TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 180-64801-1

Job Description: Harley Davidson

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

Attention: Allan Miller

Approved for release.
Carrie L Gamber
Senior Project Manager
4/5/2017 12:38 PM

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04/05/2017

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
^c	CCV Recovery is outside acceptance limits.
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

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: 180-64801-1

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

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

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

RECEIPT

The samples were received on 03/31/2017; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.4º C and 2.9º C.

VOLATILES

Methylene Chloride was detected in method blank MB 180-207111/8 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Methylene Chloride was detected in method blank MB 180-207218/8 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 180-207218 recovered outside control limits for the following analytes: Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for analytical batch 180-207111 recovered outside control limits for the following analytes: Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

4-Methyl-2-pentanone (MIBK) and Acrylonitrile failed the recovery criteria low for the MS/MSD of sample HD-SPBA-SB-009-45/45.5-0 (180-64801-4) in batch 180-207111. Several analytes failed the recovery criteria high.

The continuing calibration verification (CCV) associated with batch 180-207145 recovered above the upper control limit for 1,4-Dioxane and 2-Hexanone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The continuing calibration verification (CCV) analyzed in 180-207218 was outside the method criteria for the following analyte: Bromomethane recovered high. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-207218 was outside the method criteria for the following analytes: Acrylonitrile, Bromoform, Chloromethane, and Carbon Disulfide recovered low. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-207111 was outside the method criteria for the following analytes: Acrylonitrile and Chloromethane recovered low. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The continuing calibration verification (CCV) analyzed in 180-207111 was outside the method criteria for the following analytes:Acetone, Bromomethane, and Carbon Tetrachloride recovered high. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

PERCENT SOLIDS

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: 180-64801-1

Client Sample ID: HD-SPBA-SB-009-30/30.5-0 — Lab Sample ID: 180-64801-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.5	J B	5.1	0.57	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-SPBA-SB-009-35/35.5-0 — Lab Sample ID: 180-64801-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.3	J B	4.6	0.51	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-SPBA-SB-009-40/40.5-0 — Lab Sample ID: 180-64801-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.4	J B	4.6	0.52	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-SPBA-SB-009-45/45.5-0 — Lab Sample ID: 180-64801-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.4	J B	5.1	0.57	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-SPBA-SB-009-53.5/54-0 — Lab Sample ID: 180-64801-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.6	J B	4.9	0.55	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	6.0		4.9	1.2	ug/Kg	1	☼	8260C	Total/NA
Trichloroethene	240		4.9	1.1	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-SPBA-SB-009-58.5-59-0 — Lab Sample ID: 180-64801-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.6	J B	4.7	0.53	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	2.5	J	4.7	1.2	ug/Kg	1	☼	8260C	Total/NA
Trichloroethene	72		4.7	1.1	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-SPBA-SB-009-61/61.5-0 — Lab Sample ID: 180-64801-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.5	J B	4.7	0.53	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	5.6		4.7	1.2	ug/Kg	1	☼	8260C	Total/NA
Trichloroethene	150		4.7	1.1	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-SPBA-SB-009-65/68-0 — Lab Sample ID: 180-64801-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.9	J B	4.5	0.50	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-QC5-0/1-2 — Lab Sample ID: 180-64801-9

No Detections.

Client Sample ID: HD-QC2-0/1-3 — Lab Sample ID: 180-64801-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.9		5.0	3.1	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-QC2-0/1-4 — Lab Sample ID: 180-64801-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.8		5.0	3.1	ug/L	1		8260C	Total/NA

Client Sample ID: HD-SPBA-SB-010-0.5/1.0-0 — Lab Sample ID: 180-64801-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.4	J B	5.2	0.59	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-SPBA-SB-010-5/5.5-0 — Lab Sample ID: 180-64801-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.6	J B	5.1	0.57	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-SPBA-SB-010-10/10.5-0 — Lab Sample ID: 180-64801-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.4	J B	5.0	0.56	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-SPBA-SB-010-15/15.5-0 — Lab Sample ID: 180-64801-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.3	J B	4.6	0.51	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-SPBA-SB-010-20/20.5-0 — Lab Sample ID: 180-64801-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.2	J B	4.5	0.50	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-SPBA-SB-010-25/25.5-0 — Lab Sample ID: 180-64801-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.3	J B	5.0	0.56	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-SPBA-SB-010-31.6/32.2-0 — Lab Sample ID: 180-64801-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.2	J B	4.4	0.49	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-SPBA-SB-010-35/35.5-0 — Lab Sample ID: 180-64801-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.2	J B	4.5	0.50	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-SPBA-SB-010-40/40.5-0 — Lab Sample ID: 180-64801-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.2	J B	4.3	0.47	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	11		4.3	1.1	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-SPBA-SB-010-45/45.5-0 — Lab Sample ID: 180-64801-21

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-SPBA-SB-010-45/45.5-0 (Continued) — Lab Sample ID: 180-64801-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.2	J B	4.6	0.51	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	71		4.6	1.1	ug/Kg	1	☼	8260C	Total/NA
Trichloroethene	4.6		4.6	1.0	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-SPBA-SB-010-50/50.5 — Lab Sample ID: 180-64801-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.1	J B	4.5	0.50	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	39		4.5	1.1	ug/Kg	1	☼	8260C	Total/NA
Trichloroethene	2.1	J	4.5	1.0	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HD-QC6-0/1-2 — Lab Sample ID: 180-64801-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.7	J	5.0	3.1	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-QC5-0/1-2
Date Collected: 03/30/17 12:00
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.38	ug/L			04/03/17 16:33	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			04/03/17 16:33	1
Bromomethane	1.0	U	1.0	0.59	ug/L			04/03/17 16:33	1
Chloroethane	1.0	U	1.0	0.58	ug/L			04/03/17 16:33	1
1,1-Dichloroethene	1.0	U	1.0	0.32	ug/L			04/03/17 16:33	1
Acetone	5.0	U	5.0	3.1	ug/L			04/03/17 16:33	1
Carbon disulfide	1.0	U	1.0	0.53	ug/L			04/03/17 16:33	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			04/03/17 16:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			04/03/17 16:33	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			04/03/17 16:33	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			04/03/17 16:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/03/17 16:33	1
Bromochloromethane	1.0	U	1.0	0.36	ug/L			04/03/17 16:33	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			04/03/17 16:33	1
Chloroform	1.0	U	1.0	0.27	ug/L			04/03/17 16:33	1
1,1,1-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/03/17 16:33	1
Carbon tetrachloride	1.0	U	1.0	0.56	ug/L			04/03/17 16:33	1
Benzene	1.0	U	1.0	0.18	ug/L			04/03/17 16:33	1
1,2-Dichloroethane	1.0	U	1.0	0.24	ug/L			04/03/17 16:33	1
Trichloroethene	1.0	U	1.0	0.20	ug/L			04/03/17 16:33	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			04/03/17 16:33	1
Bromodichloromethane	1.0	U	1.0	0.57	ug/L			04/03/17 16:33	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			04/03/17 16:33	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.2	ug/L			04/03/17 16:33	1
Toluene	1.0	U	1.0	0.16	ug/L			04/03/17 16:33	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			04/03/17 16:33	1
1,1,2-Trichloroethane	1.0	U	1.0	0.31	ug/L			04/03/17 16:33	1
Tetrachloroethene	1.0	U	1.0	0.24	ug/L			04/03/17 16:33	1
2-Hexanone	5.0	U ^c	5.0	2.0	ug/L			04/03/17 16:33	1
Dibromochloromethane	1.0	U	1.0	0.44	ug/L			04/03/17 16:33	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.51	ug/L			04/03/17 16:33	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/03/17 16:33	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.49	ug/L			04/03/17 16:33	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			04/03/17 16:33	1
Xylenes, Total	2.0	U	2.0	0.27	ug/L			04/03/17 16:33	1
Styrene	1.0	U	1.0	0.22	ug/L			04/03/17 16:33	1
Bromoform	1.0	U	1.0	0.76	ug/L			04/03/17 16:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			04/03/17 16:33	1
Acrylonitrile	20	U	20	3.3	ug/L			04/03/17 16:33	1
1,4-Dioxane	200	U ^c	200	16	ug/L			04/03/17 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*72 - 134*		*04/03/17 16:33*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*04/03/17 16:33*	*1*
4-Bromofluorobenzene (Surr)	*103*		*72 - 120*		*04/03/17 16:33*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 127*		*04/03/17 16:33*	*1*

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

Client Sample ID: HD-QC2-0/1-3
Date Collected: 03/30/17 10:15
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.38	ug/L			04/03/17 16:58	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			04/03/17 16:58	1
Bromomethane	1.0	U	1.0	0.59	ug/L			04/03/17 16:58	1
Chloroethane	1.0	U	1.0	0.58	ug/L			04/03/17 16:58	1
1,1-Dichloroethene	1.0	U	1.0	0.32	ug/L			04/03/17 16:58	1
Acetone	**6.9**		5.0	3.1	ug/L			04/03/17 16:58	1
Carbon disulfide	1.0	U	1.0	0.53	ug/L			04/03/17 16:58	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			04/03/17 16:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			04/03/17 16:58	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			04/03/17 16:58	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			04/03/17 16:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/03/17 16:58	1
Bromochloromethane	1.0	U	1.0	0.36	ug/L			04/03/17 16:58	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			04/03/17 16:58	1
Chloroform	1.0	U	1.0	0.27	ug/L			04/03/17 16:58	1
1,1,1-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/03/17 16:58	1
Carbon tetrachloride	1.0	U	1.0	0.56	ug/L			04/03/17 16:58	1
Benzene	1.0	U	1.0	0.18	ug/L			04/03/17 16:58	1
1,2-Dichloroethane	1.0	U	1.0	0.24	ug/L			04/03/17 16:58	1
Trichloroethene	1.0	U	1.0	0.20	ug/L			04/03/17 16:58	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			04/03/17 16:58	1
Bromodichloromethane	1.0	U	1.0	0.57	ug/L			04/03/17 16:58	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			04/03/17 16:58	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.2	ug/L			04/03/17 16:58	1
Toluene	1.0	U	1.0	0.16	ug/L			04/03/17 16:58	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			04/03/17 16:58	1
1,1,2-Trichloroethane	1.0	U	1.0	0.31	ug/L			04/03/17 16:58	1
Tetrachloroethene	1.0	U	1.0	0.24	ug/L			04/03/17 16:58	1
2-Hexanone	5.0	U ^c	5.0	2.0	ug/L			04/03/17 16:58	1
Dibromochloromethane	1.0	U	1.0	0.44	ug/L			04/03/17 16:58	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.51	ug/L			04/03/17 16:58	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/03/17 16:58	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.49	ug/L			04/03/17 16:58	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			04/03/17 16:58	1
Xylenes, Total	2.0	U	2.0	0.27	ug/L			04/03/17 16:58	1
Styrene	1.0	U	1.0	0.22	ug/L			04/03/17 16:58	1
Bromoform	1.0	U	1.0	0.76	ug/L			04/03/17 16:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			04/03/17 16:58	1
Acrylonitrile	20	U	20	3.3	ug/L			04/03/17 16:58	1
1,4-Dioxane	200	U ^c	200	16	ug/L			04/03/17 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 134*		*04/03/17 16:58*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*04/03/17 16:58*	*1*
4-Bromofluorobenzene (Surr)	*105*		*72 - 120*		*04/03/17 16:58*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 127*		*04/03/17 16:58*	*1*

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

Client Sample ID: HD-QC2-0/1-4
Date Collected: 03/30/17 10:20
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.38	ug/L			04/03/17 17:22	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			04/03/17 17:22	1
Bromomethane	1.0	U	1.0	0.59	ug/L			04/03/17 17:22	1
Chloroethane	1.0	U	1.0	0.58	ug/L			04/03/17 17:22	1
1,1-Dichloroethene	1.0	U	1.0	0.32	ug/L			04/03/17 17:22	1
Acetone	**8.8**		5.0	3.1	ug/L			04/03/17 17:22	1
Carbon disulfide	1.0	U	1.0	0.53	ug/L			04/03/17 17:22	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			04/03/17 17:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			04/03/17 17:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			04/03/17 17:22	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			04/03/17 17:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/03/17 17:22	1
Bromochloromethane	1.0	U	1.0	0.36	ug/L			04/03/17 17:22	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			04/03/17 17:22	1
Chloroform	1.0	U	1.0	0.27	ug/L			04/03/17 17:22	1
1,1,1-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/03/17 17:22	1
Carbon tetrachloride	1.0	U	1.0	0.56	ug/L			04/03/17 17:22	1
Benzene	1.0	U	1.0	0.18	ug/L			04/03/17 17:22	1
1,2-Dichloroethane	1.0	U	1.0	0.24	ug/L			04/03/17 17:22	1
Trichloroethene	1.0	U	1.0	0.20	ug/L			04/03/17 17:22	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			04/03/17 17:22	1
Bromodichloromethane	1.0	U	1.0	0.57	ug/L			04/03/17 17:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			04/03/17 17:22	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.2	ug/L			04/03/17 17:22	1
Toluene	1.0	U	1.0	0.16	ug/L			04/03/17 17:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			04/03/17 17:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.31	ug/L			04/03/17 17:22	1
Tetrachloroethene	1.0	U	1.0	0.24	ug/L			04/03/17 17:22	1
2-Hexanone	5.0	U ^c	5.0	2.0	ug/L			04/03/17 17:22	1
Dibromochloromethane	1.0	U	1.0	0.44	ug/L			04/03/17 17:22	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.51	ug/L			04/03/17 17:22	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/03/17 17:22	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.49	ug/L			04/03/17 17:22	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			04/03/17 17:22	1
Xylenes, Total	2.0	U	2.0	0.27	ug/L			04/03/17 17:22	1
Styrene	1.0	U	1.0	0.22	ug/L			04/03/17 17:22	1
Bromoform	1.0	U	1.0	0.76	ug/L			04/03/17 17:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			04/03/17 17:22	1
Acrylonitrile	20	U	20	3.3	ug/L			04/03/17 17:22	1
1,4-Dioxane	200	U ^c	200	16	ug/L			04/03/17 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*72 - 134*		*04/03/17 17:22*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*04/03/17 17:22*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 120*		*04/03/17 17:22*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 127*		*04/03/17 17:22*	*1*

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

Client Sample ID: HD-QC6-0/1-2
Date Collected: 03/30/17 12:05
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-23
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.38	ug/L			04/03/17 17:46	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			04/03/17 17:46	1
Bromomethane	1.0	U	1.0	0.59	ug/L			04/03/17 17:46	1
Chloroethane	1.0	U	1.0	0.58	ug/L			04/03/17 17:46	1
1,1-Dichloroethene	1.0	U	1.0	0.32	ug/L			04/03/17 17:46	1
Acetone	**3.7**	**J**	5.0	3.1	ug/L			04/03/17 17:46	1
Carbon disulfide	1.0	U	1.0	0.53	ug/L			04/03/17 17:46	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			04/03/17 17:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			04/03/17 17:46	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			04/03/17 17:46	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			04/03/17 17:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/03/17 17:46	1
Bromochloromethane	1.0	U	1.0	0.36	ug/L			04/03/17 17:46	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			04/03/17 17:46	1
Chloroform	1.0	U	1.0	0.27	ug/L			04/03/17 17:46	1
1,1,1-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/03/17 17:46	1
Carbon tetrachloride	1.0	U	1.0	0.56	ug/L			04/03/17 17:46	1
Benzene	1.0	U	1.0	0.18	ug/L			04/03/17 17:46	1
1,2-Dichloroethane	1.0	U	1.0	0.24	ug/L			04/03/17 17:46	1
Trichloroethene	1.0	U	1.0	0.20	ug/L			04/03/17 17:46	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			04/03/17 17:46	1
Bromodichloromethane	1.0	U	1.0	0.57	ug/L			04/03/17 17:46	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			04/03/17 17:46	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.2	ug/L			04/03/17 17:46	1
Toluene	1.0	U	1.0	0.16	ug/L			04/03/17 17:46	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			04/03/17 17:46	1
1,1,2-Trichloroethane	1.0	U	1.0	0.31	ug/L			04/03/17 17:46	1
Tetrachloroethene	1.0	U	1.0	0.24	ug/L			04/03/17 17:46	1
2-Hexanone	5.0	U ^c	5.0	2.0	ug/L			04/03/17 17:46	1
Dibromochloromethane	1.0	U	1.0	0.44	ug/L			04/03/17 17:46	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.51	ug/L			04/03/17 17:46	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/03/17 17:46	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.49	ug/L			04/03/17 17:46	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			04/03/17 17:46	1
Xylenes, Total	2.0	U	2.0	0.27	ug/L			04/03/17 17:46	1
Styrene	1.0	U	1.0	0.22	ug/L			04/03/17 17:46	1
Bromoform	1.0	U	1.0	0.76	ug/L			04/03/17 17:46	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			04/03/17 17:46	1
Acrylonitrile	20	U	20	3.3	ug/L			04/03/17 17:46	1
1,4-Dioxane	200	U ^c	200	16	ug/L			04/03/17 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*72 - 134*		*04/03/17 17:46*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*04/03/17 17:46*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 120*		*04/03/17 17:46*	*1*
Dibromofluoromethane (Surr)	*107*		*77 - 127*		*04/03/17 17:46*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-009-30/30.5-0
Date Collected: 03/30/17 09:35
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-1
Matrix: Solid
Percent Solids: 80.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	5.1	U	5.1	2.8	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
1,1,1-Trichloroethane	5.1	U	5.1	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
1,1,2,2-Tetrachloroethane	5.1	U	5.1	4.1	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
1,1,2-Trichloroethane	5.1	U	5.1	2.9	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
1,1-Dichloroethane	5.1	U	5.1	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
1,1-Dichloroethene	5.1	U	5.1	1.5	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
1,2-Dichloroethane	5.1	U	5.1	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
1,2-Dichloropropane	5.1	U	5.1	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
2-Butanone (MEK)	5.1	U	5.1	3.1	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
2-Hexanone	5.1	U	5.1	4.2	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
4-Methyl-2-pentanone (MIBK)	5.1	U	5.1	3.7	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Acetone	20	U ^c	20	11	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Benzene	5.1	U	5.1	3.1	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Bromoform	5.1	U	5.1	4.7	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Bromomethane	5.1	U ^c *	5.1	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Carbon disulfide	5.1	U	5.1	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Carbon tetrachloride	5.1	U ^c	5.1	1.4	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Chlorobenzene	5.1	U	5.1	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Dibromochloromethane	5.1	U	5.1	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
1,4-Dioxane	1000	U	1000	26	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Chloroform	5.1	U	5.1	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Chloromethane	5.1	U ^c	5.1	2.7	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Chloroethane	5.1	U	5.1	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
cis-1,2-Dichloroethene	5.1	U	5.1	1.4	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
cis-1,3-Dichloropropene	5.1	U	5.1	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Bromodichloromethane	5.1	U	5.1	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Ethylbenzene	5.1	U	5.1	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
1,2-Dibromoethane (EDB)	5.1	U	5.1	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Methyl tert-butyl ether	5.1	U	5.1	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Methylene Chloride	**1.5**	**J B**	5.1	0.57	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Styrene	5.1	U	5.1	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Tetrachloroethene	5.1	U	5.1	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Toluene	5.1	U	5.1	3.7	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
trans-1,2-Dichloroethene	5.1	U	5.1	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
trans-1,3-Dichloropropene	5.1	U	5.1	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Trichloroethene	5.1	U	5.1	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Acrylonitrile	51	U ^c	51	26	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Vinyl chloride	5.1	U	5.1	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Xylenes, Total	10	U	10	4.7	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1
Bromochloromethane	5.1	U	5.1	1.5	ug/Kg	☼	04/01/17 07:40	04/03/17 10:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*52 - 124*	*04/01/17 07:40*	*04/03/17 10:41*	*1*
4-Bromofluorobenzene (Surr)	*82*		*63 - 120*	*04/01/17 07:40*	*04/03/17 10:41*	*1*
Dibromofluoromethane (Surr)	*99*		*68 - 121*	*04/01/17 07:40*	*04/03/17 10:41*	*1*
Toluene-d8 (Surr)	*96*		*72 - 127*	*04/01/17 07:40*	*04/03/17 10:41*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-009-35/35.5-0
Date Collected: 03/30/17 09:50
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-2
Matrix: Solid
Percent Solids: 82.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	4.6	U	4.6	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
1,1,1-Trichloroethane	4.6	U	4.6	0.99	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
1,1,2,2-Tetrachloroethane	4.6	U	4.6	3.6	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
1,1,2-Trichloroethane	4.6	U	4.6	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
1,1-Dichloroethane	4.6	U	4.6	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
1,1-Dichloroethene	4.6	U	4.6	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
1,2-Dichloroethane	4.6	U	4.6	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
1,2-Dichloropropane	4.6	U	4.6	1.7	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
2-Butanone (MEK)	4.6	U	4.6	2.7	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
2-Hexanone	4.6	U	4.6	3.7	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
4-Methyl-2-pentanone (MIBK)	4.6	U	4.6	3.3	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Acetone	18	U ^c	18	9.4	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Benzene	4.6	U	4.6	2.8	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Bromoform	4.6	U	4.6	4.2	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Bromomethane	4.6	U ^c *	4.6	1.6	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Carbon disulfide	4.6	U	4.6	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Carbon tetrachloride	4.6	U ^c	4.6	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Chlorobenzene	4.6	U	4.6	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Dibromochloromethane	4.6	U	4.6	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
1,4-Dioxane	910	U	910	23	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Chloroform	4.6	U	4.6	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Chloromethane	4.6	U ^c	4.6	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Chloroethane	4.6	U	4.6	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
cis-1,2-Dichloroethene	4.6	U	4.6	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
cis-1,3-Dichloropropene	4.6	U	4.6	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Bromodichloromethane	4.6	U	4.6	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Ethylbenzene	4.6	U	4.6	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
1,2-Dibromoethane (EDB)	4.6	U	4.6	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Methyl tert-butyl ether	4.6	U	4.6	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Methylene Chloride	**1.3**	**J B**	4.6	0.51	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Styrene	4.6	U	4.6	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Tetrachloroethene	4.6	U	4.6	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Toluene	4.6	U	4.6	3.3	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
trans-1,2-Dichloroethene	4.6	U	4.6	0.94	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
trans-1,3-Dichloropropene	4.6	U	4.6	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Trichloroethene	4.6	U	4.6	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Acrylonitrile	46	U ^c	46	23	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Vinyl chloride	4.6	U	4.6	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Xylenes, Total	9.1	U	9.1	4.2	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1
Bromochloromethane	4.6	U	4.6	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 11:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*52 - 124*	*04/01/17 07:40*	*04/03/17 11:03*	*1*
4-Bromofluorobenzene (Surr)	*76*		*63 - 120*	*04/01/17 07:40*	*04/03/17 11:03*	*1*
Dibromofluoromethane (Surr)	*92*		*68 - 121*	*04/01/17 07:40*	*04/03/17 11:03*	*1*
Toluene-d8 (Surr)	*88*		*72 - 127*	*04/01/17 07:40*	*04/03/17 11:03*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-009-40/40.5-0
Date Collected: 03/30/17 10:00
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-3
Matrix: Solid
Percent Solids: 80.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	4.6	U	4.6	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
1,1,1-Trichloroethane	4.6	U	4.6	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
1,1,2,2-Tetrachloroethane	4.6	U	4.6	3.7	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
1,1,2-Trichloroethane	4.6	U	4.6	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
1,1-Dichloroethane	4.6	U	4.6	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
1,1-Dichloroethene	4.6	U	4.6	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
1,2-Dichloroethane	4.6	U	4.6	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
1,2-Dichloropropane	4.6	U	4.6	1.7	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
2-Butanone (MEK)	4.6	U	4.6	2.8	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
2-Hexanone	4.6	U	4.6	3.8	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
4-Methyl-2-pentanone (MIBK)	4.6	U	4.6	3.3	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Acetone	19	U ^c	19	9.5	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Benzene	4.6	U	4.6	2.8	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Bromoform	4.6	U	4.6	4.2	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Bromomethane	4.6	U ^c *	4.6	1.6	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Carbon disulfide	4.6	U	4.6	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Carbon tetrachloride	4.6	U ^c	4.6	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Chlorobenzene	4.6	U	4.6	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Dibromochloromethane	4.6	U	4.6	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
1,4-Dioxane	930	U	930	23	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Chloroform	4.6	U	4.6	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Chloromethane	4.6	U ^c	4.6	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Chloroethane	4.6	U	4.6	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
cis-1,2-Dichloroethene	4.6	U	4.6	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
cis-1,3-Dichloropropene	4.6	U	4.6	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Bromodichloromethane	4.6	U	4.6	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Ethylbenzene	4.6	U	4.6	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
1,2-Dibromoethane (EDB)	4.6	U	4.6	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Methyl tert-butyl ether	4.6	U	4.6	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Methylene Chloride	**1.4**	**J B**	4.6	0.52	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Styrene	4.6	U	4.6	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Tetrachloroethene	4.6	U	4.6	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Toluene	4.6	U	4.6	3.4	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
trans-1,2-Dichloroethene	4.6	U	4.6	0.95	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
trans-1,3-Dichloropropene	4.6	U	4.6	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Trichloroethene	4.6	U	4.6	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Acrylonitrile	46	U ^c	46	23	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Vinyl chloride	4.6	U	4.6	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Xylenes, Total	9.3	U	9.3	4.2	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1
Bromochloromethane	4.6	U	4.6	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 11:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*52 - 124*	*04/01/17 07:40*	*04/03/17 11:26*	*1*
4-Bromofluorobenzene (Surr)	*83*		*63 - 120*	*04/01/17 07:40*	*04/03/17 11:26*	*1*
Dibromofluoromethane (Surr)	*103*		*68 - 121*	*04/01/17 07:40*	*04/03/17 11:26*	*1*
Toluene-d8 (Surr)	*94*		*72 - 127*	*04/01/17 07:40*	*04/03/17 11:26*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-009-45/45.5-0
Date Collected: 03/30/17 10:10
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-4
Matrix: Solid
Percent Solids: 84.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	5.1	U	5.1	2.8	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
1,1,1-Trichloroethane	5.1	U F1	5.1	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
1,1,2,2-Tetrachloroethane	5.1	U	5.1	4.1	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
1,1,2-Trichloroethane	5.1	U	5.1	2.9	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
1,1-Dichloroethane	5.1	U	5.1	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
1,1-Dichloroethene	5.1	U	5.1	1.5	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
1,2-Dichloroethane	5.1	U	5.1	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
1,2-Dichloropropane	5.1	U	5.1	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
2-Butanone (MEK)	5.1	U	5.1	3.1	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
2-Hexanone	5.1	U	5.1	4.2	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
4-Methyl-2-pentanone (MIBK)	5.1	U F1	5.1	3.7	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Acetone	20	U ^c	20	10	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Benzene	5.1	U	5.1	3.1	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Bromoform	5.1	U	5.1	4.7	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Bromomethane	5.1	U ^c * F1	5.1	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Carbon disulfide	5.1	U	5.1	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Carbon tetrachloride	5.1	U ^c F1	5.1	1.4	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Chlorobenzene	5.1	U	5.1	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Dibromochloromethane	5.1	U	5.1	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
1,4-Dioxane	1000	U	1000	26	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Chloroform	5.1	U	5.1	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Chloromethane	5.1	U ^c	5.1	2.7	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Chloroethane	5.1	U F1	5.1	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
cis-1,2-Dichloroethene	5.1	U	5.1	1.4	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
cis-1,3-Dichloropropene	5.1	U	5.1	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Bromodichloromethane	5.1	U	5.1	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Ethylbenzene	5.1	U	5.1	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
1,2-Dibromoethane (EDB)	5.1	U	5.1	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Methyl tert-butyl ether	5.1	U	5.1	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Methylene Chloride	**1.4**	**J B**	5.1	0.57	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Styrene	5.1	U	5.1	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Tetrachloroethene	5.1	U	5.1	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Toluene	5.1	U	5.1	3.7	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
trans-1,2-Dichloroethene	5.1	U	5.1	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
trans-1,3-Dichloropropene	5.1	U	5.1	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Trichloroethene	5.1	U F1	5.1	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Acrylonitrile	51	U ^c F1	51	26	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Vinyl chloride	5.1	U	5.1	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Xylenes, Total	10	U	10	4.7	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1
Bromochloromethane	5.1	U	5.1	1.5	ug/Kg	☼	04/01/17 07:40	04/03/17 09:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*52 - 124*	*04/01/17 07:40*	*04/03/17 09:33*	*1*
4-Bromofluorobenzene (Surr)	*86*		*63 - 120*	*04/01/17 07:40*	*04/03/17 09:33*	*1*
Dibromofluoromethane (Surr)	*105*		*68 - 121*	*04/01/17 07:40*	*04/03/17 09:33*	*1*
Toluene-d8 (Surr)	*98*		*72 - 127*	*04/01/17 07:40*	*04/03/17 09:33*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-009-53.5/54-0
Date Collected: 03/30/17 10:45
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-5
Matrix: Solid
Percent Solids: 78.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	4.9	U	4.9	2.7	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
1,1,1-Trichloroethane	4.9	U	4.9	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
1,1,2,2-Tetrachloroethane	4.9	U	4.9	3.9	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
1,1,2-Trichloroethane	4.9	U	4.9	2.8	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
1,1-Dichloroethane	4.9	U	4.9	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
1,1-Dichloroethene	4.9	U	4.9	1.4	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
1,2-Dichloroethane	4.9	U	4.9	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
1,2-Dichloropropane	4.9	U	4.9	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
2-Butanone (MEK)	4.9	U	4.9	2.9	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
2-Hexanone	4.9	U	4.9	4.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
4-Methyl-2-pentanone (MIBK)	4.9	U	4.9	3.5	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Acetone	20	U ^c	20	10	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Benzene	4.9	U	4.9	3.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Bromoform	4.9	U	4.9	4.5	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Bromomethane	4.9	U ^c *	4.9	1.7	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Carbon disulfide	4.9	U	4.9	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Carbon tetrachloride	4.9	U ^c	4.9	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Chlorobenzene	4.9	U	4.9	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Dibromochloromethane	4.9	U	4.9	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
1,4-Dioxane	980	U	980	25	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Chloroform	4.9	U	4.9	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Chloromethane	4.9	U ^c	4.9	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Chloroethane	4.9	U	4.9	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
cis-1,2-Dichloroethene	4.9	U	4.9	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
cis-1,3-Dichloropropene	4.9	U	4.9	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Bromodichloromethane	4.9	U	4.9	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Ethylbenzene	4.9	U	4.9	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
1,2-Dibromoethane (EDB)	4.9	U	4.9	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Methyl tert-butyl ether	4.9	U	4.9	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Methylene Chloride	**1.6**	**J B**	4.9	0.55	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Styrene	4.9	U	4.9	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Tetrachloroethene	**6.0**		4.9	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Toluene	4.9	U	4.9	3.6	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
trans-1,2-Dichloroethene	4.9	U	4.9	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
trans-1,3-Dichloropropene	4.9	U	4.9	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Trichloroethene	**240**		4.9	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Acrylonitrile	49	U ^c	49	25	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Vinyl chloride	4.9	U	4.9	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Xylenes, Total	9.8	U	9.8	4.5	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1
Bromochloromethane	4.9	U	4.9	1.4	ug/Kg	☼	04/01/17 07:40	04/03/17 11:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*52 - 124*	*04/01/17 07:40*	*04/03/17 11:49*	*1*
4-Bromofluorobenzene (Surr)	*80*		*63 - 120*	*04/01/17 07:40*	*04/03/17 11:49*	*1*
Dibromofluoromethane (Surr)	*97*		*68 - 121*	*04/01/17 07:40*	*04/03/17 11:49*	*1*
Toluene-d8 (Surr)	*92*		*72 - 127*	*04/01/17 07:40*	*04/03/17 11:49*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-009-58.5-59-0
Date Collected: 03/30/17 11:20
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-6
Matrix: Solid
Percent Solids: 72.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	4.7	U	4.7	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
1,1,1-Trichloroethane	4.7	U	4.7	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
1,1,2,2-Tetrachloroethane	4.7	U	4.7	3.8	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
1,1,2-Trichloroethane	4.7	U	4.7	2.7	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
1,1-Dichloroethane	4.7	U	4.7	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
1,1-Dichloroethene	4.7	U	4.7	1.4	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
1,2-Dichloroethane	4.7	U	4.7	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
1,2-Dichloropropane	4.7	U	4.7	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
2-Butanone (MEK)	4.7	U	4.7	2.8	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
2-Hexanone	4.7	U	4.7	3.9	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
4-Methyl-2-pentanone (MIBK)	4.7	U	4.7	3.4	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Acetone	19	U ^c	19	9.7	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Benzene	4.7	U	4.7	2.9	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Bromoform	4.7	U	4.7	4.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Bromomethane	4.7	U ^c *	4.7	1.6	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Carbon disulfide	4.7	U	4.7	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Carbon tetrachloride	4.7	U ^c	4.7	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Chlorobenzene	4.7	U	4.7	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Dibromochloromethane	4.7	U	4.7	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
1,4-Dioxane	950	U	950	24	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Chloroform	4.7	U	4.7	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Chloromethane	4.7	U ^c	4.7	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Chloroethane	4.7	U	4.7	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
cis-1,2-Dichloroethene	4.7	U	4.7	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
cis-1,3-Dichloropropene	4.7	U	4.7	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Bromodichloromethane	4.7	U	4.7	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Ethylbenzene	4.7	U	4.7	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
1,2-Dibromoethane (EDB)	4.7	U	4.7	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Methyl tert-butyl ether	4.7	U	4.7	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Methylene Chloride	**1.6**	**J B**	4.7	0.53	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Styrene	4.7	U	4.7	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Tetrachloroethene	**2.5**	**J**	4.7	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Toluene	4.7	U	4.7	3.4	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
trans-1,2-Dichloroethene	4.7	U	4.7	0.97	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
trans-1,3-Dichloropropene	4.7	U	4.7	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Trichloroethene	**72**		4.7	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Acrylonitrile	47	U ^c	47	24	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Vinyl chloride	4.7	U	4.7	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Xylenes, Total	9.5	U	9.5	4.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1
Bromochloromethane	4.7	U	4.7	1.4	ug/Kg	☼	04/01/17 07:40	04/03/17 12:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*52 - 124*	*04/01/17 07:40*	*04/03/17 12:11*	*1*
4-Bromofluorobenzene (Surr)	*81*		*63 - 120*	*04/01/17 07:40*	*04/03/17 12:11*	*1*
Dibromofluoromethane (Surr)	*97*		*68 - 121*	*04/01/17 07:40*	*04/03/17 12:11*	*1*
Toluene-d8 (Surr)	*91*		*72 - 127*	*04/01/17 07:40*	*04/03/17 12:11*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-009-61/61.5-0
Date Collected: 03/30/17 11:55
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-7
Matrix: Solid
Percent Solids: 84.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	4.7	U	4.7	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
1,1,1-Trichloroethane	4.7	U	4.7	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
1,1,2,2-Tetrachloroethane	4.7	U	4.7	3.7	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
1,1,2-Trichloroethane	4.7	U	4.7	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
1,1-Dichloroethane	4.7	U	4.7	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
1,1-Dichloroethene	4.7	U	4.7	1.4	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
1,2-Dichloroethane	4.7	U	4.7	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
1,2-Dichloropropane	4.7	U	4.7	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
2-Butanone (MEK)	4.7	U	4.7	2.8	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
2-Hexanone	4.7	U	4.7	3.8	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
4-Methyl-2-pentanone (MIBK)	4.7	U	4.7	3.4	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Acetone	19	U ^c	19	9.7	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Benzene	4.7	U	4.7	2.9	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Bromoform	4.7	U	4.7	4.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Bromomethane	4.7	U ^c *	4.7	1.6	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Carbon disulfide	4.7	U	4.7	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Carbon tetrachloride	4.7	U ^c	4.7	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Chlorobenzene	4.7	U	4.7	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Dibromochloromethane	4.7	U	4.7	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
1,4-Dioxane	940	U	940	24	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Chloroform	4.7	U	4.7	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Chloromethane	4.7	U ^c	4.7	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Chloroethane	4.7	U	4.7	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
cis-1,2-Dichloroethene	4.7	U	4.7	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
cis-1,3-Dichloropropene	4.7	U	4.7	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Bromodichloromethane	4.7	U	4.7	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Ethylbenzene	4.7	U	4.7	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
1,2-Dibromoethane (EDB)	4.7	U	4.7	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Methyl tert-butyl ether	4.7	U	4.7	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Methylene Chloride	**1.5**	**J B**	4.7	0.53	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Styrene	4.7	U	4.7	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Tetrachloroethene	**5.6**		4.7	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Toluene	4.7	U	4.7	3.4	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
trans-1,2-Dichloroethene	4.7	U	4.7	0.97	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
trans-1,3-Dichloropropene	4.7	U	4.7	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Trichloroethene	**150**		4.7	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Acrylonitrile	47	U ^c	47	24	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Vinyl chloride	4.7	U	4.7	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Xylenes, Total	9.4	U	9.4	4.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1
Bromochloromethane	4.7	U	4.7	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*52 - 124*	*04/01/17 07:40*	*04/03/17 12:34*	*1*
4-Bromofluorobenzene (Surr)	*81*		*63 - 120*	*04/01/17 07:40*	*04/03/17 12:34*	*1*
Dibromofluoromethane (Surr)	*100*		*68 - 121*	*04/01/17 07:40*	*04/03/17 12:34*	*1*
Toluene-d8 (Surr)	*95*		*72 - 127*	*04/01/17 07:40*	*04/03/17 12:34*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-009-65/68-0
Date Collected: 03/30/17 12:50
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-8
Matrix: Solid
Percent Solids: 81.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	4.5	U	4.5	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
1,1,1-Trichloroethane	4.5	U	4.5	0.97	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
1,1,2,2-Tetrachloroethane	4.5	U	4.5	3.6	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
1,1,2-Trichloroethane	4.5	U	4.5	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
1,1-Dichloroethane	4.5	U	4.5	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
1,1-Dichloroethene	4.5	U	4.5	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
1,2-Dichloroethane	4.5	U	4.5	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
1,2-Dichloropropane	4.5	U	4.5	1.7	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
2-Butanone (MEK)	4.5	U	4.5	2.7	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
2-Hexanone	4.5	U	4.5	3.7	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
4-Methyl-2-pentanone (MIBK)	4.5	U	4.5	3.2	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Acetone	18	U ^c	18	9.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Benzene	4.5	U	4.5	2.7	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Bromoform	4.5	U	4.5	4.1	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Bromomethane	4.5	U ^c *	4.5	1.6	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Carbon disulfide	4.5	U	4.5	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Carbon tetrachloride	4.5	U ^c	4.5	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Chlorobenzene	4.5	U	4.5	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Dibromochloromethane	4.5	U	4.5	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
1,4-Dioxane	900	U	900	23	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Chloroform	4.5	U	4.5	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Chloromethane	4.5	U ^c	4.5	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Chloroethane	4.5	U	4.5	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
cis-1,2-Dichloroethene	4.5	U	4.5	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
cis-1,3-Dichloropropene	4.5	U	4.5	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Bromodichloromethane	4.5	U	4.5	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Ethylbenzene	4.5	U	4.5	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
1,2-Dibromoethane (EDB)	4.5	U	4.5	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Methyl tert-butyl ether	4.5	U	4.5	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Methylene Chloride	**1.9**	**J B**	4.5	0.50	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Styrene	4.5	U	4.5	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Tetrachloroethene	4.5	U	4.5	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Toluene	4.5	U	4.5	3.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
trans-1,2-Dichloroethene	4.5	U	4.5	0.92	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
trans-1,3-Dichloropropene	4.5	U	4.5	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Trichloroethene	4.5	U	4.5	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Acrylonitrile	45	U ^c	45	22	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Vinyl chloride	4.5	U	4.5	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Xylenes, Total	9.0	U	9.0	4.1	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1
Bromochloromethane	4.5	U	4.5	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*52 - 124*	*04/01/17 07:40*	*04/03/17 12:57*	*1*
4-Bromofluorobenzene (Surr)	*82*		*63 - 120*	*04/01/17 07:40*	*04/03/17 12:57*	*1*
Dibromofluoromethane (Surr)	*98*		*68 - 121*	*04/01/17 07:40*	*04/03/17 12:57*	*1*
Toluene-d8 (Surr)	*96*		*72 - 127*	*04/01/17 07:40*	*04/03/17 12:57*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-010-0.5/1.0-0
Date Collected: 03/30/17 14:00
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-12
Matrix: Solid
Percent Solids: 87.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	5.2	U	5.2	2.8	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
1,1,1-Trichloroethane	5.2	U	5.2	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
1,1,2,2-Tetrachloroethane	5.2	U	5.2	4.2	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
1,1,2-Trichloroethane	5.2	U	5.2	2.9	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
1,1-Dichloroethane	5.2	U	5.2	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
1,1-Dichloroethene	5.2	U	5.2	1.5	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
1,2-Dichloroethane	5.2	U	5.2	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
1,2-Dichloropropane	5.2	U	5.2	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
2-Butanone (MEK)	5.2	U	5.2	3.1	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
2-Hexanone	5.2	U	5.2	4.3	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
4-Methyl-2-pentanone (MIBK)	5.2	U	5.2	3.7	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Acetone	21	U ^c	21	11	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Benzene	5.2	U	5.2	3.2	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Bromoform	5.2	U	5.2	4.8	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Bromomethane	5.2	U ^c *	5.2	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Carbon disulfide	5.2	U	5.2	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Carbon tetrachloride	5.2	U ^c	5.2	1.4	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Chlorobenzene	5.2	U	5.2	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Dibromochloromethane	5.2	U	5.2	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
1,4-Dioxane	1000	U	1000	26	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Chloroform	5.2	U	5.2	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Chloromethane	5.2	U ^c	5.2	2.8	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Chloroethane	5.2	U	5.2	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
cis-1,2-Dichloroethene	5.2	U	5.2	1.4	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
cis-1,3-Dichloropropene	5.2	U	5.2	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Bromodichloromethane	5.2	U	5.2	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Ethylbenzene	5.2	U	5.2	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
1,2-Dibromoethane (EDB)	5.2	U	5.2	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Methyl tert-butyl ether	5.2	U	5.2	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Methylene Chloride	**1.4**	**J B**	5.2	0.59	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Styrene	5.2	U	5.2	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Tetrachloroethene	5.2	U	5.2	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Toluene	5.2	U	5.2	3.8	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
trans-1,2-Dichloroethene	5.2	U	5.2	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
trans-1,3-Dichloropropene	5.2	U	5.2	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Trichloroethene	5.2	U	5.2	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Acrylonitrile	52	U ^c	52	26	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Vinyl chloride	5.2	U	5.2	2.7	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Xylenes, Total	10	U	10	4.8	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1
Bromochloromethane	5.2	U	5.2	1.5	ug/Kg	☼	04/01/17 07:40	04/03/17 13:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*52 - 124*	*04/01/17 07:40*	*04/03/17 13:20*	*1*
4-Bromofluorobenzene (Surr)	*83*		*63 - 120*	*04/01/17 07:40*	*04/03/17 13:20*	*1*
Dibromofluoromethane (Surr)	*104*		*68 - 121*	*04/01/17 07:40*	*04/03/17 13:20*	*1*
Toluene-d8 (Surr)	*95*		*72 - 127*	*04/01/17 07:40*	*04/03/17 13:20*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-010-5/5.5-0
Date Collected: 03/30/17 14:20
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-13
Matrix: Solid
Percent Solids: 84.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	5.1	U	5.1	2.8	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
1,1,1-Trichloroethane	5.1	U	5.1	1.1	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
1,1,2,2-Tetrachloroethane	5.1	U	5.1	4.1	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
1,1,2-Trichloroethane	5.1	U	5.1	2.9	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
1,1-Dichloroethane	5.1	U	5.1	1.2	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
1,1-Dichloroethene	5.1	U	5.1	1.5	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
1,2-Dichloroethane	5.1	U	5.1	1.2	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
1,2-Dichloropropane	5.1	U	5.1	1.9	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
2-Butanone (MEK)	5.1	U	5.1	3.1	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
2-Hexanone	5.1	U	5.1	4.2	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
4-Methyl-2-pentanone (MIBK)	5.1	U	5.1	3.7	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Acetone	21	U	21	11	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Benzene	5.1	U	5.1	3.1	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Bromoform	5.1	U ^c	5.1	4.7	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Bromomethane	5.1	U ^c *	5.1	1.8	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Carbon disulfide	5.1	U ^c	5.1	2.2	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Carbon tetrachloride	5.1	U	5.1	1.4	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Chlorobenzene	5.1	U	5.1	2.3	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Dibromochloromethane	5.1	U	5.1	2.5	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
1,4-Dioxane	1000	U	1000	26	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Chloroform	5.1	U	5.1	1.3	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Chloromethane	5.1	U ^c	5.1	2.7	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Chloroethane	5.1	U	5.1	2.2	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
cis-1,2-Dichloroethene	5.1	U	5.1	1.4	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
cis-1,3-Dichloropropene	5.1	U	5.1	2.3	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Bromodichloromethane	5.1	U	5.1	2.1	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Ethylbenzene	5.1	U	5.1	2.0	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
1,2-Dibromoethane (EDB)	5.1	U	5.1	2.2	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Methyl tert-butyl ether	5.1	U	5.1	2.6	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Methylene Chloride	**1.6**	**J B**	5.1	0.57	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Styrene	5.1	U	5.1	2.4	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Tetrachloroethene	5.1	U	5.1	1.3	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Toluene	5.1	U	5.1	3.7	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
trans-1,2-Dichloroethene	5.1	U	5.1	1.1	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
trans-1,3-Dichloropropene	5.1	U	5.1	2.5	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Trichloroethene	5.1	U	5.1	1.2	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Acrylonitrile	51	U ^c	51	26	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Vinyl chloride	5.1	U	5.1	2.6	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Xylenes, Total	10	U	10	4.7	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1
Bromochloromethane	5.1	U	5.1	1.5	ug/Kg	☼	04/01/17 07:40	04/04/17 11:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*52 - 124*	*04/01/17 07:40*	*04/04/17 11:33*	*1*
4-Bromofluorobenzene (Surr)	*87*		*63 - 120*	*04/01/17 07:40*	*04/04/17 11:33*	*1*
Dibromofluoromethane (Surr)	*106*		*68 - 121*	*04/01/17 07:40*	*04/04/17 11:33*	*1*
Toluene-d8 (Surr)	*96*		*72 - 127*	*04/01/17 07:40*	*04/04/17 11:33*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-010-10/10.5-0
Date Collected: 03/30/17 14:35
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-14
Matrix: Solid
Percent Solids: 82.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	5.0	U	5.0	2.7	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
1,1,1-Trichloroethane	5.0	U	5.0	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	4.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
1,1,2-Trichloroethane	5.0	U	5.0	2.8	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
1,1-Dichloroethane	5.0	U	5.0	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
1,1-Dichloroethene	5.0	U	5.0	1.4	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
1,2-Dichloroethane	5.0	U	5.0	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
1,2-Dichloropropane	5.0	U	5.0	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
2-Butanone (MEK)	5.0	U	5.0	3.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
2-Hexanone	5.0	U	5.0	4.1	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.6	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Acetone	20	U ^c	20	10	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Benzene	5.0	U	5.0	3.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Bromoform	5.0	U	5.0	4.6	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Bromomethane	5.0	U ^c *	5.0	1.7	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Carbon disulfide	5.0	U	5.0	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Carbon tetrachloride	5.0	U ^c	5.0	1.4	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Chlorobenzene	5.0	U	5.0	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Dibromochloromethane	5.0	U	5.0	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
1,4-Dioxane	1000	U	1000	25	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Chloroform	5.0	U	5.0	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Chloromethane	5.0	U ^c	5.0	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Chloroethane	5.0	U	5.0	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
cis-1,2-Dichloroethene	5.0	U	5.0	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
cis-1,3-Dichloropropene	5.0	U	5.0	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Bromodichloromethane	5.0	U	5.0	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Ethylbenzene	5.0	U	5.0	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
1,2-Dibromoethane (EDB)	5.0	U	5.0	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Methyl tert-butyl ether	5.0	U	5.0	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Methylene Chloride	**1.4**	**J B**	5.0	0.56	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Styrene	5.0	U	5.0	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Tetrachloroethene	5.0	U	5.0	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Toluene	5.0	U	5.0	3.6	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
trans-1,2-Dichloroethene	5.0	U	5.0	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
trans-1,3-Dichloropropene	5.0	U	5.0	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Trichloroethene	5.0	U	5.0	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Acrylonitrile	50	U ^c	50	25	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Vinyl chloride	5.0	U	5.0	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Xylenes, Total	10	U	10	4.5	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1
Bromochloromethane	5.0	U	5.0	1.4	ug/Kg	☼	04/01/17 07:40	04/03/17 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*52 - 124*	*04/01/17 07:40*	*04/03/17 14:05*	*1*
4-Bromofluorobenzene (Surr)	*83*		*63 - 120*	*04/01/17 07:40*	*04/03/17 14:05*	*1*
Dibromofluoromethane (Surr)	*104*		*68 - 121*	*04/01/17 07:40*	*04/03/17 14:05*	*1*
Toluene-d8 (Surr)	*94*		*72 - 127*	*04/01/17 07:40*	*04/03/17 14:05*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-010-15/15.5-0
Date Collected: 03/30/17 14:45
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-15
Matrix: Solid
Percent Solids: 79.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	4.6	U	4.6	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
1,1,1-Trichloroethane	4.6	U	4.6	0.99	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
1,1,2,2-Tetrachloroethane	4.6	U	4.6	3.6	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
1,1,2-Trichloroethane	4.6	U	4.6	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
1,1-Dichloroethane	4.6	U	4.6	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
1,1-Dichloroethene	4.6	U	4.6	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
1,2-Dichloroethane	4.6	U	4.6	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
1,2-Dichloropropane	4.6	U	4.6	1.7	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
2-Butanone (MEK)	4.6	U	4.6	2.7	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
2-Hexanone	4.6	U	4.6	3.7	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
4-Methyl-2-pentanone (MIBK)	4.6	U	4.6	3.3	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Acetone	18	U ^c	18	9.4	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Benzene	4.6	U	4.6	2.8	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Bromoform	4.6	U	4.6	4.2	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Bromomethane	4.6	U ^c *	4.6	1.6	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Carbon disulfide	4.6	U	4.6	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Carbon tetrachloride	4.6	U ^c	4.6	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Chlorobenzene	4.6	U	4.6	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Dibromochloromethane	4.6	U	4.6	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
1,4-Dioxane	920	U	920	23	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Chloroform	4.6	U	4.6	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Chloromethane	4.6	U ^c	4.6	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Chloroethane	4.6	U	4.6	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
cis-1,2-Dichloroethene	4.6	U	4.6	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
cis-1,3-Dichloropropene	4.6	U	4.6	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Bromodichloromethane	4.6	U	4.6	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Ethylbenzene	4.6	U	4.6	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
1,2-Dibromoethane (EDB)	4.6	U	4.6	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Methyl tert-butyl ether	4.6	U	4.6	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Methylene Chloride	**1.3**	**J B**	4.6	0.51	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Styrene	4.6	U	4.6	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Tetrachloroethene	4.6	U	4.6	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Toluene	4.6	U	4.6	3.3	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
trans-1,2-Dichloroethene	4.6	U	4.6	0.94	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
trans-1,3-Dichloropropene	4.6	U	4.6	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Trichloroethene	4.6	U	4.6	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Acrylonitrile	46	U ^c	46	23	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Vinyl chloride	4.6	U	4.6	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Xylenes, Total	9.2	U	9.2	4.2	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1
Bromochloromethane	4.6	U	4.6	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 14:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*52 - 124*	*04/01/17 07:40*	*04/03/17 14:28*	*1*
4-Bromofluorobenzene (Surr)	*80*		*63 - 120*	*04/01/17 07:40*	*04/03/17 14:28*	*1*
Dibromofluoromethane (Surr)	*98*		*68 - 121*	*04/01/17 07:40*	*04/03/17 14:28*	*1*
Toluene-d8 (Surr)	*91*		*72 - 127*	*04/01/17 07:40*	*04/03/17 14:28*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-010-20/20.5-0
Date Collected: 03/30/17 14:50
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-16
Matrix: Solid
Percent Solids: 78.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	4.5	U	4.5	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
1,1,1-Trichloroethane	4.5	U	4.5	0.97	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
1,1,2,2-Tetrachloroethane	4.5	U	4.5	3.6	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
1,1,2-Trichloroethane	4.5	U	4.5	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
1,1-Dichloroethane	4.5	U	4.5	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
1,1-Dichloroethene	4.5	U	4.5	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
1,2-Dichloroethane	4.5	U	4.5	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
1,2-Dichloropropane	4.5	U	4.5	1.7	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
2-Butanone (MEK)	4.5	U	4.5	2.7	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
2-Hexanone	4.5	U	4.5	3.7	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
4-Methyl-2-pentanone (MIBK)	4.5	U	4.5	3.2	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Acetone	18	U ^c	18	9.3	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Benzene	4.5	U	4.5	2.7	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Bromoform	4.5	U	4.5	4.1	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Bromomethane	4.5	U ^c *	4.5	1.6	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Carbon disulfide	4.5	U	4.5	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Carbon tetrachloride	4.5	U ^c	4.5	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Chlorobenzene	4.5	U	4.5	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Dibromochloromethane	4.5	U	4.5	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
1,4-Dioxane	900	U	900	23	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Chloroform	4.5	U	4.5	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Chloromethane	4.5	U ^c	4.5	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Chloroethane	4.5	U	4.5	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
cis-1,2-Dichloroethene	4.5	U	4.5	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
cis-1,3-Dichloropropene	4.5	U	4.5	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Bromodichloromethane	4.5	U	4.5	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Ethylbenzene	4.5	U	4.5	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
1,2-Dibromoethane (EDB)	4.5	U	4.5	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Methyl tert-butyl ether	4.5	U	4.5	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Methylene Chloride	**1.2**	**J B**	4.5	0.50	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Styrene	4.5	U	4.5	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Tetrachloroethene	4.5	U	4.5	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Toluene	4.5	U	4.5	3.3	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
trans-1,2-Dichloroethene	4.5	U	4.5	0.93	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
trans-1,3-Dichloropropene	4.5	U	4.5	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Trichloroethene	4.5	U	4.5	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Acrylonitrile	45	U ^c	45	23	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Vinyl chloride	4.5	U	4.5	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Xylenes, Total	9.0	U	9.0	4.1	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1
Bromochloromethane	4.5	U	4.5	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*52 - 124*	*04/01/17 07:40*	*04/03/17 14:51*	*1*
4-Bromofluorobenzene (Surr)	*83*		*63 - 120*	*04/01/17 07:40*	*04/03/17 14:51*	*1*
Dibromofluoromethane (Surr)	*102*		*68 - 121*	*04/01/17 07:40*	*04/03/17 14:51*	*1*
Toluene-d8 (Surr)	*95*		*72 - 127*	*04/01/17 07:40*	*04/03/17 14:51*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-010-25/25.5-0
Date Collected: 03/30/17 15:00
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-17
Matrix: Solid
Percent Solids: 75.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	5.0	U	5.0	2.7	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
1,1,1-Trichloroethane	5.0	U	5.0	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	4.0	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
1,1,2-Trichloroethane	5.0	U	5.0	2.8	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
1,1-Dichloroethane	5.0	U	5.0	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
1,1-Dichloroethene	5.0	U	5.0	1.5	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
1,2-Dichloroethane	5.0	U	5.0	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
1,2-Dichloropropane	5.0	U	5.0	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
2-Butanone (MEK)	5.0	U	5.0	3.0	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
2-Hexanone	5.0	U	5.0	4.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.6	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Acetone	20	U ^c	20	10	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Benzene	5.0	U	5.0	3.0	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Bromoform	5.0	U	5.0	4.6	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Bromomethane	5.0	U ^c *	5.0	1.7	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Carbon disulfide	5.0	U	5.0	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Carbon tetrachloride	5.0	U ^c	5.0	1.4	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Chlorobenzene	5.0	U	5.0	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Dibromochloromethane	5.0	U	5.0	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
1,4-Dioxane	1000	U	1000	25	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Chloroform	5.0	U	5.0	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Chloromethane	5.0	U ^c	5.0	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Chloroethane	5.0	U	5.0	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
cis-1,2-Dichloroethene	5.0	U	5.0	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
cis-1,3-Dichloropropene	5.0	U	5.0	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Bromodichloromethane	5.0	U	5.0	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Ethylbenzene	5.0	U	5.0	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
1,2-Dibromoethane (EDB)	5.0	U	5.0	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Methyl tert-butyl ether	5.0	U	5.0	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Methylene Chloride	**1.3**	**J B**	5.0	0.56	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Styrene	5.0	U	5.0	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Tetrachloroethene	5.0	U	5.0	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Toluene	5.0	U	5.0	3.6	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
trans-1,2-Dichloroethene	5.0	U	5.0	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
trans-1,3-Dichloropropene	5.0	U	5.0	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Trichloroethene	5.0	U	5.0	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Acrylonitrile	50	U ^c	50	25	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Vinyl chloride	5.0	U	5.0	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Xylenes, Total	10	U	10	4.5	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1
Bromochloromethane	5.0	U	5.0	1.4	ug/Kg	☼	04/01/17 07:40	04/03/17 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*52 - 124*	*04/01/17 07:40*	*04/03/17 15:13*	*1*
4-Bromofluorobenzene (Surr)	*82*		*63 - 120*	*04/01/17 07:40*	*04/03/17 15:13*	*1*
Dibromofluoromethane (Surr)	*101*		*68 - 121*	*04/01/17 07:40*	*04/03/17 15:13*	*1*
Toluene-d8 (Surr)	*92*		*72 - 127*	*04/01/17 07:40*	*04/03/17 15:13*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-010-31.6/32.2-0
Date Collected: 03/30/17 15:10
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-18
Matrix: Solid
Percent Solids: 78.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	4.4	U	4.4	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
1,1,1-Trichloroethane	4.4	U	4.4	0.95	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
1,1,2,2-Tetrachloroethane	4.4	U	4.4	3.5	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
1,1,2-Trichloroethane	4.4	U	4.4	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
1,1-Dichloroethane	4.4	U	4.4	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
1,1-Dichloroethene	4.4	U	4.4	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
1,2-Dichloroethane	4.4	U	4.4	0.99	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
1,2-Dichloropropane	4.4	U	4.4	1.7	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
2-Butanone (MEK)	4.4	U	4.4	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
2-Hexanone	4.4	U	4.4	3.6	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
4-Methyl-2-pentanone (MIBK)	4.4	U	4.4	3.2	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Acetone	18	U ^c	18	9.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Benzene	4.4	U	4.4	2.7	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Bromoform	4.4	U	4.4	4.0	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Bromomethane	4.4	U ^c *	4.4	1.5	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Carbon disulfide	4.4	U	4.4	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Carbon tetrachloride	4.4	U ^c	4.4	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Chlorobenzene	4.4	U	4.4	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Dibromochloromethane	4.4	U	4.4	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
1,4-Dioxane	880	U	880	22	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Chloroform	4.4	U	4.4	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Chloromethane	4.4	U ^c	4.4	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Chloroethane	4.4	U	4.4	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
cis-1,2-Dichloroethene	4.4	U	4.4	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
cis-1,3-Dichloropropene	4.4	U	4.4	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Bromodichloromethane	4.4	U	4.4	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Ethylbenzene	4.4	U	4.4	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
1,2-Dibromoethane (EDB)	4.4	U	4.4	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Methyl tert-butyl ether	4.4	U	4.4	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Methylene Chloride	**1.2**	**J B**	4.4	0.49	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Styrene	4.4	U	4.4	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Tetrachloroethene	4.4	U	4.4	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Toluene	4.4	U	4.4	3.2	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
trans-1,2-Dichloroethene	4.4	U	4.4	0.91	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
trans-1,3-Dichloropropene	4.4	U	4.4	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Trichloroethene	4.4	U	4.4	0.99	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Acrylonitrile	44	U ^c	44	22	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Vinyl chloride	4.4	U	4.4	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Xylenes, Total	8.8	U	8.8	4.0	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1
Bromochloromethane	4.4	U	4.4	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*52 - 124*	*04/01/17 07:40*	*04/03/17 15:36*	*1*
4-Bromofluorobenzene (Surr)	*81*		*63 - 120*	*04/01/17 07:40*	*04/03/17 15:36*	*1*
Dibromofluoromethane (Surr)	*100*		*68 - 121*	*04/01/17 07:40*	*04/03/17 15:36*	*1*
Toluene-d8 (Surr)	*94*		*72 - 127*	*04/01/17 07:40*	*04/03/17 15:36*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-010-35/35.5-0
Date Collected: 03/30/17 15:20
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-19
Matrix: Solid
Percent Solids: 81.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	4.5	U	4.5	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
1,1,1-Trichloroethane	4.5	U	4.5	0.96	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
1,1,2,2-Tetrachloroethane	4.5	U	4.5	3.5	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
1,1,2-Trichloroethane	4.5	U	4.5	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
1,1-Dichloroethane	4.5	U	4.5	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
1,1-Dichloroethene	4.5	U	4.5	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
1,2-Dichloroethane	4.5	U	4.5	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
1,2-Dichloropropane	4.5	U	4.5	1.7	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
2-Butanone (MEK)	4.5	U	4.5	2.7	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
2-Hexanone	4.5	U	4.5	3.6	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
4-Methyl-2-pentanone (MIBK)	4.5	U	4.5	3.2	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Acetone	18	U ^c	18	9.2	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Benzene	4.5	U	4.5	2.7	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Bromoform	4.5	U	4.5	4.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Bromomethane	4.5	U ^c *	4.5	1.5	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Carbon disulfide	4.5	U	4.5	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Carbon tetrachloride	4.5	U ^c	4.5	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Chlorobenzene	4.5	U	4.5	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Dibromochloromethane	4.5	U	4.5	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
1,4-Dioxane	890	U	890	22	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Chloroform	4.5	U	4.5	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Chloromethane	4.5	U ^c	4.5	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Chloroethane	4.5	U	4.5	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
cis-1,2-Dichloroethene	4.5	U	4.5	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
cis-1,3-Dichloropropene	4.5	U	4.5	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Bromodichloromethane	4.5	U	4.5	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Ethylbenzene	4.5	U	4.5	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
1,2-Dibromoethane (EDB)	4.5	U	4.5	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Methyl tert-butyl ether	4.5	U	4.5	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Methylene Chloride	**1.2**	**J B**	4.5	0.50	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Styrene	4.5	U	4.5	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Tetrachloroethene	4.5	U	4.5	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Toluene	4.5	U	4.5	3.2	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
trans-1,2-Dichloroethene	4.5	U	4.5	0.91	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
trans-1,3-Dichloropropene	4.5	U	4.5	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Trichloroethene	4.5	U	4.5	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Acrylonitrile	45	U ^c	45	22	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Vinyl chloride	4.5	U	4.5	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Xylenes, Total	8.9	U	8.9	4.1	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1
Bromochloromethane	4.5	U	4.5	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*52 - 124*	*04/01/17 07:40*	*04/03/17 15:59*	*1*
4-Bromofluorobenzene (Surr)	*84*		*63 - 120*	*04/01/17 07:40*	*04/03/17 15:59*	*1*
Dibromofluoromethane (Surr)	*101*		*68 - 121*	*04/01/17 07:40*	*04/03/17 15:59*	*1*
Toluene-d8 (Surr)	*96*		*72 - 127*	*04/01/17 07:40*	*04/03/17 15:59*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-010-40/40.5-0
Date Collected: 03/30/17 15:45
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-20
Matrix: Solid
Percent Solids: 79.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	4.3	U	4.3	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
1,1,1-Trichloroethane	4.3	U	4.3	0.92	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
1,1,2,2-Tetrachloroethane	4.3	U	4.3	3.4	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
1,1,2-Trichloroethane	4.3	U	4.3	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
1,1-Dichloroethane	4.3	U	4.3	0.96	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
1,1-Dichloroethene	4.3	U	4.3	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
1,2-Dichloroethane	4.3	U	4.3	0.95	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
1,2-Dichloropropane	4.3	U	4.3	1.6	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
2-Butanone (MEK)	4.3	U	4.3	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
2-Hexanone	4.3	U	4.3	3.5	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
4-Methyl-2-pentanone (MIBK)	4.3	U	4.3	3.0	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Acetone	17	U ^c	17	8.7	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Benzene	4.3	U	4.3	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Bromoform	4.3	U	4.3	3.9	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Bromomethane	4.3	U ^c *	4.3	1.5	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Carbon disulfide	4.3	U	4.3	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Carbon tetrachloride	4.3	U ^c	4.3	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Chlorobenzene	4.3	U	4.3	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Dibromochloromethane	4.3	U	4.3	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
1,4-Dioxane	850	U	850	21	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Chloroform	4.3	U	4.3	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Chloromethane	4.3	U ^c	4.3	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Chloroethane	4.3	U	4.3	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
cis-1,2-Dichloroethene	4.3	U	4.3	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
cis-1,3-Dichloropropene	4.3	U	4.3	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Bromodichloromethane	4.3	U	4.3	1.7	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Ethylbenzene	4.3	U	4.3	1.7	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
1,2-Dibromoethane (EDB)	4.3	U	4.3	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Methyl tert-butyl ether	4.3	U	4.3	2.1	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Methylene Chloride	**1.2**	**J B**	4.3	0.47	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Styrene	4.3	U	4.3	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Tetrachloroethene	**11**		4.3	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Toluene	4.3	U	4.3	3.1	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
trans-1,2-Dichloroethene	4.3	U	4.3	0.87	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
trans-1,3-Dichloropropene	4.3	U	4.3	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Trichloroethene	4.3	U	4.3	0.96	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Acrylonitrile	43	U ^c	43	21	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Vinyl chloride	4.3	U	4.3	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Xylenes, Total	8.5	U	8.5	3.9	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1
Bromochloromethane	4.3	U	4.3	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*52 - 124*	*04/01/17 07:40*	*04/03/17 16:22*	*1*
4-Bromofluorobenzene (Surr)	*78*		*63 - 120*	*04/01/17 07:40*	*04/03/17 16:22*	*1*
Dibromofluoromethane (Surr)	*98*		*68 - 121*	*04/01/17 07:40*	*04/03/17 16:22*	*1*
Toluene-d8 (Surr)	*91*		*72 - 127*	*04/01/17 07:40*	*04/03/17 16:22*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-010-45/45.5-0
Date Collected: 03/30/17 16:15
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-21
Matrix: Solid
Percent Solids: 79.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	4.6	U	4.6	2.5	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
1,1,1-Trichloroethane	4.6	U	4.6	0.99	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
1,1,2,2-Tetrachloroethane	4.6	U	4.6	3.7	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
1,1,2-Trichloroethane	4.6	U	4.6	2.6	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
1,1-Dichloroethane	4.6	U	4.6	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
1,1-Dichloroethene	4.6	U	4.6	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
1,2-Dichloroethane	4.6	U	4.6	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
1,2-Dichloropropane	4.6	U	4.6	1.7	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
2-Butanone (MEK)	4.6	U	4.6	2.7	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
2-Hexanone	4.6	U	4.6	3.7	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
4-Methyl-2-pentanone (MIBK)	4.6	U	4.6	3.3	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Acetone	18	U ^c	18	9.4	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Benzene	4.6	U	4.6	2.8	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Bromoform	4.6	U	4.6	4.2	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Bromomethane	4.6	U ^c *	4.6	1.6	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Carbon disulfide	4.6	U	4.6	1.9	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Carbon tetrachloride	4.6	U ^c	4.6	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Chlorobenzene	4.6	U	4.6	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Dibromochloromethane	4.6	U	4.6	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
1,4-Dioxane	920	U	920	23	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Chloroform	4.6	U	4.6	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Chloromethane	4.6	U ^c	4.6	2.4	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Chloroethane	4.6	U	4.6	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
cis-1,2-Dichloroethene	4.6	U	4.6	1.2	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
cis-1,3-Dichloropropene	4.6	U	4.6	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Bromodichloromethane	4.6	U	4.6	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Ethylbenzene	4.6	U	4.6	1.8	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
1,2-Dibromoethane (EDB)	4.6	U	4.6	2.0	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Methyl tert-butyl ether	4.6	U	4.6	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Methylene Chloride	**1.2**	**J B**	4.6	0.51	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Styrene	4.6	U	4.6	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Tetrachloroethene	**71**		4.6	1.1	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Toluene	4.6	U	4.6	3.3	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
trans-1,2-Dichloroethene	4.6	U	4.6	0.94	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
trans-1,3-Dichloropropene	4.6	U	4.6	2.2	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Trichloroethene	**4.6**		4.6	1.0	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Acrylonitrile	46	U ^c	46	23	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Vinyl chloride	4.6	U	4.6	2.3	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Xylenes, Total	9.2	U	9.2	4.2	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1
Bromochloromethane	4.6	U	4.6	1.3	ug/Kg	☼	04/01/17 07:40	04/03/17 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*52 - 124*	*04/01/17 07:40*	*04/03/17 16:45*	*1*
4-Bromofluorobenzene (Surr)	*82*		*63 - 120*	*04/01/17 07:40*	*04/03/17 16:45*	*1*
Dibromofluoromethane (Surr)	*100*		*68 - 121*	*04/01/17 07:40*	*04/03/17 16:45*	*1*
Toluene-d8 (Surr)	*93*		*72 - 127*	*04/01/17 07:40*	*04/03/17 16:45*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: HD-SPBA-SB-010-50/50.5
Date Collected: 03/30/17 17:35
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-22
Matrix: Solid
Percent Solids: 82.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	4.5	U	4.5	2.4	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
1,1,1-Trichloroethane	4.5	U	4.5	0.97	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
1,1,2,2-Tetrachloroethane	4.5	U	4.5	3.6	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
1,1,2-Trichloroethane	4.5	U	4.5	2.5	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
1,1-Dichloroethane	4.5	U	4.5	1.0	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
1,1-Dichloroethene	4.5	U	4.5	1.3	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
1,2-Dichloroethane	4.5	U	4.5	1.0	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
1,2-Dichloropropane	4.5	U	4.5	1.7	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
2-Butanone (MEK)	4.5	U	4.5	2.7	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
2-Hexanone	4.5	U	4.5	3.7	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
4-Methyl-2-pentanone (MIBK)	4.5	U	4.5	3.2	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Acetone	18	U	18	9.3	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Benzene	4.5	U	4.5	2.7	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Bromoform	4.5	U ^c	4.5	4.1	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Bromomethane	4.5	U ^c *	4.5	1.6	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Carbon disulfide	4.5	U ^c	4.5	1.9	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Carbon tetrachloride	4.5	U	4.5	1.2	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Chlorobenzene	4.5	U	4.5	2.0	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Dibromochloromethane	4.5	U	4.5	2.2	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
1,4-Dioxane	900	U	900	23	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Chloroform	4.5	U	4.5	1.1	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Chloromethane	4.5	U ^c	4.5	2.4	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Chloroethane	4.5	U	4.5	1.9	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
cis-1,2-Dichloroethene	4.5	U	4.5	1.2	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
cis-1,3-Dichloropropene	4.5	U	4.5	2.0	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Bromodichloromethane	4.5	U	4.5	1.8	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Ethylbenzene	4.5	U	4.5	1.8	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
1,2-Dibromoethane (EDB)	4.5	U	4.5	1.9	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Methyl tert-butyl ether	4.5	U	4.5	2.3	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Methylene Chloride	**1.1**	**J B**	4.5	0.50	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Styrene	4.5	U	4.5	2.1	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Tetrachloroethene	**39**		4.5	1.1	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Toluene	4.5	U	4.5	3.3	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
trans-1,2-Dichloroethene	4.5	U	4.5	0.92	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
trans-1,3-Dichloropropene	4.5	U	4.5	2.2	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Trichloroethene	**2.1**	**J**	4.5	1.0	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Acrylonitrile	45	U ^c	45	22	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Vinyl chloride	4.5	U	4.5	2.3	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Xylenes, Total	9.0	U	9.0	4.1	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1
Bromochloromethane	4.5	U	4.5	1.3	ug/Kg	☼	04/01/17 10:00	04/04/17 11:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*52 - 124*	*04/01/17 10:00*	*04/04/17 11:56*	*1*
4-Bromofluorobenzene (Surr)	*82*		*63 - 120*	*04/01/17 10:00*	*04/04/17 11:56*	*1*
Dibromofluoromethane (Surr)	*101*		*68 - 121*	*04/01/17 10:00*	*04/04/17 11:56*	*1*
Toluene-d8 (Surr)	*94*		*72 - 127*	*04/01/17 10:00*	*04/04/17 11:56*	*1*

General Chemistry

Client Sample ID: HD-SPBA-SB-009-30/30.5-0
Date Collected: 03/30/17 09:35
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.4		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	80.6		0.1	0.1	%			04/03/17 14:31	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-64801-1

General Chemistry

Client Sample ID: HD-SPBA-SB-009-35/35.5-0
Date Collected: 03/30/17 09:50
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.0		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	82.0		0.1	0.1	%			04/03/17 14:31	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-64801-1

General Chemistry

Client Sample ID: HD-SPBA-SB-009-40/40.5-0
Date Collected: 03/30/17 10:00
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.6		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	80.4		0.1	0.1	%			04/03/17 14:31	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-64801-1

General Chemistry

Client Sample ID: HD-SPBA-SB-009-45/45.5-0
Date Collected: 03/30/17 10:10
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-4
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.8		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	84.2		0.1	0.1	%			04/03/17 14:31	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-64801-1

General Chemistry

Client Sample ID: HD-SPBA-SB-009-53.5/54-0
Date Collected: 03/30/17 10:45
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.1		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	78.9		0.1	0.1	%			04/03/17 14:31	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-64801-1

General Chemistry

Client Sample ID: HD-SPBA-SB-009-58.5-59-0
Date Collected: 03/30/17 11:20
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	27.1		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	72.9		0.1	0.1	%			04/03/17 14:31	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-64801-1

General Chemistry

Client Sample ID: HD-SPBA-SB-009-61/61.5-0
Date Collected: 03/30/17 11:55
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-7
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.2		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	84.8		0.1	0.1	%			04/03/17 14:31	1

General Chemistry

Client Sample ID: HD-SPBA-SB-009-65/68-0
Date Collected: 03/30/17 12:50
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-8
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.3		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	81.7		0.1	0.1	%			04/03/17 14:31	1

General Chemistry

Client Sample ID: HD-SPBA-SB-010-0.5/1.0-0
Date Collected: 03/30/17 14:00
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-12
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.4		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	87.6		0.1	0.1	%			04/03/17 14:31	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-64801-1

General Chemistry

Client Sample ID: HD-SPBA-SB-010-5/5.5-0
Date Collected: 03/30/17 14:20
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-13
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.5		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	84.5		0.1	0.1	%			04/03/17 14:31	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-64801-1

General Chemistry

Client Sample ID: HD-SPBA-SB-010-10/10.5-0
Date Collected: 03/30/17 14:35
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-14
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.7		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	82.3		0.1	0.1	%			04/03/17 14:31	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-64801-1

General Chemistry

Client Sample ID: HD-SPBA-SB-010-15/15.5-0
Date Collected: 03/30/17 14:45
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-15
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.5		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	79.5		0.1	0.1	%			04/03/17 14:31	1

General Chemistry

Client Sample ID: HD-SPBA-SB-010-20/20.5-0
Date Collected: 03/30/17 14:50
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-16
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.1		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	78.9		0.1	0.1	%			04/03/17 14:31	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-64801-1

General Chemistry

Client Sample ID: HD-SPBA-SB-010-25/25.5-0
Date Collected: 03/30/17 15:00
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-17
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25.0		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	75.0		0.1	0.1	%			04/03/17 14:31	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-64801-1

General Chemistry

Client Sample ID: HD-SPBA-SB-010-31.6/32.2-0
Date Collected: 03/30/17 15:10
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-18
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.3		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	78.7		0.1	0.1	%			04/03/17 14:31	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-64801-1

General Chemistry

Client Sample ID: HD-SPBA-SB-010-35/35.5-0
Date Collected: 03/30/17 15:20
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-19
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.0		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	81.0		0.1	0.1	%			04/03/17 14:31	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-64801-1

General Chemistry

Client Sample ID: HD-SPBA-SB-010-40/40.5-0
Date Collected: 03/30/17 15:45
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-20
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.3		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	79.7		0.1	0.1	%			04/03/17 14:31	1

General Chemistry

Client Sample ID: HD-SPBA-SB-010-45/45.5-0
Date Collected: 03/30/17 16:15
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-21
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.9		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	79.1		0.1	0.1	%			04/03/17 14:31	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-64801-1

General Chemistry

Client Sample ID: HD-SPBA-SB-010-50/50.5
Date Collected: 03/30/17 17:35
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-22
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.2		0.1	0.1	%			04/03/17 14:31	1
Percent Solids	82.8		0.1	0.1	%			04/03/17 14:31	1

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

Analyte	RL	MDL	Units	Method
1,1,1,2-Tetrachloroethane	1.0	0.49	ug/L	8260C
1,1,1-Trichloroethane	1.0	0.27	ug/L	8260C
1,1,2,2-Tetrachloroethane	1.0	0.37	ug/L	8260C
1,1,2-Trichloroethane	1.0	0.31	ug/L	8260C
1,1-Dichloroethane	1.0	0.34	ug/L	8260C
1,1-Dichloroethene	1.0	0.32	ug/L	8260C
1,2-Dibromoethane (EDB)	1.0	0.51	ug/L	8260C
1,2-Dichloroethane	1.0	0.24	ug/L	8260C
1,2-Dichloropropane	1.0	0.35	ug/L	8260C
1,4-Dioxane	200	16	ug/L	8260C
2-Butanone (MEK)	5.0	2.6	ug/L	8260C
2-Hexanone	5.0	2.0	ug/L	8260C
4-Methyl-2-pentanone (MIBK)	5.0	2.2	ug/L	8260C
Acetone	5.0	3.1	ug/L	8260C
Acrylonitrile	20	3.3	ug/L	8260C
Benzene	1.0	0.18	ug/L	8260C
Bromochloromethane	1.0	0.36	ug/L	8260C
Bromodichloromethane	1.0	0.57	ug/L	8260C
Bromoform	1.0	0.76	ug/L	8260C
Bromomethane	1.0	0.59	ug/L	8260C
Carbon disulfide	1.0	0.53	ug/L	8260C
Carbon tetrachloride	1.0	0.56	ug/L	8260C
Chlorobenzene	1.0	0.15	ug/L	8260C
Chloroethane	1.0	0.58	ug/L	8260C
Chloroform	1.0	0.27	ug/L	8260C
Chloromethane	1.0	0.38	ug/L	8260C
cis-1,2-Dichloroethene	1.0	0.30	ug/L	8260C
cis-1,3-Dichloropropene	1.0	0.32	ug/L	8260C
Dibromochloromethane	1.0	0.44	ug/L	8260C
Ethylbenzene	1.0	0.25	ug/L	8260C
Methyl tert-butyl ether	1.0	0.20	ug/L	8260C
Methylene Chloride	1.0	0.94	ug/L	8260C
Styrene	1.0	0.22	ug/L	8260C
Tetrachloroethene	1.0	0.24	ug/L	8260C
Toluene	1.0	0.16	ug/L	8260C
trans-1,2-Dichloroethene	1.0	0.20	ug/L	8260C
trans-1,3-Dichloropropene	1.0	0.22	ug/L	8260C
Trichloroethene	1.0	0.20	ug/L	8260C
Vinyl chloride	1.0	0.17	ug/L	8260C
Xylenes, Total	2.0	0.27	ug/L	8260C

Method: 8260C - Volatile Organic Compounds by GC/MS

Prep: 5035

Analyte	RL	MDL	Units	Method
1,1,1,2-Tetrachloroethane	5.0	2.7	ug/Kg	8260C
1,1,1-Trichloroethane	5.0	1.1	ug/Kg	8260C
1,1,2,2-Tetrachloroethane	5.0	4.0	ug/Kg	8260C
1,1,2-Trichloroethane	5.0	2.8	ug/Kg	8260C
1,1-Dichloroethane	5.0	1.1	ug/Kg	8260C
1,1-Dichloroethene	5.0	1.5	ug/Kg	8260C
1,2-Dibromoethane (EDB)	5.0	2.1	ug/Kg	8260C

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

Prep: 5035

Analyte	RL	MDL	Units	Method
1,2-Dichloroethane	5.0	1.1	ug/Kg	8260C
1,2-Dichloropropane	5.0	1.9	ug/Kg	8260C
1,4-Dioxane	1000	25	ug/Kg	8260C
2-Butanone (MEK)	5.0	3.0	ug/Kg	8260C
2-Hexanone	5.0	4.1	ug/Kg	8260C
4-Methyl-2-pentanone (MIBK)	5.0	3.6	ug/Kg	8260C
Acetone	20	10	ug/Kg	8260C
Acrylonitrile	50	25	ug/Kg	8260C
Benzene	5.0	3.0	ug/Kg	8260C
Bromochloromethane	5.0	1.4	ug/Kg	8260C
Bromodichloromethane	5.0	2.0	ug/Kg	8260C
Bromoform	5.0	4.6	ug/Kg	8260C
Bromomethane	5.0	1.7	ug/Kg	8260C
Carbon disulfide	5.0	2.1	ug/Kg	8260C
Carbon tetrachloride	5.0	1.4	ug/Kg	8260C
Chlorobenzene	5.0	2.2	ug/Kg	8260C
Chloroethane	5.0	2.1	ug/Kg	8260C
Chloroform	5.0	1.3	ug/Kg	8260C
Chloromethane	5.0	2.6	ug/Kg	8260C
cis-1,2-Dichloroethene	5.0	1.3	ug/Kg	8260C
cis-1,3-Dichloropropene	5.0	2.2	ug/Kg	8260C
Dibromochloromethane	5.0	2.5	ug/Kg	8260C
Ethylbenzene	5.0	2.0	ug/Kg	8260C
Methyl tert-butyl ether	5.0	2.5	ug/Kg	8260C
Methylene Chloride	5.0	0.56	ug/Kg	8260C
Styrene	5.0	2.3	ug/Kg	8260C
Tetrachloroethene	5.0	1.2	ug/Kg	8260C
Toluene	5.0	3.6	ug/Kg	8260C
trans-1,2-Dichloroethene	5.0	1.0	ug/Kg	8260C
trans-1,3-Dichloropropene	5.0	2.4	ug/Kg	8260C
Trichloroethene	5.0	1.1	ug/Kg	8260C
Vinyl chloride	5.0	2.6	ug/Kg	8260C
Xylenes, Total	10	4.6	ug/Kg	8260C

General Chemistry

Analyte	RL	MDL	Units	Method
Percent Moisture	0.1	0.1	%	2540G
Percent Solids	0.1	0.1	%	2540G

Surrogate Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-64801-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (72-134)	TOL (80-120)	BFB (72-120)	DBFM (77-127)
180-64801-9	HD-QC5-0/1-2	102	93	103	104
180-64801-10	HD-QC2-0/1-3	97	95	105	104
180-64801-11	HD-QC2-0/1-4	104	96	106	110
180-64801-23	HD-QC6-0/1-2	100	94	100	107
LCS 180-207145/8	Lab Control Sample	96	103	96	99
MB 180-207145/5	Method Blank	98	95	101	102

Surrogate Legend

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

Method: 8260C - Volatile Organic Compounds by GC/MS

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

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (52-124)	BFB (63-120)	DBFM (68-121)	TOL (72-127)
180-64801-1	HD-SPBA-SB-009-30/30.5-0	92	82	99	96
180-64801-2	HD-SPBA-SB-009-35/35.5-0	84	76	92	88
180-64801-3	HD-SPBA-SB-009-40/40.5-0	96	83	103	94
180-64801-4	HD-SPBA-SB-009-45/45.5-0	95	86	105	98
180-64801-4 MS	HD-SPBA-SB-009-45/45.5-0	87	87	104	94
180-64801-4 MSD	HD-SPBA-SB-009-45/45.5-0	86	88	103	93
180-64801-5	HD-SPBA-SB-009-53.5/54-0	87	80	97	92
180-64801-6	HD-SPBA-SB-009-58.5-59-0	91	81	97	91
180-64801-7	HD-SPBA-SB-009-61/61.5-0	90	81	100	95
180-64801-8	HD-SPBA-SB-009-65/68-0	88	82	98	96
180-64801-12	HD-SPBA-SB-010-0.5/1.0-0	97	83	104	95
180-64801-13	HD-SPBA-SB-010-5/5.5-0	111	87	106	96
180-64801-14	HD-SPBA-SB-010-10/10.5-0	95	83	104	94
180-64801-15	HD-SPBA-SB-010-15/15.5-0	92	80	98	91
180-64801-16	HD-SPBA-SB-010-20/20.5-0	94	83	102	95
180-64801-17	HD-SPBA-SB-010-25/25.5-0	94	82	101	92
180-64801-18	HD-SPBA-SB-010-31.6/32.2-0	92	81	100	94
180-64801-19	HD-SPBA-SB-010-35/35.5-0	96	84	101	96
180-64801-20	HD-SPBA-SB-010-40/40.5-0	91	78	98	91
180-64801-21	HD-SPBA-SB-010-45/45.5-0	94	82	100	93
180-64801-22	HD-SPBA-SB-010-50/50.5	93	82	101	94
LCS 180-207111/3	Lab Control Sample	106	91	112	96
LCS 180-207218/3	Lab Control Sample	109	92	111	96
LCSD 180-207218/25	Lab Control Sample Dup	105	90	106	90
MB 180-207111/8	Method Blank	112	88	104	94
MB 180-207218/8	Method Blank	111	85	104	93

Surrogate Legend

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

Surrogate Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-64801-1

TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 180-207145/5
Matrix: Water
Analysis Batch: 207145

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	0.38	ug/L			04/03/17 11:55	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			04/03/17 11:55	1
Bromomethane	1.0	U	1.0	0.59	ug/L			04/03/17 11:55	1
Chloroethane	1.0	U	1.0	0.58	ug/L			04/03/17 11:55	1
1,1-Dichloroethene	1.0	U	1.0	0.32	ug/L			04/03/17 11:55	1
Acetone	5.0	U	5.0	3.1	ug/L			04/03/17 11:55	1
Carbon disulfide	1.0	U	1.0	0.53	ug/L			04/03/17 11:55	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			04/03/17 11:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			04/03/17 11:55	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			04/03/17 11:55	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			04/03/17 11:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/03/17 11:55	1
Bromochloromethane	1.0	U	1.0	0.36	ug/L			04/03/17 11:55	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			04/03/17 11:55	1
Chloroform	1.0	U	1.0	0.27	ug/L			04/03/17 11:55	1
1,1,1-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/03/17 11:55	1
Carbon tetrachloride	1.0	U	1.0	0.56	ug/L			04/03/17 11:55	1
Benzene	1.0	U	1.0	0.18	ug/L			04/03/17 11:55	1
1,2-Dichloroethane	1.0	U	1.0	0.24	ug/L			04/03/17 11:55	1
Trichloroethene	1.0	U	1.0	0.20	ug/L			04/03/17 11:55	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			04/03/17 11:55	1
Bromodichloromethane	1.0	U	1.0	0.57	ug/L			04/03/17 11:55	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			04/03/17 11:55	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.2	ug/L			04/03/17 11:55	1
Toluene	1.0	U	1.0	0.16	ug/L			04/03/17 11:55	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			04/03/17 11:55	1
1,1,2-Trichloroethane	1.0	U	1.0	0.31	ug/L			04/03/17 11:55	1
Tetrachloroethene	1.0	U	1.0	0.24	ug/L			04/03/17 11:55	1
2-Hexanone	5.0	U	5.0	2.0	ug/L			04/03/17 11:55	1
Dibromochloromethane	1.0	U	1.0	0.44	ug/L			04/03/17 11:55	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.51	ug/L			04/03/17 11:55	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/03/17 11:55	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.49	ug/L			04/03/17 11:55	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			04/03/17 11:55	1
Xylenes, Total	2.0	U	2.0	0.27	ug/L			04/03/17 11:55	1
Styrene	1.0	U	1.0	0.22	ug/L			04/03/17 11:55	1
Bromoform	1.0	U	1.0	0.76	ug/L			04/03/17 11:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			04/03/17 11:55	1
Acrylonitrile	20	U	20	3.3	ug/L			04/03/17 11:55	1
1,4-Dioxane	200	U	200	16	ug/L			04/03/17 11:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 134*		*04/03/17 11:55*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*04/03/17 11:55*	*1*
4-Bromofluorobenzene (Surr)	*101*		*72 - 120*		*04/03/17 11:55*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 127*		*04/03/17 11:55*	*1*

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

Lab Sample ID: LCS 180-207145/8
Matrix: Water
Analysis Batch: 207145

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	10.0	11.2		ug/L		112	51 - 150
Vinyl chloride	10.0	10.8		ug/L		108	61 - 138
Bromomethane	10.0	11.3		ug/L		113	39 - 150
Chloroethane	10.0	10.6		ug/L		106	53 - 148
1,1-Dichloroethene	10.0	10.5		ug/L		105	71 - 122
Acetone	20.0	19.0		ug/L		95	10 - 150
Carbon disulfide	10.0	10.2		ug/L		102	57 - 137
Methylene Chloride	10.0	9.70		ug/L		97	71 - 129
trans-1,2-Dichloroethene	10.0	10.7		ug/L		107	80 - 121
Methyl tert-butyl ether	10.0	9.35		ug/L		94	68 - 124
1,1-Dichloroethane	10.0	10.3		ug/L		103	76 - 126
cis-1,2-Dichloroethene	10.0	10.1		ug/L		101	80 - 120
Bromochloromethane	10.0	9.27		ug/L		93	76 - 120
2-Butanone (MEK)	20.0	21.2		ug/L		106	41 - 150
Chloroform	10.0	9.70		ug/L		97	78 - 122
1,1,1-Trichloroethane	10.0	10.1		ug/L		101	57 - 128
Carbon tetrachloride	10.0	11.0		ug/L		110	59 - 145
Benzene	10.0	10.6		ug/L		106	80 - 121
1,2-Dichloroethane	10.0	9.62		ug/L		96	72 - 126
Trichloroethene	10.0	10.0		ug/L		100	79 - 120
1,2-Dichloropropane	10.0	9.68		ug/L		97	78 - 123
Bromodichloromethane	10.0	9.11		ug/L		91	72 - 124
cis-1,3-Dichloropropene	10.0	8.89		ug/L		89	67 - 127
4-Methyl-2-pentanone (MIBK)	20.0	19.5		ug/L		98	49 - 147
Toluene	10.0	11.1		ug/L		111	80 - 125
trans-1,3-Dichloropropene	10.0	8.97		ug/L		90	63 - 144
1,1,2-Trichloroethane	10.0	10.5		ug/L		105	77 - 127
Tetrachloroethene	10.0	11.0		ug/L		110	80 - 122
2-Hexanone	20.0	22.9		ug/L		114	40 - 150
Dibromochloromethane	10.0	9.16		ug/L		92	71 - 134
1,2-Dibromoethane (EDB)	10.0	9.71		ug/L		97	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	10.6		ug/L		106	80 - 123
Xylenes, Total	20.0	20.7		ug/L		104	80 - 123
Styrene	10.0	10.6		ug/L		106	80 - 125
Bromoform	10.0	8.86		ug/L		89	62 - 138
1,1,2,2-Tetrachloroethane	10.0	10.5		ug/L		105	78 - 135
Acrylonitrile	100	96.0		ug/L		96	66 - 146
1,4-Dioxane	200	258		ug/L		129	10 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 134*
Toluene-d8 (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene (Surr)	*96*		*72 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 127*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 180-207111/8
Matrix: Solid
Analysis Batch: 207111

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	5.0	U	5.0	2.7	ug/Kg			04/03/17 09:10	1
1,1,1-Trichloroethane	5.0	U	5.0	1.1	ug/Kg			04/03/17 09:10	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	4.0	ug/Kg			04/03/17 09:10	1
1,1,2-Trichloroethane	5.0	U	5.0	2.8	ug/Kg			04/03/17 09:10	1
1,1-Dichloroethane	5.0	U	5.0	1.1	ug/Kg			04/03/17 09:10	1
1,1-Dichloroethene	5.0	U	5.0	1.5	ug/Kg			04/03/17 09:10	1
1,2-Dichloroethane	5.0	U	5.0	1.1	ug/Kg			04/03/17 09:10	1
1,2-Dichloropropane	5.0	U	5.0	1.9	ug/Kg			04/03/17 09:10	1
2-Butanone (MEK)	5.0	U	5.0	3.0	ug/Kg			04/03/17 09:10	1
2-Hexanone	5.0	U	5.0	4.1	ug/Kg			04/03/17 09:10	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.6	ug/Kg			04/03/17 09:10	1
Acetone	20	U	20	10	ug/Kg			04/03/17 09:10	1
Benzene	5.0	U	5.0	3.0	ug/Kg			04/03/17 09:10	1
Bromoform	5.0	U	5.0	4.6	ug/Kg			04/03/17 09:10	1
Bromomethane	5.0	U	5.0	1.7	ug/Kg			04/03/17 09:10	1
Carbon disulfide	5.0	U	5.0	2.1	ug/Kg			04/03/17 09:10	1
Carbon tetrachloride	5.0	U	5.0	1.4	ug/Kg			04/03/17 09:10	1
Chlorobenzene	5.0	U	5.0	2.2	ug/Kg			04/03/17 09:10	1
Dibromochloromethane	5.0	U	5.0	2.5	ug/Kg			04/03/17 09:10	1
1,4-Dioxane	1000	U	1000	25	ug/Kg			04/03/17 09:10	1
Chloroform	5.0	U	5.0	1.3	ug/Kg			04/03/17 09:10	1
Chloromethane	5.0	U	5.0	2.6	ug/Kg			04/03/17 09:10	1
Chloroethane	5.0	U	5.0	2.1	ug/Kg			04/03/17 09:10	1
cis-1,2-Dichloroethene	5.0	U	5.0	1.3	ug/Kg			04/03/17 09:10	1
cis-1,3-Dichloropropene	5.0	U	5.0	2.2	ug/Kg			04/03/17 09:10	1
Bromodichloromethane	5.0	U	5.0	2.0	ug/Kg			04/03/17 09:10	1
Ethylbenzene	5.0	U	5.0	2.0	ug/Kg			04/03/17 09:10	1
1,2-Dibromoethane (EDB)	5.0	U	5.0	2.1	ug/Kg			04/03/17 09:10	1
Methyl tert-butyl ether	5.0	U	5.0	2.5	ug/Kg			04/03/17 09:10	1
Methylene Chloride	1.86	J	5.0	0.56	ug/Kg			04/03/17 09:10	1
Styrene	5.0	U	5.0	2.3	ug/Kg			04/03/17 09:10	1
Tetrachloroethene	5.0	U	5.0	1.2	ug/Kg			04/03/17 09:10	1
Toluene	5.0	U	5.0	3.6	ug/Kg			04/03/17 09:10	1
trans-1,2-Dichloroethene	5.0	U	5.0	1.0	ug/Kg			04/03/17 09:10	1
trans-1,3-Dichloropropene	5.0	U	5.0	2.4	ug/Kg			04/03/17 09:10	1
Trichloroethene	5.0	U	5.0	1.1	ug/Kg			04/03/17 09:10	1
Acrylonitrile	50	U	50	25	ug/Kg			04/03/17 09:10	1
Vinyl chloride	5.0	U	5.0	2.6	ug/Kg			04/03/17 09:10	1
Xylenes, Total	10	U	10	4.6	ug/Kg			04/03/17 09:10	1
Bromochloromethane	5.0	U	5.0	1.4	ug/Kg			04/03/17 09:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*52 - 124*		*04/03/17 09:10*	*1*
4-Bromofluorobenzene (Surr)	*88*		*63 - 120*		*04/03/17 09:10*	*1*
Dibromofluoromethane (Surr)	*104*		*68 - 121*		*04/03/17 09:10*	*1*
Toluene-d8 (Surr)	*94*		*72 - 127*		*04/03/17 09:10*	*1*

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

Lab Sample ID: LCS 180-207111/3
Matrix: Solid
Analysis Batch: 207111

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	40.0	38.1		ug/Kg		95	76 - 124
1,1,1-Trichloroethane	40.0	45.2		ug/Kg		113	67 - 126
1,1,2,2-Tetrachloroethane	40.0	35.2		ug/Kg		88	60 - 139
1,1,2-Trichloroethane	40.0	36.6		ug/Kg		92	70 - 128
1,1-Dichloroethane	40.0	34.5		ug/Kg		86	66 - 124
1,1-Dichloroethene	40.0	37.7		ug/Kg		94	59 - 129
1,2-Dichloroethane	40.0	40.6		ug/Kg		102	61 - 127
1,2-Dichloropropane	40.0	34.6		ug/Kg		87	72 - 122
2-Butanone (MEK)	40.0	30.7		ug/Kg		77	35 - 149
2-Hexanone	40.0	31.6		ug/Kg		79	32 - 150
4-Methyl-2-pentanone (MIBK)	40.0	25.0		ug/Kg		62	44 - 148
Acetone	40.0	36.4		ug/Kg		91	20 - 150
Benzene	40.0	38.2		ug/Kg		96	77 - 120
Bromoform	40.0	32.1		ug/Kg		80	53 - 140
Bromomethane	40.0	76.7	*	ug/Kg		192	25 - 150
Carbon disulfide	40.0	33.5		ug/Kg		84	50 - 127
Carbon tetrachloride	40.0	48.7		ug/Kg		122	69 - 122
Chlorobenzene	40.0	37.2		ug/Kg		93	79 - 120
Dibromochloromethane	40.0	35.2		ug/Kg		88	70 - 132
Chloroform	40.0	39.7		ug/Kg		99	72 - 120
Chloromethane	40.0	29.3		ug/Kg		73	44 - 131
Chloroethane	40.0	37.5		ug/Kg		94	22 - 150
cis-1,2-Dichloroethene	40.0	39.2		ug/Kg		98	80 - 118
cis-1,3-Dichloropropene	40.0	39.0		ug/Kg		98	73 - 120
Bromodichloromethane	40.0	40.0		ug/Kg		100	70 - 125
Ethylbenzene	40.0	37.9		ug/Kg		95	78 - 125
1,2-Dibromoethane (EDB)	40.0	36.2		ug/Kg		90	70 - 131
Methyl tert-butyl ether	40.0	38.5		ug/Kg		96	48 - 132
Methylene Chloride	40.0	35.0		ug/Kg		88	58 - 127
Styrene	40.0	38.4		ug/Kg		96	83 - 129
Tetrachloroethene	40.0	39.2		ug/Kg		98	78 - 129
Toluene	40.0	37.0		ug/Kg		93	78 - 124
trans-1,2-Dichloroethene	40.0	40.0		ug/Kg		100	77 - 121
trans-1,3-Dichloropropene	40.0	34.6		ug/Kg		86	74 - 129
Trichloroethene	40.0	44.2		ug/Kg		110	76 - 119
Acrylonitrile	400	297		ug/Kg		74	60 - 140
Vinyl chloride	40.0	43.8		ug/Kg		110	63 - 124
Xylenes, Total	80.0	76.0		ug/Kg		95	83 - 126
Bromochloromethane	40.0	43.6		ug/Kg		109	67 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*52 - 124*
4-Bromofluorobenzene (Surr)	*91*		*63 - 120*
Dibromofluoromethane (Surr)	*112*		*68 - 121*
Toluene-d8 (Surr)	*96*		*72 - 127*

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

Lab Sample ID: 180-64801-4 MS
Matrix: Solid
Analysis Batch: 207111

Client Sample ID: HD-SPBA-SB-009-45/45.5-0
Prep Type: Total/NA
Prep Batch: 207133

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.1	U	38.5	42.0		ug/Kg	☼	109	76 - 124
1,1,1-Trichloroethane	5.1	U F1	38.5	49.9	F1	ug/Kg	☼	130	67 - 126
1,1,2,2-Tetrachloroethane	5.1	U	38.5	26.0		ug/Kg	☼	68	60 - 139
1,1,2-Trichloroethane	5.1	U	38.5	31.5		ug/Kg	☼	82	70 - 128
1,1-Dichloroethane	5.1	U	38.5	37.2		ug/Kg	☼	97	66 - 124
1,1-Dichloroethene	5.1	U	38.5	42.2		ug/Kg	☼	110	59 - 129
1,2-Dichloroethane	5.1	U	38.5	35.0		ug/Kg	☼	91	61 - 127
1,2-Dichloropropane	5.1	U	38.5	35.9		ug/Kg	☼	93	72 - 122
2-Butanone (MEK)	5.1	U	38.5	17.6		ug/Kg	☼	46	35 - 149
2-Hexanone	5.1	U	38.5	18.4		ug/Kg	☼	48	32 - 150
4-Methyl-2-pentanone (MIBK)	5.1	U F1	38.5	16.1	F1	ug/Kg	☼	42	44 - 148
Acetone	20	U ^c	38.5	22.5		ug/Kg	☼	59	20 - 150
Benzene	5.1	U	38.5	40.6		ug/Kg	☼	105	77 - 120
Bromoform	5.1	U	38.5	28.7		ug/Kg	☼	75	53 - 140
Bromomethane	5.1	U ^c * F1	38.5	81.9	F1	ug/Kg	☼	213	25 - 150
Carbon disulfide	5.1	U	38.5	39.3		ug/Kg	☼	102	50 - 127
Carbon tetrachloride	5.1	U ^c F1	38.5	55.8	F1	ug/Kg	☼	145	69 - 122
Chlorobenzene	5.1	U	38.5	39.2		ug/Kg	☼	102	79 - 120
Dibromochloromethane	5.1	U	38.5	34.5		ug/Kg	☼	90	70 - 132
Chloroform	5.1	U	38.5	42.2		ug/Kg	☼	110	72 - 120
Chloromethane	5.1	U ^c	38.5	30.2		ug/Kg	☼	79	44 - 131
Chloroethane	5.1	U F1	38.5	82.0	F1	ug/Kg	☼	213	22 - 150
cis-1,2-Dichloroethene	5.1	U	38.5	41.2		ug/Kg	☼	107	80 - 118
cis-1,3-Dichloropropene	5.1	U	38.5	39.9		ug/Kg	☼	104	73 - 120
Bromodichloromethane	5.1	U	38.5	43.4		ug/Kg	☼	113	70 - 125
Ethylbenzene	5.1	U	38.5	41.9		ug/Kg	☼	109	78 - 125
1,2-Dibromoethane (EDB)	5.1	U	38.5	29.9		ug/Kg	☼	78	70 - 131
Methyl tert-butyl ether	5.1	U	38.5	30.8		ug/Kg	☼	80	48 - 132
Methylene Chloride	1.4	J B	38.5	34.9		ug/Kg	☼	87	58 - 127
Styrene	5.1	U	38.5	40.6		ug/Kg	☼	105	83 - 129
Tetrachloroethene	5.1	U	38.5	44.0		ug/Kg	☼	114	78 - 129
Toluene	5.1	U	38.5	40.0		ug/Kg	☼	104	78 - 124
trans-1,2-Dichloroethene	5.1	U	38.5	43.1		ug/Kg	☼	112	77 - 121
trans-1,3-Dichloropropene	5.1	U	38.5	33.2		ug/Kg	☼	86	74 - 129
Trichloroethene	5.1	U F1	38.5	47.5	F1	ug/Kg	☼	123	76 - 119
Acrylonitrile	51	U ^c F1	385	189	F1	ug/Kg	☼	49	60 - 140
Vinyl chloride	5.1	U	38.5	46.3		ug/Kg	☼	120	63 - 124
Xylenes, Total	10	U	77.0	83.6		ug/Kg	☼	109	83 - 126
Bromochloromethane	5.1	U	38.5	39.9		ug/Kg	☼	104	67 - 126

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*52 - 124*
4-Bromofluorobenzene (Surr)	*87*		*63 - 120*
Dibromofluoromethane (Surr)	*104*		*68 - 121*
Toluene-d8 (Surr)	*94*		*72 - 127*

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

Lab Sample ID: 180-64801-4 MSD
Matrix: Solid
Analysis Batch: 207111

Client Sample ID: HD-SPBA-SB-009-45/45.5-0
Prep Type: Total/NA
Prep Batch: 207133

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.1	U	42.1	46.5		ug/Kg	☼	110	76 - 124	10	22
1,1,1-Trichloroethane	5.1	U F1	42.1	55.8	F1	ug/Kg	☼	133	67 - 126	11	31
1,1,2,2-Tetrachloroethane	5.1	U	42.1	28.8		ug/Kg	☼	68	60 - 139	10	24
1,1,2-Trichloroethane	5.1	U	42.1	33.9		ug/Kg	☼	81	70 - 128	7	22
1,1-Dichloroethane	5.1	U	42.1	42.1		ug/Kg	☼	100	66 - 124	12	23
1,1-Dichloroethene	5.1	U	42.1	46.8		ug/Kg	☼	111	59 - 129	11	25
1,2-Dichloroethane	5.1	U	42.1	38.8		ug/Kg	☼	92	61 - 127	10	23
1,2-Dichloropropane	5.1	U	42.1	39.3		ug/Kg	☼	93	72 - 122	9	20
2-Butanone (MEK)	5.1	U	42.1	19.2		ug/Kg	☼	46	35 - 149	8	36
2-Hexanone	5.1	U	42.1	18.6		ug/Kg	☼	44	32 - 150	1	32
4-Methyl-2-pentanone (MIBK)	5.1	U F1	42.1	17.3	F1	ug/Kg	☼	41	44 - 148	7	30
Acetone	20	U ^c	42.1	22.7		ug/Kg	☼	54	20 - 150	1	40
Benzene	5.1	U	42.1	45.0		ug/Kg	☼	107	77 - 120	10	20
Bromoform	5.1	U	42.1	31.1		ug/Kg	☼	74	53 - 140	8	23
Bromomethane	5.1	U ^c * F1	42.1	87.7	F1	ug/Kg	☼	208	25 - 150	7	40
Carbon disulfide	5.1	U	42.1	45.3		ug/Kg	☼	108	50 - 127	14	23
Carbon tetrachloride	5.1	U ^c F1	42.1	61.7	F1	ug/Kg	☼	146	69 - 122	10	22
Chlorobenzene	5.1	U	42.1	43.2		ug/Kg	☼	103	79 - 120	10	20
Dibromochloromethane	5.1	U	42.1	37.2		ug/Kg	☼	88	70 - 132	7	20
Chloroform	5.1	U	42.1	46.5		ug/Kg	☼	110	72 - 120	10	25
Chloromethane	5.1	U ^c	42.1	33.9		ug/Kg	☼	81	44 - 131	12	27
Chloroethane	5.1	U F1	42.1	102	F1	ug/Kg	☼	242	22 - 150	22	40
cis-1,2-Dichloroethene	5.1	U	42.1	45.7		ug/Kg	☼	108	80 - 118	10	20
cis-1,3-Dichloropropene	5.1	U	42.1	43.8		ug/Kg	☼	104	73 - 120	9	20
Bromodichloromethane	5.1	U	42.1	47.7		ug/Kg	☼	113	70 - 125	9	21
Ethylbenzene	5.1	U	42.1	46.3		ug/Kg	☼	110	78 - 125	10	21
1,2-Dibromoethane (EDB)	5.1	U	42.1	33.2		ug/Kg	☼	79	70 - 131	11	20
Methyl tert-butyl ether	5.1	U	42.1	33.9		ug/Kg	☼	81	48 - 132	10	36
Methylene Chloride	1.4	J B	42.1	37.9		ug/Kg	☼	87	58 - 127	8	28
Styrene	5.1	U	42.1	44.8		ug/Kg	☼	106	83 - 129	10	20
Tetrachloroethene	5.1	U	42.1	48.3		ug/Kg	☼	115	78 - 129	9	20
Toluene	5.1	U	42.1	44.4		ug/Kg	☼	105	78 - 124	10	21
trans-1,2-Dichloroethene	5.1	U	42.1	47.8		ug/Kg	☼	113	77 - 121	10	20
trans-1,3-Dichloropropene	5.1	U	42.1	36.0		ug/Kg	☼	86	74 - 129	8	20
Trichloroethene	5.1	U F1	42.1	53.5	F1	ug/Kg	☼	127	76 - 119	12	21
Acrylonitrile	51	U ^c F1	421	205	F1	ug/Kg	☼	49	60 - 140	8	20
Vinyl chloride	5.1	U	42.1	50.5		ug/Kg	☼	120	63 - 124	9	27
Xylenes, Total	10	U	84.2	91.7		ug/Kg	☼	109	83 - 126	9	20
Bromochloromethane	5.1	U	42.1	44.3		ug/Kg	☼	105	67 - 126	10	29

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*52 - 124*
4-Bromofluorobenzene (Surr)	*88*		*63 - 120*
Dibromofluoromethane (Surr)	*103*		*68 - 121*
Toluene-d8 (Surr)	*93*		*72 - 127*

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

Lab Sample ID: MB 180-207218/8
Matrix: Solid
Analysis Batch: 207218

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	5.0	U	5.0	2.7	ug/Kg			04/04/17 09:40	1
1,1,1-Trichloroethane	5.0	U	5.0	1.1	ug/Kg			04/04/17 09:40	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	4.0	ug/Kg			04/04/17 09:40	1
1,1,2-Trichloroethane	5.0	U	5.0	2.8	ug/Kg			04/04/17 09:40	1
1,1-Dichloroethane	5.0	U	5.0	1.1	ug/Kg			04/04/17 09:40	1
1,1-Dichloroethene	5.0	U	5.0	1.5	ug/Kg			04/04/17 09:40	1
1,2-Dichloroethane	5.0	U	5.0	1.1	ug/Kg			04/04/17 09:40	1
1,2-Dichloropropane	5.0	U	5.0	1.9	ug/Kg			04/04/17 09:40	1
2-Butanone (MEK)	5.0	U	5.0	3.0	ug/Kg			04/04/17 09:40	1
2-Hexanone	5.0	U	5.0	4.1	ug/Kg			04/04/17 09:40	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.6	ug/Kg			04/04/17 09:40	1
Acetone	20	U	20	10	ug/Kg			04/04/17 09:40	1
Benzene	5.0	U	5.0	3.0	ug/Kg			04/04/17 09:40	1
Bromoform	5.0	U	5.0	4.6	ug/Kg			04/04/17 09:40	1
Bromomethane	5.0	U	5.0	1.7	ug/Kg			04/04/17 09:40	1
Carbon disulfide	5.0	U	5.0	2.1	ug/Kg			04/04/17 09:40	1
Carbon tetrachloride	5.0	U	5.0	1.4	ug/Kg			04/04/17 09:40	1
Chlorobenzene	5.0	U	5.0	2.2	ug/Kg			04/04/17 09:40	1
Dibromochloromethane	5.0	U	5.0	2.5	ug/Kg			04/04/17 09:40	1
1,4-Dioxane	1000	U	1000	25	ug/Kg			04/04/17 09:40	1
Chloroform	5.0	U	5.0	1.3	ug/Kg			04/04/17 09:40	1
Chloromethane	5.0	U	5.0	2.6	ug/Kg			04/04/17 09:40	1
Chloroethane	5.0	U	5.0	2.1	ug/Kg			04/04/17 09:40	1
cis-1,2-Dichloroethene	5.0	U	5.0	1.3	ug/Kg			04/04/17 09:40	1
cis-1,3-Dichloropropene	5.0	U	5.0	2.2	ug/Kg			04/04/17 09:40	1
Bromodichloromethane	5.0	U	5.0	2.0	ug/Kg			04/04/17 09:40	1
Ethylbenzene	5.0	U	5.0	2.0	ug/Kg			04/04/17 09:40	1
1,2-Dibromoethane (EDB)	5.0	U	5.0	2.1	ug/Kg			04/04/17 09:40	1
Methyl tert-butyl ether	5.0	U	5.0	2.5	ug/Kg			04/04/17 09:40	1
Methylene Chloride	1.52	J	5.0	0.56	ug/Kg			04/04/17 09:40	1
Styrene	5.0	U	5.0	2.3	ug/Kg			04/04/17 09:40	1
Tetrachloroethene	5.0	U	5.0	1.2	ug/Kg			04/04/17 09:40	1
Toluene	5.0	U	5.0	3.6	ug/Kg			04/04/17 09:40	1
trans-1,2-Dichloroethene	5.0	U	5.0	1.0	ug/Kg			04/04/17 09:40	1
trans-1,3-Dichloropropene	5.0	U	5.0	2.4	ug/Kg			04/04/17 09:40	1
Trichloroethene	5.0	U	5.0	1.1	ug/Kg			04/04/17 09:40	1
Acrylonitrile	50	U	50	25	ug/Kg			04/04/17 09:40	1
Vinyl chloride	5.0	U	5.0	2.6	ug/Kg			04/04/17 09:40	1
Xylenes, Total	10	U	10	4.6	ug/Kg			04/04/17 09:40	1
Bromochloromethane	5.0	U	5.0	1.4	ug/Kg			04/04/17 09:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*52 - 124*		*04/04/17 09:40*	*1*
4-Bromofluorobenzene (Surr)	*85*		*63 - 120*		*04/04/17 09:40*	*1*
Dibromofluoromethane (Surr)	*104*		*68 - 121*		*04/04/17 09:40*	*1*
Toluene-d8 (Surr)	*93*		*72 - 127*		*04/04/17 09:40*	*1*

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

Lab Sample ID: LCS 180-207218/3
Matrix: Solid
Analysis Batch: 207218

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	40.0	39.1		ug/Kg		98	76 - 124
1,1,1-Trichloroethane	40.0	43.5		ug/Kg		109	67 - 126
1,1,2,2-Tetrachloroethane	40.0	34.4		ug/Kg		86	60 - 139
1,1,2-Trichloroethane	40.0	36.3		ug/Kg		91	70 - 128
1,1-Dichloroethane	40.0	34.1		ug/Kg		85	66 - 124
1,1-Dichloroethene	40.0	37.5		ug/Kg		94	59 - 129
1,2-Dichloroethane	40.0	39.6		ug/Kg		99	61 - 127
1,2-Dichloropropane	40.0	34.9		ug/Kg		87	72 - 122
2-Butanone (MEK)	40.0	27.7		ug/Kg		69	35 - 149
2-Hexanone	40.0	30.0		ug/Kg		75	32 - 150
4-Methyl-2-pentanone (MIBK)	40.0	23.8		ug/Kg		60	44 - 148
Acetone	40.0	33.9		ug/Kg		85	20 - 150
Benzene	40.0	38.3		ug/Kg		96	77 - 120
Bromoform	40.0	31.4		ug/Kg		78	53 - 140
Bromomethane	40.0	72.4	*	ug/Kg		181	25 - 150
Carbon disulfide	40.0	32.3		ug/Kg		81	50 - 127
Carbon tetrachloride	40.0	47.0		ug/Kg		118	69 - 122
Chlorobenzene	40.0	37.6		ug/Kg		94	79 - 120
Dibromochloromethane	40.0	34.6		ug/Kg		87	70 - 132
Chloroform	40.0	39.3		ug/Kg		98	72 - 120
Chloromethane	40.0	28.3		ug/Kg		71	44 - 131
Chloroethane	40.0	40.6		ug/Kg		102	22 - 150
cis-1,2-Dichloroethene	40.0	38.7		ug/Kg		97	80 - 118
cis-1,3-Dichloropropene	40.0	38.2		ug/Kg		96	73 - 120
Bromodichloromethane	40.0	39.6		ug/Kg		99	70 - 125
Ethylbenzene	40.0	38.2		ug/Kg		96	78 - 125
1,2-Dibromoethane (EDB)	40.0	36.5		ug/Kg		91	70 - 131
Methyl tert-butyl ether	40.0	37.5		ug/Kg		94	48 - 132
Methylene Chloride	40.0	34.2		ug/Kg		86	58 - 127
Styrene	40.0	38.9		ug/Kg		97	83 - 129
Tetrachloroethene	40.0	39.2		ug/Kg		98	78 - 129
Toluene	40.0	37.1		ug/Kg		93	78 - 124
trans-1,2-Dichloroethene	40.0	39.1		ug/Kg		98	77 - 121
trans-1,3-Dichloropropene	40.0	34.0		ug/Kg		85	74 - 129
Trichloroethene	40.0	43.5		ug/Kg		109	76 - 119
Acrylonitrile	400	288		ug/Kg		72	60 - 140
Vinyl chloride	40.0	42.9		ug/Kg		107	63 - 124
Xylenes, Total	80.0	76.7		ug/Kg		96	83 - 126
Bromochloromethane	40.0	43.1		ug/Kg		108	67 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*52 - 124*
4-Bromofluorobenzene (Surr)	*92*		*63 - 120*
Dibromofluoromethane (Surr)	*111*		*68 - 121*
Toluene-d8 (Surr)	*96*		*72 - 127*

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

Lab Sample ID: LCSD 180-207218/25
Matrix: Solid
Analysis Batch: 207218

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			40.0	37.4		ug/Kg		94	76 - 124	4	22
1,1,1-Trichloroethane			40.0	42.9		ug/Kg		107	67 - 126	1	31
1,1,2,2-Tetrachloroethane			40.0	36.0		ug/Kg		90	60 - 139	5	24
1,1,2-Trichloroethane			40.0	36.6		ug/Kg		92	70 - 128	1	22
1,1-Dichloroethane			40.0	34.4		ug/Kg		86	66 - 124	1	23
1,1-Dichloroethene			40.0	37.2		ug/Kg		93	59 - 129	1	25
1,2-Dichloroethane			40.0	40.4		ug/Kg		101	61 - 127	2	23
1,2-Dichloropropane			40.0	35.2		ug/Kg		88	72 - 122	1	20
2-Butanone (MEK)			40.0	32.7		ug/Kg		82	35 - 149	17	36
2-Hexanone			40.0	34.3		ug/Kg		86	32 - 150	13	32
4-Methyl-2-pentanone (MIBK)			40.0	28.6		ug/Kg		72	44 - 148	18	30
Acetone			40.0	35.6		ug/Kg		89	20 - 150	5	40
Benzene			40.0	38.0		ug/Kg		95	77 - 120	1	20
Bromoform			40.0	30.3		ug/Kg		76	53 - 140	3	23
Bromomethane			40.0	70.7	*	ug/Kg		177	25 - 150	2	40
Carbon disulfide			40.0	31.2		ug/Kg		78	50 - 127	4	23
Carbon tetrachloride			40.0	44.5		ug/Kg		111	69 - 122	5	22
Chlorobenzene			40.0	37.0		ug/Kg		93	79 - 120	2	20
Dibromochloromethane			40.0	33.4		ug/Kg		84	70 - 132	3	20
Chloroform			40.0	39.5		ug/Kg		99	72 - 120	0	25
Chloromethane			40.0	27.7		ug/Kg		69	44 - 131	2	27
Chloroethane			40.0	35.0		ug/Kg		87	22 - 150	15	40
cis-1,2-Dichloroethene			40.0	39.3		ug/Kg		98	80 - 118	1	20
cis-1,3-Dichloropropene			40.0	37.6		ug/Kg		94	73 - 120	1	20
Bromodichloromethane			40.0	39.1		ug/Kg		98	70 - 125	1	21
Ethylbenzene			40.0	38.3		ug/Kg		96	78 - 125	0	21
1,2-Dibromoethane (EDB)			40.0	37.2		ug/Kg		93	70 - 131	2	20
Methyl tert-butyl ether			40.0	37.4		ug/Kg		93	48 - 132	0	36
Methylene Chloride			40.0	35.4		ug/Kg		88	58 - 127	3	28
Styrene			40.0	38.9		ug/Kg		97	83 - 129	0	20
Tetrachloroethene			40.0	37.7		ug/Kg		94	78 - 129	4	20
Toluene			40.0	36.3		ug/Kg		91	78 - 124	2	21
trans-1,2-Dichloroethene			40.0	39.1		ug/Kg		98	77 - 121	0	20
trans-1,3-Dichloropropene			40.0	32.6		ug/Kg		81	74 - 129	4	20
Trichloroethene			40.0	43.1		ug/Kg		108	76 - 119	1	21
Acrylonitrile			400	295		ug/Kg		74	60 - 140	3	20
Vinyl chloride			40.0	40.7		ug/Kg		102	63 - 124	5	27
Xylenes, Total			80.0	76.3		ug/Kg		95	83 - 126	1	20
Bromochloromethane			40.0	42.2		ug/Kg		106	67 - 126	2	29

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*52 - 124*
4-Bromofluorobenzene (Surr)	*90*		*63 - 120*
Dibromofluoromethane (Surr)	*106*		*68 - 121*
Toluene-d8 (Surr)	*90*		*72 - 127*

Method: 2540G - SM 2540G

Lab Sample ID: 180-64801-1 DU
Matrix: Solid
Analysis Batch: 207182

Client Sample ID: HD-SPBA-SB-009-30/30.5-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	19.4			17.5		%				11	20
Percent Solids	80.6			82.5		%				2	20

Lab Sample ID: 180-64801-14 DU
Matrix: Solid
Analysis Batch: 207182

Client Sample ID: HD-SPBA-SB-010-10/10.5-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	17.7			17.5		%				1	20
Percent Solids	82.3			82.5		%				0.2	20

GC/MS VOA

Analysis Batch: 207111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-64801-1	HD-SPBA-SB-009-30/30.5-0	Total/NA	Solid	8260C	207133
180-64801-2	HD-SPBA-SB-009-35/35.5-0	Total/NA	Solid	8260C	207133
180-64801-3	HD-SPBA-SB-009-40/40.5-0	Total/NA	Solid	8260C	207133
180-64801-4	HD-SPBA-SB-009-45/45.5-0	Total/NA	Solid	8260C	207133
180-64801-5	HD-SPBA-SB-009-53.5/54-0	Total/NA	Solid	8260C	207133
180-64801-6	HD-SPBA-SB-009-58.5-59-0	Total/NA	Solid	8260C	207133
180-64801-7	HD-SPBA-SB-009-61/61.5-0	Total/NA	Solid	8260C	207133
180-64801-8	HD-SPBA-SB-009-65/68-0	Total/NA	Solid	8260C	207133
180-64801-12	HD-SPBA-SB-010-0.5/1.0-0	Total/NA	Solid	8260C	207133
180-64801-14	HD-SPBA-SB-010-10/10.5-0	Total/NA	Solid	8260C	207133
180-64801-15	HD-SPBA-SB-010-15/15.5-0	Total/NA	Solid	8260C	207133
180-64801-16	HD-SPBA-SB-010-20/20.5-0	Total/NA	Solid	8260C	207133
180-64801-17	HD-SPBA-SB-010-25/25.5-0	Total/NA	Solid	8260C	207133
180-64801-18	HD-SPBA-SB-010-31.6/32.2-0	Total/NA	Solid	8260C	207133
180-64801-19	HD-SPBA-SB-010-35/35.5-0	Total/NA	Solid	8260C	207133
180-64801-20	HD-SPBA-SB-010-40/40.5-0	Total/NA	Solid	8260C	207133
180-64801-21	HD-SPBA-SB-010-45/45.5-0	Total/NA	Solid	8260C	207133
MB 180-207111/8	Method Blank	Total/NA	Solid	8260C	
LCS 180-207111/3	Lab Control Sample	Total/NA	Solid	8260C	
180-64801-4 MS	HD-SPBA-SB-009-45/45.5-0	Total/NA	Solid	8260C	207133
180-64801-4 MSD	HD-SPBA-SB-009-45/45.5-0	Total/NA	Solid	8260C	207133

Prep Batch: 207133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-64801-1	HD-SPBA-SB-009-30/30.5-0	Total/NA	Solid	5035	
180-64801-2	HD-SPBA-SB-009-35/35.5-0	Total/NA	Solid	5035	
180-64801-3	HD-SPBA-SB-009-40/40.5-0	Total/NA	Solid	5035	
180-64801-4	HD-SPBA-SB-009-45/45.5-0	Total/NA	Solid	5035	
180-64801-5	HD-SPBA-SB-009-53.5/54-0	Total/NA	Solid	5035	
180-64801-6	HD-SPBA-SB-009-58.5-59-0	Total/NA	Solid	5035	
180-64801-7	HD-SPBA-SB-009-61/61.5-0	Total/NA	Solid	5035	
180-64801-8	HD-SPBA-SB-009-65/68-0	Total/NA	Solid	5035	
180-64801-12	HD-SPBA-SB-010-0.5/1.0-0	Total/NA	Solid	5035	
180-64801-13	HD-SPBA-SB-010-5/5.5-0	Total/NA	Solid	5035	
180-64801-14	HD-SPBA-SB-010-10/10.5-0	Total/NA	Solid	5035	
180-64801-15	HD-SPBA-SB-010-15/15.5-0	Total/NA	Solid	5035	
180-64801-16	HD-SPBA-SB-010-20/20.5-0	Total/NA	Solid	5035	
180-64801-17	HD-SPBA-SB-010-25/25.5-0	Total/NA	Solid	5035	
180-64801-18	HD-SPBA-SB-010-31.6/32.2-0	Total/NA	Solid	5035	
180-64801-19	HD-SPBA-SB-010-35/35.5-0	Total/NA	Solid	5035	
180-64801-20	HD-SPBA-SB-010-40/40.5-0	Total/NA	Solid	5035	
180-64801-21	HD-SPBA-SB-010-45/45.5-0	Total/NA	Solid	5035	
180-64801-4 MS	HD-SPBA-SB-009-45/45.5-0	Total/NA	Solid	5035	
180-64801-4 MSD	HD-SPBA-SB-009-45/45.5-0	Total/NA	Solid	5035	

Analysis Batch: 207145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-64801-9	HD-QC5-0/1-2	Total/NA	Water	8260C	
180-64801-10	HD-QC2-0/1-3	Total/NA	Water	8260C	
180-64801-11	HD-QC2-0/1-4	Total/NA	Water	8260C	
180-64801-23	HD-QC6-0/1-2	Total/NA	Water	8260C	

GC/MS VOA (Continued)

Analysis Batch: 207145 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-207145/5	Method Blank	Total/NA	Water	8260C	
LCS 180-207145/8	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 207218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-64801-13	HD-SPBA-SB-010-5/5.5-0	Total/NA	Solid	8260C	207133
180-64801-22	HD-SPBA-SB-010-50/50.5	Total/NA	Solid	8260C	207231
MB 180-207218/8	Method Blank	Total/NA	Solid	8260C	
LCS 180-207218/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 180-207218/25	Lab Control Sample Dup	Total/NA	Solid	8260C	

Prep Batch: 207231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-64801-22	HD-SPBA-SB-010-50/50.5	Total/NA	Solid	5035	

General Chemistry

Analysis Batch: 207182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-64801-1	HD-SPBA-SB-009-30/30.5-0	Total/NA	Solid	2540G	
180-64801-2	HD-SPBA-SB-009-35/35.5-0	Total/NA	Solid	2540G	
180-64801-3	HD-SPBA-SB-009-40/40.5-0	Total/NA	Solid	2540G	
180-64801-4	HD-SPBA-SB-009-45/45.5-0	Total/NA	Solid	2540G	
180-64801-5	HD-SPBA-SB-009-53.5/54-0	Total/NA	Solid	2540G	
180-64801-6	HD-SPBA-SB-009-58.5-59-0	Total/NA	Solid	2540G	
180-64801-7	HD-SPBA-SB-009-61/61.5-0	Total/NA	Solid	2540G	
180-64801-8	HD-SPBA-SB-009-65/68-0	Total/NA	Solid	2540G	
180-64801-12	HD-SPBA-SB-010-0.5/1.0-0	Total/NA	Solid	2540G	
180-64801-13	HD-SPBA-SB-010-5/5.5-0	Total/NA	Solid	2540G	
180-64801-14	HD-SPBA-SB-010-10/10.5-0	Total/NA	Solid	2540G	
180-64801-15	HD-SPBA-SB-010-15/15.5-0	Total/NA	Solid	2540G	
180-64801-16	HD-SPBA-SB-010-20/20.5-0	Total/NA	Solid	2540G	
180-64801-17	HD-SPBA-SB-010-25/25.5-0	Total/NA	Solid	2540G	
180-64801-18	HD-SPBA-SB-010-31.6/32.2-0	Total/NA	Solid	2540G	
180-64801-19	HD-SPBA-SB-010-35/35.5-0	Total/NA	Solid	2540G	
180-64801-20	HD-SPBA-SB-010-40/40.5-0	Total/NA	Solid	2540G	
180-64801-21	HD-SPBA-SB-010-45/45.5-0	Total/NA	Solid	2540G	
180-64801-22	HD-SPBA-SB-010-50/50.5	Total/NA	Solid	2540G	
180-64801-1 DU	HD-SPBA-SB-009-30/30.5-0	Total/NA	Solid	2540G	
180-64801-14 DU	HD-SPBA-SB-010-10/10.5-0	Total/NA	Solid	2540G	

Client Sample ID: HD-SPBA-SB-009-30/30.5-0
Lab Sample ID: 180-64801-1
Date Collected: 03/30/17 09:35
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-009-30/30.5-0
Lab Sample ID: 180-64801-1
Date Collected: 03/30/17 09:35
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.0579 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT
Total/NA	Analysis	8260C		1	5 mL	5 mL	207111	04/03/17 10:41	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-SPBA-SB-009-35/35.5-0
Lab Sample ID: 180-64801-2
Date Collected: 03/30/17 09:50
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-009-35/35.5-0
Lab Sample ID: 180-64801-2
Date Collected: 03/30/17 09:50
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 82.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.6734 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT
Total/NA	Analysis	8260C		1	5 mL	5 mL	207111	04/03/17 11:03	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-SPBA-SB-009-40/40.5-0
Lab Sample ID: 180-64801-3
Date Collected: 03/30/17 10:00
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-009-40/40.5-0
Lab Sample ID: 180-64801-3
Date Collected: 03/30/17 10:00
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.6906 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT

Client Sample ID: HD-SPBA-SB-009-40/40.5-0
Lab Sample ID: 180-64801-3
Date Collected: 03/30/17 10:00
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 80.4

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	207111	04/03/17 11:26	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-SPBA-SB-009-45/45.5-0
Lab Sample ID: 180-64801-4
Date Collected: 03/30/17 10:10
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-009-45/45.5-0
Lab Sample ID: 180-64801-4
Date Collected: 03/30/17 10:10
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.8096 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT
Total/NA	Analysis	8260C		1	5 mL	5 mL	207111	04/03/17 09:33	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-SPBA-SB-009-53.5/54-0
Lab Sample ID: 180-64801-5
Date Collected: 03/30/17 10:45
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-009-53.5/54-0
Lab Sample ID: 180-64801-5
Date Collected: 03/30/17 10:45
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 78.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.4525 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT
Total/NA	Analysis	8260C		1	5 mL	5 mL	207111	04/03/17 11:49	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-SPBA-SB-009-58.5-59-0
Lab Sample ID: 180-64801-6
Date Collected: 03/30/17 11:20
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT

Client Sample ID: HD-SPBA-SB-009-58.5-59-0
Lab Sample ID: 180-64801-6
Date Collected: 03/30/17 11:20
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-009-58.5-59-0
Lab Sample ID: 180-64801-6
Date Collected: 03/30/17 11:20
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 72.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.2363 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT
Total/NA	Analysis	8260C		1	5 mL	5 mL	207111	04/03/17 12:11	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-SPBA-SB-009-61/61.5-0
Lab Sample ID: 180-64801-7
Date Collected: 03/30/17 11:55
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-009-61/61.5-0
Lab Sample ID: 180-64801-7
Date Collected: 03/30/17 11:55
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.2574 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT
Total/NA	Analysis	8260C		1	5 mL	5 mL	207111	04/03/17 12:34	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-SPBA-SB-009-65/68-0
Lab Sample ID: 180-64801-8
Date Collected: 03/30/17 12:50
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-009-65/68-0
Lab Sample ID: 180-64801-8
Date Collected: 03/30/17 12:50
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.7871 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT

Client Sample ID: HD-SPBA-SB-009-65/68-0

Lab Sample ID: 180-64801-8
Date Collected: 03/30/17 12:50
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 81.7

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	207111	04/03/17 12:57	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-QC5-0/1-2

Lab Sample ID: 180-64801-9
Date Collected: 03/30/17 12:00
Matrix: Water
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	207145	04/03/17 16:33	DLF	TAL PIT
	Instrument ID: CHHP6									

Client Sample ID: HD-QC2-0/1-3

Lab Sample ID: 180-64801-10
Date Collected: 03/30/17 10:15
Matrix: Water
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	207145	04/03/17 16:58	DLF	TAL PIT
	Instrument ID: CHHP6									

Client Sample ID: HD-QC2-0/1-4

Lab Sample ID: 180-64801-11
Date Collected: 03/30/17 10:20
Matrix: Water
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	207145	04/03/17 17:22	DLF	TAL PIT
	Instrument ID: CHHP6									

Client Sample ID: HD-SPBA-SB-010-0.5/1.0-0

Lab Sample ID: 180-64801-12
Date Collected: 03/30/17 14:00
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-010-0.5/1.0-0

Lab Sample ID: 180-64801-12
Date Collected: 03/30/17 14:00
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.4417 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT
Total/NA	Analysis	8260C		1	5 mL	5 mL	207111	04/03/17 13:20	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-SPBA-SB-010-5/5.5-0
Lab Sample ID: 180-64801-13
Date Collected: 03/30/17 14:20
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-010-5/5.5-0
Lab Sample ID: 180-64801-13
Date Collected: 03/30/17 14:20
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 84.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.7612 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT
Total/NA	Analysis	8260C		1	5 mL	5 mL	207218	04/04/17 11:33	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-SPBA-SB-010-10/10.5-0
Lab Sample ID: 180-64801-14
Date Collected: 03/30/17 14:35
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-010-10/10.5-0
Lab Sample ID: 180-64801-14
Date Collected: 03/30/17 14:35
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.0902 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT
Total/NA	Analysis	8260C		1	5 mL	5 mL	207111	04/03/17 14:05	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-SPBA-SB-010-15/15.5-0
Lab Sample ID: 180-64801-15
Date Collected: 03/30/17 14:45
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-010-15/15.5-0
Lab Sample ID: 180-64801-15
Date Collected: 03/30/17 14:45
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.8695 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT

Client Sample ID: HD-SPBA-SB-010-15/15.5-0
Lab Sample ID: 180-64801-15
Date Collected: 03/30/17 14:45
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 79.5

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	207111	04/03/17 14:28	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-SPBA-SB-010-20/20.5-0
Lab Sample ID: 180-64801-16
Date Collected: 03/30/17 14:50
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-010-20/20.5-0
Lab Sample ID: 180-64801-16
Date Collected: 03/30/17 14:50
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 78.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.0211 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT
Total/NA	Analysis	8260C		1	5 mL	5 mL	207111	04/03/17 14:51	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-SPBA-SB-010-25/25.5-0
Lab Sample ID: 180-64801-17
Date Collected: 03/30/17 15:00
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-010-25/25.5-0
Lab Sample ID: 180-64801-17
Date Collected: 03/30/17 15:00
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 75.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.6749 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT
Total/NA	Analysis	8260C		1	5 mL	5 mL	207111	04/03/17 15:13	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-SPBA-SB-010-31.6/32.2-0
Lab Sample ID: 180-64801-18
Date Collected: 03/30/17 15:10
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT

Client Sample ID: HD-SPBA-SB-010-31.6/32.2-0
Lab Sample ID: 180-64801-18
Date Collected: 03/30/17 15:10
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-010-31.6/32.2-0
Lab Sample ID: 180-64801-18
Date Collected: 03/30/17 15:10
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 78.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.1918 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT
Total/NA	Analysis	8260C		1	5 mL	5 mL	207111	04/03/17 15:36	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-SPBA-SB-010-35/35.5-0
Lab Sample ID: 180-64801-19
Date Collected: 03/30/17 15:20
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-010-35/35.5-0
Lab Sample ID: 180-64801-19
Date Collected: 03/30/17 15:20
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 81.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.9198 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT
Total/NA	Analysis	8260C		1	5 mL	5 mL	207111	04/03/17 15:59	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-SPBA-SB-010-40/40.5-0
Lab Sample ID: 180-64801-20
Date Collected: 03/30/17 15:45
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-010-40/40.5-0
Lab Sample ID: 180-64801-20
Date Collected: 03/30/17 15:45
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.379 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT

Client Sample ID: HD-SPBA-SB-010-40/40.5-0
Lab Sample ID: 180-64801-20
Date Collected: 03/30/17 15:45
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 79.7

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	207111	04/03/17 16:22	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-SPBA-SB-010-45/45.5-0
Lab Sample ID: 180-64801-21
Date Collected: 03/30/17 16:15
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-010-45/45.5-0
Lab Sample ID: 180-64801-21
Date Collected: 03/30/17 16:15
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 79.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.8827 g	5 mL	207133	04/01/17 07:40	KLG	TAL PIT
Total/NA	Analysis	8260C		1	5 mL	5 mL	207111	04/03/17 16:45	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-SPBA-SB-010-50/50.5
Lab Sample ID: 180-64801-22
Date Collected: 03/30/17 17:35
Matrix: Solid
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			207182	04/03/17 14:31	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-SPBA-SB-010-50/50.5
Lab Sample ID: 180-64801-22
Date Collected: 03/30/17 17:35
Matrix: Solid
Date Received: 03/31/17 09:15
Percent Solids: 82.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.703 g	5 mL	207231	04/01/17 10:00	KLG	TAL PIT
Total/NA	Analysis	8260C		1	5 mL	5 mL	207218	04/04/17 11:56	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-QC6-0/1-2
Lab Sample ID: 180-64801-23
Date Collected: 03/30/17 12:05
Matrix: Water
Date Received: 03/31/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	207145	04/03/17 17:46	DLF	TAL PIT

Client Sample ID: HD-QC6-0/1-2

Date Collected: 03/30/17 12:05
Date Received: 03/31/17 09:15

Lab Sample ID: 180-64801-23

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	207145	04/03/17 17:46	DLF	TAL PIT
	Instrument ID: CHHP6									

Laboratory References:

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

Analyst References:

Lab: TAL PIT

Batch Type: Prep

KLG = Kathy Gordon

Batch Type: Analysis

DLF = Donald Ferguson

KLG = Kathy Gordon

MTW = Michael Wesoloski

Accreditation/Certification Summary

Client: Groundwater Sciences Corporation
TestAmerica Job ID: 180-64801-1
Project/Site: Harley Davidson

Laboratory: TestAmerica Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Pennsylvania	NELAP	3	02-00416	04-30-17 *

Analysis Method	Prep Method	Matrix	Analyte

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-64801-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL PIT
2540G	SM 2540G	SM22	TAL PIT

Protocol References:

SM22 = SM22

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: 180-64801-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-64801-1	HD-SPBA-SB-009-30/30.5-0	Solid	03/30/17 09:35	03/31/17 09:15
180-64801-2	HD-SPBA-SB-009-35/35.5-0	Solid	03/30/17 09:50	03/31/17 09:15
180-64801-3	HD-SPBA-SB-009-40/40.5-0	Solid	03/30/17 10:00	03/31/17 09:15
180-64801-4	HD-SPBA-SB-009-45/45.5-0	Solid	03/30/17 10:10	03/31/17 09:15
180-64801-5	HD-SPBA-SB-009-53.5/54-0	Solid	03/30/17 10:45	03/31/17 09:15
180-64801-6	HD-SPBA-SB-009-58.5-59-0	Solid	03/30/17 11:20	03/31/17 09:15
180-64801-7	HD-SPBA-SB-009-61/61.5-0	Solid	03/30/17 11:55	03/31/17 09:15
180-64801-8	HD-SPBA-SB-009-65/68-0	Solid	03/30/17 12:50	03/31/17 09:15
180-64801-9	HD-QC5-0/1-2	Water	03/30/17 12:00	03/31/17 09:15
180-64801-10	HD-QC2-0/1-3	Water	03/30/17 10:15	03/31/17 09:15
180-64801-11	HD-QC2-0/1-4	Water	03/30/17 10:20	03/31/17 09:15
180-64801-12	HD-SPBA-SB-010-0.5/1.0-0	Solid	03/30/17 14:00	03/31/17 09:15
180-64801-13	HD-SPBA-SB-010-5/5.5-0	Solid	03/30/17 14:20	03/31/17 09:15
180-64801-14	HD-SPBA-SB-010-10/10.5-0	Solid	03/30/17 14:35	03/31/17 09:15
180-64801-15	HD-SPBA-SB-010-15/15.5-0	Solid	03/30/17 14:45	03/31/17 09:15
180-64801-16	HD-SPBA-SB-010-20/20.5-0	Solid	03/30/17 14:50	03/31/17 09:15
180-64801-17	HD-SPBA-SB-010-25/25.5-0	Solid	03/30/17 15:00	03/31/17 09:15
180-64801-18	HD-SPBA-SB-010-31.6/32.2-0	Solid	03/30/17 15:10	03/31/17 09:15
180-64801-19	HD-SPBA-SB-010-35/35.5-0	Solid	03/30/17 15:20	03/31/17 09:15
180-64801-20	HD-SPBA-SB-010-40/40.5-0	Solid	03/30/17 15:45	03/31/17 09:15
180-64801-21	HD-SPBA-SB-010-45/45.5-0	Solid	03/30/17 16:15	03/31/17 09:15
180-64801-22	HD-SPBA-SB-010-50/50.5	Solid	03/30/17 17:35	03/31/17 09:15
180-64801-23	HD-QC6-0/1-2	Water	03/30/17 12:05	03/31/17 09:15

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Instrument ID: CHHP3 Analysis Batch Number: 189436

Lab Sample ID: IC 180-189436/4 Client Sample ID:

Date Analyzed: 09/28/16 12:01 Lab File ID: 30928K04.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroethane	2.41	Poor chromatography	gordonk	09/28/16 12:24
Trichlorofluoromethane	2.72	Poor chromatography	gordonk	09/28/16 12:24
Ethyl ether	3.18	Poor chromatography	gordonk	09/28/16 12:24
1,1-Dichloroethene	3.44	Poor chromatography	gordonk	09/28/16 12:24
Allyl chloride	4.02	Poor chromatography	gordonk	09/28/16 12:24
Methylene Chloride	4.23	Poor chromatography	gordonk	09/28/16 12:24

Lab Sample ID: IC 180-189436/5 Client Sample ID:

Date Analyzed: 09/28/16 12:24 Lab File ID: 30928K05.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.73	Poor chromatography	gordonk	09/28/16 12:45

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Instrument ID: CHHP3 Analysis Batch Number: 207111

Lab Sample ID: MB 180-207111/8 Client Sample ID:

Date Analyzed: 04/03/17 09:10 Lab File ID: 3040307.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.24	Poor chromatography	gordonk	04/03/17 09:35

Lab Sample ID: 180-64801-4 Client Sample ID: HD-SPBA-SB-009-45/45.5-0

Date Analyzed: 04/03/17 09:33 Lab File ID: 3040308.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.24	Poor chromatography	gordonk	04/03/17 09:50

Lab Sample ID: 180-64801-1 Client Sample ID: HD-SPBA-SB-009-30/30.5-0

Date Analyzed: 04/03/17 10:41 Lab File ID: 3040311.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.23	Poor chromatography	gordonk	04/03/17 11:02

Lab Sample ID: 180-64801-3 Client Sample ID: HD-SPBA-SB-009-40/40.5-0

Date Analyzed: 04/03/17 11:26 Lab File ID: 3040313.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.24	Poor chromatography	gordonk	04/03/17 11:49

Lab Sample ID: 180-64801-5 Client Sample ID: HD-SPBA-SB-009-53.5/54-0

Date Analyzed: 04/03/17 11:49 Lab File ID: 3040314.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.25	Poor chromatography	gordonk	04/03/17 12:07
cis-1,2-Dichloroethene	6.02	Poor chromatography	gordonk	04/03/17 12:07

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Instrument ID: CHHP3 Analysis Batch Number: 207111

Lab Sample ID: 180-64801-6 Client Sample ID: HD-SPBA-SB-009-58.5-59-0

Date Analyzed: 04/03/17 12:11 Lab File ID: 3040315.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.23	Poor chromatography	gordonk	04/03/17 12:28

Lab Sample ID: 180-64801-7 Client Sample ID: HD-SPBA-SB-009-61/61.5-0

Date Analyzed: 04/03/17 12:34 Lab File ID: 3040316.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.23	Poor chromatography	gordonk	04/03/17 12:52

Lab Sample ID: 180-64801-8 Client Sample ID: HD-SPBA-SB-009-65/68-0

Date Analyzed: 04/03/17 12:57 Lab File ID: 3040317.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.24	Poor chromatography	gordonk	04/03/17 13:14

Lab Sample ID: 180-64801-12 Client Sample ID: HD-SPBA-SB-010-0.5/1.0-0

Date Analyzed: 04/03/17 13:20 Lab File ID: 3040318.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.24	Poor chromatography	gordonk	04/04/17 05:28

Lab Sample ID: 180-64801-15 Client Sample ID: HD-SPBA-SB-010-15/15.5-0

Date Analyzed: 04/03/17 14:28 Lab File ID: 3040321.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.25	Poor chromatography	gordonk	04/04/17 05:30

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Instrument ID: CHHP3 Analysis Batch Number: 207111

Lab Sample ID: 180-64801-17 Client Sample ID: HD-SPBA-SB-010-25/25.5-0

Date Analyzed: 04/03/17 15:13 Lab File ID: 3040323.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.24	Poor chromatography	gordonk	04/04/17 05:31

Lab Sample ID: 180-64801-18 Client Sample ID: HD-SPBA-SB-010-31.6/32.2-0

Date Analyzed: 04/03/17 15:36 Lab File ID: 3040324.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.24	Poor chromatography	gordonk	04/04/17 05:31

Lab Sample ID: 180-64801-19 Client Sample ID: HD-SPBA-SB-010-35/35.5-0

Date Analyzed: 04/03/17 15:59 Lab File ID: 3040325.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.26	Poor chromatography	gordonk	04/04/17 05:32

Lab Sample ID: 180-64801-20 Client Sample ID: HD-SPBA-SB-010-40/40.5-0

Date Analyzed: 04/03/17 16:22 Lab File ID: 3040326.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.24	Poor chromatography	gordonk	04/04/17 05:33

Lab Sample ID: 180-64801-21 Client Sample ID: HD-SPBA-SB-010-45/45.5-0

Date Analyzed: 04/03/17 16:45 Lab File ID: 3040327.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.24	Poor chromatography	gordonk	04/04/17 05:33

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Instrument ID: CHHP3 Analysis Batch Number: 207218

Lab Sample ID: MB 180-207218/8 Client Sample ID:

Date Analyzed: 04/04/17 09:40 Lab File ID: 30404K07.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.25	Poor chromatography	gordonk	04/04/17 10:38

Lab Sample ID: 180-64801-13 Client Sample ID: HD-SPBA-SB-010-5/5.5-0

Date Analyzed: 04/04/17 11:33 Lab File ID: 30404K12.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.24	Poor chromatography	gordonk	04/04/17 11:52

Lab Sample ID: 180-64801-22 Client Sample ID: HD-SPBA-SB-010-50/50.5

Date Analyzed: 04/04/17 11:56 Lab File ID: 30404K13.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.25	Poor chromatography	gordonk	04/04/17 12:16

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 206518

Lab Sample ID: IC 180-206518/6 Client Sample ID:

Date Analyzed: 03/27/17 12:56 Lab File ID: 60327006.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroethane	2.25	Incomplete Integration	fergusond	03/28/17 09:07
Acrylonitrile	4.32	Incomplete Integration	fergusond	03/28/17 09:07
2,2-Dichloropropane	5.76	Incomplete Integration	fergusond	03/28/17 09:07
Isobutyl alcohol	6.76	Poor chromatography	fergusond	03/28/17 09:07

Lab Sample ID: IC 180-206518/7 Client Sample ID:

Date Analyzed: 03/27/17 13:20 Lab File ID: 60327007.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isobutyl alcohol	6.77	Incomplete Integration	fergusond	03/28/17 09:07
1,4-Dioxane	7.87	Incomplete Integration	fergusond	03/28/17 09:07

Lab Sample ID: ICIS 180-206518/8 Client Sample ID:

Date Analyzed: 03/27/17 13:45 Lab File ID: 60327008.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	7.87	Incomplete Integration	fergusond	03/28/17 09:07

Lab Sample ID: IC 180-206518/10 Client Sample ID:

Date Analyzed: 03/27/17 14:33 Lab File ID: 60327010.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	7.88	Incomplete Integration	fergusond	03/28/17 09:08

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 206518

Lab Sample ID: IC 180-206518/13 Client Sample ID:

Date Analyzed: 03/27/17 15:45 Lab File ID: 60327013.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TBA-d9 (IS)	4.07	Incomplete Integration	fergusond	03/28/17 09:08
1,4-Dioxane	7.87	Incomplete Integration	fergusond	03/28/17 09:08

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 207145

Lab Sample ID: CCVIS 180-207145/2 Client Sample ID:

Date Analyzed: 04/03/17 10:39 Lab File ID: 60403002.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	7.87	Incomplete Integration	fergusond	04/03/17 12:31

Lab Sample ID: 180-64801-10 Client Sample ID: HD-QC2-0/1-3

Date Analyzed: 04/03/17 16:58 Lab File ID: 60403017.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.67	Incomplete Integration	fergusond	04/05/17 07:20

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VOA8260INT_00061	10/22/16	09/22/16	Methanol, Lot 136118	10 mL	VOA8260INTRES_00126	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_00126	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
VOA8260INT_00067	04/13/17	03/13/17	Methanol, Lot 118655	10 mL	VOA8260INTRES_00132	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_00132	03/31/21		Restek, Lot A0118105		(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_00059	10/22/16	09/22/16	Methanol, Lot 136118	100 mL	VOA8260SURRES_00116	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_00116	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
VOA8260SURR_00066	04/13/17	03/13/17	Methanol, Lot 118655	100 mL	VOA8260SURRES_00123	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_00123	10/31/20		Restek, Lot A0114901		(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_00235	04/04/17	03/28/17	Methanol, Lot 2019054	10 mL	VOA8260GAS2ND_00186	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOA2ND_00233	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-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,4-Dioxane	500 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Ethylbenzene	25 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylene Chloride	25 ug/mL
							Styrene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
							Xylenes, Total	50 ug/mL
.VOA8260GAS2ND_00186	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_00233	04/14/17	03/14/17	Methanol, Lot 118655	10 mL	VOA8260KET2ND_00090	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
					VOA8260MEGA2_00058	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
..VOA8260KET2ND_00090	03/31/19		Restek, Lot A0123880		(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
..VOA8260MEGA2_00058	07/31/18		Restek, Lot A0120604		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2-Dibromoethane (EDB)	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							Styrene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00213	10/05/16	09/28/16	Methanol, Lot 136118	10 mL	VOA8260GAS1ST_00166	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_00210	1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
							1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,1-Dichloropropene	25 ug/mL
							1,2,3-Trichlorobenzene	25 ug/mL
							1,2,3-Trichloropropane	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2,4-Trimethylbenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3,5-Trimethylbenzene	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dichloropropane	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	500 ug/mL
							2,2-Dichloropropane	25 ug/mL
							2-Chlorotoluene	25 ug/mL
							2-Methyl-2-propanol	250 ug/mL
							3-Chloro-1-propene	25 ug/mL
							4-Chlorotoluene	25 ug/mL
							4-Isopropyltoluene	25 ug/mL
							Acrylonitrile	250 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	25 ug/mL
							Bromobenzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Dibromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexane	25 ug/mL
							Iodomethane	25 ug/mL
							Isobutyl alcohol	625 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	125 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							n-Butylbenzene	25 ug/mL
							n-Heptane	25 ug/mL
							N-Propylbenzene	25 ug/mL
							Naphthalene	25 ug/mL
							o-Xylene	25 ug/mL
							sec-Butylbenzene	25 ug/mL
							Styrene	25 ug/mL
							tert-Butylbenzene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Tetrahydrofuran	50 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							trans-1,4-Dichloro-2-butene	25 ug/mL
							Trichloroethene	25 ug/mL
.VOA8260GAS1ST_00166	10/31/18		Restek, Lot A0115012		(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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00210	10/07/16	09/07/16	Methanol, Lot 127999	10 mL	VOA8260KET1ST_00074	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_00053	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
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Trichloroethene	250 ug/mL
..VOA8260KET1ST_00074	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_00053	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dibromoethane (EDB)	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
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00243	03/27/17	03/20/17	Methanol, Lot 118655	10 mL	VOA8260GAS1ST_00187	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00242	1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
							1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,1-Dichloropropene	25 ug/mL
							1,2,3-Trichlorobenzene	25 ug/mL
							1,2,3-Trichloropropane	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2,4-Trimethylbenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3,5-Trimethylbenzene	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dichloropropane	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	500 ug/mL
							2,2-Dichloropropane	25 ug/mL
							2-Chlorotoluene	25 ug/mL
							2-Methyl-2-propanol	250 ug/mL
							3-Chloro-1-propene	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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_00187	01/31/20		Restek, Lot A0124278		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00242	04/14/17	03/14/17	Methanol, Lot 118655	10 mL	VOA8260KET1ST_00085	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_00060	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
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Trichloroethene	250 ug/mL
..VOA8260KET1ST_00085	01/31/20		Restek, Lot A0123890		(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_00060	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-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
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00244	04/04/17	03/28/17	Methanol, Lot 2019054	10 mL	VOA8260GAS1ST_00188	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00242	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-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.: 180-64801-1

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
.VOA8260GAS1ST_00188	01/31/20		Restek, Lot A0124278		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00242	04/14/17	03/14/17	Methanol, Lot 118655	10 mL	VOA8260KET1ST_00085	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_00060	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
..VOA8260KET1ST_00085	01/31/20		Restek, Lot A0123890		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetone	12500 ug/mL
..VOA8260MEGA1_00060	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-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2-Dibromoethane (EDB)	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
voaW2cle1stRe_00007	03/29/17	03/22/17	Methanol, Lot 127999	10 mL	VOACEVERES_00114	0.2 mL	2-Chloroethyl vinyl ether	50 ug/mL
.VOACEVERES_00114	11/30/18		Restek, Lot A0115628		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
voaWAcro1stRe_00008	10/01/16	09/01/16	Methanol, Lot 2019052	100 mL	VOAACRORES_00102	0.125 mL	Acrolein	25 ug/mL
.VOAACRORES_00102	10/31/16		Restek, Lot A0119846		(Purchased Reagent)		Acrolein	20000 ug/mL
voaWAcro1stRe_00011	04/07/17	03/07/17	Methanol, Lot 127999	100 mL	VOAACRORES_00109	0.125 mL	Acrolein	25 ug/mL
.VOAACRORES_00109	03/31/17		Restek, Lot A0122668		(Purchased Reagent)		Acrolein	20000 ug/mL
voaWEEmix1stR_00005	04/22/17	03/22/17	Methanol, Lot 127999	25 mL	VOARESEE1ST_00044	0.125 mL	1,2-dichloro-4-(trifluoromethyl)benzene	25 ug/mL
							2,3,6-Trichlorotoluene	25 ug/mL
							2,3- & 3,4- Dichlorotoluene	50 ug/mL
							2,4,5-Trichlorotoluene	25 ug/mL
							2,4- & 2,5- & 2,6-Dichlorotoluene	75 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00044	01/31/18		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_00017	04/10/17	03/10/17	Methanol, Lot 127999	50 mL	VOA8260KET2ND_00089	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_00089	03/31/19		Restek, Lot A0118013		(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
voaWKetmix1st_00002	04/22/17	03/22/17	Methanol, Lot 127999	50 mL	VOA8260KET1ST_00086	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_00086	01/31/20		Restek, Lot A0123890		(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_00008	09/30/16	09/06/16	Methanol, Lot 2019052	25 mL	VOA8260VARES_00069	0.125 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES_00069	09/30/16		Restek, Lot A0118255		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
voaWVA1stRest_00012	04/01/17	03/01/17	Methanol, Lot 127999	25 mL	VOA8260VARES_00076	0.125 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES_00076	06/30/17		Restek, Lot A0123626		(Purchased Reagent)		Vinyl acetate	5000 ug/mL

Reagent

VOA8260GAS1ST_00166

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

www.restek.com

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. : 569722 **Lot No.:** A0115012

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 **Purity** 99% (Lot Q167-08)	2,502.3 µg/mL	+/- 17.1236 +/- 140.5935 +/- 143.8698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 **Purity** 99% (Lot SHBF7067V)	2,506.2 µg/mL	+/- 15.8909 +/- 140.6631 +/- 143.9478	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 **Purity** 99% (Lot 25LPST)	2,507.2 µg/mL	+/- 16.0743 +/- 140.7405 +/- 144.0261	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 **Purity** 99% (Lot SHBF3387V)	2,517.0 µg/mL	+/- 17.1894 +/- 141.4157 +/- 144.7114	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 **Purity** 99% (Lot 101604)	2,511.3 µg/mL	+/- 17.3826 +/- 141.1222 +/- 144.4097	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 **Purity** 99% (Lot SHBD1717V)	2,497.4 µg/mL	+/- 16.0992 +/- 140.2015 +/- 143.4741	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 **Purity** 99% (Lot Q9B-58)	2,516.3 µg/mL	+/- 19.2032 +/- 141.6354 +/- 144.9242	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,512.2	µg/mL	+/-	18.6489	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot SHBF6387V)			+/-	141.3341	µg/mL	Unstressed
	Purity 99%				+/-	144.6191	µg/mL	Stressed

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

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

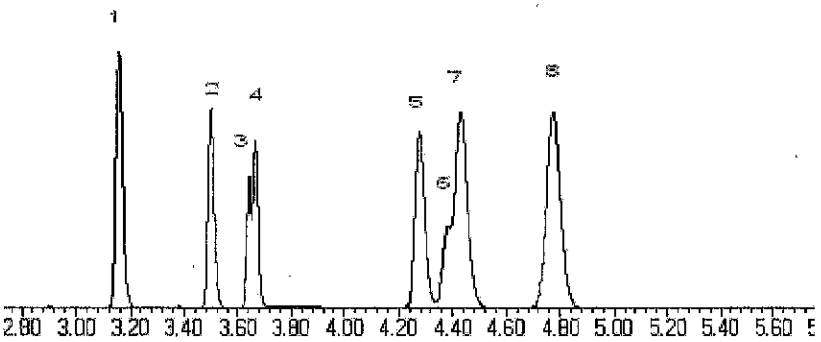
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kendra Swope - Mix Technician

Date Mixed: 29-Oct-2015 **Balance:** 1125113331

Jennifer L. Pollino - QC Analyst

Date Passed: 02-Nov-2015

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

Reagent

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569722 **Lot No.:** A0124278

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 : January 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot Q167-08) **Purity** 99%	2,500.5 µg/mL	+/- 16.7232 µg/mL +/- 140.4412 µg/mL +/- 143.7161 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBG7976V) **Purity** 99%	2,498.7 µg/mL	+/- 17.4998 µg/mL +/- 140.4406 µg/mL +/- 143.7111 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 1026101231B1) **Purity** 99%	2,498.4 µg/mL	+/- 16.6753 µg/mL +/- 140.3203 µg/mL +/- 143.5926 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBF3387V) **Purity** 99%	2,496.9 µg/mL	+/- 17.0619 µg/mL +/- 140.2843 µg/mL +/- 143.5535 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.5 µg/mL	+/- 17.3456 µg/mL +/- 140.5211 µg/mL +/- 143.7944 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 23593) **Purity** 99%	2,500.5 µg/mL	+/- 16.8189 µg/mL +/- 140.4526 µg/mL +/- 143.7272 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 10.0499 µg/mL +/- 139.7786 µg/mL +/- 143.0675 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.5	µg/mL	+/-	16.5404	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot SHBG7531V)			+/-	140.4793	µg/mL	Unstressed
	Purity 99%				+/-	143.7562	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)

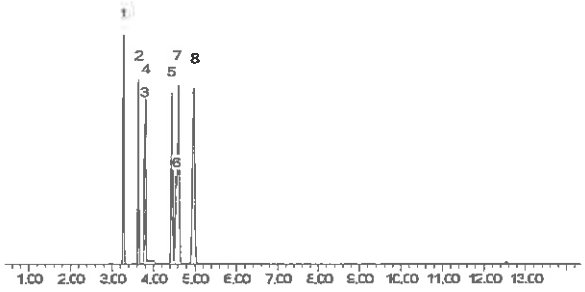
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

Joseph Jaglowski - Mix Technician **Date Mixed:** 17-Jan-2017 **Balance:** 1125113331

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 24-Jan-2017

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

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569722 **Lot No.:** A0124278

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 : January 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot Q167-08) **Purity** 99%	2,500.5 µg/mL	+/- 16.7232 µg/mL +/- 140.4412 µg/mL +/- 143.7161 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBG7976V) **Purity** 99%	2,498.7 µg/mL	+/- 17.4998 µg/mL +/- 140.4406 µg/mL +/- 143.7111 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 1026101231B1) **Purity** 99%	2,498.4 µg/mL	+/- 16.6753 µg/mL +/- 140.3203 µg/mL +/- 143.5926 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBF3387V) **Purity** 99%	2,496.9 µg/mL	+/- 17.0619 µg/mL +/- 140.2843 µg/mL +/- 143.5535 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.5 µg/mL	+/- 17.3456 µg/mL +/- 140.5211 µg/mL +/- 143.7944 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 23593) **Purity** 99%	2,500.5 µg/mL	+/- 16.8189 µg/mL +/- 140.4526 µg/mL +/- 143.7272 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 10.0499 µg/mL +/- 139.7786 µg/mL +/- 143.0675 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.5	µg/mL	+/-	16.5404	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot SHBG7531V)			+/-	140.4793	µg/mL	Unstressed
	Purity 99%				+/-	143.7562	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)

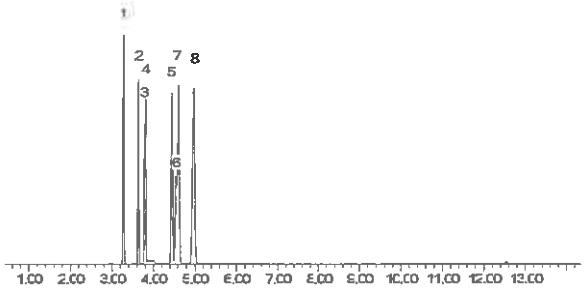
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

Joseph Jaglowski - Mix Technician **Date Mixed:** 17-Jan-2017 **Balance:** 1125113331

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 24-Jan-2017

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Certificate #FM 80397

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

Catalog No. : 569722.sec **Lot No.:** 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 µg/mL +/- 140.7169 µg/mL +/- 143.9990 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 µg/mL +/- 141.4522 µg/mL +/- 144.7477 µg/mL		Gravimetric Unstressed Stressed
3	Vinyl chloride CAS # 75-01-4.SEC (Lot MKBK6872V) Purity 99%	2,510.2 µg/mL	+/- 16.6342 µg/mL +/- 140.9727 µg/mL +/- 144.2609 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 µg/mL +/- 141.4240 µg/mL +/- 144.7182 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 µg/mL +/- 141.0664 µg/mL +/- 144.3557 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 µg/mL +/- 140.6469 µg/mL +/- 143.9283 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 µg/mL +/- 140.3776 µg/mL +/- 143.6540 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)

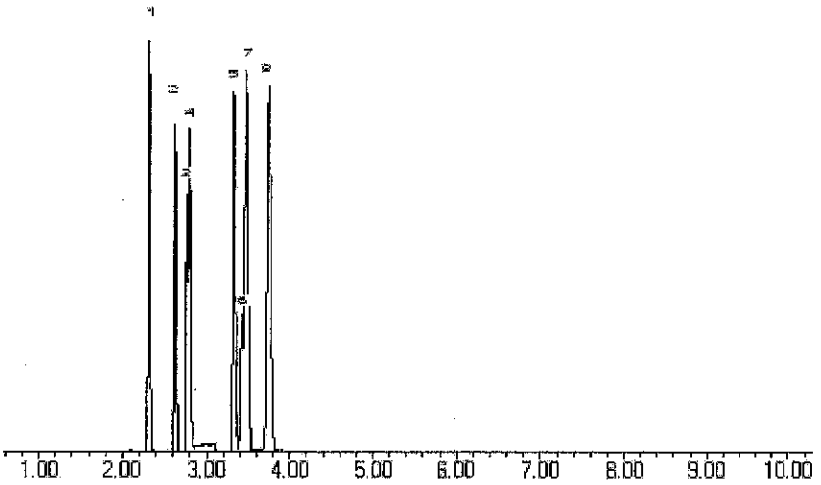
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

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

Reagent

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

VOA8260INTRES_00132

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

Catalog No. : 568718 **Lot No.:** A0118105

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 : March 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol **CAS #** 25725-11-5 (Lot I201P6) **Purity** 99%	5,023.8 µg/mL	+/- 29.2073 µg/mL +/- 107.5597 µg/mL +/- 110.6867 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone-d5 **CAS #** 24313-50-6 (Lot M276) **Purity** 99%	1,251.1 µg/mL	+/- 7.2740 µg/mL +/- 26.7862 µg/mL +/- 27.5649 µg/mL	Gravimetric Unstressed Stressed
3	Fluorobenzene **CAS #** 462-06-6 (Lot BCBK8171V) **Purity** 99%	250.2 µg/mL	+/- 1.4578 µg/mL +/- 5.3567 µg/mL +/- 5.5123 µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 (Lot I-19239) **Purity** 99%	5,005.7 µg/mL	+/- 29.1020 µg/mL +/- 107.1722 µg/mL +/- 110.2879 µg/mL	Gravimetric Unstressed Stressed
5	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-23926) **Purity** 99%	250.1 µg/mL	+/- 1.4575 µg/mL +/- 5.3556 µg/mL +/- 5.5112 µg/mL	Gravimetric Unstressed Stressed
6	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-18488) **Purity** 99%	250.0 µg/mL	+/- 1.4566 µg/mL +/- 5.3524 µg/mL +/- 5.5079 µg/mL	Gravimetric Unstressed Stressed

Reagent

VOA8260KET1ST_00074

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

VOA8260KET1ST_00085

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569721 **Lot No.:** A0123890

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone		12,517.5	µg/mL	+/- 72.7778	µg/mL	Gravimetric
	CAS # 67-64-1	(Lot SHBH0922V)			+/- 755.2362	µg/mL	Unstressed
	Purity 99%				+/- 757.0293	µg/mL	Stressed
2	2-Butanone (MEK)		12,521.8	µg/mL	+/- 72.8025	µg/mL	Gravimetric
	CAS # 78-93-3	(Lot SHBF2461V)			+/- 755.4927	µg/mL	Unstressed
	Purity 99%				+/- 757.2863	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)		12,519.8	µg/mL	+/- 72.7909	µg/mL	Gravimetric
	CAS # 108-10-1	(Lot SHBG3630V)			+/- 755.3720	µg/mL	Unstressed
	Purity 99%				+/- 757.1654	µg/mL	Stressed
4	2-Hexanone		12,508.5	µg/mL	+/- 72.7255	µg/mL	Gravimetric
	CAS # 591-78-6	(Lot MKBW0198V)			+/- 754.6932	µg/mL	Unstressed
	Purity 99%				+/- 756.4850	µg/mL	Stressed

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

Reagent

VOA8260KET1ST_00086

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Catalog No. : 569721 **Lot No.:** A0123890

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone		12,517.5 µg/mL	+/- 72.7778 µg/mL		Gravimetric
	CAS # 67-64-1	(Lot SHBH0922V)		+/- 755.2362 µg/mL		Unstressed
	Purity 99%			+/- 757.0293 µg/mL		Stressed
2	2-Butanone (MEK)		12,521.8 µg/mL	+/- 72.8025 µg/mL		Gravimetric
	CAS # 78-93-3	(Lot SHBF2461V)		+/- 755.4927 µg/mL		Unstressed
	Purity 99%			+/- 757.2863 µg/mL		Stressed
3	4-Methyl-2-pentanone (MIBK)		12,519.8 µg/mL	+/- 72.7909 µg/mL		Gravimetric
	CAS # 108-10-1	(Lot SHBG3630V)		+/- 755.3720 µg/mL		Unstressed
	Purity 99%			+/- 757.1654 µg/mL		Stressed
4	2-Hexanone		12,508.5 µg/mL	+/- 72.7255 µg/mL		Gravimetric
	CAS # 591-78-6	(Lot MKBW0198V)		+/- 754.6932 µg/mL		Unstressed
	Purity 99%			+/- 756.4850 µg/mL		Stressed

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

Reagent

VOA8260KET2ND_00089

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

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Certificate of Analysis

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Certificate #3222.02

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Catalog No. : 569721.sec **Lot No.:** A0118013

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 : March 31, 2019 **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.SEC (Lot P14A572) **Purity** 99%	12,550.0 µg/mL	+/- 73.4830 µg/mL +/- 757.2470 µg/mL +/- 759.0446 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3.SEC (Lot RA58J) **Purity** 99%	12,603.0 µg/mL	+/- 73.7933 µg/mL +/- 760.4450 µg/mL +/- 762.2502 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1.SEC (Lot E29T040) **Purity** 99%	12,591.5 µg/mL	+/- 73.7260 µg/mL +/- 759.7511 µg/mL +/- 761.5546 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6.SEC (Lot V3NRA) **Purity** 99%	12,588.0 µg/mL	+/- 73.7055 µg/mL +/- 759.5399 µg/mL +/- 761.3429 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260KET2ND_00090

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Catalog No. : 569721.sec **Lot No.:** A0123880

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

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

Expiration Date : January 31, 2020 **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.SEC (Lot P14A572) **Purity** 99%	12,501.6 µg/mL	+/- 73.1996 µg/mL +/- 754.3267 µg/mL +/- 756.1173 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3.SEC (Lot RA58J) **Purity** 99%	12,503.6 µg/mL	+/- 73.2113 µg/mL +/- 754.4473 µg/mL +/- 756.2383 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1.SEC (Lot E29T040) **Purity** 99%	12,506.0 µg/mL	+/- 73.2254 µg/mL +/- 754.5921 µg/mL +/- 756.3834 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6.SEC (Lot V3NRA) **Purity** 99%	12,504.0 µg/mL	+/- 73.2137 µg/mL +/- 754.4715 µg/mL +/- 756.2625 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260MEGA1_00053

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

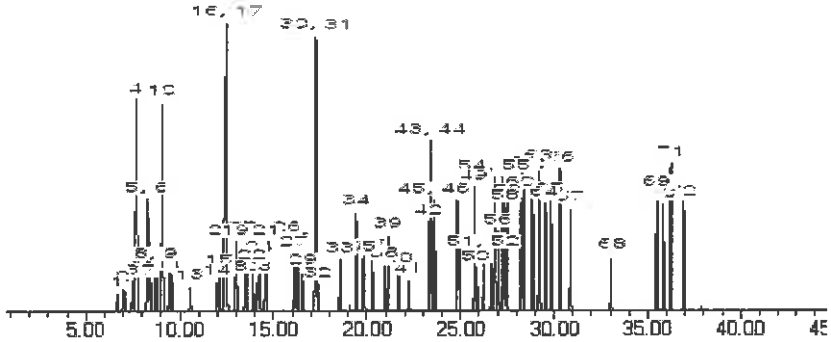
Carrier Gas:
helium-constant pressure 30 psi

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 Hauver

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

VOA8260MEGA1_00060

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

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

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

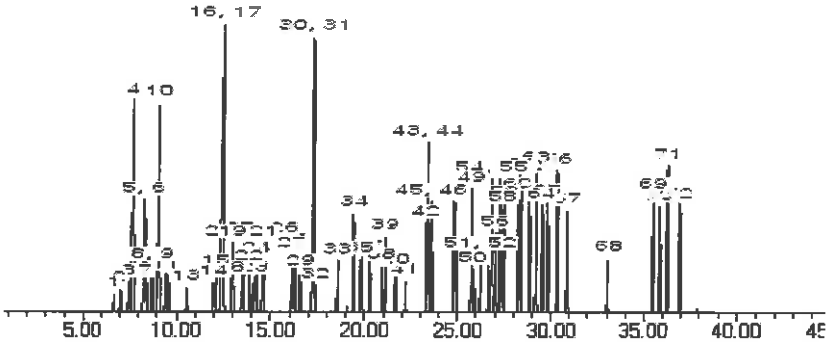
Carrier Gas:
helium-constant pressure 30 psi

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 Hauver

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_00058

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CERTIFIED REFERENCE MATERIAL

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ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569720.sec **Lot No.:** A0120604

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 : July 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.SEC (Lot F23X068) **Purity** 98%	2,501.1 µg/mL	+/- 14.5415 µg/mL +/- 150.9014 µg/mL +/- 151.2597 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 +/- 150.9040 µg/mL +/- 151.2622 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 2767000) **Purity** 99%	2,500.8 µg/mL	+/- 14.5396 µg/mL +/- 150.8813 µg/mL +/- 151.2395 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,004.1 µg/mL	+/- 145.3683 µg/mL +/- 1,508.6067 µg/mL +/- 1,512.1884 µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,501.0 µg/mL	+/- 14.5410 µg/mL +/- 150.8964 µg/mL +/- 151.2547 µg/mL	Gravimetric Unstressed Stressed
6	Methyl acetate **CAS #** 79-20-9.SEC (Lot 6WOXM) **Purity** 99%	12,501.6 µg/mL	+/- 72.6817 µg/mL +/- 754.2781 µg/mL +/- 756.0689 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot VEBOC) **Purity** 98%	2,501.0 µg/mL	+/- 14.5408 µg/mL +/- 150.8940 µg/mL +/- 151.2522 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane)		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
9	Carbon disulfide		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
10	Acrylonitrile		25,020.0	µg/mL	+/-	145.4608	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot UERIL-DA)			+/-	1,509.5667	µg/mL	Unstressed
	Purity 99%				+/-	1,513.1507	µg/mL	Stressed
11	cis-1,2-Dichloroethene		2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	150.8866	µg/mL	Unstressed
	Purity 98%				+/-	151.2448	µg/mL	Stressed
12	n-Hexane (C6)		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot 10188491)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
13	1,1-Dichloroethane		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 5035700)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
14	2,2-Dichloropropane		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot GI01)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed
15	trans-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5426	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TS5UB)			+/-	150.9125	µg/mL	Unstressed
	Purity 97%				+/-	151.2708	µg/mL	Stressed
16	Isobutanol (2-Methyl-1-propanol)		62,503.0	µg/mL	+/-	363.3788	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot 83NHH)			+/-	3,771.0811	µg/mL	Unstressed
	Purity 99%				+/-	3,780.0343	µg/mL	Stressed
17	Methyl-tert-butyl ether (MTBE)		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZAQTA-MS)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
18	Bromochloromethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 1775400)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
19	Tetrahydrofuran		5,000.3	µg/mL	+/-	29.0719	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot K3V7J-SJ)			+/-	301.6872	µg/mL	Unstressed
	Purity 99%				+/-	302.4035	µg/mL	Stressed
20	1,1,1-Trichloroethane		2,501.3	µg/mL	+/-	14.5429	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot CS160712)			+/-	150.9162	µg/mL	Unstressed
	Purity 98%				+/-	151.2745	µg/mL	Stressed
21	Cyclohexane		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
22	1,1-Dichloropropene		2,500.4	µg/mL	+/-	14.5378	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 4672600)			+/-	150.8626	µg/mL	Unstressed
	Purity 96%				+/-	151.2208	µg/mL	Stressed
23	Carbon tetrachloride		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed

24	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot OGM01)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,500.6	µg/mL	+/- 14.5388 +/- 150.8738 +/- 151.2320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	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.SEC **Purity** 99%	(Lot 24MSD-CD)	2,501.9	µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot OGG01)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	Bromodichloromethane **CAS #** 75-27-4.SEC **Purity** 99%	(Lot 10171168)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot CHA4A)	50,014.8	µg/mL	+/- 290.7749 +/- 3,017.6100 +/- 3,024.7743	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 7ZLXJ-TJ)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 99%	(Lot 2ECIC)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 98%	(Lot 3440900)	2,500.5	µg/mL	+/- 14.5379 +/- 150.8644 +/- 151.2226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane **CAS #** 124-48-1.SEC **Purity** 97%	(Lot 10181507)	2,501.9	µg/mL	+/- 14.5461 +/- 150.9491 +/- 151.3074	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4.SEC **Purity** 99%	(Lot 3505900)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7.SEC **Purity** 99%	(Lot 1161936)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6.SEC **Purity** 98%	(Lot GC01)	2,501.0	µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	Ethylbenzene **CAS #** 100-41-4.SEC **Purity** 99%	(Lot PI4SE)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	m-Xylene **CAS #** 108-38-3.SEC **Purity** 99%	(Lot OUKMG-GB)	1,250.9	µg/mL	+/- 7.2727 +/- 75.4708 +/- 75.6500	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	p-Xylene **CAS #** 106-42-3.SEC **Purity** 99%	(Lot GM01)	1,250.8	µg/mL	+/- 7.2720 +/- 75.4633 +/- 75.6425	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6.SEC **Purity** 99%	(Lot FGL01-KTPK)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5.SEC **Purity** 99%	(Lot OFIOL-IA)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8.SEC **Purity** 99%	(Lot 2PHXG-IH)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Bromoform **CAS #** 75-25-2.SEC **Purity** 99%	(Lot 5139000)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5.SEC **Purity** 99%	(Lot CFA4D-AQ)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Chloroform **CAS #** 67-66-3.SEC **Purity** 99%	(Lot 1297547)	2,500.6	µg/mL	+/- 14.5388 +/- 150.8738 +/- 151.2320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4.SEC **Purity** 98%	(Lot OGI01)	2,501.5	µg/mL	+/- 14.5436 +/- 150.9236 +/- 151.2819	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene **CAS #** 110-57-6.SEC **Purity** 98%	(Lot 100700-3)	2,500.5	µg/mL	+/- 14.5379 +/- 150.8644 +/- 151.2226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1.SEC **Purity** 99%	(Lot T2HFC-IT)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene **CAS #** 108-86-1.SEC **Purity** 99%	(Lot 2FUHG-EM)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,2,4-Trimethylbenzene **CAS #** 95-63-6.SEC **Purity** 99%	(Lot SC7LO-QA)	2,500.6	µg/mL	+/- 14.5388 +/- 150.8738 +/- 151.2320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8.SEC **Purity** 99%	(Lot SW8QG-AO)	2,500.6	µg/mL	+/- 14.5388 +/- 150.8738 +/- 151.2320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4.SEC **Purity** 99%	(Lot P4XHJ-AO)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6.SEC **Purity** 99%	(Lot OGN01-CAI)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,3,5-Trimethylbenzene **CAS #** 108-67-8.SEC **Purity** 99%	(Lot FGH02-CMLN)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8.SEC **Purity** 99%	(Lot OGN01-IMA)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	4-Isopropyltoluene (p-cymene) **CAS #** 99-87-6.SEC **Purity** 96%	(Lot 1195000)	2,501.5	µg/mL	+/- 14.5441 +/- 150.9278 +/- 151.2861	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1.SEC **Purity** 99%	(Lot FMDFD)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7.SEC **Purity** 99%	(Lot 4Y5DC)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8.SEC **Purity** 99%	(Lot OGN01-PNP)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1.SEC **Purity** 99%	(Lot 4NRGF-OT)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8.SEC **Purity** 97%	(Lot LC00408V)	2,500.3	µg/mL	+/- 14.5369 +/- 150.8539 +/- 151.2121	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1.SEC **Purity** 99%	(Lot 3LYYC)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3.SEC **Purity** 98%	(Lot 4974700)	2,500.7	µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3.SEC **Purity** 99%	(Lot SKZ5N)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,501.6 µg/mL	+/-	14.5444	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	150.9310	µg/mL	Unstressed
	Purity 98%			+/-	151.2893	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)

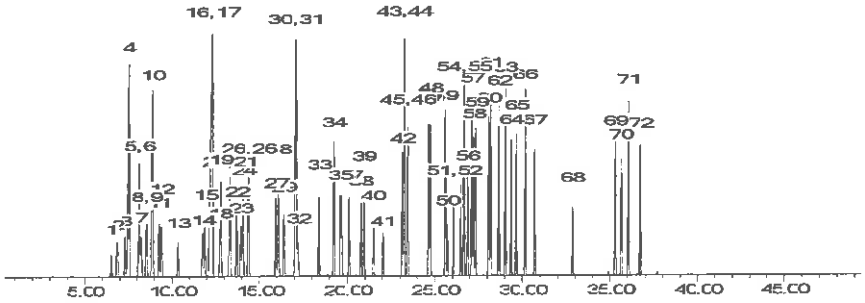
Carrier Gas:
helium-constant pressure 30 psi

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

Date Mixed: 25-Jul-2016 **Balance:** 1127510105

Jennifer L Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 28-Jul-2016

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

Reagent

VOA8260SURRES_00116

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Certificate of Analysis

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 +/- 28.2993 +/- 32.5644	µg/mL µg/mL 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 +/- 28.2757 +/- 32.5371	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 **Purity** 99%	(Lot PR-26282)	2,509.0	µg/mL	+/- 14.5875 +/- 28.2926 +/- 32.5566	µg/mL µg/mL 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 +/- 28.2587 +/- 32.5176	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260SURRES_00123

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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.:** A0114901

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 : October 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 (Lot 022012) **Purity** 99%	2,509.4 µg/mL	+/- 14.5899 µg/mL +/- 140.6996 µg/mL +/- 143.9918 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-25433) **Purity** 98%	2,509.0 µg/mL	+/- 14.5875 µg/mL +/- 140.6769 µg/mL +/- 143.9686 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-26282) **Purity** 99%	2,507.0 µg/mL	+/- 14.5759 µg/mL +/- 140.5650 µg/mL +/- 143.8540 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KOV) **Purity** 99%	2,503.6 µg/mL	+/- 14.5561 µg/mL +/- 140.3744 µg/mL +/- 143.6590 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260VARES_00069

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569724 **Lot No.:** A0118255

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 : September 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	5,003.0 µg/mL	+/- 29.3604	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBD7333V)		+/- 301.8795	µg/mL	Unstressed
	Purity 99%		+/- 302.5961	µg/mL	Stressed

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

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

Reagent

VOA8260VARES_00076

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

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. : 569724 **Lot No.:** A0123626

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 : June 30, 2017 **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		5,033.0 µg/mL	+/- 29.5365	µg/mL	Gravimetric
	CAS # 108-05-4	(Lot STBD7333V)		+/- 303.6897	µg/mL	Unstressed
	Purity 99%			+/- 304.4106	µg/mL	Stressed

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

Tech Tips:

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

Reagent

VOAACRORES_00102

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ILAC-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 **CAS #** 107-02-8 (Lot 160518JLM) **Purity** 99%	19,873.0 µg/mL	+/- 116.3608 µg/mL +/- 637.1909 µg/mL +/- 740.6647 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOAACRORES_00109

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

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. : 568720 **Lot No.:** A0122668

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750 µg/mL, Water, 1 mL/ampul

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

Expiration Date : March 31, 2017 **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		19,840.0	µg/mL	+/- 116.1676	µg/mL	Gravimetric
	CAS # 107-02-8	(Lot A160912JLM)			+/- 636.1328	µg/mL	Unstressed
	Purity 99%				+/- 739.4348	µg/mL	Stressed

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

Reagent

VOACEVERES_00114

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3223.02

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. : 569723 **Lot No.:** A0115628

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 (Lot MKBK2735V) **Purity** 99%	2,509.2 µg/mL	+/- 14.5887 µg/mL +/- 53.7223 µg/mL +/- 55.2841 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_00044

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ILAC-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 µg/mL +/- 281.7753 µg/mL +/- 288.3671 µg/mL	Gravimetric Unstressed Stressed
2	4-Chlorobenzotrifluoride **CAS #** 98-56-6 (Lot 08507BO) **Purity** 99%	5,031.0 µg/mL	+/- 29.5247 µg/mL +/- 282.1117 µg/mL +/- 288.7115 µg/mL	Gravimetric Unstressed Stressed
3	2-Chlorobenzotrifluoride **CAS #** 88-16-4 (Lot I0316DQ) **Purity** 99%	5,011.0 µg/mL	+/- 29.4074 µg/mL +/- 280.9902 µg/mL +/- 287.5637 µg/mL	Gravimetric Unstressed Stressed
4	3-Chlorotoluene **CAS #** 108-41-8 (Lot 13528LX) **Purity** 99%	5,046.0 µg/mL	+/- 29.6128 µg/mL +/- 282.9528 µg/mL +/- 289.5723 µg/mL	Gravimetric Unstressed Stressed
5	2,4-Dichlorobenzotrifluoride **CAS #** 320-60-5 (Lot MKBL3552V) **Purity** 99%	5,018.0 µg/mL	+/- 29.4484 µg/mL +/- 281.3828 µg/mL +/- 287.9654 µg/mL	Gravimetric Unstressed Stressed
6	3,4-Dichlorobenzotrifluoride **CAS #** 328-84-7 (Lot 11105EJV) **Purity** 99%	5,031.0 µg/mL	+/- 29.5247 µg/mL +/- 282.1117 µg/mL +/- 288.7115 µg/mL	Gravimetric Unstressed Stressed
7	2,5-Dichlorobenzotrifluoride **CAS #** 320-50-3 (Lot 04415DSV) **Purity** 99%	5,047.0 µg/mL	+/- 29.6186 µg/mL +/- 283.0089 µg/mL +/- 289.6296 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

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Matrix: Solid Level: Low

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

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
HD-SPBA-SB-009-30/30.5-0	180-64801-1	99	92	96	82
HD-SPBA-SB-009-35/35.5-0	180-64801-2	92	84	88	76
HD-SPBA-SB-009-40/40.5-0	180-64801-3	103	96	94	83
HD-SPBA-SB-009-45/45.5-0	180-64801-4	105	95	98	86
HD-SPBA-SB-009-53.5/54-0	180-64801-5	97	87	92	80
HD-SPBA-SB-009-58.5-59-0	180-64801-6	97	91	91	81
HD-SPBA-SB-009-61/61.5-0	180-64801-7	100	90	95	81
HD-SPBA-SB-009-65/68-0	180-64801-8	98	88	96	82
HD-SPBA-SB-010-0.5/1.0-0	180-64801-12	104	97	95	83
HD-SPBA-SB-010-5/5.5-0	180-64801-13	106	111	96	87
HD-SPBA-SB-010-10/10.5-0	180-64801-14	104	95	94	83
HD-SPBA-SB-010-15/15.5-0	180-64801-15	98	92	91	80
HD-SPBA-SB-010-20/20.5-0	180-64801-16	102	94	95	83
HD-SPBA-SB-010-25/25.5-0	180-64801-17	101	94	92	82
HD-SPBA-SB-010-31.6/32.2-0	180-64801-18	100	92	94	81
HD-SPBA-SB-010-35/35.5-0	180-64801-19	101	96	96	84
HD-SPBA-SB-010-40/40.5-0	180-64801-20	98	91	91	78
HD-SPBA-SB-010-45/45.5-0	180-64801-21	100	94	93	82
HD-SPBA-SB-010-50/50.5	180-64801-22	101	93	94	82
	MB 180-207111/8	104	112	94	88
	MB 180-207218/8	104	111	93	85
	LCS 180-207111/3	112	106	96	91
	LCS 180-207218/3	111	109	96	92
	LCSD 180-207218/25	106	105	90	90
HD-SPBA-SB-009-45/45.5-0 MS	180-64801-4 MS	104	87	94	87

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	68-121
DCA = 1,2-Dichloroethane-d4 (Surr)	52-124
TOL = Toluene-d8 (Surr)	72-127
BFB = 4-Bromofluorobenzene (Surr)	63-120

Column to be used to flag recovery values

FORM II 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Matrix: Solid Level: Low

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

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
HD-SPBA-SB-009-45/ 45.5-0 MSD	180-64801-4 MSD	103	86	93	88

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	68-121
DCA = 1,2-Dichloroethane-d4 (Surr)	52-124
TOL = Toluene-d8 (Surr)	72-127
BFB = 4-Bromofluorobenzene (Surr)	63-120

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.: 180-64801-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 3040303.D

