Amount Units: ng



Manual Integration Results

RT: 6.82
Area: 25495
Amount: 510.2903
Amount Units: ng



Reviewer: fergusond, 18-Oct-2016 10:03:31
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

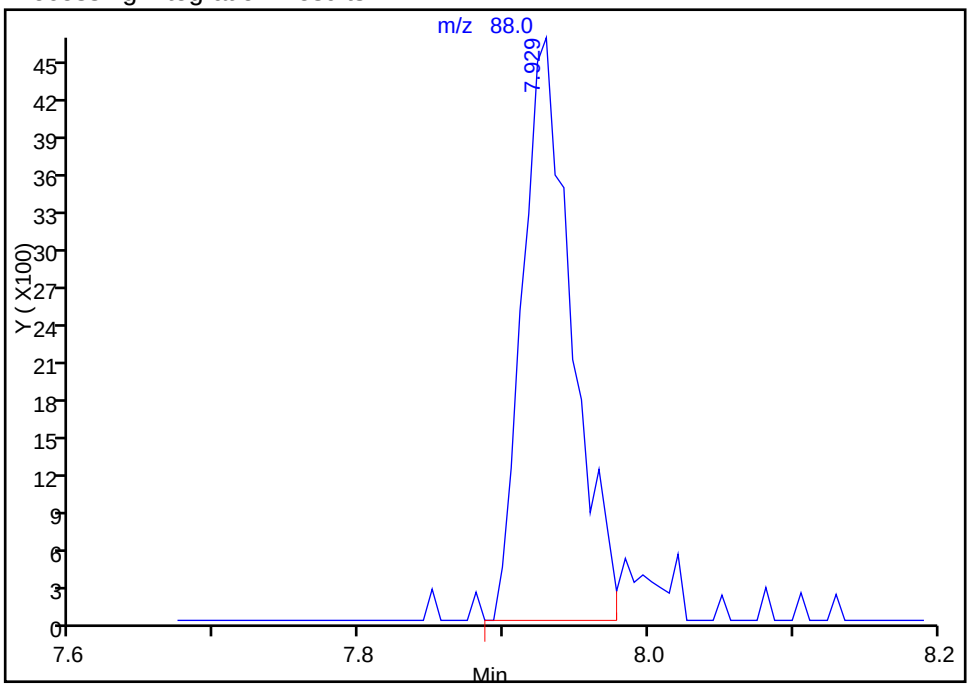
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017007.D
Injection Date: 17-Oct-2016 14:48:30 Instrument ID: CHHP6
Lims ID: IC VSTD5
Client ID:
Operator ID: 001562 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

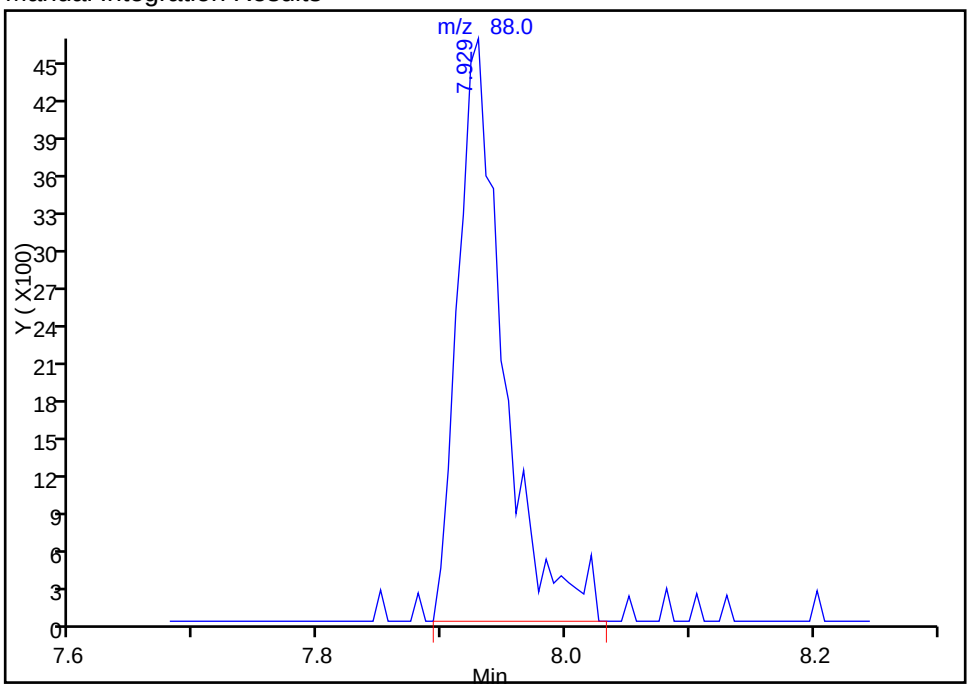
Processing Integration Results

RT: 7.93
Area: 11051
Amount: 537.9833
Amount Units: ng



Manual Integration Results

RT: 7.93
Area: 11953
Amount: 479.6305
Amount Units: ng



Reviewer: fergusond, 18-Oct-2016 10:03:31
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017008.D
Lims ID: ICIS VSTD10
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 17-Oct-2016 15:12:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013909-008
Misc. Info.: ICIS VSTD10
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 18-Oct-2016 11:27:01 Calib Date: 17-Oct-2016 17:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: fergusond Date: 18-Oct-2016 11:22:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.150	4.150	0.000	88	120951	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.180	7.180	0.000	98	437855	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.294	10.294	0.000	84	110886	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.630	12.630	0.000	92	168505	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.449	6.449	0.000	58	96169	50.0	51.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.821	6.821	0.000	54	129293	50.0	51.1	
$ 7 Toluene-d8 (Surr)	98	8.834	8.834	0.000	92	436290	50.0	53.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.474	11.474	0.000	87	160853	50.0	52.7	
11 Dichlorodifluoromethane	85	1.546	1.546	0.000	67	100117	50.0	50.2	
12 Chloromethane	50	1.698	1.698	0.000	99	127917	50.0	50.1	
13 Vinyl chloride	62	1.838	1.838	0.000	81	120442	50.0	51.6	
14 Butadiene	39	1.869	1.869	0.000	95	120959	50.0	49.5	
15 Bromomethane	94	2.167	2.167	0.000	92	55898	50.0	54.9	
16 Chloroethane	64	2.301	2.301	0.000	90	75481	50.0	51.1	
17 Dichlorofluoromethane	67	2.568	2.568	0.000	79	170966	50.0	50.6	
18 Trichlorofluoromethane	101	2.586	2.586	0.000	86	145521	50.0	52.0	
20 Ethyl ether	59	2.945	2.945	0.000	90	113477	50.0	49.7	
21 Acrolein	56	3.122	3.122	0.000	86	71951	150.0	147.6	
22 1,1-Dichloroethene	96	3.231	3.231	0.000	89	106083	50.0	49.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.298	3.298	0.000	92	109175	50.0	50.1	
24 Acetone	43	3.335	3.335	0.000	97	49176	100.0	94.1	
25 Iodomethane	142	3.420	3.420	0.000	98	158249	50.0	49.0	
26 Carbon disulfide	76	3.499	3.499	0.000	98	222248	50.0	46.4	
29 3-Chloro-1-propene	76	3.785	3.785	0.000	86	54473	50.0	45.6	
30 Methyl acetate	43	3.809	3.809	0.000	97	441720	250.0	242.4	
31 Methylene Chloride	84	3.998	3.998	0.000	88	131380	50.0	47.7	
32 2-Methyl-2-propanol	59	4.290	4.290	0.000	91	59253	500.0	482.2	
33 Acrylonitrile	53	4.399	4.399	0.000	98	484811	500.0	501.3	
34 trans-1,2-Dichloroethene	96	4.424	4.424	0.000	77	121103	50.0	50.1	
35 Methyl tert-butyl ether	73	4.454	4.454	0.000	90	235982	50.0	48.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.856	4.856	0.000	90	176837	50.0	50.3	
37 1,1-Dichloroethane	63	5.081	5.081	0.000	85	199401	50.0	49.4	
38 Vinyl acetate	43	5.129	5.129	0.000	97	169247	50.0	45.9	
42 2,2-Dichloropropane	97	5.835	5.835	0.000	49	20074	50.0	47.7	
43 cis-1,2-Dichloroethene	96	5.835	5.835	0.000	68	133878	50.0	49.5	
44 2-Butanone (MEK)	43	5.841	5.841	0.000	65	98637	100.0	99.4	
48 Chlorobromomethane	128	6.121	6.121	0.000	93	58511	50.0	48.1	
49 Tetrahydrofuran	42	6.139	6.139	0.000	92	73436	100.0	95.3	
50 Chloroform	83	6.267	6.267	0.000	79	184655	50.0	49.3	
51 1,1,1-Trichloroethane	97	6.425	6.425	0.000	92	105969	50.0	46.9	
52 Cyclohexane	56	6.498	6.498	0.000	92	208511	50.0	50.5	
53 Carbon tetrachloride	117	6.595	6.595	0.000	83	69572	50.0	46.1	
54 1,1-Dichloropropene	75	6.614	6.614	0.000	95	151638	50.0	50.0	
55 Isobutyl alcohol	41	6.827	6.827	0.000	40	56651	1250.0	1098.0	
56 Benzene	78	6.833	6.833	0.000	97	499441	50.0	51.3	
57 1,2-Dichloroethane	62	6.912	6.912	0.000	96	147481	50.0	47.6	
59 n-Heptane	43	7.198	7.198	0.000	86	147894	50.0	51.3	
61 Trichloroethene	130	7.569	7.569	0.000	93	117267	50.0	49.4	
63 Methylcyclohexane	83	7.806	7.806	0.000	89	201240	50.0	50.8	
64 1,2-Dichloropropane	63	7.843	7.843	0.000	93	122498	50.0	47.4	
67 Dibromomethane	93	7.928	7.928	0.000	94	68394	50.0	49.7	
65 1,4-Dioxane	88	7.934	7.934	0.000	33	24213	1000.0	940.9	
68 Dichlorobromomethane	83	8.129	8.129	0.000	92	92125	50.0	44.5	
70 2-Chloroethyl vinyl ether	63	8.433	8.433	0.000	92	153301	100.0	99.0	
71 cis-1,3-Dichloropropene	75	8.579	8.579	0.000	90	137183	50.0	47.8	
72 4-Methyl-2-pentanone (MIBK	43	8.731	8.731	0.000	70	203212	100.0	98.8	
73 Toluene	91	8.907	8.907	0.000	99	514268	50.0	51.7	
74 trans-1,3-Dichloropropene	75	9.157	9.157	0.000	83	102686	50.0	45.1	
75 Ethyl methacrylate	69	9.217	9.217	0.000	88	129247	50.0	47.6	
76 1,1,2-Trichloroethane	97	9.345	9.345	0.000	85	105449	50.0	49.6	
77 Tetrachloroethene	164	9.418	9.418	0.000	98	94839	50.0	49.5	
78 1,3-Dichloropropane	76	9.509	9.509	0.000	90	195279	50.0	49.3	
79 2-Hexanone	43	9.570	9.570	0.000	93	118005	100.0	95.8	
81 Chlorodibromomethane	129	9.722	9.722	0.000	86	59642	50.0	44.4	
82 Ethylene Dibromide	107	9.832	9.832	0.000	97	96912	50.0	50.6	
83 3-Chlorobenzotrifluoride	180	10.300	10.300	0.000	90	167458	50.0	50.7	
84 Chlorobenzene	112	10.319	10.319	0.000	91	351065	50.0	52.0	
85 4-Chlorobenzotrifluoride	180	10.386	10.386	0.000	96	156509	50.0	50.8	
86 1,1,1,2-Tetrachloroethane	131	10.416	10.416	0.000	36	68924	50.0	45.8	
87 Ethylbenzene	106	10.422	10.422	0.000	98	185657	50.0	51.0	
88 m-Xylene & p-Xylene	106	10.556	10.556	0.000	98	223813	50.0	50.7	
89 o-Xylene	106	10.933	10.933	0.000	96	215235	50.0	50.4	
90 Styrene	104	10.957	10.957	0.000	95	371224	50.0	52.4	
91 Bromoform	173	11.134	11.134	0.000	93	30972	50.0	46.8	
92 2-Chlorobenzotrifluoride	180	11.207	11.207	0.000	94	160946	50.0	50.5	
93 Isopropylbenzene	105	11.304	11.304	0.000	96	537055	50.0	52.8	
95 Bromobenzene	156	11.614	11.614	0.000	72	129517	50.0	47.5	
96 1,1,2,2-Tetrachloroethane	83	11.614	11.614	0.000	63	130544	50.0	48.6	
97 trans-1,4-Dichloro-2-buten	53	11.651	11.651	0.000	39	34064	50.0	48.2	
98 1,2,3-Trichloropropane	110	11.669	11.669	0.000	57	45534	50.0	49.7	
99 N-Propylbenzene	120	11.718	11.718	0.000	83	157081	50.0	49.6	
100 2-Chlorotoluene	126	11.803	11.803	0.000	96	140007	50.0	50.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.870	11.870	0.000	72	154015	50.0	51.4	
102 1,3,5-Trimethylbenzene	105	11.906	11.906	0.000	93	449655	50.0	51.6	
103 4-Chlorotoluene	126	11.931	11.931	0.000	97	146040	50.0	48.4	
104 tert-Butylbenzene	119	12.217	12.217	0.000	79	379337	50.0	51.4	
106 1,2,4-Trimethylbenzene	105	12.277	12.277	0.000	97	473012	50.0	52.3	
107 1,2-dichloro-4-(trifluorom	214	12.320	12.320	0.000	97	127792	50.0	50.0	
108 sec-Butylbenzene	105	12.436	12.436	0.000	94	561548	50.0	52.2	
109 1,3-Dichlorobenzene	146	12.551	12.551	0.000	87	263725	50.0	49.8	
110 4-Isopropyltoluene	119	12.594	12.594	0.000	79	478196	50.0	52.4	
111 1,4-Dichlorobenzene	146	12.661	12.661	0.000	95	274551	50.0	49.5	
113 2,4-Dichloro-1-(triflourom	214	12.691	12.691	0.000	88	122814	50.0	49.2	
114 2,5-Dichlorobenzotrifluori	214	12.728	12.728	0.000	97	136355	50.0	47.6	
116 n-Butylbenzene	91	13.001	13.001	0.000	98	421270	50.0	51.0	
117 1,2-Dichlorobenzene	146	13.014	13.014	0.000	91	258446	50.0	49.6	
118 1,2-Dibromo-3-Chloropropan	75	13.804	13.804	0.000	60	10924	50.0	43.2	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.944	13.944	0.000	98	636315	150.0	154.6	
121 2,3- & 3,4- Dichlorotoluen	125	14.358	14.358	0.000	98	466935	100.0	103.0	
122 1,2,4-Trichlorobenzene	180	14.626	14.626	0.000	92	173002	50.0	49.1	
123 Hexachlorobutadiene	225	14.778	14.778	0.000	91	58500	50.0	48.7	
124 Naphthalene	128	14.893	14.893	0.000	97	425875	50.0	50.7	
125 1,2,3-Trichlorobenzene	180	15.112	15.112	0.000	93	151403	50.0	48.9	
126 2,4,5-Trichlorotoluene	159	15.897	15.897	0.000	0	73389	50.0	50.4	
127 2,3,6-Trichlorotoluene	159	16.001	16.001	0.000	94	65323	50.0	48.1	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		100.0	99.6	
S 131 Xylenes, Total	106				0		100.0	101.1	
S 132 1,3-Dichloropropene, Total	1				0		100.0	92.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260VOAPRI_00216	Amount Added:	2.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	2.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	2.00	Units: uL	
voaWva2ndRest_00007	Amount Added:	2.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	2.00	Units: uL	
voaWacro2ndRe_00007	Amount Added:	6.00	Units: uL	
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

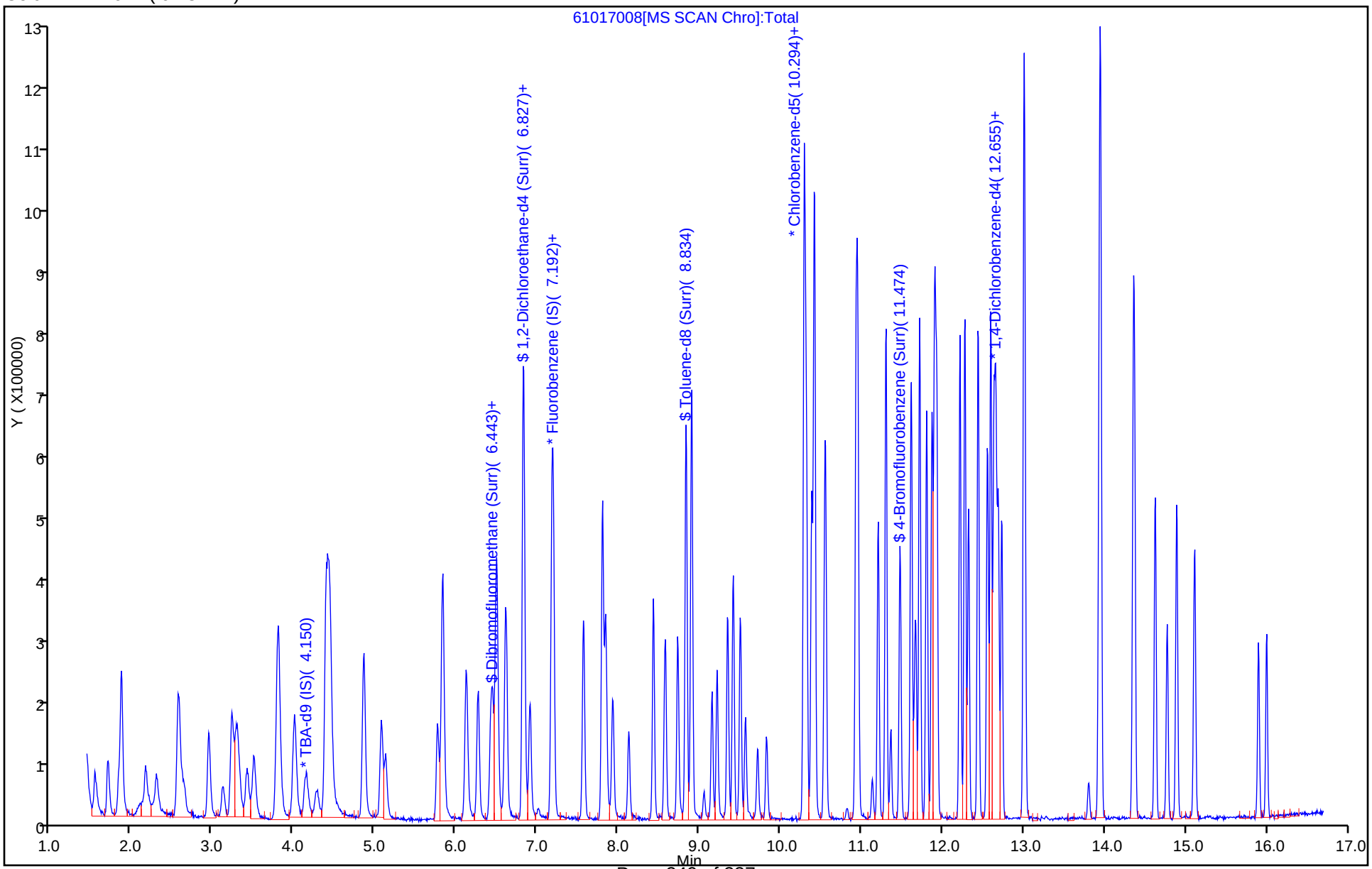
Report Date: 18-Oct-2016 11:27:03 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017008.D

Injection Date:	17-Oct-2016 15:12:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	ICIS VSTD10			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017009.D
Lims ID: IC VSTD15
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 17-Oct-2016 15:36:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013909-009
Misc. Info.: IC VSTD15
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 18-Oct-2016 11:23:24 Calib Date: 17-Oct-2016 17:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: fergusond Date: 18-Oct-2016 10:04:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.148	4.148	0.000	90	120240	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.177	7.177	0.000	99	453127	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.292	10.292	0.000	86	111560	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.634	12.634	0.000	93	170658	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.453	6.453	0.000	93	134162	75.0	69.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.824	6.824	0.000	79	179010	75.0	68.4	
$ 7 Toluene-d8 (Surr)	98	8.838	8.838	0.000	92	584326	75.0	71.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.478	11.478	0.000	89	225747	75.0	73.5	
11 Dichlorodifluoromethane	85	1.544	1.544	0.000	97	155219	75.0	75.3	
12 Chloromethane	50	1.702	1.702	0.000	99	192863	75.0	72.9	
13 Vinyl chloride	62	1.842	1.842	0.000	98	182050	75.0	75.4	
14 Butadiene	39	1.866	1.866	0.000	95	188411	75.0	74.6	
15 Bromomethane	94	2.170	2.170	0.000	92	83276	75.0	80.5	
16 Chloroethane	64	2.304	2.304	0.000	99	112107	75.0	73.3	
17 Dichlorofluoromethane	67	2.566	2.566	0.000	95	259098	75.0	74.0	
18 Trichlorofluoromethane	101	2.578	2.578	0.000	71	222716	75.0	76.9	
20 Ethyl ether	59	2.949	2.949	0.000	92	160856	75.0	68.1	
21 Acrolein	56	3.119	3.119	0.000	99	84463	175.0	167.4	
22 1,1-Dichloroethene	96	3.229	3.229	0.000	98	166080	75.0	74.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.284	3.284	0.000	94	168464	75.0	74.7	
24 Acetone	43	3.332	3.332	0.000	99	71745	150.0	132.7	
25 Iodomethane	142	3.418	3.418	0.000	97	241740	75.0	72.4	
26 Carbon disulfide	76	3.503	3.503	0.000	99	374705	75.0	75.6	
29 3-Chloro-1-propene	76	3.783	3.783	0.000	91	91556	75.0	74.0	
30 Methyl acetate	43	3.813	3.813	0.000	97	655356	375.0	347.5	
31 Methylene Chloride	84	4.008	4.008	0.000	94	199037	75.0	71.6	
32 2-Methyl-2-propanol	59	4.275	4.275	0.000	91	100509	750.0	822.8	
33 Acrylonitrile	53	4.397	4.397	0.000	99	718162	750.0	717.6	
34 trans-1,2-Dichloroethene	96	4.433	4.433	0.000	98	185288	75.0	74.0	
35 Methyl tert-butyl ether	73	4.446	4.446	0.000	97	383369	75.0	75.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.859	4.859	0.000	93	273365	75.0	75.1	
37 1,1-Dichloroethane	63	5.078	5.078	0.000	96	311510	75.0	74.6	
38 Vinyl acetate	43	5.133	5.133	0.000	97	273838	75.0	71.8	
42 2,2-Dichloropropane	97	5.833	5.833	0.000	52	34180	75.0	78.6	
43 cis-1,2-Dichloroethene	96	5.833	5.833	0.000	84	204711	75.0	73.1	
44 2-Butanone (MEK)	43	5.845	5.845	0.000	69	138742	150.0	135.1	
48 Chlorobromomethane	128	6.119	6.119	0.000	97	88514	75.0	70.4	
49 Tetrahydrofuran	42	6.131	6.131	0.000	90	106077	150.0	133.0	
50 Chloroform	83	6.265	6.265	0.000	94	283319	75.0	73.1	
51 1,1,1-Trichloroethane	97	6.429	6.429	0.000	99	182669	75.0	78.1	
52 Cyclohexane	56	6.496	6.496	0.000	92	325971	75.0	76.4	
53 Carbon tetrachloride	117	6.599	6.599	0.000	95	119292	75.0	76.4	
54 1,1-Dichloropropene	75	6.617	6.617	0.000	96	237861	75.0	75.8	
55 Isobutyl alcohol	41	6.824	6.824	0.000	52	87228	1875.0	1633.7	
56 Benzene	78	6.830	6.830	0.000	97	743305	75.0	73.8	
57 1,2-Dichloroethane	62	6.909	6.909	0.000	97	228341	75.0	71.1	
59 n-Heptane	43	7.195	7.195	0.000	91	218210	75.0	73.2	
61 Trichloroethene	130	7.573	7.573	0.000	96	178793	75.0	72.7	
63 Methylcyclohexane	83	7.804	7.804	0.000	89	313111	75.0	76.4	
64 1,2-Dichloropropane	63	7.846	7.846	0.000	95	190484	75.0	71.3	
67 Dibromomethane	93	7.931	7.931	0.000	97	104463	75.0	73.4	
65 1,4-Dioxane	88	7.931	7.931	0.000	44	35340	1500.0	1327.0	
68 Dichlorobromomethane	83	8.132	8.132	0.000	99	152191	75.0	71.0	
70 2-Chloroethyl vinyl ether	63	8.430	8.430	0.000	92	230498	150.0	143.9	
71 cis-1,3-Dichloropropene	75	8.576	8.576	0.000	95	213785	75.0	72.0	
72 4-Methyl-2-pentanone (MIBK	43	8.735	8.735	0.000	96	312902	150.0	151.2	
73 Toluene	91	8.905	8.905	0.000	99	775485	75.0	77.4	
74 trans-1,3-Dichloropropene	75	9.154	9.154	0.000	95	173904	75.0	75.9	
75 Ethyl methacrylate	69	9.215	9.215	0.000	89	209411	75.0	76.6	
76 1,1,2-Trichloroethane	97	9.349	9.349	0.000	91	159194	75.0	74.4	
77 Tetrachloroethene	164	9.416	9.416	0.000	98	146050	75.0	75.8	
78 1,3-Dichloropropane	76	9.507	9.507	0.000	92	293152	75.0	73.6	
79 2-Hexanone	43	9.568	9.568	0.000	95	188267	150.0	151.9	
81 Chlorodibromomethane	129	9.720	9.720	0.000	91	98975	75.0	73.3	
82 Ethylene Dibromide	107	9.830	9.830	0.000	97	147522	75.0	76.6	
83 3-Chlorobenzotrifluoride	180	10.298	10.298	0.000	93	252642	75.0	76.1	
84 Chlorobenzene	112	10.322	10.322	0.000	95	522084	75.0	76.8	
85 4-Chlorobenzotrifluoride	180	10.383	10.383	0.000	97	239254	75.0	77.2	
86 1,1,1,2-Tetrachloroethane	131	10.414	10.414	0.000	86	120798	75.0	79.9	
87 Ethylbenzene	106	10.420	10.420	0.000	98	285802	75.0	78.1	
88 m-Xylene & p-Xylene	106	10.553	10.553	0.000	98	354287	75.0	79.7	
89 o-Xylene	106	10.931	10.931	0.000	96	344432	75.0	80.2	
90 Styrene	104	10.955	10.955	0.000	96	568991	75.0	79.9	
91 Bromoform	173	11.131	11.131	0.000	96	53037	75.0	74.0	
92 2-Chlorobenzotrifluoride	180	11.210	11.210	0.000	97	255008	75.0	79.6	
93 Isopropylbenzene	105	11.302	11.302	0.000	96	822705	75.0	80.3	
95 Bromobenzene	156	11.612	11.612	0.000	96	203563	75.0	73.7	
96 1,1,2,2-Tetrachloroethane	83	11.618	11.618	0.000	94	206777	75.0	76.5	
97 trans-1,4-Dichloro-2-buten	53	11.655	11.655	0.000	69	50425	75.0	70.4	
98 1,2,3-Trichloropropane	110	11.673	11.673	0.000	89	66695	75.0	71.9	
99 N-Propylbenzene	120	11.721	11.721	0.000	98	249041	75.0	77.7	
100 2-Chlorotoluene	126	11.807	11.807	0.000	97	209155	75.0	74.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.867	11.867	0.000	94	227793	75.0	75.1	
102 1,3,5-Trimethylbenzene	105	11.904	11.904	0.000	97	687756	75.0	77.9	
103 4-Chlorotoluene	126	11.928	11.928	0.000	98	225430	75.0	73.8	
104 tert-Butylbenzene	119	12.214	12.214	0.000	93	582378	75.0	77.9	
106 1,2,4-Trimethylbenzene	105	12.275	12.275	0.000	97	705609	75.0	77.0	
107 1,2-dichloro-4-(trifluorom	214	12.324	12.324	0.000	98	194039	75.0	75.0	
108 sec-Butylbenzene	105	12.439	12.439	0.000	94	858280	75.0	78.8	
109 1,3-Dichlorobenzene	146	12.555	12.555	0.000	97	396160	75.0	73.9	
110 4-Isopropyltoluene	119	12.598	12.598	0.000	96	726665	75.0	78.6	
111 1,4-Dichlorobenzene	146	12.658	12.658	0.000	96	415232	75.0	73.9	
113 2,4-Dichloro-1-(triflourom	214	12.689	12.689	0.000	96	181186	75.0	71.7	
114 2,5-Dichlorobenzotrifluori	214	12.731	12.731	0.000	97	219078	75.0	75.6	
116 n-Butylbenzene	91	13.005	13.005	0.000	97	655671	75.0	78.4	
117 1,2-Dichlorobenzene	146	13.011	13.011	0.000	96	389316	75.0	73.8	
118 1,2-Dibromo-3-Chloropropan	75	13.802	13.808	-0.006	77	19664	75.0	76.8	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.948	13.948	0.000	99	961021	225.0	230.6	
121 2,3- & 3,4- Dichlorotoluen	125	14.362	14.362	0.000	98	700132	150.0	152.4	
122 1,2,4-Trichlorobenzene	180	14.623	14.623	0.000	94	266234	75.0	74.6	
123 Hexachlorobutadiene	225	14.775	14.775	0.000	97	90990	75.0	74.8	
124 Naphthalene	128	14.891	14.891	0.000	97	655837	75.0	77.2	
125 1,2,3-Trichlorobenzene	180	15.110	15.110	0.000	96	234780	75.0	74.9	
126 2,4,5-Trichlorotoluene	159	15.901	15.901	0.000	0	109739	75.0	74.4	
127 2,3,6-Trichlorotoluene	159	15.998	15.998	0.000	94	104364	75.0	75.9	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		150.0	147.1	
S 131 Xylenes, Total	106				0		150.0	159.9	
S 132 1,3-Dichloropropene, Total	1				0		150.0	147.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260SURR_00060	Amount Added:	3.00	Units: uL	
VOA8260VOAPRI_00216	Amount Added:	3.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	3.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	3.00	Units: uL	
voaWva2ndRest_00007	Amount Added:	3.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	3.00	Units: uL	
voaWacro2ndRe_00007	Amount Added:	7.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

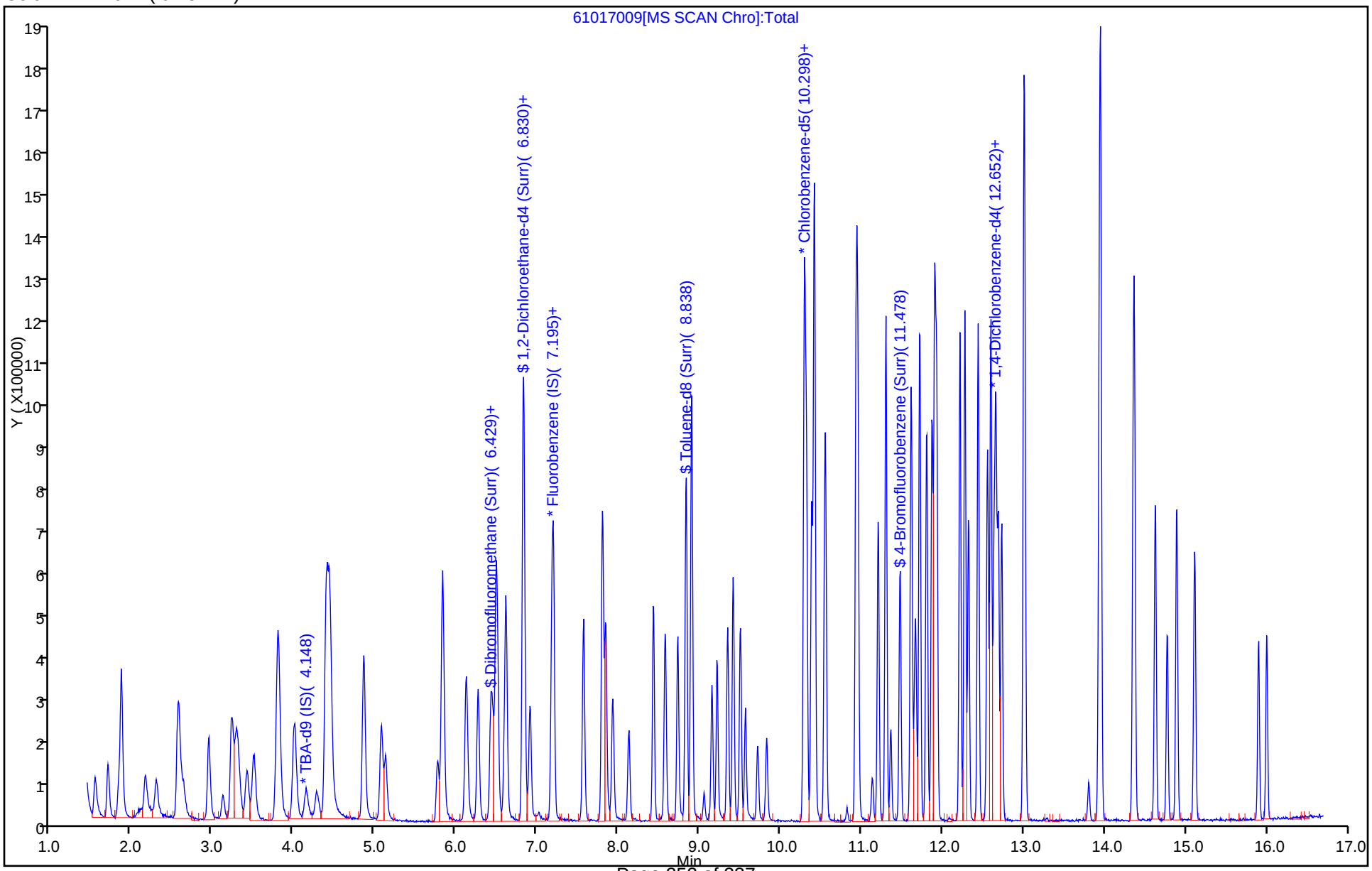
Report Date: 18-Oct-2016 11:23:28 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017009.D

