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)

Leidos Engineering, LLC
6310 Allentown Boulevard / Harrisburg, PA 17112 / 717.901.8100 leidos.com/engineering

January 28, 2014

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**
First 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 2603100044-4000-100

Dear Ms. Trowbridge:

On behalf of Harley-Davidson Motor Company Operations, Inc. (Harley-Davidson), Leidos Engineering, LLC (Leidos), formerly SAIC Energy, Environment & Infrastructure, LLC), is submitting 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 first round of quarterly groundwater monitoring 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 was to comply with the Site Specific Standards (SSSs) in soil and the Statewide Health Standards (SHSs) in groundwater to address unleaded gasoline constituents from the former Tank 009 release.

1.0 QUARTERLY GROUNDWATER MONITORING

1.1 Well Gauging

Gauging of monitoring wells MW-26, MW-77, MW-119 through MW-125, and MW-160 was performed by Leidos on December 18, 2013. MW-118 was not gauged because a trailer was parked on the well lid; however, this condition did not inhibit groundwater sampling of the required wells or construction of a water table map. No LNAPL was detected in any well gauged. Depth-to-groundwater measurements in the monitoring wells within the study area were subtracted from top-of-casing (TOC) elevations to calculate groundwater elevations (**Table 1**). A groundwater elevation contour map for wells gauged on December 18, 2013, is presented on **Figure 2**. The hydraulic gradient indicated by the wells is approximately 0.03 southwest from the area of the former dispenser for Tank 009. In general, the hydraulic gradient forms a trough that trends from MW-119 downgradient toward MW-160. The gradient and direction are consistent with previous measurements, except the magnitude measured on December 18, 2013, was slightly less than the 0.05 observed during the SCR. Monitoring wells MW-26

and MW-77 were not used to complete the groundwater contour map because they are installed into bedrock and do not represent the groundwater flow system monitored by the Tank 009 wells.

1.2 Groundwater Sampling

On December 18, 2013, groundwater samples were collected by Leidos from monitoring wells MW-125 and MW-160. The wells were purged prior to sampling with a submersible pump at a relatively low purge rate (i.e., approximately 0.25 gallons per minute [gpm]) to minimize the drawdown of the groundwater level in the wells. 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. 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 8260B. The analytical results for the sample analyses are summarized on **Table 2** and **Figure 3**. A copy of the laboratory analysis report is provided on the attached CD.

2.0 RESULTS

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

1. MW-125 had non-detectable concentrations for all analyzed parameters.

2. The concentration of benzene in MW-160 (120 micrograms per liter [µg/L]) exceeded the PADEP Nonresidential Used Aquifer MSC of 5 µg/L. All other analyzed compounds were either non-detect or were detected at concentrations below their respective MSCs.

3. The detected benzene concentration in MW-160 was less than prior measurements. As a result, the predictions of the fate-and-transport modeling conducted during site characterization activities indicate the groundwater meets the SHS at the POC.

3.0 PLANNED FUTURE ACTIVITIES

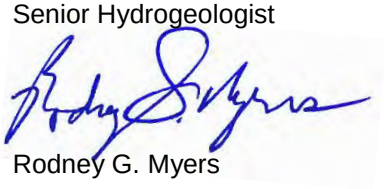
The second round of quarterly groundwater monitoring is scheduled for March 2014. An RAPR will be submitted to PADEP following receipt of the analytical results.

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 Engineering, LLC

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
Bethany Smith, ICF International – USTIF

FIGURES

NOTE: BASE MAP FROM THE YORK PA., USGS 7 1/2 MIN TOPOGRAPHIC QUADRANGLE (PR 1990).

2,000 1,000 0 2,000 Feet

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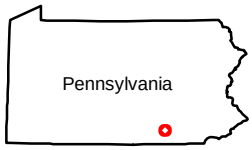

QUADRANGLE LOCATION

FORMER YORK NAVAL ORDNANCE PLANT (FYNOP)

YORK, PENNSYLVANIA

Site Location Map

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date 12/31/2013	date	date	
job no. 2603100044/4000			file no. Site_Map_20131231

initials	date	revision

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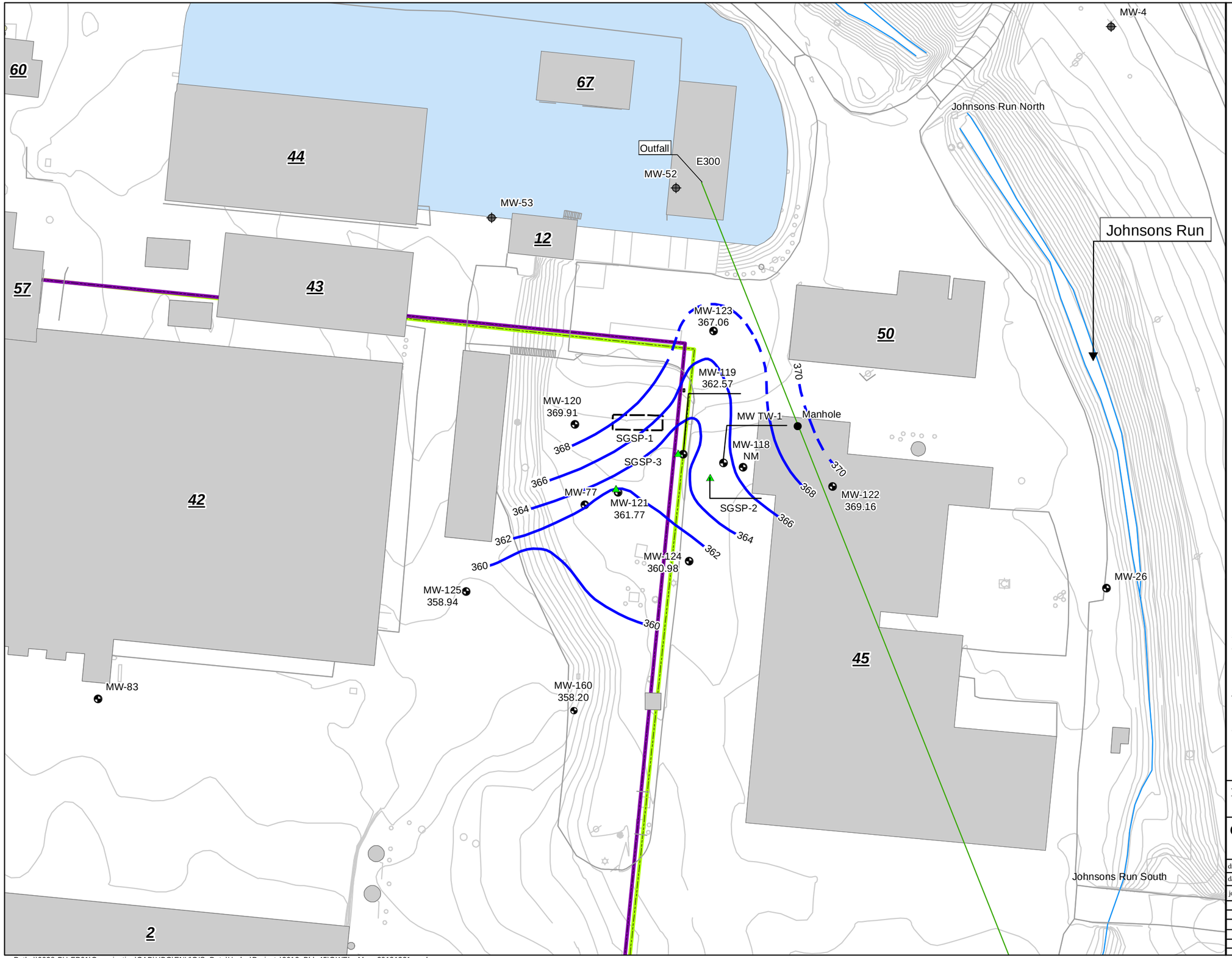
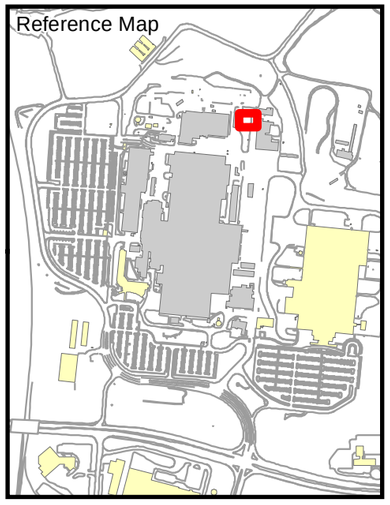


Legend

- Tank 009 (Removed July 2010)
- Existing Buildings
- Demolished Buildings
- Storm Water Detention Basin
- Roads and Curbs
- East/West Campus Boundary
- Approximate Stormwater Line
- Monitoring Well
- Abandoned Well
- Location of Soil Gas Sample Point
- 367.79 Groundwater Elevation
- Groundwater Elevation Contour (dashed where inferred)



NOTES:

1. *Base data (Buildings, Building Boundaries, Roads and Curbs, underground utilities and Contour Lines, from NuTec Survey conducted in 2006).*
2. *Monitoring Wells, Soil Borings, and Underground Storage Tank Features from SAIC site measurements.*
3. *NM - Not Measured*

N

0 550 1,100 2,200

SCALE IN FEET

Harley-Davidson Motor Company Operations, Inc.

1425 Eden Rd York, Pa 17402

Groundwater Elevation Contour Map December 18, 2013

drawn TAY	checked	approved	figure no. 2
date 12/31/2013	date	date	
job no. 2603100044/4000/100			file no. GWElevMap_20131231

initials	date	revision

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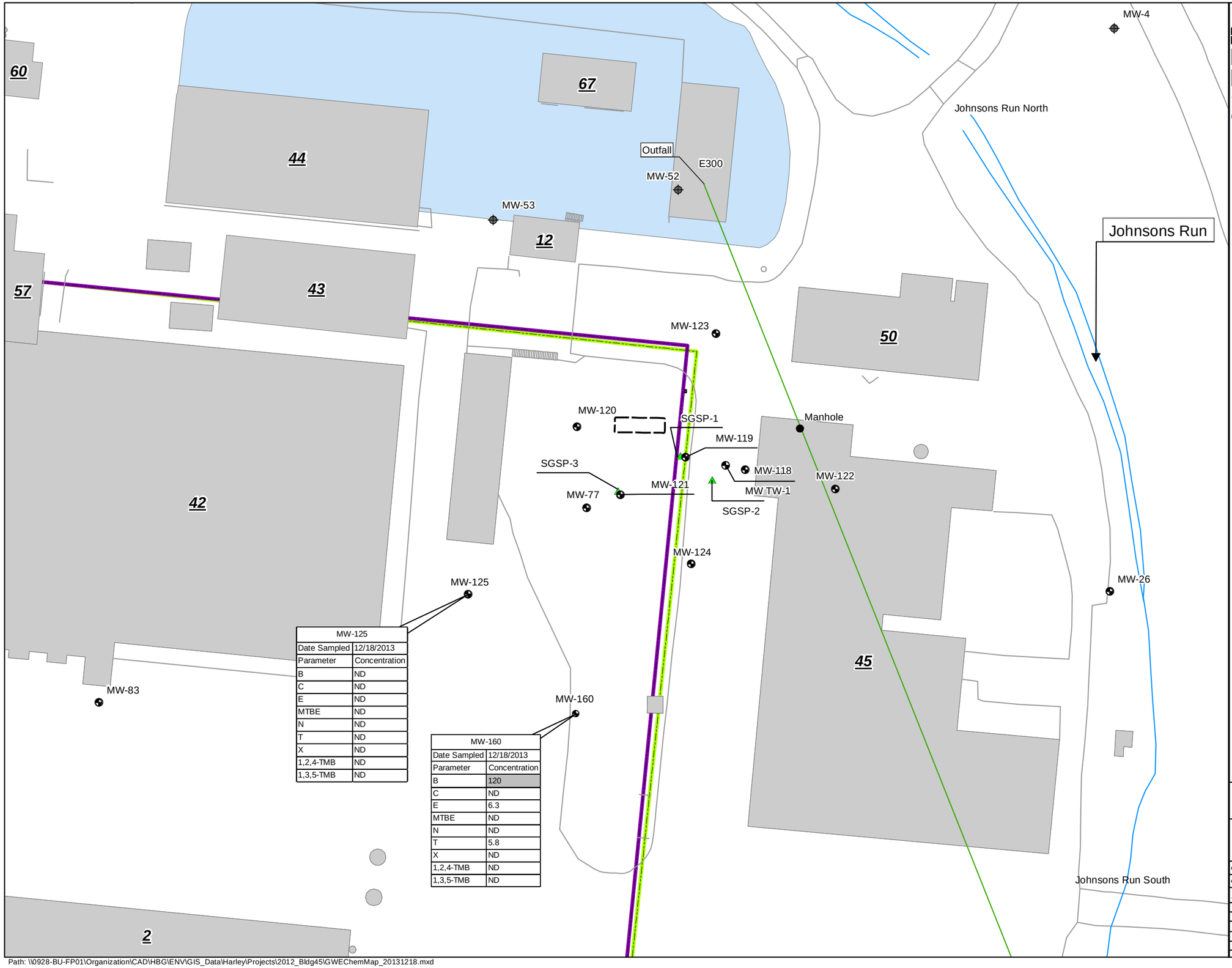

MW-125	
Date Sampled	12/18/2013
Parameter	Concentration
B	ND
C	ND
E	ND
MTBE	ND
N	ND
T	ND
X	ND
1,2,4-TMB	ND
1,3,5-TMB	ND

MW-160	
Date Sampled	12/18/2013
Parameter	Concentration
B	120
C	ND
E	6.3
MTBE	ND
N	ND
T	5.8
X	ND
1,2,4-TMB	ND
1,3,5-TMB	ND

Legend

- Tank 009 (Removed July 2010)
- Demolished Buildings
- Storm Water Detention Basin
- Roads and Curbs
- East/West Campus Boundary
- Approximate Stormwater Line
- Monitoring Well
- Abandoned Well
- Location of Soil Gas Sample Point

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

fbg: Feet Below Grade
J: Laboratory reported concentration as an approximate value.
MSC: Medium Specific Concentration
ND: Not Detected
NS: Soil Sample Not Collected for Laboratory Analysis
PADEP: Pennsylvania Department of Environmental Protection
*RPD of the LCS and LCSD exceeds the control limits
All results reported in micrograms per liter (µg/L)

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

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

N

0 25 50 100 Feet

Harley-Davidson Motor Company Operations, Inc.
1425 Eden Rd York, Pa 17402

Groundwater Quality Analytical Data December 18, 2013

drawn TAY	checked	approved	figure no. 3
date 12/31/2013	date	date	
job no. 2603100044/4000/100			file no. GWEChemMap_20131218

initials	date	revision

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TABLES

Table 1
Monitoring Well Gauging Data and Groundwater Elevations
Building 45 UST Release Characterization
Harley-Davidson Motor Company Operations, Inc.
1425 Eden Road, York, York County, Pennsylvania
PADEP Facility ID No. 67-00823
SAIC Project Number 2603100044-4000-100

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
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
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
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
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

Table 1
Monitoring Well Gauging Data and Groundwater Elevations
Building 45 UST Release Characterization
Harley-Davidson Motor Company Operations, Inc.
1425 Eden Road, York, York County, Pennsylvania
PADEP Facility ID No. 67-00823
SAIC Project Number 2603100044-4000-100

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-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
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
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
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
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
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

Notes:

fbtoc - feet below top of well casing
N/A - not applicable
NM - not measured
SWL - static water level

Table 2
Groundwater Sample Analytical Results
Building 45 UST Release Characterization
Harley-Davidson Motor Company Operations, Inc.
1425 Eden Road, York, York County, Pennsylvania
PADEP Facility ID No. 67-00823
SAIC Project Number 2603100044-4000-100

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
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
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
J - 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
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)

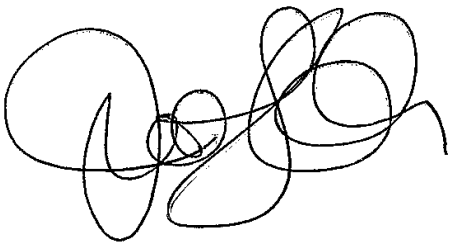
ANALYTICAL REPORT

Job Number: 180-28282-1

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
12/30/2013 4:29 PM

Jill L Colussy, Project Manager I
301 Alpha Drive, Pittsburgh, PA, 15238
(412)963-2444
jill.colussy@testamericainc.com
12/30/2013

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CASE NARRATIVE

Client: Leidos, Inc.

Project: Harley Davidson

Report Number: 180-28282-1

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 12/19/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.5 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Naphthalene was detected in method blank MB 180-93330/3 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.

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Instrument ID: HP4 Analysis Batch Number: 92621

Lab Sample ID: IC 180-92621/2 Client Sample ID:

Date Analyzed: 12/16/13 11:04 Lab File ID: 4121603.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.76	Peak Integrated Incorrectly	journetp	12/16/13 11:02
Dichlorofluoromethane	2.91	Peak Integrated Incorrectly	journetp	12/16/13 11:03
Trichlorofluoromethane	2.96	Peak Integrated Incorrectly	journetp	12/16/13 11:00
Ethyl ether	3.47	Peak Integrated Incorrectly	journetp	12/16/13 11:07
1,1,2-Trichloro-1,2,2-trifluoroethane	3.80	Peak Integrated Incorrectly	journetp	12/16/13 10:59
Acetone	4.00	Peak Integrated Incorrectly	journetp	12/16/13 12:01
Iodomethane	4.01	Peak Integrated Incorrectly	journetp	12/16/13 11:07
Methyl tert-butyl ether	5.06	Peak Integrated Incorrectly	journetp	12/16/13 11:03
Hexane	5.40	Peak Integrated Incorrectly	journetp	12/16/13 11:07
Vinyl acetate	5.75	Peak Integrated Incorrectly	journetp	12/16/13 11:07
Bromochloromethane	6.64	Peak Integrated Incorrectly	journetp	12/16/13 11:03
Isobutyl alcohol	7.35	Peak Integrated Incorrectly	journetp	12/16/13 11:08
Dioxane-d8 (IS)	8.41	Peak Integrated Incorrectly	journetp	12/16/13 13:38
Dibromomethane	8.44	Peak Integrated Incorrectly	journetp	12/16/13 11:03
trans-1,3-Dichloropropene	9.63	Peak Integrated Incorrectly	journetp	12/16/13 11:00
Ethyl methacrylate	9.73	Peak Integrated Incorrectly	journetp	12/16/13 11:07
2-Hexanone	10.14	Peak Integrated Incorrectly	journetp	12/16/13 11:01
1,2-Dibromoethane	10.32	Peak Integrated Incorrectly	journetp	12/16/13 11:03
trans-1,4-Dichloro-2-butene	12.21	Peak Integrated Incorrectly	journetp	12/16/13 11:08
1,4-Dichlorobenzene	13.13	Peak Integrated Incorrectly	journetp	12/16/13 11:04
1,2-Dibromo-3-Chloropropane	14.35	Unspecified	journetp	12/16/13 11:04
1,2,4-Trichlorobenzene	15.22	Peak Integrated Incorrectly	journetp	12/16/13 11:04
Naphthalene	15.51	Peak Integrated Incorrectly	journetp	12/16/13 11:13
1,2,3-Trichlorobenzene	15.73	Peak Integrated Incorrectly	journetp	12/16/13 11:05

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Instrument ID: HP4 Analysis Batch Number: 92621

Lab Sample ID: IC 180-92621/3 Client Sample ID:

Date Analyzed: 12/16/13 11:28 Lab File ID: 4121604.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.77	Peak Integrated Incorrectly	journetp	12/16/13 11:09
Trichlorofluoromethane	2.95	Peak Integrated Incorrectly	journetp	12/16/13 11:09
Acetone	3.99	Peak Integrated Incorrectly	journetp	12/16/13 12:00
Methylene Chloride	4.63	Peak Integrated Incorrectly	journetp	12/16/13 11:10
Vinyl acetate	5.74	Peak Integrated Incorrectly	journetp	12/16/13 11:11
1,2-Dichloroethane	7.39	Peak Integrated Incorrectly	journetp	12/16/13 11:10
1,2-Dichloropropane	8.31	Peak Integrated Incorrectly	journetp	12/16/13 11:10
2-Hexanone	10.10	Peak Integrated Incorrectly	journetp	12/16/13 13:14
trans-1,4-Dichloro-2-butene	12.18	Peak Integrated Incorrectly	journetp	12/16/13 11:25
1,2-Dibromo-3-Chloropropane	14.33	Peak Integrated Incorrectly	journetp	12/16/13 11:57
Naphthalene	15.51	Peak Integrated Incorrectly	journetp	12/16/13 11:11
1,2,3-Trichlorobenzene	15.72	Unspecified	journetp	12/16/13 11:11

Lab Sample ID: IC 180-92621/4 Client Sample ID:

Date Analyzed: 12/16/13 11:53 Lab File ID: 4121605.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.96	Peak Integrated Incorrectly	journetp	12/16/13 11:21
Acetone	3.99	Peak Integrated Incorrectly	journetp	12/16/13 12:00
Vinyl acetate	5.72	Peak Integrated Incorrectly	journetp	12/16/13 11:21
2-Butanone (MEK)	6.42	Unspecified	journetp	12/16/13 13:49
Dioxane-d8 (IS)	8.41	Peak Integrated Incorrectly	journetp	12/16/13 13:38
1,4-Dioxane	8.45	Peak Integrated Incorrectly	journetp	12/16/13 11:21
2-Hexanone	10.07	Peak Integrated Incorrectly	journetp	12/16/13 13:16
1,2-Dibromo-3-Chloropropane	14.32	Peak Integrated Incorrectly	journetp	12/16/13 11:22
1,2,4-Trichlorobenzene	15.17	Peak Integrated Incorrectly	journetp	12/16/13 11:22
Naphthalene	15.45	Peak Integrated Incorrectly	journetp	12/16/13 11:22
1,2,3-Trichlorobenzene	15.70	Poor Chromatography	journetp	12/16/13 11:23

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Instrument ID: HP4 Analysis Batch Number: 92621

Lab Sample ID: ICIS 180-92621/5 Client Sample ID:

Date Analyzed: 12/16/13 12:20 Lab File ID: 4121606.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	3.03	Poor Chromatography	journetp	12/16/13 16:20

Lab Sample ID: IC 180-92621/7 Client Sample ID:

Date Analyzed: 12/16/13 14:07 Lab File ID: 4121608.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dioxane-d8 (IS)	8.41	Peak Integrated Incorrectly	journetp	12/16/13 13:40

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Instrument ID: HP4 Analysis Batch Number: 93329

Lab Sample ID: CCVIS 180-93329/2 Client Sample ID:

Date Analyzed: 12/27/13 01:12 Lab File ID: 4122603.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dioxane-d8 (IS)	8.41	Peak Integrated Incorrectly	zukowskim	12/27/13 00:46
1,2-Dibromo-3-Chloropropane	14.32	Peak Integrated Incorrectly	zukowskim	12/27/13 00:46
1,2,4-Trichlorobenzene	15.16	Peak Integrated Incorrectly	zukowskim	12/27/13 00:46
Naphthalene	15.44	Peak Integrated Incorrectly	zukowskim	12/27/13 00:47
1,2,3-Trichlorobenzene	15.68	Peak Integrated Incorrectly	zukowskim	12/27/13 00:47

Lab Sample ID: MB 180-93329/3 Client Sample ID:

Date Analyzed: 12/27/13 02:10 Lab File ID: 4122605.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dichlorobenzene-d4	13.13	Peak Integrated Incorrectly	zukowskim	12/27/13 01:28

Lab Sample ID: 180-28282-1 Client Sample ID:

Date Analyzed: 12/27/13 02:44 Lab File ID: 4122606.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dichlorobenzene-d4	13.13	Peak Integrated Incorrectly	zukowskim	12/27/13 03:53

Lab Sample ID: 180-28282-3 Client Sample ID:

Date Analyzed: 12/27/13 03:10 Lab File ID: 4122607.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dichlorobenzene-d4	13.13	Peak Integrated Incorrectly	zukowskim	12/27/13 02:31

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Instrument ID: HP4 Analysis Batch Number: 93329

Lab Sample ID: LCS 180-93329/6 Client Sample ID:

Date Analyzed: 12/27/13 04:04 Lab File ID: 4122610.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Naphthalene	15.44	Peak Integrated Incorrectly	zukowskim	12/27/13 03:52

Lab Sample ID: 180-28282-1 MS Client Sample ID: HD-MW-125-01-0 MS

Date Analyzed: 12/27/13 04:30 Lab File ID: 4122611.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Naphthalene	15.44	Peak Integrated Incorrectly	zukowskim	12/27/13 04:28

Lab Sample ID: 180-28282-1 MSD Client Sample ID: HD-MW-125-01-0 MSD

Date Analyzed: 12/27/13 04:57 Lab File ID: 4122612.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Naphthalene	15.44	Peak Integrated Incorrectly	zukowskim	12/27/13 04:29

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Instrument ID: HP7 Analysis Batch Number: 91778

Lab Sample ID: IC 180-91778/2 Client Sample ID:

Date Analyzed: 12/06/13 07:32 Lab File ID: 7120603.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.99	Peak Integrated Incorrectly	journetp	12/06/13 08:39
Dichlorodifluoromethane	2.01	Peak Integrated Incorrectly	journetp	12/06/13 08:38
Vinyl chloride	2.17	Peak Integrated Incorrectly	journetp	12/06/13 08:39
1,3-Butadiene	2.18	Peak Integrated Incorrectly	journetp	12/06/13 08:39
Bromomethane	2.50	Peak Identified Incorrectly	journetp	12/06/13 08:39
Chloroethane	2.57	Peak Integrated Incorrectly	journetp	12/06/13 09:51
Dichlorofluoromethane	2.91	Peak Integrated Incorrectly	journetp	12/06/13 09:50
Ethyl ether	3.34	Peak Integrated Incorrectly	journetp	12/06/13 08:40
Acrolein	3.50	Peak Integrated Incorrectly	journetp	12/06/13 08:40
1,1-Dichloroethene	3.58	Peak Integrated Incorrectly	journetp	12/06/13 09:51
1,1,2-Trichloro-1,2,2-trifluoroethane	3.70	Peak Integrated Incorrectly	journetp	12/06/13 09:50
Iodomethane	3.80	Peak Integrated Incorrectly	journetp	12/06/13 08:39
Acetone	3.81	Peak Integrated Incorrectly	journetp	12/06/13 10:45
Allyl chloride	4.18	Peak Integrated Incorrectly	journetp	12/06/13 08:40
Methylene Chloride	4.37	Peak Integrated Incorrectly	journetp	12/06/13 08:41
tert-Butyl alcohol	4.77	Peak Integrated Incorrectly	journetp	12/06/13 09:50
trans-1,2-Dichloroethene	4.79	Peak Integrated Incorrectly	journetp	12/06/13 09:51
Acrylonitrile	4.80	Peak Integrated Incorrectly	journetp	12/06/13 08:40
Vinyl acetate	5.51	Peak Integrated Incorrectly	journetp	12/06/13 09:52
2-Butanone (MEK)	6.20	Peak Integrated Incorrectly	journetp	12/06/13 09:52
Dibromofluoromethane (Surr)	6.68	Peak Integrated Incorrectly	journetp	12/06/13 08:38

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Instrument ID: HP7 Analysis Batch Number: 91778

Lab Sample ID: IC 180-91778/3 Client Sample ID:

Date Analyzed: 12/06/13 08:01 Lab File ID: 7120604.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.96	Peak Integrated Incorrectly	journetp	12/06/13 09:03
Chloromethane	2.01	Peak Integrated Incorrectly	journetp	12/06/13 09:03
1,3-Butadiene	2.16	Peak Integrated Incorrectly	journetp	12/06/13 09:07
Bromomethane	2.50	Peak Integrated Incorrectly	journetp	12/06/13 09:03
Chloroethane	2.61	Peak Integrated Incorrectly	journetp	12/06/13 09:03
Dichlorofluoromethane	2.87	Peak Integrated Incorrectly	journetp	12/06/13 09:04
Trichlorofluoromethane	2.89	Peak Integrated Incorrectly	journetp	12/06/13 09:04
Ethyl ether	3.34	Peak Integrated Incorrectly	journetp	12/06/13 09:06
Acrolein	3.50	Unspecified	journetp	12/06/13 09:06
1,1-Dichloroethene	3.53	Peak Integrated Incorrectly	journetp	12/06/13 09:04
1,1,2-Trichloro-1,2,2-trifluoroethane	3.65	Peak Integrated Incorrectly	journetp	12/06/13 09:04
Iodomethane	3.77	Peak Integrated Incorrectly	journetp	12/06/13 09:06
Acetone	3.80	Peak Integrated Incorrectly	journetp	12/06/13 09:04
Allyl chloride	4.16	Peak Integrated Incorrectly	journetp	12/06/13 09:06
Methylene Chloride	4.37	Peak Integrated Incorrectly	journetp	12/06/13 09:04
TBA-d9 (IS)	4.72	Peak Integrated Incorrectly	journetp	12/06/13 09:32
Methyl tert-butyl ether	4.85	Peak Integrated Incorrectly	journetp	12/06/13 09:05
Hexane	5.17	Peak Integrated Incorrectly	journetp	12/06/13 09:31
Vinyl acetate	5.50	Peak Integrated Incorrectly	journetp	12/06/13 09:05

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Instrument ID: HP7 Analysis Batch Number: 91778

Lab Sample ID: IC 180-91778/4 Client Sample ID:

Date Analyzed: 12/06/13 08:28 Lab File ID: 7120605.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	2.03	Peak Integrated Incorrectly	journetp	12/06/13 09:27
Bromomethane	2.50	Peak Integrated Incorrectly	journetp	12/06/13 09:28
Chloroethane	2.60	Peak Integrated Incorrectly	journetp	12/06/13 09:28
Trichlorofluoromethane	2.88	Peak Integrated Incorrectly	journetp	12/06/13 09:29
Dichlorofluoromethane	2.89	Peak Integrated Incorrectly	journetp	12/06/13 09:28
Ethyl ether	3.36	Peak Integrated Incorrectly	journetp	12/06/13 09:30
Acrolein	3.51	Peak Integrated Incorrectly	journetp	12/06/13 09:30
1,1-Dichloroethene	3.56	Peak Integrated Incorrectly	journetp	12/06/13 09:29
1,1,2-Trichloro-1,2,2-trifluoroethane	3.71	Peak Integrated Incorrectly	journetp	12/06/13 09:28
Iodomethane	3.77	Peak Integrated Incorrectly	journetp	12/06/13 09:31
Allyl chloride	4.19	Peak Integrated Incorrectly	journetp	12/06/13 09:37
tert-Butyl alcohol	4.83	Peak Integrated Incorrectly	journetp	12/06/13 09:30
Hexane	5.16	Peak Integrated Incorrectly	journetp	12/06/13 09:31

Lab Sample ID: ICIS 180-91778/5 Client Sample ID:

Date Analyzed: 12/06/13 08:53 Lab File ID: 7120606.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.98	Peak Integrated Incorrectly	journetp	12/06/13 09:33
Bromomethane	2.52	Peak Integrated Incorrectly	journetp	12/06/13 09:34
Dichlorofluoromethane	2.91	Peak Integrated Incorrectly	journetp	12/06/13 09:34
Acrolein	3.52	Peak Integrated Incorrectly	journetp	12/06/13 09:35
1,1,2-Trichloro-1,2,2-trifluoroethane	3.71	Peak Integrated Incorrectly	journetp	12/06/13 09:34
Carbon disulfide	3.87	Peak Integrated Incorrectly	journetp	12/06/13 09:34
Allyl chloride	4.18	Peak Integrated Incorrectly	journetp	12/06/13 09:35
tert-Butyl alcohol	4.81	Peak Integrated Incorrectly	journetp	12/06/13 09:36

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Instrument ID: HP7 Analysis Batch Number: 91778

Lab Sample ID: IC 180-91778/6 Client Sample ID:

Date Analyzed: 12/06/13 09:23 Lab File ID: 7120607.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.97	Peak Integrated Incorrectly	journetp	12/06/13 10:12
Dichlorofluoromethane	2.88	Peak Integrated Incorrectly	journetp	12/06/13 10:12
Acrolein	3.52	Peak Integrated Incorrectly	journetp	12/06/13 10:14
1,1,2-Trichloro-1,2,2-trifluoroethane	3.69	Peak Integrated Incorrectly	journetp	12/06/13 10:12
Carbon disulfide	3.86	Peak Integrated Incorrectly	journetp	12/06/13 10:13
Allyl chloride	4.15	Peak Integrated Incorrectly	journetp	12/06/13 10:14
trans-1,2-Dichloroethene	4.78	Peak Integrated Incorrectly	journetp	12/06/13 10:13
Acrylonitrile	4.79	Peak Integrated Incorrectly	journetp	12/06/13 10:15

Lab Sample ID: IC 180-91778/7 Client Sample ID:

Date Analyzed: 12/06/13 10:27 Lab File ID: 7120608.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Vinyl chloride	2.21	Peak Integrated Incorrectly	journetp	12/06/13 10:55
Chloroethane	2.64	Peak Integrated Incorrectly	journetp	12/06/13 10:54
Trichlorofluoromethane	3.03	Peak Integrated Incorrectly	journetp	12/06/13 10:55
Carbon disulfide	3.99	Peak Integrated Incorrectly	journetp	12/06/13 10:57
Allyl chloride	4.12	Peak Integrated Incorrectly	journetp	12/06/13 10:56

Lab Sample ID: IC 180-91778/8 Client Sample ID:

Date Analyzed: 12/06/13 11:22 Lab File ID: 7120609.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethyl ether	3.29	Peak Integrated Incorrectly	journetp	12/06/13 11:53
Carbon disulfide	3.78	Peak Integrated Incorrectly	journetp	12/06/13 11:52
Allyl chloride	4.11	Peak Integrated Incorrectly	journetp	12/06/13 11:53

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Instrument ID: HP7 Analysis Batch Number: 93330

Lab Sample ID: CCVIS 180-93330/2 Client Sample ID:

Date Analyzed: 12/27/13 00:00 Lab File ID: 7122603.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethyl ether	3.33	Peak Integrated Incorrectly	zukowskim	12/27/13 00:32
Acrolein	3.52	Peak Integrated Incorrectly	zukowskim	12/27/13 00:32
Carbon disulfide	3.82	Peak Integrated Incorrectly	zukowskim	12/27/13 00:31
Allyl chloride	4.14	Peak Integrated Incorrectly	zukowskim	12/27/13 00:32
TBA-d9 (IS)	4.73	Peak Integrated Incorrectly	zukowskim	12/27/13 00:31

Lab Sample ID: 180-28341-C-1 MS Client Sample ID:

Date Analyzed: 12/27/13 03:20 Lab File ID: 7122610.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Naphthalene	15.08	Peak Integrated Incorrectly	zukowskim	12/27/13 04:01

SAMPLE SUMMARY

Client: Leidos, Inc. Job Number: 180-28282-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
180-28282-1	HD-MW-125-01-0	Water	12/18/2013 1303	12/19/2013 1000
180-28282-2	HD-MW-160-01-0	Water	12/18/2013 1119	12/19/2013 1000
180-28282-3	TRIP BLANK	Water	12/18/2013 1350	12/19/2013 1000

EXECUTIVE SUMMARY - Detections

Client: Leidos, Inc. Job Number: 180-28282-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
180-28282-2	**HD-MW-160-01-0**					
Benzene		120		5.0	ug/L	8260B
Toluene		5.8		5.0	ug/L	8260B
Ethylbenzene		6.3		5.0	ug/L	8260B

METHOD SUMMARY

Client: Leidos, Inc. Job Number: 180-28282-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL PIT	SW846 8260B	
Purge and Trap	TAL PIT		SW846 5030B

Lab References:

TAL PIT = TestAmerica Pittsburgh

Method References:

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

METHOD / ANALYST SUMMARY

Client: Leidos, Inc. Job Number: 180-28282-1

Method	Analyst	Analyst ID
SW846 8260B	Zukowski, Mike	MAZ

Client: Leidos, Inc. Job Number: 180-28282-1

Client Sample ID: **HD-MW-125-01-0**

Lab Sample ID: 180-28282-1 Date Sampled: 12/18/2013 1303
Client Matrix: Water Date Received: 12/19/2013 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	180-93329	Instrument ID:	HP4
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	4122606.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	12/27/2013 0244			Final Weight/Volume:	5 mL
Prep Date:	12/27/2013 0244				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.99	5.0
Toluene	5.0	U	0.85	5.0
Ethylbenzene	5.0	U	0.62	5.0
Xylenes, Total	10	U	2.0	10
Isopropylbenzene	5.0	U	0.53	5.0
Methyl tert-butyl ether	5.0	U	1.0	5.0
1,2,4-Trimethylbenzene	5.0	U	0.52	5.0
1,3,5-Trimethylbenzene	5.0	U	0.59	5.0
Naphthalene	5.0	U	0.47	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		62 - 123
Toluene-d8 (Surr)	93		80 - 120
4-Bromofluorobenzene (Surr)	82		75 - 120
Dibromofluoromethane (Surr)	91		80 - 120

Client: Leidos, Inc. Job Number: 180-28282-1

Client Sample ID: **HD-MW-160-01-0**

Lab Sample ID: 180-28282-2 Date Sampled: 12/18/2013 1119
Client Matrix: Water Date Received: 12/19/2013 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	180-93330	Instrument ID:	HP7
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	7122626.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	12/27/2013 1039			Final Weight/Volume:	5 mL
Prep Date:	12/27/2013 1039				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	120		0.99	5.0
Toluene	5.8		0.85	5.0
Ethylbenzene	6.3		0.62	5.0
Xylenes, Total	10	U	2.0	10
Isopropylbenzene	5.0	U	0.53	5.0
Methyl tert-butyl ether	5.0	U	1.0	5.0
1,2,4-Trimethylbenzene	5.0	U	0.52	5.0
1,3,5-Trimethylbenzene	5.0	U	0.59	5.0
Naphthalene	5.0	U	0.47	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	77		62 - 123
Toluene-d8 (Surr)	88		80 - 120
4-Bromofluorobenzene (Surr)	86		75 - 120
Dibromofluoromethane (Surr)	96		80 - 120

Client: Leidos, Inc. Job Number: 180-28282-1

Client Sample ID: **TRIP BLANK**

Lab Sample ID: 180-28282-3 Date Sampled: 12/18/2013 1350
Client Matrix: Water Date Received: 12/19/2013 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	180-93329	Instrument ID:	HP4
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	4122607.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	12/27/2013 0310			Final Weight/Volume:	5 mL
Prep Date:	12/27/2013 0310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.99	5.0
Toluene	5.0	U	0.85	5.0
Ethylbenzene	5.0	U	0.62	5.0
Xylenes, Total	10	U	2.0	10
Isopropylbenzene	5.0	U	0.53	5.0
Methyl tert-butyl ether	5.0	U	1.0	5.0
1,2,4-Trimethylbenzene	5.0	U	0.52	5.0
1,3,5-Trimethylbenzene	5.0	U	0.59	5.0
Naphthalene	5.0	U	0.47	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94		62 - 123
Toluene-d8 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	83		75 - 120
Dibromofluoromethane (Surr)	92		80 - 120

Client: Leidos, Inc.

Job Number: 180-28282-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
180-28282-1	HD-MW-125-01-0	91	91	93	82
180-28282-2	HD-MW-160-01-0	96	77	88	86
180-28282-3	TRIP BLANK	92	94	98	83
MB 180-93329/3		96	96	106	90
MB 180-93330/3		103	83	96	88
LCS 180-93329/6		102	105	92	103
LCS 180-93330/7		99	81	92	89
180-28282-1 MS	HD-MW-125-01-0 MS	103	105	91	104
180-28341-C-1 MS		95	82	91	87
180-28282-1 MSD	HD-MW-125-01-0 MSD	101	98	91	102
180-28341-D-1 MSD		98	81	93	87

Surrogate	Acceptance 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

Client: Leidos, Inc. Job Number: 180-28282-1

Method Blank - Batch: 180-93329

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 180-93329/3	Analysis Batch:	180-93329	Instrument ID:	HP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4122605.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	12/27/2013 0210	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	12/27/2013 0210				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Benzene	5.0	U	0.99	5.0
Toluene	5.0	U	0.85	5.0
Ethylbenzene	5.0	U	0.62	5.0
Xylenes, Total	10	U	2.0	10
Isopropylbenzene	5.0	U	0.53	5.0
Methyl tert-butyl ether	5.0	U	1.0	5.0
1,2,4-Trimethylbenzene	5.0	U	0.52	5.0
1,3,5-Trimethylbenzene	5.0	U	0.59	5.0
Naphthalene	5.0	U	0.47	5.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96	62 - 123
Toluene-d8 (Surr)	106	80 - 120
4-Bromofluorobenzene (Surr)	90	75 - 120
Dibromofluoromethane (Surr)	96	80 - 120

Lab Control Sample - Batch: 180-93329

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 180-93329/6	Analysis Batch:	180-93329	Instrument ID:	HP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4122610.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	12/27/2013 0404	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	12/27/2013 0404				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	40.0	41.2	103	80 - 120	
Toluene	40.0	38.0	95	80 - 124	
Ethylbenzene	40.0	42.8	107	79 - 124	
Xylenes, Total	80.0	86.0	108	81 - 121	
Isopropylbenzene	40.0	41.6	104	73 - 130	
Methyl tert-butyl ether	40.0	39.7	99	53 - 122	
1,2,4-Trimethylbenzene	40.0	40.2	101	71 - 132	
1,3,5-Trimethylbenzene	40.0	37.3	93	75 - 135	
Naphthalene	40.0	34.2	85	10 - 144	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105	62 - 123
Toluene-d8 (Surr)	92	80 - 120
4-Bromofluorobenzene (Surr)	103	75 - 120
Dibromofluoromethane (Surr)	102	80 - 120

Client: Leidos, Inc. Job Number: 180-28282-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-93329

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	180-28282-1	Analysis Batch:	180-93329	Instrument ID:	HP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4122611.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	12/27/2013 0430			Final Weight/Volume:	5 mL
Prep Date:	12/27/2013 0430				5 mL
Leach Date:	N/A				

MSD Lab Sample ID:	180-28282-1	Analysis Batch:	180-93329	Instrument ID:	HP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4122612.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	12/27/2013 0457			Final Weight/Volume:	5 mL
Prep Date:	12/27/2013 0457				5 mL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	102	103	80 - 120	1	20		
Toluene	94	94	80 - 124	0	20		
Ethylbenzene	106	102	79 - 124	4	25		
Xylenes, Total	107	105	81 - 121	2	20		
Isopropylbenzene	105	102	73 - 130	2	20		
Methyl tert-butyl ether	96	97	53 - 122	1	20		
1,2,4-Trimethylbenzene	94	100	71 - 132	6	35		
1,3,5-Trimethylbenzene	91	94	75 - 135	3	20		
Naphthalene	92	99	10 - 144	8	35		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105	98	62 - 123
Toluene-d8 (Surr)	91	91	80 - 120
4-Bromofluorobenzene (Surr)	104	102	75 - 120
Dibromofluoromethane (Surr)	103	101	80 - 120

Client: Leidos, Inc.

Job Number: 180-28282-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-93329

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	180-28282-1	Units:	ug/L	MSD Lab Sample ID:	180-28282-1
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	12/27/2013 0430			Analysis Date:	12/27/2013 0457
Prep Date:	12/27/2013 0430			Prep Date:	12/27/2013 0457
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	5.0	U	40.0	40.0	41.0	41.2
Toluene	5.0	U	40.0	40.0	37.7	37.7
Ethylbenzene	5.0	U	40.0	40.0	42.3	40.8
Xylenes, Total	10	U	80.0	80.0	85.8	83.7
Isopropylbenzene	5.0	U	40.0	40.0	41.8	40.8
Methyl tert-butyl ether	5.0	U	40.0	40.0	38.4	38.7
1,2,4-Trimethylbenzene	5.0	U	40.0	40.0	37.8	40.0
1,3,5-Trimethylbenzene	5.0	U	40.0	40.0	36.4	37.6
Naphthalene	5.0	U	40.0	40.0	36.8	39.7

Client: Leidos, Inc. Job Number: 180-28282-1

Method Blank - Batch: 180-93330

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 180-93330/3	Analysis Batch:	180-93330	Instrument ID:	HP7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	7122607.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	12/27/2013 0159	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	12/27/2013 0159				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Benzene	5.0	U	0.99	5.0
Toluene	5.0	U	0.85	5.0
Ethylbenzene	5.0	U	0.62	5.0
Xylenes, Total	10	U	2.0	10
Isopropylbenzene	5.0	U	0.53	5.0
Methyl tert-butyl ether	5.0	U	1.0	5.0
1,2,4-Trimethylbenzene	5.0	U	0.52	5.0
1,3,5-Trimethylbenzene	5.0	U	0.59	5.0
Naphthalene	2.64	J	0.47	5.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	83	62 - 123
Toluene-d8 (Surr)	96	80 - 120
4-Bromofluorobenzene (Surr)	88	75 - 120
Dibromofluoromethane (Surr)	103	80 - 120

Lab Control Sample - Batch: 180-93330

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 180-93330/7	Analysis Batch:	180-93330	Instrument ID:	HP7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	7122611.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	12/27/2013 0347	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	12/27/2013 0347				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	40.0	35.1	88	80 - 120	
Toluene	40.0	33.9	85	80 - 124	
Ethylbenzene	40.0	35.6	89	79 - 124	
Xylenes, Total	80.0	71.2	89	81 - 121	
Isopropylbenzene	40.0	43.3	108	73 - 130	
Methyl tert-butyl ether	40.0	33.8	85	53 - 122	
1,2,4-Trimethylbenzene	40.0	52.3	131	71 - 132	
1,3,5-Trimethylbenzene	40.0	46.5	116	75 - 135	
Naphthalene	40.0	31.6	79	10 - 144	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	81	62 - 123
Toluene-d8 (Surr)	92	80 - 120
4-Bromofluorobenzene (Surr)	89	75 - 120
Dibromofluoromethane (Surr)	99	80 - 120

Client: Leidos, Inc. Job Number: 180-28282-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-93330

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	180-28341-C-1 MS	Analysis Batch:	180-93330	Instrument ID:	HP7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	7122610.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	12/27/2013 0320			Final Weight/Volume:	5 mL
Prep Date:	12/27/2013 0320				5 mL
Leach Date:	N/A				

MSD Lab Sample ID:	180-28341-D-1 MSD	Analysis Batch:	180-93330	Instrument ID:	HP7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	7122612.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	12/27/2013 0417			Final Weight/Volume:	5 mL
Prep Date:	12/27/2013 0417				5 mL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	88	88	80 - 120	1	20		
Toluene	84	87	80 - 124	3	20		
Ethylbenzene	89	90	79 - 124	1	25		
Xylenes, Total	88	90	81 - 121	2	20		
Isopropylbenzene	102	105	73 - 130	2	20		
Methyl tert-butyl ether	80	81	53 - 122	1	20		
1,2,4-Trimethylbenzene	128	127	71 - 132	1	35		
1,3,5-Trimethylbenzene	114	111	75 - 135	3	20		
Naphthalene	3	130	10 - 144	185	35	J F	F

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	82	81	62 - 123
Toluene-d8 (Surr)	91	93	80 - 120
4-Bromofluorobenzene (Surr)	87	87	75 - 120
Dibromofluoromethane (Surr)	95	98	80 - 120

Client: Leidos, Inc.

Job Number: 180-28282-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-93330

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	180-28341-C-1 MS	Units: ug/L	MSD Lab Sample ID:	180-28341-D-1 MSD	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	12/27/2013 0320		Analysis Date:	12/27/2013 0417	
Prep Date:	12/27/2013 0320		Prep Date:	12/27/2013 0417	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Benzene	5.0	U	40.0	40.0	35.0		35.3	
Toluene	5.0	U	40.0	40.0	33.8		34.7	
Ethylbenzene	5.0	U	40.0	40.0	35.7		36.1	
Xylenes, Total	10	U	80.0	80.0	70.6		71.9	
Isopropylbenzene	5.0	U	40.0	40.0	40.9		41.8	
Methyl tert-butyl ether	5.0	U	40.0	40.0	32.2		32.5	
1,2,4-Trimethylbenzene	5.0	U	40.0	40.0	51.4		50.7	
1,3,5-Trimethylbenzene	5.0	U	40.0	40.0	45.6		44.5	
Naphthalene	0.91	J	40.0	40.0	2.12	J F	52.7	F

DATA REPORTING QUALIFIERS

Client: Leidos, Inc. Job Number: 180-28282-1

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Indicates the analyte was analyzed for but not detected.
	F	MS/MSD Recovery and/or RPD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Client: Leidos, Inc. Job Number: 180-28282-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:180-93329					
LCS 180-93329/6	Lab Control Sample	T	Water	8260B	
MB 180-93329/3	Method Blank	T	Water	8260B	
180-28282-1	HD-MW-125-01-0	T	Water	8260B	
180-28282-1MS	Matrix Spike	T	Water	8260B	
180-28282-1MSD	Matrix Spike Duplicate	T	Water	8260B	
180-28282-3	TRIP BLANK	T	Water	8260B	
Analysis Batch:180-93330					
LCS 180-93330/7	Lab Control Sample	T	Water	8260B	
MB 180-93330/3	Method Blank	T	Water	8260B	
180-28282-2	HD-MW-160-01-0	T	Water	8260B	
180-28341-C-1 MS	Matrix Spike	T	Water	8260B	
180-28341-D-1 MSD	Matrix Spike Duplicate	T	Water	8260B	

Report Basis
T = Total

Client: Leidos, Inc. Job Number: 180-28282-1

Laboratory Chronicle

Lab ID: 180-28282-1 **Client ID:** HD-MW-125-01-0

Sample Date/Time: 12/18/2013 13:03 Received Date/Time: 12/19/2013 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	180-28282-A-1		180-93329		12/27/2013 02:44	1	TAL PIT	MAZ
A:8260B	180-28282-A-1		180-93329		12/27/2013 02:44	1	TAL PIT	MAZ

Lab ID: 180-28282-1 MS **Client ID:** HD-MW-125-01-0

Sample Date/Time: 12/18/2013 13:03 Received Date/Time: 12/19/2013 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	180-28282-B-1 MS		180-93329		12/27/2013 04:30	1	TAL PIT	MAZ
A:8260B	180-28282-B-1 MS		180-93329		12/27/2013 04:30	1	TAL PIT	MAZ

Lab ID: 180-28282-1 MSD **Client ID:** HD-MW-125-01-0

Sample Date/Time: 12/18/2013 13:03 Received Date/Time: 12/19/2013 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	180-28282-C-1 MSD		180-93329		12/27/2013 04:57	1	TAL PIT	MAZ
A:8260B	180-28282-C-1 MSD		180-93329		12/27/2013 04:57	1	TAL PIT	MAZ

Lab ID: 180-28282-2 **Client ID:** HD-MW-160-01-0

Sample Date/Time: 12/18/2013 11:19 Received Date/Time: 12/19/2013 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	180-28282-B-2		180-93330		12/27/2013 10:39	1	TAL PIT	MAZ
A:8260B	180-28282-B-2		180-93330		12/27/2013 10:39	1	TAL PIT	MAZ

Lab ID: 180-28282-3 **Client ID:** TRIP BLANK

Sample Date/Time: 12/18/2013 13:50 Received Date/Time: 12/19/2013 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	180-28282-A-3		180-93329		12/27/2013 03:10	1	TAL PIT	MAZ
A:8260B	180-28282-A-3		180-93329		12/27/2013 03:10	1	TAL PIT	MAZ

Lab ID: MB **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	MB 180-93330/3		180-93330		12/27/2013 01:59	1	TAL PIT	MAZ
A:8260B	MB 180-93330/3		180-93330		12/27/2013 01:59	1	TAL PIT	MAZ
P:5030B	MB 180-93329/3		180-93329		12/27/2013 02:10	1	TAL PIT	MAZ
A:8260B	MB 180-93329/3		180-93329		12/27/2013 02:10	1	TAL PIT	MAZ

Client: Leidos, Inc. Job Number: 180-28282-1

Laboratory Chronicle

Lab ID: LCS **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	LCS 180-93330/7		180-93330		12/27/2013 03:47	1	TAL PIT	MAZ
A:8260B	LCS 180-93330/7		180-93330		12/27/2013 03:47	1	TAL PIT	MAZ
P:5030B	LCS 180-93329/6		180-93329		12/27/2013 04:04	1	TAL PIT	MAZ
A:8260B	LCS 180-93329/6		180-93329		12/27/2013 04:04	1	TAL PIT	MAZ

Lab ID: MS **Client ID:** N/A

Sample Date/Time: 12/19/2013 10:05 Received Date/Time: 12/20/2013 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	180-28341-C-1 MS		180-93330		12/27/2013 03:20	1	TAL PIT	MAZ
A:8260B	180-28341-C-1 MS		180-93330		12/27/2013 03:20	1	TAL PIT	MAZ

Lab ID: MSD **Client ID:** N/A

Sample Date/Time: 12/19/2013 10:05 Received Date/Time: 12/20/2013 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	180-28341-D-1 MSD		180-93330		12/27/2013 04:17	1	TAL PIT	MAZ
A:8260B	180-28341-D-1 MSD		180-93330		12/27/2013 04:17	1	TAL PIT	MAZ

Lab References:
TAL PIT = TestAmerica Pittsburgh

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VOA8260BSURR_00173	01/10/14	12/10/13	Methanol, Lot 49909	100 mL	VOA8260SURRES_00002	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_00002	12/01/17		Restek, Lot A092213		(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_00009	11/19/14	11/19/13	Methanol, Lot 49909	100 mL	VOA8260SURRES_00030	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_00030	02/01/18		Restek, Lot A093505		(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_00041	12/29/13	12/26/13	Methanol, Lot 49909	8 mL	8260VOA2ND_00001	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
.8260VOA2ND_00001	12/29/13	11/29/13	Methanol, Lot 49909	10 mL	VOA8260MEGA2_00005	1 mL	1,2,4-Trimethylbenzene	200 ug/mL
							1,3,5-Trimethylbenzene	200 ug/mL
							Benzene	200 ug/mL
							Ethylbenzene	200 ug/mL
							Isopropylbenzene	200 ug/mL
							Methyl tert-butyl ether	200 ug/mL
							Naphthalene	200 ug/mL
							Toluene	200 ug/mL
							Xylenes, Total	400 ug/mL
..VOA8260MEGA2_00005	02/01/16		Restek, Lot A093733		(Purchased Reagent)		1,2,4-Trimethylbenzene	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							Benzene	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Isopropylbenzene	2000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Naphthalene	2000 ug/mL
							Toluene	2000 ug/mL
							Xylenes, Total	4000 ug/mL
Voa8260VoaPri_00037	12/09/13	12/02/13	Methanol, Lot 49909	8 mL	VOA8260GAS1ST_00024	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

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
					VOA8260VOAPRI_00036	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
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

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	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_00024	02/01/15		Restek, Lot A093341		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Butadiene	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Dichlorofluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.VOA8260VOAPRI_00036	12/29/13	11/29/13	Methanol, Lot 49909	10 mL	VOA8260KETRES_00006	0.2 mL	2-Butanone (MEK)	200 ug/mL
							2-Hexanone	200 ug/mL
							4-Methyl-2-pentanone (MIBK)	200 ug/mL
							Acetone	200 ug/mL
					VOA8260MEGA1_00009	1 mL	1,1,1,2-Tetrachloroethane	200 ug/mL
							1,1,1-Trichloroethane	200 ug/mL
							1,1,2,2-Tetrachloroethane	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
..VOA8260KETRES_00006	02/01/18		Restek, Lot A093365		(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
..VOA8260MEGA1_00009	02/01/16		Restek, Lot A093581		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							2,2-Dichloropropane	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorotoluene	2000 ug/mL
							2-Methyl-2-propanol	20000 ug/mL
							3-Chloro-1-propene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							4-Isopropyltoluene	2000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chlorobromomethane	2000 ug/mL
							Chlorodibromomethane	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Cyclohexane	2000 ug/mL
							Dibromomethane	2000 ug/mL
							Dichlorobromomethane	2000 ug/mL
							Ethyl ether	2000 ug/mL
							Ethyl methacrylate	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Ethylene Dibromide	2000 ug/mL
							Hexachlorobutadiene	2000 ug/mL
							Hexane	2000 ug/mL
							Iodomethane	2000 ug/mL
							Isobutyl alcohol	50000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl acetate	10000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL
							n-Heptane	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Tetrahydrofuran	4000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	2000 ug/mL
Voa8260VoaPri_00038	12/17/13	12/10/13	Methanol, Lot 49909	8 mL	VOA8260GAS1ST_00036	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_00036	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
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00036	02/01/15		Restek, Lot A093341		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Butadiene	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Dichlorofluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.VOA8260VOAPRI_00036	12/29/13	11/29/13	Methanol, Lot 49909	10 mL	VOA8260KETRES_00006	0.2 mL	2-Butanone (MEK)	200 ug/mL
							2-Hexanone	200 ug/mL
							4-Methyl-2-pentanone (MIBK)	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetone	200 ug/mL
					VOA8260MEGA1_00009	1 mL	1,1,1,2-Tetrachloroethane	200 ug/mL
							1,1,1-Trichloroethane	200 ug/mL
							1,1,2,2-Tetrachloroethane	200 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ug/mL
							1,1,2-Trichloroethane	200 ug/mL
							1,1-Dichloroethane	200 ug/mL
							1,1-Dichloroethene	200 ug/mL
							1,1-Dichloropropene	200 ug/mL
							1,2,3-Trichlorobenzene	200 ug/mL
							1,2,3-Trichloropropane	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2,4-Trimethylbenzene	200 ug/mL
							1,2-Dibromo-3-Chloropropane	200 ug/mL
							1,2-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
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
..VOA8260KETRES_00006	02/01/18		Restek, Lot A093365		(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
..VOA8260MEGA1_00009	02/01/16		Restek, Lot A093581		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL
							2-Methyl-2-propanol	20000 ug/mL
							3-Chloro-1-propene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							4-Isopropyltoluene	2000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chlorobromomethane	2000 ug/mL
							Chlorodibromomethane	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Cyclohexane	2000 ug/mL
							Dibromomethane	2000 ug/mL
							Dichlorobromomethane	2000 ug/mL
							Ethyl ether	2000 ug/mL
							Ethyl methacrylate	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Ethylene Dibromide	2000 ug/mL
							Hexachlorobutadiene	2000 ug/mL
							Hexane	2000 ug/mL
							Iodomethane	2000 ug/mL
							Isobutyl alcohol	50000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl acetate	10000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL
							n-Heptane	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Tetrahydrofuran	4000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
							Trichloroethene	2000 ug/mL
VOA8260VOAPRI_00040	12/29/13	12/26/13	Methanol, Lot 49909	8 mL	VOA8260VOAPRI_00036	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
.VOA8260VOAPRI_00036	12/29/13	11/29/13	Methanol, Lot 49909	10 mL	VOA8260MEGA1_00009	1 mL	1,2,4-Trimethylbenzene	200 ug/mL
							1,3,5-Trimethylbenzene	200 ug/mL
							Benzene	200 ug/mL
							Ethylbenzene	200 ug/mL
							Isopropylbenzene	200 ug/mL
							Methyl tert-butyl ether	200 ug/mL
							Naphthalene	200 ug/mL
							Toluene	200 ug/mL
							Xylenes, Total	400 ug/mL
..VOA8260MEGA1_00009	02/01/16		Restek, Lot A093581		(Purchased Reagent)		1,2,4-Trimethylbenzene	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							Benzene	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Isopropylbenzene	2000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Naphthalene	2000 ug/mL
							Toluene	2000 ug/mL
							Xylenes, Total	4000 ug/mL
VoaVAPrimRest_00001	12/26/13	11/26/13	Methanol, Lot 49909	10 mL	VOA8260VARES_00018	0.0625 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES_00018	12/31/13		Restek, Lot A096198		(Purchased Reagent)		Vinyl acetate	4000 ug/mL
voaW8260inter_00001	01/05/14	12/05/13	Methanol, Lot 49909	50 mL	VOA8260INTRES_00033	5 mL	1,4-Dichlorobenzene-d4	25 ug/mL
							Chlorobenzene-d5	25 ug/mL
							Dioxane-d8 (IS)	500 ug/mL
							Fluorobenzene (IS)	25 ug/mL
							TBA-d9 (IS)	500 ug/mL
.VOA8260INTRES_00033	02/01/18		Restek, Lot A093504		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
voaWacoiPrime_00001	12/21/13	11/21/13	Methanol, Lot 49909	25 mL	VOAACRORES_00034	0.125 mL	Acrolein	25 ug/mL
.VOAACRORES_00034	01/31/14		Restek, Lot A098249		(Purchased Reagent)		Acrolein	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
voaWacroPriRe_00003	01/13/14	12/13/13	Methanol, Lot 49909	25 mL	VOAACRORES_00035	0.125 mL	Acrolein	25 ug/mL
.VOAACRORES_00035	01/31/14		Restek, Lot A098249		(Purchased Reagent)		Acrolein	5000 ug/mL

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FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

Catalog No. : 567645 **Lot No.:** A093341

Description : 8260 List 1 / Std #3 Gases

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

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

Expiration Date : February 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 **Purity** 99%	2,000.0 µg/mL	+/- 13.8716 µg/mL +/- 25.2661 µg/mL +/- 28.2336 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 **Purity** 99%	1,999.8 µg/mL	+/- 13.9993 µg/mL +/- 25.3348 µg/mL +/- 28.2945 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 **Purity** 99%	2,000.1 µg/mL	+/- 13.9625 µg/mL +/- 25.3168 µg/mL +/- 28.2792 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 **Purity** 99%	2,000.0 µg/mL	+/- 13.3773 µg/mL +/- 24.9981 µg/mL +/- 27.9940 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 **Purity** 99%	2,000.1 µg/mL	+/- 14.2856 µg/mL +/- 25.4963 µg/mL +/- 28.4399 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 **Purity** 99%	2,000.0 µg/mL	+/- 13.2200 µg/mL +/- 24.9143 µg/mL +/- 27.9191 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 **Purity** 99%	2,000.0 µg/mL	+/- 13.5174 µg/mL +/- 25.0735 µg/mL +/- 28.0614 µg/mL	Gravimetric Unstressed Stressed
8	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4 **Purity** 99%	1,999.9 µg/mL	+/- 13.1170 µg/mL +/- 24.8590 µg/mL +/- 27.8696 µg/mL	Gravimetric Unstressed Stressed

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

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Catalog No. : 567645 **Lot No.:** A093341

Description : 8260 List 1 / Std #3 Gases

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

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

Expiration Date : February 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 **Purity** 99%	2,000.0 µg/mL	+/- 13.8716 +/- 25.2661 +/- 28.2336	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 **Purity** 99%	1,999.8 µg/mL	+/- 13.9993 +/- 25.3348 +/- 28.2945	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 **Purity** 99%	2,000.1 µg/mL	+/- 13.9625 +/- 25.3168 +/- 28.2792	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 **Purity** 99%	2,000.0 µg/mL	+/- 13.3773 +/- 24.9981 +/- 27.9940	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 **Purity** 99%	2,000.1 µg/mL	+/- 14.2856 +/- 25.4963 +/- 28.4399	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 **Purity** 99%	2,000.0 µg/mL	+/- 13.2200 +/- 24.9143 +/- 27.9191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 **Purity** 99%	2,000.0 µg/mL	+/- 13.5174 +/- 25.0735 +/- 28.0614	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
8	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4 **Purity** 99%	1,999.9 µg/mL	+/- 13.1170 +/- 24.8590 +/- 27.8696	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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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%

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

Description : 8260 List 1 / Std #2 Ketones

8260 List 1 / Std #2 Ketones 10,000 ug/ml, P&T Methanol/Water (90:10), 1 ml/ampul

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

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 67-64-1		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
2	2-Butanone (MEK)	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 78-93-3		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 108-10-1		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
4	2-Hexanone	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 591-78-6		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed

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

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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. : 567641 **Lot No.:** A093581

Description : 8260 List 1 / Std #1 MegaMix

8260 List 1 / Std #1 MegaMix 1000-50,000 µg/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 **Purity** 97%	1,999.9 µg/mL	+/- 11.6279 +/- 44.2519 +/- 44.4323	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 **Purity** 99%	20,000.0 µg/mL	+/- 116.2756 +/- 442.5291 +/- 444.3332	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4 **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 -/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Methyl acetate **CAS #** 79-20-9 **Purity** 99%	10,000.0 µg/mL	+/- 58.1378 +/- 221.2646 +/- 222.1666	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
8	Carbon disulfide **CAS #** 75-15-0 **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

10	Acrylonitrile	20,000.0	µg/mL	+/-	116.2756	µg/mL	Gravimetric
	CAS # 107-13-1			+/-	442.5291	µg/mL	Unstressed
	Purity 99%			+/-	444.3332	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 1634-04-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
12	cis-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-59-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
13	n-Hexane (C6)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 110-54-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
14	1,1-Dichloroethane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 75-34-3			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
15	2,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 594-20-7			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
16	trans-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-60-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
17	chloroform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 67-66-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
18	Isobutanol (2-Methyl-1-propanol)	50,000.0	µg/mL	+/-	290.6891	µg/mL	Gravimetric
	CAS # 78-83-1			+/-	1,106.3228	µg/mL	Unstressed
	Purity 99%			+/-	1,110.8331	µg/mL	Stressed
19	Bromochloromethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-97-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
20	Tetrahydrofuran	4,000.0	µg/mL	+/-	23.2563	µg/mL	Gravimetric
	CAS # 109-99-9			+/-	88.5061	µg/mL	Unstressed
	Purity 99%			+/-	88.8670	µg/mL	Stressed
21	1,1,1-trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-55-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
22	Cyclohexane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 110-82-7			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
23	1,1-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 563-58-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
24	carbon tetrachloride	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 56-23-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
25	n-Heptane (C7)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 142-82-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
26	Benzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-43-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
27	1,2-Dichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 107-06-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
28	Trichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-01-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

29	Methylcyclohexane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-87-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
30	1,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 78-87-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
31	1,4-Dioxane	40,000.0	µg/mL	+/-	232.5513	µg/mL	Gravimetric
	CAS # 123-91-1			+/-	885.0582	µg/mL	Unstressed
	Purity 99%			+/-	888.6665	µg/mL	Stressed
32	Dibromomethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-95-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
33	bromodichloromethane	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 75-27-4			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
34	cis-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 10061-01-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
35	Toluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-88-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
36	Ethyl methacrylate	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 97-63-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
37	trans-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 10061-02-6			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
38	1,1,2-Trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-00-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
39	1,3-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 142-28-9			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
40	Tetrachloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 127-18-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
41	dibromochloromethane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 124-48-1			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
42	1,2-Dibromoethane (EDB)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-93-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
43	Chlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-90-7			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
44	1,1,1,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 630-20-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
45	m-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 108-38-3			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
46	p-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 106-42-3			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
47	o-Xylene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-47-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

48	Ethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-41-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
49	Styrene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-42-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
50	Isopropylbenzene (cumene)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-82-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
51	bromoform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 75-25-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-34-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
53	1,2,3-Trichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 96-18-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 110-57-6			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
55	n-Propylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 103-65-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
56	Bromobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-86-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
57	1,3,5-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-67-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
58	2-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-49-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
59	4-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-43-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
60	tert-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-06-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
61	1,2,4-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 95-63-6			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
62	sec-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 135-98-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
63	4-Isopropyltoluene (p-Cymene)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 99-87-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
64	1,3-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 541-73-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
65	1,4-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-46-7			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
66	n-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 104-51-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

67	1,2-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-50-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 96-12-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
69	1,2,4-Trichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 120-82-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
70	Hexachlorobutadiene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 87-68-3			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
71	Naphthalene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 91-20-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
72	1,2,3-Trichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 87-61-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

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

Column:
60m x .25mm x 1.4um
Rtx-502.2 (cat.#10916)

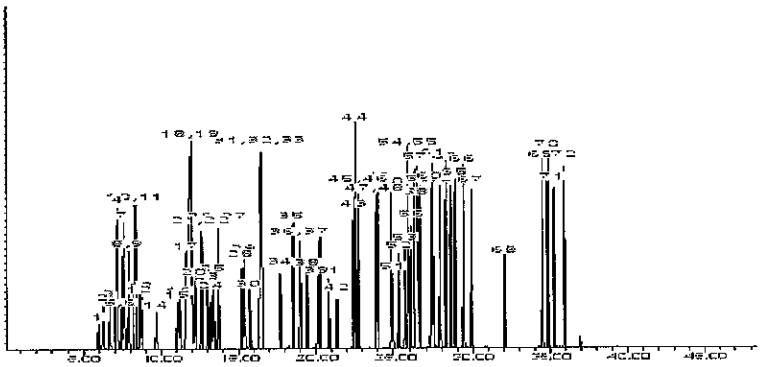
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



Jennifer L. Pollino - QC Analyst

Date Passed: 01-Mar-2013 **Balance:** B251644995

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

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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. : 567641.sec **Lot No.:** A093733

Description : 8260 List 1 / Std #1 MegaMix

8260 List 1 / Std #1 MegaMix 1,000-50,000 µg/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC **Purity** 99%	20,000.0 µg/mL	+/- 116.2756 +/- 442.5291 +/- 444.3332	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC **Purity** 97%	2,000.0 µg/mL	+/- 11.6284 +/- 44.2540 +/- 44.4344	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Methyl acetate **CAS #** 79-20-9.SEC **Purity** 99%	10,000.0 µg/mL	+/- 58.1378 +/- 221.2646 +/- 222.1666	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
8	Carbon disulfide **CAS #** 75-15-0.SEC **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

10	Acrylonitrile	20,000.0	µg/mL	+/-	116.2756	µg/mL	Gravimetric
	CAS # 107-13-1.SEC			+/-	442.5291	µg/mL	Unstressed
	Purity 99%			+/-	444.3332	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
12	cis-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-59-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
13	n-Hexane (C6)	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 110-54-3.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed
14	1,1-Dichloroethane	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 75-34-3.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
15	2,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 594-20-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
16	trans-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 156-60-5.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
17	Chloroform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 67-66-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
18	Isobutanol (2-Methyl-1-propanol)	50,000.0	µg/mL	+/-	290.6891	µg/mL	Gravimetric
	CAS # 78-83-1.SEC			+/-	1,106.3228	µg/mL	Unstressed
	Purity 99%			+/-	1,110.8331	µg/mL	Stressed
19	Bromochloromethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-97-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
20	Tetrahydrofuran	4,000.0	µg/mL	+/-	23.2563	µg/mL	Gravimetric
	CAS # 109-99-9.SEC			+/-	88.5061	µg/mL	Unstressed
	Purity 99%			+/-	88.8670	µg/mL	Stressed
21	1,1,1-Trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-55-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
22	Cyclohexane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 110-82-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
23	1,1-Dichloropropene	2,010.5	µg/mL	+/-	11.6890	µg/mL	Gravimetric
	CAS # 563-58-6.SEC			+/-	44.4847	µg/mL	Unstressed
	Purity 98%			+/-	44.6661	µg/mL	Stressed
24	Carbon tetrachloride	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 56-23-5.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed
25	n-Heptane (C7)	2,000.1	µg/mL	+/-	11.6288	µg/mL	Gravimetric
	CAS # 142-82-5.SEC			+/-	44.2553	µg/mL	Unstressed
	Purity 99%			+/-	44.4357	µg/mL	Stressed
26	Benzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-43-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
27	1,2-Dichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 107-06-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
28	Trichloroethene	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 79-01-6.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed

29	Methylcyclohexane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-87-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
30	1,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 78-87-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
31	1,4-Dioxane	40,000.0	µg/mL	+/-	232.5513	µg/mL	Gravimetric
	CAS # 123-91-1.SEC			+/-	885.0582	µg/mL	Unstressed
	Purity 99%			+/-	888.6665	µg/mL	Stressed
32	Dibromomethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-95-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
33	Bromodichloromethane	2,000.1	µg/mL	+/-	11.6290	µg/mL	Gravimetric
	CAS # 75-27-4.SEC			+/-	44.2562	µg/mL	Unstressed
	Purity 97%			+/-	44.4366	µg/mL	Stressed
34	cis-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
35	Toluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-88-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
36	Ethyl methacrylate	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 97-63-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
37	trans-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
38	1,1,2-Trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-00-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
39	1,3-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 142-28-9.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
40	Tetrachloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 127-18-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
41	Dibromochloromethane	2,000.1	µg/mL	+/-	11.6290	µg/mL	Gravimetric
	CAS # 124-48-1.SEC			+/-	44.2562	µg/mL	Unstressed
	Purity 97%			+/-	44.4366	µg/mL	Stressed
42	1,2-Dibromoethane (EDB)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-93-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
43	Chlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-90-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
44	1,1,1,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 630-20-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
45	m-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 108-38-3.SEC			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
46	p-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 106-42-3.SEC			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
47	o-Xylene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-47-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

48	Ethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-41-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
49	Styrene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-42-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
50	Isopropylbenzene (cumene)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-82-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
51	Bromoform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 75-25-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-34-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
53	1,2,3-Trichloropropane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 96-18-4.SEC			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 110-57-6.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
55	n-Propylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 103-65-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
56	Bromobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-86-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
57	1,3,5-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-67-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
58	2-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-49-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
59	4-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-43-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
60	tert-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-06-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
61	1,2,4-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-63-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
62	sec-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 135-98-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)	2,000.1	µg/mL	+/-	11.6285	µg/mL	Gravimetric
	CAS # 99-87-6.SEC			+/-	44.2545	µg/mL	Unstressed
	Purity 96%			+/-	44.4349	µg/mL	Stressed
64	1,3-Dicblorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 541-73-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
65	1,4-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-46-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
66	n-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 104-51-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

67	1,2-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-50-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 96-12-8.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
69	1,2,4-Trichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 120-82-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
70	Hexachlorobutadiene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 87-68-3.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
71	Naphthalene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 91-20-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
72	1,2,3-Trichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 87-61-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

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

Column:
60m x .25mm x 1.4um
Rtx-502.2 (cat.#10916)

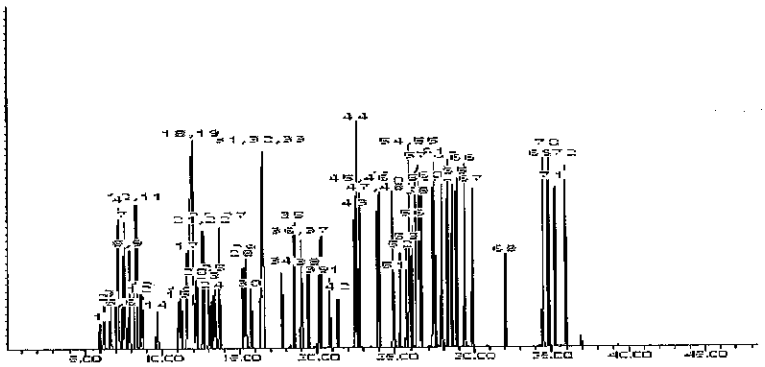
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



Jennifer L. Pollino - QC Analyst

Date Passed: 01-Mar-2013 **Balance:** 1127510105

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

RESTEK

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Certificate of Composition

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. : 567650 **Lot No.:** A092213

Description : 8260/624 Surrogate Mix

8260/624 Surrogate Mix 2500 ug/ml, P&T Methanol, 5 ml/ampul

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

Expiration Date : December 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane	2,500.0 µg/mL	+/- 14.6714	µg/mL	Gravimetric
	CAS # 1868-53-7		+/- 30.2004	µg/mL	Unstressed
	Purity 99%		+/- 34.0606	µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,500.0 µg/mL	+/- 14.6714	µg/mL	Gravimetric
	CAS # 17060-07-0		+/- 30.2004	µg/mL	Unstressed
	Purity 99%		+/- 34.0606	µg/mL	Stressed
3	Toluene-d8	2,500.0 µg/mL	+/- 14.6714	µg/mL	Gravimetric
	CAS # 2037-26-5		+/- 30.2004	µg/mL	Unstressed
	Purity 99%		+/- 34.0606	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,500.0 µg/mL	+/- 14.6714	µg/mL	Gravimetric
	CAS # 460-00-4		+/- 30.2004	µg/mL	Unstressed
	Purity 99%		+/- 34.0606	µg/mL	Stressed

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

RESTEK

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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. : 567650 **Lot No.:** A093505

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	Dibromofluoromethane	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 1868-53-7		+/- 30.1344	µg/mL	Unstressed
	Purity 99%		+/- 34.0022	µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 17060-07-0		+/- 30.1344	µg/mL	Unstressed
	Purity 99%		+/- 34.0022	µg/mL	Stressed
3	Toluene-d8	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 2037-26-5		+/- 30.1344	µg/mL	Unstressed
	Purity 99%		+/- 34.0022	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 460-00-4		+/- 30.1344	µg/mL	Unstressed
	Purity 99%		+/- 34.0022	µg/mL	Stressed

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

RESTEK CERTIFIED REFERENCE MATERIAL

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567646 **Lot No.:** A096198

Description : 8260 List 1 / Std #6 Vinyl Acetate

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

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

Expiration Date : December 31, 2013 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	Vinyl acetate	4,000.0 µg/mL	+/- 23.2563 µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBC7746V)		+/- 319.4759 µg/mL	Unstressed
	Purity 99%		+/- 319.6324 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.

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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. : 567644 **Lot No.:** A098249

Description : 8260 List 1 / Std # 5 Acrolein

8260 List 1 / Std # 5 Acrolein 5000 ug/ml, Water, 1 ml/ampul

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

Expiration Date : January 31, 2014 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	5,000.8 µg/mL	+/- 29.2808	µg/mL	Gravimetric
	CAS # 107-02-8 (Lot 130830JLM)		+/- 131.2585	µg/mL	Unstressed
	Purity 99%		+/- 165.0212	µg/mL	Stressed

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

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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. : 567644 **Lot No.:** A098249

Description : 8260 List 1 / Std # 5 Acrolein

8260 List 1 / Std # 5 Acrolein 5000 ug/ml, Water, 1 ml/ampul

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

Expiration Date : January 31, 2014 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	5,000.8 µg/mL	+/- 29.2808	µg/mL	Gravimetric
	CAS # 107-02-8 (Lot 130830JLM)		+/- 131.2585	µg/mL	Unstressed
	Purity 99%		+/- 165.0212	µg/mL	Stressed

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

Certification Summary

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

TestAmerica Job ID: 180-28282-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Pittsburgh	Arkansas DEQ	State Program	6	88-0690
TestAmerica Pittsburgh	California	NELAP	9	4224CA
TestAmerica Pittsburgh	Connecticut	State Program	1	PH-0688
TestAmerica Pittsburgh	Florida	NELAP	4	E871008
TestAmerica Pittsburgh	Illinois	NELAP	5	002602
TestAmerica Pittsburgh	Kansas	NELAP	7	E-10350
TestAmerica Pittsburgh	L-A-B	DoD ELAP		L2314
TestAmerica Pittsburgh	Louisiana	NELAP	6	04041
TestAmerica Pittsburgh	New Hampshire	NELAP	1	203011
TestAmerica Pittsburgh	New Jersey	NELAP	2	PA005
TestAmerica Pittsburgh	New York	NELAP	2	11182
TestAmerica Pittsburgh	North Carolina DENR	State Program	4	434
TestAmerica Pittsburgh	Pennsylvania	NELAP	3	02-00416
TestAmerica Pittsburgh	South Carolina	State Program	4	89014
TestAmerica Pittsburgh	US Fish & Wildlife	Federal		LE94312A-1
TestAmerica Pittsburgh	USDA	Federal		P330-10-00139
TestAmerica Pittsburgh	USDA	Federal		P-Soil-01
TestAmerica Pittsburgh	Utah	NELAP	8	STLP
TestAmerica Pittsburgh	Virginia	NELAP	3	460189
TestAmerica Pittsburgh	West Virginia DEP	State Program	3	142
TestAmerica Pittsburgh	Wisconsin	State Program	5	998027800

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method 8260B

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

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-125-01-0	180-28282-1	91	91	93	82
HD-MW-160-01-0	180-28282-2	96	77	88	86
TRIP BLANK	180-28282-3	92	94	98	83
	MB 180-93329/3	96	96	106	90
	MB 180-93330/3	103	83	96	88
	LCS 180-93329/6	102	105	92	103
	LCS 180-93330/7	99	81	92	89
HD-MW-125-01-0 MS	180-28282-1 MS	103	105	91	104
	180-28341-C-1 MS	95	82	91	87
HD-MW-125-01-0 MSD	180-28282-1 MSD	101	98	91	102
	180-28341-D-1 MSD	98	81	93	87

	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 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 4122610.D

Lab ID: LCS 180-93329/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Benzene	40.0	41.2	103	80-120	
Toluene	40.0	38.0	95	80-124	
Ethylbenzene	40.0	42.8	107	79-124	
Xylenes, Total	80.0	86.0	108	81-121	
Isopropylbenzene	40.0	41.6	104	73-130	
Methyl tert-butyl ether	40.0	39.7	99	53-122	
1,2,4-Trimethylbenzene	40.0	40.2	101	71-132	
1,3,5-Trimethylbenzene	40.0	37.3	93	75-135	
Naphthalene	40.0	34.2	85	10-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7122611.D

Lab ID: LCS 180-93330/7 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Benzene	40.0	35.1	88	80-120	
Toluene	40.0	33.9	85	80-124	
Ethylbenzene	40.0	35.6	89	79-124	
Xylenes, Total	80.0	71.2	89	81-121	
Isopropylbenzene	40.0	43.3	108	73-130	
Methyl tert-butyl ether	40.0	33.8	85	53-122	
1,2,4-Trimethylbenzene	40.0	52.3	131	71-132	
1,3,5-Trimethylbenzene	40.0	46.5	116	75-135	
Naphthalene	40.0	31.6	79	10-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 4122611.D

Lab ID: 180-28282-1 MS Client ID: HD-MW-125-01-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Benzene	40.0	5.0 U	41.0	102	80-120	
Toluene	40.0	5.0 U	37.7	94	80-124	
Ethylbenzene	40.0	5.0 U	42.3	106	79-124	
Xylenes, Total	80.0	10 U	85.8	107	81-121	
Isopropylbenzene	40.0	5.0 U	41.8	105	73-130	
Methyl tert-butyl ether	40.0	5.0 U	38.4	96	53-122	
1,2,4-Trimethylbenzene	40.0	5.0 U	37.8	94	71-132	
1,3,5-Trimethylbenzene	40.0	5.0 U	36.4	91	75-135	
Naphthalene	40.0	5.0 U	36.8	92	10-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7122610.D

Lab ID: 180-28341-C-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Benzene	40.0	5.0 U	35.0	88	80-120	
Toluene	40.0	5.0 U	33.8	84	80-124	
Ethylbenzene	40.0	5.0 U	35.7	89	79-124	
Xylenes, Total	80.0	10 U	70.6	88	81-121	
Isopropylbenzene	40.0	5.0 U	40.9	102	73-130	
Methyl tert-butyl ether	40.0	5.0 U	32.2	80	53-122	
1,2,4-Trimethylbenzene	40.0	5.0 U	51.4	128	71-132	
1,3,5-Trimethylbenzene	40.0	5.0 U	45.6	114	75-135	
Naphthalene	40.0	0.91 J	2.12 J	3	10-144	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 4122612.D

Lab ID: 180-28282-1 MSD Client ID: HD-MW-125-01-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzene	40.0	41.2	103	1	20	80-120	
Toluene	40.0	37.7	94	0	20	80-124	
Ethylbenzene	40.0	40.8	102	4	25	79-124	
Xylenes, Total	80.0	83.7	105	2	20	81-121	
Isopropylbenzene	40.0	40.8	102	2	20	73-130	
Methyl tert-butyl ether	40.0	38.7	97	1	20	53-122	
1,2,4-Trimethylbenzene	40.0	40.0	100	6	35	71-132	
1,3,5-Trimethylbenzene	40.0	37.6	94	3	20	75-135	
Naphthalene	40.0	39.7	99	8	35	10-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7122612.D

Lab ID: 180-28341-D-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzene	40.0	35.3	88	1	20	80-120	
Toluene	40.0	34.7	87	3	20	80-124	
Ethylbenzene	40.0	36.1	90	1	25	79-124	
Xylenes, Total	80.0	71.9	90	2	20	81-121	
Isopropylbenzene	40.0	41.8	105	2	20	73-130	
Methyl tert-butyl ether	40.0	32.5	81	1	20	53-122	
1,2,4-Trimethylbenzene	40.0	50.7	127	1	35	71-132	
1,3,5-Trimethylbenzene	40.0	44.5	111	3	20	75-135	
Naphthalene	40.0	52.7	130	185	35	10-144	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Lab File ID: 7122607.D Lab Sample ID: MB 180-93330/3

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

Instrument ID: HP7 Date Analyzed: 12/27/2013 01:59

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
	180-28341-C-1 MS	7122610.D	12/27/2013 03:20
	LCS 180-93330/7	7122611.D	12/27/2013 03:47
	180-28341-D-1 MSD	7122612.D	12/27/2013 04:17
HD-MW-160-01-0	180-28282-2	7122626.D	12/27/2013 10:39

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Lab File ID: 4122605.D Lab Sample ID: MB 180-93329/3

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

Instrument ID: HP4 Date Analyzed: 12/27/2013 02:10

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
HD-MW-125-01-0	180-28282-1	4122606.D	12/27/2013 02:44
TRIP BLANK	180-28282-3	4122607.D	12/27/2013 03:10
	LCS 180-93329/6	4122610.D	12/27/2013 04:04
HD-MW-125-01-0 MS	180-28282-1 MS	4122611.D	12/27/2013 04:30
HD-MW-125-01-0 MSD	180-28282-1 MSD	4122612.D	12/27/2013 04:57

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Lab File ID: 4121601.D BFB Injection Date: 12/16/2013

Instrument ID: HP4 BFB Injection Time: 09:18

Analysis Batch No.: 92621

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.6	
75	30.0 - 60.0 % of mass 95	38.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.9	(1.1)1
174	50.0 - 120.00 % of mass 95	78.9	
175	5.0 - 9.0 % of mass 174	6.5	(8.2)1
176	95.0 - 101.0 % of mass 174	75.1	(95.2)1
177	5.0 - 9.0 % of mass 176	5.2	(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
	IC 180-92621/2	4121603.D	12/16/2013	11:04
	IC 180-92621/3	4121604.D	12/16/2013	11:28
	IC 180-92621/4	4121605.D	12/16/2013	11:53
	ICIS 180-92621/5	4121606.D	12/16/2013	12:20
	IC 180-92621/7	4121608.D	12/16/2013	14:07
	IC 180-92621/8	4121609.D	12/16/2013	14:35
	IC 180-92621/6	4121613.D	12/16/2013	16:49

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Lab File ID: 4122601.D BFB Injection Date: 12/26/2013

Instrument ID: HP4 BFB Injection Time: 23:52

Analysis Batch No.: 93329

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.2	
75	30.0 - 60.0 % of mass 95	41.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.1	
173	Less than 2.0 % of mass 174	0.6	(0.8)1
174	50.0 - 120.00 % of mass 95	80.8	
175	5.0 - 9.0 % of mass 174	5.6	(7.0)1
176	95.0 - 101.0 % of mass 174	77.9	(96.4)1
177	5.0 - 9.0 % of mass 176	5.4	(6.9)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-93329/2	4122603.D	12/27/2013	01:12
	MB 180-93329/3	4122605.D	12/27/2013	02:10
HD-MW-125-01-0	180-28282-1	4122606.D	12/27/2013	02:44
TRIP BLANK	180-28282-3	4122607.D	12/27/2013	03:10
	LCS 180-93329/6	4122610.D	12/27/2013	04:04
HD-MW-125-01-0 MS	180-28282-1 MS	4122611.D	12/27/2013	04:30
HD-MW-125-01-0 MSD	180-28282-1 MSD	4122612.D	12/27/2013	04:57

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Lab File ID: 7120601.D BFB Injection Date: 12/06/2013

Instrument ID: HP7 BFB Injection Time: 06:25

Analysis Batch No.: 91778

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	28.7	
75	30.0 - 60.0 % of mass 95	51.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.5	(0.6)1
174	50.0 - 120.00 % of mass 95	81.8	
175	5.0 - 9.0 % of mass 174	6.7	(8.2)1
176	95.0 - 101.0 % of mass 174	81.3	(99.3)1
177	5.0 - 9.0 % of mass 176	5.9	(7.3)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 180-91778/2	7120603.D	12/06/2013	07:32
	IC 180-91778/3	7120604.D	12/06/2013	08:01
	IC 180-91778/4	7120605.D	12/06/2013	08:28
	ICIS 180-91778/5	7120606.D	12/06/2013	08:53
	IC 180-91778/6	7120607.D	12/06/2013	09:23
	IC 180-91778/7	7120608.D	12/06/2013	10:27
	IC 180-91778/8	7120609.D	12/06/2013	11:22

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Lab File ID: 7122601.D BFB Injection Date: 12/26/2013

Instrument ID: HP7 BFB Injection Time: 22:45

Analysis Batch No.: 93330

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.9	
75	30.0 - 60.0 % of mass 95	47.6	
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	0.6	(0.6)1
174	50.0 - 120.00 % of mass 95	89.7	
175	5.0 - 9.0 % of mass 174	6.7	(7.4)1
176	95.0 - 101.0 % of mass 174	90.0	(100.4)1
177	5.0 - 9.0 % of mass 176	6.3	(6.9)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-93330/2	7122603.D	12/27/2013	00:00
	MB 180-93330/3	7122607.D	12/27/2013	01:59
	180-28341-C-1 MS	7122610.D	12/27/2013	03:20
	LCS 180-93330/7	7122611.D	12/27/2013	03:47
	180-28341-D-1 MSD	7122612.D	12/27/2013	04:17
HD-MW-160-01-0	180-28282-2	7122626.D	12/27/2013	10:39

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Sample No.: CCVIS 180-93329/2 Date Analyzed: 12/27/2013 01:12

Instrument ID: HP4 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 4122603.D Heated Purge: (Y/N) N

Calibration ID: 12998

		TBA		FB		14DD8	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		384238	4.85	1481187	7.67	55883	8.41
UPPER LIMIT				2962374	8.17		
LOWER LIMIT				740594	7.17		
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-93329/3		337518	4.75	1598721	7.68	36079	8.41
180-28282-1	HD-MW-125-01-0	322543	4.75	1688298	7.68	37743	8.40
180-28282-3	TRIP BLANK	340641	4.76	1689664	7.68	46927	8.42
LCS 180-93329/6		373991	4.85	1445659	7.67	51527	8.41
180-28282-1 MS	HD-MW-125-01-0 MS	389325	4.85	1428047	7.68	51177	8.41
180-28282-1 MSD	HD-MW-125-01-0 MSD	411406	4.85	1506299	7.67	45997	8.41

FB = Fluorobenzene (IS)

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 8260B

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Sample No.: CCVIS 180-93329/2 Date Analyzed: 12/27/2013 01:12

Instrument ID: HP4 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 4122603.D Heated Purge: (Y/N) N

Calibration ID: 12998

		CBZ		DCB			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		358888	10.76	493260	13.09		
UPPER LIMIT		717776	11.26	986520	13.59		
LOWER LIMIT		179444	10.26	246630	12.59		
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-93329/3		328595	10.78	365747	13.13		
180-28282-1	HD-MW-125-01-0	377426	10.77	381997	13.13		
180-28282-3	TRIP BLANK	364954	10.77	386630	13.13		
LCS 180-93329/6		358594	10.76	507774	13.10		
180-28282-1 MS	HD-MW-125-01-0 MS	353737	10.76	519207	13.09		
180-28282-1 MSD	HD-MW-125-01-0 MSD	377678	10.76	524247	13.09		

CBZ = Chlorobenzene-d5
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 8260B

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Sample No.: CCVIS 180-93330/2 Date Analyzed: 12/27/2013 00:00

Instrument ID: HP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7122603.D Heated Purge: (Y/N) N

Calibration ID: 12753

		TBA		FB		14DD8	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		217146	4.73	1001549	7.40	17736	8.13
UPPER LIMIT				2003098	7.90		
LOWER LIMIT				500775	6.90		
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-93330/3		249052	4.59	1127735	7.41	29018	8.14
180-28341-C-1 MS		240746	4.73	991610	7.40	22462	8.13
LCS 180-93330/7		231918	4.71	934497	7.40	25210	8.13
180-28341-D-1 MSD		246267	4.80	1036366	7.40	25938	8.13
180-28282-2	HD-MW-160-01-0	313338	4.57	1187678	7.41	37316	8.13

FB = Fluorobenzene (IS)

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 8260B

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Sample No.: CCVIS 180-93330/2 Date Analyzed: 12/27/2013 00:00

Instrument ID: HP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7122603.D Heated Purge: (Y/N) N

Calibration ID: 12753

		CBZ		DCB			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		259498	10.46	265379	12.79		
UPPER LIMIT		518996	10.96	530758	13.29		
LOWER LIMIT		129749	9.96	132690	12.29		
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-93330/3		272982	10.47	284209	12.79		
180-28341-C-1 MS		267295	10.46	275666	12.79		
LCS 180-93330/7		246893	10.47	265960	12.79		
180-28341-D-1 MSD		268911	10.47	294089	12.79		
180-28282-2	HD-MW-160-01-0	316044	10.47	354715	12.79		

CBZ = Chlorobenzene-d5
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 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Client Sample ID: HD-MW-125-01-0 Lab Sample ID: 180-28282-1

Matrix: Water Lab File ID: 4122606.D

Analysis Method: 8260B Date Collected: 12/18/2013 13:03

Sample wt/vol: 5(mL) Date Analyzed: 12/27/2013 02:44

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.: 93329 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	5.0	U	5.0	0.99
108-88-3	Toluene	5.0	U	5.0	0.85
100-41-4	Ethylbenzene	5.0	U	5.0	0.62
1330-20-7	Xylenes, Total	10	U	10	2.0
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
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
91-20-3	Naphthalene	5.0	U	5.0	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		62-123
2037-26-5	Toluene-d8 (Surr)	93		80-120
460-00-4	4-Bromofluorobenzene (Surr)	82		75-120
1868-53-7	Dibromofluoromethane (Surr)	91		80-120

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\pitsvr06\d\chem\hp4.i\4122613d.b\4122606.D
Lab Smp Id: 180-28282-A-1 Client Smp ID: HD-MW-125-01-0
Inj Date : 27-DEC-2013 02:44
Operator : 430936 Inst ID: hp4.i
Smp Info : 180-28282-A-1
Misc Info : 180-28282-A-1
Comment :
Method : \\pitsvr06\d\chem\hp4.i\4122613d.b\T8260bh2o.m
Meth Date : 27-Dec-2013 03:56 hp4.i Quant Type: ISTD
Cal Date : 16-DEC-2013 11:28 Cal File: 4121604.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-530

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

						CONCENTRATIONS	
		QUANT SIG				ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng) (ng)
*	46 Fluorobenzene (IS)	96	7.679	7.669	(1.000)	1688298	250.000
*	69 Chlorobenzene-d5	119	10.768	10.758	(1.000)	377426	250.000
*	92 1,4-Dichlorobenzene-d4	152	13.128	13.093	(1.000)	381997	250.000 (QM)
*	176 Dioxane-d8 (IS)	96	8.403	8.405	(1.000)	37743	5000.00
*	177 TBA-d9 (IS)	65	4.754	4.847	(1.000)	322543	5000.00 (H)
$	39 Dibromofluoromethane (Surr)	113	6.943	6.933	(0.904)	323636	226.704 226.7
$	43 1,2-Dichloroethane-d4	65	7.314	7.304	(0.952)	335040	227.737 227.7
$	59 Toluene-d8	98	9.321	9.317	(0.866)	1496273	233.562 233.6
$	80 Bromofluorobenzene (Surr)	95	11.960	11.938	(1.111)	466119	205.066 205.1
	1 Dichlorodifluoromethane	85	Compound Not Detected.				
	2 Chloromethane	50	Compound Not Detected.				
	3 Vinyl Chloride	62	2.121	2.123	(0.276)	12008	4.73819 4.738
	4 Bromomethane	94	Compound Not Detected.				
	5 Chloroethane	64	Compound Not Detected.				
	7 Dichlorofluoromethane	67	Compound Not Detected.				
	10 1,1,2-trichloro-1,2,2-trifluor	101	Compound Not Detected.				
	166 Trichlorofluoromethane	101	Compound Not Detected.				
	12 1,1-Dichloroethene	96	3.811	3.777	(0.496)	26423	13.2509 13.25
	15 Carbon Disulfide	76	Compound Not Detected.				
	13 Acetone	43	Compound Not Detected.				
	18 Methylene Chloride	84	Compound Not Detected.				
	19 trans-1,2-Dichloroethene	96	Compound Not Detected.				
	20 Methyl tert-butyl ether	73	Compound Not Detected.				
	24 1,1-Dichloroethane	63	5.617	5.595	(0.732)	68594	20.2992 20.30
	27 2,2-Dichloropropane	77	Compound Not Detected.				
	28 cis-1,2-dichloroethene	96	6.365	6.349	(0.829)	1646620	786.200 786.2
M	29 1,2-Dichloroethene (total)	96				1646620	786.200 786.2
	30 Bromochloromethane	128	Compound Not Detected.				