Lab ID: LCS 180-207111/3 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	40.0	38.1	95	76-124	
1,1,1-Trichloroethane	40.0	45.2	113	67-126	
1,1,2,2-Tetrachloroethane	40.0	35.2	88	60-139	
1,1,2-Trichloroethane	40.0	36.6	92	70-128	
1,1-Dichloroethane	40.0	34.5	86	66-124	
1,1-Dichloroethene	40.0	37.7	94	59-129	
1,2-Dichloroethane	40.0	40.6	102	61-127	
1,2-Dichloropropane	40.0	34.6	87	72-122	
2-Butanone (MEK)	40.0	30.7	77	35-149	
2-Hexanone	40.0	31.6	79	32-150	
4-Methyl-2-pentanone (MIBK)	40.0	25.0	62	44-148	
Acetone	40.0	36.4	91	20-150	
Benzene	40.0	38.2	96	77-120	
Bromoform	40.0	32.1	80	53-140	
Bromomethane	40.0	76.7	192	25-150	*
Carbon disulfide	40.0	33.5	84	50-127	
Carbon tetrachloride	40.0	48.7	122	69-122	
Chlorobenzene	40.0	37.2	93	79-120	
Dibromochloromethane	40.0	35.2	88	70-132	
Chloroform	40.0	39.7	99	72-120	
Chloromethane	40.0	29.3	73	44-131	
Chloroethane	40.0	37.5	94	22-150	
cis-1,2-Dichloroethene	40.0	39.2	98	80-118	
cis-1,3-Dichloropropene	40.0	39.0	98	73-120	
Bromodichloromethane	40.0	40.0	100	70-125	
Ethylbenzene	40.0	37.9	95	78-125	
1,2-Dibromoethane (EDB)	40.0	36.2	90	70-131	
Methyl tert-butyl ether	40.0	38.5	96	48-132	
Methylene Chloride	40.0	35.0	88	58-127	
Styrene	40.0	38.4	96	83-129	
Tetrachloroethene	40.0	39.2	98	78-129	
Toluene	40.0	37.0	93	78-124	
trans-1,2-Dichloroethene	40.0	40.0	100	77-121	
trans-1,3-Dichloropropene	40.0	34.6	86	74-129	
Trichloroethene	40.0	44.2	110	76-119	
Acrylonitrile	400	297	74	60-140	
Vinyl chloride	40.0	43.8	110	63-124	
Xylenes, Total	80.0	76.0	95	83-126	
Bromochloromethane	40.0	43.6	109	67-126	

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.: 180-64801-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 30404K03.D

Lab ID: LCS 180-207218/3 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	40.0	39.1	98	76-124	
1,1,1-Trichloroethane	40.0	43.5	109	67-126	
1,1,2,2-Tetrachloroethane	40.0	34.4	86	60-139	
1,1,2-Trichloroethane	40.0	36.3	91	70-128	
1,1-Dichloroethane	40.0	34.1	85	66-124	
1,1-Dichloroethene	40.0	37.5	94	59-129	
1,2-Dichloroethane	40.0	39.6	99	61-127	
1,2-Dichloropropane	40.0	34.9	87	72-122	
2-Butanone (MEK)	40.0	27.7	69	35-149	
2-Hexanone	40.0	30.0	75	32-150	
4-Methyl-2-pentanone (MIBK)	40.0	23.8	60	44-148	
Acetone	40.0	33.9	85	20-150	
Benzene	40.0	38.3	96	77-120	
Bromoform	40.0	31.4	78	53-140	
Bromomethane	40.0	72.4	181	25-150	*
Carbon disulfide	40.0	32.3	81	50-127	
Carbon tetrachloride	40.0	47.0	118	69-122	
Chlorobenzene	40.0	37.6	94	79-120	
Dibromochloromethane	40.0	34.6	87	70-132	
Chloroform	40.0	39.3	98	72-120	
Chloromethane	40.0	28.3	71	44-131	
Chloroethane	40.0	40.6	102	22-150	
cis-1,2-Dichloroethene	40.0	38.7	97	80-118	
cis-1,3-Dichloropropene	40.0	38.2	96	73-120	
Bromodichloromethane	40.0	39.6	99	70-125	
Ethylbenzene	40.0	38.2	96	78-125	
1,2-Dibromoethane (EDB)	40.0	36.5	91	70-131	
Methyl tert-butyl ether	40.0	37.5	94	48-132	
Methylene Chloride	40.0	34.2	86	58-127	
Styrene	40.0	38.9	97	83-129	
Tetrachloroethene	40.0	39.2	98	78-129	
Toluene	40.0	37.1	93	78-124	
trans-1,2-Dichloroethene	40.0	39.1	98	77-121	
trans-1,3-Dichloropropene	40.0	34.0	85	74-129	
Trichloroethene	40.0	43.5	109	76-119	
Acrylonitrile	400	288	72	60-140	
Vinyl chloride	40.0	42.9	107	63-124	
Xylenes, Total	80.0	76.7	96	83-126	
Bromochloromethane	40.0	43.1	108	67-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 30404K11.D

Lab ID: LCSD 180-207218/25 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	40.0	37.4	94	4	22	76-124	
1,1,1-Trichloroethane	40.0	42.9	107	1	31	67-126	
1,1,2,2-Tetrachloroethane	40.0	36.0	90	5	24	60-139	
1,1,2-Trichloroethane	40.0	36.6	92	1	22	70-128	
1,1-Dichloroethane	40.0	34.4	86	1	23	66-124	
1,1-Dichloroethene	40.0	37.2	93	1	25	59-129	
1,2-Dichloroethane	40.0	40.4	101	2	23	61-127	
1,2-Dichloropropane	40.0	35.2	88	1	20	72-122	
2-Butanone (MEK)	40.0	32.7	82	17	36	35-149	
2-Hexanone	40.0	34.3	86	13	32	32-150	
4-Methyl-2-pentanone (MIBK)	40.0	28.6	72	18	30	44-148	
Acetone	40.0	35.6	89	5	40	20-150	
Benzene	40.0	38.0	95	1	20	77-120	
Bromoform	40.0	30.3	76	3	23	53-140	
Bromomethane	40.0	70.7	177	2	40	25-150	*
Carbon disulfide	40.0	31.2	78	4	23	50-127	
Carbon tetrachloride	40.0	44.5	111	5	22	69-122	
Chlorobenzene	40.0	37.0	93	2	20	79-120	
Dibromochloromethane	40.0	33.4	84	3	20	70-132	
Chloroform	40.0	39.5	99	0	25	72-120	
Chloromethane	40.0	27.7	69	2	27	44-131	
Chloroethane	40.0	35.0	87	15	40	22-150	
cis-1,2-Dichloroethene	40.0	39.3	98	1	20	80-118	
cis-1,3-Dichloropropene	40.0	37.6	94	1	20	73-120	
Bromodichloromethane	40.0	39.1	98	1	21	70-125	
Ethylbenzene	40.0	38.3	96	0	21	78-125	
1,2-Dibromoethane (EDB)	40.0	37.2	93	2	20	70-131	
Methyl tert-butyl ether	40.0	37.4	93	0	36	48-132	
Methylene Chloride	40.0	35.4	88	3	28	58-127	
Styrene	40.0	38.9	97	0	20	83-129	
Tetrachloroethene	40.0	37.7	94	4	20	78-129	
Toluene	40.0	36.3	91	2	21	78-124	
trans-1,2-Dichloroethene	40.0	39.1	98	0	20	77-121	
trans-1,3-Dichloropropene	40.0	32.6	81	4	20	74-129	
Trichloroethene	40.0	43.1	108	1	21	76-119	
Acrylonitrile	400	295	74	3	20	60-140	
Vinyl chloride	40.0	40.7	102	5	27	63-124	
Xylenes, Total	80.0	76.3	95	1	20	83-126	
Bromochloromethane	40.0	42.2	106	2	29	67-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 3040304.D

Lab ID: 180-64801-4 MS Client ID: HD-SPBA-SB-009-45/45.5-0 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	38.5	5.1 U	42.0	109	76-124	
1,1,1-Trichloroethane	38.5	5.1 U	49.9	130	67-126	F1
1,1,2,2-Tetrachloroethane	38.5	5.1 U	26.0	68	60-139	
1,1,2-Trichloroethane	38.5	5.1 U	31.5	82	70-128	
1,1-Dichloroethane	38.5	5.1 U	37.2	97	66-124	
1,1-Dichloroethene	38.5	5.1 U	42.2	110	59-129	
1,2-Dichloroethane	38.5	5.1 U	35.0	91	61-127	
1,2-Dichloropropane	38.5	5.1 U	35.9	93	72-122	
2-Butanone (MEK)	38.5	5.1 U	17.6	46	35-149	
2-Hexanone	38.5	5.1 U	18.4	48	32-150	
4-Methyl-2-pentanone (MIBK)	38.5	5.1 U	16.1	42	44-148	F1
Acetone	38.5	20 U	22.5	59	20-150	
Benzene	38.5	5.1 U	40.6	105	77-120	
Bromoform	38.5	5.1 U	28.7	75	53-140	
Bromomethane	38.5	5.1 U	81.9	213	25-150	F1
Carbon disulfide	38.5	5.1 U	39.3	102	50-127	
Carbon tetrachloride	38.5	5.1 U	55.8	145	69-122	F1
Chlorobenzene	38.5	5.1 U	39.2	102	79-120	
Dibromochloromethane	38.5	5.1 U	34.5	90	70-132	
Chloroform	38.5	5.1 U	42.2	110	72-120	
Chloromethane	38.5	5.1 U	30.2	79	44-131	
Chloroethane	38.5	5.1 U	82.0	213	22-150	F1
cis-1,2-Dichloroethene	38.5	5.1 U	41.2	107	80-118	
cis-1,3-Dichloropropene	38.5	5.1 U	39.9	104	73-120	
Bromodichloromethane	38.5	5.1 U	43.4	113	70-125	
Ethylbenzene	38.5	5.1 U	41.9	109	78-125	
1,2-Dibromoethane (EDB)	38.5	5.1 U	29.9	78	70-131	
Methyl tert-butyl ether	38.5	5.1 U	30.8	80	48-132	
Methylene Chloride	38.5	1.4 J	34.9	87	58-127	
Styrene	38.5	5.1 U	40.6	105	83-129	
Tetrachloroethene	38.5	5.1 U	44.0	114	78-129	
Toluene	38.5	5.1 U	40.0	104	78-124	
trans-1,2-Dichloroethene	38.5	5.1 U	43.1	112	77-121	
trans-1,3-Dichloropropene	38.5	5.1 U	33.2	86	74-129	
Trichloroethene	38.5	5.1 U	47.5	123	76-119	F1
Acrylonitrile	385	51 U	189	49	60-140	F1
Vinyl chloride	38.5	5.1 U	46.3	120	63-124	
Xylenes, Total	77.0	10 U	83.6	109	83-126	
Bromochloromethane	38.5	5.1 U	39.9	104	67-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 3040305.D

Lab ID: 180-64801-4 MSD Client ID: HD-SPBA-SB-009-45/45.5-0 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	42.1	46.5	110	10	22	76-124	
1,1,1-Trichloroethane	42.1	55.8	133	11	31	67-126	F1
1,1,2,2-Tetrachloroethane	42.1	28.8	68	10	24	60-139	
1,1,2-Trichloroethane	42.1	33.9	81	7	22	70-128	
1,1-Dichloroethane	42.1	42.1	100	12	23	66-124	
1,1-Dichloroethene	42.1	46.8	111	11	25	59-129	
1,2-Dichloroethane	42.1	38.8	92	10	23	61-127	
1,2-Dichloropropane	42.1	39.3	93	9	20	72-122	
2-Butanone (MEK)	42.1	19.2	46	8	36	35-149	
2-Hexanone	42.1	18.6	44	1	32	32-150	
4-Methyl-2-pentanone (MIBK)	42.1	17.3	41	7	30	44-148	F1
Acetone	42.1	22.7	54	1	40	20-150	
Benzene	42.1	45.0	107	10	20	77-120	
Bromoform	42.1	31.1	74	8	23	53-140	
Bromomethane	42.1	87.7	208	7	40	25-150	F1
Carbon disulfide	42.1	45.3	108	14	23	50-127	
Carbon tetrachloride	42.1	61.7	146	10	22	69-122	F1
Chlorobenzene	42.1	43.2	103	10	20	79-120	
Dibromochloromethane	42.1	37.2	88	7	20	70-132	
Chloroform	42.1	46.5	110	10	25	72-120	
Chloromethane	42.1	33.9	81	12	27	44-131	
Chloroethane	42.1	102	242	22	40	22-150	F1
cis-1,2-Dichloroethene	42.1	45.7	108	10	20	80-118	
cis-1,3-Dichloropropene	42.1	43.8	104	9	20	73-120	
Bromodichloromethane	42.1	47.7	113	9	21	70-125	
Ethylbenzene	42.1	46.3	110	10	21	78-125	
1,2-Dibromoethane (EDB)	42.1	33.2	79	11	20	70-131	
Methyl tert-butyl ether	42.1	33.9	81	10	36	48-132	
Methylene Chloride	42.1	37.9	87	8	28	58-127	
Styrene	42.1	44.8	106	10	20	83-129	
Tetrachloroethene	42.1	48.3	115	9	20	78-129	
Toluene	42.1	44.4	105	10	21	78-124	
trans-1,2-Dichloroethene	42.1	47.8	113	10	20	77-121	
trans-1,3-Dichloropropene	42.1	36.0	86	8	20	74-129	
Trichloroethene	42.1	53.5	127	12	21	76-119	F1
Acrylonitrile	421	205	49	8	20	60-140	F1
Vinyl chloride	42.1	50.5	120	9	27	63-124	
Xylenes, Total	84.2	91.7	109	9	20	83-126	
Bromochloromethane	42.1	44.3	105	10	29	67-126	

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.: 180-64801-1

SDG No.:

Lab File ID: 3040307.D Lab Sample ID: MB 180-207111/8

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

Instrument ID: CHHP3 Date Analyzed: 04/03/2017 09:10

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 180-207111/3	3040303.D	04/03/2017 07:35
HD-SPBA-SB-009-45/45.5-0 MS	180-64801-4 MS	3040304.D	04/03/2017 08:02
HD-SPBA-SB-009-45/45.5-0 MSD	180-64801-4 MSD	3040305.D	04/03/2017 08:25
HD-SPBA-SB-009-45/45.5-0	180-64801-4	3040308.D	04/03/2017 09:33
HD-SPBA-SB-009-30/30.5-0	180-64801-1	3040311.D	04/03/2017 10:41
HD-SPBA-SB-009-35/35.5-0	180-64801-2	3040312.D	04/03/2017 11:03
HD-SPBA-SB-009-40/40.5-0	180-64801-3	3040313.D	04/03/2017 11:26
HD-SPBA-SB-009-53.5/54-0	180-64801-5	3040314.D	04/03/2017 11:49
HD-SPBA-SB-009-58.5-59-0	180-64801-6	3040315.D	04/03/2017 12:11
HD-SPBA-SB-009-61/61.5-0	180-64801-7	3040316.D	04/03/2017 12:34
HD-SPBA-SB-009-65/68-0	180-64801-8	3040317.D	04/03/2017 12:57
HD-SPBA-SB-010-0.5/1.0-0	180-64801-12	3040318.D	04/03/2017 13:20
HD-SPBA-SB-010-10/10.5-0	180-64801-14	3040320.D	04/03/2017 14:05
HD-SPBA-SB-010-15/15.5-0	180-64801-15	3040321.D	04/03/2017 14:28
HD-SPBA-SB-010-20/20.5-0	180-64801-16	3040322.D	04/03/2017 14:51
HD-SPBA-SB-010-25/25.5-0	180-64801-17	3040323.D	04/03/2017 15:13
HD-SPBA-SB-010-31.6/32.2-0	180-64801-18	3040324.D	04/03/2017 15:36
HD-SPBA-SB-010-35/35.5-0	180-64801-19	3040325.D	04/03/2017 15:59
HD-SPBA-SB-010-40/40.5-0	180-64801-20	3040326.D	04/03/2017 16:22
HD-SPBA-SB-010-45/45.5-0	180-64801-21	3040327.D	04/03/2017 16:45

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Lab File ID: 30404K07.D Lab Sample ID: MB 180-207218/8

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

Instrument ID: CHHP3 Date Analyzed: 04/04/2017 09:40

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-207218/3	30404K03.D	04/04/2017 08:09
	LCSD 180-207218/25	30404K11.D	04/04/2017 11:10
HD-SPBA-SB-010-5/5.5-0	180-64801-13	30404K12.D	04/04/2017 11:33
HD-SPBA-SB-010-50/50.5	180-64801-22	30404K13.D	04/04/2017 11:56

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Lab File ID: 30928K01.D BFB Injection Date: 09/28/2016

Instrument ID: CHHP3 BFB Injection Time: 10:45

Analysis Batch No.: 189436

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.6	
75	30.0 - 60.0 % of mass 95	44.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	76.9	
175	5.0 - 9.0 % of mass 174	5.8	(7.5) 1
176	95.0 - 101.0 % of mass 174	73.5	(95.6) 1
177	5.0 - 9.0 % of mass 176	5.0	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-189436/4	30928K04.D	09/28/2016	12:01
	IC 180-189436/5	30928K05.D	09/28/2016	12:24
	IC 180-189436/6	30928K06.D	09/28/2016	12:47
	ICIS 180-189436/7	30928K07.D	09/28/2016	13:10
	IC 180-189436/8	30928K08.D	09/28/2016	13:33
	IC 180-189436/9	30928K09.D	09/28/2016	13:56
	IC 180-189436/10	30928K10.D	09/28/2016	14:19

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Lab File ID: 3040301.D BFB Injection Date: 04/03/2017

Instrument ID: CHHP3 BFB Injection Time: 06:13

Analysis Batch No.: 207111

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.1	
75	30.0 - 60.0 % of mass 95	49.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.1	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	50.0 - 120.00 % of mass 95	82.4	
175	5.0 - 9.0 % of mass 174	6.1	(7.4) 1
176	95.0 - 101.0 % of mass 174	80.1	(97.2) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-207111/2	3040302.D	04/03/2017	06:47
	LCS 180-207111/3	3040303.D	04/03/2017	07:35
HD-SPBA-SB-009-45/45.5-0 MS	180-64801-4 MS	3040304.D	04/03/2017	08:02
HD-SPBA-SB-009-45/45.5-0 MSD	180-64801-4 MSD	3040305.D	04/03/2017	08:25
	MB 180-207111/8	3040307.D	04/03/2017	09:10
HD-SPBA-SB-009-45/45.5-0	180-64801-4	3040308.D	04/03/2017	09:33
HD-SPBA-SB-009-30/30.5-0	180-64801-1	3040311.D	04/03/2017	10:41
HD-SPBA-SB-009-35/35.5-0	180-64801-2	3040312.D	04/03/2017	11:03
HD-SPBA-SB-009-40/40.5-0	180-64801-3	3040313.D	04/03/2017	11:26
HD-SPBA-SB-009-53.5/54-0	180-64801-5	3040314.D	04/03/2017	11:49
HD-SPBA-SB-009-58.5-59-0	180-64801-6	3040315.D	04/03/2017	12:11
HD-SPBA-SB-009-61/61.5-0	180-64801-7	3040316.D	04/03/2017	12:34
HD-SPBA-SB-009-65/68-0	180-64801-8	3040317.D	04/03/2017	12:57
HD-SPBA-SB-010-0.5/1.0-0	180-64801-12	3040318.D	04/03/2017	13:20
HD-SPBA-SB-010-10/10.5-0	180-64801-14	3040320.D	04/03/2017	14:05
HD-SPBA-SB-010-15/15.5-0	180-64801-15	3040321.D	04/03/2017	14:28
HD-SPBA-SB-010-20/20.5-0	180-64801-16	3040322.D	04/03/2017	14:51
HD-SPBA-SB-010-25/25.5-0	180-64801-17	3040323.D	04/03/2017	15:13
HD-SPBA-SB-010-31.6/32.2-0	180-64801-18	3040324.D	04/03/2017	15:36
HD-SPBA-SB-010-35/35.5-0	180-64801-19	3040325.D	04/03/2017	15:59
HD-SPBA-SB-010-40/40.5-0	180-64801-20	3040326.D	04/03/2017	16:22
HD-SPBA-SB-010-45/45.5-0	180-64801-21	3040327.D	04/03/2017	16:45

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Lab File ID: 3040401.D BFB Injection Date: 04/04/2017

Instrument ID: CHHP3 BFB Injection Time: 05:56

Analysis Batch No.: 207218

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.6	
75	30.0 - 60.0 % of mass 95	48.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	83.2	
175	5.0 - 9.0 % of mass 174	6.2	(7.5) 1
176	95.0 - 101.0 % of mass 174	81.7	(98.2) 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
	CCVIS 180-207218/2	30404K02.D	04/04/2017	07:27
	LCS 180-207218/3	30404K03.D	04/04/2017	08:09
	MB 180-207218/8	30404K07.D	04/04/2017	09:40
	LCSD 180-207218/25	30404K11.D	04/04/2017	11:10
HD-SPBA-SB-010-5/5.5-0	180-64801-13	30404K12.D	04/04/2017	11:33
HD-SPBA-SB-010-50/50.5	180-64801-22	30404K13.D	04/04/2017	11:56

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Sample No.: CCVIS 180-207111/2 Date Analyzed: 04/03/2017 06:47

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 3040302.D Heated Purge: (Y/N) Y

Calibration ID: 32996

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		168186	4.46	606211	7.35	153301	10.44
UPPER LIMIT		336372	4.96	1212422	7.85	306602	10.94
LOWER LIMIT		84093	3.96	303106	6.85	76651	9.94
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-207111/3		162475	4.47	603696	7.35	150983	10.44
180-64801-4 MS	HD-SPBA-SB-009-45/45.5-0 MS	131573	4.43	887169	7.36	217001	10.44
180-64801-4 MSD	HD-SPBA-SB-009-45/45.5-0 MSD	135381	4.44	892311	7.36	218898	10.44
MB 180-207111/8		157568	4.41	606037	7.36	148378	10.45
180-64801-4	HD-SPBA-SB-009-45/45.5-0	139613	4.41	849053	7.36	202953	10.45
180-64801-1	HD-SPBA-SB-009-30/30.5-0	118732	4.41	815925	7.36	197224	10.45
180-64801-2	HD-SPBA-SB-009-35/35.5-0	119115	4.41	842142	7.36	204005	10.44
180-64801-3	HD-SPBA-SB-009-40/40.5-0	126252	4.42	824728	7.36	203727	10.44
180-64801-5	HD-SPBA-SB-009-53.5/54-0	98569	4.41	827354	7.36	198093	10.44
180-64801-6	HD-SPBA-SB-009-58.5-59-0	144601	4.42	806038	7.36	195624	10.45
180-64801-7	HD-SPBA-SB-009-61/61.5-0	104282	4.41	796932	7.36	190446	10.45
180-64801-8	HD-SPBA-SB-009-65/68-0	99589	4.41	820812	7.36	193458	10.44
180-64801-12	HD-SPBA-SB-010-0.5/1.0-0	112559	4.42	727939	7.35	178037	10.44
180-64801-14	HD-SPBA-SB-010-10/10.5-0	116799	4.42	784489	7.36	193081	10.45
180-64801-15	HD-SPBA-SB-010-15/15.5-0	121078	4.41	796371	7.36	192997	10.44
180-64801-16	HD-SPBA-SB-010-20/20.5-0	117504	4.41	768528	7.36	188024	10.45
180-64801-17	HD-SPBA-SB-010-25/25.5-0	115259	4.41	757807	7.36	186757	10.44
180-64801-18	HD-SPBA-SB-010-31.6/32.2-0	110484	4.41	768271	7.36	184626	10.44
180-64801-19	HD-SPBA-SB-010-35/35.5-0	123845	4.42	783402	7.36	187874	10.44
180-64801-20	HD-SPBA-SB-010-40/40.5-0	111407	4.41	764781	7.36	185359	10.44

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.: 180-64801-1

SDG No.:

Sample No.: CCVIS 180-207111/2 Date Analyzed: 04/03/2017 06:47

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 3040302.D Heated Purge: (Y/N) Y

Calibration ID: 32996

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		168186	4.46	606211	7.35	153301	10.44
UPPER LIMIT		336372	4.96	1212422	7.85	306602	10.94
LOWER LIMIT		84093	3.96	303106	6.85	76651	9.94
LAB SAMPLE ID	CLIENT SAMPLE ID						
180-64801-21	HD-SPBA-SB-010-45/45.5-0	113453	4.42	778037	7.36	188558	10.44

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.: 180-64801-1

SDG No.:

Sample No.: CCVIS 180-207111/2 Date Analyzed: 04/03/2017 06:47

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 3040302.D Heated Purge: (Y/N) Y

Calibration ID: 32996

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		253493	12.76				
UPPER LIMIT		506986	13.26				
LOWER LIMIT		126747	12.26				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-207111/3		247020	12.76				
180-64801-4 MS	HD-SPBA-SB-009-45/45.5-0 MS	339344	12.76				
180-64801-4 MSD	HD-SPBA-SB-009-45/45.5-0 MSD	334894	12.76				
MB 180-207111/8		219741	12.76				
180-64801-4	HD-SPBA-SB-009-45/45.5-0	292746	12.76				
180-64801-1	HD-SPBA-SB-009-30/30.5-0	283209	12.77				
180-64801-2	HD-SPBA-SB-009-35/35.5-0	291541	12.77				
180-64801-3	HD-SPBA-SB-009-40/40.5-0	293099	12.76				
180-64801-5	HD-SPBA-SB-009-53.5/54-0	277604	12.76				
180-64801-6	HD-SPBA-SB-009-58.5-59-0	283692	12.76				
180-64801-7	HD-SPBA-SB-009-61/61.5-0	268019	12.77				
180-64801-8	HD-SPBA-SB-009-65/68-0	274777	12.76				
180-64801-12	HD-SPBA-SB-010-0.5/1.0-0	248350	12.77				
180-64801-14	HD-SPBA-SB-010-10/10.5-0	276993	12.76				
180-64801-15	HD-SPBA-SB-010-15/15.5-0	276336	12.77				
180-64801-16	HD-SPBA-SB-010-20/20.5-0	268801	12.77				
180-64801-17	HD-SPBA-SB-010-25/25.5-0	265709	12.77				
180-64801-18	HD-SPBA-SB-010-31.6/32.2-0	263658	12.76				
180-64801-19	HD-SPBA-SB-010-35/35.5-0	270936	12.77				
180-64801-20	HD-SPBA-SB-010-40/40.5-0	261017	12.77				

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.: 180-64801-1

SDG No.:

Sample No.: CCVIS 180-207111/2 Date Analyzed: 04/03/2017 06:47

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 3040302.D Heated Purge: (Y/N) Y

Calibration ID: 32996

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		253493	12.76				
UPPER LIMIT		506986	13.26				
LOWER LIMIT		126747	12.26				
LAB SAMPLE ID	CLIENT SAMPLE ID						
180-64801-21	HD-SPBA-SB-010-45/45.5-0	269674	12.77				

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.: 180-64801-1

SDG No.:

Sample No.: CCVIS 180-207218/2 Date Analyzed: 04/04/2017 07:27

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 30404K02.D Heated Purge: (Y/N) Y

Calibration ID: 32996

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		159666	4.46	617791	7.35	155973	10.44
UPPER LIMIT		319332	4.96	1235582	7.85	311946	10.94
LOWER LIMIT		79833	3.96	308896	6.85	77987	9.94
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-207218/3		158940	4.45	634622	7.35	156476	10.44
MB 180-207218/8		155485	4.42	616609	7.36	153190	10.44
LCSD 180-207218/25		143696	4.46	585502	7.35	150183	10.44
180-64801-13	HD-SPBA-SB-010-5/5.5-0	150374	4.42	624539	7.36	151921	10.45
180-64801-22	HD-SPBA-SB-010-50/50.5	124657	4.41	846742	7.36	207964	10.44

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.: 180-64801-1

SDG No.:

Sample No.: CCVIS 180-207218/2 Date Analyzed: 04/04/2017 07:27

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 30404K02.D Heated Purge: (Y/N) Y

Calibration ID: 32996

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		256719	12.77				
UPPER LIMIT		513438	13.27				
LOWER LIMIT		128360	12.27				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-207218/3		255995	12.76				
MB 180-207218/8		224382	12.77				
LCSD 180-207218/25		247451	12.76				
180-64801-13	HD-SPBA-SB-010-5/5.5-0	223655	12.76				
180-64801-22	HD-SPBA-SB-010-50/50.5	294888	12.76				

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.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-30/30.5-0 | Lab Sample ID: 180-64801-1

Matrix: Solid | Lab File ID: 3040311.D

Analysis Method: 8260C | Date Collected: 03/30/2017 09:35

Sample wt/vol: 6.0579(g) | Date Analyzed: 04/03/2017 10:41

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 19.4 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.1	U	5.1	2.8
71-55-6	1,1,1-Trichloroethane	5.1	U	5.1	1.1
79-34-5	1,1,2,2-Tetrachloroethane	5.1	U	5.1	4.1
79-00-5	1,1,2-Trichloroethane	5.1	U	5.1	2.9
75-34-3	1,1-Dichloroethane	5.1	U	5.1	1.2
75-35-4	1,1-Dichloroethene	5.1	U	5.1	1.5
107-06-2	1,2-Dichloroethane	5.1	U	5.1	1.1
78-87-5	1,2-Dichloropropane	5.1	U	5.1	1.9
78-93-3	2-Butanone (MEK)	5.1	U	5.1	3.1
591-78-6	2-Hexanone	5.1	U	5.1	4.2
108-10-1	4-Methyl-2-pentanone (MIBK)	5.1	U	5.1	3.7
67-64-1	Acetone	20	U ^c	20	11
71-43-2	Benzene	5.1	U	5.1	3.1
75-25-2	Bromoform	5.1	U	5.1	4.7
74-83-9	Bromomethane	5.1	U ^c *	5.1	1.8
75-15-0	Carbon disulfide	5.1	U	5.1	2.2
56-23-5	Carbon tetrachloride	5.1	U ^c	5.1	1.4
108-90-7	Chlorobenzene	5.1	U	5.1	2.3
124-48-1	Dibromochloromethane	5.1	U	5.1	2.5
123-91-1	1,4-Dioxane	1000	U	1000	26
67-66-3	Chloroform	5.1	U	5.1	1.3
74-87-3	Chloromethane	5.1	U ^c	5.1	2.7
75-00-3	Chloroethane	5.1	U	5.1	2.2
156-59-2	cis-1,2-Dichloroethene	5.1	U	5.1	1.4
10061-01-5	cis-1,3-Dichloropropene	5.1	U	5.1	2.2
75-27-4	Bromodichloromethane	5.1	U	5.1	2.1
100-41-4	Ethylbenzene	5.1	U	5.1	2.0
106-93-4	1,2-Dibromoethane (EDB)	5.1	U	5.1	2.2
1634-04-4	Methyl tert-butyl ether	5.1	U	5.1	2.6
75-09-2	Methylene Chloride	1.5	J B	5.1	0.57
100-42-5	Styrene	5.1	U	5.1	2.4
127-18-4	Tetrachloroethene	5.1	U	5.1	1.3
108-88-3	Toluene	5.1	U	5.1	3.7
156-60-5	trans-1,2-Dichloroethene	5.1	U	5.1	1.0
10061-02-6	trans-1,3-Dichloropropene	5.1	U	5.1	2.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-30/30.5-0 | Lab Sample ID: 180-64801-1

Matrix: Solid | Lab File ID: 3040311.D

Analysis Method: 8260C | Date Collected: 03/30/2017 09:35

Sample wt/vol: 6.0579(g) | Date Analyzed: 04/03/2017 10:41

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 19.4 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	5.1	U	5.1	1.2
107-13-1	Acrylonitrile	51	U ^c	51	26
75-01-4	Vinyl chloride	5.1	U	5.1	2.6
1330-20-7	Xylenes, Total	10	U	10	4.7
74-97-5	Bromochloromethane	5.1	U	5.1	1.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		52-124
460-00-4	4-Bromofluorobenzene (Surr)	82		63-120
1868-53-7	Dibromofluoromethane (Surr)	99		68-121
2037-26-5	Toluene-d8 (Surr)	96		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040311.D
Lims ID: 180-64801-B-1-A
Client ID: HD-SPBA-SB-009-30/30.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 10:41:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-012
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 11:02:48 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 11:02:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.410	4.464	-0.054	97	118732	5000.0	
* 2 Fluorobenzene (IS)	96	7.355	7.348	0.007	99	815925	250.0	
* 3 Chlorobenzene-d5	119	10.445	10.438	0.007	85	197224	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.769	12.762	0.007	96	283209	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.613	6.600	0.013	93	173786	248.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.978	6.971	0.007	95	185426	229.9	
$ 7 Toluene-d8 (Surr)	98	9.009	9.003	0.006	92	816832	239.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.607	11.606	0.001	87	285206	205.8	
11 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.958				ND	
14 Bromomethane	94		2.299				ND	
15 Chloroethane	64		2.420				ND	
21 1,1-Dichloroethene	96		3.424				ND	
23 Acetone	43		3.594				ND	
25 Carbon disulfide	76		3.716				ND	
30 Methylene Chloride	84	4.228	4.221	0.007	84	7998	7.54	M
32 Acrylonitrile	53		4.635				ND	
33 trans-1,2-Dichloroethene	96		4.641				ND	
34 Methyl tert-butyl ether	73		4.695				ND	
36 1,1-Dichloroethane	63		5.249				ND	
42 cis-1,2-Dichloroethene	96		6.009				ND	
43 2-Butanone (MEK)	43		6.070				ND	
47 Chlorobromomethane	128		6.295				ND	
49 Chloroform	83		6.417				ND	
50 1,1,1-Trichloroethane	97		6.612				ND	
53 Carbon tetrachloride	117		6.800				ND	
55 Benzene	78		7.031				ND	
56 1,2-Dichloroethane	62		7.056				ND	
60 Trichloroethene	130		7.743				ND	
64 1,2-Dichloropropane	63		7.981				ND	
67 1,4-Dioxane	88		8.133				ND	
68 Dichlorobromomethane	83		8.273				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.729				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893				ND	
73 Toluene	91		9.069				ND	
74 trans-1,3-Dichloropropene	75		9.288				ND	
76 1,1,2-Trichloroethane	97		9.471				ND	
77 Tetrachloroethene	164	9.618	9.617	0.001	94	1302	1.74	
79 2-Hexanone	43		9.726				ND	
81 Chlorodibromomethane	129		9.866				ND	
82 Ethylene Dibromide	107		9.976				ND	
83 Chlorobenzene	112		10.469				ND	
85 1,1,1,2-Tetrachloroethane	131		10.548				ND	
86 Ethylbenzene	106		10.578				ND	
87 m-Xylene & p-Xylene	106		10.694				ND	
88 o-Xylene	106		11.089				ND	
89 Styrene	104		11.101				ND	
90 Bromoform	173		11.284				ND	
93 1,1,2,2-Tetrachloroethane	83		11.746				ND	
S 129 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

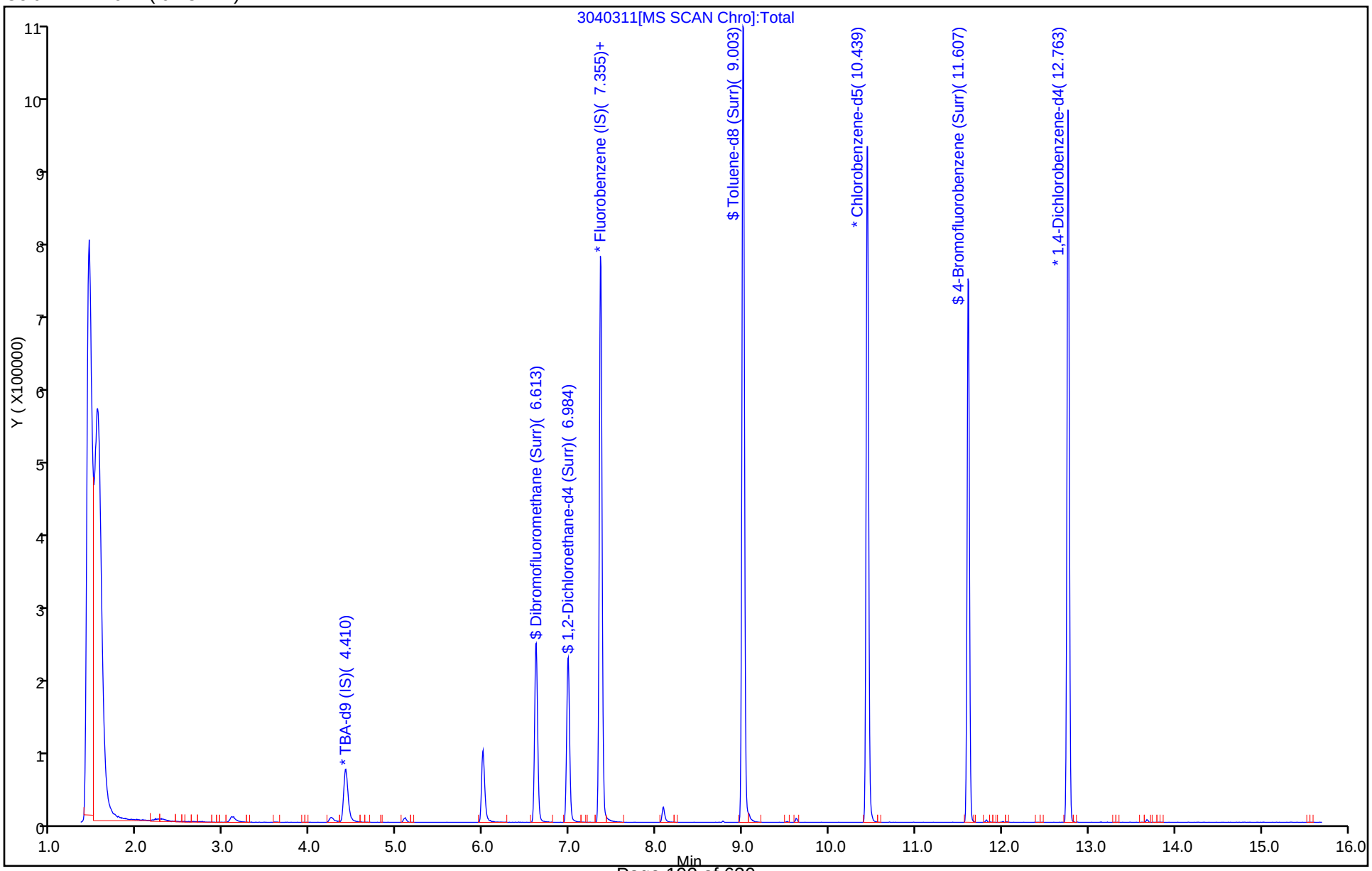
Report Date: 03-Apr-2017 11:02:49 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040311.D

Injection Date:	03-Apr-2017 10:41:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-1-A	Lab Sample ID:	180-64801-1	Worklist Smp#:	12
Client ID:	HD-SPBA-SB-009-30/30.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040311.D
Lims ID: 180-64801-B-1-A
Client ID: HD-SPBA-SB-009-30/30.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 10:41:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-012
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 11:02:48 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 11:02:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	248.0	99.20
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	229.9	91.95
$ 7 Toluene-d8 (Surr)	250.0	239.2	95.68
$ 8 4-Bromofluorobenzene (Surr)	250.0	205.8	82.32

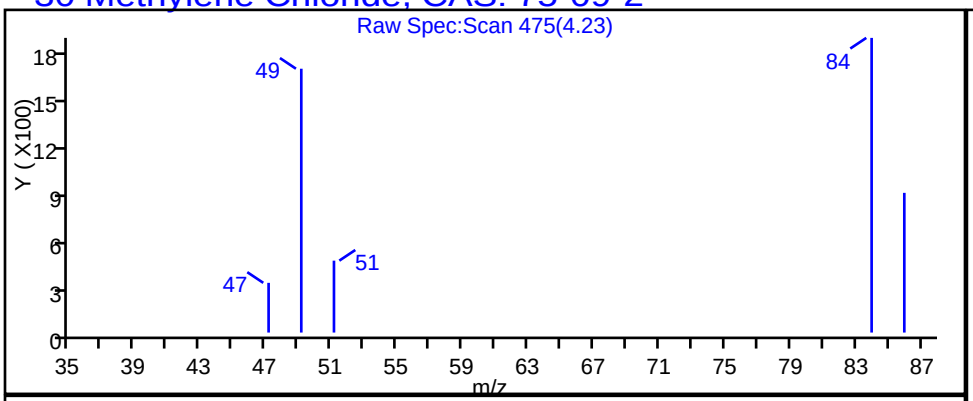
Report Date: 03-Apr-2017 11:02:49 Chrom Revision: 2.2 13-Mar-2017 15:50:30

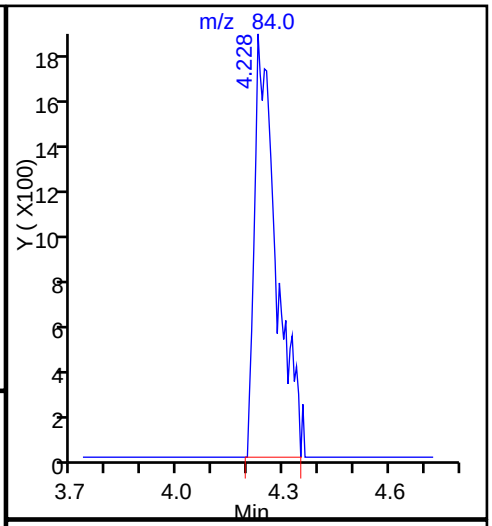
TestAmerica Pittsburgh

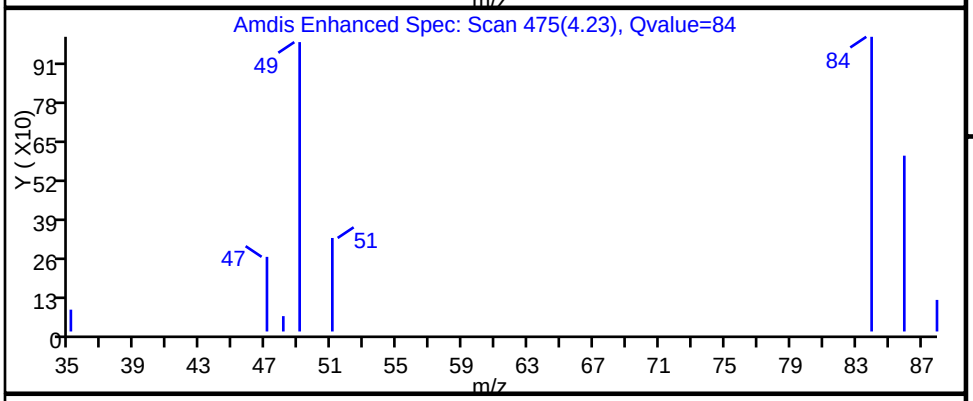
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040311.D

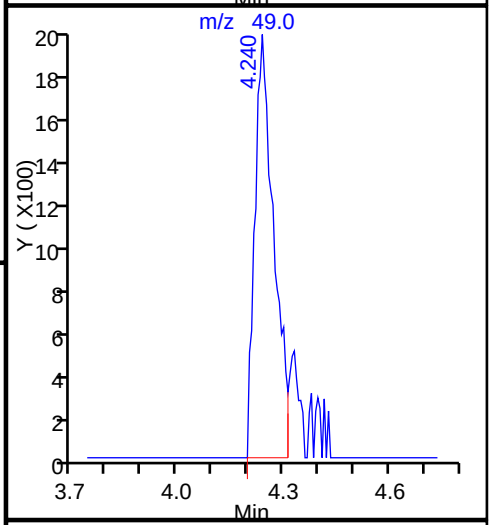
Injection Date:	03-Apr-2017 10:41:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-1-A	Lab Sample ID:	180-64801-1		
Client ID:	HD-SPBA-SB-009-30/30.5-0				
Operator ID:	10099	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

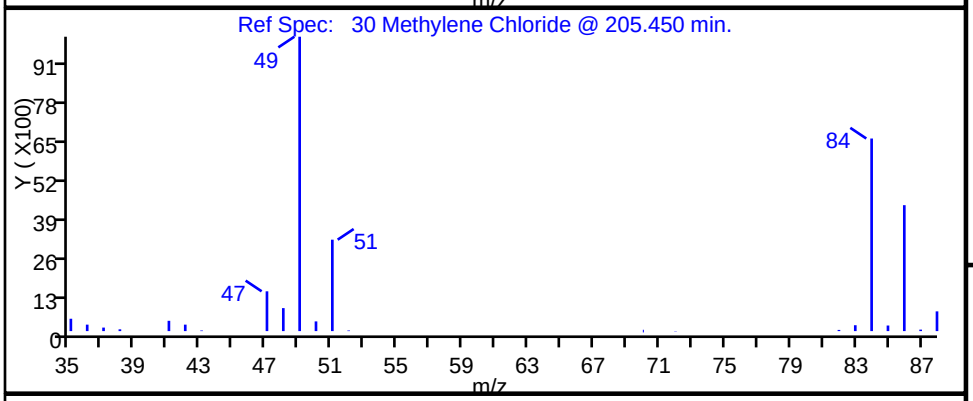
30 Methylene Chloride, CAS: 75-09-2

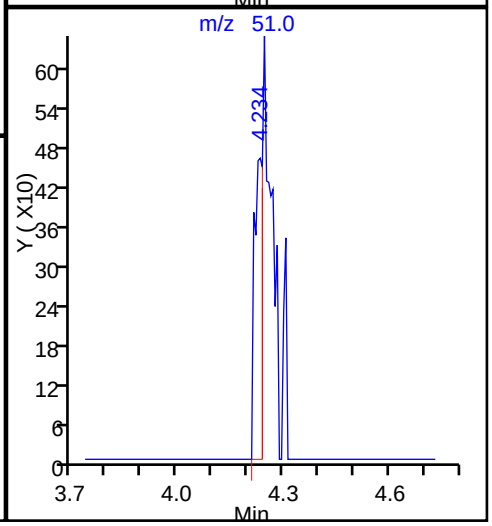


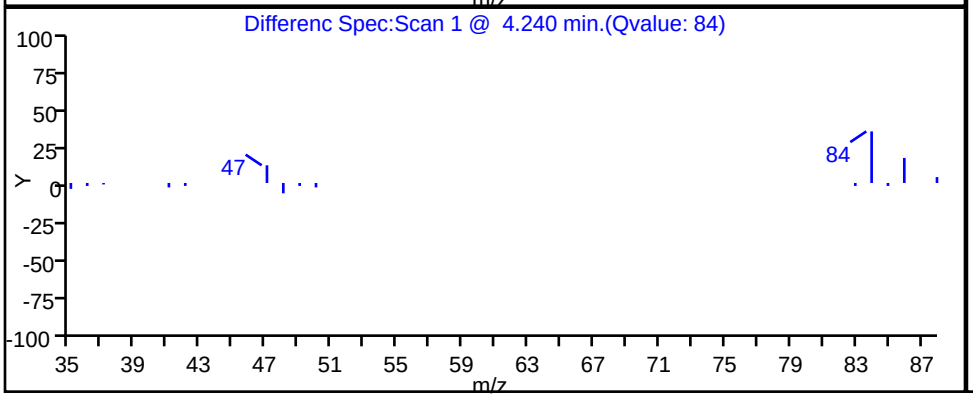












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

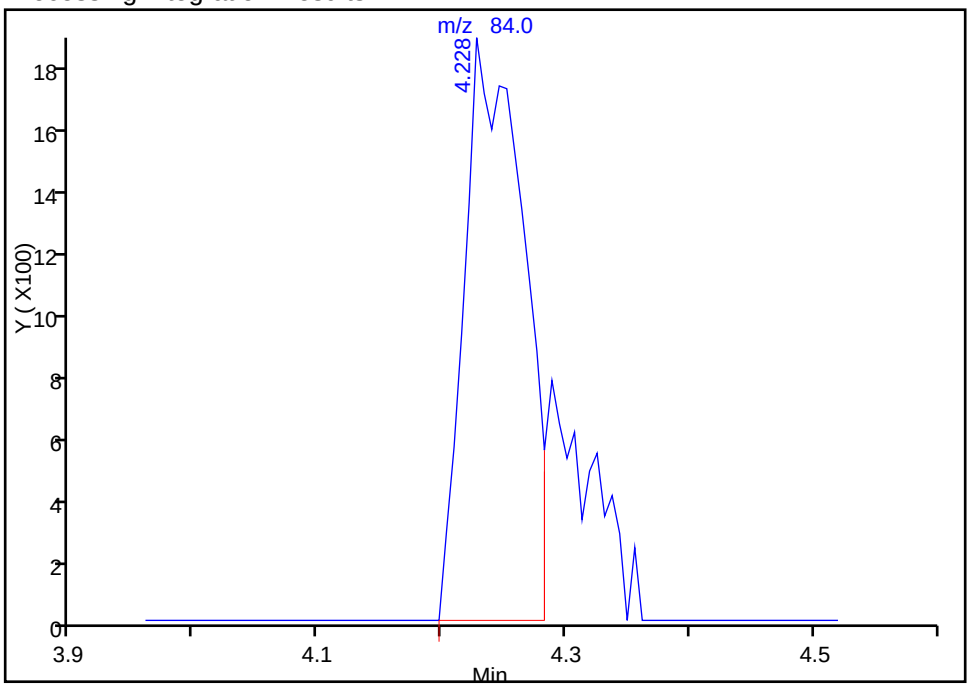
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040311.D				
Injection Date:	03-Apr-2017 10:41:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-1-A	Lab Sample ID:	180-64801-1		
Client ID:	HD-SPBA-SB-009-30/30.5-0				
Operator ID:	10099	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

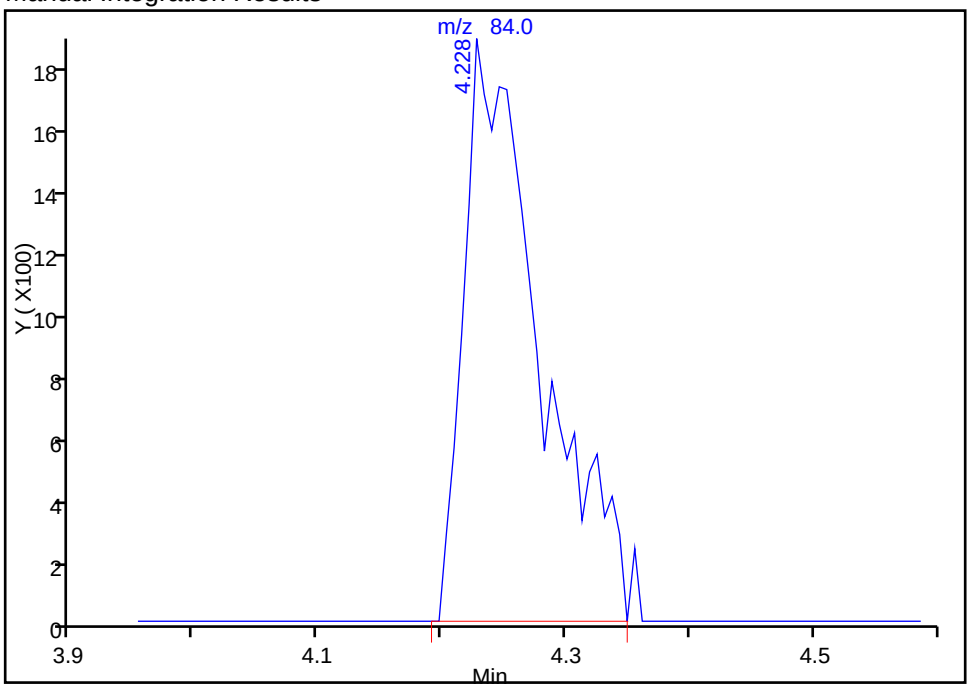
Processing Integration Results

RT: 4.23
Area: 6215
Amount: 5.858374
Amount Units: ng



Manual Integration Results

RT: 4.23
Area: 7998
Amount: 7.539063
Amount Units: ng



Reviewer: gordonk, 03-Apr-2017 11:02:27

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-35/35.5-0 | Lab Sample ID: 180-64801-2

Matrix: Solid | Lab File ID: 3040312.D

Analysis Method: 8260C | Date Collected: 03/30/2017 09:50

Sample wt/vol: 6.6734(g) | Date Analyzed: 04/03/2017 11:03

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 18.0 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.6	U	4.6	2.5
71-55-6	1,1,1-Trichloroethane	4.6	U	4.6	0.99
79-34-5	1,1,2,2-Tetrachloroethane	4.6	U	4.6	3.6
79-00-5	1,1,2-Trichloroethane	4.6	U	4.6	2.6
75-34-3	1,1-Dichloroethane	4.6	U	4.6	1.0
75-35-4	1,1-Dichloroethene	4.6	U	4.6	1.3
107-06-2	1,2-Dichloroethane	4.6	U	4.6	1.0
78-87-5	1,2-Dichloropropane	4.6	U	4.6	1.7
78-93-3	2-Butanone (MEK)	4.6	U	4.6	2.7
591-78-6	2-Hexanone	4.6	U	4.6	3.7
108-10-1	4-Methyl-2-pentanone (MIBK)	4.6	U	4.6	3.3
67-64-1	Acetone	18	U ^c	18	9.4
71-43-2	Benzene	4.6	U	4.6	2.8
75-25-2	Bromoform	4.6	U	4.6	4.2
74-83-9	Bromomethane	4.6	U ^c *	4.6	1.6
75-15-0	Carbon disulfide	4.6	U	4.6	1.9
56-23-5	Carbon tetrachloride	4.6	U ^c	4.6	1.2
108-90-7	Chlorobenzene	4.6	U	4.6	2.0
124-48-1	Dibromochloromethane	4.6	U	4.6	2.3
123-91-1	1,4-Dioxane	910	U	910	23
67-66-3	Chloroform	4.6	U	4.6	1.1
74-87-3	Chloromethane	4.6	U ^c	4.6	2.4
75-00-3	Chloroethane	4.6	U	4.6	2.0
156-59-2	cis-1,2-Dichloroethene	4.6	U	4.6	1.2
10061-01-5	cis-1,3-Dichloropropene	4.6	U	4.6	2.0
75-27-4	Bromodichloromethane	4.6	U	4.6	1.8
100-41-4	Ethylbenzene	4.6	U	4.6	1.8
106-93-4	1,2-Dibromoethane (EDB)	4.6	U	4.6	2.0
1634-04-4	Methyl tert-butyl ether	4.6	U	4.6	2.3
75-09-2	Methylene Chloride	1.3	J B	4.6	0.51
100-42-5	Styrene	4.6	U	4.6	2.1
127-18-4	Tetrachloroethene	4.6	U	4.6	1.1
108-88-3	Toluene	4.6	U	4.6	3.3
156-60-5	trans-1,2-Dichloroethene	4.6	U	4.6	0.94
10061-02-6	trans-1,3-Dichloropropene	4.6	U	4.6	2.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-35/35.5-0 | Lab Sample ID: 180-64801-2

Matrix: Solid | Lab File ID: 3040312.D

Analysis Method: 8260C | Date Collected: 03/30/2017 09:50

Sample wt/vol: 6.6734(g) | Date Analyzed: 04/03/2017 11:03

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 18.0 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	4.6	U	4.6	1.0
107-13-1	Acrylonitrile	46	U ^c	46	23
75-01-4	Vinyl chloride	4.6	U	4.6	2.3
1330-20-7	Xylenes, Total	9.1	U	9.1	4.2
74-97-5	Bromochloromethane	4.6	U	4.6	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		52-124
460-00-4	4-Bromofluorobenzene (Surr)	76		63-120
1868-53-7	Dibromofluoromethane (Surr)	92		68-121
2037-26-5	Toluene-d8 (Surr)	88		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040312.D
Lims ID: 180-64801-B-2-A
Client ID: HD-SPBA-SB-009-35/35.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 11:03:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-013
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 11:24:47 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 11:24:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.412	4.464	-0.052	98	119115	5000.0	
* 2 Fluorobenzene (IS)	96	7.356	7.348	0.008	99	842142	250.0	
* 3 Chlorobenzene-d5	119	10.441	10.438	0.003	85	204005	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.765	12.762	0.003	96	291541	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.608	6.600	0.008	93	166726	230.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.979	6.971	0.008	95	175614	210.9	
$ 7 Toluene-d8 (Surr)	98	9.005	9.003	0.002	92	776610	219.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.609	11.606	0.003	87	271288	189.2	
11 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.958				ND	
14 Bromomethane	94		2.299				ND	
15 Chloroethane	64		2.420				ND	
21 1,1-Dichloroethene	96		3.424				ND	
23 Acetone	43		3.594				ND	
25 Carbon disulfide	76		3.716				ND	
30 Methylene Chloride	84	4.242	4.221	0.021	85	7491	6.84	
32 Acrylonitrile	53		4.635				ND	
33 trans-1,2-Dichloroethene	96		4.641				ND	
34 Methyl tert-butyl ether	73		4.695				ND	
36 1,1-Dichloroethane	63		5.249				ND	
42 cis-1,2-Dichloroethene	96		6.009				ND	
43 2-Butanone (MEK)	43		6.070				ND	
47 Chlorobromomethane	128		6.295				ND	
49 Chloroform	83		6.417				ND	
50 1,1,1-Trichloroethane	97		6.612				ND	
53 Carbon tetrachloride	117		6.800				ND	
55 Benzene	78		7.031				ND	
56 1,2-Dichloroethane	62		7.056				ND	
60 Trichloroethene	130		7.743				ND	
64 1,2-Dichloropropane	63		7.981				ND	
67 1,4-Dioxane	88		8.133				ND	
68 Dichlorobromomethane	83		8.273				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.729				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893				ND	
73 Toluene	91		9.069				ND	
74 trans-1,3-Dichloropropene	75		9.288				ND	
76 1,1,2-Trichloroethane	97		9.471				ND	
77 Tetrachloroethene	164	9.613	9.617	-0.004	91	1589	2.06	
79 2-Hexanone	43		9.726				ND	
81 Chlorodibromomethane	129		9.866				ND	
82 Ethylene Dibromide	107		9.976				ND	
83 Chlorobenzene	112		10.469				ND	
85 1,1,1,2-Tetrachloroethane	131		10.548				ND	
86 Ethylbenzene	106		10.578				ND	
87 m-Xylene & p-Xylene	106		10.694				ND	
88 o-Xylene	106		11.089				ND	
89 Styrene	104		11.101				ND	
90 Bromoform	173		11.284				ND	
93 1,1,2,2-Tetrachloroethane	83		11.746				ND	
S 129 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

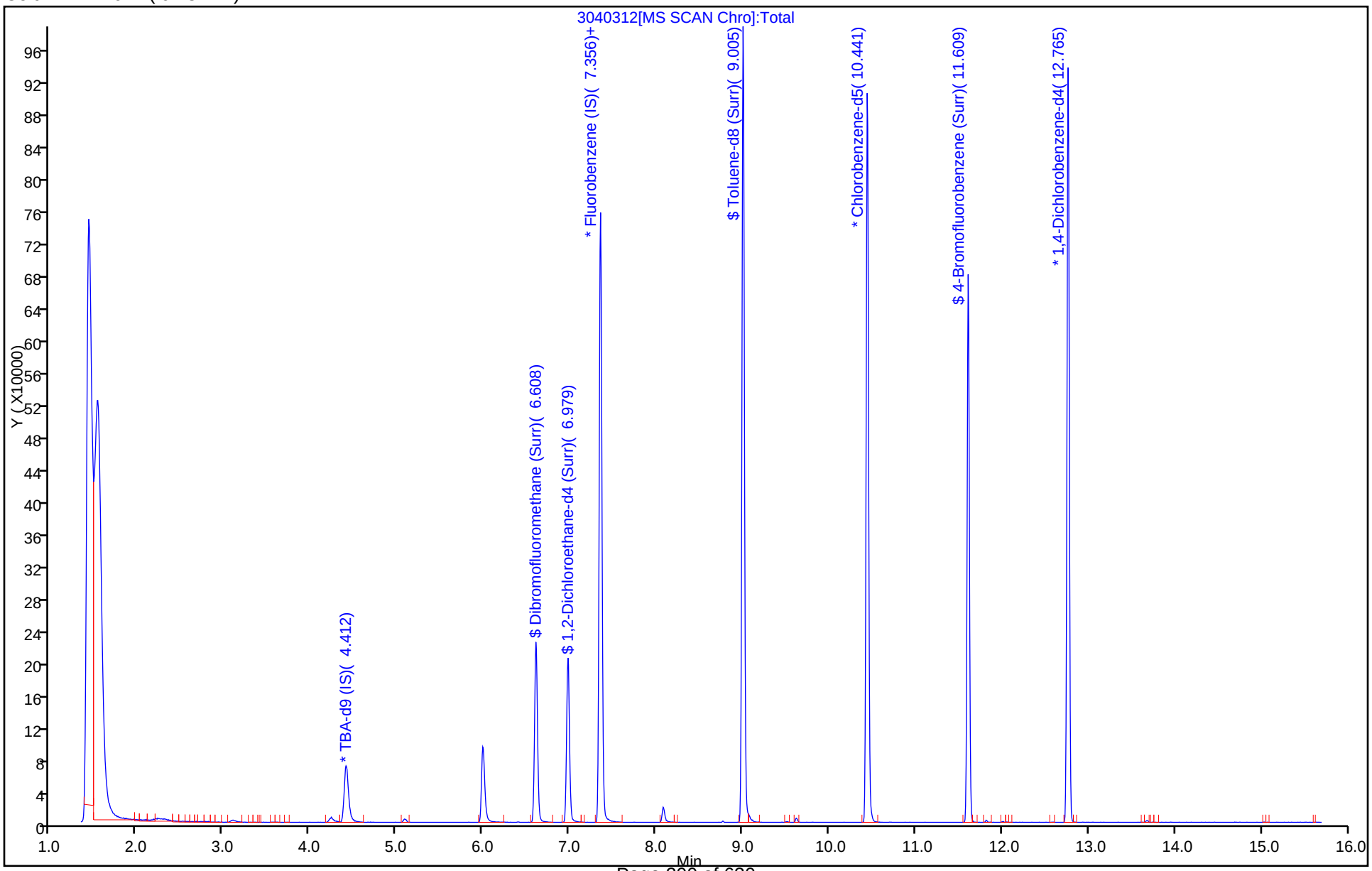
Report Date: 03-Apr-2017 11:24:47 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040312.D

Injection Date:	03-Apr-2017 11:03:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-2-A	Lab Sample ID:	180-64801-2	Worklist Smp#:	13
Client ID:	HD-SPBA-SB-009-35/35.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040312.D
Lims ID: 180-64801-B-2-A
Client ID: HD-SPBA-SB-009-35/35.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 11:03:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-013
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 11:24:47 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 11:24:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	230.5	92.21
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	210.9	84.37
$ 7 Toluene-d8 (Surr)	250.0	219.9	87.94
$ 8 4-Bromofluorobenzene (Surr)	250.0	189.2	75.70

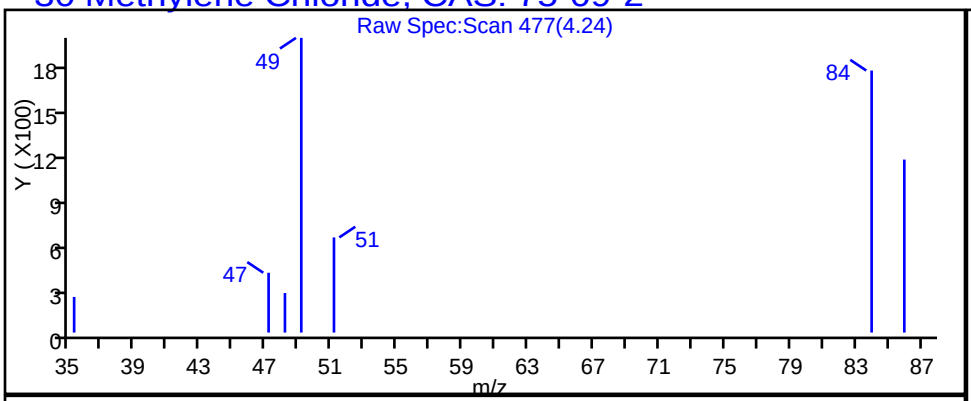
Report Date: 03-Apr-2017 11:24:47 Chrom Revision: 2.2 13-Mar-2017 15:50:30

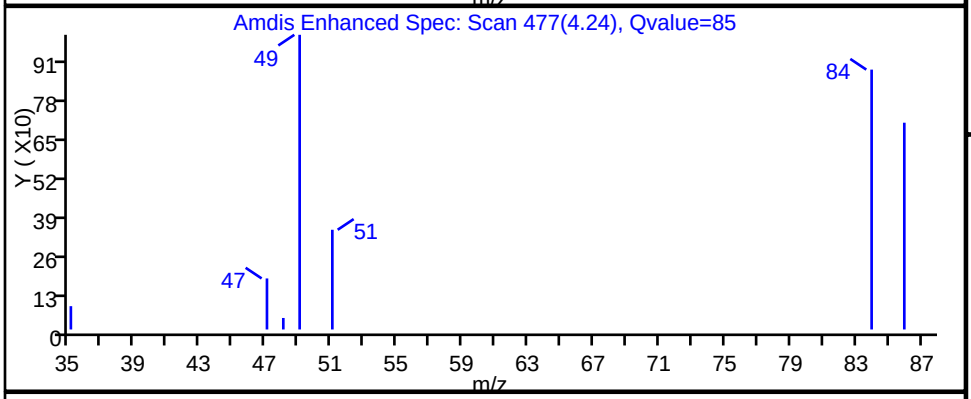
TestAmerica Pittsburgh

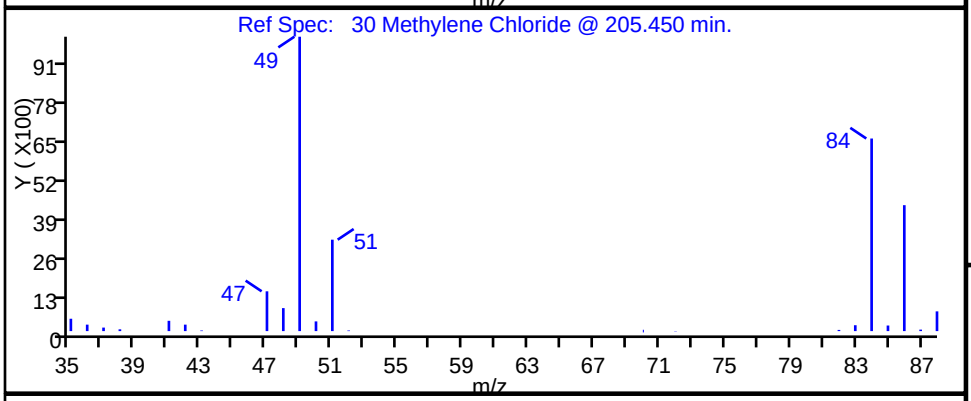
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040312.D

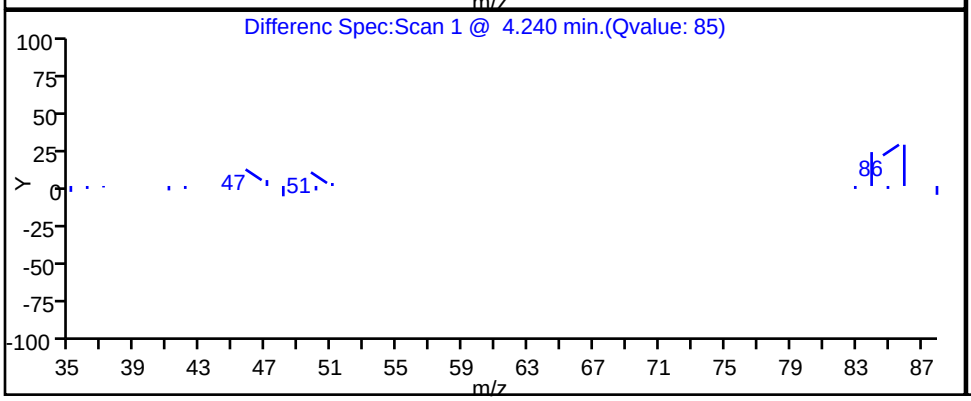
Injection Date:	03-Apr-2017 11:03:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-2-A	Lab Sample ID:	180-64801-2		
Client ID:	HD-SPBA-SB-009-35/35.5-0				
Operator ID:	10099	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

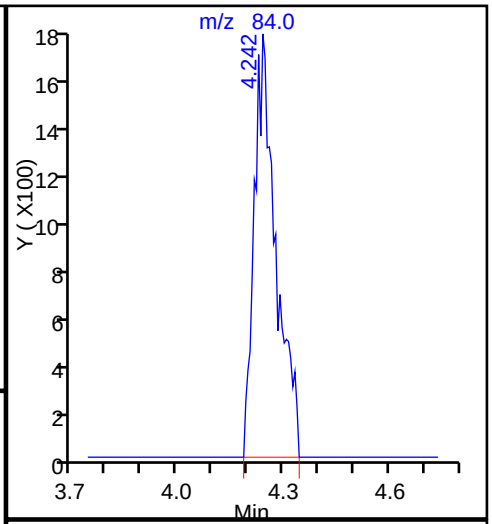
30 Methylene Chloride, CAS: 75-09-2

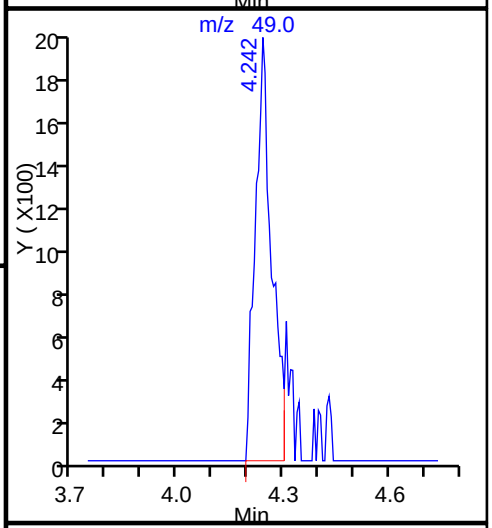


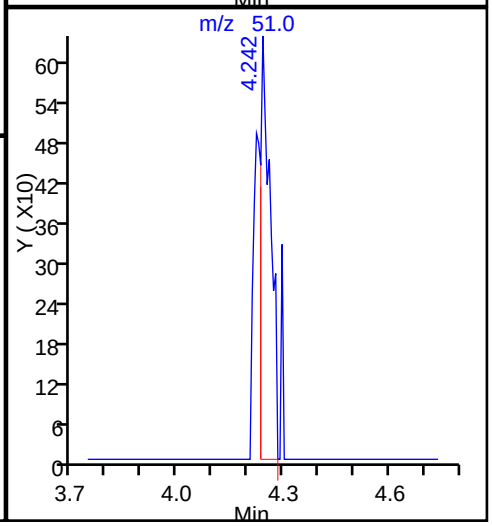












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-40/40.5-0 | Lab Sample ID: 180-64801-3

Matrix: Solid | Lab File ID: 3040313.D

Analysis Method: 8260C | Date Collected: 03/30/2017 10:00

Sample wt/vol: 6.6906(g) | Date Analyzed: 04/03/2017 11:26

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 19.6 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.6	U	4.6	2.5
71-55-6	1,1,1-Trichloroethane	4.6	U	4.6	1.0
79-34-5	1,1,2,2-Tetrachloroethane	4.6	U	4.6	3.7
79-00-5	1,1,2-Trichloroethane	4.6	U	4.6	2.6
75-34-3	1,1-Dichloroethane	4.6	U	4.6	1.0
75-35-4	1,1-Dichloroethene	4.6	U	4.6	1.3
107-06-2	1,2-Dichloroethane	4.6	U	4.6	1.0
78-87-5	1,2-Dichloropropane	4.6	U	4.6	1.7
78-93-3	2-Butanone (MEK)	4.6	U	4.6	2.8
591-78-6	2-Hexanone	4.6	U	4.6	3.8
108-10-1	4-Methyl-2-pentanone (MIBK)	4.6	U	4.6	3.3
67-64-1	Acetone	19	U ^c	19	9.5
71-43-2	Benzene	4.6	U	4.6	2.8
75-25-2	Bromoform	4.6	U	4.6	4.2
74-83-9	Bromomethane	4.6	U ^c *	4.6	1.6
75-15-0	Carbon disulfide	4.6	U	4.6	2.0
56-23-5	Carbon tetrachloride	4.6	U ^c	4.6	1.3
108-90-7	Chlorobenzene	4.6	U	4.6	2.1
124-48-1	Dibromochloromethane	4.6	U	4.6	2.3
123-91-1	1,4-Dioxane	930	U	930	23
67-66-3	Chloroform	4.6	U	4.6	1.2
74-87-3	Chloromethane	4.6	U ^c	4.6	2.5
75-00-3	Chloroethane	4.6	U	4.6	2.0
156-59-2	cis-1,2-Dichloroethene	4.6	U	4.6	1.2
10061-01-5	cis-1,3-Dichloropropene	4.6	U	4.6	2.0
75-27-4	Bromodichloromethane	4.6	U	4.6	1.9
100-41-4	Ethylbenzene	4.6	U	4.6	1.8
106-93-4	1,2-Dibromoethane (EDB)	4.6	U	4.6	2.0
1634-04-4	Methyl tert-butyl ether	4.6	U	4.6	2.3
75-09-2	Methylene Chloride	1.4	J B	4.6	0.52
100-42-5	Styrene	4.6	U	4.6	2.2
127-18-4	Tetrachloroethene	4.6	U	4.6	1.2
108-88-3	Toluene	4.6	U	4.6	3.4
156-60-5	trans-1,2-Dichloroethene	4.6	U	4.6	0.95
10061-02-6	trans-1,3-Dichloropropene	4.6	U	4.6	2.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-40/40.5-0 | Lab Sample ID: 180-64801-3

Matrix: Solid | Lab File ID: 3040313.D

Analysis Method: 8260C | Date Collected: 03/30/2017 10:00

Sample wt/vol: 6.6906(g) | Date Analyzed: 04/03/2017 11:26

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 19.6 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	4.6	U	4.6	1.0
107-13-1	Acrylonitrile	46	U ^c	46	23
75-01-4	Vinyl chloride	4.6	U	4.6	2.4
1330-20-7	Xylenes, Total	9.3	U	9.3	4.2
74-97-5	Bromochloromethane	4.6	U	4.6	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		52-124
460-00-4	4-Bromofluorobenzene (Surr)	83		63-120
1868-53-7	Dibromofluoromethane (Surr)	103		68-121
2037-26-5	Toluene-d8 (Surr)	94		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040313.D
Lims ID: 180-64801-B-3-A
Client ID: HD-SPBA-SB-009-40/40.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 11:26:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-014
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 11:50:12 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 11:50:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.418	4.464	-0.046	98	126252	5000.0	
* 2 Fluorobenzene (IS)	96	7.356	7.348	0.008	99	824728	250.0	
* 3 Chlorobenzene-d5	119	10.440	10.438	0.002	85	203727	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.764	12.762	0.002	96	293099	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.608	6.600	0.008	93	182775	258.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.985	6.971	0.014	95	196379	240.9	
$ 7 Toluene-d8 (Surr)	98	9.005	9.003	0.002	92	829151	235.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.608	11.606	0.002	87	297197	207.6	
11 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.958				ND	
14 Bromomethane	94		2.299				ND	
15 Chloroethane	64		2.420				ND	
21 1,1-Dichloroethene	96		3.424				ND	
23 Acetone	43		3.594				ND	
25 Carbon disulfide	76		3.716				ND	
30 Methylene Chloride	84	4.241	4.221	0.020	84	8334	7.77	M
32 Acrylonitrile	53		4.635				ND	
33 trans-1,2-Dichloroethene	96		4.641				ND	
34 Methyl tert-butyl ether	73		4.695				ND	
36 1,1-Dichloroethane	63		5.249				ND	
42 cis-1,2-Dichloroethene	96		6.009				ND	
43 2-Butanone (MEK)	43		6.070				ND	
47 Chlorobromomethane	128		6.295				ND	
49 Chloroform	83		6.417				ND	
50 1,1,1-Trichloroethane	97		6.612				ND	
53 Carbon tetrachloride	117		6.800				ND	
55 Benzene	78		7.031				ND	
56 1,2-Dichloroethane	62		7.056				ND	
60 Trichloroethene	130		7.743				ND	
64 1,2-Dichloropropane	63		7.981				ND	
67 1,4-Dioxane	88		8.133				ND	
68 Dichlorobromomethane	83		8.273				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.729				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893				ND	
73 Toluene	91		9.069				ND	
74 trans-1,3-Dichloropropene	75		9.288				ND	
76 1,1,2-Trichloroethane	97		9.471				ND	
77 Tetrachloroethene	164	9.619	9.617	0.002	89	987	1.28	
79 2-Hexanone	43		9.726				ND	
81 Chlorodibromomethane	129		9.866				ND	
82 Ethylene Dibromide	107		9.976				ND	
83 Chlorobenzene	112		10.469				ND	
85 1,1,1,2-Tetrachloroethane	131		10.548				ND	
86 Ethylbenzene	106		10.578				ND	
87 m-Xylene & p-Xylene	106		10.694				ND	
88 o-Xylene	106		11.089				ND	
89 Styrene	104		11.101				ND	
90 Bromoform	173		11.284				ND	
93 1,1,2,2-Tetrachloroethane	83		11.746				ND	
S 129 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

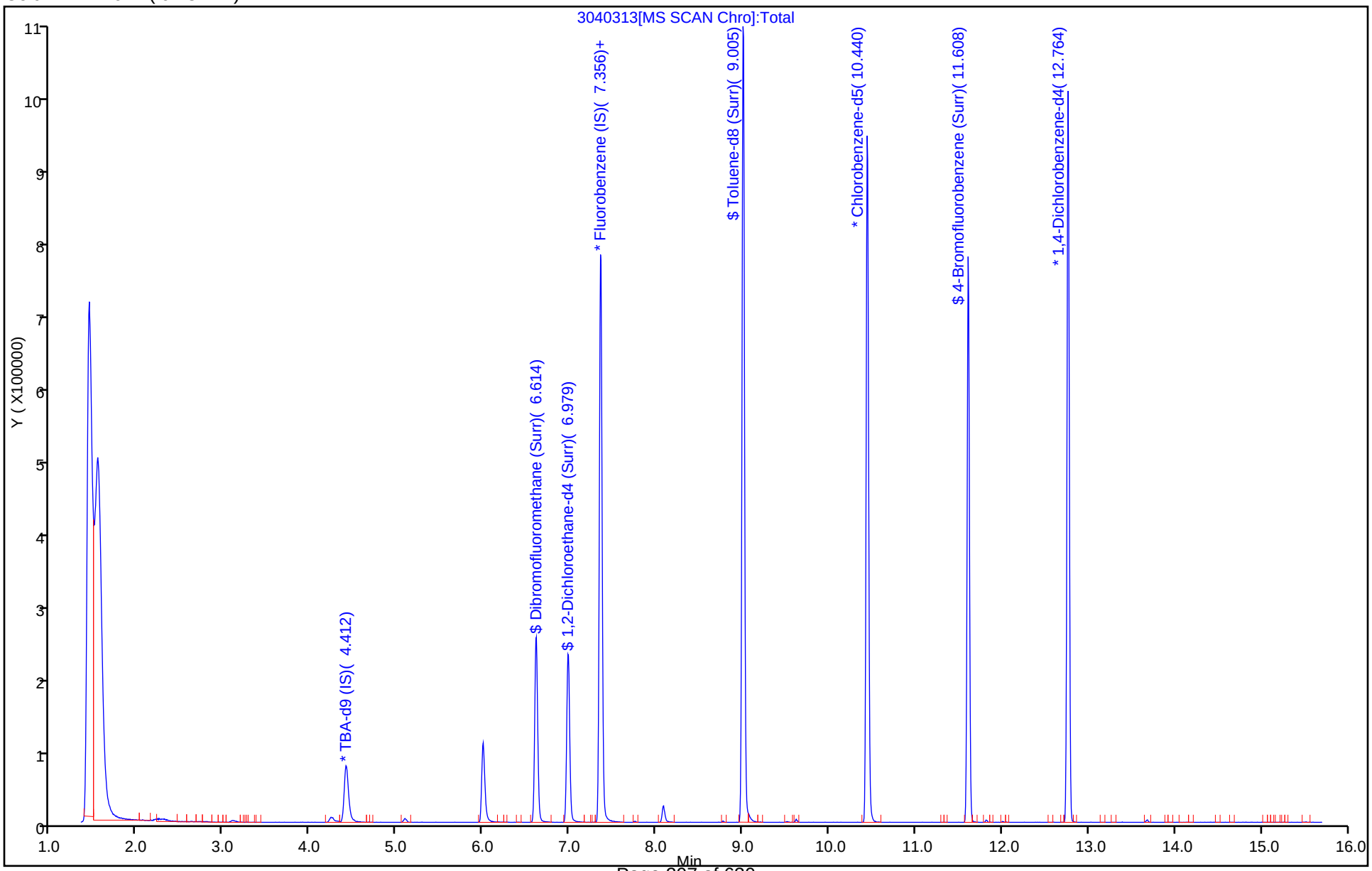
Report Date: 03-Apr-2017 11:50:12 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040313.D

Injection Date:	03-Apr-2017 11:26:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-3-A	Lab Sample ID:	180-64801-3	Worklist Smp#:	14
Client ID:	HD-SPBA-SB-009-40/40.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040313.D
Lims ID: 180-64801-B-3-A
Client ID: HD-SPBA-SB-009-40/40.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 11:26:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-014
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 11:50:12 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 11:50:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	258.1	103.22
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	240.9	96.34
$ 7 Toluene-d8 (Surr)	250.0	235.1	94.02
$ 8 4-Bromofluorobenzene (Surr)	250.0	207.6	83.04

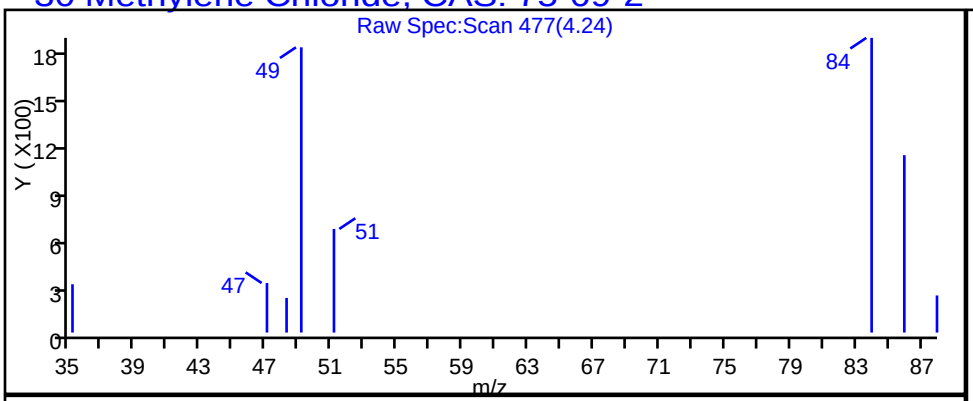
Report Date: 03-Apr-2017 11:50:12 Chrom Revision: 2.2 13-Mar-2017 15:50:30

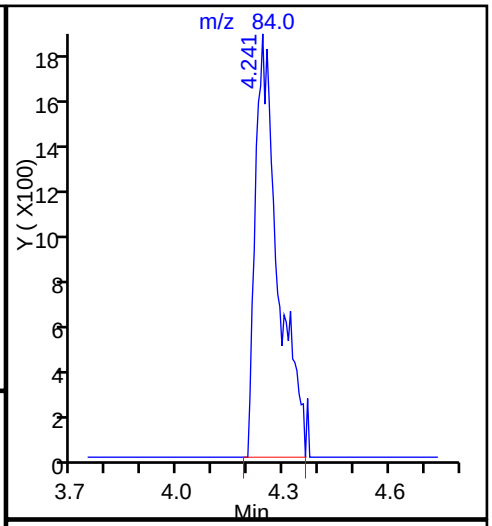
TestAmerica Pittsburgh

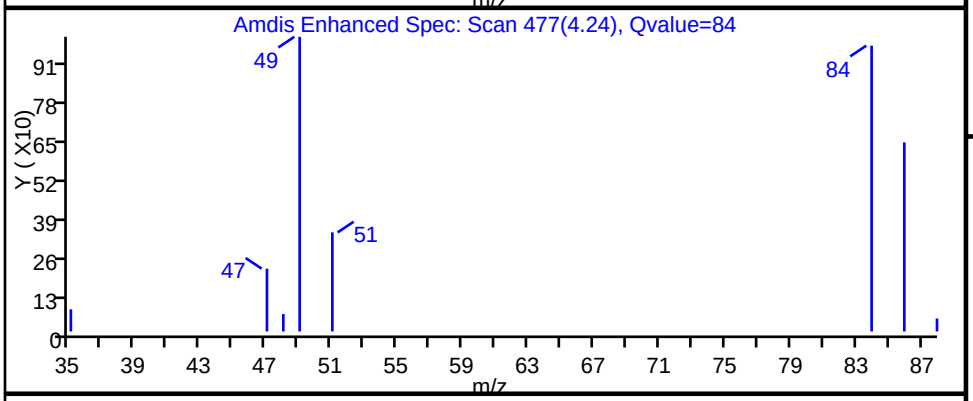
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040313.D

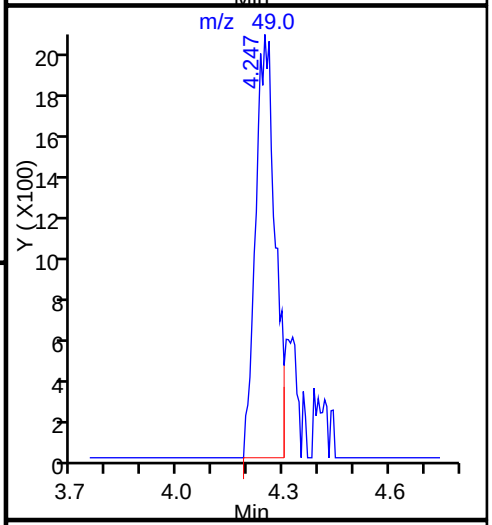
Injection Date:	03-Apr-2017 11:26:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-3-A	Lab Sample ID:	180-64801-3		
Client ID:	HD-SPBA-SB-009-40/40.5-0				
Operator ID:	10099	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

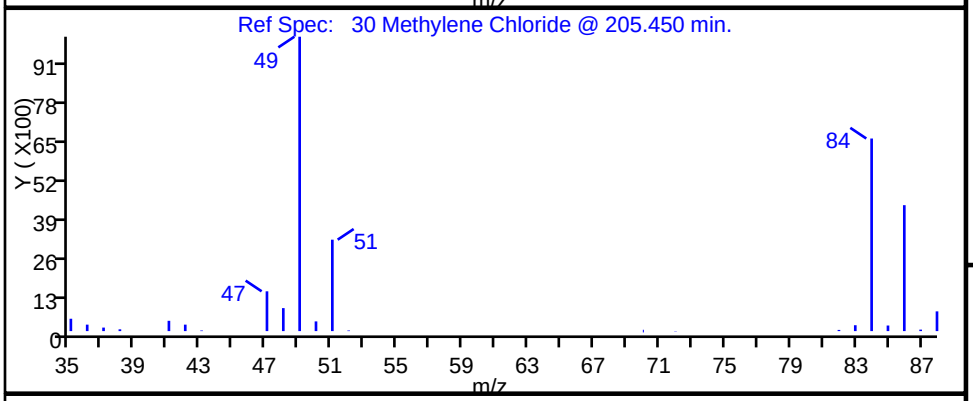
30 Methylene Chloride, CAS: 75-09-2

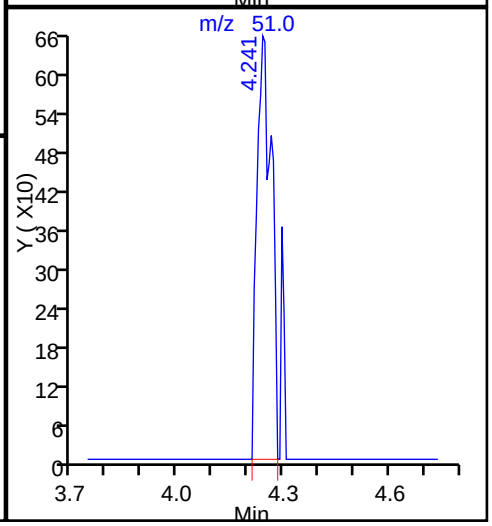


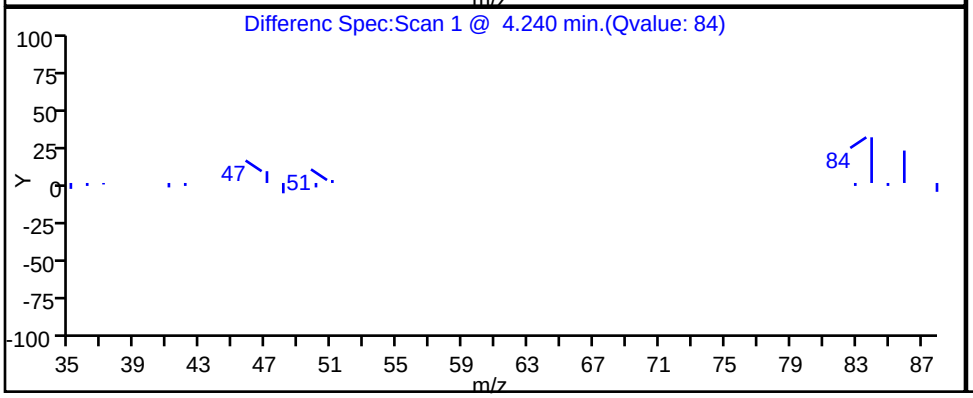












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

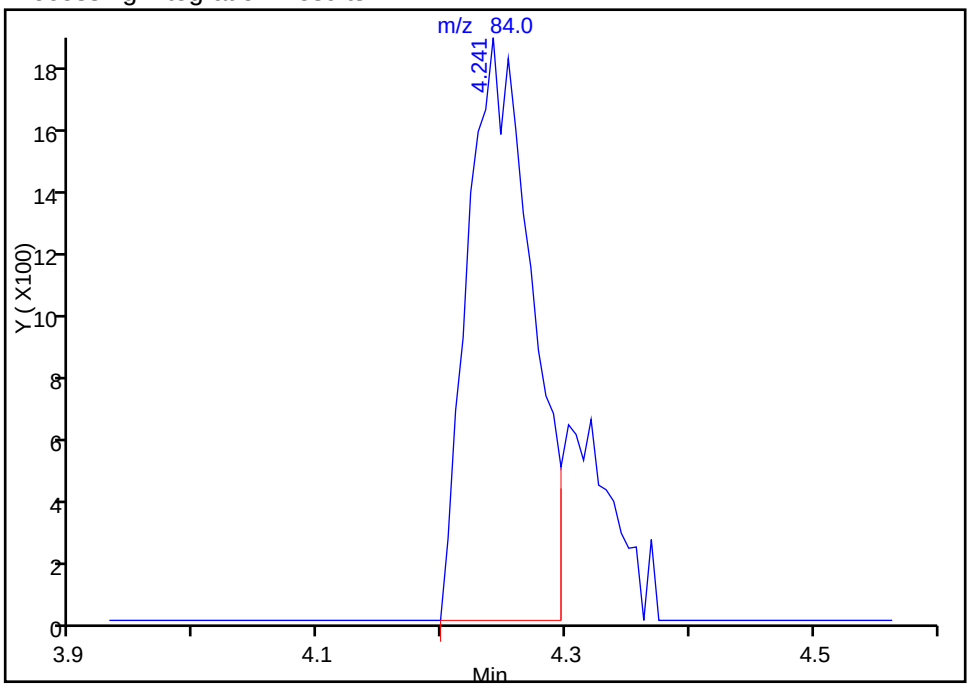
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040313.D				
Injection Date:	03-Apr-2017 11:26:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-3-A	Lab Sample ID:	180-64801-3		
Client ID:	HD-SPBA-SB-009-40/40.5-0				
Operator ID:	10099	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

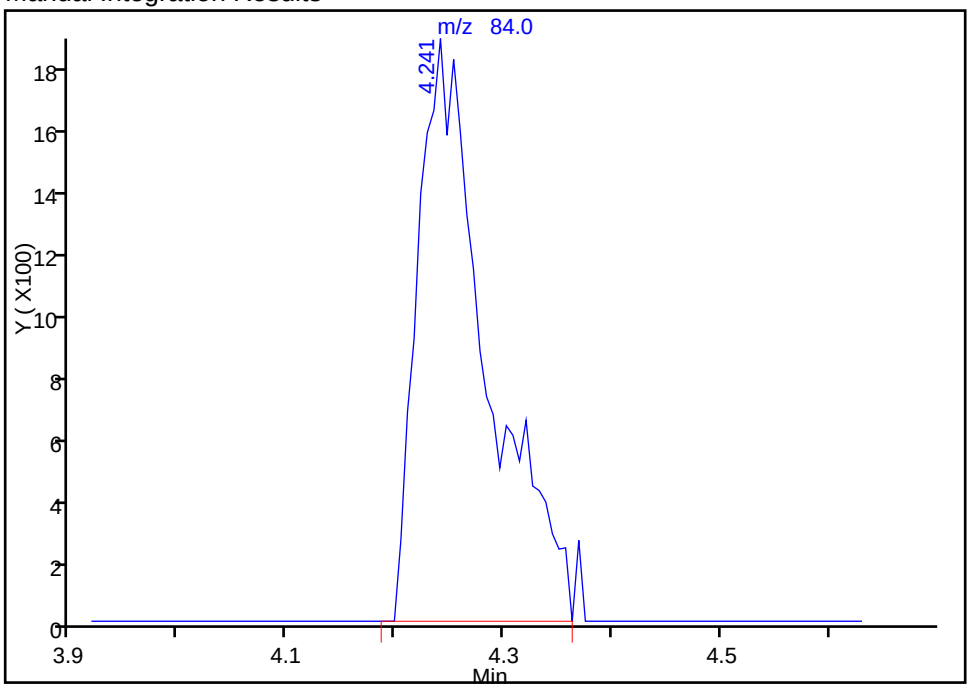
Processing Integration Results

RT: 4.24
Area: 6737
Amount: 6.282638
Amount Units: ng



Manual Integration Results

RT: 4.24
Area: 8334
Amount: 7.771932
Amount Units: ng



Reviewer: gordonk, 03-Apr-2017 11:49:49

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-45/45.5-0 | Lab Sample ID: 180-64801-4

Matrix: Solid | Lab File ID: 3040308.D

Analysis Method: 8260C | Date Collected: 03/30/2017 10:10

Sample wt/vol: 5.8096(g) | Date Analyzed: 04/03/2017 09:33

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 15.8 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.1	U	5.1	2.8
71-55-6	1,1,1-Trichloroethane	5.1	U F1	5.1	1.1
79-34-5	1,1,2,2-Tetrachloroethane	5.1	U	5.1	4.1
79-00-5	1,1,2-Trichloroethane	5.1	U	5.1	2.9
75-34-3	1,1-Dichloroethane	5.1	U	5.1	1.2
75-35-4	1,1-Dichloroethene	5.1	U	5.1	1.5
107-06-2	1,2-Dichloroethane	5.1	U	5.1	1.1
78-87-5	1,2-Dichloropropane	5.1	U	5.1	1.9
78-93-3	2-Butanone (MEK)	5.1	U	5.1	3.1
591-78-6	2-Hexanone	5.1	U	5.1	4.2
108-10-1	4-Methyl-2-pentanone (MIBK)	5.1	U F1	5.1	3.7
67-64-1	Acetone	20	U ^c	20	10
71-43-2	Benzene	5.1	U	5.1	3.1
75-25-2	Bromoform	5.1	U	5.1	4.7
74-83-9	Bromomethane	5.1	U ^c * F1	5.1	1.8
75-15-0	Carbon disulfide	5.1	U	5.1	2.2
56-23-5	Carbon tetrachloride	5.1	U ^c F1	5.1	1.4
108-90-7	Chlorobenzene	5.1	U	5.1	2.3
124-48-1	Dibromochloromethane	5.1	U	5.1	2.5
123-91-1	1,4-Dioxane	1000	U	1000	26
67-66-3	Chloroform	5.1	U	5.1	1.3
74-87-3	Chloromethane	5.1	U ^c	5.1	2.7
75-00-3	Chloroethane	5.1	U F1	5.1	2.2
156-59-2	cis-1,2-Dichloroethene	5.1	U	5.1	1.4
10061-01-5	cis-1,3-Dichloropropene	5.1	U	5.1	2.2
75-27-4	Bromodichloromethane	5.1	U	5.1	2.0
100-41-4	Ethylbenzene	5.1	U	5.1	2.0
106-93-4	1,2-Dibromoethane (EDB)	5.1	U	5.1	2.2
1634-04-4	Methyl tert-butyl ether	5.1	U	5.1	2.6
75-09-2	Methylene Chloride	1.4	J B	5.1	0.57
100-42-5	Styrene	5.1	U	5.1	2.4
127-18-4	Tetrachloroethene	5.1	U	5.1	1.3
108-88-3	Toluene	5.1	U	5.1	3.7
156-60-5	trans-1,2-Dichloroethene	5.1	U	5.1	1.0
10061-02-6	trans-1,3-Dichloropropene	5.1	U	5.1	2.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-45/45.5-0 | Lab Sample ID: 180-64801-4

Matrix: Solid | Lab File ID: 3040308.D

Analysis Method: 8260C | Date Collected: 03/30/2017 10:10

Sample wt/vol: 5.8096(g) | Date Analyzed: 04/03/2017 09:33

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 15.8 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	5.1	U F1	5.1	1.2
107-13-1	Acrylonitrile	51	U ^c F1	51	26
75-01-4	Vinyl chloride	5.1	U	5.1	2.6
1330-20-7	Xylenes, Total	10	U	10	4.7
74-97-5	Bromochloromethane	5.1	U	5.1	1.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		52-124
460-00-4	4-Bromofluorobenzene (Surr)	86		63-120
1868-53-7	Dibromofluoromethane (Surr)	105		68-121
2037-26-5	Toluene-d8 (Surr)	98		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040308.D
Lims ID: 180-64801-B-4-A
Client ID: HD-SPBA-SB-009-45/45.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 09:33:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-009
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 09:51:50 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 09:51:50

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.412	4.464	-0.052	98	139613	5000.0	
*	2 Fluorobenzene (IS)	96	7.356	7.348	0.008	99	849053	250.0	
*	3 Chlorobenzene-d5	119	10.446	10.438	0.008	86	202953	250.0	
*	4 1,4-Dichlorobenzene-d4	152	12.764	12.762	0.002	96	292746	250.0	
$	5 Dibromofluoromethane (Surr	113	6.608	6.600	0.008	93	190788	261.6	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.979	6.971	0.008	95	198587	236.6	
$	7 Toluene-d8 (Surr)	98	9.005	9.003	0.002	92	862339	245.4	
$	8 4-Bromofluorobenzene (Surr	95	11.608	11.606	0.002	87	306479	214.9	
	10 Dichlorodifluoromethane	85		1.654				ND	
	11 Chloromethane	50		1.812				ND	
	12 Vinyl chloride	62		1.958				ND	
	13 Butadiene	39		1.994				ND	
	14 Bromomethane	94		2.299				ND	
	15 Chloroethane	64		2.420				ND	
	16 Dichlorofluoromethane	67		2.700				ND	
	17 Trichlorofluoromethane	101		2.730				ND	
	19 Ethyl ether	59		3.162				ND	
	18 Ethanol	45	3.104	3.163	-0.059	92	43379	7571.5	
	20 Acrolein	56		3.321				ND	
	21 1,1-Dichloroethene	96		3.424				ND	
	22 1,1,2-Trichloro-1,2,2-trif	101		3.527				ND	
	23 Acetone	43		3.594				ND	
	24 Iodomethane	142		3.625				ND	
	25 Carbon disulfide	76		3.716				ND	
	26 Isopropyl alcohol	45		3.886				ND	
	28 3-Chloro-1-propene	76		4.014				ND	
	27 Acetonitrile	40		4.021				ND	
	29 Methyl acetate	43		4.118				ND	
	30 Methylene Chloride	84	4.235	4.221	0.014	83	7484	6.78	M
	31 2-Methyl-2-propanol	59		4.580				ND	
	32 Acrylonitrile	53		4.635				ND	
	33 trans-1,2-Dichloroethene	96		4.641				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
34 Methyl tert-butyl ether	73		4.695				ND	
35 Hexane	57	5.093	5.067	0.026	89	4210	2.42	
36 1,1-Dichloroethane	63		5.249				ND	
37 Vinyl acetate	43		5.371				ND	
38 2-Chloro-1,3-butadiene	53		5.388				ND	
39 Isopropyl ether	45		5.419				ND	
40 Tert-butyl ethyl ether	59		5.887				ND	
41 2,2-Dichloropropane	77		6.003				ND	
42 cis-1,2-Dichloroethene	96		6.009				ND	
43 2-Butanone (MEK)	43		6.070				ND	
45 Ethyl acetate	43		6.071				ND	
44 Propionitrile	54		6.130				ND	
47 Chlorobromomethane	128		6.295				ND	
46 Methacrylonitrile	41		6.313				ND	
48 Tetrahydrofuran	42		6.374				ND	
49 Chloroform	83		6.417				ND	
50 1,1,1-Trichloroethane	97		6.612				ND	
51 Cyclohexane	56		6.673				ND	
53 Carbon tetrachloride	117		6.800				ND	
52 1,1-Dichloropropene	75		6.806				ND	
54 Isobutyl alcohol	41		7.025				ND	
58 Isooctane	57		7.026				ND	
55 Benzene	78		7.031				ND	
56 1,2-Dichloroethane	62		7.056				ND	
57 Tert-amyl methyl ether	73		7.355				ND	
59 n-Heptane	43		7.366				ND	
61 n-Butanol	56		7.724				ND	
60 Trichloroethene	130	7.751	7.743	0.008	92	1453	1.61	
63 Methylcyclohexane	83		7.950				ND	
66 Methyl methacrylate	69		7.951				ND	
62 Ethyl acrylate	55		7.951				ND	
64 1,2-Dichloropropane	63		7.981				ND	
65 Dibromomethane	93		8.096				ND	
67 1,4-Dioxane	88		8.133				ND	
68 Dichlorobromomethane	83		8.273				ND	
69 2-Nitropropane	41		8.590				ND	
71 cis-1,3-Dichloropropene	75		8.729				ND	
70 2-Chloroethyl vinyl ether	63		8.729				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893				ND	
73 Toluene	91		9.069				ND	
74 trans-1,3-Dichloropropene	75		9.288				ND	
75 Ethyl methacrylate	69		9.392				ND	
76 1,1,2-Trichloroethane	97		9.471				ND	
77 Tetrachloroethene	164	9.625	9.617	0.008	91	1621	2.11	
78 1,3-Dichloropropane	76		9.635				ND	
79 2-Hexanone	43		9.726				ND	
80 n-Butyl acetate	43		9.861				ND	
81 Chlorodibromomethane	129		9.866				ND	
82 Ethylene Dibromide	107		9.976				ND	
83 Chlorobenzene	112		10.469				ND	
85 1,1,1,2-Tetrachloroethane	131		10.548				ND	
86 Ethylbenzene	106		10.578				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
87 m-Xylene & p-Xylene	106		10.694				ND	
84 4-Chlorobenzotrifluoride	180		10.745				ND	
88 o-Xylene	106		11.089				ND	
89 Styrene	104		11.101				ND	
90 Bromoform	173		11.284				ND	
91 Isopropylbenzene	105		11.460				ND	
92 Cyclohexanone	55		11.522				ND	
93 1,1,2,2-Tetrachloroethane	83		11.746				ND	
94 Bromobenzene	156		11.758				ND	
95 1,2,3-Trichloropropane	110		11.789				ND	
96 trans-1,4-Dichloro-2-buten	53		11.801				ND	
97 N-Propylbenzene	120		11.868				ND	
98 2-Chlorotoluene	126		11.953				ND	
99 1,3,5-Trimethylbenzene	105		12.044				ND	
100 4-Chlorotoluene	126		12.063				ND	
101 tert-Butylbenzene	119		12.373				ND	
102 Pentachloroethane	167		12.397				ND	
103 1,2,4-Trimethylbenzene	105		12.415				ND	
104 sec-Butylbenzene	105		12.592				ND	
105 1,3-Dichlorobenzene	146		12.701				ND	
106 4-Isopropyltoluene	119		12.738				ND	
108 1,2,3-Trimethylbenzene	105		12.738				ND	
107 1,4-Dichlorobenzene	146		12.786				ND	
109 Benzyl chloride	91		12.926				ND	
110 n-Butylbenzene	91		13.145				ND	
111 1,2-Dichlorobenzene	146		13.164				ND	
112 1,2-Dibromo-3-Chloropropan	75		13.936				ND	
113 1,3,5-Trichlorobenzene	180		14.161				ND	
114 1,2,4-Trichlorobenzene	180		14.782				ND	
115 Hexachlorobutadiene	225		14.952				ND	
116 Naphthalene	128		15.025				ND	
117 1,2,3-Trichlorobenzene	180		15.275				ND	
118 2-Methylnaphthalene	142		16.363				ND	
126 2,4-Dichloro-1-(triflourom	214		0.000				ND	
124 2,4,5-Trichlorotoluene	159		0.000				ND	
122 3-Chlorotoluene	126		0.000				ND	
128 2,3,6-Trichlorotoluene	159		0.000				ND	
121 1,2-dichloro-4-(trifluorom	214		0.000				ND	
125 2,3- & 3,4- Dichlorotoluen	125		0.000				ND	
119 2,5-Dichlorobenzotrifluori	214		0.000				ND	
127 2-Chlorobenzotrifluoride	180		0.000				ND	
120 2,4- & 2,5- & 2,6- Dichlor	125		0.000				ND	
123 3-Chlorobenzotrifluoride	180		0.000				ND	
S 130 1,2-Dichloroethene, Total	96		1.000				ND	
S 129 Xylenes, Total	106		1.000				ND	
S 131 1,3-Dichloropropene, Total	1		0.000				ND	
T 134 Tetrahydrofuran TIC	42		0.000				ND	
T 133 Methyl n-amyl ketone TIC	43		0.000				ND	
T 132 Mesityl oxide TIC	83		7.968				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00067	Amount Added:	10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added:	10.00	Units: uL	Run Reagent

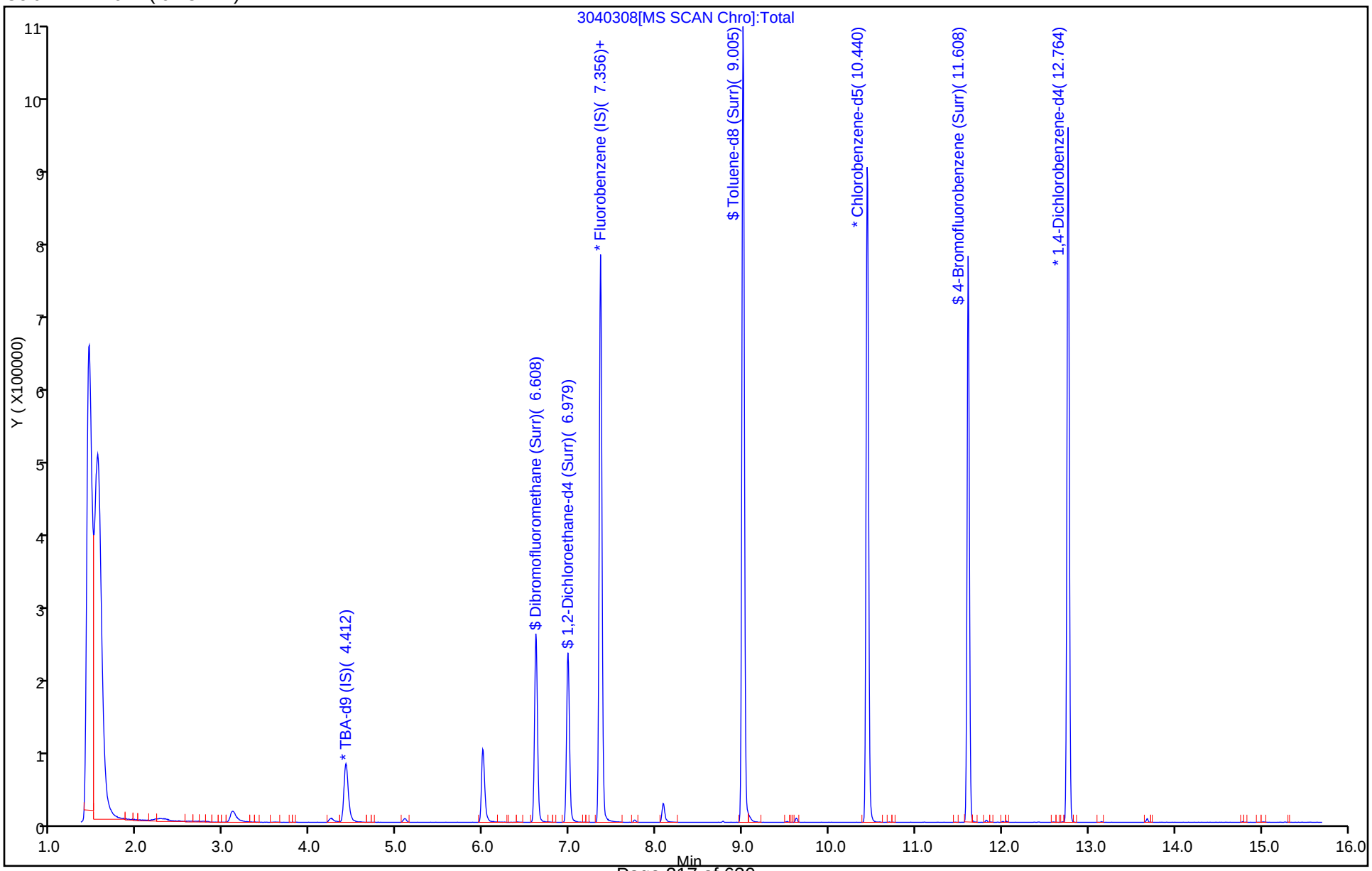
Report Date: 03-Apr-2017 09:51:51 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040308.D

Injection Date:	03-Apr-2017 09:33:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-4-A	Lab Sample ID:	180-64801-4	Worklist Smp#:	9
Client ID:	HD-SPBA-SB-009-45/45.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040308.D
Lims ID: 180-64801-B-4-A
Client ID: HD-SPBA-SB-009-45/45.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 09:33:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-009
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 09:51:50 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 09:51:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	261.6	104.66
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	236.6	94.63
$ 7 Toluene-d8 (Surr)	250.0	245.4	98.16
$ 8 4-Bromofluorobenzene (Surr)	250.0	214.9	85.96

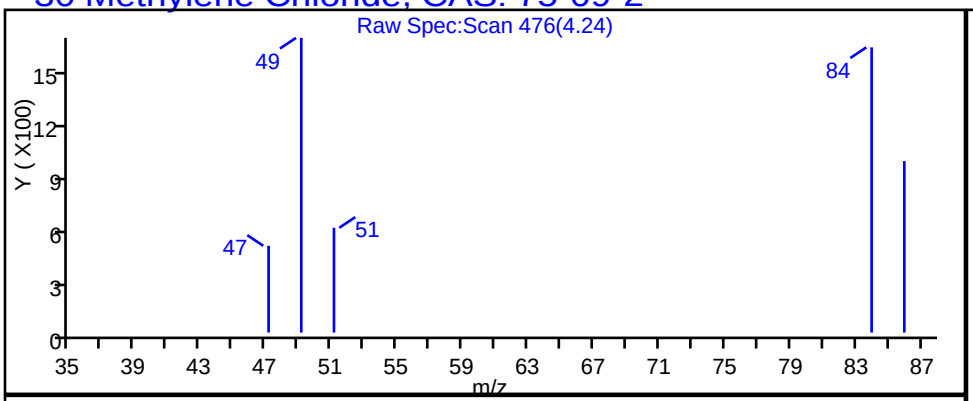
Report Date: 03-Apr-2017 09:51:51 Chrom Revision: 2.2 13-Mar-2017 15:50:30

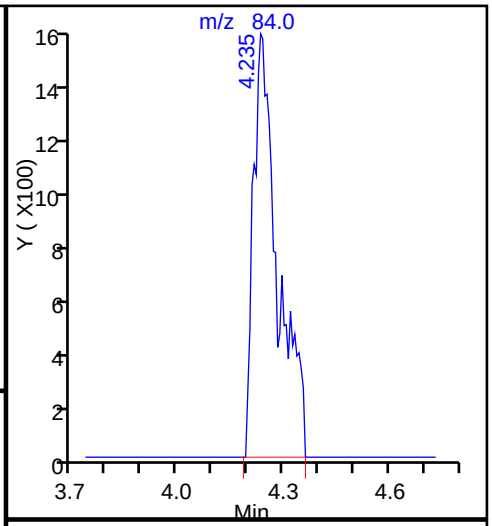
TestAmerica Pittsburgh

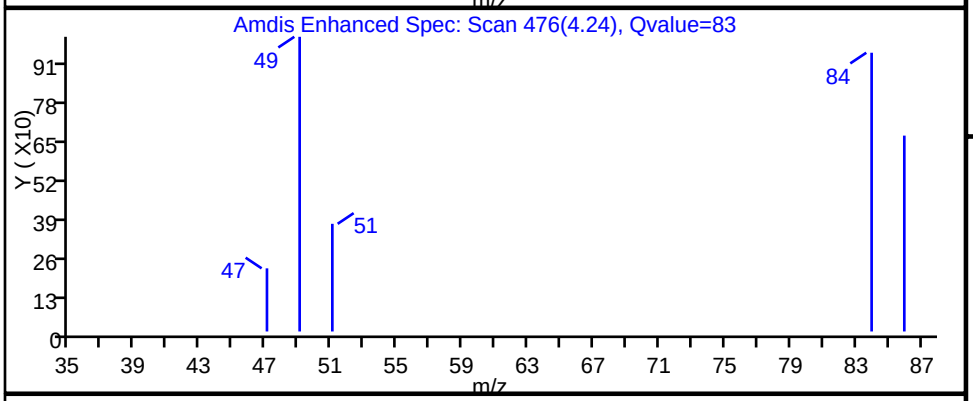
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040308.D

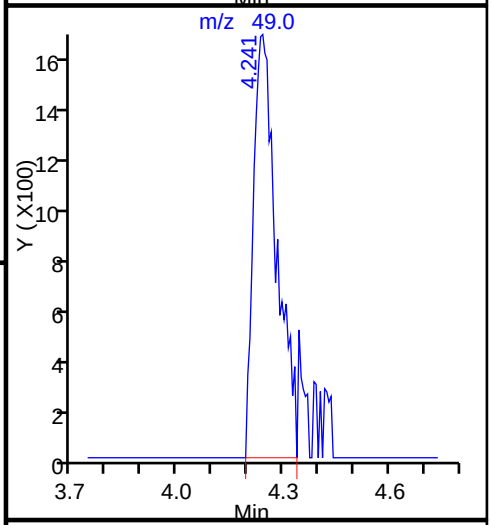
Injection Date:	03-Apr-2017 09:33:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-4-A	Lab Sample ID:	180-64801-4		
Client ID:	HD-SPBA-SB-009-45/45.5-0				
Operator ID:	10099	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

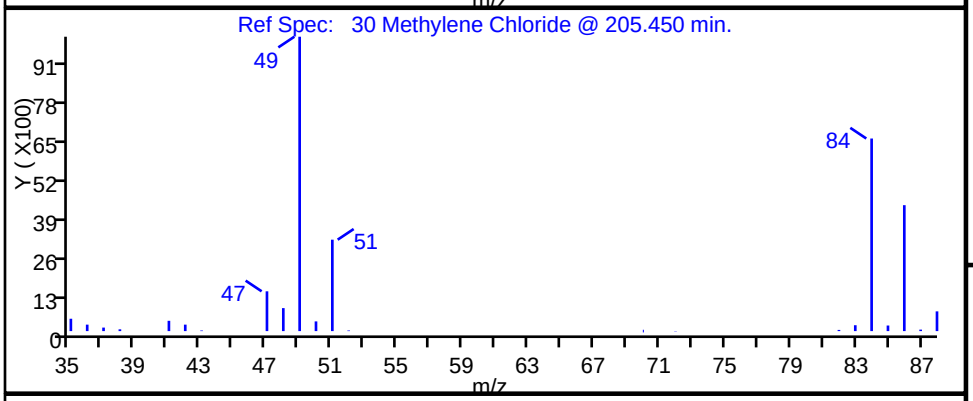
30 Methylene Chloride, CAS: 75-09-2

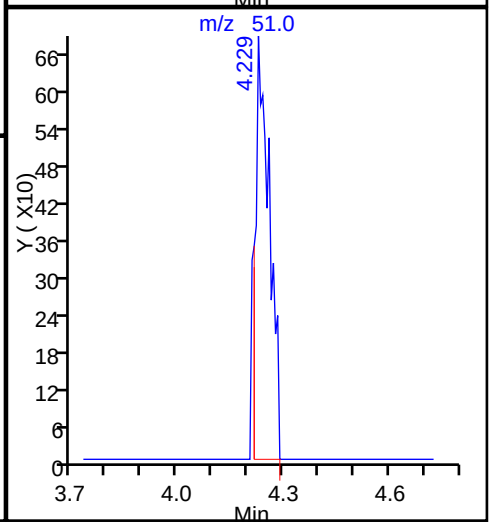


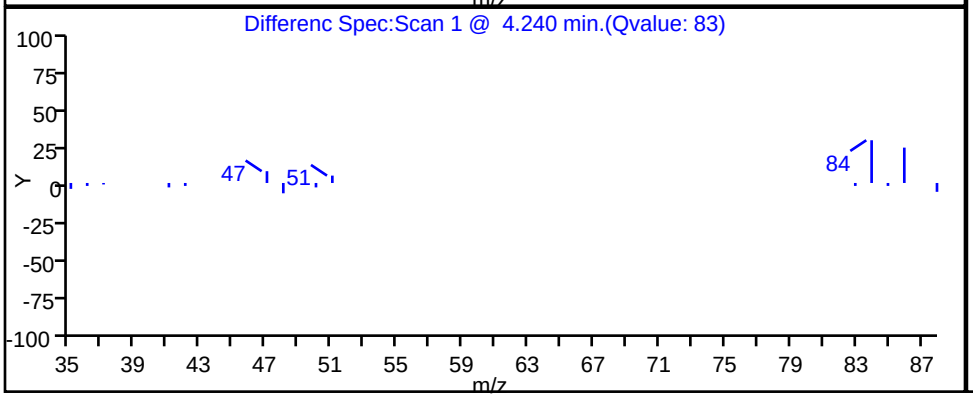












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

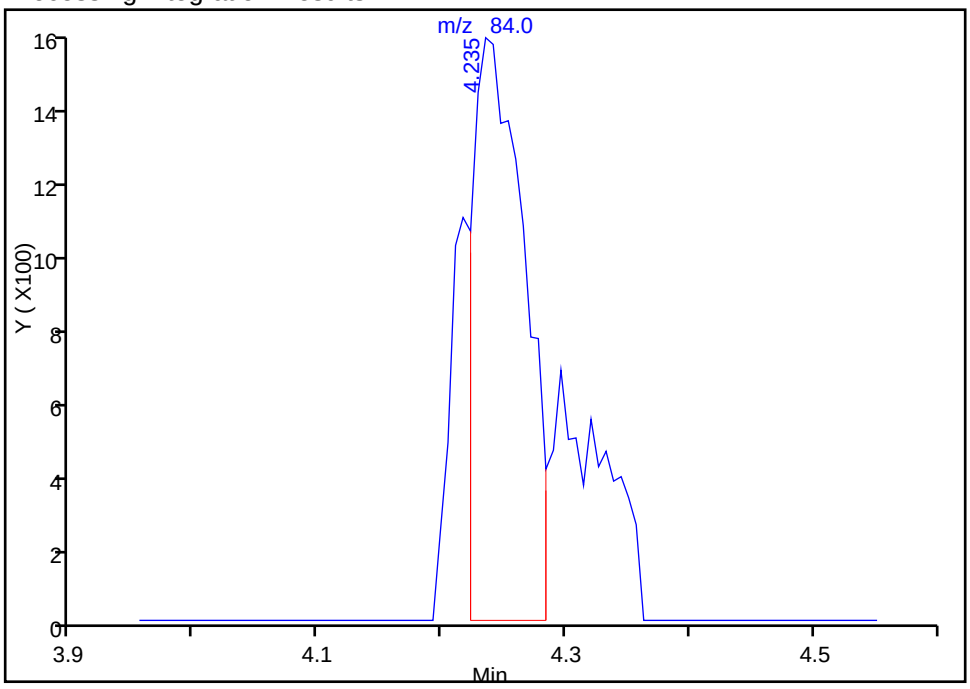
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040308.D				
Injection Date:	03-Apr-2017 09:33:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-4-A	Lab Sample ID:	180-64801-4		
Client ID:	HD-SPBA-SB-009-45/45.5-0				
Operator ID:	10099	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

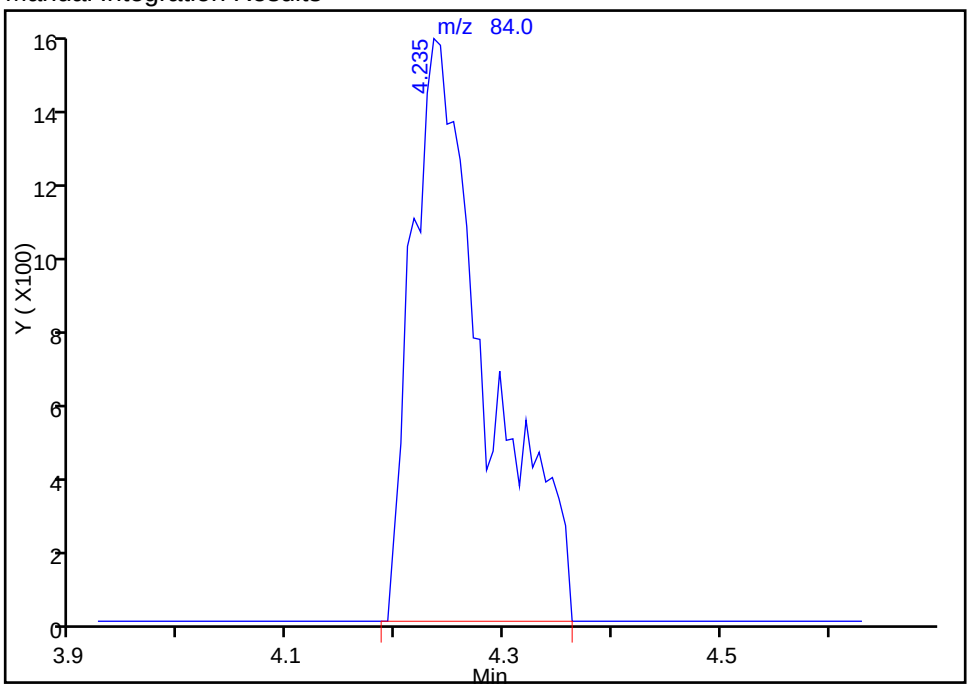
Processing Integration Results

RT: 4.24
Area: 4555
Amount: 4.126100
Amount Units: ng



Manual Integration Results

RT: 4.24
Area: 7484
Amount: 6.779305
Amount Units: ng



Reviewer: gordonk, 03-Apr-2017 09:50:54

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-53.5/54-0 | Lab Sample ID: 180-64801-5

Matrix: Solid | Lab File ID: 3040314.D

Analysis Method: 8260C | Date Collected: 03/30/2017 10:45

Sample wt/vol: 6.4525(g) | Date Analyzed: 04/03/2017 11:49

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 21.1 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.9	U	4.9	2.7
71-55-6	1,1,1-Trichloroethane	4.9	U	4.9	1.1
79-34-5	1,1,2,2-Tetrachloroethane	4.9	U	4.9	3.9
79-00-5	1,1,2-Trichloroethane	4.9	U	4.9	2.8
75-34-3	1,1-Dichloroethane	4.9	U	4.9	1.1
75-35-4	1,1-Dichloroethene	4.9	U	4.9	1.4
107-06-2	1,2-Dichloroethane	4.9	U	4.9	1.1
78-87-5	1,2-Dichloropropane	4.9	U	4.9	1.8
78-93-3	2-Butanone (MEK)	4.9	U	4.9	2.9
591-78-6	2-Hexanone	4.9	U	4.9	4.0
108-10-1	4-Methyl-2-pentanone (MIBK)	4.9	U	4.9	3.5
67-64-1	Acetone	20	U ^c	20	10
71-43-2	Benzene	4.9	U	4.9	3.0
75-25-2	Bromoform	4.9	U	4.9	4.5
74-83-9	Bromomethane	4.9	U ^c *	4.9	1.7
75-15-0	Carbon disulfide	4.9	U	4.9	2.1
56-23-5	Carbon tetrachloride	4.9	U ^c	4.9	1.3
108-90-7	Chlorobenzene	4.9	U	4.9	2.2
124-48-1	Dibromochloromethane	4.9	U	4.9	2.4
123-91-1	1,4-Dioxane	980	U	980	25
67-66-3	Chloroform	4.9	U	4.9	1.2
74-87-3	Chloromethane	4.9	U ^c	4.9	2.6
75-00-3	Chloroethane	4.9	U	4.9	2.1
156-59-2	cis-1,2-Dichloroethene	4.9	U	4.9	1.3
10061-01-5	cis-1,3-Dichloropropene	4.9	U	4.9	2.2
75-27-4	Bromodichloromethane	4.9	U	4.9	2.0
100-41-4	Ethylbenzene	4.9	U	4.9	2.0
106-93-4	1,2-Dibromoethane (EDB)	4.9	U	4.9	2.1
1634-04-4	Methyl tert-butyl ether	4.9	U	4.9	2.5
75-09-2	Methylene Chloride	1.6	J B	4.9	0.55
100-42-5	Styrene	4.9	U	4.9	2.3
127-18-4	Tetrachloroethene	6.0		4.9	1.2
108-88-3	Toluene	4.9	U	4.9	3.6
156-60-5	trans-1,2-Dichloroethene	4.9	U	4.9	1.0
10061-02-6	trans-1,3-Dichloropropene	4.9	U	4.9	2.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-53.5/54-0 | Lab Sample ID: 180-64801-5

Matrix: Solid | Lab File ID: 3040314.D

Analysis Method: 8260C | Date Collected: 03/30/2017 10:45

Sample wt/vol: 6.4525(g) | Date Analyzed: 04/03/2017 11:49

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 21.1 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	240		4.9	1.1
107-13-1	Acrylonitrile	49	U ^c	49	25
75-01-4	Vinyl chloride	4.9	U	4.9	2.5
1330-20-7	Xylenes, Total	9.8	U	9.8	4.5
74-97-5	Bromochloromethane	4.9	U	4.9	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		52-124
460-00-4	4-Bromofluorobenzene (Surr)	80		63-120
1868-53-7	Dibromofluoromethane (Surr)	97		68-121
2037-26-5	Toluene-d8 (Surr)	92		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040314.D
Lims ID: 180-64801-B-5-A
Client ID: HD-SPBA-SB-009-53.5/54-0
Sample Type: Client
Inject. Date: 03-Apr-2017 11:49:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 12:07:56 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 12:07:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.410	4.464	-0.054	98	98569	5000.0	
* 2 Fluorobenzene (IS)	96	7.360	7.348	0.012	99	827354	250.0	
* 3 Chlorobenzene-d5	119	10.444	10.438	0.006	85	198093	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.762	12.762	0.000	96	277604	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.612	6.600	0.012	93	171926	242.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.983	6.971	0.012	95	177869	217.5	
$ 7 Toluene-d8 (Surr)	98	9.009	9.003	0.006	92	792424	231.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.606	0.006	87	277744	199.5	
11 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.958				ND	
14 Bromomethane	94		2.299				ND	
15 Chloroethane	64		2.420				ND	
21 1,1-Dichloroethene	96		3.424				ND	
23 Acetone	43		3.594				ND	
25 Carbon disulfide	76		3.716				ND	
30 Methylene Chloride	84	4.245	4.221	0.024	85	8994	8.36	M
32 Acrylonitrile	53		4.635				ND	
33 trans-1,2-Dichloroethene	96		4.641				ND	
34 Methyl tert-butyl ether	73		4.695				ND	
36 1,1-Dichloroethane	63		5.249				ND	
42 cis-1,2-Dichloroethene	96	6.022	6.009	0.013	68	1459	1.40	M
43 2-Butanone (MEK)	43		6.070				ND	
47 Chlorobromomethane	128		6.295				ND	
49 Chloroform	83		6.417				ND	
50 1,1,1-Trichloroethane	97		6.612				ND	
53 Carbon tetrachloride	117		6.800				ND	
55 Benzene	78		7.031				ND	
56 1,2-Dichloroethane	62		7.056				ND	
60 Trichloroethene	130	7.755	7.743	0.012	98	1057408	1199.6	
64 1,2-Dichloropropane	63		7.981				ND	
67 1,4-Dioxane	88		8.133				ND	
68 Dichlorobromomethane	83		8.273				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.729				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893				ND	
73 Toluene	91		9.069				ND	
74 trans-1,3-Dichloropropene	75		9.288				ND	
76 1,1,2-Trichloroethane	97		9.471				ND	
77 Tetrachloroethene	164	9.623	9.617	0.006	98	22905	30.6	
79 2-Hexanone	43		9.726				ND	
81 Chlorodibromomethane	129		9.866				ND	
82 Ethylene Dibromide	107		9.976				ND	
83 Chlorobenzene	112		10.469				ND	
85 1,1,1,2-Tetrachloroethane	131		10.548				ND	
86 Ethylbenzene	106		10.578				ND	
87 m-Xylene & p-Xylene	106		10.694				ND	
88 o-Xylene	106		11.089				ND	
89 Styrene	104		11.101				ND	
90 Bromoform	173		11.284				ND	
93 1,1,2,2-Tetrachloroethane	83		11.746				ND	
S 129 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

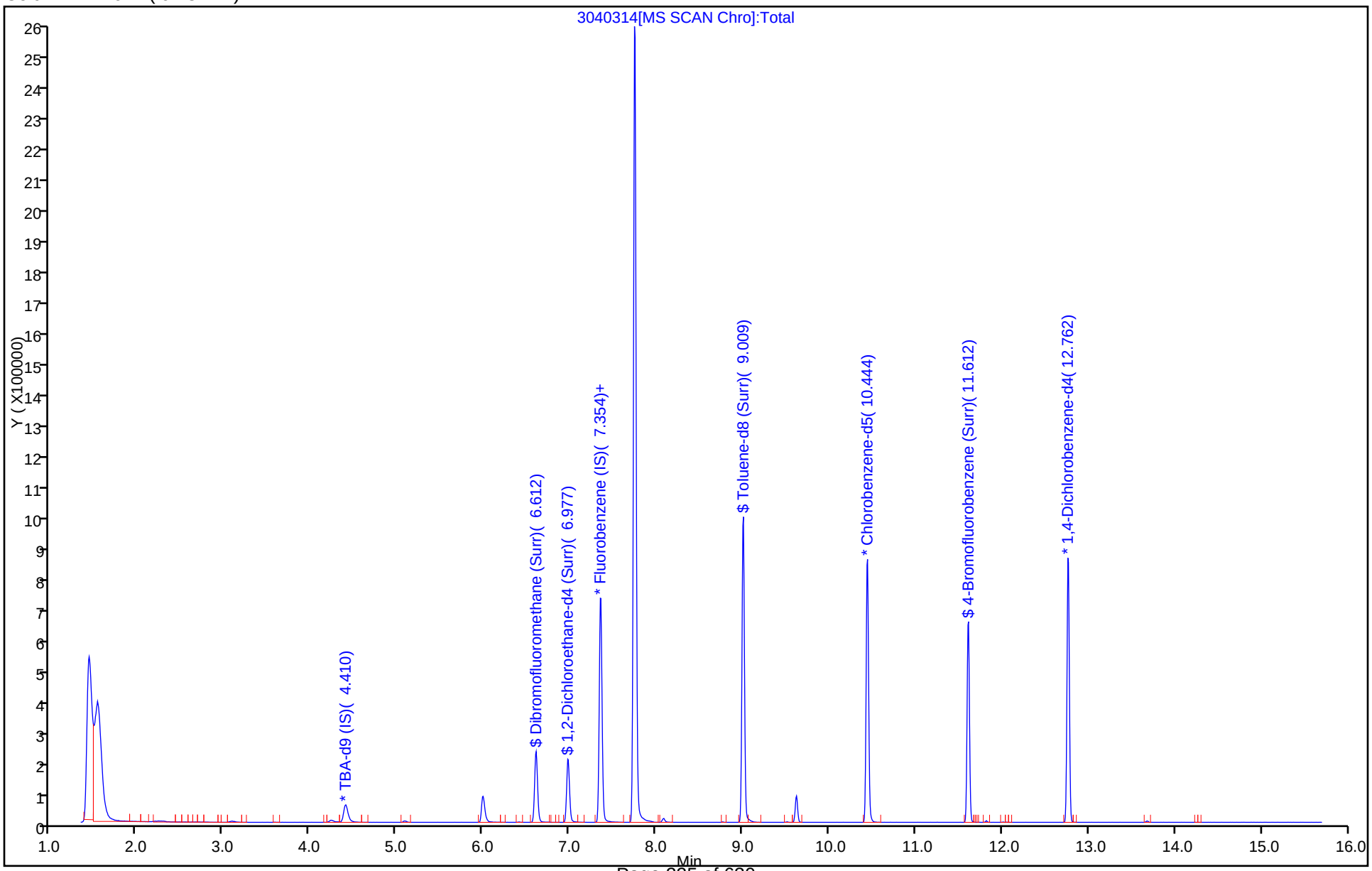
VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

Report Date: 03-Apr-2017 12:07:57 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040314.D				
Injection Date:	03-Apr-2017 11:49:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-5-A	Lab Sample ID:	180-64801-5	Worklist Smp#:	15
Client ID:	HD-SPBA-SB-009-53.5/54-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040314.D
Lims ID: 180-64801-B-5-A
Client ID: HD-SPBA-SB-009-53.5/54-0
Sample Type: Client
Inject. Date: 03-Apr-2017 11:49:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 12:07:56 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 12:07:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	242.0	96.79
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	217.5	86.98
$ 7 Toluene-d8 (Surr)	250.0	231.0	92.41
$ 8 4-Bromofluorobenzene (Surr)	250.0	199.5	79.81

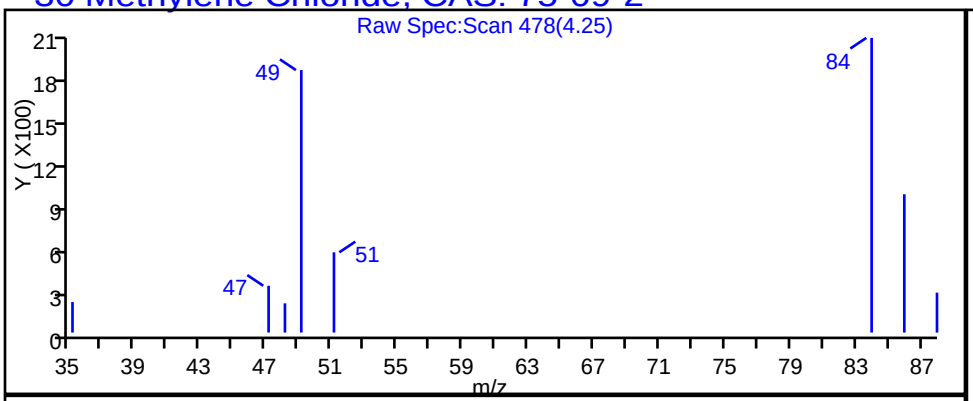
Report Date: 03-Apr-2017 12:07:57 Chrom Revision: 2.2 13-Mar-2017 15:50:30

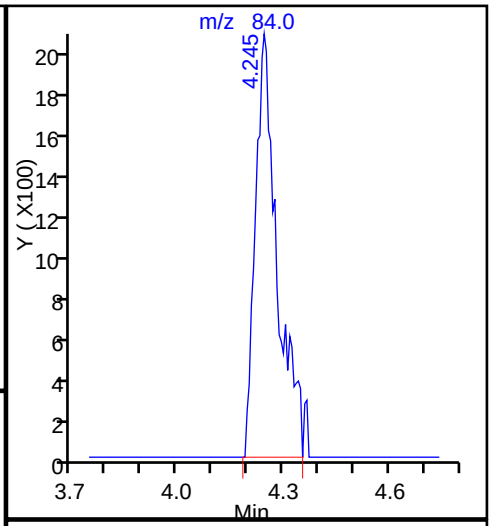
TestAmerica Pittsburgh

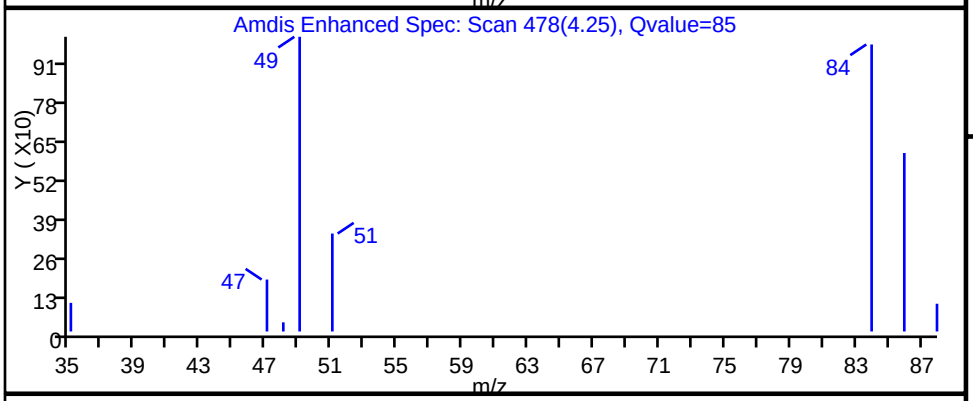
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040314.D

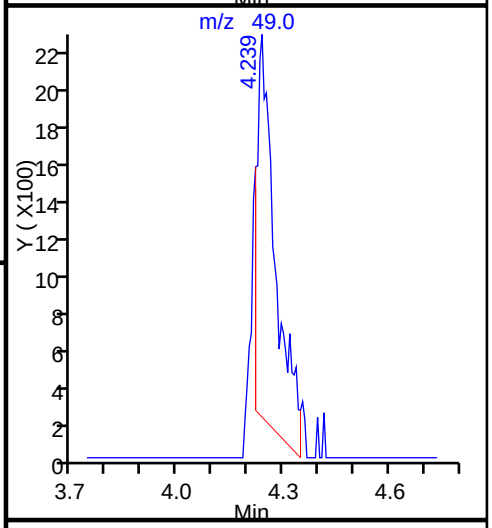
Injection Date:	03-Apr-2017 11:49:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-5-A	Lab Sample ID:	180-64801-5		
Client ID:	HD-SPBA-SB-009-53.5/54-0				
Operator ID:	10099	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

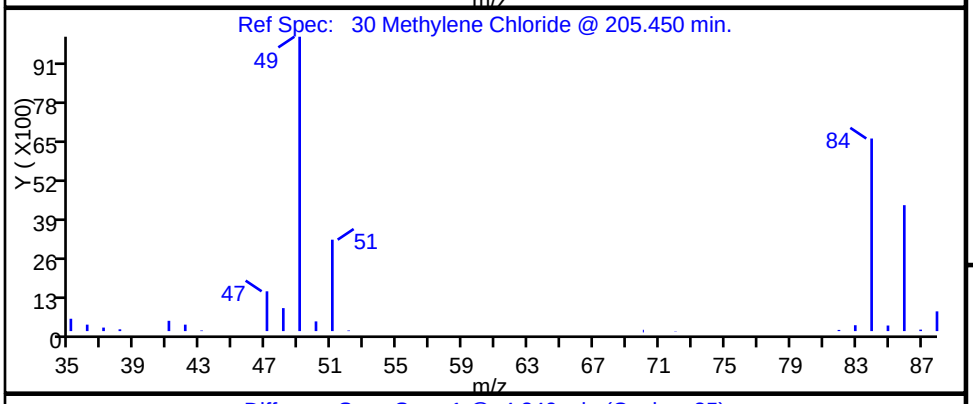
30 Methylene Chloride, CAS: 75-09-2

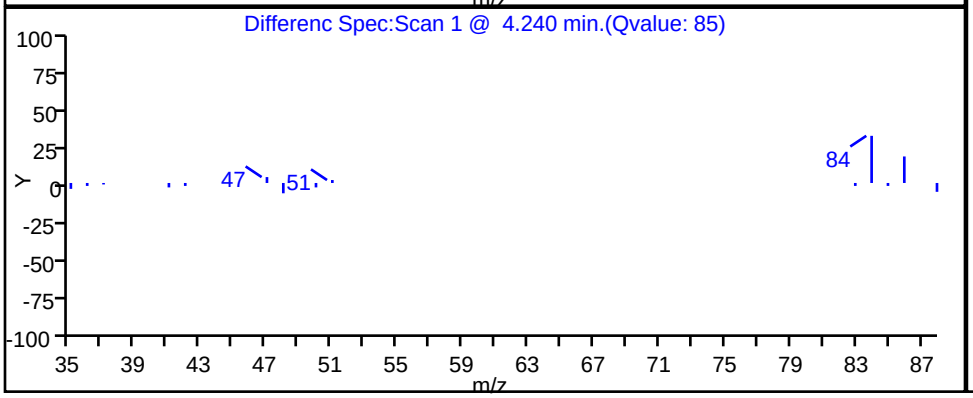


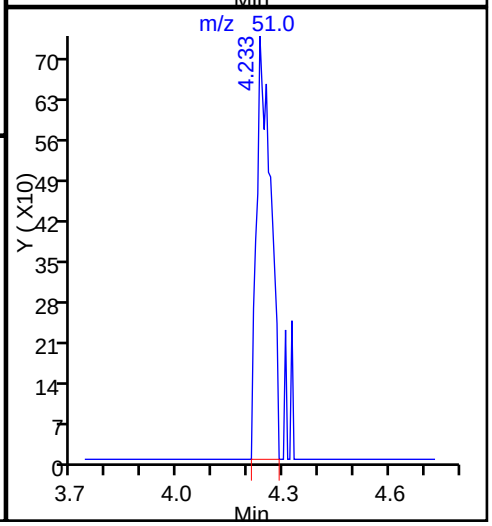










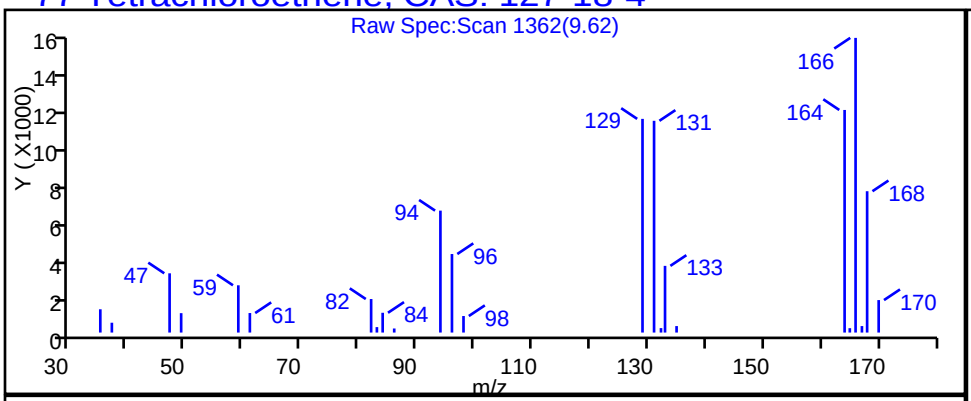


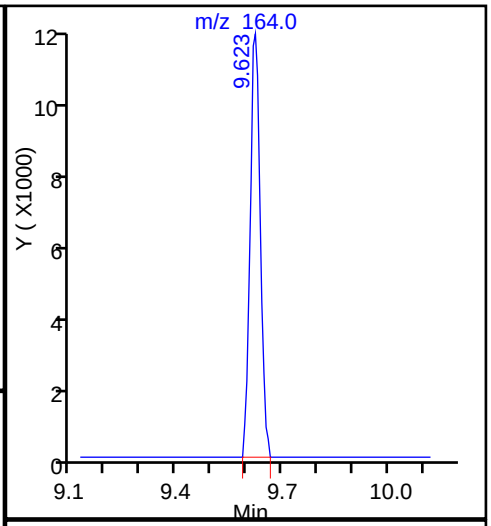
Report Date: 03-Apr-2017 12:07:57 Chrom Revision: 2.2 13-Mar-2017 15:50:30

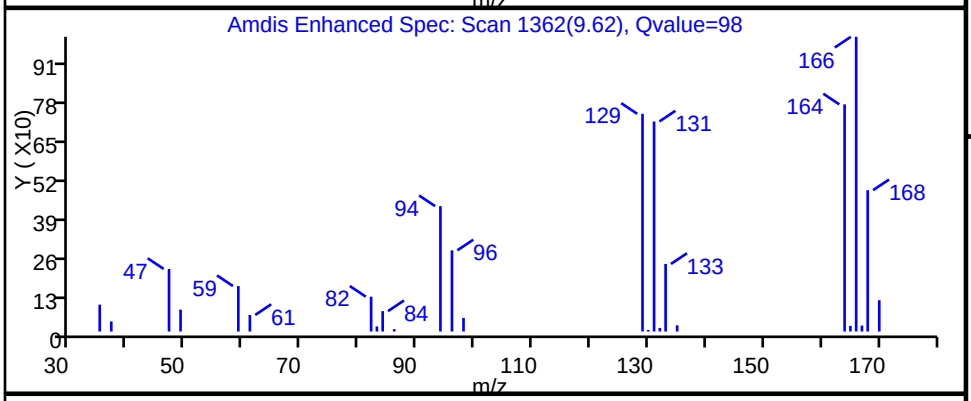
TestAmerica Pittsburgh

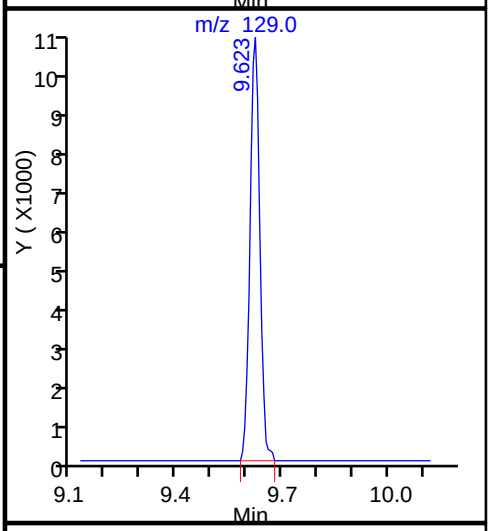
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040314.D		
Injection Date:	03-Apr-2017 11:49:30	Instrument ID:	CHHP3
Lims ID:	180-64801-B-5-A	Lab Sample ID:	180-64801-5
Client ID:	HD-SPBA-SB-009-53.5/54-0		
Operator ID:	10099	ALS Bottle#:	14 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

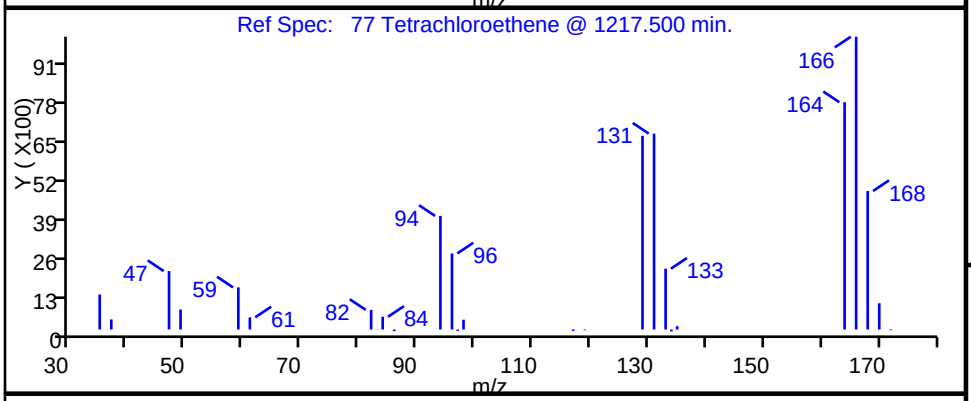
77 Tetrachloroethene, CAS: 127-18-4

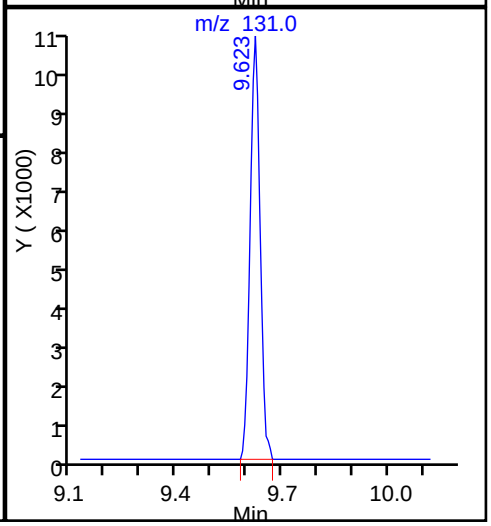


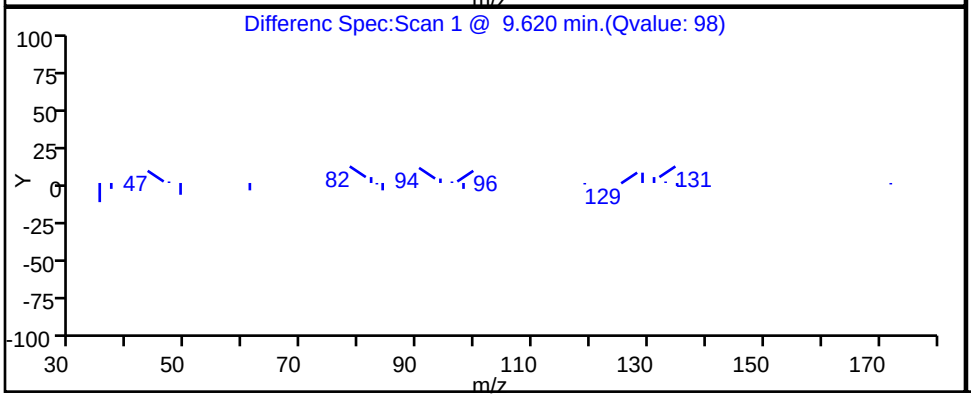












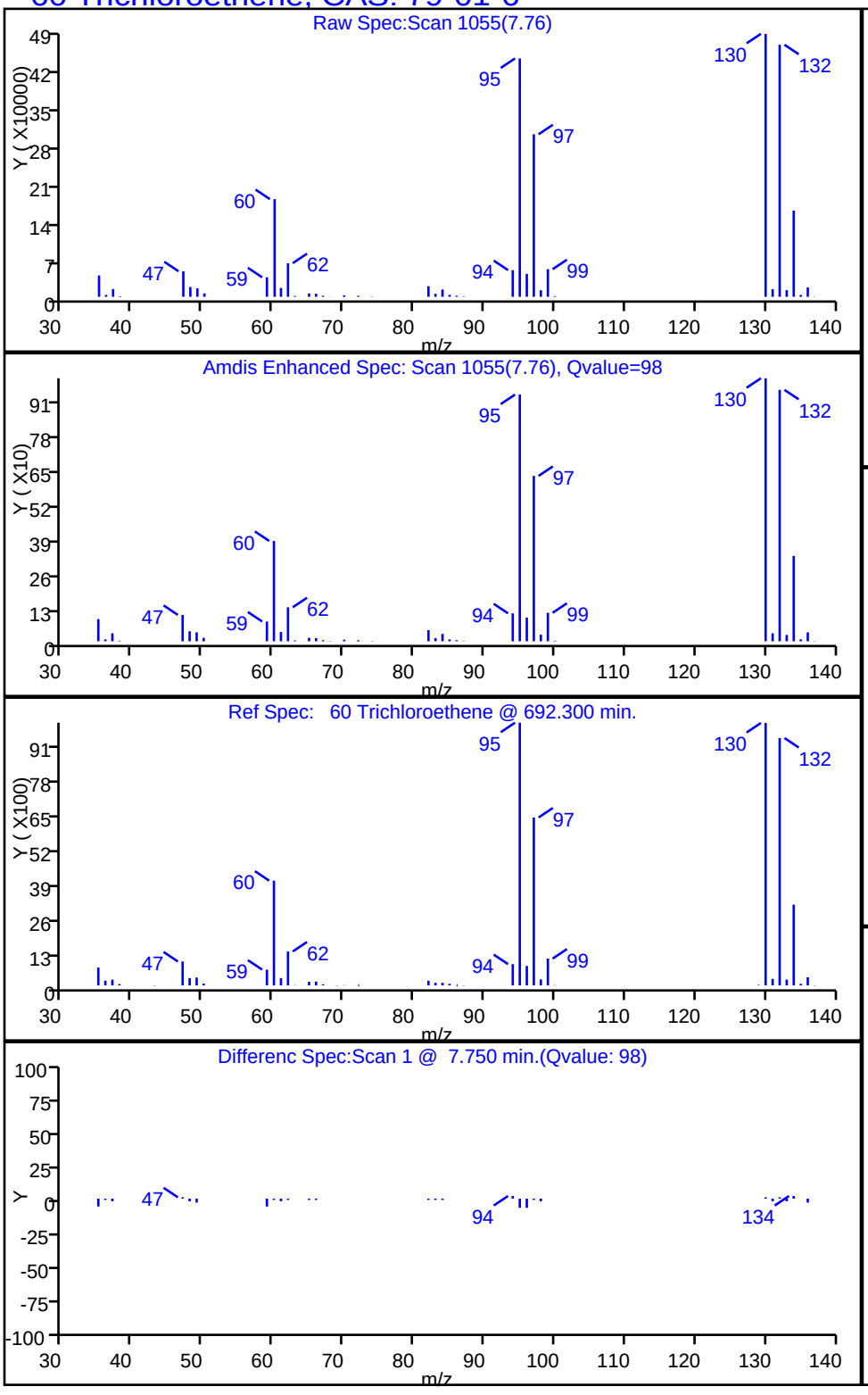
Report Date: 03-Apr-2017 12:07:57 Chrom Revision: 2.2 13-Mar-2017 15:50:30

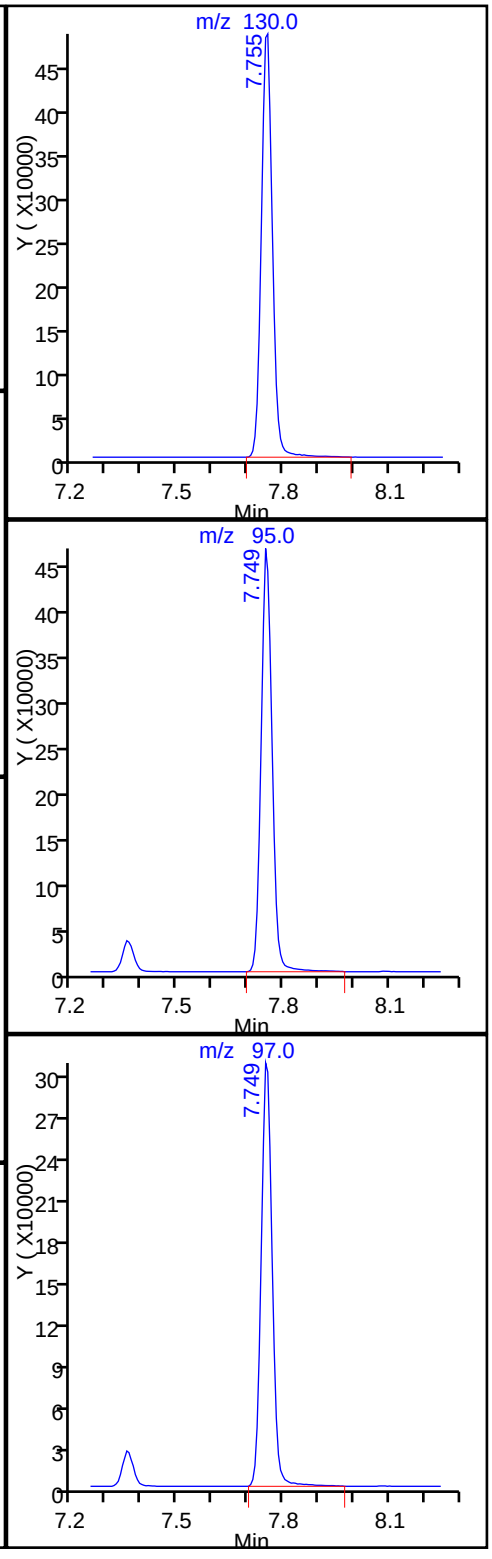
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040314.D

Injection Date:	03-Apr-2017 11:49:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-5-A	Lab Sample ID:	180-64801-5		
Client ID:	HD-SPBA-SB-009-53.5/54-0				
Operator ID:	10099	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6





Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

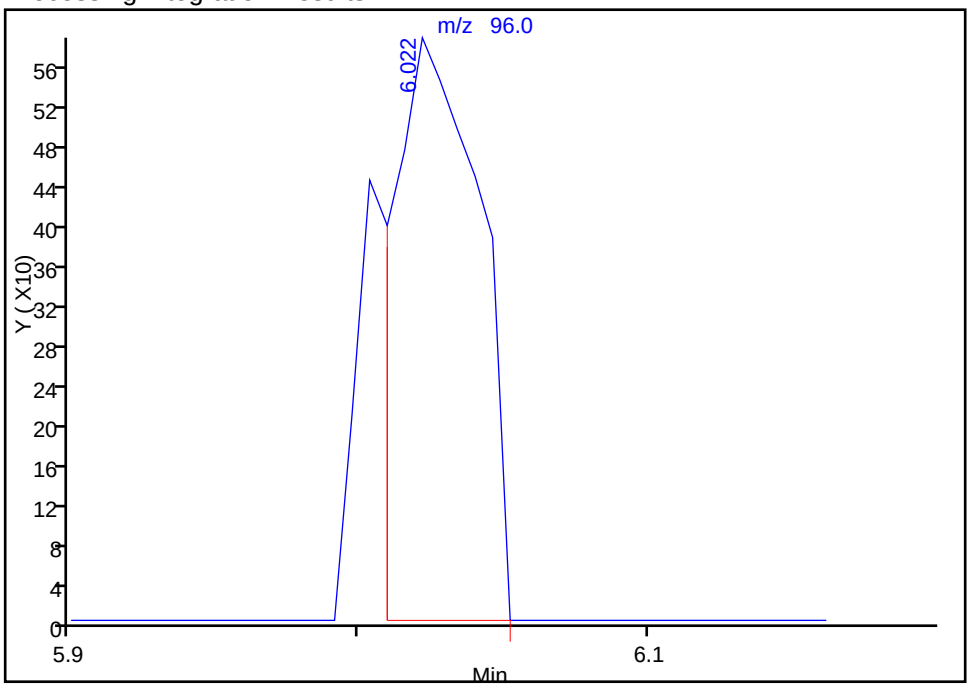
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040314.D				
Injection Date:	03-Apr-2017 11:49:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-5-A	Lab Sample ID:	180-64801-5		
Client ID:	HD-SPBA-SB-009-53.5/54-0				
Operator ID:	10099	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

Signal: 1

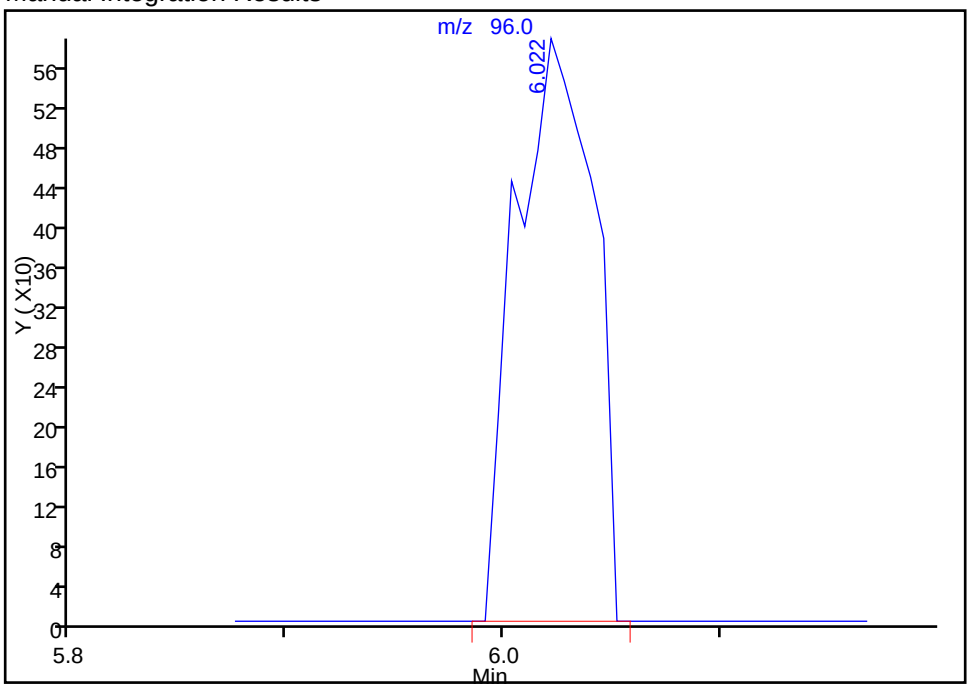
Processing Integration Results

RT: 6.02
Area: 1220
Amount: 1.169882
Amount Units: ng



Manual Integration Results

RT: 6.02
Area: 1459
Amount: 1.399064
Amount Units: ng



Reviewer: gordonk, 03-Apr-2017 12:07:28

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

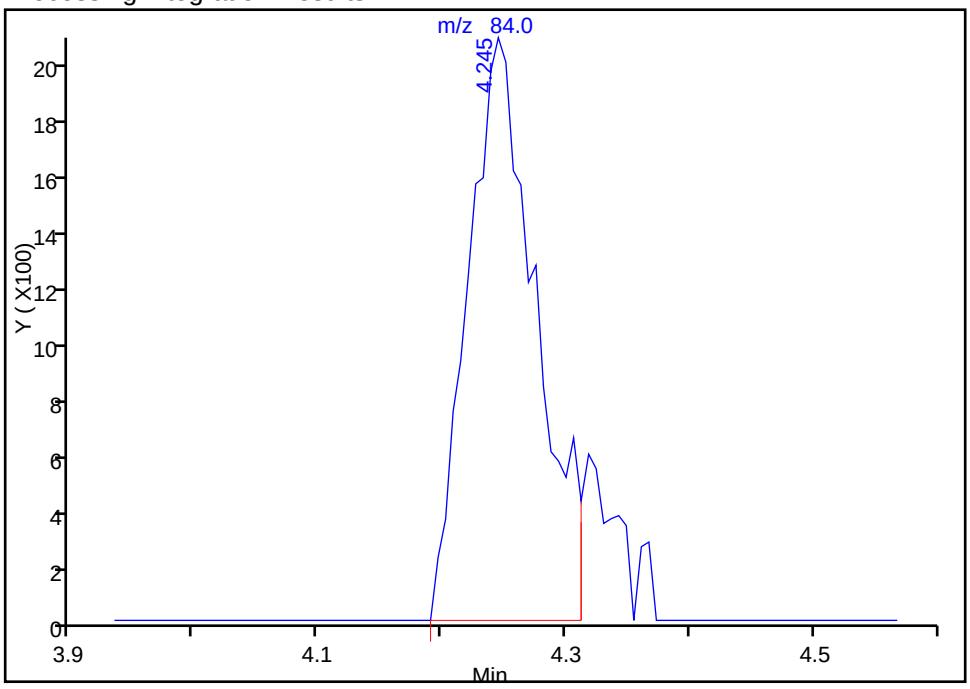
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040314.D				
Injection Date:	03-Apr-2017 11:49:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-5-A	Lab Sample ID:	180-64801-5		
Client ID:	HD-SPBA-SB-009-53.5/54-0				
Operator ID:	10099	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

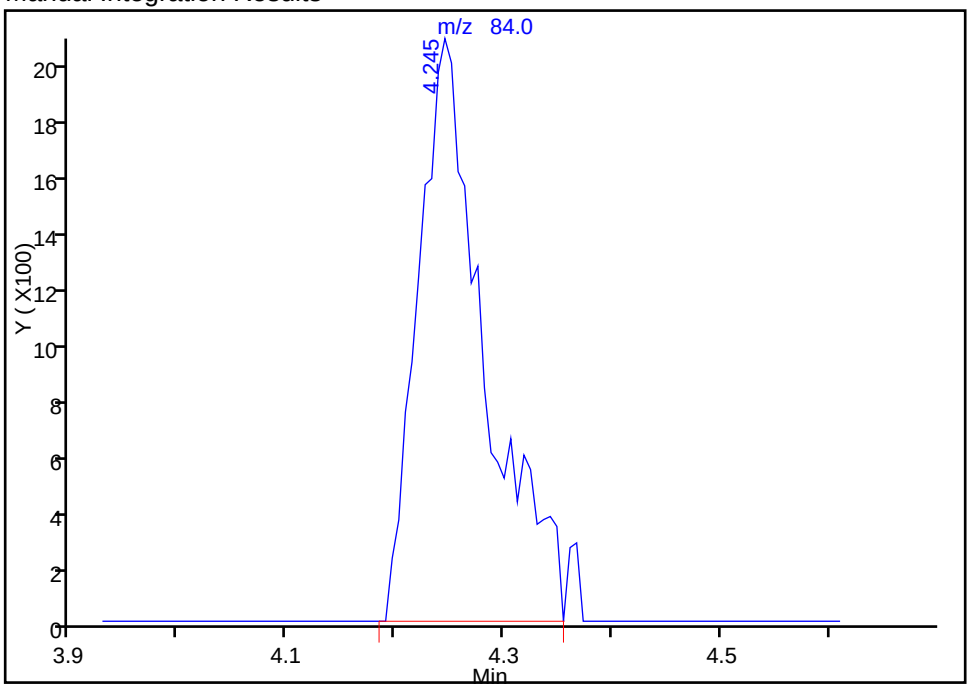
Processing Integration Results

RT: 4.25
Area: 8054
Amount: 7.486976
Amount Units: ng



Manual Integration Results

RT: 4.25
Area: 8994
Amount: 8.360798
Amount Units: ng



Reviewer: gordonk, 03-Apr-2017 12:07:37

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-58.5-59-0 | Lab Sample ID: 180-64801-6

Matrix: Solid | Lab File ID: 3040315.D

Analysis Method: 8260C | Date Collected: 03/30/2017 11:20

Sample wt/vol: 7.2363(g) | Date Analyzed: 04/03/2017 12:11

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 27.1 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.7	U	4.7	2.6
71-55-6	1,1,1-Trichloroethane	4.7	U	4.7	1.0
79-34-5	1,1,2,2-Tetrachloroethane	4.7	U	4.7	3.8
79-00-5	1,1,2-Trichloroethane	4.7	U	4.7	2.7
75-34-3	1,1-Dichloroethane	4.7	U	4.7	1.1
75-35-4	1,1-Dichloroethene	4.7	U	4.7	1.4
107-06-2	1,2-Dichloroethane	4.7	U	4.7	1.1
78-87-5	1,2-Dichloropropane	4.7	U	4.7	1.8
78-93-3	2-Butanone (MEK)	4.7	U	4.7	2.8
591-78-6	2-Hexanone	4.7	U	4.7	3.9
108-10-1	4-Methyl-2-pentanone (MIBK)	4.7	U	4.7	3.4
67-64-1	Acetone	19	U ^c	19	9.7
71-43-2	Benzene	4.7	U	4.7	2.9
75-25-2	Bromoform	4.7	U	4.7	4.3
74-83-9	Bromomethane	4.7	U ^c *	4.7	1.6
75-15-0	Carbon disulfide	4.7	U	4.7	2.0
56-23-5	Carbon tetrachloride	4.7	U ^c	4.7	1.3
108-90-7	Chlorobenzene	4.7	U	4.7	2.1
124-48-1	Dibromochloromethane	4.7	U	4.7	2.3
123-91-1	1,4-Dioxane	950	U	950	24
67-66-3	Chloroform	4.7	U	4.7	1.2
74-87-3	Chloromethane	4.7	U ^c	4.7	2.5
75-00-3	Chloroethane	4.7	U	4.7	2.0
156-59-2	cis-1,2-Dichloroethene	4.7	U	4.7	1.3
10061-01-5	cis-1,3-Dichloropropene	4.7	U	4.7	2.1
75-27-4	Bromodichloromethane	4.7	U	4.7	1.9
100-41-4	Ethylbenzene	4.7	U	4.7	1.9
106-93-4	1,2-Dibromoethane (EDB)	4.7	U	4.7	2.0
1634-04-4	Methyl tert-butyl ether	4.7	U	4.7	2.4
75-09-2	Methylene Chloride	1.6	J B	4.7	0.53
100-42-5	Styrene	4.7	U	4.7	2.2
127-18-4	Tetrachloroethene	2.5	J	4.7	1.2
108-88-3	Toluene	4.7	U	4.7	3.4
156-60-5	trans-1,2-Dichloroethene	4.7	U	4.7	0.97
10061-02-6	trans-1,3-Dichloropropene	4.7	U	4.7	2.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-58.5-59-0 | Lab Sample ID: 180-64801-6

Matrix: Solid | Lab File ID: 3040315.D

Analysis Method: 8260C | Date Collected: 03/30/2017 11:20

Sample wt/vol: 7.2363(g) | Date Analyzed: 04/03/2017 12:11

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 27.1 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	72		4.7	1.1
107-13-1	Acrylonitrile	47	U ^c	47	24
75-01-4	Vinyl chloride	4.7	U	4.7	2.4
1330-20-7	Xylenes, Total	9.5	U	9.5	4.3
74-97-5	Bromochloromethane	4.7	U	4.7	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		52-124
460-00-4	4-Bromofluorobenzene (Surr)	81		63-120
1868-53-7	Dibromofluoromethane (Surr)	97		68-121
2037-26-5	Toluene-d8 (Surr)	91		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040315.D
Lims ID: 180-64801-B-6-A
Client ID: HD-SPBA-SB-009-58.5-59-0
Sample Type: Client
Inject. Date: 03-Apr-2017 12:11:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-016
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 12:28:45 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 12:28:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.416	4.464	-0.048	98	144601	5000.0	
* 2 Fluorobenzene (IS)	96	7.355	7.348	0.007	99	806038	250.0	
* 3 Chlorobenzene-d5	119	10.445	10.438	0.007	85	195624	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.763	12.762	0.001	96	283692	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.606	6.600	0.006	93	167069	241.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.984	6.971	0.013	95	180489	226.5	
$ 7 Toluene-d8 (Surr)	98	9.009	9.003	0.006	93	774130	228.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.607	11.606	0.001	86	279354	203.2	
11 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.958				ND	
14 Bromomethane	94		2.299				ND	
15 Chloroethane	64		2.420				ND	
21 1,1-Dichloroethene	96		3.424				ND	
23 Acetone	43		3.594				ND	
25 Carbon disulfide	76		3.716				ND	
30 Methylene Chloride	84	4.234	4.221	0.013	81	8588	8.19	M
32 Acrylonitrile	53		4.635				ND	
33 trans-1,2-Dichloroethene	96		4.641				ND	
34 Methyl tert-butyl ether	73		4.695				ND	
36 1,1-Dichloroethane	63		5.249				ND	
42 cis-1,2-Dichloroethene	96		6.009				ND	
43 2-Butanone (MEK)	43		6.070				ND	
47 Chlorobromomethane	128		6.295				ND	
49 Chloroform	83		6.417				ND	
50 1,1,1-Trichloroethane	97		6.612				ND	
53 Carbon tetrachloride	117		6.800				ND	
55 Benzene	78		7.031				ND	
56 1,2-Dichloroethane	62		7.056				ND	
60 Trichloroethene	130	7.756	7.743	0.013	98	328550	382.6	
64 1,2-Dichloropropane	63		7.981				ND	
67 1,4-Dioxane	88		8.133				ND	
68 Dichlorobromomethane	83		8.273				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.729				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893				ND	
73 Toluene	91		9.069				ND	
74 trans-1,3-Dichloropropene	75		9.288				ND	
76 1,1,2-Trichloroethane	97		9.471				ND	
77 Tetrachloroethene	164	9.624	9.617	0.007	95	9897	13.4	
79 2-Hexanone	43		9.726				ND	
81 Chlorodibromomethane	129		9.866				ND	
82 Ethylene Dibromide	107		9.976				ND	
83 Chlorobenzene	112		10.469				ND	
85 1,1,1,2-Tetrachloroethane	131		10.548				ND	
86 Ethylbenzene	106		10.578				ND	
87 m-Xylene & p-Xylene	106		10.694				ND	
88 o-Xylene	106		11.089				ND	
89 Styrene	104		11.101				ND	
90 Bromoform	173		11.284				ND	
93 1,1,2,2-Tetrachloroethane	83		11.746				ND	
S 129 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

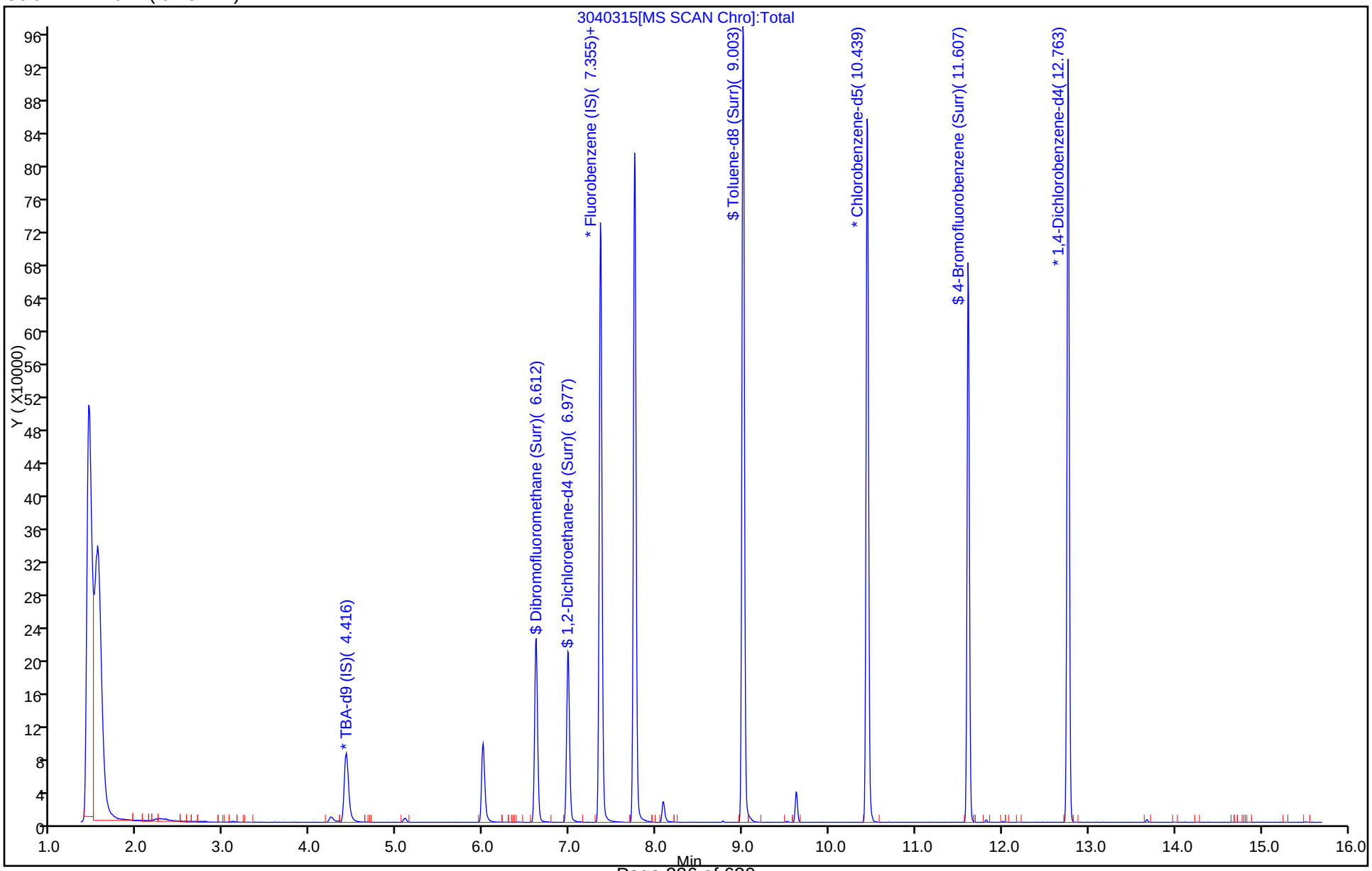
VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

Report Date: 03-Apr-2017 12:28:45 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040315.D				
Injection Date:	03-Apr-2017 12:11:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-6-A	Lab Sample ID:	180-64801-6	Worklist Smp#:	16
Client ID:	HD-SPBA-SB-009-58.5-59-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040315.D				
Lims ID:	180-64801-B-6-A				
Client ID:	HD-SPBA-SB-009-58.5-59-0				
Sample Type:	Client				
Inject. Date:	03-Apr-2017 12:11:30	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	180-0016128-016				
Operator ID:	10099	Instrument ID:	CHHP3		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	03-Apr-2017 12:28:45	Calib Date:	28-Sep-2016 14:19:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK011				

First Level Reviewer: gordonk Date: 03-Apr-2017 12:28:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	241.3	96.54
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	226.5	90.60
$ 7 Toluene-d8 (Surr)	250.0	228.5	91.42
$ 8 4-Bromofluorobenzene (Surr)	250.0	203.2	81.29

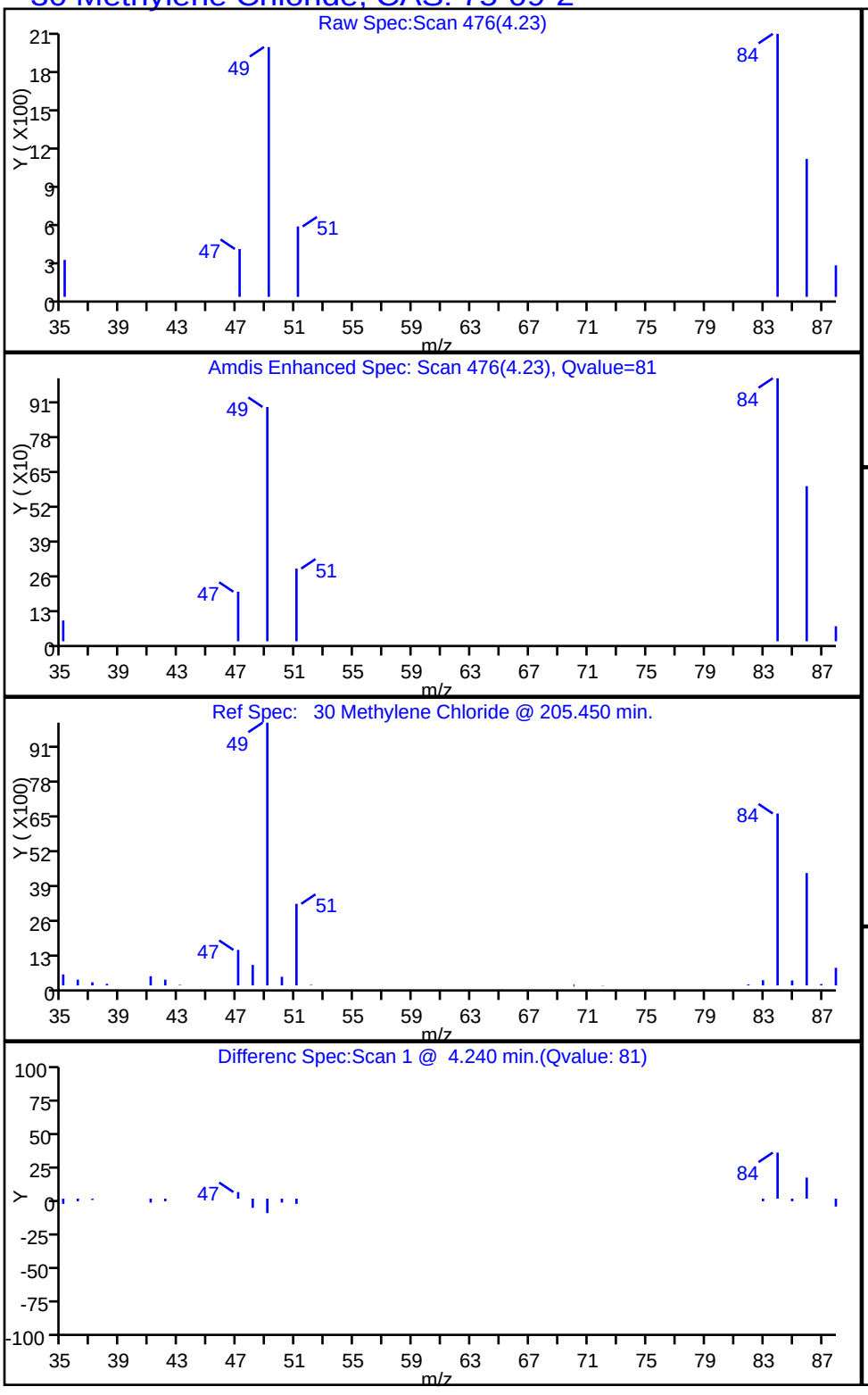
Report Date: 03-Apr-2017 12:28:45 Chrom Revision: 2.2 13-Mar-2017 15:50:30

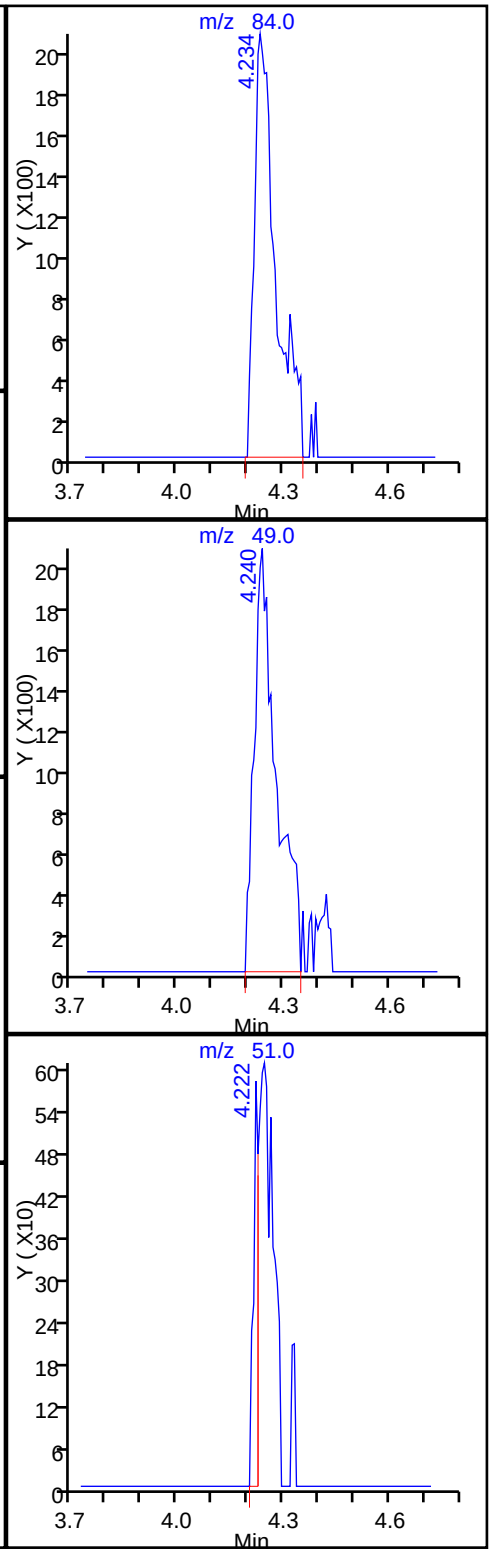
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040315.D

Injection Date:	03-Apr-2017 12:11:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-6-A	Lab Sample ID:	180-64801-6		
Client ID:	HD-SPBA-SB-009-58.5-59-0				
Operator ID:	10099	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2





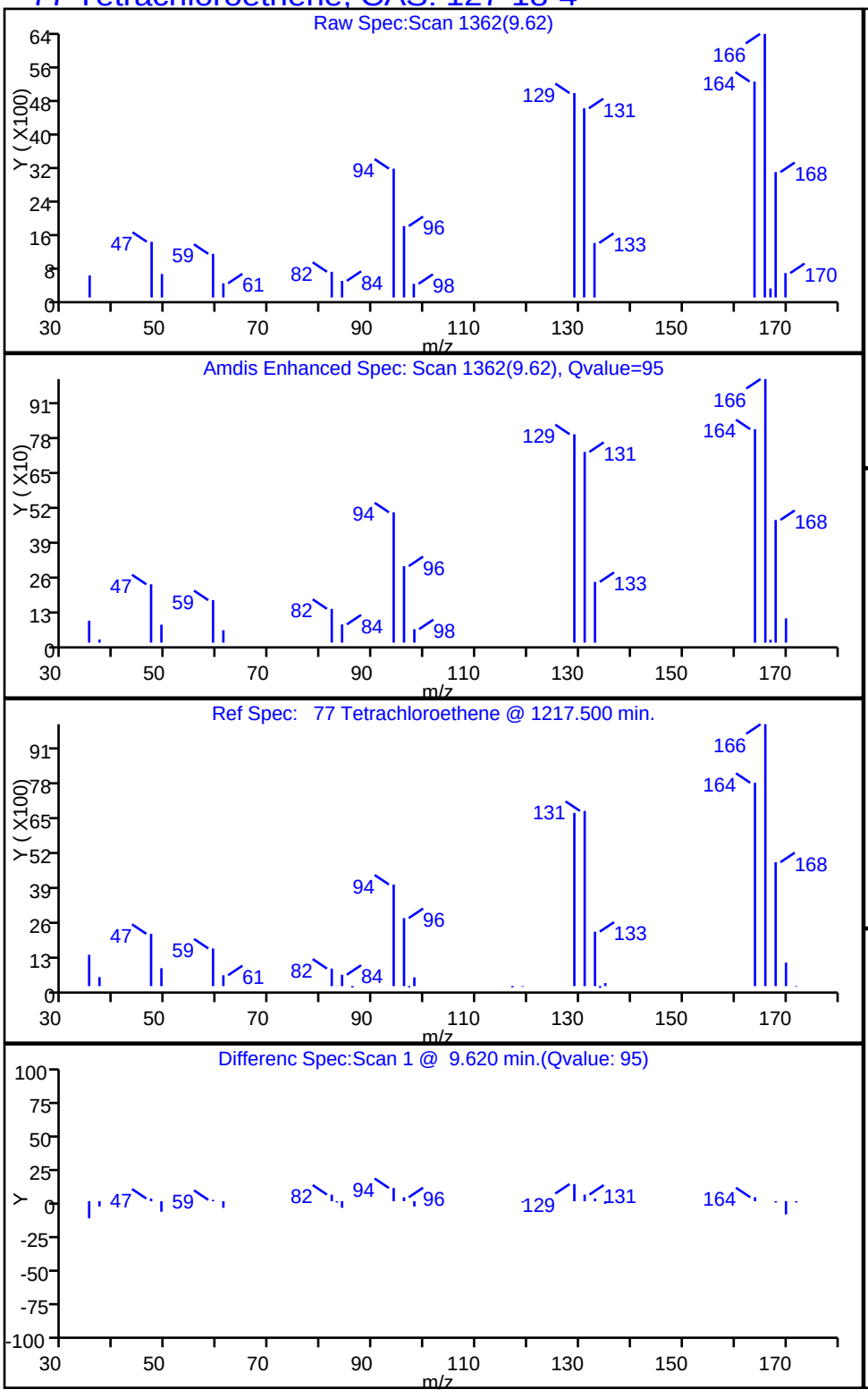
Report Date: 03-Apr-2017 12:28:45 Chrom Revision: 2.2 13-Mar-2017 15:50:30

