Remedial Action Progress Report/ Plan Cover Sheet

CHAPTER 245
STORAGE TANK ACT

- ☐ **Site Characterization Report – Section 245.310(b)**
- ☐ **Site Characterization Report – Site-Specific Standard**
- ☐ **Site Characterization Report – Statewide Health or Background Standard**
- ☐ **Site Characterization Report PLUS – Statewide Health Standard**
- ☐ **Remedial Action Plan – Statewide Health or Background Standard**
- ☐ **Remedial Action Plan – Site-Specific Standard**
- ☒ **Remedial Action Progress Report**
- ☐ **Remedial Action Completion Report – Statewide Health or Background Standard**
- ☐ **Remedial Action Completion Report – Site-Specific Standard**
- ☐ **Post-Remediation Care Plan Report**
- ☐ **Environmental Covenant**

(check all that apply to the enclosed submission)

August 10, 2015

Ms. Pamela S. Trowbridge, P.G.
Pennsylvania Department of Environmental Protection
Environmental Cleanup and Brownfields Program
Southcentral Region
909 Elmerton Avenue
Harrisburg, PA 17110

Subject: **Remedial Action Progress Report**
Seventh Quarterly Groundwater Monitoring Event
Former York Naval Ordnance Plant, York, Pennsylvania
Former Building 45/50 Unleaded Gasoline UST Release - Tank 009
PADEP Facility I.D. No. 67-00823
USTIF Claim No. 2010-0106(M)
Leidos Project 301425.TM.100044.4000.0100

Dear Ms. Trowbridge:

On behalf of Harley-Davidson Motor Company Operations, Inc. (Harley-Davidson), Leidos, Inc. (Leidos) submits this Remedial Action Progress Report (RAPR) to the Pennsylvania Department of Environmental Protection (PADEP) for the above-referenced site (**Figure 1**). This RAPR details the seventh (7^{th}) consecutive quarter of groundwater measurement and sampling performed in accordance with the recommendations presented in the September 9, 2013, Remedial Action Plan (RAP), approved by PADEP on November 22, 2013. The goal of the RAP is to comply with the Site-Specific Standards (SSSs) in soil and the Statewide Health Standards (SHSs) in groundwater to address an unleaded gasoline release from Tank 009.

1.0 QUARTERLY GROUNDWATER MONITORING

1.1 Well Gauging

Gauging of monitoring wells within the study area (MW-26, MW-77, MW-118 through MW-125, and MW-160) was performed by Leidos on June 17, 2015. In contrast with the previous quarter, groundwater elevations in the monitoring wells fell approximately 1.2 feet below their two-year mean groundwater elevations. Light non-aqueous phase liquid (LNAPL) was not detected in any of the monitoring wells.

Depth-to-groundwater measurements in the monitoring wells were subtracted from top-of-casing (TOC) elevations to calculate groundwater elevations (**Table 1**). A groundwater elevation contour map for wells

gauged on June 17, 2015, is presented on **Figure 2**. The hydraulic gradient indicated is consistent with previous measurements at approximately 0.04 southwest from the area of the former dispenser for Tank 009. In general, the hydraulic gradient forms a trough trending downgradient from MW-119 toward MW-125. Monitoring wells MW-26 and MW-77 were not used to complete the groundwater contour map as they do not represent the monitored groundwater flow system.

1.2 Groundwater Sampling

On June 17, 2015, groundwater samples were collected by Leidos from monitoring wells MW-125 and MW-160. Prior to sampling, the wells were purged with a submersible pump at a relatively low purge rate (i.e., less than 0.25 gallons per minute [gpm]) to minimize the drawdown of the groundwater level. The pump was decontaminated before use at each well by washing with a Liqui-Nox®/potable water solution and a potable water rinse.

During purging, water quality field parameters (temperature, pH, conductivity, dissolved oxygen, and turbidity) were measured and recorded. Upon stabilization of the field parameters during purging, groundwater samples were collected directly from the dedicated pump discharge tubing into laboratory-provided 40 milliliter (mL) volatile organic analysis (VOA) vials containing preservative (i.e., hydrochloric acid). Additionally, a quality assurance/quality control (QA/QC) sample, consisting of a laboratory-provided trip blank, accompanied the groundwater samples.

Upon sample collection, labels were affixed to the sample containers, and they were placed into a cooler with ice and a chain-of-custody (COC). The groundwater and QA/QC samples were submitted to TestAmerica for laboratory analysis of the PADEP Short List of Petroleum Products (unleaded gasoline) using United States Environmental Protection Agency (EPA) Method 8260C. All samples arrived at the laboratory in good condition and were analyzed within holding times. The analytical results for the samples are summarized in **Table 2** and on **Figure 3**. A copy of the laboratory analysis report is provided in **Appendix A** on the attached CD.

2.0 RESULTS

The following are the significant findings of the groundwater sample analytical results:

1. The benzene concentration of 660 micrograms per liter (µg/L) in the sample from MW-160 exceeded the PADEP Nonresidential Used Aquifer Medium Specific Concentration (MSC) of 5 µg/L. This was higher than the March 2015 concentration and previous measurements but remained well below 15,000 µg/L—the concentration determined in the December 2012 Supplemental Site Characterization Report (SCR) to not exceed the MSC at the point of compliance (POC).

2. All other analyzed compounds from MW-160 were either not detected or were at concentrations less than their respective MSCs.

3. The sample from MW-125 had non-detectable concentrations for all analyzed parameters except ethylbenzene, which was estimated at less than its 700 µg/L Nonresidential Used Aquifer MSC.

4. The results of groundwater sampling continue to support the SCR's fate-and-transport predictions that the groundwater meets the SHS at the POC.

4.0 PLANNED FUTURE ACTIVITIES

The eighth (8th) and final round of quarterly groundwater sampling is scheduled for September 2015. Upon sampling and receipt of analytical results, a remedial action completion report (RACR) will be submitted to PADEP.

Harley-Davidson and Leidos appreciate PADEP's continued support and assistance on this project. Please contact the undersigned at (717) 901-8843 if you have any questions.

Respectfully submitted,

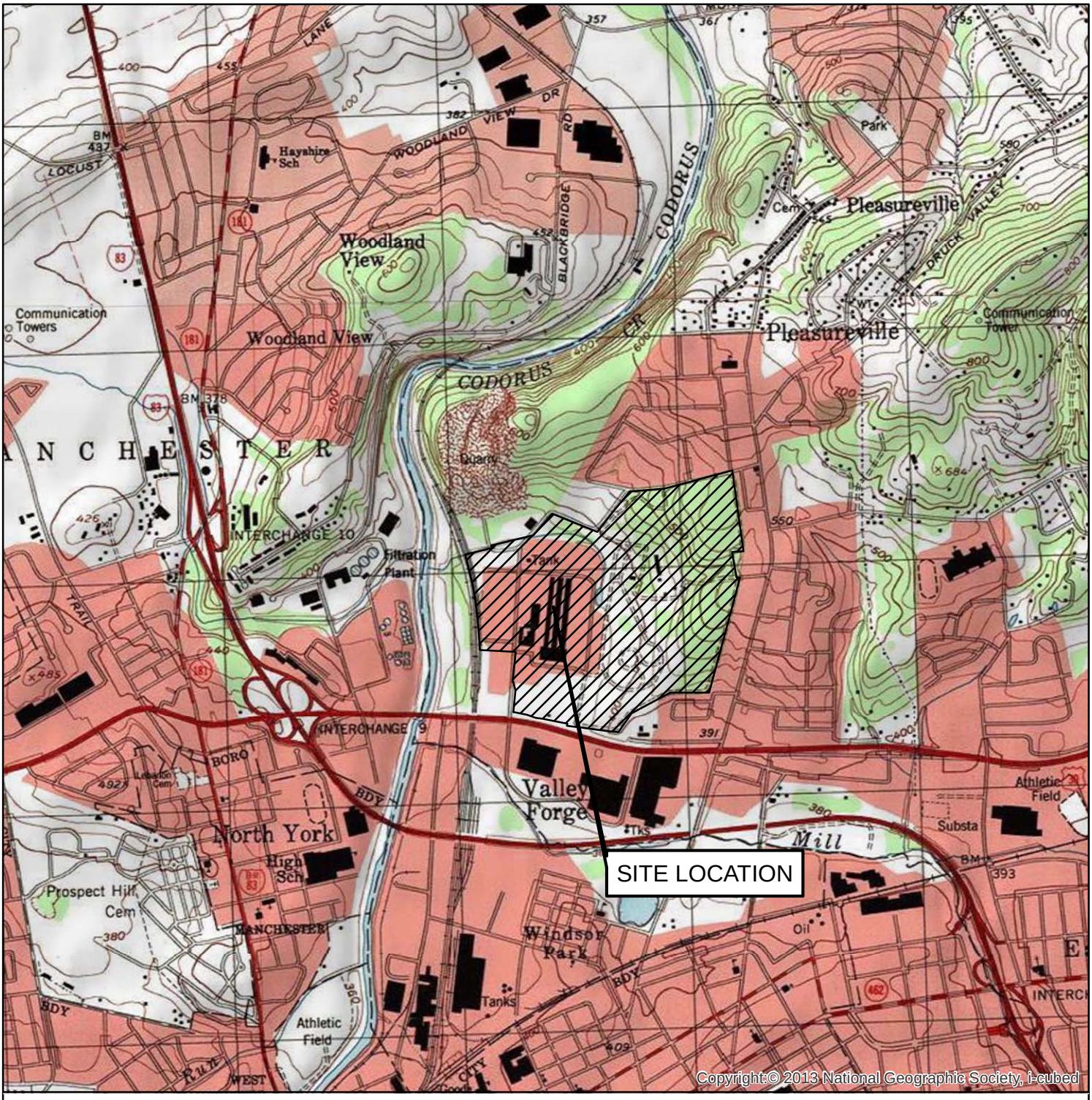
Leidos, Inc.

Kent V. Littlefield, P.G.
Senior Hydrogeologist

Rodney G. Myers
Senior Project Manager

KVL:pr
Attachments
cc: Sharon R. Fisher, Harley-Davidson
Ralph T. Golia, P.G., AMO Environmental Decisions
Gregory Bowman, PADEP, Storage Tank Section
Blanda Nace, YCIDA
Linda Melvin, ICF International – USTIF

FIGURES



2,000 1,000 0 2,000 Feet

N

Pennsylvania

QUADRANGLE LOCATION

FORMER YORK NAVAL ORDNANCE PLANT

1425 EDEN ROAD, YORK, PENNSYLVANIA

Site Location Map

drawn JEB	checked EMW	approved RGM	figure no. 1
date 1/30/2014	date 1/30/2014	date 1/30/2014	
job no. 2603200245/2000/100		file no. Site_Map_20131231	

initials	date	revision

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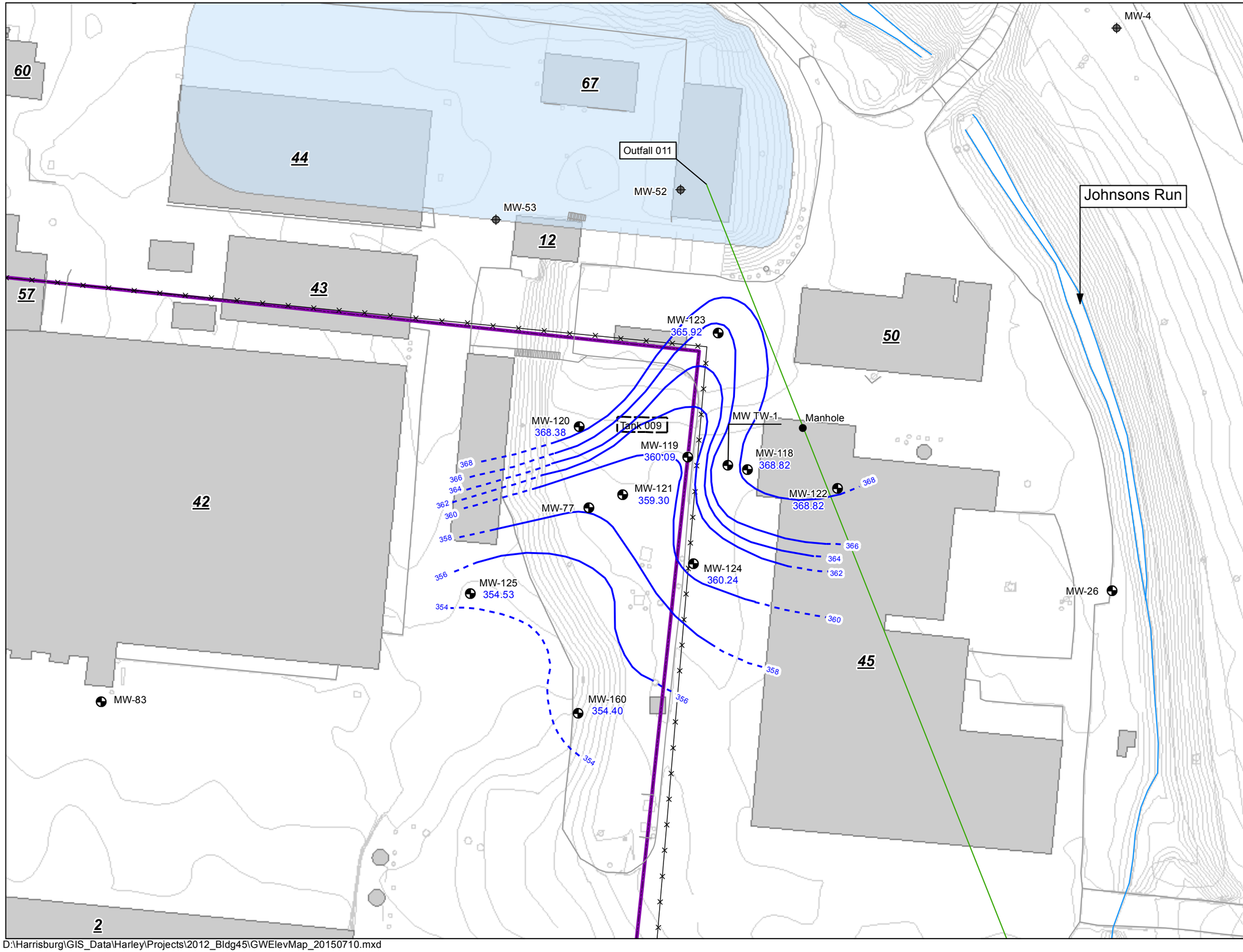
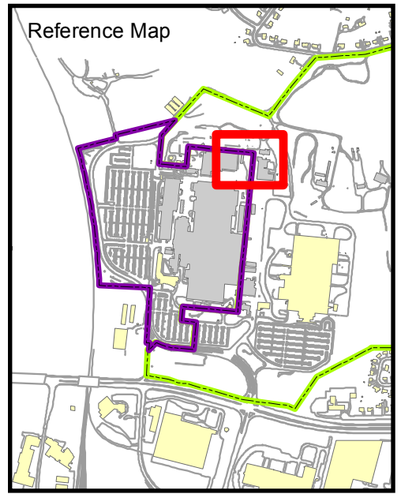


Legend

- Tank 009 (Removed July 2010)
- 45 Demolished Buildings
- Stormwater Detention Basin
- Roads and Curbs
- Fence Line
- West Campus Boundary
- Approximate Stormwater Line
- Monitoring Well
- Abandoned Well
- Groundwater Elevation Contour (Dashed where inferred)
- 356 Groundwater Elevation
- MW-118 368.75 Monitoring Well Identification and Groundwater Elevation



NOTES:

1. *Base data (Buildings, Building Boundaries, Roads and Curbs, underground utilities and Contour Lines, from NuTec Survey conducted in 2006).*
2. *Monitoring Wells and Underground Storage Tank features from Leidos site measurements.*

N

0 25 50 100 Feet

Former York Naval Ordnance Plant
1425 Eden Rd York, Pa 17402

Groundwater Elevation Contour Map
June 17, 2015

drawn TAY	checked	approved	figure no. 2
date 07/10/2015	date	date	
job no. 301425.TM.100044.4000.0100			file no. GWElevMap_20150710

initials	date	revision

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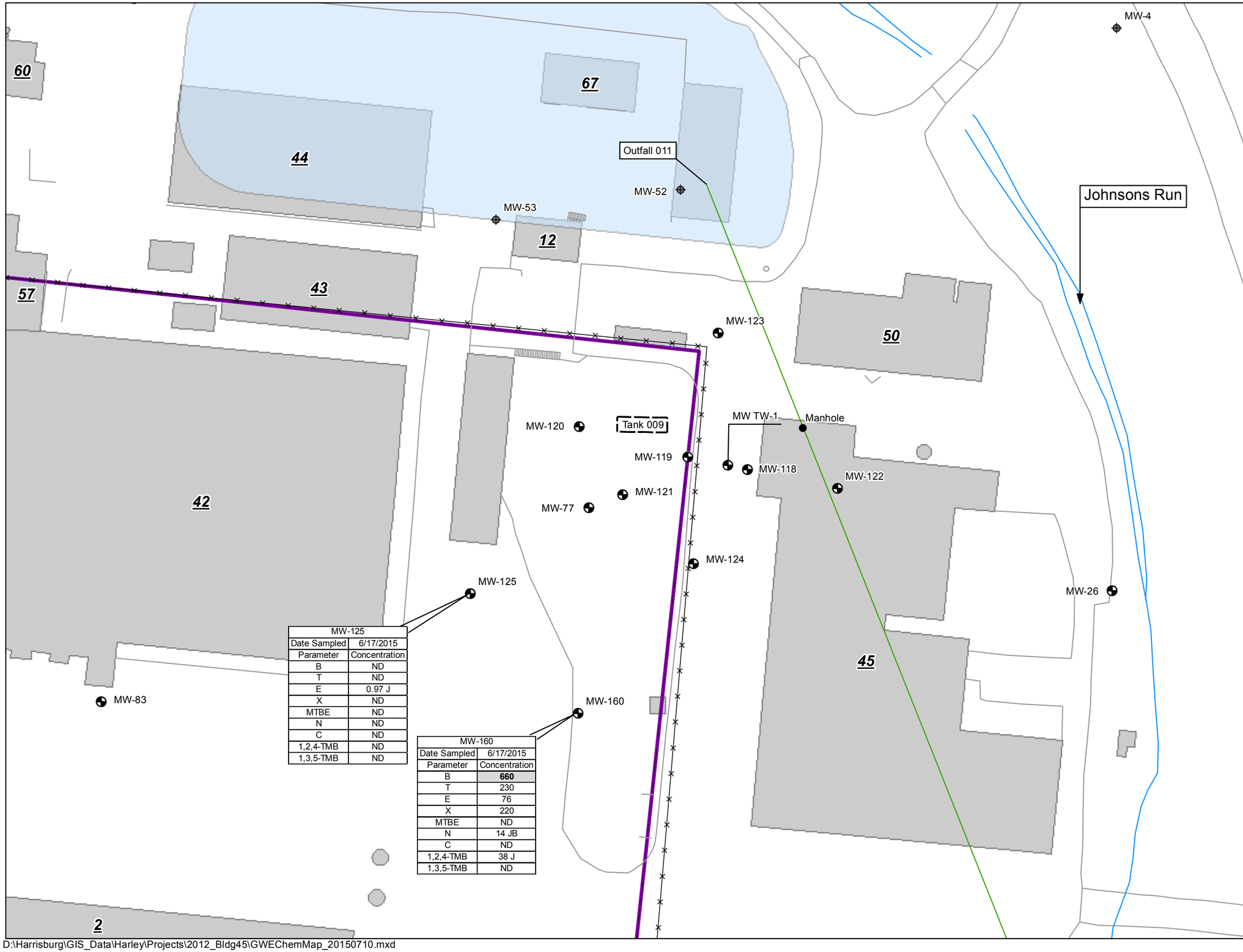


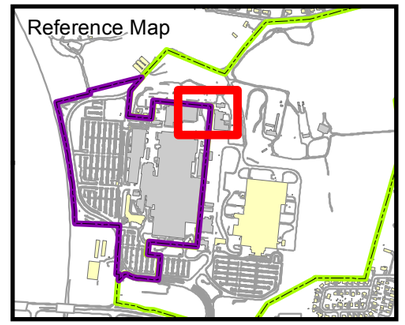
MW-125	
Date Sampled	6/17/2015
Parameter	Concentration
B	ND
T	ND
E	0.97 J
X	ND
MTBE	ND
N	ND
C	ND
1,2,4-TMB	ND
1,3,5-TMB	ND

MW-160	
Date Sampled	6/17/2015
Parameter	Concentration
B	**660**
T	230
E	76
X	220
MTBE	ND
N	14 JB
C	ND
1,2,4-TMB	38 J
1,3,5-TMB	ND

Legend

- Tank 009 (Removed July 2010)
- 45 Demolished Buildings
- Stormwater Detention Basin
- Roads and Curbs
- Fence Line
- West Campus Boundary
- Approximate Stormwater Line
- Monitoring Well
- Abandoned Well

Reference Map



B: Benzene
T: Toluene
E: Ethylbenzene
X: Total Xylenes
MTBE: Methyl Tert-Butyl Ether
N: Naphthalene
C: Cumene
1,2,4-TMB: 1,2,4 - Trimethylbenzene
1,3,5-TMB: 1,3,5 - Trimethylbenzene

B: Compound was found in the blank and sample.
J: Laboratory reported concentration as an approximate value.
MSC: Medium Specific Concentration
ND: Not Detected
PADEP: Pennsylvania Department of Environmental Protection
All results reported in micrograms per liter (µg/L)

Bold/Shaded concentrations are greater than a PADEP Non-Residential MSC

NOTES:
1. *Base data (Buildings, Building Boundaries, Roads and Curbs, underground utilities and Contour Lines, from NuTec Survey conducted in 2006).*
2. *Monitoring Wells and Underground Storage Tank features from Leidos site measurements.*

N

0 25 50 100 Feet

Former York Naval Ordnance Plant
1425 Eden Rd York, Pa 17402

Groundwater Quality Analytical Data June 17, 2015

drawn TAY	checked	approved	figure no.
date 07/10/2015	date	date	3
job no. 301425.TM.100044.4000.0100		file no. GWEChemMap_20150710	

initials	date	revision

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TABLES

Table 1
Monitoring Well Gauging Data and Groundwater Elevations
Former Building 45/50 Unleaded Gasoline Release - Tank 009
Harley-Davidson Motor Company Operations, Inc.
1425 Eden Road, York, York County, Pennsylvania
PADEP Facility ID No. 67-00823
Leidos Project Number 301425.TM.100044.4000.0100

Location	Monitoring Well Installation Date	TOC Elevation (Feet)	Well Diameter (inches)	Total Drilled Depth (fbg)	Screened Interval (fbg)	Top of Well Screen Elevation (feet)	Date	SWL (fbtoc)	SWL Elevation (feet)
MW-118	8/15/2011	377.44	2	25	8 - 23	369.11	6/27/2012	7.50	369.94
							7/2/2012	7.59	369.85
							7/5/2012	7.49	369.95
							7/10/2012	7.59	369.85
							7/20/2012	7.03	370.41
							7/25/2012	7.62	369.82
							8/1/2012	7.45	369.99
							8/6/2012	7.55	369.89
							8/17/2012	7.25	370.19
							8/24/2012	7.22	370.22
							8/30/2012	7.51	369.93
							9/12/2012	7.50	369.94
							10/8/2012	7.38	370.06
							12/18/2013	NM	NM
							3/25/2014	7.28	370.16
							6/19/2014	7.35	370.09
							9/25/2014	8.45	368.99
							12/17/2014	8.69	368.75
							3/25/2015	8.35	369.09
							6/17/2015	8.62	368.82
MW-119	8/17/2011	377.03	2	27	5 - 25	372.20	6/27/2012	16.28	360.75
							7/2/2012	16.75	360.28
							7/5/2012	16.72	360.31
							7/10/2012	17.33	359.70
							7/20/2012	17.30	359.73
							7/25/2012	16.84	360.19
							8/1/2012	16.60	360.43
							8/6/2012	16.67	360.36
							8/17/2012	16.38	360.65
							8/24/2012	16.65	360.38
							8/30/2012	16.54	360.49
							9/12/2012	16.43	360.60
							10/8/2012	14.99	362.04
							12/18/2013	14.46	362.57
							3/25/2014	12.11	364.92
							6/19/2014	12.52	364.51
							9/25/2014	19.84	*357.42
							12/17/2014	18.62	*358.60
							3/25/2015	14.81	362.22
							6/17/2015	16.94	360.09
MW-120	8/17/2011	377.63	2	40	6 - 39	371.30	6/27/2012	9.43	368.20
							7/2/2012	10.50	367.13
							7/5/2012	11.14	366.49
							7/10/2012	12.22	365.41
							7/20/2012	13.20	364.43
							7/25/2012	13.29	364.34
							8/1/2012	13.60	364.03
							8/6/2012	15.73	361.90
							8/17/2012	14.13	363.50
							8/24/2012	14.39	363.24
							8/30/2012	14.41	363.22
							9/12/2012	14.44	363.19
							10/8/2012	10.32	367.31
							12/18/2013	7.72	369.91
							3/25/2014	6.58	371.05
							6/19/2014	7.63	370.00
							9/25/2014	16.33	361.30
							12/17/2014	16.06	361.57
							3/25/2015	7.50	370.13
							6/17/2015	9.25	368.38

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Location	Monitoring Well Installation Date	TOC Elevation (Feet)	Well Diameter (inches)	Total Drilled Depth (fbg)	Screened Interval (fbg)	Top of Well Screen Elevation (feet)	Date	SWL (fbtoc)	SWL Elevation (feet)
MW-121	8/18/2011	376.31	2	36	7 - 35	369.08	6/27/2012	16.61	359.70
							7/2/2012	17.19	359.12
							7/5/2012	17.38	358.93
							7/10/2012	17.94	358.37
							7/20/2012	15.63	360.68
							7/25/2012	17.71	358.60
							8/1/2012	17.47	358.84
							8/6/2012	17.47	358.84
							8/17/2012	17.17	359.14
							8/24/2012	17.50	358.81
							8/30/2012	17.34	358.97
							9/12/2012	17.07	359.24
							10/8/2012	14.72	361.59
							12/18/2013	14.54	361.77
							3/25/2014	11.19	365.12
							6/19/2014	12.05	364.26
							9/25/2014	20.45	355.86
							12/17/2014	19.33	356.98
							3/25/2015	14.39	361.92
							6/17/2015	17.01	359.30
MW-122	6/20/2012	377.61	2	30	7 - 30	370.61	6/27/2012	8.98	368.63
							7/2/2012	8.93	368.68
							7/5/2012	8.90	368.71
							7/10/2012	8.93	368.68
							7/20/2012	8.75	368.86
							7/25/2012	8.78	368.83
							8/1/2012	8.52	369.09
							8/6/2012	8.43	369.18
							8/17/2012	8.34	369.27
							8/24/2012	8.40	369.21
							8/30/2012	8.36	369.25
							9/12/2012	8.30	369.31
							10/8/2012	7.65	369.96
							12/18/2013	8.45	369.16
							3/25/2014	7.98	369.63
							6/19/2014	7.84	369.77
							9/25/2014	9.43	368.18
							12/17/2014	9.31	368.30
							3/25/2015	8.91	368.70
							6/17/2015	8.79	368.82
MW-123	6/20/2012	379.64	2	30	7 - 30	372.64	6/27/2012	12.18	367.46
							7/2/2012	12.37	367.27
							7/5/2012	12.33	367.31
							7/10/2012	12.54	367.10
							7/20/2012	12.53	367.11
							7/25/2012	12.55	367.09
							8/1/2012	12.37	367.27
							8/6/2012	12.44	367.20
							8/17/2012	12.28	367.36
							8/24/2012	12.46	367.18
							8/30/2012	12.47	367.17
							9/12/2012	12.47	367.17
							10/8/2012	11.85	367.79
							12/18/2013	12.58	367.06
							3/25/2014	11.32	368.32
							6/19/2014	11.29	368.35
							9/25/2014	14.83	364.81
							12/17/2014	14.94	364.70
							3/25/2015	13.57	366.07
							6/17/2015	13.72	365.92

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PADEP Facility ID No. 67-00823
Leidos Project Number 301425.TM.100044.4000.0100

Location	Monitoring Well Installation Date	TOC Elevation (Feet)	Well Diameter (inches)	Total Drilled Depth (fbg)	Screened Interval (fbg)	Top of Well Screen Elevation (feet)	Date	SWL (fbtoc)	SWL Elevation (feet)
MW-124	6/21/2012	376.37	2	34	8 - 34	368.37	6/27/2012	14.87	361.50
							7/2/2012	15.50	360.87
							7/5/2012	15.56	360.81
							7/10/2012	16.21	360.16
							7/20/2012	16.31	360.06
							7/25/2012	15.79	360.58
							8/1/2012	15.66	360.71
							8/6/2012	15.68	360.69
							8/17/2012	14.94	361.43
							8/24/2012	15.29	361.08
							8/30/2012	15.14	361.23
							9/12/2012	14.94	361.43
							10/8/2012	13.54	362.83
							12/18/2013	15.39	360.98
							3/25/2014	11.93	364.44
							6/19/2014	12.14	364.23
							9/25/2014	18.42	357.95
							12/17/2014	17.45	358.92
							3/25/2015	15.49	360.88
							6/17/2015	16.13	360.24
MW-125	6/21/2012	366.56	2	24	4 - 24	362.56	6/27/2012	11.37	355.19
							7/2/2012	11.59	354.97
							7/5/2012	11.89	354.67
							7/10/2012	12.32	354.24
							7/20/2012	11.31	355.25
							7/25/2012	11.31	355.25
							8/1/2012	10.78	355.78
							8/6/2012	10.21	356.35
							8/17/2012	10.58	355.98
							8/24/2012	11.14	355.42
							8/30/2012	10.86	355.70
							9/12/2012	NM	NM
							10/8/2012	6.21	360.35
							12/18/2013	7.62	358.94
							3/25/2014	7.24	359.32
							6/19/2014	7.39	359.17
							9/25/2014	14.59	351.97
							12/17/2014	11.88	354.68
							3/25/2015	9.31	357.25
							6/17/2015	12.03	354.53
MW-160	9/4/2012	374.71	2	38	7.5 - 37.5	367.21	9/12/2012	19.04	355.67
							10/8/2012	17.65	357.06
							12/18/2013	16.51	358.20
							3/25/2014	15.56	359.15
							6/19/2014	15.72	358.99
							9/25/2014	22.65	352.06
							12/17/2014	20.54	354.17
							3/25/2015	17.83	356.88
							6/17/2015	20.31	354.40

Table 1
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Former Building 45/50 Unleaded Gasoline Release - Tank 009
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PADEP Facility ID No. 67-00823
Leidos Project Number 301425.TM.100044.4000.0100

Location	Monitoring Well Installation Date	TOC Elevation (Feet)	Well Diameter (inches)	Total Drilled Depth (fbg)	Screened Interval (fbg)	Top of Well Screen Elevation (feet)	Date	SWL (fbtoc)	SWL Elevation (feet)
MW-26	5/20/1987	379.44	2	62	11 - 61	368.44	6/27/2012	25.02	354.42
							7/2/2012	25.32	354.12
							7/5/2012	25.56	353.88
							7/10/2012	26.04	353.40
							7/20/2012	25.11	354.33
							7/25/2012	25.31	354.13
							8/1/2012	24.68	354.76
							8/6/2012	24.28	355.16
							8/17/2012	24.25	355.19
							8/24/2012	24.86	354.58
							8/30/2012	24.71	354.73
							9/12/2012	NM	NM
							10/8/2012	23.68	355.76
							12/18/2013	22.75	356.69
							3/25/2014	20.91	358.53
							6/19/2014	21.40	358.04
							9/25/2014	28.15	351.29
							12/17/2014	26.22	353.22
							3/25/2015	23.93	355.51
							6/17/2015	25.83	353.61
MW-77	6/10/1998	379.48	2	67	40 - 65	339.48	6/27/2012	24.29	355.19
							7/2/2012	24.72	354.76
							7/5/2012	24.93	354.55
							7/10/2012	25.42	354.06
							7/20/2012	24.96	354.52
							7/25/2012	24.83	354.65
							8/1/2012	24.35	355.13
							8/6/2012	24.13	355.35
							8/17/2012	24.15	355.33
							8/24/2012	24.53	354.95
							8/30/2012	24.40	355.08
							9/12/2012	24.20	355.28
							10/8/2012	23.04	356.44
							12/18/2013	22.22	357.26
							3/25/2014	20.51	358.97
							6/19/2014	20.81	358.67
							9/25/2014	27.65	351.83
							12/17/2014	25.87	353.61
							3/25/2015	23.21	356.27
							6/17/2015	25.19	354.29

Notes:

fbtoc - feet below top of well casing
TOC - top of casing
fbg - feet below grade
N/A - not applicable
NM - not measured
SWL - static water level
*- Groundwater elevation corrected for the presence of product using a specific gravity of 0.75 for gasoline

Table 2
Groundwater Sample Analytical Results
Former Building 45/50 Unleaded Gasoline Release - Tank 009
Harley-Davidson Motor Company Operations, Inc.
1425 Eden Road, York, York County, Pennsylvania
PADEP Facility ID No. 67-00823
Leidos Project Number 301425.TM.100044.4000.0100

Sample Location	Sample ID	Date Sample Collected	Date Sample Analyzed	Analysis Method 8260B								
				Benzene	Toluene	Ethylbenzene	Total Xylenes	Methyl Tertiary Butyl Ether (MTBE)	Naphthalene	Isopropylbenzene (Cumene)	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
MW-77	HD-MW-77-01-0	6/24/2011	7/7/2011	**1,500**	56	80	74 J	**520**	NA	NA	NA	NA
	HD-MW-77-01-0	8/1/2012	8/7/2012	**2,000**	110	140	130 J	**540**	41 J	24 J	33 J	13 J
MW-118	HD-MW-118-01-0	8/25/2011	9/9/2011	**120 H**	560 H	630 H	1,900 H	<50 H	42 J H	130 H	**460 H**	**130 H**
	HD-MW-118-01-0	9/30/2011	10/11/2011	**120**	520	**1,000**	2,800	<100	**130**	88 J	**790**	**250**
	HD-MW-118-01-0	8/1/2012	8/15/2012	**39 J**	110	**600**	1,400	<50	22 JB	78	**600**	**210**
MW-119	HD-MW-119-01-0	8/25/2011	9/9/2011	**6,100 H**	**6,300 H**	510 J H	1,900 H	<630 H	**280 J H**	<630 H	**170 J H**	<630 H
	HD-MW-119-01-0	9/30/2011	10/11/2011	**11,000**	**18,000**	**2,600**	10,000	<500	**240 J**	<500	**1,300**	**480 J**
	HD-MW-119-01-0	8/1/2012	NS/FP	**NS/FP**	**NS/FP**	**NS/FP**	**NS/FP**	**NS/FP**	**NS/FP**	**NS/FP**	**NS/FP**	**NS/FP**
MW-120	HD-MW-120-01-0	8/25/2011	9/7/2011	2.2 J	0.94 J	<5.0	<15.0	14.0	<5.0	<5.0	<5.0	<5.0
	HD-MW-120-01-0	9/30/2011	10/11/2011	<5.0	<5.0	<5.0	<15.0	1.1 J	<5.0	<5.0	<5.0	<5.0
	HD-MW-120-01-0	8/1/2012	8/6/2012	**7.0**	<5.0	<5.0	<15.0	6.8	<5.0	<5.0	<5.0	<5.0
MW-121	HD-MW-121-01-0	8/25/2011	9/8/2011	**390**	**3,700 E**	**990**	3,600	**45 J**	26 J	120	**430**	**120**
	HD-MW-121-01-0	9/30/2011	10/11/2011	**430**	**4,900**	**1,000**	3,700	**56 J**	<250	45 J	**330**	**140 J**
	HD-MW-121-01-0	8/1/2012	8/7/2012	**480 J**	**6,900**	**1,900**	7,600	**35**	<500	89	**980**	**230**
MW-122	HD-MW-122-01-0	7/2/2012	7/6/2012	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0
	HD-MW-122-01-0	8/1/2012	8/15/2012	<5.0	<5.0	<5.0	<15.0	<5.0	1.1 JB	<5.0	<5.0	<5.0
MW-123	HD-MW-123-01-0	7/2/2012	7/6/2012	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0
	HD-MW-123-01-0	8/1/2012	8/15/2012	<5.0	<5.0	<5.0	<15.0	<5.0	2.8 JB	<5.0	<5.0	<5.0
MW-124	HD-MW-124-01-0	7/2/2012	7/6/2012	**1,400**	**4,000**	660	3,800	**39**	**1,600**	57	**550**	**240**
	HD-MW-124-01-0	8/1/2012	8/15/2012	**2,300**	**8,400**	**960**	9,500	**44 J**	**540 B**	36 J	**1,200**	**490**
MW-125	HD-MW-125-01-0	7/2/2012	7/6/2012	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0
	HD-MW-125-01-0	8/1/2012	8/6/2012	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0
	HD-MW-125-01-0	12/18/2013	12/27/2013	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
	HD-MW-125-01-0	3/25/2014	4/7/2014	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
	HD-MW-125-01-0	6/19/2014	6/24/2014	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
	HD-MW-125-01-0	9/25/2014	10/2/2014	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
	HD-MW-125-01-0	12/17/2014	12/19/2014	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
	HD-MW-125-01-0	3/25/2015	3/30/2015	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
	HD-MW-125-01-0	6/17/2015	6/19/2015	<5.0	<5.0	0.97 J	<10	<5.0	<5.0	<5.0	<5.0	<5.0
MW-160	HD-MW-160-01-0	9/12/2012	9/21/2012	**180**	17	12	20	<5.0	4.3 J	1.2 J	3.4 J	<5.0
	HD-MW-160-01-0	12/18/2013	12/27/2013	**120**	5.8	6.3	<10	<5.0	<5.0	<5.0	<5.0	<5.0
	HD-MW-160-01-0	3/25/2014	4/8/2014	**340**	61	23 J	51	<25	<25	4.1 J	17 J	<25
	HD-MW-160-01-0	6/19/2014	6/24/2014	**270**	59	22	48	<5.0	<5.0	2.5 J	20	6.0
	HD-MW-160-01-0	9/25/2014	10/2/2014	**440**	190	35 J	190	<50	<50	<50	<50	<50
	HD-MW-160-01-0	12/17/2014	12/19/2014	**400**	76	39	51	<5.0	3.8 J	5.5	25	<5.0
	HD-MW-160-01-0	3/25/2015	3/30/2015	**560**	64	38	34	1.7 J	5.2	4.1 J	14	<5.0
	HD-MW-160-01-0	6/17/2015	6/19/2015	**660**	230	76	220	<50	14 JB	<50	38 J	<50
PADEP Non-Residential Groundwater MSCs				5	1,000	700	10,000	20	100	3,500	62	53
PADEP Default Non-Residential Volatilization to Indoor Air Screening Values for Groundwater				5,900	NOC	45,000	NOC	640,000	NOC	NOC	12,000	10,000

Notes:
All results reported in micrograms per liter (µg/L)
E - Result exceeded calibration range
H - Sample was prepped or analyzed beyond the specified holding time
I - Result is less than the reporting limit (RL) but greater than or equal to the method detection limit (MDL) and the concentration is an approximate value
B - Compound was found in both the method blank and sample.
NS/FP - Not Sampled, Free Product observed.
MSCs - Medium Specific Concentrations
NOC - Not of concern, value above constituent water solubility
PADEP - Pennsylvania Department of Environmental Protection
QA/QC - Quality Assurance/Quality Control
Results that are bold/shaded are greater than PADEP nonresidential MSCs and/or indoor air screening values

APPENDIX A

Groundwater Sample Analytical Report
(Provided on Accompanying CD)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

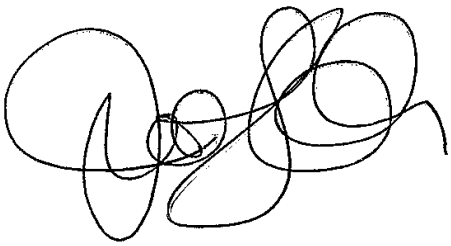
ANALYTICAL REPORT

Job Number: 180-45180-1

Job Description: Harley Davidson

For:
Leidos, Inc.
6310 Allentown Boulevard
Harrisburg, PA 17112

Attention: Mr. Rodney Myers



Approved for release.
Jill L Colussy
Project Manager I
6/30/2015 2:17 PM

Jill L Colussy, Project Manager I
301 Alpha Drive, Pittsburgh, PA, 15238
(412)963-2444
jill.colussy@testamericainc.com
06/30/2015

cc: Kent V Littlefield

Table of Contents

Table of Contents

Definitions/Glossary

Client: Leidos, Inc.
Project/Site: Harley Davidson

TestAmerica Job ID: 180-45180-1

Qualifiers

GC/MS VOA

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

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: Leidos, Inc.

Project: Harley Davidson

Report Number: 180-45180-1

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 06/18/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.8 C.

VOLATILES

Due to the concentration of target compounds detected, sample HD-MW-160-0/0-0 (180-45180-2)[10X] was analyzed at a dilution. The reporting limits have been adjusted accordingly.

Naphthalene was detected in method blank MB 180-145522/3 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.

Detection Summary

Client: Leidos, Inc.
Project/Site: Harley Davidson

TestAmerica Job ID: 180-45180-1

Client Sample ID: HD-MW-125-0/0-0 — Lab Sample ID: 180-45180-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.97	J	5.0	0.62	ug/L	1		8260C	Total/NA

Client Sample ID: HD-MW-160-0/0-0 — Lab Sample ID: 180-45180-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	38	J	50	5.2	ug/L	10		8260C	Total/NA
Benzene	660		50	9.9	ug/L	10		8260C	Total/NA
Ethylbenzene	76		50	6.2	ug/L	10		8260C	Total/NA
Naphthalene	14	J B	50	4.7	ug/L	10		8260C	Total/NA
Toluene	230		50	8.5	ug/L	10		8260C	Total/NA
Xylenes, Total	220		100	17	ug/L	10		8260C	Total/NA

Client Sample ID: TRIP BLANK 1 — Lab Sample ID: 180-45180-3

No Detections.

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: HD-MW-125-0/0-0
Date Collected: 06/17/15 11:45
Date Received: 06/18/15 08:55

Lab Sample ID: 180-45180-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	5.0	U	5.0	0.52	ug/L			06/19/15 14:41	1
1,3,5-Trimethylbenzene	5.0	U	5.0	0.59	ug/L			06/19/15 14:41	1
Benzene	5.0	U	5.0	0.99	ug/L			06/19/15 14:41	1
Ethylbenzene	**0.97**	**J**	5.0	0.62	ug/L			06/19/15 14:41	1
Isopropylbenzene	5.0	U	5.0	0.53	ug/L			06/19/15 14:41	1
Methyl tert-butyl ether	5.0	U	5.0	1.0	ug/L			06/19/15 14:41	1
Naphthalene	5.0	U	5.0	0.47	ug/L			06/19/15 14:41	1
Toluene	5.0	U	5.0	0.85	ug/L			06/19/15 14:41	1
Xylenes, Total	10	U	10	1.7	ug/L			06/19/15 14:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 123*		*06/19/15 14:41*	*1*
4-Bromofluorobenzene (Surr)	*84*		*75 - 120*		*06/19/15 14:41*	*1*
Dibromofluoromethane (Surr)	*93*		*80 - 120*		*06/19/15 14:41*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/19/15 14:41*	*1*

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

Client Sample ID: HD-MW-160-0/0-0
Date Collected: 06/17/15 10:35
Date Received: 06/18/15 08:55

Lab Sample ID: 180-45180-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	**38**	**J**	50	5.2	ug/L			06/19/15 15:04	10
1,3,5-Trimethylbenzene	50	U	50	5.9	ug/L			06/19/15 15:04	10
Benzene	**660**		50	9.9	ug/L			06/19/15 15:04	10
Ethylbenzene	**76**		50	6.2	ug/L			06/19/15 15:04	10
Isopropylbenzene	50	U	50	5.3	ug/L			06/19/15 15:04	10
Methyl tert-butyl ether	50	U	50	10	ug/L			06/19/15 15:04	10
Naphthalene	**14**	**J B**	50	4.7	ug/L			06/19/15 15:04	10
Toluene	**230**		50	8.5	ug/L			06/19/15 15:04	10
Xylenes, Total	**220**		100	17	ug/L			06/19/15 15:04	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 123*		*06/19/15 15:04*	*10*
4-Bromofluorobenzene (Surr)	*84*		*75 - 120*		*06/19/15 15:04*	*10*
Dibromofluoromethane (Surr)	*92*		*80 - 120*		*06/19/15 15:04*	*10*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/19/15 15:04*	*10*

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

Client Sample ID: TRIP BLANK 1
Date Collected: 06/17/15 13:00
Date Received: 06/18/15 08:55

Lab Sample ID: 180-45180-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	5.0	U	5.0	0.52	ug/L			06/20/15 18:07	1
1,3,5-Trimethylbenzene	5.0	U	5.0	0.59	ug/L			06/20/15 18:07	1
Benzene	5.0	U	5.0	0.99	ug/L			06/20/15 18:07	1
Ethylbenzene	5.0	U	5.0	0.62	ug/L			06/20/15 18:07	1
Isopropylbenzene	5.0	U	5.0	0.53	ug/L			06/20/15 18:07	1
Methyl tert-butyl ether	5.0	U	5.0	1.0	ug/L			06/20/15 18:07	1
Naphthalene	5.0	U	5.0	0.47	ug/L			06/20/15 18:07	1
Toluene	5.0	U	5.0	0.85	ug/L			06/20/15 18:07	1
Xylenes, Total	10	U	10	1.7	ug/L			06/20/15 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 123*		*06/20/15 18:07*	*1*
4-Bromofluorobenzene (Surr)	*90*		*75 - 120*		*06/20/15 18:07*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*06/20/15 18:07*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*06/20/15 18:07*	*1*

Default Detection Limits

Client: Leidos, Inc.
Project/Site: Harley Davidson

TestAmerica Job ID: 180-45180-1

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

Analyte	RL	MDL	Units	Method
1,2,4-Trimethylbenzene	5.0	0.52	ug/L	8260C
1,3,5-Trimethylbenzene	5.0	0.59	ug/L	8260C
Benzene	5.0	0.99	ug/L	8260C
Ethylbenzene	5.0	0.62	ug/L	8260C
Isopropylbenzene	5.0	0.53	ug/L	8260C
Methyl tert-butyl ether	5.0	1.0	ug/L	8260C
Naphthalene	5.0	0.47	ug/L	8260C
Toluene	5.0	0.85	ug/L	8260C
Xylenes, Total	10	1.7	ug/L	8260C

Surrogate Summary

Client: Leidos, Inc.
Project/Site: Harley Davidson

TestAmerica Job ID: 180-45180-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(62-123)	(75-120)	(80-120)	(80-120)
180-45138-J-4 MS	Matrix Spike	86	92	94	96
180-45138-J-4 MSD	Matrix Spike Duplicate	88	95	97	98
180-45180-1	HD-MW-125-0/0-0	88	84	93	93
180-45180-2	HD-MW-160-0/0-0	89	84	92	99
180-45180-3	TRIP BLANK 1	96	90	99	109
LCS 180-145522/5	Lab Control Sample	85	89	92	93
LCS 180-145636/7	Lab Control Sample	102	91	97	94
MB 180-145522/3	Method Blank	93	86	97	95
MB 180-145636/4	Method Blank	80	82	87	111

Surrogate Legend

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

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

Lab Sample ID: MB 180-145522/3
Matrix: Water
Analysis Batch: 145522

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	5.0	U	5.0	0.52	ug/L			06/19/15 08:12	1
1,3,5-Trimethylbenzene	5.0	U	5.0	0.59	ug/L			06/19/15 08:12	1
Benzene	5.0	U	5.0	0.99	ug/L			06/19/15 08:12	1
Ethylbenzene	5.0	U	5.0	0.62	ug/L			06/19/15 08:12	1
Isopropylbenzene	5.0	U	5.0	0.53	ug/L			06/19/15 08:12	1
Methyl tert-butyl ether	5.0	U	5.0	1.0	ug/L			06/19/15 08:12	1
Naphthalene	2.17	J	5.0	0.47	ug/L			06/19/15 08:12	1
Toluene	5.0	U	5.0	0.85	ug/L			06/19/15 08:12	1
Xylenes, Total	10	U	10	1.7	ug/L			06/19/15 08:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 123*		*06/19/15 08:12*	*1*
4-Bromofluorobenzene (Surr)	*86*		*75 - 120*		*06/19/15 08:12*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*06/19/15 08:12*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*06/19/15 08:12*	*1*

Lab Sample ID: LCS 180-145522/5
Matrix: Water
Analysis Batch: 145522

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	40.0	39.6		ug/L		99	71 - 132
1,3,5-Trimethylbenzene	40.0	39.5		ug/L		99	75 - 135
Benzene	40.0	40.7		ug/L		102	80 - 120
Ethylbenzene	40.0	40.5		ug/L		101	79 - 124
Isopropylbenzene	40.0	39.0		ug/L		98	73 - 130
Methyl tert-butyl ether	40.0	39.4		ug/L		99	53 - 122
Naphthalene	40.0	49.4		ug/L		124	10 - 144
Toluene	40.0	39.2		ug/L		98	80 - 124
Xylenes, Total	80.0	79.6		ug/L		100	81 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*62 - 123*
4-Bromofluorobenzene (Surr)	*89*		*75 - 120*
Dibromofluoromethane (Surr)	*92*		*80 - 120*
Toluene-d8 (Surr)	*93*		*80 - 120*

Lab Sample ID: 180-45138-J-4 MS
Matrix: Water
Analysis Batch: 145522

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	5.0	U	40.0	40.7		ug/L		102	71 - 132
1,3,5-Trimethylbenzene	5.0	U	40.0	41.1		ug/L		103	75 - 135
Benzene	5.0	U	40.0	41.3		ug/L		103	80 - 120
Ethylbenzene	5.0	U	40.0	41.7		ug/L		104	79 - 124
Isopropylbenzene	5.0	U	40.0	40.4		ug/L		101	73 - 130

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

Lab Sample ID: 180-45138-J-4 MS
Matrix: Water
Analysis Batch: 145522

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	5.0	U	40.0	39.6		ug/L		99	53 - 122
Naphthalene	1.5	J B	40.0	54.1		ug/L		132	10 - 144
Toluene	5.0	U	40.0	40.8		ug/L		102	80 - 124
Xylenes, Total	10	U	80.0	82.6		ug/L		103	81 - 121

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*62 - 123*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*
Dibromofluoromethane (Surr)	*94*		*80 - 120*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: 180-45138-J-4 MSD
Matrix: Water
Analysis Batch: 145522

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene	5.0	U	40.0	39.6		ug/L		99	71 - 132	3	35
1,3,5-Trimethylbenzene	5.0	U	40.0	39.4		ug/L		98	75 - 135	4	20
Benzene	5.0	U	40.0	40.5		ug/L		101	80 - 120	2	20
Ethylbenzene	5.0	U	40.0	41.1		ug/L		103	79 - 124	1	25
Isopropylbenzene	5.0	U	40.0	39.9		ug/L		100	73 - 130	1	20
Methyl tert-butyl ether	5.0	U	40.0	41.5		ug/L		104	53 - 122	5	20
Naphthalene	1.5	J B	40.0	53.2		ug/L		129	10 - 144	2	35
Toluene	5.0	U	40.0	39.9		ug/L		100	80 - 124	2	20
Xylenes, Total	10	U	80.0	81.4		ug/L		102	81 - 121	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 123*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*
Dibromofluoromethane (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: MB 180-145636/4
Matrix: Water
Analysis Batch: 145636

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	5.0	U	5.0	0.52	ug/L			06/20/15 13:37	1
1,3,5-Trimethylbenzene	5.0	U	5.0	0.59	ug/L			06/20/15 13:37	1
Benzene	5.0	U	5.0	0.99	ug/L			06/20/15 13:37	1
Ethylbenzene	5.0	U	5.0	0.62	ug/L			06/20/15 13:37	1
Isopropylbenzene	5.0	U	5.0	0.53	ug/L			06/20/15 13:37	1
Methyl tert-butyl ether	5.0	U	5.0	1.0	ug/L			06/20/15 13:37	1
Naphthalene	5.0	U	5.0	0.47	ug/L			06/20/15 13:37	1
Toluene	5.0	U	5.0	0.85	ug/L			06/20/15 13:37	1
Xylenes, Total	10	U	10	1.7	ug/L			06/20/15 13:37	1

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

Lab Sample ID: MB 180-145636/4
Matrix: Water
Analysis Batch: 145636

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*80*		*62 - 123*		*06/20/15 13:37*	*1*
4-Bromofluorobenzene (Surr)	*82*		*75 - 120*		*06/20/15 13:37*	*1*
Dibromofluoromethane (Surr)	*87*		*80 - 120*		*06/20/15 13:37*	*1*
Toluene-d8 (Surr)	*111*		*80 - 120*		*06/20/15 13:37*	*1*

Lab Sample ID: LCS 180-145636/7
Matrix: Water
Analysis Batch: 145636

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	40.0	37.8		ug/L		94	71 - 132
1,3,5-Trimethylbenzene	40.0	37.7		ug/L		94	75 - 135
Benzene	40.0	39.2		ug/L		98	80 - 120
Ethylbenzene	40.0	38.5		ug/L		96	79 - 124
Isopropylbenzene	40.0	37.4		ug/L		93	73 - 130
Methyl tert-butyl ether	40.0	38.9		ug/L		97	53 - 122
Naphthalene	40.0	40.2		ug/L		100	10 - 144
Toluene	40.0	37.0		ug/L		93	80 - 124
Xylenes, Total	80.0	76.2		ug/L		95	81 - 121

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*102*		*62 - 123*
4-Bromofluorobenzene (Surr)	*91*		*75 - 120*
Dibromofluoromethane (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*94*		*80 - 120*

QC Association Summary

Client: Leidos, Inc.
Project/Site: Harley Davidson

TestAmerica Job ID: 180-45180-1

GC/MS VOA

Analysis Batch: 145522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-45138-J-4 MS	Matrix Spike	Total/NA	Water	8260C	
180-45138-J-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	
180-45180-1	HD-MW-125-0/0-0	Total/NA	Water	8260C	
180-45180-2	HD-MW-160-0/0-0	Total/NA	Water	8260C	
LCS 180-145522/5	Lab Control Sample	Total/NA	Water	8260C	
MB 180-145522/3	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 145636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-45180-3	TRIP BLANK 1	Total/NA	Water	8260C	
LCS 180-145636/7	Lab Control Sample	Total/NA	Water	8260C	
MB 180-145636/4	Method Blank	Total/NA	Water	8260C	

Lab Chronicle

Client: Leidos, Inc.
Project/Site: Harley Davidson

TestAmerica Job ID: 180-45180-1

Client Sample ID: HD-MW-125-0/0-0
Date Collected: 06/17/15 11:45
Date Received: 06/18/15 08:55

Lab Sample ID: 180-45180-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	145522	06/19/15 14:41	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: HD-MW-160-0/0-0
Date Collected: 06/17/15 10:35
Date Received: 06/18/15 08:55

Lab Sample ID: 180-45180-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	5 mL	5 mL	145522	06/19/15 15:04	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: TRIP BLANK 1
Date Collected: 06/17/15 13:00
Date Received: 06/18/15 08:55

Lab Sample ID: 180-45180-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	145636	06/20/15 18:07	PJJ	TAL PIT
	Instrument ID: CHHP4									

Laboratory References:

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

Analyst References:

Lab: TAL PIT

Batch Type: Analysis

KLG = Kathy Gordon

PJJ = Patrick Journet

Certification Summary

Client: Leidos, Inc.
Project/Site: Harley Davidson

TestAmerica Job ID: 180-45180-1

Laboratory: TestAmerica Pittsburgh

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Pennsylvania	NELAP	3	02-00416	04-30-16

Method Summary

Client: Leidos, Inc.
Project/Site: Harley Davidson

TestAmerica Job ID: 180-45180-1

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

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Leidos, Inc.
Project/Site: Harley Davidson

TestAmerica Job ID: 180-45180-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-45180-1	HD-MW-125-0/0-0	Water	06/17/15 11:45	06/18/15 08:55
180-45180-2	HD-MW-160-0/0-0	Water	06/17/15 10:35	06/18/15 08:55
180-45180-3	TRIP BLANK 1	Water	06/17/15 13:00	06/18/15 08:55

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Instrument ID: CHHP3 Analysis Batch Number: 143986

Lab Sample ID: IC 180-143986/3 Client Sample ID:

Date Analyzed: 06/05/15 06:50 Lab File ID: 3060503.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorofluoromethane	2.75	Poor chromatography	gordonk	06/05/15 07:41
Trichlorofluoromethane	2.78	Poor chromatography	gordonk	06/05/15 07:41
Ethyl ether	3.21	Poor chromatography	gordonk	06/05/15 07:41
Acrolein	3.37	Poor chromatography	gordonk	06/05/15 07:41
1,1-Dichloroethene	3.48	Poor chromatography	gordonk	06/05/15 07:41
1,1,2-Trichloro-1,2,2-trifluoroethane	3.56	Poor chromatography	gordonk	06/05/15 07:41
Iodomethane	3.69	Poor chromatography	gordonk	06/05/15 07:41
Carbon disulfide	3.77	Poor chromatography	gordonk	06/05/15 07:41
Allyl chloride	4.07	Poor chromatography	gordonk	06/05/15 07:41
Methyl tert-butyl ether	4.74	Poor chromatography	gordonk	06/05/15 07:41

Lab Sample ID: IC 180-143986/4 Client Sample ID:

Date Analyzed: 06/05/15 07:12 Lab File ID: 3060504.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorofluoromethane	2.73	Poor chromatography	gordonk	06/05/15 07:47
Acrolein	3.36	Poor chromatography	gordonk	06/05/15 07:47

Lab Sample ID: ICIS 180-143986/6 Client Sample ID:

Date Analyzed: 06/05/15 07:55 Lab File ID: 3060506.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroethane	2.44	Poor chromatography	gordonk	06/05/15 08:20

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Instrument ID: CHHP4 Analysis Batch Number: 145114

Lab Sample ID: IC 180-145114/4 Client Sample ID:

Date Analyzed: 06/16/15 12:49 Lab File ID: 4061604.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorofluoromethane	1.95	Poor chromatography	journetp	06/16/15 12:16

Lab Sample ID: IC 180-145114/6 Client Sample ID:

Date Analyzed: 06/16/15 13:38 Lab File ID: 4061606.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Iodomethane	2.55	Poor chromatography	journetp	06/16/15 13:15

Lab Sample ID: IC 180-145114/9 Client Sample ID:

Date Analyzed: 06/16/15 14:51 Lab File ID: 4061609.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	1.98	Poor chromatography	journetp	06/16/15 14:46

Lab Sample ID: IC 180-145114/10 Client Sample ID:

Date Analyzed: 06/16/15 15:16 Lab File ID: 4061610.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	2.45	Poor chromatography	journetp	06/16/15 14:45
Iodomethane	2.54	Poor chromatography	journetp	06/16/15 14:45

Lab Sample ID: IC 180-145114/13 Client Sample ID:

Date Analyzed: 06/16/15 17:04 Lab File ID: 4061613.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Iodomethane	2.55	Poor chromatography	journetp	06/16/15 16:32

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VOA8260INT_00037	06/28/15	05/28/15	Methanol, Lot 85233	10 mL	VOA8260INTRES_00047	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_00047	02/01/18		Restek, Lot A093504		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
VOA8260INT_00038	07/09/15	06/09/15	Methanol, Lot 85233	10 mL	VOA8260INTRES_00041	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_00041	02/01/18		Restek, Lot A093504		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
VOA8260SURR_00036	06/13/15	05/13/15	Methanol, Lot 85233	100 mL	VOA8260SURRES_00090	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_00090	04/30/19		Restek, Lot A0102817		(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_00038	07/09/15	06/09/15	Methanol, Lot 85233	100 mL	VOA8260SURRES_00091	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_00091	04/30/19		Restek, Lot A0102817		(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_00128	06/23/15	06/16/15	Methanol, Lot 85233	10 mL	VOA8260VOA2ND_00127	1 mL	1,2,4-Trimethylbenzene	25 ug/mL
							1,3,5-Trimethylbenzene	25 ug/mL
							Benzene	25 ug/mL
							Ethylbenzene	25 ug/mL
							Isopropylbenzene	25 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Naphthalene	25 ug/mL
							Toluene	25 ug/mL
							Xylenes, Total	50 ug/mL
.VOA8260VOA2ND_00127	07/12/15	06/12/15	Methanol, Lot 85233	10 mL	VOA8260MEGA2_00033	1 mL	1,2,4-Trimethylbenzene	250 ug/mL
							1,3,5-Trimethylbenzene	250 ug/mL
							Benzene	250 ug/mL
							Ethylbenzene	250 ug/mL
							Isopropylbenzene	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	250 ug/mL
							Naphthalene	250 ug/mL
							Toluene	250 ug/mL
							Xylenes, Total	500 ug/mL
..VOA8260MEGA2_00033	01/31/17		Restek, Lot A0108163		(Purchased Reagent)		1,2,4-Trimethylbenzene	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							Benzene	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Naphthalene	2500 ug/mL
							Toluene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VOA8260VOAPRI_00123	06/10/15	06/03/15	Methanol, Lot 85233	10 mL	VOA8260GAS1ST_00101	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_00117	1.25 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
							1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,1-Dichloropropene	25 ug/mL
							1,2,3-Trichlorobenzene	25 ug/mL
							1,2,3-Trichloropropane	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2,4-Trimethylbenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorotoluene	25 ug/mL
							2-Methyl-2-propanol	250 ug/mL
							3-Chloro-1-propene	25 ug/mL
							4-Chlorotoluene	25 ug/mL
							4-Isopropyltoluene	25 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromobenzene	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chlorobromomethane	25 ug/mL
							Chlorodibromomethane	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
							Dibromomethane	25 ug/mL
							Dichlorobromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Ethylene Dibromide	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	25 ug/mL
.VOA8260GAS1ST_00101	04/30/18		Restek, Lot A011070		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00117	06/15/15	05/15/15	Methanol, Lot 85233	10 mL	VOA8260KET1ST_00044	0.16 mL	2-Butanone (MEK)	200 ug/mL
							2-Hexanone	200 ug/mL
							4-Methyl-2-pentanone (MIBK)	200 ug/mL
							Acetone	200 ug/mL
					VOA8260MEGA1_00028	0.8 mL	1,1,1,2-Tetrachloroethane	200 ug/mL
							1,1,1-Trichloroethane	200 ug/mL
							1,1,2,2-Tetrachloroethane	200 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ug/mL
							1,1,2-Trichloroethane	200 ug/mL
							1,1-Dichloroethane	200 ug/mL
							1,1-Dichloroethene	200 ug/mL
							1,1-Dichloropropene	200 ug/mL
							1,2,3-Trichlorobenzene	200 ug/mL
							1,2,3-Trichloropropane	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2,4-Trimethylbenzene	200 ug/mL
							1,2-Dibromo-3-Chloropropane	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Dichloroethane	200 ug/mL
							1,2-Dichloropropane	200 ug/mL
							1,3,5-Trimethylbenzene	200 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dichloropropane	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	4000 ug/mL
							2,2-Dichloropropane	200 ug/mL
							2-Chlorotoluene	200 ug/mL
							2-Methyl-2-propanol	2000 ug/mL
							3-Chloro-1-propene	200 ug/mL
							4-Chlorotoluene	200 ug/mL
							4-Isopropyltoluene	200 ug/mL
							Acrylonitrile	2000 ug/mL
							Benzene	200 ug/mL
							Bromobenzene	200 ug/mL
							Bromoform	200 ug/mL
							Carbon disulfide	200 ug/mL
							Carbon tetrachloride	200 ug/mL
							Chlorobenzene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobromomethane	200 ug/mL
							Chlorodibromomethane	200 ug/mL
							Chloroform	200 ug/mL
							cis-1,2-Dichloroethene	200 ug/mL
							cis-1,3-Dichloropropene	200 ug/mL
							Cyclohexane	200 ug/mL
							Dibromomethane	200 ug/mL
							Dichlorobromomethane	200 ug/mL
							Ethyl ether	200 ug/mL
							Ethyl methacrylate	200 ug/mL
							Ethylbenzene	200 ug/mL
							Ethylene Dibromide	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexane	200 ug/mL
							Iodomethane	200 ug/mL
							Isobutyl alcohol	5000 ug/mL
							Isopropylbenzene	200 ug/mL
							m-Xylene & p-Xylene	200 ug/mL
							Methyl acetate	1000 ug/mL
							Methyl tert-butyl ether	200 ug/mL
							Methylcyclohexane	200 ug/mL
							Methylene Chloride	200 ug/mL
							n-Butylbenzene	200 ug/mL
							n-Heptane	200 ug/mL
							N-Propylbenzene	200 ug/mL
							Naphthalene	200 ug/mL
							o-Xylene	200 ug/mL
							sec-Butylbenzene	200 ug/mL
							Styrene	200 ug/mL
							tert-Butylbenzene	200 ug/mL
							Tetrachloroethene	200 ug/mL
							Tetrahydrofuran	400 ug/mL
							Toluene	200 ug/mL
							trans-1,2-Dichloroethene	200 ug/mL
							trans-1,3-Dichloropropene	200 ug/mL
							trans-1,4-Dichloro-2-butene	200 ug/mL
							Trichloroethene	200 ug/mL
..VOA8260KET1ST_00044	04/30/18		Restek, Lot A0110400		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VOA8260MEGA1_00028	02/28/16		Restek, Lot A0108166		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-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
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	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
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VOA8260VOAPRI_00125	06/23/15	06/16/15	Methanol, Lot 85233	10 mL	VOA 8260VOAPR_00001	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-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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Isopropyltoluene	25 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromobenzene	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chlorobromomethane	25 ug/mL
							Chlorodibromomethane	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
							Dibromomethane	25 ug/mL
							Dichlorobromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Ethylene Dibromide	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_00105	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Dichlorofluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
.VOA 8260VOAPR_00001	07/12/15	06/12/15	Methanol, Lot 85233	10 mL	VOA8260KET1ST_00045	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_00029	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-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
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chlorobromomethane	250 ug/mL
							Chlorodibromomethane	250 ug/mL
							Chloroform	250 ug/mL
							cis-1,2-Dichloroethene	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

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
							Dibromomethane	250 ug/mL
							Dichlorobromomethane	250 ug/mL
							Ethyl ether	250 ug/mL
							Ethyl methacrylate	250 ug/mL
							Ethylbenzene	250 ug/mL
							Ethylene Dibromide	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_00045	04/30/18		Restek, Lot A0110400		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VOA8260MEGA1_00029	02/28/16		Restek, Lot A0108166		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	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
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	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
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.VOA8260GAS1ST_00105	04/30/18		Restek, Lot A011070		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VOA8260VOAPRI_00125	06/23/15	06/16/15	Methanol, Lot 85233	10 mL	VOA 8260VOAPR_00001	1 mL	Xylenes, Total	50 ug/mL
.VOA 8260VOAPR_00001	07/12/15	06/12/15	Methanol, Lot 85233	10 mL	VOA8260MEGA1_00029	1 mL	Xylenes, Total	500 ug/mL
..VOA8260MEGA1_00029	02/28/16		Restek, Lot A0108166		(Purchased Reagent)		Xylenes, Total	5000 ug/mL
VOAACRLOEINPR_00001	06/22/15	05/22/15	Methanol, Lot 85233	100 mL	VOAACRORES_00071	0.125 mL	Acrolein	25 ug/mL
.VOAACRORES_00071	07/31/15		Restek, Lot A0109948		(Purchased Reagent)		Acrolein	20000 ug/mL
voaWVA1st Res_00001	06/16/15	05/16/15	Methanol, Lot 85233	25 mL	VOA8260VARES_00051	0.125 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES_00051	07/31/15		Restek, Lot A0108225		(Purchased Reagent)		Vinyl acetate	5000 ug/mL

Reagent

VOA8260GAS1ST_00101

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

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

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot Q167-08) **Purity** 99%	2,499.9 µg/mL	+/- 17.9502 µg/mL +/- 30.0934 µg/mL +/- 34.1055 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBC8470V) **Purity** 99%	2,500.1 µg/mL	+/- 17.2963 µg/mL +/- 29.7101 µg/mL +/- 33.7686 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 17542) **Purity** 99%	2,500.2 µg/mL	+/- 16.5642 µg/mL +/- 29.2906 µg/mL +/- 33.4004 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBF3387V) **Purity** 99%	2,500.0 µg/mL	+/- 17.0072 µg/mL +/- 29.5416 µg/mL +/- 33.6200 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,499.8 µg/mL	+/- 18.9451 µg/mL +/- 30.6969 µg/mL +/- 34.6391 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot SHBD1717V) **Purity** 99%	2,500.3 µg/mL	+/- 17.6395 µg/mL +/- 29.9122 µg/mL +/- 33.9470 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot Q9B-58) **Purity** 99%	2,500.2 µg/mL	+/- 16.7318 µg/mL +/- 29.3854 µg/mL +/- 33.4835 µg/mL	Gravimetric Unstressed Stressed

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

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

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

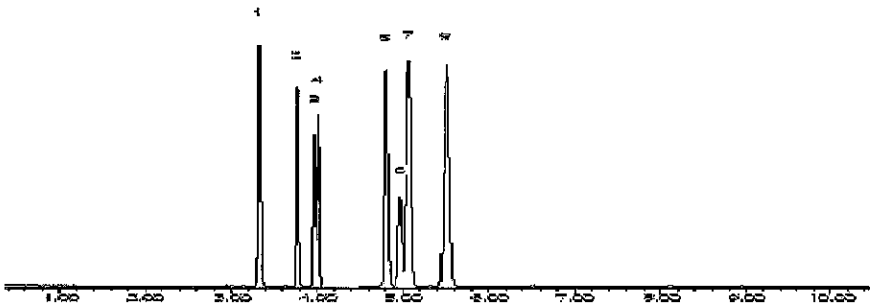
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

F. Joseph Tallon - Mix Technician

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

Tyler Brown - QA Analyst

Date Passed: 08-Apr-2015

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

Reagent

VOA8260GAS1ST_00105

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot Q167-08) **Purity** 99%	2,499.9 µg/mL	+/- 17.9502 +/- 30.0934 +/- 34.1055	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBC8470V) **Purity** 99%	2,500.1 µg/mL	+/- 17.2963 +/- 29.7101 +/- 33.7686	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 17542) **Purity** 99%	2,500.2 µg/mL	+/- 16.5642 +/- 29.2906 +/- 33.4004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBF3387V) **Purity** 99%	2,500.0 µg/mL	+/- 17.0072 +/- 29.5416 +/- 33.6200	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,499.8 µg/mL	+/- 18.9451 +/- 30.6969 +/- 34.6391	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot SHBD1717V) **Purity** 99%	2,500.3 µg/mL	+/- 17.6395 +/- 29.9122 +/- 33.9470	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot Q9B-58) **Purity** 99%	2,500.2 µg/mL	+/- 16.7318 +/- 29.3854 +/- 33.4835	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

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

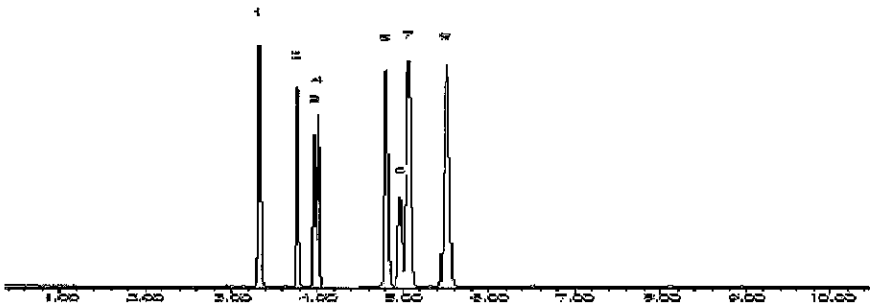
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

F. Joseph Tallon - Mix Technician

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

Tyler Brown - QA Analyst

Date Passed: 08-Apr-2015

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

Reagent

VOA8260INTRES_00041

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

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

Description : 8260 Internal Standard

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

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

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

CERTIFIED VALUES

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

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

Reagent

VOA8260INTRES_00047

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

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

Description : 8260 Internal Standard

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

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

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

CERTIFIED VALUES

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

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

Reagent

VOA8260KET1ST_00044

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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.:** A0110400

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

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

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

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

CERTIFIED VALUES

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

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

Reagent

VOA8260KET1ST_00045

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

Catalog No. : 569721 **Lot No.:** A0110400

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

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

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

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

CERTIFIED VALUES

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

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

Reagent

VOA8260MEGA1_00028

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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. : 569720 **Lot No.:** A0108166

Description : 8260 List 1 / Std #1 MegaMix (2015)

8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : January 31, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

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

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

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

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

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

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

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

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

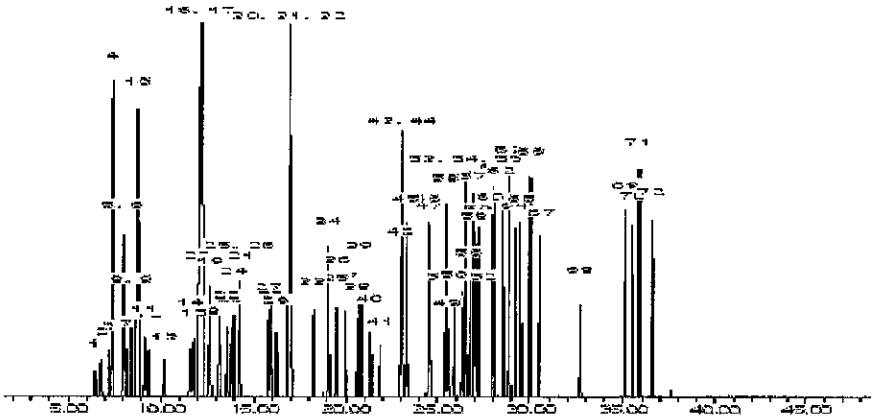
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Kendra Swope - Mix Technician

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

Tyler Brown - QA Analyst

Date Passed: 14-Jan-2015

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

Reagent

VOA8260MEGA1_00029

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. : 569720 **Lot No.:** A0108166

Description : 8260 List 1 / Std #1 MegaMix (2015)

8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : January 31, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

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

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

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

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

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

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

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

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

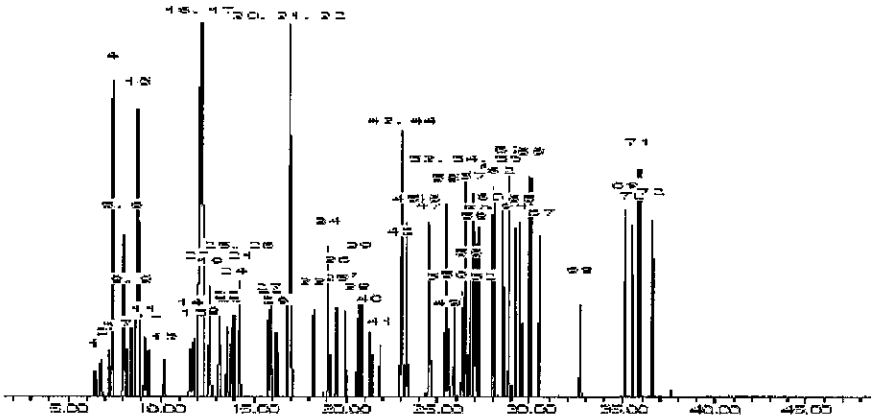
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Kendra Swope - Mix Technician

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

Tyler Brown - QA Analyst

Date Passed: 14-Jan-2015

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

Reagent

VOA8260MEGA2_00033

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
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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.:** A0108163

Description : 8260 List 1 / Std #1 MegaMix (2015)

8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : January 31, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 133.1044 µg/mL +/- 133.2511 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 133.1044 µg/mL +/- 133.2511 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 903000) **Purity** 99%	2,502.8 µg/mL	+/- 14.5512 µg/mL +/- 133.1908 µg/mL +/- 133.3377 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,000.5 µg/mL	+/- 145.3477 µg/mL +/- 1,330.4725 µg/mL +/- 1,331.9397 µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot A13Y016) **Purity** 97%	2,500.5 µg/mL	+/- 14.5383 µg/mL +/- 133.0732 µg/mL +/- 133.2199 µg/mL	Gravimetric Unstressed Stressed
6	Methyl acetate **CAS #** 79-20-9.SEC (Lot YDGVD) **Purity** 99%	12,500.6 µg/mL	+/- 72.6759 µg/mL +/- 665.2553 µg/mL +/- 665.9889 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot 5MNOA-DQ) **Purity** 99%	2,501.3 µg/mL	+/- 14.5425 µg/mL +/- 133.1110 µg/mL +/- 133.2578 µg/mL	Gravimetric Unstressed Stressed

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

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

40	Dibromochloromethane		2,501.8	µg/mL	+/-	14.5454	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot I13W021)			+/-	133.1377	µg/mL	Unstressed
	Purity 97%				+/-	133.2845	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,502.1	µg/mL	+/-	14.5472	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 1368400)			+/-	133.1542	µg/mL	Unstressed
	Purity 98%				+/-	133.3011	µg/mL	Stressed
42	Chlorobenzene		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/-	133.1310	µg/mL	Unstressed
	Purity 99%				+/-	133.2778	µg/mL	Stressed
43	1,1,1,2-Tetrachloroethane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01-QSHR)			+/-	133.0844	µg/mL	Unstressed
	Purity 99%				+/-	133.2312	µg/mL	Stressed
44	Ethylbenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE-GR)			+/-	133.0578	µg/mL	Unstressed
	Purity 99%				+/-	133.2045	µg/mL	Stressed
45	m-Xylene		1,250.4	µg/mL	+/-	7.2698	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)			+/-	66.5422	µg/mL	Unstressed
	Purity 99%				+/-	66.6156	µg/mL	Stressed
46	o-Xylene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01-KTPK)			+/-	133.1110	µg/mL	Unstressed
	Purity 99%				+/-	133.2578	µg/mL	Stressed
47	p-Xylene		1,251.6	µg/mL	+/-	7.2771	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)			+/-	66.6087	µg/mL	Unstressed
	Purity 99%				+/-	66.6822	µg/mL	Stressed
48	Styrene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)			+/-	133.0911	µg/mL	Unstressed
	Purity 99%				+/-	133.2378	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot 2PHXG-IH)			+/-	133.1110	µg/mL	Unstressed
	Purity 99%				+/-	133.2578	µg/mL	Stressed
50	Bromoform		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 1039300)			+/-	133.1243	µg/mL	Unstressed
	Purity 99%				+/-	133.2711	µg/mL	Stressed
51	1,1,2,2-Tetrachloroethane		2,502.9	µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)			+/-	133.1975	µg/mL	Unstressed
	Purity 99%				+/-	133.3444	µg/mL	Stressed
52	Chloroform		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	133.1310	µg/mL	Unstressed
	Purity 99%				+/-	133.2778	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.9	µg/mL	+/-	14.5465	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot OGI01)			+/-	133.1477	µg/mL	Unstressed
	Purity 98%				+/-	133.2946	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,502.7	µg/mL	+/-	14.5510	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot 100700-2)			+/-	133.1893	µg/mL	Unstressed
	Purity 97%				+/-	133.3362	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC-IT)			+/-	133.0445	µg/mL	Unstressed
	Purity 99%				+/-	133.1912	µg/mL	Stressed

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

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

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

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

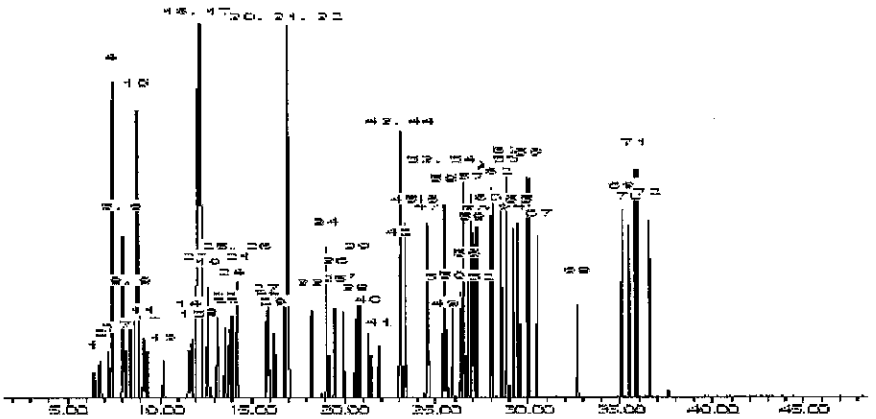
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Tyler Brown - QA Analyst

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

Date Passed: 14-Jan-2015

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

Reagent

VOA8260SURRES_00090

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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.:** A0102817

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 : April 30, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 022012) **Purity** 99%	2,503.8 µg/mL	+/- 14.5573 +/- 28.2339 +/- 32.4891	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot 13I-483) **Purity** 99%	2,502.4 µg/mL	+/- 14.5492 +/- 28.2182 +/- 32.4709	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot 13I-050) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 +/- 28.1911 +/- 32.4398	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 01127COV) **Purity** 99%	2,503.6 µg/mL	+/- 14.5561 +/- 28.2317 +/- 32.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260SURRES_00091

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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. : 567650 **Lot No.:** A0102817

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 : April 30, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 022012) **Purity** 99%	2,503.8 µg/mL	+/- 14.5573 +/- 28.2339 +/- 32.4891	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot 13I-483) **Purity** 99%	2,502.4 µg/mL	+/- 14.5492 +/- 28.2182 +/- 32.4709	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot 13I-050) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 +/- 28.1911 +/- 32.4398	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 01127COV) **Purity** 99%	2,503.6 µg/mL	+/- 14.5561 +/- 28.2317 +/- 32.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260VARES_00051

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569724 **Lot No.:** A0108225

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

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

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

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

CERTIFIED VALUES

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

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

Tech Tips:

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

Reagent

VOAACRORES_00071

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568720 **Lot No.:** A0109948

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 : July 31, 2015 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	19,756.0 µg/mL	+/- 115.6757	µg/mL	Gravimetric
	CAS # 107-02-8 (Lot 150115JLM)		+/- 633.4395	µg/mL	Unstressed
	Purity 99%		+/- 736.3041	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
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.: 180-45180-1

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-MW-125-0/0-0	180-45180-1	93	88	93	84
HD-MW-160-0/0-0	180-45180-2	92	89	99	84
TRIP BLANK 1	180-45180-3	99	96	109	90
	MB 180-145522/3	97	93	95	86
	MB 180-145636/4	87	80	111	82
	LCS 180-145522/5	92	85	93	89
	LCS 180-145636/7	97	102	94	91
	180-45138-J-4 MS	94	86	96	92
	180-45138-J-4 MSD	97	88	98	95

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	80-120
DCA = 1,2-Dichloroethane-d4 (Surr)	62-123
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	75-120

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.: 180-45180-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 3061910.D

Lab ID: LCS 180-145522/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,2,4-Trimethylbenzene	40.0	39.6	99	71-132	
1,3,5-Trimethylbenzene	40.0	39.5	99	75-135	
Benzene	40.0	40.7	102	80-120	
Ethylbenzene	40.0	40.5	101	79-124	
Isopropylbenzene	40.0	39.0	98	73-130	
Methyl tert-butyl ether	40.0	39.4	99	53-122	
Naphthalene	40.0	49.4	124	10-144	
Toluene	40.0	39.2	98	80-124	
Xylenes, Total	80.0	79.6	100	81-121	

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.: 180-45180-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 4062007.D

Lab ID: LCS 180-145636/7 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,2,4-Trimethylbenzene	40.0	37.8	94	71-132	
1,3,5-Trimethylbenzene	40.0	37.7	94	75-135	
Benzene	40.0	39.2	98	80-120	
Ethylbenzene	40.0	38.5	96	79-124	
Isopropylbenzene	40.0	37.4	93	73-130	
Methyl tert-butyl ether	40.0	38.9	97	53-122	
Naphthalene	40.0	40.2	100	10-144	
Toluene	40.0	37.0	93	80-124	
Xylenes, Total	80.0	76.2	95	81-121	

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.: 180-45180-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 3061911.D

Lab ID: 180-45138-J-4 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,2,4-Trimethylbenzene	40.0	5.0 U	40.7	102	71-132	
1,3,5-Trimethylbenzene	40.0	5.0 U	41.1	103	75-135	
Benzene	40.0	5.0 U	41.3	103	80-120	
Ethylbenzene	40.0	5.0 U	41.7	104	79-124	
Isopropylbenzene	40.0	5.0 U	40.4	101	73-130	
Methyl tert-butyl ether	40.0	5.0 U	39.6	99	53-122	
Naphthalene	40.0	1.5 J	54.1	132	10-144	
Toluene	40.0	5.0 U	40.8	102	80-124	
Xylenes, Total	80.0	10 U	82.6	103	81-121	

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.: 180-45180-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 3061912.D

Lab ID: 180-45138-J-4 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,2,4-Trimethylbenzene	40.0	39.6	99	3	35	71-132	
1,3,5-Trimethylbenzene	40.0	39.4	98	4	20	75-135	
Benzene	40.0	40.5	101	2	20	80-120	
Ethylbenzene	40.0	41.1	103	1	25	79-124	
Isopropylbenzene	40.0	39.9	100	1	20	73-130	
Methyl tert-butyl ether	40.0	41.5	104	5	20	53-122	
Naphthalene	40.0	53.2	129	2	35	10-144	
Toluene	40.0	39.9	100	2	20	80-124	
Xylenes, Total	80.0	81.4	102	1	20	81-121	

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.: 180-45180-1

SDG No.:

Lab File ID: 3061905.D Lab Sample ID: MB 180-145522/3

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

Instrument ID: CHHP3 Date Analyzed: 06/19/2015 08:12

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 180-145522/5	3061910.D	06/19/2015 10:04
	180-45138-J-4 MS	3061911.D	06/19/2015 10:27
	180-45138-J-4 MSD	3061912.D	06/19/2015 10:50
HD-MW-125-0/0-0	180-45180-1	3061918.D	06/19/2015 14:41
HD-MW-160-0/0-0	180-45180-2	3061919.D	06/19/2015 15:04

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Lab File ID: 4062004.D Lab Sample ID: MB 180-145636/4

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

Instrument ID: CHHP4 Date Analyzed: 06/20/2015 13:37

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-145636/7	4062007.D	06/20/2015 14:51
TRIP BLANK 1	180-45180-3	4062015.D	06/20/2015 18:07

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Lab File ID: 3060501.D BFB Injection Date: 06/05/2015