Injection Date:	17-Oct-2016 15:36:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD15			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017010.D
Lims ID: IC VSTD20
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 17-Oct-2016 16:01:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013909-010
Misc. Info.: IC VSTD20
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 18-Oct-2016 11:23:31 Calib Date: 17-Oct-2016 17:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: fergusond Date: 18-Oct-2016 10:05:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.150	4.148	0.002	92	139066	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.180	7.177	0.003	99	451403	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.294	10.292	0.002	87	114230	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.637	12.634	0.003	94	171707	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.450	6.453	-0.003	92	185587	100.0	96.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.821	6.824	-0.003	77	244733	100.0	93.8	
$ 7 Toluene-d8 (Surr)	98	8.834	8.838	-0.004	93	825990	100.0	98.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.475	11.478	-0.003	88	324431	100.0	103.1	
11 Dichlorodifluoromethane	85	1.540	1.544	-0.004	99	199392	100.0	97.1	
12 Chloromethane	50	1.699	1.702	-0.004	99	254110	100.0	96.5	
13 Vinyl chloride	62	1.838	1.842	-0.004	99	234479	100.0	97.5	
14 Butadiene	39	1.869	1.866	0.003	92	249033	100.0	98.9	
15 Bromomethane	94	2.161	2.170	-0.009	91	103957	100.0	101.6	
16 Chloroethane	64	2.295	2.304	-0.009	98	143903	100.0	94.4	
17 Dichlorofluoromethane	67	2.562	2.566	-0.004	95	335318	100.0	96.2	
18 Trichlorofluoromethane	101	2.568	2.578	-0.010	83	286516	100.0	99.3	
20 Ethyl ether	59	2.940	2.949	-0.009	93	226945	100.0	96.5	
21 Acrolein	56	3.116	3.119	-0.003	98	99424	200.0	197.8	
22 1,1-Dichloroethene	96	3.225	3.229	-0.004	97	215759	100.0	97.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.286	3.284	0.002	94	222211	100.0	98.9	
24 Acetone	43	3.329	3.332	-0.003	100	99571	200.0	184.8	
25 Iodomethane	142	3.414	3.418	-0.004	98	323779	100.0	97.3	
26 Carbon disulfide	76	3.499	3.503	-0.004	99	525000	100.0	106.3	
29 3-Chloro-1-propene	76	3.785	3.783	0.002	92	126033	100.0	102.3	
30 Methyl acetate	43	3.809	3.813	-0.004	97	896631	500.0	477.2	
31 Methylene Chloride	84	4.004	4.008	-0.004	93	271253	100.0	99.4	
32 2-Methyl-2-propanol	59	4.272	4.275	-0.003	91	139826	1000.0	989.7	
33 Acrylonitrile	53	4.393	4.397	-0.004	99	971547	1000.0	974.5	
34 trans-1,2-Dichloroethene	96	4.430	4.433	-0.003	99	245768	100.0	98.6	
35 Methyl tert-butyl ether	73	4.442	4.446	-0.004	97	505912	100.0	100.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.856	4.859	-0.003	91	354786	100.0	97.9	
37 1,1-Dichloroethane	63	5.075	5.078	-0.003	96	406664	100.0	97.7	
38 Vinyl acetate	43	5.130	5.133	-0.003	97	397309	100.0	104.5	
42 2,2-Dichloropropane	97	5.829	5.833	-0.004	54	43091	100.0	99.4	
43 cis-1,2-Dichloroethene	96	5.835	5.833	0.002	80	274481	100.0	98.4	
44 2-Butanone (MEK)	43	5.847	5.845	0.002	100	192377	200.0	188.0	
48 Chlorobromomethane	128	6.115	6.119	-0.004	98	124956	100.0	99.7	
49 Tetrahydrofuran	42	6.133	6.131	0.002	89	147123	200.0	185.1	
50 Chloroform	83	6.267	6.265	0.002	94	378117	100.0	97.9	
51 1,1,1-Trichloroethane	97	6.425	6.429	-0.004	97	234557	100.0	100.7	
52 Cyclohexane	56	6.492	6.496	-0.004	92	427162	100.0	100.4	
53 Carbon tetrachloride	117	6.596	6.599	-0.003	96	160232	100.0	102.9	
54 1,1-Dichloropropene	75	6.614	6.617	-0.003	97	313440	100.0	100.2	
55 Isobutyl alcohol	41	6.827	6.824	0.003	44	130717	2500.0	2457.6	
56 Benzene	78	6.833	6.830	0.003	97	975189	100.0	97.1	
57 1,2-Dichloroethane	62	6.912	6.909	0.003	97	307797	100.0	96.3	
59 n-Heptane	43	7.198	7.195	0.003	91	290989	100.0	98.0	
61 Trichloroethene	130	7.569	7.573	-0.004	98	241168	100.0	98.5	
63 Methylcyclohexane	83	7.806	7.804	0.002	88	409562	100.0	100.3	
64 1,2-Dichloropropane	63	7.843	7.846	-0.003	94	253000	100.0	95.0	
67 Dibromomethane	93	7.928	7.931	-0.003	98	138282	100.0	97.6	
65 1,4-Dioxane	88	7.928	7.931	-0.003	43	49945	2000.0	1882.5	M
68 Dichlorobromomethane	83	8.129	8.132	-0.003	99	217329	100.0	101.8	
70 2-Chloroethyl vinyl ether	63	8.433	8.430	0.003	91	316024	200.0	198.0	
71 cis-1,3-Dichloropropene	75	8.573	8.576	-0.003	95	317933	100.0	107.5	
72 4-Methyl-2-pentanone (MIBK	43	8.731	8.735	-0.003	96	437594	200.0	206.5	
73 Toluene	91	8.901	8.905	-0.004	98	1017095	100.0	99.2	
74 trans-1,3-Dichloropropene	75	9.157	9.154	0.003	95	250101	100.0	106.6	
75 Ethyl methacrylate	69	9.218	9.215	0.003	89	307910	100.0	110.1	
76 1,1,2-Trichloroethane	97	9.352	9.349	0.003	91	220068	100.0	100.4	
77 Tetrachloroethene	164	9.412	9.416	-0.004	99	192418	100.0	97.6	
78 1,3-Dichloropropane	76	9.504	9.507	-0.003	91	401017	100.0	98.4	
79 2-Hexanone	43	9.564	9.568	-0.004	95	252132	200.0	198.7	
81 Chlorodibromomethane	129	9.717	9.720	-0.004	90	146523	100.0	106.0	
82 Ethylene Dibromide	107	9.832	9.830	0.002	98	205355	100.0	104.1	
83 3-Chlorobenzotrifluoride	180	10.301	10.298	0.003	94	342084	100.0	100.6	
84 Chlorobenzene	112	10.319	10.322	-0.003	95	685552	100.0	98.5	
85 4-Chlorobenzotrifluoride	180	10.386	10.383	0.003	97	320957	100.0	101.2	
86 1,1,1,2-Tetrachloroethane	131	10.416	10.414	0.002	88	166796	100.0	107.7	
87 Ethylbenzene	106	10.422	10.420	0.002	98	377626	100.0	100.8	
88 m-Xylene & p-Xylene	106	10.550	10.553	-0.003	98	469943	100.0	103.3	
89 o-Xylene	106	10.933	10.931	0.002	95	458418	100.0	104.2	
90 Styrene	104	10.958	10.955	0.003	96	774114	100.0	106.1	
91 Bromoform	173	11.134	11.131	0.003	95	78027	100.0	100.8	
92 2-Chlorobenzotrifluoride	180	11.207	11.210	-0.003	96	331627	100.0	101.1	
93 Isopropylbenzene	105	11.304	11.302	0.002	96	1074317	100.0	102.4	
95 Bromobenzene	156	11.615	11.612	0.003	97	278887	100.0	100.3	
96 1,1,2,2-Tetrachloroethane	83	11.615	11.618	-0.003	95	277556	100.0	100.3	
97 trans-1,4-Dichloro-2-buten	53	11.651	11.655	-0.004	74	71740	100.0	99.6	
98 1,2,3-Trichloropropane	110	11.669	11.673	-0.004	87	92976	100.0	99.6	
99 N-Propylbenzene	120	11.718	11.721	-0.003	98	328458	100.0	101.8	
100 2-Chlorotoluene	126	11.803	11.807	-0.004	97	289491	100.0	102.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.870	11.867	0.003	95	308307	100.0	101.0	
102 1,3,5-Trimethylbenzene	105	11.900	11.904	-0.004	95	907748	100.0	102.2	
103 4-Chlorotoluene	126	11.931	11.928	0.003	97	311605	100.0	101.4	
104 tert-Butylbenzene	119	12.217	12.214	0.003	93	774274	100.0	102.9	
106 1,2,4-Trimethylbenzene	105	12.278	12.275	0.003	97	937826	100.0	101.7	
107 1,2-dichloro-4-(trifluorom	214	12.320	12.324	-0.004	98	259663	100.0	99.7	
108 sec-Butylbenzene	105	12.442	12.439	0.003	94	1116611	100.0	101.9	
109 1,3-Dichlorobenzene	146	12.557	12.555	0.002	97	536874	100.0	99.5	
110 4-Isopropyltoluene	119	12.594	12.598	-0.004	96	942198	100.0	101.3	
111 1,4-Dichlorobenzene	146	12.661	12.658	0.003	94	551119	100.0	97.5	
113 2,4-Dichloro-1-(triflourom	214	12.691	12.689	0.002	96	255147	100.0	100.3	
114 2,5-Dichlorobenzotrifluori	214	12.734	12.731	0.003	98	282871	100.0	97.0	
116 n-Butylbenzene	91	13.002	13.005	-0.003	97	860909	100.0	102.3	
117 1,2-Dichlorobenzene	146	13.014	13.011	0.003	96	525389	100.0	99.0	
118 1,2-Dibromo-3-Chloropropan	75	13.805	13.808	-0.003	78	29140	100.0	113.1	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.945	13.948	-0.004	98	1283654	300.0	306.1	
121 2,3- & 3,4- Dichlorotoluen	125	14.364	14.362	0.002	98	945407	200.0	204.6	
122 1,2,4-Trichlorobenzene	180	14.626	14.623	0.003	94	360686	100.0	100.5	
123 Hexachlorobutadiene	225	14.772	14.775	-0.003	98	117388	100.0	96.0	
124 Naphthalene	128	14.887	14.891	-0.004	97	895652	100.0	104.7	
125 1,2,3-Trichlorobenzene	180	15.113	15.110	0.003	95	318943	100.0	101.1	
126 2,4,5-Trichlorotoluene	159	15.897	15.901	-0.004	0	165986	100.0	111.9	
127 2,3,6-Trichlorotoluene	159	16.001	15.998	0.003	94	148017	100.0	107.1	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		200.0	197.0	
S 131 Xylenes, Total	106				0		200.0	207.5	
S 132 1,3-Dichloropropene, Total	1				0		200.0	214.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWacro2ndRe_00007	Amount Added:	8.00	Units: uL	
VOA8260SURR_00060	Amount Added:	4.00	Units: uL	
VOA8260VOAPRI_00216	Amount Added:	4.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	4.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	4.00	Units: uL	
voaWva2ndRest_00007	Amount Added:	4.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	4.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

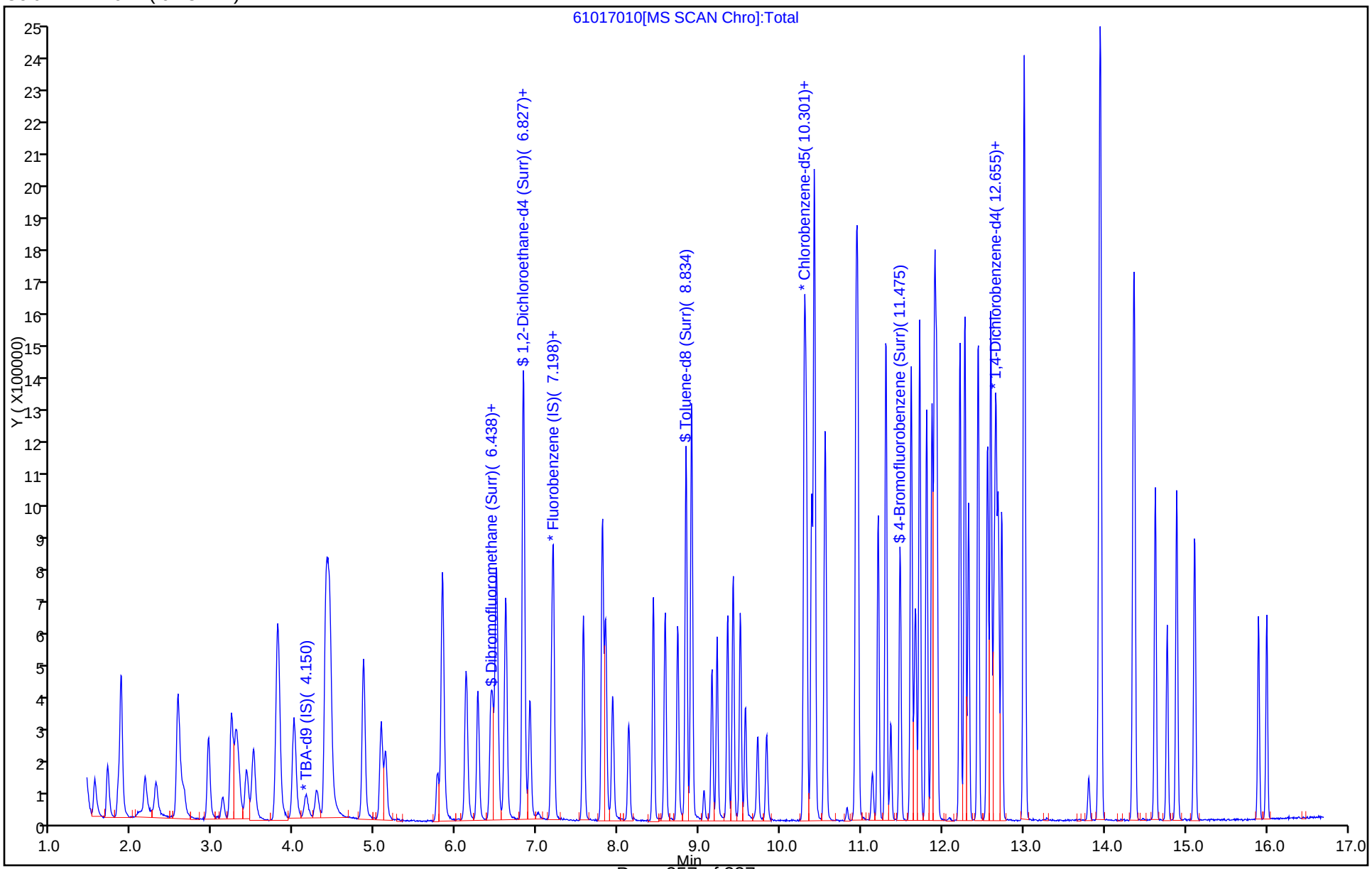
Report Date: 18-Oct-2016 11:23:34 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017010.D

Injection Date:	17-Oct-2016 16:01:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD20			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

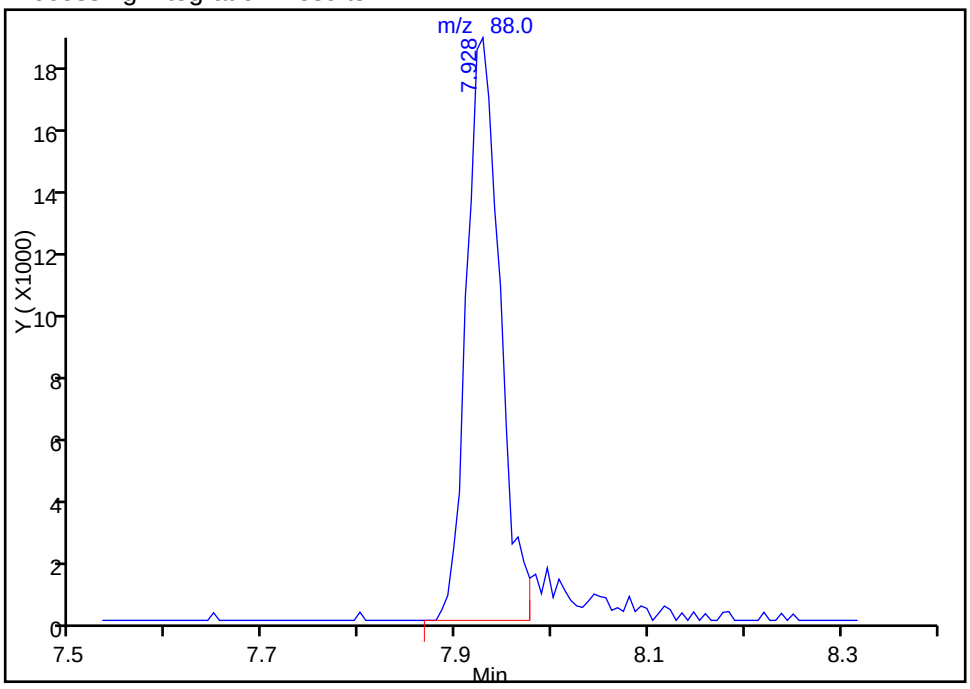
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017010.D				
Injection Date:	17-Oct-2016 16:01:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD20				
Client ID:					
Operator ID:	001562	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

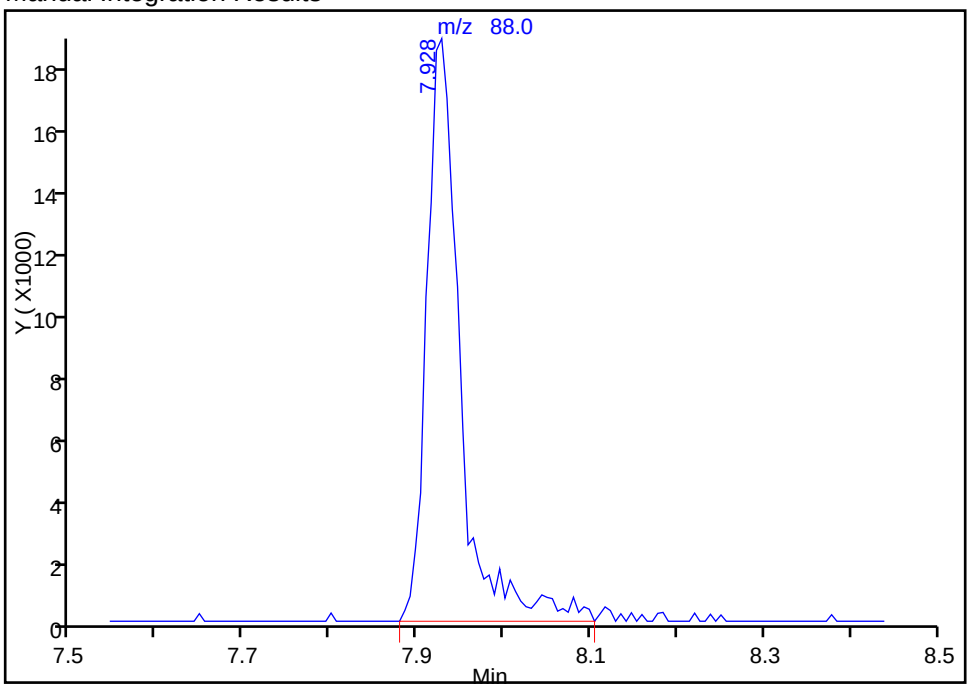
Processing Integration Results

RT: 7.93
Area: 44725
Amount: 2019.8377
Amount Units: ng



Manual Integration Results

RT: 7.93
Area: 49945
Amount: 1882.5028
Amount Units: ng



Reviewer: fergusond, 18-Oct-2016 10:09:53
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017012.D
Lims ID: IC VSTD40
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 17-Oct-2016 16:49:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013909-012
Misc. Info.: IC VSTD40
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 18-Oct-2016 11:23:38 Calib Date: 17-Oct-2016 17:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: fergusond Date: 18-Oct-2016 09:28:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.151	4.148	0.003	90	145569	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.180	7.177	0.003	99	429506	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.289	10.292	-0.003	84	117125	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.631	12.634	-0.003	93	163439	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.450	6.453	-0.003	93	374833	200.0	204.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.821	6.824	-0.003	77	487373	200.0	196.4	
$ 7 Toluene-d8 (Surr)	98	8.835	8.838	-0.003	93	1549248	200.0	180.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.475	11.478	-0.003	87	640890	200.0	198.7	
11 Dichlorodifluoromethane	85	1.541	1.544	-0.003	99	378244	200.0	193.5	
12 Chloromethane	50	1.705	1.702	0.003	99	491486	200.0	196.1	
13 Vinyl chloride	62	1.845	1.842	0.003	99	426204	200.0	186.2	
14 Butadiene	39	1.869	1.866	0.003	93	443777	200.0	185.3	
15 Bromomethane	94	2.161	2.170	-0.009	92	182317	200.0	190.0	
16 Chloroethane	64	2.301	2.304	-0.003	99	282905	200.0	195.1	
17 Dichlorofluoromethane	67	2.575	2.566	0.009	96	646552	200.0	194.9	
18 Trichlorofluoromethane	101	2.581	2.578	0.003	73	505956	200.0	184.3	
20 Ethyl ether	59	2.946	2.949	-0.003	93	424510	200.0	189.6	
21 Acrolein	56	3.117	3.119	-0.002	99	124997	250.0	261.4	
22 1,1-Dichloroethene	96	3.220	3.229	-0.009	98	424212	200.0	201.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.305	3.284	0.021	93	410013	200.0	191.8	
24 Acetone	43	3.330	3.332	-0.002	99	213338	400.0	416.2	
25 Iodomethane	142	3.409	3.418	-0.009	97	637925	200.0	201.5	
26 Carbon disulfide	76	3.494	3.503	-0.009	100	1067872	200.0	227.2	
29 3-Chloro-1-propene	76	3.780	3.783	-0.003	92	261792	200.0	223.4	
30 Methyl acetate	43	3.810	3.813	-0.003	97	1829691	1000.0	1023.4	
31 Methylene Chloride	84	3.999	4.008	-0.009	94	536396	200.0	210.7	
32 2-Methyl-2-propanol	59	4.285	4.275	0.010	92	301487	2000.0	2038.6	
33 Acrylonitrile	53	4.394	4.397	-0.003	99	1951122	2000.0	2056.8	
34 trans-1,2-Dichloroethene	96	4.425	4.433	-0.008	99	477780	200.0	201.4	
35 Methyl tert-butyl ether	73	4.449	4.446	0.003	98	1048549	200.0	218.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.856	4.859	-0.003	91	681626	200.0	197.7	
37 1,1-Dichloroethane	63	5.075	5.078	-0.003	96	815765	200.0	206.0	
38 Vinyl acetate	43	5.130	5.133	-0.003	97	848933	200.0	234.7	
42 2,2-Dichloropropane	97	5.830	5.833	-0.003	84	87561	200.0	212.3	
43 cis-1,2-Dichloroethene	96	5.830	5.833	-0.003	81	540467	200.0	203.6	
44 2-Butanone (MEK)	43	5.848	5.845	0.003	99	399161	400.0	409.9	
48 Chlorobromomethane	128	6.122	6.119	0.003	97	250455	200.0	210.1	
49 Tetrahydrofuran	42	6.128	6.131	-0.003	91	322508	400.0	426.5	
50 Chloroform	83	6.268	6.265	0.003	94	740796	200.0	201.5	
51 1,1,1-Trichloroethane	97	6.426	6.429	-0.003	98	470282	200.0	212.1	
52 Cyclohexane	56	6.493	6.496	-0.003	92	822246	200.0	203.2	
53 Carbon tetrachloride	117	6.596	6.599	-0.003	96	336776	200.0	227.4	
54 1,1-Dichloropropene	75	6.615	6.617	-0.002	95	597892	200.0	200.9	
55 Isobutyl alcohol	41	6.828	6.824	0.004	87	307377	5000.0	6073.5	
56 Benzene	78	6.834	6.830	0.004	98	1842451	200.0	192.9	
57 1,2-Dichloroethane	62	6.907	6.909	-0.002	96	622020	200.0	204.5	
59 n-Heptane	43	7.199	7.195	0.004	90	574146	200.0	203.2	
61 Trichloroethene	130	7.570	7.573	-0.003	97	472890	200.0	202.9	
63 Methylcyclohexane	83	7.801	7.804	-0.003	88	786142	200.0	202.3	
64 1,2-Dichloropropane	63	7.843	7.846	-0.003	95	530080	200.0	209.2	
67 Dibromomethane	93	7.929	7.931	-0.002	97	288225	200.0	213.7	
65 1,4-Dioxane	88	7.929	7.931	-0.002	57	110995	4000.0	4396.9	M
68 Dichlorobromomethane	83	8.129	8.132	-0.003	99	474319	200.0	233.4	
70 2-Chloroethyl vinyl ether	63	8.434	8.430	0.004	92	692602	400.0	456.0	
71 cis-1,3-Dichloropropene	75	8.573	8.576	-0.003	95	689681	200.0	245.1	
72 4-Methyl-2-pentanone (MIBK	43	8.732	8.735	-0.002	95	917167	400.0	422.2	
73 Toluene	91	8.902	8.905	-0.003	97	1917420	200.0	182.4	
74 trans-1,3-Dichloropropene	75	9.157	9.154	0.003	95	591828	200.0	246.1	
75 Ethyl methacrylate	69	9.218	9.215	0.003	89	679063	200.0	236.7	
76 1,1,2-Trichloroethane	97	9.346	9.349	-0.003	92	450576	200.0	200.5	
77 Tetrachloroethene	164	9.419	9.416	0.003	96	372914	200.0	184.4	
78 1,3-Dichloropropane	76	9.504	9.507	-0.003	91	819178	200.0	196.0	
79 2-Hexanone	43	9.565	9.568	-0.003	96	575173	400.0	442.1	
81 Chlorodibromomethane	129	9.717	9.720	-0.003	91	331692	200.0	234.0	
82 Ethylene Dibromide	107	9.833	9.830	0.003	99	431843	200.0	213.6	
83 3-Chlorobenzotrifluoride	180	10.301	10.298	0.003	94	661345	200.0	189.7	
84 Chlorobenzene	112	10.319	10.322	-0.003	93	1326603	200.0	185.9	
85 4-Chlorobenzotrifluoride	180	10.386	10.383	0.003	96	629550	200.0	193.5	
86 1,1,1,2-Tetrachloroethane	131	10.417	10.414	0.003	91	370091	200.0	233.1	
87 Ethylbenzene	106	10.423	10.420	0.003	97	737491	200.0	191.9	
88 m-Xylene & p-Xylene	106	10.551	10.553	-0.002	97	912180	200.0	195.5	
89 o-Xylene	106	10.934	10.931	0.003	96	896798	200.0	198.9	
90 Styrene	104	10.952	10.955	-0.003	95	1489206	200.0	199.1	
91 Bromoform	173	11.135	11.131	0.004	95	186999	200.0	202.0	
92 2-Chlorobenzotrifluoride	180	11.208	11.210	-0.002	97	667562	200.0	198.5	
93 Isopropylbenzene	105	11.299	11.302	-0.003	97	1991060	200.0	185.2	
95 Bromobenzene	156	11.615	11.612	0.003	98	557168	200.0	210.6	
96 1,1,2,2-Tetrachloroethane	83	11.615	11.618	-0.003	94	576728	200.0	203.2	
97 trans-1,4-Dichloro-2-buten	53	11.652	11.655	-0.003	81	159455	200.0	232.6	
98 1,2,3-Trichloropropane	110	11.670	11.673	-0.003	88	194495	200.0	218.8	
99 N-Propylbenzene	120	11.719	11.721	-0.002	97	640794	200.0	208.7	
100 2-Chlorotoluene	126	11.804	11.807	-0.003	97	567599	200.0	211.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.871	11.867	0.004	94	622267	200.0	214.1	
102 1,3,5-Trimethylbenzene	105	11.901	11.904	-0.003	97	1683074	200.0	199.1	
103 4-Chlorotoluene	126	11.925	11.928	-0.003	97	603912	200.0	206.4	
104 tert-Butylbenzene	119	12.217	12.214	0.003	93	1428342	200.0	199.4	
106 1,2,4-Trimethylbenzene	105	12.278	12.275	0.003	97	1762909	200.0	200.8	
107 1,2-dichloro-4-(trifluorom	214	12.321	12.324	-0.003	97	507998	200.0	204.9	
108 sec-Butylbenzene	105	12.436	12.439	-0.003	95	1998910	200.0	191.7	
109 1,3-Dichlorobenzene	146	12.552	12.555	-0.003	96	1032823	200.0	201.0	
110 4-Isopropyltoluene	119	12.595	12.598	-0.003	95	1751779	200.0	197.8	
111 1,4-Dichlorobenzene	146	12.662	12.658	0.004	92	1074021	200.0	199.6	
113 2,4-Dichloro-1-(triflourom	214	12.692	12.689	0.003	96	498793	200.0	206.0	
114 2,5-Dichlorobenzotrifluori	214	12.735	12.731	0.004	98	555657	200.0	200.1	
116 n-Butylbenzene	91	13.002	13.005	-0.003	96	1586792	200.0	198.1	
117 1,2-Dichlorobenzene	146	13.014	13.011	0.003	94	1010481	200.0	200.0	
118 1,2-Dibromo-3-Chloropropan	75	13.805	13.808	-0.003	81	71842	200.0	292.8	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.945	13.948	-0.003	98	2411828	600.0	604.2	
121 2,3- & 3,4- Dichlorotoluen	125	14.365	14.362	0.003	97	1814435	400.0	412.5	
122 1,2,4-Trichlorobenzene	180	14.627	14.623	0.003	94	728230	200.0	213.1	
123 Hexachlorobutadiene	225	14.773	14.775	-0.003	97	239421	200.0	205.6	
124 Naphthalene	128	14.888	14.891	-0.003	98	1754190	200.0	215.5	
125 1,2,3-Trichlorobenzene	180	15.113	15.110	0.003	97	637531	200.0	212.2	
126 2,4,5-Trichlorotoluene	159	15.898	15.901	-0.003	0	326073	200.0	230.9	
127 2,3,6-Trichlorotoluene	159	16.001	15.998	0.003	94	296296	200.0	225.1	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		400.0	405.1	
S 131 Xylenes, Total	106				0		400.0	394.4	
S 132 1,3-Dichloropropene, Total	1				0		400.0	491.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWacro2ndRe_00007	Amount Added:	10.00	Units: uL	
VOA8260SURR_00060	Amount Added:	8.00	Units: uL	
VOA8260VOAPRI_00216	Amount Added:	8.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	8.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	8.00	Units: uL	
voaWva2ndRest_00007	Amount Added:	8.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	8.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