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
31	2-Butanone	43	Compound Not Detected.					
37	Chloroform	83	Compound Not Detected.					
38	1,1,1-Trichloroethane	97	Compound Not Detected.					
40	1,1-Dichloropropene	75	Compound Not Detected.					
41	Carbon Tetrachloride	117	Compound Not Detected.					
42	Benzene	78	7.381	7.359	(0.961)	19547	2.64207	2.642
45	1,2-Dichloroethane	62	Compound Not Detected.					
47	Trichloroethene	130	8.068	8.064	(1.051)	4452385	2399.01	2399
49	1,2-Dichloropropane	63	Compound Not Detected.					
50	Dibromomethane	93	Compound Not Detected.					
53	Bromodichloromethane	83	Compound Not Detected.					
57	cis-1,3-Dichloropropene	75	Compound Not Detected.					
58	4-Methyl-2-Pentanone	43	Compound Not Detected.					
60	Toluene	91	Compound Not Detected.					
61	trans-1,3-Dichloropropene	75	Compound Not Detected.					
63	1,3-Dichloropropane	76	Compound Not Detected.					
64	1,1,2-Trichloroethane	97	Compound Not Detected.					
65	Tetrachloroethene	164	9.947	9.931	(0.924)	30267	20.9939	20.99
66	2-Hexanone	43	Compound Not Detected.					
67	Dibromochloromethane	129	Compound Not Detected.					
68	1,2-Dibromoethane	107	Compound Not Detected.					
70	Chlorobenzene	112	Compound Not Detected.					
71	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
72	Ethylbenzene	106	Compound Not Detected.					
73	m,p-XYLENE	106	Compound Not Detected.					
74	Xylene-o	106	Compound Not Detected.					
76	Styrene	104	Compound Not Detected.					
77	Bromoform	173	Compound Not Detected.					
78	Isopropylbenzene	105	Compound Not Detected.					
79	Bromobenzene	156	Compound Not Detected.					
81	n-Propylbenzene	120	Compound Not Detected.					
82	2-Chlorotoluene	126	Compound Not Detected.					
83	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
84	1,2,3-Trichloropropane	110	Compound Not Detected.					
85	4-Chlorotoluene	126	Compound Not Detected.					
86	1,3,5-Trimethylbenzene	105	Compound Not Detected.					
87	tert-Butylbenzene	119	Compound Not Detected.					
88	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
89	sec-Butylbenzene	105	Compound Not Detected.					
90	4-Isopropyltoluene	119	Compound Not Detected.					
91	1,3-Dichlorobenzene	146	Compound Not Detected.					
94	n-Butylbenzene	91	Compound Not Detected.					
93	1,4-Dichlorobenzene	146	Compound Not Detected.					
95	1,2-Dichlorobenzene	146	Compound Not Detected.					
96	1,2-Dibromo-3-chloropropane	157	Compound Not Detected.					
97	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
98	Hexachlorobutadiene	225	Compound Not Detected.					
99	Naphthalene	128	Compound Not Detected.					
100	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
156	Methyl Acetate	43	Compound Not Detected.					
157	Cyclohexane	56	Compound Not Detected.					
158	Methyl Cyclohexane	83	Compound Not Detected.					
32	Vinyl Acetate	43	Compound Not Detected.					
52	1,4-Dioxane	88	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ng)
	21 tert-Butyl Alcohol	59	Compound Not Detected.					
	16 3-Chloro-1-propene	76	Compound Not Detected.					
	11 Acrolein	56	Compound Not Detected.					
	22 Acrylonitrile	53	Compound Not Detected.					
	8 Ethyl Ether	59	Compound Not Detected.					
	62 Ethyl methacrylate	69	Compound Not Detected.					
	23 Hexane	57	Compound Not Detected.					
	14 Iodomethane	142	Compound Not Detected.					
	44 Isobutanol	41	Compound Not Detected.					
	155 N-Heptane	41	Compound Not Detected.					
	35 Tetrahydrofuran	42	Compound Not Detected.					
	164 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.					
	169 Butadiene	39	Compound Not Detected.					
M	75 Xylenes (total)	106	Compound Not Detected.					

QC Flag Legend

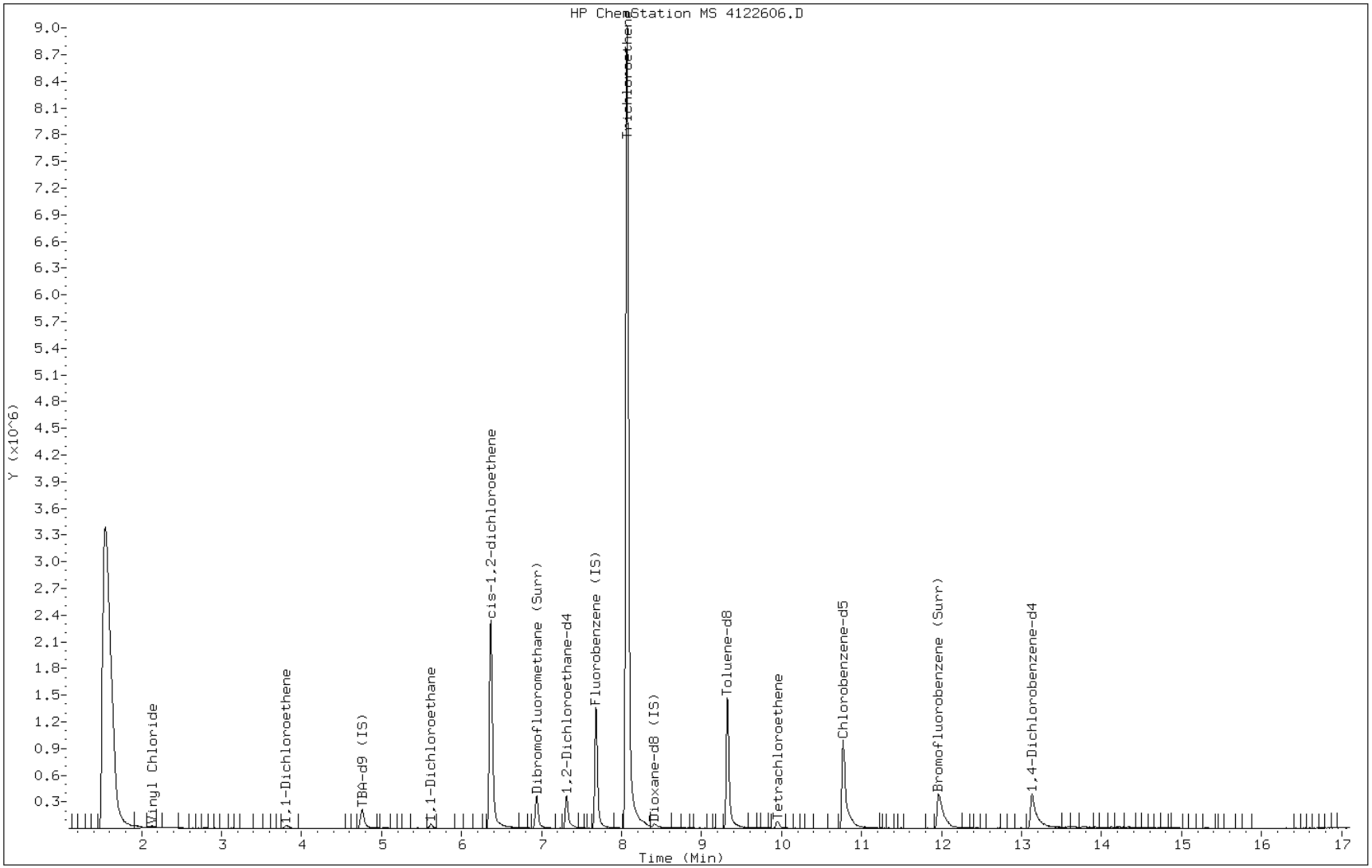
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 4122606.D

Date: 27-DEC-2013 02:44

Client ID: HD-MW-125-01-0 Instrument: hp4.i

Sample Info: 180-28282-A-1 Operator: 430936



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-28282-1

SDG No.:

Client Sample ID: HD-MW-160-01-0 | Lab Sample ID: 180-28282-2

Matrix: Water | Lab File ID: 7122626.D

Analysis Method: 8260B | Date Collected: 12/18/2013 11:19

Sample wt/vol: 5(mL) | Date Analyzed: 12/27/2013 10:39

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 93330 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	120		5.0	0.99
108-88-3	Toluene	5.8		5.0	0.85
100-41-4	Ethylbenzene	6.3		5.0	0.62
1330-20-7	Xylenes, Total	10	U	10	2.0
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
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
91-20-3	Naphthalene	5.0	U	5.0	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	77		62-123
2037-26-5	Toluene-d8 (Surr)	88		80-120
460-00-4	4-Bromofluorobenzene (Surr)	86		75-120
1868-53-7	Dibromofluoromethane (Surr)	96		80-120

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\PITSVR06\D\chem\hp7.i\7122613d.b\7122626.D
Lab Smp Id: 180-28282-B-2 Client Smp ID: HD-MW-160-01-0
Inj Date : 27-DEC-2013 10:39 MS Autotune Date: 29-AUG-2013 08:08
Operator : 430936 Inst ID: hp7.i
Smp Info : 180-28282-B-2
Misc Info : 7122613d.b,T8260bh2o.m,list1.sub
Comment :
Method : \\PITSVR06\D\chem\hp7.i\7122613d.b\T8260bh2o.m
Meth Date : 27-Dec-2013 10:19 journetp Quant Type: ISTD
Cal Date : 06-DEC-2013 11:22 Cal File: 7120609.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITSVR06

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
*	46 Fluorobenzene (IS)	96	7.413	7.396	(1.000)	1187678	250.000	
*	69 Chlorobenzene-d5	119	10.467	10.462	(1.000)	316044	250.000	
*	92 1,4-Dichlorobenzene-d4	152	12.785	12.786	(1.000)	354715	250.000	
*	176 Dioxane-d8 (IS)	96	8.125	8.126	(1.000)	37316	5000.00	
*	177 TBA-d9 (IS)	65	4.572	4.600	(1.000)	313338	5000.00	
$	39 Dibromofluoromethane (Surr)	113	6.677	6.672	(0.901)	302294	238.808	238.8
$	43 1,2-Dichloroethane-d4	65	7.048	7.037	(0.951)	282588	192.940	192.9
$	59 Toluene-d8	98	9.038	9.032	(0.863)	1083626	221.239	221.2
$	80 Bromofluorobenzene (Surr)	95	11.629	11.630	(1.111)	409593	215.004	215.0
	1 Dichlorodifluoromethane	85	Compound Not Detected.					
	2 Chloromethane	50	Compound Not Detected.					
	3 Vinyl Chloride	62	Compound Not Detected.					
	4 Bromomethane	94	Compound Not Detected.					
	5 Chloroethane	64	Compound Not Detected.					
	7 Dichlorofluoromethane	67	Compound Not Detected.					
	10 1,1,2-trichloro-1,2,2-trifluor	101	Compound Not Detected.					
	166 Trichlorofluoromethane	101	Compound Not Detected.					
	12 1,1-Dichloroethene	96	3.648	3.539	(0.492)	94437	55.8585	55.86(M)
	15 Carbon Disulfide	76	Compound Not Detected.					
	13 Acetone	43	Compound Not Detected.					
	18 Methylene Chloride	84	Compound Not Detected.					
	19 trans-1,2-Dichloroethene	96	Compound Not Detected.					
	20 Methyl tert-butyl ether	73	Compound Not Detected.					
	24 1,1-Dichloroethane	63	5.400	5.346	(0.728)	22111	6.43955	6.440(QM)
	27 2,2-Dichloropropane	77	Compound Not Detected.					
	28 cis-1,2-dichloroethene	96	6.118	6.082	(0.825)	1845684	972.892	972.9
M	29 1,2-Dichloroethene (total)	96				1845684	972.892	972.9
	30 Bromochloromethane	128	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
31 2-Butanone	43	Compound Not Detected.					
37 Chloroform	83	6.501	6.489	(0.877)	21704	7.77123	7.771
38 1,1,1-Trichloroethane	97	Compound Not Detected.					
40 1,1-Dichloropropene	75	Compound Not Detected.					
41 Carbon Tetrachloride	117	Compound Not Detected.					
42 Benzene	78	7.103	7.092	(0.958)	3511217	592.424	592.4
45 1,2-Dichloroethane	62	Compound Not Detected.					
47 Trichloroethene	130	7.797	7.785	(1.052)	971020	570.764	570.8
49 1,2-Dichloropropane	63	Compound Not Detected.					
50 Dibromomethane	93	Compound Not Detected.					
53 Bromodichloromethane	83	Compound Not Detected.					
57 cis-1,3-Dichloropropene	75	Compound Not Detected.					
58 4-Methyl-2-Pentanone	43	Compound Not Detected.					
60 Toluene	91	9.105	9.099	(0.870)	63629	29.1181	29.12
61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
63 1,3-Dichloropropane	76	Compound Not Detected.					
64 1,1,2-Trichloroethane	97	Compound Not Detected.					
65 Tetrachloroethene	164	9.652	9.647	(0.922)	3037	2.40127	2.401
66 2-Hexanone	43	Compound Not Detected.					
67 Dibromochloromethane	129	Compound Not Detected.					
68 1,2-Dibromoethane	107	Compound Not Detected.					
70 Chlorobenzene	112	Compound Not Detected.					
71 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
72 Ethylbenzene	106	10.607	10.602	(1.013)	68877	31.3547	31.35(Q)
73 m,p-XYLENE	106	10.723	10.717	(1.024)	5145	1.85743	1.857
74 Xylene-o	106	11.118	11.113	(1.062)	3810	1.28282	1.283(Q)
76 Styrene	104	Compound Not Detected.					
77 Bromoform	173	Compound Not Detected.					
78 Isopropylbenzene	105	Compound Not Detected.					
79 Bromobenzene	156	Compound Not Detected.					
81 n-Propylbenzene	120	Compound Not Detected.					
82 2-Chlorotoluene	126	Compound Not Detected.					
83 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
84 1,2,3-Trichloropropane	110	Compound Not Detected.					
85 4-Chlorotoluene	126	Compound Not Detected.					
86 1,3,5-Trimethylbenzene	105	Compound Not Detected.					
87 tert-Butylbenzene	119	Compound Not Detected.					
88 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
89 sec-Butylbenzene	105	Compound Not Detected.					
90 4-Isopropyltoluene	119	Compound Not Detected.					
91 1,3-Dichlorobenzene	146	Compound Not Detected.					
94 n-Butylbenzene	91	Compound Not Detected.					
93 1,4-Dichlorobenzene	146	Compound Not Detected.					
95 1,2-Dichlorobenzene	146	Compound Not Detected.					
96 1,2-Dibromo-3-chloropropane	157	Compound Not Detected.					
97 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
98 Hexachlorobutadiene	225	Compound Not Detected.					
99 Naphthalene	128	Compound Not Detected.					
100 1,2,3-Trichlorobenzene	180	Compound Not Detected.					
156 Methyl Acetate	43	Compound Not Detected.					
157 Cyclohexane	56	6.750	6.727	(0.911)	356566	98.9071	98.91
158 Methyl Cyclohexane	83	7.991	7.980	(1.078)	124412	43.3308	43.33
32 Vinyl Acetate	43	Compound Not Detected.					
52 1,4-Dioxane	88	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ng)
21	tert-Butyl Alcohol	59	Compound Not Detected.					
16	3-Chloro-1-propene	76	Compound Not Detected.					
11	Acrolein	56	Compound Not Detected.					
22	Acrylonitrile	53	Compound Not Detected.					
8	Ethyl Ether	59	Compound Not Detected.					
62	Ethyl methacrylate	69	Compound Not Detected.					
23	Hexane	57	5.193	5.151	(0.701)	62183	20.4419	20.44(H)
14	Iodomethane	142	Compound Not Detected.					
44	Isobutanol	41	Compound Not Detected.					
155	N-Heptane	41	Compound Not Detected.					
35	Tetrahydrofuran	42	Compound Not Detected.					
164	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.					
169	Butadiene	39	Compound Not Detected.					
M 75	Xylenes (total)	106				8955	3.14025	3.140

QC Flag Legend

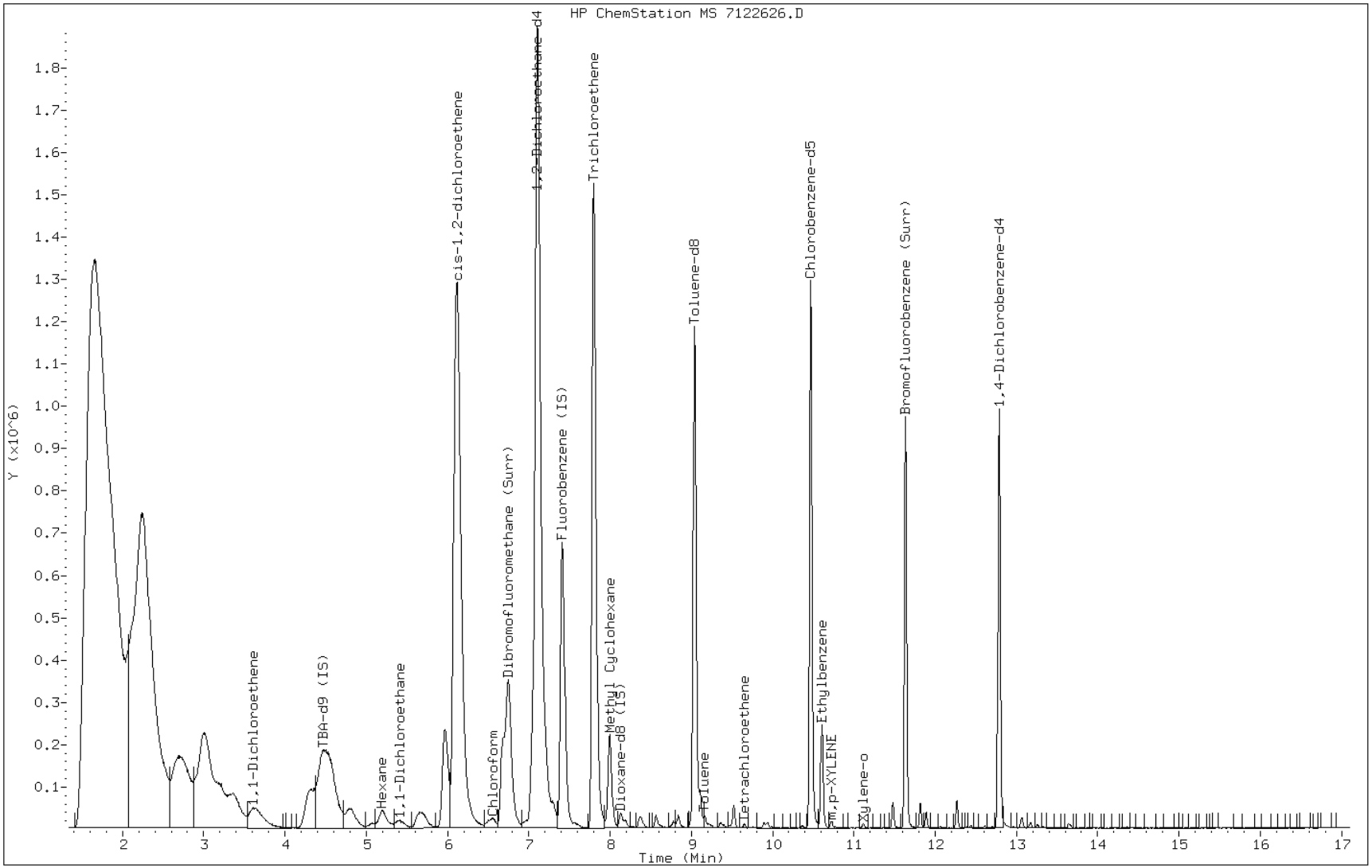
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 7122626.D

Date: 27-DEC-2013 10:39

Client ID: HD-MW-160-01-0 Instrument: hp7.i

Sample Info: 180-28282-B-2 Operator: 430936



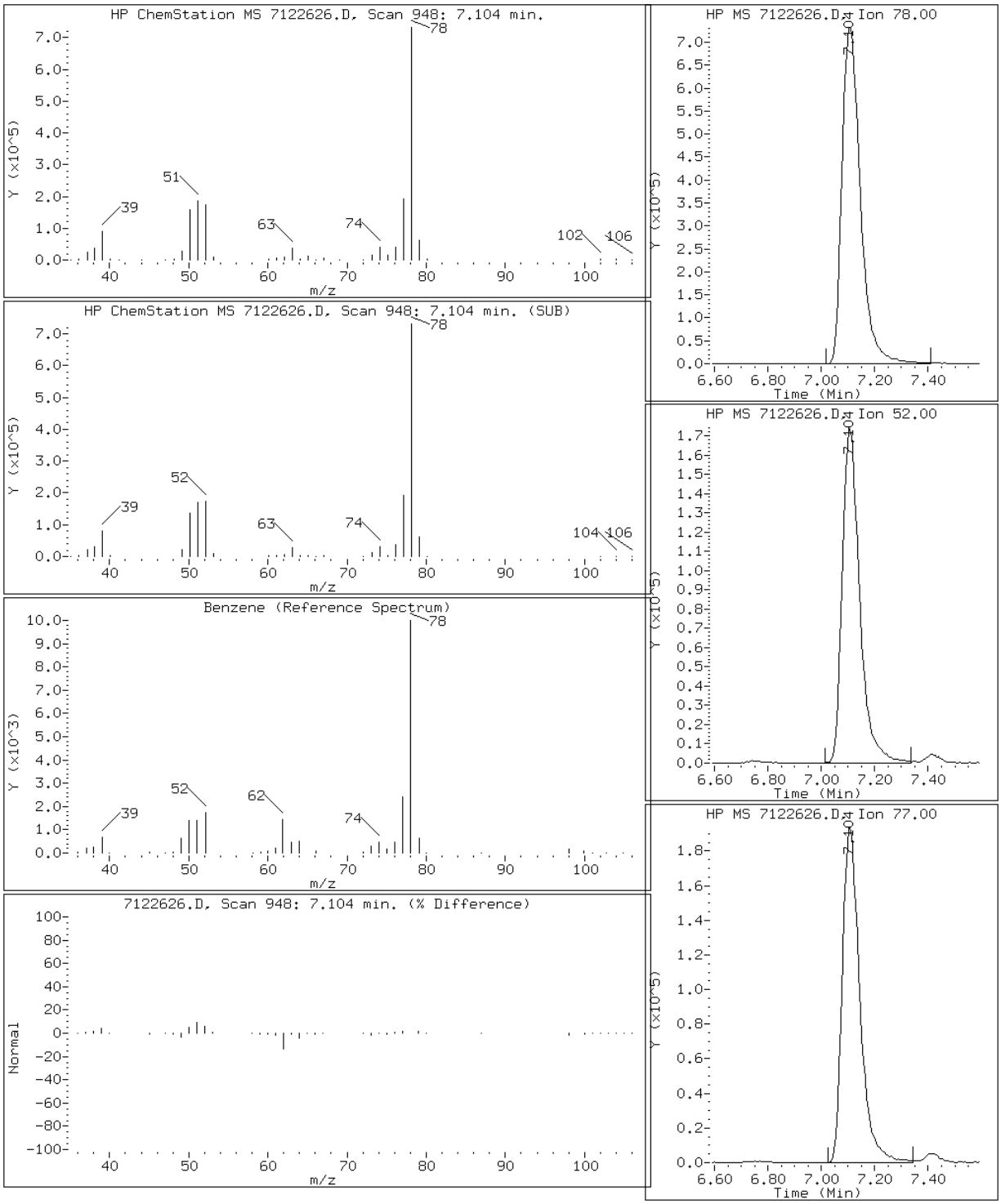
Data File: 7122626.D

Date: 27-DEC-2013 10:39

Client ID: HD-MW-160-01-0 Instrument: hp7.i

Sample Info: 180-28282-B-2 Operator: 430936

42 Benzene



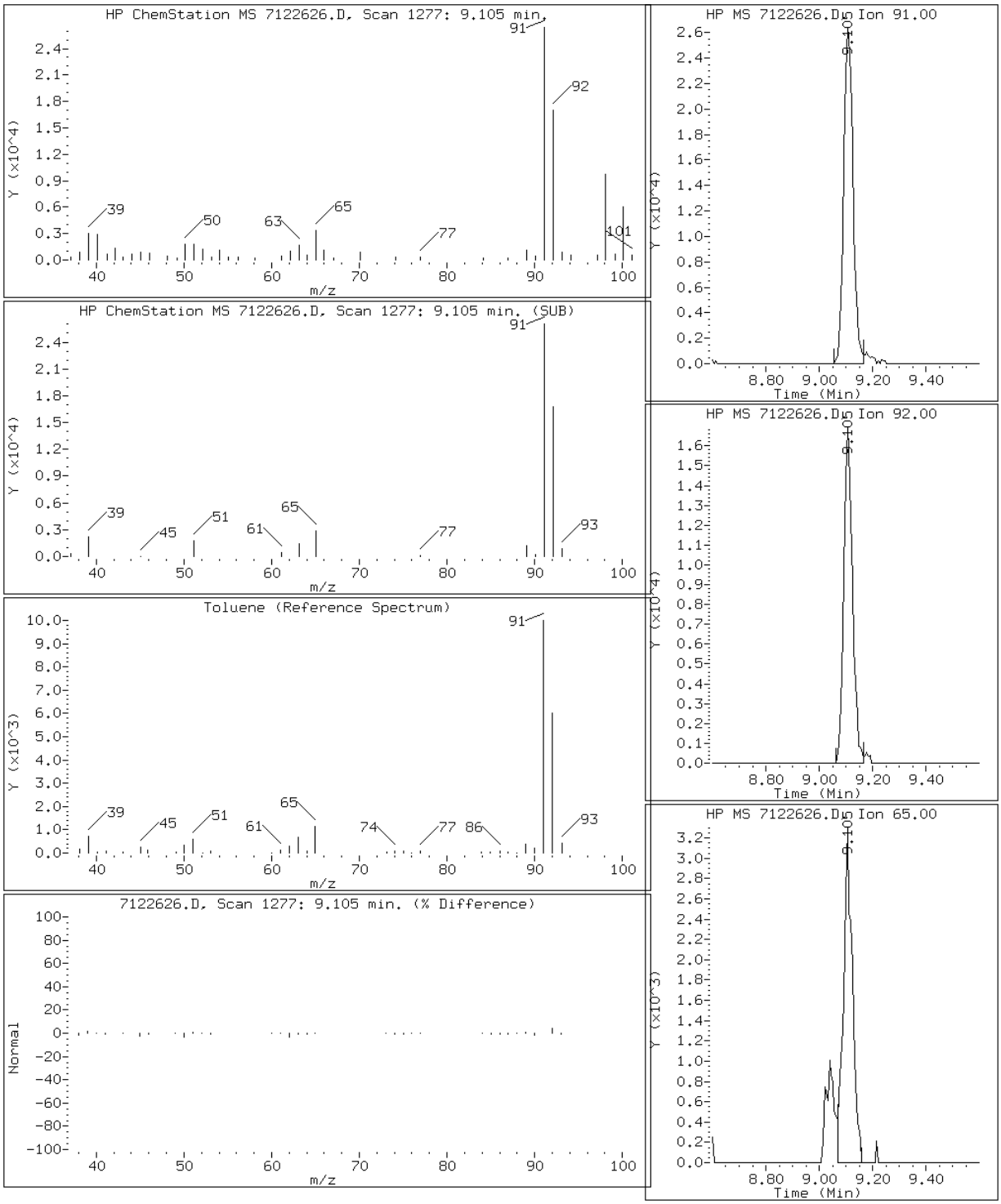
Data File: 7122626.D

Date: 27-DEC-2013 10:39

Client ID: HD-MW-160-01-0 Instrument: hp7.i

Sample Info: 180-28282-B-2 Operator: 430936

60 Toluene



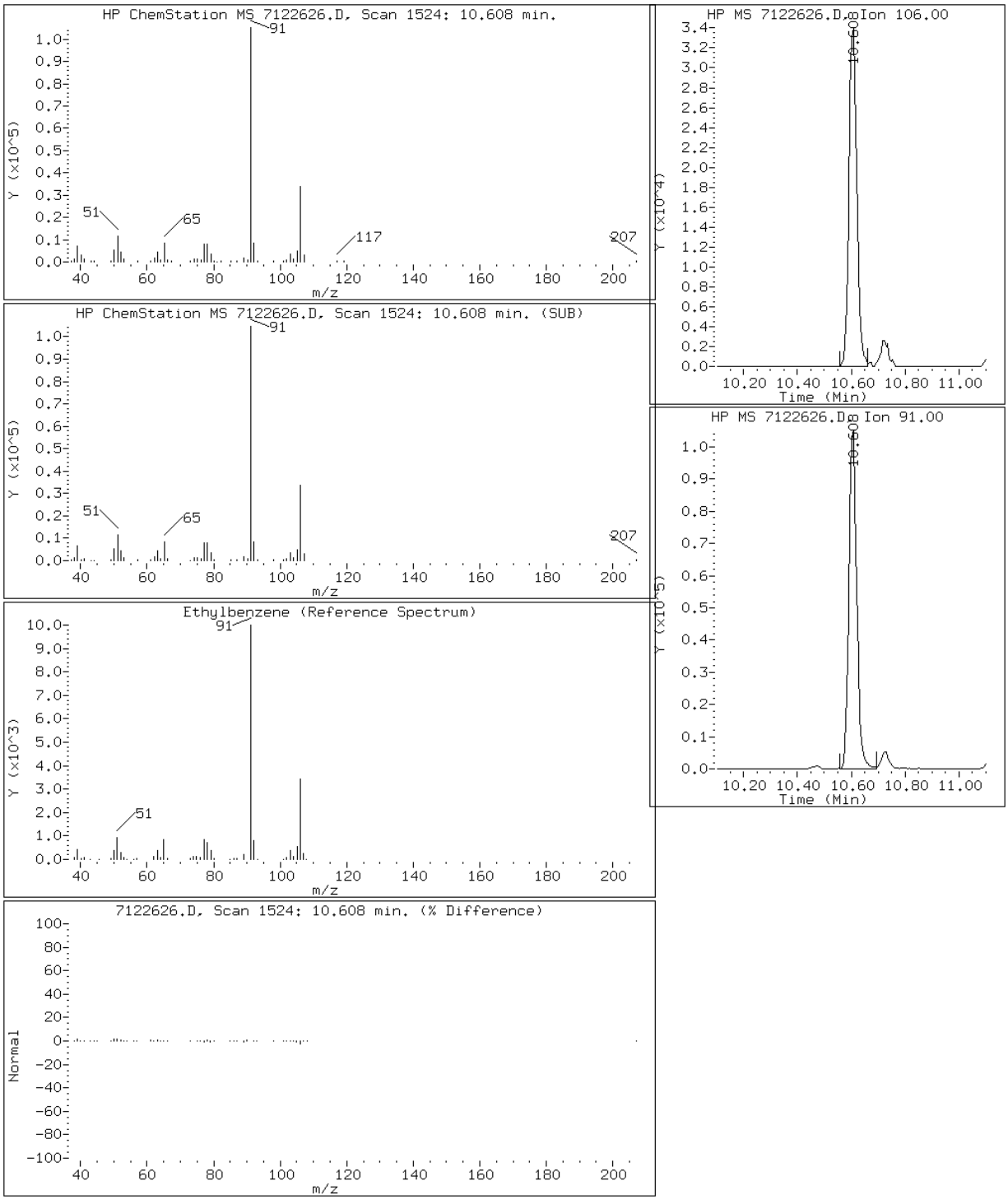
Data File: 7122626.D

Date: 27-DEC-2013 10:39

Client ID: HD-MW-160-01-0 Instrument: hp7.i

Sample Info: 180-28282-B-2 Operator: 430936

72 Ethylbenzene



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Client Sample ID: TRIP BLANK Lab Sample ID: 180-28282-3

Matrix: Water Lab File ID: 4122607.D

Analysis Method: 8260B Date Collected: 12/18/2013 13:50

Sample wt/vol: 5(mL) Date Analyzed: 12/27/2013 03:10

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 93329 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	5.0	U	5.0	0.99
108-88-3	Toluene	5.0	U	5.0	0.85
100-41-4	Ethylbenzene	5.0	U	5.0	0.62
1330-20-7	Xylenes, Total	10	U	10	2.0
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
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
91-20-3	Naphthalene	5.0	U	5.0	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		62-123
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	83		75-120
1868-53-7	Dibromofluoromethane (Surr)	92		80-120

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\pitsvr06\d\chem\hp4.i\4122613d.b\4122607.D
Lab Smp Id: 180-28282-A-3 Client Smp ID: TRIP BLANK
Inj Date : 27-DEC-2013 03:10
Operator : 430936 Inst ID: hp4.i
Smp Info : 180-28282-A-3
Misc Info : 180-28282-A-3
Comment :
Method : \\pitsvr06\d\chem\hp4.i\4122613d.b\T8260bh2o.m
Meth Date : 27-Dec-2013 03:56 hp4.i Quant Type: ISTD
Cal Date : 16-DEC-2013 11:28 Cal File: 4121604.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-530

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
*	46 Fluorobenzene (IS)	96	7.681	7.669	(1.000)	1689664	250.000	
*	69 Chlorobenzene-d5	119	10.771	10.758	(1.000)	364954	250.000	(Q)
*	92 1,4-Dichlorobenzene-d4	152	13.130	13.093	(1.000)	386630	250.000	(QM)
*	176 Dioxane-d8 (IS)	96	8.417	8.405	(1.000)	46927	5000.00	
*	177 TBA-d9 (IS)	65	4.762	4.847	(1.000)	340641	5000.00	(H)
$	39 Dibromofluoromethane (Surr)	113	6.939	6.933	(0.903)	327539	229.252	229.2
$	43 1,2-Dichloroethane-d4	65	7.310	7.304	(0.952)	346521	235.351	235.4
$	59 Toluene-d8	98	9.323	9.317	(0.866)	1516292	244.776	244.8
$	80 Bromofluorobenzene (Surr)	95	11.962	11.938	(1.111)	454705	206.881	206.9
	1 Dichlorodifluoromethane	85	Compound Not Detected.					
	2 Chloromethane	50	Compound Not Detected.					
	3 Vinyl Chloride	62	Compound Not Detected.					
	4 Bromomethane	94	Compound Not Detected.					
	5 Chloroethane	64	Compound Not Detected.					
	7 Dichlorofluoromethane	67	Compound Not Detected.					
	10 1,1,2-trichloro-1,2,2-trifluor	101	Compound Not Detected.					
	166 Trichlorofluoromethane	101	Compound Not Detected.					
	12 1,1-Dichloroethene	96	Compound Not Detected.					
	15 Carbon Disulfide	76	Compound Not Detected.					
	13 Acetone	43	Compound Not Detected.					
	18 Methylene Chloride	84	Compound Not Detected.					
	19 trans-1,2-Dichloroethene	96	Compound Not Detected.					
	20 Methyl tert-butyl ether	73	Compound Not Detected.					
	24 1,1-Dichloroethane	63	Compound Not Detected.					
	27 2,2-Dichloropropane	77	Compound Not Detected.					
	28 cis-1,2-dichloroethene	96	Compound Not Detected.					
M	29 1,2-Dichloroethene (total)	96	Compound Not Detected.					
	30 Bromochloromethane	128	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
31	2-Butanone	43	Compound Not Detected.					
37	Chloroform	83	Compound Not Detected.					
38	1,1,1-Trichloroethane	97	Compound Not Detected.					
40	1,1-Dichloropropene	75	Compound Not Detected.					
41	Carbon Tetrachloride	117	Compound Not Detected.					
42	Benzene	78	Compound Not Detected.					
45	1,2-Dichloroethane	62	Compound Not Detected.					
47	Trichloroethene	130	8.089	8.064	(1.053)	17530	9.43777	9.438(M)
49	1,2-Dichloropropane	63	Compound Not Detected.					
50	Dibromomethane	93	Compound Not Detected.					
53	Bromodichloromethane	83	Compound Not Detected.					
57	cis-1,3-Dichloropropene	75	Compound Not Detected.					
58	4-Methyl-2-Pentanone	43	Compound Not Detected.					
60	Toluene	91	Compound Not Detected.					
61	trans-1,3-Dichloropropene	75	Compound Not Detected.					
63	1,3-Dichloropropane	76	Compound Not Detected.					
64	1,1,2-Trichloroethane	97	Compound Not Detected.					
65	Tetrachloroethene	164	Compound Not Detected.					
66	2-Hexanone	43	Compound Not Detected.					
67	Dibromochloromethane	129	Compound Not Detected.					
68	1,2-Dibromoethane	107	Compound Not Detected.					
70	Chlorobenzene	112	Compound Not Detected.					
71	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
72	Ethylbenzene	106	Compound Not Detected.					
73	m,p-XYLENE	106	Compound Not Detected.					
74	Xylene-o	106	Compound Not Detected.					
76	Styrene	104	Compound Not Detected.					
77	Bromoform	173	Compound Not Detected.					
78	Isopropylbenzene	105	Compound Not Detected.					
79	Bromobenzene	156	Compound Not Detected.					
81	n-Propylbenzene	120	Compound Not Detected.					
82	2-Chlorotoluene	126	Compound Not Detected.					
83	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
84	1,2,3-Trichloropropane	110	Compound Not Detected.					
85	4-Chlorotoluene	126	Compound Not Detected.					
86	1,3,5-Trimethylbenzene	105	Compound Not Detected.					
87	tert-Butylbenzene	119	Compound Not Detected.					
88	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
89	sec-Butylbenzene	105	Compound Not Detected.					
90	4-Isopropyltoluene	119	Compound Not Detected.					
91	1,3-Dichlorobenzene	146	Compound Not Detected.					
94	n-Butylbenzene	91	Compound Not Detected.					
93	1,4-Dichlorobenzene	146	Compound Not Detected.					
95	1,2-Dichlorobenzene	146	Compound Not Detected.					
96	1,2-Dibromo-3-chloropropane	157	Compound Not Detected.					
97	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
98	Hexachlorobutadiene	225	Compound Not Detected.					
99	Naphthalene	128	Compound Not Detected.					
100	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
156	Methyl Acetate	43	Compound Not Detected.					
157	Cyclohexane	56	Compound Not Detected.					
158	Methyl Cyclohexane	83	Compound Not Detected.					
32	Vinyl Acetate	43	Compound Not Detected.					
52	1,4-Dioxane	88	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ng)
	21 tert-Butyl Alcohol	59	Compound Not Detected.					
	16 3-Chloro-1-propene	76	Compound Not Detected.					
	11 Acrolein	56	Compound Not Detected.					
	22 Acrylonitrile	53	Compound Not Detected.					
	8 Ethyl Ether	59	Compound Not Detected.					
	62 Ethyl methacrylate	69	Compound Not Detected.					
	23 Hexane	57	Compound Not Detected.					
	14 Iodomethane	142	Compound Not Detected.					
	44 Isobutanol	41	Compound Not Detected.					
	155 N-Heptane	41	Compound Not Detected.					
	35 Tetrahydrofuran	42	Compound Not Detected.					
	164 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.					
	169 Butadiene	39	Compound Not Detected.					
M	75 Xylenes (total)	106	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 4122607.D

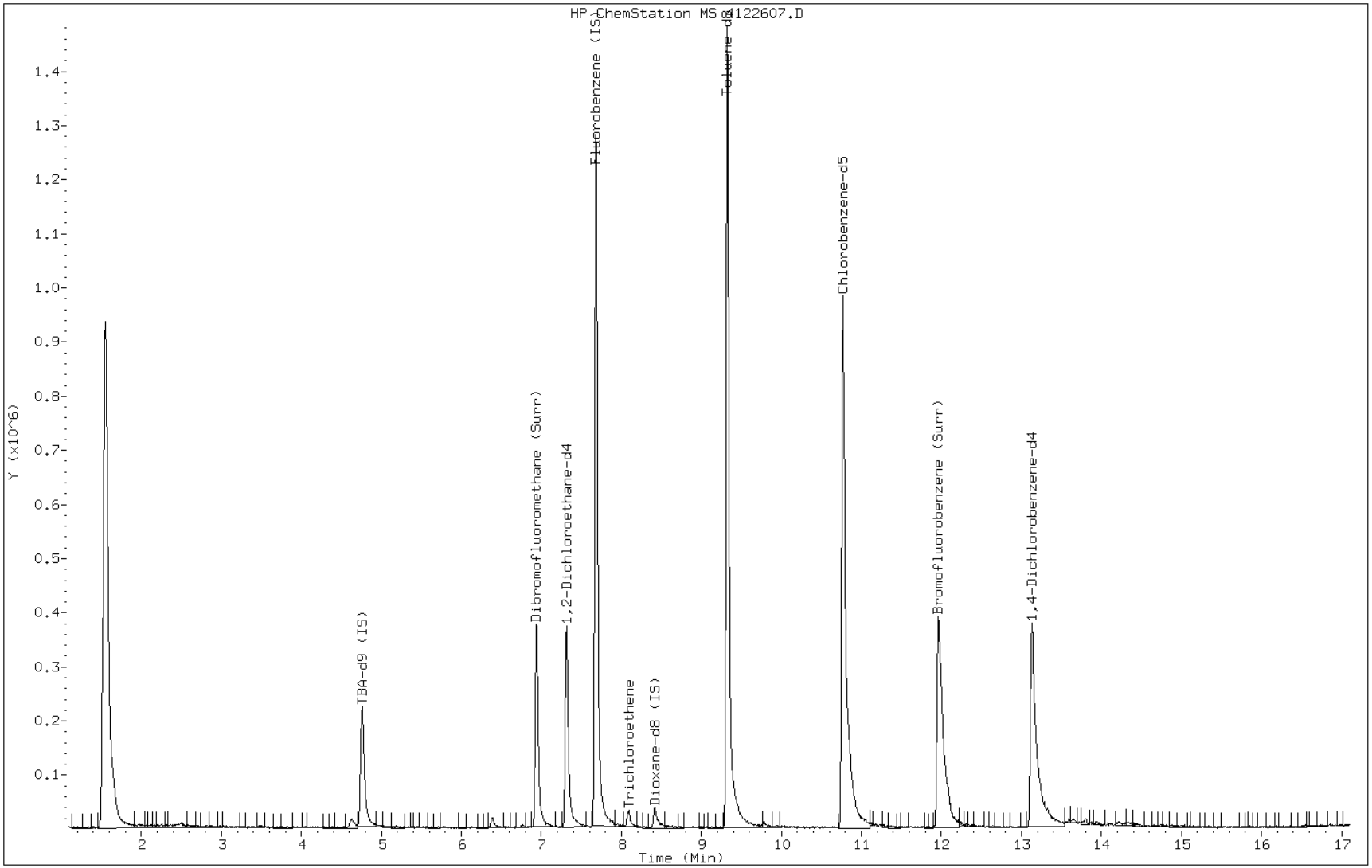
Date: 27-DEC-2013 03:10

Client ID: TRIP BLANK

Instrument: hp4.i

Sample Info: 180-28282-A-3

Operator: 430936



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

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1 Analy Batch No.: 92621

SDG No.:

Instrument ID: HP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2013 11:04 Calibration End Date: 12/16/2013 16:49 Calibration ID: 12998

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-92621/2	4121603.D
Level 2	IC 180-92621/3	4121604.D
Level 3	IC 180-92621/4	4121605.D
Level 4	ICIS 180-92621/5	4121606.D
Level 5	IC 180-92621/6	4121613.D
Level 6	IC 180-92621/7	4121608.D
Level 7	IC 180-92621/8	4121609.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	0.3493 0.3078	0.3516 0.3229	0.3106	0.3119	0.3267	Ave		0.3258				5.6		15.0			
Chloromethane	0.4762 0.4119	0.4785 0.4049	0.4467	0.4412	0.4490	Ave		0.4440			0.1000	6.4		15.0			
Vinyl chloride	0.4252 0.3614	0.4290 0.3275	0.3717	0.3388	0.3734	Ave		0.3753				10.4		15.0			
1,3-Butadiene	0.4349 0.3528	0.4104 0.3413	0.3738	0.3450	0.3720	Ave		0.3758				9.3					
Bromomethane	0.0677 0.0584	0.0671 0.0634	0.0585	0.0610	0.0628	Ave		0.0627				6.0		15.0			
Chloroethane	0.0667 0.0582	0.0647 0.0647	0.0587	0.0609	0.0597	Ave		0.0619				5.4		15.0			
Dichlorofluoromethane	0.1927 0.1788	0.1905 0.1851	0.1696	0.1673	0.1998	Qua	-0.006	5.6256	-0.229						0.9991		
Trichlorofluoromethane	0.1539 0.1384	0.1482 0.1978	0.1442	0.1681	0.1923	Ave		0.1633				14.5		15.0			
Ethyl ether	0.2757 0.2338	0.2657 0.2523	0.2328	0.2417	0.2455	Ave		0.2497				6.5		15.0			
Acrolein	0.0377 0.0301	0.0388 0.0358	0.0297	0.0338	0.0322	Ave		0.0340				10.5		15.0			
1,1-Dichloroethene	0.3111 0.2828	0.3114 0.3061	0.2791	0.2832	0.2934	Ave		0.2953				4.8		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2911 0.2612	0.2896 0.2813	0.2670	0.2688	0.2739	Ave		0.2761				4.2		15.0			
Acetone	0.0997 0.0826	0.0999 0.0865	0.0705	0.0725	0.0765	Ave		0.0840				14.4		15.0			
Iodomethane	0.4131 0.3923	0.4110 0.4037	0.3766	0.3690	0.3965	Ave		0.3946				4.2		15.0			

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.: 180-28282-1 Analy Batch No.: 92621

SDG No.:

Instrument ID: HP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2013 11:04 Calibration End Date: 12/16/2013 16:49 Calibration ID: 12998

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	0.6104 0.7897	0.6269 0.8136	0.6488	0.6803	0.7525	Ave		0.7032				11.6		15.0			
Allyl chloride	0.1536 0.1752	0.1537 0.1980	0.1521	0.1548	0.1646	Ave		0.1646				10.3		15.0			
Methyl acetate	0.2162 0.1680	0.2415 0.1816	0.1810	0.2162	0.1898	Ave		0.1992				13.1		15.0			
Methylene Chloride	0.3527 0.2873	0.3375 0.2974	0.2937	0.2809	0.3044	Ave		0.3077				8.8		15.0			
tert-Butyl alcohol	1.3652 1.2271	1.3434 1.7021	1.2159	1.2652	1.2725	Ave		1.3416				12.5		15.0			
trans-1,2-Dichloroethene	0.3114 0.2815	0.3128 0.2783	0.2849	0.2939	0.2949	Ave		0.2939				4.7		15.0			
Acrylonitrile	0.1052 0.0844	0.1183 0.0908	0.0937	0.1059	0.0982	Ave		0.0995				11.4		15.0			
Methyl tert-butyl ether	0.6346 0.5510	0.6609 0.5627	0.5604	0.5985	0.5899	Ave		0.5940				6.9		15.0			
Hexane	0.5836 0.4613	0.5583 0.4803	0.4749	0.4990	0.4759	Ave		0.5048				9.3		15.0			
1,1-Dichloroethane	0.5118 0.4843	0.5387 0.4882	0.4896	0.4908	0.4993	Ave		0.5004			0.1000	3.8		15.0			
Vinyl acetate	0.4367 0.3912	0.4002 0.4208	0.3529	0.4027	0.3838	Ave		0.3983				6.7		15.0			
2,2-Dichloropropane	0.1851 0.1765	0.1826 0.1796	0.1695	0.1672	0.1826	Ave		0.1776				3.9		15.0			
cis-1,2-Dichloroethene	0.3058 0.3031	0.3241 0.3012	0.3115	0.3027	0.3225	Ave		0.3101				3.1		15.0			
2-Butanone (MEK)	0.1016 0.1238	0.1106 0.1374	0.0863	0.0924	0.1142	Qua	0.0710	8.5872	-2.066					15.0	0.9987		0.9900
Bromochloromethane	0.1295 0.1291	0.1293 0.1371	0.1253	0.1306	0.1364	Ave		0.1311				3.2		15.0			
Chloroform	0.4652 0.3943	0.4444 0.3931	0.4172	0.3945	0.4156	Ave		0.4178				6.7		30.0			
1,1,1-Trichloroethane	0.3132 0.3042	0.2991 0.3146	0.2925	0.3006	0.3104	Ave		0.3049				2.7		15.0			
Tetrahydrofuran	0.0902 0.0781	0.0906 0.0809	0.0791	0.0780	0.0756	Ave		0.0818				7.5		15.0			
Cyclohexane	0.7415 0.5917	0.7236 0.5922	0.6400	0.6483	0.6361	Ave		0.6533				9.0		15.0			
Carbon tetrachloride	0.2394 0.2735	0.2581 0.2921	0.2530	0.2645	0.2714	Ave		0.2646				6.4		15.0			

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.: 180-28282-1 Analy Batch No.: 92621

SDG No.:

Instrument ID: HP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2013 11:04 Calibration End Date: 12/16/2013 16:49 Calibration ID: 12998

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	0.3597 0.3275	0.3715 0.3324	0.3352	0.3380	0.3357	Ave		0.3428				4.7		15.0			
Isobutyl alcohol	0.0063 0.0057	0.0061 0.0060	0.0052	0.0057	0.0053	Ave		0.0057				7.4		15.0			
Benzene	1.2786 0.9602	1.2396 0.8352	1.1445	1.1025	1.1081	Ave		1.0955				14.1		15.0			
1,2-Dichloroethane	0.2879 0.2627	0.3071 0.2755	0.2671	0.2706	0.2814	Ave		0.2789				5.4		15.0			
n-Heptane	0.3076 0.2439	0.2996 0.2596	0.2534	0.2797	0.2467	Ave		0.2701				9.5		15.0			
Trichloroethene	0.2874 0.2713	0.2832 0.2728	0.2613	0.2771	0.2706	Ave		0.2748				3.2		15.0			
Methylcyclohexane	0.6012 0.4945	0.6085 0.4870	0.5337	0.5506	0.5259	Ave		0.5431				8.8		15.0			
1,2-Dichloropropane	0.2942 0.2846	0.3122 0.2790	0.2888	0.2805	0.2869	Ave		0.2895				3.9		30.0			
Dibromomethane	0.1265 0.1319	0.1337 0.1405	0.1252	0.1322	0.1374	Ave		0.1325				4.1		15.0			
1,4-Dioxane	1.0368 1.0931	1.4418 1.1458	1.0036	1.2966	1.0914	Ave		1.1584				13.5		15.0			
Dichlorobromomethane	0.2396 0.2881	0.2471 0.2983	0.2652	0.2702	0.2782	Ave		0.2695				7.8		15.0			
cis-1,3-Dichloropropene	0.2992 0.3926	0.3057 0.3915	0.3600	0.3736	0.3890	Ave		0.3588				11.2		15.0			
4-Methyl-2-pentanone (MIBK)	0.7856 1.1815	1.0437 1.1943	0.9013	1.1554	1.1262	Qua	0.0549	0.8327	-0.001					15.0	0.9996		0.9900
Toluene	5.7803 4.0599	5.9705 +++++	5.2722	5.1790	4.8347	Ave		5.1828				13.3		30.0			
trans-1,3-Dichloropropene	1.0144 1.2460	1.1109 1.2741	1.1198	1.2635	1.2499	Ave		1.1826				8.5		15.0			
Ethyl methacrylate	1.1581 1.1816	1.2035 1.2215	1.1694	1.4005	1.2631	Ave		1.2282				6.8		15.0			
1,1,2-Trichloroethane	1.0756 0.8411	1.1022 0.8666	0.9363	0.9989	0.9179	Ave		0.9627				10.4		15.0			
Tetrachloroethene	1.0585 0.8648	1.0632 0.8599	0.9447	0.9859	0.9076	Ave		0.9550				8.9		15.0			
1,3-Dichloropropane	1.7264 1.4450	1.8886 1.4137	1.6311	1.7118	1.6390	Ave		1.6365				10.1		15.0			
2-Hexanone	0.9075 0.8838	0.9858 0.8317	0.8079	0.8485	0.6922	Qua	0.0478	1.1023	0.0202					15.0	0.9975		0.9900

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.: 180-28282-1 Analy Batch No.: 92621

SDG No.:

Instrument ID: HP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2013 11:04 Calibration End Date: 12/16/2013 16:49 Calibration ID: 12998

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	0.6970 0.8130	0.7339 0.8785	0.7408	0.8286	0.8211	Ave		0.7876				8.2		15.0			
1,2-Dibromoethane	0.8315 0.8113	0.9035 0.8712	0.8058	0.9113	0.8705	Ave		0.8578				5.0		15.0			
Chlorobenzene	3.5535 2.7752	3.5331 2.4652	3.3029	3.1929	3.1448	Ave		3.1382			0.3000	12.6		15.0			
1,1,1,2-Tetrachloroethane	0.8803 0.9292	0.9730 0.9060	0.9730	0.9410	0.9822	Ave		0.9407				4.1		15.0			
Ethylbenzene	1.9467 1.5722	1.8882 1.4203	1.7721	1.7963	1.7504	Ave		1.7352				10.5		30.0			
m-Xylene & p-Xylene	2.4277 1.9468	2.2514 1.7666	2.1680	2.2341	2.1939	Ave		2.1412				10.2		15.0			
o-Xylene	2.3610 1.8449	2.2354 1.5895	2.1651	2.1170	2.1059	Ave		2.0598				12.6		15.0			
Styrene	3.4280 2.9914	3.4409 2.5081	3.5080	3.4416	3.4999	Ave		3.2597				11.5		15.0			
Bromoform	0.3409 0.5194	0.4457 0.6018	0.3966	0.4857	0.5043	Qua	0.0339	2.0650	-0.138		0.1000			15.0	0.9997		0.9900
Isopropylbenzene	6.0463 4.1762	6.0851 +++++	5.4003	5.2398	5.1208	Ave		5.3447				13.2		15.0			
1,1,2,2-Tetrachloroethane	1.0638 0.9540	1.2352 0.9594	1.0426	1.1038	1.0524	Ave		1.0587			0.3000	9.0		15.0			
Bromobenzene	0.9969 0.8430	1.0864 0.8620	0.9591	1.0357	0.9396	Ave		0.9604				9.2		15.0			
1,2,3-Trichloropropane	0.2832 0.1963	0.2731 0.2290	0.2229	0.2754	0.2189	Ave		0.2427				14.0		15.0			
trans-1,4-Dichloro-2-butene	0.1781 0.2090	0.2056 0.2599	0.1819	0.2139	0.1959	Ave		0.2063				13.2		15.0			
N-Propylbenzene	1.3249 1.0318	1.3173 1.0230	1.2153	1.3266	1.1472	Ave		1.1980				11.2		15.0			
2-Chlorotoluene	1.0872 0.8665	1.0762 0.8572	0.9641	1.0634	0.9571	Ave		0.9817				9.9		15.0			
1,3,5-Trimethylbenzene	3.7722 +++++	3.7234 +++++	3.3267	3.5315	3.1175	Ave		3.4943				7.9		15.0			
4-Chlorotoluene	0.9908 0.8667	0.9996 0.8647	0.9740	1.0510	0.9551	Ave		0.9574				7.2		15.0			
tert-Butylbenzene	3.4339 +++++	3.3035 +++++	2.8810	3.1770	2.7847	Ave		3.1160				8.9		15.0			
1,2,4-Trimethylbenzene	3.5816 2.5631	3.7032 +++++	3.3872	3.5052	3.1376	Ave		3.3130				12.5		15.0			

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.: 180-28282-1 Analy Batch No.: 92621

SDG No.:

Instrument ID: HP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2013 11:04 Calibration End Date: 12/16/2013 16:49 Calibration ID: 12998

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	5.1695 +++++	4.7610 +++++	4.3389	4.6116	3.9828	Ave		4.5728				9.8		15.0			
1,3-Dichlorobenzene	1.5848 1.4795	1.6537 1.3589	1.6023	1.6223	1.6045	Ave		1.5580				6.6		15.0			
4-Isopropyltoluene	4.1053 2.6736	4.0066 +++++	3.5413	3.6086	3.3143	Ave		3.5416				14.6		15.0			
1,4-Dichlorobenzene	2.3740 1.5984	1.8997 +++++	1.7302	1.7588	1.7700	Ave		1.8552				14.6		15.0			
n-Butylbenzene	3.7333 2.7641	3.3317 +++++	3.3126	3.3285	3.2482	Ave		3.2864				9.4		15.0			
1,2-Dichlorobenzene	1.8097 1.4111	1.6385 1.2888	1.5506	1.5669	1.5800	Ave		1.5494				10.7		15.0			
1,2-Dibromo-3-Chloropropane	0.0549 0.0768	0.0784 0.0994	0.0629	0.0866	0.0618	Qua	0.0040	14.660	-9.266					15.0	0.9973		0.9900
1,2,4-Trichlorobenzene	0.3686 0.3855	0.2337 0.4199	0.3299	0.3557	0.3379	Qua	0.0471	2.7429	-0.184					15.0	0.9997		0.9900
Hexachlorobutadiene	0.5309 0.4329	0.4852 0.3823	0.4464	0.4188	0.4312	Ave		0.4468				10.8		15.0			
Naphthalene	0.6289 0.5346	0.5449 0.6419	0.4947	0.6395	0.4820	Qua	-0.041	2.0770	-0.157					15.0	0.9977		0.9900
1,2,3-Trichlorobenzene	0.2849 0.1847	0.1820 +++++	0.1569	0.2056	0.1901	Qua	0.0124	4.9786	0.8702					15.0	0.9962		0.9900
Dibromofluoromethane (Surr)	0.2208 0.2067	0.2184 0.2050	0.2072	0.2074	0.2142	Ave		0.2114				3.0					
1,2-Dichloroethane-d4 (Surr)	0.2381 0.2046	0.2172 0.2110	0.2235	0.2102	0.2205	Ave		0.2178				5.1		15.0			
Toluene-d8 (Surr)	5.1368 3.3406	4.5297 +++++	4.3168	4.2447	3.8920	Ave		4.2434				14.2		15.0			
4-Bromofluorobenzene (Surr)	1.7296 1.4460	1.5248 1.2869	1.5391	1.4654	1.5474	Ave		1.5056				8.8		15.0			

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.: 180-28282-1 Analy Batch No.: 92621

SDG No.:

Instrument ID: HP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2013 11:04 Calibration End Date: 12/16/2013 16:49 Calibration ID: 12998

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-92621/2	4121603.D
Level 2	IC 180-92621/3	4121604.D
Level 3	IC 180-92621/4	4121605.D
Level 4	ICIS 180-92621/5	4121606.D
Level 5	IC 180-92621/6	4121613.D
Level 6	IC 180-92621/7	4121608.D
Level 7	IC 180-92621/8	4121609.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	53674 1297080	105884 2712904	244869	415552	553737	25.0 625	50.0 1250	125	200	250
Chloromethane	FB	Ave	73172 1735750	144093 3401895	352110	587800	760840	25.0 625	50.0 1250	125	200	250
Vinyl chloride	FB	Ave	65336 1523176	129189 2750890	293012	451359	632775	25.0 625	50.0 1250	125	200	250
1,3-Butadiene	FB	Ave	66831 1486895	123593 2866976	294691	459710	630505	25.0 625	50.0 1250	125	200	250
Bromomethane	FB	Ave	10404 245969	20198 532493	46132	81272	106349	25.0 625	50.0 1250	125	200	250
Chloroethane	FB	Ave	10254 245366	19475 543563	46291	81075	101215	25.0 625	50.0 1250	125	200	250
Dichlorofluoromethane	FB	Qua	29612 753575	57353 1555247	133719	222957	338580	25.0 625	50.0 1250	125	200	250
Trichlorofluoromethane	FB	Ave	23649 583096	44629 1661995	113652	223965	325872	25.0 625	50.0 1250	125	200	250
Ethyl ether	FB	Ave	42374 985113	80022 2119804	183505	322050	416071	25.0 625	50.0 1250	125	200	250
Acrolein	FB	Ave	115719 228080	145878 300609	140306	196994	218208	500 1125	625 1250	750	875	1000
1,1-Dichloroethene	FB	Ave	47806 1191605	93762 2571839	219971	377280	497168	25.0 625	50.0 1250	125	200	250
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	44736 1100596	87219 2362993	210472	358159	464116	25.0 625	50.0 1250	125	200	250
Acetone	FB	Ave	15326 348169	30098 726860	55535	96654	129568	25.0 625	50.0 1250	125	200	250
Iodomethane	FB	Ave	63483 1653257	123757 3391222	296835	491663	671935	25.0 625	50.0 1250	125	200	250
Carbon disulfide	FB	Ave	93801 3327885	188780 6835150	511459	906456	1275291	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.: 180-28282-1 Analy Batch No.: 92621

SDG No.:

Instrument ID: HP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2013 11:04 Calibration End Date: 12/16/2013 16:49 Calibration ID: 12998

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	23599 738355	46288 1663387	119914	206226	278976	25.0 625	50.0 1250	125	200	250
Methyl acetate	FB	Ave	166085 3539179	363671 7625878	713549	1440532	1607837	125 3125	250 6250	625	1000	1250
Methylene Chloride	FB	Ave	54201 1210887	101634 2498278	231557	374312	515930	25.0 625	50.0 1250	125	200	250
tert-Butyl alcohol	TBA	Ave	30411 668896	61321 1384259	124916	183791	264937	250 6250	500 12500	1250	2000	2500
trans-1,2-Dichloroethene	FB	Ave	47856 1186284	94195 2337577	224567	391569	499735	25.0 625	50.0 1250	125	200	250
Acrylonitrile	FB	Ave	161602 3555937	356164 7628893	738601	1411604	1664965	250 6250	500 12500	1250	2000	2500
Methyl tert-butyl ether	FB	Ave	97513 2321884	199020 4727239	441747	797477	999629	25.0 625	50.0 1250	125	200	250
Hexane	FB	Ave	89687 1944197	168122 4034546	374367	664851	806459	25.0 625	50.0 1250	125	200	250
1,1-Dichloroethane	FB	Ave	78652 2040955	162214 4101239	385912	653944	846137	25.0 625	50.0 1250	125	200	250
Vinyl acetate	FB	Ave	67108 1648834	120505 3534775	278156	536520	650483	25.0 625	50.0 1250	125	200	250
2,2-Dichloropropane	FB	Ave	28444 743953	54981 1508725	133651	222751	309489	25.0 625	50.0 1250	125	200	250
cis-1,2-Dichloroethene	FB	Ave	46987 1277462	97597 2530388	245577	403363	546500	25.0 625	50.0 1250	125	200	250
2-Butanone (MEK)	FB	Qua	15616 521781	33292 1154009	68047	123057	193545	25.0 625	50.0 1250	125	200	250
Bromochloromethane	FB	Ave	19902 544224	38942 1151902	98776	174060	231148	25.0 625	50.0 1250	125	200	250
Chloroform	FB	Ave	71495 1661735	133821 3302218	328895	525557	704278	25.0 625	50.0 1250	125	200	250
1,1,1-Trichloroethane	FB	Ave	48131 1281791	90083 2642667	230568	400555	525976	25.0 625	50.0 1250	125	200	250
Tetrahydrofuran	FB	Ave	27733 658621	54555 1359576	124724	207801	256161	50.0 1250	100 2500	250	400	500
Cyclohexane	FB	Ave	113949 2493698	217897 4974965	504522	863739	1078040	25.0 625	50.0 1250	125	200	250
Carbon tetrachloride	FB	Ave	36792 1152820	77710 2454069	199468	352397	459936	25.0 625	50.0 1250	125	200	250
1,1-Dichloropropene	FB	Ave	55281 1379980	111867 2792016	264193	450301	568858	25.0 625	50.0 1250	125	200	250
Isobutyl alcohol	FB	Ave	24187 599160	46066 1258283	101831	188918	222616	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.: 180-28282-1 Analy Batch No.: 92621

SDG No.:

Instrument ID: HP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2013 11:04 Calibration End Date: 12/16/2013 16:49 Calibration ID: 12998

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	196477 4046521	373291 7016761	902183	1468958	1877948	25.0 625	50.0 1250	125	200	250
1,2-Dichloroethane	FB	Ave	44237 1107169	92484 2314147	210563	360600	476933	25.0 625	50.0 1250	125	200	250
n-Heptane	FB	Ave	47268 1027856	90222 2180981	199740	372639	418119	25.0 625	50.0 1250	125	200	250
Trichloroethene	FB	Ave	44167 1143455	85272 2291706	205989	369255	458581	25.0 625	50.0 1250	125	200	250
Methylcyclohexane	FB	Ave	92386 2084118	183240 4091577	420672	733665	891282	25.0 625	50.0 1250	125	200	250
1,2-Dichloropropane	FB	Ave	45210 1199298	94017 2344021	227679	373796	486126	25.0 625	50.0 1250	125	200	250
Dibromomethane	FB	Ave	19438 555764	40256 1180713	98728	176087	232863	25.0 625	50.0 1250	125	200	250
1,4-Dioxane	14DD 8	Ave	7026 185728	15527 336147	32265	61009	63934	500 12500	1000 25000	2500	4000	5000
Dichlorobromomethane	FB	Ave	36817 1214068	74410 2506060	209056	360037	471536	25.0 625	50.0 1250	125	200	250
cis-1,3-Dichloropropene	FB	Ave	45972 1654558	92054 3288696	283750	497826	659161	25.0 625	50.0 1250	125	200	250
4-Methyl-2-pentanone (MIBK)	CBZ	Qua	26784 1210374	69405 2454553	160686	341893	449587	25.0 625	50.0 1250	125	200	250
Toluene	CBZ	Ave	197063 4159168	397051 +++++	939896	1532481	1930073	25.0 625	50.0 +++++	125	200	250
trans-1,3-Dichloropropene	CBZ	Ave	34584 1276409	73877 2618453	199629	373871	498964	25.0 625	50.0 1250	125	200	250
Ethyl methacrylate	CBZ	Ave	39482 1210534	80032 2510476	208477	414426	504228	25.0 625	50.0 1250	125	200	250
1,1,2-Trichloroethane	CBZ	Ave	36669 861633	73301 1781129	166911	295571	366430	25.0 625	50.0 1250	125	200	250
Tetrachloroethene	CBZ	Ave	36088 885942	70707 1767291	168408	291743	362335	25.0 625	50.0 1250	125	200	250
1,3-Dichloropropane	CBZ	Ave	58856 1480364	125594 2905418	290779	506516	654303	25.0 625	50.0 1250	125	200	250
2-Hexanone	CBZ	Qua	30939 905412	65560 1709218	144021	251079	276343	25.0 625	50.0 1250	125	200	250
Chlorodibromomethane	CBZ	Ave	23762 832848	48807 1805411	132073	245200	327790	25.0 625	50.0 1250	125	200	250
1,2-Dibromoethane	CBZ	Ave	28346 831112	60082 1790511	143647	269648	347496	25.0 625	50.0 1250	125	200	250
Chlorobenzene	CBZ	Ave	121146 2843063	234957 5066483	588827	944781	1255443	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.: 180-28282-1 Analy Batch No.: 92621

SDG No.:

Instrument ID: HP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2013 11:04 Calibration End Date: 12/16/2013 16:49 Calibration ID: 12998

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	30012 951874	64706 1862040	173458	278441	392100	25.0 625	50.0 1250	125	200	250
Ethylbenzene	CBZ	Ave	66367 1610670	125569 2919022	315913	531545	698769	25.0 625	50.0 1250	125	200	250
m-Xylene & p-Xylene	CBZ	Ave	82765 1994427	149724 3630694	386492	661072	875826	25.0 625	50.0 1250	125	200	250
o-Xylene	CBZ	Ave	80493 1889959	148658 3266771	385980	626426	840703	25.0 625	50.0 1250	125	200	250
Styrene	CBZ	Ave	116868 3064557	228826 5154722	625397	1018386	1397192	25.0 625	50.0 1250	125	200	250
Bromoform	CBZ	Qua	11622 532121	29643 1236823	70701	143710	201323	25.0 625	50.0 1250	125	200	250
Isopropylbenzene	CBZ	Ave	206130 4278283	404671 +++++	962733	1550473	2044294	25.0 625	50.0 +++++	125	200	250
1,1,2,2-Tetrachloroethane	CBZ	Ave	36266 977348	82140 1971772	185878	326612	420149	25.0 625	50.0 1250	125	200	250
Bromobenzene	DCB	Ave	42208 1193136	90916 2221908	223745	351738	501811	25.0 625	50.0 1250	125	200	250
1,2,3-Trichloropropane	DCB	Ave	11989 277775	22851 590376	52011	93523	116915	25.0 625	50.0 1250	125	200	250
trans-1,4-Dichloro-2-butene	DCB	Ave	7541 295887	17204 670045	42444	72640	104608	25.0 625	50.0 1250	125	200	250
N-Propylbenzene	DCB	Ave	56093 1460415	110233 2636805	283504	450520	612716	25.0 625	50.0 1250	125	200	250
2-Chlorotoluene	DCB	Ave	46029 1226377	90057 2209646	224912	361140	511155	25.0 625	50.0 1250	125	200	250
1,3,5-Trimethylbenzene	DCB	Ave	159709 +++++	311590 +++++	776066	1199295	1664989	25.0 +++++	50.0 +++++	125	200	250
4-Chlorotoluene	DCB	Ave	41948 1226698	83649 2228961	227223	356908	510100	25.0 625	50.0 1250	125	200	250
tert-Butylbenzene	DCB	Ave	145386 +++++	276452 +++++	672097	1078920	1487251	25.0 +++++	50.0 +++++	125	200	250
1,2,4-Trimethylbenzene	DCB	Ave	151638 3627770	309901 +++++	790180	1190361	1675735	25.0 625	50.0 +++++	125	200	250
sec-Butylbenzene	DCB	Ave	218868 +++++	398419 +++++	1012201	1566093	2127148	25.0 +++++	50.0 +++++	125	200	250
1,3-Dichlorobenzene	DCB	Ave	67098 2094057	138387 3502681	373788	550929	856945	25.0 625	50.0 1250	125	200	250
4-Isopropyltoluene	DCB	Ave	173812 3784160	335287 +++++	826133	1225476	1770089	25.0 625	50.0 +++++	125	200	250
1,4-Dichlorobenzene	DCB	Ave	100512 2262415	158970 +++++	403629	597299	945330	25.0 625	50.0 +++++	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1 Analy Batch No.: 92621

SDG No.:

Instrument ID: HP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2013 11:04 Calibration End Date: 12/16/2013 16:49 Calibration ID: 12998

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	158061 3912364	278812 +++++	772777	1130348	1734798	25.0 625	50.0 +++++	125	200	250
1,2-Dichlorobenzene	DCB	Ave	76619 1997305	137120 3322080	361736	532109	843847	25.0 625	50.0 1250	125	200	250
1,2-Dibromo-3-Chloropropane	DCB	Qua	2325 108684	6562 256280	14665	29402	32997	25.0 625	50.0 1250	125	200	250
1,2,4-Trichlorobenzene	DCB	Qua	15604 545614	19560 1082396	76967	120799	180490	25.0 625	50.0 1250	125	200	250
Hexachlorobutadiene	DCB	Ave	22477 612699	40600 985387	104146	142235	230309	25.0 625	50.0 1250	125	200	250
Naphthalene	DCB	Qua	26626 756713	45597 1654472	115406	217185	257409	25.0 625	50.0 1250	125	200	250
1,2,3-Trichlorobenzene	DCB	Qua	12063 261466	15229 +++++	36608	69806	101510	25.0 625	50.0 +++++	125	200	250
Dibromofluoromethane (Surr)	FB	Ave	33923 871217	65782 1722178	163334	276315	363051	25.0 625	50.0 1250	125	200	250
1,2-Dichloroethane-d4 (Surr)	FB	Ave	36590 862118	65400 1772417	176161	280013	373620	25.0 625	50.0 1250	125	200	250
Toluene-d8 (Surr)	CBZ	Ave	175123 3422259	301232 +++++	769586	1256017	1553717	25.0 625	50.0 +++++	125	200	250
4-Bromofluorobenzene (Surr)	CBZ	Ave	58964 1481381	101404 2644876	274381	433633	617725	25.0 625	50.0 1250	125	200	250

Curve Type Legend:

Ave = Average ISTD
Qua = Quadratic ISTD

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\PITSVR06\D\chem\hp4.i\4121613d.b\4121603.D
Lab Smp Id: IC Client Smp ID: vstd5
Inj Date : 16-DEC-2013 11:04
Operator : 034635 Inst ID: hp4.i
Smp Info : IC
Misc Info : 4121613d.b,t8260bh2o.m,list1.sub
Comment :
Method : \\PITSVR06\D\chem\hp4.i\4121613d.b\T8260bh2o.m
Meth Date : 16-Dec-2013 16:23 journetp Quant Type: ISTD
Cal Date : 16-DEC-2013 16:49 Cal File: 4121613.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-088

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
*	46 Fluorobenzene (IS)	96	7.669	7.677	(1.000)	1536702	250.000	
*	69 Chlorobenzene-d5	119	10.759	10.760	(1.000)	340921	250.000	
*	92 1,4-Dichlorobenzene-d4	152	13.106	13.095	(1.000)	423382	250.000	(Q)
*	176 Dioxane-d8 (IS)	96	8.411	8.401	(1.000)	67767	5000.00	(QM)
*	177 TBA-d9 (IS)	65	4.854	4.843	(1.000)	445529	5000.00	
$	39 Dibromofluoromethane (Surr)	113	6.933	6.935	(0.904)	33923	25.0000	26.11
$	43 1,2-Dichloroethane-d4	65	7.304	7.306	(0.952)	36590	25.0000	27.32
$	59 Toluene-d8	98	9.323	9.319	(0.867)	175123	25.0000	30.26
$	80 Bromofluorobenzene (Surr)	95	11.969	11.934	(1.112)	58964	25.0000	28.72
	1 Dichlorodifluoromethane	85	1.764	1.772	(0.230)	53674	25.0000	26.80(M)
	2 Chloromethane	50	1.953	1.966	(0.255)	73172	25.0000	26.81
	3 Vinyl Chloride	62	2.111	2.130	(0.275)	65336	25.0000	28.32
	4 Bromomethane	94	2.494	2.501	(0.325)	10404	25.0000	27.00
	5 Chloroethane	64	2.622	2.629	(0.342)	10254	25.0000	26.93
	7 Dichlorofluoromethane	67	2.908	2.933	(0.379)	29612	25.0000	25.60(MH)
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.801	3.827	(0.496)	44736	25.0000	26.36(QM)
	166 Trichlorofluoromethane	101	2.956	2.976	(0.385)	23649	25.0000	23.56(QM)
	12 1,1-Dichloroethene	96	3.765	3.791	(0.491)	47806	25.0000	26.34(Q)
	15 Carbon Disulfide	76	4.106	4.131	(0.535)	93801	25.0000	21.70
	13 Acetone	43	3.996	3.979	(0.521)	15326	25.0000	29.67(QM)
	18 Methylene Chloride	84	4.586	4.624	(0.598)	54201	25.0000	28.65(Q)
	19 trans-1,2-Dichloroethene	96	4.993	5.007	(0.651)	47856	25.0000	26.49
	20 Methyl tert-butyl ether	73	5.060	5.062	(0.660)	97513	25.0000	26.71(M)
	24 1,1-Dichloroethane	63	5.602	5.603	(0.730)	78652	25.0000	25.57
	27 2,2-Dichloropropane	77	6.343	6.345	(0.827)	28444	25.0000	26.06
	28 cis-1,2-dichloroethene	96	6.362	6.357	(0.830)	46987	25.0000	24.65
M	29 1,2-Dichloroethene (total)	96				94843	50.0000	51.13
	30 Bromochloromethane	128	6.641	6.643	(0.866)	19902	25.0000	24.70(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
31 2-Butanone	43	6.453	6.424	(0.841)	15616	25.0000	39.51
37 Chloroform	83	6.745	6.753	(0.879)	71495	25.0000	27.84
38 1,1,1-Trichloroethane	97	6.933	6.941	(0.904)	48131	25.0000	25.68
40 1,1-Dichloropropene	75	7.140	7.136	(0.931)	55281	25.0000	26.23
41 Carbon Tetrachloride	117	7.128	7.130	(0.929)	36792	25.0000	22.62
42 Benzene	78	7.365	7.367	(0.960)	196477	25.0000	29.18
45 1,2-Dichloroethane	62	7.389	7.391	(0.964)	44237	25.0000	25.80
47 Trichloroethene	130	8.077	8.066	(1.053)	44167	25.0000	26.14
49 1,2-Dichloropropane	63	8.302	8.303	(1.082)	45210	25.0000	25.41(Q)
50 Dibromomethane	93	8.435	8.425	(1.100)	19438	25.0000	23.87(M)
53 Bromodichloromethane	83	8.587	8.589	(1.120)	36817	25.0000	22.22
57 cis-1,3-Dichloropropene	75	9.062	9.045	(1.182)	45972	25.0000	20.84
58 4-Methyl-2-Pentanone	43	9.220	9.209	(0.857)	26784	25.0000	30.08(Q)
60 Toluene	91	9.390	9.386	(0.873)	197063	25.0000	27.88
61 trans-1,3-Dichloropropene	75	9.633	9.605	(0.895)	34584	25.0000	21.44(M)
63 1,3-Dichloropropane	76	9.962	9.957	(0.926)	58856	25.0000	26.37
64 1,1,2-Trichloroethane	97	9.798	9.787	(0.911)	36669	25.0000	27.93
65 Tetrachloroethene	164	9.938	9.933	(0.924)	36088	25.0000	27.71
66 2-Hexanone	43	10.138	10.055	(0.942)	30939	25.0000	37.00(QM)
67 Dibromochloromethane	129	10.199	10.188	(0.948)	23762	25.0000	22.12
68 1,2-Dibromoethane	107	10.321	10.304	(0.959)	28346	25.0000	24.23(M)
70 Chlorobenzene	112	10.795	10.791	(1.003)	121146	25.0000	28.31
71 1,1,1,2-Tetrachloroethane	131	10.868	10.863	(1.010)	30012	25.0000	23.40(Q)
72 Ethylbenzene	106	10.911	10.894	(1.014)	66367	25.0000	28.05
73 m,p-XYLENE	106	11.038	11.009	(1.026)	82765	25.0000	28.34
74 Xylene-o	106	11.427	11.405	(1.062)	80493	25.0000	28.66
76 Styrene	104	11.458	11.423	(1.065)	116868	25.0000	26.29
77 Bromoform	173	11.640	11.618	(1.082)	11622	25.0000	26.03
78 Isopropylbenzene	105	11.792	11.776	(1.096)	206130	25.0000	28.28
79 Bromobenzene	156	12.127	12.092	(0.925)	42208	25.0000	25.95
81 n-Propylbenzene	120	12.206	12.183	(0.931)	56093	25.0000	27.65(Q)
82 2-Chlorotoluene	126	12.297	12.280	(0.938)	46029	25.0000	27.69(Q)
83 1,1,2,2-Tetrachloroethane	83	12.072	12.062	(1.122)	36266	25.0000	25.12
84 1,2,3-Trichloropropane	110	12.133	12.116	(0.926)	11989	25.0000	29.17(Q)
85 4-Chlorotoluene	126	12.419	12.390	(0.948)	41948	25.0000	25.87
86 1,3,5-Trimethylbenzene	105	12.370	12.353	(0.944)	159709	25.0000	26.99
87 tert-Butylbenzene	119	12.692	12.682	(0.968)	145386	25.0000	27.55
88 1,2,4-Trimethylbenzene	105	12.747	12.737	(0.973)	151638	25.0000	27.03
89 sec-Butylbenzene	105	12.917	12.907	(0.986)	218868	25.0000	28.26
90 4-Isopropyltoluene	119	13.063	13.047	(0.997)	173812	25.0000	28.98
91 1,3-Dichlorobenzene	146	13.045	13.035	(0.995)	67098	25.0000	25.43
94 n-Butylbenzene	91	13.513	13.466	(1.031)	158061	25.0000	28.40
93 1,4-Dichlorobenzene	146	13.130	13.120	(1.002)	100512	25.0000	31.99(M)
95 1,2-Dichlorobenzene	146	13.532	13.503	(1.032)	76619	25.0000	29.20
96 1,2-Dibromo-3-chloropropane	157	14.353	14.306	(1.095)	2325	25.0000	21.06(M)
97 1,2,4-Trichlorobenzene	180	15.216	15.145	(1.161)	15604	25.0000	36.98(QM)
98 Hexachlorobutadiene	225	15.307	15.285	(1.168)	22477	25.0000	29.70(Q)
99 Naphthalene	128	15.514	15.418	(1.184)	26626	25.0000	22.29(M)
100 1,2,3-Trichlorobenzene	180	15.727	15.686	(1.200)	12063	25.0000	38.74(QM)
156 Methyl Acetate	43	4.513	4.502	(0.588)	166085	125.000	135.6
157 Cyclohexane	56	7.000	7.002	(0.913)	113949	25.0000	28.37
158 Methyl Cyclohexane	83	8.259	8.266	(1.077)	92386	25.0000	27.68
32 Vinyl Acetate	43	5.748	5.725	(0.749)	67108	25.0000	27.41(M)
52 1,4-Dioxane	88	8.460	8.455	(1.006)	7026	500.000	447.5

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	21 tert-Butyl Alcohol	59	4.981	4.965	(1.026)	30411	250.000	254.4
	16 3-Chloro-1-propene	76	4.379	4.387	(0.571)	23599	25.0000	23.33(Q)
	11 Acrolein	56	3.674	3.675	(0.479)	115719	500.000	553.9
	22 Acrylonitrile	53	5.024	5.013	(0.655)	161602	250.000	264.2
	8 Ethyl Ether	59	3.473	3.481	(0.453)	42374	25.0000	27.61(M)
	62 Ethyl methacrylate	69	9.725	9.696	(0.904)	39482	25.0000	23.57(M)
	23 Hexane	57	5.401	5.409	(0.704)	89687	25.0000	28.91(M)
	14 Iodomethane	142	4.014	4.046	(0.523)	63483	25.0000	26.17(QM)
	44 Isobutanol	41	7.353	7.342	(0.959)	24187	625.000	685.4(M)
	155 N-Heptane	41	7.663	7.670	(0.999)	47268	25.0000	28.47
	35 Tetrahydrofuran	42	6.988	7.002	(0.911)	27733	50.0000	55.16
	164 trans-1,4-Dichloro-2-butene	53	12.206	12.140	(0.931)	7541	25.0000	21.58(M)
	169 Butadiene	39	2.160	2.161	(0.282)	66831	25.0000	28.93
M	75 Xylenes (total)	106				163258	50.0000	57.00

QC Flag Legend

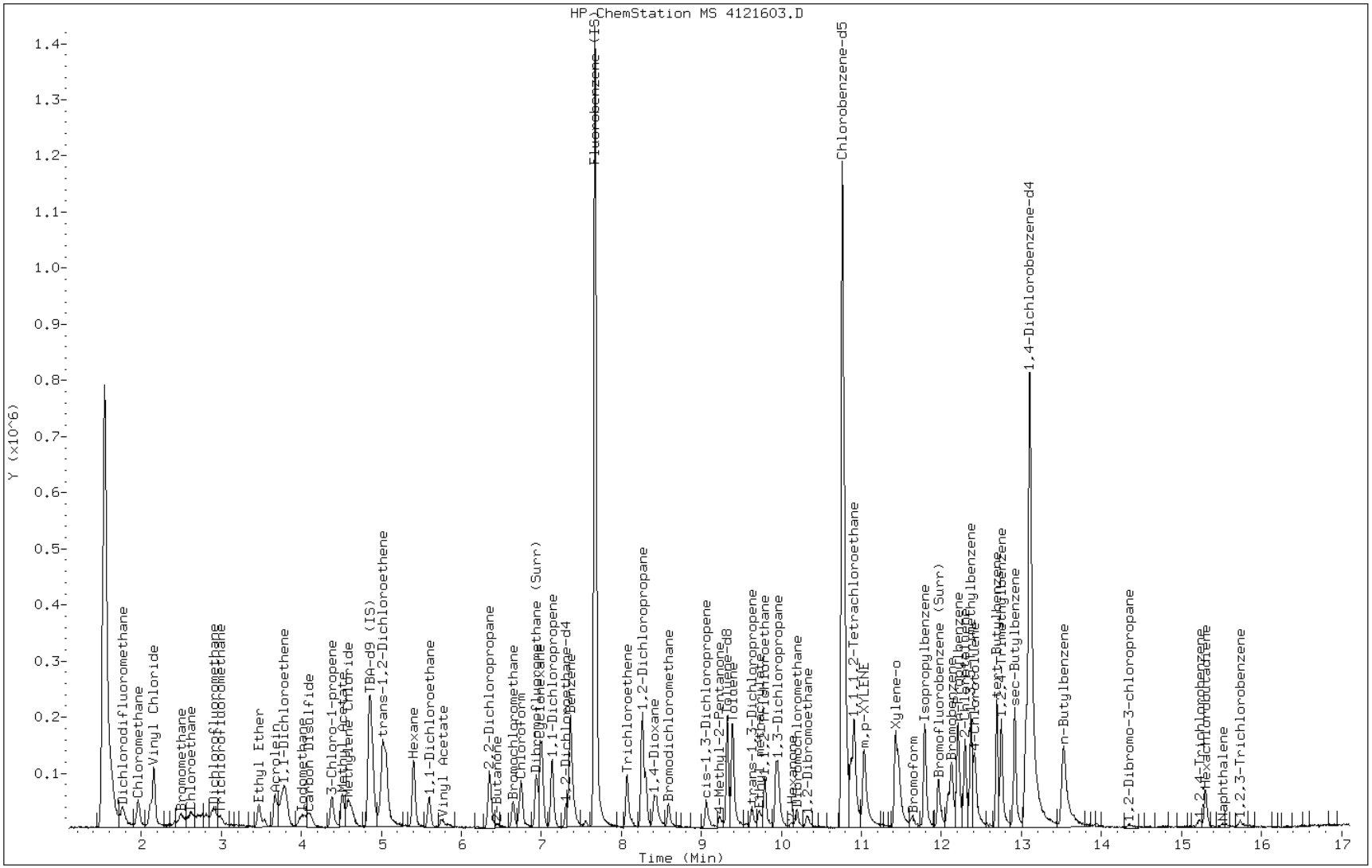
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 4121603.D

Date: 16-DEC-2013 11:04

Client ID: vstd5 Instrument: hp4.i

Sample Info: IC Operator: 034635



Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 1 Dichlorodifluoromethane
CAS #: 75-71-8
Report Date: 12/17/2013

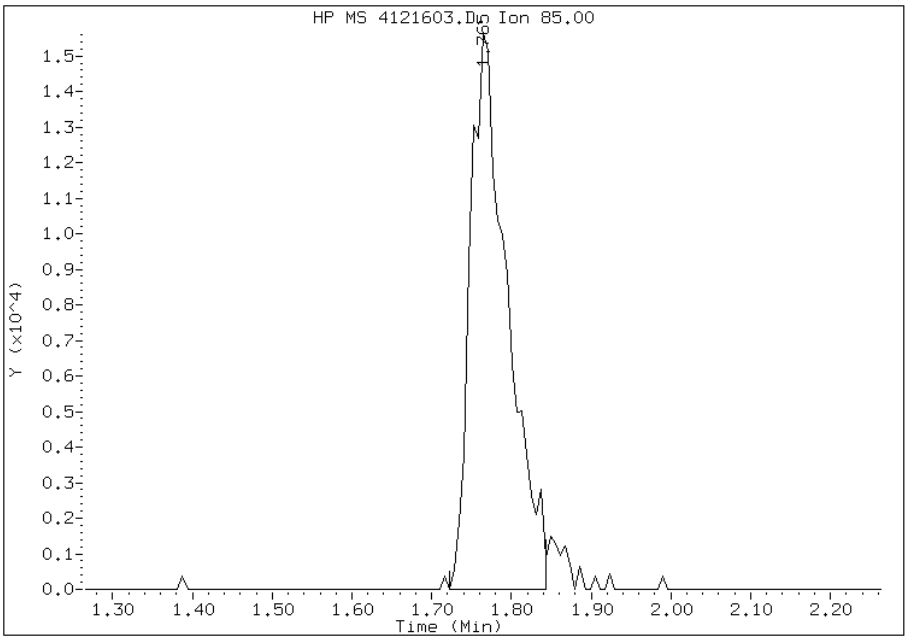
Processing Integration Results

RT: 1.76

Response: 51610

Amount: 25

Conc: 25



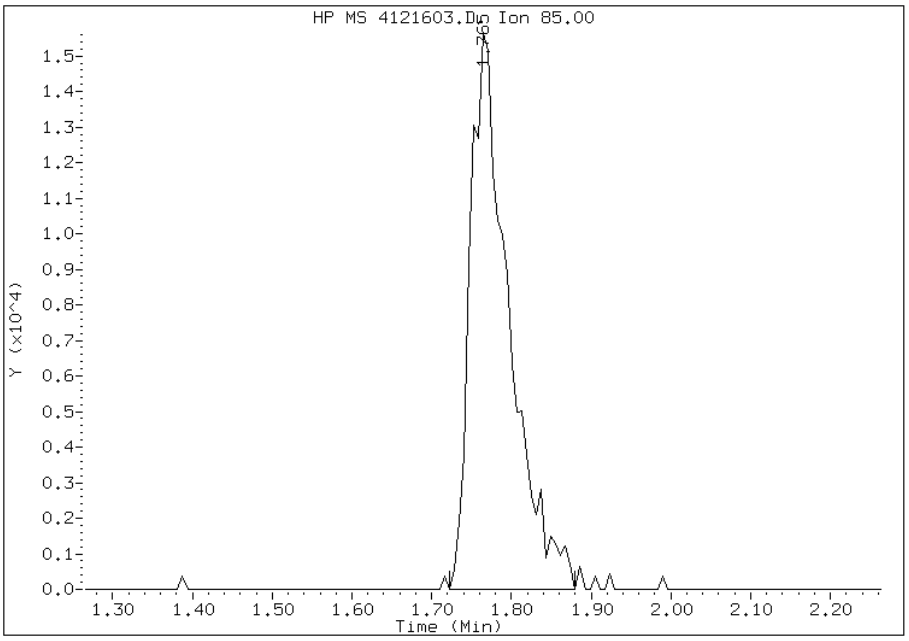
Manual Integration Results

RT: 1.76

Response: 53674

Amount: 27

Conc: 27



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:02
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 7 Dichlorofluoromethane
CAS #: 75-43-4
Report Date: 12/17/2013