Instrument ID: CHHP3 BFB Injection Time: 06:00

Analysis Batch No.: 143986

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.3	
75	30.0 - 60.0 % of mass 95	46.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	71.2	
175	5.0 - 9.0 % of mass 174	5.5	(7.7)1
176	95.0 - 101.0 % of mass 174	71.2	(100.0)1
177	5.0 - 9.0 % of mass 176	4.5	(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
	IC 180-143986/3	3060503.D	06/05/2015	06:50
	IC 180-143986/4	3060504.D	06/05/2015	07:12
	IC 180-143986/5	3060505.D	06/05/2015	07:33
	ICIS 180-143986/6	3060506.D	06/05/2015	07:55
	IC 180-143986/7	3060507.D	06/05/2015	08:17
	IC 180-143986/8	3060508.D	06/05/2015	08:40
	IC 180-143986/9	3060509.D	06/05/2015	09:02

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Lab File ID: 3061901.D BFB Injection Date: 06/19/2015

Instrument ID: CHHP3 BFB Injection Time: 05:55

Analysis Batch No.: 145522

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.5	
75	30.0 - 60.0 % of mass 95	45.3	
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	0.2	(0.2)1
174	50.0 - 120.00 % of mass 95	74.3	
175	5.0 - 9.0 % of mass 174	5.7	(7.7)1
176	95.0 - 101.0 % of mass 174	70.8	(95.4)1
177	5.0 - 9.0 % of mass 176	5.0	(7.0)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
	CCVIS 180-145522/2	3061902.D	06/19/2015	06:50
	MB 180-145522/3	3061905.D	06/19/2015	08:12
	LCS 180-145522/5	3061910.D	06/19/2015	10:04
	180-45138-J-4 MS	3061911.D	06/19/2015	10:27
	180-45138-J-4 MSD	3061912.D	06/19/2015	10:50
HD-MW-125-0/0-0	180-45180-1	3061918.D	06/19/2015	14:41
HD-MW-160-0/0-0	180-45180-2	3061919.D	06/19/2015	15:04

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Lab File ID: 4061601.D BFB Injection Date: 06/16/2015

Instrument ID: CHHP4 BFB Injection Time: 09:24

Analysis Batch No.: 145114

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.1	
75	30.0 - 60.0 % of mass 95	52.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.3	
173	Less than 2.0 % of mass 174	0.8	(0.9)1
174	50.0 - 120.00 % of mass 95	85.7	
175	5.0 - 9.0 % of mass 174	6.9	(8.0)1
176	95.0 - 101.0 % of mass 174	84.6	(98.7)1
177	5.0 - 9.0 % of mass 176	5.6	(6.6)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-145114/4	4061604.D	06/16/2015	12:49
	IC 180-145114/6	4061606.D	06/16/2015	13:38
	ICIS 180-145114/7	4061607.D	06/16/2015	14:02
	IC 180-145114/8	4061608.D	06/16/2015	14:27
	IC 180-145114/9	4061609.D	06/16/2015	14:51
	IC 180-145114/10	4061610.D	06/16/2015	15:16
	IC 180-145114/13	4061613.D	06/16/2015	17:04

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Lab File ID: 4062001.D BFB Injection Date: 06/20/2015

Instrument ID: CHHP4 BFB Injection Time: 11:13

Analysis Batch No.: 145636

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.7	
75	30.0 - 60.0 % of mass 95	50.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.2	(0.3)1
174	50.0 - 120.00 % of mass 95	84.2	
175	5.0 - 9.0 % of mass 174	6.1	(7.3)1
176	95.0 - 101.0 % of mass 174	82.5	(98.0)1
177	5.0 - 9.0 % of mass 176	5.9	(7.2)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-145636/2	4062002.D	06/20/2015	11:59
	MB 180-145636/4	4062004.D	06/20/2015	13:37
	LCS 180-145636/7	4062007.D	06/20/2015	14:51
TRIP BLANK 1	180-45180-3	4062015.D	06/20/2015	18:07

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Sample No.: CCVIS 180-145522/2 Date Analyzed: 06/19/2015 06:50

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

Lab File ID (Standard): 3061902.D Heated Purge: (Y/N) Y

Calibration ID: 24032

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		168675	4.49	848699	7.36	182623	10.44
UPPER LIMIT		337350	4.99	1697398	7.86	365246	10.94
LOWER LIMIT		84338	3.99	424350	6.86	91312	9.94
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-145522/3		162367	4.45	783701	7.37	175227	10.45
LCS 180-145522/5		169442	4.48	818164	7.37	186146	10.44
180-45138-J-4 MS		168688	4.48	832180	7.37	185644	10.45
180-45138-J-4 MSD		178679	4.49	804462	7.36	182749	10.45
180-45180-1	HD-MW-125-0/0-0	173277	4.44	843573	7.37	192546	10.45
180-45180-2	HD-MW-160-0/0-0	167377	4.45	855481	7.37	185746	10.44

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

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Sample No.: CCVIS 180-145522/2 Date Analyzed: 06/19/2015 06:50

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

Lab File ID (Standard): 3061902.D Heated Purge: (Y/N) Y

Calibration ID: 24032

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		282875	12.77				
UPPER LIMIT		565750	13.27				
LOWER LIMIT		141438	12.27				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-145522/3		240509	12.77				
LCS 180-145522/5		271667	12.77				
180-45138-J-4 MS		264493	12.77				
180-45138-J-4 MSD		268488	12.77				
180-45180-1	HD-MW-125-0/0-0	249095	12.77				
180-45180-2	HD-MW-160-0/0-0	251512	12.77				

DCB = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Sample No.: CCVIS 180-145636/2 Date Analyzed: 06/20/2015 11:59

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 4062002.D Heated Purge: (Y/N) N

Calibration ID: 24306

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		169709	3.15	685010	6.26	163844	9.45
UPPER LIMIT		339418	3.65	1370020	6.76	327688	9.95
LOWER LIMIT		84855	2.65	342505	5.76	81922	8.95
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-145636/4		114292	3.09	827336	6.26	174939	9.45
LCS 180-145636/7		192747	3.16	717306	6.25	175381	9.45
180-45180-3	TRIP BLANK 1	127732	3.11	753155	6.26	166874	9.45

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

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Sample No.: CCVIS 180-145636/2 Date Analyzed: 06/20/2015 11:59

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 4062002.D Heated Purge: (Y/N) N

Calibration ID: 24306

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		223555	11.80				
UPPER LIMIT		447110	12.30				
LOWER LIMIT		111778	11.30				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-145636/4		192983	11.80				
LCS 180-145636/7		232920	11.80				
180-45180-3	TRIP BLANK 1	206056	11.80				

DCB = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-45180-1

SDG No.:

Client Sample ID: HD-MW-125-0/0-0 | Lab Sample ID: 180-45180-1

Matrix: Water | Lab File ID: 3061918.D

Analysis Method: 8260C | Date Collected: 06/17/2015 11:45

Sample wt/vol: 5(mL) | Date Analyzed: 06/19/2015 14:41

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 145522 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-63-6	1,2,4-Trimethylbenzene	5.0	U	5.0	0.52
108-67-8	1,3,5-Trimethylbenzene	5.0	U	5.0	0.59
71-43-2	Benzene	5.0	U	5.0	0.99
100-41-4	Ethylbenzene	0.97	J	5.0	0.62
98-82-8	Isopropylbenzene	5.0	U	5.0	0.53
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	1.0
91-20-3	Naphthalene	5.0	U	5.0	0.47
108-88-3	Toluene	5.0	U	5.0	0.85
1330-20-7	Xylenes, Total	10	U	10	1.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		62-123
460-00-4	4-Bromofluorobenzene (Surr)	84		75-120
1868-53-7	Dibromofluoromethane (Surr)	93		80-120
2037-26-5	Toluene-d8 (Surr)	93		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20150619-7465.b\3061918.D
Lims ID: 180-45180-C-1 Lab Sample ID: 180-45180-1
Client ID: HD-MW-125-0/0-0
Sample Type: Client
Inject. Date: 19-Jun-2015 14:41:30 ALS Bottle#: 18 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-45180-C-1
Misc. Info.: 180-0007465-009180-0007465-009
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20150619-7465.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 22-Jun-2015 07:05:57 Calib Date: 05-Jun-2015 09:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20150605-7277.b\3060509.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK033

First Level Reviewer: gordonk Date: 22-Jun-2015 07:05:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.436	4.489	-0.053	99	173277	5000.0	
* 2 Fluorobenzene (IS)	96	7.368	7.360	0.008	99	843573	250.0	
* 3 Chlorobenzene-d5	119	10.446	10.444	0.002	88	192546	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.770	12.768	0.002	97	249095	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.620	6.618	0.002	93	170055	233.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.997	6.989	0.008	96	155904	220.0	
$ 7 Toluene-d8 (Surr)	98	9.011	9.009	0.002	92	764156	232.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.614	11.612	0.002	86	282280	208.9	
34 Methyl tert-butyl ether	73		4.732				ND	
55 Benzene	78		7.050				ND	
73 Toluene	91		9.075				ND	
86 Ethylbenzene	106	10.580	10.584	-0.004	89	7601	4.86	
87 m-Xylene & p-Xylene	106		10.700				ND	
88 o-Xylene	106		11.095				ND	
91 Isopropylbenzene	105		11.460				ND	
99 1,3,5-Trimethylbenzene	105		12.044				ND	
103 1,2,4-Trimethylbenzene	105		12.421				ND	
116 Naphthalene	128		15.031				ND	
S 129 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00038 Amount Added: 10.00 Units: uL
VOA8260INT_00038 Amount Added: 10.00 Units: uL Run Reagent

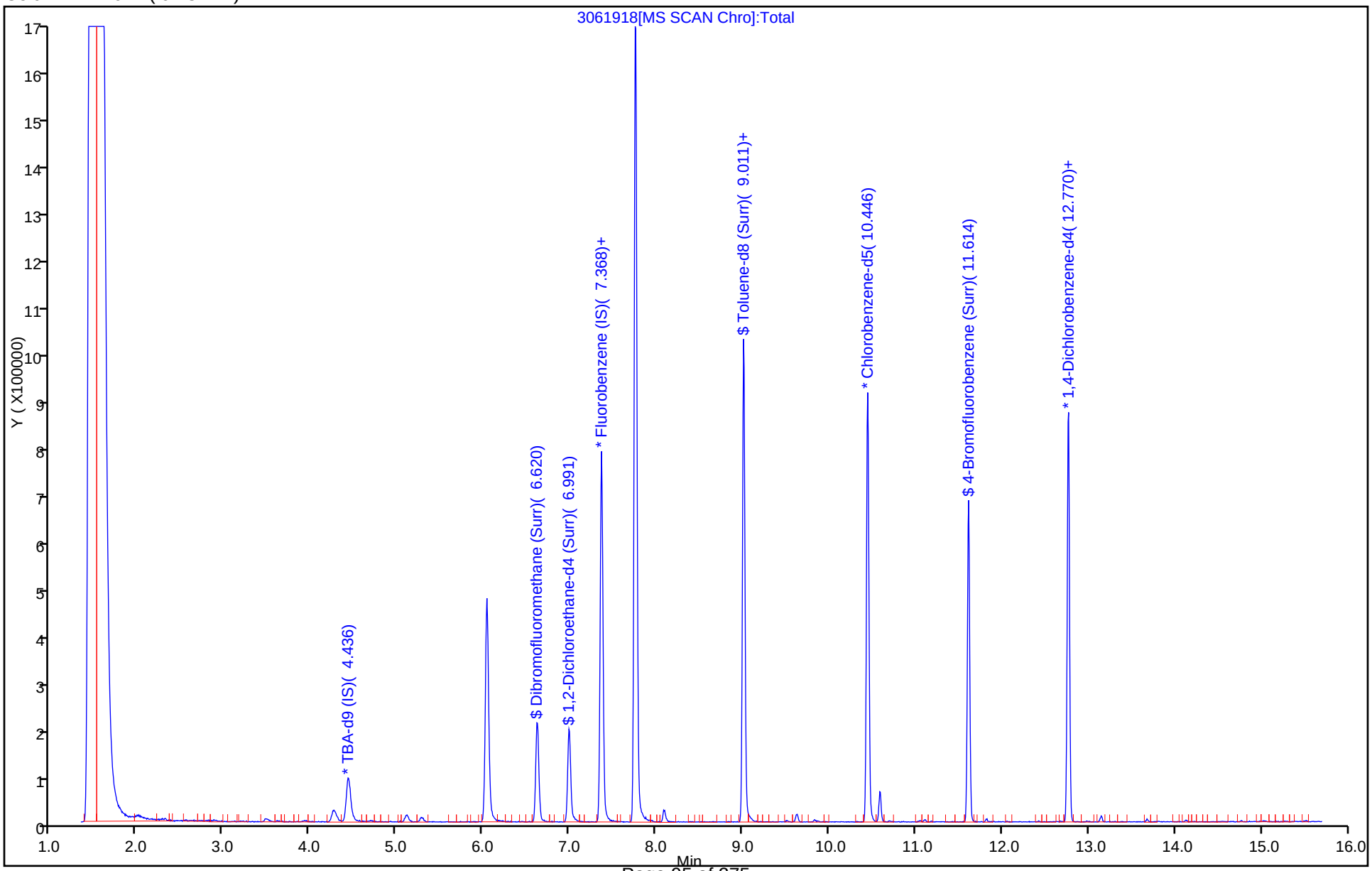
Report Date: 22-Jun-2015 07:05:58 Chrom Revision: 2.2 14-May-2015 11:41:56

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20150619-7465.b\3061918.D

Injection Date:	19-Jun-2015 14:41:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-45180-C-1	Lab Sample ID:	180-45180-1	Worklist Smp#:	9
Client ID:	HD-MW-125-0/0-0				
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)

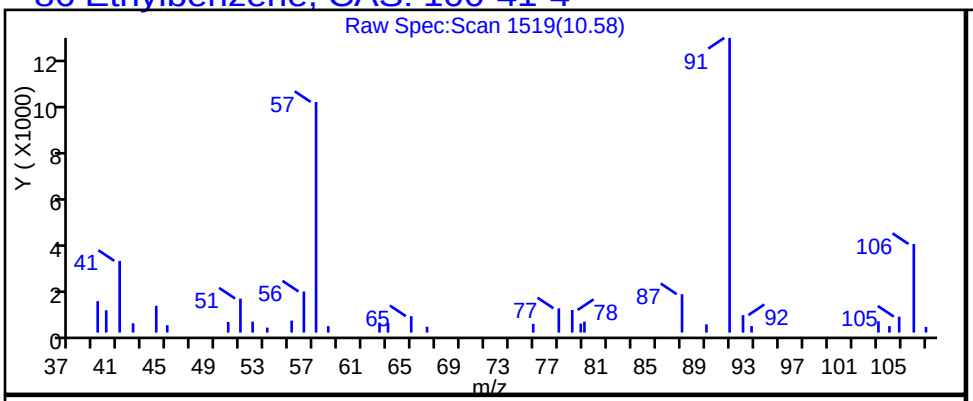


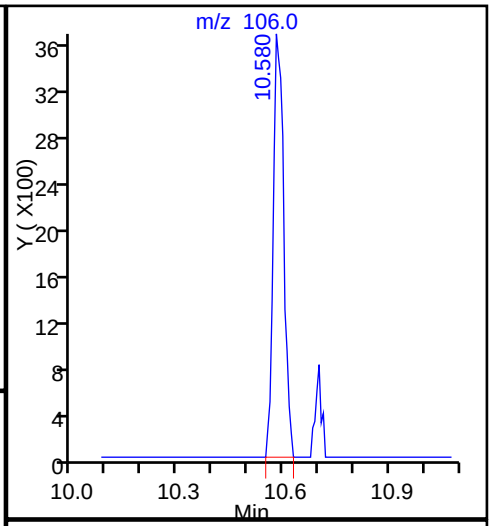
Report Date: 22-Jun-2015 07:05:58 Chrom Revision: 2.2 14-May-2015 11:41:56

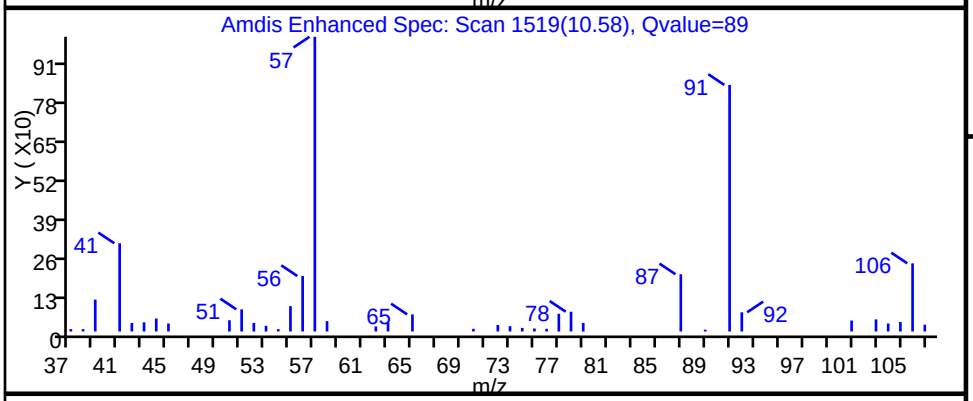
TestAmerica Pittsburgh

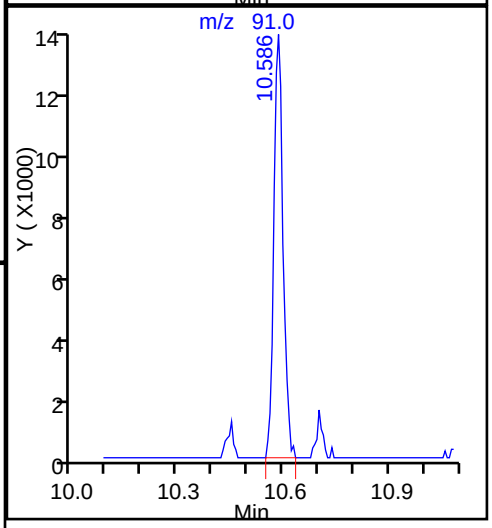
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20150619-7465.b\3061918.D		
Injection Date:	19-Jun-2015 14:41:30	Instrument ID:	CHHP3
Lims ID:	180-45180-C-1	Lab Sample ID:	180-45180-1
Client ID:	HD-MW-125-0/0-0		
Operator ID:	10099	ALS Bottle#:	18 Worklist Smp#: 9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

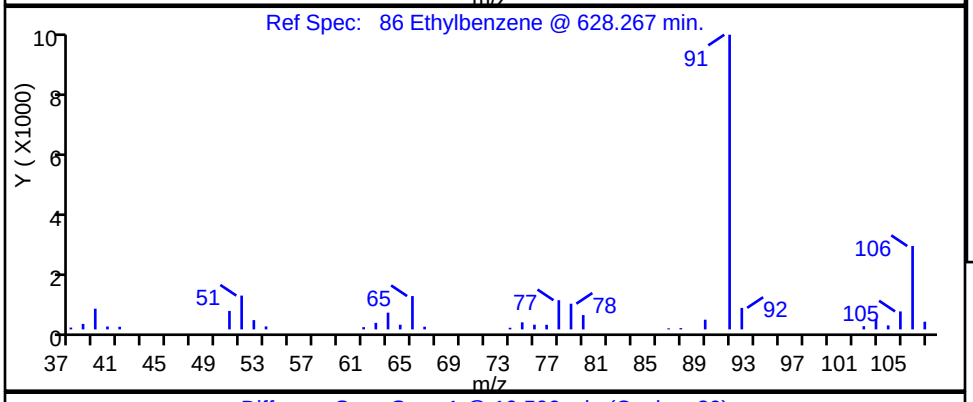
86 Ethylbenzene, CAS: 100-41-4

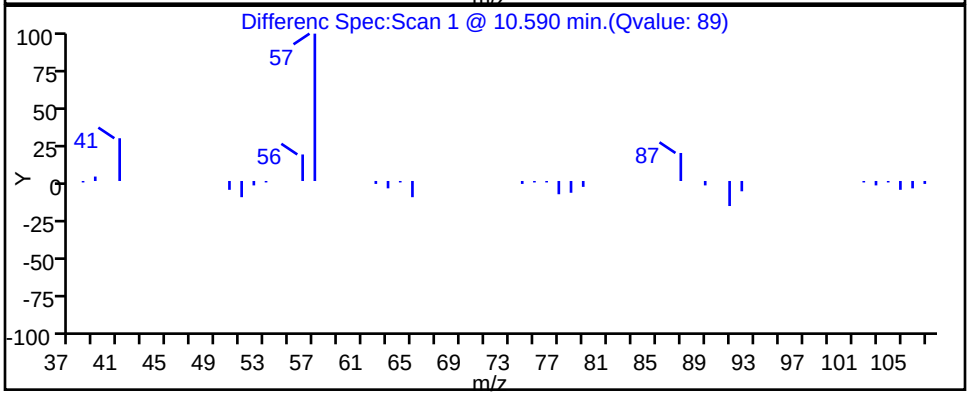












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-45180-1

SDG No.:

Client Sample ID: HD-MW-160-0/0-0 | Lab Sample ID: 180-45180-2

Matrix: Water | Lab File ID: 3061919.D

Analysis Method: 8260C | Date Collected: 06/17/2015 10:35

Sample wt/vol: 5(mL) | Date Analyzed: 06/19/2015 15:04

Soil Aliquot Vol: | Dilution Factor: 10

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

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

Analysis Batch No.: 145522 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-63-6	1,2,4-Trimethylbenzene	38	J	50	5.2
108-67-8	1,3,5-Trimethylbenzene	50	U	50	5.9
71-43-2	Benzene	660		50	9.9
100-41-4	Ethylbenzene	76		50	6.2
98-82-8	Isopropylbenzene	50	U	50	5.3
1634-04-4	Methyl tert-butyl ether	50	U	50	10
91-20-3	Naphthalene	14	J B	50	4.7
108-88-3	Toluene	230		50	8.5
1330-20-7	Xylenes, Total	220		100	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		62-123
460-00-4	4-Bromofluorobenzene (Surr)	84		75-120
1868-53-7	Dibromofluoromethane (Surr)	92		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20150619-7465.b\3061919.D
Lims ID: 180-45180-A-2 Lab Sample ID: 180-45180-2
Client ID: HD-MW-160-0/0-0
Sample Type: Client
Inject. Date: 19-Jun-2015 15:04:30 ALS Bottle#: 19 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 180-45180-A-2
Misc. Info.: 180-0007465-010180-0007465-010
Operator ID: 10099 Instrument ID: CHHP3

Method: \\ChromNA\Pittsburgh\ChromData\CHHP3\20150619-7465.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 22-Jun-2015 07:06:23 Calib Date: 05-Jun-2015 09:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20150605-7277.b\3060509.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK033

First Level Reviewer: gordonk Date: 22-Jun-2015 07:06:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.446	4.489	-0.043	99	167377	5000.0	
* 2 Fluorobenzene (IS)	96	7.366	7.360	0.006	99	855481	250.0	
* 3 Chlorobenzene-d5	119	10.444	10.444	0.000	88	185746	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.768	0.000	97	251512	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.623	6.618	0.005	93	169675	229.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.995	6.989	0.006	95	160628	223.5	
$ 7 Toluene-d8 (Surr)	98	9.014	9.009	0.005	92	782871	247.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.612	0.000	85	274642	210.7	
34 Methyl tert-butyl ether	73		4.732				ND	
55 Benzene	78	7.055	7.050	0.005	97	1321863	330.2	
73 Toluene	91	9.081	9.075	0.006	98	441697	114.1	
86 Ethylbenzene	106	10.590	10.584	0.006	98	57216	37.9	
87 m-Xylene & p-Xylene	106	10.699	10.700	-0.001	99	150091	80.5	
88 o-Xylene	106	11.095	11.095	0.000	97	50963	28.1	
91 Isopropylbenzene	105	11.466	11.460	0.006	95	11689	2.37	
99 1,3,5-Trimethylbenzene	105	12.050	12.044	0.006	94	8673	2.30	
103 1,2,4-Trimethylbenzene	105	12.421	12.421	0.000	97	73283	19.1	
116 Naphthalene	128	15.031	15.031	0.000	95	7890	6.87	
S 129 Xylenes, Total	106				0		108.6	

Reagents:

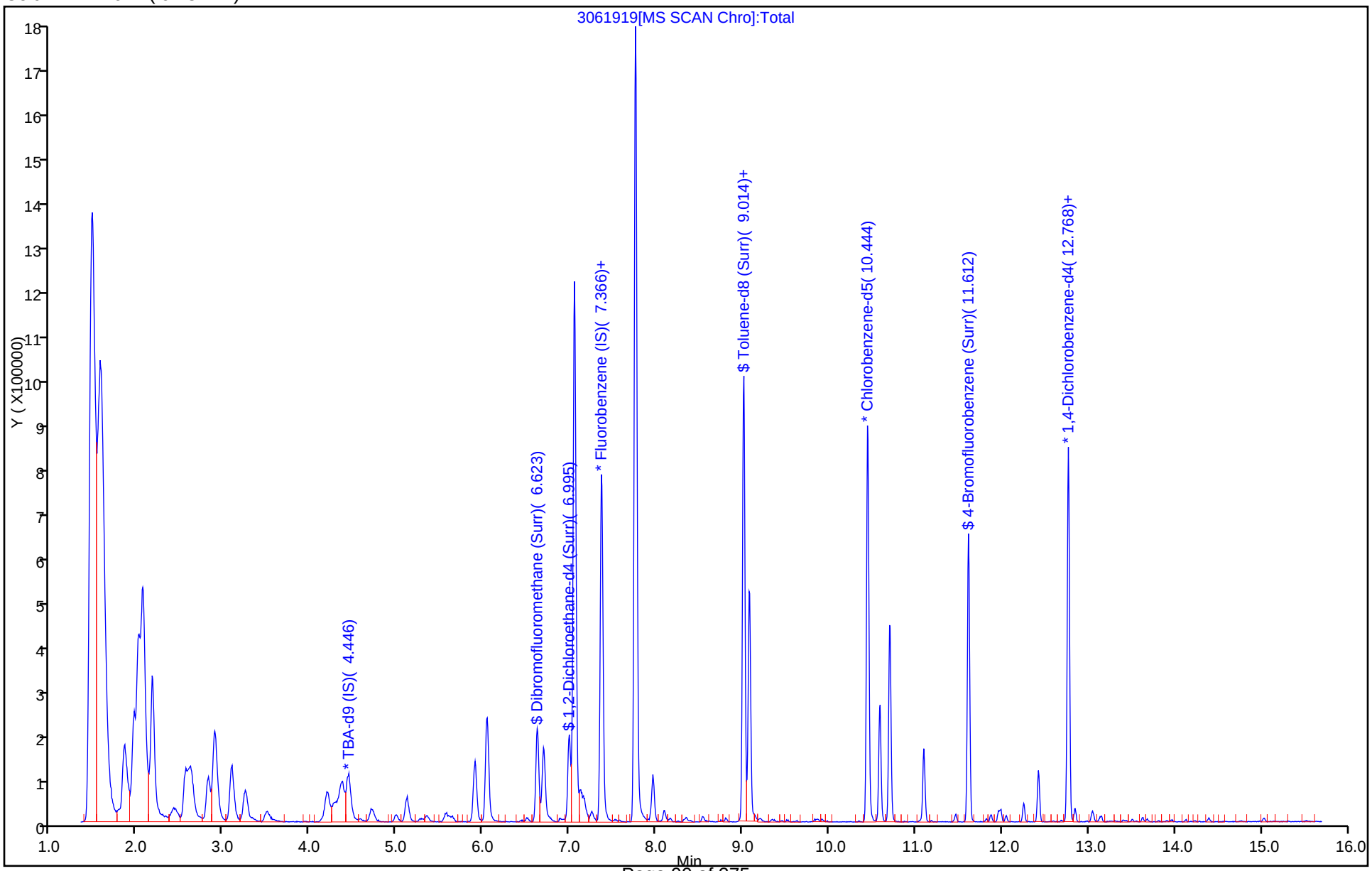
VOA8260SURR_00038 Amount Added: 10.00 Units: uL
VOA8260INT_00038 Amount Added: 10.00 Units: uL Run Reagent

Report Date: 22-Jun-2015 07:06:23 Chrom Revision: 2.2 14-May-2015 11:41:56

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20150619-7465.b\3061919.D				
Injection Date:	19-Jun-2015 15:04:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-45180-A-2	Lab Sample ID:	180-45180-2	Worklist Smp#:	10
Client ID:	HD-MW-160-0/0-0				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	19
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



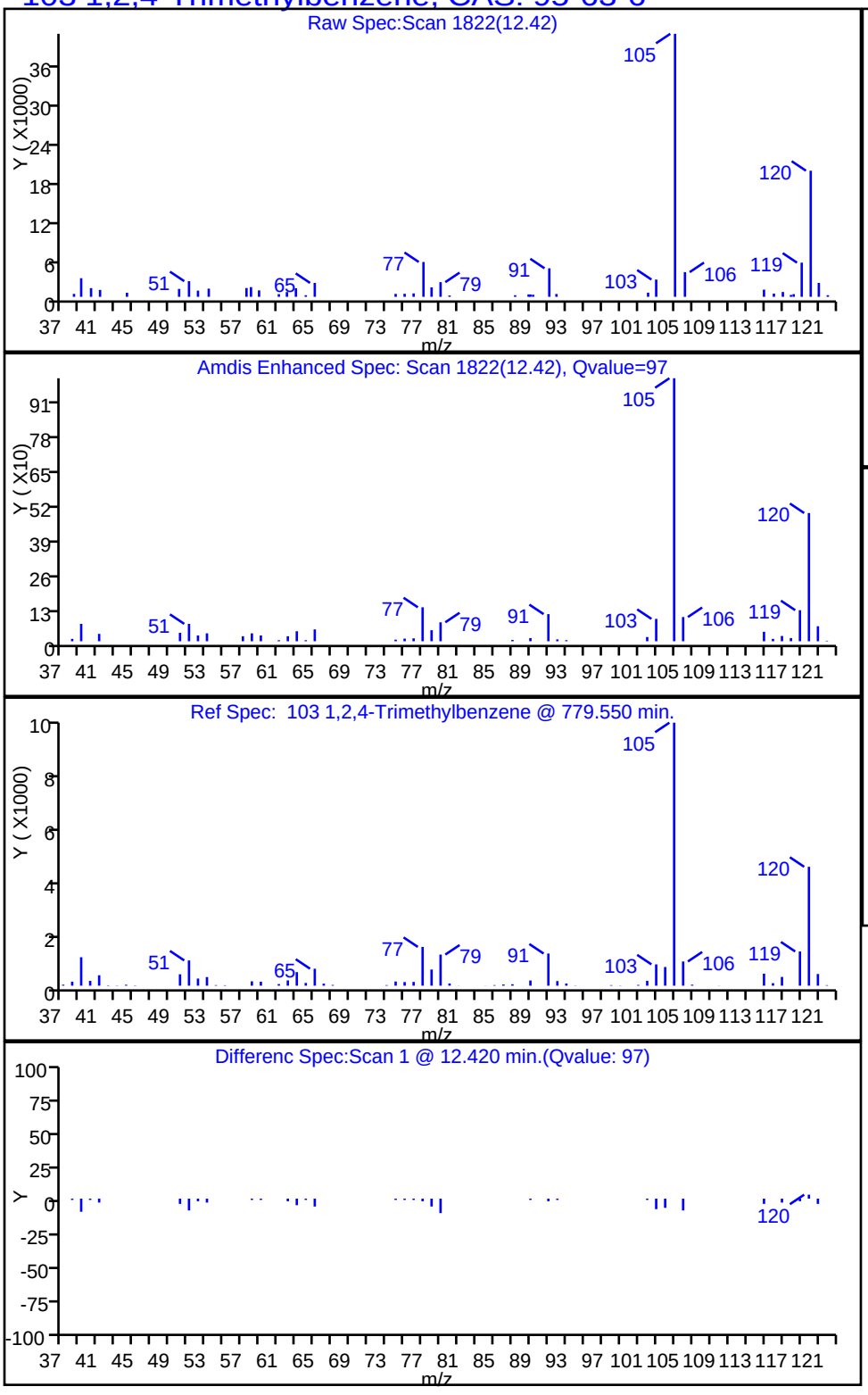
Report Date: 22-Jun-2015 07:06:23 Chrom Revision: 2.2 14-May-2015 11:41:56

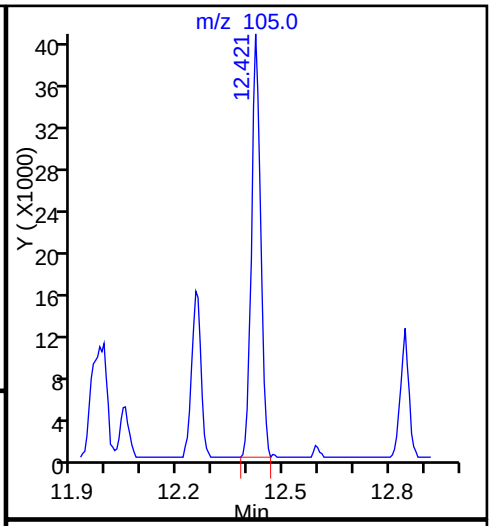
TestAmerica Pittsburgh

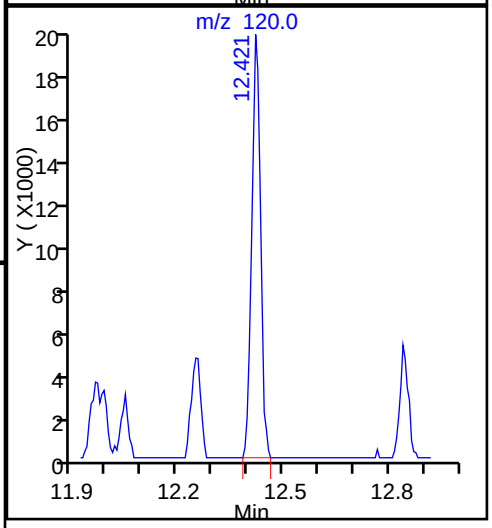
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20150619-7465.b\3061919.D

Injection Date:	19-Jun-2015 15:04:30	Instrument ID:	CHHP3		
Lims ID:	180-45180-A-2	Lab Sample ID:	180-45180-2		
Client ID:	HD-MW-160-0/0-0				
Operator ID:	10099	ALS Bottle#:	19	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

103 1,2,4-Trimethylbenzene, CAS: 95-63-6







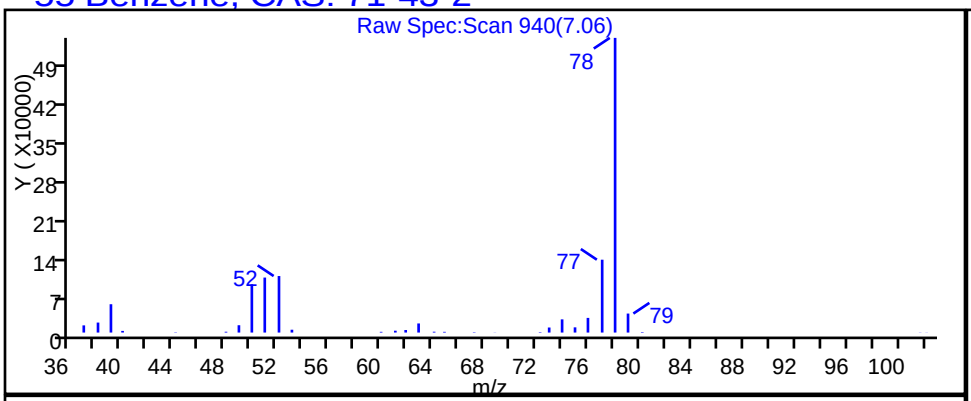
Report Date: 22-Jun-2015 07:06:23 Chrom Revision: 2.2 14-May-2015 11:41:56

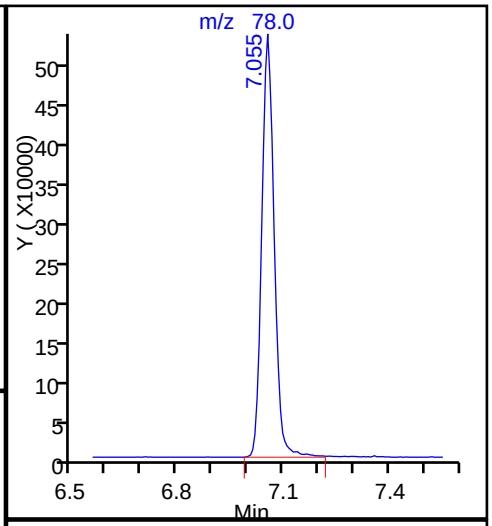
TestAmerica Pittsburgh

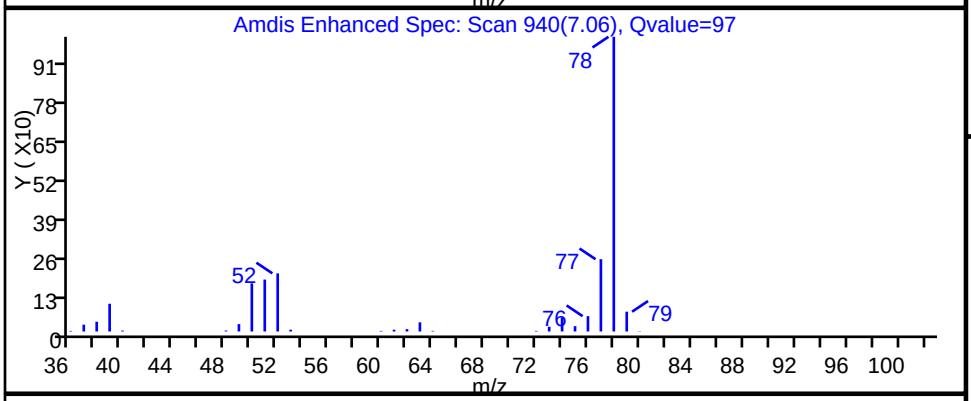
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20150619-7465.b\3061919.D

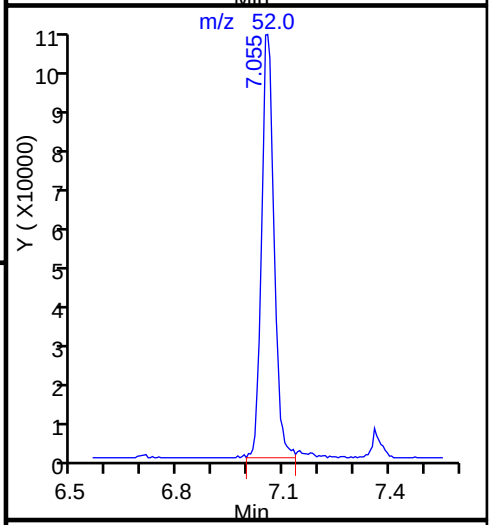
Injection Date:	19-Jun-2015 15:04:30	Instrument ID:	CHHP3
Lims ID:	180-45180-A-2	Lab Sample ID:	180-45180-2
Client ID:	HD-MW-160-0/0-0		
Operator ID:	10099	ALS Bottle#:	19 Worklist Smp#: 10
Purge Vol:	5.000 mL	Dil. Factor:	10.0000
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

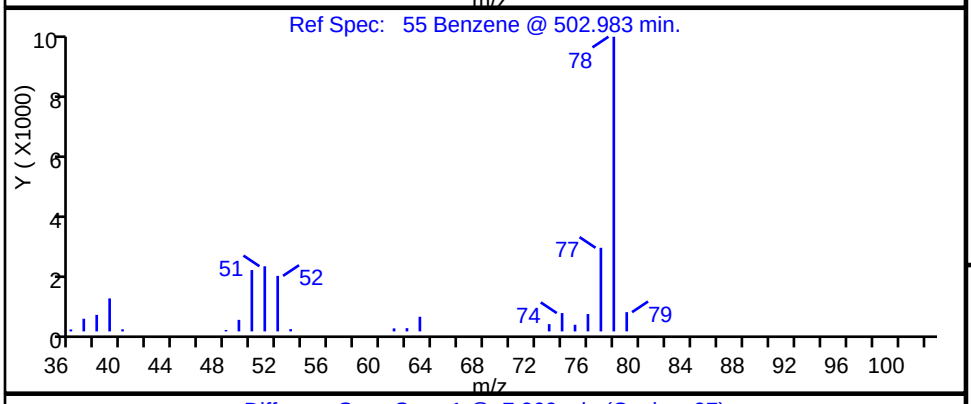
55 Benzene, CAS: 71-43-2

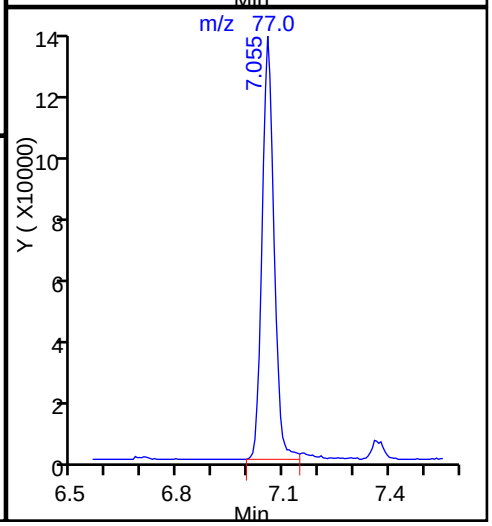


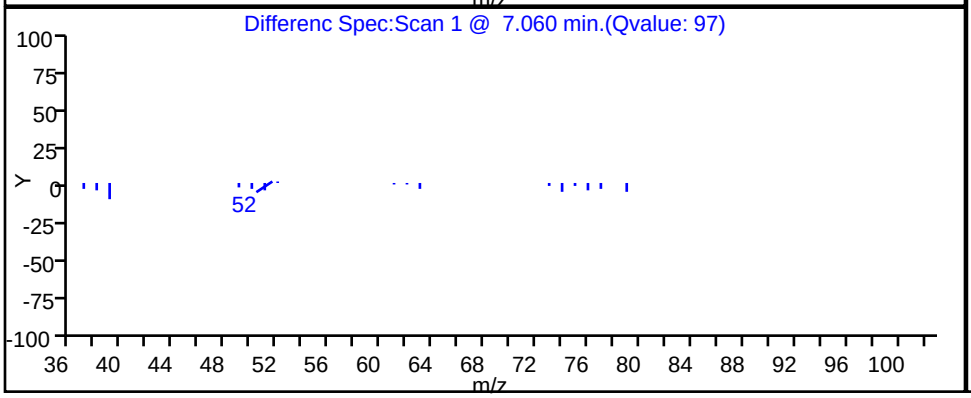












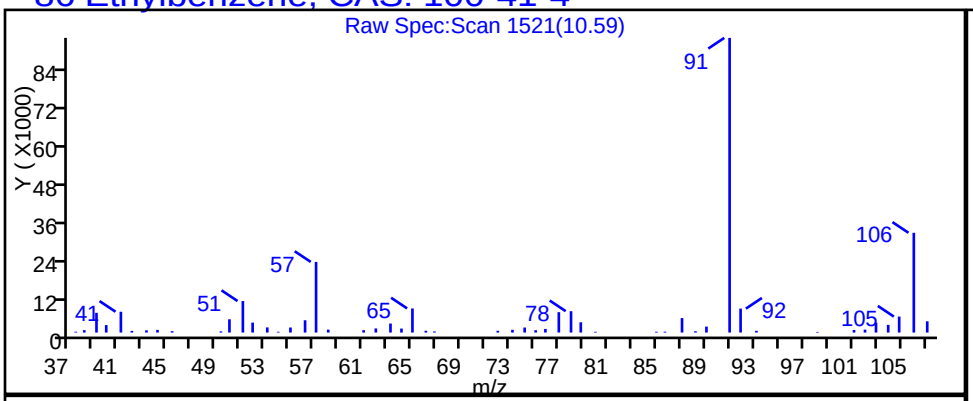
Report Date: 22-Jun-2015 07:06:23 Chrom Revision: 2.2 14-May-2015 11:41:56

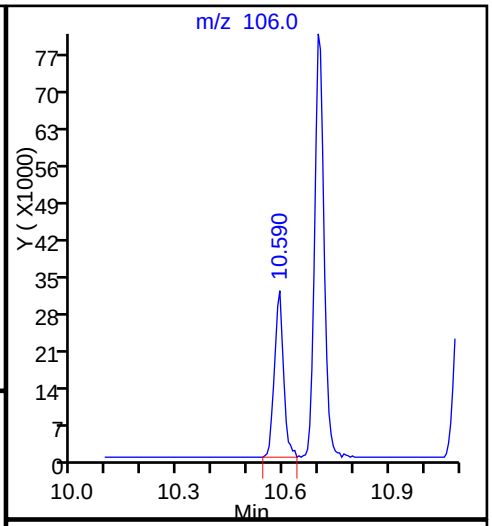
TestAmerica Pittsburgh

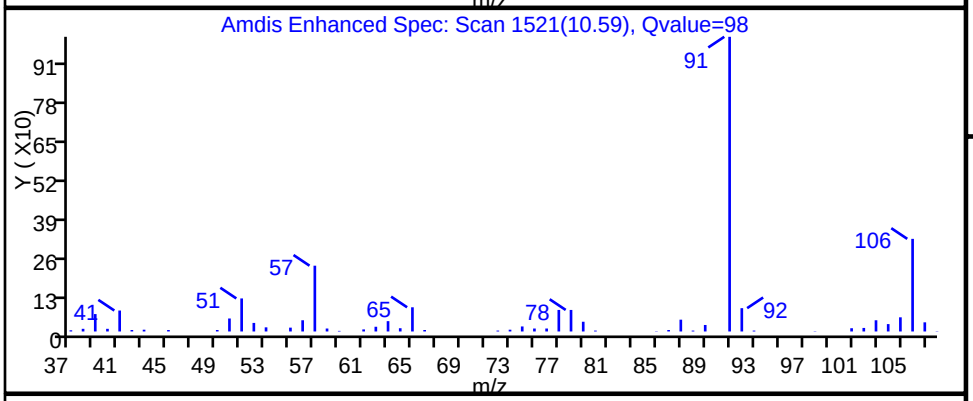
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20150619-7465.b\3061919.D

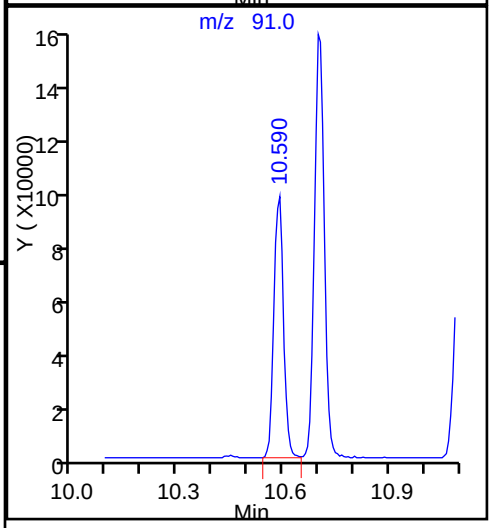
Injection Date:	19-Jun-2015 15:04:30	Instrument ID:	CHHP3		
Lims ID:	180-45180-A-2	Lab Sample ID:	180-45180-2		
Client ID:	HD-MW-160-0/0-0				
Operator ID:	10099	ALS Bottle#:	19	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

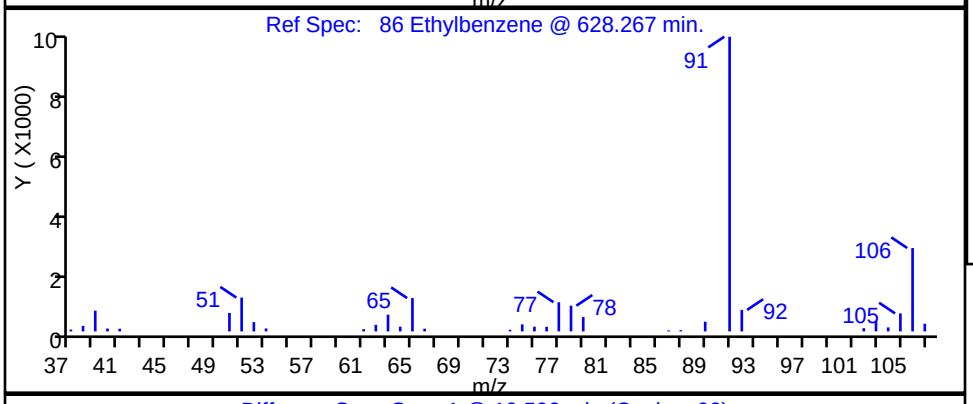
86 Ethylbenzene, CAS: 100-41-4

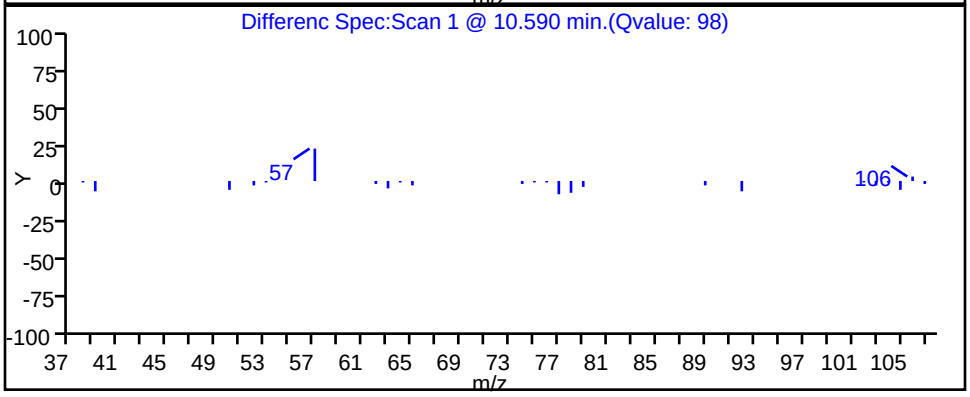










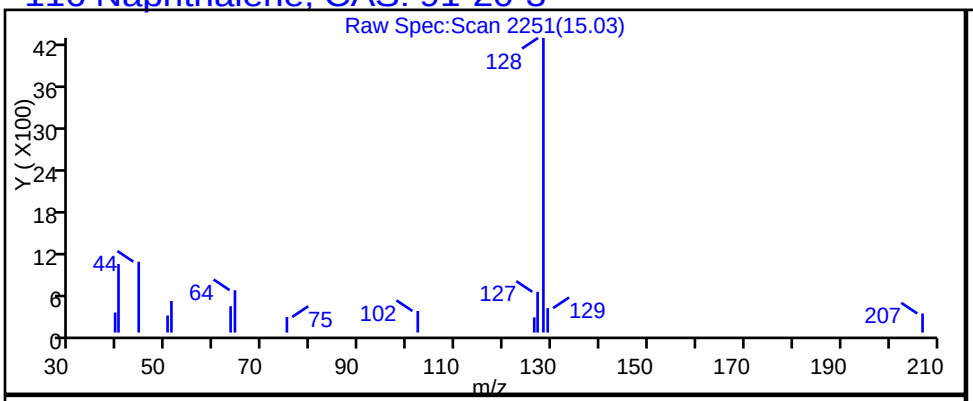


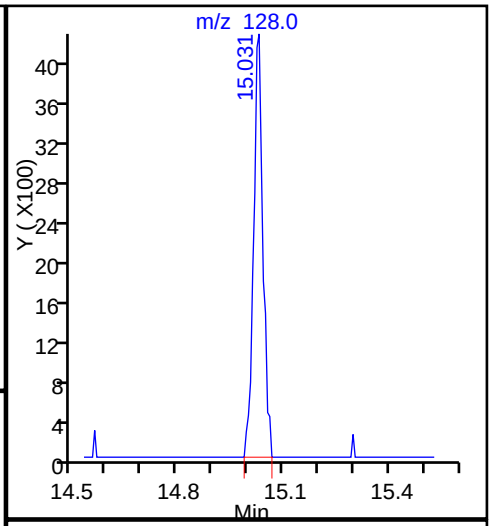
Report Date: 22-Jun-2015 07:06:23 Chrom Revision: 2.2 14-May-2015 11:41:56

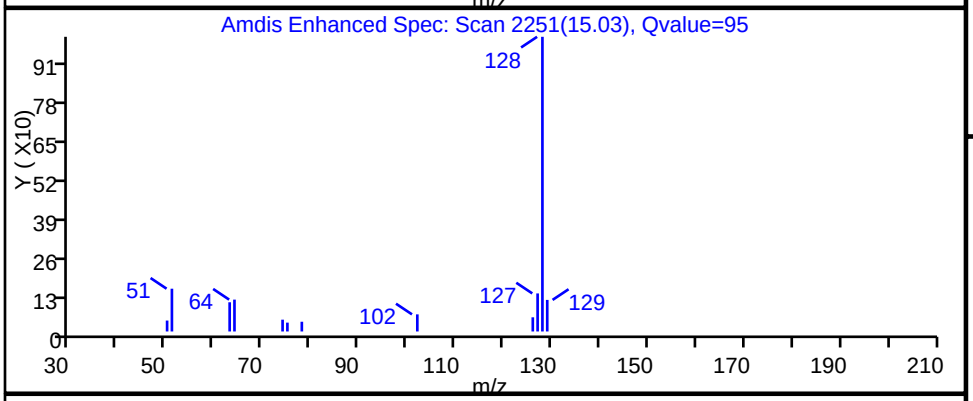
TestAmerica Pittsburgh

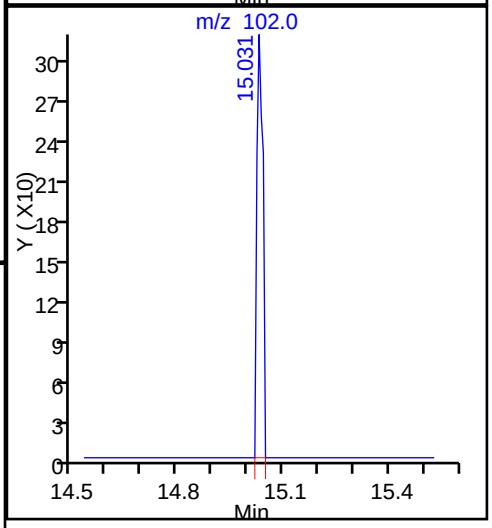
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP3\20150619-7465.b\3061919.D				
Injection Date:	19-Jun-2015 15:04:30	Instrument ID:	CHHP3		
Lims ID:	180-45180-A-2	Lab Sample ID:	180-45180-2		
Client ID:	HD-MW-160-0/0-0				
Operator ID:	10099	ALS Bottle#:	19	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

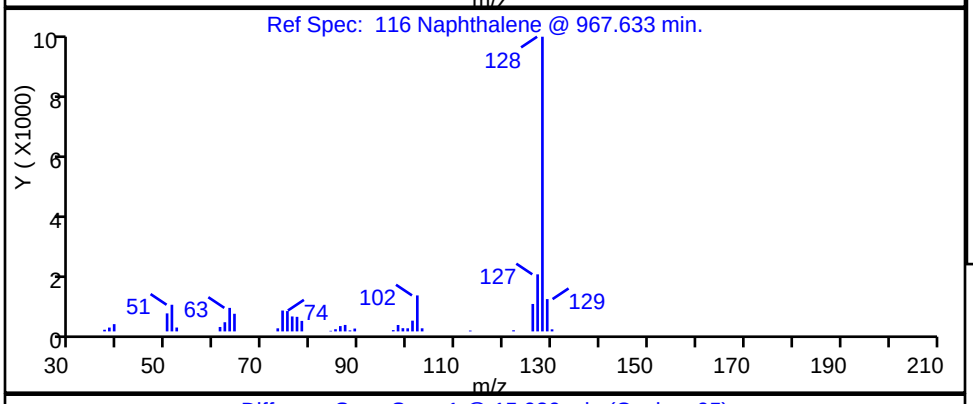
116 Naphthalene, CAS: 91-20-3

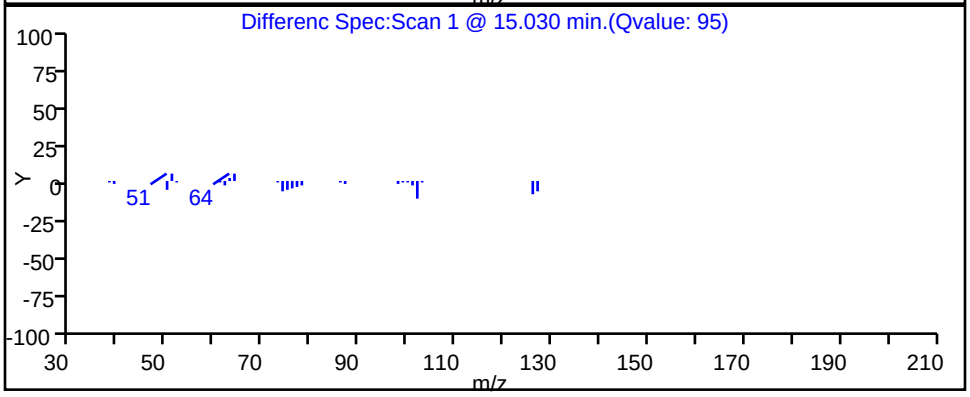












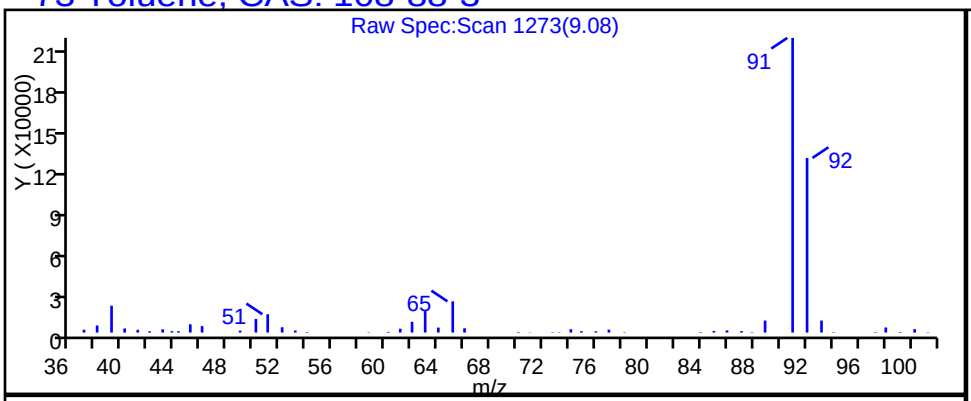
Report Date: 22-Jun-2015 07:06:23 Chrom Revision: 2.2 14-May-2015 11:41:56

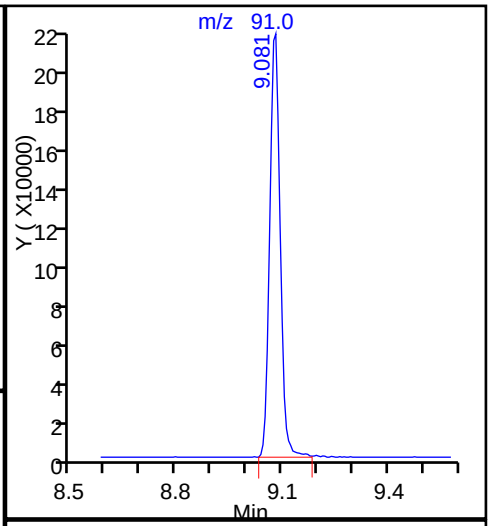
TestAmerica Pittsburgh

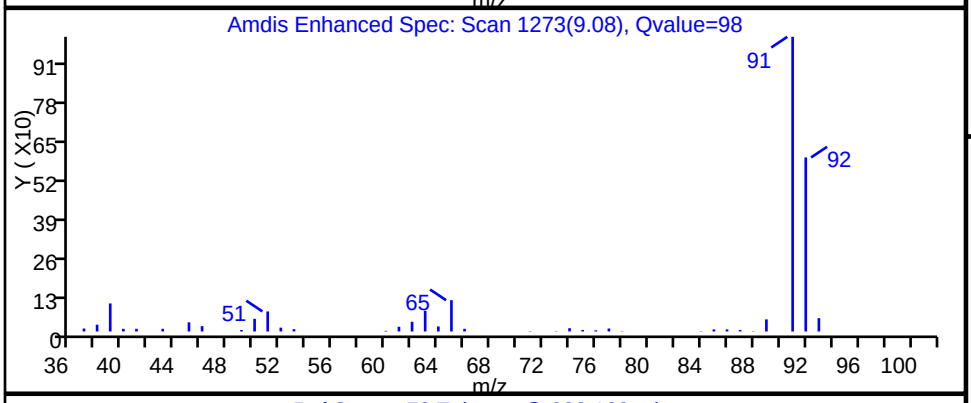
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20150619-7465.b\3061919.D

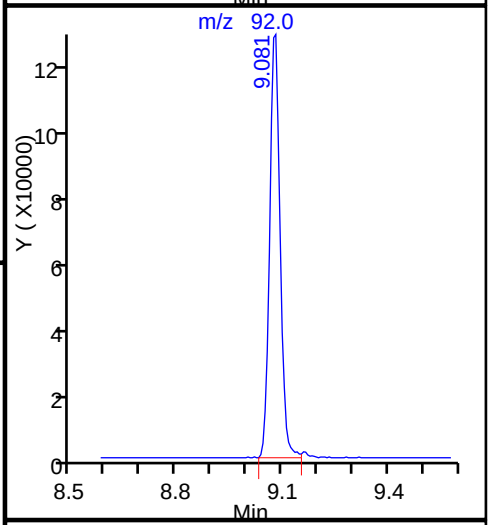
Injection Date:	19-Jun-2015 15:04:30	Instrument ID:	CHHP3
Lims ID:	180-45180-A-2	Lab Sample ID:	180-45180-2
Client ID:	HD-MW-160-0/0-0		
Operator ID:	10099	ALS Bottle#:	19 Worklist Smp#: 10
Purge Vol:	5.000 mL	Dil. Factor:	10.0000
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

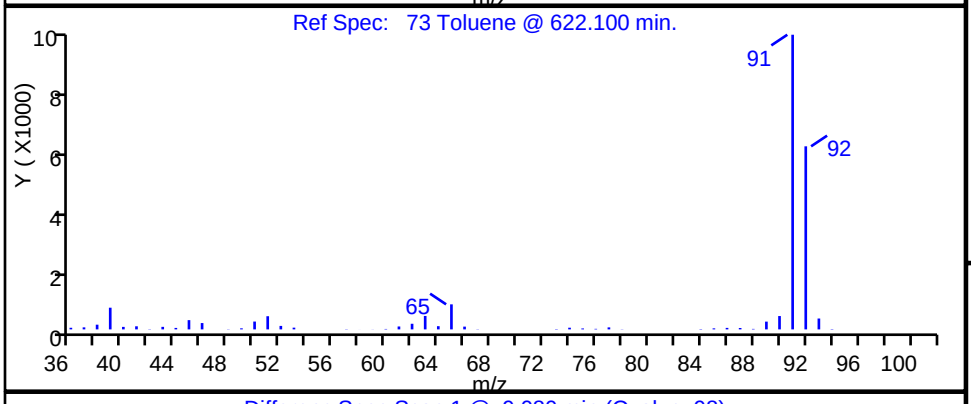
73 Toluene, CAS: 108-88-3

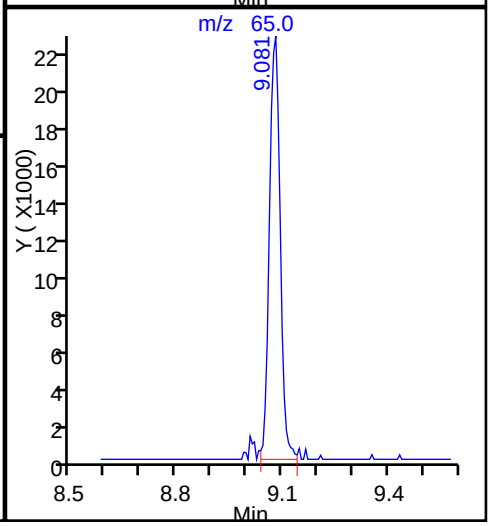


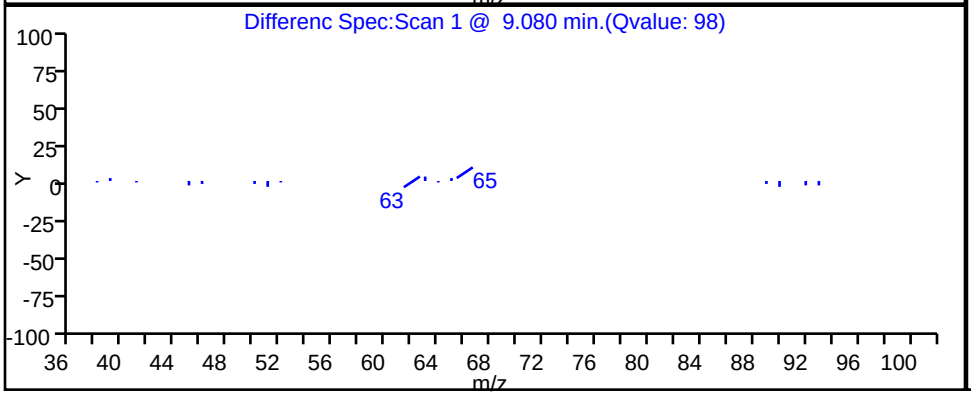












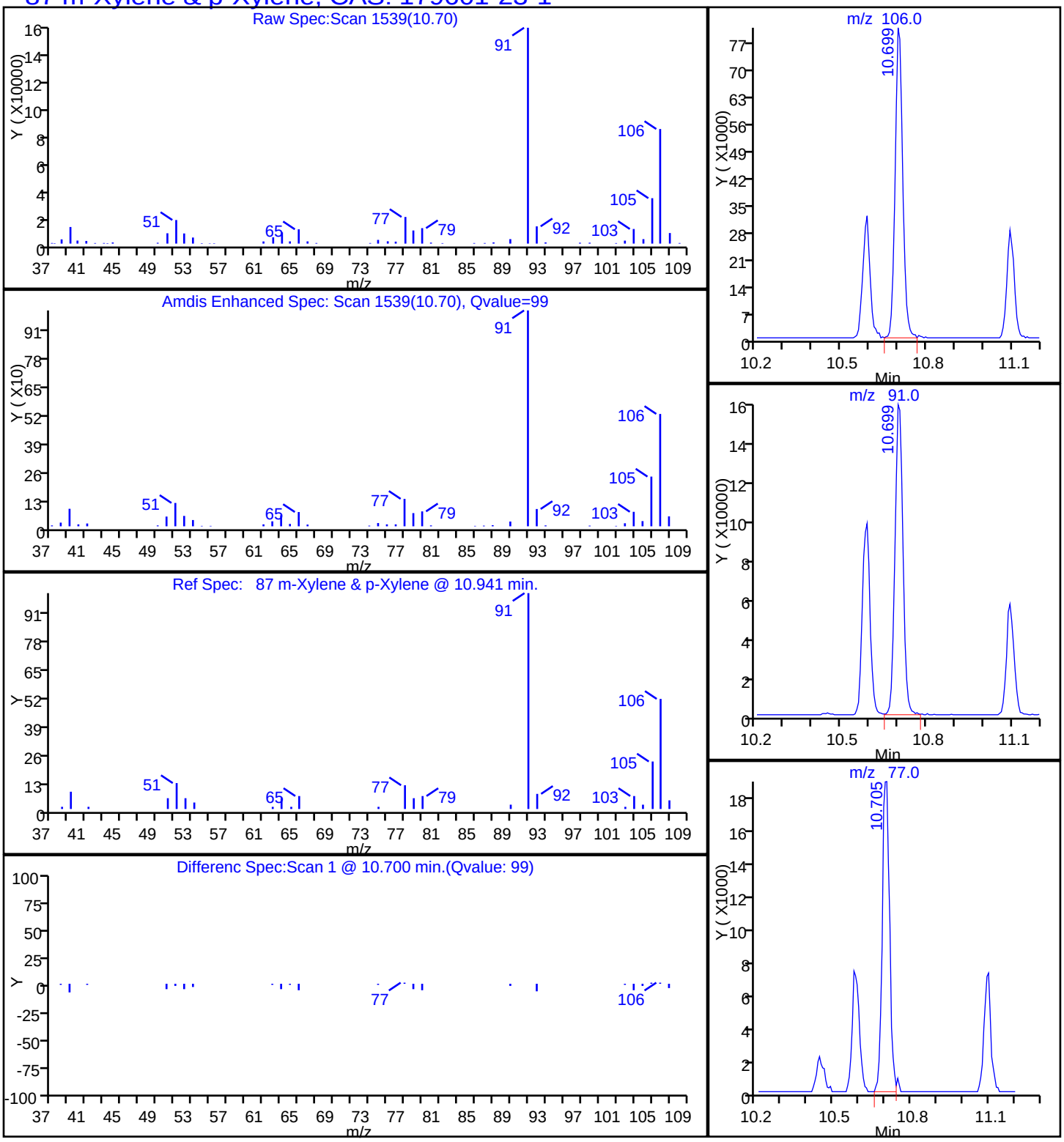
Report Date: 22-Jun-2015 07:06:23 Chrom Revision: 2.2 14-May-2015 11:41:56

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20150619-7465.b\3061919.D

Injection Date:	19-Jun-2015 15:04:30	Instrument ID:	CHHP3		
Lims ID:	180-45180-A-2	Lab Sample ID:	180-45180-2		
Client ID:	HD-MW-160-0/0-0				
Operator ID:	10099	ALS Bottle#:	19	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



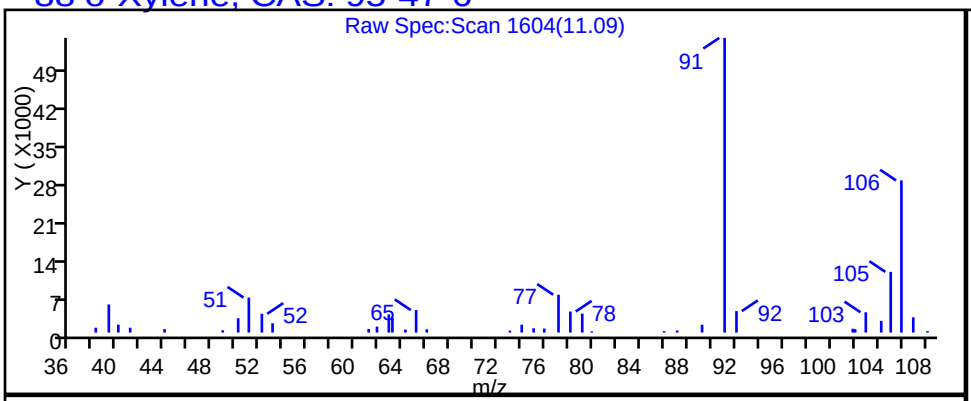
Report Date: 22-Jun-2015 07:06:23 Chrom Revision: 2.2 14-May-2015 11:41:56

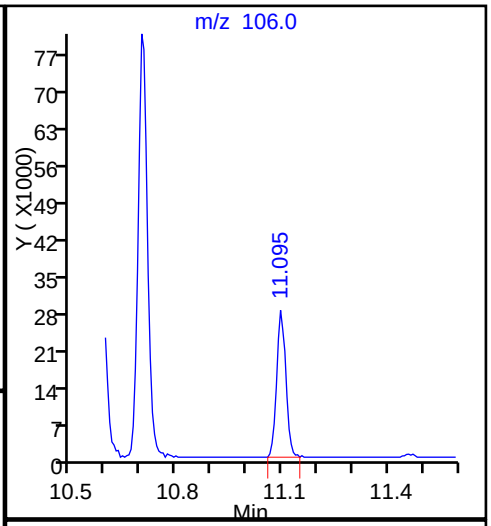
TestAmerica Pittsburgh

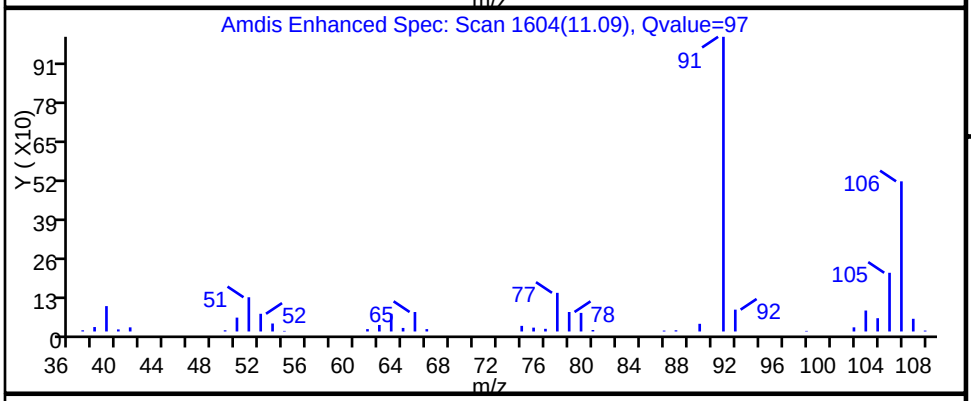
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP3\20150619-7465.b\3061919.D

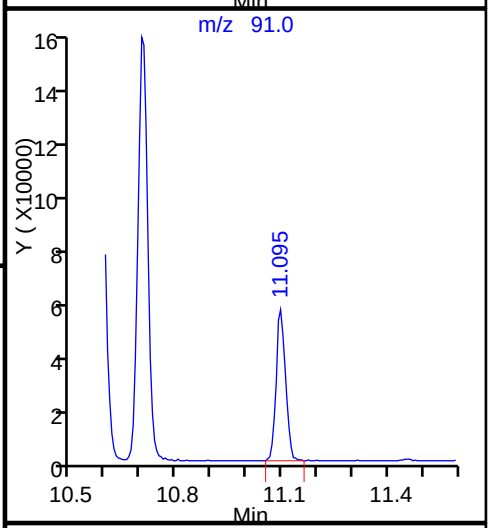
Injection Date:	19-Jun-2015 15:04:30	Instrument ID:	CHHP3		
Lims ID:	180-45180-A-2	Lab Sample ID:	180-45180-2		
Client ID:	HD-MW-160-0/0-0				
Operator ID:	10099	ALS Bottle#:	19	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_S_CHHP3	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

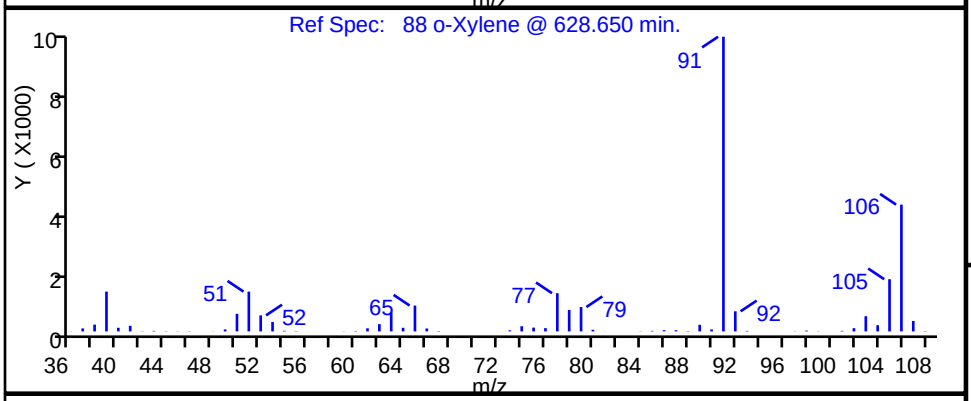
88 o-Xylene, CAS: 95-47-6

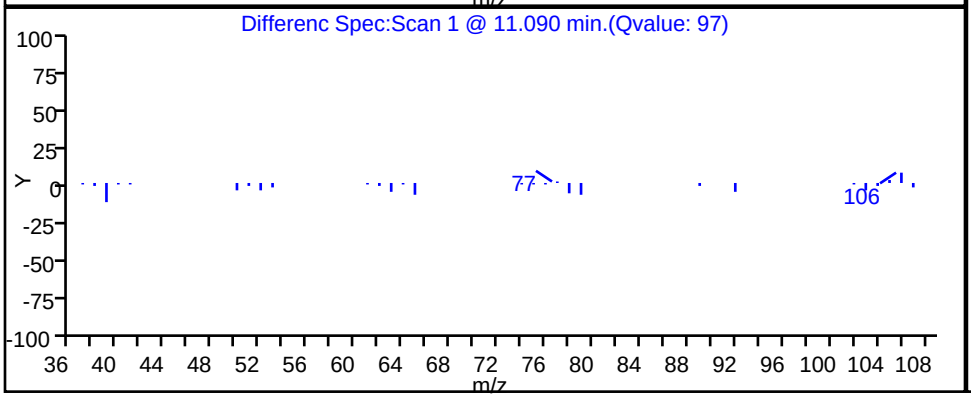


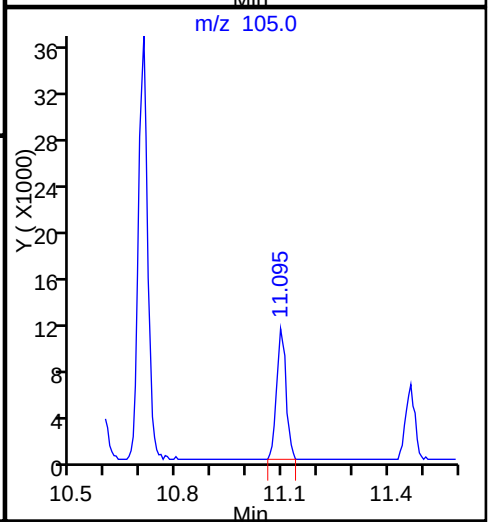












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-45180-1

SDG No.:

Client Sample ID: TRIP BLANK 1 | Lab Sample ID: 180-45180-3

Matrix: Water | Lab File ID: 4062015.D

Analysis Method: 8260C | Date Collected: 06/17/2015 13:00

Sample wt/vol: 5(mL) | Date Analyzed: 06/20/2015 18:07

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 145636 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-63-6	1,2,4-Trimethylbenzene	5.0	U	5.0	0.52
108-67-8	1,3,5-Trimethylbenzene	5.0	U	5.0	0.59
71-43-2	Benzene	5.0	U	5.0	0.99
100-41-4	Ethylbenzene	5.0	U	5.0	0.62
98-82-8	Isopropylbenzene	5.0	U	5.0	0.53
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	1.0
91-20-3	Naphthalene	5.0	U	5.0	0.47
108-88-3	Toluene	5.0	U	5.0	0.85
1330-20-7	Xylenes, Total	10	U	10	1.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		62-123
460-00-4	4-Bromofluorobenzene (Surr)	90		75-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	109		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20150620-7482.b\4062015.D
Lims ID: 180-45180-B-3 Lab Sample ID: 180-80284-19
Client ID: TRIP BLANK 1
Sample Type: Client
Inject. Date: 20-Jun-2015 18:07:30 ALS Bottle#: 23 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-45180-b-3
Misc. Info.: 180-0007482-015
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20150620-7482.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 21-Jun-2015 11:06:22 Calib Date: 16-Jun-2015 17:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK035

First Level Reviewer: journetp Date: 21-Jun-2015 10:47:40

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.105	3.150	-0.045	99	127732	5000.0	
*	2 Fluorobenzene (IS)	96	6.262	6.259	0.003	98	753155	250.0	
*	3 Chlorobenzene-d5	119	9.450	9.446	0.004	86	166874	250.0	
*	4 1,4-Dichlorobenzene-d4	152	11.798	11.801	-0.003	95	206056	250.0	
$	5 Dibromofluoromethane (Surr	113	5.495	5.486	0.009	94	161023	247.2	
$	6 1,2-Dichloroethane-d4 (Sur	65	5.891	5.882	0.009	94	160166	239.7	
$	7 Toluene-d8 (Surr)	98	7.977	7.974	0.003	94	697004	271.6	
$	8 4-Bromofluorobenzene (Surr	95	10.648	10.645	0.003	93	208749	225.8	
	34 Methyl tert-butyl ether	73		3.363				ND	
	54 Benzene	78		5.875				ND	
	73 Toluene	91		8.047				ND	
	86 Ethylbenzene	106		9.592				ND	
	87 m-Xylene & p-Xylene	106		9.726				ND	
	88 o-Xylene	106		10.103				ND	
	91 Isopropylbenzene	105		10.481				ND	
	99 1,3,5-Trimethylbenzene	105		11.089				ND	
	103 1,2,4-Trimethylbenzene	105		11.454				ND	
	116 Naphthalene	128		14.033				ND	
S	130 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00038 Amount Added: 10.00 Units: uL Run Reagent
VOA8260INT_00038 Amount Added: 10.00 Units: uL Run Reagent

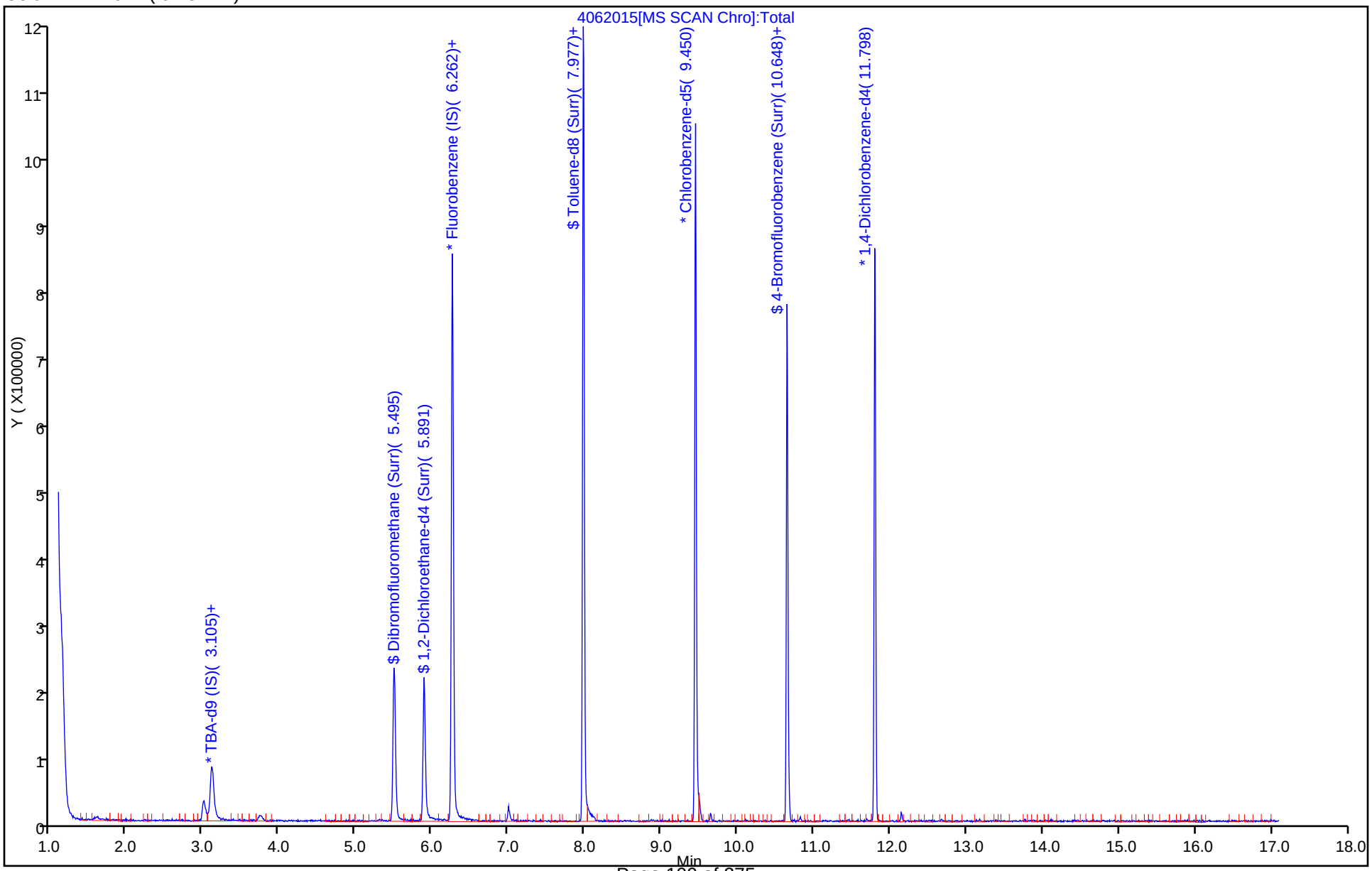
Report Date: 21-Jun-2015 11:06:59 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150620-7482.b\4062015.D

Injection Date:	20-Jun-2015 18:07:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	180-45180-B-3	Lab Sample ID:	180-80284-19	Worklist Smp#:	15
Client ID:	TRIP BLANK 1				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 143986

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/05/2015 06:50 Calibration End Date: 06/05/2015 09:02 Calibration ID: 24032

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-143986/3	3060503.D
Level 2	IC 180-143986/4	3060504.D
Level 3	IC 180-143986/5	3060505.D
Level 4	ICIS 180-143986/6	3060506.D
Level 5	IC 180-143986/7	3060507.D
Level 6	IC 180-143986/8	3060508.D
Level 7	IC 180-143986/9	3060509.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	0.3446 0.3656	0.3835 0.3586	0.3723	0.3526	0.3702	Ave		0.3639			0.1000	3.6		20.0			
Chloromethane	0.5290 0.5093	0.5498 0.4819	0.5469	0.5099	0.5541	Ave		0.5258			0.1000	5.1		20.0			
Vinyl chloride	0.4686 0.4576	0.4873 0.4347	0.4788	0.4599	0.4924	Ave		0.4685			0.1000	4.2		20.0			
1,3-Butadiene	0.4914 0.4669	0.5226 0.4333	0.5009	0.4746	0.4949	Ave		0.4835			0.0100	5.9		20.0			
Bromomethane	0.1387 0.1073	0.1201 0.1091	0.1218	0.1117	0.1191	Ave		0.1183			0.0500	9.0		20.0			
Chloroethane	0.1964 0.1164	0.1462 0.1116	0.1273	0.1199	0.1239	Lin2	2.0604	0.1112			0.0500				0.9990		0.9900
Dichlorofluoromethane	0.5258 0.4703	0.5493 0.4092	0.5204	0.4789	0.5162	Ave		0.4958			0.0100	9.5		20.0			
Trichlorofluoromethane	0.4208 0.3900	0.4300 0.3515	0.4179	0.3945	0.4094	Ave		0.4020			0.1000	6.6		20.0			
Ethyl ether	0.2265 0.2022	0.2137 0.1932	0.2166	0.2083	0.2183	Ave		0.2112			0.0100	5.2		20.0			
Acrolein	0.0318 0.0303	0.0314 0.0282	0.0291	0.0297	0.0323	Ave		0.0304			0.0100	4.9		20.0			
1,1-Dichloroethene	0.3628 0.3329	0.3476 0.3137	0.3513	0.3156	0.3578	Ave		0.3402			0.1000	5.8		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.3296 0.3249	0.3566 0.3187	0.3512	0.3205	0.3429	Ave		0.3349			0.1000	4.6		20.0			
Acetone	0.1059 +++++	0.0783 +++++	0.0579	0.0517	0.0600	Lin2	1.4325	0.0487		*	0.0500				0.9900		0.9900
Iodomethane	0.4255 0.4098	0.4338 0.3899	0.4408	0.4087	0.4489	Ave		0.4225			0.0100	4.9		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 143986

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/05/2015 06:50 Calibration End Date: 06/05/2015 09:02 Calibration ID: 24032