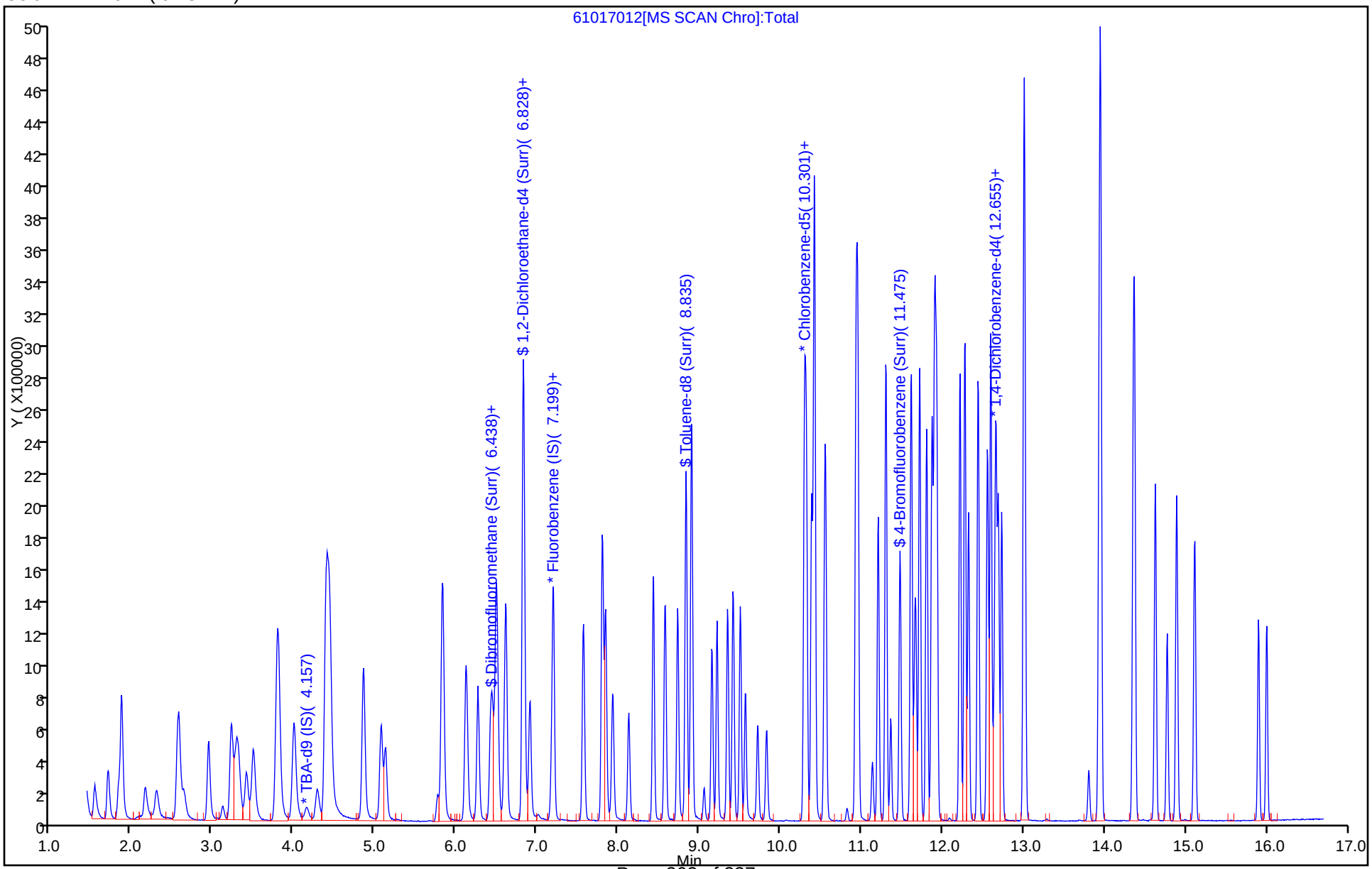
Report Date: 18-Oct-2016 11:23:40 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017012.D

Injection Date:	17-Oct-2016 16:49:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD40			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

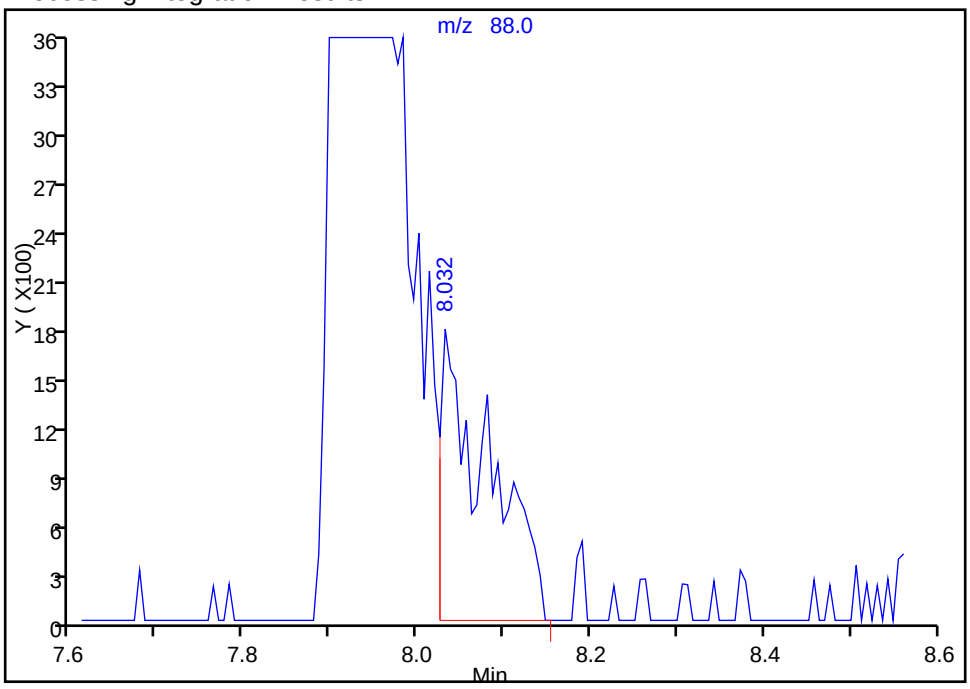
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017012.D
Injection Date: 17-Oct-2016 16:49:30 Instrument ID: CHHP6
Lims ID: IC VSTD40
Client ID:
Operator ID: 001562 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

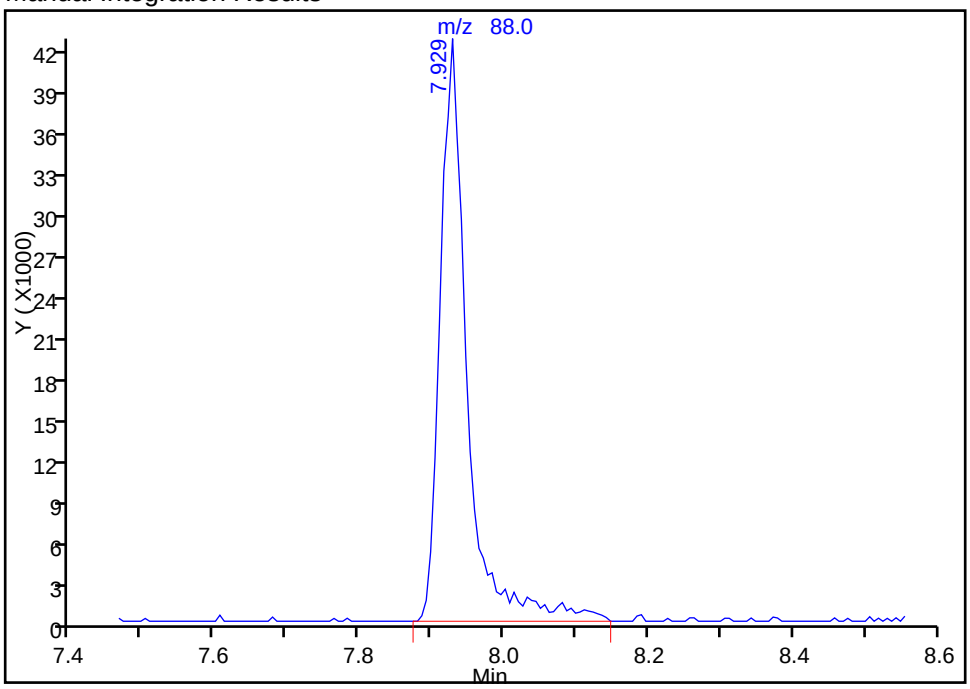
Processing Integration Results

RT: 8.03
Area: 6665
Amount: 311.1067
Amount Units: ng



Manual Integration Results

RT: 7.93
Area: 110995
Amount: 4396.8559
Amount Units: ng



Reviewer: fergusond, 18-Oct-2016 10:15:32
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D
Lims ID: IC VSTD50
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 17-Oct-2016 17:13:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013909-013
Misc. Info.: IC VSTD50
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 18-Oct-2016 11:26:58 Calib Date: 17-Oct-2016 17:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: fergusond Date: 18-Oct-2016 09:29:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.168	4.150	0.018	92	156482	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.179	7.180	-0.001	99	442275	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.288	10.294	-0.006	85	122856	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.636	12.630	0.006	90	169384	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.449	6.449	0.000	94	457863	250.0	242.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.820	6.821	-0.001	68	616626	250.0	241.3	
$ 7 Toluene-d8 (Surr)	98	8.834	8.834	0.000	93	1778033	250.0	197.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.474	11.474	0.000	87	767526	250.0	226.9	
11 Dichlorodifluoromethane	85	1.540	1.546	-0.006	99	437808	250.0	217.5	
12 Chloromethane	50	1.704	1.698	0.006	99	587869	250.0	227.8	
13 Vinyl chloride	62	1.838	1.838	0.000	99	517628	250.0	219.6	
14 Butadiene	39	1.869	1.869	0.000	93	536408	250.0	217.5	
15 Bromomethane	94	2.161	2.167	-0.006	93	211399	250.0	214.3	
16 Chloroethane	64	2.300	2.301	-0.001	100	333168	250.0	223.2	
17 Dichlorofluoromethane	67	2.562	2.568	-0.006	98	791623	250.0	231.8	
18 Trichlorofluoromethane	101	2.574	2.586	-0.012	98	595629	250.0	210.7	
20 Ethyl ether	59	2.945	2.945	0.000	93	497445	250.0	215.8	
21 Acrolein	56	3.122	3.122	0.000	98	144221	275.0	292.8	
22 1,1-Dichloroethene	96	3.219	3.231	-0.012	98	527379	250.0	242.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.286	3.298	-0.012	94	512442	250.0	232.8	
24 Acetone	43	3.329	3.335	-0.006	100	282151	500.0	534.6	
25 Iodomethane	142	3.408	3.420	-0.012	97	828161	250.0	254.1	
26 Carbon disulfide	76	3.493	3.499	-0.006	100	1371596	250.0	283.4	
29 3-Chloro-1-propene	76	3.785	3.785	0.000	92	350147	250.0	290.1	
30 Methyl acetate	43	3.809	3.809	0.000	96	2310919	1250.0	1255.2	
31 Methylene Chloride	84	3.998	3.998	0.000	93	682055	250.0	261.1	
32 2-Methyl-2-propanol	59	4.290	4.290	0.000	92	393228	2500.0	2473.6	
33 Acrylonitrile	53	4.393	4.399	-0.006	98	2428773	2500.0	2486.4	
34 trans-1,2-Dichloroethene	96	4.430	4.424	0.006	99	590066	250.0	241.6	
35 Methyl tert-butyl ether	73	4.448	4.454	-0.006	97	1319612	250.0	266.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.856	4.856	0.000	92	844165	250.0	237.8	
37 1,1-Dichloroethane	63	5.075	5.081	-0.007	96	1035587	250.0	254.0	
38 Vinyl acetate	43	5.129	5.129	0.000	97	1122396	250.0	301.4	
43 cis-1,2-Dichloroethene	96	5.829	5.835	-0.006	80	689543	250.0	252.3	
42 2,2-Dichloropropane	97	5.829	5.835	-0.006	54	117742	250.0	277.2	
44 2-Butanone (MEK)	43	5.847	5.841	0.006	99	508836	500.0	507.5	
48 Chlorobromomethane	128	6.121	6.121	0.000	98	322793	250.0	262.9	
49 Tetrahydrofuran	42	6.133	6.139	-0.006	87	393583	500.0	505.5	
50 Chloroform	83	6.267	6.267	0.000	96	939276	250.0	248.2	
51 1,1,1-Trichloroethane	97	6.425	6.425	0.000	98	610188	250.0	267.3	
52 Cyclohexane	56	6.492	6.498	-0.006	92	990348	250.0	237.7	
53 Carbon tetrachloride	117	6.595	6.595	0.000	95	438205	250.0	287.4	
54 1,1-Dichloropropene	75	6.614	6.614	0.000	95	754822	250.0	246.4	
55 Isobutyl alcohol	41	6.833	6.827	0.006	49	410540	6250.0	7877.8	
56 Benzene	78	6.833	6.833	0.000	98	2234343	250.0	227.1	
57 1,2-Dichloroethane	62	6.912	6.912	0.000	96	801768	250.0	255.9	
59 n-Heptane	43	7.198	7.198	0.000	91	684814	250.0	235.4	
61 Trichloroethene	130	7.569	7.569	0.000	97	588427	250.0	245.2	
63 Methylcyclohexane	83	7.806	7.806	0.000	89	947928	250.0	236.9	
64 1,2-Dichloropropane	63	7.842	7.843	-0.001	95	658421	250.0	252.4	
65 1,4-Dioxane	88	7.928	7.934	-0.006	88	143535	5000.0	5521.7	M
67 Dibromomethane	93	7.928	7.928	0.000	97	377143	250.0	271.6	
68 Dichlorobromomethane	83	8.128	8.129	-0.001	98	624230	250.0	298.3	
70 2-Chloroethyl vinyl ether	63	8.433	8.433	0.000	92	868925	500.0	555.6	
71 cis-1,3-Dichloropropene	75	8.573	8.579	-0.007	94	888989	250.0	306.8	
72 4-Methyl-2-pentanone (MIBK	43	8.731	8.731	0.000	95	1182012	500.0	518.7	
73 Toluene	91	8.901	8.907	-0.006	97	2295736	250.0	208.1	
74 trans-1,3-Dichloropropene	75	9.157	9.157	0.000	95	784438	250.0	310.9	
75 Ethyl methacrylate	69	9.217	9.217	0.000	89	871674	250.0	289.7	
76 1,1,2-Trichloroethane	97	9.351	9.345	0.006	92	569382	250.0	241.5	
77 Tetrachloroethene	164	9.418	9.418	0.000	97	459589	250.0	216.7	
78 1,3-Dichloropropane	76	9.503	9.509	-0.006	92	1033930	250.0	235.8	
79 2-Hexanone	43	9.564	9.570	-0.006	94	723957	500.0	530.5	
81 Chlorodibromomethane	129	9.716	9.722	-0.006	90	453002	250.0	304.7	
82 Ethylene Dibromide	107	9.832	9.832	0.000	98	559480	250.0	263.8	
83 3-Chlorobenzotrifluoride	180	10.300	10.300	0.000	94	759861	250.0	207.8	
84 Chlorobenzene	112	10.318	10.319	-0.001	96	1615675	250.0	215.9	
85 4-Chlorobenzotrifluoride	180	10.385	10.386	-0.001	96	736864	250.0	215.9	
86 1,1,1,2-Tetrachloroethane	131	10.416	10.416	0.000	92	483803	250.0	290.5	
87 Ethylbenzene	106	10.422	10.422	0.000	97	909219	250.0	225.6	
88 m-Xylene & p-Xylene	106	10.556	10.556	0.000	96	1120035	250.0	228.8	
89 o-Xylene	106	10.933	10.933	0.000	93	1086046	250.0	229.6	
90 Styrene	104	10.957	10.957	0.000	94	1810645	250.0	230.8	
91 Bromoform	173	11.134	11.134	0.000	95	256599	250.0	248.9	
92 2-Chlorobenzotrifluoride	180	11.207	11.207	0.000	95	774175	250.0	219.5	
93 Isopropylbenzene	105	11.304	11.304	0.000	97	2336935	250.0	207.2	
95 Bromobenzene	156	11.614	11.614	0.000	98	687578	250.0	250.8	
96 1,1,2,2-Tetrachloroethane	83	11.614	11.614	0.000	97	727352	250.0	244.3	
97 trans-1,4-Dichloro-2-buten	53	11.651	11.651	0.000	79	210068	250.0	295.6	
98 1,2,3-Trichloropropane	110	11.669	11.669	0.000	88	240309	250.0	260.8	
99 N-Propylbenzene	120	11.718	11.718	0.000	96	778345	250.0	244.6	
100 2-Chlorotoluene	126	11.803	11.803	0.000	96	682833	250.0	245.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.870	11.870	0.000	93	716597	250.0	237.9	
102 1,3,5-Trimethylbenzene	105	11.906	11.906	0.000	97	1999367	250.0	228.2	
103 4-Chlorotoluene	126	11.931	11.931	0.000	97	740089	250.0	244.0	
104 tert-Butylbenzene	119	12.216	12.217	-0.001	93	1730663	250.0	233.1	
106 1,2,4-Trimethylbenzene	105	12.277	12.277	0.000	97	2113255	250.0	232.3	
107 1,2-dichloro-4-(trifluorom	214	12.320	12.320	0.000	96	592020	250.0	230.4	
108 sec-Butylbenzene	105	12.442	12.436	0.006	95	2379583	250.0	220.2	
109 1,3-Dichlorobenzene	146	12.557	12.551	0.006	95	1263061	250.0	237.2	
110 4-Isopropyltoluene	119	12.594	12.594	0.000	94	2095851	250.0	228.4	
111 1,4-Dichlorobenzene	146	12.661	12.661	0.000	92	1306720	250.0	234.3	
113 2,4-Dichloro-1-(triflourom	214	12.691	12.691	0.000	94	573367	250.0	228.5	
114 2,5-Dichlorobenzotrifluori	214	12.734	12.728	0.006	99	657948	250.0	228.7	
116 n-Butylbenzene	91	13.001	13.001	0.000	95	1887735	250.0	227.4	
117 1,2-Dichlorobenzene	146	13.013	13.014	-0.001	94	1216119	250.0	232.3	
118 1,2-Dibromo-3-Chloropropan	75	13.804	13.804	0.000	79	100207	250.0	394.1	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.944	13.944	0.000	96	2819474	750.0	681.5	
121 2,3- & 3,4- Dichlorotoluen	125	14.364	14.358	0.006	97	2176172	500.0	477.4	
122 1,2,4-Trichlorobenzene	180	14.626	14.626	0.000	95	895565	250.0	252.9	
123 Hexachlorobutadiene	225	14.772	14.778	-0.006	97	302126	250.0	250.3	
124 Naphthalene	128	14.887	14.893	-0.006	99	2144730	250.0	254.2	
125 1,2,3-Trichlorobenzene	180	15.112	15.112	0.000	95	811942	250.0	260.8	
126 2,4,5-Trichlorotoluene	159	15.897	15.897	0.000	0	408566	250.0	279.2	
127 2,3,6-Trichlorotoluene	159	16.000	16.001	-0.001	93	370449	250.0	271.6	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		500.0	458.4	
S 130 1,2-Dichloroethene, Total	96				0		500.0	493.9	
S 132 1,3-Dichloropropene, Total	1				0		500.0	617.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00060	Amount Added:	10.00	Units: uL	
VOA8260VOAPRI_00216	Amount Added:	10.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	10.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	10.00	Units: uL	
voaWva2ndRest_00007	Amount Added:	10.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	10.00	Units: uL	
voaWacro2ndRe_00007	Amount Added:	11.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

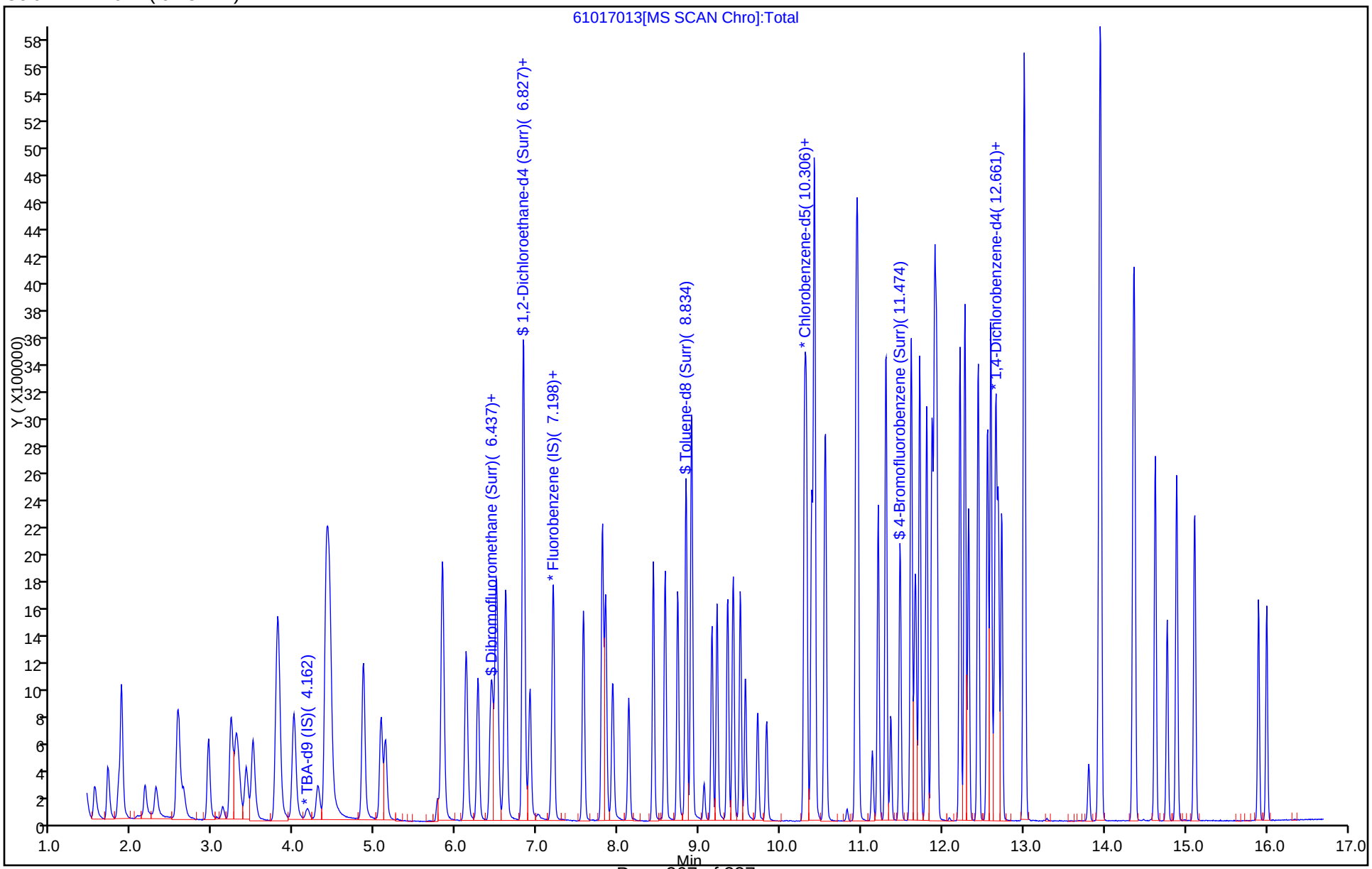
Report Date: 18-Oct-2016 11:27:00 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D

Injection Date:	17-Oct-2016 17:13:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD50			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

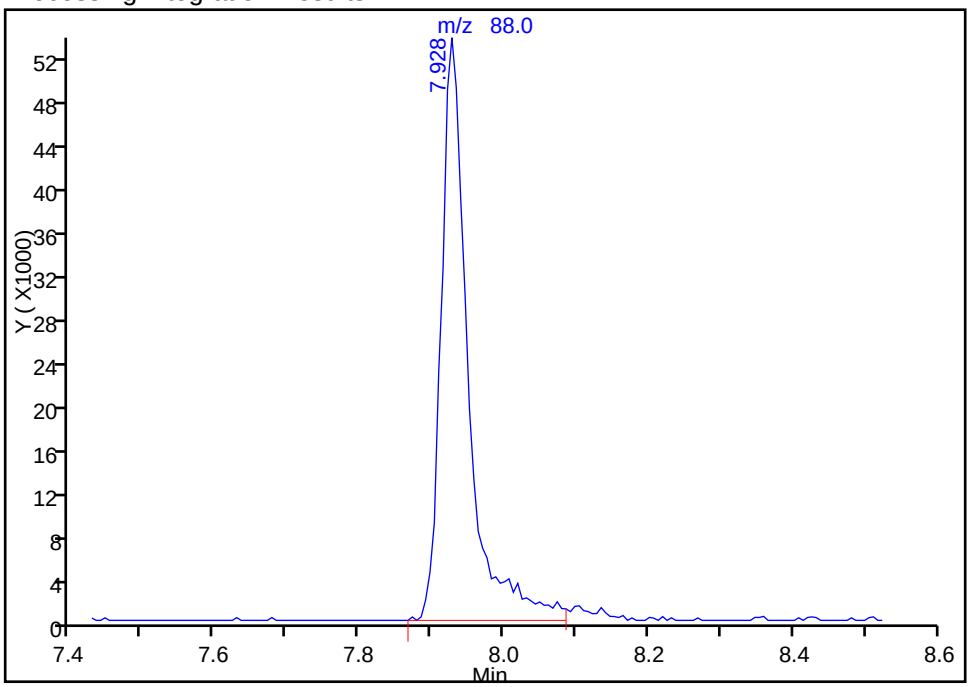
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D				
Injection Date:	17-Oct-2016 17:13:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD50				
Client ID:					
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

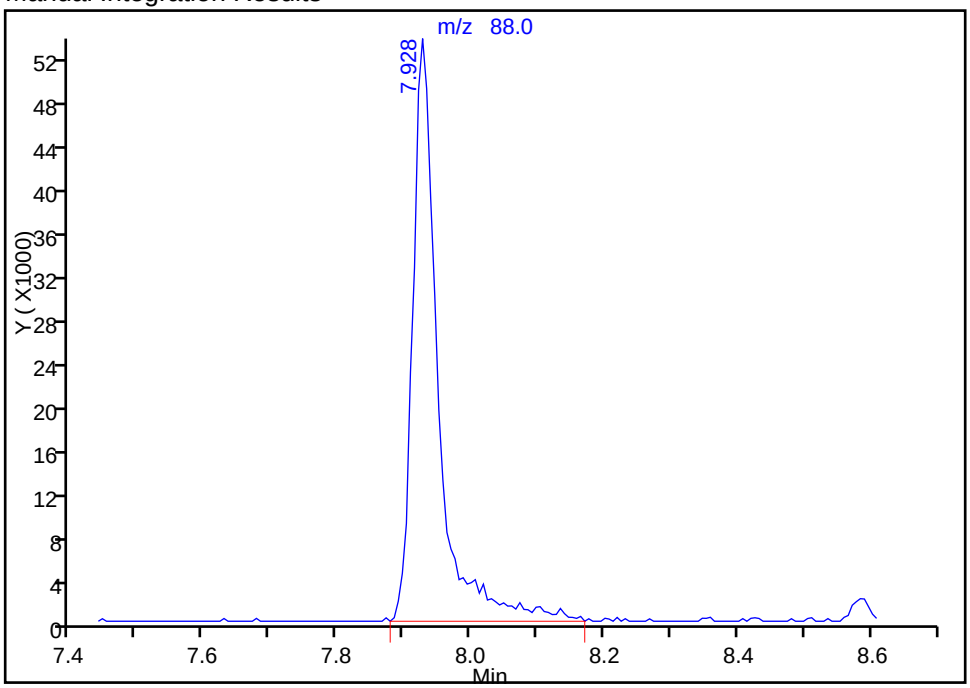
Processing Integration Results

RT: 7.93
Area: 140126
Amount: 5410.8402
Amount Units: ng



Manual Integration Results

RT: 7.93
Area: 143535
Amount: 5521.7085
Amount Units: ng



Reviewer: fergusond, 18-Oct-2016 10:20:11

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Lab Sample ID: CCVIS 180-192156/2 Calibration Date: 10/24/2016 11:05

Instrument ID: CHHP5 Calib Start Date: 10/22/2016 14:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/22/2016 17:46

Lab File ID: 51024002.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	0.2972	0.2545	0.1000	8.56	10.0	-14.4	20.0
Chloromethane	Ave	0.5769	0.5335	0.1000	9.25	10.0	-7.5	20.0
Vinyl chloride	Ave	0.3823	0.3456	0.1000	9.04	10.0	-9.6	20.0
1,3-Butadiene	Ave	0.5652	0.5174	0.0100	9.15	10.0	-8.5	20.0
Bromomethane	Ave	0.0955	0.0923	0.0500	9.66	10.0	-3.4	20.0
Chloroethane	Ave	0.1705	0.1746	0.0500	10.2	10.0	2.4	20.0
Dichlorofluoromethane	Ave	0.4075	0.3979	0.0100	9.76	10.0	-2.4	20.0
Trichlorofluoromethane	Ave	0.3231	0.2974	0.1000	9.20	10.0	-8.0	20.0
Ethyl ether	Ave	0.3213	0.3060	0.0100	9.52	10.0	-4.8	20.0
Acrolein	Ave	0.0755	0.0666	0.0100	26.5	30.0	-11.8	20.0
1,1-Dichloroethene	Ave	0.2526	0.2478	0.1000	9.81	10.0	-1.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2754	0.2619	0.1000	9.51	10.0	-4.9	20.0
Acetone	Ave	0.1287	0.1171	0.0500	18.2	20.0	-9.0	20.0
Iodomethane	Ave	0.3758	0.3549	0.0100	9.45	10.0	-5.5	20.0
Carbon disulfide	Ave	0.6614	0.6029	0.1000	9.12	10.0	-8.8	20.0
Allyl chloride	Ave	0.1570	0.1443	0.0100	9.19	10.0	-8.1	20.0
Methyl acetate	Ave	0.3331	0.3072	0.1000	46.1	50.0	-7.8	20.0
Methylene Chloride	Ave	0.3163	0.2880	0.1000	9.10	10.0	-9.0	20.0
tert-Butyl alcohol	Ave	1.228	1.226	0.0100	99.8	100	-0.2	20.0
Acrylonitrile	Ave	0.1592	0.1515	0.0100	95.2	100	-4.8	20.0
trans-1,2-Dichloroethene	Ave	0.2752	0.2630	0.1000	9.56	10.0	-4.4	20.0
Methyl tert-butyl ether	Ave	0.7149	0.6448	0.1000	9.02	10.0	-9.8	20.0
Hexane	Ave	0.5756	0.5587	0.0100	9.70	10.0	-3.0	20.0
1,1-Dichloroethane	Ave	0.6144	0.5729	0.2000	9.32	10.0	-6.8	20.0
Vinyl acetate	Ave	0.6823	0.7288	0.0100	10.7	10.0	6.8	20.0
cis-1,2-Dichloroethene	Ave	0.3039	0.2918	0.1000	9.60	10.0	-4.0	20.0
2,2-Dichloropropane	Ave	0.0512	0.0497	0.0100	9.70	10.0	-3.0	20.0
2-Butanone (MEK)	Ave	0.2050	0.1922	0.0500	18.7	20.0	-6.3	20.0
Bromochloromethane	Ave	0.1283	0.1193	0.0100	9.29	10.0	-7.1	20.0
Tetrahydrofuran	Ave	0.1404	0.1275	0.0100	18.2	20.0	-9.2	20.0
Chloroform	Ave	0.4883	0.4570	0.2000	9.36	10.0	-6.4	20.0
1,1,1-Trichloroethane	Ave	0.3436	0.3323	0.1000	9.67	10.0	-3.3	20.0
Cyclohexane	Ave	0.7546	0.7380	0.1000	9.78	10.0	-2.2	20.0
Carbon tetrachloride	Ave	0.2876	0.2821	0.1000	9.81	10.0	-1.9	20.0
1,1-Dichloropropene	Ave	0.4056	0.3889	0.0100	9.59	10.0	-4.1	20.0
Isobutyl alcohol	Ave	0.0097	0.0096*	0.0100	249	250	-0.4	20.0
Benzene	Ave	1.168	1.128	0.5000	9.66	10.0	-3.4	20.0
1,2-Dichloroethane	Ave	0.4392	0.4152	0.1000	9.45	10.0	-5.5	20.0
n-Heptane	Ave	0.5664	0.5612	0.0100	9.91	10.0	-0.9	20.0
Trichloroethene	Ave	0.2796	0.2623	0.2000	9.38	10.0	-6.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Lab Sample ID: CCVIS 180-192156/2 Calibration Date: 10/24/2016 11:05