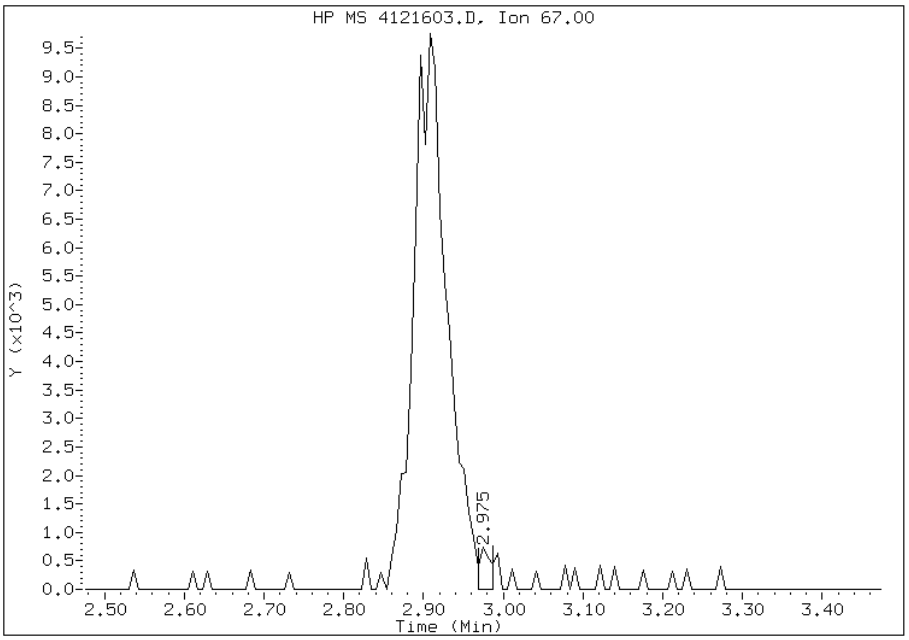
Processing Integration Results

RT: 2.97

Response: 776

Amount: 1

Conc: 1



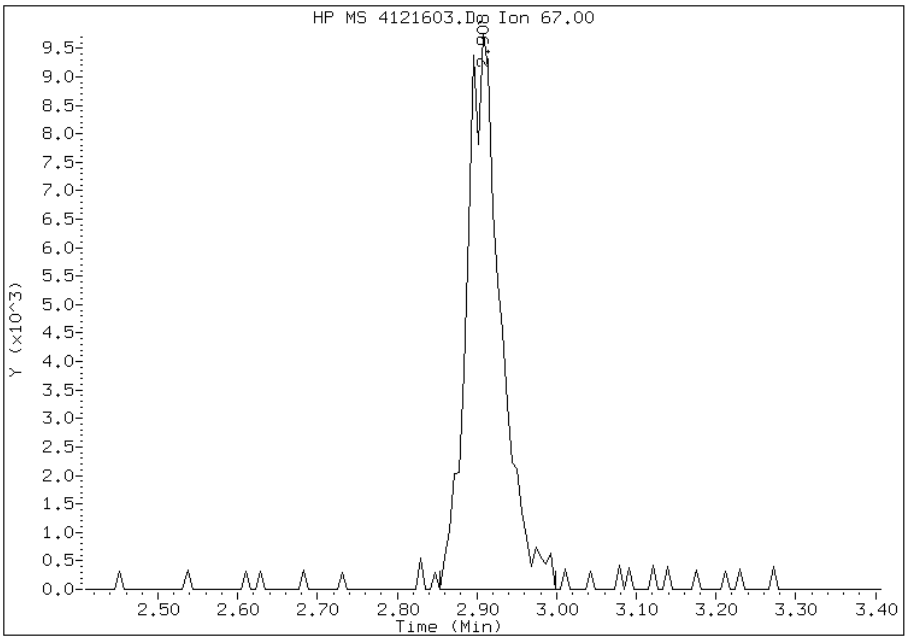
Manual Integration Results

RT: 2.91

Response: 29612

Amount: 26

Conc: 26



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:03
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 166 Trichlorofluoromethane
CAS #: 75-69-4
Report Date: 12/17/2013

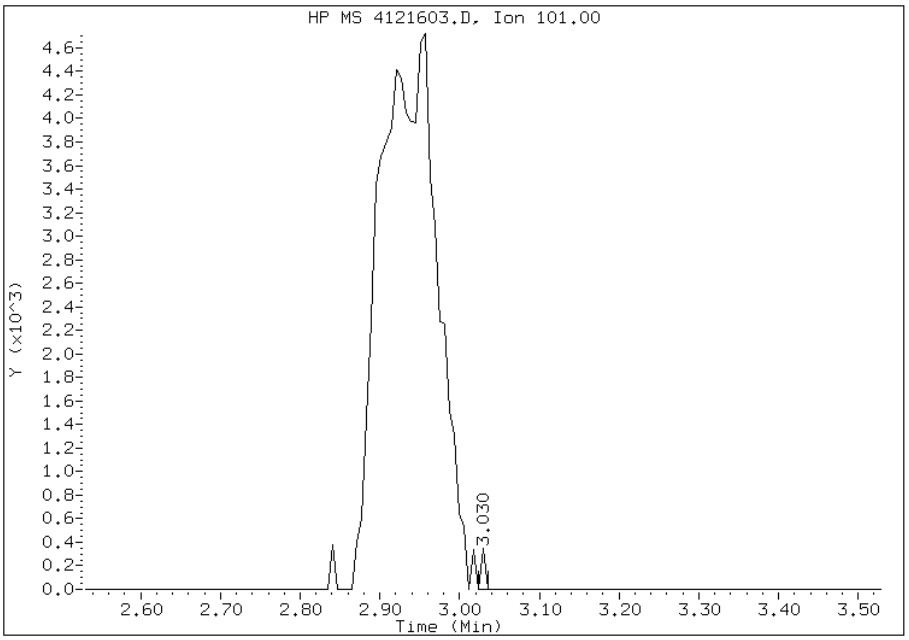
Processing Integration Results

RT: 3.03

Response: 127

Amount: 24

Conc: 24



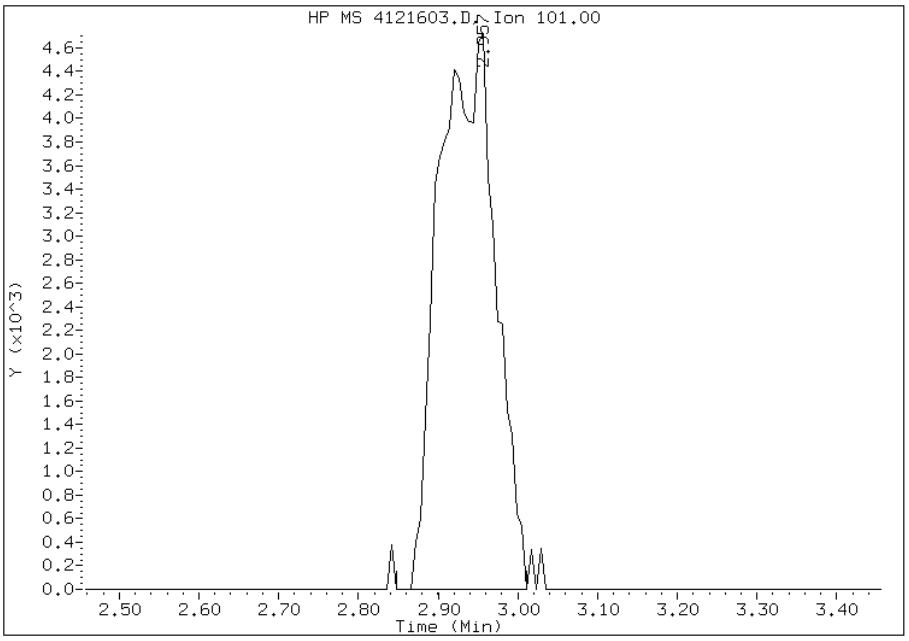
Manual Integration Results

RT: 2.96

Response: 23649

Amount: 24

Conc: 24



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:00
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 8 Ethyl Ether
CAS #: 60-29-7
Report Date: 12/17/2013

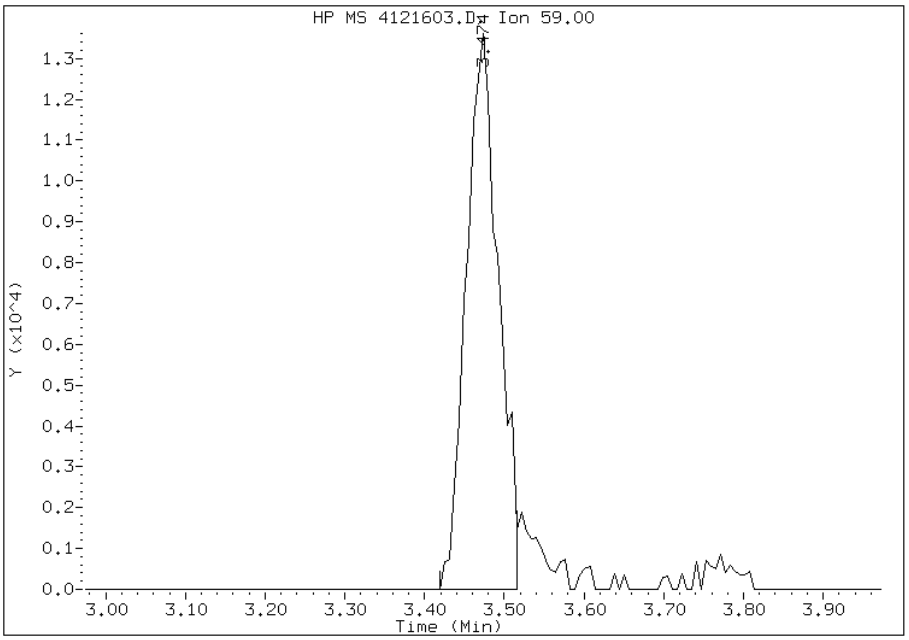
Processing Integration Results

RT: 3.47

Response: 38777

Amount: 24

Conc: 24



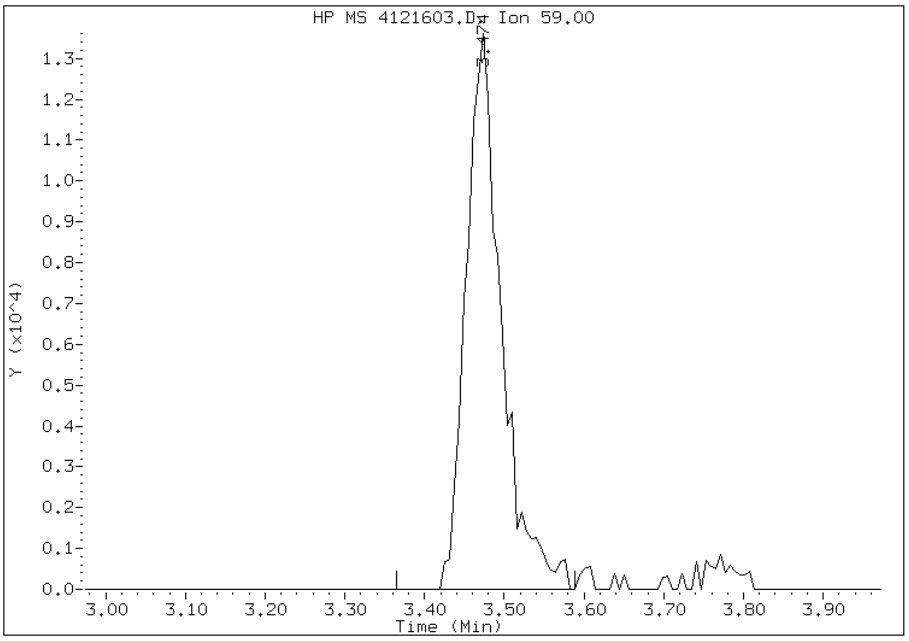
Manual Integration Results

RT: 3.47

Response: 42374

Amount: 28

Conc: 28



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:07
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 10 1,1,2-trichloro-1,2,2-trifluoro
CAS #: 76-13-1
Report Date: 12/17/2013

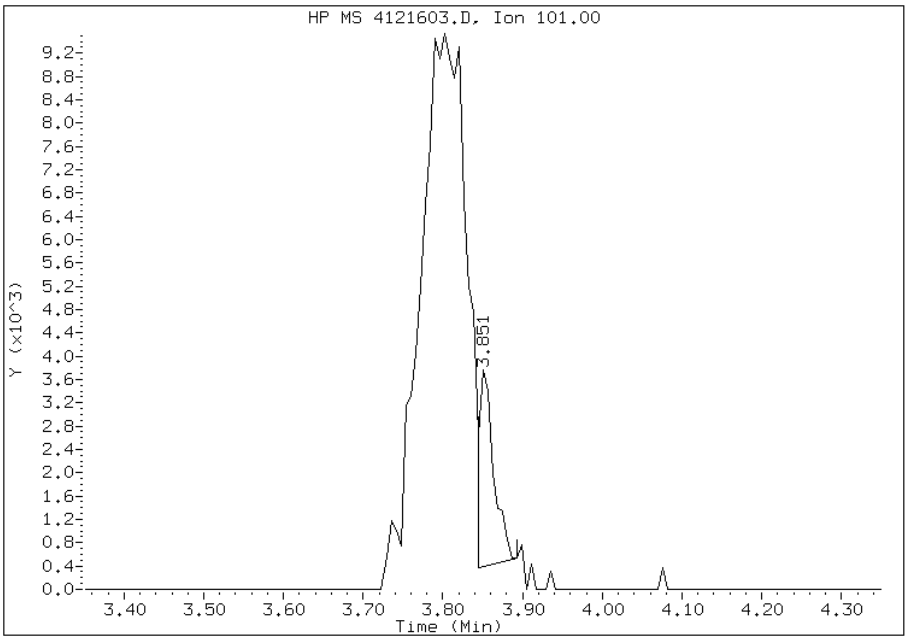
Processing Integration Results

RT: 3.85

Response: 3710

Amount: 0

Conc: 0



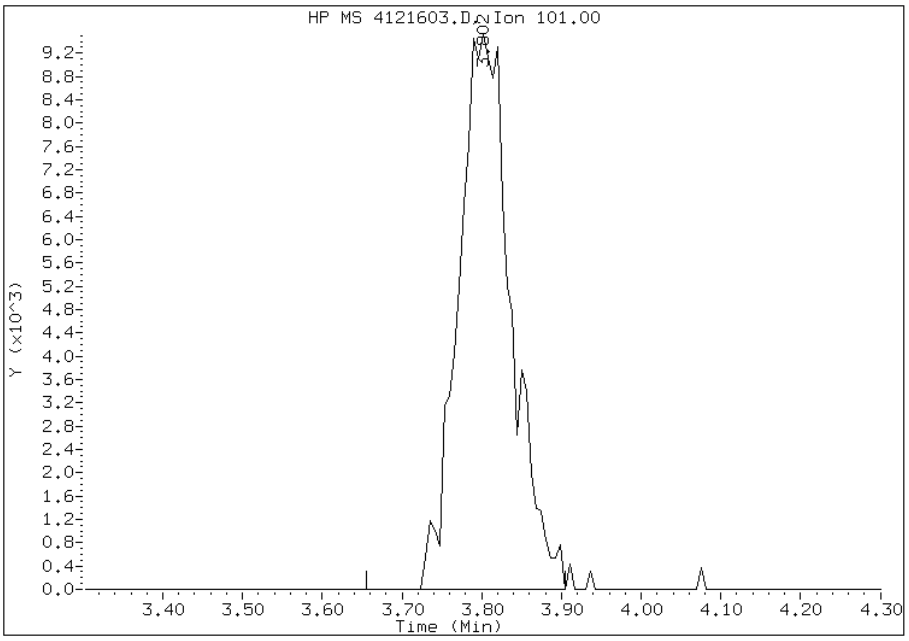
Manual Integration Results

RT: 3.80

Response: 44736

Amount: 26

Conc: 26



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 10:59
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 13 Acetone
CAS #: 67-64-1
Report Date: 12/17/2013

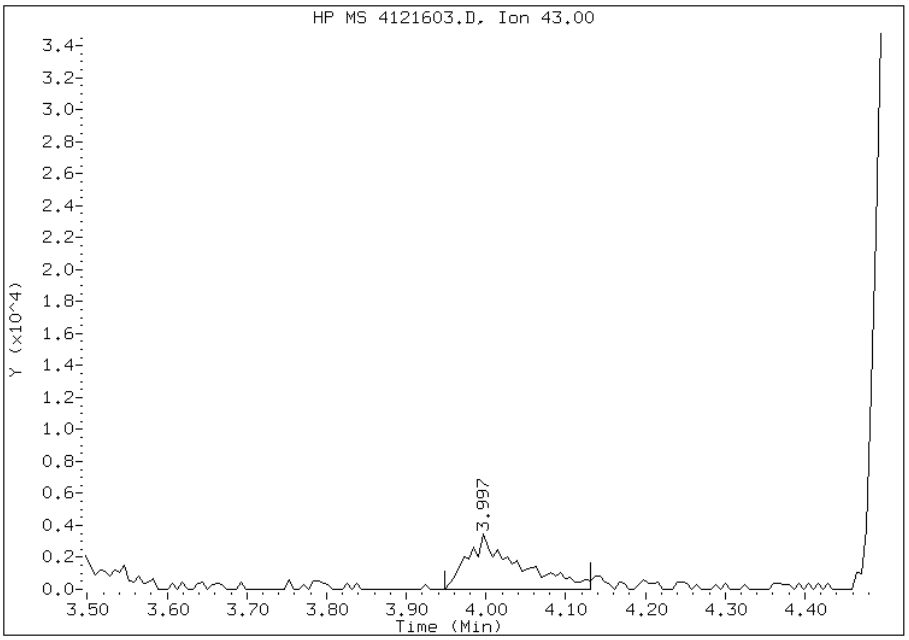
Processing Integration Results

RT: 4.00

Response: 15417

Amount: 30

Conc: 30



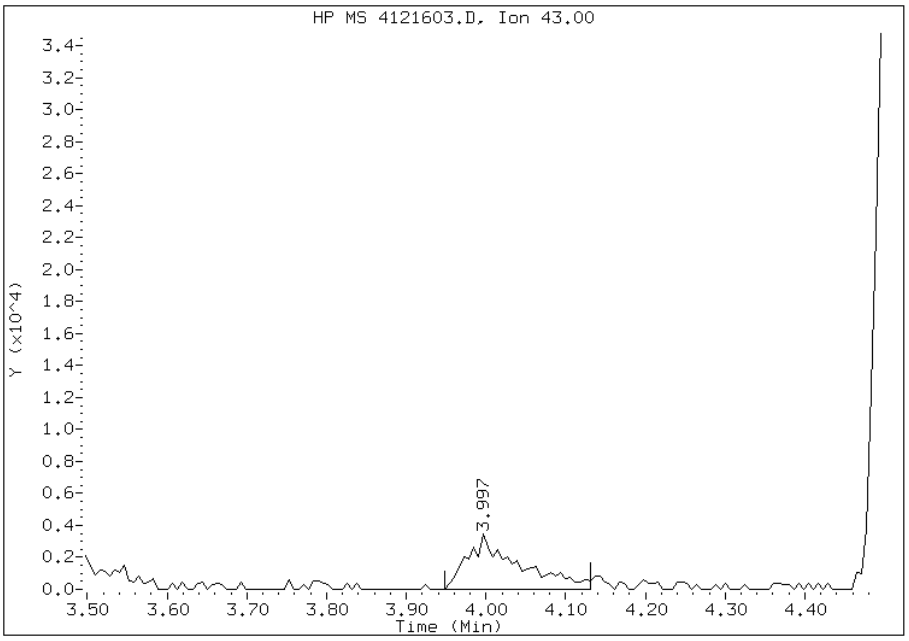
Manual Integration Results

RT: 4.00

Response: 15326

Amount: 30

Conc: 30



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 12:01
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 14 Iodomethane
CAS #: 74-88-4
Report Date: 12/17/2013

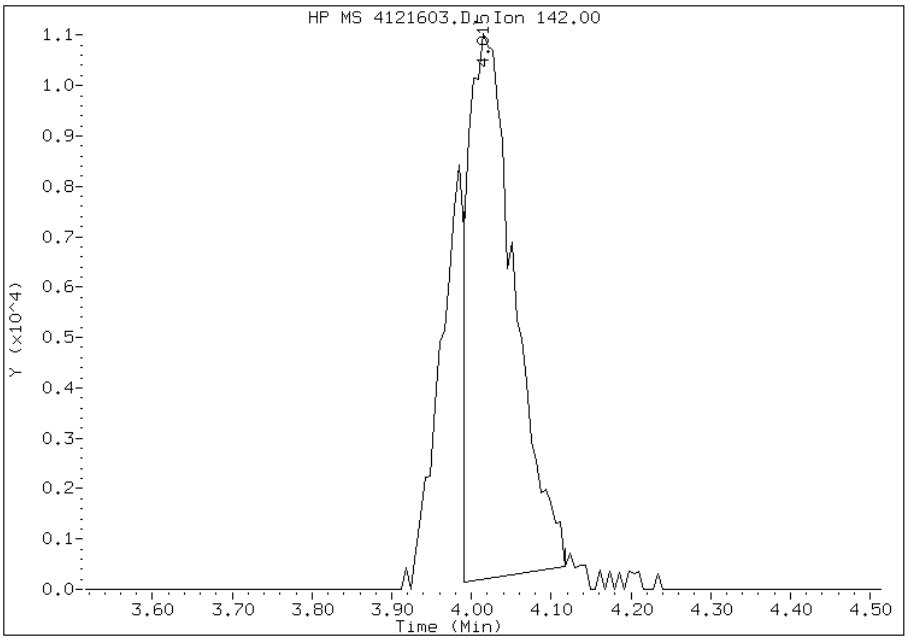
Processing Integration Results

RT: 4.01

Response: 42273

Amount: 20

Conc: 20



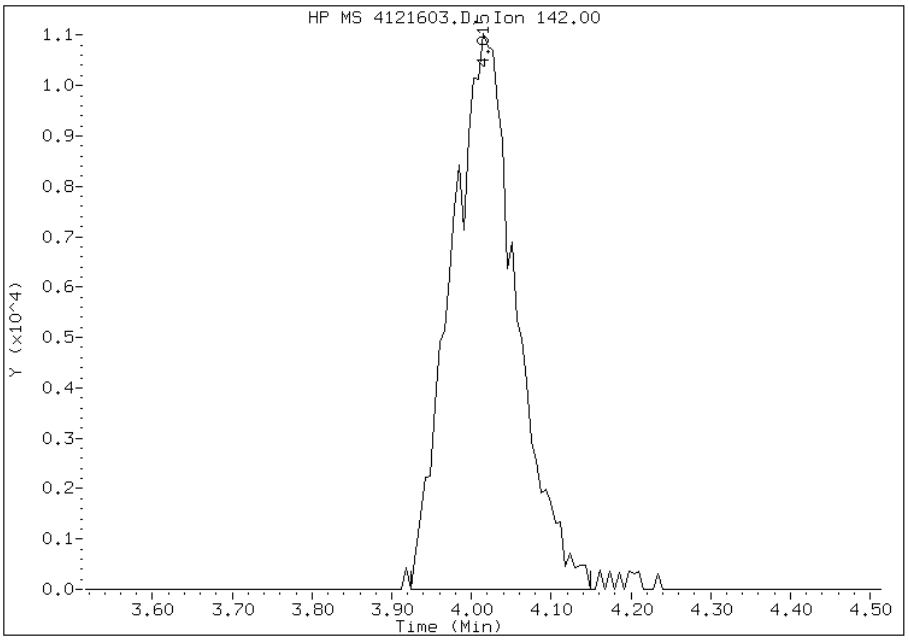
Manual Integration Results

RT: 4.01

Response: 63483

Amount: 26

Conc: 26



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:07
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 20 Methyl tert-butyl ether
CAS #: 1634-04-4
Report Date: 12/17/2013

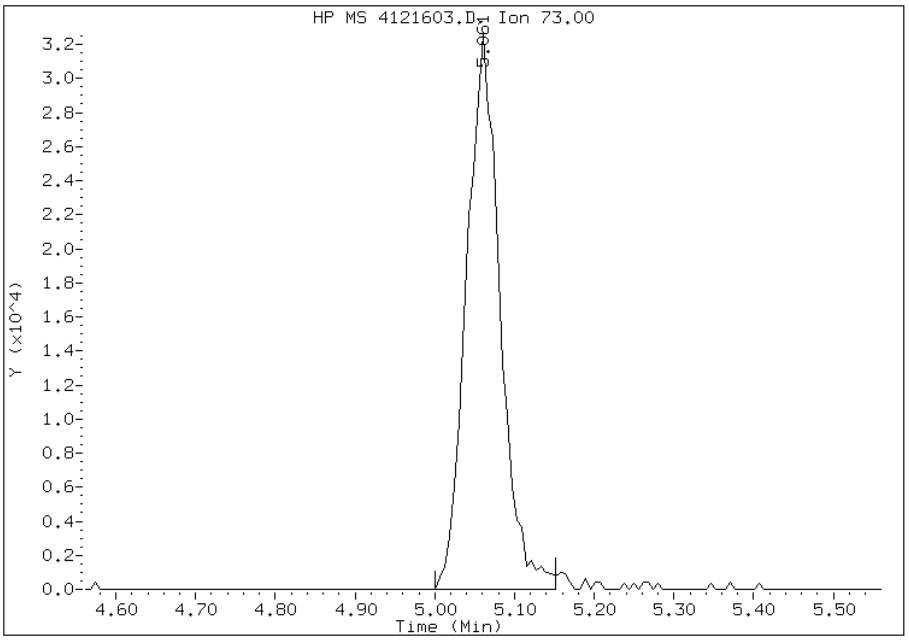
Processing Integration Results

RT: 5.06

Response: 96642

Amount: 24

Conc: 24



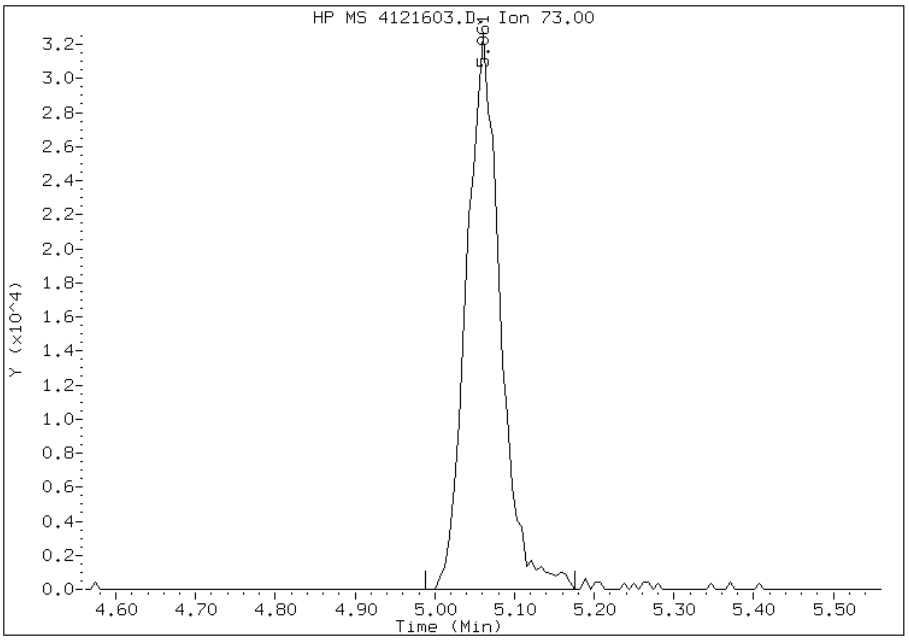
Manual Integration Results

RT: 5.06

Response: 97513

Amount: 27

Conc: 27



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:03
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 23 Hexane
CAS #: 110-54-3
Report Date: 12/17/2013

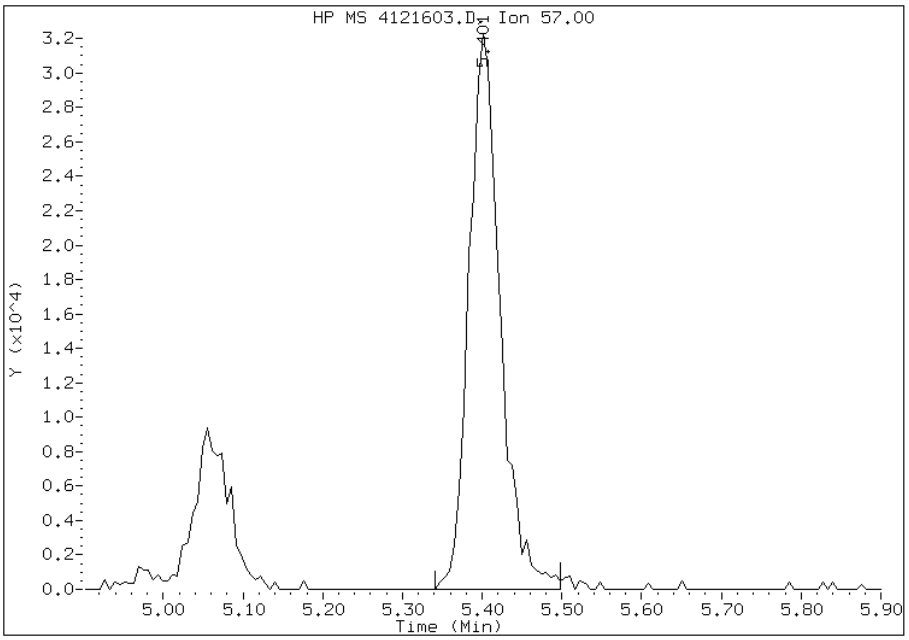
Processing Integration Results

RT: 5.40

Response: 89156

Amount: 25

Conc: 25



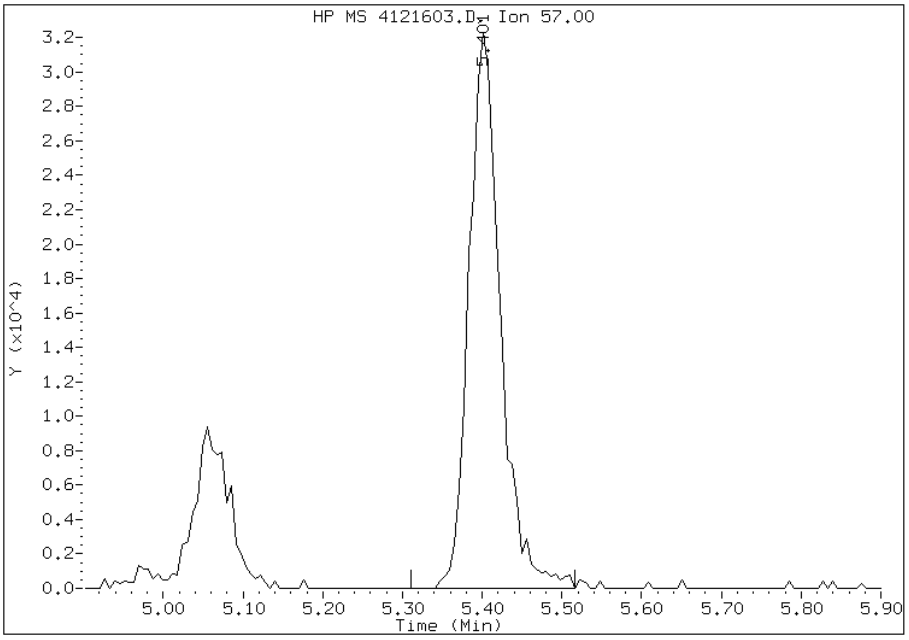
Manual Integration Results

RT: 5.40

Response: 89687

Amount: 29

Conc: 29



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:07
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 32 Vinyl Acetate
CAS #: 108-05-4
Report Date: 12/17/2013

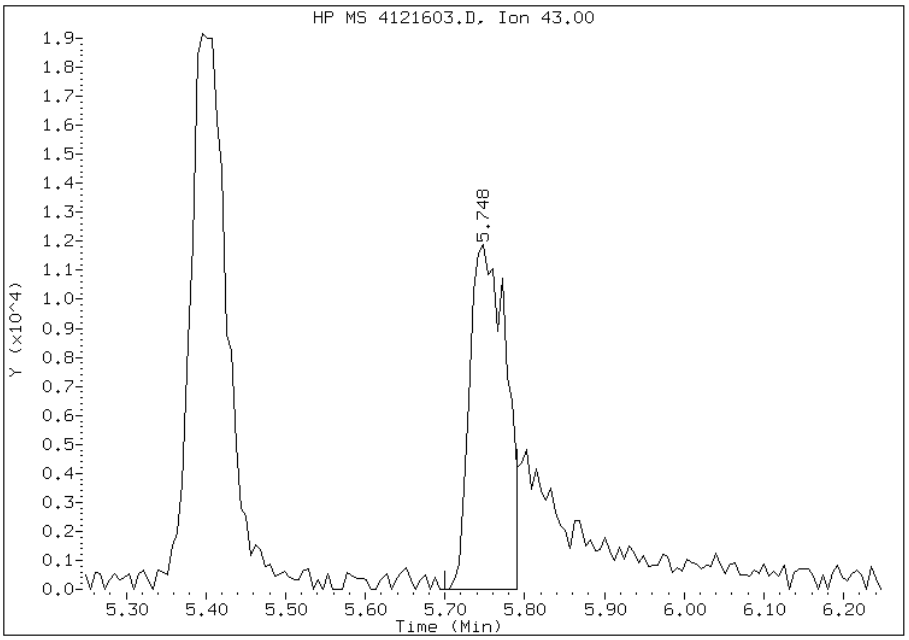
Processing Integration Results

RT: 5.75

Response: 38163

Amount: 20

Conc: 20



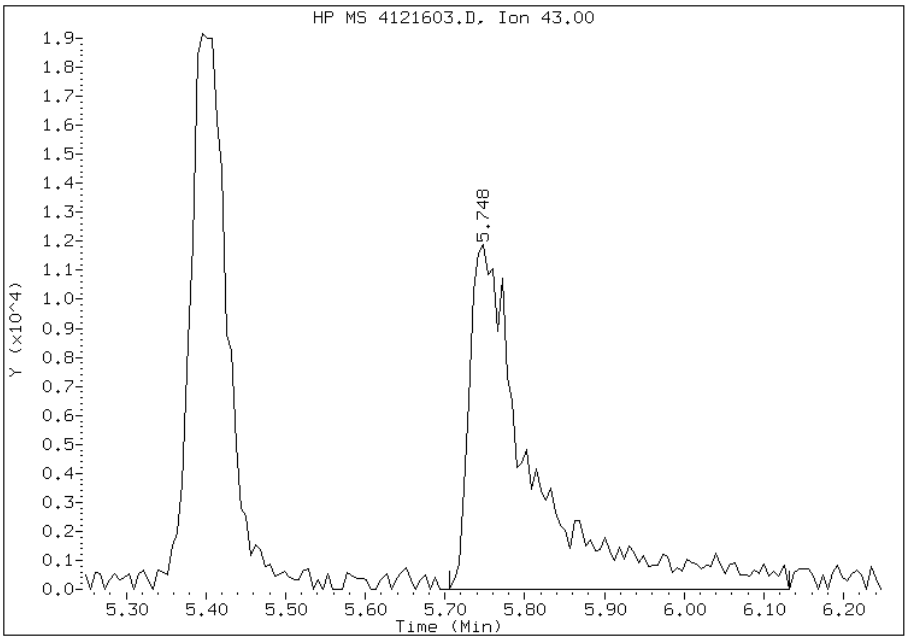
Manual Integration Results

RT: 5.75

Response: 67108

Amount: 27

Conc: 27



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:07
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 30 Bromochloromethane
CAS #: 74-97-5
Report Date: 12/17/2013

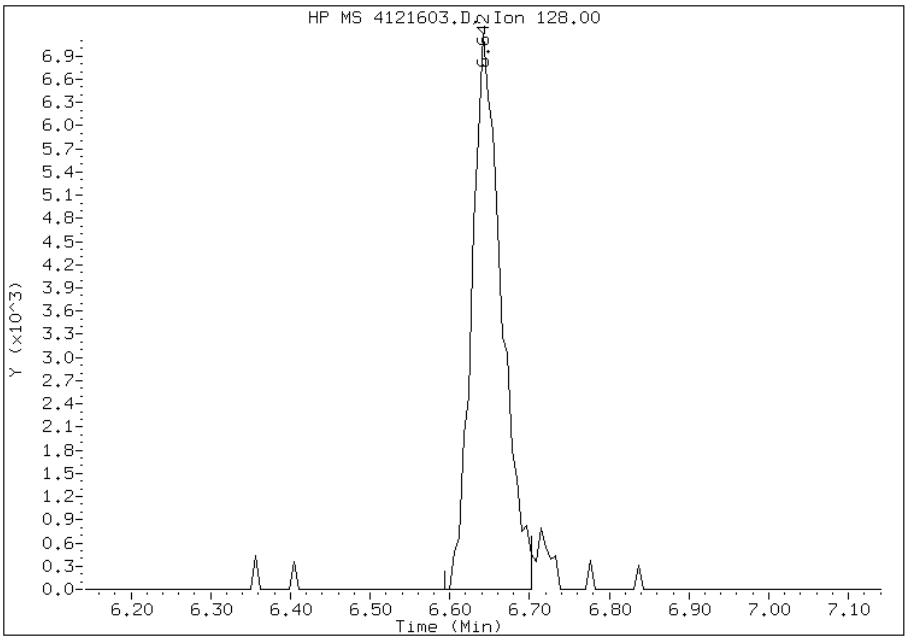
Processing Integration Results

RT: 6.64

Response: 18979

Amount: 24

Conc: 24



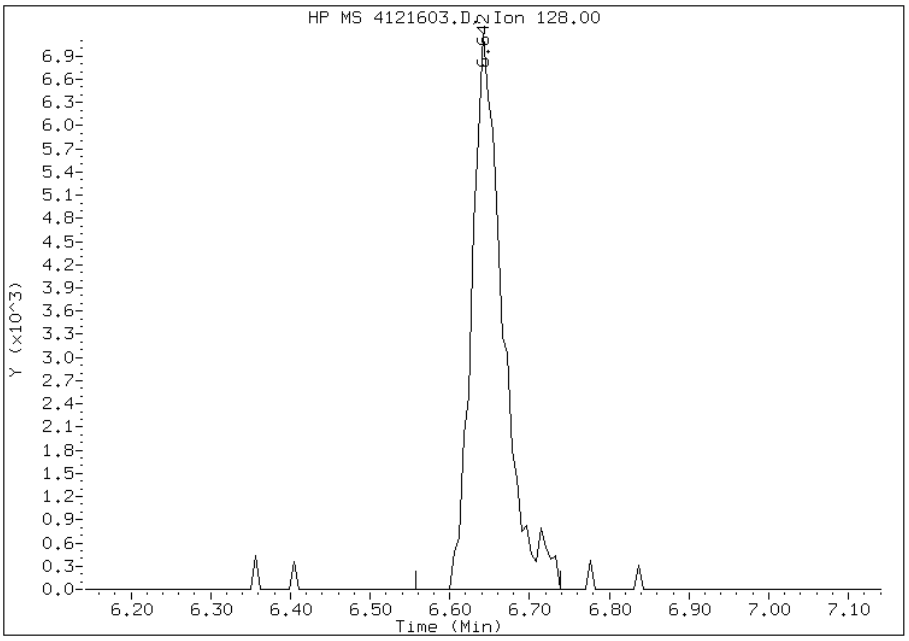
Manual Integration Results

RT: 6.64

Response: 19902

Amount: 25

Conc: 25



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:03
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 44 Isobutanol
CAS #: 78-83-1
Report Date: 12/17/2013

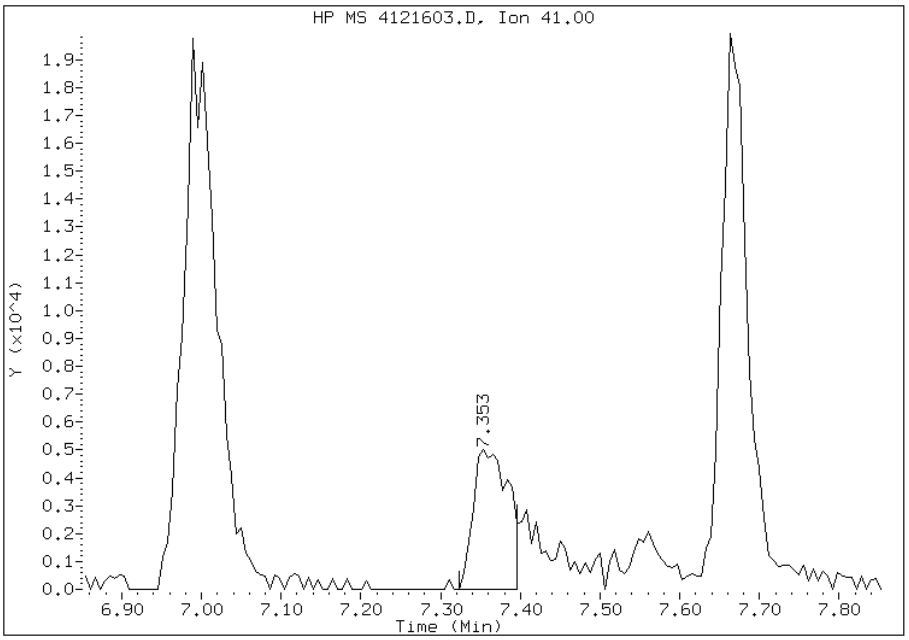
Processing Integration Results

RT: 7.35

Response: 15576

Amount: 498

Conc: 498



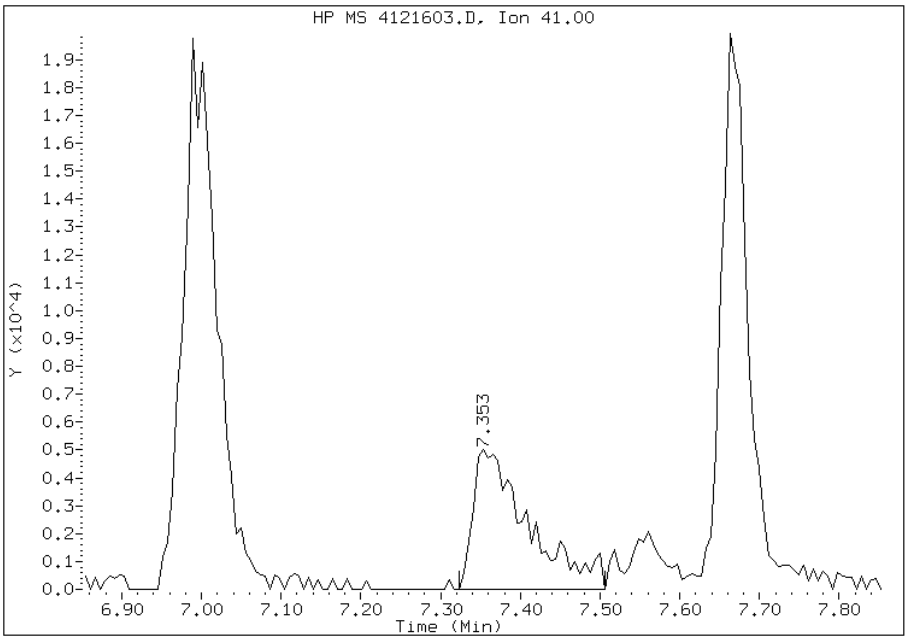
Manual Integration Results

RT: 7.35

Response: 24187

Amount: 685

Conc: 685



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:08
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 176 Dioxane-d8 (IS)
CAS #: 17647-74-4
Report Date: 12/17/2013

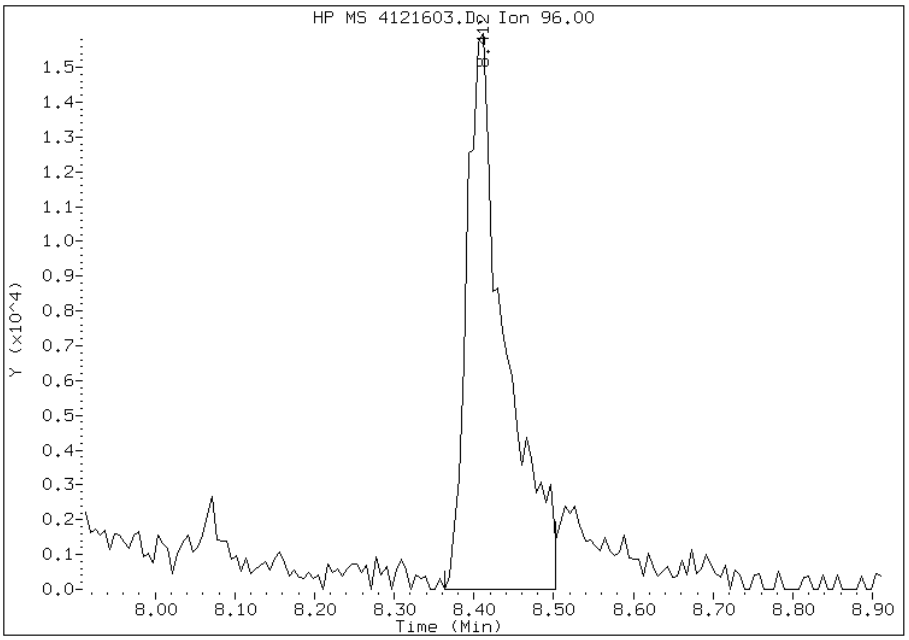
Processing Integration Results

RT: 8.41

Response: 54062

Amount: 5000

Conc: 5000



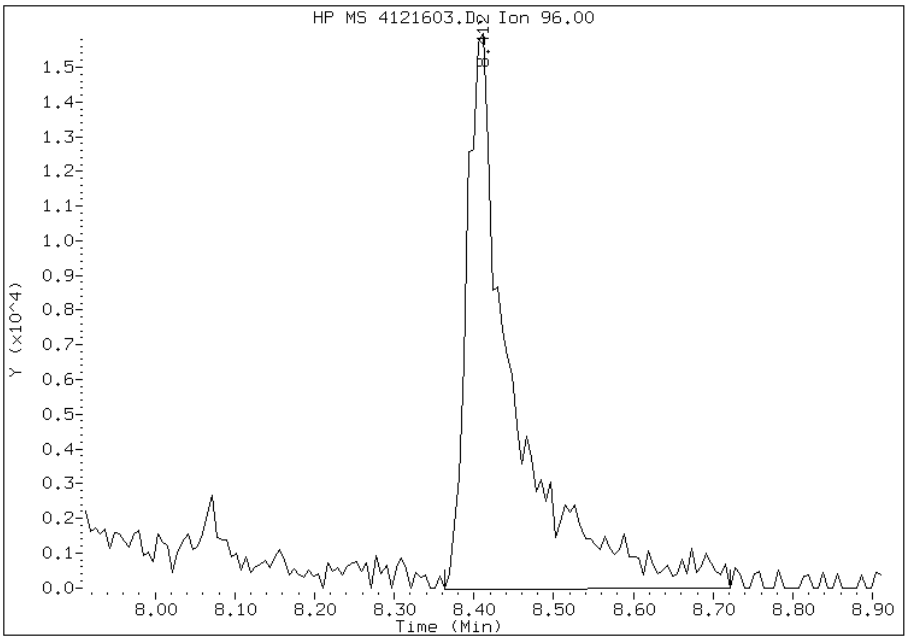
Manual Integration Results

RT: 8.41

Response: 67767

Amount: 5000

Conc: 5000



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 13:38
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 50 Dibromomethane
CAS #: 74-95-3
Report Date: 12/17/2013

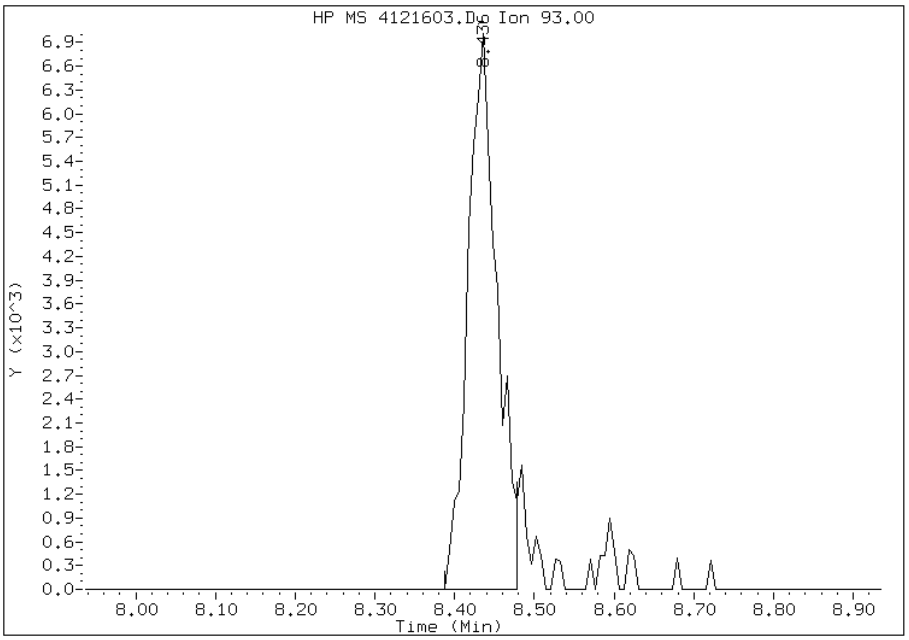
Processing Integration Results

RT: 8.44

Response: 18109

Amount: 23

Conc: 23



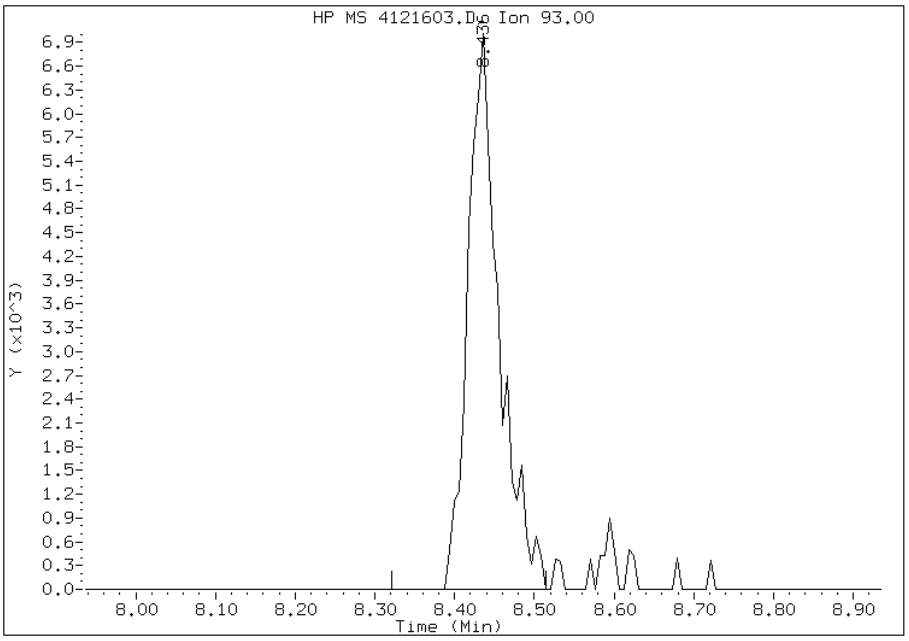
Manual Integration Results

RT: 8.44

Response: 19438

Amount: 24

Conc: 24



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:03
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 61 trans-1,3-Dichloropropene
CAS #: 10061-02-6
Report Date: 12/17/2013

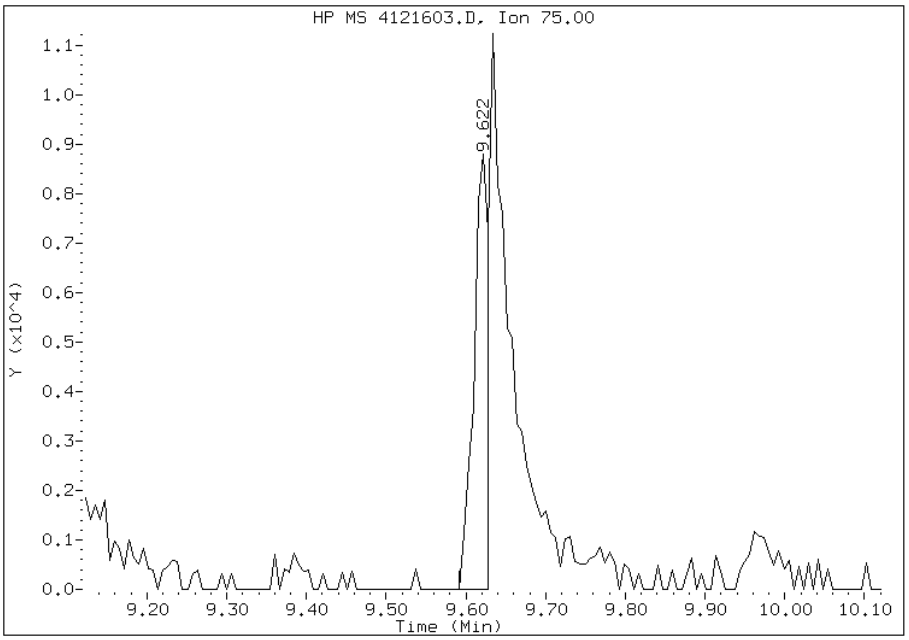
Processing Integration Results

RT: 9.62

Response: 11384

Amount: 12

Conc: 12



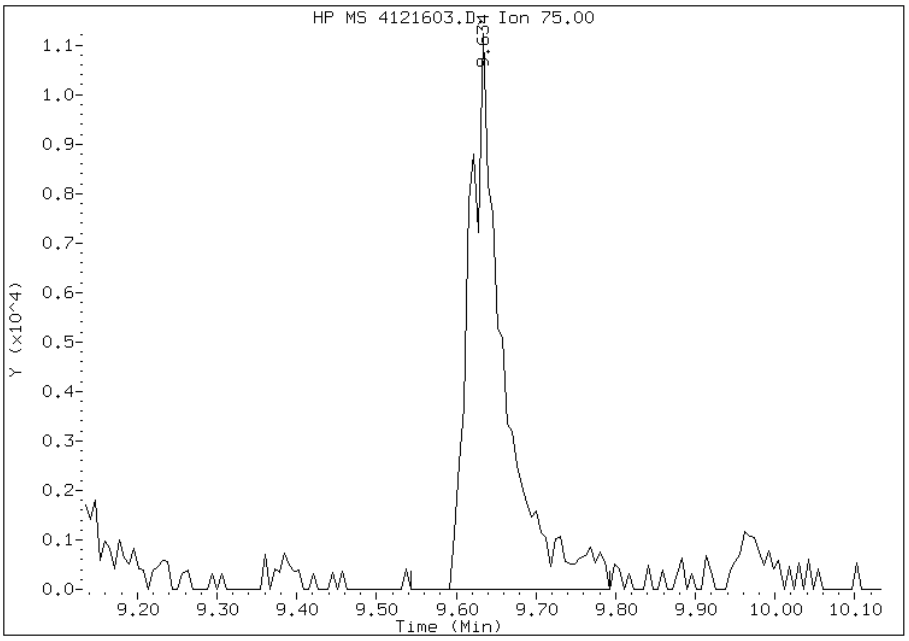
Manual Integration Results

RT: 9.63

Response: 34584

Amount: 21

Conc: 21



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:00
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 62 Ethyl methacrylate
CAS #: 97-63-2
Report Date: 12/17/2013

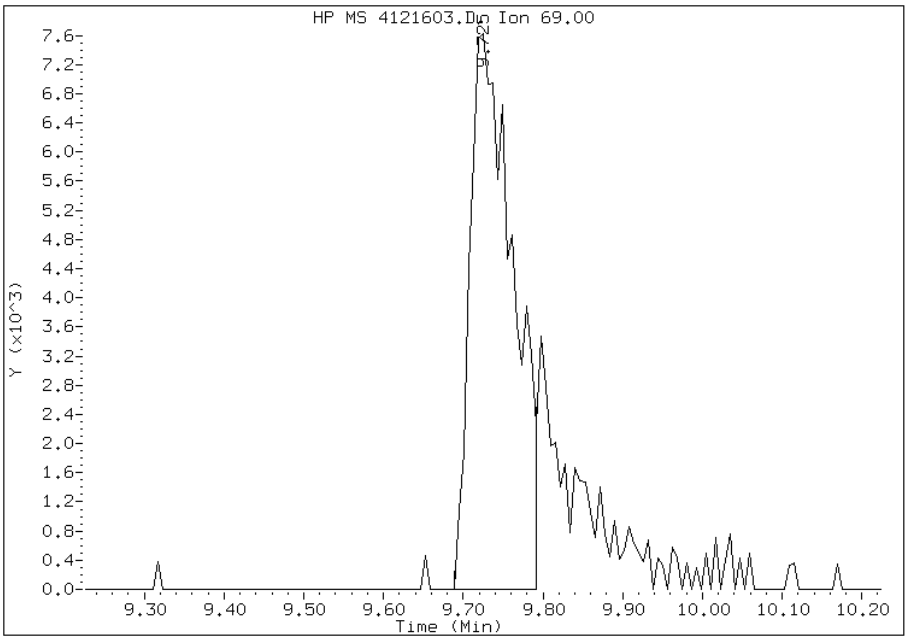
Processing Integration Results

RT: 9.73

Response: 29236

Amount: 21

Conc: 21



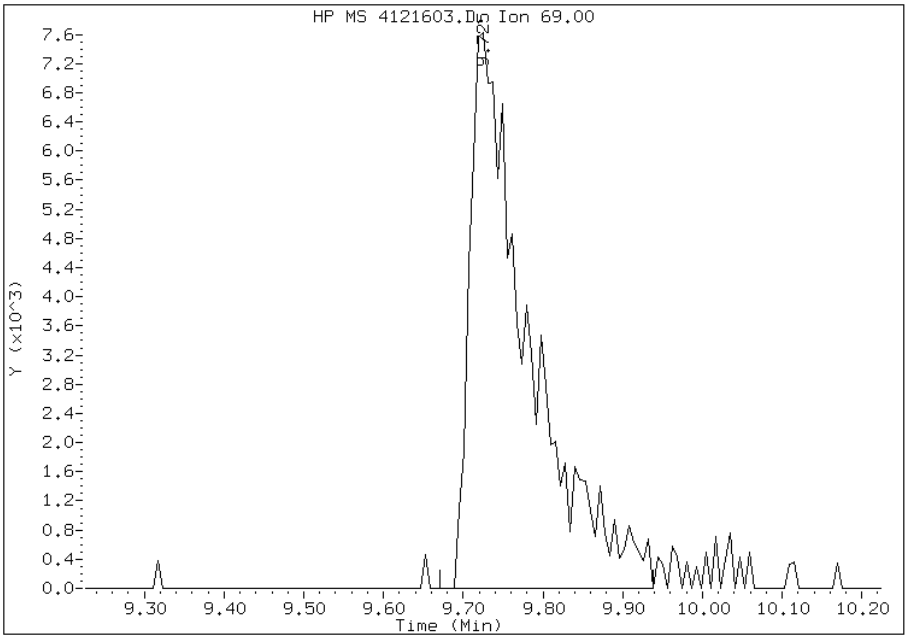
Manual Integration Results

RT: 9.73

Response: 39482

Amount: 24

Conc: 24



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:07
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 66 2-Hexanone
CAS #: 591-78-6
Report Date: 12/17/2013

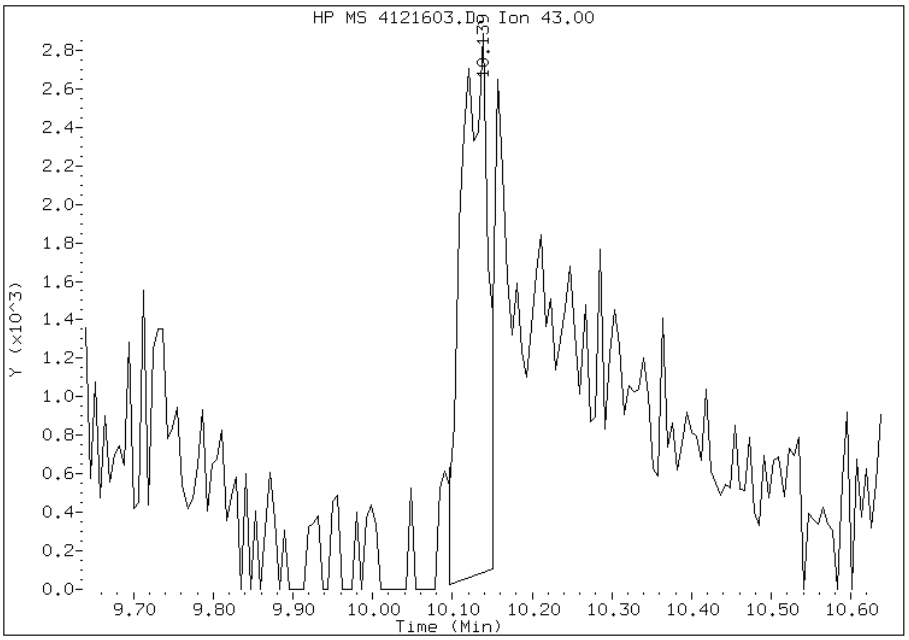
Processing Integration Results

RT: 10.14

Response: 6725

Amount: 25

Conc: 25



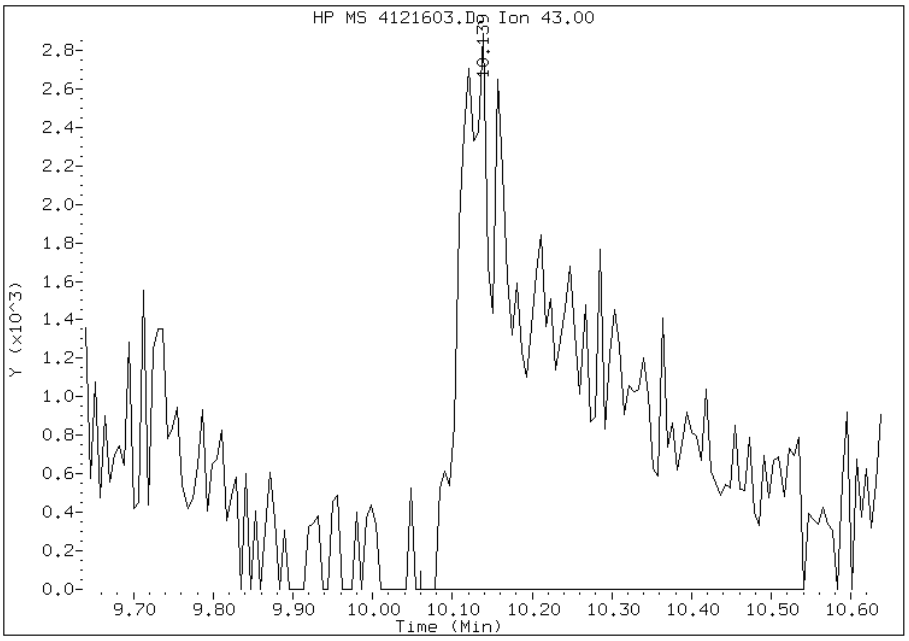
Manual Integration Results

RT: 10.14

Response: 30939

Amount: 37

Conc: 37



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:01
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 68 1,2-Dibromoethane
CAS #: 106-93-4
Report Date: 12/17/2013

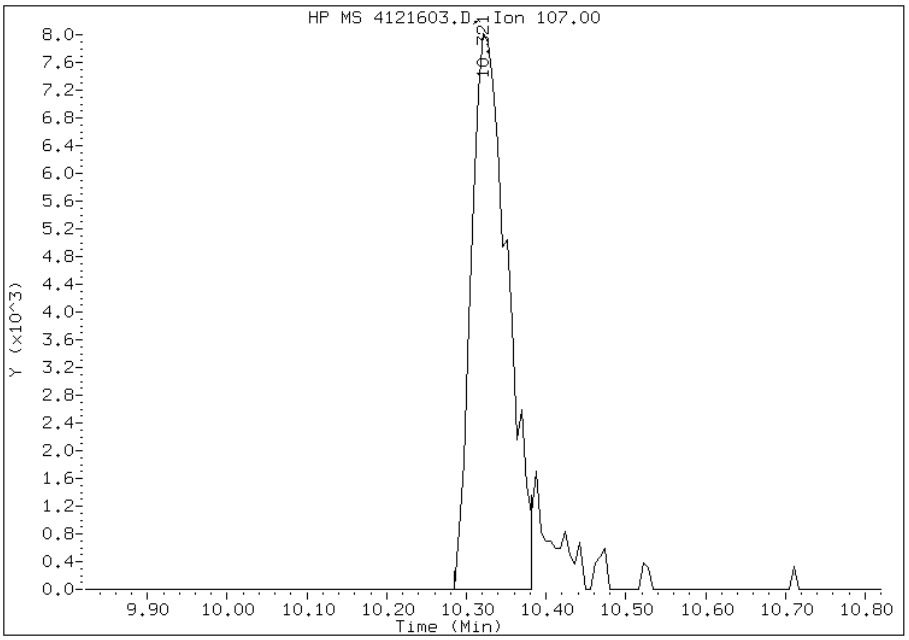
Processing Integration Results

RT: 10.32

Response: 25613

Amount: 23

Conc: 23



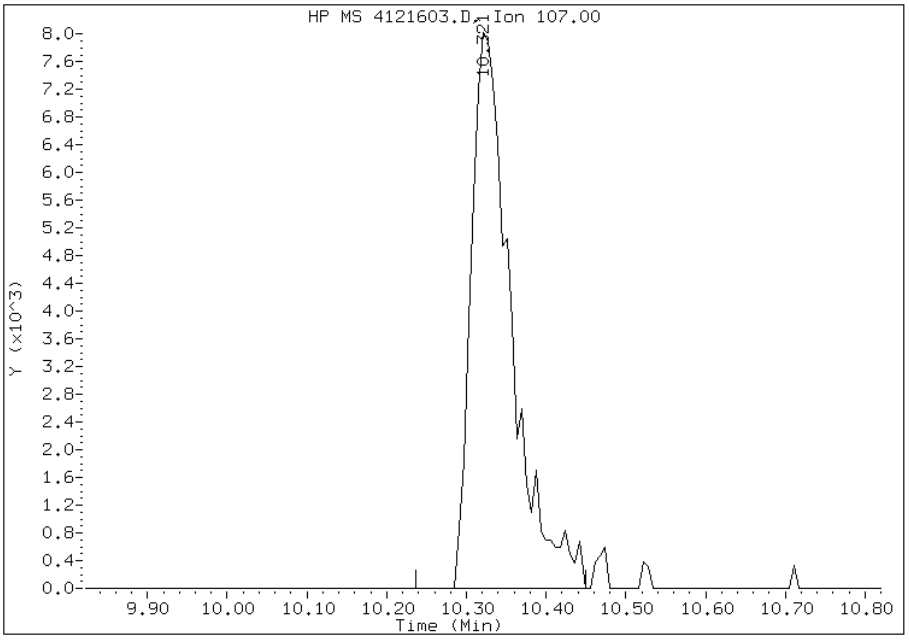
Manual Integration Results

RT: 10.32

Response: 28346

Amount: 24

Conc: 24



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:03
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 164 trans-1,4-Dichloro-2-butene
CAS #: 110-57-6
Report Date: 12/17/2013

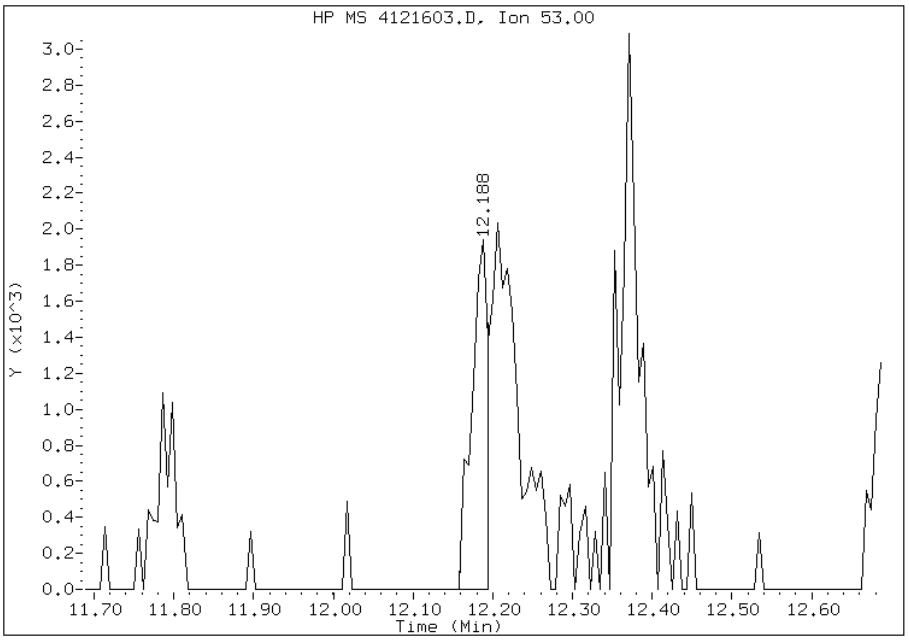
Processing Integration Results

RT: 12.19

Response: 2777

Amount: 25

Conc: 25



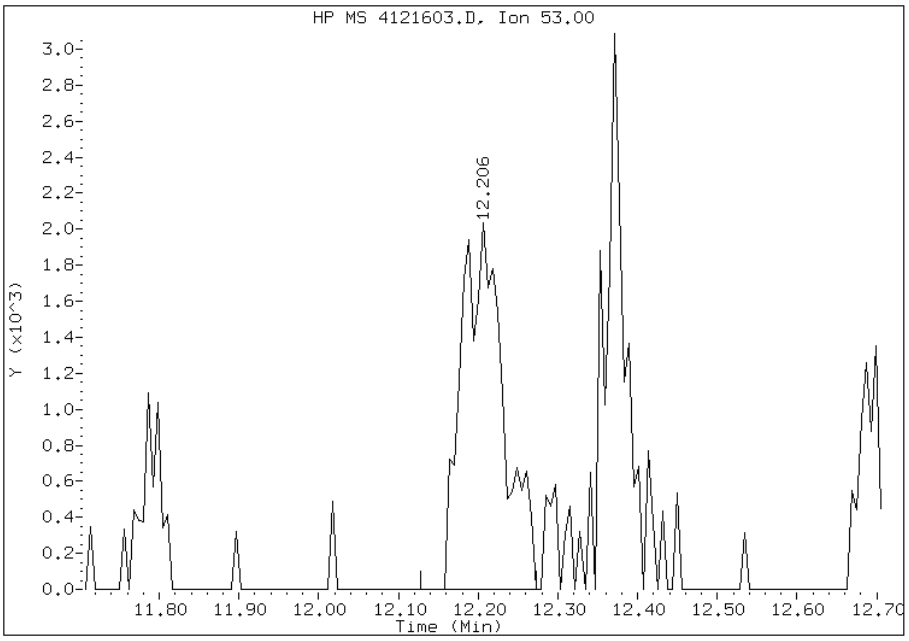
Manual Integration Results

RT: 12.21

Response: 7541

Amount: 22

Conc: 22



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:08
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 93 1,4-Dichlorobenzene
CAS #: 106-46-7
Report Date: 12/17/2013

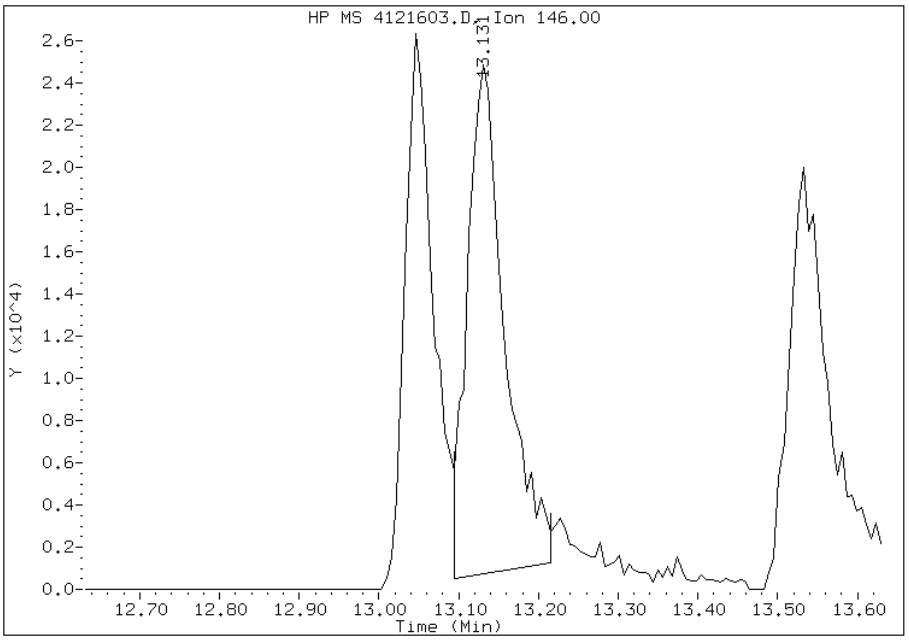
Processing Integration Results

RT: 13.13

Response: 78645

Amount: 25

Conc: 25



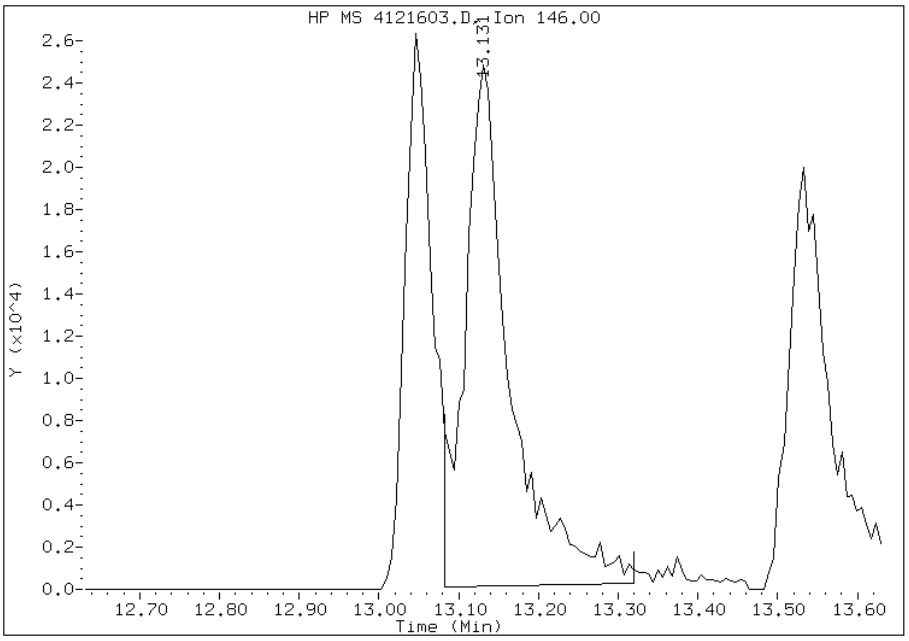
Manual Integration Results

RT: 13.13

Response: 100512

Amount: 32

Conc: 32



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:04
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 96 1,2-Dibromo-3-chloropropane
CAS #: 96-12-8
Report Date: 12/17/2013

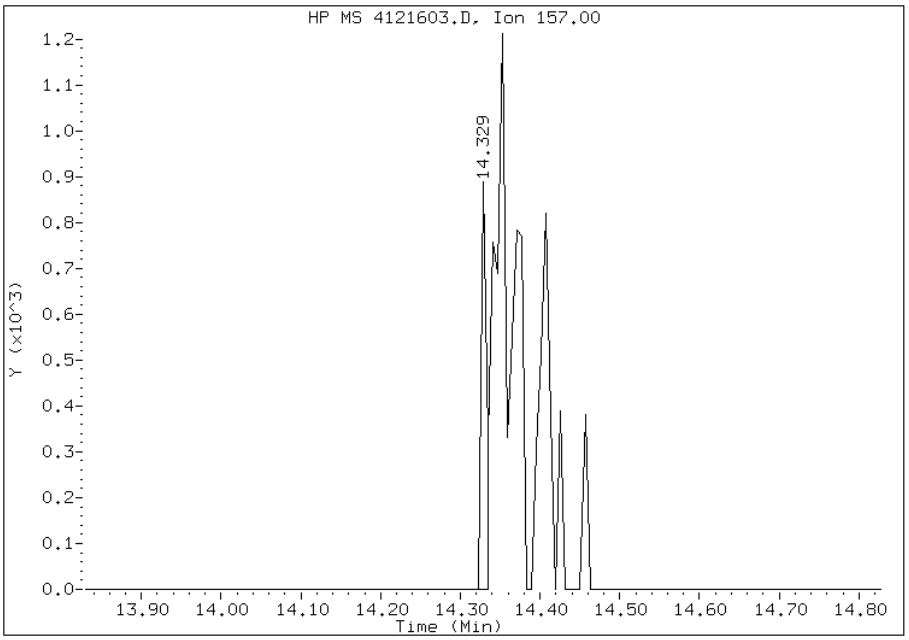
Processing Integration Results

RT: 14.33

Response: 442

Amount: 25

Conc: 25



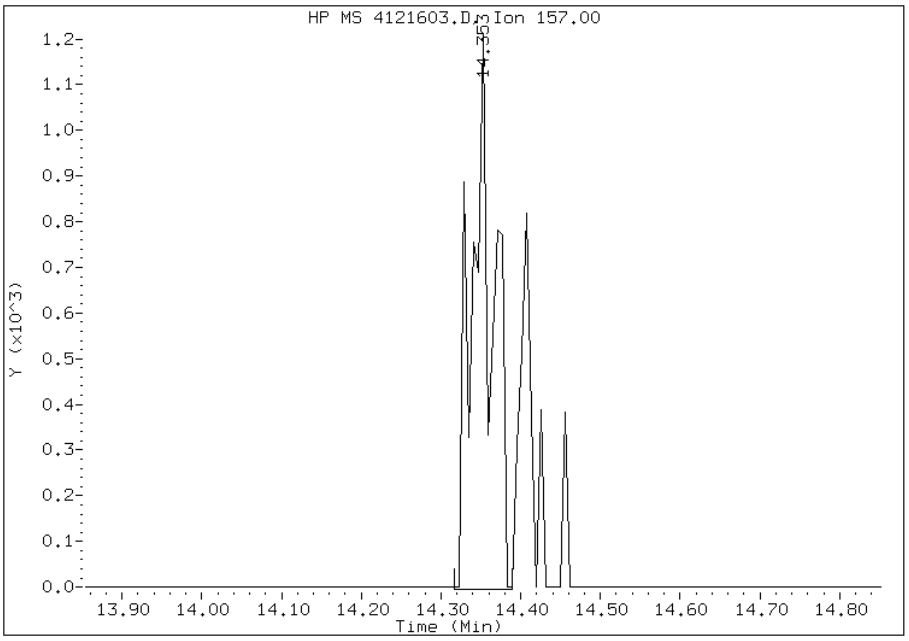
Manual Integration Results

RT: 14.35

Response: 2325

Amount: 21

Conc: 21



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:04
Manual Integration Reason:

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 97 1,2,4-Trichlorobenzene
CAS #: 120-82-1
Report Date: 12/17/2013

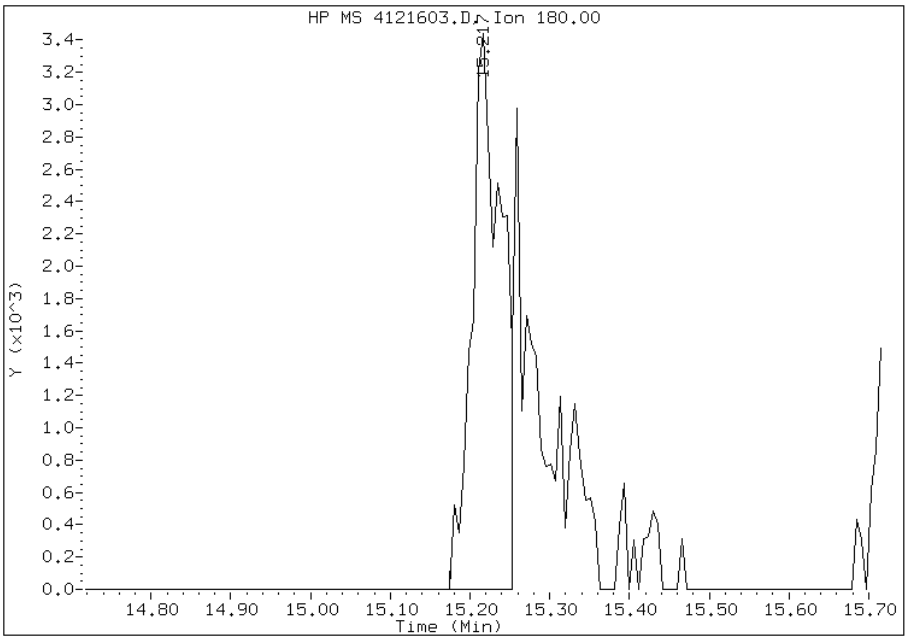
Processing Integration Results

RT: 15.22

Response: 9123

Amount: 25

Conc: 25



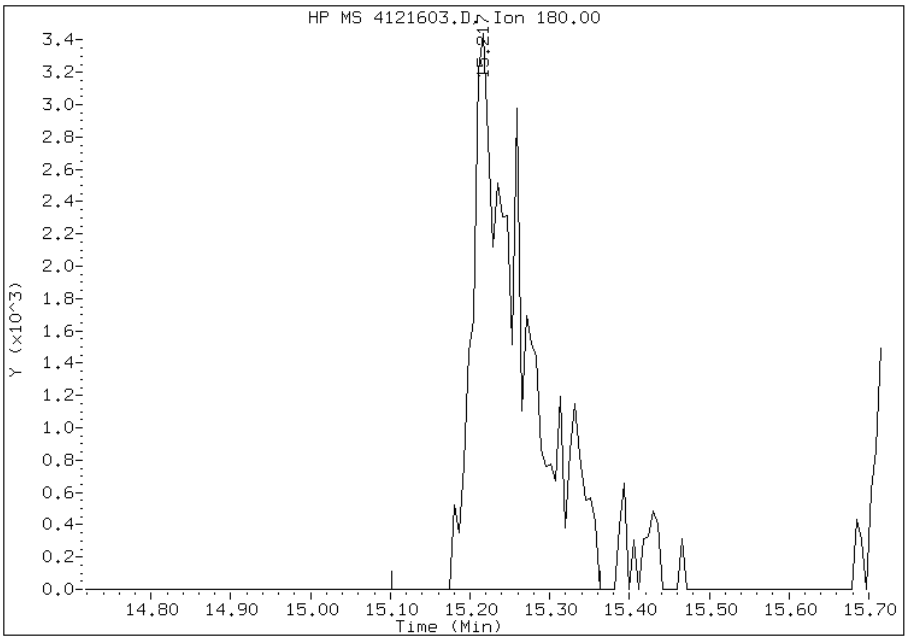
Manual Integration Results

RT: 15.22

Response: 15604

Amount: 37

Conc: 37



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:04
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 99 Naphthalene
CAS #: 91-20-3
Report Date: 12/17/2013

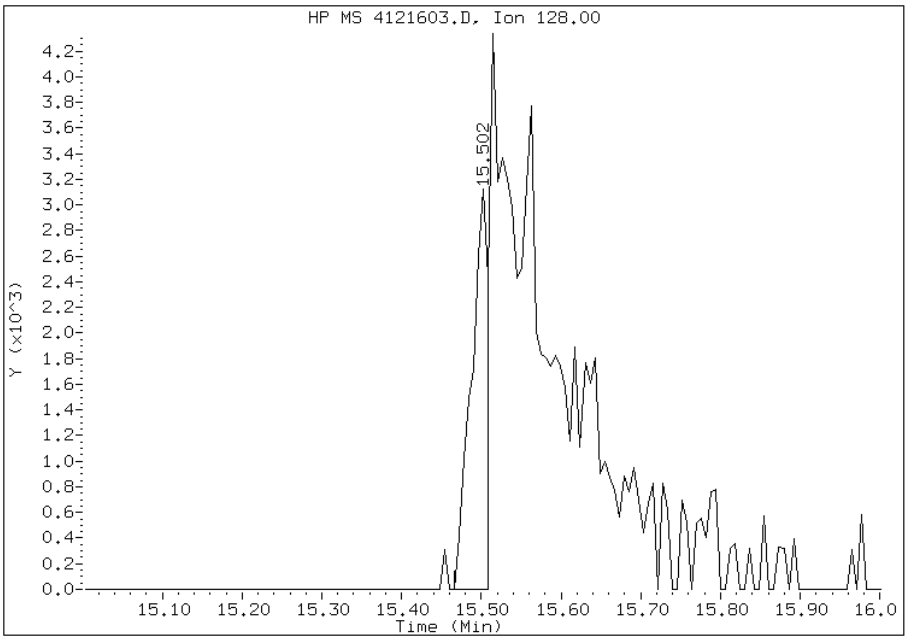
Processing Integration Results

RT: 15.50

Response: 4665

Amount: 25

Conc: 25



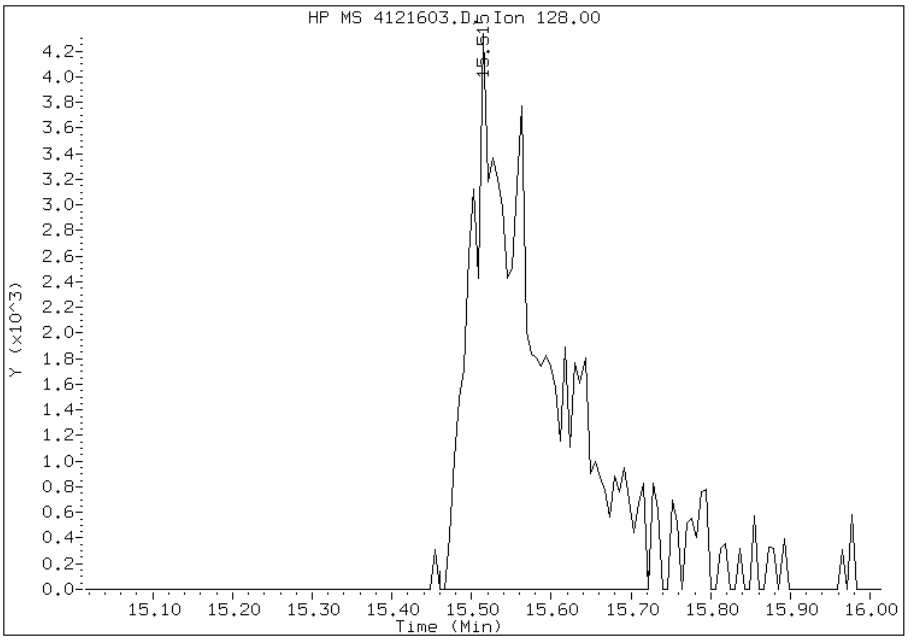
Manual Integration Results

RT: 15.51

Response: 26626

Amount: 22

Conc: 22



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:13
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121603.D
Inj. Date and Time: 16-DEC-2013 11:04
Instrument ID: hp4.i
Client ID: vstd5
Compound: 100 1,2,3-Trichlorobenzene
CAS #: 87-61-6
Report Date: 12/17/2013

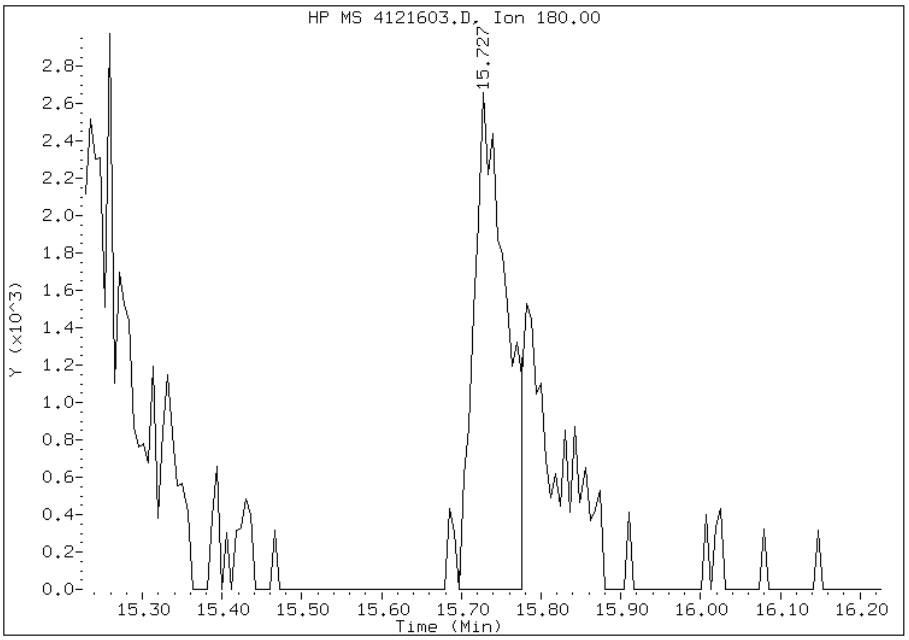
Processing Integration Results

RT: 15.73

Response: 7699

Amount: 25

Conc: 25



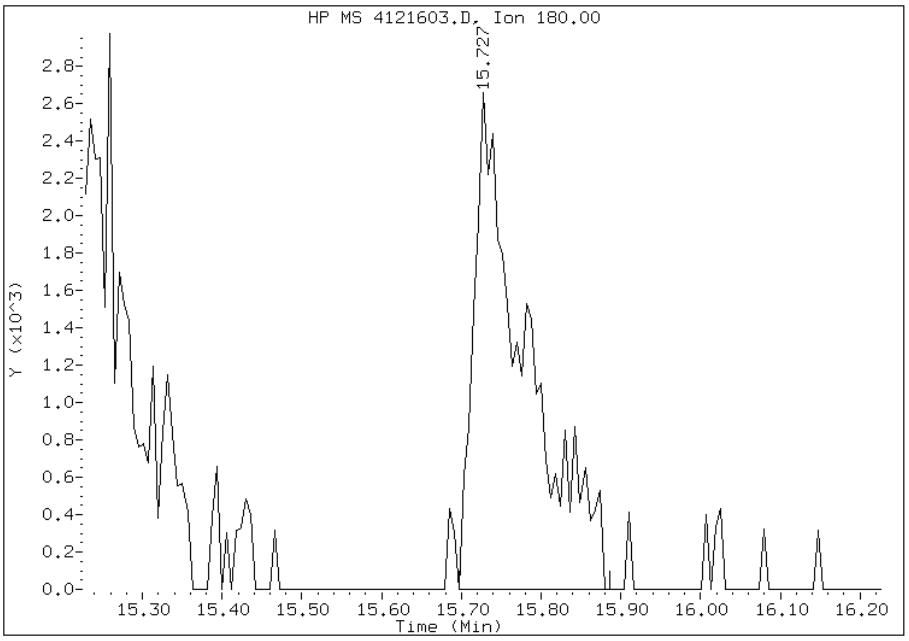
Manual Integration Results

RT: 15.73

Response: 12063

Amount: 39

Conc: 39



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:05
Manual Integration Reason: Peak Integrated Incorrectly

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\PITSVR06\D\chem\hp4.i\4121613d.b\4121604.D
Lab Smp Id: IC Client Smp ID: vstd10
Inj Date : 16-DEC-2013 11:28
Operator : 034635 Inst ID: hp4.i
Smp Info : IC
Misc Info : 4121613d.b,t8260bh2o.m,list1.sub
Comment :
Method : \\PITSVR06\D\chem\hp4.i\4121613d.b\T8260bh2o.m
Meth Date : 16-Dec-2013 14:04 journetp Quant Type: ISTD
Cal Date : 20-NOV-2013 10:48 Cal File: 4112004.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
*	46 Fluorobenzene (IS)	96	7.673	7.675	(1.000)	1505695	250.000	
*	69 Chlorobenzene-d5	119	10.768	10.758	(1.000)	332509	250.000	
*	92 1,4-Dichlorobenzene-d4	152	13.104	13.094	(1.000)	418419	250.000	
*	176 Dioxane-d8 (IS)	96	8.409	8.405	(1.000)	53845	5000.00	(Q)
*	177 TBA-d9 (IS)	65	4.851	4.835	(1.000)	456448	5000.00	
$	39 Dibromofluoromethane (Surr)	113	6.931	6.927	(0.903)	65782	50.0000	51.72
$	43 1,2-Dichloroethane-d4	65	7.314	7.304	(0.953)	65400	50.0000	50.06
$	59 Toluene-d8	98	9.321	9.311	(0.866)	301232	50.0000	55.71
$	80 Bromofluorobenzene (Surr)	95	11.954	11.926	(1.110)	101404	50.0000	51.15
	1 Dichlorodifluoromethane	85	1.774	1.776	(0.231)	105884	50.0000	54.06(M)
	2 Chloromethane	50	1.963	1.983	(0.256)	144093	50.0000	53.90
	3 Vinyl Chloride	62	2.115	2.135	(0.276)	129189	50.0000	57.79
	4 Bromomethane	94	2.492	2.506	(0.325)	20198	50.0000	53.86
	5 Chloroethane	64	2.619	2.621	(0.341)	19475	50.0000	51.69
	7 Dichlorofluoromethane	67	2.917	2.950	(0.380)	57353	50.0000	53.10
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.823	3.837	(0.498)	87219	50.0000	52.37(Q)
	166 Trichlorofluoromethane	101	2.954	3.035	(0.385)	44629	50.0000	49.49(QM)
	12 1,1-Dichloroethene	96	3.775	3.795	(0.492)	93762	50.0000	52.59
	15 Carbon Disulfide	76	4.121	4.141	(0.537)	188780	50.0000	44.57
	13 Acetone	43	3.988	3.959	(0.520)	30098	50.0000	59.20(M)
	18 Methylene Chloride	84	4.632	4.628	(0.604)	101634	50.0000	55.10(M)
	19 trans-1,2-Dichloroethene	96	5.003	4.999	(0.652)	94195	50.0000	53.18
	20 Methyl tert-butyl ether	73	5.058	5.060	(0.659)	199020	50.0000	55.52
	24 1,1-Dichloroethane	63	5.605	5.595	(0.731)	162214	50.0000	53.72
	27 2,2-Dichloropropane	77	6.341	6.343	(0.826)	54981	50.0000	51.54
	28 cis-1,2-dichloroethene	96	6.359	6.349	(0.829)	97597	50.0000	52.40
M	29 1,2-Dichloroethene (total)	96				191792	100.000	105.6
	30 Bromochloromethane	128	6.639	6.635	(0.865)	38942	50.0000	49.80
	31 2-Butanone	43	6.438	6.410	(0.839)	33292	50.0000	49.58