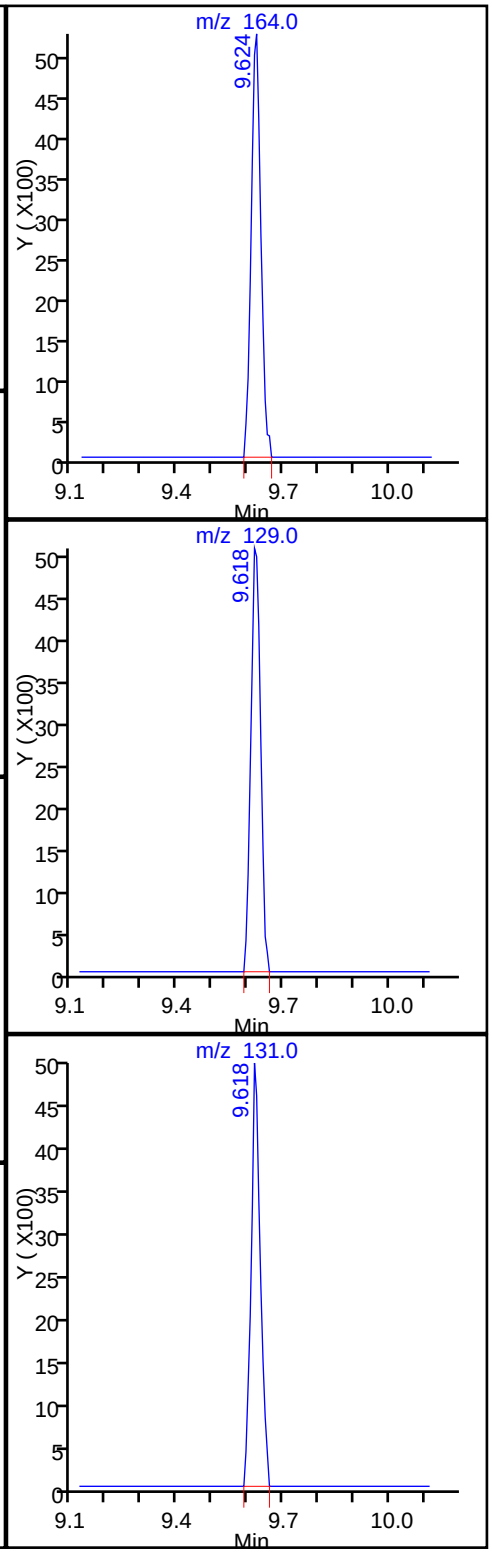
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040315.D

Injection Date:	03-Apr-2017 12:11:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-6-A	Lab Sample ID:	180-64801-6		
Client ID:	HD-SPBA-SB-009-58.5-59-0				
Operator ID:	10099	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

77 Tetrachloroethene, CAS: 127-18-4





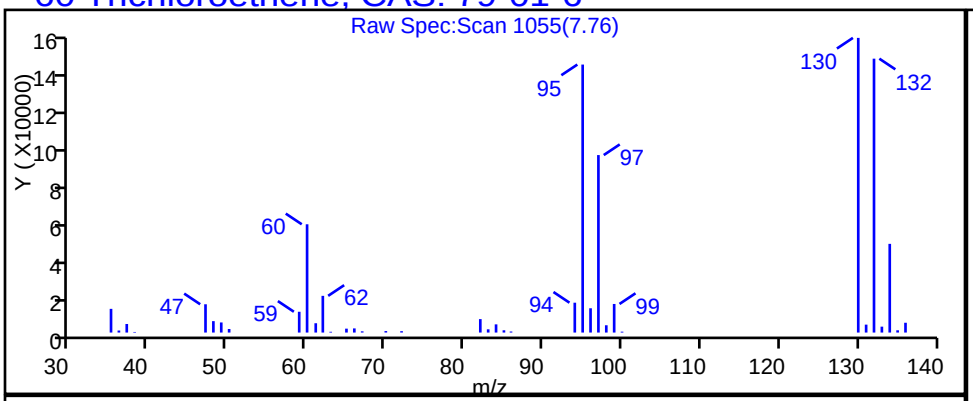
Report Date: 03-Apr-2017 12:28:45 Chrom Revision: 2.2 13-Mar-2017 15:50:30

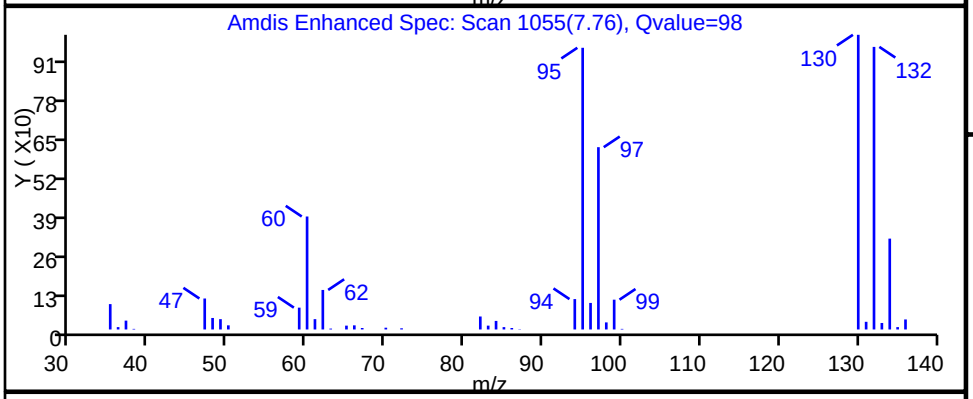
TestAmerica Pittsburgh

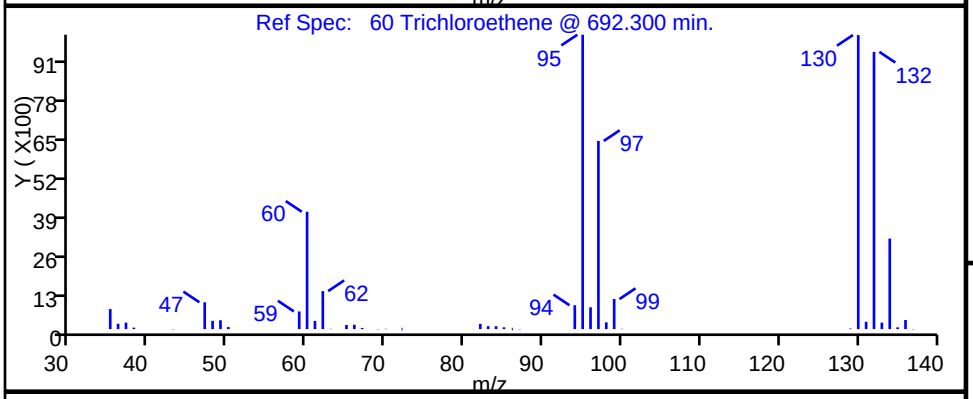
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040315.D

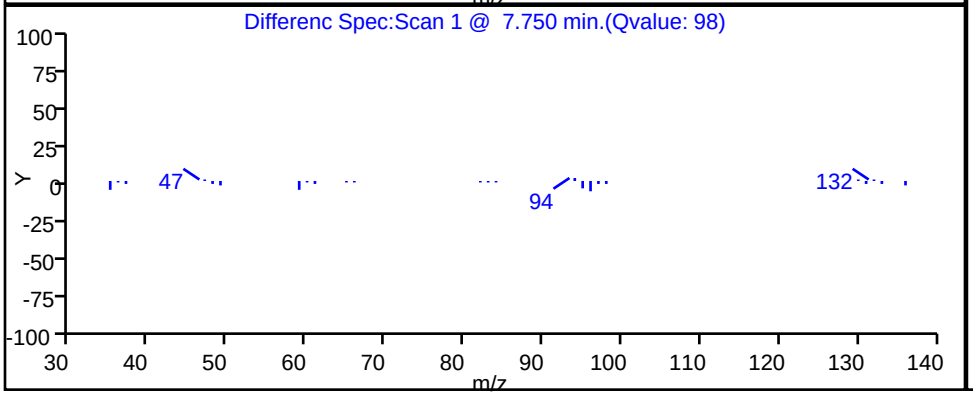
Injection Date:	03-Apr-2017 12:11:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-6-A	Lab Sample ID:	180-64801-6		
Client ID:	HD-SPBA-SB-009-58.5-59-0				
Operator ID:	10099	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

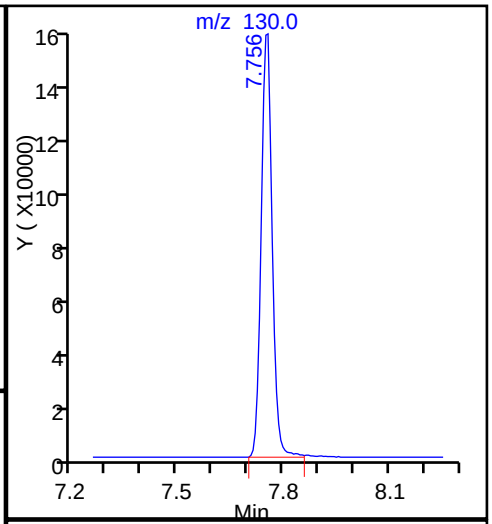
60 Trichloroethene, CAS: 79-01-6

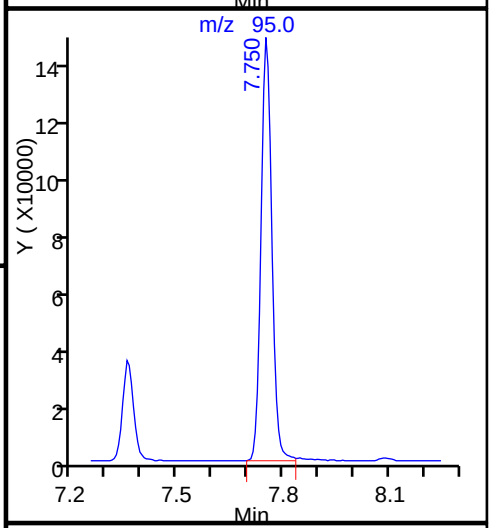


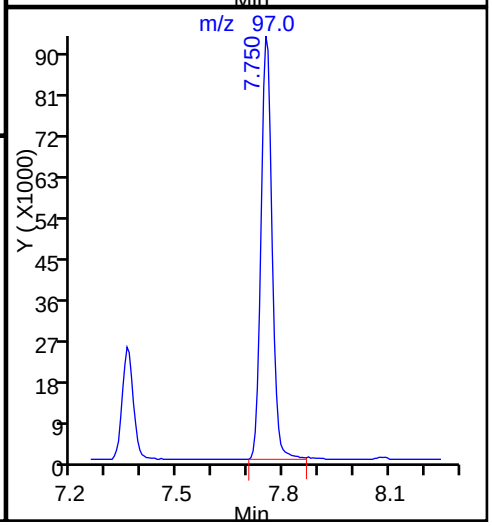












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

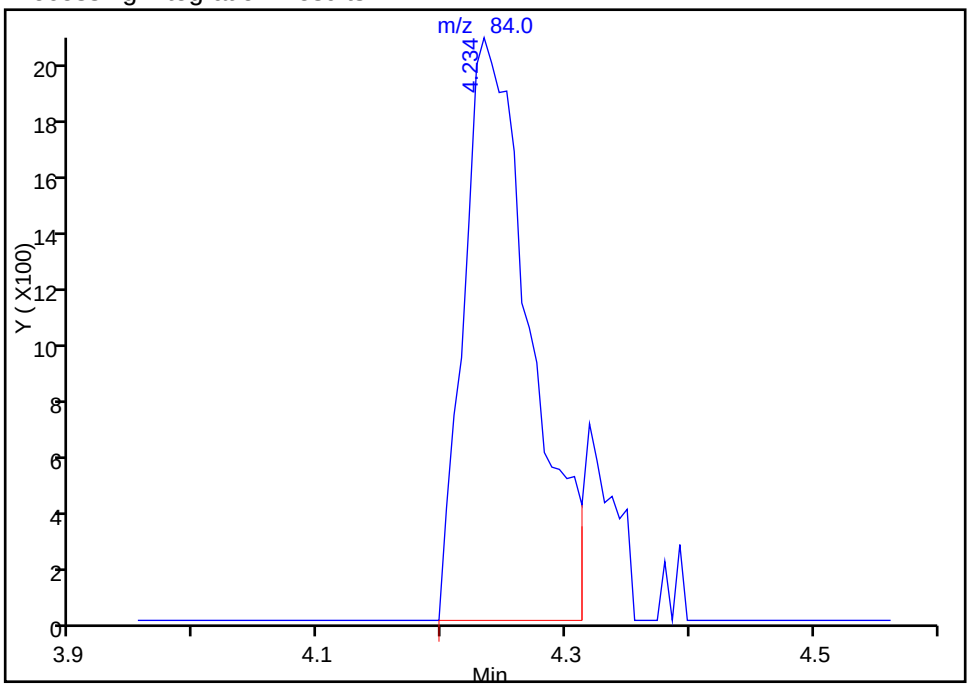
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040315.D				
Injection Date:	03-Apr-2017 12:11:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-6-A	Lab Sample ID:	180-64801-6		
Client ID:	HD-SPBA-SB-009-58.5-59-0				
Operator ID:	10099	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

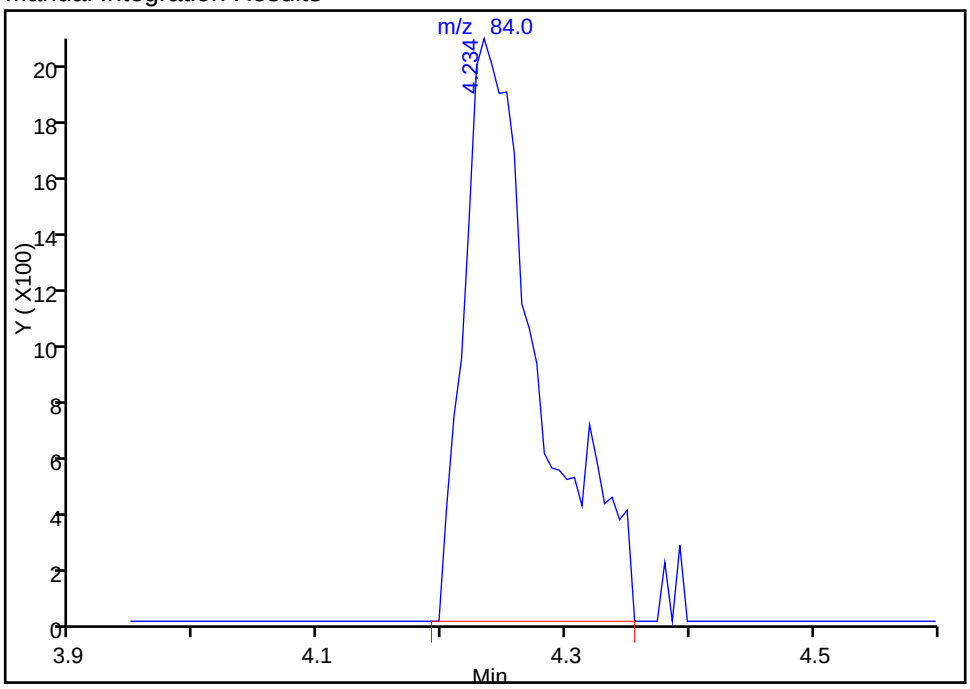
Processing Integration Results

RT: 4.23
Area: 7557
Amount: 7.210745
Amount Units: ng



Manual Integration Results

RT: 4.23
Area: 8588
Amount: 8.194505
Amount Units: ng



Reviewer: gordonk, 03-Apr-2017 12:28:17

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-61/61.5-0 | Lab Sample ID: 180-64801-7

Matrix: Solid | Lab File ID: 3040316.D

Analysis Method: 8260C | Date Collected: 03/30/2017 11:55

Sample wt/vol: 6.2574(g) | Date Analyzed: 04/03/2017 12:34

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 15.2 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.7	U	4.7	2.6
71-55-6	1,1,1-Trichloroethane	4.7	U	4.7	1.0
79-34-5	1,1,2,2-Tetrachloroethane	4.7	U	4.7	3.7
79-00-5	1,1,2-Trichloroethane	4.7	U	4.7	2.6
75-34-3	1,1-Dichloroethane	4.7	U	4.7	1.1
75-35-4	1,1-Dichloroethene	4.7	U	4.7	1.4
107-06-2	1,2-Dichloroethane	4.7	U	4.7	1.1
78-87-5	1,2-Dichloropropane	4.7	U	4.7	1.8
78-93-3	2-Butanone (MEK)	4.7	U	4.7	2.8
591-78-6	2-Hexanone	4.7	U	4.7	3.8
108-10-1	4-Methyl-2-pentanone (MIBK)	4.7	U	4.7	3.4
67-64-1	Acetone	19	U ^c	19	9.7
71-43-2	Benzene	4.7	U	4.7	2.9
75-25-2	Bromoform	4.7	U	4.7	4.3
74-83-9	Bromomethane	4.7	U ^c *	4.7	1.6
75-15-0	Carbon disulfide	4.7	U	4.7	2.0
56-23-5	Carbon tetrachloride	4.7	U ^c	4.7	1.3
108-90-7	Chlorobenzene	4.7	U	4.7	2.1
124-48-1	Dibromochloromethane	4.7	U	4.7	2.3
123-91-1	1,4-Dioxane	940	U	940	24
67-66-3	Chloroform	4.7	U	4.7	1.2
74-87-3	Chloromethane	4.7	U ^c	4.7	2.5
75-00-3	Chloroethane	4.7	U	4.7	2.0
156-59-2	cis-1,2-Dichloroethene	4.7	U	4.7	1.3
10061-01-5	cis-1,3-Dichloropropene	4.7	U	4.7	2.1
75-27-4	Bromodichloromethane	4.7	U	4.7	1.9
100-41-4	Ethylbenzene	4.7	U	4.7	1.9
106-93-4	1,2-Dibromoethane (EDB)	4.7	U	4.7	2.0
1634-04-4	Methyl tert-butyl ether	4.7	U	4.7	2.4
75-09-2	Methylene Chloride	1.5	J B	4.7	0.53
100-42-5	Styrene	4.7	U	4.7	2.2
127-18-4	Tetrachloroethene	5.6		4.7	1.2
108-88-3	Toluene	4.7	U	4.7	3.4
156-60-5	trans-1,2-Dichloroethene	4.7	U	4.7	0.97
10061-02-6	trans-1,3-Dichloropropene	4.7	U	4.7	2.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-61/61.5-0 | Lab Sample ID: 180-64801-7

Matrix: Solid | Lab File ID: 3040316.D

Analysis Method: 8260C | Date Collected: 03/30/2017 11:55

Sample wt/vol: 6.2574(g) | Date Analyzed: 04/03/2017 12:34

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 15.2 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	150		4.7	1.1
107-13-1	Acrylonitrile	47	U ^c	47	24
75-01-4	Vinyl chloride	4.7	U	4.7	2.4
1330-20-7	Xylenes, Total	9.4	U	9.4	4.3
74-97-5	Bromochloromethane	4.7	U	4.7	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		52-124
460-00-4	4-Bromofluorobenzene (Surr)	81		63-120
1868-53-7	Dibromofluoromethane (Surr)	100		68-121
2037-26-5	Toluene-d8 (Surr)	95		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040316.D
Lims ID: 180-64801-B-7-A
Client ID: HD-SPBA-SB-009-61/61.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 12:34:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-017
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 12:53:00 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 12:53:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.410	4.464	-0.054	98	104282	5000.0	
* 2 Fluorobenzene (IS)	96	7.360	7.348	0.012	99	796932	250.0	
* 3 Chlorobenzene-d5	119	10.445	10.438	0.007	85	190446	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.769	12.762	0.007	96	268019	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.612	6.600	0.012	93	171726	250.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.983	6.971	0.012	95	177810	225.7	
$ 7 Toluene-d8 (Surr)	98	9.009	9.003	0.006	92	780079	236.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.607	11.606	0.001	87	269964	201.7	
11 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.958				ND	
14 Bromomethane	94		2.299				ND	
15 Chloroethane	64		2.420				ND	
21 1,1-Dichloroethene	96		3.424				ND	
23 Acetone	43		3.594				ND	
25 Carbon disulfide	76		3.716				ND	
30 Methylene Chloride	84	4.234	4.221	0.013	85	8411	8.12	M
32 Acrylonitrile	53		4.635				ND	
33 trans-1,2-Dichloroethene	96		4.641				ND	
34 Methyl tert-butyl ether	73		4.695				ND	
36 1,1-Dichloroethane	63		5.249				ND	
42 cis-1,2-Dichloroethene	96		6.009				ND	
43 2-Butanone (MEK)	43		6.070				ND	
47 Chlorobromomethane	128		6.295				ND	
49 Chloroform	83		6.417				ND	
50 1,1,1-Trichloroethane	97		6.612				ND	
53 Carbon tetrachloride	117		6.800				ND	
55 Benzene	78		7.031				ND	
56 1,2-Dichloroethane	62		7.056				ND	
60 Trichloroethene	130	7.750	7.743	0.007	98	654612	771.0	
64 1,2-Dichloropropane	63		7.981				ND	
67 1,4-Dioxane	88		8.133				ND	
68 Dichlorobromomethane	83		8.273				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.729				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893				ND	
73 Toluene	91		9.069				ND	
74 trans-1,3-Dichloropropene	75		9.288				ND	
76 1,1,2-Trichloroethane	97		9.471				ND	
77 Tetrachloroethene	164	9.623	9.617	0.006	97	21399	29.7	
79 2-Hexanone	43		9.726				ND	
81 Chlorodibromomethane	129		9.866				ND	
82 Ethylene Dibromide	107		9.976				ND	
83 Chlorobenzene	112		10.469				ND	
85 1,1,1,2-Tetrachloroethane	131		10.548				ND	
86 Ethylbenzene	106		10.578				ND	
87 m-Xylene & p-Xylene	106		10.694				ND	
88 o-Xylene	106		11.089				ND	
89 Styrene	104		11.101				ND	
90 Bromoform	173		11.284				ND	
93 1,1,2,2-Tetrachloroethane	83		11.746				ND	
S 129 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

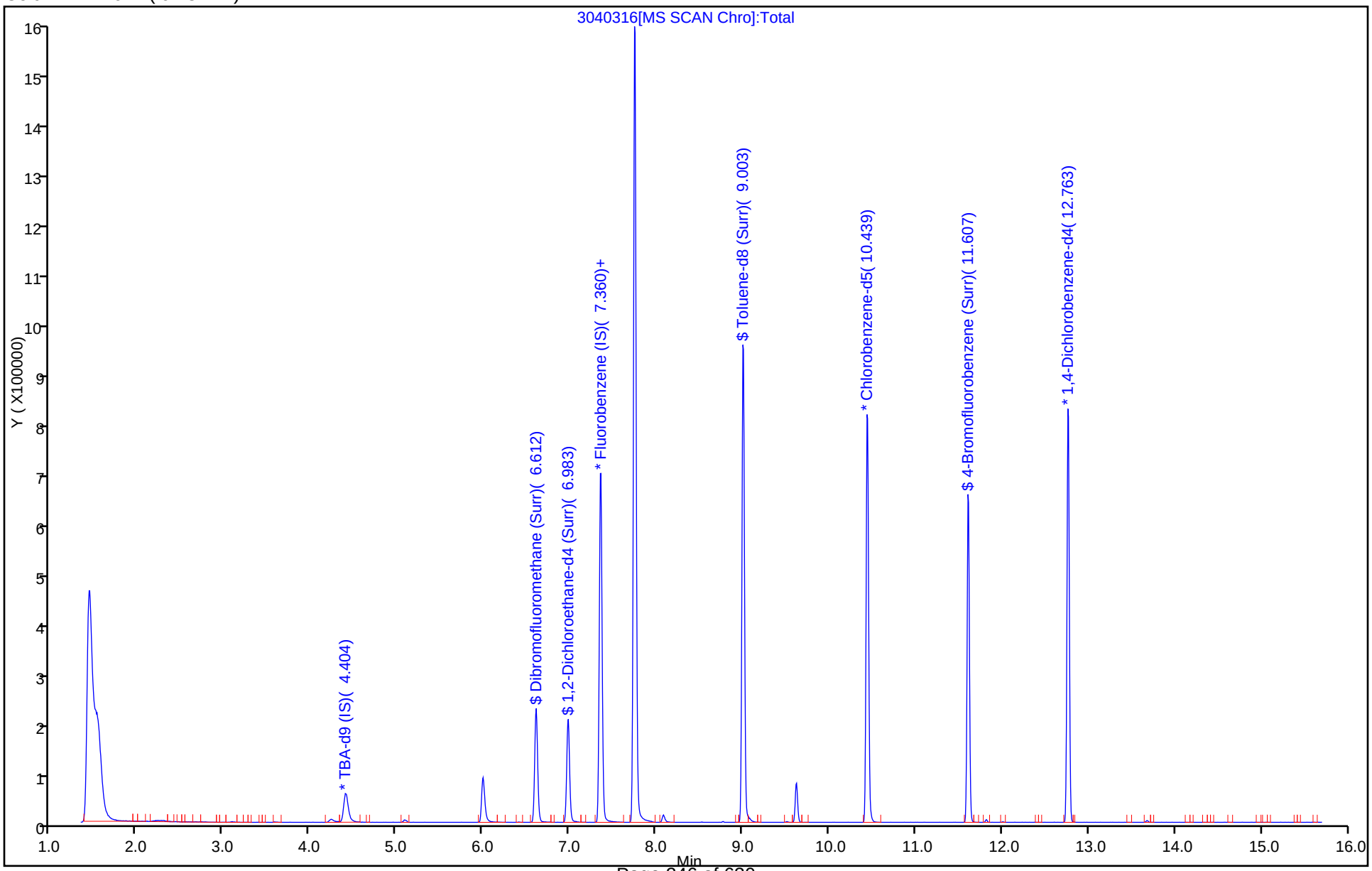
Report Date: 03-Apr-2017 12:53:00 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040316.D

Injection Date:	03-Apr-2017 12:34:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-7-A	Lab Sample ID:	180-64801-7	Worklist Smp#:	17
Client ID:	HD-SPBA-SB-009-61/61.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040316.D
Lims ID: 180-64801-B-7-A
Client ID: HD-SPBA-SB-009-61/61.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 12:34:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-017
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 12:53:00 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 12:53:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	250.9	100.36
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	225.7	90.28
$ 7 Toluene-d8 (Surr)	250.0	236.6	94.62
$ 8 4-Bromofluorobenzene (Surr)	250.0	201.7	80.69

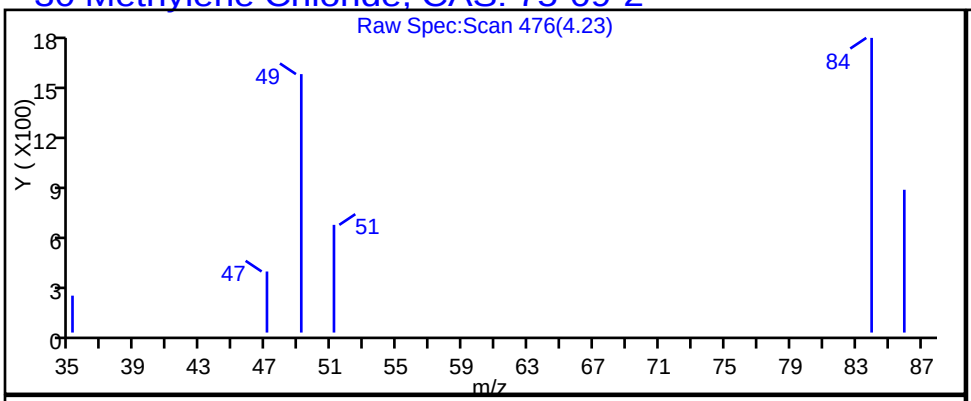
Report Date: 03-Apr-2017 12:53:00 Chrom Revision: 2.2 13-Mar-2017 15:50:30

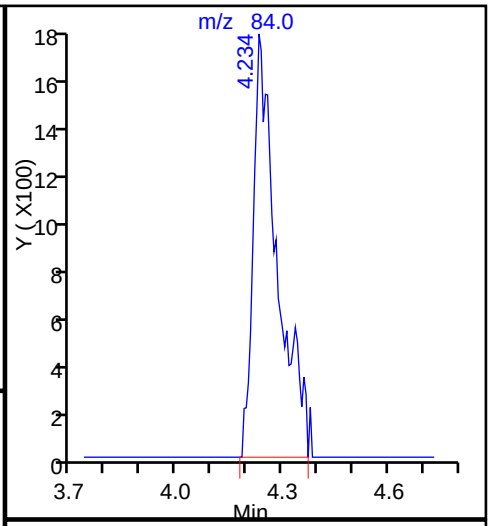
TestAmerica Pittsburgh

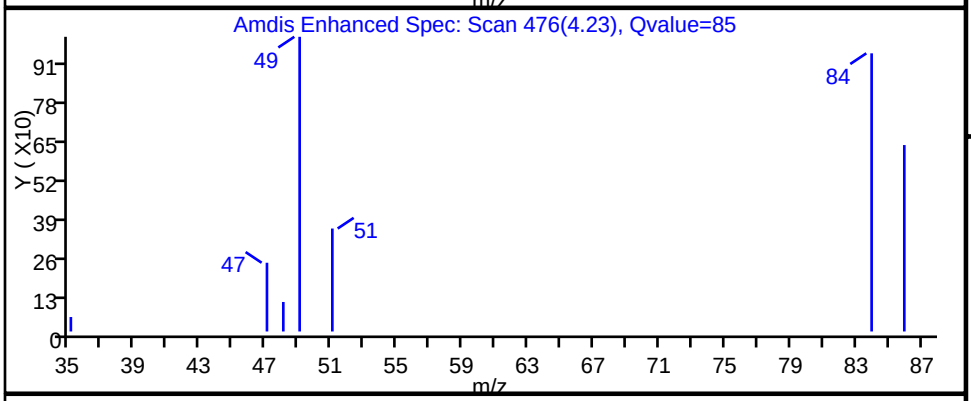
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040316.D

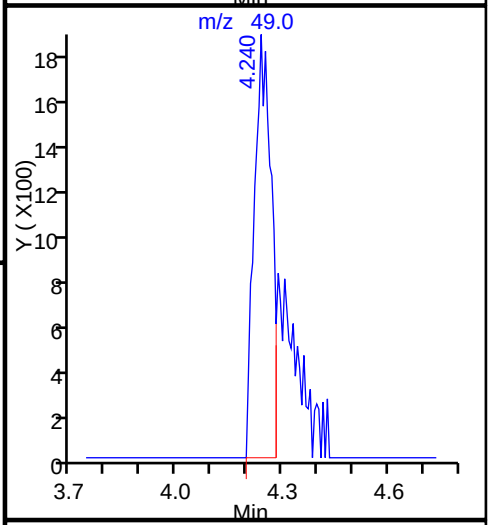
Injection Date:	03-Apr-2017 12:34:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-7-A	Lab Sample ID:	180-64801-7		
Client ID:	HD-SPBA-SB-009-61/61.5-0				
Operator ID:	10099	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

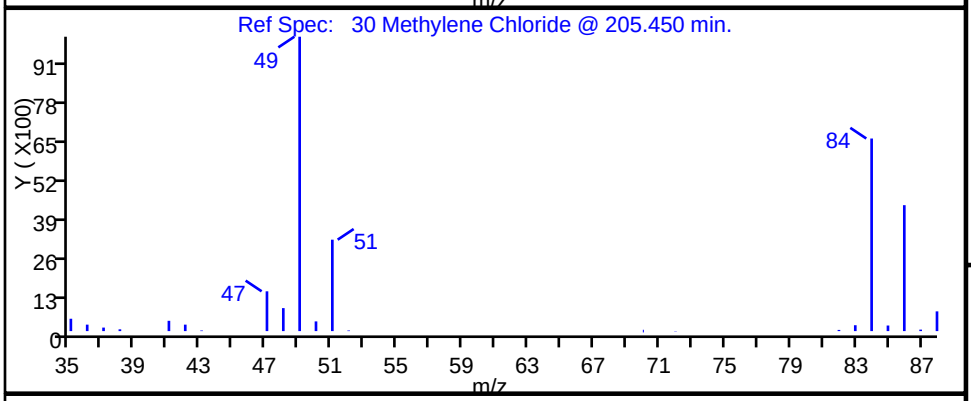
30 Methylene Chloride, CAS: 75-09-2

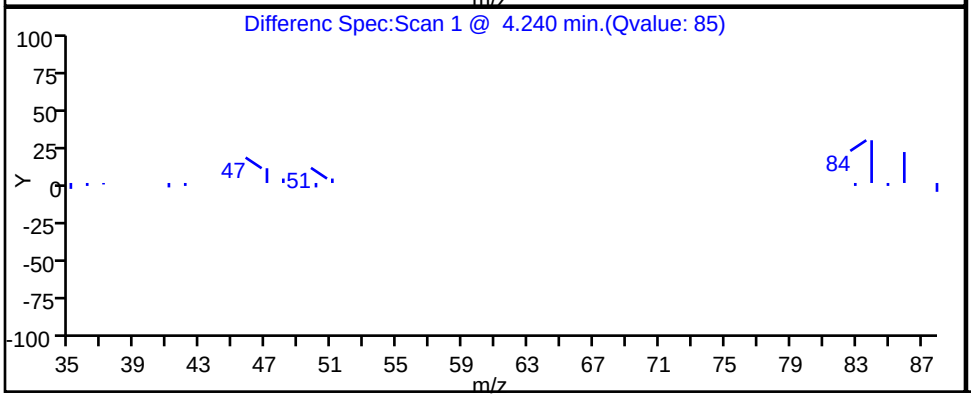


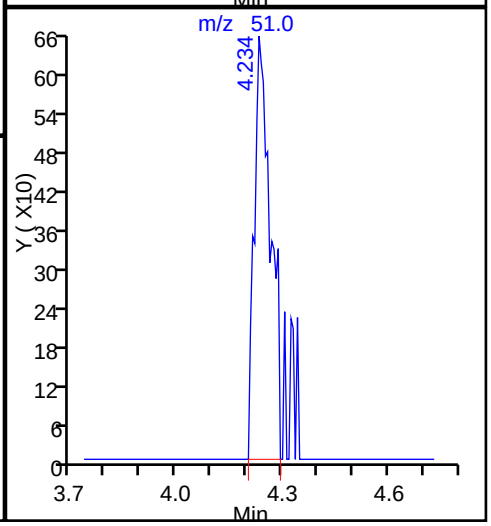












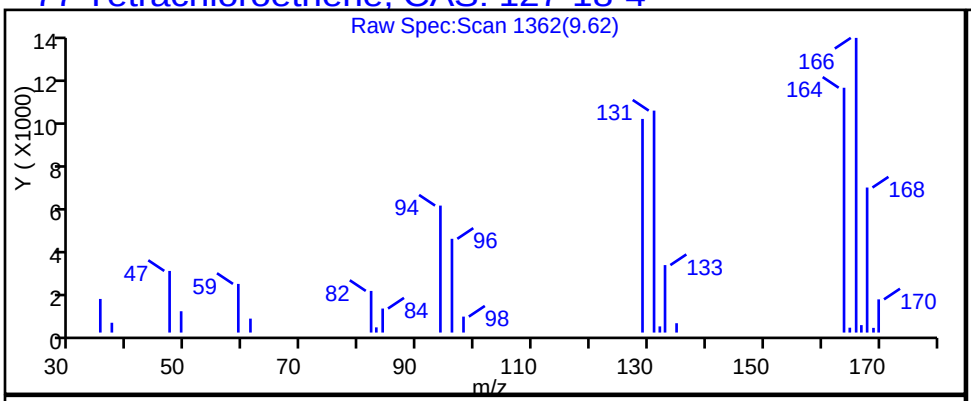
Report Date: 03-Apr-2017 12:53:01 Chrom Revision: 2.2 13-Mar-2017 15:50:30

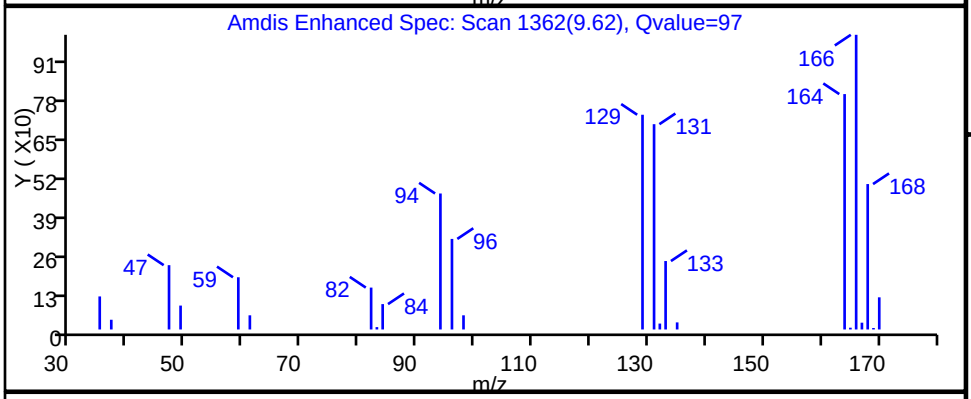
TestAmerica Pittsburgh

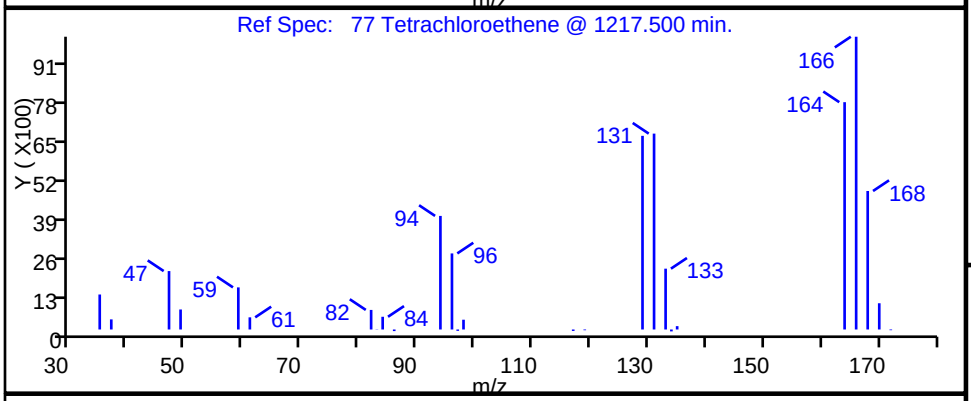
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040316.D

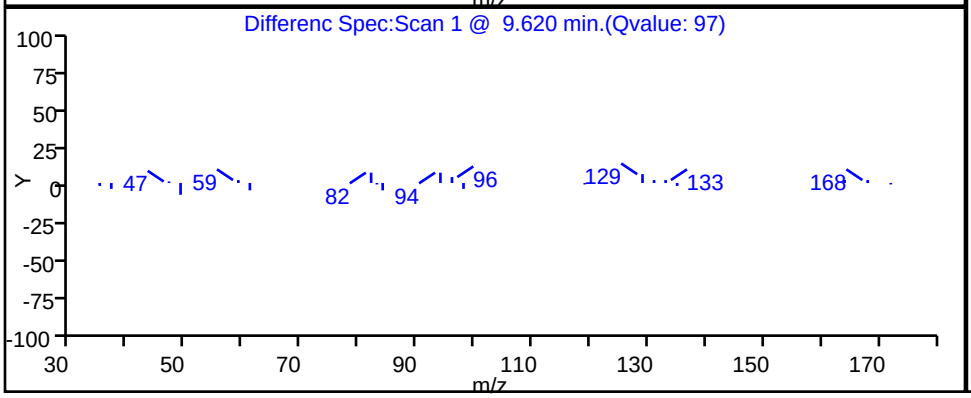
Injection Date:	03-Apr-2017 12:34:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-7-A	Lab Sample ID:	180-64801-7		
Client ID:	HD-SPBA-SB-009-61/61.5-0				
Operator ID:	10099	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

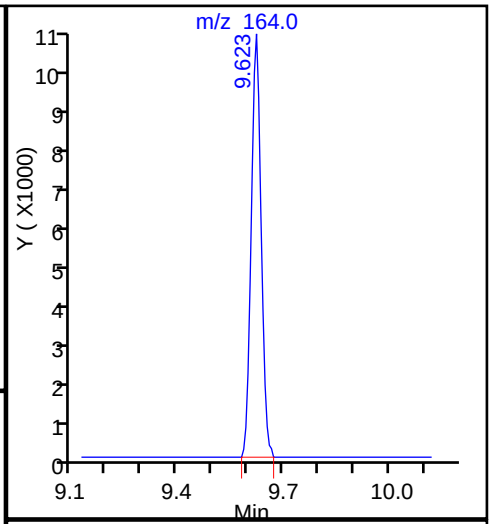
77 Tetrachloroethene, CAS: 127-18-4

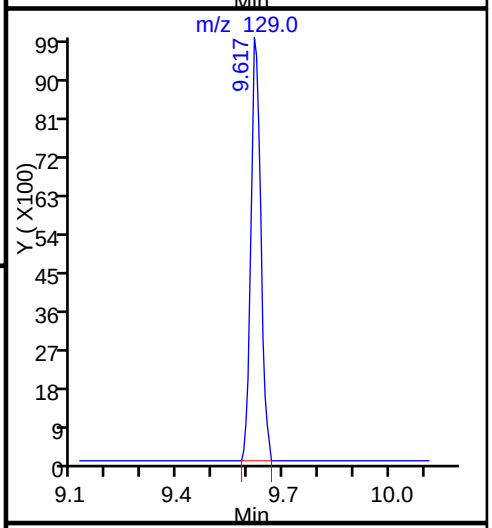


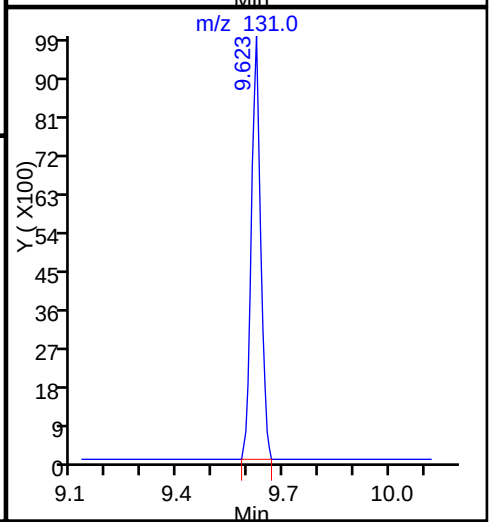












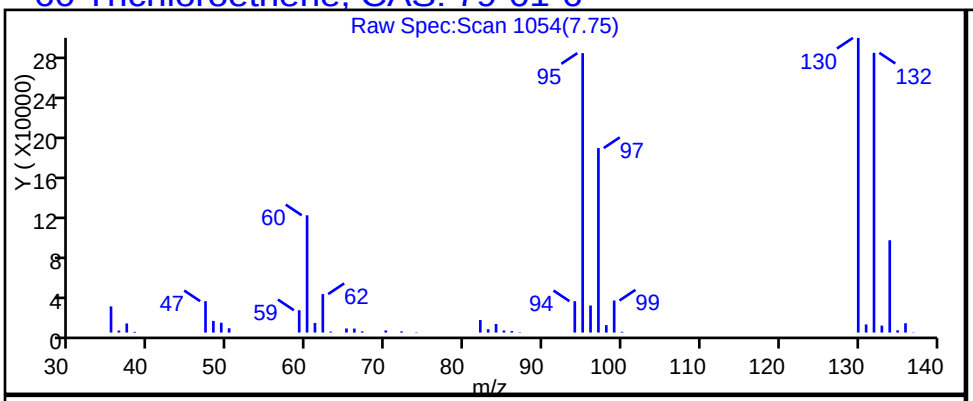
Report Date: 03-Apr-2017 12:53:01 Chrom Revision: 2.2 13-Mar-2017 15:50:30

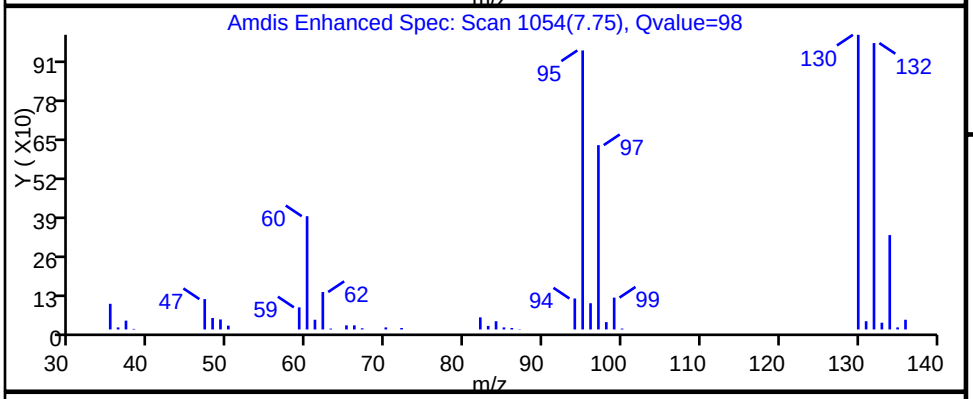
TestAmerica Pittsburgh

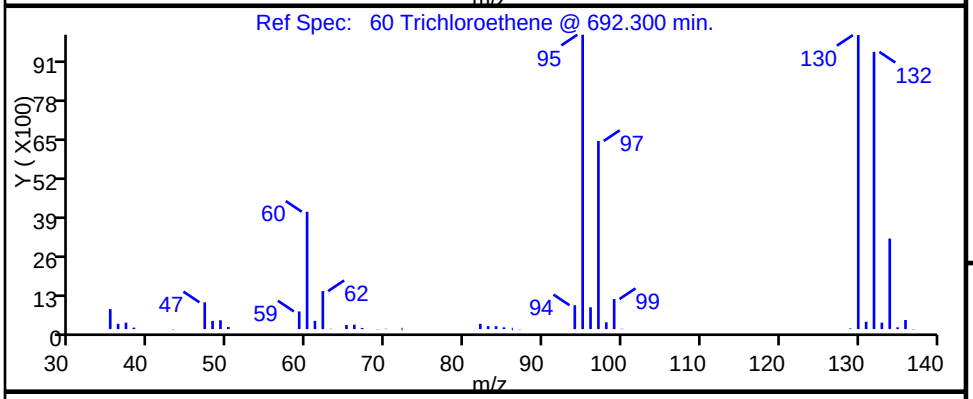
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040316.D

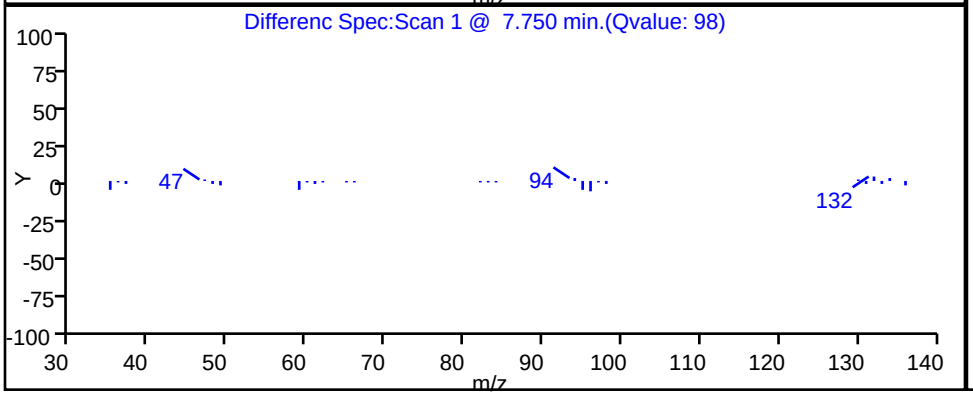
Injection Date:	03-Apr-2017 12:34:30	Instrument ID:	CHHP3
Lims ID:	180-64801-B-7-A	Lab Sample ID:	180-64801-7
Client ID:	HD-SPBA-SB-009-61/61.5-0		
Operator ID:	10099	ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

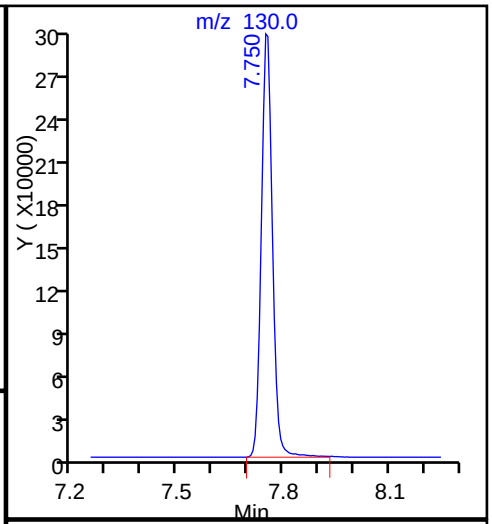
60 Trichloroethene, CAS: 79-01-6

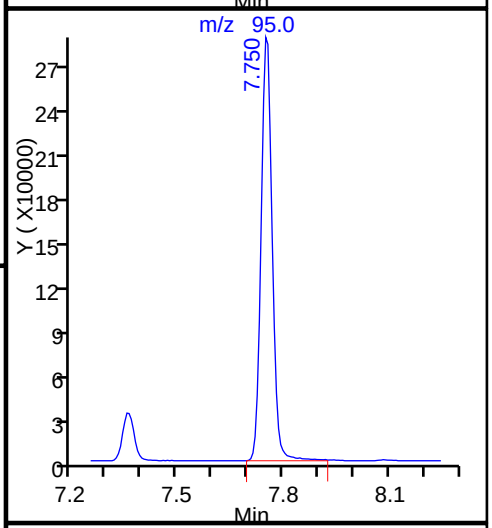


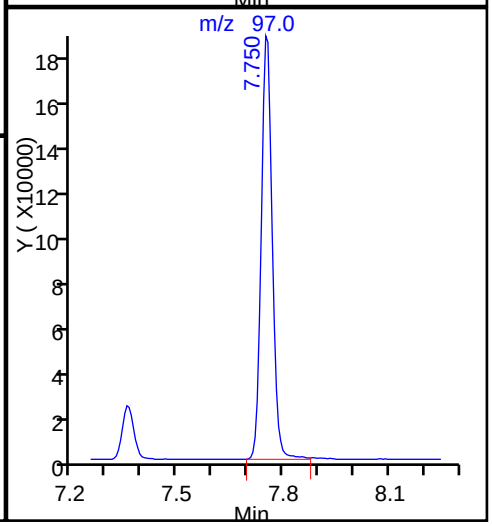












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

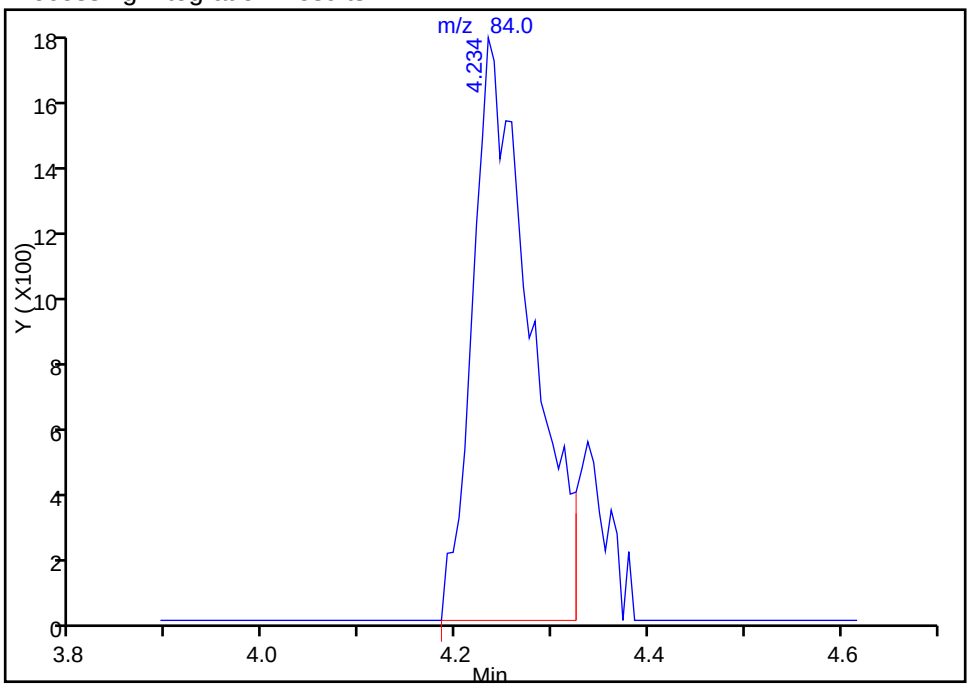
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040316.D				
Injection Date:	03-Apr-2017 12:34:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-7-A	Lab Sample ID:	180-64801-7		
Client ID:	HD-SPBA-SB-009-61/61.5-0				
Operator ID:	10099	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

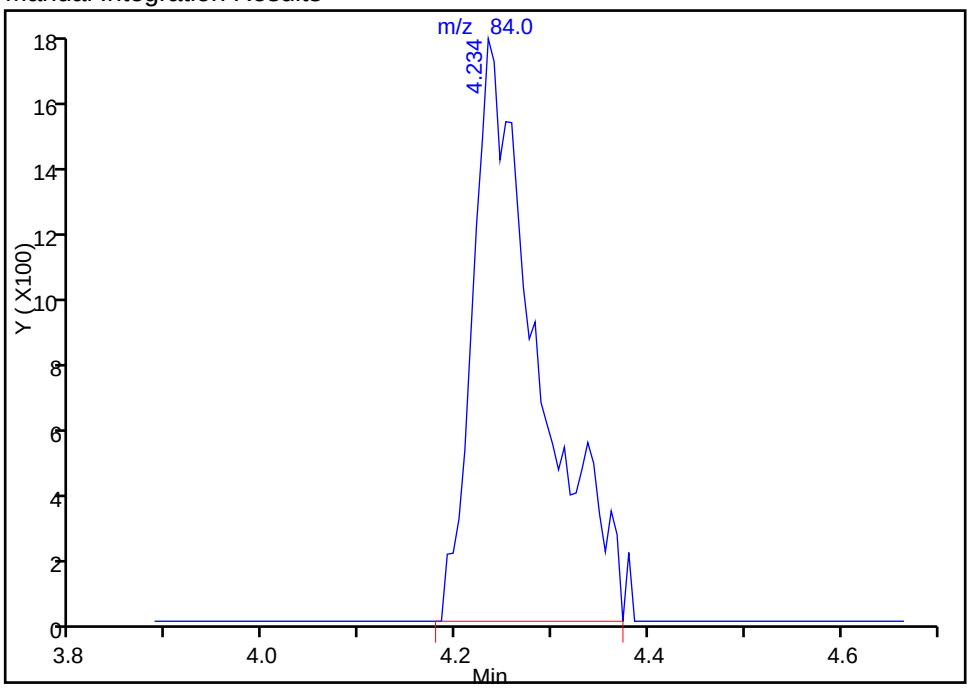
Processing Integration Results

RT: 4.23
Area: 7449
Amount: 7.188908
Amount Units: ng



Manual Integration Results

RT: 4.23
Area: 8411
Amount: 8.117318
Amount Units: ng



Reviewer: gordonk, 03-Apr-2017 12:52:25

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-65/68-0 | Lab Sample ID: 180-64801-8

Matrix: Solid | Lab File ID: 3040317.D

Analysis Method: 8260C | Date Collected: 03/30/2017 12:50

Sample wt/vol: 6.7871(g) | Date Analyzed: 04/03/2017 12:57

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 18.3 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.5	U	4.5	2.4
71-55-6	1,1,1-Trichloroethane	4.5	U	4.5	0.97
79-34-5	1,1,2,2-Tetrachloroethane	4.5	U	4.5	3.6
79-00-5	1,1,2-Trichloroethane	4.5	U	4.5	2.5
75-34-3	1,1-Dichloroethane	4.5	U	4.5	1.0
75-35-4	1,1-Dichloroethene	4.5	U	4.5	1.3
107-06-2	1,2-Dichloroethane	4.5	U	4.5	1.0
78-87-5	1,2-Dichloropropane	4.5	U	4.5	1.7
78-93-3	2-Butanone (MEK)	4.5	U	4.5	2.7
591-78-6	2-Hexanone	4.5	U	4.5	3.7
108-10-1	4-Methyl-2-pentanone (MIBK)	4.5	U	4.5	3.2
67-64-1	Acetone	18	U ^c	18	9.3
71-43-2	Benzene	4.5	U	4.5	2.7
75-25-2	Bromoform	4.5	U	4.5	4.1
74-83-9	Bromomethane	4.5	U ^c *	4.5	1.6
75-15-0	Carbon disulfide	4.5	U	4.5	1.9
56-23-5	Carbon tetrachloride	4.5	U ^c	4.5	1.2
108-90-7	Chlorobenzene	4.5	U	4.5	2.0
124-48-1	Dibromochloromethane	4.5	U	4.5	2.2
123-91-1	1,4-Dioxane	900	U	900	23
67-66-3	Chloroform	4.5	U	4.5	1.1
74-87-3	Chloromethane	4.5	U ^c	4.5	2.4
75-00-3	Chloroethane	4.5	U	4.5	1.9
156-59-2	cis-1,2-Dichloroethene	4.5	U	4.5	1.2
10061-01-5	cis-1,3-Dichloropropene	4.5	U	4.5	2.0
75-27-4	Bromodichloromethane	4.5	U	4.5	1.8
100-41-4	Ethylbenzene	4.5	U	4.5	1.8
106-93-4	1,2-Dibromoethane (EDB)	4.5	U	4.5	1.9
1634-04-4	Methyl tert-butyl ether	4.5	U	4.5	2.3
75-09-2	Methylene Chloride	1.9	J B	4.5	0.50
100-42-5	Styrene	4.5	U	4.5	2.1
127-18-4	Tetrachloroethene	4.5	U	4.5	1.1
108-88-3	Toluene	4.5	U	4.5	3.3
156-60-5	trans-1,2-Dichloroethene	4.5	U	4.5	0.92
10061-02-6	trans-1,3-Dichloropropene	4.5	U	4.5	2.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-65/68-0 | Lab Sample ID: 180-64801-8

Matrix: Solid | Lab File ID: 3040317.D

Analysis Method: 8260C | Date Collected: 03/30/2017 12:50

Sample wt/vol: 6.7871(g) | Date Analyzed: 04/03/2017 12:57

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 18.3 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	4.5	U	4.5	1.0
107-13-1	Acrylonitrile	45	U ^c	45	22
75-01-4	Vinyl chloride	4.5	U	4.5	2.3
1330-20-7	Xylenes, Total	9.0	U	9.0	4.1
74-97-5	Bromochloromethane	4.5	U	4.5	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		52-124
460-00-4	4-Bromofluorobenzene (Surr)	82		63-120
1868-53-7	Dibromofluoromethane (Surr)	98		68-121
2037-26-5	Toluene-d8 (Surr)	96		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040317.D
Lims ID: 180-64801-B-8-A
Client ID: HD-SPBA-SB-009-65/68-0
Sample Type: Client
Inject. Date: 03-Apr-2017 12:57:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-018
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 13:15:11 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 13:15:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.412	4.464	-0.052	98	99589	5000.0	
* 2 Fluorobenzene (IS)	96	7.356	7.348	0.008	99	820812	250.0	
* 3 Chlorobenzene-d5	119	10.441	10.438	0.003	85	193458	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.764	12.762	0.002	96	274777	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.608	6.600	0.008	93	173234	245.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.979	6.971	0.008	95	178953	220.5	
$ 7 Toluene-d8 (Surr)	98	9.005	9.003	0.002	92	806920	240.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.609	11.606	0.003	87	279235	205.4	
11 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.958				ND	
14 Bromomethane	94		2.299				ND	
15 Chloroethane	64		2.420				ND	
21 1,1-Dichloroethene	96		3.424				ND	
23 Acetone	43		3.594				ND	
25 Carbon disulfide	76		3.716				ND	
30 Methylene Chloride	84	4.235	4.221	0.014	86	11427	10.7	M
32 Acrylonitrile	53		4.635				ND	
33 trans-1,2-Dichloroethene	96		4.641				ND	
34 Methyl tert-butyl ether	73		4.695				ND	
36 1,1-Dichloroethane	63		5.249				ND	
42 cis-1,2-Dichloroethene	96		6.009				ND	
43 2-Butanone (MEK)	43		6.070				ND	
47 Chlorobromomethane	128		6.295				ND	
49 Chloroform	83		6.417				ND	
50 1,1,1-Trichloroethane	97		6.612				ND	
53 Carbon tetrachloride	117		6.800				ND	
55 Benzene	78		7.031				ND	
56 1,2-Dichloroethane	62		7.056				ND	
60 Trichloroethene	130	7.758	7.743	0.015	93	2188	2.50	
64 1,2-Dichloropropane	63		7.981				ND	
67 1,4-Dioxane	88		8.133				ND	
68 Dichlorobromomethane	83		8.273				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.729				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893				ND	
73 Toluene	91		9.069				ND	
74 trans-1,3-Dichloropropene	75		9.288				ND	
76 1,1,2-Trichloroethane	97		9.471				ND	
77 Tetrachloroethene	164		9.617				ND	
79 2-Hexanone	43		9.726				ND	
81 Chlorodibromomethane	129		9.866				ND	
82 Ethylene Dibromide	107		9.976				ND	
83 Chlorobenzene	112		10.469				ND	
85 1,1,1,2-Tetrachloroethane	131		10.548				ND	
86 Ethylbenzene	106		10.578				ND	
87 m-Xylene & p-Xylene	106		10.694				ND	
88 o-Xylene	106		11.089				ND	
89 Styrene	104		11.101				ND	
90 Bromoform	173		11.284				ND	
93 1,1,2,2-Tetrachloroethane	83		11.746				ND	
S 129 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

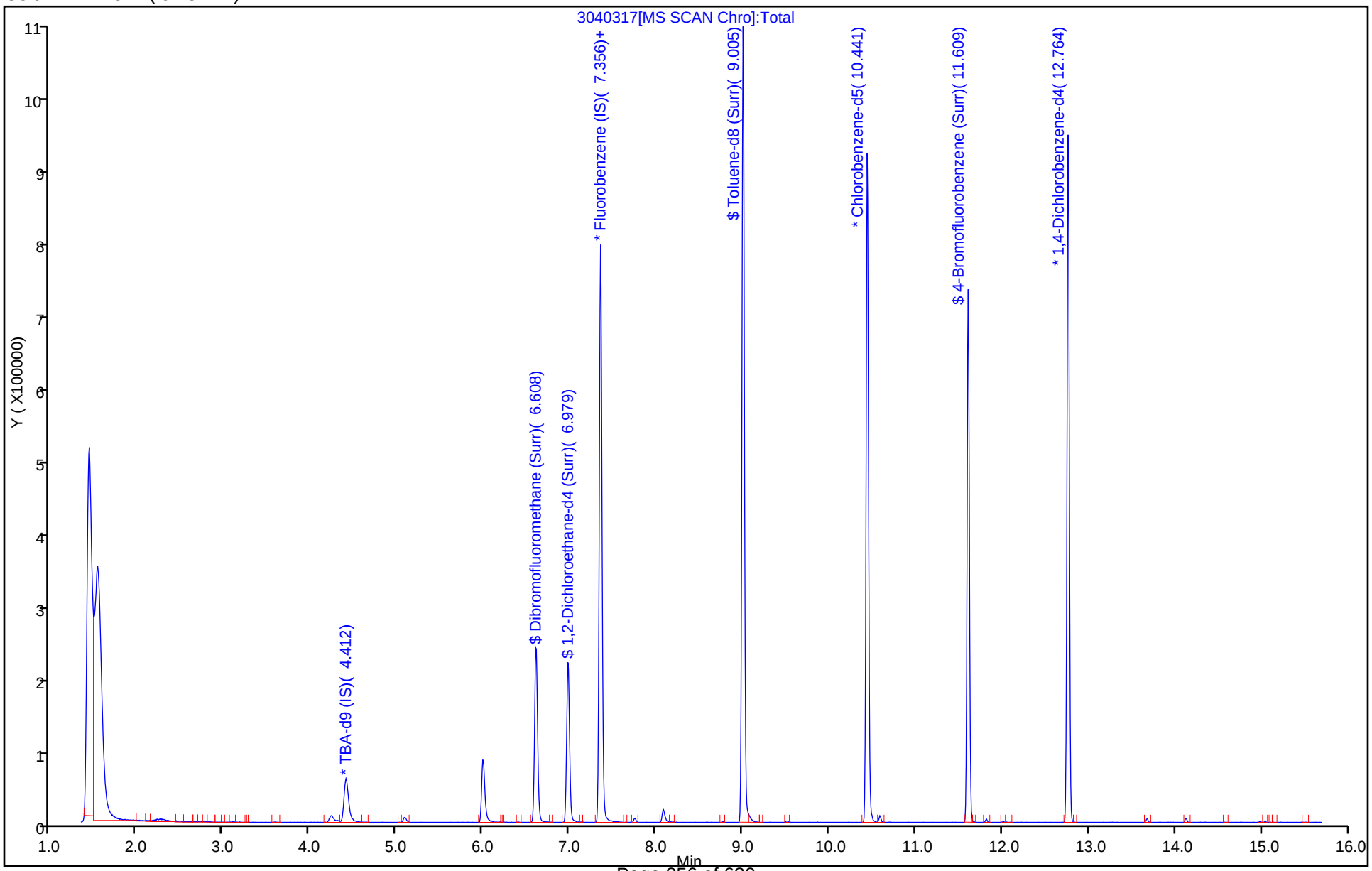
Report Date: 03-Apr-2017 13:15:12 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040317.D

Injection Date:	03-Apr-2017 12:57:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-8-A	Lab Sample ID:	180-64801-8	Worklist Smp#:	18
Client ID:	HD-SPBA-SB-009-65/68-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040317.D				
Lims ID:	180-64801-B-8-A				
Client ID:	HD-SPBA-SB-009-65/68-0				
Sample Type:	Client				
Inject. Date:	03-Apr-2017 12:57:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	180-0016128-018				
Operator ID:	10099	Instrument ID:	CHHP3		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	03-Apr-2017 13:15:11	Calib Date:	28-Sep-2016 14:19:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK011				

First Level Reviewer: gordonk Date: 03-Apr-2017 13:15:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	245.7	98.30
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	220.5	88.21
$ 7 Toluene-d8 (Surr)	250.0	240.9	96.36
$ 8 4-Bromofluorobenzene (Surr)	250.0	205.4	82.16

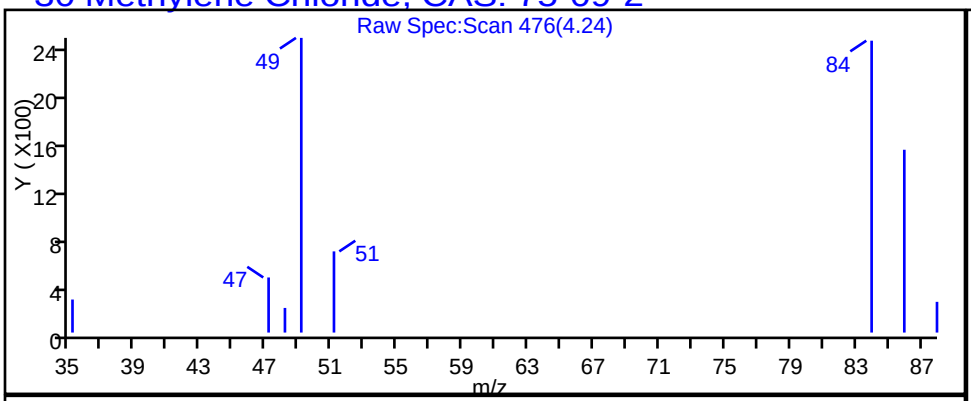
Report Date: 03-Apr-2017 13:15:12 Chrom Revision: 2.2 13-Mar-2017 15:50:30

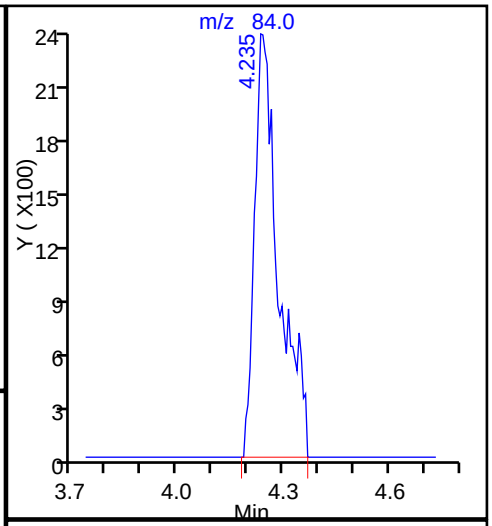
TestAmerica Pittsburgh

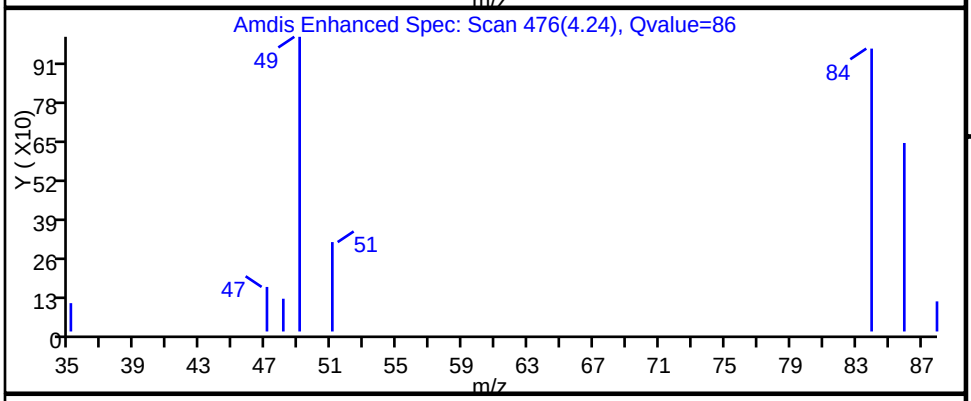
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040317.D

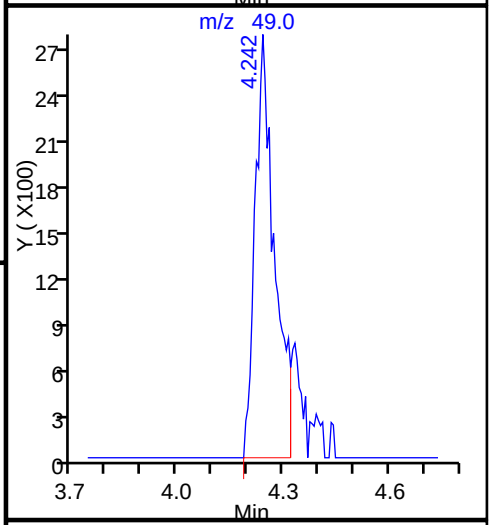
Injection Date:	03-Apr-2017 12:57:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-8-A	Lab Sample ID:	180-64801-8		
Client ID:	HD-SPBA-SB-009-65/68-0				
Operator ID:	10099	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

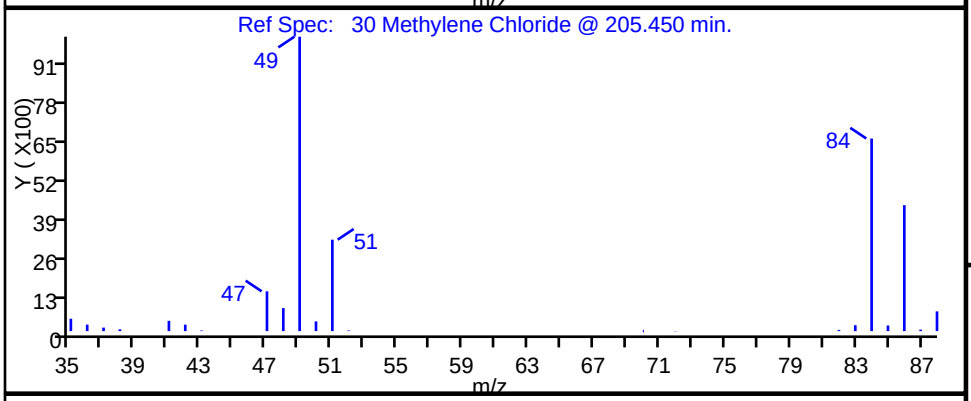
30 Methylene Chloride, CAS: 75-09-2

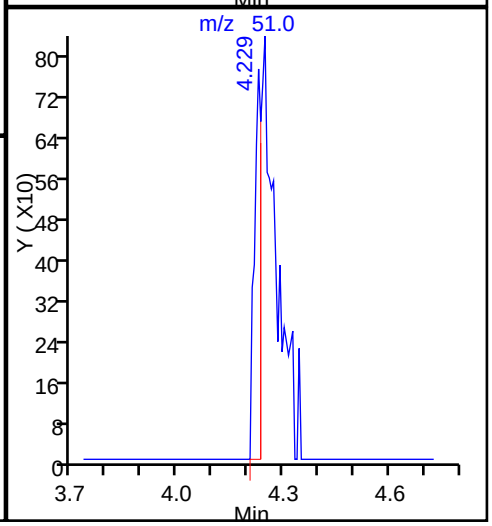


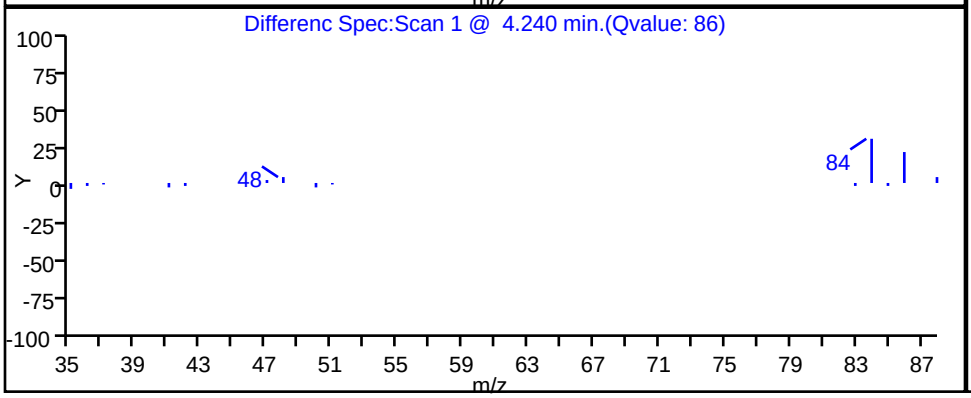












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

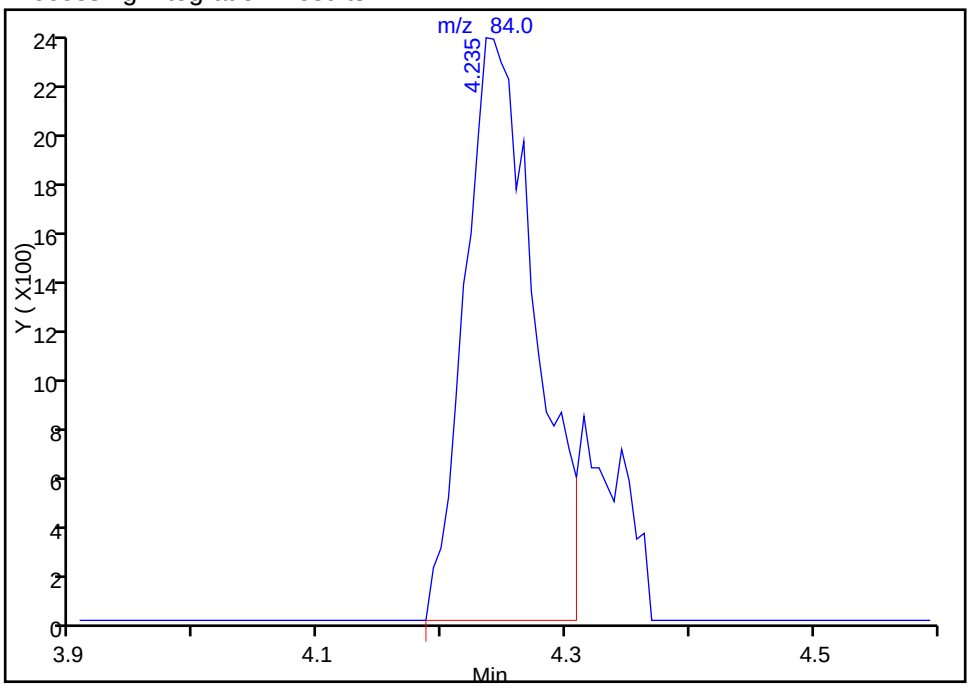
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040317.D				
Injection Date:	03-Apr-2017 12:57:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-8-A	Lab Sample ID:	180-64801-8		
Client ID:	HD-SPBA-SB-009-65/68-0				
Operator ID:	10099	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

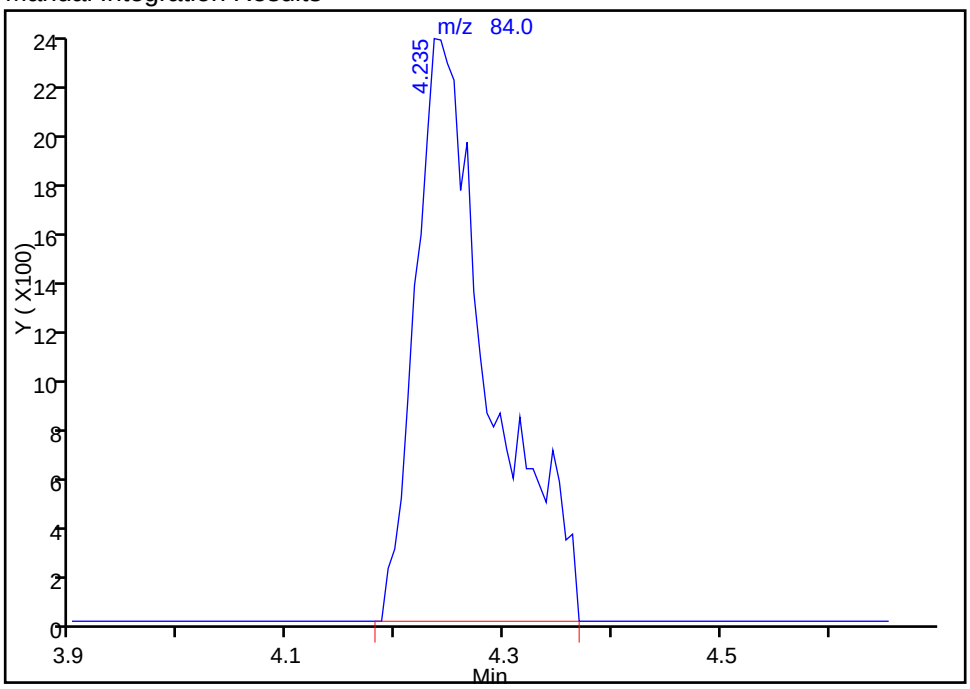
Processing Integration Results

RT: 4.24
Area: 9563
Amount: 8.960591
Amount Units: ng



Manual Integration Results

RT: 4.24
Area: 11427
Amount: 10.707171
Amount Units: ng



Reviewer: gordonk, 03-Apr-2017 13:14:44

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-0.5/1.0-0 | Lab Sample ID: 180-64801-12

Matrix: Solid | Lab File ID: 3040318.D

Analysis Method: 8260C | Date Collected: 03/30/2017 14:00

Sample wt/vol: 5.4417(g) | Date Analyzed: 04/03/2017 13:20

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 12.4 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.2	U	5.2	2.8
71-55-6	1,1,1-Trichloroethane	5.2	U	5.2	1.1
79-34-5	1,1,2,2-Tetrachloroethane	5.2	U	5.2	4.2
79-00-5	1,1,2-Trichloroethane	5.2	U	5.2	2.9
75-34-3	1,1-Dichloroethane	5.2	U	5.2	1.2
75-35-4	1,1-Dichloroethene	5.2	U	5.2	1.5
107-06-2	1,2-Dichloroethane	5.2	U	5.2	1.2
78-87-5	1,2-Dichloropropane	5.2	U	5.2	2.0
78-93-3	2-Butanone (MEK)	5.2	U	5.2	3.1
591-78-6	2-Hexanone	5.2	U	5.2	4.3
108-10-1	4-Methyl-2-pentanone (MIBK)	5.2	U	5.2	3.7
67-64-1	Acetone	21	U ^c	21	11
71-43-2	Benzene	5.2	U	5.2	3.2
75-25-2	Bromoform	5.2	U	5.2	4.8
74-83-9	Bromomethane	5.2	U ^c *	5.2	1.8
75-15-0	Carbon disulfide	5.2	U	5.2	2.2
56-23-5	Carbon tetrachloride	5.2	U ^c	5.2	1.4
108-90-7	Chlorobenzene	5.2	U	5.2	2.3
124-48-1	Dibromochloromethane	5.2	U	5.2	2.6
123-91-1	1,4-Dioxane	1000	U	1000	26
67-66-3	Chloroform	5.2	U	5.2	1.3
74-87-3	Chloromethane	5.2	U ^c	5.2	2.8
75-00-3	Chloroethane	5.2	U	5.2	2.2
156-59-2	cis-1,2-Dichloroethene	5.2	U	5.2	1.4
10061-01-5	cis-1,3-Dichloropropene	5.2	U	5.2	2.3
75-27-4	Bromodichloromethane	5.2	U	5.2	2.1
100-41-4	Ethylbenzene	5.2	U	5.2	2.1
106-93-4	1,2-Dibromoethane (EDB)	5.2	U	5.2	2.2
1634-04-4	Methyl tert-butyl ether	5.2	U	5.2	2.6
75-09-2	Methylene Chloride	1.4	J B	5.2	0.59
100-42-5	Styrene	5.2	U	5.2	2.5
127-18-4	Tetrachloroethene	5.2	U	5.2	1.3
108-88-3	Toluene	5.2	U	5.2	3.8
156-60-5	trans-1,2-Dichloroethene	5.2	U	5.2	1.1
10061-02-6	trans-1,3-Dichloropropene	5.2	U	5.2	2.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-0.5/1.0-0 | Lab Sample ID: 180-64801-12

Matrix: Solid | Lab File ID: 3040318.D

Analysis Method: 8260C | Date Collected: 03/30/2017 14:00

Sample wt/vol: 5.4417(g) | Date Analyzed: 04/03/2017 13:20

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 12.4 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	5.2	U	5.2	1.2
107-13-1	Acrylonitrile	52	U ^c	52	26
75-01-4	Vinyl chloride	5.2	U	5.2	2.7
1330-20-7	Xylenes, Total	10	U	10	4.8
74-97-5	Bromochloromethane	5.2	U	5.2	1.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		52-124
460-00-4	4-Bromofluorobenzene (Surr)	83		63-120
1868-53-7	Dibromofluoromethane (Surr)	104		68-121
2037-26-5	Toluene-d8 (Surr)	95		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040318.D
Lims ID: 180-64801-C-12-A
Client ID: HD-SPBA-SB-010-0.5/1.0-0
Sample Type: Client
Inject. Date: 03-Apr-2017 13:20:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-019
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:29:01 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:29:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.415	4.464	-0.049	98	112559	5000.0	
* 2 Fluorobenzene (IS)	96	7.354	7.348	0.006	99	727939	250.0	
* 3 Chlorobenzene-d5	119	10.444	10.438	0.006	85	178037	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.762	0.006	96	248350	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.611	6.600	0.011	93	162112	259.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.982	6.971	0.011	95	175374	243.7	
$ 7 Toluene-d8 (Surr)	98	9.008	9.003	0.005	92	733594	238.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.606	11.606	0.000	87	260689	208.4	
11 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.958				ND	
14 Bromomethane	94		2.299				ND	
15 Chloroethane	64		2.420				ND	
21 1,1-Dichloroethene	96		3.424				ND	
23 Acetone	43		3.594				ND	
25 Carbon disulfide	76		3.716				ND	
30 Methylene Chloride	84	4.239	4.221	0.018	85	6316	6.67	M
32 Acrylonitrile	53		4.635				ND	
33 trans-1,2-Dichloroethene	96		4.641				ND	
34 Methyl tert-butyl ether	73		4.695				ND	
36 1,1-Dichloroethane	63		5.249				ND	
42 cis-1,2-Dichloroethene	96		6.009				ND	
43 2-Butanone (MEK)	43		6.070				ND	
47 Chlorobromomethane	128		6.295				ND	
49 Chloroform	83		6.417				ND	
50 1,1,1-Trichloroethane	97		6.612				ND	
53 Carbon tetrachloride	117		6.800				ND	
55 Benzene	78		7.031				ND	
56 1,2-Dichloroethane	62		7.056				ND	
60 Trichloroethene	130		7.743				ND	
64 1,2-Dichloropropane	63		7.981				ND	
67 1,4-Dioxane	88		8.133				ND	
68 Dichlorobromomethane	83		8.273				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.729				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893				ND	
73 Toluene	91		9.069				ND	
74 trans-1,3-Dichloropropene	75		9.288				ND	
76 1,1,2-Trichloroethane	97		9.471				ND	
77 Tetrachloroethene	164	9.617	9.617	0.000	79	750	1.11	
79 2-Hexanone	43		9.726				ND	
81 Chlorodibromomethane	129		9.866				ND	
82 Ethylene Dibromide	107		9.976				ND	
83 Chlorobenzene	112		10.469				ND	
85 1,1,1,2-Tetrachloroethane	131		10.548				ND	
86 Ethylbenzene	106		10.578				ND	
87 m-Xylene & p-Xylene	106		10.694				ND	
88 o-Xylene	106		11.089				ND	
89 Styrene	104		11.101				ND	
90 Bromoform	173		11.284				ND	
93 1,1,2,2-Tetrachloroethane	83		11.746				ND	
S 129 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

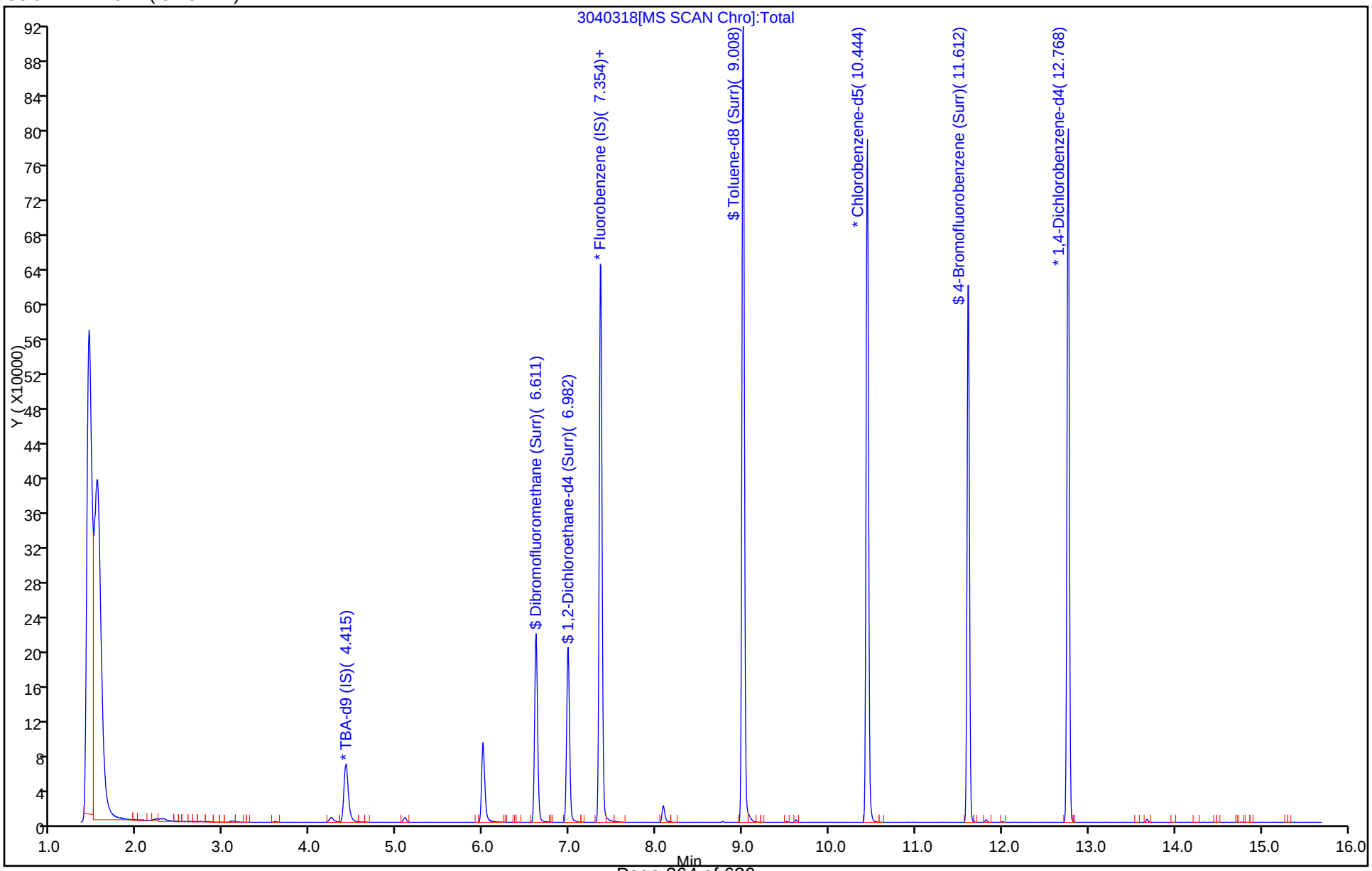
Report Date: 04-Apr-2017 05:29:02 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040318.D

Injection Date:	03-Apr-2017 13:20:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-C-12-A	Lab Sample ID:	180-64801-12	Worklist Smp#:	19
Client ID:	HD-SPBA-SB-010-0.5/1.0-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040318.D
Lims ID: 180-64801-C-12-A
Client ID: HD-SPBA-SB-010-0.5/1.0-0
Sample Type: Client
Inject. Date: 03-Apr-2017 13:20:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-019
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:29:01 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:29:01

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	259.3	103.72
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	243.7	97.48
$ 7 Toluene-d8 (Surr)	250.0	238.0	95.19
$ 8 4-Bromofluorobenzene (Surr)	250.0	208.4	83.35

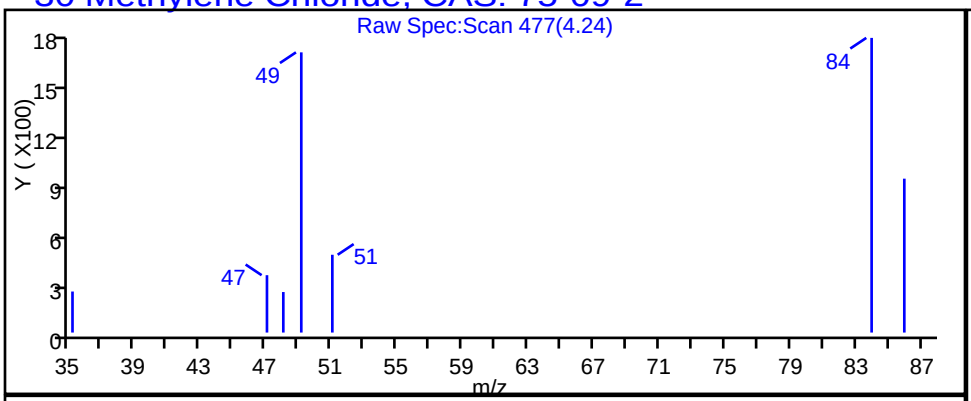
Report Date: 04-Apr-2017 05:29:02 Chrom Revision: 2.2 13-Mar-2017 15:50:30

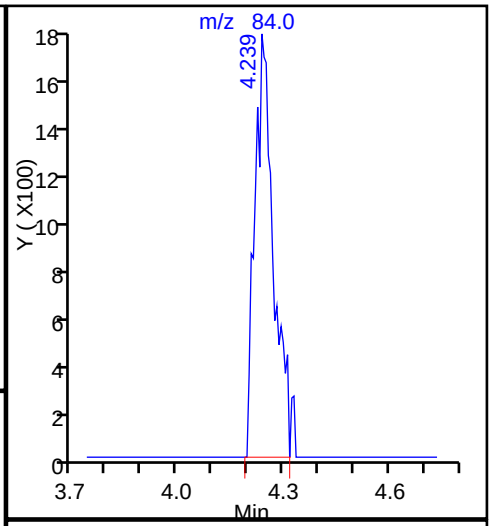
TestAmerica Pittsburgh

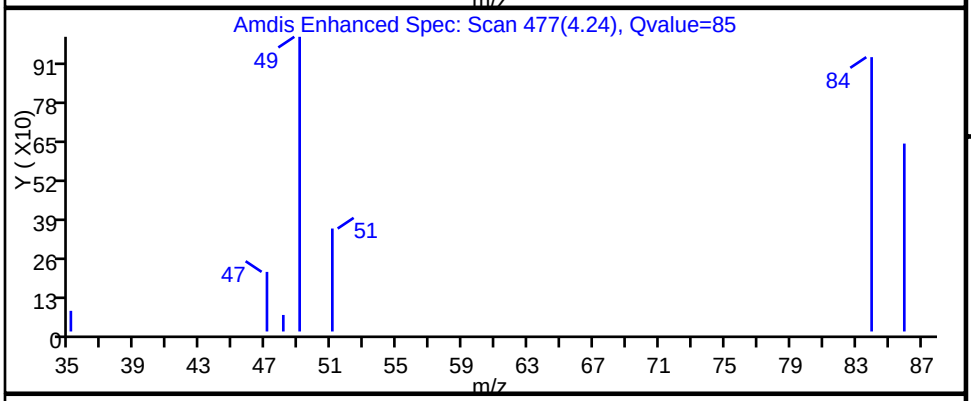
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040318.D

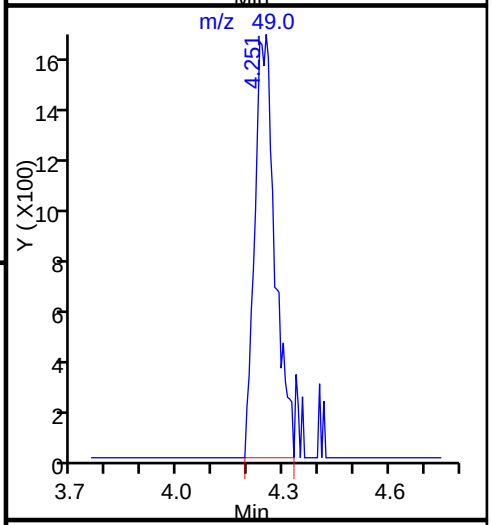
Injection Date:	03-Apr-2017 13:20:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-C-12-A	Lab Sample ID:	180-64801-12		
Client ID:	HD-SPBA-SB-010-0.5/1.0-0				
Operator ID:	10099	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

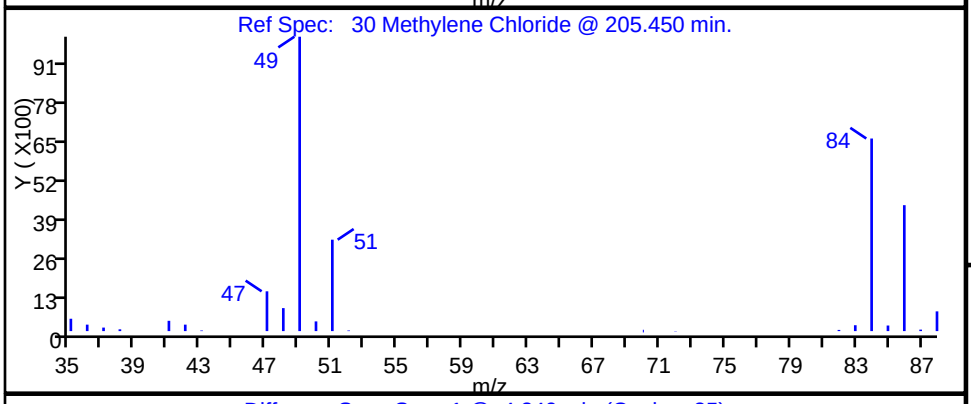
30 Methylene Chloride, CAS: 75-09-2

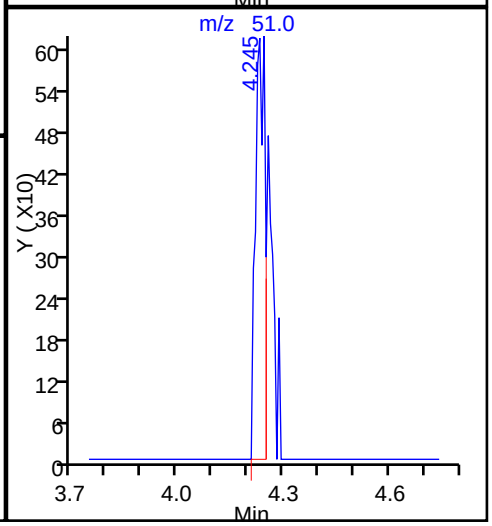


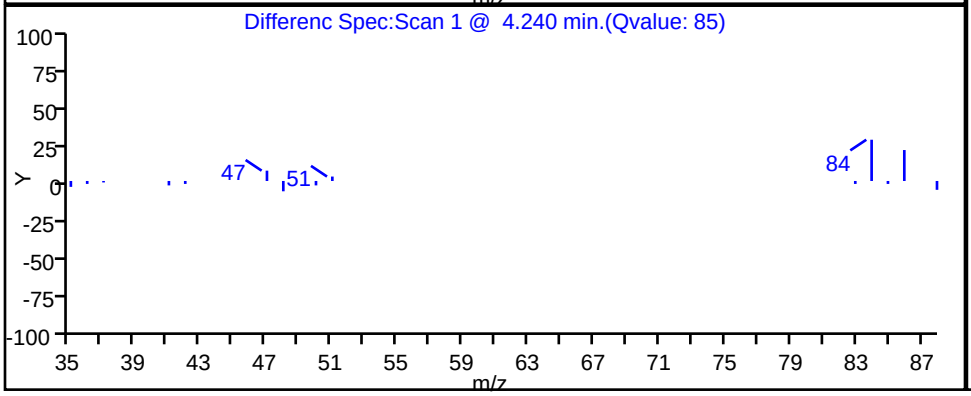












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

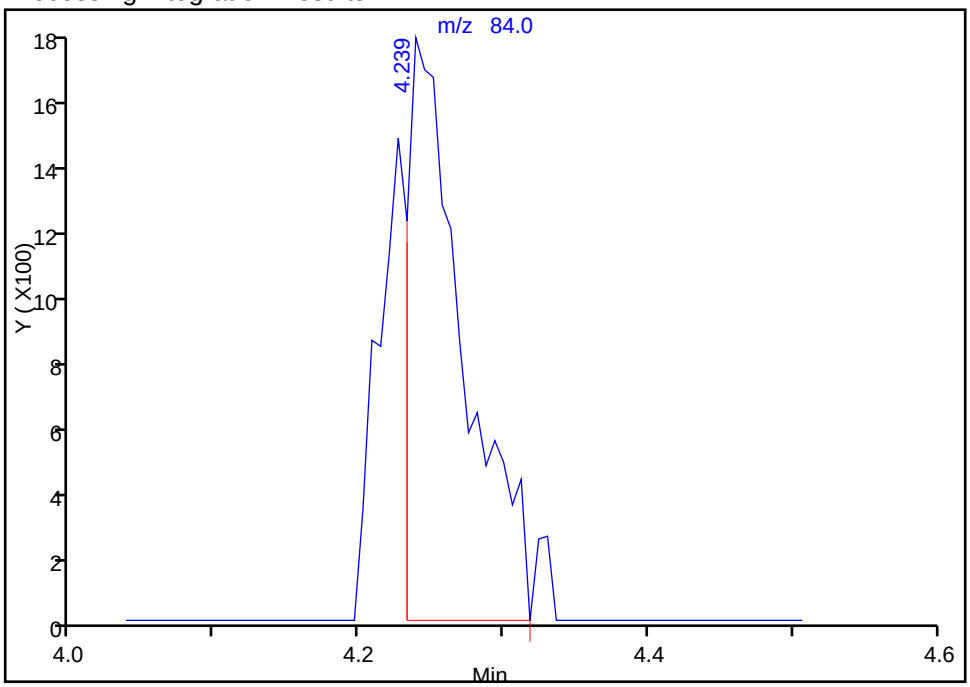
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040318.D				
Injection Date:	03-Apr-2017 13:20:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-C-12-A	Lab Sample ID:	180-64801-12		
Client ID:	HD-SPBA-SB-010-0.5/1.0-0				
Operator ID:	10099	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

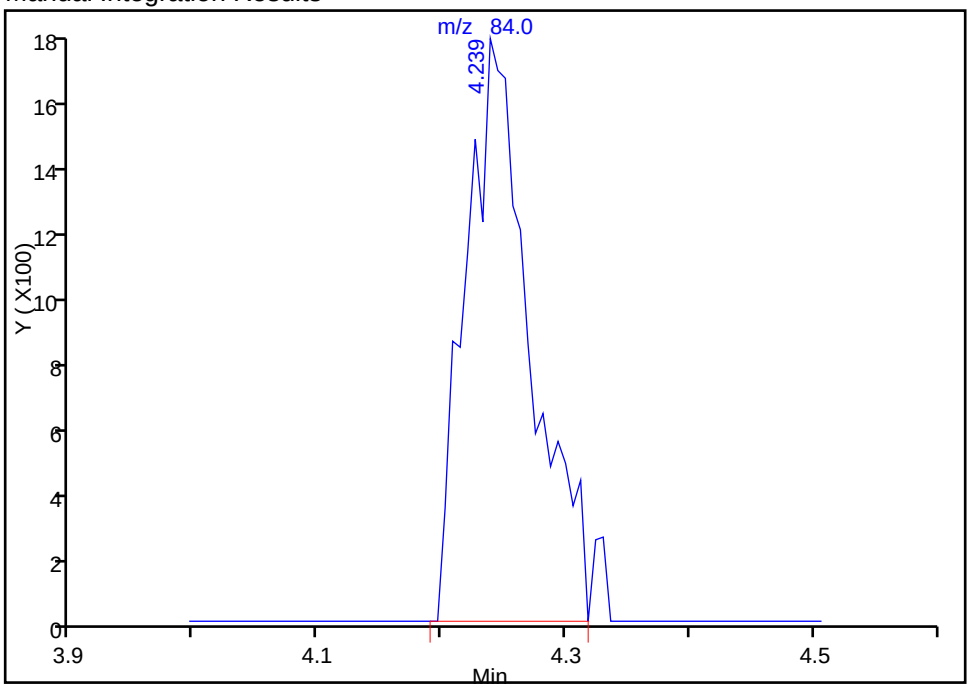
Processing Integration Results

RT: 4.24
Area: 4668
Amount: 4.931989
Amount Units: ng



Manual Integration Results

RT: 4.24
Area: 6316
Amount: 6.673188
Amount Units: ng



Reviewer: gordonk, 04-Apr-2017 05:28:32

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-5/5.5-0 | Lab Sample ID: 180-64801-13

Matrix: Solid | Lab File ID: 30404K12.D

Analysis Method: 8260C | Date Collected: 03/30/2017 14:20

Sample wt/vol: 5.7612(g) | Date Analyzed: 04/04/2017 11:33

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 15.5 | Level: (low/med) Low

Analysis Batch No.: 207218 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.1	U	5.1	2.8
71-55-6	1,1,1-Trichloroethane	5.1	U	5.1	1.1
79-34-5	1,1,2,2-Tetrachloroethane	5.1	U	5.1	4.1
79-00-5	1,1,2-Trichloroethane	5.1	U	5.1	2.9
75-34-3	1,1-Dichloroethane	5.1	U	5.1	1.2
75-35-4	1,1-Dichloroethene	5.1	U	5.1	1.5
107-06-2	1,2-Dichloroethane	5.1	U	5.1	1.2
78-87-5	1,2-Dichloropropane	5.1	U	5.1	1.9
78-93-3	2-Butanone (MEK)	5.1	U	5.1	3.1
591-78-6	2-Hexanone	5.1	U	5.1	4.2
108-10-1	4-Methyl-2-pentanone (MIBK)	5.1	U	5.1	3.7
67-64-1	Acetone	21	U	21	11
71-43-2	Benzene	5.1	U	5.1	3.1
75-25-2	Bromoform	5.1	U ^c	5.1	4.7
74-83-9	Bromomethane	5.1	U ^c *	5.1	1.8
75-15-0	Carbon disulfide	5.1	U ^c	5.1	2.2
56-23-5	Carbon tetrachloride	5.1	U	5.1	1.4
108-90-7	Chlorobenzene	5.1	U	5.1	2.3
124-48-1	Dibromochloromethane	5.1	U	5.1	2.5
123-91-1	1,4-Dioxane	1000	U	1000	26
67-66-3	Chloroform	5.1	U	5.1	1.3
74-87-3	Chloromethane	5.1	U ^c	5.1	2.7
75-00-3	Chloroethane	5.1	U	5.1	2.2
156-59-2	cis-1,2-Dichloroethene	5.1	U	5.1	1.4
10061-01-5	cis-1,3-Dichloropropene	5.1	U	5.1	2.3
75-27-4	Bromodichloromethane	5.1	U	5.1	2.1
100-41-4	Ethylbenzene	5.1	U	5.1	2.0
106-93-4	1,2-Dibromoethane (EDB)	5.1	U	5.1	2.2
1634-04-4	Methyl tert-butyl ether	5.1	U	5.1	2.6
75-09-2	Methylene Chloride	1.6	J B	5.1	0.57
100-42-5	Styrene	5.1	U	5.1	2.4
127-18-4	Tetrachloroethene	5.1	U	5.1	1.3
108-88-3	Toluene	5.1	U	5.1	3.7
156-60-5	trans-1,2-Dichloroethene	5.1	U	5.1	1.1
10061-02-6	trans-1,3-Dichloropropene	5.1	U	5.1	2.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-5/5.5-0 | Lab Sample ID: 180-64801-13

Matrix: Solid | Lab File ID: 30404K12.D

Analysis Method: 8260C | Date Collected: 03/30/2017 14:20

Sample wt/vol: 5.7612(g) | Date Analyzed: 04/04/2017 11:33

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 15.5 | Level: (low/med) Low

Analysis Batch No.: 207218 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	5.1	U	5.1	1.2
107-13-1	Acrylonitrile	51	U ^c	51	26
75-01-4	Vinyl chloride	5.1	U	5.1	2.6
1330-20-7	Xylenes, Total	10	U	10	4.7
74-97-5	Bromochloromethane	5.1	U	5.1	1.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		52-124
460-00-4	4-Bromofluorobenzene (Surr)	87		63-120
1868-53-7	Dibromofluoromethane (Surr)	106		68-121
2037-26-5	Toluene-d8 (Surr)	96		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K12.D
Lims ID: 180-64801-C-13-A
Client ID: HD-SPBA-SB-010-5/5.5-0
Sample Type: Client
Inject. Date: 04-Apr-2017 11:33:30 ALS Bottle#: 12 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016141-026
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 11:52:27 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 11:52:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.416	4.461	-0.045	98	150374	5000.0	
* 2 Fluorobenzene (IS)	96	7.360	7.351	0.009	99	624539	250.0	
* 3 Chlorobenzene-d5	119	10.445	10.441	0.004	85	151921	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.762	12.765	-0.003	96	223655	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.612	6.603	0.009	93	141581	264.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.983	6.974	0.009	95	171197	277.3	
$ 7 Toluene-d8 (Surr)	98	9.003	9.000	0.003	92	631093	239.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.607	11.609	-0.002	87	232210	217.5	
11 Chloromethane	50		1.821				ND	
12 Vinyl chloride	62		1.961				ND	
14 Bromomethane	94		2.302				ND	
15 Chloroethane	64		2.423				ND	
21 1,1-Dichloroethene	96		3.427				ND	
23 Acetone	43		3.597				ND	
25 Carbon disulfide	76		3.731				ND	
30 Methylene Chloride	84	4.240	4.218	0.022	88	6421	7.91	M
32 Acrylonitrile	53		4.632				ND	
33 trans-1,2-Dichloroethene	96		4.644				ND	
34 Methyl tert-butyl ether	73		4.705				ND	
36 1,1-Dichloroethane	63		5.252				ND	
42 cis-1,2-Dichloroethene	96		6.013				ND	
43 2-Butanone (MEK)	43		6.073				ND	
47 Chlorobromomethane	128		6.299				ND	
49 Chloroform	83		6.420				ND	
50 1,1,1-Trichloroethane	97		6.609				ND	
53 Carbon tetrachloride	117		6.803				ND	
55 Benzene	78		7.035				ND	
56 1,2-Dichloroethane	62		7.059				ND	
60 Trichloroethene	130		7.746				ND	
64 1,2-Dichloropropane	63		7.978				ND	
67 1,4-Dioxane	88		8.136				ND	
68 Dichlorobromomethane	83		8.270				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.732				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.896				ND	
73 Toluene	91		9.066				ND	
74 trans-1,3-Dichloropropene	75		9.292				ND	
76 1,1,2-Trichloroethane	97		9.474				ND	
77 Tetrachloroethene	164		9.620				ND	
79 2-Hexanone	43		9.730				ND	
81 Chlorodibromomethane	129		9.863				ND	
82 Ethylene Dibromide	107		9.973				ND	
83 Chlorobenzene	112		10.466				ND	
85 1,1,1,2-Tetrachloroethane	131		10.551				ND	
86 Ethylbenzene	106		10.581				ND	
87 m-Xylene & p-Xylene	106		10.697				ND	
88 o-Xylene	106		11.092				ND	
89 Styrene	104		11.104				ND	
90 Bromoform	173		11.281				ND	
93 1,1,2,2-Tetrachloroethane	83		11.743				ND	
S 129 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

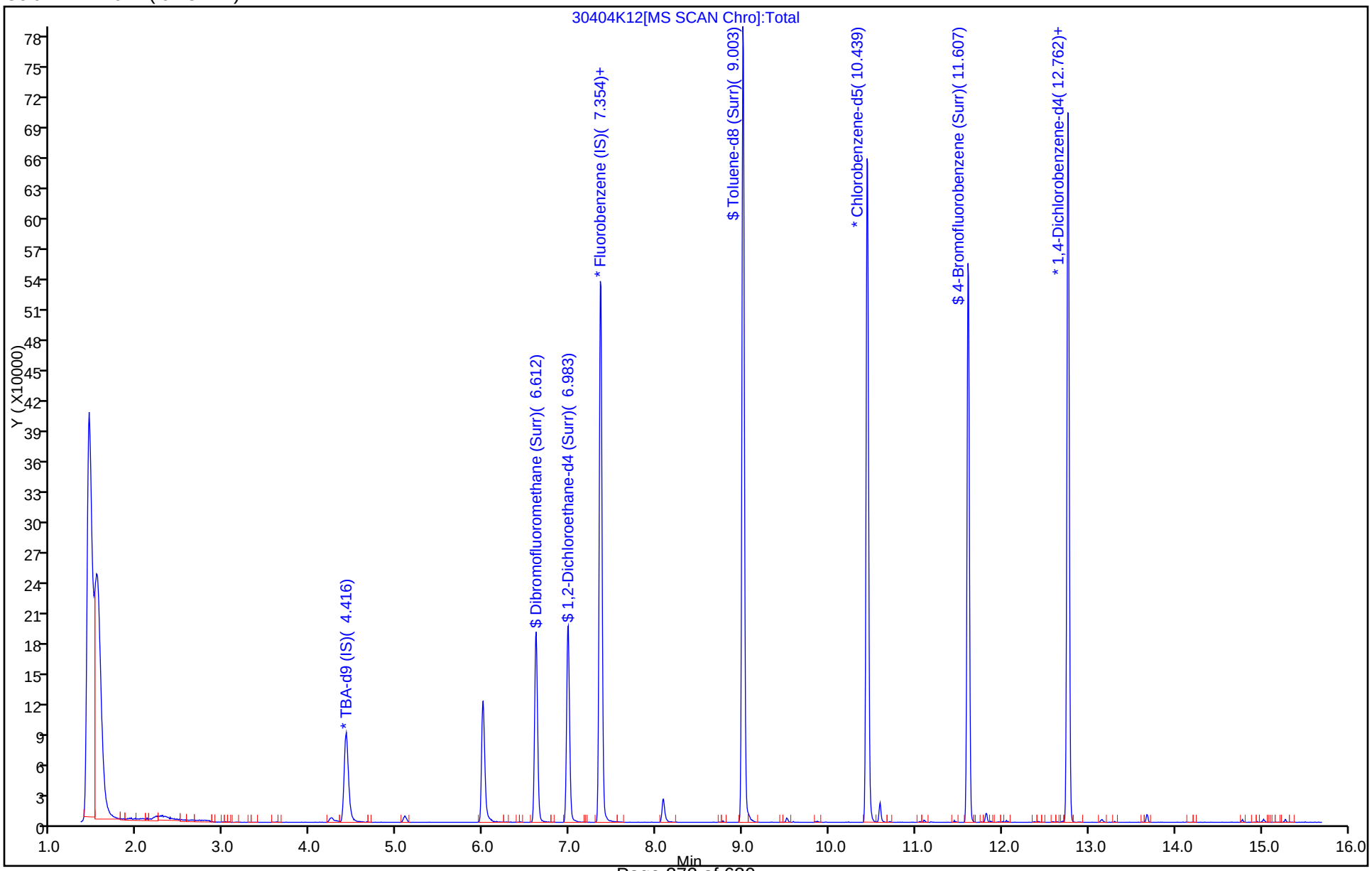
Report Date: 04-Apr-2017 11:52:27 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K12.D

Injection Date:	04-Apr-2017 11:33:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-C-13-A	Lab Sample ID:	180-64801-13	Worklist Smp#:	26
Client ID:	HD-SPBA-SB-010-5/5.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K12.D
Lims ID: 180-64801-C-13-A
Client ID: HD-SPBA-SB-010-5/5.5-0
Sample Type: Client
Inject. Date: 04-Apr-2017 11:33:30 ALS Bottle#: 12 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016141-026
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 11:52:27 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 11:52:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	264.0	105.59
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	277.3	110.91
$ 7 Toluene-d8 (Surr)	250.0	239.9	95.96
$ 8 4-Bromofluorobenzene (Surr)	250.0	217.5	87.00

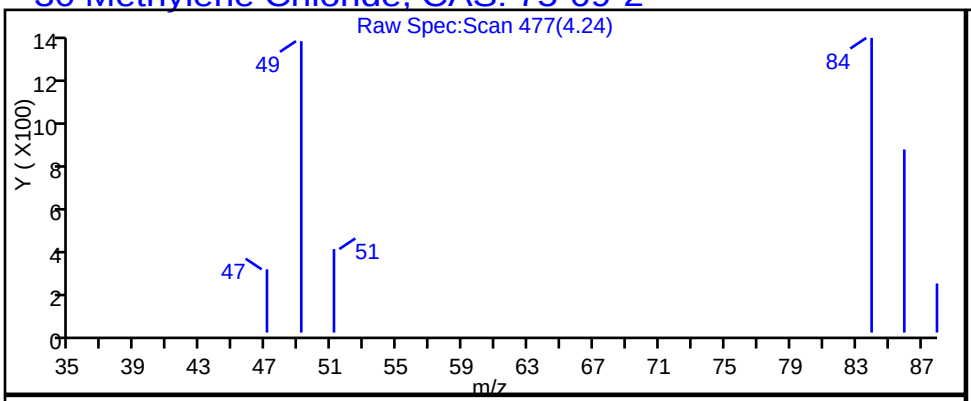
Report Date: 04-Apr-2017 11:52:28 Chrom Revision: 2.2 13-Mar-2017 15:50:30

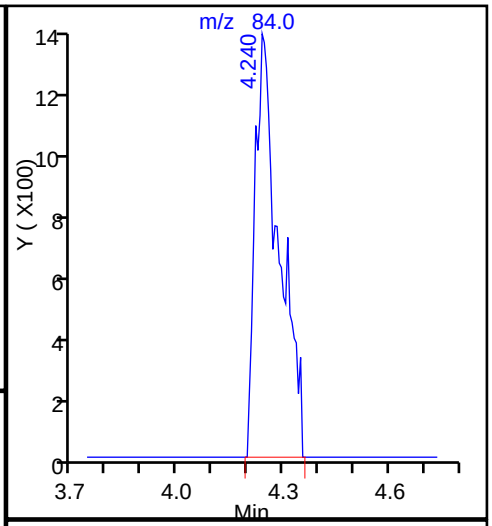
TestAmerica Pittsburgh

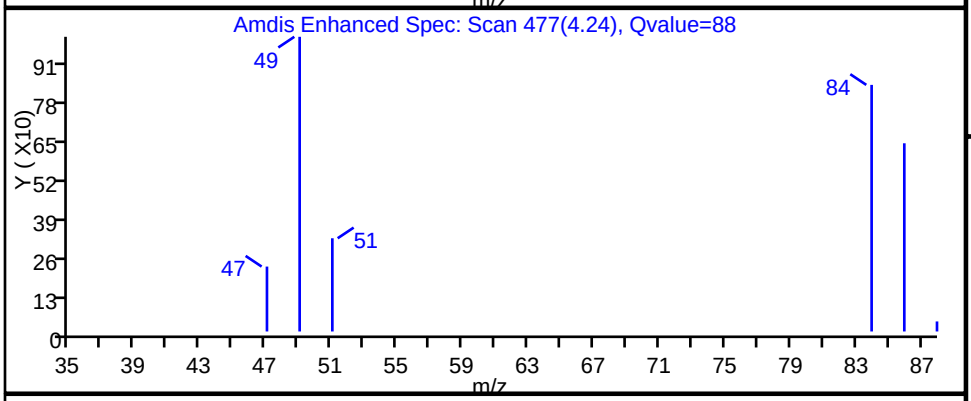
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K12.D

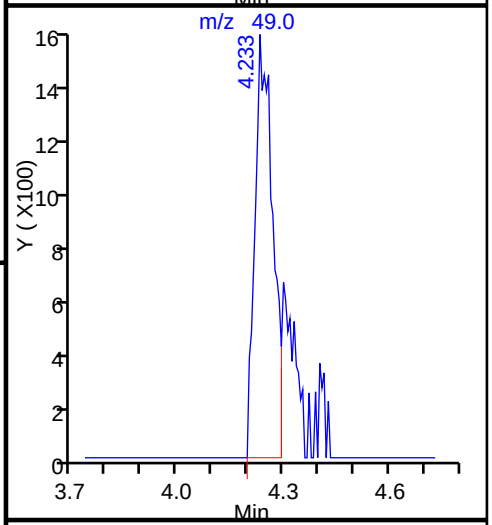
Injection Date:	04-Apr-2017 11:33:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-C-13-A	Lab Sample ID:	180-64801-13		
Client ID:	HD-SPBA-SB-010-5/5.5-0				
Operator ID:	10099	ALS Bottle#:	12	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

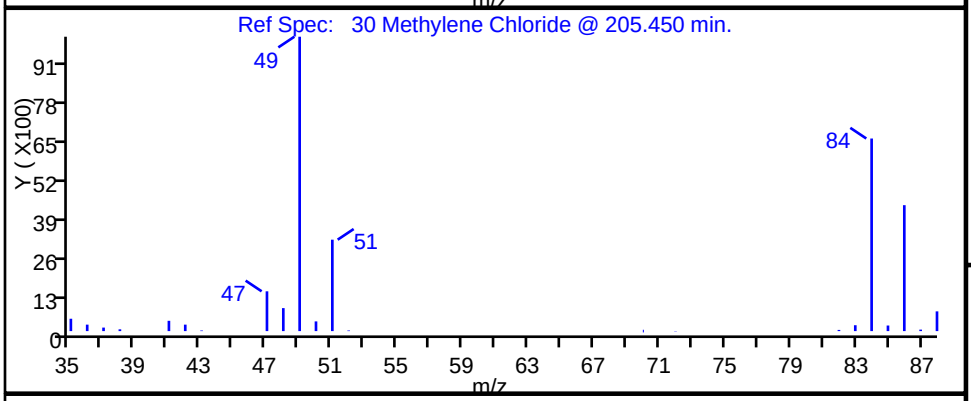
30 Methylene Chloride, CAS: 75-09-2

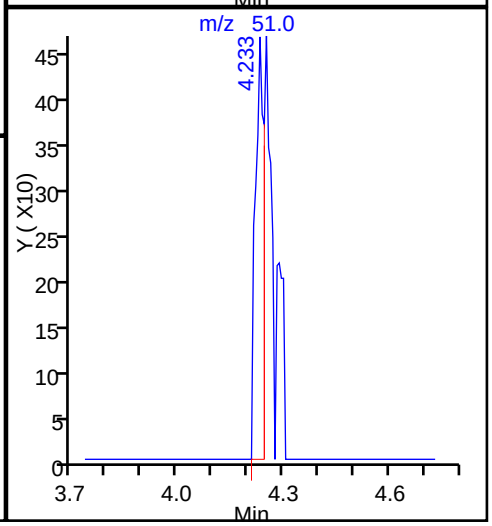


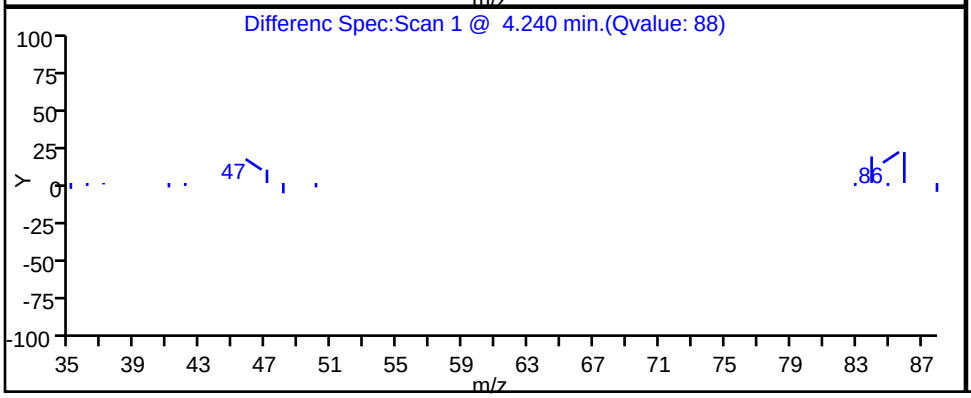












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

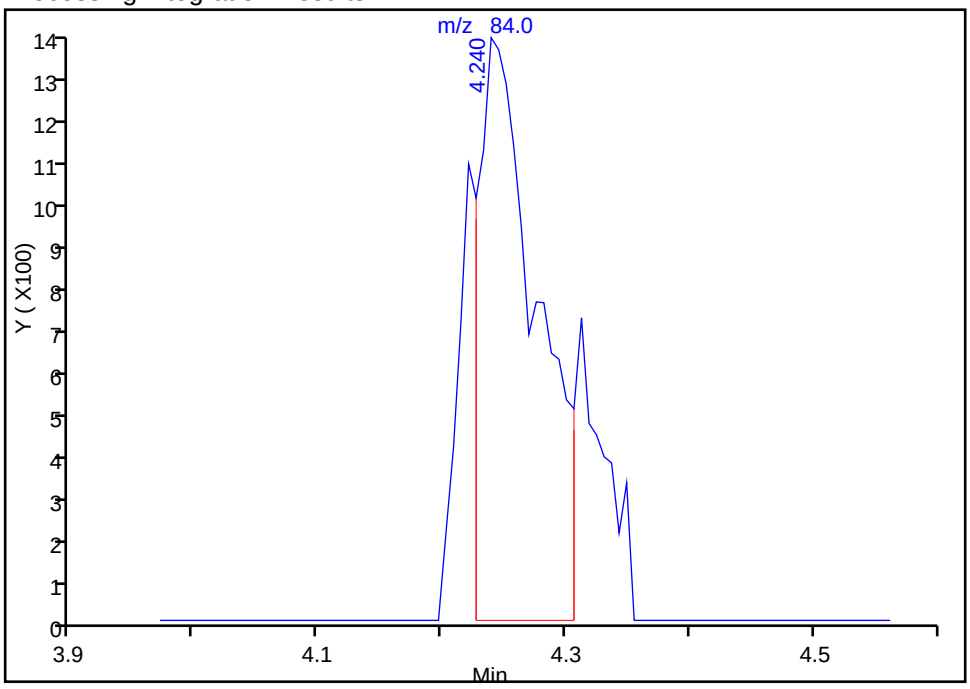
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K12.D				
Injection Date:	04-Apr-2017 11:33:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-C-13-A	Lab Sample ID:	180-64801-13		
Client ID:	HD-SPBA-SB-010-5/5.5-0				
Operator ID:	10099	ALS Bottle#:	12	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

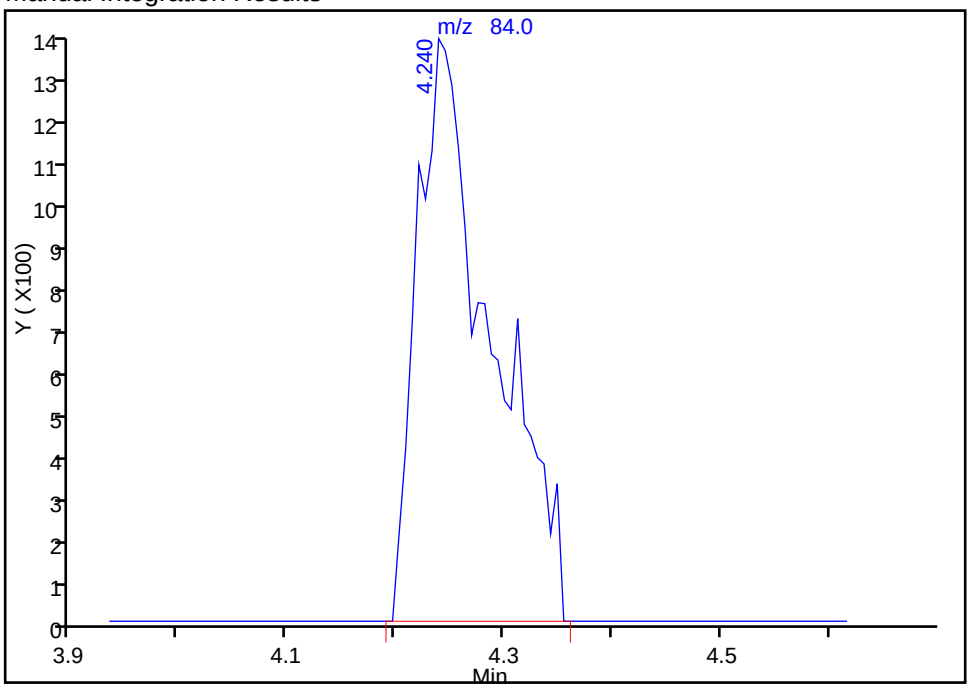
Processing Integration Results

RT: 4.24
Area: 4517
Amount: 5.562586
Amount Units: ng



Manual Integration Results

RT: 4.24
Area: 6421
Amount: 7.907320
Amount Units: ng



Reviewer: gordonk, 04-Apr-2017 11:52:00

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-10/10.5-0 | Lab Sample ID: 180-64801-14

Matrix: Solid | Lab File ID: 3040320.D

Analysis Method: 8260C | Date Collected: 03/30/2017 14:35

Sample wt/vol: 6.0902(g) | Date Analyzed: 04/03/2017 14:05

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 17.7 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	2.7
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	1.1
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	4.0
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	2.8
75-34-3	1,1-Dichloroethane	5.0	U	5.0	1.1
75-35-4	1,1-Dichloroethene	5.0	U	5.0	1.4
107-06-2	1,2-Dichloroethane	5.0	U	5.0	1.1
78-87-5	1,2-Dichloropropane	5.0	U	5.0	1.9
78-93-3	2-Butanone (MEK)	5.0	U	5.0	3.0
591-78-6	2-Hexanone	5.0	U	5.0	4.1
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.6
67-64-1	Acetone	20	U ^c	20	10
71-43-2	Benzene	5.0	U	5.0	3.0
75-25-2	Bromoform	5.0	U	5.0	4.6
74-83-9	Bromomethane	5.0	U ^c *	5.0	1.7
75-15-0	Carbon disulfide	5.0	U	5.0	2.1
56-23-5	Carbon tetrachloride	5.0	U ^c	5.0	1.4
108-90-7	Chlorobenzene	5.0	U	5.0	2.2
124-48-1	Dibromochloromethane	5.0	U	5.0	2.5
123-91-1	1,4-Dioxane	1000	U	1000	25
67-66-3	Chloroform	5.0	U	5.0	1.2
74-87-3	Chloromethane	5.0	U ^c	5.0	2.6
75-00-3	Chloroethane	5.0	U	5.0	2.1
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	1.3
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	2.2
75-27-4	Bromodichloromethane	5.0	U	5.0	2.0
100-41-4	Ethylbenzene	5.0	U	5.0	2.0
106-93-4	1,2-Dibromoethane (EDB)	5.0	U	5.0	2.1
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	2.5
75-09-2	Methylene Chloride	1.4	J B	5.0	0.56
100-42-5	Styrene	5.0	U	5.0	2.3
127-18-4	Tetrachloroethene	5.0	U	5.0	1.2
108-88-3	Toluene	5.0	U	5.0	3.6
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	1.0
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	2.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-10/10.5-0 | Lab Sample ID: 180-64801-14

Matrix: Solid | Lab File ID: 3040320.D

Analysis Method: 8260C | Date Collected: 03/30/2017 14:35

Sample wt/vol: 6.0902(g) | Date Analyzed: 04/03/2017 14:05

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 17.7 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	5.0	U	5.0	1.1
107-13-1	Acrylonitrile	50	U ^c	50	25
75-01-4	Vinyl chloride	5.0	U	5.0	2.5
1330-20-7	Xylenes, Total	10	U	10	4.5
74-97-5	Bromochloromethane	5.0	U	5.0	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		52-124
460-00-4	4-Bromofluorobenzene (Surr)	83		63-120
1868-53-7	Dibromofluoromethane (Surr)	104		68-121
2037-26-5	Toluene-d8 (Surr)	94		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040320.D
Lims ID: 180-64801-B-14-A
Client ID: HD-SPBA-SB-010-10/10.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 14:05:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-021
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:29:44 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:29:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.416	4.464	-0.048	98	116799	5000.0	
* 2 Fluorobenzene (IS)	96	7.360	7.348	0.012	99	784489	250.0	
* 3 Chlorobenzene-d5	119	10.445	10.438	0.007	85	193081	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.763	12.762	0.001	96	276993	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.612	6.600	0.012	93	175047	259.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.983	6.971	0.012	95	183652	236.8	
$ 7 Toluene-d8 (Surr)	98	9.009	9.003	0.006	92	789286	236.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.607	11.606	0.001	87	281706	207.6	
11 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.958				ND	
14 Bromomethane	94		2.299				ND	
15 Chloroethane	64		2.420				ND	
21 1,1-Dichloroethene	96		3.424				ND	
23 Acetone	43		3.594				ND	
25 Carbon disulfide	76		3.716				ND	
30 Methylene Chloride	84	4.240	4.221	0.019	83	7124	6.98	
32 Acrylonitrile	53		4.635				ND	
33 trans-1,2-Dichloroethene	96		4.641				ND	
34 Methyl tert-butyl ether	73		4.695				ND	
36 1,1-Dichloroethane	63		5.249				ND	
42 cis-1,2-Dichloroethene	96		6.009				ND	
43 2-Butanone (MEK)	43		6.070				ND	
47 Chlorobromomethane	128		6.295				ND	
49 Chloroform	83		6.417				ND	
50 1,1,1-Trichloroethane	97		6.612				ND	
53 Carbon tetrachloride	117		6.800				ND	
55 Benzene	78		7.031				ND	
56 1,2-Dichloroethane	62		7.056				ND	
60 Trichloroethene	130		7.743				ND	
64 1,2-Dichloropropane	63		7.981				ND	
67 1,4-Dioxane	88		8.133				ND	
68 Dichlorobromomethane	83		8.273				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.729				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893				ND	
73 Toluene	91		9.069				ND	
74 trans-1,3-Dichloropropene	75		9.288				ND	
76 1,1,2-Trichloroethane	97		9.471				ND	
77 Tetrachloroethene	164		9.617				ND	
79 2-Hexanone	43		9.726				ND	
81 Chlorodibromomethane	129		9.866				ND	
82 Ethylene Dibromide	107		9.976				ND	
83 Chlorobenzene	112		10.469				ND	
85 1,1,1,2-Tetrachloroethane	131		10.548				ND	
86 Ethylbenzene	106		10.578				ND	
87 m-Xylene & p-Xylene	106		10.694				ND	
88 o-Xylene	106		11.089				ND	
89 Styrene	104		11.101				ND	
90 Bromoform	173		11.284				ND	
93 1,1,2,2-Tetrachloroethane	83		11.746				ND	
S 129 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

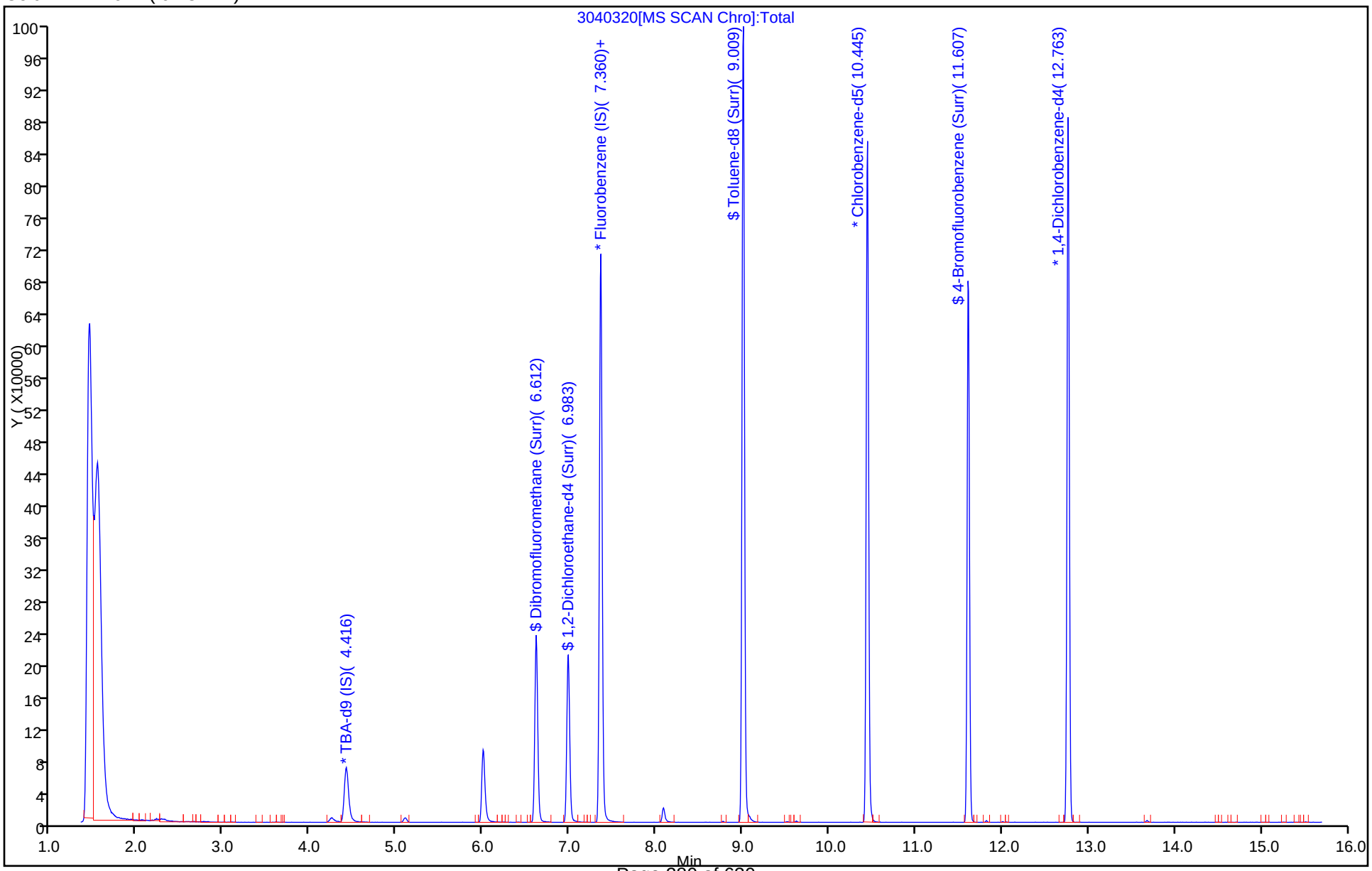
Report Date: 04-Apr-2017 05:29:45 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040320.D

Injection Date:	03-Apr-2017 14:05:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-14-A	Lab Sample ID:	180-64801-14	Worklist Smp#:	21
Client ID:	HD-SPBA-SB-010-10/10.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040320.D
Lims ID: 180-64801-B-14-A
Client ID: HD-SPBA-SB-010-10/10.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 14:05:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-021
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:29:44 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:29:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	259.8	103.93
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	236.8	94.72
$ 7 Toluene-d8 (Surr)	250.0	236.1	94.43
$ 8 4-Bromofluorobenzene (Surr)	250.0	207.6	83.05

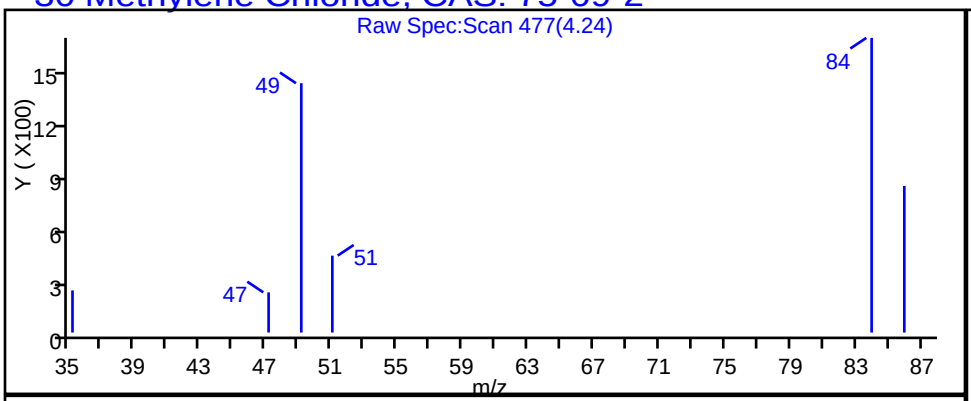
Report Date: 04-Apr-2017 05:29:45 Chrom Revision: 2.2 13-Mar-2017 15:50:30

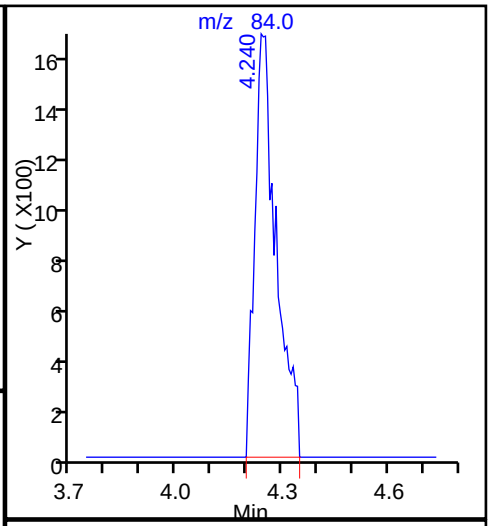
TestAmerica Pittsburgh

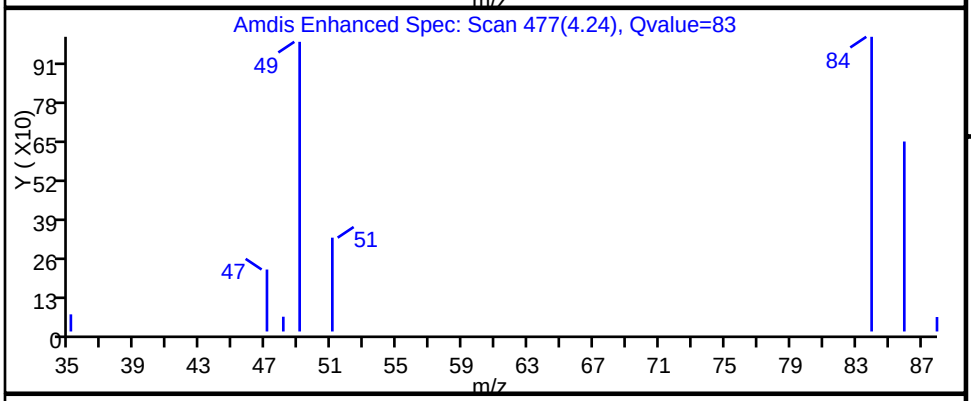
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040320.D

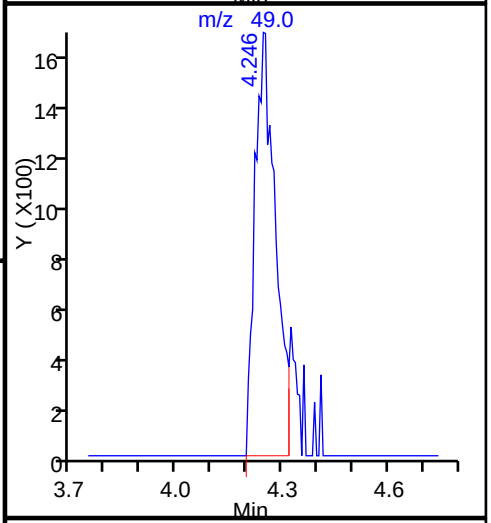
Injection Date:	03-Apr-2017 14:05:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-14-A	Lab Sample ID:	180-64801-14		
Client ID:	HD-SPBA-SB-010-10/10.5-0				
Operator ID:	10099	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

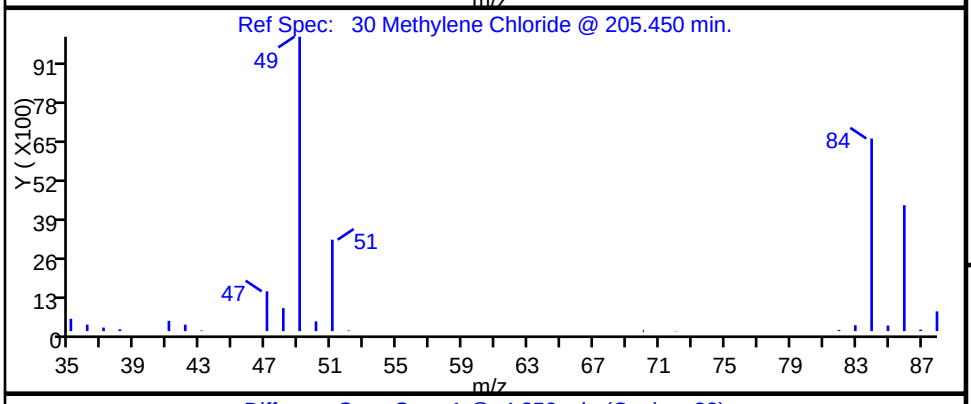
30 Methylene Chloride, CAS: 75-09-2

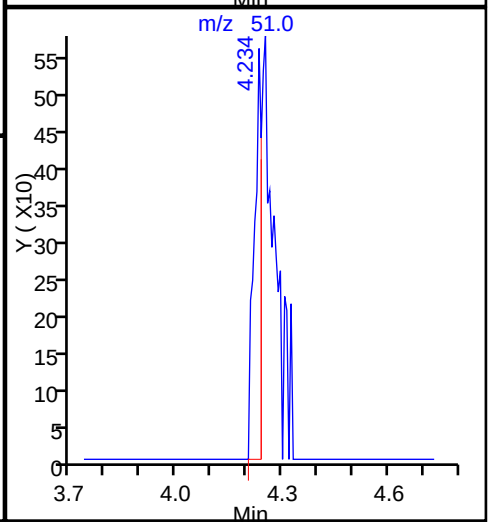


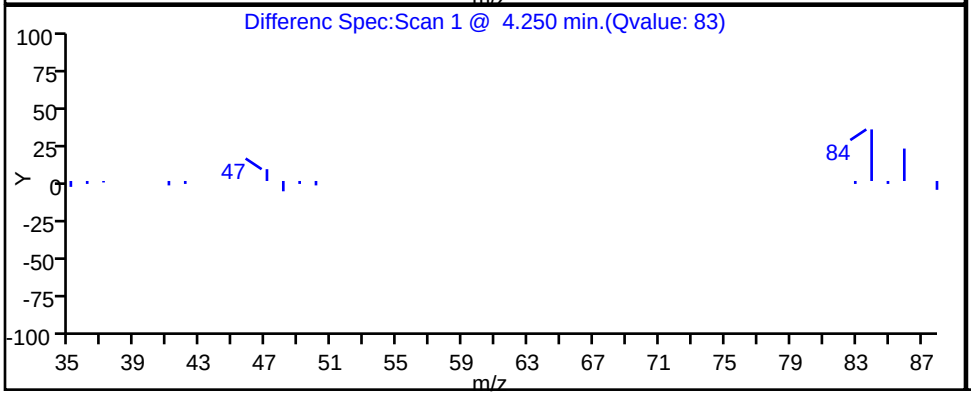












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-15/15.5-0 | Lab Sample ID: 180-64801-15

Matrix: Solid | Lab File ID: 3040321.D

Analysis Method: 8260C | Date Collected: 03/30/2017 14:45

Sample wt/vol: 6.8695(g) | Date Analyzed: 04/03/2017 14:28

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 20.5 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.6	U	4.6	2.5
71-55-6	1,1,1-Trichloroethane	4.6	U	4.6	0.99
79-34-5	1,1,2,2-Tetrachloroethane	4.6	U	4.6	3.6
79-00-5	1,1,2-Trichloroethane	4.6	U	4.6	2.6
75-34-3	1,1-Dichloroethane	4.6	U	4.6	1.0
75-35-4	1,1-Dichloroethene	4.6	U	4.6	1.3
107-06-2	1,2-Dichloroethane	4.6	U	4.6	1.0
78-87-5	1,2-Dichloropropane	4.6	U	4.6	1.7
78-93-3	2-Butanone (MEK)	4.6	U	4.6	2.7
591-78-6	2-Hexanone	4.6	U	4.6	3.7
108-10-1	4-Methyl-2-pentanone (MIBK)	4.6	U	4.6	3.3
67-64-1	Acetone	18	U ^c	18	9.4
71-43-2	Benzene	4.6	U	4.6	2.8
75-25-2	Bromoform	4.6	U	4.6	4.2
74-83-9	Bromomethane	4.6	U ^c *	4.6	1.6
75-15-0	Carbon disulfide	4.6	U	4.6	1.9
56-23-5	Carbon tetrachloride	4.6	U ^c	4.6	1.3
108-90-7	Chlorobenzene	4.6	U	4.6	2.0
124-48-1	Dibromochloromethane	4.6	U	4.6	2.3
123-91-1	1,4-Dioxane	920	U	920	23
67-66-3	Chloroform	4.6	U	4.6	1.1
74-87-3	Chloromethane	4.6	U ^c	4.6	2.4
75-00-3	Chloroethane	4.6	U	4.6	2.0
156-59-2	cis-1,2-Dichloroethene	4.6	U	4.6	1.2
10061-01-5	cis-1,3-Dichloropropene	4.6	U	4.6	2.0
75-27-4	Bromodichloromethane	4.6	U	4.6	1.8
100-41-4	Ethylbenzene	4.6	U	4.6	1.8
106-93-4	1,2-Dibromoethane (EDB)	4.6	U	4.6	2.0
1634-04-4	Methyl tert-butyl ether	4.6	U	4.6	2.3
75-09-2	Methylene Chloride	1.3	J B	4.6	0.51
100-42-5	Styrene	4.6	U	4.6	2.1
127-18-4	Tetrachloroethene	4.6	U	4.6	1.1
108-88-3	Toluene	4.6	U	4.6	3.3
156-60-5	trans-1,2-Dichloroethene	4.6	U	4.6	0.94
10061-02-6	trans-1,3-Dichloropropene	4.6	U	4.6	2.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-15/15.5-0 | Lab Sample ID: 180-64801-15

Matrix: Solid | Lab File ID: 3040321.D

Analysis Method: 8260C | Date Collected: 03/30/2017 14:45

Sample wt/vol: 6.8695(g) | Date Analyzed: 04/03/2017 14:28

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 20.5 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	4.6	U	4.6	1.0
107-13-1	Acrylonitrile	46	U ^c	46	23
75-01-4	Vinyl chloride	4.6	U	4.6	2.3
1330-20-7	Xylenes, Total	9.2	U	9.2	4.2
74-97-5	Bromochloromethane	4.6	U	4.6	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		52-124
460-00-4	4-Bromofluorobenzene (Surr)	80		63-120
1868-53-7	Dibromofluoromethane (Surr)	98		68-121
2037-26-5	Toluene-d8 (Surr)	91		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040321.D
Lims ID: 180-64801-B-15-A
Client ID: HD-SPBA-SB-010-15/15.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 14:28:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-022
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:30:21 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:30:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.409	4.464	-0.055	98	121078	5000.0	
* 2 Fluorobenzene (IS)	96	7.359	7.348	0.011	99	796371	250.0	
* 3 Chlorobenzene-d5	119	10.444	10.438	0.006	85	192997	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.762	0.006	96	276336	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.611	6.600	0.011	93	167977	245.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.982	6.971	0.011	94	180202	228.9	
$ 7 Toluene-d8 (Surr)	98	9.008	9.003	0.005	92	756257	226.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.606	0.006	88	271281	200.0	
11 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.958				ND	
14 Bromomethane	94		2.299				ND	
15 Chloroethane	64		2.420				ND	
21 1,1-Dichloroethene	96		3.424				ND	
23 Acetone	43		3.594				ND	
25 Carbon disulfide	76		3.716				ND	
30 Methylene Chloride	84	4.245	4.221	0.024	89	7432	7.18	M
32 Acrylonitrile	53		4.635				ND	
33 trans-1,2-Dichloroethene	96		4.641				ND	
34 Methyl tert-butyl ether	73		4.695				ND	
36 1,1-Dichloroethane	63		5.249				ND	
42 cis-1,2-Dichloroethene	96		6.009				ND	
43 2-Butanone (MEK)	43		6.070				ND	
47 Chlorobromomethane	128		6.295				ND	
49 Chloroform	83		6.417				ND	
50 1,1,1-Trichloroethane	97		6.612				ND	
53 Carbon tetrachloride	117		6.800				ND	
55 Benzene	78		7.031				ND	
56 1,2-Dichloroethane	62		7.056				ND	
60 Trichloroethene	130		7.743				ND	
64 1,2-Dichloropropane	63		7.981				ND	
67 1,4-Dioxane	88		8.133				ND	
68 Dichlorobromomethane	83		8.273				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.729				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893				ND	
73 Toluene	91		9.069				ND	
74 trans-1,3-Dichloropropene	75		9.288				ND	
76 1,1,2-Trichloroethane	97		9.471				ND	
77 Tetrachloroethene	164		9.617				ND	
79 2-Hexanone	43		9.726				ND	
81 Chlorodibromomethane	129		9.866				ND	
82 Ethylene Dibromide	107		9.976				ND	
83 Chlorobenzene	112		10.469				ND	
85 1,1,1,2-Tetrachloroethane	131		10.548				ND	
86 Ethylbenzene	106		10.578				ND	
87 m-Xylene & p-Xylene	106		10.694				ND	
88 o-Xylene	106		11.089				ND	
89 Styrene	104		11.101				ND	
90 Bromoform	173		11.284				ND	
93 1,1,2,2-Tetrachloroethane	83		11.746				ND	
S 129 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

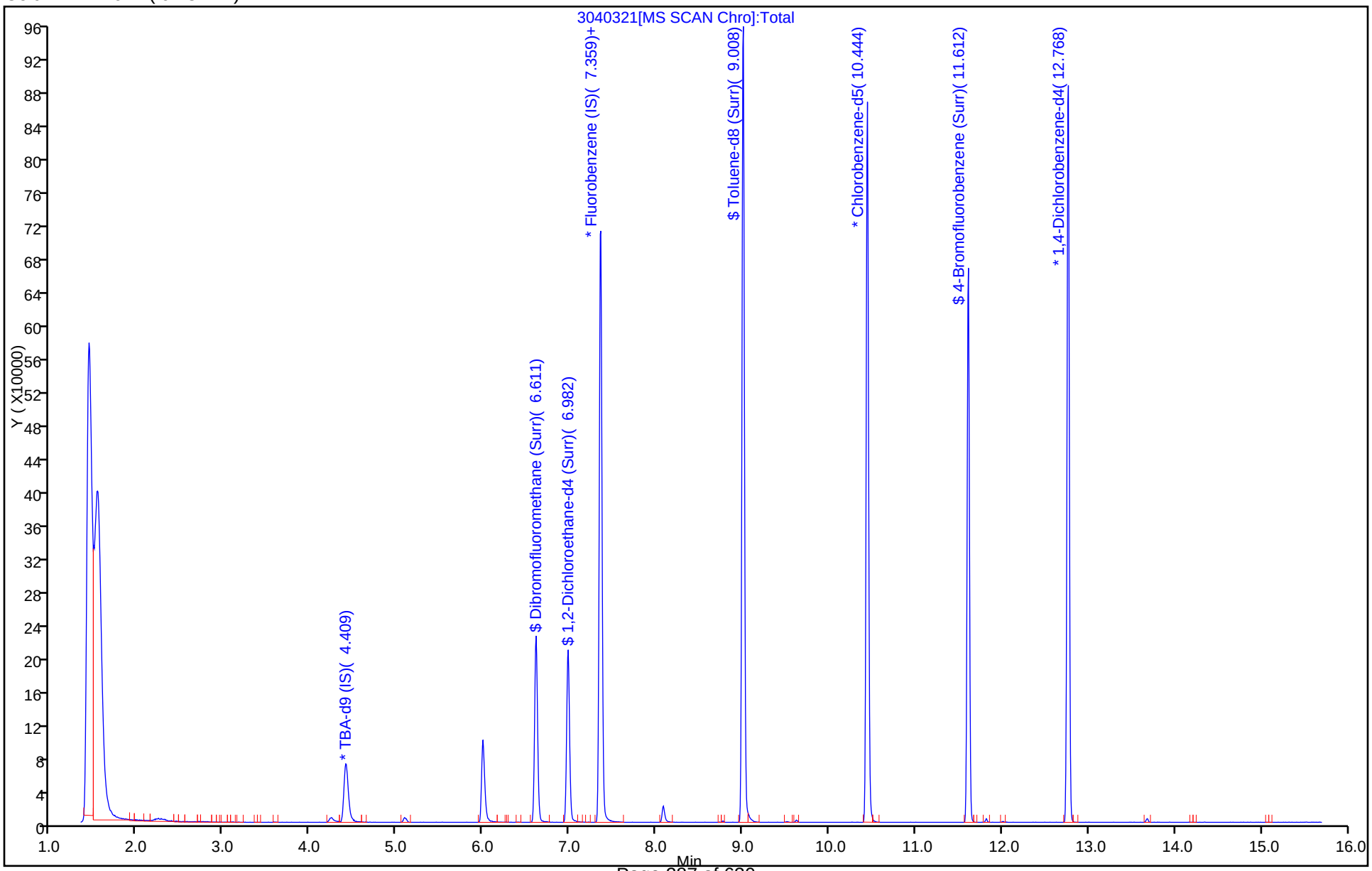
Report Date: 04-Apr-2017 05:30:22 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040321.D

Injection Date:	03-Apr-2017 14:28:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-15-A	Lab Sample ID:	180-64801-15	Worklist Smp#:	22
Client ID:	HD-SPBA-SB-010-15/15.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040321.D
Lims ID: 180-64801-B-15-A
Client ID: HD-SPBA-SB-010-15/15.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 14:28:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-022
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:30:21 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:30:21

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	245.6	98.24
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	228.9	91.55
$ 7 Toluene-d8 (Surr)	250.0	226.3	90.52
$ 8 4-Bromofluorobenzene (Surr)	250.0	200.0	80.01

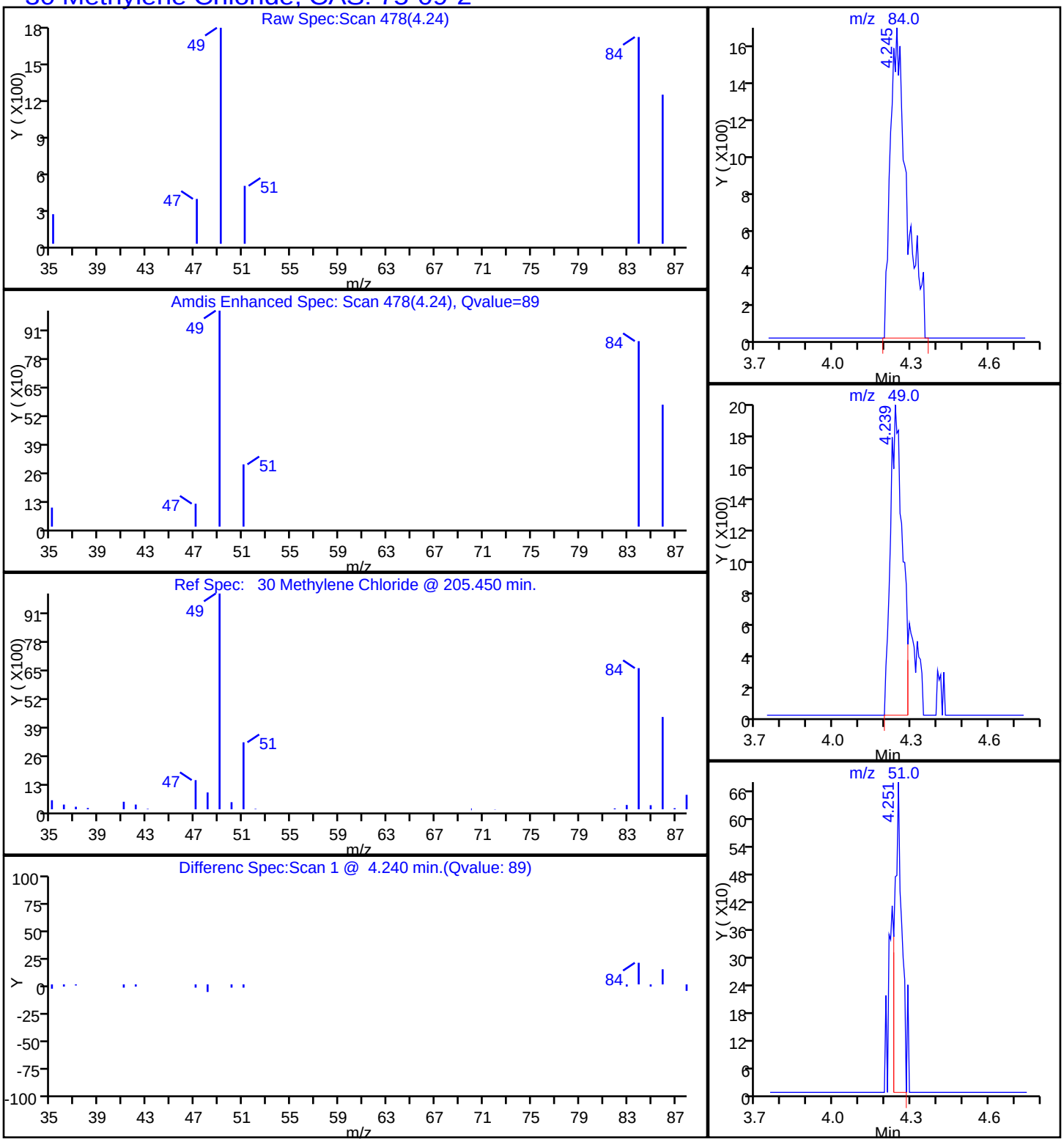
Report Date: 04-Apr-2017 05:30:22 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040321.D

Injection Date:	03-Apr-2017 14:28:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-15-A	Lab Sample ID:	180-64801-15		
Client ID:	HD-SPBA-SB-010-15/15.5-0				
Operator ID:	10099	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

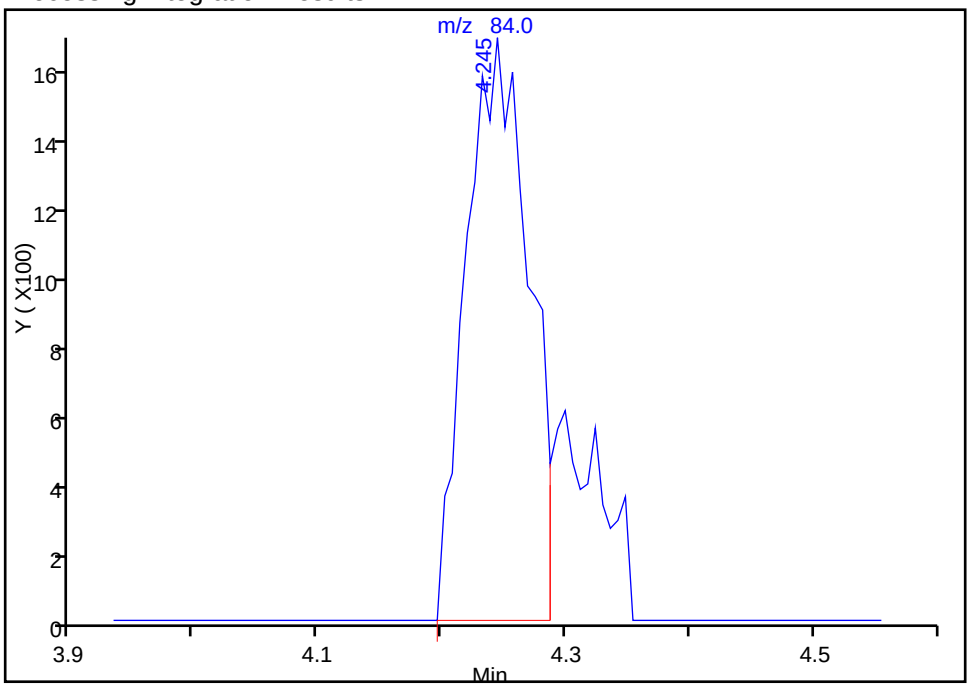
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040321.D				
Injection Date:	03-Apr-2017 14:28:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-15-A	Lab Sample ID:	180-64801-15		
Client ID:	HD-SPBA-SB-010-15/15.5-0				
Operator ID:	10099	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

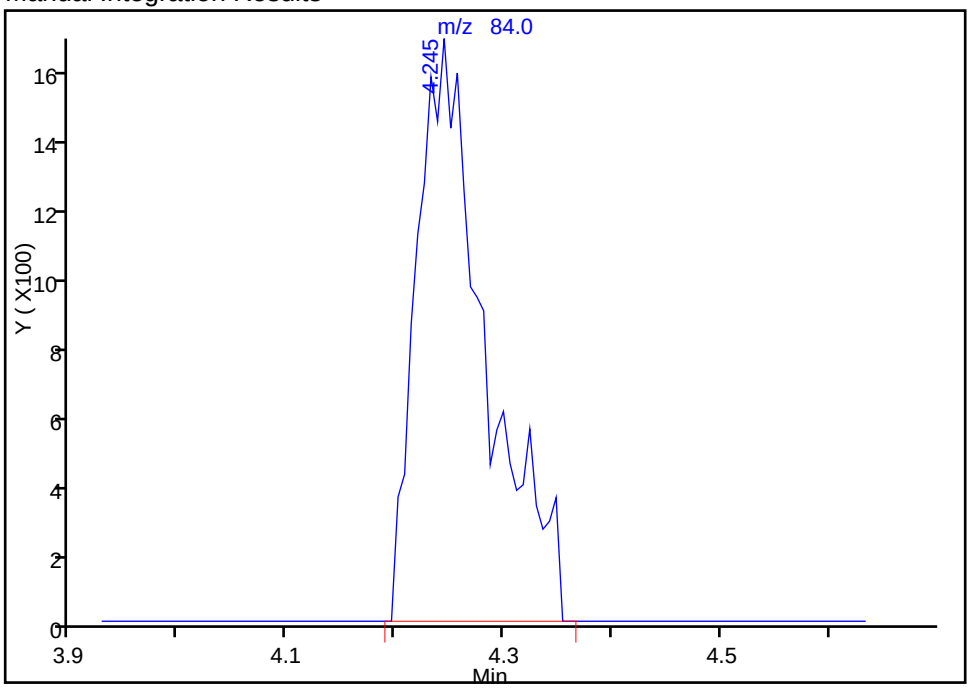
Processing Integration Results

RT: 4.24
Area: 5908
Amount: 5.705731
Amount Units: ng



Manual Integration Results

RT: 4.24
Area: 7432
Amount: 7.177554
Amount Units: ng



Reviewer: gordonk, 04-Apr-2017 05:30:01

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-20/20.5-0 | Lab Sample ID: 180-64801-16

Matrix: Solid | Lab File ID: 3040322.D

Analysis Method: 8260C | Date Collected: 03/30/2017 14:50

Sample wt/vol: 7.0211(g) | Date Analyzed: 04/03/2017 14:51

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 21.1 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.5	U	4.5	2.4
71-55-6	1,1,1-Trichloroethane	4.5	U	4.5	0.97
79-34-5	1,1,2,2-Tetrachloroethane	4.5	U	4.5	3.6
79-00-5	1,1,2-Trichloroethane	4.5	U	4.5	2.5
75-34-3	1,1-Dichloroethane	4.5	U	4.5	1.0
75-35-4	1,1-Dichloroethene	4.5	U	4.5	1.3
107-06-2	1,2-Dichloroethane	4.5	U	4.5	1.0
78-87-5	1,2-Dichloropropane	4.5	U	4.5	1.7
78-93-3	2-Butanone (MEK)	4.5	U	4.5	2.7
591-78-6	2-Hexanone	4.5	U	4.5	3.7
108-10-1	4-Methyl-2-pentanone (MIBK)	4.5	U	4.5	3.2
67-64-1	Acetone	18	U ^c	18	9.3
71-43-2	Benzene	4.5	U	4.5	2.7
75-25-2	Bromoform	4.5	U	4.5	4.1
74-83-9	Bromomethane	4.5	U ^c *	4.5	1.6
75-15-0	Carbon disulfide	4.5	U	4.5	1.9
56-23-5	Carbon tetrachloride	4.5	U ^c	4.5	1.2
108-90-7	Chlorobenzene	4.5	U	4.5	2.0
124-48-1	Dibromochloromethane	4.5	U	4.5	2.2
123-91-1	1,4-Dioxane	900	U	900	23
67-66-3	Chloroform	4.5	U	4.5	1.1
74-87-3	Chloromethane	4.5	U ^c	4.5	2.4
75-00-3	Chloroethane	4.5	U	4.5	1.9
156-59-2	cis-1,2-Dichloroethene	4.5	U	4.5	1.2
10061-01-5	cis-1,3-Dichloropropene	4.5	U	4.5	2.0
75-27-4	Bromodichloromethane	4.5	U	4.5	1.8
100-41-4	Ethylbenzene	4.5	U	4.5	1.8
106-93-4	1,2-Dibromoethane (EDB)	4.5	U	4.5	1.9
1634-04-4	Methyl tert-butyl ether	4.5	U	4.5	2.3
75-09-2	Methylene Chloride	1.2	J B	4.5	0.50
100-42-5	Styrene	4.5	U	4.5	2.1
127-18-4	Tetrachloroethene	4.5	U	4.5	1.1
108-88-3	Toluene	4.5	U	4.5	3.3
156-60-5	trans-1,2-Dichloroethene	4.5	U	4.5	0.93
10061-02-6	trans-1,3-Dichloropropene	4.5	U	4.5	2.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-20/20.5-0 | Lab Sample ID: 180-64801-16

Matrix: Solid | Lab File ID: 3040322.D

Analysis Method: 8260C | Date Collected: 03/30/2017 14:50

Sample wt/vol: 7.0211(g) | Date Analyzed: 04/03/2017 14:51

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 21.1 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	4.5	U	4.5	1.0
107-13-1	Acrylonitrile	45	U ^c	45	23
75-01-4	Vinyl chloride	4.5	U	4.5	2.3
1330-20-7	Xylenes, Total	9.0	U	9.0	4.1
74-97-5	Bromochloromethane	4.5	U	4.5	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		52-124
460-00-4	4-Bromofluorobenzene (Surr)	83		63-120
1868-53-7	Dibromofluoromethane (Surr)	102		68-121
2037-26-5	Toluene-d8 (Surr)	95		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040322.D
Lims ID: 180-64801-B-16-A
Client ID: HD-SPBA-SB-010-20/20.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 14:51:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-023
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:30:53 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:30:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.410	4.464	-0.054	98	117504	5000.0	
* 2 Fluorobenzene (IS)	96	7.355	7.348	0.007	99	768528	250.0	
* 3 Chlorobenzene-d5	119	10.445	10.438	0.007	85	188024	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.769	12.762	0.007	96	268801	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.612	6.600	0.012	93	167813	254.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.977	6.971	0.006	95	178497	234.9	
$ 7 Toluene-d8 (Surr)	98	9.003	9.003	0.000	92	769686	236.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.607	11.606	0.001	87	273370	206.9	
11 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.958				ND	
14 Bromomethane	94		2.299				ND	
15 Chloroethane	64		2.420				ND	
21 1,1-Dichloroethene	96		3.424				ND	
23 Acetone	43		3.594				ND	
25 Carbon disulfide	76		3.716				ND	
30 Methylene Chloride	84	4.240	4.221	0.019	87	6669	6.67	
32 Acrylonitrile	53		4.635				ND	
33 trans-1,2-Dichloroethene	96		4.641				ND	
34 Methyl tert-butyl ether	73		4.695				ND	
36 1,1-Dichloroethane	63		5.249				ND	
42 cis-1,2-Dichloroethene	96		6.009				ND	
43 2-Butanone (MEK)	43		6.070				ND	
47 Chlorobromomethane	128		6.295				ND	
49 Chloroform	83		6.417				ND	
50 1,1,1-Trichloroethane	97		6.612				ND	
53 Carbon tetrachloride	117		6.800				ND	
55 Benzene	78		7.031				ND	
56 1,2-Dichloroethane	62		7.056				ND	
60 Trichloroethene	130		7.743				ND	
64 1,2-Dichloropropane	63		7.981				ND	
67 1,4-Dioxane	88		8.133				ND	
68 Dichlorobromomethane	83		8.273				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.729				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893				ND	
73 Toluene	91		9.069				ND	
74 trans-1,3-Dichloropropene	75		9.288				ND	
76 1,1,2-Trichloroethane	97		9.471				ND	
77 Tetrachloroethene	164	9.618	9.617	0.001	86	716	1.01	
79 2-Hexanone	43		9.726				ND	
81 Chlorodibromomethane	129		9.866				ND	
82 Ethylene Dibromide	107		9.976				ND	
83 Chlorobenzene	112		10.469				ND	
85 1,1,1,2-Tetrachloroethane	131		10.548				ND	
86 Ethylbenzene	106		10.578				ND	
87 m-Xylene & p-Xylene	106		10.694				ND	
88 o-Xylene	106		11.089				ND	
89 Styrene	104		11.101				ND	
90 Bromoform	173		11.284				ND	
93 1,1,2,2-Tetrachloroethane	83		11.746				ND	
S 129 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

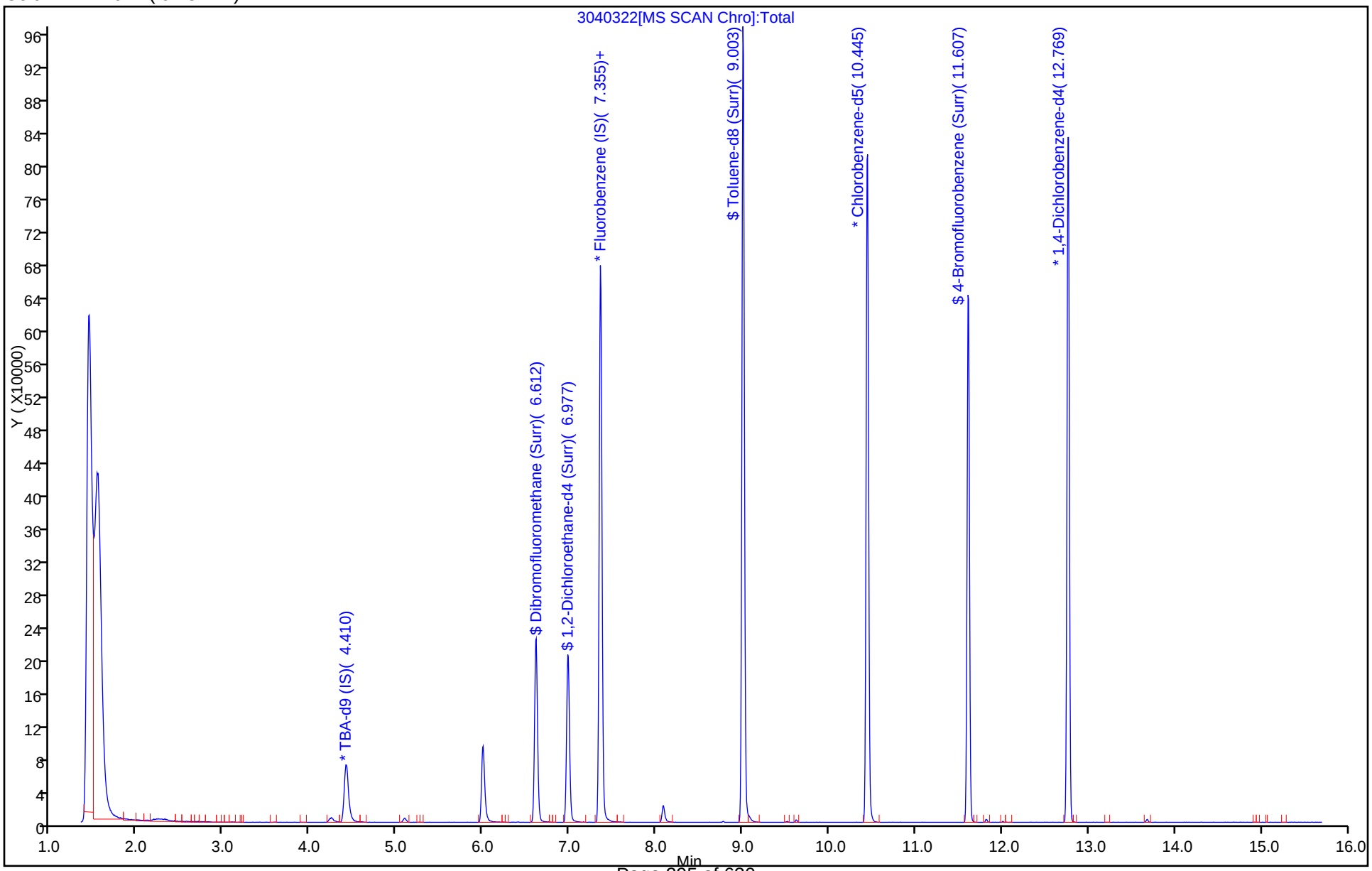
Report Date: 04-Apr-2017 05:30:53 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040322.D

Injection Date:	03-Apr-2017 14:51:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-16-A	Lab Sample ID:	180-64801-16	Worklist Smp#:	23
Client ID:	HD-SPBA-SB-010-20/20.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040322.D
Lims ID: 180-64801-B-16-A
Client ID: HD-SPBA-SB-010-20/20.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 14:51:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-023
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:30:53 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:30:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	254.3	101.70
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	234.9	93.97
$ 7 Toluene-d8 (Surr)	250.0	236.4	94.57
$ 8 4-Bromofluorobenzene (Surr)	250.0	206.9	82.76

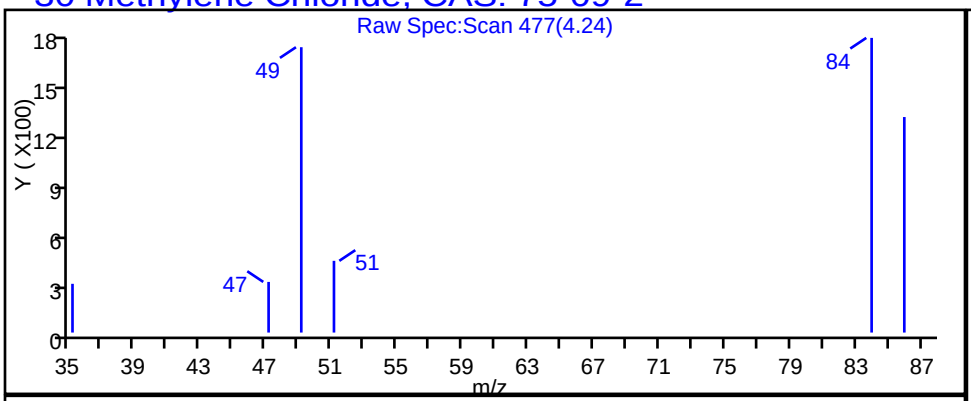
Report Date: 04-Apr-2017 05:30:53 Chrom Revision: 2.2 13-Mar-2017 15:50:30

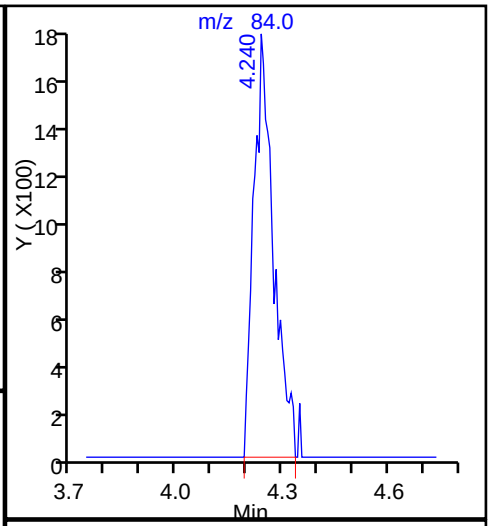
TestAmerica Pittsburgh

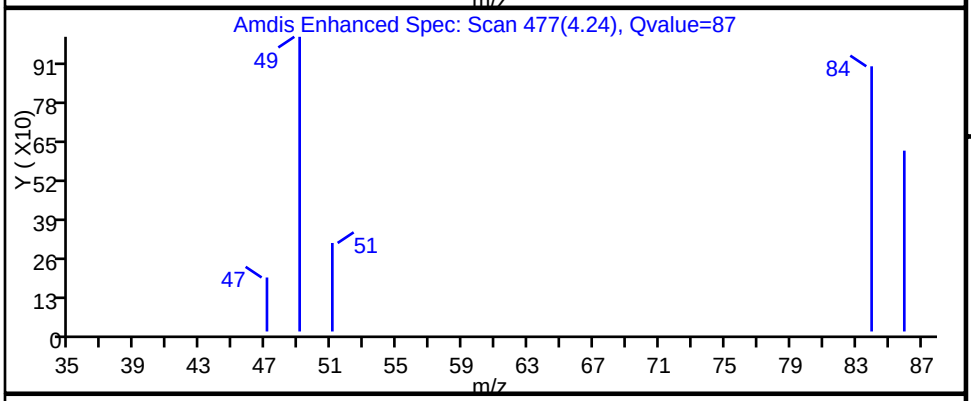
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040322.D

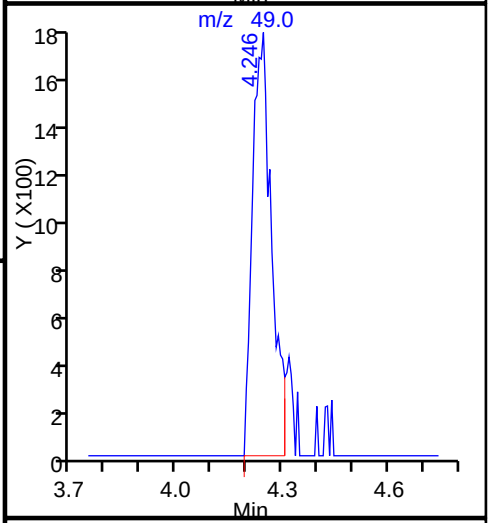
Injection Date:	03-Apr-2017 14:51:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-16-A	Lab Sample ID:	180-64801-16		
Client ID:	HD-SPBA-SB-010-20/20.5-0				
Operator ID:	10099	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

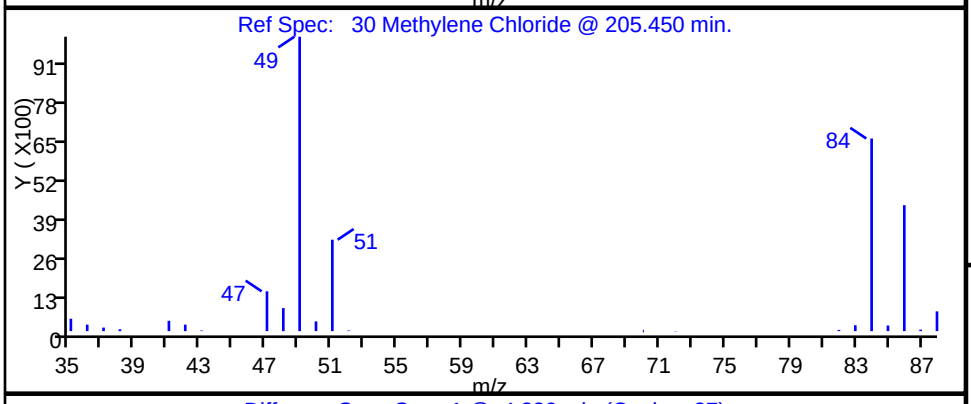
30 Methylene Chloride, CAS: 75-09-2

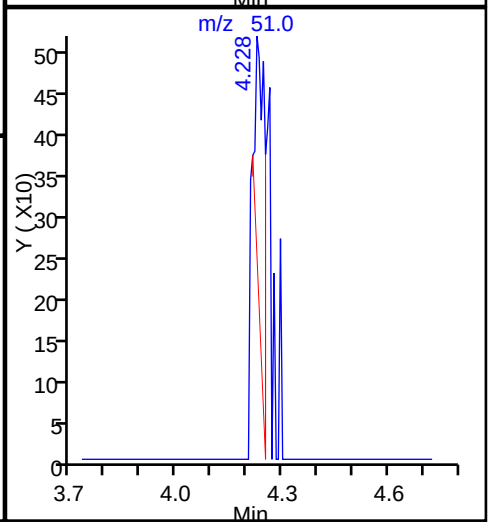


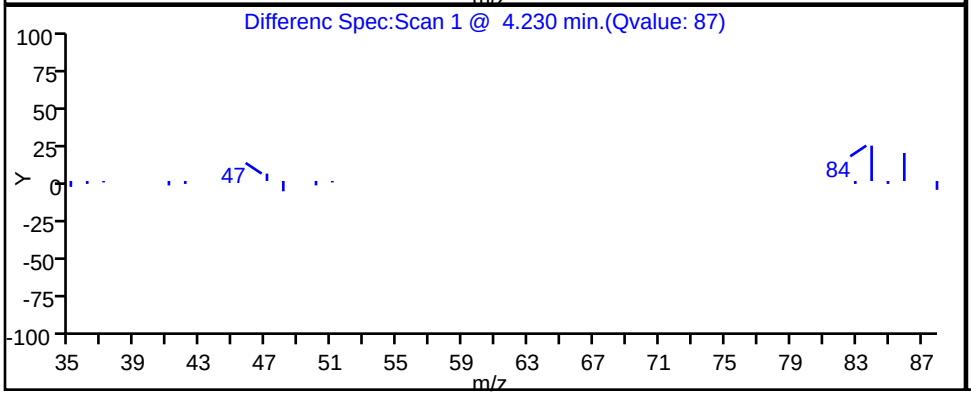












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-25/25.5-0 | Lab Sample ID: 180-64801-17

Matrix: Solid | Lab File ID: 3040323.D

Analysis Method: 8260C | Date Collected: 03/30/2017 15:00

Sample wt/vol: 6.6749(g) | Date Analyzed: 04/03/2017 15:13

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 25.0 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	2.7
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	1.1
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	4.0
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	2.8
75-34-3	1,1-Dichloroethane	5.0	U	5.0	1.1
75-35-4	1,1-Dichloroethene	5.0	U	5.0	1.5
107-06-2	1,2-Dichloroethane	5.0	U	5.0	1.1
78-87-5	1,2-Dichloropropane	5.0	U	5.0	1.9
78-93-3	2-Butanone (MEK)	5.0	U	5.0	3.0
591-78-6	2-Hexanone	5.0	U	5.0	4.1
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.6
67-64-1	Acetone	20	U ^c	20	10
71-43-2	Benzene	5.0	U	5.0	3.0
75-25-2	Bromoform	5.0	U	5.0	4.6
74-83-9	Bromomethane	5.0	U ^c *	5.0	1.7
75-15-0	Carbon disulfide	5.0	U	5.0	2.1
56-23-5	Carbon tetrachloride	5.0	U ^c	5.0	1.4
108-90-7	Chlorobenzene	5.0	U	5.0	2.2
124-48-1	Dibromochloromethane	5.0	U	5.0	2.5
123-91-1	1,4-Dioxane	1000	U	1000	25
67-66-3	Chloroform	5.0	U	5.0	1.3
74-87-3	Chloromethane	5.0	U ^c	5.0	2.6
75-00-3	Chloroethane	5.0	U	5.0	2.1
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	1.3
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	2.2
75-27-4	Bromodichloromethane	5.0	U	5.0	2.0
100-41-4	Ethylbenzene	5.0	U	5.0	2.0
106-93-4	1,2-Dibromoethane (EDB)	5.0	U	5.0	2.1
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	2.5
75-09-2	Methylene Chloride	1.3	J B	5.0	0.56
100-42-5	Styrene	5.0	U	5.0	2.3
127-18-4	Tetrachloroethene	5.0	U	5.0	1.2
108-88-3	Toluene	5.0	U	5.0	3.6
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	1.0
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	2.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-25/25.5-0 | Lab Sample ID: 180-64801-17

Matrix: Solid | Lab File ID: 3040323.D

Analysis Method: 8260C | Date Collected: 03/30/2017 15:00

Sample wt/vol: 6.6749(g) | Date Analyzed: 04/03/2017 15:13

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 25.0 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	5.0	U	5.0	1.1
107-13-1	Acrylonitrile	50	U ^c	50	25
75-01-4	Vinyl chloride	5.0	U	5.0	2.6
1330-20-7	Xylenes, Total	10	U	10	4.5
74-97-5	Bromochloromethane	5.0	U	5.0	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		52-124
460-00-4	4-Bromofluorobenzene (Surr)	82		63-120
1868-53-7	Dibromofluoromethane (Surr)	101		68-121
2037-26-5	Toluene-d8 (Surr)	92		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040323.D
Lims ID: 180-64801-B-17-A
Client ID: HD-SPBA-SB-010-25/25.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 15:13:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-024
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:31:36 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:31:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.413	4.464	-0.051	98	115259	5000.0	
* 2 Fluorobenzene (IS)	96	7.357	7.348	0.009	99	757807	250.0	
* 3 Chlorobenzene-d5	119	10.442	10.438	0.004	85	186757	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.765	12.762	0.003	96	265709	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.609	6.600	0.009	93	164363	252.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.980	6.971	0.009	95	175787	234.6	
$ 7 Toluene-d8 (Surr)	98	9.006	9.003	0.003	92	745279	230.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.610	11.606	0.004	87	267974	204.2	
11 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.958				ND	
14 Bromomethane	94		2.299				ND	
15 Chloroethane	64		2.420				ND	
21 1,1-Dichloroethene	96		3.424				ND	
23 Acetone	43		3.594				ND	
25 Carbon disulfide	76		3.716				ND	
30 Methylene Chloride	84	4.236	4.221	0.015	84	6405	6.50	M
32 Acrylonitrile	53		4.635				ND	
33 trans-1,2-Dichloroethene	96		4.641				ND	
34 Methyl tert-butyl ether	73		4.695				ND	
36 1,1-Dichloroethane	63		5.249				ND	
42 cis-1,2-Dichloroethene	96		6.009				ND	
43 2-Butanone (MEK)	43		6.070				ND	
47 Chlorobromomethane	128		6.295				ND	
49 Chloroform	83		6.417				ND	
50 1,1,1-Trichloroethane	97		6.612				ND	
53 Carbon tetrachloride	117		6.800				ND	
55 Benzene	78		7.031				ND	
56 1,2-Dichloroethane	62		7.056				ND	
60 Trichloroethene	130		7.743				ND	
64 1,2-Dichloropropane	63		7.981				ND	
67 1,4-Dioxane	88		8.133				ND	
68 Dichlorobromomethane	83		8.273				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.729				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893				ND	
73 Toluene	91		9.069				ND	
74 trans-1,3-Dichloropropene	75		9.288				ND	
76 1,1,2-Trichloroethane	97		9.471				ND	
77 Tetrachloroethene	164	9.626	9.617	0.009	86	1534	2.17	
79 2-Hexanone	43		9.726				ND	
81 Chlorodibromomethane	129		9.866				ND	
82 Ethylene Dibromide	107		9.976				ND	
83 Chlorobenzene	112		10.469				ND	
85 1,1,1,2-Tetrachloroethane	131		10.548				ND	
86 Ethylbenzene	106		10.578				ND	
87 m-Xylene & p-Xylene	106		10.694				ND	
88 o-Xylene	106		11.089				ND	
89 Styrene	104		11.101				ND	
90 Bromoform	173		11.284				ND	
93 1,1,2,2-Tetrachloroethane	83		11.746				ND	
S 129 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