Instrument ID: CHHP5 Calib Start Date: 10/22/2016 14:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/22/2016 17:46

Lab File ID: 51024002.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	0.4801	0.4753	0.1000	9.90	10.0	-1.0	20.0
1,2-Dichloropropane	Ave	0.3508	0.3365	0.1000	9.59	10.0	-4.1	20.0
1,4-Dioxane	Ave	0.0028	0.0023*	0.0100	167	200	-16.3	20.0
Dibromomethane	Ave	0.1486	0.1380	0.0100	9.29	10.0	-7.1	20.0
Bromodichloromethane	Ave	0.3221	0.3074	0.2000	9.54	10.0	-4.6	20.0
2-Chloroethyl vinyl ether	Ave	0.1839	0.1678	0.0100	18.2	20.0	-8.8	20.0
cis-1,3-Dichloropropene	Ave	0.3813	0.3453	0.2000	9.06	10.0	-9.4	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.532	1.542	0.1000	20.1	20.0	0.6	20.0
Toluene	Ave	4.589	4.879	0.4000	10.6	10.0	6.3	20.0
trans-1,3-Dichloropropene	Ave	1.163	1.197	0.1000	10.3	10.0	2.9	20.0
Ethyl methacrylate	Ave	1.247	1.271	0.0100	10.2	10.0	1.9	20.0
1,1,2-Trichloroethane	Ave	0.8630	0.9412	0.1000	10.9	10.0	9.1	20.0
Tetrachloroethene	Ave	0.9033	0.9649	0.2000	10.7	10.0	6.8	20.0
1,3-Dichloropropane	Ave	1.663	1.710	0.0100	10.3	10.0	2.8	20.0
2-Hexanone	Ave	1.162	1.191	0.1000	20.5	20.0	2.5	20.0
Dibromochloromethane	Ave	0.7837	0.7886	0.1000	10.1	10.0	0.6	20.0
1,2-Dibromoethane (EDB)	Ave	0.8942	0.9185	0.1000	10.3	10.0	2.7	20.0
3-Chlorobenzotrifluoride	Ave	1.714	1.790	0.0100	10.4	10.0	4.5	20.0
Chlorobenzene	Ave	3.010	3.233	0.5000	10.7	10.0	7.4	20.0
4-Chlorobenzotrifluoride	Ave	1.582	1.688	0.0100	10.7	10.0	6.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9040	0.9380	0.0100	10.4	10.0	3.8	20.0
Ethylbenzene	Ave	1.695	1.813	0.1000	10.7	10.0	7.0	20.0
m-Xylene & p-Xylene	Ave	2.115	2.250	0.1000	10.6	10.0	6.4	20.0
o-Xylene	Ave	2.013	2.155	0.3000	10.7	10.0	7.0	20.0
Styrene	Ave	3.406	3.717	0.3000	10.9	10.0	9.1	20.0
Bromoform	Ave	0.4726	0.4713	0.1000	9.97	10.0	-0.3	20.0
2-Chlorobenzotrifluoride	Ave	1.668	1.710	0.0100	10.3	10.0	2.5	20.0
Isopropylbenzene	Ave	5.168	5.665	0.1000	11.0	10.0	9.6	20.0
1,1,2,2-Tetrachloroethane	Ave	1.220	1.251	0.3000	10.3	10.0	2.5	20.0
Bromobenzene	Ave	0.8444	0.8436	0.0100	9.99	10.0	-0.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2909	0.3131	0.0100	10.8	10.0	7.6	20.0
1,2,3-Trichloropropane	Ave	0.2759	0.2904	0.0100	10.5	10.0	5.3	20.0
N-Propylbenzene	Ave	0.9783	1.039	0.0100	10.6	10.0	6.2	20.0
2-Chlorotoluene	Ave	0.8371	0.8579	0.0100	10.2	10.0	2.5	20.0
3-Chlorotoluene	Ave	0.8919	0.8765	0.0100	9.83	10.0	-1.7	20.0
1,3,5-Trimethylbenzene	Ave	2.956	3.111	0.0100	10.5	10.0	5.2	20.0
4-Chlorotoluene	Ave	0.8959	0.9356	0.0100	10.4	10.0	4.4	20.0
tert-Butylbenzene	Ave	2.404	2.500	0.0100	10.4	10.0	4.0	20.0
1,2,4-Trimethylbenzene	Ave	2.996	3.128	0.0100	10.4	10.0	4.4	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.8309	0.8795	0.0100	10.6	10.0	5.8	20.0
sec-Butylbenzene	Ave	3.476	3.726	0.0100	10.7	10.0	7.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Lab Sample ID: CCVIS 180-192156/2 Calibration Date: 10/24/2016 11:05

Instrument ID: CHHP5 Calib Start Date: 10/22/2016 14:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/22/2016 17:46

Lab File ID: 51024002.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
1,3-Dichlorobenzene	Ave	1.606	1.643	0.6000	10.2	10.0	2.3	20.0
4-Isopropyltoluene	Ave	2.890	3.131	0.0100	10.8	10.0	8.3	20.0
1,4-Dichlorobenzene	Ave	1.641	1.652	0.5000	10.1	10.0	0.7	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7882	0.7716	0.0100	9.79	10.0	-2.1	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.8986	0.9329	0.0100	10.4	10.0	3.8	20.0
n-Butylbenzene	Ave	2.484	2.689	0.0100	10.8	10.0	8.3	20.0
1,2-Dichlorobenzene	Ave	1.479	1.511	0.4000	10.2	10.0	2.1	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1335	0.1228	0.0500	9.20	10.0	-8.0	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.036	1.044	0.0100	30.2	30.0	0.8	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.009	1.011	0.0100	20.1	20.0	0.3	20.0
1,2,4-Trichlorobenzene	Ave	0.7303	0.6957	0.2000	9.53	10.0	-4.7	20.0
Hexachlorobutadiene	Ave	0.3130	0.3410	0.0100	10.9	10.0	9.0	20.0
Naphthalene	Ave	1.815	1.730	0.0100	9.53	10.0	-4.7	20.0
1,2,3-Trichlorobenzene	Ave	0.5681	0.5455	0.0100	9.60	10.0	-4.0	20.0
2,4,5-Trichlorotoluene	Ave	0.1803	0.1645	0.0100	9.12	10.0	-8.8	20.0
2,3,6-Trichlorotoluene	Ave	0.1864	0.1594	0.0100	8.55	10.0	-14.5	20.0
Dibromofluoromethane (Surr)	Ave	0.2392	0.2293		9.58	10.0	-4.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3454	0.3341		9.67	10.0	-3.3	20.0
Toluene-d8 (Surr)	Ave	3.774	4.056		10.7	10.0	7.5	20.0
4-Bromofluorobenzene (Surr)	Ave	1.526	1.601		10.5	10.0	4.9	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 24-Oct-2016 11:05:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014019-002
Misc. Info.: CCVIS
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 24-Oct-2016 13:06:35 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: fergusond Date: 24-Oct-2016 11:30:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.272	4.272	0.000	0	115230	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.271	0.000	96	388826	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	91	91950	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.722	0.000	94	135718	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.547	6.547	0.000	94	89140	50.0	47.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.918	0.000	0	129896	50.0	48.4	
$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	95	372960	50.0	53.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	84	147227	50.0	52.5	
11 Dichlorodifluoromethane	85	1.601	1.601	0.000	98	98958	50.0	42.8	
12 Chloromethane	50	1.766	1.766	0.000	99	207429	50.0	46.2	
13 Vinyl chloride	62	1.912	1.912	0.000	96	134359	50.0	45.2	
14 Butadiene	39	1.936	1.936	0.000	98	201177	50.0	45.8	
15 Bromomethane	94	2.234	2.234	0.000	91	35871	50.0	48.3	
16 Chloroethane	64	2.374	2.374	0.000	97	67894	50.0	51.2	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	96	154725	50.0	48.8	
18 Trichlorofluoromethane	101	2.666	2.666	0.000	95	115642	50.0	46.0	
20 Ethyl ether	59	3.043	3.043	0.000	97	118968	50.0	47.6	
21 Acrolein	56	3.226	3.226	0.000	99	77649	150.0	132.3	
22 1,1-Dichloroethene	96	3.323	3.323	0.000	90	96338	50.0	49.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.396	3.396	0.000	93	101843	50.0	47.6	
24 Acetone	43	3.445	3.445	0.000	98	91075	100.0	91.0	
25 Iodomethane	142	3.524	3.524	0.000	99	138011	50.0	47.2	
26 Carbon disulfide	76	3.615	3.615	0.000	99	234412	50.0	45.6	
28 3-Chloro-1-propene	76	3.901	3.901	0.000	87	56103	50.0	46.0	
30 Methyl acetate	43	3.931	3.931	0.000	100	597165	250.0	230.6	
31 Methylene Chloride	84	4.126	4.126	0.000	91	111982	50.0	45.5	
32 2-Methyl-2-propanol	59	4.412	4.412	0.000	85	70610	500.0	498.9	
33 Acrylonitrile	53	4.509	4.509	0.000	98	589140	500.0	475.8	
34 trans-1,2-Dichloroethene	96	4.552	4.552	0.000	91	102259	50.0	47.8	
35 Methyl tert-butyl ether	73	4.570	4.570	0.000	95	250723	50.0	45.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.966	4.966	0.000	96	217220	50.0	48.5	
37 1,1-Dichloroethane	63	5.185	5.185	0.000	97	222750	50.0	46.6	
38 Vinyl acetate	43	5.233	5.233	0.000	97	283391	50.0	53.4	
45 cis-1,2-Dichloroethene	96	5.927	5.927	0.000	89	113450	50.0	48.0	
44 2,2-Dichloropropane	97	5.933	5.933	0.000	55	19326	50.0	48.5	
46 2-Butanone (MEK)	43	5.945	5.945	0.000	93	149463	100.0	93.7	
49 Chlorobromomethane	128	6.219	6.219	0.000	85	46366	50.0	46.5	
51 Tetrahydrofuran	42	6.243	6.243	0.000	94	99126	100.0	90.8	
52 Chloroform	83	6.359	6.359	0.000	96	177687	50.0	46.8	
53 1,1,1-Trichloroethane	97	6.517	6.517	0.000	94	129194	50.0	48.3	
54 Cyclohexane	56	6.590	6.590	0.000	96	286968	50.0	48.9	
56 Carbon tetrachloride	117	6.693	6.693	0.000	93	109670	50.0	49.0	
55 1,1-Dichloropropene	75	6.712	6.712	0.000	85	151202	50.0	47.9	
57 Isobutyl alcohol	41	6.912	6.912	0.000	67	93625	1250.0	1244.7	
58 Benzene	78	6.924	6.924	0.000	96	438418	50.0	48.3	
59 1,2-Dichloroethane	62	7.004	7.004	0.000	95	161444	50.0	47.3	
62 n-Heptane	43	7.283	7.283	0.000	97	218219	50.0	49.5	
64 Trichloroethene	130	7.661	7.661	0.000	95	101985	50.0	46.9	
66 Methylcyclohexane	83	7.892	7.892	0.000	97	184825	50.0	49.5	
67 1,2-Dichloropropane	63	7.934	7.934	0.000	93	130840	50.0	48.0	
70 1,4-Dioxane	88	8.019	8.019	0.000	47	18090	1000.0	837.0	
68 Dibromomethane	93	8.026	8.026	0.000	97	53661	50.0	46.4	
71 Dichlorobromomethane	83	8.214	8.214	0.000	96	119521	50.0	47.7	
73 2-Chloroethyl vinyl ether	63	8.518	8.518	0.000	87	130466	100.0	91.2	
74 cis-1,3-Dichloropropene	75	8.658	8.658	0.000	84	134263	50.0	45.3	
75 4-Methyl-2-pentanone (MIBK	43	8.816	8.816	0.000	98	283514	100.0	100.6	
76 Toluene	91	8.993	8.993	0.000	97	448608	50.0	53.2	
77 trans-1,3-Dichloropropene	75	9.236	9.236	0.000	94	110034	50.0	51.4	
78 Ethyl methacrylate	69	9.297	9.297	0.000	93	116841	50.0	51.0	
79 1,1,2-Trichloroethane	97	9.431	9.431	0.000	95	86539	50.0	54.5	
80 Tetrachloroethene	164	9.504	9.504	0.000	96	88722	50.0	53.4	
81 1,3-Dichloropropane	76	9.589	9.589	0.000	93	157199	50.0	51.4	
82 2-Hexanone	43	9.650	9.650	0.000	98	219031	100.0	102.5	
84 Chlorodibromomethane	129	9.802	9.802	0.000	90	72508	50.0	50.3	
85 Ethylene Dibromide	107	9.917	9.917	0.000	96	84456	50.0	51.4	
86 3-Chlorobenzotrifluoride	180	10.380	10.380	0.000	93	164631	50.0	52.2	
87 Chlorobenzene	112	10.404	10.404	0.000	89	297237	50.0	53.7	
88 4-Chlorobenzotrifluoride	180	10.465	10.465	0.000	96	155185	50.0	53.4	
89 1,1,1,2-Tetrachloroethane	131	10.495	10.495	0.000	90	86245	50.0	51.9	
90 Ethylbenzene	106	10.502	10.502	0.000	98	166741	50.0	53.5	
91 m-Xylene & p-Xylene	106	10.635	10.635	0.000	0	206850	50.0	53.2	
92 o-Xylene	106	11.013	11.013	0.000	97	198130	50.0	53.5	
93 Styrene	104	11.037	11.037	0.000	94	341821	50.0	54.6	
94 Bromoform	173	11.219	11.219	0.000	95	43334	50.0	49.9	
96 2-Chlorobenzotrifluoride	180	11.286	11.286	0.000	96	157235	50.0	51.3	
97 Isopropylbenzene	105	11.384	11.384	0.000	97	520901	50.0	54.8	
100 Bromobenzene	156	11.700	11.700	0.000	97	114496	50.0	50.0	
99 1,1,2,2-Tetrachloroethane	83	11.700	11.700	0.000	91	115060	50.0	51.3	
102 trans-1,4-Dichloro-2-buten	53	11.736	11.736	0.000	71	42497	50.0	53.8	
101 1,2,3-Trichloropropane	110	11.755	11.755	0.000	90	39418	50.0	52.6	
103 N-Propylbenzene	120	11.797	11.797	0.000	99	141050	50.0	53.1	
104 2-Chlorotoluene	126	11.889	11.889	0.000	95	116428	50.0	51.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.955	11.955	0.000	97	118958	50.0	49.1	
106 1,3,5-Trimethylbenzene	105	11.986	11.986	0.000	95	422174	50.0	52.6	
107 4-Chlorotoluene	126	12.010	12.010	0.000	98	126971	50.0	52.2	
108 tert-Butylbenzene	119	12.296	12.296	0.000	95	339285	50.0	52.0	
110 1,2,4-Trimethylbenzene	105	12.357	12.357	0.000	99	424510	50.0	52.2	
111 1,2-dichloro-4-(trifluorom	214	12.406	12.406	0.000	97	119365	50.0	52.9	
112 sec-Butylbenzene	105	12.521	12.521	0.000	96	505730	50.0	53.6	
113 1,3-Dichlorobenzene	146	12.637	12.637	0.000	97	222964	50.0	51.1	
114 4-Isopropyltoluene	119	12.679	12.679	0.000	97	424877	50.0	54.2	
115 1,4-Dichlorobenzene	146	12.746	12.746	0.000	94	224199	50.0	50.3	
116 2,4-Dichloro-1-(triflourom	214	12.771	12.771	0.000	96	104716	50.0	48.9	
118 2,5-Dichlorobenzotrifluori	214	12.813	12.813	0.000	0	126612	50.0	51.9	
120 n-Butylbenzene	91	13.087	13.087	0.000	98	364938	50.0	54.1	
121 1,2-Dichlorobenzene	146	13.099	13.099	0.000	95	205037	50.0	51.1	
122 1,2-Dibromo-3-Chloropropan	75	13.890	13.890	0.000	72	16668	50.0	46.0	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.036	14.036	0.000	0	425174	150.0	151.2	
125 2,3- & 3,4- Dichlorotoluen	125	14.450	14.450	0.000	0	274554	100.0	100.3	
126 1,2,4-Trichlorobenzene	180	14.717	14.717	0.000	95	94424	50.0	47.6	
127 Hexachlorobutadiene	225	14.863	14.863	0.000	96	46285	50.0	54.5	
128 Naphthalene	128	14.979	14.979	0.000	97	234782	50.0	47.6	
129 1,2,3-Trichlorobenzene	180	15.204	15.204	0.000	93	74034	50.0	48.0	
131 2,4,5-Trichlorotoluene	159	15.983	15.983	0.000	0	22320	50.0	45.6	
130 2,3,6-Trichlorotoluene	159	16.086	16.086	0.000	94	21638	50.0	42.8	
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	95.8	
S 133 Xylenes, Total	106				0		100.0	106.7	
S 135 1,3-Dichloropropene, Total	1				0		100.0	96.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOACEVEPRI_00018	Amount Added:	2.00	Units: uL		
VOA8260VOAPRI_00217	Amount Added:	2.00	Units: uL		
voaWEEmixRest_00001	Amount Added:	2.00	Units: uL		
voaWVA1stRest_00009	Amount Added:	2.00	Units: uL		
voaWKetPriRes_00002	Amount Added:	2.00	Units: uL		
VOAACROPRI_00007	Amount Added:	6.00	Units: uL		
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent	

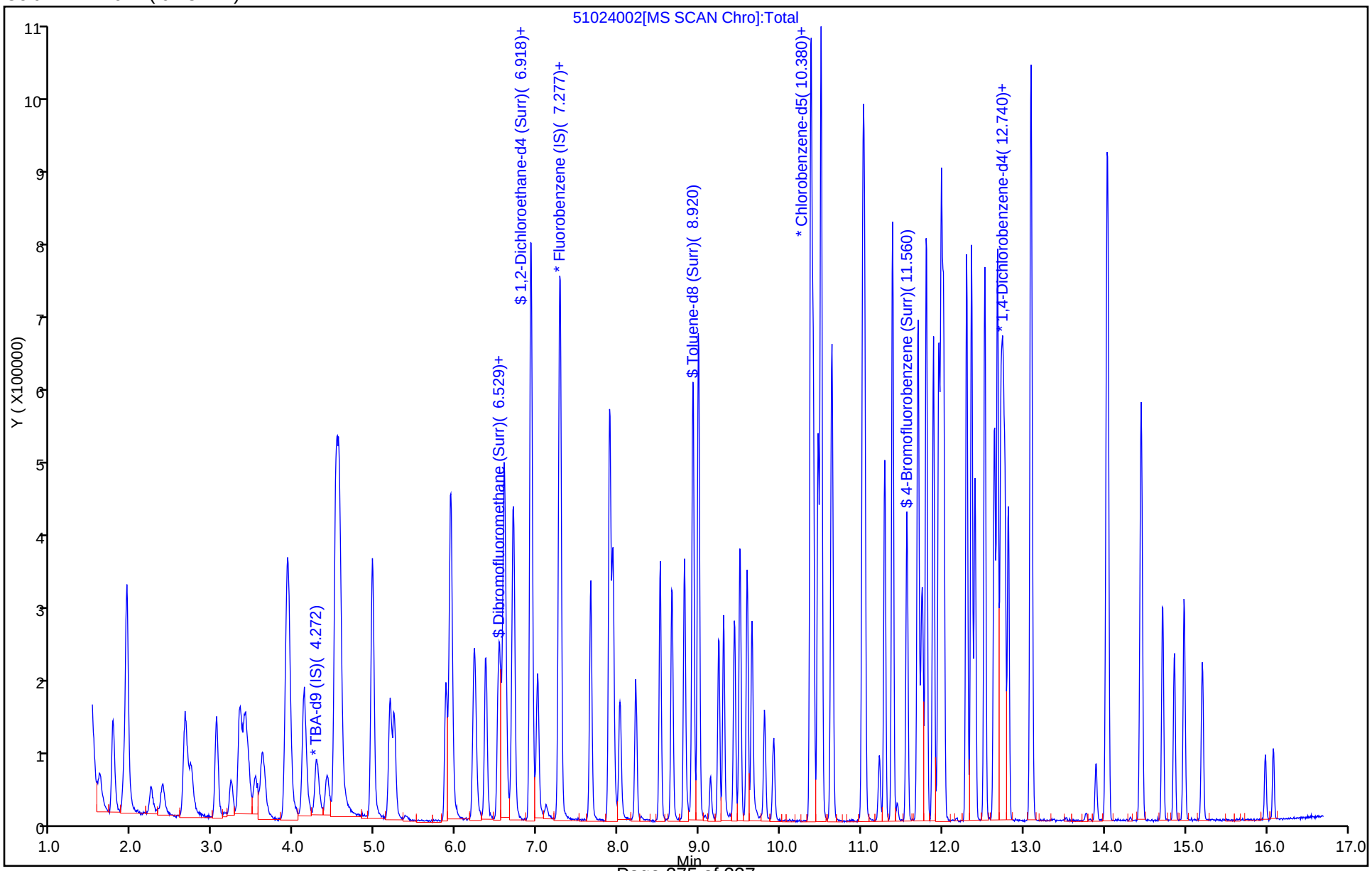
Report Date: 24-Oct-2016 13:06:36 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024002.D

Injection Date:	24-Oct-2016 11:05:30	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.: 180-59864-1

SDG No.:

Lab Sample ID: CCVIS 180-192068/2 Calibration Date: 10/23/2016 11:32

Instrument ID: CHHP6 Calib Start Date: 10/17/2016 14:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/17/2016 17:13

Lab File ID: 61023002.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	0.2275	0.2227	0.1000	9.79	10.0	-2.1	20.0
Chloromethane	Ave	0.2918	0.2841	0.1000	9.74	10.0	-2.6	20.0
Vinyl chloride	Ave	0.2665	0.2748	0.1000	10.3	10.0	3.1	20.0
1,3-Butadiene	Ave	0.2789	0.2980	0.0100	10.7	10.0	6.9	20.0
Bromomethane	Lin2		0.1226	0.0500	10.5	10.0	5.2	20.0
Chloroethane	Ave	0.1688	0.1745	0.0500	10.3	10.0	3.4	20.0
Dichlorofluoromethane	Ave	0.3861	0.4092	0.0100	10.6	10.0	6.0	20.0
Trichlorofluoromethane	Ave	0.3195	0.3532	0.1000	11.1	10.0	10.5	20.0
Ethyl ether	Ave	0.2606	0.2458	0.0100	9.43	10.0	-5.7	20.0
Acrolein	Ave	0.0557	0.0520	0.0100	28.0	30.0	-6.6	20.0
1,1-Dichloroethene	Ave	0.2457	0.2525	0.1000	10.3	10.0	2.7	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2488	0.2549	0.1000	10.2	10.0	2.4	20.0
Acetone	Ave	0.0597	0.0642	0.0500	21.5	20.0	7.6	20.0
Iodomethane	Ave	0.3685	0.3721	0.0100	10.1	10.0	1.0	20.0
Carbon disulfide	Ave	0.5472	0.5112	0.1000	9.34	10.0	-6.6	20.0
Allyl chloride	Ave	0.1364	0.1292	0.0100	9.47	10.0	-5.3	20.0
Methyl acetate	Ave	0.2081	0.2051	0.1000	49.3	50.0	-1.5	20.0
Methylene Chloride	Lin2		0.3215	0.1000	10.3	10.0	2.7	20.0
tert-Butyl alcohol	Ave	1.016	1.125	0.0100	111	100	10.7	20.0
Acrylonitrile	Ave	0.1104	0.1129	0.0100	102	100	2.3	20.0
trans-1,2-Dichloroethene	Ave	0.2761	0.2878	0.1000	10.4	10.0	4.2	20.0
Methyl tert-butyl ether	Ave	0.5600	0.5855	0.1000	10.5	10.0	4.6	20.0
Hexane	Ave	0.4014	0.3983	0.0100	9.92	10.0	-0.8	20.0
1,1-Dichloroethane	Ave	0.4610	0.4746	0.2000	10.3	10.0	3.0	20.0
Vinyl acetate	Ave	0.4211	0.3614	0.0100	8.58	10.0	-14.2	20.0
2,2-Dichloropropane	Ave	0.0480	0.0481	0.0100	10.0	10.0	0.3	20.0
cis-1,2-Dichloroethene	Ave	0.3090	0.3095	0.1000	10.0	10.0	0.2	20.0
2-Butanone (MEK)	Ave	0.1134	0.1059	0.0500	18.7	20.0	-6.6	20.0
Bromochloromethane	Ave	0.1388	0.1374	0.0100	9.90	10.0	-1.0	20.0
Tetrahydrofuran	Ave	0.0880	0.0854	0.0100	19.4	20.0	-3.0	20.0
Chloroform	Ave	0.4279	0.4353	0.2000	10.2	10.0	1.7	20.0
1,1,1-Trichloroethane	Ave	0.2581	0.2826	0.1000	10.9	10.0	9.5	20.0
Cyclohexane	Ave	0.4711	0.4787	0.1000	10.2	10.0	1.6	20.0
Carbon tetrachloride	Ave	0.1724	0.2043	0.1000	11.8	10.0	18.5	20.0
1,1-Dichloropropene	Ave	0.3464	0.3541	0.0100	10.2	10.0	2.2	20.0
Isobutyl alcohol	Ave	0.0059	0.0059*	0.0100	251	250	0.5	20.0
Benzene	Ave	1.112	1.175	0.5000	10.6	10.0	5.7	20.0
1,2-Dichloroethane	Ave	0.3541	0.3629	0.1000	10.2	10.0	2.5	20.0
n-Heptane	Ave	0.3289	0.3410	0.0100	10.4	10.0	3.7	20.0
Trichloroethene	Ave	0.2713	0.2849	0.2000	10.5	10.0	5.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Lab Sample ID: CCVIS 180-192068/2 Calibration Date: 10/23/2016 11:32

Instrument ID: CHHP6 Calib Start Date: 10/17/2016 14:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/17/2016 17:13

Lab File ID: 61023002.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	0.4523	0.4566	0.1000	10.1	10.0	1.0	20.0
1,2-Dichloropropane	Ave	0.2949	0.2922	0.1000	9.91	10.0	-0.9	20.0
1,4-Dioxane	Ave	0.0029	0.0028*	0.0100	188	200	-5.9	20.0
Dibromomethane	Ave	0.1570	0.1630	0.0100	10.4	10.0	3.8	20.0
Bromodichloromethane	Ave	0.2366	0.2530	0.2000	10.7	10.0	6.9	20.0
2-Chloroethyl vinyl ether	Ave	0.1768	0.1634	0.0100	18.5	20.0	-7.6	20.0
cis-1,3-Dichloropropene	Ave	0.3276	0.3247	0.2000	9.91	10.0	-0.9	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9273	0.8125	0.1000	17.5	20.0	-12.4	20.0
Toluene	Ave	4.489	4.891	0.4000	10.9	10.0	9.0	20.0
trans-1,3-Dichloropropene	Ave	1.027	1.016	0.1000	9.90	10.0	-1.0	20.0
Ethyl methacrylate	Ave	1.225	1.187	0.0100	9.69	10.0	-3.1	20.0
1,1,2-Trichloroethane	Ave	0.9594	1.030	0.1000	10.7	10.0	7.4	20.0
Tetrachloroethene	Ave	0.8633	0.9316	0.2000	10.8	10.0	7.9	20.0
1,3-Dichloropropane	Ave	1.784	1.855	0.0100	10.4	10.0	3.9	20.0
2-Hexanone	Ave	0.5554	0.6233	0.1000	22.4	20.0	12.2	20.0
Dibromochloromethane	Ave	0.6051	0.6463	0.1000	10.7	10.0	6.8	20.0
1,2-Dibromoethane (EDB)	Ave	0.8631	0.9233	0.1000	10.7	10.0	7.0	20.0
3-Chlorobenzotrifluoride	Ave	1.488	1.523	0.0100	10.2	10.0	2.3	20.0
Chlorobenzene	Ave	3.046	3.301	0.5000	10.8	10.0	8.4	20.0
4-Chlorobenzotrifluoride	Ave	1.389	1.419	0.0100	10.2	10.0	2.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6779	0.7911	0.0100	11.7	10.0	16.7	20.0
Ethylbenzene	Ave	1.640	1.764	0.1000	10.8	10.0	7.6	20.0
m-Xylene & p-Xylene	Ave	1.992	2.148	0.1000	10.8	10.0	7.8	20.0
o-Xylene	Ave	1.925	2.024	0.3000	10.5	10.0	5.2	20.0
Styrene	Ave	3.193	3.548	0.3000	11.1	10.0	11.1	20.0
Bromoform	Qua		0.3368	0.1000	11.0	10.0	10.0	20.0
2-Chlorobenzotrifluoride	Ave	1.436	1.467	0.0100	10.2	10.0	2.2	20.0
Isopropylbenzene	Ave	4.590	5.027	0.1000	11.0	10.0	9.5	20.0
1,1,2,2-Tetrachloroethane	Ave	1.212	1.317	0.3000	10.9	10.0	8.7	20.0
Bromobenzene	Ave	0.8093	0.7985	0.0100	9.87	10.0	-1.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2098	0.1019	0.0100	4.86	10.0	-51.4*	20.0
1,2,3-Trichloropropane	Ave	0.2719	0.2890	0.0100	10.6	10.0	6.3	20.0
N-Propylbenzene	Ave	0.9391	0.9550	0.0100	10.2	10.0	1.7	20.0
2-Chlorotoluene	Ave	0.8204	0.8197	0.0100	9.99	10.0	-0.0	20.0
3-Chlorotoluene	Ave	0.8891	0.8415	0.0100	9.46	10.0	-5.4	20.0
1,3,5-Trimethylbenzene	Ave	2.586	2.694	0.0100	10.4	10.0	4.2	20.0
4-Chlorotoluene	Ave	0.8952	0.9127	0.0100	10.2	10.0	2.0	20.0
tert-Butylbenzene	Ave	2.191	2.220	0.0100	10.1	10.0	1.3	20.0
1,2,4-Trimethylbenzene	Ave	2.686	2.768	0.0100	10.3	10.0	3.1	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.7585	0.7309	0.0100	9.64	10.0	-3.6	20.0
sec-Butylbenzene	Ave	3.191	3.289	0.0100	10.3	10.0	3.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Lab Sample ID: CCVIS 180-192068/2 Calibration Date: 10/23/2016 11:32

Instrument ID: CHHP6 Calib Start Date: 10/17/2016 14:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/17/2016 17:13

Lab File ID: 61023002.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
1,3-Dichlorobenzene	Ave	1.572	1.608	0.6000	10.2	10.0	2.3	20.0
4-Isopropyltoluene	Ave	2.709	2.884	0.0100	10.6	10.0	6.5	20.0
1,4-Dichlorobenzene	Ave	1.646	1.641	0.5000	9.97	10.0	-0.3	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7408	0.7167	0.0100	9.67	10.0	-3.3	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.8494	0.8027	0.0100	9.45	10.0	-5.5	20.0
n-Butylbenzene	Ave	2.450	2.509	0.0100	10.2	10.0	2.4	20.0
1,2-Dichlorobenzene	Ave	1.546	1.545	0.4000	10.0	10.0	-0.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0751	0.0783	0.0500	10.4	10.0	4.3	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.221	1.186	0.0100	29.1	30.0	-2.9	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.346	1.248	0.0100	18.5	20.0	-7.3	20.0
1,2,4-Trichlorobenzene	Ave	1.045	1.020	0.2000	9.75	10.0	-2.5	20.0
Hexachlorobutadiene	Ave	0.3562	0.3410	0.0100	9.57	10.0	-4.3	20.0
Naphthalene	Ave	2.491	2.470	0.0100	9.92	10.0	-0.8	20.0
1,2,3-Trichlorobenzene	Ave	0.9190	0.8844	0.0100	9.62	10.0	-3.8	20.0
2,4,5-Trichlorotoluene	Ave	0.4320	0.3382	0.0100	7.83	10.0	-21.7*	20.0
2,3,6-Trichlorotoluene	Ave	0.4026	0.3356	0.0100	8.34	10.0	-16.6	20.0
Dibromofluoromethane (Surr)	Ave	0.2135	0.2237		10.5	10.0	4.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2889	0.2906		10.1	10.0	0.6	20.0
Toluene-d8 (Surr)	Ave	3.657	3.981		10.9	10.0	8.8	20.0
4-Bromofluorobenzene (Surr)	Ave	1.377	1.475		10.7	10.0	7.1	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 23-Oct-2016 11:32:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013999-002
Misc. Info.: CCVIS
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 12:57:43 Calib Date: 17-Oct-2016 17:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D