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
37 Chloroform	83	6.749	6.744	(0.880)	133821	50.0000	53.32
38 1,1,1-Trichloroethane	97	6.943	6.939	(0.905)	90083	50.0000	48.95
40 1,1-Dichloropropene	75	7.138	7.127	(0.930)	111867	50.0000	53.77
41 Carbon Tetrachloride	117	7.126	7.127	(0.929)	77710	50.0000	48.46
42 Benzene	78	7.363	7.365	(0.960)	373291	50.0000	56.54
45 1,2-Dichloroethane	62	7.393	7.389	(0.964)	92484	50.0000	55.17(M)
47 Trichloroethene	130	8.074	8.064	(1.052)	85272	50.0000	51.16
49 1,2-Dichloropropane	63	8.305	8.295	(1.082)	94017	50.0000	53.76(QM)
50 Dibromomethane	93	8.433	8.417	(1.099)	40256	50.0000	50.74
53 Bromodichloromethane	83	8.591	8.587	(1.120)	74410	50.0000	45.78
57 cis-1,3-Dichloropropene	75	9.059	9.043	(1.181)	92054	50.0000	42.58
58 4-Methyl-2-Pentanone	43	9.218	9.202	(0.856)	69405	50.0000	48.28(Q)
60 Toluene	91	9.388	9.384	(0.872)	397051	50.0000	60.27
61 trans-1,3-Dichloropropene	75	9.619	9.596	(0.893)	73877	50.0000	46.96
63 1,3-Dichloropropane	76	9.960	9.949	(0.925)	125594	50.0000	57.64
64 1,1,2-Trichloroethane	97	9.789	9.785	(0.909)	73301	50.0000	57.01
65 Tetrachloroethene	164	9.935	9.931	(0.923)	70707	50.0000	55.20
66 2-Hexanone	43	10.099	10.034	(0.938)	65560	50.0000	55.97(M)
67 Dibromochloromethane	129	10.191	10.180	(0.946)	48807	50.0000	46.64
68 1,2-Dibromoethane	107	10.318	10.296	(0.958)	60082	50.0000	52.54
70 Chlorobenzene	112	10.793	10.788	(1.002)	234957	50.0000	56.35
71 1,1,1,2-Tetrachloroethane	131	10.872	10.861	(1.010)	64706	50.0000	51.79(Q)
72 Ethylbenzene	106	10.902	10.892	(1.012)	125569	50.0000	54.29
73 m,p-XYLENE	106	11.024	11.007	(1.024)	149724	50.0000	52.57(Q)
74 Xylene-o	106	11.413	11.403	(1.060)	148658	50.0000	54.49
76 Styrene	104	11.449	11.421	(1.063)	228826	50.0000	53.14
77 Bromoform	173	11.632	11.610	(1.080)	29643	50.0000	47.52
78 Isopropylbenzene	105	11.784	11.768	(1.094)	404671	50.0000	60.41
79 Bromobenzene	156	12.106	12.090	(0.924)	90916	50.0000	55.84
81 n-Propylbenzene	120	12.197	12.181	(0.931)	110233	50.0000	53.85
82 2-Chlorotoluene	126	12.289	12.278	(0.938)	90057	50.0000	54.07
83 1,1,2,2-Tetrachloroethane	83	12.076	12.059	(1.121)	82140	50.0000	58.43
84 1,2,3-Trichloropropane	110	12.124	12.114	(0.925)	22851	50.0000	54.77(Q)
85 4-Chlorotoluene	126	12.410	12.382	(0.947)	83649	50.0000	51.41(Q)
86 1,3,5-Trimethylbenzene	105	12.362	12.352	(0.943)	311590	50.0000	58.01
87 tert-Butylbenzene	119	12.690	12.686	(0.968)	276452	50.0000	57.33
88 1,2,4-Trimethylbenzene	105	12.745	12.729	(0.973)	309901	50.0000	58.15
89 sec-Butylbenzene	105	12.915	12.905	(0.986)	398419	50.0000	57.63
90 4-Isopropyltoluene	119	13.061	13.045	(0.997)	335287	50.0000	59.42
91 1,3-Dichlorobenzene	146	13.043	13.026	(0.995)	138387	50.0000	52.85
94 n-Butylbenzene	91	13.499	13.459	(1.030)	278812	50.0000	53.13
93 1,4-Dichlorobenzene	146	13.128	13.112	(1.002)	158970	50.0000	52.94
95 1,2-Dichlorobenzene	146	13.517	13.495	(1.032)	137120	50.0000	53.06
96 1,2-Dibromo-3-chloropropane	157	14.326	14.286	(1.093)	6562	50.0000	50.02(M)
97 1,2,4-Trichlorobenzene	180	15.196	15.119	(1.160)	19560	50.0000	32.86(Q)
98 Hexachlorobutadiene	225	15.299	15.282	(1.168)	40600	50.0000	54.95(Q)
99 Naphthalene	128	15.512	15.392	(1.184)	45597	50.0000	43.13(M)
100 1,2,3-Trichlorobenzene	180	15.719	15.660	(1.200)	15229	50.0000	41.13(QM)
156 Methyl Acetate	43	4.505	4.488	(0.587)	363671	250.000	300.5
157 Cyclohexane	56	6.998	7.006	(0.912)	217897	50.0000	55.31
158 Methyl Cyclohexane	83	8.263	8.265	(1.077)	183240	50.0000	55.62
32 Vinyl Acetate	43	5.739	5.717	(0.748)	120505	50.0000	49.41(M)
52 1,4-Dioxane	88	8.464	8.453	(1.007)	15527	1000.00	1102(Q)
21 tert-Butyl Alcohol	59	4.973	4.945	(1.025)	61321	500.000	468.7(H)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
16	3-Chloro-1-propene	76	4.389	4.391	(0.572)	46288	50.0000	46.16
11	Acrolein	56	3.678	3.667	(0.479)	145878	625.000	710.0
22	Acrylonitrile	53	5.021	5.011	(0.654)	356164	500.000	585.8
8	Ethyl Ether	59	3.477	3.466	(0.453)	80022	50.0000	53.39
62	Ethyl methacrylate	69	9.710	9.688	(0.902)	80032	50.0000	48.61
23	Hexane	57	5.405	5.406	(0.704)	168122	50.0000	54.79
14	Iodomethane	142	4.036	4.038	(0.526)	123757	50.0000	52.27
44	Isobutanol	41	7.351	7.334	(0.958)	46066	1250.00	1303
155	N-Heptane	41	7.673	7.669	(1.000)	90222	50.0000	54.74
35	Tetrahydrofuran	42	6.992	7.006	(0.911)	54555	100.000	109.4
164	trans-1,4-Dichloro-2-butene	53	12.179	12.120	(0.929)	17204	50.0000	48.87(M)
169	Butadiene	39	2.157	2.165	(0.281)	123593	50.0000	55.02
M 75	Xylenes (total)	106				298382	100.000	107.0

QC Flag Legend

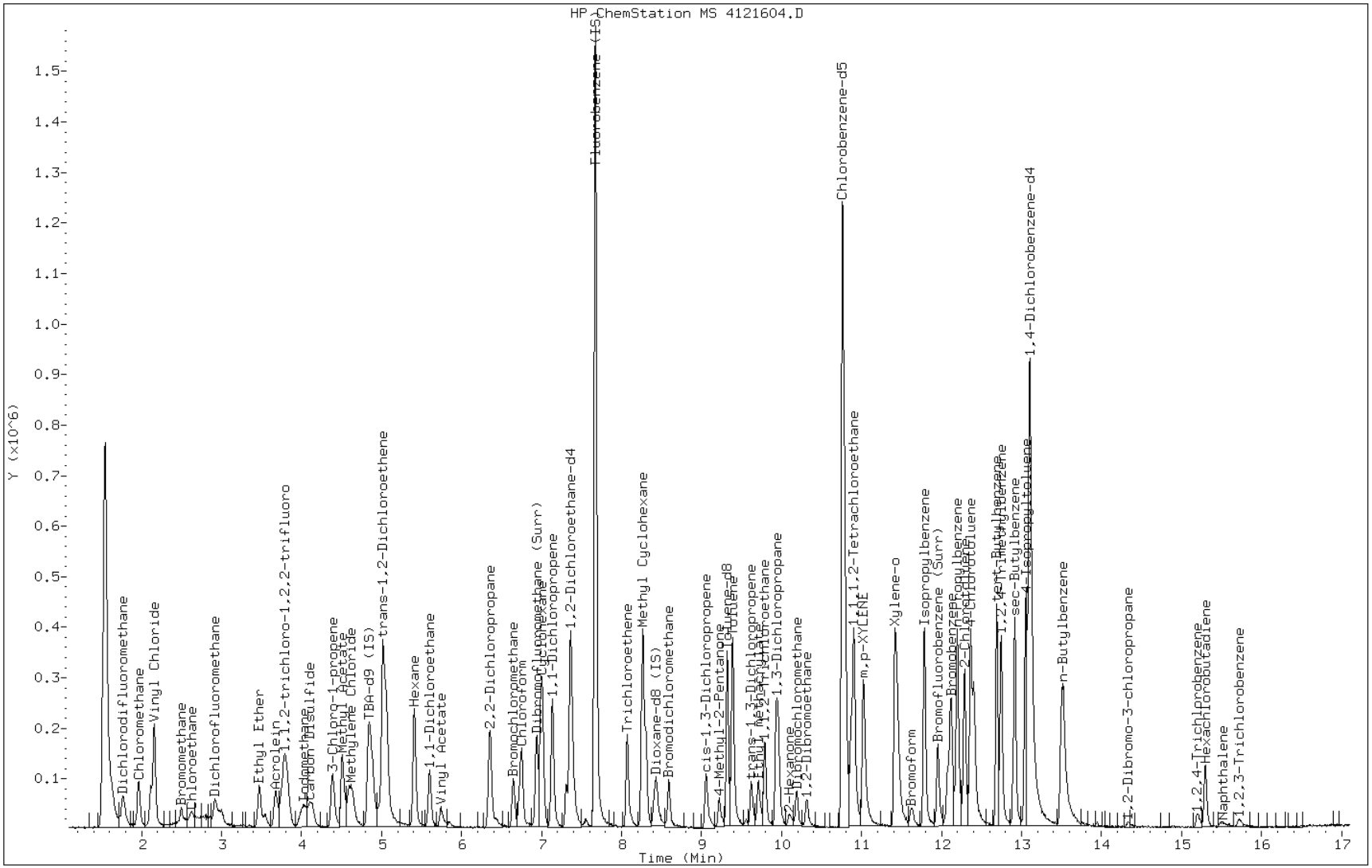
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 4121604.D

Date: 16-DEC-2013 11:28

Client ID: vstd10 Instrument: hp4.i

Sample Info: IC Operator: 034635



Manual Integration Report

Data File: 4121604.D
Inj. Date and Time: 16-DEC-2013 11:28
Instrument ID: hp4.i
Client ID: vstd10
Compound: 1 Dichlorodifluoromethane
CAS #: 75-71-8
Report Date: 12/17/2013

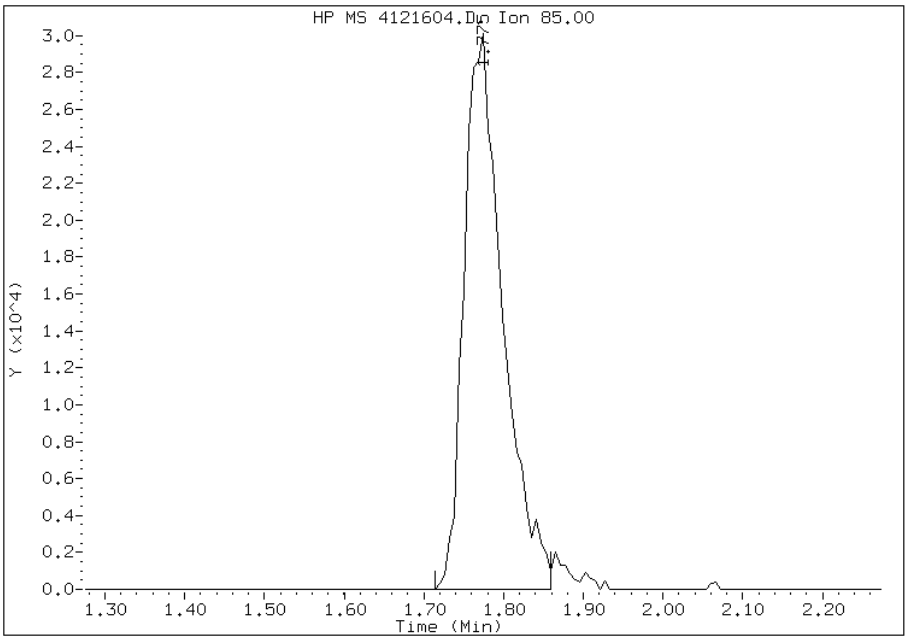
Processing Integration Results

RT: 1.77

Response: 102864

Amount: 51

Conc: 51



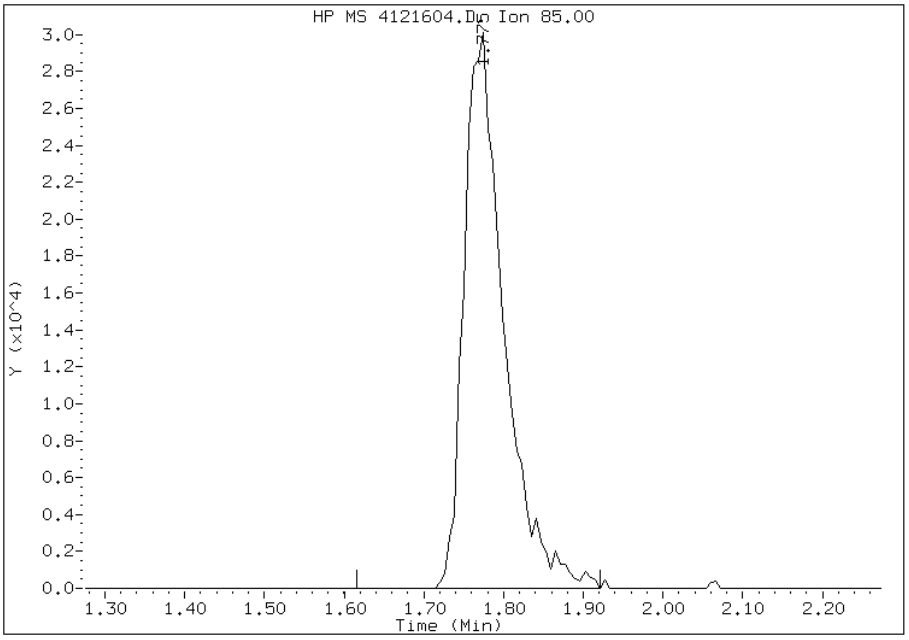
Manual Integration Results

RT: 1.77

Response: 105884

Amount: 54

Conc: 54



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:09
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121604.D
Inj. Date and Time: 16-DEC-2013 11:28
Instrument ID: hp4.i
Client ID: vstd10
Compound: 166 Trichlorofluoromethane
CAS #: 75-69-4
Report Date: 12/17/2013

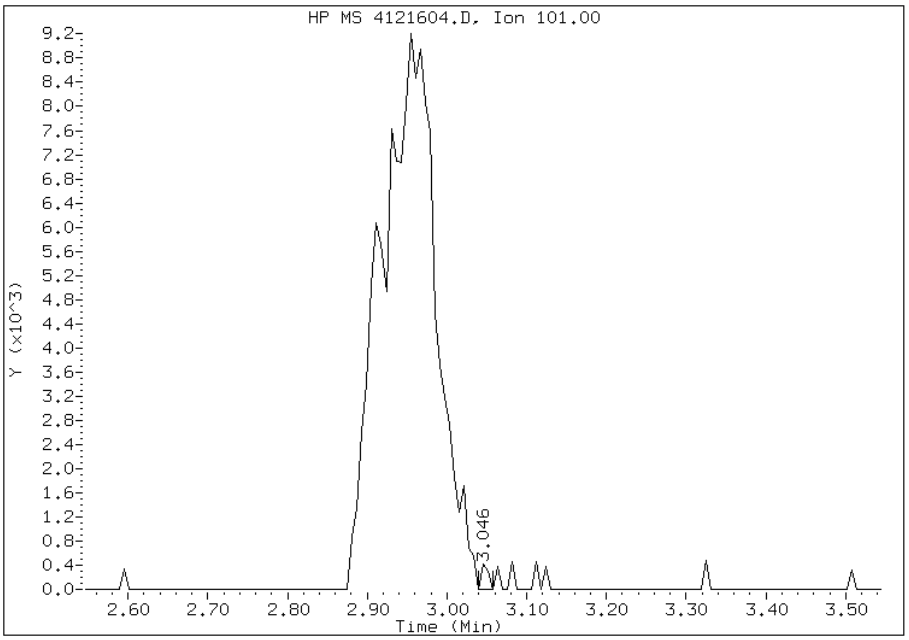
Processing Integration Results

RT: 3.05

Response: 266

Amount: 1

Conc: 1



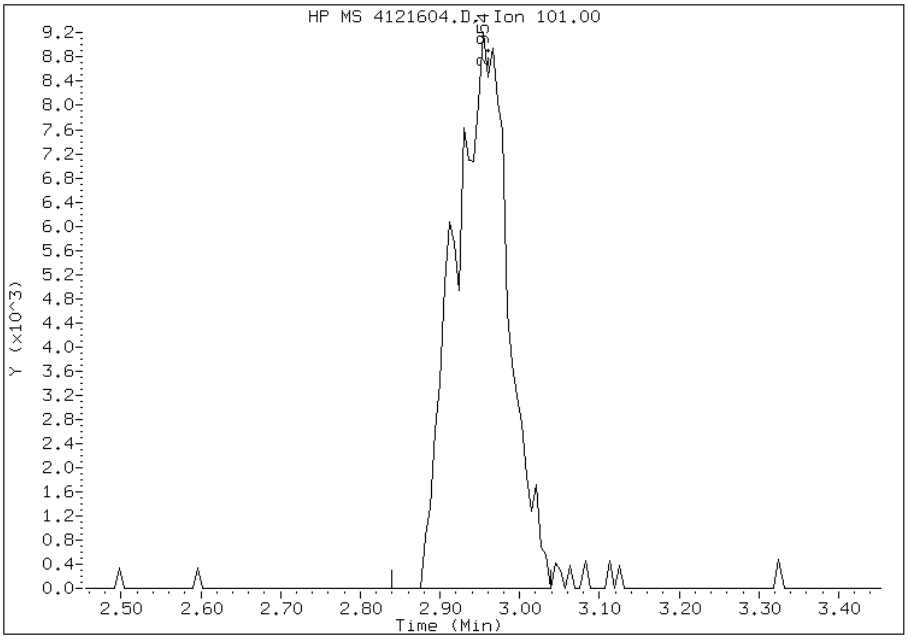
Manual Integration Results

RT: 2.95

Response: 44629

Amount: 49

Conc: 49



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:09
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121604.D
Inj. Date and Time: 16-DEC-2013 11:28
Instrument ID: hp4.i
Client ID: vstd10
Compound: 13 Acetone
CAS #: 67-64-1
Report Date: 12/17/2013

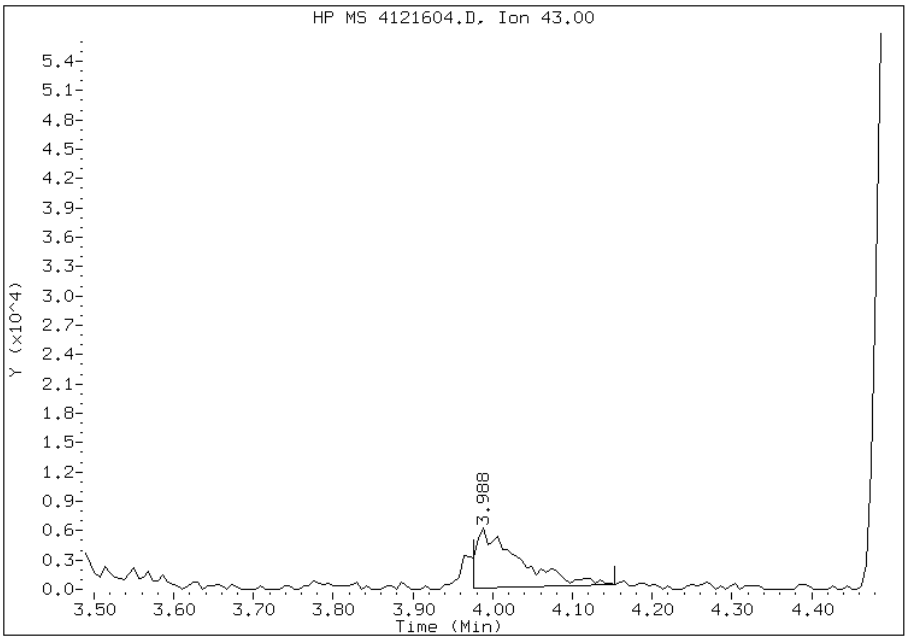
Processing Integration Results

RT: 3.99

Response: 22997

Amount: 43

Conc: 43



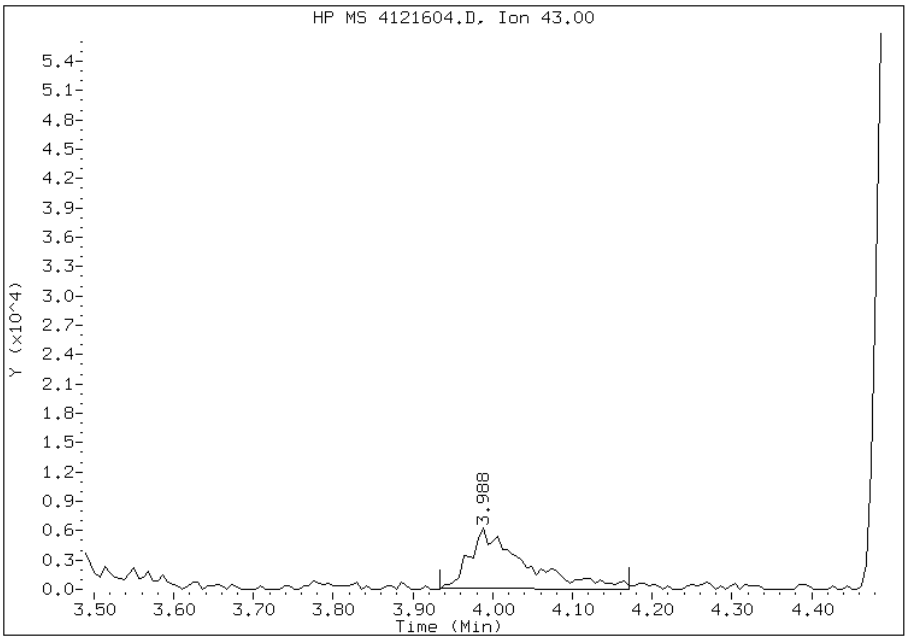
Manual Integration Results

RT: 3.99

Response: 30098

Amount: 59

Conc: 59



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 12:00
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121604.D
Inj. Date and Time: 16-DEC-2013 11:28
Instrument ID: hp4.i
Client ID: vstd10
Compound: 18 Methylene Chloride
CAS #: 75-09-2
Report Date: 12/17/2013

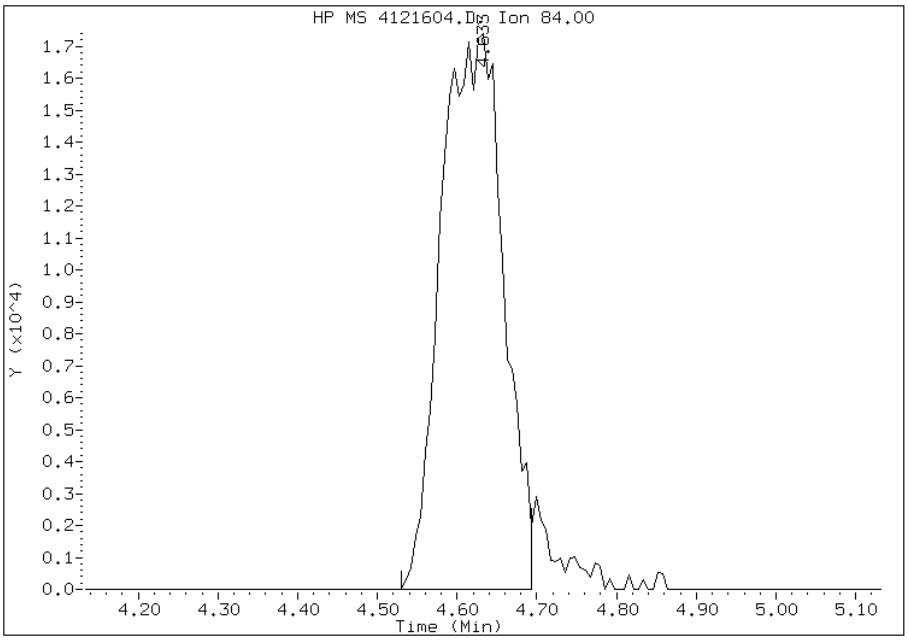
Processing Integration Results

RT: 4.63

Response: 95995

Amount: 47

Conc: 47



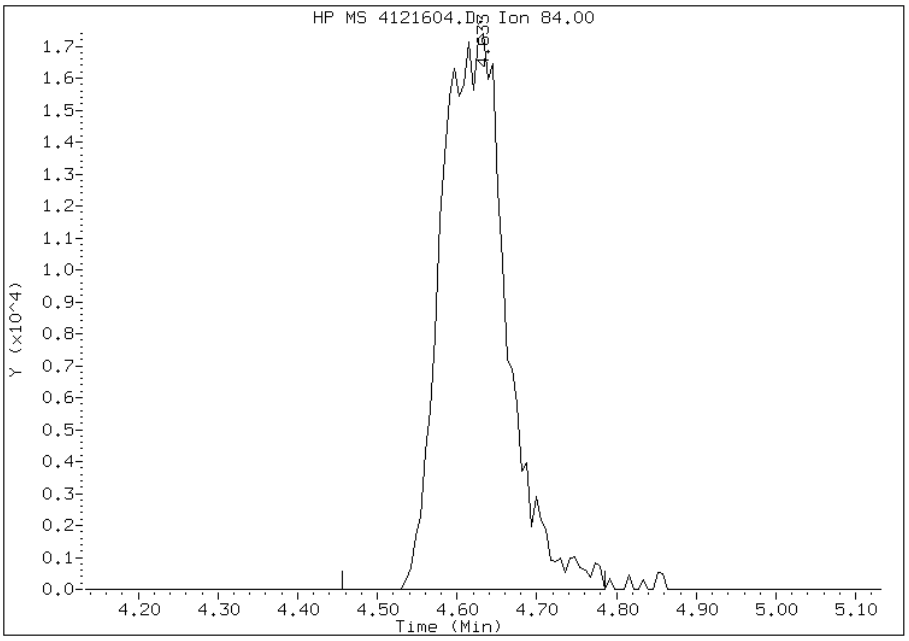
Manual Integration Results

RT: 4.63

Response: 101634

Amount: 55

Conc: 55



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:10
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121604.D
Inj. Date and Time: 16-DEC-2013 11:28
Instrument ID: hp4.i
Client ID: vstd10
Compound: 32 Vinyl Acetate
CAS #: 108-05-4
Report Date: 12/17/2013

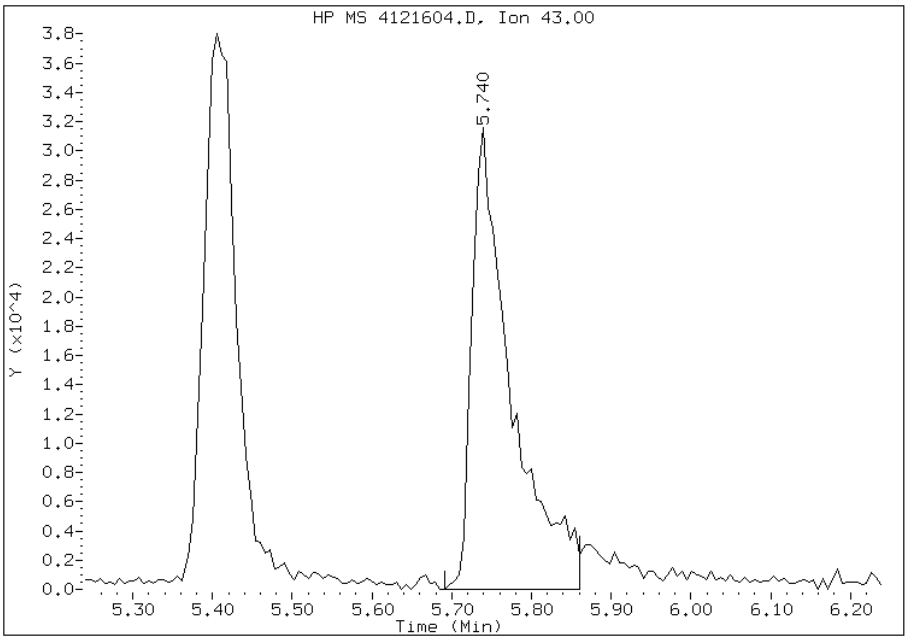
Processing Integration Results

RT: 5.74

Response: 109666

Amount: 45

Conc: 45



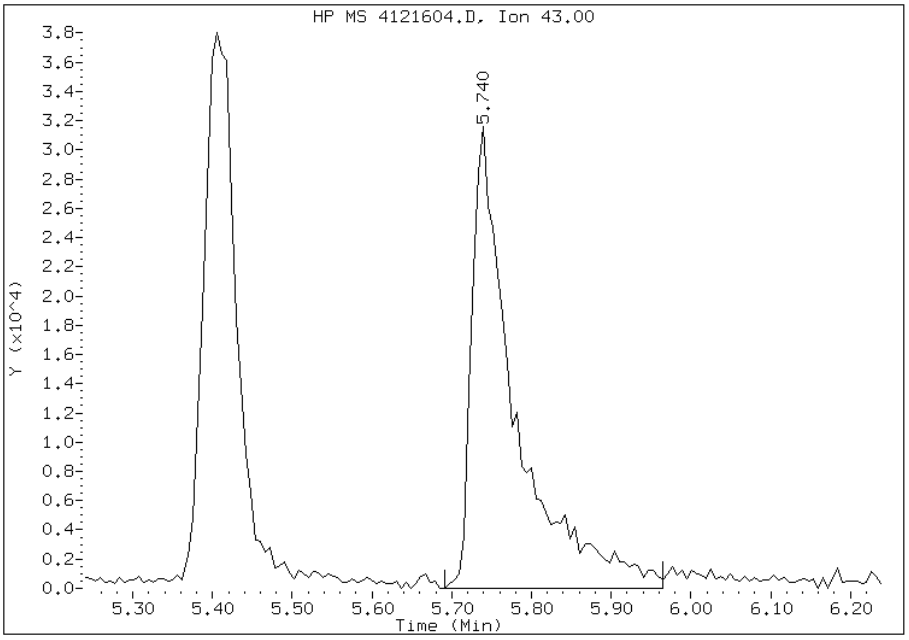
Manual Integration Results

RT: 5.74

Response: 120505

Amount: 49

Conc: 49



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:11
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121604.D
Inj. Date and Time: 16-DEC-2013 11:28
Instrument ID: hp4.i
Client ID: vstd10
Compound: 45 1,2-Dichloroethane
CAS #: 107-06-2
Report Date: 12/17/2013

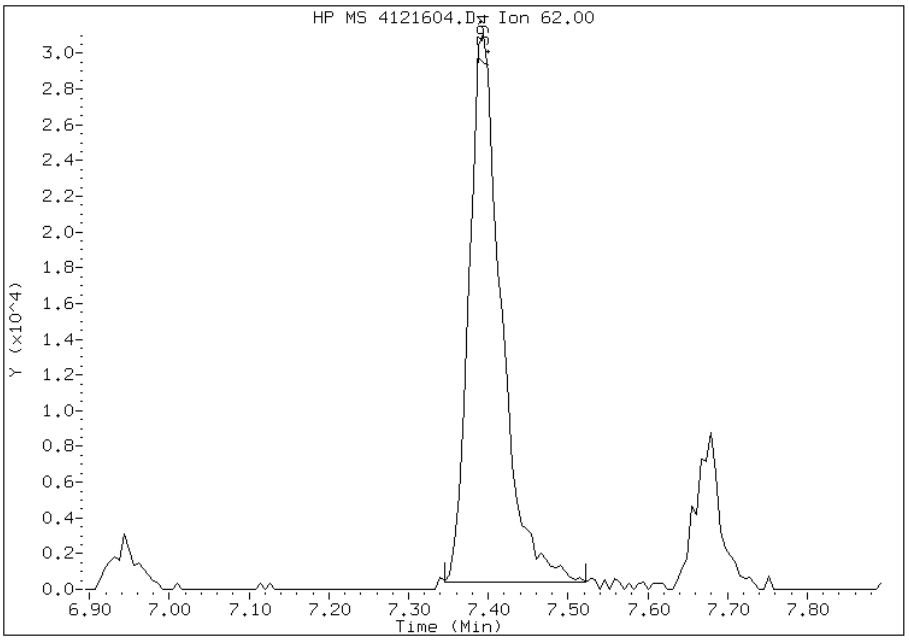
Processing Integration Results

RT: 7.39

Response: 87331

Amount: 50

Conc: 50



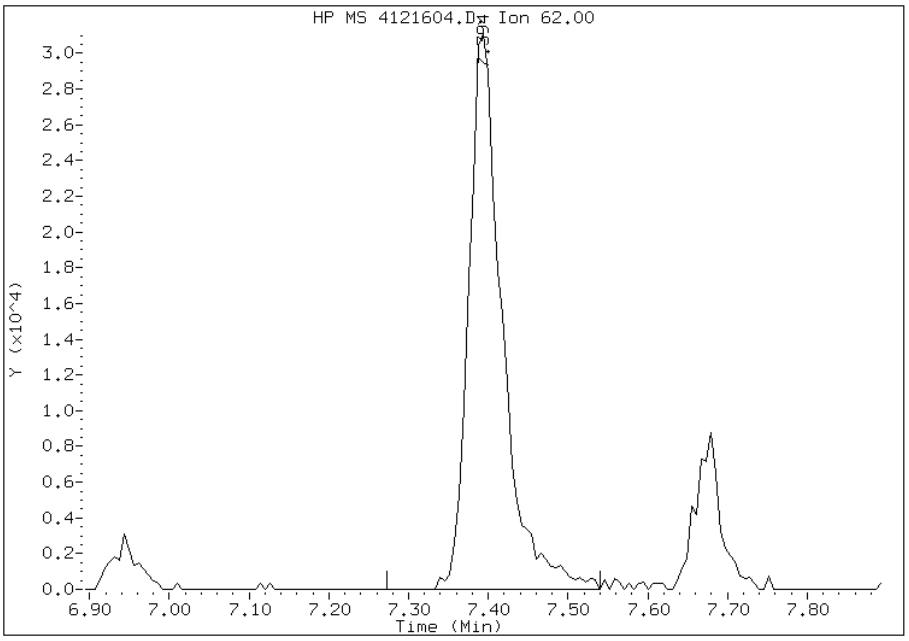
Manual Integration Results

RT: 7.39

Response: 92484

Amount: 55

Conc: 55



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:10
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121604.D
Inj. Date and Time: 16-DEC-2013 11:28
Instrument ID: hp4.i
Client ID: vstd10
Compound: 49 1,2-Dichloropropane
CAS #: 78-87-5
Report Date: 12/17/2013

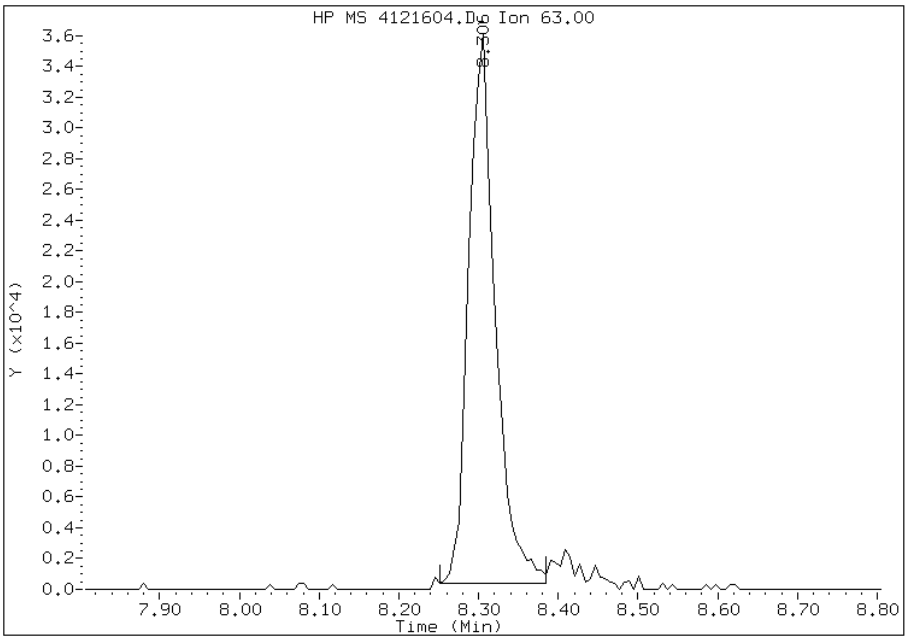
Processing Integration Results

RT: 8.31

Response: 83792

Amount: 49

Conc: 49



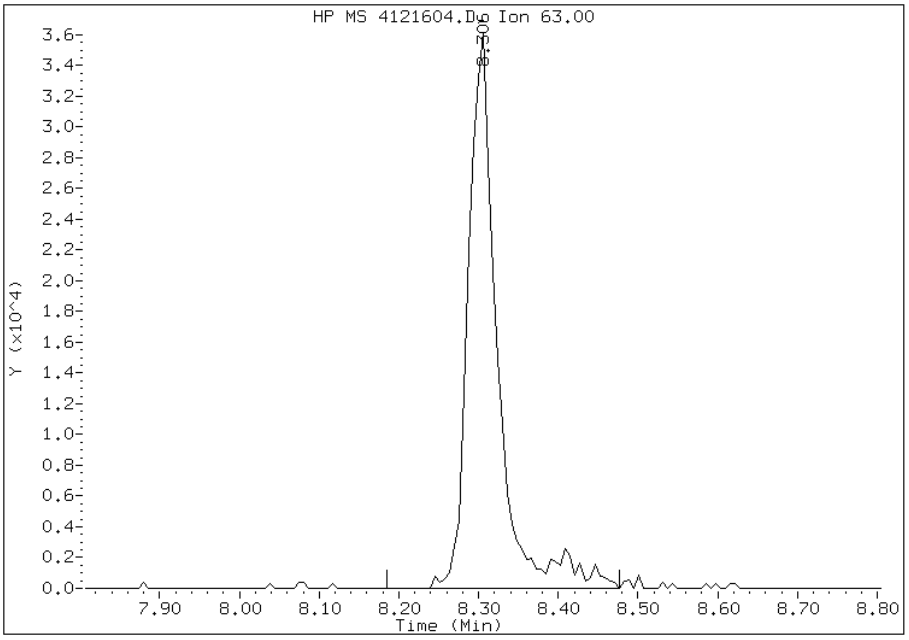
Manual Integration Results

RT: 8.31

Response: 94017

Amount: 54

Conc: 54



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:10
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121604.D
Inj. Date and Time: 16-DEC-2013 11:28
Instrument ID: hp4.i
Client ID: vstd10
Compound: 66 2-Hexanone
CAS #: 591-78-6
Report Date: 12/17/2013

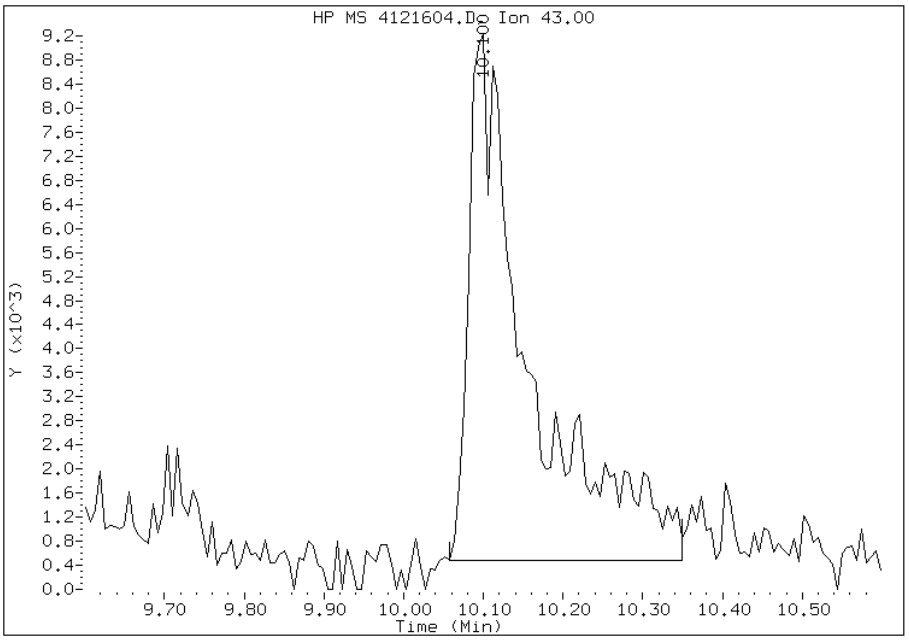
Processing Integration Results

RT: 10.10

Response: 46328

Amount: 47

Conc: 47



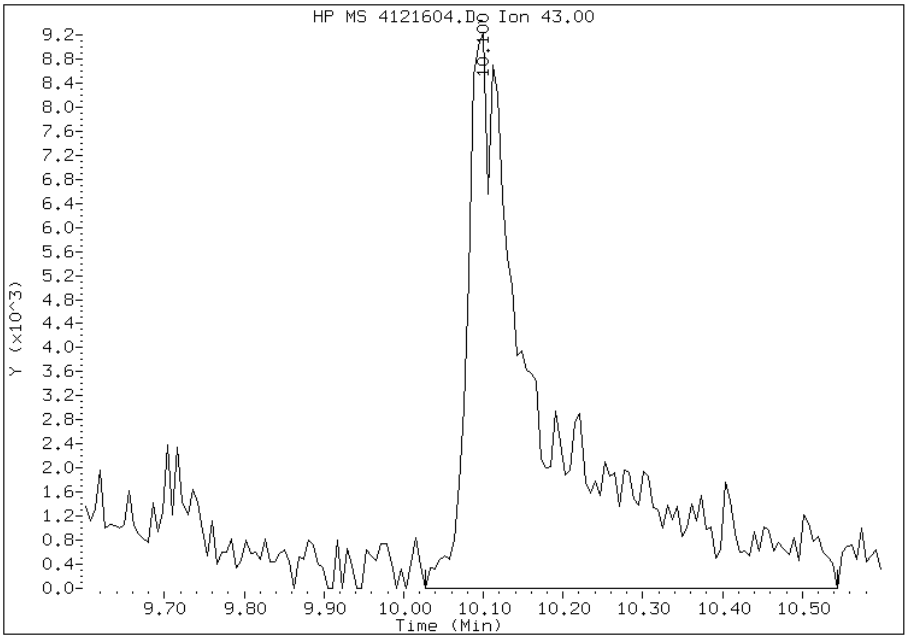
Manual Integration Results

RT: 10.10

Response: 65560

Amount: 56

Conc: 56



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 13:14
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121604.D
Inj. Date and Time: 16-DEC-2013 11:28
Instrument ID: hp4.i
Client ID: vstd10
Compound: 164 trans-1,4-Dichloro-2-butene
CAS #: 110-57-6
Report Date: 12/17/2013

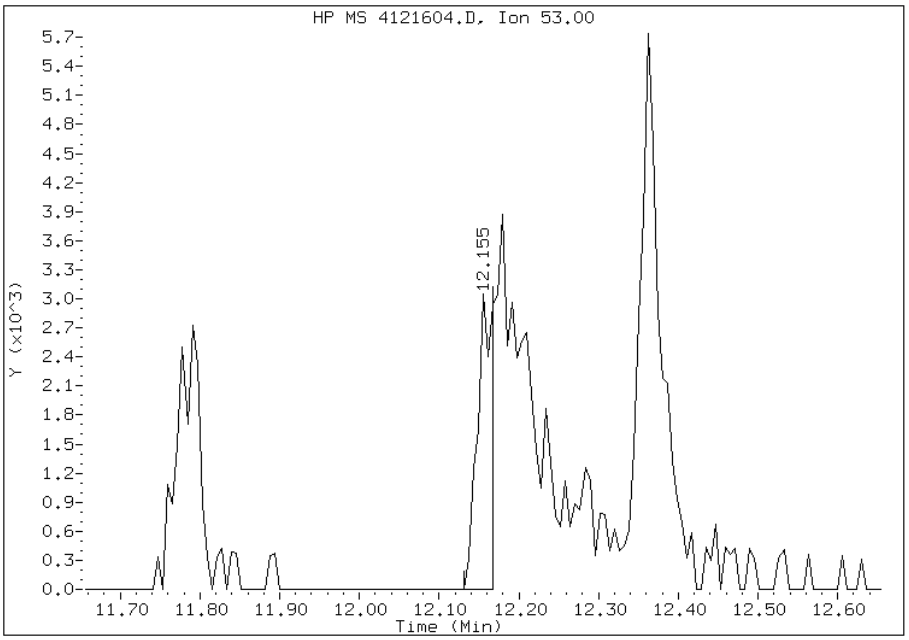
Processing Integration Results

RT: 12.16

Response: 4232

Amount: 22

Conc: 22



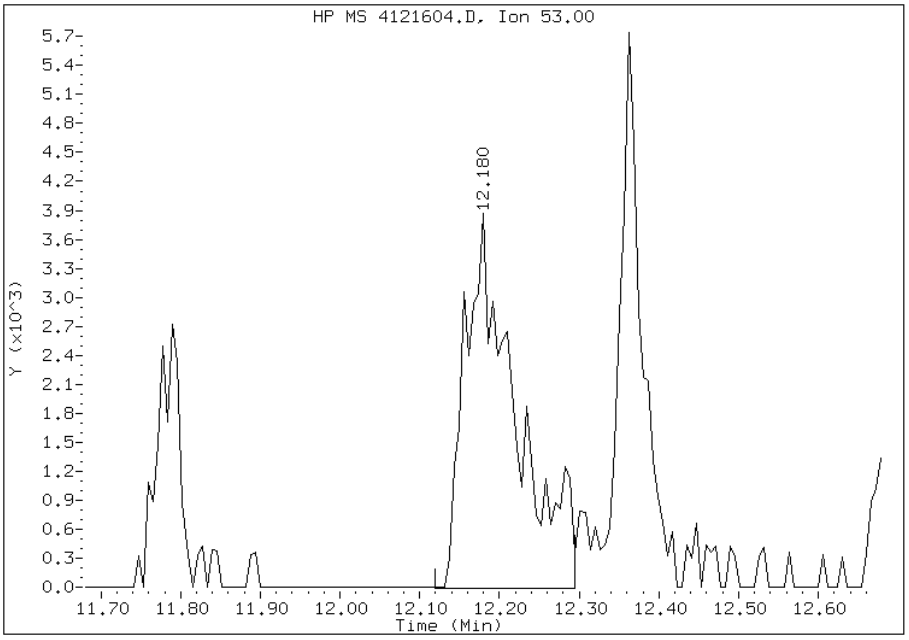
Manual Integration Results

RT: 12.18

Response: 17204

Amount: 49

Conc: 49



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:25
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121604.D
Inj. Date and Time: 16-DEC-2013 11:28
Instrument ID: hp4.i
Client ID: vstd10
Compound: 96 1,2-Dibromo-3-chloropropane
CAS #: 96-12-8
Report Date: 12/17/2013

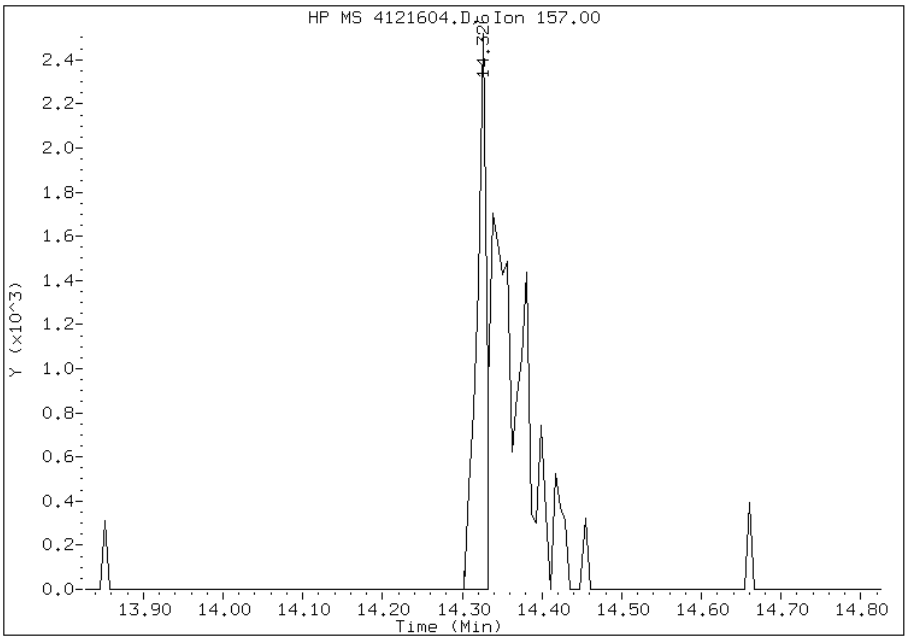
Processing Integration Results

RT: 14.33

Response: 2213

Amount: 23

Conc: 23



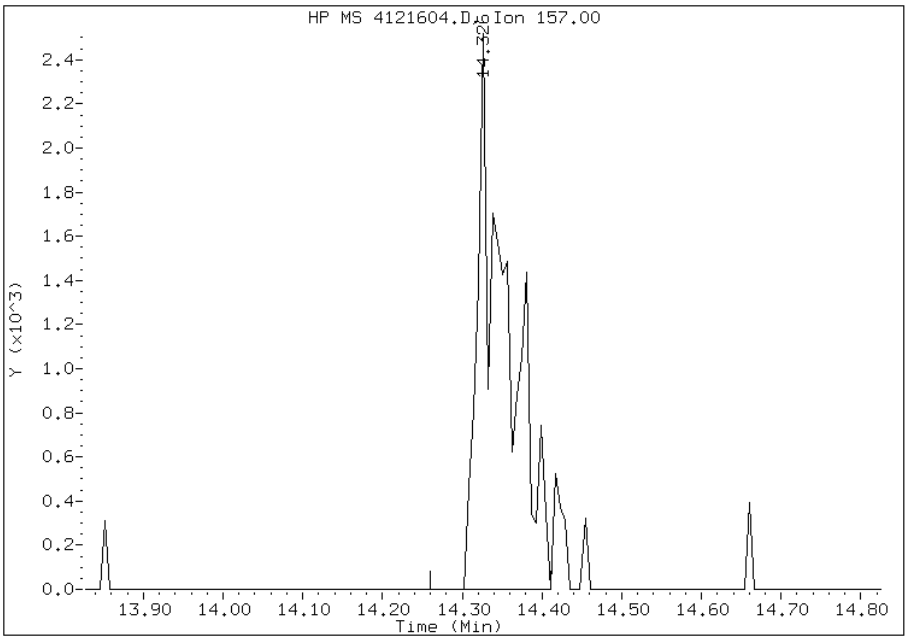
Manual Integration Results

RT: 14.33

Response: 6562

Amount: 50

Conc: 50



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:57
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121604.D
Inj. Date and Time: 16-DEC-2013 11:28
Instrument ID: hp4.i
Client ID: vstd10
Compound: 99 Naphthalene
CAS #: 91-20-3
Report Date: 12/17/2013

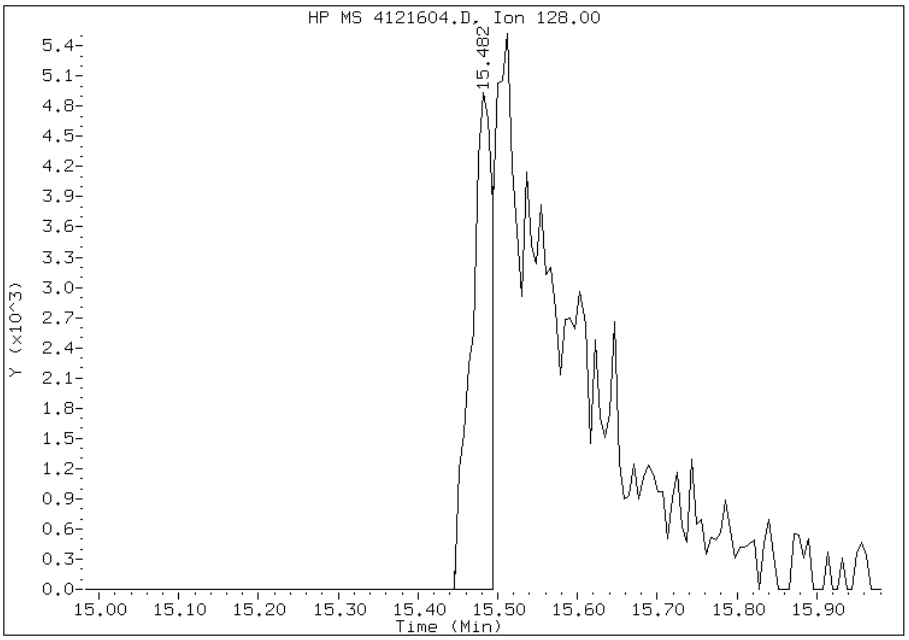
Processing Integration Results

RT: 15.48

Response: 9210

Amount: 50

Conc: 50



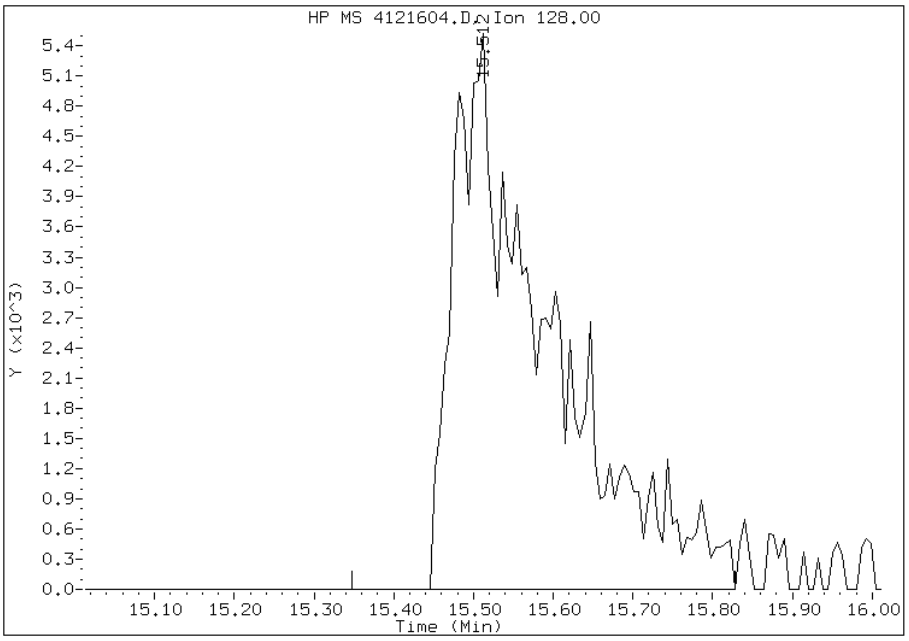
Manual Integration Results

RT: 15.51

Response: 45597

Amount: 43

Conc: 43



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:11
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121604.D
Inj. Date and Time: 16-DEC-2013 11:28
Instrument ID: hp4.i
Client ID: vstd10
Compound: 100 1,2,3-Trichlorobenzene
CAS #: 87-61-6
Report Date: 12/17/2013

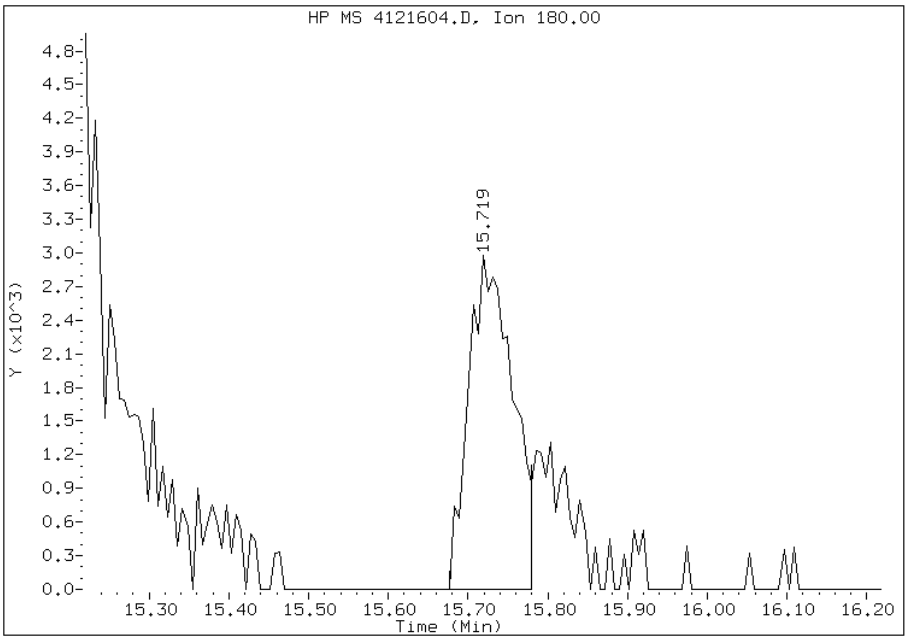
Processing Integration Results

RT: 15.72

Response: 11608

Amount: 33

Conc: 33



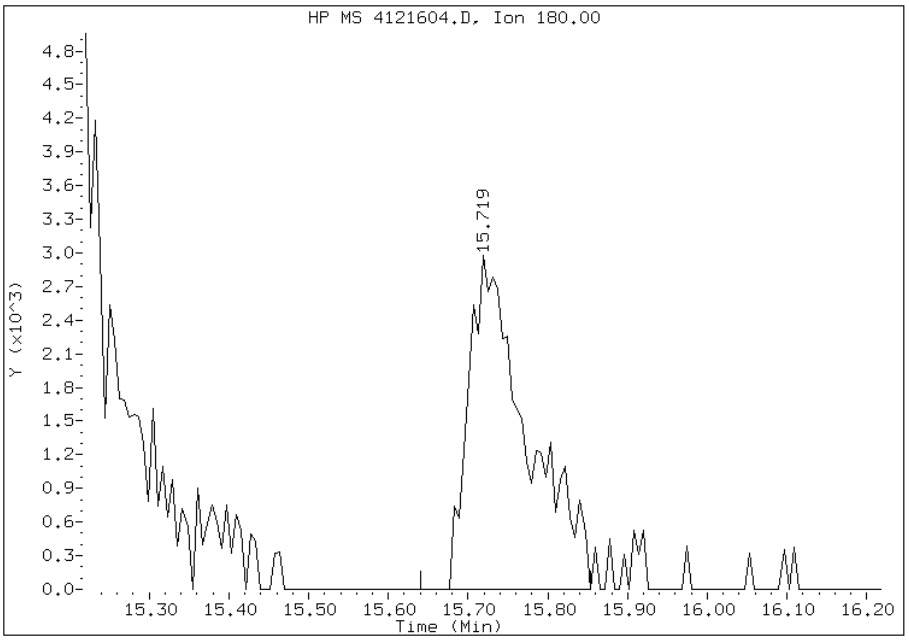
Manual Integration Results

RT: 15.72

Response: 15229

Amount: 41

Conc: 41



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:11
Manual Integration Reason:

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\PITSVR06\D\chem\hp4.i\4121613d.b\4121605.D
Lab Smp Id: IC Client Smp ID: vstd25
Inj Date : 16-DEC-2013 11:53
Operator : 034635 Inst ID: hp4.i
Smp Info : IC
Misc Info : 4121613d.b,t8260bh2o.m,list1.sub
Comment :
Method : \\PITSVR06\D\chem\hp4.i\4121613d.b\T8260bh2o.m
Meth Date : 16-Dec-2013 14:04 journetp Quant Type: ISTD
Cal Date : 16-DEC-2013 11:53 Cal File: 4121605.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

		QUANT SIG					AMOUNTS CAL-AMT	ON-COL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)	
*	46 Fluorobenzene (IS)	96	7.670	7.675	(1.000)	1576560	250.000		
*	69 Chlorobenzene-d5	119	10.765	10.758	(1.000)	356550	250.000		
*	92 1,4-Dichlorobenzene-d4	152	13.094	13.094	(1.000)	466572	250.000		
*	176 Dioxane-d8 (IS)	96	8.406	8.405	(1.000)	64298	5000.00		(M)
*	177 TBA-d9 (IS)	65	4.854	4.835	(1.000)	410953	5000.00		
$	39 Dibromofluoromethane (Surr)	113	6.934	6.927	(0.904)	163334	125.000	122.6	
$	43 1,2-Dichloroethane-d4	65	7.305	7.304	(0.952)	176161	125.000	128.8	
$	59 Toluene-d8	98	9.318	9.311	(0.866)	769586	125.000	132.7	
$	80 Bromofluorobenzene (Surr)	95	11.939	11.926	(1.109)	274381	125.000	129.1	
	1 Dichlorodifluoromethane	85	1.771	1.776	(0.231)	244869	125.000	119.4	
	2 Chloromethane	50	1.959	1.983	(0.256)	352110	125.000	125.8	
	3 Vinyl Chloride	62	2.118	2.135	(0.276)	293012	125.000	125.2	
	4 Bromomethane	94	2.495	2.506	(0.325)	46132	125.000	117.5	
	5 Chloroethane	64	2.622	2.621	(0.342)	46291	125.000	117.3	
	7 Dichlorofluoromethane	67	2.920	2.950	(0.381)	133719	125.000	118.2	
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.814	3.837	(0.497)	210472	125.000	120.7	
	166 Trichlorofluoromethane	101	2.957	3.035	(0.386)	113652	125.000	120.4	(QM)
	12 1,1-Dichloroethene	96	3.772	3.795	(0.492)	219971	125.000	117.8	(Q)
	15 Carbon Disulfide	76	4.100	4.141	(0.535)	511459	125.000	115.3	
	13 Acetone	43	3.991	3.959	(0.520)	55535	125.000	104.3	(M)
	18 Methylene Chloride	84	4.587	4.628	(0.598)	231557	125.000	119.9	
	19 trans-1,2-Dichloroethene	96	5.000	4.999	(0.652)	224567	125.000	121.1	
	20 Methyl tert-butyl ether	73	5.061	5.060	(0.660)	441747	125.000	117.7	
	24 1,1-Dichloroethane	63	5.602	5.595	(0.730)	385912	125.000	122.0	
	27 2,2-Dichloropropane	77	6.338	6.343	(0.826)	133651	125.000	119.7	
	28 cis-1,2-dichloroethene	96	6.356	6.349	(0.829)	245577	125.000	125.9	
M	29 1,2-Dichloroethene (total)	96				470144	250.000	247.0	
	30 Bromochloromethane	128	6.642	6.635	(0.866)	98776	125.000	120.6	
	31 2-Butanone	43	6.423	6.410	(0.837)	68047	125.000	96.78	(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
37 Chloroform	83	6.752	6.744	(0.880)	328895	125.000	125.1
38 1,1,1-Trichloroethane	97	6.940	6.939	(0.905)	230568	125.000	119.7
40 1,1-Dichloropropene	75	7.135	7.127	(0.930)	264193	125.000	121.3
41 Carbon Tetrachloride	117	7.129	7.127	(0.929)	199468	125.000	118.8
42 Benzene	78	7.360	7.365	(0.960)	902183	125.000	130.5
45 1,2-Dichloroethane	62	7.396	7.389	(0.964)	210563	125.000	120.0
47 Trichloroethene	130	8.065	8.064	(1.052)	205989	125.000	118.0
49 1,2-Dichloropropane	63	8.296	8.295	(1.082)	227679	125.000	124.3
50 Dibromomethane	93	8.430	8.417	(1.099)	98728	125.000	118.8
53 Bromodichloromethane	83	8.588	8.587	(1.120)	209056	125.000	122.8
57 cis-1,3-Dichloropropene	75	9.050	9.043	(1.180)	283750	125.000	125.3
58 4-Methyl-2-Pentanone	43	9.208	9.202	(0.855)	160686	125.000	104.2(Q)
60 Toluene	91	9.385	9.384	(0.872)	939896	125.000	133.1
61 trans-1,3-Dichloropropene	75	9.616	9.596	(0.893)	199629	125.000	118.3
63 1,3-Dichloropropane	76	9.956	9.949	(0.925)	290779	125.000	124.4
64 1,1,2-Trichloroethane	97	9.792	9.785	(0.910)	166911	125.000	121.1
65 Tetrachloroethene	164	9.932	9.931	(0.923)	168408	125.000	122.6
66 2-Hexanone	43	10.072	10.034	(0.936)	144021	125.000	114.7(M)
67 Dibromochloromethane	129	10.187	10.180	(0.946)	132073	125.000	117.7
68 1,2-Dibromoethane	107	10.309	10.296	(0.958)	143647	125.000	117.2
70 Chlorobenzene	112	10.790	10.788	(1.002)	588827	125.000	131.7
71 1,1,1,2-Tetrachloroethane	131	10.869	10.861	(1.010)	173458	125.000	129.5(Q)
72 Ethylbenzene	106	10.893	10.892	(1.012)	315913	125.000	127.4
73 m,p-XYLENE	106	11.015	11.007	(1.023)	386492	125.000	126.6
74 Xylene-o	106	11.410	11.403	(1.060)	385980	125.000	131.9
76 Styrene	104	11.428	11.421	(1.062)	625397	125.000	135.4
77 Bromoform	173	11.623	11.610	(1.080)	70701	125.000	105.7
78 Isopropylbenzene	105	11.775	11.768	(1.094)	962733	125.000	134.0
79 Bromobenzene	156	12.097	12.090	(0.924)	223745	125.000	123.2
81 n-Propylbenzene	120	12.188	12.181	(0.931)	283504	125.000	124.2
82 2-Chlorotoluene	126	12.279	12.278	(0.938)	224912	125.000	121.1(Q)
83 1,1,2,2-Tetrachloroethane	83	12.067	12.059	(1.121)	185878	125.000	123.3
84 1,2,3-Trichloropropane	110	12.121	12.114	(0.926)	52011	125.000	111.8
85 4-Chlorotoluene	126	12.395	12.382	(0.947)	227223	125.000	125.2
86 1,3,5-Trimethylbenzene	105	12.359	12.352	(0.944)	776066	125.000	129.6
87 tert-Butylbenzene	119	12.687	12.686	(0.969)	672097	125.000	125.0
88 1,2,4-Trimethylbenzene	105	12.736	12.729	(0.973)	790180	125.000	133.0
89 sec-Butylbenzene	105	12.906	12.905	(0.986)	1012201	125.000	131.3
90 4-Isopropyltoluene	119	13.052	13.045	(0.997)	826133	125.000	131.3
91 1,3-Dichlorobenzene	146	13.034	13.026	(0.995)	373788	125.000	128.0
94 n-Butylbenzene	91	13.471	13.459	(1.029)	772777	125.000	132.1
93 1,4-Dichlorobenzene	146	13.125	13.112	(1.002)	403629	125.000	120.5
95 1,2-Dichlorobenzene	146	13.508	13.495	(1.032)	361736	125.000	125.5
96 1,2-Dibromo-3-chloropropane	157	14.323	14.286	(1.094)	14665	125.000	100.2(M)
97 1,2,4-Trichlorobenzene	180	15.168	15.119	(1.158)	76967	125.000	116.0(M)
98 Hexachlorobutadiene	225	15.290	15.282	(1.168)	104146	125.000	126.4
99 Naphthalene	128	15.448	15.392	(1.180)	115406	125.000	97.90(M)
100 1,2,3-Trichlorobenzene	180	15.703	15.660	(1.199)	36608	125.000	88.67(M)
156 Methyl Acetate	43	4.501	4.488	(0.587)	713549	625.000	563.0
157 Cyclohexane	56	6.995	7.006	(0.912)	504522	125.000	122.3
158 Methyl Cyclohexane	83	8.260	8.265	(1.077)	420672	125.000	121.9
32 Vinyl Acetate	43	5.724	5.717	(0.746)	278156	125.000	108.9(M)
52 1,4-Dioxane	88	8.454	8.453	(1.006)	32265	2500.00	2060(M)
21 tert-Butyl Alcohol	59	4.976	4.945	(1.025)	124916	1250.00	1060

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
16	3-Chloro-1-propene	76	4.380	4.391	(0.571)	119914	125.000	114.2
11	Acrolein	56	3.668	3.667	(0.478)	140306	750.000	652.2
22	Acrylonitrile	53	5.012	5.011	(0.654)	738601	1250.00	1160
8	Ethyl Ether	59	3.474	3.466	(0.453)	183505	125.000	116.9
62	Ethyl methacrylate	69	9.701	9.688	(0.901)	208477	125.000	118.1
23	Hexane	57	5.401	5.406	(0.704)	374367	125.000	116.5
14	Iodomethane	142	4.027	4.038	(0.525)	296835	125.000	119.7
44	Isobutanol	41	7.341	7.334	(0.957)	101831	3125.00	2752
155	N-Heptane	41	7.670	7.669	(1.000)	199740	125.000	115.7
35	Tetrahydrofuran	42	7.001	7.006	(0.913)	124724	250.000	239.0
164	trans-1,4-Dichloro-2-butene	53	12.140	12.120	(0.927)	42444	125.000	108.1(H)
169	Butadiene	39	2.160	2.165	(0.282)	294691	125.000	125.3
M 75	Xylenes (total)	106				772472	250.000	258.5

QC Flag Legend

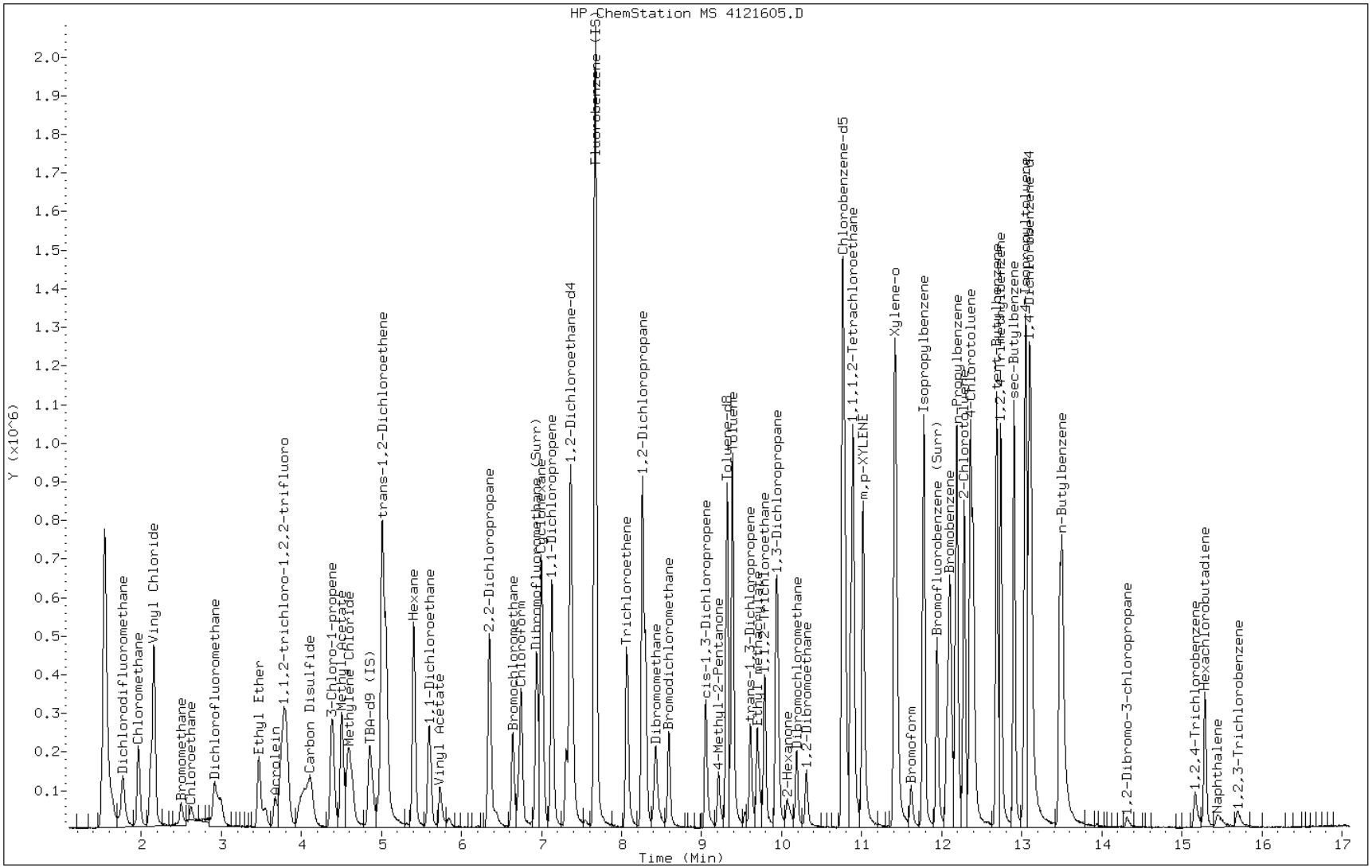
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 4121605.D

Date: 16-DEC-2013 11:53

Client ID: vstd25 Instrument: hp4.i

Sample Info: IC Operator: 034635



Manual Integration Report

Data File: 4121605.D
Inj. Date and Time: 16-DEC-2013 11:53
Instrument ID: hp4.i
Client ID: vstd25
Compound: 166 Trichlorofluoromethane
CAS #: 75-69-4
Report Date: 12/17/2013

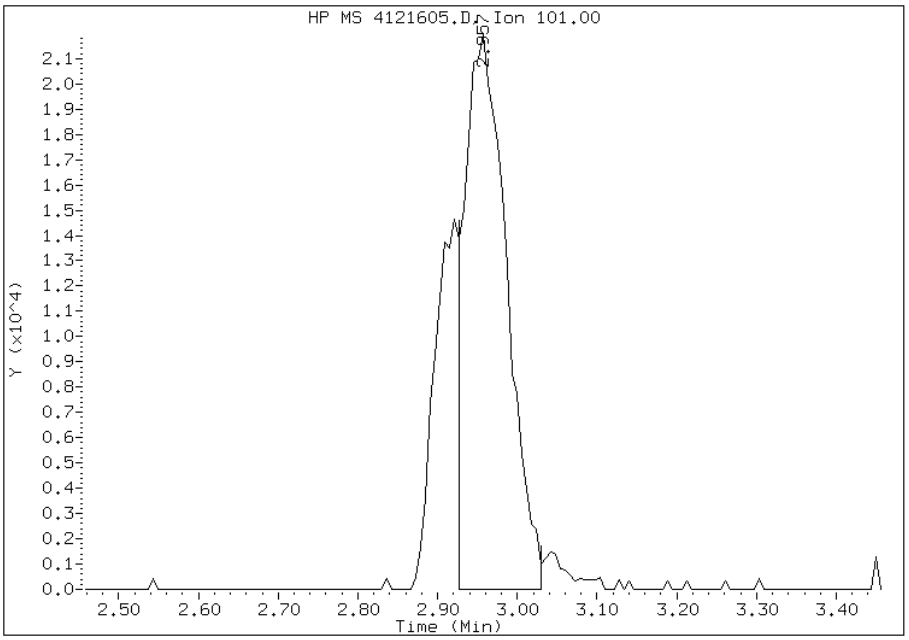
Processing Integration Results

RT: 2.96

Response: 82872

Amount: 97

Conc: 97



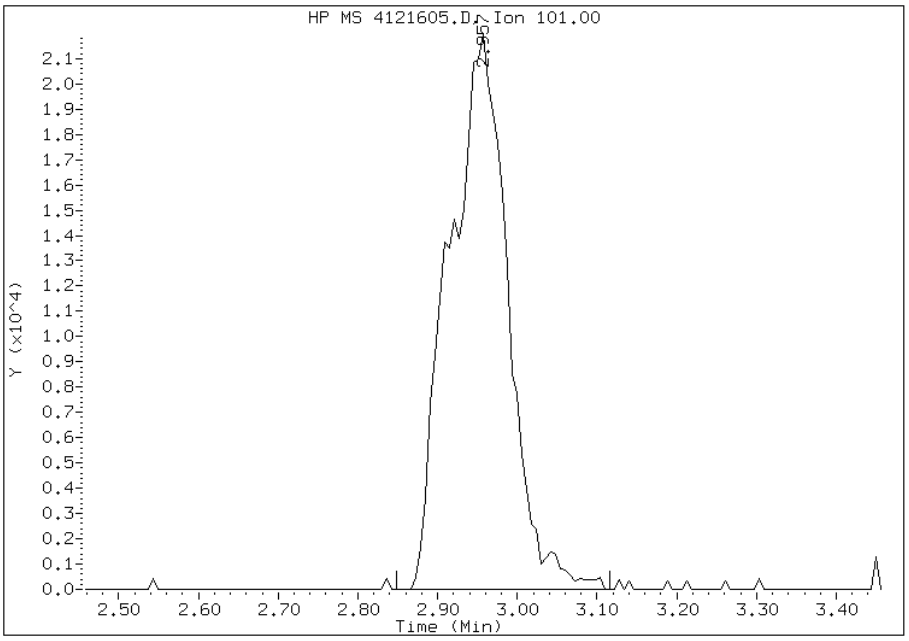
Manual Integration Results

RT: 2.96

Response: 113652

Amount: 120

Conc: 120



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:21
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121605.D
Inj. Date and Time: 16-DEC-2013 11:53
Instrument ID: hp4.i
Client ID: vstd25
Compound: 13 Acetone
CAS #: 67-64-1
Report Date: 12/17/2013

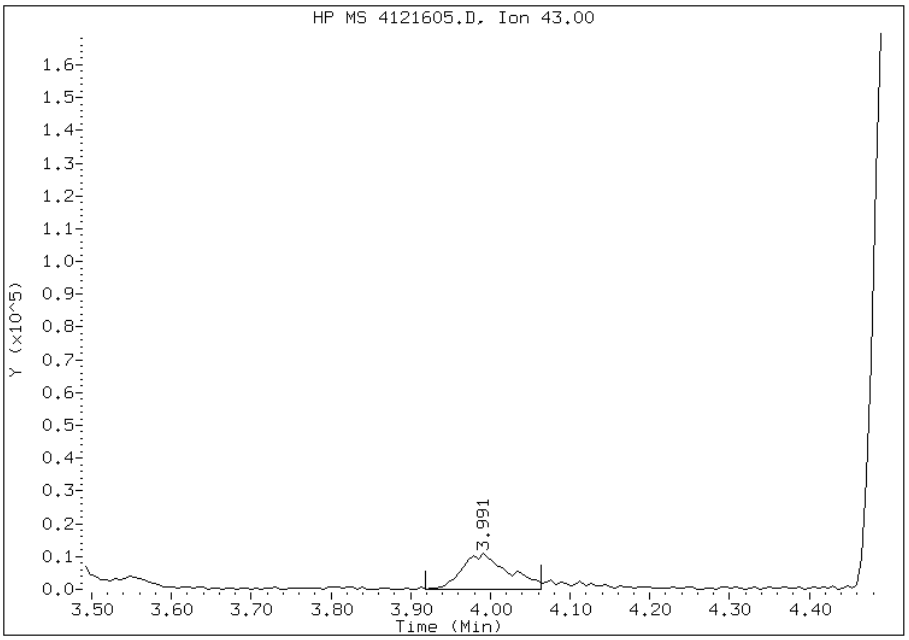
Processing Integration Results

RT: 3.99

Response: 44942

Amount: 85

Conc: 85



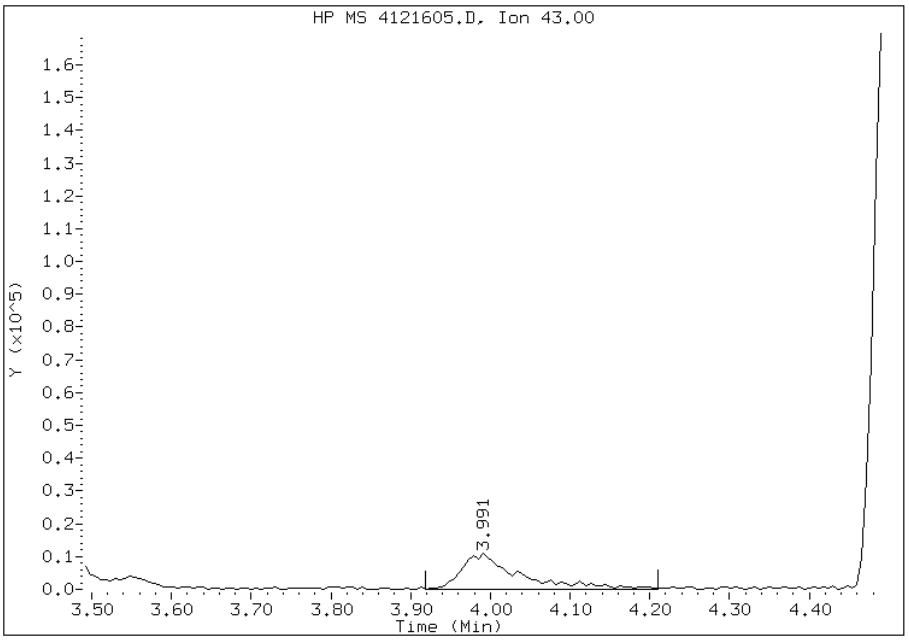
Manual Integration Results

RT: 3.99

Response: 55535

Amount: 104

Conc: 104



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 12:00
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121605.D
Inj. Date and Time: 16-DEC-2013 11:53
Instrument ID: hp4.i
Client ID: vstd25
Compound: 32 Vinyl Acetate
CAS #: 108-05-4
Report Date: 12/17/2013

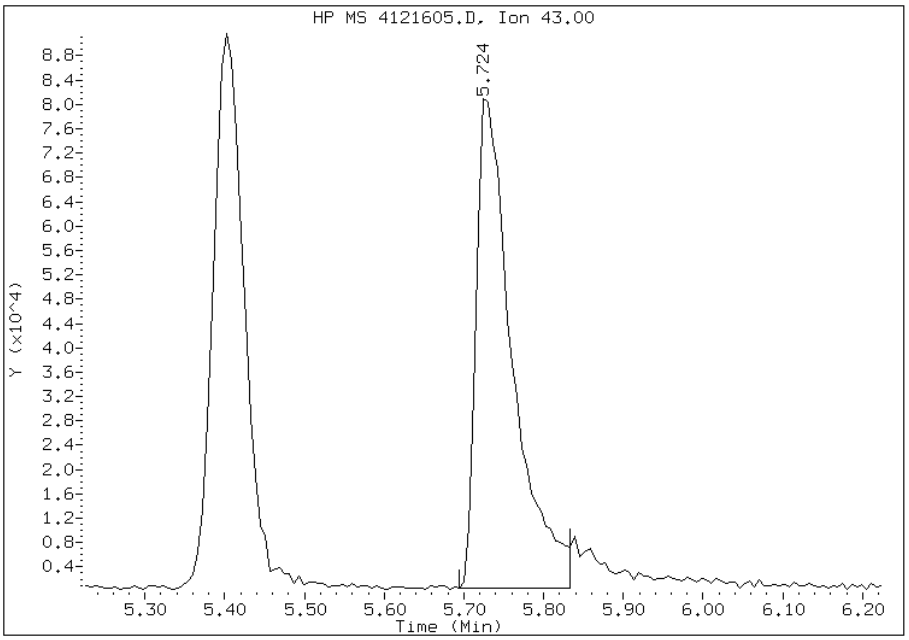
Processing Integration Results

RT: 5.72

Response: 258539

Amount: 106

Conc: 106



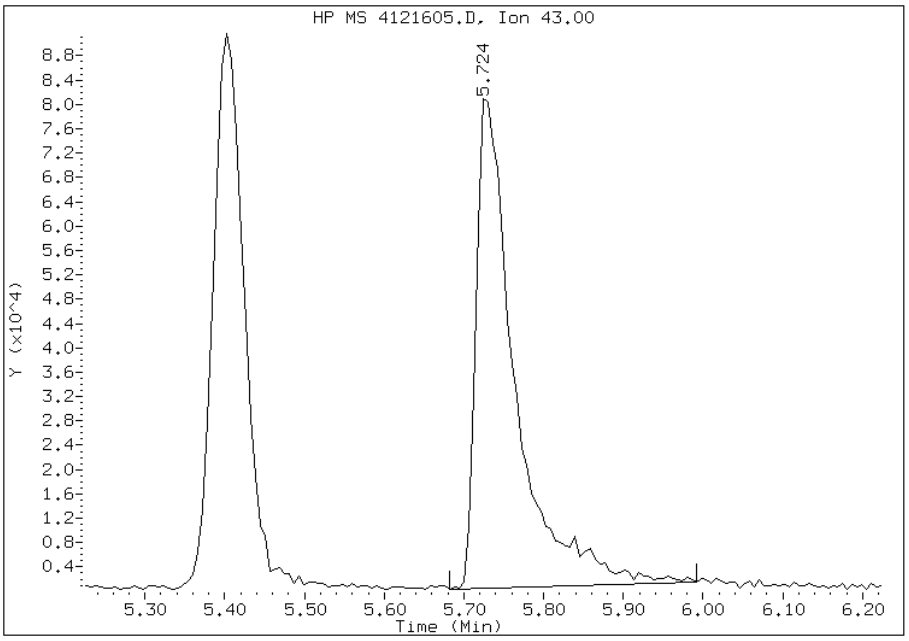
Manual Integration Results

RT: 5.72

Response: 278156

Amount: 109

Conc: 109



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:21
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121605.D
Inj. Date and Time: 16-DEC-2013 11:53
Instrument ID: hp4.i
Client ID: vstd25
Compound: 31 2-Butanone
CAS #: 78-93-3
Report Date: 12/17/2013

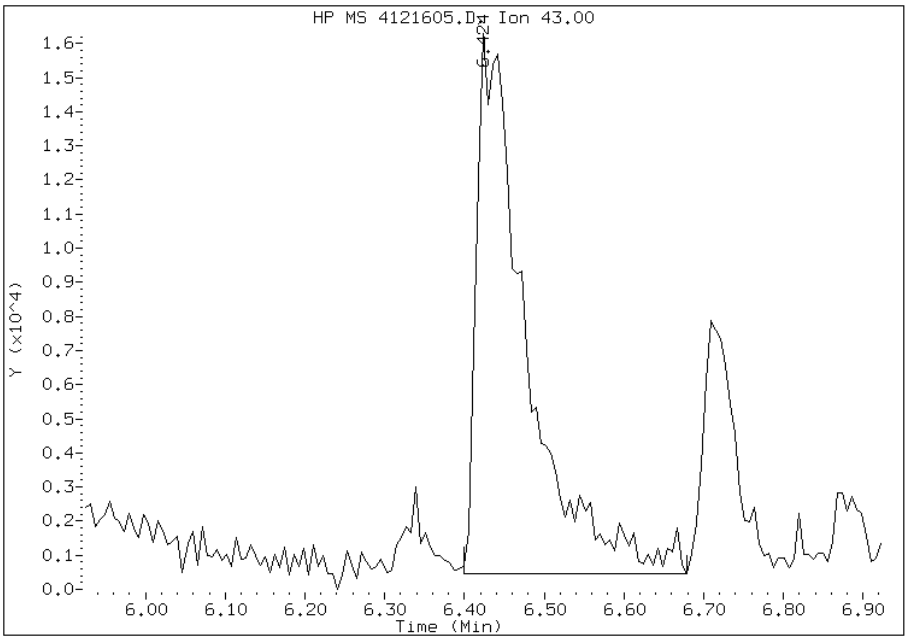
Processing Integration Results

RT: 6.42

Response: 69329

Amount: 102

Conc: 102



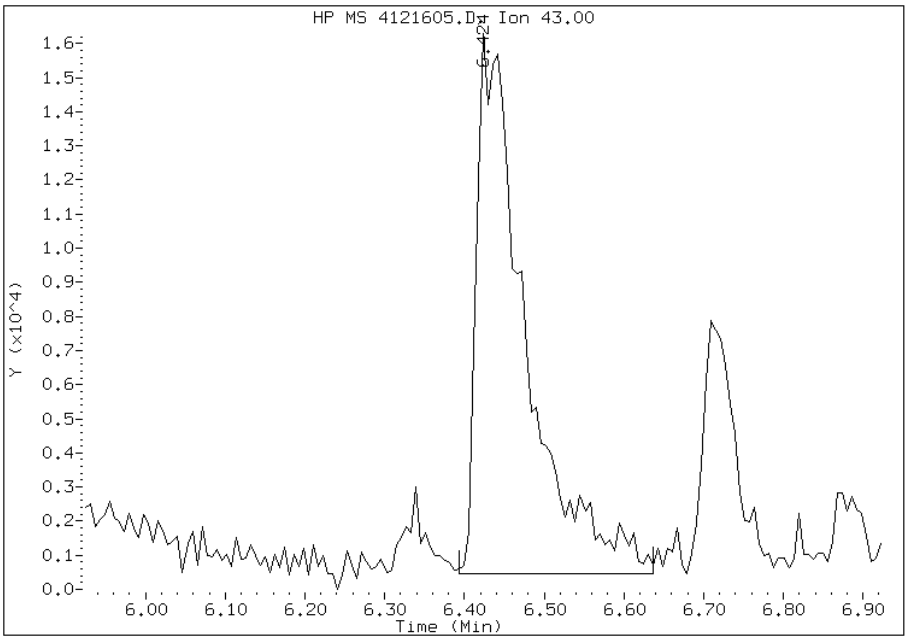
Manual Integration Results

RT: 6.42

Response: 68047

Amount: 97

Conc: 97



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 13:49
Manual Integration Reason:

Manual Integration Report

Data File: 4121605.D
Inj. Date and Time: 16-DEC-2013 11:53
Instrument ID: hp4.i
Client ID: vstd25
Compound: 176 Dioxane-d8 (IS)
CAS #: 17647-74-4
Report Date: 12/17/2013

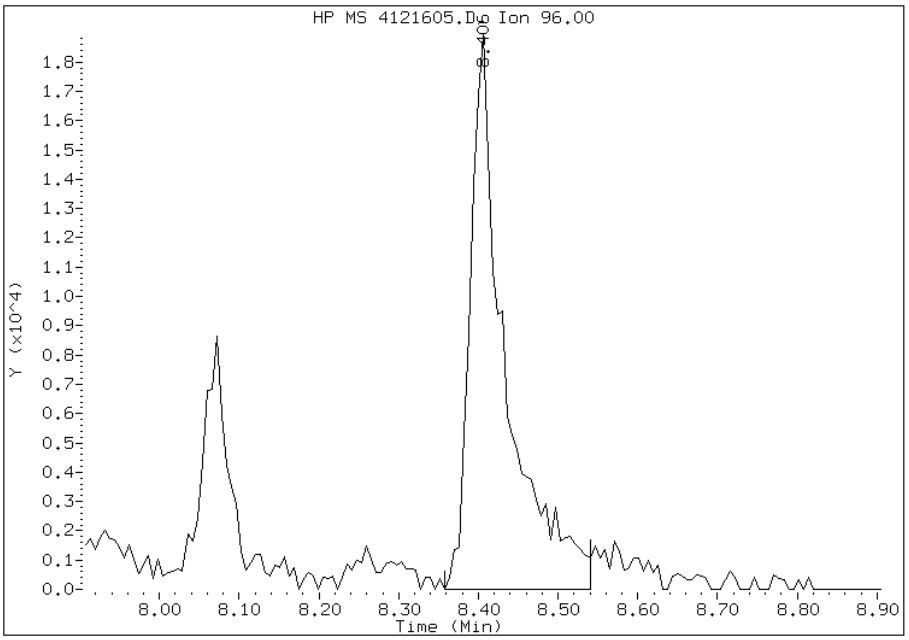
Processing Integration Results

RT: 8.41

Response: 59155

Amount: 5000

Conc: 5000



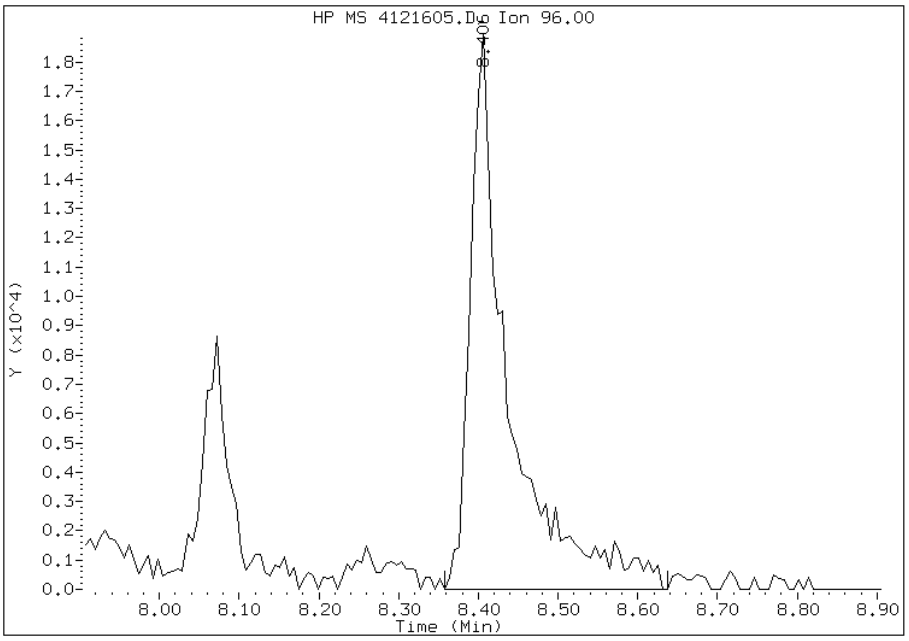
Manual Integration Results

RT: 8.41

Response: 64298

Amount: 5000

Conc: 5000



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 13:38
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121605.D
Inj. Date and Time: 16-DEC-2013 11:53
Instrument ID: hp4.i
Client ID: vstd25
Compound: 52 1,4-Dioxane
CAS #: 123-91-1
Report Date: 12/17/2013