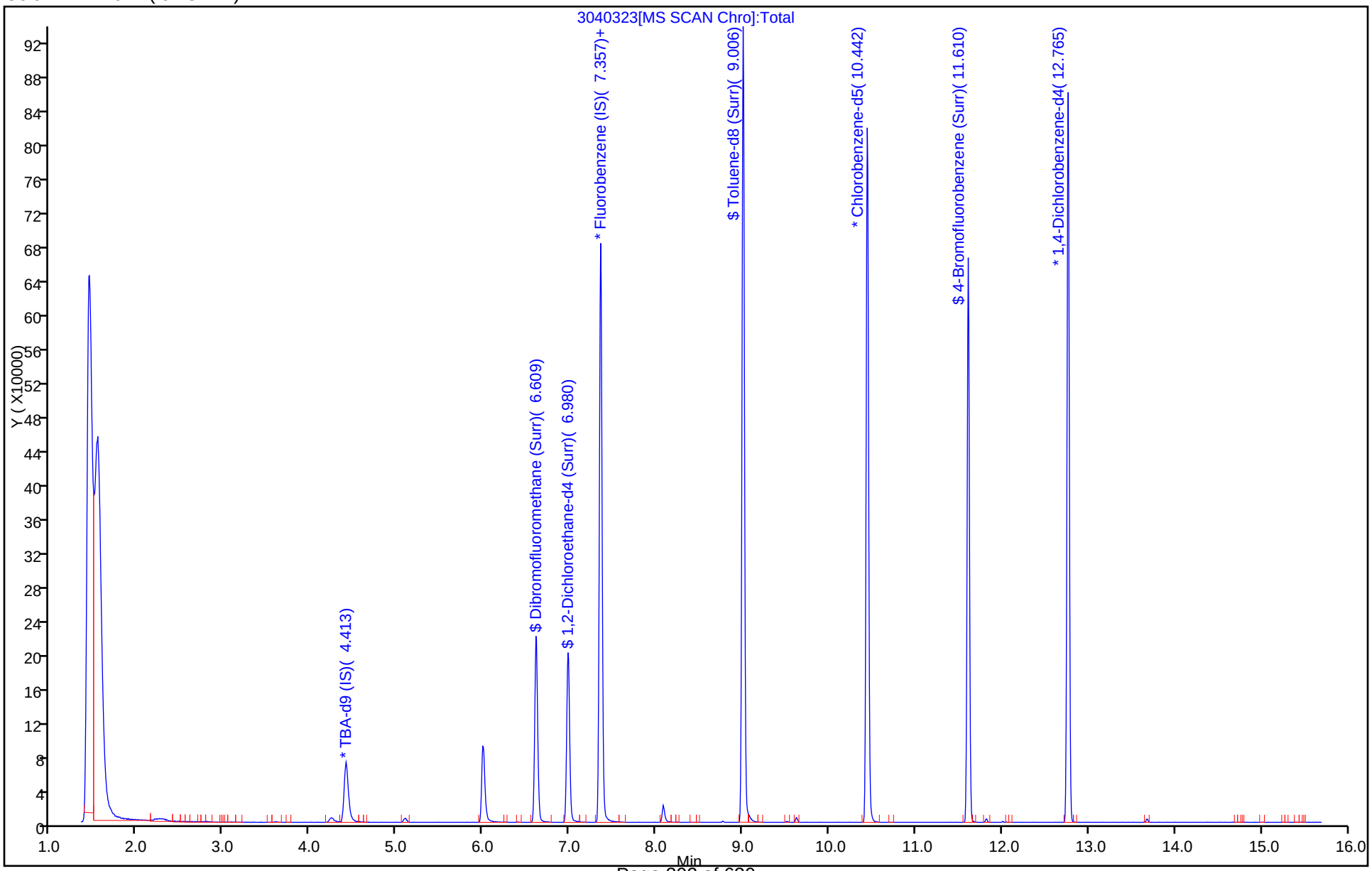
Report Date: 04-Apr-2017 05:31:36 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040323.D

Injection Date:	03-Apr-2017 15:13:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-17-A	Lab Sample ID:	180-64801-17	Worklist Smp#:	24
Client ID:	HD-SPBA-SB-010-25/25.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040323.D
Lims ID: 180-64801-B-17-A
Client ID: HD-SPBA-SB-010-25/25.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 15:13:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-024
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:31:36 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:31:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	252.5	101.02
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	234.6	93.86
$ 7 Toluene-d8 (Surr)	250.0	230.5	92.19
$ 8 4-Bromofluorobenzene (Surr)	250.0	204.2	81.68

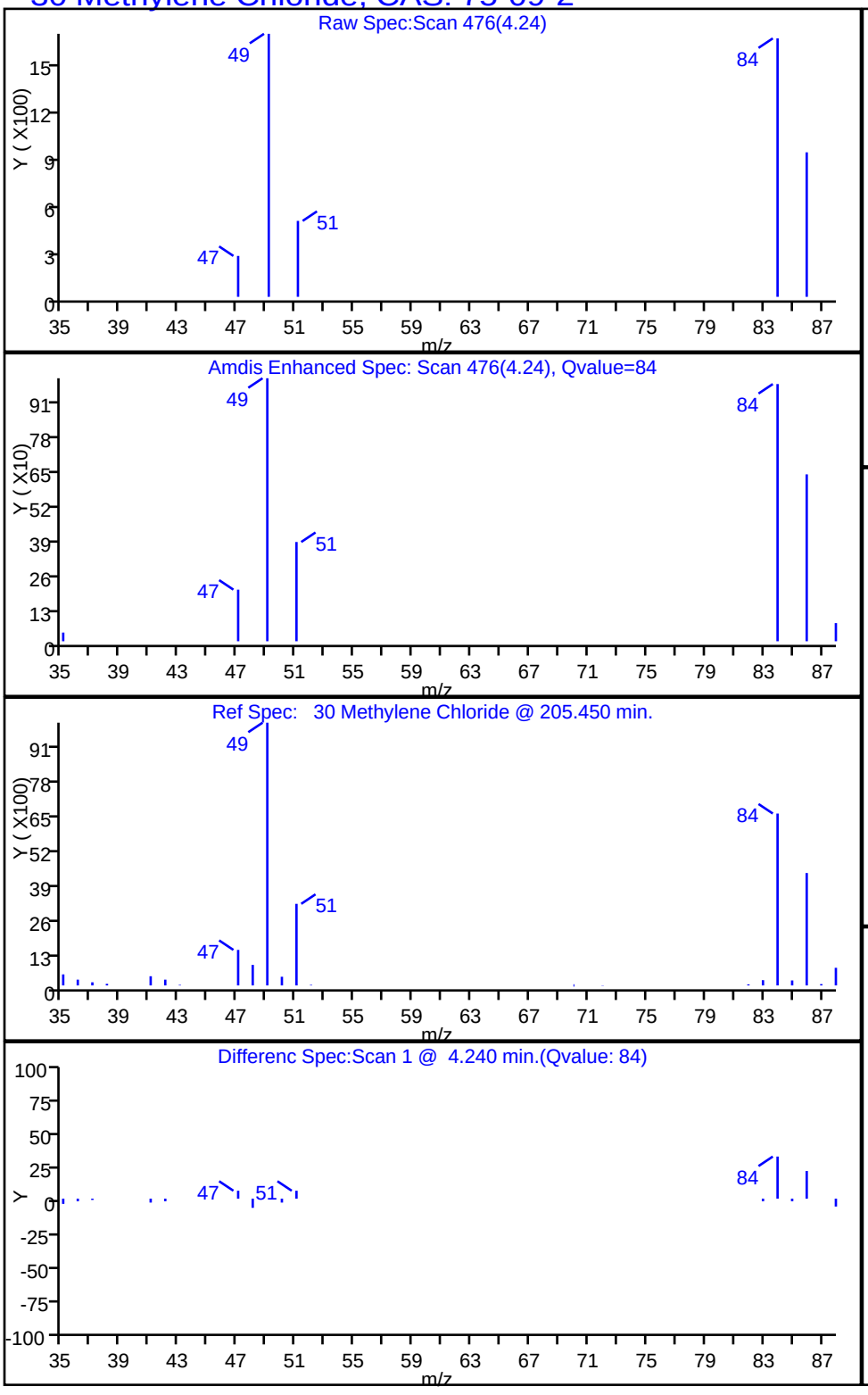
Report Date: 04-Apr-2017 05:31:37 Chrom Revision: 2.2 13-Mar-2017 15:50:30

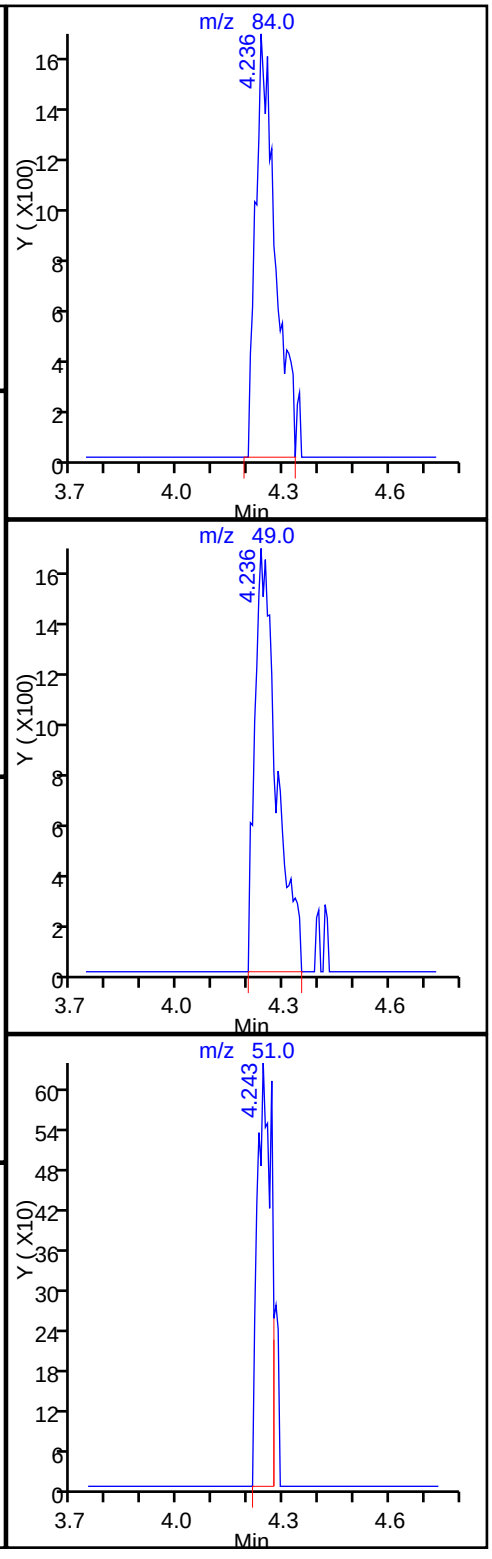
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040323.D

Injection Date:	03-Apr-2017 15:13:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-17-A	Lab Sample ID:	180-64801-17		
Client ID:	HD-SPBA-SB-010-25/25.5-0				
Operator ID:	10099	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2





Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

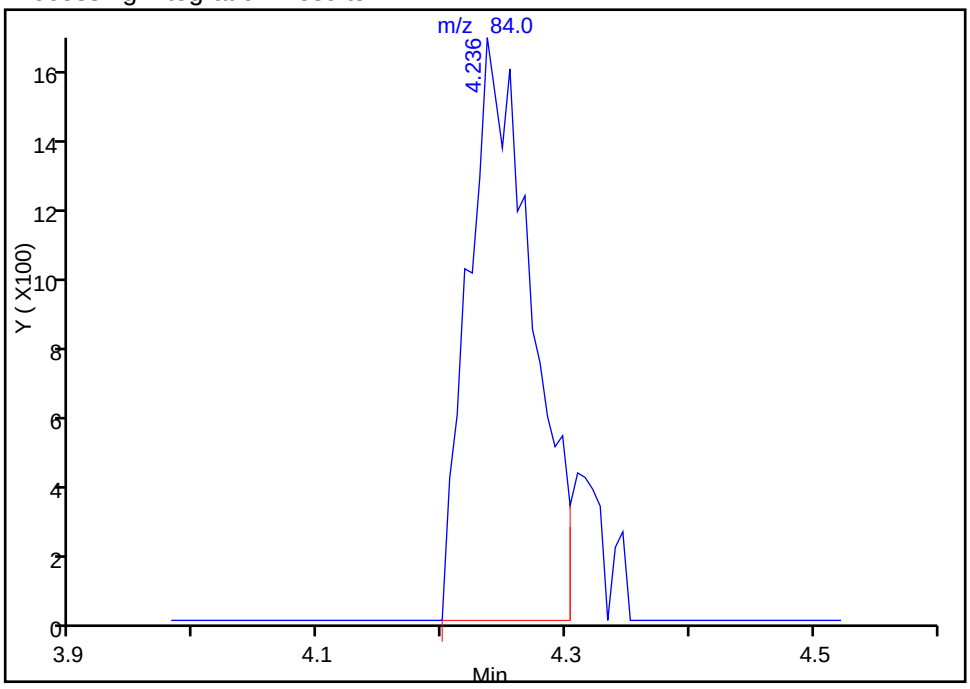
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040323.D				
Injection Date:	03-Apr-2017 15:13:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-17-A	Lab Sample ID:	180-64801-17		
Client ID:	HD-SPBA-SB-010-25/25.5-0				
Operator ID:	10099	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

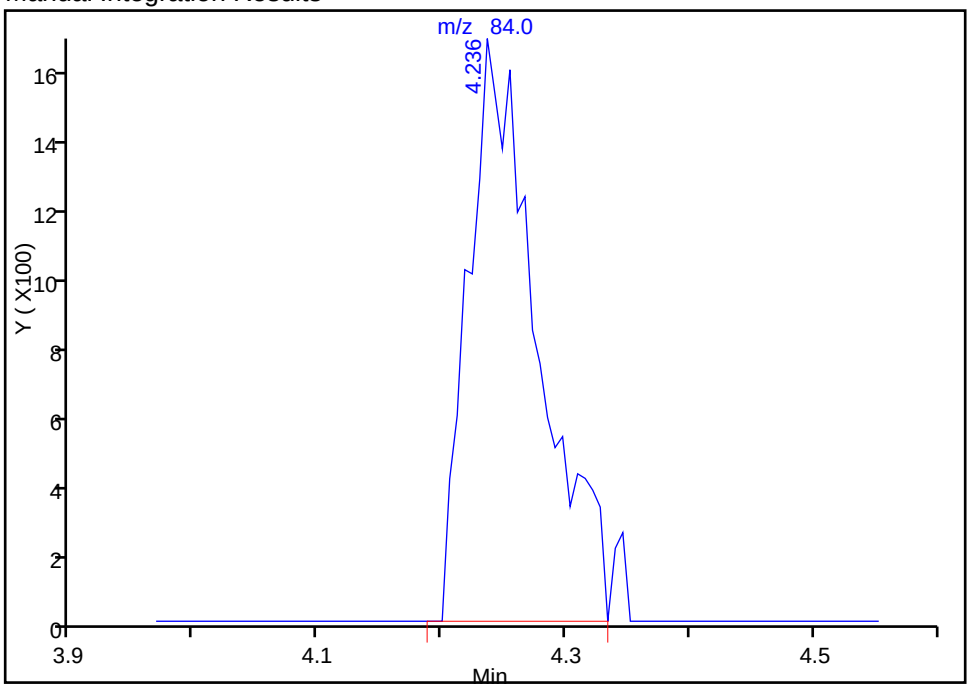
Processing Integration Results

RT: 4.24
Area: 5853
Amount: 5.940269
Amount Units: ng



Manual Integration Results

RT: 4.24
Area: 6405
Amount: 6.500500
Amount Units: ng



Reviewer: gordonk, 04-Apr-2017 05:31:11

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-31.6/32.2-0 | Lab Sample ID: 180-64801-18

Matrix: Solid | Lab File ID: 3040324.D

Analysis Method: 8260C | Date Collected: 03/30/2017 15:10

Sample wt/vol: 7.1918(g) | Date Analyzed: 04/03/2017 15:36

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 21.3 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.4	U	4.4	2.4
71-55-6	1,1,1-Trichloroethane	4.4	U	4.4	0.95
79-34-5	1,1,2,2-Tetrachloroethane	4.4	U	4.4	3.5
79-00-5	1,1,2-Trichloroethane	4.4	U	4.4	2.5
75-34-3	1,1-Dichloroethane	4.4	U	4.4	1.0
75-35-4	1,1-Dichloroethene	4.4	U	4.4	1.3
107-06-2	1,2-Dichloroethane	4.4	U	4.4	0.99
78-87-5	1,2-Dichloropropane	4.4	U	4.4	1.7
78-93-3	2-Butanone (MEK)	4.4	U	4.4	2.6
591-78-6	2-Hexanone	4.4	U	4.4	3.6
108-10-1	4-Methyl-2-pentanone (MIBK)	4.4	U	4.4	3.2
67-64-1	Acetone	18	U ^c	18	9.1
71-43-2	Benzene	4.4	U	4.4	2.7
75-25-2	Bromoform	4.4	U	4.4	4.0
74-83-9	Bromomethane	4.4	U ^c *	4.4	1.5
75-15-0	Carbon disulfide	4.4	U	4.4	1.9
56-23-5	Carbon tetrachloride	4.4	U ^c	4.4	1.2
108-90-7	Chlorobenzene	4.4	U	4.4	2.0
124-48-1	Dibromochloromethane	4.4	U	4.4	2.2
123-91-1	1,4-Dioxane	880	U	880	22
67-66-3	Chloroform	4.4	U	4.4	1.1
74-87-3	Chloromethane	4.4	U ^c	4.4	2.3
75-00-3	Chloroethane	4.4	U	4.4	1.9
156-59-2	cis-1,2-Dichloroethene	4.4	U	4.4	1.2
10061-01-5	cis-1,3-Dichloropropene	4.4	U	4.4	1.9
75-27-4	Bromodichloromethane	4.4	U	4.4	1.8
100-41-4	Ethylbenzene	4.4	U	4.4	1.8
106-93-4	1,2-Dibromoethane (EDB)	4.4	U	4.4	1.9
1634-04-4	Methyl tert-butyl ether	4.4	U	4.4	2.2
75-09-2	Methylene Chloride	1.2	J B	4.4	0.49
100-42-5	Styrene	4.4	U	4.4	2.1
127-18-4	Tetrachloroethene	4.4	U	4.4	1.1
108-88-3	Toluene	4.4	U	4.4	3.2
156-60-5	trans-1,2-Dichloroethene	4.4	U	4.4	0.91

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-31.6/32.2-0 | Lab Sample ID: 180-64801-18

Matrix: Solid | Lab File ID: 3040324.D

Analysis Method: 8260C | Date Collected: 03/30/2017 15:10

Sample wt/vol: 7.1918(g) | Date Analyzed: 04/03/2017 15:36

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 21.3 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-02-6	trans-1,3-Dichloropropene	4.4	U	4.4	2.1
79-01-6	Trichloroethene	4.4	U	4.4	0.99
107-13-1	Acrylonitrile	44	U ^c	44	22
75-01-4	Vinyl chloride	4.4	U	4.4	2.3
1330-20-7	Xylenes, Total	8.8	U	8.8	4.0
74-97-5	Bromochloromethane	4.4	U	4.4	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		52-124
460-00-4	4-Bromofluorobenzene (Surr)	81		63-120
1868-53-7	Dibromofluoromethane (Surr)	100		68-121
2037-26-5	Toluene-d8 (Surr)	94		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040324.D
Lims ID: 180-64801-B-18-A
Client ID: HD-SPBA-SB-010-31.6/32.2-0
Sample Type: Client
Inject. Date: 03-Apr-2017 15:36:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-025
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:32:15 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:32:15

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.411	4.464	-0.053	98	110484	5000.0	
*	2 Fluorobenzene (IS)	96	7.356	7.348	0.008	99	768271	250.0	
*	3 Chlorobenzene-d5	119	10.440	10.438	0.002	85	184626	250.0	
*	4 1,4-Dichlorobenzene-d4	152	12.764	12.762	0.002	96	263658	250.0	
$	5 Dibromofluoromethane (Surr	113	6.607	6.600	0.007	93	165314	250.6	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.978	6.971	0.007	95	175207	230.7	
$	7 Toluene-d8 (Surr)	98	9.004	9.003	0.001	92	754426	236.0	
$	8 4-Bromofluorobenzene (Surr	95	11.608	11.606	0.002	88	263313	203.0	
	11 Chloromethane	50		1.812				ND	
	12 Vinyl chloride	62		1.958				ND	
	14 Bromomethane	94		2.299				ND	
	15 Chloroethane	64		2.420				ND	
	21 1,1-Dichloroethene	96		3.424				ND	
	23 Acetone	43		3.594				ND	
	25 Carbon disulfide	76		3.716				ND	
	30 Methylene Chloride	84	4.241	4.221	0.020	79	6845	6.85	M
	32 Acrylonitrile	53		4.635				ND	
	33 trans-1,2-Dichloroethene	96		4.641				ND	
	34 Methyl tert-butyl ether	73		4.695				ND	
	36 1,1-Dichloroethane	63		5.249				ND	
	42 cis-1,2-Dichloroethene	96		6.009				ND	
	43 2-Butanone (MEK)	43		6.070				ND	
	47 Chlorobromomethane	128		6.295				ND	
	49 Chloroform	83		6.417				ND	
	50 1,1,1-Trichloroethane	97		6.612				ND	
	53 Carbon tetrachloride	117		6.800				ND	
	55 Benzene	78		7.031				ND	
	56 1,2-Dichloroethane	62		7.056				ND	
	60 Trichloroethene	130		7.743				ND	
	64 1,2-Dichloropropane	63		7.981				ND	
	67 1,4-Dioxane	88		8.133				ND	
	68 Dichlorobromomethane	83		8.273				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.729				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893				ND	
73 Toluene	91		9.069				ND	
74 trans-1,3-Dichloropropene	75		9.288				ND	
76 1,1,2-Trichloroethane	97		9.471				ND	
77 Tetrachloroethene	164	9.625	9.617	0.008	83	1708	2.44	
79 2-Hexanone	43		9.726				ND	
81 Chlorodibromomethane	129		9.866				ND	
82 Ethylene Dibromide	107		9.976				ND	
83 Chlorobenzene	112		10.469				ND	
85 1,1,1,2-Tetrachloroethane	131		10.548				ND	
86 Ethylbenzene	106		10.578				ND	
87 m-Xylene & p-Xylene	106		10.694				ND	
88 o-Xylene	106		11.089				ND	
89 Styrene	104		11.101				ND	
90 Bromoform	173		11.284				ND	
93 1,1,2,2-Tetrachloroethane	83		11.746				ND	
S 129 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

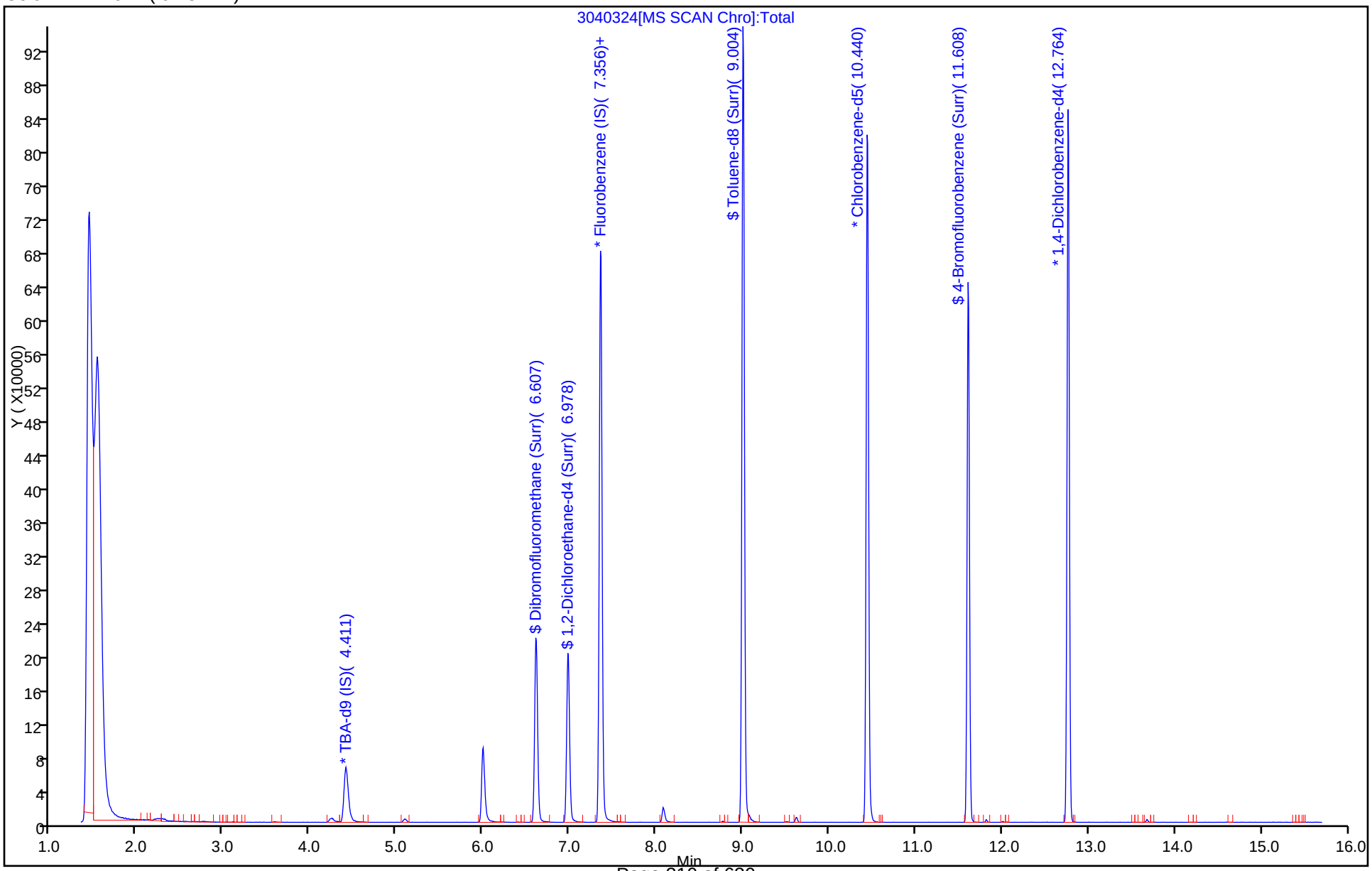
VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

Report Date: 04-Apr-2017 05:32:15 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040324.D				
Injection Date:	03-Apr-2017 15:36:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-18-A	Lab Sample ID:	180-64801-18	Worklist Smp#:	25
Client ID:	HD-SPBA-SB-010-31.6/32.2-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040324.D
Lims ID: 180-64801-B-18-A
Client ID: HD-SPBA-SB-010-31.6/32.2-0
Sample Type: Client
Inject. Date: 03-Apr-2017 15:36:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-025
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:32:15 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:32:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	250.6	100.22
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	230.7	92.27
$ 7 Toluene-d8 (Surr)	250.0	236.0	94.40
$ 8 4-Bromofluorobenzene (Surr)	250.0	203.0	81.18

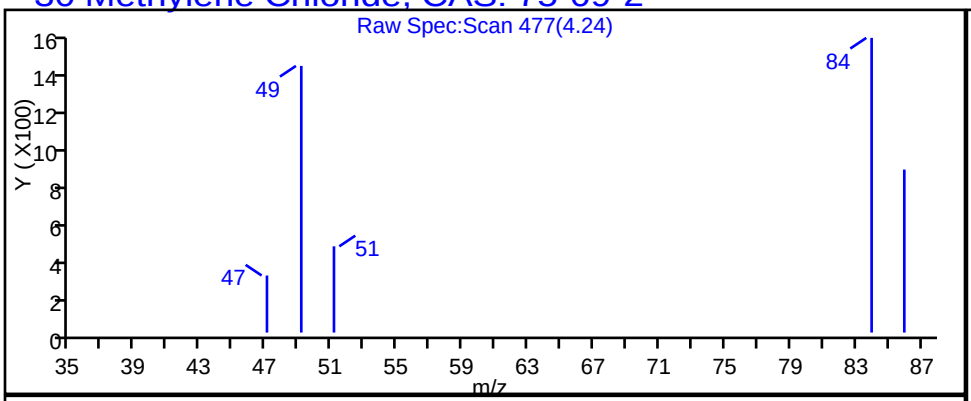
Report Date: 04-Apr-2017 05:32:15 Chrom Revision: 2.2 13-Mar-2017 15:50:30

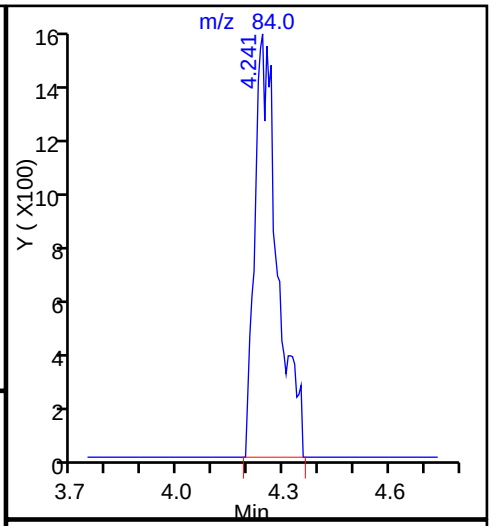
TestAmerica Pittsburgh

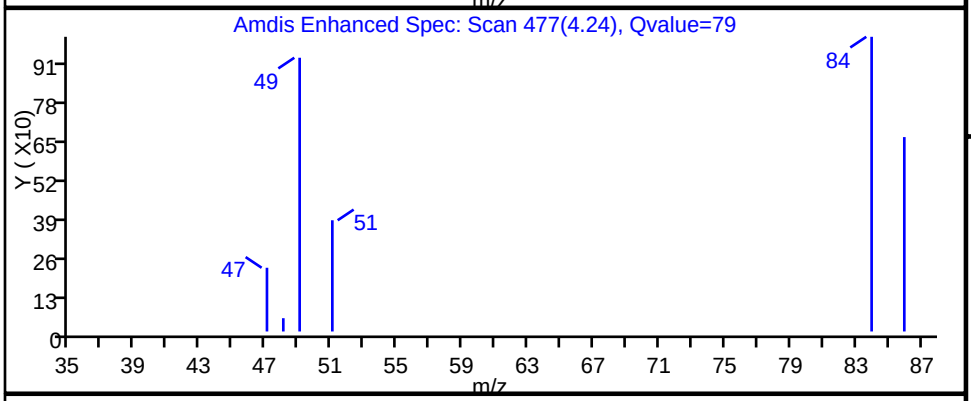
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040324.D

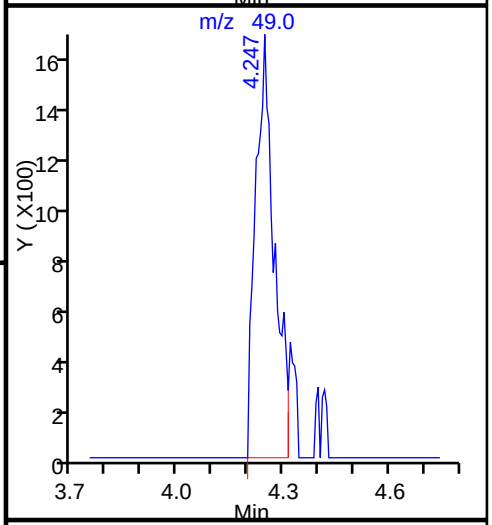
Injection Date:	03-Apr-2017 15:36:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-18-A	Lab Sample ID:	180-64801-18		
Client ID:	HD-SPBA-SB-010-31.6/32.2-0				
Operator ID:	10099	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

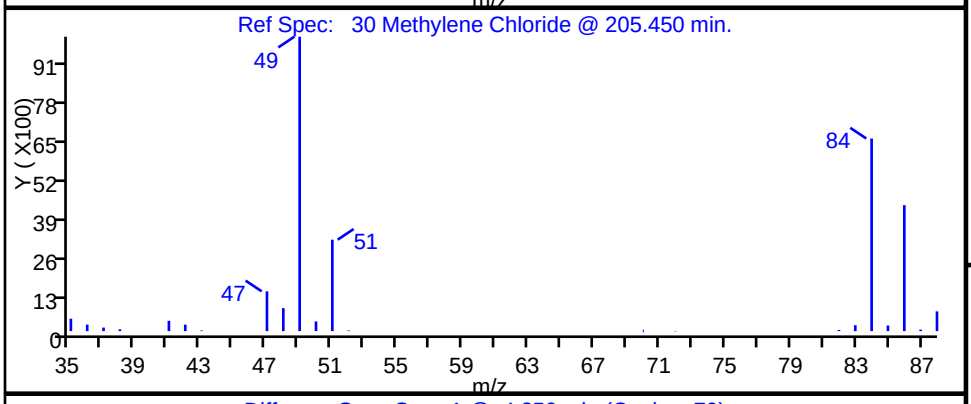
30 Methylene Chloride, CAS: 75-09-2

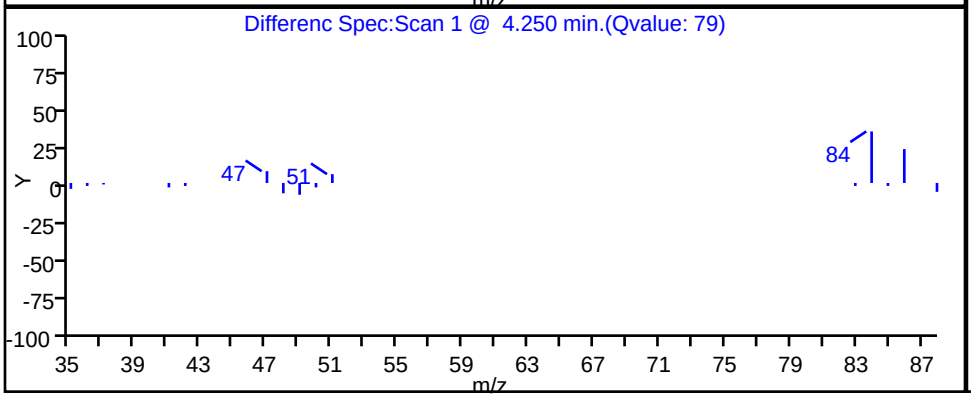


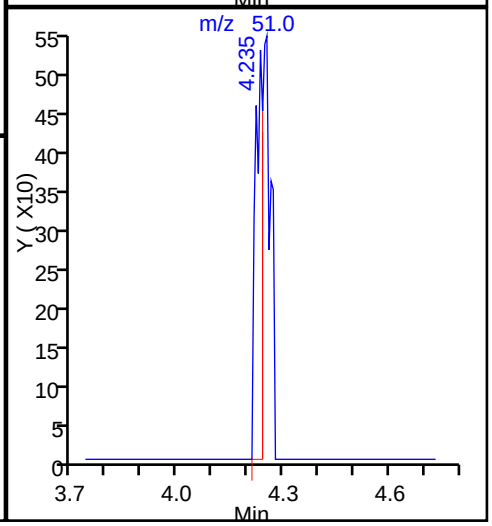












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

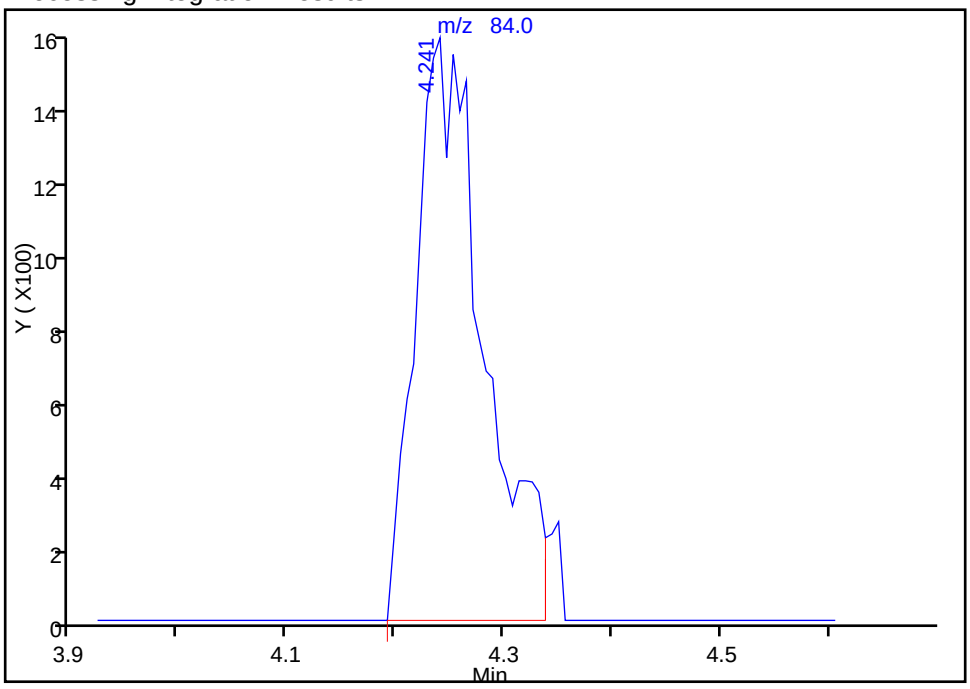
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040324.D				
Injection Date:	03-Apr-2017 15:36:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-18-A	Lab Sample ID:	180-64801-18		
Client ID:	HD-SPBA-SB-010-31.6/32.2-0				
Operator ID:	10099	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

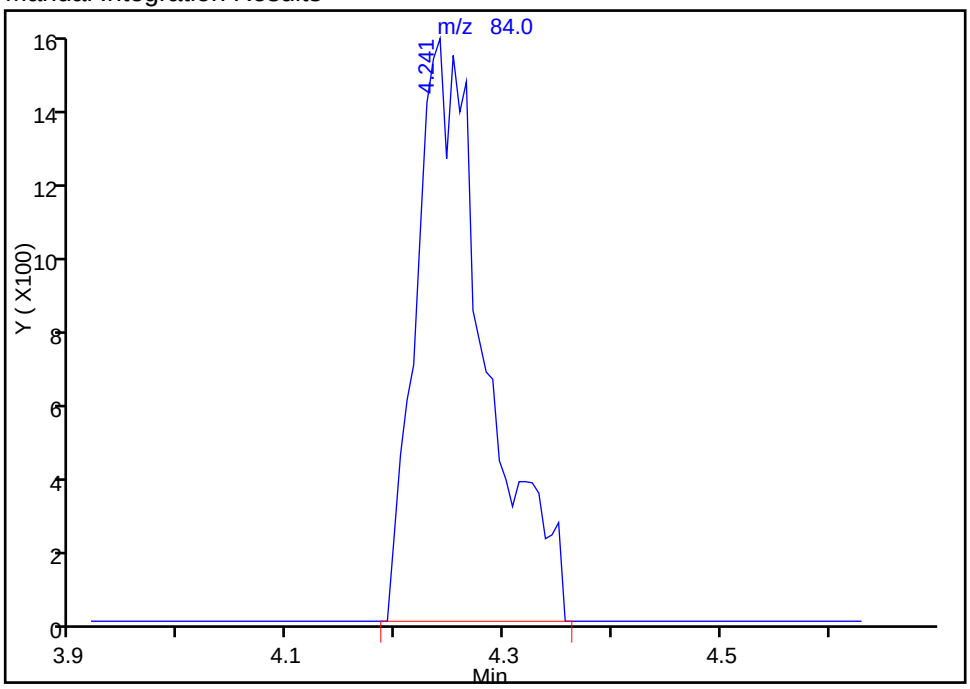
Processing Integration Results

RT: 4.24
Area: 6668
Amount: 6.675247
Amount Units: ng



Manual Integration Results

RT: 4.24
Area: 6845
Amount: 6.852440
Amount Units: ng



Reviewer: gordonk, 04-Apr-2017 05:31:55

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-35/35.5-0 | Lab Sample ID: 180-64801-19

Matrix: Solid | Lab File ID: 3040325.D

Analysis Method: 8260C | Date Collected: 03/30/2017 15:20

Sample wt/vol: 6.9198(g) | Date Analyzed: 04/03/2017 15:59

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 19.0 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.5	U	4.5	2.4
71-55-6	1,1,1-Trichloroethane	4.5	U	4.5	0.96
79-34-5	1,1,2,2-Tetrachloroethane	4.5	U	4.5	3.5
79-00-5	1,1,2-Trichloroethane	4.5	U	4.5	2.5
75-34-3	1,1-Dichloroethane	4.5	U	4.5	1.0
75-35-4	1,1-Dichloroethene	4.5	U	4.5	1.3
107-06-2	1,2-Dichloroethane	4.5	U	4.5	1.0
78-87-5	1,2-Dichloropropane	4.5	U	4.5	1.7
78-93-3	2-Butanone (MEK)	4.5	U	4.5	2.7
591-78-6	2-Hexanone	4.5	U	4.5	3.6
108-10-1	4-Methyl-2-pentanone (MIBK)	4.5	U	4.5	3.2
67-64-1	Acetone	18	U ^c	18	9.2
71-43-2	Benzene	4.5	U	4.5	2.7
75-25-2	Bromoform	4.5	U	4.5	4.1
74-83-9	Bromomethane	4.5	U ^c *	4.5	1.5
75-15-0	Carbon disulfide	4.5	U	4.5	1.9
56-23-5	Carbon tetrachloride	4.5	U ^c	4.5	1.2
108-90-7	Chlorobenzene	4.5	U	4.5	2.0
124-48-1	Dibromochloromethane	4.5	U	4.5	2.2
123-91-1	1,4-Dioxane	890	U	890	22
67-66-3	Chloroform	4.5	U	4.5	1.1
74-87-3	Chloromethane	4.5	U ^c	4.5	2.4
75-00-3	Chloroethane	4.5	U	4.5	1.9
156-59-2	cis-1,2-Dichloroethene	4.5	U	4.5	1.2
10061-01-5	cis-1,3-Dichloropropene	4.5	U	4.5	2.0
75-27-4	Bromodichloromethane	4.5	U	4.5	1.8
100-41-4	Ethylbenzene	4.5	U	4.5	1.8
106-93-4	1,2-Dibromoethane (EDB)	4.5	U	4.5	1.9
1634-04-4	Methyl tert-butyl ether	4.5	U	4.5	2.2
75-09-2	Methylene Chloride	1.2	J B	4.5	0.50
100-42-5	Styrene	4.5	U	4.5	2.1
127-18-4	Tetrachloroethene	4.5	U	4.5	1.1
108-88-3	Toluene	4.5	U	4.5	3.2
156-60-5	trans-1,2-Dichloroethene	4.5	U	4.5	0.91
10061-02-6	trans-1,3-Dichloropropene	4.5	U	4.5	2.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-35/35.5-0 | Lab Sample ID: 180-64801-19

Matrix: Solid | Lab File ID: 3040325.D

Analysis Method: 8260C | Date Collected: 03/30/2017 15:20

Sample wt/vol: 6.9198(g) | Date Analyzed: 04/03/2017 15:59

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 19.0 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	4.5	U	4.5	1.0
107-13-1	Acrylonitrile	45	U ^c	45	22
75-01-4	Vinyl chloride	4.5	U	4.5	2.3
1330-20-7	Xylenes, Total	8.9	U	8.9	4.1
74-97-5	Bromochloromethane	4.5	U	4.5	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		52-124
460-00-4	4-Bromofluorobenzene (Surr)	84		63-120
1868-53-7	Dibromofluoromethane (Surr)	101		68-121
2037-26-5	Toluene-d8 (Surr)	96		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040325.D
Lims ID: 180-64801-B-19-A
Client ID: HD-SPBA-SB-010-35/35.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 15:59:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-026
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:32:57 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:32:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.416	4.464	-0.048	98	123845	5000.0	
* 2 Fluorobenzene (IS)	96	7.360	7.348	0.012	99	783402	250.0	
* 3 Chlorobenzene-d5	119	10.444	10.438	0.006	85	187874	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.762	0.006	96	270936	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.612	6.600	0.012	93	170504	253.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.983	6.971	0.012	95	186412	240.7	
$ 7 Toluene-d8 (Surr)	98	9.009	9.003	0.006	92	780598	240.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.606	11.606	0.000	87	275749	208.9	
11 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.958				ND	
14 Bromomethane	94		2.299				ND	
15 Chloroethane	64		2.420				ND	
21 1,1-Dichloroethene	96		3.424				ND	
23 Acetone	43		3.594				ND	
25 Carbon disulfide	76		3.716				ND	
30 Methylene Chloride	84	4.258	4.221	0.037	86	6656	6.53	M
32 Acrylonitrile	53		4.635				ND	
33 trans-1,2-Dichloroethene	96		4.641				ND	
34 Methyl tert-butyl ether	73		4.695				ND	
36 1,1-Dichloroethane	63		5.249				ND	
42 cis-1,2-Dichloroethene	96		6.009				ND	
43 2-Butanone (MEK)	43		6.070				ND	
47 Chlorobromomethane	128		6.295				ND	
49 Chloroform	83		6.417				ND	
50 1,1,1-Trichloroethane	97		6.612				ND	
53 Carbon tetrachloride	117		6.800				ND	
55 Benzene	78		7.031				ND	
56 1,2-Dichloroethane	62		7.056				ND	
60 Trichloroethene	130		7.743				ND	
64 1,2-Dichloropropane	63		7.981				ND	
67 1,4-Dioxane	88		8.133				ND	
68 Dichlorobromomethane	83		8.273				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.729				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893				ND	
73 Toluene	91		9.069				ND	
74 trans-1,3-Dichloropropene	75		9.288				ND	
76 1,1,2-Trichloroethane	97		9.471				ND	
77 Tetrachloroethene	164	9.623	9.617	0.006	93	3008	4.23	
79 2-Hexanone	43		9.726				ND	
81 Chlorodibromomethane	129		9.866				ND	
82 Ethylene Dibromide	107		9.976				ND	
83 Chlorobenzene	112		10.469				ND	
85 1,1,1,2-Tetrachloroethane	131		10.548				ND	
86 Ethylbenzene	106		10.578				ND	
87 m-Xylene & p-Xylene	106		10.694				ND	
88 o-Xylene	106		11.089				ND	
89 Styrene	104		11.101				ND	
90 Bromoform	173		11.284				ND	
93 1,1,2,2-Tetrachloroethane	83		11.746				ND	
S 129 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

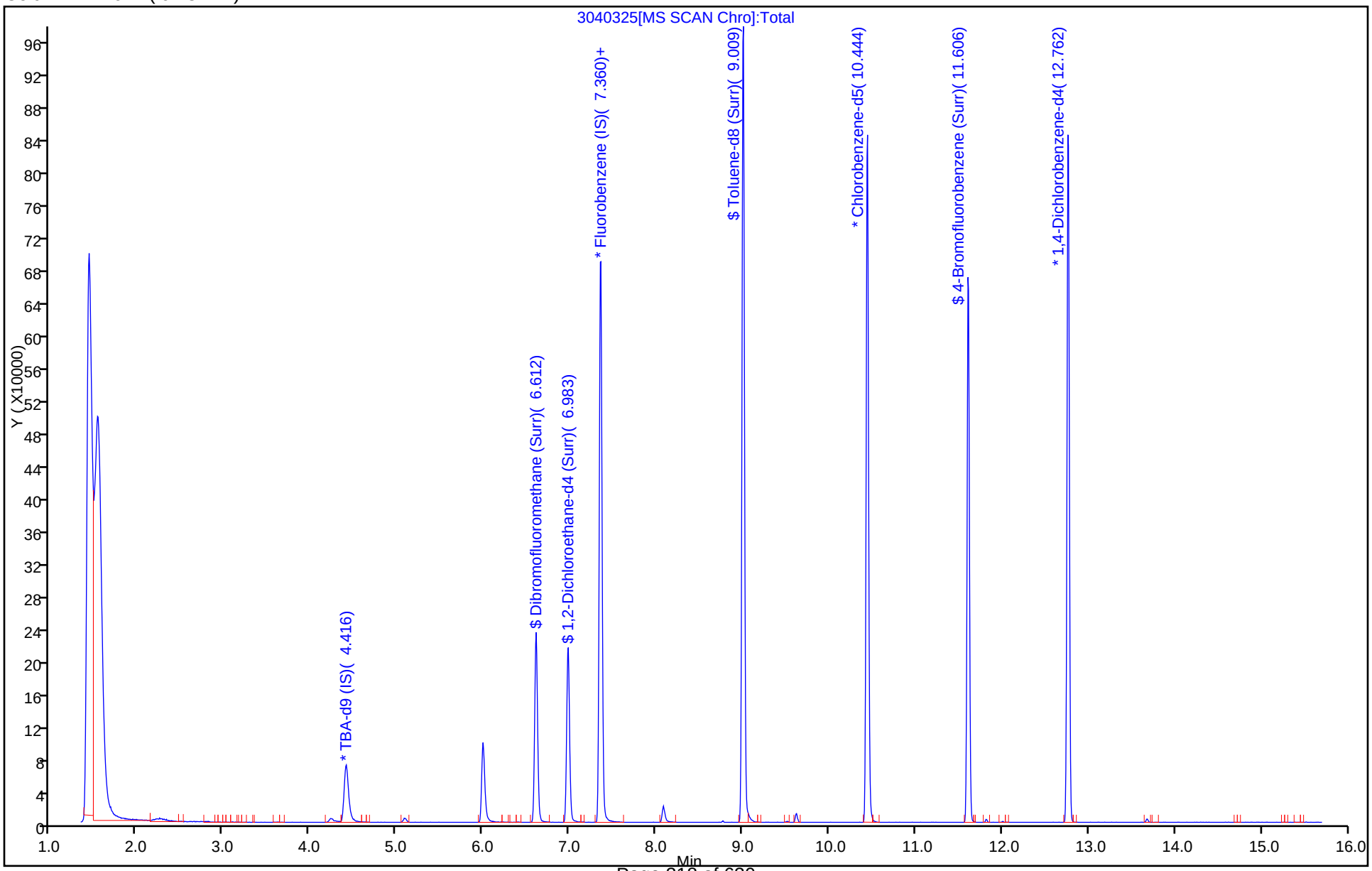
Report Date: 04-Apr-2017 05:32:58 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040325.D

Injection Date:	03-Apr-2017 15:59:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-19-A	Lab Sample ID:	180-64801-19	Worklist Smp#:	26
Client ID:	HD-SPBA-SB-010-35/35.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040325.D
Lims ID: 180-64801-B-19-A
Client ID: HD-SPBA-SB-010-35/35.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 15:59:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-026
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:32:57 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:32:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	253.4	101.37
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	240.7	96.28
$ 7 Toluene-d8 (Surr)	250.0	240.0	95.98
$ 8 4-Bromofluorobenzene (Surr)	250.0	208.9	83.55

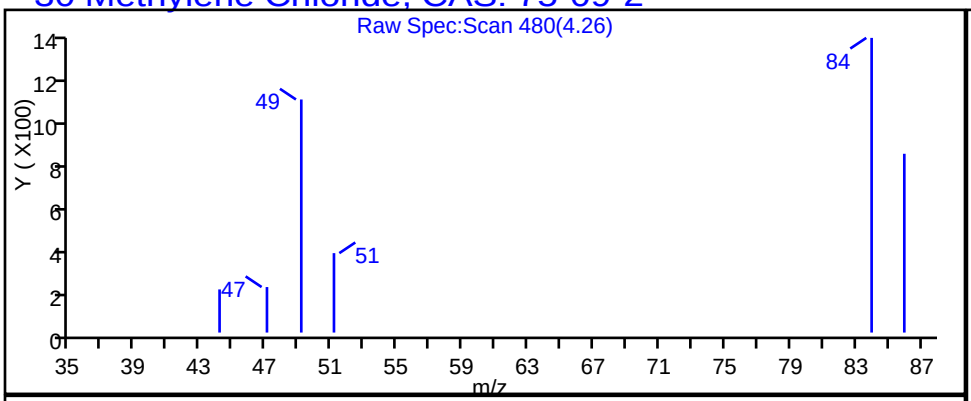
Report Date: 04-Apr-2017 05:32:58 Chrom Revision: 2.2 13-Mar-2017 15:50:30

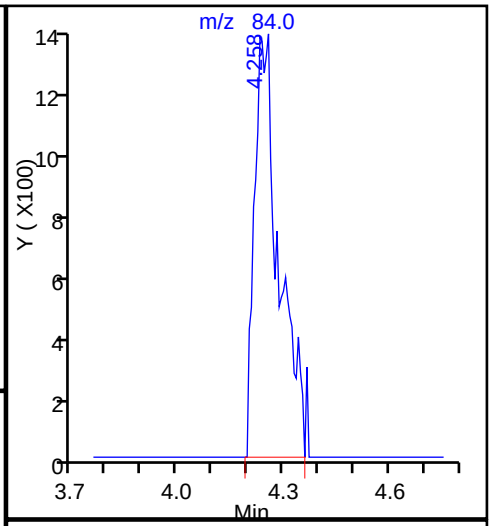
TestAmerica Pittsburgh

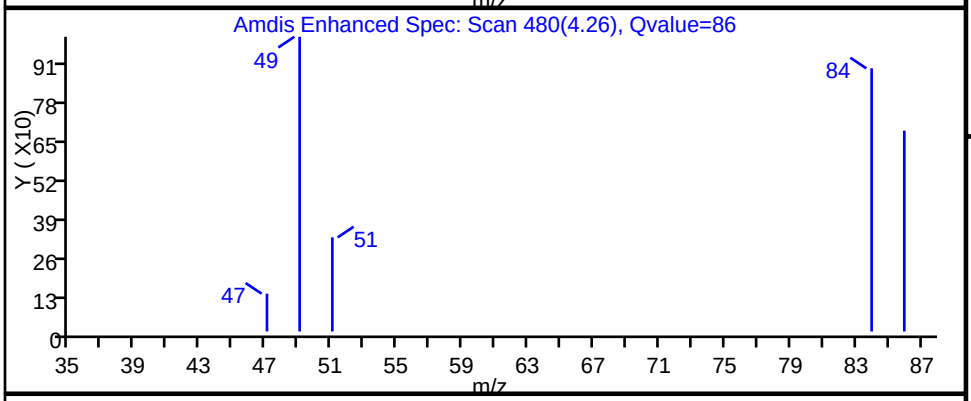
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040325.D

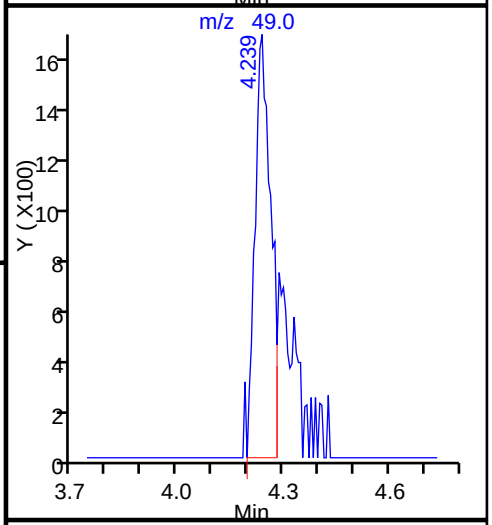
Injection Date:	03-Apr-2017 15:59:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-19-A	Lab Sample ID:	180-64801-19		
Client ID:	HD-SPBA-SB-010-35/35.5-0				
Operator ID:	10099	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

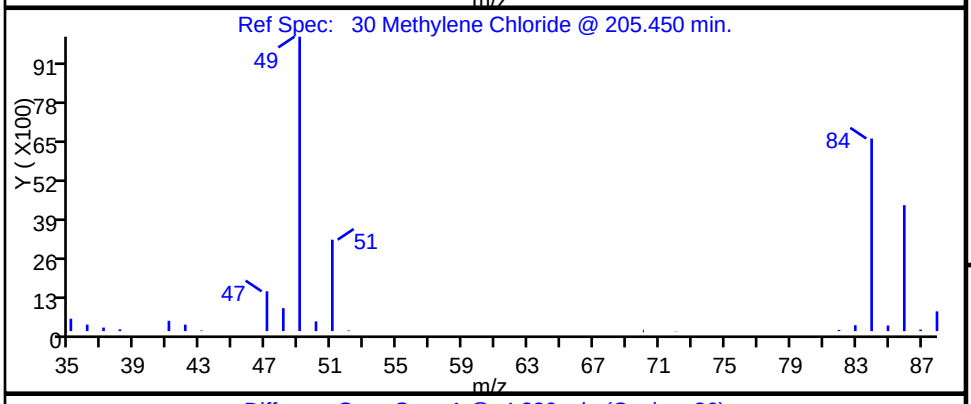
30 Methylene Chloride, CAS: 75-09-2

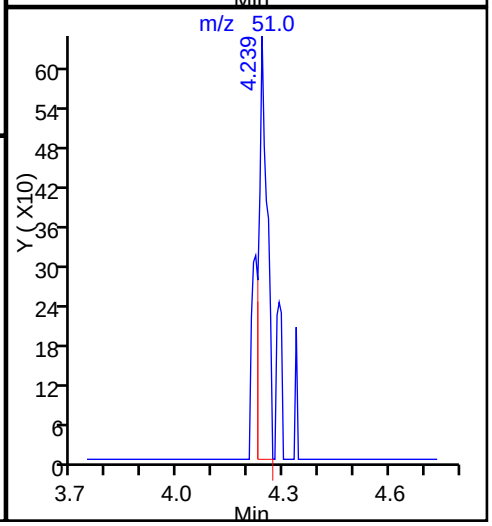


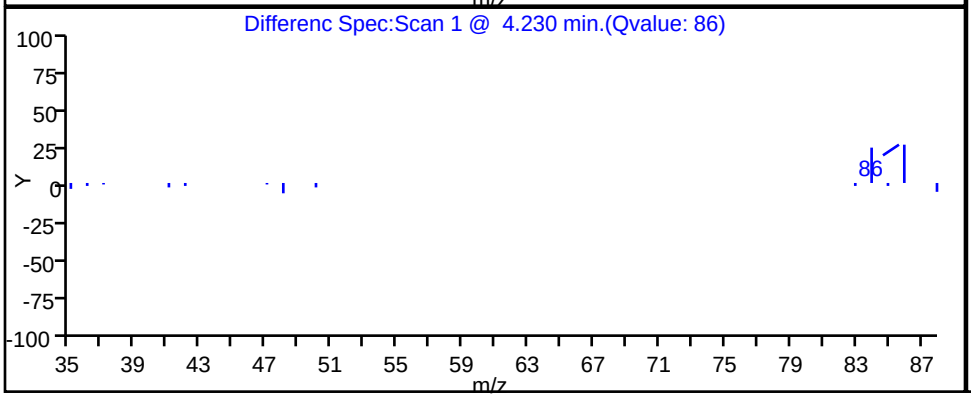












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

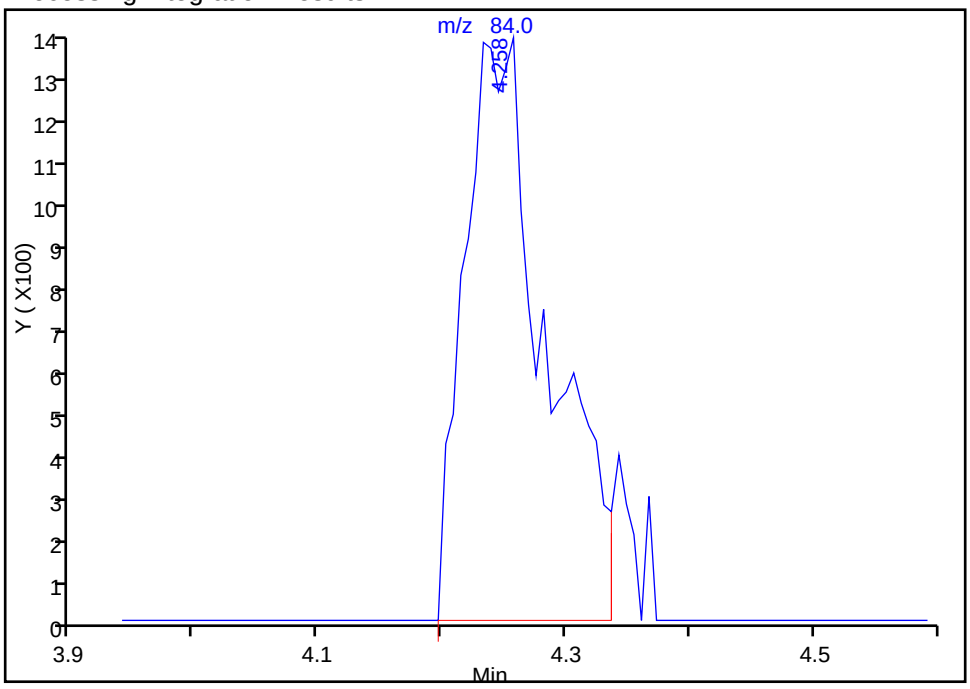
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040325.D				
Injection Date:	03-Apr-2017 15:59:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-19-A	Lab Sample ID:	180-64801-19		
Client ID:	HD-SPBA-SB-010-35/35.5-0				
Operator ID:	10099	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

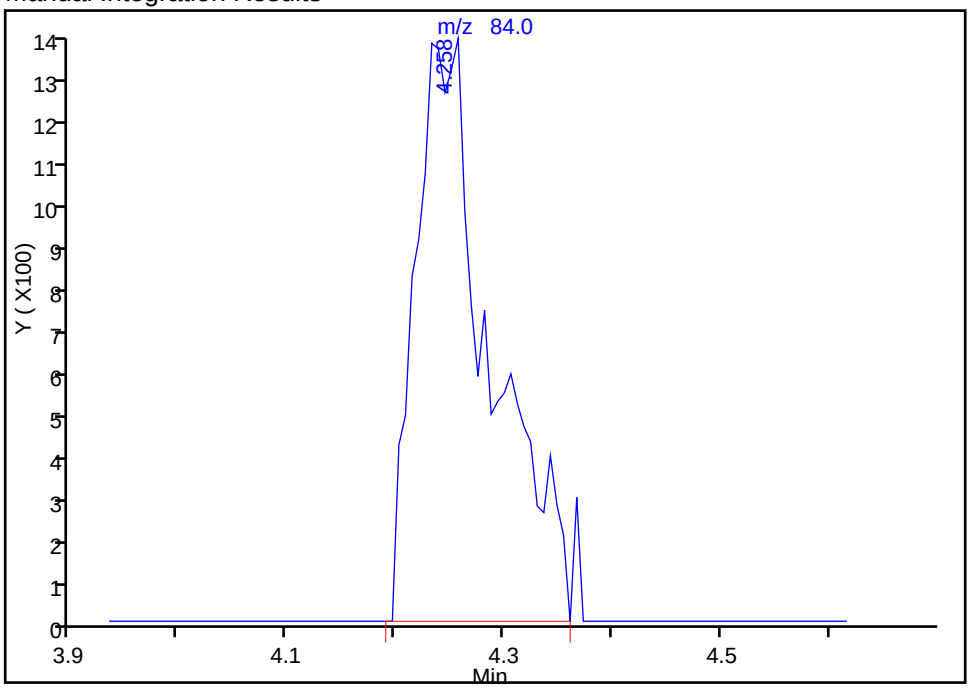
Processing Integration Results

RT: 4.26
Area: 6340
Amount: 6.224304
Amount Units: ng



Manual Integration Results

RT: 4.26
Area: 6656
Amount: 6.534537
Amount Units: ng



Reviewer: gordonk, 04-Apr-2017 05:32:36

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-40/40.5-0 | Lab Sample ID: 180-64801-20

Matrix: Solid | Lab File ID: 3040326.D

Analysis Method: 8260C | Date Collected: 03/30/2017 15:45

Sample wt/vol: 7.379(g) | Date Analyzed: 04/03/2017 16:22

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 20.3 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.3	U	4.3	2.3
71-55-6	1,1,1-Trichloroethane	4.3	U	4.3	0.92
79-34-5	1,1,2,2-Tetrachloroethane	4.3	U	4.3	3.4
79-00-5	1,1,2-Trichloroethane	4.3	U	4.3	2.4
75-34-3	1,1-Dichloroethane	4.3	U	4.3	0.96
75-35-4	1,1-Dichloroethene	4.3	U	4.3	1.2
107-06-2	1,2-Dichloroethane	4.3	U	4.3	0.95
78-87-5	1,2-Dichloropropane	4.3	U	4.3	1.6
78-93-3	2-Butanone (MEK)	4.3	U	4.3	2.5
591-78-6	2-Hexanone	4.3	U	4.3	3.5
108-10-1	4-Methyl-2-pentanone (MIBK)	4.3	U	4.3	3.0
67-64-1	Acetone	17	U ^c	17	8.7
71-43-2	Benzene	4.3	U	4.3	2.6
75-25-2	Bromoform	4.3	U	4.3	3.9
74-83-9	Bromomethane	4.3	U ^c *	4.3	1.5
75-15-0	Carbon disulfide	4.3	U	4.3	1.8
56-23-5	Carbon tetrachloride	4.3	U ^c	4.3	1.2
108-90-7	Chlorobenzene	4.3	U	4.3	1.9
124-48-1	Dibromochloromethane	4.3	U	4.3	2.1
123-91-1	1,4-Dioxane	850	U	850	21
67-66-3	Chloroform	4.3	U	4.3	1.1
74-87-3	Chloromethane	4.3	U ^c	4.3	2.3
75-00-3	Chloroethane	4.3	U	4.3	1.8
156-59-2	cis-1,2-Dichloroethene	4.3	U	4.3	1.1
10061-01-5	cis-1,3-Dichloropropene	4.3	U	4.3	1.9
75-27-4	Bromodichloromethane	4.3	U	4.3	1.7
100-41-4	Ethylbenzene	4.3	U	4.3	1.7
106-93-4	1,2-Dibromoethane (EDB)	4.3	U	4.3	1.8
1634-04-4	Methyl tert-butyl ether	4.3	U	4.3	2.1
75-09-2	Methylene Chloride	1.2	J B	4.3	0.47
100-42-5	Styrene	4.3	U	4.3	2.0
127-18-4	Tetrachloroethene	11		4.3	1.1
108-88-3	Toluene	4.3	U	4.3	3.1
156-60-5	trans-1,2-Dichloroethene	4.3	U	4.3	0.87
10061-02-6	trans-1,3-Dichloropropene	4.3	U	4.3	2.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-40/40.5-0 | Lab Sample ID: 180-64801-20

Matrix: Solid | Lab File ID: 3040326.D

Analysis Method: 8260C | Date Collected: 03/30/2017 15:45

Sample wt/vol: 7.379(g) | Date Analyzed: 04/03/2017 16:22

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 20.3 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	4.3	U	4.3	0.96
107-13-1	Acrylonitrile	43	U ^c	43	21
75-01-4	Vinyl chloride	4.3	U	4.3	2.2
1330-20-7	Xylenes, Total	8.5	U	8.5	3.9
74-97-5	Bromochloromethane	4.3	U	4.3	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		52-124
460-00-4	4-Bromofluorobenzene (Surr)	78		63-120
1868-53-7	Dibromofluoromethane (Surr)	98		68-121
2037-26-5	Toluene-d8 (Surr)	91		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040326.D
Lims ID: 180-64801-B-20-A
Client ID: HD-SPBA-SB-010-40/40.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 16:22:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-027
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:33:33 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:33:32

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.410	4.464	-0.054	98	111407	5000.0	
*	2 Fluorobenzene (IS)	96	7.360	7.348	0.012	99	764781	250.0	
*	3 Chlorobenzene-d5	119	10.444	10.438	0.006	85	185359	250.0	
*	4 1,4-Dichlorobenzene-d4	152	12.768	12.762	0.006	96	261017	250.0	
$	5 Dibromofluoromethane (Surr	113	6.612	6.600	0.012	93	160955	245.1	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.983	6.971	0.012	95	172200	227.8	
$	7 Toluene-d8 (Surr)	98	9.009	9.003	0.006	93	728467	227.0	
$	8 4-Bromofluorobenzene (Surr	95	11.606	11.606	0.000	87	255285	196.0	
	11 Chloromethane	50		1.812				ND	
	12 Vinyl chloride	62		1.958				ND	
	14 Bromomethane	94		2.299				ND	
	15 Chloroethane	64		2.420				ND	
	21 1,1-Dichloroethene	96		3.424				ND	
	23 Acetone	43		3.594				ND	
	25 Carbon disulfide	76		3.716				ND	
	30 Methylene Chloride	84	4.239	4.221	0.018	85	6949	6.99	M
	32 Acrylonitrile	53		4.635				ND	
	33 trans-1,2-Dichloroethene	96		4.641				ND	
	34 Methyl tert-butyl ether	73		4.695				ND	
	36 1,1-Dichloroethane	63		5.249				ND	
	42 cis-1,2-Dichloroethene	96		6.009				ND	
	43 2-Butanone (MEK)	43		6.070				ND	
	47 Chlorobromomethane	128		6.295				ND	
	49 Chloroform	83		6.417				ND	
	50 1,1,1-Trichloroethane	97		6.612				ND	
	53 Carbon tetrachloride	117		6.800				ND	
	55 Benzene	78		7.031				ND	
	56 1,2-Dichloroethane	62		7.056				ND	
	60 Trichloroethene	130		7.743				ND	
	64 1,2-Dichloropropane	63		7.981				ND	
	67 1,4-Dioxane	88		8.133				ND	
	68 Dichlorobromomethane	83		8.273				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.729				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893				ND	
73 Toluene	91		9.069				ND	
74 trans-1,3-Dichloropropene	75		9.288				ND	
76 1,1,2-Trichloroethane	97		9.471				ND	
77 Tetrachloroethene	164	9.623	9.617	0.006	97	43522	62.1	
79 2-Hexanone	43		9.726				ND	
81 Chlorodibromomethane	129		9.866				ND	
82 Ethylene Dibromide	107		9.976				ND	
83 Chlorobenzene	112		10.469				ND	
85 1,1,1,2-Tetrachloroethane	131		10.548				ND	
86 Ethylbenzene	106		10.578				ND	
87 m-Xylene & p-Xylene	106		10.694				ND	
88 o-Xylene	106		11.089				ND	
89 Styrene	104		11.101				ND	
90 Bromoform	173		11.284				ND	
93 1,1,2,2-Tetrachloroethane	83		11.746				ND	
S 129 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

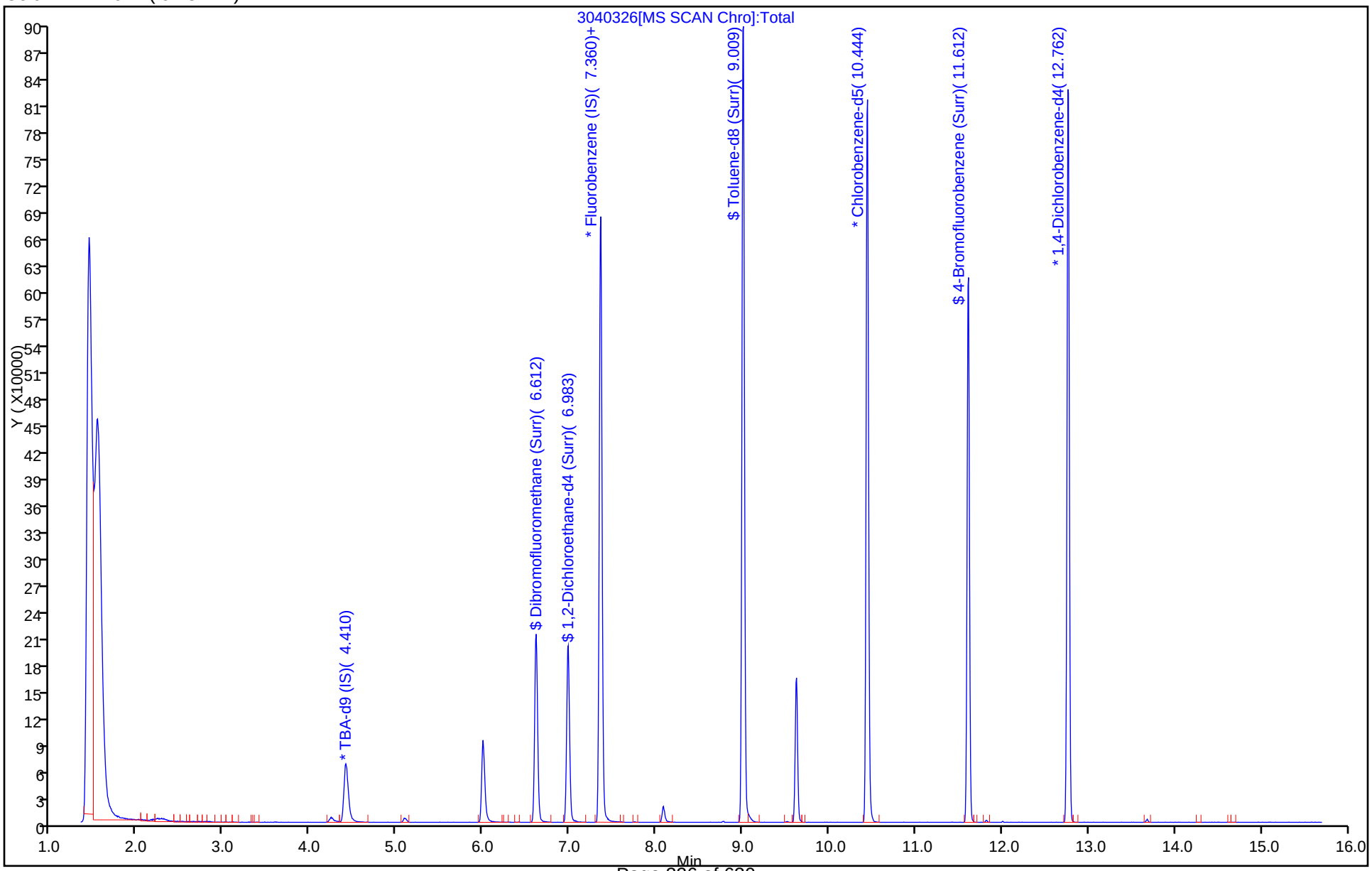
Report Date: 04-Apr-2017 05:33:33 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040326.D

Injection Date:	03-Apr-2017 16:22:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-20-A	Lab Sample ID:	180-64801-20	Worklist Smp#:	27
Client ID:	HD-SPBA-SB-010-40/40.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040326.D
Lims ID: 180-64801-B-20-A
Client ID: HD-SPBA-SB-010-40/40.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 16:22:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-027
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:33:33 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:33:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	245.1	98.02
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	227.8	91.10
$ 7 Toluene-d8 (Surr)	250.0	227.0	90.79
$ 8 4-Bromofluorobenzene (Surr)	250.0	196.0	78.40

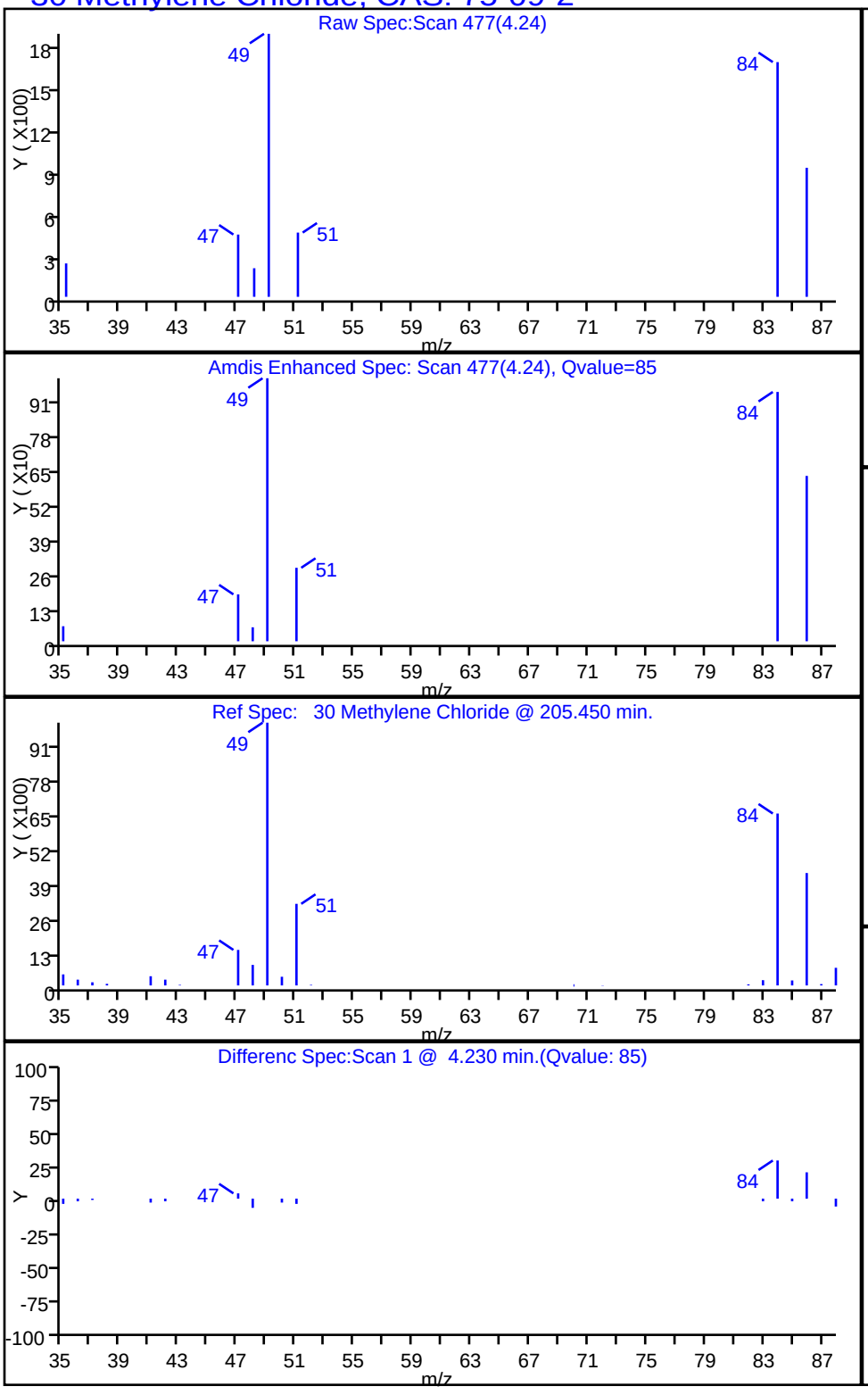
Report Date: 04-Apr-2017 05:33:33 Chrom Revision: 2.2 13-Mar-2017 15:50:30

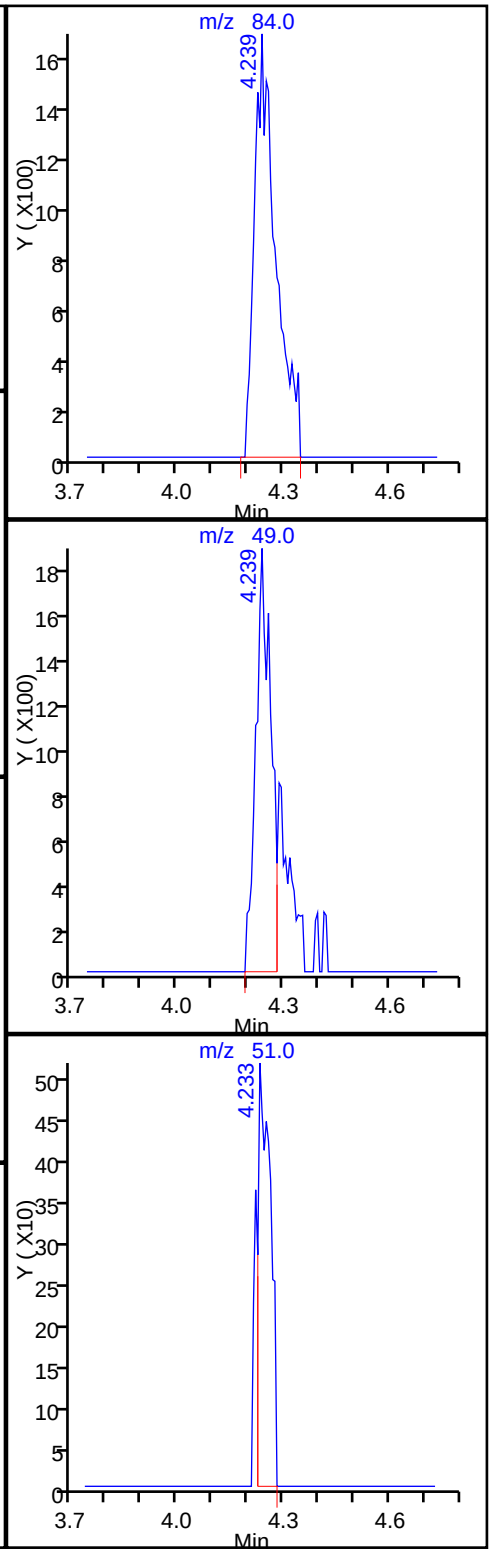
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040326.D

Injection Date:	03-Apr-2017 16:22:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-20-A	Lab Sample ID:	180-64801-20		
Client ID:	HD-SPBA-SB-010-40/40.5-0				
Operator ID:	10099	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2





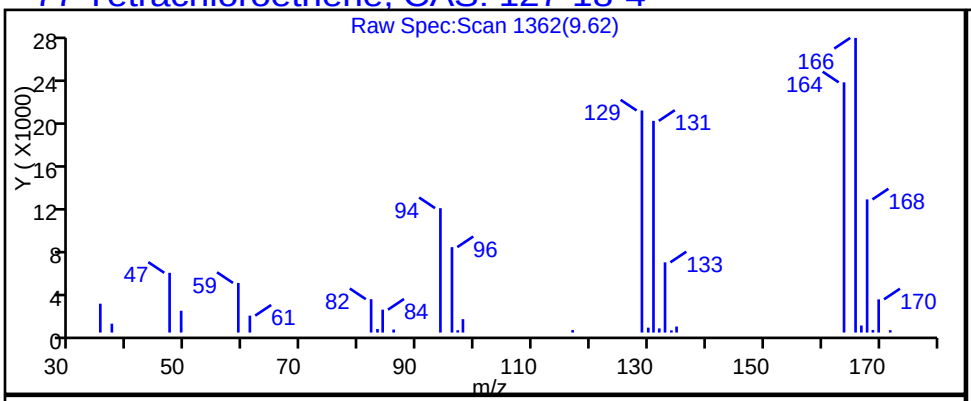
Report Date: 04-Apr-2017 05:33:33 Chrom Revision: 2.2 13-Mar-2017 15:50:30

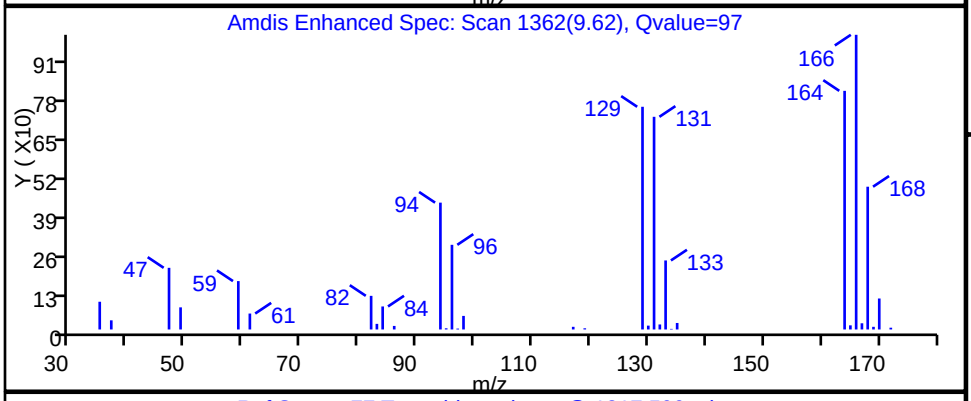
TestAmerica Pittsburgh

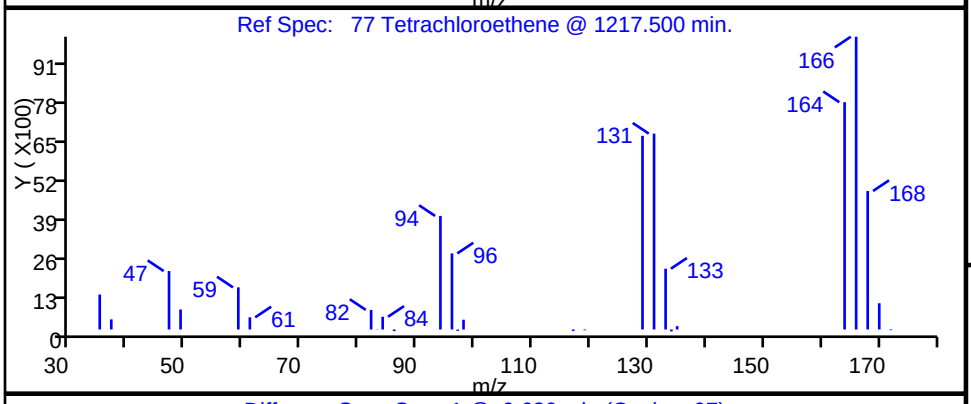
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040326.D

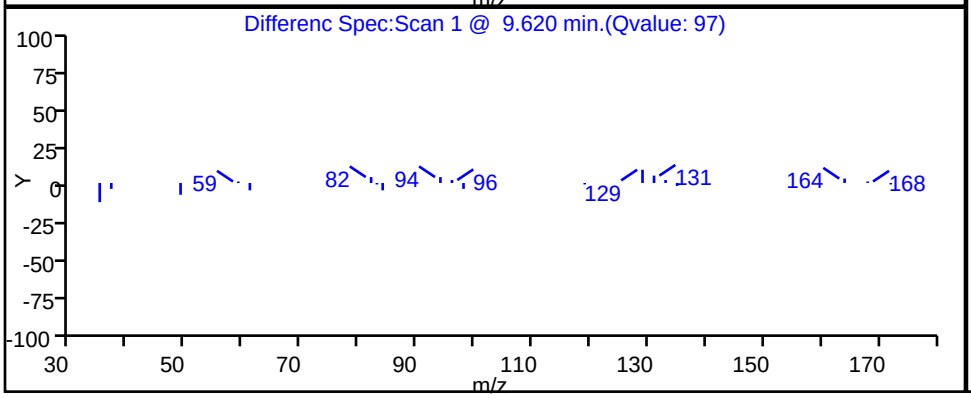
Injection Date:	03-Apr-2017 16:22:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-20-A	Lab Sample ID:	180-64801-20		
Client ID:	HD-SPBA-SB-010-40/40.5-0				
Operator ID:	10099	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

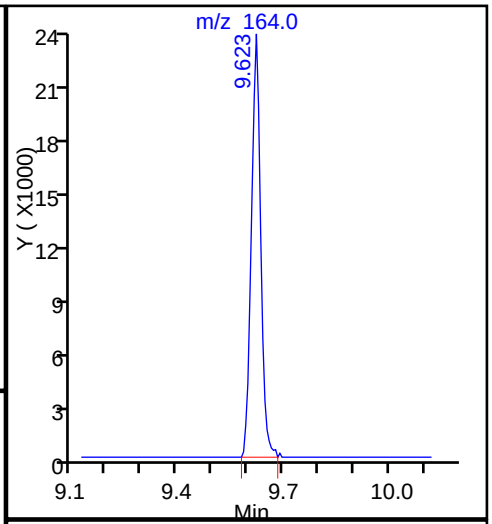
77 Tetrachloroethene, CAS: 127-18-4

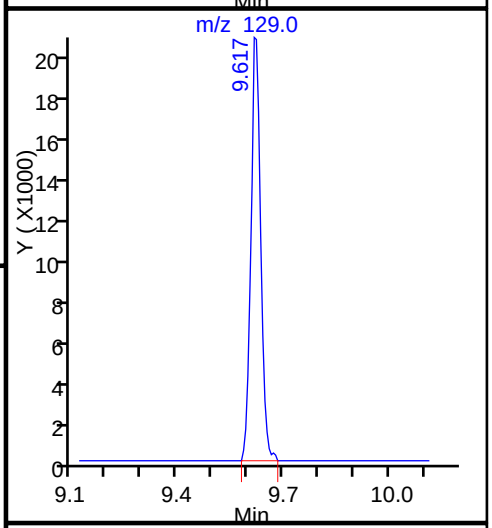


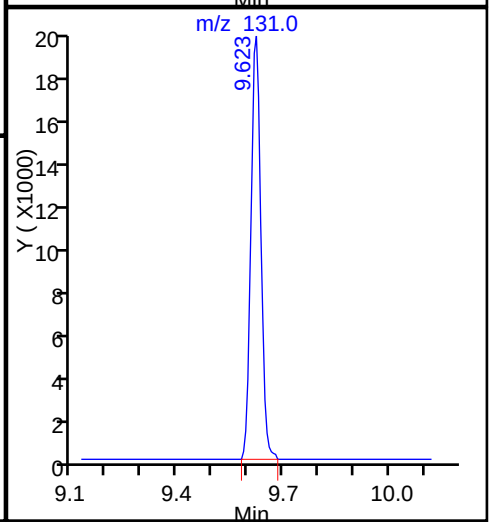












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

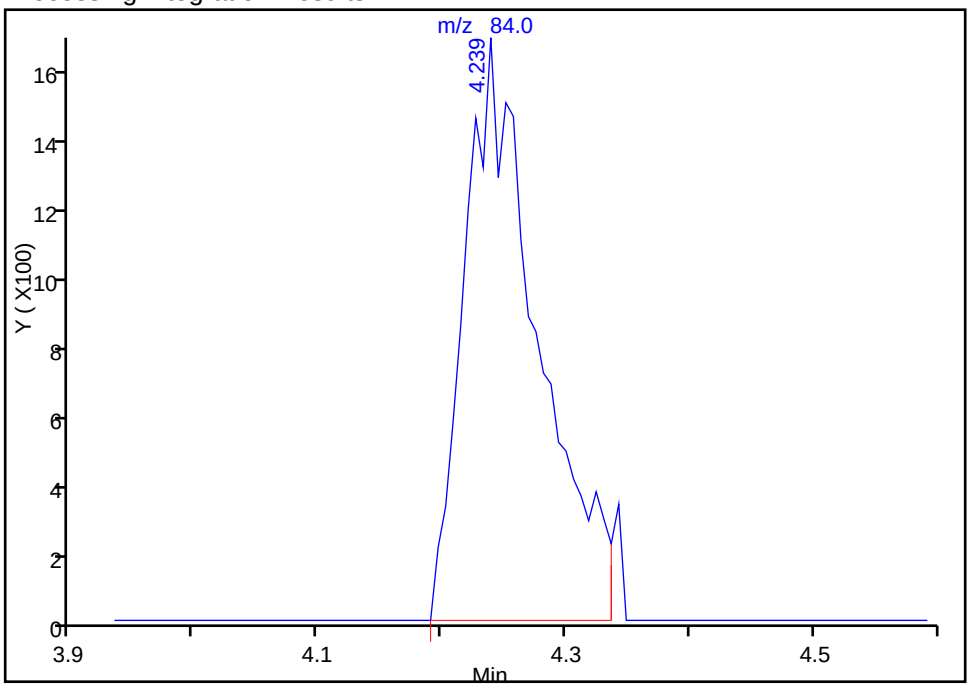
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040326.D				
Injection Date:	03-Apr-2017 16:22:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-20-A	Lab Sample ID:	180-64801-20		
Client ID:	HD-SPBA-SB-010-40/40.5-0				
Operator ID:	10099	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

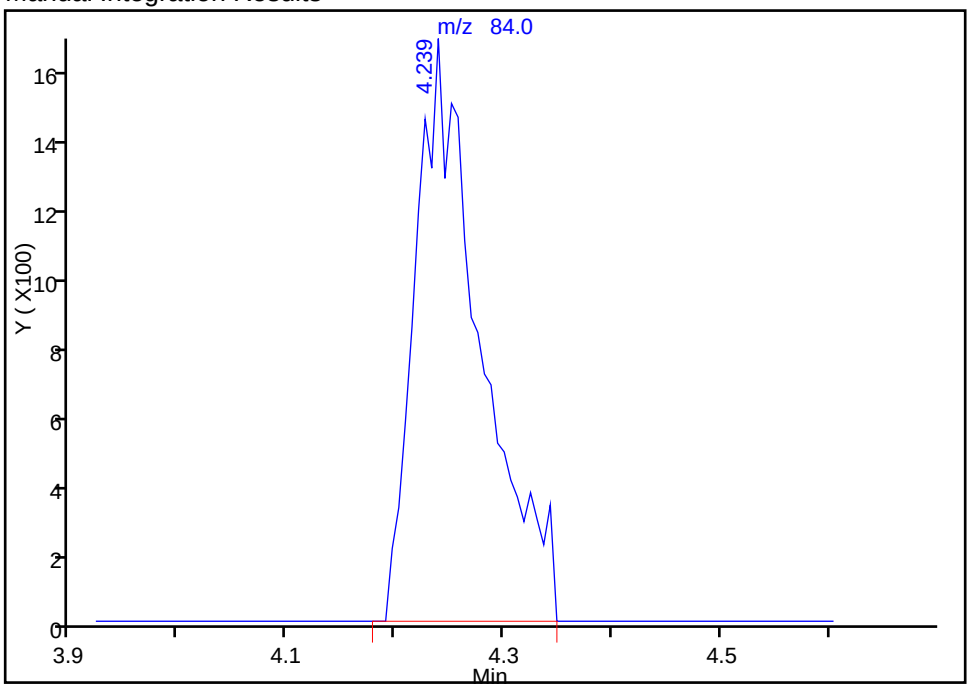
Processing Integration Results

RT: 4.24
Area: 6828
Amount: 6.866614
Amount Units: ng



Manual Integration Results

RT: 4.24
Area: 6949
Amount: 6.988298
Amount Units: ng



Reviewer: gordonk, 04-Apr-2017 05:33:13

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-45/45.5-0 | Lab Sample ID: 180-64801-21

Matrix: Solid | Lab File ID: 3040327.D

Analysis Method: 8260C | Date Collected: 03/30/2017 16:15

Sample wt/vol: 6.8827(g) | Date Analyzed: 04/03/2017 16:45

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 20.9 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.6	U	4.6	2.5
71-55-6	1,1,1-Trichloroethane	4.6	U	4.6	0.99
79-34-5	1,1,2,2-Tetrachloroethane	4.6	U	4.6	3.7
79-00-5	1,1,2-Trichloroethane	4.6	U	4.6	2.6
75-34-3	1,1-Dichloroethane	4.6	U	4.6	1.0
75-35-4	1,1-Dichloroethene	4.6	U	4.6	1.3
107-06-2	1,2-Dichloroethane	4.6	U	4.6	1.0
78-87-5	1,2-Dichloropropane	4.6	U	4.6	1.7
78-93-3	2-Butanone (MEK)	4.6	U	4.6	2.7
591-78-6	2-Hexanone	4.6	U	4.6	3.7
108-10-1	4-Methyl-2-pentanone (MIBK)	4.6	U	4.6	3.3
67-64-1	Acetone	18	U ^c	18	9.4
71-43-2	Benzene	4.6	U	4.6	2.8
75-25-2	Bromoform	4.6	U	4.6	4.2
74-83-9	Bromomethane	4.6	U ^c *	4.6	1.6
75-15-0	Carbon disulfide	4.6	U	4.6	1.9
56-23-5	Carbon tetrachloride	4.6	U ^c	4.6	1.3
108-90-7	Chlorobenzene	4.6	U	4.6	2.0
124-48-1	Dibromochloromethane	4.6	U	4.6	2.3
123-91-1	1,4-Dioxane	920	U	920	23
67-66-3	Chloroform	4.6	U	4.6	1.2
74-87-3	Chloromethane	4.6	U ^c	4.6	2.4
75-00-3	Chloroethane	4.6	U	4.6	2.0
156-59-2	cis-1,2-Dichloroethene	4.6	U	4.6	1.2
10061-01-5	cis-1,3-Dichloropropene	4.6	U	4.6	2.0
75-27-4	Bromodichloromethane	4.6	U	4.6	1.8
100-41-4	Ethylbenzene	4.6	U	4.6	1.8
106-93-4	1,2-Dibromoethane (EDB)	4.6	U	4.6	2.0
1634-04-4	Methyl tert-butyl ether	4.6	U	4.6	2.3
75-09-2	Methylene Chloride	1.2	J B	4.6	0.51
100-42-5	Styrene	4.6	U	4.6	2.2
127-18-4	Tetrachloroethene	71		4.6	1.1
108-88-3	Toluene	4.6	U	4.6	3.3
156-60-5	trans-1,2-Dichloroethene	4.6	U	4.6	0.94
10061-02-6	trans-1,3-Dichloropropene	4.6	U	4.6	2.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-45/45.5-0 | Lab Sample ID: 180-64801-21

Matrix: Solid | Lab File ID: 3040327.D

Analysis Method: 8260C | Date Collected: 03/30/2017 16:15

Sample wt/vol: 6.8827(g) | Date Analyzed: 04/03/2017 16:45

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 20.9 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	4.6		4.6	1.0
107-13-1	Acrylonitrile	46	U ^c	46	23
75-01-4	Vinyl chloride	4.6	U	4.6	2.3
1330-20-7	Xylenes, Total	9.2	U	9.2	4.2
74-97-5	Bromochloromethane	4.6	U	4.6	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		52-124
460-00-4	4-Bromofluorobenzene (Surr)	82		63-120
1868-53-7	Dibromofluoromethane (Surr)	100		68-121
2037-26-5	Toluene-d8 (Surr)	93		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040327.D
Lims ID: 180-64801-B-21-A
Client ID: HD-SPBA-SB-010-45/45.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 16:45:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-028
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:34:20 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:34:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.419	4.464	-0.045	98	113453	5000.0	
* 2 Fluorobenzene (IS)	96	7.357	7.348	0.009	99	778037	250.0	
* 3 Chlorobenzene-d5	119	10.441	10.438	0.003	86	188558	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.765	12.762	0.003	96	269674	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.609	6.600	0.009	93	166892	249.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.980	6.971	0.009	95	179985	234.0	
$ 7 Toluene-d8 (Surr)	98	9.006	9.003	0.003	92	758152	232.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.609	11.606	0.003	87	270321	204.0	
11 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.958				ND	
14 Bromomethane	94		2.299				ND	
15 Chloroethane	64		2.420				ND	
21 1,1-Dichloroethene	96		3.424				ND	
23 Acetone	43		3.594				ND	
25 Carbon disulfide	76		3.716				ND	
30 Methylene Chloride	84	4.236	4.221	0.015	80	6673	6.60	M
32 Acrylonitrile	53		4.635				ND	
33 trans-1,2-Dichloroethene	96		4.641				ND	
34 Methyl tert-butyl ether	73		4.695				ND	
36 1,1-Dichloroethane	63		5.249				ND	
42 cis-1,2-Dichloroethene	96		6.009				ND	
43 2-Butanone (MEK)	43		6.070				ND	
47 Chlorobromomethane	128		6.295				ND	
49 Chloroform	83		6.417				ND	
50 1,1,1-Trichloroethane	97		6.612				ND	
53 Carbon tetrachloride	117		6.800				ND	
55 Benzene	78		7.031				ND	
56 1,2-Dichloroethane	62		7.056				ND	
60 Trichloroethene	130	7.752	7.743	0.009	98	20810	25.1	
64 1,2-Dichloropropane	63		7.981				ND	
67 1,4-Dioxane	88		8.133				ND	
68 Dichlorobromomethane	83		8.273				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.729				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893				ND	
73 Toluene	91		9.069				ND	
74 trans-1,3-Dichloropropene	75		9.288				ND	
76 1,1,2-Trichloroethane	97		9.471				ND	
77 Tetrachloroethene	164	9.620	9.617	0.003	97	275689	386.4	
79 2-Hexanone	43		9.726				ND	
81 Chlorodibromomethane	129		9.866				ND	
82 Ethylene Dibromide	107		9.976				ND	
83 Chlorobenzene	112		10.469				ND	
85 1,1,1,2-Tetrachloroethane	131		10.548				ND	
86 Ethylbenzene	106		10.578				ND	
87 m-Xylene & p-Xylene	106		10.694				ND	
88 o-Xylene	106		11.089				ND	
89 Styrene	104		11.101				ND	
90 Bromoform	173		11.284				ND	
93 1,1,2,2-Tetrachloroethane	83		11.746				ND	
S 129 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

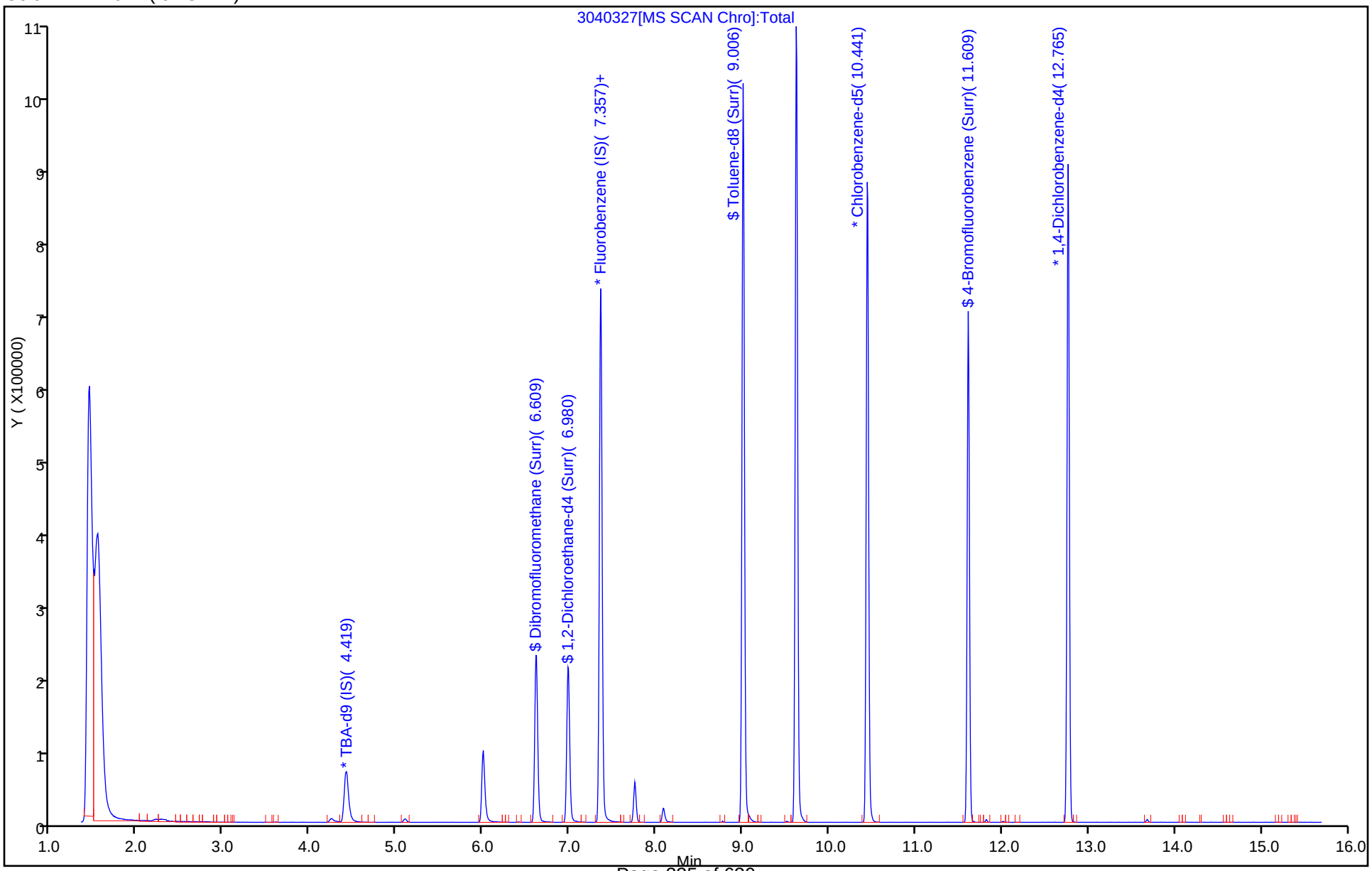
Report Date: 04-Apr-2017 05:34:21 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040327.D

Injection Date:	03-Apr-2017 16:45:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-21-A	Lab Sample ID:	180-64801-21	Worklist Smp#:	28
Client ID:	HD-SPBA-SB-010-45/45.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040327.D
Lims ID: 180-64801-B-21-A
Client ID: HD-SPBA-SB-010-45/45.5-0
Sample Type: Client
Inject. Date: 03-Apr-2017 16:45:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-028
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 05:34:20 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 05:34:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	249.8	99.91
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	234.0	93.60
$ 7 Toluene-d8 (Surr)	250.0	232.2	92.89
$ 8 4-Bromofluorobenzene (Surr)	250.0	204.0	81.60

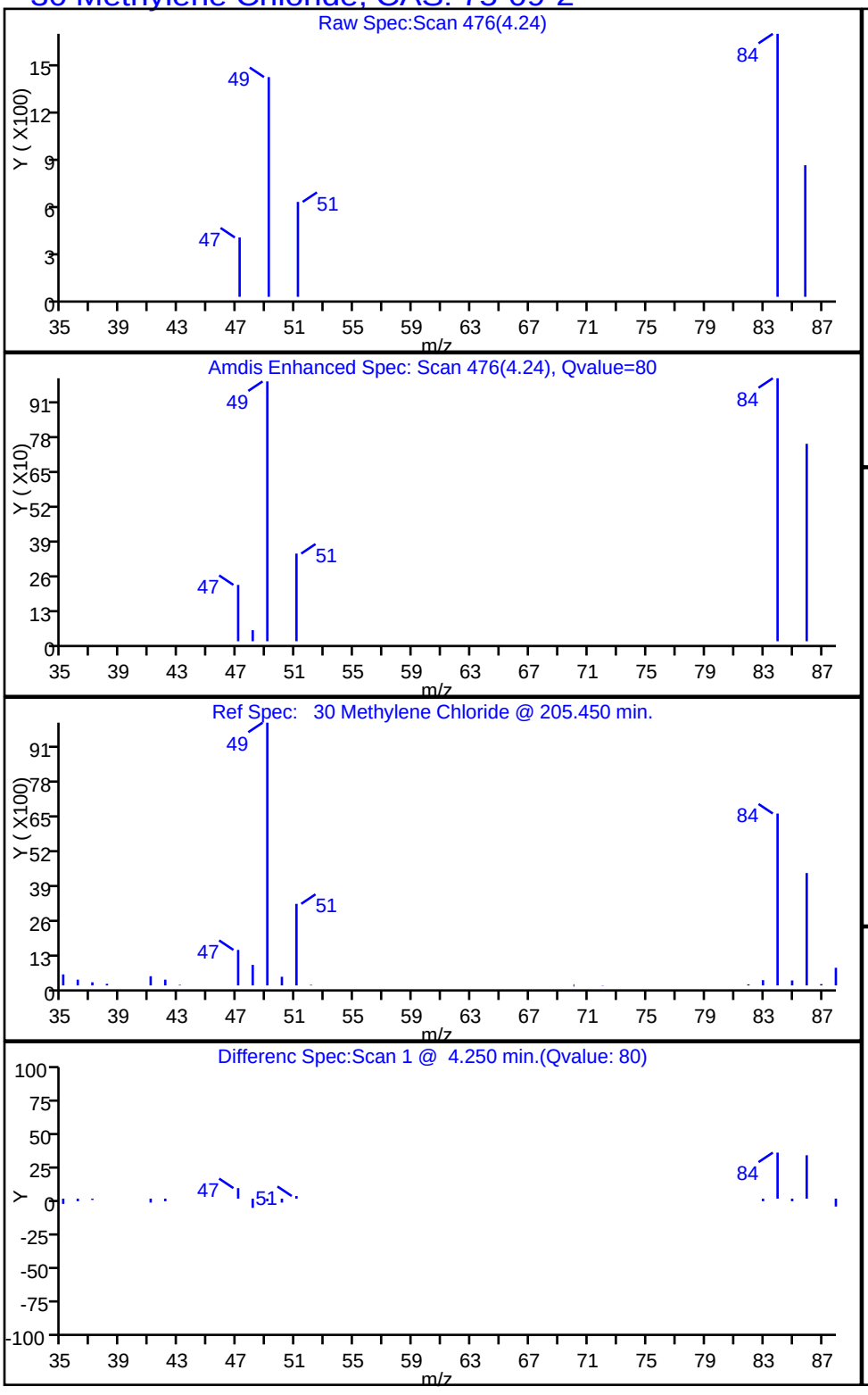
Report Date: 04-Apr-2017 05:34:21 Chrom Revision: 2.2 13-Mar-2017 15:50:30

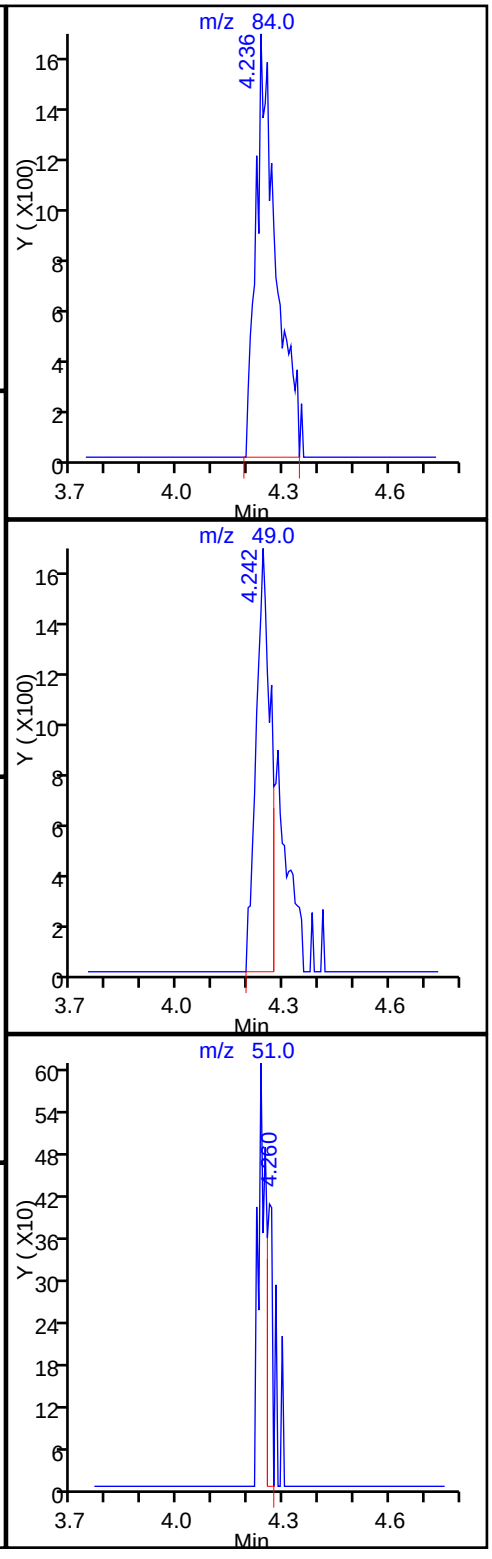
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040327.D

Injection Date:	03-Apr-2017 16:45:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-21-A	Lab Sample ID:	180-64801-21		
Client ID:	HD-SPBA-SB-010-45/45.5-0				
Operator ID:	10099	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2





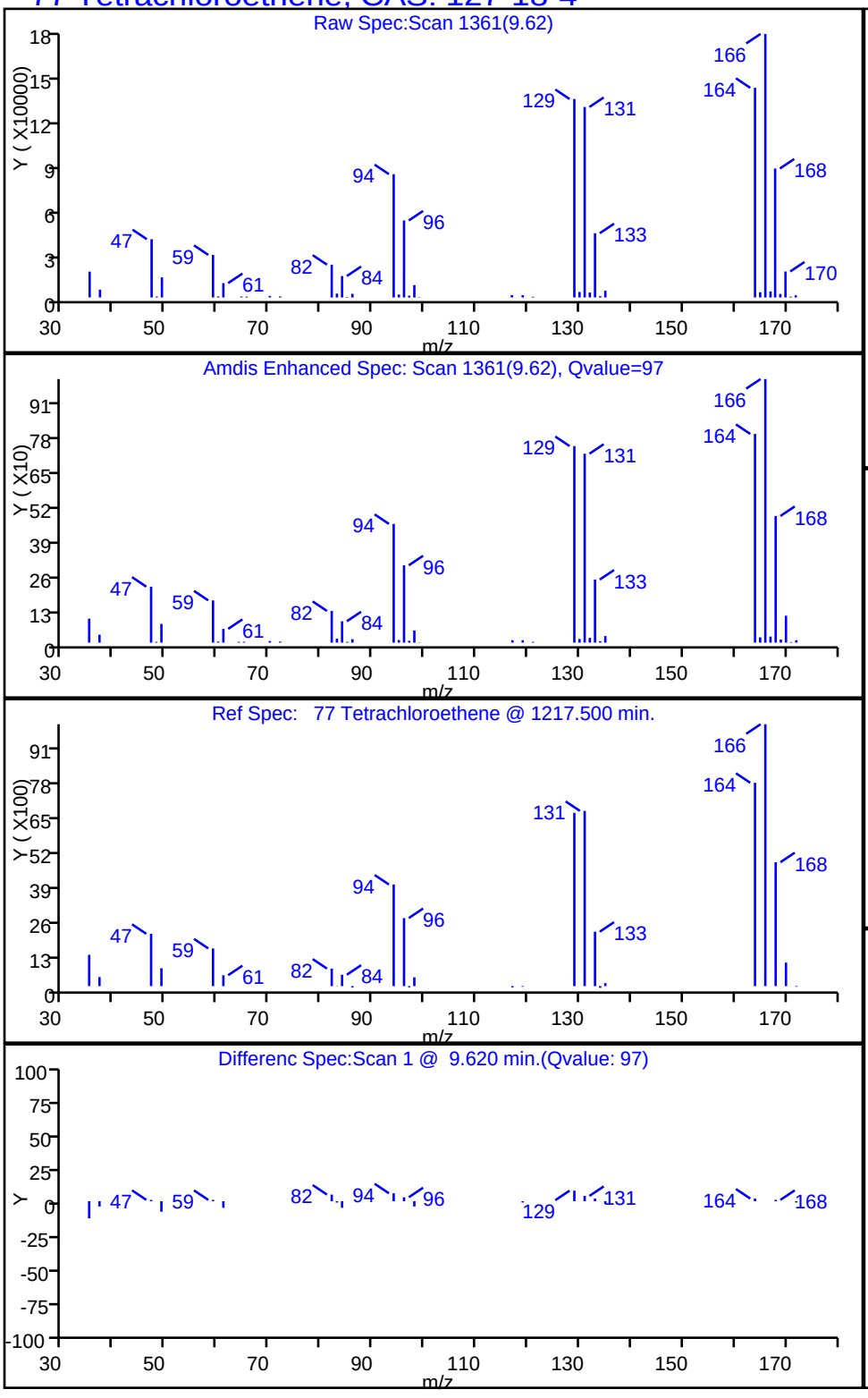
Report Date: 04-Apr-2017 05:34:21 Chrom Revision: 2.2 13-Mar-2017 15:50:30

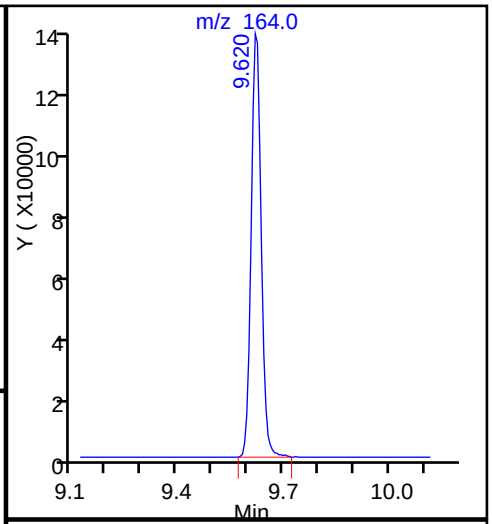
TestAmerica Pittsburgh

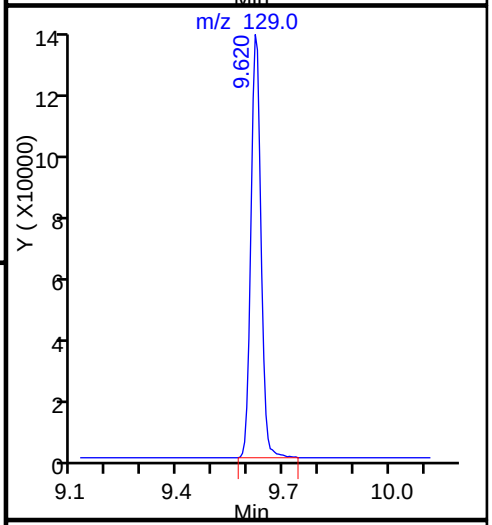
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040327.D

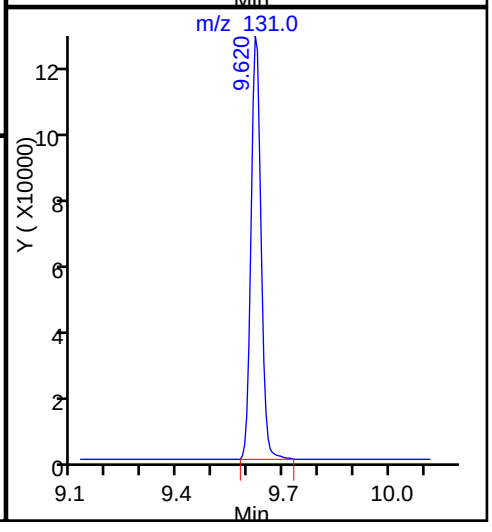
Injection Date:	03-Apr-2017 16:45:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-21-A	Lab Sample ID:	180-64801-21		
Client ID:	HD-SPBA-SB-010-45/45.5-0				
Operator ID:	10099	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

77 Tetrachloroethene, CAS: 127-18-4









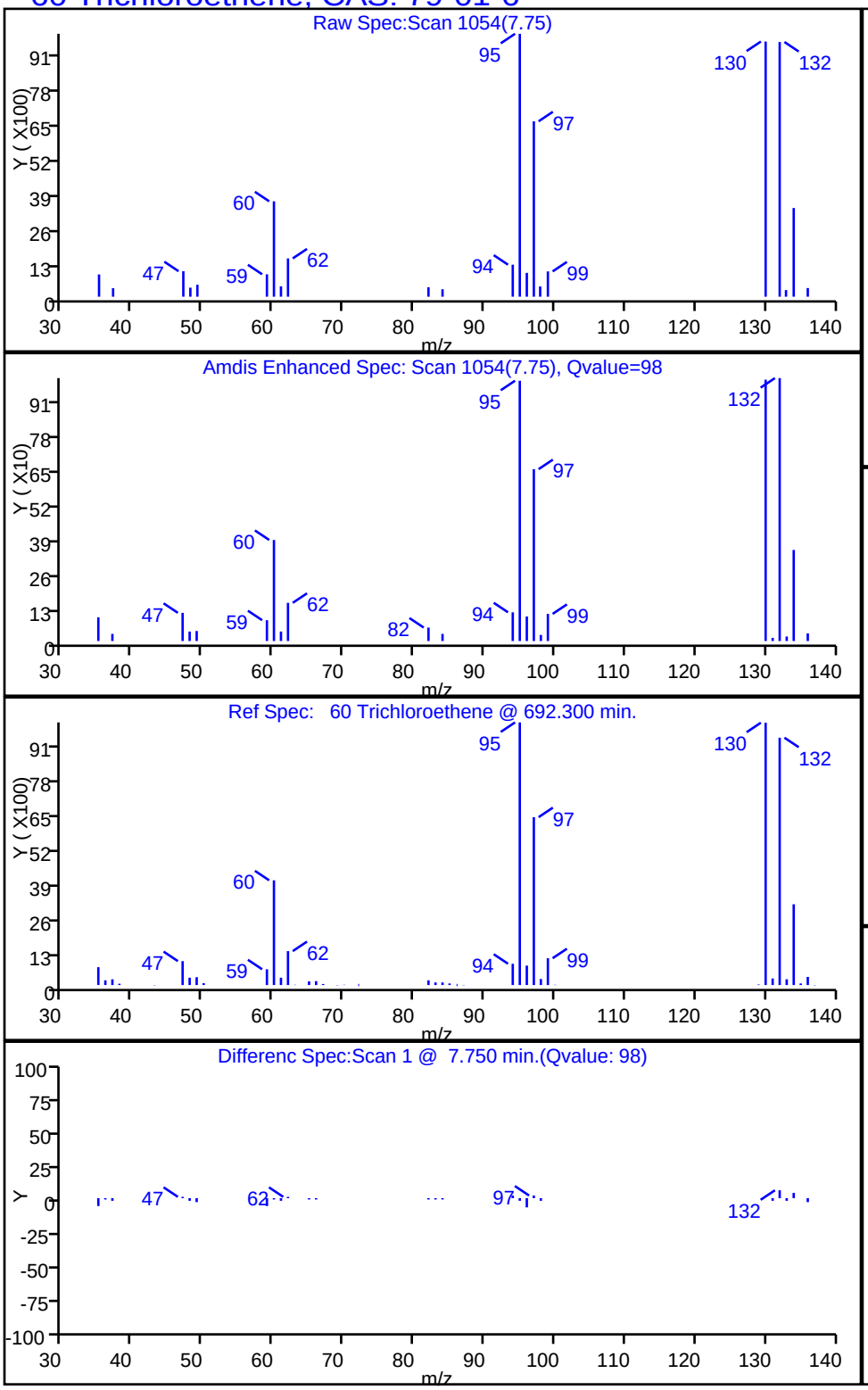
Report Date: 04-Apr-2017 05:34:21 Chrom Revision: 2.2 13-Mar-2017 15:50:30

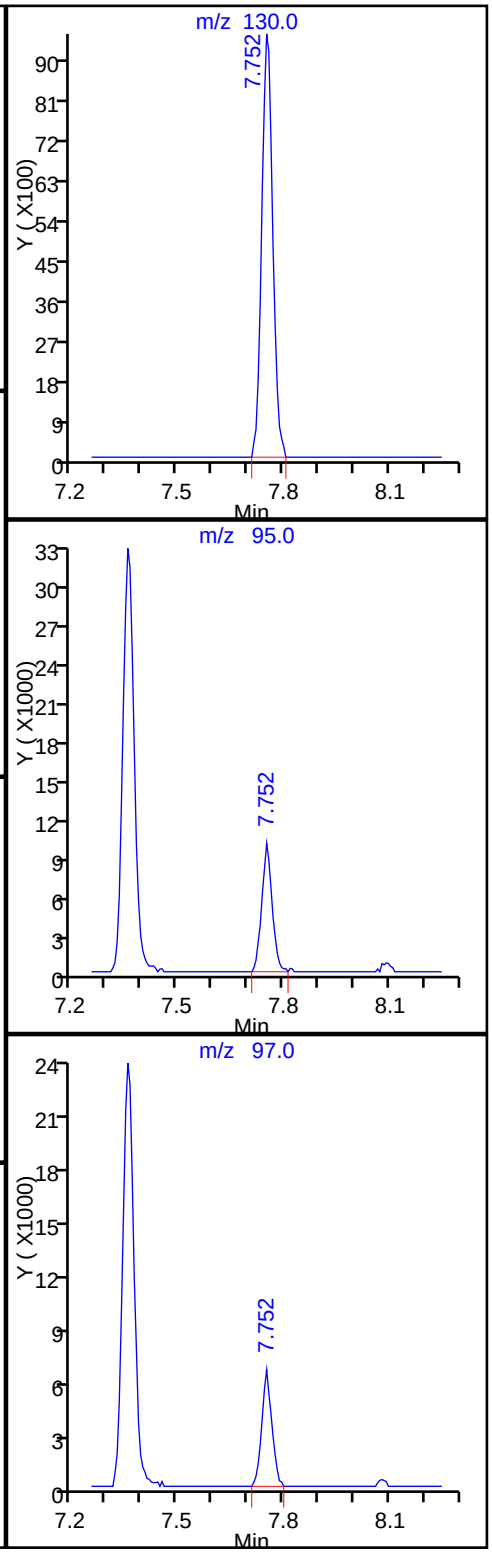
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040327.D

Injection Date:	03-Apr-2017 16:45:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-21-A	Lab Sample ID:	180-64801-21		
Client ID:	HD-SPBA-SB-010-45/45.5-0				
Operator ID:	10099	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6





Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

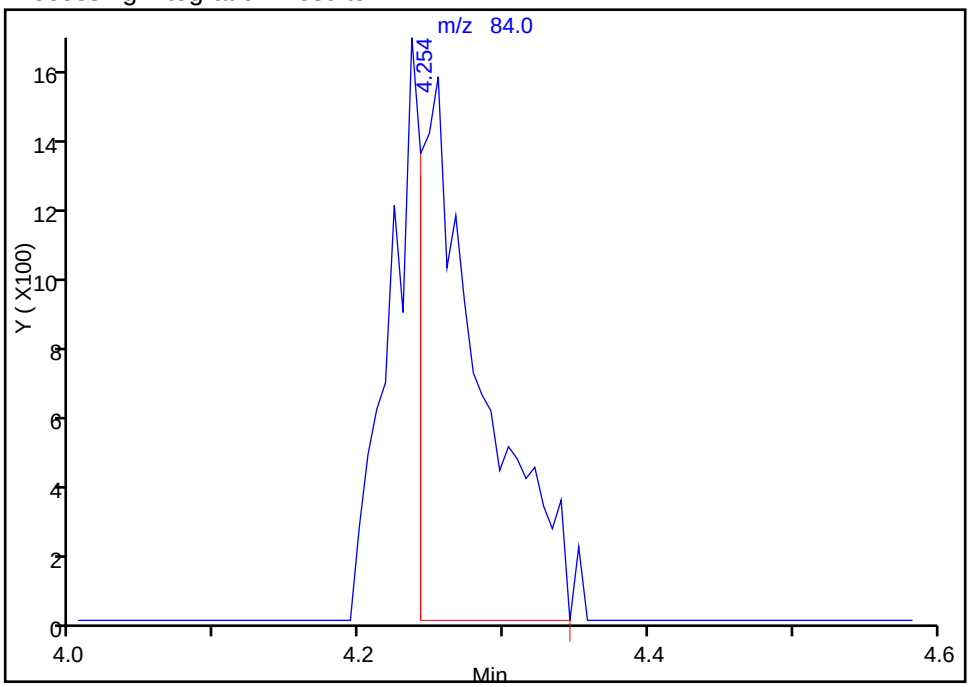
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040327.D				
Injection Date:	03-Apr-2017 16:45:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-21-A	Lab Sample ID:	180-64801-21		
Client ID:	HD-SPBA-SB-010-45/45.5-0				
Operator ID:	10099	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

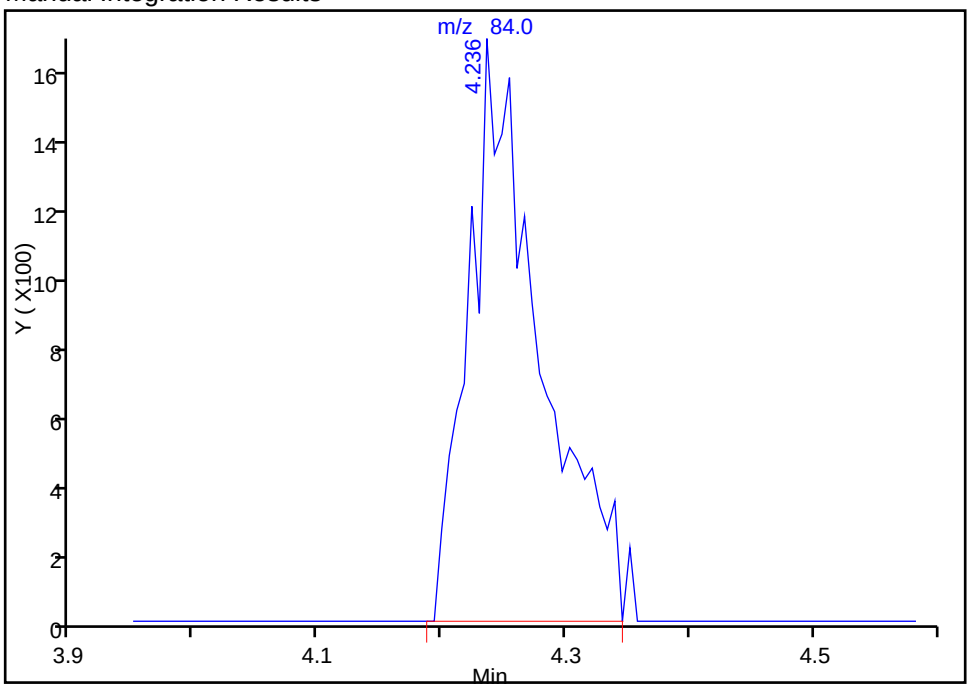
Processing Integration Results

RT: 4.25
Area: 4567
Amount: 4.514576
Amount Units: ng



Manual Integration Results

RT: 4.24
Area: 6673
Amount: 6.596402
Amount Units: ng



Reviewer: gordonk, 04-Apr-2017 05:33:56

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-50/50.5 | Lab Sample ID: 180-64801-22

Matrix: Solid | Lab File ID: 30404K13.D

Analysis Method: 8260C | Date Collected: 03/30/2017 17:35

Sample wt/vol: 6.703(g) | Date Analyzed: 04/04/2017 11:56

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 17.2 | Level: (low/med) Low

Analysis Batch No.: 207218 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.5	U	4.5	2.4
71-55-6	1,1,1-Trichloroethane	4.5	U	4.5	0.97
79-34-5	1,1,2,2-Tetrachloroethane	4.5	U	4.5	3.6
79-00-5	1,1,2-Trichloroethane	4.5	U	4.5	2.5
75-34-3	1,1-Dichloroethane	4.5	U	4.5	1.0
75-35-4	1,1-Dichloroethene	4.5	U	4.5	1.3
107-06-2	1,2-Dichloroethane	4.5	U	4.5	1.0
78-87-5	1,2-Dichloropropane	4.5	U	4.5	1.7
78-93-3	2-Butanone (MEK)	4.5	U	4.5	2.7
591-78-6	2-Hexanone	4.5	U	4.5	3.7
108-10-1	4-Methyl-2-pentanone (MIBK)	4.5	U	4.5	3.2
67-64-1	Acetone	18	U	18	9.3
71-43-2	Benzene	4.5	U	4.5	2.7
75-25-2	Bromoform	4.5	U ^c	4.5	4.1
74-83-9	Bromomethane	4.5	U ^c *	4.5	1.6
75-15-0	Carbon disulfide	4.5	U ^c	4.5	1.9
56-23-5	Carbon tetrachloride	4.5	U	4.5	1.2
108-90-7	Chlorobenzene	4.5	U	4.5	2.0
124-48-1	Dibromochloromethane	4.5	U	4.5	2.2
123-91-1	1,4-Dioxane	900	U	900	23
67-66-3	Chloroform	4.5	U	4.5	1.1
74-87-3	Chloromethane	4.5	U ^c	4.5	2.4
75-00-3	Chloroethane	4.5	U	4.5	1.9
156-59-2	cis-1,2-Dichloroethene	4.5	U	4.5	1.2
10061-01-5	cis-1,3-Dichloropropene	4.5	U	4.5	2.0
75-27-4	Bromodichloromethane	4.5	U	4.5	1.8
100-41-4	Ethylbenzene	4.5	U	4.5	1.8
106-93-4	1,2-Dibromoethane (EDB)	4.5	U	4.5	1.9
1634-04-4	Methyl tert-butyl ether	4.5	U	4.5	2.3
75-09-2	Methylene Chloride	1.1	J B	4.5	0.50
100-42-5	Styrene	4.5	U	4.5	2.1
127-18-4	Tetrachloroethene	39		4.5	1.1
108-88-3	Toluene	4.5	U	4.5	3.3
156-60-5	trans-1,2-Dichloroethene	4.5	U	4.5	0.92
10061-02-6	trans-1,3-Dichloropropene	4.5	U	4.5	2.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-010-50/50.5 | Lab Sample ID: 180-64801-22

Matrix: Solid | Lab File ID: 30404K13.D

Analysis Method: 8260C | Date Collected: 03/30/2017 17:35

Sample wt/vol: 6.703(g) | Date Analyzed: 04/04/2017 11:56

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 17.2 | Level: (low/med) Low

Analysis Batch No.: 207218 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	2.1	J	4.5	1.0
107-13-1	Acrylonitrile	45	U ^c	45	22
75-01-4	Vinyl chloride	4.5	U	4.5	2.3
1330-20-7	Xylenes, Total	9.0	U	9.0	4.1
74-97-5	Bromochloromethane	4.5	U	4.5	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		52-124
460-00-4	4-Bromofluorobenzene (Surr)	82		63-120
1868-53-7	Dibromofluoromethane (Surr)	101		68-121
2037-26-5	Toluene-d8 (Surr)	94		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K13.D
Lims ID: 180-64801-B-22-A
Client ID: HD-SPBA-SB-010-50/50.5
Sample Type: Client
Inject. Date: 04-Apr-2017 11:56:30 ALS Bottle#: 13 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016141-012
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 12:17:14 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 12:17:14

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.411	4.461	-0.050	98	124657	5000.0	
*	2 Fluorobenzene (IS)	96	7.356	7.351	0.005	99	846742	250.0	
*	3 Chlorobenzene-d5	119	10.440	10.441	-0.001	86	207964	250.0	
*	4 1,4-Dichlorobenzene-d4	152	12.764	12.765	-0.001	97	294888	250.0	
$	5 Dibromofluoromethane (Surr	113	6.607	6.603	0.004	93	184213	253.3	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.979	6.974	0.005	95	194119	231.9	
$	7 Toluene-d8 (Surr)	98	9.004	9.000	0.004	92	844007	234.4	
$	8 4-Bromofluorobenzene (Surr	95	11.608	11.609	-0.001	87	300500	205.6	
	11 Chloromethane	50		1.821				ND	
	12 Vinyl chloride	62		1.961				ND	
	14 Bromomethane	94		2.302				ND	
	15 Chloroethane	64		2.423				ND	
	21 1,1-Dichloroethene	96		3.427				ND	
	23 Acetone	43		3.597				ND	
	25 Carbon disulfide	76		3.731				ND	
	30 Methylene Chloride	84	4.253	4.218	0.035	64	6514	5.92	M
	32 Acrylonitrile	53		4.632				ND	
	33 trans-1,2-Dichloroethene	96		4.644				ND	
	34 Methyl tert-butyl ether	73		4.705				ND	
	36 1,1-Dichloroethane	63		5.252				ND	
	42 cis-1,2-Dichloroethene	96		6.013				ND	
	43 2-Butanone (MEK)	43		6.073				ND	
	47 Chlorobromomethane	128		6.299				ND	
	49 Chloroform	83		6.420				ND	
	50 1,1,1-Trichloroethane	97		6.609				ND	
	53 Carbon tetrachloride	117		6.803				ND	
	55 Benzene	78		7.035				ND	
	56 1,2-Dichloroethane	62		7.059				ND	
	60 Trichloroethene	130	7.751	7.746	0.005	98	10415	11.5	
	64 1,2-Dichloropropane	63		7.978				ND	
	67 1,4-Dioxane	88		8.136				ND	
	68 Dichlorobromomethane	83		8.270				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 cis-1,3-Dichloropropene	75		8.732				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.896				ND	
73 Toluene	91		9.066				ND	
74 trans-1,3-Dichloropropene	75		9.292				ND	
76 1,1,2-Trichloroethane	97		9.474				ND	
77 Tetrachloroethene	164	9.625	9.620	0.005	97	170310	216.4	
79 2-Hexanone	43		9.730				ND	
81 Chlorodibromomethane	129		9.863				ND	
82 Ethylene Dibromide	107		9.973				ND	
83 Chlorobenzene	112		10.466				ND	
85 1,1,1,2-Tetrachloroethane	131		10.551				ND	
86 Ethylbenzene	106		10.581				ND	
87 m-Xylene & p-Xylene	106		10.697				ND	
88 o-Xylene	106		11.092				ND	
89 Styrene	104		11.104				ND	
90 Bromoform	173		11.281				ND	
93 1,1,2,2-Tetrachloroethane	83		11.743				ND	
S 129 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00067	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added: 10.00	Units: uL	Run Reagent

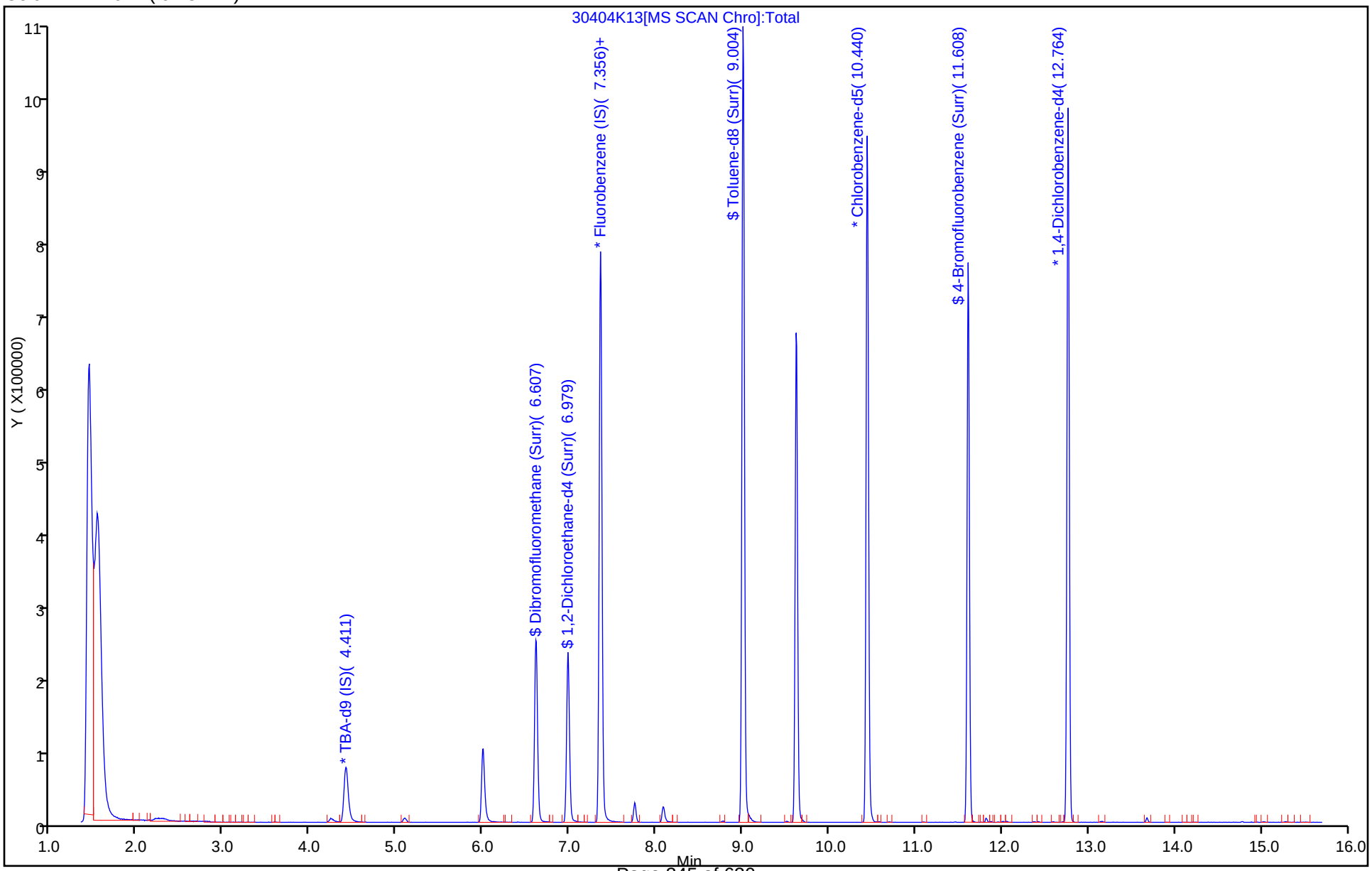
Report Date: 04-Apr-2017 12:17:15 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K13.D

Injection Date:	04-Apr-2017 11:56:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-22-A	Lab Sample ID:	180-64801-22	Worklist Smp#:	12
Client ID:	HD-SPBA-SB-010-50/50.5				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K13.D
Lims ID: 180-64801-B-22-A
Client ID: HD-SPBA-SB-010-50/50.5
Sample Type: Client
Inject. Date: 04-Apr-2017 11:56:30 ALS Bottle#: 13 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016141-012
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 12:17:14 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 12:17:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	253.3	101.33
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	231.9	92.76
$ 7 Toluene-d8 (Surr)	250.0	234.4	93.76
$ 8 4-Bromofluorobenzene (Surr)	250.0	205.6	82.25

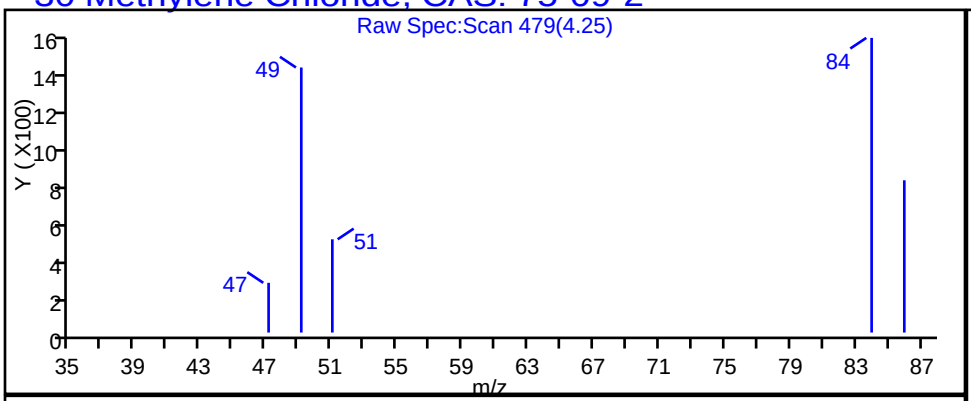
Report Date: 04-Apr-2017 12:17:15 Chrom Revision: 2.2 13-Mar-2017 15:50:30

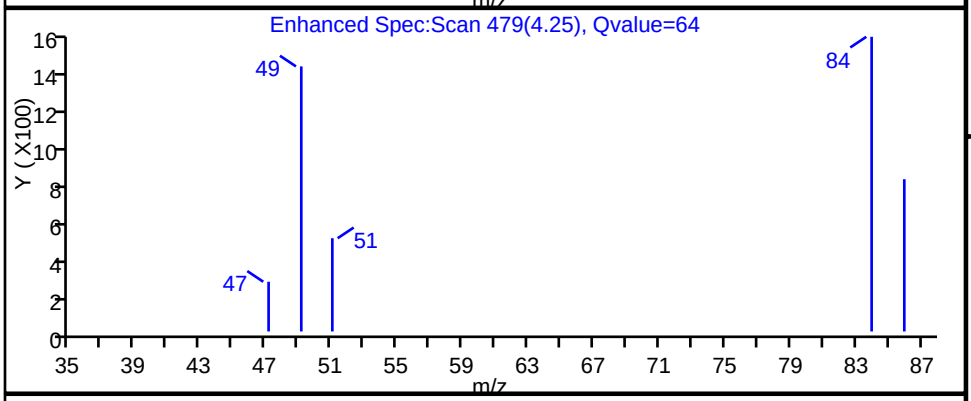
TestAmerica Pittsburgh

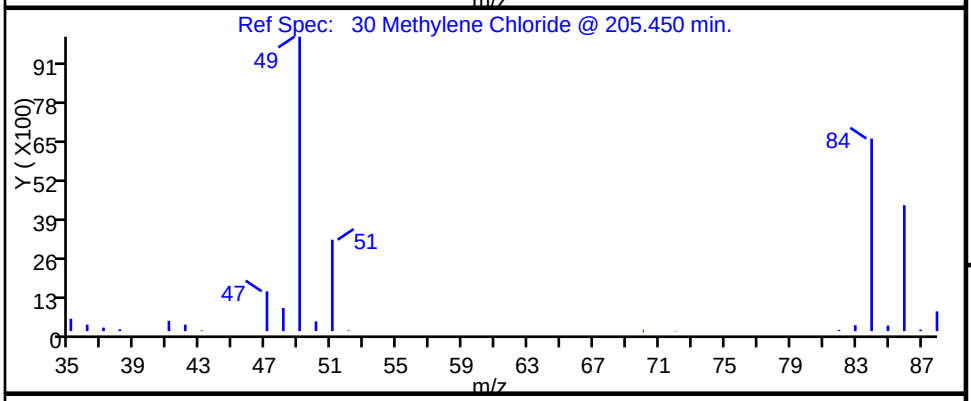
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K13.D

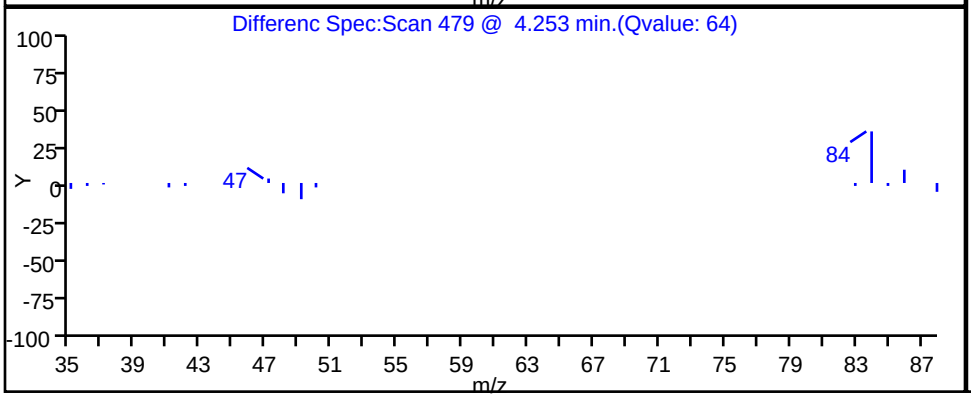
Injection Date:	04-Apr-2017 11:56:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-22-A	Lab Sample ID:	180-64801-22		
Client ID:	HD-SPBA-SB-010-50/50.5				
Operator ID:	10099	ALS Bottle#:	13	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

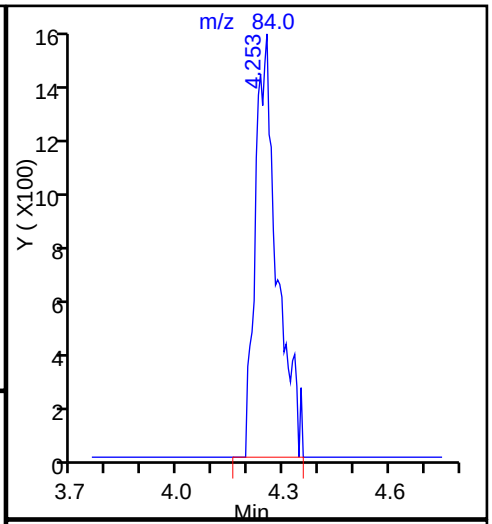
30 Methylene Chloride, CAS: 75-09-2

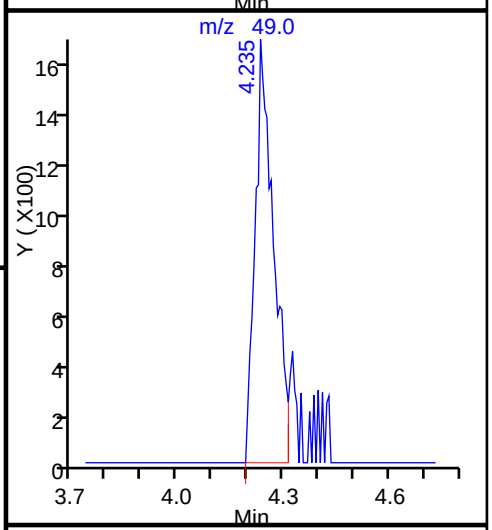


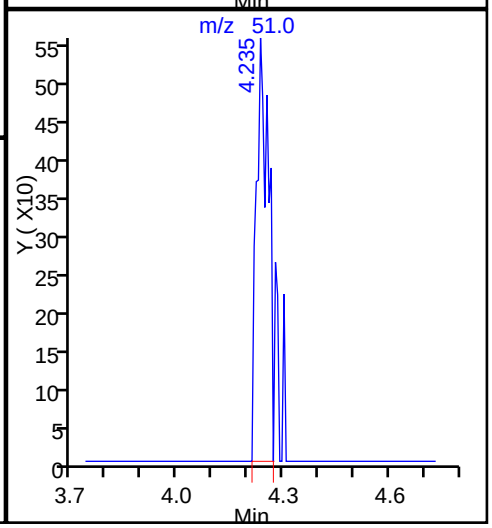












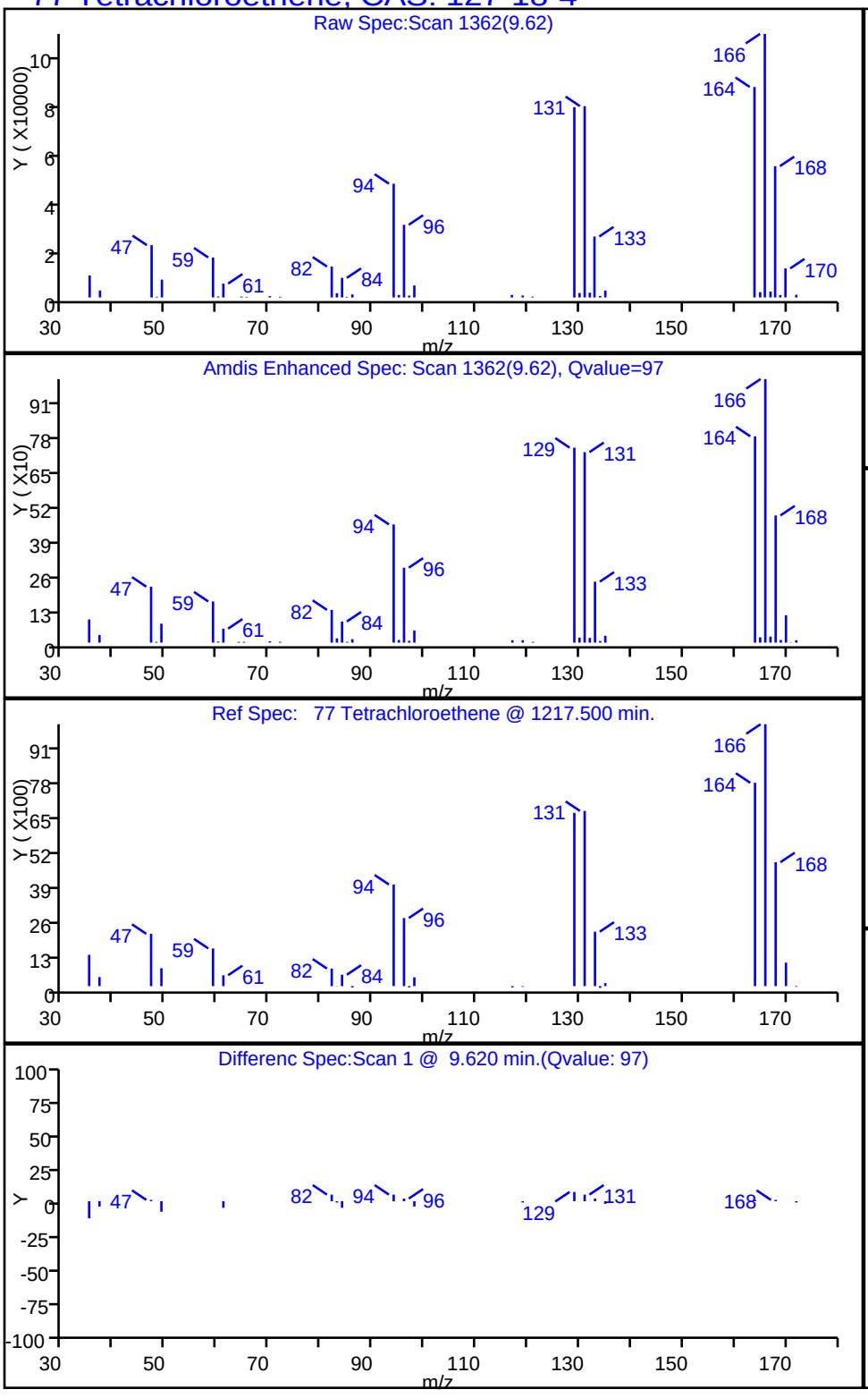
Report Date: 04-Apr-2017 12:17:16 Chrom Revision: 2.2 13-Mar-2017 15:50:30

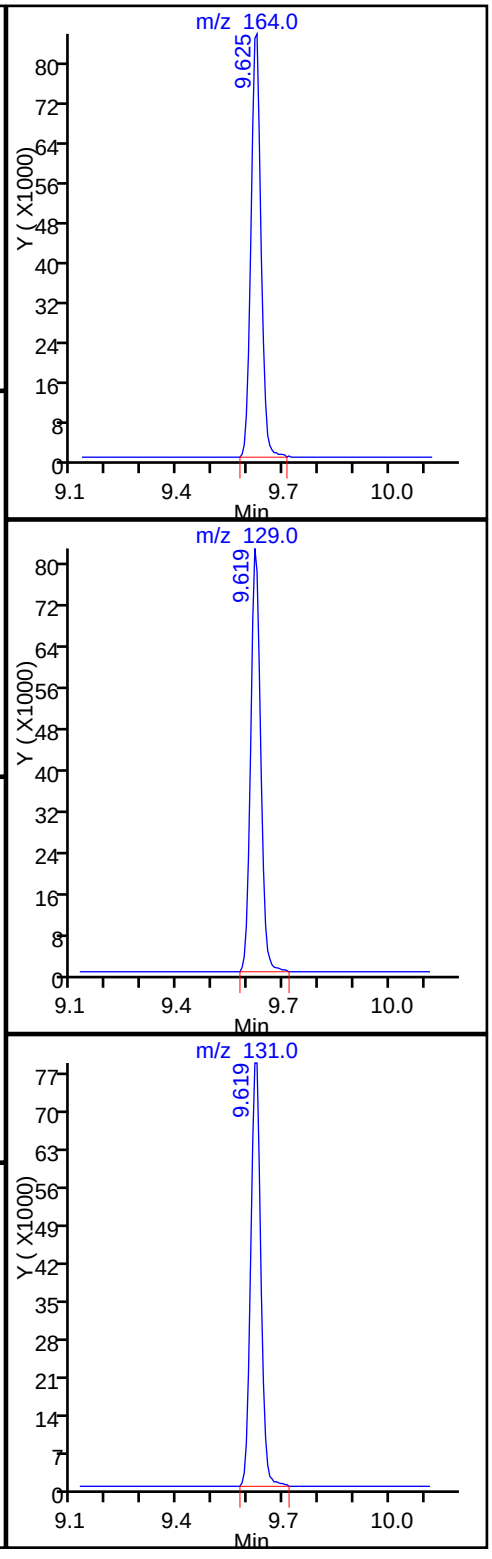
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K13.D

Injection Date:	04-Apr-2017 11:56:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-22-A	Lab Sample ID:	180-64801-22		
Client ID:	HD-SPBA-SB-010-50/50.5				
Operator ID:	10099	ALS Bottle#:	13	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

77 Tetrachloroethene, CAS: 127-18-4





Report Date: 04-Apr-2017 12:17:15 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K13.D

Injection Date: 04-Apr-2017 11:56:30 Instrument ID: CHHP3

Lims ID: 180-64801-B-22-A Lab Sample ID: 180-64801-22

Client ID: HD-SPBA-SB-010-50/50.5

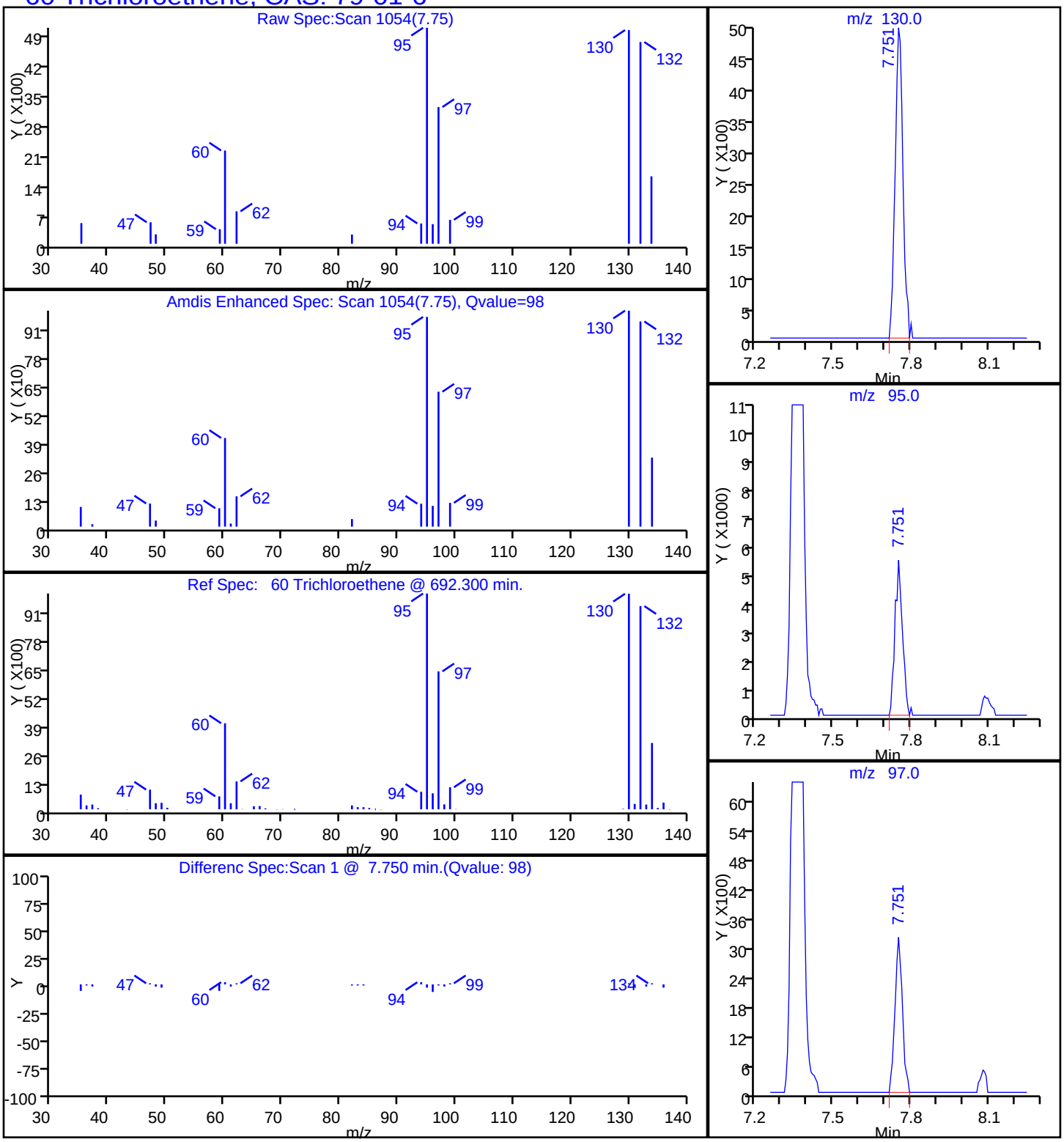
Operator ID: 10099 ALS Bottle#: 13 Worklist Smp#: 12

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: MSVOA_S_CHHP3 Limit Group: VOA 8260C ICAL

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

60 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

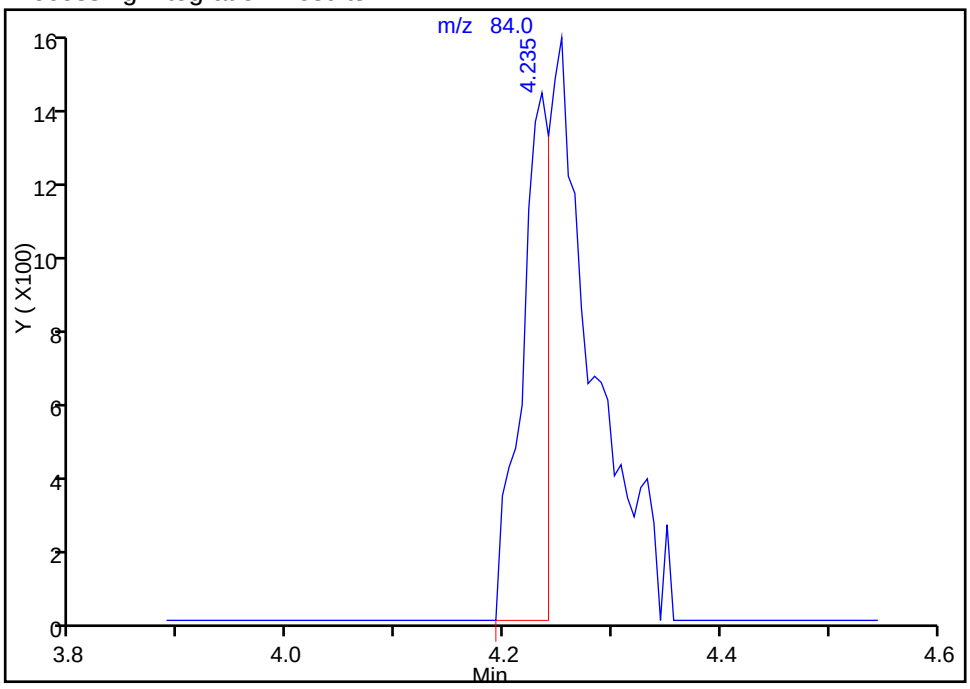
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K13.D				
Injection Date:	04-Apr-2017 11:56:30	Instrument ID:	CHHP3		
Lims ID:	180-64801-B-22-A	Lab Sample ID:	180-64801-22		
Client ID:	HD-SPBA-SB-010-50/50.5				
Operator ID:	10099	ALS Bottle#:	13	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

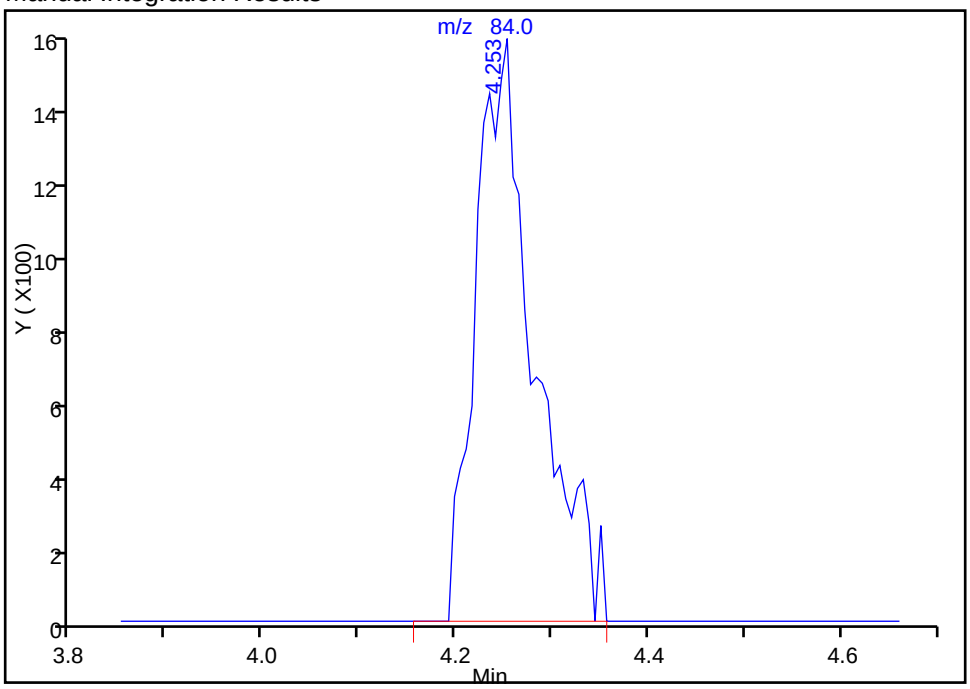
Processing Integration Results

RT: 4.23
Area: 2467
Amount: 2.240806
Amount Units: ng



Manual Integration Results

RT: 4.25
Area: 6514
Amount: 5.916745
Amount Units: ng



Reviewer: gordonk, 04-Apr-2017 12:16:45

Audit Action: Manually Integrated Audit Reason: Poor chromatography

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 189436

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/28/2016 12:01 Calibration End Date: 09/28/2016 14:19 Calibration ID: 32996

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-189436/4	30928K04.D
Level 2	IC 180-189436/5	30928K05.D
Level 3	IC 180-189436/6	30928K06.D
Level 4	ICIS 180-189436/7	30928K07.D
Level 5	IC 180-189436/8	30928K08.D
Level 6	IC 180-189436/9	30928K09.D
Level 7	IC 180-189436/10	30928K10.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	0.3194 0.3211	0.2985 0.3086	0.2996	0.3265	0.3363	Ave		0.3157			0.1000	4.5		20.0			
Chloromethane	0.4458 0.4506	0.4422 0.4269	0.4097	0.4759	0.4768	Ave		0.4468			0.1000	5.4		20.0			
Vinyl chloride	0.3610 0.3768	0.3517 0.3615	0.3424	0.3828	0.3951	Ave		0.3673			0.1000	5.0		20.0			
1,3-Butadiene	0.3438 0.3322	0.3355 0.3215	0.3155	0.3513	0.3638	Ave		0.3377			0.0100	5.0		20.0			
Bromomethane	0.0820 0.0869	0.0832 0.0858	0.0852	0.0874	0.0884	Ave		0.0856			0.0500	2.7		20.0			
Chloroethane	0.0927 0.0912	0.0911 0.0873	0.0933	0.0921	0.0928	Ave		0.0915			0.0500	2.2		20.0			
Dichlorofluoromethane	0.3386 +++++	0.3393 +++++	0.3420	0.3180	0.3020	Ave		0.3280			0.0100	5.3		20.0			
Trichlorofluoromethane	0.2618 +++++	0.2411 +++++	0.2509	0.2306	0.2231	Ave		0.2415			0.1000	6.4		20.0			
Ethyl ether	0.2188 0.2257	0.2198 0.2151	0.2249	0.2328	0.2372	Ave		0.2249			0.0100	3.5		20.0			
Acrolein	0.0419 0.0400	0.0429 0.0362	0.0400	0.0439	0.0413	Ave		0.0409			0.0100	6.2		20.0			
1,1-Dichloroethene	0.2586 0.2817	0.2572 0.2740	0.2637	0.2823	0.2893	Ave		0.2724			0.1000	4.7		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2662 0.2662	0.2644 0.2511	0.2574	0.2738	0.2866	Ave		0.2665			0.1000	4.3		20.0			
Acetone	0.0765 0.0564	0.0722 0.0567	0.0684	0.0609	0.0623	Ave		0.0648			0.0500	12.0		20.0			
Iodomethane	0.3316 0.3839	0.3557 0.3695	0.3532	0.3854	0.3849	Ave		0.3663			0.0100	5.6		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.: 180-64801-1 Analy Batch No.: 189436

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/28/2016 12:01 Calibration End Date: 09/28/2016 14:19 Calibration ID: 32996

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	0.5107 0.8155	0.5321 0.8209	0.6602	0.7419	0.7825	Lin2	-8.294	0.7889			0.1000				0.9920		0.9900
Allyl chloride	0.1152 0.1658	0.1343 0.1744	0.1528	0.1680	0.1719	Ave		0.1546			0.0100	14.4		20.0			
Methyl acetate	0.1483 0.1567	0.1521 0.1542	0.1559	0.1628	0.1731	Ave		0.1576			0.1000	5.2		20.0			
Methylene Chloride	0.4154 0.2965	0.3431 0.2879	0.3083	0.3119	0.3122	Ave		0.3251			0.1000	13.3		20.0			
tert-Butyl alcohol	1.1143 1.2814	1.2395 1.2742	1.2448	1.2759	1.3488	Ave		1.2541			0.0100	5.7		20.0			
Acrylonitrile	0.0832 0.0830	0.0857 0.0790	0.0834	0.0880	0.0915	Ave		0.0848			0.0100	4.8		20.0			
trans-1,2-Dichloroethene	0.2820 0.2868	0.2875 0.2736	0.2741	0.2971	0.3030	Ave		0.2863			0.1000	3.8		20.0			
Methyl tert-butyl ether	0.6046 0.6105	0.6003 0.6147	0.6001	0.6249	0.6656	Ave		0.6173			0.1000	3.7		20.0			
Hexane	0.5488 0.4970	0.5076 0.4813	0.5117	0.5078	0.5262	Ave		0.5115			0.0100	4.2		20.0			
1,1-Dichloroethane	0.4981 0.5023	0.4839 0.4877	0.4936	0.5130	0.5315	Ave		0.5015			0.2000	3.3		20.0			
Vinyl acetate	0.3654 0.4024	0.3941 0.4023	0.4291	0.4233	0.4380	Ave		0.4078			0.0100	6.1		20.0			
2,2-Dichloropropane	1.1560 0.2824	0.7006 0.2470	0.4129	0.3555	0.3541	Lin2	22.858	0.2419			0.0100				0.9970		0.9900
cis-1,2-Dichloroethene	0.3060 0.3216	0.3028 0.3066	0.3119	0.3249	0.3320	Ave		0.3151			0.1000	3.5		20.0			
2-Butanone (MEK)	0.1106 0.0884	0.0962 0.0829	0.1018	0.0887	0.0945	Ave		0.0947			0.0500	9.8		20.0			
Bromochloromethane	0.1065 0.1245	0.1168 0.1224	0.1110	0.1235	0.1259	Ave		0.1186			0.0100	6.3		20.0			
Tetrahydrofuran	0.0620 0.0640	0.0575 0.0631	0.0576	0.0646	0.0664	Ave		0.0622			0.0100	5.5		20.0			
Chloroform	0.4520 0.4627	0.4262 0.4377	0.4472	0.4580	0.4761	Ave		0.4514			0.2000	3.6		20.0			
1,1,1-Trichloroethane	0.3055 0.3649	0.3047 0.3379	0.3308	0.3458	0.3668	Ave		0.3366			0.1000	7.5		20.0			
Cyclohexane	0.6350 0.6046	0.6011 0.5711	0.5944	0.6178	0.6393	Ave		0.6090			0.1000	3.9		20.0			
Carbon tetrachloride	0.2032 0.2886	0.2086 0.2806	0.2489	0.2583	0.2782	Ave		0.2523			0.1000	13.7		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.: 180-64801-1 Analy Batch No.: 189436

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/28/2016 12:01 Calibration End Date: 09/28/2016 14:19 Calibration ID: 32996

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	0.3657 0.3726	0.3516 0.3518	0.3751	0.3770	0.3858	Ave		0.3685			0.0100	3.5		20.0			
Isobutyl alcohol	0.0049 0.0058	0.0053 0.0055	0.0055	0.0055	0.0060	Ave		0.0055		*	0.0100	6.1		20.0			
Benzene	1.1325 1.0860	1.0773 0.9977	1.1006	1.1249	1.1371	Ave		1.0937			0.5000	4.4		20.0			
1,2-Dichloroethane	0.3170 0.3030	0.2788 0.2733	0.2988	0.2953	0.3160	Ave		0.2975			0.1000	5.6		20.0			
n-Heptane	0.4732 0.4920	0.4561 0.4601	0.4870	0.4757	0.5045	Ave		0.4784			0.0100	3.6		20.0			
Trichloroethene	0.2464 0.2803	0.2465 0.2695	0.2612	0.2785	0.2822	Ave		0.2664			0.2000	5.8		20.0			
Methylcyclohexane	0.5789 0.5870	0.5790 0.5431	0.5649	0.5916	0.6070	Ave		0.5788			0.1000	3.5		20.0			
1,2-Dichloropropane	0.2459 0.2734	0.2519 0.2625	0.2688	0.2691	0.2772	Ave		0.2641			0.1000	4.3		20.0			
Dibromomethane	0.1169 0.1347	0.1116 0.1269	0.1214	0.1284	0.1311	Ave		0.1244			0.0100	6.6		20.0			
1,4-Dioxane	0.0017 0.0023	0.0019 0.0023	0.0020	0.0022	0.0023	Ave		0.0021		*	0.0100	10.7		20.0			
Bromodichloromethane	0.1909 0.3024	0.1962 0.3045	0.2459	0.2631	0.2776	Ave		0.2544			0.2000	18.2		20.0			
cis-1,3-Dichloropropene	0.2475 0.4123	0.2768 0.4026	0.3464	0.3655	0.3897	Ave		0.3487			0.2000	18.3		20.0			
4-Methyl-2-pentanone (MIBK)	0.7487 0.8578	0.7606 0.8266	0.8010	0.8470	0.8622	Ave		0.8148			0.1000	5.7		20.0			
Toluene	5.2701 4.9072	5.0127 4.3602	5.1702	5.1595	5.2279	Ave		5.0154			0.4000	6.3		20.0			
trans-1,3-Dichloropropene	0.8948 1.5064	1.0383 1.4517	1.2158	1.3525	1.4463	Ave		1.2723			0.1000	18.3		20.0			
Ethyl methacrylate	1.0190 1.2597	1.0933 1.1621	1.1846	1.2194	1.2830	Ave		1.1745			0.0100	7.9		20.0			
1,1,2-Trichloroethane	0.8446 0.8881	0.8155 0.8307	0.8402	0.8885	0.9021	Ave		0.8585			0.1000	3.9		20.0			
Tetrachloroethene	0.9314 0.9633	0.9185 0.9167	0.9351	0.9668	0.9902	Ave		0.9460			0.2000	2.9		20.0			
1,3-Dichloropropane	1.6014 1.5750	1.5164 1.4150	1.5677	1.6070	1.6280	Ave		1.5587			0.0100	4.7		20.0			
2-Hexanone	0.4455 0.5788	0.4956 0.5279	0.5749	0.5250	0.5770	Ave		0.5321			0.1000	9.4		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.: 180-64801-1 Analy Batch No.: 189436

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/28/2016 12:01 Calibration End Date: 09/28/2016 14:19 Calibration ID: 32996

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								
Dibromochloromethane	0.4377 0.8623	0.4866 0.8472	0.6341	0.7204	0.7726	Lin1	-15.36	0.8543			0.1000				0.9970		0.9900
1,2-Dibromoethane (EDB)	0.7506 0.8837	0.7619 0.8294	0.8152	0.8564	0.8821	Ave		0.8256			0.1000	6.5		20.0			
Chlorobenzene	3.4322 3.2657	3.1955 2.9926	3.2142	3.3603	3.3751	Ave		3.2622			0.5000	4.5		20.0			
1,1,1,2-Tetrachloroethane	0.8033 1.0378	0.7819 0.9747	0.9131	0.9760	1.0185	Ave		0.9293			0.0100	10.9		20.0			
Ethylbenzene	1.8555 1.8183	1.8038 1.6428	1.8371	1.8715	1.9098	Ave		1.8198			0.1000	4.7		20.0			
m-Xylene & p-Xylene	2.3869 2.2926	2.2340 2.0897	2.2905	2.3757	2.3522	Ave		2.2888			0.1000	4.5		20.0			
o-Xylene	2.2640 2.2408	2.2347 2.0093	2.2246	2.3503	2.3671	Ave		2.2416			0.3000	5.2		20.0			
Styrene	3.8519 3.6458	3.6150 3.1633	3.6862	3.8714	3.9230	Ave		3.6795			0.3000	7.0		20.0			
Bromoform	0.2315 0.5202	0.2408 0.5594	0.3370	0.3923	0.4407	Qua	-14.94	0.4940	0.0000627		0.1000				0.9990		0.9900
Isopropylbenzene	6.4125 5.8750	6.0558 5.0630	6.0817	6.3238	6.3604	Ave		6.0246			0.1000	7.7		20.0			
1,1,2,2-Tetrachloroethane	1.0101 1.1159	1.0586 1.0252	1.0447	1.1225	1.1627	Ave		1.0771			0.3000	5.3		20.0			
Bromobenzene	0.7798 0.8155	0.7782 0.7883	0.7944	0.8313	0.8276	Ave		0.8022			0.0100	2.8		20.0			
1,2,3-Trichloropropane	0.1981 0.2106	0.1983 0.2008	0.2115	0.2059	0.2207	Ave		0.2066			0.0100	4.0		20.0			
trans-1,4-Dichloro-2-butene	0.1531 0.2084	0.1563 0.1939	0.1832	0.2013	0.2090	Ave		0.1864			0.0100	12.6		20.0			
N-Propylbenzene	1.0438 1.0528	1.0101 0.9874	1.0454	1.0618	1.0703	Ave		1.0388			0.0100	2.8		20.0			
2-Chlorotoluene	0.8288 0.8688	0.8444 0.8334	0.8513	0.9015	0.8888	Ave		0.8596			0.0100	3.2		20.0			
1,3,5-Trimethylbenzene	3.2270 3.0967	3.1789 2.7047	3.1890	3.3099	3.3023	Ave		3.1441			0.0100	6.6		20.0			
4-Chlorotoluene	0.8915 0.8645	0.8437 0.8076	0.8541	0.8760	0.8842	Ave		0.8602			0.0100	3.3		20.0			
tert-Butylbenzene	2.8319 2.8094	2.6783 2.5214	2.7669	2.9068	2.9267	Ave		2.7773			0.0100	5.1		20.0			
1,2,4-Trimethylbenzene	3.3825 3.2137	3.2402 2.8119	3.3223	3.3935	3.3853	Ave		3.2499			0.0100	6.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 189436

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/28/2016 12:01 Calibration End Date: 09/28/2016 14:19 Calibration ID: 32996

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								
sec-Butylbenzene	4.3449 4.2083	4.2765 3.6485	4.3266	4.4520	4.4507	Ave		4.2439			0.0100	6.5		20.0			
1,3-Dichlorobenzene	1.6943 1.7104	1.6128 1.6077	1.6373	1.7250	1.7280	Ave		1.6737			0.6000	3.2		20.0			
4-Isopropyltoluene	3.4723 3.3489	3.3745 2.9090	3.4467	3.5582	3.5399	Ave		3.3785			0.0100	6.5		20.0			
1,4-Dichlorobenzene	1.6013 1.6774	1.5908 1.5771	1.5924	1.6781	1.7114	Ave		1.6326			0.5000	3.3		20.0			
n-Butylbenzene	3.4238 3.3711	3.2923 2.8654	3.4234	3.5394	3.5915	Ave		3.3582			0.0100	7.1		20.0			
1,2-Dichlorobenzene	1.5233 1.5343	1.4657 1.4130	1.4980	1.5757	1.5807	Ave		1.5129			0.4000	4.0		20.0			
1,2-Dibromo-3-Chloropropane	0.0549 0.1186	0.0609 0.1182	0.0795	0.0965	0.0992	Qua	-3.729	0.1211	0.0000004		0.0500				0.9990		0.9900
1,2,4-Trichlorobenzene	1.0515 1.1828	1.0166 1.1345	1.1089	1.1542	1.1807	Ave		1.1185			0.2000	5.7		20.0			
Hexachlorobutadiene	0.6199 0.7298	0.6604 0.6871	0.6750	0.7108	0.7370	Ave		0.6886			0.0100	6.0		20.0			
Naphthalene	1.8684 2.2518	1.9288 2.1021	2.1212	2.2476	2.2784	Ave		2.1140			0.0100	7.7		20.0			
1,2,3-Trichlorobenzene	0.8398 0.9942	0.8454 0.9619	0.9227	0.9666	0.9718	Ave		0.9289			0.0100	6.7		20.0			
Dibromofluoromethane (Surr)	0.2078 0.2203	0.2031 0.2111	0.2167	0.2233	0.2207	Ave		0.2147				3.5		20.0			
1,2-Dichloroethane-d4 (Surr)	0.2583 0.2475	0.2413 0.2358	0.2523	0.2487	0.2462	Ave		0.2472				2.9		20.0			
Toluene-d8 (Surr)	4.5930 4.1951	4.3214 3.7863	4.5108	4.5100	4.3846	Ave		4.3288				6.3		20.0			
4-Bromofluorobenzene (Surr)	1.9412 1.7202	1.7479 1.5577	1.7374	1.8221	1.7711	Ave		1.7568				6.6		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
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 189436

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/28/2016 12:01 Calibration End Date: 09/28/2016 14:19 Calibration ID: 32996

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-189436/4	30928K04.D
Level 2	IC 180-189436/5	30928K05.D
Level 3	IC 180-189436/6	30928K06.D
Level 4	ICIS 180-189436/7	30928K07.D
Level 5	IC 180-189436/8	30928K08.D
Level 6	IC 180-189436/9	30928K09.D
Level 7	IC 180-189436/10	30928K10.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	14161 332266	25119 663252	63216	107126	142555	25.0 625	50.0 1250	125	200	250
Chloromethane	FB	Ave	19764 466333	37209 917519	86443	156155	202121	25.0 625	50.0 1250	125	200	250
Vinyl chloride	FB	Ave	16003 389919	29592 777037	72244	125625	167499	25.0 625	50.0 1250	125	200	250
1,3-Butadiene	FB	Ave	15240 343755	28233 691063	66573	115290	154201	25.0 625	50.0 1250	125	200	250
Bromomethane	FB	Ave	3635 89939	7000 184332	17971	28683	37491	25.0 625	50.0 1250	125	200	250
Chloroethane	FB	Ave	4111 94382	7669 187713	19675	30213	39327	25.0 625	50.0 1250	125	200	250
Dichlorofluoromethane	FB	Ave	15013 +++++	28552 +++++	72152	104352	128027	25.0 +++++	50.0 +++++	125	200	250
Trichlorofluoromethane	FB	Ave	11607 +++++	20283 +++++	52935	75680	94571	25.0 +++++	50.0 +++++	125	200	250
Ethyl ether	FB	Ave	9702 233578	18491 462309	47444	76390	100537	25.0 625	50.0 1250	125	200	250
Acrolein	FB	Ave	37122 74434	45169 77788	50612	63042	70099	500 1125	625 1250	750	875	1000
1,1-Dichloroethene	FB	Ave	11465 291498	21645 588948	55628	92625	122617	25.0 625	50.0 1250	125	200	250
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	11800 275470	22244 539659	54304	89846	121494	25.0 625	50.0 1250	125	200	250
Acetone	FB	Ave	3393 58409	6071 121884	14439	19970	26415	25.0 625	50.0 1250	125	200	250
Iodomethane	FB	Ave	14700 397275	29931 794299	74517	126481	163145	25.0 625	50.0 1250	125	200	250
Carbon disulfide	FB	Lin2	22642 843942	44773 1764493	139282	243457	331726	25.0 625	50.0 1250	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 189436

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/28/2016 12:01 Calibration End Date: 09/28/2016 14:19 Calibration ID: 32996

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	5107 171617	11300 374889	32240	55131	72859	25.0 625	50.0 1250	125	200	250
Methyl acetate	FB	Ave	32864 810786	63995 1656860	164444	267111	366916	125 3125	250 6250	625	1000	1250
Methylene Chloride	FB	Ave	18414 306849	28872 618832	65042	102363	132352	25.0 625	50.0 1250	125	200	250
tert-Butyl alcohol	TBAd9	Ave	6996 190192	14873 412009	35819	60767	86310	250 6250	500 12500	1250	2000	2500
Acrylonitrile	FB	Ave	36893 859430	72119 1697712	175922	288616	388073	250 6250	500 12500	1250	2000	2500
trans-1,2-Dichloroethene	FB	Ave	12502 296753	24189 588010	57828	97479	128449	25.0 625	50.0 1250	125	200	250
Methyl tert-butyl ether	FB	Ave	26805 631821	50513 1321166	126609	205052	282152	25.0 625	50.0 1250	125	200	250
Hexane	FB	Ave	24328 514346	42710 1034526	107963	166631	223048	25.0 625	50.0 1250	125	200	250
1,1-Dichloroethane	FB	Ave	22084 519828	40717 1048311	104137	168347	225290	25.0 625	50.0 1250	125	200	250
Vinyl acetate	FB	Ave	16197 416385	33159 864758	90526	138910	185680	25.0 625	50.0 1250	125	200	250
2,2-Dichloropropane	FB	Lin2	51247 292205	58948 530858	87113	116657	150096	25.0 625	50.0 1250	125	200	250
cis-1,2-Dichloroethene	FB	Ave	13564 332783	25477 659039	65812	106616	140744	25.0 625	50.0 1250	125	200	250
2-Butanone (MEK)	FB	Ave	4903 91515	8097 178131	21485	29091	40054	25.0 625	50.0 1250	125	200	250
Bromochloromethane	FB	Ave	4720 128830	9826 263106	23425	40529	53352	25.0 625	50.0 1250	125	200	250
Tetrahydrofuran	FB	Ave	5497 132471	9678 271157	24318	42418	56275	50.0 1250	100 2500	250	400	500
Chloroform	FB	Ave	20040 478867	35859 940874	94350	150288	201837	25.0 625	50.0 1250	125	200	250
1,1,1-Trichloroethane	FB	Ave	13542 377655	25640 726257	69795	113470	155486	25.0 625	50.0 1250	125	200	250
Cyclohexane	FB	Ave	28150 625634	50580 1227556	125400	202721	271013	25.0 625	50.0 1250	125	200	250
Carbon tetrachloride	FB	Ave	9007 298659	17554 603105	52516	84752	117922	25.0 625	50.0 1250	125	200	250
1,1-Dichloropropene	FB	Ave	16212 385589	29582 756170	79130	123712	163539	25.0 625	50.0 1250	125	200	250
Isobutyl alcohol	FB	Ave	5427 148998	11200 296132	29098	45416	63276	625 15625	1250 31250	3125	5000	6250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 189436

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/28/2016 12:01 Calibration End Date: 09/28/2016 14:19 Calibration ID: 32996

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	50208 1123832	90647 2144503	232198	369141	482005	25.0 625	50.0 1250	125	200	250
1,2-Dichloroethane	FB	Ave	14052 313603	23459 587510	63033	96913	133964	25.0 625	50.0 1250	125	200	250
n-Heptane	FB	Ave	20977 509163	38375 988930	102749	156116	213850	25.0 625	50.0 1250	125	200	250
Trichloroethene	FB	Ave	10922 290022	20740 579172	55100	91393	119637	25.0 625	50.0 1250	125	200	250
Methylcyclohexane	FB	Ave	25666 607448	48716 1167362	119189	194134	257324	25.0 625	50.0 1250	125	200	250
1,2-Dichloropropane	FB	Ave	10902 282926	21192 564168	56716	88293	117517	25.0 625	50.0 1250	125	200	250
Dibromomethane	FB	Ave	5183 139416	9388 272810	25613	42132	55579	25.0 625	50.0 1250	125	200	250
1,4-Dioxane	FB	Ave	1526 47573	3268 97707	8576	14467	19812	500 12500	1000 25000	2500	4000	5000
Bromodichloromethane	FB	Ave	8463 312900	16506 654512	51875	86330	117682	25.0 625	50.0 1250	125	200	250
cis-1,3-Dichloropropene	FB	Ave	10971 426650	23292 865270	73094	119934	165215	25.0 625	50.0 1250	125	200	250
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	7151 200129	14216 405877	37323	61528	81071	25.0 625	50.0 1250	125	200	250
Toluene	CBNZ d5	Ave	50337 1144841	93693 2140861	240917	374778	491565	25.0 625	50.0 1250	125	200	250
trans-1,3-Dichloropropene	CBNZ d5	Ave	8547 351451	19408 712764	56652	98247	135996	25.0 625	50.0 1250	125	200	250
Ethyl methacrylate	CBNZ d5	Ave	9733 293888	20436 570595	55199	88572	120641	25.0 625	50.0 1250	125	200	250
1,1,2-Trichloroethane	CBNZ d5	Ave	8067 207192	15243 407852	39149	64541	84820	25.0 625	50.0 1250	125	200	250
Tetrachloroethene	CBNZ d5	Ave	8896 224742	17167 450114	43573	70227	93107	25.0 625	50.0 1250	125	200	250
1,3-Dichloropropane	CBNZ d5	Ave	15296 367447	28344 694789	73049	116730	153076	25.0 625	50.0 1250	125	200	250
2-Hexanone	CBNZ d5	Ave	4255 135034	9264 259178	26787	38135	54256	25.0 625	50.0 1250	125	200	250
Dibromochloromethane	CBNZ d5	Lin1	4181 201165	9095 415965	29545	52328	72645	25.0 625	50.0 1250	125	200	250
1,2-Dibromoethane (EDB)	CBNZ d5	Ave	7169 206157	14241 407229	37988	62204	82943	25.0 625	50.0 1250	125	200	250
Chlorobenzene	CBNZ d5	Ave	32783 761888	59728 1469381	149771	244089	317352	25.0 625	50.0 1250	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 189436