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

First Level Reviewer: fergusond Date: 23-Oct-2016 12:15:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.144	4.144	0.000	87	107438	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.180	7.180	0.000	99	402886	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.289	10.289	0.000	86	101362	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.637	12.637	0.000	95	163672	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.444	6.444	0.000	93	90127	50.0	52.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.821	6.821	0.000	78	117079	50.0	50.3	
$ 7 Toluene-d8 (Surr)	98	8.835	8.835	0.000	93	403522	50.0	54.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.475	11.475	0.000	88	149508	50.0	53.6	
11 Dichlorodifluoromethane	85	1.541	1.541	0.000	99	89731	50.0	48.9	
12 Chloromethane	50	1.699	1.699	0.000	99	114451	50.0	48.7	
13 Vinyl chloride	62	1.833	1.833	0.000	98	110701	50.0	51.6	
14 Butadiene	39	1.869	1.869	0.000	98	120073	50.0	53.4	
15 Bromomethane	94	2.167	2.167	0.000	90	49378	50.0	52.6	
16 Chloroethane	64	2.301	2.301	0.000	99	70291	50.0	51.7	
17 Dichlorofluoromethane	67	2.569	2.569	0.000	94	164840	50.0	53.0	
18 Trichlorofluoromethane	101	2.575	2.575	0.000	95	142283	50.0	55.3	
20 Ethyl ether	59	2.946	2.946	0.000	90	99042	50.0	47.2	
21 Acrolein	56	3.122	3.122	0.000	100	62876	150.0	140.2	
22 1,1-Dichloroethene	96	3.226	3.226	0.000	97	101712	50.0	51.4	
23 1,1,2-Trichloro-1,2,2-trif	101	3.287	3.287	0.000	96	102676	50.0	51.2	
24 Acetone	43	3.317	3.317	0.000	97	51741	100.0	107.6	
25 Iodomethane	142	3.414	3.414	0.000	98	149893	50.0	50.5	
26 Carbon disulfide	76	3.500	3.500	0.000	99	205955	50.0	46.7	
29 3-Chloro-1-propene	76	3.792	3.792	0.000	90	52062	50.0	47.4	
30 Methyl acetate	43	3.804	3.804	0.000	98	413080	250.0	246.3	
31 Methylene Chloride	84	3.998	3.998	0.000	93	129520	50.0	51.3	
32 2-Methyl-2-propanol	59	4.272	4.272	0.000	90	60418	500.0	553.5	
33 Acrylonitrile	53	4.388	4.388	0.000	100	455024	500.0	511.4	
34 trans-1,2-Dichloroethene	96	4.430	4.430	0.000	99	115954	50.0	52.1	
35 Methyl tert-butyl ether	73	4.449	4.449	0.000	96	235875	50.0	52.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.856	4.856	0.000	91	160468	50.0	49.6	
37 1,1-Dichloroethane	63	5.075	5.075	0.000	96	191202	50.0	51.5	
38 Vinyl acetate	43	5.124	5.124	0.000	98	145620	50.0	42.9	
42 2,2-Dichloropropane	97	5.830	5.830	0.000	53	19396	50.0	50.1	
43 cis-1,2-Dichloroethene	96	5.830	5.830	0.000	82	124706	50.0	50.1	
44 2-Butanone (MEK)	43	5.842	5.842	0.000	78	85336	100.0	93.4	
48 Chlorobromomethane	128	6.122	6.122	0.000	97	55360	50.0	49.5	
49 Tetrahydrofuran	42	6.128	6.128	0.000	86	68830	100.0	97.0	
50 Chloroform	83	6.268	6.268	0.000	95	175364	50.0	50.9	
51 1,1,1-Trichloroethane	97	6.426	6.426	0.000	98	113838	50.0	54.7	
52 Cyclohexane	56	6.493	6.493	0.000	93	192867	50.0	50.8	
53 Carbon tetrachloride	117	6.596	6.596	0.000	91	82298	50.0	59.2	
54 1,1-Dichloropropene	75	6.614	6.614	0.000	95	142640	50.0	51.1	
55 Isobutyl alcohol	41	6.821	6.821	0.000	48	59617	1250.0	1255.8	
56 Benzene	78	6.827	6.827	0.000	97	473379	50.0	52.8	
57 1,2-Dichloroethane	62	6.906	6.906	0.000	97	146213	50.0	51.2	
59 n-Heptane	43	7.198	7.198	0.000	91	137379	50.0	51.8	
61 Trichloroethene	130	7.569	7.569	0.000	96	114763	50.0	52.5	
63 Methylcyclohexane	83	7.807	7.807	0.000	88	183974	50.0	50.5	
64 1,2-Dichloropropane	63	7.843	7.843	0.000	92	117710	50.0	49.5	
67 Dibromomethane	93	7.928	7.928	0.000	96	65670	50.0	51.9	
65 1,4-Dioxane	88	7.928	7.928	0.000	44	22275	1000.0	940.7	
68 Dichlorobromomethane	83	8.129	8.129	0.000	99	101920	50.0	53.5	
70 2-Chloroethyl vinyl ether	63	8.433	8.433	0.000	91	131658	100.0	92.4	
71 cis-1,3-Dichloropropene	75	8.573	8.573	0.000	95	130811	50.0	49.6	
72 4-Methyl-2-pentanone (MIBK	43	8.731	8.731	0.000	97	164719	100.0	87.6	
73 Toluene	91	8.902	8.902	0.000	99	495720	50.0	54.5	
74 trans-1,3-Dichloropropene	75	9.157	9.157	0.000	93	103029	50.0	49.5	
75 Ethyl methacrylate	69	9.218	9.218	0.000	88	120294	50.0	48.5	
76 1,1,2-Trichloroethane	97	9.346	9.346	0.000	92	104429	50.0	53.7	
77 Tetrachloroethene	164	9.419	9.419	0.000	98	94429	50.0	54.0	
78 1,3-Dichloropropane	76	9.504	9.504	0.000	92	187978	50.0	52.0	
79 2-Hexanone	43	9.565	9.565	0.000	96	126349	100.0	112.2	
81 Chlorodibromomethane	129	9.717	9.717	0.000	91	65512	50.0	53.4	
82 Ethylene Dibromide	107	9.826	9.826	0.000	100	93588	50.0	53.5	
83 3-Chlorobenzotrifluoride	180	10.301	10.301	0.000	94	154336	50.0	51.2	
84 Chlorobenzene	112	10.319	10.319	0.000	95	334566	50.0	54.2	
85 4-Chlorobenzotrifluoride	180	10.386	10.386	0.000	94	143809	50.0	51.1	
86 1,1,1,2-Tetrachloroethane	131	10.417	10.417	0.000	86	80189	50.0	58.4	
87 Ethylbenzene	106	10.423	10.423	0.000	98	178838	50.0	53.8	
88 m-Xylene & p-Xylene	106	10.550	10.550	0.000	99	217754	50.0	53.9	
89 o-Xylene	106	10.934	10.934	0.000	96	205176	50.0	52.6	
90 Styrene	104	10.958	10.958	0.000	96	359633	50.0	55.6	
91 Bromoform	173	11.134	11.134	0.000	93	34140	50.0	55.0	
92 2-Chlorobenzotrifluoride	180	11.207	11.207	0.000	97	148681	50.0	51.1	
93 Isopropylbenzene	105	11.299	11.299	0.000	96	509511	50.0	54.8	
95 Bromobenzene	156	11.615	11.615	0.000	96	130689	50.0	49.3	
96 1,1,2,2-Tetrachloroethane	83	11.615	11.615	0.000	94	133521	50.0	54.4	
97 trans-1,4-Dichloro-2-buten	53	11.651	11.651	0.000	62	16685	50.0	24.3	
98 1,2,3-Trichloropropane	110	11.670	11.670	0.000	88	47302	50.0	53.1	
99 N-Propylbenzene	120	11.718	11.718	0.000	98	156302	50.0	50.8	
100 2-Chlorotoluene	126	11.804	11.804	0.000	97	134168	50.0	50.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.870	11.870	0.000	95	137725	50.0	47.3	
102 1,3,5-Trimethylbenzene	105	11.901	11.901	0.000	95	440900	50.0	52.1	
103 4-Chlorotoluene	126	11.925	11.925	0.000	97	149386	50.0	51.0	
104 tert-Butylbenzene	119	12.217	12.217	0.000	93	363392	50.0	50.7	
106 1,2,4-Trimethylbenzene	105	12.278	12.278	0.000	97	453112	50.0	51.5	
107 1,2-dichloro-4-(trifluorom	214	12.321	12.321	0.000	98	119624	50.0	48.2	
108 sec-Butylbenzene	105	12.442	12.442	0.000	94	538393	50.0	51.5	
109 1,3-Dichlorobenzene	146	12.558	12.558	0.000	97	263147	50.0	51.2	
110 4-Isopropyltoluene	119	12.594	12.594	0.000	96	471999	50.0	53.2	
111 1,4-Dichlorobenzene	146	12.655	12.655	0.000	94	268563	50.0	49.8	
113 2,4-Dichloro-1-(triflourom	214	12.692	12.692	0.000	97	117297	50.0	48.4	
114 2,5-Dichlorobenzotrifluori	214	12.728	12.728	0.000	97	131385	50.0	47.3	
116 n-Butylbenzene	91	13.002	13.002	0.000	98	410731	50.0	51.2	
117 1,2-Dichlorobenzene	146	13.014	13.014	0.000	95	252940	50.0	50.0	
118 1,2-Dibromo-3-Chloropropan	75	13.805	13.805	0.000	78	12818	50.0	52.2	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.945	13.945	0.000	98	582285	150.0	145.7	
121 2,3- & 3,4- Dichlorotoluen	125	14.365	14.365	0.000	98	408557	100.0	92.7	
122 1,2,4-Trichlorobenzene	180	14.626	14.626	0.000	92	166870	50.0	48.8	
123 Hexachlorobutadiene	225	14.772	14.772	0.000	97	55815	50.0	47.9	
124 Naphthalene	128	14.888	14.888	0.000	97	404197	50.0	49.6	
125 1,2,3-Trichlorobenzene	180	15.113	15.113	0.000	94	144750	50.0	48.1	
126 2,4,5-Trichlorotoluene	159	15.904	15.904	0.000	0	55345	50.0	39.1	
127 2,3,6-Trichlorotoluene	159	16.001	16.001	0.000	93	54926	50.0	41.7	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		100.0	102.2	
S 131 Xylenes, Total	106				0		100.0	106.5	
S 132 1,3-Dichloropropene, Total	1				0		100.0	99.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260VOAPRI_00217	Amount Added:	2.00	Units: uL		
voaWEEmixRest_00001	Amount Added:	2.00	Units: uL		
voaW2cleveRes_00002	Amount Added:	2.00	Units: uL		
voaWKetPriRes_00002	Amount Added:	2.00	Units: uL		
voaWVA1stRest_00009	Amount Added:	2.00	Units: uL		
VOAACROPRI_00007	Amount Added:	6.00	Units: uL		
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent	

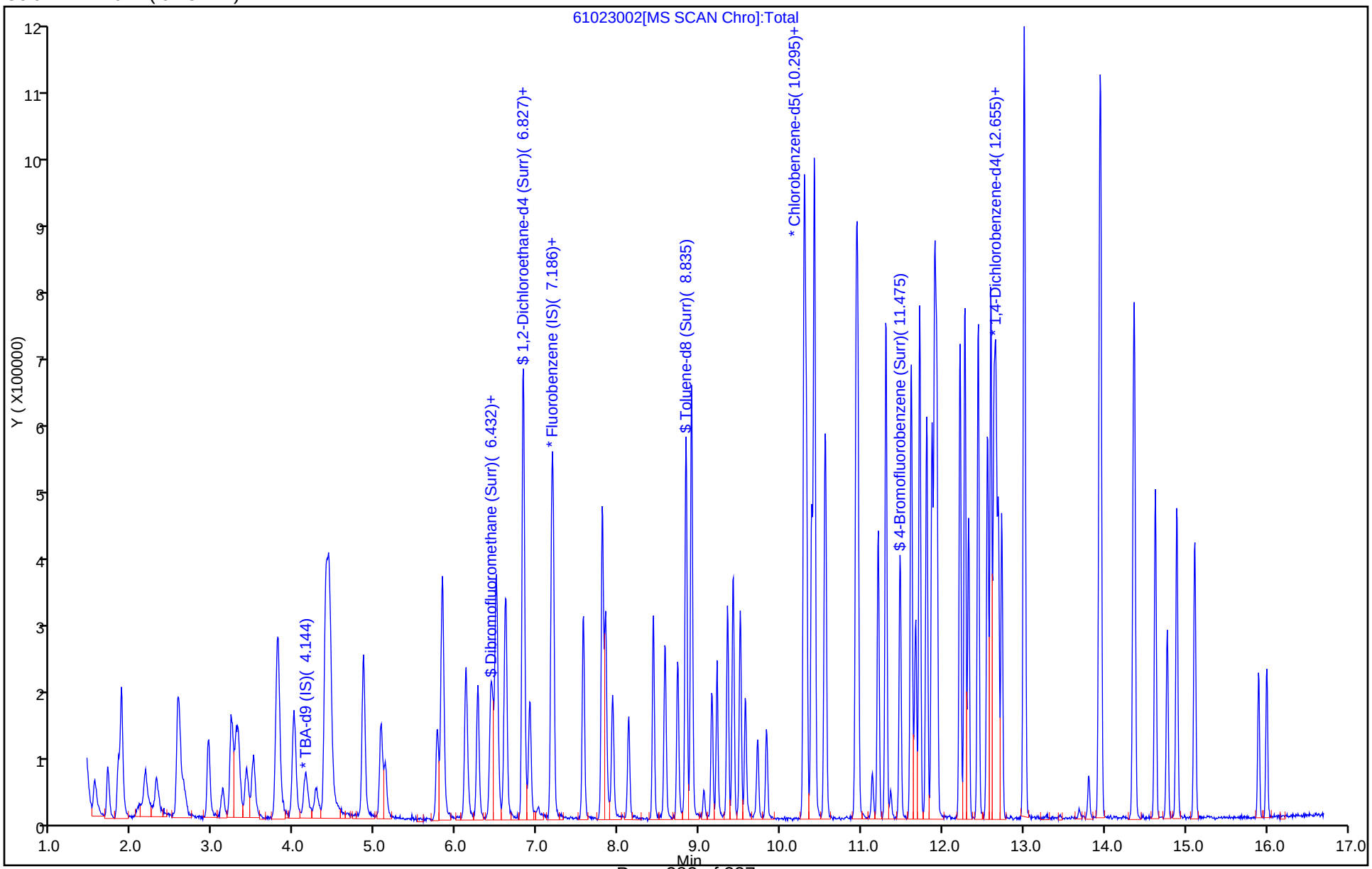
Report Date: 23-Oct-2016 12:57:44 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023002.D

Injection Date:	23-Oct-2016 11:32:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022001.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	22-Oct-2016 12:45:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	180-0013995-001				
Misc. Info.:	BFB				
Operator ID:	001562	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	23-Oct-2016 13:13:24	Calib Date:	22-Oct-2016 17:46:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK002				
First Level Reviewer: fergusond		Date:	22-Oct-2016 13:10:03		

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	57959	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

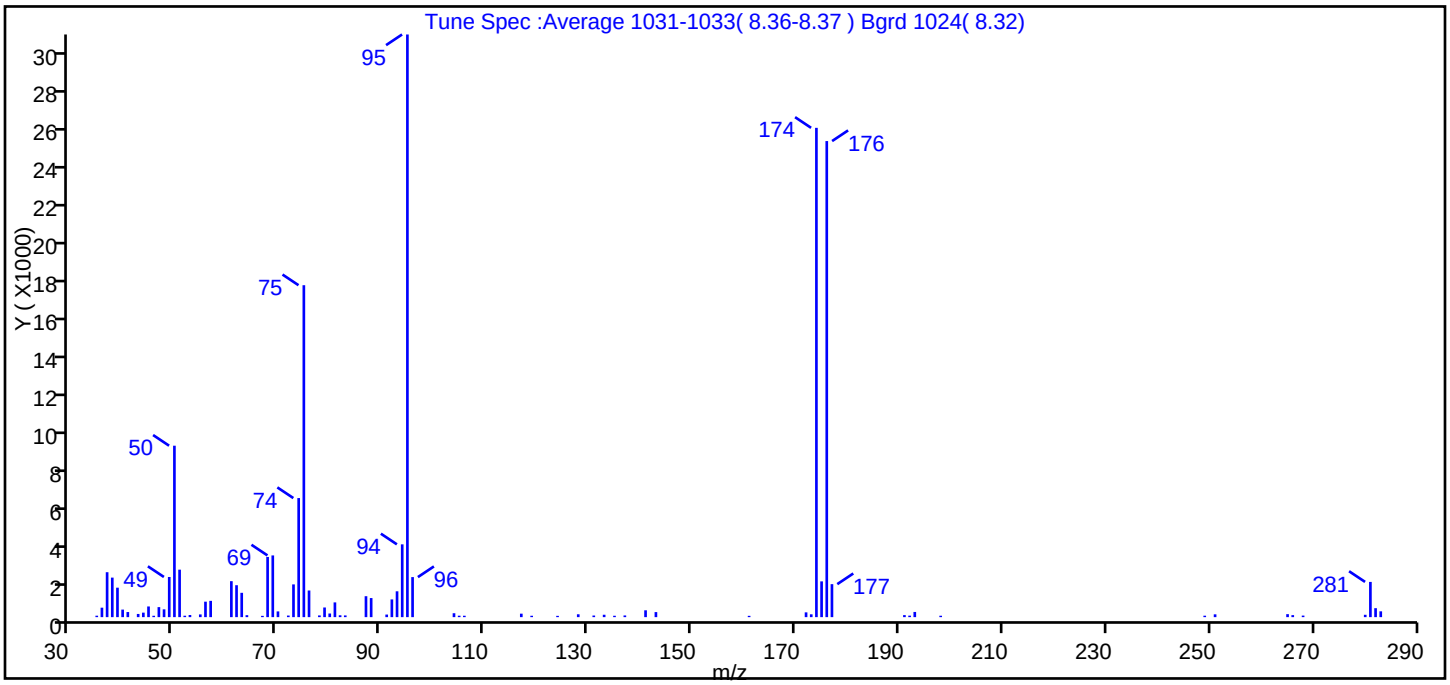
VOABFB25_00080 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022001.D				
Injection Date:	22-Oct-2016 12:45:30	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	29.4
75	30 to 60% of m/z 95	57.0
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	84.0
175	5 to 9% of m/z 174	6.1 (7.3)
176	Greater than 95% but less than 101% of m/z 174	81.7 (97.3)
177	5 to 9% of m/z 176	5.7 (6.9)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022001.D\MSVOA_LL_CHHP5.rslt\spect
Injection Date: 22-Oct-2016 12:45:30
Spectrum: Tune Spec :Average 1031-1033(8.36-8.37) Bgrd 1024(8.32)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 81

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	76	61.00	1893	91.00	136	173.00	149
36.00	498	62.00	1680	92.00	933	174.00	25744
37.00	2364	63.00	1280	93.00	1360	175.00	1882
38.00	2080	64.00	103	94.00	3830	176.00	25048
39.00	1550	67.00	68	95.00	30656	177.00	1736
40.00	397	68.00	3167	96.00	2107	191.00	107
41.00	268	69.00	3247	104.00	206	192.00	79
43.00	168	70.00	302	105.00	76	193.00	273
44.00	237	72.00	84	106.00	74	198.00	74
45.00	562	73.00	1723	117.00	183	249.00	76
46.00	72	74.00	6265	119.00	73	251.00	148
47.00	527	75.00	17464	124.00	68	265.00	157
48.00	411	76.00	1402	128.00	151	266.00	106
49.00	2113	78.00	90	131.00	85	268.00	82
50.00	9020	79.00	508	133.00	126	280.00	124
51.00	2498	80.00	191	135.00	73	281.00	1854
52.00	75	81.00	776	137.00	89	282.00	472
53.00	112	82.00	98	141.00	360	283.00	306
55.00	143	83.00	90	143.00	266		
56.00	814	87.00	1102	161.00	69		
57.00	857	88.00	1004	172.00	252		

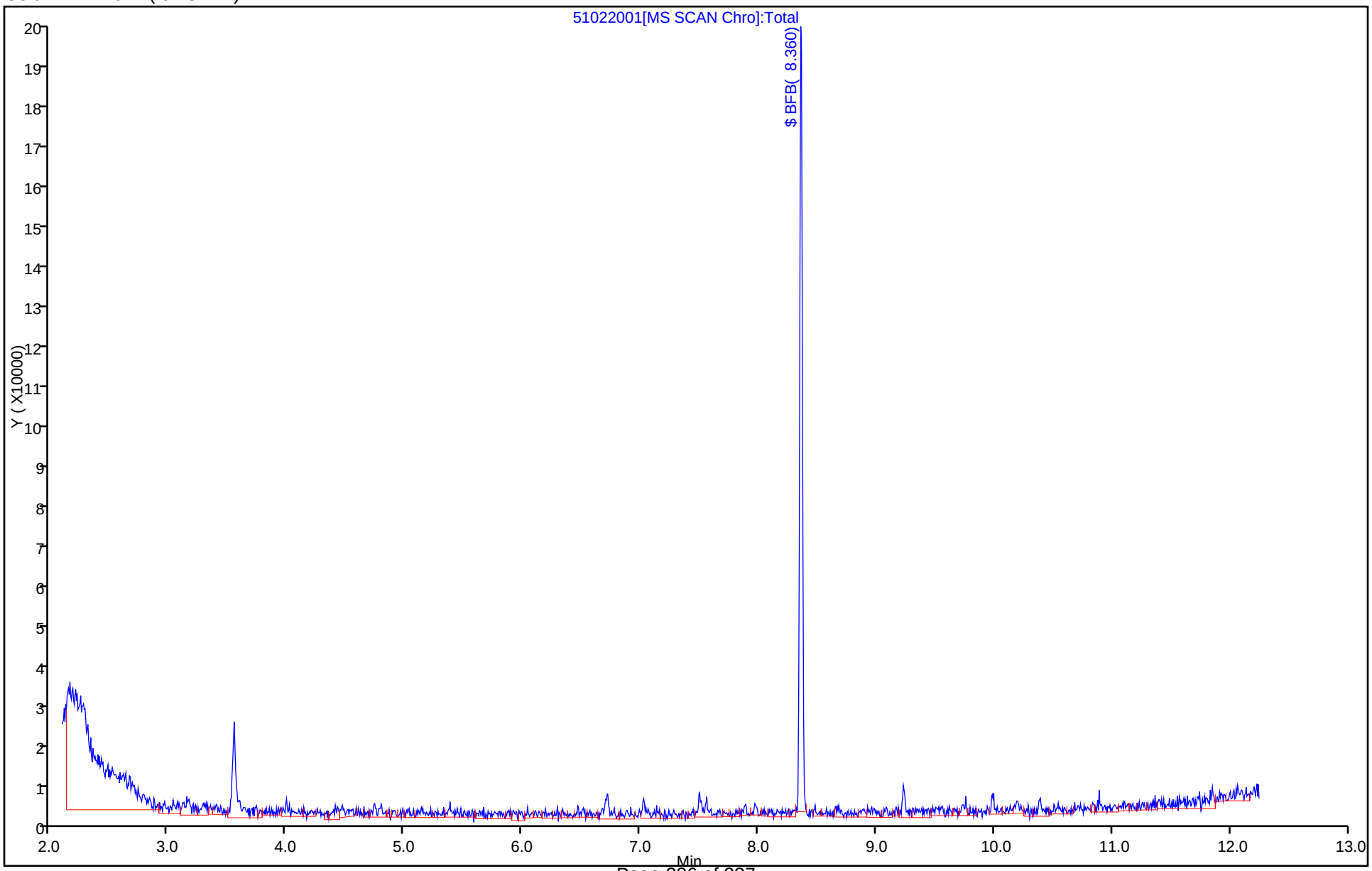
Report Date: 23-Oct-2016 13:13:25 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022001.D

Injection Date:	22-Oct-2016 12:45:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024004.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	24-Oct-2016 10:29:30	ALS Bottle#:	1	Worklist Smp#:	4
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	180-0014019-004				
Misc. Info.:	BFB				
Operator ID:	001562	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	24-Oct-2016 13:06:31	Calib Date:	22-Oct-2016 17:46:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK018				
First Level Reviewer: fergusond		Date:	24-Oct-2016 10:45:26		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.355	8.355	0.000	0	60677	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

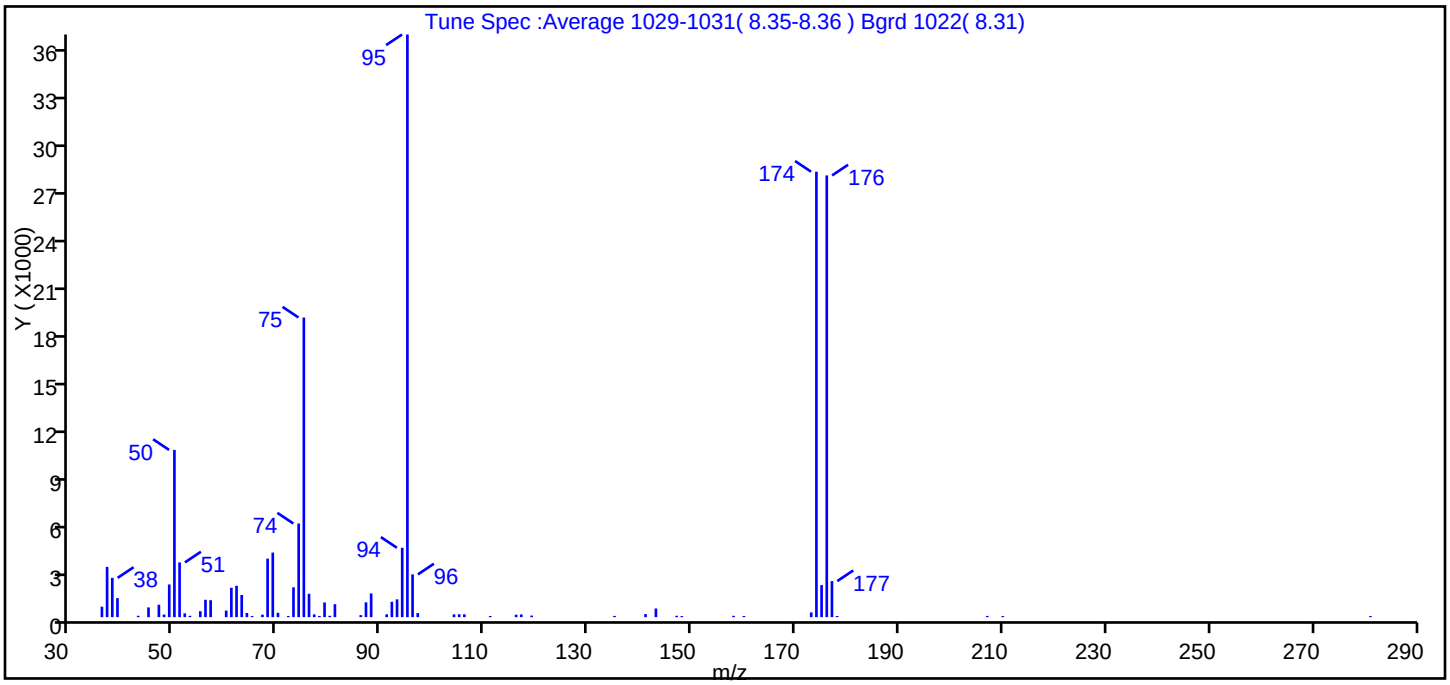
VOABFB25_00080 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024004.D
Injection Date: 24-Oct-2016 10:29:30 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	28.7
75	30 to 60% of m/z 95	51.4
96	5 to 9% of m/z 95	7.3
173	Less than 2% of m/z 174	0.8 (1.1)
174	50 to 120% of m/z 95	76.5
175	5 to 9% of m/z 174	5.5 (7.2)
176	Greater than 95% but less than 101% of m/z 174	75.8 (99.2)
177	5 to 9% of m/z 176	6.2 (8.2)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024004.D\MSVOA_LL_CHHP5.rslt\spect
Injection Date: 24-Oct-2016 10:29:30
Spectrum: Tune Spec :Average 1029-1031(8.35-8.36) Bgrd 1022(8.31)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 69

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	651	62.00	1950	86.00	125	141.00	189
37.00	3128	63.00	1379	87.00	921	143.00	538
38.00	2443	64.00	258	88.00	1474	147.00	86
39.00	1182	65.00	69	91.00	175	148.00	68
43.00	86	67.00	152	92.00	956	158.00	82
45.00	605	68.00	3641	93.00	1106	160.00	74
47.00	771	69.00	4018	94.00	4316	173.00	292
48.00	162	70.00	271	95.00	36248	174.00	27712
49.00	2033	72.00	72	96.00	2659	175.00	1994
50.00	10403	73.00	1856	97.00	251	176.00	27480
51.00	3405	74.00	5825	104.00	172	177.00	2243
52.00	236	75.00	18640	105.00	180	178.00	72
53.00	84	76.00	1452	106.00	175	207.00	75
55.00	368	77.00	172	111.00	74	210.00	67
56.00	1078	78.00	74	116.00	152	281.00	67
57.00	1054	79.00	913	117.00	166		
60.00	409	80.00	83	119.00	98		
61.00	1825	81.00	805	135.00	76		

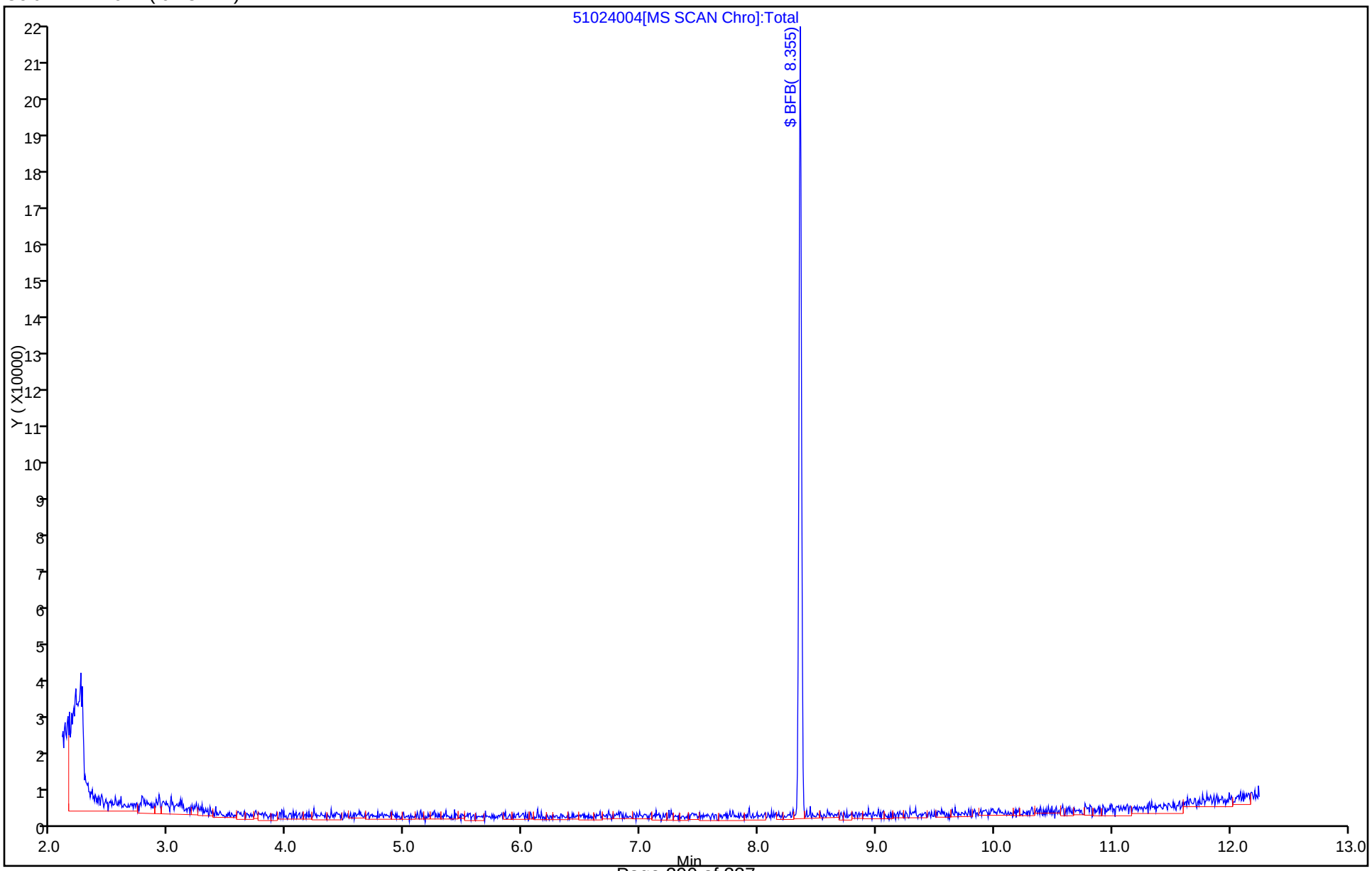
Report Date: 24-Oct-2016 13:06:32 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024004.D