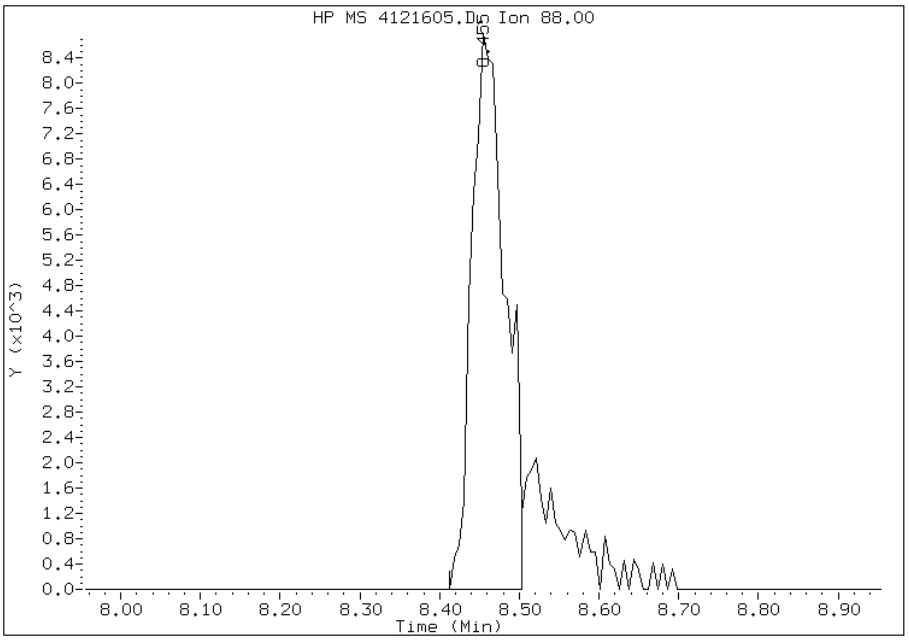
Processing Integration Results

RT: 8.45

Response: 26041

Amount: 1823

Conc: 1823



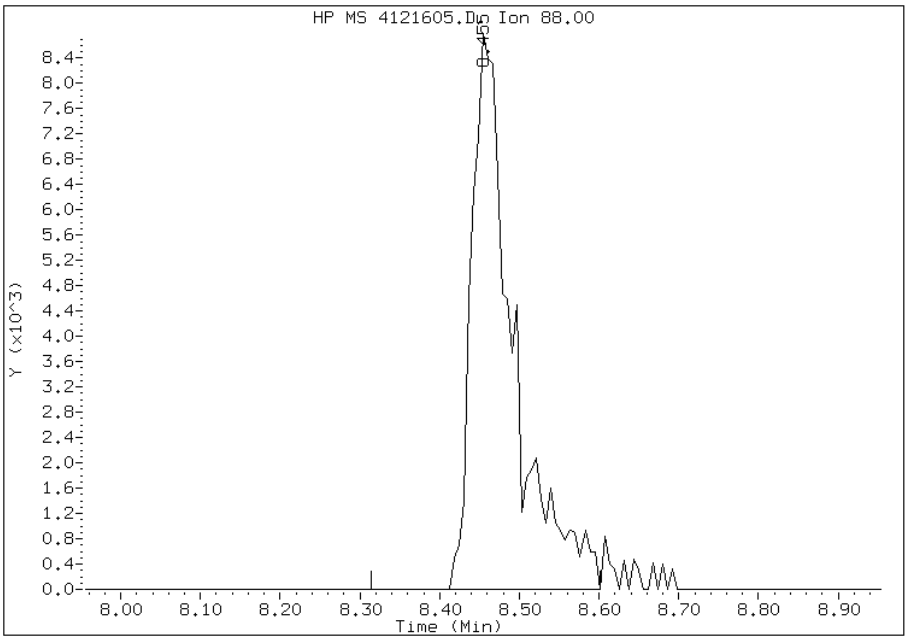
Manual Integration Results

RT: 8.45

Response: 32265

Amount: 2060

Conc: 2060



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:21
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121605.D
Inj. Date and Time: 16-DEC-2013 11:53
Instrument ID: hp4.i
Client ID: vstd25
Compound: 66 2-Hexanone
CAS #: 591-78-6
Report Date: 12/17/2013

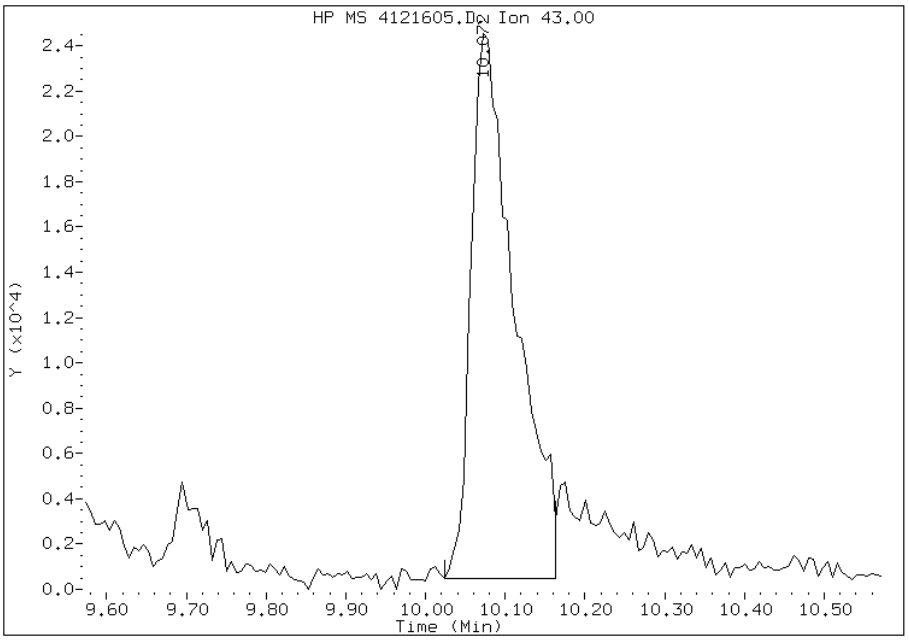
Processing Integration Results

RT: 10.07

Response: 93188

Amount: 88

Conc: 88



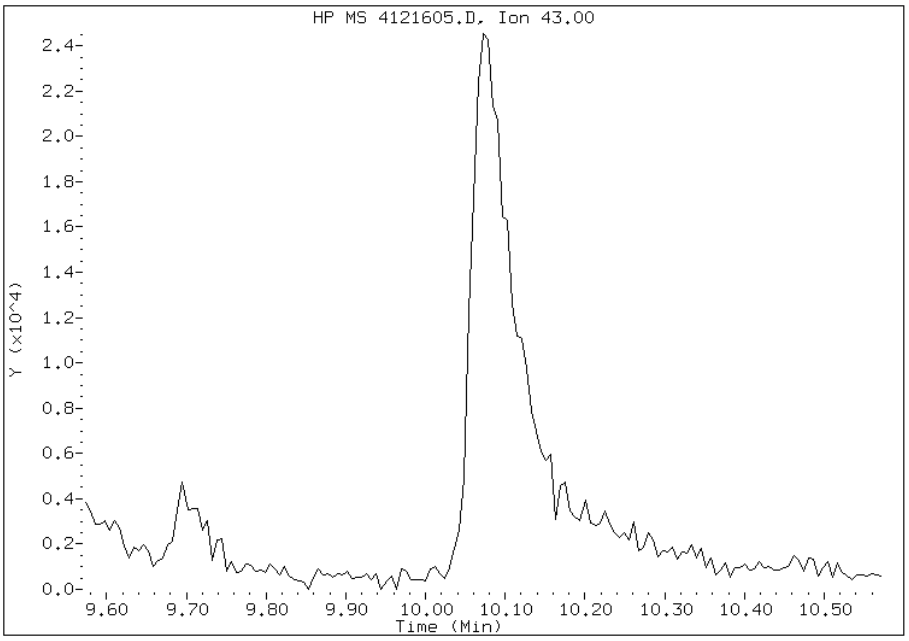
Manual Integration Results

RT: 10.07

Response: 144021

Amount: 115

Conc: 115



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 13:16
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121605.D
Inj. Date and Time: 16-DEC-2013 11:53
Instrument ID: hp4.i
Client ID: vstd25
Compound: 96 1,2-Dibromo-3-chloropropane
CAS #: 96-12-8
Report Date: 12/17/2013

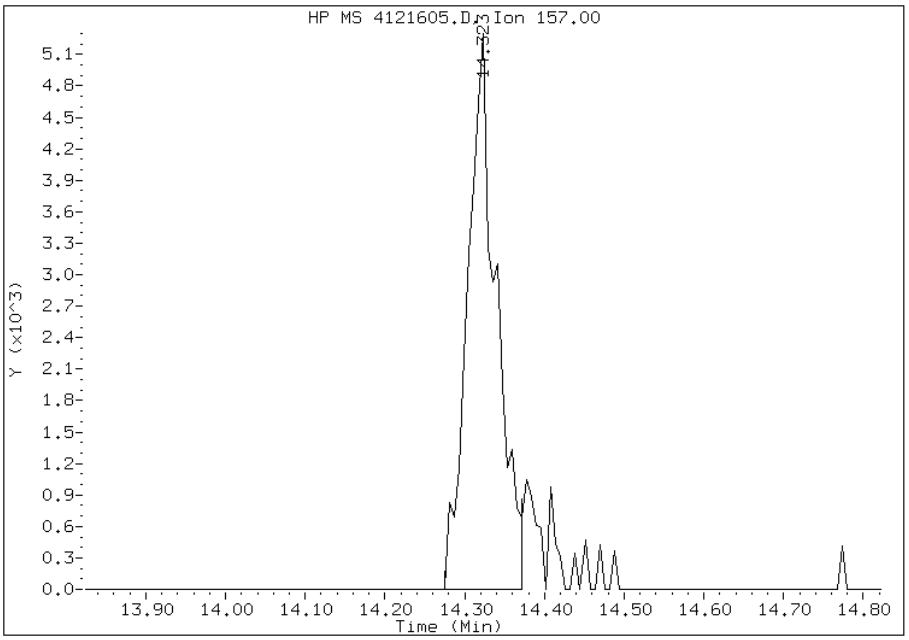
Processing Integration Results

RT: 14.32

Response: 13521

Amount: 156

Conc: 156



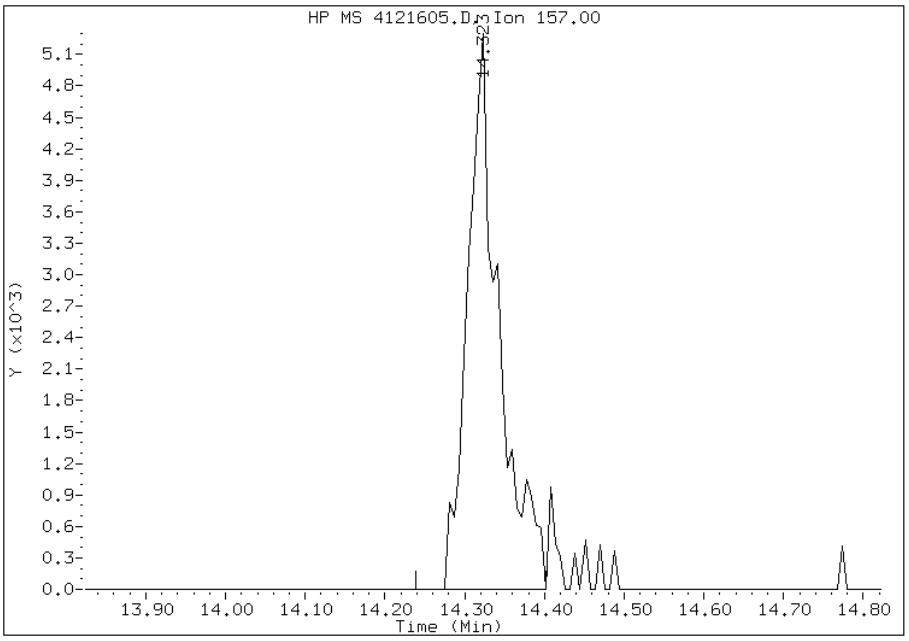
Manual Integration Results

RT: 14.32

Response: 14665

Amount: 100

Conc: 100



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:22
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121605.D
Inj. Date and Time: 16-DEC-2013 11:53
Instrument ID: hp4.i
Client ID: vstd25
Compound: 97 1,2,4-Trichlorobenzene
CAS #: 120-82-1
Report Date: 12/17/2013

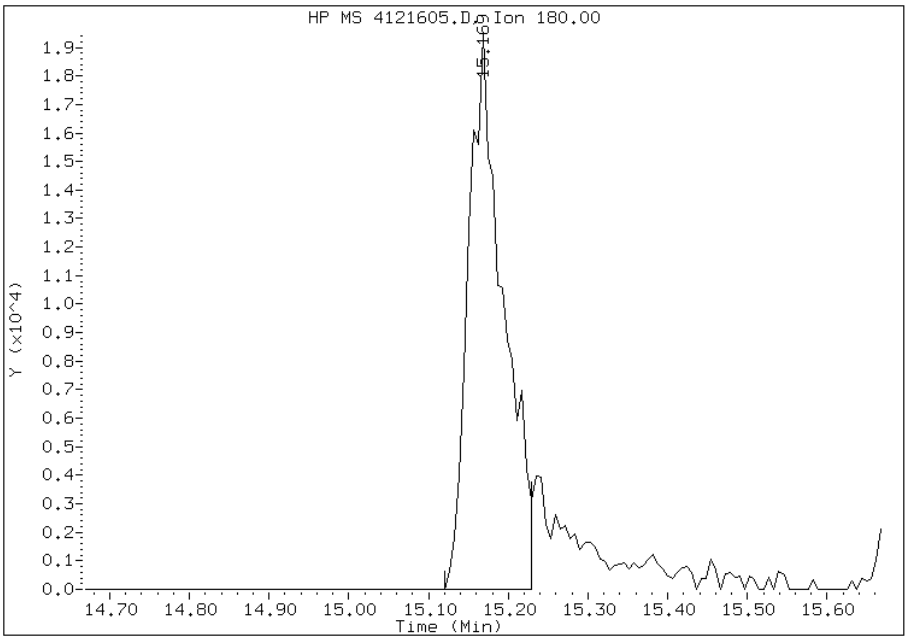
Processing Integration Results

RT: 15.17

Response: 60556

Amount: 113

Conc: 113



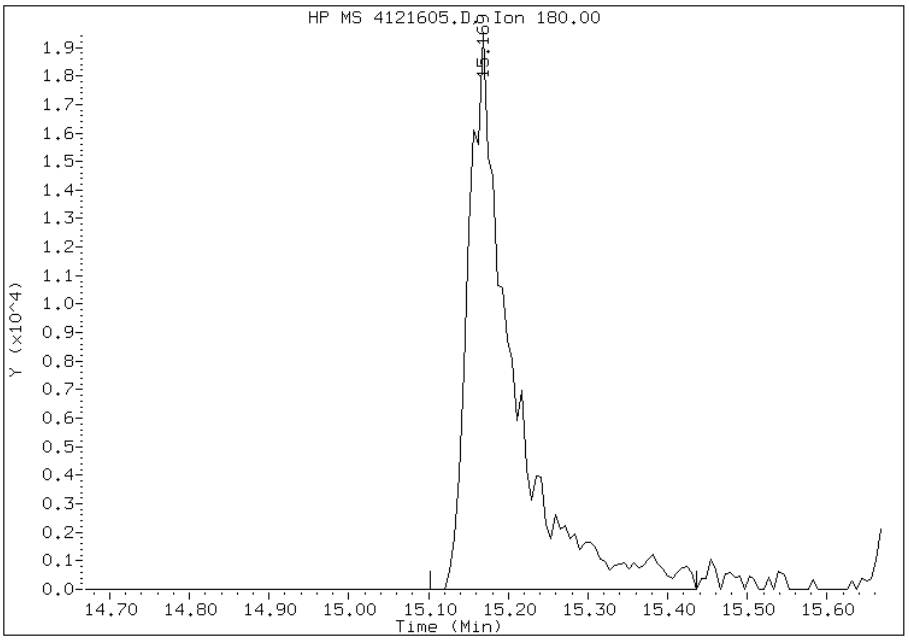
Manual Integration Results

RT: 15.17

Response: 76967

Amount: 116

Conc: 116



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:22
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121605.D
Inj. Date and Time: 16-DEC-2013 11:53
Instrument ID: hp4.i
Client ID: vstd25
Compound: 99 Naphthalene
CAS #: 91-20-3
Report Date: 12/17/2013

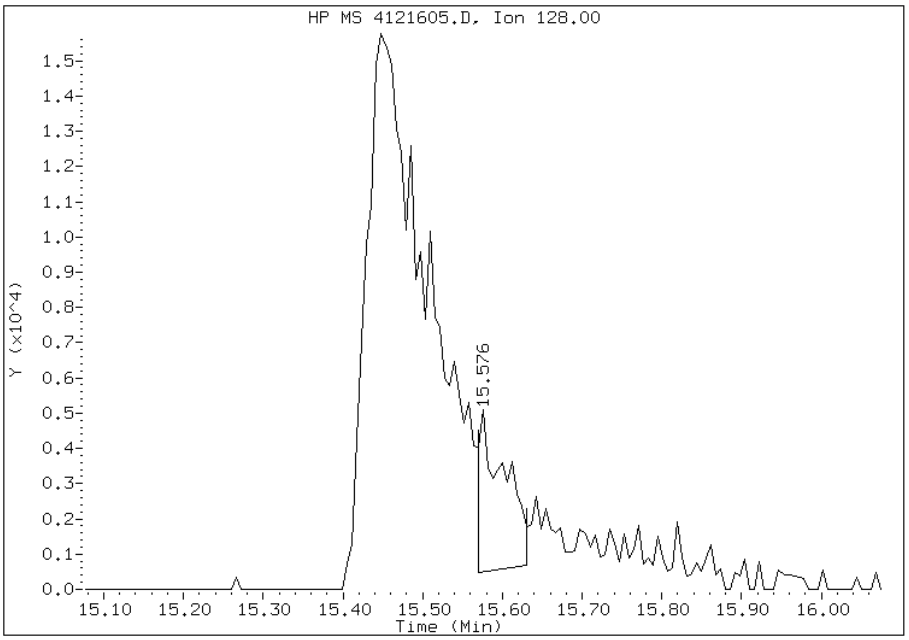
Processing Integration Results

RT: 15.58

Response: 9595

Amount: 13

Conc: 13



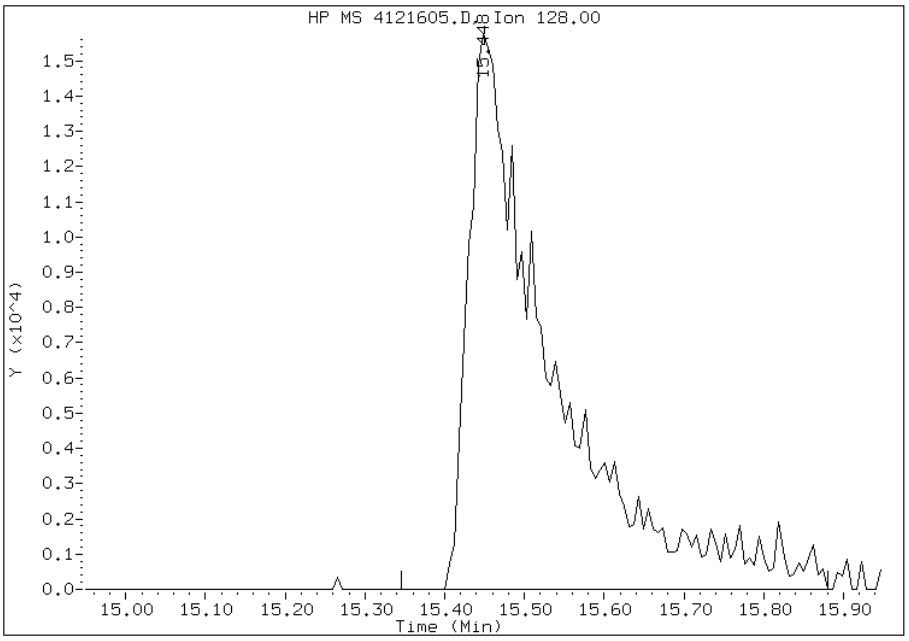
Manual Integration Results

RT: 15.45

Response: 115406

Amount: 98

Conc: 98



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:22
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4121605.D
Inj. Date and Time: 16-DEC-2013 11:53
Instrument ID: hp4.i
Client ID: vstd25
Compound: 100 1,2,3-Trichlorobenzene
CAS #: 87-61-6
Report Date: 12/17/2013

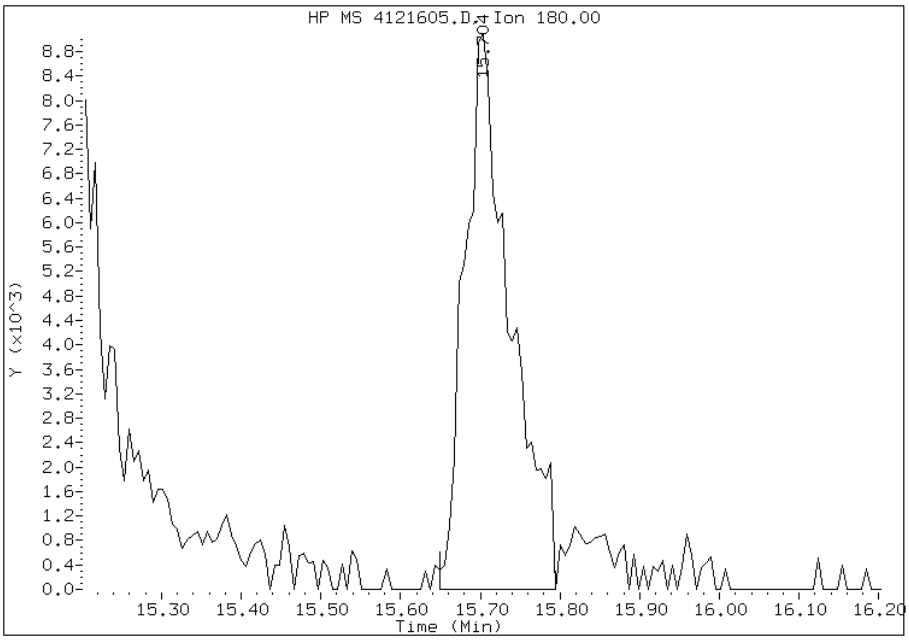
Processing Integration Results

RT: 15.70

Response: 36353

Amount: 94

Conc: 94



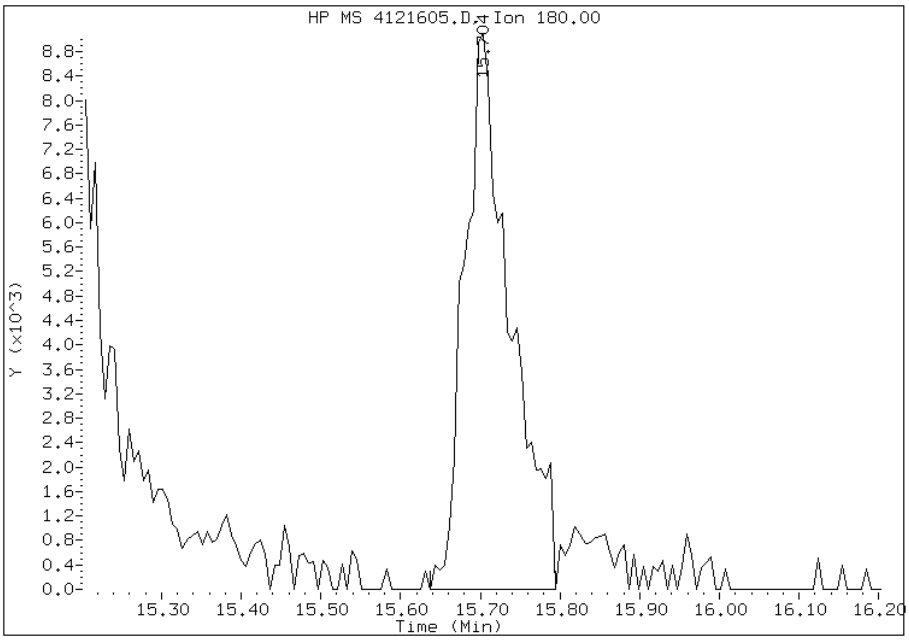
Manual Integration Results

RT: 15.70

Response: 36608

Amount: 89

Conc: 89



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 11:23
Manual Integration Reason: Poor Chromatography

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\PITSVR06\D\chem\hp4.i\4121613d.b\4121606.D
Lab Smp Id: ICIS Client Smp ID: vstd40
Inj Date : 16-DEC-2013 12:20
Operator : 034635 Inst ID: hp4.i
Smp Info : ICIS
Misc Info : 4121613d.b,t8260bh2o.m,list1.sub
Comment :
Method : \\PITSVR06\D\chem\hp4.i\4121613d.b\T8260bh2o.m
Meth Date : 16-Dec-2013 16:21 hp4.i Quant Type: ISTD
Cal Date : 16-DEC-2013 12:20 Cal File: 4121606.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-088

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
*	46 Fluorobenzene (IS)	96	7.674	7.674	(1.000)	1665461	250.000	
*	69 Chlorobenzene-d5	119	10.763	10.763	(1.000)	369881	250.000	
*	92 1,4-Dichlorobenzene-d4	152	13.092	13.092	(1.000)	424500	250.000	
*	176 Dioxane-d8 (IS)	96	8.397	8.397	(1.000)	58816	5000.00	
*	177 TBA-d9 (IS)	65	4.822	4.822	(1.000)	363172	5000.00	
$	39 Dibromofluoromethane (Surr)	113	6.932	6.932	(0.903)	276315	200.000	196.2
$	43 1,2-Dichloroethane-d4	65	7.309	7.309	(0.952)	280013	200.000	192.9
$	59 Toluene-d8	98	9.316	9.316	(0.866)	1256017	200.000	200.0
$	80 Bromofluorobenzene (Surr)	95	11.937	11.937	(1.109)	433633	200.000	194.7
	1 Dichlorodifluoromethane	85	1.775	1.775	(0.231)	415552	200.000	191.4
	2 Chloromethane	50	1.970	1.970	(0.257)	587800	200.000	198.7
	3 Vinyl Chloride	62	2.128	2.128	(0.277)	451359	200.000	180.5
	4 Bromomethane	94	2.499	2.499	(0.326)	81272	200.000	194.6
	5 Chloroethane	64	2.626	2.626	(0.342)	81075	200.000	196.5
	7 Dichlorofluoromethane	67	2.967	2.967	(0.387)	222957	200.000	185.8
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.843	3.843	(0.501)	358159	200.000	194.7
	166 Trichlorofluoromethane	101	3.028	3.028	(0.395)	223965	200.000	218.5(M)
	12 1,1-Dichloroethene	96	3.806	3.806	(0.496)	377280	200.000	191.8
	15 Carbon Disulfide	76	4.147	4.147	(0.540)	906456	200.000	193.5
	13 Acetone	43	3.964	3.964	(0.517)	96654	200.000	172.6
	18 Methylene Chloride	84	4.621	4.621	(0.602)	374312	200.000	182.6
	19 trans-1,2-Dichloroethene	96	5.010	5.010	(0.653)	391569	200.000	200.0
	20 Methyl tert-butyl ether	73	5.059	5.059	(0.659)	797477	200.000	201.5
	24 1,1-Dichloroethane	63	5.606	5.606	(0.731)	653944	200.000	196.2
	27 2,2-Dichloropropane	77	6.348	6.348	(0.827)	222751	200.000	188.3
	28 cis-1,2-dichloroethene	96	6.354	6.354	(0.828)	403363	200.000	195.2
M	29 1,2-Dichloroethene (total)	96				794932	400.000	395.2
	30 Bromochloromethane	128	6.640	6.640	(0.865)	174060	200.000	199.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
31 2-Butanone	43	6.421	6.421	(0.837)	123057	200.000	173.5
37 Chloroform	83	6.749	6.749	(0.880)	525557	200.000	188.8
38 1,1,1-Trichloroethane	97	6.944	6.944	(0.905)	400555	200.000	197.2
40 1,1-Dichloropropene	75	7.133	7.133	(0.929)	450301	200.000	197.2
41 Carbon Tetrachloride	117	7.133	7.133	(0.929)	352397	200.000	199.9
42 Benzene	78	7.364	7.364	(0.960)	1468958	200.000	201.3
45 1,2-Dichloroethane	62	7.388	7.388	(0.963)	360600	200.000	194.1
47 Trichloroethene	130	8.069	8.069	(1.052)	369255	200.000	201.7
49 1,2-Dichloropropane	63	8.300	8.300	(1.082)	373796	200.000	193.8
50 Dibromomethane	93	8.422	8.422	(1.097)	176087	200.000	199.5
53 Bromodichloromethane	83	8.586	8.586	(1.119)	360037	200.000	200.5
57 cis-1,3-Dichloropropene	75	9.048	9.048	(1.179)	497826	200.000	208.3
58 4-Methyl-2-Pentanone	43	9.206	9.206	(0.855)	341893	200.000	206.0
60 Toluene	91	9.383	9.383	(0.872)	1532481	200.000	199.8
61 trans-1,3-Dichloropropene	75	9.608	9.608	(0.893)	373871	200.000	213.7
63 1,3-Dichloropropane	76	9.954	9.954	(0.925)	506516	200.000	209.2
64 1,1,2-Trichloroethane	97	9.784	9.784	(0.909)	295571	200.000	207.5
65 Tetrachloroethene	164	9.930	9.930	(0.923)	291743	200.000	206.5
66 2-Hexanone	43	10.052	10.052	(0.934)	251079	200.000	201.4
67 Dibromochloromethane	129	10.185	10.185	(0.946)	245200	200.000	210.4
68 1,2-Dibromoethane	107	10.301	10.301	(0.957)	269648	200.000	212.4
70 Chlorobenzene	112	10.787	10.787	(1.002)	944781	200.000	203.5
71 1,1,1,2-Tetrachloroethane	131	10.867	10.867	(1.010)	278441	200.000	200.1
72 Ethylbenzene	106	10.897	10.897	(1.012)	531545	200.000	207.0
73 m,p-XYLENE	106	11.012	11.012	(1.023)	661072	200.000	208.7
74 Xylene-o	106	11.408	11.408	(1.060)	626426	200.000	205.5
76 Styrene	104	11.426	11.426	(1.062)	1018386	200.000	211.2
77 Bromoform	173	11.615	11.615	(1.079)	143710	200.000	216.4
78 Isopropylbenzene	105	11.773	11.773	(1.094)	1550473	200.000	196.1
79 Bromobenzene	156	12.095	12.095	(0.924)	351738	200.000	215.7
81 n-Propylbenzene	120	12.186	12.186	(0.931)	450520	200.000	221.5
82 2-Chlorotoluene	126	12.277	12.277	(0.938)	361140	200.000	216.6
83 1,1,2,2-Tetrachloroethane	83	12.065	12.065	(1.121)	326612	200.000	208.5
84 1,2,3-Trichloropropane	110	12.119	12.119	(0.926)	93523	200.000	227.0
85 4-Chlorotoluene	126	12.387	12.387	(0.946)	356908	200.000	219.5
86 1,3,5-Trimethylbenzene	105	12.356	12.356	(0.944)	1199295	200.000	202.1
87 tert-Butylbenzene	119	12.685	12.685	(0.969)	1078920	200.000	203.9
88 1,2,4-Trimethylbenzene	105	12.733	12.733	(0.973)	1190361	200.000	211.6
89 sec-Butylbenzene	105	12.904	12.904	(0.986)	1566093	200.000	201.7
90 4-Isopropyltoluene	119	13.050	13.050	(0.997)	1225476	200.000	203.8
91 1,3-Dichlorobenzene	146	13.031	13.031	(0.995)	550929	200.000	208.2
94 n-Butylbenzene	91	13.469	13.469	(1.029)	1130348	200.000	212.0
93 1,4-Dichlorobenzene	146	13.117	13.117	(1.002)	597299	200.000	195.7
95 1,2-Dichlorobenzene	146	13.500	13.500	(1.031)	532109	200.000	202.2
96 1,2-Dibromo-3-chloropropane	157	14.302	14.302	(1.092)	29402	200.000	243.7
97 1,2,4-Trichlorobenzene	180	15.154	15.154	(1.157)	120799	200.000	203.2
98 Hexachlorobutadiene	225	15.288	15.288	(1.168)	142235	200.000	187.5
99 Naphthalene	128	15.428	15.428	(1.178)	217185	200.000	245.2
100 1,2,3-Trichlorobenzene	180	15.677	15.677	(1.197)	69806	200.000	213.6
156 Methyl Acetate	43	4.493	4.493	(0.586)	1440532	1000.00	1086
157 Cyclohexane	56	6.999	6.999	(0.912)	863739	200.000	198.4
158 Methyl Cyclohexane	83	8.264	8.264	(1.077)	733665	200.000	202.8
32 Vinyl Acetate	43	5.728	5.728	(0.746)	536520	200.000	202.2
52 1,4-Dioxane	88	8.458	8.458	(1.007)	61009	4000.00	4477

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
21	tert-Butyl Alcohol	59	4.937	4.937	(1.024)	183791	2000.00	1886
16	3-Chloro-1-propene	76	4.396	4.396	(0.573)	206226	200.000	188.1
11	Acrolein	56	3.672	3.672	(0.479)	196994	875.000	870.1
22	Acrylonitrile	53	5.010	5.010	(0.653)	1411604	2000.00	2130
8	Ethyl Ether	59	3.466	3.466	(0.452)	322050	200.000	193.6
62	Ethyl methacrylate	69	9.693	9.693	(0.901)	414426	200.000	228.0
23	Hexane	57	5.412	5.412	(0.705)	664851	200.000	197.7
14	Iodomethane	142	4.049	4.049	(0.528)	491663	200.000	187.0
44	Isobutanol	41	7.345	7.345	(0.957)	188918	5000.00	4940
155	N-Heptane	41	7.668	7.668	(0.999)	372639	200.000	207.1
35	Tetrahydrofuran	42	7.005	7.005	(0.913)	207801	400.000	381.4
164	trans-1,4-Dichloro-2-butene	53	12.144	12.144	(0.928)	72640	200.000	207.3
169	Butadiene	39	2.158	2.158	(0.281)	459710	200.000	183.6
M 75	Xylenes (total)	106				1287498	400.000	414.2

QC Flag Legend

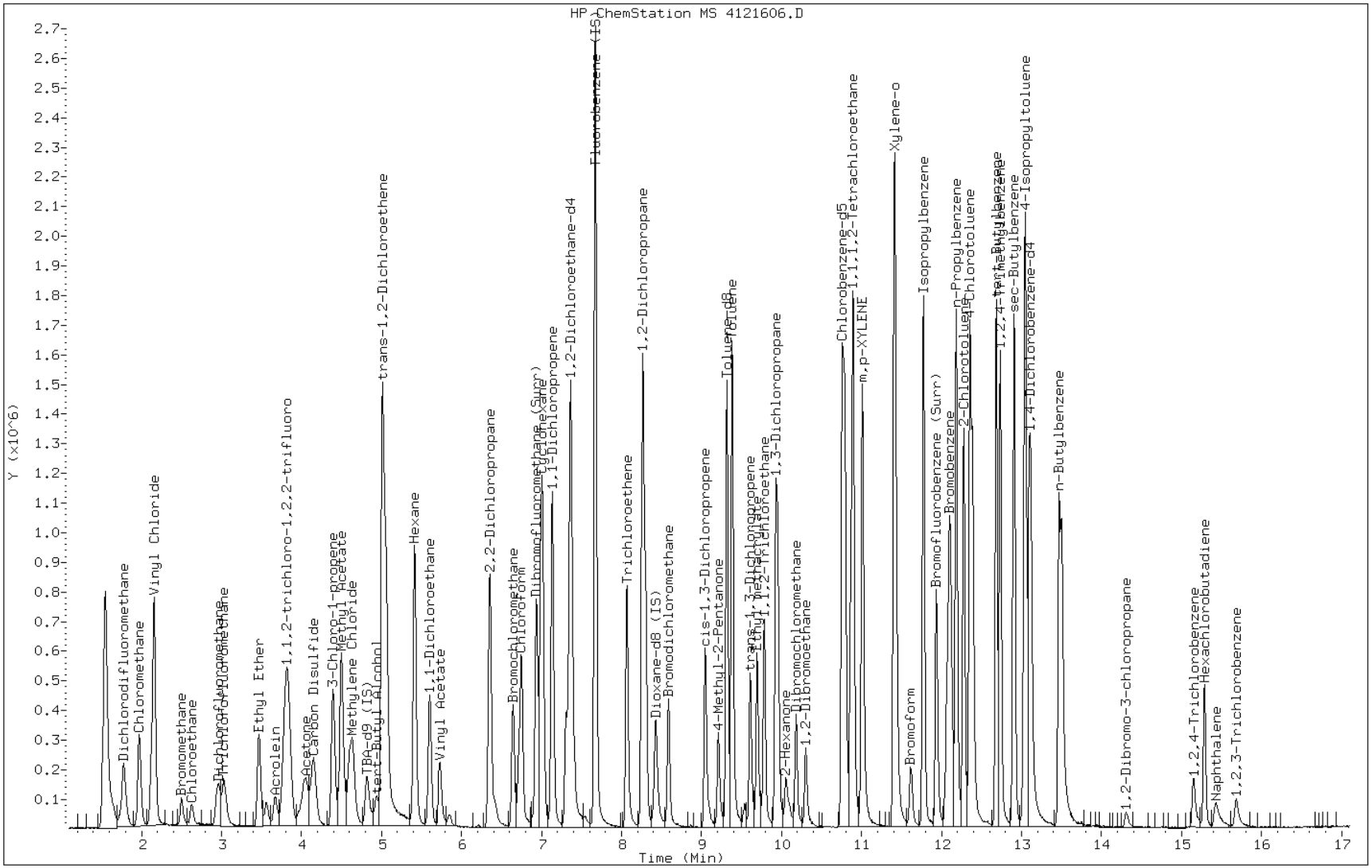
M - Compound response manually integrated.

Data File: 4121606.D

Date: 16-DEC-2013 12:20

Client ID: vstd40 Instrument: hp4.i

Sample Info: ICIS Operator: 034635



Manual Integration Report

Data File: 4121606.D
Inj. Date and Time: 16-DEC-2013 12:20
Instrument ID: hp4.i
Client ID: vstd40
Compound: 166 Trichlorofluoromethane
CAS #: 75-69-4
Report Date: 12/17/2013

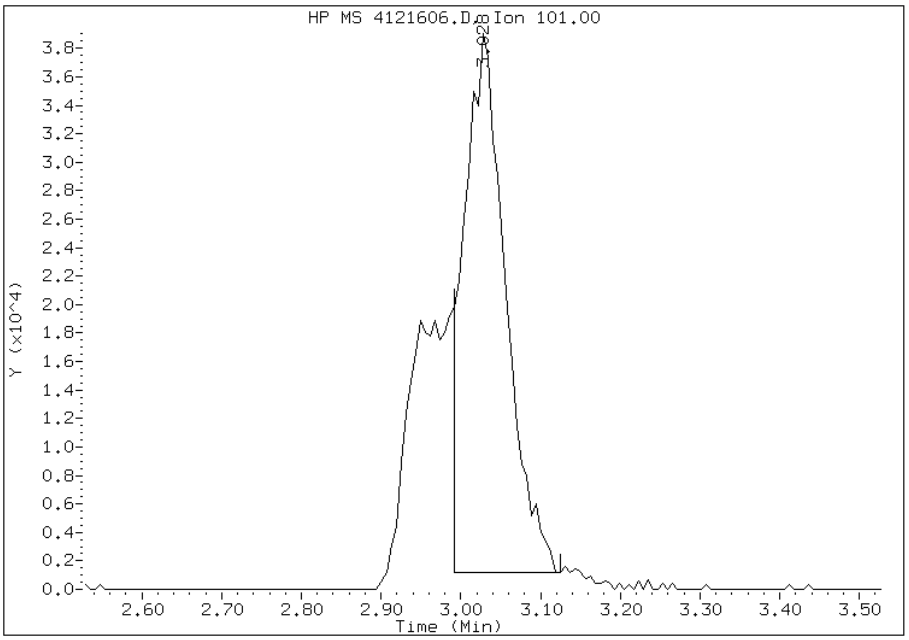
Processing Integration Results

RT: 3.03

Response: 141262

Amount: 142

Conc: 142



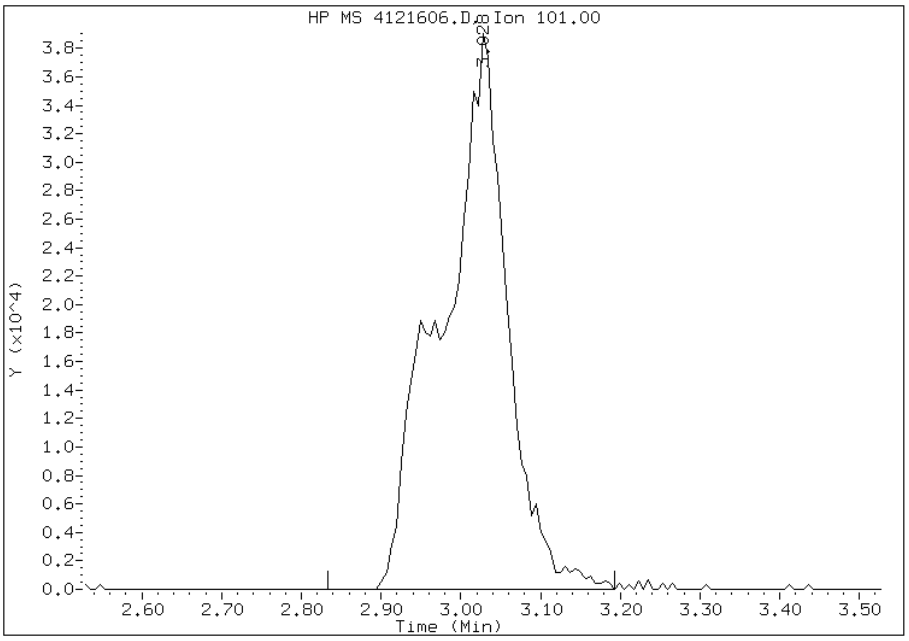
Manual Integration Results

RT: 3.03

Response: 223965

Amount: 218

Conc: 218



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 16:20
Manual Integration Reason: Poor Chromatography

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\PITSVR06\D\chem\hp4.i\4121613d.b\4121613.D
Lab Smp Id: IC Client Smp ID: vstd50
Inj Date : 16-DEC-2013 16:49
Operator : 034635 Inst ID: hp4.i
Smp Info : IC
Misc Info : 4121613d.b,t8260bh2o.m,list1.sub
Comment :
Method : \\PITSVR06\D\chem\hp4.i\4121613d.b\T8260bh2o.m
Meth Date : 16-Dec-2013 16:23 journetp Quant Type: ISTD
Cal Date : 16-DEC-2013 16:49 Cal File: 4121613.D
Als bottle: 12 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-088

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
*	46 Fluorobenzene (IS)	96	7.676	7.677	(1.000)	1694686	250.000	
*	69 Chlorobenzene-d5	119	10.760	10.760	(1.000)	399212	250.000	
*	92 1,4-Dichlorobenzene-d4	152	13.095	13.095	(1.000)	534080	250.000	
*	176 Dioxane-d8 (IS)	96	8.400	8.401	(1.000)	58581	5000.00	
*	177 TBA-d9 (IS)	65	4.842	4.843	(1.000)	416402	5000.00	
$	39 Dibromofluoromethane (Surr)	113	6.934	6.935	(0.903)	363051	250.000	253.4
$	43 1,2-Dichloroethane-d4	65	7.305	7.306	(0.952)	373620	250.000	253.0
$	59 Toluene-d8	98	9.318	9.319	(0.866)	1553717	250.000	229.3
$	80 Bromofluorobenzene (Surr)	95	11.933	11.934	(1.109)	617725	250.000	256.9
	1 Dichlorodifluoromethane	85	1.771	1.772	(0.231)	553737	250.000	250.7
	2 Chloromethane	50	1.966	1.966	(0.256)	760840	250.000	252.8
	3 Vinyl Chloride	62	2.130	2.130	(0.278)	632775	250.000	248.7
	4 Bromomethane	94	2.501	2.501	(0.326)	106349	250.000	250.3
	5 Chloroethane	64	2.629	2.629	(0.343)	101215	250.000	241.0
	7 Dichlorofluoromethane	67	2.933	2.933	(0.382)	338580	250.000	277.2
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.827	3.827	(0.499)	464116	250.000	248.0
	166 Trichlorofluoromethane	101	2.975	2.976	(0.388)	325872	250.000	294.4
	12 1,1-Dichloroethene	96	3.790	3.791	(0.494)	497168	250.000	248.4
	15 Carbon Disulfide	76	4.131	4.131	(0.538)	1275291	250.000	267.5
	13 Acetone	43	3.979	3.979	(0.518)	129568	250.000	227.4
	18 Methylene Chloride	84	4.624	4.624	(0.602)	515930	250.000	247.3
	19 trans-1,2-Dichloroethene	96	5.007	5.007	(0.652)	499735	250.000	250.8
	20 Methyl tert-butyl ether	73	5.061	5.062	(0.659)	999629	250.000	248.3
	24 1,1-Dichloroethane	63	5.603	5.603	(0.730)	846137	250.000	249.4
	27 2,2-Dichloropropane	77	6.345	6.345	(0.827)	309489	250.000	257.1
	28 cis-1,2-dichloroethene	96	6.357	6.357	(0.828)	546500	250.000	260.0
M	29 1,2-Dichloroethene (total)	96				1046235	500.000	510.7
	30 Bromochloromethane	128	6.643	6.643	(0.865)	231148	250.000	260.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
31 2-Butanone	43	6.424	6.424	(0.837)	193545	250.000	256.2
37 Chloroform	83	6.752	6.753	(0.880)	704278	250.000	248.7
38 1,1,1-Trichloroethane	97	6.941	6.941	(0.904)	525976	250.000	254.4
40 1,1-Dichloropropene	75	7.135	7.136	(0.929)	568858	250.000	244.8
41 Carbon Tetrachloride	117	7.129	7.130	(0.929)	459936	250.000	256.4
42 Benzene	78	7.366	7.367	(0.960)	1877948	250.000	252.9
45 1,2-Dichloroethane	62	7.391	7.391	(0.963)	476933	250.000	252.2
47 Trichloroethene	130	8.066	8.066	(1.051)	458581	250.000	246.2
49 1,2-Dichloropropane	63	8.303	8.303	(1.082)	486126	250.000	247.7
50 Dibromomethane	93	8.424	8.425	(1.097)	232863	250.000	259.3
53 Bromodichloromethane	83	8.589	8.589	(1.119)	471536	250.000	258.1
57 cis-1,3-Dichloropropene	75	9.045	9.045	(1.178)	659161	250.000	271.0
58 4-Methyl-2-Pentanone	43	9.209	9.209	(0.856)	449587	250.000	247.9
60 Toluene	91	9.385	9.386	(0.872)	1930073	250.000	233.2
61 trans-1,3-Dichloropropene	75	9.604	9.605	(0.893)	498964	250.000	264.2
63 1,3-Dichloropropane	76	9.957	9.957	(0.925)	654303	250.000	250.4
64 1,1,2-Trichloroethane	97	9.787	9.787	(0.910)	366430	250.000	238.4
65 Tetrachloroethene	164	9.933	9.933	(0.923)	362335	250.000	237.6
66 2-Hexanone	43	10.054	10.055	(0.934)	276343	250.000	205.1
67 Dibromochloromethane	129	10.188	10.188	(0.947)	327790	250.000	260.6
68 1,2-Dibromoethane	107	10.303	10.304	(0.958)	347496	250.000	253.7
70 Chlorobenzene	112	10.790	10.791	(1.003)	1255443	250.000	250.5
71 1,1,1,2-Tetrachloroethane	131	10.863	10.863	(1.010)	392100	250.000	261.0
72 Ethylbenzene	106	10.893	10.894	(1.012)	698769	250.000	252.2
73 m,p-XYLENE	106	11.009	11.009	(1.023)	875826	250.000	256.2
74 Xylene-o	106	11.404	11.405	(1.060)	840703	250.000	255.6
76 Styrene	104	11.422	11.423	(1.062)	1397192	250.000	268.4
77 Bromoform	173	11.617	11.618	(1.080)	201323	250.000	260.1
78 Isopropylbenzene	105	11.775	11.776	(1.094)	2044294	250.000	239.5
79 Bromobenzene	156	12.091	12.092	(0.923)	501811	250.000	244.6
81 n-Propylbenzene	120	12.183	12.183	(0.930)	612716	250.000	239.4
82 2-Chlorotoluene	126	12.280	12.280	(0.938)	511155	250.000	243.7
83 1,1,2,2-Tetrachloroethane	83	12.061	12.062	(1.121)	420149	250.000	248.5
84 1,2,3-Trichloropropane	110	12.116	12.116	(0.925)	116915	250.000	225.5
85 4-Chlorotoluene	126	12.389	12.390	(0.946)	510100	250.000	249.4
86 1,3,5-Trimethylbenzene	105	12.353	12.353	(0.943)	1664989	250.000	223.0
87 tert-Butylbenzene	119	12.681	12.682	(0.968)	1487251	250.000	223.4
88 1,2,4-Trimethylbenzene	105	12.736	12.737	(0.973)	1675735	250.000	236.8
89 sec-Butylbenzene	105	12.906	12.907	(0.986)	2127148	250.000	217.7
90 4-Isopropyltoluene	119	13.046	13.047	(0.996)	1770089	250.000	234.0
91 1,3-Dichlorobenzene	146	13.034	13.035	(0.995)	856945	250.000	257.5
94 n-Butylbenzene	91	13.466	13.466	(1.028)	1734798	250.000	247.1
93 1,4-Dichlorobenzene	146	13.119	13.120	(1.002)	945330	250.000	238.5
95 1,2-Dichlorobenzene	146	13.502	13.503	(1.031)	843847	250.000	254.9
96 1,2-Dibromo-3-chloropropane	157	14.305	14.306	(1.092)	32997	250.000	218.6
97 1,2,4-Trichlorobenzene	180	15.144	15.145	(1.156)	180490	250.000	238.3
98 Hexachlorobutadiene	225	15.284	15.285	(1.167)	230309	250.000	241.3
99 Naphthalene	128	15.418	15.418	(1.177)	257409	250.000	230.9
100 1,2,3-Trichlorobenzene	180	15.685	15.686	(1.198)	101510	250.000	247.5
156 Methyl Acetate	43	4.502	4.502	(0.586)	1607837	1250.00	1191
157 Cyclohexane	56	7.001	7.002	(0.912)	1078040	250.000	243.4
158 Methyl Cyclohexane	83	8.266	8.266	(1.077)	891282	250.000	242.1
32 Vinyl Acetate	43	5.724	5.725	(0.746)	650483	250.000	240.9
52 1,4-Dioxane	88	8.455	8.455	(1.007)	63934	5000.00	4710

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
21	tert-Butyl Alcohol	59	4.964	4.965	(1.025)	264937	2500.00	2371
16	3-Chloro-1-propene	76	4.386	4.387	(0.571)	278976	250.000	250.1
11	Acrolein	56	3.675	3.675	(0.479)	218208	1000.00	947.1
22	Acrylonitrile	53	5.013	5.013	(0.653)	1664965	2500.00	2468
8	Ethyl Ether	59	3.480	3.481	(0.453)	416071	250.000	245.8
62	Ethyl methacrylate	69	9.695	9.696	(0.901)	504228	250.000	257.1
23	Hexane	57	5.408	5.409	(0.705)	806459	250.000	235.7
14	Iodomethane	142	4.046	4.046	(0.527)	671935	250.000	251.2
44	Isobutanol	41	7.342	7.342	(0.956)	222616	6250.00	5720
155	N-Heptane	41	7.670	7.670	(0.999)	418119	250.000	228.4
35	Tetrahydrofuran	42	7.001	7.002	(0.912)	256161	500.000	462.0
164	trans-1,4-Dichloro-2-butene	53	12.140	12.140	(0.927)	104608	250.000	237.3(H)
169	Butadiene	39	2.161	2.161	(0.282)	630505	250.000	247.5
M 75	Xylenes (total)	106				1716529	500.000	511.7

QC Flag Legend

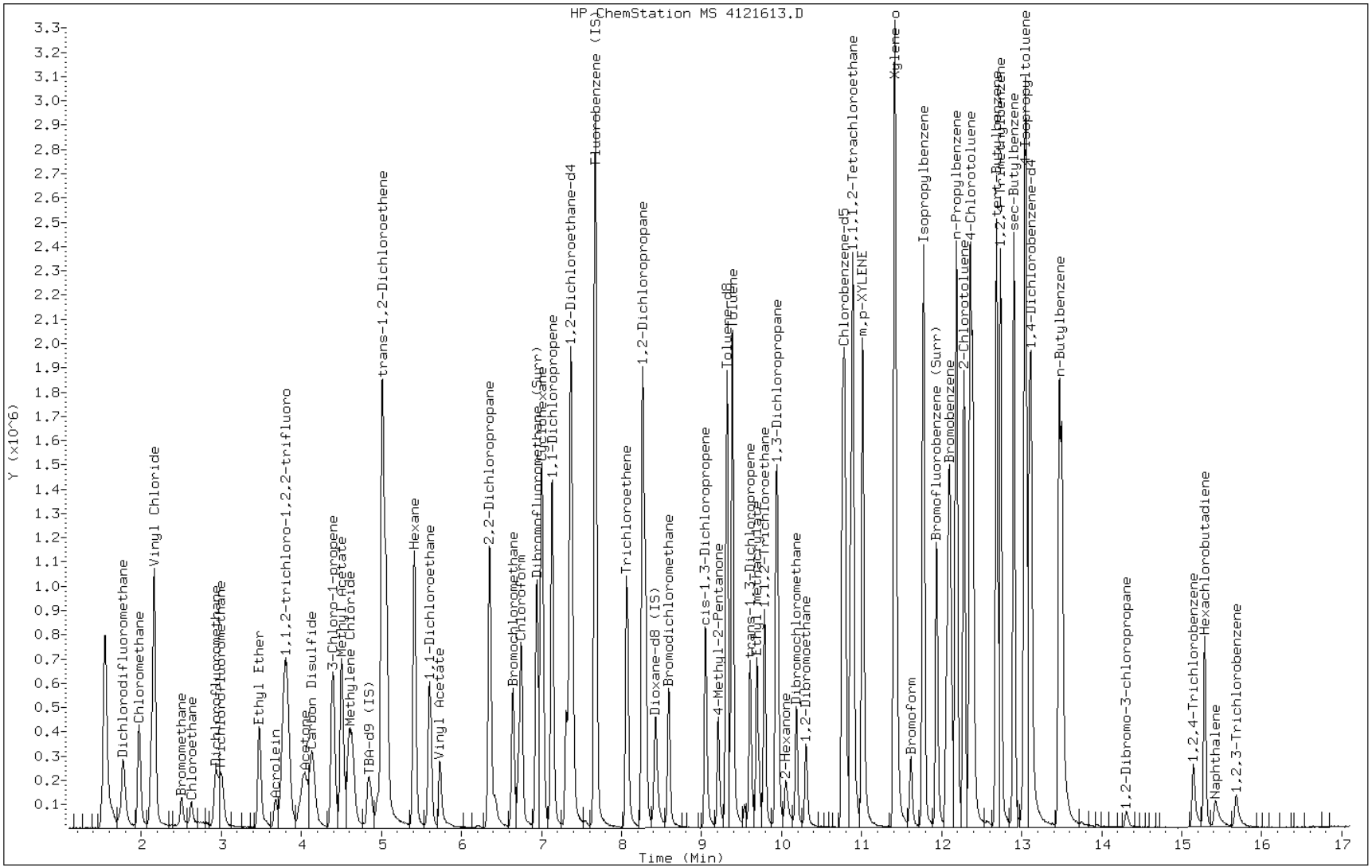
H - Operator selected an alternate compound hit.

Data File: 4121613.D

Date: 16-DEC-2013 16:49

Client ID: vstd50 Instrument: hp4.i

Sample Info: IC Operator: 034635



TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\PITSVR06\D\chem\hp4.i\4121613d.b\4121608.D
Lab Smp Id: IC Client Smp ID: vstd125
Inj Date : 16-DEC-2013 14:07
Operator : 034635 Inst ID: hp4.i
Smp Info : IC
Misc Info : 4121613d.b,t8260bh2o.m,list1.sub
Comment :
Method : \\PITSVR06\D\chem\hp4.i\4121613d.b\T8260bh2o.m
Meth Date : 16-Dec-2013 13:56 hp4.i Quant Type: ISTD
Cal Date : 16-DEC-2013 13:41 Cal File: 4121607.D
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-088

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	
*	46 Fluorobenzene (IS)	96	7.673	7.673	(1.000)	1685721	250.000		
*	69 Chlorobenzene-d5	119	10.757	10.757	(1.000)	409778	250.000		
*	92 1,4-Dichlorobenzene-d4	152	13.092	13.092	(1.000)	566161	250.000		(Q)
*	176 Dioxane-d8 (IS)	96	8.409	8.409	(1.000)	67962	5000.00		(M)
*	177 TBA-d9 (IS)	65	4.852	4.852	(1.000)	436094	5000.00		
$	39 Dibromofluoromethane (Surr)	113	6.925	6.925	(0.903)	871217	625.000	611.8	
$	43 1,2-Dichloroethane-d4	65	7.302	7.302	(0.952)	862118	625.000	589.4	
$	59 Toluene-d8	98	9.315	9.315	(0.866)	3422259	625.000	513.6	
$	80 Bromofluorobenzene (Surr)	95	11.930	11.930	(1.109)	1481381	625.000	606.4	
	1 Dichlorodifluoromethane	85	1.768	1.768	(0.231)	1297080	625.000	591.5	
	2 Chloromethane	50	1.969	1.969	(0.257)	1735750	625.000	580.0	
	3 Vinyl Chloride	62	2.127	2.127	(0.277)	1523176	625.000	608.6	
	4 Bromomethane	94	2.498	2.498	(0.326)	245969	625.000	585.9	
	5 Chloroethane	64	2.620	2.620	(0.341)	245366	625.000	581.7	
	7 Dichlorofluoromethane	67	2.918	2.918	(0.380)	753575	625.000	623.2	
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.812	3.812	(0.497)	1100596	625.000	590.2	
	166 Trichlorofluoromethane	101	2.960	2.960	(0.386)	583096	625.000	577.6	
	12 1,1-Dichloroethene	96	3.769	3.769	(0.491)	1191605	625.000	597.0	
	15 Carbon Disulfide	76	4.104	4.104	(0.535)	3327885	625.000	701.7	
	13 Acetone	43	3.976	3.976	(0.518)	348169	625.000	611.6	
	18 Methylene Chloride	84	4.584	4.584	(0.597)	1210887	625.000	586.4	
	19 trans-1,2-Dichloroethene	96	4.998	4.998	(0.651)	1186284	625.000	598.2	
	20 Methyl tert-butyl ether	73	5.058	5.058	(0.659)	2321884	625.000	578.6	
	24 1,1-Dichloroethane	63	5.593	5.593	(0.729)	2040955	625.000	603.7	
	27 2,2-Dichloropropane	77	6.335	6.335	(0.826)	743953	625.000	623.0	
	28 cis-1,2-dichloroethene	96	6.354	6.354	(0.828)	1277462	625.000	612.6	
M	29 1,2-Dichloroethene (total)	96				2463746	1250.00	1211	
	30 Bromochloromethane	128	6.639	6.639	(0.865)	544224	625.000	621.6	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
31 2-Butanone	43	6.414	6.414	(0.836)	521781	625.000	694.0
37 Chloroform	83	6.743	6.743	(0.879)	1661735	625.000	591.4
38 1,1,1-Trichloroethane	97	6.937	6.937	(0.904)	1281791	625.000	622.2
40 1,1-Dichloropropene	75	7.132	7.132	(0.929)	1379980	625.000	592.4
41 Carbon Tetrachloride	117	7.126	7.126	(0.929)	1152820	625.000	642.1
42 Benzene	78	7.357	7.357	(0.959)	4046521	625.000	547.5
45 1,2-Dichloroethane	62	7.387	7.387	(0.963)	1107169	625.000	589.9
47 Trichloroethene	130	8.063	8.063	(1.051)	1143455	625.000	612.8
49 1,2-Dichloropropane	63	8.300	8.300	(1.082)	1199298	625.000	612.6
50 Dibromomethane	93	8.421	8.421	(1.097)	555764	625.000	625.7
53 Bromodichloromethane	83	8.586	8.586	(1.119)	1214068	625.000	667.2
57 cis-1,3-Dichloropropene	75	9.042	9.042	(1.178)	1654558	625.000	683.5
58 4-Methyl-2-Pentanone	43	9.206	9.206	(0.856)	1210374	625.000	683.2
60 Toluene	91	9.382	9.382	(0.872)	4159168	625.000	512.3
61 trans-1,3-Dichloropropene	75	9.601	9.601	(0.893)	1276409	625.000	658.4
63 1,3-Dichloropropane	76	9.954	9.954	(0.925)	1480364	625.000	551.3
64 1,1,2-Trichloroethane	97	9.784	9.784	(0.910)	861633	625.000	543.8
65 Tetrachloroethene	164	9.929	9.929	(0.923)	885942	625.000	561.3
66 2-Hexanone	43	10.039	10.039	(0.933)	905412	625.000	627.2
67 Dibromochloromethane	129	10.179	10.179	(0.946)	832848	625.000	645.8
68 1,2-Dibromoethane	107	10.294	10.294	(0.957)	831112	625.000	589.8
70 Chlorobenzene	112	10.787	10.787	(1.003)	2843063	625.000	553.3
71 1,1,1,2-Tetrachloroethane	131	10.860	10.860	(1.010)	951874	625.000	618.3
72 Ethylbenzene	106	10.890	10.890	(1.012)	1610670	625.000	565.1(Q)
73 m,p-XYLENE	106	11.006	11.006	(1.023)	1994427	625.000	568.2
74 Xylene-o	106	11.401	11.401	(1.060)	1889959	625.000	562.1
76 Styrene	104	11.419	11.419	(1.062)	3064557	625.000	577.5
77 Bromoform	173	11.608	11.608	(1.079)	532121	625.000	692.2
78 Isopropylbenzene	105	11.766	11.766	(1.094)	4278283	625.000	518.3
79 Bromobenzene	156	12.088	12.088	(0.923)	1193136	625.000	541.6
81 n-Propylbenzene	120	12.180	12.180	(0.930)	1460415	625.000	527.3(Q)
82 2-Chlorotoluene	126	12.277	12.277	(0.938)	1226377	625.000	544.2(Q)
83 1,1,2,2-Tetrachloroethane	83	12.058	12.058	(1.121)	977348	625.000	564.1
84 1,2,3-Trichloropropane	110	12.107	12.107	(0.925)	277775	625.000	492.1(Q)
85 4-Chlorotoluene	126	12.386	12.386	(0.946)	1226698	625.000	557.2
86 1,3,5-Trimethylbenzene	105	12.350	12.350	(0.943)	3553196	625.000	488.8
87 tert-Butylbenzene	119	12.684	12.684	(0.969)	3226572	625.000	494.6
88 1,2,4-Trimethylbenzene	105	12.733	12.733	(0.973)	3627770	625.000	503.1
89 sec-Butylbenzene	105	12.903	12.903	(0.986)	4438483	625.000	474.5
90 4-Isopropyltoluene	119	13.043	13.043	(0.996)	3784160	625.000	495.6
91 1,3-Dichlorobenzene	146	13.025	13.025	(0.995)	2094057	625.000	591.0
94 n-Butylbenzene	91	13.457	13.457	(1.028)	3912364	625.000	551.0
93 1,4-Dichlorobenzene	146	13.116	13.116	(1.002)	2262415	625.000	556.8
95 1,2-Dichlorobenzene	146	13.493	13.493	(1.031)	1997305	625.000	571.2
96 1,2-Dibromo-3-chloropropane	157	14.296	14.296	(1.092)	108684	625.000	612.3
97 1,2,4-Trichlorobenzene	180	15.123	15.123	(1.155)	545614	625.000	677.5
98 Hexachlorobutadiene	225	15.287	15.287	(1.168)	612699	625.000	612.8
99 Naphthalene	128	15.403	15.403	(1.177)	756713	625.000	529.0
100 1,2,3-Trichlorobenzene	180	15.664	15.664	(1.196)	261466	625.000	521.9
156 Methyl Acetate	43	4.493	4.493	(0.586)	3539179	3125.00	2612
157 Cyclohexane	56	6.998	6.998	(0.912)	2493698	625.000	565.4
158 Methyl Cyclohexane	83	8.263	8.263	(1.077)	2084118	625.000	565.0
32 Vinyl Acetate	43	5.721	5.721	(0.746)	1648834	625.000	603.9
52 1,4-Dioxane	88	8.452	8.452	(1.005)	185728	12500.0	11990

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	21 tert-Butyl Alcohol	59	4.961	4.961	(1.023)	668896	6250.00	5352
	16 3-Chloro-1-propene	76	4.377	4.377	(0.570)	738355	625.000	657.6
	11 Acrolein	56	3.660	3.660	(0.477)	228080	1125.00	991.6
	22 Acrylonitrile	53	5.010	5.010	(0.653)	3555937	6250.00	5224
	8 Ethyl Ether	59	3.465	3.465	(0.452)	985113	625.000	587.1
	62 Ethyl methacrylate	69	9.692	9.692	(0.901)	1210534	625.000	596.7
	23 Hexane	57	5.399	5.399	(0.704)	1944197	625.000	565.9
	14 Iodomethane	142	4.012	4.012	(0.523)	1653257	625.000	623.7
	44 Isobutanol	41	7.345	7.345	(0.957)	599160	15625.0	15140
	155 N-Heptane	41	7.667	7.667	(0.999)	1027856	625.000	557.0
	35 Tetrahydrofuran	42	6.998	6.998	(0.912)	658621	1250.00	1180
	164 trans-1,4-Dichloro-2-butene	53	12.125	12.125	(0.926)	295887	625.000	621.2
	169 Butadiene	39	2.158	2.158	(0.281)	1486895	625.000	591.2
M	75 Xylenes (total)	106				3884386	1250.00	1130

QC Flag Legend

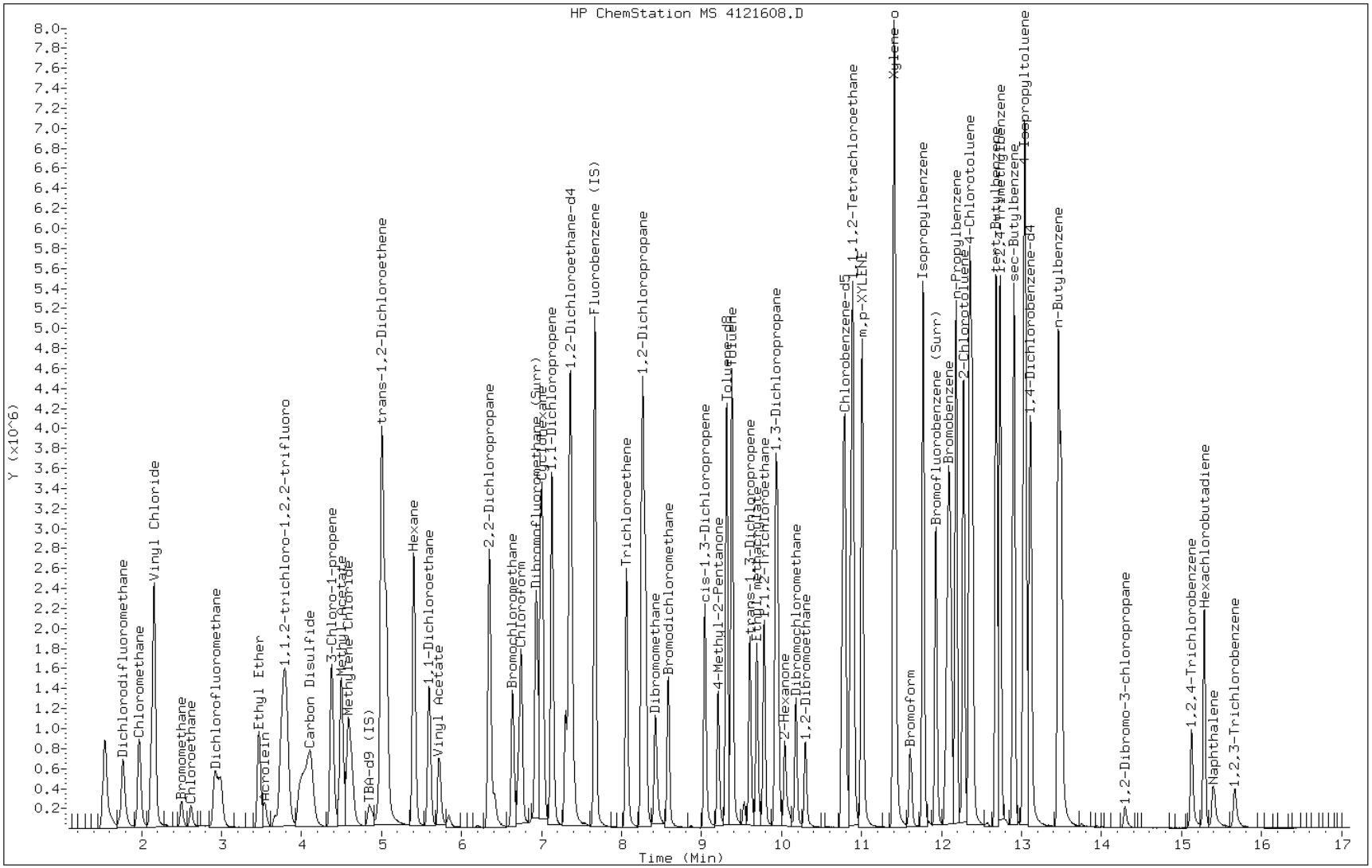
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 4121608.D

Date: 16-DEC-2013 14:07

Client ID: vstd125 Instrument: hp4.i

Sample Info: IC Operator: 034635



Manual Integration Report

Data File: 4121608.D
Inj. Date and Time: 16-DEC-2013 14:07
Instrument ID: hp4.i
Client ID: vstd125
Compound: 176 Dioxane-d8 (IS)
CAS #: 17647-74-4
Report Date: 12/17/2013

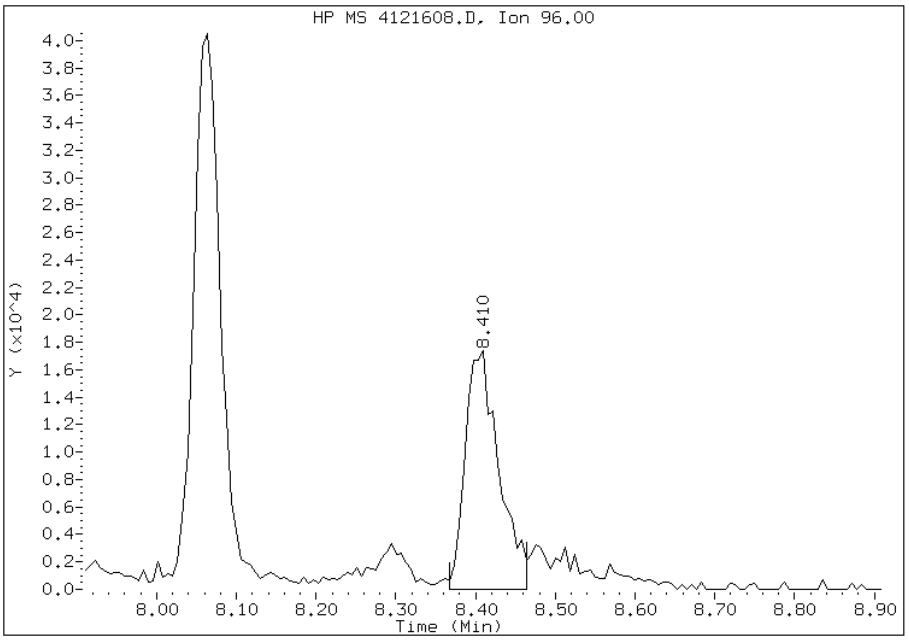
Processing Integration Results

RT: 8.41

Response: 51827

Amount: 5000

Conc: 5000



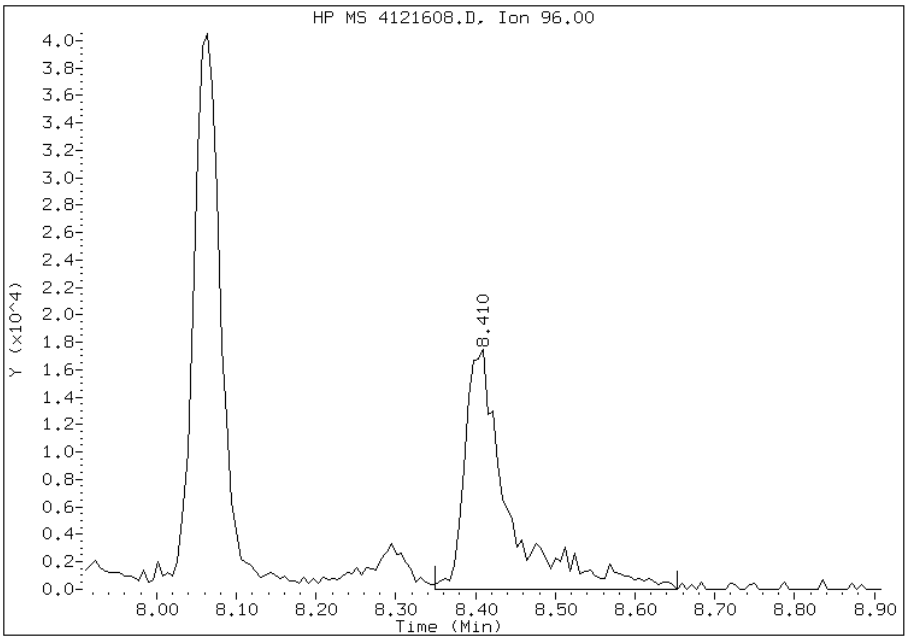
Manual Integration Results

RT: 8.41

Response: 67962

Amount: 5000

Conc: 5000



Manually Integrated By: journetp
Modification Date: 16-Dec-2013 13:40
Manual Integration Reason: Peak Integrated Incorrectly

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\PITSVR06\D\chem\hp4.i\4121613d.b\4121609.D
Lab Smp Id: IC Client Smp ID: vstd250
Inj Date : 16-DEC-2013 14:35
Operator : 034635 Inst ID: hp4.i
Smp Info : IC
Misc Info : 4121613d.b,t8260bh2o.m,list1.sub
Comment :
Method : \\PITSVR06\D\chem\hp4.i\4121613d.b\T8260bh2o.m
Meth Date : 16-Dec-2013 13:56 hp4.i Quant Type: ISTD
Cal Date : 16-DEC-2013 14:07 Cal File: 4121608.D
Als bottle: 8 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-088

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	
*	46 Fluorobenzene (IS)	96	7.675	7.675	(1.000)	1680161	250.000		
*	69 Chlorobenzene-d5	119	10.758	10.758	(1.000)	411038	250.000		
*	92 1,4-Dichlorobenzene-d4	152	13.093	13.093	(1.000)	515529	250.000		(Q)
*	176 Dioxane-d8 (IS)	96	8.405	8.405	(1.000)	58674	5000.00		
*	177 TBA-d9 (IS)	65	4.835	4.835	(1.000)	325314	5000.00		
$	39 Dibromofluoromethane (Surr)	113	6.927	6.927	(0.903)	1722178	1250.00	1213	
$	43 1,2-Dichloroethane-d4	65	7.304	7.304	(0.952)	1772417	1250.00	1216	
$	59 Toluene-d8	98	9.311	9.311	(0.865)	5781610	1250.00	865.0	
$	80 Bromofluorobenzene (Surr)	95	11.926	11.926	(1.109)	2644876	1250.00	1079	
	1 Dichlorodifluoromethane	85	1.776	1.776	(0.231)	2712904	1250.00	1241	
	2 Chloromethane	50	1.983	1.983	(0.258)	3401895	1250.00	1140	
	3 Vinyl Chloride	62	2.135	2.135	(0.278)	2750890	1250.00	1103	
	4 Bromomethane	94	2.506	2.506	(0.327)	532493	1250.00	1272	
	5 Chloroethane	64	2.621	2.621	(0.342)	543563	1250.00	1293	
	7 Dichlorofluoromethane	67	2.950	2.950	(0.384)	1555247	1250.00	1290	
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.837	3.837	(0.500)	2362993	1250.00	1271	
	166 Trichlorofluoromethane	101	3.035	3.035	(0.395)	1661995	1250.00	1652	
	12 1,1-Dichloroethene	96	3.795	3.795	(0.494)	2571839	1250.00	1293	
	15 Carbon Disulfide	76	4.141	4.141	(0.540)	6835150	1250.00	1446	
	13 Acetone	43	3.959	3.959	(0.516)	726860	1250.00	1281	
	18 Methylene Chloride	84	4.628	4.628	(0.603)	2498278	1250.00	1214	
	19 trans-1,2-Dichloroethene	96	4.999	4.999	(0.651)	2337577	1250.00	1183	
	20 Methyl tert-butyl ether	73	5.060	5.060	(0.659)	4727239	1250.00	1182	
	24 1,1-Dichloroethane	63	5.595	5.595	(0.729)	4101239	1250.00	1217	
	27 2,2-Dichloropropane	77	6.343	6.343	(0.826)	1508725	1250.00	1268	
	28 cis-1,2-dichloroethene	96	6.349	6.349	(0.827)	2530388	1250.00	1218	
M	29 1,2-Dichloroethene (total)	96				4867965	2500.00	2400	
	30 Bromochloromethane	128	6.635	6.635	(0.865)	1151902	1250.00	1320	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
31	2-Butanone	43	6.410	6.410	(0.835)	1154009	1250.00	1540
37	Chloroform	83	6.744	6.744	(0.879)	3302218	1250.00	1179
38	1,1,1-Trichloroethane	97	6.939	6.939	(0.904)	2642667	1250.00	1287
40	1,1-Dichloropropene	75	7.127	7.127	(0.929)	2792016	1250.00	1202
41	Carbon Tetrachloride	117	7.127	7.127	(0.929)	2454069	1250.00	1371
42	Benzene	78	7.365	7.365	(0.960)	7016761	1250.00	952.4
45	1,2-Dichloroethane	62	7.389	7.389	(0.963)	2314147	1250.00	1237
47	Trichloroethene	130	8.064	8.064	(1.051)	2291706	1250.00	1232
49	1,2-Dichloropropane	63	8.295	8.295	(1.081)	2344021	1250.00	1201
50	Dibromomethane	93	8.417	8.417	(1.097)	1180713	1250.00	1334
53	Bromodichloromethane	83	8.587	8.587	(1.119)	2506060	1250.00	1382
57	cis-1,3-Dichloropropene	75	9.043	9.043	(1.178)	3288696	1250.00	1363
58	4-Methyl-2-Pentanone	43	9.201	9.201	(0.855)	2454553	1250.00	1381
60	Toluene	91	9.384	9.384	(0.872)	6936827	1250.00	851.8
61	trans-1,3-Dichloropropene	75	9.596	9.596	(0.892)	2618453	1250.00	1346
63	1,3-Dichloropropane	76	9.949	9.949	(0.925)	2905418	1250.00	1079
64	1,1,2-Trichloroethane	97	9.785	9.785	(0.910)	1781129	1250.00	1121
65	Tetrachloroethene	164	9.931	9.931	(0.923)	1767291	1250.00	1116
66	2-Hexanone	43	10.034	10.034	(0.933)	1709218	1250.00	1180
67	Dibromochloromethane	129	10.180	10.180	(0.946)	1805411	1250.00	1396
68	1,2-Dibromoethane	107	10.296	10.296	(0.957)	1790511	1250.00	1267
70	Chlorobenzene	112	10.788	10.788	(1.003)	5066483	1250.00	983.0
71	1,1,1,2-Tetrachloroethane	131	10.861	10.861	(1.010)	1862040	1250.00	1206
72	Ethylbenzene	106	10.892	10.892	(1.012)	2919022	1250.00	1021(Q)
73	m,p-XYLENE	106	11.007	11.007	(1.023)	3630694	1250.00	1031
74	Xylene-o	106	11.403	11.403	(1.060)	3266771	1250.00	968.6
76	Styrene	104	11.421	11.421	(1.062)	5154722	1250.00	968.4
77	Bromoform	173	11.609	11.609	(1.079)	1236823	1250.00	1604
78	Isopropylbenzene	105	11.767	11.767	(1.094)	6742276	1250.00	814.2
79	Bromobenzene	156	12.090	12.090	(0.923)	2221908	1250.00	1108
81	n-Propylbenzene	120	12.181	12.181	(0.930)	2636805	1250.00	1046(Q)
82	2-Chlorotoluene	126	12.278	12.278	(0.938)	2209646	1250.00	1077(Q)
83	1,1,2,2-Tetrachloroethane	83	12.059	12.059	(1.121)	1971772	1250.00	1135
84	1,2,3-Trichloropropane	110	12.114	12.114	(0.925)	590376	1250.00	1148
85	4-Chlorotoluene	126	12.382	12.382	(0.946)	2228961	1250.00	1112(Q)
86	1,3,5-Trimethylbenzene	105	12.351	12.351	(0.943)	5615699	1250.00	848.5
87	tert-Butylbenzene	119	12.686	12.686	(0.969)	5274071	1250.00	887.8
88	1,2,4-Trimethylbenzene	105	12.728	12.728	(0.972)	5718238	1250.00	870.9
89	sec-Butylbenzene	105	12.905	12.905	(0.986)	6670662	1250.00	783.1
90	4-Isopropyltoluene	119	13.045	13.045	(0.996)	5715080	1250.00	822.0
91	1,3-Dichlorobenzene	146	13.026	13.026	(0.995)	3502681	1250.00	1086
94	n-Butylbenzene	91	13.458	13.458	(1.028)	5834007	1250.00	902.3
93	1,4-Dichlorobenzene	146	13.111	13.111	(1.001)	3742970	1250.00	1012
95	1,2-Dichlorobenzene	146	13.495	13.495	(1.031)	3322080	1250.00	1043
96	1,2-Dibromo-3-chloropropane	157	14.285	14.285	(1.091)	256280	1250.00	1586
97	1,2,4-Trichlorobenzene	180	15.118	15.118	(1.155)	1082396	1250.00	1476
98	Hexachlorobutadiene	225	15.282	15.282	(1.167)	985387	1250.00	1082
99	Naphthalene	128	15.392	15.392	(1.176)	1654472	1250.00	1270
100	1,2,3-Trichlorobenzene	180	15.660	15.660	(1.196)	574526	1250.00	1259
156	Methyl Acetate	43	4.488	4.488	(0.585)	7625878	6250.00	5646
157	Cyclohexane	56	7.006	7.006	(0.913)	4974965	1250.00	1132
158	Methyl Cyclohexane	83	8.265	8.265	(1.077)	4091577	1250.00	1113
32	Vinyl Acetate	43	5.717	5.717	(0.745)	3534775	1250.00	1299
52	1,4-Dioxane	88	8.453	8.453	(1.006)	336147	25000.0	25080

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	21 tert-Butyl Alcohol	59	4.944	4.944	(1.023)	1384259	12500.0	14850
	16 3-Chloro-1-propene	76	4.391	4.391	(0.572)	1663387	1250.00	1486(Q)
	11 Acrolein	56	3.667	3.667	(0.478)	300609	1250.00	1311
	22 Acrylonitrile	53	5.011	5.011	(0.653)	7628893	12500.0	11240
	8 Ethyl Ether	59	3.466	3.466	(0.452)	2119804	1250.00	1268
	62 Ethyl methacrylate	69	9.688	9.688	(0.901)	2510476	1250.00	1234
	23 Hexane	57	5.406	5.406	(0.704)	4034546	1250.00	1178
	14 Iodomethane	142	4.038	4.038	(0.526)	3391222	1250.00	1284
	44 Isobutanol	41	7.334	7.334	(0.956)	1258283	31250.0	31910
	155 N-Heptane	41	7.669	7.669	(0.999)	2180981	1250.00	1186
	35 Tetrahydrofuran	42	7.006	7.006	(0.913)	1359576	2500.00	2444
	164 trans-1,4-Dichloro-2-butene	53	12.120	12.120	(0.926)	670045	1250.00	1545
	169 Butadiene	39	2.165	2.165	(0.282)	2866976	1250.00	1144
M	75 Xylenes (total)	106				6897465	2500.00	2000

QC Flag Legend

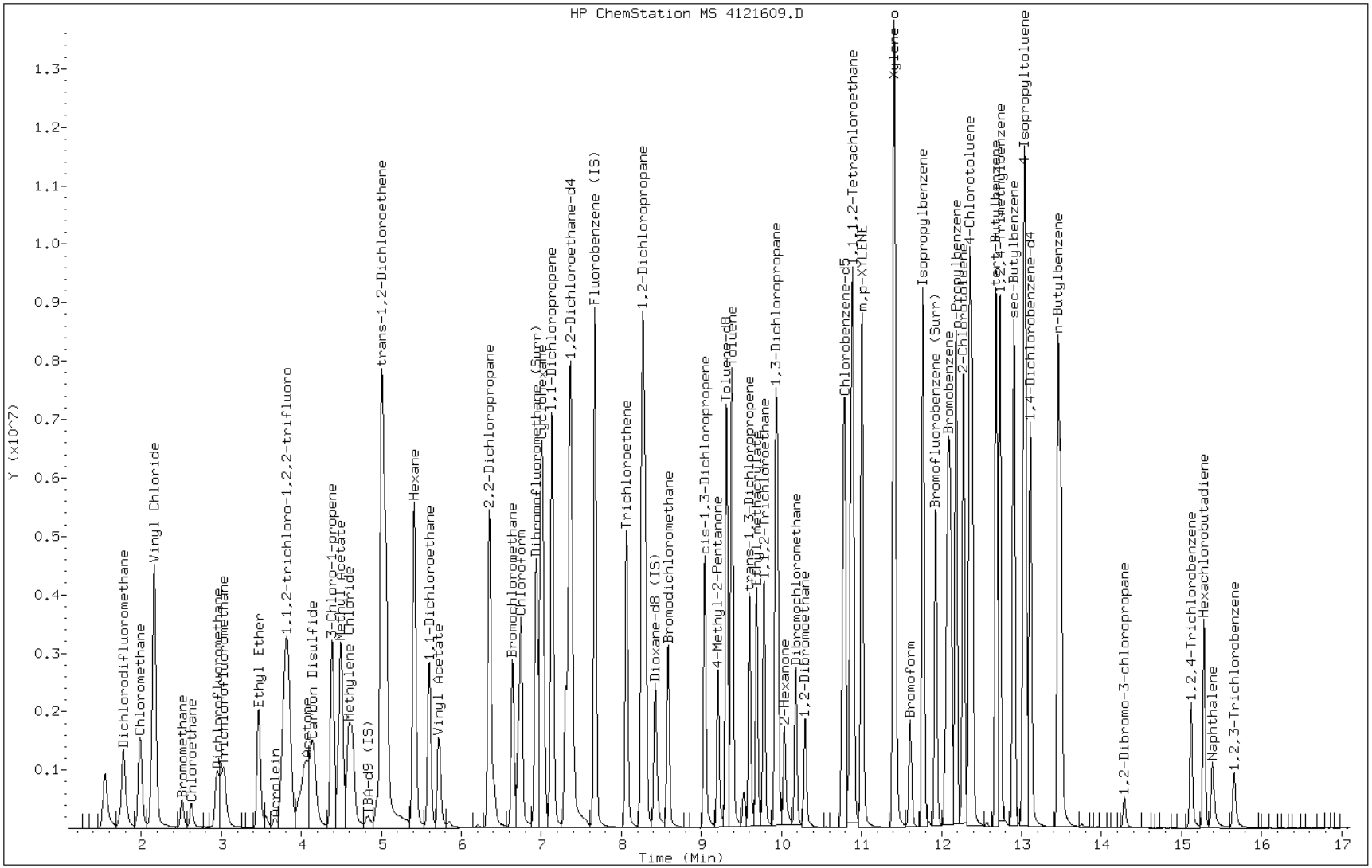
Q - Qualifier signal failed the ratio test.