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	1.2051 1.1364	1.1618 1.0575	1.2125	1.1297	1.2512	Ave		1.1649			0.1000	5.5		20.0			
Allyl chloride	0.2277 0.2104	0.2096 0.2036	0.2211	0.2053	0.2349	Ave		0.2161			0.0100	5.5		20.0			
Methyl acetate	0.1266 0.1146	0.1225 0.1069	0.1231	0.1172	0.1280	Ave		0.1198			0.1000	6.2		20.0			
Methylene Chloride	0.5729 0.3121	0.4471 0.2861	0.3782	0.3327	0.3565	Lin2	6.8220	0.3063			0.1000				0.9960		0.9900
tert-Butyl alcohol	1.3064 1.3682	1.3262 1.3483	1.2170	1.2410	1.3770	Ave		1.3120			0.0100	4.7		20.0			
Acrylonitrile	0.0619 0.0578	0.0638 0.0526	0.0635	0.0605	0.0674	Ave		0.0611			0.0100	7.8		20.0			
trans-1,2-Dichloroethene	0.3836 0.3376	0.3736 0.3189	0.3814	0.3446	0.3761	Ave		0.3594			0.1000	7.1		20.0			
Methyl tert-butyl ether	0.5697 0.5103	0.5596 0.4801	0.5682	0.5305	0.5636	Ave		0.5403			0.1000	6.4		20.0			
Hexane	0.7424 0.5904	0.7195 0.5745	0.6372	0.6100	0.5885	Ave		0.6375			0.0100	10.5		20.0			
1,1-Dichloroethane	0.6509 0.5979	0.6231 0.5479	0.6510	0.6198	0.6359	Ave		0.6181			0.2000	5.8		20.0			
Vinyl acetate	0.2681 0.2821	0.2678 0.3004	0.2692	0.2815	0.2878	Ave		0.2796			0.0100	4.3		20.0			
2,2-Dichloropropane	0.4328 0.3859	0.4354 0.3675	0.4451	0.4157	0.4399	Ave		0.4175			0.0100	7.1		20.0			
cis-1,2-Dichloroethene	0.3633 0.3258	0.3573 0.3069	0.3626	0.3410	0.3622	Ave		0.3456			0.1000	6.4		20.0			
2-Butanone (MEK)	0.0894 0.0618	0.0813 0.0618	0.0751	0.0671	0.0791	Ave		0.0737			0.0500	14.3		20.0			
Chlorobromomethane	0.1141 0.1078	0.1122 0.1037	0.1176	0.1151	0.1189	Ave		0.1128			0.0100	4.8		20.0			
Tetrahydrofuran	0.0473 0.0429	0.0470 0.0408	0.0446	0.0438	0.0472	Ave		0.0448			0.0100	5.5		20.0			
Chloroform	0.5307 0.4667	0.5099 0.4362	0.5216	0.4941	0.5144	Ave		0.4962			0.2000	6.8		20.0			
1,1,1-Trichloroethane	0.4726 0.4427	0.4845 0.4107	0.4913	0.4551	0.4791	Ave		0.4623			0.1000	6.1		20.0			
Cyclohexane	0.8220 0.7680	0.8730 0.7070	0.8429	0.7837	0.8040	Ave		0.8001			0.1000	6.8		20.0			
Carbon tetrachloride	0.3792 0.3522	0.3847 0.3351	0.3901	0.3515	0.3701	Ave		0.3661			0.1000	5.6		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 143986

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/05/2015 06:50 Calibration End Date: 06/05/2015 09:02 Calibration ID: 24032

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	0.4354 0.4086	0.4506 0.3896	0.4514	0.4363	0.4374	Ave		0.4299			0.0100	5.3		20.0			
Isobutyl alcohol	0.0040 0.0036	0.0043 0.0033	0.0040	0.0039	0.0045	Ave		0.0039		*	0.0100	10.6		20.0			
Benzene	1.2712 1.0899	1.2389 0.9852	1.2224	1.1919	1.1902	Ave		1.1700			0.5000	8.5		20.0			
1,2-Dichloroethane	0.2689 0.2369	0.2788 0.2299	0.2685	0.2553	0.2584	Ave		0.2567			0.1000	6.9		20.0			
n-Heptane	0.5260 0.5462	0.5709 0.5350	0.5649	0.5724	0.5334	Ave		0.5498			0.0100	3.5		20.0			
Trichloroethene	0.2791 0.2691	0.2797 0.2641	0.2737	0.2697	0.2758	Ave		0.2730			0.2000	2.1		20.0			
Methylcyclohexane	0.6555 0.6594	0.7267 0.6063	0.7218	0.6787	0.6982	Ave		0.6781			0.1000	6.2		20.0			
1,2-Dichloropropane	0.2526 0.2330	0.2570 0.2275	0.2616	0.2523	0.2471	Ave		0.2473			0.1000	5.1		20.0			
Dibromomethane	0.1098 0.0943	0.1092 0.0910	0.1041	0.0985	0.0988	Ave		0.1008			0.0100	7.1		20.0			
1,4-Dioxane	0.0013 0.0012	0.0014 0.0012	0.0013	0.0013	0.0014	Ave		0.0013		*	0.0100	7.5		20.0			
Dichlorobromomethane	0.2818 0.2680	0.2806 0.2616	0.2746	0.2814	0.2790	Ave		0.2753			0.2000	2.8		20.0			
cis-1,3-Dichloropropene	0.3152 0.3230	0.3295 0.3207	0.3411	0.3466	0.3318	Ave		0.3297			0.2000	3.4		20.0			
4-Methyl-2-pentanone (MIBK)	0.6197 0.6233	0.6281 0.6204	0.6155	0.6183	0.6576	Ave		0.6262			0.1000	2.3		20.0			
Toluene	5.5026 4.8959	5.4499 4.5065	5.5581	5.3999	5.1678	Ave		5.2115			0.4000	7.4		20.0			
trans-1,3-Dichloropropene	1.2001 1.2022	1.1670 1.1794	1.1942	1.2431	1.2208	Ave		1.2010			0.1000	2.1		20.0			
Ethyl methacrylate	0.8009 0.8034	0.8838 0.7899	0.8714	0.8785	0.8705	Ave		0.8426			0.0100	5.0		20.0			
1,1,2-Trichloroethane	0.6325 0.6324	0.6999 0.6221	0.6793	0.6766	0.6513	Ave		0.6563			0.1000	4.5		20.0			
Tetrachloroethene	0.9387 0.9531	0.9658 0.9858	0.9935	0.9678	0.9309	Ave		0.9622			0.2000	2.4		20.0			
1,3-Dichloropropane	1.2961 1.1341	1.2565 1.0799	1.2463	1.2790	1.2188	Ave		1.2158			0.0100	6.6		20.0			
2-Hexanone	0.5954 0.5314	0.6132 0.4880	0.5427	0.5785	0.5699	Ave		0.5599			0.1000	7.6		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 143986

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/05/2015 06:50 Calibration End Date: 06/05/2015 09:02 Calibration ID: 24032

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								
Chlorodibromomethane	0.6836 0.6896	0.6368 0.6930	0.6772	0.6961	0.6832	Ave		0.6799			0.1000	3.0		20.0			
1,2-Dibromoethane	0.6046 0.5976	0.6391 0.5972	0.6563	0.6629	0.6353	Ave		0.6276			0.1000	4.4		20.0			
Chlorobenzene	3.3936 3.0278	3.5011 2.8744	3.4239	3.3258	3.2272	Ave		3.2534			0.5000	7.0		20.0			
1,1,1,2-Tetrachloroethane	0.9790 1.0307	0.9936 1.0041	1.0008	1.0119	1.0065	Ave		1.0038			0.0100	1.6		20.0			
Ethylbenzene	2.1035 1.9019	2.1156 1.8110	2.1223	2.1053	2.0464	Ave		2.0294			0.1000	6.1		20.0			
m-Xylene & p-Xylene	2.5422 2.3849	2.6440 2.2409	2.6294	2.5764	2.5440	Ave		2.5088			0.1000	5.8		20.0			
o-Xylene	2.4001 2.3539	2.4847 2.1950	2.5994	2.4871	2.5646	Ave		2.4407			0.3000	5.7		20.0			
Styrene	3.9561 3.5098	4.0298 3.0859	4.0702	3.9587	3.8881	Ave		3.7855			0.3000	9.5		20.0			
Bromoform	0.3284 0.3816	0.3333 0.3939	0.3632	0.3547	0.3741	Ave		0.3613			0.1000	6.7		20.0			
Isopropylbenzene	6.7310 6.2305	7.0799 5.3923	7.1590	6.8914	6.9643	Ave		6.6355			0.1000	9.5		20.0			
1,1,2,2-Tetrachloroethane	0.7542 0.7734	0.7959 0.7191	0.8008	0.8094	0.8404	Ave		0.7848			0.3000	5.1		20.0			
Bromobenzene	0.8132 0.7578	0.8366 0.7264	0.8071	0.7960	0.7915	Ave		0.7898			0.0100	4.7		20.0			
1,2,3-Trichloropropane	0.1607 0.1444	0.1604 0.1371	0.1545	0.1534	0.1492	Ave		0.1514			0.0100	5.7		20.0			
trans-1,4-Dichloro-2-butene	0.1992 0.1686	0.1833 0.1690	0.1729	0.1776	0.1931	Ave		0.1805			0.0100	6.6		20.0			
N-Propylbenzene	1.4008 1.2513	1.3645 1.1862	1.3648	1.3383	1.3086	Ave		1.3164			0.0100	5.7		20.0			
2-Chlorotoluene	1.0022 0.9544	1.0570 0.9156	1.0284	1.0019	0.9786	Ave		0.9912			0.0100	4.7		20.0			
1,3,5-Trimethylbenzene	3.9441 3.4547	4.1306 3.0130	4.0081	3.9109	3.8202	Ave		3.7545			0.0100	10.4		20.0			
4-Chlorotoluene	1.1223 0.9339	1.0689 0.8876	1.0197	1.0221	0.9973	Ave		1.0074			0.0100	7.8		20.0			
tert-Butylbenzene	3.2407 3.2173	3.5200 2.8812	3.4755	3.4639	3.3739	Ave		3.3104			0.0100	6.7		20.0			
1,2,4-Trimethylbenzene	4.0362 3.4975	4.1333 3.0236	4.0252	4.0256	3.9220	Ave		3.8090			0.0100	10.6		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 143986

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/05/2015 06:50 Calibration End Date: 06/05/2015 09:02 Calibration ID: 24032

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	5.3882 4.6947	5.7734 4.0250	5.4294	5.4111	5.2806	Ave		5.1432			0.0100	11.5		20.0			
1,3-Dichlorobenzene	1.8215 1.7489	1.8501 1.6314	1.8001	1.8137	1.7983	Ave		1.7806			0.6000	4.1		20.0			
4-Isopropyltoluene	4.1417 3.7680	4.4960 3.2686	4.3015	4.2917	4.1935	Ave		4.0658			0.0100	10.2		20.0			
1,4-Dichlorobenzene	1.7851 1.6505	1.7908 1.5450	1.6776	1.7391	1.7113	Ave		1.6999			0.5000	5.0		20.0			
n-Butylbenzene	4.2077 3.9056	4.4848 3.2730	4.4265	4.3848	4.3730	Ave		4.1508			0.0100	10.4		20.0			
1,2-Dichlorobenzene	1.5671 1.4084	1.5987 1.2979	1.4935	1.5109	1.4980	Ave		1.4821			0.4000	6.8		20.0			
1,2-Dibromo-3-Chloropropane	0.0724 0.0749	0.0653 0.0780	0.0691	0.0739	0.0757	Ave		0.0728			0.0500	5.9		20.0			
1,2,4-Trichlorobenzene	0.8321 0.9602	0.8852 0.9429	0.8676	0.9462	0.9735	Ave		0.9154			0.2000	5.9		20.0			
Hexachlorobutadiene	0.6483 0.7159	0.7043 0.7159	0.6573	0.7230	0.7170	Ave		0.6974			0.0100	4.5		20.0			
Naphthalene	0.8415 1.2020	1.1052 1.1998	1.0700	1.2266	1.3403	Ave		1.1408			0.0100	13.9		20.0			
1,2,3-Trichlorobenzene	0.5745 0.6744	0.6553 0.6923	0.6274	0.6765	0.7047	Ave		0.6579			0.0100	6.8		20.0			
Dibromofluoromethane (Surr)	0.2202 0.2078	0.2276 0.1939	0.2293	0.2112	0.2239	Ave		0.2163				5.9		20.0			
1,2-Dichloroethane-d4 (Surr)	0.2394 0.1965	0.2215 0.1880	0.2092	0.2041	0.2117	Ave		0.2101				8.0		20.0			
Toluene-d8 (Surr)	4.1845 4.1135	4.4775 3.8555	4.5011	4.4024	4.2828	Ave		4.2596				5.4		20.0			
4-Bromofluorobenzene (Surr)	1.8553 1.6935	1.8524 1.5511	1.7817	1.7684	1.7785	Ave		1.7544				6.0		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 143986

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/05/2015 06:50 Calibration End Date: 06/05/2015 09:02 Calibration ID: 24032

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-143986/3	3060503.D
Level 2	IC 180-143986/4	3060504.D
Level 3	IC 180-143986/5	3060505.D
Level 4	ICIS 180-143986/6	3060506.D
Level 5	IC 180-143986/7	3060507.D
Level 6	IC 180-143986/8	3060508.D
Level 7	IC 180-143986/9	3060509.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	28588 786154	64081 1584645	155479	243953	290700	25.0 625	50.0 1250	125	200	250
Chloromethane	FB	Ave	43883 1095318	91876 2129295	228381	352787	435112	25.0 625	50.0 1250	125	200	250
Vinyl chloride	FB	Ave	38873 984006	81434 1920682	199925	318219	386622	25.0 625	50.0 1250	125	200	250
1,3-Butadiene	FB	Ave	40765 1004125	87323 1914578	209188	328351	388590	25.0 625	50.0 1250	125	200	250
Bromomethane	FB	Ave	11510 230687	20071 482023	50859	77302	93485	25.0 625	50.0 1250	125	200	250
Chloroethane	FB	Lin2	16295 250346	24434 493127	53153	82955	97305	25.0 625	50.0 1250	125	200	250
Dichlorofluoromethane	FB	Ave	43622 1011445	91797 1808161	217337	331337	405365	25.0 625	50.0 1250	125	200	250
Trichlorofluoromethane	FB	Ave	34911 838816	71863 1553000	174533	272919	321483	25.0 625	50.0 1250	125	200	250
Ethyl ether	FB	Ave	18786 434801	35718 853503	90470	144101	171392	25.0 625	50.0 1250	125	200	250
Acrolein	FB	Ave	52764 117172	65612 124777	72803	89981	101449	500 1125	625 1250	750	875	1000
1,1-Dichloroethene	FB	Ave	30097 715930	58078 1385922	146716	218340	280939	25.0 625	50.0 1250	125	200	250
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	27340 698795	59595 1408195	146658	221707	269254	25.0 625	50.0 1250	125	200	250
Acetone	FB	Lin2	8788 +++++	13086 +++++	24163	35763	47086	25.0 +++++	50.0 +++++	125	200	250
Iodomethane	FB	Ave	35302 881268	72488 1722673	184088	282792	352457	25.0 625	50.0 1250	125	200	250
Carbon disulfide	FB	Ave	99977 2443916	194137 4672758	506335	781619	982479	25.0 625	50.0 1250	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 143986

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/05/2015 06:50 Calibration End Date: 06/05/2015 09:02 Calibration ID: 24032

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	18893 452522	35022 899814	92331	142042	184443	25.0 625	50.0 1250	125	200	250
Methyl acetate	FB	Ave	52526 1231982	102331 2361346	256982	405524	502654	125 3125	250 6250	625	1000	1250
Methylene Chloride	FB	Lin2	47527 671293	74711 1264148	157952	230207	279921	25.0 625	50.0 1250	125	200	250
tert-Butyl alcohol	TBA	Ave	11311 281328	22164 555214	50567	81603	116771	250 6250	500 12500	1250	2000	2500
Acrylonitrile	FB	Ave	51366 1242531	106646 2324228	265278	418305	529107	250 6250	500 12500	1250	2000	2500
trans-1,2-Dichloroethene	FB	Ave	31820 726018	62436 1409235	159266	238399	295308	25.0 625	50.0 1250	125	200	250
Methyl tert-butyl ether	FB	Ave	47263 1097425	93509 2121569	237276	367032	442517	25.0 625	50.0 1250	125	200	250
Hexane	FB	Ave	61585 1269756	120233 2538300	266101	422017	462109	25.0 625	50.0 1250	125	200	250
1,1-Dichloroethane	FB	Ave	53998 1285870	104118 2420991	271857	428826	499338	25.0 625	50.0 1250	125	200	250
Vinyl acetate	FB	Ave	22245 606609	44747 1327126	112432	194787	225973	25.0 625	50.0 1250	125	200	250
2,2-Dichloropropane	FB	Ave	35908 829864	72755 1624035	185858	287612	345394	25.0 625	50.0 1250	125	200	250
cis-1,2-Dichloroethene	FB	Ave	30141 700632	59703 1355894	151420	235953	284379	25.0 625	50.0 1250	125	200	250
2-Butanone (MEK)	FB	Ave	7419 132970	13588 272863	31371	46419	62102	25.0 625	50.0 1250	125	200	250
Chlorobromomethane	FB	Ave	9463 231737	18757 458144	49105	79648	93370	25.0 625	50.0 1250	125	200	250
Tetrahydrofuran	FB	Ave	7841 184537	15707 360860	37283	60633	74127	50.0 1250	100 2500	250	400	500
Chloroform	FB	Ave	44026 1003682	85201 1927244	217806	341848	403940	25.0 625	50.0 1250	125	200	250
1,1,1-Trichloroethane	FB	Ave	39209 952134	80971 1814646	205151	314881	376197	25.0 625	50.0 1250	125	200	250
Cyclohexane	FB	Ave	68191 1651754	145889 3123938	352000	542175	631274	25.0 625	50.0 1250	125	200	250
Carbon tetrachloride	FB	Ave	31460 757418	64281 1480475	162899	243204	290606	25.0 625	50.0 1250	125	200	250
1,1-Dichloropropene	FB	Ave	36124 878820	75298 1721605	188504	301888	343482	25.0 625	50.0 1250	125	200	250
Isobutyl alcohol	FB	Ave	8242 192197	18164 364044	41641	67284	88574	625 15625	1250 31250	3125	5000	6250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 143986

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/05/2015 06:50 Calibration End Date: 06/05/2015 09:02 Calibration ID: 24032

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	105455 2344006	207023 4353375	510452	824603	934566	25.0 625	50.0 1250	125	200	250
1,2-Dichloroethane	FB	Ave	22308 509524	46589 1015994	112140	176639	202933	25.0 625	50.0 1250	125	200	250
n-Heptane	FB	Ave	43633 1174713	95407 2363960	235886	396029	418853	25.0 625	50.0 1250	125	200	250
Trichloroethene	FB	Ave	23152 578806	46744 1166779	114313	186579	216595	25.0 625	50.0 1250	125	200	250
Methylcyclohexane	FB	Ave	54377 1418188	121442 2678908	301440	469537	548204	25.0 625	50.0 1250	125	200	250
1,2-Dichloropropane	FB	Ave	20958 501133	42943 1005330	109231	174535	194049	25.0 625	50.0 1250	125	200	250
Dibromomethane	FB	Ave	9109 202883	18252 402138	43457	68163	77564	25.0 625	50.0 1250	125	200	250
1,4-Dioxane	FB	Ave	2139 51628	4846 102996	10788	17816	21626	500 12500	1000 25000	2500	4000	5000
Dichlorobromomethane	FB	Ave	23379 576444	46893 1155721	114679	194681	219039	25.0 625	50.0 1250	125	200	250
cis-1,3-Dichloropropene	FB	Ave	26145 694607	55058 1416991	142441	239793	260537	25.0 625	50.0 1250	125	200	250
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	11263 270126	23228 543424	55878	90035	109505	25.0 625	50.0 1250	125	200	250
Toluene	CBZ	Ave	100008 2121680	201535 3947035	504560	786279	860583	25.0 625	50.0 1250	125	200	250
trans-1,3-Dichloropropene	CBZ	Ave	21812 520999	43156 1032986	108407	181005	203294	25.0 625	50.0 1250	125	200	250
Ethyl methacrylate	CBZ	Ave	14556 348153	32681 691824	79103	127922	144958	25.0 625	50.0 1250	125	200	250
1,1,2-Trichloroethane	CBZ	Ave	11496 274056	25882 544857	61664	98526	108467	25.0 625	50.0 1250	125	200	250
Tetrachloroethene	CBZ	Ave	17060 413050	35713 863420	90189	140925	155024	25.0 625	50.0 1250	125	200	250
1,3-Dichloropropane	CBZ	Ave	23557 491477	46464 945847	113135	186240	202972	25.0 625	50.0 1250	125	200	250
2-Hexanone	CBZ	Ave	10822 230295	22677 427444	49268	84235	94908	25.0 625	50.0 1250	125	200	250
Chlorodibromomethane	CBZ	Ave	12424 298859	23547 606927	61474	101359	113769	25.0 625	50.0 1250	125	200	250
1,2-Dibromoethane	CBZ	Ave	10988 258977	23635 523091	59580	96532	105795	25.0 625	50.0 1250	125	200	250
Chlorobenzene	CBZ	Ave	61678 1312109	129467 2517517	310817	484268	537425	25.0 625	50.0 1250	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 143986

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/05/2015 06:50 Calibration End Date: 06/05/2015 09:02 Calibration ID: 24032

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	CBZ	Ave	17793 446679	36742 879423	90856	147340	167606	25.0 625	50.0 1250	125	200	250
Ethylbenzene	CBZ	Ave	38231 824207	78235 1586135	192665	306557	340793	25.0 625	50.0 1250	125	200	250
m-Xylene & p-Xylene	CBZ	Ave	46204 1033516	97773 1962723	238696	375146	423644	25.0 625	50.0 1250	125	200	250
o-Xylene	CBZ	Ave	43620 1020102	91882 1922528	235976	362154	427072	25.0 625	50.0 1250	125	200	250
Styrene	CBZ	Ave	71901 1520997	149020 2702796	369487	576427	647483	25.0 625	50.0 1250	125	200	250
Bromoform	CBZ	Ave	5969 165354	12325 344979	32970	51653	62295	25.0 625	50.0 1250	125	200	250
Isopropylbenzene	CBZ	Ave	122334 2700059	261809 4722852	649888	1003461	1159752	25.0 625	50.0 1250	125	200	250
1,1,2,2-Tetrachloroethane	CBZ	Ave	13707 335174	29431 629813	72697	117862	139959	25.0 625	50.0 1250	125	200	250
Bromobenzene	DCB	Ave	20979 494974	43882 946186	108930	169108	201302	25.0 625	50.0 1250	125	200	250
1,2,3-Trichloropropane	DCB	Ave	4147 94331	8414 178555	20854	32586	37937	25.0 625	50.0 1250	125	200	250
trans-1,4-Dichloro-2-butene	DCB	Ave	5140 110145	9617 220113	23331	37723	49109	25.0 625	50.0 1250	125	200	250
N-Propylbenzene	DCB	Ave	36139 817343	71571 1545035	184203	284313	332811	25.0 625	50.0 1250	125	200	250
2-Chlorotoluene	DCB	Ave	25855 623431	55440 1192565	138801	212847	248878	25.0 625	50.0 1250	125	200	250
1,3,5-Trimethylbenzene	DCB	Ave	101754 2256540	216658 3924581	540953	830834	971552	25.0 625	50.0 1250	125	200	250
4-Chlorotoluene	DCB	Ave	28955 610006	56066 1156118	137627	217136	253643	25.0 625	50.0 1250	125	200	250
tert-Butylbenzene	DCB	Ave	83608 2101519	184629 3752903	469077	735868	858030	25.0 625	50.0 1250	125	200	250
1,2,4-Trimethylbenzene	DCB	Ave	104131 2284503	216800 3938405	543255	855206	997427	25.0 625	50.0 1250	125	200	250
sec-Butylbenzene	DCB	Ave	139011 3066525	302828 5242795	732781	1149547	1342941	25.0 625	50.0 1250	125	200	250
1,3-Dichlorobenzene	DCB	Ave	46994 1142361	97044 2125035	242955	385313	457349	25.0 625	50.0 1250	125	200	250
4-Isopropyltoluene	DCB	Ave	106853 2461171	235823 4257491	580550	911736	1066480	25.0 625	50.0 1250	125	200	250
1,4-Dichlorobenzene	DCB	Ave	46054 1078059	93933 2012503	226421	369448	435213	25.0 625	50.0 1250	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 143986

SDG No.:

Instrument ID: CHHP3 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/05/2015 06:50 Calibration End Date: 06/05/2015 09:02 Calibration ID: 24032

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	DCB	Ave	108556 2551094	235239 4263226	597417	931502	1112132	25.0 625	50.0 1250	125	200	250
1,2-Dichlorobenzene	DCB	Ave	40431 919923	83853 1690592	201569	320977	380969	25.0 625	50.0 1250	125	200	250
1,2-Dibromo-3-Chloropropane	DCB	Ave	1869 48922	3426 101644	9328	15695	19242	25.0 625	50.0 1250	125	200	250
1,2,4-Trichlorobenzene	DCB	Ave	21468 627165	46433 1228158	117095	201015	247570	25.0 625	50.0 1250	125	200	250
Hexachlorobutadiene	DCB	Ave	16726 467637	36940 932511	88708	153586	182357	25.0 625	50.0 1250	125	200	250
Naphthalene	DCB	Ave	21709 785138	57969 1562867	144415	260581	340863	25.0 625	50.0 1250	125	200	250
1,2,3-Trichlorobenzene	DCB	Ave	14822 440527	34373 901712	84671	143711	179223	25.0 625	50.0 1250	125	200	250
Dibromofluoromethane (Surr)	FB	Ave	18269 446956	38038 856770	95774	146099	175829	25.0 625	50.0 1250	125	200	250
1,2-Dichloroethane-d4 (Surr)	FB	Ave	19859 422594	37015 830518	87377	141234	166224	25.0 625	50.0 1250	125	200	250
Toluene-d8 (Surr)	CBZ	Ave	76052 1782607	165577 3376841	408610	641032	713204	25.0 625	50.0 1250	125	200	250
4-Bromofluorobenzene (Surr)	CBZ	Ave	33719 733900	68502 1358529	161746	257496	296180	25.0 625	50.0 1250	125	200	250

Curve Type Legend:

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

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060503.D
Lims ID: IC VSTD5
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 05-Jun-2015 06:50:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD5
Operator ID: 10099 Instrument ID: CHHP3
Sublist: chrom-MSVOA_S_CHHP3*sub4

Method: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Jun-2015 10:31:04 Calib Date: 05-Jun-2015 09:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060509.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: gordonk Date: 05-Jun-2015 10:31:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.452	4.471	-0.019	98	173162	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.366	7.366	0.000	98	829587	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.451	10.445	0.006	89	181746	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.769	12.769	0.000	98	257993	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.618	6.618	0.000	85	18269	25.0	25.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.983	6.989	-0.006	95	19859	25.0	28.5	
$ 7 Toluene-d8 (Surr)	98	9.015	9.009	0.006	92	76052	25.0	24.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.613	11.613	0.000	86	33719	25.0	26.4	
10 Dichlorodifluoromethane	85	1.709	1.685	0.024	98	28588	25.0	23.7	
11 Chloromethane	50	1.849	1.843	0.006	99	43883	25.0	25.1	
12 Vinyl chloride	62	1.983	1.989	-0.006	98	38873	25.0	25.0	
13 Butadiene	39	2.019	2.019	0.000	97	40765	25.0	25.4	
14 Bromomethane	94	2.323	2.323	0.000	89	11510	25.0	29.3	
15 Chloroethane	64	2.451	2.439	0.012	94	16295	25.0	25.6	
16 Dichlorofluoromethane	67	2.749	2.725	0.024	97	43622	25.0	26.5	M
17 Trichlorofluoromethane	101	2.780	2.743	0.037	51	34911	25.0	26.2	M
19 Ethyl ether	59	3.205	3.199	0.006	93	18786	25.0	26.8	M
20 Acrolein	56	3.370	3.370	0.000	99	52764	500.0	523.0	M
21 1,1-Dichloroethene	96	3.479	3.467	0.012	98	30097	25.0	26.7	M
22 1,1,2-Trichloro-1,2,2-trif	101	3.564	3.534	0.030	94	27340	25.0	24.6	M
23 Acetone	43	3.649	3.637	0.012	98	8788	25.0	25.0	
24 Iodomethane	142	3.686	3.674	0.012	99	35302	25.0	25.2	M
25 Carbon disulfide	76	3.771	3.753	0.018	99	99977	25.0	25.9	M
28 3-Chloro-1-propene	76	4.069	4.057	0.012	95	18893	25.0	26.3	M
29 Methyl acetate	43	4.160	4.160	0.000	98	52526	125.0	132.1	
30 Methylene Chloride	84	4.264	4.264	0.000	99	47527	25.0	24.5	
31 2-Methyl-2-propanol	59	4.586	4.605	-0.019	28	11311	250.0	248.9	
32 Acrylonitrile	53	4.671	4.665	0.006	97	51366	250.0	253.5	
33 trans-1,2-Dichloroethene	96	4.684	4.678	0.006	96	31820	25.0	26.7	
34 Methyl tert-butyl ether	73	4.738	4.726	0.012	97	47263	25.0	26.4	M
35 Hexane	57	5.103	5.103	0.000	94	61585	25.0	29.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.280	5.280	0.000	95	53998	25.0	26.3	
37 Vinyl acetate	43	5.402	5.402	0.000	97	22245	25.0	24.0	
41 2,2-Dichloropropane	77	6.034	6.034	0.000	69	35908	25.0	25.9	
42 cis-1,2-Dichloroethene	96	6.040	6.034	0.006	84	30141	25.0	26.3	
43 2-Butanone (MEK)	43	6.107	6.095	0.012	84	7419	25.0	30.4	
47 Chlorobromomethane	128	6.326	6.326	0.000	93	9463	25.0	25.3	
48 Tetrahydrofuran	42	6.411	6.393	0.018	88	7841	50.0	52.7	
49 Chloroform	83	6.442	6.436	0.006	95	44026	25.0	26.7	
50 1,1,1-Trichloroethane	97	6.630	6.630	0.000	99	39209	25.0	25.6	
51 Cyclohexane	56	6.691	6.691	0.000	92	68191	25.0	25.7	
52 1,1-Dichloropropene	75	6.819	6.819	0.000	93	36124	25.0	25.3	
53 Carbon tetrachloride	117	6.825	6.819	0.006	87	31460	25.0	25.9	
54 Isobutyl alcohol	41	7.038	7.044	-0.006	23	8242	625.0	630.3	
55 Benzene	78	7.056	7.050	0.006	97	105455	25.0	27.2	
56 1,2-Dichloroethane	62	7.081	7.074	0.007	94	22308	25.0	26.2	
59 n-Heptane	43	7.379	7.379	0.000	92	43633	25.0	23.9	
60 Trichloroethene	130	7.756	7.756	0.000	98	23152	25.0	25.6	
63 Methylcyclohexane	83	7.963	7.957	0.006	96	54377	25.0	24.2	
64 1,2-Dichloropropane	63	7.993	7.987	0.006	76	20958	25.0	25.5	
65 Dibromomethane	93	8.115	8.109	0.006	91	9109	25.0	27.2	
67 1,4-Dioxane	88	8.151	8.145	0.006	25	2139	500.0	498.0	
68 Dichlorobromomethane	83	8.285	8.279	0.006	96	23379	25.0	25.6	
71 cis-1,3-Dichloropropene	75	8.741	8.735	0.006	93	26145	25.0	23.9	
72 4-Methyl-2-pentanone (MIBK	43	8.900	8.906	-0.006	97	11263	25.0	24.7	
73 Toluene	91	9.076	9.076	0.000	98	100008	25.0	26.4	
74 trans-1,3-Dichloropropene	75	9.295	9.295	0.000	93	21812	25.0	25.0	
75 Ethyl methacrylate	69	9.404	9.398	0.006	95	14556	25.0	23.8	
76 1,1,2-Trichloroethane	97	9.477	9.477	0.000	93	11496	25.0	24.1	
77 Tetrachloroethene	164	9.630	9.623	0.007	96	17060	25.0	24.4	
78 1,3-Dichloropropane	76	9.648	9.648	0.000	94	23557	25.0	26.7	
79 2-Hexanone	43	9.733	9.739	-0.006	98	10822	25.0	26.6	
81 Chlorodibromomethane	129	9.867	9.867	0.000	91	12424	25.0	25.1	
82 Ethylene Dibromide	107	9.976	9.982	-0.006	98	10988	25.0	24.1	
83 Chlorobenzene	112	10.475	10.475	0.000	95	61678	25.0	26.1	
85 1,1,1,2-Tetrachloroethane	131	10.560	10.554	0.006	96	17793	25.0	24.4	
86 Ethylbenzene	106	10.585	10.585	0.000	98	38231	25.0	25.9	
87 m-Xylene & p-Xylene	106	10.700	10.700	0.000	99	46204	25.0	25.3	
88 o-Xylene	106	11.096	11.096	0.000	97	43620	25.0	24.6	
89 Styrene	104	11.108	11.108	0.000	92	71901	25.0	26.1	
90 Bromoform	173	11.284	11.290	-0.006	95	5969	25.0	22.7	
91 Isopropylbenzene	105	11.461	11.461	0.000	96	122334	25.0	25.4	
93 1,1,2,2-Tetrachloroethane	83	11.747	11.747	0.000	47	13707	25.0	24.0	
94 Bromobenzene	156	11.765	11.765	0.000	95	20979	25.0	25.7	
95 1,2,3-Trichloropropane	110	11.789	11.795	-0.006	77	4147	25.0	26.5	
96 trans-1,4-Dichloro-2-buten	53	11.807	11.807	0.000	78	5140	25.0	27.6	
97 N-Propylbenzene	120	11.874	11.874	0.000	96	36139	25.0	26.6	
98 2-Chlorotoluene	126	11.953	11.959	-0.006	95	25855	25.0	25.3	
99 1,3,5-Trimethylbenzene	105	12.045	12.045	0.000	93	101754	25.0	26.3	
100 4-Chlorotoluene	126	12.069	12.069	0.000	98	28955	25.0	27.9	
101 tert-Butylbenzene	119	12.373	12.373	0.000	92	83608	25.0	24.5	
103 1,2,4-Trimethylbenzene	105	12.422	12.422	0.000	97	104131	25.0	26.5	
104 sec-Butylbenzene	105	12.592	12.598	-0.006	95	139011	25.0	26.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	12.708	12.708	0.000	96	46994	25.0	25.6	
106 4-Isopropyltoluene	119	12.738	12.738	0.000	97	106853	25.0	25.5	
107 1,4-Dichlorobenzene	146	12.793	12.793	0.000	93	46054	25.0	26.3	
110 n-Butylbenzene	91	13.146	13.146	0.000	99	108556	25.0	25.3	
111 1,2-Dichlorobenzene	146	13.164	13.164	0.000	95	40431	25.0	26.4	
112 1,2-Dibromo-3-Chloropropan	75	13.931	13.937	-0.006	71	1869	25.0	24.9	
114 1,2,4-Trichlorobenzene	180	14.782	14.782	0.000	93	21468	25.0	22.7	
115 Hexachlorobutadiene	225	14.953	14.959	-0.006	94	16726	25.0	23.2	
116 Naphthalene	128	15.032	15.032	0.000	97	21709	25.0	18.4	
117 1,2,3-Trichlorobenzene	180	15.281	15.281	0.000	93	14822	25.0	21.8	
S 130 1,2-Dichloroethene, Total	96				0		50.0	53.0	
S 129 Xylenes, Total	106				0		50.0	49.9	
S 131 1,3-Dichloropropene, Total	1				0		50.0	48.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00036	Amount Added:	1.00	Units: uL	
VOA8260VOAPRI_00123	Amount Added:	1.00	Units: uL	
voaWVA1st Res_00001	Amount Added:	1.00	Units: uL	
VOAACRLOEINPR_00001	Amount Added:	20.00	Units: uL	
VOA8260INT_00037	Amount Added:	10.00	Units: uL	Run Reagent

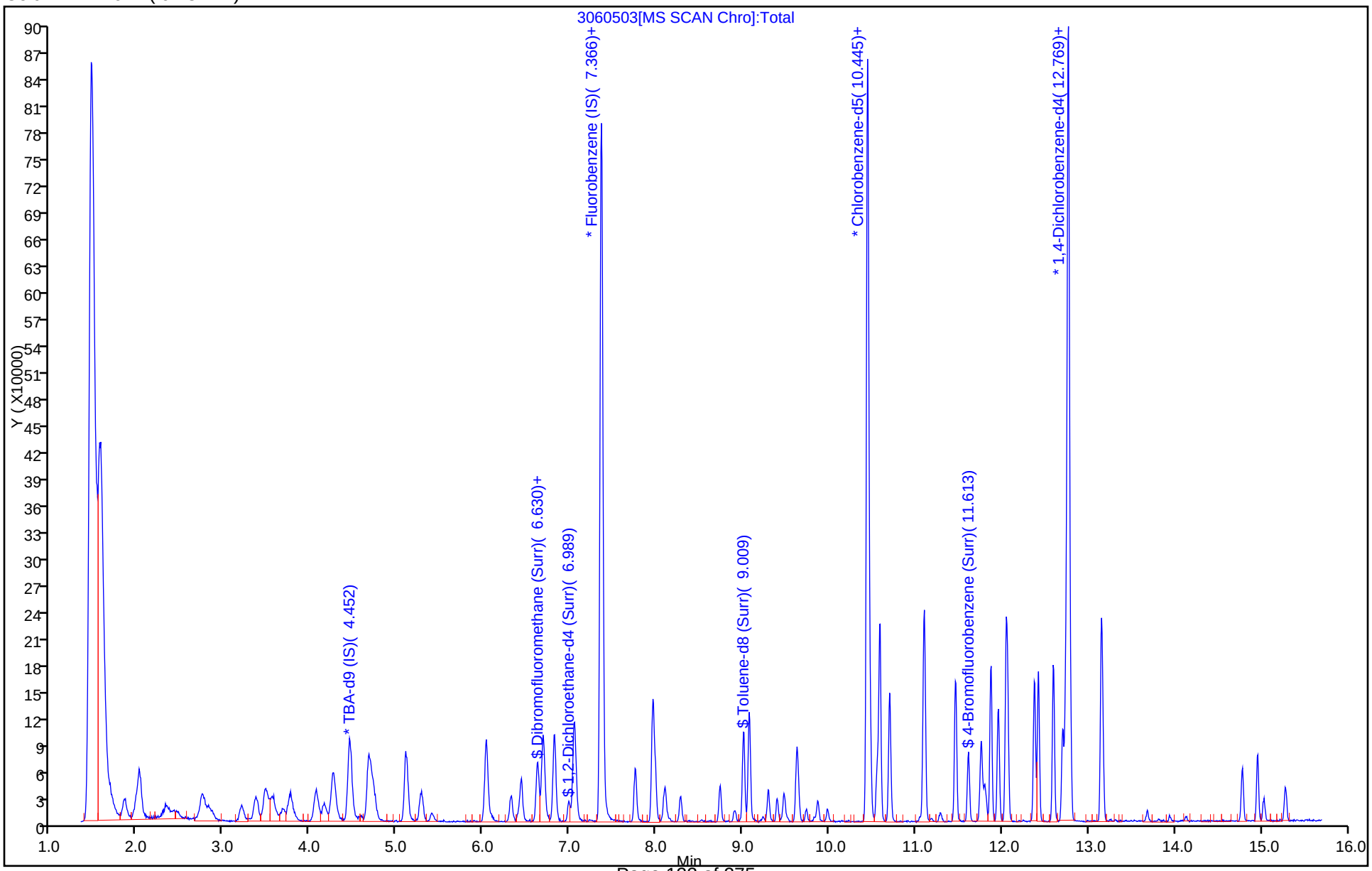
Report Date: 05-Jun-2015 10:31:04 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060503.D

Injection Date:	05-Jun-2015 06:50:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	IC VSTD5			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)



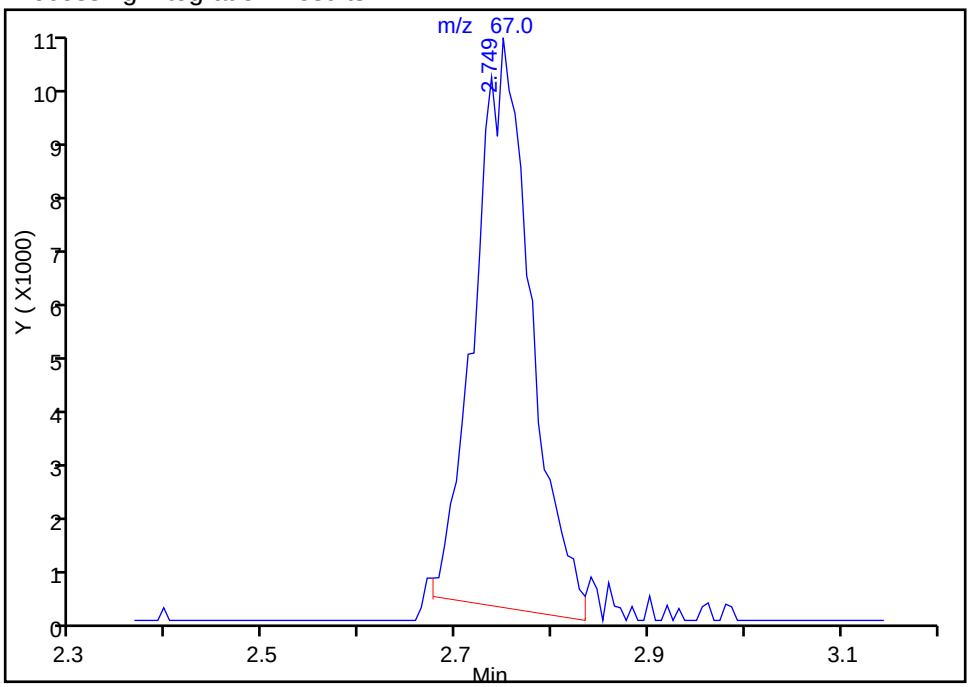
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060503.D
Injection Date: 05-Jun-2015 06:50:30 Instrument ID: CHHP3
Lims ID: IC VSTD5
Client ID:
Operator ID: 10099 ALS Bottle#: 3 Worklist Smp#: 3
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

16 Dichlorofluoromethane, CAS: 75-43-4

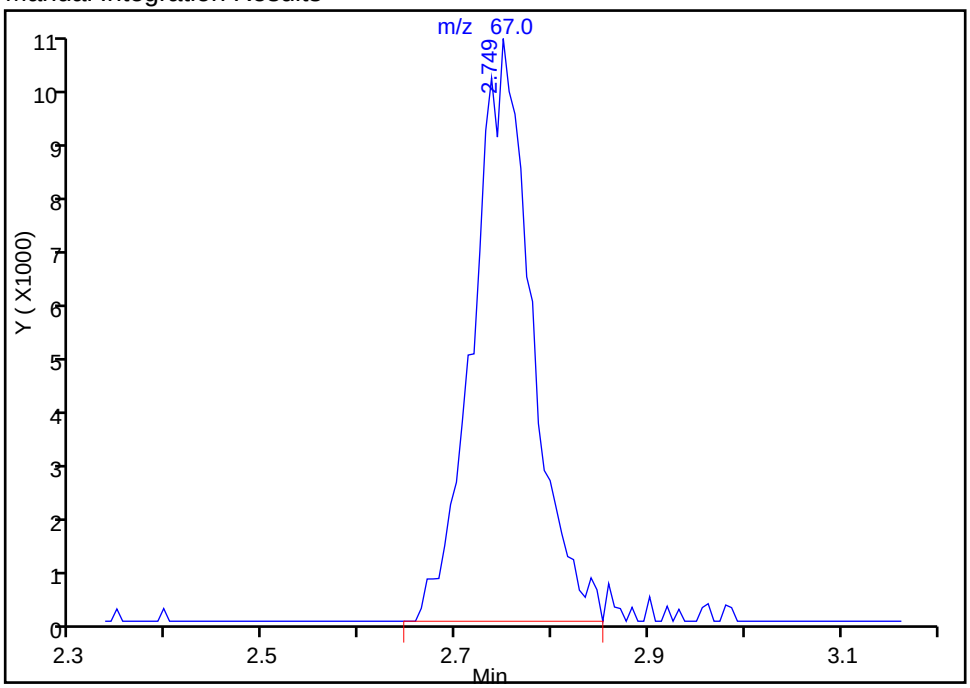
Processing Integration Results

RT: 2.75
Area: 40701
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 2.75
Area: 43622
Amount: 26.516427
Amount Units: ng



Reviewer: gordonk, 05-Jun-2015 07:41:50
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

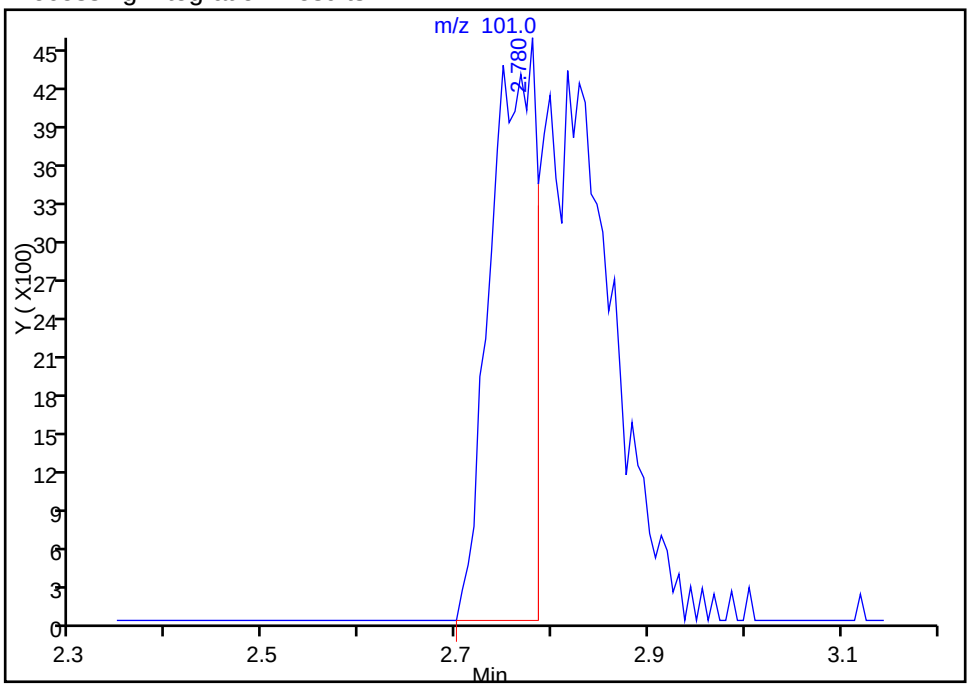
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060503.D
Injection Date: 05-Jun-2015 06:50:30 Instrument ID: CHHP3
Lims ID: IC VSTD5
Client ID:
Operator ID: 10099 ALS Bottle#: 3 Worklist Smp#: 3
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

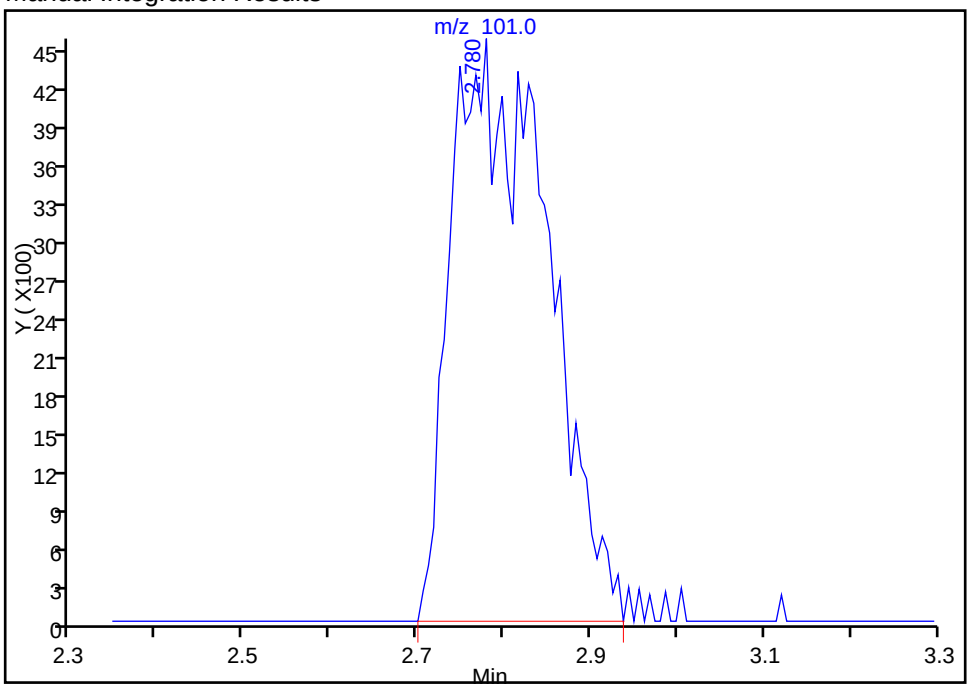
Processing Integration Results

RT: 2.78
Area: 14749
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 2.78
Area: 34911
Amount: 26.168582
Amount Units: ng



Reviewer: gordonk, 05-Jun-2015 07:41:50
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

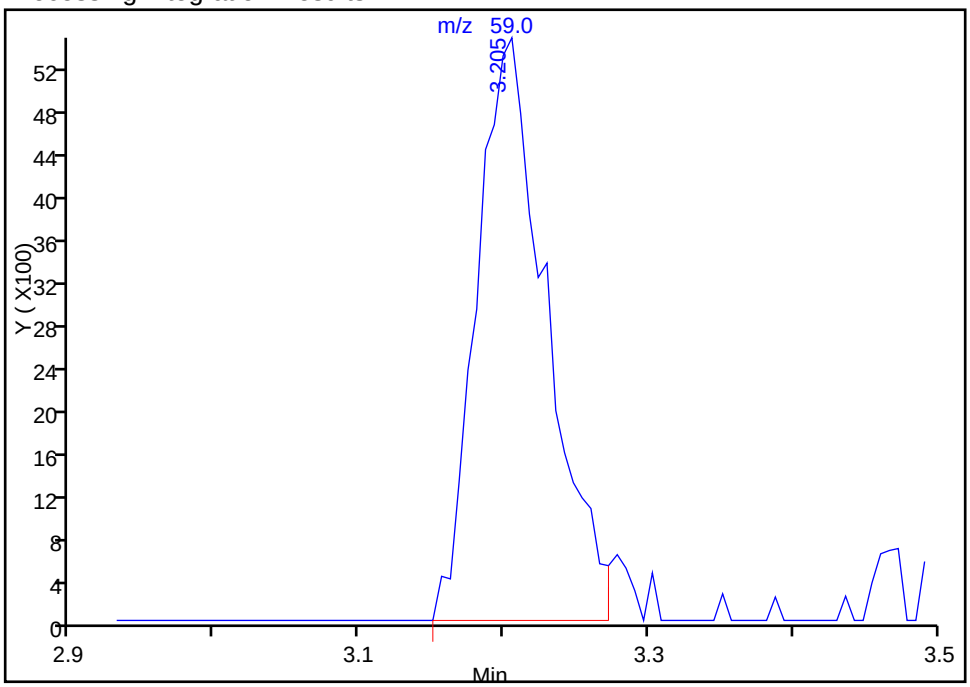
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060503.D
Injection Date: 05-Jun-2015 06:50:30 Instrument ID: CHHP3
Lims ID: IC VSTD5
Client ID:
Operator ID: 10099 ALS Bottle#: 3 Worklist Smp#: 3
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

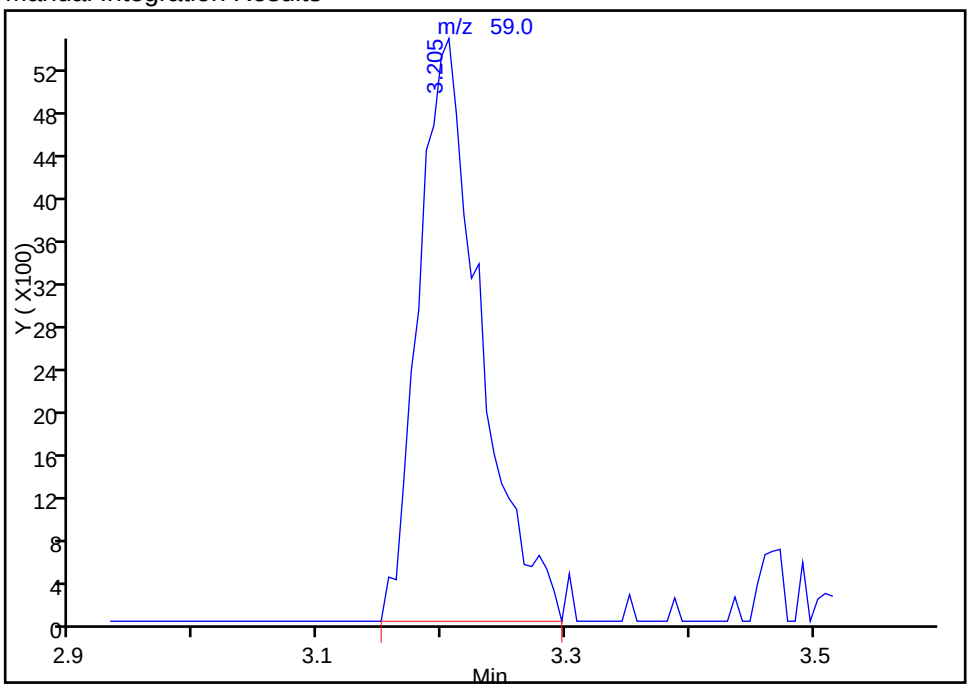
Processing Integration Results

RT: 3.21
Area: 18284
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 3.21
Area: 18786
Amount: 26.799078
Amount Units: ng



Reviewer: gordonk, 05-Jun-2015 07:41:50
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

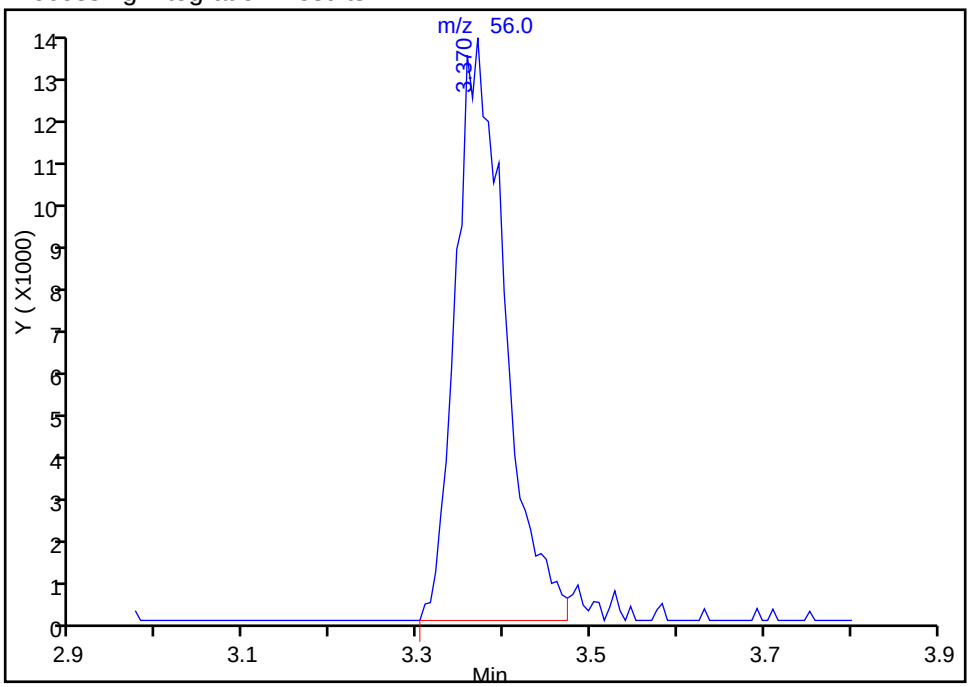
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060503.D
Injection Date: 05-Jun-2015 06:50:30 Instrument ID: CHHP3
Lims ID: IC VSTD5
Client ID:
Operator ID: 10099 ALS Bottle#: 3 Worklist Smp#: 3
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

20 Acrolein, CAS: 107-02-8

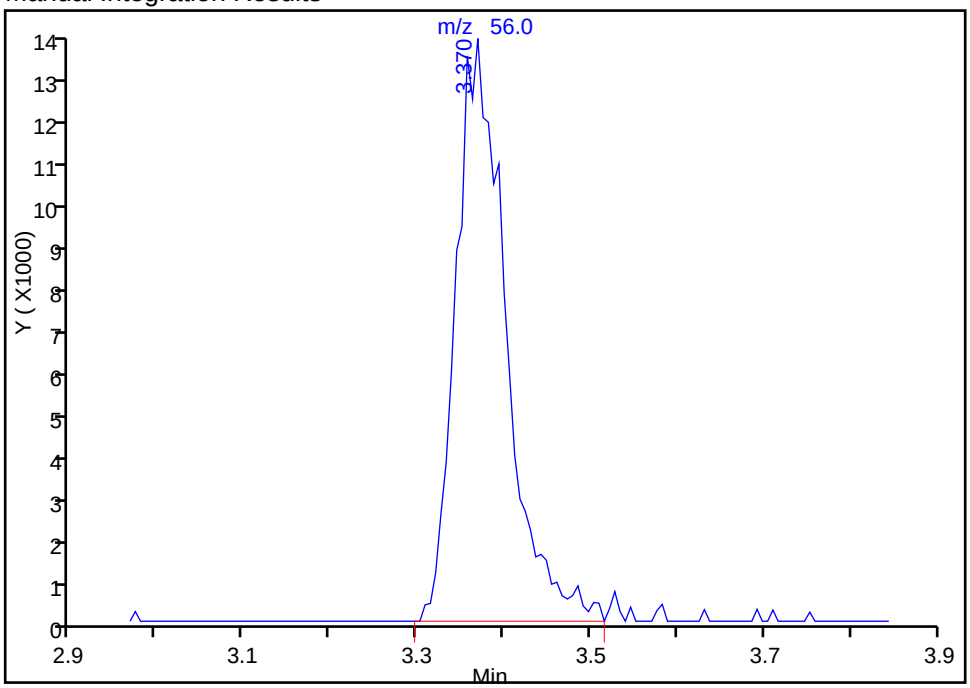
Processing Integration Results

RT: 3.37
Area: 51754
Amount: 500.0000
Amount Units: ng



Manual Integration Results

RT: 3.37
Area: 52764
Amount: 523.0393
Amount Units: ng



Reviewer: gordonk, 05-Jun-2015 07:41:50
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

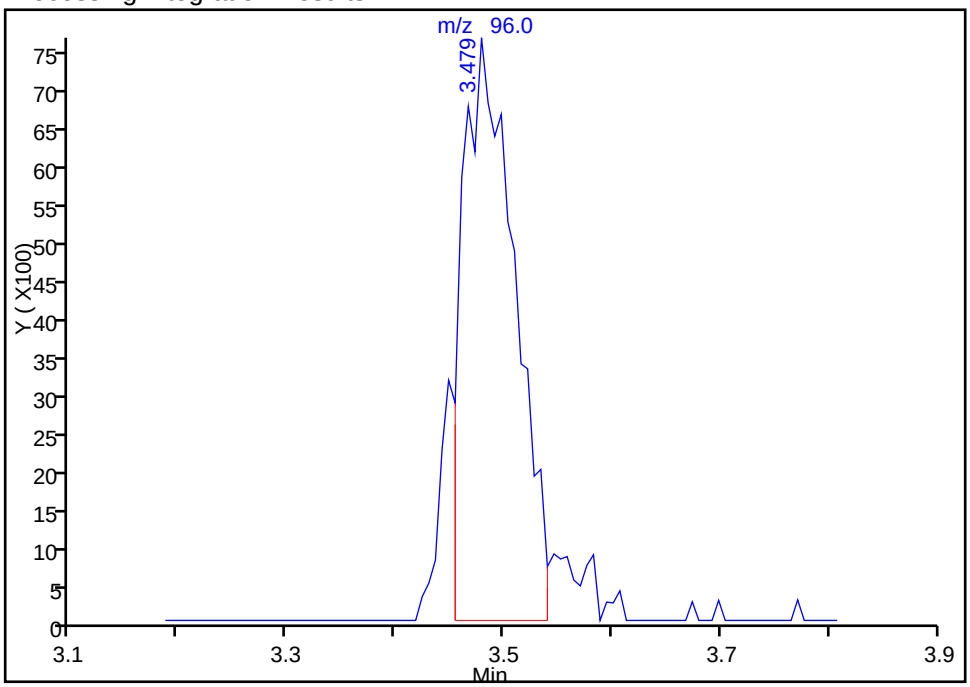
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060503.D
Injection Date: 05-Jun-2015 06:50:30 Instrument ID: CHHP3
Lims ID: IC VSTD5
Client ID:
Operator ID: 10099 ALS Bottle#: 3 Worklist Smp#: 3
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

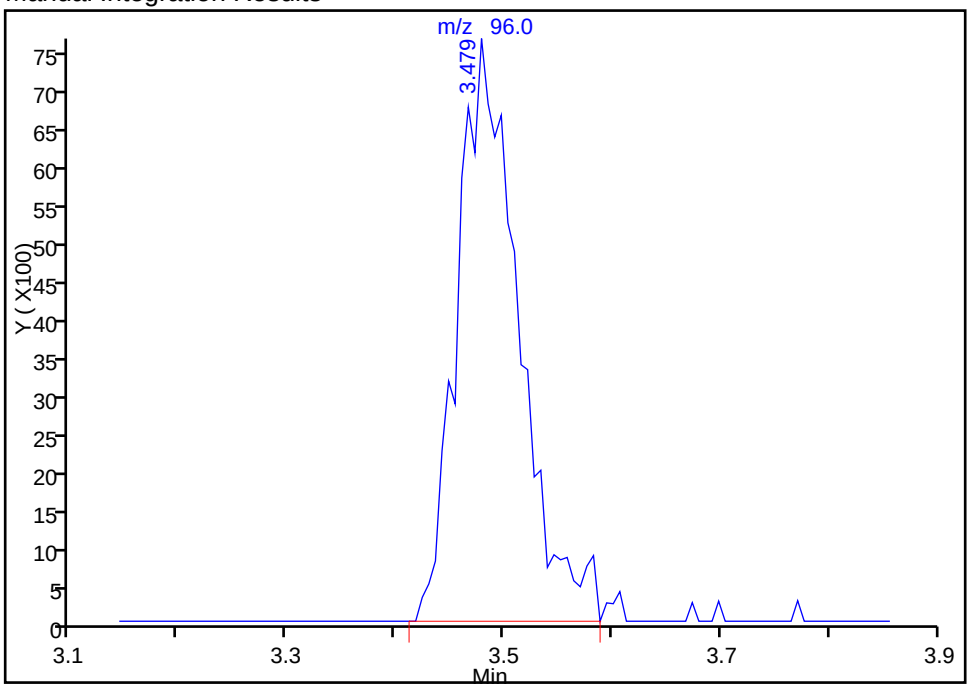
Processing Integration Results

RT: 3.48
Area: 25687
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 3.48
Area: 30097
Amount: 26.658046
Amount Units: ng



Reviewer: gordonk, 05-Jun-2015 07:41:50
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

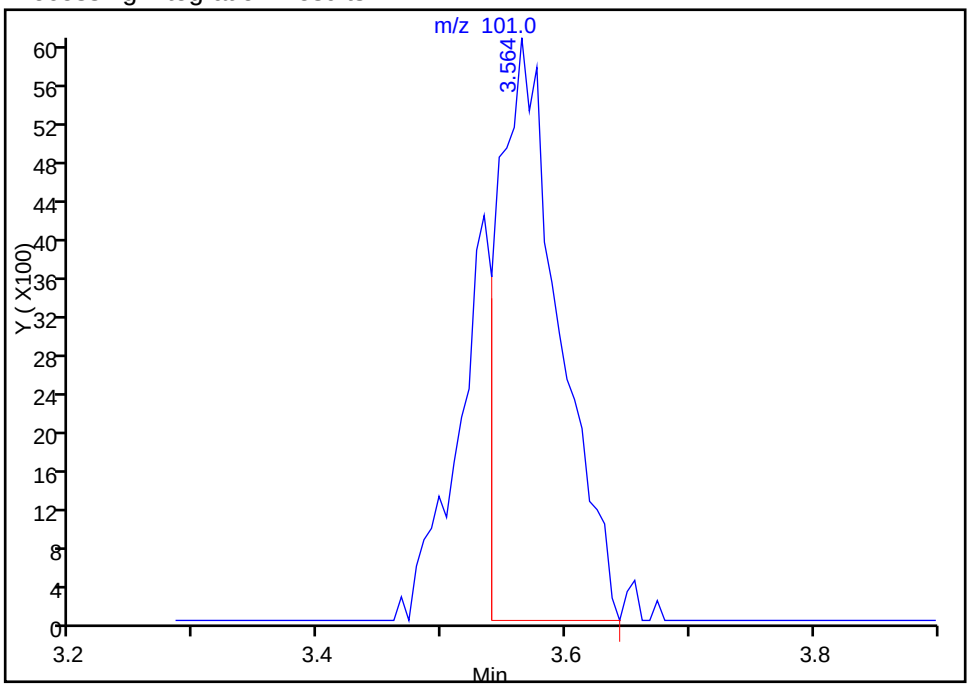
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060503.D
Injection Date: 05-Jun-2015 06:50:30 Instrument ID: CHHP3
Lims ID: IC VSTD5
Client ID:
Operator ID: 10099 ALS Bottle#: 3 Worklist Smp#: 3
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

22 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

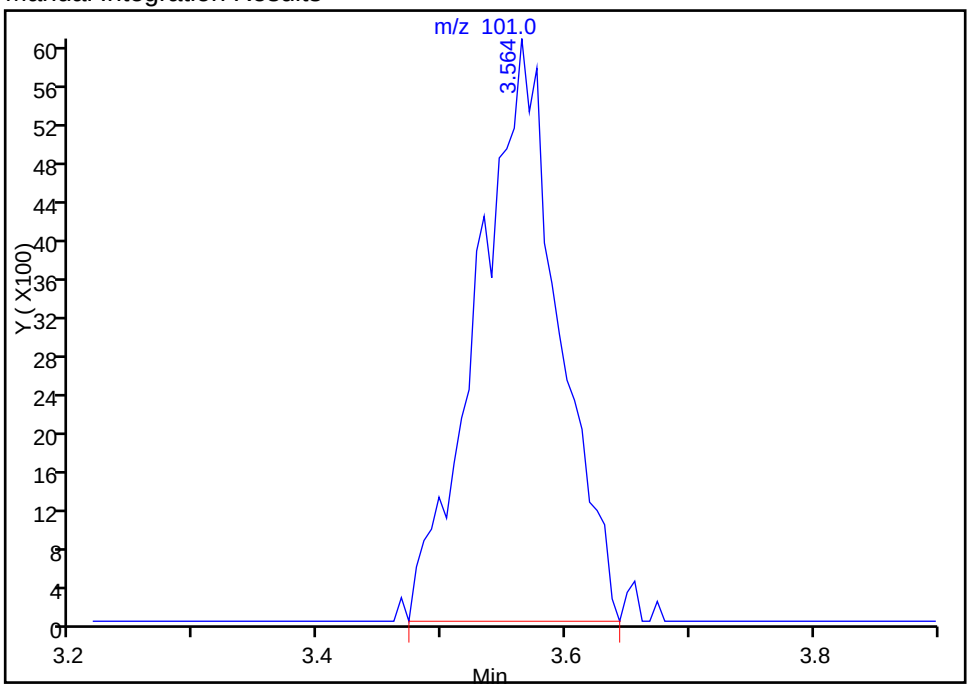
Processing Integration Results

RT: 3.56
Area: 20462
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 3.56
Area: 27340
Amount: 24.600691
Amount Units: ng



Reviewer: gordonk, 05-Jun-2015 07:41:50
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

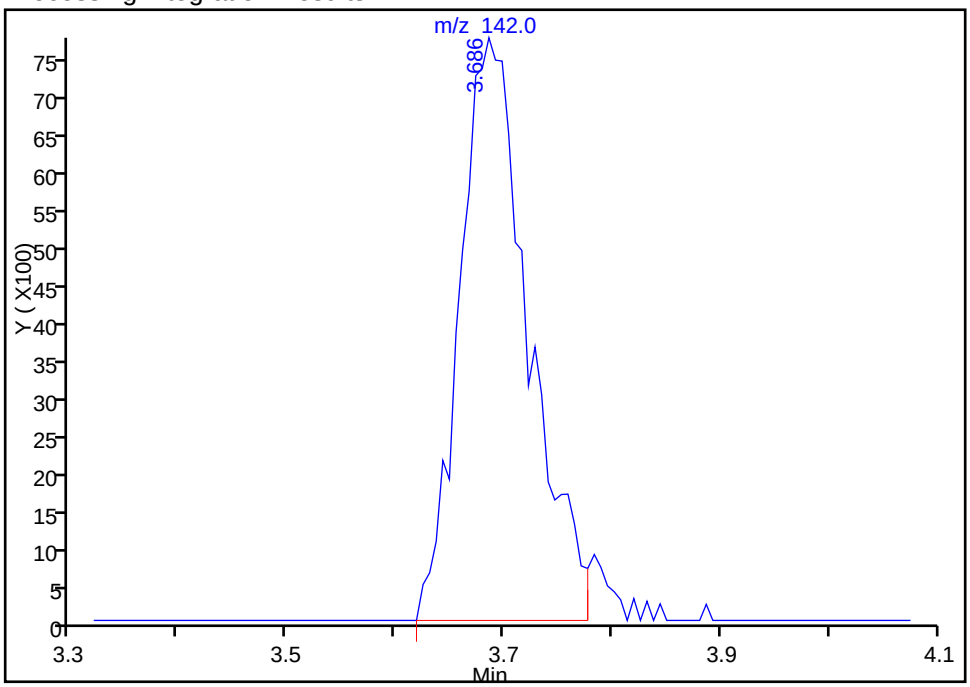
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060503.D
Injection Date: 05-Jun-2015 06:50:30 Instrument ID: CHHP3
Lims ID: IC VSTD5
Client ID:
Operator ID: 10099 ALS Bottle#: 3 Worklist Smp#: 3
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

24 Iodomethane, CAS: 74-88-4

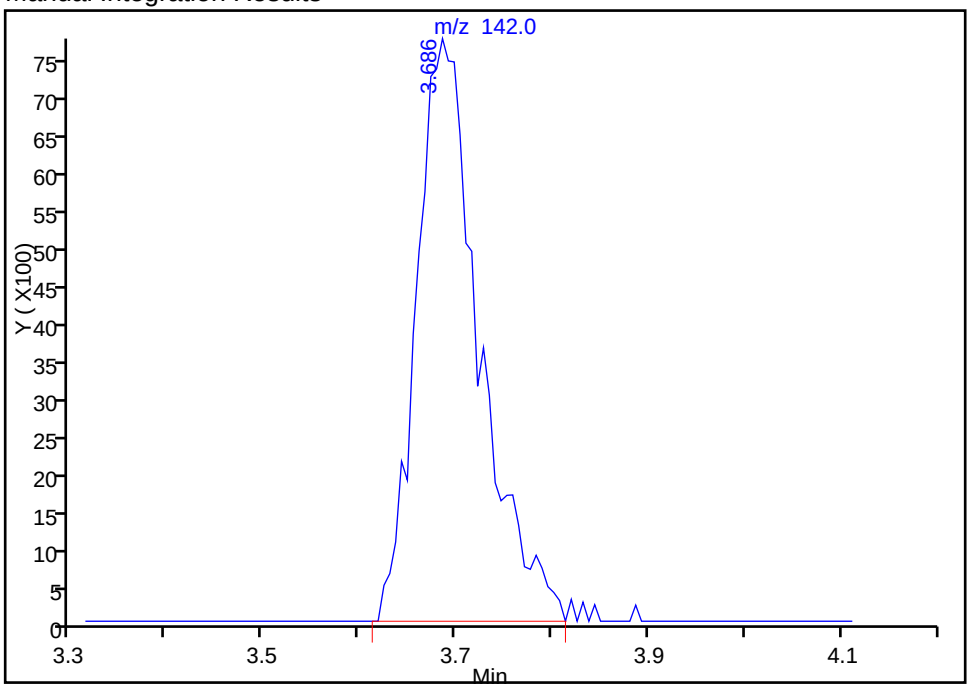
Processing Integration Results

RT: 3.69
Area: 34311
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 3.69
Area: 35302
Amount: 25.180456
Amount Units: ng



Reviewer: gordonk, 05-Jun-2015 07:41:50
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

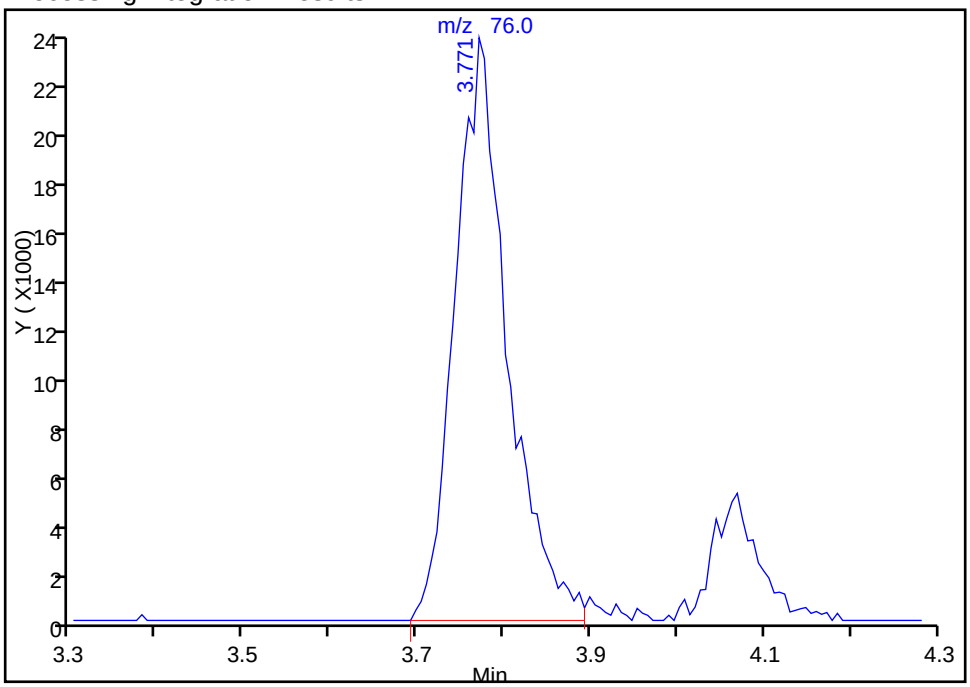
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060503.D
Injection Date: 05-Jun-2015 06:50:30 Instrument ID: CHHP3
Lims ID: IC VSTD5
Client ID:
Operator ID: 10099 ALS Bottle#: 3 Worklist Smp#: 3
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

25 Carbon disulfide, CAS: 75-15-0

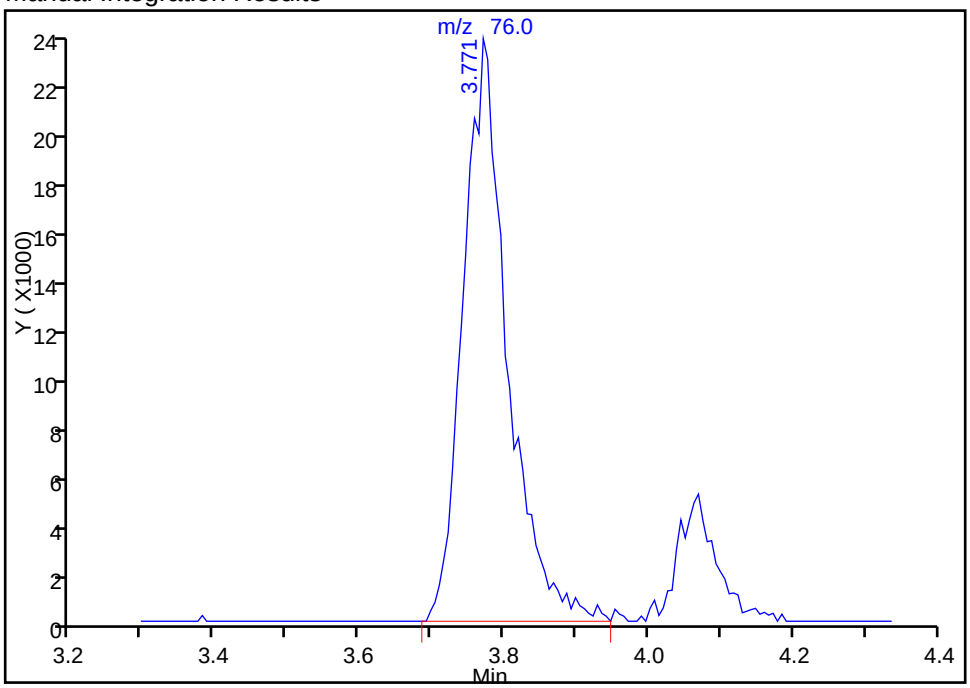
Processing Integration Results

RT: 3.77
Area: 98591
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 3.77
Area: 99977
Amount: 25.863668
Amount Units: ng



Reviewer: gordonk, 05-Jun-2015 07:41:50
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

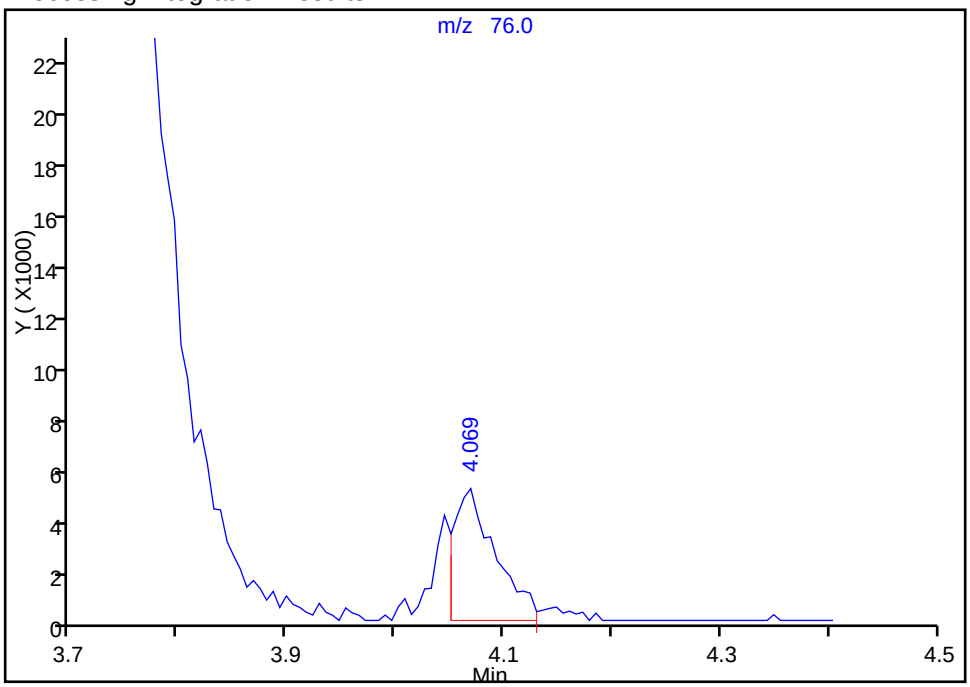
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060503.D
Injection Date: 05-Jun-2015 06:50:30 Instrument ID: CHHP3
Lims ID: IC VSTD5
Client ID:
Operator ID: 10099 ALS Bottle#: 3 Worklist Smp#: 3
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

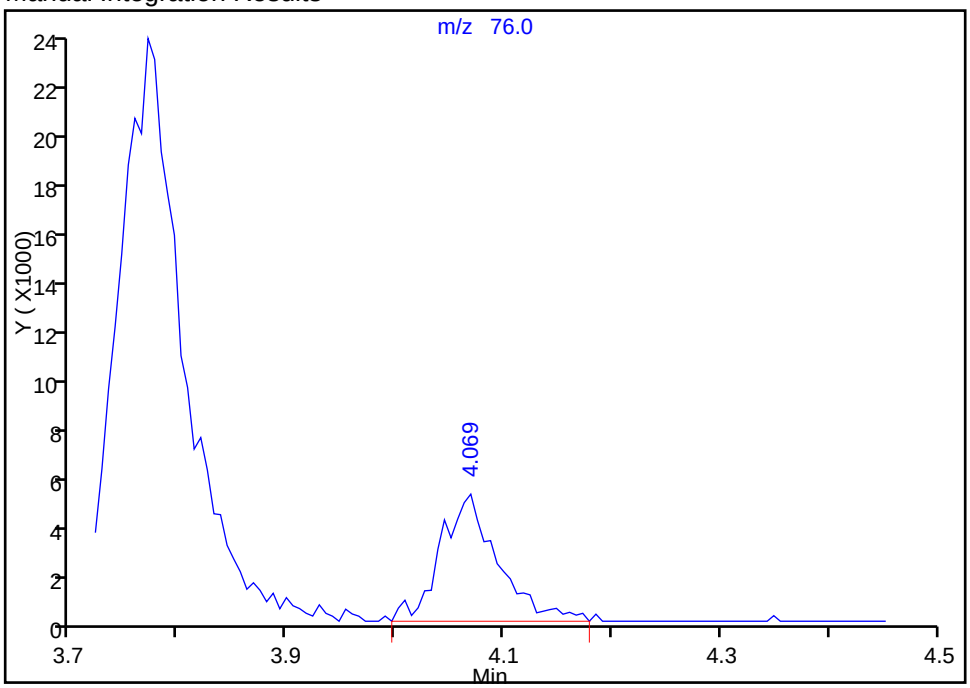
Processing Integration Results

RT: 4.07
Area: 13709
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 4.07
Area: 18893
Amount: 26.346876
Amount Units: ng



Reviewer: gordonk, 05-Jun-2015 07:41:50
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

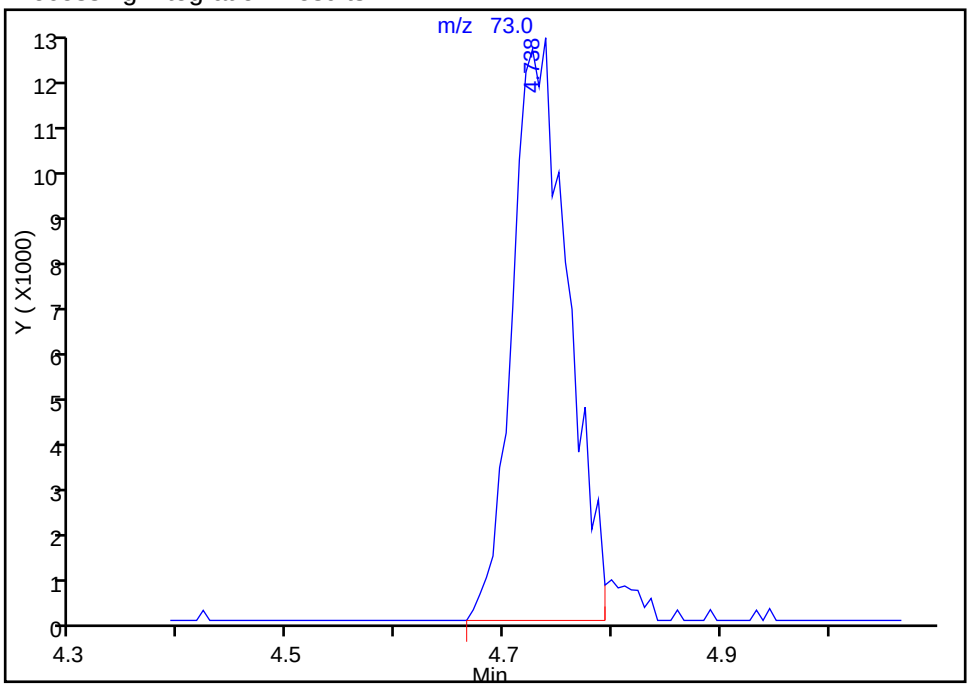
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060503.D
Injection Date: 05-Jun-2015 06:50:30 Instrument ID: CHHP3
Lims ID: IC VSTD5
Client ID:
Operator ID: 10099 ALS Bottle#: 3 Worklist Smp#: 3
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

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

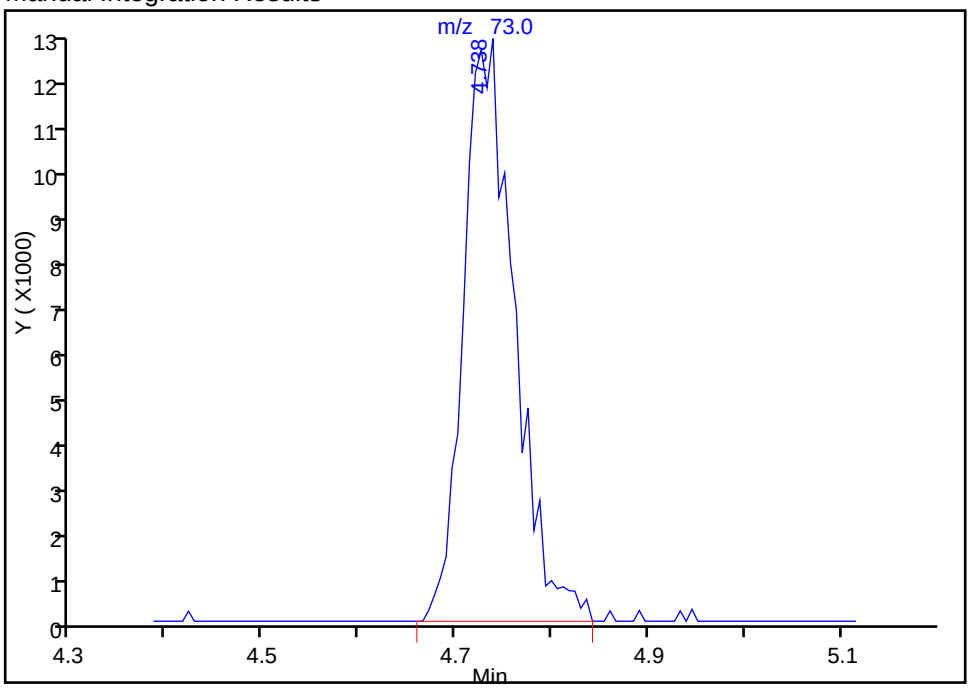
Processing Integration Results

RT: 4.74
Area: 45626
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 4.74
Area: 47263
Amount: 26.361879
Amount Units: ng