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/28/2016 12:01 Calibration End Date: 09/28/2016 14:19 Calibration ID: 32996

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
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	7673 242114	14614 478563	42546	70892	95765	25.0 625	50.0 1250	125	200	250
Ethylbenzene	CBNZ d5	Ave	17723 424204	33715 806603	85605	135942	179578	25.0 625	50.0 1250	125	200	250
m-Xylene & p-Xylene	CBNZ d5	Ave	22798 534853	41757 1026028	106729	172568	221174	25.0 625	50.0 1250	125	200	250
o-Xylene	CBNZ d5	Ave	21625 522777	41770 986570	103659	170724	222572	25.0 625	50.0 1250	125	200	250
Styrene	CBNZ d5	Ave	36791 850572	67569 1553170	171767	281211	368874	25.0 625	50.0 1250	125	200	250
Bromoform	CBNZ d5	Qua	2211 121357	4500 274645	15703	28493	41437	25.0 625	50.0 1250	125	200	250
Isopropylbenzene	CBNZ d5	Ave	61249 1370632	113190 2485952	283389	459353	598056	25.0 625	50.0 1250	125	200	250
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	9648 260344	19787 503358	48678	81535	109330	25.0 625	50.0 1250	125	200	250
Bromobenzene	DCBd 4	Ave	12269 299985	23494 594994	57321	97010	125885	25.0 625	50.0 1250	125	200	250
1,2,3-Trichloropropane	DCBd 4	Ave	3116 77469	5986 151593	15261	24031	33577	25.0 625	50.0 1250	125	200	250
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	2408 76650	4719 146337	13216	23494	31784	25.0 625	50.0 1250	125	200	250
N-Propylbenzene	DCBd 4	Ave	16422 387245	30494 745292	75436	123916	162802	25.0 625	50.0 1250	125	200	250
2-Chlorotoluene	DCBd 4	Ave	13039 319563	25491 629050	61426	105211	135190	25.0 625	50.0 1250	125	200	250
1,3,5-Trimethylbenzene	DCBd 4	Ave	50771 1139050	95971 2041575	230110	386264	502296	25.0 625	50.0 1250	125	200	250
4-Chlorotoluene	DCBd 4	Ave	14026 317977	25470 609579	61626	102234	134496	25.0 625	50.0 1250	125	200	250
tert-Butylbenzene	DCBd 4	Ave	44554 1033400	80857 1903165	199650	339227	445165	25.0 625	50.0 1250	125	200	250
1,2,4-Trimethylbenzene	DCBd 4	Ave	53217 1182105	97822 2122433	239725	396029	514932	25.0 625	50.0 1250	125	200	250
sec-Butylbenzene	DCBd 4	Ave	68359 1547965	129108 2753940	312191	519553	676978	25.0 625	50.0 1250	125	200	250
1,3-Dichlorobenzene	DCBd 4	Ave	26657 629151	48691 1213495	118142	201314	262845	25.0 625	50.0 1250	125	200	250
4-Isopropyltoluene	DCBd 4	Ave	54630 1231816	101876 2195730	248705	415244	538443	25.0 625	50.0 1250	125	200	250
1,4-Dichlorobenzene	DCBd 4	Ave	25193 616991	48026 1190434	114901	195837	260315	25.0 625	50.0 1250	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 189436

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/28/2016 12:01 Calibration End Date: 09/28/2016 14:19 Calibration ID: 32996

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
n-Butylbenzene	DCBd 4	Ave	53867 1240017	99396 2162864	247025	413050	546287	25.0 625	50.0 1250	125	200	250
1,2-Dichlorobenzene	DCBd 4	Ave	23966 564358	44249 1066534	108088	183886	240428	25.0 625	50.0 1250	125	200	250
1,2-Dibromo-3-Chloropropane	DCBd 4	Qua	864 43612	1840 89230	5735	11262	15094	25.0 625	50.0 1250	125	200	250
1,2,4-Trichlorobenzene	DCBd 4	Ave	16544 435079	30690 856304	80017	134701	179588	25.0 625	50.0 1250	125	200	250
Hexachlorobutadiene	DCBd 4	Ave	9753 268455	19938 518614	48705	82951	112098	25.0 625	50.0 1250	125	200	250
Naphthalene	DCBd 4	Ave	29395 828277	58230 1586726	153060	262292	346553	25.0 625	50.0 1250	125	200	250
1,2,3-Trichlorobenzene	DCBd 4	Ave	13213 365707	25522 726049	66578	112800	147820	25.0 625	50.0 1250	125	200	250
Dibromofluoromethane (Surr)	FB	Ave	9211 228018	17085 453748	45722	73275	93537	25.0 625	50.0 1250	125	200	250
1,2-Dichloroethane-d4 (Surr)	FB	Ave	11452 256136	20302 506847	53220	81608	104369	25.0 625	50.0 1250	125	200	250
Toluene-d8 (Surr)	CBNZ d5	Ave	43870 978717	80773 1859075	210191	327597	412279	25.0 625	50.0 1250	125	200	250
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	18541 401319	32671 764809	80956	132353	166536	25.0 625	50.0 1250	125	200	250

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc 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.: 180-64801-1 Analy Batch No.: 189436

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/28/2016 12:01 Calibration End Date: 09/28/2016 14:19 Calibration ID: 32996

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-189436/4	30928K04.D
Level 2	IC 180-189436/5	30928K05.D
Level 3	IC 180-189436/6	30928K06.D
Level 4	ICIS 180-189436/7	30928K07.D
Level 5	IC 180-189436/8	30928K08.D
Level 6	IC 180-189436/9	30928K09.D
Level 7	IC 180-189436/10	30928K10.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
Carbon disulfide	6.8 4.9	-11.5	-7.9	-0.7	3.4	5.1	30 30	30	30	30	30	30
2,2-Dichloropropane	-0.1 -5.5	0.6	-4.9	-0.3	8.6	1.6	30 30	30	30	30	30	30
Dibromochloromethane	23.1 0.6	-7.1	-11.4	-6.7	-2.4	3.8	30 30	30	30	30	30	30
Bromoform	66.9 -0.2	8.5	-8.9	-7.6	-1.8	1.9	70 70	70	70	70	70	70
1,2-Dibromo-3-Chloropropane	68.5 -0.3	11.9	-9.7	-4.9	-5.8	2.7	70 70	70	70	70	70	70

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K04.D
Lims ID: IC VSTD5
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 28-Sep-2016 12:01:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013637-004
Operator ID: 10099 Instrument ID: CHHP3
Sublist: chrom-MSVOA_S_CHHP3*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Jan-2017 10:28:31 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: gordonk Date: 28-Sep-2016 12:24:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.441	4.441	0.000	98	125571	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.355	7.355	0.000	99	443322	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.439	10.439	0.000	88	95515	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.763	12.763	0.000	97	157330	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.600	6.600	0.000	93	9211	25.0	24.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.971	6.971	0.000	95	11452	25.0	26.1	
$ 7 Toluene-d8 (Surr)	98	9.003	9.003	0.000	94	43870	25.0	26.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.607	11.607	0.000	86	18541	25.0	27.6	
10 Dichlorodifluoromethane	85	1.660	1.660	0.000	98	14161	25.0	25.3	
11 Chloromethane	50	1.812	1.812	0.000	99	19764	25.0	24.9	
12 Vinyl chloride	62	1.971	1.971	0.000	97	16003	25.0	24.6	
13 Butadiene	39	1.989	1.989	0.000	90	15240	25.0	25.5	
14 Bromomethane	94	2.287	2.287	0.000	82	3635	25.0	24.0	
15 Chloroethane	64	2.409	2.409	0.000	94	4111	25.0	25.3	M
16 Dichlorofluoromethane	67	2.701	2.701	0.000	96	15013	25.0	25.8	
17 Trichlorofluoromethane	101	2.719	2.719	0.000	14	11607	25.0	27.1	M
19 Ethyl ether	59	3.175	3.175	0.000	89	9702	25.0	24.3	M
20 Acrolein	56	3.327	3.327	0.000	99	37122	500.0	512.0	
21 1,1-Dichloroethene	96	3.443	3.443	0.000	1	11465	25.0	23.7	M
22 1,1,2-Trichloro-1,2,2-trif	101	3.510	3.510	0.000	93	11800	25.0	25.0	
23 Acetone	43	3.601	3.601	0.000	86	3393	25.0	29.5	
24 Iodomethane	142	3.638	3.638	0.000	99	14700	25.0	22.6	
25 Carbon disulfide	76	3.723	3.723	0.000	98	22642	25.0	26.7	
28 3-Chloro-1-propene	76	4.021	4.021	0.000	94	5107	25.0	18.6	M
29 Methyl acetate	43	4.124	4.124	0.000	98	32864	125.0	117.6	
30 Methylene Chloride	84	4.228	4.228	0.000	93	18414	25.0	31.9	M
31 2-Methyl-2-propanol	59	4.574	4.574	0.000	95	6996	250.0	222.1	
32 Acrylonitrile	53	4.641	4.641	0.000	99	36893	250.0	245.2	
33 trans-1,2-Dichloroethene	96	4.647	4.647	0.000	96	12502	25.0	24.6	
34 Methyl tert-butyl ether	73	4.708	4.708	0.000	98	26805	25.0	24.5	
35 Hexane	57	5.073	5.073	0.000	90	24328	25.0	26.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.250	5.250	0.000	96	22084	25.0	24.8	
37 Vinyl acetate	43	5.383	5.383	0.000	97	16197	25.0	22.4	
41 2,2-Dichloropropane	77	5.992	5.992	0.000	38	51247	25.0	25.0	
42 cis-1,2-Dichloroethene	96	6.016	6.016	0.000	84	13564	25.0	24.3	
43 2-Butanone (MEK)	43	6.077	6.077	0.000	96	4903	25.0	29.2	
47 Chlorobromomethane	128	6.302	6.302	0.000	95	4720	25.0	22.4	
48 Tetrahydrofuran	42	6.381	6.381	0.000	91	5497	50.0	49.9	
49 Chloroform	83	6.424	6.424	0.000	94	20040	25.0	25.0	
50 1,1,1-Trichloroethane	97	6.618	6.618	0.000	98	13542	25.0	22.7	
51 Cyclohexane	56	6.679	6.679	0.000	89	28150	25.0	26.1	
53 Carbon tetrachloride	117	6.807	6.807	0.000	65	9007	25.0	20.1	
52 1,1-Dichloropropene	75	6.807	6.807	0.000	94	16212	25.0	24.8	
54 Isobutyl alcohol	41	7.026	7.026	0.000	39	5427	625.0	556.2	
55 Benzene	78	7.038	7.038	0.000	97	50208	25.0	25.9	
56 1,2-Dichloroethane	62	7.056	7.056	0.000	95	14052	25.0	26.6	
59 n-Heptane	43	7.367	7.367	0.000	94	20977	25.0	24.7	
60 Trichloroethene	130	7.744	7.744	0.000	96	10922	25.0	23.1	
63 Methylcyclohexane	83	7.951	7.951	0.000	94	25666	25.0	25.0	
64 1,2-Dichloropropane	63	7.981	7.981	0.000	80	10902	25.0	23.3	
65 Dibromomethane	93	8.097	8.097	0.000	95	5183	25.0	23.5	
67 1,4-Dioxane	88	8.145	8.145	0.000	65	1526	500.0	406.8	
68 Dichlorobromomethane	83	8.273	8.273	0.000	97	8463	25.0	18.8	
71 cis-1,3-Dichloropropene	75	8.729	8.729	0.000	95	10971	25.0	17.7	
72 4-Methyl-2-pentanone (MIBK	43	8.894	8.894	0.000	95	7151	25.0	23.0	
73 Toluene	91	9.070	9.070	0.000	98	50337	25.0	26.3	
74 trans-1,3-Dichloropropene	75	9.289	9.289	0.000	92	8547	25.0	17.6	
75 Ethyl methacrylate	69	9.392	9.392	0.000	90	9733	25.0	21.7	
76 1,1,2-Trichloroethane	97	9.472	9.472	0.000	91	8067	25.0	24.6	
77 Tetrachloroethene	164	9.618	9.618	0.000	97	8896	25.0	24.6	
78 1,3-Dichloropropane	76	9.636	9.636	0.000	91	15296	25.0	25.7	
79 2-Hexanone	43	9.733	9.733	0.000	93	4255	25.0	20.9	
81 Chlorodibromomethane	129	9.861	9.861	0.000	88	4181	25.0	30.8	
82 Ethylene Dibromide	107	9.977	9.977	0.000	97	7169	25.0	22.7	
83 Chlorobenzene	112	10.469	10.469	0.000	94	32783	25.0	26.3	
85 1,1,1,2-Tetrachloroethane	131	10.542	10.542	0.000	90	7673	25.0	21.6	
86 Ethylbenzene	106	10.579	10.579	0.000	99	17723	25.0	25.5	
87 m-Xylene & p-Xylene	106	10.694	10.694	0.000	99	22798	25.0	26.1	
88 o-Xylene	106	11.090	11.090	0.000	96	21625	25.0	25.3	
89 Styrene	104	11.102	11.102	0.000	93	36791	25.0	26.2	
90 Bromoform	173	11.291	11.291	0.000	21	2211	25.0	41.7	
91 Isopropylbenzene	105	11.461	11.461	0.000	96	61249	25.0	26.6	
93 1,1,2,2-Tetrachloroethane	83	11.741	11.741	0.000	95	9648	25.0	23.4	
94 Bromobenzene	156	11.759	11.759	0.000	95	12269	25.0	24.3	
95 1,2,3-Trichloropropane	110	11.789	11.789	0.000	85	3116	25.0	24.0	
96 trans-1,4-Dichloro-2-buten	53	11.802	11.802	0.000	68	2408	25.0	20.5	
97 N-Propylbenzene	120	11.868	11.868	0.000	99	16422	25.0	25.1	
98 2-Chlorotoluene	126	11.948	11.948	0.000	95	13039	25.0	24.1	
99 1,3,5-Trimethylbenzene	105	12.039	12.039	0.000	93	50771	25.0	25.7	
100 4-Chlorotoluene	126	12.063	12.063	0.000	98	14026	25.0	25.9	
101 tert-Butylbenzene	119	12.373	12.373	0.000	92	44554	25.0	25.5	
103 1,2,4-Trimethylbenzene	105	12.416	12.416	0.000	94	53217	25.0	26.0	
104 sec-Butylbenzene	105	12.592	12.592	0.000	94	68359	25.0	25.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	12.696	12.696	0.000	97	26657	25.0	25.3	
106 4-Isopropyltoluene	119	12.732	12.732	0.000	97	54630	25.0	25.7	
107 1,4-Dichlorobenzene	146	12.787	12.787	0.000	91	25193	25.0	24.5	
110 n-Butylbenzene	91	13.146	13.146	0.000	98	53867	25.0	25.5	
111 1,2-Dichlorobenzene	146	13.158	13.158	0.000	95	23966	25.0	25.2	
112 1,2-Dibromo-3-Chloropropan	75	13.937	13.937	0.000	75	864	25.0	42.1	
114 1,2,4-Trichlorobenzene	180	14.776	14.776	0.000	94	16544	25.0	23.5	
115 Hexachlorobutadiene	225	14.953	14.953	0.000	93	9753	25.0	22.5	
116 Naphthalene	128	15.026	15.026	0.000	97	29395	25.0	22.1	
117 1,2,3-Trichlorobenzene	180	15.275	15.275	0.000	93	13213	25.0	22.6	
S 129 Xylenes, Total	106				0		50.0	51.3	
S 130 1,2-Dichloroethene, Total	96				0		50.0	48.9	
S 131 1,3-Dichloropropene, Total	1				0		50.0	35.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00059	Amount Added:	1.00	Units: uL	
VOA8260VOAPRI_00213	Amount Added:	1.00	Units: uL	
voaWVA1stRest_00008	Amount Added:	1.00	Units: uL	
voaWAcro1stRe_00008	Amount Added:	20.00	Units: uL	
VOA8260INT_00061	Amount Added:	10.00	Units: uL	Run Reagent

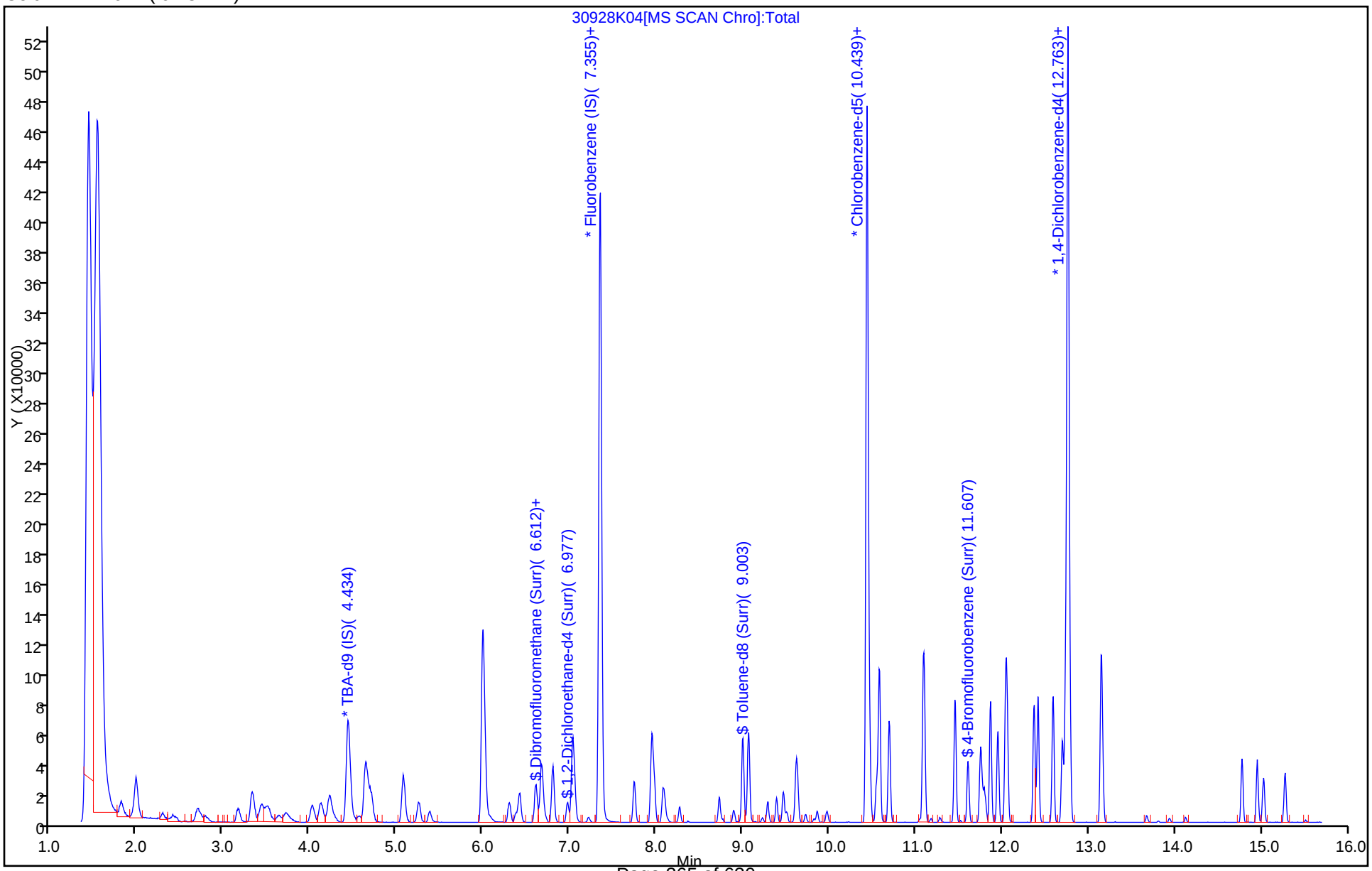
Report Date: 26-Jan-2017 10:28:32 Chrom Revision: 2.2 10-Jan-2017 11:26:10

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K04.D

Injection Date:	28-Sep-2016 12:01:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	IC VSTD5			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

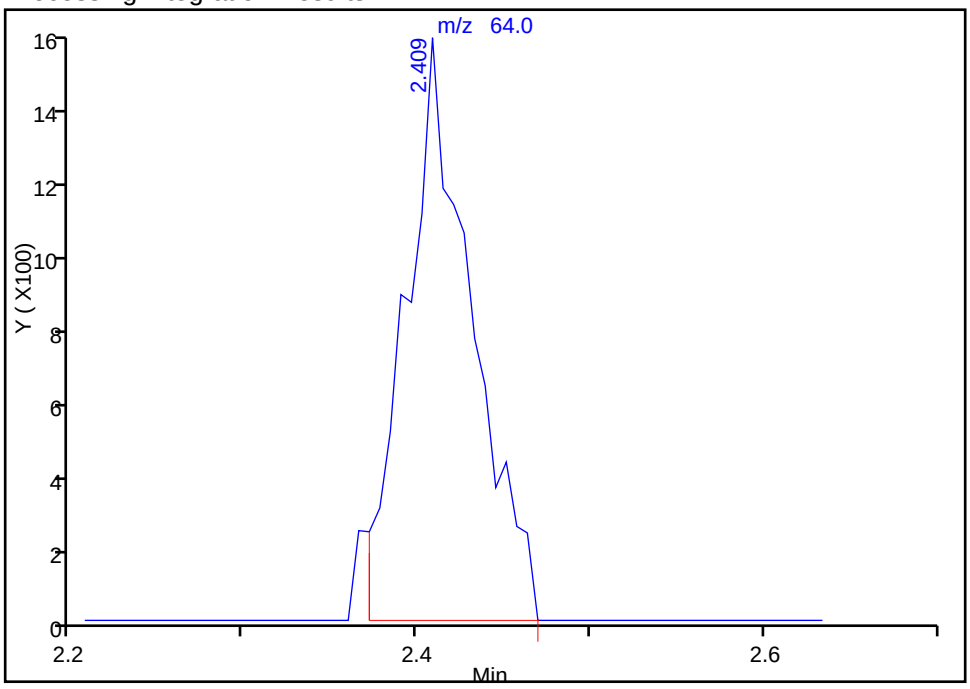
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K04.D
Injection Date: 28-Sep-2016 12:01:30 Instrument ID: CHHP3
Lims ID: IC VSTD5
Client ID:
Operator ID: 10099 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_S_CHHP3 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

15 Chloroethane, CAS: 75-00-3

Signal: 1

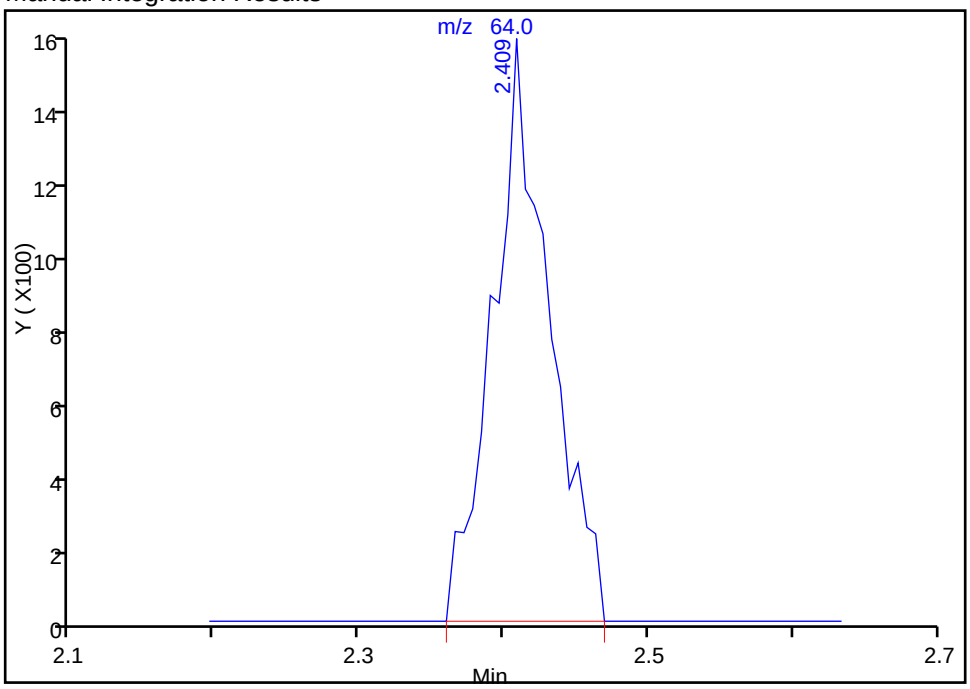
Processing Integration Results

RT: 2.41
Area: 4026
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 2.41
Area: 4111
Amount: 25.336112
Amount Units: ng



Reviewer: gordonk, 28-Sep-2016 12:24:58
Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh

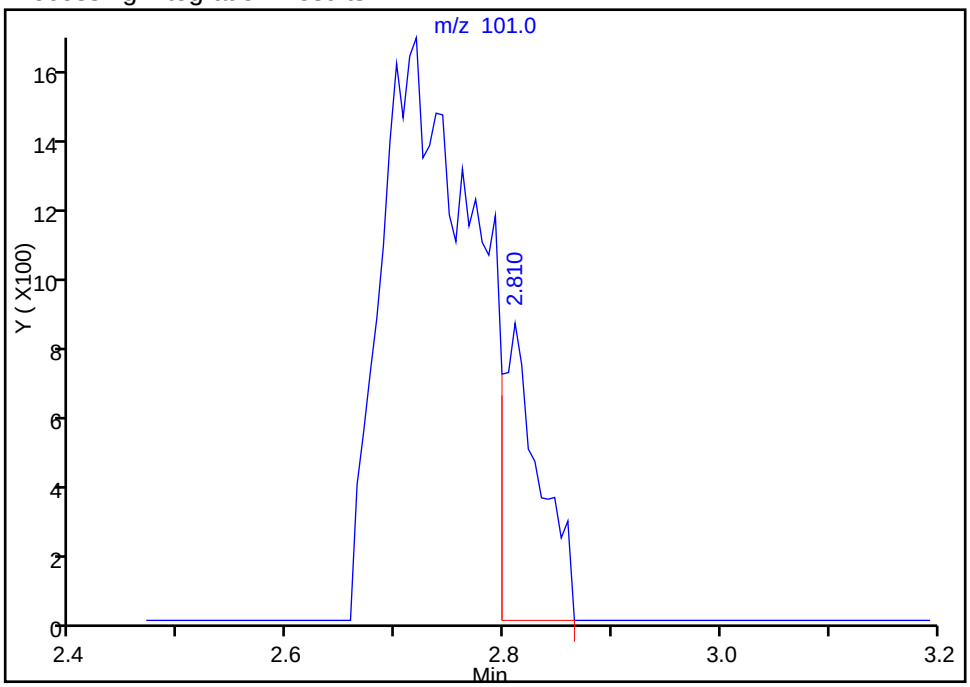
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K04.D
Injection Date: 28-Sep-2016 12:01:30 Instrument ID: CHHP3
Lims ID: IC VSTD5
Client ID:
Operator ID: 10099 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_S_CHHP3 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

17 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

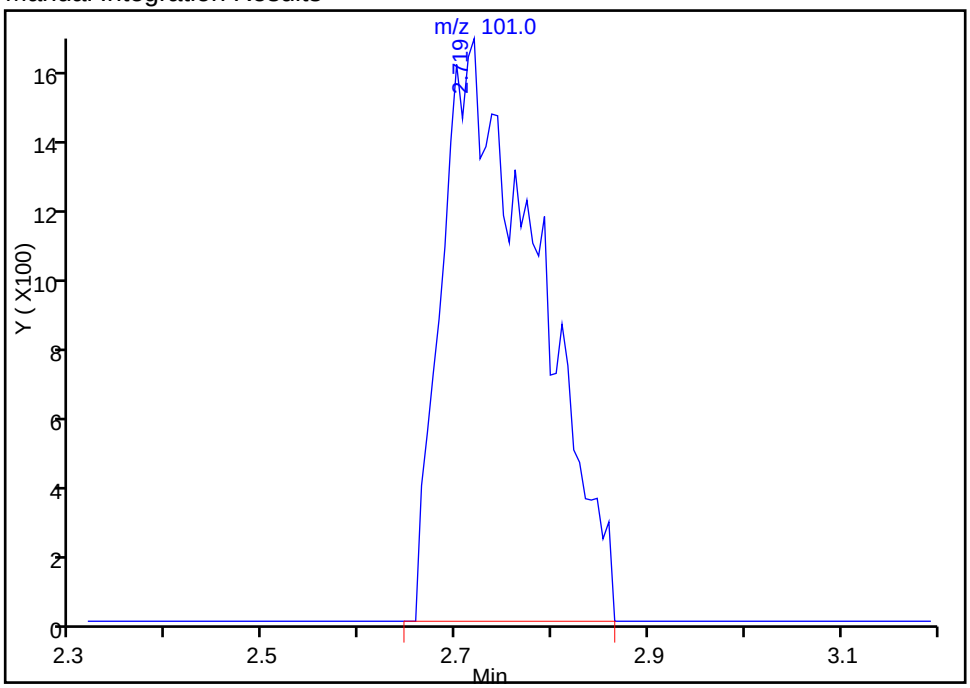
Processing Integration Results

RT: 2.81
Area: 2030
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 2.72
Area: 11607
Amount: 27.103419
Amount Units: ng



Reviewer: gordonk, 28-Sep-2016 12:24:58
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

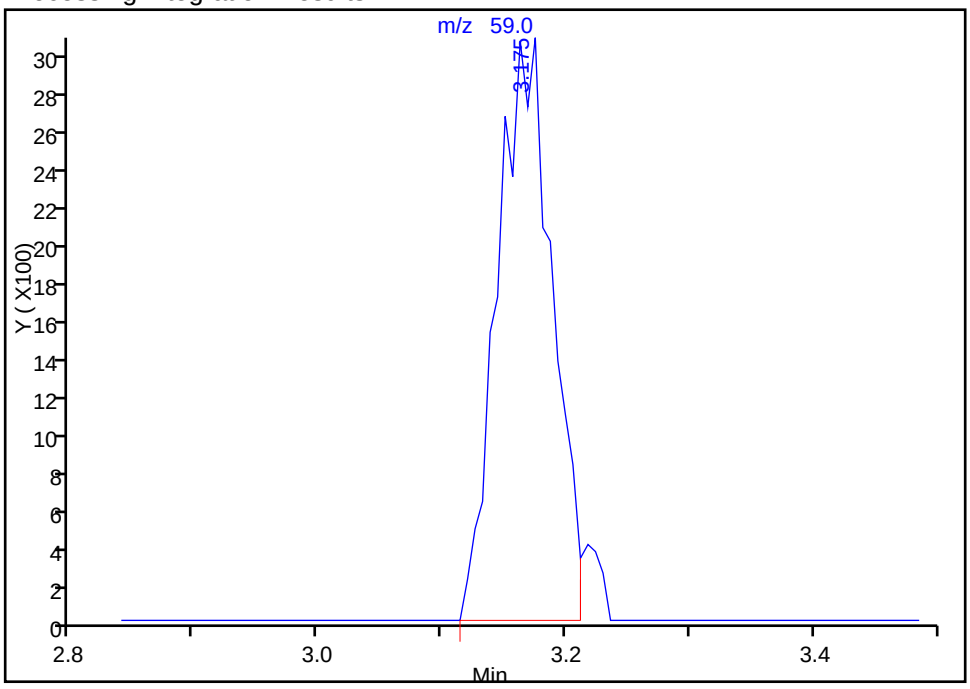
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K04.D
Injection Date: 28-Sep-2016 12:01:30 Instrument ID: CHHP3
Lims ID: IC VSTD5
Client ID:
Operator ID: 10099 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_S_CHHP3 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

19 Ethyl ether, CAS: 60-29-7

Signal: 1

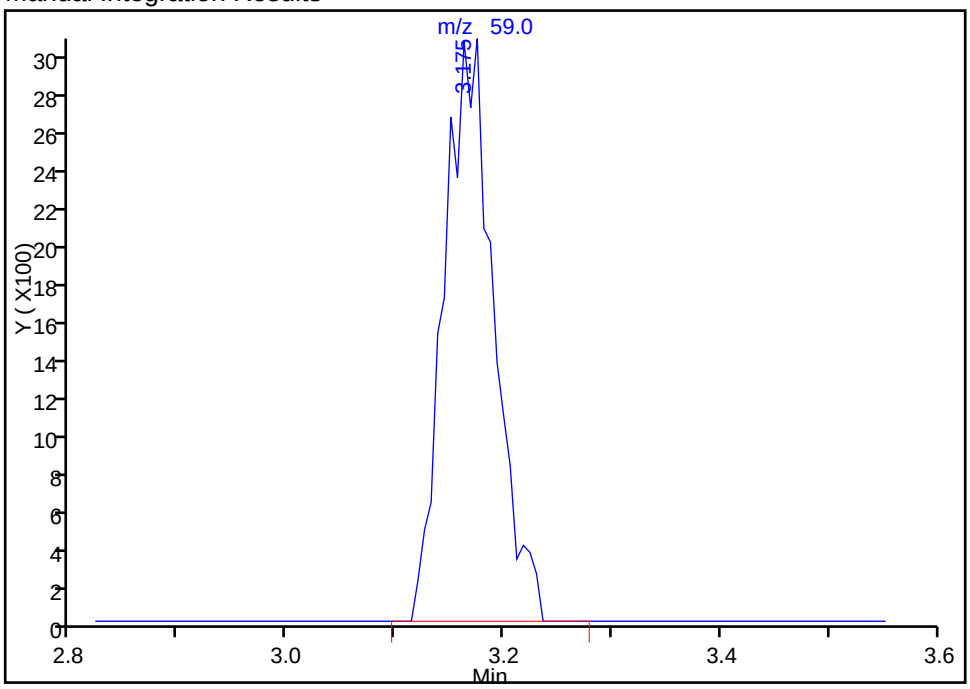
Processing Integration Results

RT: 3.18
Area: 9339
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 3.18
Area: 9702
Amount: 24.328166
Amount Units: ng



Reviewer: gordonk, 28-Sep-2016 12:24:58
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

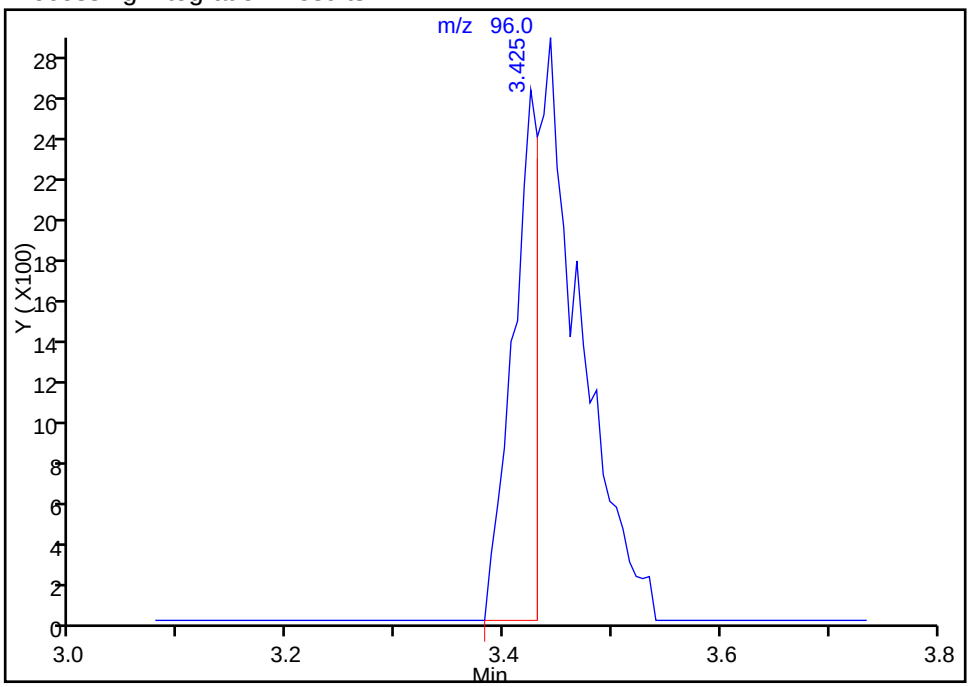
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K04.D
Injection Date: 28-Sep-2016 12:01:30 Instrument ID: CHHP3
Lims ID: IC VSTD5
Client ID:
Operator ID: 10099 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_S_CHHP3 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

21 1,1-Dichloroethene, CAS: 75-35-4

Signal: 1

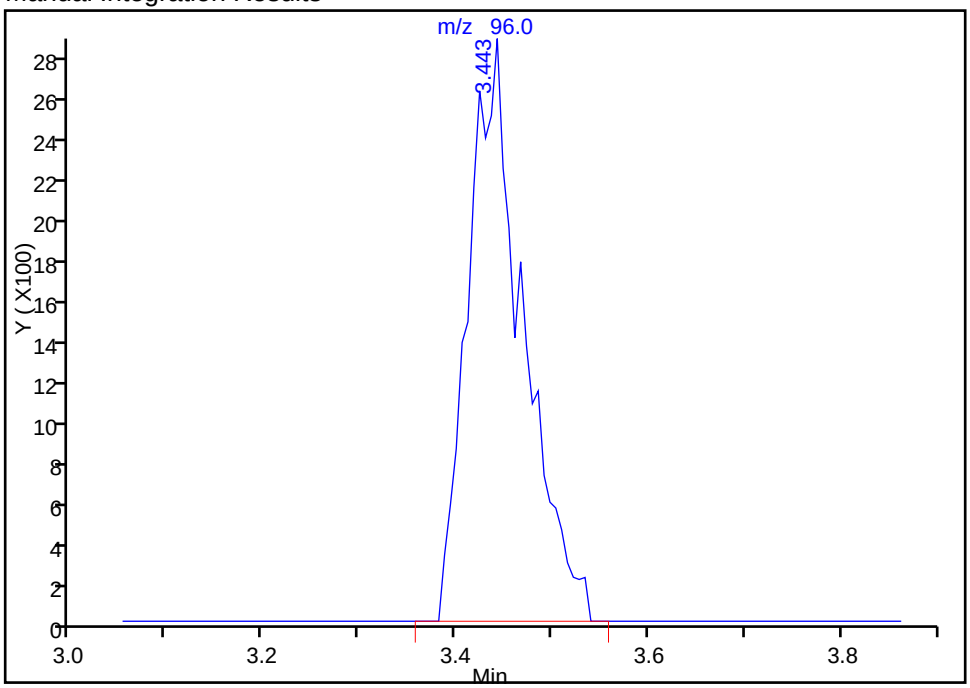
Processing Integration Results

RT: 3.42
Area: 4306
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 3.44
Area: 11465
Amount: 23.735781
Amount Units: ng



Reviewer: gordonk, 28-Sep-2016 12:24:58
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

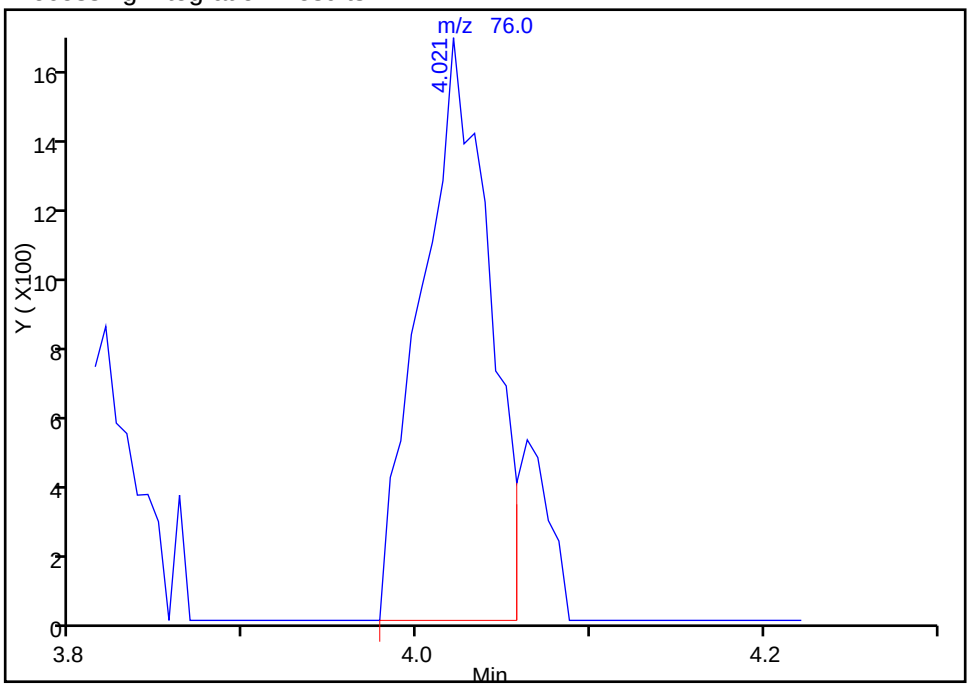
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K04.D
Injection Date: 28-Sep-2016 12:01:30 Instrument ID: CHHP3
Lims ID: IC VSTD5
Client ID:
Operator ID: 10099 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_S_CHHP3 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

28 3-Chloro-1-propene, CAS: 107-05-1

Signal: 1

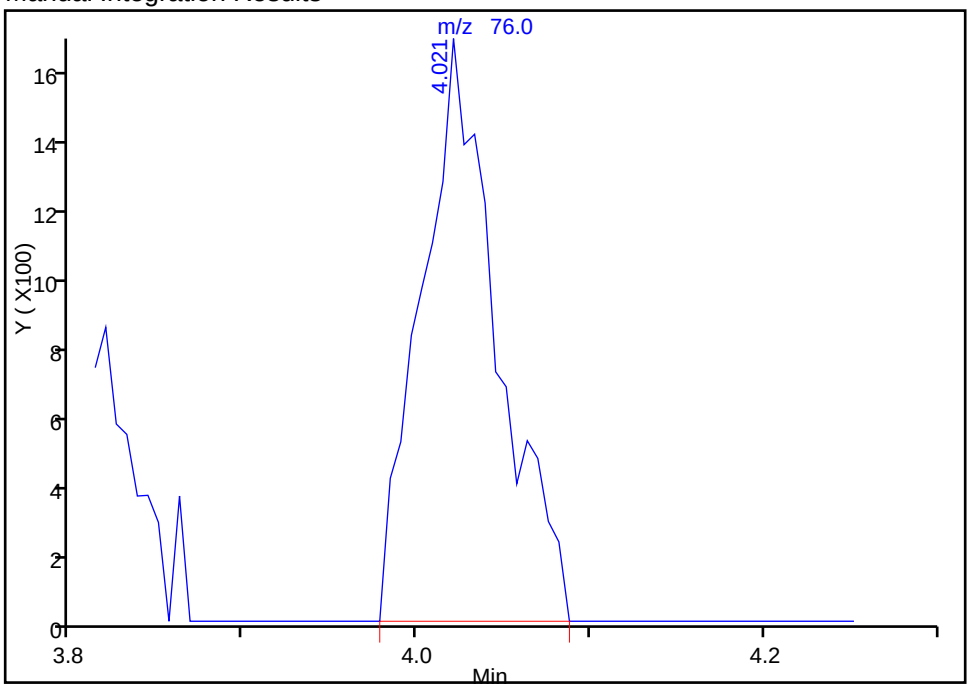
Processing Integration Results

RT: 4.02
Area: 4559
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 4.02
Area: 5107
Amount: 18.624346
Amount Units: ng



Reviewer: gordonk, 28-Sep-2016 12:24:58
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

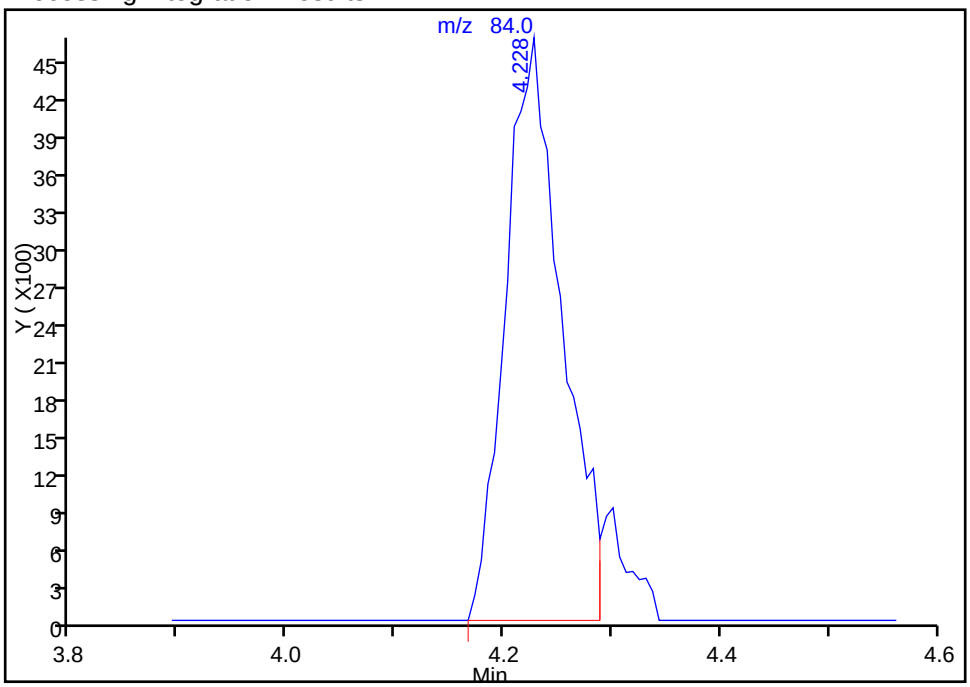
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K04.D
Injection Date: 28-Sep-2016 12:01:30 Instrument ID: CHHP3
Lims ID: IC VSTD5
Client ID:
Operator ID: 10099 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_S_CHHP3 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

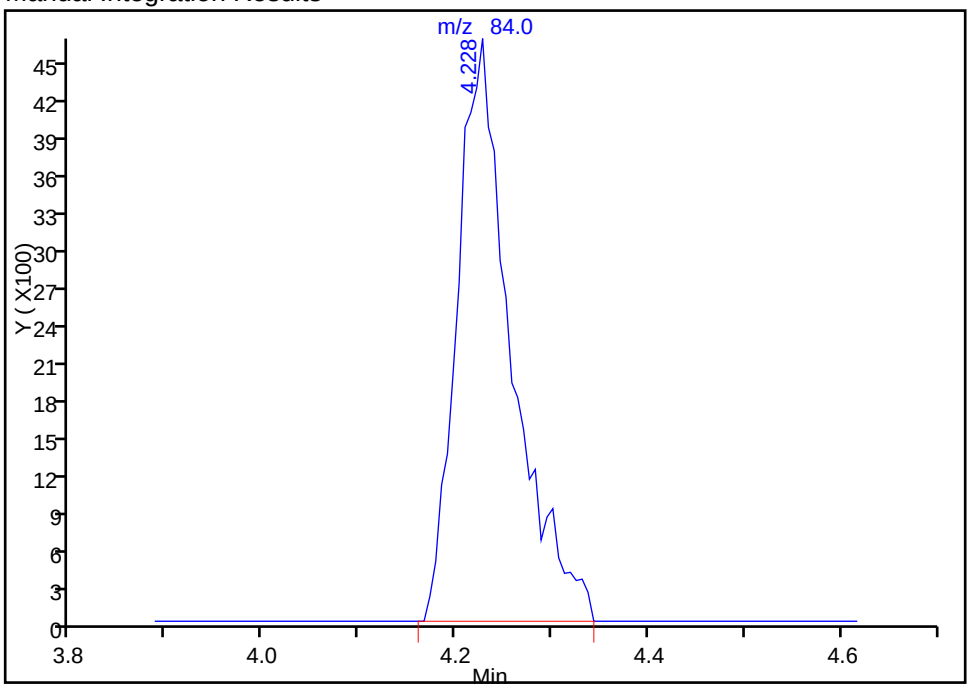
Processing Integration Results

RT: 4.23
Area: 16980
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 4.23
Area: 18414
Amount: 31.945896
Amount Units: ng



Reviewer: gordonk, 28-Sep-2016 12:24:58
Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K05.D
Lims ID: IC VSTD10
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 28-Sep-2016 12:24:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013637-005
Operator ID: 10099 Instrument ID: CHHP3
Sublist: chrom-MSVOA_S_CHHP3*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Jan-2017 10:28:33 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: gordonk Date: 28-Sep-2016 12:45:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.453	4.441	0.012	98	119994	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.354	7.355	-0.001	99	420700	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.439	10.439	0.000	87	93456	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.763	12.763	0.000	97	150950	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.600	6.600	0.000	93	17085	50.0	47.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.971	6.971	0.000	96	20302	50.0	48.8	
$ 7 Toluene-d8 (Surr)	98	9.003	9.003	0.000	92	80773	50.0	49.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.607	11.607	0.000	87	32671	50.0	49.7	
10 Dichlorodifluoromethane	85	1.660	1.660	0.000	98	25119	50.0	47.3	
11 Chloromethane	50	1.812	1.812	0.000	99	37209	50.0	49.5	
12 Vinyl chloride	62	1.971	1.971	0.000	98	29592	50.0	47.9	
13 Butadiene	39	1.989	1.989	0.000	90	28233	50.0	49.7	
14 Bromomethane	94	2.299	2.287	0.012	90	7000	50.0	48.6	
15 Chloroethane	64	2.409	2.409	0.000	96	7669	50.0	49.8	
16 Dichlorofluoromethane	67	2.694	2.701	-0.007	97	28552	50.0	51.7	
17 Trichlorofluoromethane	101	2.731	2.719	0.012	51	20283	50.0	49.9	M
19 Ethyl ether	59	3.163	3.175	-0.012	91	18491	50.0	48.9	
20 Acrolein	56	3.327	3.327	0.000	99	45169	625.0	656.5	
21 1,1-Dichloroethene	96	3.431	3.443	-0.012	94	21645	50.0	47.2	
22 1,1,2-Trichloro-1,2,2-trif	101	3.510	3.510	0.000	92	22244	50.0	49.6	
23 Acetone	43	3.595	3.601	-0.006	99	6071	50.0	55.7	
24 Iodomethane	142	3.631	3.638	-0.007	95	29931	50.0	48.6	
25 Carbon disulfide	76	3.723	3.723	0.000	99	44773	50.0	44.2	
28 3-Chloro-1-propene	76	4.021	4.021	0.000	94	11300	50.0	43.4	
29 Methyl acetate	43	4.118	4.124	-0.006	98	63995	250.0	241.3	
30 Methylene Chloride	84	4.221	4.228	-0.007	95	28872	50.0	52.8	
31 2-Methyl-2-propanol	59	4.568	4.574	-0.006	98	14873	500.0	494.2	
32 Acrylonitrile	53	4.635	4.641	-0.006	98	72119	500.0	505.2	
33 trans-1,2-Dichloroethene	96	4.647	4.647	0.000	98	24189	50.0	50.2	
34 Methyl tert-butyl ether	73	4.702	4.708	-0.006	96	50513	50.0	48.6	
35 Hexane	57	5.073	5.073	0.000	90	42710	50.0	49.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.256	5.250	0.006	95	40717	50.0	48.3	
37 Vinyl acetate	43	5.377	5.383	-0.006	97	33159	50.0	48.3	
41 2,2-Dichloropropane	77	5.992	5.992	0.000	40	58948	50.0	50.3	
42 cis-1,2-Dichloroethene	96	6.010	6.016	-0.006	83	25477	50.0	48.0	
43 2-Butanone (MEK)	43	6.071	6.077	-0.006	99	8097	50.0	50.8	
47 Chlorobromomethane	128	6.302	6.302	0.000	96	9826	50.0	49.2	
48 Tetrahydrofuran	42	6.381	6.381	0.000	92	9678	100.0	92.5	
49 Chloroform	83	6.424	6.424	0.000	94	35859	50.0	47.2	
50 1,1,1-Trichloroethane	97	6.612	6.618	-0.006	98	25640	50.0	45.3	
51 Cyclohexane	56	6.673	6.679	-0.006	90	50580	50.0	49.4	
53 Carbon tetrachloride	117	6.801	6.807	-0.006	65	17554	50.0	41.3	
52 1,1-Dichloropropene	75	6.807	6.807	0.000	96	29582	50.0	47.7	
55 Benzene	78	7.038	7.038	0.000	96	90647	50.0	49.3	
54 Isobutyl alcohol	41	7.026	7.026	0.000	93	11200	1250.0	1209.6	
56 1,2-Dichloroethane	62	7.056	7.056	0.000	95	23459	50.0	46.9	
59 n-Heptane	43	7.367	7.367	0.000	92	38375	50.0	47.7	
60 Trichloroethene	130	7.744	7.744	0.000	97	20740	50.0	46.3	
63 Methylcyclohexane	83	7.951	7.951	0.000	91	48716	50.0	50.0	
64 1,2-Dichloropropane	63	7.981	7.981	0.000	89	21192	50.0	47.7	
65 Dibromomethane	93	8.097	8.097	0.000	97	9388	50.0	44.8	
67 1,4-Dioxane	88	8.145	8.145	0.000	56	3268	1000.0	918.0	
68 Dichlorobromomethane	83	8.267	8.273	-0.006	98	16506	50.0	38.6	
71 cis-1,3-Dichloropropene	75	8.729	8.729	0.000	96	23292	50.0	39.7	
72 4-Methyl-2-pentanone (MIBK	43	8.900	8.894	0.006	94	14216	50.0	46.7	
73 Toluene	91	9.070	9.070	0.000	99	93693	50.0	50.0	
74 trans-1,3-Dichloropropene	75	9.289	9.289	0.000	92	19408	50.0	40.8	
75 Ethyl methacrylate	69	9.392	9.392	0.000	90	20436	50.0	46.5	
76 1,1,2-Trichloroethane	97	9.471	9.472	-0.001	89	15243	50.0	47.5	
77 Tetrachloroethene	164	9.617	9.618	-0.001	98	17167	50.0	48.5	
78 1,3-Dichloropropane	76	9.636	9.636	0.000	89	28344	50.0	48.6	
79 2-Hexanone	43	9.727	9.733	-0.006	96	9264	50.0	46.6	
81 Chlorodibromomethane	129	9.867	9.861	0.006	89	9095	50.0	46.5	
82 Ethylene Dibromide	107	9.976	9.977	0.000	98	14241	50.0	46.1	
83 Chlorobenzene	112	10.469	10.469	0.000	95	59728	50.0	49.0	
85 1,1,1,2-Tetrachloroethane	131	10.548	10.542	0.006	93	14614	50.0	42.1	
86 Ethylbenzene	106	10.579	10.579	0.000	98	33715	50.0	49.6	
87 m-Xylene & p-Xylene	106	10.694	10.694	0.000	99	41757	50.0	48.8	
88 o-Xylene	106	11.090	11.090	0.000	97	41770	50.0	49.8	
89 Styrene	104	11.102	11.102	0.000	93	67569	50.0	49.1	
90 Bromoform	173	11.278	11.291	-0.013	95	4500	50.0	54.2	
91 Isopropylbenzene	105	11.461	11.461	0.000	96	113190	50.0	50.3	
93 1,1,2,2-Tetrachloroethane	83	11.741	11.741	0.000	95	19787	50.0	49.1	
94 Bromobenzene	156	11.759	11.759	0.000	95	23494	50.0	48.5	
95 1,2,3-Trichloropropane	110	11.789	11.789	0.000	85	5986	50.0	48.0	
96 trans-1,4-Dichloro-2-buten	53	11.801	11.802	-0.001	71	4719	50.0	41.9	
97 N-Propylbenzene	120	11.868	11.868	0.000	99	30494	50.0	48.6	
98 2-Chlorotoluene	126	11.954	11.948	0.006	96	25491	50.0	49.1	
99 1,3,5-Trimethylbenzene	105	12.045	12.039	0.006	94	95971	50.0	50.6	
100 4-Chlorotoluene	126	12.057	12.063	-0.006	98	25470	50.0	49.0	
101 tert-Butylbenzene	119	12.367	12.373	-0.006	92	80857	50.0	48.2	
103 1,2,4-Trimethylbenzene	105	12.416	12.416	0.000	94	97822	50.0	49.9	
104 sec-Butylbenzene	105	12.592	12.592	0.000	94	129108	50.0	50.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	12.696	12.696	0.000	97	48691	50.0	48.2	
106 4-Isopropyltoluene	119	12.732	12.732	0.000	97	101876	50.0	49.9	
107 1,4-Dichlorobenzene	146	12.787	12.787	0.000	95	48026	50.0	48.7	
110 n-Butylbenzene	91	13.146	13.146	0.000	98	99396	50.0	49.0	
111 1,2-Dichlorobenzene	146	13.158	13.158	0.000	97	44249	50.0	48.4	
112 1,2-Dibromo-3-Chloropropan	75	13.943	13.937	0.006	75	1840	50.0	56.0	
114 1,2,4-Trichlorobenzene	180	14.776	14.776	0.000	94	30690	50.0	45.4	
115 Hexachlorobutadiene	225	14.953	14.953	0.000	94	19938	50.0	48.0	
116 Naphthalene	128	15.026	15.026	0.000	97	58230	50.0	45.6	
117 1,2,3-Trichlorobenzene	180	15.275	15.275	0.000	94	25522	50.0	45.5	
S 130 1,2-Dichloroethene, Total	96				0		100.0	98.3	
S 129 Xylenes, Total	106				0		100.0	98.7	
S 131 1,3-Dichloropropene, Total	1				0		100.0	80.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

voaWAcro1stRe_00008	Amount Added:	25.00	Units: uL	
voaWVA1stRest_00008	Amount Added:	2.00	Units: uL	
VOA8260VOAPRI_00213	Amount Added:	2.00	Units: uL	
VOA8260SURR_00059	Amount Added:	2.00	Units: uL	
VOA8260INT_00061	Amount Added:	10.00	Units: uL	Run Reagent

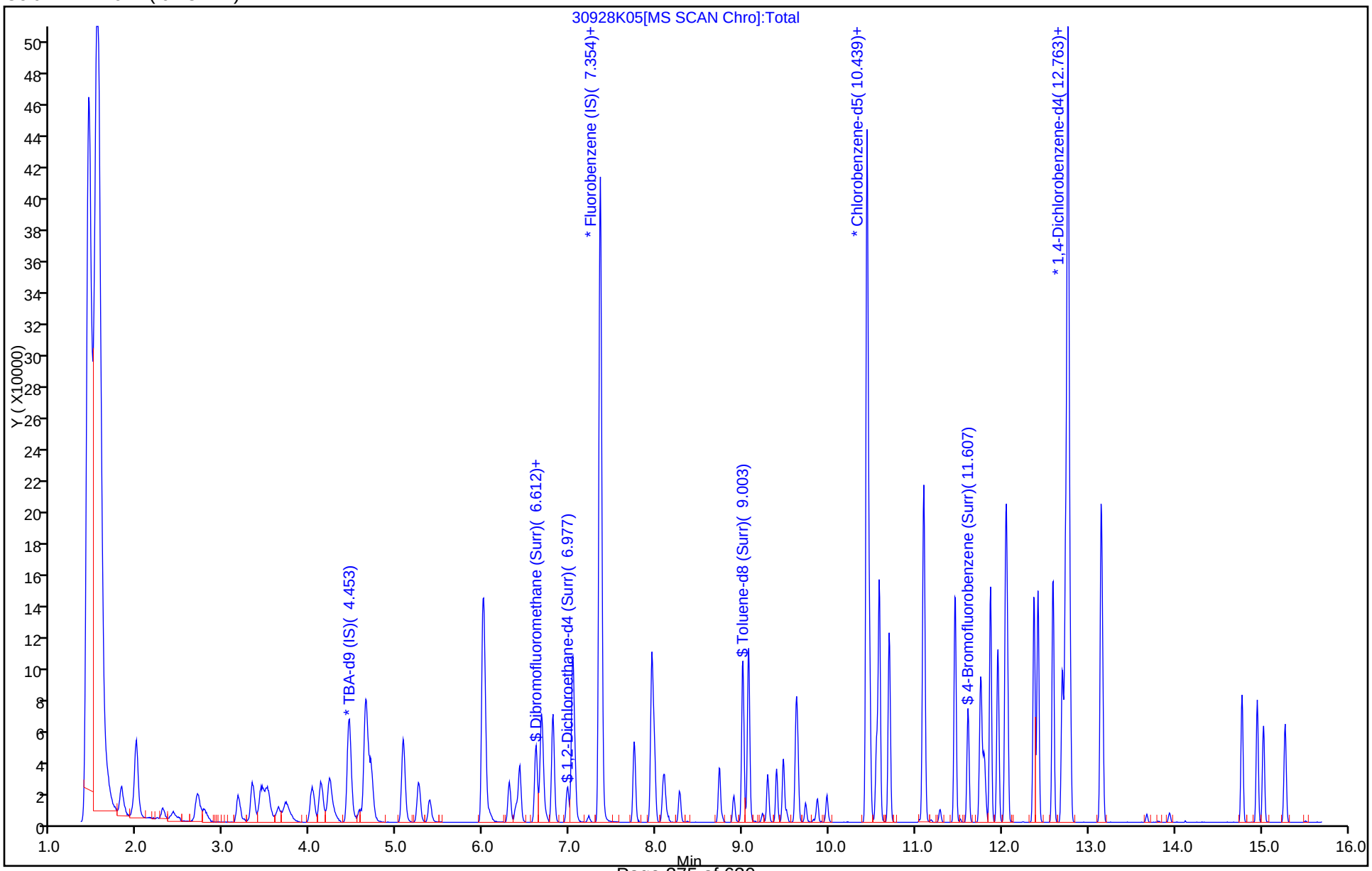
Report Date: 26-Jan-2017 10:28:34 Chrom Revision: 2.2 10-Jan-2017 11:26:10

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K05.D

Injection Date:	28-Sep-2016 12:24:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	IC VSTD10			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

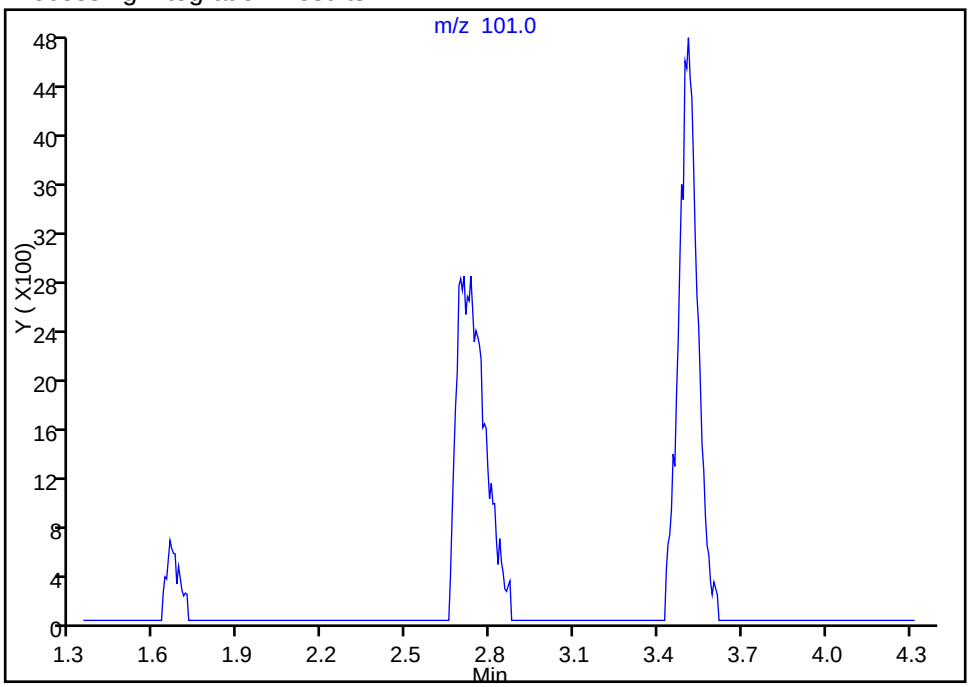
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K05.D				
Injection Date:	28-Sep-2016 12:24:30	Instrument ID:	CHHP3		
Lims ID:	IC VSTD10				
Client ID:					
Operator ID:	10099	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

17 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

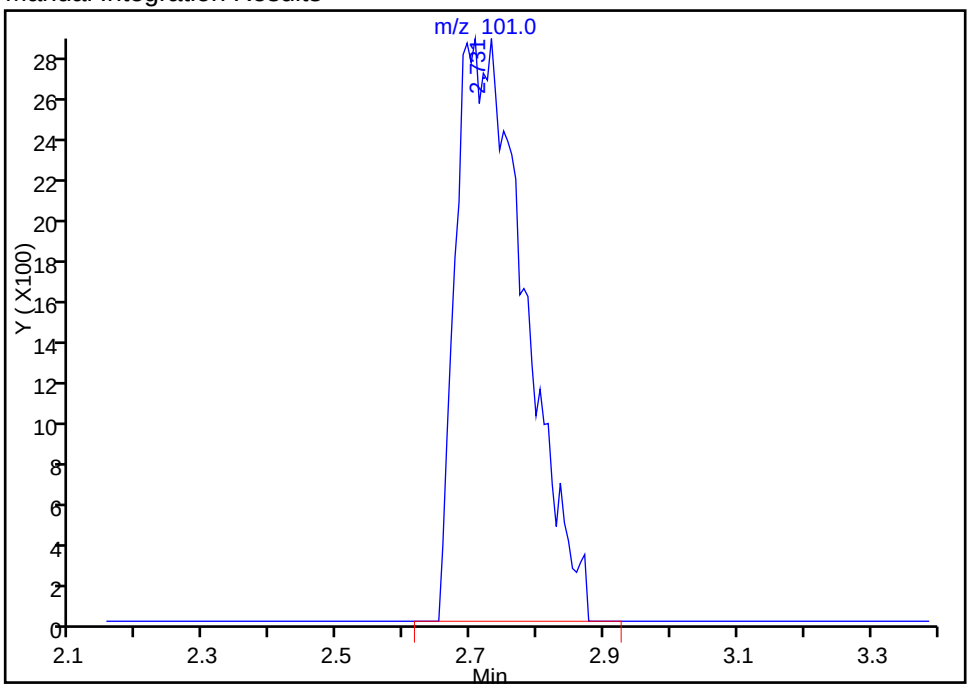
Not Detected
Expected RT: 2.72

Processing Integration Results



Manual Integration Results

RT: 2.73
Area: 20283
Amount: 49.909482
Amount Units: ng



Reviewer: gordonk, 28-Sep-2016 12:45:53
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

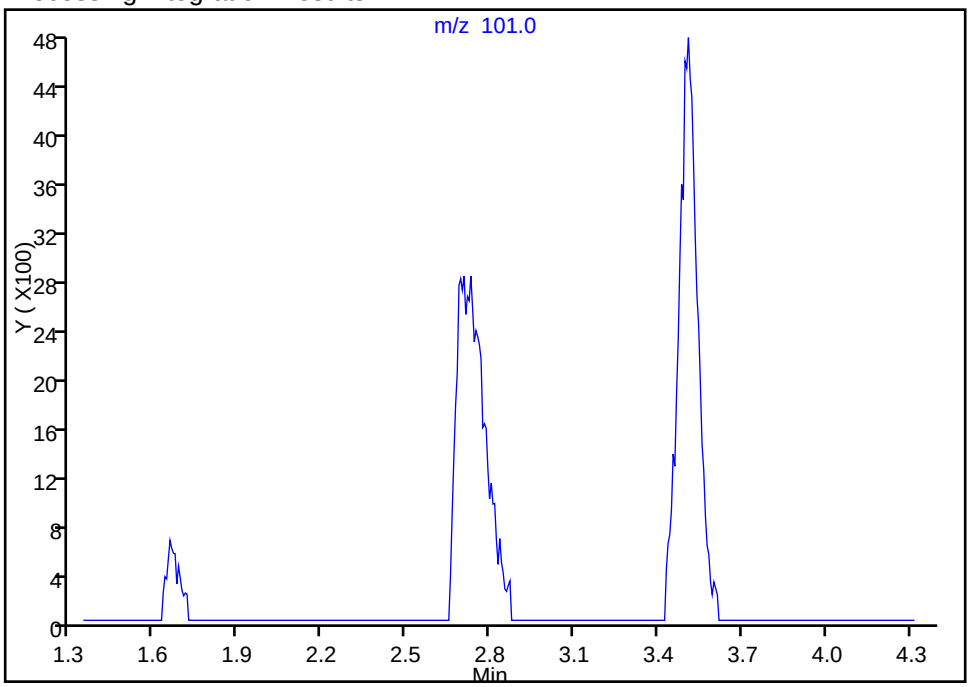
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K05.D
Injection Date: 28-Sep-2016 12:24:30 Instrument ID: CHHP3
Lims ID: IC VSTD10
Client ID:
Operator ID: 10099 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_S_CHHP3 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

17 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

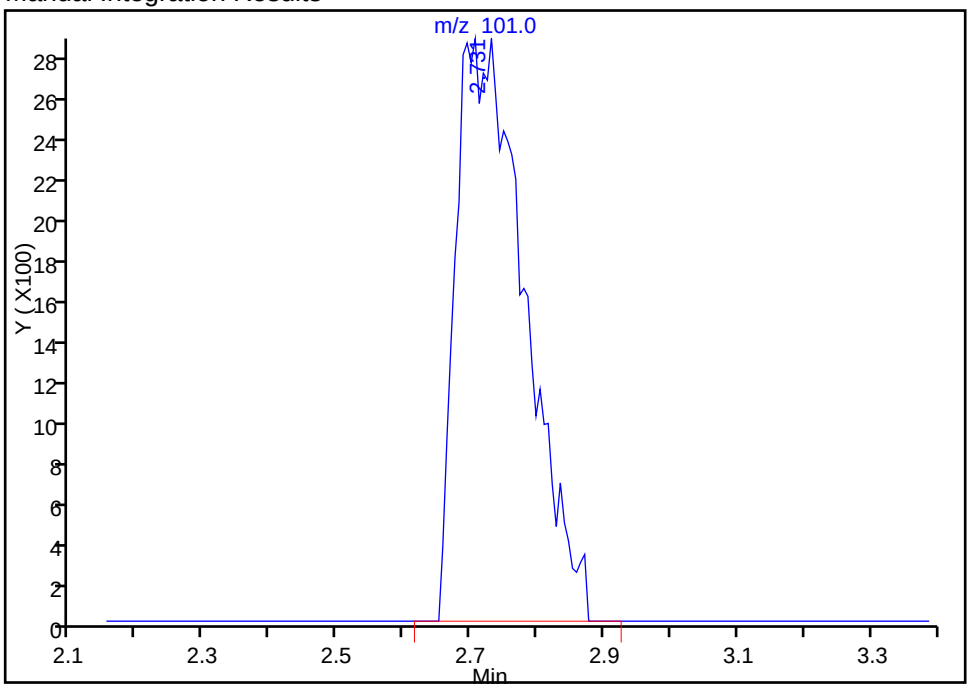
Not Detected
Expected RT: 2.72

Processing Integration Results



Manual Integration Results

RT: 2.73
Area: 20283
Amount: 49.909482
Amount Units: ng



Reviewer: gordonk, 28-Sep-2016 12:45:53
Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K06.D
Lims ID: IC VSTD25
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 28-Sep-2016 12:47:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013637-006
Operator ID: 10099 Instrument ID: CHHP3
Sublist: chrom-MSVOA_S_CHHP3*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Jan-2017 10:28:35 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: gordonk Date: 28-Sep-2016 13:27:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.443	4.441	0.002	98	115100	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.351	7.355	-0.004	98	421962	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.441	10.439	0.002	88	93194	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.765	12.763	0.002	96	144314	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.603	6.600	0.003	92	45722	125.0	126.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.974	6.971	0.003	95	53220	125.0	127.6	
$ 7 Toluene-d8 (Surr)	98	8.999	9.003	-0.004	92	210191	125.0	130.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.609	11.607	0.002	85	80956	125.0	123.6	
10 Dichlorodifluoromethane	85	1.669	1.660	0.009	99	63216	125.0	118.6	
11 Chloromethane	50	1.809	1.812	-0.003	99	86443	125.0	114.6	
12 Vinyl chloride	62	1.973	1.971	0.002	98	72244	125.0	116.5	
13 Butadiene	39	1.985	1.989	-0.004	89	66573	125.0	116.8	
14 Bromomethane	94	2.295	2.287	0.008	89	17971	125.0	124.4	
15 Chloroethane	64	2.417	2.409	0.008	98	19675	125.0	127.4	
16 Dichlorofluoromethane	67	2.691	2.701	-0.010	97	72152	125.0	130.3	
17 Trichlorofluoromethane	101	2.715	2.719	-0.004	90	52935	125.0	129.9	
19 Ethyl ether	59	3.165	3.175	-0.010	92	47444	125.0	125.0	
20 Acrolein	56	3.330	3.327	0.003	100	50612	750.0	733.4	
21 1,1-Dichloroethene	96	3.439	3.443	-0.004	96	55628	125.0	121.0	
22 1,1,2-Trichloro-1,2,2-trif	101	3.506	3.510	-0.004	94	54304	125.0	120.7	
23 Acetone	43	3.591	3.601	-0.010	99	14439	125.0	132.1	
24 Iodomethane	142	3.640	3.638	0.002	95	74517	125.0	120.5	
25 Carbon disulfide	76	3.737	3.723	0.014	99	139282	125.0	115.1	
28 3-Chloro-1-propene	76	4.017	4.021	-0.004	94	32240	125.0	123.5	
29 Methyl acetate	43	4.120	4.124	-0.004	98	164444	625.0	618.3	
30 Methylene Chloride	84	4.236	4.228	0.008	96	65042	125.0	118.6	
31 2-Methyl-2-propanol	59	4.565	4.574	-0.009	97	35819	1250.0	1240.7	
32 Acrylonitrile	53	4.638	4.641	-0.003	99	175922	1250.0	1228.6	
33 trans-1,2-Dichloroethene	96	4.650	4.647	0.003	98	57828	125.0	119.7	
34 Methyl tert-butyl ether	73	4.704	4.708	-0.004	96	126609	125.0	121.5	
35 Hexane	57	5.076	5.073	0.003	90	107963	125.0	125.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.258	5.250	0.008	96	104137	125.0	123.0	
37 Vinyl acetate	43	5.380	5.383	-0.003	97	90526	125.0	131.5	
41 2,2-Dichloropropane	77	6.000	5.992	0.008	81	87113	125.0	118.9	
42 cis-1,2-Dichloroethene	96	6.019	6.016	0.003	84	65812	125.0	123.7	
43 2-Butanone (MEK)	43	6.067	6.077	-0.010	100	21485	125.0	134.4	
47 Chlorobromomethane	128	6.304	6.302	0.002	95	23425	125.0	117.0	
48 Tetrahydrofuran	42	6.377	6.381	-0.004	89	24318	250.0	231.7	
49 Chloroform	83	6.420	6.424	-0.004	95	94350	125.0	123.8	
50 1,1,1-Trichloroethane	97	6.615	6.618	-0.003	98	69795	125.0	122.8	
51 Cyclohexane	56	6.676	6.679	-0.003	89	125400	125.0	122.0	
52 1,1-Dichloropropene	75	6.809	6.807	0.002	96	79130	125.0	127.2	
53 Carbon tetrachloride	117	6.803	6.807	-0.004	97	52516	125.0	123.3	
54 Isobutyl alcohol	41	7.022	7.026	-0.004	95	29098	3125.0	3133.3	
55 Benzene	78	7.034	7.038	-0.004	97	232198	125.0	125.8	
56 1,2-Dichloroethane	62	7.059	7.056	0.003	97	63033	125.0	125.5	
59 n-Heptane	43	7.369	7.367	0.002	93	102749	125.0	127.3	
60 Trichloroethene	130	7.746	7.744	0.002	99	55100	125.0	122.6	
63 Methylcyclohexane	83	7.953	7.951	0.002	93	119189	125.0	122.0	
64 1,2-Dichloropropane	63	7.977	7.981	-0.004	91	56716	125.0	127.2	
65 Dibromomethane	93	8.099	8.097	0.002	97	25613	125.0	122.0	
67 1,4-Dioxane	88	8.136	8.145	-0.009	95	8576	2500.0	2401.9	
68 Dichlorobromomethane	83	8.275	8.273	0.002	99	51875	125.0	120.8	
71 cis-1,3-Dichloropropene	75	8.732	8.729	0.003	96	73094	125.0	124.2	
72 4-Methyl-2-pentanone (MIBK	43	8.896	8.894	0.002	96	37323	125.0	122.9	
73 Toluene	91	9.066	9.070	-0.004	98	240917	125.0	128.9	
74 trans-1,3-Dichloropropene	75	9.291	9.289	0.002	93	56652	125.0	119.4	
75 Ethyl methacrylate	69	9.395	9.392	0.003	90	55199	125.0	126.1	
76 1,1,2-Trichloroethane	97	9.474	9.472	0.002	89	39149	125.0	122.3	
77 Tetrachloroethene	164	9.620	9.618	0.002	98	43573	125.0	123.6	
78 1,3-Dichloropropane	76	9.638	9.636	0.002	91	73049	125.0	125.7	
79 2-Hexanone	43	9.729	9.733	-0.004	96	26787	125.0	135.0	
81 Chlorodibromomethane	129	9.863	9.861	0.002	92	29545	125.0	110.7	
82 Ethylene Dibromide	107	9.979	9.977	0.003	99	37988	125.0	123.4	
83 Chlorobenzene	112	10.466	10.469	-0.003	94	149771	125.0	123.2	
85 1,1,1,2-Tetrachloroethane	131	10.551	10.542	0.009	93	42546	125.0	122.8	
86 Ethylbenzene	106	10.581	10.579	0.002	98	85605	125.0	126.2	
87 m-Xylene & p-Xylene	106	10.697	10.694	0.003	100	106729	125.0	125.1	
88 o-Xylene	106	11.092	11.090	0.002	94	103659	125.0	124.1	
89 Styrene	104	11.104	11.102	0.002	92	171767	125.0	125.2	
90 Bromoform	173	11.287	11.291	-0.004	95	15703	125.0	113.9	
91 Isopropylbenzene	105	11.457	11.461	-0.004	96	283389	125.0	126.2	
93 1,1,2,2-Tetrachloroethane	83	11.743	11.741	0.002	94	48678	125.0	121.2	
94 Bromobenzene	156	11.761	11.759	0.002	94	57321	125.0	123.8	
95 1,2,3-Trichloropropane	110	11.792	11.789	0.003	83	15261	125.0	128.0	
96 trans-1,4-Dichloro-2-buten	53	11.804	11.802	0.002	73	13216	125.0	122.8	
97 N-Propylbenzene	120	11.865	11.868	-0.003	99	75436	125.0	125.8	
98 2-Chlorotoluene	126	11.950	11.948	0.002	96	61426	125.0	123.8	
99 1,3,5-Trimethylbenzene	105	12.041	12.039	0.002	94	230110	125.0	126.8	
100 4-Chlorotoluene	126	12.059	12.063	-0.004	98	61626	125.0	124.1	
101 tert-Butylbenzene	119	12.370	12.373	-0.003	92	199650	125.0	124.5	
103 1,2,4-Trimethylbenzene	105	12.418	12.416	0.002	98	239725	125.0	127.8	
104 sec-Butylbenzene	105	12.589	12.592	-0.003	94	312191	125.0	127.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	12.698	12.696	0.002	97	118142	125.0	122.3	
106 4-Isopropyltoluene	119	12.735	12.732	0.003	97	248705	125.0	127.5	
107 1,4-Dichlorobenzene	146	12.789	12.787	0.002	94	114901	125.0	121.9	
110 n-Butylbenzene	91	13.142	13.146	-0.004	98	247025	125.0	127.4	
111 1,2-Dichlorobenzene	146	13.161	13.158	0.002	96	108088	125.0	123.8	
112 1,2-Dibromo-3-Chloropropan	75	13.933	13.937	-0.004	79	5735	125.0	112.8	
114 1,2,4-Trichlorobenzene	180	14.779	14.776	0.003	95	80017	125.0	123.9	
115 Hexachlorobutadiene	225	14.955	14.953	0.002	96	48705	125.0	122.5	
116 Naphthalene	128	15.022	15.026	-0.004	97	153060	125.0	125.4	
117 1,2,3-Trichlorobenzene	180	15.278	15.275	0.003	94	66578	125.0	124.2	
S 129 Xylenes, Total	106				0		250.0	249.1	
S 130 1,2-Dichloroethene, Total	96				0		250.0	243.4	
S 131 1,3-Dichloropropene, Total	1				0		250.0	243.6	

Reagents:

VOA8260VOAPRI_00213	Amount Added:	5.00	Units: uL	
VOA8260SURR_00059	Amount Added:	5.00	Units: uL	
voaWVA1stRest_00008	Amount Added:	5.00	Units: uL	
voaWAcro1stRe_00008	Amount Added:	30.00	Units: uL	
VOA8260INT_00061	Amount Added:	10.00	Units: uL	Run Reagent

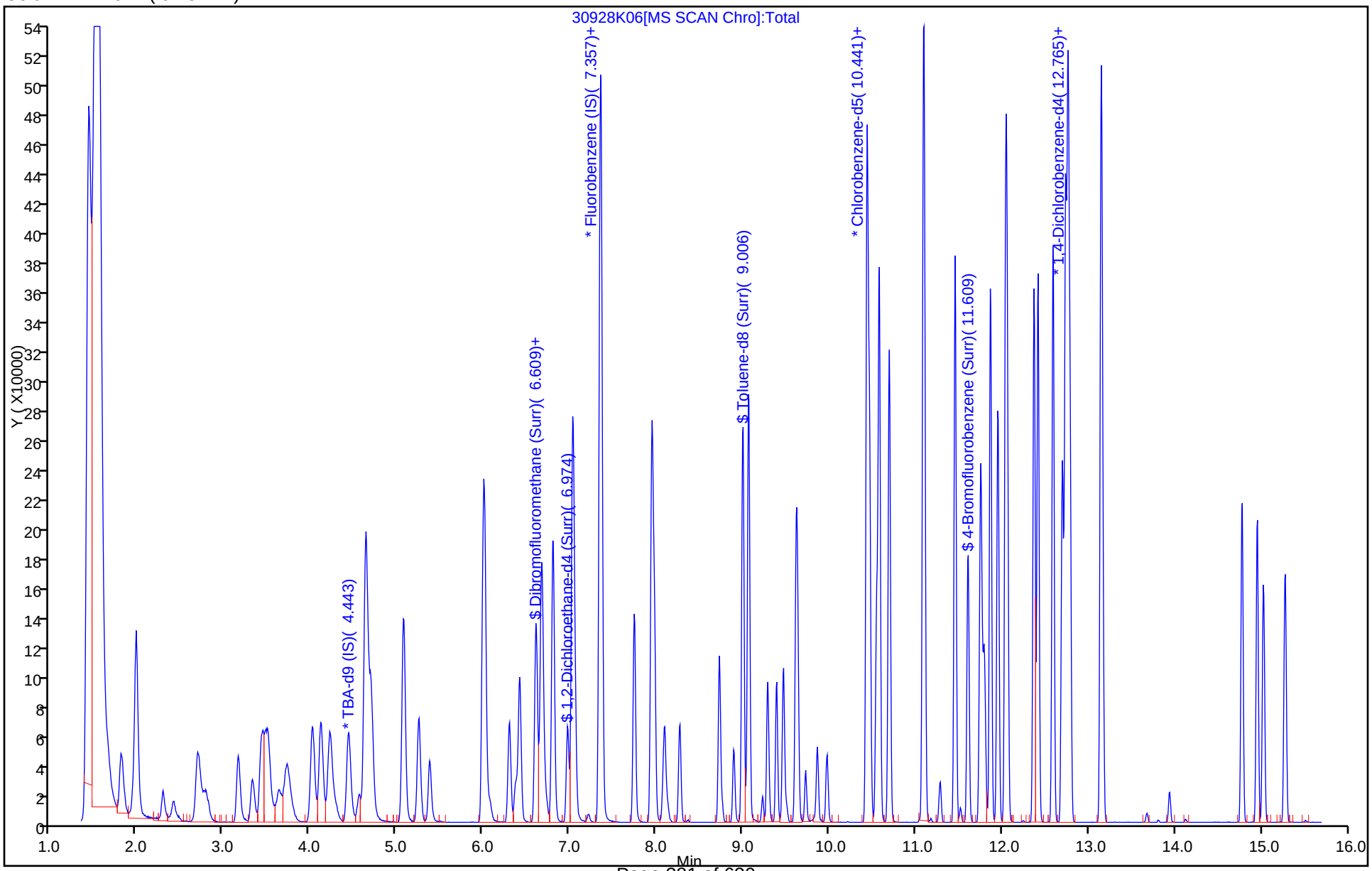
Report Date: 26-Jan-2017 10:28:36 Chrom Revision: 2.2 10-Jan-2017 11:26:10

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K06.D

Injection Date:	28-Sep-2016 12:47:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	IC VSTD25			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K07.D
Lims ID: ICIS VSTD40
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 28-Sep-2016 13:10:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013637-007
Operator ID: 10099 Instrument ID: CHHP3
Sublist: chrom-MSVOA_S_CHHP3*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Jan-2017 10:28:37 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: gordonk Date: 28-Sep-2016 18:25:59

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.464	4.464	0.000	97	119071	5000.0	5000.0	
*	2 Fluorobenzene (IS)	96	7.347	7.347	0.000	99	410192	250.0	250.0	
*	3 Chlorobenzene-d5	119	10.438	10.438	0.000	88	90798	250.0	250.0	
*	4 1,4-Dichlorobenzene-d4	152	12.761	12.761	0.000	96	145876	250.0	250.0	
$	5 Dibromofluoromethane (Surr	113	6.599	6.599	0.000	94	73275	200.0	208.0	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.970	6.970	0.000	95	81608	200.0	201.2	
$	7 Toluene-d8 (Surr)	98	9.002	9.002	0.000	92	327597	200.0	208.4	
$	8 4-Bromofluorobenzene (Surr	95	11.606	11.606	0.000	86	132353	200.0	207.4	
	10 Dichlorodifluoromethane	85	1.659	1.659	0.000	100	107126	200.0	206.8	
	11 Chloromethane	50	1.823	1.823	0.000	100	156155	200.0	213.0	
	12 Vinyl chloride	62	1.982	1.982	0.000	79	125625	200.0	208.4	
	13 Butadiene	39	1.988	1.988	0.000	88	115290	200.0	208.1	
	14 Bromomethane	94	2.292	2.292	0.000	90	28683	200.0	204.3	
	15 Chloroethane	64	2.413	2.413	0.000	99	30213	200.0	201.2	
	16 Dichlorofluoromethane	67	2.687	2.687	0.000	97	104352	200.0	193.9	
	17 Trichlorofluoromethane	101	2.736	2.736	0.000	97	75680	200.0	191.0	
	19 Ethyl ether	59	3.162	3.162	0.000	92	76390	200.0	207.0	
	20 Acrolein	56	3.326	3.326	0.000	98	63042	875.0	939.8	
	21 1,1-Dichloroethene	96	3.417	3.417	0.000	97	92625	200.0	207.2	
	22 1,1,2-Trichloro-1,2,2-trif	101	3.496	3.496	0.000	92	89846	200.0	205.5	
	23 Acetone	43	3.594	3.594	0.000	100	19970	200.0	187.9	
	24 Iodomethane	142	3.624	3.624	0.000	96	126481	200.0	210.4	
	25 Carbon disulfide	76	3.715	3.715	0.000	99	243457	200.0	198.6	
	28 3-Chloro-1-propene	76	4.013	4.013	0.000	95	55131	200.0	217.3	
	29 Methyl acetate	43	4.117	4.117	0.000	98	267111	1000.0	1033.1	
	30 Methylene Chloride	84	4.214	4.214	0.000	95	102363	200.0	191.9	
	31 2-Methyl-2-propanol	59	4.585	4.585	0.000	97	60767	2000.0	2034.7	
	32 Acrylonitrile	53	4.634	4.634	0.000	99	288616	2000.0	2073.5	
	33 trans-1,2-Dichloroethene	96	4.640	4.640	0.000	98	97479	200.0	207.5	
	34 Methyl tert-butyl ether	73	4.701	4.701	0.000	96	205052	200.0	202.5	
	35 Hexane	57	5.072	5.072	0.000	89	166631	200.0	198.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.248	5.248	0.000	96	168347	200.0	204.6	
37 Vinyl acetate	43	5.376	5.376	0.000	97	138910	200.0	207.6	
41 2,2-Dichloropropane	77	6.003	6.003	0.000	79	116657	200.0	199.4	
42 cis-1,2-Dichloroethene	96	6.015	6.015	0.000	83	106616	200.0	206.2	
43 2-Butanone (MEK)	43	6.076	6.076	0.000	100	29091	200.0	187.2	
47 Chlorobromomethane	128	6.301	6.301	0.000	96	40529	200.0	208.2	
48 Tetrahydrofuran	42	6.374	6.374	0.000	93	42418	400.0	415.8	
49 Chloroform	83	6.422	6.422	0.000	94	150288	200.0	202.9	
50 1,1,1-Trichloroethane	97	6.611	6.611	0.000	99	113470	200.0	205.4	
51 Cyclohexane	56	6.672	6.672	0.000	89	202721	200.0	202.9	
53 Carbon tetrachloride	117	6.800	6.800	0.000	72	84752	200.0	204.7	
52 1,1-Dichloropropene	75	6.806	6.806	0.000	96	123712	200.0	204.6	
54 Isobutyl alcohol	41	7.031	7.031	0.000	96	45416	5000.0	5030.8	
55 Benzene	78	7.031	7.031	0.000	97	369141	200.0	205.7	
56 1,2-Dichloroethane	62	7.061	7.061	0.000	96	96913	200.0	198.6	
59 n-Heptane	43	7.365	7.365	0.000	90	156116	200.0	198.9	
60 Trichloroethene	130	7.743	7.743	0.000	100	91393	200.0	209.1	
63 Methylcyclohexane	83	7.949	7.949	0.000	92	194134	200.0	204.4	
64 1,2-Dichloropropane	63	7.980	7.980	0.000	94	88293	200.0	203.7	
65 Dibromomethane	93	8.095	8.095	0.000	96	42132	200.0	206.4	
67 1,4-Dioxane	88	8.132	8.132	0.000	97	14467	4000.0	4168.0	
68 Dichlorobromomethane	83	8.272	8.272	0.000	99	86330	200.0	206.9	
71 cis-1,3-Dichloropropene	75	8.728	8.728	0.000	97	119934	200.0	209.6	
72 4-Methyl-2-pentanone (MIBK	43	8.898	8.898	0.000	95	61528	200.0	207.9	
73 Toluene	91	9.069	9.069	0.000	99	374778	200.0	205.7	
74 trans-1,3-Dichloropropene	75	9.288	9.288	0.000	92	98247	200.0	212.6	
75 Ethyl methacrylate	69	9.391	9.391	0.000	90	88572	200.0	207.6	
76 1,1,2-Trichloroethane	97	9.470	9.470	0.000	91	64541	200.0	207.0	
77 Tetrachloroethene	164	9.616	9.616	0.000	98	70227	200.0	204.4	
78 1,3-Dichloropropane	76	9.635	9.635	0.000	90	116730	200.0	206.2	
79 2-Hexanone	43	9.732	9.732	0.000	96	38135	200.0	197.3	
81 Chlorodibromomethane	129	9.866	9.866	0.000	91	52328	200.0	186.6	
82 Ethylene Dibromide	107	9.975	9.975	0.000	97	62204	200.0	207.4	
83 Chlorobenzene	112	10.468	10.468	0.000	94	244089	200.0	206.0	
85 1,1,1,2-Tetrachloroethane	131	10.547	10.547	0.000	95	70892	200.0	210.0	
86 Ethylbenzene	106	10.577	10.577	0.000	98	135942	200.0	205.7	
87 m-Xylene & p-Xylene	106	10.693	10.693	0.000	99	172568	200.0	207.6	
88 o-Xylene	106	11.088	11.088	0.000	97	170724	200.0	209.7	
89 Styrene	104	11.101	11.101	0.000	95	281211	200.0	210.4	
90 Bromoform	173	11.283	11.283	0.000	96	28493	200.0	184.7	
91 Isopropylbenzene	105	11.460	11.460	0.000	96	459353	200.0	209.9	
93 1,1,2,2-Tetrachloroethane	83	11.745	11.745	0.000	95	81535	200.0	208.4	
94 Bromobenzene	156	11.758	11.758	0.000	94	97010	200.0	207.3	
95 1,2,3-Trichloropropane	110	11.788	11.788	0.000	85	24031	200.0	199.4	
96 trans-1,4-Dichloro-2-buten	53	11.800	11.800	0.000	84	23494	200.0	216.0	
97 N-Propylbenzene	120	11.867	11.867	0.000	99	123916	200.0	204.4	
98 2-Chlorotoluene	126	11.952	11.952	0.000	96	105211	200.0	209.8	
99 1,3,5-Trimethylbenzene	105	12.044	12.044	0.000	94	386264	200.0	210.5	
100 4-Chlorotoluene	126	12.062	12.062	0.000	98	102234	200.0	203.7	
101 tert-Butylbenzene	119	12.372	12.372	0.000	92	339227	200.0	209.3	
103 1,2,4-Trimethylbenzene	105	12.415	12.415	0.000	97	396029	200.0	208.8	
104 sec-Butylbenzene	105	12.591	12.591	0.000	94	519553	200.0	209.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	12.701	12.701	0.000	97	201314	200.0	206.1	
106 4-Isopropyltoluene	119	12.731	12.731	0.000	96	415244	200.0	210.6	
107 1,4-Dichlorobenzene	146	12.786	12.786	0.000	94	195837	200.0	205.6	
110 n-Butylbenzene	91	13.145	13.145	0.000	98	413050	200.0	210.8	
111 1,2-Dichlorobenzene	146	13.163	13.163	0.000	96	183886	200.0	208.3	
112 1,2-Dibromo-3-Chloropropan	75	13.936	13.936	0.000	83	11262	200.0	190.1	
114 1,2,4-Trichlorobenzene	180	14.775	14.775	0.000	94	134701	200.0	206.4	
115 Hexachlorobutadiene	225	14.951	14.951	0.000	95	82951	200.0	206.5	
116 Naphthalene	128	15.024	15.024	0.000	97	262292	200.0	212.6	
117 1,2,3-Trichlorobenzene	180	15.274	15.274	0.000	94	112800	200.0	208.1	
S 130 1,2-Dichloroethene, Total	96				0		400.0	413.7	
S 129 Xylenes, Total	106				0		400.0	417.3	
S 131 1,3-Dichloropropene, Total	1				0		400.0	422.3	

Reagents:

voaWAcro1stRe_00008	Amount Added:	35.00	Units: uL	
voaWVA1stRest_00008	Amount Added:	8.00	Units: uL	
VOA8260VOAPRI_00213	Amount Added:	8.00	Units: uL	
VOA8260SURR_00059	Amount Added:	8.00	Units: uL	
VOA8260INT_00061	Amount Added:	10.00	Units: uL	Run Reagent

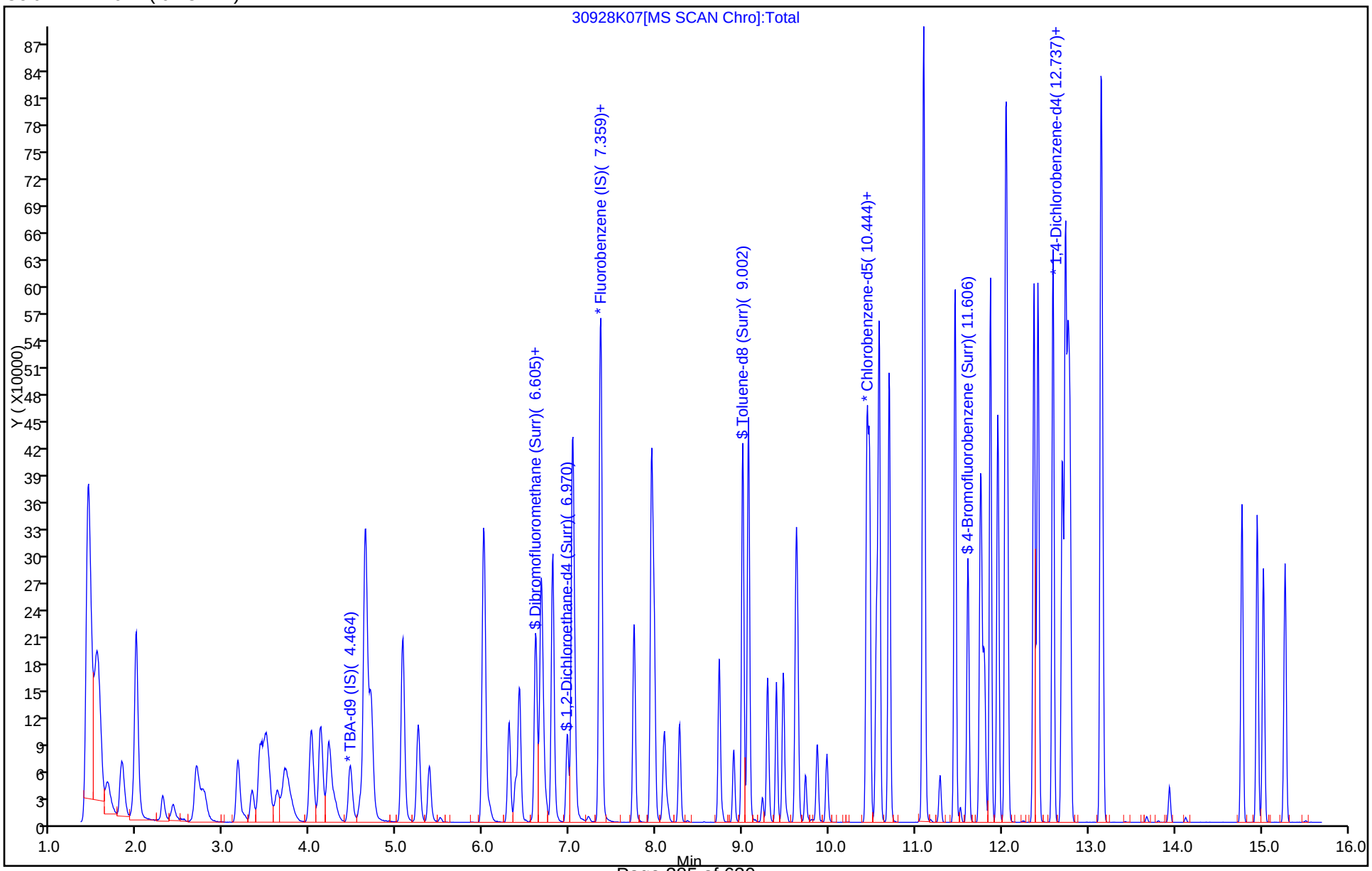
Report Date: 26-Jan-2017 10:28:37 Chrom Revision: 2.2 10-Jan-2017 11:26:10

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K07.D

Injection Date:	28-Sep-2016 13:10:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	ICIS VSTD40			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K08.D
Lims ID: IC VSTD50
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 28-Sep-2016 13:33:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013637-008
Operator ID: 10099 Instrument ID: CHHP3
Sublist: chrom-MSVOA_S_CHHP3*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Jan-2017 10:28:39 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: gordonk Date: 28-Sep-2016 18:27:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.471	4.464	0.007	97	127981	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.348	7.347	0.001	99	423906	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.439	10.438	0.001	88	94028	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.763	12.761	0.002	97	152106	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.606	6.599	0.007	94	93537	250.0	256.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.971	6.970	0.001	95	104369	250.0	249.0	
$ 7 Toluene-d8 (Surr)	98	9.003	9.002	0.001	92	412279	250.0	253.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.607	11.606	0.001	87	166536	250.0	252.0	
10 Dichlorodifluoromethane	85	1.654	1.659	-0.005	100	142555	250.0	266.3	
11 Chloromethane	50	1.825	1.823	0.002	99	202121	250.0	266.8	
12 Vinyl chloride	62	1.971	1.982	-0.011	98	167499	250.0	268.9	
13 Butadiene	39	1.989	1.988	0.001	89	154201	250.0	269.3	
14 Bromomethane	94	2.293	2.292	0.001	90	37491	250.0	258.4	
15 Chloroethane	64	2.409	2.413	-0.004	99	39327	250.0	253.5	
16 Dichlorofluoromethane	67	2.676	2.687	-0.011	98	128027	250.0	230.2	
17 Trichlorofluoromethane	101	2.731	2.736	-0.005	95	94571	250.0	230.9	
19 Ethyl ether	59	3.169	3.162	0.007	92	100537	250.0	263.6	
20 Acrolein	56	3.333	3.326	0.007	99	70099	1000.0	1011.1	
21 1,1-Dichloroethene	96	3.412	3.417	-0.005	96	122617	250.0	265.5	
22 1,1,2-Trichloro-1,2,2-trif	101	3.485	3.496	-0.011	93	121494	250.0	268.8	
23 Acetone	43	3.595	3.594	0.001	99	26415	250.0	240.5	
24 Iodomethane	142	3.613	3.624	-0.011	97	163145	250.0	262.7	
25 Carbon disulfide	76	3.704	3.715	-0.011	99	331726	250.0	258.5	
28 3-Chloro-1-propene	76	4.009	4.013	-0.004	94	72859	250.0	277.9	
29 Methyl acetate	43	4.124	4.117	0.007	98	366916	1250.0	1373.2	
30 Methylene Chloride	84	4.215	4.214	0.001	96	132352	250.0	240.1	
31 2-Methyl-2-propanol	59	4.593	4.585	0.008	98	86310	2500.0	2688.7	
32 Acrylonitrile	53	4.635	4.634	0.001	99	388073	2500.0	2697.8	
33 trans-1,2-Dichloroethene	96	4.641	4.640	0.001	98	128449	250.0	264.6	
34 Methyl tert-butyl ether	73	4.702	4.701	0.001	96	282152	250.0	269.6	
35 Hexane	57	5.067	5.072	-0.005	90	223048	250.0	257.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.250	5.248	0.002	96	225290	250.0	265.0	
37 Vinyl acetate	43	5.377	5.376	0.001	97	185680	250.0	268.5	
41 2,2-Dichloropropane	77	6.004	6.003	0.001	80	150096	250.0	271.4	
42 cis-1,2-Dichloroethene	96	6.016	6.015	0.001	84	140744	250.0	263.4	
43 2-Butanone (MEK)	43	6.071	6.076	-0.005	100	40054	250.0	249.4	
47 Chlorobromomethane	128	6.296	6.301	-0.005	96	53352	250.0	265.2	
48 Tetrahydrofuran	42	6.375	6.374	0.001	92	56275	500.0	533.8	
49 Chloroform	83	6.418	6.422	-0.004	95	201837	250.0	263.7	
50 1,1,1-Trichloroethane	97	6.612	6.611	0.001	99	155486	250.0	272.4	
51 Cyclohexane	56	6.673	6.672	0.001	89	271013	250.0	262.4	
52 1,1-Dichloropropene	75	6.801	6.806	-0.005	97	163539	250.0	261.7	
53 Carbon tetrachloride	117	6.801	6.800	0.001	95	117922	250.0	275.6	
54 Isobutyl alcohol	41	7.032	7.031	0.001	44	63276	6250.0	6782.4	
55 Benzene	78	7.032	7.031	0.001	98	482005	250.0	259.9	
56 1,2-Dichloroethane	62	7.056	7.061	-0.005	96	133964	250.0	265.6	
59 n-Heptane	43	7.367	7.365	0.002	92	213850	250.0	263.6	
60 Trichloroethene	130	7.744	7.743	0.001	99	119637	250.0	264.9	
63 Methylcyclohexane	83	7.951	7.949	0.002	92	257324	250.0	262.2	
64 1,2-Dichloropropane	63	7.975	7.980	-0.005	94	117517	250.0	262.4	
65 Dibromomethane	93	8.097	8.095	0.002	97	55579	250.0	263.4	
67 1,4-Dioxane	88	8.133	8.132	0.001	96	19812	5000.0	5523.3	
68 Dichlorobromomethane	83	8.273	8.272	0.001	99	117682	250.0	272.9	
71 cis-1,3-Dichloropropene	75	8.729	8.728	0.001	96	165215	250.0	279.4	
72 4-Methyl-2-pentanone (MIBK	43	8.900	8.898	0.002	95	81071	250.0	264.5	
73 Toluene	91	9.070	9.069	0.001	99	491565	250.0	260.6	
74 trans-1,3-Dichloropropene	75	9.289	9.288	0.001	93	135996	250.0	284.2	
75 Ethyl methacrylate	69	9.392	9.391	0.001	90	120641	250.0	273.1	
76 1,1,2-Trichloroethane	97	9.472	9.470	0.002	90	84820	250.0	262.7	
77 Tetrachloroethene	164	9.618	9.616	0.002	99	93107	250.0	261.7	
78 1,3-Dichloropropane	76	9.636	9.635	0.001	90	153076	250.0	261.1	
79 2-Hexanone	43	9.727	9.732	-0.005	95	54256	250.0	271.1	
81 Chlorodibromomethane	129	9.861	9.866	-0.005	92	72645	250.0	244.1	
82 Ethylene Dibromide	107	9.976	9.975	0.001	98	82943	250.0	267.1	
83 Chlorobenzene	112	10.469	10.468	0.001	94	317352	250.0	258.6	
85 1,1,1,2-Tetrachloroethane	131	10.548	10.547	0.001	95	95765	250.0	274.0	
86 Ethylbenzene	106	10.579	10.577	0.002	98	179578	250.0	262.4	
87 m-Xylene & p-Xylene	106	10.694	10.693	0.001	100	221174	250.0	256.9	
88 o-Xylene	106	11.090	11.088	0.002	97	222572	250.0	264.0	
89 Styrene	104	11.102	11.101	0.001	93	368874	250.0	266.5	
90 Bromoform	173	11.284	11.283	0.001	97	41437	250.0	245.6	
91 Isopropylbenzene	105	11.461	11.460	0.001	96	598056	250.0	263.9	
93 1,1,2,2-Tetrachloroethane	83	11.747	11.745	0.002	94	109330	250.0	269.9	
94 Bromobenzene	156	11.759	11.758	0.001	95	125885	250.0	257.9	
95 1,2,3-Trichloropropane	110	11.789	11.788	0.001	84	33577	250.0	267.2	
96 trans-1,4-Dichloro-2-buten	53	11.801	11.800	0.001	85	31784	250.0	280.2	
97 N-Propylbenzene	120	11.868	11.867	0.001	99	162802	250.0	257.6	
98 2-Chlorotoluene	126	11.954	11.952	0.002	96	135190	250.0	258.5	
99 1,3,5-Trimethylbenzene	105	12.045	12.044	0.001	94	502296	250.0	262.6	
100 4-Chlorotoluene	126	12.063	12.062	0.001	99	134496	250.0	257.0	
101 tert-Butylbenzene	119	12.373	12.372	0.001	92	445165	250.0	263.4	
103 1,2,4-Trimethylbenzene	105	12.416	12.415	0.001	98	514932	250.0	260.4	
104 sec-Butylbenzene	105	12.592	12.591	0.001	94	676978	250.0	262.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	12.702	12.701	0.001	97	262845	250.0	258.1	
106 4-Isopropyltoluene	119	12.732	12.731	0.001	96	538443	250.0	261.9	
107 1,4-Dichlorobenzene	146	12.787	12.786	0.001	93	260315	250.0	262.1	
110 n-Butylbenzene	91	13.146	13.145	0.001	97	546287	250.0	267.4	
111 1,2-Dichlorobenzene	146	13.164	13.163	0.001	97	240428	250.0	261.2	
112 1,2-Dibromo-3-Chloropropan	75	13.937	13.936	0.001	83	15094	250.0	235.5	
114 1,2,4-Trichlorobenzene	180	14.776	14.775	0.001	94	179588	250.0	263.9	
115 Hexachlorobutadiene	225	14.953	14.951	0.002	95	112098	250.0	267.6	
116 Naphthalene	128	15.026	15.024	0.002	97	346553	250.0	269.4	
117 1,2,3-Trichlorobenzene	180	15.275	15.274	0.001	94	147820	250.0	261.5	
S 129 Xylenes, Total	106				0		500.0	520.9	
S 130 1,2-Dichloroethene, Total	96				0		500.0	528.0	
S 131 1,3-Dichloropropene, Total	1				0		500.0	563.6	

Reagents:

voaWVA1stRest_00008	Amount Added:	10.00	Units: uL	
VOA8260VOAPRI_00213	Amount Added:	10.00	Units: uL	
VOA8260SURR_00059	Amount Added:	10.00	Units: uL	
voaWAcro1stRe_00008	Amount Added:	40.00	Units: uL	
VOA8260INT_00061	Amount Added:	10.00	Units: uL	Run Reagent

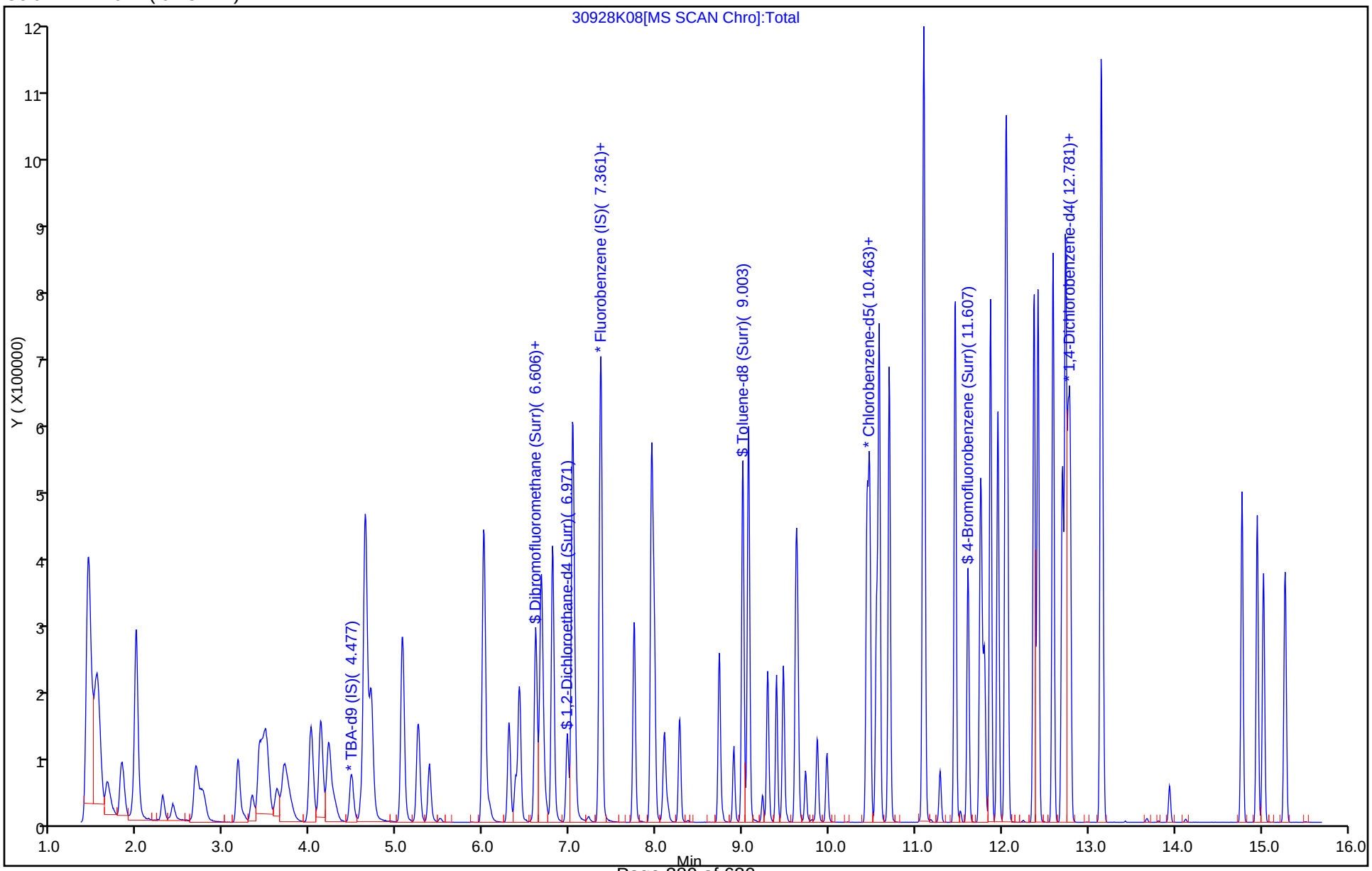
Report Date: 26-Jan-2017 10:28:39 Chrom Revision: 2.2 10-Jan-2017 11:26:10

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K08.D

Injection Date:	28-Sep-2016 13:33:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	IC VSTD50			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K09.D
Lims ID: IC VSTD125
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 28-Sep-2016 13:56:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013637-009
Operator ID: 10099 Instrument ID: CHHP3
Sublist: chrom-MSVOA_S_CHHP3*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Jan-2017 10:28:41 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: gordonk Date: 28-Sep-2016 18:28:44

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.512	4.464	0.048	97	118739	5000.0	5000.0	
*	2 Fluorobenzene (IS)	96	7.347	7.347	0.000	99	413942	250.0	250.0	
*	3 Chlorobenzene-d5	119	10.437	10.438	-0.001	86	93320	250.0	250.0	
*	4 1,4-Dichlorobenzene-d4	152	12.767	12.761	0.006	94	147133	250.0	250.0	
$	5 Dibromofluoromethane (Surr	113	6.599	6.599	0.000	94	228018	625.0	641.4	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.970	6.970	0.000	96	256136	625.0	625.9	
$	7 Toluene-d8 (Surr)	98	9.002	9.002	0.000	92	978717	625.0	605.7	
$	8 4-Bromofluorobenzene (Surr	95	11.605	11.606	-0.001	87	401319	625.0	612.0	
	10 Dichlorodifluoromethane	85	1.653	1.659	-0.006	100	332266	625.0	635.6	
	11 Chloromethane	50	1.823	1.823	0.000	99	466333	625.0	630.3	
	12 Vinyl chloride	62	1.981	1.982	-0.001	92	389919	625.0	641.1	
	13 Butadiene	39	1.981	1.988	-0.007	88	343755	625.0	614.8	
	14 Bromomethane	94	2.292	2.292	0.000	89	89939	625.0	634.9	
	15 Chloroethane	64	2.407	2.413	-0.006	99	94382	625.0	623.0	
	16 Dichlorofluoromethane	67	2.675	2.687	-0.012	98	212154	625.0	390.6	
	17 Trichlorofluoromethane	101	2.711	2.736	-0.025	99	162846	625.0	407.2	
	19 Ethyl ether	59	3.162	3.162	0.000	92	233578	625.0	627.3	
	20 Acrolein	56	3.332	3.326	0.006	98	74434	1125.0	1099.5	
	21 1,1-Dichloroethene	96	3.405	3.417	-0.012	98	291498	625.0	646.3	
	22 1,1,2-Trichloro-1,2,2-trif	101	3.478	3.496	-0.018	93	275470	625.0	624.2	
	23 Acetone	43	3.612	3.594	0.018	85	58409	625.0	544.6	
	24 Iodomethane	142	3.612	3.624	-0.012	99	397275	625.0	655.0	
	25 Carbon disulfide	76	3.697	3.715	-0.018	99	843942	625.0	656.6	
	28 3-Chloro-1-propene	76	3.995	4.013	-0.018	96	171617	625.0	670.3	
	29 Methyl acetate	43	4.123	4.117	0.006	98	810786	3125.0	3107.5	
	30 Methylene Chloride	84	4.208	4.214	-0.006	94	306849	625.0	570.1	
	31 2-Methyl-2-propanol	59	4.628	4.585	0.043	73	190192	6250.0	6386.0	
	32 Acrylonitrile	53	4.640	4.634	0.006	99	859430	6250.0	6118.3	
	33 trans-1,2-Dichloroethene	96	4.634	4.640	-0.006	97	296753	625.0	626.0	
	34 Methyl tert-butyl ether	73	4.707	4.701	0.006	95	631821	625.0	618.2	
	35 Hexane	57	5.060	5.072	-0.012	89	514346	625.0	607.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.242	5.248	-0.006	96	519828	625.0	626.1	
37 Vinyl acetate	43	5.376	5.376	0.000	97	416385	625.0	616.7	
41 2,2-Dichloropropane	77	6.003	6.003	0.000	87	292205	625.0	635.0	
42 cis-1,2-Dichloroethene	96	6.009	6.015	-0.006	83	332783	625.0	637.8	
43 2-Butanone (MEK)	43	6.076	6.076	0.000	100	91515	625.0	583.5	
47 Chlorobromomethane	128	6.295	6.301	-0.006	96	128830	625.0	655.8	
48 Tetrahydrofuran	42	6.374	6.374	0.000	91	132471	1250.0	1286.8	
49 Chloroform	83	6.416	6.422	-0.006	95	478867	625.0	640.7	
50 1,1,1-Trichloroethane	97	6.605	6.611	-0.006	98	377655	625.0	677.6	
51 Cyclohexane	56	6.672	6.672	0.000	89	625634	625.0	620.4	
53 Carbon tetrachloride	117	6.800	6.800	0.000	98	298659	625.0	714.8	
52 1,1-Dichloropropene	75	6.800	6.806	-0.006	98	385589	625.0	632.0	
55 Benzene	78	7.031	7.031	0.000	98	1123832	625.0	620.6	
54 Isobutyl alcohol	41	7.043	7.031	0.012	96	148998	15625	16355	
56 1,2-Dichloroethane	62	7.055	7.061	-0.006	97	313603	625.0	636.7	
59 n-Heptane	43	7.365	7.365	0.000	92	509163	625.0	642.8	
60 Trichloroethene	130	7.742	7.743	-0.001	99	290022	625.0	657.6	
63 Methylcyclohexane	83	7.943	7.949	-0.006	93	607448	625.0	633.8	
64 1,2-Dichloropropane	63	7.980	7.980	0.000	92	282926	625.0	647.0	
65 Dibromomethane	93	8.095	8.095	0.000	96	139416	625.0	676.7	
67 1,4-Dioxane	88	8.138	8.132	0.006	97	47573	12500	13582	
68 Dichlorobromomethane	83	8.272	8.272	0.000	99	312900	625.0	743.0	
71 cis-1,3-Dichloropropene	75	8.728	8.728	0.000	97	426650	625.0	739.0	
72 4-Methyl-2-pentanone (MIBK	43	8.898	8.898	0.000	95	200129	625.0	658.0	
73 Toluene	91	9.069	9.069	0.000	99	1144841	625.0	611.5	
74 trans-1,3-Dichloropropene	75	9.288	9.288	0.000	92	351451	625.0	740.0	
75 Ethyl methacrylate	69	9.391	9.391	0.000	90	293888	625.0	670.4	
76 1,1,2-Trichloroethane	97	9.470	9.470	0.000	91	207192	625.0	646.5	
77 Tetrachloroethene	164	9.616	9.616	0.000	98	224742	625.0	636.4	
78 1,3-Dichloropropane	76	9.634	9.635	-0.001	91	367447	625.0	631.6	
79 2-Hexanone	43	9.726	9.732	-0.006	95	135034	625.0	679.9	
81 Chlorodibromomethane	129	9.866	9.866	0.000	91	201165	625.0	648.8	
82 Ethylene Dibromide	107	9.975	9.975	0.000	98	206157	625.0	668.9	
83 Chlorobenzene	112	10.468	10.468	0.000	93	761888	625.0	625.7	
85 1,1,1,2-Tetrachloroethane	131	10.553	10.547	0.006	95	242114	625.0	698.0	
86 Ethylbenzene	106	10.577	10.577	0.000	98	424204	625.0	624.5	
87 m-Xylene & p-Xylene	106	10.693	10.693	0.000	99	534853	625.0	626.0	
88 o-Xylene	106	11.088	11.088	0.000	97	522777	625.0	624.8	
89 Styrene	104	11.101	11.101	0.000	95	850572	625.0	619.3	
90 Bromoform	173	11.283	11.283	0.000	97	121357	625.0	636.9	
91 Isopropylbenzene	105	11.459	11.460	-0.001	96	1370632	625.0	609.5	
93 1,1,2,2-Tetrachloroethane	83	11.745	11.745	0.000	94	260344	625.0	647.5	
94 Bromobenzene	156	11.758	11.758	0.000	95	299985	625.0	635.4	
95 1,2,3-Trichloropropane	110	11.788	11.788	0.000	84	77469	625.0	637.2	
96 trans-1,4-Dichloro-2-buten	53	11.800	11.800	0.000	90	76650	625.0	698.6	
97 N-Propylbenzene	120	11.867	11.867	0.000	98	387245	625.0	633.4	
98 2-Chlorotoluene	126	11.952	11.952	0.000	96	319563	625.0	631.7	
99 1,3,5-Trimethylbenzene	105	12.043	12.044	-0.001	96	1139050	625.0	615.6	
100 4-Chlorotoluene	126	12.062	12.062	0.000	99	317977	625.0	628.1	
101 tert-Butylbenzene	119	12.372	12.372	0.000	92	1033400	625.0	632.2	
103 1,2,4-Trimethylbenzene	105	12.421	12.415	0.006	95	1182105	625.0	618.0	
104 sec-Butylbenzene	105	12.591	12.591	0.000	94	1547965	625.0	619.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	12.700	12.701	-0.001	97	629151	625.0	638.7	
106 4-Isopropyltoluene	119	12.737	12.731	0.006	96	1231816	625.0	619.5	
107 1,4-Dichlorobenzene	146	12.792	12.786	0.006	94	616991	625.0	642.1	
110 n-Butylbenzene	91	13.145	13.145	0.000	98	1240017	625.0	627.4	
111 1,2-Dichlorobenzene	146	13.163	13.163	0.000	97	564358	625.0	633.8	
112 1,2-Dibromo-3-Chloropropan	75	13.935	13.936	-0.001	86	43612	625.0	641.7	
114 1,2,4-Trichlorobenzene	180	14.781	14.775	0.006	94	435079	625.0	661.0	
115 Hexachlorobutadiene	225	14.951	14.951	0.000	95	268455	625.0	662.5	
116 Naphthalene	128	15.024	15.024	0.000	97	828277	625.0	665.7	
117 1,2,3-Trichlorobenzene	180	15.274	15.274	0.000	94	365707	625.0	668.9	
S 130 1,2-Dichloroethene, Total	96				0		1250.0	1263.9	
S 129 Xylenes, Total	106				0		1250.0	1250.8	
S 131 1,3-Dichloropropene, Total	1				0		1250.0	1479.0	

Reagents:

voaWAcro1stRe_00008	Amount Added:	45.00	Units: uL	
voaWVA1stRest_00008	Amount Added:	25.00	Units: uL	
VOA8260VOAPRI_00213	Amount Added:	25.00	Units: uL	
VOA8260SURR_00059	Amount Added:	25.00	Units: uL	
VOA8260INT_00061	Amount Added:	10.00	Units: uL	Run Reagent

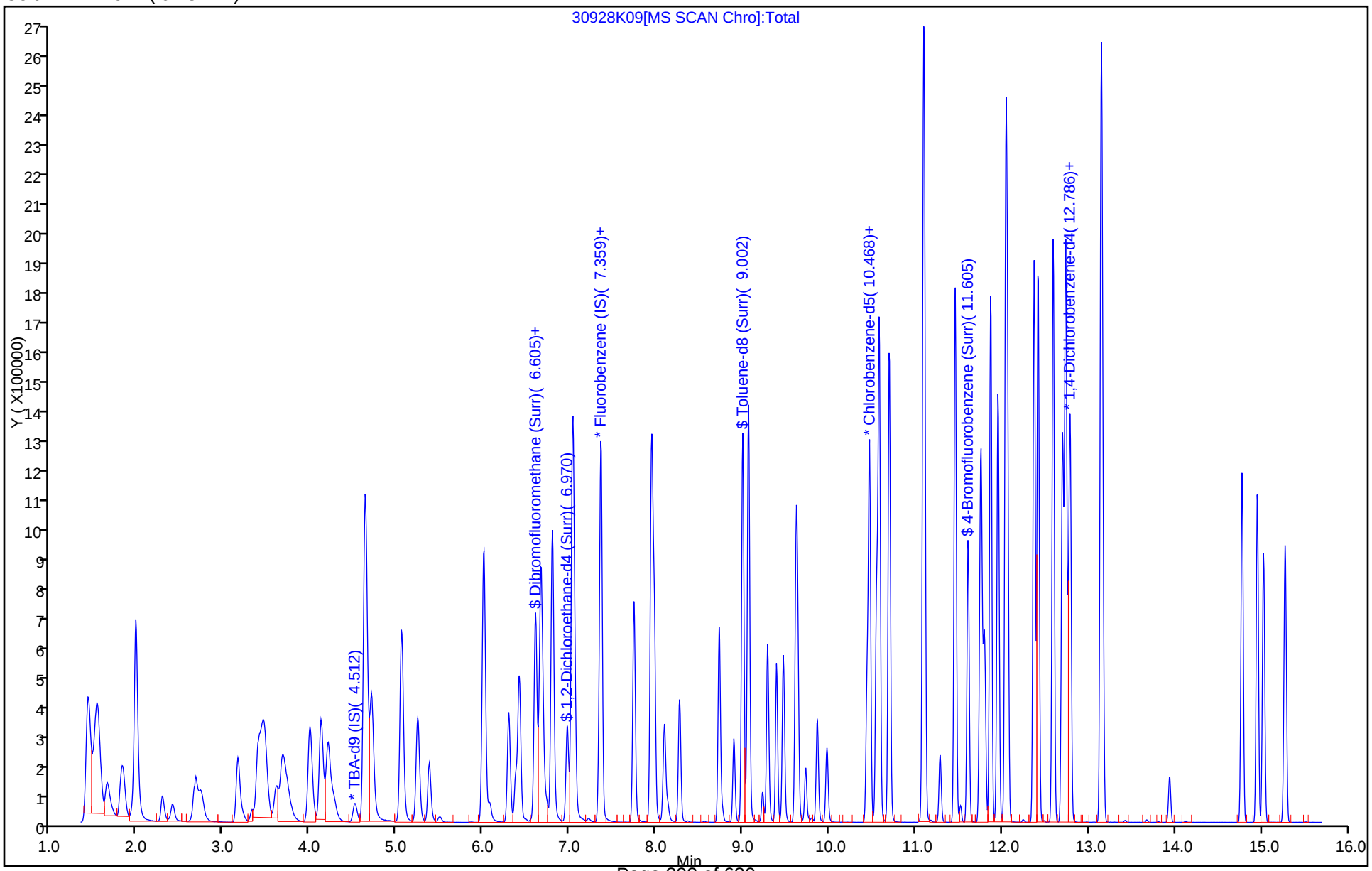
Report Date: 26-Jan-2017 10:28:42 Chrom Revision: 2.2 10-Jan-2017 11:26:10

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K09.D

Injection Date:	28-Sep-2016 13:56:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	IC VSTD125			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D
Lims ID: IC VSTD250
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 28-Sep-2016 14:19:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013637-010
Operator ID: 10099 Instrument ID: CHHP3
Sublist: chrom-MSVOA_S_CHHP3*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Jan-2017 10:28:43 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: gordonk Date: 28-Sep-2016 18:46:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.549	4.464	0.085	97	129334	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.348	7.347	0.001	99	429881	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.444	10.438	0.006	86	98200	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.762	12.761	0.001	95	150963	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.606	6.599	0.007	94	453748	1250.0	1229.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.971	6.970	0.001	96	506847	1250.0	1192.6	
$ 7 Toluene-d8 (Surr)	98	9.003	9.002	0.001	92	1859075	1250.0	1093.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.606	11.606	0.000	89	764809	1250.0	1108.3	
10 Dichlorodifluoromethane	85	1.654	1.659	-0.005	100	663252	1250.0	1221.7	
11 Chloromethane	50	1.836	1.823	0.013	99	917519	1250.0	1194.1	
12 Vinyl chloride	62	1.988	1.982	0.006	73	777037	1250.0	1230.2	
13 Butadiene	39	1.988	1.988	0.000	88	691063	1250.0	1190.2	
14 Bromomethane	94	2.293	2.292	0.000	89	184332	1250.0	1253.0	
15 Chloroethane	64	2.408	2.413	-0.005	99	187713	1250.0	1193.0	
16 Dichlorofluoromethane	67	2.664	2.687	-0.023	98	318452	1250.0	564.6	
17 Trichlorofluoromethane	101	2.712	2.736	-0.024	99	231586	1250.0	557.7	
19 Ethyl ether	59	3.169	3.162	0.007	92	462309	1250.0	1195.5	
20 Acrolein	56	3.333	3.326	0.007	98	77788	1250.0	1106.5	
21 1,1-Dichloroethene	96	3.412	3.417	-0.005	98	588948	1250.0	1257.4	
22 1,1,2-Trichloro-1,2,2-trif	101	3.461	3.496	-0.035	94	539659	1250.0	1177.6	
23 Acetone	43	3.619	3.594	0.025	99	121884	1250.0	1094.2	
24 Iodomethane	142	3.649	3.624	0.025	96	794299	1250.0	1261.0	
25 Carbon disulfide	76	3.698	3.715	-0.017	99	1764493	1250.0	1311.2	
28 3-Chloro-1-propene	76	3.996	4.013	-0.017	95	374889	1250.0	1409.9	
29 Methyl acetate	43	4.136	4.117	0.019	98	1656860	6250.0	6114.9	
30 Methylene Chloride	84	4.215	4.214	0.001	97	618832	1250.0	1107.2	
31 2-Methyl-2-propanol	59	4.659	4.585	0.074	91	412009	12500	12701	
32 Acrylonitrile	53	4.647	4.634	0.013	98	1697712	12500	11638	
33 trans-1,2-Dichloroethene	96	4.629	4.640	-0.011	98	588010	1250.0	1194.5	
34 Methyl tert-butyl ether	73	4.720	4.701	0.019	96	1321166	1250.0	1244.8	
35 Hexane	57	5.054	5.072	-0.018	90	1034526	1250.0	1176.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.243	5.248	-0.005	96	1048311	1250.0	1215.8	
37 Vinyl acetate	43	5.377	5.376	0.001	97	864758	1250.0	1233.2	
41 2,2-Dichloropropane	77	6.003	6.003	0.000	90	530858	1250.0	1181.6	
42 cis-1,2-Dichloroethene	96	6.010	6.015	-0.005	83	659039	1250.0	1216.3	
43 2-Butanone (MEK)	43	6.083	6.076	0.007	100	178131	1250.0	1093.6	
47 Chlorobromomethane	128	6.295	6.301	-0.006	96	263106	1250.0	1289.6	
48 Tetrahydrofuran	42	6.381	6.374	0.007	90	271157	2500.0	2536.2	
49 Chloroform	83	6.417	6.422	-0.005	95	940874	1250.0	1212.1	
50 1,1,1-Trichloroethane	97	6.606	6.611	-0.005	98	726257	1250.0	1254.7	
51 Cyclohexane	56	6.667	6.672	-0.005	90	1227556	1250.0	1172.2	
53 Carbon tetrachloride	117	6.800	6.800	0.000	98	603105	1250.0	1390.0	
52 1,1-Dichloropropene	75	6.800	6.806	-0.006	97	756170	1250.0	1193.4	
54 Isobutyl alcohol	41	7.050	7.031	0.019	95	296132	31250	31300	
55 Benzene	78	7.032	7.031	0.001	98	2144503	1250.0	1140.3	
56 1,2-Dichloroethane	62	7.062	7.061	0.001	96	587510	1250.0	1148.6	
59 n-Heptane	43	7.366	7.365	0.001	91	988930	1250.0	1202.2	
60 Trichloroethene	130	7.743	7.743	0.000	99	579172	1250.0	1264.6	
63 Methylcyclohexane	83	7.950	7.949	0.001	92	1167362	1250.0	1172.9	
64 1,2-Dichloropropane	63	7.981	7.980	0.001	95	564168	1250.0	1242.3	
65 Dibromomethane	93	8.096	8.095	0.001	95	272810	1250.0	1275.0	
67 1,4-Dioxane	88	8.133	8.132	0.001	97	97707	25000	26861	
68 Dichlorobromomethane	83	8.273	8.272	0.001	99	654512	1250.0	1496.5	
71 cis-1,3-Dichloropropene	75	8.729	8.728	0.001	97	865270	1250.0	1443.1	
72 4-Methyl-2-pentanone (MIBK	43	8.899	8.898	0.001	95	405877	1250.0	1268.1	
73 Toluene	91	9.070	9.069	0.001	97	2140861	1250.0	1086.7	
74 trans-1,3-Dichloropropene	75	9.288	9.288	0.000	92	712764	1250.0	1426.2	
75 Ethyl methacrylate	69	9.392	9.391	0.001	90	570595	1250.0	1236.9	
76 1,1,2-Trichloroethane	97	9.477	9.470	0.007	90	407852	1250.0	1209.4	
77 Tetrachloroethene	164	9.617	9.616	0.001	99	450114	1250.0	1211.3	
78 1,3-Dichloropropane	76	9.641	9.635	0.006	90	694789	1250.0	1134.8	
79 2-Hexanone	43	9.733	9.732	0.001	95	259178	1250.0	1240.0	
81 Chlorodibromomethane	129	9.866	9.866	0.000	91	415965	1250.0	1257.5	
82 Ethylene Dibromide	107	9.976	9.975	0.001	99	407229	1250.0	1255.7	
83 Chlorobenzene	112	10.469	10.468	0.001	93	1469381	1250.0	1146.7	
85 1,1,1,2-Tetrachloroethane	131	10.548	10.547	0.001	97	478563	1250.0	1311.0	
86 Ethylbenzene	106	10.584	10.577	0.007	98	806603	1250.0	1128.4	
87 m-Xylene & p-Xylene	106	10.700	10.693	0.007	98	1026028	1250.0	1141.3	
88 o-Xylene	106	11.089	11.088	0.001	93	986570	1250.0	1120.5	
89 Styrene	104	11.107	11.101	0.006	95	1553170	1250.0	1074.6	
90 Bromoform	173	11.284	11.283	0.001	98	274645	1250.0	1247.9	
91 Isopropylbenzene	105	11.460	11.460	0.000	96	2485952	1250.0	1050.5	
93 1,1,2,2-Tetrachloroethane	83	11.746	11.745	0.001	94	503358	1250.0	1189.7	
94 Bromobenzene	156	11.758	11.758	0.000	93	594994	1250.0	1228.3	
95 1,2,3-Trichloropropane	110	11.789	11.788	0.001	80	151593	1250.0	1215.3	
96 trans-1,4-Dichloro-2-buten	53	11.807	11.800	0.007	90	146337	1250.0	1299.9	
97 N-Propylbenzene	120	11.874	11.867	0.007	97	745292	1250.0	1188.1	
98 2-Chlorotoluene	126	11.953	11.952	0.001	97	629050	1250.0	1211.9	
99 1,3,5-Trimethylbenzene	105	12.044	12.044	0.000	96	2041575	1250.0	1075.3	
100 4-Chlorotoluene	126	12.063	12.062	0.001	98	609579	1250.0	1173.5	
101 tert-Butylbenzene	119	12.373	12.372	0.001	91	1903165	1250.0	1134.8	
103 1,2,4-Trimethylbenzene	105	12.421	12.415	0.006	95	2122433	1250.0	1081.5	
104 sec-Butylbenzene	105	12.592	12.591	0.001	95	2753940	1250.0	1074.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	12.701	12.701	0.000	97	1213495	1250.0	1200.7	
106 4-Isopropyltoluene	119	12.738	12.731	0.007	95	2195730	1250.0	1076.3	
107 1,4-Dichlorobenzene	146	12.793	12.786	0.007	93	1190434	1250.0	1207.5	
110 n-Butylbenzene	91	13.145	13.145	0.000	95	2162864	1250.0	1066.6	
111 1,2-Dichlorobenzene	146	13.164	13.163	0.001	97	1066534	1250.0	1167.4	
112 1,2-Dibromo-3-Chloropropan	75	13.936	13.936	0.000	89	89230	1250.0	1246.8	
114 1,2,4-Trichlorobenzene	180	14.776	14.775	0.001	94	856304	1250.0	1267.9	
115 Hexachlorobutadiene	225	14.952	14.951	0.001	94	518614	1250.0	1247.3	
116 Naphthalene	128	15.025	15.024	0.001	98	1586726	1250.0	1243.0	
117 1,2,3-Trichlorobenzene	180	15.275	15.274	0.001	94	726049	1250.0	1294.4	
S 129 Xylenes, Total	106				0		2500.0	2261.7	
S 130 1,2-Dichloroethene, Total	96				0		2500.0	2410.8	
S 131 1,3-Dichloropropene, Total	1				0		2500.0	2869.4	

Reagents:

voaWVA1stRest_00008	Amount Added:	50.00	Units: uL	
VOA8260VOAPRI_00213	Amount Added:	50.00	Units: uL	
VOA8260SURR_00059	Amount Added:	50.00	Units: uL	
voaWAcro1stRe_00008	Amount Added:	50.00	Units: uL	
VOA8260INT_00061	Amount Added:	10.00	Units: uL	Run Reagent

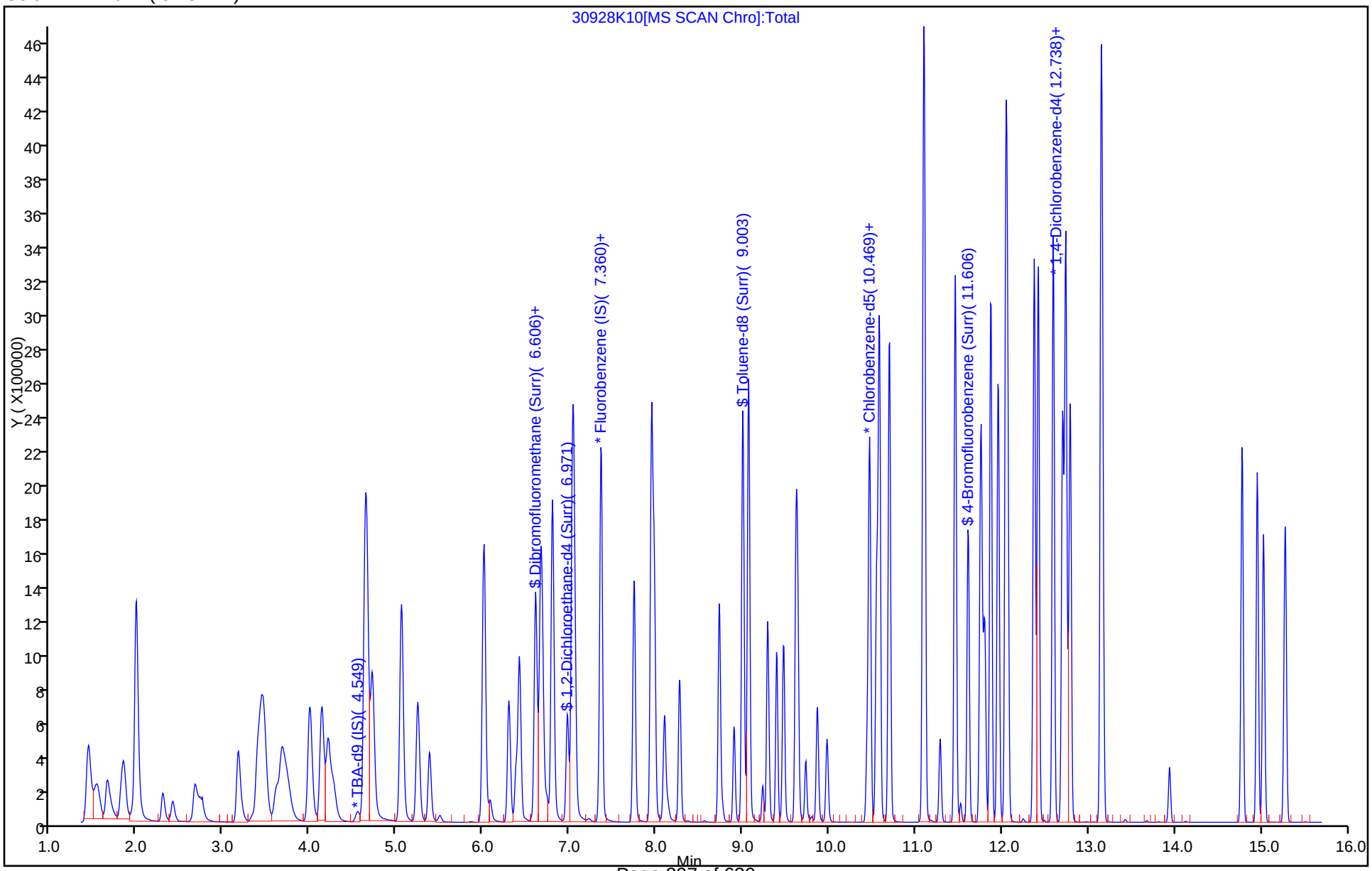
Report Date: 26-Jan-2017 10:28:43 Chrom Revision: 2.2 10-Jan-2017 11:26:10

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Injection Date:	28-Sep-2016 14:19:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	IC VSTD250			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_S_CHHP3	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.: 180-64801-1

SDG No.:

Lab Sample ID: CCVIS 180-207111/2 Calibration Date: 04/03/2017 06:47

Instrument ID: CHHP3 Calib Start Date: 09/28/2016 12:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/28/2016 14:19

Lab File ID: 3040302.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3157	0.3695	0.1000	46.8	40.0	17.0	20.0
Chloromethane	Ave	0.4468	0.3287	0.1000	29.4	40.0	-26.4*	20.0
Vinyl chloride	Ave	0.3673	0.4227	0.1000	46.0	40.0	15.1	20.0
1,3-Butadiene	Ave	0.3377	0.3041	0.0100	36.0	40.0	-9.9	20.0
Bromomethane	Ave	0.0856	0.1763	0.0500	82.4	40.0	106.1*	20.0
Chloroethane	Ave	0.0915	0.0940	0.0500	41.1	40.0	2.7	20.0
Dichlorofluoromethane	Ave	0.3280	0.6608	0.0100	80.6	40.0	101.4*	20.0
Trichlorofluoromethane	Ave	0.2415	0.5976	0.1000	99.0	40.0	147.4*	20.0
Ethyl ether	Ave	0.2249	0.2014	0.0100	35.8	40.0	-10.5	20.0
1,1-Dichloroethene	Ave	0.2724	0.2690	0.1000	39.5	40.0	-1.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2665	0.2992	0.1000	44.9	40.0	12.3	20.0
Acetone	Ave	0.0648	0.0792	0.0500	48.9	40.0	22.3*	20.0
Iodomethane	Ave	0.3663	0.4296	0.0100	46.9	40.0	17.3	20.0
Carbon disulfide	Lin2		0.6294	0.1000	34.0	40.0	-15.0	20.0
Allyl chloride	Ave	0.1546	0.1581	0.0100	40.9	40.0	2.2	20.0
Methyl acetate	Ave	0.1576	0.1148	0.1000	146	200	-27.2*	20.0
Methylene Chloride	Ave	0.3251	0.2942	0.1000	36.2	40.0	-9.5	20.0
tert-Butyl alcohol	Ave	1.254	1.151	0.0100	367	400	-8.3	20.0
Acrylonitrile	Ave	0.0848	0.0675	0.0100	318	400	-20.4*	20.0
trans-1,2-Dichloroethene	Ave	0.2863	0.2918	0.1000	40.8	40.0	1.9	20.0
Methyl tert-butyl ether	Ave	0.6173	0.6325	0.1000	41.0	40.0	2.5	20.0
Hexane	Ave	0.5115	0.4455	0.0100	34.8	40.0	-12.9	20.0
1,1-Dichloroethane	Ave	0.5015	0.4649	0.2000	37.1	40.0	-7.3	20.0
2,2-Dichloropropane	Lin2		0.3516	0.0100	39.2	40.0	-1.9	20.0
cis-1,2-Dichloroethene	Ave	0.3151	0.3209	0.1000	40.7	40.0	1.8	20.0
2-Butanone (MEK)	Ave	0.0947	0.1050	0.0500	44.3	40.0	10.9	20.0
Bromochloromethane	Ave	0.1186	0.1355	0.0100	45.7	40.0	14.2	20.0
Tetrahydrofuran	Ave	0.0622	0.0431	0.0100	55.4	80.0	-30.8*	20.0
Chloroform	Ave	0.4514	0.4627	0.2000	41.0	40.0	2.5	20.0
1,1,1-Trichloroethane	Ave	0.3366	0.3977	0.1000	47.3	40.0	18.1	20.0
Cyclohexane	Ave	0.6090	0.4866	0.1000	32.0	40.0	-20.1*	20.0
Carbon tetrachloride	Ave	0.2523	0.3334	0.1000	52.8	40.0	32.1*	20.0
1,1-Dichloropropene	Ave	0.3685	0.4004	0.0100	43.5	40.0	8.7	20.0
Isobutyl alcohol	Ave	0.0055	0.0042*	0.0100	771	1000	-22.9*	20.0
Benzene	Ave	1.094	1.107	0.5000	40.5	40.0	1.2	20.0
1,2-Dichloroethane	Ave	0.2975	0.3167	0.1000	42.6	40.0	6.5	20.0
n-Heptane	Ave	0.4784	0.3660	0.0100	30.6	40.0	-23.5*	20.0
Trichloroethene	Ave	0.2664	0.3127	0.2000	47.0	40.0	17.4	20.0
Methylcyclohexane	Ave	0.5788	0.5777	0.1000	39.9	40.0	-0.2	20.0
1,2-Dichloropropane	Ave	0.2641	0.2424	0.1000	36.7	40.0	-8.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Lab Sample ID: CCVIS 180-207111/2 Calibration Date: 04/03/2017 06:47

Instrument ID: CHHP3 Calib Start Date: 09/28/2016 12:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/28/2016 14:19

Lab File ID: 3040302.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromomethane	Ave	0.1244	0.1338	0.0100	43.0	40.0	7.5	20.0
1,4-Dioxane	Ave	0.0021	0.0024*	0.0100	894	800	11.7	20.0
Bromodichloromethane	Ave	0.2544	0.2772	0.2000	43.6	40.0	9.0	20.0
cis-1,3-Dichloropropene	Ave	0.3487	0.3668	0.2000	42.1	40.0	5.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8148	0.7742	0.1000	38.0	40.0	-5.0	20.0
Toluene	Ave	5.015	4.805	0.4000	38.3	40.0	-4.2	20.0
trans-1,3-Dichloropropene	Ave	1.272	1.154	0.1000	36.3	40.0	-9.3	20.0
Ethyl methacrylate	Ave	1.174	1.081	0.0100	36.8	40.0	-7.9	20.0
1,1,2-Trichloroethane	Ave	0.8585	0.8191	0.1000	38.2	40.0	-4.6	20.0
Tetrachloroethene	Ave	0.9460	0.9793	0.2000	41.4	40.0	3.5	20.0
1,3-Dichloropropane	Ave	1.559	1.408	0.0100	36.1	40.0	-9.7	20.0
2-Hexanone	Ave	0.5321	0.6082	0.1000	45.7	40.0	14.3	20.0
Dibromochloromethane	Lin1		0.7420	0.1000	38.3	40.0	-4.2	20.0
1,2-Dibromoethane (EDB)	Ave	0.8256	0.7907	0.1000	38.3	40.0	-4.2	20.0
Chlorobenzene	Ave	3.262	3.168	0.5000	38.8	40.0	-2.9	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9293	0.9687	0.0100	41.7	40.0	4.2	20.0
Ethylbenzene	Ave	1.820	1.793	0.1000	39.4	40.0	-1.5	20.0
m-Xylene & p-Xylene	Ave	2.289	2.195	0.1000	38.4	40.0	-4.1	20.0
o-Xylene	Ave	2.242	2.213	0.3000	39.5	40.0	-1.3	20.0
Styrene	Ave	3.680	3.660	0.3000	39.8	40.0	-0.5	20.0
Bromoform	Qua		0.3726	0.1000	35.4	40.0	-11.5	20.0
Isopropylbenzene	Ave	6.025	5.936	0.1000	39.4	40.0	-1.5	20.0
1,1,2,2-Tetrachloroethane	Ave	1.077	0.996	0.3000	37.0	40.0	-7.6	20.0
Bromobenzene	Ave	0.8022	0.8067	0.0100	40.2	40.0	0.6	20.0
1,2,3-Trichloropropane	Ave	0.2066	0.1943	0.0100	37.6	40.0	-5.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1864	0.1414	0.0100	30.3	40.0	-24.1*	20.0
N-Propylbenzene	Ave	1.039	1.038	0.0100	40.0	40.0	-0.1	20.0
2-Chlorotoluene	Ave	0.8596	0.8278	0.0100	38.5	40.0	-3.7	20.0
1,3,5-Trimethylbenzene	Ave	3.144	3.057	0.0100	38.9	40.0	-2.8	20.0
4-Chlorotoluene	Ave	0.8602	0.8699	0.0100	40.5	40.0	1.1	20.0
tert-Butylbenzene	Ave	2.777	2.828	0.0100	40.7	40.0	1.8	20.0
1,2,4-Trimethylbenzene	Ave	3.250	3.112	0.0100	38.3	40.0	-4.2	20.0
sec-Butylbenzene	Ave	4.244	4.054	0.0100	38.2	40.0	-4.5	20.0
1,3-Dichlorobenzene	Ave	1.674	1.685	0.6000	40.3	40.0	0.7	20.0
4-Isopropyltoluene	Ave	3.378	3.496	0.0100	41.4	40.0	3.5	20.0
1,4-Dichlorobenzene	Ave	1.633	1.642	0.5000	40.2	40.0	0.6	20.0
n-Butylbenzene	Ave	3.358	3.251	0.0100	38.7	40.0	-3.2	20.0
1,2-Dichlorobenzene	Ave	1.513	1.542	0.4000	40.8	40.0	1.9	20.0
1,2-Dibromo-3-Chloropropane	Qua		0.0839	0.0500	33.9	40.0	-15.4	20.0
1,2,4-Trichlorobenzene	Ave	1.118	1.028	0.2000	36.8	40.0	-8.1	20.0
Hexachlorobutadiene	Ave	0.6886	0.5584	0.0100	32.4	40.0	-18.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Lab Sample ID: CCVIS 180-207111/2 Calibration Date: 04/03/2017 06:47

Instrument ID: CHHP3 Calib Start Date: 09/28/2016 12:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/28/2016 14:19

Lab File ID: 3040302.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	2.114	1.978	0.0100	37.4	40.0	-6.5	20.0
1,2,3-Trichlorobenzene	Ave	0.9289	0.8507	0.0100	36.6	40.0	-8.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2147	0.2435		45.4	40.0	13.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2472	0.2695		43.6	40.0	9.0	20.0
Toluene-d8 (Surr)	Ave	4.329	4.117		38.0	40.0	-4.9	20.0
4-Bromofluorobenzene (Surr)	Ave	1.757	1.584		36.1	40.0	-9.8	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040302.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 03-Apr-2017 06:47:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Operator ID: 10099 Instrument ID: CHHP3
Sublist: chrom-MSVOA_S_CHHP3*sub41

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 08:17:57 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 08:17:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.464	4.464	0.000	96	168186	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.348	7.348	0.000	99	606211	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.438	10.438	0.000	86	153301	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.762	12.762	0.000	94	253493	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.600	6.600	0.000	92	118088	200.0	226.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.971	6.971	0.000	95	130709	200.0	218.1	
$ 7 Toluene-d8 (Surr)	98	9.003	9.003	0.000	93	504954	200.0	190.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.606	11.606	0.000	88	194245	200.0	180.3	
10 Dichlorodifluoromethane	85	1.654	1.654	0.000	100	179192	200.0	234.1	
11 Chloromethane	50	1.812	1.812	0.000	99	159417	200.0	147.1	
12 Vinyl chloride	62	1.958	1.958	0.000	98	205010	200.0	230.2	
13 Butadiene	39	1.994	1.994	0.000	87	147486	200.0	180.1	
14 Bromomethane	94	2.299	2.299	0.000	89	85503	200.0	412.1	
15 Chloroethane	64	2.420	2.420	0.000	98	45579	200.0	205.4	
16 Dichlorofluoromethane	67	2.700	2.700	0.000	97	320441	200.0	402.9	E
17 Trichlorofluoromethane	101	2.730	2.730	0.000	99	289804	200.0	494.9	E
19 Ethyl ether	59	3.162	3.162	0.000	87	97662	200.0	179.1	
21 1,1-Dichloroethene	96	3.424	3.424	0.000	98	130470	200.0	197.5	
22 1,1,2-Trichloro-1,2,2-trif	101	3.527	3.527	0.000	93	145102	200.0	224.5	
23 Acetone	43	3.594	3.594	0.000	100	38408	200.0	244.5	
24 Iodomethane	142	3.625	3.625	0.000	99	208364	200.0	234.6	
25 Carbon disulfide	76	3.716	3.716	0.000	99	305218	200.0	170.1	
28 3-Chloro-1-propene	76	4.014	4.014	0.000	87	76677	200.0	204.5	
29 Methyl acetate	43	4.118	4.118	0.000	96	278345	1000.0	728.5	
30 Methylene Chloride	84	4.221	4.221	0.000	86	142677	200.0	181.0	
31 2-Methyl-2-propanol	59	4.580	4.580	0.000	97	77405	2000.0	1834.9	
32 Acrylonitrile	53	4.635	4.635	0.000	99	327560	2000.0	1592.3	
33 trans-1,2-Dichloroethene	96	4.641	4.641	0.000	96	141498	200.0	203.8	
34 Methyl tert-butyl ether	73	4.695	4.695	0.000	93	306734	200.0	204.9	
35 Hexane	57	5.067	5.067	0.000	87	216034	200.0	174.2	
36 1,1-Dichloroethane	63	5.249	5.249	0.000	96	225455	200.0	185.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
41 2,2-Dichloropropane	77	6.003	6.003	0.000	73	170517	200.0	196.2	
42 cis-1,2-Dichloroethene	96	6.009	6.009	0.000	82	155647	200.0	203.7	
43 2-Butanone (MEK)	43	6.070	6.070	0.000	97	50933	200.0	221.7	
47 Chlorobromomethane	128	6.295	6.295	0.000	89	65709	200.0	228.4	
48 Tetrahydrofuran	42	6.374	6.374	0.000	82	41759	400.0	277.0	
49 Chloroform	83	6.417	6.417	0.000	94	224385	200.0	205.0	
50 1,1,1-Trichloroethane	97	6.612	6.612	0.000	98	192851	200.0	236.3	
51 Cyclohexane	56	6.673	6.673	0.000	85	235985	200.0	159.8	
53 Carbon tetrachloride	117	6.800	6.800	0.000	98	161675	200.0	264.2	
52 1,1-Dichloropropene	75	6.806	6.806	0.000	98	194179	200.0	217.3	
54 Isobutyl alcohol	41	7.025	7.025	0.000	91	51448	5000.0	3856.2	
55 Benzene	78	7.031	7.031	0.000	96	536673	200.0	202.4	
56 1,2-Dichloroethane	62	7.056	7.056	0.000	99	153589	200.0	212.9	
59 n-Heptane	43	7.366	7.366	0.000	84	177513	200.0	153.0	
60 Trichloroethene	130	7.743	7.743	0.000	98	151629	200.0	234.8	
63 Methylcyclohexane	83	7.950	7.950	0.000	87	280168	200.0	199.6	
64 1,2-Dichloropropane	63	7.981	7.981	0.000	95	117544	200.0	183.5	
65 Dibromomethane	93	8.096	8.096	0.000	96	64870	200.0	215.0	
67 1,4-Dioxane	88	8.133	8.133	0.000	90	22923	4000.0	4468.8	
68 Dichlorobromomethane	83	8.273	8.273	0.000	99	134415	200.0	217.9	
71 cis-1,3-Dichloropropene	75	8.729	8.729	0.000	97	177875	200.0	210.4	
72 4-Methyl-2-pentanone (MIBK	43	8.893	8.893	0.000	93	94945	200.0	190.0	
73 Toluene	91	9.069	9.069	0.000	99	589254	200.0	191.6	
74 trans-1,3-Dichloropropene	75	9.288	9.288	0.000	91	141494	200.0	181.4	
75 Ethyl methacrylate	69	9.392	9.392	0.000	85	132604	200.0	184.1	
76 1,1,2-Trichloroethane	97	9.471	9.471	0.000	91	100459	200.0	190.8	
77 Tetrachloroethene	164	9.617	9.617	0.000	98	120107	200.0	207.0	
78 1,3-Dichloropropane	76	9.635	9.635	0.000	87	172679	200.0	180.7	
79 2-Hexanone	43	9.726	9.726	0.000	93	74584	200.0	228.6	
81 Chlorodibromomethane	129	9.866	9.866	0.000	90	90993	200.0	191.7	
82 Ethylene Dibromide	107	9.976	9.976	0.000	98	96973	200.0	191.5	
83 Chlorobenzene	112	10.469	10.469	0.000	95	388560	200.0	194.2	
85 1,1,1,2-Tetrachloroethane	131	10.548	10.548	0.000	95	118805	200.0	208.5	
86 Ethylbenzene	106	10.578	10.578	0.000	98	219854	200.0	197.0	
87 m-Xylene & p-Xylene	106	10.694	10.694	0.000	99	269209	200.0	191.8	
88 o-Xylene	106	11.089	11.089	0.000	96	271373	200.0	197.4	
89 Styrene	104	11.101	11.101	0.000	93	448811	200.0	198.9	
90 Bromoform	173	11.284	11.284	0.000	96	45693	200.0	177.1	
91 Isopropylbenzene	105	11.460	11.460	0.000	96	727951	200.0	197.0	
93 1,1,2,2-Tetrachloroethane	83	11.746	11.746	0.000	96	122094	200.0	184.9	
94 Bromobenzene	156	11.758	11.758	0.000	93	163601	200.0	201.1	
95 1,2,3-Trichloropropane	110	11.789	11.789	0.000	83	39408	200.0	188.2	
96 trans-1,4-Dichloro-2-buten	53	11.801	11.801	0.000	86	28678	200.0	151.7	
97 N-Propylbenzene	120	11.868	11.868	0.000	98	210430	200.0	199.8	
98 2-Chlorotoluene	126	11.953	11.953	0.000	96	167881	200.0	192.6	
99 1,3,5-Trimethylbenzene	105	12.044	12.044	0.000	95	619842	200.0	194.4	
100 4-Chlorotoluene	126	12.063	12.063	0.000	98	176410	200.0	202.3	
101 tert-Butylbenzene	119	12.373	12.373	0.000	92	573420	200.0	203.6	
103 1,2,4-Trimethylbenzene	105	12.415	12.415	0.000	97	631163	200.0	191.5	
104 sec-Butylbenzene	105	12.592	12.592	0.000	94	822049	200.0	191.0	
105 1,3-Dichlorobenzene	146	12.701	12.701	0.000	97	341685	200.0	201.3	
106 4-Isopropyltoluene	119	12.738	12.738	0.000	96	708949	200.0	207.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.786	12.786	0.000	94	333052	200.0	201.2	
110 n-Butylbenzene	91	13.145	13.145	0.000	97	659332	200.0	193.6	
111 1,2-Dichlorobenzene	146	13.164	13.164	0.000	97	312722	200.0	203.9	
112 1,2-Dibromo-3-Chloropropan	75	13.936	13.936	0.000	85	17010	200.0	169.3	
114 1,2,4-Trichlorobenzene	180	14.782	14.782	0.000	94	208423	200.0	183.8	
115 Hexachlorobutadiene	225	14.952	14.952	0.000	98	113237	200.0	162.2	
116 Naphthalene	128	15.025	15.025	0.000	97	401028	200.0	187.1	
117 1,2,3-Trichlorobenzene	180	15.275	15.275	0.000	95	172509	200.0	183.2	
S 130 1,2-Dichloroethene, Total	96				0		400.0	407.5	
S 129 Xylenes, Total	106				0		400.0	389.2	
S 131 1,3-Dichloropropene, Total	1				0		400.0	391.7	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VOA8260VOAPRI_00244	Amount Added:	8.00	Units: uL
VOA8260SURR_00066	Amount Added:	8.00	Units: uL
VOA8260INT_00067	Amount Added:	10.00	Units: uL

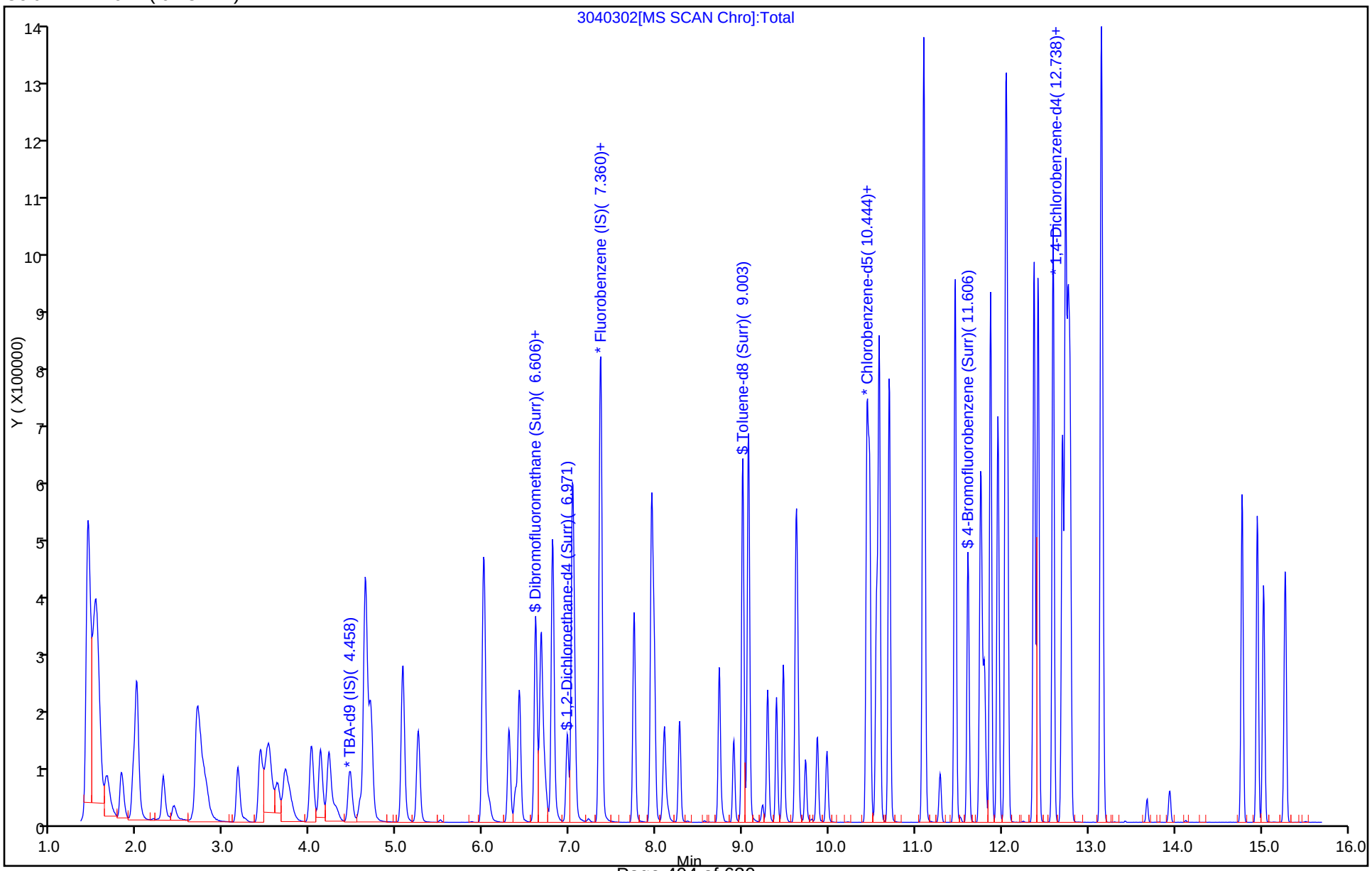
Report Date: 03-Apr-2017 08:17:59 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040302.D

Injection Date:	03-Apr-2017 06:47:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_S_CHHP3	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.: 180-64801-1

SDG No.:

Lab Sample ID: CCVIS 180-207218/2 Calibration Date: 04/04/2017 07:27

Instrument ID: CHHP3 Calib Start Date: 09/28/2016 12:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/28/2016 14:19

Lab File ID: 30404K02.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3157	0.3693	0.1000	46.8	40.0	17.0	20.0
Chloromethane	Ave	0.4468	0.3176	0.1000	28.4	40.0	-28.9*	20.0
Vinyl chloride	Ave	0.3673	0.4023	0.1000	43.8	40.0	9.5	20.0
1,3-Butadiene	Ave	0.3377	0.2756	0.0100	32.7	40.0	-18.4	20.0
Bromomethane	Ave	0.0856	0.1610	0.0500	75.3	40.0	88.2*	20.0
Chloroethane	Ave	0.0915	0.0862	0.0500	37.7	40.0	-5.8	20.0
Dichlorofluoromethane	Ave	0.3280	0.6024	0.0100	73.5	40.0	83.6*	20.0
Trichlorofluoromethane	Ave	0.2415	0.5584	0.1000	92.5	40.0	131.2*	20.0
Ethyl ether	Ave	0.2249	0.1839	0.0100	32.7	40.0	-18.2	20.0
1,1-Dichloroethene	Ave	0.2724	0.2555	0.1000	37.5	40.0	-6.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2665	0.2846	0.1000	42.7	40.0	6.8	20.0
Acetone	Ave	0.0648	0.0679	0.0500	41.9	40.0	4.9	20.0
Iodomethane	Ave	0.3663	0.4124	0.0100	45.0	40.0	12.6	20.0
Carbon disulfide	Lin2		0.5794	0.1000	31.5	40.0	-21.3*	20.0
Allyl chloride	Ave	0.1546	0.1458	0.0100	37.7	40.0	-5.7	20.0
Methyl acetate	Ave	0.1576	0.1025	0.1000	130	200	-34.9*	20.0
Methylene Chloride	Ave	0.3251	0.2833	0.1000	34.9	40.0	-12.8	20.0
tert-Butyl alcohol	Ave	1.254	1.135	0.0100	362	400	-9.5	20.0
Acrylonitrile	Ave	0.0848	0.0625	0.0100	295	400	-26.4*	20.0
trans-1,2-Dichloroethene	Ave	0.2863	0.2790	0.1000	39.0	40.0	-2.6	20.0
Methyl tert-butyl ether	Ave	0.6173	0.5792	0.1000	37.5	40.0	-6.2	20.0
Hexane	Ave	0.5115	0.4099	0.0100	32.1	40.0	-19.9	20.0
1,1-Dichloroethane	Ave	0.5015	0.4307	0.2000	34.4	40.0	-14.1	20.0
2,2-Dichloropropane	Lin2		0.3213	0.0100	34.2	40.0	-14.5	20.0
cis-1,2-Dichloroethene	Ave	0.3151	0.3059	0.1000	38.8	40.0	-2.9	20.0
2-Butanone (MEK)	Ave	0.0947	0.0886	0.0500	37.4	40.0	-6.5	20.0
Bromochloromethane	Ave	0.1186	0.1276	0.0100	43.0	40.0	7.5	20.0
Tetrahydrofuran	Ave	0.0622	0.0386	0.0100	49.7	80.0	-37.9*	20.0
Chloroform	Ave	0.4514	0.4427	0.2000	39.2	40.0	-1.9	20.0
1,1,1-Trichloroethane	Ave	0.3366	0.3666	0.1000	43.6	40.0	8.9	20.0
Cyclohexane	Ave	0.6090	0.4523	0.1000	29.7	40.0	-25.7*	20.0
1,1-Dichloropropene	Ave	0.3685	0.3703	0.0100	40.2	40.0	0.5	20.0
Carbon tetrachloride	Ave	0.2523	0.2970	0.1000	47.1	40.0	17.7	20.0
Isobutyl alcohol	Ave	0.0055	0.0040*	0.0100	723	1000	-27.7*	20.0
Benzene	Ave	1.094	1.045	0.5000	38.2	40.0	-4.5	20.0
1,2-Dichloroethane	Ave	0.2975	0.2943	0.1000	39.6	40.0	-1.1	20.0
n-Heptane	Ave	0.4784	0.3331	0.0100	27.9	40.0	-30.4*	20.0
Trichloroethene	Ave	0.2664	0.2890	0.2000	43.4	40.0	8.5	20.0
Methylcyclohexane	Ave	0.5788	0.5341	0.1000	36.9	40.0	-7.7	20.0
1,2-Dichloropropane	Ave	0.2641	0.2295	0.1000	34.8	40.0	-13.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Lab Sample ID: CCVIS 180-207218/2 Calibration Date: 04/04/2017 07:27

Instrument ID: CHHP3 Calib Start Date: 09/28/2016 12:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/28/2016 14:19

Lab File ID: 30404K02.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromomethane	Ave	0.1244	0.1266	0.0100	40.7	40.0	1.7	20.0
1,4-Dioxane	Ave	0.0021	0.0022*	0.0100	837	800	4.7	20.0
Bromodichloromethane	Ave	0.2544	0.2517	0.2000	39.6	40.0	-1.0	20.0
cis-1,3-Dichloropropene	Ave	0.3487	0.3318	0.2000	38.1	40.0	-4.9	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8148	0.6661	0.1000	32.7	40.0	-18.3	20.0
Toluene	Ave	5.015	4.636	0.4000	37.0	40.0	-7.6	20.0
trans-1,3-Dichloropropene	Ave	1.272	1.071	0.1000	33.7	40.0	-15.8	20.0
Ethyl methacrylate	Ave	1.174	1.020	0.0100	34.7	40.0	-13.1	20.0
1,1,2-Trichloroethane	Ave	0.8585	0.7789	0.1000	36.3	40.0	-9.3	20.0
Tetrachloroethene	Ave	0.9460	0.9151	0.2000	38.7	40.0	-3.3	20.0
1,3-Dichloropropane	Ave	1.559	1.351	0.0100	34.7	40.0	-13.3	20.0
2-Hexanone	Ave	0.5321	0.5106	0.1000	38.4	40.0	-4.0	20.0
Dibromochloromethane	Lin1		0.6566	0.1000	34.3	40.0	-14.2	20.0
1,2-Dibromoethane (EDB)	Ave	0.8256	0.7592	0.1000	36.8	40.0	-8.0	20.0
Chlorobenzene	Ave	3.262	3.073	0.5000	37.7	40.0	-5.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9293	0.8899	0.0100	38.3	40.0	-4.2	20.0
Ethylbenzene	Ave	1.820	1.746	0.1000	38.4	40.0	-4.1	20.0
m-Xylene & p-Xylene	Ave	2.289	2.164	0.1000	37.8	40.0	-5.5	20.0
o-Xylene	Ave	2.242	2.155	0.3000	38.5	40.0	-3.9	20.0
Styrene	Ave	3.680	3.571	0.3000	38.8	40.0	-3.0	20.0
Bromoform	Qua		0.3103	0.1000	30.6	40.0	-23.5*	20.0
Isopropylbenzene	Ave	6.025	5.739	0.1000	38.1	40.0	-4.7	20.0
1,1,2,2-Tetrachloroethane	Ave	1.077	0.9253	0.3000	34.4	40.0	-14.1	20.0
Bromobenzene	Ave	0.8022	0.7789	0.0100	38.8	40.0	-2.9	20.0
1,2,3-Trichloropropane	Ave	0.2066	0.1877	0.0100	36.3	40.0	-9.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1864	0.1277	0.0100	27.4	40.0	-31.5*	20.0
N-Propylbenzene	Ave	1.039	1.003	0.0100	38.6	40.0	-3.5	20.0
2-Chlorotoluene	Ave	0.8596	0.8021	0.0100	37.3	40.0	-6.7	20.0
1,3,5-Trimethylbenzene	Ave	3.144	2.936	0.0100	37.4	40.0	-6.6	20.0
4-Chlorotoluene	Ave	0.8602	0.8447	0.0100	39.3	40.0	-1.8	20.0
tert-Butylbenzene	Ave	2.777	2.723	0.0100	39.2	40.0	-2.0	20.0
1,2,4-Trimethylbenzene	Ave	3.250	2.983	0.0100	36.7	40.0	-8.2	20.0
sec-Butylbenzene	Ave	4.244	3.905	0.0100	36.8	40.0	-8.0	20.0
1,3-Dichlorobenzene	Ave	1.674	1.617	0.6000	38.7	40.0	-3.4	20.0
4-Isopropyltoluene	Ave	3.378	3.329	0.0100	39.4	40.0	-1.5	20.0
1,4-Dichlorobenzene	Ave	1.633	1.579	0.5000	38.7	40.0	-3.3	20.0
n-Butylbenzene	Ave	3.358	3.079	0.0100	36.7	40.0	-8.3	20.0
1,2-Dichlorobenzene	Ave	1.513	1.478	0.4000	39.1	40.0	-2.3	20.0
1,2-Dibromo-3-Chloropropane	Qua		0.0694	0.0500	29.1	40.0	-27.3*	20.0
1,2,4-Trichlorobenzene	Ave	1.118	0.9805	0.2000	35.1	40.0	-12.3	20.0
Hexachlorobutadiene	Ave	0.6886	0.5217	0.0100	30.3	40.0	-24.2*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Lab Sample ID: CCVIS 180-207218/2 Calibration Date: 04/04/2017 07:27

Instrument ID: CHHP3 Calib Start Date: 09/28/2016 12:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/28/2016 14:19

Lab File ID: 30404K02.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	2.114	1.875	0.0100	35.5	40.0	-11.3	20.0
1,2,3-Trichlorobenzene	Ave	0.9289	0.8048	0.0100	34.7	40.0	-13.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2147	0.2348		43.7	40.0	9.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2472	0.2592		41.9	40.0	4.9	20.0
Toluene-d8 (Surr)	Ave	4.329	4.088		37.8	40.0	-5.6	20.0
4-Bromofluorobenzene (Surr)	Ave	1.757	1.585		36.1	40.0	-9.8	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K02.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 04-Apr-2017 07:27:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Operator ID: 10099 Instrument ID: CHHP3
Sublist: chrom-MSVOA_S_CHHP3*sub41

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 10:38:24 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 08:44:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.461	4.461	0.000	97	159666	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.351	7.351	0.000	99	617791	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.441	10.441	0.000	86	155973	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.765	12.765	0.000	94	256719	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.603	6.603	0.000	93	116036	200.0	218.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.974	6.974	0.000	95	128101	200.0	209.7	
$ 7 Toluene-d8 (Surr)	98	9.000	9.000	0.000	93	510077	200.0	188.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.609	11.609	0.000	88	197718	200.0	180.4	
10 Dichlorodifluoromethane	85	1.651	1.651	0.000	100	182509	200.0	233.9	
11 Chloromethane	50	1.821	1.821	0.000	100	156974	200.0	142.2	
12 Vinyl chloride	62	1.961	1.961	0.000	98	198829	200.0	219.0	
13 Butadiene	39	1.997	1.997	0.000	86	136232	200.0	163.3	
14 Bromomethane	94	2.302	2.302	0.000	89	79579	200.0	376.4	
15 Chloroethane	64	2.423	2.423	0.000	98	42584	200.0	188.3	
16 Dichlorofluoromethane	67	2.691	2.691	0.000	97	297707	200.0	367.3	E
17 Trichlorofluoromethane	101	2.734	2.734	0.000	99	275961	200.0	462.4	E
19 Ethyl ether	59	3.166	3.166	0.000	86	90875	200.0	163.5	
21 1,1-Dichloroethene	96	3.427	3.427	0.000	98	126263	200.0	187.6	
22 1,1,2-Trichloro-1,2,2-trif	101	3.518	3.518	0.000	93	140659	200.0	213.6	
23 Acetone	43	3.597	3.597	0.000	98	33574	200.0	209.7	
24 Iodomethane	142	3.628	3.628	0.000	99	203803	200.0	225.1	
25 Carbon disulfide	76	3.731	3.731	0.000	97	286351	200.0	157.4	
28 3-Chloro-1-propene	76	4.011	4.011	0.000	88	72046	200.0	188.5	
29 Methyl acetate	43	4.121	4.121	0.000	96	253357	1000.0	650.6	
30 Methylene Chloride	84	4.218	4.218	0.000	86	140030	200.0	174.3	
31 2-Methyl-2-propanol	59	4.589	4.589	0.000	96	72484	2000.0	1809.9	
32 Acrylonitrile	53	4.632	4.632	0.000	99	308796	2000.0	1473.0	
33 trans-1,2-Dichloroethene	96	4.644	4.644	0.000	97	137882	200.0	194.9	
34 Methyl tert-butyl ether	73	4.705	4.705	0.000	93	286248	200.0	187.7	
35 Hexane	57	5.070	5.070	0.000	87	202593	200.0	160.3	
36 1,1-Dichloroethane	63	5.252	5.252	0.000	97	212881	200.0	171.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
41 2,2-Dichloropropane	77	6.000	6.000	0.000	84	158774	200.0	171.1	
42 cis-1,2-Dichloroethene	96	6.013	6.013	0.000	82	151184	200.0	194.2	
43 2-Butanone (MEK)	43	6.073	6.073	0.000	97	43766	200.0	187.0	
47 Chlorobromomethane	128	6.299	6.299	0.000	89	63045	200.0	215.0	
48 Tetrahydrofuran	42	6.372	6.372	0.000	81	38191	400.0	248.6	
49 Chloroform	83	6.420	6.420	0.000	94	218818	200.0	196.2	
50 1,1,1-Trichloroethane	97	6.609	6.609	0.000	98	181159	200.0	217.8	
51 Cyclohexane	56	6.676	6.676	0.000	85	223526	200.0	148.5	
53 Carbon tetrachloride	117	6.803	6.803	0.000	97	146801	200.0	235.4	
52 1,1-Dichloropropene	75	6.803	6.803	0.000	98	182999	200.0	201.0	
54 Isobutyl alcohol	41	7.029	7.029	0.000	95	49163	5000.0	3615.8	
55 Benzene	78	7.035	7.035	0.000	96	516424	200.0	191.1	
56 1,2-Dichloroethane	62	7.059	7.059	0.000	98	145439	200.0	197.9	
59 n-Heptane	43	7.363	7.363	0.000	85	164614	200.0	139.3	
60 Trichloroethene	130	7.746	7.746	0.000	98	142812	200.0	217.0	
63 Methylcyclohexane	83	7.947	7.947	0.000	87	263953	200.0	184.5	
64 1,2-Dichloropropane	63	7.978	7.978	0.000	93	113412	200.0	173.8	
65 Dibromomethane	93	8.093	8.093	0.000	97	62552	200.0	203.4	
67 1,4-Dioxane	88	8.136	8.136	0.000	94	21887	4000.0	4186.8	
68 Dichlorobromomethane	83	8.270	8.270	0.000	99	124408	200.0	197.9	
71 cis-1,3-Dichloropropene	75	8.732	8.732	0.000	97	163968	200.0	190.3	
72 4-Methyl-2-pentanone (MIBK	43	8.896	8.896	0.000	92	83114	200.0	163.5	
73 Toluene	91	9.066	9.066	0.000	98	578495	200.0	184.9	
74 trans-1,3-Dichloropropene	75	9.292	9.292	0.000	91	133610	200.0	168.3	
75 Ethyl methacrylate	69	9.389	9.389	0.000	86	127309	200.0	173.7	
76 1,1,2-Trichloroethane	97	9.474	9.474	0.000	90	97185	200.0	181.4	
77 Tetrachloroethene	164	9.620	9.620	0.000	97	114189	200.0	193.5	
78 1,3-Dichloropropane	76	9.638	9.638	0.000	86	168525	200.0	173.3	
79 2-Hexanone	43	9.730	9.730	0.000	92	63711	200.0	191.9	
81 Chlorodibromomethane	129	9.863	9.863	0.000	90	81927	200.0	171.7	
82 Ethylene Dibromide	107	9.973	9.973	0.000	98	94731	200.0	183.9	
83 Chlorobenzene	112	10.466	10.466	0.000	95	383389	200.0	188.4	
85 1,1,1,2-Tetrachloroethane	131	10.551	10.551	0.000	95	111044	200.0	191.5	
86 Ethylbenzene	106	10.581	10.581	0.000	98	217810	200.0	191.8	
87 m-Xylene & p-Xylene	106	10.697	10.697	0.000	99	269970	200.0	189.1	
88 o-Xylene	106	11.092	11.092	0.000	96	268910	200.0	192.3	
89 Styrene	104	11.104	11.104	0.000	93	445573	200.0	194.1	
90 Bromoform	173	11.281	11.281	0.000	95	38720	200.0	152.9	
91 Isopropylbenzene	105	11.457	11.457	0.000	96	716161	200.0	190.5	
93 1,1,2,2-Tetrachloroethane	83	11.743	11.743	0.000	96	115459	200.0	171.8	
94 Bromobenzene	156	11.761	11.761	0.000	93	159975	200.0	194.2	
95 1,2,3-Trichloropropane	110	11.792	11.792	0.000	85	38541	200.0	181.7	
96 trans-1,4-Dichloro-2-buten	53	11.804	11.804	0.000	83	26232	200.0	137.0	
97 N-Propylbenzene	120	11.865	11.865	0.000	98	205953	200.0	193.1	
98 2-Chlorotoluene	126	11.956	11.956	0.000	97	164723	200.0	186.6	
99 1,3,5-Trimethylbenzene	105	12.041	12.041	0.000	95	602949	200.0	186.8	
100 4-Chlorotoluene	126	12.060	12.060	0.000	99	173485	200.0	196.4	
101 tert-Butylbenzene	119	12.370	12.370	0.000	91	559212	200.0	196.1	
103 1,2,4-Trimethylbenzene	105	12.418	12.418	0.000	97	612721	200.0	183.6	
104 sec-Butylbenzene	105	12.589	12.589	0.000	94	801914	200.0	184.0	
105 1,3-Dichlorobenzene	146	12.698	12.698	0.000	97	332188	200.0	193.3	
106 4-Isopropyltoluene	119	12.735	12.735	0.000	96	683765	200.0	197.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.790	12.790	0.000	94	324216	200.0	193.4	
110 n-Butylbenzene	91	13.142	13.142	0.000	97	632355	200.0	183.4	
111 1,2-Dichlorobenzene	146	13.161	13.161	0.000	98	303446	200.0	195.3	
112 1,2-Dibromo-3-Chloropropan	75	13.933	13.933	0.000	87	14260	200.0	145.4	
114 1,2,4-Trichlorobenzene	180	14.779	14.779	0.000	94	201366	200.0	175.3	
115 Hexachlorobutadiene	225	14.955	14.955	0.000	98	107148	200.0	151.5	
116 Naphthalene	128	15.028	15.028	0.000	97	385112	200.0	177.4	
117 1,2,3-Trichlorobenzene	180	15.278	15.278	0.000	95	165275	200.0	173.3	
S 130 1,2-Dichloroethene, Total	96				0		400.0	389.1	
S 129 Xylenes, Total	106				0		400.0	381.3	
S 131 1,3-Dichloropropene, Total	1				0		400.0	358.6	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VOA8260VOAPRI_00244	Amount Added:	8.00	Units: uL
VOA8260SURR_00066	Amount Added:	8.00	Units: uL
VOA8260INT_00067	Amount Added:	10.00	Units: uL

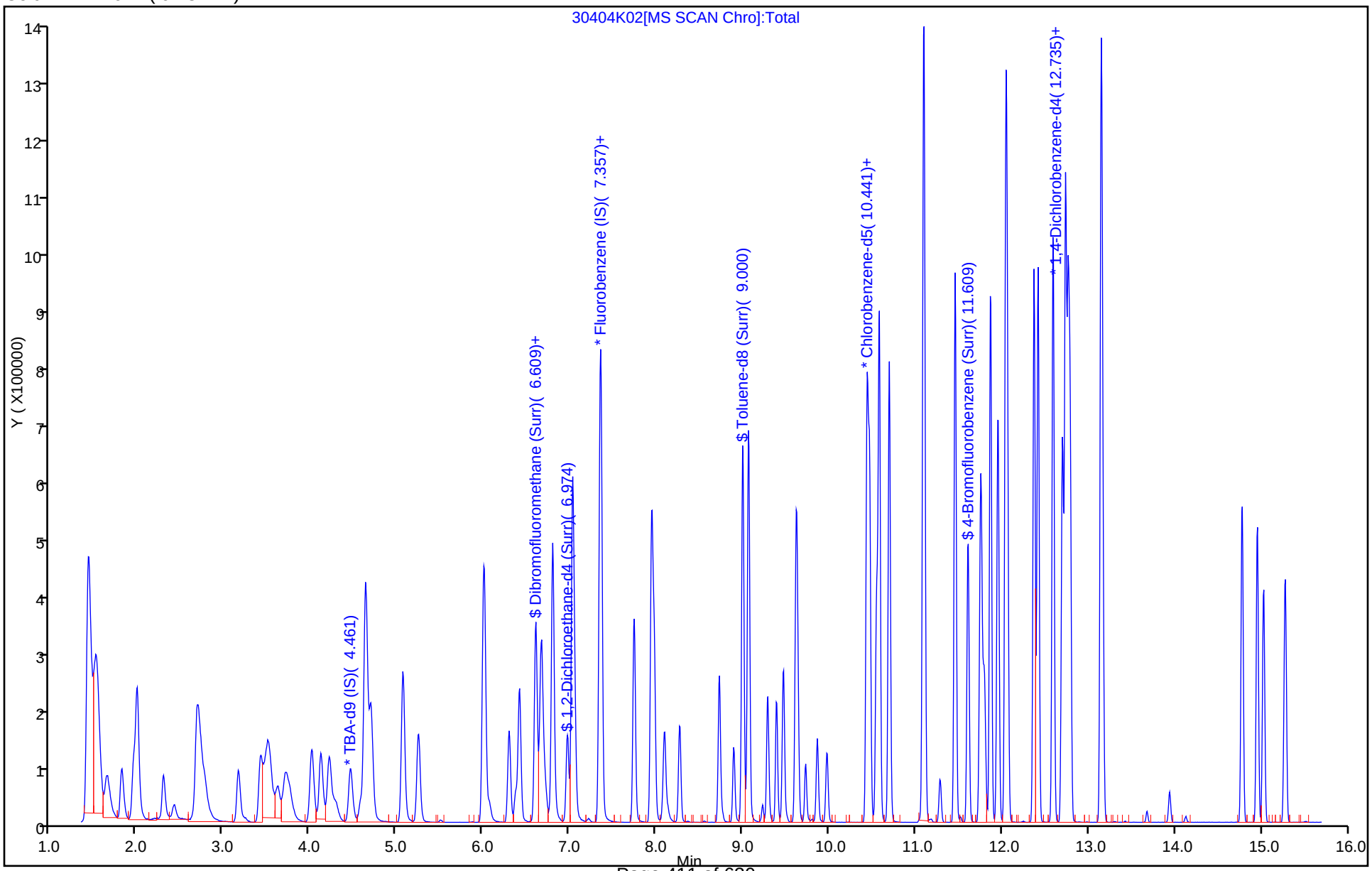
Report Date: 04-Apr-2017 10:38:25 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K02.D

Injection Date:	04-Apr-2017 07:27:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K01.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 28-Sep-2016 10:45:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Sep-2016 18:47:35 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK001

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 9 BFB	95	8.401	8.401	0.000	0	341600	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