Data File: 4121609.D

Date: 16-DEC-2013 14:35

Client ID: vstd250 Instrument: hp4.i

Sample Info: IC Operator: 034635



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

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1 Analy Batch No.: 91778

SDG No.:

Instrument ID: HP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2013 07:32 Calibration End Date: 12/06/2013 11:22 Calibration ID: 12753

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-91778/2	7120603.D
Level 2	IC 180-91778/3	7120604.D
Level 3	IC 180-91778/4	7120605.D
Level 4	ICIS 180-91778/5	7120606.D
Level 5	IC 180-91778/6	7120607.D
Level 6	IC 180-91778/7	7120608.D
Level 7	IC 180-91778/8	7120609.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	0.4554 0.4110	0.4274 0.4975	0.4165	0.4234	0.4246	Ave		0.4365				6.9		15.0			
Chloromethane	1.0603 0.8018	0.8820 0.8861	0.8523	0.8315	0.8406	Ave		0.8792			0.1000	9.7		15.0			
Vinyl chloride	0.5797 0.3794	0.4801 0.4641	0.4624	0.4450	0.4512	Ave		0.4660				12.8		15.0			
1,3-Butadiene	0.7309 0.4642	0.5911 0.5185	0.5382	0.5229	0.5215	Qua	-0.114	2.3646	-0.150						0.9991		
Bromomethane	0.1852 0.1008	0.1372 0.1295	0.1167	0.1129	0.1135	Qua	-0.159	11.717	-5.774					15.0	0.9989		0.9900
Chloroethane	0.1561 0.1153	0.1277 0.1398	0.1186	0.1170	0.1116	Ave		0.1266				12.7		15.0			
Dichlorofluoromethane	0.3783 0.2460	0.2523 0.2529	0.2541	0.2608	0.2744	Qua	-0.046	4.1250	-0.101						0.9994		
Trichlorofluoromethane	0.1778 0.2186	0.2082 0.1987	0.2148	0.2139	0.2563	Ave		0.2126				11.1		15.0			
Ethyl ether	0.3324 0.3032	0.2278 +++++	0.2573	0.2665	0.2587	Ave		0.2743				13.6		15.0			
Acrolein	0.0320 +++++	0.0265 +++++	0.0266	0.0272	0.0316	Ave		0.0288				9.7		15.0			
1,1-Dichloroethene	0.3783 0.4227	0.3374 0.3494	0.3406	0.3304	0.3324	Ave		0.3559				9.4		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.3709 0.3109	0.3479 0.3454	0.3514	0.3406	0.3345	Ave		0.3431				5.3		15.0			
Iodomethane	0.6378 0.5008	0.5585 0.5672	0.5342	0.5156	0.5113	Ave		0.5465				8.6		15.0			
Acetone	0.1336 0.1359	0.1067 +++++	0.0756	0.0888	0.0901	Qua	-0.055	13.438	-17.43					15.0	0.9983		0.9900

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.: 180-28282-1 Analy Batch No.: 91778

SDG No.:

Instrument ID: HP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2013 07:32 Calibration End Date: 12/06/2013 11:22 Calibration ID: 12753

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	1.2255 0.7841	1.0718 1.0966	1.0970	1.0582	1.0622	Ave		1.0565				12.6		15.0			
Allyl chloride	0.3214 +++++	0.2738 +++++	0.2545	0.2646	0.2690	Ave		0.2767				9.4		15.0			
Methyl acetate	0.2941 0.3368	0.2242 +++++	0.2089	0.2105	0.2279	Qua	-0.173	5.2622	-0.535					15.0	0.9995		0.9900
Methylene Chloride	0.4739 0.3449	0.3886 0.3799	0.3575	0.3385	0.3365	Ave		0.3743				12.9		15.0			
trans-1,2-Dichloroethene	0.4285 0.3319	0.3716 0.4047	0.3561	0.3506	0.3474	Ave		0.3701				9.3		15.0			
Acrylonitrile	0.1334 +++++	0.1012 +++++	0.0964	0.0958	0.1073	Ave		0.1069				14.6		15.0			
tert-Butyl alcohol	1.5652 1.4645	1.3738 +++++	1.3804	1.3270	1.2482	Ave		1.3932				7.9		15.0			
Methyl tert-butyl ether	0.8001 0.7937	0.6838 0.7494	0.6670	0.6469	0.6895	Ave		0.7186				8.6		15.0			
Hexane	0.6817 0.6158	0.6803 0.6530	0.6347	0.6102	0.6065	Ave		0.6403				5.0		15.0			
1,1-Dichloroethane	0.8495 0.6720	0.7348 0.7322	0.7085	0.6924	0.6699	Ave		0.7228			0.1000	8.5		15.0			
Vinyl acetate	0.3307 +++++	0.2519 +++++	0.2635	0.2699	0.3015	Ave		0.2835				11.3		15.0			
2,2-Dichloropropane	0.5208 0.3699	0.4556 0.4429	0.4506	0.4456	0.4489	Ave		0.4478				9.8		15.0			
cis-1,2-Dichloroethene	0.4663 0.3746	0.4099 0.3906	0.3964	0.3831	0.3745	Ave		0.3993				8.0		15.0			
2-Butanone (MEK)	0.1560 0.2246	0.1141 +++++	0.1021	0.1017	0.1190	Qua	-0.025	10.263	-10.27					15.0	0.9980		0.9900
Bromochloromethane	0.2027 0.1764	0.1688 0.1875	0.1597	0.1602	0.1619	Ave		0.1739				9.3		15.0			
Chloroform	0.7502 0.5219	0.6270 0.5451	0.5809	0.5578	0.5322	Ave		0.5879				13.6		30.0			
1,1,1-Trichloroethane	0.5747 0.4340	0.4798 0.4506	0.4646	0.4556	0.4516	Ave		0.4730				9.9		15.0			
Tetrahydrofuran	0.1259 0.0904	0.1172 0.0930	0.0984	0.0998	0.0991	Ave		0.1034				12.7		15.0			
Cyclohexane	0.9422 0.6669	0.8398 0.6394	0.7651	0.7304	0.7281	Ave		0.7588				13.7		15.0			
Carbon tetrachloride	0.4271 0.3736	0.3763 0.3936	0.3597	0.3562	0.3660	Ave		0.3789				6.5		15.0			

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.: 180-28282-1 Analy Batch No.: 91778

SDG No.:

Instrument ID: HP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2013 07:32 Calibration End Date: 12/06/2013 11:22 Calibration ID: 12753

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	0.4770 0.3876	0.4064 0.3808	0.4073	0.3870	0.3812	Ave		0.4039				8.4		15.0			
Benzene	1.5343 1.2730	1.3259 1.1125	1.2266	1.1512	1.1096	Ave		1.2476				12.1		15.0			
1,2-Dichloroethane	0.4490 0.3829	0.3651 0.3490	0.3348	0.3269	0.3350	Ave		0.3633				11.7		15.0			
Isobutyl alcohol	0.0142 0.0124	0.0137 0.0120	0.0124	0.0117	0.0131	Ave		0.0128				7.2		15.0			
Trichloroethene	0.3651 0.4235	0.3461 0.3880	0.3341	0.3292	0.3209	Ave		0.3581				10.3		15.0			
Methylcyclohexane	0.7069 0.5223	0.6783 0.4962	0.6244	0.6010	0.6015	Ave		0.6044				12.6		15.0			
n-Heptane	0.6649 0.4610	0.6082 0.4467	0.5494	0.5109	0.5125	Ave		0.5362				14.6		15.0			
1,2-Dichloropropane	0.3922 0.3258	0.3242 0.2955	0.3021	0.2871	0.3029	Ave		0.3185				11.1		30.0			
Dibromomethane	0.1745 0.1890	0.1511 0.1670	0.1465	0.1384	0.1542	Ave		0.1601				11.0		15.0			
1,4-Dioxane	1.3613 1.2935	1.0460 1.2711	1.0316	1.1172	1.1100	Ave		1.1758				11.1		15.0			
Dichlorobromomethane	0.4277 0.4124	0.3621 0.3842	0.3653	0.3586	0.3752	Ave		0.3836				6.9		15.0			
cis-1,3-Dichloropropene	0.4896 0.4904	0.4244 0.4233	0.4191	0.4107	0.4540	Ave		0.4445				7.6		15.0			
4-Methyl-2-pentanone (MIBK)	1.2580 +++++	1.0593 +++++	1.0425	1.0598	1.1587	Ave		1.1157				8.2		15.0			
Toluene	5.9633 4.1586	5.0918 3.2377	4.7243	4.2991	4.0144	Qua	0.0853	0.1530	0.0091					30.0	0.9964		0.9900
trans-1,3-Dichloropropene	1.5703 1.4692	1.3335 1.2243	1.3046	1.2573	1.3146	Ave		1.3534				9.1		15.0			
Ethyl methacrylate	1.3598 1.3611	1.0803 +++++	1.0087	0.9673	1.1327	Ave		1.1517				14.9		15.0			
1,1,2-Trichloroethane	1.1175 0.9806	0.8961 0.7879	0.8110	0.7779	0.8311	Ave		0.8860				14.0		15.0			
Tetrachloroethene	1.2248 0.9290	1.0856 0.8327	1.0289	0.9748	0.9273	Ave		1.0005				12.8		15.0			
1,3-Dichloropropane	1.8587 1.4370	1.4261 +++++	1.3067	1.2564	1.3206	Qua	-0.049	0.8676	-0.044					15.0	0.9997		0.9900
2-Hexanone	0.8419 1.1169	0.7125 +++++	0.6696	0.6584	0.8068	Qua	0.0050	1.4780	-0.210					15.0	0.9972		0.9900

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.: 180-28282-1 Analy Batch No.: 91778

SDG No.:

Instrument ID: HP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2013 07:32 Calibration End Date: 12/06/2013 11:22 Calibration ID: 12753

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	1.1098 1.1524	0.9279 0.9738	0.9450	0.9207	0.9603	Ave		0.9986				9.3		15.0			
1,2-Dibromoethane	1.0347 1.0976	0.8700 0.8737	0.8543	0.8270	0.8955	Ave		0.9218				11.1		15.0			
Chlorobenzene	3.6117 2.8550	3.0796 2.3608	2.9443	2.7729	2.6899	Ave		2.9020			0.3000	13.3		15.0			
1,1,1,2-Tetrachloroethane	1.2486 1.0159	1.1050 0.9158	1.1148	1.1078	1.0005	Ave		1.0726				9.9		15.0			
Ethylbenzene	2.1185 +++++	1.8280 +++++	1.6518	1.5477	1.5424	Ave		1.7377				13.9		30.0			
m-Xylene & p-Xylene	2.5976 +++++	2.2824 +++++	2.1404	1.9645	1.9707	Ave		2.1911				12.0		15.0			
o-Xylene	2.7801 +++++	2.4242 +++++	2.3545	2.1548	2.0331	Ave		2.3494				12.2		15.0			
Styrene	4.5724 2.2573	3.8165 1.8115	3.4225	3.0864	3.0113	Qua	-0.026	0.2526	0.0335					15.0	0.9998		0.9900
Bromoform	0.6585 +++++	0.5318 +++++	0.5759	0.5732	0.6239	Ave		0.5927			0.1000	8.3		15.0			
Isopropylbenzene	7.1415 3.5459	6.3986 2.9215	5.9060	5.3425	4.7777	Qua	-0.067	0.1694	0.0123					15.0	0.9988		0.9900
1,1,2,2-Tetrachloroethane	1.3117 1.1714	1.0981 +++++	1.0505	1.0011	1.0084	Ave		1.1069			0.3000	10.7		15.0			
Bromobenzene	1.1498 0.8432	0.9783 0.7917	0.9390	0.8905	0.9075	Ave		0.9286				12.4		15.0			
1,2,3-Trichloropropane	0.2171 +++++	0.1888 +++++	0.1723	0.1757	0.1925	Ave		0.1893				9.4		15.0			
trans-1,4-Dichloro-2-butene	0.1942 +++++	0.1693 +++++	0.1844	0.1834	0.2032	Ave		0.1869				6.8		15.0			
2-Chlorotoluene	1.1165 0.8319	0.9484 0.8047	0.9005	0.8577	0.8481	Ave		0.9011				11.8		15.0			
1,3,5-Trimethylbenzene	3.6740 +++++	3.2495 +++++	3.0443	2.8193	2.6665	Ave		3.0907				12.8		15.0			
N-Propylbenzene	1.8079 1.1570	1.6522 +++++	1.5796	1.4886	1.4373	Ave		1.5204				14.5		15.0			
4-Chlorotoluene	1.1223 0.7574	0.9081 +++++	0.8657	0.8173	0.8110	Ave		0.8803				14.7		15.0			
tert-Butylbenzene	3.2022 2.0859	2.9410 +++++	2.8558	2.7314	2.5107	Ave		2.7212				14.2		15.0			
1,2,4-Trimethylbenzene	3.8925 2.1553	3.3929 1.8853	3.0862	2.8219	2.6884	Qua	-0.081	0.3671	0.0184					15.0	0.9994		0.9900

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.: 180-28282-1 Analy Batch No.: 91778

SDG No.:

Instrument ID: HP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2013 07:32 Calibration End Date: 12/06/2013 11:22 Calibration ID: 12753

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	4.9271 +++++	4.6823 +++++	4.2618	3.9085	3.6273	Ave		4.2814				12.5		15.0			
1,3-Dichlorobenzene	2.0945 1.4179	1.9182 +++++	1.7994	1.6944	1.6294	Ave		1.7590				13.4		15.0			
4-Isopropyltoluene	3.8356 +++++	3.5822 +++++	3.2354	2.9699	2.7676	Ave		3.2781				13.3		15.0			
1,4-Dichlorobenzene	1.8114 1.4045	1.6353 1.2682	1.5726	1.5246	1.4698	Ave		1.5266				11.3		15.0			
n-Butylbenzene	3.8899 +++++	3.7414 +++++	3.5186	3.2548	2.9289	Ave		3.4667				11.1		15.0			
1,2-Dichlorobenzene	1.7946 1.2844	1.5355 +++++	1.4961	1.4271	1.3600	Ave		1.4830				12.0		15.0			
1,2-Dibromo-3-Chloropropane	0.0683 0.2561	0.0714 +++++	0.0928	0.1002	0.1059	Qua	0.0462	10.118	-9.817					15.0	0.9999		0.9900
1,2,4-Trichlorobenzene	0.5860 +++++	0.4950 +++++	0.5321	0.5810	0.5898	Ave		0.5568				7.5		15.0			
Hexachlorobutadiene	0.6646 0.5648	0.6149 0.5401	0.5895	0.5724	0.5287	Ave		0.5821				8.0		15.0			
Naphthalene	0.5408 +++++	0.5434 +++++	0.5391	0.6417	0.6765	Ave		0.5883				11.2		15.0			
1,2,3-Trichlorobenzene	0.3100 +++++	0.2554 +++++	0.2171	0.2844	0.3116	Ave		0.2757				14.5		15.0			
Dibromofluoromethane (Surr)	0.2991 0.2610	0.2878 0.2362	0.2668	0.2596	0.2547	Ave		0.2665				7.9					
1,2-Dichloroethane-d4 (Surr)	0.3363 0.3394	0.3202 0.2880	0.2901	0.2869	0.2972	Ave		0.3083				7.5		15.0			
Toluene-d8 (Surr)	4.4609 3.0502	4.4008 +++++	4.0970	3.7473	3.4905	Ave		3.8745				14.2		15.0			
4-Bromofluorobenzene (Surr)	1.7592 1.4586	1.7090 1.2106	1.5341	1.4563	1.4209	Ave		1.5069				12.3		15.0			

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.: 180-28282-1 Analy Batch No.: 91778

SDG No.:

Instrument ID: HP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2013 07:32 Calibration End Date: 12/06/2013 11:22 Calibration ID: 12753

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-91778/2	7120603.D
Level 2	IC 180-91778/3	7120604.D
Level 3	IC 180-91778/4	7120605.D
Level 4	ICIS 180-91778/5	7120606.D
Level 5	IC 180-91778/6	7120607.D
Level 6	IC 180-91778/7	7120608.D
Level 7	IC 180-91778/8	7120609.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	49610 1642130	98150 3225464	244697	405981	521816	25.0 625	50.0 1250	125	200	250
Chloromethane	FB	Ave	115505 3203862	202531 5745548	500738	797261	1033054	25.0 625	50.0 1250	125	200	250
Vinyl chloride	FB	Ave	63158 1516042	110244 3009411	271675	426656	554567	25.0 625	50.0 1250	125	200	250
1,3-Butadiene	FB	Qua	79622 1854797	135736 3362129	316191	501355	640883	25.0 625	50.0 1250	125	200	250
Bromomethane	FB	Qua	20174 402608	31496 839870	68585	108224	139543	25.0 625	50.0 1250	125	200	250
Chloroethane	FB	Ave	17005 460666	29323 906498	69670	112148	137112	25.0 625	50.0 1250	125	200	250
Dichlorofluoromethane	FB	Qua	41213 983091	57929 1639440	149300	250092	337285	25.0 625	50.0 1250	125	200	250
Trichlorofluoromethane	FB	Ave	19373 873614	47815 1288442	126215	205054	314951	25.0 625	50.0 1250	125	200	250
Ethyl ether	FB	Ave	36215 1211471	52313 +++++	151194	255549	317910	25.0 625	50.0 +++++	125	200	250
Acrolein	FB	Ave	69764 +++++	75919 +++++	93692	114106	155577	500 +++++	625 +++++	750	875	1000
1,1-Dichloroethene	FB	Ave	41209 1688899	77483 2265202	200099	316798	408467	25.0 625	50.0 1250	125	200	250
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	40403 1242280	79880 2239615	206481	326526	411041	25.0 625	50.0 1250	125	200	250
Iodomethane	FB	Ave	69482 2001024	128253 3677783	313829	494377	628372	25.0 625	50.0 1250	125	200	250
Acetone	FB	Qua	14558 542837	24506 +++++	44388	85098	110776	25.0 625	50.0 +++++	125	200	250
Carbon disulfide	FB	Ave	133512 3133102	246095 7110359	644506	1014622	1305395	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.: 180-28282-1 Analy Batch No.: 91778

SDG No.:

Instrument ID: HP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2013 07:32 Calibration End Date: 12/06/2013 11:22 Calibration ID: 12753

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	35012 +++++	62875 +++++	149495	253718	330567	25.0 +++++	50.0 +++++	125	200	250
Methyl acetate	FB	Qua	160174 6728909	257383 +++++	613550	1009343	1400199	125 3125	250 +++++	625	1000	1250
Methylene Chloride	FB	Ave	51623 1378349	89232 2463293	210050	324524	413496	25.0 625	50.0 1250	125	200	250
trans-1,2-Dichloroethene	FB	Ave	46677 1326048	85331 2624013	209238	336146	426987	25.0 625	50.0 1250	125	200	250
Acrylonitrile	FB	Ave	145370 +++++	232471 +++++	566586	918807	1319024	250 +++++	500 +++++	1250	2000	2500
tert-Butyl alcohol	TBA	Ave	23803 1390057	45643 +++++	108078	180393	218449	250 6250	500 +++++	1250	2000	2500
Methyl tert-butyl ether	FB	Ave	87161 3171653	157005 4858931	391869	620243	847386	25.0 625	50.0 1250	125	200	250
Hexane	FB	Ave	74270 2460572	156206 4233883	372884	585038	745401	25.0 625	50.0 1250	125	200	250
1,1-Dichloroethane	FB	Ave	92540 2685307	168719 4747329	416268	663915	823295	25.0 625	50.0 1250	125	200	250
Vinyl acetate	FB	Ave	36027 +++++	57839 +++++	154800	258750	370569	25.0 +++++	50.0 +++++	125	200	250
2,2-Dichloropropane	FB	Ave	56740 1478107	104609 2871822	264762	427264	551645	25.0 625	50.0 1250	125	200	250
cis-1,2-Dichloroethene	FB	Ave	50799 1496676	94125 2532390	232892	367333	460190	25.0 625	50.0 1250	125	200	250
2-Butanone (MEK)	FB	Qua	16990 897362	26200 +++++	59987	97550	146267	25.0 625	50.0 +++++	125	200	250
Bromochloromethane	FB	Ave	22084 704734	38767 1215443	93819	153564	198935	25.0 625	50.0 1250	125	200	250
Chloroform	FB	Ave	81730 2085365	143980 3534510	341304	534799	654053	25.0 625	50.0 1250	125	200	250
1,1,1-Trichloroethane	FB	Ave	62612 1734014	110181 2921374	272972	436836	555028	25.0 625	50.0 1250	125	200	250
Tetrahydrofuran	FB	Ave	27442 722610	53840 1206519	115634	191448	243590	50.0 1250	100 2500	250	400	500
Cyclohexane	FB	Ave	102649 2664865	192838 4145690	449529	700274	894755	25.0 625	50.0 1250	125	200	250
Carbon tetrachloride	FB	Ave	46528 1493021	86410 2552248	211339	341554	449776	25.0 625	50.0 1250	125	200	250
1,1-Dichloropropene	FB	Ave	51970 1548636	93320 2468743	239294	371078	468448	25.0 625	50.0 1250	125	200	250
Benzene	FB	Ave	167147 5086560	304449 7212883	720671	1103753	1363647	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.: 180-28282-1 Analy Batch No.: 91778

SDG No.:

Instrument ID: HP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2013 07:32 Calibration End Date: 12/06/2013 11:22 Calibration ID: 12753

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-Dichloroethane	FB	Ave	48918 1530098	83844 2262810	196718	313408	411704	25.0 625	50.0 1250	125	200	250
Isobutyl alcohol	FB	Ave	38781 1236089	78602 1948807	182011	280937	403221	625 15625	1250 31250	3125	5000	6250
Trichloroethene	FB	Ave	39770 1692097	79474 2515433	196297	315605	394339	25.0 625	50.0 1250	125	200	250
Methylcyclohexane	FB	Ave	77007 2087147	155753 3217082	366863	576218	739267	25.0 625	50.0 1250	125	200	250
n-Heptane	FB	Ave	72438 1841984	139663 2896497	322776	489840	629810	25.0 625	50.0 1250	125	200	250
1,2-Dichloropropane	FB	Ave	42723 1301818	74442 1916041	177495	275277	372244	25.0 625	50.0 1250	125	200	250
Dibromomethane	FB	Ave	19007 755202	34689 1083055	86077	132655	189569	25.0 625	50.0 1250	125	200	250
1,4-Dioxane	14DD8	Ave	5055 273991	8343 292860	17141	32858	42365	500 12500	1000 25000	2500	4000	5000
Dichlorobromomethane	FB	Ave	46589 1647693	83137 2490833	214614	343800	461172	25.0 625	50.0 1250	125	200	250
cis-1,3-Dichloropropene	FB	Ave	53341 1959682	97443 2744512	246254	393739	558015	25.0 625	50.0 1250	125	200	250
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	33800 +++++	58603 +++++	141842	238207	375560	25.0 +++++	50.0 +++++	125	200	250
Toluene	CBZ	Qua	160221 4368940	281700 5554878	642784	966288	1301180	25.0 625	50.0 1250	125	200	250
trans-1,3-Dichloropropene	CBZ	Ave	42192 1543463	73774 2100460	177505	282589	426111	25.0 625	50.0 1250	125	200	250
Ethyl methacrylate	CBZ	Ave	36535 1429930	59768 +++++	137248	217424	367128	25.0 625	50.0 +++++	125	200	250
1,1,2-Trichloroethane	CBZ	Ave	30025 1030197	49578 1351825	110350	174842	269392	25.0 625	50.0 1250	125	200	250
Tetrachloroethene	CBZ	Ave	32909 975966	60061 1428633	139989	219097	300576	25.0 625	50.0 1250	125	200	250
1,3-Dichloropropane	CBZ	Qua	49940 1509714	78900 +++++	177781	282403	428042	25.0 625	50.0 +++++	125	200	250
2-Hexanone	CBZ	Qua	22621 1173433	39416 +++++	91111	147982	261513	25.0 625	50.0 +++++	125	200	250
Chlorodibromomethane	CBZ	Ave	29818 1210660	51337 1670765	128578	206936	311252	25.0 625	50.0 1250	125	200	250
1,2-Dibromoethane	CBZ	Ave	27801 1153083	48131 1499058	116240	185887	290269	25.0 625	50.0 1250	125	200	250
Chlorobenzene	CBZ	Ave	97039 2999407	170378 4050310	400596	623256	871880	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.: 180-28282-1 Analy Batch No.: 91778

SDG No.:

Instrument ID: HP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2013 07:32 Calibration End Date: 12/06/2013 11:22 Calibration ID: 12753

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	33547 1067307	61131 1571274	151675	248988	324291	25.0 625	50.0 1250	125	200	250
Ethylbenzene	CBZ	Ave	56920 +++++	101133 +++++	224738	347858	499916	25.0 +++++	50.0 +++++	125	200	250
m-Xylene & p-Xylene	CBZ	Ave	69791 +++++	126271 +++++	291220	441556	638768	25.0 +++++	50.0 +++++	125	200	250
o-Xylene	CBZ	Ave	74697 +++++	134118 +++++	320356	484326	658982	25.0 +++++	50.0 +++++	125	200	250
Styrene	CBZ	Qua	122852 2371507	211143 3107877	465665	693724	976031	25.0 625	50.0 1250	125	200	250
Bromoform	CBZ	Ave	17693 +++++	29420 +++++	78356	128825	202232	25.0 +++++	50.0 +++++	125	200	250
Isopropylbenzene	CBZ	Qua	191877 3725260	353997 5012298	803559	1200795	1548567	25.0 625	50.0 1250	125	200	250
1,1,2,2-Tetrachloroethane	CBZ	Ave	35243 1230611	60753 +++++	142935	225016	326833	25.0 625	50.0 +++++	125	200	250
Bromobenzene	DCB	Ave	48234 1197795	83421 1716079	194303	298114	412123	25.0 625	50.0 1250	125	200	250
1,2,3-Trichloropropane	DCB	Ave	9106 +++++	16103 +++++	35648	58830	87409	25.0 +++++	50.0 +++++	125	200	250
trans-1,4-Dichloro-2-butene	DCB	Ave	8147 +++++	14436 +++++	38148	61411	92291	25.0 +++++	50.0 +++++	125	200	250
2-Chlorotoluene	DCB	Ave	46835 1181807	80875 1744271	186321	287122	385145	25.0 625	50.0 1250	125	200	250
1,3,5-Trimethylbenzene	DCB	Ave	154117 +++++	277099 +++++	629917	943780	1210998	25.0 +++++	50.0 +++++	125	200	250
N-Propylbenzene	DCB	Ave	75836 1643650	140893 +++++	326853	498323	652769	25.0 625	50.0 +++++	125	200	250
4-Chlorotoluene	DCB	Ave	47078 1075966	77439 +++++	179123	273617	368322	25.0 625	50.0 +++++	125	200	250
tert-Butylbenzene	DCB	Ave	134325 2963234	250792 +++++	590899	914383	1140237	25.0 625	50.0 +++++	125	200	250
1,2,4-Trimethylbenzene	DCB	Qua	163285 3061726	289331 4086785	638573	944665	1220924	25.0 625	50.0 1250	125	200	250
sec-Butylbenzene	DCB	Ave	206684 +++++	399284 +++++	881830	1308415	1647343	25.0 +++++	50.0 +++++	125	200	250
1,3-Dichlorobenzene	DCB	Ave	87862 2014284	163573 +++++	372316	567218	740004	25.0 625	50.0 +++++	125	200	250
4-Isopropyltoluene	DCB	Ave	160895 +++++	305472 +++++	669445	994215	1256902	25.0 +++++	50.0 +++++	125	200	250
1,4-Dichlorobenzene	DCB	Ave	75984 1995197	139449 2749061	325396	510391	667512	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.: 180-28282-1 Analy Batch No.: 91778

SDG No.:

Instrument ID: HP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2013 07:32 Calibration End Date: 12/06/2013 11:22 Calibration ID: 12753

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	163175 +++++	319048 +++++	728051	1089581	1330162	25.0 +++++	50.0 +++++	125	200	250
1,2-Dichlorobenzene	DCB	Ave	75280 1824538	130944 +++++	309562	477746	617661	25.0 625	50.0 +++++	125	200	250
1,2-Dibromo-3-Chloropropane	DCB	Qua	2865 363811	6090 +++++	19195	33555	48112	25.0 625	50.0 +++++	125	200	250
1,2,4-Trichlorobenzene	DCB	Ave	24581 +++++	42214 +++++	110110	194484	267877	25.0 +++++	50.0 +++++	125	200	250
Hexachlorobutadiene	DCB	Ave	27877 802340	52440 1170674	121976	191606	240109	25.0 625	50.0 1250	125	200	250
Naphthalene	DCB	Ave	22685 +++++	46342 +++++	111549	214802	307249	25.0 +++++	50.0 +++++	125	200	250
1,2,3-Trichlorobenzene	DCB	Ave	13003 +++++	21779 +++++	44916	95209	141499	25.0 +++++	50.0 +++++	125	200	250
Dibromofluoromethane (Surr)	FB	Ave	32585 1042993	66078 1531161	156761	248863	313080	25.0 625	50.0 1250	125	200	250
1,2-Dichloroethane-d4 (Surr)	FB	Ave	36635 1356329	73525 1867401	170423	275038	365285	25.0 625	50.0 1250	125	200	250
Toluene-d8 (Surr)	CBZ	Ave	119855 3204461	243472 +++++	557425	842265	1131376	25.0 625	50.0 +++++	125	200	250
4-Bromofluorobenzene (Surr)	CBZ	Ave	47266 1532364	94546 2076969	208732	327324	460547	25.0 625	50.0 1250	125	200	250

Curve Type Legend:

Ave = Average ISTD
Qua = Quadratic ISTD

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\PITSVR06\D\chem\hp7.i\7120613d.b\7120603.D
Lab Smp Id: IC Client Smp ID: vstd5
Inj Date : 06-DEC-2013 07:32 MS Autotune Date: 29-AUG-2013 08:08
Operator : 034635 Inst ID: hp7.i
Smp Info : IC,vstd5
Misc Info : 7120613d.b,T8260bh2o.m,list1.sub
Comment :
Method : \\PITSVR06\D\chem\hp7.i\7120613d.b\T8260bh2o.m
Meth Date : 06-Dec-2013 16:16 journetp Quant Type: ISTD
Cal Date : 06-DEC-2013 11:22 Cal File: 7120609.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-088

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
*	46 Fluorobenzene (IS)	96	7.407	7.414	(1.000)	1089408	250.000	
*	69 Chlorobenzene-d5	119	10.467	10.468	(1.000)	268680	250.000	
*	92 1,4-Dichlorobenzene-d4	152	12.785	12.786	(1.000)	419481	250.000	
*	176 Dioxane-d8 (IS)	96	8.125	8.138	(1.000)	37134	5000.00	
*	177 TBA-d9 (IS)	65	4.676	4.688	(1.000)	304150	5000.00	(H)
$	39 Dibromofluoromethane (Surr)	113	6.677	6.684	(0.901)	32585	25.0000	28.06(M)
$	43 1,2-Dichloroethane-d4	65	7.042	7.049	(0.951)	36635	25.0000	27.27
$	59 Toluene-d8	98	9.038	9.038	(0.863)	119855	25.0000	28.78
$	80 Bromofluorobenzene (Surr)	95	11.629	11.630	(1.111)	47266	25.0000	29.18
	1 Dichlorodifluoromethane	85	2.005	1.987	(0.271)	49610	25.0000	26.08(QM)
	2 Chloromethane	50	1.993	2.048	(0.269)	115505	25.0000	30.15(QM)
	3 Vinyl Chloride	62	2.170	2.152	(0.293)	63158	25.0000	31.10(M)
	4 Bromomethane	94	2.504	2.523	(0.338)	20174	25.0000	13.94(QM)
	5 Chloroethane	64	2.571	2.663	(0.347)	17005	25.0000	30.83(QM)
	7 Dichlorofluoromethane	67	2.906	2.936	(0.392)	41213	25.0000	27.59(M)
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.696	3.739	(0.499)	40403	25.0000	27.02(QM)
	166 Trichlorofluoromethane	101	2.930	2.924	(0.396)	19373	25.0000	20.91
	12 1,1-Dichloroethene	96	3.581	3.599	(0.483)	41209	25.0000	26.57(QM)
	15 Carbon Disulfide	76	3.909	3.891	(0.528)	133512	25.0000	29.00
	13 Acetone	43	3.812	3.788	(0.515)	14558	25.0000	30.45(QM)
	18 Methylene Chloride	84	4.372	4.378	(0.590)	51623	25.0000	31.65(QM)
	19 trans-1,2-Dichloroethene	96	4.785	4.798	(0.646)	46677	25.0000	28.94(M)
	20 Methyl tert-butyl ether	73	4.840	4.859	(0.653)	87161	25.0000	27.83
	24 1,1-Dichloroethane	63	5.351	5.382	(0.722)	92540	25.0000	29.38
	27 2,2-Dichloropropane	77	6.087	6.106	(0.822)	56740	25.0000	29.08
	28 cis-1,2-dichloroethene	96	6.118	6.106	(0.826)	50799	25.0000	29.19
M	29 1,2-Dichloroethene (total)	96				97476	50.0000	58.13
	30 Bromochloromethane	128	6.379	6.398	(0.861)	22084	25.0000	29.15(Q)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
31 2-Butanone	43	6.197	6.185	(0.837)	16990	25.0000	33.09(M)
37 Chloroform	83	6.495	6.507	(0.877)	81730	25.0000	31.90
38 1,1,1-Trichloroethane	97	6.683	6.690	(0.902)	62612	25.0000	30.38
40 1,1-Dichloropropene	75	6.878	6.878	(0.929)	51970	25.0000	29.53
41 Carbon Tetrachloride	117	6.878	6.872	(0.929)	46528	25.0000	28.18
42 Benzene	78	7.103	7.104	(0.959)	167147	25.0000	30.74
45 1,2-Dichloroethane	62	7.128	7.134	(0.962)	48918	25.0000	30.90
47 Trichloroethene	130	7.803	7.797	(1.053)	39770	25.0000	25.48
49 1,2-Dichloropropane	63	8.034	8.034	(1.085)	42723	25.0000	30.78
50 Dibromomethane	93	8.150	8.150	(1.100)	19007	25.0000	27.24
53 Bromodichloromethane	83	8.320	8.320	(1.123)	46589	25.0000	27.87
57 cis-1,3-Dichloropropene	75	8.776	8.777	(1.185)	53341	25.0000	27.54
58 4-Methyl-2-Pentanone	43	8.940	8.941	(0.854)	33800	25.0000	28.19(Q)
60 Toluene	91	9.105	9.105	(0.870)	160221	25.0000	44.95
61 trans-1,3-Dichloropropene	75	9.330	9.330	(0.891)	42192	25.0000	29.01
63 1,3-Dichloropropane	76	9.670	9.671	(0.924)	49940	25.0000	27.57
64 1,1,2-Trichloroethane	97	9.506	9.507	(0.908)	30025	25.0000	31.53
65 Tetrachloroethene	164	9.652	9.653	(0.922)	32909	25.0000	30.61
66 2-Hexanone	43	9.768	9.762	(0.933)	22621	25.0000	31.99
67 Dibromochloromethane	129	9.902	9.902	(0.946)	29818	25.0000	27.78
68 1,2-Dibromoethane	107	10.011	10.011	(0.956)	27801	25.0000	28.06
70 Chlorobenzene	112	10.498	10.498	(1.003)	97039	25.0000	31.11
71 1,1,1,2-Tetrachloroethane	131	10.577	10.577	(1.010)	33547	25.0000	29.10(Q)
72 Ethylbenzene	106	10.607	10.608	(1.013)	56920	25.0000	30.48(Q)
73 m,p-XYLENE	106	10.723	10.723	(1.024)	69791	25.0000	29.64
74 Xylene-o	106	11.112	11.113	(1.062)	74697	25.0000	29.58
76 Styrene	104	11.124	11.131	(1.063)	122852	25.0000	24.01
77 Bromoform	173	11.313	11.313	(1.081)	17693	25.0000	27.78
78 Isopropylbenzene	105	11.477	11.478	(1.096)	191877	25.0000	15.07
79 Bromobenzene	156	11.787	11.788	(0.922)	48234	25.0000	30.96
81 n-Propylbenzene	120	12.061	12.062	(0.943)	75836	25.0000	29.72
82 2-Chlorotoluene	126	11.976	11.976	(0.937)	46835	25.0000	30.98
83 1,1,2,2-Tetrachloroethane	83	11.775	11.770	(1.125)	35243	25.0000	29.63
84 1,2,3-Trichloropropane	110	11.824	11.818	(0.925)	9106	25.0000	28.67(Q)
85 4-Chlorotoluene	126	12.086	12.086	(0.945)	47078	25.0000	31.87
86 1,3,5-Trimethylbenzene	105	12.061	12.062	(0.943)	154117	25.0000	29.72
87 tert-Butylbenzene	119	12.384	12.390	(0.969)	134325	25.0000	29.42
88 1,2,4-Trimethylbenzene	105	12.438	12.439	(0.973)	163285	25.0000	16.22
89 sec-Butylbenzene	105	12.609	12.609	(0.986)	206684	25.0000	28.77
90 4-Isopropyltoluene	119	12.749	12.755	(0.997)	160895	25.0000	29.25
91 1,3-Dichlorobenzene	146	12.724	12.725	(0.995)	87862	25.0000	29.77
94 n-Butylbenzene	91	13.162	13.163	(1.029)	163175	25.0000	28.05
93 1,4-Dichlorobenzene	146	12.809	12.816	(1.002)	75984	25.0000	29.66
95 1,2-Dichlorobenzene	146	13.187	13.187	(1.031)	75280	25.0000	30.25
96 1,2-Dibromo-3-chloropropane	157	13.971	13.972	(1.093)	2865	25.0000	28.70
97 1,2,4-Trichlorobenzene	180	14.805	14.799	(1.158)	24581	25.0000	26.31
98 Hexachlorobutadiene	225	14.975	14.969	(1.171)	27877	25.0000	28.54
99 Naphthalene	128	15.054	15.055	(1.177)	22685	25.0000	22.98
100 1,2,3-Trichlorobenzene	180	15.310	15.304	(1.197)	13003	25.0000	28.11
156 Methyl Acetate	43	4.293	4.299	(0.580)	160174	125.000	147.2
157 Cyclohexane	56	6.744	6.751	(0.910)	102649	25.0000	31.04
158 Methyl Cyclohexane	83	7.991	7.998	(1.079)	77007	25.0000	29.24
32 Vinyl Acetate	43	5.509	5.498	(0.744)	36027	25.0000	29.16(M)
52 1,4-Dioxane	88	8.192	8.192	(1.008)	5055	500.000	578.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
21	tert-Butyl Alcohol	59	4.773	4.786	(1.021)	23803	250.000	280.9(QMH)
16	3-Chloro-1-propene	76	4.177	4.177	(0.564)	35012	25.0000	29.04(QM)
11	Acrolein	56	3.496	3.545	(0.472)	69764	500.000	556.3(QM)
22	Acrylonitrile	53	4.804	4.810	(0.649)	145370	250.000	297.8(M)
8	Ethyl Ether	59	3.338	3.368	(0.451)	36215	25.0000	30.29(QM)
62	Ethyl methacrylate	69	9.421	9.421	(0.900)	36535	25.0000	29.52
23	Hexane	57	5.181	5.187	(0.699)	74270	25.0000	26.62
14	Iodomethane	142	3.800	3.806	(0.513)	69482	25.0000	29.18(QM)
44	Isobutanol	41	7.407	7.414	(1.000)	38781	625.000	695.6
155	N-Heptane	41	8.010	7.998	(1.081)	72438	25.0000	31.00
35	Tetrahydrofuran	42	6.756	6.745	(0.912)	27442	50.0000	60.89
164	trans-1,4-Dichloro-2-butene	53	11.836	11.830	(0.926)	8147	25.0000	25.98
169	Butadiene	39	2.182	2.225	(0.295)	79622	25.0000	14.57(QM)
M 75	Xylenes (total)	106				144488	50.0000	59.22

QC Flag Legend

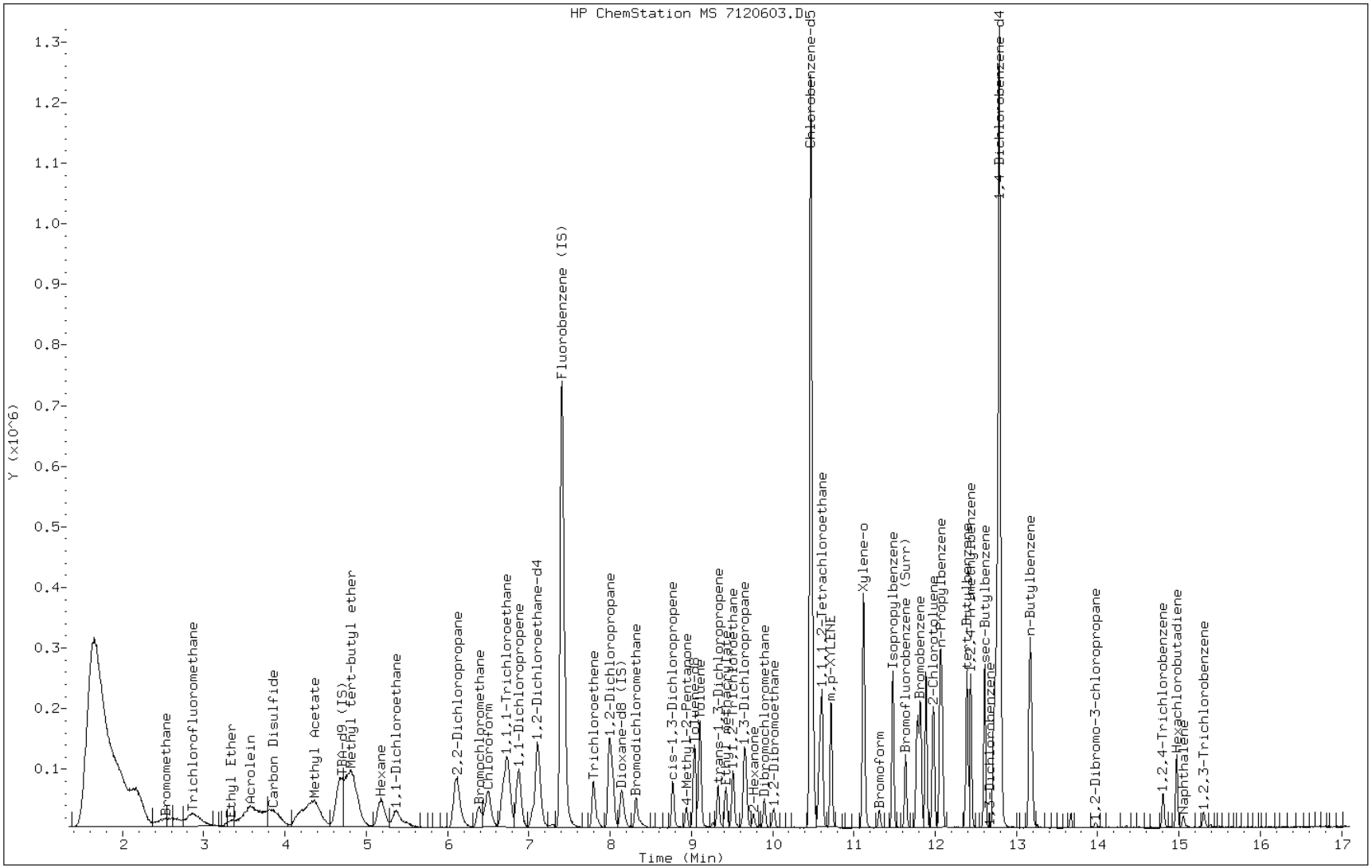
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 7120603.D

Date: 06-DEC-2013 07:32

Client ID: vstd5 Instrument: hp7.i

Sample Info: IC,vstd5 Operator: 034635



Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 2 Chloromethane
CAS #: 74-87-3
Report Date: 12/09/2013

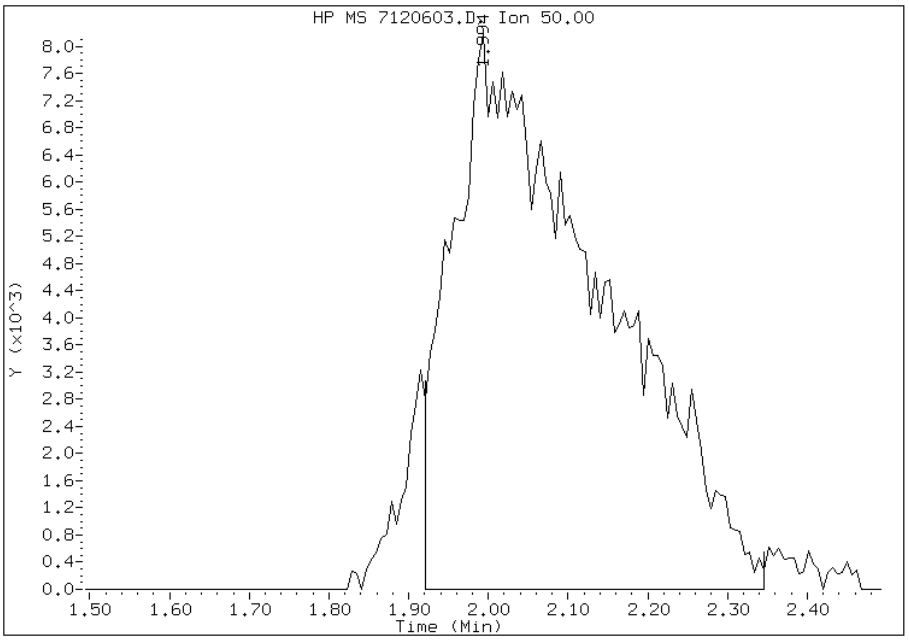
Processing Integration Results

RT: 1.99

Response: 107849

Amount: 0

Conc: 0



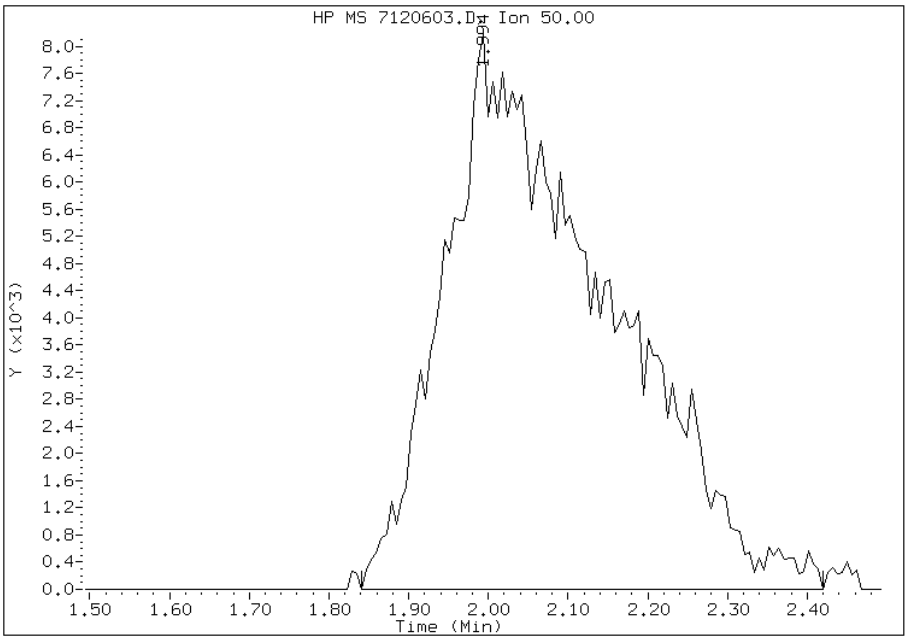
Manual Integration Results

RT: 1.99

Response: 115505

Amount: 30

Conc: 30



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 08:39
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 1 Dichlorodifluoromethane
CAS #: 75-71-8
Report Date: 12/09/2013

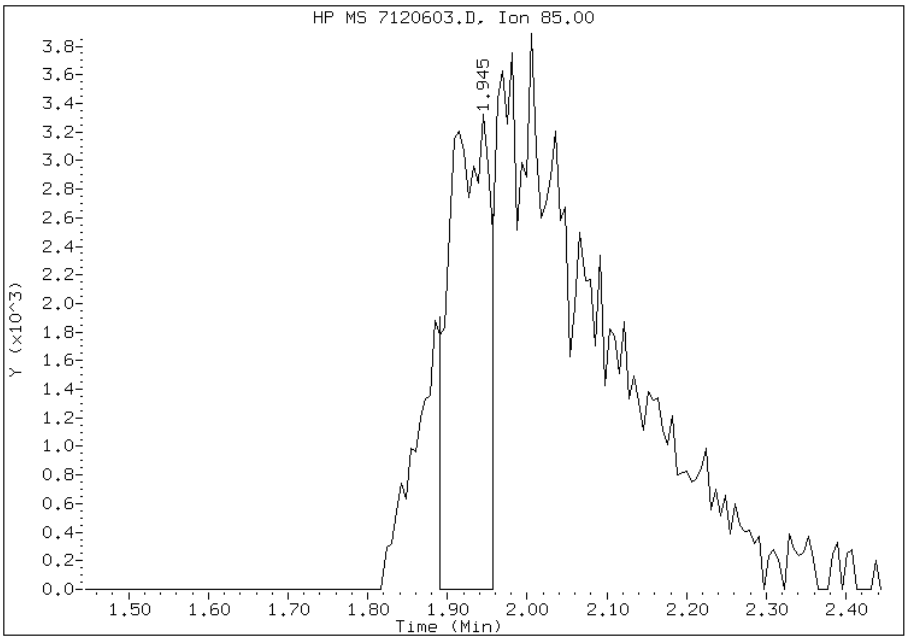
Processing Integration Results

RT: 1.94

Response: 12004

Amount: 0

Conc: 0



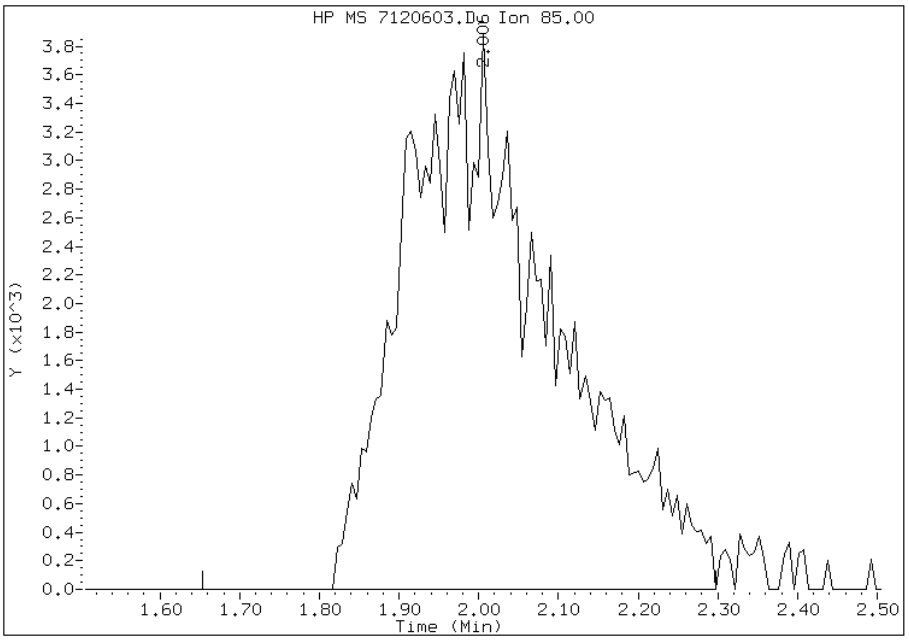
Manual Integration Results

RT: 2.01

Response: 49610

Amount: 26

Conc: 26



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 08:38
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 3 Vinyl Chloride
CAS #: 75-01-4
Report Date: 12/09/2013

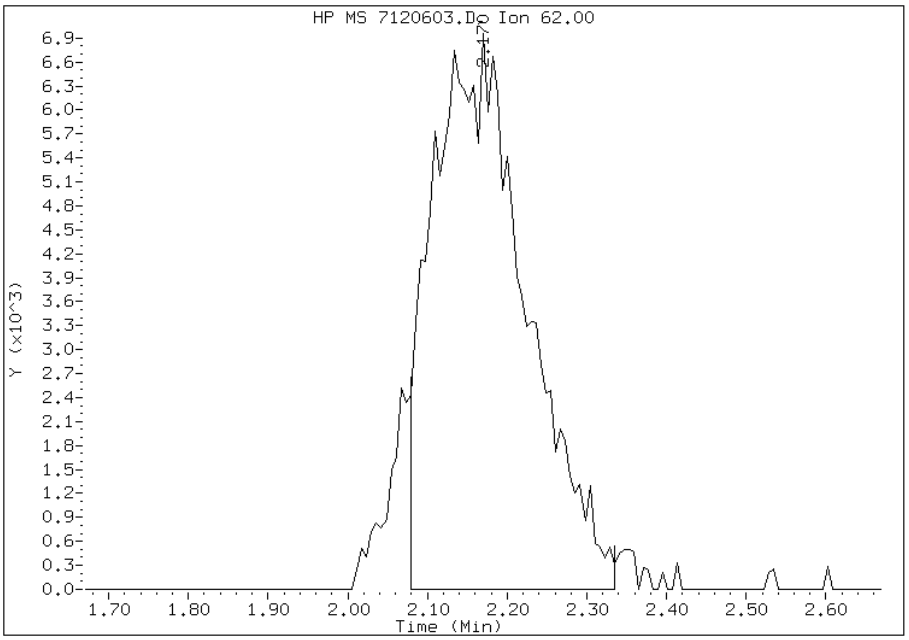
Processing Integration Results

RT: 2.17

Response: 57935

Amount: 0

Conc: 0



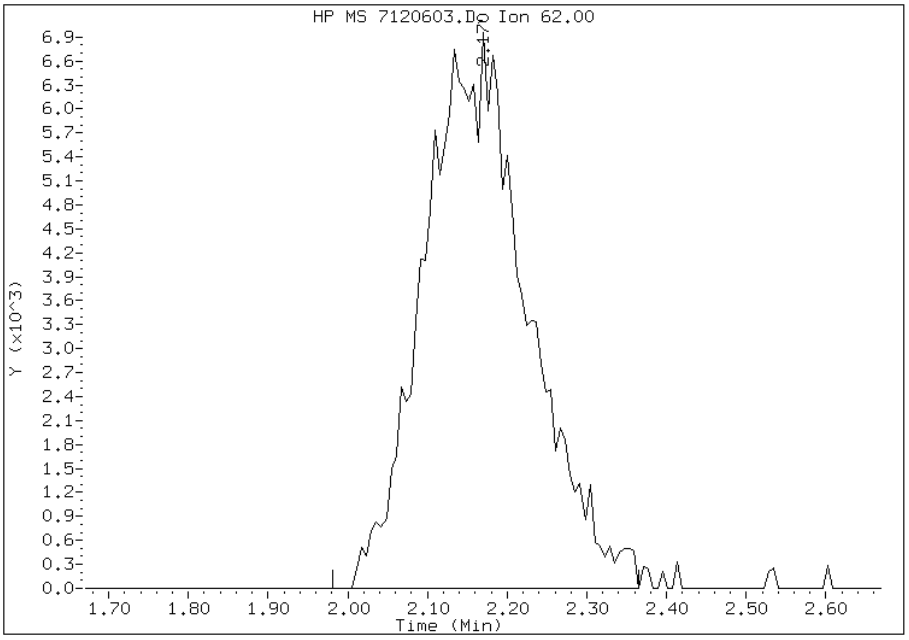
Manual Integration Results

RT: 2.17

Response: 63158

Amount: 31

Conc: 31



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 08:39
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 169 Butadiene
CAS #: 106-99-0
Report Date: 12/09/2013

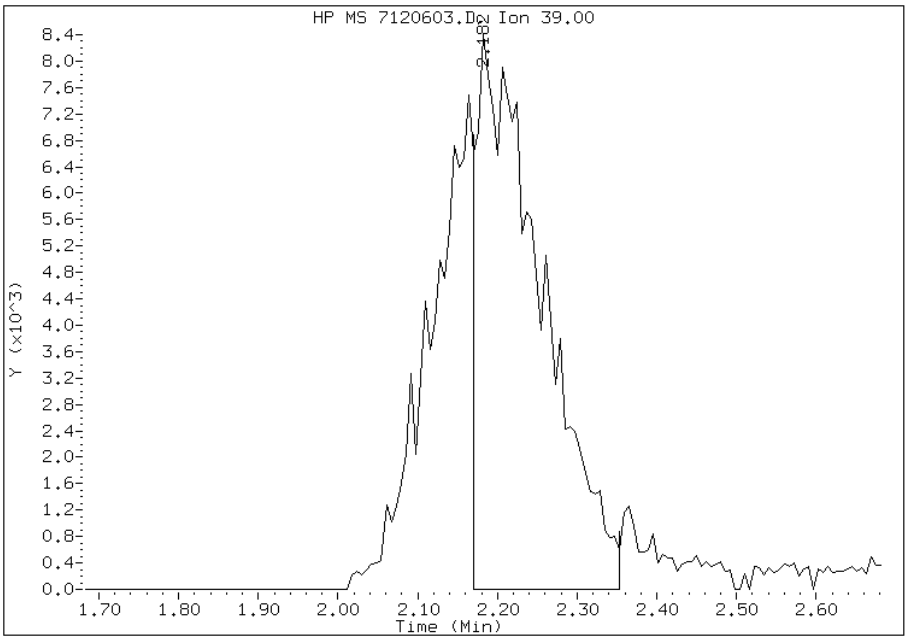
Processing Integration Results

RT: 2.18

Response: 48750

Amount: 0

Conc: 0



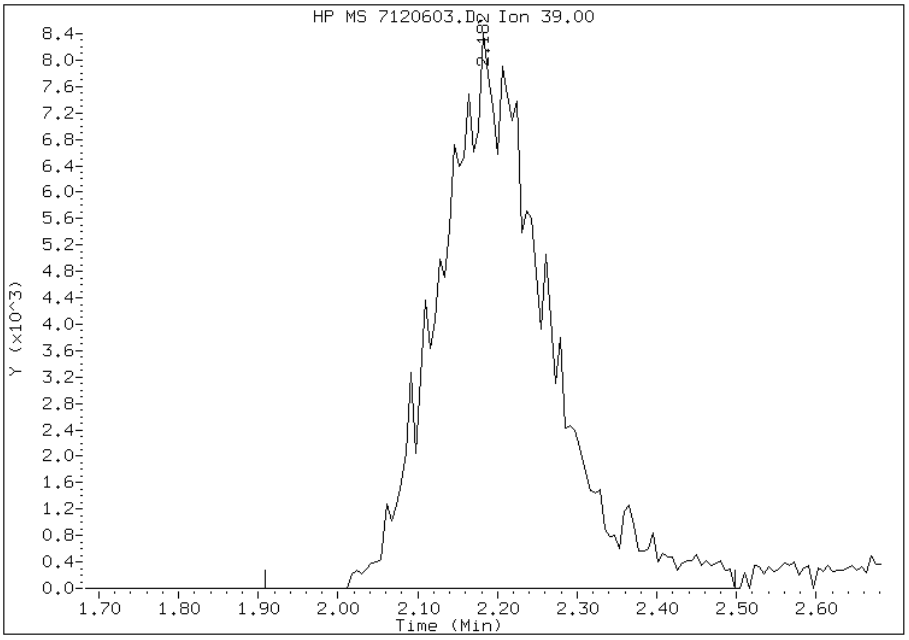
Manual Integration Results

RT: 2.18

Response: 79622

Amount: 15

Conc: 15



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 08:39
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 4 Bromomethane
CAS #: 74-83-9
Report Date: 12/09/2013

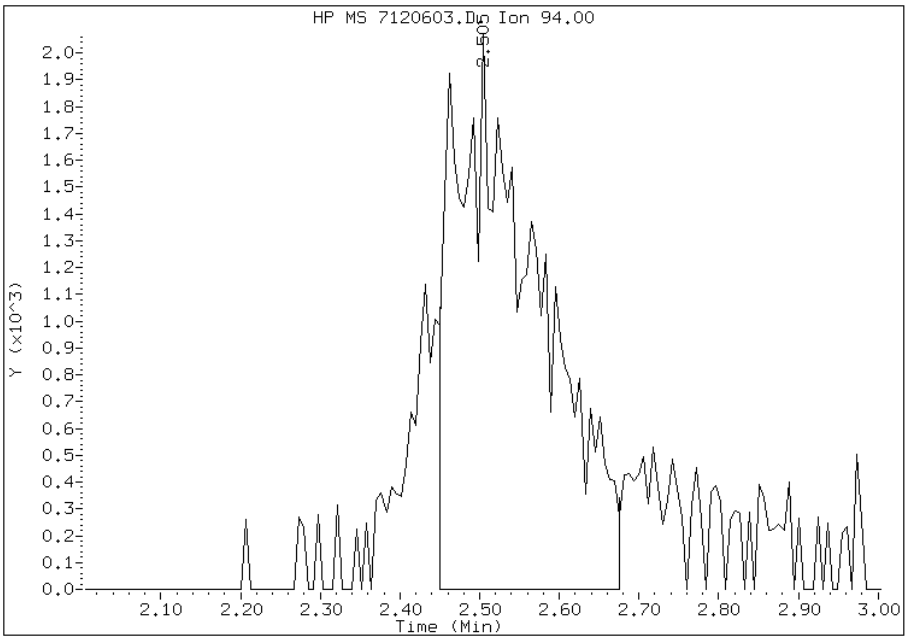
Processing Integration Results

RT: 2.50

Response: 15486

Amount: 0

Conc: 0



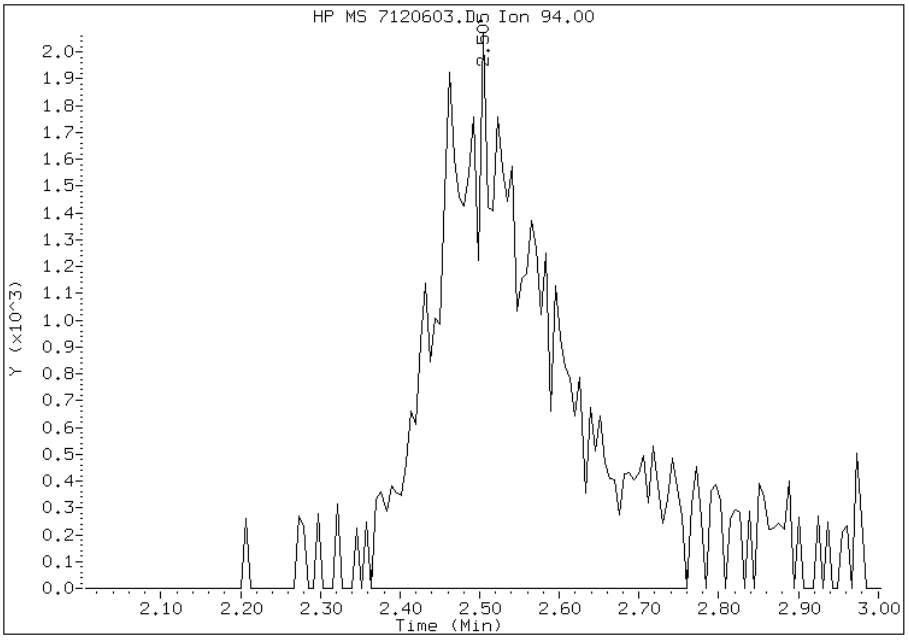
Manual Integration Results

RT: 2.50

Response: 20174

Amount: 14

Conc: 14



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 08:39
Manual Integration Reason: Peak Identified Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 5 Chloroethane
CAS #: 75-00-3
Report Date: 12/09/2013

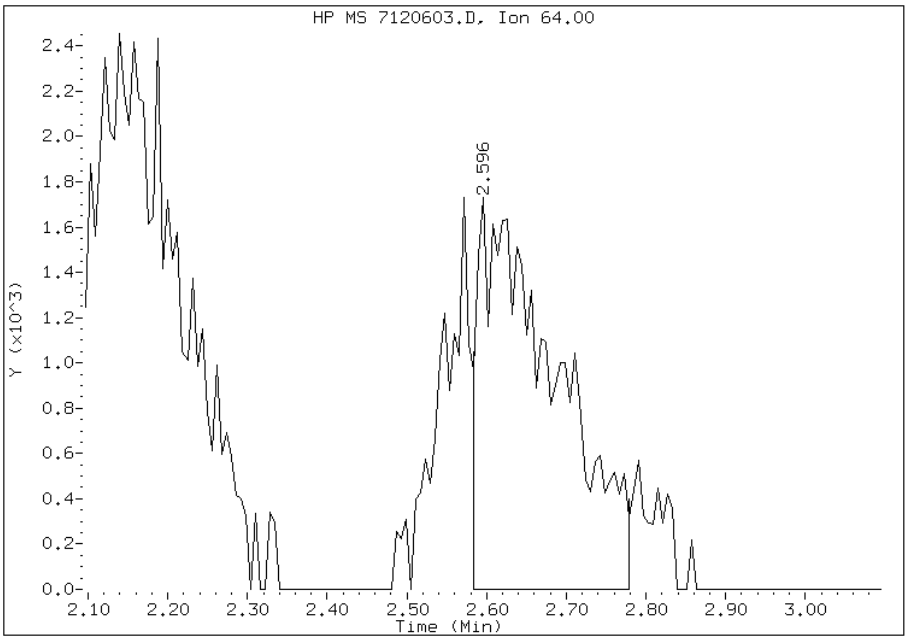
Processing Integration Results

RT: 2.60

Response: 11878

Amount: 23

Conc: 23



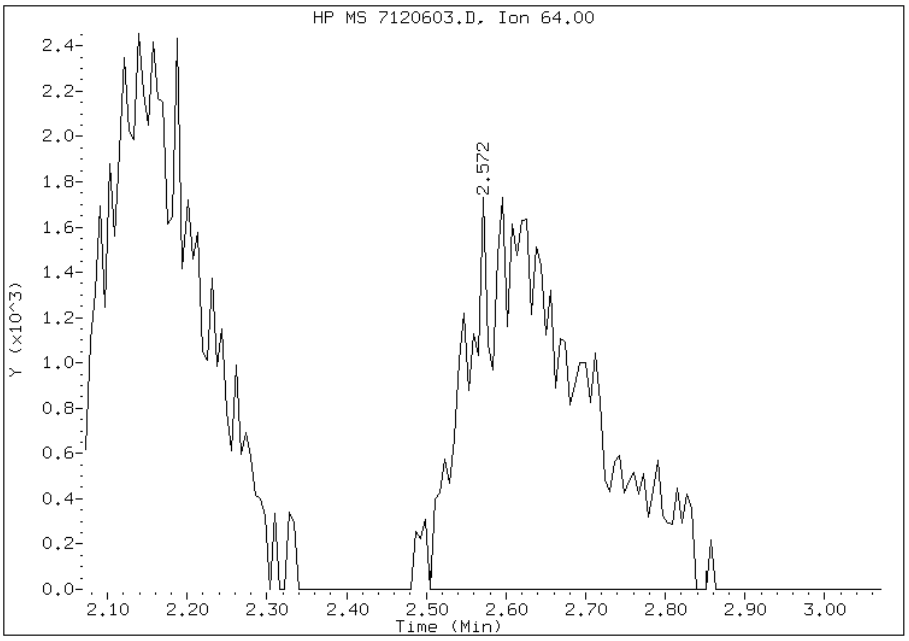
Manual Integration Results

RT: 2.57

Response: 17005

Amount: 31

Conc: 31



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:51
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 7 Dichlorofluoromethane
CAS #: 75-43-4
Report Date: 12/09/2013

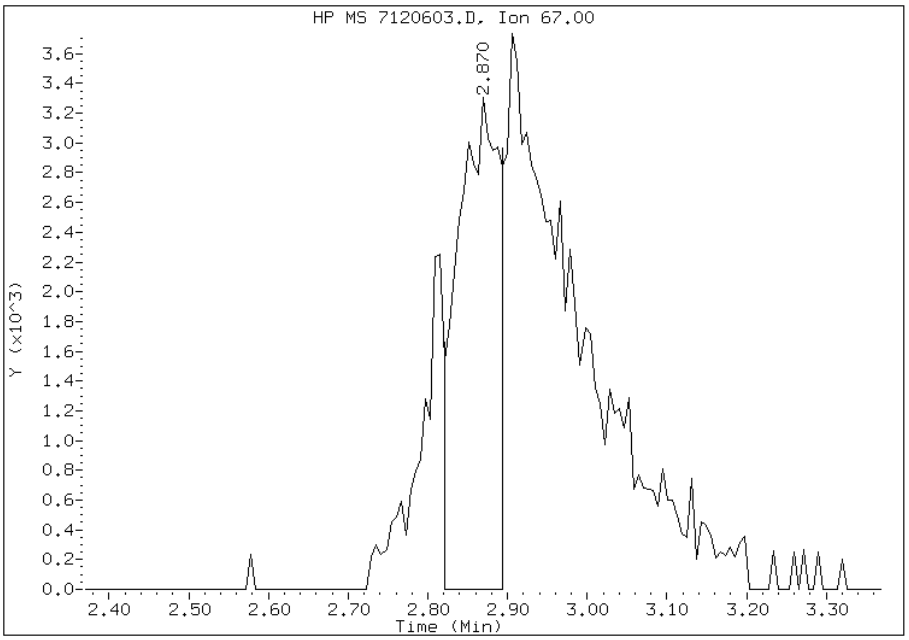
Processing Integration Results

RT: 2.87

Response: 12549

Amount: 13

Conc: 13



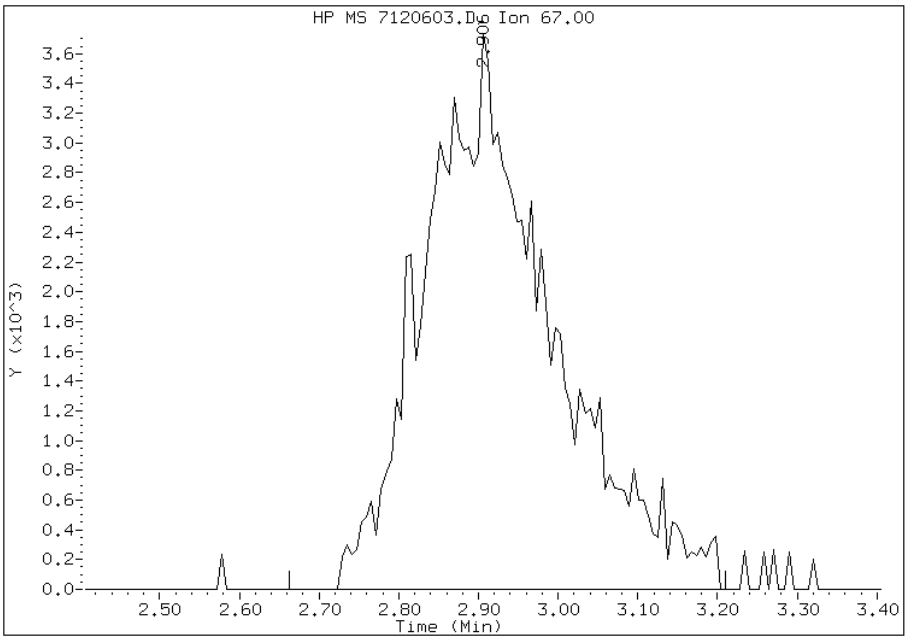
Manual Integration Results

RT: 2.91

Response: 41213

Amount: 28

Conc: 28



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:50
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 8 Ethyl Ether
CAS #: 60-29-7
Report Date: 12/09/2013

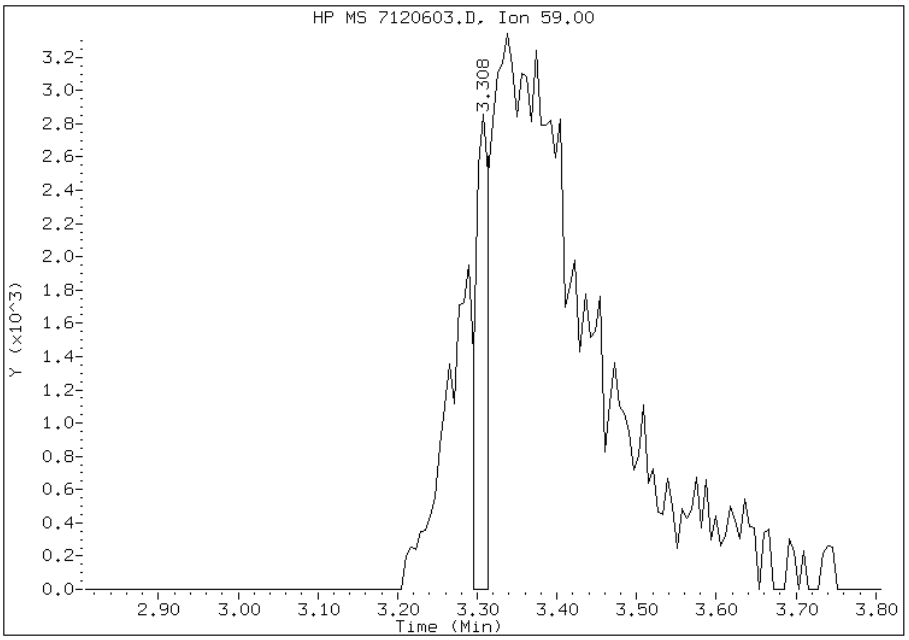
Processing Integration Results

RT: 3.31

Response: 3394

Amount: 0

Conc: 0



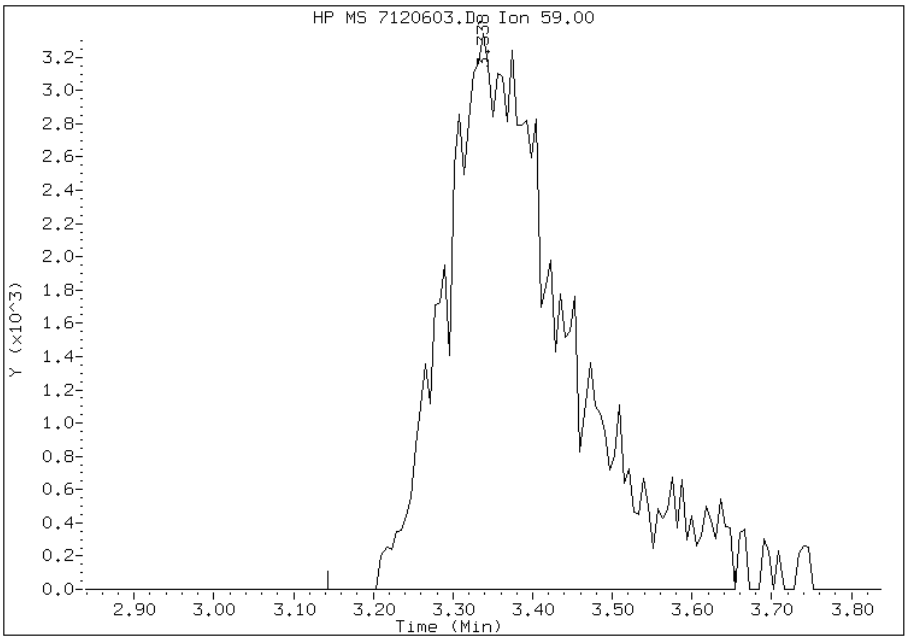
Manual Integration Results

RT: 3.34

Response: 36215

Amount: 30

Conc: 30



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 08:40
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 11 Acrolein
CAS #: 107-02-8
Report Date: 12/09/2013

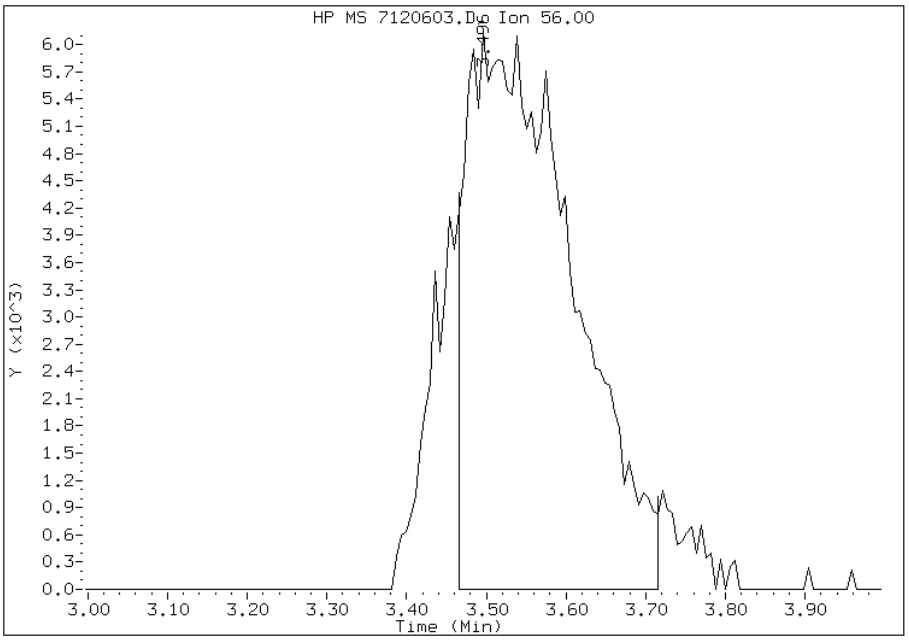
Processing Integration Results

RT: 3.50

Response: 57542

Amount: 0

Conc: 0



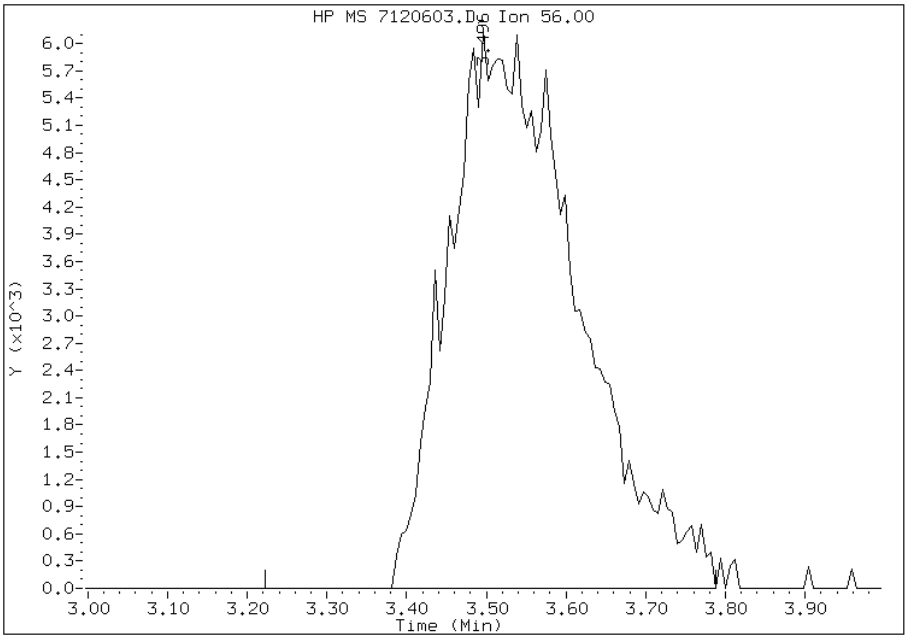
Manual Integration Results

RT: 3.50

Response: 69764

Amount: 556

Conc: 556



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 08:40
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 12 1,1-Dichloroethene
CAS #: 75-35-4
Report Date: 12/09/2013

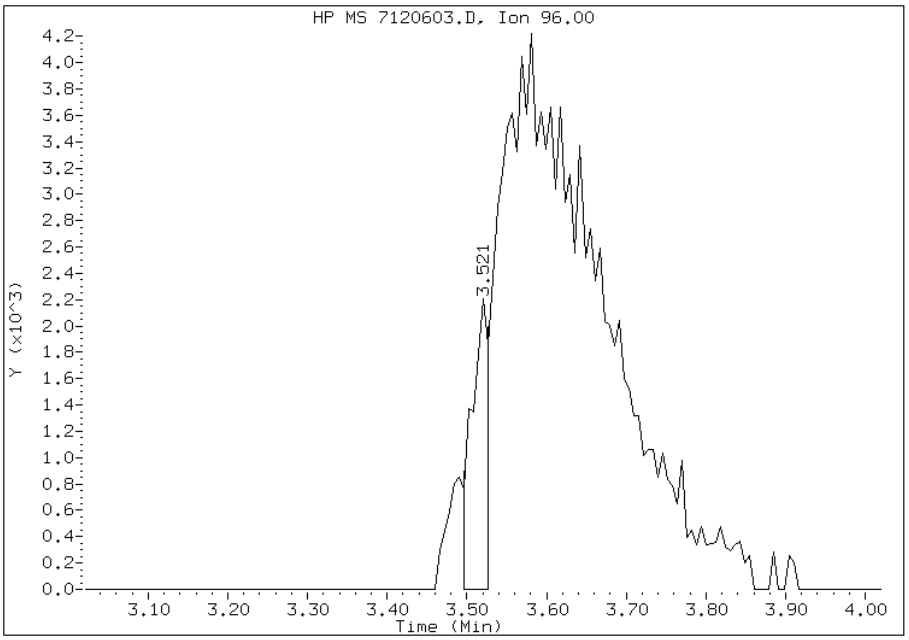
Processing Integration Results

RT: 3.52

Response: 3125

Amount: 3

Conc: 3



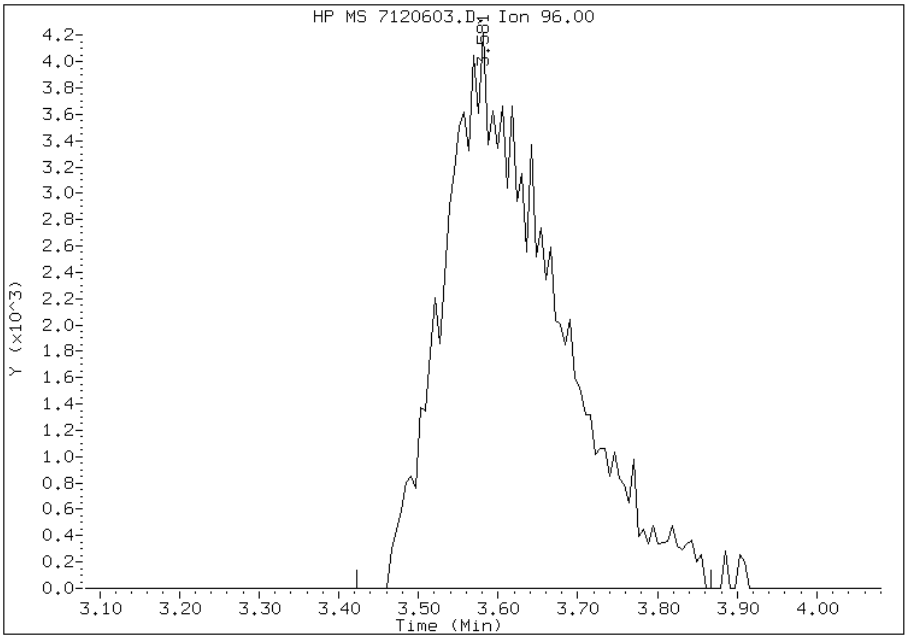
Manual Integration Results

RT: 3.58

Response: 41209

Amount: 27

Conc: 27



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:51
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 10 1,1,2-trichloro-1,2,2-trifluoro
CAS #: 76-13-1
Report Date: 12/09/2013

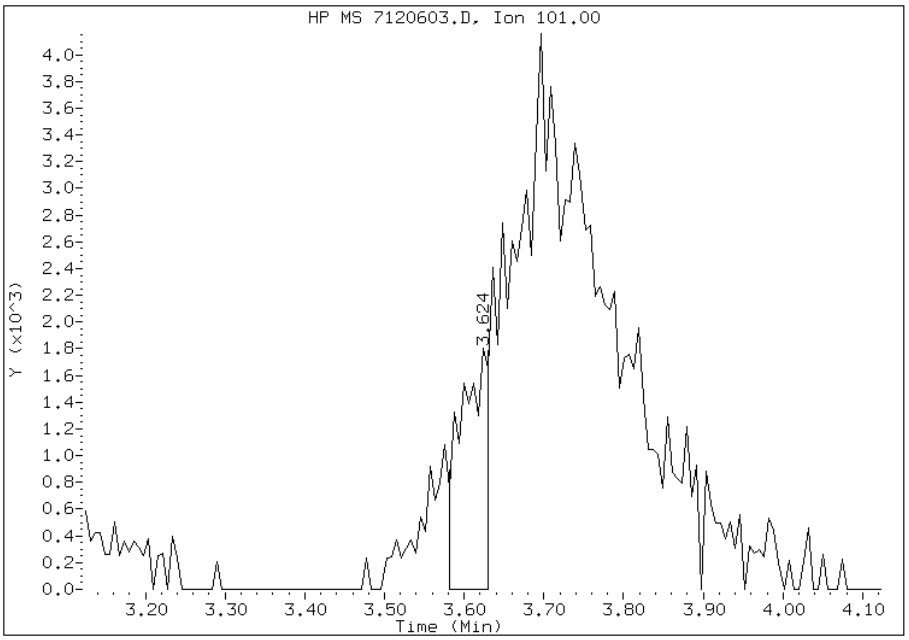
Processing Integration Results

RT: 3.62

Response: 4255

Amount: 4

Conc: 4



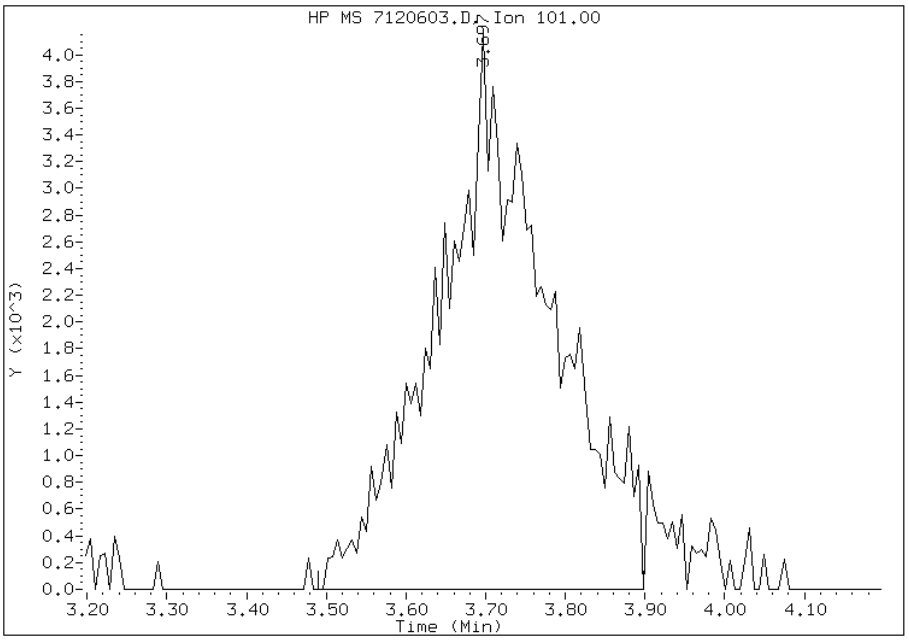
Manual Integration Results

RT: 3.70

Response: 40403

Amount: 27

Conc: 27



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:50
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 14 Iodomethane
CAS #: 74-88-4
Report Date: 12/09/2013

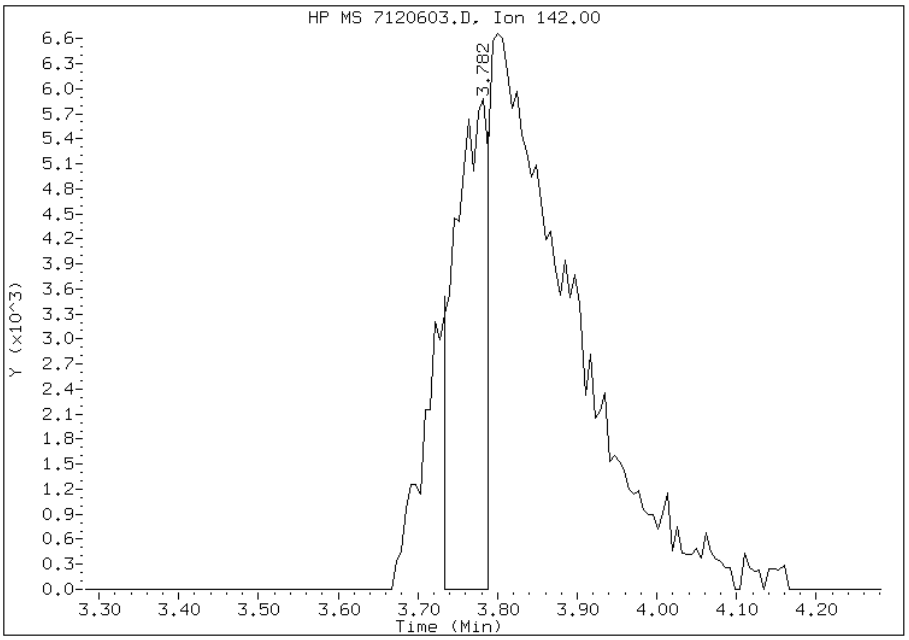
Processing Integration Results

RT: 3.78

Response: 16407

Amount: 0

Conc: 0



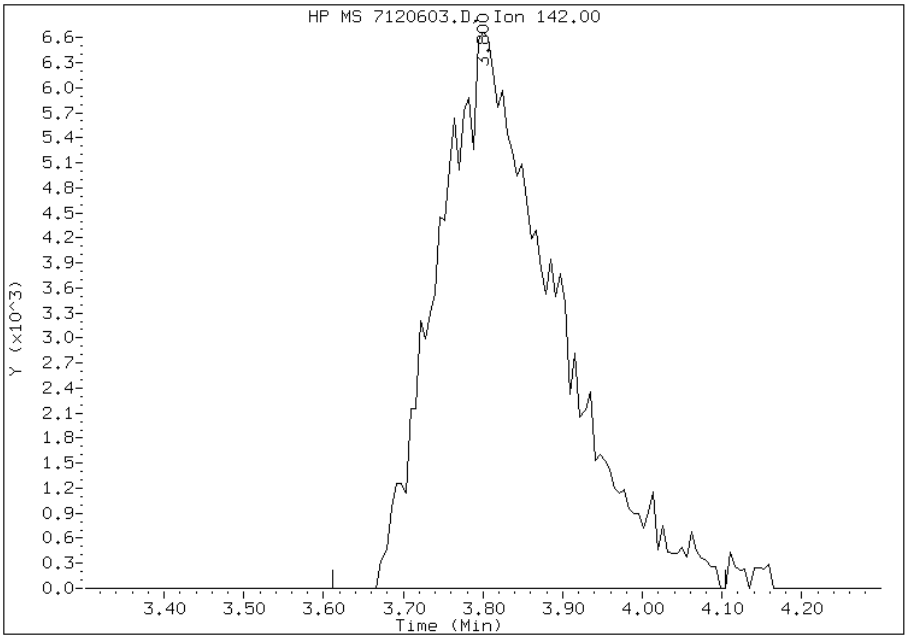
Manual Integration Results

RT: 3.80

Response: 69482

Amount: 29

Conc: 29



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 08:39
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 13 Acetone
CAS #: 67-64-1
Report Date: 12/09/2013

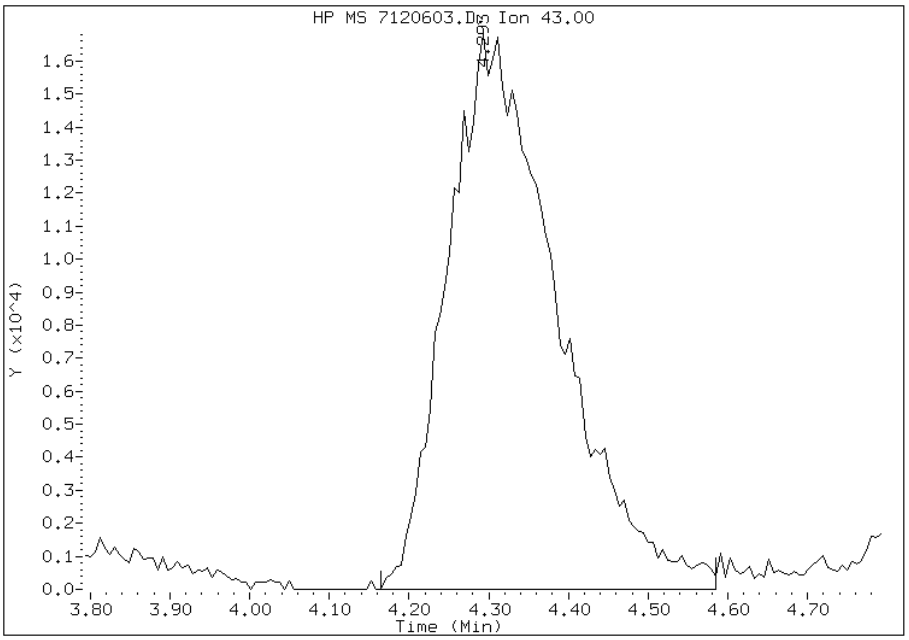
Processing Integration Results

RT: 4.29

Response: 162553

Amount: 0

Conc: 0



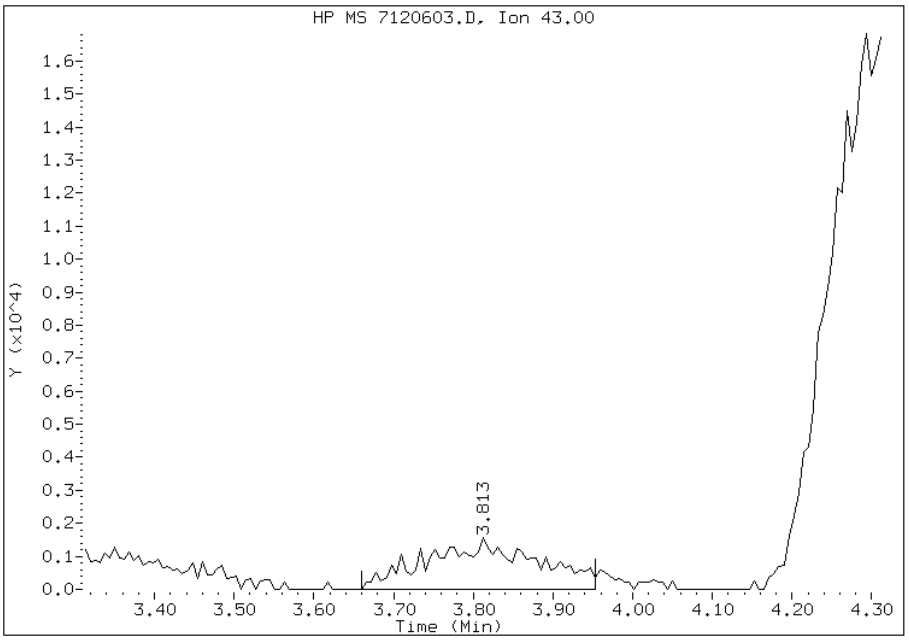
Manual Integration Results

RT: 3.81

Response: 14558

Amount: 30

Conc: 30



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 10:45
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 16 3-Chloro-1-propene
CAS #: 107-05-1
Report Date: 12/09/2013

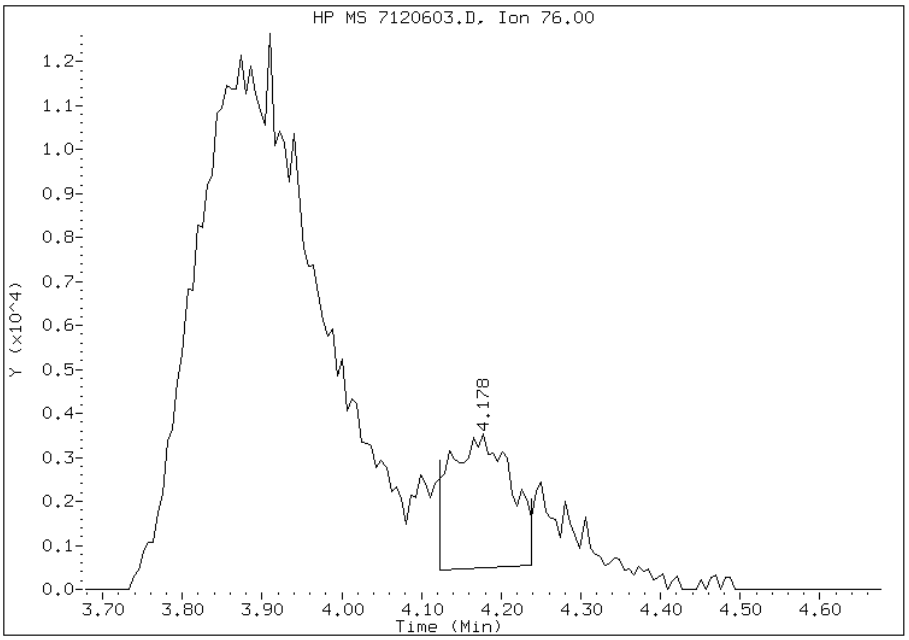
Processing Integration Results

RT: 4.18

Response: 15908

Amount: 0

Conc: 0



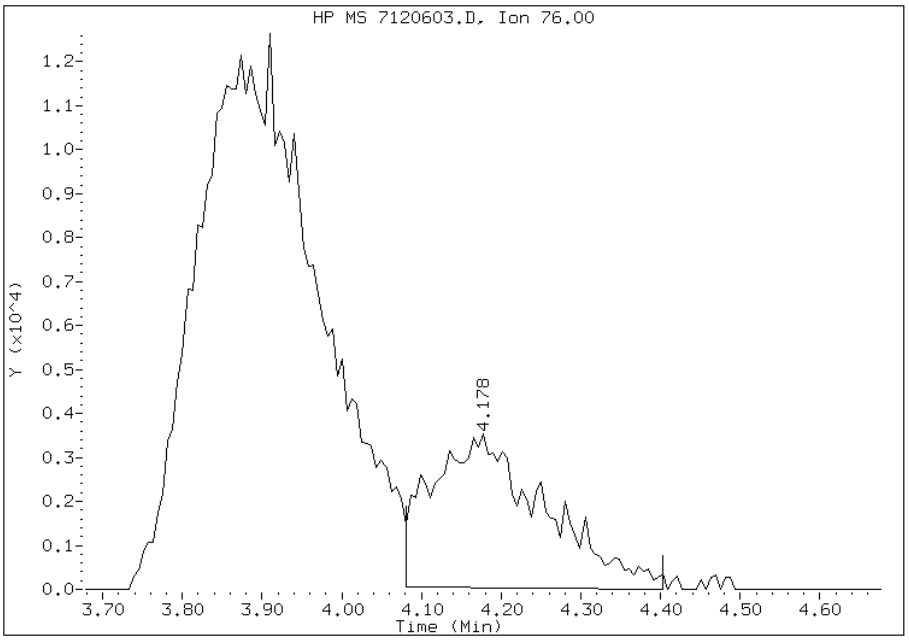
Manual Integration Results

RT: 4.18

Response: 35012

Amount: 29

Conc: 29



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 08:40
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 18 Methylene Chloride
CAS #: 75-09-2
Report Date: 12/09/2013

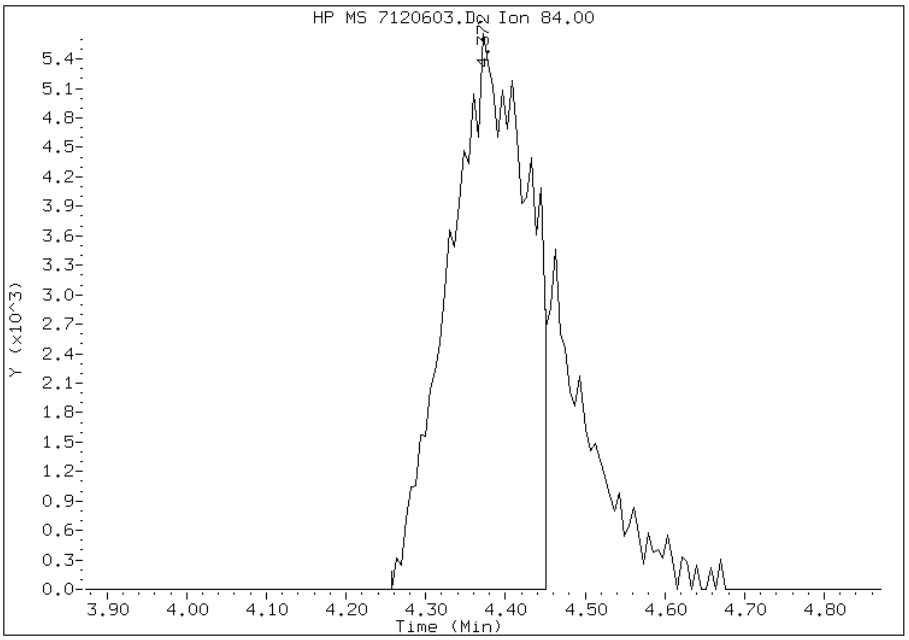
Processing Integration Results

RT: 4.37

Response: 39728

Amount: 0

Conc: 0



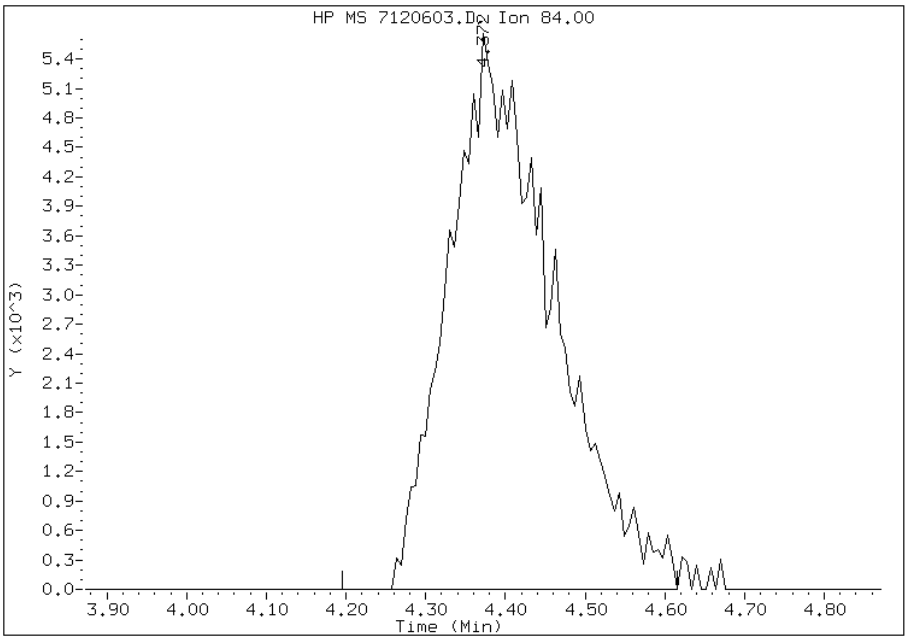
Manual Integration Results

RT: 4.37

Response: 51623

Amount: 32

Conc: 32



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 08:41
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 21 tert-Butyl Alcohol
CAS #: 75-65-0
Report Date: 12/09/2013