Reviewer: gordonk, 05-Jun-2015 07:41:50
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060504.D
Lims ID: IC VSTD10
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 05-Jun-2015 07:12:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD10
Operator ID: 10099 Instrument ID: CHHP3
Sublist: chrom-MSVOA_S_CHHP3*sub4

Method: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Jun-2015 09:53:18 Calib Date: 05-Jun-2015 09:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060509.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: gordonk Date: 05-Jun-2015 07:47:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.467	4.471	-0.004	98	167120	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.363	7.366	-0.003	97	835532	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.447	10.445	0.002	89	184897	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.771	12.769	0.002	97	262260	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.621	6.618	0.003	92	38038	50.0	52.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.992	6.989	0.003	93	37015	50.0	52.7	
$ 7 Toluene-d8 (Surr)	98	9.012	9.009	0.003	94	165577	50.0	52.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.615	11.613	0.002	84	68502	50.0	52.8	
10 Dichlorodifluoromethane	85	1.687	1.685	0.002	99	64081	50.0	52.7	
11 Chloromethane	50	1.839	1.843	-0.004	99	91876	50.0	52.3	
12 Vinyl chloride	62	1.973	1.989	-0.016	97	81434	50.0	52.0	
13 Butadiene	39	2.022	2.019	0.003	94	87323	50.0	54.0	
14 Bromomethane	94	2.320	2.323	-0.003	90	20071	50.0	50.8	
15 Chloroethane	64	2.454	2.439	0.015	95	24434	50.0	47.2	
16 Dichlorofluoromethane	67	2.727	2.725	0.002	36	91797	50.0	55.4	M
17 Trichlorofluoromethane	101	2.752	2.743	0.009	98	71863	50.0	53.5	
19 Ethyl ether	59	3.208	3.199	0.009	94	35718	50.0	50.6	
20 Acrolein	56	3.360	3.370	-0.010	96	65612	625.0	645.8	M
21 1,1-Dichloroethene	96	3.469	3.467	0.002	95	58078	50.0	51.1	
22 1,1,2-Trichloro-1,2,2-trif	101	3.536	3.534	0.002	95	59595	50.0	53.2	
23 Acetone	43	3.634	3.637	-0.003	97	13086	50.0	51.0	
24 Iodomethane	142	3.676	3.674	0.002	96	72488	50.0	51.3	
25 Carbon disulfide	76	3.749	3.753	-0.004	99	194137	50.0	49.9	
28 3-Chloro-1-propene	76	4.072	4.057	0.015	92	35022	50.0	48.5	
29 Methyl acetate	43	4.157	4.160	-0.003	99	102331	250.0	255.5	
30 Methylene Chloride	84	4.266	4.264	0.002	99	74711	50.0	50.7	
31 2-Methyl-2-propanol	59	4.595	4.605	-0.010	56	22164	500.0	505.4	
32 Acrylonitrile	53	4.662	4.665	-0.003	99	106646	500.0	522.5	
33 trans-1,2-Dichloroethene	96	4.674	4.678	-0.004	92	62436	50.0	52.0	
34 Methyl tert-butyl ether	73	4.729	4.726	0.003	97	93509	50.0	51.8	
35 Hexane	57	5.100	5.103	-0.003	92	120233	50.0	56.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.276	5.280	-0.004	95	104118	50.0	50.4	
37 Vinyl acetate	43	5.404	5.402	0.002	97	44747	50.0	47.9	
41 2,2-Dichloropropane	77	6.037	6.034	0.003	71	72755	50.0	52.1	
42 cis-1,2-Dichloroethene	96	6.031	6.034	-0.003	85	59703	50.0	51.7	
43 2-Butanone (MEK)	43	6.098	6.095	0.003	98	13588	50.0	55.2	
47 Chlorobromomethane	128	6.317	6.326	-0.009	91	18757	50.0	49.8	
48 Tetrahydrofuran	42	6.402	6.393	0.009	81	15707	100.0	104.9	
49 Chloroform	83	6.438	6.436	0.002	94	85201	50.0	51.4	
50 1,1,1-Trichloroethane	97	6.633	6.630	0.003	98	80971	50.0	52.4	
51 Cyclohexane	56	6.694	6.691	0.003	92	145889	50.0	54.6	
52 1,1-Dichloropropene	75	6.821	6.819	0.002	94	75298	50.0	52.4	
53 Carbon tetrachloride	117	6.821	6.819	0.002	82	64281	50.0	52.5	
54 Isobutyl alcohol	41	7.040	7.044	-0.004	38	18164	1250.0	1379.3	
55 Benzene	78	7.053	7.050	0.003	97	207023	50.0	52.9	
56 1,2-Dichloroethane	62	7.071	7.074	-0.003	96	46589	50.0	54.3	
59 n-Heptane	43	7.381	7.379	0.002	95	95407	50.0	51.9	
60 Trichloroethene	130	7.758	7.756	0.002	97	46744	50.0	51.2	
63 Methylcyclohexane	83	7.959	7.957	0.002	94	121442	50.0	53.6	
64 1,2-Dichloropropane	63	7.996	7.987	0.009	93	42943	50.0	52.0	
65 Dibromomethane	93	8.105	8.109	-0.004	95	18252	50.0	54.2	
67 1,4-Dioxane	88	8.154	8.145	0.009	71	4846	1000.0	1120.1	
68 Dichlorobromomethane	83	8.281	8.279	0.002	97	46893	50.0	51.0	
71 cis-1,3-Dichloropropene	75	8.738	8.735	0.003	94	55058	50.0	50.0	
72 4-Methyl-2-pentanone (MIBK	43	8.908	8.906	0.002	96	23228	50.0	50.2	
73 Toluene	91	9.078	9.076	0.002	98	201535	50.0	52.3	
74 trans-1,3-Dichloropropene	75	9.297	9.295	0.002	95	43156	50.0	48.6	
75 Ethyl methacrylate	69	9.401	9.398	0.003	92	32681	50.0	52.4	
76 1,1,2-Trichloroethane	97	9.480	9.477	0.003	91	25882	50.0	53.3	
77 Tetrachloroethene	164	9.626	9.623	0.003	96	35713	50.0	50.2	
78 1,3-Dichloropropane	76	9.644	9.648	-0.004	94	46464	50.0	51.7	
79 2-Hexanone	43	9.742	9.739	0.003	98	22677	50.0	54.8	
81 Chlorodibromomethane	129	9.869	9.867	0.002	91	23547	50.0	46.8	
82 Ethylene Dibromide	107	9.979	9.982	-0.003	95	23635	50.0	50.9	
83 Chlorobenzene	112	10.472	10.475	-0.003	93	129467	50.0	53.8	
85 1,1,1,2-Tetrachloroethane	131	10.557	10.554	0.003	95	36742	50.0	49.5	
86 Ethylbenzene	106	10.581	10.585	-0.004	99	78235	50.0	52.1	
87 m-Xylene & p-Xylene	106	10.697	10.700	-0.003	99	97773	50.0	52.7	
88 o-Xylene	106	11.092	11.096	-0.004	95	91882	50.0	50.9	
89 Styrene	104	11.104	11.108	-0.004	95	149020	50.0	53.2	
90 Bromoform	173	11.287	11.290	-0.003	92	12325	50.0	46.1	
91 Isopropylbenzene	105	11.463	11.461	0.002	96	261809	50.0	53.3	
93 1,1,2,2-Tetrachloroethane	83	11.749	11.747	0.002	94	29431	50.0	50.7	
94 Bromobenzene	156	11.767	11.765	0.002	94	43882	50.0	53.0	
95 1,2,3-Trichloropropane	110	11.798	11.795	0.003	84	8414	50.0	53.0	
96 trans-1,4-Dichloro-2-buten	53	11.810	11.807	0.003	78	9617	50.0	50.8	
97 N-Propylbenzene	120	11.877	11.874	0.003	100	71571	50.0	51.8	
98 2-Chlorotoluene	126	11.956	11.959	-0.003	95	55440	50.0	53.3	
99 1,3,5-Trimethylbenzene	105	12.047	12.045	0.002	94	216658	50.0	55.0	
100 4-Chlorotoluene	126	12.065	12.069	-0.004	98	56066	50.0	53.1	
101 tert-Butylbenzene	119	12.376	12.373	0.003	93	184629	50.0	53.2	
103 1,2,4-Trimethylbenzene	105	12.424	12.422	0.002	97	216800	50.0	54.3	
104 sec-Butylbenzene	105	12.595	12.598	-0.003	94	302828	50.0	56.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	12.704	12.708	-0.004	96	97044	50.0	52.0	
106 4-Isopropyltoluene	119	12.741	12.738	0.003	98	235823	50.0	55.3	
107 1,4-Dichlorobenzene	146	12.795	12.793	0.002	95	93933	50.0	52.7	
110 n-Butylbenzene	91	13.148	13.146	0.002	98	235239	50.0	54.0	
111 1,2-Dichlorobenzene	146	13.167	13.164	0.003	94	83853	50.0	53.9	
112 1,2-Dibromo-3-Chloropropan	75	13.945	13.937	0.008	79	3426	50.0	44.9	
114 1,2,4-Trichlorobenzene	180	14.785	14.782	0.003	95	46433	50.0	48.4	
115 Hexachlorobutadiene	225	14.955	14.959	-0.004	94	36940	50.0	50.5	
116 Naphthalene	128	15.028	15.032	-0.004	97	57969	50.0	48.4	
117 1,2,3-Trichlorobenzene	180	15.284	15.281	0.003	92	34373	50.0	49.8	
S 130 1,2-Dichloroethene, Total	96				0		100.0	103.7	
S 129 Xylenes, Total	106				0		100.0	103.6	
S 131 1,3-Dichloropropene, Total	1				0		100.0	98.6	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00036	Amount Added:	2.00	Units: uL	
VOA8260VOAPRI_00123	Amount Added:	2.00	Units: uL	
voaWVA1st Res_00001	Amount Added:	2.00	Units: uL	
VOAACRLOEINPR_00001	Amount Added:	25.00	Units: uL	
VOA8260INT_00037	Amount Added:	10.00	Units: uL	Run Reagent

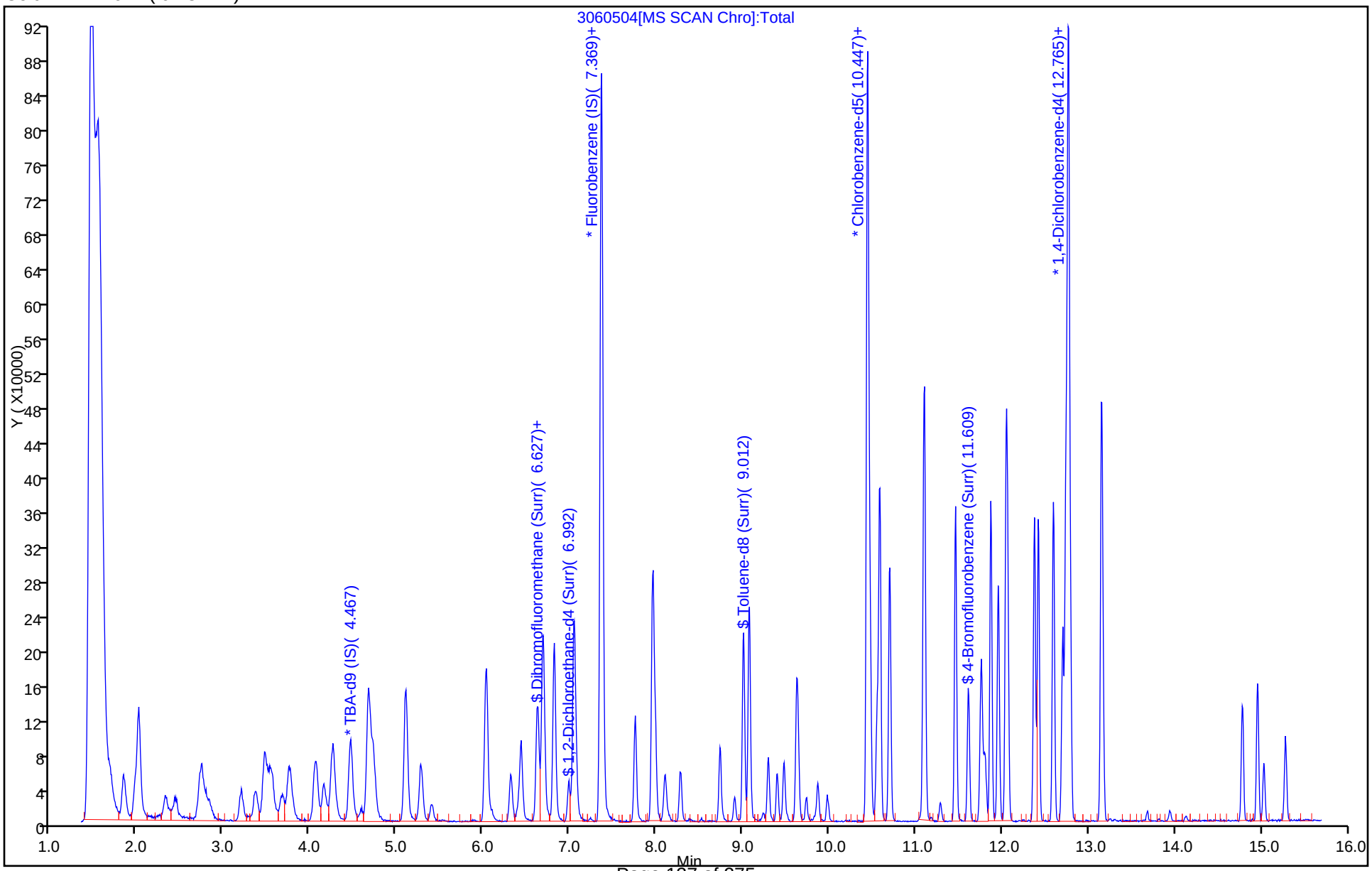
Report Date: 05-Jun-2015 09:53:19 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060504.D

Injection Date:	05-Jun-2015 07:12:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	IC VSTD10			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)



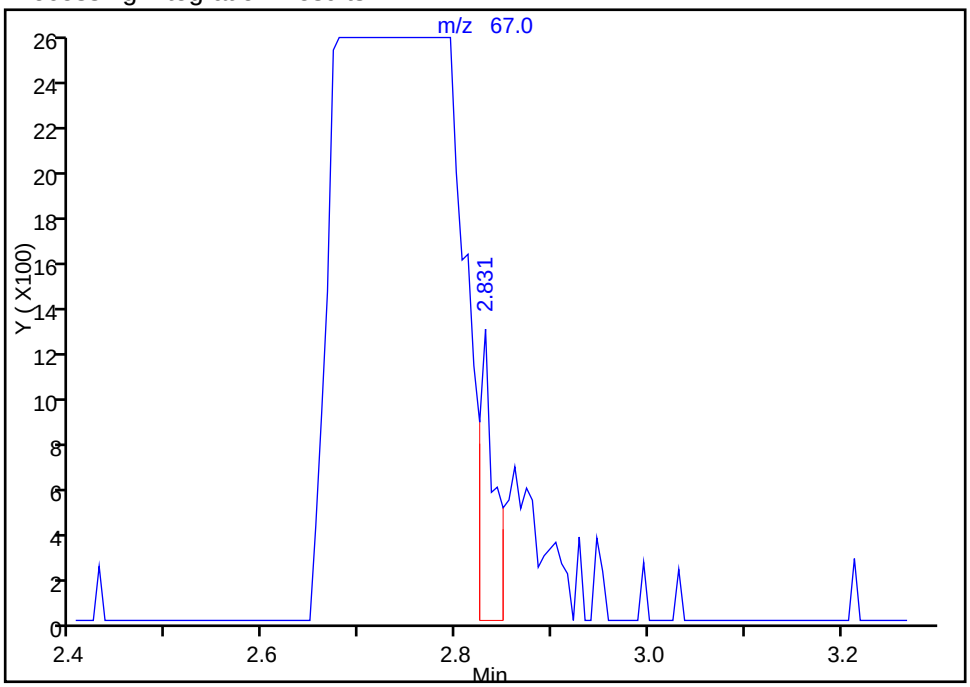
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060504.D
Injection Date: 05-Jun-2015 07:12:30 Instrument ID: CHHP3
Lims ID: IC VSTD10
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

16 Dichlorofluoromethane, CAS: 75-43-4

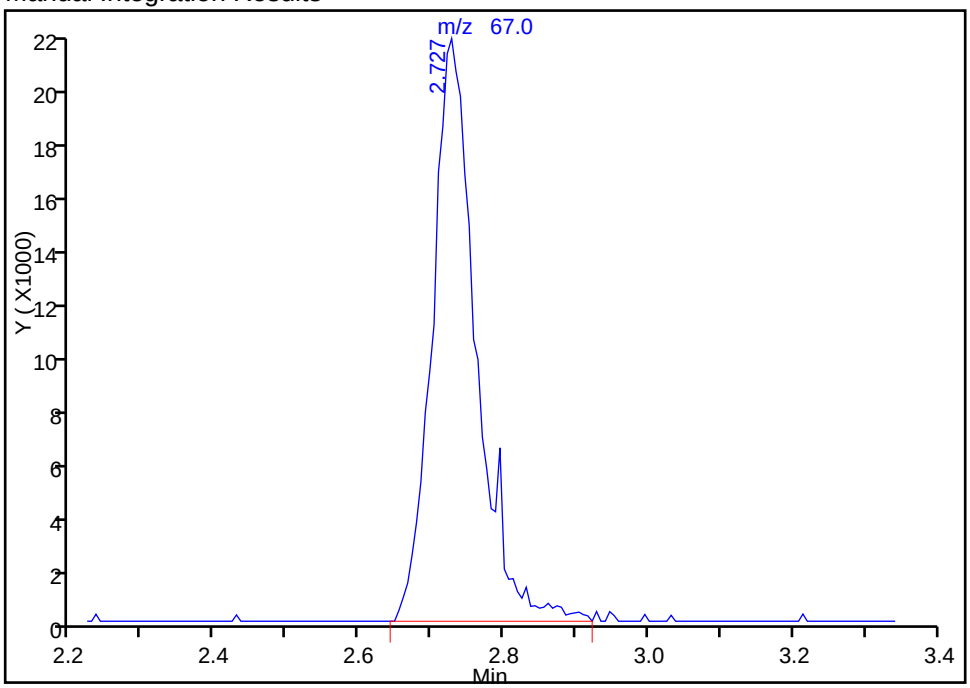
Processing Integration Results

RT: 2.83
Area: 1355
Amount: 1.518646
Amount Units: ng



Manual Integration Results

RT: 2.73
Area: 91797
Amount: 55.403445
Amount Units: ng



Reviewer: gordonk, 05-Jun-2015 07:47:46
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

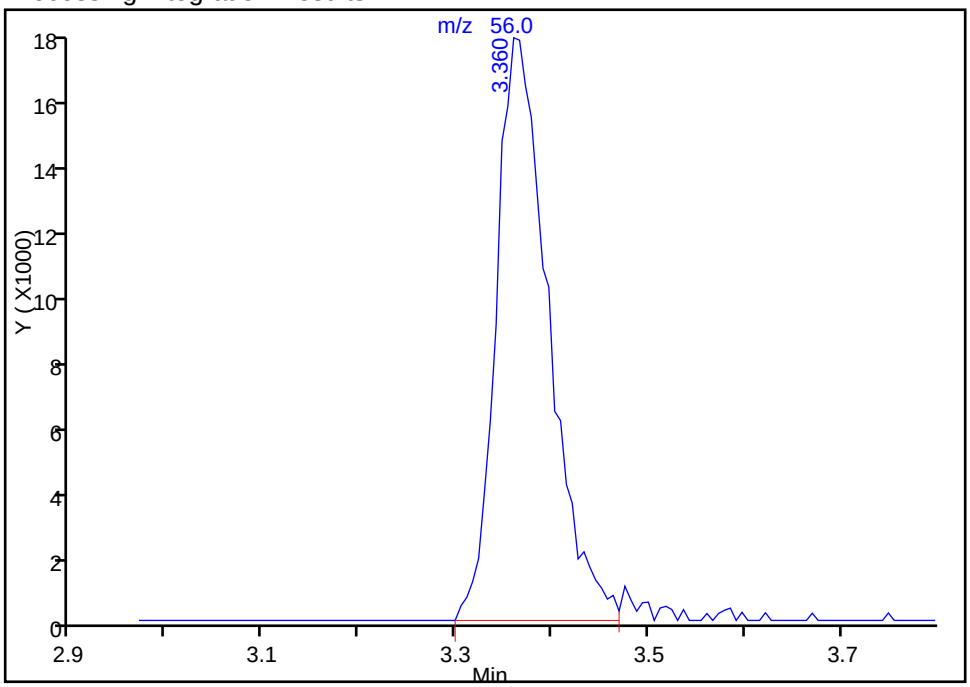
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060504.D
Injection Date: 05-Jun-2015 07:12:30 Instrument ID: CHHP3
Lims ID: IC VSTD10
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

20 Acrolein, CAS: 107-02-8

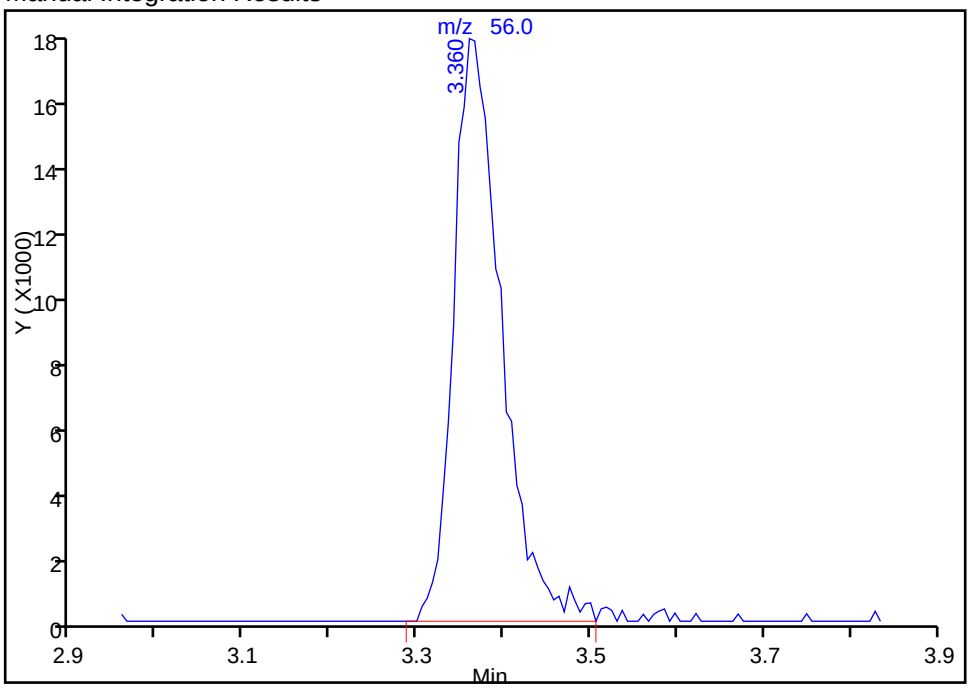
Processing Integration Results

RT: 3.36
Area: 64543
Amount: 616.0063
Amount Units: ng



Manual Integration Results

RT: 3.36
Area: 65612
Amount: 645.7713
Amount Units: ng



Reviewer: gordonk, 05-Jun-2015 07:47:46
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060505.D
Lims ID: IC VSTD25
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 05-Jun-2015 07:33:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD25
Operator ID: 10099 Instrument ID: CHHP3
Sublist: chrom-MSVOA_S_CHHP3*sub4

Method: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Jun-2015 09:53:19 Calib Date: 05-Jun-2015 09:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060509.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: gordonk Date: 05-Jun-2015 08:14:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.467	4.471	-0.004	98	166198	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.363	7.366	-0.003	97	835189	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.447	10.445	0.002	89	181559	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.765	12.769	-0.004	97	269930	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.620	6.618	0.002	89	95774	125.0	132.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.991	6.989	0.002	95	87377	125.0	124.5	
$ 7 Toluene-d8 (Surr)	98	9.011	9.009	0.002	93	408610	125.0	132.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.609	11.613	-0.004	84	161746	125.0	126.9	
10 Dichlorodifluoromethane	85	1.687	1.685	0.002	100	155479	125.0	127.9	
11 Chloromethane	50	1.845	1.843	0.002	100	228381	125.0	130.0	
12 Vinyl chloride	62	1.979	1.989	-0.010	97	199925	125.0	127.7	
13 Butadiene	39	2.015	2.019	-0.004	92	209188	125.0	129.5	
14 Bromomethane	94	2.319	2.323	-0.004	88	50859	125.0	128.7	
15 Chloroethane	64	2.435	2.439	-0.004	97	53153	125.0	124.6	
16 Dichlorofluoromethane	67	2.733	2.725	0.008	98	217337	125.0	131.2	
17 Trichlorofluoromethane	101	2.751	2.743	0.008	89	174533	125.0	129.9	
19 Ethyl ether	59	3.208	3.199	0.009	95	90470	125.0	128.2	
20 Acrolein	56	3.366	3.370	-0.004	100	72803	750.0	716.8	
21 1,1-Dichloroethene	96	3.463	3.467	-0.004	95	146716	125.0	129.1	
22 1,1,2-Trichloro-1,2,2-trif	101	3.548	3.534	0.014	95	146658	125.0	131.1	
23 Acetone	43	3.621	3.637	-0.016	99	24163	125.0	119.1	
24 Iodomethane	142	3.676	3.674	0.002	97	184088	125.0	130.4	
25 Carbon disulfide	76	3.755	3.753	0.002	99	506335	125.0	130.1	
28 3-Chloro-1-propene	76	4.059	4.057	0.002	93	92331	125.0	127.9	
29 Methyl acetate	43	4.163	4.160	0.003	99	256982	625.0	641.9	
30 Methylene Chloride	84	4.260	4.264	-0.004	99	157952	125.0	132.1	
31 2-Methyl-2-propanol	59	4.588	4.605	-0.017	98	50567	1250.0	1159.5	
32 Acrylonitrile	53	4.668	4.665	0.003	100	265278	1250.0	1300.3	
33 trans-1,2-Dichloroethene	96	4.680	4.678	0.002	98	159266	125.0	132.6	
34 Methyl tert-butyl ether	73	4.728	4.726	0.002	97	237276	125.0	131.5	
35 Hexane	57	5.106	5.103	0.003	94	266101	125.0	124.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.282	5.280	0.002	95	271857	125.0	131.7	
37 Vinyl acetate	43	5.404	5.402	0.002	97	112432	125.0	120.4	
41 2,2-Dichloropropane	77	6.030	6.034	-0.004	92	185858	125.0	133.3	
42 cis-1,2-Dichloroethene	96	6.036	6.034	0.002	85	151420	125.0	131.2	
43 2-Butanone (MEK)	43	6.097	6.095	0.002	99	31371	125.0	127.5	
47 Chlorobromomethane	128	6.316	6.326	-0.010	91	49105	125.0	130.3	
48 Tetrahydrofuran	42	6.401	6.393	0.008	94	37283	250.0	249.1	
49 Chloroform	83	6.438	6.436	0.002	95	217806	125.0	131.4	
50 1,1,1-Trichloroethane	97	6.632	6.630	0.002	99	205151	125.0	132.8	
51 Cyclohexane	56	6.693	6.691	0.002	92	352000	125.0	131.7	
52 1,1-Dichloropropene	75	6.821	6.819	0.002	95	188504	125.0	131.2	
53 Carbon tetrachloride	117	6.815	6.819	-0.004	96	162899	125.0	133.2	
54 Isobutyl alcohol	41	7.040	7.044	-0.004	41	41641	3125.0	3163.2	
55 Benzene	78	7.052	7.050	0.002	98	510452	125.0	130.6	
56 1,2-Dichloroethane	62	7.077	7.074	0.003	96	112140	125.0	130.8	
59 n-Heptane	43	7.381	7.379	0.002	94	235886	125.0	128.4	
60 Trichloroethene	130	7.758	7.756	0.002	97	114313	125.0	125.3	
63 Methylcyclohexane	83	7.959	7.957	0.002	93	301440	125.0	133.1	
64 1,2-Dichloropropane	63	7.989	7.987	0.002	89	109231	125.0	132.2	
65 Dibromomethane	93	8.111	8.109	0.002	95	43457	125.0	129.0	
67 1,4-Dioxane	88	8.147	8.145	0.002	95	10788	2500.0	2494.6	
68 Dichlorobromomethane	83	8.281	8.279	0.002	99	114679	125.0	124.7	
71 cis-1,3-Dichloropropene	75	8.737	8.735	0.002	95	142441	125.0	129.3	
72 4-Methyl-2-pentanone (MIBK	43	8.908	8.906	0.002	97	55878	125.0	122.9	
73 Toluene	91	9.078	9.076	0.002	98	504560	125.0	133.3	
74 trans-1,3-Dichloropropene	75	9.297	9.295	0.002	95	108407	125.0	124.3	
75 Ethyl methacrylate	69	9.400	9.398	0.002	91	79103	125.0	129.3	
76 1,1,2-Trichloroethane	97	9.473	9.477	-0.004	91	61664	125.0	129.4	
77 Tetrachloroethene	164	9.619	9.623	-0.004	98	90189	125.0	129.1	
78 1,3-Dichloropropane	76	9.644	9.648	-0.004	93	113135	125.0	128.1	
79 2-Hexanone	43	9.735	9.739	-0.004	97	49268	125.0	121.2	
81 Chlorodibromomethane	129	9.875	9.867	0.008	92	61474	125.0	124.5	
82 Ethylene Dibromide	107	9.984	9.982	0.002	96	59580	125.0	130.7	
83 Chlorobenzene	112	10.477	10.475	0.002	92	310817	125.0	131.6	
85 1,1,1,2-Tetrachloroethane	131	10.556	10.554	0.002	95	90856	125.0	124.6	
86 Ethylbenzene	106	10.587	10.585	0.002	98	192665	125.0	130.7	
87 m-Xylene & p-Xylene	106	10.702	10.700	0.002	99	238696	125.0	131.0	
88 o-Xylene	106	11.092	11.096	-0.004	97	235976	125.0	133.1	
89 Styrene	104	11.104	11.108	-0.004	95	369487	125.0	134.4	
90 Bromoform	173	11.286	11.290	-0.004	96	32970	125.0	125.7	
91 Isopropylbenzene	105	11.463	11.461	0.002	96	649888	125.0	134.9	
93 1,1,2,2-Tetrachloroethane	83	11.749	11.747	0.002	94	72697	125.0	127.6	
94 Bromobenzene	156	11.761	11.765	-0.004	95	108930	125.0	127.7	
95 1,2,3-Trichloropropane	110	11.797	11.795	0.002	83	20854	125.0	127.6	
96 trans-1,4-Dichloro-2-buten	53	11.810	11.807	0.003	69	23331	125.0	119.7	
97 N-Propylbenzene	120	11.870	11.874	-0.004	99	184203	125.0	129.6	
98 2-Chlorotoluene	126	11.962	11.959	0.003	96	138801	125.0	129.7	
99 1,3,5-Trimethylbenzene	105	12.047	12.045	0.002	94	540953	125.0	133.4	
100 4-Chlorotoluene	126	12.065	12.069	-0.004	98	137627	125.0	126.5	
101 tert-Butylbenzene	119	12.375	12.373	0.002	93	469077	125.0	131.2	
103 1,2,4-Trimethylbenzene	105	12.418	12.422	-0.004	96	543255	125.0	132.1	
104 sec-Butylbenzene	105	12.594	12.598	-0.004	94	732781	125.0	132.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	12.704	12.708	-0.004	96	242955	125.0	126.4	
106 4-Isopropyltoluene	119	12.740	12.738	0.002	97	580550	125.0	132.2	
107 1,4-Dichlorobenzene	146	12.789	12.793	-0.004	92	226421	125.0	123.4	
110 n-Butylbenzene	91	13.148	13.146	0.002	98	597417	125.0	133.3	
111 1,2-Dichlorobenzene	146	13.166	13.164	0.002	95	201569	125.0	126.0	
112 1,2-Dibromo-3-Chloropropan	75	13.939	13.937	0.002	77	9328	125.0	118.7	
114 1,2,4-Trichlorobenzene	180	14.778	14.782	-0.004	95	117095	125.0	118.5	
115 Hexachlorobutadiene	225	14.961	14.959	0.002	95	88708	125.0	117.8	
116 Naphthalene	128	15.028	15.032	-0.004	97	144415	125.0	117.2	
117 1,2,3-Trichlorobenzene	180	15.283	15.281	0.002	93	84671	125.0	119.2	
S 130 1,2-Dichloroethene, Total	96				0		250.0	263.8	
S 129 Xylenes, Total	106				0		250.0	264.1	
S 131 1,3-Dichloropropene, Total	1				0		250.0	253.6	

Reagents:

VOA8260SURR_00036	Amount Added:	5.00	Units: uL	
VOA8260VOAPRI_00123	Amount Added:	5.00	Units: uL	
voaWVA1st Res_00001	Amount Added:	5.00	Units: uL	
VOAACRLOEINPR_00001	Amount Added:	30.00	Units: uL	
VOA8260INT_00037	Amount Added:	10.00	Units: uL	Run Reagent

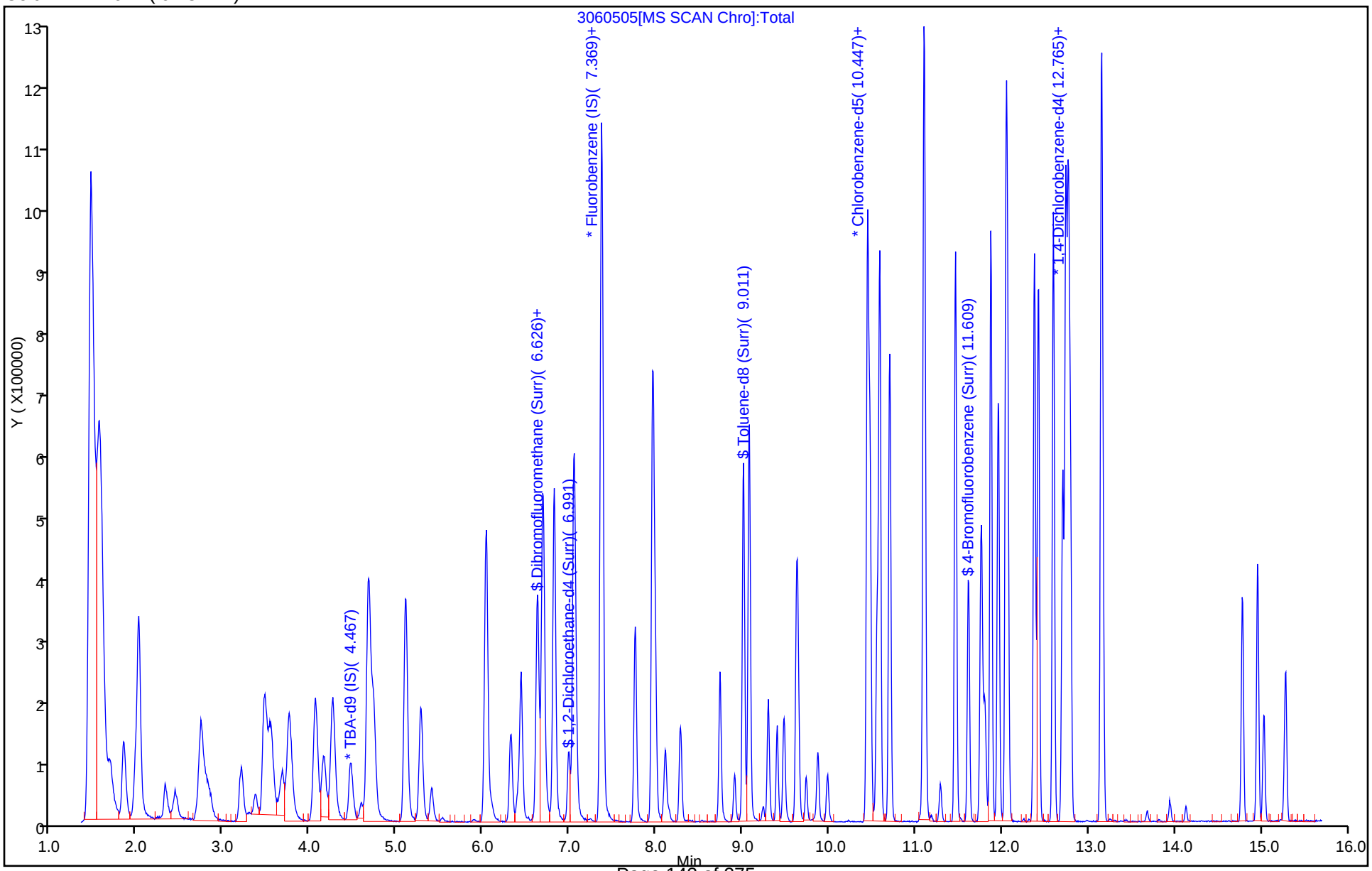
Report Date: 05-Jun-2015 09:53:20 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060505.D

Injection Date:	05-Jun-2015 07:33:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	IC VSTD25			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)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060506.D
Lims ID: ICIS VSTD40
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 05-Jun-2015 07:55:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS VSTD40
Operator ID: 10099 Instrument ID: CHHP3
Sublist: chrom-MSVOA_S_CHHP3*sub4

Method: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Jun-2015 09:53:21 Calib Date: 05-Jun-2015 09:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060509.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: gordonk Date: 05-Jun-2015 08:20:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.471	4.471	0.000	97	164384	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.366	7.366	0.000	98	864820	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.445	10.445	0.000	88	182013	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.769	12.769	0.000	96	265551	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.618	6.618	0.000	92	146099	200.0	195.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.989	6.989	0.000	94	141234	200.0	194.4	
$ 7 Toluene-d8 (Surr)	98	9.009	9.009	0.000	92	641032	200.0	206.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.613	11.613	0.000	84	257496	200.0	201.6	
10 Dichlorodifluoromethane	85	1.685	1.685	0.000	99	243953	200.0	193.8	
11 Chloromethane	50	1.843	1.843	0.000	99	352787	200.0	193.9	
12 Vinyl chloride	62	1.989	1.989	0.000	98	318219	200.0	196.4	
13 Butadiene	39	2.019	2.019	0.000	92	328351	200.0	196.3	
14 Bromomethane	94	2.323	2.323	0.000	91	77302	200.0	189.0	
15 Chloroethane	64	2.439	2.439	0.000	98	82955	200.0	197.2	M
16 Dichlorofluoromethane	67	2.725	2.725	0.000	97	331337	200.0	193.2	
17 Trichlorofluoromethane	101	2.743	2.743	0.000	76	272919	200.0	196.2	
19 Ethyl ether	59	3.199	3.199	0.000	95	144101	200.0	197.2	
20 Acrolein	56	3.370	3.370	0.000	99	89981	875.0	855.6	
21 1,1-Dichloroethene	96	3.467	3.467	0.000	95	218340	200.0	185.5	
22 1,1,2-Trichloro-1,2,2-trif	101	3.534	3.534	0.000	94	221707	200.0	191.4	
23 Acetone	43	3.637	3.637	0.000	99	35763	200.0	182.9	
24 Iodomethane	142	3.674	3.674	0.000	97	282792	200.0	193.5	
25 Carbon disulfide	76	3.753	3.753	0.000	99	781619	200.0	194.0	
28 3-Chloro-1-propene	76	4.057	4.057	0.000	94	142042	200.0	190.0	
29 Methyl acetate	43	4.160	4.160	0.000	99	405524	1000.0	978.2	
30 Methylene Chloride	84	4.264	4.264	0.000	100	230207	200.0	195.0	
31 2-Methyl-2-propanol	59	4.605	4.605	0.000	97	81603	2000.0	1891.8	
32 Acrylonitrile	53	4.665	4.665	0.000	100	418305	2000.0	1980.1	
33 trans-1,2-Dichloroethene	96	4.678	4.678	0.000	97	238399	200.0	191.8	
34 Methyl tert-butyl ether	73	4.726	4.726	0.000	97	367032	200.0	196.4	
35 Hexane	57	5.103	5.103	0.000	93	422017	200.0	191.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.280	5.280	0.000	97	428826	200.0	200.6	
37 Vinyl acetate	43	5.402	5.402	0.000	97	194787	200.0	201.4	
41 2,2-Dichloropropane	77	6.034	6.034	0.000	67	287612	200.0	199.2	
42 cis-1,2-Dichloroethene	96	6.034	6.034	0.000	85	235953	200.0	197.4	
43 2-Butanone (MEK)	43	6.095	6.095	0.000	99	46419	200.0	182.2	
47 Chlorobromomethane	128	6.326	6.326	0.000	93	79648	200.0	204.2	
48 Tetrahydrofuran	42	6.393	6.393	0.000	93	60633	400.0	391.2	
49 Chloroform	83	6.436	6.436	0.000	95	341848	200.0	199.1	
50 1,1,1-Trichloroethane	97	6.630	6.630	0.000	99	314881	200.0	196.9	
51 Cyclohexane	56	6.691	6.691	0.000	93	542175	200.0	195.9	
52 1,1-Dichloropropene	75	6.819	6.819	0.000	94	301888	200.0	203.0	
53 Carbon tetrachloride	117	6.819	6.819	0.000	96	243204	200.0	192.0	
54 Isobutyl alcohol	41	7.044	7.044	0.000	40	67284	5000.0	4936.1	
55 Benzene	78	7.050	7.050	0.000	98	824603	200.0	203.7	
56 1,2-Dichloroethane	62	7.074	7.074	0.000	97	176639	200.0	198.9	
59 n-Heptane	43	7.379	7.379	0.000	95	396029	200.0	208.2	
60 Trichloroethene	130	7.756	7.756	0.000	97	186579	200.0	197.5	
63 Methylcyclohexane	83	7.957	7.957	0.000	95	469537	200.0	200.2	
64 1,2-Dichloropropane	63	7.987	7.987	0.000	87	174535	200.0	204.0	
65 Dibromomethane	93	8.109	8.109	0.000	96	68163	200.0	195.4	
67 1,4-Dioxane	88	8.145	8.145	0.000	96	17816	4000.0	3978.6	
68 Dichlorobromomethane	83	8.279	8.279	0.000	98	194681	200.0	204.4	
71 cis-1,3-Dichloropropene	75	8.735	8.735	0.000	95	239793	200.0	210.3	
72 4-Methyl-2-pentanone (MIBK	43	8.906	8.906	0.000	96	90035	200.0	197.5	
73 Toluene	91	9.076	9.076	0.000	98	786279	200.0	207.2	
74 trans-1,3-Dichloropropene	75	9.295	9.295	0.000	94	181005	200.0	207.0	
75 Ethyl methacrylate	69	9.398	9.398	0.000	93	127922	200.0	208.5	
76 1,1,2-Trichloroethane	97	9.477	9.477	0.000	92	98526	200.0	206.2	
77 Tetrachloroethene	164	9.623	9.623	0.000	96	140925	200.0	201.2	
78 1,3-Dichloropropane	76	9.648	9.648	0.000	93	186240	200.0	210.4	
79 2-Hexanone	43	9.739	9.739	0.000	97	84235	200.0	206.6	
81 Chlorodibromomethane	129	9.867	9.867	0.000	91	101359	200.0	204.8	
82 Ethylene Dibromide	107	9.982	9.982	0.000	96	96532	200.0	211.3	
83 Chlorobenzene	112	10.475	10.475	0.000	92	484268	200.0	204.5	
85 1,1,1,2-Tetrachloroethane	131	10.554	10.554	0.000	96	147340	200.0	201.6	
86 Ethylbenzene	106	10.585	10.585	0.000	98	306557	200.0	207.5	
87 m-Xylene & p-Xylene	106	10.700	10.700	0.000	99	375146	200.0	205.4	
88 o-Xylene	106	11.096	11.096	0.000	97	362154	200.0	203.8	
89 Styrene	104	11.108	11.108	0.000	95	576427	200.0	209.1	
90 Bromoform	173	11.290	11.290	0.000	95	51653	200.0	196.4	
91 Isopropylbenzene	105	11.461	11.461	0.000	96	1003461	200.0	207.7	
93 1,1,2,2-Tetrachloroethane	83	11.747	11.747	0.000	93	117862	200.0	206.3	
94 Bromobenzene	156	11.765	11.765	0.000	95	169108	200.0	201.6	
95 1,2,3-Trichloropropane	110	11.795	11.795	0.000	84	32586	200.0	202.6	
96 trans-1,4-Dichloro-2-buten	53	11.807	11.807	0.000	77	37723	200.0	196.7	
97 N-Propylbenzene	120	11.874	11.874	0.000	99	284313	200.0	203.3	
98 2-Chlorotoluene	126	11.959	11.959	0.000	96	212847	200.0	202.2	
99 1,3,5-Trimethylbenzene	105	12.045	12.045	0.000	95	830834	200.0	208.3	
100 4-Chlorotoluene	126	12.069	12.069	0.000	98	217136	200.0	202.9	
101 tert-Butylbenzene	119	12.373	12.373	0.000	93	735868	200.0	209.3	
103 1,2,4-Trimethylbenzene	105	12.422	12.422	0.000	95	855206	200.0	211.4	
104 sec-Butylbenzene	105	12.598	12.598	0.000	95	1149547	200.0	210.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	12.708	12.708	0.000	97	385313	200.0	203.7	
106 4-Isopropyltoluene	119	12.738	12.738	0.000	97	911736	200.0	211.1	
107 1,4-Dichlorobenzene	146	12.793	12.793	0.000	93	369448	200.0	204.6	
110 n-Butylbenzene	91	13.146	13.146	0.000	98	931502	200.0	211.3	
111 1,2-Dichlorobenzene	146	13.164	13.164	0.000	95	320977	200.0	203.9	
112 1,2-Dibromo-3-Chloropropan	75	13.937	13.937	0.000	80	15695	200.0	203.1	
114 1,2,4-Trichlorobenzene	180	14.782	14.782	0.000	94	201015	200.0	206.7	
115 Hexachlorobutadiene	225	14.959	14.959	0.000	94	153586	200.0	207.3	
116 Naphthalene	128	15.032	15.032	0.000	97	260581	200.0	215.0	
117 1,2,3-Trichlorobenzene	180	15.281	15.281	0.000	93	143711	200.0	205.7	
S 130 1,2-Dichloroethene, Total	96				0		400.0	389.1	
S 129 Xylenes, Total	106				0		400.0	409.2	
S 131 1,3-Dichloropropene, Total	1				0		400.0	417.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00036	Amount Added:	8.00	Units: uL	
VOA8260VOAPRI_00123	Amount Added:	8.00	Units: uL	
voaWVA1st Res_00001	Amount Added:	8.00	Units: uL	
VOAACRLOEINPR_00001	Amount Added:	35.00	Units: uL	
VOA8260INT_00037	Amount Added:	10.00	Units: uL	Run Reagent

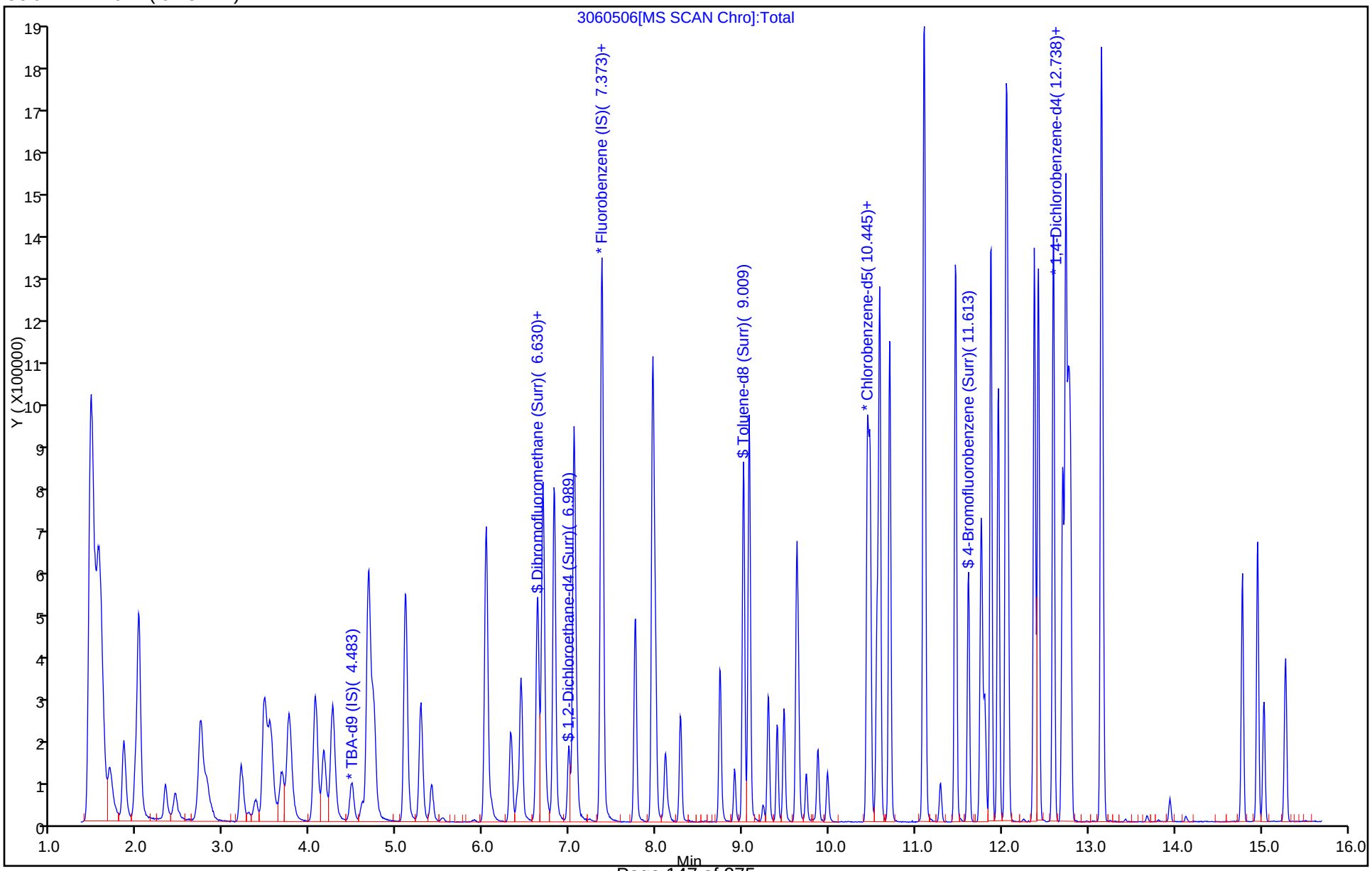
Report Date: 05-Jun-2015 09:53:21 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060506.D

Injection Date:	05-Jun-2015 07:55:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	ICIS VSTD40			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)



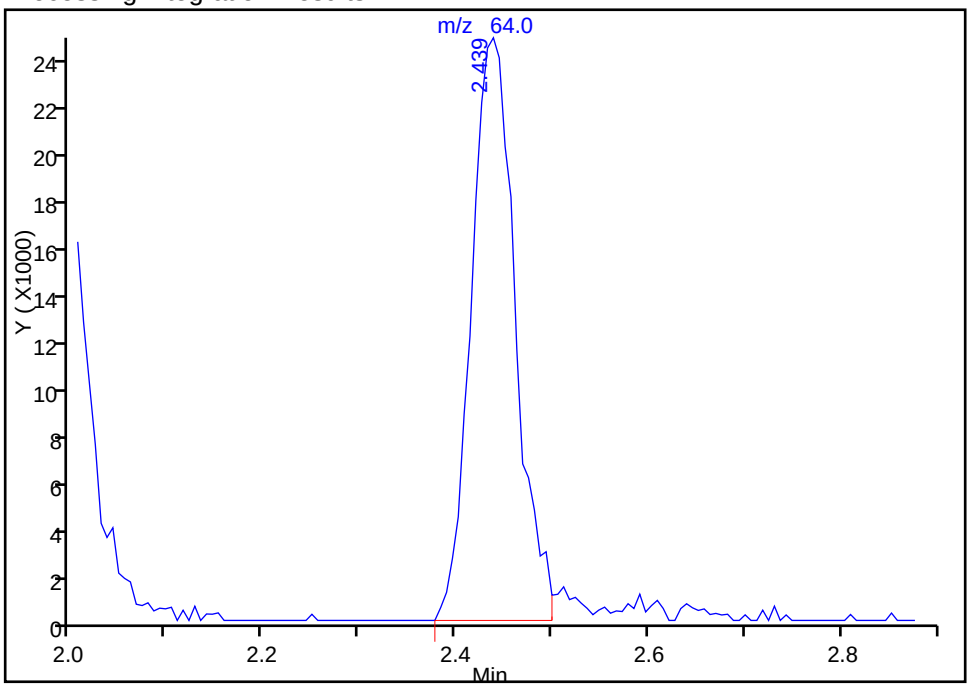
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060506.D
Injection Date: 05-Jun-2015 07:55:30 Instrument ID: CHHP3
Lims ID: ICIS VSTD40
Client ID:
Operator ID: 10099 ALS Bottle#: 6 Worklist Smp#: 6
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

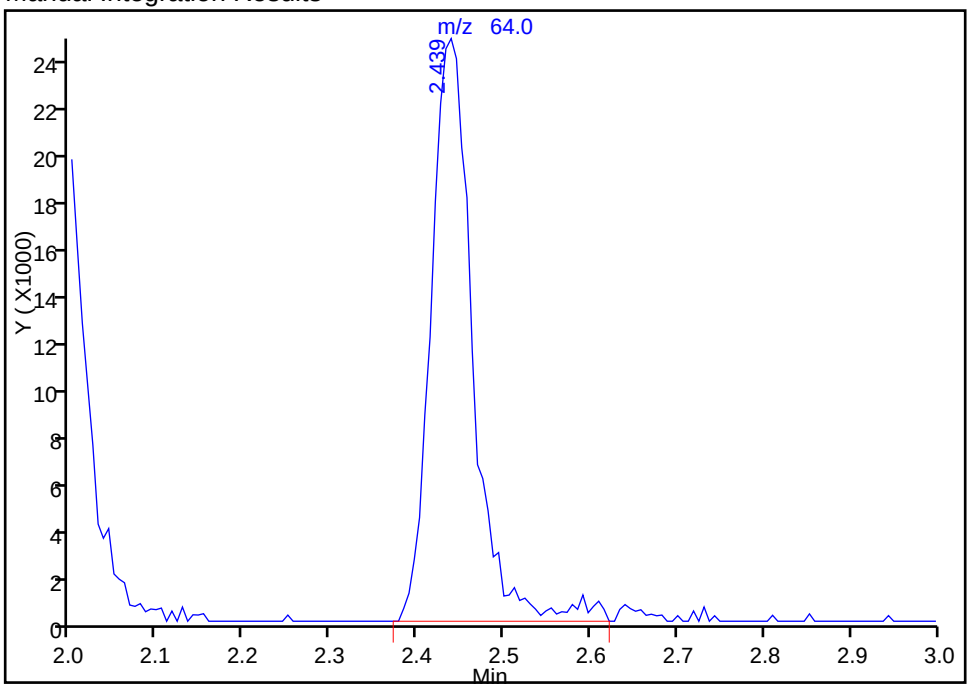
Processing Integration Results

RT: 2.44
Area: 78363
Amount: 155.3729
Amount Units: ng



Manual Integration Results

RT: 2.44
Area: 82955
Amount: 197.1818
Amount Units: ng



Reviewer: gordonk, 05-Jun-2015 08:20:35
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060507.D
Lims ID: IC VSTD50
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 05-Jun-2015 08:17:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD50
Operator ID: 10099 Instrument ID: CHHP3
Sublist: chrom-MSVOA_S_CHHP3*sub4

Method: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Jun-2015 09:53:22 Calib Date: 05-Jun-2015 09:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060509.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: gordonk Date: 05-Jun-2015 08:37:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.476	4.471	0.005	99	169608	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.365	7.366	-0.001	98	785214	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.450	10.445	0.005	89	166529	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.769	-0.001	98	254317	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.623	6.618	0.005	92	175829	250.0	258.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.988	6.989	-0.001	93	166224	250.0	251.9	
$ 7 Toluene-d8 (Surr)	98	9.014	9.009	0.005	93	713204	250.0	251.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.613	-0.001	84	296180	250.0	253.4	
10 Dichlorodifluoromethane	85	1.690	1.685	0.005	100	290700	250.0	254.3	
11 Chloromethane	50	1.842	1.843	-0.001	100	435112	250.0	263.4	
12 Vinyl chloride	62	1.988	1.989	-0.001	98	386622	250.0	262.8	
13 Butadiene	39	2.018	2.019	-0.001	91	388590	250.0	255.9	
14 Bromomethane	94	2.322	2.323	-0.001	90	93485	250.0	251.7	
15 Chloroethane	64	2.444	2.439	0.005	98	97305	250.0	260.2	
16 Dichlorofluoromethane	67	2.724	2.725	-0.001	98	405365	250.0	260.3	
17 Trichlorofluoromethane	101	2.742	2.743	-0.001	86	321483	250.0	254.6	
19 Ethyl ether	59	3.198	3.199	-0.001	95	171392	250.0	258.3	
20 Acrolein	56	3.369	3.370	-0.001	98	101449	1000.0	1062.5	
21 1,1-Dichloroethene	96	3.460	3.467	-0.007	98	280939	250.0	262.9	
22 1,1,2-Trichloro-1,2,2-trif	101	3.545	3.534	0.011	95	269254	250.0	256.0	
23 Acetone	43	3.630	3.637	-0.007	90	47086	250.0	278.5	
24 Iodomethane	142	3.673	3.674	-0.001	97	352457	250.0	265.6	
25 Carbon disulfide	76	3.758	3.753	0.005	99	982479	250.0	268.5	
28 3-Chloro-1-propene	76	4.056	4.057	-0.001	94	184443	250.0	271.7	
29 Methyl acetate	43	4.153	4.160	-0.007	99	502654	1250.0	1335.4	
30 Methylene Chloride	84	4.251	4.264	-0.013	99	279921	250.0	268.7	
31 2-Methyl-2-propanol	59	4.597	4.605	-0.008	97	116771	2500.0	2623.7	
32 Acrylonitrile	53	4.658	4.665	-0.007	100	529107	2500.0	2758.5	
33 trans-1,2-Dichloroethene	96	4.683	4.678	0.005	97	295308	250.0	261.6	
34 Methyl tert-butyl ether	73	4.731	4.726	0.005	98	442517	250.0	260.8	
35 Hexane	57	5.102	5.103	-0.001	93	462109	250.0	230.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.273	5.280	-0.007	95	499338	250.0	257.2	
37 Vinyl acetate	43	5.401	5.402	-0.002	97	225973	250.0	257.4	
41 2,2-Dichloropropane	77	6.033	6.034	-0.001	92	345394	250.0	263.4	
42 cis-1,2-Dichloroethene	96	6.039	6.034	0.005	85	284379	250.0	262.0	
43 2-Butanone (MEK)	43	6.094	6.095	-0.001	99	62102	250.0	268.4	
47 Chlorobromomethane	128	6.319	6.326	-0.007	90	93370	250.0	263.6	
48 Tetrahydrofuran	42	6.392	6.393	-0.001	91	74127	500.0	526.7	
49 Chloroform	83	6.441	6.436	0.005	95	403940	250.0	259.2	
50 1,1,1-Trichloroethane	97	6.629	6.630	-0.001	98	376197	250.0	259.1	
51 Cyclohexane	56	6.690	6.691	-0.001	92	631274	250.0	251.2	
52 1,1-Dichloropropene	75	6.824	6.819	0.005	95	343482	250.0	254.4	
53 Carbon tetrachloride	117	6.818	6.819	-0.001	98	290606	250.0	252.7	
54 Isobutyl alcohol	41	7.037	7.044	-0.007	94	88574	6250.0	7156.7	
55 Benzene	78	7.049	7.050	-0.001	98	934566	250.0	254.3	
56 1,2-Dichloroethane	62	7.073	7.074	-0.001	96	202933	250.0	251.7	
59 n-Heptane	43	7.384	7.379	0.005	94	418853	250.0	242.5	
60 Trichloroethene	130	7.761	7.756	0.005	97	216595	250.0	252.6	
63 Methylcyclohexane	83	7.962	7.957	0.005	93	548204	250.0	257.4	
64 1,2-Dichloropropane	63	7.992	7.987	0.005	92	194049	250.0	249.8	
65 Dibromomethane	93	8.108	8.109	-0.001	96	77564	250.0	244.9	
67 1,4-Dioxane	88	8.144	8.145	-0.001	96	21626	5000.0	5319.1	
68 Dichlorobromomethane	83	8.284	8.279	0.005	99	219039	250.0	253.3	
71 cis-1,3-Dichloropropene	75	8.740	8.735	0.005	95	260537	250.0	251.6	
72 4-Methyl-2-pentanone (MIBK	43	8.905	8.906	-0.001	96	109505	250.0	262.5	
73 Toluene	91	9.075	9.076	-0.001	99	860583	250.0	247.9	
74 trans-1,3-Dichloropropene	75	9.300	9.295	0.005	94	203294	250.0	254.1	
75 Ethyl methacrylate	69	9.403	9.398	0.005	92	144958	250.0	258.3	
76 1,1,2-Trichloroethane	97	9.483	9.477	0.006	91	108467	250.0	248.1	
77 Tetrachloroethene	164	9.629	9.623	0.006	98	155024	250.0	241.9	
78 1,3-Dichloropropane	76	9.647	9.648	-0.001	93	202972	250.0	250.6	
79 2-Hexanone	43	9.738	9.739	-0.001	96	94908	250.0	254.5	
81 Chlorodibromomethane	129	9.872	9.867	0.005	92	113769	250.0	251.2	
82 Ethylene Dibromide	107	9.981	9.982	-0.001	100	105795	250.0	253.1	
83 Chlorobenzene	112	10.474	10.475	-0.001	92	537425	250.0	248.0	
85 1,1,1,2-Tetrachloroethane	131	10.553	10.554	-0.001	97	167606	250.0	250.7	
86 Ethylbenzene	106	10.584	10.585	-0.001	98	340793	250.0	252.1	
87 m-Xylene & p-Xylene	106	10.699	10.700	-0.001	99	423644	250.0	253.5	
88 o-Xylene	106	11.095	11.096	-0.001	95	427072	250.0	262.7	
89 Styrene	104	11.107	11.108	-0.001	91	647483	250.0	256.8	
90 Bromoform	173	11.289	11.290	-0.001	96	62295	250.0	258.8	
91 Isopropylbenzene	105	11.466	11.461	0.005	97	1159752	250.0	262.4	
93 1,1,2,2-Tetrachloroethane	83	11.752	11.747	0.005	93	139959	250.0	267.7	
94 Bromobenzene	156	11.764	11.765	-0.001	95	201302	250.0	250.5	
95 1,2,3-Trichloropropane	110	11.794	11.795	-0.001	81	37937	250.0	246.3	
96 trans-1,4-Dichloro-2-buten	53	11.806	11.807	-0.001	74	49109	250.0	267.4	
97 N-Propylbenzene	120	11.873	11.874	-0.001	99	332811	250.0	248.5	
98 2-Chlorotoluene	126	11.958	11.959	-0.001	96	248878	250.0	246.8	
99 1,3,5-Trimethylbenzene	105	12.050	12.045	0.005	95	971552	250.0	254.4	
100 4-Chlorotoluene	126	12.068	12.069	-0.001	98	253643	250.0	247.5	
101 tert-Butylbenzene	119	12.378	12.373	0.005	93	858030	250.0	254.8	
103 1,2,4-Trimethylbenzene	105	12.421	12.422	-0.001	97	997427	250.0	257.4	
104 sec-Butylbenzene	105	12.597	12.598	-0.001	95	1342941	250.0	256.7	

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	12.708	-0.007	96	457349	250.0	252.5	
106 4-Isopropyltoluene	119	12.737	12.738	-0.001	96	1066480	250.0	257.8	
107 1,4-Dichlorobenzene	146	12.792	12.793	-0.001	93	435213	250.0	251.7	
110 n-Butylbenzene	91	13.151	13.146	0.005	98	1112132	250.0	263.4	
111 1,2-Dichlorobenzene	146	13.169	13.164	0.005	95	380969	250.0	252.7	
112 1,2-Dibromo-3-Chloropropan	75	13.942	13.937	0.005	78	19242	250.0	260.0	
114 1,2,4-Trichlorobenzene	180	14.781	14.782	-0.001	93	247570	250.0	265.9	
115 Hexachlorobutadiene	225	14.958	14.959	-0.001	96	182357	250.0	257.0	
116 Naphthalene	128	15.031	15.032	-0.001	97	340863	250.0	293.7	
117 1,2,3-Trichlorobenzene	180	15.280	15.281	-0.001	95	179223	250.0	267.8	
S 130 1,2-Dichloroethene, Total	96				0		500.0	523.6	
S 129 Xylenes, Total	106				0		500.0	516.2	
S 131 1,3-Dichloropropene, Total	1				0		500.0	505.7	

Reagents:

VOA8260SURR_00036	Amount Added:	10.00	Units: uL	
VOA8260VOAPRI_00123	Amount Added:	10.00	Units: uL	
voaWVA1st Res_00001	Amount Added:	10.00	Units: uL	
VOAACRLOEINPR_00001	Amount Added:	40.00	Units: uL	
VOA8260INT_00037	Amount Added:	10.00	Units: uL	Run Reagent

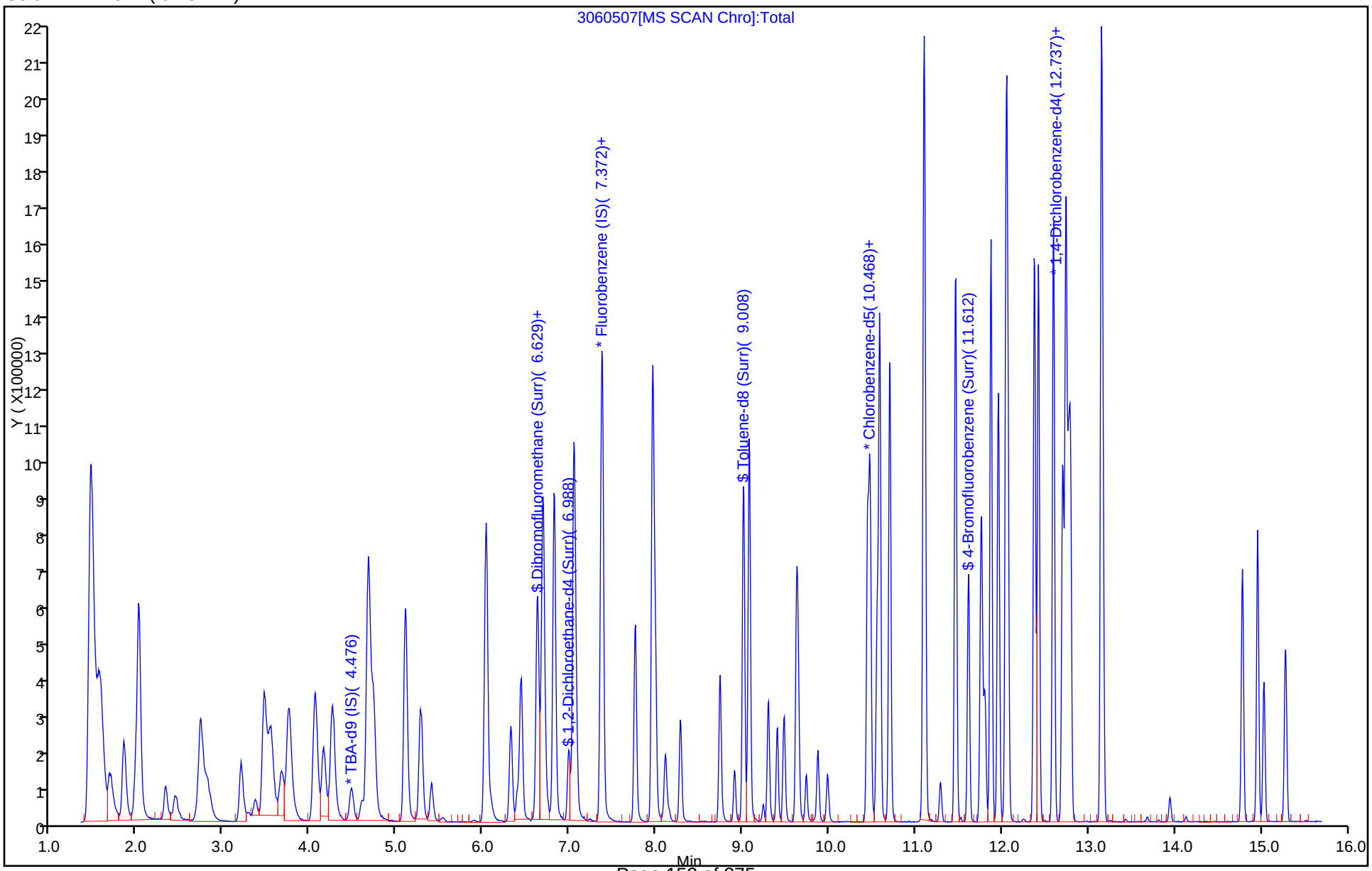
Report Date: 05-Jun-2015 09:53:22 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060507.D

Injection Date:	05-Jun-2015 08:17:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	IC VSTD50			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: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060508.D
Lims ID: IC VSTD125
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 05-Jun-2015 08:40:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD125
Operator ID: 10099 Instrument ID: CHHP3
Sublist: chrom-MSVOA_S_CHHP3*sub4

Method: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Jun-2015 09:53:23 Calib Date: 05-Jun-2015 09:02:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060509.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: gordonk Date: 05-Jun-2015 09:18:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.495	4.471	0.024	98	164500	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.366	7.366	0.000	98	860235	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.444	10.445	-0.001	89	173344	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.769	-0.001	96	261274	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.618	6.618	0.000	94	446956	625.0	600.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.989	6.989	0.000	95	422594	625.0	584.7	
$ 7 Toluene-d8 (Surr)	98	9.009	9.009	0.000	93	1782607	625.0	603.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.613	-0.001	84	733900	625.0	603.3	
10 Dichlorodifluoromethane	85	1.684	1.685	-0.001	100	786154	625.0	627.8	
11 Chloromethane	50	1.848	1.843	0.005	99	1095318	625.0	605.3	
12 Vinyl chloride	62	2.000	1.989	0.011	98	984006	625.0	610.4	
13 Butadiene	39	2.019	2.019	0.000	91	1004125	625.0	603.5	
14 Bromomethane	94	2.323	2.323	0.000	90	230687	625.0	566.9	
15 Chloroethane	64	2.438	2.439	-0.001	99	250346	625.0	635.9	
16 Dichlorofluoromethane	67	2.724	2.725	-0.001	98	1011445	625.0	592.9	
17 Trichlorofluoromethane	101	2.730	2.743	-0.013	57	838816	625.0	606.4	
19 Ethyl ether	59	3.205	3.199	0.006	94	434801	625.0	598.2	
20 Acrolein	56	3.369	3.370	-0.001	99	117172	1125.0	1120.1	
21 1,1-Dichloroethene	96	3.460	3.467	-0.007	98	715930	625.0	611.5	
22 1,1,2-Trichloro-1,2,2-trif	101	3.533	3.534	-0.001	94	698795	625.0	606.4	
23 Acetone	43	3.631	3.637	-0.006	99	94960	625.0	537.4	
24 Iodomethane	142	3.667	3.674	-0.007	97	881268	625.0	606.2	
25 Carbon disulfide	76	3.746	3.753	-0.007	99	2443916	625.0	609.7	
28 3-Chloro-1-propene	76	4.057	4.057	0.000	94	452522	625.0	608.6	
29 Methyl acetate	43	4.154	4.160	-0.006	99	1231982	3125.0	2987.6	
30 Methylene Chloride	84	4.251	4.264	-0.013	98	671293	625.0	614.7	
31 2-Methyl-2-propanol	59	4.616	4.605	0.011	97	281328	6250.0	6517.4	
32 Acrylonitrile	53	4.659	4.665	-0.006	99	1242531	6250.0	5913.0	
33 trans-1,2-Dichloroethene	96	4.677	4.678	-0.001	97	726018	625.0	587.1	
34 Methyl tert-butyl ether	73	4.732	4.726	0.006	97	1097425	625.0	590.3	
35 Hexane	57	5.097	5.103	-0.006	93	1269756	625.0	578.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.279	5.280	-0.001	95	1285870	625.0	604.6	
37 Vinyl acetate	43	5.401	5.402	-0.001	97	606609	625.0	630.6	
41 2,2-Dichloropropane	77	6.028	6.034	-0.006	90	829864	625.0	577.7	
42 cis-1,2-Dichloroethene	96	6.034	6.034	0.000	85	700632	625.0	589.2	
43 2-Butanone (MEK)	43	6.088	6.095	-0.007	99	132970	625.0	524.6	
47 Chlorobromomethane	128	6.320	6.326	-0.006	91	231737	625.0	597.2	
48 Tetrahydrofuran	42	6.393	6.393	0.000	95	184537	1250.0	1196.9	
49 Chloroform	83	6.435	6.436	-0.001	95	1003682	625.0	587.8	
50 1,1,1-Trichloroethane	97	6.630	6.630	0.000	99	952134	625.0	598.5	
51 Cyclohexane	56	6.691	6.691	0.000	92	1651754	625.0	600.0	
52 1,1-Dichloropropene	75	6.825	6.819	0.006	95	878820	625.0	594.1	
53 Carbon tetrachloride	117	6.818	6.819	-0.001	90	757418	625.0	601.2	
54 Isobutyl alcohol	41	7.044	7.044	0.000	95	192197	15625	14175	
55 Benzene	78	7.050	7.050	0.000	98	2344006	625.0	582.3	
56 1,2-Dichloroethane	62	7.074	7.074	0.000	96	509524	625.0	576.9	
59 n-Heptane	43	7.378	7.379	-0.001	94	1174713	625.0	620.9	
60 Trichloroethene	130	7.755	7.756	-0.001	97	578806	625.0	616.1	
63 Methylcyclohexane	83	7.962	7.957	0.005	95	1418188	625.0	607.8	
64 1,2-Dichloropropane	63	7.987	7.987	-0.001	88	501133	625.0	588.9	
65 Dibromomethane	93	8.108	8.109	-0.001	97	202883	625.0	584.8	
67 1,4-Dioxane	88	8.151	8.145	0.006	96	51628	12500	11591	
68 Dichlorobromomethane	83	8.279	8.279	-0.001	99	576444	625.0	608.6	
71 cis-1,3-Dichloropropene	75	8.741	8.735	0.006	95	694607	625.0	612.3	
72 4-Methyl-2-pentanone (MIBK	43	8.905	8.906	-0.001	96	270126	625.0	622.2	
73 Toluene	91	9.075	9.076	-0.001	98	2121680	625.0	587.1	
74 trans-1,3-Dichloropropene	75	9.294	9.295	-0.001	94	520999	625.0	625.7	
75 Ethyl methacrylate	69	9.398	9.398	0.000	93	348153	625.0	595.9	
76 1,1,2-Trichloroethane	97	9.477	9.477	0.000	91	274056	625.0	602.2	
77 Tetrachloroethene	164	9.629	9.623	0.006	98	413050	625.0	619.1	
78 1,3-Dichloropropane	76	9.647	9.648	-0.001	94	491477	625.0	583.0	
79 2-Hexanone	43	9.732	9.739	-0.007	98	230295	625.0	593.2	
81 Chlorodibromomethane	129	9.872	9.867	0.005	91	298859	625.0	633.9	
82 Ethylene Dibromide	107	9.982	9.982	0.000	100	258977	625.0	595.1	
83 Chlorobenzene	112	10.475	10.475	0.000	91	1312109	625.0	581.7	
85 1,1,1,2-Tetrachloroethane	131	10.554	10.554	0.000	96	446679	625.0	641.8	
86 Ethylbenzene	106	10.584	10.585	-0.001	98	824207	625.0	585.7	
87 m-Xylene & p-Xylene	106	10.700	10.700	0.000	98	1033516	625.0	594.1	
88 o-Xylene	106	11.095	11.096	-0.001	97	1020102	625.0	602.8	
89 Styrene	104	11.107	11.108	-0.001	95	1520997	625.0	579.5	
90 Bromoform	173	11.290	11.290	0.000	96	165354	625.0	660.0	
91 Isopropylbenzene	105	11.466	11.461	0.005	97	2700059	625.0	586.9	
93 1,1,2,2-Tetrachloroethane	83	11.752	11.747	0.005	94	335174	625.0	616.0	
94 Bromobenzene	156	11.764	11.765	-0.001	95	494974	625.0	599.7	
95 1,2,3-Trichloropropane	110	11.795	11.795	0.000	83	94331	625.0	596.2	
96 trans-1,4-Dichloro-2-buten	53	11.807	11.807	0.000	88	110145	625.0	583.8	
97 N-Propylbenzene	120	11.874	11.874	0.000	98	817343	625.0	594.1	
98 2-Chlorotoluene	126	11.959	11.959	0.000	96	623431	625.0	601.9	
99 1,3,5-Trimethylbenzene	105	12.050	12.045	0.005	96	2256540	625.0	575.1	
100 4-Chlorotoluene	126	12.069	12.069	-0.001	98	610006	625.0	579.4	
101 tert-Butylbenzene	119	12.379	12.373	0.006	93	2101519	625.0	607.4	
103 1,2,4-Trimethylbenzene	105	12.421	12.422	-0.001	96	2284503	625.0	573.9	
104 sec-Butylbenzene	105	12.598	12.598	0.000	95	3066525	625.0	570.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	12.707	12.708	-0.001	97	1142361	625.0	613.9	
106 4-Isopropyltoluene	119	12.738	12.738	0.000	95	2461171	625.0	579.2	
107 1,4-Dichlorobenzene	146	12.792	12.793	-0.001	92	1078059	625.0	606.8	
110 n-Butylbenzene	91	13.151	13.146	0.005	97	2551094	625.0	588.1	
111 1,2-Dichlorobenzene	146	13.170	13.164	0.006	95	919923	625.0	593.9	
112 1,2-Dibromo-3-Chloropropan	75	13.942	13.937	0.005	81	48922	625.0	643.3	
114 1,2,4-Trichlorobenzene	180	14.782	14.782	0.000	94	627165	625.0	655.6	
115 Hexachlorobutadiene	225	14.958	14.959	-0.001	96	467637	625.0	641.6	
116 Naphthalene	128	15.031	15.032	-0.001	97	785138	625.0	658.6	
117 1,2,3-Trichlorobenzene	180	15.281	15.281	0.000	94	440527	625.0	640.7	
S 130 1,2-Dichloroethene, Total	96				0		1250.0	1176.3	
S 129 Xylenes, Total	106				0		1250.0	1196.9	
S 131 1,3-Dichloropropene, Total	1				0		1250.0	1237.9	

Reagents:

VOA8260SURR_00036	Amount Added:	25.00	Units: uL	
VOA8260VOAPRI_00123	Amount Added:	25.00	Units: uL	
voaWVA1st Res_00001	Amount Added:	25.00	Units: uL	
VOAACRLOEINPR_00001	Amount Added:	45.00	Units: uL	
VOA8260INT_00037	Amount Added:	10.00	Units: uL	Run Reagent

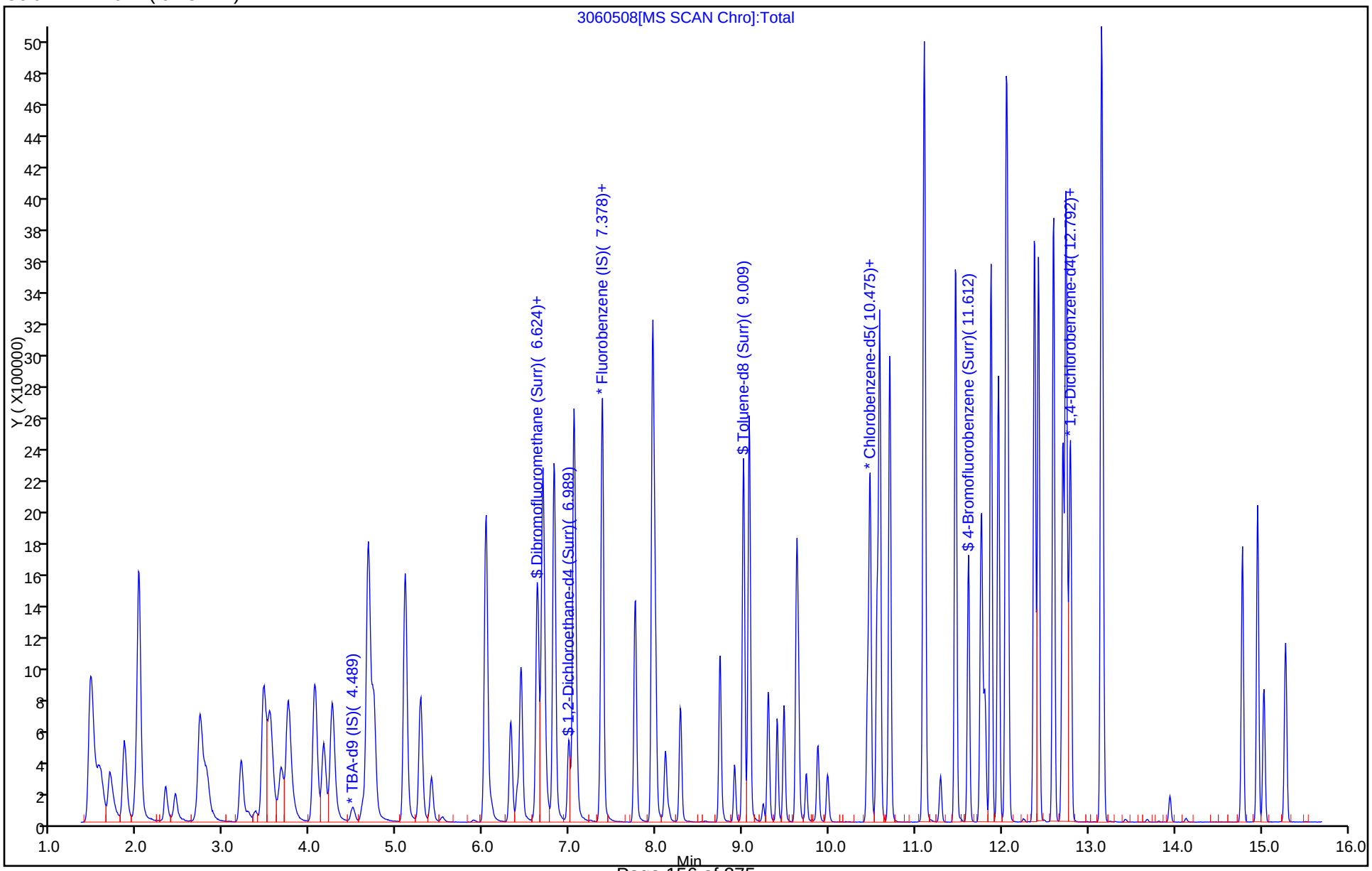
Report Date: 05-Jun-2015 09:53:23 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060508.D

Injection Date:	05-Jun-2015 08:40:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	IC VSTD125			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: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060509.D
Lims ID: IC VSTD250
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 05-Jun-2015 09:02:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD250
Operator ID: 10099 Instrument ID: CHHP3
Sublist: chrom-MSVOA_S_CHHP3*sub4