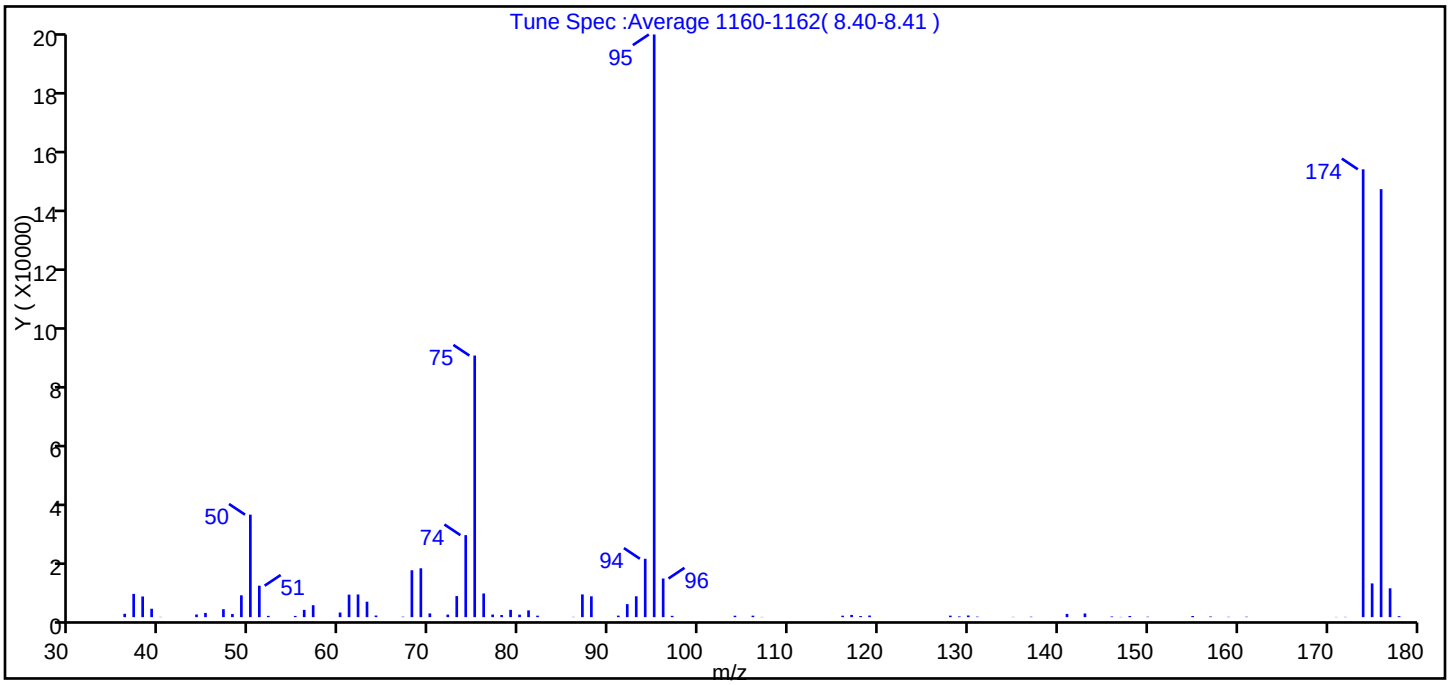
VOABFB50_00082 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K01.D
Injection Date: 28-Sep-2016 10:45:30 Instrument ID: CHHP3
Lims ID: BFB
Client ID:
Operator ID: 10099 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_S_CHHP3 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.6
75	30 to 60% of m/z 95	44.9
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	76.9
175	5 to 9% of m/z 174	5.8 (7.5)
176	Greater than 95% but less than 101% of m/z 174	73.5 (95.6)
177	5 to 9% of m/z 176	5.0 (6.7)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K01.D\MSVOA_S_CHHP3.rslt\spectr
Injection Date: 28-Sep-2016 10:45:30
Spectrum: Tune Spec :Average 1160-1162(8.40-8.41)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 76

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1100	63.00	5039	88.00	6787	135.00	83
37.00	7588	64.00	532	91.00	495	137.00	142
38.00	6741	67.00	148	92.00	4247	141.00	1056
39.00	2738	68.00	15288	93.00	6799	143.00	1191
40.00	79	69.00	15934	94.00	19040	146.00	218
44.00	863	70.00	1222	95.00	190016	147.00	73
45.00	1376	72.00	831	96.00	12600	148.00	362
47.00	2593	73.00	6860	97.00	430	150.00	142
48.00	1014	74.00	26744	104.00	465	155.00	378
49.00	7115	75.00	85304	106.00	481	157.00	203
50.00	33424	76.00	7716	107.00	72	159.00	104
51.00	10258	77.00	850	116.00	469	161.00	143
52.00	416	78.00	676	117.00	725	171.00	67
55.00	399	79.00	2379	118.00	351	172.00	81
56.00	2375	80.00	811	119.00	522	174.00	146048
57.00	3895	81.00	2203	128.00	484	175.00	11000
60.00	1509	82.00	482	129.00	236	176.00	139584
61.00	7339	86.00	85	130.00	539	177.00	9412
62.00	7400	87.00	7413	131.00	167	178.00	307

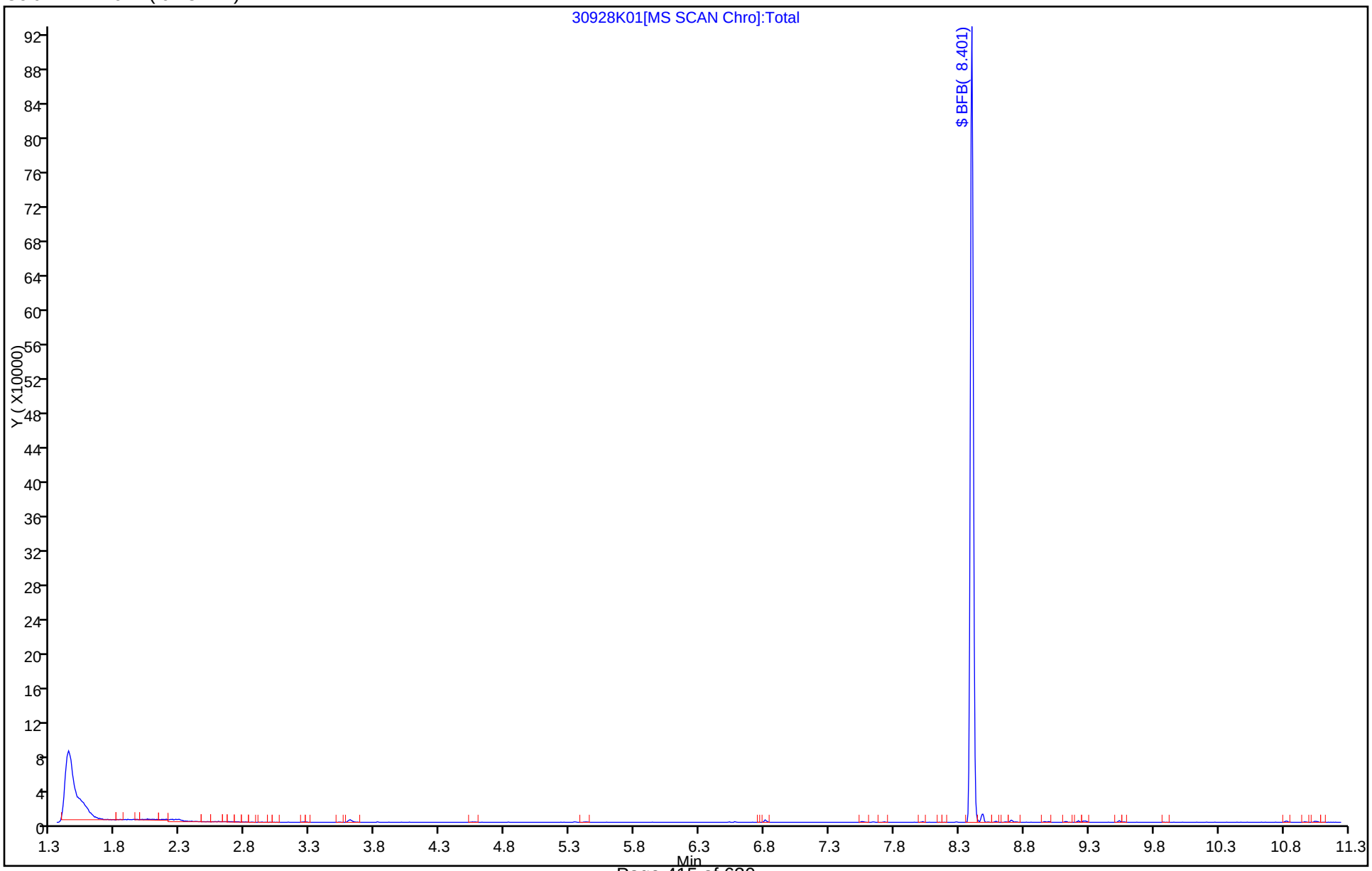
Report Date: 28-Sep-2016 18:47:36 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K01.D

Injection Date:	28-Sep-2016 10:45:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040301.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 03-Apr-2017 06:13:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 08:18:12 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 08:18:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 9 BFB	95	8.401	8.401	0.000	0	514348	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

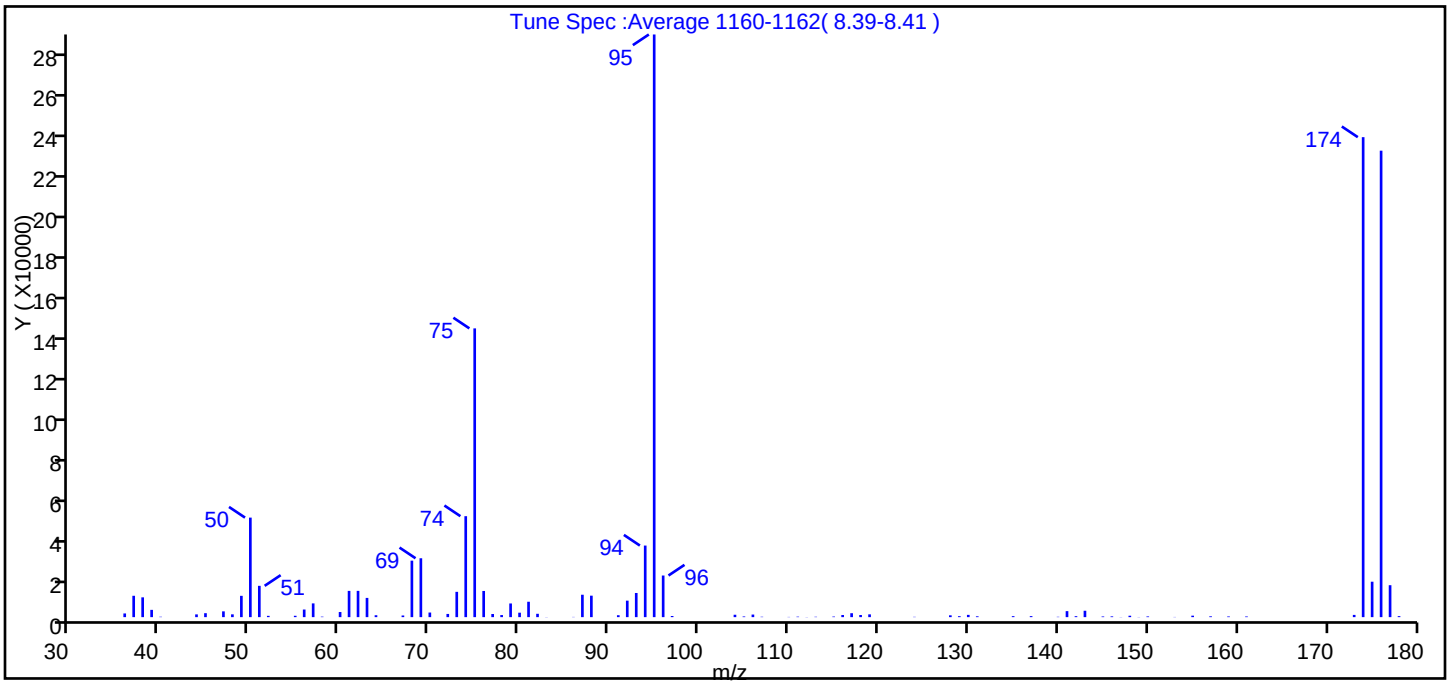
VOABFB50_00089 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040301.D
Injection Date: 03-Apr-2017 06:13:30 Instrument ID: CHHP3
Lims ID: BFB
Client ID:
Operator ID: 10099 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_S_CHHP3 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.1
75	30 to 60% of m/z 95	49.6
96	5 to 9% of m/z 95	7.1
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	82.4
175	5 to 9% of m/z 174	6.1 (7.4)
176	Greater than 95% but less than 101% of m/z 174	80.1 (97.2)
177	5 to 9% of m/z 176	5.5 (6.8)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040301.D\MSVOA_S_CHHP3.rslt\spectra
Injection Date: 03-Apr-2017 06:13:30
Spectrum: Tune Spec :Average 1160-1162(8.39-8.41)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 89

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1835	68.00	28096	96.00	20704	141.00	2988
37.00	10622	69.00	29288	97.00	563	142.00	476
38.00	9846	70.00	2294	104.00	1192	143.00	3178
39.00	3623	72.00	1596	105.00	338	145.00	334
40.00	194	73.00	12584	106.00	1289	146.00	378
44.00	1371	74.00	50216	107.00	196	147.00	70
45.00	1970	75.00	143616	110.00	108	148.00	701
47.00	2882	76.00	13017	111.00	242	149.00	74
48.00	1395	77.00	1563	112.00	71	150.00	351
49.00	10598	78.00	1035	113.00	188	153.00	95
50.00	49504	79.00	6803	115.00	292	155.00	732
51.00	15572	80.00	2216	116.00	1057	157.00	407
52.00	648	81.00	7657	117.00	1958	159.00	340
55.00	677	82.00	1669	118.00	1059	161.00	337
56.00	3790	83.00	72	119.00	1387	173.00	1114
57.00	6839	86.00	110	124.00	151	174.00	238720
58.00	245	87.00	11148	128.00	901	175.00	17624
60.00	2547	88.00	10679	129.00	475	176.00	232000
61.00	13056	91.00	956	130.00	1130	177.00	15886
62.00	13069	92.00	8200	131.00	418	178.00	501
63.00	9566	93.00	12014	135.00	485		
64.00	949	94.00	35600	137.00	506		
67.00	821	95.00	289792	140.00	172		

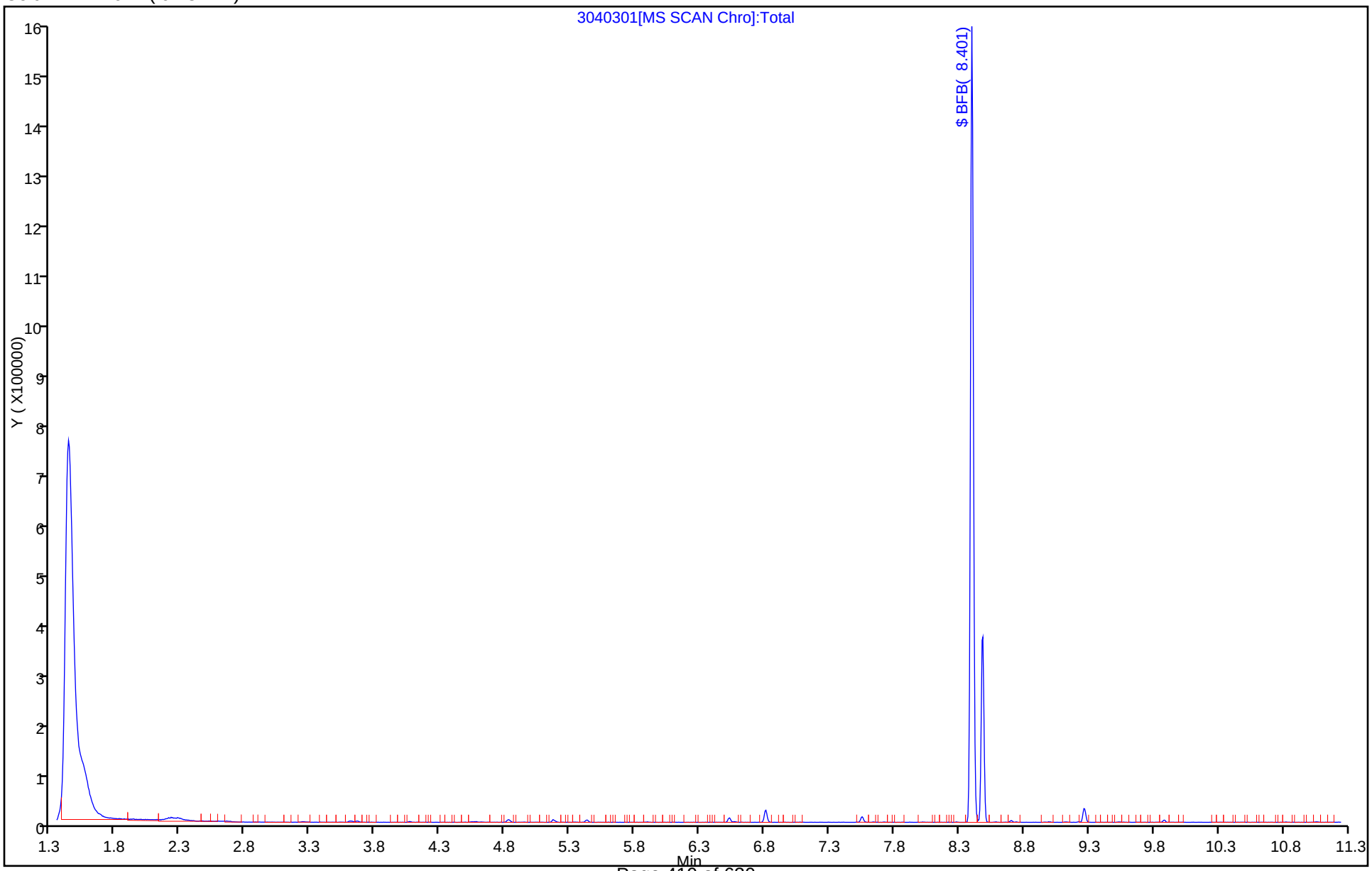
Report Date: 03-Apr-2017 08:18:12 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040301.D

Injection Date:	03-Apr-2017 06:13:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\3040401.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 04-Apr-2017 05:56:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 10:38:22 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 08:44:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 9 BFB	95	8.403	8.403	0.000	0	397165	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

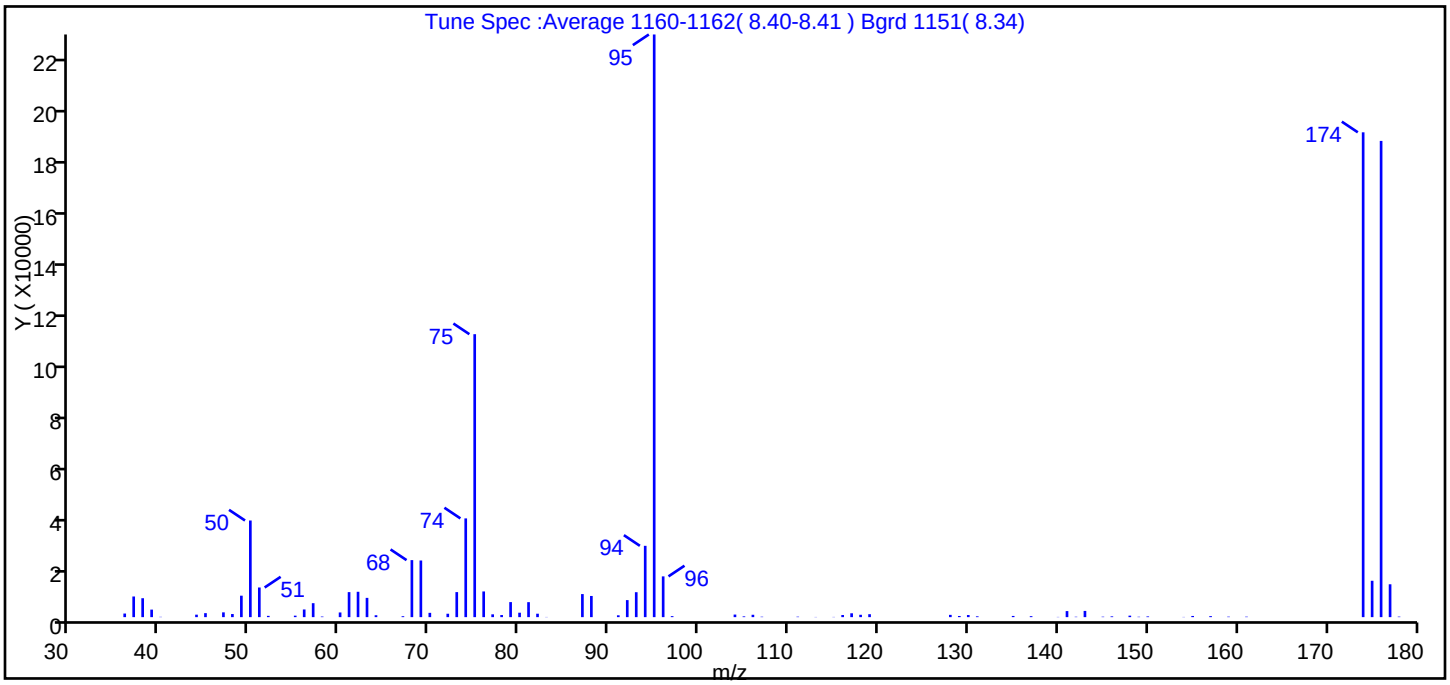
VOABFB50_00089 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\3040401.D
Injection Date: 04-Apr-2017 05:56:30 Instrument ID: CHHP3
Lims ID: BFB
Client ID:
Operator ID: 10099 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_S_CHHP3 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.6
75	30 to 60% of m/z 95	48.6
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	83.2
175	5 to 9% of m/z 174	6.2 (7.5)
176	Greater than 95% but less than 101% of m/z 174	81.7 (98.2)
177	5 to 9% of m/z 176	5.6 (6.9)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\3040401.D\MSVOA_S_CHHP3.rslt\spectra
Injection Date: 04-Apr-2017 05:56:30
Spectrum: Tune Spec :Average 1160-1162(8.40-8.41) Bgrd 1151(8.34)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 83

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1368	64.00	722	93.00	9480	137.00	369
37.00	7849	67.00	350	94.00	27104	140.00	82
38.00	7193	68.00	21672	95.00	221440	141.00	2302
39.00	2863	69.00	21528	96.00	15491	142.00	152
40.00	111	70.00	1637	97.00	377	143.00	2364
44.00	941	72.00	1297	104.00	980	145.00	172
45.00	1518	73.00	9516	105.00	288	146.00	292
47.00	1821	74.00	37528	106.00	903	148.00	563
48.00	1182	75.00	107536	107.00	162	149.00	146
49.00	8156	76.00	9765	111.00	176	150.00	272
50.00	36728	77.00	1072	113.00	70	154.00	76
51.00	11270	78.00	798	115.00	80	155.00	449
52.00	491	79.00	5718	116.00	809	157.00	382
55.00	562	80.00	1684	117.00	1468	159.00	184
56.00	2918	81.00	5695	118.00	898	161.00	178
57.00	5305	82.00	1306	119.00	1117	174.00	184256
58.00	224	83.00	70	128.00	866	175.00	13824
60.00	1780	87.00	8764	129.00	439	176.00	180992
61.00	9509	88.00	8048	130.00	799	177.00	12492
62.00	9638	91.00	700	131.00	313	178.00	198
63.00	7323	92.00	6474	135.00	456		

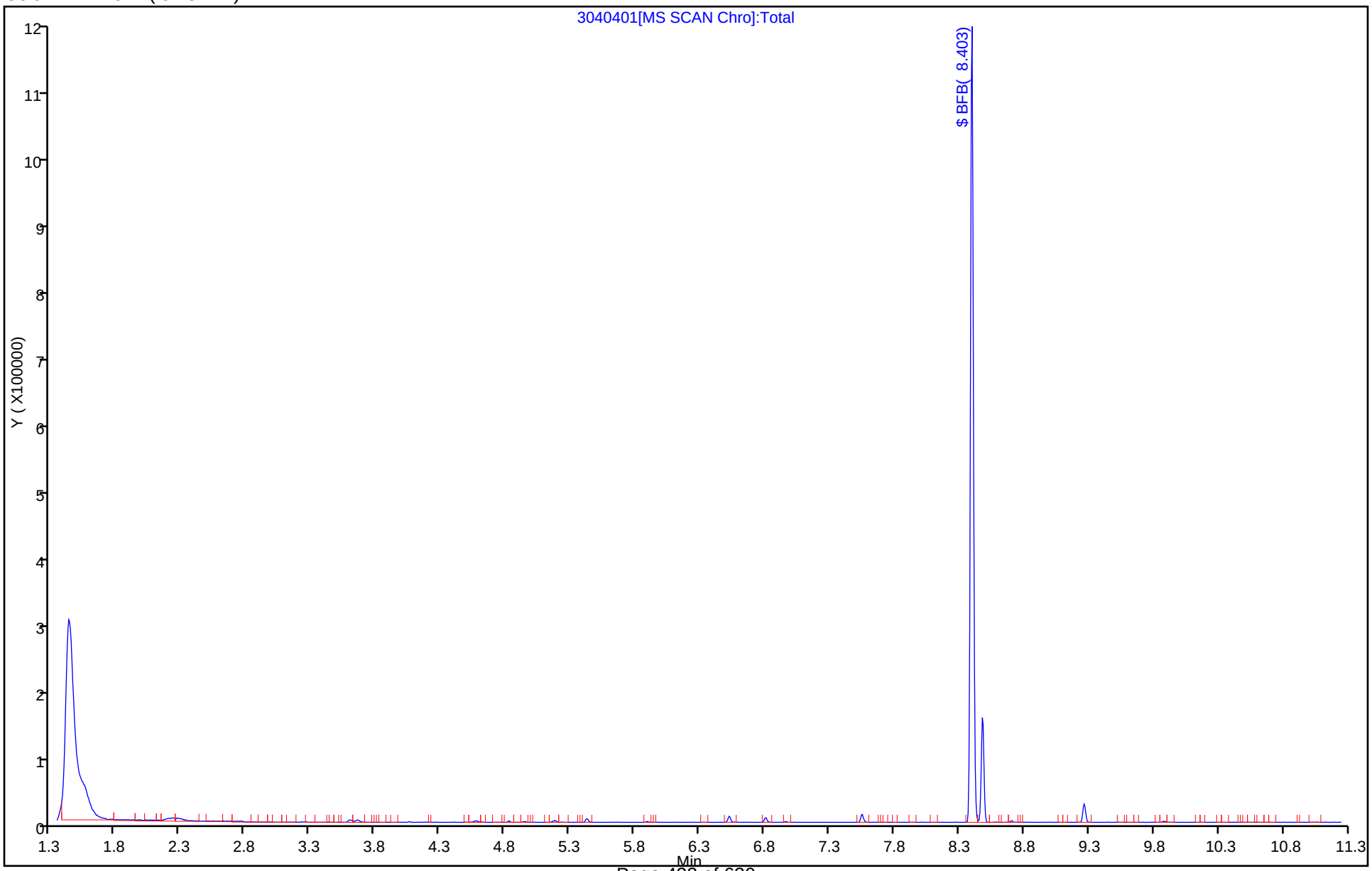
Report Date: 04-Apr-2017 10:38:23 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\3040401.D

Injection Date:	04-Apr-2017 05:56:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_S_CHHP3	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.: 180-64801-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-207111/8

Matrix: Solid | Lab File ID: 3040307.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/03/2017 09:10

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	2.7
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	1.1
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	4.0
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	2.8
75-34-3	1,1-Dichloroethane	5.0	U	5.0	1.1
75-35-4	1,1-Dichloroethene	5.0	U	5.0	1.5
107-06-2	1,2-Dichloroethane	5.0	U	5.0	1.1
78-87-5	1,2-Dichloropropane	5.0	U	5.0	1.9
78-93-3	2-Butanone (MEK)	5.0	U	5.0	3.0
591-78-6	2-Hexanone	5.0	U	5.0	4.1
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.6
67-64-1	Acetone	20	U	20	10
71-43-2	Benzene	5.0	U	5.0	3.0
75-25-2	Bromoform	5.0	U	5.0	4.6
74-83-9	Bromomethane	5.0	U	5.0	1.7
75-15-0	Carbon disulfide	5.0	U	5.0	2.1
56-23-5	Carbon tetrachloride	5.0	U	5.0	1.4
108-90-7	Chlorobenzene	5.0	U	5.0	2.2
124-48-1	Dibromochloromethane	5.0	U	5.0	2.5
123-91-1	1,4-Dioxane	1000	U	1000	25
67-66-3	Chloroform	5.0	U	5.0	1.3
74-87-3	Chloromethane	5.0	U	5.0	2.6
75-00-3	Chloroethane	5.0	U	5.0	2.1
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	1.3
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	2.2
75-27-4	Bromodichloromethane	5.0	U	5.0	2.0
100-41-4	Ethylbenzene	5.0	U	5.0	2.0
106-93-4	1,2-Dibromoethane (EDB)	5.0	U	5.0	2.1
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	2.5
75-09-2	Methylene Chloride	1.86	J	5.0	0.56
100-42-5	Styrene	5.0	U	5.0	2.3
127-18-4	Tetrachloroethene	5.0	U	5.0	1.2
108-88-3	Toluene	5.0	U	5.0	3.6
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	1.0
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	2.4
79-01-6	Trichloroethene	5.0	U	5.0	1.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-207111/8

Matrix: Solid | Lab File ID: 3040307.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/03/2017 09:10

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-13-1	Acrylonitrile	50	U	50	25
75-01-4	Vinyl chloride	5.0	U	5.0	2.6
1330-20-7	Xylenes, Total	10	U	10	4.6
74-97-5	Bromochloromethane	5.0	U	5.0	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		52-124
460-00-4	4-Bromofluorobenzene (Surr)	88		63-120
1868-53-7	Dibromofluoromethane (Surr)	104		68-121
2037-26-5	Toluene-d8 (Surr)	94		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040307.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-Apr-2017 09:10:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-008
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 09:36:17 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 09:36:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.411	4.464	-0.053	98	157568	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.355	7.348	0.007	99	606037	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.446	10.438	0.008	85	148378	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.764	12.762	0.002	96	219741	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.613	6.600	0.013	93	134734	250.0	258.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.978	6.971	0.007	95	167249	250.0	279.2	
$ 7 Toluene-d8 (Surr)	98	9.004	9.003	0.001	93	606196	250.0	236.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.608	11.606	0.002	86	228909	250.0	219.5	
10 Dichlorodifluoromethane	85		1.654					ND	
11 Chloromethane	50		1.812					ND	
12 Vinyl chloride	62		1.958					ND	
13 Butadiene	39		1.994					ND	
14 Bromomethane	94		2.299					ND	
15 Chloroethane	64		2.420					ND	
16 Dichlorofluoromethane	67		2.700					ND	
17 Trichlorofluoromethane	101		2.730					ND	
19 Ethyl ether	59		3.162					ND	
18 Ethanol	45		3.163					ND	
20 Acrolein	56		3.321					ND	
21 1,1-Dichloroethene	96		3.424					ND	
22 1,1,2-Trichloro-1,2,2-trif	101		3.527					ND	
23 Acetone	43		3.594					ND	
24 Iodomethane	142		3.625					ND	
25 Carbon disulfide	76		3.716					ND	
26 Isopropyl alcohol	45		3.886					ND	
28 3-Chloro-1-propene	76		4.014					ND	
27 Acetonitrile	40		4.021					ND	
29 Methyl acetate	43		4.118					ND	
30 Methylene Chloride	84	4.235	4.221	0.014	86	7346		9.32	M
31 2-Methyl-2-propanol	59		4.580					ND	
32 Acrylonitrile	53		4.635					ND	
33 trans-1,2-Dichloroethene	96		4.641					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
34 Methyl tert-butyl ether	73		4.695					ND	
35 Hexane	57	5.086	5.067	0.019	86	5940		4.79	
36 1,1-Dichloroethane	63		5.249					ND	
37 Vinyl acetate	43		5.371					ND	
38 2-Chloro-1,3-butadiene	53		5.388					ND	
39 Isopropyl ether	45		5.419					ND	
40 Tert-butyl ethyl ether	59		5.887					ND	
41 2,2-Dichloropropane	77		6.003					ND	
42 cis-1,2-Dichloroethene	96		6.009					ND	
43 2-Butanone (MEK)	43		6.070					ND	
45 Ethyl acetate	43		6.071					ND	
44 Propionitrile	54		6.130					ND	
47 Chlorobromomethane	128		6.295					ND	
46 Methacrylonitrile	41		6.313					ND	
48 Tetrahydrofuran	42		6.374					ND	
49 Chloroform	83		6.417					ND	
50 1,1,1-Trichloroethane	97		6.612					ND	
51 Cyclohexane	56		6.673					ND	
53 Carbon tetrachloride	117		6.800					ND	
52 1,1-Dichloropropene	75		6.806					ND	
54 Isobutyl alcohol	41		7.025					ND	
58 Isooctane	57		7.026					ND	
55 Benzene	78		7.031					ND	
56 1,2-Dichloroethane	62		7.056					ND	
57 Tert-amyl methyl ether	73		7.355					ND	
59 n-Heptane	43		7.366					ND	
61 n-Butanol	56		7.724					ND	
60 Trichloroethene	130		7.743					ND	
63 Methylcyclohexane	83		7.950					ND	
66 Methyl methacrylate	69		7.951					ND	
62 Ethyl acrylate	55		7.951					ND	
64 1,2-Dichloropropane	63		7.981					ND	
65 Dibromomethane	93		8.096					ND	
67 1,4-Dioxane	88		8.133					ND	
68 Dichlorobromomethane	83		8.273					ND	
69 2-Nitropropane	41		8.590					ND	
71 cis-1,3-Dichloropropene	75		8.729					ND	
70 2-Chloroethyl vinyl ether	63		8.729					ND	
72 4-Methyl-2-pentanone (MIBK	43		8.893					ND	
73 Toluene	91		9.069					ND	
74 trans-1,3-Dichloropropene	75		9.288					ND	
75 Ethyl methacrylate	69		9.392					ND	
76 1,1,2-Trichloroethane	97		9.471					ND	
77 Tetrachloroethene	164		9.617					ND	
78 1,3-Dichloropropane	76		9.635					ND	
79 2-Hexanone	43		9.726					ND	
80 n-Butyl acetate	43		9.861					ND	
81 Chlorodibromomethane	129		9.866					ND	
82 Ethylene Dibromide	107		9.976					ND	
83 Chlorobenzene	112		10.469					ND	
85 1,1,1,2-Tetrachloroethane	131		10.548					ND	
86 Ethylbenzene	106		10.578					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
87 m-Xylene & p-Xylene	106		10.694					ND	
84 4-Chlorobenzotrifluoride	180		10.745					ND	
88 o-Xylene	106		11.089					ND	
89 Styrene	104		11.101					ND	
90 Bromoform	173		11.284					ND	
91 Isopropylbenzene	105		11.460					ND	
92 Cyclohexanone	55		11.522					ND	
93 1,1,2,2-Tetrachloroethane	83		11.746					ND	
94 Bromobenzene	156		11.758					ND	
95 1,2,3-Trichloropropane	110		11.789					ND	
96 trans-1,4-Dichloro-2-buten	53		11.801					ND	
97 N-Propylbenzene	120		11.868					ND	
98 2-Chlorotoluene	126		11.953					ND	
99 1,3,5-Trimethylbenzene	105		12.044					ND	
100 4-Chlorotoluene	126		12.063					ND	
101 tert-Butylbenzene	119		12.373					ND	
102 Pentachloroethane	167		12.397					ND	
103 1,2,4-Trimethylbenzene	105		12.415					ND	
104 sec-Butylbenzene	105		12.592					ND	
105 1,3-Dichlorobenzene	146		12.701					ND	
106 4-Isopropyltoluene	119		12.738					ND	
108 1,2,3-Trimethylbenzene	105		12.738					ND	
107 1,4-Dichlorobenzene	146		12.786					ND	
109 Benzyl chloride	91		12.926					ND	
110 n-Butylbenzene	91		13.145					ND	
111 1,2-Dichlorobenzene	146		13.164					ND	
112 1,2-Dibromo-3-Chloropropan	75		13.936					ND	
113 1,3,5-Trichlorobenzene	180		14.161					ND	
114 1,2,4-Trichlorobenzene	180		14.782					ND	
115 Hexachlorobutadiene	225		14.952					ND	
116 Naphthalene	128		15.025					ND	
117 1,2,3-Trichlorobenzene	180		15.275					ND	
118 2-Methylnaphthalene	142		16.363					ND	
126 2,4-Dichloro-1-(triflourom	214		0.000					ND	
121 1,2-dichloro-4-(trifluorom	214		0.000					ND	
122 3-Chlorotoluene	126		0.000					ND	
128 2,3,6-Trichlorotoluene	159		0.000					ND	
127 2-Chlorobenzotrifluoride	180		0.000					ND	
125 2,3- & 3,4- Dichlorotoluen	125		0.000					ND	
119 2,5-Dichlorobenzotrifluori	214		0.000					ND	
124 2,4,5-Trichlorotoluene	159		0.000					ND	
120 2,4- & 2,5- & 2,6- Dichlor	125		0.000					ND	
123 3-Chlorobenzotrifluoride	180		0.000					ND	
S 130 1,2-Dichloroethene, Total	96		1.000					ND	
S 129 Xylenes, Total	106		1.000					ND	
S 131 1,3-Dichloropropene, Total	1		0.000					ND	
T 134 Tetrahydrofuran TIC	42		0.000					ND	
T 133 Methyl n-amyl ketone TIC	43		0.000					ND	
T 132 Mesityl oxide TIC	83		7.968					ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00067	Amount Added:	10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added:	10.00	Units: uL	Run Reagent

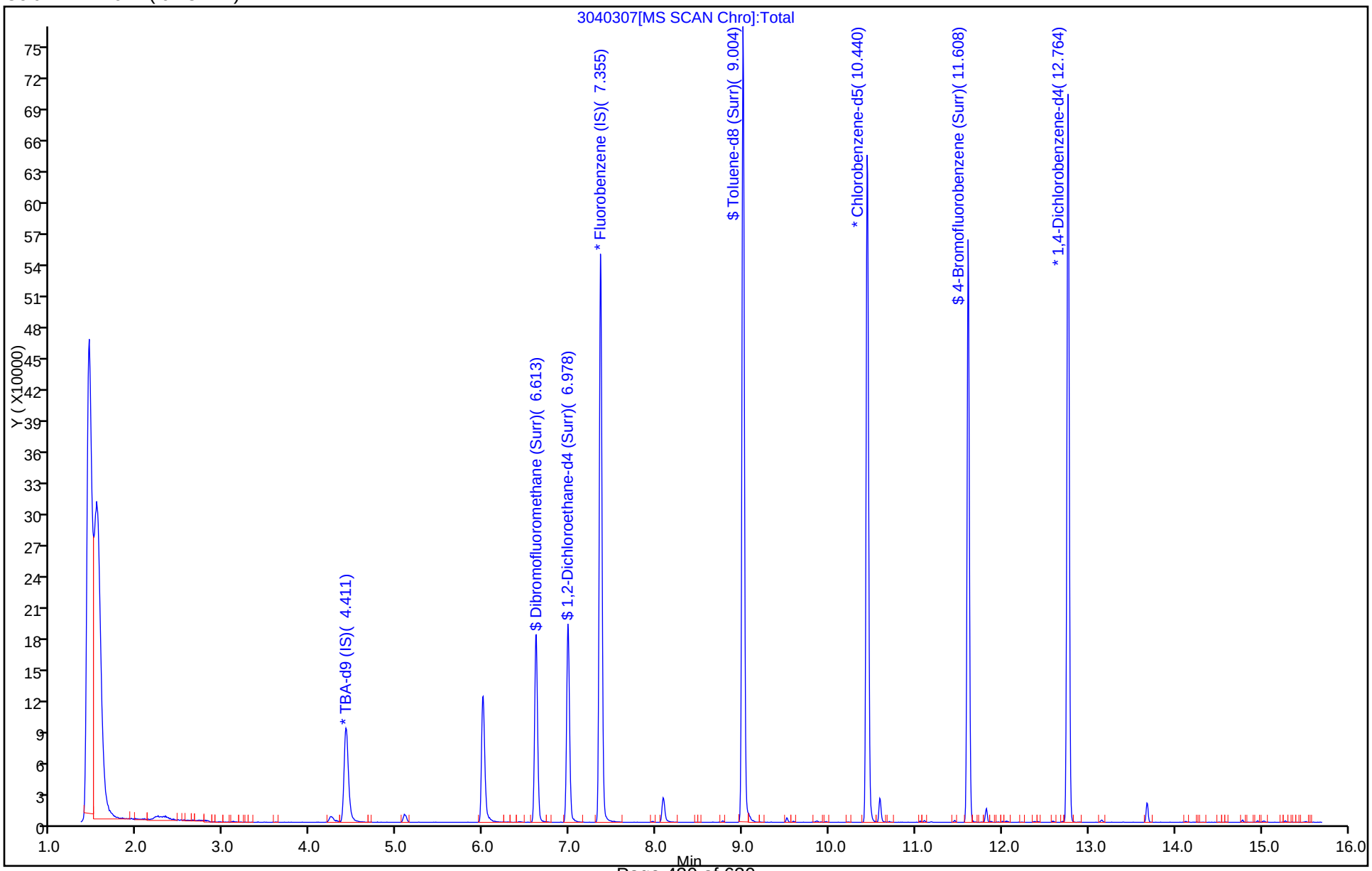
Report Date: 03-Apr-2017 09:36:18 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040307.D

Injection Date:	03-Apr-2017 09:10:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040307.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-Apr-2017 09:10:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-008
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 09:36:17 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 09:36:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	258.9	103.55
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	279.2	111.66
$ 7 Toluene-d8 (Surr)	250.0	236.0	94.38
$ 8 4-Bromofluorobenzene (Surr)	250.0	219.5	87.82

Report Date: 03-Apr-2017 09:36:18 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040307.D

Injection Date: 03-Apr-2017 09:10:30 Instrument ID: CHHP3

Lims ID: MB

Client ID:

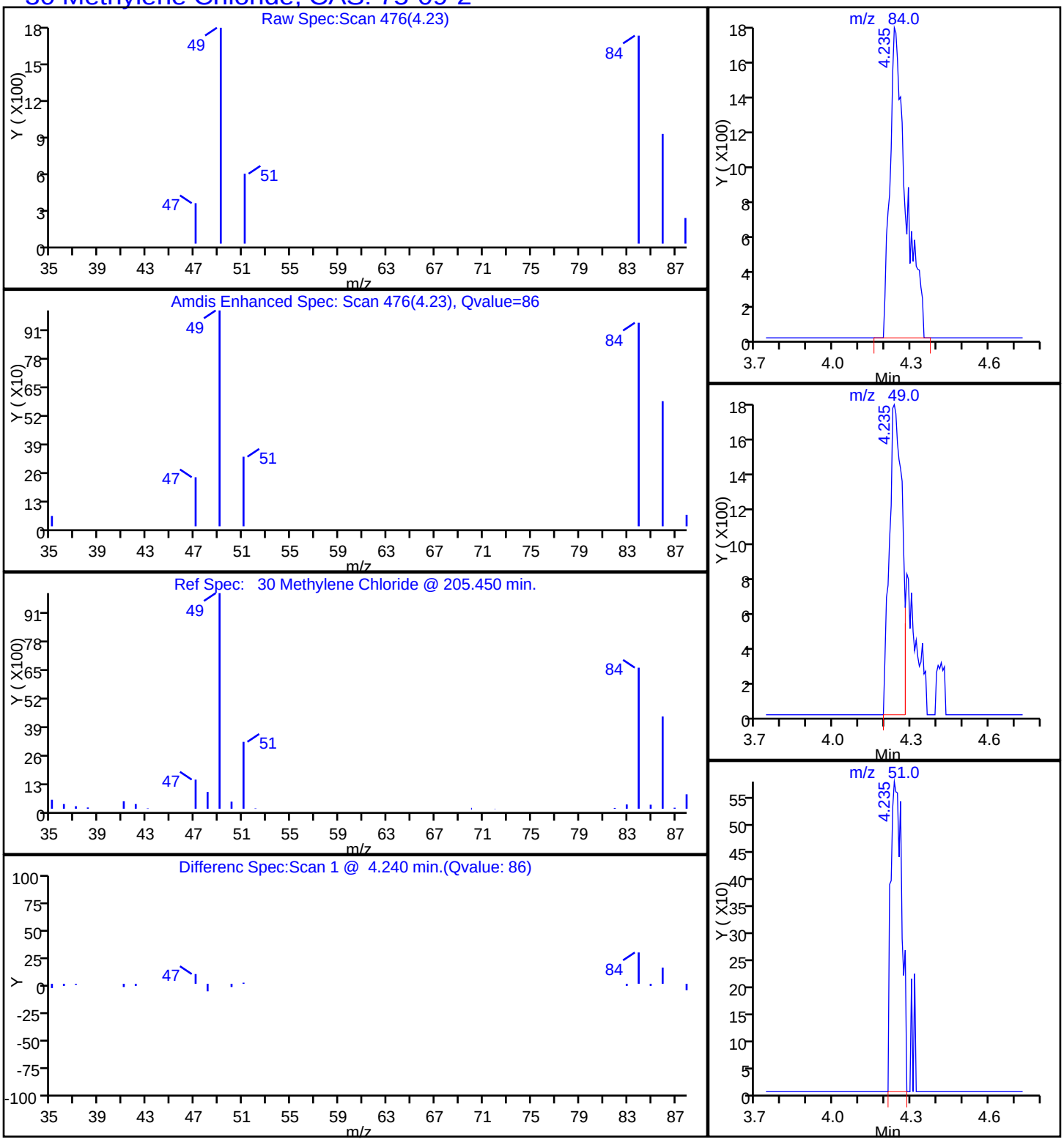
Operator ID: 10099 ALS Bottle#: 7 Worklist Smp#: 8

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: MSVOA_S_CHHP3 Limit Group: VOA 8260C ICAL

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

30 Methylene Chloride, CAS: 75-09-2



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

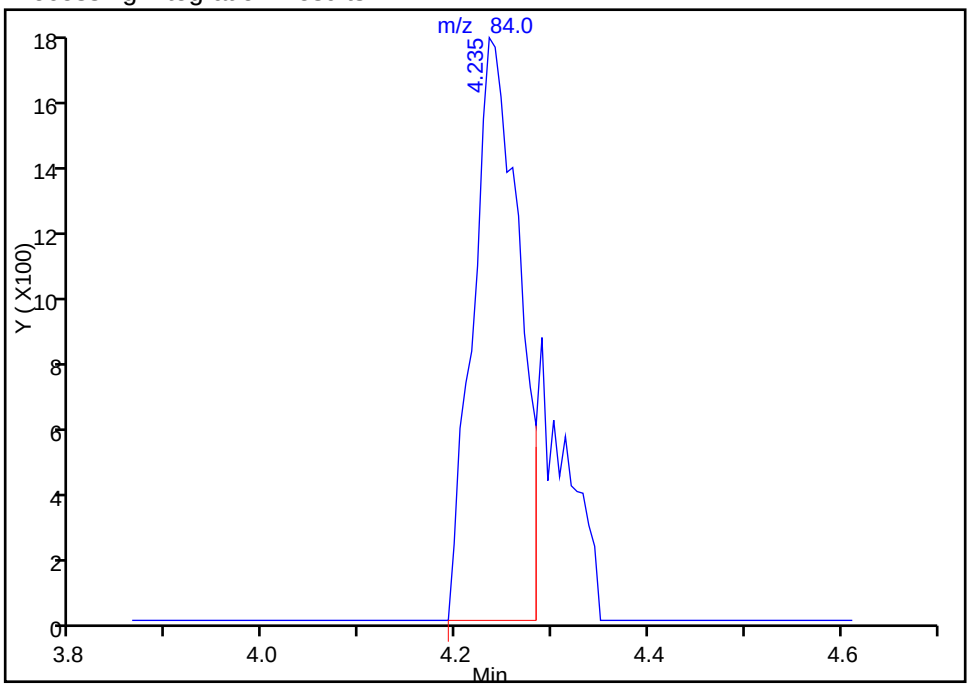
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040307.D
Injection Date: 03-Apr-2017 09:10:30 Instrument ID: CHHP3
Lims ID: MB
Client ID:
Operator ID: 10099 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_S_CHHP3 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

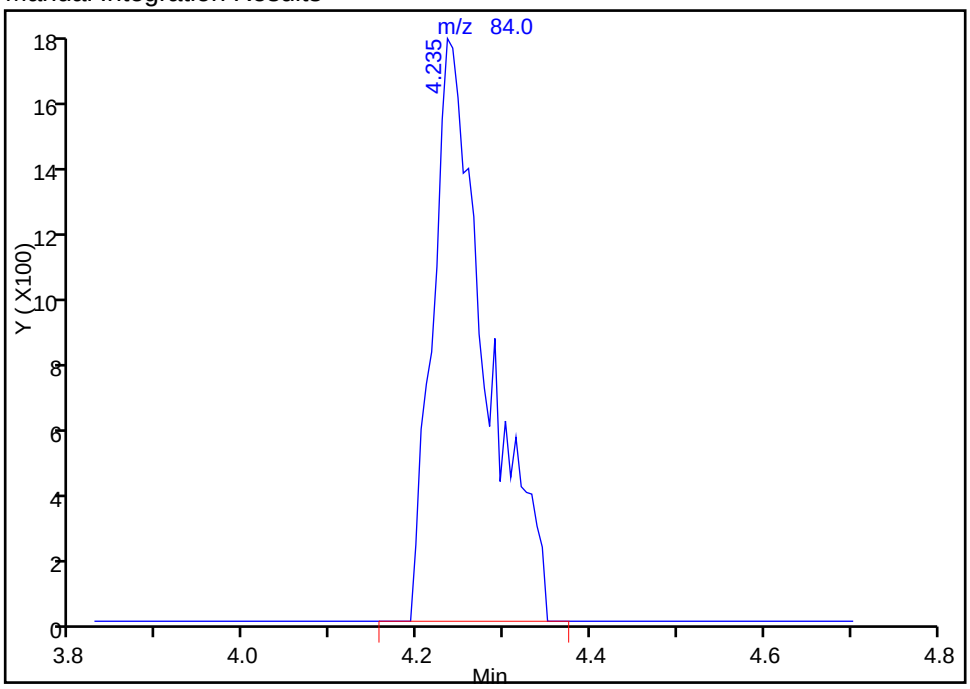
Processing Integration Results

RT: 4.23
Area: 5724
Amount: 7.264182
Amount Units: ng



Manual Integration Results

RT: 4.23
Area: 7346
Amount: 9.322620
Amount Units: ng



Reviewer: gordonk, 03-Apr-2017 09:35:19
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-207218/8

Matrix: Solid | Lab File ID: 30404K07.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/04/2017 09:40

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 207218 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	2.7
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	1.1
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	4.0
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	2.8
75-34-3	1,1-Dichloroethane	5.0	U	5.0	1.1
75-35-4	1,1-Dichloroethene	5.0	U	5.0	1.5
107-06-2	1,2-Dichloroethane	5.0	U	5.0	1.1
78-87-5	1,2-Dichloropropane	5.0	U	5.0	1.9
78-93-3	2-Butanone (MEK)	5.0	U	5.0	3.0
591-78-6	2-Hexanone	5.0	U	5.0	4.1
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.6
67-64-1	Acetone	20	U	20	10
71-43-2	Benzene	5.0	U	5.0	3.0
75-25-2	Bromoform	5.0	U	5.0	4.6
74-83-9	Bromomethane	5.0	U	5.0	1.7
75-15-0	Carbon disulfide	5.0	U	5.0	2.1
56-23-5	Carbon tetrachloride	5.0	U	5.0	1.4
108-90-7	Chlorobenzene	5.0	U	5.0	2.2
124-48-1	Dibromochloromethane	5.0	U	5.0	2.5
123-91-1	1,4-Dioxane	1000	U	1000	25
67-66-3	Chloroform	5.0	U	5.0	1.3
74-87-3	Chloromethane	5.0	U	5.0	2.6
75-00-3	Chloroethane	5.0	U	5.0	2.1
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	1.3
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	2.2
75-27-4	Bromodichloromethane	5.0	U	5.0	2.0
100-41-4	Ethylbenzene	5.0	U	5.0	2.0
106-93-4	1,2-Dibromoethane (EDB)	5.0	U	5.0	2.1
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	2.5
75-09-2	Methylene Chloride	1.52	J	5.0	0.56
100-42-5	Styrene	5.0	U	5.0	2.3
127-18-4	Tetrachloroethene	5.0	U	5.0	1.2
108-88-3	Toluene	5.0	U	5.0	3.6
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	1.0
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	2.4
79-01-6	Trichloroethene	5.0	U	5.0	1.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-207218/8

Matrix: Solid | Lab File ID: 30404K07.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/04/2017 09:40

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 207218 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-13-1	Acrylonitrile	50	U	50	25
75-01-4	Vinyl chloride	5.0	U	5.0	2.6
1330-20-7	Xylenes, Total	10	U	10	4.6
74-97-5	Bromochloromethane	5.0	U	5.0	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		52-124
460-00-4	4-Bromofluorobenzene (Surr)	85		63-120
1868-53-7	Dibromofluoromethane (Surr)	104		68-121
2037-26-5	Toluene-d8 (Surr)	93		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K07.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 04-Apr-2017 09:40:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016141-008
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 10:38:24 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 09:59:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.415	4.461	-0.046	97	155485	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.360	7.351	0.009	99	616609	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.444	10.441	0.003	85	153190	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.765	0.003	96	224382	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.611	6.603	0.008	93	137563	250.0	259.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.982	6.974	0.008	95	169686	250.0	278.4	
$ 7 Toluene-d8 (Surr)	98	9.008	9.000	0.008	92	619375	250.0	233.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.609	0.003	92	229815	250.0	213.5	
10 Dichlorodifluoromethane	85		1.651					ND	
11 Chloromethane	50		1.821					ND	
12 Vinyl chloride	62		1.961					ND	
13 Butadiene	39		1.997					ND	
14 Bromomethane	94		2.302					ND	
15 Chloroethane	64		2.423					ND	
16 Dichlorofluoromethane	67		2.691					ND	
17 Trichlorofluoromethane	101		2.734					ND	
18 Ethanol	45		3.163					ND	
19 Ethyl ether	59		3.166					ND	
20 Acrolein	56		3.321					ND	
21 1,1-Dichloroethene	96		3.427					ND	
22 1,1,2-Trichloro-1,2,2-trif	101		3.518					ND	
23 Acetone	43		3.597					ND	
24 Iodomethane	142		3.628					ND	
25 Carbon disulfide	76		3.731					ND	
26 Isopropyl alcohol	45		3.886					ND	
28 3-Chloro-1-propene	76		4.011					ND	
27 Acetonitrile	40		4.021					ND	
29 Methyl acetate	43		4.121					ND	
30 Methylene Chloride	84	4.245	4.218	0.027	82	6101		7.61	M
31 2-Methyl-2-propanol	59		4.589					ND	
32 Acrylonitrile	53		4.632					ND	
33 trans-1,2-Dichloroethene	96		4.644					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
34 Methyl tert-butyl ether	73		4.705					ND	
35 Hexane	57	5.091	5.070	0.021	87	4271		3.39	
36 1,1-Dichloroethane	63		5.252					ND	
37 Vinyl acetate	43		5.371					ND	
38 2-Chloro-1,3-butadiene	53		5.388					ND	
39 Isopropyl ether	45		5.419					ND	
40 Tert-butyl ethyl ether	59		5.887					ND	
41 2,2-Dichloropropane	77		6.000					ND	
42 cis-1,2-Dichloroethene	96		6.013					ND	
45 Ethyl acetate	43		6.071					ND	
43 2-Butanone (MEK)	43		6.073					ND	
44 Propionitrile	54		6.130					ND	
47 Chlorobromomethane	128		6.299					ND	
46 Methacrylonitrile	41		6.313					ND	
48 Tetrahydrofuran	42		6.372					ND	
49 Chloroform	83		6.420					ND	
50 1,1,1-Trichloroethane	97		6.609					ND	
51 Cyclohexane	56		6.676					ND	
53 Carbon tetrachloride	117		6.803					ND	
52 1,1-Dichloropropene	75		6.803					ND	
58 Isooctane	57		7.026					ND	
54 Isobutyl alcohol	41		7.029					ND	
55 Benzene	78		7.035					ND	
56 1,2-Dichloroethane	62		7.059					ND	
57 Tert-amyl methyl ether	73		7.355					ND	
59 n-Heptane	43		7.363					ND	
61 n-Butanol	56		7.724					ND	
60 Trichloroethene	130		7.746					ND	
63 Methylcyclohexane	83		7.947					ND	
66 Methyl methacrylate	69		7.951					ND	
62 Ethyl acrylate	55		7.951					ND	
64 1,2-Dichloropropane	63		7.978					ND	
65 Dibromomethane	93		8.093					ND	
67 1,4-Dioxane	88		8.136					ND	
68 Dichlorobromomethane	83		8.270					ND	
69 2-Nitropropane	41		8.590					ND	
70 2-Chloroethyl vinyl ether	63		8.729					ND	
71 cis-1,3-Dichloropropene	75		8.732					ND	
72 4-Methyl-2-pentanone (MIBK	43		8.896					ND	
73 Toluene	91		9.066					ND	
74 trans-1,3-Dichloropropene	75		9.292					ND	
75 Ethyl methacrylate	69		9.389					ND	
76 1,1,2-Trichloroethane	97		9.474					ND	
77 Tetrachloroethene	164		9.620					ND	
78 1,3-Dichloropropane	76		9.638					ND	
79 2-Hexanone	43		9.730					ND	
80 n-Butyl acetate	43		9.861					ND	
81 Chlorodibromomethane	129		9.863					ND	
82 Ethylene Dibromide	107		9.973					ND	
83 Chlorobenzene	112		10.466					ND	
85 1,1,1,2-Tetrachloroethane	131		10.551					ND	
86 Ethylbenzene	106		10.581					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
87 m-Xylene & p-Xylene	106		10.697					ND	
84 4-Chlorobenzotrifluoride	180		10.745					ND	
88 o-Xylene	106		11.092					ND	
89 Styrene	104		11.104					ND	
90 Bromoform	173		11.281					ND	
91 Isopropylbenzene	105		11.457					ND	
92 Cyclohexanone	55		11.522					ND	
93 1,1,2,2-Tetrachloroethane	83		11.743					ND	
94 Bromobenzene	156		11.761					ND	
95 1,2,3-Trichloropropane	110		11.792					ND	
96 trans-1,4-Dichloro-2-buten	53		11.804					ND	
97 N-Propylbenzene	120		11.865					ND	
98 2-Chlorotoluene	126		11.956					ND	
99 1,3,5-Trimethylbenzene	105		12.041					ND	
100 4-Chlorotoluene	126		12.060					ND	
101 tert-Butylbenzene	119		12.370					ND	
102 Pentachloroethane	167		12.397					ND	
103 1,2,4-Trimethylbenzene	105		12.418					ND	
104 sec-Butylbenzene	105		12.589					ND	
105 1,3-Dichlorobenzene	146		12.698					ND	
106 4-Isopropyltoluene	119		12.735					ND	
108 1,2,3-Trimethylbenzene	105		12.738					ND	
107 1,4-Dichlorobenzene	146		12.790					ND	
109 Benzyl chloride	91		12.926					ND	
110 n-Butylbenzene	91		13.142					ND	
111 1,2-Dichlorobenzene	146		13.161					ND	
112 1,2-Dibromo-3-Chloropropan	75		13.933					ND	
113 1,3,5-Trichlorobenzene	180		14.161					ND	
114 1,2,4-Trichlorobenzene	180		14.779					ND	
115 Hexachlorobutadiene	225		14.955					ND	
116 Naphthalene	128		15.028					ND	
117 1,2,3-Trichlorobenzene	180		15.278					ND	
118 2-Methylnaphthalene	142		16.363					ND	
126 2,4-Dichloro-1-(triflourom	214		0.000					ND	
127 2-Chlorobenzotrifluoride	180		0.000					ND	
122 3-Chlorotoluene	126		0.000					ND	
128 2,3,6-Trichlorotoluene	159		0.000					ND	
124 2,4,5-Trichlorotoluene	159		0.000					ND	
125 2,3- & 3,4- Dichlorotoluen	125		0.000					ND	
119 2,5-Dichlorobenzotrifluori	214		0.000					ND	
121 1,2-dichloro-4-(trifluorom	214		0.000					ND	
120 2,4- & 2,5- & 2,6- Dichlor	125		0.000					ND	
123 3-Chlorobenzotrifluoride	180		0.000					ND	
S 130 1,2-Dichloroethene, Total	96		1.000					ND	
S 129 Xylenes, Total	106		1.000					ND	
S 131 1,3-Dichloropropene, Total	1		0.000					ND	
T 134 Tetrahydrofuran TIC	42		0.000					ND	
T 133 Methyl n-amyl ketone TIC	43		0.000					ND	
T 132 Mesityl oxide TIC	83		7.968					ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00067	Amount Added:	10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added:	10.00	Units: uL	Run Reagent

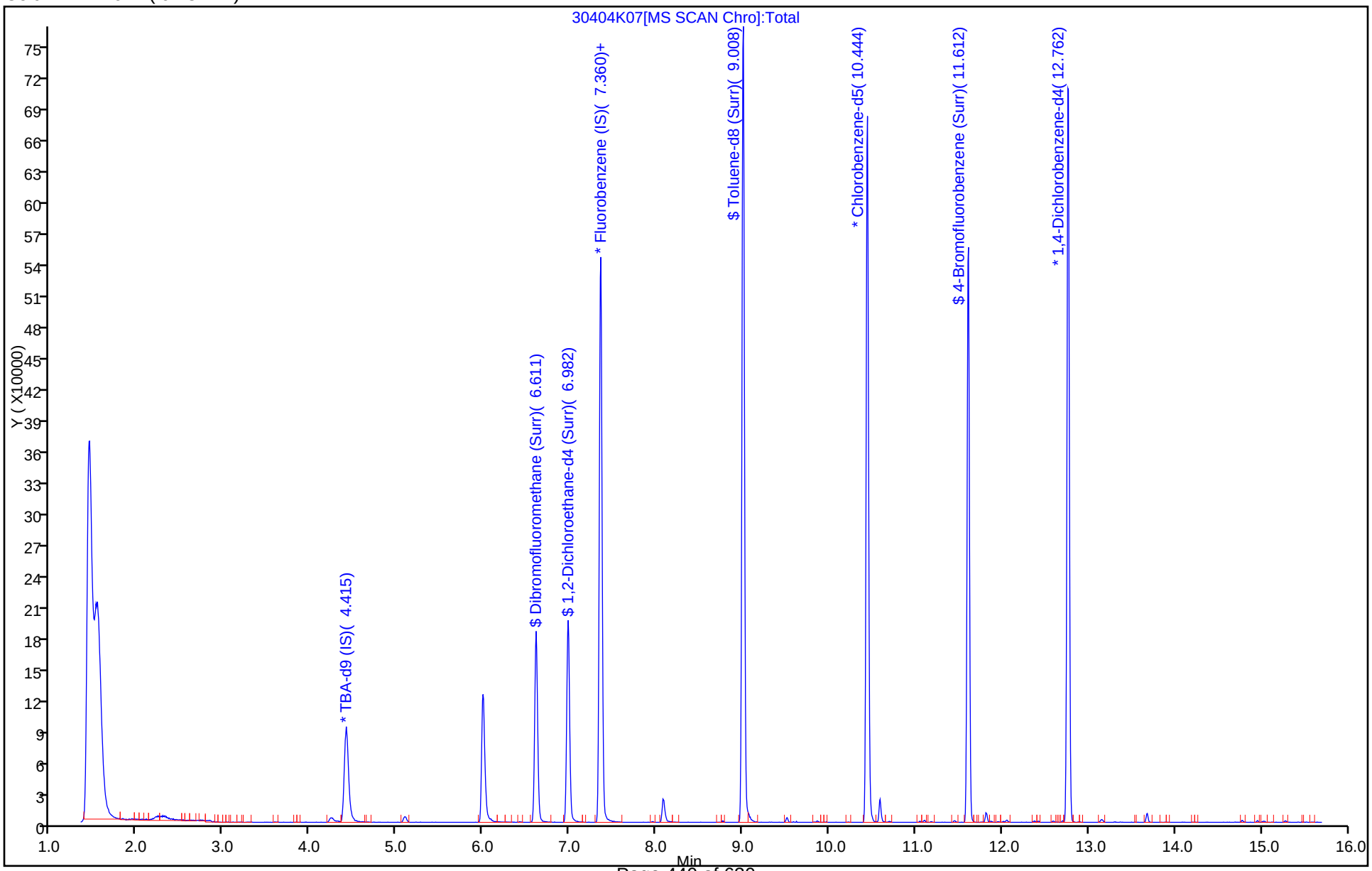
Report Date: 04-Apr-2017 10:38:29 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K07.D

Injection Date:	04-Apr-2017 09:40:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K07.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 04-Apr-2017 09:40:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016141-008
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 10:38:24 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 09:59:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	259.8	103.91
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	278.4	111.34
$ 7 Toluene-d8 (Surr)	250.0	233.5	93.40
$ 8 4-Bromofluorobenzene (Surr)	250.0	213.5	85.39

Report Date: 04-Apr-2017 10:38:29 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K07.D

Injection Date: 04-Apr-2017 09:40:30 Instrument ID: CHHP3

Lims ID: MB

Client ID:

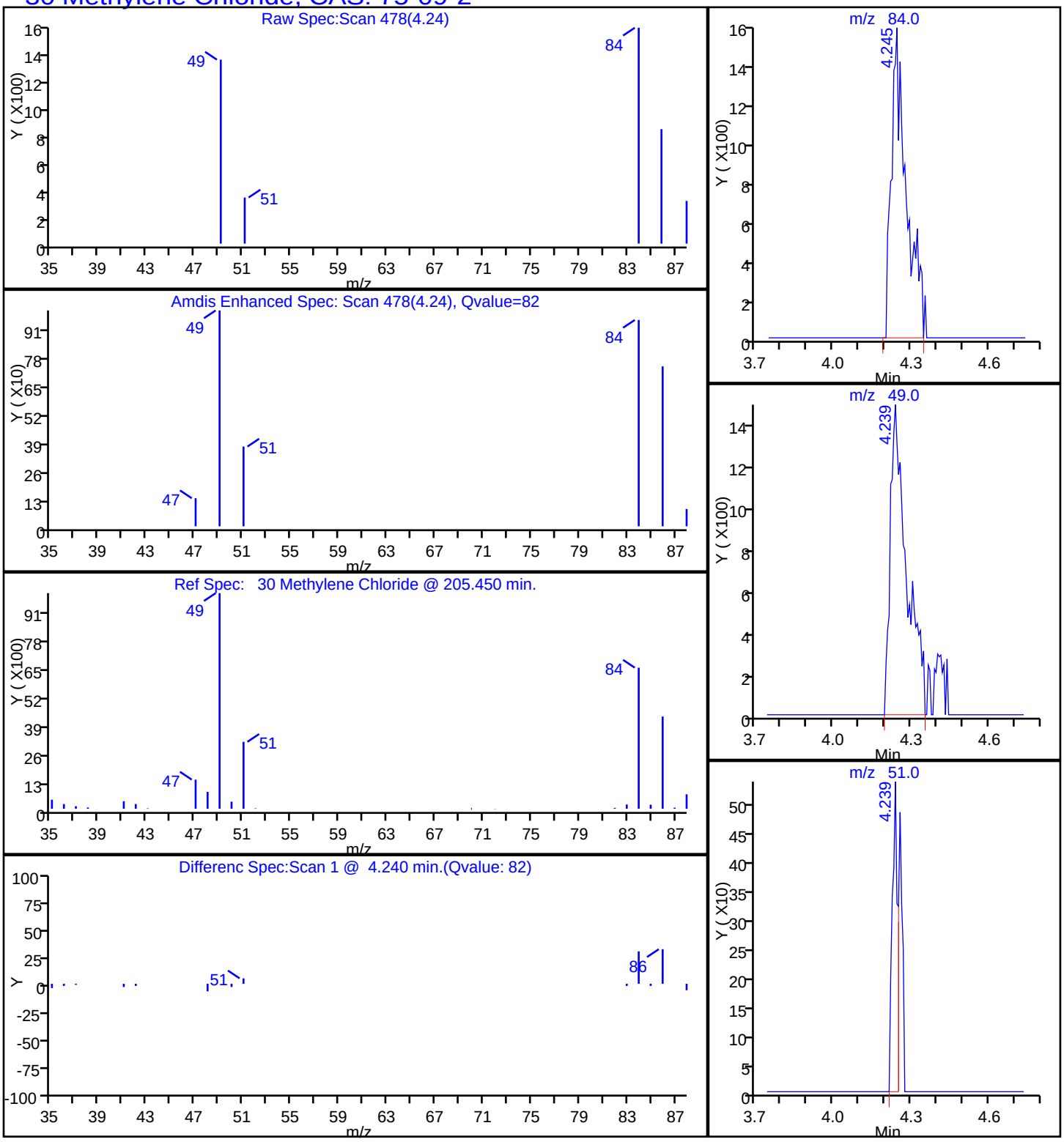
Operator ID: 10099 ALS Bottle#: 7 Worklist Smp#: 8

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: MSVOA_S_CHHP3 Limit Group: VOA 8260C ICAL

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

30 Methylene Chloride, CAS: 75-09-2



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

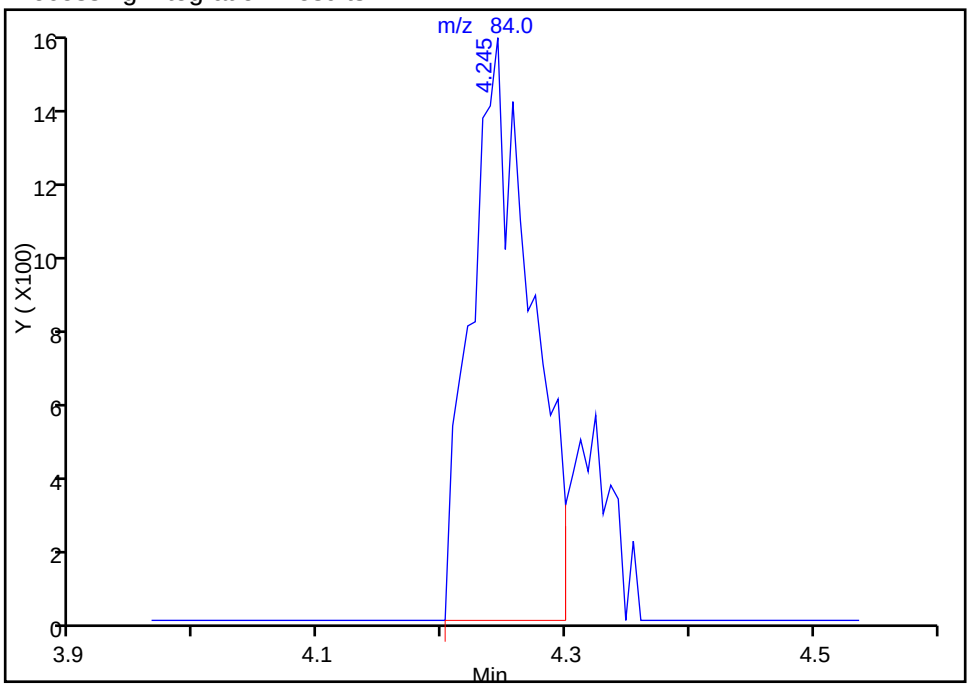
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K07.D				
Injection Date:	04-Apr-2017 09:40:30	Instrument ID:	CHHP3		
Lims ID:	MB				
Client ID:					
Operator ID:	10099	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

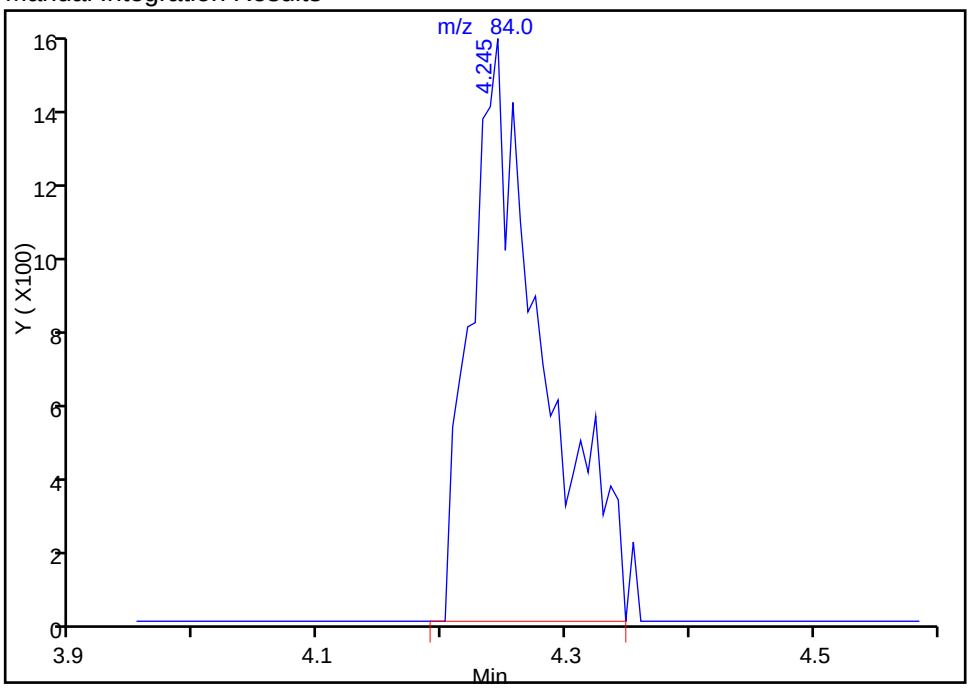
Processing Integration Results

RT: 4.24
Area: 5105
Amount: 6.367546
Amount Units: ng



Manual Integration Results

RT: 4.24
Area: 6101
Amount: 7.609872
Amount Units: ng



Reviewer: gordonk, 04-Apr-2017 10:38:28

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-207111/3

Matrix: Solid | Lab File ID: 3040303.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/03/2017 07:35

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	38.1		5.0	2.7
71-55-6	1,1,1-Trichloroethane	45.2		5.0	1.1
79-34-5	1,1,2,2-Tetrachloroethane	35.2		5.0	4.0
79-00-5	1,1,2-Trichloroethane	36.6		5.0	2.8
75-34-3	1,1-Dichloroethane	34.5		5.0	1.1
75-35-4	1,1-Dichloroethene	37.7		5.0	1.5
107-06-2	1,2-Dichloroethane	40.6		5.0	1.1
78-87-5	1,2-Dichloropropane	34.6		5.0	1.9
78-93-3	2-Butanone (MEK)	30.7		5.0	3.0
591-78-6	2-Hexanone	31.6		5.0	4.1
108-10-1	4-Methyl-2-pentanone (MIBK)	25.0		5.0	3.6
67-64-1	Acetone	36.4		20	10
71-43-2	Benzene	38.2		5.0	3.0
75-25-2	Bromoform	32.1		5.0	4.6
74-83-9	Bromomethane	76.7		5.0	1.7
75-15-0	Carbon disulfide	33.5		5.0	2.1
56-23-5	Carbon tetrachloride	48.7		5.0	1.4
108-90-7	Chlorobenzene	37.2		5.0	2.2
124-48-1	Dibromochloromethane	35.2		5.0	2.5
123-91-1	1,4-Dioxane	865	J	1000	25
67-66-3	Chloroform	39.7		5.0	1.3
74-87-3	Chloromethane	29.3		5.0	2.6
75-00-3	Chloroethane	37.5		5.0	2.1
156-59-2	cis-1,2-Dichloroethene	39.2		5.0	1.3
10061-01-5	cis-1,3-Dichloropropene	39.0		5.0	2.2
75-27-4	Bromodichloromethane	40.0		5.0	2.0
100-41-4	Ethylbenzene	37.9		5.0	2.0
106-93-4	1,2-Dibromoethane (EDB)	36.2		5.0	2.1
1634-04-4	Methyl tert-butyl ether	38.5		5.0	2.5
75-09-2	Methylene Chloride	35.0		5.0	0.56
100-42-5	Styrene	38.4		5.0	2.3
127-18-4	Tetrachloroethene	39.2		5.0	1.2
108-88-3	Toluene	37.0		5.0	3.6
156-60-5	trans-1,2-Dichloroethene	40.0		5.0	1.0
10061-02-6	trans-1,3-Dichloropropene	34.6		5.0	2.4
79-01-6	Trichloroethene	44.2		5.0	1.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-207111/3

Matrix: Solid | Lab File ID: 3040303.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/03/2017 07:35

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-13-1	Acrylonitrile	297		50	25
75-01-4	Vinyl chloride	43.8		5.0	2.6
1330-20-7	Xylenes, Total	76.0		10	4.6
74-97-5	Bromochloromethane	43.6		5.0	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		52-124
460-00-4	4-Bromofluorobenzene (Surr)	91		63-120
1868-53-7	Dibromofluoromethane (Surr)	112		68-121
2037-26-5	Toluene-d8 (Surr)	96		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040303.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-Apr-2017 07:35:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 08:16:48 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 08:16:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.465	4.464	0.001	96	162475	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.348	7.348	0.000	99	603696	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.439	10.438	0.001	86	150983	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.763	12.762	0.001	95	247020	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.600	6.600	0.000	93	144635	250.0	279.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.971	6.971	0.000	95	158795	250.0	266.1	
$ 7 Toluene-d8 (Surr)	98	9.003	9.003	0.000	93	625380	250.0	239.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.607	11.606	0.001	88	241993	250.0	228.1	
10 Dichlorodifluoromethane	85	1.642	1.654	-0.012	100	177425	200.0	232.7	
11 Chloromethane	50	1.813	1.812	0.001	100	157978	200.0	146.4	
12 Vinyl chloride	62	1.952	1.958	-0.006	98	194370	200.0	219.1	
13 Butadiene	39	1.989	1.994	-0.005	86	139196	200.0	170.7	
14 Bromomethane	94	2.299	2.299	0.000	89	79189	200.0	383.3	
15 Chloroethane	64	2.415	2.420	-0.005	98	41404	200.0	187.4	
16 Dichlorofluoromethane	67	2.689	2.700	-0.011	96	291371	200.0	367.9	E
17 Trichlorofluoromethane	101	2.725	2.730	-0.005	98	266597	200.0	457.2	E
19 Ethyl ether	59	3.163	3.162	0.001	86	90641	200.0	166.9	
21 1,1-Dichloroethene	96	3.412	3.424	-0.012	98	124045	200.0	188.6	
22 1,1,2-Trichloro-1,2,2-trif	101	3.504	3.527	-0.023	93	137007	200.0	212.9	
23 Acetone	43	3.589	3.594	-0.005	99	28465	200.0	182.0	
24 Iodomethane	142	3.619	3.625	-0.006	99	199459	200.0	225.5	
25 Carbon disulfide	76	3.717	3.716	0.001	99	299058	200.0	167.5	
28 3-Chloro-1-propene	76	4.015	4.014	0.001	88	71966	200.0	192.7	
29 Methyl acetate	43	4.118	4.118	0.000	96	260525	1000.0	684.7	
30 Methylene Chloride	84	4.222	4.221	0.001	86	137495	200.0	175.2	
31 2-Methyl-2-propanol	59	4.593	4.580	0.013	97	75120	2000.0	1843.3	
32 Acrylonitrile	53	4.629	4.635	-0.006	99	304671	2000.0	1487.2	
33 trans-1,2-Dichloroethene	96	4.641	4.641	0.000	97	138227	200.0	199.9	
34 Methyl tert-butyl ether	73	4.696	4.695	0.001	94	287264	200.0	192.7	
35 Hexane	57	5.067	5.067	0.000	87	202452	200.0	163.9	
36 1,1-Dichloroethane	63	5.244	5.249	-0.005	96	208810	200.0	172.4	
41 2,2-Dichloropropane	77	5.998	6.003	-0.005	84	167189	200.0	191.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 cis-1,2-Dichloroethene	96	6.010	6.009	0.001	82	149281	200.0	196.2	
43 2-Butanone (MEK)	43	6.071	6.070	0.001	97	35060	200.0	153.3	
47 Chlorobromomethane	128	6.302	6.295	0.007	88	62407	200.0	217.8	
48 Tetrahydrofuran	42	6.375	6.374	0.001	82	38886	400.0	259.0	
49 Chloroform	83	6.418	6.417	0.001	94	216274	200.0	198.4	
50 1,1,1-Trichloroethane	97	6.612	6.612	0.000	98	183584	200.0	225.8	
51 Cyclohexane	56	6.673	6.673	0.000	84	222296	200.0	151.2	
53 Carbon tetrachloride	117	6.801	6.800	0.001	98	148459	200.0	243.6	
52 1,1-Dichloropropene	75	6.801	6.806	-0.005	97	182556	200.0	205.2	
54 Isobutyl alcohol	41	7.032	7.025	0.007	40	48615	5000.0	3659.0	
55 Benzene	78	7.032	7.031	0.001	95	504548	200.0	191.0	
56 1,2-Dichloroethane	62	7.056	7.056	0.000	98	145934	200.0	203.2	
59 n-Heptane	43	7.367	7.366	0.001	84	162885	200.0	141.0	
60 Trichloroethene	130	7.744	7.743	0.001	98	142143	200.0	221.0	
63 Methylcyclohexane	83	7.951	7.950	0.001	86	262362	200.0	187.7	
64 1,2-Dichloropropane	63	7.975	7.981	-0.005	94	110439	200.0	173.2	
65 Dibromomethane	93	8.097	8.096	0.001	96	61382	200.0	204.3	
67 1,4-Dioxane	88	8.133	8.133	0.000	90	22087	4000.0	4323.7	
68 Dichlorobromomethane	83	8.273	8.273	0.001	100	122790	200.0	199.9	
71 cis-1,3-Dichloropropene	75	8.729	8.729	0.000	98	164282	200.0	195.1	
72 4-Methyl-2-pentanone (MIBK	43	8.900	8.893	0.007	92	61419	200.0	124.8	
73 Toluene	91	9.070	9.069	0.001	98	560682	200.0	185.1	
74 trans-1,3-Dichloropropene	75	9.289	9.288	0.001	91	132897	200.0	173.0	
75 Ethyl methacrylate	69	9.393	9.392	0.001	85	126698	200.0	178.6	
76 1,1,2-Trichloroethane	97	9.472	9.471	0.001	90	94985	200.0	183.2	
77 Tetrachloroethene	164	9.618	9.617	0.001	98	112087	200.0	196.2	
78 1,3-Dichloropropane	76	9.636	9.635	0.001	87	162663	200.0	172.8	
79 2-Hexanone	43	9.727	9.726	0.001	91	50707	200.0	157.8	
81 Chlorodibromomethane	129	9.867	9.866	0.001	90	81616	200.0	176.2	
82 Ethylene Dibromide	107	9.977	9.976	0.001	99	90243	200.0	181.0	
83 Chlorobenzene	112	10.469	10.469	0.000	95	366897	200.0	186.2	
85 1,1,1,2-Tetrachloroethane	131	10.548	10.548	0.000	94	106785	200.0	190.3	
86 Ethylbenzene	106	10.579	10.578	0.001	98	208524	200.0	189.7	
87 m-Xylene & p-Xylene	106	10.700	10.694	0.006	99	260614	200.0	188.5	
88 o-Xylene	106	11.090	11.089	0.001	96	259164	200.0	191.4	
89 Styrene	104	11.102	11.101	0.001	93	426677	200.0	192.0	
90 Bromoform	173	11.284	11.284	0.000	96	39853	200.0	160.5	
91 Isopropylbenzene	105	11.461	11.460	0.001	95	690733	200.0	189.8	
93 1,1,2,2-Tetrachloroethane	83	11.747	11.746	0.001	95	114405	200.0	175.9	
94 Bromobenzene	156	11.759	11.758	0.001	93	153921	200.0	194.2	
95 1,2,3-Trichloropropane	110	11.789	11.789	0.000	85	37973	200.0	186.1	
96 trans-1,4-Dichloro-2-buten	53	11.802	11.801	0.001	85	26906	200.0	146.1	
97 N-Propylbenzene	120	11.869	11.868	0.000	98	202220	200.0	197.0	
98 2-Chlorotoluene	126	11.954	11.953	0.001	96	160221	200.0	188.6	
99 1,3,5-Trimethylbenzene	105	12.045	12.044	0.001	95	581941	200.0	187.3	
100 4-Chlorotoluene	126	12.063	12.063	0.001	99	165453	200.0	194.7	
101 tert-Butylbenzene	119	12.373	12.373	0.000	92	535447	200.0	195.1	
103 1,2,4-Trimethylbenzene	105	12.416	12.415	0.001	97	595162	200.0	185.3	
104 sec-Butylbenzene	105	12.592	12.592	0.000	94	775533	200.0	184.9	
105 1,3-Dichlorobenzene	146	12.702	12.701	0.001	97	318116	200.0	192.4	
106 4-Isopropyltoluene	119	12.738	12.738	0.000	96	660377	200.0	197.8	
107 1,4-Dichlorobenzene	146	12.787	12.786	0.001	94	315332	200.0	195.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
110 n-Butylbenzene	91	13.146	13.145	0.001	97	618478	200.0	186.4	
111 1,2-Dichlorobenzene	146	13.158	13.164	-0.006	97	293035	200.0	196.0	
112 1,2-Dibromo-3-Chloropropan	75	13.943	13.936	0.007	83	15996	200.0	164.4	
114 1,2,4-Trichlorobenzene	180	14.776	14.782	-0.006	94	194111	200.0	175.6	
115 Hexachlorobutadiene	225	14.953	14.952	0.001	97	104025	200.0	152.9	
116 Naphthalene	128	15.026	15.025	0.001	97	380629	200.0	182.2	
117 1,2,3-Trichlorobenzene	180	15.275	15.275	0.000	96	162180	200.0	176.7	
S 130 1,2-Dichloroethene, Total	96				0		400.0	396.1	
S 129 Xylenes, Total	106				0		400.0	380.0	
S 131 1,3-Dichloropropene, Total	1				0		400.0	368.1	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VOA8260VOA2ND_00235	Amount Added:	8.00	Units: uL	
VOA8260INT_00067	Amount Added:	10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added:	10.00	Units: uL	Run Reagent

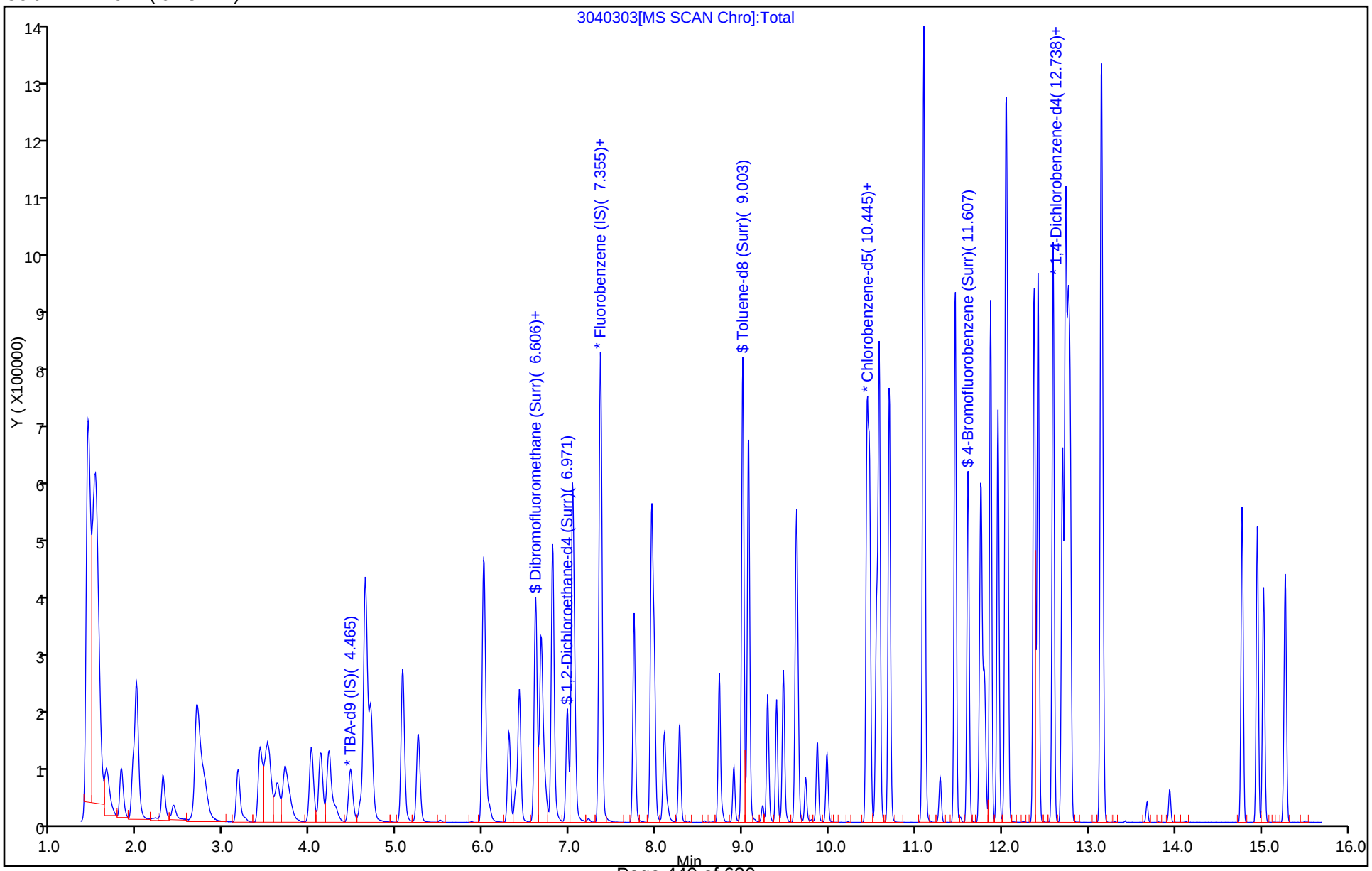
Report Date: 03-Apr-2017 08:16:48 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040303.D

Injection Date:	03-Apr-2017 07:35:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	LCS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040303.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-Apr-2017 07:35:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 08:16:48 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 08:16:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	279.0	111.59
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	266.1	106.43
$ 7 Toluene-d8 (Surr)	250.0	239.2	95.69
$ 8 4-Bromofluorobenzene (Surr)	250.0	228.1	91.23

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-207218/3

Matrix: Solid | Lab File ID: 30404K03.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/04/2017 08:09

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 207218 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	39.1		5.0	2.7
71-55-6	1,1,1-Trichloroethane	43.5		5.0	1.1
79-34-5	1,1,2,2-Tetrachloroethane	34.4		5.0	4.0
79-00-5	1,1,2-Trichloroethane	36.3		5.0	2.8
75-34-3	1,1-Dichloroethane	34.1		5.0	1.1
75-35-4	1,1-Dichloroethene	37.5		5.0	1.5
107-06-2	1,2-Dichloroethane	39.6		5.0	1.1
78-87-5	1,2-Dichloropropane	34.9		5.0	1.9
78-93-3	2-Butanone (MEK)	27.7		5.0	3.0
591-78-6	2-Hexanone	30.0		5.0	4.1
108-10-1	4-Methyl-2-pentanone (MIBK)	23.8		5.0	3.6
67-64-1	Acetone	33.9		20	10
71-43-2	Benzene	38.3		5.0	3.0
75-25-2	Bromoform	31.4		5.0	4.6
74-83-9	Bromomethane	72.4		5.0	1.7
75-15-0	Carbon disulfide	32.3		5.0	2.1
56-23-5	Carbon tetrachloride	47.0		5.0	1.4
108-90-7	Chlorobenzene	37.6		5.0	2.2
124-48-1	Dibromochloromethane	34.6		5.0	2.5
123-91-1	1,4-Dioxane	795	J	1000	25
67-66-3	Chloroform	39.3		5.0	1.3
74-87-3	Chloromethane	28.3		5.0	2.6
75-00-3	Chloroethane	40.6		5.0	2.1
156-59-2	cis-1,2-Dichloroethene	38.7		5.0	1.3
10061-01-5	cis-1,3-Dichloropropene	38.2		5.0	2.2
75-27-4	Bromodichloromethane	39.6		5.0	2.0
100-41-4	Ethylbenzene	38.2		5.0	2.0
106-93-4	1,2-Dibromoethane (EDB)	36.5		5.0	2.1
1634-04-4	Methyl tert-butyl ether	37.5		5.0	2.5
75-09-2	Methylene Chloride	34.2		5.0	0.56
100-42-5	Styrene	38.9		5.0	2.3
127-18-4	Tetrachloroethene	39.2		5.0	1.2
108-88-3	Toluene	37.1		5.0	3.6
156-60-5	trans-1,2-Dichloroethene	39.1		5.0	1.0
10061-02-6	trans-1,3-Dichloropropene	34.0		5.0	2.4
79-01-6	Trichloroethene	43.5		5.0	1.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-207218/3

Matrix: Solid | Lab File ID: 30404K03.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/04/2017 08:09

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 207218 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-13-1	Acrylonitrile	288		50	25
75-01-4	Vinyl chloride	42.9		5.0	2.6
1330-20-7	Xylenes, Total	76.7		10	4.6
74-97-5	Bromochloromethane	43.1		5.0	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		52-124
460-00-4	4-Bromofluorobenzene (Surr)	92		63-120
1868-53-7	Dibromofluoromethane (Surr)	111		68-121
2037-26-5	Toluene-d8 (Surr)	96		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 04-Apr-2017 08:09:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016141-003
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 10:38:24 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 08:30:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.446	4.461	-0.015	97	158940	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.354	7.351	0.003	99	634622	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.438	10.441	-0.003	86	156476	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.762	12.765	-0.003	94	255995	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.600	6.603	-0.003	93	150603	250.0	276.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.977	6.974	0.003	95	171186	250.0	272.9	
$ 7 Toluene-d8 (Surr)	98	9.003	9.000	0.003	93	653549	250.0	241.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.606	11.609	-0.003	88	252324	250.0	229.5	
10 Dichlorodifluoromethane	85	1.660	1.651	0.009	100	184013	200.0	229.6	
11 Chloromethane	50	1.818	1.821	-0.003	99	160307	200.0	141.3	
12 Vinyl chloride	62	1.964	1.961	0.003	98	200125	200.0	214.6	
13 Butadiene	39	2.001	1.997	0.004	85	137620	200.0	160.6	
14 Bromomethane	94	2.305	2.302	0.003	89	78671	200.0	362.2	
15 Chloroethane	64	2.426	2.423	0.003	97	47154	200.0	203.0	
16 Dichlorofluoromethane	67	2.706	2.691	0.015	97	299209	200.0	359.4	E
17 Trichlorofluoromethane	101	2.743	2.734	0.009	99	272500	200.0	444.5	E
19 Ethyl ether	59	3.169	3.166	0.003	86	92408	200.0	161.9	
21 1,1-Dichloroethene	96	3.424	3.427	-0.003	98	129491	200.0	187.3	
22 1,1,2-Trichloro-1,2,2-trif	101	3.521	3.518	0.003	93	139483	200.0	206.2	
23 Acetone	43	3.594	3.597	-0.003	100	27833	200.0	169.3	
24 Iodomethane	142	3.631	3.628	0.003	99	204704	200.0	220.1	
25 Carbon disulfide	76	3.728	3.731	-0.003	99	302434	200.0	161.5	
28 3-Chloro-1-propene	76	4.026	4.011	0.015	87	73325	200.0	186.8	
29 Methyl acetate	43	4.118	4.121	-0.003	96	256838	1000.0	642.1	
30 Methylene Chloride	84	4.221	4.218	0.003	89	141124	200.0	171.0	
31 2-Methyl-2-propanol	59	4.568	4.589	-0.021	97	71288	2000.0	1788.2	
32 Acrylonitrile	53	4.635	4.632	0.003	99	309638	2000.0	1437.8	
33 trans-1,2-Dichloroethene	96	4.647	4.644	0.003	96	142227	200.0	195.7	
34 Methyl tert-butyl ether	73	4.702	4.705	-0.003	93	293532	200.0	187.3	
35 Hexane	57	5.073	5.070	0.003	87	204634	200.0	157.6	
36 1,1-Dichloroethane	63	5.255	5.252	0.003	97	217347	200.0	170.7	
41 2,2-Dichloropropane	77	6.003	6.000	0.003	81	168424	200.0	179.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 cis-1,2-Dichloroethene	96	6.016	6.013	0.003	81	154767	200.0	193.5	
43 2-Butanone (MEK)	43	6.070	6.073	-0.003	97	33292	200.0	138.4	
47 Chlorobromomethane	128	6.302	6.299	0.004	89	64928	200.0	215.6	
48 Tetrahydrofuran	42	6.369	6.372	-0.004	82	37969	400.0	240.6	
49 Chloroform	83	6.417	6.420	-0.003	94	225151	200.0	196.5	
50 1,1,1-Trichloroethane	97	6.612	6.609	0.003	98	186047	200.0	217.7	
51 Cyclohexane	56	6.673	6.676	-0.003	85	228323	200.0	147.7	
53 Carbon tetrachloride	117	6.800	6.803	-0.003	98	150681	200.0	235.2	
52 1,1-Dichloropropene	75	6.807	6.803	0.004	98	190100	200.0	203.2	
54 Isobutyl alcohol	41	7.026	7.029	-0.003	92	45579	5000.0	3263.3	
55 Benzene	78	7.038	7.035	0.003	96	531446	200.0	191.4	
56 1,2-Dichloroethane	62	7.062	7.059	0.003	98	149646	200.0	198.2	
59 n-Heptane	43	7.366	7.363	0.003	83	167298	200.0	137.8	
60 Trichloroethene	130	7.749	7.746	0.003	98	146961	200.0	217.4	
63 Methylcyclohexane	83	7.950	7.947	0.003	89	273128	200.0	185.9	
64 1,2-Dichloropropane	63	7.981	7.978	0.003	94	116855	200.0	174.3	
65 Dibromomethane	93	8.096	8.093	0.003	96	63227	200.0	200.2	
67 1,4-Dioxane	88	8.139	8.136	0.003	90	21345	4000.0	3974.8	
68 Dichlorobromomethane	83	8.273	8.270	0.003	100	127972	200.0	198.2	
71 cis-1,3-Dichloropropene	75	8.729	8.732	-0.003	98	169129	200.0	191.1	
72 4-Methyl-2-pentanone (MIBK	43	8.893	8.896	-0.003	93	60717	200.0	119.0	
73 Toluene	91	9.070	9.066	0.004	99	581722	200.0	185.3	
74 trans-1,3-Dichloropropene	75	9.289	9.292	-0.003	90	135507	200.0	170.2	
75 Ethyl methacrylate	69	9.392	9.389	0.003	85	128058	200.0	174.2	
76 1,1,2-Trichloroethane	97	9.471	9.474	-0.003	90	97443	200.0	181.3	
77 Tetrachloroethene	164	9.617	9.620	-0.003	98	116024	200.0	196.0	
78 1,3-Dichloropropane	76	9.635	9.638	-0.003	86	167526	200.0	171.7	
79 2-Hexanone	43	9.727	9.730	-0.003	90	49989	200.0	150.1	
81 Chlorodibromomethane	129	9.866	9.863	0.003	90	82981	200.0	173.2	
82 Ethylene Dibromide	107	9.976	9.973	0.003	100	94197	200.0	182.3	
83 Chlorobenzene	112	10.469	10.466	0.003	95	383856	200.0	188.0	
85 1,1,1,2-Tetrachloroethane	131	10.548	10.551	-0.003	95	113793	200.0	195.6	
86 Ethylbenzene	106	10.578	10.581	-0.003	98	217777	200.0	191.2	
87 m-Xylene & p-Xylene	106	10.694	10.697	-0.003	99	271468	200.0	189.5	
88 o-Xylene	106	11.089	11.092	-0.003	96	272471	200.0	194.2	
89 Styrene	104	11.101	11.104	-0.003	93	448118	200.0	194.6	
90 Bromoform	173	11.284	11.281	0.003	95	40118	200.0	156.9	
91 Isopropylbenzene	105	11.460	11.457	0.003	95	723535	200.0	191.9	
93 1,1,2,2-Tetrachloroethane	83	11.746	11.743	0.003	96	115870	200.0	171.9	
94 Bromobenzene	156	11.758	11.761	-0.003	92	162232	200.0	197.5	
95 1,2,3-Trichloropropane	110	11.789	11.792	-0.003	84	39794	200.0	188.1	
96 trans-1,4-Dichloro-2-buten	53	11.801	11.804	-0.003	82	25940	200.0	135.9	
97 N-Propylbenzene	120	11.868	11.865	0.003	98	208962	200.0	196.4	
98 2-Chlorotoluene	126	11.953	11.956	-0.003	96	167773	200.0	190.6	
99 1,3,5-Trimethylbenzene	105	12.044	12.041	0.003	95	615026	200.0	191.0	
100 4-Chlorotoluene	126	12.063	12.060	0.003	99	172857	200.0	196.2	
101 tert-Butylbenzene	119	12.373	12.370	0.003	92	563983	200.0	198.3	
103 1,2,4-Trimethylbenzene	105	12.415	12.418	-0.003	97	621303	200.0	186.7	
104 sec-Butylbenzene	105	12.592	12.589	0.003	94	818702	200.0	188.4	
105 1,3-Dichlorobenzene	146	12.701	12.698	0.003	97	337228	200.0	196.8	
106 4-Isopropyltoluene	119	12.732	12.735	-0.003	96	694811	200.0	200.8	
107 1,4-Dichlorobenzene	146	12.787	12.790	-0.003	94	332841	200.0	199.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
110 n-Butylbenzene	91	13.145	13.142	0.003	97	647910	200.0	188.4	
111 1,2-Dichlorobenzene	146	13.164	13.161	0.003	97	307964	200.0	198.8	
112 1,2-Dibromo-3-Chloropropan	75	13.936	13.933	0.003	80	14989	200.0	151.6	
114 1,2,4-Trichlorobenzene	180	14.776	14.779	-0.003	94	204291	200.0	178.4	
115 Hexachlorobutadiene	225	14.952	14.955	-0.003	98	109202	200.0	154.9	
116 Naphthalene	128	15.025	15.028	-0.003	97	389308	200.0	179.8	
117 1,2,3-Trichlorobenzene	180	15.281	15.278	0.003	96	166405	200.0	174.9	
S 130 1,2-Dichloroethene, Total	96				0		400.0	389.2	
S 129 Xylenes, Total	106				0		400.0	383.7	
S 131 1,3-Dichloropropene, Total	1				0		400.0	361.2	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VOA8260VOA2ND_00235	Amount Added:	8.00	Units: uL	
VOA8260INT_00067	Amount Added:	10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added:	10.00	Units: uL	Run Reagent

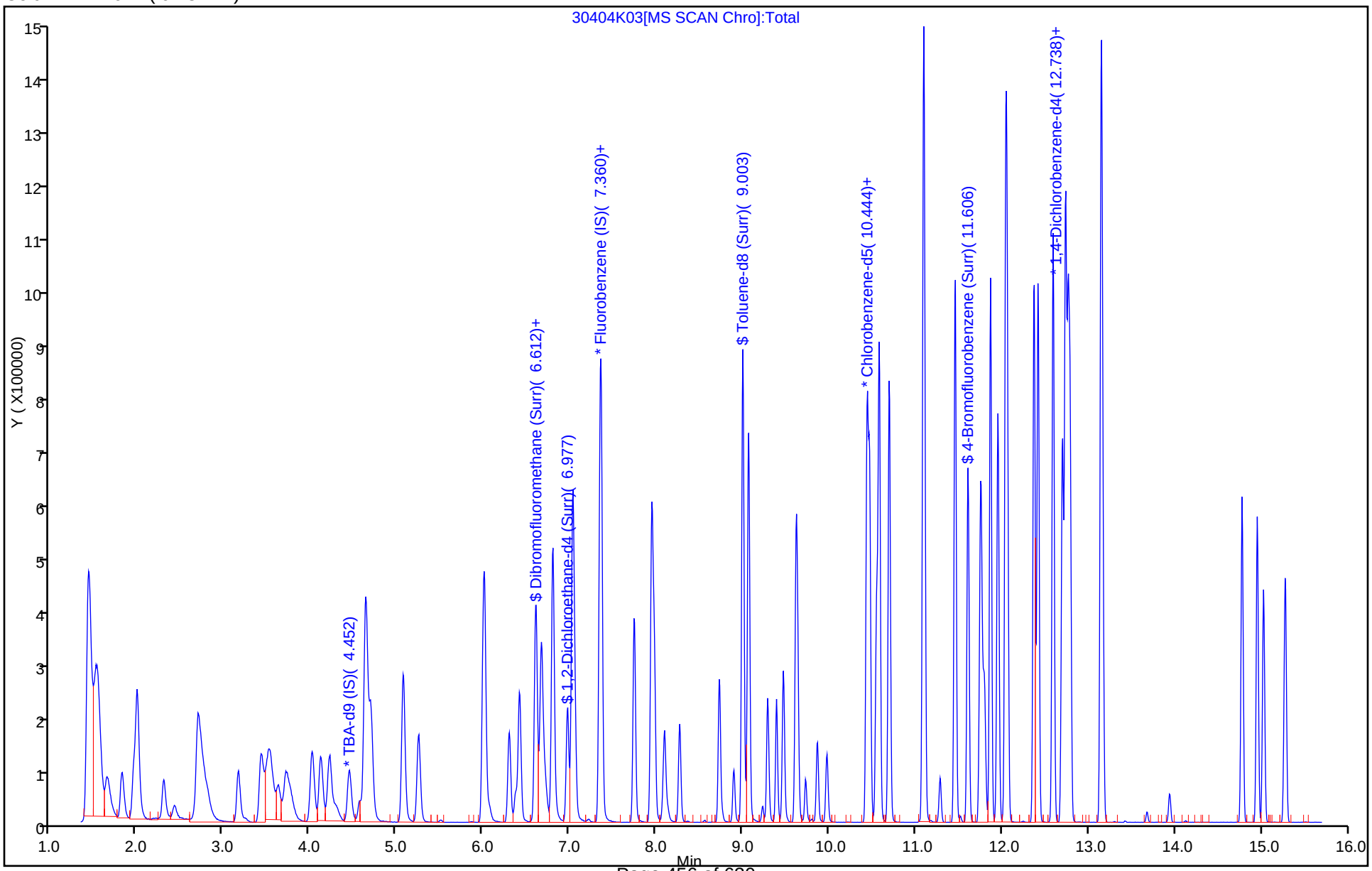
Report Date: 04-Apr-2017 10:38:27 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K03.D

Injection Date:	04-Apr-2017 08:09:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	LCS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 04-Apr-2017 08:09:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016141-003
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 10:38:24 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 08:30:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	276.3	110.53
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	272.9	109.14
$ 7 Toluene-d8 (Surr)	250.0	241.2	96.49
$ 8 4-Bromofluorobenzene (Surr)	250.0	229.5	91.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-207218/25

Matrix: Solid | Lab File ID: 30404K11.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/04/2017 11:10

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 207218 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	37.4		5.0	2.7
71-55-6	1,1,1-Trichloroethane	42.9		5.0	1.1
79-34-5	1,1,2,2-Tetrachloroethane	36.0		5.0	4.0
79-00-5	1,1,2-Trichloroethane	36.6		5.0	2.8
75-34-3	1,1-Dichloroethane	34.4		5.0	1.1
75-35-4	1,1-Dichloroethene	37.2		5.0	1.5
107-06-2	1,2-Dichloroethane	40.4		5.0	1.1
78-87-5	1,2-Dichloropropane	35.2		5.0	1.9
78-93-3	2-Butanone (MEK)	32.7		5.0	3.0
591-78-6	2-Hexanone	34.3		5.0	4.1
108-10-1	4-Methyl-2-pentanone (MIBK)	28.6		5.0	3.6
67-64-1	Acetone	35.6		20	10
71-43-2	Benzene	38.0		5.0	3.0
75-25-2	Bromoform	30.3		5.0	4.6
74-83-9	Bromomethane	70.7		5.0	1.7
75-15-0	Carbon disulfide	31.2		5.0	2.1
56-23-5	Carbon tetrachloride	44.5		5.0	1.4
108-90-7	Chlorobenzene	37.0		5.0	2.2
124-48-1	Dibromochloromethane	33.4		5.0	2.5
123-91-1	1,4-Dioxane	886	J	1000	25
67-66-3	Chloroform	39.5		5.0	1.3
74-87-3	Chloromethane	27.7		5.0	2.6
75-00-3	Chloroethane	35.0		5.0	2.1
156-59-2	cis-1,2-Dichloroethene	39.3		5.0	1.3
10061-01-5	cis-1,3-Dichloropropene	37.6		5.0	2.2
75-27-4	Bromodichloromethane	39.1		5.0	2.0
100-41-4	Ethylbenzene	38.3		5.0	2.0
106-93-4	1,2-Dibromoethane (EDB)	37.2		5.0	2.1
1634-04-4	Methyl tert-butyl ether	37.4		5.0	2.5
75-09-2	Methylene Chloride	35.4		5.0	0.56
100-42-5	Styrene	38.9		5.0	2.3
127-18-4	Tetrachloroethene	37.7		5.0	1.2
108-88-3	Toluene	36.3		5.0	3.6
156-60-5	trans-1,2-Dichloroethene	39.1		5.0	1.0
10061-02-6	trans-1,3-Dichloropropene	32.6		5.0	2.4
79-01-6	Trichloroethene	43.1		5.0	1.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-207218/25

Matrix: Solid | Lab File ID: 30404K11.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/04/2017 11:10

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 207218 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-13-1	Acrylonitrile	295		50	25
75-01-4	Vinyl chloride	40.7		5.0	2.6
1330-20-7	Xylenes, Total	76.3		10	4.6
74-97-5	Bromochloromethane	42.2		5.0	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		52-124
460-00-4	4-Bromofluorobenzene (Surr)	90		63-120
1868-53-7	Dibromofluoromethane (Surr)	106		68-121
2037-26-5	Toluene-d8 (Surr)	90		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K11.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 04-Apr-2017 11:10:30 ALS Bottle#: 11 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016141-025
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 11:32:36 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 11:32:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.464	4.461	0.003	97	143696	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.353	7.351	0.002	99	585502	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.438	10.441	-0.003	86	150183	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.762	12.765	-0.003	95	247451	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.605	6.603	0.002	93	133697	250.0	265.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.976	6.974	0.002	94	152531	250.0	263.5	
$ 7 Toluene-d8 (Surr)	98	9.002	9.000	0.002	92	584614	250.0	224.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.606	11.609	-0.003	88	236556	250.0	224.1	
10 Dichlorodifluoromethane	85	1.653	1.651	0.002	99	166349	200.0	225.0	
11 Chloromethane	50	1.811	1.821	-0.010	99	145012	200.0	138.6	
12 Vinyl chloride	62	1.957	1.961	-0.004	98	174862	200.0	203.3	
13 Butadiene	39	1.994	1.997	-0.003	84	117289	200.0	148.3	
14 Bromomethane	94	2.298	2.302	-0.004	89	70842	200.0	353.6	
15 Chloroethane	64	2.420	2.423	-0.003	98	37463	200.0	174.8	
16 Dichlorofluoromethane	67	2.694	2.691	0.003	97	268932	200.0	350.1	E
17 Trichlorofluoromethane	101	2.736	2.734	0.002	98	253691	200.0	448.5	E
19 Ethyl ether	59	3.168	3.166	0.002	85	84384	200.0	160.2	
21 1,1-Dichloroethene	96	3.430	3.427	0.003	97	118530	200.0	185.8	
22 1,1,2-Trichloro-1,2,2-trif	101	3.527	3.518	0.009	94	128311	200.0	205.6	
23 Acetone	43	3.600	3.597	0.003	99	27025	200.0	178.1	
24 Iodomethane	142	3.636	3.628	0.008	98	184698	200.0	215.3	
25 Carbon disulfide	76	3.746	3.731	0.015	99	268588	200.0	155.9	
28 3-Chloro-1-propene	76	4.014	4.011	0.003	88	66437	200.0	183.4	
29 Methyl acetate	43	4.129	4.121	0.008	95	234578	1000.0	635.6	
30 Methylene Chloride	84	4.227	4.218	0.009	87	134599	200.0	176.8	
31 2-Methyl-2-propanol	59	4.585	4.589	-0.004	96	68618	2000.0	1903.8	
32 Acrylonitrile	53	4.640	4.632	0.008	99	293399	2000.0	1476.7	
33 trans-1,2-Dichloroethene	96	4.646	4.644	0.002	95	131192	200.0	195.7	
34 Methyl tert-butyl ether	73	4.707	4.705	0.002	93	270315	200.0	187.0	
35 Hexane	57	5.072	5.070	0.002	87	183583	200.0	153.3	
36 1,1-Dichloroethane	63	5.249	5.252	-0.003	96	201874	200.0	171.9	
41 2,2-Dichloropropane	77	6.003	6.000	0.003	77	154220	200.0	177.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 cis-1,2-Dichloroethene	96	6.015	6.013	0.002	81	144909	200.0	196.4	
43 2-Butanone (MEK)	43	6.076	6.073	0.003	97	36329	200.0	163.7	
47 Chlorobromomethane	128	6.301	6.299	0.003	89	58649	200.0	211.1	
48 Tetrahydrofuran	42	6.374	6.372	0.002	82	38283	400.0	262.9	
49 Chloroform	83	6.423	6.420	0.003	93	208680	200.0	197.4	
50 1,1,1-Trichloroethane	97	6.611	6.609	0.002	97	169271	200.0	214.7	
51 Cyclohexane	56	6.678	6.676	0.002	84	206797	200.0	145.0	
53 Carbon tetrachloride	117	6.806	6.803	0.003	97	131582	200.0	222.7	
52 1,1-Dichloropropene	75	6.806	6.803	0.003	98	172741	200.0	200.2	
54 Isobutyl alcohol	41	7.037	7.029	0.008	93	47496	5000.0	3685.9	
55 Benzene	78	7.037	7.035	0.002	95	487297	200.0	190.2	
56 1,2-Dichloroethane	62	7.061	7.059	0.002	98	140854	200.0	202.2	
59 n-Heptane	43	7.366	7.363	0.003	86	152221	200.0	135.9	
60 Trichloroethene	130	7.749	7.746	0.003	98	134498	200.0	215.6	
63 Methylcyclohexane	83	7.950	7.947	0.003	87	251997	200.0	185.9	
64 1,2-Dichloropropane	63	7.980	7.978	0.002	93	108725	200.0	175.8	
65 Dibromomethane	93	8.096	8.093	0.003	97	60264	200.0	206.8	
67 1,4-Dioxane	88	8.132	8.136	-0.004	89	21947	4000.0	4429.8	
68 Dichlorobromomethane	83	8.272	8.270	0.002	99	116433	200.0	195.5	
71 cis-1,3-Dichloropropene	75	8.734	8.732	0.002	97	153719	200.0	188.2	
72 4-Methyl-2-pentanone (MIBK	43	8.899	8.896	0.003	92	70003	200.0	143.0	
73 Toluene	91	9.069	9.066	0.003	99	546666	200.0	181.4	
74 trans-1,3-Dichloropropene	75	9.294	9.292	0.002	90	124540	200.0	162.9	
75 Ethyl methacrylate	69	9.391	9.389	0.002	85	124504	200.0	176.5	
76 1,1,2-Trichloroethane	97	9.471	9.474	-0.003	90	94412	200.0	183.1	
77 Tetrachloroethene	164	9.623	9.620	0.003	97	107043	200.0	188.4	
78 1,3-Dichloropropane	76	9.641	9.638	0.003	87	162491	200.0	173.5	
79 2-Hexanone	43	9.732	9.730	0.002	91	54855	200.0	171.6	
81 Chlorodibromomethane	129	9.866	9.863	0.003	90	76598	200.0	167.2	
82 Ethylene Dibromide	107	9.975	9.973	0.002	97	92237	200.0	186.0	
83 Chlorobenzene	112	10.468	10.466	0.002	95	362636	200.0	185.0	
85 1,1,1,2-Tetrachloroethane	131	10.553	10.551	0.002	94	104511	200.0	187.2	
86 Ethylbenzene	106	10.578	10.581	-0.003	98	209613	200.0	191.7	
87 m-Xylene & p-Xylene	106	10.699	10.697	0.002	99	259391	200.0	188.7	
88 o-Xylene	106	11.089	11.092	-0.003	95	260089	200.0	193.1	
89 Styrene	104	11.101	11.104	-0.003	92	430203	200.0	194.6	
90 Bromoform	173	11.283	11.281	0.002	94	36925	200.0	151.7	
91 Isopropylbenzene	105	11.460	11.457	0.003	96	692337	200.0	191.3	
93 1,1,2,2-Tetrachloroethane	83	11.746	11.743	0.003	95	116619	200.0	180.2	
94 Bromobenzene	156	11.758	11.761	-0.003	92	156381	200.0	197.0	
95 1,2,3-Trichloropropane	110	11.788	11.792	-0.004	84	38774	200.0	189.6	
96 trans-1,4-Dichloro-2-buten	53	11.800	11.804	-0.004	73	26020	200.0	141.0	
97 N-Propylbenzene	120	11.867	11.865	0.002	98	199658	200.0	194.2	
98 2-Chlorotoluene	126	11.953	11.956	-0.003	96	161468	200.0	189.8	
99 1,3,5-Trimethylbenzene	105	12.044	12.041	0.003	94	588965	200.0	189.3	
100 4-Chlorotoluene	126	12.062	12.060	0.002	99	170251	200.0	200.0	
101 tert-Butylbenzene	119	12.372	12.370	0.002	92	536304	200.0	195.1	
103 1,2,4-Trimethylbenzene	105	12.415	12.418	-0.003	97	598791	200.0	186.1	
104 sec-Butylbenzene	105	12.591	12.589	0.002	94	791815	200.0	188.5	
105 1,3-Dichlorobenzene	146	12.701	12.698	0.003	97	319687	200.0	193.0	
106 4-Isopropyltoluene	119	12.737	12.735	0.002	96	662074	200.0	198.0	
107 1,4-Dichlorobenzene	146	12.786	12.790	-0.004	94	317822	200.0	196.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
110 n-Butylbenzene	91	13.145	13.142	0.003	97	632434	200.0	190.3	
111 1,2-Dichlorobenzene	146	13.163	13.161	0.002	97	294666	200.0	196.8	
112 1,2-Dibromo-3-Chloropropan	75	13.942	13.933	0.009	82	14483	200.0	151.6	
114 1,2,4-Trichlorobenzene	180	14.781	14.779	0.002	94	199230	200.0	180.0	
115 Hexachlorobutadiene	225	14.952	14.955	-0.003	98	103914	200.0	152.5	
116 Naphthalene	128	15.025	15.028	-0.003	97	391389	200.0	187.0	
117 1,2,3-Trichlorobenzene	180	15.280	15.278	0.002	95	163206	200.0	177.5	
S 130 1,2-Dichloroethene, Total	96				0		400.0	392.0	
S 129 Xylenes, Total	106				0		400.0	381.8	
S 131 1,3-Dichloropropene, Total	1				0		400.0	351.2	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VOA8260VOA2ND_00235	Amount Added:	8.00	Units: uL	
VOA8260INT_00067	Amount Added:	10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added:	10.00	Units: uL	Run Reagent

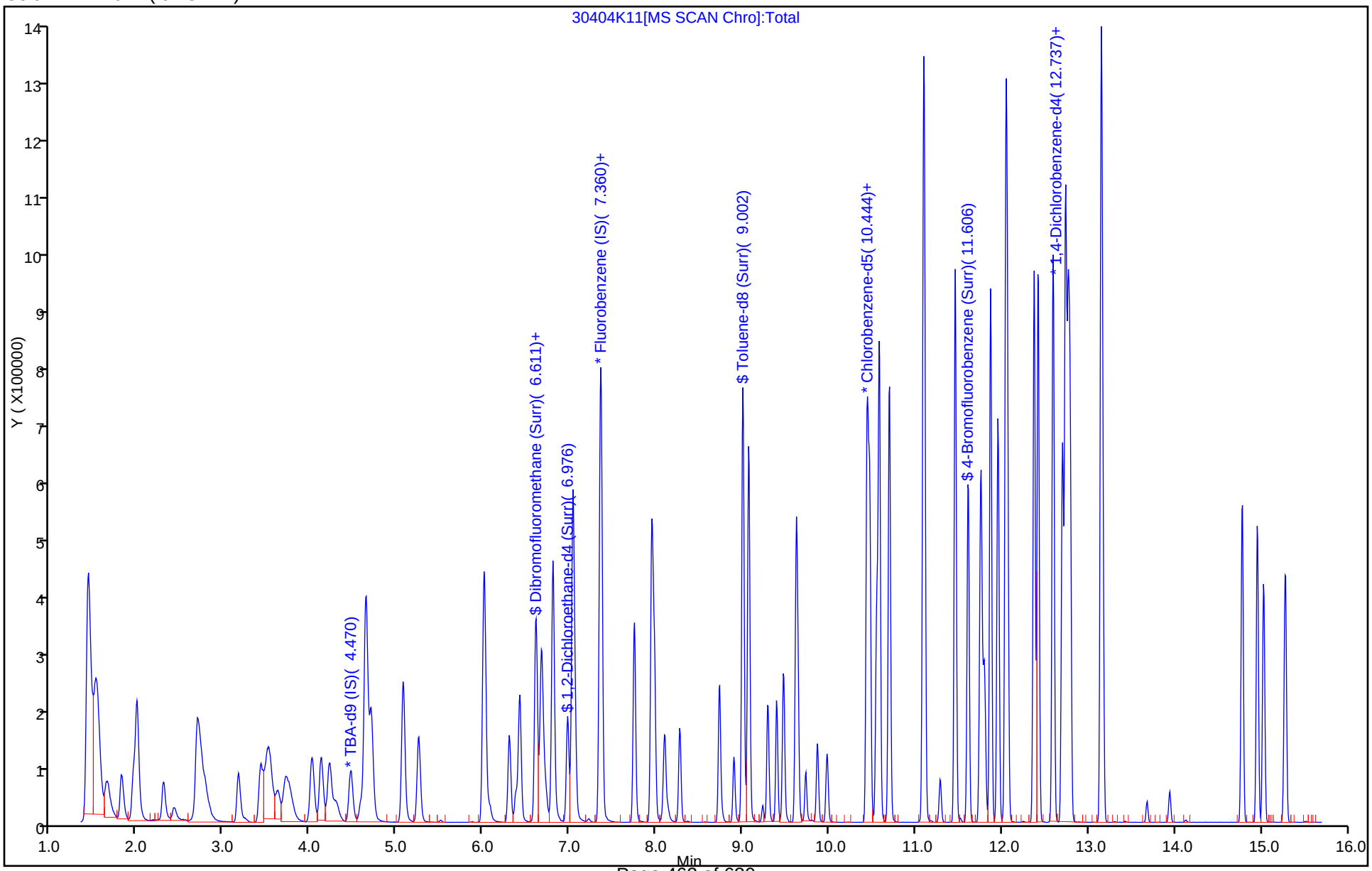
Report Date: 04-Apr-2017 11:32:37 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K11.D

Injection Date:	04-Apr-2017 11:10:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	LCSD			Worklist Smp#:	25
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\30404K11.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 04-Apr-2017 11:10:30 ALS Bottle#: 11 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016141-025
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170404-16141.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2017 11:32:36 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: gordonk Date: 04-Apr-2017 11:32:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	265.9	106.35
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	263.5	105.41
$ 7 Toluene-d8 (Surr)	250.0	224.8	89.93
$ 8 4-Bromofluorobenzene (Surr)	250.0	224.1	89.66

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-45/45.5-0 MS | Lab Sample ID: 180-64801-4 MS

Matrix: Solid | Lab File ID: 3040304.D

Analysis Method: 8260C | Date Collected: 03/30/2017 10:10

Sample wt/vol: 6.1706(g) | Date Analyzed: 04/03/2017 08:02

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 15.8 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	42.0		4.8	2.6
71-55-6	1,1,1-Trichloroethane	49.9		4.8	1.0
79-34-5	1,1,2,2-Tetrachloroethane	26.0		4.8	3.8
79-00-5	1,1,2-Trichloroethane	31.5		4.8	2.7
75-34-3	1,1-Dichloroethane	37.2		4.8	1.1
75-35-4	1,1-Dichloroethene	42.2		4.8	1.4
107-06-2	1,2-Dichloroethane	35.0		4.8	1.1
78-87-5	1,2-Dichloropropane	35.9		4.8	1.8
78-93-3	2-Butanone (MEK)	17.6		4.8	2.9
591-78-6	2-Hexanone	18.4		4.8	3.9
108-10-1	4-Methyl-2-pentanone (MIBK)	16.1		4.8	3.4
67-64-1	Acetone	22.5		19	9.9
71-43-2	Benzene	40.6		4.8	2.9
75-25-2	Bromoform	28.7		4.8	4.4
74-83-9	Bromomethane	81.9		4.8	1.7
75-15-0	Carbon disulfide	39.3		4.8	2.0
56-23-5	Carbon tetrachloride	55.8		4.8	1.3
108-90-7	Chlorobenzene	39.2		4.8	2.1
124-48-1	Dibromochloromethane	34.5		4.8	2.4
123-91-1	1,4-Dioxane	502	J	960	24
67-66-3	Chloroform	42.2		4.8	1.2
74-87-3	Chloromethane	30.2		4.8	2.5
75-00-3	Chloroethane	82.0		4.8	2.1
156-59-2	cis-1,2-Dichloroethene	41.2		4.8	1.3
10061-01-5	cis-1,3-Dichloropropene	39.9		4.8	2.1
75-27-4	Bromodichloromethane	43.4		4.8	1.9
100-41-4	Ethylbenzene	41.9		4.8	1.9
106-93-4	1,2-Dibromoethane (EDB)	29.9		4.8	2.1
1634-04-4	Methyl tert-butyl ether	30.8		4.8	2.4
75-09-2	Methylene Chloride	34.9		4.8	0.54
100-42-5	Styrene	40.6		4.8	2.3
127-18-4	Tetrachloroethene	44.0		4.8	1.2
108-88-3	Toluene	40.0		4.8	3.5
156-60-5	trans-1,2-Dichloroethene	43.1		4.8	0.99
10061-02-6	trans-1,3-Dichloropropene	33.2		4.8	2.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-45/45.5-0 MS | Lab Sample ID: 180-64801-4 MS

Matrix: Solid | Lab File ID: 3040304.D

Analysis Method: 8260C | Date Collected: 03/30/2017 10:10

Sample wt/vol: 6.1706(g) | Date Analyzed: 04/03/2017 08:02

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 15.8 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	47.5		4.8	1.1
107-13-1	Acrylonitrile	189		48	24
75-01-4	Vinyl chloride	46.3		4.8	2.5
1330-20-7	Xylenes, Total	83.6		9.6	4.4
74-97-5	Bromochloromethane	39.9		4.8	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		52-124
460-00-4	4-Bromofluorobenzene (Surr)	87		63-120
1868-53-7	Dibromofluoromethane (Surr)	104		68-121
2037-26-5	Toluene-d8 (Surr)	94		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040304.D
Lims ID: 180-64801-B-4-B MS
Client ID: HD-SPBA-SB-009-45/45.5-0
Sample Type: MS
Inject. Date: 03-Apr-2017 08:02:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-005
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 08:26:46 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 08:26:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.429	4.464	-0.035	97	131573	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.355	7.348	0.007	99	887169	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.439	10.438	0.001	86	217001	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.763	12.762	0.001	94	339344	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.606	6.600	0.006	93	198966	250.0	261.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.978	6.971	0.007	95	190133	250.0	216.8	
$ 7 Toluene-d8 (Surr)	98	9.003	9.003	0.000	92	883603	250.0	235.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.607	11.606	0.001	88	330834	250.0	217.0	
10 Dichlorodifluoromethane	85	1.661	1.654	0.007	100	294279	200.0	262.7	
11 Chloromethane	50	1.825	1.812	0.013	99	249235	200.0	157.2	
12 Vinyl chloride	62	1.965	1.958	0.007	98	313398	200.0	240.4	
13 Butadiene	39	2.001	1.994	0.007	84	210545	200.0	175.7	
14 Bromomethane	94	2.312	2.299	0.013	89	129196	200.0	425.5	
15 Chloroethane	64	2.445	2.420	0.025	98	138405	200.0	426.2	
16 Dichlorofluoromethane	67	2.719	2.700	0.019	96	435988	200.0	374.6	E
17 Trichlorofluoromethane	101	2.768	2.730	0.038	99	403833	200.0	471.2	E
19 Ethyl ether	59	3.163	3.162	0.001	87	117015	200.0	146.6	
21 1,1-Dichloroethene	96	3.443	3.424	0.019	97	211842	200.0	219.2	
22 1,1,2-Trichloro-1,2,2-trif	101	3.540	3.527	0.013	93	223162	200.0	236.0	
23 Acetone	43	3.583	3.594	-0.011	83	26927	200.0	117.1	
24 Iodomethane	142	3.644	3.625	0.019	100	322372	200.0	248.0	
25 Carbon disulfide	76	3.772	3.716	0.056	99	542908	200.0	204.4	
28 3-Chloro-1-propene	76	4.033	4.014	0.019	89	126011	200.0	229.6	
29 Methyl acetate	43	4.118	4.118	0.000	96	238605	1000.0	426.7	
30 Methylene Chloride	84	4.228	4.221	0.007	86	209370	200.0	181.5	
31 2-Methyl-2-propanol	59	4.550	4.580	-0.030	97	59206	2000.0	1794.0	
32 Acrylonitrile	53	4.635	4.635	0.000	99	295410	2000.0	981.3	
33 trans-1,2-Dichloroethene	96	4.654	4.641	0.013	97	227710	200.0	224.1	
34 Methyl tert-butyl ether	73	4.702	4.695	0.007	93	350851	200.0	160.2	
35 Hexane	57	5.079	5.067	0.012	87	327975	200.0	180.7	
36 1,1-Dichloroethane	63	5.256	5.249	0.007	96	344093	200.0	193.4	
41 2,2-Dichloropropane	77	6.010	6.003	0.007	84	232378	200.0	176.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 cis-1,2-Dichloroethene	96	6.016	6.009	0.007	81	239263	200.0	214.0	
43 2-Butanone (MEK)	43	6.071	6.070	0.001	96	30782	200.0	91.6	
47 Chlorobromomethane	128	6.302	6.295	0.007	89	87389	200.0	207.6	
48 Tetrahydrofuran	42	6.375	6.374	0.001	81	36435	400.0	165.1	
49 Chloroform	83	6.424	6.417	0.007	94	351192	200.0	219.2	
50 1,1,1-Trichloroethane	97	6.613	6.612	0.001	97	309565	200.0	259.1	
51 Cyclohexane	56	6.673	6.673	0.000	84	357005	200.0	165.2	
53 Carbon tetrachloride	117	6.807	6.800	0.007	98	259487	200.0	289.8	
52 1,1-Dichloropropene	75	6.807	6.806	0.001	98	297731	200.0	227.7	
54 Isobutyl alcohol	41	7.020	7.025	-0.005	94	44508	5000.0	2279.5	
55 Benzene	78	7.038	7.031	0.007	96	818278	200.0	210.8	
56 1,2-Dichloroethane	62	7.063	7.056	0.007	98	191887	200.0	181.8	
59 n-Heptane	43	7.373	7.366	0.007	84	268737	200.0	158.3	
60 Trichloroethene	130	7.750	7.743	0.007	99	233410	200.0	246.9	
63 Methylcyclohexane	83	7.951	7.950	0.001	87	434624	200.0	211.6	
64 1,2-Dichloropropane	63	7.981	7.981	0.001	94	174789	200.0	186.5	
65 Dibromomethane	93	8.097	8.096	0.001	97	80562	200.0	182.4	
67 1,4-Dioxane	88	8.133	8.133	0.000	93	19598	4000.0	2610.6	
68 Dichlorobromomethane	83	8.273	8.273	0.001	99	203785	200.0	225.8	
71 cis-1,3-Dichloropropene	75	8.730	8.729	0.001	98	256654	200.0	207.4	
72 4-Methyl-2-pentanone (MIBK	43	8.894	8.893	0.001	93	59128	200.0	83.6	
73 Toluene	91	9.070	9.069	0.001	99	903961	200.0	207.6	
74 trans-1,3-Dichloropropene	75	9.289	9.288	0.001	90	190501	200.0	172.5	
75 Ethyl methacrylate	69	9.393	9.392	0.001	85	146639	200.0	143.8	
76 1,1,2-Trichloroethane	97	9.472	9.471	0.001	90	122003	200.0	163.7	
77 Tetrachloroethene	164	9.618	9.617	0.001	98	187689	200.0	228.6	
78 1,3-Dichloropropane	76	9.636	9.635	0.001	87	208730	200.0	154.3	
79 2-Hexanone	43	9.727	9.726	0.001	92	44187	200.0	95.7	
81 Chlorodibromomethane	129	9.861	9.866	-0.005	89	119761	200.0	179.5	
82 Ethylene Dibromide	107	9.977	9.976	0.001	98	111335	200.0	155.4	
83 Chlorobenzene	112	10.469	10.469	0.000	97	577204	200.0	203.8	
85 1,1,1,2-Tetrachloroethane	131	10.549	10.548	0.001	95	175923	200.0	218.1	
86 Ethylbenzene	106	10.579	10.578	0.001	98	343788	200.0	217.6	
87 m-Xylene & p-Xylene	106	10.701	10.694	0.007	98	429075	200.0	216.0	
88 o-Xylene	106	11.090	11.089	0.001	96	424360	200.0	218.1	
89 Styrene	104	11.102	11.101	0.001	93	673757	200.0	211.0	
90 Bromoform	173	11.285	11.284	0.001	96	52323	200.0	149.4	
91 Isopropylbenzene	105	11.461	11.460	0.001	96	1128512	200.0	215.8	
93 1,1,2,2-Tetrachloroethane	83	11.747	11.746	0.001	96	126296	200.0	135.1	
94 Bromobenzene	156	11.759	11.758	0.001	92	233666	200.0	214.6	
95 1,2,3-Trichloropropane	110	11.790	11.789	0.001	83	40242	200.0	143.5	
96 trans-1,4-Dichloro-2-buten	53	11.802	11.801	0.001	86	28051	200.0	110.8	
97 N-Propylbenzene	120	11.869	11.868	0.001	98	331980	200.0	235.4	
98 2-Chlorotoluene	126	11.954	11.953	0.001	97	261665	200.0	224.3	
99 1,3,5-Trimethylbenzene	105	12.045	12.044	0.001	96	953834	200.0	223.5	
100 4-Chlorotoluene	126	12.063	12.063	0.001	99	271604	200.0	232.6	
101 tert-Butylbenzene	119	12.374	12.373	0.001	92	881295	200.0	233.8	
103 1,2,4-Trimethylbenzene	105	12.416	12.415	0.001	96	954544	200.0	216.4	
104 sec-Butylbenzene	105	12.593	12.592	0.001	94	1267064	200.0	220.0	
105 1,3-Dichlorobenzene	146	12.702	12.701	0.001	97	498495	200.0	219.4	
106 4-Isopropyltoluene	119	12.732	12.738	-0.006	96	1071909	200.0	233.7	
107 1,4-Dichlorobenzene	146	12.787	12.786	0.001	94	483696	200.0	218.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
110 n-Butylbenzene	91	13.146	13.145	0.001	97	1017258	200.0	223.2	
111 1,2-Dichlorobenzene	146	13.164	13.164	0.000	97	432001	200.0	210.4	
112 1,2-Dibromo-3-Chloropropan	75	13.943	13.936	0.007	85	15130	200.0	122.8	
114 1,2,4-Trichlorobenzene	180	14.777	14.782	-0.005	95	287632	200.0	189.5	
115 Hexachlorobutadiene	225	14.953	14.952	0.001	98	172339	200.0	184.4	
116 Naphthalene	128	15.026	15.025	0.001	97	416581	200.0	145.2	
117 1,2,3-Trichlorobenzene	180	15.275	15.275	0.000	95	215999	200.0	171.3	
S 130 1,2-Dichloroethene, Total	96				0		400.0	438.1	
S 129 Xylenes, Total	106				0		400.0	434.1	
S 131 1,3-Dichloropropene, Total	1				0		400.0	379.9	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VOA8260VOA2ND_00235	Amount Added:	8.00	Units: uL	
VOA8260INT_00067	Amount Added:	10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added:	10.00	Units: uL	Run Reagent

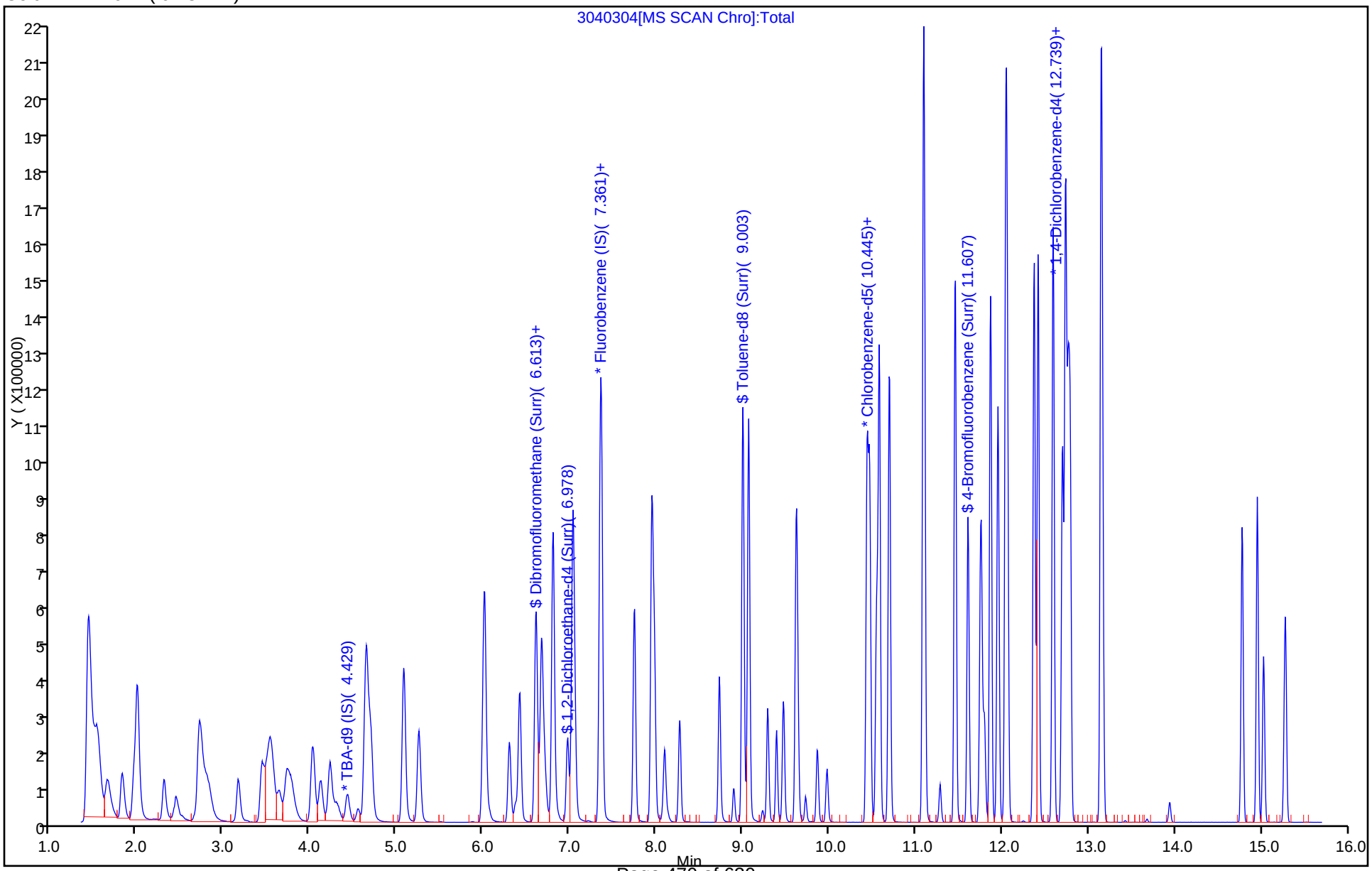
Report Date: 03-Apr-2017 08:26:46 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040304.D

Injection Date:	03-Apr-2017 08:02:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-4-B MS			Worklist Smp#:	5
Client ID:	HD-SPBA-SB-009-45/45.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040304.D
Lims ID: 180-64801-B-4-B MS
Client ID: HD-SPBA-SB-009-45/45.5-0
Sample Type: MS
Inject. Date: 03-Apr-2017 08:02:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-005
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 08:26:46 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 08:26:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	261.1	104.46
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	216.8	86.71
$ 7 Toluene-d8 (Surr)	250.0	235.2	94.07
$ 8 4-Bromofluorobenzene (Surr)	250.0	217.0	86.78

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-45/45.5-0 MSD | Lab Sample ID: 180-64801-4 MSD

Matrix: Solid | Lab File ID: 3040305.D

Analysis Method: 8260C | Date Collected: 03/30/2017 10:10

Sample wt/vol: 5.637(g) | Date Analyzed: 04/03/2017 08:25

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 15.8 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	46.5		5.3	2.9
71-55-6	1,1,1-Trichloroethane	55.8		5.3	1.1
79-34-5	1,1,2,2-Tetrachloroethane	28.8		5.3	4.2
79-00-5	1,1,2-Trichloroethane	33.9		5.3	3.0
75-34-3	1,1-Dichloroethane	42.1		5.3	1.2
75-35-4	1,1-Dichloroethene	46.8		5.3	1.5
107-06-2	1,2-Dichloroethane	38.8		5.3	1.2
78-87-5	1,2-Dichloropropane	39.3		5.3	2.0
78-93-3	2-Butanone (MEK)	19.2		5.3	3.1
591-78-6	2-Hexanone	18.6		5.3	4.3
108-10-1	4-Methyl-2-pentanone (MIBK)	17.3		5.3	3.8
67-64-1	Acetone	22.7		21	11
71-43-2	Benzene	45.0		5.3	3.2
75-25-2	Bromoform	31.1		5.3	4.8
74-83-9	Bromomethane	87.7		5.3	1.8
75-15-0	Carbon disulfide	45.3		5.3	2.2
56-23-5	Carbon tetrachloride	61.7		5.3	1.4
108-90-7	Chlorobenzene	43.2		5.3	2.3
124-48-1	Dibromochloromethane	37.2		5.3	2.6
123-91-1	1,4-Dioxane	484	J	1100	26
67-66-3	Chloroform	46.5		5.3	1.3
74-87-3	Chloromethane	33.9		5.3	2.8
75-00-3	Chloroethane	102		5.3	2.3
156-59-2	cis-1,2-Dichloroethene	45.7		5.3	1.4
10061-01-5	cis-1,3-Dichloropropene	43.8		5.3	2.3
75-27-4	Bromodichloromethane	47.7		5.3	2.1
100-41-4	Ethylbenzene	46.3		5.3	2.1
106-93-4	1,2-Dibromoethane (EDB)	33.2		5.3	2.3
1634-04-4	Methyl tert-butyl ether	33.9		5.3	2.6
75-09-2	Methylene Chloride	37.9		5.3	0.59
100-42-5	Styrene	44.8		5.3	2.5
127-18-4	Tetrachloroethene	48.3		5.3	1.3
108-88-3	Toluene	44.4		5.3	3.8
156-60-5	trans-1,2-Dichloroethene	47.8		5.3	1.1
10061-02-6	trans-1,3-Dichloropropene	36.0		5.3	2.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-SPBA-SB-009-45/45.5-0 MSD | Lab Sample ID: 180-64801-4 MSD

Matrix: Solid | Lab File ID: 3040305.D

Analysis Method: 8260C | Date Collected: 03/30/2017 10:10

Sample wt/vol: 5.637(g) | Date Analyzed: 04/03/2017 08:25

Soil Aliquot Vol: | Dilution Factor: 1

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

% Moisture: 15.8 | Level: (low/med) Low

Analysis Batch No.: 207111 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	53.5		5.3	1.2
107-13-1	Acrylonitrile	205		53	26
75-01-4	Vinyl chloride	50.5		5.3	2.7
1330-20-7	Xylenes, Total	91.7		11	4.8
74-97-5	Bromochloromethane	44.3		5.3	1.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		52-124
460-00-4	4-Bromofluorobenzene (Surr)	88		63-120
1868-53-7	Dibromofluoromethane (Surr)	103		68-121
2037-26-5	Toluene-d8 (Surr)	93		72-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040305.D
Lims ID: 180-64801-B-4-C MSD
Client ID: HD-SPBA-SB-009-45/45.5-0
Sample Type: MSD
Inject. Date: 03-Apr-2017 08:25:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-006
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 08:45:35 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 08:45:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.436	4.464	-0.028	97	135381	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.356	7.348	0.008	99	892311	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.440	10.438	0.002	86	218898	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.764	12.762	0.002	94	334894	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.608	6.600	0.008	93	197444	250.0	257.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.979	6.971	0.008	94	190208	250.0	215.6	
$ 7 Toluene-d8 (Surr)	98	9.005	9.003	0.002	92	880706	250.0	232.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.608	11.606	0.002	87	336773	250.0	218.9	
10 Dichlorodifluoromethane	85	1.656	1.654	0.002	100	290288	200.0	257.6	
11 Chloromethane	50	1.820	1.812	0.008	99	257001	200.0	161.1	
12 Vinyl chloride	62	1.966	1.958	0.008	98	314224	200.0	239.7	
13 Butadiene	39	1.997	1.994	0.003	85	211964	200.0	175.9	
14 Bromomethane	94	2.307	2.299	0.008	89	127221	200.0	416.6	
15 Chloroethane	64	2.435	2.420	0.015	98	158342	200.0	484.8	
16 Dichlorofluoromethane	67	2.714	2.700	0.014	96	459793	200.0	392.7	E
17 Trichlorofluoromethane	101	2.775	2.730	0.045	99	441087	200.0	511.7	E
19 Ethyl ether	59	3.171	3.162	0.009	85	113377	200.0	141.2	
21 1,1-Dichloroethene	96	3.444	3.424	0.020	97	216242	200.0	222.4	
22 1,1,2-Trichloro-1,2,2-trif	101	3.542	3.527	0.015	94	229235	200.0	241.0	
23 Acetone	43	3.590	3.594	-0.004	100	24909	200.0	107.7	
24 Iodomethane	142	3.645	3.625	0.020	99	326095	200.0	249.4	
25 Carbon disulfide	76	3.743	3.716	0.026	99	576622	200.0	215.3	
28 3-Chloro-1-propene	76	4.035	4.014	0.021	88	128351	200.0	232.6	
29 Methyl acetate	43	4.126	4.118	0.008	96	240476	1000.0	427.6	
30 Methylene Chloride	84	4.235	4.221	0.014	86	209018	200.0	180.2	
31 2-Methyl-2-propanol	59	4.558	4.580	-0.022	97	57392	2000.0	1690.1	
32 Acrylonitrile	53	4.637	4.635	0.002	99	295035	2000.0	974.4	
33 trans-1,2-Dichloroethene	96	4.655	4.641	0.014	96	231726	200.0	226.8	
34 Methyl tert-butyl ether	73	4.704	4.695	0.009	93	354835	200.0	161.1	
35 Hexane	57	5.081	5.067	0.014	88	323369	200.0	177.1	
36 1,1-Dichloroethane	63	5.257	5.249	0.008	96	357813	200.0	199.9	
41 2,2-Dichloropropane	77	6.012	6.003	0.009	84	248164	200.0	192.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 cis-1,2-Dichloroethene	96	6.018	6.009	0.009	81	244047	200.0	217.0	
43 2-Butanone (MEK)	43	6.072	6.070	0.002	96	30771	200.0	91.0	
47 Chlorobromomethane	128	6.304	6.295	0.009	90	88980	200.0	210.1	
48 Tetrahydrofuran	42	6.377	6.374	0.003	84	36054	400.0	162.5	
49 Chloroform	83	6.425	6.417	0.008	94	356074	200.0	221.0	
50 1,1,1-Trichloroethane	97	6.614	6.612	0.002	98	318463	200.0	265.1	
51 Cyclohexane	56	6.681	6.673	0.008	84	360264	200.0	165.7	
53 Carbon tetrachloride	117	6.809	6.800	0.009	98	263646	200.0	292.7	
52 1,1-Dichloropropene	75	6.809	6.806	0.003	98	299415	200.0	227.6	
54 Isobutyl alcohol	41	7.028	7.025	0.003	94	42022	5000.0	2139.8	
55 Benzene	78	7.040	7.031	0.009	95	833875	200.0	213.6	
56 1,2-Dichloroethane	62	7.064	7.056	0.008	98	195655	200.0	184.3	
59 n-Heptane	43	7.374	7.366	0.008	87	267368	200.0	156.6	
60 Trichloroethene	130	7.752	7.743	0.009	99	241680	200.0	254.2	
63 Methylcyclohexane	83	7.952	7.950	0.002	86	440134	200.0	213.1	
64 1,2-Dichloropropane	63	7.983	7.981	0.003	93	176125	200.0	186.8	
65 Dibromomethane	93	8.098	8.096	0.002	97	79966	200.0	180.0	
67 1,4-Dioxane	88	8.135	8.133	0.002	90	17367	4000.0	2300.1	
68 Dichlorobromomethane	83	8.275	8.273	0.003	99	205560	200.0	226.4	
71 cis-1,3-Dichloropropene	75	8.731	8.729	0.002	98	258638	200.0	207.8	
72 4-Methyl-2-pentanone (MIBK	43	8.895	8.893	0.002	92	58601	200.0	82.1	
73 Toluene	91	9.072	9.069	0.003	99	924959	200.0	210.6	
74 trans-1,3-Dichloropropene	75	9.291	9.288	0.003	90	190607	200.0	171.1	
75 Ethyl methacrylate	69	9.394	9.392	0.002	85	146507	200.0	142.5	
76 1,1,2-Trichloroethane	97	9.473	9.471	0.002	90	121084	200.0	161.1	
77 Tetrachloroethene	164	9.619	9.617	0.002	98	190034	200.0	229.4	
78 1,3-Dichloropropane	76	9.637	9.635	0.002	87	207308	200.0	151.9	
79 2-Hexanone	43	9.729	9.726	0.003	90	41212	200.0	88.5	
81 Chlorodibromomethane	129	9.862	9.866	-0.004	90	118641	200.0	176.6	
82 Ethylene Dibromide	107	9.978	9.976	0.002	99	114041	200.0	157.8	
83 Chlorobenzene	112	10.471	10.469	0.002	95	585660	200.0	205.0	
85 1,1,1,2-Tetrachloroethane	131	10.550	10.548	0.002	95	179561	200.0	220.7	
86 Ethylbenzene	106	10.580	10.578	0.002	98	349962	200.0	219.6	
87 m-Xylene & p-Xylene	106	10.696	10.694	0.002	98	431727	200.0	215.4	
88 o-Xylene	106	11.091	11.089	0.002	95	431365	200.0	219.8	
89 Styrene	104	11.103	11.101	0.002	93	685214	200.0	212.7	
90 Bromoform	173	11.286	11.284	0.002	95	51951	200.0	147.6	
91 Isopropylbenzene	105	11.462	11.460	0.002	96	1147042	200.0	217.4	
93 1,1,2,2-Tetrachloroethane	83	11.748	11.746	0.002	95	128876	200.0	136.7	
94 Bromobenzene	156	11.761	11.758	0.002	92	237802	200.0	221.3	
95 1,2,3-Trichloropropane	110	11.791	11.789	0.002	85	40656	200.0	146.9	
96 trans-1,4-Dichloro-2-buten	53	11.803	11.801	0.002	85	28259	200.0	113.2	
97 N-Propylbenzene	120	11.870	11.868	0.002	98	338457	200.0	243.2	
98 2-Chlorotoluene	126	11.955	11.953	0.002	97	267728	200.0	232.5	
99 1,3,5-Trimethylbenzene	105	12.046	12.044	0.002	96	968123	200.0	229.9	
100 4-Chlorotoluene	126	12.065	12.063	0.003	99	274845	200.0	238.5	
101 tert-Butylbenzene	119	12.375	12.373	0.002	92	900530	200.0	242.0	
103 1,2,4-Trimethylbenzene	105	12.418	12.415	0.003	97	969386	200.0	222.7	
104 sec-Butylbenzene	105	12.594	12.592	0.002	94	1290164	200.0	226.9	
105 1,3-Dichlorobenzene	146	12.703	12.701	0.002	97	506653	200.0	226.0	
106 4-Isopropyltoluene	119	12.734	12.738	-0.004	96	1090904	200.0	241.0	
107 1,4-Dichlorobenzene	146	12.789	12.786	0.003	95	489970	200.0	224.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
110 n-Butylbenzene	91	13.148	13.145	0.003	97	1035333	200.0	230.2	
111 1,2-Dichlorobenzene	146	13.160	13.164	-0.004	97	435354	200.0	214.8	
112 1,2-Dibromo-3-Chloropropan	75	13.938	13.936	0.002	83	15558	200.0	126.7	
114 1,2,4-Trichlorobenzene	180	14.778	14.782	-0.004	94	287793	200.0	192.1	
115 Hexachlorobutadiene	225	14.954	14.952	0.002	98	176399	200.0	191.2	
116 Naphthalene	128	15.027	15.025	0.002	97	427406	200.0	150.9	
117 1,2,3-Trichlorobenzene	180	15.277	15.275	0.002	96	218549	200.0	175.6	
S 130 1,2-Dichloroethene, Total	96				0		400.0	443.8	
S 129 Xylenes, Total	106				0		400.0	435.2	
S 131 1,3-Dichloropropene, Total	1				0		400.0	378.9	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VOA8260VOA2ND_00235	Amount Added:	8.00	Units: uL	
VOA8260INT_00067	Amount Added:	10.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added:	10.00	Units: uL	Run Reagent

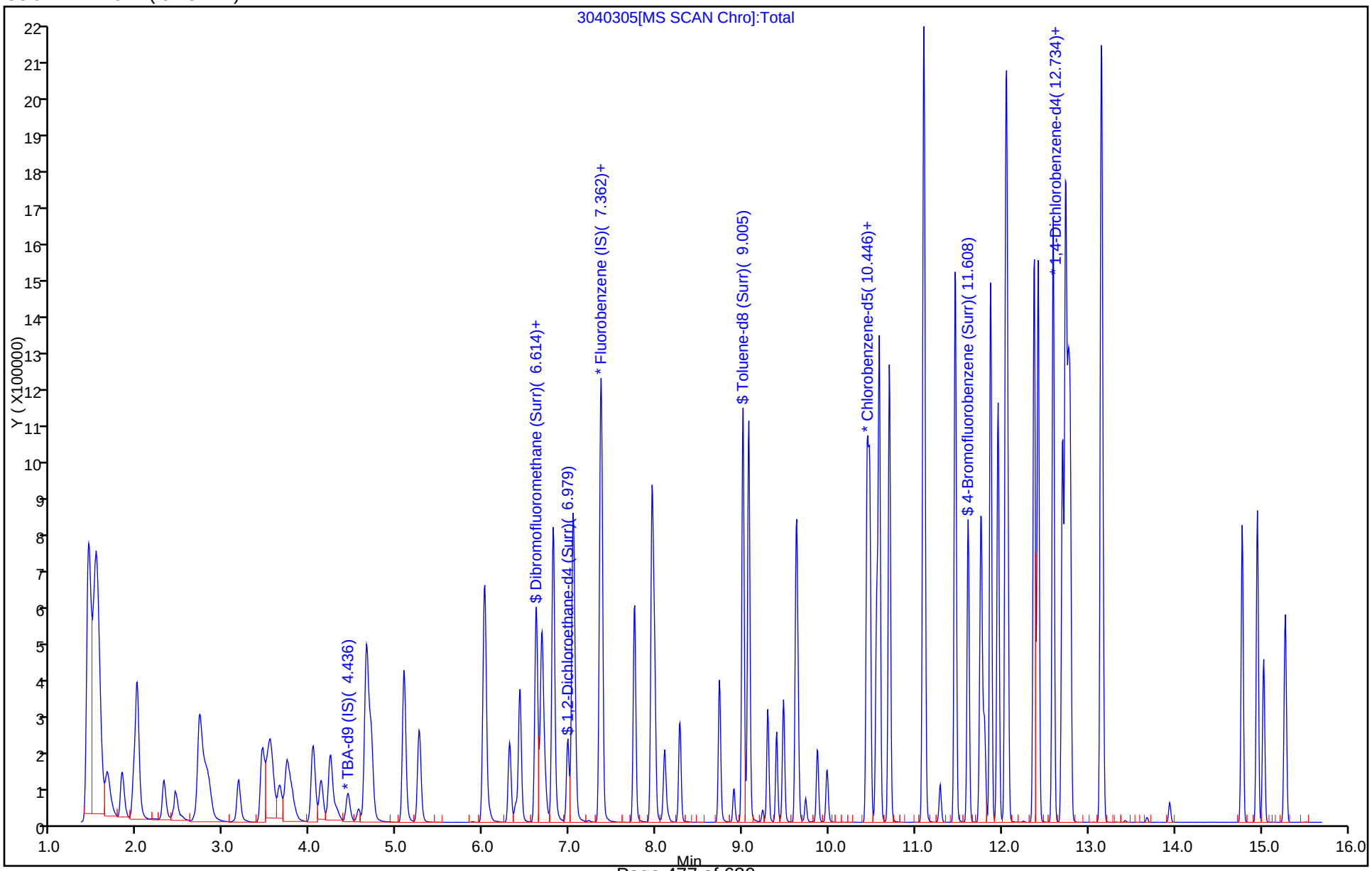
Report Date: 03-Apr-2017 08:45:35 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040305.D

Injection Date:	03-Apr-2017 08:25:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-64801-B-4-C MSD			Worklist Smp#:	6
Client ID:	HD-SPBA-SB-009-45/45.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\3040305.D
Lims ID: 180-64801-B-4-C MSD
Client ID: HD-SPBA-SB-009-45/45.5-0
Sample Type: MSD
Inject. Date: 03-Apr-2017 08:25:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016128-006
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20170403-16128.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 08:45:35 Calib Date: 28-Sep-2016 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20160928-13637.b\30928K10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: gordonk Date: 03-Apr-2017 08:45:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	250.0	257.6	103.06
$ 6 1,2-Dichloroethane-d4 (Surr)	250.0	215.6	86.25
$ 7 Toluene-d8 (Surr)	250.0	232.4	92.95
$ 8 4-Bromofluorobenzene (Surr)	250.0	218.9	87.57

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Instrument ID: CHHP3 Start Date: 09/28/2016 10:45

Analysis Batch Number: 189436 End Date: 09/28/2016 16:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-189436/1		09/28/2016 10:45	1	30928K01.D	DB-624 0.18(mm)
IC 180-189436/4		09/28/2016 12:01	1	30928K04.D	DB-624 0.18(mm)
IC 180-189436/5		09/28/2016 12:24	1	30928K05.D	DB-624 0.18(mm)
IC 180-189436/6		09/28/2016 12:47	1	30928K06.D	DB-624 0.18(mm)
ICIS 180-189436/7		09/28/2016 13:10	1	30928K07.D	DB-624 0.18(mm)
IC 180-189436/8		09/28/2016 13:33	1	30928K08.D	DB-624 0.18(mm)
IC 180-189436/9		09/28/2016 13:56	1	30928K09.D	DB-624 0.18(mm)
IC 180-189436/10		09/28/2016 14:19	1	30928K10.D	DB-624 0.18(mm)
ZZZZZ		09/28/2016 15:51	1		DB-624 0.18(mm)
ICV 180-189436/16		09/28/2016 16:37	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Instrument ID: CHHP3 Start Date: 04/03/2017 06:13

Analysis Batch Number: 207111 End Date: 04/03/2017 16:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-207111/1		04/03/2017 06:13	1	3040301.D	DB-624 0.18(mm)
CCVIS 180-207111/2		04/03/2017 06:47	1	3040302.D	DB-624 0.18(mm)
LCS 180-207111/3		04/03/2017 07:35	1	3040303.D	DB-624 0.18(mm)
180-64801-4 MS		04/03/2017 08:02	1	3040304.D	DB-624 0.18(mm)
180-64801-4 MSD		04/03/2017 08:25	1	3040305.D	DB-624 0.18(mm)
ZZZZZ		04/03/2017 08:47	1		DB-624 0.18(mm)
MB 180-207111/8		04/03/2017 09:10	1	3040307.D	DB-624 0.18(mm)
180-64801-4		04/03/2017 09:33	1	3040308.D	DB-624 0.18(mm)
ZZZZZ		04/03/2017 10:18	1		DB-624 0.18(mm)
180-64801-1		04/03/2017 10:41	1	3040311.D	DB-624 0.18(mm)
180-64801-2		04/03/2017 11:03	1	3040312.D	DB-624 0.18(mm)
180-64801-3		04/03/2017 11:26	1	3040313.D	DB-624 0.18(mm)
180-64801-5		04/03/2017 11:49	1	3040314.D	DB-624 0.18(mm)
180-64801-6		04/03/2017 12:11	1	3040315.D	DB-624 0.18(mm)
180-64801-7		04/03/2017 12:34	1	3040316.D	DB-624 0.18(mm)
180-64801-8		04/03/2017 12:57	1	3040317.D	DB-624 0.18(mm)
180-64801-12		04/03/2017 13:20	1	3040318.D	DB-624 0.18(mm)
180-64801-14		04/03/2017 14:05	1	3040320.D	DB-624 0.18(mm)
180-64801-15		04/03/2017 14:28	1	3040321.D	DB-624 0.18(mm)
180-64801-16		04/03/2017 14:51	1	3040322.D	DB-624 0.18(mm)
180-64801-17		04/03/2017 15:13	1	3040323.D	DB-624 0.18(mm)
180-64801-18		04/03/2017 15:36	1	3040324.D	DB-624 0.18(mm)
180-64801-19		04/03/2017 15:59	1	3040325.D	DB-624 0.18(mm)
180-64801-20		04/03/2017 16:22	1	3040326.D	DB-624 0.18(mm)
180-64801-21		04/03/2017 16:45	1	3040327.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Instrument ID: CHHP3 Start Date: 04/04/2017 05:56

Analysis Batch Number: 207218 End Date: 04/04/2017 12:18

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-207218/1		04/04/2017 05:56	1	3040401.D	DB-624 0.18(mm)
CCVIS 180-207218/2		04/04/2017 07:27	1	30404K02.D	DB-624 0.18(mm)
LCS 180-207218/3		04/04/2017 08:09	1	30404K03.D	DB-624 0.18(mm)
MB 180-207218/8		04/04/2017 09:40	1	30404K07.D	DB-624 0.18(mm)
LCSD 180-207218/25		04/04/2017 11:10	1	30404K11.D	DB-624 0.18(mm)
180-64801-13		04/04/2017 11:33	1	30404K12.D	DB-624 0.18(mm)
180-64801-22		04/04/2017 11:56	1	30404K13.D	DB-624 0.18(mm)
ZZZZZ		04/04/2017 12:18	1		DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Batch Number: 207133 Batch Start Date: 04/01/17 07:40 Batch Analyst: Gordon, Kathy L

Batch Method: 5035 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
180-64801-B-4	HD-SPBA-SB-009-45/45.5-0	5035, 8260C	T	30.552 g	36.3616 g	5.8096 g	5 mL		
180-64801-B-4 MS	HD-SPBA-SB-009-45/45.5-0	5035, 8260C	T	30.300 g	36.4706 g	6.1706 g	5 mL		
180-64801-B-4 MSD	HD-SPBA-SB-009-45/45.5-0	5035, 8260C	T	30.378 g	36.0150 g	5.637 g	5 mL		
180-64801-B-1	HD-SPBA-SB-009-30/30.5-0	5035, 8260C	T	30.288 g	36.3459 g	6.0579 g	5 mL		
180-64801-B-2	HD-SPBA-SB-009-35/35.5-0	5035, 8260C	T	30.659 g	37.3324 g	6.6734 g	5 mL		
180-64801-B-3	HD-SPBA-SB-009-40/40.5-0	5035, 8260C	T	30.389 g	37.0796 g	6.6906 g	5 mL		
180-64801-B-5	HD-SPBA-SB-009-53.5/54-0	5035, 8260C	T	30.223 g	36.6755 g	6.4525 g	5 mL		
180-64801-B-6	HD-SPBA-SB-009-58.5-59-0	5035, 8260C	T	30.276 g	37.5123 g	7.2363 g	5 mL		
180-64801-B-7	HD-SPBA-SB-009-61/61.5-0	5035, 8260C	T	29.918 g	36.1754 g	6.2574 g	5 mL		
180-64801-B-8	HD-SPBA-SB-009-65/68-0	5035, 8260C	T	30.442 g	37.2291 g	6.7871 g	5 mL		
180-64801-C-12	HD-SPBA-SB-010-0.5/1.0-0	5035, 8260C	T	30.606 g	36.0477 g	5.4417 g	5 mL		
180-64801-C-13	HD-SPBA-SB-010-5/5.5-0	5035, 8260C	T	29.868 g	35.6292 g	5.7612 g	5 mL		
180-64801-B-14	HD-SPBA-SB-010-10/10.5-0	5035, 8260C	T	30.194 g	36.2842 g	6.0902 g	5 mL		
180-64801-B-15	HD-SPBA-SB-010-15/15.5-0	5035, 8260C	T	30.318 g	37.1875 g	6.8695 g	5 mL		
180-64801-B-16	HD-SPBA-SB-010-20/20.5-0	5035, 8260C	T	30.239 g	37.2601 g	7.0211 g	5 mL		
180-64801-B-17	HD-SPBA-SB-010-25/25.5-0	5035, 8260C	T	30.268 g	36.9429 g	6.6749 g	5 mL		
180-64801-B-18	HD-SPBA-SB-010-31.6/32.2-0	5035, 8260C	T	30.275 g	37.4668 g	7.1918 g	5 mL		
180-64801-B-19	HD-SPBA-SB-010-35/35.5-0	5035, 8260C	T	30.588 g	37.5078 g	6.9198 g	5 mL		
180-64801-B-20	HD-SPBA-SB-010-40/40.5-0	5035, 8260C	T	30.171 g	37.5500 g	7.379 g	5 mL		
180-64801-B-21	HD-SPBA-SB-010-45/45.5-0	5035, 8260C	T	30.504 g	37.3867 g	6.8827 g	5 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Batch Number: 207133 Batch Start Date: 04/01/17 07:40 Batch Analyst: Gordon, Kathy L

Batch Method: 5035 Batch End Date:

Batch Notes	
Balance ID	14234771
Methanol ID	2019055
Blank Sand Lot #	2CB0289

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Batch Number: 207231 Batch Start Date: 04/01/17 10:00 Batch Analyst: Gordon, Kathy L

Batch Method: 5035 Batch End Date: 04/01/17 11:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
180-64801-B-22	HD-SPBA-SB-010-50/50.5	5035, 8260C	T	30.176 g	36.8790 g	6.703 g	5 mL		

Batch Notes	
Balance ID	14234771
Methanol ID	2019055
Blank Sand Lot #	2CB0289

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

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.: 180-64801-1

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-QC5-0/1-2	180-64801-9	104	102	93	103
HD-QC2-0/1-3	180-64801-10	104	97	95	105
HD-QC2-0/1-4	180-64801-11	110	104	96	106
HD-QC6-0/1-2	180-64801-23	107	100	94	100
	MB 180-207145/5	102	98	95	101
	LCS 180-207145/8	99	96	103	96

	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.: 180-64801-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 60403008.D

Lab ID: LCS 180-207145/8 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	11.2	112	51-150	
Vinyl chloride	10.0	10.8	108	61-138	
Bromomethane	10.0	11.3	113	39-150	
Chloroethane	10.0	10.6	106	53-148	
1,1-Dichloroethene	10.0	10.5	105	71-122	
Acetone	20.0	19.0	95	10-150	
Carbon disulfide	10.0	10.2	102	57-137	
Methylene Chloride	10.0	9.70	97	71-129	
trans-1,2-Dichloroethene	10.0	10.7	107	80-121	
Methyl tert-butyl ether	10.0	9.35	94	68-124	
1,1-Dichloroethane	10.0	10.3	103	76-126	
cis-1,2-Dichloroethene	10.0	10.1	101	80-120	
Bromochloromethane	10.0	9.27	93	76-120	
2-Butanone (MEK)	20.0	21.2	106	41-150	
Chloroform	10.0	9.70	97	78-122	
1,1,1-Trichloroethane	10.0	10.1	101	57-128	
Carbon tetrachloride	10.0	11.0	110	59-145	
Benzene	10.0	10.6	106	80-121	
1,2-Dichloroethane	10.0	9.62	96	72-126	
Trichloroethene	10.0	10.0	100	79-120	
1,2-Dichloropropane	10.0	9.68	97	78-123	
Bromodichloromethane	10.0	9.11	91	72-124	
cis-1,3-Dichloropropene	10.0	8.89	89	67-127	
4-Methyl-2-pentanone (MIBK)	20.0	19.5	98	49-147	
Toluene	10.0	11.1	111	80-125	
trans-1,3-Dichloropropene	10.0	8.97	90	63-144	
1,1,2-Trichloroethane	10.0	10.5	105	77-127	
Tetrachloroethene	10.0	11.0	110	80-122	
2-Hexanone	20.0	22.9	114	40-150	
Dibromochloromethane	10.0	9.16	92	71-134	
1,2-Dibromoethane (EDB)	10.0	9.71	97	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	10.6	106	80-123	
Xylenes, Total	20.0	20.7	104	80-123	
Styrene	10.0	10.6	106	80-125	
Bromoform	10.0	8.86	89	62-138	
1,1,2,2-Tetrachloroethane	10.0	10.5	105	78-135	
Acrylonitrile	100	96.0	96	66-146	
1,4-Dioxane	200	258	129	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.: 180-64801-1

SDG No.:

Lab File ID: 60403005.D Lab Sample ID: MB 180-207145/5

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

Instrument ID: CHHP6 Date Analyzed: 04/03/2017 11:55

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 180-207145/8	60403008.D	04/03/2017 13:19
HD-QC5-0/1-2	180-64801-9	60403016.D	04/03/2017 16:33
HD-QC2-0/1-3	180-64801-10	60403017.D	04/03/2017 16:58
HD-QC2-0/1-4	180-64801-11	60403018.D	04/03/2017 17:22
HD-QC6-0/1-2	180-64801-23	60403019.D	04/03/2017 17:46

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Lab File ID: 60327004.D BFB Injection Date: 03/27/2017

Instrument ID: CHHP6 BFB Injection Time: 11:25

Analysis Batch No.: 206518

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.5	
75	30.0 - 60.0 % of mass 95	50.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.6	(0.7) 1
174	50.0 - 120.00 % of mass 95	74.6	
175	5.0 - 9.0 % of mass 174	3.9	(5.2) 1
176	95.0 - 101.0 % of mass 174	72.5	(97.1) 1
177	5.0 - 9.0 % of mass 176	4.4	(6.0) 2

1-Value is % mass 174 2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-206518/6	60327006.D	03/27/2017	12:56
	IC 180-206518/7	60327007.D	03/27/2017	13:20
	ICIS 180-206518/8	60327008.D	03/27/2017	13:45
	IC 180-206518/9	60327009.D	03/27/2017	14:09
	IC 180-206518/10	60327010.D	03/27/2017	14:33
	IC 180-206518/11	60327011.D	03/27/2017	14:57
	IC 180-206518/12	60327012.D	03/27/2017	15:21
	IC 180-206518/13	60327013.D	03/27/2017	15:45

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Lab File ID: 60403001.D BFB Injection Date: 04/03/2017

Instrument ID: CHHP6 BFB Injection Time: 10:00

Analysis Batch No.: 207145

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	25.0	
75	30.0 - 60.0 % of mass 95	52.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.1	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	83.1	
175	5.0 - 9.0 % of mass 174	6.9	(8.3) 1
176	95.0 - 101.0 % of mass 174	81.5	(98.1) 1
177	5.0 - 9.0 % of mass 176	5.2	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-207145/2	60403002.D	04/03/2017	10:39
	CCV 180-207145/3	60403003.D	04/03/2017	11:03
	MB 180-207145/5	60403005.D	04/03/2017	11:55
	LCS 180-207145/8	60403008.D	04/03/2017	13:19
HD-QC5-0/1-2	180-64801-9	60403016.D	04/03/2017	16:33
HD-QC2-0/1-3	180-64801-10	60403017.D	04/03/2017	16:58
HD-QC2-0/1-4	180-64801-11	60403018.D	04/03/2017	17:22
HD-QC6-0/1-2	180-64801-23	60403019.D	04/03/2017	17:46

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Sample No.: CCVIS 180-207145/2 Date Analyzed: 04/03/2017 10:39

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

Lab File ID (Standard): 60403002.D Heated Purge: (Y/N) N

Calibration ID: 34317

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		115333	4.07	344579	7.12	75253	10.23
UPPER LIMIT		230666	4.57	689158	7.62	150506	10.73
LOWER LIMIT		57667	3.57	172290	6.62	37627	9.73
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-207145/3		150166	4.05	327966	7.13	69594	10.23
MB 180-207145/5		140647	4.05	274786	7.13	69552	10.23
LCS 180-207145/8		92883	4.06	340490	7.12	72104	10.24
180-64801-9	HD-QC5-0/1-2	114291	4.05	274870	7.13	73426	10.23
180-64801-10	HD-QC2-0/1-3	110172	4.06	284107	7.12	70788	10.24
180-64801-11	HD-QC2-0/1-4	106069	4.05	267081	7.12	68036	10.24
180-64801-23	HD-QC6-0/1-2	93089	4.04	270686	7.12	70172	10.24

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.: 180-64801-1

SDG No.:

Sample No.: CCVIS 180-207145/2 Date Analyzed: 04/03/2017 10:39

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

Lab File ID (Standard): 60403002.D Heated Purge: (Y/N) N

Calibration ID: 34317

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		123040	12.58				
UPPER LIMIT		246080	13.08				
LOWER LIMIT		61520	12.08				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-207145/3		96915	12.58				
MB 180-207145/5		108275	12.58				
LCS 180-207145/8		111905	12.58				
180-64801-9	HD-QC5-0/1-2	117308	12.58				
180-64801-10	HD-QC2-0/1-3	118884	12.58				
180-64801-11	HD-QC2-0/1-4	116399	12.58				
180-64801-23	HD-QC6-0/1-2	103018	12.58				

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.: 180-64801-1

SDG No.:

Client Sample ID: HD-QC5-0/1-2 | Lab Sample ID: 180-64801-9

Matrix: Water | Lab File ID: 60403016.D

Analysis Method: 8260C | Date Collected: 03/30/2017 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 04/03/2017 16:33

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.: 207145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.38
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-00-3	Chloroethane	1.0	U	1.0	0.58
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
67-64-1	Acetone	5.0	U	5.0	3.1
75-15-0	Carbon disulfide	1.0	U	1.0	0.53
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30
74-97-5	Bromochloromethane	1.0	U	1.0	0.36
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
71-43-2	Benzene	1.0	U	1.0	0.18
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.24
79-01-6	Trichloroethene	1.0	U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
75-27-4	Bromodichloromethane	1.0	U	1.0	0.57
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.2
108-88-3	Toluene	1.0	U	1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
127-18-4	Tetrachloroethene	1.0	U	1.0	0.24
591-78-6	2-Hexanone	5.0	U ^c	5.0	2.0
124-48-1	Dibromochloromethane	1.0	U	1.0	0.44
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.51
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.49
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
100-42-5	Styrene	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-QC5-0/1-2 | Lab Sample ID: 180-64801-9

Matrix: Water | Lab File ID: 60403016.D

Analysis Method: 8260C | Date Collected: 03/30/2017 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 04/03/2017 16:33

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.: 207145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.76
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
107-13-1	Acrylonitrile	20	U	20	3.3
123-91-1	1,4-Dioxane	200	U ^c	200	16

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		72-134
2037-26-5	Toluene-d8 (Surr)	93		80-120
460-00-4	4-Bromofluorobenzene (Surr)	103		72-120
1868-53-7	Dibromofluoromethane (Surr)	104		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403016.D
Lims ID: 180-64801-A-9
Client ID: HD-QC5-0/1-2
Sample Type: Client
Inject. Date: 03-Apr-2017 16:33:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016136-016
Misc. Info.: 180-64801-A-9
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Apr-2017 07:20:08 Calib Date: 29-Mar-2017 15:25:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170329-16081.b\60329012.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 05-Apr-2017 07:20:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.047	4.047	0.000	85	114291	1000.0	
* 2 Fluorobenzene (IS)	96	7.125	7.125	0.000	98	274870	50.0	
* 3 Chlorobenzene-d5	119	10.234	10.233	0.001	91	73426	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.582	12.582	0.000	98	117308	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.389	6.389	0.000	92	64106	51.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.766	6.760	0.006	69	97938	51.1	
$ 7 Toluene-d8 (Surr)	98	8.780	8.780	0.000	94	267154	46.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.420	11.420	0.000	86	124846	51.4	
12 Chloromethane	50		1.663				ND	
13 Vinyl chloride	62		1.784				ND	
15 Bromomethane	94		2.131				ND	
16 Chloroethane	64		2.247				ND	
22 1,1-Dichloroethene	96		3.171				ND	
24 Acetone	43	3.268	3.256	0.012	99	7528	13.6	
26 Carbon disulfide	76		3.445				ND	
31 Methylene Chloride	84	3.950	3.926	0.024	60	5330	2.84	
33 Acrylonitrile	53		4.321				ND	
34 trans-1,2-Dichloroethene	96		4.358				ND	
35 Methyl tert-butyl ether	73		4.364				ND	
37 1,1-Dichloroethane	63		5.002				ND	
43 cis-1,2-Dichloroethene	96		5.769				ND	
44 2-Butanone (MEK)	43		5.781				ND	
48 Chlorobromomethane	128		6.055				ND	
50 Chloroform	83		6.207				ND	
51 1,1,1-Trichloroethane	97		6.365				ND	
53 Carbon tetrachloride	117		6.535				ND	
56 Benzene	78		6.767				ND	
57 1,2-Dichloroethane	62		6.852				ND	
61 Trichloroethene	130		7.509				ND	
64 1,2-Dichloropropane	63		7.783				ND	
65 1,4-Dioxane	88		7.868				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.075				ND	
71 cis-1,3-Dichloropropene	75		8.519				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.677				ND	
73 Toluene	91		8.847				ND	
74 trans-1,3-Dichloropropene	75		9.103				ND	
76 1,1,2-Trichloroethane	97		9.291				ND	
77 Tetrachloroethene	164		9.364				ND	
79 2-Hexanone	43		9.510				ND	
81 Chlorodibromomethane	129		9.662				ND	
82 Ethylene Dibromide	107		9.772				ND	
84 Chlorobenzene	112		10.265				ND	
86 1,1,1,2-Tetrachloroethane	131		10.362				ND	
87 Ethylbenzene	106		10.368				ND	
88 m-Xylene & p-Xylene	106		10.502				ND	
89 o-Xylene	106		10.879				ND	
90 Styrene	104		10.903				ND	
91 Bromoform	173		11.080				ND	
96 1,1,2,2-Tetrachloroethane	83		11.560				ND	
S 131 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00067	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added:	2.00	Units: uL	Run Reagent

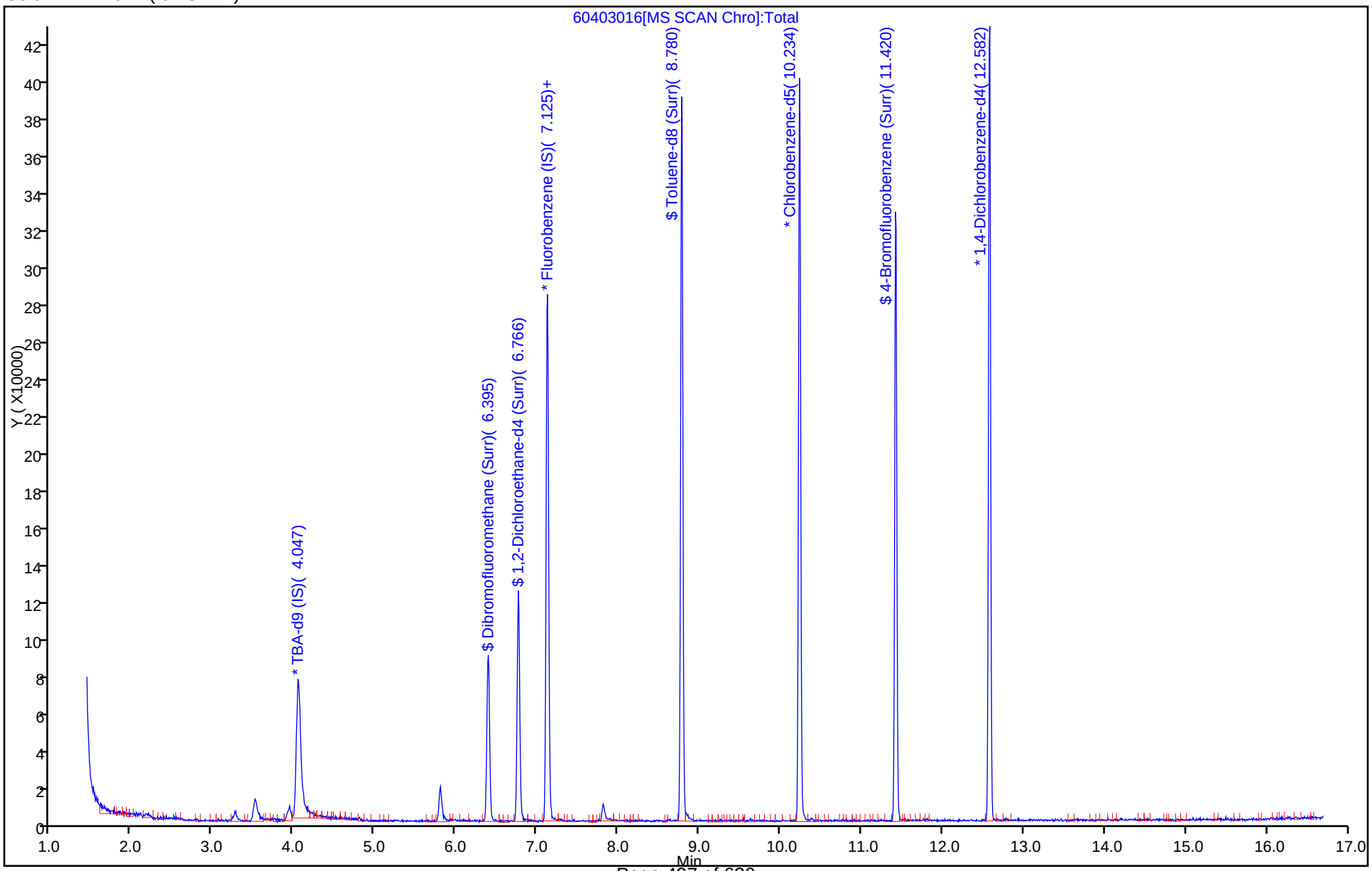
Report Date: 05-Apr-2017 07:20:09 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403016.D

Injection Date:	03-Apr-2017 16:33:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-64801-A-9	Lab Sample ID:	180-64801-9	Worklist Smp#:	16
Client ID:	HD-QC5-0/1-2				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
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\20170403-16136.b\60403016.D
Lims ID: 180-64801-A-9
Client ID: HD-QC5-0/1-2
Sample Type: Client
Inject. Date: 03-Apr-2017 16:33:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016136-016
Misc. Info.: 180-64801-A-9
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Apr-2017 07:20:08 Calib Date: 29-Mar-2017 15:25:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170329-16081.b\60329012.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 05-Apr-2017 07:20:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.9	103.74
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	51.1	102.12
$ 7 Toluene-d8 (Surr)	50.0	46.4	92.86
$ 8 4-Bromofluorobenzene (Surr)	50.0	51.4	102.71

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-QC2-0/1-3 | Lab Sample ID: 180-64801-10

Matrix: Water | Lab File ID: 60403017.D

Analysis Method: 8260C | Date Collected: 03/30/2017 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 04/03/2017 16:58

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 207145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.38
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-00-3	Chloroethane	1.0	U	1.0	0.58
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
67-64-1	Acetone	6.9		5.0	3.1
75-15-0	Carbon disulfide	1.0	U	1.0	0.53
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30
74-97-5	Bromochloromethane	1.0	U	1.0	0.36
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
71-43-2	Benzene	1.0	U	1.0	0.18
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.24
79-01-6	Trichloroethene	1.0	U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
75-27-4	Bromodichloromethane	1.0	U	1.0	0.57
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.2
108-88-3	Toluene	1.0	U	1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
127-18-4	Tetrachloroethene	1.0	U	1.0	0.24
591-78-6	2-Hexanone	5.0	U ^c	5.0	2.0
124-48-1	Dibromochloromethane	1.0	U	1.0	0.44
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.51
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.49
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
100-42-5	Styrene	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-QC2-0/1-3 | Lab Sample ID: 180-64801-10

Matrix: Water | Lab File ID: 60403017.D

Analysis Method: 8260C | Date Collected: 03/30/2017 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 04/03/2017 16:58

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 207145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.76
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
107-13-1	Acrylonitrile	20	U	20	3.3
123-91-1	1,4-Dioxane	200	U ^c	200	16

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		72-134
2037-26-5	Toluene-d8 (Surr)	95		80-120
460-00-4	4-Bromofluorobenzene (Surr)	105		72-120
1868-53-7	Dibromofluoromethane (Surr)	104		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403017.D
Lims ID: 180-64801-B-10
Client ID: HD-QC2-0/1-3
Sample Type: Client
Inject. Date: 03-Apr-2017 16:58:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016136-017
Misc. Info.: 180-64801-B-10
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Apr-2017 07:22:18 Calib Date: 29-Mar-2017 15:25:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170329-16081.b\60329012.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 05-Apr-2017 07:22:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.056	4.047	0.009	86	110172	1000.0	
* 2 Fluorobenzene (IS)	96	7.122	7.125	-0.003	98	284107	50.0	
* 3 Chlorobenzene-d5	119	10.236	10.233	0.003	92	70788	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.579	12.582	-0.004	98	118884	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.392	6.389	0.003	94	66480	52.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.763	6.760	0.003	69	96357	48.6	
$ 7 Toluene-d8 (Surr)	98	8.782	8.780	0.002	94	264584	47.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.423	11.420	0.003	86	123146	52.5	
12 Chloromethane	50	1.671	1.663	0.008	94	3108	1.32	M
13 Vinyl chloride	62		1.784				ND	
15 Bromomethane	94		2.131				ND	
16 Chloroethane	64		2.247				ND	
22 1,1-Dichloroethene	96		3.171				ND	
24 Acetone	43	3.271	3.256	0.015	99	19683	34.5	
26 Carbon disulfide	76		3.445				ND	
31 Methylene Chloride	84		3.926				ND	
33 Acrylonitrile	53		4.321				ND	
34 trans-1,2-Dichloroethene	96		4.358				ND	
35 Methyl tert-butyl ether	73		4.364				ND	
37 1,1-Dichloroethane	63		5.002				ND	
43 cis-1,2-Dichloroethene	96		5.769				ND	
44 2-Butanone (MEK)	43	5.789	5.781	0.008	97	6478	7.36	
48 Chlorobromomethane	128		6.055				ND	
50 Chloroform	83		6.207				ND	
51 1,1,1-Trichloroethane	97		6.365				ND	
53 Carbon tetrachloride	117		6.535				ND	
56 Benzene	78		6.767				ND	
57 1,2-Dichloroethane	62		6.852				ND	
61 Trichloroethene	130		7.509				ND	
64 1,2-Dichloropropane	63		7.783				ND	
65 1,4-Dioxane	88		7.868				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.075				ND	
71 cis-1,3-Dichloropropene	75		8.519				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.677				ND	
73 Toluene	91		8.847				ND	
74 trans-1,3-Dichloropropene	75		9.103				ND	
76 1,1,2-Trichloroethane	97		9.291				ND	
77 Tetrachloroethene	164		9.364				ND	
79 2-Hexanone	43		9.510				ND	
81 Chlorodibromomethane	129		9.662				ND	
82 Ethylene Dibromide	107		9.772				ND	
84 Chlorobenzene	112		10.265				ND	
86 1,1,1,2-Tetrachloroethane	131		10.362				ND	
87 Ethylbenzene	106		10.368				ND	
88 m-Xylene & p-Xylene	106		10.502				ND	
89 o-Xylene	106		10.879				ND	
90 Styrene	104		10.903				ND	
91 Bromoform	173		11.080				ND	
96 1,1,2,2-Tetrachloroethane	83		11.560				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00067	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added:	2.00	Units: uL	Run Reagent