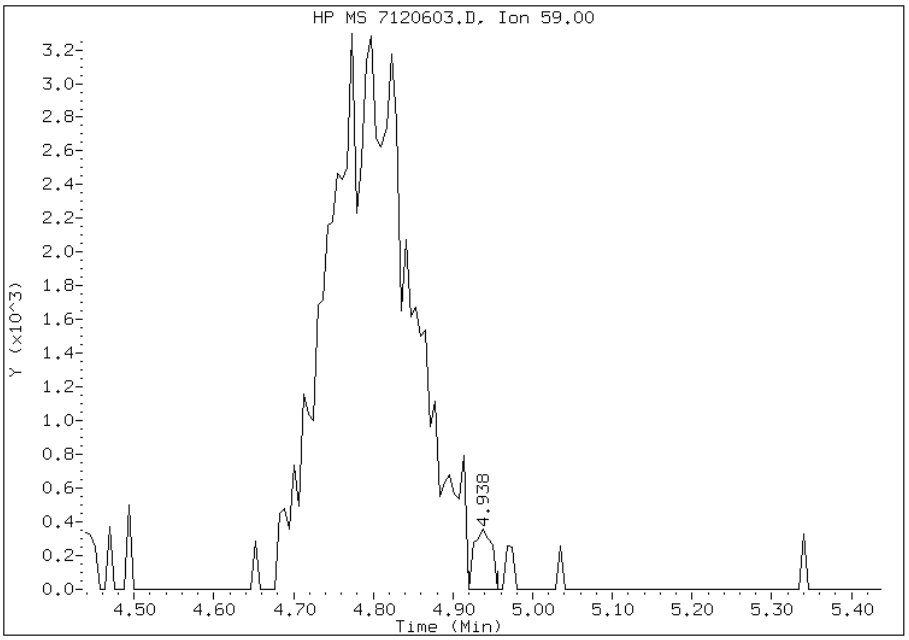
Processing Integration Results

RT: 4.94

Response: 546

Amount: 0

Conc: 0



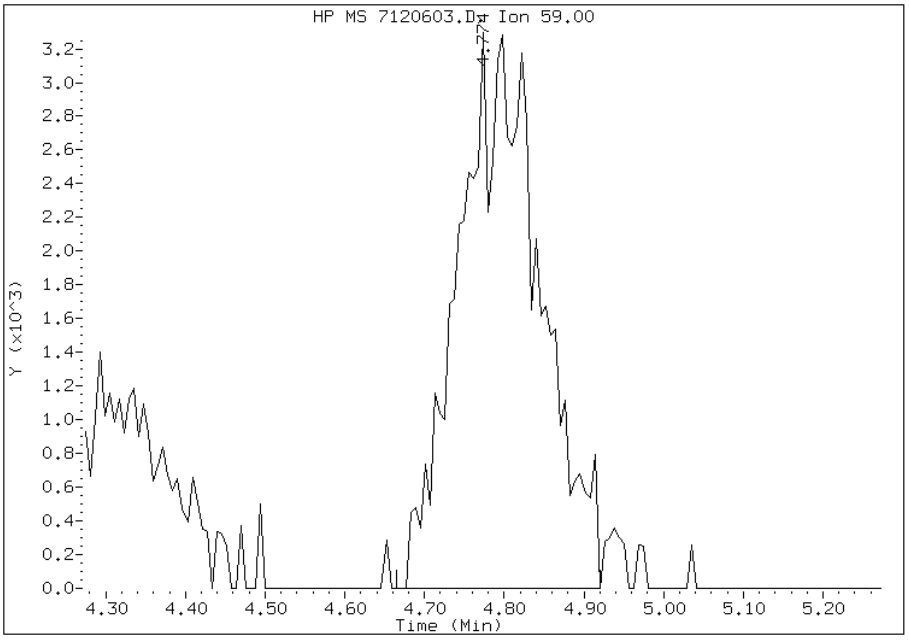
Manual Integration Results

RT: 4.77

Response: 23803

Amount: 281

Conc: 281



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:50
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 19 trans-1,2-Dichloroethene
CAS #: 156-60-5
Report Date: 12/09/2013

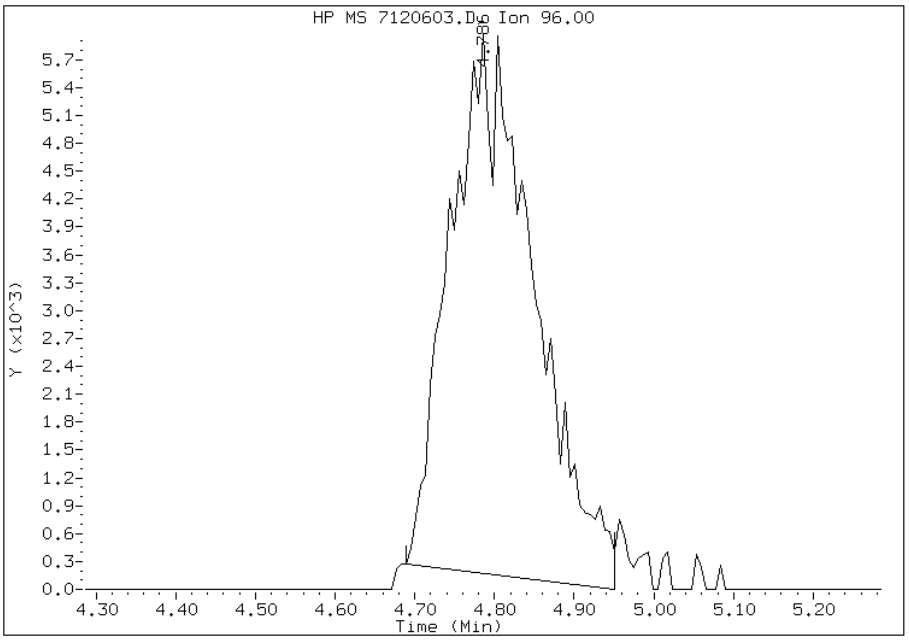
Processing Integration Results

RT: 4.79

Response: 43155

Amount: 27

Conc: 27



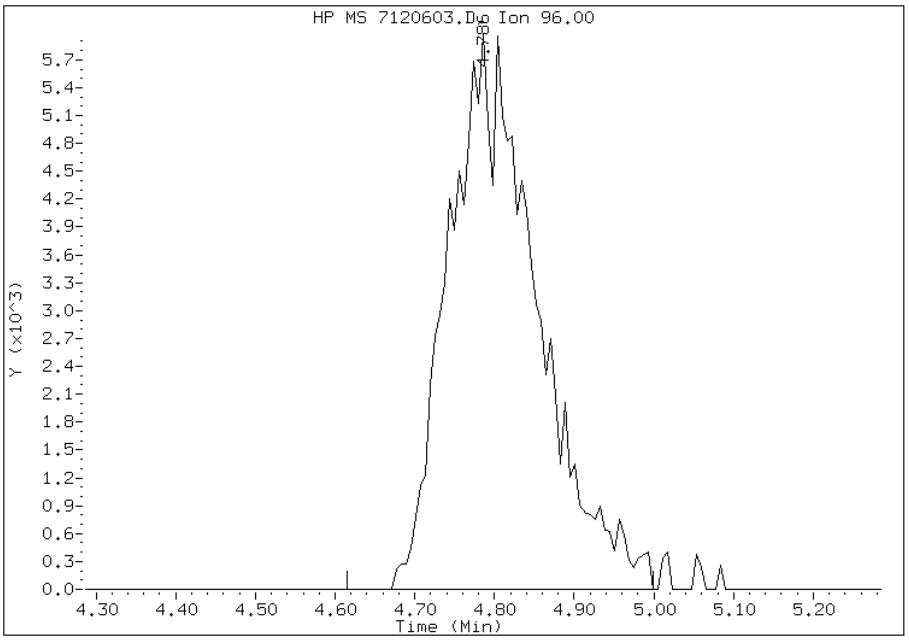
Manual Integration Results

RT: 4.79

Response: 46677

Amount: 29

Conc: 29



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:51
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 22 Acrylonitrile
CAS #: 107-13-1
Report Date: 12/09/2013

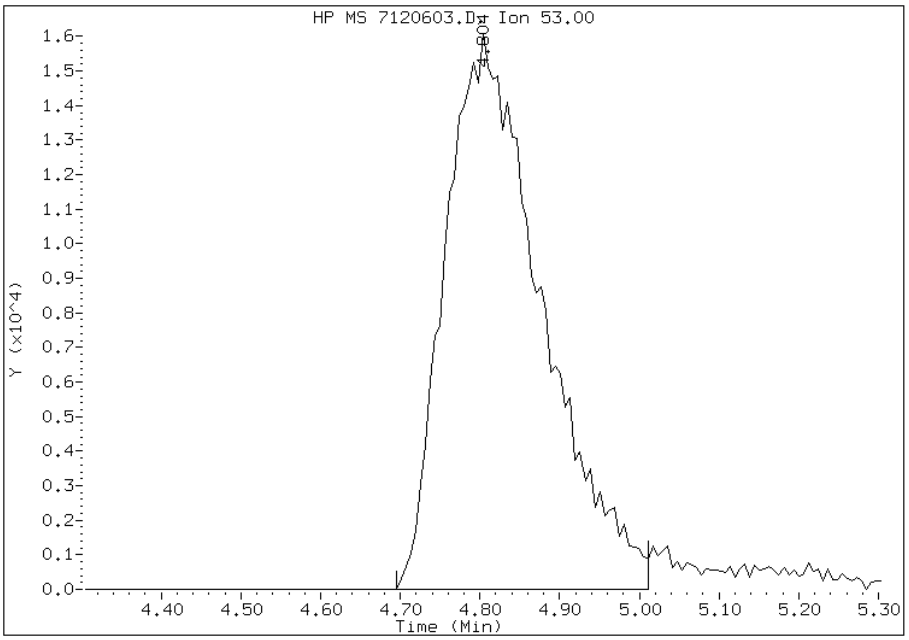
Processing Integration Results

RT: 4.80

Response: 136140

Amount: 0

Conc: 0



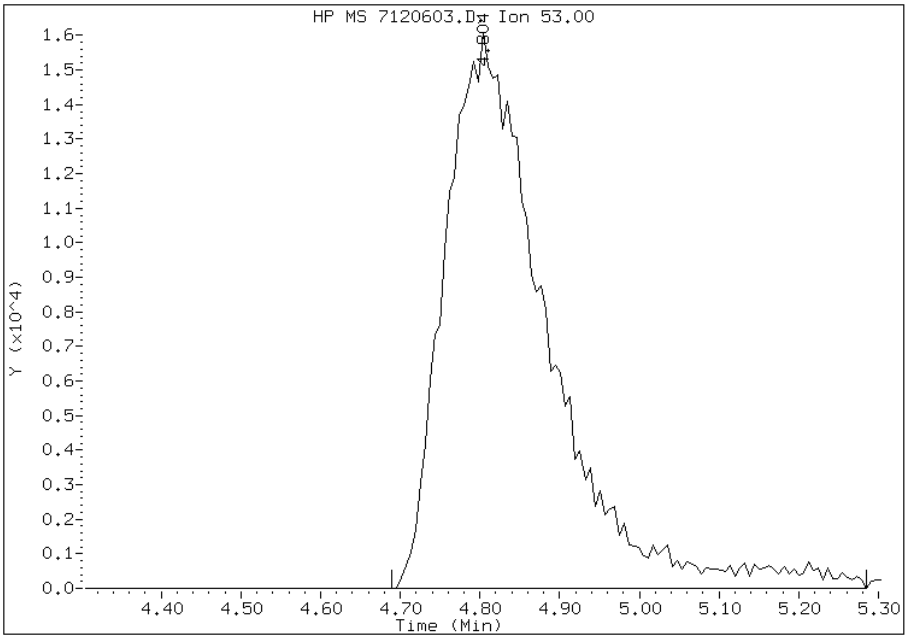
Manual Integration Results

RT: 4.80

Response: 145370

Amount: 298

Conc: 298



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 08:40
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 32 Vinyl Acetate
CAS #: 108-05-4
Report Date: 12/09/2013

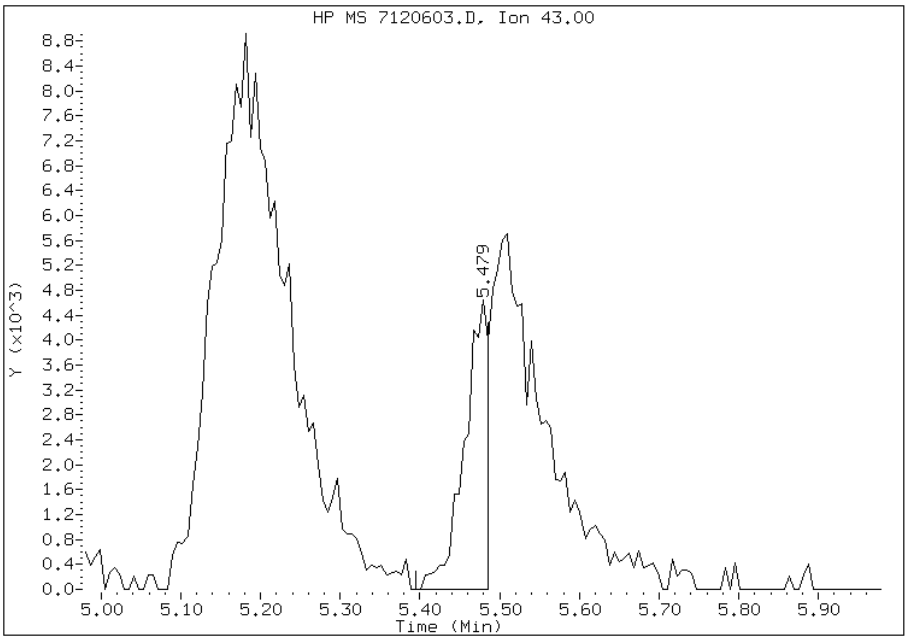
Processing Integration Results

RT: 5.48

Response: 9814

Amount: 10

Conc: 10



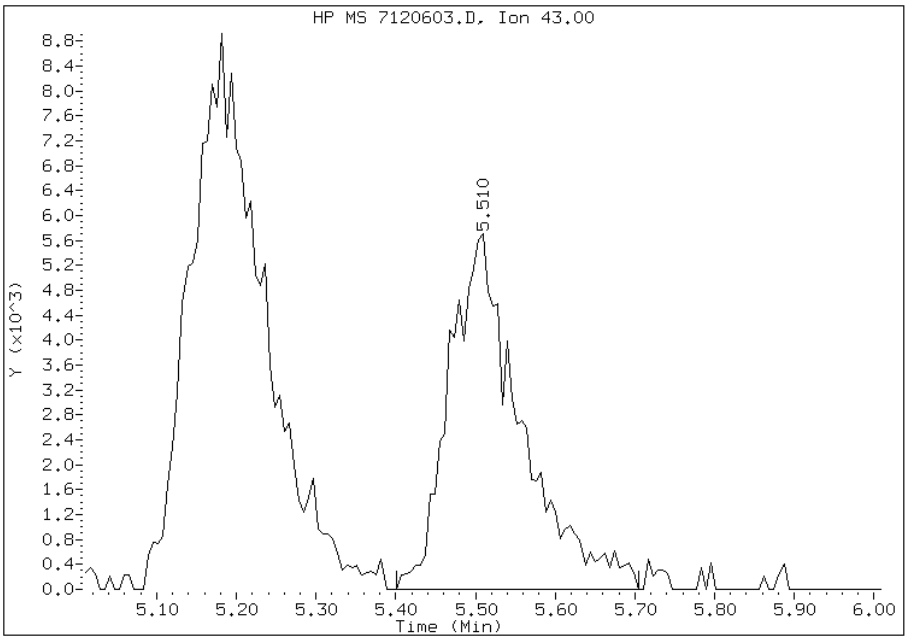
Manual Integration Results

RT: 5.51

Response: 36027

Amount: 29

Conc: 29



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:52
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 31 2-Butanone
CAS #: 78-93-3
Report Date: 12/09/2013

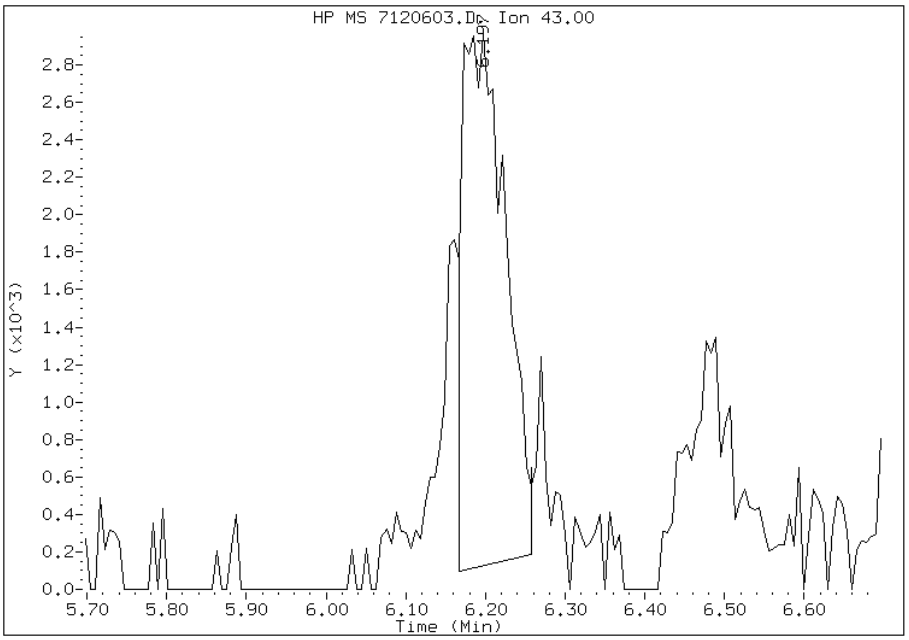
Processing Integration Results

RT: 6.20

Response: 11068

Amount: 24

Conc: 24



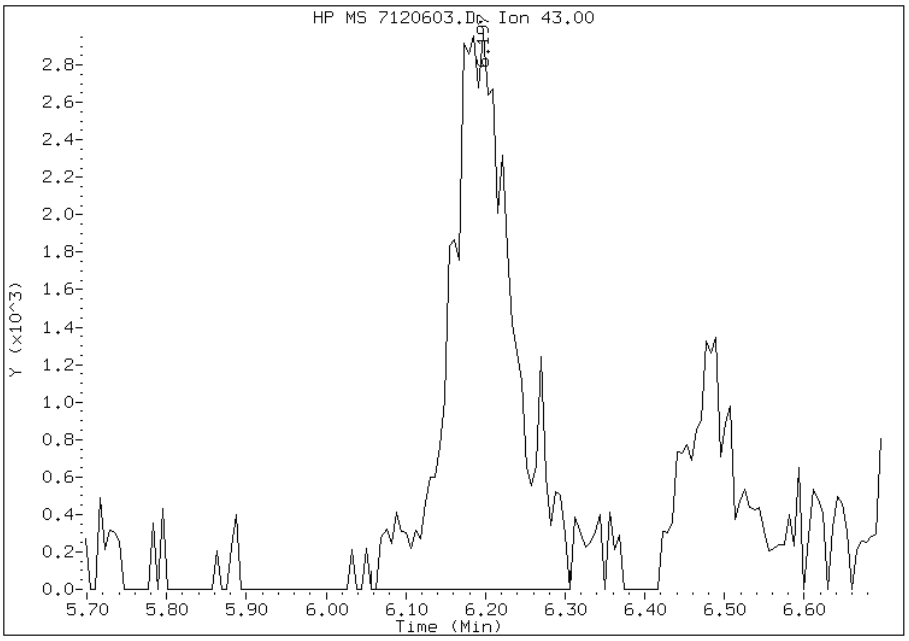
Manual Integration Results

RT: 6.20

Response: 16990

Amount: 33

Conc: 33



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:52
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120603.D
Inj. Date and Time: 06-DEC-2013 07:32
Instrument ID: hp7.i
Client ID: vstd5
Compound: 39 Dibromofluoromethane (Surr)
CAS #: 1868-53-7
Report Date: 12/09/2013

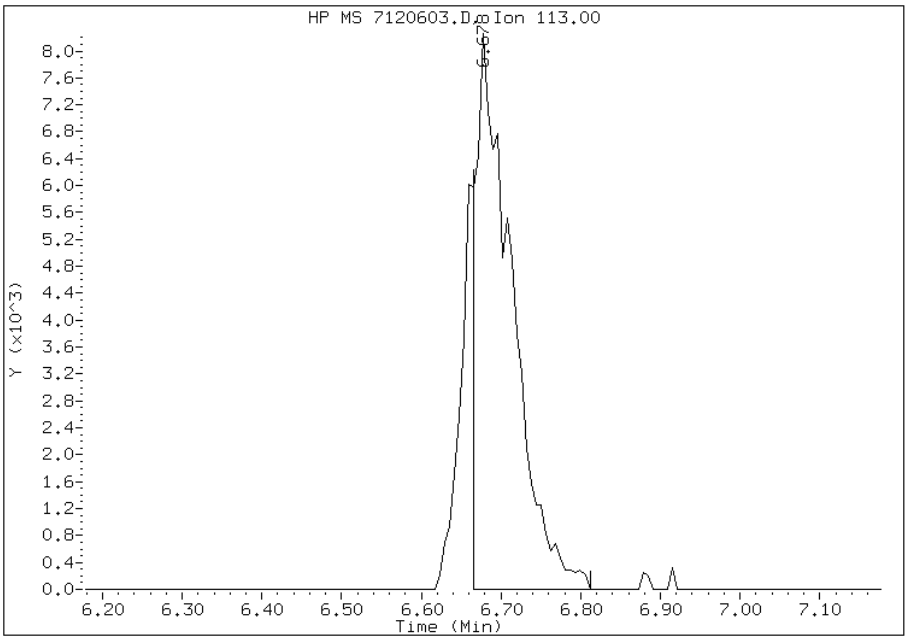
Processing Integration Results

RT: 6.68

Response: 26803

Amount: 0

Conc: 0



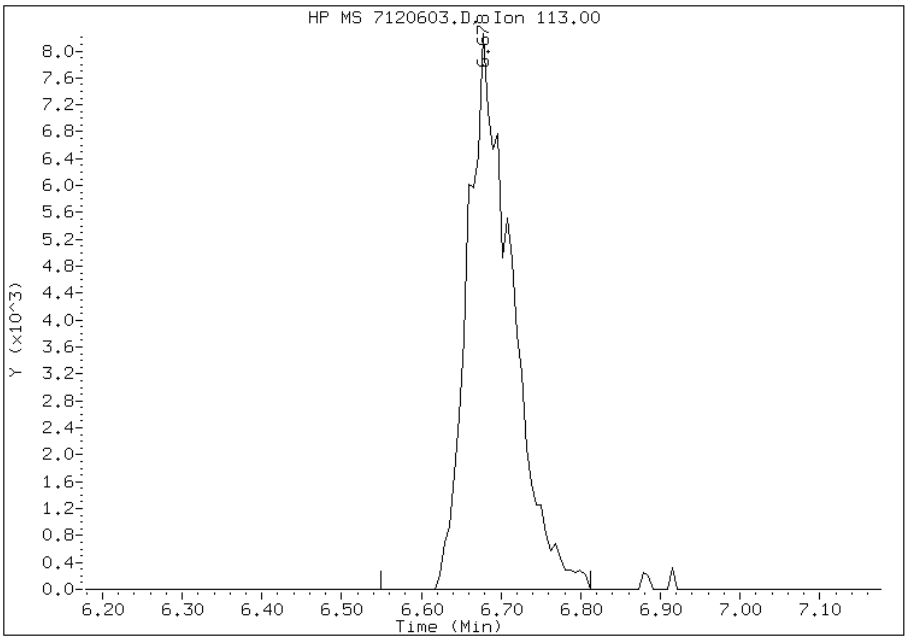
Manual Integration Results

RT: 6.68

Response: 32585

Amount: 28

Conc: 28



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 08:38
Manual Integration Reason: Peak Integrated Incorrectly

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\PITSVR06\D\chem\hp7.i\7120613d.b\7120604.D
Lab Smp Id: IC Client Smp ID: vstd10
Inj Date : 06-DEC-2013 08:01 MS Autotune Date: 29-AUG-2013 08:08
Operator : 034635 Inst ID: hp7.i
Smp Info : IC,vstd10
Misc Info : 7120613d.b,T8260bh2o.m,list1.sub
Comment :
Method : \\PITSVR06\D\chem\hp7.i\7120613d.b\T8260bh2o.m
Meth Date : 06-Dec-2013 16:16 journetp Quant Type: ISTD
Cal Date : 06-DEC-2013 11:22 Cal File: 7120609.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-088

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
*	46 Fluorobenzene (IS)	96	7.408	7.414	(1.000)	1148094	250.000	
*	69 Chlorobenzene-d5	119	10.468	10.468	(1.000)	276620	250.000	
*	92 1,4-Dichlorobenzene-d4	152	12.785	12.786	(1.000)	426378	250.000	
*	176 Dioxane-d8 (IS)	96	8.138	8.138	(1.000)	39881	5000.00	
*	177 TBA-d9 (IS)	65	4.719	4.688	(1.000)	332233	5000.00	(M)
$	39 Dibromofluoromethane (Surr)	113	6.678	6.684	(0.901)	66078	50.0000	54.00
$	43 1,2-Dichloroethane-d4	65	7.043	7.049	(0.951)	73525	50.0000	51.93
$	59 Toluene-d8	98	9.038	9.038	(0.863)	243472	50.0000	56.79
$	80 Bromofluorobenzene (Surr)	95	11.630	11.630	(1.111)	94546	50.0000	56.70
	1 Dichlorodifluoromethane	85	1.963	1.987	(0.265)	98150	50.0000	48.96(M)
	2 Chloromethane	50	2.006	2.048	(0.271)	202531	50.0000	50.16(M)
	3 Vinyl Chloride	62	2.146	2.152	(0.290)	110244	50.0000	51.51
	4 Bromomethane	94	2.498	2.523	(0.337)	31496	50.0000	39.46(M)
	5 Chloroethane	64	2.608	2.663	(0.352)	29323	50.0000	50.45(QM)
	7 Dichlorofluoromethane	67	2.869	2.936	(0.387)	57929	50.0000	40.59(QM)
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.654	3.739	(0.493)	79880	50.0000	50.70(QM)
	166 Trichlorofluoromethane	101	2.894	2.924	(0.391)	47815	50.0000	48.97(QM)
	12 1,1-Dichloroethene	96	3.533	3.599	(0.477)	77483	50.0000	47.41(QM)
	15 Carbon Disulfide	76	3.837	3.891	(0.518)	246095	50.0000	50.72
	13 Acetone	43	3.800	3.788	(0.513)	24506	50.0000	56.06(M)
	18 Methylene Chloride	84	4.372	4.378	(0.590)	89232	50.0000	51.92(QM)
	19 trans-1,2-Dichloroethene	96	4.774	4.798	(0.644)	85331	50.0000	50.20
	20 Methyl tert-butyl ether	73	4.853	4.859	(0.655)	157005	50.0000	47.57(M)
	24 1,1-Dichloroethane	63	5.364	5.382	(0.724)	168719	50.0000	50.83
	27 2,2-Dichloropropane	77	6.106	6.106	(0.824)	104609	50.0000	50.87
	28 cis-1,2-dichloroethene	96	6.112	6.106	(0.825)	94125	50.0000	51.32
M	29 1,2-Dichloroethene (total)	96				179456	100.000	101.5
	30 Bromochloromethane	128	6.380	6.398	(0.861)	38767	50.0000	48.55

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
31 2-Butanone	43	6.215	6.185	(0.839)	26200	50.0000	50.92
37 Chloroform	83	6.501	6.507	(0.878)	143980	50.0000	53.33
38 1,1,1-Trichloroethane	97	6.684	6.690	(0.902)	110181	50.0000	50.72
40 1,1-Dichloropropene	75	6.866	6.878	(0.927)	93320	50.0000	50.31
41 Carbon Tetrachloride	117	6.866	6.872	(0.927)	86410	50.0000	49.65
42 Benzene	78	7.104	7.104	(0.959)	304449	50.0000	53.14
45 1,2-Dichloroethane	62	7.122	7.134	(0.961)	83844	50.0000	50.26
47 Trichloroethene	130	7.797	7.797	(1.053)	79474	50.0000	48.32
49 1,2-Dichloropropane	63	8.028	8.034	(1.084)	74442	50.0000	50.89(Q)
50 Dibromomethane	93	8.150	8.150	(1.100)	34689	50.0000	47.18
53 Bromodichloromethane	83	8.314	8.320	(1.122)	83137	50.0000	47.19
57 cis-1,3-Dichloropropene	75	8.770	8.777	(1.184)	97443	50.0000	47.73
58 4-Methyl-2-Pentanone	43	8.935	8.941	(0.854)	58603	50.0000	47.47(Q)
60 Toluene	91	9.099	9.105	(0.869)	281700	50.0000	62.64
61 trans-1,3-Dichloropropene	75	9.330	9.330	(0.891)	73774	50.0000	49.26
63 1,3-Dichloropropane	76	9.671	9.671	(0.924)	78900	50.0000	48.61
64 1,1,2-Trichloroethane	97	9.506	9.507	(0.908)	49578	50.0000	50.57
65 Tetrachloroethene	164	9.646	9.653	(0.922)	60061	50.0000	54.26
66 2-Hexanone	43	9.768	9.762	(0.933)	39416	50.0000	52.84
67 Dibromochloromethane	129	9.902	9.902	(0.946)	51337	50.0000	46.46
68 1,2-Dibromoethane	107	10.005	10.011	(0.956)	48131	50.0000	47.19
70 Chlorobenzene	112	10.498	10.498	(1.003)	170378	50.0000	53.06
71 1,1,1,2-Tetrachloroethane	131	10.577	10.577	(1.010)	61131	50.0000	51.51
72 Ethylbenzene	106	10.602	10.608	(1.013)	101133	50.0000	52.60(Q)
73 m,p-XYLENE	106	10.717	10.723	(1.024)	126271	50.0000	52.08
74 Xylene-o	106	11.113	11.113	(1.062)	134118	50.0000	51.59
76 Styrene	104	11.125	11.131	(1.063)	211143	50.0000	46.47
77 Bromoform	173	11.313	11.313	(1.081)	29420	50.0000	44.86
78 Isopropylbenzene	105	11.478	11.478	(1.096)	353997	50.0000	42.48
79 Bromobenzene	156	11.788	11.788	(0.922)	83421	50.0000	52.68
81 n-Propylbenzene	120	12.062	12.062	(0.943)	140893	50.0000	54.33
82 2-Chlorotoluene	126	11.976	11.976	(0.937)	80875	50.0000	52.62
83 1,1,2,2-Tetrachloroethane	83	11.770	11.770	(1.124)	60753	50.0000	49.60
84 1,2,3-Trichloropropane	110	11.818	11.818	(0.924)	16103	50.0000	49.88
85 4-Chlorotoluene	126	12.086	12.086	(0.945)	77439	50.0000	51.58(Q)
86 1,3,5-Trimethylbenzene	105	12.062	12.062	(0.943)	277099	50.0000	52.57
87 tert-Butylbenzene	119	12.384	12.390	(0.969)	250792	50.0000	54.04
88 1,2,4-Trimethylbenzene	105	12.433	12.439	(0.972)	289331	50.0000	44.19
89 sec-Butylbenzene	105	12.609	12.609	(0.986)	399284	50.0000	54.68
90 4-Isopropyltoluene	119	12.749	12.755	(0.997)	305472	50.0000	54.64
91 1,3-Dichlorobenzene	146	12.725	12.725	(0.995)	163573	50.0000	54.52
94 n-Butylbenzene	91	13.163	13.163	(1.029)	319048	50.0000	53.96
93 1,4-Dichlorobenzene	146	12.810	12.816	(1.002)	139449	50.0000	53.56
95 1,2-Dichlorobenzene	146	13.187	13.187	(1.031)	130944	50.0000	51.77
96 1,2-Dibromo-3-chloropropane	157	13.972	13.972	(1.093)	6090	50.0000	47.17
97 1,2,4-Trichlorobenzene	180	14.799	14.799	(1.157)	42214	50.0000	44.45
98 Hexachlorobutadiene	225	14.969	14.969	(1.171)	52440	50.0000	52.82
99 Naphthalene	128	15.055	15.055	(1.177)	46342	50.0000	46.19
100 1,2,3-Trichlorobenzene	180	15.310	15.304	(1.197)	21779	50.0000	46.32
156 Methyl Acetate	43	4.293	4.299	(0.580)	257383	250.000	244.9
157 Cyclohexane	56	6.739	6.751	(0.910)	192838	50.0000	55.34
158 Methyl Cyclohexane	83	7.992	7.998	(1.079)	155753	50.0000	56.12
32 Vinyl Acetate	43	5.504	5.498	(0.743)	57839	50.0000	44.43(M)
52 1,4-Dioxane	88	8.192	8.192	(1.007)	8343	1000.00	889.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
21	tert-Butyl Alcohol	59	4.853	4.786	(1.028)	45643	500.000	493.0(QH)
16	3-Chloro-1-propene	76	4.159	4.177	(0.561)	62875	50.0000	49.49(QMH)
11	Acrolein	56	3.502	3.545	(0.473)	75919	625.000	574.4(M)
22	Acrylonitrile	53	4.798	4.810	(0.648)	232471	500.000	451.8
8	Ethyl Ether	59	3.344	3.368	(0.451)	52313	50.0000	41.52(QM)
62	Ethyl methacrylate	69	9.421	9.421	(0.900)	59768	50.0000	46.90
23	Hexane	57	5.169	5.187	(0.698)	156206	50.0000	53.12(M)
14	Iodomethane	142	3.770	3.806	(0.509)	128253	50.0000	51.10(QM)
44	Isobutanol	41	7.402	7.414	(0.999)	78602	1250.00	1338
155	N-Heptane	41	7.986	7.998	(1.078)	139663	50.0000	56.71
35	Tetrahydrofuran	42	6.726	6.745	(0.908)	53840	100.000	113.4
164	trans-1,4-Dichloro-2-butene	53	11.824	11.830	(0.925)	14436	50.0000	45.29
169	Butadiene	39	2.164	2.225	(0.292)	135736	50.0000	40.93(QM)
M 75	Xylenes (total)	106				260389	100.000	103.7

QC Flag Legend

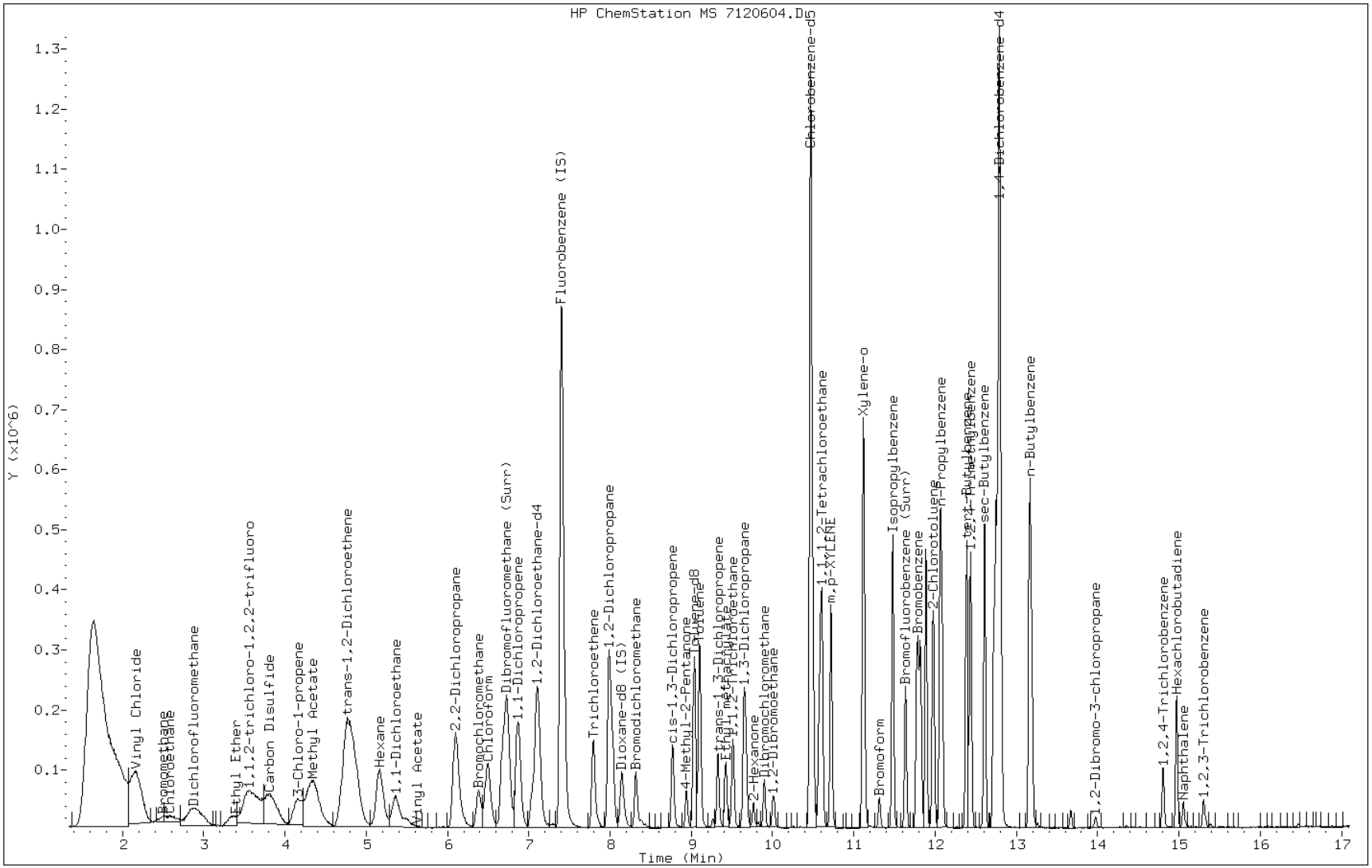
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 7120604.D

Date: 06-DEC-2013 08:01

Client ID: vstd10 Instrument: hp7.i

Sample Info: IC,vstd10 Operator: 034635



Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 1 Dichlorodifluoromethane
CAS #: 75-71-8
Report Date: 12/09/2013

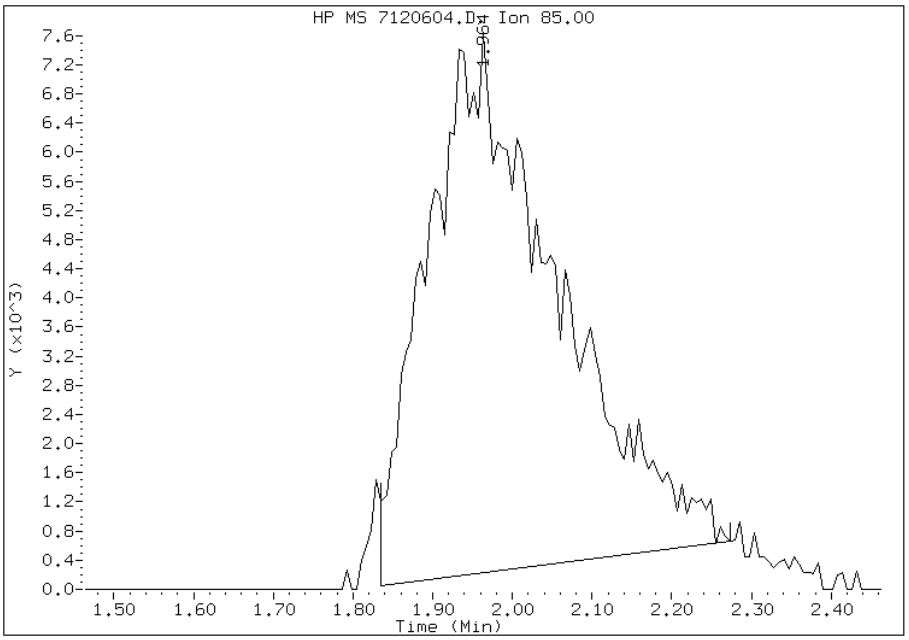
Processing Integration Results

RT: 1.96

Response: 84851

Amount: 0

Conc: 0



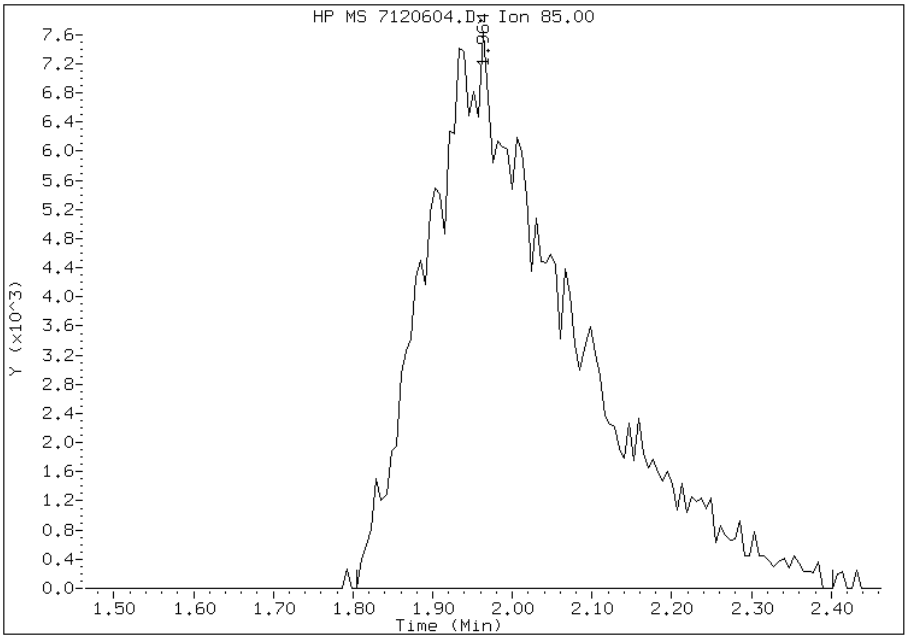
Manual Integration Results

RT: 1.96

Response: 98150

Amount: 49

Conc: 49



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:03
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 2 Chloromethane
CAS #: 74-87-3
Report Date: 12/09/2013

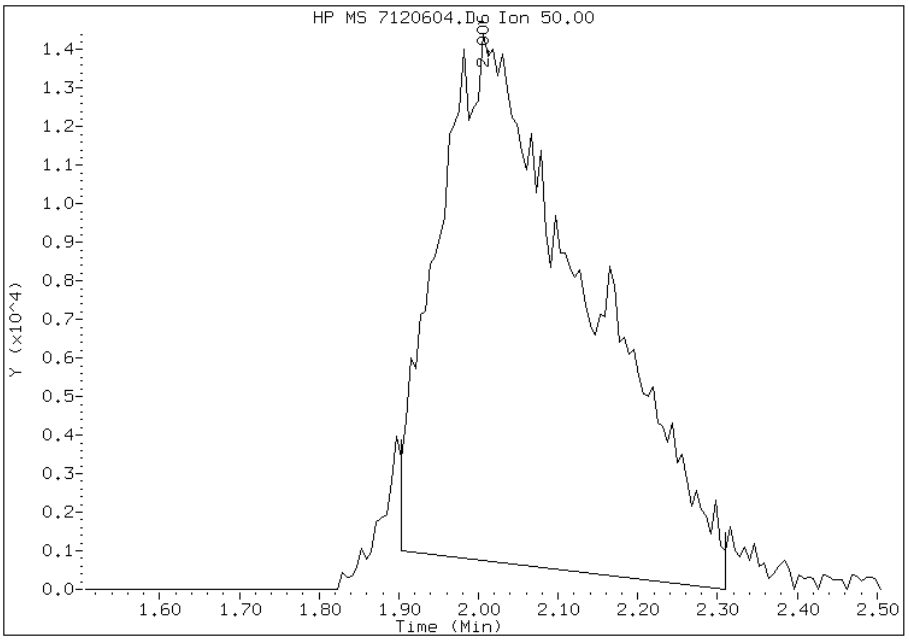
Processing Integration Results

RT: 2.01

Response: 180268

Amount: 0

Conc: 0



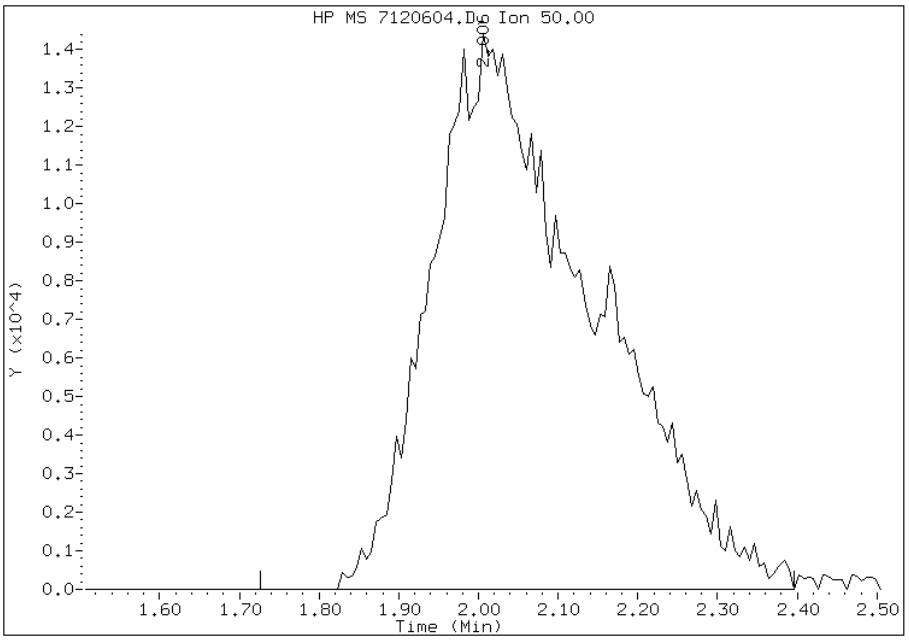
Manual Integration Results

RT: 2.01

Response: 202531

Amount: 50

Conc: 50



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:03
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 169 Butadiene
CAS #: 106-99-0
Report Date: 12/09/2013

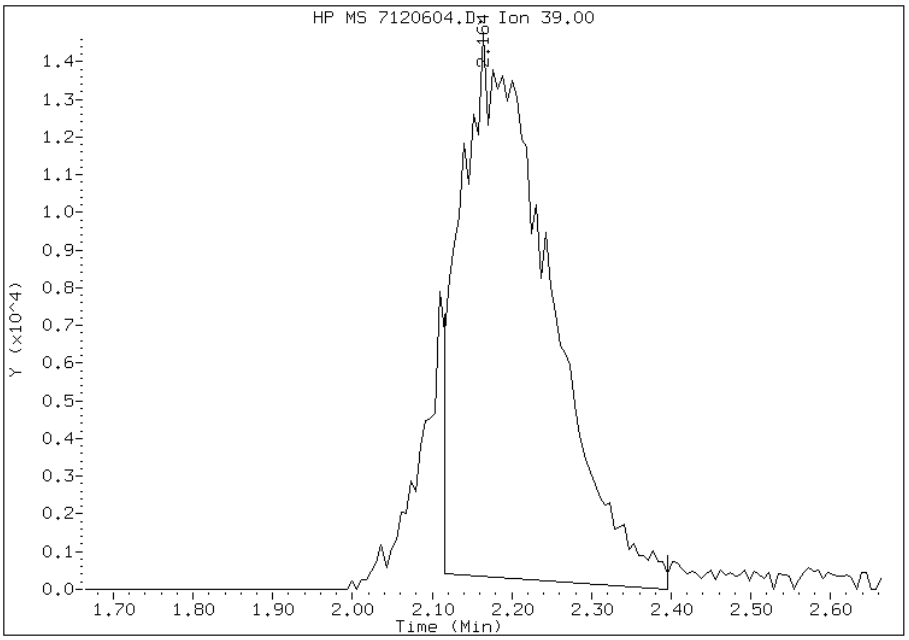
Processing Integration Results

RT: 2.16

Response: 113987

Amount: 0

Conc: 0



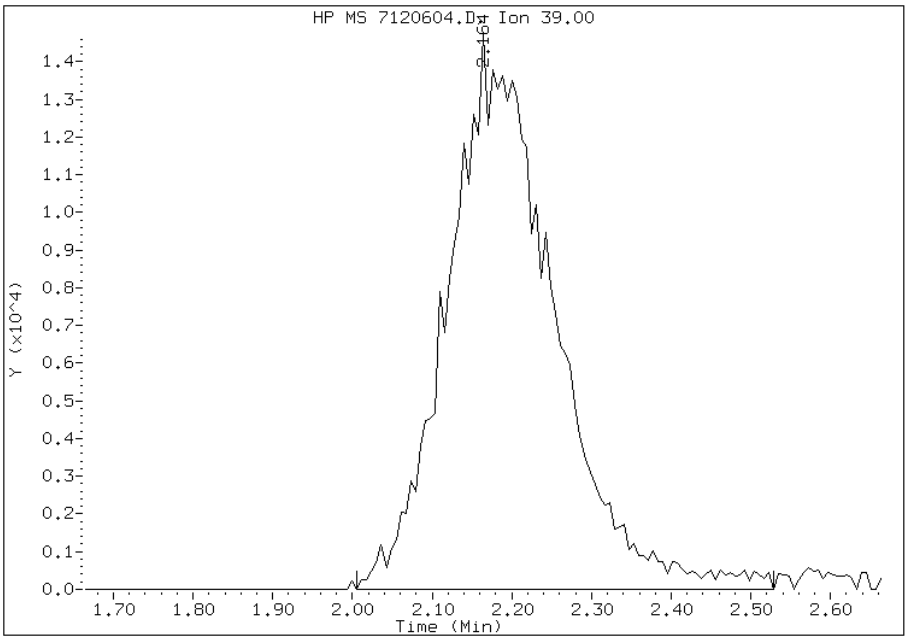
Manual Integration Results

RT: 2.16

Response: 135736

Amount: 41

Conc: 41



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:07
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 4 Bromomethane
CAS #: 74-83-9
Report Date: 12/09/2013

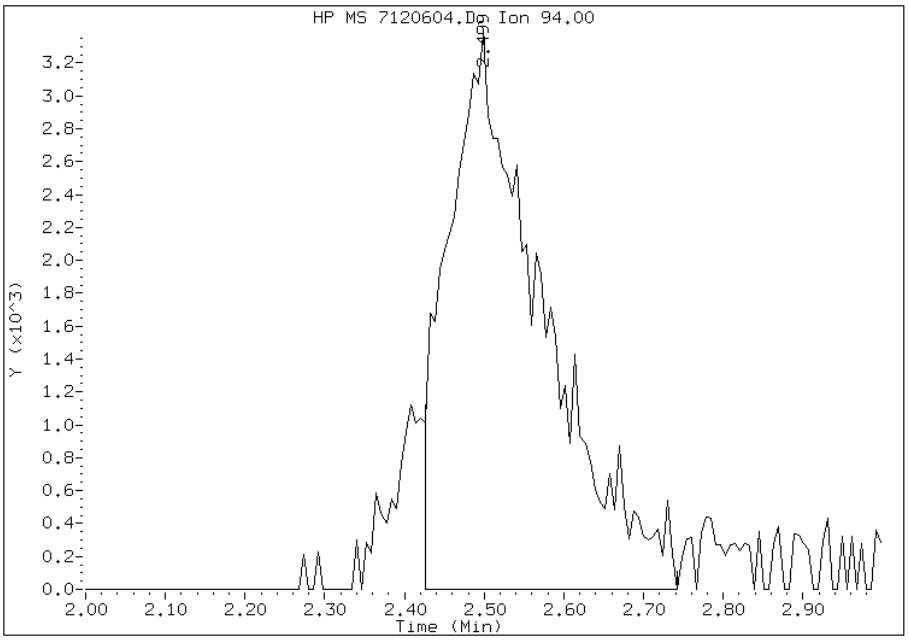
Processing Integration Results

RT: 2.50

Response: 28609

Amount: 0

Conc: 0



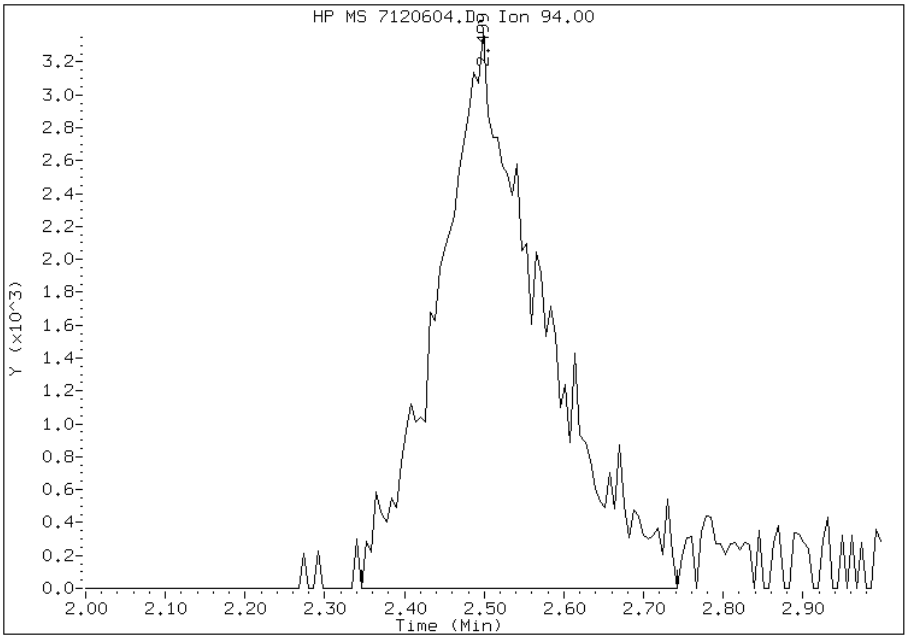
Manual Integration Results

RT: 2.50

Response: 31496

Amount: 39

Conc: 39



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:03
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 5 Chloroethane
CAS #: 75-00-3
Report Date: 12/09/2013

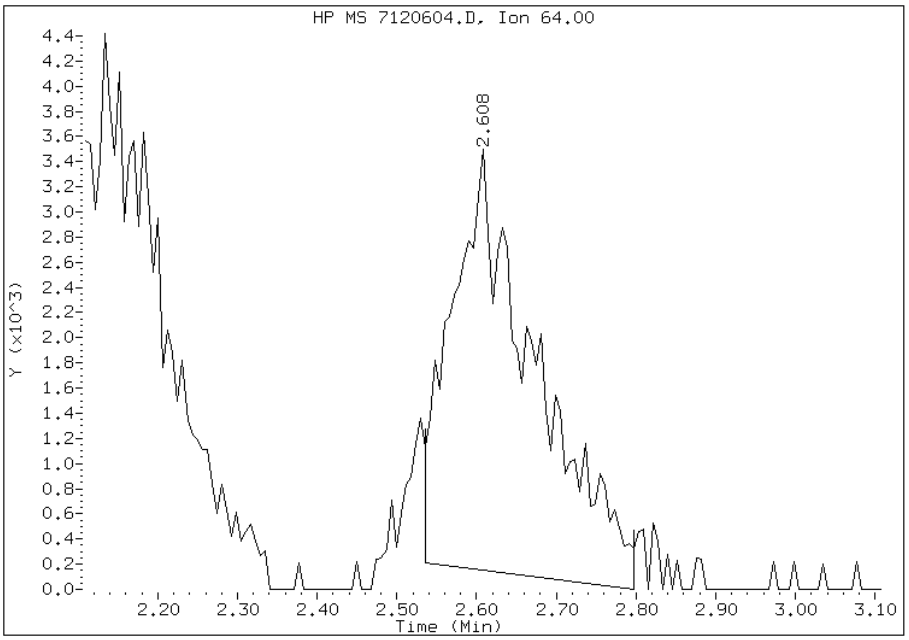
Processing Integration Results

RT: 2.61

Response: 24862

Amount: 0

Conc: 0



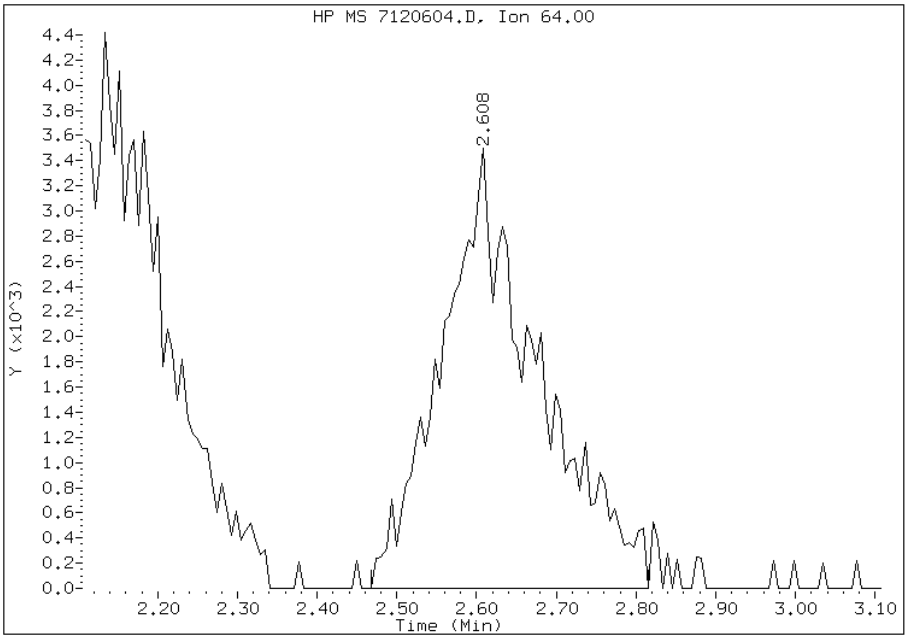
Manual Integration Results

RT: 2.61

Response: 29323

Amount: 50

Conc: 50



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:03
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 7 Dichlorofluoromethane
CAS #: 75-43-4
Report Date: 12/09/2013

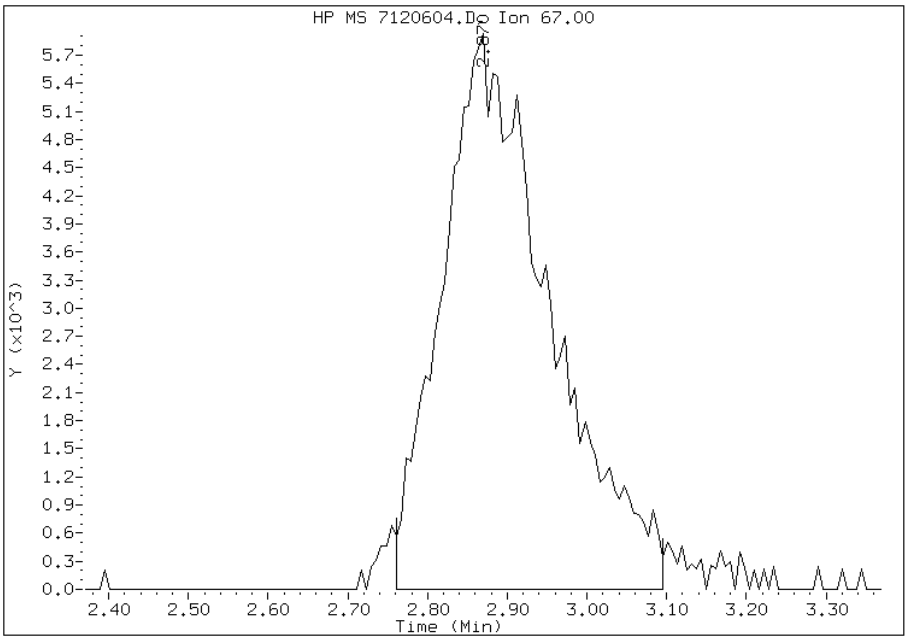
Processing Integration Results

RT: 2.87

Response: 56164

Amount: 0

Conc: 0



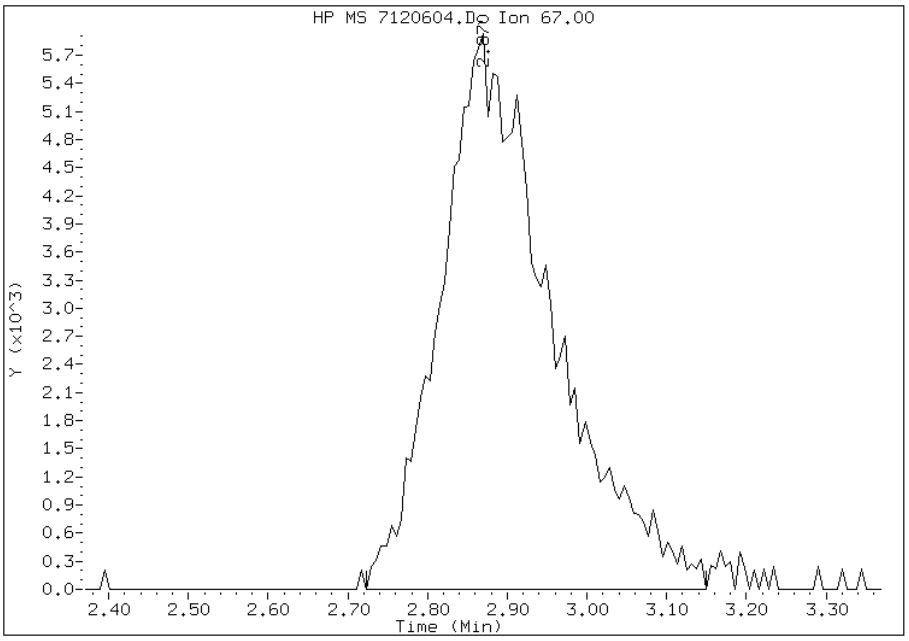
Manual Integration Results

RT: 2.87

Response: 57929

Amount: 41

Conc: 41



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:04
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 166 Trichlorofluoromethane
CAS #: 75-69-4
Report Date: 12/09/2013

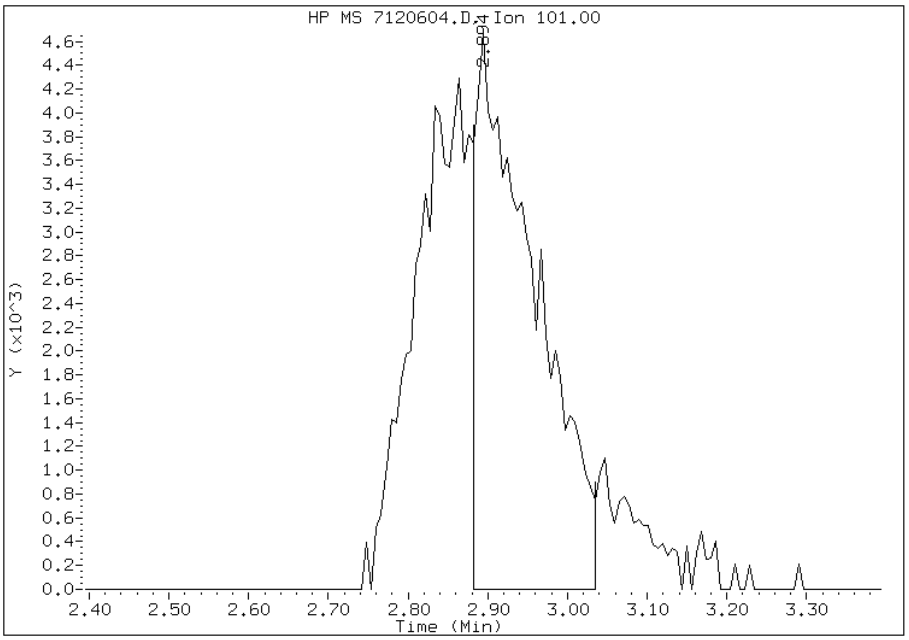
Processing Integration Results

RT: 2.89

Response: 24722

Amount: 0

Conc: 0



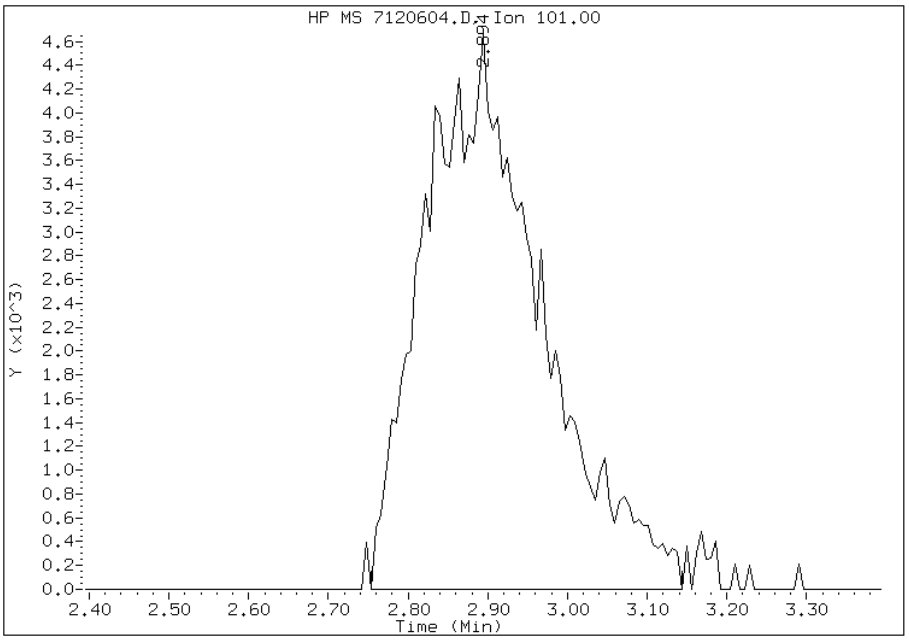
Manual Integration Results

RT: 2.89

Response: 47815

Amount: 49

Conc: 49



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:04
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 8 Ethyl Ether
CAS #: 60-29-7
Report Date: 12/09/2013

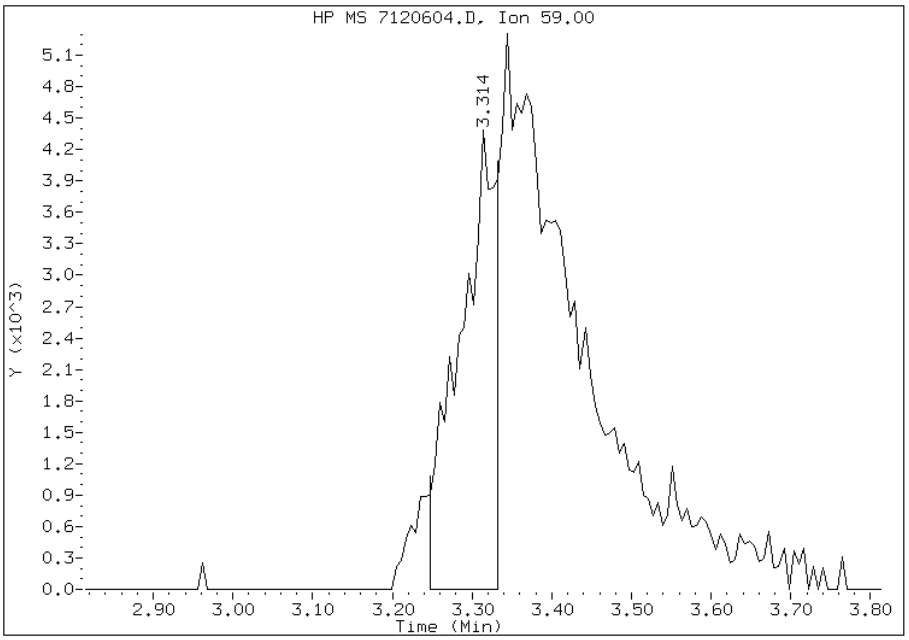
Processing Integration Results

RT: 3.31

Response: 14430

Amount: 0

Conc: 0



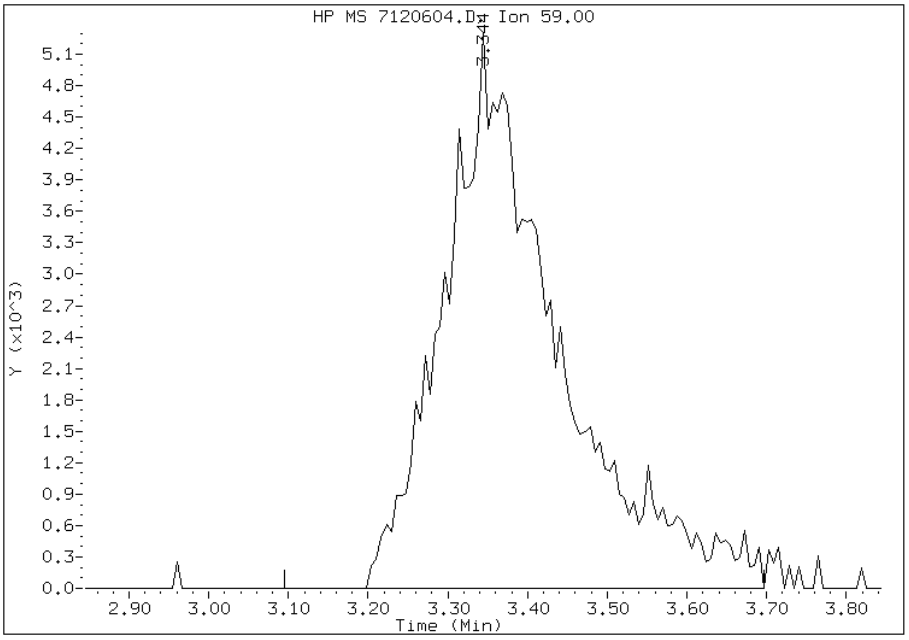
Manual Integration Results

RT: 3.34

Response: 52313

Amount: 42

Conc: 42



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:06
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 11 Acrolein
CAS #: 107-02-8
Report Date: 12/09/2013

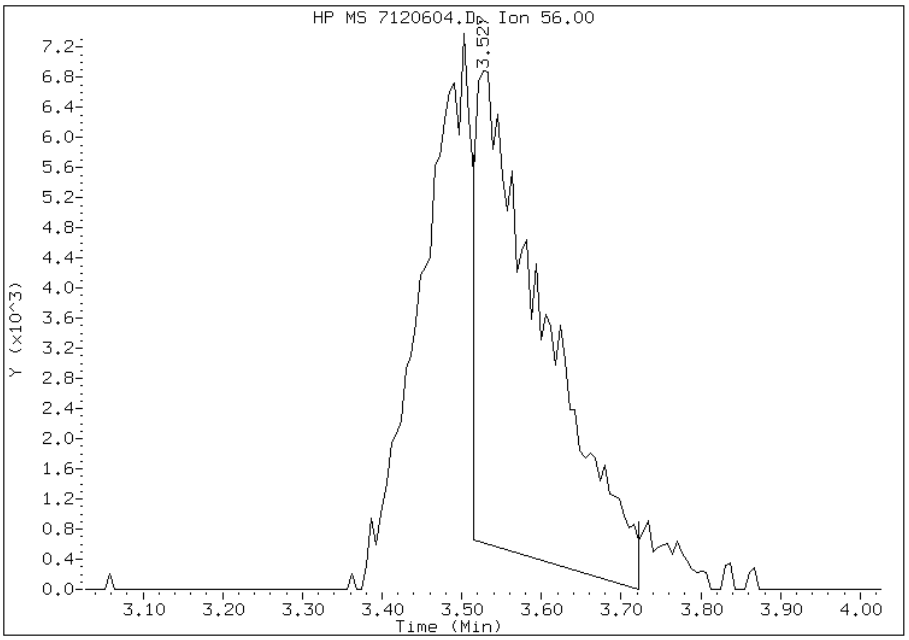
Processing Integration Results

RT: 3.53

Response: 38650

Amount: 0

Conc: 0



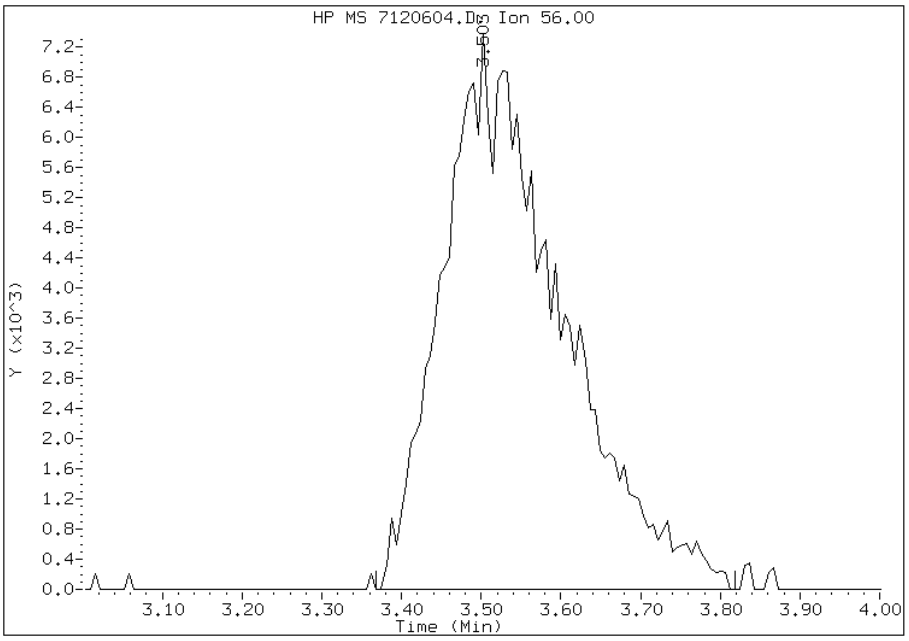
Manual Integration Results

RT: 3.50

Response: 75919

Amount: 574

Conc: 574



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:06
Manual Integration Reason:

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 12 1,1-Dichloroethene
CAS #: 75-35-4
Report Date: 12/09/2013

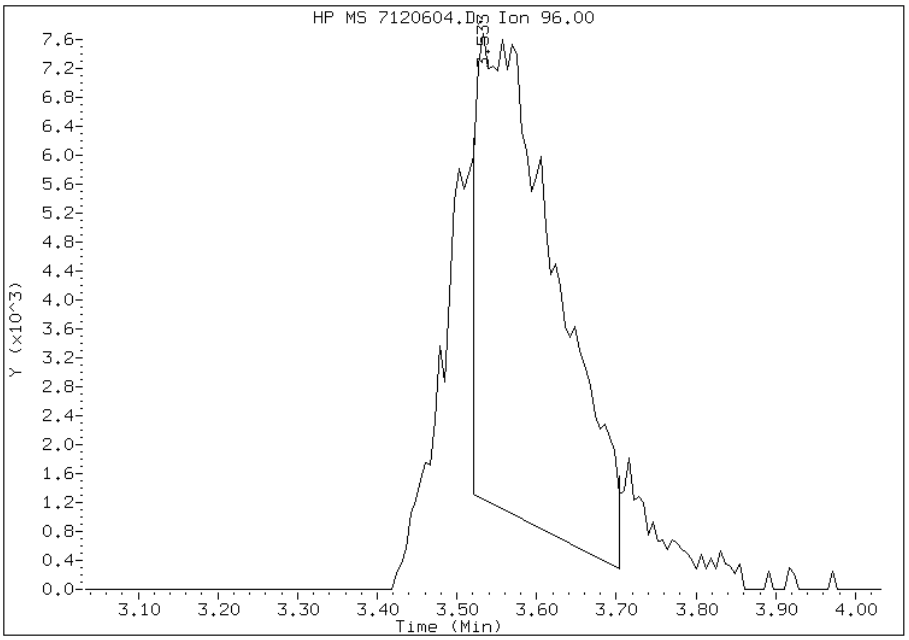
Processing Integration Results

RT: 3.53

Response: 44521

Amount: 0

Conc: 0



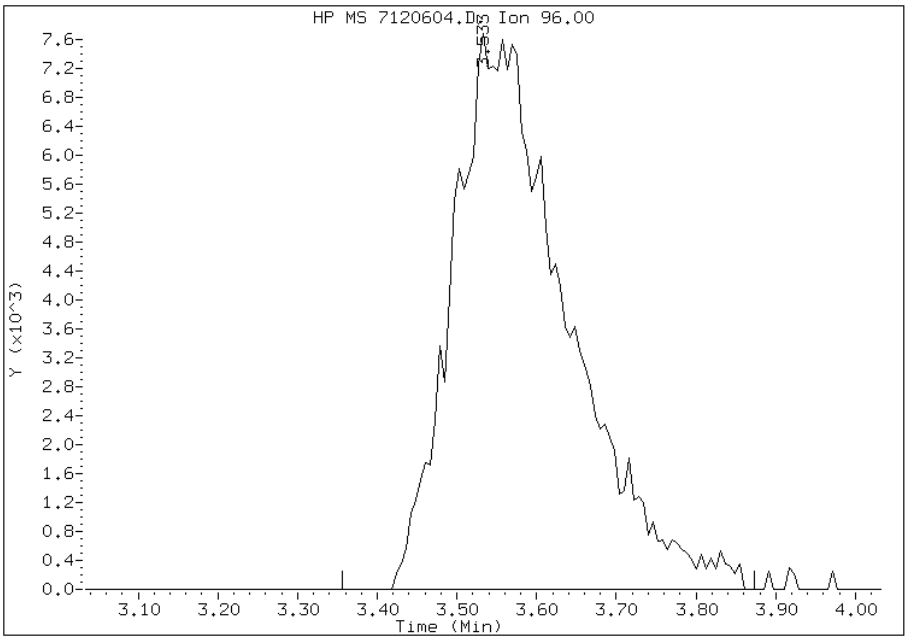
Manual Integration Results

RT: 3.53

Response: 77483

Amount: 47

Conc: 47



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:04
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 10 1,1,2-trichloro-1,2,2-trifluoro
CAS #: 76-13-1
Report Date: 12/09/2013

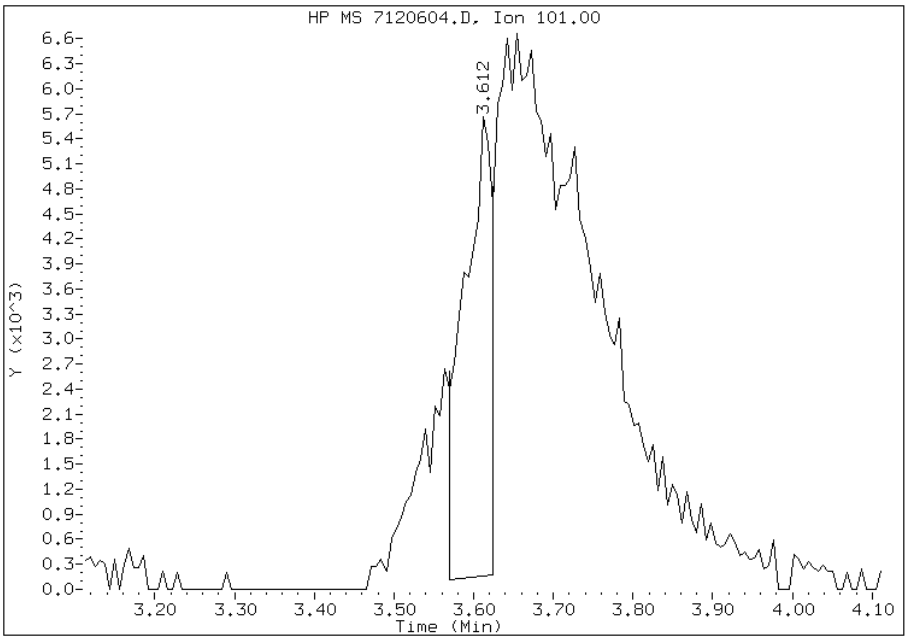
Processing Integration Results

RT: 3.61

Response: 13264

Amount: 0

Conc: 0



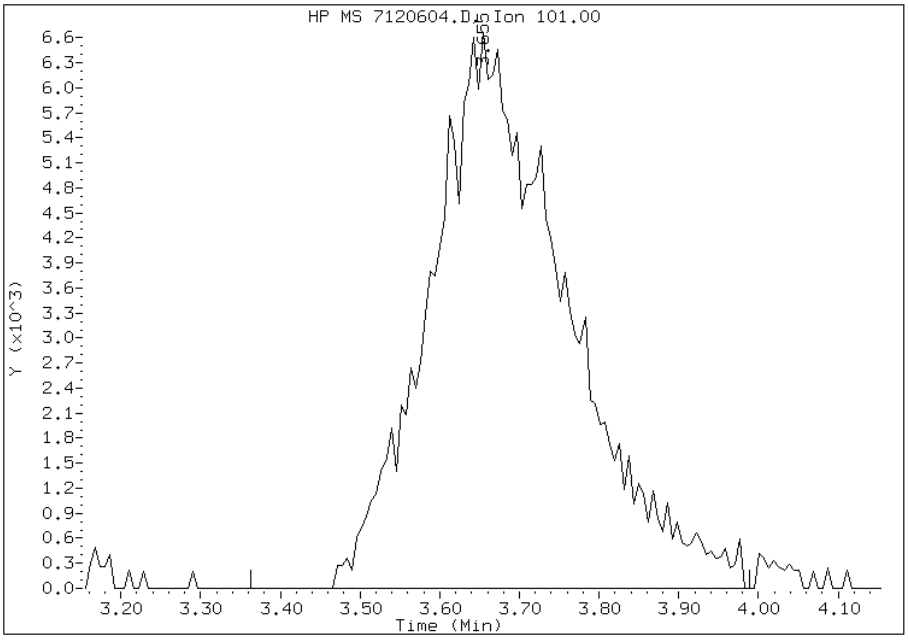
Manual Integration Results

RT: 3.65

Response: 79880

Amount: 51

Conc: 51



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:04
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 14 Iodomethane
CAS #: 74-88-4
Report Date: 12/09/2013

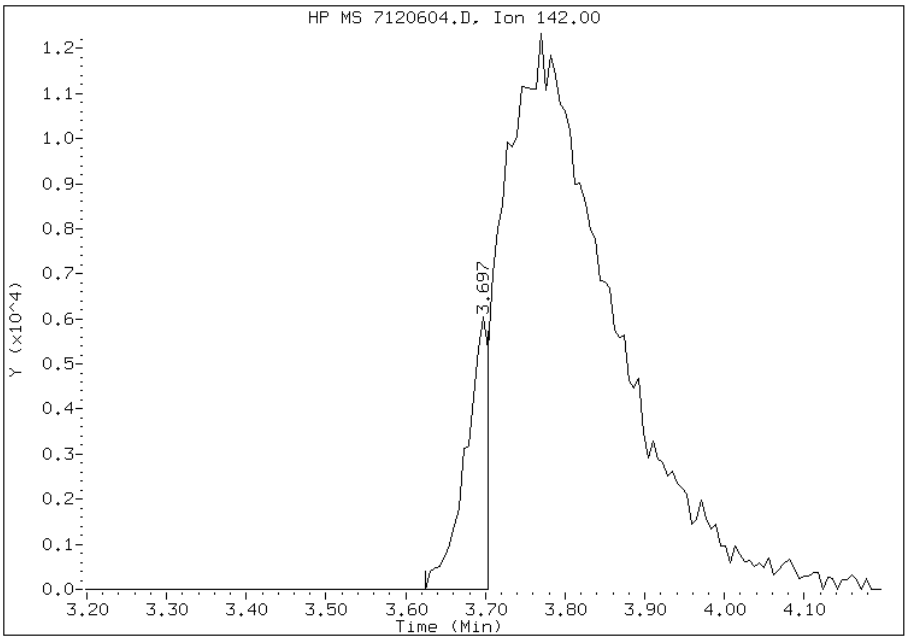
Processing Integration Results

RT: 3.70

Response: 12258

Amount: 0

Conc: 0



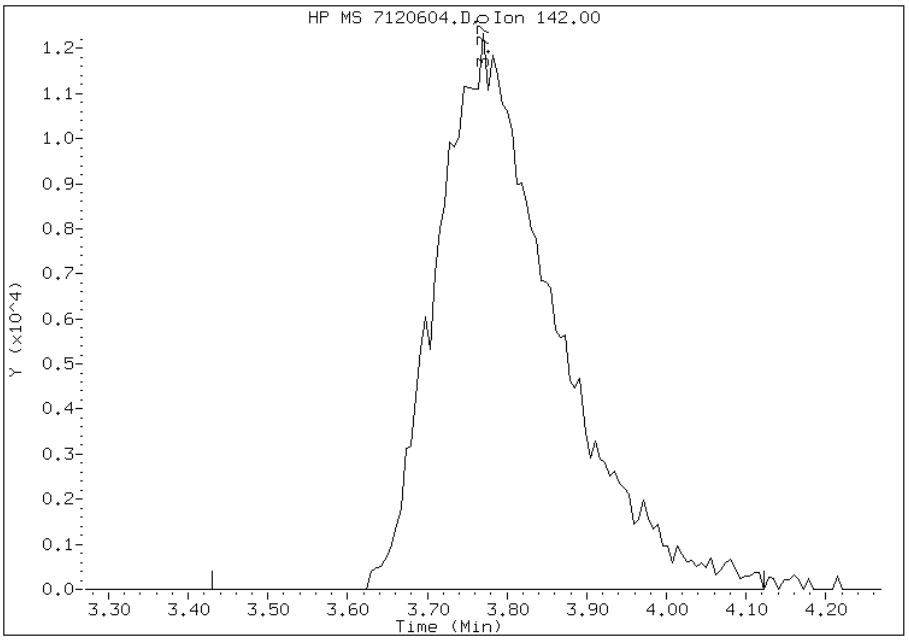
Manual Integration Results

RT: 3.77

Response: 128253

Amount: 51

Conc: 51



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:06
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 13 Acetone
CAS #: 67-64-1
Report Date: 12/09/2013

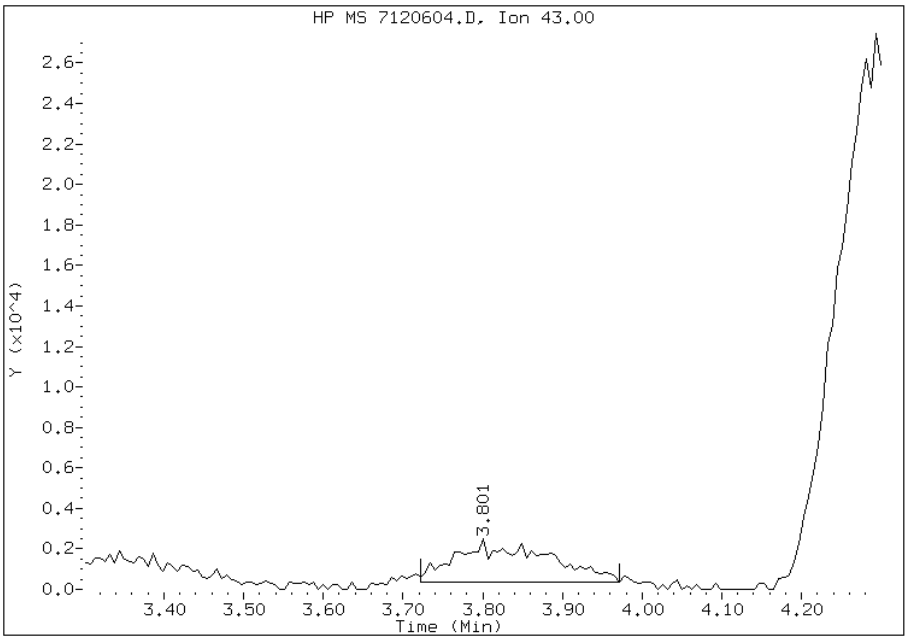
Processing Integration Results

RT: 3.80

Response: 16369

Amount: 0

Conc: 0



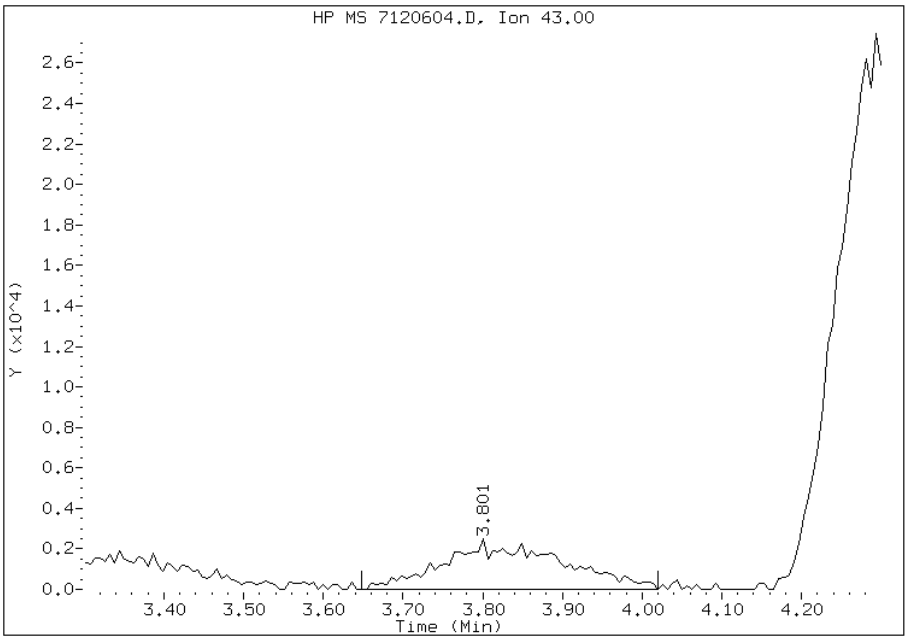
Manual Integration Results

RT: 3.80

Response: 24506

Amount: 56

Conc: 56



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:04
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 16 3-Chloro-1-propene
CAS #: 107-05-1
Report Date: 12/09/2013

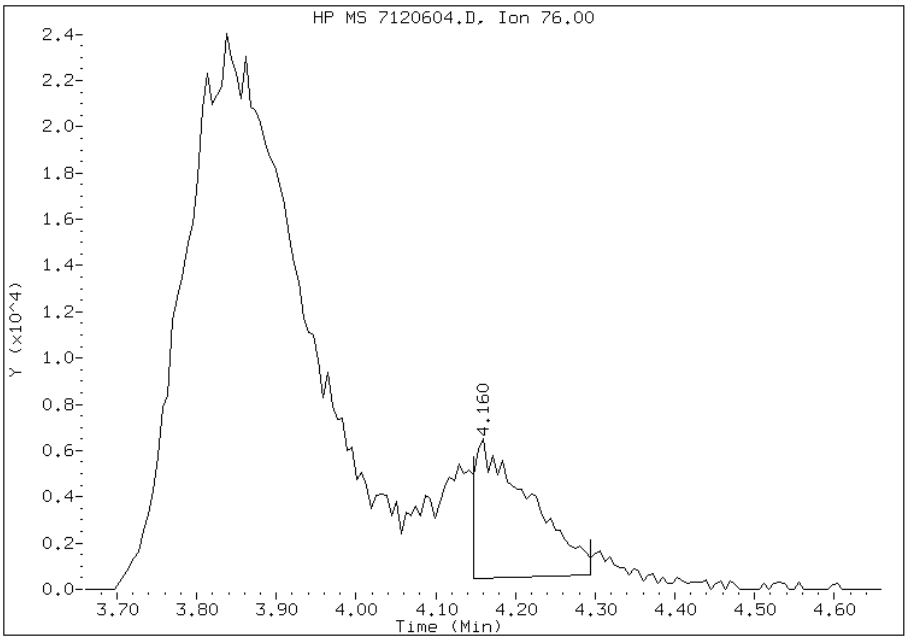
Processing Integration Results

RT: 4.16

Response: 27495

Amount: 0

Conc: 0



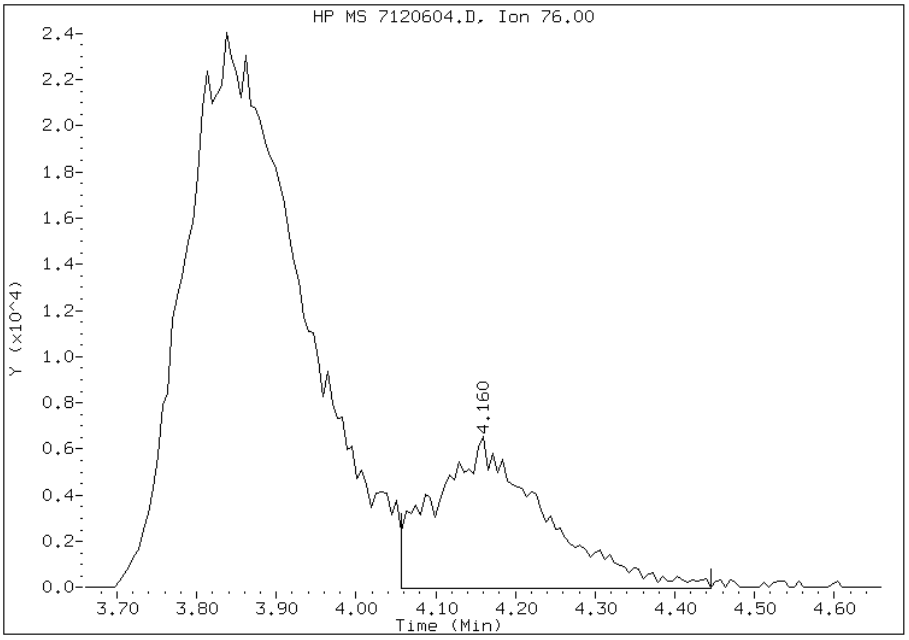
Manual Integration Results

RT: 4.16

Response: 62875

Amount: 49

Conc: 49



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:06
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 18 Methylene Chloride
CAS #: 75-09-2
Report Date: 12/09/2013