Method: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Jun-2015 09:53:24 Calib Date: 05-Jun-2015 09:02:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060509.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: gordonk Date: 05-Jun-2015 09:52:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.513	4.471	0.042	97	164713	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.360	7.366	-0.006	99	883716	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.444	10.445	-0.001	88	175171	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.769	-0.001	94	260511	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.618	6.618	0.000	94	856770	1250.0	1120.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.989	6.989	0.000	96	830518	1250.0	1118.5	
$ 7 Toluene-d8 (Surr)	98	9.009	9.009	0.000	93	3376841	1250.0	1131.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.613	11.613	0.000	86	1358529	1250.0	1105.1	
10 Dichlorodifluoromethane	85	1.678	1.685	-0.007	100	1584645	1250.0	1231.9	
11 Chloromethane	50	1.849	1.843	0.006	99	2129295	1250.0	1145.5	
12 Vinyl chloride	62	1.995	1.989	0.006	99	1920682	1250.0	1159.9	
13 Butadiene	39	2.013	2.019	-0.006	89	1914578	1250.0	1120.2	
14 Bromomethane	94	2.323	2.323	0.000	90	482023	1250.0	1153.1	
15 Chloroethane	64	2.433	2.439	-0.006	98	493127	1250.0	1236.4	
16 Dichlorofluoromethane	67	2.706	2.725	-0.019	98	1808161	1250.0	1031.8	
17 Trichlorofluoromethane	101	2.718	2.743	-0.025	98	1553000	1250.0	1092.8	
19 Ethyl ether	59	3.199	3.199	0.000	94	853503	1250.0	1143.0	
20 Acrolein	56	3.369	3.370	-0.001	98	124777	1250.0	1161.1	
21 1,1-Dichloroethene	96	3.449	3.467	-0.019	98	1385922	1250.0	1152.4	
22 1,1,2-Trichloro-1,2,2-trif	101	3.509	3.534	-0.025	94	1408195	1250.0	1189.5	
23 Acetone	43	3.637	3.637	0.000	99	179223	1250.0	1011.9	
24 Iodomethane	142	3.655	3.674	-0.019	97	1722673	1250.0	1153.5	
25 Carbon disulfide	76	3.734	3.753	-0.019	99	4672758	1250.0	1134.8	
28 3-Chloro-1-propene	76	4.045	4.057	-0.012	94	899814	1250.0	1178.0	
29 Methyl acetate	43	4.160	4.160	0.000	99	2361346	6250.0	5574.1	
30 Methylene Chloride	84	4.252	4.264	-0.012	98	1264148	1250.0	1145.3	
31 2-Methyl-2-propanol	59	4.629	4.605	0.024	99	555214	12500	12846	
32 Acrylonitrile	53	4.671	4.665	0.006	99	2324228	12500	10767	
33 trans-1,2-Dichloroethene	96	4.671	4.678	-0.007	96	1409235	1250.0	1109.3	
34 Methyl tert-butyl ether	73	4.732	4.726	0.006	97	2121569	1250.0	1110.9	
35 Hexane	57	5.091	5.103	-0.012	93	2538300	1250.0	1126.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.274	5.280	-0.006	94	2420991	1250.0	1108.1	
37 Vinyl acetate	43	5.401	5.402	-0.001	97	1327126	1250.0	1343.0	
41 2,2-Dichloropropane	77	6.028	6.034	-0.006	91	1624035	1250.0	1100.5	
42 cis-1,2-Dichloroethene	96	6.034	6.034	0.000	84	1355894	1250.0	1110.0	
43 2-Butanone (MEK)	43	6.095	6.095	0.000	100	272863	1250.0	1047.9	
47 Chlorobromomethane	128	6.314	6.326	-0.012	92	458144	1250.0	1149.3	
48 Tetrahydrofuran	42	6.393	6.393	0.000	94	360860	2500.0	2278.3	
49 Chloroform	83	6.435	6.436	-0.001	95	1927244	1250.0	1098.7	
50 1,1,1-Trichloroethane	97	6.630	6.630	0.000	98	1814646	1250.0	1110.4	
51 Cyclohexane	56	6.691	6.691	0.000	92	3123938	1250.0	1104.6	
52 1,1-Dichloropropene	75	6.819	6.819	0.000	94	1721605	1250.0	1132.8	
53 Carbon tetrachloride	117	6.819	6.819	0.000	98	1480475	1250.0	1143.9	
54 Isobutyl alcohol	41	7.050	7.044	0.006	74	364044	31250	26136	
55 Benzene	78	7.050	7.050	0.000	99	4353375	1250.0	1052.7	
56 1,2-Dichloroethane	62	7.074	7.074	0.000	96	1015994	1250.0	1119.7	
59 n-Heptane	43	7.378	7.379	-0.001	93	2363960	1250.0	1216.3	
60 Trichloroethene	130	7.756	7.756	0.000	98	1166779	1250.0	1208.9	
63 Methylcyclohexane	83	7.962	7.957	0.005	94	2678908	1250.0	1117.6	
64 1,2-Dichloropropane	63	7.993	7.987	0.006	89	1005330	1250.0	1150.0	
65 Dibromomethane	93	8.108	8.109	-0.001	98	402138	1250.0	1128.4	
67 1,4-Dioxane	88	8.145	8.145	0.000	97	102996	25000	22509	
68 Dichlorobromomethane	83	8.279	8.279	0.000	99	1155721	1250.0	1187.7	
71 cis-1,3-Dichloropropene	75	8.741	8.735	0.006	95	1416991	1250.0	1215.9	
72 4-Methyl-2-pentanone (MIBK	43	8.905	8.906	-0.001	96	543424	1250.0	1238.6	
73 Toluene	91	9.076	9.076	0.000	96	3947035	1250.0	1080.9	
74 trans-1,3-Dichloropropene	75	9.295	9.295	0.000	94	1032986	1250.0	1227.5	
75 Ethyl methacrylate	69	9.398	9.398	0.000	92	691824	1250.0	1171.8	
76 1,1,2-Trichloroethane	97	9.477	9.477	0.000	91	544857	1250.0	1184.8	
77 Tetrachloroethene	164	9.623	9.623	0.000	98	863420	1250.0	1280.6	
78 1,3-Dichloropropane	76	9.648	9.648	0.000	94	945847	1250.0	1110.3	
79 2-Hexanone	43	9.733	9.739	-0.006	96	427444	1250.0	1089.6	
81 Chlorodibromomethane	129	9.873	9.867	0.006	92	606927	1250.0	1274.0	
82 Ethylene Dibromide	107	9.982	9.982	0.000	98	523091	1250.0	1189.5	
83 Chlorobenzene	112	10.475	10.475	0.000	91	2517517	1250.0	1104.4	
85 1,1,1,2-Tetrachloroethane	131	10.560	10.554	0.006	96	879423	1250.0	1250.3	
86 Ethylbenzene	106	10.584	10.585	-0.001	97	1586135	1250.0	1115.4	
87 m-Xylene & p-Xylene	106	10.706	10.700	0.006	96	1962723	1250.0	1116.5	
88 o-Xylene	106	11.095	11.096	-0.001	92	1922528	1250.0	1124.2	
89 Styrene	104	11.108	11.108	0.000	89	2702796	1250.0	1019.0	
90 Bromoform	173	11.290	11.290	0.000	96	344979	1250.0	1362.7	
91 Isopropylbenzene	105	11.467	11.461	0.006	97	4722852	1250.0	1015.8	
93 1,1,2,2-Tetrachloroethane	83	11.752	11.747	0.005	95	629813	1250.0	1145.4	
94 Bromobenzene	156	11.765	11.765	0.000	95	946186	1250.0	1149.7	
95 1,2,3-Trichloropropane	110	11.801	11.795	0.006	83	178555	1250.0	1131.9	
96 trans-1,4-Dichloro-2-buten	53	11.807	11.807	0.000	89	220113	1250.0	1170.0	
97 N-Propylbenzene	120	11.874	11.874	0.000	96	1545035	1250.0	1126.4	
98 2-Chlorotoluene	126	11.959	11.959	0.000	96	1192565	1250.0	1154.7	
99 1,3,5-Trimethylbenzene	105	12.051	12.045	0.006	97	3924581	1250.0	1003.1	
100 4-Chlorotoluene	126	12.069	12.069	0.000	98	1156118	1250.0	1101.3	
101 tert-Butylbenzene	119	12.379	12.373	0.006	93	3752903	1250.0	1087.9	
103 1,2,4-Trimethylbenzene	105	12.428	12.422	0.006	96	3938405	1250.0	992.2	
104 sec-Butylbenzene	105	12.598	12.598	0.000	95	5242795	1250.0	978.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	12.708	12.708	0.000	97	2125035	1250.0	1145.3	
106 4-Isopropyltoluene	119	12.744	12.738	0.006	93	4257491	1250.0	1004.9	
107 1,4-Dichlorobenzene	146	12.793	12.793	0.000	90	2012503	1250.0	1136.1	
110 n-Butylbenzene	91	13.152	13.146	0.006	94	4263226	1250.0	985.7	
111 1,2-Dichlorobenzene	146	13.170	13.164	0.006	95	1690592	1250.0	1094.7	
112 1,2-Dibromo-3-Chloropropan	75	13.942	13.937	0.005	84	101644	1250.0	1340.5	
114 1,2,4-Trichlorobenzene	180	14.782	14.782	0.000	95	1228158	1250.0	1287.6	
115 Hexachlorobutadiene	225	14.958	14.959	-0.001	96	932511	1250.0	1283.2	
116 Naphthalene	128	15.031	15.032	-0.001	98	1562867	1250.0	1314.7	
117 1,2,3-Trichlorobenzene	180	15.281	15.281	0.000	94	901712	1250.0	1315.4	
S 130 1,2-Dichloroethene, Total	96				0		2500.0	2219.2	
S 129 Xylenes, Total	106				0		2500.0	2240.7	
S 131 1,3-Dichloropropene, Total	1				0		2500.0	2443.4	

Reagents:

VOA8260SURR_00036	Amount Added:	50.00	Units: uL	
VOAACRLOEINPR_00001	Amount Added:	50.00	Units: uL	
VOA8260VOAPRI_00123	Amount Added:	50.00	Units: uL	
voaWVA1st Res_00001	Amount Added:	50.00	Units: uL	
VOA8260INT_00037	Amount Added:	10.00	Units: uL	Run Reagent

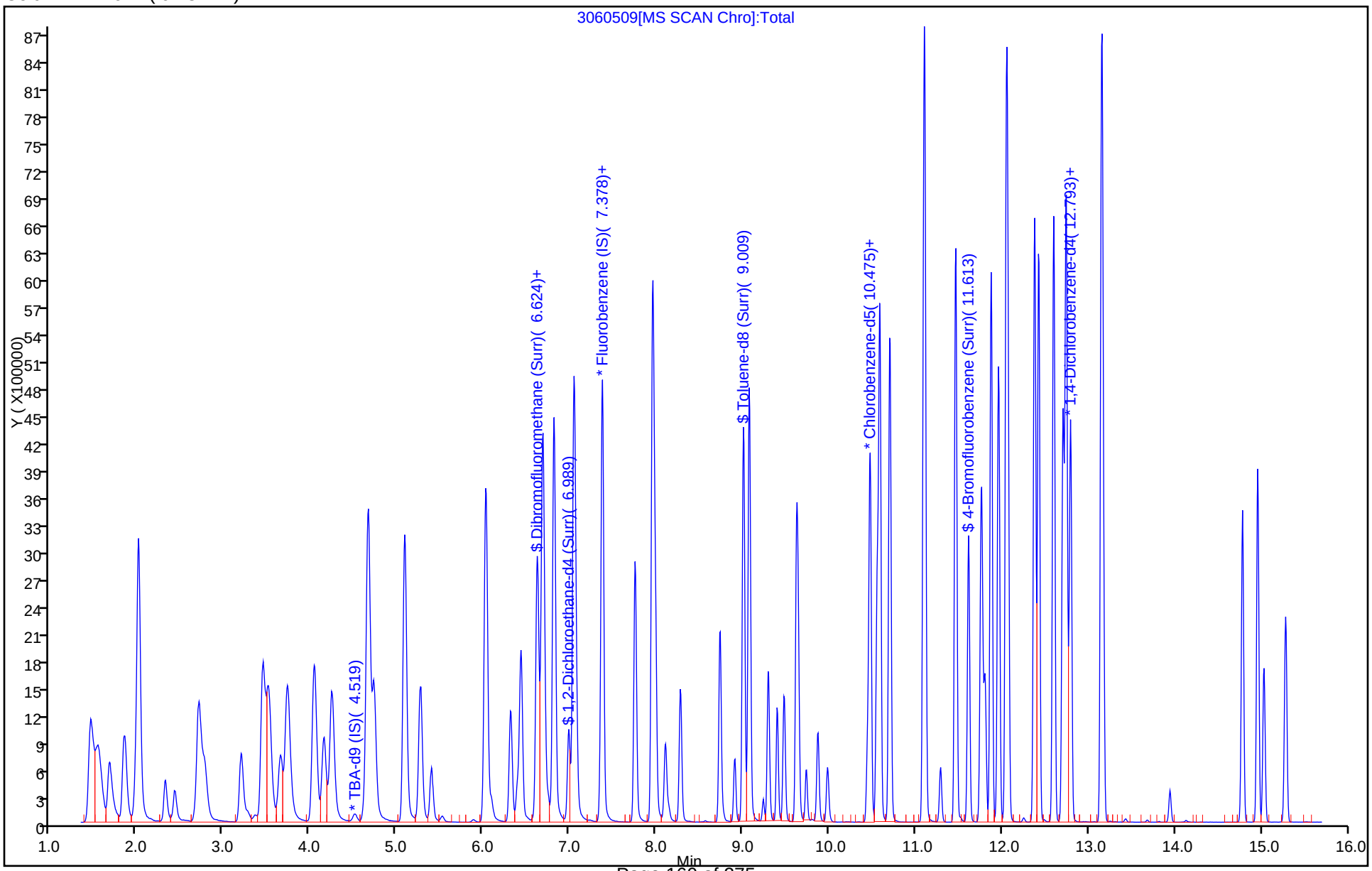
Report Date: 05-Jun-2015 09:53:24 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060509.D

Injection Date:	05-Jun-2015 09:02:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	IC VSTD250			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)



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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 145114

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/16/2015 12:49 Calibration End Date: 06/16/2015 17:04 Calibration ID: 24306

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-145114/4	4061604.D
Level 2	IC 180-145114/13	4061613.D
Level 3	IC 180-145114/6	4061606.D
Level 4	ICIS 180-145114/7	4061607.D
Level 5	IC 180-145114/8	4061608.D
Level 6	IC 180-145114/9	4061609.D
Level 7	IC 180-145114/10	4061610.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	0.3884 0.3688	0.4352 0.3422	0.3730	0.3698	0.3692	Ave		0.3781			0.1000	7.6		20.0			
Chloromethane	0.4846 0.4406	0.5479 0.4052	0.4613	0.4637	0.4611	Ave		0.4663			0.1000	9.4		20.0			
Vinyl chloride	0.3811 0.3358	0.4366 0.3191	0.3698	0.3601	0.3652	Ave		0.3668			0.1000	10.2		20.0			
1,3-Butadiene	0.3751 0.3364	0.4167 0.3181	0.3637	0.3599	0.3575	Ave		0.3611			0.0100	8.6		20.0			
Bromomethane	0.0882 0.0625	0.0778 0.0591	0.0632	0.0682	0.0654	Ave		0.0692			0.0500	14.8		20.0			
Chloroethane	0.0977 0.0722	0.0899 0.0674	0.0793	0.0734	0.0739	Ave		0.0791			0.0500	13.7		20.0			
Dichlorofluoromethane	0.3234 0.2649	0.3269 +++++	0.2747	0.2983	0.3052	Ave		0.2989			0.0100	8.4		20.0			
Trichlorofluoromethane	0.2643 0.2494	0.2844 0.2044	0.2378	0.2730	0.2831	Ave		0.2566			0.1000	11.2		20.0			
Ethyl ether	0.1510 0.1322	0.1519 0.1322	0.1420	0.1339	0.1305	Ave		0.1391			0.0100	6.6		20.0			
Acrolein	0.0147 0.0158	0.0153 0.0156	0.0164	0.0160	0.0159	Ave		0.0157			0.0100	3.5		20.0			
1,1-Dichloroethene	0.2263 0.2145	0.2487 0.2202	0.2215	0.2167	0.2209	Ave		0.2241			0.1000	5.1		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2900 0.2657	0.3020 0.2886	0.2862	0.2645	0.2737	Ave		0.2815			0.1000	4.9		20.0			
Acetone	0.1113 0.0783	0.0890 0.0791	0.0893	0.0741	0.0807	Lin1	0.7343	0.0776			0.0500				0.9990		0.9900
Iodomethane	0.4442 0.4279	0.5108 0.4053	0.4308	0.4256	0.4299	Ave		0.4392			0.0100	7.6		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 145114

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/16/2015 12:49 Calibration End Date: 06/16/2015 17:04 Calibration ID: 24306

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	0.6110 0.8849	0.8345 0.8588	0.7422	0.8170	0.8591	Ave		0.8011			0.1000	11.9		20.0			
Allyl chloride	0.1642 0.2097	0.2112 0.2045	0.1836	0.1933	0.2013	Ave		0.1954			0.0100	8.6		20.0			
Methyl acetate	0.1640 0.1552	0.1771 0.1510	0.1612	0.1611	0.1539	Ave		0.1605			0.1000	5.4		20.0			
Methylene Chloride	0.6858 0.3114	0.5144 0.2904	0.3678	0.3458	0.3331	Lin2	10.054	0.2929			0.1000				0.9980		0.9900
tert-Butyl alcohol	1.4143 1.3205	1.5828 1.2221	1.3072	1.3538	1.2977	Ave		1.3569			0.0100	8.5		20.0			
trans-1,2-Dichloroethene	0.2979 0.2945	0.3429 0.2677	0.2937	0.2913	0.3063	Ave		0.2992			0.1000	7.6		20.0			
Acrylonitrile	0.0707 0.0678	0.0790 0.0640	0.0707	0.0696	0.0705	Ave		0.0703			0.0100	6.4		20.0			
Methyl tert-butyl ether	0.6252 0.5861	0.6850 0.5634	0.6021	0.5938	0.5854	Ave		0.6058			0.1000	6.5		20.0			
Hexane	0.9971 0.5786	0.7987 0.5327	0.6475	0.6180	0.6222	Lin2	11.247	0.5574			0.0100				0.9980		0.9900
1,1-Dichloroethane	0.5833 0.5597	0.6191 0.5162	0.5679	0.5679	0.5613	Ave		0.5679			0.2000	5.4		20.0			
Vinyl acetate	0.2079 0.2305	0.1984 0.2199	0.1950	0.2036	0.2183	Lin2	-0.359	0.2146			0.0100				0.9950		0.9900
2,2-Dichloropropane	0.2223 0.2435	0.2764 0.2253	0.2360	0.2408	0.2491	Ave		0.2419			0.0100	7.4		20.0			
cis-1,2-Dichloroethene	0.3312 0.3065	0.3412 0.2865	0.3100	0.3156	0.3097	Ave		0.3144			0.1000	5.6		20.0			
2-Butanone (MEK)	0.0814 0.0885	0.0926 0.0886	0.0878	0.0855	0.0848	Ave		0.0870			0.0500	4.1		20.0			
Chlorobromomethane	0.1265 0.1243	0.1312 0.1199	0.1186	0.1176	0.1218	Ave		0.1228			0.0100	4.0		20.0			
Tetrahydrofuran	0.0567 0.0574	0.0606 0.0582	0.0574	0.0580	0.0580	Ave		0.0580			0.0100	2.1		20.0			
Chloroform	0.4881 0.4360	0.4955 0.4024	0.4477	0.4467	0.4429	Ave		0.4513			0.2000	7.0		20.0			
1,1,1-Trichloroethane	0.3378 0.3658	0.3951 0.3493	0.3503	0.3571	0.3636	Ave		0.3599			0.1000	5.1		20.0			
Cyclohexane	0.7481 0.6321	0.7656 0.5788	0.6773	0.6577	0.6636	Ave		0.6747			0.1000	9.6		20.0			
Carbon tetrachloride	0.2923 0.3461	0.3511 0.3402	0.3109	0.3337	0.3413	Ave		0.3308			0.1000	6.4		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 145114

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/16/2015 12:49 Calibration End Date: 06/16/2015 17:04 Calibration ID: 24306

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	0.4193 0.3938	0.4384 0.3607	0.4111	0.4071	0.3985	Ave		0.4041			0.0100	6.0		20.0			
Benzene	1.2746 1.0549	1.3428 0.8872	1.1669	1.1584	1.1308	Ave		1.1451			0.5000	12.9		20.0			
Isobutyl alcohol	0.0042 0.0047	0.0044 0.0050	0.0041	0.0042	0.0043	Ave		0.0044		*	0.0100	7.5		20.0			
1,2-Dichloroethane	0.2822 0.2773	0.2965 0.2711	0.2778	0.2791	0.2777	Ave		0.2802			0.1000	2.8		20.0			
n-Heptane	0.6704 0.5342	0.6413 0.4701	0.5831	0.5739	0.5770	Ave		0.5786			0.0100	11.4		20.0			
Trichloroethene	0.3081 0.2778	0.3224 0.2585	0.2875	0.2824	0.2864	Ave		0.2890			0.2000	7.2		20.0			
Methylcyclohexane	0.6458 0.5289	0.6465 0.4790	0.5742	0.5646	0.5732	Lin2	3.4707	0.5338			0.1000				0.9940		0.9900
1,2-Dichloropropane	0.2967 0.2800	0.3154 0.2560	0.2835	0.2865	0.2785	Ave		0.2852			0.1000	6.4		20.0			
Dibromomethane	0.1132 0.1173	0.1212 0.1177	0.1094	0.1179	0.1148	Ave		0.1159			0.0100	3.3		20.0			
1,4-Dioxane	0.0019 0.0017	0.0018 0.0016	0.0016	0.0015	0.0016	Ave		0.0017		*	0.0100	8.7		20.0			
Dichlorobromomethane	0.2137 0.2827	0.2601 0.2772	0.2496	0.2677	0.2668	Ave		0.2597			0.2000	8.8		20.0			
trans-1,3-Dichloropropene	1.2776 1.5942	1.5231 1.4977	1.5062	1.6162	1.5844	Ave		1.5142			0.1000	7.5		20.0			
4-Methyl-2-pentanone (MIBK)	0.5916 0.6821	0.6871 0.6723	0.6766	0.7019	0.6806	Ave		0.6703			0.1000	5.4		20.0			
Toluene	5.6206 4.3179	5.8879 +++++	5.1364	5.1720	4.9333	Ave		5.1780			0.4000	10.6		20.0			
cis-1,3-Dichloropropene	0.2219 0.2996	0.2583 0.2876	0.2559	0.2777	0.2742	Ave		0.2679			0.2000	9.5		20.0			
Ethyl methacrylate	0.9206 1.0018	1.0181 0.9556	0.9887	1.0746	0.9950	Qua	-2.767	1.0533	-0.000076		0.0100				1.0000		0.9900
1,1,2-Trichloroethane	0.7101 0.7360	0.7808 0.6962	0.7514	0.7971	0.7301	Ave		0.7431			0.1000	4.9		20.0			
Tetrachloroethene	1.1397 0.9823	1.1588 0.8798	1.0619	1.0836	1.0415	Ave		1.0497			0.2000	9.1		20.0			
1,3-Dichloropropane	1.4564 1.3515	1.5028 1.2426	1.3712	1.4066	1.3532	Ave		1.3835			0.0100	6.0		20.0			
2-Hexanone	0.4137 0.4355	0.4125 0.4551	0.4009	0.4458	0.4352	Ave		0.4284			0.1000	4.6		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 145114

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/16/2015 12:49 Calibration End Date: 06/16/2015 17:04 Calibration ID: 24306

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								
Chlorodibromomethane	0.4717 0.7895	0.6020 0.7818	0.6345	0.7020	0.6970	Ave		0.6684			0.1000	16.6		20.0			
1,2-Dibromoethane	0.6642 0.7156	0.7042 0.7041	0.6995	0.7255	0.6985	Ave		0.7017			0.1000	2.7		20.0			
Chlorobenzene	3.2865 2.8157	3.5327 2.3292	3.1109	3.1406	3.0291	Ave		3.0350			0.5000	12.6		20.0			
1,1,1,2-Tetrachloroethane	0.9150 0.9742	1.0672 0.8604	1.0162	1.0390	0.9781	Ave		0.9786			0.0100	7.3		20.0			
Ethylbenzene	2.2080 1.6791	2.2141 1.3538	1.9877	1.9496	1.8982	Ave		1.8986			0.1000	16.0		20.0			
m-Xylene & p-Xylene	2.6176 2.1998	2.7139 1.9109	2.4545	2.4596	2.3879	Ave		2.3920			0.1000	11.2		20.0			
o-Xylene	2.5520 2.0807	2.7102 1.7264	2.3679	2.3752	2.2484	Ave		2.2944			0.3000	14.0		20.0			
Styrene	3.7801 3.2306	4.1238 2.5971	3.5965	3.6974	3.5308	Ave		3.5080			0.3000	13.8		20.0			
Bromoform	0.2189 +++++	0.3034 +++++	0.2887	0.3373	0.3248	Lin2	-2.792	0.3376			0.1000				0.9940		0.9900
Isopropylbenzene	6.5935 4.8395	6.8816 +++++	5.9869	5.9554	5.6700	Ave		5.9878			0.1000	12.0		20.0			
Bromobenzene	0.9566 0.8640	0.9847 0.7875	0.8791	0.9094	0.8942	Ave		0.8965			0.0100	7.2		20.0			
1,1,2,2-Tetrachloroethane	0.7423 0.8107	0.8722 0.7893	0.7936	0.8116	0.8036	Ave		0.8033			0.3000	4.8		20.0			
trans-1,4-Dichloro-2-butene	0.1370 0.1620	0.1282 0.1783	0.1405	0.1359	0.1467	Ave		0.1469			0.0100	11.9		20.0			
1,2,3-Trichloropropane	0.1749 0.1728	0.1747 0.1784	0.1740	0.1781	0.1844	Lin2	-0.087	0.1778			0.0100				0.9990		0.9900
N-Propylbenzene	1.4424 1.1386	1.4788 0.9644	1.2946	1.3115	1.2660	Ave		1.2709			0.0100	13.9		20.0			
2-Chlorotoluene	1.0353 0.8902	1.0885 0.7826	0.9965	0.9943	0.9722	Ave		0.9657			0.0100	10.4		20.0			
1,3,5-Trimethylbenzene	4.0658 2.8563	4.2125 +++++	3.6151	3.5401	3.4411	Ave		3.6218			0.0100	13.4		20.0			
4-Chlorotoluene	1.0753 0.8393	1.1262 0.6956	0.9800	0.9537	0.9581	Ave		0.9469			0.0100	15.2		20.0			
tert-Butylbenzene	3.5697 2.6989	3.7577 +++++	3.2449	3.2346	3.1457	Ave		3.2752			0.0100	11.2		20.0			
1,2,4-Trimethylbenzene	4.0021 3.0071	4.1855 +++++	3.6152	3.6055	3.4651	Ave		3.6468			0.0100	11.4		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 145114

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/16/2015 12:49 Calibration End Date: 06/16/2015 17:04 Calibration ID: 24306

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	5.5438 3.8328	5.6816 +++++	4.8893	4.7720	4.5968	Ave		4.8861			0.0100	13.8		20.0			
1,3-Dichlorobenzene	1.9313 1.6905	2.0975 1.4781	1.8339	1.8669	1.8189	Ave		1.8167			0.6000	10.7		20.0			
4-Isopropyltoluene	4.5136 3.2318	4.6685 +++++	4.0595	3.9773	3.8862	Ave		4.0562			0.0100	12.6		20.0			
1,4-Dichlorobenzene	1.9174 1.6442	2.0531 1.4481	1.7782	1.7655	1.7450	Ave		1.7645			0.5000	10.9		20.0			
1,2-Dichlorobenzene	1.7686 1.4858	1.8458 1.2562	1.6697	1.6301	1.5838	Ave		1.6057			0.4000	12.1		20.0			
n-Butylbenzene	4.1816 2.9445	4.2056 +++++	3.6705	3.6976	3.5286	Ave		3.7047			0.0100	12.6		20.0			
1,2-Dibromo-3-Chloropropane	0.0529 0.0728	0.0650 +++++	0.0506	0.0589	0.0621	Qua	0.0684	0.0520	0.0000332		0.0500				0.9990		0.9900
1,2,4-Trichlorobenzene	0.8057 0.8071	0.8738 0.7399	0.8167	0.8129	0.8304	Ave		0.8124			0.2000	4.9		20.0			
Hexachlorobutadiene	0.8397 0.6797	0.8689 0.5979	0.8030	0.7508	0.7334	Ave		0.7533			0.0100	12.5		20.0			
Naphthalene	1.2014 1.2553	1.2744 1.2024	1.2652	1.2591	1.2568	Ave		1.2449			0.0100	2.4		20.0			
1,2,3-Trichlorobenzene	0.5763 0.5967	0.6352 0.5483	0.6285	0.6303	0.6066	Ave		0.6031			0.0100	5.3		20.0			
Dibromofluoromethane (Surr)	0.2129 0.2150	0.2250 0.2028	0.2200	0.2230	0.2150	Ave		0.2163				3.4		20.0			
1,2-Dichloroethane-d4 (Surr)	0.2367 0.2166	0.2212 0.2199	0.2189	0.2255	0.2136	Ave		0.2218				3.4		20.0			
Toluene-d8 (Surr)	4.2539 3.4612	4.3511 2.8842	4.0424	4.0852	3.8374	Ave		3.8451				13.4		20.0			
4-Bromofluorobenzene (Surr)	1.5539 1.3238	1.4592 1.2315	1.3770	1.3937	1.3546	Ave		1.3848				7.4		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 145114

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/16/2015 12:49 Calibration End Date: 06/16/2015 17:04 Calibration ID: 24306

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-145114/4	4061604.D
Level 2	IC 180-145114/13	4061613.D
Level 3	IC 180-145114/6	4061606.D
Level 4	ICIS 180-145114/7	4061607.D
Level 5	IC 180-145114/8	4061608.D
Level 6	IC 180-145114/9	4061609.D
Level 7	IC 180-145114/10	4061610.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	31893 776830	76905 1511639	157642	255101	320106	25.0 625	50.0 1250	125	200	250
Chloromethane	FB	Ave	39797 928051	96811 1790016	194932	319903	399812	25.0 625	50.0 1250	125	200	250
Vinyl chloride	FB	Ave	31298 707290	77154 1409860	156299	248424	316681	25.0 625	50.0 1250	125	200	250
1,3-Butadiene	FB	Ave	30803 708565	73636 1405162	153701	248299	309979	25.0 625	50.0 1250	125	200	250
Bromomethane	FB	Ave	7240 131547	13746 261304	26724	47060	56726	25.0 625	50.0 1250	125	200	250
Chloroethane	FB	Ave	8024 152053	15881 297756	33513	50610	64094	25.0 625	50.0 1250	125	200	250
Dichlorofluoromethane	FB	Ave	26554 557951	57771 +++++	116099	205807	264656	25.0 625	50.0 +++++	125	200	250
Trichlorofluoromethane	FB	Ave	21707 525248	50265 902912	100502	188314	245461	25.0 625	50.0 1250	125	200	250
Ethyl ether	FB	Ave	12400 278548	26841 584176	60030	92400	113180	25.0 625	50.0 1250	125	200	250
Acrolein	FB	Ave	24099 59984	33750 68978	41478	48319	55100	500 1125	625 1250	750	875	1000
1,1-Dichloroethene	FB	Ave	18586 451723	43946 972865	93606	149493	191525	25.0 625	50.0 1250	125	200	250
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	23818 559695	53364 1275114	120935	182469	237371	25.0 625	50.0 1250	125	200	250
Acetone	FB	Lin1	9143 164831	15722 349429	37730	51089	70005	25.0 625	50.0 1250	125	200	250
Iodomethane	FB	Ave	36481 901333	90265 1790639	182073	293580	372736	25.0 625	50.0 1250	125	200	250
Carbon disulfide	FB	Ave	50173 1864054	147458 3794262	313676	563603	744950	25.0 625	50.0 1250	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 145114

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/16/2015 12:49 Calibration End Date: 06/16/2015 17:04 Calibration ID: 24306

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	13483 441644	37329 903369	77581	133340	174586	25.0 625	50.0 1250	125	200	250
Methyl acetate	FB	Ave	67338 1634432	156497 3334573	340535	555817	667420	125 3125	250 6250	625	1000	1250
Methylene Chloride	FB	Lin2	56314 655989	90903 1282817	155443	238565	288820	25.0 625	50.0 1250	125	200	250
tert-Butyl alcohol	TBA	Ave	12852 336531	33209 689825	66787	110634	135383	250 6250	500 12500	1250	2000	2500
trans-1,2-Dichloroethene	FB	Ave	24467 620420	60593 1182485	124131	200958	265623	25.0 625	50.0 1250	125	200	250
Acrylonitrile	FB	Ave	58018 1429049	139592 2826406	298883	480098	611665	250 6250	500 12500	1250	2000	2500
Methyl tert-butyl ether	FB	Ave	51337 1234603	121038 2488985	254439	409619	507628	25.0 625	50.0 1250	125	200	250
Hexane	FB	Lin2	81883 1218808	141130 2353388	273620	426303	539559	25.0 625	50.0 1250	125	200	250
1,1-Dichloroethane	FB	Ave	47901 1178992	109401 2280706	240009	391736	486716	25.0 625	50.0 1250	125	200	250
Vinyl acetate	FB	Lin2	17075 485451	35051 971407	82389	140461	189278	25.0 625	50.0 1250	125	200	250
2,2-Dichloropropane	FB	Ave	18253 512888	48848 995207	99722	166099	215988	25.0 625	50.0 1250	125	200	250
cis-1,2-Dichloroethene	FB	Ave	27198 645659	60289 1265583	131018	217686	268527	25.0 625	50.0 1250	125	200	250
2-Butanone (MEK)	FB	Ave	6685 186403	16355 391504	37114	58988	73541	25.0 625	50.0 1250	125	200	250
Chlorobromomethane	FB	Ave	10391 261741	23184 529493	50116	81095	105587	25.0 625	50.0 1250	125	200	250
Tetrahydrofuran	FB	Ave	9318 241699	21406 513946	48539	79971	100550	50.0 1250	100 2500	250	400	500
Chloroform	FB	Ave	40080 918423	87557 1777696	189220	308172	384071	25.0 625	50.0 1250	125	200	250
1,1,1-Trichloroethane	FB	Ave	27741 770444	69819 1543383	148041	246315	315307	25.0 625	50.0 1250	125	200	250
Cyclohexane	FB	Ave	61432 1331359	135290 2557200	286213	453688	575376	25.0 625	50.0 1250	125	200	250
Carbon tetrachloride	FB	Ave	24007 728933	62047 1502927	131386	230216	295972	25.0 625	50.0 1250	125	200	250
1,1-Dichloropropene	FB	Ave	34429 829506	77469 1593530	173729	280842	345552	25.0 625	50.0 1250	125	200	250
Benzene	FB	Ave	104666 2222065	237290 3919415	493119	799103	980506	25.0 625	50.0 1250	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 145114

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/16/2015 12:49 Calibration End Date: 06/16/2015 17:04 Calibration ID: 24306

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
Isobutyl alcohol	FB	Ave	8705 246701	19621 554436	43028	71593	93942	625 15625	1250 31250	3125	5000	6250
1,2-Dichloroethane	FB	Ave	23172 584003	52398 1197858	117416	192514	240811	25.0 625	50.0 1250	125	200	250
n-Heptane	FB	Ave	55054 1125140	113324 2076728	246434	395902	500325	25.0 625	50.0 1250	125	200	250
Trichloroethene	FB	Ave	25301 585212	56977 1141959	121483	194804	248321	25.0 625	50.0 1250	125	200	250
Methylcyclohexane	FB	Lin2	53033 1114039	114236 2115968	242676	389469	497067	25.0 625	50.0 1250	125	200	250
1,2-Dichloropropane	FB	Ave	24366 589798	55728 1131196	119823	197632	241478	25.0 625	50.0 1250	125	200	250
Dibromomethane	FB	Ave	9293 247153	21426 519870	46214	81326	99501	25.0 625	50.0 1250	125	200	250
1,4-Dioxane	FB	Ave	3111 73502	6452 141753	13925	20249	27834	500 12500	1000 25000	2500	4000	5000
Dichlorobromomethane	FB	Ave	17551 595546	45968 1224855	105486	184667	231383	25.0 625	50.0 1250	125	200	250
trans-1,3-Dichloropropene	CBZ	Ave	25080 807831	63872 1599227	149930	256360	325641	25.0 625	50.0 1250	125	200	250
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	11614 345652	28815 717852	67348	111342	139895	25.0 625	50.0 1250	125	200	250
Toluene	CBZ	Ave	110340 2188028	246908 +++++	511281	820374	1013965	25.0 625	50.0 +++++	125	200	250
cis-1,3-Dichloropropene	FB	Ave	18225 631065	45652 1270625	108129	191577	237791	25.0 625	50.0 1250	125	200	250
Ethyl methacrylate	CBZ	Qua	18072 507647	42694 1020327	98415	170447	204507	25.0 625	50.0 1250	125	200	250
1,1,2-Trichloroethane	CBZ	Ave	13941 372935	32743 743379	74797	126439	150054	25.0 625	50.0 1250	125	200	250
Tetrachloroethene	CBZ	Ave	22374 497765	48593 939401	105699	171884	214066	25.0 625	50.0 1250	125	200	250
1,3-Dichloropropane	CBZ	Ave	28591 684872	63020 1326847	136496	223115	278123	25.0 625	50.0 1250	125	200	250
2-Hexanone	CBZ	Ave	8122 220657	17298 485975	39903	70711	89448	25.0 625	50.0 1250	125	200	250
Chlorodibromomethane	CBZ	Ave	9260 400088	25243 834824	63160	111352	143254	25.0 625	50.0 1250	125	200	250
1,2-Dibromoethane	CBZ	Ave	13039 362626	29530 751771	69632	115079	143566	25.0 625	50.0 1250	125	200	250
Chlorobenzene	CBZ	Ave	64518 1426798	148145 2487044	309663	498164	622582	25.0 625	50.0 1250	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 145114

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/16/2015 12:49 Calibration End Date: 06/16/2015 17:04 Calibration ID: 24306

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	CBZ	Ave	17962 493662	44755 918756	101151	164805	201032	25.0 625	50.0 1250	125	200	250
Ethylbenzene	CBZ	Ave	43345 850838	92848 1445587	197863	309244	390147	25.0 625	50.0 1250	125	200	250
m-Xylene & p-Xylene	CBZ	Ave	51387 1114706	113807 2040358	244326	390131	490804	25.0 625	50.0 1250	125	200	250
o-Xylene	CBZ	Ave	50099 1054356	113654 1843436	235705	376749	462124	25.0 625	50.0 1250	125	200	250
Styrene	CBZ	Ave	74208 1637057	172930 2773118	358001	586478	725694	25.0 625	50.0 1250	125	200	250
Bromoform	CBZ	Lin2	4298 +++++	12721 +++++	28739	53505	66765	25.0 +++++	50.0 +++++	125	200	250
Isopropylbenzene	CBZ	Ave	129439 2452321	288581 +++++	595942	944633	1165379	25.0 625	50.0 +++++	125	200	250
Bromobenzene	DCB	Ave	25240 614353	55671 1158182	121158	199146	248761	25.0 625	50.0 1250	125	200	250
1,1,2,2-Tetrachloroethane	CBZ	Ave	14572 410811	36574 842808	78993	128728	165162	25.0 625	50.0 1250	125	200	250
trans-1,4-Dichloro-2-butene	DCB	Ave	3615 115197	7250 262245	19370	29753	40800	25.0 625	50.0 1250	125	200	250
1,2,3-Trichloropropane	DCB	Lin2	4616 122896	9874 262405	23975	39009	51305	25.0 625	50.0 1250	125	200	250
N-Propylbenzene	DCB	Ave	38059 809616	83601 1418199	178432	287211	352193	25.0 625	50.0 1250	125	200	250
2-Chlorotoluene	DCB	Ave	27317 632988	61539 1150939	137343	217735	270457	25.0 625	50.0 1250	125	200	250
1,3,5-Trimethylbenzene	DCB	Ave	107279 2031021	238153 +++++	498241	775267	957281	25.0 625	50.0 +++++	125	200	250
4-Chlorotoluene	DCB	Ave	28373 596803	63669 1022917	135074	208854	266538	25.0 625	50.0 1250	125	200	250
tert-Butylbenzene	DCB	Ave	94189 1919073	212438 +++++	447222	708358	875091	25.0 625	50.0 +++++	125	200	250
1,2,4-Trimethylbenzene	DCB	Ave	105599 2138259	236623 +++++	498255	789589	963964	25.0 625	50.0 +++++	125	200	250
sec-Butylbenzene	DCB	Ave	146278 2725330	321207 +++++	673866	1045040	1278774	25.0 625	50.0 +++++	125	200	250
1,3-Dichlorobenzene	DCB	Ave	50958 1202036	118581 2173659	252762	408839	505991	25.0 625	50.0 1250	125	200	250
4-Isopropyltoluene	DCB	Ave	119096 2298025	263931 +++++	559499	871012	1081087	25.0 625	50.0 +++++	125	200	250
1,4-Dichlorobenzene	DCB	Ave	50592 1169151	116072 2129623	245072	386630	485448	25.0 625	50.0 1250	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1 Analy Batch No.: 145114

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/16/2015 12:49 Calibration End Date: 06/16/2015 17:04 Calibration ID: 24306

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,2-Dichlorobenzene	DCB	Ave	46666 1056520	104352 1847389	230121	356988	440600	25.0 625	50.0 1250	125	200	250
n-Butylbenzene	DCB	Ave	110335 2093713	237761 +++++	505887	809753	981609	25.0 625	50.0 +++++	125	200	250
1,2-Dibromo-3-Chloropropane	DCB	Qua	1396 51753	3673 +++++	6973	12891	17280	25.0 625	50.0 +++++	125	200	250
1,2,4-Trichlorobenzene	DCB	Ave	21258 573907	49402 1088085	112565	178012	231001	25.0 625	50.0 1250	125	200	250
Hexachlorobutadiene	DCB	Ave	22157 483340	49122 879278	110679	164415	204012	25.0 625	50.0 1250	125	200	250
Naphthalene	DCB	Ave	31699 892613	72050 1768305	174371	275743	349617	25.0 625	50.0 1250	125	200	250
1,2,3-Trichlorobenzene	DCB	Ave	15206 424278	35911 806307	86618	138039	168738	25.0 625	50.0 1250	125	200	250
Dibromofluoromethane (Surr)	FB	Ave	17484 452943	39759 896068	92964	153862	186456	25.0 625	50.0 1250	125	200	250
1,2-Dichloroethane-d4 (Surr)	FB	Ave	19438 456187	39083 971604	92523	155543	185245	25.0 625	50.0 1250	125	200	250
Toluene-d8 (Surr)	CBZ	Ave	83510 1753890	182464 3079639	402388	647984	788715	25.0 625	50.0 1250	125	200	250
4-Bromofluorobenzene (Surr)	CBZ	Ave	30505 670810	61191 1315017	137073	221064	278416	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

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061604.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Jun-2015 12:49:30 ALS Bottle#: 12 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0007420-004
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 16-Jun-2015 17:51:17 Calib Date: 16-Jun-2015 17:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: journetp Date: 16-Jun-2015 12:16:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.212	3.192	0.020	99	181743	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.254	6.258	-0.004	98	821190	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.448	9.446	0.002	86	196312	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.796	11.800	-0.004	94	263858	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.494	5.491	0.003	90	17484	25.0	24.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.889	5.887	0.002	91	19438	25.0	26.7	
$ 7 Toluene-d8 (Surr)	98	7.976	7.980	-0.004	94	83510	25.0	27.7	
$ 8 4-Bromofluorobenzene (Surr	95	10.646	10.650	-0.004	93	30505	25.0	28.1	
10 Dichlorodifluoromethane	85	1.205	1.203	0.002	29	31893	25.0	25.7	
11 Chloromethane	50	1.308	1.318	-0.010	99	39797	25.0	26.0	
12 Vinyl chloride	62	1.412	1.416	-0.004	97	31298	25.0	26.0	
13 Butadiene	54	1.436	1.434	0.002	96	30803	25.0	26.0	
14 Bromomethane	94	1.643	1.653	-0.010	89	7240	25.0	31.8	
15 Chloroethane	64	1.758	1.750	0.008	37	8024	25.0	30.9	
16 Dichlorofluoromethane	67	1.953	1.957	-0.004	96	26554	25.0	27.0	M
17 Trichlorofluoromethane	101	1.965	1.957	0.008	61	21707	25.0	25.8	
19 Ethyl ether	59	2.239	2.231	0.008	97	12400	25.0	27.1	
20 Acrolein	56	2.367	2.365	0.002	94	24099	500.0	468.4	
21 1,1-Dichloroethene	96	2.403	2.401	0.002	94	18586	25.0	25.2	
22 1,1,2-Trichloro-1,2,2-trif	101	2.470	2.468	0.002	86	23818	25.0	25.8	
23 Acetone	43	2.537	2.535	0.002	46	9143	25.0	26.4	
24 Iodomethane	142	2.549	2.547	0.002	88	36481	25.0	25.3	
25 Carbon disulfide	76	2.604	2.608	-0.004	98	50173	25.0	19.1	
28 3-Chloro-1-propene	76	2.817	2.821	-0.004	92	13483	25.0	21.0	
29 Methyl acetate	43	2.878	2.869	0.009	99	67338	125.0	127.7	
30 Methylene Chloride	84	2.993	2.991	0.002	98	56314	25.0	24.2	
31 2-Methyl-2-propanol	59	3.316	3.289	0.027	34	12852	250.0	260.6	
32 Acrylonitrile	53	3.328	3.326	0.002	97	58018	250.0	251.1	
33 trans-1,2-Dichloroethene	96	3.328	3.332	-0.004	79	24467	25.0	24.9	
34 Methyl tert-butyl ether	73	3.377	3.374	0.003	97	51337	25.0	25.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	3.711	3.715	-0.004	91	81883	25.0	24.5	
36 1,1-Dichloroethane	63	3.967	3.964	0.003	96	47901	25.0	25.7	
38 Vinyl acetate	43	4.052	4.050	0.002	97	17075	25.0	25.9	
41 2,2-Dichloropropane	77	4.800	4.798	0.002	58	18253	25.0	23.0	
42 cis-1,2-Dichloroethene	96	4.812	4.810	0.002	80	27198	25.0	26.3	
43 2-Butanone (MEK)	43	4.867	4.865	0.002	86	6685	25.0	23.4	
46 Chlorobromomethane	128	5.123	5.126	-0.004	95	10391	25.0	25.8	
48 Tetrahydrofuran	42	5.153	5.151	0.002	89	9318	50.0	48.9	
49 Chloroform	83	5.299	5.297	0.002	93	40080	25.0	27.0	
50 1,1,1-Trichloroethane	97	5.445	5.443	0.002	95	27741	25.0	23.5	
51 Cyclohexane	56	5.506	5.510	-0.004	92	61432	25.0	27.7	
53 Carbon tetrachloride	117	5.621	5.625	-0.004	97	24007	25.0	22.1	
52 1,1-Dichloropropene	75	5.652	5.650	0.002	96	34429	25.0	25.9	
54 Benzene	78	5.877	5.875	0.002	97	104666	25.0	27.8	
59 Isobutyl alcohol	41	5.956	5.948	0.008	66	8705	625.0	599.5	
55 1,2-Dichloroethane	62	5.980	5.978	0.002	96	23172	25.0	25.2	
58 n-Heptane	43	6.291	6.294	-0.003	93	55054	25.0	29.0	
61 Trichloroethene	130	6.668	6.666	0.002	98	25301	25.0	26.7	
63 Methylcyclohexane	83	6.899	6.903	-0.004	92	53033	25.0	23.7	
64 1,2-Dichloropropane	63	6.954	6.951	0.003	91	24366	25.0	26.0	
65 Dibromomethane	93	7.045	7.037	0.008	93	9293	25.0	24.4	
67 1,4-Dioxane	88	7.069	7.055	0.014	41	3111	500.0	562.4	
68 Dichlorobromomethane	83	7.258	7.262	-0.004	96	17551	25.0	20.6	
74 trans-1,3-Dichloropropene	75	7.726	7.724	0.002	95	25080	25.0	21.1	
72 4-Methyl-2-pentanone (MIBK	43	7.890	7.894	-0.004	94	11614	25.0	22.1	
73 Toluene	91	8.049	8.046	0.003	99	110340	25.0	27.1	
71 cis-1,3-Dichloropropene	75	8.322	8.326	-0.004	91	18225	25.0	20.7	
75 Ethyl methacrylate	69	8.408	8.411	-0.003	94	18072	25.0	24.5	
76 1,1,2-Trichloroethane	97	8.517	8.515	0.002	90	13941	25.0	23.9	
77 Tetrachloroethene	164	8.560	8.558	0.002	97	22374	25.0	27.1	
78 1,3-Dichloropropane	76	8.669	8.667	0.002	93	28591	25.0	26.3	
79 2-Hexanone	43	8.748	8.752	-0.004	95	8122	25.0	24.1	
81 Chlorodibromomethane	129	8.882	8.880	0.002	94	9260	25.0	17.6	
82 Ethylene Dibromide	107	8.979	8.983	-0.004	98	13039	25.0	23.7	
84 Chlorobenzene	112	9.478	9.476	0.002	95	64518	25.0	27.1	
85 1,1,1,2-Tetrachloroethane	131	9.582	9.586	-0.004	93	17962	25.0	23.4	
86 Ethylbenzene	106	9.588	9.592	-0.004	97	43345	25.0	29.1	
87 m-Xylene & p-Xylene	106	9.728	9.726	0.002	97	51387	25.0	27.4	
88 o-Xylene	106	10.105	10.103	0.002	95	50099	25.0	27.8	
89 Styrene	104	10.129	10.127	0.002	95	74208	25.0	26.9	
90 Bromoform	173	10.293	10.297	-0.004	97	4298	25.0	24.5	
91 Isopropylbenzene	105	10.476	10.480	-0.004	94	129439	25.0	27.5	
94 Bromobenzene	156	10.768	10.772	-0.004	90	25240	25.0	26.7	
93 1,1,2,2-Tetrachloroethane	83	10.804	10.802	0.002	95	14572	25.0	23.1	
96 trans-1,4-Dichloro-2-buten	53	10.835	10.839	-0.004	69	3615	25.0	23.3	
95 1,2,3-Trichloropropane	110	10.847	10.851	-0.004	86	4616	25.0	25.1	
97 N-Propylbenzene	120	10.896	10.894	0.002	98	38059	25.0	28.4	
98 2-Chlorotoluene	126	10.969	10.967	0.002	97	27317	25.0	26.8	
99 1,3,5-Trimethylbenzene	105	11.084	11.088	-0.004	94	107279	25.0	28.1	
100 4-Chlorotoluene	126	11.096	11.094	0.002	99	28373	25.0	28.4	
101 tert-Butylbenzene	119	11.388	11.392	-0.004	93	94189	25.0	27.2	
103 1,2,4-Trimethylbenzene	105	11.449	11.453	-0.004	97	105599	25.0	27.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	11.614	11.617	-0.003	93	146278	25.0	28.4	
105 1,3-Dichlorobenzene	146	11.717	11.715	0.002	98	50958	25.0	26.6	
106 4-Isopropyltoluene	119	11.778	11.782	-0.004	97	119096	25.0	27.8	
107 1,4-Dichlorobenzene	146	11.820	11.824	-0.004	92	50592	25.0	27.2	
111 1,2-Dichlorobenzene	146	12.167	12.165	0.002	97	46666	25.0	27.5	
110 n-Butylbenzene	91	12.179	12.183	-0.004	97	110335	25.0	28.2	
112 1,2-Dibromo-3-Chloropropan	75	12.958	12.962	-0.004	73	1396	25.0	23.8	
113 1,2,4-Trichlorobenzene	180	13.773	13.777	-0.004	93	21258	25.0	24.8	
115 Hexachlorobutadiene	225	13.925	13.929	-0.004	94	22157	25.0	27.9	
116 Naphthalene	128	14.029	14.033	-0.004	97	31699	25.0	24.1	
117 1,2,3-Trichlorobenzene	180	14.248	14.246	0.002	94	15206	25.0	23.9	
S 129 1,2-Dichloroethene, Total	96				0		50.0	51.2	
S 130 Xylenes, Total	106				0		50.0	55.2	
S 131 1,3-Dichloropropene, Total	1				0		50.0	41.8	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00038	Amount Added:	10.00	Units: uL
VOAACRLOEINPR_00001	Amount Added:	20.00	Units: uL
voaWVA1st Res_00001	Amount Added:	1.00	Units: uL
VOA8260SURR_00038	Amount Added:	1.00	Units: uL
VOA8260VOAPRI_00125	Amount Added:	1.00	Units: uL

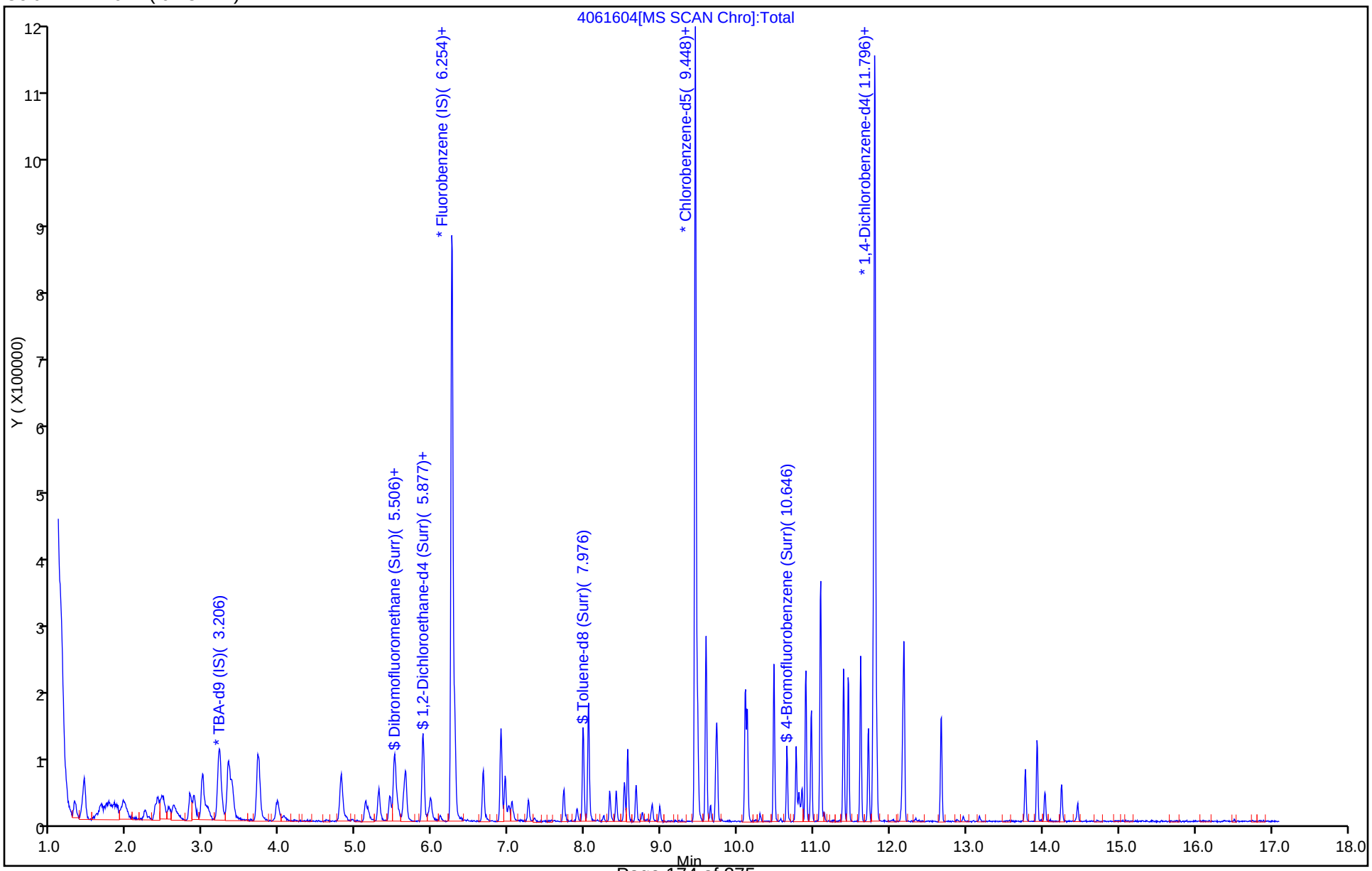
Report Date: 16-Jun-2015 17:51:18 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061604.D

Injection Date:	16-Jun-2015 12:49:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



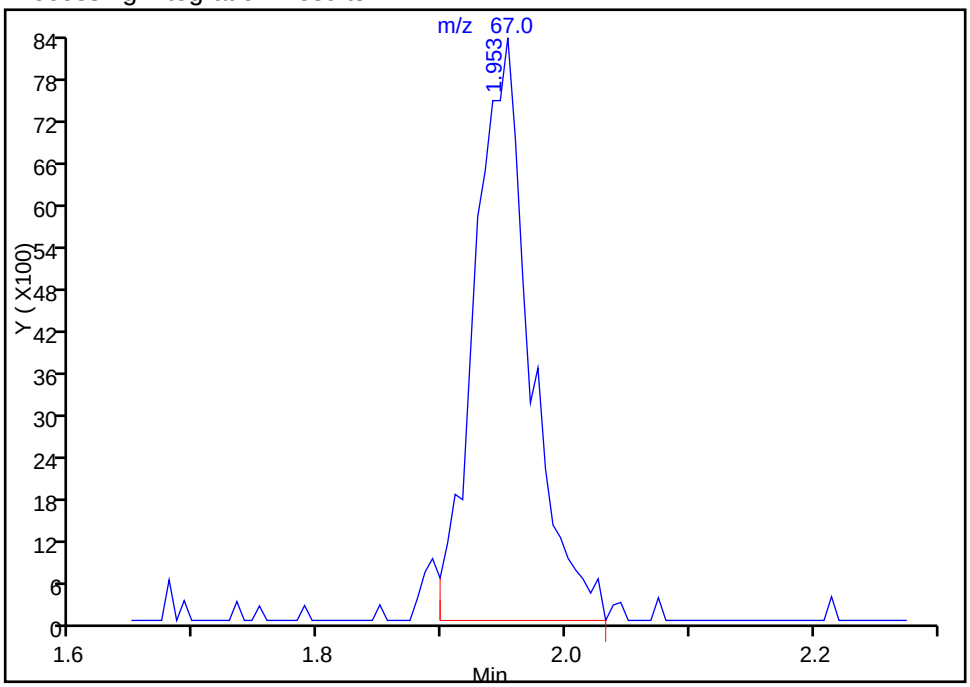
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061604.D
Injection Date: 16-Jun-2015 12:49:30 Instrument ID: CHHP4
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 12 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

16 Dichlorofluoromethane, CAS: 75-43-4

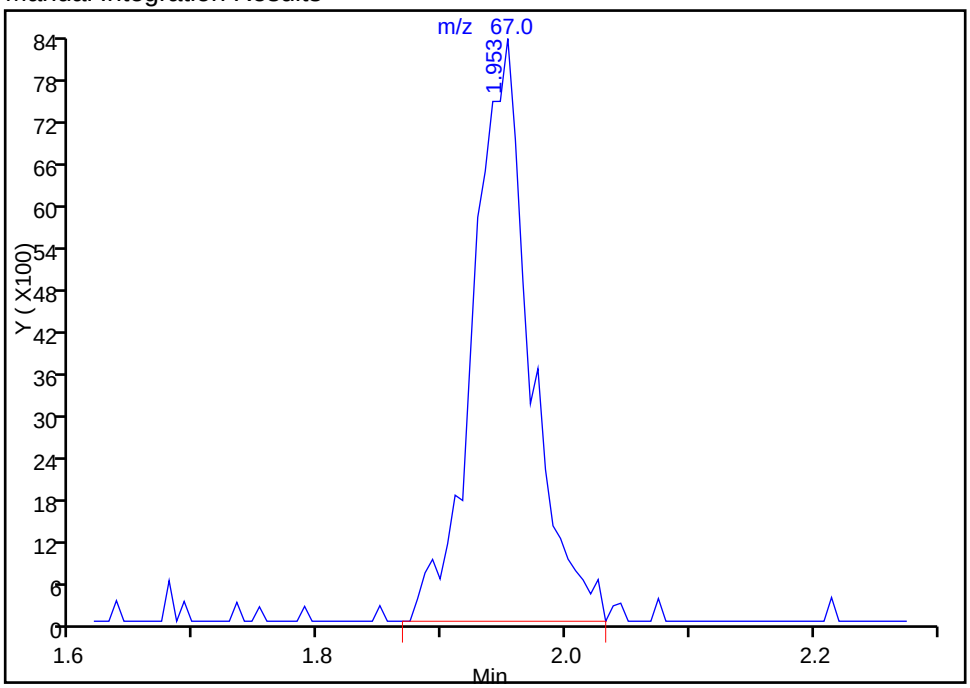
Processing Integration Results

RT: 1.95
Area: 25862
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 1.95
Area: 26554
Amount: 27.045064
Amount Units: ng



Reviewer: journetp, 16-Jun-2015 12:16:50
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061606.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-Jun-2015 13:38:30 ALS Bottle#: 14 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0007420-006
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 16-Jun-2015 17:51:19 Calib Date: 16-Jun-2015 17:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: journetp Date: 16-Jun-2015 13:15:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.210	3.192	0.018	99	204363	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.252	6.258	-0.006	99	845207	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.446	9.446	0.000	85	199083	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.800	11.800	0.000	95	275648	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.492	5.491	0.001	95	92964	125.0	127.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.887	5.887	0.000	96	92523	125.0	123.4	
$ 7 Toluene-d8 (Surr)	98	7.974	7.980	-0.006	93	402388	125.0	131.4	
$ 8 4-Bromofluorobenzene (Surr	95	10.651	10.650	0.001	94	137073	125.0	124.3	
10 Dichlorodifluoromethane	85	1.209	1.203	0.006	99	157642	125.0	123.3	
11 Chloromethane	50	1.318	1.318	0.000	99	194932	125.0	123.6	
12 Vinyl chloride	62	1.416	1.416	0.000	98	156299	125.0	126.0	
13 Butadiene	54	1.440	1.434	0.006	94	153701	125.0	125.9	
14 Bromomethane	94	1.659	1.653	0.006	91	26724	125.0	114.2	
15 Chloroethane	64	1.750	1.750	0.000	97	33513	125.0	125.3	
16 Dichlorofluoromethane	67	1.951	1.957	-0.006	96	116099	125.0	114.9	
17 Trichlorofluoromethane	101	1.969	1.957	0.012	93	100502	125.0	115.8	
19 Ethyl ether	59	2.237	2.231	0.006	96	60030	125.0	127.6	
20 Acrolein	56	2.365	2.365	0.000	98	41478	750.0	783.3	
21 1,1-Dichloroethene	96	2.401	2.401	0.000	96	93606	125.0	123.5	
22 1,1,2-Trichloro-1,2,2-trif	101	2.474	2.468	0.006	95	120935	125.0	127.1	
23 Acetone	43	2.541	2.535	0.006	41	37730	125.0	134.3	
24 Iodomethane	142	2.547	2.547	0.000	97	182073	125.0	122.6	M
25 Carbon disulfide	76	2.608	2.608	0.000	99	313676	125.0	115.8	
28 3-Chloro-1-propene	76	2.821	2.821	0.000	93	77581	125.0	117.4	
29 Methyl acetate	43	2.876	2.869	0.007	98	340535	625.0	627.6	
30 Methylene Chloride	84	2.991	2.991	0.000	98	155443	125.0	122.6	
31 2-Methyl-2-propanol	59	3.314	3.289	0.025	46	66787	1250.0	1204.2	
32 Acrylonitrile	53	3.326	3.326	0.000	100	298883	1250.0	1257.0	
33 trans-1,2-Dichloroethene	96	3.326	3.332	-0.006	81	124131	125.0	122.7	
34 Methyl tert-butyl ether	73	3.375	3.374	0.001	97	254439	125.0	124.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	3.715	3.715	0.000	92	273620	125.0	125.0	
36 1,1-Dichloroethane	63	3.971	3.964	0.007	96	240009	125.0	125.0	
38 Vinyl acetate	43	4.050	4.050	0.000	97	82389	125.0	115.2	
41 2,2-Dichloropropane	77	4.798	4.798	0.000	65	99722	125.0	121.9	
42 cis-1,2-Dichloroethene	96	4.810	4.810	0.000	82	131018	125.0	123.3	
43 2-Butanone (MEK)	43	4.865	4.865	0.000	100	37114	125.0	126.1	
46 Chlorobromomethane	128	5.121	5.126	-0.005	94	50116	125.0	120.7	
48 Tetrahydrofuran	42	5.151	5.151	0.000	93	48539	250.0	247.4	
49 Chloroform	83	5.291	5.297	-0.006	94	189220	125.0	124.0	
50 1,1,1-Trichloroethane	97	5.443	5.443	0.000	99	148041	125.0	121.7	
51 Cyclohexane	56	5.510	5.510	0.000	93	286213	125.0	125.5	
53 Carbon tetrachloride	117	5.626	5.625	0.001	96	131386	125.0	117.5	
52 1,1-Dichloropropene	75	5.650	5.650	0.000	97	173729	125.0	127.2	
54 Benzene	78	5.875	5.875	0.000	97	493119	125.0	127.4	
59 Isobutyl alcohol	41	5.948	5.948	0.000	95	43028	3125.0	2879.1	
55 1,2-Dichloroethane	62	5.978	5.978	0.000	96	117416	125.0	123.9	
58 n-Heptane	43	6.295	6.294	0.001	94	246434	125.0	126.0	
61 Trichloroethene	130	6.666	6.666	0.000	97	121483	125.0	124.3	
63 Methylcyclohexane	83	6.903	6.903	0.000	92	242676	125.0	128.0	
64 1,2-Dichloropropane	63	6.952	6.951	0.001	98	119823	125.0	124.3	
65 Dibromomethane	93	7.043	7.037	0.006	92	46214	125.0	117.9	
67 1,4-Dioxane	88	7.061	7.055	0.006	96	13925	2500.0	2445.6	
68 Dichlorobromomethane	83	7.262	7.262	0.000	99	105486	125.0	120.1	
74 trans-1,3-Dichloropropene	75	7.724	7.724	0.000	94	149930	125.0	124.3	
72 4-Methyl-2-pentanone (MIBK	43	7.895	7.894	0.001	97	67348	125.0	126.2	
73 Toluene	91	8.047	8.046	0.001	99	511281	125.0	124.0	
71 cis-1,3-Dichloropropene	75	8.327	8.326	0.001	94	108129	125.0	119.4	
75 Ethyl methacrylate	69	8.412	8.411	0.001	92	98415	125.0	121.0	
76 1,1,2-Trichloroethane	97	8.515	8.515	0.000	90	74797	125.0	126.4	
77 Tetrachloroethene	164	8.558	8.558	0.000	97	105699	125.0	126.5	
78 1,3-Dichloropropane	76	8.667	8.667	0.000	94	136496	125.0	123.9	
79 2-Hexanone	43	8.752	8.752	0.000	94	39903	125.0	117.0	
81 Chlorodibromomethane	129	8.880	8.880	0.000	92	63160	125.0	118.7	
82 Ethylene Dibromide	107	8.984	8.983	0.001	96	69632	125.0	124.6	
84 Chlorobenzene	112	9.476	9.476	0.000	94	309663	125.0	128.1	
85 1,1,1,2-Tetrachloroethane	131	9.586	9.586	0.000	95	101151	125.0	129.8	
86 Ethylbenzene	106	9.592	9.592	0.000	98	197863	125.0	130.9	
87 m-Xylene & p-Xylene	106	9.732	9.726	0.006	97	244326	125.0	128.3	
88 o-Xylene	106	10.103	10.103	0.000	96	235705	125.0	129.0	
89 Styrene	104	10.127	10.127	0.000	95	358001	125.0	128.2	
90 Bromoform	173	10.298	10.297	0.001	96	28739	125.0	115.2	
91 Isopropylbenzene	105	10.480	10.480	0.000	95	595942	125.0	125.0	
94 Bromobenzene	156	10.772	10.772	0.000	92	121158	125.0	122.6	
93 1,1,2,2-Tetrachloroethane	83	10.803	10.802	0.001	95	78993	125.0	123.5	
96 trans-1,4-Dichloro-2-buten	53	10.845	10.839	0.006	73	19370	125.0	119.5	
95 1,2,3-Trichloropropane	110	10.851	10.851	0.000	86	23975	125.0	122.8	
97 N-Propylbenzene	120	10.894	10.894	0.000	98	178432	125.0	127.3	
98 2-Chlorotoluene	126	10.967	10.967	0.000	96	137343	125.0	129.0	
99 1,3,5-Trimethylbenzene	105	11.089	11.088	0.001	94	498241	125.0	124.8	
100 4-Chlorotoluene	126	11.095	11.094	0.001	98	135074	125.0	129.4	
101 tert-Butylbenzene	119	11.393	11.392	0.001	93	447222	125.0	123.8	
103 1,2,4-Trimethylbenzene	105	11.454	11.453	0.001	97	498255	125.0	123.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	11.618	11.617	0.001	94	673866	125.0	125.1	
105 1,3-Dichlorobenzene	146	11.715	11.715	0.000	99	252762	125.0	126.2	
106 4-Isopropyltoluene	119	11.782	11.782	0.000	97	559499	125.0	125.1	
107 1,4-Dichlorobenzene	146	11.825	11.824	0.001	97	245072	125.0	126.0	
111 1,2-Dichlorobenzene	146	12.165	12.165	0.000	98	230121	125.0	130.0	
110 n-Butylbenzene	91	12.184	12.183	0.001	97	505887	125.0	123.8	
112 1,2-Dibromo-3-Chloropropan	75	12.962	12.962	0.000	86	6973	125.0	112.3	
113 1,2,4-Trichlorobenzene	180	13.771	13.777	-0.006	93	112565	125.0	125.7	
115 Hexachlorobutadiene	225	13.930	13.929	0.001	90	110679	125.0	133.2	
116 Naphthalene	128	14.033	14.033	0.000	96	174371	125.0	127.0	
117 1,2,3-Trichlorobenzene	180	14.246	14.246	0.000	94	86618	125.0	130.3	
S 129 1,2-Dichloroethene, Total	96				0		250.0	246.0	
S 130 Xylenes, Total	106				0		250.0	257.3	
S 131 1,3-Dichloropropene, Total	1				0		250.0	243.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOAACRLOEINPR_00001	Amount Added:	30.00	Units: uL
voaWVA1st Res_00001	Amount Added:	5.00	Units: uL
VOA8260SURR_00038	Amount Added:	5.00	Units: uL
VOA8260VOAPRI_00125	Amount Added:	5.00	Units: uL
VOA8260INT_00038	Amount Added:	10.00	Units: uL

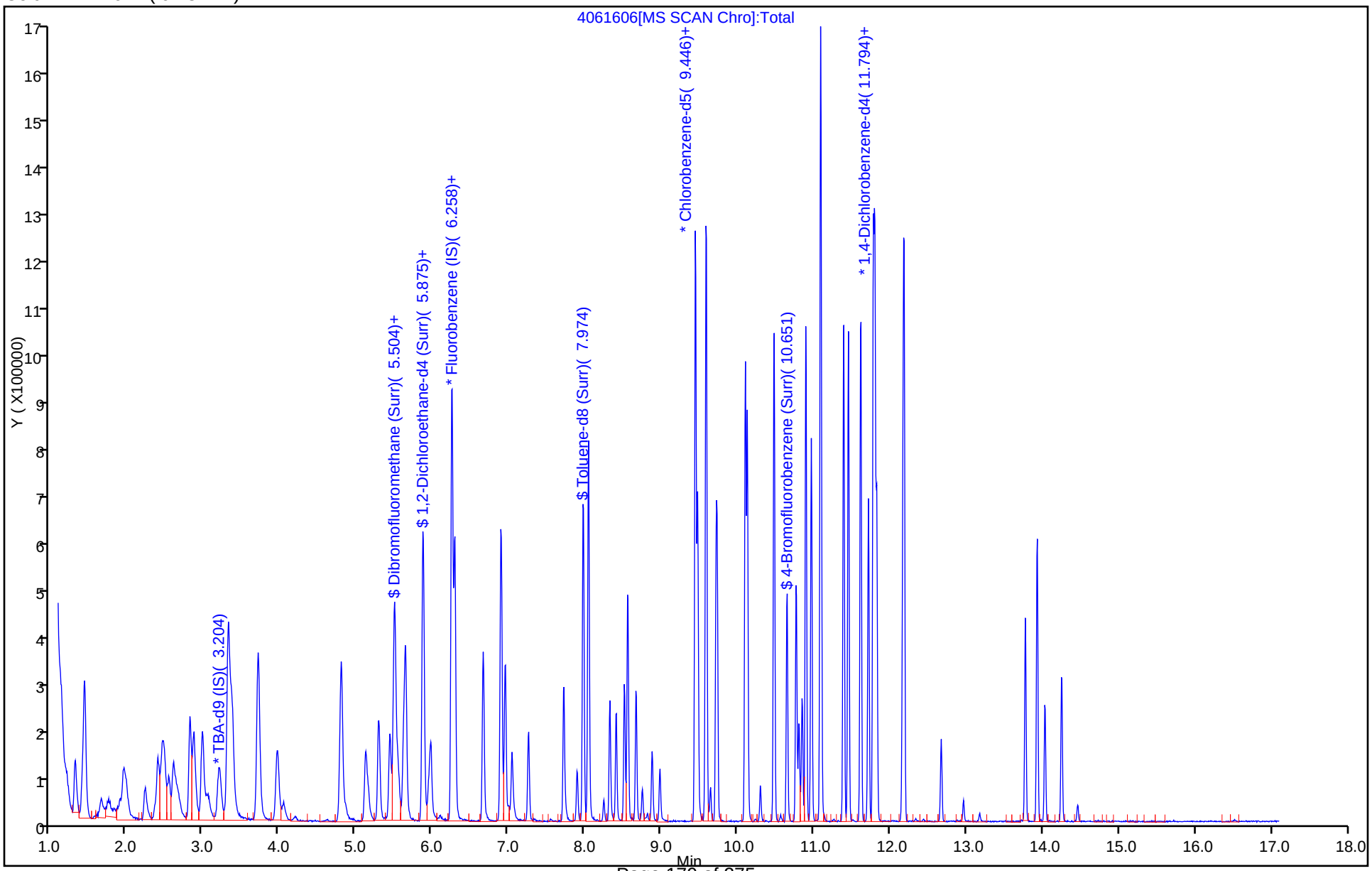
Report Date: 16-Jun-2015 17:51:19 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061606.D

Injection Date:	16-Jun-2015 13:38:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



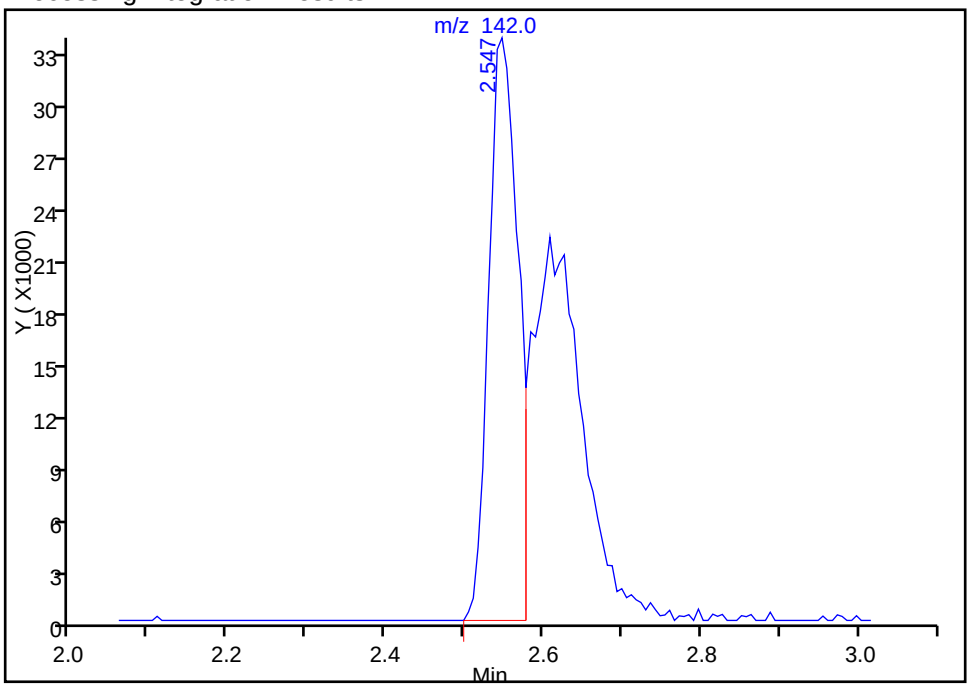
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061606.D
Injection Date: 16-Jun-2015 13:38:30 Instrument ID: CHHP4
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

24 Iodomethane, CAS: 74-88-4

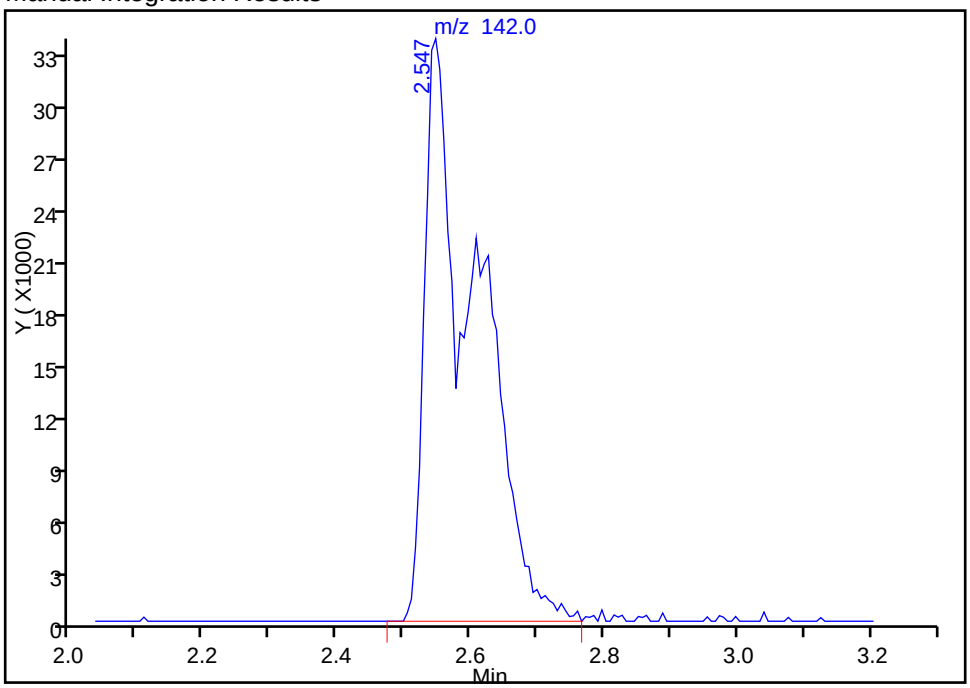
Processing Integration Results

RT: 2.55
Area: 87573
Amount: 87.556713
Amount Units: ng



Manual Integration Results

RT: 2.55
Area: 182073
Amount: 122.6138
Amount Units: ng



Reviewer: journetp, 16-Jun-2015 13:15:47
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061607.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 16-Jun-2015 14:02:30 ALS Bottle#: 15 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Misc. Info.: 180-0007420-007
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 16-Jun-2015 17:51:20 Calib Date: 16-Jun-2015 17:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: journetp Date: 16-Jun-2015 13:32:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.192	3.192	0.000	99	204309	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.258	6.258	0.000	98	862289	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.446	9.446	0.000	86	198273	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.800	11.800	0.000	95	273742	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.491	5.491	0.000	94	153862	200.0	206.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.887	5.887	0.000	94	155543	200.0	203.3	
$ 7 Toluene-d8 (Surr)	98	7.980	7.980	0.000	93	647984	200.0	212.5	
$ 8 4-Bromofluorobenzene (Surr	95	10.650	10.650	0.000	93	221064	200.0	201.3	
10 Dichlorodifluoromethane	85	1.203	1.203	0.000	99	255101	200.0	195.6	
11 Chloromethane	50	1.318	1.318	0.000	99	319903	200.0	198.9	
12 Vinyl chloride	62	1.416	1.416	0.000	98	248424	200.0	196.3	
13 Butadiene	54	1.440	1.434	0.006	92	248299	200.0	199.4	
14 Bromomethane	94	1.653	1.653	0.000	88	47060	200.0	197.2	
15 Chloroethane	64	1.750	1.750	0.000	96	50610	200.0	185.5	
16 Dichlorofluoromethane	67	1.957	1.957	0.000	99	205807	200.0	199.6	
17 Trichlorofluoromethane	101	1.957	1.957	0.000	97	188314	200.0	212.7	
19 Ethyl ether	59	2.231	2.231	0.000	97	92400	200.0	192.6	
20 Acrolein	56	2.365	2.365	0.000	98	48319	875.0	894.4	
21 1,1-Dichloroethene	96	2.401	2.401	0.000	94	149493	200.0	193.4	
22 1,1,2-Trichloro-1,2,2-trif	101	2.468	2.468	0.000	93	182469	200.0	187.9	
23 Acetone	43	2.535	2.535	0.000	51	51089	200.0	181.3	
24 Iodomethane	142	2.547	2.547	0.000	95	293580	200.0	193.8	
25 Carbon disulfide	76	2.608	2.608	0.000	100	563603	200.0	204.0	
28 3-Chloro-1-propene	76	2.821	2.821	0.000	93	133340	200.0	197.8	
29 Methyl acetate	43	2.869	2.869	0.000	99	555817	1000.0	1004.0	
30 Methylene Chloride	84	2.991	2.991	0.000	99	238565	200.0	201.8	
31 2-Methyl-2-propanol	59	3.289	3.289	0.000	97	110634	2000.0	1995.3	
32 Acrylonitrile	53	3.326	3.326	0.000	100	480098	2000.0	1979.1	
33 trans-1,2-Dichloroethene	96	3.332	3.332	0.000	82	200958	200.0	194.7	
34 Methyl tert-butyl ether	73	3.374	3.374	0.000	97	409619	200.0	196.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	3.715	3.715	0.000	93	426303	200.0	201.6	
36 1,1-Dichloroethane	63	3.964	3.964	0.000	96	391736	200.0	200.0	
38 Vinyl acetate	43	4.050	4.050	0.000	96	140461	200.0	191.5	
41 2,2-Dichloropropane	77	4.798	4.798	0.000	93	166099	200.0	199.1	
42 cis-1,2-Dichloroethene	96	4.810	4.810	0.000	82	217686	200.0	200.8	
43 2-Butanone (MEK)	43	4.865	4.865	0.000	99	58988	200.0	196.5	
46 Chlorobromomethane	128	5.126	5.126	0.000	93	81095	200.0	191.4	
48 Tetrahydrofuran	42	5.151	5.151	0.000	92	79971	400.0	399.5	
49 Chloroform	83	5.297	5.297	0.000	93	308172	200.0	198.0	
50 1,1,1-Trichloroethane	97	5.443	5.443	0.000	98	246315	200.0	198.4	
51 Cyclohexane	56	5.510	5.510	0.000	93	453688	200.0	194.9	
53 Carbon tetrachloride	117	5.625	5.625	0.000	96	230216	200.0	201.8	
52 1,1-Dichloropropene	75	5.650	5.650	0.000	96	280842	200.0	201.5	
54 Benzene	78	5.875	5.875	0.000	98	799103	200.0	202.3	
59 Isobutyl alcohol	41	5.948	5.948	0.000	95	71593	5000.0	4695.5	
55 1,2-Dichloroethane	62	5.978	5.978	0.000	96	192514	200.0	199.2	
58 n-Heptane	43	6.294	6.294	0.000	94	395902	200.0	198.4	
61 Trichloroethene	130	6.666	6.666	0.000	96	194804	200.0	195.4	
63 Methylcyclohexane	83	6.903	6.903	0.000	93	389469	200.0	205.0	
64 1,2-Dichloropropane	63	6.951	6.951	0.000	97	197632	200.0	200.9	
65 Dibromomethane	93	7.037	7.037	0.000	94	81326	200.0	203.4	
67 1,4-Dioxane	88	7.055	7.055	0.000	94	20249	4000.0	3485.9	
68 Dichlorobromomethane	83	7.262	7.262	0.000	97	184667	200.0	206.1	
74 trans-1,3-Dichloropropene	75	7.724	7.724	0.000	95	256360	200.0	213.5	
72 4-Methyl-2-pentanone (MIBK	43	7.894	7.894	0.000	97	111342	200.0	209.4	
73 Toluene	91	8.046	8.046	0.000	98	820374	200.0	199.8	
71 cis-1,3-Dichloropropene	75	8.326	8.326	0.000	94	191577	200.0	207.3	
75 Ethyl methacrylate	69	8.411	8.411	0.000	91	170447	200.0	209.9	
76 1,1,2-Trichloroethane	97	8.515	8.515	0.000	90	126439	200.0	214.5	
77 Tetrachloroethene	164	8.558	8.558	0.000	97	171884	200.0	206.5	
78 1,3-Dichloropropane	76	8.667	8.667	0.000	94	223115	200.0	203.3	
79 2-Hexanone	43	8.752	8.752	0.000	97	70711	200.0	208.1	
81 Chlorodibromomethane	129	8.880	8.880	0.000	91	111352	200.0	210.1	
82 Ethylene Dibromide	107	8.983	8.983	0.000	97	115079	200.0	206.8	
84 Chlorobenzene	112	9.476	9.476	0.000	94	498164	200.0	207.0	
85 1,1,1,2-Tetrachloroethane	131	9.586	9.586	0.000	96	164805	200.0	212.3	
86 Ethylbenzene	106	9.592	9.592	0.000	98	309244	200.0	205.4	
87 m-Xylene & p-Xylene	106	9.726	9.726	0.000	98	390131	200.0	205.6	
88 o-Xylene	106	10.103	10.103	0.000	97	376749	200.0	207.0	
89 Styrene	104	10.127	10.127	0.000	96	586478	200.0	210.8	
90 Bromoform	173	10.297	10.297	0.000	97	53505	200.0	208.1	
91 Isopropylbenzene	105	10.480	10.480	0.000	96	944633	200.0	198.9	
94 Bromobenzene	156	10.772	10.772	0.000	93	199146	200.0	202.9	
93 1,1,2,2-Tetrachloroethane	83	10.802	10.802	0.000	95	128728	200.0	202.1	
96 trans-1,4-Dichloro-2-buten	53	10.839	10.839	0.000	72	29753	200.0	184.9	
95 1,2,3-Trichloropropane	110	10.851	10.851	0.000	86	39009	200.0	200.9	
97 N-Propylbenzene	120	10.894	10.894	0.000	98	287211	200.0	206.4	
98 2-Chlorotoluene	126	10.967	10.967	0.000	96	217735	200.0	205.9	
99 1,3,5-Trimethylbenzene	105	11.088	11.088	0.000	96	775267	200.0	195.5	
100 4-Chlorotoluene	126	11.094	11.094	0.000	99	208854	200.0	201.4	
101 tert-Butylbenzene	119	11.392	11.392	0.000	94	708358	200.0	197.5	
103 1,2,4-Trimethylbenzene	105	11.453	11.453	0.000	97	789589	200.0	197.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	11.617	11.617	0.000	94	1045040	200.0	195.3	
105 1,3-Dichlorobenzene	146	11.715	11.715	0.000	99	408839	200.0	205.5	
106 4-Isopropyltoluene	119	11.782	11.782	0.000	96	871012	200.0	196.1	
107 1,4-Dichlorobenzene	146	11.824	11.824	0.000	95	386630	200.0	200.1	
111 1,2-Dichlorobenzene	146	12.165	12.165	0.000	98	356988	200.0	203.0	
110 n-Butylbenzene	91	12.183	12.183	0.000	98	809753	200.0	199.6	
112 1,2-Dibromo-3-Chloropropan	75	12.962	12.962	0.000	85	12891	200.0	199.7	
113 1,2,4-Trichlorobenzene	180	13.777	13.777	0.000	94	178012	200.0	200.1	
115 Hexachlorobutadiene	225	13.929	13.929	0.000	95	164415	200.0	199.3	
116 Naphthalene	128	14.033	14.033	0.000	97	275743	200.0	202.3	
117 1,2,3-Trichlorobenzene	180	14.246	14.246	0.000	95	138039	200.0	209.0	
S 129 1,2-Dichloroethene, Total	96				0		400.0	395.5	
S 130 Xylenes, Total	106				0		400.0	412.7	
S 131 1,3-Dichloropropene, Total	1				0		400.0	420.8	

Reagents:

VOAACRLOEINPR_00001	Amount Added:	35.00	Units: uL
voaWVA1st Res_00001	Amount Added:	8.00	Units: uL
VOA8260SURR_00038	Amount Added:	8.00	Units: uL
VOA8260VOAPRI_00125	Amount Added:	8.00	Units: uL
VOA8260INT_00038	Amount Added:	10.00	Units: uL