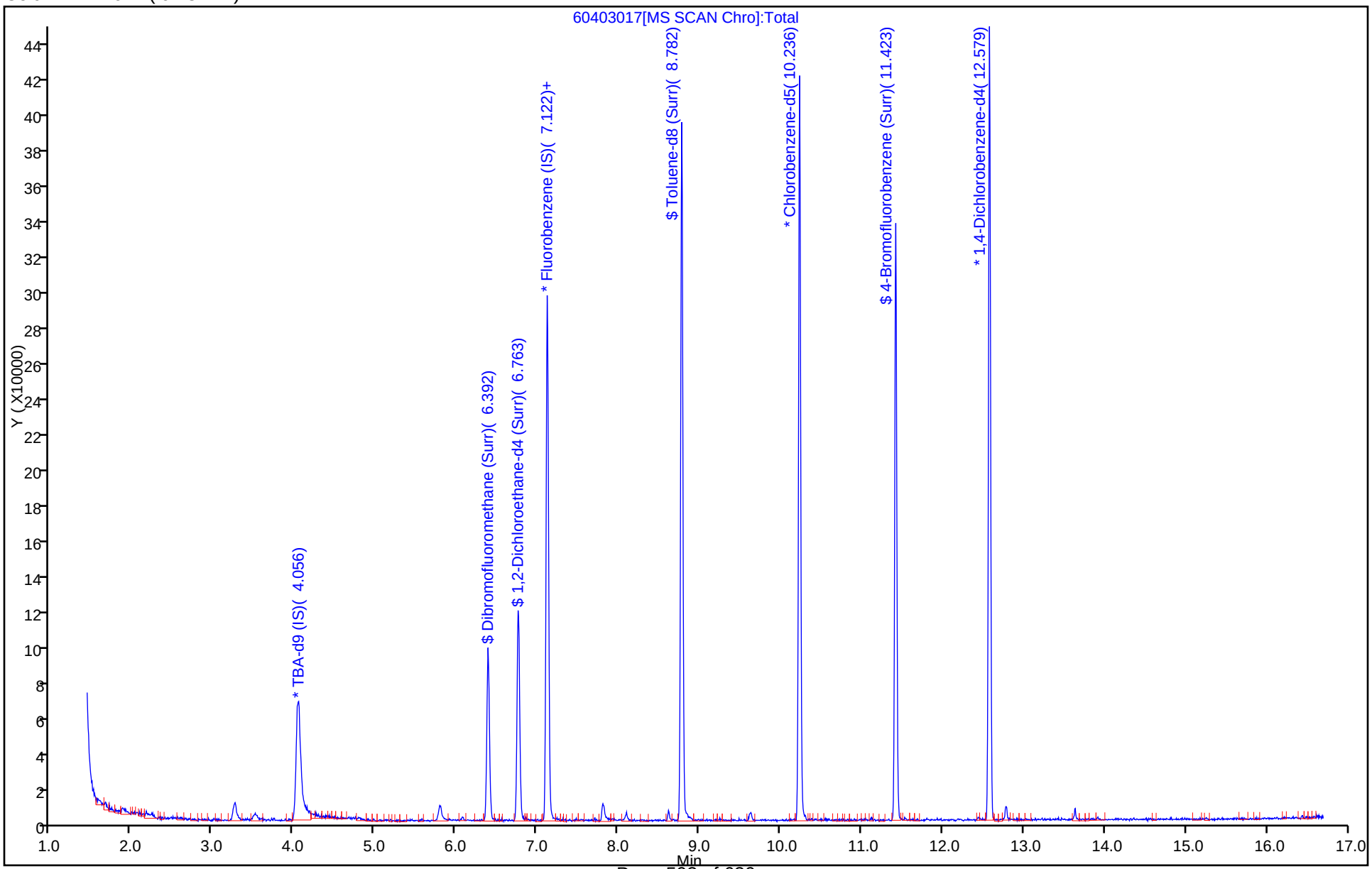
Report Date: 05-Apr-2017 07:22:19 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403017.D

Injection Date:	03-Apr-2017 16:58:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-64801-B-10	Lab Sample ID:	180-64801-10	Worklist Smp#:	17
Client ID:	HD-QC2-0/1-3				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403017.D				
Lims ID:	180-64801-B-10				
Client ID:	HD-QC2-0/1-3				
Sample Type:	Client				
Inject. Date:	03-Apr-2017 16:58:30	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	180-0016136-017				
Misc. Info.:	180-64801-B-10				
Operator ID:	001562	Instrument ID:	CHHP6		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\MSVOA_LL_CHHP6.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	05-Apr-2017 07:22:18	Calib Date:	29-Mar-2017 15:25:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170329-16081.b\60329012.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK022				

First Level Reviewer: fergusond Date: 05-Apr-2017 07:22:18

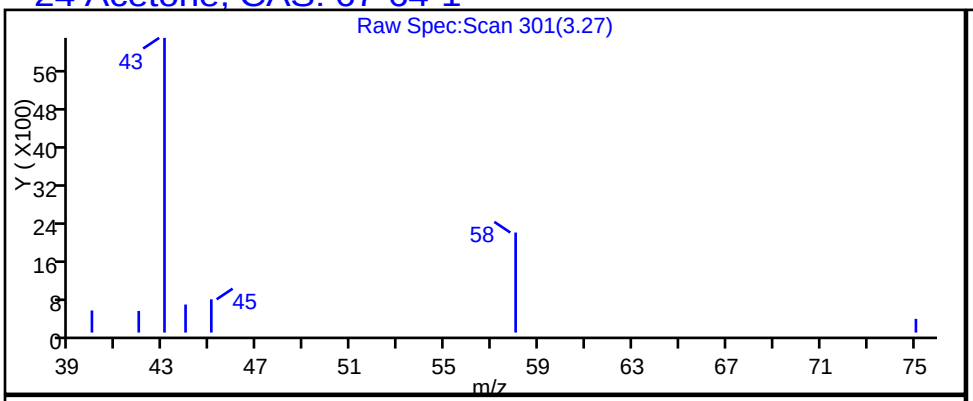
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	52.0	104.08
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.6	97.20
$ 7 Toluene-d8 (Surr)	50.0	47.7	95.39
$ 8 4-Bromofluorobenzene (Surr)	50.0	52.5	105.08

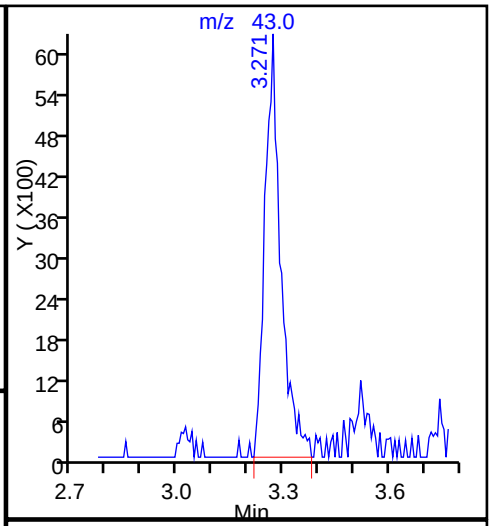
Report Date: 05-Apr-2017 07:22:19 Chrom Revision: 2.2 13-Mar-2017 15:50:30

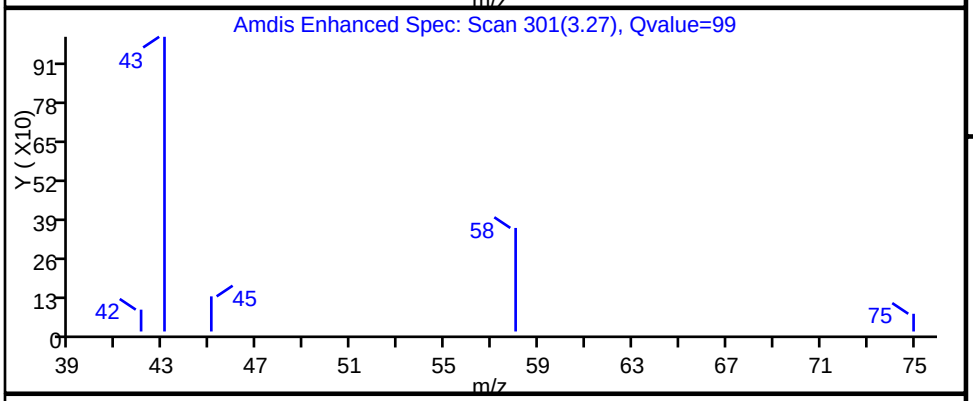
TestAmerica Pittsburgh

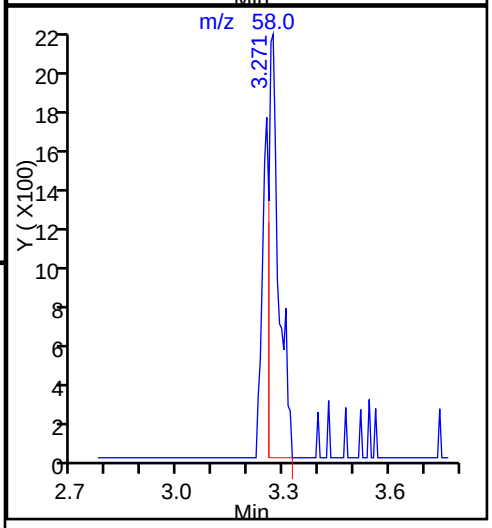
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403017.D				
Injection Date:	03-Apr-2017 16:58:30	Instrument ID:	CHHP6		
Lims ID:	180-64801-B-10	Lab Sample ID:	180-64801-10		
Client ID:	HD-QC2-0/1-3				
Operator ID:	001562	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

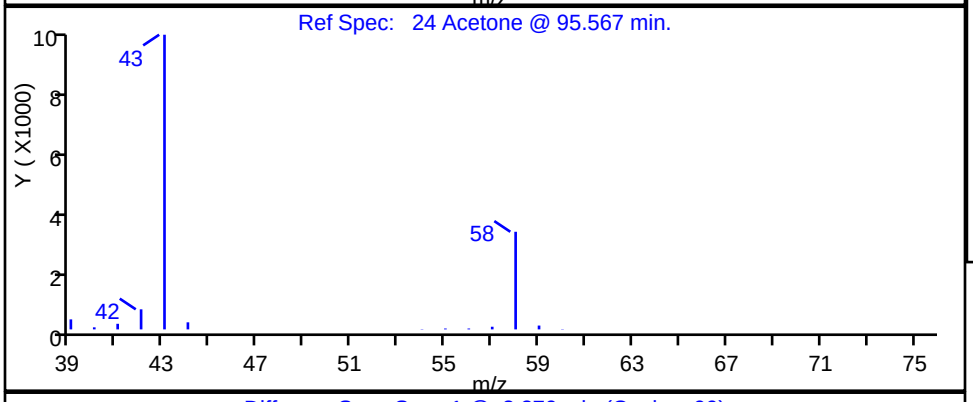
24 Acetone, CAS: 67-64-1

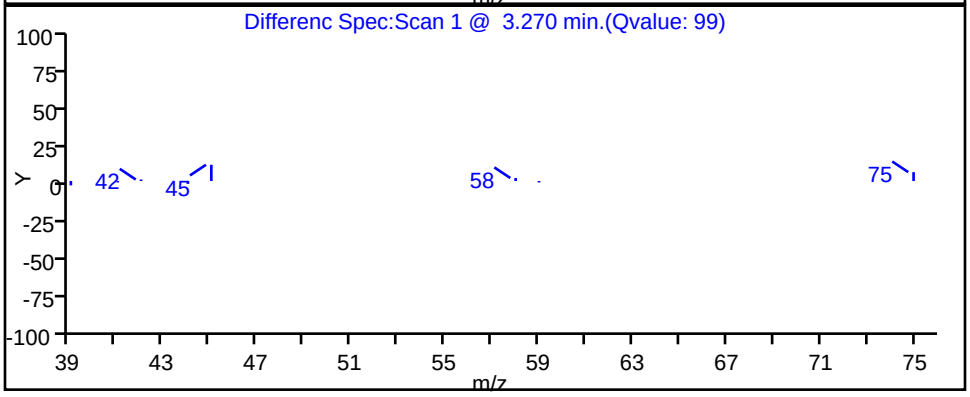












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

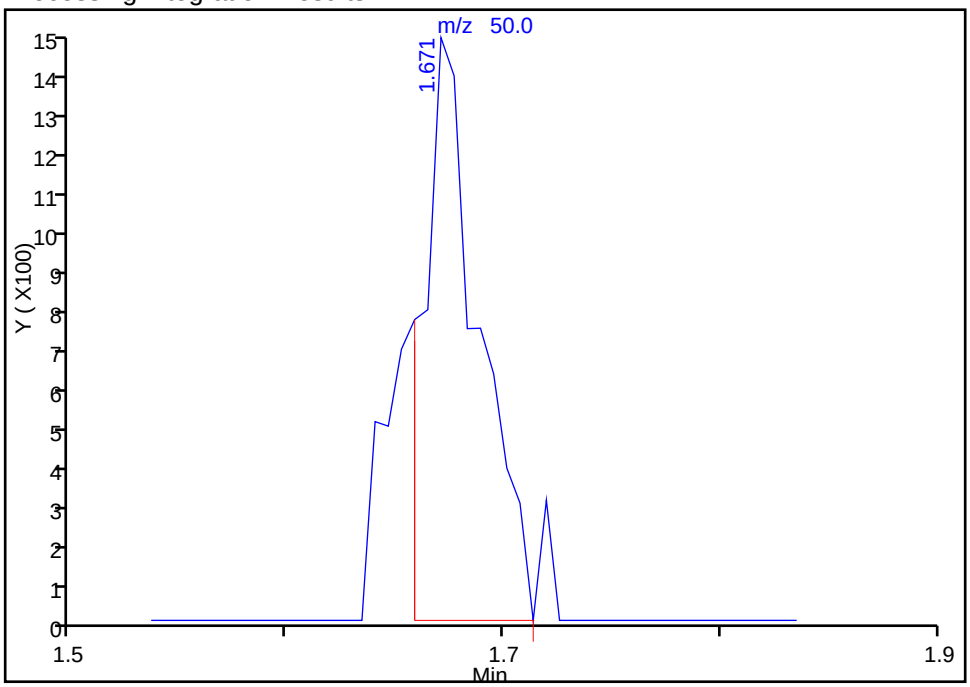
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403017.D				
Injection Date:	03-Apr-2017 16:58:30	Instrument ID:	CHHP6		
Lims ID:	180-64801-B-10	Lab Sample ID:	180-64801-10		
Client ID:	HD-QC2-0/1-3				
Operator ID:	001562	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

12 Chloromethane, CAS: 74-87-3

Signal: 1

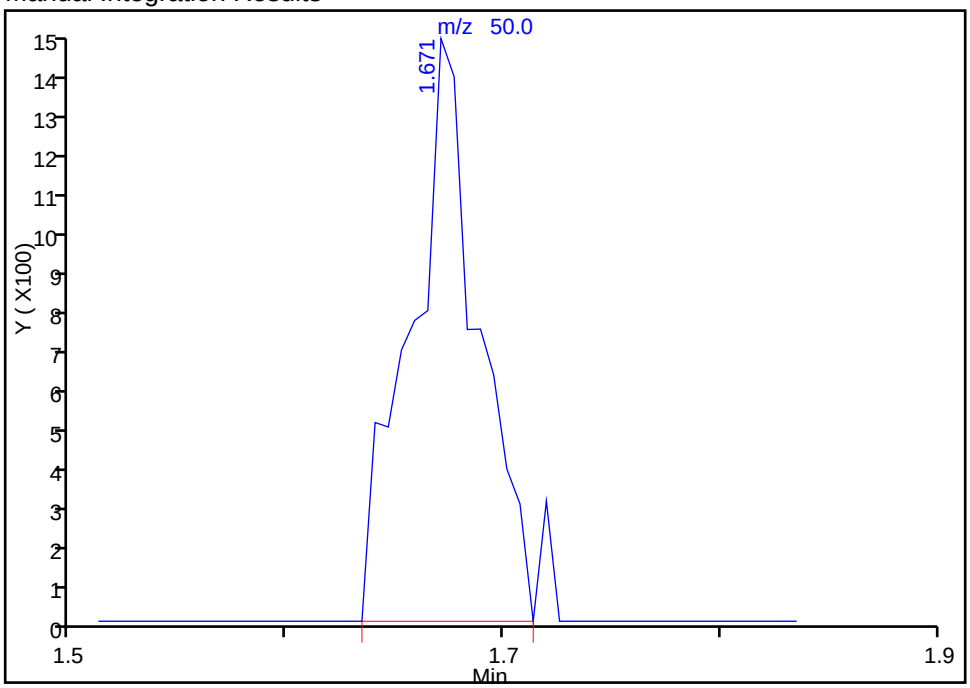
Processing Integration Results

RT: 1.67
Area: 2518
Amount: 1.066838
Amount Units: ng



Manual Integration Results

RT: 1.67
Area: 3108
Amount: 1.316812
Amount Units: ng



Reviewer: fergusond, 05-Apr-2017 07:20:57

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-QC2-0/1-4 | Lab Sample ID: 180-64801-11

Matrix: Water | Lab File ID: 60403018.D

Analysis Method: 8260C | Date Collected: 03/30/2017 10:20

Sample wt/vol: 5(mL) | Date Analyzed: 04/03/2017 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.: 207145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.38
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-00-3	Chloroethane	1.0	U	1.0	0.58
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
67-64-1	Acetone	8.8		5.0	3.1
75-15-0	Carbon disulfide	1.0	U	1.0	0.53
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30
74-97-5	Bromochloromethane	1.0	U	1.0	0.36
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
71-43-2	Benzene	1.0	U	1.0	0.18
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.24
79-01-6	Trichloroethene	1.0	U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
75-27-4	Bromodichloromethane	1.0	U	1.0	0.57
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.2
108-88-3	Toluene	1.0	U	1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
127-18-4	Tetrachloroethene	1.0	U	1.0	0.24
591-78-6	2-Hexanone	5.0	U ^c	5.0	2.0
124-48-1	Dibromochloromethane	1.0	U	1.0	0.44
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.51
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.49
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
100-42-5	Styrene	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-QC2-0/1-4 | Lab Sample ID: 180-64801-11

Matrix: Water | Lab File ID: 60403018.D

Analysis Method: 8260C | Date Collected: 03/30/2017 10:20

Sample wt/vol: 5(mL) | Date Analyzed: 04/03/2017 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.: 207145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.76
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
107-13-1	Acrylonitrile	20	U	20	3.3
123-91-1	1,4-Dioxane	200	U ^c	200	16

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		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)	110		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403018.D
Lims ID: 180-64801-A-11
Client ID: HD-QC2-0/1-4
Sample Type: Client
Inject. Date: 03-Apr-2017 17:22:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016136-018
Misc. Info.: 180-64801-A-11
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Apr-2017 07:30:36 Calib Date: 29-Mar-2017 15:25:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170329-16081.b\60329012.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 05-Apr-2017 07:30:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.050	4.047	0.003	89	106069	1000.0	
* 2 Fluorobenzene (IS)	96	7.122	7.125	-0.003	97	267081	50.0	
* 3 Chlorobenzene-d5	119	10.236	10.233	0.003	92	68036	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.579	12.582	-0.003	98	116399	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.392	6.389	0.003	92	66068	55.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.769	6.760	0.009	69	97130	52.1	
$ 7 Toluene-d8 (Surr)	98	8.782	8.780	0.002	94	256373	48.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.423	11.420	0.003	86	119877	53.2	
12 Chloromethane	50		1.663				ND	
13 Vinyl chloride	62		1.784				ND	
15 Bromomethane	94		2.131				ND	
16 Chloroethane	64		2.247				ND	
22 1,1-Dichloroethene	96		3.171				ND	
24 Acetone	43	3.259	3.256	0.003	100	23643	44.0	
26 Carbon disulfide	76		3.445				ND	
31 Methylene Chloride	84		3.926				ND	
33 Acrylonitrile	53		4.321				ND	
34 trans-1,2-Dichloroethene	96		4.358				ND	
35 Methyl tert-butyl ether	73		4.364				ND	
37 1,1-Dichloroethane	63		5.002				ND	
43 cis-1,2-Dichloroethene	96		5.769				ND	
44 2-Butanone (MEK)	43	5.795	5.781	0.014	33	8515	10.3	
48 Chlorobromomethane	128		6.055				ND	
50 Chloroform	83		6.207				ND	
51 1,1,1-Trichloroethane	97		6.365				ND	
53 Carbon tetrachloride	117		6.535				ND	
56 Benzene	78		6.767				ND	
57 1,2-Dichloroethane	62		6.852				ND	
61 Trichloroethene	130		7.509				ND	
64 1,2-Dichloropropane	63		7.783				ND	
65 1,4-Dioxane	88		7.868				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.075				ND	
71 cis-1,3-Dichloropropene	75		8.519				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.677				ND	
73 Toluene	91		8.847				ND	
74 trans-1,3-Dichloropropene	75		9.103				ND	
76 1,1,2-Trichloroethane	97		9.291				ND	
77 Tetrachloroethene	164		9.364				ND	
79 2-Hexanone	43		9.510				ND	
81 Chlorodibromomethane	129		9.662				ND	
82 Ethylene Dibromide	107		9.772				ND	
84 Chlorobenzene	112		10.265				ND	
86 1,1,1,2-Tetrachloroethane	131		10.362				ND	
87 Ethylbenzene	106		10.368				ND	
88 m-Xylene & p-Xylene	106		10.502				ND	
89 o-Xylene	106		10.879				ND	
90 Styrene	104		10.903				ND	
91 Bromoform	173		11.080				ND	
96 1,1,2,2-Tetrachloroethane	83		11.560				ND	
S 131 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00067	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added:	2.00	Units: uL	Run Reagent

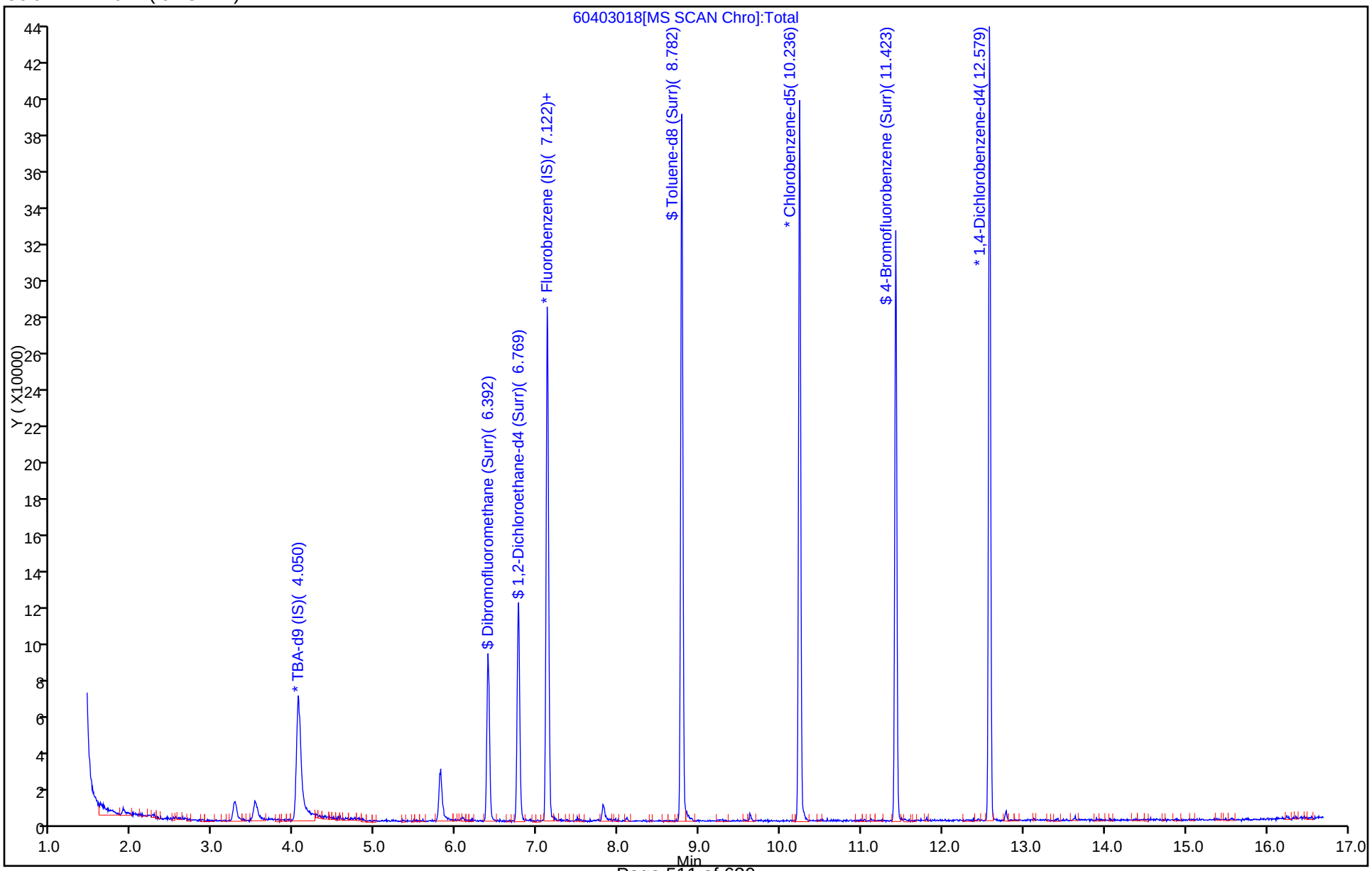
Report Date: 05-Apr-2017 07:30:36 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403018.D

Injection Date:	03-Apr-2017 17:22:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-64801-A-11	Lab Sample ID:	180-64801-11	Worklist Smp#:	18
Client ID:	HD-QC2-0/1-4				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403018.D
Lims ID: 180-64801-A-11
Client ID: HD-QC2-0/1-4
Sample Type: Client
Inject. Date: 03-Apr-2017 17:22:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016136-018
Misc. Info.: 180-64801-A-11
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Apr-2017 07:30:36 Calib Date: 29-Mar-2017 15:25:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170329-16081.b\60329012.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 05-Apr-2017 07:30:36

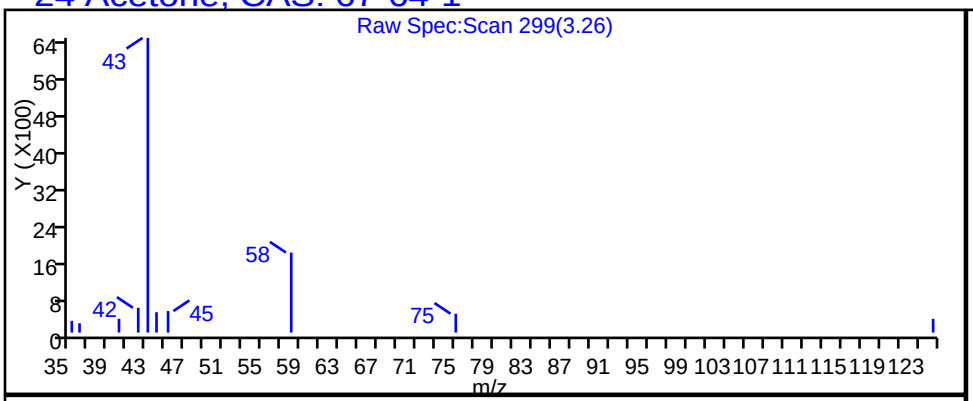
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	55.0	110.03
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	52.1	104.23
$ 7 Toluene-d8 (Surr)	50.0	48.1	96.17
$ 8 4-Bromofluorobenzene (Surr)	50.0	53.2	106.43

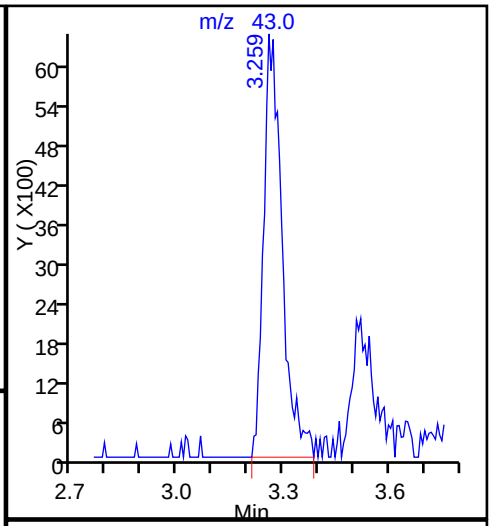
Report Date: 05-Apr-2017 07:30:36 Chrom Revision: 2.2 13-Mar-2017 15:50:30

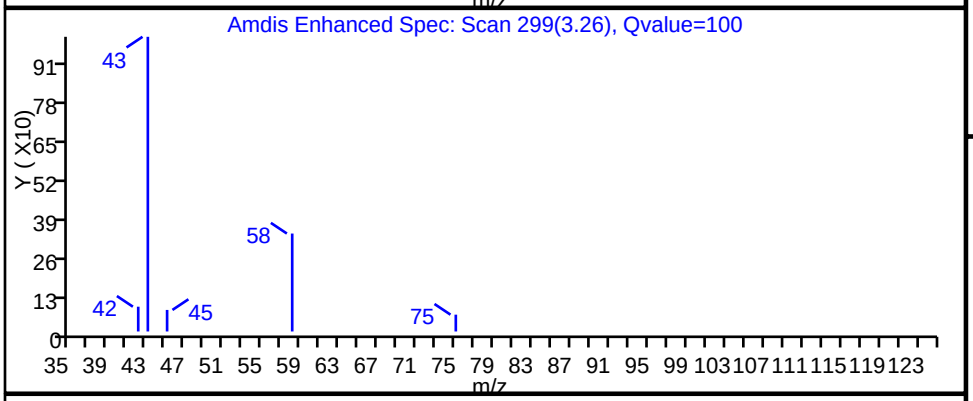
TestAmerica Pittsburgh

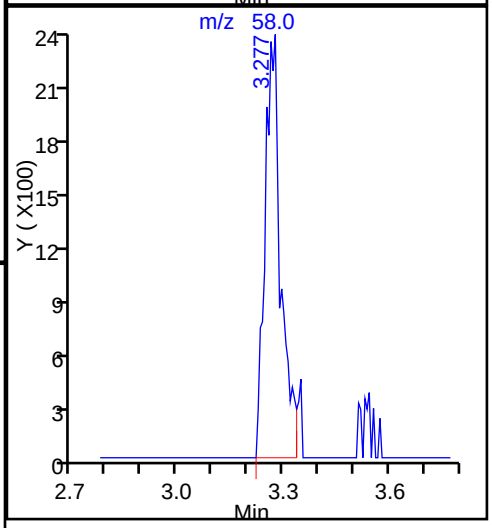
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403018.D				
Injection Date:	03-Apr-2017 17:22:30	Instrument ID:	CHHP6		
Lims ID:	180-64801-A-11	Lab Sample ID:	180-64801-11		
Client ID:	HD-QC2-0/1-4				
Operator ID:	001562	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

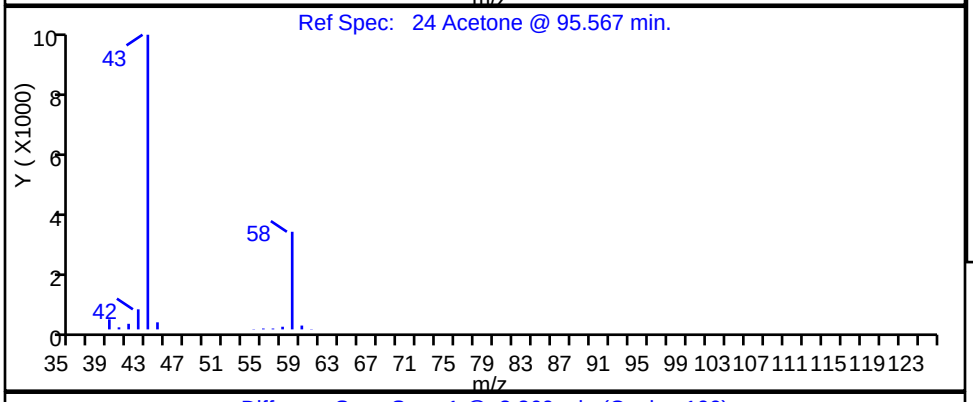
24 Acetone, CAS: 67-64-1

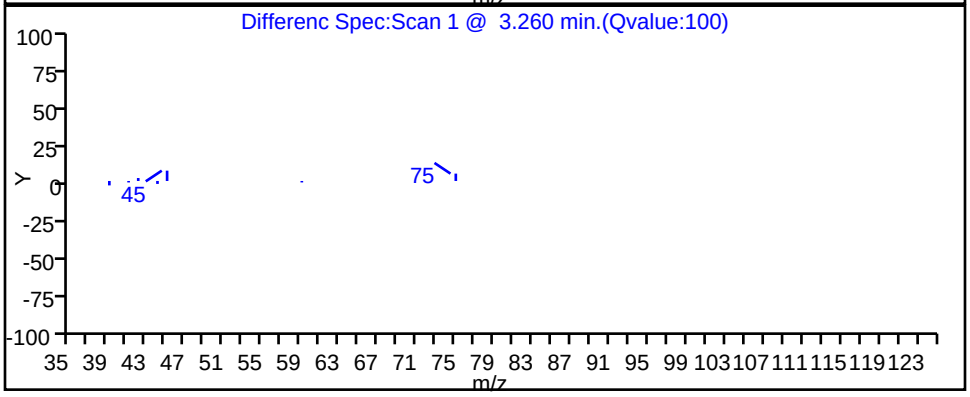












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-QC6-0/1-2 | Lab Sample ID: 180-64801-23

Matrix: Water | Lab File ID: 60403019.D

Analysis Method: 8260C | Date Collected: 03/30/2017 12:05

Sample wt/vol: 5(mL) | Date Analyzed: 04/03/2017 17:46

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 207145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.38
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-00-3	Chloroethane	1.0	U	1.0	0.58
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
67-64-1	Acetone	3.7	J	5.0	3.1
75-15-0	Carbon disulfide	1.0	U	1.0	0.53
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30
74-97-5	Bromochloromethane	1.0	U	1.0	0.36
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
71-43-2	Benzene	1.0	U	1.0	0.18
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.24
79-01-6	Trichloroethene	1.0	U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
75-27-4	Bromodichloromethane	1.0	U	1.0	0.57
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.2
108-88-3	Toluene	1.0	U	1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
127-18-4	Tetrachloroethene	1.0	U	1.0	0.24
591-78-6	2-Hexanone	5.0	U ^c	5.0	2.0
124-48-1	Dibromochloromethane	1.0	U	1.0	0.44
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.51
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.49
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
100-42-5	Styrene	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: HD-QC6-0/1-2 | Lab Sample ID: 180-64801-23

Matrix: Water | Lab File ID: 60403019.D

Analysis Method: 8260C | Date Collected: 03/30/2017 12:05

Sample wt/vol: 5(mL) | Date Analyzed: 04/03/2017 17:46

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 207145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.76
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
107-13-1	Acrylonitrile	20	U	20	3.3
123-91-1	1,4-Dioxane	200	U ^c	200	16

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		72-134
2037-26-5	Toluene-d8 (Surr)	94		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		72-120
1868-53-7	Dibromofluoromethane (Surr)	107		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403019.D
Lims ID: 180-64801-A-23
Client ID: HD-QC6-0/1-2
Sample Type: Client
Inject. Date: 03-Apr-2017 17:46:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016136-019
Misc. Info.: 180-64801-A-23
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Apr-2017 07:31:48 Calib Date: 29-Mar-2017 15:25:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170329-16081.b\60329012.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 05-Apr-2017 07:31:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.044	4.047	-0.003	90	93089	1000.0	
* 2 Fluorobenzene (IS)	96	7.122	7.125	-0.003	98	270686	50.0	
* 3 Chlorobenzene-d5	119	10.237	10.233	0.004	91	70172	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.579	12.582	-0.003	98	103018	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.392	6.389	0.003	93	64960	53.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.763	6.760	0.003	69	94874	50.2	
$ 7 Toluene-d8 (Surr)	98	8.783	8.780	0.003	95	259496	47.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.423	11.420	0.003	85	115738	49.8	
12 Chloromethane	50		1.663				ND	
13 Vinyl chloride	62		1.784				ND	
15 Bromomethane	94		2.131				ND	
16 Chloroethane	64		2.247				ND	
22 1,1-Dichloroethene	96		3.171				ND	
24 Acetone	43	3.265	3.256	0.009	99	10161	18.7	
26 Carbon disulfide	76		3.445				ND	
31 Methylene Chloride	84	3.934	3.926	0.008	95	5542	3.00	
33 Acrylonitrile	53		4.321				ND	
34 trans-1,2-Dichloroethene	96		4.358				ND	
35 Methyl tert-butyl ether	73		4.364				ND	
37 1,1-Dichloroethane	63		5.002				ND	
43 cis-1,2-Dichloroethene	96		5.769				ND	
44 2-Butanone (MEK)	43		5.781				ND	
48 Chlorobromomethane	128		6.055				ND	
50 Chloroform	83		6.207				ND	
51 1,1,1-Trichloroethane	97		6.365				ND	
53 Carbon tetrachloride	117		6.535				ND	
56 Benzene	78		6.767				ND	
57 1,2-Dichloroethane	62		6.852				ND	
61 Trichloroethene	130		7.509				ND	
64 1,2-Dichloropropane	63		7.783				ND	
65 1,4-Dioxane	88		7.868				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.075				ND	
71 cis-1,3-Dichloropropene	75		8.519				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.677				ND	
73 Toluene	91		8.847				ND	
74 trans-1,3-Dichloropropene	75		9.103				ND	
76 1,1,2-Trichloroethane	97		9.291				ND	
77 Tetrachloroethene	164		9.364				ND	
79 2-Hexanone	43		9.510				ND	
81 Chlorodibromomethane	129		9.662				ND	
82 Ethylene Dibromide	107		9.772				ND	
84 Chlorobenzene	112		10.265				ND	
86 1,1,1,2-Tetrachloroethane	131		10.362				ND	
87 Ethylbenzene	106		10.368				ND	
88 m-Xylene & p-Xylene	106		10.502				ND	
89 o-Xylene	106		10.879				ND	
90 Styrene	104		10.903				ND	
91 Bromoform	173		11.080				ND	
96 1,1,2,2-Tetrachloroethane	83		11.560				ND	
S 131 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00067	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added:	2.00	Units: uL	Run Reagent

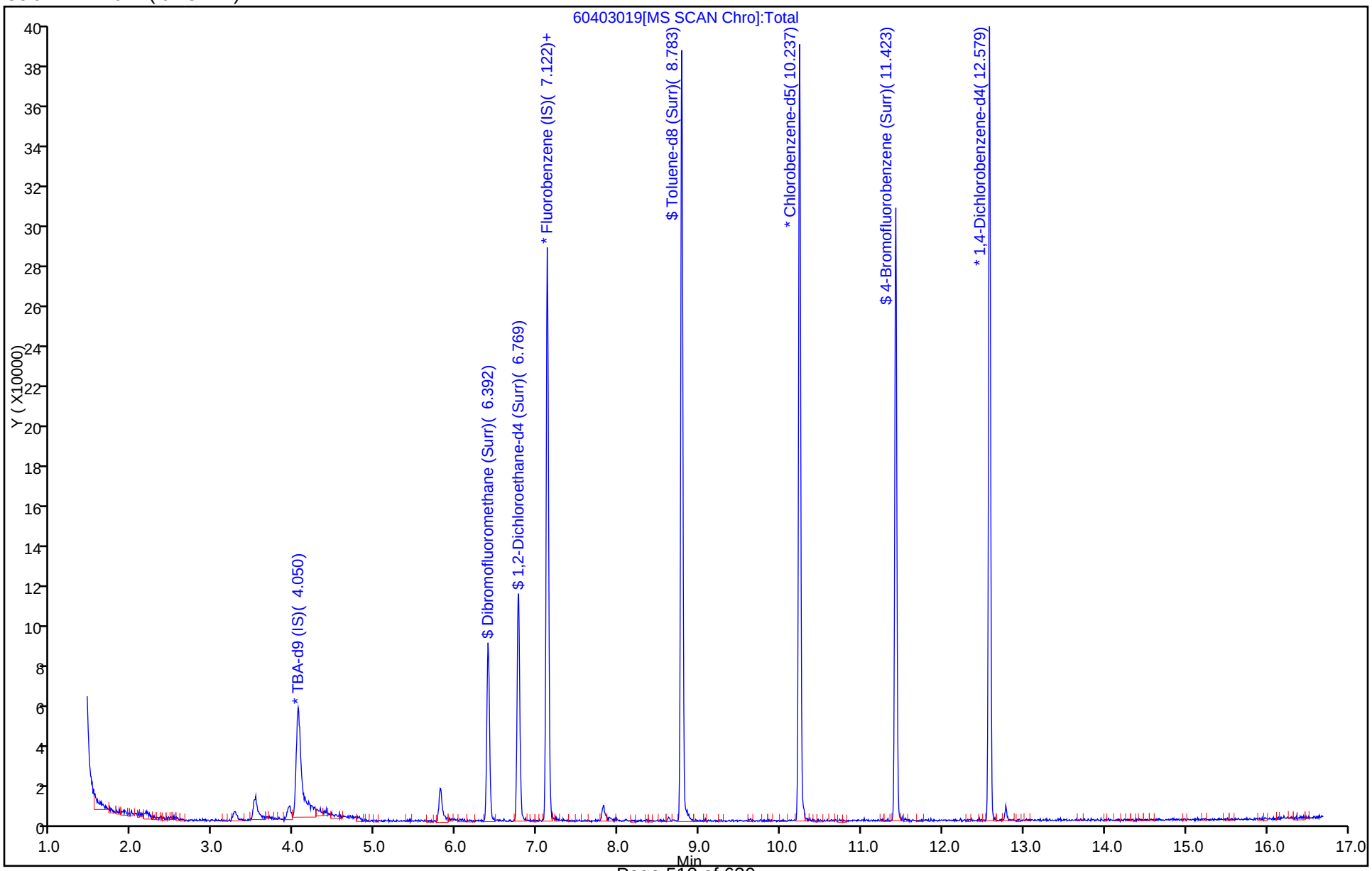
Report Date: 05-Apr-2017 07:31:49 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403019.D

Injection Date:	03-Apr-2017 17:46:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-64801-A-23	Lab Sample ID:	180-64801-23	Worklist Smp#:	19
Client ID:	HD-QC6-0/1-2				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403019.D
Lims ID: 180-64801-A-23
Client ID: HD-QC6-0/1-2
Sample Type: Client
Inject. Date: 03-Apr-2017 17:46:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016136-019
Misc. Info.: 180-64801-A-23
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Apr-2017 07:31:48 Calib Date: 29-Mar-2017 15:25:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170329-16081.b\60329012.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 05-Apr-2017 07:31:48

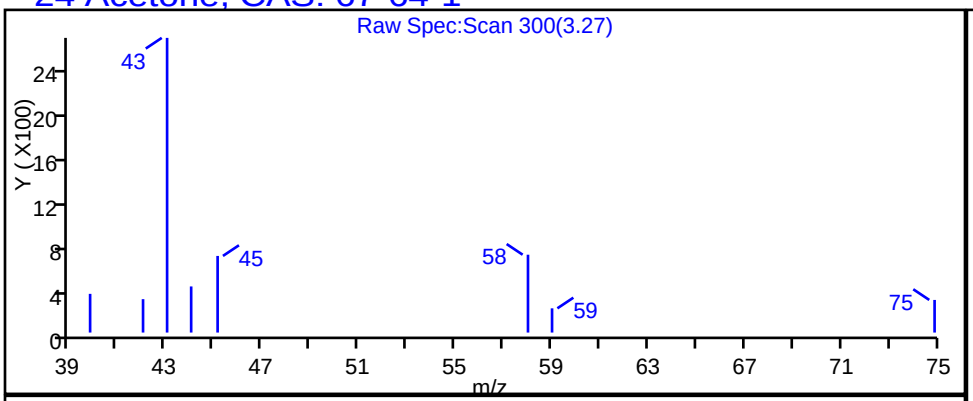
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	53.4	106.75
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	50.2	100.45
$ 7 Toluene-d8 (Surr)	50.0	47.2	94.38
$ 8 4-Bromofluorobenzene (Surr)	50.0	49.8	99.63

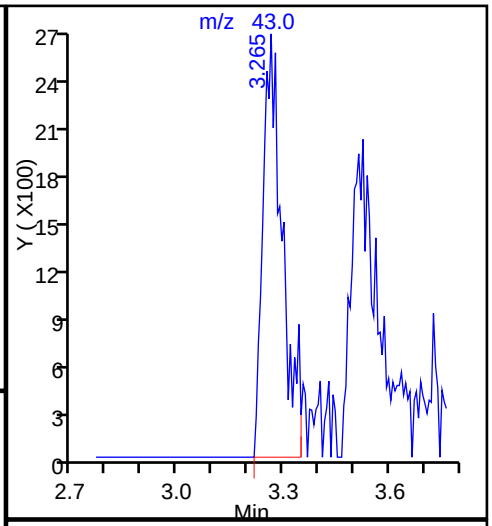
Report Date: 05-Apr-2017 07:31:49 Chrom Revision: 2.2 13-Mar-2017 15:50:30

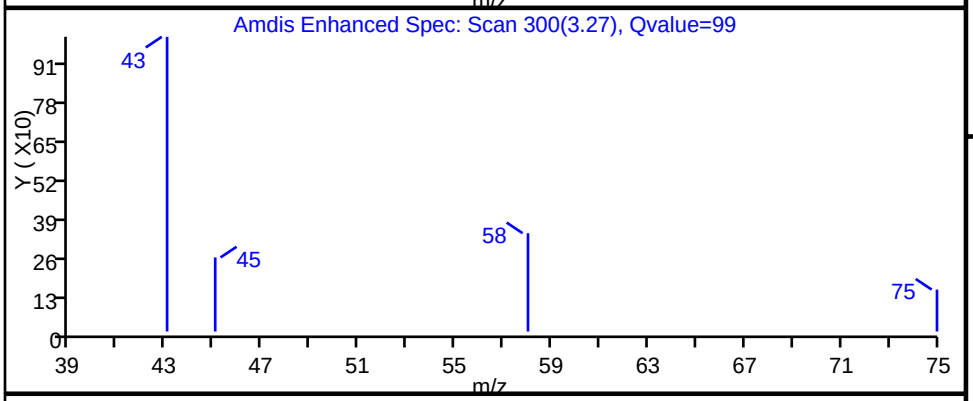
TestAmerica Pittsburgh

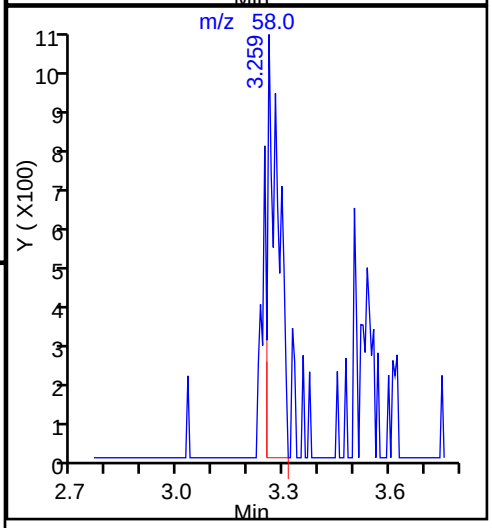
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403019.D				
Injection Date:	03-Apr-2017 17:46:30	Instrument ID:	CHHP6		
Lims ID:	180-64801-A-23	Lab Sample ID:	180-64801-23		
Client ID:	HD-QC6-0/1-2				
Operator ID:	001562	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

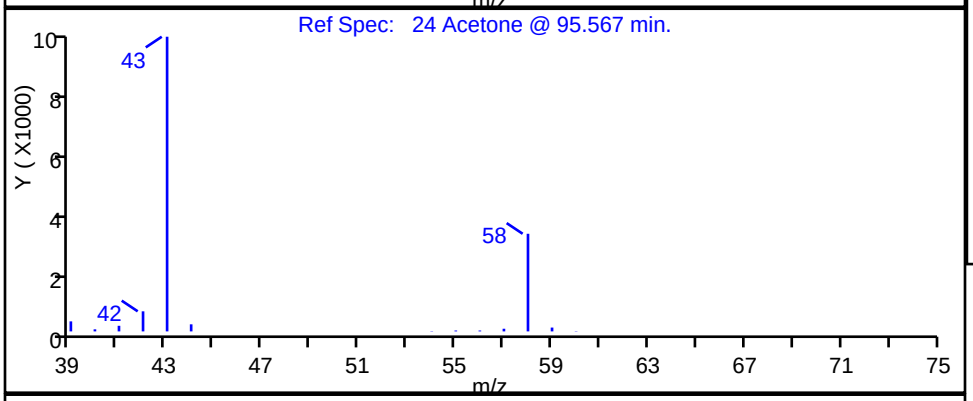
24 Acetone, CAS: 67-64-1

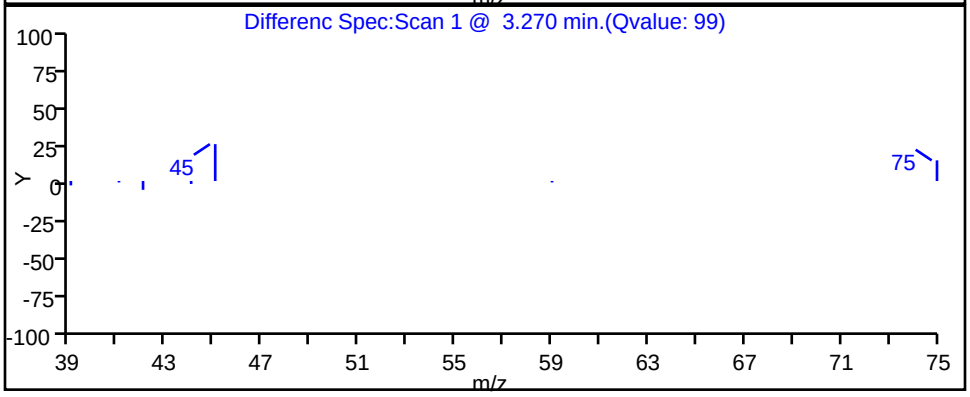












FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-206518/6	60327006.D
Level 2	IC 180-206518/7	60327007.D
Level 3	ICIS 180-206518/8	60327008.D
Level 4	IC 180-206518/9	60327009.D
Level 5	IC 180-206518/10	60327010.D
Level 6	IC 180-206518/11	60327011.D
Level 7	IC 180-206518/12	60327012.D
Level 8	IC 180-206518/13	60327013.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	0.3377 0.3140	0.3016 0.3099	0.3165 0.3219	0.3103	0.3184	Ave		0.3163			0.1000	3.4		20.0			
Chloromethane	0.4966 0.3816	0.3984 0.3917	0.4199 0.4033	0.4202	0.4114	Ave		0.4154			0.1000	8.5		20.0			
Vinyl chloride	0.3996 0.3406	0.3392 0.3283	0.3501 0.3420	0.3524	0.3475	Ave		0.3500			0.1000	6.1		20.0			
1,3-Butadiene	0.4440 0.3637	0.3594 0.3505	0.3802 0.3612	0.3767	0.3701	Ave		0.3757			0.0100	7.8		20.0			
Bromomethane	0.0915 0.0989	0.0918 0.0996	0.1103 0.1031	0.0959	0.1064	Ave		0.0997			0.0500	6.7		20.0			
Chloroethane	0.1756 0.1507	0.1491 0.1508	0.1704 0.1472	0.1642	0.1658	Ave		0.1592			0.0500	6.9		20.0			
Trichlorofluoromethane	0.2129 0.2195	0.1945 0.2272	0.2384 0.2423	0.2267	0.2275	Ave		0.2236			0.1000	6.7		20.0			
Ethyl ether	0.3445 0.3441	0.3269 0.3385	0.3333 0.3390	0.3388	0.3572	Ave		0.3403			0.0100	2.6		20.0			
Acrolein	0.0883 0.0975	0.0842 0.0947	0.0826 0.0963	0.0954	0.0943	Ave		0.0917			0.0100	6.3		20.0			
1,1-Dichloroethene	0.2845 0.2740	0.2500 0.2646	0.2579 0.2729	0.2747	0.2713	Ave		0.2687			0.1000	4.0		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2917 0.2596	0.2451 0.2476	0.2553 0.2599	0.2659	0.2622	Ave		0.2609			0.1000	5.5		20.0			
Acetone	0.1149 0.1101	0.0991 0.1005	0.0791 0.1009	0.1102	0.0892	Ave		0.1005			0.0500	11.8		20.0			
Iodomethane	0.3696 0.3635	0.3180 0.3686	0.3490 0.3794	0.3606	0.3760	Ave		0.3606			0.0100	5.4		20.0			
Carbon disulfide	0.5481 0.6593	0.5034 0.6650	0.5596 0.7005	0.6029	0.6281	Ave		0.6084			0.1000	11.1		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
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

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								
Allyl chloride	0.1142 0.1711	0.1224 0.1686	0.1438 0.1768	0.1535	0.1675	Ave		0.1523			0.0100	15.4		20.0			
Methyl acetate	0.3341 0.3329	0.3148 0.3348	0.3103 0.3311	0.3354	0.3376	Ave		0.3289			0.1000	3.1		20.0			
Methylene Chloride	0.4050 0.3289	0.3199 0.3308	0.3313 0.3364	0.3300	0.3444	Ave		0.3408			0.1000	7.9		20.0			
tert-Butyl alcohol	1.2618 1.3370	1.2990 1.2760	1.0826 1.1421	1.2992	1.2003	Ave		1.2372			0.0100	7.1		20.0			
Acrylonitrile	0.1698 0.1726	0.1586 0.1723	0.1518 0.1679	0.1764	0.1724	Ave		0.1677			0.0100	4.9		20.0			
trans-1,2-Dichloroethene	0.2927 0.2947	0.2670 0.2936	0.2863 0.3034	0.2944	0.3036	Ave		0.2920			0.1000	4.0		20.0			
Methyl tert-butyl ether	0.8663 0.9227	0.8032 0.9248	0.8373 0.9304	0.8860	0.9208	Ave		0.8865			0.1000	5.3		20.0			
Hexane	0.5351 0.4925	0.4632 0.4861	0.4895 0.4974	0.4916	0.4987	Ave		0.4943			0.0100	4.0		20.0			
1,1-Dichloroethane	0.5636 0.5682	0.5098 0.5587	0.5392 0.5707	0.5502	0.5827	Ave		0.5554			0.2000	4.1		20.0			
Vinyl acetate	0.6069 0.7624	0.5715 0.7985	0.6079 0.8082	0.7195	0.7146	Ave		0.6987			0.0100	13.2		20.0			
2,2-Dichloropropane	0.0496 0.0586	0.0475 0.0567	0.0529 0.0597	0.0545	0.0564	Ave		0.0545			0.0100	7.9		20.0			
cis-1,2-Dichloroethene	0.3187 0.3391	0.3146 0.3445	0.3348 0.3471	0.3361	0.3518	Ave		0.3358			0.1000	3.9		20.0			
2-Butanone (MEK)	0.1691 0.1620	0.1512 0.1585	0.1276 0.1644	0.1550	0.1509	Ave		0.1548			0.0500	8.2		20.0			
Bromochloromethane	0.1409 0.1475	0.1280 0.1470	0.1415 0.1486	0.1413	0.1522	Ave		0.1434			0.0100	5.2		20.0			
Tetrahydrofuran	0.1662 0.1425	0.1340 0.1422	0.1208 0.1423	0.1400	0.1364	Ave		0.1406			0.0100	9.0		20.0			
Chloroform	0.5210 0.5317	0.4783 0.5288	0.5073 0.5281	0.5173	0.5414	Ave		0.5193			0.2000	3.7		20.0			
1,1,1-Trichloroethane	0.3235 0.3561	0.2981 0.3552	0.3327 0.3654	0.3448	0.3514	Ave		0.3409			0.1000	6.4		20.0			
Cyclohexane	0.7067 0.6634	0.6202 0.6333	0.6565 0.6460	0.6626	0.6765	Ave		0.6581			0.1000	4.0		20.0			
Carbon tetrachloride	0.2397 0.2651	0.2186 0.2658	0.2410 0.2725	0.2537	0.2599	Ave		0.2520			0.1000	7.1		20.0			
1,1-Dichloropropene	0.3913 0.4068	0.3733 0.3985	0.3880 0.3992	0.4066	0.4048	Ave		0.3961			0.0100	2.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

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								
Isobutyl alcohol	0.0083 0.0105	0.0096 0.0093	0.0081 0.0087	0.0111	0.0090	Ave		0.0093		*	0.0100	11.3		20.0			
Benzene	1.2847 1.1691	1.1591 1.1526	1.1476 1.1607	1.1801	1.2334	Ave		1.1859			0.5000	4.1		20.0			
1,2-Dichloroethane	0.4548 0.4740	0.4204 0.4771	0.4447 0.4842	0.4541	0.4825	Ave		0.4615			0.1000	4.8		20.0			
n-Heptane	0.4321 0.4034	0.3879 0.3843	0.3794 0.4006	0.4011	0.4008	Ave		0.3987			0.0100	4.1		20.0			
Trichloroethene	0.2971 0.2831	0.2476 0.2748	0.2642 0.2775	0.2720	0.2839	Ave		0.2750			0.2000	5.4		20.0			
Methylcyclohexane	0.5422 0.5194	0.4845 0.4933	0.5175 0.4924	0.5189	0.5249	Ave		0.5116			0.1000	3.8		20.0			
1,2-Dichloropropane	0.3292 0.3259	0.2888 0.3195	0.2972 0.3253	0.3066	0.3277	Ave		0.3150			0.1000	4.9		20.0			
1,4-Dioxane	0.0017 0.0021	0.0018 0.0022	0.0017 0.0022	0.0021	0.0020	Ave		0.0020		*	0.0100	10.2		20.0			
Dibromomethane	0.1576 0.1865	0.1548 0.1904	0.1644 0.1899	0.1742	0.1853	Ave		0.1754			0.0100	8.4		20.0			
Bromodichloromethane	0.2597 0.3473	0.2459 0.3521	0.2767 0.3573	0.2964	0.3285	Ave		0.3080			0.2000	14.3		20.0			
2-Chloroethyl vinyl ether	0.1577 0.2004	0.1578 0.2084	0.1630 0.2085	0.1766	0.1952	Ave		0.1835			0.0100	12.1		20.0			
cis-1,3-Dichloropropene	0.2590 0.4342	0.2929 0.4411	0.3271 0.4448	0.3625	0.4148	Ave		0.3721			0.2000	19.5		20.0			
4-Methyl-2-pentanone (MIBK)	1.4380 1.6080	1.5846 1.6837	1.5578 1.6730	1.7362	1.7083	Ave		1.6237			0.1000	6.0		20.0			
Toluene	5.6661 4.6464	5.3385 4.7294	5.1809 4.6411	5.2922	5.1615	Ave		5.0820			0.4000	7.3		20.0			
trans-1,3-Dichloropropene	1.0624 1.5144	1.1636 1.6201	1.2333 1.6697	1.4160	1.4927	Ave		1.3965			0.1000	15.8		20.0			
Ethyl methacrylate	1.3028 1.7381	1.5249 1.8538	1.5880 1.8457	1.7615	1.7943	Ave		1.6761			0.0100	11.4		20.0			
1,1,2-Trichloroethane	1.1310 1.0749	1.1101 1.0853	1.0849 1.1452	1.0987	1.1371	Ave		1.1084			0.1000	2.4		20.0			
Tetrachloroethene	1.0389 0.8967	0.9340 0.9001	0.9287 0.8774	0.9855	0.9544	Ave		0.9395			0.2000	5.6		20.0			
1,3-Dichloropropane	2.1312 1.9178	1.9677 2.0081	1.9455 2.0145	2.0028	2.0654	Ave		2.0066			0.0100	3.4		20.0			
2-Hexanone	0.9067 0.9530	0.9215 1.0094	0.8747 1.0112	0.9810	0.9755	Ave		0.9541			0.1000	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.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibromochloromethane	0.6655 0.9153	0.7577 0.9868	0.7809 0.9967	0.8803	0.9303	Ave		0.8642			0.1000	13.7		20.0			
1,2-Dibromoethane (EDB)	1.0136 1.0423	1.0448 1.0936	1.0064 1.0690	1.0764	1.0964	Ave		1.0553			0.1000	3.2		20.0			
3-Chlorobenzotrifluoride	1.8140 1.5922	1.8116 1.6036	1.7183 1.4375	1.7987	1.5729	Ave		1.6686			0.0100	8.3		20.0			
Chlorobenzene	3.7820 2.9956	3.4284 3.0419	3.2360 2.9646	3.3599	3.3346	Ave		3.2679			0.5000	8.4		20.0			
4-Chlorobenzotrifluoride	1.5772 1.5025	1.6427 1.5130	1.6194 1.3670	1.6519	1.4910	Ave		1.5456			0.0100	6.2		20.0			
1,1,1,2-Tetrachloroethane	0.8739 1.0292	0.9706 1.0551	0.9809 1.0300	1.0938	1.1034	Ave		1.0171			0.0100	7.3		20.0			
Ethylbenzene	1.9122 1.7207	1.9003 1.6992	1.8231 1.6521	1.8844	1.8638	Ave		1.8070			0.1000	5.6		20.0			
m-Xylene & p-Xylene	2.3198 2.1742	2.2919 2.1390	2.2944 2.0726	2.3886	2.3548	Ave		2.2544			0.1000	5.0		20.0			
o-Xylene	2.3722 2.1349	2.3490 2.0940	2.3095 1.9994	2.3813	2.3251	Ave		2.2457			0.3000	6.5		20.0			
Styrene	3.4801 3.5668	3.7203 3.5469	3.6931 3.3890	3.8855	3.8899	Ave		3.6464			0.3000	5.0		20.0			
Bromoform	0.4030 0.6236	0.4837 0.6482	0.5017 0.6482	0.5872	0.6099	Ave		0.5632			0.1000	16.0		20.0			
2-Chlorobenzotrifluoride	1.8180 1.6265	1.7829 1.5668	1.7496 1.3739	1.8097	1.6446	Ave		1.6715			0.0100	9.1		20.0			
Isopropylbenzene	5.8256 5.0266	5.9926 4.8053	5.6298 4.4095	5.9880	5.6496	Ave		5.4159			0.1000	11.0		20.0			
Bromobenzene	0.8756 0.8843	0.8108 0.9390	0.8437 0.9451	0.8486	0.9243	Ave		0.8839			0.0100	5.5		20.0			
1,1,2,2-Tetrachloroethane	1.6636 1.6214	1.6792 1.6315	1.6527 1.5626	1.7649	1.7736	Ave		1.6687			0.3000	4.3		20.0			
trans-1,4-Dichloro-2-butene	0.3387 0.4361	0.3358 0.4629	0.3829 0.4773	0.3891	0.4181	Ave		0.4051			0.0100	13.1		20.0			
1,2,3-Trichloropropane	0.3723 0.3766	0.3285 0.4024	0.3434 0.3951	0.3475	0.3841	Ave		0.3687			0.0100	7.1		20.0			
N-Propylbenzene	0.8993 0.9855	0.8849 0.9819	0.9352 0.9556	0.9692	1.0021	Ave		0.9517			0.0100	4.4		20.0			
2-Chlorotoluene	0.8346 0.8638	0.7891 0.8378	0.8196 0.8353	0.8268	0.8755	Ave		0.8353			0.0100	3.2		20.0			
3-Chlorotoluene	0.8334 0.9209	0.8443 0.9277	0.9036 0.8742	0.8999	0.8750	Ave		0.8849			0.0100	3.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,3,5-Trimethylbenzene	2.9181 2.9406	2.8563 2.8275	2.9135 2.7417	3.0709	3.0999	Ave		2.9211			0.0100	4.1		20.0			
4-Chlorotoluene	0.9671 0.9221	0.8403 0.9398	0.8700 0.9230	0.8911	0.9482	Ave		0.9127			0.0100	4.7		20.0			
tert-Butylbenzene	2.2912 2.3637	2.3116 2.2480	2.3097 2.1705	2.4784	2.4478	Ave		2.3276			0.0100	4.3		20.0			
1,2,4-Trimethylbenzene	2.9855 3.0171	3.0019 2.9031	3.0162 2.8756	3.1803	3.2003	Ave		3.0225			0.0100	3.8		20.0			
3,4-Dichlorobenzotrifluoride	0.7918 0.8068	0.7749 0.7905	0.8111 0.7326	0.8168	0.7780	Ave		0.7878			0.0100	3.4		20.0			
sec-Butylbenzene	3.3929 3.3252	3.3467 3.1613	3.4182 3.0630	3.6394	3.5104	Ave		3.3571			0.0100	5.4		20.0			
1,3-Dichlorobenzene	1.6585 1.6528	1.5704 1.6572	1.6407 1.6274	1.6515	1.7333	Ave		1.6490			0.6000	2.7		20.0			
4-Isopropyltoluene	2.7946 2.7425	2.7742 2.6128	2.8300 2.6005	2.9973	2.9093	Ave		2.7827			0.0100	4.9		20.0			
1,4-Dichlorobenzene	1.8588 1.7155	1.6976 1.7137	1.6628 1.6939	1.7066	1.7752	Ave		1.7280			0.5000	3.6		20.0			
2,4-Dichlorobenzotrifluoride	0.6924 0.7509	0.7514 0.7548	0.7655 0.7254	0.7945	0.7466	Ave		0.7477			0.0100	4.0		20.0			
2,5-Dichlorobenzotrifluoride	0.7928 0.8397	0.8406 0.8025	0.8608 0.7682	0.8502	0.8044	Ave		0.8199			0.0100	4.0		20.0			
n-Butylbenzene	2.4443 2.4692	2.5138 2.4257	2.5702 2.3669	2.6951	2.6786	Ave		2.5205			0.0100	4.7		20.0			
1,2-Dichlorobenzene	1.6873 1.5570	1.5722 1.5355	1.5654 1.5385	1.5766	1.6347	Ave		1.5834			0.4000	3.3		20.0			
1,2-Dibromo-3-Chloropropane	0.1262 0.1693	0.1120 0.1816	0.1405 0.1917	0.1549	0.1564	Ave		0.1541			0.0500	17.6		20.0			
2,4- & 2,5- & 2,6- Dichlorotoluene	0.9313 1.0008	1.0784 1.0639	1.1198 1.0703	1.0834	1.0794	Ave		1.0534			0.0100	5.6		20.0			
2,3- & 3,4- Dichlorotoluene	0.9044 1.0472	1.1085 1.1789	1.1524 1.2417	1.0940	1.1462	Ave		1.1092			0.0100	9.1		20.0			
1,2,4-Trichlorobenzene	0.7368 0.7868	0.8280 0.9221	0.8905 1.0187	0.7705	0.9238	Ave		0.8597			0.2000	11.1		20.0			
Hexachlorobutadiene	0.2467 0.2922	0.2976 0.3598	0.3442 0.3939	0.3121	0.3390	Ave		0.3232			0.0100	14.1		20.0			
Naphthalene	1.7139 2.3011	2.1889 2.6723	2.4976 2.9185	2.2242	2.6215	Ave		2.3923			0.0100	15.5		20.0			
1,2,3-Trichlorobenzene	0.5314 0.6650	0.6665 0.8742	0.7821 0.9936	0.6336	0.7969	Ave		0.7429			0.0100	19.9		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.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

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								
2,4,5-Trichlorotoluene	0.2239 0.3977	0.3366 0.6360	0.4582 0.7280	0.2836	0.4577	Ave		0.4402			0.0100	38.9	*	20.0			
2,3,6-Trichlorotoluene	0.2276 0.3596	0.3012 0.5861	0.4224 0.6638	0.2694	0.4184	Ave		0.4061			0.0100	37.6	*	20.0			
Dibromofluoromethane (Surr)	0.2195 0.2377	0.2203 0.2204	0.2311 0.2273	0.2172	0.2250	Ave		0.2248				3.1		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3623 0.3541	0.3472 0.3403	0.3506 0.3440	0.3420	0.3508	Ave		0.3489				2.1		20.0			
Toluene-d8 (Surr)	4.4495 3.6032	4.4332 3.3781	4.3242 3.4076	3.9565	3.7927	Ave		3.9181				11.3		20.0			
4-Bromofluorobenzene (Surr)	1.9215 1.5444	1.8581 1.4762	1.7297 1.4094	1.6710	1.6335	Ave		1.6555				10.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-206518/6	60327006.D
Level 2	IC 180-206518/7	60327007.D
Level 3	ICIS 180-206518/8	60327008.D
Level 4	IC 180-206518/9	60327009.D
Level 5	IC 180-206518/10	60327010.D
Level 6	IC 180-206518/11	60327011.D
Level 7	IC 180-206518/12	60327012.D
Level 8	IC 180-206518/13	60327013.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	12644 386249	57271 432588	112691 539286	168133	216483	5.00 175	25.0 200	50.0 250	75.0	100
Chloromethane	FB	Ave	18595 469398	75653 546750	149511 675483	227692	279721	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl chloride	FB	Ave	14964 419021	64415 458366	124641 572838	190975	236286	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Butadiene	FB	Ave	16626 447322	68236 489360	135357 605076	204115	251666	5.00 175	25.0 200	50.0 250	75.0	100
Bromomethane	FB	Ave	3426 121628	17424 139014	39287 172658	51952	72319	5.00 175	25.0 200	50.0 250	75.0	100
Chloroethane	FB	Ave	6577 185415	28313 210533	60681 246616	88953	112754	5.00 175	25.0 200	50.0 250	75.0	100
Trichlorofluoromethane	FB	Ave	7971 269948	36927 317157	84894 405930	122842	154725	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl ether	FB	Ave	12899 423272	62068 472610	118652 567803	183576	242903	5.00 175	25.0 200	50.0 250	75.0	100
Acrolein	FB	Ave	66123 154150	79970 165269	88178 177439	120650	128285	100 225	125 250	150 275	175	200
1,1-Dichloroethene	FB	Ave	10654 337006	47462 369316	91807 457102	148825	184505	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	10923 319280	46539 345714	90880 435427	144103	178311	5.00 175	25.0 200	50.0 250	75.0	100
Acetone	FB	Ave	21511 270747	37639 280673	56344 338049	119390	121339	25.0 350	50.0 400	100 500	150	200
Iodomethane	FB	Ave	13840 447128	60382 514550	124245 635466	195389	255641	5.00 175	25.0 200	50.0 250	75.0	100
Carbon disulfide	FB	Ave	20524 811028	95585 928263	199236 1173468	326677	427112	5.00 175	25.0 200	50.0 250	75.0	100
Allyl chloride	FB	Ave	4276 210508	23248 235373	51212 296191	83179	113929	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.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

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
Methyl acetate	FB	Ave	62558 2047269	298891 2336669	552464 2773319	908745	1147895	25.0 875	125 1000	250 1250	375	500
Methylene Chloride	FB	Ave	15167 404568	60744 461756	117958 563464	178789	234202	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butyl alcohol	TBAd9	Ave	7774 313235	44805 281823	52099 300565	152648	136791	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	63578 2122598	301159 2405462	540596 2812632	955621	1172162	50.0 1750	250 2000	500 2500	750	1000
trans-1,2-Dichloroethene	FB	Ave	10961 362494	50706 409844	101938 508196	159544	206418	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	32441 1134990	152513 1290992	298117 1558561	480085	626157	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	20036 605821	87958 678558	174280 833250	266370	339107	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	21103 698877	96791 779914	191981 955957	298153	396245	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl acetate	FB	Ave	22727 937809	108515 1114756	216434 1353786	389887	485922	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Ave	1858 72047	9010 79219	18851 100047	29523	38326	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,2-Dichloroethene	FB	Ave	11933 417106	59736 480870	119205 581418	182097	239234	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	31666 398537	57437 442469	90862 550640	167937	205167	25.0 350	50.0 400	100 500	150	200
Bromochloromethane	FB	Ave	5276 181479	24300 205188	50373 248977	76573	103507	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Ave	12446 350607	50880 396935	86006 476741	151749	185555	10.0 350	50.0 400	100 500	150	200
Chloroform	FB	Ave	19510 654005	90824 738259	180628 884552	280324	368143	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	12115 438065	56604 495923	118447 612106	186824	238939	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	26463 816007	117761 884031	233741 1082089	359022	460014	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	8975 326097	41501 370990	85817 456456	137463	176699	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	14653 500444	70887 556252	138130 668623	220326	275270	5.00 175	25.0 200	50.0 250	75.0	100
Isobutyl alcohol	FB	Ave	7744 322987	45763 325474	71916 364924	150534	153846	125 4375	625 5000	1250 6250	1875	2500
Benzene	FB	Ave	48107 1438026	220094 1608994	408593 1944268	639443	838690	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.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2-Dichloroethane	FB	Ave	17032 583074	79825 666080	158313 811041	246081	328081	5.00 175	25.0 200	50.0 250	75.0	100
n-Heptane	FB	Ave	16179 496246	73662 536421	135077 671070	217321	272528	5.00 175	25.0 200	50.0 250	75.0	100
Trichloroethene	FB	Ave	11127 348273	47018 383676	94065 464754	147368	193061	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	20302 638935	92000 688662	184256 824811	281154	356941	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	12327 400856	54830 446014	105807 544821	166135	222838	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Ave	1275 51981	6816 60789	12422 72713	23260	27130	100 3500	500 4000	1000 5000	1500	2000
Dibromomethane	FB	Ave	5901 229349	29388 265736	58537 318117	94415	125984	5.00 175	25.0 200	50.0 250	75.0	100
Bromodichloromethane	FB	Ave	9723 427199	46692 491490	98502 598471	160628	223370	5.00 175	25.0 200	50.0 250	75.0	100
2-Chloroethyl vinyl ether	FB	Ave	11808 492899	59938 581859	116067 698644	191438	265478	10.0 350	50.0 400	100 500	150	200
cis-1,3-Dichloropropene	FB	Ave	9697 534152	55613 615782	116468 745142	196404	282086	5.00 175	25.0 200	50.0 250	75.0	100
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	55579 980569	123739 1118765	238510 1326644	408528	530164	25.0 350	50.0 400	100 500	150	200
Toluene	CBNZ d5	Ave	43799 1416679	208443 1571282	396623 1840176	622636	800917	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,3-Dichloropropene	CBNZ d5	Ave	8212 461730	45432 538256	94419 662019	166589	231620	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl methacrylate	CBNZ d5	Ave	10071 529941	59538 615910	121572 731800	207248	278418	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloroethane	CBNZ d5	Ave	8743 327724	43344 360571	83055 454076	129266	176445	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBNZ d5	Ave	8031 273412	36469 299049	71099 347882	115941	148096	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBNZ d5	Ave	16474 584732	76829 667158	148935 798739	235636	320485	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBNZ d5	Ave	35045 581157	71957 670748	133927 801839	230831	302749	25.0 350	50.0 400	100 500	150	200
Dibromochloromethane	CBNZ d5	Ave	5144 279074	29583 327866	59782 395169	103568	144364	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromoethane (EDB)	CBNZ d5	Ave	7835 317796	40795 363320	77044 423834	126643	170125	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorobenzotrifluoride	CBNZ d5	Ave	14022 485446	70734 532779	131544 569964	211617	244070	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.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	29235 913331	133860 1010634	247731 1175460	395300	517443	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorobenzotrifluoride	CBNZ d5	Ave	12192 458109	64138 502672	123973 542023	194348	231360	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	6755 313804	37896 350539	75092 408402	128689	171215	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBNZ d5	Ave	14781 524642	74199 564541	139570 655050	221704	289210	5.00 175	25.0 200	50.0 250	75.0	100
m-Xylene & p-Xylene	CBNZ d5	Ave	17932 662906	89487 710666	175647 821760	281024	365397	5.00 175	25.0 200	50.0 250	75.0	100
o-Xylene	CBNZ d5	Ave	18337 650936	91715 695704	176804 792757	280158	360795	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBNZ d5	Ave	26901 1087501	145259 1178396	282722 1343713	457133	603602	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBNZ d5	Ave	3115 190139	18887 215368	38411 257019	69088	94643	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorobenzotrifluoride	CBNZ d5	Ave	14053 495903	69614 520551	133942 544746	212914	255199	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBNZ d5	Ave	45032 1532580	233980 1596484	430993 1748340	704493	876659	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCBd 4	Ave	10944 385232	56394 433756	102526 494211	165506	218820	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	12860 494354	65563 542032	126525 619578	207638	275214	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	4233 189993	23352 213826	46531 249595	75886	98981	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichloropropane	DCBd 4	Ave	4653 164081	22847 185904	41724 206603	67770	90931	5.00 175	25.0 200	50.0 250	75.0	100
N-Propylbenzene	DCBd 4	Ave	11241 429337	61547 453574	113640 499696	189020	237232	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCBd 4	Ave	10432 376303	54880 387001	99587 436769	161253	207261	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorotoluene	DCBd 4	Ave	10417 401201	58722 428545	109801 457114	175512	207158	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCBd 4	Ave	36474 1281096	198662 1306134	354037 1433646	598931	733873	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCBd 4	Ave	12088 401721	58443 434121	105715 482661	173793	224469	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCBd 4	Ave	28638 1029760	160777 1038444	280664 1134992	483378	579488	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trimethylbenzene	DCBd 4	Ave	37316 1314421	208788 1341036	366510 1503654	620269	757628	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.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
3,4-Dichlorobenzotrifluoride	DCBd 4	Ave	9897 351498	53892 365162	98554 383070	159307	184172	5.00 175	25.0 200	50.0 250	75.0	100
sec-Butylbenzene	DCBd 4	Ave	42408 1448655	232765 1460318	415360 1601677	709820	831061	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichlorobenzene	DCBd 4	Ave	20730 720064	109227 765528	199370 850980	322100	410334	5.00 175	25.0 200	50.0 250	75.0	100
4-Isopropyltoluene	DCBd 4	Ave	34930 1194786	192953 1206946	343888 1359825	584588	688749	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dichlorobenzene	DCBd 4	Ave	23234 747382	118072 791609	202051 885752	332849	420259	5.00 175	25.0 200	50.0 250	75.0	100
2,4-Dichlorobenzotrifluoride	DCBd 4	Ave	8654 327131	52261 348649	93013 379325	154948	176758	5.00 175	25.0 200	50.0 250	75.0	100
2,5-Dichlorobenzotrifluoride	DCBd 4	Ave	9909 365803	58466 370724	104602 401711	165814	190443	5.00 175	25.0 200	50.0 250	75.0	100
n-Butylbenzene	DCBd 4	Ave	30552 1075731	174840 1120505	312316 1237687	525648	634140	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichlorobenzene	DCBd 4	Ave	21090 678324	109351 709299	190221 804515	307487	387001	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1577 73742	7791 83886	17075 100229	30218	37026	5.00 175	25.0 200	50.0 250	75.0	100
2,4- & 2,5- & 2,6- Dichlorotoluene	DCBd 4	Ave	34921 1308067	225006 1474311	408225 1678947	633923	766638	15.0 525	75.0 600	150 750	225	300
2,3- & 3,4- Dichlorotoluene	DCBd 4	Ave	22608 912480	154191 1089180	280063 1298549	426720	542712	10.0 350	50.0 400	100 500	150	200
1,2,4-Trichlorobenzene	DCBd 4	Ave	9210 342785	57586 425960	108205 532686	150272	218710	5.00 175	25.0 200	50.0 250	75.0	100
Hexachlorobutadiene	DCBd 4	Ave	3084 127318	20699 166219	41822 205949	60872	80256	5.00 175	25.0 200	50.0 250	75.0	100
Naphthalene	DCBd 4	Ave	21423 1002485	152242 1234441	303491 1526133	433800	620608	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichlorobenzene	DCBd 4	Ave	6642 289732	46355 403802	95032 519568	123568	188655	5.00 175	25.0 200	50.0 250	75.0	100
2,4,5-Trichlorotoluene	DCBd 4	Ave	2799 173240	23413 293807	55676 380688	55312	108367	5.00 175	25.0 200	50.0 250	75.0	100
2,3,6-Trichlorotoluene	DCBd 4	Ave	2845 156653	20947 270729	51331 347106	52549	99061	5.00 175	25.0 200	50.0 250	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	8221 292373	41832 307745	82273 380677	117678	153020	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	13565 435556	65925 475095	124809 576291	185325	238536	5.00 175	25.0 200	50.0 250	75.0	100
Toluene-d8 (Surr)	CBNZ d5	Ave	34395 1098608	173094 1122336	331040 1351077	465492	588517	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.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

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
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	14853 470891	72549 490440	132419 558819	196600	253479	5.00 175	25.0 200	50.0 250	75.0	100

Curve Type Legend:
Ave = Average ISTD

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-206518/6	60327006.D
Level 2	IC 180-206518/7	60327007.D
Level 3	ICIS 180-206518/8	60327008.D
Level 4	IC 180-206518/9	60327009.D
Level 5	IC 180-206518/10	60327010.D
Level 6	IC 180-206518/11	60327011.D
Level 7	IC 180-206518/12	60327012.D
Level 8	IC 180-206518/13	60327013.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
Dichlorodifluoromethane	6.8 -2.0	-4.6 1.8	0.1	-1.9	0.7	-0.7	30 30	30 30	30	30	30	30
Chloromethane	19.5 -5.7	-4.1 -2.9	1.1	1.2	-1.0	-8.1	40 40	40 40	40	40	40	40
Vinyl chloride	14.2 -6.2	-3.1 -2.3	0.0	0.7	-0.7	-2.7	30 30	30 30	30	30	30	30
1,3-Butadiene	18.2 -6.7	-4.4 -3.9	1.2	0.3	-1.5	-3.2	30 30	30 30	30	30	30	30
Bromomethane	-8.2 -0.1	-7.9 3.4	10.7	-3.8	6.7	-0.8	40 40	40 40	40	40	40	40
Chloroethane	10.3 -5.3	-6.4 -7.5	7.0	3.1	4.1	-5.3	40 40	40 40	40	40	40	40
Trichlorofluoromethane	-4.8 1.6	-13.0 8.4	6.6	1.4	1.8	-1.9	40 40	40 40	40	40	40	40
Ethyl ether	1.2 -0.5	-3.9 -0.4	-2.1	-0.4	5.0	1.1	30 30	30 30	30	30	30	30
Acrolein	-3.7 3.3	-8.1 5.1	-9.9	4.1	2.9	6.3	30 30	30 30	30	30	30	30
1,1-Dichloroethene	5.9 -1.5	-7.0 1.6	-4.0	2.2	1.0	2.0	30 30	30 30	30	30	30	30
1,1,2-Trichloro-1,2,2-trifluoroethane	11.8 -5.1	-6.1 -0.4	-2.2	1.9	0.5	-0.5	30 30	30 30	30	30	30	30
Acetone	14.3 0.0	-1.4 0.4	-21.3	9.6	-11.2	9.5	40 40	40 40	40	40	40	40
Iodomethane	2.5 2.2	-11.8 5.2	-3.2	0.0	4.3	0.8	30 30	30 30	30	30	30	30
Carbon disulfide	-9.9 9.3	-17.3 15.2	-8.0	-0.9	3.2	8.4	30 30	30 30	30	30	30	30
Allyl chloride	-25.0 10.7	-19.6 16.1	-5.5	0.8	10.0	12.4	30 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
Methyl acetate	1.6 1.8	-4.3 0.7	-5.6	2.0	2.7	1.2	30 30	30 30	30	30	30	30
Methylene Chloride	18.8 -3.0	-6.1 -1.3	-2.8	-3.2	1.1	-3.5	40 40	40 40	40	40	40	40
tert-Butyl alcohol	2.0 3.1	5.0 -7.7	-12.5	5.0	-3.0	8.1	30 30	30 30	30	30	30	30
Acrylonitrile	1.2 2.7	-5.4 0.1	-9.5	5.2	2.8	2.9	30 30	30 30	30	30	30	30
trans-1,2-Dichloroethene	0.3 0.6	-8.5 3.9	-1.9	0.8	4.0	0.9	30 30	30 30	30	30	30	30
Methyl tert-butyl ether	-2.3 4.3	-9.4 5.0	-5.5	-0.1	3.9	4.1	30 30	30 30	30	30	30	30
Hexane	8.3 -1.7	-6.3 0.6	-1.0	-0.5	0.9	-0.4	30 30	30 30	30	30	30	30
1,1-Dichloroethane	1.5 0.6	-8.2 2.8	-2.9	-0.9	4.9	2.3	30 30	30 30	30	30	30	30
Vinyl acetate	-13.1 14.3	-18.2 15.7	-13.0	3.0	2.3	9.1	30 30	30 30	30	30	30	30
2,2-Dichloropropane	-8.9 4.1	-12.9 9.6	-2.8	0.0	3.4	7.5	30 30	30 30	30	30	30	30
cis-1,2-Dichloroethene	-5.1 2.6	-6.3 3.4	-0.3	0.1	4.8	1.0	30 30	30 30	30	30	30	30
2-Butanone (MEK)	9.2 2.4	-2.3 6.2	-17.6	0.1	-2.6	4.6	40 40	40 40	40	40	40	40
Bromochloromethane	-1.7 2.5	-10.7 3.7	-1.3	-1.4	6.2	2.9	30 30	30 30	30	30	30	30
Tetrahydrofuran	18.2 1.2	-4.7 1.2	-14.1	-0.4	-2.9	1.4	30 30	30 30	30	30	30	30
Chloroform	0.3 1.8	-7.9 1.7	-2.3	-0.4	4.3	2.4	30 30	30 30	30	30	30	30
1,1,1-Trichloroethane	-5.1 4.2	-12.6 7.2	-2.4	1.1	3.1	4.5	30 30	30 30	30	30	30	30
Cyclohexane	7.4 -3.8	-5.8 -1.8	-0.2	0.7	2.8	0.8	30 30	30 30	30	30	30	30
Carbon tetrachloride	-4.9 5.4	-13.3 8.1	-4.4	0.7	3.1	5.2	30 30	30 30	30	30	30	30
1,1-Dichloropropene	-1.2 0.6	-5.7 0.8	-2.0	2.7	2.2	2.7	30 30	30 30	30	30	30	30
Isobutyl alcohol	-11.4 -0.1	3.2 -6.7	-13.5	19.0	-3.1	12.5	40 40	40 40	40	40	40	40
Benzene	8.3 -2.8	-2.3 -2.1	-3.2	-0.5	4.0	-1.4	30 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
1,2-Dichloroethane	-1.4 3.4	-8.9 4.9	-3.6	-1.6	4.6	2.7	30 30	30 30	30	30	30	30
n-Heptane	8.4 -3.6	-2.7 0.5	-4.8	0.6	0.5	1.2	30 30	30 30	30	30	30	30
Trichloroethene	8.0 -0.1	-10.0 0.9	-3.9	-1.1	3.2	2.9	30 30	30 30	30	30	30	30
Methylcyclohexane	6.0 -3.6	-5.3 -3.8	1.2	1.4	2.6	1.5	30 30	30 30	30	30	30	30
1,2-Dichloropropane	4.5 1.4	-8.3 3.3	-5.7	-2.7	4.0	3.5	30 30	30 30	30	30	30	30
1,4-Dioxane	-14.0 9.9	-9.4 9.6	-11.9	8.4	0.7	6.7	30 30	30 30	30	30	30	30
Dibromomethane	-10.1 8.5	-11.7 8.3	-6.2	-0.6	5.6	6.3	30 30	30 30	30	30	30	30
Bromodichloromethane	-15.7 14.3	-20.2 16.0	-10.2	-3.7	6.7	12.8	30 30	30 30	30	30	30	30
2-Chloroethyl vinyl ether	-14.1 13.6	-14.0 13.7	-11.1	-3.7	6.4	9.2	30 30	30 30	30	30	30	30
cis-1,3-Dichloropropene	-30.4 * 18.6	-21.3 19.6	-12.1	-2.6	11.5	16.7	30 30	30 30	30	30	30	30
4-Methyl-2-pentanone (MIBK)	-11.4 3.7	-2.4 3.0	-4.1	6.9	5.2	-1.0	40 40	40 40	40	40	40	40
Toluene	11.5 -6.9	5.0 -8.7	1.9	4.1	1.6	-8.6	30 30	30 30	30	30	30	30
trans-1,3-Dichloropropene	-23.9 16.0	-16.7 19.6	-11.7	1.4	6.9	8.4	30 30	30 30	30	30	30	30
Ethyl methacrylate	-22.3 10.6	-9.0 10.1	-5.3	5.1	7.0	3.7	30 30	30 30	30	30	30	30
1,1,2-Trichloroethane	2.0 -2.1	0.2 3.3	-2.1	-0.9	2.6	-3.0	30 30	30 30	30	30	30	30
Tetrachloroethene	10.6 -4.2	-0.6 -6.6	-1.1	4.9	1.6	-4.5	30 30	30 30	30	30	30	30
1,3-Dichloropropane	6.2 0.1	-1.9 0.4	-3.0	-0.2	2.9	-4.4	30 30	30 30	30	30	30	30
2-Hexanone	-5.0 5.8	-3.4 6.0	-8.3	2.8	2.2	-0.1	40 40	40 40	40	40	40	40
Dibromochloromethane	-23.0 14.2	-12.3 15.3	-9.6	1.9	7.7	5.9	30 30	30 30	30	30	30	30
1,2-Dibromoethane (EDB)	-4.0 3.6	-1.0 1.3	-4.6	2.0	3.9	-1.2	30 30	30 30	30	30	30	30
3-Chlorobenzotrifluoride	8.7 -3.9	8.6 -13.8	3.0	7.8	-5.7	-4.6	30 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
Chlorobenzene	15.7 -6.9	4.9 -9.3	-1.0	2.8	2.0	-8.3	30 30	30 30	30	30	30	30
4-Chlorobenzotrifluoride	2.0 -2.1	6.3 -11.6	4.8	6.9	-3.5	-2.8	30 30	30 30	30	30	30	30
1,1,1,2-Tetrachloroethane	-14.1 3.7	-4.6 1.3	-3.6	7.5	8.5	1.2	30 30	30 30	30	30	30	30
Ethylbenzene	5.8 -6.0	5.2 -8.6	0.9	4.3	3.1	-4.8	30 30	30 30	30	30	30	30
m-Xylene & p-Xylene	2.9 -5.1	1.7 -8.1	1.8	6.0	4.5	-3.6	30 30	30 30	30	30	30	30
o-Xylene	5.6 -6.8	4.6 -11.0	2.8	6.0	3.5	-4.9	30 30	30 30	30	30	30	30
Styrene	-4.6 -2.7	2.0 -7.1	1.3	6.6	6.7	-2.2	30 30	30 30	30	30	30	30
Bromoform	-28.5 15.1	-14.1 15.1	-10.9	4.3	8.3	10.7	30 30	30 30	30	30	30	30
2-Chlorobenzotrifluoride	8.8 -6.3	6.7 -17.8	4.7	8.3	-1.6	-2.7	30 30	30 30	30	30	30	30
Isopropylbenzene	7.6 -11.3	10.6 -18.6	4.0	10.6	4.3	-7.2	30 30	30 30	30	30	30	30
Bromobenzene	-0.9 6.2	-8.3 6.9	-4.5	-4.0	4.6	0.0	30 30	30 30	30	30	30	30
1,1,2,2-Tetrachloroethane	-0.3 -2.2	0.6 -6.4	-1.0	5.8	6.3	-2.8	30 30	30 30	30	30	30	30
trans-1,4-Dichloro-2-butene	-16.4 14.3	-17.1 17.8	-5.5	-4.0	3.2	7.7	30 30	30 30	30	30	30	30
1,2,3-Trichloropropane	1.0 9.1	-10.9 7.2	-6.9	-5.8	4.2	2.1	30 30	30 30	30	30	30	30
N-Propylbenzene	-5.5 3.2	-7.0 0.4	-1.7	1.8	5.3	3.5	30 30	30 30	30	30	30	30
2-Chlorotoluene	-0.1 0.3	-5.5 0.0	-1.9	-1.0	4.8	3.4	30 30	30 30	30	30	30	30
3-Chlorotoluene	-5.8 4.8	-4.6 -1.2	2.1	1.7	-1.1	4.1	30 30	30 30	30	30	30	30
1,3,5-Trimethylbenzene	-0.1 -3.2	-2.2 -6.1	-0.3	5.1	6.1	0.7	30 30	30 30	30	30	30	30
4-Chlorotoluene	6.0 3.0	-7.9 1.1	-4.7	-2.4	3.9	1.0	30 30	30 30	30	30	30	30
tert-Butylbenzene	-1.6 -3.4	-0.7 -6.7	-0.8	6.5	5.2	1.5	30 30	30 30	30	30	30	30
1,2,4-Trimethylbenzene	-1.2 -4.0	-0.7 -4.9	-0.2	5.2	5.9	-0.2	30 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
3,4-Dichlorobenzotrifluoride	0.5 0.3	-1.6 -7.0	3.0	3.7	-1.2	2.4	30 30	30 30	30	30	30	30
sec-Butylbenzene	1.1 -5.8	-0.3 -8.8	1.8	8.4	4.6	-1.0	30 30	30 30	30	30	30	30
1,3-Dichlorobenzene	0.6 0.5	-4.8 -1.3	-0.5	0.2	5.1	0.2	30 30	30 30	30	30	30	30
4-Isopropyltoluene	0.4 -6.1	-0.3 -6.5	1.7	7.7	4.6	-1.4	30 30	30 30	30	30	30	30
1,4-Dichlorobenzene	7.6 -0.8	-1.8 -2.0	-3.8	-1.2	2.7	-0.7	30 30	30 30	30	30	30	30
2,4-Dichlorobenzotrifluoride	-7.4 0.9	0.5 -3.0	2.4	6.3	-0.1	0.4	30 30	30 30	30	30	30	30
2,5-Dichlorobenzotrifluoride	-3.3 -2.1	2.5 -6.3	5.0	3.7	-1.9	2.4	30 30	30 30	30	30	30	30
n-Butylbenzene	-3.0 -3.8	-0.3 -6.1	2.0	6.9	6.3	-2.0	30 30	30 30	30	30	30	30
1,2-Dichlorobenzene	6.6 -3.0	-0.7 -2.8	-1.1	-0.4	3.2	-1.7	30 30	30 30	30	30	30	30
1,2-Dibromo-3-Chloropropane	-18.1 17.9	-27.3 24.4	-8.8	0.6	1.5	9.9	30 30	30 30	30	30	30	30
2,4- & 2,5- & 2,6- Dichlorotoluene	-11.6 1.0	2.4 1.6	6.3	2.8	2.5	-5.0	30 30	30 30	30	30	30	30
2,3- & 3,4- Dichlorotoluene	-18.5 6.3	-0.1 11.9	3.9	-1.4	3.3	-5.6	30 30	30 30	30	30	30	30
1,2,4-Trichlorobenzene	-14.3 7.3	-3.7 18.5	3.6	-10.4	7.5	-8.5	40 40	40 40	40	40	40	40
Hexachlorobutadiene	-23.7 11.3	-7.9 21.9	6.5	-3.4	4.9	-9.6	30 30	30 30	30	30	30	30
Naphthalene	-28.4 11.7	-8.5 22.0	4.4	-7.0	9.6	-3.8	40 40	40 40	40	40	40	40
1,2,3-Trichlorobenzene	-28.5 17.7	-10.3 33.7	5.3	-14.7	7.3	-10.5	40 40	40 40	40	40	40	40
2,4,5-Trichlorotoluene	-49.1 * 44.5 *	-23.5 65.4 *	4.1	-35.6 *	4.0	-9.7	30 30	30 30	30	30	30	30
2,3,6-Trichlorotoluene	-43.9 * 44.3 *	-25.8 63.5 *	4.0	-33.6 *	3.0	-11.4	30 30	30 30	30	30	30	30
Dibromofluoromethane (Surr)	-2.3 -1.9	-2.0 1.1	2.8	-3.4	0.1	5.7	30 30	30 30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	3.8 -2.5	-0.5 -1.4	0.5	-2.0	0.5	1.5	30 30	30 30	30	30	30	30
Toluene-d8 (Surr)	13.6 -13.8	13.1 -13.0	10.4	1.0	-3.2	-8.0	30 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1 Analy Batch No.: 206518

SDG No.:

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

Calibration Start Date: 03/27/2017 12:56 Calibration End Date: 03/27/2017 15:45 Calibration ID: 34285

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
4-Bromofluorobenzene (Surr)	16.1 -10.8	12.2 -14.9	4.5	0.9	-1.3	-6.7	30 30	30 30	30	30	30	30

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327006.D
Lims ID: IC VSTD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 27-Mar-2017 12:56:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016041-006
Misc. Info.: IC VSTD1
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub65

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Mar-2017 09:07:38 Calib Date: 27-Mar-2017 15:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327013.D

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

First Level Reviewer: fergusond Date: 27-Mar-2017 15:37:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.048	4.059	-0.011	89	123223	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.120	7.119	0.001	98	374464	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.235	10.233	0.002	91	77300	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.577	12.576	0.001	97	124992	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.390	6.389	0.001	93	8221	5.00	4.88	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.755	6.766	-0.011	57	13565	5.00	5.19	
$ 7 Toluene-d8 (Surr)	98	8.775	8.779	-0.004	95	34395	5.00	5.68	
$ 8 4-Bromofluorobenzene (Surr	95	11.415	11.420	-0.005	86	14853	5.00	5.80	
11 Dichlorodifluoromethane	85	1.517	1.516	0.001	98	12644	5.00	5.34	
12 Chloromethane	50	1.663	1.662	0.001	98	18595	5.00	5.98	
13 Vinyl chloride	62	1.785	1.790	-0.005	97	14964	5.00	5.71	
14 Butadiene	39	1.828	1.826	0.002	95	16626	5.00	5.91	
15 Bromomethane	94	2.132	2.130	0.002	52	3426	5.00	4.59	
16 Chloroethane	64	2.253	2.258	-0.005	63	6577	5.00	5.51	M
17 Dichlorofluoromethane	67	2.527	2.513	0.014	95	11340	5.00	4.97	
18 Trichlorofluoromethane	101	2.527	2.532	-0.005	68	7971	5.00	4.76	
20 Ethyl ether	59	2.892	2.891	0.001	94	12899	5.00	5.06	
21 Acrolein	56	3.062	3.067	-0.005	98	66123	100.0	96.3	
22 1,1-Dichloroethene	96	3.172	3.177	-0.005	91	10654	5.00	5.29	
23 1,1,2-Trichloro-1,2,2-trif	101	3.233	3.225	0.008	90	10923	5.00	5.59	
24 Acetone	43	3.257	3.268	-0.011	99	21511	25.0	28.6	
25 Iodomethane	142	3.354	3.365	-0.011	96	13840	5.00	5.13	
26 Carbon disulfide	76	3.446	3.444	0.002	100	20524	5.00	4.50	
29 3-Chloro-1-propene	76	3.713	3.712	0.001	91	4276	5.00	3.75	
30 Methyl acetate	43	3.732	3.736	-0.004	99	62558	25.0	25.4	
31 Methylene Chloride	84	3.920	3.931	-0.011	96	15167	5.00	5.94	
32 2-Methyl-2-propanol	59	4.188	4.199	-0.011	82	7774	50.0	51.0	
33 Acrylonitrile	53	4.322	4.326	-0.004	96	63578	50.0	50.6	M
34 trans-1,2-Dichloroethene	96	4.358	4.369	-0.011	95	10961	5.00	5.01	
35 Methyl tert-butyl ether	73	4.376	4.375	0.001	97	32441	5.00	4.89	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.784	4.795	-0.011	95	20036	5.00	5.41	
37 1,1-Dichloroethane	63	5.003	5.008	-0.005	70	21103	5.00	5.07	
38 Vinyl acetate	43	5.064	5.062	0.002	97	22727	5.00	4.34	
42 2,2-Dichloropropane	97	5.757	5.768	-0.011	68	1858	5.00	4.55	M
43 cis-1,2-Dichloroethene	96	5.757	5.774	-0.017	87	11933	5.00	4.74	
44 2-Butanone (MEK)	43	5.782	5.786	-0.004	99	31666	25.0	27.3	
48 Chlorobromomethane	128	6.062	6.054	0.008	94	5276	5.00	4.91	
49 Tetrahydrofuran	42	6.068	6.072	-0.004	91	12446	10.0	11.8	
50 Chloroform	83	6.208	6.206	0.002	96	19510	5.00	5.02	
51 1,1,1-Trichloroethane	97	6.372	6.364	0.008	94	12115	5.00	4.75	
52 Cyclohexane	56	6.427	6.437	-0.010	95	26463	5.00	5.37	
53 Carbon tetrachloride	117	6.536	6.541	-0.005	95	8975	5.00	4.76	
54 1,1-Dichloropropene	75	6.554	6.553	0.001	93	14653	5.00	4.94	
55 Isobutyl alcohol	41	6.755	6.766	-0.011	53	7744	125.0	110.7	M
56 Benzene	78	6.767	6.772	-0.005	95	48107	5.00	5.42	
57 1,2-Dichloroethane	62	6.852	6.851	0.001	97	17032	5.00	4.93	
59 n-Heptane	43	7.138	7.143	-0.005	96	16179	5.00	5.42	
61 Trichloroethene	130	7.516	7.514	0.002	93	11127	5.00	5.40	
63 Methylcyclohexane	83	7.747	7.745	0.002	91	20302	5.00	5.30	
64 1,2-Dichloropropane	63	7.783	7.788	-0.005	81	12327	5.00	5.23	
67 Dibromomethane	93	7.868	7.867	0.001	93	5901	5.00	4.49	
65 1,4-Dioxane	88	7.862	7.867	-0.005	37	1275	100.0	86.0	
68 Dichlorobromomethane	83	8.069	8.074	-0.005	97	9723	5.00	4.22	
70 2-Chloroethyl vinyl ether	63	8.373	8.378	-0.005	92	11808	10.0	8.59	
71 cis-1,3-Dichloropropene	75	8.519	8.524	-0.005	89	9697	5.00	3.48	
72 4-Methyl-2-pentanone (MIBK	43	8.677	8.676	0.001	97	55579	25.0	22.1	
73 Toluene	91	8.848	8.852	-0.004	98	43799	5.00	5.57	
74 trans-1,3-Dichloropropene	75	9.097	9.102	-0.005	96	8212	5.00	3.80	
75 Ethyl methacrylate	69	9.170	9.163	0.007	93	10071	5.00	3.89	
76 1,1,2-Trichloroethane	97	9.292	9.297	-0.005	92	8743	5.00	5.10	
77 Tetrachloroethene	164	9.359	9.363	-0.004	93	8031	5.00	5.53	
78 1,3-Dichloropropane	76	9.444	9.455	-0.011	97	16474	5.00	5.31	
79 2-Hexanone	43	9.511	9.516	-0.005	98	35045	25.0	23.8	
81 Chlorodibromomethane	129	9.663	9.662	0.001	84	5144	5.00	3.85	
82 Ethylene Dibromide	107	9.773	9.771	0.001	92	7835	5.00	4.80	
83 3-Chlorobenzotrifluoride	180	10.241	10.246	-0.005	55	14022	5.00	5.44	
84 Chlorobenzene	112	10.259	10.264	-0.005	94	29235	5.00	5.79	
85 4-Chlorobenzotrifluoride	180	10.332	10.331	0.001	94	12192	5.00	5.10	
86 1,1,1,2-Tetrachloroethane	131	10.363	10.361	0.002	42	6755	5.00	4.30	
87 Ethylbenzene	106	10.363	10.367	-0.004	99	14781	5.00	5.29	
88 m-Xylene & p-Xylene	106	10.496	10.501	-0.005	99	17932	5.00	5.15	
89 o-Xylene	106	10.880	10.878	0.002	97	18337	5.00	5.28	
90 Styrene	104	10.904	10.896	0.008	96	26901	5.00	4.77	
91 Bromoform	173	11.074	11.079	-0.005	93	3115	5.00	3.58	
92 2-Chlorobenzotrifluoride	180	11.147	11.152	-0.005	95	14053	5.00	5.44	
93 Isopropylbenzene	105	11.245	11.249	-0.004	96	45032	5.00	5.38	
95 Bromobenzene	156	11.555	11.554	0.001	97	10944	5.00	4.95	
96 1,1,2,2-Tetrachloroethane	83	11.561	11.566	-0.005	79	12860	5.00	4.98	
97 trans-1,4-Dichloro-2-buten	53	11.604	11.596	0.008	61	4233	5.00	4.18	
98 1,2,3-Trichloropropane	110	11.616	11.614	0.002	89	4653	5.00	5.05	
99 N-Propylbenzene	120	11.671	11.663	0.008	99	11241	5.00	4.72	
100 2-Chlorotoluene	126	11.750	11.748	0.002	94	10432	5.00	5.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.810	11.815	-0.005	98	10417	5.00	4.71	
102 1,3,5-Trimethylbenzene	105	11.847	11.846	0.001	93	36474	5.00	4.99	
103 4-Chlorotoluene	126	11.871	11.876	-0.005	97	12088	5.00	5.30	
104 tert-Butylbenzene	119	12.157	12.162	-0.005	91	28638	5.00	4.92	
106 1,2,4-Trimethylbenzene	105	12.224	12.223	0.001	98	37316	5.00	4.94	
107 1,2-dichloro-4-(trifluorom	214	12.267	12.265	0.002	95	9897	5.00	5.03	
108 sec-Butylbenzene	105	12.382	12.387	-0.005	95	42408	5.00	5.05	
109 1,3-Dichlorobenzene	146	12.498	12.503	-0.005	94	20730	5.00	5.03	
110 4-Isopropyltoluene	119	12.540	12.539	0.001	96	34930	5.00	5.02	
111 1,4-Dichlorobenzene	146	12.601	12.600	0.001	93	23234	5.00	5.38	
113 2,4-Dichloro-1-(triflourom	214	12.638	12.636	0.002	88	8654	5.00	4.63	
114 2,5-Dichlorobenzotrifluori	214	12.680	12.673	0.007	95	9909	5.00	4.83	
116 n-Butylbenzene	91	12.948	12.947	0.001	98	30552	5.00	4.85	
117 1,2-Dichlorobenzene	146	12.954	12.959	-0.005	76	21090	5.00	5.33	
118 1,2-Dibromo-3-Chloropropan	75	13.751	13.750	0.001	67	1577	5.00	4.09	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.891	13.890	0.001	98	34921	15.0	13.3	
121 2,3- & 3,4- Dichlorotoluen	125	14.299	14.303	-0.004	98	22608	10.0	8.15	
122 1,2,4-Trichlorobenzene	180	14.566	14.571	-0.005	91	9210	5.00	4.29	
123 Hexachlorobutadiene	225	14.718	14.717	0.001	91	3084	5.00	3.82	
124 Naphthalene	128	14.834	14.832	0.002	96	21423	5.00	3.58	
125 1,2,3-Trichlorobenzene	180	15.059	15.058	0.001	90	6642	5.00	3.58	
126 2,4,5-Trichlorotoluene	159	15.850	15.842	0.008	0	2799	5.00	2.54	
127 2,3,6-Trichlorotoluene	159	15.953	15.952	0.001	87	2845	5.00	2.80	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		10.0	9.76	
S 131 Xylenes, Total	106				0		10.0	10.4	
S 132 1,3-Dichloropropene, Total	1				0		10.0	7.28	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWAcro1stRe_00011	Amount Added:	4.00	Units: uL	
voaWVA1stRest_00012	Amount Added:	0.20	Units: uL	
voaW2cle1stRe_00007	Amount Added:	0.20	Units: uL	
VOA8260SURR_00066	Amount Added:	0.20	Units: uL	
voaWEEmix1stR_00005	Amount Added:	0.20	Units: uL	
VOA8260VOAPRI_00243	Amount Added:	0.20	Units: uL	
voaWKetmix1st_00002	Amount Added:	0.80	Units: uL	
VOA8260INT_00067	Amount Added:	2.00	Units: uL	Run Reagent

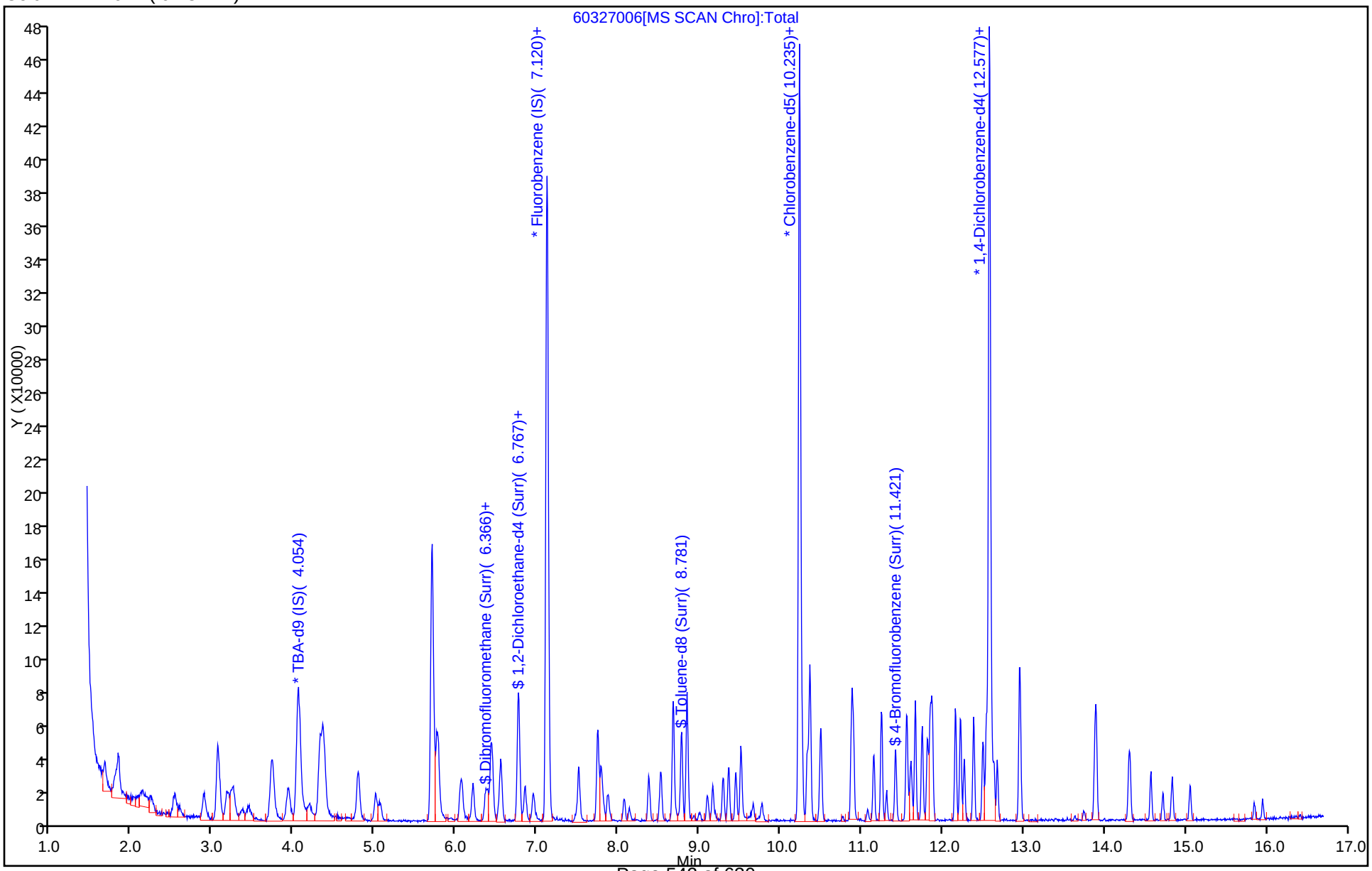
Report Date: 28-Mar-2017 09:07:39 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327006.D

Injection Date:	27-Mar-2017 12:56:30	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)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

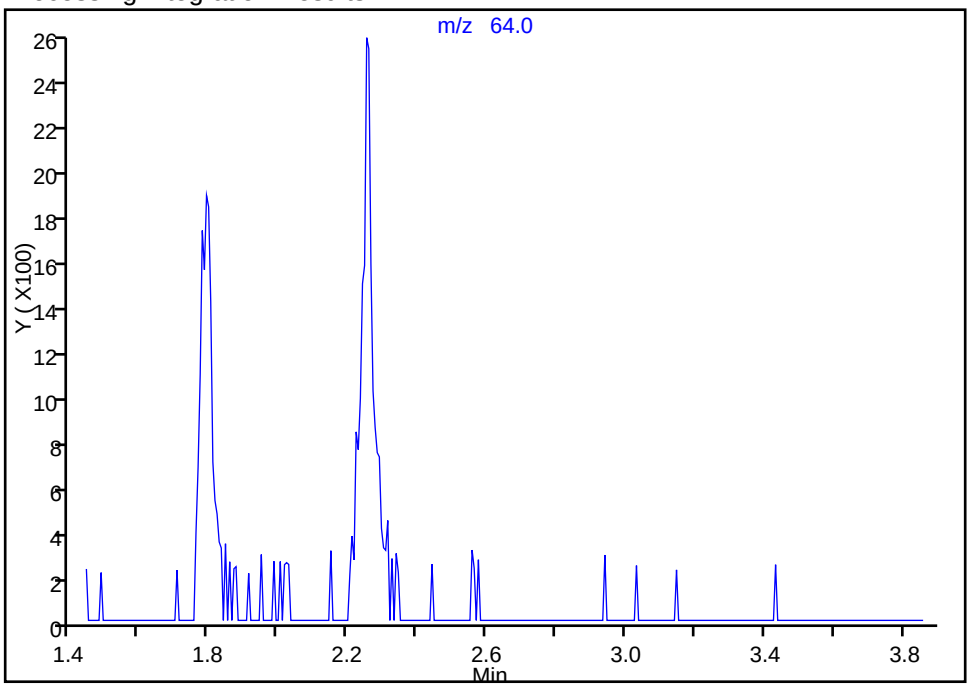
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327006.D				
Injection Date:	27-Mar-2017 12:56:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

16 Chloroethane, CAS: 75-00-3

Signal: 1

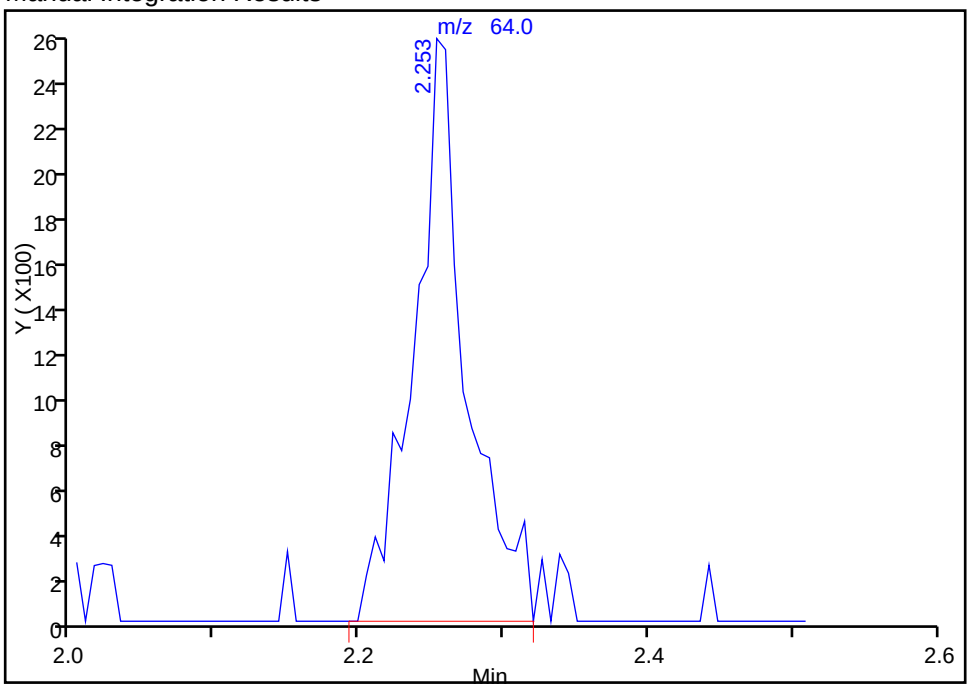
Not Detected
Expected RT: 2.26

Processing Integration Results



Manual Integration Results

RT: 2.25
Area: 6577
Amount: 5.514762
Amount Units: ng



Reviewer: fergusond, 28-Mar-2017 09:07:37
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

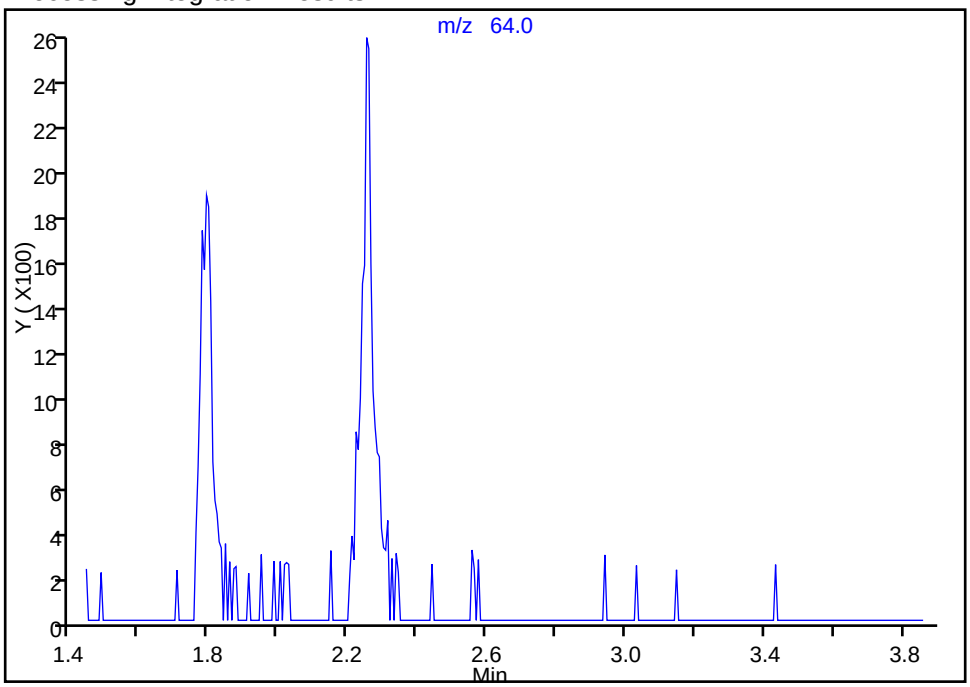
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327006.D				
Injection Date:	27-Mar-2017 12:56:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

16 Chloroethane, CAS: 75-00-3

Signal: 1

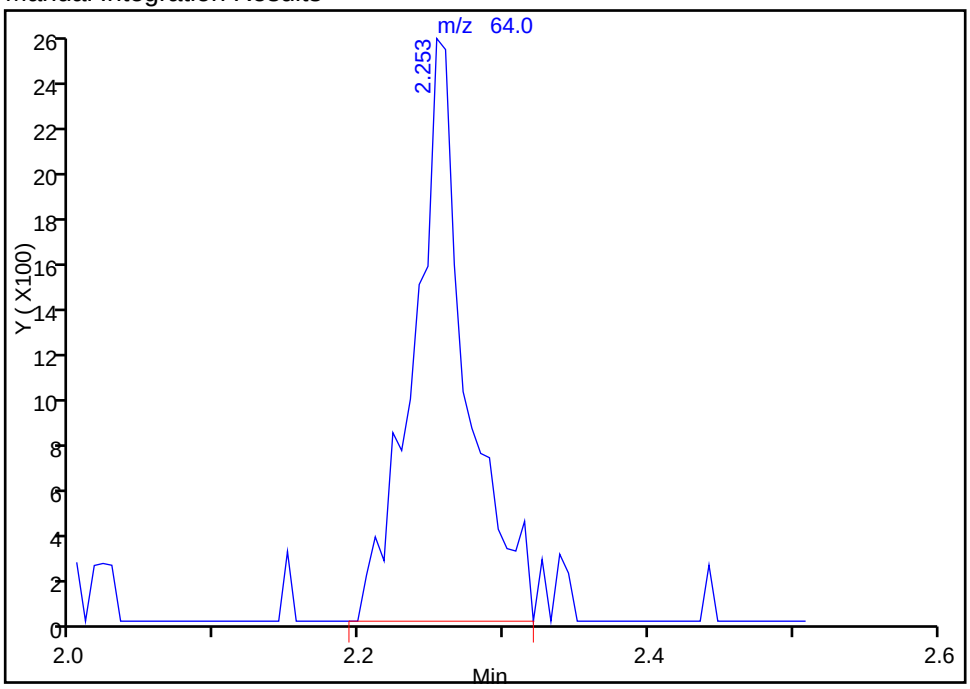
Not Detected
Expected RT: 2.26

Processing Integration Results



Manual Integration Results

RT: 2.25
Area: 6577
Amount: 5.514762
Amount Units: ng



Reviewer: fergusond, 28-Mar-2017 09:07:37
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

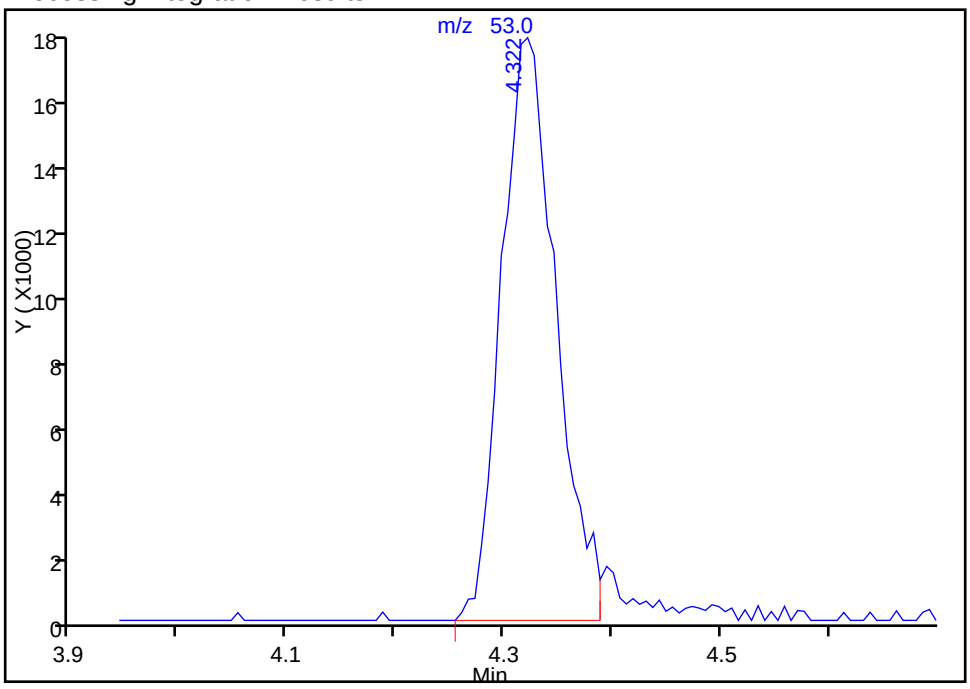
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327006.D				
Injection Date:	27-Mar-2017 12:56:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

33 Acrylonitrile, CAS: 107-13-1

Signal: 1

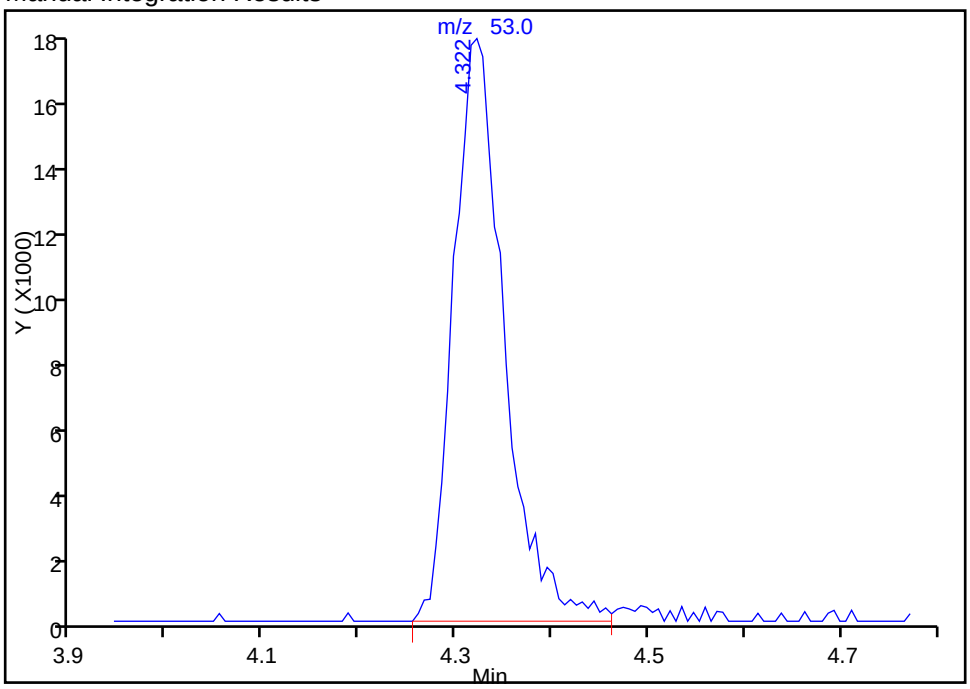
Processing Integration Results

RT: 4.32
Area: 60774
Amount: 48.980489
Amount Units: ng



Manual Integration Results

RT: 4.32
Area: 63578
Amount: 50.615466
Amount Units: ng



Reviewer: fergusond, 28-Mar-2017 09:07:37

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

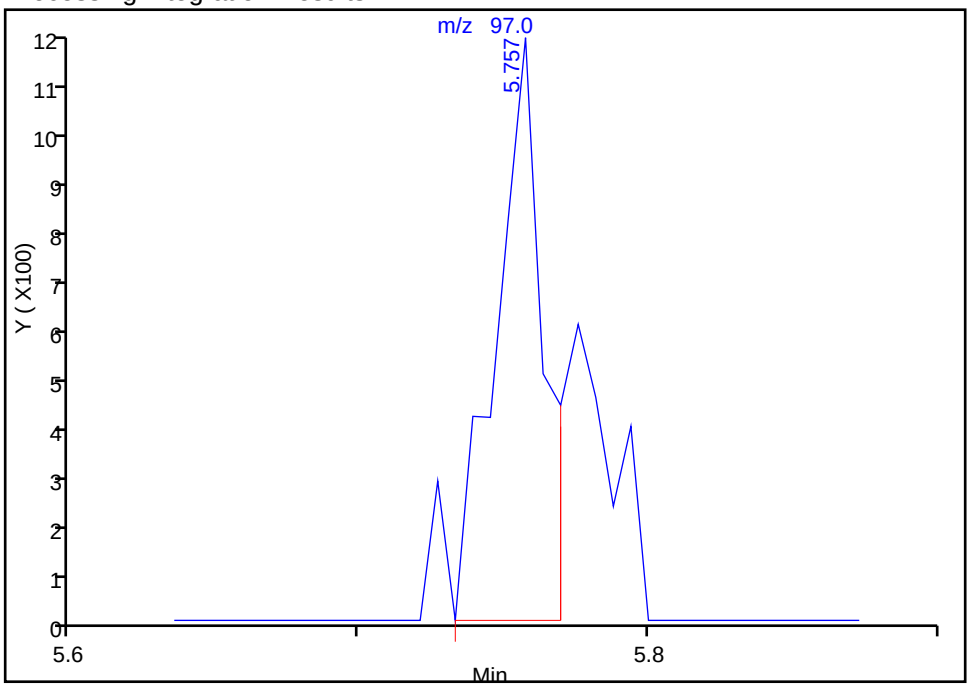
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327006.D				
Injection Date:	27-Mar-2017 12:56:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

42 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

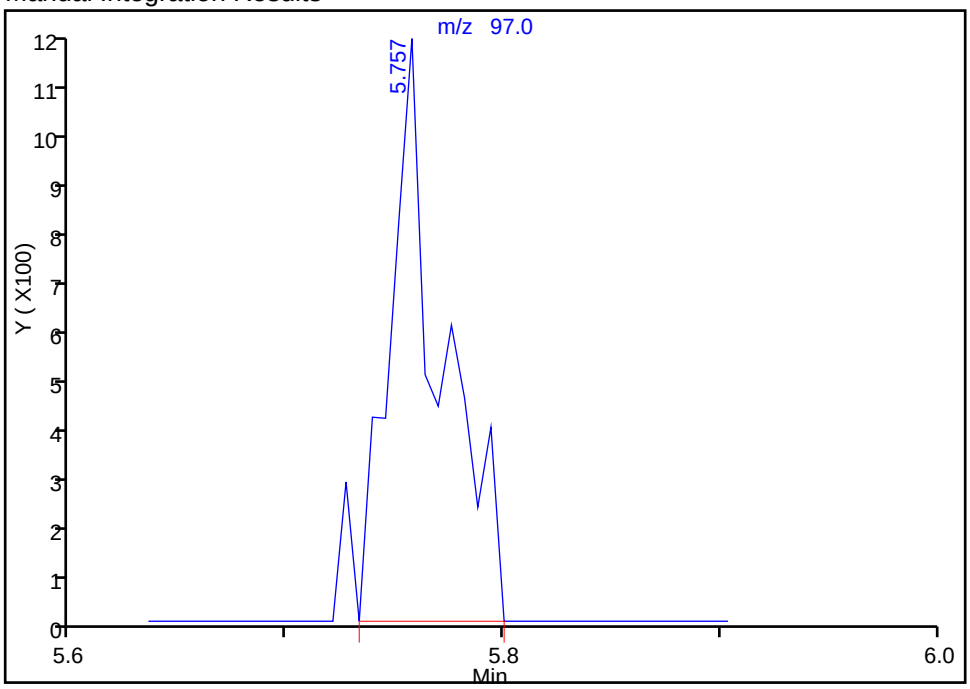
Processing Integration Results

RT: 5.76
Area: 1284
Amount: 5.069214
Amount Units: ng



Manual Integration Results

RT: 5.76
Area: 1858
Amount: 4.552998
Amount Units: ng



Reviewer: fergusond, 28-Mar-2017 09:07:37

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

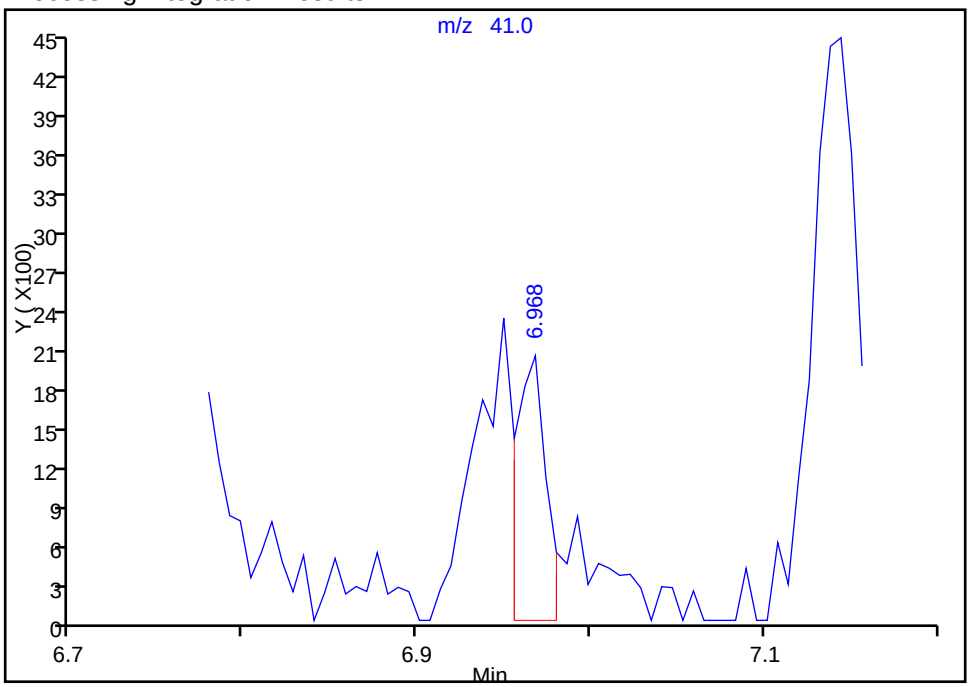
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327006.D				
Injection Date:	27-Mar-2017 12:56:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

55 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

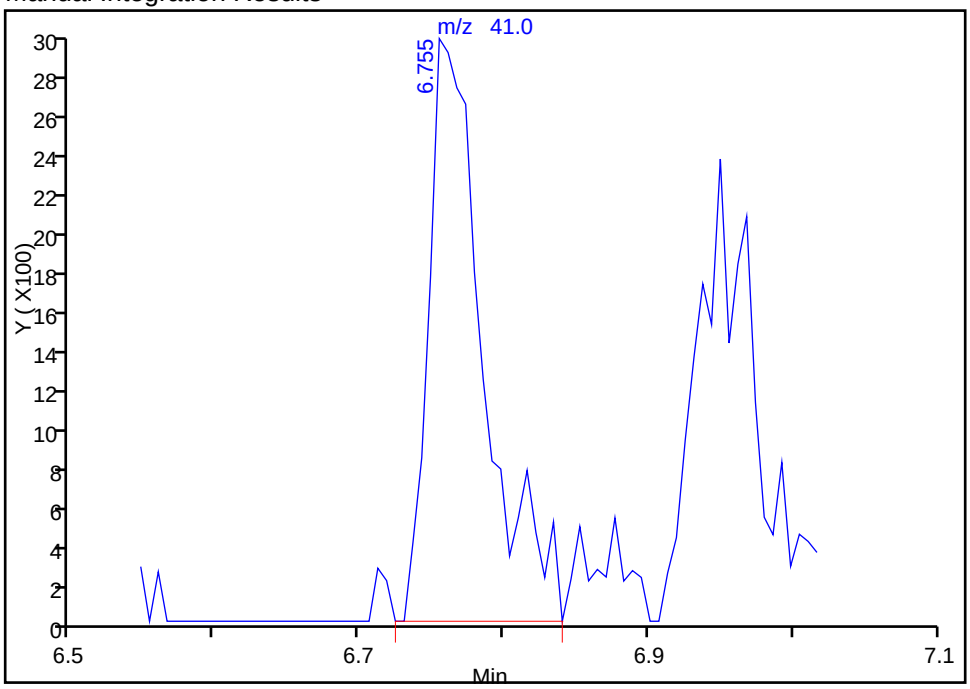
Processing Integration Results

RT: 6.97
Area: 2485
Amount: 116.7593
Amount Units: ng



Manual Integration Results

RT: 6.76
Area: 7744
Amount: 110.7403
Amount Units: ng



Reviewer: fergusond, 28-Mar-2017 09:07:37

Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

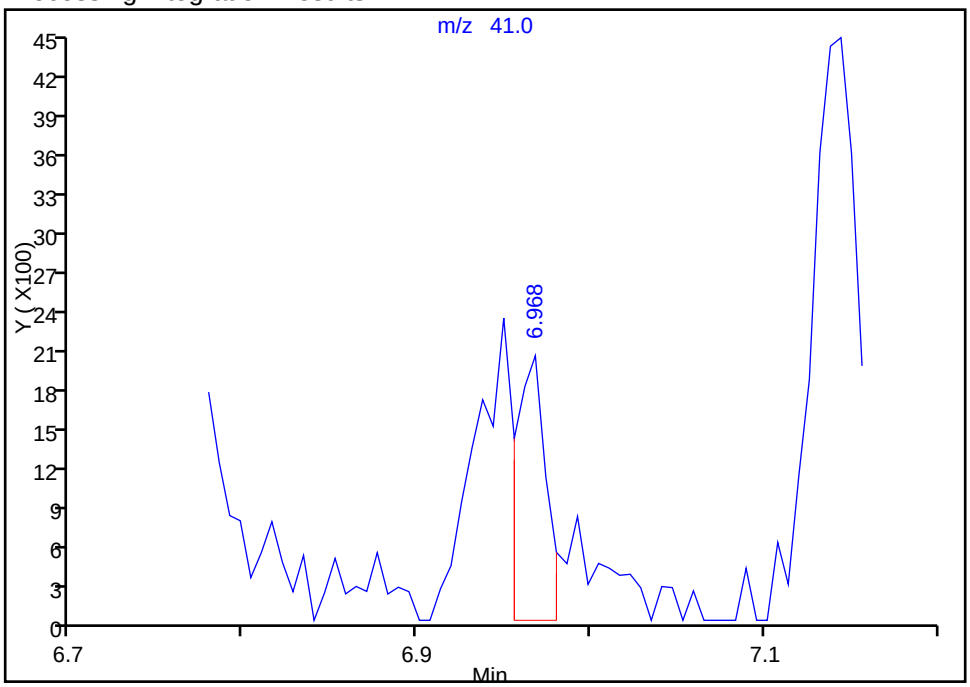
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327006.D
Injection Date: 27-Mar-2017 12:56:30 Instrument ID: CHHP6
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

55 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

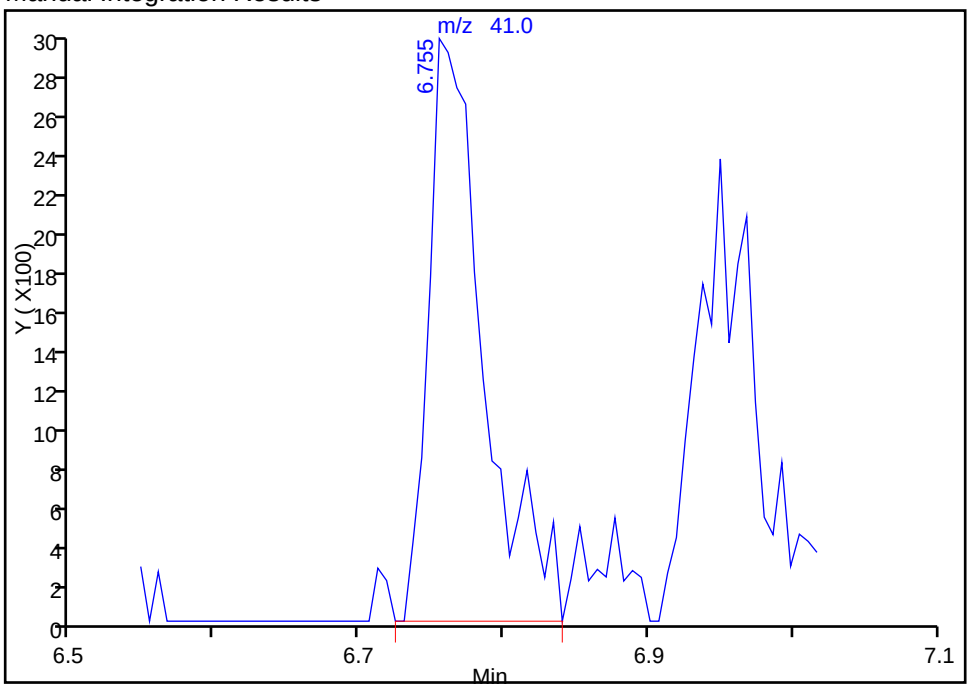
Processing Integration Results

RT: 6.97
Area: 2485
Amount: 116.7593
Amount Units: ng



Manual Integration Results

RT: 6.76
Area: 7744
Amount: 110.7403
Amount Units: ng



Reviewer: fergusond, 28-Mar-2017 09:07:37
Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327007.D
Lims ID: IC VSTD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 27-Mar-2017 13:20:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016041-007
Misc. Info.: IC VSTD5
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub65

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Mar-2017 09:07:44 Calib Date: 27-Mar-2017 15:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327013.D

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

First Level Reviewer: fergusond Date: 27-Mar-2017 15:41:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.065	4.059	0.006	88	137969	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.119	7.119	0.000	98	379751	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.234	10.233	0.001	91	78090	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.582	12.576	0.006	96	139103	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.389	6.389	0.000	93	41832	25.0	24.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.766	6.766	0.000	85	65925	25.0	24.9	
$ 7 Toluene-d8 (Surr)	98	8.780	8.779	0.001	94	173094	25.0	28.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.420	11.420	0.000	85	72549	25.0	28.1	
11 Dichlorodifluoromethane	85	1.510	1.516	-0.006	99	57271	25.0	23.8	
12 Chloromethane	50	1.675	1.662	0.013	99	75653	25.0	24.0	
13 Vinyl chloride	62	1.790	1.790	0.000	96	64415	25.0	24.2	
14 Butadiene	39	1.833	1.826	0.007	88	68236	25.0	23.9	
15 Bromomethane	94	2.119	2.130	-0.011	93	17424	25.0	23.0	
16 Chloroethane	64	2.265	2.258	0.007	98	28313	25.0	23.4	
17 Dichlorofluoromethane	67	2.526	2.513	0.013	95	56151	25.0	24.3	
18 Trichlorofluoromethane	101	2.538	2.532	0.006	94	36927	25.0	21.7	
20 Ethyl ether	59	2.891	2.891	0.000	97	62068	25.0	24.0	
21 Acrolein	56	3.062	3.067	-0.005	99	79970	125.0	114.9	
22 1,1-Dichloroethene	96	3.177	3.177	0.000	96	47462	25.0	23.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.232	3.225	0.007	95	46539	25.0	23.5	
24 Acetone	43	3.268	3.268	0.000	98	37639	50.0	49.3	
25 Iodomethane	142	3.348	3.365	-0.017	97	60382	25.0	22.0	
26 Carbon disulfide	76	3.439	3.444	-0.005	100	95585	25.0	20.7	
29 3-Chloro-1-propene	76	3.713	3.712	0.001	88	23248	25.0	20.1	
30 Methyl acetate	43	3.737	3.736	0.001	99	298891	125.0	119.7	
31 Methylene Chloride	84	3.925	3.931	-0.006	98	60744	25.0	23.5	
32 2-Methyl-2-propanol	59	4.193	4.199	-0.006	91	44805	250.0	262.5	
33 Acrylonitrile	53	4.327	4.326	0.001	99	301159	250.0	236.4	
34 trans-1,2-Dichloroethene	96	4.357	4.369	-0.012	96	50706	25.0	22.9	
35 Methyl tert-butyl ether	73	4.370	4.375	-0.005	97	152513	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	4.789	4.795	-0.006	93	87958	25.0	23.4	
37 1,1-Dichloroethane	63	5.008	5.008	0.000	96	96791	25.0	22.9	
38 Vinyl acetate	43	5.063	5.062	0.001	97	108515	25.0	20.4	
42 2,2-Dichloropropane	97	5.769	5.768	0.001	51	9010	25.0	21.8	
43 cis-1,2-Dichloroethene	96	5.769	5.774	-0.005	84	59736	25.0	23.4	
44 2-Butanone (MEK)	43	5.781	5.786	-0.005	73	57437	50.0	48.8	
48 Chlorobromomethane	128	6.061	6.054	0.007	92	24300	25.0	22.3	
49 Tetrahydrofuran	42	6.067	6.072	-0.005	91	50880	50.0	47.7	
50 Chloroform	83	6.207	6.206	0.001	96	90824	25.0	23.0	
51 1,1,1-Trichloroethane	97	6.365	6.364	0.001	97	56604	25.0	21.9	
52 Cyclohexane	56	6.438	6.437	0.001	97	117761	25.0	23.6	
53 Carbon tetrachloride	117	6.535	6.541	-0.006	94	41501	25.0	21.7	
54 1,1-Dichloropropene	75	6.554	6.553	0.001	94	70887	25.0	23.6	
55 Isobutyl alcohol	41	6.766	6.766	0.000	91	45763	625.0	645.3	M
56 Benzene	78	6.773	6.772	0.001	96	220094	25.0	24.4	
57 1,2-Dichloroethane	62	6.852	6.851	0.001	97	79825	25.0	22.8	
59 n-Heptane	43	7.144	7.143	0.001	97	73662	25.0	24.3	
61 Trichloroethene	130	7.509	7.514	-0.005	95	47018	25.0	22.5	
63 Methylcyclohexane	83	7.746	7.745	0.001	92	92000	25.0	23.7	
64 1,2-Dichloropropane	63	7.788	7.788	0.000	92	54830	25.0	22.9	
65 1,4-Dioxane	88	7.868	7.867	0.001	39	6816	500.0	453.1	M
67 Dibromomethane	93	7.874	7.867	0.007	97	29388	25.0	22.1	
68 Dichlorobromomethane	83	8.074	8.074	0.000	97	46692	25.0	20.0	
70 2-Chloroethyl vinyl ether	63	8.379	8.378	0.001	91	59938	50.0	43.0	
71 cis-1,3-Dichloropropene	75	8.525	8.524	0.001	90	55613	25.0	19.7	
72 4-Methyl-2-pentanone (MIBK	43	8.677	8.676	0.001	98	123739	50.0	48.8	
73 Toluene	91	8.847	8.852	-0.005	98	208443	25.0	26.3	
74 trans-1,3-Dichloropropene	75	9.102	9.102	0.000	98	45432	25.0	20.8	
75 Ethyl methacrylate	69	9.163	9.163	0.000	93	59538	25.0	22.7	
76 1,1,2-Trichloroethane	97	9.297	9.297	0.000	94	43344	25.0	25.0	
77 Tetrachloroethene	164	9.358	9.363	-0.005	94	36469	25.0	24.9	
78 1,3-Dichloropropane	76	9.449	9.455	-0.006	97	76829	25.0	24.5	
79 2-Hexanone	43	9.510	9.516	-0.006	97	71957	50.0	48.3	
81 Chlorodibromomethane	129	9.662	9.662	0.000	91	29583	25.0	21.9	
82 Ethylene Dibromide	107	9.772	9.771	0.001	98	40795	25.0	24.8	
83 3-Chlorobenzotrifluoride	180	10.246	10.246	0.000	94	70734	25.0	27.1	
84 Chlorobenzene	112	10.264	10.264	0.000	92	133860	25.0	26.2	
85 4-Chlorobenzotrifluoride	180	10.331	10.331	0.000	96	64138	25.0	26.6	
86 1,1,1,2-Tetrachloroethane	131	10.362	10.361	0.001	88	37896	25.0	23.9	
87 Ethylbenzene	106	10.368	10.367	0.001	99	74199	25.0	26.3	
88 m-Xylene & p-Xylene	106	10.496	10.501	-0.005	98	89487	25.0	25.4	
89 o-Xylene	106	10.879	10.878	0.001	98	91715	25.0	26.1	
90 Styrene	104	10.903	10.896	0.007	94	145259	25.0	25.5	
91 Bromoform	173	11.080	11.079	0.001	96	18887	25.0	21.5	
92 2-Chlorobenzotrifluoride	180	11.153	11.152	0.001	94	69614	25.0	26.7	
93 Isopropylbenzene	105	11.250	11.249	0.001	97	233980	25.0	27.7	
95 Bromobenzene	156	11.560	11.554	0.006	97	56394	25.0	22.9	
96 1,1,2,2-Tetrachloroethane	83	11.560	11.566	-0.006	94	65563	25.0	25.2	
97 trans-1,4-Dichloro-2-buten	53	11.597	11.596	0.001	66	23352	25.0	20.7	
98 1,2,3-Trichloropropane	110	11.615	11.614	0.001	89	22847	25.0	22.3	
99 N-Propylbenzene	120	11.664	11.663	0.001	99	61547	25.0	23.2	
100 2-Chlorotoluene	126	11.749	11.748	0.001	95	54880	25.0	23.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.816	11.815	0.001	97	58722	25.0	23.9	
102 1,3,5-Trimethylbenzene	105	11.846	11.846	0.000	94	198662	25.0	24.4	
103 4-Chlorotoluene	126	11.877	11.876	0.001	98	58443	25.0	23.0	
104 tert-Butylbenzene	119	12.156	12.162	-0.006	94	160777	25.0	24.8	
106 1,2,4-Trimethylbenzene	105	12.223	12.223	0.000	98	208788	25.0	24.8	
107 1,2-dichloro-4-(trifluorom	214	12.266	12.265	0.001	97	53892	25.0	24.6	
108 sec-Butylbenzene	105	12.388	12.387	0.001	95	232765	25.0	24.9	
109 1,3-Dichlorobenzene	146	12.497	12.503	-0.006	97	109227	25.0	23.8	
110 4-Isopropyltoluene	119	12.540	12.539	0.001	97	192953	25.0	24.9	
111 1,4-Dichlorobenzene	146	12.607	12.600	0.007	95	118072	25.0	24.6	
113 2,4-Dichloro-1-(triflourom	214	12.631	12.636	-0.005	97	52261	25.0	25.1	
114 2,5-Dichlorobenzotrifluori	214	12.680	12.673	0.007	97	58466	25.0	25.6	
116 n-Butylbenzene	91	12.947	12.947	0.000	99	174840	25.0	24.9	
117 1,2-Dichlorobenzene	146	12.953	12.959	-0.006	95	109351	25.0	24.8	
118 1,2-Dibromo-3-Chloropropan	75	13.744	13.750	-0.006	72	7791	25.0	18.2	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.890	13.890	0.000	99	225006	75.0	76.8	
121 2,3- & 3,4- Dichlorotoluen	125	14.310	14.303	0.007	98	154191	50.0	50.0	
122 1,2,4-Trichlorobenzene	180	14.572	14.571	0.001	94	57586	25.0	24.1	
123 Hexachlorobutadiene	225	14.718	14.717	0.001	97	20699	25.0	23.0	
124 Naphthalene	128	14.833	14.832	0.001	97	152242	25.0	22.9	
125 1,2,3-Trichlorobenzene	180	15.052	15.058	-0.006	95	46355	25.0	22.4	
126 2,4,5-Trichlorotoluene	159	15.849	15.842	0.007	0	23413	25.0	19.1	
127 2,3,6-Trichlorotoluene	159	15.946	15.952	-0.006	94	20947	25.0	18.5	
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	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		50.0	51.6	
S 130 1,2-Dichloroethene, Total	96				0		50.0	46.3	
S 132 1,3-Dichloropropene, Total	1				0		50.0	40.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWKetmix1st_00002	Amount Added:	1.00	Units: uL	
VOA8260VOAPRI_00243	Amount Added:	1.00	Units: uL	
voaWVA1stRest_00012	Amount Added:	1.00	Units: uL	
voaW2cle1stRe_00007	Amount Added:	1.00	Units: uL	
voaWEEmix1stR_00005	Amount Added:	1.00	Units: uL	
VOA8260SURR_00066	Amount Added:	1.00	Units: uL	
voaWAcro1stRe_00011	Amount Added:	5.00	Units: uL	
VOA8260INT_00067	Amount Added:	2.00	Units: uL	Run Reagent

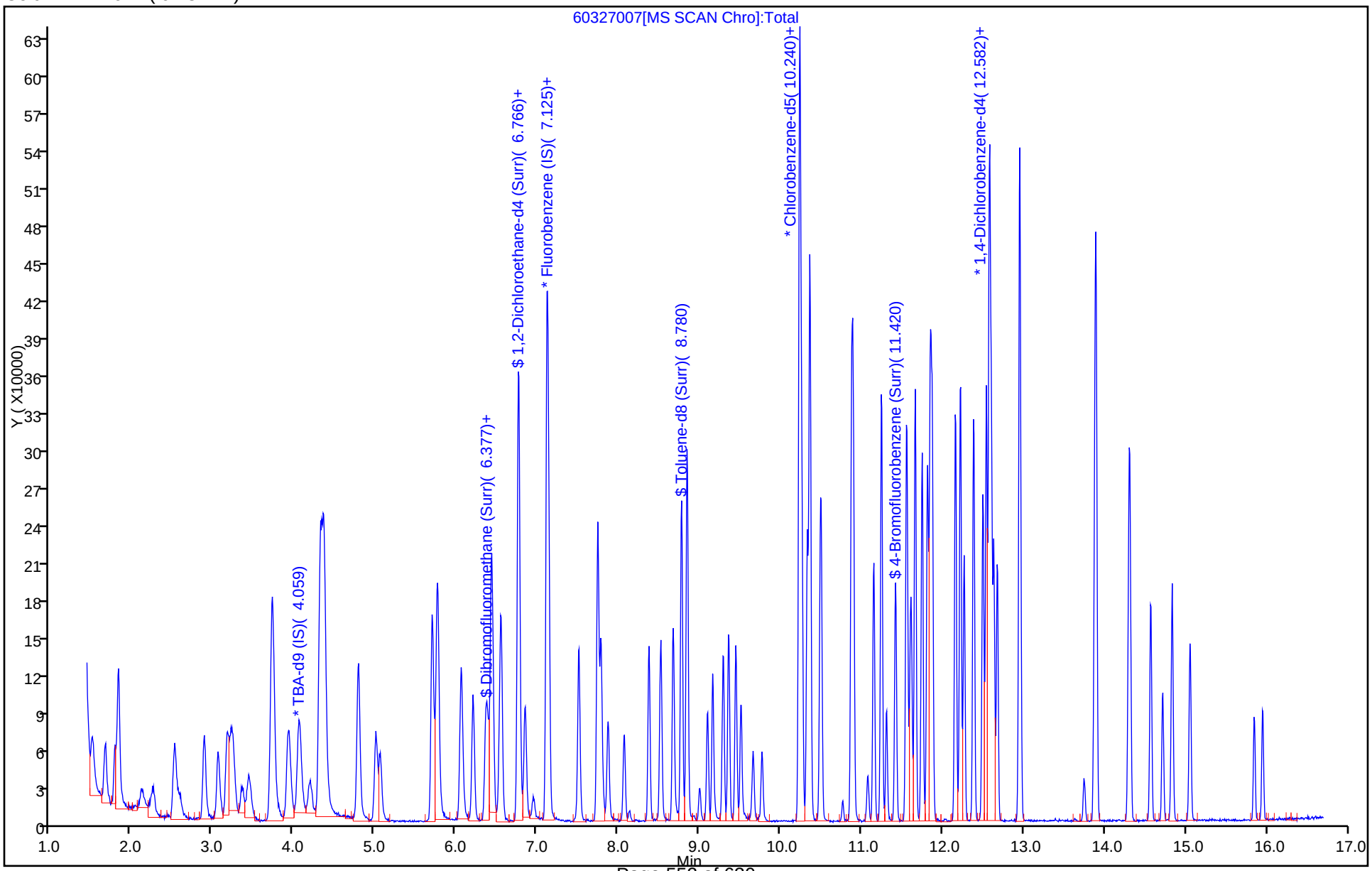
Report Date: 28-Mar-2017 09:07:46 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327007.D

Injection Date:	27-Mar-2017 13:20:30	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)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

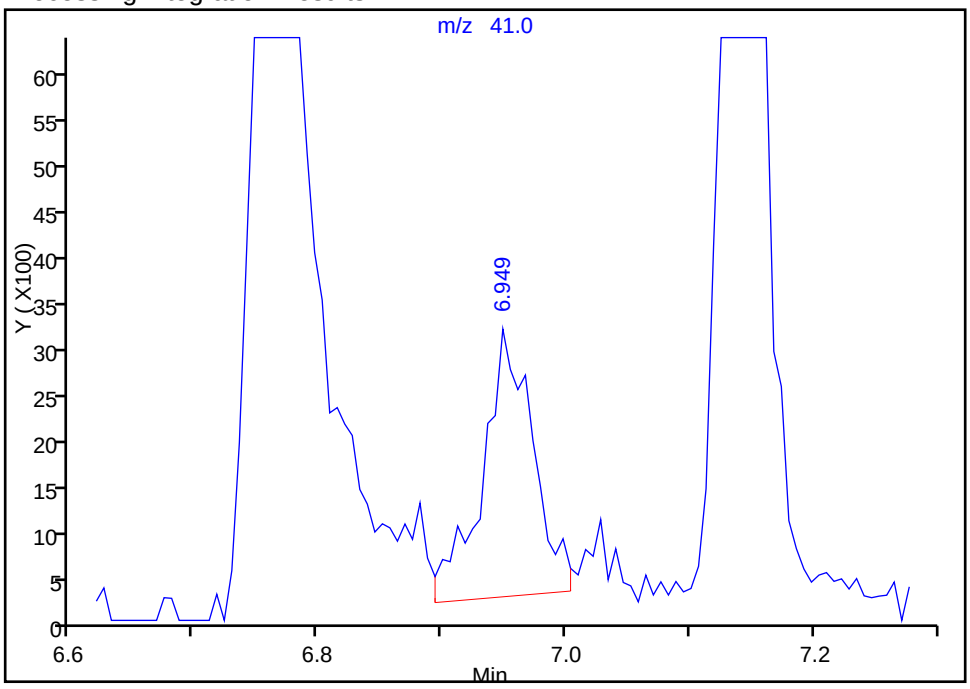
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327007.D
Injection Date: 27-Mar-2017 13:20:30 Instrument ID: CHHP6
Lims ID: IC VSTD5
Client ID:
Operator ID: 001562 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

55 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

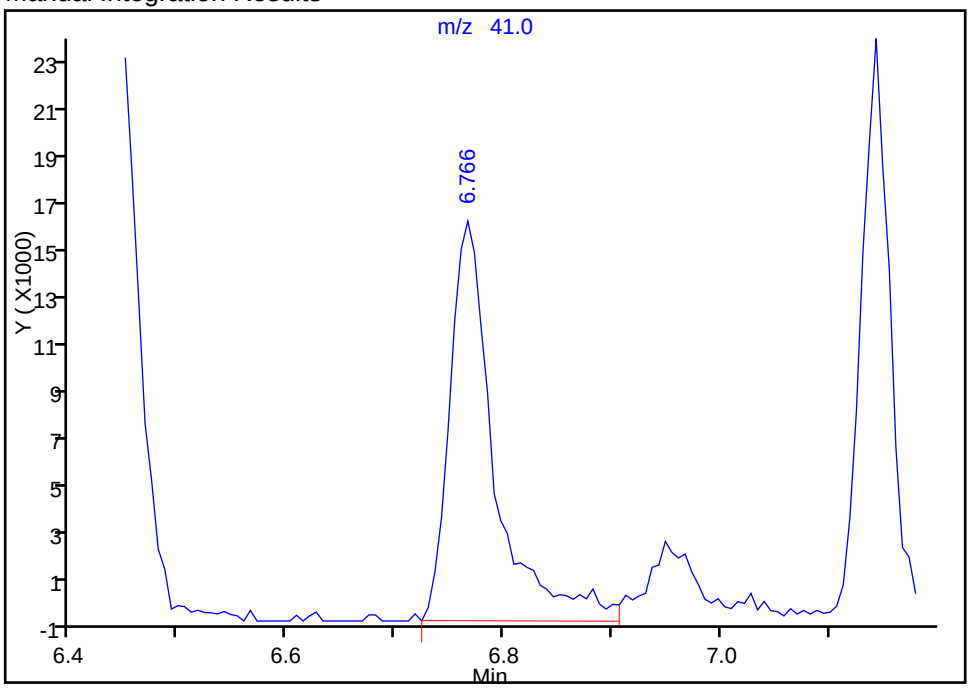
Processing Integration Results

RT: 6.95
Area: 8287
Amount: 288.8000
Amount Units: ng



Manual Integration Results

RT: 6.77
Area: 45763
Amount: 645.3062
Amount Units: ng



Reviewer: fergusond, 28-Mar-2017 09:07:43
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

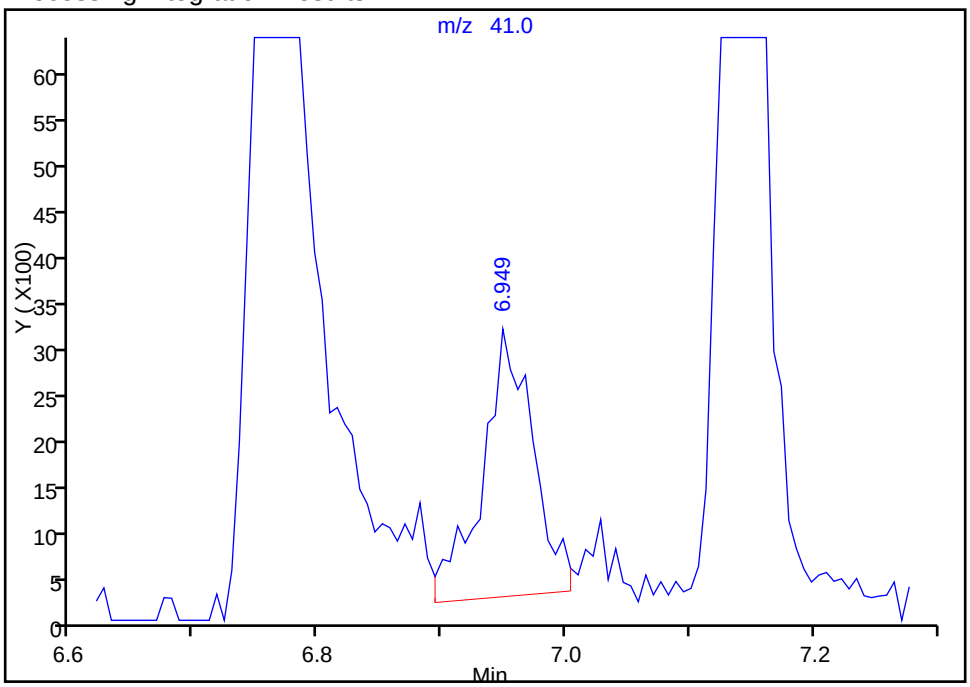
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327007.D
Injection Date: 27-Mar-2017 13:20:30 Instrument ID: CHHP6
Lims ID: IC VSTD5
Client ID:
Operator ID: 001562 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

55 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

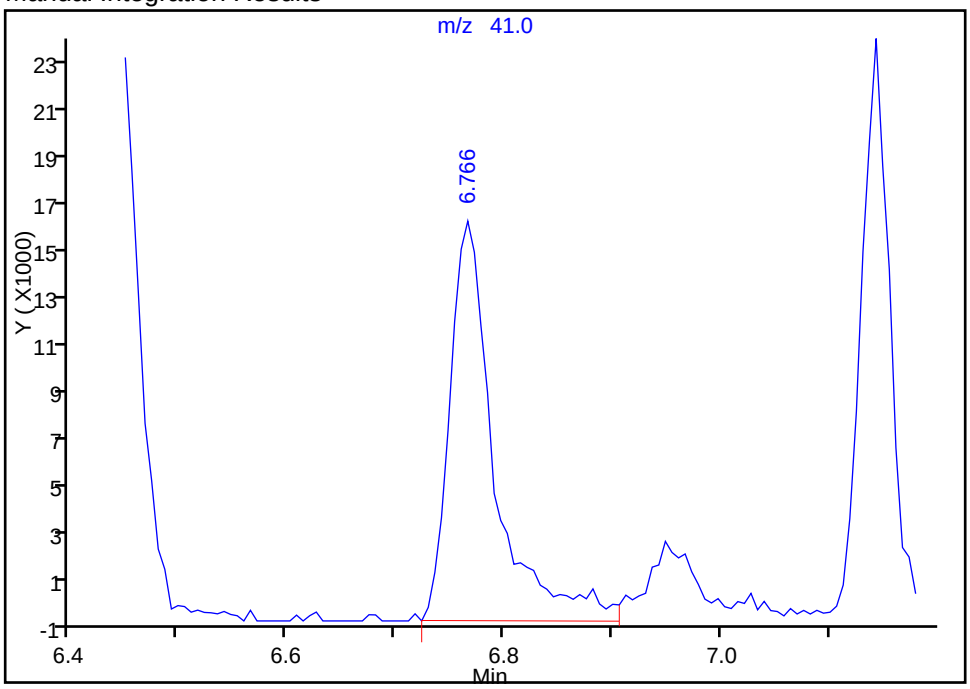
Processing Integration Results

RT: 6.95
Area: 8287
Amount: 288.8000
Amount Units: ng



Manual Integration Results

RT: 6.77
Area: 45763
Amount: 645.3062
Amount Units: ng



Reviewer: fergusond, 28-Mar-2017 09:07:43
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

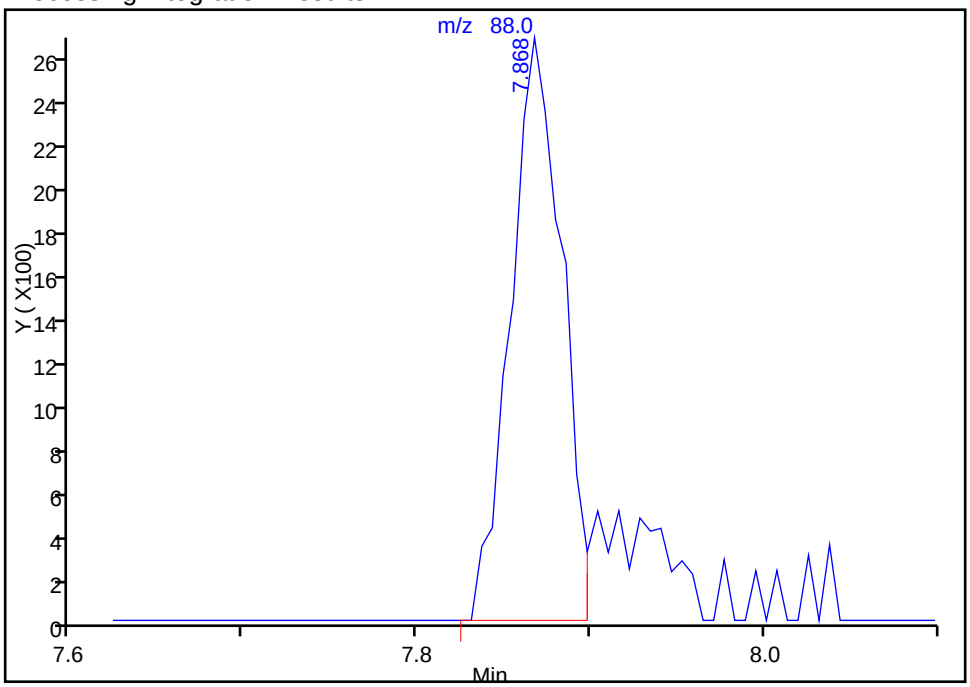
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327007.D				
Injection Date:	27-Mar-2017 13:20:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD5				
Client ID:					
Operator ID:	001562	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

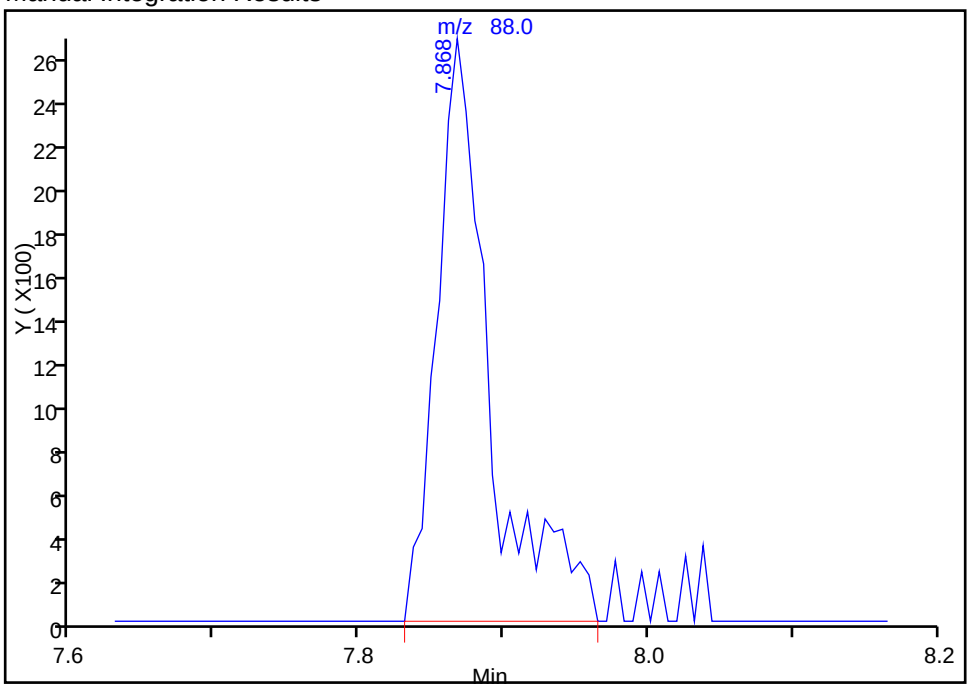
Processing Integration Results

RT: 7.87
Area: 5517
Amount: 403.2305
Amount Units: ng



Manual Integration Results

RT: 7.87
Area: 6816
Amount: 453.1425
Amount Units: ng



Reviewer: fergusond, 28-Mar-2017 09:07:43

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327008.D
Lims ID: ICIS VSTD10
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 27-Mar-2017 13:45:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016041-008
Misc. Info.: ICIS VSTD10
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub65

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Mar-2017 09:07:49 Calib Date: 27-Mar-2017 15:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327013.D

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

First Level Reviewer: fergusond Date: 27-Mar-2017 15:29:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.059	4.059	0.000	89	96247	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.119	7.119	0.000	98	356028	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.233	10.233	0.000	91	76555	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.576	12.576	0.000	94	121514	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.389	6.389	0.000	93	82273	50.0	51.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.766	6.766	0.000	83	124809	50.0	50.2	
$ 7 Toluene-d8 (Surr)	98	8.779	8.779	0.000	94	331040	50.0	55.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.420	11.420	0.000	85	132419	50.0	52.2	
11 Dichlorodifluoromethane	85	1.516	1.516	0.000	99	112691	50.0	50.0	
12 Chloromethane	50	1.662	1.662	0.000	99	149511	50.0	50.5	
13 Vinyl chloride	62	1.790	1.790	0.000	97	124641	50.0	50.0	
14 Butadiene	39	1.826	1.826	0.000	92	135357	50.0	50.6	
15 Bromomethane	94	2.130	2.130	0.000	93	39287	50.0	55.4	
16 Chloroethane	64	2.258	2.258	0.000	99	60681	50.0	53.5	
17 Dichlorofluoromethane	67	2.513	2.513	0.000	95	117985	50.0	54.4	
18 Trichlorofluoromethane	101	2.532	2.532	0.000	69	84894	50.0	53.3	
20 Ethyl ether	59	2.891	2.891	0.000	96	118652	50.0	49.0	
21 Acrolein	56	3.067	3.067	0.000	98	88178	150.0	135.1	
22 1,1-Dichloroethene	96	3.177	3.177	0.000	94	91807	50.0	48.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.225	3.225	0.000	93	90880	50.0	48.9	
24 Acetone	43	3.268	3.268	0.000	99	56344	100.0	78.7	
25 Iodomethane	142	3.365	3.365	0.000	99	124245	50.0	48.4	
26 Carbon disulfide	76	3.444	3.444	0.000	100	199236	50.0	46.0	
29 3-Chloro-1-propene	76	3.712	3.712	0.000	91	51212	50.0	47.2	
30 Methyl acetate	43	3.736	3.736	0.000	99	552464	250.0	235.9	
31 Methylene Chloride	84	3.931	3.931	0.000	98	117958	50.0	48.6	
32 2-Methyl-2-propanol	59	4.199	4.199	0.000	91	52099	500.0	437.5	
33 Acrylonitrile	53	4.326	4.326	0.000	99	540596	500.0	452.7	
34 trans-1,2-Dichloroethene	96	4.369	4.369	0.000	95	101938	50.0	49.0	
35 Methyl tert-butyl ether	73	4.375	4.375	0.000	98	298117	50.0	47.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.795	4.795	0.000	94	174280	50.0	49.5	
37 1,1-Dichloroethane	63	5.008	5.008	0.000	97	191981	50.0	48.5	
38 Vinyl acetate	43	5.062	5.062	0.000	97	216434	50.0	43.5	
42 2,2-Dichloropropane	97	5.768	5.768	0.000	52	18851	50.0	48.6	
43 cis-1,2-Dichloroethene	96	5.774	5.774	0.000	87	119205	50.0	49.8	
44 2-Butanone (MEK)	43	5.786	5.786	0.000	74	90862	100.0	82.4	
48 Chlorobromomethane	128	6.054	6.054	0.000	91	50373	50.0	49.3	
49 Tetrahydrofuran	42	6.072	6.072	0.000	92	86006	100.0	85.9	
50 Chloroform	83	6.206	6.206	0.000	95	180628	50.0	48.9	
51 1,1,1-Trichloroethane	97	6.364	6.364	0.000	96	118447	50.0	48.8	
52 Cyclohexane	56	6.437	6.437	0.000	96	233741	50.0	49.9	
53 Carbon tetrachloride	117	6.541	6.541	0.000	95	85817	50.0	47.8	
54 1,1-Dichloropropene	75	6.553	6.553	0.000	94	138130	50.0	49.0	
55 Isobutyl alcohol	41	6.766	6.766	0.000	60	71916	1250.0	1081.7	
56 Benzene	78	6.772	6.772	0.000	98	408593	50.0	48.4	
57 1,2-Dichloroethane	62	6.851	6.851	0.000	96	158313	50.0	48.2	
59 n-Heptane	43	7.143	7.143	0.000	94	135077	50.0	47.6	
61 Trichloroethene	130	7.514	7.514	0.000	95	94065	50.0	48.0	
63 Methylcyclohexane	83	7.745	7.745	0.000	95	184256	50.0	50.6	
64 1,2-Dichloropropane	63	7.788	7.788	0.000	93	105807	50.0	47.2	
67 Dibromomethane	93	7.867	7.867	0.000	94	58537	50.0	46.9	
65 1,4-Dioxane	88	7.867	7.867	0.000	36	12422	1000.0	880.9	M
68 Dichlorobromomethane	83	8.074	8.074	0.000	97	98502	50.0	44.9	
70 2-Chloroethyl vinyl ether	63	8.378	8.378	0.000	91	116067	100.0	88.9	
71 cis-1,3-Dichloropropene	75	8.524	8.524	0.000	91	116468	50.0	44.0	
72 4-Methyl-2-pentanone (MIBK	43	8.676	8.676	0.000	98	238510	100.0	95.9	
73 Toluene	91	8.852	8.852	0.000	98	396623	50.0	51.0	
74 trans-1,3-Dichloropropene	75	9.102	9.102	0.000	98	94419	50.0	44.2	
75 Ethyl methacrylate	69	9.163	9.163	0.000	92	121572	50.0	47.4	
76 1,1,2-Trichloroethane	97	9.297	9.297	0.000	93	83055	50.0	48.9	
77 Tetrachloroethene	164	9.363	9.363	0.000	98	71099	50.0	49.4	
78 1,3-Dichloropropane	76	9.455	9.455	0.000	97	148935	50.0	48.5	
79 2-Hexanone	43	9.516	9.516	0.000	98	133927	100.0	91.7	
81 Chlorodibromomethane	129	9.662	9.662	0.000	91	59782	50.0	45.2	
82 Ethylene Dibromide	107	9.771	9.771	0.000	99	77044	50.0	47.7	
83 3-Chlorobenzotrifluoride	180	10.246	10.246	0.000	93	131544	50.0	51.5	
84 Chlorobenzene	112	10.264	10.264	0.000	92	247731	50.0	49.5	
85 4-Chlorobenzotrifluoride	180	10.331	10.331	0.000	95	123973	50.0	52.4	
86 1,1,1,2-Tetrachloroethane	131	10.361	10.361	0.000	89	75092	50.0	48.2	
87 Ethylbenzene	106	10.367	10.367	0.000	99	139570	50.0	50.4	
88 m-Xylene & p-Xylene	106	10.501	10.501	0.000	99	175647	50.0	50.9	
89 o-Xylene	106	10.878	10.878	0.000	97	176804	50.0	51.4	
90 Styrene	104	10.896	10.896	0.000	94	282722	50.0	50.6	
91 Bromoform	173	11.079	11.079	0.000	95	38411	50.0	44.5	
92 2-Chlorobenzotrifluoride	180	11.152	11.152	0.000	96	133942	50.0	52.3	
93 Isopropylbenzene	105	11.249	11.249	0.000	97	430993	50.0	52.0	
95 Bromobenzene	156	11.554	11.554	0.000	98	102526	50.0	47.7	
96 1,1,2,2-Tetrachloroethane	83	11.566	11.566	0.000	95	126525	50.0	49.5	
97 trans-1,4-Dichloro-2-buten	53	11.596	11.596	0.000	69	46531	50.0	47.3	
98 1,2,3-Trichloropropane	110	11.614	11.614	0.000	89	41724	50.0	46.6	
99 N-Propylbenzene	120	11.663	11.663	0.000	99	113640	50.0	49.1	
100 2-Chlorotoluene	126	11.748	11.748	0.000	95	99587	50.0	49.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.815	11.815	0.000	97	109801	50.0	51.1	
102 1,3,5-Trimethylbenzene	105	11.846	11.846	0.000	93	354037	50.0	49.9	
103 4-Chlorotoluene	126	11.876	11.876	0.000	99	105715	50.0	47.7	
104 tert-Butylbenzene	119	12.162	12.162	0.000	93	280664	50.0	49.6	
106 1,2,4-Trimethylbenzene	105	12.223	12.223	0.000	98	366510	50.0	49.9	
107 1,2-dichloro-4-(trifluorom	214	12.265	12.265	0.000	98	98554	50.0	51.5	
108 sec-Butylbenzene	105	12.387	12.387	0.000	95	415360	50.0	50.9	
109 1,3-Dichlorobenzene	146	12.503	12.503	0.000	97	199370	50.0	49.7	
110 4-Isopropyltoluene	119	12.539	12.539	0.000	97	343888	50.0	50.9	
111 1,4-Dichlorobenzene	146	12.600	12.600	0.000	93	202051	50.0	48.1	
113 2,4-Dichloro-1-(triflourom	214	12.636	12.636	0.000	95	93013	50.0	51.2	
114 2,5-Dichlorobenzotrifluori	214	12.673	12.673	0.000	98	104602	50.0	52.5	
116 n-Butylbenzene	91	12.947	12.947	0.000	99	312316	50.0	51.0	
117 1,2-Dichlorobenzene	146	12.959	12.959	0.000	96	190221	50.0	49.4	
118 1,2-Dibromo-3-Chloropropan	75	13.750	13.750	0.000	74	17075	50.0	45.6	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.890	13.890	0.000	99	408225	150.0	159.5	
121 2,3- & 3,4- Dichlorotoluen	125	14.303	14.303	0.000	98	280063	100.0	103.9	
122 1,2,4-Trichlorobenzene	180	14.571	14.571	0.000	94	108205	50.0	51.8	
123 Hexachlorobutadiene	225	14.717	14.717	0.000	95	41822	50.0	53.2	
124 Naphthalene	128	14.832	14.832	0.000	97	303491	50.0	52.2	
125 1,2,3-Trichlorobenzene	180	15.058	15.058	0.000	95	95032	50.0	52.6	
126 2,4,5-Trichlorotoluene	159	15.842	15.842	0.000	0	55676	50.0	52.0	
127 2,3,6-Trichlorotoluene	159	15.952	15.952	0.000	92	51331	50.0	52.0	
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	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		100.0	98.9	
S 131 Xylenes, Total	106				0		100.0	102.3	
S 132 1,3-Dichloropropene, Total	1				0		100.0	88.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWAcro1stRe_00011	Amount Added:	6.00	Units: uL	
VOA8260SURR_00066	Amount Added:	2.00	Units: uL	
VOA8260VOAPRI_00243	Amount Added:	2.00	Units: uL	
voaWVA1stRest_00012	Amount Added:	2.00	Units: uL	
voaW2cle1stRe_00007	Amount Added:	2.00	Units: uL	
voaWKetmix1st_00002	Amount Added:	2.00	Units: uL	
voaWEEmix1stR_00005	Amount Added:	2.00	Units: uL	
VOA8260INT_00067	Amount Added:	2.00	Units: uL	Run Reagent

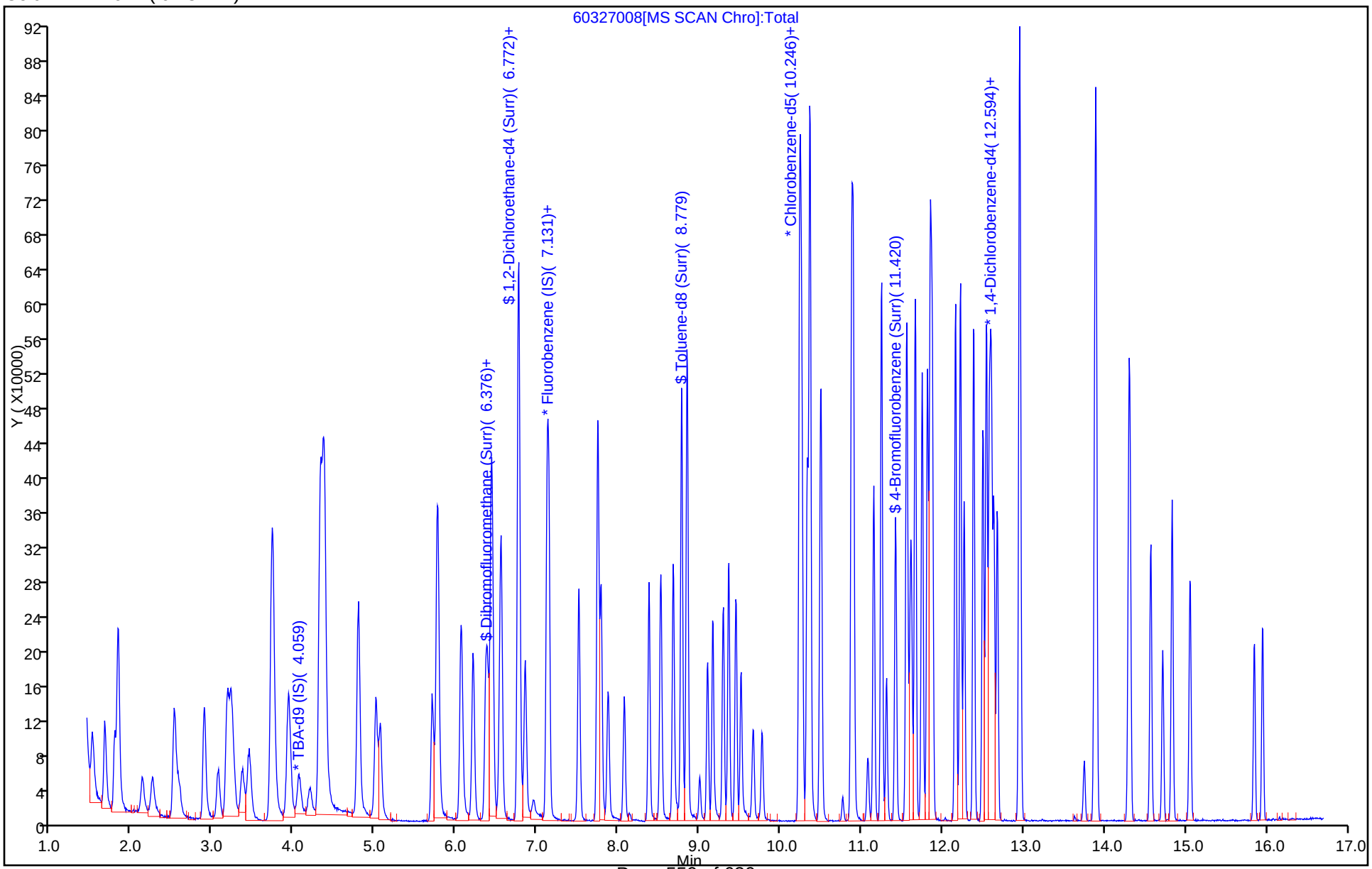
Report Date: 28-Mar-2017 09:07:50 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327008.D

Injection Date:	27-Mar-2017 13:45:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	ICIS VSTD10			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

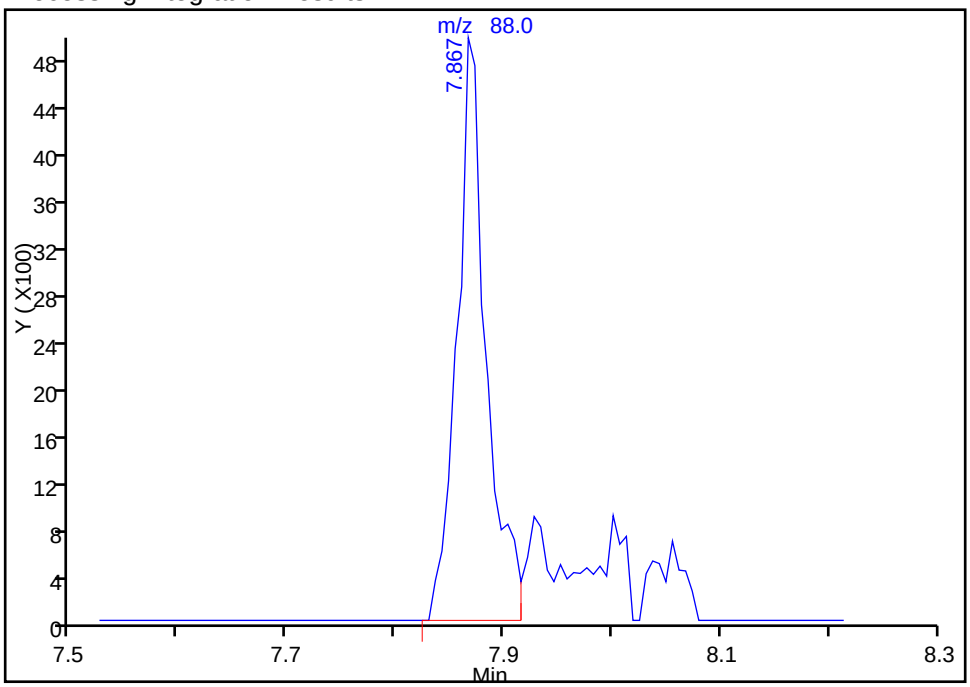
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327008.D				
Injection Date:	27-Mar-2017 13:45:30	Instrument ID:	CHHP6		
Lims ID:	ICIS VSTD10				
Client ID:					
Operator ID:	001562	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

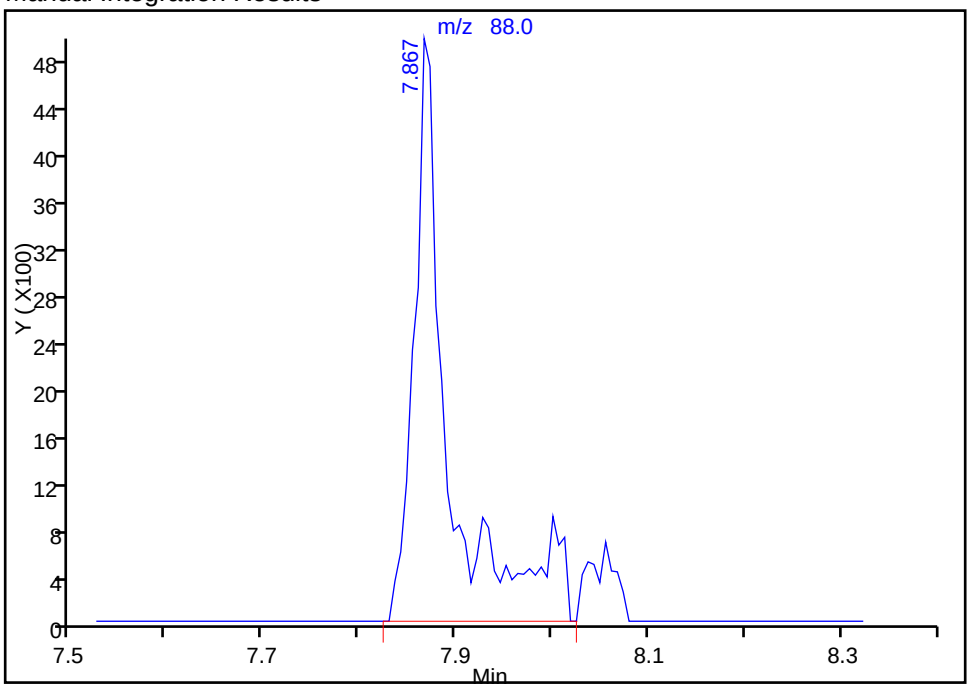
Processing Integration Results

RT: 7.87
Area: 9295
Amount: 749.5189
Amount Units: ng



Manual Integration Results

RT: 7.87
Area: 12422
Amount: 880.8694
Amount Units: ng



Reviewer: fergusond, 28-Mar-2017 09:07:48

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327009.D
Lims ID: IC VSTD15
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 27-Mar-2017 14:09:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016041-009
Misc. Info.: IC VSTD15
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub65

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Mar-2017 09:07:54 Calib Date: 27-Mar-2017 15:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327013.D