Injection Date:	24-Oct-2016 10:29:30	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\CHHP6\20161018-13923.b\61017001.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	17-Oct-2016 11:29:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	180-0013909-001				
Misc. Info.:	BFB				
Operator ID:	001562	Instrument ID:	CHHP6		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\MSVOA_LL_CHHP6.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	18-Oct-2016 11:22:48	Calib Date:	17-Oct-2016 17:13:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK008				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.289	7.564	0.725	0	56183	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

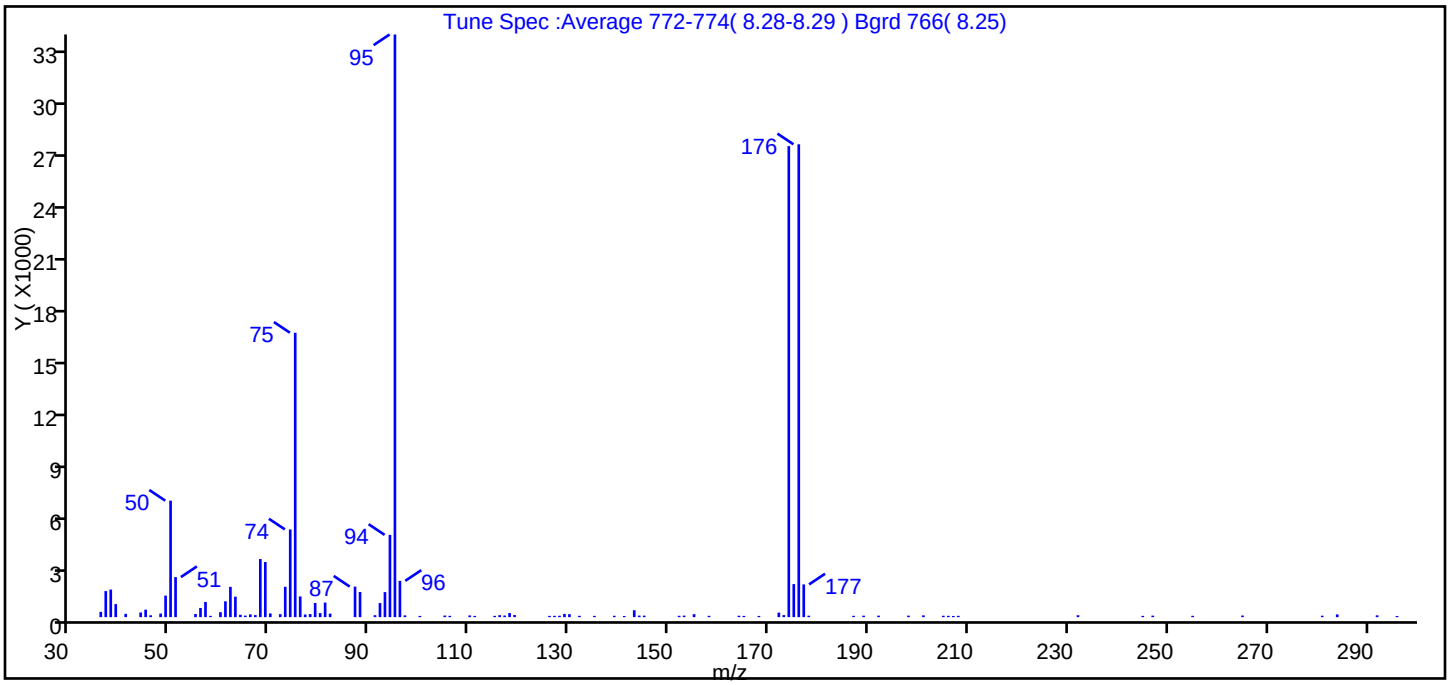
VOABFB25_00080 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017001.D
Injection Date: 17-Oct-2016 11:29:30 Instrument ID: CHHP6
Lims ID: BFB
Client ID:
Operator ID: 001562 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.0
75	30 to 60% of m/z 95	48.8
96	5 to 9% of m/z 95	6.2
173	Less than 2% of m/z 174	0.4 (0.4)
174	50 to 120% of m/z 95	80.8
175	5 to 9% of m/z 174	5.7 (7.0)
176	Greater than 95% but less than 101% of m/z 174	81.2 (100.4)
177	5 to 9% of m/z 176	5.6 (6.9)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017001.D\MSVOA_LL_CHHP6.rslt\spect
Injection Date: 17-Oct-2016 11:29:30
Spectrum: Tune Spec :Average 772-774(8.28-8.29) Bgrd 766(8.25)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 101

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	299	70.00	210	115.00	73	174.00	26696
37.00	1476	72.00	168	116.00	113	175.00	1873
38.00	1565	73.00	1722	117.00	92	176.00	26800
39.00	740	74.00	4972	118.00	231	177.00	1856
41.00	188	75.00	16121	119.00	120	178.00	84
44.00	264	76.00	1174	126.00	72	187.00	76
45.00	426	77.00	150	127.00	75	189.00	84
46.00	104	78.00	174	128.00	79	192.00	85
48.00	204	79.00	801	129.00	182	198.00	87
49.00	1220	80.00	228	130.00	167	201.00	102
50.00	6603	81.00	826	132.00	76	205.00	79
51.00	2271	82.00	199	135.00	74	206.00	77
55.00	178	87.00	1731	139.00	78	207.00	67
56.00	518	88.00	1423	141.00	67	208.00	76
57.00	861	91.00	111	143.00	393	232.00	109
58.00	75	92.00	799	144.00	88	245.00	72
60.00	281	93.00	1419	145.00	86	247.00	86
61.00	897	94.00	4663	152.00	77	255.00	76
62.00	1716	95.00	33024	153.00	88	265.00	92
63.00	1161	96.00	2057	155.00	167	281.00	81
64.00	132	97.00	99	158.00	76	284.00	156
65.00	88	100.00	70	164.00	80	292.00	102
66.00	158	105.00	91	165.00	70	296.00	67
67.00	116	106.00	75	168.00	69		
68.00	3293	110.00	97	172.00	256		
69.00	3123	111.00	71	173.00	117		

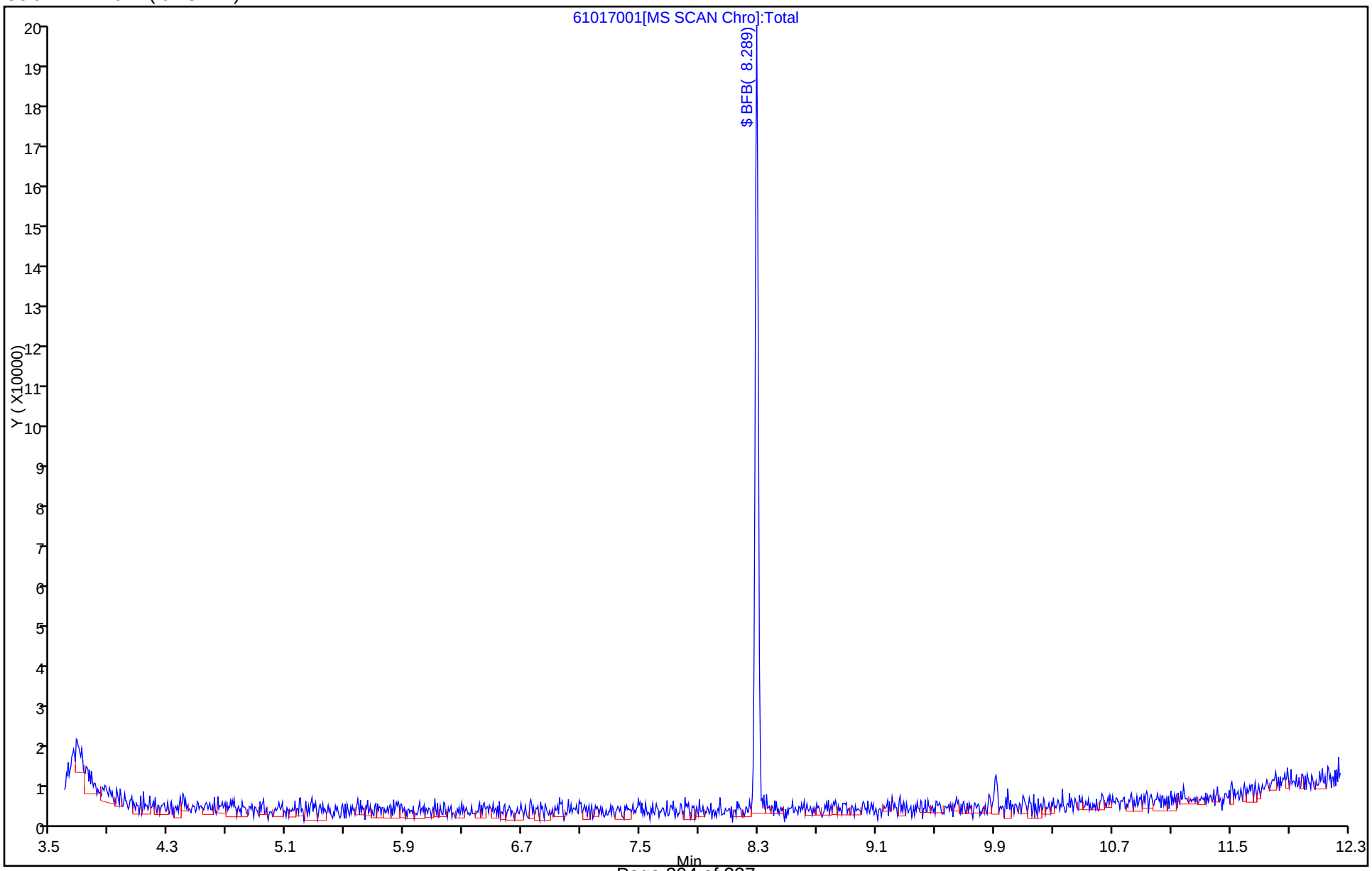
Report Date: 18-Oct-2016 11:22:50 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017001.D

Injection Date:	17-Oct-2016 11:29:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023001.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	23-Oct-2016 10:53:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	180-0013999-001				
Misc. Info.:	BFB				
Operator ID:	001562	Instrument ID:	CHHP6		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\MSVOA_LL_CHHP6.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	23-Oct-2016 12:57:42	Calib Date:	17-Oct-2016 17:13:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK002				
First Level Reviewer: fergusond		Date:	23-Oct-2016 11:20:55		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.289	8.289	0.000	0	55297	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

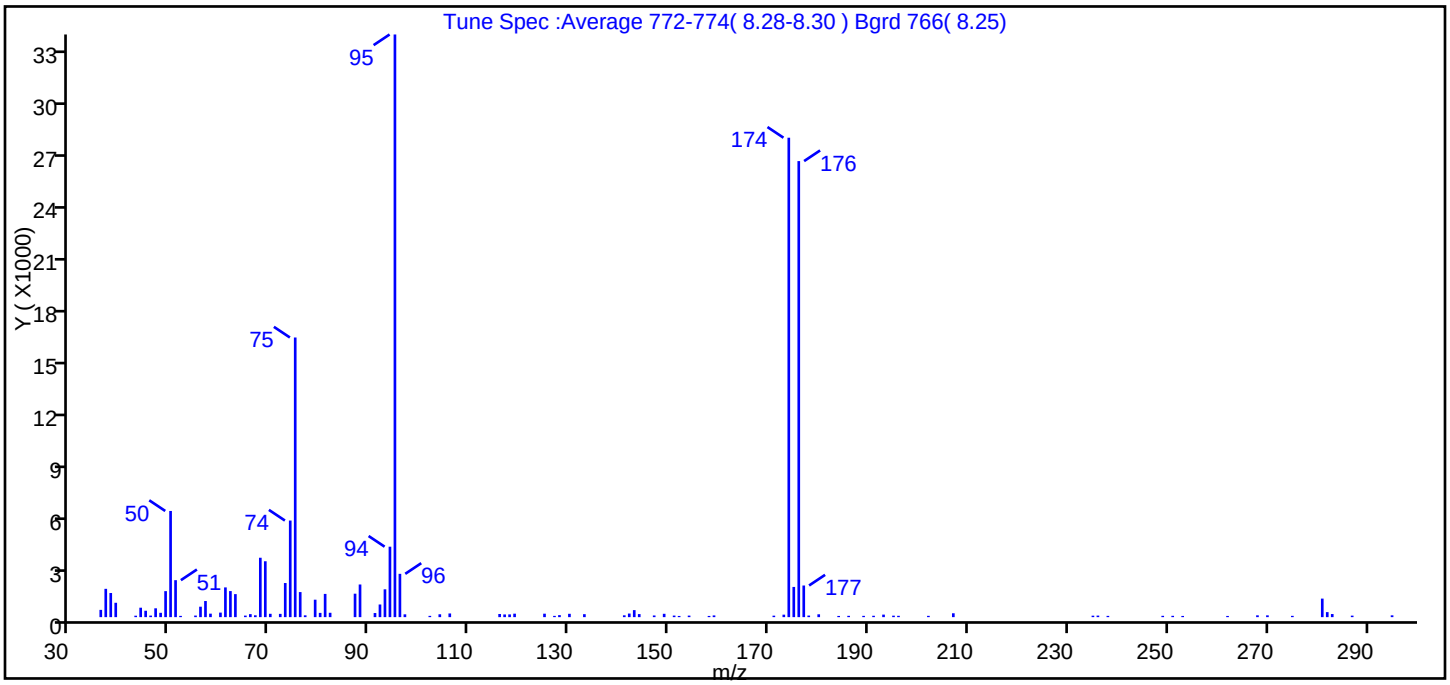
VOABFB25_00080 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023001.D
Injection Date: 23-Oct-2016 10:53:30 Instrument ID: CHHP6
Lims ID: BFB
Client ID:
Operator ID: 001562 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.2
75	30 to 60% of m/z 95	48.0
96	5 to 9% of m/z 95	7.4
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	82.3
175	5 to 9% of m/z 174	5.2 (6.3)
176	Greater than 95% but less than 101% of m/z 174	78.3 (95.1)
177	5 to 9% of m/z 176	5.4 (6.9)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023001.D\MSVOA_LL_CHHP6.rslt\spect
Injection Date: 23-Oct-2016 10:53:30
Spectrum: Tune Spec :Average 772-774(8.28-8.30) Bgrd 766(8.25)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 102

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	413	69.00	3174	118.00	156	184.00	69
37.00	1608	70.00	190	119.00	197	186.00	75
38.00	1371	72.00	186	125.00	196	189.00	73
39.00	816	73.00	1938	127.00	72	191.00	78
43.00	82	74.00	5487	128.00	115	193.00	144
44.00	536	75.00	15884	130.00	190	195.00	84
45.00	363	76.00	1424	133.00	169	196.00	76
46.00	88	77.00	103	141.00	104	202.00	74
47.00	502	79.00	991	142.00	204	207.00	220
48.00	246	80.00	242	143.00	399	235.00	83
49.00	1477	81.00	1320	144.00	174	236.00	88
50.00	6031	82.00	248	147.00	95	238.00	72
51.00	2100	87.00	1332	149.00	190	249.00	75
52.00	72	88.00	1855	151.00	89	251.00	75
55.00	90	91.00	234	152.00	68	253.00	69
56.00	593	92.00	719	154.00	87	262.00	68
57.00	915	93.00	1581	158.00	69	268.00	103
58.00	198	94.00	4002	159.00	98	270.00	102
60.00	258	95.00	33096	171.00	84	275.00	74
61.00	1689	96.00	2460	173.00	141	281.00	1053
62.00	1480	97.00	160	174.00	27232	282.00	285
63.00	1308	102.00	73	175.00	1716	283.00	177
65.00	88	104.00	163	176.00	25904	287.00	86
66.00	171	106.00	209	177.00	1797	295.00	103
67.00	105	116.00	179	178.00	90		
68.00	3374	117.00	153	180.00	162		

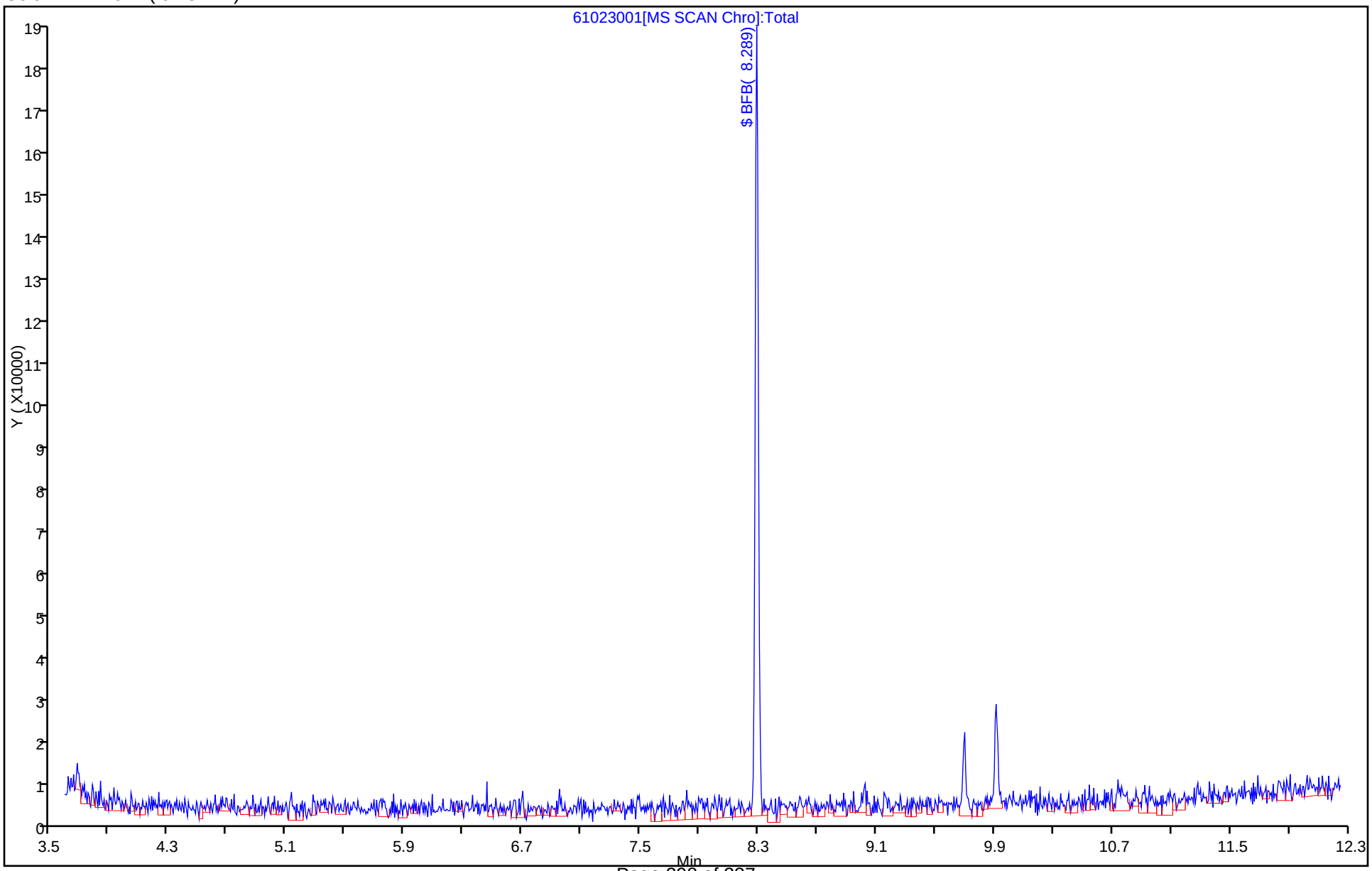
Report Date: 23-Oct-2016 12:57:42 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023001.D

Injection Date:	23-Oct-2016 10:53:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-192068/4

Matrix: Water | Lab File ID: 61023004.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/23/2016 12:36

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.: 192068 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	1.0	U	1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	1.0	U	1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-192068/4

Matrix: Water | Lab File ID: 61023004.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/23/2016 12:36

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.: 192068 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		72-134
2037-26-5	Toluene-d8 (Surr)	107		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		72-120
1868-53-7	Dibromofluoromethane (Surr)	92		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023004.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 23-Oct-2016 12:36:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013999-004
Misc. Info.: MB
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 14:07:50 Calib Date: 17-Oct-2016 17:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D

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

First Level Reviewer: fergusond Date: 23-Oct-2016 14:07:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.132	4.144	-0.012	92	81668	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.180	7.180	0.000	99	390892	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.289	10.289	0.000	87	89898	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.637	12.637	0.000	96	133323	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.450	6.444	0.006	93	76743	50.0	46.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.821	6.821	0.000	68	106311	50.0	47.1	
$ 7 Toluene-d8 (Surr)	98	8.835	8.835	0.000	93	352149	50.0	53.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.475	11.475	0.000	88	119300	50.0	48.2	
11 Dichlorodifluoromethane	85		1.541					ND	
12 Chloromethane	50		1.699					ND	
13 Vinyl chloride	62		1.833					ND	
14 Butadiene	39		1.869					ND	
15 Bromomethane	94		2.167					ND	
16 Chloroethane	64		2.301					ND	
17 Dichlorofluoromethane	67		2.569					ND	
18 Trichlorofluoromethane	101		2.575					ND	
19 Ethanol	45		2.819					ND	
20 Ethyl ether	59		2.946					ND	
21 Acrolein	56		3.122					ND	
22 1,1-Dichloroethene	96		3.226					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.287					ND	
24 Acetone	43		3.317					ND	
25 Iodomethane	142		3.414					ND	
26 Carbon disulfide	76		3.500					ND	
27 Isopropyl alcohol	45		3.609					ND	
28 Acetonitrile	40	3.798	3.774	0.024	2	1440			NC
29 3-Chloro-1-propene	76		3.792					ND	
30 Methyl acetate	43		3.804					ND	
31 Methylene Chloride	84		3.998					ND	
32 2-Methyl-2-propanol	59		4.272					ND	
33 Acrylonitrile	53		4.388					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		4.430					ND	
35 Methyl tert-butyl ether	73		4.449					ND	
36 Hexane	57		4.856					ND	
37 1,1-Dichloroethane	63		5.075					ND	
39 2-Chloro-1,3-butadiene	53		5.093					ND	
40 Isopropyl ether	45		5.094					ND	
38 Vinyl acetate	43		5.124					ND	
41 Tert-butyl ethyl ether	59		5.580					ND	
43 cis-1,2-Dichloroethene	96		5.830					ND	
42 2,2-Dichloropropane	97		5.830					ND	
44 2-Butanone (MEK)	43		5.842					ND	
46 Ethyl acetate	43		5.842					ND	
45 Propionitrile	54		5.848					ND	
47 Methacrylonitrile	41	6.128	6.079	0.049	1	100			NC
48 Chlorobromomethane	128		6.122					ND	
49 Tetrahydrofuran	42		6.128					ND	
50 Chloroform	83		6.268					ND	
51 1,1,1-Trichloroethane	97		6.426					ND	
52 Cyclohexane	56		6.493					ND	
53 Carbon tetrachloride	117		6.596					ND	
54 1,1-Dichloropropene	75		6.614					ND	
55 Isobutyl alcohol	41		6.821					ND	
56 Benzene	78		6.827					ND	
57 1,2-Dichloroethane	62		6.906					ND	
148 Isooctane	57		6.907					ND	
58 Tert-amyl methyl ether	73	7.174	7.132	0.042	37	5469			NC
59 n-Heptane	43		7.198					ND	
60 n-Butanol	56		7.436					ND	
61 Trichloroethene	130		7.569					ND	
66 Methyl methacrylate	69		7.801					ND	
62 Ethyl acrylate	55		7.801					ND	
63 Methylcyclohexane	83		7.807					ND	
64 1,2-Dichloropropane	63		7.843					ND	
65 1,4-Dioxane	88		7.928					ND	
67 Dibromomethane	93		7.928					ND	
68 Dichlorobromomethane	83		8.129					ND	
69 2-Nitropropane	41		8.367					ND	
70 2-Chloroethyl vinyl ether	63		8.433					ND	
71 cis-1,3-Dichloropropene	75		8.573					ND	
72 4-Methyl-2-pentanone (MIBK	43		8.731					ND	
73 Toluene	91		8.902					ND	
74 trans-1,3-Dichloropropene	75		9.157					ND	
75 Ethyl methacrylate	69		9.218					ND	
76 1,1,2-Trichloroethane	97		9.346					ND	
77 Tetrachloroethene	164		9.419					ND	
78 1,3-Dichloropropane	76		9.504					ND	
79 2-Hexanone	43		9.565					ND	
80 n-Butyl acetate	43	9.662	9.565	0.097	1	84			NC
81 Chlorodibromomethane	129		9.717					ND	
82 Ethylene Dibromide	107		9.826					ND	
83 3-Chlorobenzotrifluoride	180		10.301					ND	
84 Chlorobenzene	112		10.319					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
85 4-Chlorobenzotrifluoride	180		10.386					ND	
86 1,1,1,2-Tetrachloroethane	131		10.417					ND	
87 Ethylbenzene	106		10.423					ND	
88 m-Xylene & p-Xylene	106		10.550					ND	
89 o-Xylene	106		10.934					ND	
90 Styrene	104		10.958					ND	
91 Bromoform	173		11.134					ND	
129 Cyclohexanol	57		11.153					ND	
92 2-Chlorobenzotrifluoride	180		11.207					ND	
93 Isopropylbenzene	105		11.299					ND	
94 Cyclohexanone	55		11.360					ND	
95 Bromobenzene	156		11.615					ND	
96 1,1,2,2-Tetrachloroethane	83		11.615					ND	
97 trans-1,4-Dichloro-2-buten	53		11.651					ND	
98 1,2,3-Trichloropropane	110		11.670					ND	
99 N-Propylbenzene	120		11.718					ND	
100 2-Chlorotoluene	126		11.804					ND	
101 3-Chlorotoluene	126		11.870					ND	
102 1,3,5-Trimethylbenzene	105		11.901					ND	
103 4-Chlorotoluene	126		11.925					ND	
104 tert-Butylbenzene	119		12.217					ND	
106 1,2,4-Trimethylbenzene	105		12.278					ND	
107 1,2-dichloro-4-(trifluorom	214		12.321					ND	
105 Pentachloroethane	167		12.321					ND	
112 1,2,3-Trimethylbenzene	105		12.437					ND	
108 sec-Butylbenzene	105		12.442					ND	
109 1,3-Dichlorobenzene	146		12.558					ND	
110 4-Isopropyltoluene	119		12.594					ND	
111 1,4-Dichlorobenzene	146		12.655					ND	
113 2,4-Dichloro-1-(triflourom	214		12.692					ND	
114 2,5-Dichlorobenzotrifluori	214		12.728					ND	
115 Benzyl chloride	91		12.729					ND	
116 n-Butylbenzene	91		13.002					ND	
117 1,2-Dichlorobenzene	146		13.014					ND	
118 1,2-Dibromo-3-Chloropropan	75		13.805					ND	
119 2,4- & 2,5- & 2,6- Dichlor	125		13.945					ND	
120 1,3,5-Trichlorobenzene	180		13.948					ND	
121 2,3- & 3,4- Dichlorotoluen	125		14.365					ND	
122 1,2,4-Trichlorobenzene	180		14.626					ND	
123 Hexachlorobutadiene	225		14.772					ND	
124 Naphthalene	128		14.888					ND	
125 1,2,3-Trichlorobenzene	180		15.113					ND	
126 2,4,5-Trichlorotoluene	159		15.904					ND	
128 2-Methylnaphthalene	142		15.983					ND	
127 2,3,6-Trichlorotoluene	159		16.001					ND	
150 Tert-butyl ethyl ether (TI	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	
151 Tert-amyl methyl ether (TI	1		0.000					ND	
143 2,5-Dichlorotoluene	1		0.000					ND	
149 Isopropyl ether TIC	1		0.000					ND	
144 2,4-Dichlorotoluene	1		0.000					ND	
147 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
146 3,4-Dichlorotoluene	1		0.000					ND	
153 1,2 Epoxybutane TIC	1		0.000					ND	
145 2,3-Dichlorotoluene	1		0.000					ND	
S 131 Xylenes, Total	106		1.000					ND	
S 130 1,2-Dichloroethene, Total	96		1.000					ND	
S 132 1,3-Dichloropropene, Total	1		0.000					ND	
T 135 Mesityl oxide TIC	83		0.000					ND	
T 134 Methyl n-amyl ketone TIC	43		0.000					ND	
T 133 Tetrahydrofuran TIC	42		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent

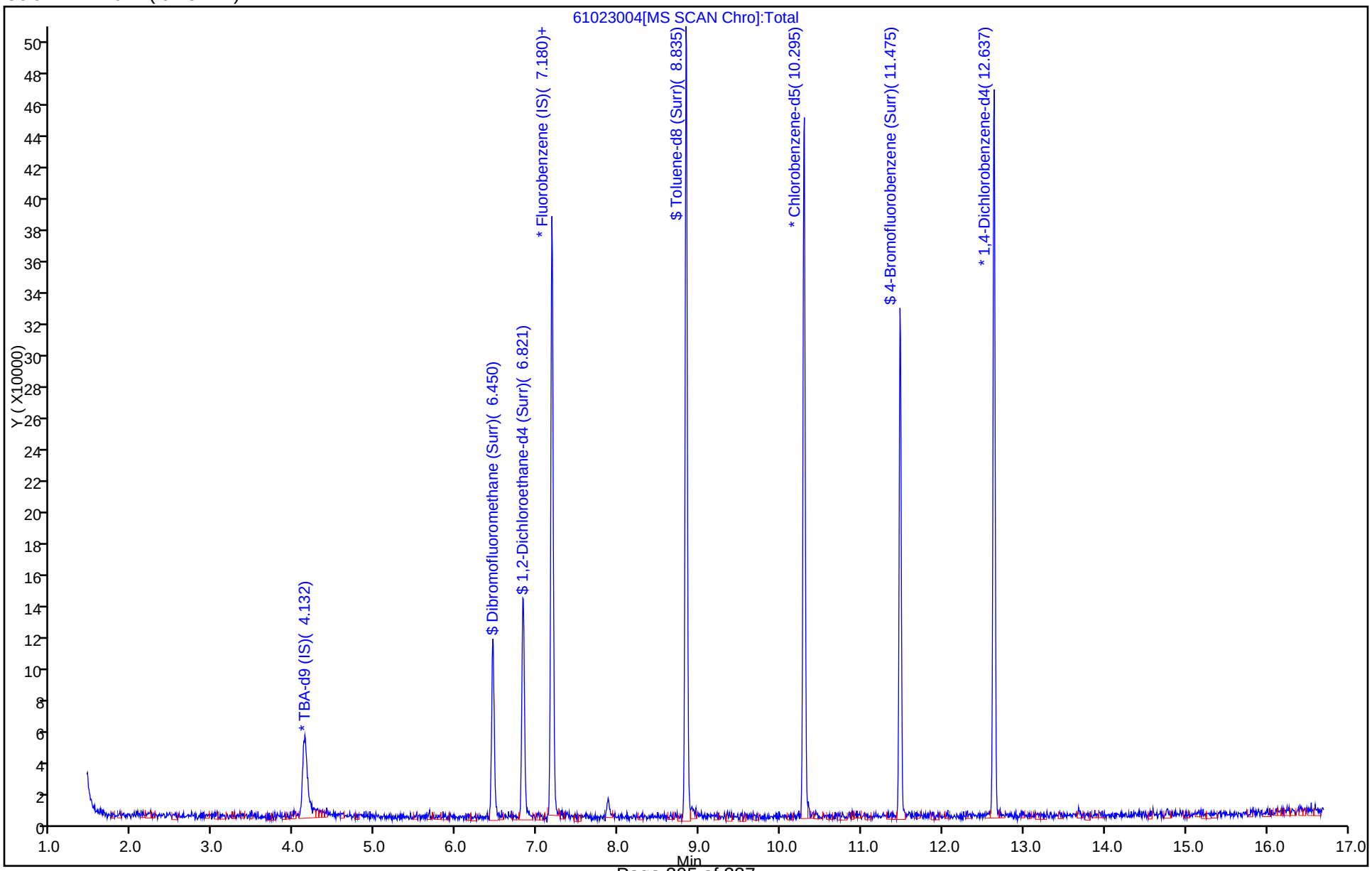
Report Date: 23-Oct-2016 14:07:50 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023004.D