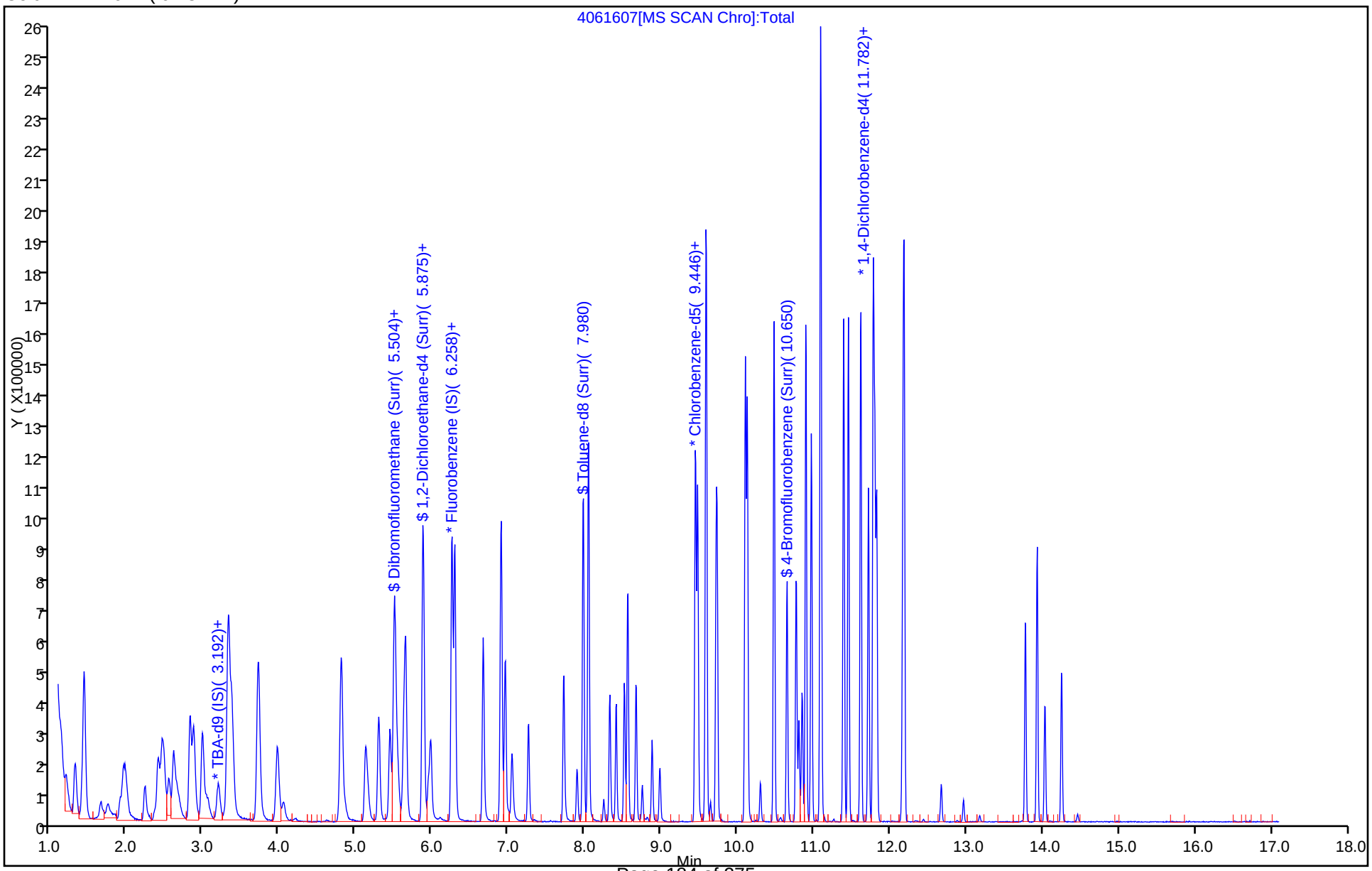
Report Date: 16-Jun-2015 17:51:21 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061607.D

Injection Date:	16-Jun-2015 14:02:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	ICIS			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061608.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-Jun-2015 14:27:30 ALS Bottle#: 16 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0007420-008
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 16-Jun-2015 17:51:21 Calib Date: 16-Jun-2015 17:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: journetp Date: 16-Jun-2015 14:47:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.192	3.192	0.000	98	208645	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.258	6.258	0.000	98	867110	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.446	9.446	0.000	85	205535	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.800	11.800	0.000	94	278189	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.492	5.491	0.001	93	186456	250.0	248.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.887	5.887	0.000	96	185245	250.0	240.8	
$ 7 Toluene-d8 (Surr)	98	7.980	7.980	0.000	93	788715	250.0	249.5	
$ 8 4-Bromofluorobenzene (Surr	95	10.650	10.650	0.000	92	278416	250.0	244.5	
10 Dichlorodifluoromethane	85	1.209	1.203	0.006	99	320106	250.0	244.1	
11 Chloromethane	50	1.324	1.318	0.006	99	399812	250.0	247.2	
12 Vinyl chloride	62	1.422	1.416	0.006	98	316681	250.0	248.9	
13 Butadiene	54	1.440	1.434	0.006	95	309979	250.0	247.5	
14 Bromomethane	94	1.659	1.653	0.006	92	56726	250.0	236.3	
15 Chloroethane	64	1.750	1.750	0.000	98	64094	250.0	233.6	
16 Dichlorofluoromethane	67	1.957	1.957	0.000	96	264656	250.0	255.3	
17 Trichlorofluoromethane	101	1.969	1.957	0.012	98	245461	250.0	275.8	
19 Ethyl ether	59	2.231	2.231	0.000	95	113180	250.0	234.5	
20 Acrolein	56	2.359	2.365	-0.006	98	55100	1000.0	1014.2	
21 1,1-Dichloroethene	96	2.407	2.401	0.006	96	191525	250.0	246.4	
22 1,1,2-Trichloro-1,2,2-trif	101	2.480	2.468	0.012	94	237371	250.0	243.1	
23 Acetone	43	2.529	2.535	-0.006	98	70005	250.0	250.5	
24 Iodomethane	142	2.553	2.547	0.006	96	372736	250.0	244.7	
25 Carbon disulfide	76	2.608	2.608	0.000	99	744950	250.0	268.1	
28 3-Chloro-1-propene	76	2.821	2.821	0.000	93	174586	250.0	257.6	
29 Methyl acetate	43	2.870	2.869	0.001	99	667420	1250.0	1198.9	
30 Methylene Chloride	84	2.985	2.991	-0.006	99	288820	250.0	250.0	
31 2-Methyl-2-propanol	59	3.301	3.289	0.012	98	135383	2500.0	2390.9	
32 Acrylonitrile	53	3.326	3.326	0.000	100	611665	2500.0	2507.4	
33 trans-1,2-Dichloroethene	96	3.332	3.332	0.000	83	265623	250.0	256.0	
34 Methyl tert-butyl ether	73	3.374	3.374	0.000	97	507628	250.0	241.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	3.721	3.715	0.006	92	539559	250.0	258.9	
36 1,1-Dichloroethane	63	3.971	3.964	0.007	97	486716	250.0	247.1	
38 Vinyl acetate	43	4.044	4.050	-0.006	97	189278	250.0	256.0	
41 2,2-Dichloropropane	77	4.804	4.798	0.006	58	215988	250.0	257.4	
42 cis-1,2-Dichloroethene	96	4.810	4.810	0.000	83	268527	250.0	246.3	
43 2-Butanone (MEK)	43	4.865	4.865	0.000	100	73541	250.0	243.6	
46 Chlorobromomethane	128	5.127	5.126	0.001	94	105587	250.0	247.9	
48 Tetrahydrofuran	42	5.151	5.151	0.000	94	100550	500.0	499.6	
49 Chloroform	83	5.297	5.297	0.000	93	384071	250.0	245.3	
50 1,1,1-Trichloroethane	97	5.443	5.443	0.000	99	315307	250.0	252.6	
51 Cyclohexane	56	5.510	5.510	0.000	93	575376	250.0	245.9	
53 Carbon tetrachloride	117	5.625	5.625	0.000	97	295972	250.0	258.0	
52 1,1-Dichloropropene	75	5.650	5.650	0.000	95	345552	250.0	246.5	
54 Benzene	78	5.875	5.875	0.000	97	980506	250.0	246.9	
59 Isobutyl alcohol	41	5.954	5.948	0.006	96	93942	6250.0	6127.0	
55 1,2-Dichloroethane	62	5.978	5.978	0.000	97	240811	250.0	247.7	
58 n-Heptane	43	6.295	6.294	0.001	95	500325	250.0	249.3	
61 Trichloroethene	130	6.666	6.666	0.000	98	248321	250.0	247.7	
63 Methylcyclohexane	83	6.903	6.903	0.000	94	497067	250.0	262.0	
64 1,2-Dichloropropane	63	6.958	6.951	0.007	98	241478	250.0	244.1	
65 Dibromomethane	93	7.043	7.037	0.006	92	99501	250.0	247.5	
67 1,4-Dioxane	88	7.061	7.055	0.006	97	27834	5000.0	4765.0	
68 Dichlorobromomethane	83	7.256	7.262	-0.006	97	231383	250.0	256.9	
74 trans-1,3-Dichloropropene	75	7.724	7.724	0.000	94	325641	250.0	261.6	
72 4-Methyl-2-pentanone (MIBK	43	7.895	7.894	0.000	96	139895	250.0	253.8	
73 Toluene	91	8.047	8.046	0.001	98	1013965	250.0	238.2	
71 cis-1,3-Dichloropropene	75	8.326	8.326	0.000	94	237791	250.0	255.9	
75 Ethyl methacrylate	69	8.412	8.411	0.001	92	204507	250.0	243.1	
76 1,1,2-Trichloroethane	97	8.515	8.515	0.000	89	150054	250.0	245.6	
77 Tetrachloroethene	164	8.564	8.558	0.006	98	214066	250.0	248.1	
78 1,3-Dichloropropane	76	8.667	8.667	0.000	94	278123	250.0	244.5	
79 2-Hexanone	43	8.752	8.752	0.000	98	89448	250.0	254.0	
81 Chlorodibromomethane	129	8.880	8.880	0.000	91	143254	250.0	260.7	
82 Ethylene Dibromide	107	8.983	8.983	0.000	99	143566	250.0	248.9	
84 Chlorobenzene	112	9.476	9.476	0.000	94	622582	250.0	249.5	
85 1,1,1,2-Tetrachloroethane	131	9.586	9.586	0.000	97	201032	250.0	249.9	
86 Ethylbenzene	106	9.592	9.592	0.000	98	390147	250.0	249.9	
87 m-Xylene & p-Xylene	106	9.726	9.726	0.000	98	490804	250.0	249.6	
88 o-Xylene	106	10.103	10.103	0.000	96	462124	250.0	245.0	
89 Styrene	104	10.127	10.127	0.000	96	725694	250.0	251.6	
90 Bromoform	173	10.297	10.297	0.000	97	66765	250.0	248.8	
91 Isopropylbenzene	105	10.480	10.480	0.000	96	1165379	250.0	236.7	
94 Bromobenzene	156	10.772	10.772	0.000	92	248761	250.0	249.4	
93 1,1,2,2-Tetrachloroethane	83	10.802	10.802	0.000	94	165162	250.0	250.1	
96 trans-1,4-Dichloro-2-buten	53	10.845	10.839	0.006	74	40800	250.0	249.5	
95 1,2,3-Trichloropropane	110	10.851	10.851	0.000	87	51305	250.0	259.9	
97 N-Propylbenzene	120	10.900	10.894	0.006	98	352193	250.0	249.0	
98 2-Chlorotoluene	126	10.967	10.967	0.000	96	270457	250.0	251.7	
99 1,3,5-Trimethylbenzene	105	11.088	11.088	0.000	96	957281	250.0	237.5	
100 4-Chlorotoluene	126	11.094	11.094	0.000	99	266538	250.0	253.0	
101 tert-Butylbenzene	119	11.392	11.392	0.000	94	875091	250.0	240.1	
103 1,2,4-Trimethylbenzene	105	11.453	11.453	0.000	97	963964	250.0	237.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	11.618	11.617	0.001	94	1278774	250.0	235.2	
105 1,3-Dichlorobenzene	146	11.715	11.715	0.000	99	505991	250.0	250.3	
106 4-Isopropyltoluene	119	11.782	11.782	0.000	96	1081087	250.0	239.5	
107 1,4-Dichlorobenzene	146	11.824	11.824	0.000	95	485448	250.0	247.2	
111 1,2-Dichlorobenzene	146	12.171	12.165	0.006	98	440600	250.0	246.6	
110 n-Butylbenzene	91	12.183	12.183	0.000	97	981609	250.0	238.1	
112 1,2-Dibromo-3-Chloropropan	75	12.962	12.962	0.000	85	17280	250.0	255.6	
113 1,2,4-Trichlorobenzene	180	13.777	13.777	0.000	94	231001	250.0	255.5	
115 Hexachlorobutadiene	225	13.929	13.929	0.000	97	204012	250.0	243.4	
116 Naphthalene	128	14.027	14.033	-0.006	97	349617	250.0	252.4	
117 1,2,3-Trichlorobenzene	180	14.252	14.246	0.006	95	168738	250.0	251.4	
S 129 1,2-Dichloroethene, Total	96				0		500.0	502.2	
S 130 Xylenes, Total	106				0		500.0	494.6	
S 131 1,3-Dichloropropene, Total	1				0		500.0	517.5	

Reagents:

VOAACRLOEINPR_00001	Amount Added:	40.00	Units: uL
voaWVA1st Res_00001	Amount Added:	10.00	Units: uL
VOA8260SURR_00038	Amount Added:	10.00	Units: uL
VOA8260VOAPRI_00125	Amount Added:	10.00	Units: uL
VOA8260INT_00038	Amount Added:	10.00	Units: uL

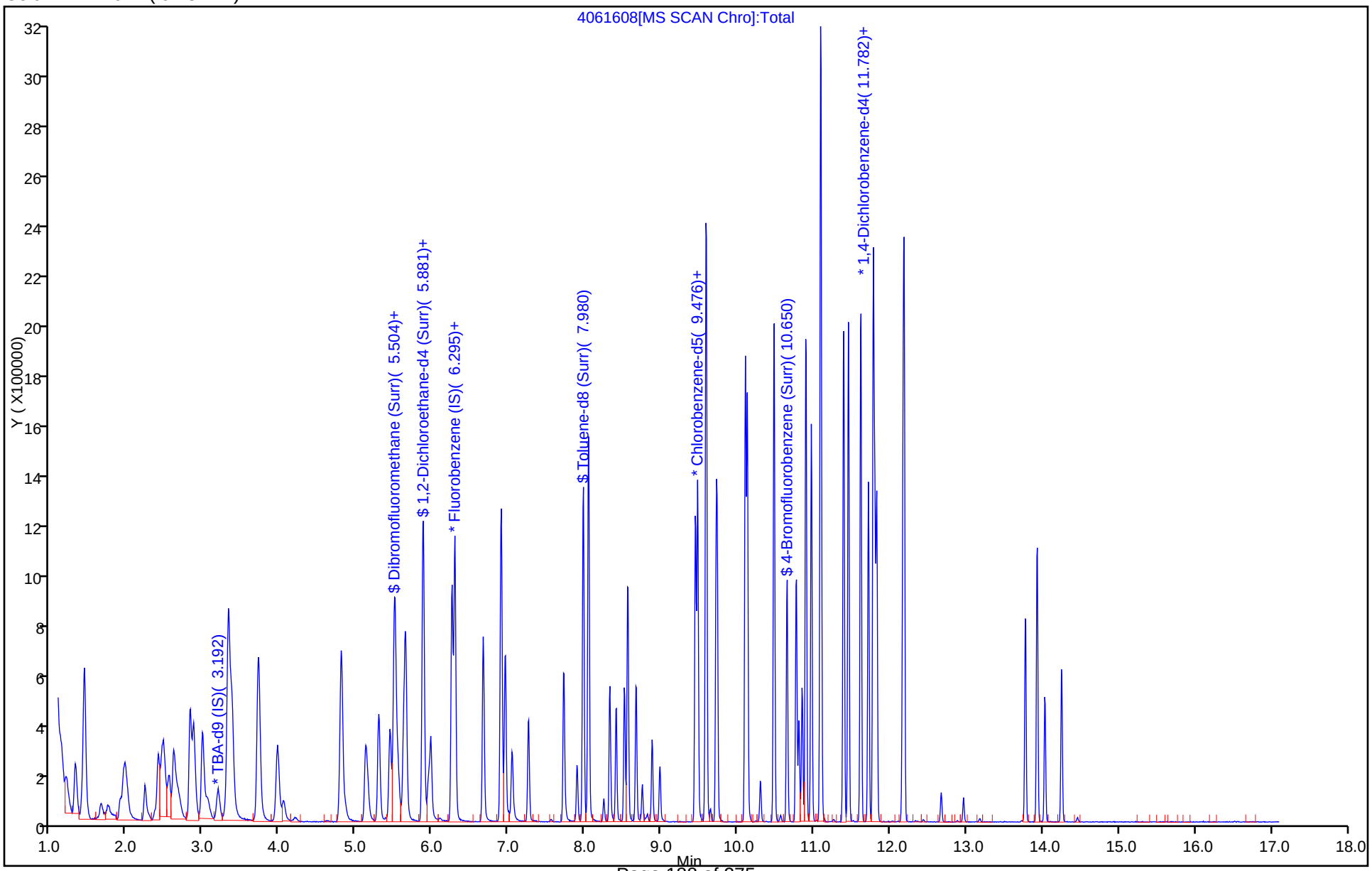
Report Date: 16-Jun-2015 17:51:22 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061608.D

Injection Date:	16-Jun-2015 14:27:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061609.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-Jun-2015 14:51:30 ALS Bottle#: 17 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0007420-009
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 16-Jun-2015 17:51:23 Calib Date: 16-Jun-2015 17:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: journetp Date: 16-Jun-2015 14:46:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.198	3.192	0.006	99	203874	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.258	6.258	0.000	98	842561	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.451	9.446	0.005	84	202693	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.800	11.800	0.000	96	284424	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.491	5.491	0.000	94	452943	625.0	621.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.887	5.887	0.000	97	456187	625.0	610.3	
$ 7 Toluene-d8 (Surr)	98	7.979	7.980	-0.001	93	1753890	625.0	562.6	
$ 8 4-Bromofluorobenzene (Surr	95	10.650	10.650	0.000	92	670810	625.0	597.5	
10 Dichlorodifluoromethane	85	1.202	1.203	-0.001	99	776830	625.0	609.7	
11 Chloromethane	50	1.324	1.318	0.006	99	928051	625.0	590.5	
12 Vinyl chloride	62	1.427	1.416	0.011	98	707290	625.0	572.1	
13 Butadiene	54	1.440	1.434	0.006	94	708565	625.0	582.3	
14 Bromomethane	94	1.659	1.653	0.006	92	131547	625.0	564.0	
15 Chloroethane	64	1.756	1.750	0.006	96	152053	625.0	570.3	
16 Dichlorofluoromethane	67	1.957	1.957	0.000	98	557951	625.0	553.9	
17 Trichlorofluoromethane	101	1.975	1.957	0.018	71	525248	625.0	607.3	M
19 Ethyl ether	59	2.230	2.231	-0.001	96	278548	625.0	594.1	
20 Acrolein	56	2.358	2.365	-0.007	99	59984	1125.0	1136.3	
21 1,1-Dichloroethene	96	2.401	2.401	0.000	94	451723	625.0	598.1	
22 1,1,2-Trichloro-1,2,2-trif	101	2.480	2.468	0.012	95	559695	625.0	589.9	
23 Acetone	43	2.535	2.535	0.000	48	164831	625.0	620.5	
24 Iodomethane	142	2.547	2.547	0.000	97	901333	625.0	608.9	
25 Carbon disulfide	76	2.601	2.608	-0.007	100	1864054	625.0	690.4	
28 3-Chloro-1-propene	76	2.820	2.821	-0.001	93	441644	625.0	670.6	
29 Methyl acetate	43	2.869	2.869	0.000	98	1634432	3125.0	3021.5	
30 Methylene Chloride	84	2.979	2.991	-0.012	98	655989	625.0	630.2	
31 2-Methyl-2-propanol	59	3.301	3.289	0.012	61	336531	6250.0	6082.4	
32 Acrylonitrile	53	3.325	3.326	-0.001	100	1429049	6250.0	6028.8	
33 trans-1,2-Dichloroethene	96	3.319	3.332	-0.013	87	620420	625.0	615.3	
34 Methyl tert-butyl ether	73	3.374	3.374	0.000	97	1234603	625.0	604.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	3.715	3.715	0.000	92	1218808	625.0	628.6	
36 1,1-Dichloroethane	63	3.964	3.964	0.000	96	1178992	625.0	616.0	
38 Vinyl acetate	43	4.043	4.050	-0.007	97	485451	625.0	673.0	
41 2,2-Dichloropropane	77	4.798	4.798	0.000	63	512888	625.0	629.1	
42 cis-1,2-Dichloroethene	96	4.810	4.810	0.000	83	645659	625.0	609.4	
43 2-Butanone (MEK)	43	4.858	4.865	-0.007	100	186403	625.0	635.5	
46 Chlorobromomethane	128	5.126	5.126	0.000	94	261741	625.0	632.3	
48 Tetrahydrofuran	42	5.150	5.151	-0.001	92	241699	1250.0	1235.8	
49 Chloroform	83	5.296	5.297	-0.001	93	918423	625.0	603.8	
50 1,1,1-Trichloroethane	97	5.442	5.443	-0.001	99	770444	625.0	635.2	
51 Cyclohexane	56	5.509	5.510	-0.001	93	1331359	625.0	585.5	
53 Carbon tetrachloride	117	5.625	5.625	0.000	97	728933	625.0	653.8	
52 1,1-Dichloropropene	75	5.649	5.650	-0.001	95	829506	625.0	609.0	
54 Benzene	78	5.874	5.875	-0.001	98	2222065	625.0	575.8	
59 Isobutyl alcohol	41	5.953	5.948	0.005	96	246701	15625	16559	
55 1,2-Dichloroethane	62	5.978	5.978	0.000	96	584003	625.0	618.3	
58 n-Heptane	43	6.294	6.294	0.000	94	1125140	625.0	577.0	
61 Trichloroethene	130	6.665	6.666	-0.001	95	585212	625.0	600.8	
63 Methylcyclohexane	83	6.902	6.903	-0.001	93	1114039	625.0	612.7	
64 1,2-Dichloropropane	63	6.957	6.951	0.006	97	589798	625.0	613.5	
65 Dibromomethane	93	7.042	7.037	0.005	93	247153	625.0	632.6	
67 1,4-Dioxane	88	7.055	7.055	0.000	97	73502	12500	12950	
68 Dichlorobromomethane	83	7.261	7.262	-0.001	96	595546	625.0	680.4	
74 trans-1,3-Dichloropropene	75	7.724	7.724	0.000	95	807831	625.0	658.0	
72 4-Methyl-2-pentanone (MIBK	43	7.894	7.894	0.000	97	345652	625.0	636.0	
73 Toluene	91	8.046	8.046	0.000	98	2188028	625.0	521.2	
71 cis-1,3-Dichloropropene	75	8.326	8.326	0.000	94	631065	625.0	698.9	
75 Ethyl methacrylate	69	8.411	8.411	0.000	92	507647	625.0	625.4	
76 1,1,2-Trichloroethane	97	8.521	8.515	0.006	90	372935	625.0	619.0	
77 Tetrachloroethene	164	8.563	8.558	0.005	98	497765	625.0	584.9	
78 1,3-Dichloropropane	76	8.673	8.667	0.006	94	684872	625.0	610.6	
79 2-Hexanone	43	8.752	8.752	0.000	96	220657	625.0	635.3	
81 Chlorodibromomethane	129	8.880	8.880	0.000	91	400088	625.0	738.3	
82 Ethylene Dibromide	107	8.983	8.983	0.000	98	362626	625.0	637.4	
84 Chlorobenzene	112	9.476	9.476	0.000	91	1426798	625.0	579.8	
85 1,1,1,2-Tetrachloroethane	131	9.585	9.586	-0.001	94	493662	625.0	622.2	
86 Ethylbenzene	106	9.591	9.592	-0.001	98	850838	625.0	552.7	
87 m-Xylene & p-Xylene	106	9.731	9.726	0.005	98	1114706	625.0	574.8	
88 o-Xylene	106	10.102	10.103	-0.001	96	1054356	625.0	566.8	
89 Styrene	104	10.133	10.127	0.006	95	1637057	625.0	575.6	
90 Bromoform	173	10.303	10.297	0.006	98	207317	625.0	765.6	
91 Isopropylbenzene	105	10.480	10.480	0.000	96	2452321	625.0	505.1	
94 Bromobenzene	156	10.772	10.772	0.000	93	614353	625.0	602.3	
93 1,1,2,2-Tetrachloroethane	83	10.802	10.802	0.000	94	410811	625.0	630.8	
96 trans-1,4-Dichloro-2-buten	53	10.845	10.839	0.006	89	115197	625.0	689.0	
95 1,2,3-Trichloropropane	110	10.851	10.851	0.000	86	122896	625.0	608.2	
97 N-Propylbenzene	120	10.899	10.894	0.005	97	809616	625.0	559.9	
98 2-Chlorotoluene	126	10.972	10.967	0.005	96	632988	625.0	576.2	
99 1,3,5-Trimethylbenzene	105	11.088	11.088	0.000	96	2031021	625.0	492.9	
100 4-Chlorotoluene	126	11.100	11.094	0.006	98	596803	625.0	554.0	
101 tert-Butylbenzene	119	11.392	11.392	0.000	93	1919073	625.0	515.0	
103 1,2,4-Trimethylbenzene	105	11.453	11.453	0.000	97	2138259	625.0	515.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	11.617	11.617	0.000	95	2725330	625.0	490.3	
105 1,3-Dichlorobenzene	146	11.721	11.715	0.006	98	1202036	625.0	581.6	
106 4-Isopropyltoluene	119	11.781	11.782	-0.001	95	2298025	625.0	498.0	
107 1,4-Dichlorobenzene	146	11.824	11.824	0.000	93	1169151	625.0	582.4	
111 1,2-Dichlorobenzene	146	12.171	12.165	0.006	98	1056520	625.0	578.3	
110 n-Butylbenzene	91	12.183	12.183	0.000	96	2093713	625.0	496.7	
112 1,2-Dibromo-3-Chloropropan	75	12.962	12.962	0.000	87	51753	625.0	624.7	
113 1,2,4-Trichlorobenzene	180	13.777	13.777	0.000	94	573907	625.0	621.0	
115 Hexachlorobutadiene	225	13.929	13.929	0.000	96	483340	625.0	563.9	
116 Naphthalene	128	14.032	14.033	-0.001	97	892613	625.0	630.2	
117 1,2,3-Trichlorobenzene	180	14.251	14.246	0.005	94	424278	625.0	618.3	
S 129 1,2-Dichloroethene, Total	96				0		1250.0	1224.6	
S 130 Xylenes, Total	106				0		1250.0	1141.6	
S 131 1,3-Dichloropropene, Total	1				0		1250.0	1357.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOAACRLOEINPR_00001	Amount Added:	45.00	Units: uL
voaWVA1st Res_00001	Amount Added:	25.00	Units: uL
VOA8260SURR_00038	Amount Added:	25.00	Units: uL
VOA8260VOAPRI_00125	Amount Added:	25.00	Units: uL
VOA8260INT_00038	Amount Added:	10.00	Units: uL

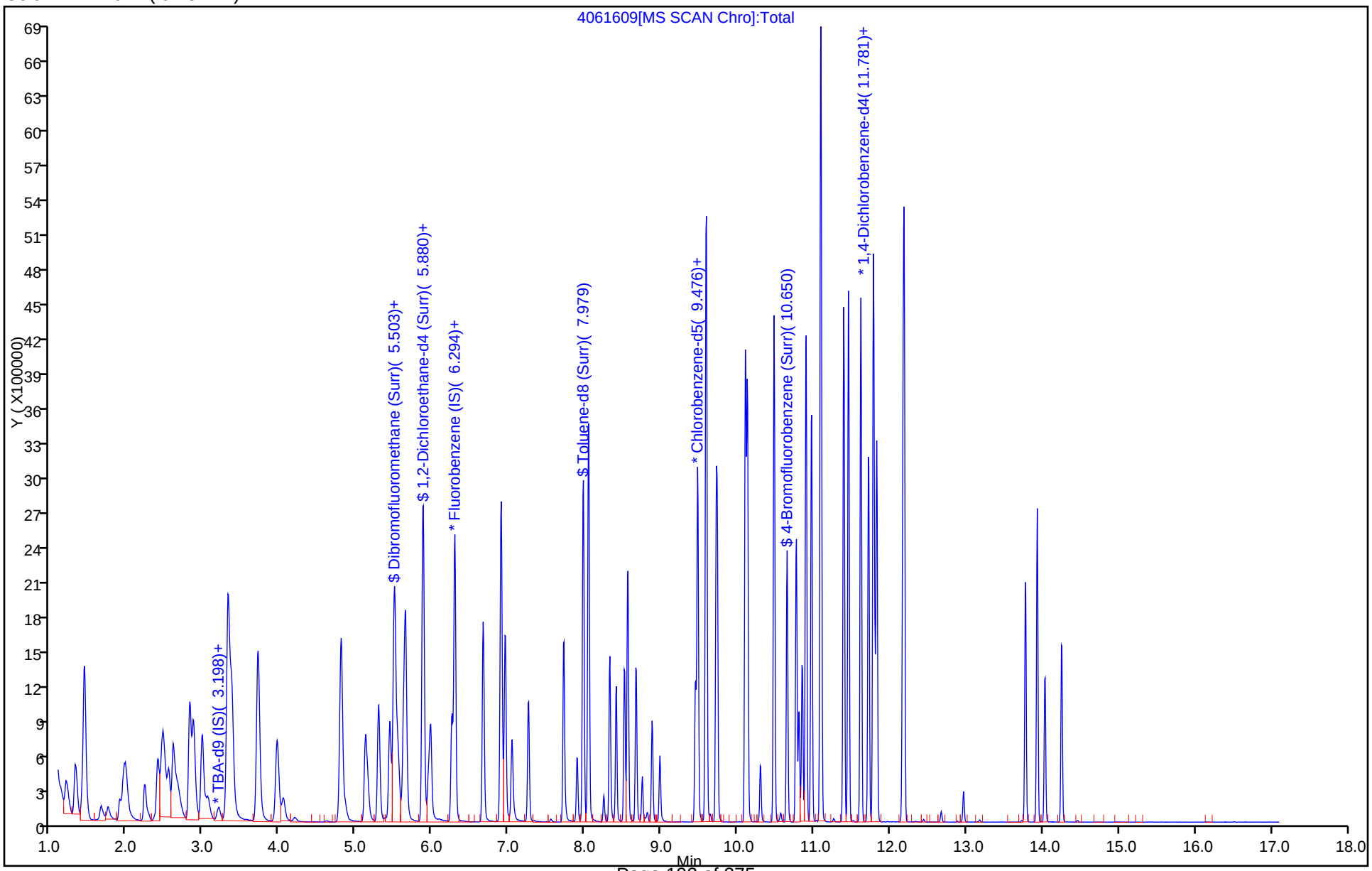
Report Date: 16-Jun-2015 17:51:23 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061609.D

Injection Date:	16-Jun-2015 14:51:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



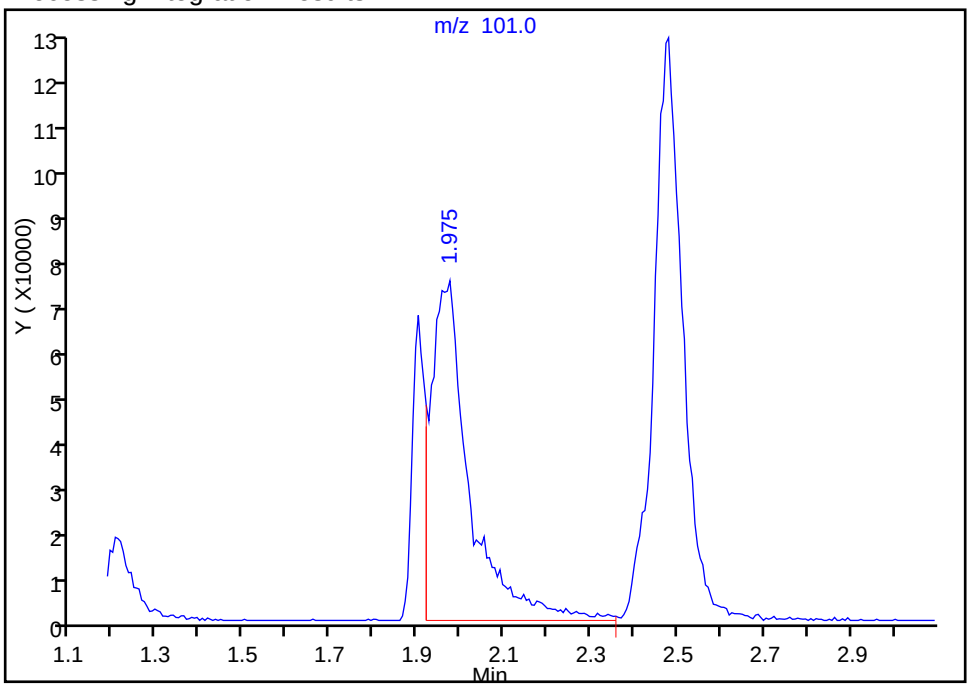
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061609.D
Injection Date: 16-Jun-2015 14:51:30 Instrument ID: CHHP4
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

17 Trichlorofluoromethane, CAS: 75-69-4

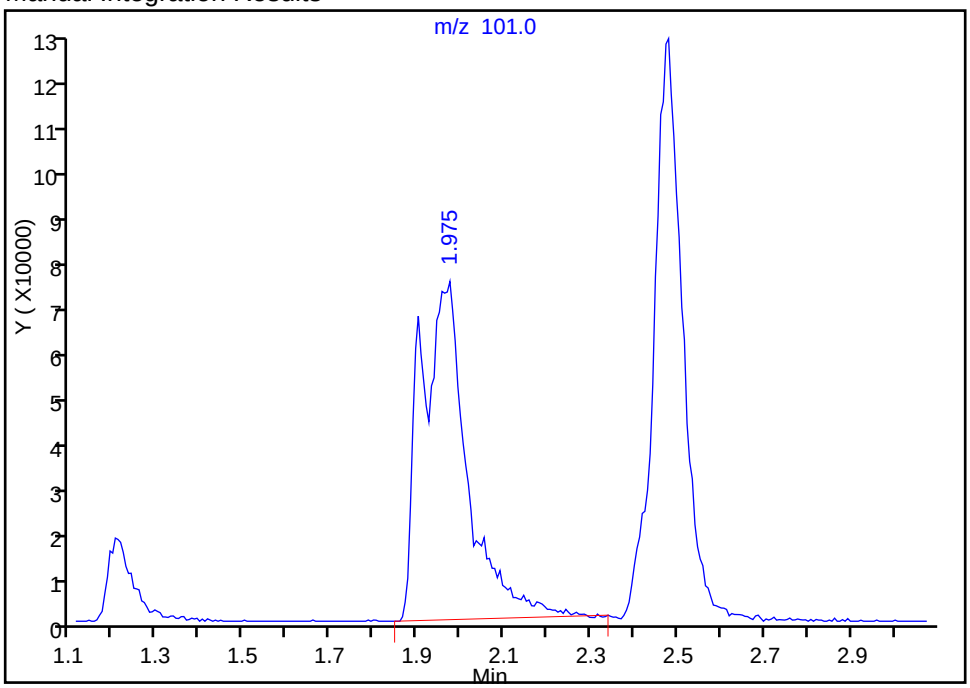
Processing Integration Results

RT: 1.97
Area: 434154
Amount: 527.2714
Amount Units: ng



Manual Integration Results

RT: 1.97
Area: 525248
Amount: 607.2931
Amount Units: ng



Reviewer: journetp, 16-Jun-2015 14:46:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061610.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 16-Jun-2015 15:16:30 ALS Bottle#: 18 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0007420-010
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 16-Jun-2015 17:51:24 Calib Date: 16-Jun-2015 17:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: journetp Date: 16-Jun-2015 14:45:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.229	3.192	0.037	67	225781	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.259	6.258	0.001	98	883581	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.447	9.446	0.001	85	213555	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.801	11.800	0.001	84	294125	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.492	5.491	0.001	74	896068	1250.0	1172.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.888	5.887	0.001	30	971604	1250.0	1239.6	
$ 7 Toluene-d8 (Surr)	98	7.981	7.980	0.001	94	3079639	1250.0	937.6	
$ 8 4-Bromofluorobenzene (Surr	95	10.651	10.650	0.001	90	1315017	1250.0	1111.6	
10 Dichlorodifluoromethane	85	1.204	1.203	0.001	98	1511639	1250.0	1131.3	
11 Chloromethane	50	1.331	1.318	0.013	86	1790016	1250.0	1086.1	
12 Vinyl chloride	62	1.429	1.416	0.013	98	1409860	1250.0	1087.4	
13 Butadiene	54	1.441	1.434	0.007	93	1405162	1250.0	1101.2	
14 Bromomethane	94	1.660	1.653	0.007	90	261304	1250.0	1068.3	
15 Chloroethane	64	1.751	1.750	0.001	80	297756	1250.0	1065.0	
16 Dichlorofluoromethane	67	1.958	1.957	0.001	97	957963	1250.0	906.8	
17 Trichlorofluoromethane	101	1.964	1.957	0.007	56	902912	1250.0	995.5	
19 Ethyl ether	59	2.238	2.231	0.007	95	584176	1250.0	1188.0	
20 Acrolein	56	2.378	2.365	0.013	77	68978	1250.0	1246.0	
21 1,1-Dichloroethene	96	2.451	2.401	0.050	76	972865	1250.0	1228.2	M
22 1,1,2-Trichloro-1,2,2-trif	101	2.475	2.468	0.007	85	1275114	1250.0	1281.4	
23 Acetone	43	2.548	2.535	0.013	27	349429	1250.0	1264.1	
24 Iodomethane	142	2.542	2.547	-0.005	96	1790639	1250.0	1153.5	M
25 Carbon disulfide	76	2.603	2.608	-0.005	99	3794262	1250.0	1340.1	
28 3-Chloro-1-propene	76	2.822	2.821	0.001	83	903369	1250.0	1308.1	
29 Methyl acetate	43	2.877	2.869	0.008	98	3334573	6250.0	5878.3	
30 Methylene Chloride	84	2.986	2.991	-0.005	91	1282817	1250.0	1204.8	
31 2-Methyl-2-propanol	59	3.327	3.289	0.038	45	689825	12500	11258	
32 Acrylonitrile	53	3.339	3.326	0.013	99	2826406	12500	11370	
33 trans-1,2-Dichloroethene	96	3.321	3.332	-0.011	96	1182485	1250.0	1118.2	
34 Methyl tert-butyl ether	73	3.382	3.374	0.008	92	2488985	1250.0	1162.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	3.710	3.715	-0.005	94	2353388	1250.0	1174.4	
36 1,1-Dichloroethane	63	3.972	3.964	0.008	96	2280706	1250.0	1136.2	
38 Vinyl acetate	43	4.051	4.050	0.001	97	971407	1250.0	1282.6	
41 2,2-Dichloropropane	77	4.799	4.798	0.001	62	995207	1250.0	1164.0	
42 cis-1,2-Dichloroethene	96	4.811	4.810	0.001	83	1265583	1250.0	1139.0	
43 2-Butanone (MEK)	43	4.866	4.865	0.001	99	391504	1250.0	1272.8	
46 Chlorobromomethane	128	5.121	5.126	-0.005	91	529493	1250.0	1219.8	
48 Tetrahydrofuran	42	5.158	5.151	0.007	90	513946	2500.0	2505.8	
49 Chloroform	83	5.298	5.297	0.001	79	1777696	1250.0	1114.4	
50 1,1,1-Trichloroethane	97	5.444	5.443	0.001	53	1543383	1250.0	1213.5	
51 Cyclohexane	56	5.511	5.510	0.001	71	2557200	1250.0	1072.3	
53 Carbon tetrachloride	117	5.626	5.625	0.001	98	1502927	1250.0	1285.4	
52 1,1-Dichloropropene	75	5.651	5.650	0.001	92	1593530	1250.0	1115.7	
54 Benzene	78	5.876	5.875	0.001	98	3919415	1250.0	968.5	
59 Isobutyl alcohol	41	5.961	5.948	0.013	95	554436	31250	35487	
55 1,2-Dichloroethane	62	5.979	5.978	0.001	89	1197858	1250.0	1209.4	
58 n-Heptane	43	6.295	6.294	0.001	92	2076728	1250.0	1015.6	
61 Trichloroethene	130	6.667	6.666	0.001	91	1141959	1250.0	1118.0	
63 Methylcyclohexane	83	6.904	6.903	0.001	92	2115968	1250.0	1115.1	
64 1,2-Dichloropropane	63	6.959	6.951	0.008	91	1131196	1250.0	1122.1	
65 Dibromomethane	93	7.044	7.037	0.007	93	519870	1250.0	1268.9	
67 1,4-Dioxane	88	7.062	7.055	0.007	64	141753	25000	23815	
68 Dichlorobromomethane	83	7.263	7.262	0.001	96	1224855	1250.0	1334.4	
74 trans-1,3-Dichloropropene	75	7.725	7.724	0.001	90	1599227	1250.0	1236.4	
72 4-Methyl-2-pentanone (MIBK	43	7.902	7.894	0.008	70	717852	1250.0	1253.6	
73 Toluene	91	8.048	8.046	0.002	95	3719432	1250.0	840.9	
71 cis-1,3-Dichloropropene	75	8.327	8.326	0.001	90	1270625	1250.0	1342.0	
75 Ethyl methacrylate	69	8.413	8.411	0.002	87	1020327	1250.0	1250.0	
76 1,1,2-Trichloroethane	97	8.522	8.515	0.007	63	743379	1250.0	1171.1	
77 Tetrachloroethene	164	8.565	8.558	0.007	98	939401	1250.0	1047.7	
78 1,3-Dichloropropane	76	8.674	8.667	0.007	94	1326847	1250.0	1122.7	
79 2-Hexanone	43	8.753	8.752	0.001	94	485975	1250.0	1328.1	
81 Chlorodibromomethane	129	8.881	8.880	0.001	90	834824	1250.0	1462.2	
82 Ethylene Dibromide	107	8.984	8.983	0.001	98	751771	1250.0	1254.3	
84 Chlorobenzene	112	9.477	9.476	0.001	87	2487044	1250.0	959.3	
85 1,1,1,2-Tetrachloroethane	131	9.587	9.586	0.001	49	918756	1250.0	1099.1	
86 Ethylbenzene	106	9.599	9.592	0.007	96	1445587	1250.0	891.3	
87 m-Xylene & p-Xylene	106	9.727	9.726	0.001	95	2040358	1250.0	998.6	
88 o-Xylene	106	10.104	10.103	0.001	94	1843436	1250.0	940.6	
89 Styrene	104	10.134	10.127	0.007	93	2773118	1250.0	925.4	
90 Bromoform	173	10.298	10.297	0.001	97	480243	1250.0	1673.4	
91 Isopropylbenzene	105	10.481	10.480	0.001	97	4019473	1250.0	785.8	
94 Bromobenzene	156	10.773	10.772	0.001	80	1158182	1250.0	1098.1	
93 1,1,2,2-Tetrachloroethane	83	10.809	10.802	0.007	57	842808	1250.0	1228.2	
96 trans-1,4-Dichloro-2-buten	53	10.846	10.839	0.007	67	262245	1250.0	1516.9	
95 1,2,3-Trichloropropane	110	10.852	10.851	0.001	44	262405	1250.0	1255.2	
97 N-Propylbenzene	120	10.901	10.894	0.007	88	1418199	1250.0	948.5	
98 2-Chlorotoluene	126	10.974	10.967	0.007	96	1150939	1250.0	1013.1	
99 1,3,5-Trimethylbenzene	105	11.089	11.088	0.001	88	3283447	1250.0	770.6	
100 4-Chlorotoluene	126	11.101	11.094	0.007	96	1022917	1250.0	918.2	
101 tert-Butylbenzene	119	11.393	11.392	0.001	86	3185947	1250.0	826.8	
103 1,2,4-Trimethylbenzene	105	11.460	11.453	0.007	96	3532471	1250.0	823.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	11.619	11.617	0.002	96	4313387	1250.0	750.4	
105 1,3-Dichlorobenzene	146	11.722	11.715	0.007	93	2173659	1250.0	1017.0	
106 4-Isopropyltoluene	119	11.783	11.782	0.001	83	3718299	1250.0	779.2	
107 1,4-Dichlorobenzene	146	11.825	11.824	0.001	89	2129623	1250.0	1025.9	
111 1,2-Dichlorobenzene	146	12.172	12.165	0.007	94	1847389	1250.0	977.9	
110 n-Butylbenzene	91	12.184	12.183	0.001	93	3388361	1250.0	777.4	
112 1,2-Dibromo-3-Chloropropan	75	12.963	12.962	0.001	86	117034	1250.0	1116.6	
113 1,2,4-Trichlorobenzene	180	13.778	13.777	0.001	94	1088085	1250.0	1138.5	
115 Hexachlorobutadiene	225	13.930	13.929	0.001	97	879278	1250.0	992.1	
116 Naphthalene	128	14.034	14.033	0.001	98	1768305	1250.0	1207.3	
117 1,2,3-Trichlorobenzene	180	14.253	14.246	0.007	91	806307	1250.0	1136.3	
S 129 1,2-Dichloroethene, Total	96				0		2500.0	2257.2	
S 130 Xylenes, Total	106				0		2500.0	1939.1	
S 131 1,3-Dichloropropene, Total	1				0		2500.0	2578.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOAACRLOEINPR_00001	Amount Added:	50.00	Units: uL
voaWVA1st Res_00001	Amount Added:	50.00	Units: uL
VOA8260SURR_00038	Amount Added:	50.00	Units: uL
VOA8260VOAPRI_00125	Amount Added:	50.00	Units: uL
VOA8260INT_00038	Amount Added:	10.00	Units: uL

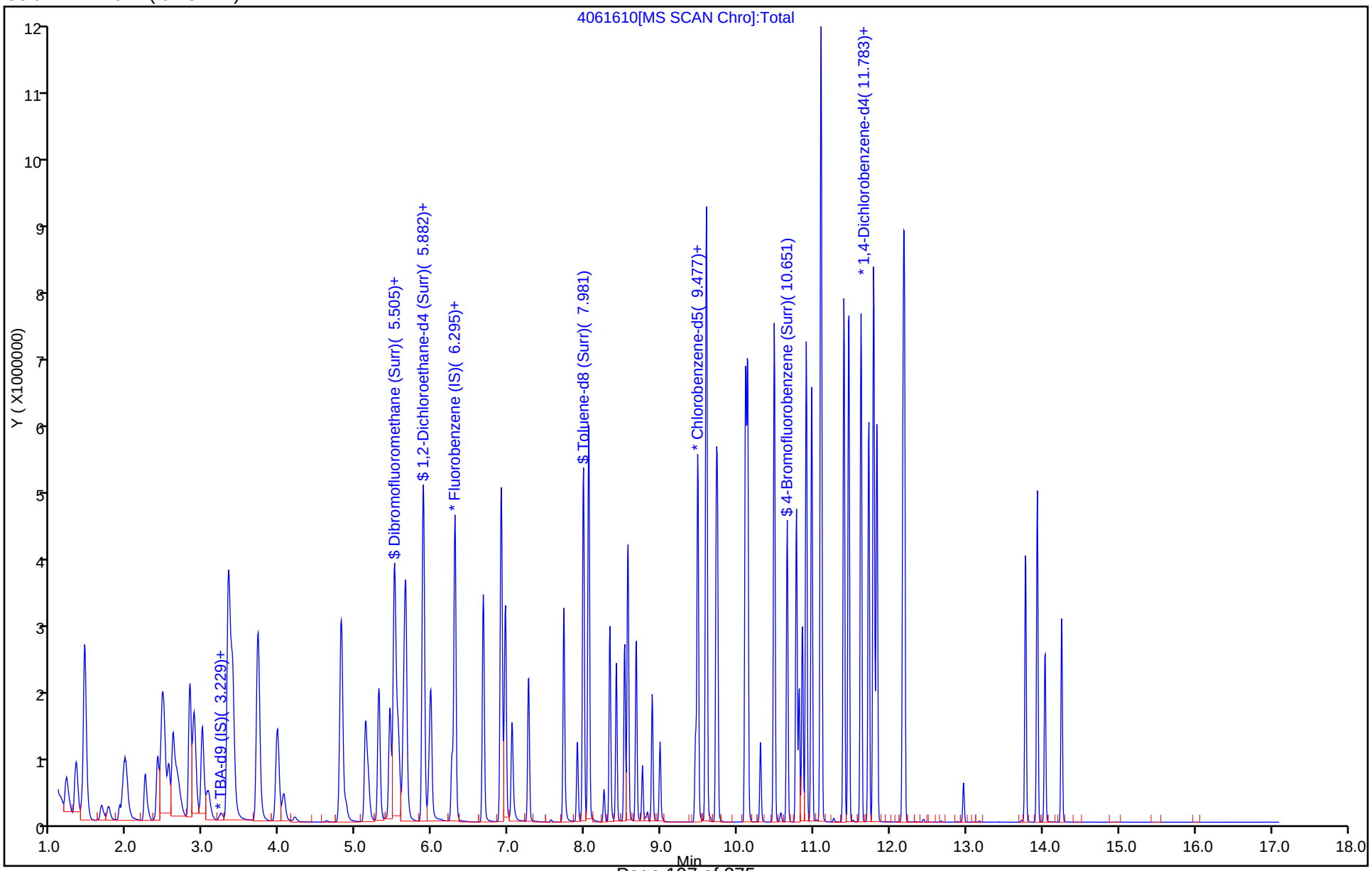
Report Date: 16-Jun-2015 17:51:24 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061610.D

Injection Date:	16-Jun-2015 15:16:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



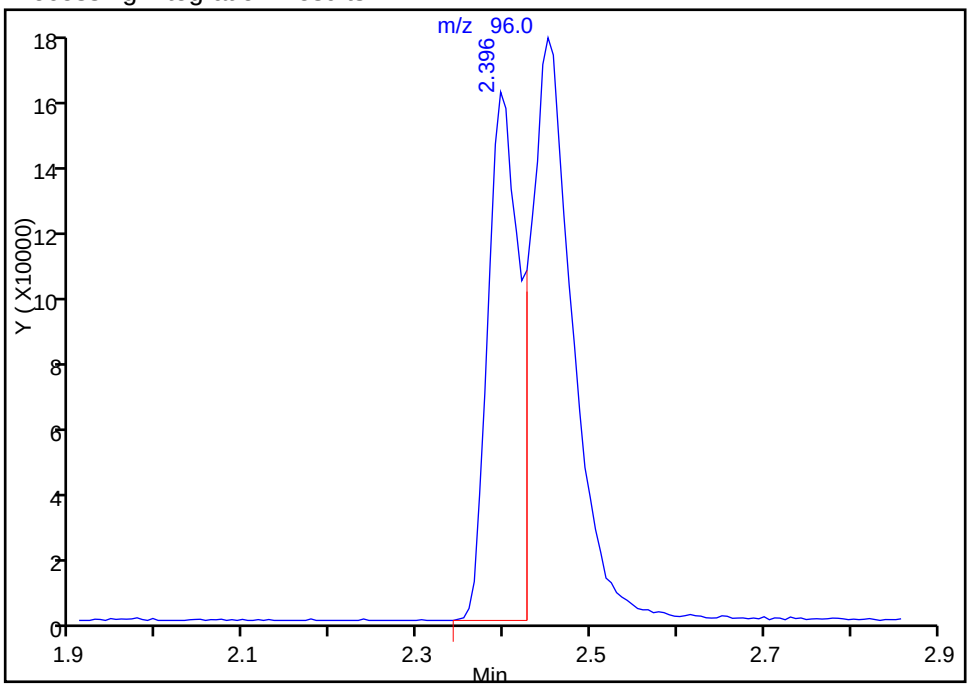
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061610.D
Injection Date: 16-Jun-2015 15:16:30 Instrument ID: CHHP4
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

21 1,1-Dichloroethene, CAS: 75-35-4

Processing Integration Results

RT: 2.40
Area: 426046
Amount: 602.4045
Amount Units: ng



Manual Integration Results

RT: 2.45
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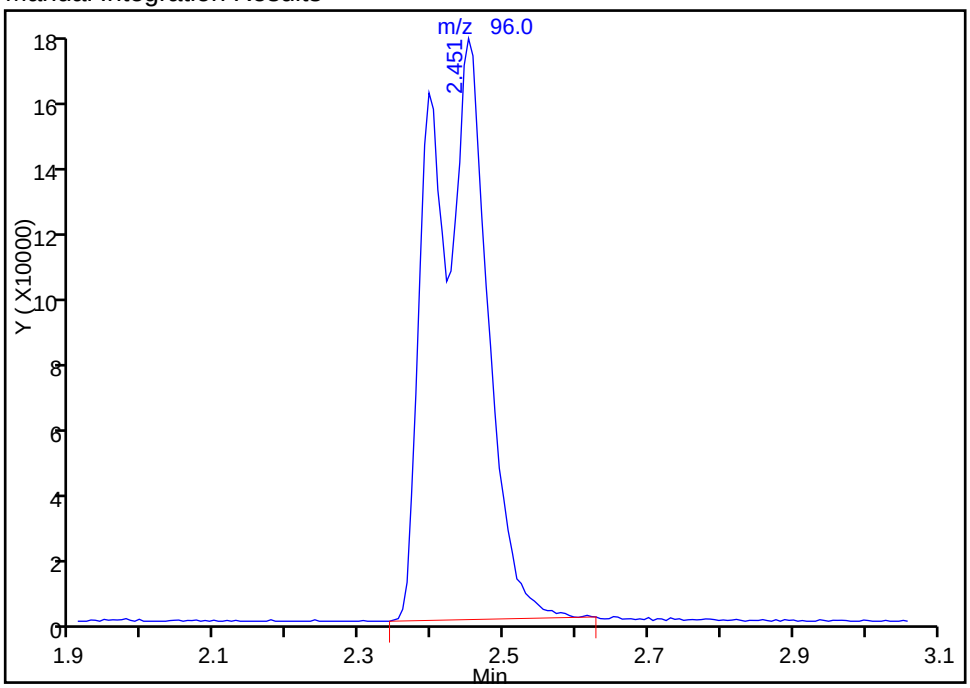
Amount: 1228.2477
Amount Units: ng



Reviewer: journetp, 16-Jun-2015 14:45:25
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

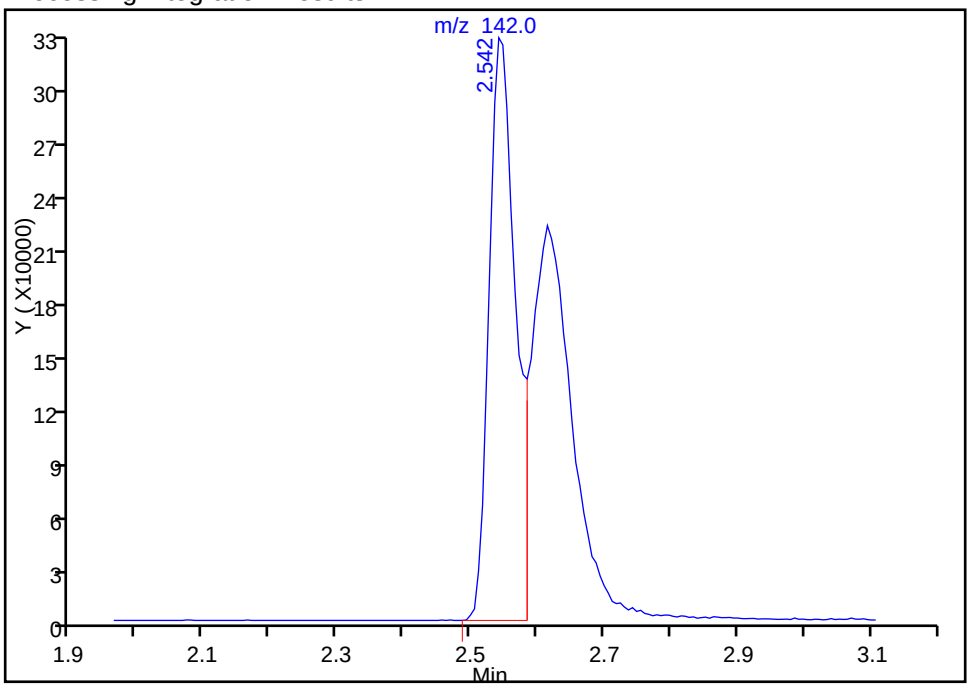
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061610.D				
Injection Date:	16-Jun-2015 15:16:30	Instrument ID:	CHHP4		
Lims ID:	IC				
Client ID:					
Operator ID:	034635	ALS Bottle#:	18	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Iodomethane, CAS: 74-88-4

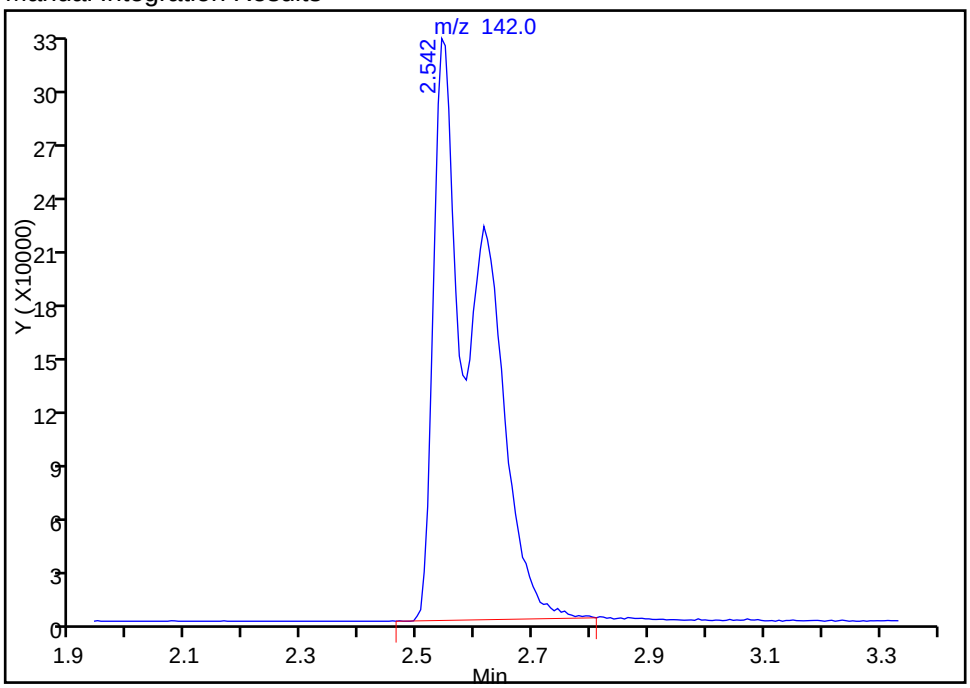
Processing Integration Results

RT: 2.54
Area: 918450
Amount: 649.6355
Amount Units: ng



Manual Integration Results

RT: 2.54
Area: 1790639
Amount: 1153.5026
Amount Units: ng



Reviewer: journetp, 16-Jun-2015 14:45:25
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061613.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Jun-2015 17:04:30 ALS Bottle#: 21 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0007420-013
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 16-Jun-2015 17:51:25 Calib Date: 16-Jun-2015 17:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: journetp Date: 16-Jun-2015 16:32:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.204	3.192	0.012	96	209809	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.258	6.258	0.000	98	883553	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.452	9.446	0.006	85	209675	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.800	11.800	0.000	94	282671	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.492	5.491	0.001	76	39759	50.0	52.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.887	5.887	0.000	17	39083	50.0	49.9	
$ 7 Toluene-d8 (Surr)	98	7.974	7.980	-0.006	73	182464	50.0	56.6	
$ 8 4-Bromofluorobenzene (Surr	95	10.651	10.650	0.001	91	61191	50.0	52.7	
10 Dichlorodifluoromethane	85	1.209	1.203	0.006	43	76905	50.0	57.6	
11 Chloromethane	50	1.313	1.318	-0.006	98	96811	50.0	58.7	
12 Vinyl chloride	62	1.416	1.416	0.000	81	77154	50.0	59.5	
13 Butadiene	54	1.440	1.434	0.006	94	73636	50.0	57.7	
14 Bromomethane	94	1.653	1.653	0.000	89	13746	50.0	56.2	
15 Chloroethane	64	1.751	1.750	0.000	44	15881	50.0	56.8	
16 Dichlorofluoromethane	67	1.951	1.957	-0.006	80	57771	50.0	54.7	
17 Trichlorofluoromethane	101	1.963	1.957	0.006	64	50265	50.0	55.4	
19 Ethyl ether	59	2.237	2.231	0.006	92	26841	50.0	54.6	
20 Acrolein	56	2.371	2.365	0.006	93	33750	625.0	609.7	
21 1,1-Dichloroethene	96	2.401	2.401	0.000	95	43946	50.0	55.5	
22 1,1,2-Trichloro-1,2,2-trif	101	2.481	2.468	0.013	79	53364	50.0	53.6	
23 Acetone	43	2.541	2.535	0.006	62	15722	50.0	47.8	
24 Iodomethane	142	2.554	2.547	0.007	90	90265	50.0	58.1	M
25 Carbon disulfide	76	2.614	2.608	0.006	98	147458	50.0	52.1	
28 3-Chloro-1-propene	76	2.815	2.821	-0.006	91	37329	50.0	54.1	
29 Methyl acetate	43	2.870	2.869	0.001	97	156497	250.0	275.9	
30 Methylene Chloride	84	2.979	2.991	-0.012	90	90903	50.0	53.5	
31 2-Methyl-2-propanol	59	3.308	3.289	0.019	1	33209	500.0	583.2	
32 Acrylonitrile	53	3.320	3.326	-0.006	94	139592	500.0	561.6	
33 trans-1,2-Dichloroethene	96	3.326	3.332	-0.006	81	60593	50.0	57.3	
34 Methyl tert-butyl ether	73	3.369	3.374	-0.005	92	121038	50.0	56.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	3.722	3.715	0.007	90	141130	50.0	51.5	
36 1,1-Dichloroethane	63	3.971	3.964	0.007	83	109401	50.0	54.5	
38 Vinyl acetate	43	4.050	4.050	0.000	87	35051	50.0	47.9	
41 2,2-Dichloropropane	77	4.804	4.798	0.006	59	48848	50.0	57.1	
42 cis-1,2-Dichloroethene	96	4.817	4.810	0.007	67	60289	50.0	54.3	
43 2-Butanone (MEK)	43	4.871	4.865	0.006	93	16355	50.0	53.2	
46 Chlorobromomethane	128	5.121	5.126	-0.005	83	23184	50.0	53.4	
48 Tetrahydrofuran	42	5.157	5.151	0.006	86	21406	100.0	104.4	
49 Chloroform	83	5.297	5.297	0.000	95	87557	50.0	54.9	
50 1,1,1-Trichloroethane	97	5.443	5.443	0.000	89	69819	50.0	54.9	
51 Cyclohexane	56	5.504	5.510	-0.006	86	135290	50.0	56.7	
53 Carbon tetrachloride	117	5.626	5.625	0.001	79	62047	50.0	53.1	
52 1,1-Dichloropropene	75	5.644	5.650	-0.006	92	77469	50.0	54.2	
54 Benzene	78	5.875	5.875	0.000	90	237290	50.0	58.6	
59 Isobutyl alcohol	41	5.960	5.948	0.012	84	19621	1250.0	1255.9	
55 1,2-Dichloroethane	62	5.979	5.978	0.001	94	52398	50.0	52.9	
58 n-Heptane	43	6.295	6.294	0.001	93	113324	50.0	55.4	
61 Trichloroethene	130	6.672	6.666	0.006	90	56977	50.0	55.8	
63 Methylcyclohexane	83	6.903	6.903	0.000	90	114236	50.0	54.1	
64 1,2-Dichloropropane	63	6.952	6.951	0.001	88	55728	50.0	55.3	
65 Dibromomethane	93	7.043	7.037	0.006	87	21426	50.0	52.3	
67 1,4-Dioxane	88	7.061	7.055	0.006	43	6452	1000.0	1084.0	
68 Dichlorobromomethane	83	7.256	7.262	-0.006	88	45968	50.0	50.1	
74 trans-1,3-Dichloropropene	75	7.724	7.724	0.000	91	63872	50.0	50.3	
72 4-Methyl-2-pentanone (MIBK	43	7.901	7.894	0.007	77	28815	50.0	51.3	
73 Toluene	91	8.047	8.046	0.001	92	246908	50.0	56.9	
71 cis-1,3-Dichloropropene	75	8.327	8.326	0.001	84	45652	50.0	48.2	
75 Ethyl methacrylate	69	8.412	8.411	0.001	88	42694	50.0	51.1	
76 1,1,2-Trichloroethane	97	8.515	8.515	0.000	90	32743	50.0	52.5	
77 Tetrachloroethene	164	8.564	8.558	0.006	89	48593	50.0	55.2	
78 1,3-Dichloropropane	76	8.667	8.667	0.000	91	63020	50.0	54.3	
79 2-Hexanone	43	8.753	8.752	0.001	80	17298	50.0	48.1	
81 Chlorodibromomethane	129	8.880	8.880	0.000	87	25243	50.0	45.0	
82 Ethylene Dibromide	107	8.984	8.983	0.001	90	29530	50.0	50.2	
84 Chlorobenzene	112	9.477	9.476	0.000	92	148145	50.0	58.2	
85 1,1,1,2-Tetrachloroethane	131	9.580	9.586	-0.006	45	44755	50.0	54.5	
86 Ethylbenzene	106	9.592	9.592	0.000	97	92848	50.0	58.3	
87 m-Xylene & p-Xylene	106	9.726	9.726	0.000	99	113807	50.0	56.7	
88 o-Xylene	106	10.103	10.103	0.000	96	113654	50.0	59.1	
89 Styrene	104	10.127	10.127	0.000	96	172930	50.0	58.8	
90 Bromoform	173	10.298	10.297	0.001	83	12721	50.0	53.2	
91 Isopropylbenzene	105	10.480	10.480	0.000	95	288581	50.0	57.5	
94 Bromobenzene	156	10.772	10.772	0.000	89	55671	50.0	54.9	
93 1,1,2,2-Tetrachloroethane	83	10.803	10.802	0.001	81	36574	50.0	54.3	
96 trans-1,4-Dichloro-2-buten	53	10.845	10.839	0.006	61	7250	50.0	43.6	
95 1,2,3-Trichloropropane	110	10.845	10.851	-0.006	32	9874	50.0	49.6	
97 N-Propylbenzene	120	10.894	10.894	0.000	98	83601	50.0	58.2	
98 2-Chlorotoluene	126	10.967	10.967	0.000	95	61539	50.0	56.4	
99 1,3,5-Trimethylbenzene	105	11.089	11.088	0.001	90	238153	50.0	58.2	
100 4-Chlorotoluene	126	11.095	11.094	0.001	96	63669	50.0	59.5	
101 tert-Butylbenzene	119	11.393	11.392	0.001	89	212438	50.0	57.4	
103 1,2,4-Trimethylbenzene	105	11.454	11.453	0.001	97	236623	50.0	57.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	11.612	11.617	-0.005	93	321207	50.0	58.1	
105 1,3-Dichlorobenzene	146	11.715	11.715	0.000	96	118581	50.0	57.7	
106 4-Isopropyltoluene	119	11.782	11.782	0.000	92	263931	50.0	57.5	
107 1,4-Dichlorobenzene	146	11.825	11.824	0.001	92	116072	50.0	58.2	
111 1,2-Dichlorobenzene	146	12.165	12.165	0.000	96	104352	50.0	57.5	
110 n-Butylbenzene	91	12.184	12.183	0.001	97	237761	50.0	56.8	
112 1,2-Dibromo-3-Chloropropan	75	12.962	12.962	0.000	41	3673	50.0	58.9	
113 1,2,4-Trichlorobenzene	180	13.778	13.777	0.001	89	49402	50.0	53.8	
115 Hexachlorobutadiene	225	13.930	13.929	0.001	90	49122	50.0	57.7	
116 Naphthalene	128	14.033	14.033	0.000	94	72050	50.0	51.2	
117 1,2,3-Trichlorobenzene	180	14.246	14.246	0.000	93	35911	50.0	52.7	
S 129 1,2-Dichloroethene, Total	96				0		100.0	111.6	
S 130 Xylenes, Total	106				0		100.0	115.8	
S 131 1,3-Dichloropropene, Total	1				0		100.0	98.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00038	Amount Added: 10.00	Units: uL
VOA8260SURR_00038	Amount Added: 2.00	Units: uL
VOA8260VOAPRI_00125	Amount Added: 2.00	Units: uL
VOAACRLOEINPR_00001	Amount Added: 25.00	Units: uL
voaWVA1st Res_00001	Amount Added: 2.00	Units: uL

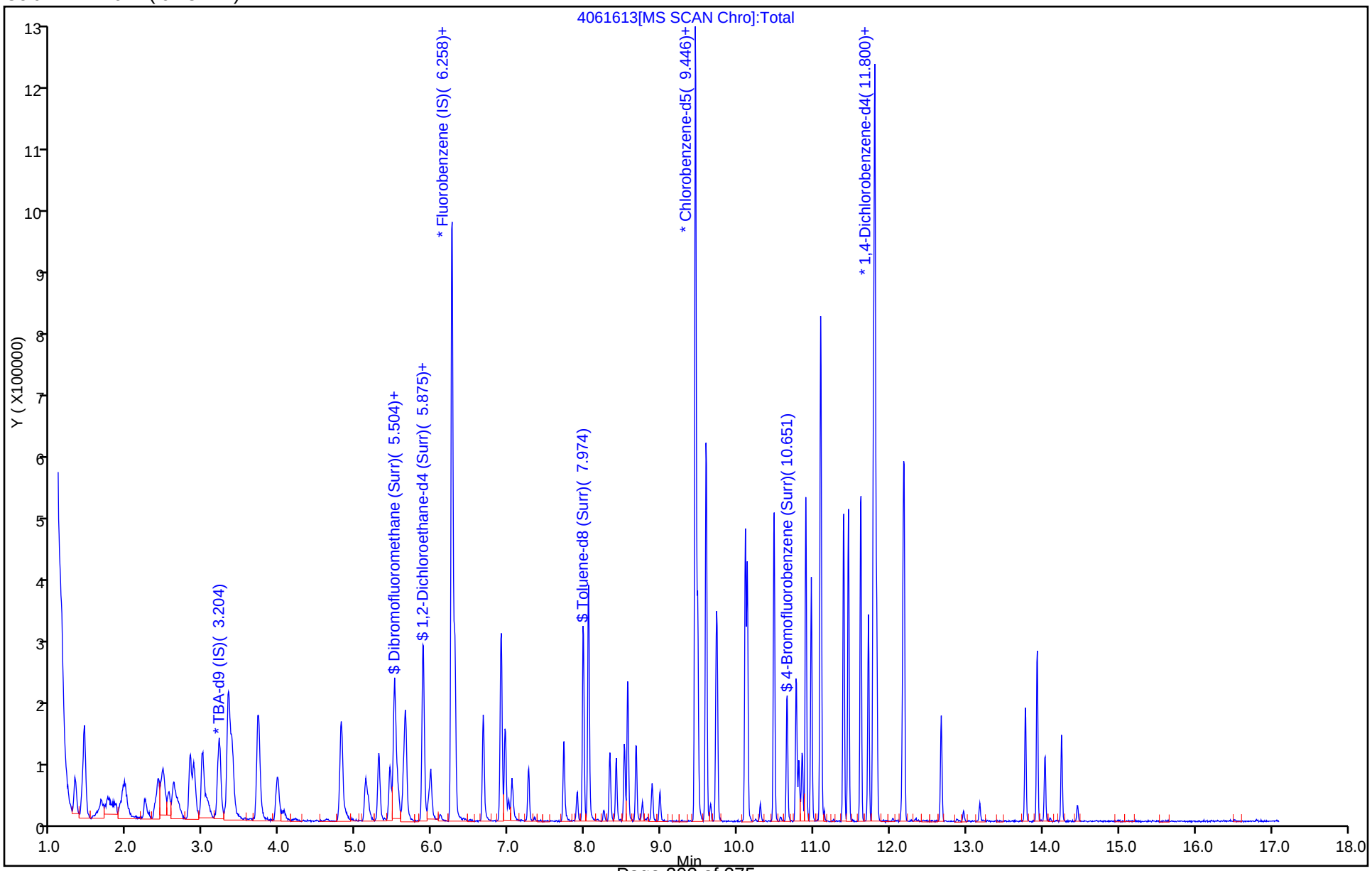
Report Date: 16-Jun-2015 17:51:25 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061613.D

Injection Date:	16-Jun-2015 17:04:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



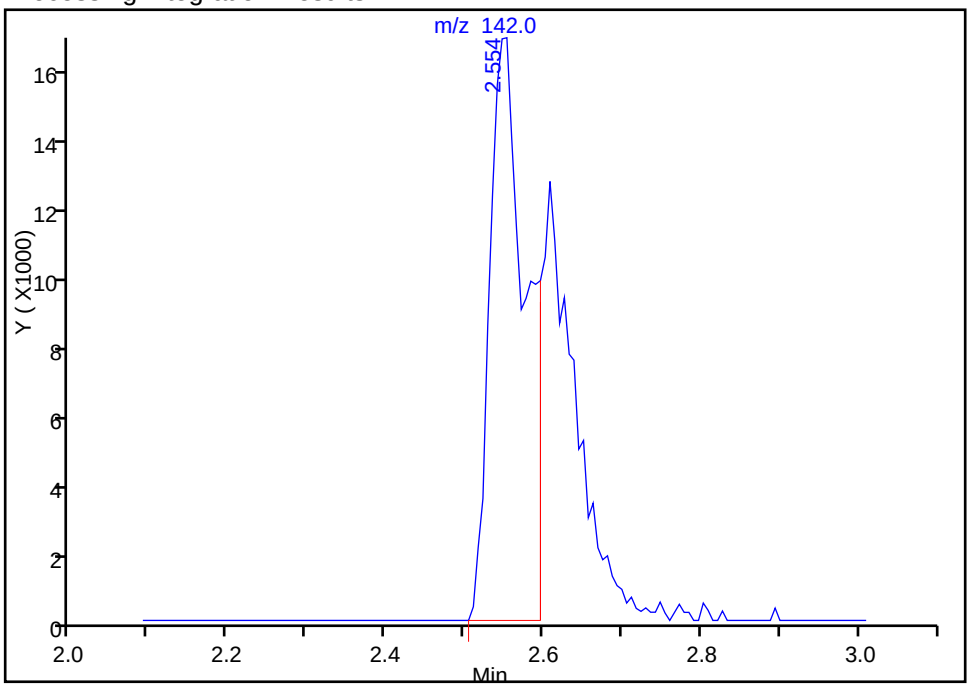
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061613.D				
Injection Date:	16-Jun-2015 17:04:30	Instrument ID:	CHHP4		
Lims ID:	IC				
Client ID:					
Operator ID:	034635	ALS Bottle#:	21	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Iodomethane, CAS: 74-88-4

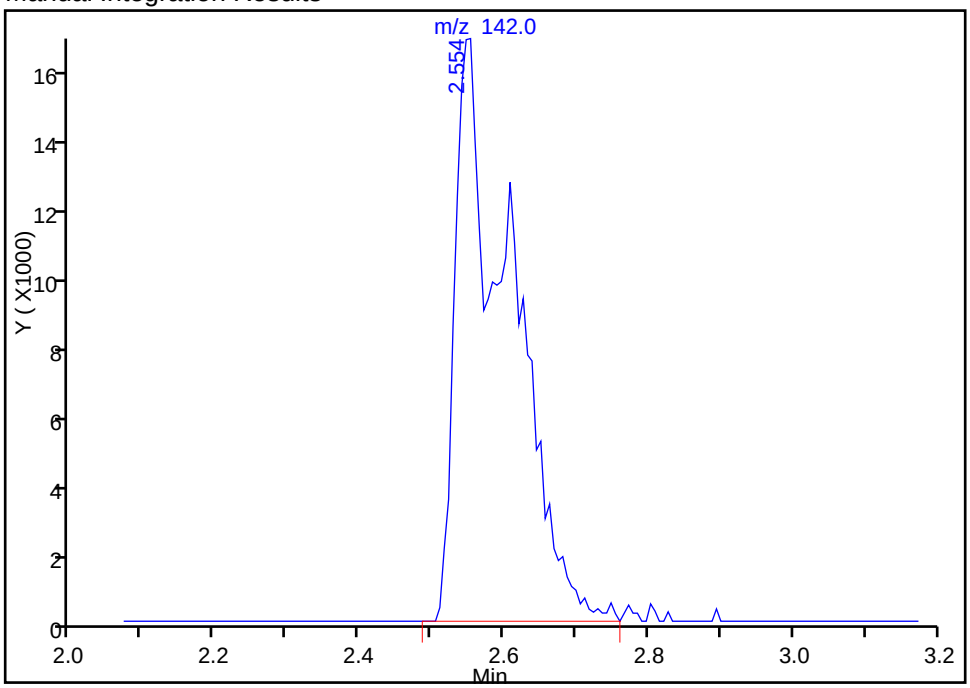
Processing Integration Results

RT: 2.55
Area: 54860
Amount: 37.804681
Amount Units: ng



Manual Integration Results

RT: 2.55
Area: 90265
Amount: 58.149191
Amount Units: ng



Reviewer: journetp, 16-Jun-2015 16:32:23
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Lab Sample ID: CCVIS 180-145522/2 Calibration Date: 06/19/2015 06:50

Instrument ID: CHHP3 Calib Start Date: 06/05/2015 06:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/05/2015 09:02

Lab File ID: 3061902.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	0.3639	0.3158	0.1000	34.7	40.0	-13.2	20.0
Chloromethane	Ave	0.5258	0.5009	0.1000	38.1	40.0	-4.7	20.0
Vinyl chloride	Ave	0.4685	0.4455	0.1000	38.0	40.0	-4.9	20.0
1,3-Butadiene	Ave	0.4835	0.4451	0.0100	36.8	40.0	-7.9	20.0
Bromomethane	Ave	0.1183	0.0984	0.0500	33.3	40.0	-16.8	20.0
Chloroethane	Lin2		0.1032	0.0500	33.4	40.0	-16.5	20.0
Dichlorofluoromethane	Ave	0.4958	0.4742	0.0100	38.3	40.0	-4.3	20.0
Trichlorofluoromethane	Ave	0.4020	0.3715	0.1000	37.0	40.0	-7.6	20.0
Ethyl ether	Ave	0.2112	0.2078	0.0100	39.3	40.0	-1.6	20.0
1,1-Dichloroethene	Ave	0.3402	0.3342	0.1000	39.3	40.0	-1.8	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3349	0.3367	0.1000	40.2	40.0	0.5	20.0
Acetone	Lin2		0.0653	0.0500	47.8	40.0	19.4	20.0
Iodomethane	Ave	0.4225	0.4144	0.0100	39.2	40.0	-1.9	20.0
Carbon disulfide	Ave	1.165	1.148	0.1000	39.4	40.0	-1.5	20.0
Allyl chloride	Ave	0.2161	0.2065	0.0100	38.2	40.0	-4.5	20.0
Methyl acetate	Ave	0.1198	0.1150	0.1000	192	200	-4.1	20.0
Methylene Chloride	Lin2		0.3468	0.1000	40.8	40.0	2.1	20.0
tert-Butyl alcohol	Ave	1.312	1.299	0.0100	396	400	-1.0	20.0
Acrylonitrile	Ave	0.0611	0.0636	0.0100	417	400	4.2	20.0
trans-1,2-Dichloroethene	Ave	0.3594	0.3519	0.1000	39.2	40.0	-2.1	20.0
Methyl tert-butyl ether	Ave	0.5403	0.4982	0.1000	36.9	40.0	-7.8	20.0
Hexane	Ave	0.6375	0.6008	0.0100	37.7	40.0	-5.8	20.0
1,1-Dichloroethane	Ave	0.6181	0.5844	0.2000	37.8	40.0	-5.4	20.0
2,2-Dichloropropane	Ave	0.4175	0.3647	0.0100	34.9	40.0	-12.7	20.0
cis-1,2-Dichloroethene	Ave	0.3456	0.3347	0.1000	38.7	40.0	-3.1	20.0
2-Butanone (MEK)	Ave	0.0737	0.0751	0.0500	40.8	40.0	2.0	20.0
Chlorobromomethane	Ave	0.1128	0.1109	0.0100	39.3	40.0	-1.7	20.0
Tetrahydrofuran	Ave	0.0448	0.0428	0.0100	76.4	80.0	-4.5	20.0
Chloroform	Ave	0.4962	0.4669	0.2000	37.6	40.0	-5.9	20.0
1,1,1-Trichloroethane	Ave	0.4623	0.4177	0.1000	36.1	40.0	-9.6	20.0
Cyclohexane	Ave	0.8001	0.7954	0.1000	39.8	40.0	-0.6	20.0
Carbon tetrachloride	Ave	0.3661	0.3403	0.1000	37.2	40.0	-7.0	20.0
1,1-Dichloropropene	Ave	0.4299	0.3964	0.0100	36.9	40.0	-7.8	20.0
Isobutyl alcohol	Ave	0.0039	0.0040*	0.0100	1010	1000	1.4	20.0
Benzene	Ave	1.170	1.161	0.5000	39.7	40.0	-0.7	20.0
1,2-Dichloroethane	Ave	0.2567	0.2318	0.1000	36.1	40.0	-9.7	20.0
n-Heptane	Ave	0.5498	0.5594	0.0100	40.7	40.0	1.7	20.0
Trichloroethene	Ave	0.2730	0.2714	0.2000	39.8	40.0	-0.6	20.0
Methylcyclohexane	Ave	0.6781	0.6953	0.1000	41.0	40.0	2.5	20.0
1,2-Dichloropropane	Ave	0.2473	0.2427	0.1000	39.3	40.0	-1.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Lab Sample ID: CCVIS 180-145522/2 Calibration Date: 06/19/2015 06:50

Instrument ID: CHHP3 Calib Start Date: 06/05/2015 06:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/05/2015 09:02

Lab File ID: 3061902.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	0.1008	0.0982	0.0100	39.0	40.0	-2.6	20.0
1,4-Dioxane	Ave	0.0013	0.0015*	0.0100	920	800	15.0	20.0
Dichlorobromomethane	Ave	0.2753	0.2524	0.2000	36.7	40.0	-8.3	20.0
cis-1,3-Dichloropropene	Ave	0.3297	0.3247	0.2000	39.4	40.0	-1.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6262	0.5545	0.1000	35.4	40.0	-11.4	20.0
Toluene	Ave	5.212	5.187	0.4000	39.8	40.0	-0.5	20.0
trans-1,3-Dichloropropene	Ave	1.201	1.137	0.1000	37.9	40.0	-5.3	20.0
Ethyl methacrylate	Ave	0.8426	0.7933	0.0100	37.7	40.0	-5.9	20.0
1,1,2-Trichloroethane	Ave	0.6563	0.6601	0.1000	40.2	40.0	0.6	20.0
Tetrachloroethene	Ave	0.9622	0.9610	0.2000	40.0	40.0	-0.1	20.0
1,3-Dichloropropane	Ave	1.216	1.187	0.0100	39.0	40.0	-2.4	20.0
2-Hexanone	Ave	0.5599	0.5375	0.1000	38.4	40.0	-4.0	20.0
Chlorodibromomethane	Ave	0.6799	0.6645	0.1000	39.1	40.0	-2.3	20.0
1,2-Dibromoethane	Ave	0.6276	0.5924	0.1000	37.8	40.0	-5.6	20.0
Chlorobenzene	Ave	3.253	3.271	0.5000	40.2	40.0	0.5	20.0
1,1,1,2-Tetrachloroethane	Ave	1.004	0.9935	0.0100	39.6	40.0	-1.0	20.0
Ethylbenzene	Ave	2.029	2.021	0.1000	39.8	40.0	-0.4	20.0
m-Xylene & p-Xylene	Ave	2.509	2.458	0.1000	39.2	40.0	-2.0	20.0
o-Xylene	Ave	2.441	2.471	0.3000	40.5	40.0	1.2	20.0
Styrene	Ave	3.786	3.764	0.3000	39.8	40.0	-0.6	20.0
Bromoform	Ave	0.3613	0.3743	0.1000	41.4	40.0	3.6	20.0
Isopropylbenzene	Ave	6.635	6.526	0.1000	39.3	40.0	-1.6	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7848	0.7837	0.3000	39.9	40.0	-0.1	20.0
Bromobenzene	Ave	0.7898	0.7596	0.0100	38.5	40.0	-3.8	20.0
1,2,3-Trichloropropane	Ave	0.1514	0.1428	0.0100	37.7	40.0	-5.7	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1805	0.1582	0.0100	35.0	40.0	-12.4	20.0
N-Propylbenzene	Ave	1.316	1.237	0.0100	37.6	40.0	-6.1	20.0
2-Chlorotoluene	Ave	0.9912	0.9405	0.0100	38.0	40.0	-5.1	20.0
1,3,5-Trimethylbenzene	Ave	3.755	3.563	0.0100	38.0	40.0	-5.1	20.0
4-Chlorotoluene	Ave	1.007	0.9457	0.0100	37.5	40.0	-6.1	20.0
tert-Butylbenzene	Ave	3.310	3.159	0.0100	38.2	40.0	-4.6	20.0
1,2,4-Trimethylbenzene	Ave	3.809	3.579	0.0100	37.6	40.0	-6.0	20.0
sec-Butylbenzene	Ave	5.143	4.979	0.0100	38.7	40.0	-3.2	20.0
1,3-Dichlorobenzene	Ave	1.781	1.726	0.6000	38.8	40.0	-3.1	20.0
4-Isopropyltoluene	Ave	4.066	3.938	0.0100	38.7	40.0	-3.2	20.0
1,4-Dichlorobenzene	Ave	1.700	1.660	0.5000	39.0	40.0	-2.4	20.0
n-Butylbenzene	Ave	4.151	4.052	0.0100	39.0	40.0	-2.4	20.0
1,2-Dichlorobenzene	Ave	1.482	1.484	0.4000	40.0	40.0	0.1	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0728	0.0657	0.0500	36.1	40.0	-9.7	20.0
1,2,4-Trichlorobenzene	Ave	0.9154	0.9118	0.2000	39.8	40.0	-0.4	20.0
Hexachlorobutadiene	Ave	0.6974	0.7103	0.0100	40.7	40.0	1.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Lab Sample ID: CCVIS 180-145522/2 Calibration Date: 06/19/2015 06:50

Instrument ID: CHHP3 Calib Start Date: 06/05/2015 06:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/05/2015 09:02

Lab File ID: 3061902.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	1.141	1.332	0.0100	46.7	40.0	16.7	20.0
1,2,3-Trichlorobenzene	Ave	0.6579	0.6567	0.0100	39.9	40.0	-0.2	20.0
Dibromofluoromethane (Surr)	Ave	0.2163	0.2302		42.6	40.0	6.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2101	0.2027		38.6	40.0	-3.5	20.0
Toluene-d8 (Surr)	Ave	4.260	4.693		44.1	40.0	10.2	20.0
4-Bromofluorobenzene (Surr)	Ave	1.754	1.812		41.3	40.0	3.3	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\3061902.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 19-Jun-2015 06:50:30 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*sub23