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

First Level Reviewer: fergusond Date: 27-Mar-2017 15:45:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.060	4.060	0.000	90	156656	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.120	7.120	0.000	98	361242	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.235	10.235	0.000	91	78434	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.577	12.577	0.000	96	130024	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.390	6.390	0.000	94	117678	75.0	72.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.761	6.761	0.000	90	185325	75.0	73.5	
$ 7 Toluene-d8 (Surr)	98	8.781	8.781	0.000	94	465492	75.0	75.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.421	11.421	0.000	85	196600	75.0	75.7	
11 Dichlorodifluoromethane	85	1.505	1.505	0.000	98	168133	75.0	73.6	
12 Chloromethane	50	1.663	1.663	0.000	99	227692	75.0	75.9	
13 Vinyl chloride	62	1.785	1.785	0.000	98	190975	75.0	75.5	
14 Butadiene	39	1.833	1.833	0.000	91	204115	75.0	75.2	
15 Bromomethane	94	2.113	2.113	0.000	91	51952	75.0	72.1	
16 Chloroethane	64	2.253	2.253	0.000	99	88953	75.0	77.3	
17 Dichlorofluoromethane	67	2.515	2.515	0.000	96	167177	75.0	75.9	
18 Trichlorofluoromethane	101	2.527	2.527	0.000	69	122842	75.0	76.0	
20 Ethyl ether	59	2.886	2.886	0.000	96	183576	75.0	74.7	
21 Acrolein	56	3.056	3.056	0.000	99	120650	175.0	182.2	
22 1,1-Dichloroethene	96	3.172	3.172	0.000	94	148825	75.0	76.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.226	3.226	0.000	94	144103	75.0	76.4	
24 Acetone	43	3.257	3.257	0.000	99	119390	150.0	164.4	
25 Iodomethane	142	3.360	3.360	0.000	100	195389	75.0	75.0	
26 Carbon disulfide	76	3.445	3.445	0.000	100	326677	75.0	74.3	
29 3-Chloro-1-propene	76	3.719	3.719	0.000	90	83179	75.0	75.6	
30 Methyl acetate	43	3.731	3.731	0.000	99	908745	375.0	382.4	
31 Methylene Chloride	84	3.926	3.926	0.000	98	178789	75.0	72.6	
32 2-Methyl-2-propanol	59	4.200	4.200	0.000	92	152648	750.0	787.6	
33 Acrylonitrile	53	4.321	4.321	0.000	98	955621	750.0	788.6	
34 trans-1,2-Dichloroethene	96	4.358	4.358	0.000	95	159544	75.0	75.6	
35 Methyl tert-butyl ether	73	4.370	4.370	0.000	97	480085	75.0	75.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.790	4.790	0.000	93	266370	75.0	74.6	
37 1,1-Dichloroethane	63	5.003	5.003	0.000	96	298153	75.0	74.3	
38 Vinyl acetate	43	5.057	5.057	0.000	97	389887	75.0	77.2	
42 2,2-Dichloropropane	97	5.763	5.763	0.000	75	29523	75.0	75.0	
43 cis-1,2-Dichloroethene	96	5.769	5.769	0.000	86	182097	75.0	75.1	
44 2-Butanone (MEK)	43	5.775	5.775	0.000	99	167937	150.0	150.1	
48 Chlorobromomethane	128	6.055	6.055	0.000	90	76573	75.0	73.9	
49 Tetrahydrofuran	42	6.067	6.067	0.000	92	151749	150.0	149.4	
50 Chloroform	83	6.207	6.207	0.000	97	280324	75.0	74.7	
51 1,1,1-Trichloroethane	97	6.365	6.365	0.000	97	186824	75.0	75.9	
52 Cyclohexane	56	6.432	6.432	0.000	95	359022	75.0	75.5	
53 Carbon tetrachloride	117	6.536	6.536	0.000	95	137463	75.0	75.5	
54 1,1-Dichloropropene	75	6.554	6.554	0.000	93	220326	75.0	77.0	
55 Isobutyl alcohol	41	6.767	6.767	0.000	93	150534	1875.0	2231.4	
56 Benzene	78	6.773	6.773	0.000	98	639443	75.0	74.6	
57 1,2-Dichloroethane	62	6.852	6.852	0.000	97	246081	75.0	73.8	
59 n-Heptane	43	7.144	7.144	0.000	96	217321	75.0	75.4	
61 Trichloroethene	130	7.509	7.509	0.000	97	147368	75.0	74.2	
63 Methylcyclohexane	83	7.746	7.746	0.000	94	281154	75.0	76.1	
64 1,2-Dichloropropane	63	7.783	7.783	0.000	94	166135	75.0	73.0	
65 1,4-Dioxane	88	7.868	7.868	0.000	41	23260	1500.0	1625.6	
67 Dibromomethane	93	7.874	7.874	0.000	96	94415	75.0	74.5	
68 Dichlorobromomethane	83	8.075	8.075	0.000	98	160628	75.0	72.2	
70 2-Chloroethyl vinyl ether	63	8.379	8.379	0.000	92	191438	150.0	144.4	
71 cis-1,3-Dichloropropene	75	8.519	8.519	0.000	91	196404	75.0	73.1	
72 4-Methyl-2-pentanone (MIBK	43	8.677	8.677	0.000	97	408528	150.0	160.4	
73 Toluene	91	8.847	8.847	0.000	98	622636	75.0	78.1	
74 trans-1,3-Dichloropropene	75	9.103	9.103	0.000	98	166589	75.0	76.0	
75 Ethyl methacrylate	69	9.164	9.164	0.000	92	207248	75.0	78.8	
76 1,1,2-Trichloroethane	97	9.298	9.298	0.000	94	129266	75.0	74.3	
77 Tetrachloroethene	164	9.365	9.365	0.000	97	115941	75.0	78.7	
78 1,3-Dichloropropane	76	9.450	9.450	0.000	97	235636	75.0	74.9	
79 2-Hexanone	43	9.511	9.511	0.000	96	230831	150.0	154.2	
81 Chlorodibromomethane	129	9.663	9.663	0.000	91	103568	75.0	76.4	
82 Ethylene Dibromide	107	9.772	9.772	0.000	99	126643	75.0	76.5	
83 3-Chlorobenzotrifluoride	180	10.247	10.247	0.000	92	211617	75.0	80.8	
84 Chlorobenzene	112	10.265	10.265	0.000	90	395300	75.0	77.1	
85 4-Chlorobenzotrifluoride	180	10.332	10.332	0.000	96	194348	75.0	80.2	
86 1,1,1,2-Tetrachloroethane	131	10.356	10.356	0.000	91	128689	75.0	80.7	
87 Ethylbenzene	106	10.368	10.368	0.000	99	221704	75.0	78.2	
88 m-Xylene & p-Xylene	106	10.496	10.496	0.000	100	281024	75.0	79.5	
89 o-Xylene	106	10.879	10.879	0.000	98	280158	75.0	79.5	
90 Styrene	104	10.898	10.898	0.000	94	457133	75.0	79.9	
91 Bromoform	173	11.074	11.074	0.000	95	69088	75.0	78.2	
92 2-Chlorobenzotrifluoride	180	11.153	11.153	0.000	95	212914	75.0	81.2	
93 Isopropylbenzene	105	11.244	11.244	0.000	97	704493	75.0	82.9	
95 Bromobenzene	156	11.555	11.555	0.000	98	165506	75.0	72.0	
96 1,1,2,2-Tetrachloroethane	83	11.561	11.561	0.000	94	207638	75.0	79.3	
97 trans-1,4-Dichloro-2-buten	53	11.597	11.597	0.000	75	75886	75.0	72.0	
98 1,2,3-Trichloropropane	110	11.615	11.615	0.000	89	67770	75.0	70.7	
99 N-Propylbenzene	120	11.664	11.664	0.000	99	189020	75.0	76.4	
100 2-Chlorotoluene	126	11.749	11.749	0.000	95	161253	75.0	74.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.816	11.816	0.000	97	175512	75.0	76.3	
102 1,3,5-Trimethylbenzene	105	11.847	11.847	0.000	93	598931	75.0	78.8	
103 4-Chlorotoluene	126	11.871	11.871	0.000	99	173793	75.0	73.2	
104 tert-Butylbenzene	119	12.157	12.157	0.000	94	483378	75.0	79.9	
106 1,2,4-Trimethylbenzene	105	12.218	12.218	0.000	99	620269	75.0	78.9	
107 1,2-dichloro-4-(trifluorom	214	12.266	12.266	0.000	98	159307	75.0	77.8	
108 sec-Butylbenzene	105	12.382	12.382	0.000	95	709820	75.0	81.3	
109 1,3-Dichlorobenzene	146	12.498	12.498	0.000	97	322100	75.0	75.1	
110 4-Isopropyltoluene	119	12.540	12.540	0.000	96	584588	75.0	80.8	
111 1,4-Dichlorobenzene	146	12.601	12.601	0.000	93	332849	75.0	74.1	
113 2,4-Dichloro-1-(triflourom	214	12.631	12.631	0.000	96	154948	75.0	79.7	
114 2,5-Dichlorobenzotrifluori	214	12.674	12.674	0.000	98	165814	75.0	77.8	
116 n-Butylbenzene	91	12.948	12.948	0.000	98	525648	75.0	80.2	
117 1,2-Dichlorobenzene	146	12.960	12.960	0.000	95	307487	75.0	74.7	
118 1,2-Dibromo-3-Chloropropan	75	13.751	13.751	0.000	75	30218	75.0	75.4	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.891	13.891	0.000	99	633923	225.0	231.4	
121 2,3- & 3,4- Dichlorotoluen	125	14.304	14.304	0.000	99	426720	150.0	147.9	
122 1,2,4-Trichlorobenzene	180	14.572	14.572	0.000	94	150272	75.0	67.2	
123 Hexachlorobutadiene	225	14.718	14.718	0.000	95	60872	75.0	72.4	
124 Naphthalene	128	14.834	14.834	0.000	98	433800	75.0	69.7	
125 1,2,3-Trichlorobenzene	180	15.053	15.053	0.000	95	123568	75.0	64.0	
126 2,4,5-Trichlorotoluene	159	15.850	15.850	0.000	0	55312	75.0	48.3	
127 2,3,6-Trichlorotoluene	159	15.947	15.947	0.000	95	52549	75.0	49.8	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		150.0	159.0	
S 130 1,2-Dichloroethene, Total	96				0		150.0	150.7	
S 132 1,3-Dichloropropene, Total	1				0		150.0	149.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260SURR_00066	Amount Added:	3.00	Units: uL	
VOA8260VOAPRI_00243	Amount Added:	3.00	Units: uL	
voaWVA1stRest_00012	Amount Added:	3.00	Units: uL	
voaW2cle1stRe_00007	Amount Added:	3.00	Units: uL	
voaWKetmix1st_00002	Amount Added:	3.00	Units: uL	
voaWEEmix1stR_00005	Amount Added:	3.00	Units: uL	
voaWAcro1stRe_00011	Amount Added:	7.00	Units: uL	
VOA8260INT_00067	Amount Added:	2.00	Units: uL	Run Reagent

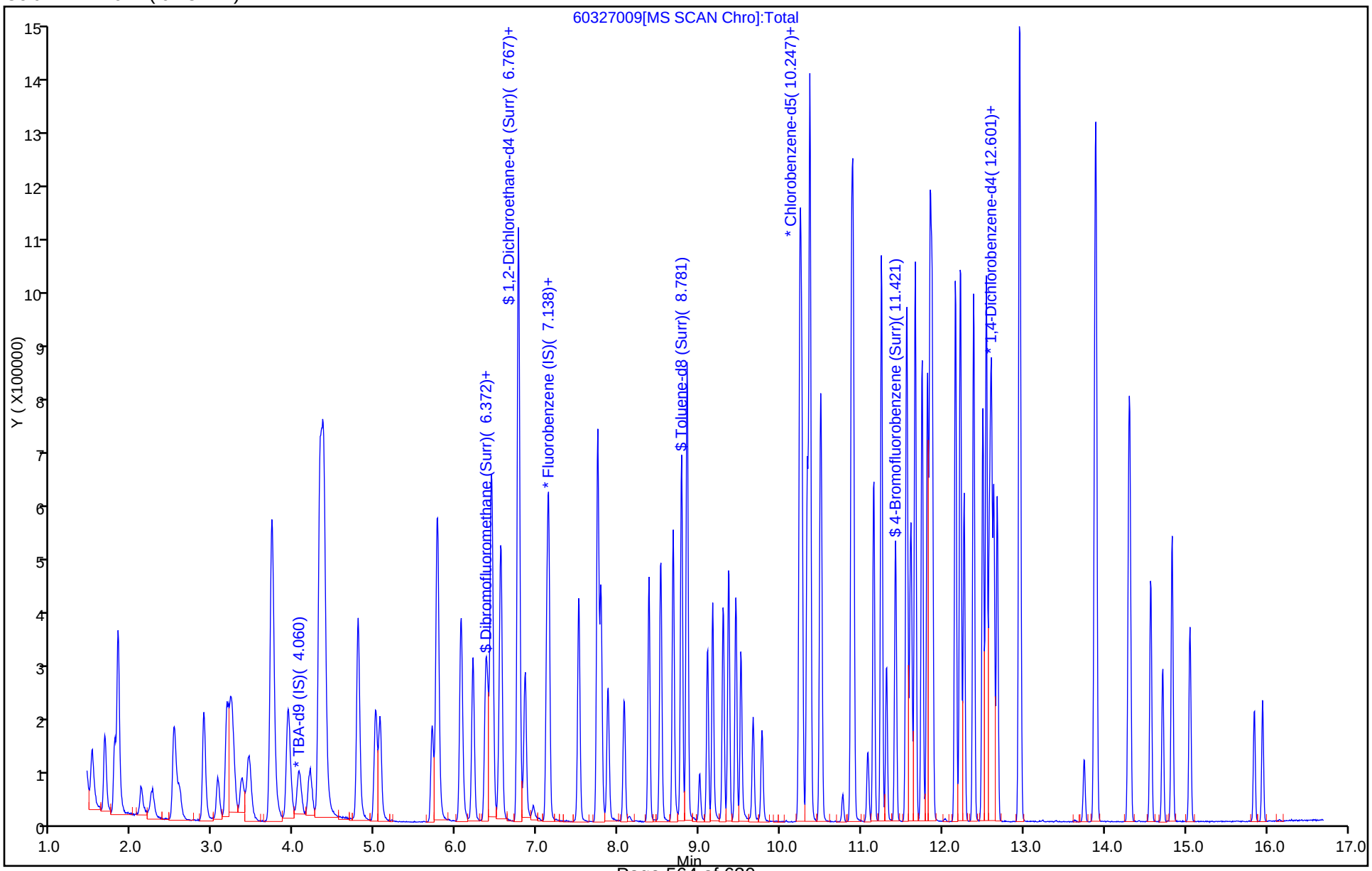
Report Date: 28-Mar-2017 09:07:57 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327009.D

Injection Date:	27-Mar-2017 14:09:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD15			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	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\20170327-16041.b\60327010.D
Lims ID: IC VSTD20
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 27-Mar-2017 14:33:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016041-010
Misc. Info.: IC VSTD20
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub65

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Mar-2017 09:08:01 Calib Date: 27-Mar-2017 15:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327013.D

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

First Level Reviewer: fergusond Date: 27-Mar-2017 15:47:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.048	4.060	-0.012	89	113966	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.120	7.120	0.000	98	339992	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.235	10.235	0.000	92	77586	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.577	12.577	0.000	97	118370	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.390	6.390	0.000	93	153020	100.0	100.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.762	6.761	0.001	86	238536	100.0	100.5	
$ 7 Toluene-d8 (Surr)	98	8.781	8.781	0.000	94	588517	100.0	96.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.421	11.421	0.000	86	253479	100.0	98.7	
11 Dichlorodifluoromethane	85	1.512	1.505	0.007	99	216483	100.0	100.7	
12 Chloromethane	50	1.664	1.663	0.001	98	279721	100.0	99.0	
13 Vinyl chloride	62	1.785	1.785	0.000	99	236286	100.0	99.3	
14 Butadiene	39	1.834	1.833	0.001	90	251666	100.0	98.5	
15 Bromomethane	94	2.138	2.113	0.025	91	72319	100.0	106.7	
16 Chloroethane	64	2.260	2.253	0.007	99	112754	100.0	104.1	
17 Dichlorofluoromethane	67	2.521	2.515	0.006	97	212083	100.0	102.3	
18 Trichlorofluoromethane	101	2.540	2.527	0.013	96	154725	100.0	101.8	
20 Ethyl ether	59	2.892	2.886	0.006	95	242903	100.0	105.0	
21 Acrolein	56	3.063	3.056	0.007	99	128285	200.0	205.8	
22 1,1-Dichloroethene	96	3.172	3.172	0.000	94	184505	100.0	101.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.227	3.226	0.001	94	178311	100.0	100.5	
24 Acetone	43	3.257	3.257	0.000	100	121339	200.0	177.6	
25 Iodomethane	142	3.355	3.360	-0.005	98	255641	100.0	104.3	
26 Carbon disulfide	76	3.446	3.445	0.001	100	427112	100.0	103.2	
29 3-Chloro-1-propene	76	3.720	3.719	0.001	90	113929	100.0	110.0	
30 Methyl acetate	43	3.732	3.731	0.001	99	1147895	500.0	513.3	
31 Methylene Chloride	84	3.933	3.926	0.007	99	234202	100.0	101.1	
32 2-Methyl-2-propanol	59	4.188	4.200	-0.012	95	136791	1000.0	970.1	
33 Acrylonitrile	53	4.322	4.321	0.001	98	1172162	1000.0	1027.8	
34 trans-1,2-Dichloroethene	96	4.359	4.358	0.001	96	206418	100.0	104.0	
35 Methyl tert-butyl ether	73	4.377	4.370	0.007	98	626157	100.0	103.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.791	4.790	0.000	94	339107	100.0	100.9	
37 1,1-Dichloroethane	63	5.010	5.003	0.007	97	396245	100.0	104.9	
38 Vinyl acetate	43	5.058	5.057	0.001	97	485922	100.0	102.3	
42 2,2-Dichloropropane	97	5.770	5.763	0.007	79	38326	100.0	103.4	
43 cis-1,2-Dichloroethene	96	5.770	5.769	0.001	87	239234	100.0	104.8	
44 2-Butanone (MEK)	43	5.776	5.775	0.001	100	205167	200.0	194.9	
48 Chlorobromomethane	128	6.062	6.055	0.007	92	103507	100.0	106.2	
49 Tetrahydrofuran	42	6.068	6.067	0.001	92	185555	200.0	194.2	
50 Chloroform	83	6.208	6.207	0.001	95	368143	100.0	104.3	
51 1,1,1-Trichloroethane	97	6.360	6.365	-0.005	97	238939	100.0	103.1	
52 Cyclohexane	56	6.433	6.432	0.001	96	460014	100.0	102.8	
53 Carbon tetrachloride	117	6.543	6.536	0.007	95	176699	100.0	103.1	
54 1,1-Dichloropropene	75	6.555	6.554	0.001	93	275270	100.0	102.2	
55 Isobutyl alcohol	41	6.762	6.767	-0.005	82	153846	2500.0	2423.1	
56 Benzene	78	6.768	6.773	-0.005	98	838690	100.0	104.0	
57 1,2-Dichloroethane	62	6.853	6.852	0.001	96	328081	100.0	104.6	
59 n-Heptane	43	7.145	7.144	0.001	95	272528	100.0	100.5	
61 Trichloroethene	130	7.510	7.509	0.001	96	193061	100.0	103.2	
63 Methylcyclohexane	83	7.747	7.746	0.001	96	356941	100.0	102.6	
64 1,2-Dichloropropane	63	7.784	7.783	0.001	93	222838	100.0	104.0	
67 Dibromomethane	93	7.875	7.874	0.001	96	125984	100.0	105.6	
65 1,4-Dioxane	88	7.875	7.868	0.007	36	27130	2000.0	2014.6	M
68 Dichlorobromomethane	83	8.069	8.075	-0.006	98	223370	100.0	106.7	
70 2-Chloroethyl vinyl ether	63	8.380	8.379	0.001	92	265478	200.0	212.8	
71 cis-1,3-Dichloropropene	75	8.520	8.519	0.001	92	282086	100.0	111.5	
72 4-Methyl-2-pentanone (MIBK	43	8.678	8.677	0.001	97	530164	200.0	210.4	
73 Toluene	91	8.848	8.847	0.001	98	800917	100.0	101.6	
74 trans-1,3-Dichloropropene	75	9.098	9.103	-0.005	98	231620	100.0	106.9	
75 Ethyl methacrylate	69	9.165	9.164	0.000	92	278418	100.0	107.0	
76 1,1,2-Trichloroethane	97	9.292	9.298	-0.006	94	176445	100.0	102.6	
77 Tetrachloroethene	164	9.365	9.365	0.000	97	148096	100.0	101.6	
78 1,3-Dichloropropane	76	9.450	9.450	0.000	97	320485	100.0	102.9	
79 2-Hexanone	43	9.511	9.511	0.000	97	302749	200.0	204.5	
81 Chlorodibromomethane	129	9.663	9.663	0.000	91	144364	100.0	107.7	
82 Ethylene Dibromide	107	9.773	9.772	0.001	98	170125	100.0	103.9	
83 3-Chlorobenzotrifluoride	180	10.247	10.247	0.000	92	244070	100.0	94.3	
84 Chlorobenzene	112	10.266	10.265	0.001	90	517443	100.0	102.0	
85 4-Chlorobenzotrifluoride	180	10.333	10.332	0.001	96	231360	100.0	96.5	
86 1,1,1,2-Tetrachloroethane	131	10.357	10.356	0.001	90	171215	100.0	108.5	
87 Ethylbenzene	106	10.369	10.368	0.001	99	289210	100.0	103.1	
88 m-Xylene & p-Xylene	106	10.497	10.496	0.001	99	365397	100.0	104.5	
89 o-Xylene	106	10.880	10.879	0.001	97	360795	100.0	103.5	
90 Styrene	104	10.898	10.898	0.000	94	603602	100.0	106.7	
91 Bromoform	173	11.081	11.074	0.007	96	94643	100.0	108.3	
92 2-Chlorobenzotrifluoride	180	11.154	11.153	0.001	94	255199	100.0	98.4	
93 Isopropylbenzene	105	11.245	11.244	0.001	98	876659	100.0	104.3	
95 Bromobenzene	156	11.555	11.555	0.000	98	218820	100.0	104.6	
96 1,1,2,2-Tetrachloroethane	83	11.561	11.561	0.000	94	275214	100.0	106.3	
97 trans-1,4-Dichloro-2-buten	53	11.598	11.597	0.001	82	98981	100.0	103.2	
98 1,2,3-Trichloropropane	110	11.616	11.615	0.001	88	90931	100.0	104.2	
99 N-Propylbenzene	120	11.665	11.664	0.001	99	237232	100.0	105.3	
100 2-Chlorotoluene	126	11.750	11.749	0.001	95	207261	100.0	104.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.817	11.816	0.001	97	207158	100.0	98.9	
102 1,3,5-Trimethylbenzene	105	11.847	11.847	0.000	93	733873	100.0	106.1	
103 4-Chlorotoluene	126	11.872	11.871	0.001	99	224469	100.0	103.9	
104 tert-Butylbenzene	119	12.164	12.157	0.007	93	579488	100.0	105.2	
106 1,2,4-Trimethylbenzene	105	12.218	12.218	0.000	99	757628	100.0	105.9	
107 1,2-dichloro-4-(trifluorom	214	12.267	12.266	0.001	97	184172	100.0	98.8	
108 sec-Butylbenzene	105	12.383	12.382	0.001	95	831061	100.0	104.6	
109 1,3-Dichlorobenzene	146	12.498	12.498	0.000	96	410334	100.0	105.1	
110 4-Isopropyltoluene	119	12.541	12.540	0.001	96	688749	100.0	104.6	
111 1,4-Dichlorobenzene	146	12.602	12.601	0.001	92	420259	100.0	102.7	
113 2,4-Dichloro-1-(triflourom	214	12.638	12.631	0.007	96	176758	100.0	99.9	
114 2,5-Dichlorobenzotrifluori	214	12.675	12.674	0.001	98	190443	100.0	98.1	
116 n-Butylbenzene	91	12.948	12.948	0.000	98	634140	100.0	106.3	
117 1,2-Dichlorobenzene	146	12.961	12.960	0.001	95	387001	100.0	103.2	
118 1,2-Dibromo-3-Chloropropan	75	13.745	13.751	-0.006	76	37026	100.0	101.5	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.891	13.891	0.000	99	766638	300.0	307.4	
121 2,3- & 3,4- Dichlorotoluen	125	14.305	14.304	0.001	98	542712	200.0	206.7	
122 1,2,4-Trichlorobenzene	180	14.573	14.572	0.001	92	218710	100.0	107.5	
123 Hexachlorobutadiene	225	14.719	14.718	0.001	96	80256	100.0	104.9	
124 Naphthalene	128	14.834	14.834	0.000	98	620608	100.0	109.6	
125 1,2,3-Trichlorobenzene	180	15.053	15.053	0.000	95	188655	100.0	107.3	
126 2,4,5-Trichlorotoluene	159	15.844	15.850	-0.006	0	108367	100.0	104.0	
127 2,3,6-Trichlorotoluene	159	15.948	15.947	0.001	94	99061	100.0	103.0	
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	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		200.0	208.7	
S 131 Xylenes, Total	106				0		200.0	208.0	
S 132 1,3-Dichloropropene, Total	1				0		200.0	218.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWAcro1stRe_00011	Amount Added:	8.00	Units: uL	
VOA8260SURR_00066	Amount Added:	4.00	Units: uL	
VOA8260VOAPRI_00243	Amount Added:	4.00	Units: uL	
voaWVA1stRest_00012	Amount Added:	4.00	Units: uL	
voaW2cle1stRe_00007	Amount Added:	4.00	Units: uL	
voaWKetmix1st_00002	Amount Added:	4.00	Units: uL	
voaWEEmix1stR_00005	Amount Added:	4.00	Units: uL	
VOA8260INT_00067	Amount Added:	2.00	Units: uL	Run Reagent

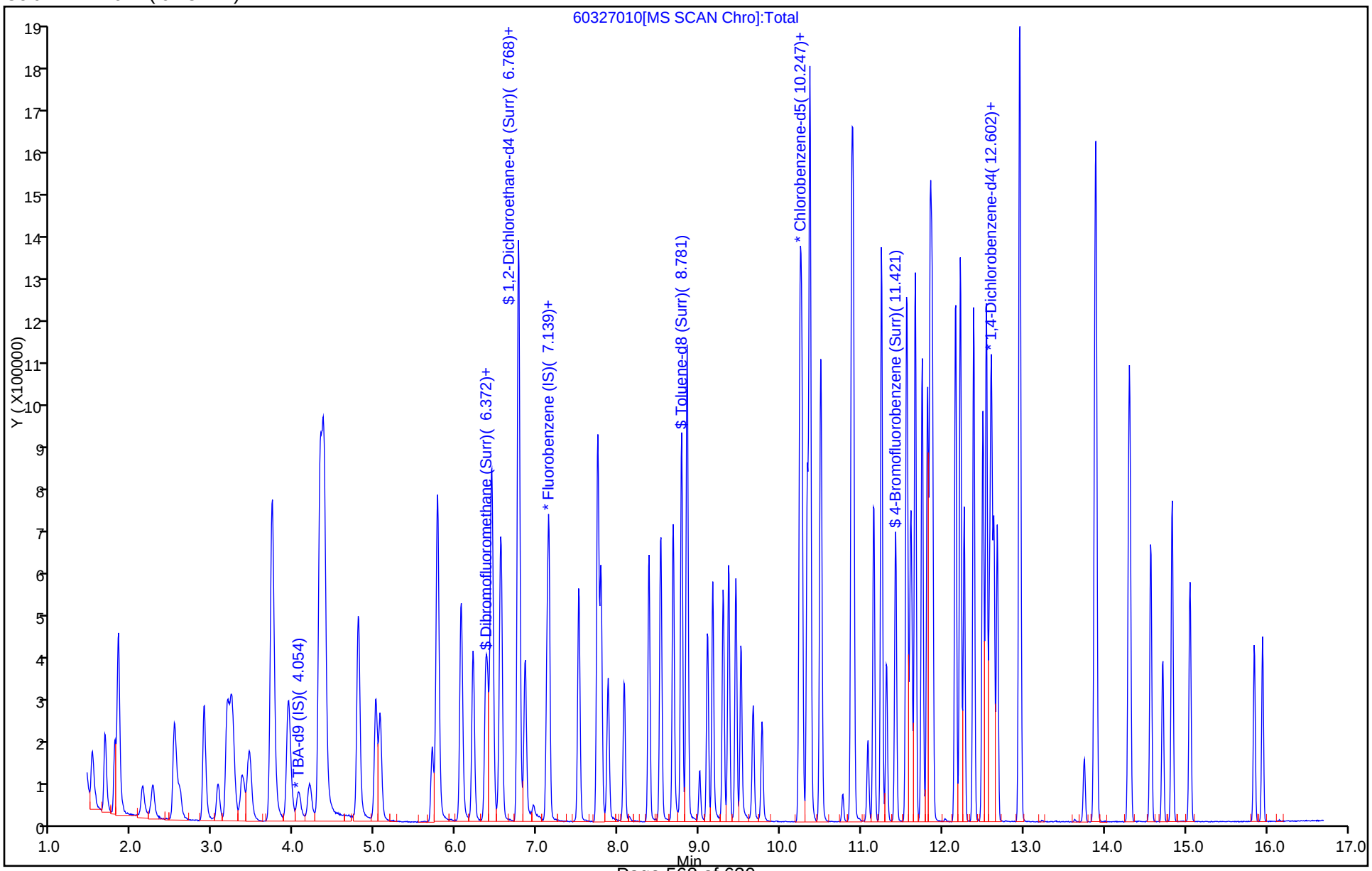
Report Date: 28-Mar-2017 09:08:02 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327010.D

Injection Date:	27-Mar-2017 14:33:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD20			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

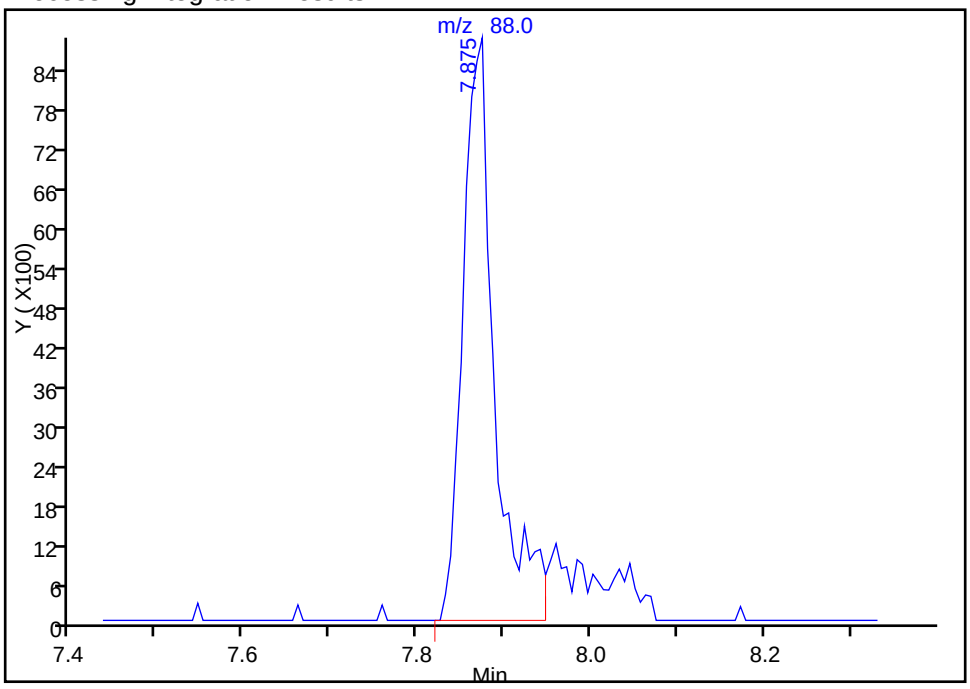
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327010.D				
Injection Date:	27-Mar-2017 14:33:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD20				
Client ID:					
Operator ID:	001562	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

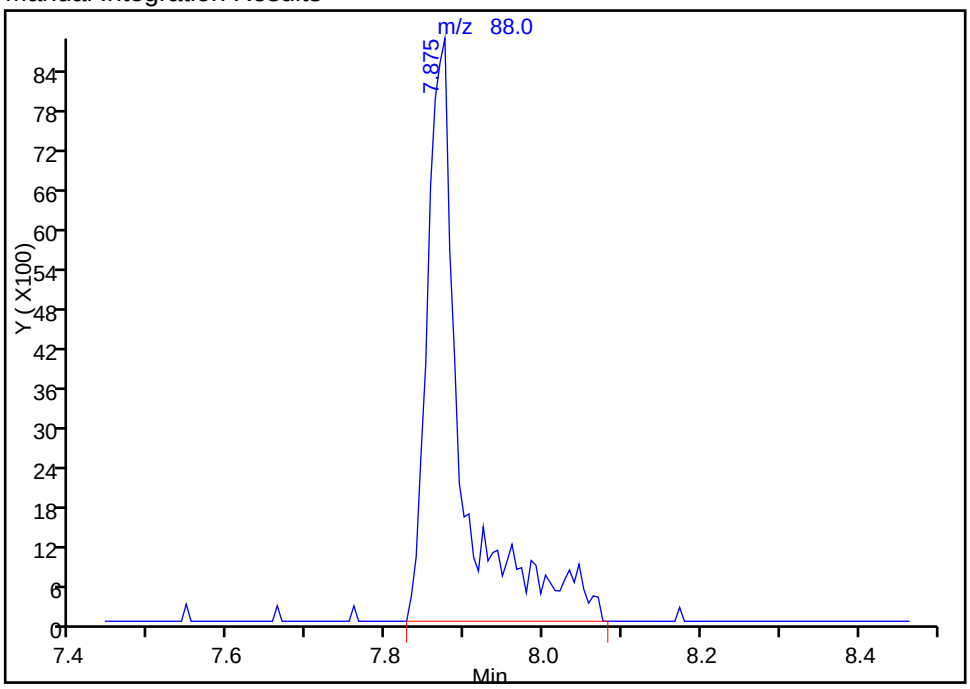
Processing Integration Results

RT: 7.87
Area: 22435
Amount: 1732.8475
Amount Units: ng



Manual Integration Results

RT: 7.87
Area: 27130
Amount: 2014.5834
Amount Units: ng



Reviewer: fergusond, 28-Mar-2017 09:08:00

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327011.D
Lims ID: IC VSTD35
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 27-Mar-2017 14:57:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016041-011
Misc. Info.: IC VSTD35
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub65

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Mar-2017 09:08:06 Calib Date: 27-Mar-2017 15:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327013.D

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

First Level Reviewer: fergusond Date: 28-Mar-2017 07:37:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.065	4.060	0.005	93	133877	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.119	7.120	-0.001	98	351447	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.234	10.235	-0.001	93	87113	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.576	12.577	-0.001	92	124474	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.389	6.390	-0.001	94	292373	175.0	185.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.766	6.761	0.005	84	435556	175.0	177.6	
$ 7 Toluene-d8 (Surr)	98	8.780	8.781	-0.001	94	1098608	175.0	160.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.420	11.421	-0.001	85	470891	175.0	163.3	
11 Dichlorodifluoromethane	85	1.510	1.505	0.005	99	386249	175.0	173.7	
12 Chloromethane	50	1.668	1.663	0.005	99	469398	175.0	160.8	
13 Vinyl chloride	62	1.790	1.785	0.005	98	419021	175.0	170.3	
14 Butadiene	39	1.832	1.833	-0.001	89	447322	175.0	169.4	
15 Bromomethane	94	2.131	2.113	0.018	92	121628	175.0	173.6	
16 Chloroethane	64	2.258	2.253	0.005	99	185415	175.0	165.7	
17 Dichlorofluoromethane	67	2.526	2.515	0.011	97	350090	175.0	163.4	
18 Trichlorofluoromethane	101	2.532	2.527	0.005	98	269948	175.0	171.7	
20 Ethyl ether	59	2.891	2.886	0.005	96	423272	175.0	177.0	
21 Acrolein	56	3.067	3.056	0.011	99	154150	225.0	239.3	
22 1,1-Dichloroethene	96	3.183	3.172	0.011	95	337006	175.0	178.4	
23 1,1,2-Trichloro-1,2,2-trif	101	3.232	3.226	0.006	95	319280	175.0	174.1	
24 Acetone	43	3.262	3.257	0.005	100	270747	350.0	383.3	
25 Iodomethane	142	3.366	3.360	0.006	99	447128	175.0	176.4	
26 Carbon disulfide	76	3.445	3.445	0.000	100	811028	175.0	189.7	
29 3-Chloro-1-propene	76	3.718	3.719	-0.001	90	210508	175.0	196.7	
30 Methyl acetate	43	3.737	3.731	0.006	98	2047269	875.0	885.6	
31 Methylene Chloride	84	3.937	3.926	0.011	99	404568	175.0	168.9	
32 2-Methyl-2-propanol	59	4.199	4.200	-0.001	93	313235	1750.0	1891.1	
33 Acrylonitrile	53	4.321	4.321	0.000	98	2122598	1750.0	1800.5	
34 trans-1,2-Dichloroethene	96	4.363	4.358	0.005	94	362494	175.0	176.6	
35 Methyl tert-butyl ether	73	4.375	4.370	0.005	98	1134990	175.0	182.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.795	4.790	0.005	94	605821	175.0	174.4	
37 1,1-Dichloroethane	63	5.008	5.003	0.005	96	698877	175.0	179.0	
38 Vinyl acetate	43	5.063	5.057	0.006	98	937809	175.0	191.0	
42 2,2-Dichloropropane	97	5.762	5.763	-0.001	80	72047	175.0	188.1	
43 cis-1,2-Dichloroethene	96	5.768	5.769	-0.001	84	417106	175.0	176.7	
44 2-Butanone (MEK)	43	5.781	5.775	0.006	99	398537	350.0	366.2	
48 Chlorobromomethane	128	6.054	6.055	-0.001	91	181479	175.0	180.1	
49 Tetrahydrofuran	42	6.067	6.067	0.000	91	350607	350.0	354.9	
50 Chloroform	83	6.206	6.207	-0.001	96	654005	175.0	179.2	
51 1,1,1-Trichloroethane	97	6.365	6.365	0.000	97	438065	175.0	182.8	
52 Cyclohexane	56	6.438	6.432	0.006	96	816007	175.0	176.4	
53 Carbon tetrachloride	117	6.535	6.536	-0.001	95	326097	175.0	184.1	
54 1,1-Dichloropropene	75	6.553	6.554	-0.001	92	500444	175.0	179.8	
55 Isobutyl alcohol	41	6.766	6.767	-0.001	86	322987	4375.0	4921.3	
56 Benzene	78	6.772	6.773	-0.001	98	1438026	175.0	172.5	
57 1,2-Dichloroethane	62	6.851	6.852	-0.001	96	583074	175.0	179.8	
59 n-Heptane	43	7.143	7.144	-0.001	95	496246	175.0	177.1	
61 Trichloroethene	130	7.514	7.509	0.005	96	348273	175.0	180.2	
63 Methylcyclohexane	83	7.746	7.746	0.000	94	638935	175.0	177.7	
64 1,2-Dichloropropane	63	7.788	7.783	0.005	94	400856	175.0	181.0	
65 1,4-Dioxane	88	7.867	7.868	-0.001	96	51981	3500.0	3734.1	
67 Dibromomethane	93	7.873	7.874	-0.001	97	229349	175.0	186.1	
68 Dichlorobromomethane	83	8.074	8.075	-0.001	98	427199	175.0	197.3	
70 2-Chloroethyl vinyl ether	63	8.378	8.379	-0.001	93	492899	350.0	382.2	
71 cis-1,3-Dichloropropene	75	8.518	8.519	-0.001	92	534152	175.0	204.3	
72 4-Methyl-2-pentanone (MIBK	43	8.676	8.677	-0.001	97	980569	350.0	346.6	
73 Toluene	91	8.847	8.847	0.000	98	1416679	175.0	160.0	
74 trans-1,3-Dichloropropene	75	9.102	9.103	-0.001	98	461730	175.0	189.8	
75 Ethyl methacrylate	69	9.163	9.164	-0.001	92	529941	175.0	181.5	
76 1,1,2-Trichloroethane	97	9.297	9.298	-0.001	94	327724	175.0	169.7	
77 Tetrachloroethene	164	9.364	9.365	-0.001	97	273412	175.0	167.0	
78 1,3-Dichloropropane	76	9.449	9.450	-0.001	97	584732	175.0	167.3	
79 2-Hexanone	43	9.510	9.511	-0.001	96	581157	350.0	349.6	
81 Chlorodibromomethane	129	9.662	9.663	-0.001	91	279074	175.0	185.4	
82 Ethylene Dibromide	107	9.771	9.772	-0.001	99	317796	175.0	172.8	
83 3-Chlorobenzotrifluoride	180	10.246	10.247	-0.001	94	485446	175.0	167.0	
84 Chlorobenzene	112	10.264	10.265	-0.001	90	913331	175.0	160.4	
85 4-Chlorobenzotrifluoride	180	10.331	10.332	-0.001	96	458109	175.0	170.1	
86 1,1,1,2-Tetrachloroethane	131	10.362	10.356	0.006	91	313804	175.0	177.1	
87 Ethylbenzene	106	10.368	10.368	0.000	98	524642	175.0	166.6	
88 m-Xylene & p-Xylene	106	10.495	10.496	-0.001	98	662906	175.0	168.8	
89 o-Xylene	106	10.879	10.879	0.000	95	650936	175.0	166.4	
90 Styrene	104	10.897	10.898	-0.001	94	1087501	175.0	171.2	
91 Bromoform	173	11.079	11.074	0.005	96	190139	175.0	193.8	
92 2-Chlorobenzotrifluoride	180	11.152	11.153	-0.001	94	495903	175.0	170.3	
93 Isopropylbenzene	105	11.250	11.244	0.006	98	1532580	175.0	162.4	
95 Bromobenzene	156	11.554	11.555	-0.001	98	385232	175.0	175.1	
96 1,1,2,2-Tetrachloroethane	83	11.560	11.561	-0.001	95	494354	175.0	170.0	
97 trans-1,4-Dichloro-2-buten	53	11.596	11.597	-0.001	79	189993	175.0	188.4	
98 1,2,3-Trichloropropane	110	11.615	11.615	0.000	89	164081	175.0	178.7	
99 N-Propylbenzene	120	11.663	11.664	-0.001	98	429337	175.0	181.2	
100 2-Chlorotoluene	126	11.749	11.749	0.000	95	376303	175.0	181.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.815	11.816	-0.001	96	401201	175.0	182.1	
102 1,3,5-Trimethylbenzene	105	11.846	11.847	-0.001	94	1281096	175.0	176.2	
103 4-Chlorotoluene	126	11.876	11.871	0.005	99	401721	175.0	176.8	
104 tert-Butylbenzene	119	12.162	12.157	0.005	93	1029760	175.0	177.7	
106 1,2,4-Trimethylbenzene	105	12.223	12.218	0.005	99	1314421	175.0	174.7	
107 1,2-dichloro-4-(trifluorom	214	12.266	12.266	0.000	97	351498	175.0	179.2	
108 sec-Butylbenzene	105	12.387	12.382	0.005	96	1448655	175.0	173.3	
109 1,3-Dichlorobenzene	146	12.497	12.498	-0.001	96	720064	175.0	175.4	
110 4-Isopropyltoluene	119	12.539	12.540	-0.001	95	1194786	175.0	172.5	
111 1,4-Dichlorobenzene	146	12.600	12.601	-0.001	92	747382	175.0	173.7	
113 2,4-Dichloro-1-(triflourom	214	12.637	12.631	0.006	96	327131	175.0	175.8	
114 2,5-Dichlorobenzotrifluori	214	12.679	12.674	0.005	98	365803	175.0	179.2	
116 n-Butylbenzene	91	12.947	12.948	-0.001	97	1075731	175.0	171.4	
117 1,2-Dichlorobenzene	146	12.959	12.960	-0.001	95	678324	175.0	172.1	
118 1,2-Dibromo-3-Chloropropan	75	13.750	13.751	-0.001	89	73742	175.0	192.3	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.890	13.891	-0.001	98	1308067	525.0	498.8	
121 2,3- & 3,4- Dichlorotoluen	125	14.304	14.304	0.000	98	912480	350.0	330.5	
122 1,2,4-Trichlorobenzene	180	14.571	14.572	-0.001	94	342785	175.0	160.2	
123 Hexachlorobutadiene	225	14.717	14.718	-0.001	96	127318	175.0	158.2	
124 Naphthalene	128	14.833	14.834	-0.001	98	1002485	175.0	168.3	
125 1,2,3-Trichlorobenzene	180	15.052	15.053	-0.001	94	289732	175.0	156.7	
126 2,4,5-Trichlorotoluene	159	15.849	15.850	-0.001	0	173240	175.0	158.1	
127 2,3,6-Trichlorotoluene	159	15.946	15.947	-0.001	93	156653	175.0	155.0	
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	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		350.0	335.1	
S 130 1,2-Dichloroethene, Total	96				0		350.0	353.3	
S 132 1,3-Dichloropropene, Total	1				0		350.0	394.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260SURR_00066	Amount Added:	7.00	Units: uL	
VOA8260VOAPRI_00243	Amount Added:	7.00	Units: uL	
voaWVA1stRest_00012	Amount Added:	7.00	Units: uL	
voaW2cle1stRe_00007	Amount Added:	7.00	Units: uL	
voaWKetmix1st_00002	Amount Added:	7.00	Units: uL	
voaWEEmix1stR_00005	Amount Added:	7.00	Units: uL	
voaWAcro1stRe_00011	Amount Added:	9.00	Units: uL	
VOA8260INT_00067	Amount Added:	2.00	Units: uL	Run Reagent

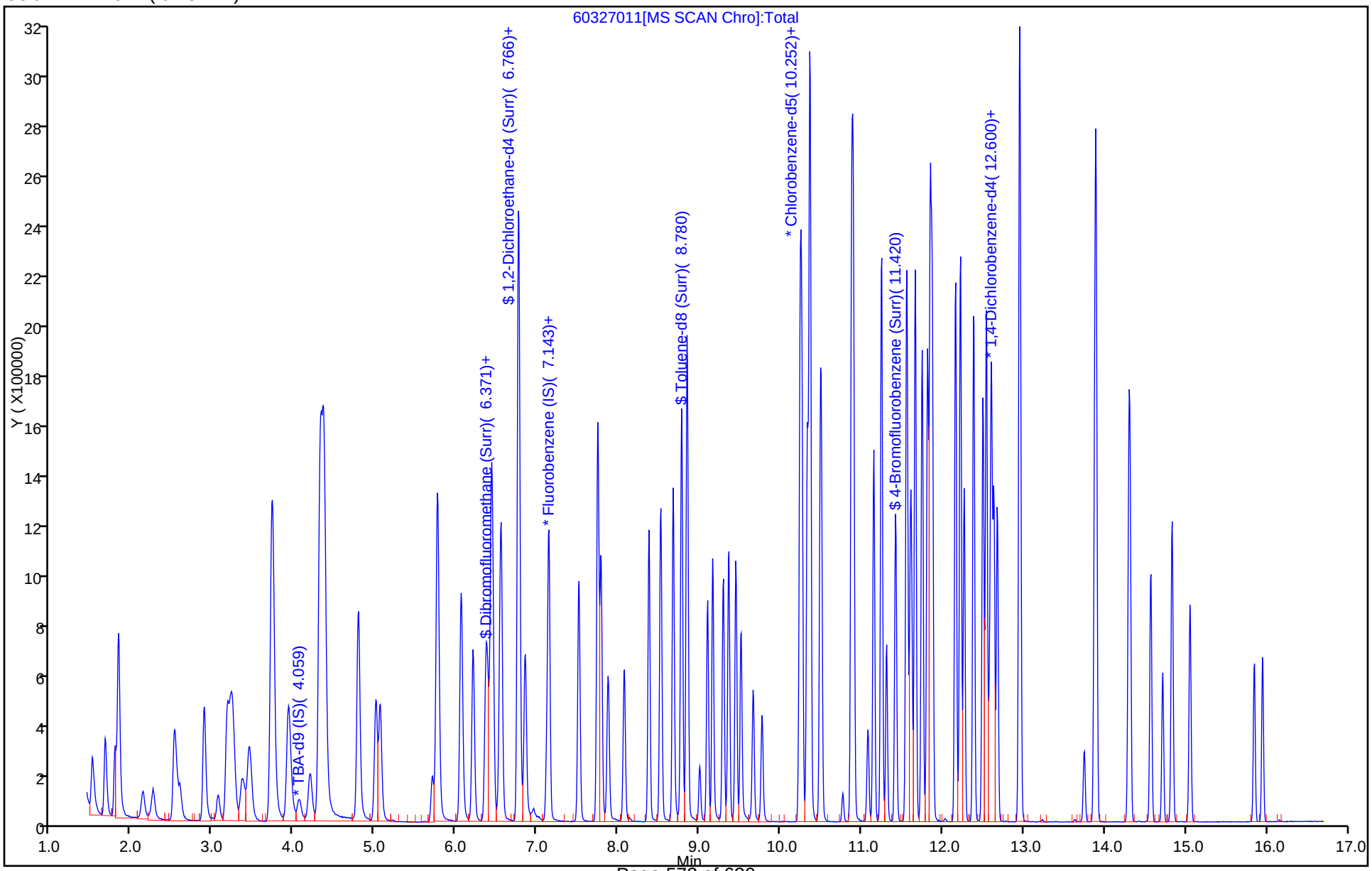
Report Date: 28-Mar-2017 09:08:07 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327011.D

Injection Date:	27-Mar-2017 14:57:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD35			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
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\20170327-16041.b\60327012.D
Lims ID: IC VSTD40
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 27-Mar-2017 15:21:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016041-012
Misc. Info.: IC VSTD40
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub65

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Mar-2017 09:08:12 Calib Date: 27-Mar-2017 15:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327013.D

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

First Level Reviewer: fergusond Date: 27-Mar-2017 16:05:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.061	4.060	0.001	92	110431	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.121	7.120	0.001	98	348997	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.236	10.235	0.001	90	83059	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.578	12.577	0.001	90	115484	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.391	6.390	0.001	94	307745	200.0	196.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.762	6.761	0.001	88	475095	200.0	195.1	
$ 7 Toluene-d8 (Surr)	98	8.782	8.781	0.001	94	1122336	200.0	172.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.422	11.421	0.001	85	490440	200.0	178.3	
11 Dichlorodifluoromethane	85	1.506	1.505	0.001	99	432588	200.0	195.9	
12 Chloromethane	50	1.664	1.663	0.001	99	546750	200.0	188.6	
13 Vinyl chloride	62	1.786	1.785	0.001	98	458366	200.0	187.6	
14 Butadiene	39	1.828	1.833	-0.005	90	489360	200.0	186.6	
15 Bromomethane	94	2.126	2.113	0.013	93	139014	200.0	199.8	
16 Chloroethane	64	2.248	2.253	-0.005	98	210533	200.0	189.4	
17 Dichlorofluoromethane	67	2.516	2.515	0.001	98	415950	200.0	195.5	
18 Trichlorofluoromethane	101	2.534	2.527	0.007	98	317157	200.0	203.2	
20 Ethyl ether	59	2.887	2.886	0.001	97	472610	200.0	199.0	
21 Acrolein	56	3.057	3.056	0.001	99	165269	250.0	258.3	
22 1,1-Dichloroethene	96	3.173	3.172	0.001	95	369316	200.0	196.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.221	3.226	-0.005	95	345714	200.0	189.8	
24 Acetone	43	3.264	3.257	0.007	100	280673	400.0	400.1	
25 Iodomethane	142	3.361	3.360	0.001	99	514550	200.0	204.4	
26 Carbon disulfide	76	3.447	3.445	0.001	100	928263	200.0	218.6	
29 3-Chloro-1-propene	76	3.720	3.719	0.001	89	235373	200.0	221.5	
30 Methyl acetate	43	3.732	3.731	0.001	98	2336669	1000.0	1017.9	
31 Methylene Chloride	84	3.933	3.926	0.007	99	461756	200.0	194.1	
32 2-Methyl-2-propanol	59	4.195	4.200	-0.005	93	281823	2000.0	2062.7	
33 Acrylonitrile	53	4.323	4.321	0.002	97	2405462	2000.0	2054.8	
34 trans-1,2-Dichloroethene	96	4.359	4.358	0.001	95	409844	200.0	201.1	
35 Methyl tert-butyl ether	73	4.377	4.370	0.007	98	1290992	200.0	208.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.791	4.790	0.001	93	678558	200.0	196.7	
37 1,1-Dichloroethane	63	5.010	5.003	0.007	96	779914	200.0	201.2	
38 Vinyl acetate	43	5.065	5.057	0.008	97	1114756	200.0	228.6	
42 2,2-Dichloropropane	97	5.764	5.763	0.001	80	79219	200.0	208.3	
43 cis-1,2-Dichloroethene	96	5.770	5.769	0.001	85	480870	200.0	205.1	
44 2-Butanone (MEK)	43	5.783	5.775	0.008	100	442469	400.0	409.4	
48 Chlorobromomethane	128	6.062	6.055	0.007	92	205188	200.0	205.0	
49 Tetrahydrofuran	42	6.068	6.067	0.001	92	396935	400.0	404.6	
50 Chloroform	83	6.208	6.207	0.001	95	738259	200.0	203.7	
51 1,1,1-Trichloroethane	97	6.367	6.365	0.002	95	495923	200.0	208.4	
52 Cyclohexane	56	6.433	6.432	0.001	96	884031	200.0	192.4	
53 Carbon tetrachloride	117	6.537	6.536	0.001	95	370990	200.0	210.9	
54 1,1-Dichloropropene	75	6.555	6.554	0.001	93	556252	200.0	201.2	
55 Isobutyl alcohol	41	6.768	6.767	0.001	87	325474	5000.0	4994.0	
56 Benzene	78	6.774	6.773	0.001	98	1608994	200.0	194.4	
57 1,2-Dichloroethane	62	6.853	6.852	0.001	96	666080	200.0	206.8	
59 n-Heptane	43	7.145	7.144	0.001	95	536421	200.0	192.8	
61 Trichloroethene	130	7.516	7.509	0.007	96	383676	200.0	199.9	
63 Methylcyclohexane	83	7.748	7.746	0.002	94	688662	200.0	192.8	
64 1,2-Dichloropropane	63	7.784	7.783	0.001	95	446014	200.0	202.8	
65 1,4-Dioxane	88	7.863	7.868	-0.005	41	60789	4000.0	4397.5	
67 Dibromomethane	93	7.875	7.874	0.001	97	265736	200.0	217.1	
68 Dichlorobromomethane	83	8.070	8.075	-0.005	98	491490	200.0	228.6	
70 2-Chloroethyl vinyl ether	63	8.380	8.379	0.001	93	581859	400.0	454.4	
71 cis-1,3-Dichloropropene	75	8.520	8.519	0.001	92	615782	200.0	237.1	
72 4-Methyl-2-pentanone (MIBK	43	8.678	8.677	0.001	97	1118765	400.0	414.8	
73 Toluene	91	8.849	8.847	0.002	97	1571282	200.0	186.1	
74 trans-1,3-Dichloropropene	75	9.098	9.103	-0.005	98	538256	200.0	232.0	
75 Ethyl methacrylate	69	9.165	9.164	0.001	93	615910	200.0	221.2	
76 1,1,2-Trichloroethane	97	9.293	9.298	-0.005	94	360571	200.0	195.8	
77 Tetrachloroethene	164	9.360	9.365	-0.005	96	299049	200.0	191.6	
78 1,3-Dichloropropane	76	9.451	9.450	0.001	97	667158	200.0	200.1	
79 2-Hexanone	43	9.512	9.511	0.001	96	670748	400.0	423.2	
81 Chlorodibromomethane	129	9.664	9.663	0.001	91	327866	200.0	228.4	
82 Ethylene Dibromide	107	9.773	9.772	0.001	99	363320	200.0	207.3	
83 3-Chlorobenzotrifluoride	180	10.248	10.247	0.001	92	532779	200.0	192.2	
84 Chlorobenzene	112	10.266	10.265	0.001	91	1010634	200.0	186.2	
85 4-Chlorobenzotrifluoride	180	10.333	10.332	0.001	96	502672	200.0	195.8	
86 1,1,1,2-Tetrachloroethane	131	10.357	10.356	0.001	91	350539	200.0	207.5	
87 Ethylbenzene	106	10.363	10.368	-0.005	98	564541	200.0	188.1	
88 m-Xylene & p-Xylene	106	10.497	10.496	0.001	98	710666	200.0	189.8	
89 o-Xylene	106	10.881	10.879	0.001	97	695704	200.0	186.5	
90 Styrene	104	10.899	10.898	0.001	94	1178396	200.0	194.5	
91 Bromoform	173	11.081	11.074	0.007	96	215368	200.0	230.2	
92 2-Chlorobenzotrifluoride	180	11.154	11.153	0.001	95	520551	200.0	187.5	
93 Isopropylbenzene	105	11.246	11.244	0.002	98	1596484	200.0	177.5	
95 Bromobenzene	156	11.556	11.555	0.001	98	433756	200.0	212.5	
96 1,1,2,2-Tetrachloroethane	83	11.562	11.561	0.001	95	542032	200.0	195.5	
97 trans-1,4-Dichloro-2-buten	53	11.598	11.597	0.001	81	213826	200.0	228.5	
98 1,2,3-Trichloropropane	110	11.617	11.615	0.002	87	185904	200.0	218.3	
99 N-Propylbenzene	120	11.665	11.664	0.001	98	453574	200.0	206.3	
100 2-Chlorotoluene	126	11.750	11.749	0.001	95	387001	200.0	200.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.817	11.816	0.001	96	428545	200.0	209.7	
102 1,3,5-Trimethylbenzene	105	11.848	11.847	0.001	94	1306134	200.0	193.6	
103 4-Chlorotoluene	126	11.872	11.871	0.001	99	434121	200.0	205.9	
104 tert-Butylbenzene	119	12.158	12.157	0.001	93	1038444	200.0	193.2	
106 1,2,4-Trimethylbenzene	105	12.219	12.218	0.001	98	1341036	200.0	192.1	
107 1,2-dichloro-4-(trifluorom	214	12.268	12.266	0.002	97	365162	200.0	200.7	
108 sec-Butylbenzene	105	12.383	12.382	0.001	96	1460318	200.0	188.3	
109 1,3-Dichlorobenzene	146	12.499	12.498	0.001	96	765528	200.0	201.0	
110 4-Isopropyltoluene	119	12.541	12.540	0.001	95	1206946	200.0	187.8	
111 1,4-Dichlorobenzene	146	12.602	12.601	0.001	91	791609	200.0	198.3	
113 2,4-Dichloro-1-(triflourom	214	12.633	12.631	0.002	96	348649	200.0	201.9	
114 2,5-Dichlorobenzotrifluori	214	12.675	12.674	0.001	98	370724	200.0	195.8	
116 n-Butylbenzene	91	12.949	12.948	0.001	97	1120505	200.0	192.5	
117 1,2-Dichlorobenzene	146	12.961	12.960	0.001	93	709299	200.0	193.9	
118 1,2-Dibromo-3-Chloropropan	75	13.752	13.751	0.001	92	83886	200.0	235.7	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.892	13.891	0.001	98	1474311	600.0	606.0	
121 2,3- & 3,4- Dichlorotoluen	125	14.305	14.304	0.001	98	1089180	400.0	425.2	
122 1,2,4-Trichlorobenzene	180	14.567	14.572	-0.005	94	425960	200.0	214.5	
123 Hexachlorobutadiene	225	14.719	14.718	0.001	97	166219	200.0	222.7	
124 Naphthalene	128	14.835	14.834	0.001	98	1234441	200.0	223.4	
125 1,2,3-Trichlorobenzene	180	15.054	15.053	0.001	94	403802	200.0	235.3	
126 2,4,5-Trichlorotoluene	159	15.845	15.850	-0.005	0	293807	200.0	289.0	
127 2,3,6-Trichlorotoluene	159	15.948	15.947	0.001	92	270729	200.0	288.7	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		400.0	406.3	
S 131 Xylenes, Total	106				0		400.0	376.3	
S 132 1,3-Dichloropropene, Total	1				0		400.0	469.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

voaWAcro1stRe_00011	Amount Added:	10.00	Units: uL	
VOA8260SURR_00066	Amount Added:	8.00	Units: uL	
VOA8260VOAPRI_00243	Amount Added:	8.00	Units: uL	
voaWVA1stRest_00012	Amount Added:	8.00	Units: uL	
voaW2cle1stRe_00007	Amount Added:	8.00	Units: uL	
voaWKetmix1st_00002	Amount Added:	8.00	Units: uL	
voaWEEmix1stR_00005	Amount Added:	8.00	Units: uL	
VOA8260INT_00067	Amount Added:	2.00	Units: uL	Run Reagent

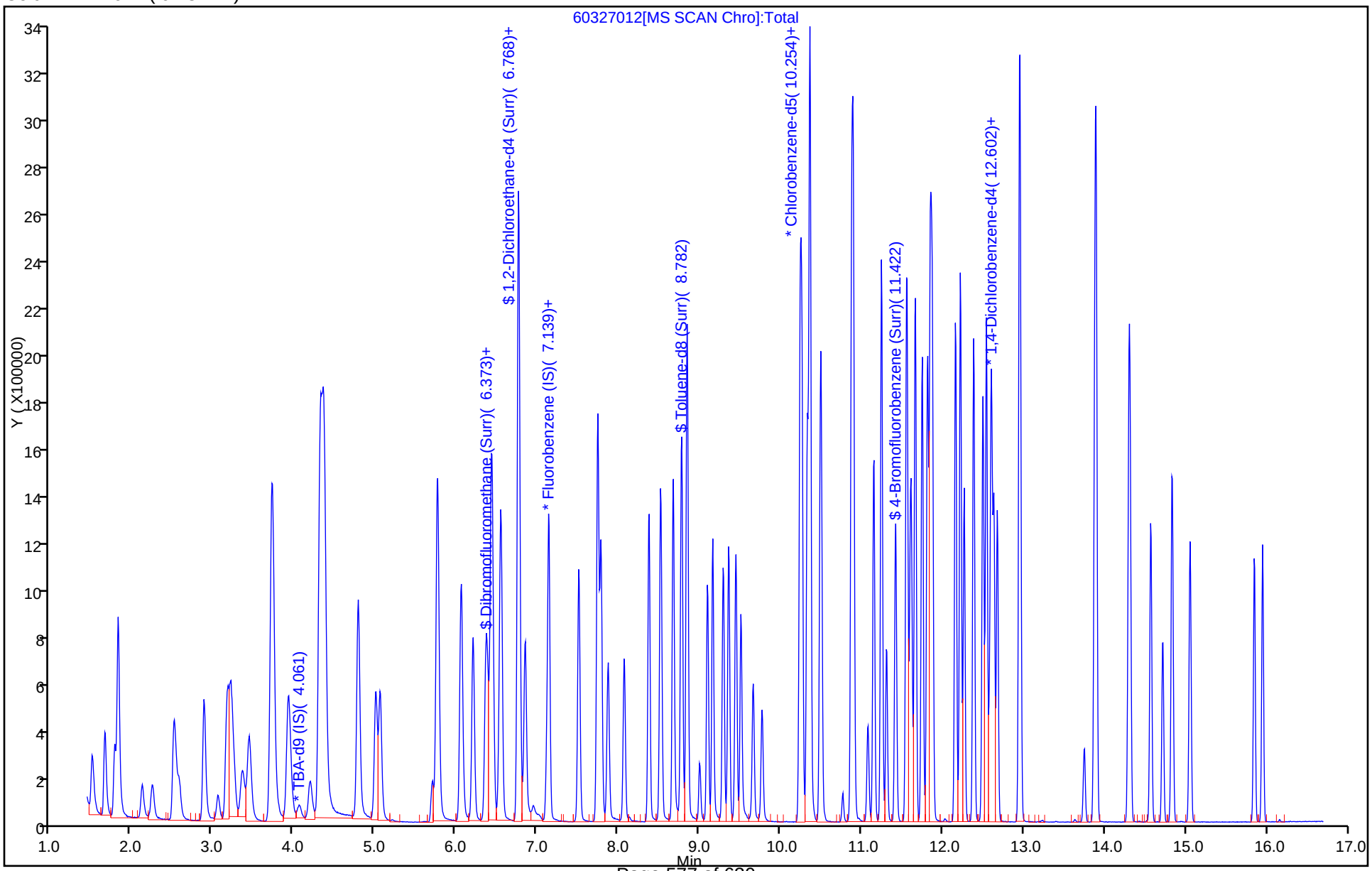
Report Date: 28-Mar-2017 09:08:12 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327012.D

Injection Date:	27-Mar-2017 15:21:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD40			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
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\20170327-16041.b\60327013.D
Lims ID: IC VSTD50
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 27-Mar-2017 15:45:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016041-013
Misc. Info.: IC VSTD50
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub65

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Mar-2017 09:08:15 Calib Date: 27-Mar-2017 15:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327013.D

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

First Level Reviewer: fergusond Date: 28-Mar-2017 07:40:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.073	4.060	0.013	91	105271	1000.0	1000.0	M
* 2 Fluorobenzene (IS)	96	7.121	7.120	0.001	98	335015	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.236	10.235	0.001	89	79299	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.578	12.577	0.001	97	104582	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.391	6.390	0.001	94	380677	250.0	252.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.762	6.761	0.001	82	576291	250.0	246.5	
$ 7 Toluene-d8 (Surr)	98	8.782	8.781	0.001	94	1351077	250.0	217.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.422	11.421	0.001	85	558819	250.0	212.8	
11 Dichlorodifluoromethane	85	1.512	1.505	0.007	99	539286	250.0	254.5	
12 Chloromethane	50	1.664	1.663	0.001	99	675483	250.0	242.7	
13 Vinyl chloride	62	1.786	1.785	0.001	98	572838	250.0	244.3	
14 Butadiene	39	1.828	1.833	-0.005	89	605076	250.0	240.4	
15 Bromomethane	94	2.120	2.113	0.007	92	172658	250.0	258.5	
16 Chloroethane	64	2.248	2.253	-0.005	99	246616	250.0	231.1	
17 Dichlorofluoromethane	67	2.516	2.515	0.001	97	512402	250.0	250.9	
18 Trichlorofluoromethane	101	2.540	2.527	0.013	96	405930	250.0	270.9	
20 Ethyl ether	59	2.887	2.886	0.001	96	567803	250.0	249.0	
21 Acrolein	56	3.057	3.056	0.001	99	177439	275.0	288.9	
22 1,1-Dichloroethene	96	3.173	3.172	0.001	95	457102	250.0	253.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.221	3.226	-0.005	94	435427	250.0	249.1	
24 Acetone	43	3.264	3.257	0.007	100	338049	500.0	502.0	
25 Iodomethane	142	3.361	3.360	0.001	99	635466	250.0	263.0	
26 Carbon disulfide	76	3.440	3.445	-0.005	100	1173468	250.0	287.9	
29 3-Chloro-1-propene	76	3.714	3.719	-0.005	90	296191	250.0	290.3	
30 Methyl acetate	43	3.739	3.731	0.007	98	2773319	1250.0	1258.5	
31 Methylene Chloride	84	3.933	3.926	0.007	99	563464	250.0	246.7	
32 2-Methyl-2-propanol	59	4.201	4.200	0.001	93	300565	2500.0	2307.7	
33 Acrylonitrile	53	4.323	4.321	0.002	97	2812632	2500.0	2502.9	
34 trans-1,2-Dichloroethene	96	4.359	4.358	0.001	96	508196	250.0	259.8	
35 Methyl tert-butyl ether	73	4.377	4.370	0.007	98	1558561	250.0	262.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.791	4.790	0.001	94	833250	250.0	251.6	
37 1,1-Dichloroethane	63	5.004	5.003	0.001	96	955957	250.0	256.9	
38 Vinyl acetate	43	5.059	5.057	0.002	98	1353786	250.0	289.2	
42 2,2-Dichloropropane	97	5.764	5.763	0.001	85	100047	250.0	274.0	
43 cis-1,2-Dichloroethene	96	5.770	5.769	0.001	85	581418	250.0	258.4	
44 2-Butanone (MEK)	43	5.783	5.775	0.008	100	550640	500.0	530.8	
48 Chlorobromomethane	128	6.056	6.055	0.001	91	248977	250.0	259.2	
49 Tetrahydrofuran	42	6.068	6.067	0.001	95	476741	500.0	506.2	
50 Chloroform	83	6.208	6.207	0.001	96	884552	250.0	254.2	
51 1,1,1-Trichloroethane	97	6.367	6.365	0.002	97	612106	250.0	268.0	
52 Cyclohexane	56	6.433	6.432	0.001	96	1082089	250.0	245.4	
53 Carbon tetrachloride	117	6.537	6.536	0.001	95	456456	250.0	270.3	
54 1,1-Dichloropropene	75	6.555	6.554	0.001	93	668623	250.0	252.0	
55 Isobutyl alcohol	41	6.768	6.767	0.001	86	364924	6250.0	5833.0	
56 Benzene	78	6.774	6.773	0.001	99	1944268	250.0	244.7	
57 1,2-Dichloroethane	62	6.853	6.852	0.001	97	811041	250.0	262.3	
59 n-Heptane	43	7.139	7.144	-0.005	95	671070	250.0	251.2	
61 Trichloroethene	130	7.510	7.509	0.001	96	464754	250.0	252.2	
63 Methylcyclohexane	83	7.748	7.746	0.002	95	824811	250.0	240.6	
64 1,2-Dichloropropane	63	7.784	7.783	0.001	93	544821	250.0	258.1	
65 1,4-Dioxane	88	7.869	7.868	0.001	36	72713	5000.0	5479.6	M
67 Dibromomethane	93	7.875	7.874	0.001	97	318117	250.0	270.7	
68 Dichlorobromomethane	83	8.070	8.075	-0.005	98	598471	250.0	290.0	
70 2-Chloroethyl vinyl ether	63	8.380	8.379	0.001	93	698644	500.0	568.4	
71 cis-1,3-Dichloropropene	75	8.520	8.519	0.001	91	745142	250.0	298.9	
72 4-Methyl-2-pentanone (MIBK	43	8.678	8.677	0.001	96	1326644	500.0	515.2	
73 Toluene	91	8.849	8.847	0.002	96	1840176	250.0	228.3	
74 trans-1,3-Dichloropropene	75	9.098	9.103	-0.005	98	662019	250.0	298.9	
75 Ethyl methacrylate	69	9.165	9.164	0.001	92	731800	250.0	275.3	
76 1,1,2-Trichloroethane	97	9.293	9.298	-0.005	93	454076	250.0	258.3	
77 Tetrachloroethene	164	9.360	9.365	-0.005	97	347882	250.0	233.5	
78 1,3-Dichloropropane	76	9.451	9.450	0.001	97	798739	250.0	251.0	
79 2-Hexanone	43	9.512	9.511	0.001	96	801839	500.0	529.9	
81 Chlorodibromomethane	129	9.664	9.663	0.001	91	395169	250.0	288.3	
82 Ethylene Dibromide	107	9.773	9.772	0.001	99	423834	250.0	253.2	
83 3-Chlorobenzotrifluoride	180	10.242	10.247	-0.005	91	569964	250.0	215.4	
84 Chlorobenzene	112	10.266	10.265	0.001	95	1175460	250.0	226.8	
85 4-Chlorobenzotrifluoride	180	10.333	10.332	0.001	96	542023	250.0	221.1	
86 1,1,1,2-Tetrachloroethane	131	10.357	10.356	0.001	91	408402	250.0	253.2	
87 Ethylbenzene	106	10.369	10.368	0.001	98	655050	250.0	228.6	
88 m-Xylene & p-Xylene	106	10.497	10.496	0.001	98	821760	250.0	229.8	
89 o-Xylene	106	10.880	10.879	0.001	97	792757	250.0	222.6	
90 Styrene	104	10.899	10.898	0.001	94	1343713	250.0	232.3	
91 Bromoform	173	11.081	11.074	0.007	95	257019	250.0	287.7	
92 2-Chlorobenzotrifluoride	180	11.154	11.153	0.001	95	544746	250.0	205.5	
93 Isopropylbenzene	105	11.246	11.244	0.002	98	1748340	250.0	203.5	
95 Bromobenzene	156	11.556	11.555	0.001	98	494211	250.0	267.3	
96 1,1,2,2-Tetrachloroethane	83	11.562	11.561	0.001	95	619578	250.0	234.1	
97 trans-1,4-Dichloro-2-buten	53	11.598	11.597	0.001	85	249595	250.0	294.6	
98 1,2,3-Trichloropropane	110	11.617	11.615	0.002	89	206603	250.0	267.9	
99 N-Propylbenzene	120	11.665	11.664	0.001	97	499696	250.0	251.0	
100 2-Chlorotoluene	126	11.750	11.749	0.001	95	436769	250.0	250.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.817	11.816	0.001	96	457114	250.0	247.0	
102 1,3,5-Trimethylbenzene	105	11.848	11.847	0.001	93	1433646	250.0	234.6	
103 4-Chlorotoluene	126	11.872	11.871	0.001	99	482661	250.0	252.8	
104 tert-Butylbenzene	119	12.158	12.157	0.001	93	1134992	250.0	233.1	
106 1,2,4-Trimethylbenzene	105	12.219	12.218	0.001	99	1503654	250.0	237.8	
107 1,2-dichloro-4-(trifluorom	214	12.268	12.266	0.002	96	383070	250.0	232.5	
108 sec-Butylbenzene	105	12.383	12.382	0.001	96	1601677	250.0	228.1	
109 1,3-Dichlorobenzene	146	12.499	12.498	0.001	96	850980	250.0	246.7	
110 4-Isopropyltoluene	119	12.541	12.540	0.001	95	1359825	250.0	233.6	
111 1,4-Dichlorobenzene	146	12.602	12.601	0.001	91	885752	250.0	245.1	
113 2,4-Dichloro-1-(triflourom	214	12.633	12.631	0.002	95	379325	250.0	242.6	
114 2,5-Dichlorobenzotrifluori	214	12.675	12.674	0.001	98	401711	250.0	234.2	
116 n-Butylbenzene	91	12.949	12.948	0.001	97	1237687	250.0	234.8	
117 1,2-Dichlorobenzene	146	12.961	12.960	0.001	96	804515	250.0	242.9	
118 1,2-Dibromo-3-Chloropropan	75	13.752	13.751	0.001	78	100229	250.0	311.0	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.892	13.891	0.001	97	1678947	750.0	762.0	
121 2,3- & 3,4- Dichlorotoluen	125	14.305	14.304	0.001	97	1298549	500.0	559.7	
122 1,2,4-Trichlorobenzene	180	14.567	14.572	-0.005	94	532686	250.0	296.3	
123 Hexachlorobutadiene	225	14.713	14.718	-0.005	97	205949	250.0	304.7	
124 Naphthalene	128	14.835	14.834	0.001	98	1526133	250.0	305.0	
125 1,2,3-Trichlorobenzene	180	15.054	15.053	0.001	95	519568	250.0	334.4	
126 2,4,5-Trichlorotoluene	159	15.845	15.850	-0.005	0	380688	250.0	413.4	
127 2,3,6-Trichlorotoluene	159	15.948	15.947	0.001	93	347106	250.0	408.7	
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	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		500.0	452.4	
S 130 1,2-Dichloroethene, Total	96				0		500.0	518.2	
S 132 1,3-Dichloropropene, Total	1				0		500.0	597.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00066	Amount Added:	10.00	Units: uL	
VOA8260VOAPRI_00243	Amount Added:	10.00	Units: uL	
voaWVA1stRest_00012	Amount Added:	10.00	Units: uL	
voaW2cle1stRe_00007	Amount Added:	10.00	Units: uL	
voaWKetmix1st_00002	Amount Added:	10.00	Units: uL	
voaWEEmix1stR_00005	Amount Added:	10.00	Units: uL	
voaWAcro1stRe_00011	Amount Added:	11.00	Units: uL	
VOA8260INT_00067	Amount Added:	2.00	Units: uL	Run Reagent

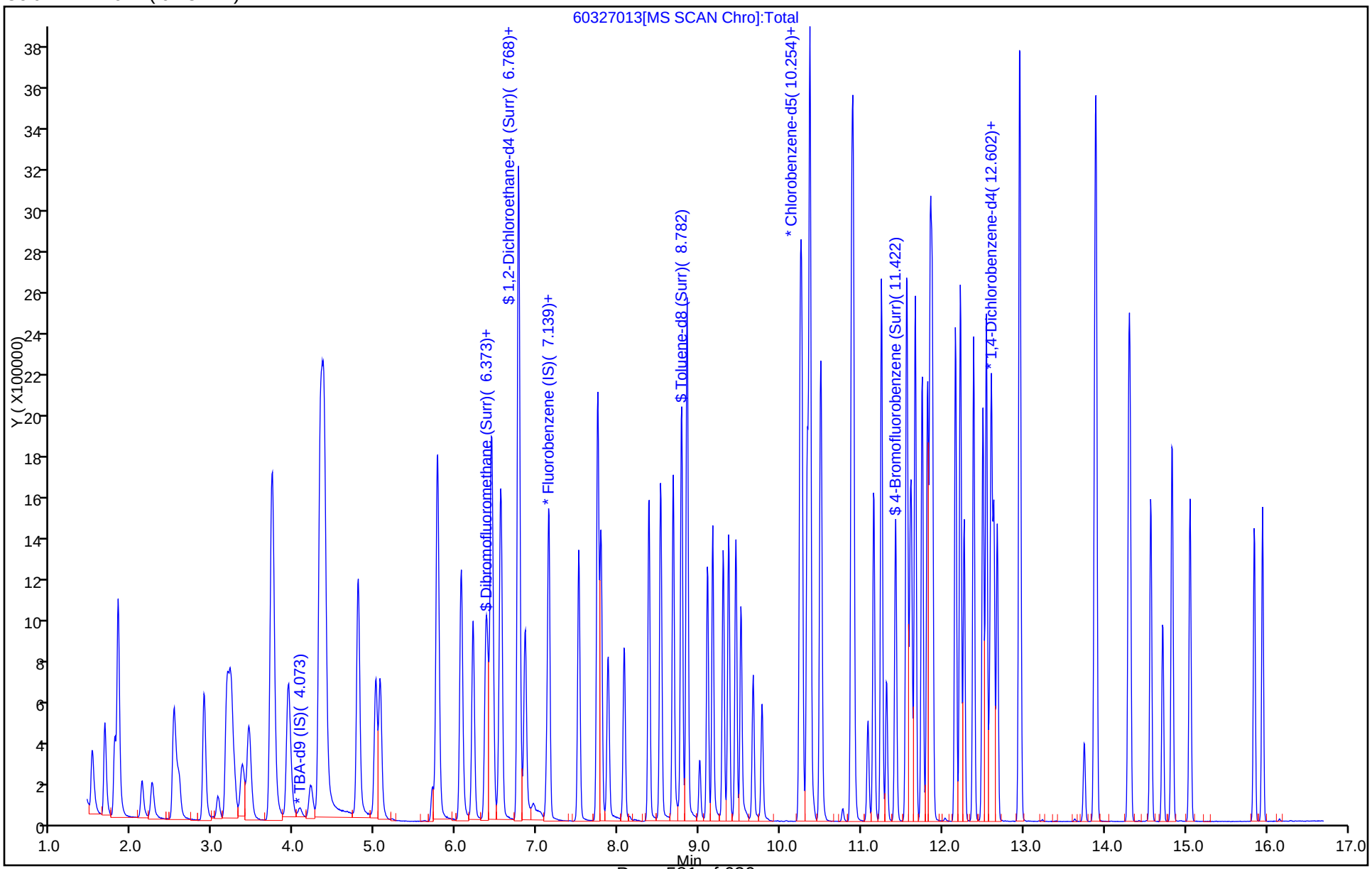
Report Date: 28-Mar-2017 09:08:16 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327013.D

Injection Date:	27-Mar-2017 15:45:30	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

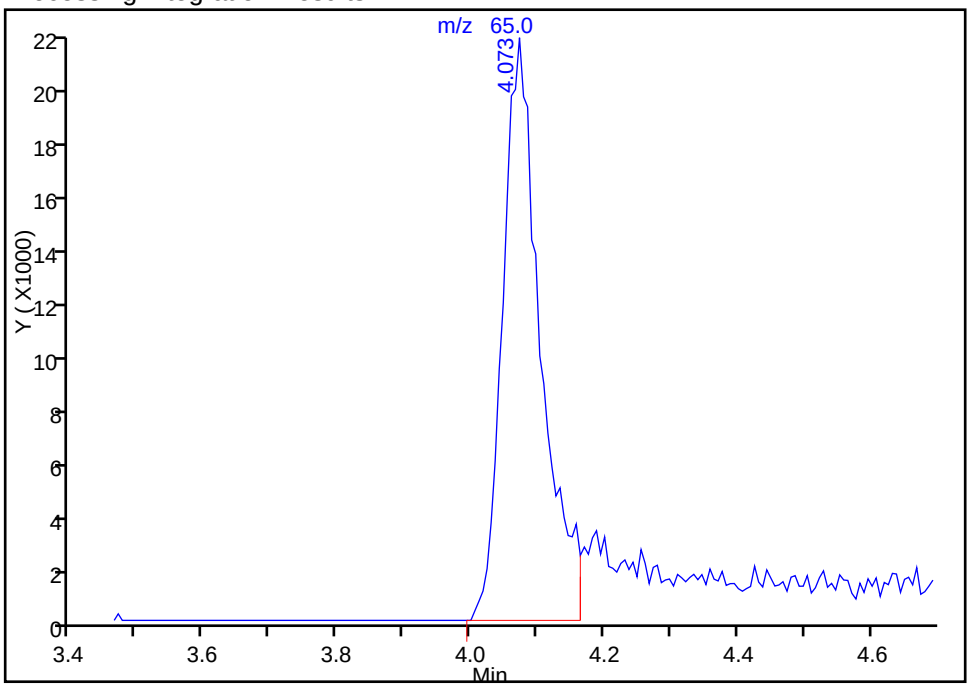
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327013.D				
Injection Date:	27-Mar-2017 15:45:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD50				
Client ID:					
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

Signal: 1

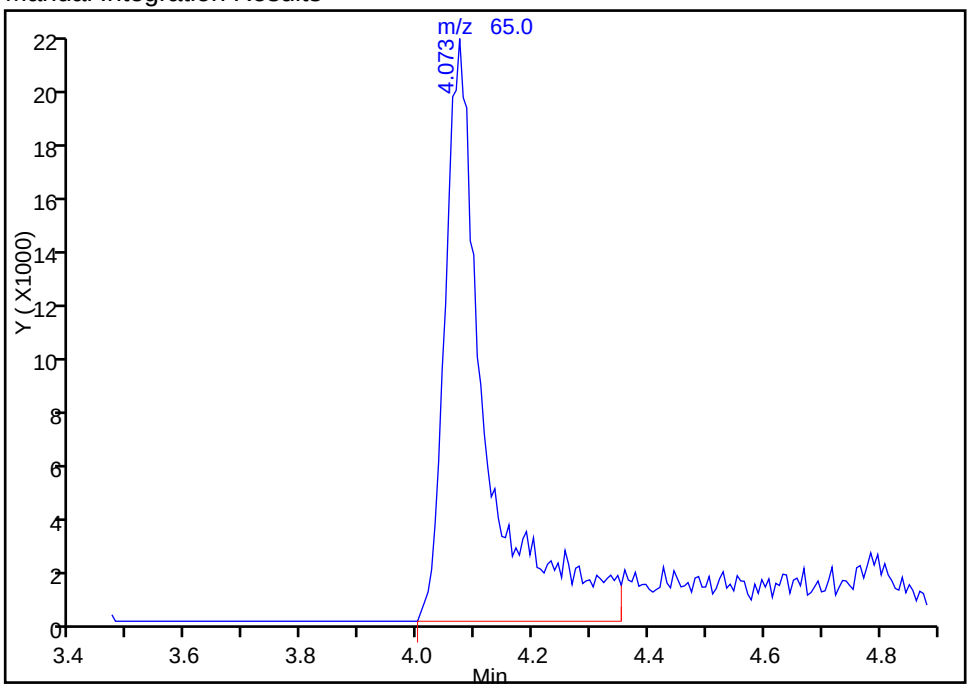
Processing Integration Results

RT: 4.07
Area: 83459
Amount: 1000.0000
Amount Units: ng



Manual Integration Results

RT: 4.07
Area: 105271
Amount: 1000.0000
Amount Units: ng



Reviewer: fergusond, 28-Mar-2017 09:08:14

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

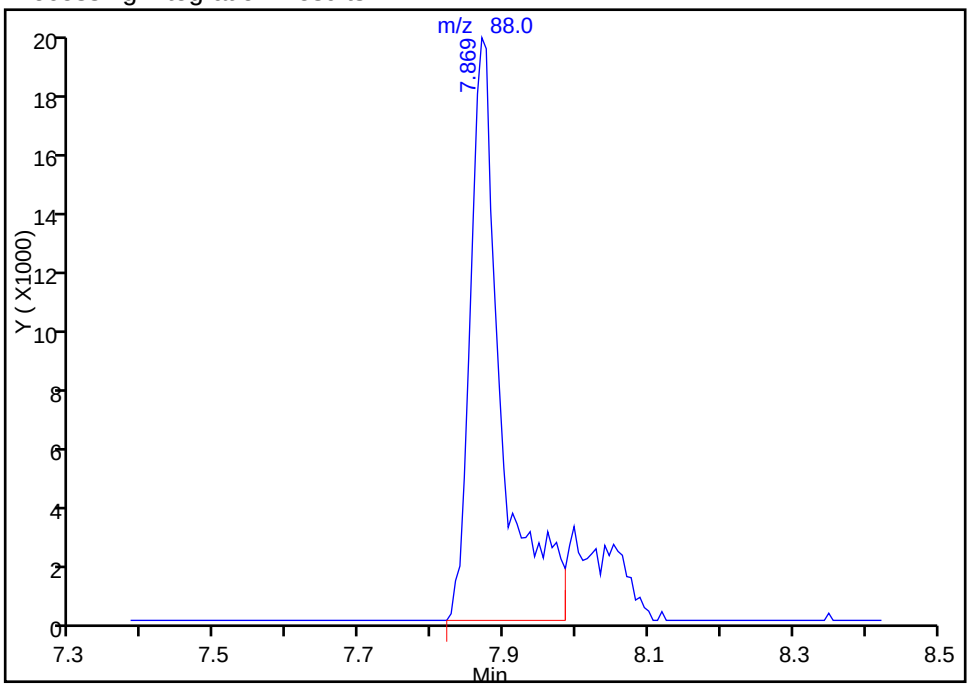
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327013.D				
Injection Date:	27-Mar-2017 15:45:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD50				
Client ID:					
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

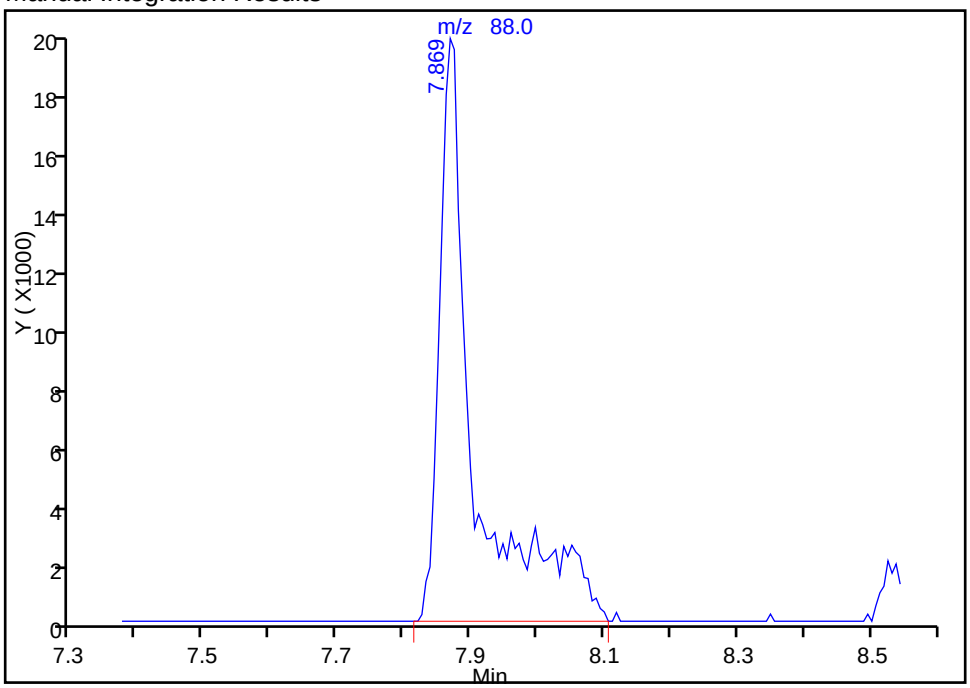
Processing Integration Results

RT: 7.87
Area: 59736
Amount: 4614.5132
Amount Units: ng



Manual Integration Results

RT: 7.87
Area: 72713
Amount: 5479.6393
Amount Units: ng



Reviewer: fergusond, 28-Mar-2017 09:08:14

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Lab Sample ID: CCVIS 180-207145/2 Calibration Date: 04/03/2017 10:39

Instrument ID: CHHP6 Calib Start Date: 03/27/2017 12:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/27/2017 15:45

Lab File ID: 60403002.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	0.3163	0.3394	0.1000	10.7	10.0	7.3	20.0
Chloromethane	Ave	0.4154	0.4697	0.1000	11.3	10.0	13.1	20.0
Vinyl chloride	Ave	0.3500	0.3913	0.1000	11.2	10.0	11.8	20.0
Bromomethane	Ave	0.0997	0.1167	0.0500	11.7	10.0	17.0	20.0
Chloroethane	Ave	0.1592	0.1741	0.0500	10.9	10.0	9.3	20.0
Trichlorofluoromethane	Ave	0.2236	0.2537	0.1000	11.3	10.0	13.5	20.0
Ethyl ether	Ave	0.3403	0.3300	0.0100	9.70	10.0	-3.0	20.0
Acrolein	Ave	0.0917	0.0969	0.0100	31.7	30.0	5.7	20.0
1,1-Dichloroethene	Ave	0.2687	0.2855	0.1000	10.6	10.0	6.3	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2609	0.2871	0.1000	11.0	10.0	10.0	20.0
Acetone	Ave	0.1005	0.0994	0.0500	19.8	20.0	-1.1	20.0
Iodomethane	Ave	0.3606	0.3761	0.0100	10.4	10.0	4.3	20.0
Carbon disulfide	Ave	0.6084	0.6443	0.1000	10.6	10.0	5.9	20.0
Allyl chloride	Ave	0.1523	0.1511	0.0100	9.92	10.0	-0.8	20.0
Methyl acetate	Ave	0.3289	0.3430	0.1000	52.1	50.0	4.3	20.0
Methylene Chloride	Ave	0.3408	0.3338	0.1000	9.79	10.0	-2.1	20.0
tert-Butyl alcohol	Ave	1.237	1.164	0.0100	94.1	100	-5.9	20.0
Acrylonitrile	Ave	0.1677	0.1809	0.0100	108	100	7.8	20.0
trans-1,2-Dichloroethene	Ave	0.2920	0.3054	0.1000	10.5	10.0	4.6	20.0
Methyl tert-butyl ether	Ave	0.8865	0.8432	0.1000	9.51	10.0	-4.9	20.0
Hexane	Ave	0.4943	0.5497	0.0100	11.1	10.0	11.2	20.0
1,1-Dichloroethane	Ave	0.5554	0.5801	0.2000	10.4	10.0	4.4	20.0
Vinyl acetate	Ave	0.6987	0.7188	0.0100	10.3	10.0	2.9	20.0
2,2-Dichloropropane	Ave	0.0545	0.0555	0.0100	10.2	10.0	1.8	20.0
cis-1,2-Dichloroethene	Ave	0.3358	0.3409	0.1000	10.2	10.0	1.5	20.0
2-Butanone (MEK)	Ave	0.1548	0.1650	0.0500	21.3	20.0	6.6	20.0
Bromochloromethane	Ave	0.1434	0.1407	0.0100	9.82	10.0	-1.8	20.0
Tetrahydrofuran	Ave	0.1406	0.1400	0.0100	19.9	20.0	-0.4	20.0
Chloroform	Ave	0.5193	0.5243	0.2000	10.1	10.0	1.0	20.0
1,1,1-Trichloroethane	Ave	0.3409	0.3526	0.1000	10.3	10.0	3.4	20.0
Cyclohexane	Ave	0.6581	0.7214	0.1000	11.0	10.0	9.6	20.0
Carbon tetrachloride	Ave	0.2520	0.2913	0.1000	11.6	10.0	15.6	20.0
1,1-Dichloropropene	Ave	0.3961	0.4216	0.0100	10.6	10.0	6.4	20.0
Benzene	Ave	1.186	1.263	0.5000	10.6	10.0	6.5	20.0
Isobutyl alcohol	Ave	0.0093	0.0103	0.0100	277	250	10.7	20.0
1,2-Dichloroethane	Ave	0.4615	0.4568	0.1000	9.90	10.0	-1.0	20.0
n-Heptane	Ave	0.3987	0.4591	0.0100	11.5	10.0	15.2	20.0
Trichloroethene	Ave	0.2750	0.2763	0.2000	10.0	10.0	0.4	20.0
Methylcyclohexane	Ave	0.5116	0.5526	0.1000	10.8	10.0	8.0	20.0
1,2-Dichloropropane	Ave	0.3150	0.3255	0.1000	10.3	10.0	3.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Lab Sample ID: CCVIS 180-207145/2 Calibration Date: 04/03/2017 10:39

Instrument ID: CHHP6 Calib Start Date: 03/27/2017 12:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/27/2017 15:45

Lab File ID: 60403002.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.0020	0.0032*	0.0100	320	200	60.1*	20.0
Dibromomethane	Ave	0.1754	0.1721	0.0100	9.82	10.0	-1.8	20.0
Bromodichloromethane	Ave	0.3080	0.3095	0.2000	10.0	10.0	0.5	20.0
2-Chloroethyl vinyl ether	Ave	0.1835	0.2263	0.0100	24.7	20.0	23.3*	20.0
cis-1,3-Dichloropropene	Ave	0.3721	0.3640	0.2000	9.78	10.0	-2.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.624	1.550	0.1000	19.1	20.0	-4.6	20.0
Toluene	Ave	5.082	5.718	0.4000	11.3	10.0	12.5	20.0
trans-1,3-Dichloropropene	Ave	1.397	1.360	0.1000	9.74	10.0	-2.6	20.0
Ethyl methacrylate	Ave	1.676	1.736	0.0100	10.4	10.0	3.6	20.0
1,1,2-Trichloroethane	Ave	1.108	1.170	0.1000	10.6	10.0	5.6	20.0
Tetrachloroethene	Ave	0.9395	1.069	0.2000	11.4	10.0	13.8	20.0
1,3-Dichloropropane	Ave	2.007	2.111	0.0100	10.5	10.0	5.2	20.0
2-Hexanone	Ave	0.9541	1.299	0.1000	27.2	20.0	36.1*	20.0
Dibromochloromethane	Ave	0.8642	0.8757	0.1000	10.1	10.0	1.3	20.0
1,2-Dibromoethane (EDB)	Ave	1.055	1.110	0.1000	10.5	10.0	5.2	20.0
3-Chlorobenzotrifluoride	Ave	1.669	1.922	0.0100	11.5	10.0	15.2	20.0
Chlorobenzene	Ave	3.268	3.487	0.5000	10.7	10.0	6.7	20.0
4-Chlorobenzotrifluoride	Ave	1.546	1.821	0.0100	11.8	10.0	17.8	20.0
1,1,1,2-Tetrachloroethane	Ave	1.017	1.115	0.0100	11.0	10.0	9.6	20.0
Ethylbenzene	Ave	1.807	1.960	0.1000	10.8	10.0	8.5	20.0
m-Xylene & p-Xylene	Ave	2.254	2.393	0.1000	10.6	10.0	6.2	20.0
o-Xylene	Ave	2.246	2.417	0.3000	10.8	10.0	7.6	20.0
Styrene	Ave	3.646	3.994	0.3000	11.0	10.0	9.5	20.0
Bromoform	Ave	0.5632	0.5901	0.1000	10.5	10.0	4.8	20.0
2-Chlorobenzotrifluoride	Ave	1.672	1.935	0.0100	11.6	10.0	15.8	20.0
Isopropylbenzene	Ave	5.416	6.075	0.1000	11.2	10.0	12.2	20.0
Bromobenzene	Ave	0.8839	0.8897	0.0100	10.1	10.0	0.7	20.0
1,1,2,2-Tetrachloroethane	Ave	1.669	1.788	0.3000	10.7	10.0	7.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.4051	0.3721	0.0100	9.19	10.0	-8.1	20.0
1,2,3-Trichloropropane	Ave	0.3687	0.3532	0.0100	9.58	10.0	-4.2	20.0
N-Propylbenzene	Ave	0.9517	1.002	0.0100	10.5	10.0	5.3	20.0
2-Chlorotoluene	Ave	0.8353	0.8356	0.0100	10.0	10.0	0.0	20.0
3-Chlorotoluene	Ave	0.8849	0.9633	0.0100	10.9	10.0	8.9	20.0
1,3,5-Trimethylbenzene	Ave	2.921	3.050	0.0100	10.4	10.0	4.4	20.0
4-Chlorotoluene	Ave	0.9127	0.9116	0.0100	9.99	10.0	-0.1	20.0
tert-Butylbenzene	Ave	2.328	2.413	0.0100	10.4	10.0	3.7	20.0
1,2,4-Trimethylbenzene	Ave	3.022	3.123	0.0100	10.3	10.0	3.3	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.7878	0.8356	0.0100	10.6	10.0	6.1	20.0
sec-Butylbenzene	Ave	3.357	3.500	0.0100	10.4	10.0	4.3	20.0
1,3-Dichlorobenzene	Ave	1.649	1.636	0.6000	9.92	10.0	-0.8	20.0
4-Isopropyltoluene	Ave	2.783	2.803	0.0100	10.1	10.0	0.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Lab Sample ID: CCVIS 180-207145/2 Calibration Date: 04/03/2017 10:39

Instrument ID: CHHP6 Calib Start Date: 03/27/2017 12:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/27/2017 15:45

Lab File ID: 60403002.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.728	1.735	0.5000	10.0	10.0	0.4	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7477	0.7915	0.0100	10.6	10.0	5.9	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.8199	0.9096	0.0100	11.1	10.0	10.9	20.0
n-Butylbenzene	Ave	2.520	2.501	0.0100	9.92	10.0	-0.8	20.0
1,2-Dichlorobenzene	Ave	1.583	1.610	0.4000	10.2	10.0	1.7	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1541	0.1465	0.0500	9.51	10.0	-4.9	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.053	1.095	0.0100	31.2	30.0	4.0	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.109	1.129	0.0100	20.4	20.0	1.8	20.0
1,2,4-Trichlorobenzene	Ave	0.8597	0.7915	0.2000	9.21	10.0	-7.9	20.0
Hexachlorobutadiene	Ave	0.3232	0.2922	0.0100	9.04	10.0	-9.6	20.0
Naphthalene	Ave	2.392	2.341	0.0100	9.79	10.0	-2.1	20.0
1,2,3-Trichlorobenzene	Ave	0.7429	0.6896	0.0100	9.28	10.0	-7.2	20.0
2,4,5-Trichlorotoluene	Ave	0.4402	0.3215	0.0100	7.30	10.0	-27.0*	20.0
2,3,6-Trichlorotoluene	Ave	0.4061	0.3101	0.0100	7.64	10.0	-23.6*	20.0
Dibromofluoromethane (Surr)	Ave	0.2248	0.2290		10.2	10.0	1.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3489	0.3446		9.88	10.0	-1.2	20.0
Toluene-d8 (Surr)	Ave	3.918	4.167		10.6	10.0	6.4	20.0
4-Bromofluorobenzene (Surr)	Ave	1.655	1.701		10.3	10.0	2.8	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 03-Apr-2017 10:39:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016136-002
Misc. Info.: CCVIS
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub65

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 12:31:12 Calib Date: 29-Mar-2017 15:25:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170329-16081.b\60329012.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK033

First Level Reviewer: fergusond Date: 03-Apr-2017 11:23:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.066	4.066	0.000	87	115333	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.119	7.119	0.000	98	344579	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.234	10.234	0.000	91	75253	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.576	12.576	0.000	94	123040	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.389	6.389	0.000	94	78894	50.0	50.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.760	6.760	0.000	83	118726	50.0	49.4	
$ 7 Toluene-d8 (Surr)	98	8.780	8.780	0.000	94	313580	50.0	53.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.420	11.420	0.000	86	128013	50.0	51.4	
11 Dichlorodifluoromethane	85	1.510	1.510	0.000	99	116965	50.0	53.7	
12 Chloromethane	50	1.663	1.663	0.000	99	161855	50.0	56.5	
13 Vinyl chloride	62	1.784	1.784	0.000	98	134823	50.0	55.9	
14 Butadiene	39	1.827	1.827	0.000	91	146492	50.0	56.6	
15 Bromomethane	94	2.131	2.131	0.000	93	40194	50.0	58.5	
16 Chloroethane	64	2.247	2.247	0.000	99	60000	50.0	54.7	
17 Dichlorofluoromethane	67	2.514	2.514	0.000	96	126213	50.0	60.1	
18 Trichlorofluoromethane	101	2.532	2.532	0.000	69	87427	50.0	56.7	
20 Ethyl ether	59	2.885	2.885	0.000	96	113723	50.0	48.5	
21 Acrolein	56	3.056	3.056	0.000	100	100176	150.0	158.6	
22 1,1-Dichloroethene	96	3.171	3.171	0.000	93	98386	50.0	53.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.226	3.226	0.000	95	98939	50.0	55.0	
24 Acetone	43	3.256	3.256	0.000	100	68498	100.0	98.9	
25 Iodomethane	142	3.354	3.354	0.000	98	129593	50.0	52.2	
26 Carbon disulfide	76	3.445	3.445	0.000	100	221995	50.0	52.9	
29 3-Chloro-1-propene	76	3.707	3.707	0.000	88	52071	50.0	49.6	
30 Methyl acetate	43	3.731	3.731	0.000	99	590933	250.0	260.7	
31 Methylene Chloride	84	3.926	3.926	0.000	97	115032	50.0	49.0	
32 2-Methyl-2-propanol	59	4.187	4.187	0.000	89	67122	500.0	470.4	
33 Acrylonitrile	53	4.321	4.321	0.000	99	623221	500.0	539.2	
34 trans-1,2-Dichloroethene	96	4.358	4.358	0.000	94	105225	50.0	52.3	
35 Methyl tert-butyl ether	73	4.364	4.364	0.000	97	290531	50.0	47.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.789	4.789	0.000	94	189420	50.0	55.6	
37 1,1-Dichloroethane	63	5.002	5.002	0.000	97	199878	50.0	52.2	
38 Vinyl acetate	43	5.057	5.057	0.000	97	247681	50.0	51.4	
42 2,2-Dichloropropane	97	5.763	5.763	0.000	55	19108	50.0	50.9	
43 cis-1,2-Dichloroethene	96	5.769	5.769	0.000	84	117456	50.0	50.8	
44 2-Butanone (MEK)	43	5.781	5.781	0.000	99	113730	100.0	106.6	
48 Chlorobromomethane	128	6.055	6.055	0.000	89	48493	50.0	49.1	
49 Tetrahydrofuran	42	6.067	6.067	0.000	93	96478	100.0	99.6	
50 Chloroform	83	6.207	6.207	0.000	95	180665	50.0	50.5	
51 1,1,1-Trichloroethane	97	6.365	6.365	0.000	96	121484	50.0	51.7	
52 Cyclohexane	56	6.432	6.432	0.000	96	248574	50.0	54.8	
53 Carbon tetrachloride	117	6.535	6.535	0.000	95	100359	50.0	57.8	
54 1,1-Dichloropropene	75	6.548	6.548	0.000	92	145274	50.0	53.2	
55 Isobutyl alcohol	41	6.767	6.767	0.000	96	89011	1250.0	1383.3	
56 Benzene	78	6.767	6.767	0.000	98	435058	50.0	53.2	
57 1,2-Dichloroethane	62	6.852	6.852	0.000	97	157397	50.0	49.5	
59 n-Heptane	43	7.138	7.138	0.000	97	158206	50.0	57.6	
61 Trichloroethene	130	7.509	7.509	0.000	96	95196	50.0	50.2	
63 Methylcyclohexane	83	7.746	7.746	0.000	93	190406	50.0	54.0	
64 1,2-Dichloropropane	63	7.783	7.783	0.000	87	112157	50.0	51.7	
65 1,4-Dioxane	88	7.868	7.868	0.000	41	21849	1000.0	1600.8	M
67 Dibromomethane	93	7.874	7.874	0.000	96	59317	50.0	49.1	
68 Dichlorobromomethane	83	8.075	8.075	0.000	98	106649	50.0	50.2	
70 2-Chloroethyl vinyl ether	63	8.379	8.379	0.000	92	155926	100.0	123.3	
71 cis-1,3-Dichloropropene	75	8.519	8.519	0.000	91	125425	50.0	48.9	
72 4-Methyl-2-pentanone (MIBK	43	8.677	8.677	0.000	98	233240	100.0	95.4	
73 Toluene	91	8.847	8.847	0.000	98	430271	50.0	56.3	
74 trans-1,3-Dichloropropene	75	9.103	9.103	0.000	98	102347	50.0	48.7	
75 Ethyl methacrylate	69	9.163	9.163	0.000	92	130622	50.0	51.8	
76 1,1,2-Trichloroethane	97	9.291	9.291	0.000	93	88076	50.0	52.8	
77 Tetrachloroethene	164	9.364	9.364	0.000	96	80454	50.0	56.9	
78 1,3-Dichloropropane	76	9.449	9.449	0.000	97	158859	50.0	52.6	
79 2-Hexanone	43	9.510	9.510	0.000	97	195508	100.0	136.1	
81 Chlorodibromomethane	129	9.662	9.662	0.000	91	65896	50.0	50.7	
82 Ethylene Dibromide	107	9.772	9.772	0.000	99	83549	50.0	52.6	
83 3-Chlorobenzotrifluoride	180	10.246	10.246	0.000	93	144601	50.0	57.6	
84 Chlorobenzene	112	10.265	10.265	0.000	95	262423	50.0	53.4	
85 4-Chlorobenzotrifluoride	180	10.331	10.331	0.000	96	137055	50.0	58.9	
86 1,1,1,2-Tetrachloroethane	131	10.362	10.362	0.000	89	83891	50.0	54.8	
87 Ethylbenzene	106	10.368	10.368	0.000	99	147515	50.0	54.2	
88 m-Xylene & p-Xylene	106	10.502	10.502	0.000	99	180114	50.0	53.1	
89 o-Xylene	106	10.879	10.879	0.000	98	181919	50.0	53.8	
90 Styrene	104	10.903	10.903	0.000	95	300582	50.0	54.8	
91 Bromoform	173	11.080	11.080	0.000	96	44408	50.0	52.4	
92 2-Chlorobenzotrifluoride	180	11.153	11.153	0.000	96	145633	50.0	57.9	
93 Isopropylbenzene	105	11.250	11.250	0.000	97	457199	50.0	56.1	
95 Bromobenzene	156	11.554	11.554	0.000	99	109469	50.0	50.3	
96 1,1,2,2-Tetrachloroethane	83	11.560	11.560	0.000	94	134535	50.0	53.6	
97 trans-1,4-Dichloro-2-buten	53	11.603	11.603	0.000	70	45787	50.0	45.9	
98 1,2,3-Trichloropropane	110	11.615	11.615	0.000	89	43451	50.0	47.9	
99 N-Propylbenzene	120	11.664	11.664	0.000	99	123314	50.0	52.7	
100 2-Chlorotoluene	126	11.749	11.749	0.000	95	102806	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	11.816	11.816	0.000	97	118519	50.0	54.4	
102 1,3,5-Trimethylbenzene	105	11.846	11.846	0.000	95	375266	50.0	52.2	
103 4-Chlorotoluene	126	11.877	11.877	0.000	99	112157	50.0	49.9	
104 tert-Butylbenzene	119	12.163	12.163	0.000	94	296873	50.0	51.8	
106 1,2,4-Trimethylbenzene	105	12.223	12.223	0.000	99	384272	50.0	51.7	
107 1,2-dichloro-4-(trifluorom	214	12.266	12.266	0.000	97	102813	50.0	53.0	
108 sec-Butylbenzene	105	12.382	12.382	0.000	95	430624	50.0	52.1	
109 1,3-Dichlorobenzene	146	12.497	12.497	0.000	96	201320	50.0	49.6	
110 4-Isopropyltoluene	119	12.540	12.540	0.000	96	344837	50.0	50.4	
111 1,4-Dichlorobenzene	146	12.601	12.601	0.000	94	213484	50.0	50.2	
113 2,4-Dichloro-1-(triflourom	214	12.637	12.637	0.000	96	97383	50.0	52.9	
114 2,5-Dichlorobenzotrifluori	214	12.680	12.680	0.000	98	111912	50.0	55.5	
116 n-Butylbenzene	91	12.947	12.947	0.000	98	307716	50.0	49.6	
117 1,2-Dichlorobenzene	146	12.960	12.960	0.000	97	198056	50.0	50.8	
118 1,2-Dibromo-3-Chloropropan	75	13.750	13.744	0.006	76	18030	50.0	47.6	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.890	13.890	0.000	99	404209	150.0	155.9	
121 2,3- & 3,4- Dichlorotoluen	125	14.304	14.304	0.000	98	277780	100.0	101.8	
122 1,2,4-Trichlorobenzene	180	14.572	14.572	0.000	94	97382	50.0	46.0	
123 Hexachlorobutadiene	225	14.718	14.718	0.000	96	35952	50.0	45.2	
124 Naphthalene	128	14.833	14.833	0.000	97	288032	50.0	48.9	
125 1,2,3-Trichlorobenzene	180	15.058	15.058	0.000	96	84848	50.0	46.4	
126 2,4,5-Trichlorotoluene	159	15.849	15.849	0.000	0	39556	50.0	36.5	
127 2,3,6-Trichlorotoluene	159	15.953	15.953	0.000	94	38148	50.0	38.2	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
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	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		100.0	106.9	
S 130 1,2-Dichloroethene, Total	96				0		100.0	103.0	
S 132 1,3-Dichloropropene, Total	1				0		100.0	97.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWAcro1stRe_00011	Amount Added:	6.00	Units: uL	
VOA8260VOAPRI_00244	Amount Added:	2.00	Units: uL	
voaW2cle1stRe_00008	Amount Added:	2.00	Units: uL	
voaWKetmix1st_00002	Amount Added:	2.00	Units: uL	
voaWEEmix1stR_00005	Amount Added:	2.00	Units: uL	
voaWva2ndRete_00001	Amount Added:	2.00	Units: uL	
VOA8260INT_00067	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added:	2.00	Units: uL	Run Reagent

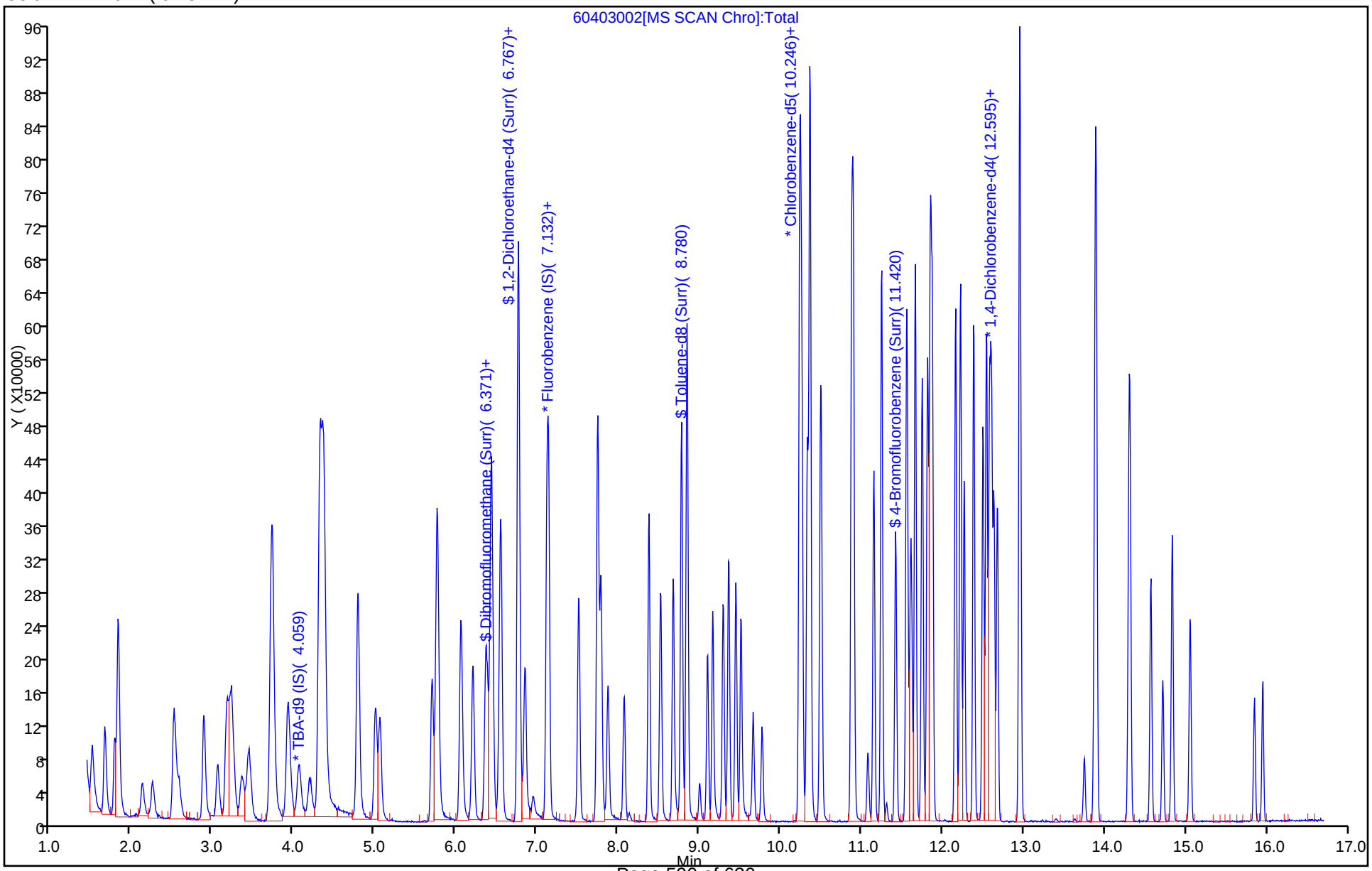
Report Date: 03-Apr-2017 12:31:14 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403002.D

Injection Date:	03-Apr-2017 10:39:30	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)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

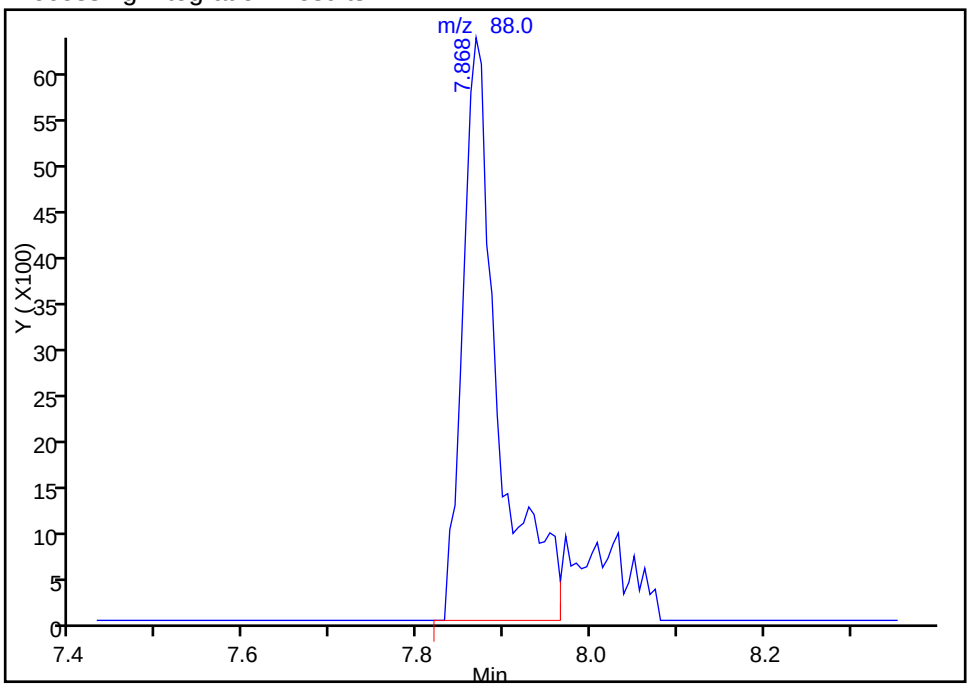
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403002.D				
Injection Date:	03-Apr-2017 10:39:30	Instrument ID:	CHHP6		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	001562	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

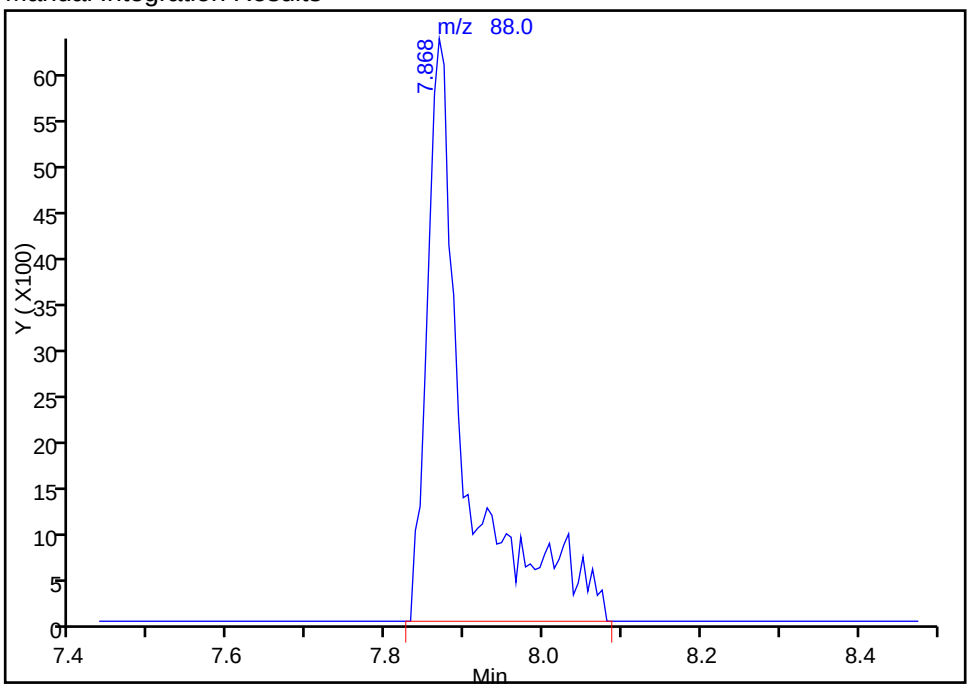
Processing Integration Results

RT: 7.87
Area: 17919
Amount: 1312.8924
Amount Units: ng



Manual Integration Results

RT: 7.87
Area: 21849
Amount: 1600.8363
Amount Units: ng



Reviewer: fergusond, 03-Apr-2017 12:31:11

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327004.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 27-Mar-2017 11:25:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 180-0016041-004
Misc. Info.: BFB
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Mar-2017 09:07:33 Calib Date: 27-Mar-2017 15:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327013.D

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

First Level Reviewer: fergusond Date: 27-Mar-2017 12:01:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.241	8.241	0.000	0	84041	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

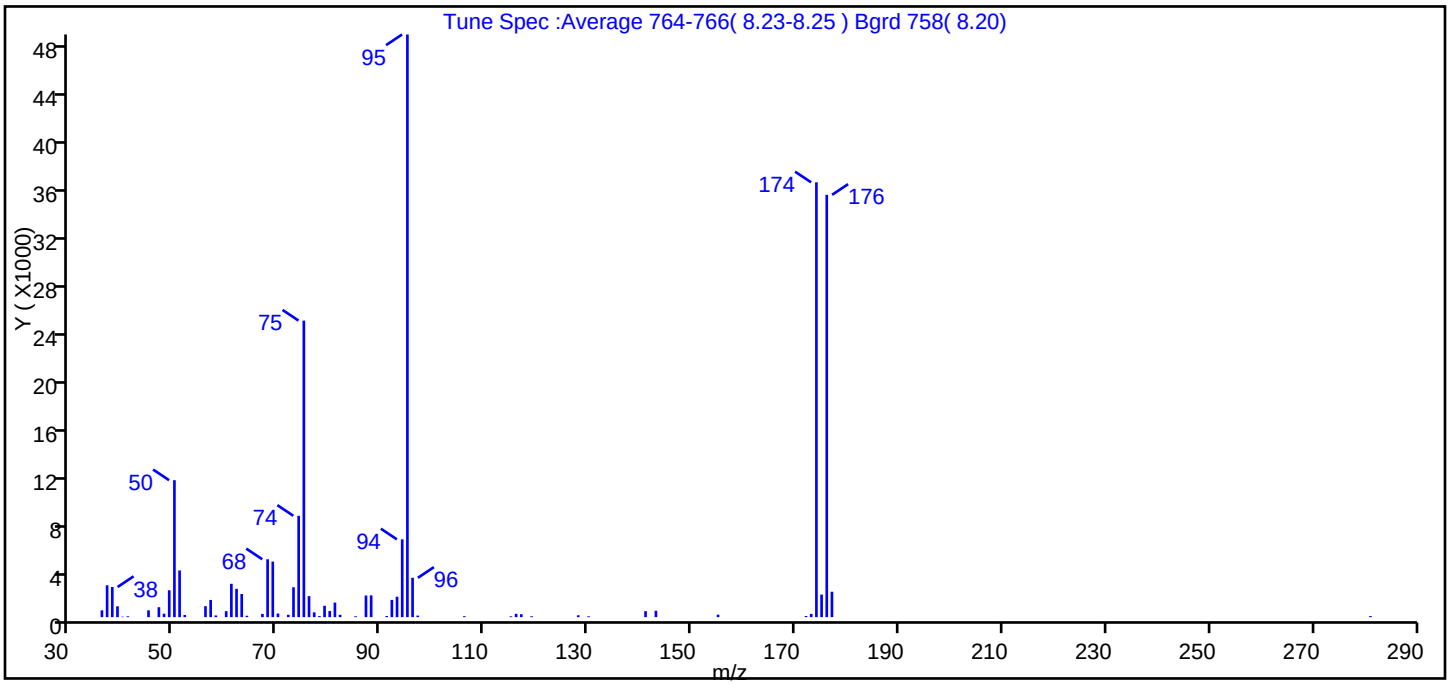
VOABFB25_00086 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327004.D
Injection Date: 27-Mar-2017 11:25:30 Instrument ID: CHHP6
Lims ID: BFB
Client ID:
Operator ID: 001562 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.5
75	30 to 60% of m/z 95	50.9
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.6 (0.7)
174	50 to 120% of m/z 95	74.6
175	5 to 9% of m/z 174	3.9 (5.2)
176	Greater than 95% but less than 101% of m/z 174	72.5 (97.1)
177	5 to 9% of m/z 176	4.4 (6.0)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327004.D\MSVOA_LL_CHHP6.rslt\spect
Injection Date: 27-Mar-2017 11:25:30
Spectrum: Tune Spec :Average 764-766(8.23-8.25) Bgrd 758(8.20)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 63

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	562	60.00	494	79.00	938	116.00	276
37.00	2635	61.00	2757	80.00	505	117.00	242
38.00	2494	62.00	2339	81.00	1203	119.00	73
39.00	897	63.00	1913	82.00	192	128.00	156
40.00	34	64.00	116	85.00	72	130.00	69
41.00	71	67.00	265	87.00	1787	141.00	493
45.00	564	68.00	4784	88.00	1802	143.00	526
47.00	821	69.00	4593	91.00	92	155.00	203
48.00	286	70.00	298	92.00	1426	172.00	95
49.00	2223	72.00	195	93.00	1691	173.00	268
50.00	11323	73.00	2471	94.00	6431	174.00	35952
51.00	3860	74.00	8379	95.00	48176	175.00	1865
52.00	176	75.00	24520	96.00	3253	176.00	34920
56.00	906	76.00	1737	97.00	128	177.00	2099
57.00	1422	77.00	395	106.00	77	281.00	87
58.00	140	78.00	87	115.00	68		

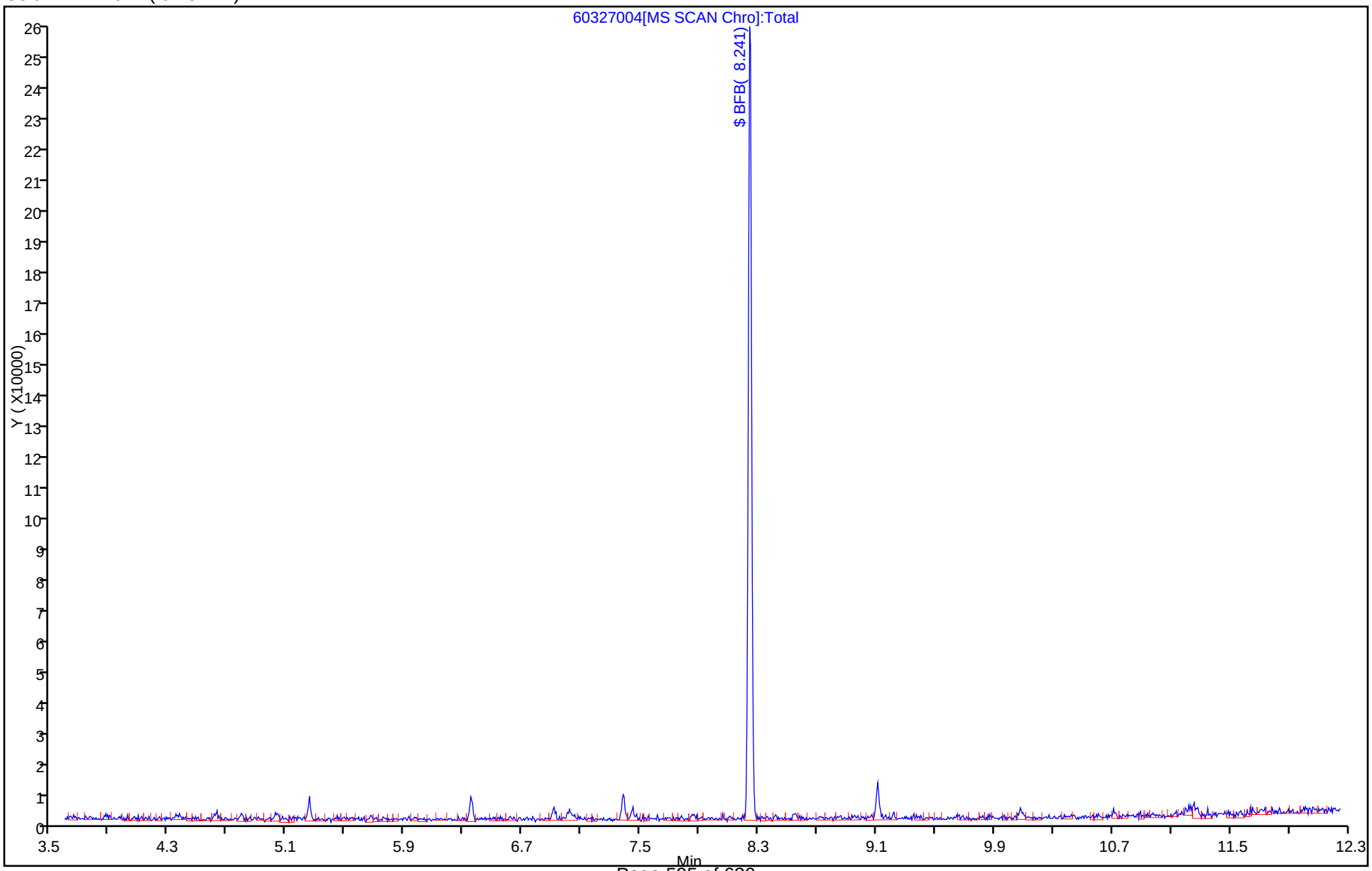
Report Date: 28-Mar-2017 09:07:36 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170327-16041.b\60327004.D

Injection Date:	27-Mar-2017 11:25:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403001.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 03-Apr-2017 10:00:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 180-0016136-001
Misc. Info.: BFB
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 12:31:08 Calib Date: 29-Mar-2017 15:25:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170329-16081.b\60329012.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK033

First Level Reviewer: fergusond Date: 03-Apr-2017 10:23:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.243	8.243	0.000	0	73105	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

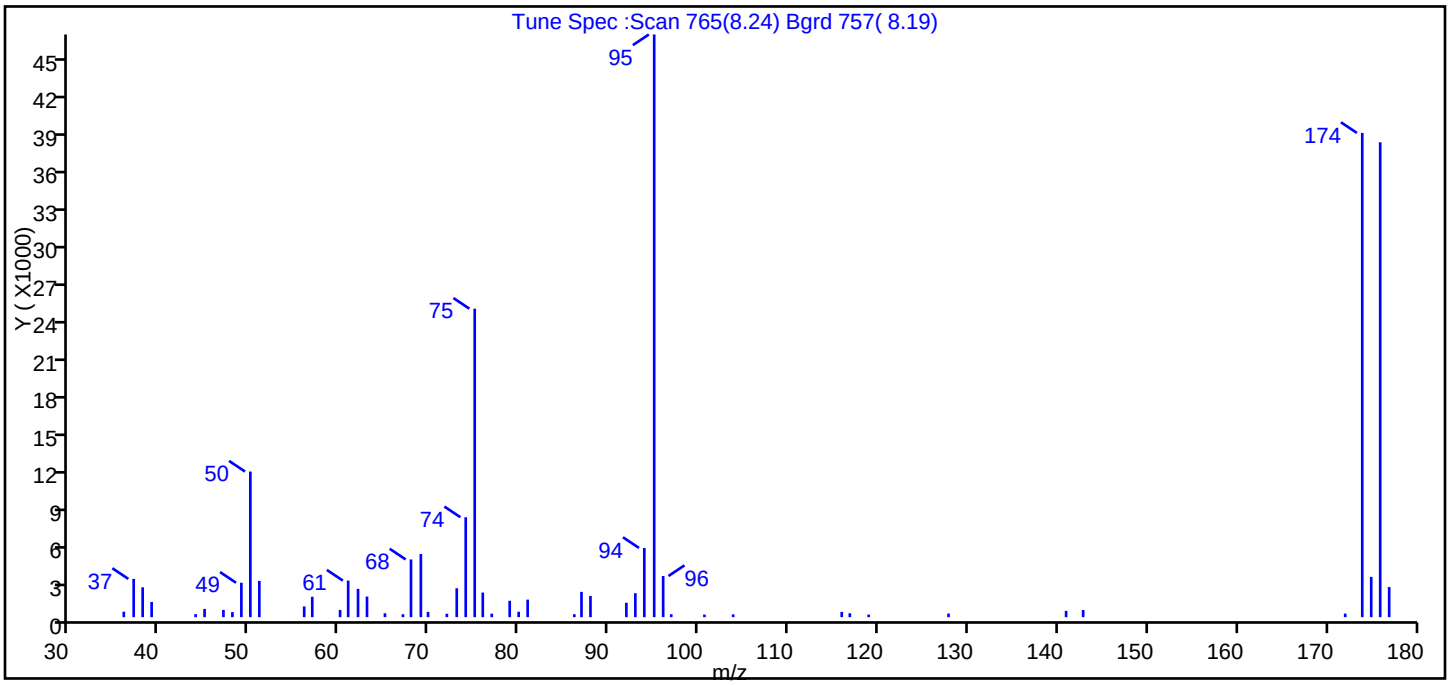
VOABFB25_00086 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403001.D
Injection Date: 03-Apr-2017 10:00:30 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	25.0
75	30 to 60% of m/z 95	52.9
96	5 to 9% of m/z 95	7.1
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	83.1
175	5 to 9% of m/z 174	6.9 (8.3)
176	Greater than 95% but less than 101% of m/z 174	81.5 (98.1)
177	5 to 9% of m/z 176	5.2 (6.3)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403001.D\MSVOA_LL_CHHP6.rslt\spect
Injection Date: 03-Apr-2017 10:00:30
Spectrum: Tune Spec :Scan 765(8.24) Bgrd 757(8.19)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 53

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.90	439	60.90	2948	78.90	1318	115.90	423
37.00	3082	62.00	2279	79.90	437	116.80	314
38.00	2405	63.00	1658	80.90	1412	118.90	202
39.00	1225	65.00	311	86.10	236	127.80	290
43.90	244	67.00	236	86.90	2038	140.90	508
44.90	664	67.90	4652	87.90	1709	142.80	577
47.00	585	69.00	5092	91.90	1158	172.00	287
48.00	407	69.80	426	92.90	1929	173.90	39032
49.00	2773	71.90	274	93.90	5578	174.90	3243
50.00	11737	73.00	2327	95.00	46968	175.90	38280
51.00	2923	74.00	8053	96.00	3316	176.90	2426
56.00	864	75.00	24864	96.90	233		
56.90	1644	75.90	1983	100.60	207		
60.00	583	76.90	281	103.80	224		

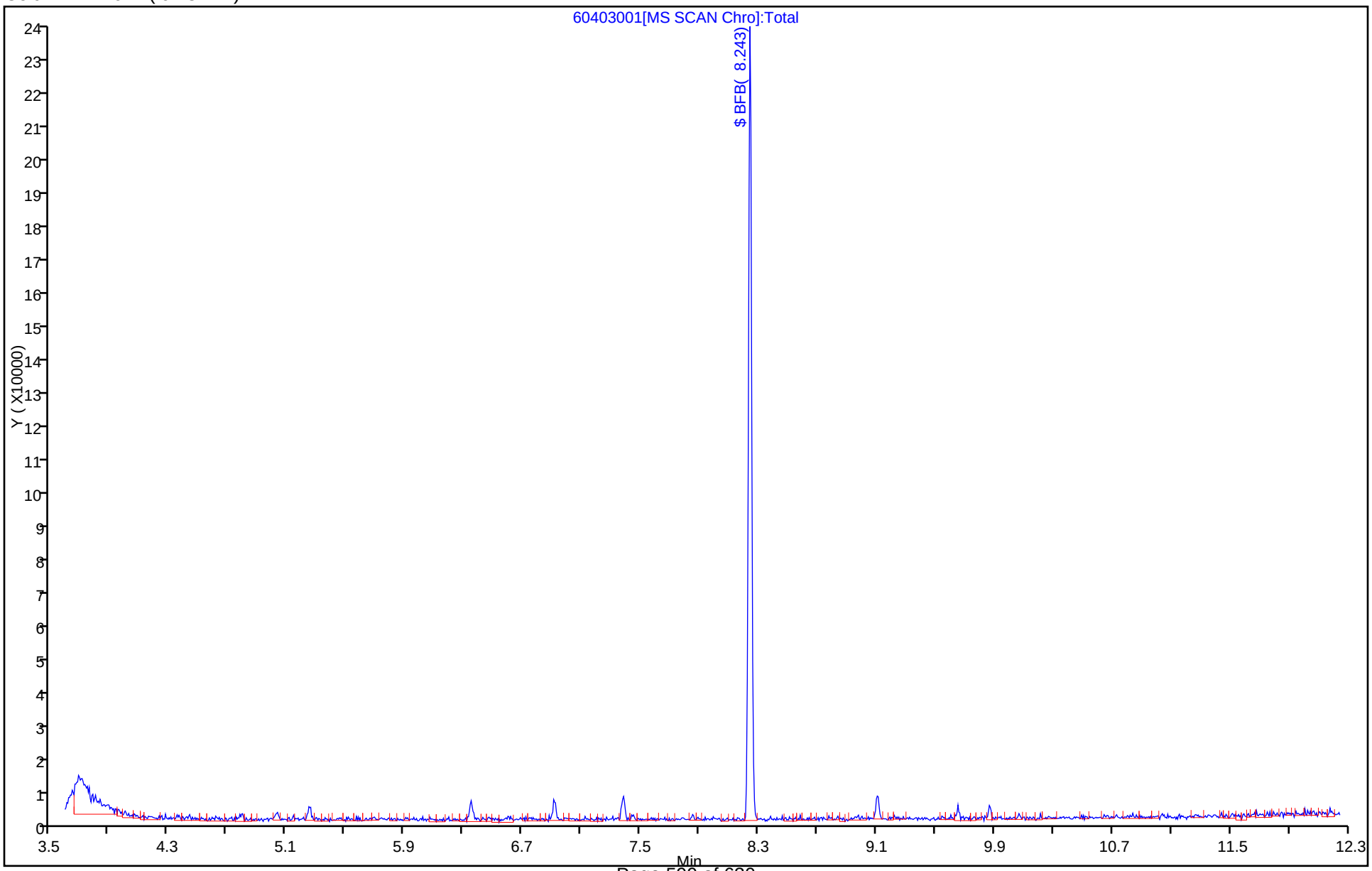
Report Date: 03-Apr-2017 12:31:09 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403001.D

Injection Date:	03-Apr-2017 10:00:30	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.: 180-64801-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-207145/5

Matrix: Water | Lab File ID: 60403005.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/03/2017 11:55

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.: 207145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.38
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-00-3	Chloroethane	1.0	U	1.0	0.58
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
67-64-1	Acetone	5.0	U	5.0	3.1
75-15-0	Carbon disulfide	1.0	U	1.0	0.53
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30
74-97-5	Bromochloromethane	1.0	U	1.0	0.36
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
71-43-2	Benzene	1.0	U	1.0	0.18
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.24
79-01-6	Trichloroethene	1.0	U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
75-27-4	Bromodichloromethane	1.0	U	1.0	0.57
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.2
108-88-3	Toluene	1.0	U	1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
127-18-4	Tetrachloroethene	1.0	U	1.0	0.24
591-78-6	2-Hexanone	5.0	U	5.0	2.0
124-48-1	Dibromochloromethane	1.0	U	1.0	0.44
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.51
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.49
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
100-42-5	Styrene	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-207145/5

Matrix: Water | Lab File ID: 60403005.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/03/2017 11:55

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.: 207145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.76
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
107-13-1	Acrylonitrile	20	U	20	3.3
123-91-1	1,4-Dioxane	200	U	200	16

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		72-134
2037-26-5	Toluene-d8 (Surr)	95		80-120
460-00-4	4-Bromofluorobenzene (Surr)	101		72-120
1868-53-7	Dibromofluoromethane (Surr)	102		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403005.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-Apr-2017 11:55:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016136-005
Misc. Info.: MB
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 13:13:20 Calib Date: 29-Mar-2017 15:25:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170329-16081.b\60329012.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK033

First Level Reviewer: fergusond Date: 03-Apr-2017 13:13:20

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.046	4.047	-0.001	88	140647	1000.0	1000.0	
*	2 Fluorobenzene (IS)	96	7.125	7.125	0.000	98	274786	50.0	50.0	
*	3 Chlorobenzene-d5	119	10.233	10.233	0.000	91	69552	50.0	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.581	12.582	-0.001	97	108275	50.0	50.0	
$	5 Dibromofluoromethane (Surr	113	6.388	6.389	-0.001	93	62958	50.0	51.0	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.760	6.760	0.000	69	94225	50.0	49.1	
$	7 Toluene-d8 (Surr)	98	8.779	8.780	-0.001	94	259183	50.0	47.6	
$	8 4-Bromofluorobenzene (Surr	95	11.420	11.420	0.000	85	116696	50.0	50.7	
	11 Dichlorodifluoromethane	85		1.510					ND	
	12 Chloromethane	50		1.663					ND	
	13 Vinyl chloride	62		1.784					ND	
	14 Butadiene	39		1.827					ND	
	15 Bromomethane	94		2.131					ND	
	16 Chloroethane	64		2.247					ND	
	17 Dichlorofluoromethane	67		2.514					ND	
	18 Trichlorofluoromethane	101		2.532					ND	
	19 Ethanol	45		2.775					ND	
	20 Ethyl ether	59		2.885					ND	
	21 Acrolein	56		3.056					ND	
	22 1,1-Dichloroethene	96		3.171					ND	
	23 1,1,2-Trichloro-1,2,2-trif	101		3.226					ND	
	24 Acetone	43	3.268	3.256	0.012	65	1108		2.01	
	25 Iodomethane	142		3.354					ND	
	26 Carbon disulfide	76		3.445					ND	
	27 Isopropyl alcohol	45		3.517					ND	
	28 Acetonitrile	41		3.675					ND	
	29 3-Chloro-1-propene	76		3.707					ND	
	30 Methyl acetate	43		3.731					ND	
	31 Methylene Chloride	84	3.913	3.926	-0.014	1	654		0.3491	
	32 2-Methyl-2-propanol	59		4.187					ND	
	33 Acrylonitrile	53		4.321					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		4.358					ND	
35 Methyl tert-butyl ether	73		4.364					ND	
36 Hexane	57		4.789					ND	
37 1,1-Dichloroethane	63		5.002					ND	
38 Vinyl acetate	43		5.057					ND	
40 Isopropyl ether	45		5.111					ND	
39 2-Chloro-1,3-butadiene	53		5.111					ND	
41 Tert-butyl ethyl ether	59		5.592					ND	
42 2,2-Dichloropropane	97		5.763					ND	
43 cis-1,2-Dichloroethene	96		5.769					ND	
44 2-Butanone (MEK)	43		5.781					ND	
45 Propionitrile	54		5.853					ND	
46 Ethyl acetate	43		5.859					ND	
47 Methacrylonitrile	41		6.036					ND	
48 Chlorobromomethane	128		6.055					ND	
49 Tetrahydrofuran	42		6.067					ND	
50 Chloroform	83		6.207					ND	
51 1,1,1-Trichloroethane	97		6.365					ND	
52 Cyclohexane	56		6.432					ND	
53 Carbon tetrachloride	117		6.535					ND	
54 1,1-Dichloropropene	75		6.548					ND	
55 Isobutyl alcohol	41		6.767					ND	
56 Benzene	78		6.767					ND	
57 1,2-Dichloroethane	62		6.852					ND	
148 Isooctane	57		6.930					ND	
58 Tert-amyl methyl ether	73		6.954					ND	
59 n-Heptane	43		7.138					ND	
60 n-Butanol	56		7.478					ND	
61 Trichloroethene	130		7.509					ND	
62 Ethyl acrylate	55		7.642					ND	
63 Methylcyclohexane	83		7.746					ND	
64 1,2-Dichloropropane	63		7.783					ND	
65 1,4-Dioxane	88		7.868					ND	
67 Dibromomethane	93		7.874					ND	
66 Methyl methacrylate	69		7.879					ND	
68 Dichlorobromomethane	83		8.075					ND	
69 2-Nitropropane	41		8.305					ND	
70 2-Chloroethyl vinyl ether	63		8.379					ND	
71 cis-1,3-Dichloropropene	75		8.519					ND	
72 4-Methyl-2-pentanone (MIBK	43		8.677					ND	
73 Toluene	91		8.847					ND	
74 trans-1,3-Dichloropropene	75		9.103					ND	
75 Ethyl methacrylate	69		9.163					ND	
76 1,1,2-Trichloroethane	97		9.291					ND	
77 Tetrachloroethene	164		9.364					ND	
78 1,3-Dichloropropane	76		9.449					ND	
79 2-Hexanone	43		9.510					ND	
80 n-Butyl acetate	43	9.637	9.643	-0.006	84	2012		0.5557	
81 Chlorodibromomethane	129		9.662					ND	
82 Ethylene Dibromide	107		9.772					ND	
83 3-Chlorobenzotrifluoride	180		10.246					ND	
84 Chlorobenzene	112		10.265					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
85 4-Chlorobenzotrifluoride	180		10.331					ND	
86 1,1,1,2-Tetrachloroethane	131		10.362					ND	
87 Ethylbenzene	106		10.368					ND	
88 m-Xylene & p-Xylene	106		10.502					ND	
89 o-Xylene	106		10.879					ND	
90 Styrene	104		10.903					ND	
129 Cyclohexanol	57		11.074					ND	
91 Bromoform	173		11.080					ND	
92 2-Chlorobenzotrifluoride	180		11.153					ND	
93 Isopropylbenzene	105		11.250					ND	
94 Cyclohexanone	55		11.335					ND	
95 Bromobenzene	156		11.554					ND	
96 1,1,2,2-Tetrachloroethane	83		11.560					ND	
97 trans-1,4-Dichloro-2-buten	53		11.603					ND	
98 1,2,3-Trichloropropane	110		11.615					ND	
99 N-Propylbenzene	120		11.664					ND	
100 2-Chlorotoluene	126		11.749					ND	
101 3-Chlorotoluene	126		11.816					ND	
102 1,3,5-Trimethylbenzene	105		11.846					ND	
103 4-Chlorotoluene	126		11.877					ND	
104 tert-Butylbenzene	119		12.163					ND	
106 1,2,4-Trimethylbenzene	105		12.223					ND	
107 1,2-dichloro-4-(trifluorom	214		12.266					ND	
105 Pentachloroethane	167		12.351					ND	
108 sec-Butylbenzene	105		12.382					ND	
109 1,3-Dichlorobenzene	146		12.497					ND	
110 4-Isopropyltoluene	119		12.540					ND	
111 1,4-Dichlorobenzene	146		12.601					ND	
112 1,2,3-Trimethylbenzene	105		12.630					ND	
113 2,4-Dichloro-1-(triflourom	214		12.637					ND	
114 2,5-Dichlorobenzotrifluori	214		12.680					ND	
115 Benzyl chloride	91		12.722					ND	
116 n-Butylbenzene	91		12.947					ND	
117 1,2-Dichlorobenzene	146		12.960					ND	
118 1,2-Dibromo-3-Chloropropan	75		13.744					ND	
119 2,4- & 2,5- & 2,6- Dichlor	125		13.890					ND	
120 1,3,5-Trichlorobenzene	180		13.938					ND	
121 2,3- & 3,4- Dichlorotoluen	125		14.304					ND	
122 1,2,4-Trichlorobenzene	180		14.572					ND	
123 Hexachlorobutadiene	225		14.718					ND	
124 Naphthalene	128		14.833					ND	
125 1,2,3-Trichlorobenzene	180		15.058					ND	
126 2,4,5-Trichlorotoluene	159		15.849					ND	
127 2,3,6-Trichlorotoluene	159		15.953					ND	
128 2-Methylnaphthalene	142		15.983					ND	
150 Tert-butyl ethyl ether (TI	1		0.000					ND	
153 1,2 Epoxybutane TIC	1		0.000					ND	
151 Tert-amyl methyl ether (TI	1		0.000					ND	
143 2,5-Dichlorotoluene	1		0.000					ND	
145 2,3-Dichlorotoluene	1		0.000					ND	
152 Formaldehyde TIC	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
149 Isopropyl ether TIC	1		0.000					ND	
144 2,4-Dichlorotoluene	1		0.000					ND	
146 3,4-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	

Reagents:

VOA8260INT_00067	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00066	Amount Added:	2.00	Units: uL	Run Reagent

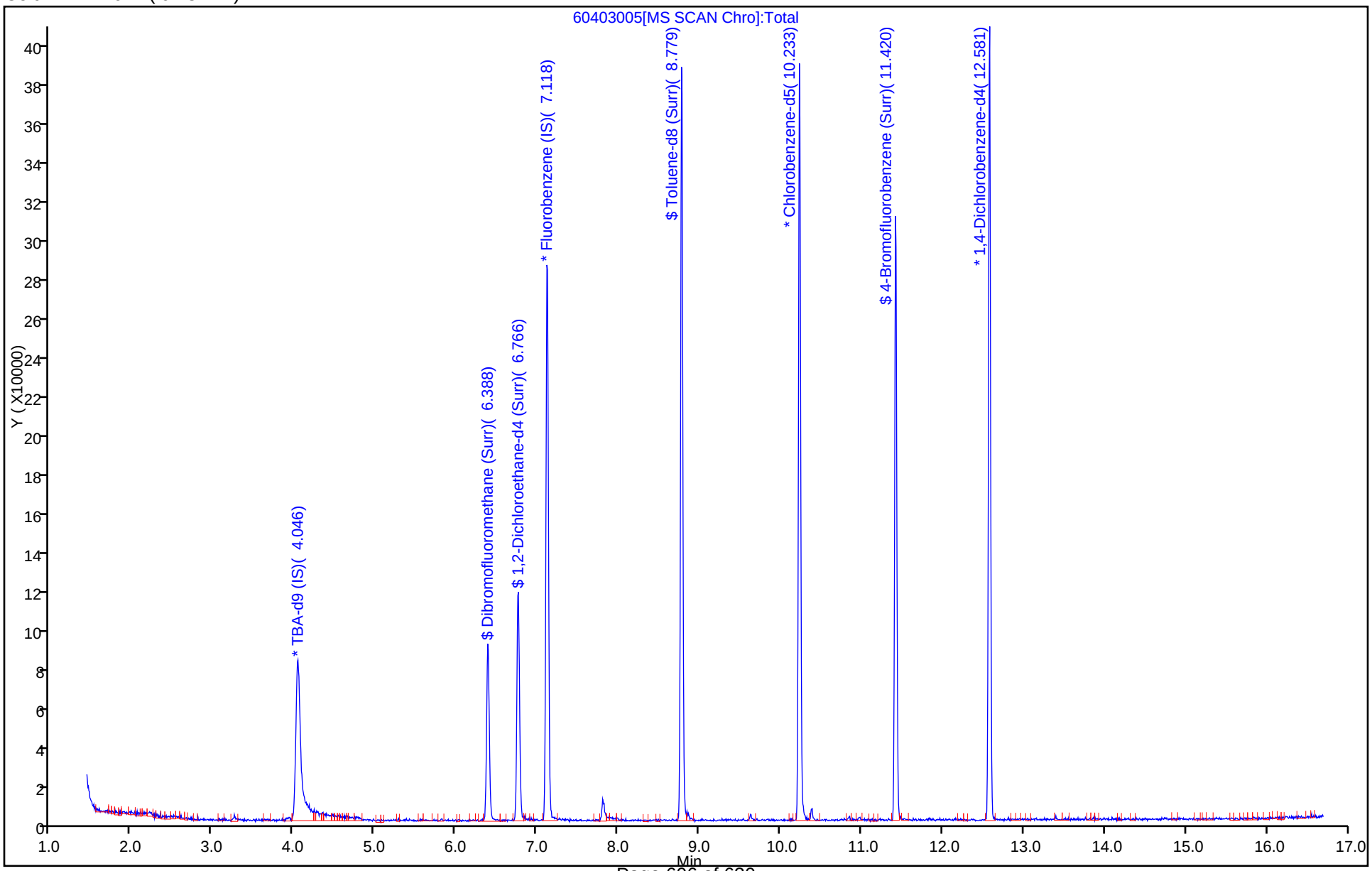
Report Date: 03-Apr-2017 13:13:21 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403005.D

Injection Date:	03-Apr-2017 11:55:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	MB			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403005.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-Apr-2017 11:55:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016136-005
Misc. Info.: MB
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 13:13:20 Calib Date: 29-Mar-2017 15:25:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170329-16081.b\60329012.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK033

First Level Reviewer: fergusond Date: 03-Apr-2017 13:13:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.0	101.91
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.1	98.28
$ 7 Toluene-d8 (Surr)	50.0	47.6	95.11
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.7	101.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-207145/8

Matrix: Water | Lab File ID: 60403008.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/03/2017 13:19

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 207145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	11.2		1.0	0.38
75-01-4	Vinyl chloride	10.8		1.0	0.17
74-83-9	Bromomethane	11.3		1.0	0.59
75-00-3	Chloroethane	10.6		1.0	0.58
75-35-4	1,1-Dichloroethene	10.5		1.0	0.32
67-64-1	Acetone	19.0		5.0	3.1
75-15-0	Carbon disulfide	10.2		1.0	0.53
75-09-2	Methylene Chloride	9.70		1.0	0.94
156-60-5	trans-1,2-Dichloroethene	10.7		1.0	0.20
1634-04-4	Methyl tert-butyl ether	9.35		1.0	0.20
75-34-3	1,1-Dichloroethane	10.3		1.0	0.34
156-59-2	cis-1,2-Dichloroethene	10.1		1.0	0.30
74-97-5	Bromochloromethane	9.27		1.0	0.36
78-93-3	2-Butanone (MEK)	21.2		5.0	2.6
67-66-3	Chloroform	9.70		1.0	0.27
71-55-6	1,1,1-Trichloroethane	10.1		1.0	0.27
56-23-5	Carbon tetrachloride	11.0		1.0	0.56
71-43-2	Benzene	10.6		1.0	0.18
107-06-2	1,2-Dichloroethane	9.62		1.0	0.24
79-01-6	Trichloroethene	10.0		1.0	0.20
78-87-5	1,2-Dichloropropane	9.68		1.0	0.35
75-27-4	Bromodichloromethane	9.11		1.0	0.57
10061-01-5	cis-1,3-Dichloropropene	8.89		1.0	0.32
108-10-1	4-Methyl-2-pentanone (MIBK)	19.5		5.0	2.2
108-88-3	Toluene	11.1		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	8.97		1.0	0.22
79-00-5	1,1,2-Trichloroethane	10.5		1.0	0.31
127-18-4	Tetrachloroethene	11.0		1.0	0.24
591-78-6	2-Hexanone	22.9		5.0	2.0
124-48-1	Dibromochloromethane	9.16		1.0	0.44
106-93-4	1,2-Dibromoethane (EDB)	9.71		1.0	0.51
108-90-7	Chlorobenzene	10.5		1.0	0.15
630-20-6	1,1,1,2-Tetrachloroethane	10.1		1.0	0.49
100-41-4	Ethylbenzene	10.6		1.0	0.25
1330-20-7	Xylenes, Total	20.7		2.0	0.27
100-42-5	Styrene	10.6		1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-64801-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-207145/8

Matrix: Water | Lab File ID: 60403008.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/03/2017 13:19

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 207145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	8.86		1.0	0.76
79-34-5	1,1,2,2-Tetrachloroethane	10.5		1.0	0.37
107-13-1	Acrylonitrile	96.0		20	3.3
123-91-1	1,4-Dioxane	258		200	16

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		72-134
2037-26-5	Toluene-d8 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		72-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403008.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-Apr-2017 13:19:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016136-008
Misc. Info.: LCS
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 13:41:42 Calib Date: 29-Mar-2017 15:25:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170329-16081.b\60329012.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK033

First Level Reviewer: fergusond Date: 03-Apr-2017 13:41:42

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.062	4.047	0.015	86	92883	1000.0	1000.0	
*	2 Fluorobenzene (IS)	96	7.122	7.125	-0.003	98	340490	50.0	50.0	
*	3 Chlorobenzene-d5	119	10.236	10.233	0.003	91	72104	50.0	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.579	12.582	-0.003	97	111905	50.0	50.0	
$	5 Dibromofluoromethane (Surr	113	6.392	6.389	0.003	92	75466	50.0	49.3	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.763	6.760	0.003	81	114036	50.0	48.0	
$	7 Toluene-d8 (Surr)	98	8.782	8.780	0.002	94	290724	50.0	51.5	
$	8 4-Bromofluorobenzene (Surr	95	11.423	11.420	0.003	86	114756	50.0	48.1	
	11 Dichlorodifluoromethane	85	1.513	1.510	0.003	99	120842	50.0	56.1	
	12 Chloromethane	50	1.671	1.663	0.008	99	158222	50.0	55.9	
	13 Vinyl chloride	62	1.793	1.784	0.009	98	129248	50.0	54.2	
	14 Butadiene	39	1.835	1.827	0.008	91	145726	50.0	57.0	
	15 Bromomethane	94	2.139	2.131	0.008	93	38374	50.0	56.5	
	16 Chloroethane	64	2.261	2.247	0.014	99	57603	50.0	53.1	
	17 Dichlorofluoromethane	67	2.529	2.514	0.015	97	116191	50.0	56.0	
	18 Trichlorofluoromethane	101	2.547	2.532	0.015	97	83521	50.0	54.8	
	20 Ethyl ether	59	2.894	2.885	0.009	98	115183	50.0	49.7	
	21 Acrolein	56	3.064	3.056	0.008	99	75198	150.0	120.5	
	22 1,1-Dichloroethene	96	3.180	3.171	0.009	94	95745	50.0	52.3	
	23 1,1,2-Trichloro-1,2,2-trif	101	3.240	3.226	0.014	95	98688	50.0	55.5	
	24 Acetone	43	3.259	3.256	0.003	99	65131	100.0	95.2	
	25 Iodomethane	142	3.356	3.354	0.002	100	123392	50.0	50.3	
	26 Carbon disulfide	76	3.447	3.445	0.002	100	210886	50.0	50.9	
	29 3-Chloro-1-propene	76	3.715	3.707	0.008	89	51926	50.0	50.1	
	30 Methyl acetate	43	3.739	3.731	0.008	99	547370	250.0	244.4	
	31 Methylene Chloride	84	3.934	3.926	0.008	97	112604	50.0	48.5	
	32 2-Methyl-2-propanol	59	4.189	4.187	0.002	89	54382	500.0	473.2	
	33 Acrylonitrile	53	4.323	4.321	0.002	99	548257	500.0	480.0	
	34 trans-1,2-Dichloroethene	96	4.366	4.358	0.008	95	106218	50.0	53.4	
	35 Methyl tert-butyl ether	73	4.372	4.364	0.008	97	282241	50.0	46.8	
	36 Hexane	57	4.792	4.789	0.003	95	177755	50.0	52.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.005	5.002	0.003	97	194852	50.0	51.5	
38 Vinyl acetate	43	5.059	5.057	0.002	97	226001	50.0	47.5	
42 2,2-Dichloropropane	97	5.759	5.763	-0.004	76	18147	50.0	48.9	
43 cis-1,2-Dichloroethene	96	5.771	5.769	0.002	86	115650	50.0	50.6	
44 2-Butanone (MEK)	43	5.783	5.781	0.002	98	111623	100.0	105.9	
48 Chlorobromomethane	128	6.063	6.055	0.008	89	45266	50.0	46.4	
49 Tetrahydrofuran	42	6.069	6.067	0.002	93	84030	100.0	87.8	
50 Chloroform	83	6.209	6.207	0.002	96	171477	50.0	48.5	
51 1,1,1-Trichloroethane	97	6.367	6.365	0.002	95	117640	50.0	50.7	
52 Cyclohexane	56	6.434	6.432	0.002	94	245694	50.0	54.8	
53 Carbon tetrachloride	117	6.538	6.535	0.003	94	94056	50.0	54.8	
54 1,1-Dichloropropene	75	6.556	6.548	0.008	93	143667	50.0	53.3	
56 Benzene	78	6.775	6.767	0.008	97	427370	50.0	52.9	
55 Isobutyl alcohol	41	6.769	6.767	0.002	67	79778	1250.0	1254.7	
57 1,2-Dichloroethane	62	6.854	6.852	0.002	96	151096	50.0	48.1	
59 n-Heptane	43	7.146	7.138	0.008	97	148441	50.0	54.7	
61 Trichloroethene	130	7.511	7.509	0.002	96	93805	50.0	50.1	
63 Methylcyclohexane	83	7.748	7.746	0.002	95	180596	50.0	51.8	
64 1,2-Dichloropropane	63	7.785	7.783	0.003	93	103867	50.0	48.4	
65 1,4-Dioxane	88	7.870	7.868	0.002	38	17389	1000.0	1289.4	
67 Dibromomethane	93	7.876	7.874	0.002	97	57040	50.0	47.8	
68 Dichlorobromomethane	83	8.071	8.075	-0.003	97	95479	50.0	45.5	
70 2-Chloroethyl vinyl ether	63	8.381	8.379	0.002	92	138778	100.0	111.1	
71 cis-1,3-Dichloropropene	75	8.521	8.519	0.002	91	112626	50.0	44.5	
72 4-Methyl-2-pentanone (MIBK	43	8.679	8.677	0.002	98	228446	100.0	97.6	
73 Toluene	91	8.849	8.847	0.002	98	405661	50.0	55.4	
74 trans-1,3-Dichloropropene	75	9.099	9.103	-0.004	98	90299	50.0	44.8	
75 Ethyl methacrylate	69	9.166	9.163	0.003	92	121426	50.0	50.2	
76 1,1,2-Trichloroethane	97	9.293	9.291	0.002	94	83928	50.0	52.5	
77 Tetrachloroethene	164	9.360	9.364	-0.004	96	74526	50.0	55.0	
78 1,3-Dichloropropane	76	9.452	9.449	0.003	98	149622	50.0	51.7	
79 2-Hexanone	43	9.512	9.510	0.002	99	157498	100.0	114.5	
81 Chlorodibromomethane	129	9.665	9.662	0.003	92	57070	50.0	45.8	
82 Ethylene Dibromide	107	9.774	9.772	0.002	99	73892	50.0	48.6	
83 3-Chlorobenzotrifluoride	180	10.249	10.246	0.003	95	124581	50.0	51.8	
84 Chlorobenzene	112	10.267	10.265	0.002	91	248511	50.0	52.7	
85 4-Chlorobenzotrifluoride	180	10.334	10.331	0.003	96	114488	50.0	51.4	
86 1,1,1,2-Tetrachloroethane	131	10.358	10.362	-0.004	87	73754	50.0	50.3	
87 Ethylbenzene	106	10.364	10.368	-0.004	99	137543	50.0	52.8	
88 m-Xylene & p-Xylene	106	10.498	10.502	-0.004	99	170233	50.0	52.4	
89 o-Xylene	106	10.881	10.879	0.002	98	165191	50.0	51.0	
90 Styrene	104	10.900	10.903	-0.003	94	279749	50.0	53.2	
91 Bromoform	173	11.082	11.080	0.002	95	35979	50.0	44.3	
92 2-Chlorobenzotrifluoride	180	11.155	11.153	0.002	96	122641	50.0	50.9	
93 Isopropylbenzene	105	11.246	11.250	-0.004	97	412190	50.0	52.8	
95 Bromobenzene	156	11.557	11.554	0.003	98	98703	50.0	49.9	
96 1,1,2,2-Tetrachloroethane	83	11.563	11.560	0.003	93	126765	50.0	52.7	
97 trans-1,4-Dichloro-2-buten	53	11.599	11.603	-0.004	76	38691	50.0	42.7	
98 1,2,3-Trichloropropane	110	11.617	11.615	0.002	90	39636	50.0	48.0	
99 N-Propylbenzene	120	11.666	11.664	0.002	99	107580	50.0	50.5	
100 2-Chlorotoluene	126	11.751	11.749	0.002	95	94655	50.0	50.6	
101 3-Chlorotoluene	126	11.818	11.816	0.002	97	99457	50.0	50.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	11.849	11.846	0.003	93	332651	50.0	50.9	
103 4-Chlorotoluene	126	11.873	11.877	-0.004	99	102940	50.0	50.4	
104 tert-Butylbenzene	119	12.165	12.163	0.002	94	258811	50.0	49.7	
106 1,2,4-Trimethylbenzene	105	12.220	12.223	-0.003	98	336633	50.0	49.8	
107 1,2-dichloro-4-(trifluorom	214	12.268	12.266	0.002	97	84846	50.0	48.1	
108 sec-Butylbenzene	105	12.384	12.382	0.002	96	375346	50.0	50.0	
109 1,3-Dichlorobenzene	146	12.499	12.497	0.002	96	184226	50.0	49.9	
110 4-Isopropyltoluene	119	12.542	12.540	0.002	97	305618	50.0	49.1	
111 1,4-Dichlorobenzene	146	12.603	12.601	0.002	93	188877	50.0	48.8	
113 2,4-Dichloro-1-(triflourom	214	12.633	12.637	-0.004	95	82340	50.0	49.2	
114 2,5-Dichlorobenzotrifluori	214	12.676	12.680	-0.004	98	87870	50.0	47.9	
116 n-Butylbenzene	91	12.950	12.947	0.003	98	271725	50.0	48.2	
117 1,2-Dichlorobenzene	146	12.962	12.960	0.002	96	176873	50.0	49.9	
118 1,2-Dibromo-3-Chloropropan	75	13.747	13.744	0.003	71	16429	50.0	47.6	
119 2,4- & 2,5- & 2,6- Dichlor	125	13.893	13.890	0.003	99	333652	150.0	141.5	
121 2,3- & 3,4- Dichlorotoluen	125	14.306	14.304	0.002	98	230593	100.0	92.9	
122 1,2,4-Trichlorobenzene	180	14.574	14.572	0.002	94	83034	50.0	43.2	
123 Hexachlorobutadiene	225	14.720	14.718	0.002	97	30959	50.0	42.8	
124 Naphthalene	128	14.836	14.833	0.003	98	254393	50.0	47.5	
125 1,2,3-Trichlorobenzene	180	15.055	15.058	-0.003	95	71912	50.0	43.3	
126 2,4,5-Trichlorotoluene	159	15.851	15.849	0.002	0	32094	50.0	32.6	
127 2,3,6-Trichlorotoluene	159	15.949	15.953	-0.004	91	31881	50.0	35.1	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-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	104.0	
S 131 Xylenes, Total	106				0		100.0	103.4	
S 132 1,3-Dichloropropene, Total	1				0		100.0	89.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260VOA2ND_00235	Amount Added:	2.00	Units: uL		
voaWva2ndRete_00001	Amount Added:	2.00	Units: uL		
voaWKet2ndRes_00017	Amount Added:	2.00	Units: uL		
voaW2cle1stRe_00008	Amount Added:	2.00	Units: uL		
voaWEEmix1stR_00005	Amount Added:	2.00	Units: uL		
voaWAcro2ndRe_00011	Amount Added:	6.00	Units: uL		
VOA8260INT_00067	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00066	Amount Added:	2.00	Units: uL	Run Reagent	

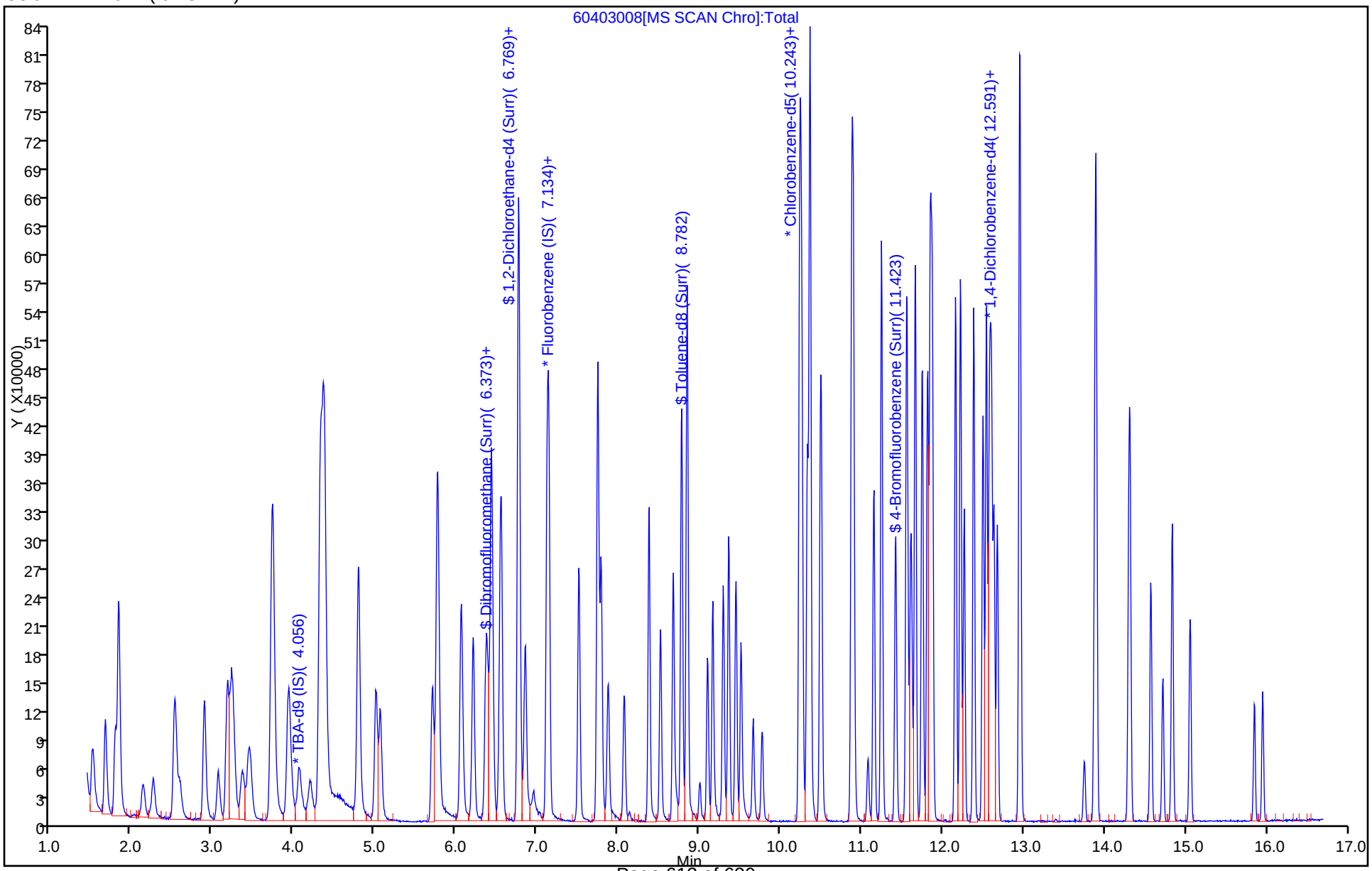
Report Date: 03-Apr-2017 13:41:42 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403008.D

Injection Date:	03-Apr-2017 13:19:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	LCS			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\60403008.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-Apr-2017 13:19:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0016136-008
Misc. Info.: LCS
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170403-16136.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2017 13:41:42 Calib Date: 29-Mar-2017 15:25:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20170329-16081.b\60329012.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK033

First Level Reviewer: fergusond Date: 03-Apr-2017 13:41:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	49.3	98.59
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.0	95.99
$ 7 Toluene-d8 (Surr)	50.0	51.5	102.91
$ 8 4-Bromofluorobenzene (Surr)	50.0	48.1	96.14

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Instrument ID: CHHP6 Start Date: 03/27/2017 11:25

Analysis Batch Number: 206518 End Date: 03/27/2017 18:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-206518/4		03/27/2017 11:25	1	60327004.D	DB-624 0.18(mm)
IC 180-206518/6		03/27/2017 12:56	1	60327006.D	DB-624 0.18(mm)
IC 180-206518/7		03/27/2017 13:20	1	60327007.D	DB-624 0.18(mm)
ICIS 180-206518/8		03/27/2017 13:45	1	60327008.D	DB-624 0.18(mm)
IC 180-206518/9		03/27/2017 14:09	1	60327009.D	DB-624 0.18(mm)
IC 180-206518/10		03/27/2017 14:33	1	60327010.D	DB-624 0.18(mm)
IC 180-206518/11		03/27/2017 14:57	1	60327011.D	DB-624 0.18(mm)
IC 180-206518/12		03/27/2017 15:21	1	60327012.D	DB-624 0.18(mm)
IC 180-206518/13		03/27/2017 15:45	1	60327013.D	DB-624 0.18(mm)
ZZZZZ		03/27/2017 17:50	1		DB-624 0.18(mm)
ICV 180-206518/19		03/27/2017 18:14	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Instrument ID: CHHP6 Start Date: 04/03/2017 10:00

Analysis Batch Number: 207145 End Date: 04/03/2017 21:49

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-207145/1		04/03/2017 10:00	1	60403001.D	DB-624 0.18(mm)
CCVIS 180-207145/2		04/03/2017 10:39	1	60403002.D	DB-624 0.18(mm)
CCV 180-207145/3		04/03/2017 11:03	1	60403003.D	DB-624 0.18(mm)
ZZZZZ		04/03/2017 11:27	1		DB-624 0.18(mm)
MB 180-207145/5		04/03/2017 11:55	1	60403005.D	DB-624 0.18(mm)
ZZZZZ		04/03/2017 12:30	1		DB-624 0.18(mm)
ZZZZZ		04/03/2017 12:54	1		DB-624 0.18(mm)
LCS 180-207145/8		04/03/2017 13:19	1	60403008.D	DB-624 0.18(mm)
ZZZZZ		04/03/2017 13:43	1		DB-624 0.18(mm)
ZZZZZ		04/03/2017 14:08	1		DB-624 0.18(mm)
ZZZZZ		04/03/2017 15:45	1		DB-624 0.18(mm)
ZZZZZ		04/03/2017 16:09	1		DB-624 0.18(mm)
180-64801-9		04/03/2017 16:33	1	60403016.D	DB-624 0.18(mm)
180-64801-10		04/03/2017 16:58	1	60403017.D	DB-624 0.18(mm)
180-64801-11		04/03/2017 17:22	1	60403018.D	DB-624 0.18(mm)
180-64801-23		04/03/2017 17:46	1	60403019.D	DB-624 0.18(mm)
ZZZZZ		04/03/2017 18:11	1		DB-624 0.18(mm)
ZZZZZ		04/03/2017 18:35	1		DB-624 0.18(mm)
ZZZZZ		04/03/2017 18:59	1		DB-624 0.18(mm)
ZZZZZ		04/03/2017 19:24	1		DB-624 0.18(mm)
ZZZZZ		04/03/2017 19:48	1		DB-624 0.18(mm)
ZZZZZ		04/03/2017 20:12	1		DB-624 0.18(mm)
ZZZZZ		04/03/2017 20:36	1		DB-624 0.18(mm)
ZZZZZ		04/03/2017 21:01	1		DB-624 0.18(mm)
ZZZZZ		04/03/2017 21:49	1		DB-624 0.18(mm)

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-64801-1

SDG No.:

Project: Harley Davidson

Client Sample ID	Lab Sample ID
HD-SPBA-SB-009-30/30.5-0	180-64801-1
HD-SPBA-SB-009-35/35.5-0	180-64801-2
HD-SPBA-SB-009-40/40.5-0	180-64801-3
HD-SPBA-SB-009-45/45.5-0	180-64801-4
HD-SPBA-SB-009-53.5/54-0	180-64801-5
HD-SPBA-SB-009-58.5-59-0	180-64801-6
HD-SPBA-SB-009-61/61.5-0	180-64801-7
HD-SPBA-SB-009-65/68-0	180-64801-8
HD-SPBA-SB-010-0.5/1.0-0	180-64801-12
HD-SPBA-SB-010-5/5.5-0	180-64801-13
HD-SPBA-SB-010-10/10.5-0	180-64801-14
HD-SPBA-SB-010-15/15.5-0	180-64801-15
HD-SPBA-SB-010-20/20.5-0	180-64801-16
HD-SPBA-SB-010-25/25.5-0	180-64801-17
HD-SPBA-SB-010-31.6/32.2-0	180-64801-18
HD-SPBA-SB-010-35/35.5-0	180-64801-19
HD-SPBA-SB-010-40/40.5-0	180-64801-20
HD-SPBA-SB-010-45/45.5-0	180-64801-21
HD-SPBA-SB-010-50/50.5	180-64801-22

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-64801-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 2540G RL Date: 01/31/2010 13:27

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-64801-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 2540G XRL Date: 01/31/2010 13:31

Analyte	Wavelength/ Mass	XRL (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 2540G

Start Date: 04/03/2017 14:31 End Date: 04/03/2017 14:31

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
180-64801-1	1	T	14:31	X	X																								
180-64801-1 DU	1	T	14:31	X	X																								
180-64801-2	1	T	14:31	X	X																								
180-64801-3	1	T	14:31	X	X																								
180-64801-4	1	T	14:31	X	X																								
180-64801-5	1	T	14:31	X	X																								
180-64801-6	1	T	14:31	X	X																								
180-64801-7	1	T	14:31	X	X																								
180-64801-8	1	T	14:31	X	X																								
180-64801-12	1	T	14:31	X	X																								
180-64801-13	1	T	14:31	X	X																								
180-64801-14	1	T	14:31	X	X																								
180-64801-14 DU	1	T	14:31	X	X																								
180-64801-15	1	T	14:31	X	X																								
180-64801-16	1	T	14:31	X	X																								
180-64801-17	1	T	14:31	X	X																								
180-64801-18	1	T	14:31	X	X																								
180-64801-19	1	T	14:31	X	X																								
180-64801-20	1	T	14:31	X	X																								
180-64801-21	1	T	14:31	X	X																								
180-64801-22	1	T	14:31	X	X																								

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Batch Number: 207182 Batch Start Date: 04/03/17 14:31 Batch Analyst: Wesoloski, Michael

Batch Method: 2540G Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
180-64801-A-1	HD-SPBA-SB-009-30/30.5-0	2540G	T	cGGQS 0.1174	2.54 g	12.58 g	10.63 g		
180-64801-A-1 DU	HD-SPBA-SB-009-30/30.5-0	2540G	T	cGGQR 0.1140	2.55 g	12.79 g	11.00 g		
180-64801-A-2	HD-SPBA-SB-009-35/35.5-0	2540G	T	cGGQP 0.1174	2.55 g	12.21 g	10.47 g		
180-64801-A-3	HD-SPBA-SB-009-40/40.5-0	2540G	T	cGGQQ 0.1171	2.55 g	12.10 g	10.23 g		
180-64801-A-4	HD-SPBA-SB-009-45/45.5-0	2540G	T	cGGF0 0.1167	2.55 g	12.76 g	11.15 g		
180-64801-A-5	HD-SPBA-SB-009-53.5/54-0	2540G	T	cGGEZ 0.1159	2.56 g	12.85 g	10.68 g		
180-64801-A-6	HD-SPBA-SB-009-58.5-59-0	2540G	T	cGGEY 0.1180	2.56 g	11.43 g	9.03 g		
180-64801-A-7	HD-SPBA-SB-009-61/61.5-0	2540G	T	cGGEX 0.1164	2.56 g	12.48 g	10.97 g		
180-64801-A-8	HD-SPBA-SB-009-65/68-0	2540G	T	cGGEW 0.1163	2.58 g	14.08 g	11.98 g		
180-64801-A-12	HD-SPBA-SB-010-0.5/1.0-0	2540G	T	cGGET 0.1172	2.60 g	13.09 g	11.79 g		
180-64801-A-13	HD-SPBA-SB-010-5/5.5-0	2540G	T	cGGES 0.1174	2.59 g	12.62 g	11.07 g		
180-64801-A-14	HD-SPBA-SB-010-10/10.5-0	2540G	T	cGGEV 0.1145	2.54 g	12.34 g	10.61 g		
180-64801-A-14 DU	HD-SPBA-SB-010-10/10.5-0	2540G	T	cGGEU 0.1169	2.56 g	12.74 g	10.96 g		
180-64801-A-15	HD-SPBA-SB-010-15/15.5-0	2540G	T	cGGER 0.1179	2.56 g	13.34 g	11.13 g		
180-64801-A-16	HD-SPBA-SB-010-20/20.5-0	2540G	T	cGGEQ 0.1169	2.57 g	12.22 g	10.18 g		
180-64801-A-17	HD-SPBA-SB-010-25/25.5-0	2540G	T	cGGEP 0.1175	2.57 g	12.48 g	10.00 g		
180-64801-A-18	HD-SPBA-SB-010-31.6/32.2-0	2540G	T	cGGR3 0.1152	2.53 g	12.58 g	10.44 g		
180-64801-A-19	HD-SPBA-SB-010-35/35.5-0	2540G	T	cGGQX 0.1174	2.54 g	12.68 g	10.75 g		
180-64801-A-20	HD-SPBA-SB-010-40/40.5-0	2540G	T	cGGQW 0.1161	2.54 g	12.99 g	10.87 g		
180-64801-A-21	HD-SPBA-SB-010-45/45.5-0	2540G	T	cGGQU 0.1178	2.56 g	12.73 g	10.60 g		
180-64801-A-22	HD-SPBA-SB-010-50/50.5	2540G	T	cGGR2 0.1168	2.53 g	13.29 g	11.44 g		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-64801-1

SDG No.:

Batch Number: 207182 Batch Start Date: 04/03/17 14:31 Batch Analyst: Wesoloski, Michael

Batch Method: 2540G Batch End Date:

Batch Notes	
Balance ID	1126472457 No Unit
Date and Time Samples in Desiccator	04/04/17@ 05:10
Date and Time Samples out of Desiccator	04/04/17@ 07:10
Date samples were placed in the oven	04/03/17
Oven Temp In	104 Degrees C
Time samples were place in the oven	14:50
Date samples were removed from oven	04/04/17
Oven Temp Out	104 Degrees C
Time Samples were removed from oven	05:10
Oven ID	5005
Thermometer ID	Wet-34
Uncorrected In Temperature	104 Celsius
Uncorrected Out Temperature	104 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Reco

180-64801 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: KBT	Lab PM: Gamber, Ca	COC No: 180-36449-8014.5
Client Contact: Kaitlin Fleming / Chris Ureil	Phone: 631-766-2976	E-Mail: carrie.gamb	Page: Page 1 of 2 Cooler 1
Company: Groundwater Sciences Corporation			Job #: 100231
Address: 2601 Market Place Street, Suite 310	Due Date Requested: 4/6/17		Analysis Requested
City: Harrisburg	TAT Requested (days): Sample results to be provided by 4/6/17 as per email w/ Carrie Gamber		Preservation Codes:
State, Zip: PA, 17110-9307			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Phone: 901-8194(Tel)	PO #: Purchase Order not required		
Email: kfleming@groundwatersciences.com	WO #:		Other:
Project Name: Harley Davidson	Project #: 18010144		
Site: SPBA	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOCs by 8260 GAPP List	VOCs by 8260 GAPP List	moisture	VOCs by 8260 GAPP List																Total Number of containers	Special Instructions/Note:
			Preservation Code:				J	F	N	A																	
HD-SPBA-SB-009-30/30.5-0	3/30/17	0935	G	S	N	N	2	1	1																	4	
HD-SPBA-SB-009-35/35.5-0	3/30/17	0950	G	S	N	N	2	1	1																	4	
HD-SPBA-SB-009-40/40.5-0	3/30/17	1000	G	S	N	N	2	1	1																	4	
HD-SPBA-SB-009-45/45.5-0	3/30/17	1010	G	S	N	N	2	1	1																	4	
HD-SPBA-SB-009-45/45.5-0MS	3/30/17	1010	G	S	N	N	2	1	1																	4	
HD-SPBA-SB-009-45/45.5-0MSD	3/30/17	1010	G	S	N	N	2	1	1																	4	
HD-SPBA-SB-009-53.5/54-0	3/30/17	1045	G	S	N	N	2	1	1																	4	
HD-SPBA-SB-009-58.5/59-0	3/30/17	1120	G	S	N	N	2	1	1																	4	
HD-SPBA-SB-009-61/61.5-0	3/30/17	1155	G	S	N	N	2	1	1																	4	
HD-SPBA-SB-009-65/68-0	3/30/17	1250	G	S	N	N	2	1	1																	4	
HD-QC5-01-2	3/30/17	1200	G	W	N					2																2	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/30/17 1900	GSC		3/31/17 915	TAP
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: KBF	Lab PM: Gamber, Carrie L	Carrier Tracking No(s):	COC No: 180-36449-8014.6
Client Contact: Kaitlin Fleming / chris prell	Phone: 631-766-2476	E-Mail: carrie.gamber@testamericainc.com		Page: Page 2 of 12 cooler-1
Company: Groundwater Sciences Corporation				Job #: 10012.37
Address: 2601 Market Place Street, Suite 310	Due Date Requested: 4/6/17			
City: Harrisburg	TAT Requested (days): provided by Sample results to be 4/6/17 as per conv w/carrie Gamber			
State, Zip: PA, 17110-9307				
Phone: 901-8194(Tel)	PO #: Purchase Order not required			
Email: kfleming@groundwatersciences.com	WO #:			
Project Name: Harley Davidson	Project #: 18010144			
Site: SPBA	SSOW#:			

Analysis Requested

VOCs by 8260 QMPLIST

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOCs by 8260 QMPLIST	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
HD-QC2-01-3	3/30/17	1015	G	W	N	N	3	3	EB
HD-QC2-01-4	3/30/17	1020	G	W	N	N	3	3	FB

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/30/17 1900	GSC	Thomas Arp	3/31/17 915	TAP
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: KBE	Lab PM: Gamber, Carrie L	Carrier Tracking No(s):	COC No: 180-36449-8014.8
Client Contact: Kaitlin Fleming / Chris Grill	Phone: 031-766-2976	E-Mail: carrie.gamber@testamericainc.com		Page: Page 8 of 12 Cooler 2
Company: Groundwater Sciences Corporation				Job #: 10012.31

Address: 2601 Market Place Street, Suite 310	Due Date Requested: 4/6/17	Analysis Requested	Preservation Codes:
City: Harrisburg	TAT Requested (days): Sample Results to be provided by 4/6/17 as per conv. w/ Carrie Gamber		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: PA, 17110-9307			
Phone: 901-8194(Tel)	PO #: Purchase Order not required		Other:
Email: kfleming@groundwatersciences.com	WO #:		
Project Name: Harley Davidson	Project #: 18010144		
Site: SPBA	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	J: VOCs by 8260 QAPP List	F: VOCs by 8260 QAPP List	N: Moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				J	F	N		
HD-SPBA-SB-010-0.5/1.0-0	3/30/17	1400	G	S	N	N	2	1	1	4	
HD-SPBA-SB-010-5/5.5-0	3/30/17	1420	G	S	N	N	2	1	1	4	
HD-SPBA-SB-010-10/10.5-0	3/30/17	1435	G	S	N	N	2	1	1	4	
HD-SPBA-SB-010-15/15.5-0	3/30/17	1445	G	S	N	N	2	1	1	4	
HD-SPBA-SB-010-20/20.5-0	3/30/17	1450	G	S	N	N	2	1	1	4	
HD-SPBA-SB-010-25/25.5-0	3/30/17	1500	G	S	N	N	2	1	1	4	
HD-SPBA-SB-010-31.6/32.2-0	3/30/17	1510	G	S	N	N	2	1	1	4	
HD-SPBA-SB-010-35/35.5-0	3/30/17	1520	G	S	N	N	2	1	1	4	
HD-SPBA-SB-010-40/40.5-0	3/30/17	1545	G	S	N	N	2	1	1	4	
HD-SPBA-SB-010-45/45.5-0	3/30/17	1615	G	S	N	N	2	1	1	4	
HD-SPBA-SB-010-50/50.5-0	3/30/17	1735	G	S	N	N	2	1	1	4	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/30/17 1900	GSC	[signature]	3/31/17 915	TAP
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: KBF	Lab PM: Gamber, Carrie L	Carrier Tracking No(s):	COC No: 180-36449-8014.9
Client Contact: Kaitlin Fleming / Chris Orlil	Phone:	E-Mail: carrie.gamber@testamericainc.com		Page: Page 2 of 2 Cooler
Company: Groundwater Sciences Corporation				Job #: 100.2.31
Address: 2601 Market Place Street, Suite 310	Due Date Requested: 4/6/17	Analysis Requested		
City: Harrisburg	TAT Requested (days): Sample results to be provided by 4/6/17 as per Convo w/ Carrie. Gamber			
State, Zip: PA, 17110-9307				
Phone: 901-8194(Tel)	PO #: Purchase Order not required			
Email: kfleming@groundwatersciences.com	WO #:			
Project Name: Harley Davidson	Project #: 18010144			
Site: SPBX	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOCs by 8260 QAPPList	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
HD-QC6-01-2	3/30/17	1205	G	W	N	N	2	2	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		3/30/17 1400	GSL	Flummer AM	3/31/17 915	TAP
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

641-7050

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ORIGIN ID:AGCA (717) 652-6832
KAITLIN FLEMING
GROUNDWATER SCIENCES CORPORATION
2601 MARKET PLACE STREET, SUITE 310

HARRISBURG, PA 171109307
UNITED STATES US

SHIP DATE: 23MAR17
ACTWGT: 10.00 LB MAN
CAD: 741733/CAFE3011

TO SHIPPING MANAGER
TESTAMERICA
301 ALPHA DR
RETURNS
PITTSBURGH PA 15238
(412) 963-7058
REF: S180-36449

RMA:

FedEx Express

FedEx
TRK# 0221 7255 9074 [illegible]86

FRI - 31 MAR 10:30A
PRIORITY OVERNIGHT

EV AGCA

15238
PA-US PIT

Uncorrected temp 1.4 °C
Thermometer ID 12
CF 0 Initials TS

PT-WI-SR-001 effective 7/26/13

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ORIGIN ID:AGCA (717) 652-6832
KAITLIN FLEMING
GROUNDWATER SCIENCES CORPORATION
2601 MARKET PLACE STREET, SUITE 310

HARRISBURG, PA 171109307
UNITED STATES US

SHIP DATE: 23MAR17
ACTWGT: 10.00 LB MAN
CAD: 741733/CAFE3011

TO SHIPPING MANAGER
TESTAMERICA
301 ALPHA DR
RETURNS
PITTSBURGH PA 15238
(412) 963-7058
REF: S180-36449

FedEx Express

FedEx
TRK# 0221 7255 9074 3897

FRI - 31 MAR 10:30A
PRIORITY OVERNIGHT

EV AGCA

15238
PA-US PIT

Uncorrected temp 2.9 °C
Thermometer ID 12
CF 0 Initials TS

PT-WI-SR-001 effective 7/26/13

180-64801 Waybill

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-64801-1

Login Number: 64801
List Number: 1
Creator: Say, Thomas C

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.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (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	