Injection Date:	23-Oct-2016 12:36:30	Instrument ID:	CHHP6	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_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023004.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 23-Oct-2016 12:36:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013999-004
Misc. Info.: MB
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 14:07:50 Calib Date: 17-Oct-2016 17:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D

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

First Level Reviewer: fergusond Date: 23-Oct-2016 14:07:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	46.0	91.95
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.1	94.14
$ 7 Toluene-d8 (Surr)	50.0	53.6	107.11
$ 8 4-Bromofluorobenzene (Surr)	50.0	48.2	96.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-192156/5

Matrix: Water | Lab File ID: 51024005.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/24/2016 12:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 192156 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	1.0	U	1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	1.0	U	1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-192156/5

Matrix: Water | Lab File ID: 51024005.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/24/2016 12:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 192156 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		72-134
2037-26-5	Toluene-d8 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	102		72-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024005.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 24-Oct-2016 12:05:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014019-005
Misc. Info.: MB
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 24-Oct-2016 14:04:23 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: fergusond Date: 24-Oct-2016 14:04:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.266	4.272	-0.006	0	115527	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.272	7.271	0.001	97	362365	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	90	88488	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.722	0.000	97	138117	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.548	6.547	0.001	92	84548	50.0	48.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.919	6.918	0.001	0	127339	50.0	50.9	
$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	96	329329	50.0	49.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	85	137948	50.0	51.1	
11 Dichlorodifluoromethane	85		1.601					ND	
12 Chloromethane	50		1.766					ND	
13 Vinyl chloride	62		1.912					ND	
14 Butadiene	39		1.936					ND	
15 Bromomethane	94		2.234					ND	
16 Chloroethane	64		2.374					ND	
17 Dichlorofluoromethane	67		2.654					ND	
18 Trichlorofluoromethane	101		2.666					ND	
19 Ethanol	45		2.954					ND	
20 Ethyl ether	59		3.043					ND	
21 Acrolein	56		3.226					ND	
22 1,1-Dichloroethene	96		3.323					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.396					ND	
24 Acetone	43		3.445					ND	
25 Iodomethane	142		3.524					ND	
26 Carbon disulfide	76		3.615					ND	
27 Isopropyl alcohol	45		3.721					ND	
29 Acetonitrile	41		3.873					ND	
28 3-Chloro-1-propene	76		3.901					ND	
30 Methyl acetate	43		3.931					ND	
31 Methylene Chloride	84		4.126					ND	
32 2-Methyl-2-propanol	59		4.412					ND	
33 Acrylonitrile	53		4.509					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		4.552					ND	
35 Methyl tert-butyl ether	73		4.570					ND	
36 Hexane	57		4.966					ND	
37 1,1-Dichloroethane	63		5.185					ND	
38 Vinyl acetate	43		5.233					ND	
39 2-Chloro-1,3-butadiene	53		5.284					ND	
41 Isopropyl ether	45		5.290					ND	
40 Isopropyl ether TIC	45		5.410					ND	
42 Tert-butyl ethyl ether	59		5.759					ND	
45 cis-1,2-Dichloroethene	96		5.927					ND	
44 2,2-Dichloropropane	97		5.933					ND	
46 2-Butanone (MEK)	43		5.945					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
47 Propionitrile	54		6.020					ND	
48 Ethyl acetate	43		6.026					ND	
50 Methacrylonitrile	41		6.203					ND	
49 Chlorobromomethane	128		6.219					ND	
51 Tetrahydrofuran	42		6.243					ND	
52 Chloroform	83		6.359					ND	
53 1,1,1-Trichloroethane	97		6.517					ND	
54 Cyclohexane	56		6.590					ND	
56 Carbon tetrachloride	117		6.693					ND	
55 1,1-Dichloropropene	75		6.712					ND	
57 Isobutyl alcohol	41		6.912					ND	
58 Benzene	78		6.924					ND	
59 1,2-Dichloroethane	62		7.004					ND	
151 Isooctane	57		7.085					ND	
61 Tert-amyl methyl ether	73		7.109					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
62 n-Heptane	43		7.283					ND	
63 n-Butanol	56		7.632					ND	
64 Trichloroethene	130		7.661					ND	
65 Ethyl acrylate	55		7.785					ND	
66 Methylcyclohexane	83		7.892					ND	
67 1,2-Dichloropropane	63		7.934					ND	
70 1,4-Dioxane	88		8.019					ND	
69 Methyl methacrylate	69		8.022					ND	
68 Dibromomethane	93		8.026					ND	
71 Dichlorobromomethane	83		8.214					ND	
72 2-Nitropropane	41		8.448					ND	
73 2-Chloroethyl vinyl ether	63		8.518					ND	
74 cis-1,3-Dichloropropene	75		8.658					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.816					ND	
76 Toluene	91		8.993					ND	
77 trans-1,3-Dichloropropene	75		9.236					ND	
78 Ethyl methacrylate	69		9.297					ND	
79 1,1,2-Trichloroethane	97		9.431					ND	
80 Tetrachloroethene	164		9.504					ND	
81 1,3-Dichloropropane	76		9.589					ND	
82 2-Hexanone	43		9.650					ND	
83 n-Butyl acetate	43		9.774					ND	
84 Chlorodibromomethane	129		9.802					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
85 Ethylene Dibromide	107		9.917					ND	
86 3-Chlorobenzotrifluoride	180		10.380					ND	
87 Chlorobenzene	112		10.404					ND	
88 4-Chlorobenzotrifluoride	180		10.465					ND	
89 1,1,1,2-Tetrachloroethane	131		10.495					ND	
90 Ethylbenzene	106		10.502					ND	
91 m-Xylene & p-Xylene	106		10.635					ND	
92 o-Xylene	106		11.013					ND	
93 Styrene	104		11.037					ND	
94 Bromoform	173		11.219					ND	
95 Cyclohexanol	57		11.244					ND	
96 2-Chlorobenzotrifluoride	180		11.286					ND	
97 Isopropylbenzene	105		11.384					ND	
98 Cyclohexanone	55		11.477					ND	
100 Bromobenzene	156		11.700					ND	
99 1,1,2,2-Tetrachloroethane	83		11.700					ND	
102 trans-1,4-Dichloro-2-buten	53		11.736					ND	
101 1,2,3-Trichloropropane	110		11.755					ND	
103 N-Propylbenzene	120		11.797					ND	
104 2-Chlorotoluene	126		11.889					ND	
105 3-Chlorotoluene	126		11.955					ND	
106 1,3,5-Trimethylbenzene	105		11.986					ND	
107 4-Chlorotoluene	126		12.010					ND	
108 tert-Butylbenzene	119		12.296					ND	
110 1,2,4-Trimethylbenzene	105		12.357					ND	
109 Pentachloroethane	167		12.402					ND	
111 1,2-dichloro-4-(trifluorom	214		12.406					ND	
112 sec-Butylbenzene	105		12.521					ND	
113 1,3-Dichlorobenzene	146		12.637					ND	
114 4-Isopropyltoluene	119		12.679					ND	
115 1,4-Dichlorobenzene	146		12.746					ND	
117 1,2,3-Trimethylbenzene	105		12.767					ND	
116 2,4-Dichloro-1-(triflourom	214		12.771					ND	
118 2,5-Dichlorobenzotrifluori	214		12.813					ND	
119 Benzyl chloride	91		12.864					ND	
120 n-Butylbenzene	91		13.087					ND	
121 1,2-Dichlorobenzene	146		13.099					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.890					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.036					ND	
124 1,3,5-Trichlorobenzene	180		14.081					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.450					ND	
126 1,2,4-Trichlorobenzene	180		14.717					ND	
127 Hexachlorobutadiene	225		14.863					ND	
128 Naphthalene	128		14.979					ND	
129 1,2,3-Trichlorobenzene	180		15.204					ND	
131 2,4,5-Trichlorotoluene	159		15.983					ND	
130 2,3,6-Trichlorotoluene	159		16.086					ND	
132 2-Methylnaphthalene	142		16.098					ND	
147 2,4-Dichlorotoluene	1		0.000					ND	
146 2,5-Dichlorotoluene	1		0.000					ND	
148 2,3-Dichlorotoluene	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
150 2,6-Dichlorotoluene	1		0.000					ND	
149 3,4-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:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

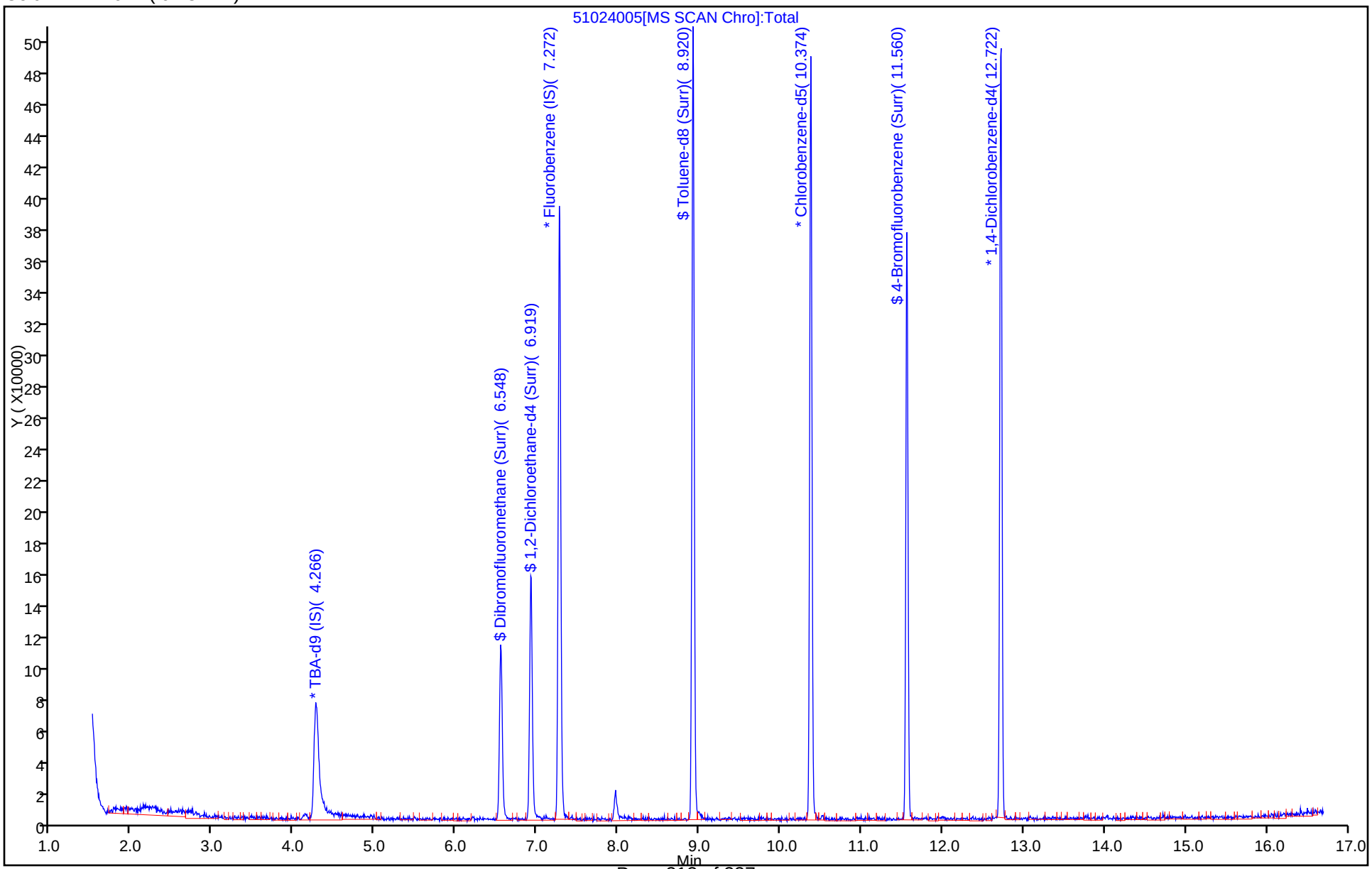
Report Date: 24-Oct-2016 14:04:25 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024005.D

Injection Date:	24-Oct-2016 12:05:30	Instrument ID:	CHHP5	Operator ID:	001562
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)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024005.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 24-Oct-2016 12:05:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014019-005
Misc. Info.: MB
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 24-Oct-2016 14:04:23 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: fergusond Date: 24-Oct-2016 14:04:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.8	97.53
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	50.9	101.75
$ 7 Toluene-d8 (Surr)	50.0	49.3	98.62
$ 8 4-Bromofluorobenzene (Surr)	50.0	51.1	102.18

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-192068/14

Matrix: Water | Lab File ID: 61023014.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/23/2016 17:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 192068 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	9.96		1.0	0.23
75-01-4	Vinyl chloride	9.76		1.0	0.32
74-83-9	Bromomethane	10.9		1.0	0.36
75-00-3	Chloroethane	9.43		1.0	0.26
75-35-4	1,1-Dichloroethene	9.67		1.0	0.29
67-64-1	Acetone	27.8		5.0	2.5
75-15-0	Carbon disulfide	9.16		1.0	0.18
75-09-2	Methylene Chloride	9.50		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	9.84		1.0	0.29
1634-04-4	Methyl tert-butyl ether	10.8		1.0	0.24
75-34-3	1,1-Dichloroethane	9.91		1.0	0.24
156-59-2	cis-1,2-Dichloroethene	9.85		1.0	0.29
74-97-5	Bromochloromethane	9.71		1.0	0.38
78-93-3	2-Butanone (MEK)	19.4		5.0	1.2
67-66-3	Chloroform	9.76		1.0	0.27
71-55-6	1,1,1-Trichloroethane	10.2		1.0	0.22
56-23-5	Carbon tetrachloride	11.2		1.0	0.24
71-43-2	Benzene	10.1		1.0	0.26
107-06-2	1,2-Dichloroethane	9.98		1.0	0.25
79-01-6	Trichloroethene	9.98		1.0	0.26
78-87-5	1,2-Dichloropropane	9.59		1.0	0.23
75-27-4	Bromodichloromethane	10.0		1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	9.56		1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	12.3		5.0	0.59
108-88-3	Toluene	10.5		1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	9.85		1.0	0.24
79-00-5	1,1,2-Trichloroethane	10.3		1.0	0.35
127-18-4	Tetrachloroethene	10.2		1.0	0.27
591-78-6	2-Hexanone	19.0		5.0	0.74
124-48-1	Dibromochloromethane	9.72		1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	10.6		1.0	0.29
108-90-7	Chlorobenzene	10.4		1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	10.7		1.0	0.20
100-41-4	Ethylbenzene	10.6		1.0	0.27
1330-20-7	Xylenes, Total	21.0		2.0	0.48
100-42-5	Styrene	10.4		1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-192068/14

Matrix: Water | Lab File ID: 61023014.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/23/2016 17:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 192068 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.00		1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	10.5		1.0	0.35
107-13-1	Acrylonitrile	98.2		20	2.8
123-91-1	1,4-Dioxane	120	J	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		72-134
2037-26-5	Toluene-d8 (Surr)	109		80-120
460-00-4	4-Bromofluorobenzene (Surr)	104		72-120
1868-53-7	Dibromofluoromethane (Surr)	102		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023014.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 23-Oct-2016 17:22:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013999-014
Misc. Info.: LCS
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 24-Oct-2016 07:34:56 Calib Date: 17-Oct-2016 17:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: fergusond Date: 24-Oct-2016 07:34:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.126	4.144	-0.018	92	107111	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.180	7.180	0.000	99	437385	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.289	10.289	0.000	86	109143	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.631	12.637	-0.006	93	172810	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.444	6.444	0.000	93	95196	50.0	51.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.821	6.821	0.000	79	124254	50.0	49.2	
$ 7 Toluene-d8 (Surr)	98	8.835	8.835	0.000	93	435228	50.0	54.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.475	11.475	0.000	88	156688	50.0	52.1	
11 Dichlorodifluoromethane	85	1.547	1.541	0.006	99	102997	50.0	51.7	
12 Chloromethane	50	1.711	1.699	0.012	99	127123	50.0	49.8	
13 Vinyl chloride	62	1.833	1.833	0.000	99	113750	50.0	48.8	
14 Butadiene	39	1.881	1.869	0.012	95	130927	50.0	53.7	
15 Bromomethane	94	2.180	2.167	0.013	92	55561	50.0	54.7	
16 Chloroethane	64	2.313	2.301	0.012	99	69612	50.0	47.1	
17 Dichlorofluoromethane	67	2.581	2.569	0.012	95	158438	50.0	46.9	
18 Trichlorofluoromethane	101	2.581	2.575	0.006	69	141740	50.0	50.7	
20 Ethyl ether	59	2.946	2.946	0.000	91	112416	50.0	49.3	
21 Acrolein	56	3.116	3.122	-0.006	98	69946	150.0	143.6	
22 1,1-Dichloroethene	96	3.232	3.226	0.006	97	103885	50.0	48.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.305	3.287	0.018	93	107106	50.0	49.2	
24 Acetone	43	3.323	3.317	0.006	100	72633	100.0	139.2	
25 Iodomethane	142	3.421	3.414	0.007	97	157157	50.0	48.7	
26 Carbon disulfide	76	3.506	3.500	0.006	99	219322	50.0	45.8	
29 3-Chloro-1-propene	76	3.779	3.792	-0.013	92	54663	50.0	45.8	
30 Methyl acetate	43	3.810	3.804	0.006	97	450698	250.0	247.5	
31 Methylene Chloride	84	3.998	3.998	0.000	94	130784	50.0	47.5	
32 2-Methyl-2-propanol	59	4.272	4.272	0.000	89	59715	500.0	548.8	
33 Acrylonitrile	53	4.394	4.388	0.006	99	474505	500.0	491.2	
34 trans-1,2-Dichloroethene	96	4.430	4.430	0.000	98	118882	50.0	49.2	
35 Methyl tert-butyl ether	73	4.449	4.449	0.000	97	263651	50.0	53.8	
36 Hexane	57	4.856	4.856	0.000	94	171498	50.0	48.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.075	5.075	0.000	97	199740	50.0	49.5	
38 Vinyl acetate	43	5.124	5.124	0.000	97	198165	50.0	53.8	
43 cis-1,2-Dichloroethene	96	5.836	5.830	0.006	81	133071	50.0	49.2	
42 2,2-Dichloropropane	97	5.824	5.830	-0.006	58	20152	50.0	48.0	
44 2-Butanone (MEK)	43	5.848	5.842	0.006	99	96159	100.0	97.0	
48 Chlorobromomethane	128	6.122	6.122	0.000	97	58973	50.0	48.6	
49 Tetrahydrofuran	42	6.128	6.128	0.000	86	70231	100.0	91.2	
50 Chloroform	83	6.268	6.268	0.000	96	182657	50.0	48.8	
51 1,1,1-Trichloroethane	97	6.426	6.426	0.000	99	114611	50.0	50.8	
52 Cyclohexane	56	6.493	6.493	0.000	90	199147	50.0	48.3	
53 Carbon tetrachloride	117	6.602	6.596	0.006	71	84324	50.0	55.9	
54 1,1-Dichloropropene	75	6.614	6.614	0.000	95	147824	50.0	48.8	
55 Isobutyl alcohol	41	6.821	6.821	0.000	48	54828	1250.0	1063.8	
56 Benzene	78	6.833	6.827	0.006	97	491759	50.0	50.6	
57 1,2-Dichloroethane	62	6.912	6.906	0.006	97	154646	50.0	49.9	
59 n-Heptane	43	7.198	7.198	0.000	91	143162	50.0	49.8	
61 Trichloroethene	130	7.569	7.569	0.000	96	118373	50.0	49.9	
63 Methylcyclohexane	83	7.801	7.807	-0.006	89	200242	50.0	50.6	
64 1,2-Dichloropropane	63	7.843	7.843	0.000	94	123755	50.0	48.0	
65 1,4-Dioxane	88	7.935	7.928	0.006	36	15363	1000.0	597.6	
67 Dibromomethane	93	7.928	7.928	0.000	95	67924	50.0	49.5	
68 Dichlorobromomethane	83	8.129	8.129	0.000	99	103938	50.0	50.2	
70 2-Chloroethyl vinyl ether	63	8.433	8.433	0.000	92	145186	100.0	93.9	
71 cis-1,3-Dichloropropene	75	8.573	8.573	0.000	95	137059	50.0	47.8	
72 4-Methyl-2-pentanone (MIBK	43	8.731	8.731	0.000	97	124198	100.0	61.4	
73 Toluene	91	8.902	8.902	0.000	99	515880	50.0	52.7	
74 trans-1,3-Dichloropropene	75	9.151	9.157	-0.006	94	110417	50.0	49.3	
75 Ethyl methacrylate	69	9.218	9.218	0.000	89	136764	50.0	51.2	
76 1,1,2-Trichloroethane	97	9.352	9.346	0.006	91	107511	50.0	51.3	
77 Tetrachloroethene	164	9.413	9.419	-0.006	95	95673	50.0	50.8	
78 1,3-Dichloropropane	76	9.504	9.504	0.000	91	204386	50.0	52.5	
79 2-Hexanone	43	9.565	9.565	0.000	97	115293	100.0	95.1	
81 Chlorodibromomethane	129	9.717	9.717	0.000	89	64193	50.0	48.6	
82 Ethylene Dibromide	107	9.833	9.826	0.007	97	99492	50.0	52.8	
83 3-Chlorobenzotrifluoride	180	10.295	10.301	-0.006	92	162077	50.0	49.9	
84 Chlorobenzene	112	10.319	10.319	0.000	95	344118	50.0	51.8	
85 4-Chlorobenzotrifluoride	180	10.386	10.386	0.000	95	151926	50.0	50.1	
86 1,1,1,2-Tetrachloroethane	131	10.410	10.417	-0.006	89	79139	50.0	53.5	
87 Ethylbenzene	106	10.423	10.423	0.000	98	190072	50.0	53.1	
88 m-Xylene & p-Xylene	106	10.550	10.550	0.000	98	230126	50.0	52.9	
89 o-Xylene	106	10.934	10.934	0.000	95	218423	50.0	52.0	
90 Styrene	104	10.952	10.958	-0.006	95	360764	50.0	51.8	
91 Bromoform	173	11.128	11.134	-0.006	92	29104	50.0	45.0	
92 2-Chlorobenzotrifluoride	180	11.207	11.207	0.000	97	158353	50.0	50.5	
93 Isopropylbenzene	105	11.305	11.299	0.006	96	535196	50.0	53.4	
95 Bromobenzene	156	11.615	11.615	0.000	95	136444	50.0	48.8	
96 1,1,2,2-Tetrachloroethane	83	11.615	11.615	0.000	93	138625	50.0	52.4	
97 trans-1,4-Dichloro-2-buten	53	11.651	11.651	0.000	66	16530	50.0	22.8	
98 1,2,3-Trichloropropane	110	11.676	11.670	0.006	86	45371	50.0	48.3	
99 N-Propylbenzene	120	11.718	11.718	0.000	98	156476	50.0	48.2	
100 2-Chlorotoluene	126	11.804	11.804	0.000	97	137374	50.0	48.4	
101 3-Chlorotoluene	126	11.871	11.870	0.000	95	144689	50.0	47.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	11.907	11.901	0.006	95	447498	50.0	50.1	
103 4-Chlorotoluene	126	11.925	11.925	0.000	97	150937	50.0	48.8	
104 tert-Butylbenzene	119	12.217	12.217	0.000	93	376061	50.0	49.7	
106 1,2,4-Trimethylbenzene	105	12.278	12.278	0.000	97	463806	50.0	50.0	
107 1,2-dichloro-4-(trifluorom	214	12.321	12.321	0.000	98	123519	50.0	47.1	
108 sec-Butylbenzene	105	12.436	12.442	-0.006	94	546735	50.0	49.6	
109 1,3-Dichlorobenzene	146	12.552	12.558	-0.006	97	268770	50.0	49.5	
110 4-Isopropyltoluene	119	12.594	12.594	0.000	96	468857	50.0	50.1	
111 1,4-Dichlorobenzene	146	12.661	12.655	0.006	95	278446	50.0	48.9	
113 2,4-Dichloro-1-(triflourom	214	12.692	12.692	0.000	96	117696	50.0	46.0	
114 2,5-Dichlorobenzotrifluori	214	12.734	12.728	0.006	97	133114	50.0	45.3	
116 n-Butylbenzene	91	13.002	13.002	0.000	98	413816	50.0	48.9	
117 1,2-Dichlorobenzene	146	13.014	13.014	0.000	94	261865	50.0	49.0	
118 1,2-Dibromo-3-Chloropropan	75	13.805	13.805	0.000	79	11827	50.0	45.6	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.945	13.945	0.000	98	611921	150.0	145.0	
121 2,3- & 3,4- Dichlorotoluen	125	14.359	14.365	-0.006	99	448290	100.0	96.4	
122 1,2,4-Trichlorobenzene	180	14.626	14.626	0.000	94	174288	50.0	48.2	
123 Hexachlorobutadiene	225	14.772	14.772	0.000	97	59073	50.0	48.0	
124 Naphthalene	128	14.888	14.888	0.000	97	427961	50.0	49.7	
125 1,2,3-Trichlorobenzene	180	15.113	15.113	0.000	95	151589	50.0	47.7	
126 2,4,5-Trichlorotoluene	159	15.898	15.904	-0.006	0	65449	50.0	43.8	
127 2,3,6-Trichlorotoluene	159	16.001	16.001	0.000	92	61111	50.0	43.9	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		100.0	104.9	
S 130 1,2-Dichloroethene, Total	96				0		100.0	98.4	
S 132 1,3-Dichloropropene, Total	1				0		100.0	97.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260VOA2ND_00210	Amount Added:	2.00	Units: uL	
voaWKet2ndRes_00014	Amount Added:	2.00	Units: uL	
voaWva2ndRest_00008	Amount Added:	2.00	Units: uL	
voaWee2ndRest_00009	Amount Added:	2.00	Units: uL	
VOACEVEPRI_00018	Amount Added:	2.00	Units: uL	
voaWacro2ndRe_00008	Amount Added:	6.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent

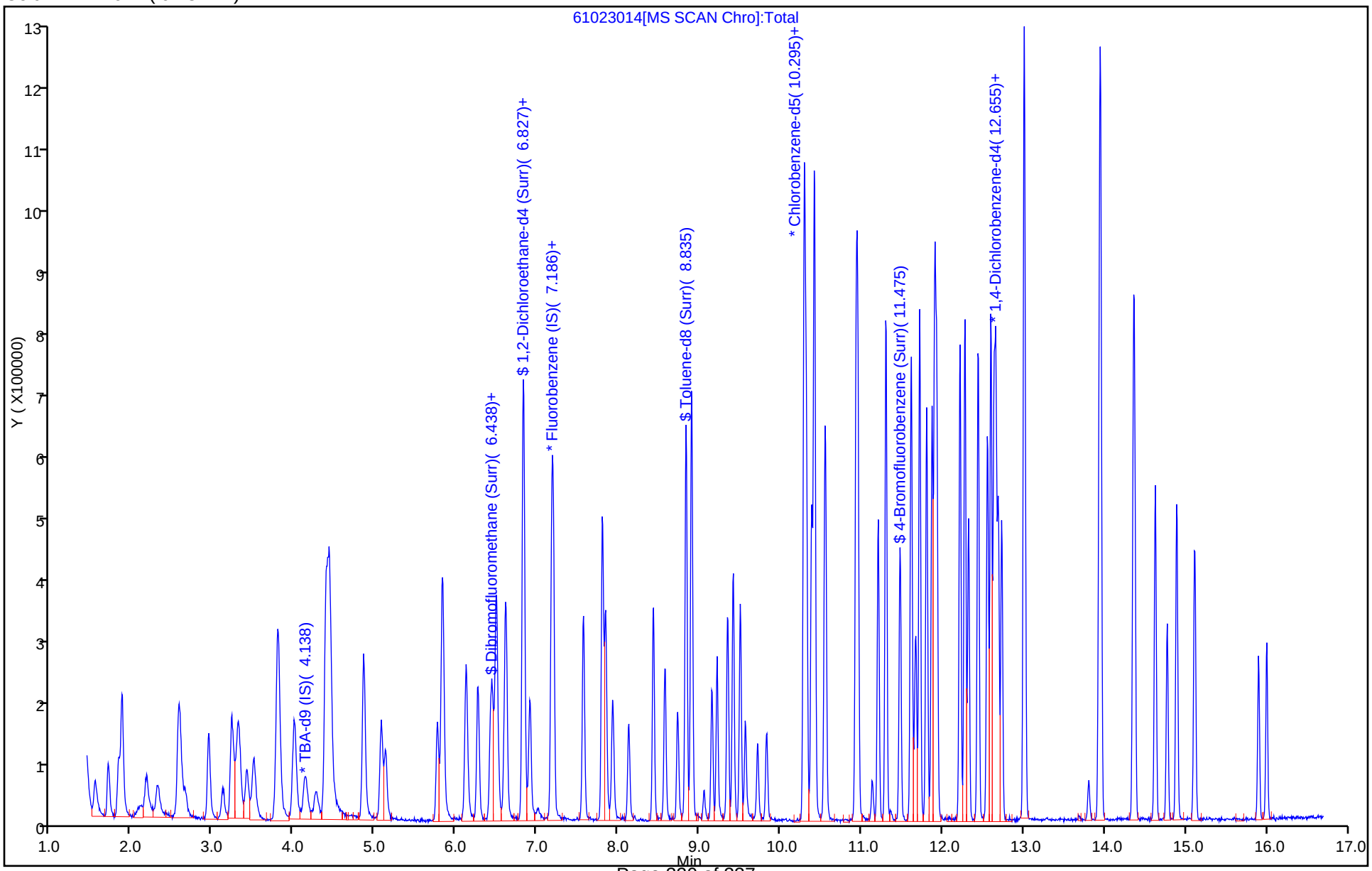
Report Date: 24-Oct-2016 07:34:57 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023014.D

Injection Date:	23-Oct-2016 17:22:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	LCS			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\61023014.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 23-Oct-2016 17:22:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013999-014
Misc. Info.: LCS
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161023-13999.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 24-Oct-2016 07:34:56 Calib Date: 17-Oct-2016 17:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20161018-13923.b\61017013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: fergusond Date: 24-Oct-2016 07:34:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.0	101.94
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.2	98.34
$ 7 Toluene-d8 (Surr)	50.0	54.5	109.03
$ 8 4-Bromofluorobenzene (Surr)	50.0	52.1	104.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-192156/8

Matrix: Water | Lab File ID: 51024008.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/24/2016 13:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 192156 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	9.46		1.0	0.23
75-01-4	Vinyl chloride	9.60		1.0	0.32
74-83-9	Bromomethane	10.1		1.0	0.36
75-00-3	Chloroethane	10.6		1.0	0.26
75-35-4	1,1-Dichloroethene	10.0		1.0	0.29
67-64-1	Acetone	17.3		5.0	2.5
75-15-0	Carbon disulfide	9.26		1.0	0.18
75-09-2	Methylene Chloride	9.69		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	9.73		1.0	0.29
1634-04-4	Methyl tert-butyl ether	9.25		1.0	0.24
75-34-3	1,1-Dichloroethane	9.83		1.0	0.24
156-59-2	cis-1,2-Dichloroethene	9.70		1.0	0.29
74-97-5	Bromochloromethane	9.96		1.0	0.38
78-93-3	2-Butanone (MEK)	18.4		5.0	1.2
67-66-3	Chloroform	9.83		1.0	0.27
71-55-6	1,1,1-Trichloroethane	9.95		1.0	0.22
56-23-5	Carbon tetrachloride	10.2		1.0	0.24
71-43-2	Benzene	9.90		1.0	0.26
107-06-2	1,2-Dichloroethane	9.61		1.0	0.25
79-01-6	Trichloroethene	9.71		1.0	0.26
78-87-5	1,2-Dichloropropane	9.49		1.0	0.23
75-27-4	Bromodichloromethane	9.54		1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	9.28		1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	19.2		5.0	0.59
108-88-3	Toluene	10.6		1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	9.50		1.0	0.24
79-00-5	1,1,2-Trichloroethane	9.92		1.0	0.35
127-18-4	Tetrachloroethene	10.4		1.0	0.27
591-78-6	2-Hexanone	18.4		5.0	0.74
124-48-1	Dibromochloromethane	9.67		1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	9.77		1.0	0.29
108-90-7	Chlorobenzene	10.5		1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	10.1		1.0	0.20
100-41-4	Ethylbenzene	10.4		1.0	0.27
1330-20-7	Xylenes, Total	21.2		2.0	0.48
100-42-5	Styrene	10.5		1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-59864-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-192156/8