Method: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 19-Jun-2015 08:30:53 Calib Date: 05-Jun-2015 09:02:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060509.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: gordonk Date: 19-Jun-2015 07:31:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.489	4.489	0.000	98	168675	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.360	7.360	0.000	97	848699	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.444	10.444	0.000	87	182623	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.768	0.000	97	282875	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.618	6.618	0.000	42	156295	200.0	212.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.989	6.989	0.000	72	137596	200.0	193.0	
$ 7 Toluene-d8 (Surr)	98	9.009	9.009	0.000	83	685712	200.0	220.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.612	0.000	87	264739	200.0	206.6	
10 Dichlorodifluoromethane	85	1.690	1.690	0.000	79	214408	200.0	173.6	
11 Chloromethane	50	1.848	1.848	0.000	89	340102	200.0	190.5	
12 Vinyl chloride	62	1.994	1.994	0.000	69	302480	200.0	190.2	
13 Butadiene	39	2.019	2.019	0.000	90	302194	200.0	184.1	
14 Bromomethane	94	2.323	2.323	0.000	86	66778	200.0	166.3	
15 Chloroethane	64	2.432	2.432	0.000	92	70046	200.0	167.1	
16 Dichlorofluoromethane	67	2.724	2.724	0.000	96	321961	200.0	191.3	
17 Trichlorofluoromethane	101	2.730	2.730	0.000	62	252207	200.0	184.8	
19 Ethyl ether	59	3.199	3.199	0.000	96	141063	200.0	196.7	
21 1,1-Dichloroethene	96	3.460	3.460	0.000	97	226906	200.0	196.5	
22 1,1,2-Trichloro-1,2,2-trif	101	3.533	3.533	0.000	84	228574	200.0	201.0	
23 Acetone	43	3.625	3.625	0.000	92	44330	200.0	238.8	
24 Iodomethane	142	3.673	3.673	0.000	93	281347	200.0	196.2	
25 Carbon disulfide	76	3.740	3.740	0.000	99	779274	200.0	197.1	
28 3-Chloro-1-propene	76	4.044	4.044	0.000	90	140168	200.0	191.1	
29 Methyl acetate	43	4.154	4.154	0.000	98	390315	1000.0	959.4	
30 Methylene Chloride	84	4.251	4.251	0.000	95	235447	200.0	204.2	
31 2-Methyl-2-propanol	59	4.604	4.604	0.000	6	87655	2000.0	1980.4	
32 Acrylonitrile	53	4.659	4.659	0.000	100	431880	2000.0	2083.2	
33 trans-1,2-Dichloroethene	96	4.671	4.671	0.000	92	238927	200.0	195.8	
34 Methyl tert-butyl ether	73	4.732	4.732	0.000	92	338274	200.0	184.4	
35 Hexane	57	5.097	5.097	0.000	92	407918	200.0	188.5	
36 1,1-Dichloroethane	63	5.273	5.273	0.000	85	396810	200.0	189.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
41 2,2-Dichloropropane	77	6.028	6.028	0.000	65	247586	200.0	174.7	
42 cis-1,2-Dichloroethene	96	6.034	6.034	0.000	70	227244	200.0	193.7	
43 2-Butanone (MEK)	43	6.088	6.088	0.000	98	51017	200.0	204.0	
47 Chlorobromomethane	128	6.320	6.320	0.000	78	75292	200.0	196.7	
48 Tetrahydrofuran	42	6.393	6.393	0.000	95	58116	400.0	382.1	
49 Chloroform	83	6.435	6.435	0.000	85	316983	200.0	188.2	
50 1,1,1-Trichloroethane	97	6.630	6.630	0.000	88	283631	200.0	180.7	
51 Cyclohexane	56	6.685	6.685	0.000	78	540052	200.0	198.8	
53 Carbon tetrachloride	117	6.812	6.812	0.000	85	231060	200.0	185.9	
52 1,1-Dichloropropene	75	6.819	6.819	0.000	93	269158	200.0	184.4	
54 Isobutyl alcohol	41	7.044	7.044	0.000	40	67811	5000.0	5069.2	
55 Benzene	78	7.050	7.050	0.000	97	788515	200.0	198.5	
56 1,2-Dichloroethane	62	7.068	7.068	0.000	66	157408	200.0	180.6	
59 n-Heptane	43	7.378	7.378	0.000	90	379820	200.0	203.5	
60 Trichloroethene	130	7.755	7.755	0.000	94	184250	200.0	198.8	
63 Methylcyclohexane	83	7.956	7.956	0.000	92	472066	200.0	205.1	
64 1,2-Dichloropropane	63	7.987	7.987	0.000	91	164770	200.0	196.3	
65 Dibromomethane	93	8.108	8.108	0.000	87	66659	200.0	194.8	
67 1,4-Dioxane	88	8.145	8.145	0.000	95	20213	4000.0	4599.7	
68 Dichlorobromomethane	83	8.279	8.279	0.000	97	171385	200.0	183.4	
71 cis-1,3-Dichloropropene	75	8.741	8.741	0.000	91	220478	200.0	197.0	
72 4-Methyl-2-pentanone (MIBK	43	8.905	8.905	0.000	65	81009	200.0	177.1	
73 Toluene	91	9.075	9.075	0.000	92	757750	200.0	199.0	
74 trans-1,3-Dichloropropene	75	9.294	9.294	0.000	92	166097	200.0	189.3	
75 Ethyl methacrylate	69	9.398	9.398	0.000	76	115896	200.0	188.3	
76 1,1,2-Trichloroethane	97	9.477	9.477	0.000	90	96437	200.0	201.1	
77 Tetrachloroethene	164	9.623	9.623	0.000	97	140405	200.0	199.8	
78 1,3-Dichloropropane	76	9.641	9.641	0.000	89	173376	200.0	195.2	
79 2-Hexanone	43	9.732	9.732	0.000	98	78526	200.0	192.0	
81 Chlorodibromomethane	129	9.872	9.872	0.000	89	97075	200.0	195.5	
82 Ethylene Dibromide	107	9.982	9.982	0.000	98	86554	200.0	188.8	
83 Chlorobenzene	112	10.469	10.469	0.000	89	477872	200.0	201.1	
85 1,1,1,2-Tetrachloroethane	131	10.554	10.554	0.000	92	145144	200.0	197.9	
86 Ethylbenzene	106	10.584	10.584	0.000	98	295271	200.0	199.2	
87 m-Xylene & p-Xylene	106	10.700	10.700	0.000	99	359162	200.0	196.0	
88 o-Xylene	106	11.095	11.095	0.000	90	360988	200.0	202.5	
89 Styrene	104	11.107	11.107	0.000	92	549862	200.0	198.8	
90 Bromoform	173	11.290	11.290	0.000	97	54686	200.0	207.2	
91 Isopropylbenzene	105	11.460	11.460	0.000	96	953506	200.0	196.7	
93 1,1,2,2-Tetrachloroethane	83	11.746	11.746	0.000	86	114499	200.0	199.7	
94 Bromobenzene	156	11.764	11.764	0.000	94	171899	200.0	192.4	
95 1,2,3-Trichloropropane	110	11.795	11.795	0.000	46	32317	200.0	188.7	
96 trans-1,4-Dichloro-2-buten	53	11.807	11.807	0.000	62	35792	200.0	175.2	
97 N-Propylbenzene	120	11.874	11.874	0.000	97	279835	200.0	187.9	
98 2-Chlorotoluene	126	11.959	11.959	0.000	94	212824	200.0	189.8	
99 1,3,5-Trimethylbenzene	105	12.044	12.044	0.000	91	806278	200.0	189.8	
100 4-Chlorotoluene	126	12.062	12.062	0.000	97	214006	200.0	187.7	
101 tert-Butylbenzene	119	12.373	12.373	0.000	58	714774	200.0	190.8	
103 1,2,4-Trimethylbenzene	105	12.421	12.421	0.000	91	809907	200.0	187.9	
104 sec-Butylbenzene	105	12.592	12.592	0.000	82	1126777	200.0	193.6	
105 1,3-Dichlorobenzene	146	12.701	12.701	0.000	81	390643	200.0	193.9	
106 4-Isopropyltoluene	119	12.738	12.738	0.000	87	891102	200.0	193.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.792	12.792	0.000	92	375549	200.0	195.2	
110 n-Butylbenzene	91	13.151	13.151	0.000	94	916908	200.0	195.2	
111 1,2-Dichlorobenzene	146	13.164	13.164	0.000	83	335719	200.0	200.2	
112 1,2-Dibromo-3-Chloropropan	75	13.942	13.942	0.000	66	14870	200.0	180.6	
114 1,2,4-Trichlorobenzene	180	14.782	14.782	0.000	90	206340	200.0	199.2	
115 Hexachlorobutadiene	225	14.952	14.952	0.000	93	160745	200.0	203.7	
116 Naphthalene	128	15.031	15.031	0.000	97	301353	200.0	233.5	
117 1,2,3-Trichlorobenzene	180	15.281	15.281	0.000	93	148604	200.0	199.6	
S 129 Xylenes, Total	106				0		400.0	398.4	
S 130 1,2-Dichloroethene, Total	96				0		400.0	389.5	
S 131 1,3-Dichloropropene, Total	1				0		400.0	386.3	

Reagents:

VOA8260VOAPRI_00125	Amount Added:	8.00	Units: uL	
VOA8260SURR_00038	Amount Added:	8.00	Units: uL	
VOA8260INT_00038	Amount Added:	10.00	Units: uL	Run Reagent

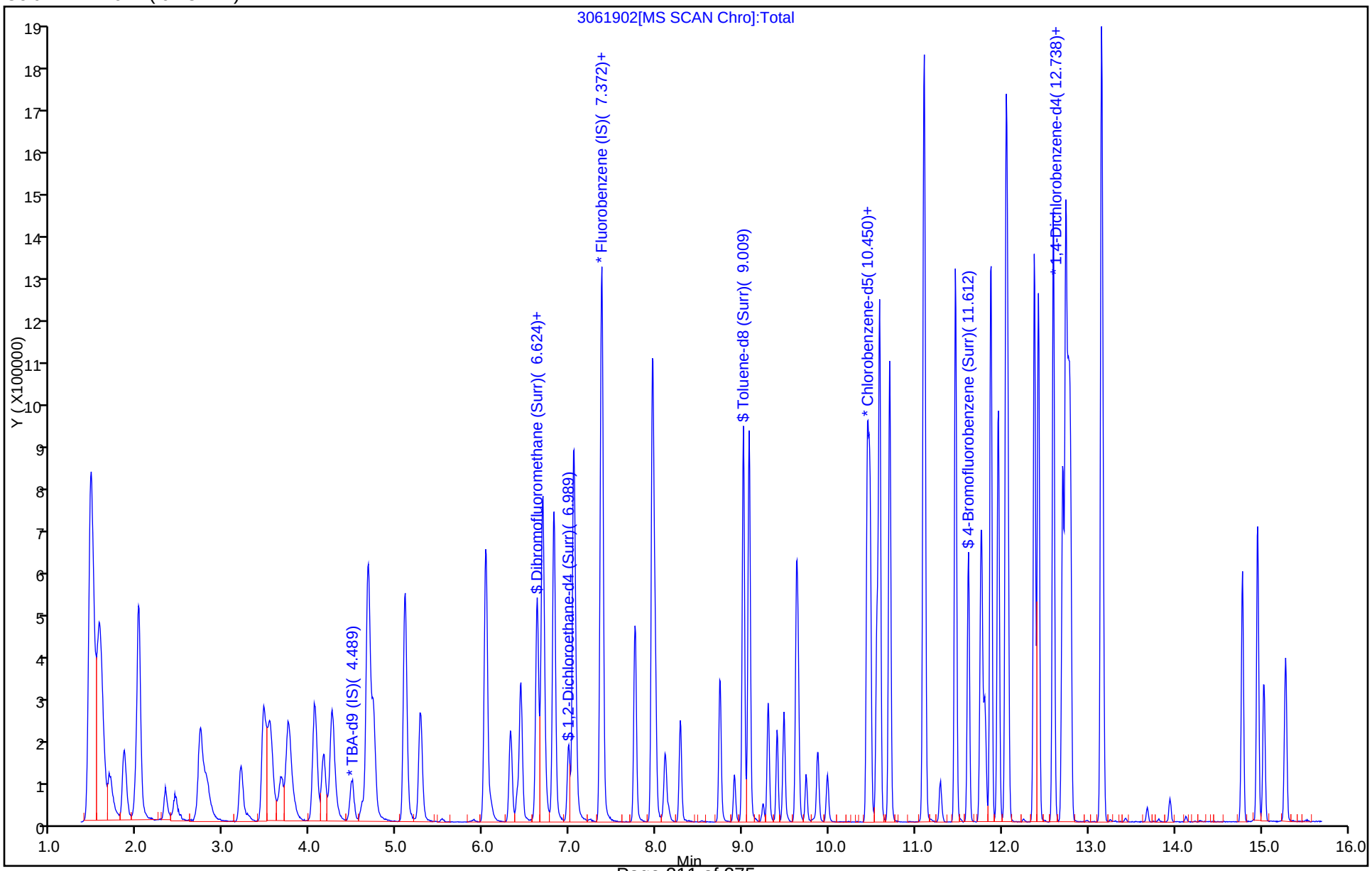
Report Date: 19-Jun-2015 08:30:53 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\3061902.D

Injection Date:	19-Jun-2015 06:50:30	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.: 180-45180-1

SDG No.:

Lab Sample ID: CCVIS 180-145636/2 Calibration Date: 06/20/2015 11:59

Instrument ID: CHHP4 Calib Start Date: 06/16/2015 12:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/16/2015 17:04

Lab File ID: 4062002.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	0.3781	0.3494	0.1000	37.0	40.0	-7.6	20.0
Chloromethane	Ave	0.4663	0.4587	0.1000	39.3	40.0	-1.6	20.0
Vinyl chloride	Ave	0.3668	0.3633	0.1000	39.6	40.0	-1.0	20.0
1,3-Butadiene	Ave	0.3611	0.3551	0.0100	39.3	40.0	-1.7	20.0
Bromomethane	Ave	0.0692	0.0750	0.0500	43.4	40.0	8.4	20.0
Chloroethane	Ave	0.0791	0.0880	0.0500	44.5	40.0	11.2	20.0
Trichlorofluoromethane	Ave	0.2566	0.3797	0.1000	59.2	40.0	47.9*	20.0
Dichlorofluoromethane	Ave	0.2989	0.3811	0.0100	51.0	40.0	27.5*	20.0
Ethyl ether	Ave	0.1391	0.1745	0.0100	50.2	40.0	25.4*	20.0
1,1-Dichloroethene	Ave	0.2241	0.2913	0.1000	52.0	40.0	30.0*	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2815	0.3511	0.1000	49.9	40.0	24.7*	20.0
Acetone	Lin1		0.1028	0.0500	51.1	40.0	27.7*	20.0
Iodomethane	Ave	0.4392	0.2860	0.0100	26.0	40.0	-34.9*	20.0
Carbon disulfide	Ave	0.8011	0.8314	0.1000	41.5	40.0	3.8	20.0
Allyl chloride	Ave	0.1954	0.2016	0.0100	41.3	40.0	3.2	20.0
Methyl acetate	Ave	0.1605	0.1594	0.1000	199	200	-0.7	20.0
Methylene Chloride	Lin2		0.3372	0.1000	39.2	40.0	-2.0	20.0
tert-Butyl alcohol	Ave	1.357	1.352	0.0100	398	400	-0.4	20.0
Acrylonitrile	Ave	0.0703	0.0759	0.0100	431	400	7.9	20.0
trans-1,2-Dichloroethene	Ave	0.2992	0.3039	0.1000	40.6	40.0	1.6	20.0
Methyl tert-butyl ether	Ave	0.6058	0.5924	0.1000	39.1	40.0	-2.2	20.0
Hexane	Lin2		0.6308	0.0100	41.2	40.0	3.1	20.0
1,1-Dichloroethane	Ave	0.5679	0.5783	0.2000	40.7	40.0	1.8	20.0
2,2-Dichloropropane	Ave	0.2419	0.2327	0.0100	38.5	40.0	-3.8	20.0
cis-1,2-Dichloroethene	Ave	0.3144	0.3088	0.1000	39.3	40.0	-1.8	20.0
2-Butanone (MEK)	Ave	0.0870	0.0962	0.0500	44.2	40.0	10.6	20.0
Chlorobromomethane	Ave	0.1228	0.1238	0.0100	40.3	40.0	0.8	20.0
Tetrahydrofuran	Ave	0.0580	0.0628	0.0100	86.6	80.0	8.3	20.0
Chloroform	Ave	0.4513	0.4529	0.2000	40.1	40.0	0.3	20.0
1,1,1-Trichloroethane	Ave	0.3599	0.3655	0.1000	40.6	40.0	1.6	20.0
Cyclohexane	Ave	0.6747	0.6912	0.1000	41.0	40.0	2.4	20.0
Carbon tetrachloride	Ave	0.3308	0.3542	0.1000	42.8	40.0	7.1	20.0
1,1-Dichloropropene	Ave	0.4041	0.4239	0.0100	42.0	40.0	4.9	20.0
Benzene	Ave	1.145	1.160	0.5000	40.5	40.0	1.3	20.0
Isobutyl alcohol	Ave	0.0044	0.0051*	0.0100	1140	1000	14.3	20.0
1,2-Dichloroethane	Ave	0.2802	0.2873	0.1000	41.0	40.0	2.5	20.0
n-Heptane	Ave	0.5786	0.6152	0.0100	42.5	40.0	6.3	20.0
Trichloroethene	Ave	0.2890	0.2812	0.2000	38.9	40.0	-2.7	20.0
Methylcyclohexane	Lin2		0.5886	0.1000	42.8	40.0	7.0	20.0
1,2-Dichloropropane	Ave	0.2852	0.3026	0.1000	42.4	40.0	6.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Lab Sample ID: CCVIS 180-145636/2 Calibration Date: 06/20/2015 11:59

Instrument ID: CHHP4 Calib Start Date: 06/16/2015 12:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/16/2015 17:04

Lab File ID: 4062002.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
Dibromomethane	Ave	0.1159	0.1104	0.0100	38.1	40.0	-4.8	20.0
1,4-Dioxane	Ave	0.0017	0.0018*	0.0100	838	800	4.8	20.0
Dichlorobromomethane	Ave	0.2597	0.2753	0.2000	42.4	40.0	6.0	20.0
trans-1,3-Dichloropropene	Ave	1.514	1.532	0.1000	40.5	40.0	1.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6703	0.7141	0.1000	42.6	40.0	6.5	20.0
Toluene	Ave	5.178	5.158	0.4000	39.8	40.0	-0.4	20.0
cis-1,3-Dichloropropene	Ave	0.2679	0.2614	0.2000	39.0	40.0	-2.4	20.0
Ethyl methacrylate	Qua		1.058	0.0100	41.3	40.0	3.3	20.0
1,1,2-Trichloroethane	Ave	0.7431	0.7782	0.1000	41.9	40.0	4.7	20.0
Tetrachloroethene	Ave	1.050	1.097	0.2000	41.8	40.0	4.5	20.0
1,3-Dichloropropane	Ave	1.383	1.425	0.0100	41.2	40.0	3.0	20.0
2-Hexanone	Ave	0.4284	0.5018	0.1000	46.9	40.0	17.1	20.0
Chlorodibromomethane	Ave	0.6684	0.7077	0.1000	42.4	40.0	5.9	20.0
1,2-Dibromoethane	Ave	0.7017	0.7040	0.1000	40.1	40.0	0.3	20.0
Chlorobenzene	Ave	3.035	3.117	0.5000	41.1	40.0	2.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9786	1.018	0.0100	41.6	40.0	4.0	20.0
Ethylbenzene	Ave	1.899	1.976	0.1000	41.6	40.0	4.0	20.0
m-Xylene & p-Xylene	Ave	2.392	2.437	0.1000	40.8	40.0	1.9	20.0
o-Xylene	Ave	2.294	2.362	0.3000	41.2	40.0	3.0	20.0
Styrene	Ave	3.508	3.672	0.3000	41.9	40.0	4.7	20.0
Bromoform	Lin2		0.3570	0.1000	44.0	40.0	9.9	20.0
Isopropylbenzene	Ave	5.988	6.041	0.1000	40.4	40.0	0.9	20.0
Bromobenzene	Ave	0.8965	0.8953	0.0100	39.9	40.0	-0.1	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8033	0.8188	0.3000	40.8	40.0	1.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1469	0.1530	0.0100	41.6	40.0	4.1	20.0
1,2,3-Trichloropropane	Lin2		0.1887	0.0100	42.6	40.0	6.4	20.0
N-Propylbenzene	Ave	1.271	1.292	0.0100	40.7	40.0	1.7	20.0
2-Chlorotoluene	Ave	0.9657	0.9795	0.0100	40.6	40.0	1.4	20.0
1,3,5-Trimethylbenzene	Ave	3.622	3.557	0.0100	39.3	40.0	-1.8	20.0
4-Chlorotoluene	Ave	0.9469	0.9526	0.0100	40.2	40.0	0.6	20.0
tert-Butylbenzene	Ave	3.275	3.272	0.0100	40.0	40.0	-0.1	20.0
1,2,4-Trimethylbenzene	Ave	3.647	3.615	0.0100	39.7	40.0	-0.9	20.0
sec-Butylbenzene	Ave	4.886	4.840	0.0100	39.6	40.0	-0.9	20.0
1,3-Dichlorobenzene	Ave	1.817	1.810	0.6000	39.8	40.0	-0.4	20.0
4-Isopropyltoluene	Ave	4.056	3.957	0.0100	39.0	40.0	-2.4	20.0
1,4-Dichlorobenzene	Ave	1.765	1.725	0.5000	39.1	40.0	-2.3	20.0
1,2-Dichlorobenzene	Ave	1.606	1.640	0.4000	40.9	40.0	2.1	20.0
n-Butylbenzene	Ave	3.705	3.690	0.0100	39.8	40.0	-0.4	20.0
1,2-Dibromo-3-Chloropropane	Qua		0.0653	0.0500	43.8	40.0	9.5	20.0
1,2,4-Trichlorobenzene	Ave	0.8124	0.8079	0.2000	39.8	40.0	-0.5	20.0
Hexachlorobutadiene	Ave	0.7533	0.7525	0.0100	40.0	40.0	-0.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Lab Sample ID: CCVIS 180-145636/2 Calibration Date: 06/20/2015 11:59

Instrument ID: CHHP4 Calib Start Date: 06/16/2015 12:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/16/2015 17:04

Lab File ID: 4062002.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
Naphthalene	Ave	1.245	1.282	0.0100	41.2	40.0	3.0	20.0
1,2,3-Trichlorobenzene	Ave	0.6031	0.6003	0.0100	39.8	40.0	-0.5	20.0
Dibromofluoromethane (Surr)	Ave	0.2163	0.2210		40.9	40.0	2.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2218	0.2299		41.5	40.0	3.7	20.0
Toluene-d8 (Surr)	Ave	3.845	4.025		41.9	40.0	4.7	20.0
4-Bromofluorobenzene (Surr)	Ave	1.385	1.376		39.8	40.0	-0.6	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20150620-7482.b\4062002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 20-Jun-2015 11:59:30 ALS Bottle#: 10 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0007482-002
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub24

Method: \\PITCHROM\ChromData\CHHP4\20150620-7482.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 21-Jun-2015 11:36:50 Calib Date: 16-Jun-2015 17:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK035

First Level Reviewer: journetp Date: 20-Jun-2015 11:48:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.150	3.150	0.000	99	169709	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.259	6.259	0.000	98	685010	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.446	9.446	0.000	85	163844	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.801	11.801	0.000	95	223555	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.486	5.486	0.000	57	121129	200.0	204.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.882	5.882	0.000	20	125995	200.0	207.3	
$ 7 Toluene-d8 (Surr)	98	7.974	7.974	0.000	93	527598	200.0	209.4	
$ 8 4-Bromofluorobenzene (Surr	95	10.645	10.645	0.000	88	180414	200.0	198.8	
10 Dichlorodifluoromethane	85	1.209	1.209	0.000	72	191460	200.0	184.8	
11 Chloromethane	50	1.325	1.325	0.000	98	251383	200.0	196.7	
12 Vinyl chloride	62	1.422	1.422	0.000	82	199105	200.0	198.1	
13 Butadiene	54	1.447	1.447	0.000	95	194582	200.0	196.7	
14 Bromomethane	94	1.660	1.660	0.000	87	41105	200.0	216.8	
15 Chloroethane	64	1.757	1.757	0.000	61	48221	200.0	222.5	
17 Trichlorofluoromethane	101	1.915	1.915	0.000	87	208054	200.0	295.9	
16 Dichlorofluoromethane	67	1.964	1.964	0.000	97	208840	200.0	255.0	
19 Ethyl ether	59	2.238	2.238	0.000	94	95605	200.0	250.8	
21 1,1-Dichloroethene	96	2.408	2.408	0.000	88	159623	200.0	259.9	
22 1,1,2-Trichloro-1,2,2-trif	101	2.487	2.487	0.000	92	192386	200.0	249.4	
23 Acetone	43	2.523	2.523	0.000	77	56342	200.0	255.4	
24 Iodomethane	142	2.554	2.554	0.000	97	156703	200.0	130.2	
25 Carbon disulfide	76	2.621	2.621	0.000	99	455615	200.0	207.6	
28 3-Chloro-1-propene	76	2.828	2.828	0.000	91	110493	200.0	206.4	
29 Methyl acetate	43	2.864	2.864	0.000	99	436717	1000.0	993.0	
30 Methylene Chloride	84	2.986	2.986	0.000	89	184812	200.0	195.9	
31 2-Methyl-2-propanol	59	3.260	3.260	0.000	56	91753	2000.0	1992.2	
32 Acrylonitrile	53	3.320	3.320	0.000	98	415710	2000.0	2157.1	
33 trans-1,2-Dichloroethene	96	3.333	3.333	0.000	95	166550	200.0	203.2	
34 Methyl tert-butyl ether	73	3.363	3.363	0.000	91	324641	200.0	195.6	
35 Hexane	57	3.722	3.722	0.000	92	345656	200.0	206.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	3.971	3.971	0.000	84	316902	200.0	203.6	
41 2,2-Dichloropropane	77	4.799	4.799	0.000	63	127493	200.0	192.4	
42 cis-1,2-Dichloroethene	96	4.811	4.811	0.000	84	169209	200.0	196.4	
43 2-Butanone (MEK)	43	4.860	4.860	0.000	99	52741	200.0	221.2	
46 Chlorobromomethane	128	5.127	5.127	0.000	79	67817	200.0	201.5	
48 Tetrahydrofuran	42	5.145	5.145	0.000	94	68871	400.0	433.1	
49 Chloroform	83	5.298	5.298	0.000	94	248181	200.0	200.7	
50 1,1,1-Trichloroethane	97	5.444	5.444	0.000	94	200293	200.0	203.1	
51 Cyclohexane	56	5.510	5.510	0.000	75	378790	200.0	204.9	
53 Carbon tetrachloride	117	5.620	5.620	0.000	90	194102	200.0	214.1	
52 1,1-Dichloropropene	75	5.650	5.650	0.000	93	232285	200.0	209.8	
54 Benzene	78	5.875	5.875	0.000	96	635517	200.0	202.6	
59 Isobutyl alcohol	41	5.936	5.936	0.000	95	69246	5000.0	5716.9	
55 1,2-Dichloroethane	62	5.979	5.979	0.000	95	157423	200.0	205.0	
58 n-Heptane	43	6.295	6.295	0.000	95	337150	200.0	212.7	
61 Trichloroethene	130	6.666	6.666	0.000	88	154083	200.0	194.6	
63 Methylcyclohexane	83	6.897	6.897	0.000	94	322568	200.0	214.0	
64 1,2-Dichloropropane	63	6.952	6.952	0.000	94	165818	200.0	212.2	
65 Dibromomethane	93	7.043	7.043	0.000	90	60500	200.0	190.5	
67 1,4-Dioxane	88	7.056	7.056	0.000	53	19337	4000.0	4190.4	
68 Dichlorobromomethane	83	7.256	7.256	0.000	91	150879	200.0	212.0	
74 trans-1,3-Dichloropropene	75	7.725	7.725	0.000	91	200864	200.0	202.4	
72 4-Methyl-2-pentanone (MIBK	43	7.895	7.895	0.000	94	93603	200.0	213.1	
73 Toluene	91	8.047	8.047	0.000	98	676036	200.0	199.2	
71 cis-1,3-Dichloropropene	75	8.327	8.327	0.000	87	143222	200.0	195.1	
75 Ethyl methacrylate	69	8.406	8.406	0.000	92	138673	200.0	206.6	
76 1,1,2-Trichloroethane	97	8.516	8.516	0.000	86	101999	200.0	209.4	
77 Tetrachloroethene	164	8.558	8.558	0.000	96	143776	200.0	209.0	
78 1,3-Dichloropropane	76	8.668	8.668	0.000	94	186826	200.0	206.0	
79 2-Hexanone	43	8.747	8.747	0.000	95	65773	200.0	234.3	
81 Chlorodibromomethane	129	8.881	8.881	0.000	87	92758	200.0	211.8	
82 Ethylene Dibromide	107	8.984	8.984	0.000	95	92276	200.0	200.7	
84 Chlorobenzene	112	9.477	9.477	0.000	92	408570	200.0	205.4	
85 1,1,1,2-Tetrachloroethane	131	9.580	9.580	0.000	49	133374	200.0	208.0	
86 Ethylbenzene	106	9.592	9.592	0.000	98	258939	200.0	208.1	
87 m-Xylene & p-Xylene	106	9.726	9.726	0.000	99	319455	200.0	203.8	
88 o-Xylene	106	10.103	10.103	0.000	97	309629	200.0	205.9	
89 Styrene	104	10.128	10.128	0.000	96	481326	200.0	209.4	
90 Bromoform	173	10.298	10.298	0.000	97	46797	200.0	219.8	
91 Isopropylbenzene	105	10.481	10.481	0.000	95	791885	200.0	201.8	
94 Bromobenzene	156	10.773	10.773	0.000	90	160115	200.0	199.7	
93 1,1,2,2-Tetrachloroethane	83	10.803	10.803	0.000	65	107323	200.0	203.9	
96 trans-1,4-Dichloro-2-buten	53	10.840	10.840	0.000	40	27359	200.0	208.2	
95 1,2,3-Trichloropropane	110	10.852	10.852	0.000	43	33752	200.0	212.8	
97 N-Propylbenzene	120	10.894	10.894	0.000	97	231089	200.0	203.3	
98 2-Chlorotoluene	126	10.967	10.967	0.000	96	175172	200.0	202.9	
99 1,3,5-Trimethylbenzene	105	11.089	11.089	0.000	88	636215	200.0	196.4	
100 4-Chlorotoluene	126	11.095	11.095	0.000	98	170358	200.0	201.2	
101 tert-Butylbenzene	119	11.393	11.393	0.000	86	585167	200.0	199.8	
103 1,2,4-Trimethylbenzene	105	11.454	11.454	0.000	97	646581	200.0	198.3	
104 sec-Butylbenzene	105	11.618	11.618	0.000	94	865662	200.0	198.1	
105 1,3-Dichlorobenzene	146	11.716	11.716	0.000	98	323634	200.0	199.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 4-Isopropyltoluene	119	11.782	11.782	0.000	91	707747	200.0	195.1	
107 1,4-Dichlorobenzene	146	11.825	11.825	0.000	95	308426	200.0	195.5	
111 1,2-Dichlorobenzene	146	12.166	12.166	0.000	97	293326	200.0	204.3	
110 n-Butylbenzene	91	12.184	12.184	0.000	97	659934	200.0	199.2	
112 1,2-Dibromo-3-Chloropropan	75	12.963	12.963	0.000	72	11671	200.0	219.1	
113 1,2,4-Trichlorobenzene	180	13.778	13.778	0.000	92	144495	200.0	198.9	
115 Hexachlorobutadiene	225	13.930	13.930	0.000	92	134581	200.0	199.8	
116 Naphthalene	128	14.033	14.033	0.000	96	229283	200.0	206.0	
117 1,2,3-Trichlorobenzene	180	14.252	14.252	0.000	95	107364	200.0	199.1	
S 129 1,2-Dichloroethene, Total	96				0		400.0	399.6	
S 130 Xylenes, Total	106				0		400.0	409.7	
S 131 1,3-Dichloropropene, Total	1				0		400.0	397.5	

Reagents:

VOA8260INT_00038	Amount Added: 10.00	Units: uL
VOA8260VOAPRI_00125	Amount Added: 8.00	Units: uL
VOA8260SURR_00038	Amount Added: 8.00	Units: uL

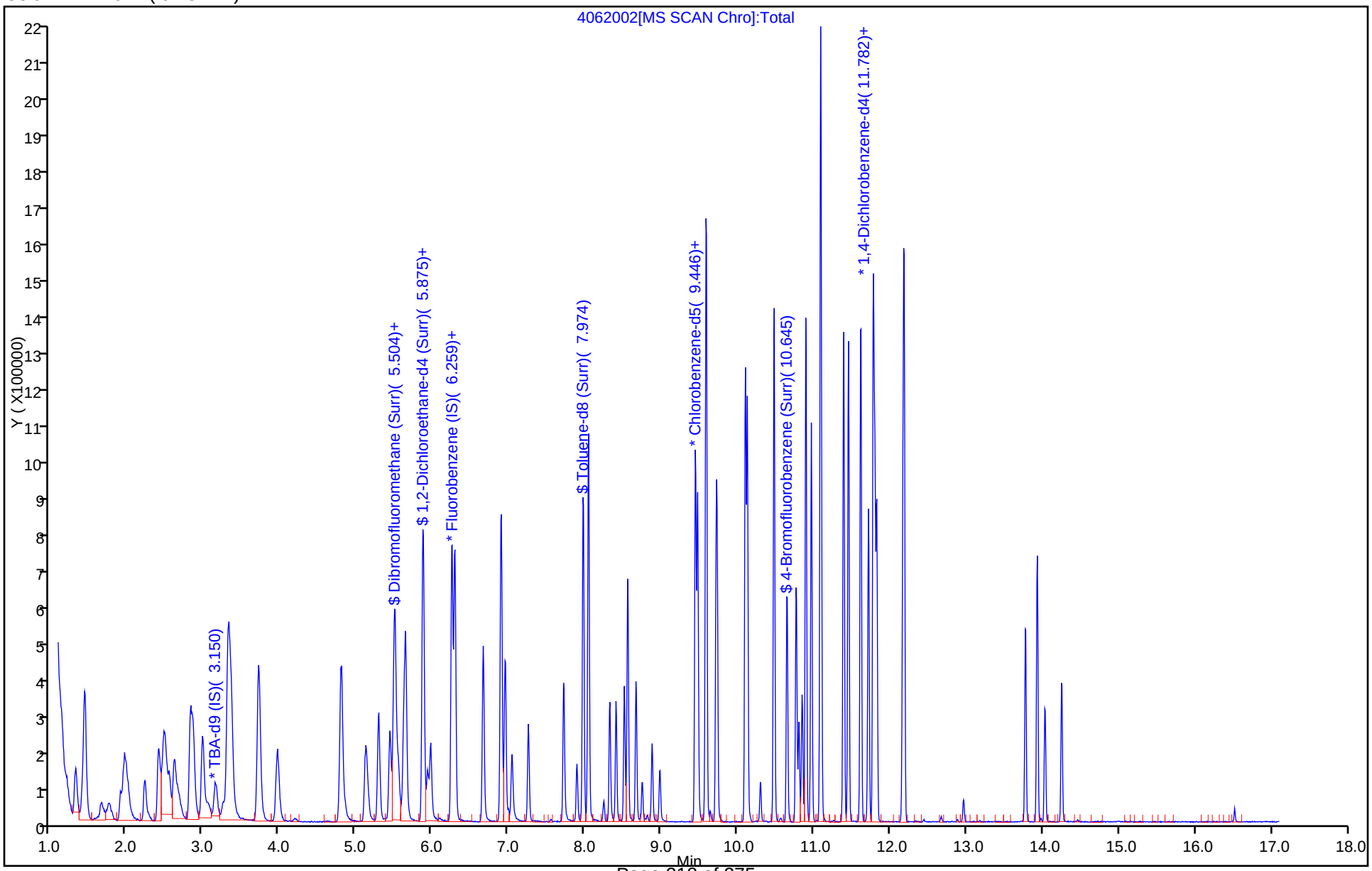
Report Date: 21-Jun-2015 11:36:51 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150620-7482.b\4062002.D

Injection Date:	20-Jun-2015 11:59:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060501.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 05-Jun-2015 06:00:30 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: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Jun-2015 09:53:16 Calib Date: 05-Jun-2015 09:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060509.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: gordonk Date: 05-Jun-2015 07:09:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 9 BFB	95	8.407	8.407	0.000	0	629750	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

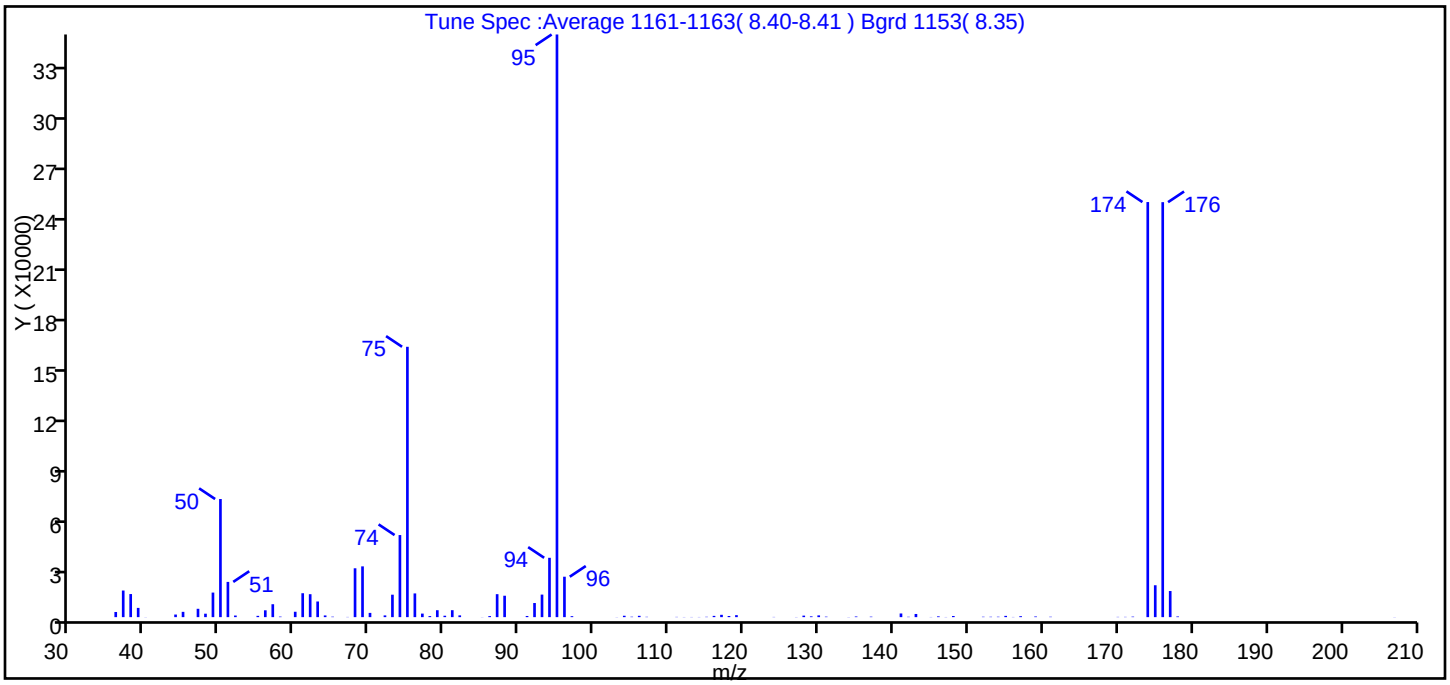
VOABFB50_00064 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060501.D
Injection Date: 05-Jun-2015 06:00:30 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	20.3
75	30 to 60% of m/z 95	46.4
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	71.2
175	5 to 9% of m/z 174	5.5 (7.7)
176	Greater than 95% but less than 101% of m/z 174	71.2 (100.0)
177	5 to 9% of m/z 176	4.5 (6.3)

Data File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060501.D\MSVOA_S_CHHP3.rslt\spectra.d
Injection Date: 05-Jun-2015 06:00:30
Spectrum: Tune Spec :Average 1161-1163(8.40-8.41) Bgrd 1153(8.35)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 96

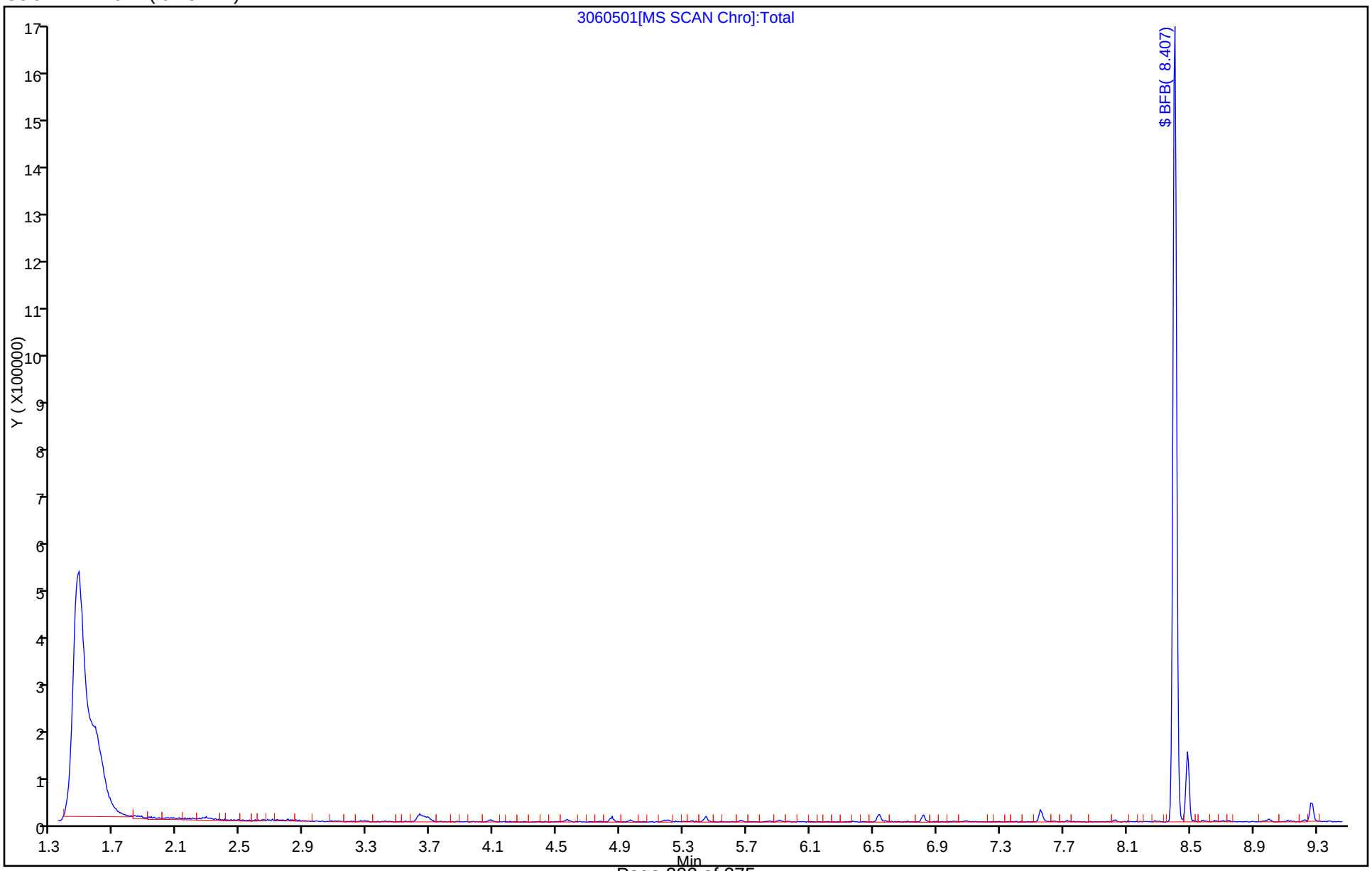
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3078	68.00	29152	97.00	572	141.00	2189
37.00	15880	69.00	30288	103.00	72	142.00	213
38.00	13775	70.00	2536	104.00	829	143.00	1888
39.00	5515	72.00	1033	105.00	258	145.00	96
40.00	67	73.00	13394	106.00	791	146.00	465
44.00	1556	74.00	48968	107.00	193	147.00	94
45.00	3162	75.00	161280	111.00	149	148.00	668
47.00	4980	76.00	14151	112.00	93	152.00	239
48.00	2056	77.00	2120	113.00	103	153.00	226
49.00	14660	78.00	636	114.00	102	154.00	251
50.00	70464	79.00	4132	115.00	208	155.00	760
51.00	21024	80.00	843	116.00	753	156.00	108
52.00	962	81.00	4151	117.00	1390	157.00	562
55.00	773	82.00	1056	118.00	682	159.00	393
56.00	4082	85.00	69	119.00	1183	161.00	235
57.00	7708	86.00	622	124.00	124	170.00	152
58.00	317	87.00	13705	127.00	89	171.00	157
60.00	3213	88.00	12775	128.00	904	172.00	305
61.00	14261	91.00	687	129.00	470	174.00	247616
62.00	13689	92.00	8422	130.00	1042	175.00	19024
63.00	9335	93.00	13452	131.00	293	176.00	247552
64.00	1012	94.00	35400	134.00	83	177.00	15579
65.00	272	95.00	347584	135.00	390	178.00	400
67.00	121	96.00	24120	137.00	289	207.00	71

Report Date: 05-Jun-2015 09:53:16 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060501.D				
Injection Date:	05-Jun-2015 06:00:30	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: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\3061901.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 19-Jun-2015 05:55:30 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: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 19-Jun-2015 08:30:52 Calib Date: 05-Jun-2015 09:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060509.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: gordonk Date: 19-Jun-2015 07:31:33

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	724470	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

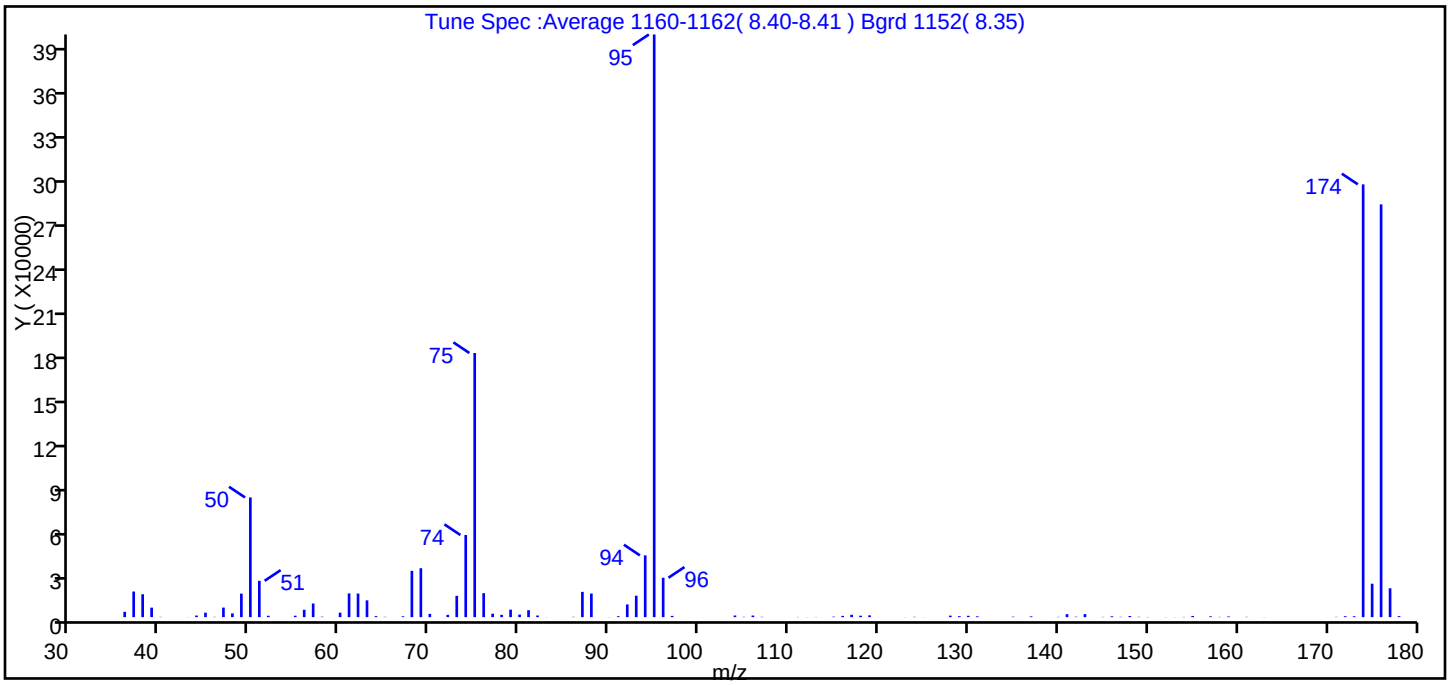
VOABFB50_00065 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\3061901.D
Injection Date: 19-Jun-2015 05:55:30 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	20.5
75	30 to 60% of m/z 95	45.3
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.2 (0.2)
174	50 to 120% of m/z 95	74.3
175	5 to 9% of m/z 174	5.7 (7.7)
176	Greater than 95% but less than 101% of m/z 174	70.8 (95.4)
177	5 to 9% of m/z 176	5.0 (7.0)

Data File: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\3061901.D\MSVOA_S_CHHP3.rslt\spectra.d
Injection Date: 19-Jun-2015 05:55:30
Spectrum: Tune Spec :Average 1160-1162(8.40-8.41) Bgrd 1152(8.35)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 100

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3641	67.00	577	96.00	26848	142.00	296
37.00	17456	68.00	31536	97.00	851	143.00	2056
38.00	15596	69.00	33312	104.00	1127	145.00	170
39.00	6481	70.00	2222	105.00	221	146.00	580
40.00	183	72.00	1559	106.00	1103	147.00	204
43.00	83	73.00	14521	107.00	223	148.00	762
44.00	1086	74.00	55944	111.00	130	149.00	232
45.00	3040	75.00	179904	112.00	80	150.00	126
46.00	191	76.00	16329	113.00	117	152.00	90
47.00	6521	77.00	2350	115.00	352	153.00	78
48.00	2542	78.00	1559	116.00	873	154.00	156
49.00	16037	79.00	5098	117.00	1590	155.00	808
50.00	81536	80.00	1731	118.00	984	157.00	550
51.00	24752	81.00	4738	119.00	1226	158.00	172
52.00	944	82.00	1120	123.00	81	159.00	468
55.00	974	83.00	74	124.00	219	161.00	195
56.00	5036	86.00	208	125.00	67	163.00	76
57.00	9286	87.00	17216	128.00	1025	171.00	188
58.00	290	88.00	16078	129.00	662	172.00	621
60.00	3050	90.00	82	130.00	923	173.00	597
61.00	16177	91.00	626	131.00	578	174.00	294784
62.00	16065	92.00	8654	135.00	325	175.00	22760
63.00	11431	93.00	14600	137.00	527	176.00	281152
64.00	712	94.00	42072	140.00	175	177.00	19664
65.00	206	95.00	396864	141.00	2005	178.00	674

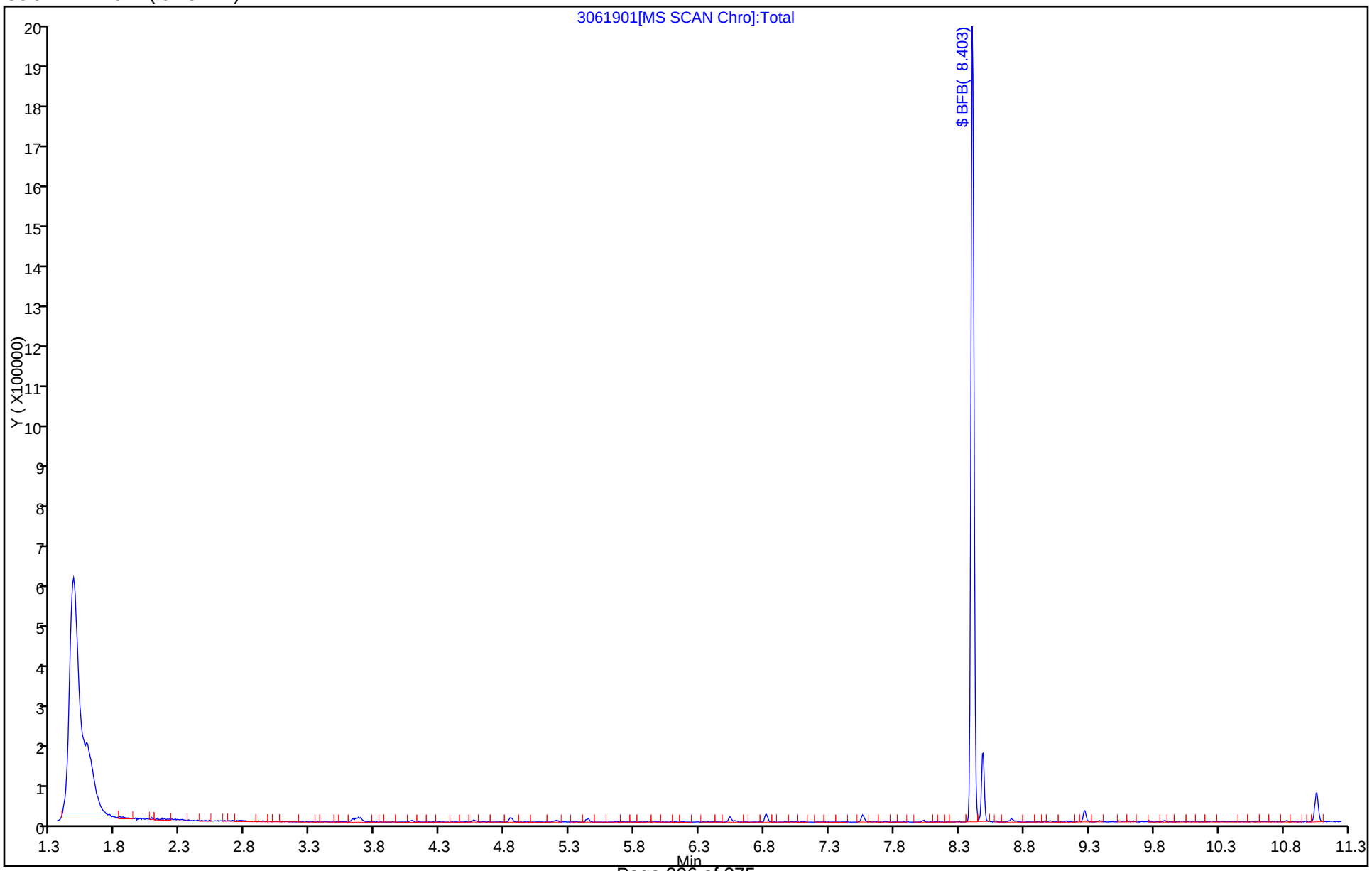
Report Date: 19-Jun-2015 08:30:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\3061901.D

Injection Date:	19-Jun-2015 05:55:30	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: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061601.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 16-Jun-2015 09:24:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0007420-001
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Jun-2015 07:33:55 Calib Date: 16-Jun-2015 17:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: journetp Date: 16-Jun-2015 08:53:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 9 BFB	95	10.647	10.647	0.000	0	294736	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

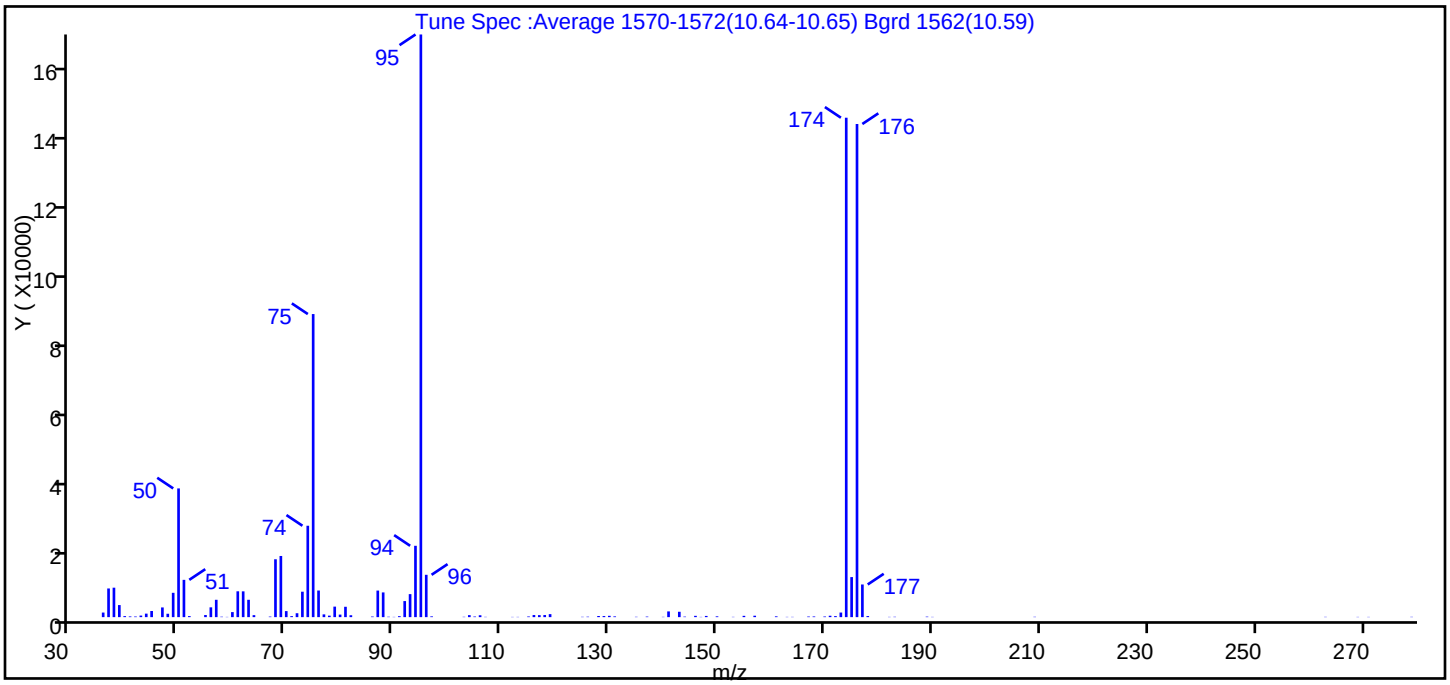
VOABFB50_00064 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061601.D
Injection Date: 16-Jun-2015 09:24:30 Instrument ID: CHHP4
Lims ID: BFB
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 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	22.1
75	30 to 60% of m/z 95	52.0
96	5 to 9% of m/z 95	7.3
173	Less than 2% of m/z 174	0.8 (0.9)
174	50 to 120% of m/z 95	85.7
175	5 to 9% of m/z 174	6.9 (8.0)
176	Greater than 95% but less than 101% of m/z 174	84.6 (98.7)
177	5 to 9% of m/z 176	5.6 (6.6)

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061601.D\MSVOA_CHHP4.rslt\spectra.d
Injection Date: 16-Jun-2015 09:24:30
Spectrum: Tune Spec :Average 1570-1572(10.64-10.65) Bgrd 1562(10.59)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 108

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1310	68.00	16512	103.00	96	150.00	230
37.00	8179	69.00	17448	104.00	574	153.00	79
38.00	8402	70.00	1725	105.00	175	155.00	372
39.00	3442	71.00	288	106.00	534	157.00	406
40.00	292	72.00	1118	107.00	80	161.00	229
41.00	202	73.00	7256	112.00	68	163.00	75
42.00	179	74.00	26072	113.00	71	164.00	76
43.00	447	75.00	86456	115.00	190	167.00	173
44.00	1000	76.00	7595	116.00	601	168.00	193
45.00	1751	77.00	790	117.00	572	170.00	183
47.00	2770	78.00	428	118.00	599	171.00	399
48.00	967	79.00	3000	119.00	855	172.00	298
49.00	6941	80.00	724	125.00	94	173.00	1310
50.00	36720	81.00	2958	126.00	129	174.00	142464
51.00	10639	82.00	542	128.00	325	175.00	11424
52.00	292	86.00	172	129.00	309	176.00	140672
55.00	602	87.00	7580	130.00	379	177.00	9318
56.00	2797	88.00	7052	131.00	215	178.00	304
57.00	4950	89.00	119	135.00	100	182.00	75
58.00	124	90.00	70	137.00	160	183.00	103
59.00	69	91.00	273	140.00	85	189.00	143
60.00	1437	92.00	4584	141.00	1635	190.00	72
61.00	7374	93.00	6566	143.00	1532	209.00	100
62.00	7360	94.00	20352	144.00	150	263.00	84
63.00	4952	95.00	166208	146.00	374	269.00	70
64.00	567	96.00	12077	147.00	68	271.00	69
67.00	161	97.00	216	148.00	345	279.00	89

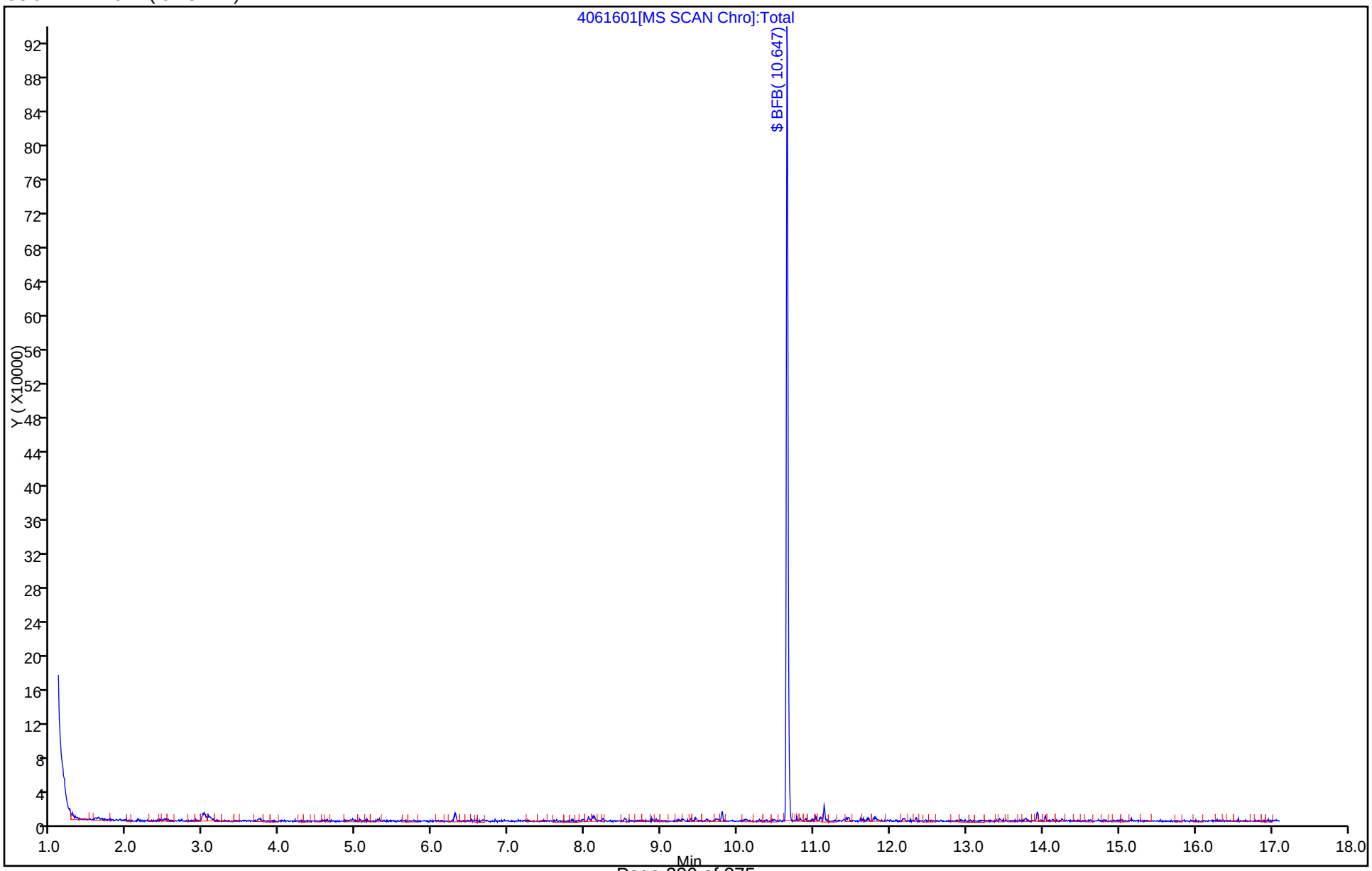
Report Date: 17-Jun-2015 07:33:56 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061601.D

Injection Date:	16-Jun-2015 09:24:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20150620-7482.b\4062001.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 20-Jun-2015 11:13:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0007482-001
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20150620-7482.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 21-Jun-2015 11:36:49 Calib Date: 16-Jun-2015 17:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK035

First Level Reviewer: journetp Date: 20-Jun-2015 10:47:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 9 BFB	95	10.647	10.647	0.000	0	264527	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

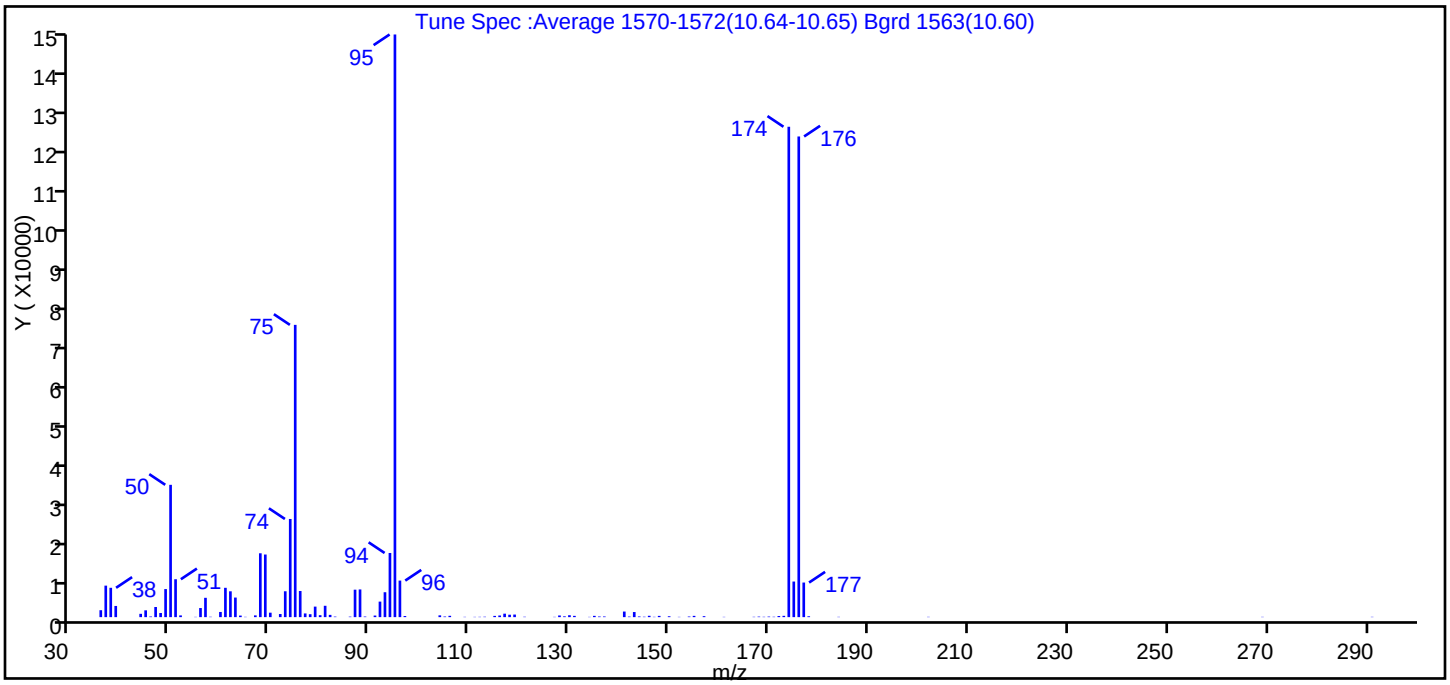
VOABFB50_00064 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150620-7482.b\4062001.D
Injection Date: 20-Jun-2015 11:13:30 Instrument ID: CHHP4
Lims ID: BFB
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 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	22.7
75	30 to 60% of m/z 95	50.2
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	84.2
175	5 to 9% of m/z 174	6.1 (7.3)
176	Greater than 95% but less than 101% of m/z 174	82.5 (98.0)
177	5 to 9% of m/z 176	5.9 (7.2)

Data File: \\PITCHROM\ChromData\CHHP4\20150620-7482.b\4062001.D\MSVOA_CHHP4.rslt\spectra.d
Injection Date: 20-Jun-2015 11:13:30
Spectrum: Tune Spec :Average 1570-1572(10.64-10.65) Bgrd 1563(10.60)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 102

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1763	70.00	1135	106.00	342	147.00	81
37.00	8011	72.00	793	109.00	75	148.00	320
38.00	7464	73.00	6579	111.00	70	150.00	221
39.00	2844	74.00	24960	112.00	81	152.00	71
44.00	843	75.00	74320	113.00	105	154.00	154
45.00	1731	76.00	6645	115.00	319	155.00	324
46.00	163	77.00	940	116.00	417	157.00	241
47.00	2579	78.00	744	117.00	880	161.00	69
48.00	1054	79.00	2678	118.00	616	167.00	85
49.00	7137	80.00	494	119.00	658	168.00	137
50.00	33648	81.00	2887	121.00	98	169.00	89
51.00	9640	82.00	578	127.00	72	170.00	144
52.00	440	83.00	135	128.00	426	171.00	99
55.00	69	86.00	129	129.00	205	172.00	284
56.00	2316	87.00	6982	130.00	488	173.00	332
57.00	4915	88.00	7044	131.00	328	174.00	124696
58.00	97	89.00	149	134.00	68	175.00	9054
60.00	1314	91.00	406	135.00	328	176.00	122224
61.00	7460	92.00	3950	136.00	163	177.00	8798
62.00	6570	93.00	6337	137.00	165	178.00	216
63.00	4981	94.00	16314	141.00	1422	184.00	76
64.00	398	95.00	148160	142.00	140	202.00	76
65.00	74	96.00	9295	143.00	1299	269.00	73
67.00	447	97.00	285	144.00	169	291.00	78
68.00	16239	104.00	453	145.00	107		
69.00	15924	105.00	158	146.00	344		

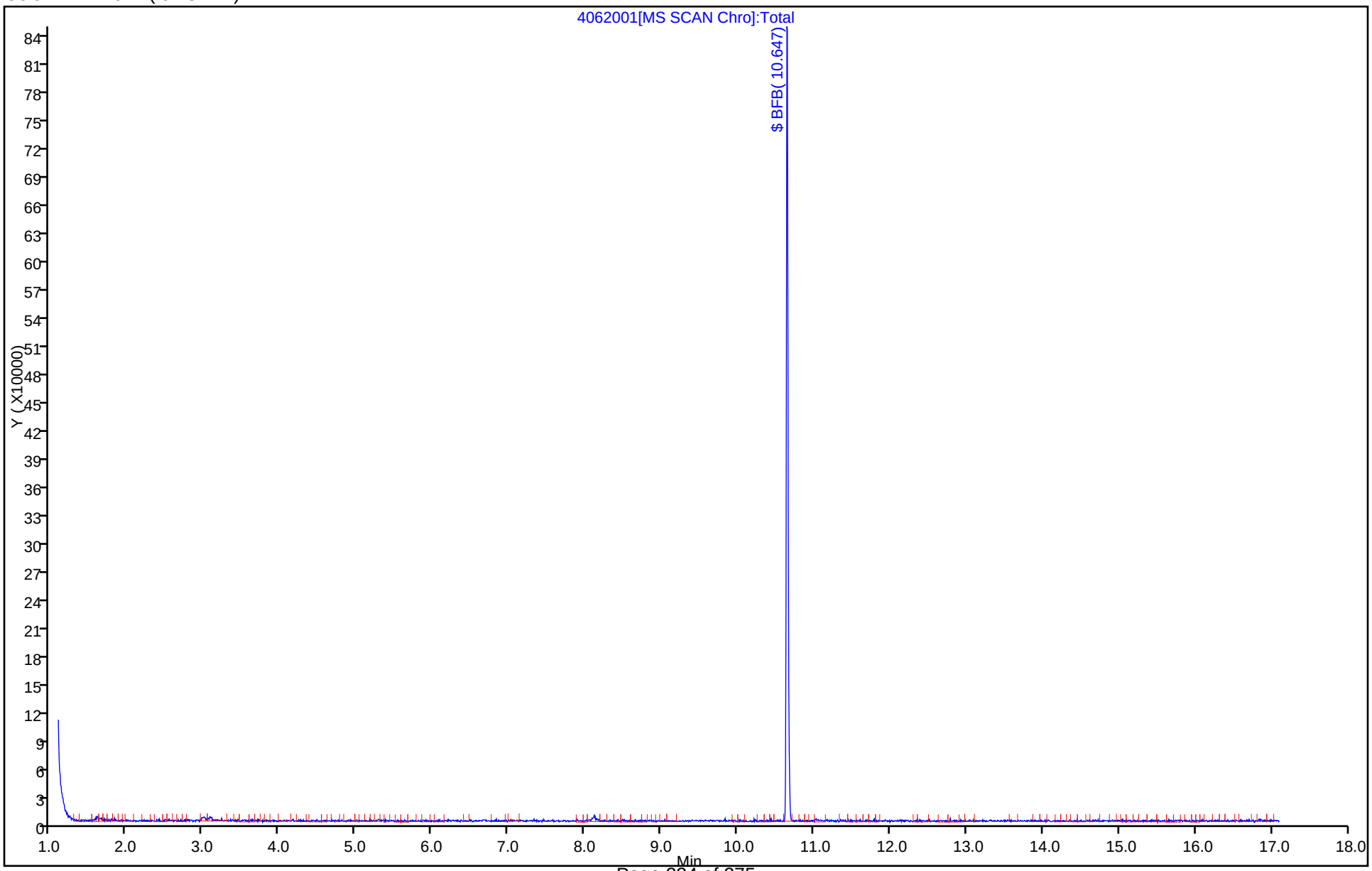
Report Date: 21-Jun-2015 11:36:49 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150620-7482.b\4062001.D

Injection Date:	20-Jun-2015 11:13:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_CHHP4	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.: 180-45180-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-145522/3

Matrix: Water Lab File ID: 3061905.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2015 08:12

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 145522 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-63-6	1,2,4-Trimethylbenzene	5.0	U	5.0	0.52
108-67-8	1,3,5-Trimethylbenzene	5.0	U	5.0	0.59
71-43-2	Benzene	5.0	U	5.0	0.99
100-41-4	Ethylbenzene	5.0	U	5.0	0.62
98-82-8	Isopropylbenzene	5.0	U	5.0	0.53
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	1.0
91-20-3	Naphthalene	2.17	J	5.0	0.47
108-88-3	Toluene	5.0	U	5.0	0.85
1330-20-7	Xylenes, Total	10	U	10	1.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		62-123
460-00-4	4-Bromofluorobenzene (Surr)	86		75-120
1868-53-7	Dibromofluoromethane (Surr)	97		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\3061905.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 19-Jun-2015 08:12:30 ALS Bottle#: 5 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 180-0007465-003180-0007465-003
Operator ID: 10099 Instrument ID: CHHP3

Method: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 19-Jun-2015 08:32:10 Calib Date: 05-Jun-2015 09:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060509.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: gordonk Date: 19-Jun-2015 08:32:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.452	4.489	-0.037	100	162367	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.372	7.360	0.012	99	783701	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.450	10.444	0.006	88	175227	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.768	0.000	97	240509	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.623	6.618	0.005	94	163898	250.0	241.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.988	6.989	-0.001	95	153153	250.0	232.6	
$ 7 Toluene-d8 (Surr)	98	9.008	9.009	-0.001	93	708768	250.0	237.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.612	0.000	86	264180	250.0	214.8	
10 Dichlorodifluoromethane	85		1.690					ND	
11 Chloromethane	50		1.848					ND	
12 Vinyl chloride	62		1.994					ND	
13 Butadiene	39		2.019					ND	
14 Bromomethane	94		2.323					ND	
15 Chloroethane	64		2.432					ND	
16 Dichlorofluoromethane	67		2.724					ND	
17 Trichlorofluoromethane	101		2.730					ND	
18 Ethanol	45		3.128					ND	
19 Ethyl ether	59		3.199					ND	
20 Acrolein	56		3.363					ND	
21 1,1-Dichloroethene	96		3.460					ND	
22 1,1,2-Trichloro-1,2,2-trif	101		3.533					ND	
23 Acetone	43		3.625					ND	
24 Iodomethane	142		3.673					ND	
25 Carbon disulfide	76		3.740					ND	
27 Acetonitrile	40		3.900					ND	
26 Isopropyl alcohol	45		3.906					ND	
28 3-Chloro-1-propene	76		4.044					ND	
29 Methyl acetate	43		4.154					ND	
30 Methylene Chloride	84		4.251					ND	
31 2-Methyl-2-propanol	59		4.604					ND	
32 Acrylonitrile	53		4.659					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
33 trans-1,2-Dichloroethene	96		4.671					ND	
34 Methyl tert-butyl ether	73		4.732					ND	
35 Hexane	57	5.115	5.097	0.018	93	10739		5.37	
36 1,1-Dichloroethane	63		5.273					ND	
37 Vinyl acetate	43		5.395					ND	
38 2-Chloro-1,3-butadiene	53		5.416					ND	
39 Isopropyl ether	45		5.452					ND	
40 Tert-butyl ethyl ether	59		5.914					ND	
41 2,2-Dichloropropane	77		6.028					ND	
42 cis-1,2-Dichloroethene	96		6.034					ND	
43 2-Butanone (MEK)	43		6.088					ND	
45 Ethyl acetate	43		6.090					ND	
44 Propionitrile	54		6.152					ND	
47 Chlorobromomethane	128		6.320					ND	
46 Methacrylonitrile	41		6.334					ND	
48 Tetrahydrofuran	42		6.393					ND	
49 Chloroform	83		6.435					ND	
50 1,1,1-Trichloroethane	97		6.630					ND	
51 Cyclohexane	56		6.685					ND	
53 Carbon tetrachloride	117		6.812					ND	
52 1,1-Dichloropropene	75		6.819					ND	
54 Isobutyl alcohol	41		7.044					ND	
55 Benzene	78		7.050					ND	
56 1,2-Dichloroethane	62		7.068					ND	
58 Isooctane	57		7.368					ND	
57 Tert-amyl methyl ether	73		7.374					ND	
59 n-Heptane	43		7.378					ND	
61 n-Butanol	56		7.733					ND	
60 Trichloroethene	130		7.755					ND	
63 Methylcyclohexane	83		7.956					ND	
62 Ethyl acrylate	55		7.956					ND	
64 1,2-Dichloropropane	63		7.987					ND	
65 Dibromomethane	93		8.108					ND	
66 Methyl methacrylate	69		8.141					ND	
67 1,4-Dioxane	88		8.145					ND	
68 Dichlorobromomethane	83		8.279					ND	
69 2-Nitropropane	41		8.534					ND	
70 2-Chloroethyl vinyl ether	63		8.600					ND	
71 cis-1,3-Dichloropropene	75		8.741					ND	
72 4-Methyl-2-pentanone (MIBK	43		8.905					ND	
73 Toluene	91		9.075					ND	
74 trans-1,3-Dichloropropene	75		9.294					ND	
75 Ethyl methacrylate	69		9.398					ND	
76 1,1,2-Trichloroethane	97		9.477					ND	
77 Tetrachloroethene	164		9.623					ND	
78 1,3-Dichloropropane	76		9.641					ND	
79 2-Hexanone	43		9.732					ND	
80 n-Butyl acetate	43		9.838					ND	
81 Chlorodibromomethane	129		9.872					ND	
82 Ethylene Dibromide	107		9.982					ND	
83 Chlorobenzene	112		10.469					ND	
85 1,1,1,2-Tetrachloroethane	131		10.554					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 Ethylbenzene	106		10.584					ND	
87 m-Xylene & p-Xylene	106		10.700					ND	
84 4-Chlorobenzotrifluoride	180		10.745					ND	
88 o-Xylene	106		11.095					ND	
89 Styrene	104		11.107					ND	
90 Bromoform	173		11.290					ND	
91 Isopropylbenzene	105		11.460					ND	
92 Cyclohexanone	55		11.554					ND	
93 1,1,2,2-Tetrachloroethane	83		11.746					ND	
94 Bromobenzene	156		11.764					ND	
95 1,2,3-Trichloropropane	110		11.795					ND	
96 trans-1,4-Dichloro-2-buten	53		11.807					ND	
97 N-Propylbenzene	120		11.874					ND	
98 2-Chlorotoluene	126		11.959					ND	
99 1,3,5-Trimethylbenzene	105		12.044					ND	
100 4-Chlorotoluene	126		12.062					ND	
101 tert-Butylbenzene	119		12.373					ND	
102 Pentachloroethane	167		12.393					ND	
103 1,2,4-Trimethylbenzene	105		12.421					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		12.740					ND	
107 1,4-Dichlorobenzene	146		12.792					ND	
109 Benzyl chloride	91		12.929					ND	
110 n-Butylbenzene	91		13.151					ND	
111 1,2-Dichlorobenzene	146		13.164					ND	
112 1,2-Dibromo-3-Chloropropan	75		13.942					ND	
113 1,3,5-Trichlorobenzene	180		14.157					ND	
114 1,2,4-Trichlorobenzene	180		14.782					ND	
115 Hexachlorobutadiene	225		14.952					ND	
116 Naphthalene	128	15.031	15.031	0.000	96	11912		10.9	
117 1,2,3-Trichlorobenzene	180		15.281					ND	
118 2-Methylnaphthalene	142		16.356					ND	
123 3-Chlorobenzotrifluoride	180		0.000					ND	
122 3-Chlorotoluene	126		0.000					ND	
126 2,4-Dichloro-1-(triflourom	214		0.000					ND	
125 2,3- & 3,4- Dichlorotoluen	125		0.000					ND	
124 2,4,5-Trichlorotoluene	159		0.000					ND	
121 1,2-dichloro-4-(trifluorom	214		0.000					ND	
128 2,3,6-Trichlorotoluene	159		0.000					ND	
127 2-Chlorobenzotrifluoride	180		0.000					ND	
119 2,5-Dichlorobenzotrifluori	214		0.000					ND	
120 2,4- & 2,5- & 2,6- Dichlor	125		0.000					ND	
S 129 Xylenes, Total	106		1.000					ND	
S 130 1,2-Dichloroethene, Total	96		1.000					ND	
S 131 1,3-Dichloropropene, Total	1		0.000					ND	
T 133 Methyl n-amyl ketone TIC	43		0.000					ND	
T 134 Tetrahydrofuran TIC	42		0.000					ND	
T 132 Mesityl oxide TIC	83		7.968					ND	

Reagents:

VOA8260SURR_00038	Amount Added:	10.00	Units: uL	
VOA8260INT_00038	Amount Added:	10.00	Units: uL	Run Reagent

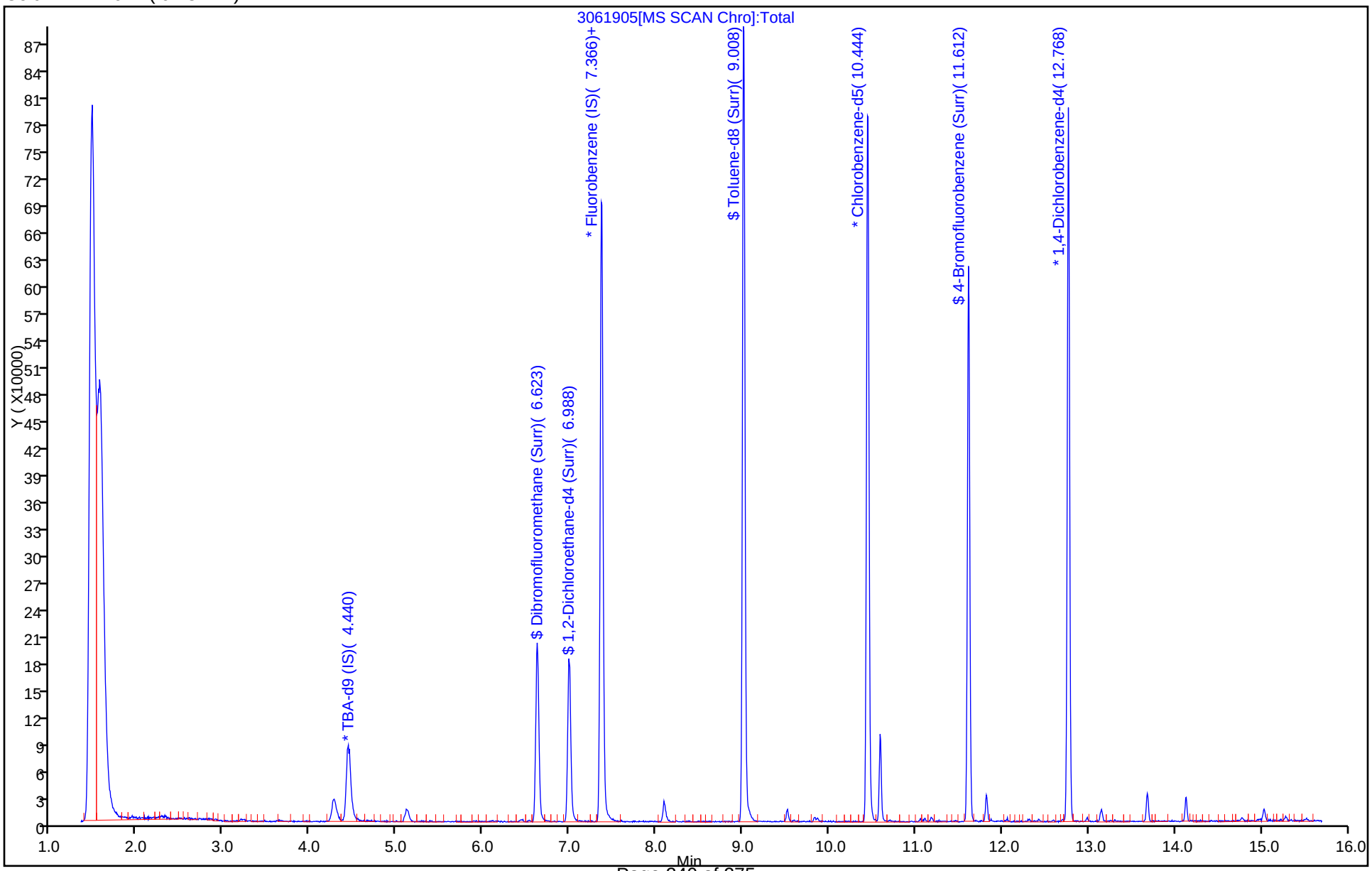
Report Date: 19-Jun-2015 08:32:10 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\3061905.D

Injection Date:	19-Jun-2015 08:12:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	MB			Worklist Smp#:	3
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)



Report Date: 19-Jun-2015 08:32:11 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\3061905.D

Injection Date: 19-Jun-2015 08:12:30 Instrument ID: CHHP3

Lims ID: MB

Client ID:

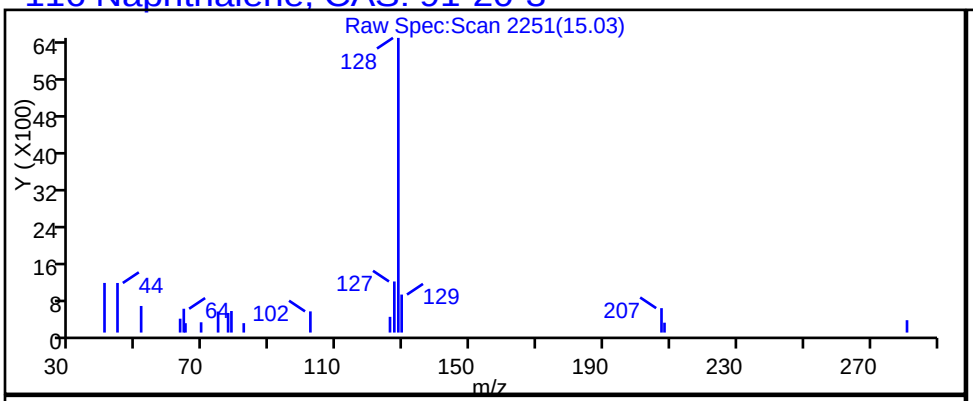
Operator ID: 10099 ALS Bottle#: 5 Worklist Smp#: 3

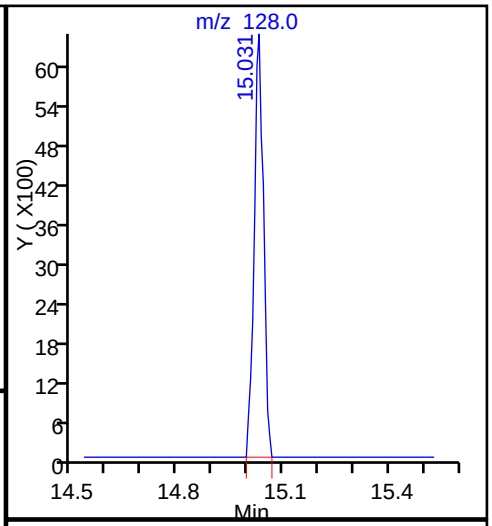
Purge Vol: 5.000 mL Dil. Factor: 1.0000

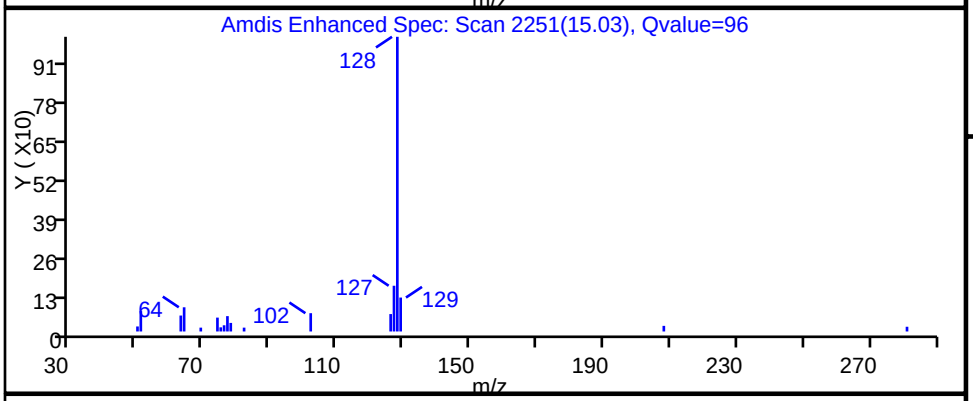
Method: MSVOA_S_CHHP3 Limit Group: VOA 8260C ICAL

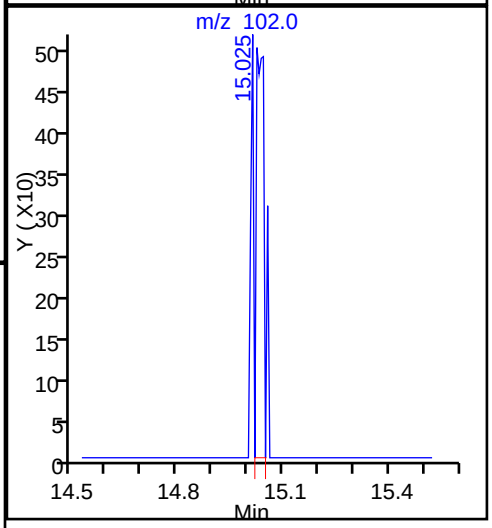
Column: DB-624 (0.18 mm) Detector MS SCAN

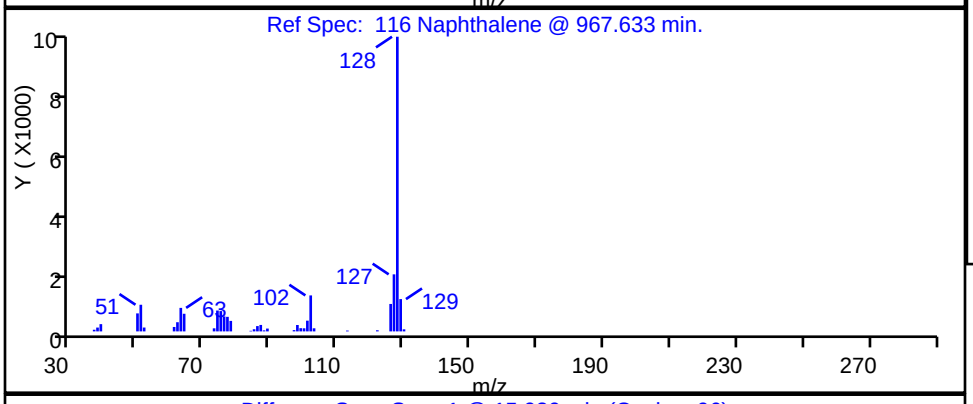
116 Naphthalene, CAS: 91-20-3

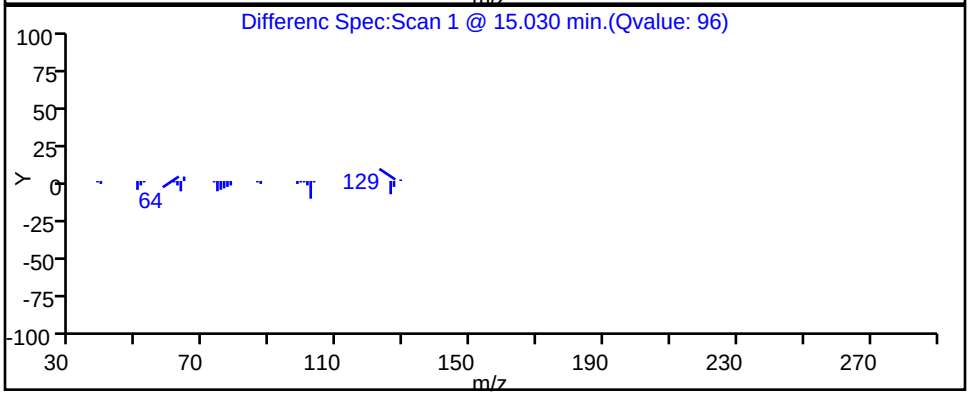












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-45180-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-145636/4

Matrix: Water | Lab File ID: 4062004.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 06/20/2015 13:37

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 145636 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-63-6	1,2,4-Trimethylbenzene	5.0	U	5.0	0.52
108-67-8	1,3,5-Trimethylbenzene	5.0	U	5.0	0.59
71-43-2	Benzene	5.0	U	5.0	0.99
100-41-4	Ethylbenzene	5.0	U	5.0	0.62
98-82-8	Isopropylbenzene	5.0	U	5.0	0.53
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	1.0
91-20-3	Naphthalene	5.0	U	5.0	0.47
108-88-3	Toluene	5.0	U	5.0	0.85
1330-20-7	Xylenes, Total	10	U	10	1.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		62-123
460-00-4	4-Bromofluorobenzene (Surr)	82		75-120
1868-53-7	Dibromofluoromethane (Surr)	87		80-120
2037-26-5	Toluene-d8 (Surr)	111		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20150620-7482.b\4062004.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 20-Jun-2015 13:37:30 ALS Bottle#: 12 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: mb
Misc. Info.: 180-0007482-004
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20150620-7482.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 21-Jun-2015 11:36:50 Calib Date: 16-Jun-2015 17:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK035

First Level Reviewer: journetp Date: 20-Jun-2015 13:04:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.085	3.150	-0.065	98	114292	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.261	6.259	0.002	98	827336	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.449	9.446	0.003	88	174939	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.803	11.801	0.002	95	192983	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.495	5.486	0.009	93	156401	250.0	218.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.890	5.882	0.008	94	147541	250.0	201.0	
$ 7 Toluene-d8 (Surr)	98	7.977	7.974	0.003	93	747208	250.0	277.7	
$ 8 4-Bromofluorobenzene (Surr	95	10.653	10.645	0.008	93	199763	250.0	206.1	
10 Dichlorodifluoromethane	85		1.209					ND	
11 Chloromethane	50		1.325					ND	
12 Vinyl chloride	62		1.422					ND	
13 Butadiene	54		1.447					ND	
14 Bromomethane	94		1.660					ND	
15 Chloroethane	64		1.757					ND	
17 Trichlorofluoromethane	101		1.915					ND	
16 Dichlorofluoromethane	67		1.964					ND	
19 Ethyl ether	59		2.238					ND	
20 Acrolein	56		2.365					ND	
21 1,1-Dichloroethene	96		2.408					ND	
22 1,1,2-Trichloro-1,2,2-trif	101		2.487					ND	
23 Acetone	43		2.523					ND	
24 Iodomethane	142		2.554					ND	
25 Carbon disulfide	76		2.621					ND	
27 Acetonitrile	40		2.810					ND	
28 3-Chloro-1-propene	76		2.828					ND	
29 Methyl acetate	43		2.864					ND	
30 Methylene Chloride	84		2.986					ND	
18 Ethanol	45		3.121					ND	
26 Isopropyl alcohol	45		3.121					ND	
31 2-Methyl-2-propanol	59		3.260					ND	
32 Acrylonitrile	53		3.320					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
33 trans-1,2-Dichloroethene	96		3.333					ND	
34 Methyl tert-butyl ether	73		3.363					ND	
35 Hexane	57		3.722					ND	
36 1,1-Dichloroethane	63		3.971					ND	
38 Vinyl acetate	43		4.045					ND	
37 2-Chloro-1,3-butadiene	53		4.080					ND	
39 Isopropyl ether	45		4.104					ND	
40 Tert-butyl ethyl ether	59		4.640					ND	
44 Propionitrile	54		4.646					ND	
41 2,2-Dichloropropane	77		4.799					ND	
42 cis-1,2-Dichloroethene	96		4.811					ND	
43 2-Butanone (MEK)	43		4.860					ND	
45 Ethyl acetate	43		4.944					ND	
47 Methacrylonitrile	41		5.120					ND	
46 Chlorobromomethane	128		5.127					ND	
48 Tetrahydrofuran	42		5.145					ND	
49 Chloroform	83		5.298					ND	
50 1,1,1-Trichloroethane	97		5.444					ND	
51 Cyclohexane	56		5.510					ND	
53 Carbon tetrachloride	117		5.620					ND	
52 1,1-Dichloropropene	75		5.650					ND	
54 Benzene	78		5.875					ND	
59 Isobutyl alcohol	41		5.936					ND	
55 1,2-Dichloroethane	62		5.979					ND	
56 Tert-amyl methyl ether	73		6.254					ND	
58 n-Heptane	43		6.295					ND	
57 Isooctane	57		6.308					ND	
61 Trichloroethene	130		6.666					ND	
60 n-Butanol	56		6.684					ND	
62 Ethyl acrylate	55		6.836					ND	
63 Methylcyclohexane	83		6.897					ND	
64 1,2-Dichloropropane	63		6.952					ND	
65 Dibromomethane	93		7.043					ND	
67 1,4-Dioxane	88		7.056					ND	
69 2-Nitropropane	41		7.079					ND	
66 Methyl methacrylate	69		7.079					ND	
68 Dichlorobromomethane	83		7.256					ND	
70 2-Chloroethyl vinyl ether	63		7.711					ND	
74 trans-1,3-Dichloropropene	75		7.725					ND	
72 4-Methyl-2-pentanone (MIBK	43		7.895					ND	
73 Toluene	91		8.047					ND	
71 cis-1,3-Dichloropropene	75		8.327					ND	
75 Ethyl methacrylate	69		8.406					ND	
76 1,1,2-Trichloroethane	97		8.516					ND	
77 Tetrachloroethene	164		8.558					ND	
78 1,3-Dichloropropane	76		8.668					ND	
79 2-Hexanone	43		8.747					ND	
81 Chlorodibromomethane	129		8.881					ND	
80 n-Butyl acetate	43		8.900					ND	
82 Ethylene Dibromide	107		8.984					ND	
84 Chlorobenzene	112		9.477					ND	
85 1,1,1,2-Tetrachloroethane	131		9.580					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 Ethylbenzene	106		9.592					ND	
87 m-Xylene & p-Xylene	106		9.726					ND	
88 o-Xylene	106		10.103					ND	
89 Styrene	104		10.128					ND	
90 Bromoform	173		10.298					ND	
92 Cyclohexanone	55		10.366					ND	
91 Isopropylbenzene	105		10.481					ND	
83 4-Chlorobenzotrifluoride	180		10.528					ND	
94 Bromobenzene	156		10.773					ND	
93 1,1,2,2-Tetrachloroethane	83		10.803					ND	
96 trans-1,4-Dichloro-2-buten	53		10.840					ND	
95 1,2,3-Trichloropropane	110		10.852					ND	
97 N-Propylbenzene	120		10.894					ND	
98 2-Chlorotoluene	126		10.967					ND	
99 1,3,5-Trimethylbenzene	105		11.089					ND	
100 4-Chlorotoluene	126		11.095					ND	
101 tert-Butylbenzene	119		11.393					ND	
102 Pentachloroethane	167		11.411					ND	
108 1,2,3-Trimethylbenzene	105		11.449					ND	
103 1,2,4-Trimethylbenzene	105		11.454					ND	
104 sec-Butylbenzene	105		11.618					ND	
105 1,3-Dichlorobenzene	146		11.716					ND	
106 4-Isopropyltoluene	119		11.782					ND	
107 1,4-Dichlorobenzene	146		11.825					ND	
109 Benzyl chloride	91		11.946					ND	
111 1,2-Dichlorobenzene	146		12.166					ND	
110 n-Butylbenzene	91		12.184					ND	
112 1,2-Dibromo-3-Chloropropan	75		12.963					ND	
114 1,3,5-Trichlorobenzene	180		13.150					ND	
113 1,2,4-Trichlorobenzene	180		13.778					ND	
115 Hexachlorobutadiene	225		13.930					ND	
116 Naphthalene	128		14.033					ND	
117 1,2,3-Trichlorobenzene	180		14.252					ND	
118 2-Methylnaphthalene	142		15.170					ND	
126 2,4-Dichloro-1-(triflourom	214		0.000					ND	
119 1,2-dichloro-4-(trifluorom	214		0.000					ND	
121 2,4,5-Trichlorotoluene	159		0.000					ND	
123 2,5-Dichlorobenzotrifluori	214		0.000					ND	
120 2,4- & 2,5- & 2,6- Dichlor	125		0.000					ND	
127 2,3- & 3,4- Dichlorotoluen	125		0.000					ND	
128 2,3,6-Trichlorotoluene	159		0.000					ND	
124 3-Chlorobenzotrifluoride	180		0.000					ND	
125 2-Chlorobenzotrifluoride	180		0.000					ND	
122 3-Chlorotoluene	126		0.000					ND	
S 129 1,2-Dichloroethene, Total	96		1.000					ND	
S 130 Xylenes, Total	106		1.000					ND	
S 131 1,3-Dichloropropene, Total	1		0.000					ND	
T 133 Methyl n-amyl ketone TIC	43		0.000					ND	
T 132 Tetrahydrofuran TIC	42		6.255					ND	
T 134 Mesityl oxide TIC	83		7.915					ND	

Reagents:

VOA8260SURR_00038	Amount Added:	10.00	Units: uL	Run Reagent
VOA8260INT_00038	Amount Added:	10.00	Units: uL	Run Reagent

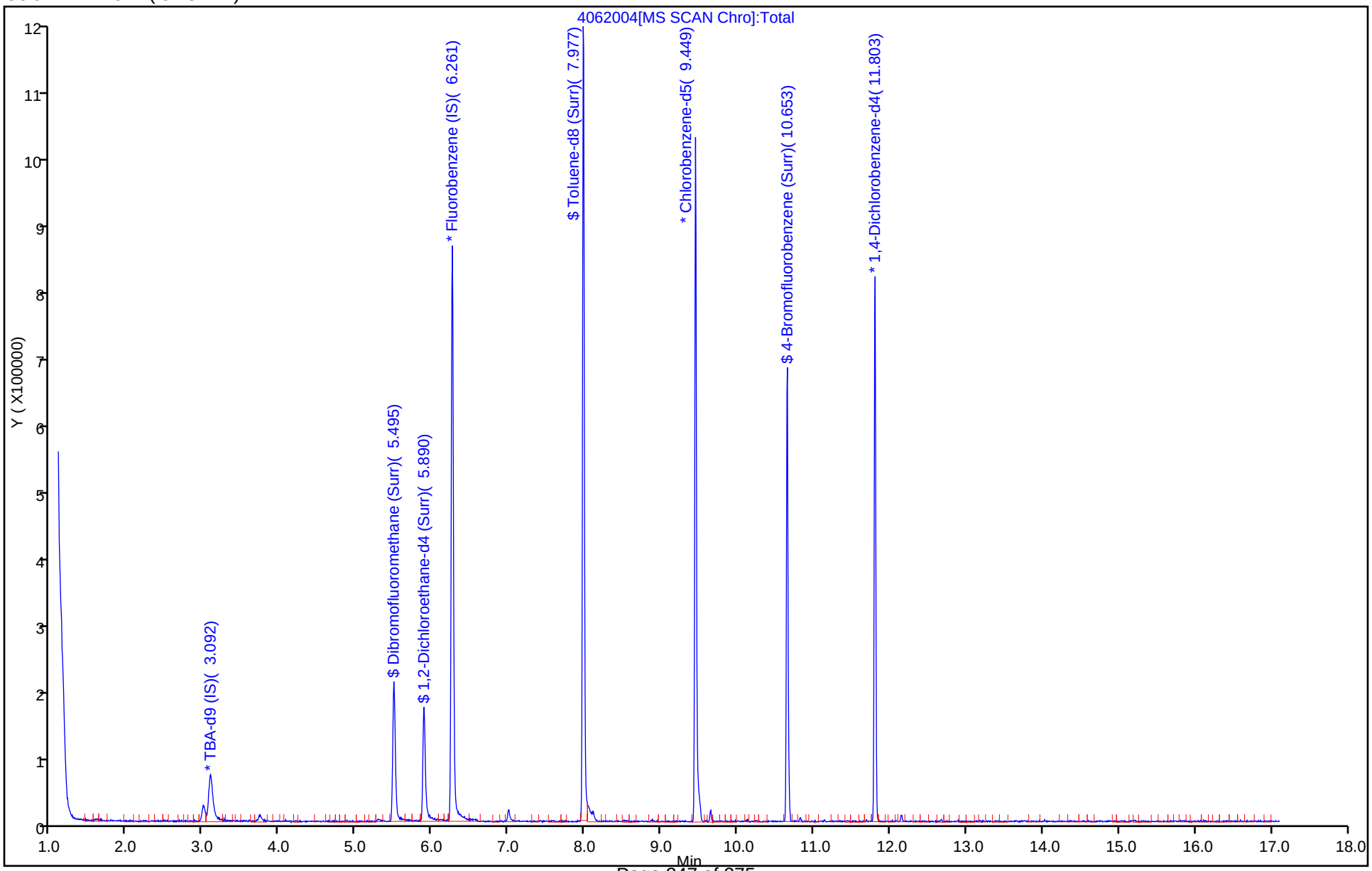
Report Date: 21-Jun-2015 11:36:53 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150620-7482.b\4062004.D

Injection Date:	20-Jun-2015 13:37:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSVOA_CHHP4	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.: 180-45180-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-145522/5

Matrix: Water | Lab File ID: 3061910.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 06/19/2015 10:04

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 145522 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-63-6	1,2,4-Trimethylbenzene	39.6		5.0	0.52
108-67-8	1,3,5-Trimethylbenzene	39.5		5.0	0.59
71-43-2	Benzene	40.7		5.0	0.99
100-41-4	Ethylbenzene	40.5		5.0	0.62
98-82-8	Isopropylbenzene	39.0		5.0	0.53
1634-04-4	Methyl tert-butyl ether	39.4		5.0	1.0
91-20-3	Naphthalene	49.4		5.0	0.47
108-88-3	Toluene	39.2		5.0	0.85
1330-20-7	Xylenes, Total	79.6		10	1.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		62-123
460-00-4	4-Bromofluorobenzene (Surr)	89		75-120
1868-53-7	Dibromofluoromethane (Surr)	92		80-120
2037-26-5	Toluene-d8 (Surr)	93		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\3061910.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 19-Jun-2015 10:04:30 ALS Bottle#: 10 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 180-0007465-005180-0007465-005
Operator ID: 10099 Instrument ID: CHHP3

Method: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 19-Jun-2015 10:22:19 Calib Date: 05-Jun-2015 09:02:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060509.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: gordonk Date: 19-Jun-2015 10:22:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.482	4.489	-0.007	98	169442	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.366	7.360	0.006	96	818164	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.444	10.444	0.000	86	186146	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.768	0.000	97	271667	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.624	6.618	0.006	37	163008	250.0	230.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.989	6.989	0.000	71	146724	250.0	213.4	
$ 7 Toluene-d8 (Surr)	98	9.009	9.009	0.000	85	741170	250.0	233.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.612	0.000	87	289100	250.0	221.3	
10 Dichlorodifluoromethane	85	1.684	1.690	-0.006	60	227113	200.0	190.7	
11 Chloromethane	50	1.848	1.848	0.000	88	345436	200.0	200.7	
12 Vinyl chloride	62	1.994	1.994	0.000	83	310417	200.0	202.5	
13 Butadiene	39	2.019	2.019	0.000	91	303143	200.0	191.6	
14 Bromomethane	94	2.329	2.323	0.006	89	69093	200.0	178.5	
15 Chloroethane	64	2.444	2.432	0.012	90	69284	200.0	171.9	
16 Dichlorofluoromethane	67	2.724	2.724	0.000	96	319696	200.0	197.0	
17 Trichlorofluoromethane	101	2.730	2.730	0.000	53	255522	200.0	194.2	
19 Ethyl ether	59	3.205	3.199	0.006	93	141061	200.0	204.0	
21 1,1-Dichloroethene	96	3.460	3.460	0.000	96	227310	200.0	204.1	
22 1,1,2-Trichloro-1,2,2-trif	101	3.539	3.533	0.006	87	222185	200.0	202.7	
23 Acetone	43	3.631	3.625	0.006	85	39680	200.0	219.6	
24 Iodomethane	142	3.673	3.673	0.000	96	279469	200.0	202.1	
25 Carbon disulfide	76	3.746	3.740	0.006	99	789829	200.0	207.2	
28 3-Chloro-1-propene	76	4.051	4.044	0.007	89	142224	200.0	201.1	
29 Methyl acetate	43	4.154	4.154	0.000	98	400680	1000.0	1021.6	
30 Methylene Chloride	84	4.257	4.251	0.006	97	231088	200.0	208.3	
31 2-Methyl-2-propanol	59	4.610	4.604	0.006	13	93914	2000.0	2112.2	
32 Acrylonitrile	53	4.665	4.659	0.006	99	445035	2000.0	2226.7	
33 trans-1,2-Dichloroethene	96	4.683	4.671	0.012	95	237549	200.0	202.0	
34 Methyl tert-butyl ether	73	4.732	4.732	0.000	91	348376	200.0	197.0	
35 Hexane	57	5.097	5.097	0.000	92	409608	200.0	196.3	
36 1,1-Dichloroethane	63	5.279	5.273	0.006	82	396773	200.0	196.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
41 2,2-Dichloropropane	77	6.028	6.028	0.000	70	252530	200.0	184.8	
42 cis-1,2-Dichloroethene	96	6.034	6.034	0.000	71	229720	200.0	203.1	
43 2-Butanone (MEK)	43	6.088	6.088	0.000	98	47762	200.0	198.1	
47 Chlorobromomethane	128	6.320	6.320	0.000	77	75731	200.0	205.2	
48 Tetrahydrofuran	42	6.399	6.393	0.006	96	60786	400.0	414.5	
49 Chloroform	83	6.441	6.435	0.006	91	310868	200.0	191.4	
50 1,1,1-Trichloroethane	97	6.630	6.630	0.000	91	285315	200.0	188.6	
51 Cyclohexane	56	6.691	6.685	0.006	76	536252	200.0	204.8	
53 Carbon tetrachloride	117	6.818	6.812	0.006	79	229959	200.0	191.9	
52 1,1-Dichloropropene	75	6.825	6.819	0.007	88	270837	200.0	192.5	
54 Isobutyl alcohol	41	7.037	7.044	-0.007	44	70566	5000.0	5472.1	
55 Benzene	78	7.050	7.050	0.000	97	779677	200.0	203.6	
56 1,2-Dichloroethane	62	7.074	7.068	0.006	65	154168	200.0	183.5	
59 n-Heptane	43	7.378	7.378	0.000	83	371736	200.0	206.6	
60 Trichloroethene	130	7.761	7.755	0.006	97	181412	200.0	203.0	
63 Methylcyclohexane	83	7.962	7.956	0.006	93	468532	200.0	211.1	
64 1,2-Dichloropropane	63	7.987	7.987	-0.001	88	159259	200.0	196.8	
65 Dibromomethane	93	8.108	8.108	0.000	94	66294	200.0	200.9	
67 1,4-Dioxane	88	8.151	8.145	0.006	94	18217	4000.0	4300.2	
68 Dichlorobromomethane	83	8.279	8.279	-0.001	95	176019	200.0	195.4	
71 cis-1,3-Dichloropropene	75	8.741	8.741	0.000	91	228377	200.0	211.7	
72 4-Methyl-2-pentanone (MIBK	43	8.905	8.905	0.000	73	84585	200.0	181.4	
73 Toluene	91	9.075	9.075	0.000	93	761076	200.0	196.1	
74 trans-1,3-Dichloropropene	75	9.301	9.294	0.007	82	175590	200.0	196.4	
75 Ethyl methacrylate	69	9.398	9.398	0.000	85	126563	200.0	201.7	
76 1,1,2-Trichloroethane	97	9.477	9.477	0.000	90	98180	200.0	200.9	
77 Tetrachloroethene	164	9.623	9.623	0.000	96	144582	200.0	201.8	
78 1,3-Dichloropropane	76	9.647	9.641	0.006	91	183634	200.0	202.8	
79 2-Hexanone	43	9.732	9.732	0.000	98	74010	200.0	177.5	
81 Chlorodibromomethane	129	9.872	9.872	0.000	88	99394	200.0	196.3	
82 Ethylene Dibromide	107	9.982	9.982	0.000	95	96504	200.0	206.5	
83 Chlorobenzene	112	10.475	10.469	0.006	89	492373	200.0	203.3	
85 1,1,1,2-Tetrachloroethane	131	10.554	10.554	0.000	95	145162	200.0	194.2	
86 Ethylbenzene	106	10.584	10.584	0.000	98	306106	200.0	202.6	
87 m-Xylene & p-Xylene	106	10.700	10.700	0.000	99	372404	200.0	199.4	
88 o-Xylene	106	11.095	11.095	0.000	91	360816	200.0	198.5	
89 Styrene	104	11.107	11.107	0.000	91	565924	200.0	200.8	
90 Bromoform	173	11.290	11.290	0.000	95	53723	200.0	199.7	
91 Isopropylbenzene	105	11.466	11.460	0.006	96	964444	200.0	195.2	
93 1,1,2,2-Tetrachloroethane	83	11.752	11.746	0.006	72	125136	200.0	214.2	
94 Bromobenzene	156	11.764	11.764	0.000	95	176595	200.0	205.8	
95 1,2,3-Trichloropropane	110	11.795	11.795	0.000	78	33056	200.0	200.9	
96 trans-1,4-Dichloro-2-buten	53	11.807	11.807	0.000	65	39527	200.0	201.5	
97 N-Propylbenzene	120	11.874	11.874	0.000	81	286740	200.0	200.5	
98 2-Chlorotoluene	126	11.959	11.959	0.000	95	219474	200.0	203.8	
99 1,3,5-Trimethylbenzene	105	12.050	12.044	0.006	87	805022	200.0	197.3	
100 4-Chlorotoluene	126	12.069	12.062	0.006	98	216744	200.0	198.0	
101 tert-Butylbenzene	119	12.379	12.373	0.006	55	722502	200.0	200.8	
103 1,2,4-Trimethylbenzene	105	12.421	12.421	0.000	98	820093	200.0	198.1	
104 sec-Butylbenzene	105	12.598	12.592	0.006	77	1141173	200.0	204.2	
105 1,3-Dichlorobenzene	146	12.707	12.701	0.006	78	401516	200.0	207.5	
106 4-Isopropyltoluene	119	12.738	12.738	0.000	87	897551	200.0	203.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.792	12.792	0.000	92	377682	200.0	204.5	
110 n-Butylbenzene	91	13.151	13.151	0.000	94	925685	200.0	205.2	
111 1,2-Dichlorobenzene	146	13.170	13.164	0.006	96	330864	200.0	205.4	
112 1,2-Dibromo-3-Chloropropan	75	13.936	13.942	-0.006	56	16186	200.0	204.7	
114 1,2,4-Trichlorobenzene	180	14.782	14.782	0.000	94	214844	200.0	216.0	
115 Hexachlorobutadiene	225	14.958	14.952	0.006	93	156880	200.0	207.0	
116 Naphthalene	128	15.031	15.031	0.000	95	306323	200.0	247.1	
117 1,2,3-Trichlorobenzene	180	15.281	15.281	0.000	94	162770	200.0	227.7	
S 129 Xylenes, Total	106				0		400.0	397.9	
S 130 1,2-Dichloroethene, Total	96				0		400.0	405.1	
S 131 1,3-Dichloropropene, Total	1				0		400.0	408.0	

Reagents:

VOA8260SURR_00038	Amount Added: 10.00	Units: uL	
VOA8260VOA2ND_00128	Amount Added: 8.00	Units: uL	
VOA8260INT_00038	Amount Added: 10.00	Units: uL	Run Reagent

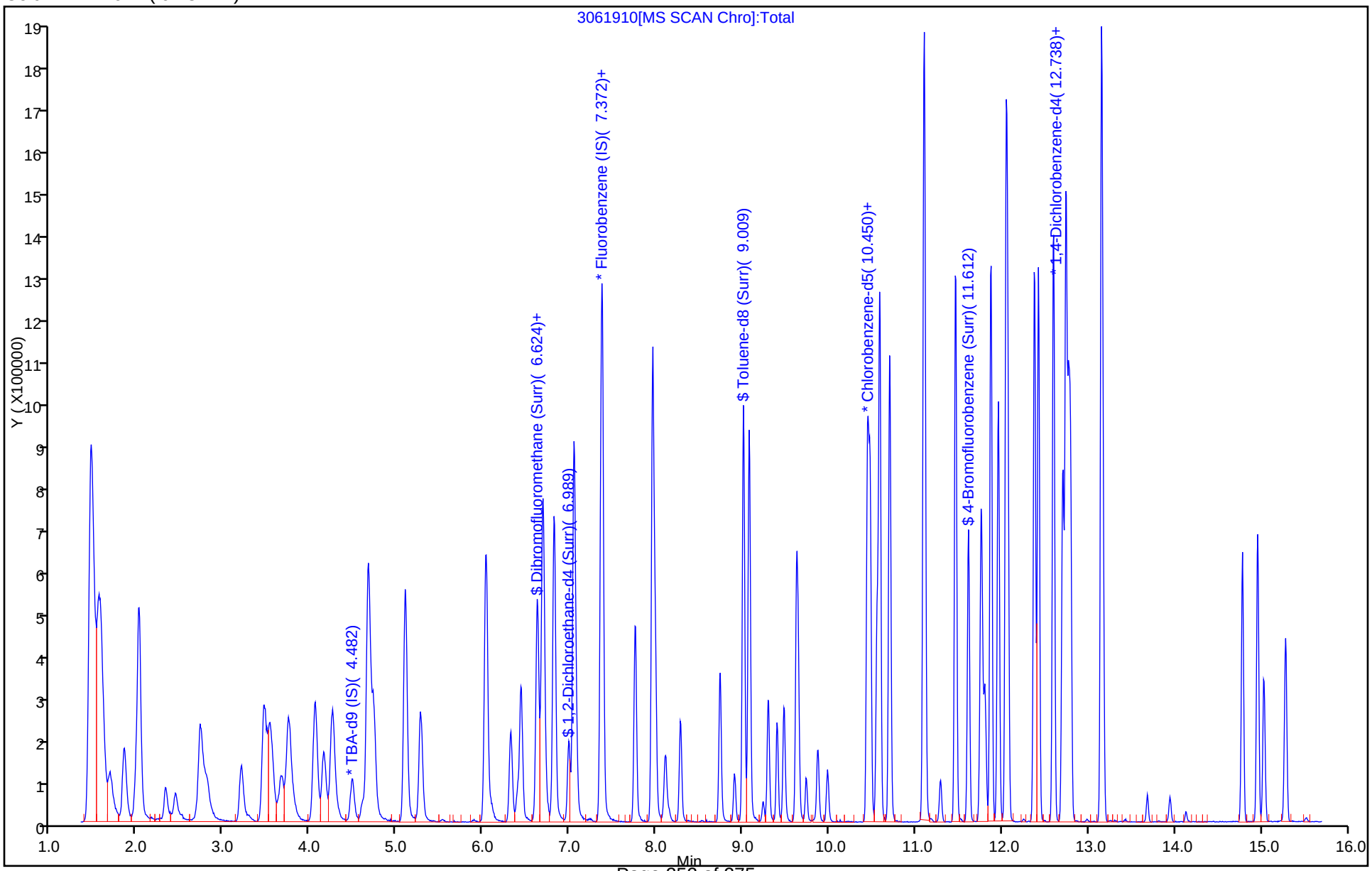
Report Date: 19-Jun-2015 10:22:20 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\3061910.D

Injection Date:	19-Jun-2015 10:04:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	LCS			Worklist Smp#:	5
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 I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-45180-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-145636/7

Matrix: Water | Lab File ID: 4062007.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 06/20/2015 14:51

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 145636 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-63-6	1,2,4-Trimethylbenzene	37.8		5.0	0.52
108-67-8	1,3,5-Trimethylbenzene	37.7		5.0	0.59
71-43-2	Benzene	39.2		5.0	0.99
100-41-4	Ethylbenzene	38.5		5.0	0.62
98-82-8	Isopropylbenzene	37.4		5.0	0.53
1634-04-4	Methyl tert-butyl ether	38.9		5.0	1.0
91-20-3	Naphthalene	40.2		5.0	0.47
108-88-3	Toluene	37.0		5.0	0.85
1330-20-7	Xylenes, Total	76.2		10	1.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		62-123
460-00-4	4-Bromofluorobenzene (Surr)	91		75-120
1868-53-7	Dibromofluoromethane (Surr)	97		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20150620-7482.b\4062007.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 20-Jun-2015 14:51:30 ALS Bottle#: 15 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Misc. Info.: 180-0007482-007
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20150620-7482.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 21-Jun-2015 11:36:50 Calib Date: 16-Jun-2015 17:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20150616-7420.b\4061613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK035

First Level Reviewer: journetp Date: 21-Jun-2015 11:00:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.164	3.150	0.014	100	192747	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.254	6.259	-0.005	98	717306	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.448	9.446	0.002	85	175381	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.802	11.801	0.001	94	232920	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.494	5.486	0.008	93	150994	250.0	243.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.889	5.882	0.007	95	161939	250.0	254.5	
$ 7 Toluene-d8 (Surr)	98	7.976	7.974	0.002	93	635191	250.0	235.5	
$ 8 4-Bromofluorobenzene (Surr	95	10.647	10.645	0.002	92	220825	250.0	227.3	
10 Dichlorodifluoromethane	85	1.211	1.209	0.002	100	194125	200.0	179.0	
11 Chloromethane	50	1.321	1.325	-0.004	99	249781	200.0	186.7	
12 Vinyl chloride	62	1.418	1.422	-0.004	98	195618	200.0	185.9	
13 Butadiene	54	1.442	1.447	-0.005	94	195507	200.0	188.7	
14 Bromomethane	94	1.655	1.660	-0.005	92	41988	200.0	211.5	
15 Chloroethane	64	1.753	1.757	-0.004	94	47734	200.0	210.3	
17 Trichlorofluoromethane	101	1.972	1.915	0.057	67	130815	200.0	177.7	
16 Dichlorofluoromethane	67	1.959	1.964	-0.005	97	212507	200.0	247.8	
19 Ethyl ether	59	2.233	2.238	-0.005	96	84906	200.0	212.7	
21 1,1-Dichloroethene	96	2.416	2.408	0.008	94	145478	200.0	226.2	
22 1,1,2-Trichloro-1,2,2-trif	101	2.489	2.487	0.002	93	173830	200.0	215.2	
23 Acetone	43	2.525	2.523	0.002	98	35549	200.0	150.1	
24 Iodomethane	142	2.562	2.554	0.008	96	238346	200.0	189.1	
25 Carbon disulfide	76	2.616	2.621	-0.005	100	444772	200.0	193.5	
28 3-Chloro-1-propene	76	2.829	2.828	0.001	93	103592	200.0	184.8	
29 Methyl acetate	43	2.866	2.864	0.002	99	449656	1000.0	976.4	
30 Methylene Chloride	84	2.988	2.986	0.002	98	190073	200.0	191.8	
31 2-Methyl-2-propanol	59	3.267	3.260	0.007	96	95622	2000.0	1828.0	
32 Acrylonitrile	53	3.322	3.320	0.002	100	428267	2000.0	2122.2	
33 trans-1,2-Dichloroethene	96	3.334	3.333	0.001	98	166689	200.0	194.2	
34 Methyl tert-butyl ether	73	3.365	3.363	0.002	98	338081	200.0	194.5	
35 Hexane	57	3.724	3.722	0.002	93	346751	200.0	196.6	
36 1,1-Dichloroethane	63	3.979	3.971	0.008	96	321766	200.0	197.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
41 2,2-Dichloropropane	77	4.800	4.799	0.001	66	133846	200.0	192.8	
42 cis-1,2-Dichloroethene	96	4.813	4.811	0.002	83	174664	200.0	193.6	
43 2-Butanone (MEK)	43	4.855	4.860	-0.005	98	47590	200.0	190.6	
46 Chlorobromomethane	128	5.129	5.127	0.002	94	66698	200.0	189.3	
48 Tetrahydrofuran	42	5.147	5.145	0.002	92	70112	400.0	421.1	
49 Chloroform	83	5.299	5.298	0.001	94	253608	200.0	195.8	
50 1,1,1-Trichloroethane	97	5.445	5.444	0.001	98	204589	200.0	198.1	
51 Cyclohexane	56	5.512	5.510	0.002	94	372046	200.0	192.2	
53 Carbon tetrachloride	117	5.628	5.620	0.008	93	192914	200.0	203.2	
52 1,1-Dichloropropene	75	5.652	5.650	0.002	96	232096	200.0	200.2	
54 Benzene	78	5.877	5.875	0.002	98	643570	200.0	195.9	
59 Isobutyl alcohol	41	5.938	5.936	0.002	95	75113	5000.0	5922.1	
55 1,2-Dichloroethane	62	5.975	5.979	-0.005	95	166729	200.0	207.4	
58 n-Heptane	43	6.297	6.295	0.002	95	333169	200.0	200.7	
61 Trichloroethene	130	6.668	6.666	0.002	94	154951	200.0	186.9	
63 Methylcyclohexane	83	6.905	6.897	0.008	94	327418	200.0	207.3	
64 1,2-Dichloropropane	63	6.954	6.952	0.002	97	165496	200.0	202.2	
65 Dibromomethane	93	7.045	7.043	0.002	95	66996	200.0	201.4	
67 1,4-Dioxane	88	7.051	7.056	-0.005	98	21906	4000.0	4533.4	
68 Dichlorobromomethane	83	7.258	7.256	0.002	97	152278	200.0	204.4	
74 trans-1,3-Dichloropropene	75	7.720	7.725	-0.005	96	201170	200.0	189.4	
72 4-Methyl-2-pentanone (MIBK	43	7.897	7.895	0.002	98	100790	200.0	214.3	
73 Toluene	91	8.049	8.047	0.002	98	672023	200.0	185.0	
71 cis-1,3-Dichloropropene	75	8.323	8.327	-0.004	94	154364	200.0	200.8	
75 Ethyl methacrylate	69	8.408	8.406	0.002	93	140634	200.0	195.7	
76 1,1,2-Trichloroethane	97	8.517	8.516	0.001	91	103207	200.0	198.0	
77 Tetrachloroethene	164	8.560	8.558	0.002	98	137164	200.0	186.3	
78 1,3-Dichloropropane	76	8.669	8.668	0.001	94	192730	200.0	198.6	
79 2-Hexanone	43	8.749	8.747	0.002	99	63346	200.0	210.8	
81 Chlorodibromomethane	129	8.882	8.881	0.001	92	94964	200.0	202.5	
82 Ethylene Dibromide	107	8.980	8.984	-0.004	98	94036	200.0	191.0	
84 Chlorobenzene	112	9.479	9.477	0.002	93	404406	200.0	189.9	
85 1,1,1,2-Tetrachloroethane	131	9.582	9.580	0.002	96	133336	200.0	194.2	
86 Ethylbenzene	106	9.594	9.592	0.002	98	256660	200.0	192.7	
87 m-Xylene & p-Xylene	106	9.728	9.726	0.002	99	312297	200.0	186.1	
88 o-Xylene	106	10.105	10.103	0.002	96	313969	200.0	195.1	
89 Styrene	104	10.130	10.128	0.002	96	474774	200.0	192.9	
90 Bromoform	173	10.300	10.298	0.002	96	45570	200.0	200.7	
91 Isopropylbenzene	105	10.476	10.481	-0.005	96	784812	200.0	186.8	
94 Bromobenzene	156	10.768	10.773	-0.005	93	162306	200.0	194.3	
93 1,1,2,2-Tetrachloroethane	83	10.805	10.803	0.002	93	116487	200.0	206.7	
96 trans-1,4-Dichloro-2-buten	53	10.841	10.840	0.001	70	28552	200.0	208.5	
95 1,2,3-Trichloropropane	110	10.847	10.852	-0.005	87	33961	200.0	205.6	
97 N-Propylbenzene	120	10.896	10.894	0.002	99	230550	200.0	194.7	
98 2-Chlorotoluene	126	10.969	10.967	0.002	96	177924	200.0	197.8	
99 1,3,5-Trimethylbenzene	105	11.085	11.089	-0.004	95	635948	200.0	188.5	
100 4-Chlorotoluene	126	11.097	11.095	0.002	99	169195	200.0	191.8	
101 tert-Butylbenzene	119	11.395	11.393	0.002	94	565870	200.0	185.4	
103 1,2,4-Trimethylbenzene	105	11.450	11.454	-0.004	98	642095	200.0	189.0	
104 sec-Butylbenzene	105	11.614	11.618	-0.004	94	861840	200.0	189.3	
105 1,3-Dichlorobenzene	146	11.717	11.716	0.001	99	324341	200.0	191.6	
106 4-Isopropyltoluene	119	11.778	11.782	-0.004	97	704262	200.0	186.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	11.827	11.825	0.002	96	314515	200.0	191.3	
111 1,2-Dichlorobenzene	146	12.167	12.166	0.001	98	297081	200.0	198.6	
110 n-Butylbenzene	91	12.180	12.184	-0.004	98	653051	200.0	189.2	
112 1,2-Dibromo-3-Chloropropan	75	12.964	12.963	0.001	83	12480	200.0	224.2	
113 1,2,4-Trichlorobenzene	180	13.774	13.778	-0.004	95	146482	200.0	193.5	
115 Hexachlorobutadiene	225	13.926	13.930	-0.004	96	139272	200.0	198.4	
116 Naphthalene	128	14.029	14.033	-0.004	97	233094	200.0	201.0	
117 1,2,3-Trichlorobenzene	180	14.248	14.252	-0.004	94	110868	200.0	197.3	
S 129 1,2-Dichloroethene, Total	96				0		400.0	387.8	
S 130 Xylenes, Total	106				0		400.0	381.2	
S 131 1,3-Dichloropropene, Total	1				0		400.0	390.2	

Reagents:

VOA8260VOA2ND_00128	Amount Added: 8.00	Units: uL	
VOA8260SURR_00038	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260INT_00038	Amount Added: 10.00	Units: uL	Run Reagent

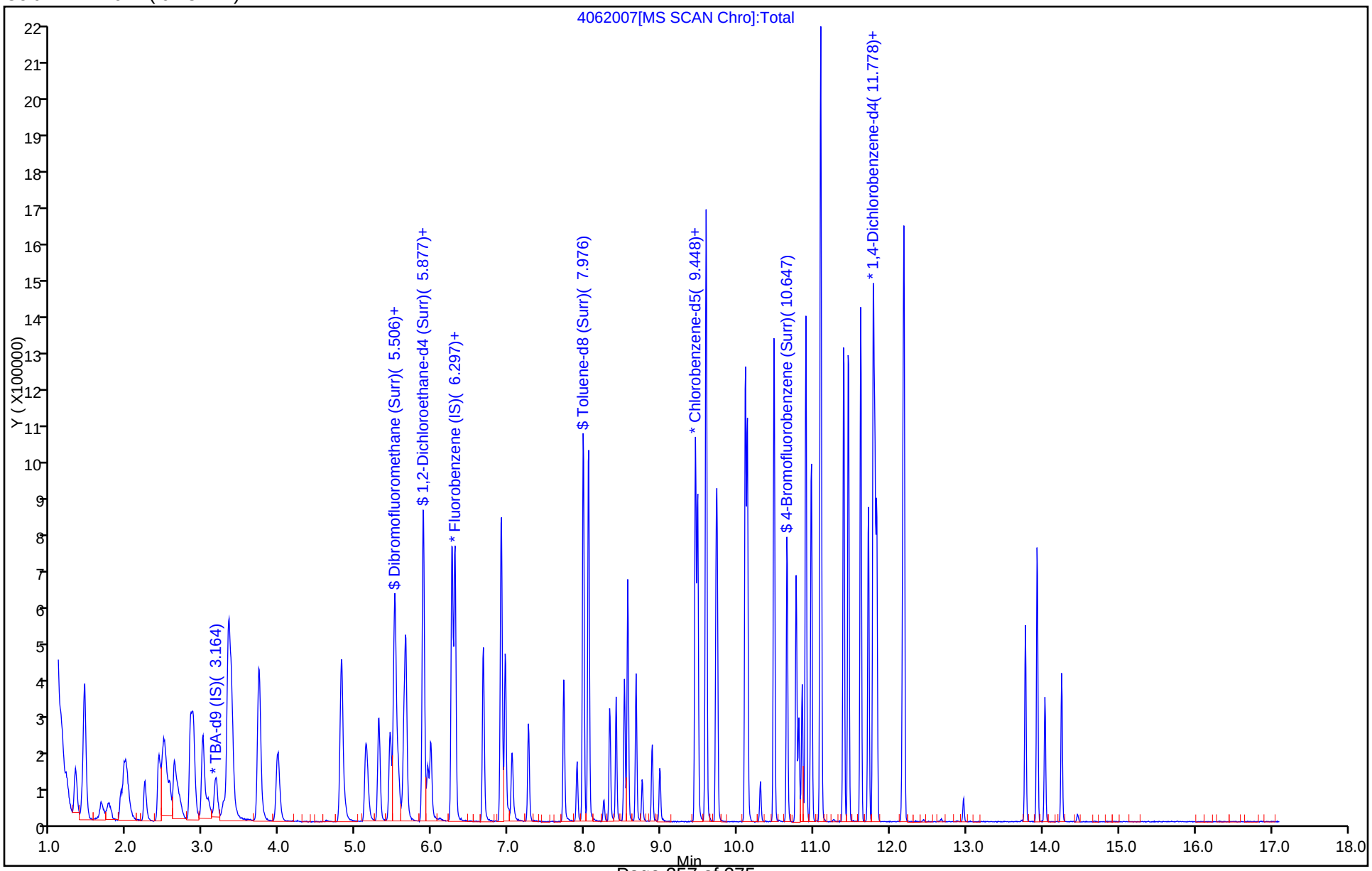
Report Date: 21-Jun-2015 11:53:27 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20150620-7482.b\4062007.D

Injection Date:	20-Jun-2015 14:51:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	lcs			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MSVOA_CHHP4	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.: 180-45180-1

SDG No.:

Client Sample ID: | Lab Sample ID: 180-45138-J-4 MS

Matrix: Water | Lab File ID: 3061911.D

Analysis Method: 8260C | Date Collected: 06/17/2015 12:45

Sample wt/vol: 5(mL) | Date Analyzed: 06/19/2015 10:27

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 145522 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-63-6	1,2,4-Trimethylbenzene	40.7		5.0	0.52
108-67-8	1,3,5-Trimethylbenzene	41.1		5.0	0.59
71-43-2	Benzene	41.3		5.0	0.99
100-41-4	Ethylbenzene	41.7		5.0	0.62
98-82-8	Isopropylbenzene	40.4		5.0	0.53
1634-04-4	Methyl tert-butyl ether	39.6		5.0	1.0
91-20-3	Naphthalene	54.1		5.0	0.47
108-88-3	Toluene	40.8		5.0	0.85
1330-20-7	Xylenes, Total	82.6		10	1.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		62-123
460-00-4	4-Bromofluorobenzene (Surr)	92		75-120
1868-53-7	Dibromofluoromethane (Surr)	94		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\3061911.D
Lims ID: 180-45138-J-4 MS
Client ID: MW-4
Sample Type: MS
Inject. Date: 19-Jun-2015 10:27:30 ALS Bottle#: 11 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-45138-J-4 MS
Misc. Info.: 180-0007465-006180-0007465-006
Operator ID: 10099 Instrument ID: CHHP3

Method: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 19-Jun-2015 10:44:13 Calib Date: 05-Jun-2015 09:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060509.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: gordonk Date: 19-Jun-2015 10:44:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.484	4.489	-0.005	99	168688	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.368	7.360	0.008	99	832180	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.446	10.444	0.002	86	185644	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.770	12.768	0.002	96	264493	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.620	6.618	0.002	94	168736	250.0	234.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.985	6.989	-0.004	96	150612	250.0	215.4	
$ 7 Toluene-d8 (Surr)	98	9.011	9.009	0.002	92	762307	250.0	241.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.614	11.612	0.002	86	298947	250.0	229.5	
10 Dichlorodifluoromethane	85	1.680	1.690	-0.010	99	222686	200.0	183.8	
11 Chloromethane	50	1.856	1.848	0.008	99	340062	200.0	194.3	
12 Vinyl chloride	62	1.996	1.994	0.002	98	312792	200.0	200.6	
13 Butadiene	39	2.021	2.019	0.002	91	302636	200.0	188.0	
14 Bromomethane	94	2.325	2.323	0.002	90	71968	200.0	182.8	
15 Chloroethane	64	2.440	2.432	0.008	98	73039	200.0	178.8	
16 Dichlorofluoromethane	67	2.720	2.724	-0.004	96	326857	200.0	198.1	
17 Trichlorofluoromethane	101	2.739	2.730	0.009	79	258323	200.0	193.0	
19 Ethyl ether	59	3.201	3.199	0.002	95	144041	200.0	204.8	
21 1,1-Dichloroethene	96	3.456	3.460	-0.004	98	226860	200.0	200.3	
22 1,1,2-Trichloro-1,2,2-trif	101	3.523	3.533	-0.010	95	231979	200.0	208.1	
23 Acetone	43	3.633	3.625	0.008	96	30811	200.0	160.7	
24 Iodomethane	142	3.669	3.673	-0.004	96	284715	200.0	202.5	
25 Carbon disulfide	76	3.742	3.740	0.002	99	792172	200.0	204.3	
28 3-Chloro-1-propene	76	4.046	4.044	0.002	96	143733	200.0	199.8	
29 Methyl acetate	43	4.150	4.154	-0.004	99	402980	1000.0	1010.2	
30 Methylene Chloride	84	4.253	4.251	0.002	99	234156	200.0	207.4	
31 2-Methyl-2-propanol	59	4.606	4.604	0.002	97	96106	2000.0	2171.2	
32 Acrylonitrile	53	4.661	4.659	0.002	100	447845	2000.0	2203.1	
33 trans-1,2-Dichloroethene	96	4.679	4.671	0.008	98	235155	200.0	196.6	
34 Methyl tert-butyl ether	73	4.734	4.732	0.002	97	356364	200.0	198.1	
35 Hexane	57	5.099	5.097	0.002	92	422889	200.0	199.3	
36 1,1-Dichloroethane	63	5.275	5.273	0.002	96	399614	200.0	194.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
41 2,2-Dichloropropane	77	6.024	6.028	-0.004	92	257047	200.0	185.0	
42 cis-1,2-Dichloroethene	96	6.030	6.034	-0.004	84	231943	200.0	201.6	
43 2-Butanone (MEK)	43	6.097	6.088	0.009	100	38893	200.0	158.6	
47 Chlorobromomethane	128	6.316	6.320	-0.004	92	77443	200.0	206.3	
48 Tetrahydrofuran	42	6.395	6.393	0.002	93	61286	400.0	410.9	
49 Chloroform	83	6.437	6.435	0.002	95	316544	200.0	191.6	
50 1,1,1-Trichloroethane	97	6.632	6.630	0.002	98	286705	200.0	186.3	
51 Cyclohexane	56	6.687	6.685	0.002	91	539232	200.0	202.5	
53 Carbon tetrachloride	117	6.814	6.812	0.002	95	232369	200.0	190.7	
52 1,1-Dichloropropene	75	6.821	6.819	0.003	95	276451	200.0	193.2	
54 Isobutyl alcohol	41	7.046	7.044	0.002	93	76375	5000.0	5822.8	
55 Benzene	78	7.046	7.050	-0.004	97	803950	200.0	206.4	
56 1,2-Dichloroethane	62	7.070	7.068	0.002	95	164665	200.0	192.7	
59 n-Heptane	43	7.380	7.378	0.002	92	389489	200.0	212.8	
60 Trichloroethene	130	7.757	7.755	0.002	98	238181	200.0	262.1	
63 Methylcyclohexane	83	7.958	7.956	0.002	92	471045	200.0	208.7	
64 1,2-Dichloropropane	63	7.989	7.987	0.002	91	167570	200.0	203.6	
65 Dibromomethane	93	8.104	8.108	-0.004	98	68652	200.0	204.6	
67 1,4-Dioxane	88	8.147	8.145	0.002	97	19541	4000.0	4535.0	
68 Dichlorobromomethane	83	8.281	8.279	0.002	98	178278	200.0	194.6	
71 cis-1,3-Dichloropropene	75	8.737	8.741	-0.004	96	234115	200.0	213.3	
72 4-Methyl-2-pentanone (MIBK	43	8.907	8.905	0.002	96	84232	200.0	181.2	
73 Toluene	91	9.078	9.075	0.003	98	789387	200.0	204.0	
74 trans-1,3-Dichloropropene	75	9.297	9.294	0.002	94	180922	200.0	202.9	
75 Ethyl methacrylate	69	9.400	9.398	0.002	92	134197	200.0	214.5	
76 1,1,2-Trichloroethane	97	9.479	9.477	0.002	90	103346	200.0	212.1	
77 Tetrachloroethene	164	9.625	9.623	0.002	97	145151	200.0	203.1	
78 1,3-Dichloropropane	76	9.643	9.641	0.002	93	184106	200.0	203.9	
79 2-Hexanone	43	9.735	9.732	0.003	96	57780	200.0	139.0	
81 Chlorodibromomethane	129	9.868	9.872	-0.004	91	102918	200.0	203.8	
82 Ethylene Dibromide	107	9.984	9.982	0.002	99	97312	200.0	208.8	
83 Chlorobenzene	112	10.477	10.469	0.008	94	501904	200.0	207.8	
85 1,1,1,2-Tetrachloroethane	131	10.556	10.554	0.002	96	148533	200.0	199.3	
86 Ethylbenzene	106	10.586	10.584	0.002	98	313838	200.0	208.3	
87 m-Xylene & p-Xylene	106	10.702	10.700	0.002	99	381701	200.0	204.9	
88 o-Xylene	106	11.097	11.095	0.002	97	376644	200.0	207.8	
89 Styrene	104	11.109	11.107	0.002	94	585290	200.0	208.2	
90 Bromoform	173	11.292	11.290	0.002	97	56609	200.0	211.0	
91 Isopropylbenzene	105	11.462	11.460	0.002	96	996520	200.0	202.2	
93 1,1,2,2-Tetrachloroethane	83	11.748	11.746	0.002	93	127417	200.0	218.7	
94 Bromobenzene	156	11.760	11.764	-0.004	97	182724	200.0	218.7	
95 1,2,3-Trichloropropane	110	11.797	11.795	0.002	83	34165	200.0	213.3	
96 trans-1,4-Dichloro-2-buten	53	11.809	11.807	0.002	76	39436	200.0	206.5	
97 N-Propylbenzene	120	11.870	11.874	-0.004	99	289234	200.0	207.7	
98 2-Chlorotoluene	126	11.961	11.959	0.002	96	222976	200.0	212.6	
99 1,3,5-Trimethylbenzene	105	12.046	12.044	0.002	95	815859	200.0	205.4	
100 4-Chlorotoluene	126	12.064	12.062	0.002	98	223694	200.0	209.9	
101 tert-Butylbenzene	119	12.375	12.373	0.002	93	716881	200.0	204.7	
103 1,2,4-Trimethylbenzene	105	12.423	12.421	0.002	95	821044	200.0	203.7	
104 sec-Butylbenzene	105	12.594	12.592	0.002	94	1147757	200.0	210.9	
105 1,3-Dichlorobenzene	146	12.703	12.701	0.002	97	400339	200.0	212.5	
106 4-Isopropyltoluene	119	12.740	12.738	0.002	97	910969	200.0	211.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.788	12.792	-0.004	94	376572	200.0	209.4	
110 n-Butylbenzene	91	13.147	13.151	-0.004	97	932004	200.0	212.2	
111 1,2-Dichlorobenzene	146	13.166	13.164	0.002	96	336064	200.0	214.3	
112 1,2-Dibromo-3-Chloropropan	75	13.944	13.942	0.002	80	16299	200.0	211.7	
114 1,2,4-Trichlorobenzene	180	14.784	14.782	0.002	95	216566	200.0	223.6	
115 Hexachlorobutadiene	225	14.954	14.952	0.002	94	158026	200.0	214.2	
116 Naphthalene	128	15.027	15.031	-0.004	97	326682	200.0	270.7	
117 1,2,3-Trichlorobenzene	180	15.283	15.281	0.002	95	164955	200.0	237.0	
S 129 Xylenes, Total	106				0		400.0	412.7	
S 130 1,2-Dichloroethene, Total	96				0		400.0	398.2	
S 131 1,3-Dichloropropene, Total	1				0		400.0	416.2	

Reagents:

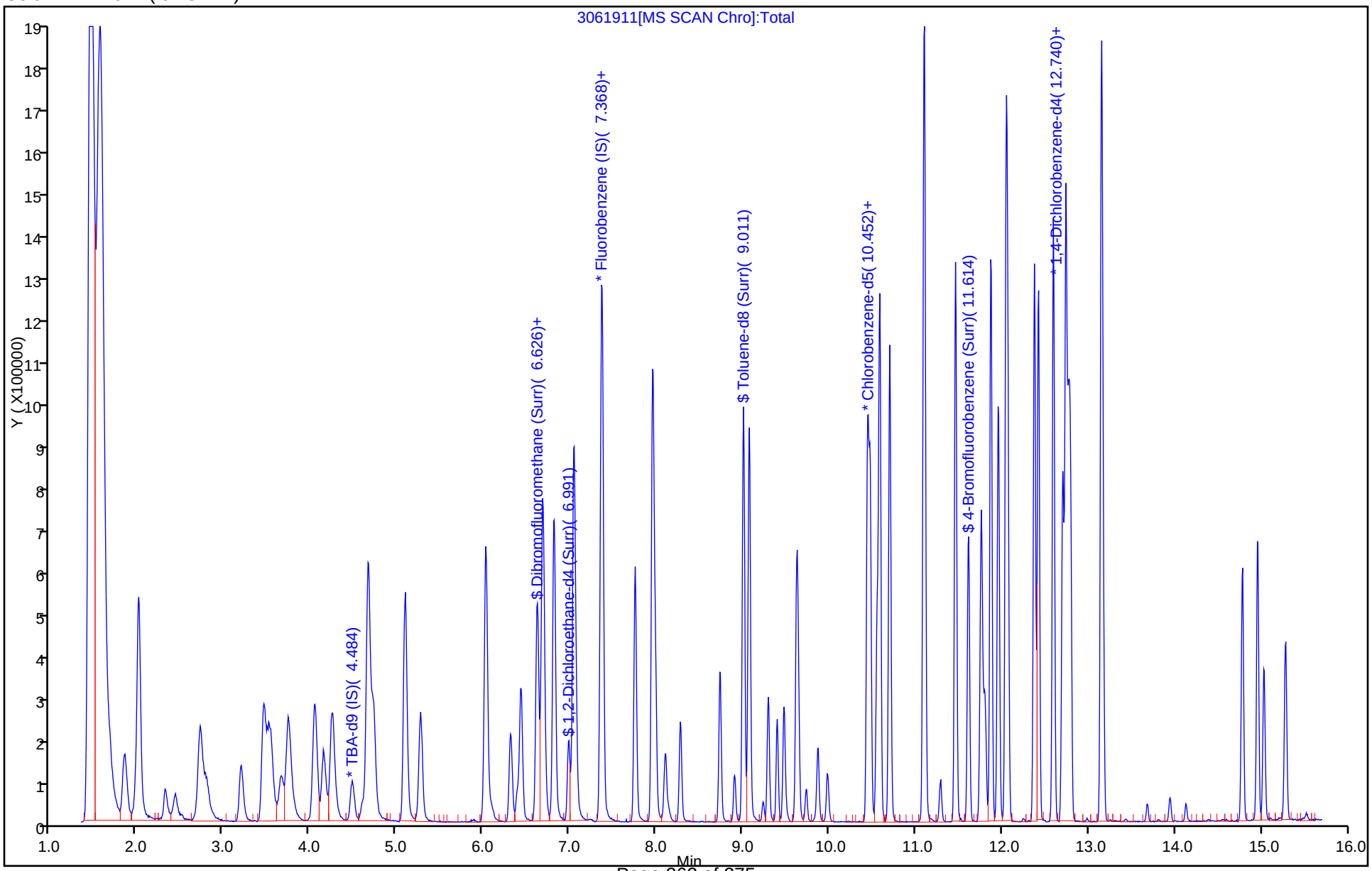
VOA8260SURR_00038	Amount Added: 10.00	Units: uL	
VOA8260VOA2ND_00128	Amount Added: 8.00	Units: uL	
VOA8260INT_00038	Amount Added: 10.00	Units: uL	Run Reagent

Report Date: 19-Jun-2015 10:44:13 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP3\20150619-7465.b\3061911.D				
Injection Date:	19-Jun-2015 10:27:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-45138-J-4 MS			Worklist Smp#:	6
Client ID:	MW-4				
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)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Client Sample ID: Lab Sample ID: 180-45138-J-4 MSD

Matrix: Water Lab File ID: 3061912.D

Analysis Method: 8260C Date Collected: 06/17/2015 12:45

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2015 10:50

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.: 145522 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-63-6	1,2,4-Trimethylbenzene	39.6		5.0	0.52
108-67-8	1,3,5-Trimethylbenzene	39.4		5.0	0.59
71-43-2	Benzene	40.5		5.0	0.99
100-41-4	Ethylbenzene	41.1		5.0	0.62
98-82-8	Isopropylbenzene	39.9		5.0	0.53
1634-04-4	Methyl tert-butyl ether	41.5		5.0	1.0
91-20-3	Naphthalene	53.2		5.0	0.47
108-88-3	Toluene	39.9		5.0	0.85
1330-20-7	Xylenes, Total	81.4		10	1.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		62-123
460-00-4	4-Bromofluorobenzene (Surr)	95		75-120
1868-53-7	Dibromofluoromethane (Surr)	97		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\3061912.D
Lims ID: 180-45138-J-4 MSD
Client ID: MW-4
Sample Type: MSD
Inject. Date: 19-Jun-2015 10:50:30 ALS Bottle#: 12 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-45138-J-4 MSD
Misc. Info.: 180-0007465-007
Operator ID: 10099 Instrument ID: CHHP3

Method: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\MSVOA_S_CHHP3.m
Limit Group: VOA 8260C ICAL
Last Update: 19-Jun-2015 11:04:57 Calib Date: 05-Jun-2015 09:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP3\20150605-7277.b\3060509.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: gordonk Date: 19-Jun-2015 11:04:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.486	4.489	-0.003	98	178679	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.363	7.360	0.003	99	804462	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.447	10.444	0.003	86	182749	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	12.765	12.768	-0.003	98	268488	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.621	6.618	0.003	93	169290	250.0	243.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.986	6.989	-0.003	97	148236	250.0	219.3	
$ 7 Toluene-d8 (Surr)	98	9.012	9.009	0.003	93	765010	250.0	245.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.615	11.612	0.003	86	303302	250.0	236.5	
10 Dichlorodifluoromethane	85	1.681	1.690	-0.009	99	201158	200.0	171.8	
11 Chloromethane	50	1.857	1.848	0.009	99	329694	200.0	194.8	
12 Vinyl chloride	62	2.003	1.994	0.009	98	304928	200.0	202.3	
13 Butadiene	39	2.022	2.019	0.003	90	297337	200.0	191.1	
14 Bromomethane	94	2.326	2.323	0.003	91	68695	200.0	180.5	
15 Chloroethane	64	2.435	2.432	0.003	98	71385	200.0	181.0	
16 Dichlorofluoromethane	67	2.721	2.724	-0.003	98	311477	200.0	195.3	
17 Trichlorofluoromethane	101	2.734	2.730	0.004	93	228957	200.0	177.0	
19 Ethyl ether	59	3.202	3.199	0.003	95	144227	200.0	212.2	
21 1,1-Dichloroethene	96	3.457	3.460	-0.003	97	219664	200.0	200.6	
22 1,1,2-Trichloro-1,2,2-trif	101	3.537	3.533	0.004	94	224501	200.0	208.3	
23 Acetone	43	3.634	3.625	0.009	100	30924	200.0	167.9	
24 Iodomethane	142	3.670	3.673	-0.003	96	272897	200.0	200.7	
25 Carbon disulfide	76	3.749	3.740	0.009	99	757631	200.0	202.1	
28 3-Chloro-1-propene	76	4.054	4.044	0.010	95	137262	200.0	197.4	
29 Methyl acetate	43	4.151	4.154	-0.003	99	417469	1000.0	1082.6	
30 Methylene Chloride	84	4.254	4.251	0.003	98	233959	200.0	215.1	
31 2-Methyl-2-propanol	59	4.607	4.604	0.003	97	99247	2000.0	2116.8	
32 Acrylonitrile	53	4.662	4.659	0.003	100	461796	2000.0	2350.0	
33 trans-1,2-Dichloroethene	96	4.674	4.671	0.003	96	232803	200.0	201.3	
34 Methyl tert-butyl ether	73	4.729	4.732	-0.003	97	360970	200.0	207.6	
35 Hexane	57	5.100	5.097	0.003	92	396118	200.0	193.1	
36 1,1-Dichloroethane	63	5.276	5.273	0.003	96	392943	200.0	197.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
41 2,2-Dichloropropane	77	6.031	6.028	0.003	90	243593	200.0	181.3	
42 cis-1,2-Dichloroethene	96	6.037	6.034	0.003	84	227418	200.0	204.5	
43 2-Butanone (MEK)	43	6.092	6.088	0.004	98	43533	200.0	183.7	
47 Chlorobromomethane	128	6.317	6.320	-0.003	92	76296	200.0	210.3	
48 Tetrahydrofuran	42	6.396	6.393	0.003	94	63453	400.0	440.1	
49 Chloroform	83	6.432	6.435	-0.003	95	312202	200.0	195.5	
50 1,1,1-Trichloroethane	97	6.627	6.630	-0.003	99	270379	200.0	181.8	
51 Cyclohexane	56	6.688	6.685	0.003	91	519814	200.0	201.9	
53 Carbon tetrachloride	117	6.816	6.812	0.004	95	219551	200.0	186.4	
52 1,1-Dichloropropene	75	6.816	6.819	-0.002	95	264644	200.0	191.3	
54 Isobutyl alcohol	41	7.041	7.044	-0.003	43	75003	5000.0	5915.2	
55 Benzene	78	7.047	7.050	-0.003	98	762597	200.0	202.6	
56 1,2-Dichloroethane	62	7.071	7.068	0.003	94	158415	200.0	191.8	
59 n-Heptane	43	7.375	7.378	-0.003	94	358726	200.0	202.8	
60 Trichloroethene	130	7.758	7.755	0.003	99	229412	200.0	261.1	
63 Methylcyclohexane	83	7.959	7.956	0.003	93	453258	200.0	207.7	
64 1,2-Dichloropropane	63	7.990	7.987	0.003	92	165674	200.0	208.2	
65 Dibromomethane	93	8.105	8.108	-0.003	98	67230	200.0	207.2	
67 1,4-Dioxane	88	8.148	8.145	0.003	95	20729	4000.0	4976.5	
68 Dichlorobromomethane	83	8.282	8.279	0.003	98	174504	200.0	197.0	
71 cis-1,3-Dichloropropene	75	8.738	8.741	-0.003	96	232884	200.0	219.5	
72 4-Methyl-2-pentanone (MIBK	43	8.902	8.905	-0.003	96	86802	200.0	189.6	
73 Toluene	91	9.072	9.075	-0.003	98	760956	200.0	199.7	
74 trans-1,3-Dichloropropene	75	9.298	9.294	0.004	94	181868	200.0	207.2	
75 Ethyl methacrylate	69	9.401	9.398	0.003	92	133196	200.0	216.2	
76 1,1,2-Trichloroethane	97	9.480	9.477	0.003	91	102138	200.0	212.9	
77 Tetrachloroethene	164	9.626	9.623	0.003	97	142564	200.0	202.7	
78 1,3-Dichloropropane	76	9.644	9.641	0.003	93	189000	200.0	212.7	
79 2-Hexanone	43	9.736	9.732	0.004	97	59326	200.0	145.0	
81 Chlorodibromomethane	129	9.869	9.872	-0.003	92	104357	200.0	210.0	
82 Ethylene Dibromide	107	9.979	9.982	-0.003	99	97638	200.0	212.8	
83 Chlorobenzene	112	10.472	10.469	0.003	94	491372	200.0	206.6	
85 1,1,1,2-Tetrachloroethane	131	10.557	10.554	0.003	97	142112	200.0	193.7	
86 Ethylbenzene	106	10.587	10.584	0.003	98	304649	200.0	205.4	
87 m-Xylene & p-Xylene	106	10.703	10.700	0.003	99	373346	200.0	203.6	
88 o-Xylene	106	11.098	11.095	0.003	95	363485	200.0	203.7	
89 Styrene	104	11.104	11.107	-0.003	96	567037	200.0	204.9	
90 Bromoform	173	11.293	11.290	0.003	97	54520	200.0	206.4	
91 Isopropylbenzene	105	11.463	11.460	0.003	96	967172	200.0	199.4	
93 1,1,2,2-Tetrachloroethane	83	11.749	11.746	0.003	93	130592	200.0	227.7	
94 Bromobenzene	156	11.761	11.764	-0.003	95	177157	200.0	208.9	
95 1,2,3-Trichloropropane	110	11.792	11.795	-0.003	82	33952	200.0	208.8	
96 trans-1,4-Dichloro-2-buten	53	11.804	11.807	-0.003	91	39251	200.0	202.4	
97 N-Propylbenzene	120	11.871	11.874	-0.003	99	277113	200.0	196.0	
98 2-Chlorotoluene	126	11.956	11.959	-0.003	96	218267	200.0	205.1	
99 1,3,5-Trimethylbenzene	105	12.047	12.044	0.003	95	793886	200.0	196.9	
100 4-Chlorotoluene	126	12.066	12.062	0.004	98	219439	200.0	202.8	
101 tert-Butylbenzene	119	12.376	12.373	0.003	93	697229	200.0	196.1	
103 1,2,4-Trimethylbenzene	105	12.424	12.421	0.003	95	809836	200.0	198.0	
104 sec-Butylbenzene	105	12.595	12.592	0.003	94	1119853	200.0	202.7	
105 1,3-Dichlorobenzene	146	12.704	12.701	0.003	98	401571	200.0	210.0	
106 4-Isopropyltoluene	119	12.741	12.738	0.003	96	880814	200.0	201.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.789	12.792	-0.003	93	372678	200.0	204.1	
110 n-Butylbenzene	91	13.148	13.151	-0.003	97	894071	200.0	200.6	
111 1,2-Dichlorobenzene	146	13.167	13.164	0.003	96	327410	200.0	205.7	
112 1,2-Dibromo-3-Chloropropan	75	13.939	13.942	-0.003	85	15760	200.0	201.7	
114 1,2,4-Trichlorobenzene	180	14.785	14.782	0.003	93	214758	200.0	218.5	
115 Hexachlorobutadiene	225	14.961	14.952	0.009	96	152850	200.0	204.1	
116 Naphthalene	128	15.028	15.031	-0.003	97	325738	200.0	265.9	
117 1,2,3-Trichlorobenzene	180	15.278	15.281	-0.003	95	165229	200.0	233.9	
S 129 Xylenes, Total	106				0		400.0	407.3	
S 130 1,2-Dichloroethene, Total	96				0		400.0	405.8	
S 131 1,3-Dichloropropene, Total	1				0		400.0	426.7	

Reagents:

VOA8260SURR_00038	Amount Added: 10.00	Units: uL	
VOA8260VOA2ND_00128	Amount Added: 8.00	Units: uL	
VOA8260INT_00038	Amount Added: 10.00	Units: uL	Run Reagent

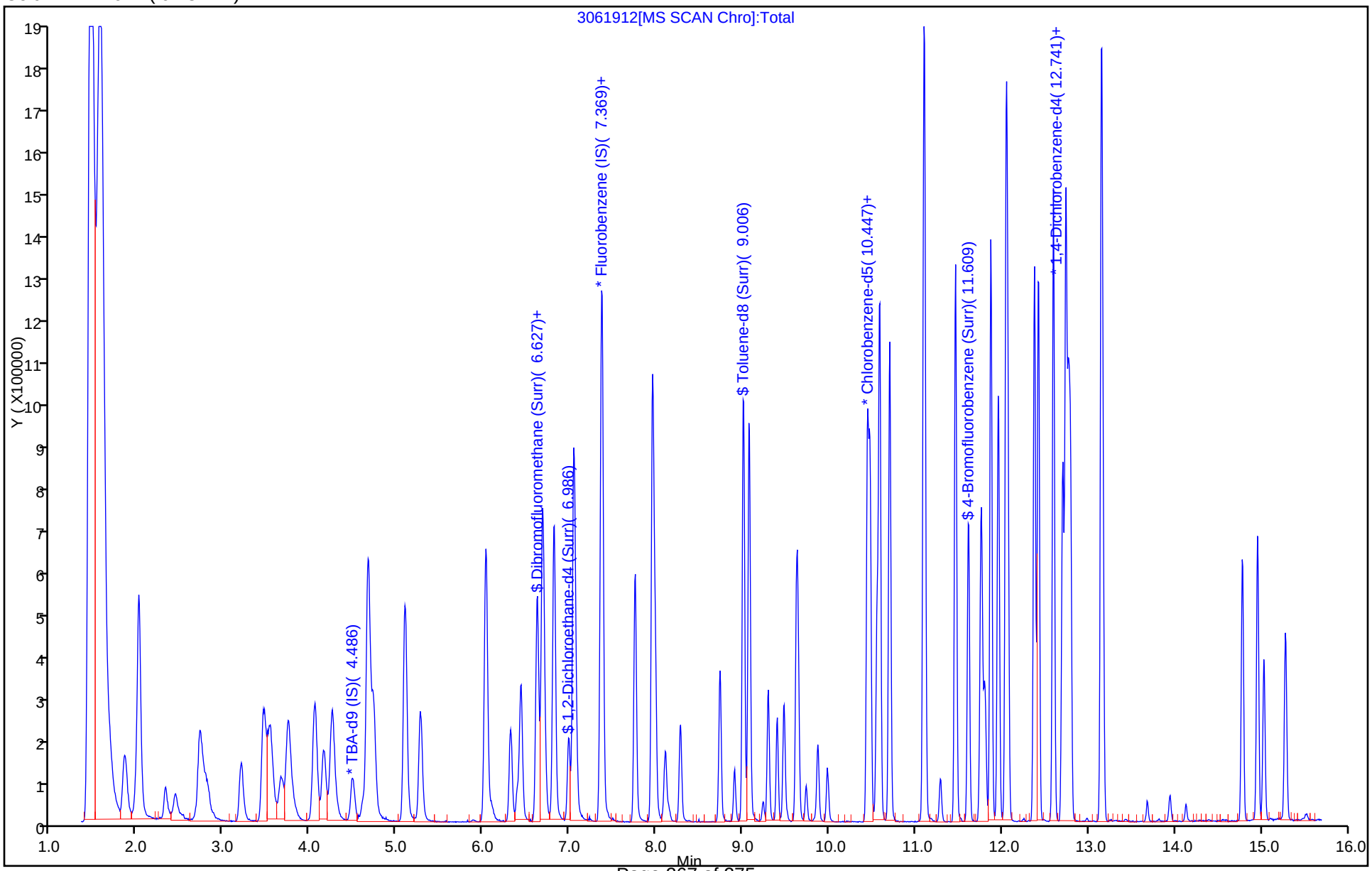
Report Date: 19-Jun-2015 11:04:58 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP3\20150619-7465.b\3061912.D

Injection Date:	19-Jun-2015 10:50:30	Instrument ID:	CHHP3	Operator ID:	10099
Lims ID:	180-45138-J-4 MSD			Worklist Smp#:	7
Client ID:	MW-4				
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)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Instrument ID: CHHP3 Start Date: 06/05/2015 06:00

Analysis Batch Number: 143986 End Date: 06/05/2015 11:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-143986/1		06/05/2015 06:00	1	3060501.D	DB-624 0.18(mm)
IC 180-143986/3		06/05/2015 06:50	1	3060503.D	DB-624 0.18(mm)
IC 180-143986/4		06/05/2015 07:12	1	3060504.D	DB-624 0.18(mm)
IC 180-143986/5		06/05/2015 07:33	1	3060505.D	DB-624 0.18(mm)
ICIS 180-143986/6		06/05/2015 07:55	1	3060506.D	DB-624 0.18(mm)
IC 180-143986/7		06/05/2015 08:17	1	3060507.D	DB-624 0.18(mm)
IC 180-143986/8		06/05/2015 08:40	1	3060508.D	DB-624 0.18(mm)
IC 180-143986/9		06/05/2015 09:02	1	3060509.D	DB-624 0.18(mm)
LODV 180-143986/13		06/05/2015 10:56	1		DB-624 0.18(mm)
ICV 180-143986/14		06/05/2015 11:20	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Instrument ID: CHHP4 Start Date: 06/16/2015 09:24

Analysis Batch Number: 145114 End Date: 06/16/2015 17:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-145114/1		06/16/2015 09:24	1	4061601.D	DB-624 0.18(mm)
IC 180-145114/4		06/16/2015 12:49	1	4061604.D	DB-624 0.18(mm)
IC 180-145114/6		06/16/2015 13:38	1	4061606.D	DB-624 0.18(mm)
ICIS 180-145114/7		06/16/2015 14:02	1	4061607.D	DB-624 0.18(mm)
IC 180-145114/8		06/16/2015 14:27	1	4061608.D	DB-624 0.18(mm)
IC 180-145114/9		06/16/2015 14:51	1	4061609.D	DB-624 0.18(mm)
IC 180-145114/10		06/16/2015 15:16	1	4061610.D	DB-624 0.18(mm)
IC 180-145114/13		06/16/2015 17:04	1	4061613.D	DB-624 0.18(mm)
ICV 180-145114/15		06/16/2015 17:54	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Instrument ID: CHHP3 Start Date: 06/19/2015 05:55

Analysis Batch Number: 145522 End Date: 06/19/2015 16:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-145522/1		06/19/2015 05:55	1	3061901.D	DB-624 0.18(mm)
CCVIS 180-145522/2		06/19/2015 06:50	1	3061902.D	DB-624 0.18(mm)
MB 180-145522/3		06/19/2015 08:12	1	3061905.D	DB-624 0.18(mm)
ZZZZZ		06/19/2015 08:34	1		DB-624 0.18(mm)
LCS 180-145522/5		06/19/2015 10:04	1	3061910.D	DB-624 0.18(mm)
180-45138-J-4 MS		06/19/2015 10:27	1	3061911.D	DB-624 0.18(mm)
180-45138-J-4 MSD		06/19/2015 10:50	1	3061912.D	DB-624 0.18(mm)
180-45180-1	HD-MW-125-0/0-0	06/19/2015 14:41	1	3061918.D	DB-624 0.18(mm)
180-45180-2	HD-MW-160-0/0-0	06/19/2015 15:04	10	3061919.D	DB-624 0.18(mm)
ZZZZZ		06/19/2015 15:26	1		DB-624 0.18(mm)
ZZZZZ		06/19/2015 15:49	1		DB-624 0.18(mm)
ZZZZZ		06/19/2015 16:11	1		DB-624 0.18(mm)
ZZZZZ		06/19/2015 16:34	1		DB-624 0.18(mm)
ZZZZZ		06/19/2015 16:56	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-45180-1

SDG No.:

Instrument ID: CHHP4 Start Date: 06/20/2015 11:13

Analysis Batch Number: 145636 End Date: 06/20/2015 18:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-145636/1		06/20/2015 11:13	1	4062001.D	DB-624 0.18(mm)
CCVIS 180-145636/2		06/20/2015 11:59	1	4062002.D	DB-624 0.18(mm)
LODV 180-145636/3		06/20/2015 12:40	1		DB-624 0.18(mm)
MB 180-145636/4		06/20/2015 13:37	1	4062004.D	DB-624 0.18(mm)
LCS 180-145636/7		06/20/2015 14:51	1	4062007.D	DB-624 0.18(mm)
180-45180-3	TRIP BLANK 1	06/20/2015 18:07	1	4062015.D	DB-624 0.18(mm)

Shipping and Receiving Documents

TestAmerica Pittsburgh
301 Alpha Drive
Pittsburgh, PA 15238
phone 412.963.7058 fax 412.963.2470

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Kent Littlefield	Site Contact: Rodney Myers	Date Submitted: 6/17/2015	COC No: TAP061720151
Leidos	Tel/Fax: 717-901-8100	Lab Contact: Carrie Gamber	Carrier:	1 of 1 COCs
6310 Allentown Blvd.	Analysis Turnaround Time			Job No.
Harrisburg, PA 17112	Calendar (C) or Work Days (W) _____			
(717) 901 - 8100 Phone	TAT if different from Below; Standard			er No. 1
(717) 901-8102 FAX	☐ 2 weeks			
Project Name: HD Bldg 45 UST Characterization	☐ 1 week			
Site: York PA	☐ 2 days			
Quote # 450MR00673	☐ 1 day			

180-45180 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	PADEP UST Shortlist Unleaded (8260B)															
HD-MW-125-0/0-0	6/17/2015	11:45	Groundwater	Water	3	X															
HD-MW-160-0/0-0	6/17/2015	10:35	Groundwater	Water	3	X															
Trip Blank 1	6/17/2015	13:00	Trip Blank	Water	2	X															
Temp Blank 1	6/17/2015	13:05	Temp Blank	Water	1																

Sample Specific Notes:

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Unpreserved 7=Na2S2O3	2	6	4	6	6	5	5	6	4	4	4	4	4	4	4	4	4	4
Field Filter	N	N	Y	N	Y	N	N	N	Y	N	Y	N	Y	N	Y	N	Y	N

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **CLP Like Deliverables, Project Specific Analyte Lists Bill to Leidios, e-mail lab results to kent.v.littlefield@leidos.com**

Relinquished by: Emily Wade	Company: Leidos	Date/Time: 06/17/2015/13:30	Received by: Fed-Ex	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by: Debbie Watson	Company: TAL	Date/Time: 6-18-15 8:55
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

FedEx Express NEW

FedEx Tracking Number 8055 8404 9608

Form ID No. 0200

1 From

Date 6/17/15 [redacted]

Sender's Name Emily Wade Phone 717 425-8494

Company Leidos

Address 6310 Allentown Blvd Dept/Floor/Suite/Room

City Harrisburg State PA ZIP 17112

2 Your Internal Billing Reference

3 To

Recipient's Name Sample Receiving Phone 412 963-2428

Company Test America - Pittsburgh

Address 301 Alpha Drive Dept/Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight

HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Address

Use this line for the HOLD location address or for continuation of your shipping address

City Pittsburgh State PA ZIP 15238

Uncorrected temp 4.0 °C

Thermometer ID 1

CF -.2 Initials EJ

PT-WI-SR-001 effective 7/26/13

8055 8404 9608

4 Express Package Service * To most locations.

NOTE: Service order h ...daily.

Packages up to 150 lbs.

For packages over 150 lbs., use the new FedEx Express Freight US Airbill

Next Business D

- [ ] FedEx First Over — Earliest next business locations. Friday ship Monday unless SAT
- [x] FedEx Priority — Next business morn delivered on Monday, is selected
- [ ] FedEx Standard Overnight — Next business afternoon * Saturday Delivery NOT available

180-45180 Waybill

Saturday Delivery

5 Packaging * Declared value limit $500

- [ ] FedEx Envelope*
- [ ] FedEx Pak*
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

6 Special Handling and Delivery Signature Options

- [ ] SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver
- [ ] No Signature Required — Package may be left without obtaining a signature for delivery
- [ ] Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 x kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box

- [ ] Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

- [ ] Sender — Acct. No. in Section 1 will be billed
- [x] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

[redacted]

Total Packages 1 Total Weight lbs

Credit Card Auth

†Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details

644

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Login Sample Receipt Checklist

Client: Leidos, Inc.

Job Number: 180-45180-1

Login Number: 45180
List Number: 1
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	