Matrix: Water | Lab File ID: 51024008.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/24/2016 13:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 192156 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.01		1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	10.3		1.0	0.35
107-13-1	Acrylonitrile	93.0		20	2.8
123-91-1	1,4-Dioxane	164	J	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		72-134
2037-26-5	Toluene-d8 (Surr)	104		80-120
460-00-4	4-Bromofluorobenzene (Surr)	102		72-120
1868-53-7	Dibromofluoromethane (Surr)	93		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024008.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 24-Oct-2016 13:33:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014019-008
Misc. Info.: LCS
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 24-Oct-2016 14:10:53 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: fergusond Date: 24-Oct-2016 14:10:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.283	4.272	0.011	0	96312	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.270	7.271	-0.001	96	375272	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.373	10.374	-0.001	92	90984	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.721	12.722	-0.001	96	136125	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.546	6.547	-0.001	92	83679	50.0	46.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.917	6.918	-0.001	0	122860	50.0	47.4	
$ 7 Toluene-d8 (Surr)	98	8.919	8.920	-0.001	96	358225	50.0	52.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.559	11.560	-0.001	85	141038	50.0	50.8	
11 Dichlorodifluoromethane	85	1.606	1.601	0.005	98	107994	50.0	48.4	
12 Chloromethane	50	1.765	1.766	-0.001	99	204710	50.0	47.3	
13 Vinyl chloride	62	1.904	1.912	-0.008	98	137651	50.0	48.0	
14 Butadiene	39	1.935	1.936	-0.001	98	215103	50.0	50.7	
15 Bromomethane	94	2.233	2.234	-0.001	90	36211	50.0	50.5	
16 Chloroethane	64	2.373	2.374	-0.001	96	67676	50.0	52.9	
17 Dichlorofluoromethane	67	2.659	2.654	0.005	96	152032	50.0	49.7	
18 Trichlorofluoromethane	101	2.665	2.666	-0.001	94	124488	50.0	51.3	M
20 Ethyl ether	59	3.048	3.043	0.005	98	116570	50.0	48.3	
21 Acrolein	56	3.231	3.226	0.005	99	81882	150.0	144.6	
22 1,1-Dichloroethene	96	3.340	3.323	0.017	91	94917	50.0	50.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.395	3.396	-0.001	93	103700	50.0	50.2	
24 Acetone	43	3.444	3.445	-0.001	97	83592	100.0	86.5	
25 Iodomethane	142	3.535	3.524	0.011	98	136983	50.0	48.6	
26 Carbon disulfide	76	3.614	3.615	-0.001	100	229851	50.0	46.3	
28 3-Chloro-1-propene	76	3.912	3.901	0.011	88	52609	50.0	44.6	
30 Methyl acetate	43	3.936	3.931	0.005	100	565526	250.0	226.2	
31 Methylene Chloride	84	4.125	4.126	-0.001	92	115029	50.0	48.5	
32 2-Methyl-2-propanol	59	4.411	4.412	-0.001	84	60809	500.0	514.1	
33 Acrylonitrile	53	4.520	4.509	0.011	99	555767	500.0	465.0	
34 trans-1,2-Dichloroethene	96	4.551	4.552	-0.001	92	100546	50.0	48.7	
35 Methyl tert-butyl ether	73	4.569	4.570	-0.001	91	248139	50.0	46.2	
36 Hexane	57	4.971	4.966	0.005	98	211631	50.0	49.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.190	5.185	0.005	96	226668	50.0	49.2	
38 Vinyl acetate	43	5.238	5.233	0.005	96	267202	50.0	52.2	
45 cis-1,2-Dichloroethene	96	5.938	5.927	0.011	88	110606	50.0	48.5	
44 2,2-Dichloropropane	97	5.926	5.933	-0.007	61	17609	50.0	45.8	
46 2-Butanone (MEK)	43	5.950	5.945	0.005	97	141432	100.0	91.9	
49 Chlorobromomethane	128	6.218	6.219	-0.001	85	47962	50.0	49.8	
51 Tetrahydrofuran	42	6.236	6.243	-0.007	94	89796	100.0	85.2	
52 Chloroform	83	6.370	6.359	0.011	98	180215	50.0	49.2	
53 1,1,1-Trichloroethane	97	6.522	6.517	0.005	94	128370	50.0	49.8	
54 Cyclohexane	56	6.589	6.590	-0.001	95	281180	50.0	49.6	
56 Carbon tetrachloride	117	6.698	6.693	0.005	92	110260	50.0	51.1	
55 1,1-Dichloropropene	75	6.710	6.712	-0.002	86	154559	50.0	50.8	
57 Isobutyl alcohol	41	6.923	6.912	0.011	53	79327	1250.0	1092.7	
58 Benzene	78	6.923	6.924	-0.001	96	433742	50.0	49.5	
59 1,2-Dichloroethane	62	7.008	7.004	0.004	95	158457	50.0	48.1	
62 n-Heptane	43	7.288	7.283	0.005	96	207896	50.0	48.9	
64 Trichloroethene	130	7.659	7.661	-0.002	95	101916	50.0	48.6	
66 Methylcyclohexane	83	7.897	7.892	0.005	97	181942	50.0	50.5	
67 1,2-Dichloropropane	63	7.933	7.934	-0.001	93	124898	50.0	47.4	
70 1,4-Dioxane	88	8.018	8.019	-0.001	47	17075	1000.0	818.5	M
68 Dibromomethane	93	8.024	8.026	-0.002	95	53029	50.0	47.6	
71 Dichlorobromomethane	83	8.219	8.214	0.005	95	115295	50.0	47.7	
73 2-Chloroethyl vinyl ether	63	8.517	8.518	-0.001	87	124346	100.0	90.1	
74 cis-1,3-Dichloropropene	75	8.657	8.658	-0.001	86	132714	50.0	46.4	
75 4-Methyl-2-pentanone (MIBK	43	8.815	8.816	-0.001	99	268267	100.0	96.2	
76 Toluene	91	8.992	8.993	-0.001	97	443752	50.0	53.1	
77 trans-1,3-Dichloropropene	75	9.241	9.236	0.005	92	100573	50.0	47.5	
78 Ethyl methacrylate	69	9.302	9.297	0.005	91	109978	50.0	48.5	
79 1,1,2-Trichloroethane	97	9.436	9.431	0.005	93	77884	50.0	49.6	
80 Tetrachloroethene	164	9.503	9.504	-0.001	97	85663	50.0	52.1	
81 1,3-Dichloropropane	76	9.588	9.589	-0.001	94	148525	50.0	49.1	
82 2-Hexanone	43	9.649	9.650	-0.001	97	194891	100.0	92.2	
84 Chlorodibromomethane	129	9.801	9.802	-0.001	90	68956	50.0	48.4	
85 Ethylene Dibromide	107	9.916	9.917	-0.001	100	79452	50.0	48.8	
86 3-Chlorobenzotrifluoride	180	10.379	10.380	-0.001	91	153397	50.0	49.2	
87 Chlorobenzene	112	10.403	10.404	-0.001	91	286462	50.0	52.3	
88 4-Chlorobenzotrifluoride	180	10.464	10.465	-0.001	96	147675	50.0	51.3	
89 1,1,1,2-Tetrachloroethane	131	10.500	10.495	0.005	89	83331	50.0	50.7	
90 Ethylbenzene	106	10.500	10.502	-0.002	98	160734	50.0	52.1	
91 m-Xylene & p-Xylene	106	10.634	10.635	-0.001	0	205135	50.0	53.3	
92 o-Xylene	106	11.017	11.013	0.004	98	192392	50.0	52.5	
93 Styrene	104	11.036	11.037	-0.001	93	325082	50.0	52.5	
94 Bromoform	173	11.218	11.219	-0.001	96	38725	50.0	45.0	
96 2-Chlorobenzotrifluoride	180	11.285	11.286	-0.001	96	151247	50.0	49.8	
97 Isopropylbenzene	105	11.383	11.384	-0.002	97	499109	50.0	53.1	
100 Bromobenzene	156	11.693	11.700	-0.007	96	111113	50.0	48.3	
99 1,1,2,2-Tetrachloroethane	83	11.699	11.700	-0.001	73	114504	50.0	51.6	
102 trans-1,4-Dichloro-2-buten	53	11.735	11.736	-0.001	68	32901	50.0	41.5	
101 1,2,3-Trichloropropane	110	11.754	11.755	-0.001	92	36837	50.0	49.0	
103 N-Propylbenzene	120	11.796	11.797	-0.001	99	137107	50.0	51.5	
104 2-Chlorotoluene	126	11.887	11.889	-0.002	95	109760	50.0	48.2	
105 3-Chlorotoluene	126	11.954	11.955	-0.001	96	116297	50.0	47.9	

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	11.985	11.986	-0.001	94	408609	50.0	50.8	
107 4-Chlorotoluene	126	12.009	12.010	-0.001	99	116812	50.0	47.9	
108 tert-Butylbenzene	119	12.295	12.296	-0.001	96	333268	50.0	50.9	
110 1,2,4-Trimethylbenzene	105	12.356	12.357	-0.001	99	409583	50.0	50.2	
111 1,2-dichloro-4-(trifluorom	214	12.398	12.406	-0.008	97	105581	50.0	46.7	
112 sec-Butylbenzene	105	12.520	12.521	-0.001	95	480789	50.0	50.8	
113 1,3-Dichlorobenzene	146	12.642	12.637	0.005	97	214225	50.0	49.0	
114 4-Isopropyltoluene	119	12.678	12.679	-0.001	97	397807	50.0	50.6	
115 1,4-Dichlorobenzene	146	12.745	12.746	-0.001	93	217893	50.0	48.8	
116 2,4-Dichloro-1-(triflourom	214	12.770	12.771	-0.001	96	106876	50.0	49.8	
118 2,5-Dichlorobenzotrifluori	214	12.812	12.813	-0.001	0	108863	50.0	44.5	
120 n-Butylbenzene	91	13.086	13.087	-0.001	98	337901	50.0	50.0	
121 1,2-Dichlorobenzene	146	13.098	13.099	-0.001	95	197264	50.0	49.0	
122 1,2-Dibromo-3-Chloropropan	75	13.889	13.890	-0.001	71	15942	50.0	43.9	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.035	14.036	-0.001	0	400060	150.0	141.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.449	14.450	-0.001	0	262478	100.0	95.6	
126 1,2,4-Trichlorobenzene	180	14.716	14.717	-0.001	95	93433	50.0	47.0	
127 Hexachlorobutadiene	225	14.862	14.863	-0.001	96	42814	50.0	50.2	
128 Naphthalene	128	14.978	14.979	-0.001	97	229900	50.0	46.5	
129 1,2,3-Trichlorobenzene	180	15.203	15.204	-0.001	95	70957	50.0	45.9	
131 2,4,5-Trichlorotoluene	159	15.982	15.983	-0.001	0	21888	50.0	44.6	
130 2,3,6-Trichlorotoluene	159	16.079	16.086	-0.007	96	20904	50.0	41.2	
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	97.2	
S 133 Xylenes, Total	106				0		100.0	105.8	
S 135 1,3-Dichloropropene, Total	1				0		100.0	93.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00210	Amount Added:	2.00	Units: uL		
voaWva2ndRest_00008	Amount Added:	2.00	Units: uL		
voaWee2ndRest_00009	Amount Added:	2.00	Units: uL		
voaW2cleveRes_00002	Amount Added:	2.00	Units: uL		
voaWKet2ndRes_00014	Amount Added:	2.00	Units: uL		
voaWacro2ndRe_00008	Amount Added:	6.00	Units: uL		
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent	

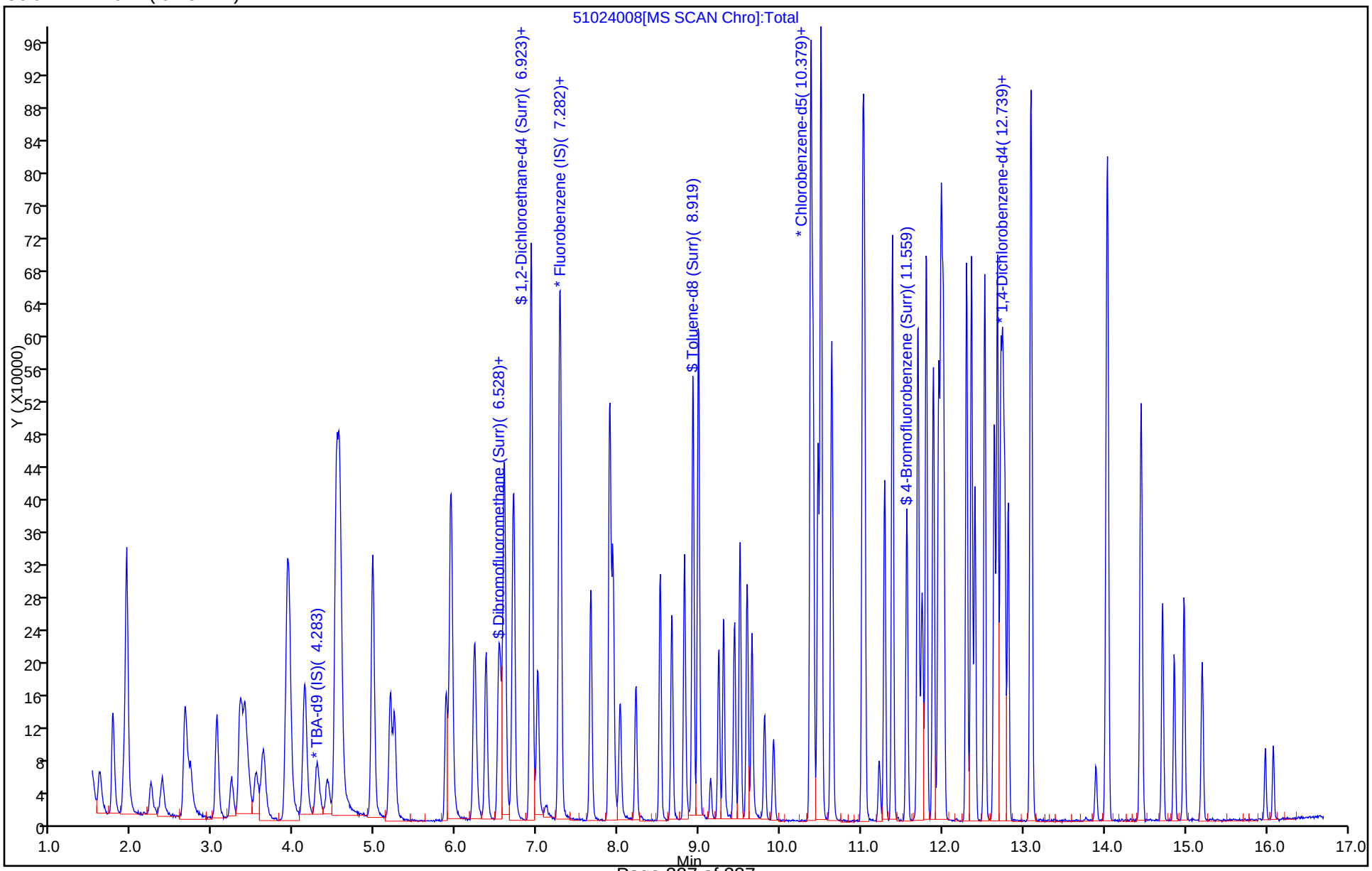
Report Date: 24-Oct-2016 14:10:54 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024008.D

Injection Date:	24-Oct-2016 13:33:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	LCS			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
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024008.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 24-Oct-2016 13:33:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014019-008
Misc. Info.: LCS
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 24-Oct-2016 14:10:53 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: fergusond Date: 24-Oct-2016 14:10:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	46.6	93.21
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.4	94.80
$ 7 Toluene-d8 (Surr)	50.0	52.2	104.33
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.8	101.60

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

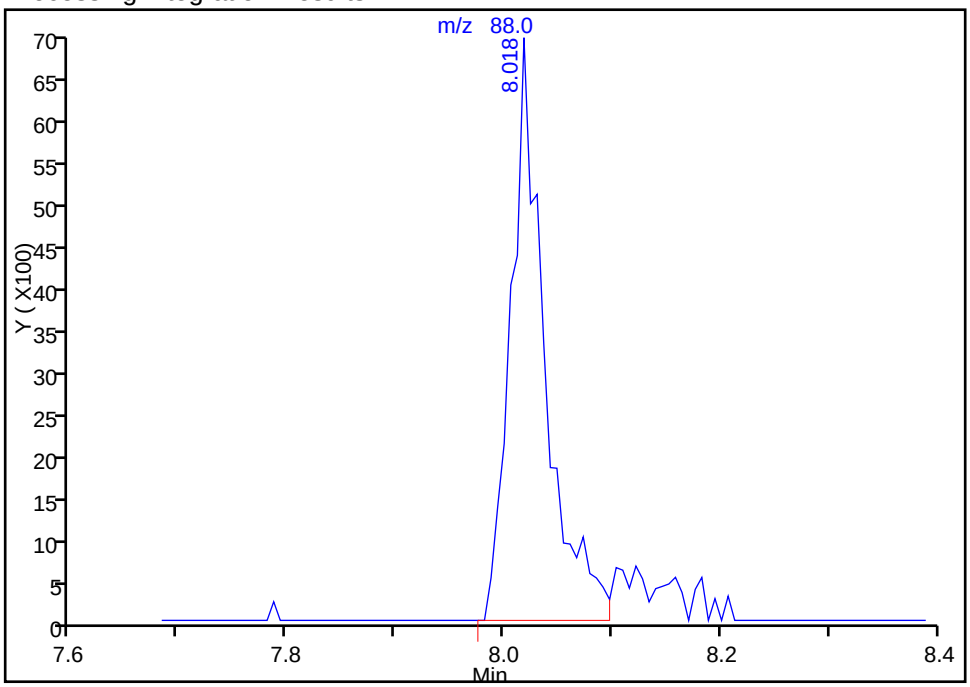
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161024-14019.b\51024008.D
Injection Date: 24-Oct-2016 13:33:30 Instrument ID: CHHP5
Lims ID: LCS
Client ID:
Operator ID: 001562 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

Signal: 1

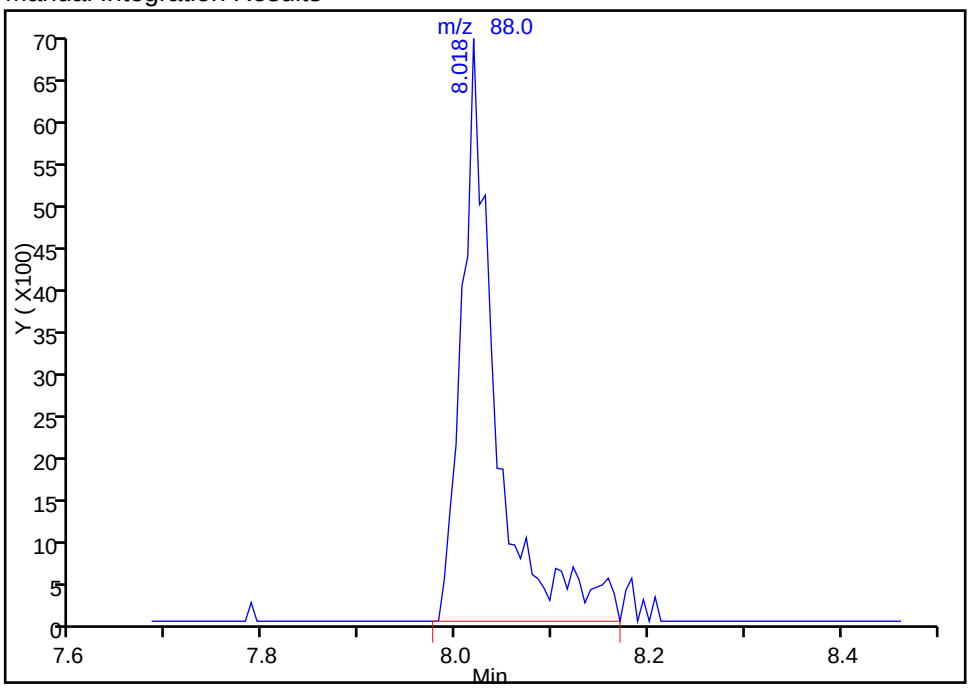
Processing Integration Results

RT: 8.02
Area: 15229
Amount: 730.0418
Amount Units: ng



Manual Integration Results

RT: 8.02
Area: 17075
Amount: 818.5346
Amount Units: ng



Reviewer: fergusond, 24-Oct-2016 14:10:53
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Instrument ID: CHHP6 Start Date: 10/17/2016 11:29

Analysis Batch Number: 191498 End Date: 10/17/2016 17:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-191498/1		10/17/2016 11:29	1	61017001.D	DB-624 0.18(mm)
IC 180-191498/6		10/17/2016 14:23	1	61017006.D	DB-624 0.18(mm)
IC 180-191498/7		10/17/2016 14:48	1	61017007.D	DB-624 0.18(mm)
ICIS 180-191498/8		10/17/2016 15:12	1	61017008.D	DB-624 0.18(mm)
IC 180-191498/9		10/17/2016 15:36	1	61017009.D	DB-624 0.18(mm)
IC 180-191498/10		10/17/2016 16:01	1	61017010.D	DB-624 0.18(mm)
IC 180-191498/12		10/17/2016 16:49	1	61017012.D	DB-624 0.18(mm)
IC 180-191498/13		10/17/2016 17:13	1	61017013.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Instrument ID: CHHP5 Start Date: 10/22/2016 12:45

Analysis Batch Number: 192047 End Date: 10/22/2016 17:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-192047/1		10/22/2016 12:45	1	51022001.D	DB-624 0.18(mm)
IC 180-192047/3		10/22/2016 14:57	1	51022003.D	DB-624 0.18(mm)
IC 180-192047/4		10/22/2016 15:21	1	51022004.D	DB-624 0.18(mm)
ICIS 180-192047/5		10/22/2016 15:45	1	51022005.D	DB-624 0.18(mm)
IC 180-192047/6		10/22/2016 16:09	1	51022006.D	DB-624 0.18(mm)
IC 180-192047/7		10/22/2016 16:33	1	51022007.D	DB-624 0.18(mm)
IC 180-192047/8		10/22/2016 16:57	1	51022008.D	DB-624 0.18(mm)
IC 180-192047/9		10/22/2016 17:22	1	51022009.D	DB-624 0.18(mm)
IC 180-192047/10		10/22/2016 17:46	1	51022010.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Instrument ID: CHHP6 Start Date: 10/23/2016 10:53

Analysis Batch Number: 192068 End Date: 10/23/2016 21:49

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-192068/1		10/23/2016 10:53	1	61023001.D	DB-624 0.18(mm)
CCVIS 180-192068/2		10/23/2016 11:32	1	61023002.D	DB-624 0.18(mm)
ZZZZZ		10/23/2016 12:08	1		DB-624 0.18(mm)
MB 180-192068/4		10/23/2016 12:36	1	61023004.D	DB-624 0.18(mm)
ZZZZZ		10/23/2016 13:13	1		DB-624 0.18(mm)
ZZZZZ		10/23/2016 14:01	5		DB-624 0.18(mm)
ZZZZZ		10/23/2016 14:52	5		DB-624 0.18(mm)
ZZZZZ		10/23/2016 15:16	5		DB-624 0.18(mm)
LCS 180-192068/14		10/23/2016 17:22	1	61023014.D	DB-624 0.18(mm)
ZZZZZ		10/23/2016 18:11	3		DB-624 0.18(mm)
ZZZZZ		10/23/2016 18:35	1		DB-624 0.18(mm)
ZZZZZ		10/23/2016 18:59	25		DB-624 0.18(mm)
ZZZZZ		10/23/2016 19:24	1		DB-624 0.18(mm)
ZZZZZ		10/23/2016 19:48	1		DB-624 0.18(mm)
ZZZZZ		10/23/2016 20:12	1		DB-624 0.18(mm)
180-59864-2		10/23/2016 20:36	1	61023022.D	DB-624 0.18(mm)
180-59864-1		10/23/2016 21:25	1	61023024.D	DB-624 0.18(mm)
180-59864-4		10/23/2016 21:49	1	61023025.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-59864-1

SDG No.:

Instrument ID: CHHP5 Start Date: 10/24/2016 10:29

Analysis Batch Number: 192156 End Date: 10/24/2016 21:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-192156/4		10/24/2016 10:29	1	51024004.D	DB-624 0.18(mm)
CCVIS 180-192156/2		10/24/2016 11:05	1	51024002.D	DB-624 0.18(mm)
ZZZZZ		10/24/2016 11:40	1		DB-624 0.18(mm)
MB 180-192156/5		10/24/2016 12:05	1	51024005.D	DB-624 0.18(mm)
LCS 180-192156/8		10/24/2016 13:33	1	51024008.D	DB-624 0.18(mm)
180-59864-6		10/24/2016 20:24	1	51024025.D	DB-624 0.18(mm)
180-59864-3		10/24/2016 20:48	1	51024026.D	DB-624 0.18(mm)
180-59864-5		10/24/2016 21:12	1	51024027.D	DB-624 0.18(mm)
180-59864-7		10/24/2016 21:36	1	51024028.D	DB-624 0.18(mm)

Shipping and Receiving Documents

TestAmerica Pittsburgh
301 Alpha Drive
Pittsburgh, PA 15238
phone 412.963.7058 fax 412.963.2470

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Christopher D. O'neil	Site Contact: ~~Jennifer S. Reese~~ CDO	DateSubmitted: 10/14/16	COC No: TAP2016 101401
Groundwater Sciences Corporation	Tel/Fax: 717-901-8176 / (717) 657-1611	Lab Contact: Carrie Gamber	Carrier: FEDEX	1 of 1 COCs
2601 Market Place St. Suite 310	Analysis Turnaround Time			Job No. 10012.30
Harrisburg, PA 17110	Calendar (C) or Work Days (W)			
(717) 901-8180 Phone	TAT if different from Below: Standard			Container No. 1
(717) 657-1611 FAX	■ 2 weeks			
Project Name: 2016 Comprehensive Event	☐ 1 week			
Site: Harley-Davidson, York PA	☐ 5 days			
Quote # 18000557	☐ 1 day			

180-59864 Chain of Custody

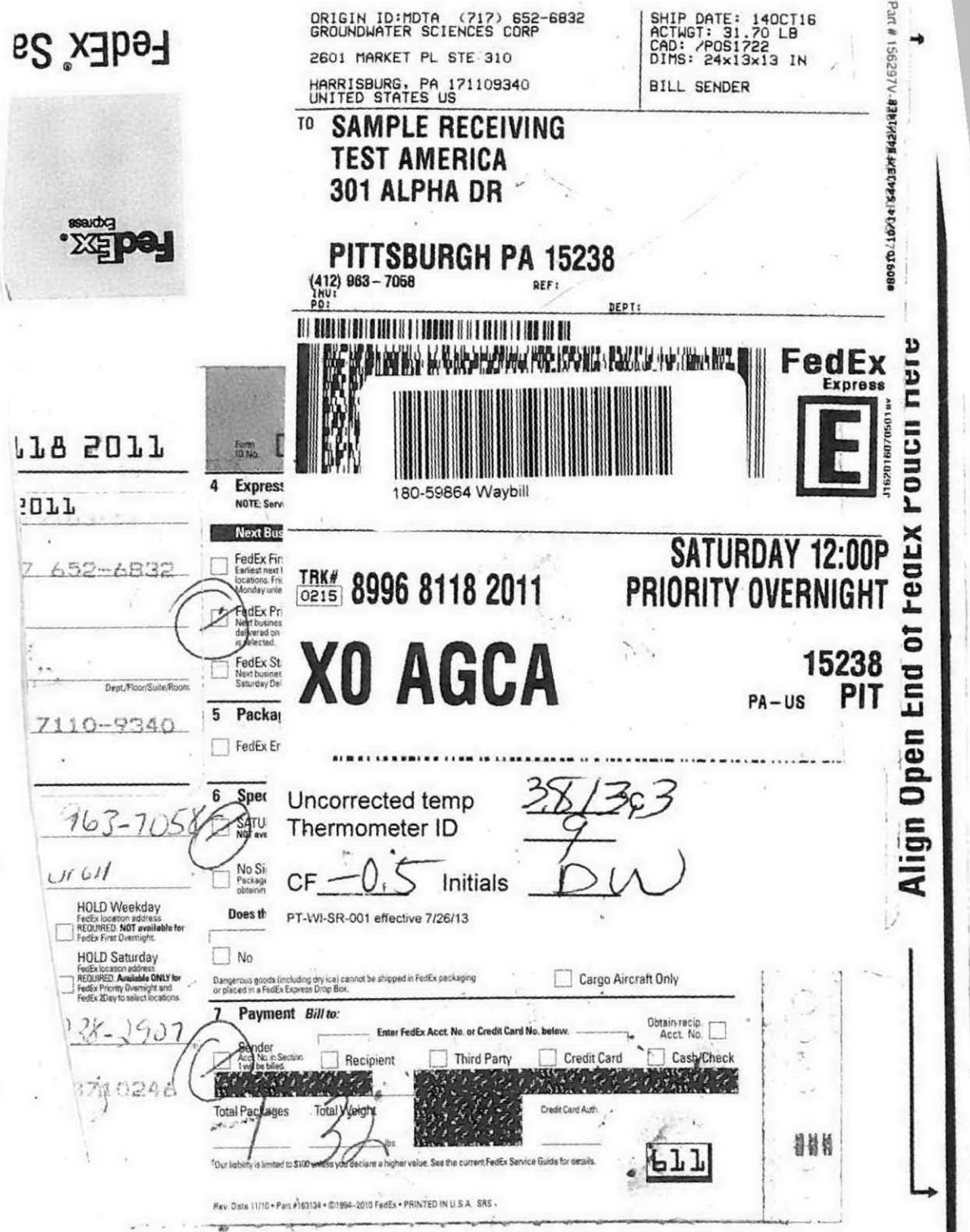
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (8260C)	Select List Total Metals by ICP MS (SW846 6020/SW846 7470A)	Select List Dissolved Metals by ICP MS (SW846 6020/SW846 7470A)	1,4-Dioxane (SW846 8270D LL)	Notes:
HD-QC7-01/1-2	10/13/16	1200	Trip Blank	W	2	X				
HD-MW-20D-01/1-01	10/13/16	0825	GW	W	3	X				
HD-MW-18S-01/1-01	10/13/16	0815	GW	W	3	X				
HD-MW-142S-01/1-01	10/13/16	1206	GW	W	3	X				
HD-MW-20S-01/1-01	10/13/16	1050	GW	W	3	X				
HD-MW-142D-01/1-01	10/13/16	1025	GW	W	2	X				* spoke w/ carrie gamber only 2 vols collected *
HD-MW-20M-01/1-01	10/14/16		GW	W	3	X				
Number of Containers						3	1	1	2	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Unpreserved 7=Zinc Acetate & NaOH						2	1	1	1	
Field Filter						N	N	Y	N	

Possible Hazard Identification
■ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ■ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments: **CLP Like Deliverables**

Relinquished by (Print and Sign):	Company: GSC	Date/Time: 10/14/16 1200	Received by: Willie Watson	Company: TAP	Date/Time: 10-15-16
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time: 9:05
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:



ORIGIN ID:MDTA (717) 652-6832
GROUNDWATER SCIENCES CORP
2601 MARKET PL STE 310
HARRISBURG, PA 171109340
UNITED STATES US

SHIP DATE: 140CT16
ACTWGT: 31.70 LB
CAD: /POS1722
DIMS: 24x13x13 IN
BILL SENDER

TO SAMPLE RECEIVING
TEST AMERICA
301 ALPHA DR

PITTSBURGH PA 15238
(412) 963-7058
REF:
INV:
PO:
DEPT:

180-59864 Waybill

FedEx Express

TRK# 0215 8996 8118 2011

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO AGCA

15238
PA-US PIT

Uncorrected temp 38/39
Thermometer ID 9
CF -0.5 Initials DW

PT-WI-SR-001 effective 7/26/13

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Enter FedEx Acct. No. or Credit Card No. below.
Obtain recip. Acct. No.
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Credit Card Auth.

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611

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Part # 156297V

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-59864-1

Login Number: 59864
List Number: 1
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
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 (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	