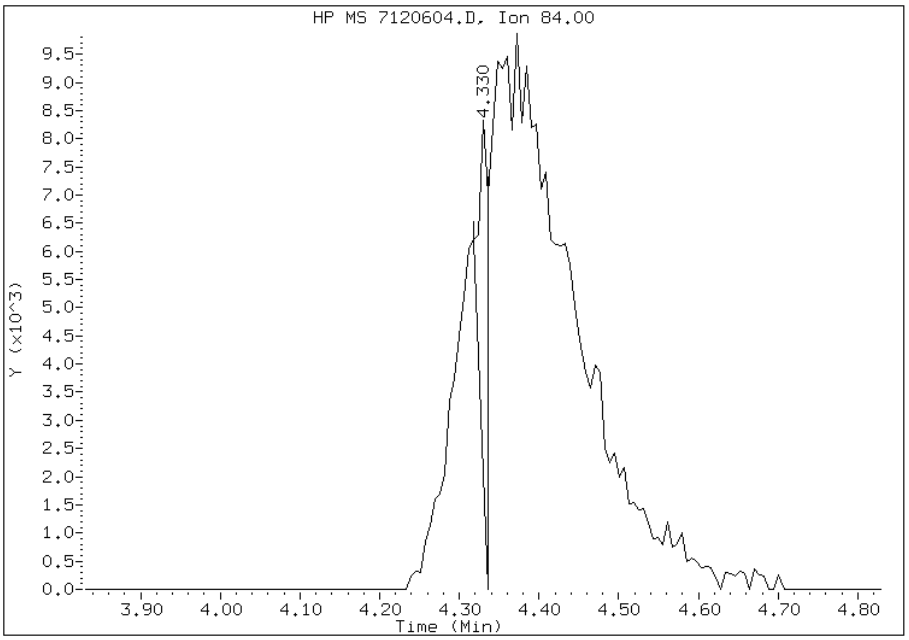
Processing Integration Results

RT: 4.33

Response: 4507

Amount: 0

Conc: 0



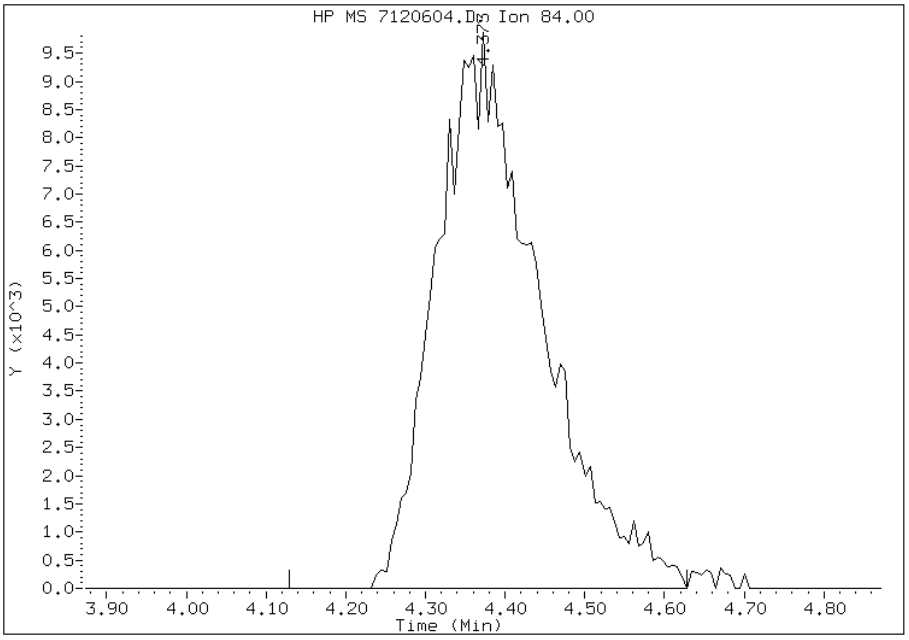
Manual Integration Results

RT: 4.37

Response: 89232

Amount: 52

Conc: 52



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:04
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 177 TBA-d9 (IS)
CAS #: 25725-11-5
Report Date: 12/09/2013

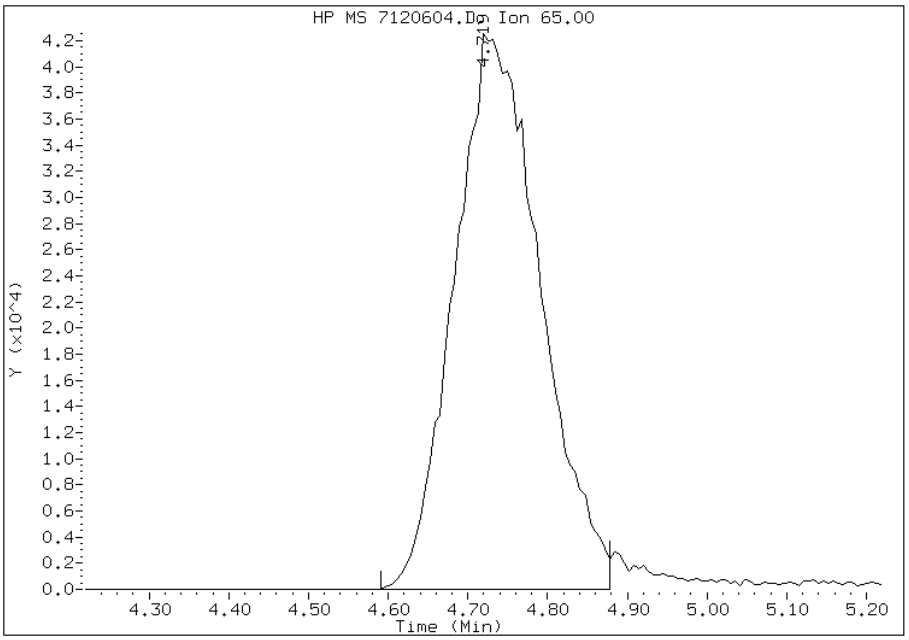
Processing Integration Results

RT: 4.72

Response: 321134

Amount: 5000

Conc: 5000



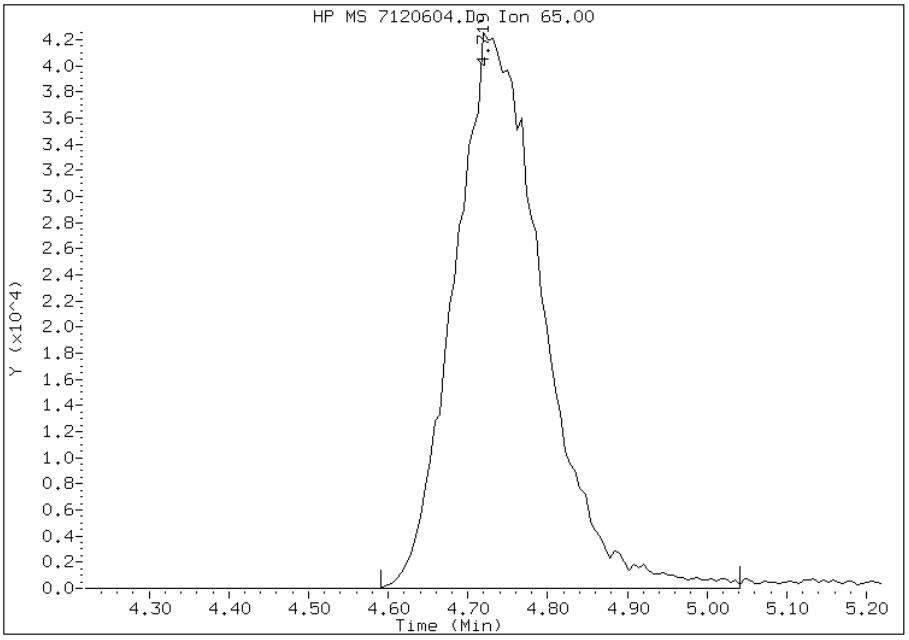
Manual Integration Results

RT: 4.72

Response: 332233

Amount: 5000

Conc: 5000



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:32
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 20 Methyl tert-butyl ether
CAS #: 1634-04-4
Report Date: 12/09/2013

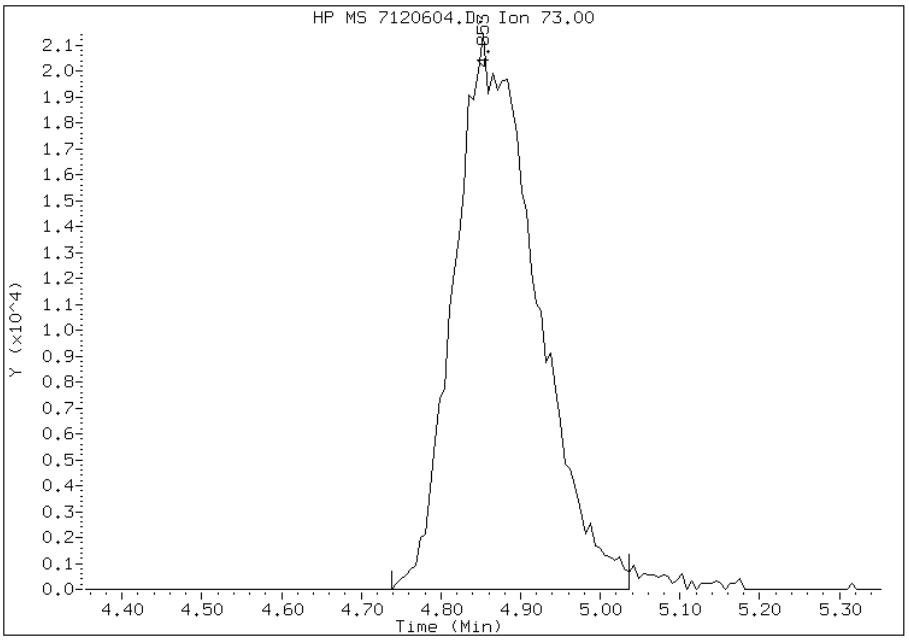
Processing Integration Results

RT: 4.85

Response: 154873

Amount: 0

Conc: 0



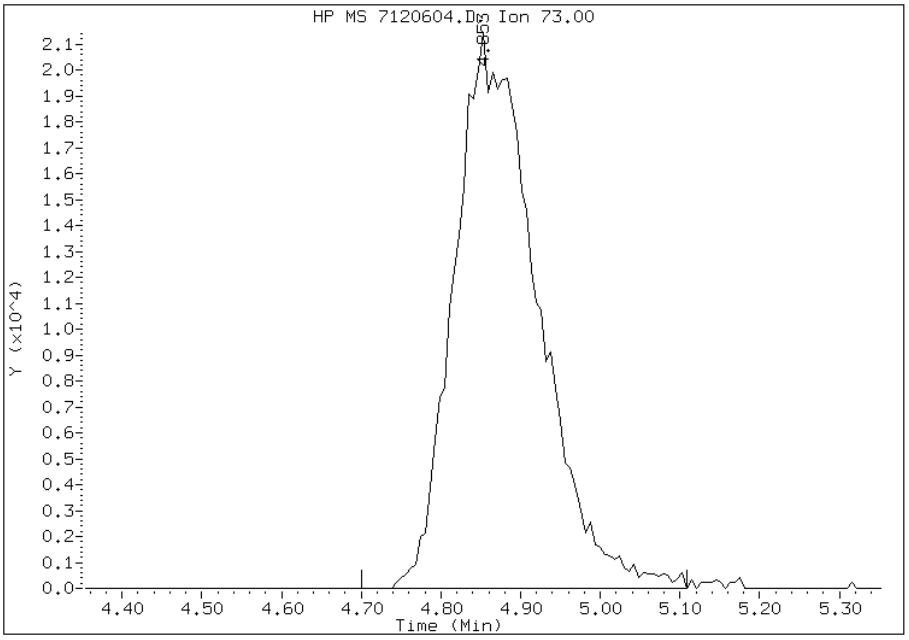
Manual Integration Results

RT: 4.85

Response: 157005

Amount: 48

Conc: 48



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:05
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 23 Hexane
CAS #: 110-54-3
Report Date: 12/09/2013

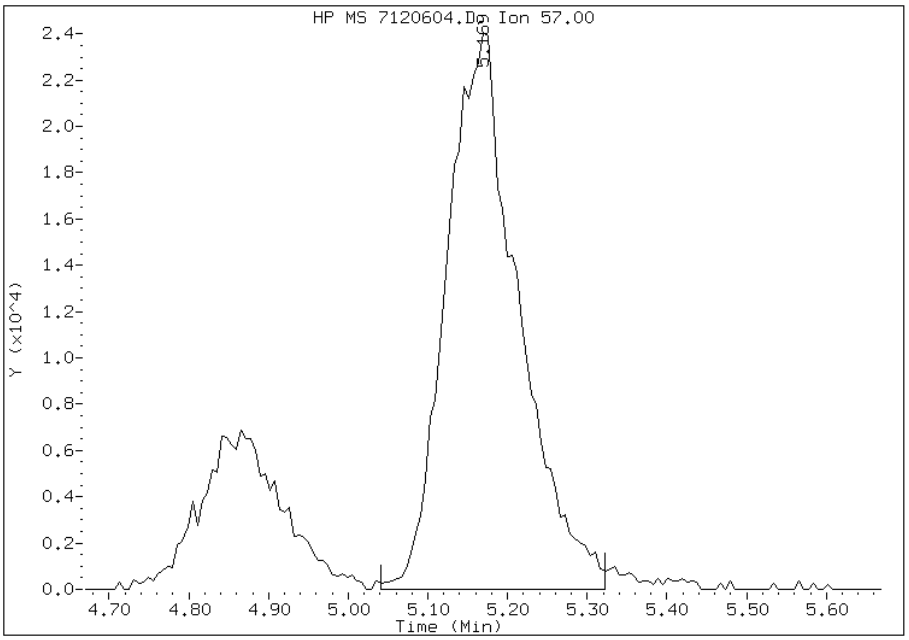
Processing Integration Results

RT: 5.17

Response: 152809

Amount: 0

Conc: 0



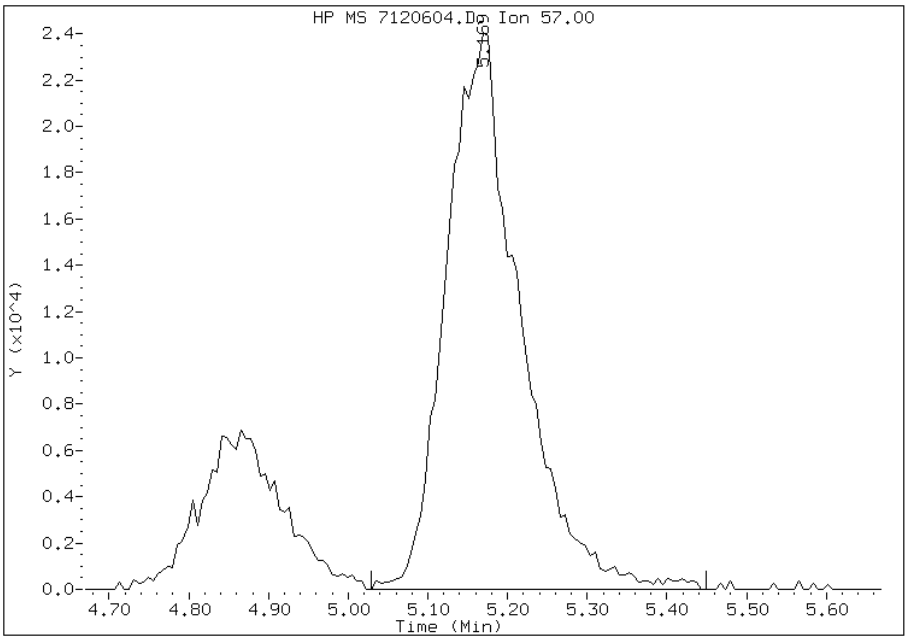
Manual Integration Results

RT: 5.17

Response: 156206

Amount: 53

Conc: 53



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:31
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120604.D
Inj. Date and Time: 06-DEC-2013 08:01
Instrument ID: hp7.i
Client ID: vstd10
Compound: 32 Vinyl Acetate
CAS #: 108-05-4
Report Date: 12/09/2013

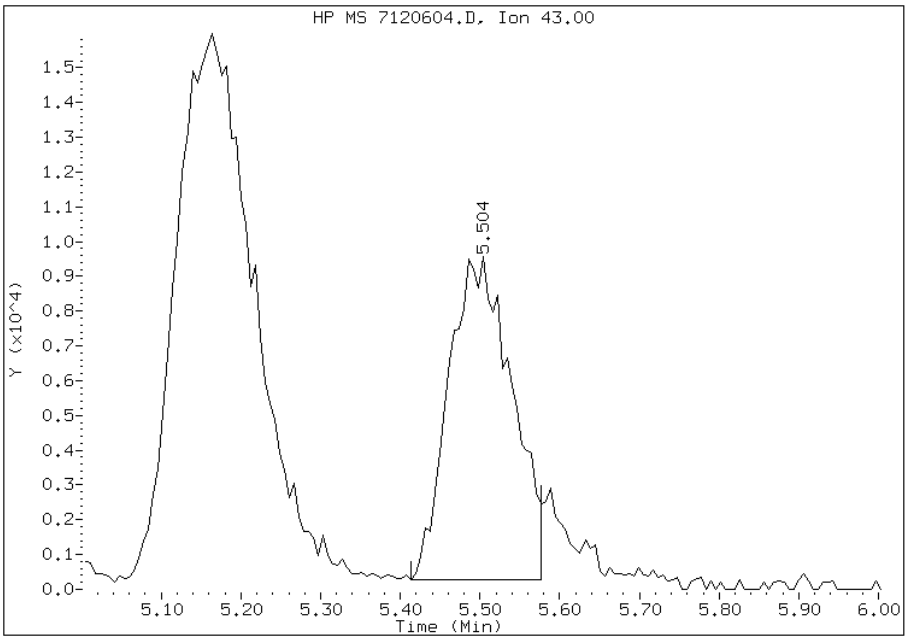
Processing Integration Results

RT: 5.50

Response: 51683

Amount: 0

Conc: 0



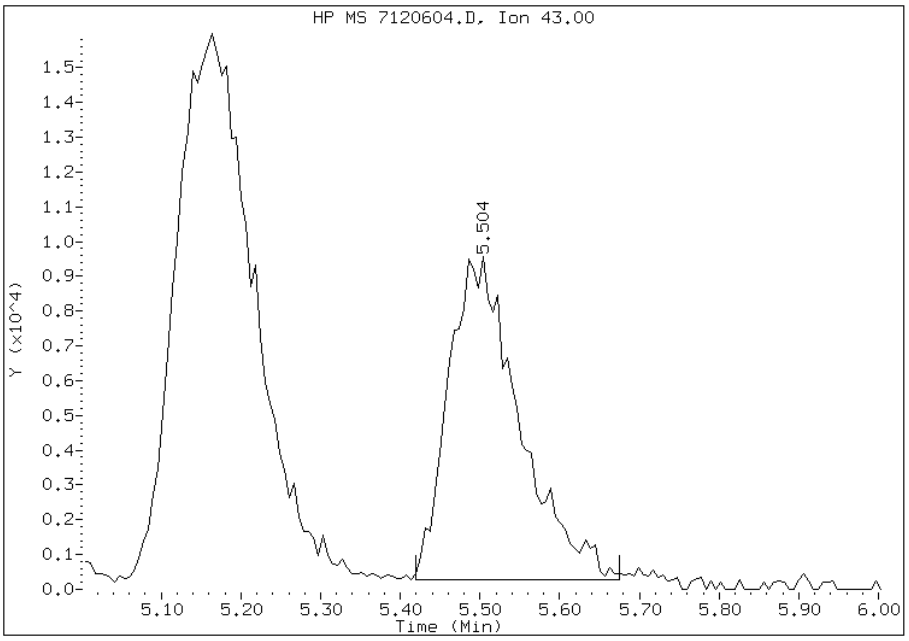
Manual Integration Results

RT: 5.50

Response: 57839

Amount: 44

Conc: 44



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:05
Manual Integration Reason: Peak Integrated Incorrectly

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\PITSVR06\D\chem\hp7.i\7120613d.b\7120605.D
Lab Smp Id: IC Client Smp ID: vstd25
Inj Date : 06-DEC-2013 08:28 MS Autotune Date: 29-AUG-2013 08:08
Operator : 034635 Inst ID: hp7.i
Smp Info : IC,vstd25
Misc Info : 7120613d.b,T8260bh2o.m,list1.sub
Comment :
Method : \\PITSVR06\D\chem\hp7.i\7120613d.b\T8260bh2o.m
Meth Date : 06-Dec-2013 16:16 journetp Quant Type: ISTD
Cal Date : 06-DEC-2013 11:22 Cal File: 7120609.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-088

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
*	46 Fluorobenzene (IS)	96	7.408	7.414	(1.000)	1175027	250.000	
*	69 Chlorobenzene-d5	119	10.468	10.468	(1.000)	272117	250.000	
*	92 1,4-Dichlorobenzene-d4	152	12.786	12.786	(1.000)	413831	250.000	
*	176 Dioxane-d8 (IS)	96	8.138	8.138	(1.000)	33233	5000.00	
*	177 TBA-d9 (IS)	65	4.719	4.688	(1.000)	313184	5000.00	
$	39 Dibromofluoromethane (Surr)	113	6.678	6.684	(0.901)	156761	125.000	125.2
$	43 1,2-Dichloroethane-d4	65	7.043	7.049	(0.951)	170423	125.000	117.6
$	59 Toluene-d8	98	9.038	9.038	(0.863)	557425	125.000	132.2
$	80 Bromofluorobenzene (Surr)	95	11.630	11.630	(1.111)	208732	125.000	127.2
	1 Dichlorodifluoromethane	85	1.963	1.987	(0.265)	244697	125.000	119.3
	2 Chloromethane	50	2.030	2.048	(0.274)	500738	125.000	121.2(M)
	3 Vinyl Chloride	62	2.158	2.152	(0.291)	271675	125.000	124.0
	4 Bromomethane	94	2.498	2.523	(0.337)	68585	125.000	126.2(M)
	5 Chloroethane	64	2.602	2.663	(0.351)	69670	125.000	117.1(QM)
	7 Dichlorofluoromethane	67	2.888	2.936	(0.390)	149300	125.000	119.2(M)
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.709	3.739	(0.501)	206481	125.000	128.0(QM)
	166 Trichlorofluoromethane	101	2.882	2.924	(0.389)	126215	125.000	126.3(M)
	12 1,1-Dichloroethene	96	3.563	3.599	(0.481)	200099	125.000	119.6(M)
	15 Carbon Disulfide	76	3.861	3.891	(0.521)	644506	125.000	129.8
	13 Acetone	43	3.806	3.788	(0.514)	44388	125.000	107.0
	18 Methylene Chloride	84	4.360	4.378	(0.589)	210050	125.000	119.4
	19 trans-1,2-Dichloroethene	96	4.780	4.798	(0.645)	209238	125.000	120.3
	20 Methyl tert-butyl ether	73	4.865	4.859	(0.657)	391869	125.000	116.0
	24 1,1-Dichloroethane	63	5.364	5.382	(0.724)	416268	125.000	122.5
	27 2,2-Dichloropropane	77	6.094	6.106	(0.823)	264762	125.000	125.8
	28 cis-1,2-dichloroethene	96	6.100	6.106	(0.823)	232892	125.000	124.1
M	29 1,2-Dichloroethene (total)	96				442130	250.000	244.4
	30 Bromochloromethane	128	6.386	6.398	(0.862)	93819	125.000	114.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
31 2-Butanone	43	6.179	6.185	(0.834)	59987	125.000	118.0
37 Chloroform	83	6.501	6.507	(0.878)	341304	125.000	123.5
38 1,1,1-Trichloroethane	97	6.684	6.690	(0.902)	272972	125.000	122.8
40 1,1-Dichloropropene	75	6.872	6.878	(0.928)	239294	125.000	126.0
41 Carbon Tetrachloride	117	6.866	6.872	(0.927)	211339	125.000	118.6
42 Benzene	78	7.097	7.104	(0.958)	720671	125.000	122.9
45 1,2-Dichloroethane	62	7.128	7.134	(0.962)	196718	125.000	115.2
47 Trichloroethene	130	7.791	7.797	(1.052)	196297	125.000	116.6
49 1,2-Dichloropropane	63	8.028	8.034	(1.084)	177495	125.000	118.6(Q)
50 Dibromomethane	93	8.150	8.150	(1.100)	86077	125.000	114.4
53 Bromodichloromethane	83	8.320	8.320	(1.123)	214614	125.000	119.0
57 cis-1,3-Dichloropropene	75	8.770	8.777	(1.184)	246254	125.000	117.9
58 4-Methyl-2-Pentanone	43	8.941	8.941	(0.854)	141842	125.000	116.8(Q)
60 Toluene	91	9.105	9.105	(0.870)	642784	125.000	124.4
61 trans-1,3-Dichloropropene	75	9.324	9.330	(0.891)	177505	125.000	120.5
63 1,3-Dichloropropane	76	9.671	9.671	(0.924)	177781	125.000	124.6
64 1,1,2-Trichloroethane	97	9.507	9.507	(0.908)	110350	125.000	114.4
65 Tetrachloroethene	164	9.646	9.653	(0.922)	139989	125.000	128.6
66 2-Hexanone	43	9.762	9.762	(0.933)	91111	125.000	119.1
67 Dibromochloromethane	129	9.896	9.902	(0.945)	128578	125.000	118.3
68 1,2-Dibromoethane	107	10.011	10.011	(0.956)	116240	125.000	115.8
70 Chlorobenzene	112	10.498	10.498	(1.003)	400596	125.000	126.8
71 1,1,1,2-Tetrachloroethane	131	10.577	10.577	(1.010)	151675	125.000	129.9
72 Ethylbenzene	106	10.602	10.608	(1.013)	224738	125.000	118.8(Q)
73 m,p-XYLENE	106	10.717	10.723	(1.024)	291220	125.000	122.1
74 Xylene-o	106	11.113	11.113	(1.062)	320356	125.000	125.3
76 Styrene	104	11.125	11.131	(1.063)	465665	125.000	126.0
77 Bromoform	173	11.313	11.313	(1.081)	78356	125.000	121.5
78 Isopropylbenzene	105	11.478	11.478	(1.096)	803559	125.000	135.1
79 Bromobenzene	156	11.788	11.788	(0.922)	194303	125.000	126.4
81 n-Propylbenzene	120	12.062	12.062	(0.943)	326853	125.000	129.9
82 2-Chlorotoluene	126	11.976	11.976	(0.937)	186321	125.000	124.9
83 1,1,2,2-Tetrachloroethane	83	11.770	11.770	(1.124)	142935	125.000	118.6
84 1,2,3-Trichloropropane	110	11.818	11.818	(0.924)	35648	125.000	113.8(Q)
85 4-Chlorotoluene	126	12.086	12.086	(0.945)	179123	125.000	122.9
86 1,3,5-Trimethylbenzene	105	12.062	12.062	(0.943)	629917	125.000	123.1
87 tert-Butylbenzene	119	12.390	12.390	(0.969)	590899	125.000	131.2
88 1,2,4-Trimethylbenzene	105	12.433	12.439	(0.972)	638573	125.000	132.4
89 sec-Butylbenzene	105	12.609	12.609	(0.986)	881830	125.000	124.4
90 4-Isopropyltoluene	119	12.749	12.755	(0.997)	669445	125.000	123.4
91 1,3-Dichlorobenzene	146	12.725	12.725	(0.995)	372316	125.000	127.9
94 n-Butylbenzene	91	13.163	13.163	(1.029)	728051	125.000	126.9
93 1,4-Dichlorobenzene	146	12.810	12.816	(1.002)	325396	125.000	128.8
95 1,2-Dichlorobenzene	146	13.187	13.187	(1.031)	309562	125.000	126.1
96 1,2-Dibromo-3-chloropropane	157	13.966	13.972	(1.092)	19195	125.000	123.6
97 1,2,4-Trichlorobenzene	180	14.805	14.799	(1.158)	110110	125.000	119.5
98 Hexachlorobutadiene	225	14.969	14.969	(1.171)	121976	125.000	126.6
99 Naphthalene	128	15.055	15.055	(1.177)	111549	125.000	114.5
100 1,2,3-Trichlorobenzene	180	15.304	15.304	(1.197)	44916	125.000	98.42
156 Methyl Acetate	43	4.299	4.299	(0.580)	613550	625.000	607.1
157 Cyclohexane	56	6.739	6.751	(0.910)	449529	125.000	126.0
158 Methyl Cyclohexane	83	7.992	7.998	(1.079)	366863	125.000	129.1
32 Vinyl Acetate	43	5.491	5.498	(0.741)	154800	125.000	116.2
52 1,4-Dioxane	88	8.199	8.192	(1.007)	17141	2500.00	2193

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
21	tert-Butyl Alcohol	59	4.828	4.786	(1.023)	108078	1250.00	1238(QMH)
16	3-Chloro-1-propene	76	4.190	4.177	(0.566)	149495	125.000	115.0(M)
11	Acrolein	56	3.514	3.545	(0.474)	93692	750.000	692.6(M)
22	Acrylonitrile	53	4.786	4.810	(0.646)	566586	1250.00	1076
8	Ethyl Ether	59	3.356	3.368	(0.453)	151194	125.000	117.3(M)
62	Ethyl methacrylate	69	9.421	9.421	(0.900)	137248	125.000	109.5
23	Hexane	57	5.163	5.187	(0.697)	372884	125.000	123.9(M)
14	Iodomethane	142	3.770	3.806	(0.509)	313829	125.000	122.2(M)
44	Isobutanol	41	7.408	7.414	(1.000)	182011	3125.00	3026
155	N-Heptane	41	7.992	7.998	(1.079)	322776	125.000	128.1
35	Tetrahydrofuran	42	6.726	6.745	(0.908)	115634	250.000	237.9
164	trans-1,4-Dichloro-2-butene	53	11.830	11.830	(0.925)	38148	125.000	123.3
169	Butadiene	39	2.200	2.225	(0.297)	316191	125.000	127.9
M 75	Xylenes (total)	106				611576	250.000	247.4

QC Flag Legend

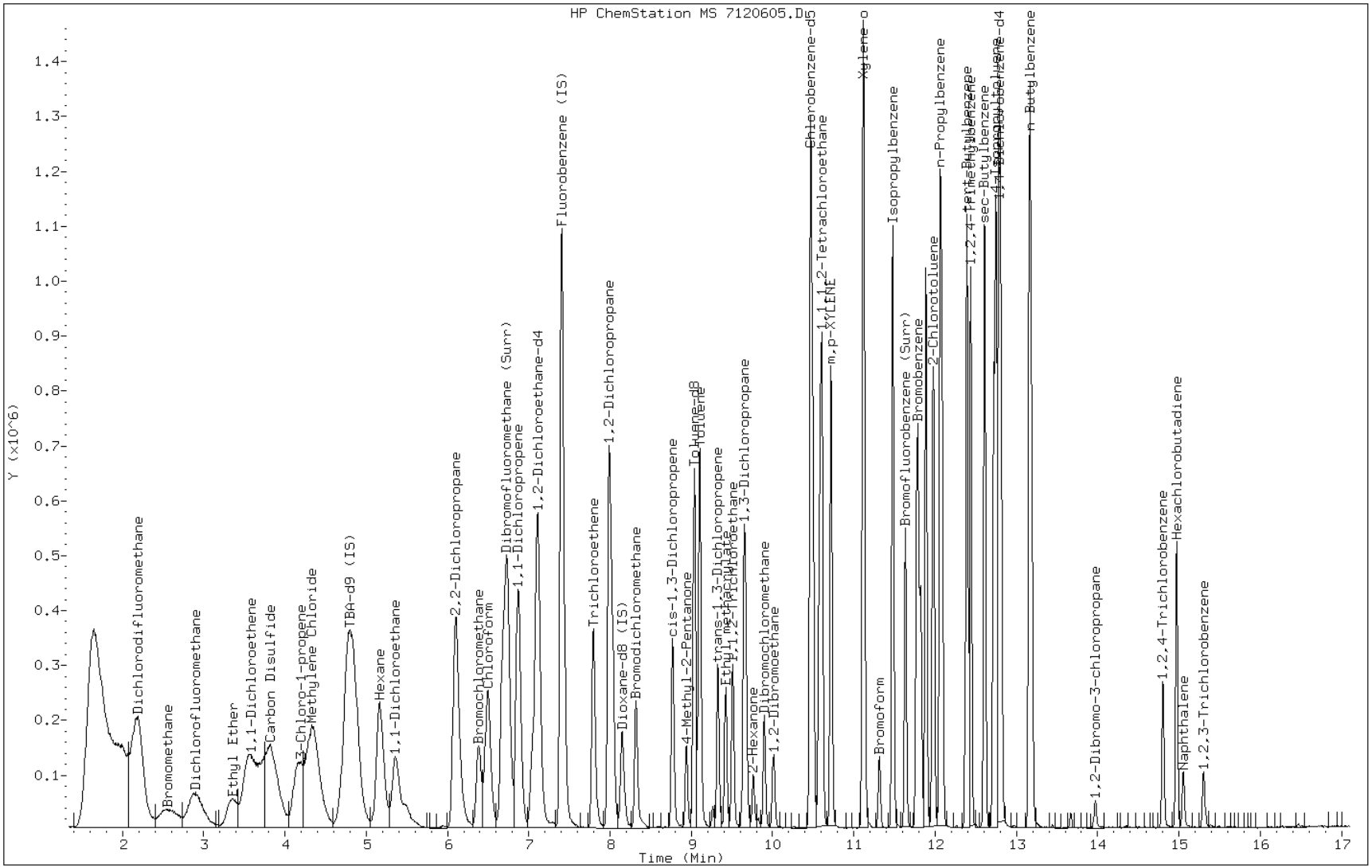
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 7120605.D

Date: 06-DEC-2013 08:28

Client ID: vstd25 Instrument: hp7.i

Sample Info: IC,vstd25 Operator: 034635



Manual Integration Report

Data File: 7120605.D
Inj. Date and Time: 06-DEC-2013 08:28
Instrument ID: hp7.i
Client ID: vstd25
Compound: 2 Chloromethane
CAS #: 74-87-3
Report Date: 12/09/2013

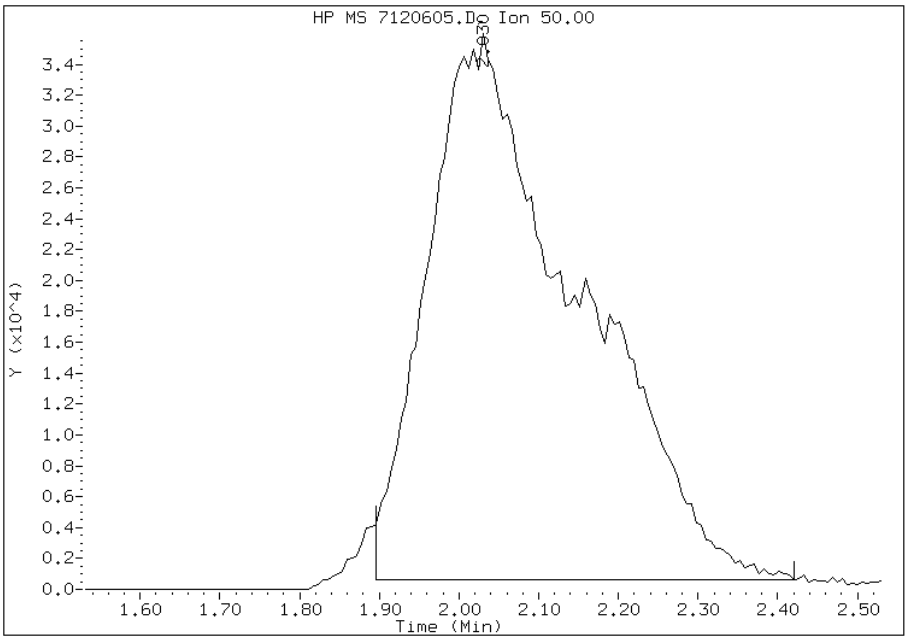
Processing Integration Results

RT: 2.03

Response: 466587

Amount: 0

Conc: 0



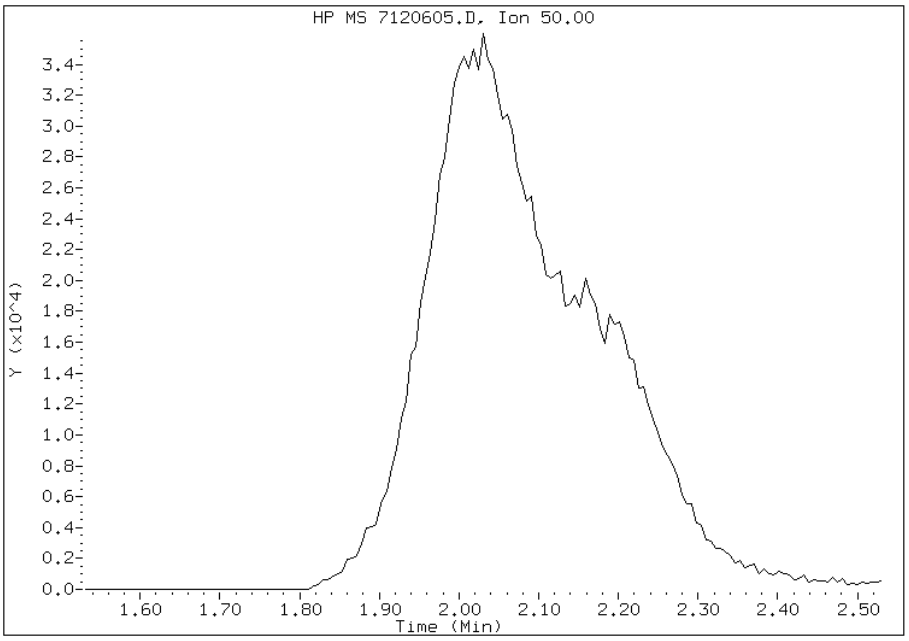
Manual Integration Results

RT: 2.03

Response: 500738

Amount: 121

Conc: 121



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:27
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120605.D
Inj. Date and Time: 06-DEC-2013 08:28
Instrument ID: hp7.i
Client ID: vstd25
Compound: 4 Bromomethane
CAS #: 74-83-9
Report Date: 12/09/2013

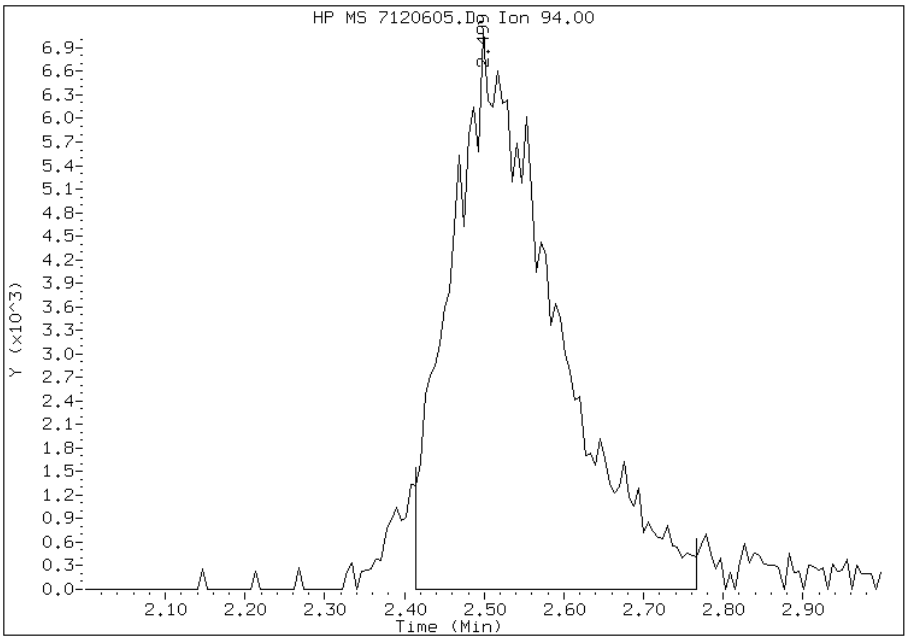
Processing Integration Results

RT: 2.50

Response: 65041

Amount: 0

Conc: 0



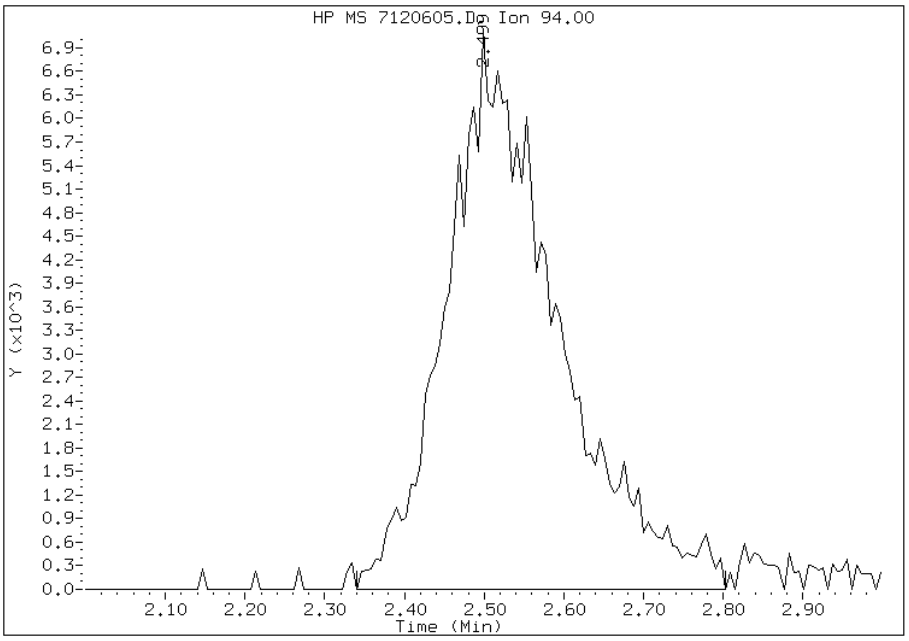
Manual Integration Results

RT: 2.50

Response: 68585

Amount: 126

Conc: 126



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:28
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120605.D
Inj. Date and Time: 06-DEC-2013 08:28
Instrument ID: hp7.i
Client ID: vstd25
Compound: 5 Chloroethane
CAS #: 75-00-3
Report Date: 12/09/2013

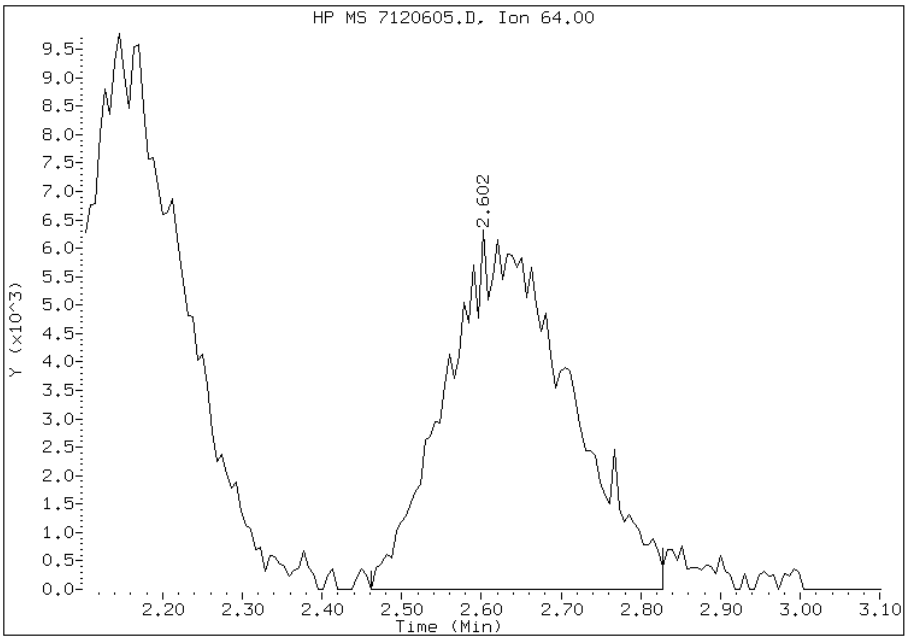
Processing Integration Results

RT: 2.60

Response: 67349

Amount: 0

Conc: 0



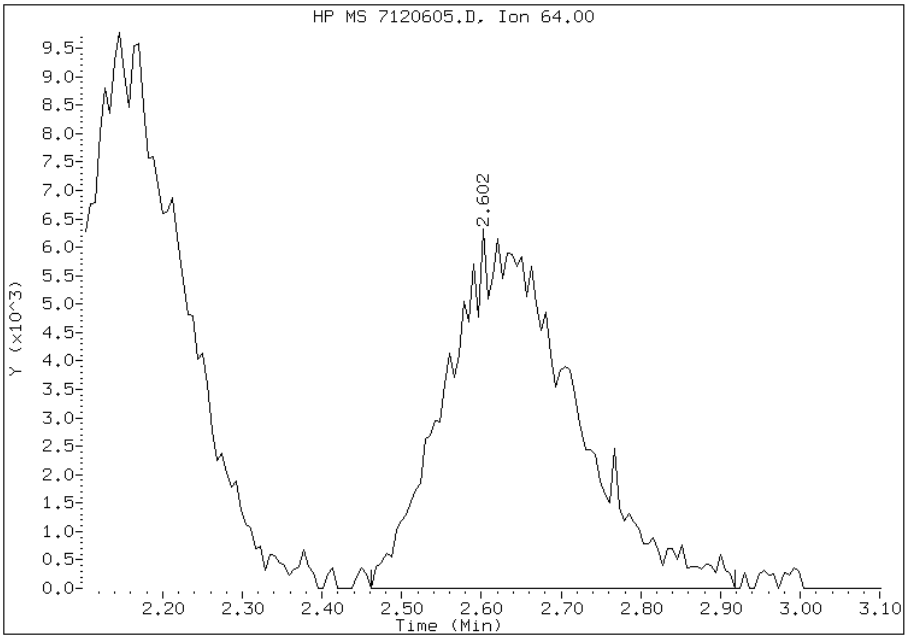
Manual Integration Results

RT: 2.60

Response: 69670

Amount: 117

Conc: 117



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:28
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120605.D
Inj. Date and Time: 06-DEC-2013 08:28
Instrument ID: hp7.i
Client ID: vstd25
Compound: 166 Trichlorofluoromethane
CAS #: 75-69-4
Report Date: 12/09/2013

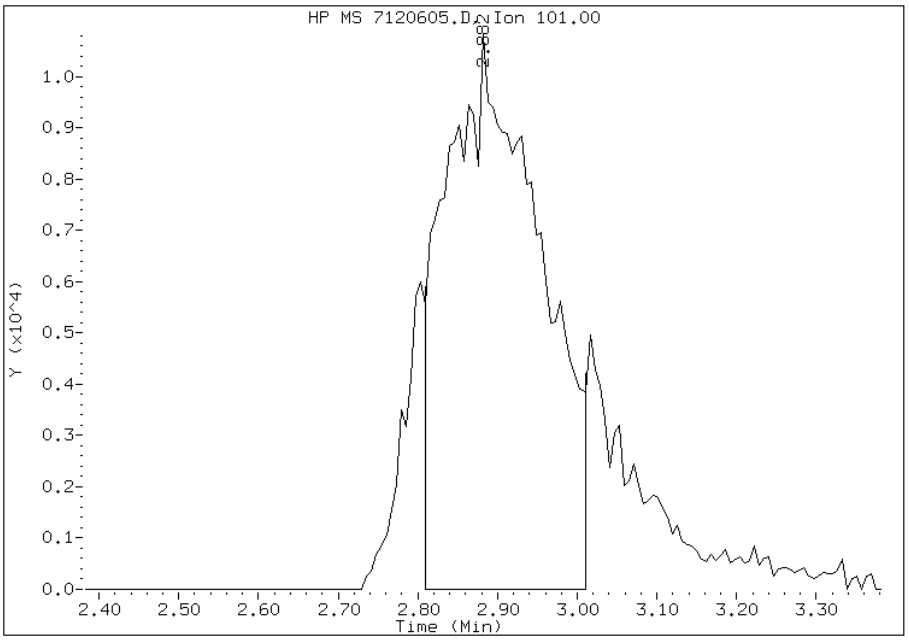
Processing Integration Results

RT: 2.88

Response: 92163

Amount: 0

Conc: 0



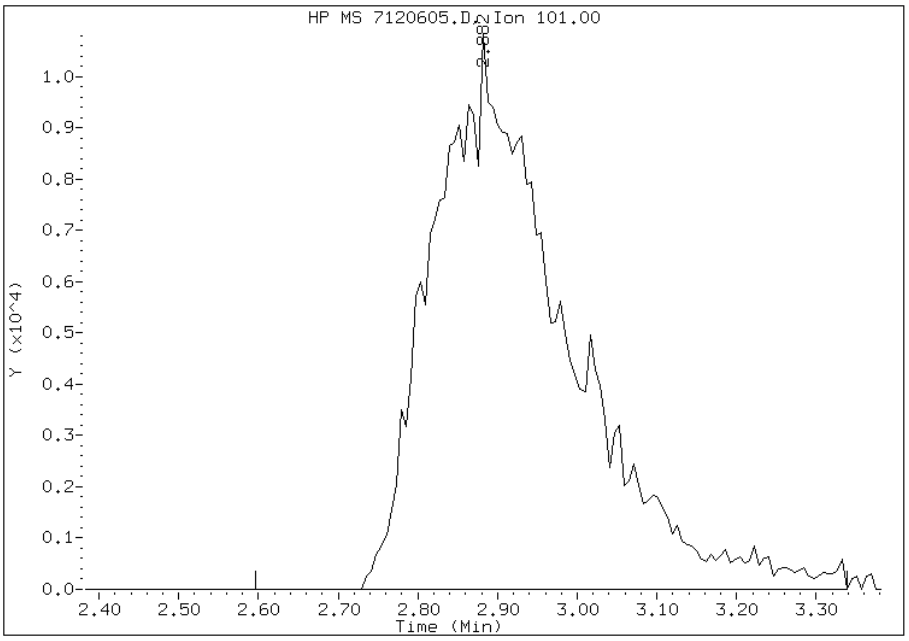
Manual Integration Results

RT: 2.88

Response: 126215

Amount: 126

Conc: 126



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:29
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120605.D
Inj. Date and Time: 06-DEC-2013 08:28
Instrument ID: hp7.i
Client ID: vstd25
Compound: 7 Dichlorofluoromethane
CAS #: 75-43-4
Report Date: 12/09/2013

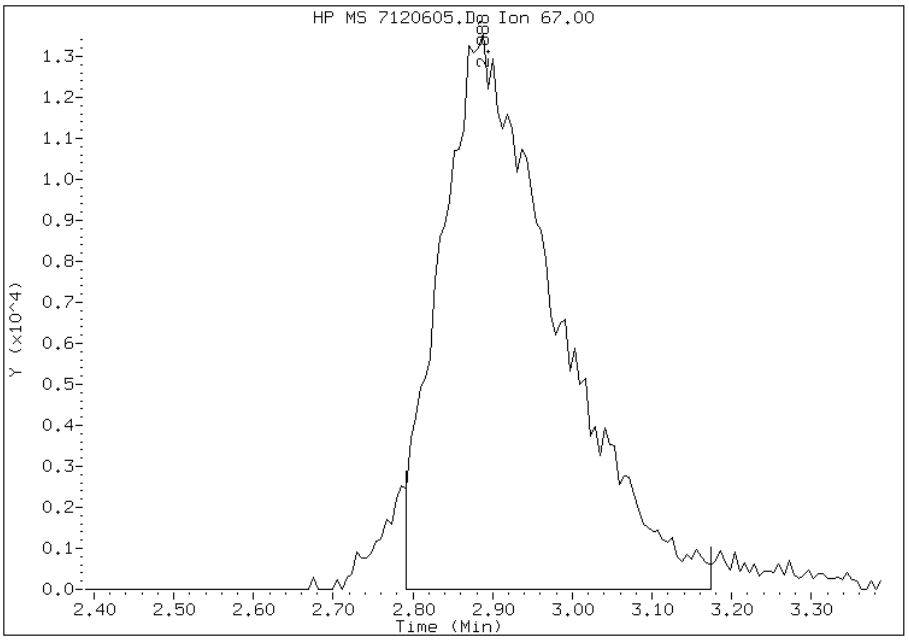
Processing Integration Results

RT: 2.89

Response: 139126

Amount: 0

Conc: 0



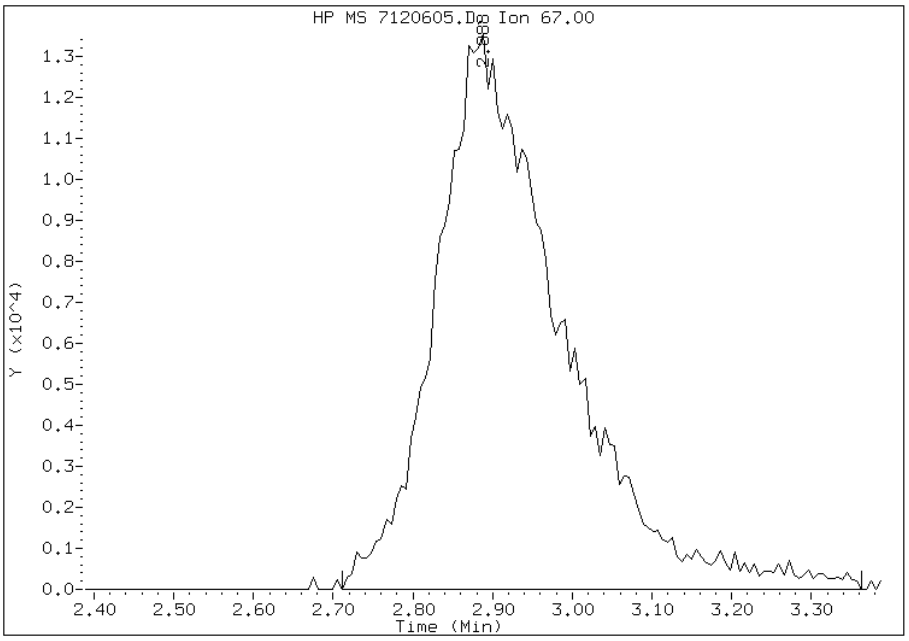
Manual Integration Results

RT: 2.89

Response: 149300

Amount: 119

Conc: 119



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:28
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120605.D
Inj. Date and Time: 06-DEC-2013 08:28
Instrument ID: hp7.i
Client ID: vstd25
Compound: 8 Ethyl Ether
CAS #: 60-29-7
Report Date: 12/09/2013

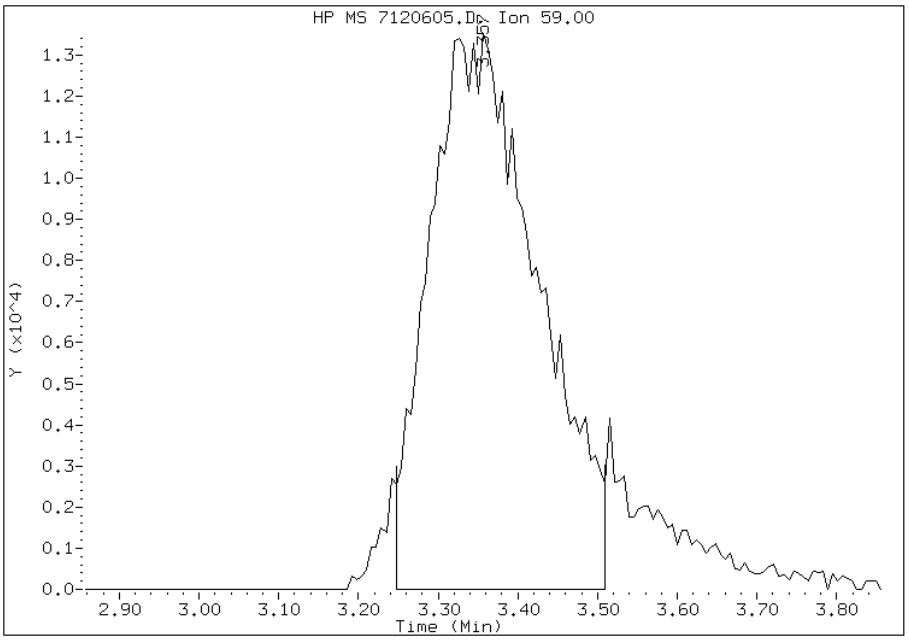
Processing Integration Results

RT: 3.36

Response: 129247

Amount: 0

Conc: 0



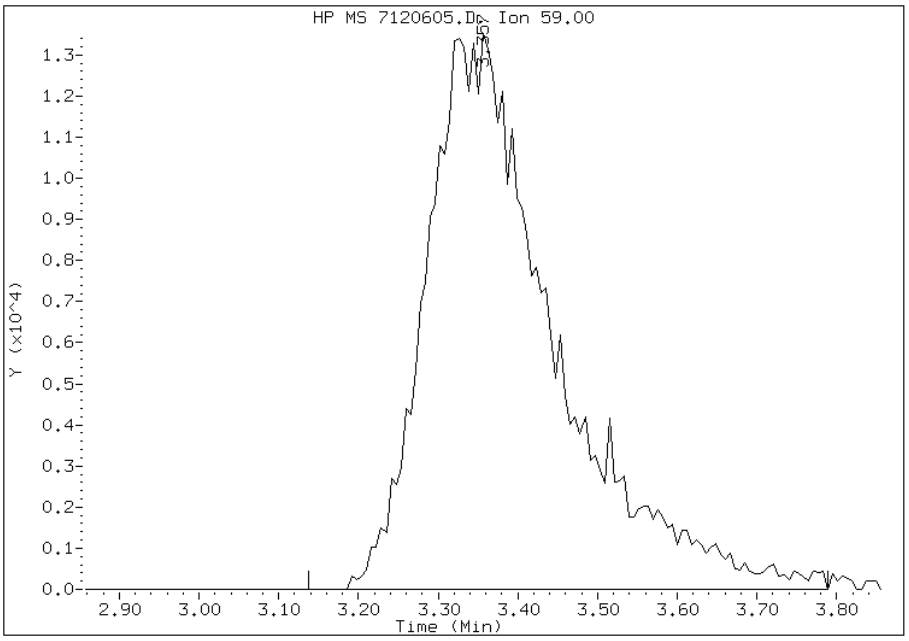
Manual Integration Results

RT: 3.36

Response: 151194

Amount: 117

Conc: 117



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:30
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120605.D
Inj. Date and Time: 06-DEC-2013 08:28
Instrument ID: hp7.i
Client ID: vstd25
Compound: 11 Acrolein
CAS #: 107-02-8
Report Date: 12/09/2013

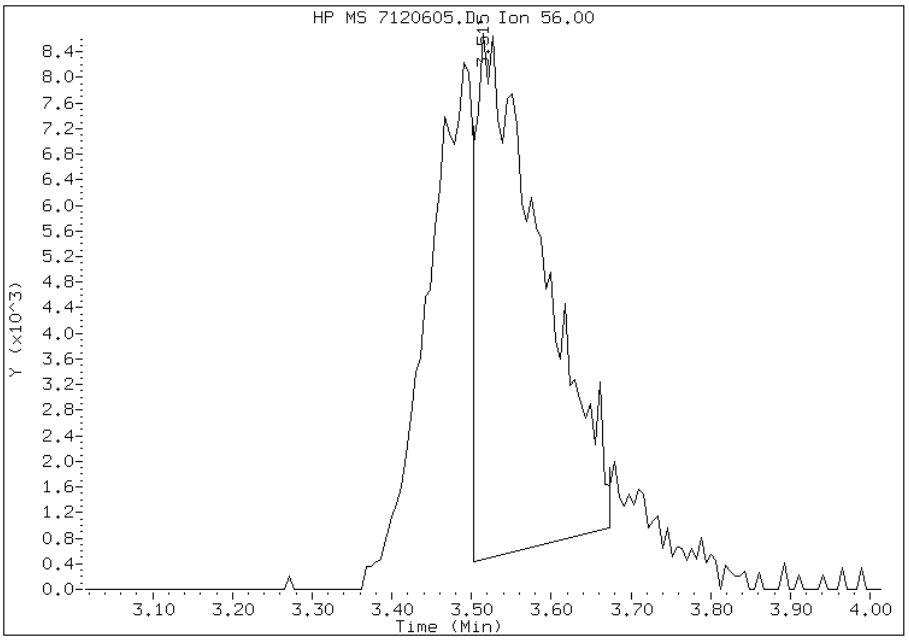
Processing Integration Results

RT: 3.51

Response: 47683

Amount: 0

Conc: 0



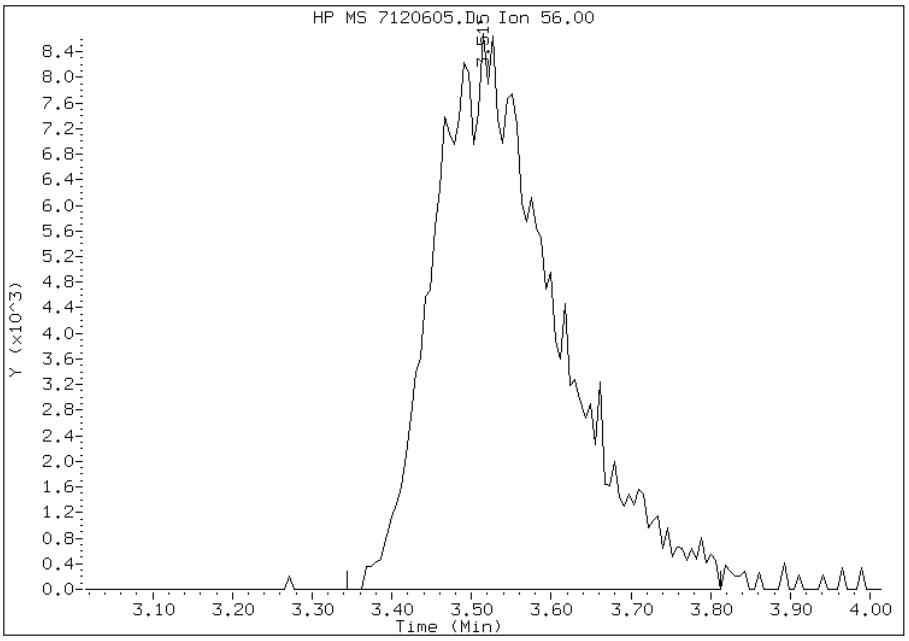
Manual Integration Results

RT: 3.51

Response: 93692

Amount: 693

Conc: 693



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:30
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120605.D
Inj. Date and Time: 06-DEC-2013 08:28
Instrument ID: hp7.i
Client ID: vstd25
Compound: 12 1,1-Dichloroethene
CAS #: 75-35-4
Report Date: 12/09/2013

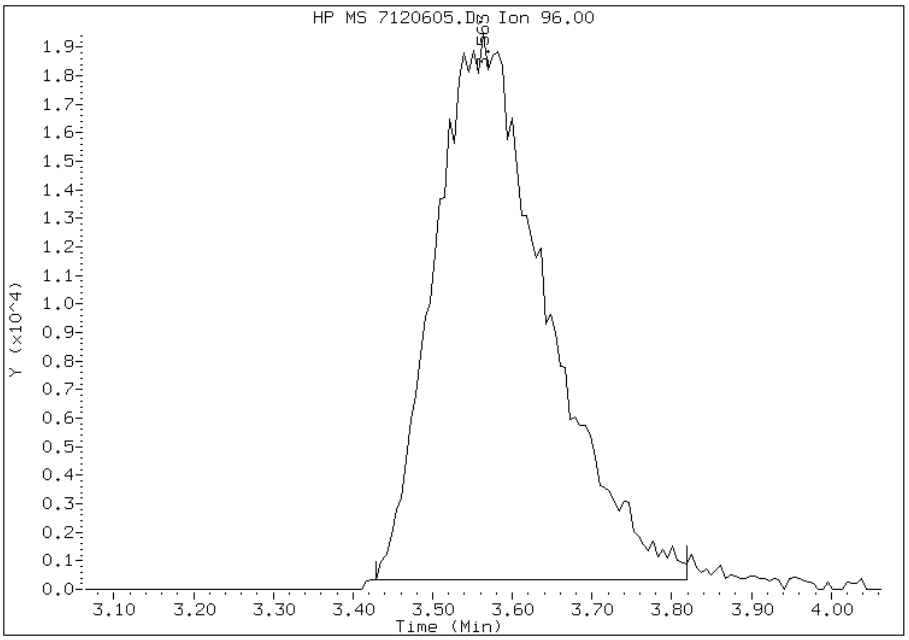
Processing Integration Results

RT: 3.56

Response: 188164

Amount: 0

Conc: 0



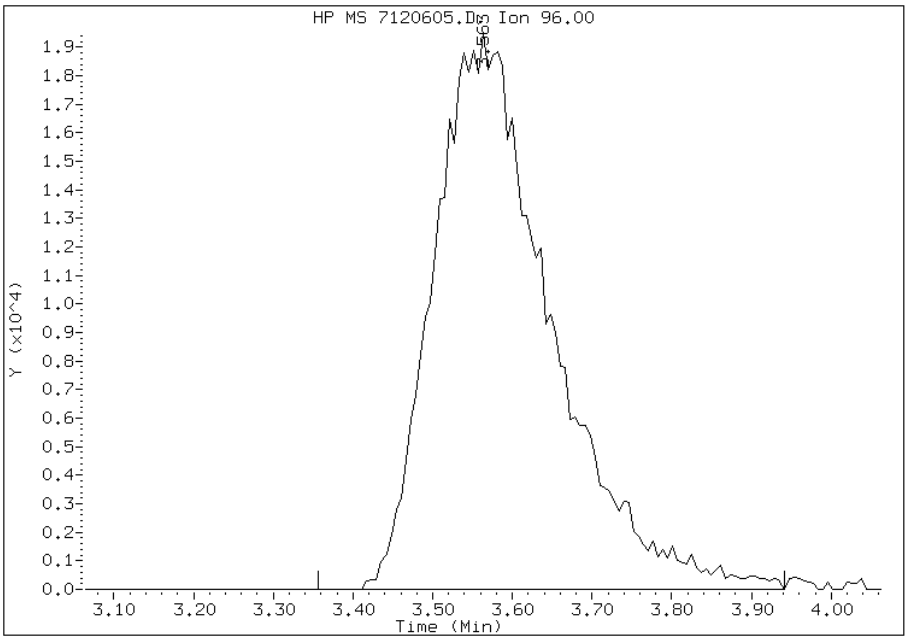
Manual Integration Results

RT: 3.56

Response: 200099

Amount: 120

Conc: 120



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:29
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120605.D
Inj. Date and Time: 06-DEC-2013 08:28
Instrument ID: hp7.i
Client ID: vstd25
Compound: 10 1,1,2-trichloro-1,2,2-trifluoro
CAS #: 76-13-1
Report Date: 12/09/2013

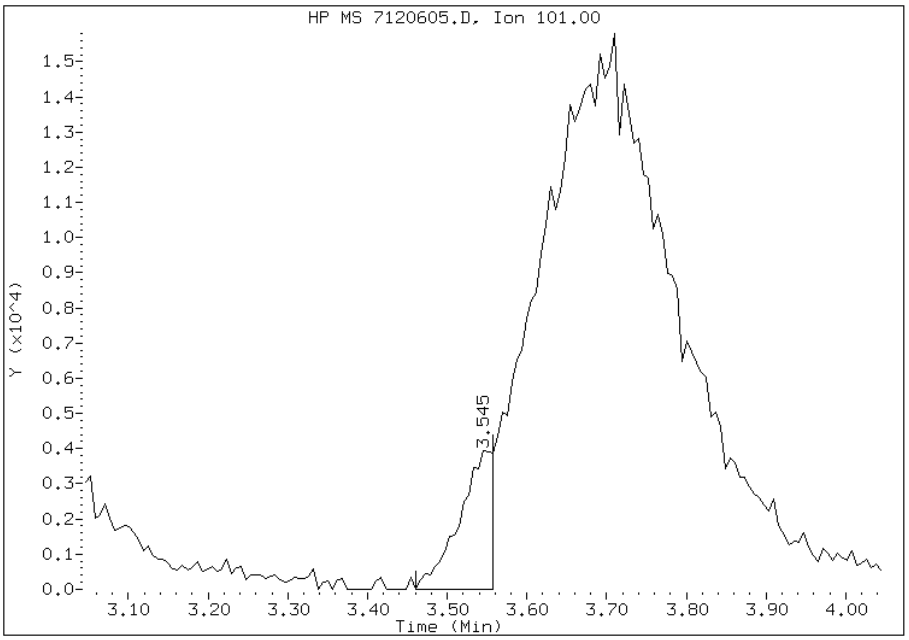
Processing Integration Results

RT: 3.55

Response: 11767

Amount: 0

Conc: 0



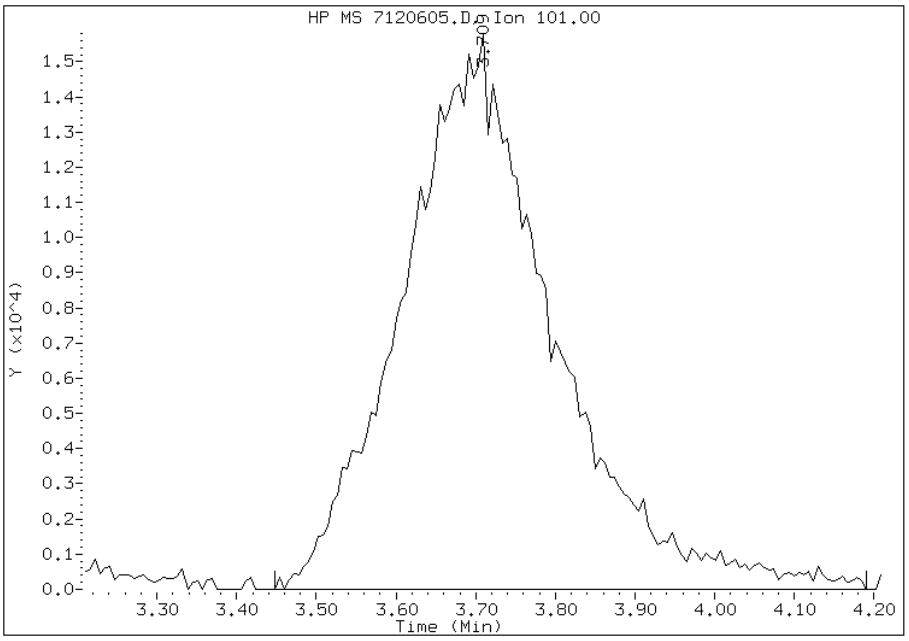
Manual Integration Results

RT: 3.71

Response: 206481

Amount: 128

Conc: 128



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:28
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120605.D
Inj. Date and Time: 06-DEC-2013 08:28
Instrument ID: hp7.i
Client ID: vstd25
Compound: 14 Iodomethane
CAS #: 74-88-4
Report Date: 12/09/2013

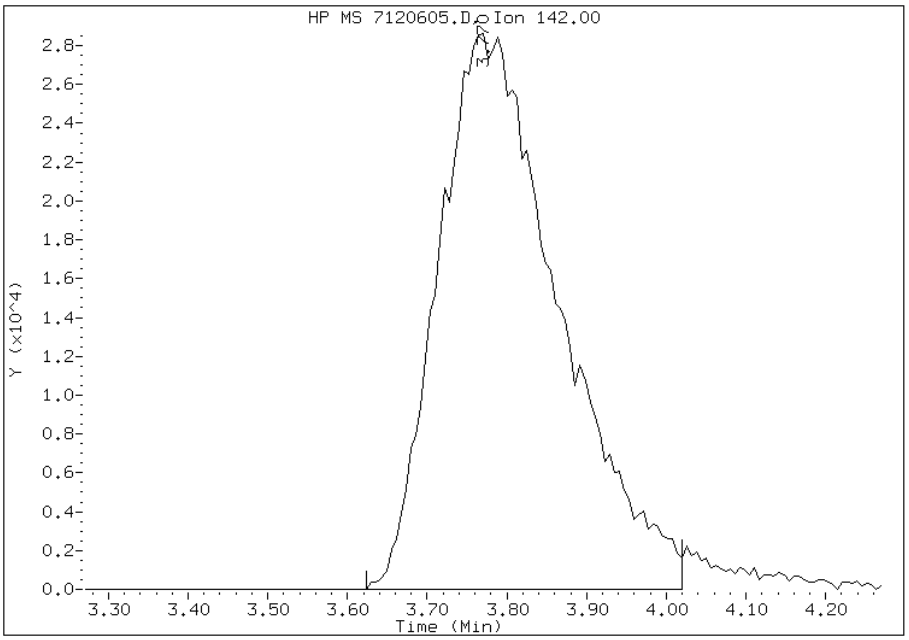
Processing Integration Results

RT: 3.77

Response: 303539

Amount: 0

Conc: 0



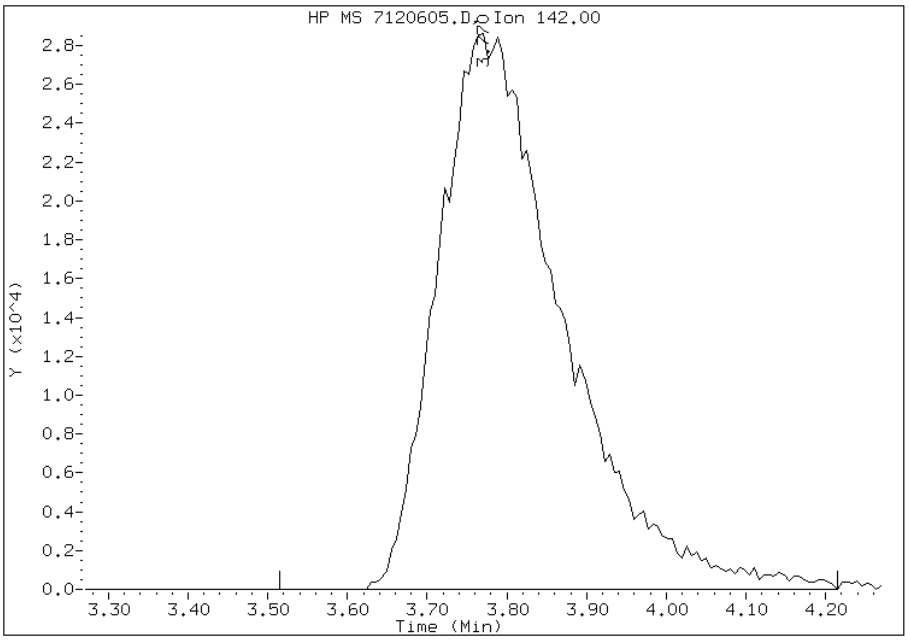
Manual Integration Results

RT: 3.77

Response: 313829

Amount: 122

Conc: 122



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:31
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120605.D
Inj. Date and Time: 06-DEC-2013 08:28
Instrument ID: hp7.i
Client ID: vstd25
Compound: 16 3-Chloro-1-propene
CAS #: 107-05-1
Report Date: 12/09/2013

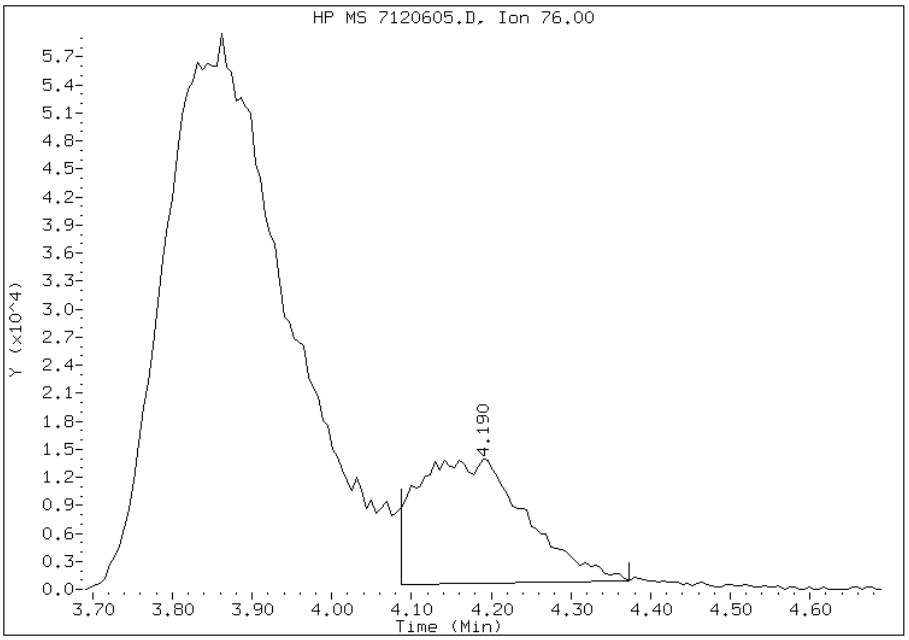
Processing Integration Results

RT: 4.19

Response: 125182

Amount: 0

Conc: 0



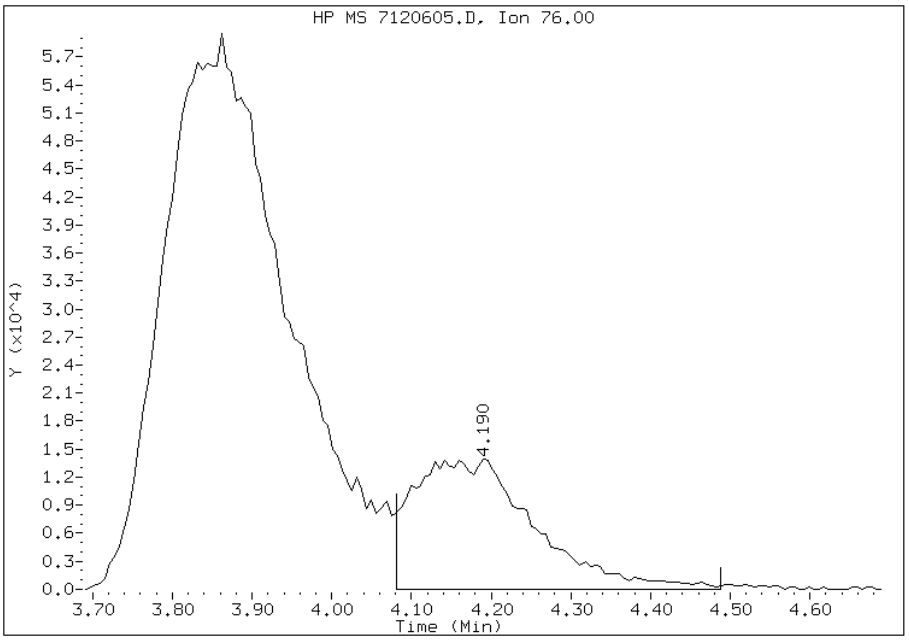
Manual Integration Results

RT: 4.19

Response: 149495

Amount: 115

Conc: 115



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:37
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120605.D
Inj. Date and Time: 06-DEC-2013 08:28
Instrument ID: hp7.i
Client ID: vstd25
Compound: 21 tert-Butyl Alcohol
CAS #: 75-65-0
Report Date: 12/09/2013

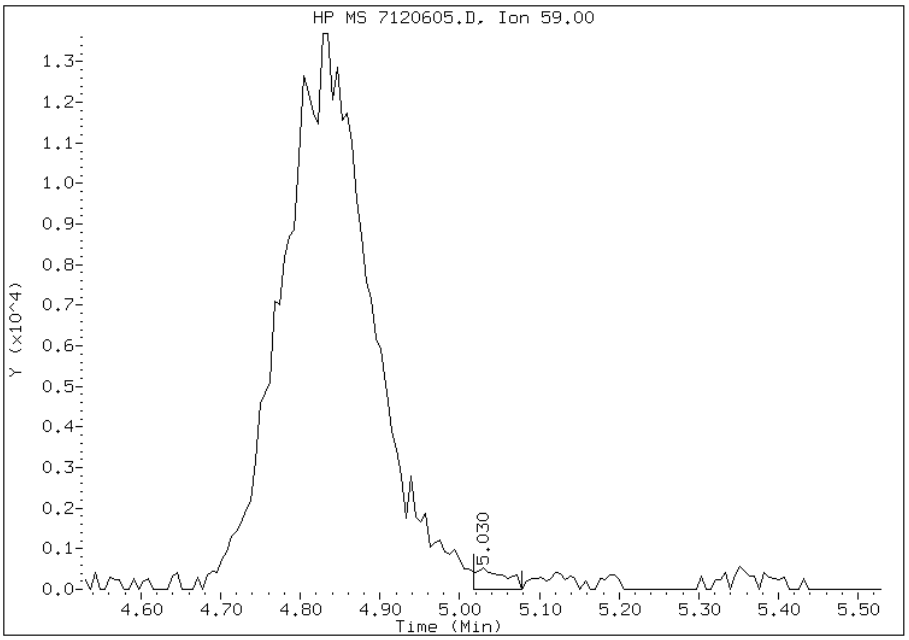
Processing Integration Results

RT: 5.03

Response: 1426

Amount: 0

Conc: 0



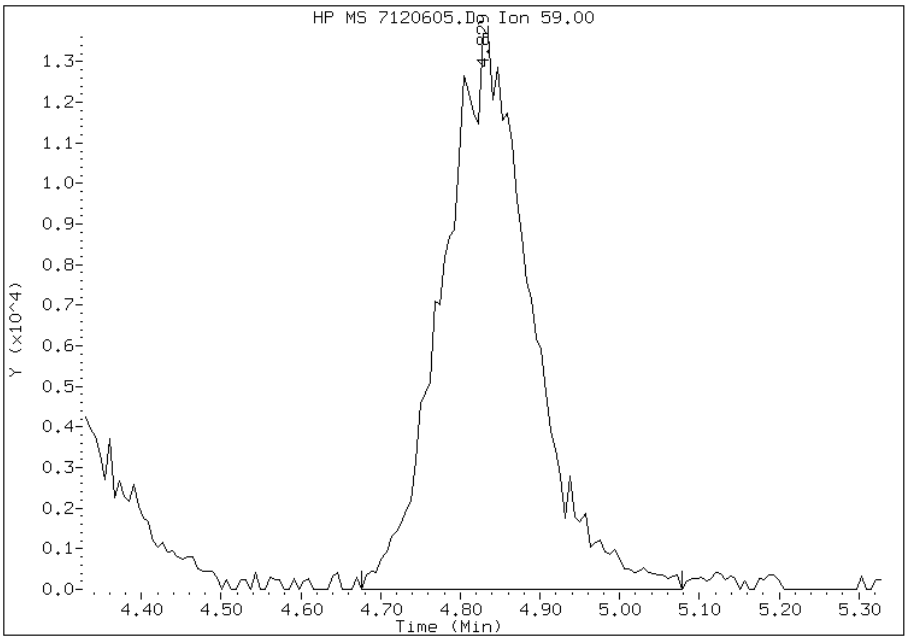
Manual Integration Results

RT: 4.83

Response: 108078

Amount: 1239

Conc: 1239



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:30
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120605.D
Inj. Date and Time: 06-DEC-2013 08:28
Instrument ID: hp7.i
Client ID: vstd25
Compound: 23 Hexane
CAS #: 110-54-3
Report Date: 12/09/2013

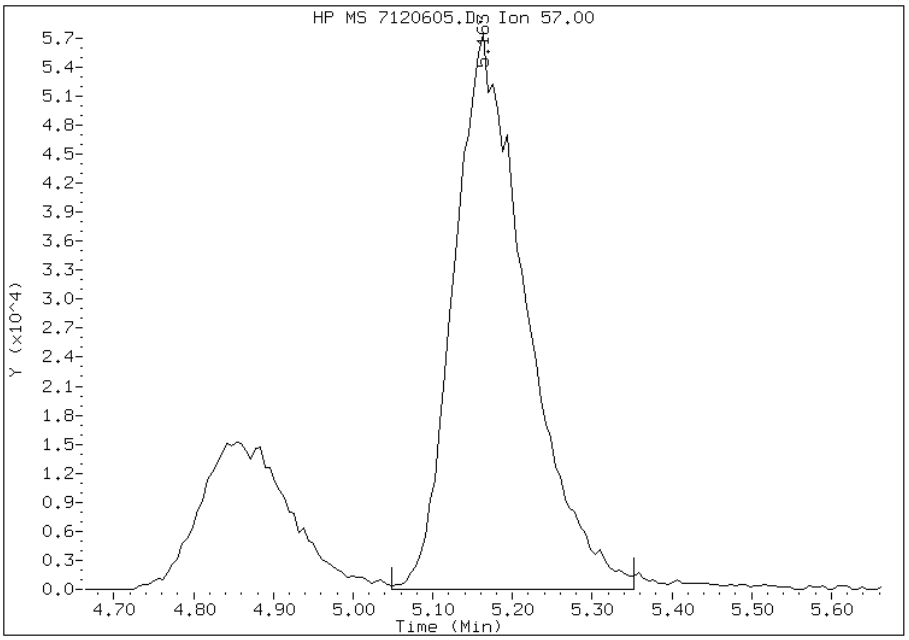
Processing Integration Results

RT: 5.16

Response: 367035

Amount: 0

Conc: 0



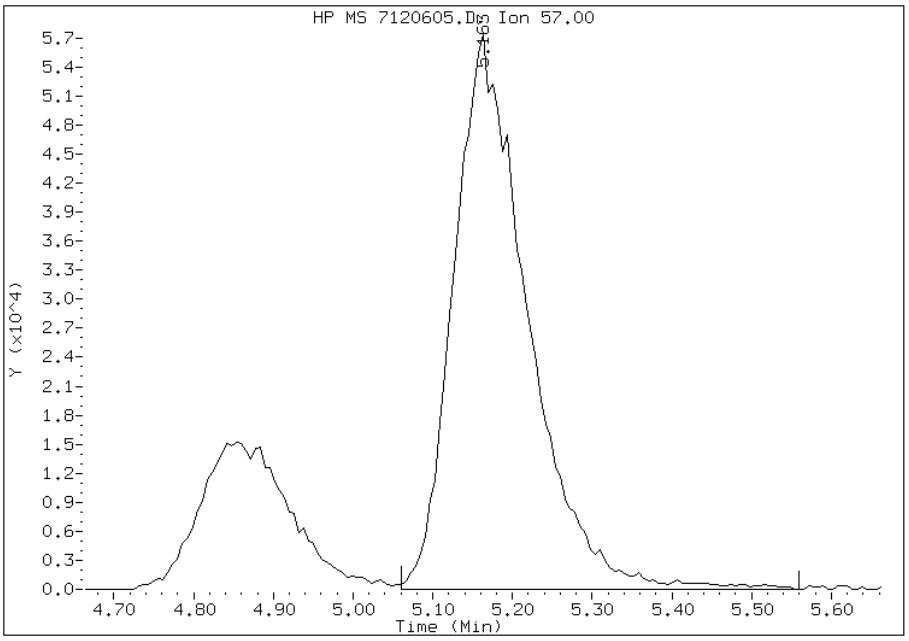
Manual Integration Results

RT: 5.16

Response: 372884

Amount: 124

Conc: 124



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:31
Manual Integration Reason: Peak Integrated Incorrectly

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\pitsvr06\d\chem\hp7.i\7120613d.b\7120606.D
Lab Smp Id: ICIS Client Smp ID: vstd40
Inj Date : 06-DEC-2013 08:53 MS Autotune Date: 29-AUG-2013 08:08
Operator : 034635 Inst ID: hp7.i
Smp Info : ICIS,vstd40
Misc Info : 7120613d.b,T8260bh2o.m,list1.sub
Comment :
Method : \\pitsvr06\d\chem\hp7.i\7120613d.b\T8260bh2o.m
Meth Date : 08-Dec-2013 22:22 zukowskim Quant Type: ISTD
Cal Date : 05-DEC-2013 02:18 Cal File: 7120509.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
*	46 Fluorobenzene (IS)	96	7.409	7.409	(1.000)	1198505	250.000	
*	69 Chlorobenzene-d5	119	10.469	10.469	(1.000)	280956	250.000	
*	92 1,4-Dichlorobenzene-d4	152	12.787	12.787	(1.000)	418453	250.000	
*	176 Dioxane-d8 (IS)	96	8.133	8.133	(1.000)	36763	5000.00	
*	177 TBA-d9 (IS)	65	4.708	4.708	(1.000)	339852	5000.00	(H)
$	39 Dibromofluoromethane (Surr)	113	6.673	6.673	(0.901)	248863	200.000	194.8
$	43 1,2-Dichloroethane-d4	65	7.044	7.044	(0.951)	275038	200.000	186.1
$	59 Toluene-d8	98	9.039	9.039	(0.863)	842265	200.000	193.4
$	80 Bromofluorobenzene (Surr)	95	11.631	11.631	(1.111)	327324	200.000	193.3
	1 Dichlorodifluoromethane	85	1.982	1.982	(0.268)	405981	200.000	194.0(M)
	2 Chloromethane	50	2.031	2.031	(0.274)	797261	200.000	189.1
	3 Vinyl Chloride	62	2.165	2.165	(0.292)	426656	200.000	191.0
	4 Bromomethane	94	2.518	2.518	(0.340)	108224	200.000	212.9(M)
	5 Chloroethane	64	2.621	2.621	(0.354)	112148	200.000	184.8
	7 Dichlorofluoromethane	67	2.913	2.913	(0.393)	250092	200.000	202.7(M)
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.710	3.710	(0.501)	326526	200.000	198.5(M)
	166 Trichlorofluoromethane	101	2.883	2.883	(0.389)	205054	200.000	201.2
	12 1,1-Dichloroethene	96	3.558	3.558	(0.480)	316798	200.000	185.7
	15 Carbon Disulfide	76	3.868	3.868	(0.522)	1014622	200.000	200.3(M)
	13 Acetone	43	3.801	3.801	(0.513)	85098	200.000	202.9
	18 Methylene Chloride	84	4.373	4.373	(0.590)	324524	200.000	180.9
	19 trans-1,2-Dichloroethene	96	4.769	4.769	(0.644)	336146	200.000	189.4
	20 Methyl tert-butyl ether	73	4.866	4.866	(0.657)	620243	200.000	180.0
	24 1,1-Dichloroethane	63	5.365	5.365	(0.724)	663915	200.000	191.6
	27 2,2-Dichloropropane	77	6.101	6.101	(0.823)	427264	200.000	199.0
	28 cis-1,2-dichloroethene	96	6.101	6.101	(0.823)	367333	200.000	191.9
M	29 1,2-Dichloroethene (total)	96				703479	400.000	381.3
	30 Bromochloromethane	128	6.387	6.387	(0.862)	153564	200.000	184.2
	31 2-Butanone	43	6.186	6.186	(0.835)	97550	200.000	185.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
37 Chloroform	83	6.509	6.509	(0.878)	534799	200.000	189.8
38 1,1,1-Trichloroethane	97	6.685	6.685	(0.902)	436836	200.000	192.6
40 1,1-Dichloropropene	75	6.867	6.867	(0.927)	371078	200.000	191.6
41 Carbon Tetrachloride	117	6.867	6.867	(0.927)	341554	200.000	188.0
42 Benzene	78	7.093	7.093	(0.957)	1103753	200.000	184.5
45 1,2-Dichloroethane	62	7.129	7.129	(0.962)	313408	200.000	180.0
47 Trichloroethene	130	7.798	7.798	(1.053)	315605	200.000	183.8
49 1,2-Dichloropropane	63	8.029	8.029	(1.084)	275277	200.000	180.3
50 Dibromomethane	93	8.145	8.145	(1.099)	132655	200.000	172.8
53 Bromodichloromethane	83	8.315	8.315	(1.122)	343800	200.000	186.9
57 cis-1,3-Dichloropropene	75	8.772	8.772	(1.184)	393739	200.000	184.8
58 4-Methyl-2-Pentanone	43	8.936	8.936	(0.854)	238207	200.000	190.0
60 Toluene	91	9.106	9.106	(0.870)	966288	200.000	179.8
61 trans-1,3-Dichloropropene	75	9.325	9.325	(0.891)	282589	200.000	185.8
63 1,3-Dichloropropane	76	9.672	9.672	(0.924)	282403	200.000	194.5
64 1,1,2-Trichloroethane	97	9.508	9.508	(0.908)	174842	200.000	175.6
65 Tetrachloroethene	164	9.648	9.648	(0.922)	219097	200.000	194.9
66 2-Hexanone	43	9.763	9.763	(0.933)	147982	200.000	181.3
67 Dibromochloromethane	129	9.897	9.897	(0.945)	206936	200.000	184.4
68 1,2-Dibromoethane	107	10.013	10.013	(0.956)	185887	200.000	179.4
70 Chlorobenzene	112	10.499	10.499	(1.003)	623256	200.000	191.1
71 1,1,1,2-Tetrachloroethane	131	10.578	10.578	(1.010)	248988	200.000	206.6
72 Ethylbenzene	106	10.603	10.603	(1.013)	347858	200.000	178.1
73 m,p-XYLENE	106	10.718	10.718	(1.024)	441556	200.000	179.3
74 Xylene-o	106	11.114	11.114	(1.062)	484326	200.000	183.4
76 Styrene	104	11.126	11.126	(1.063)	693724	200.000	200.4
77 Bromoform	173	11.314	11.314	(1.081)	128825	200.000	193.4
78 Isopropylbenzene	105	11.479	11.479	(1.096)	1200795	200.000	220.3
79 Bromobenzene	156	11.783	11.783	(0.922)	298114	200.000	191.8
81 n-Propylbenzene	120	12.063	12.063	(0.943)	498323	200.000	195.8
82 2-Chlorotoluene	126	11.978	11.978	(0.937)	287122	200.000	190.4
83 1,1,2,2-Tetrachloroethane	83	11.771	11.771	(1.124)	225016	200.000	180.9
84 1,2,3-Trichloropropane	110	11.819	11.819	(0.924)	58830	200.000	185.7
85 4-Chlorotoluene	126	12.087	12.087	(0.945)	273617	200.000	185.7
86 1,3,5-Trimethylbenzene	105	12.057	12.057	(0.943)	943780	200.000	182.4
87 tert-Butylbenzene	119	12.385	12.385	(0.969)	914383	200.000	200.8
88 1,2,4-Trimethylbenzene	105	12.434	12.434	(0.972)	944665	200.000	210.4
89 sec-Butylbenzene	105	12.604	12.604	(0.986)	1308415	200.000	182.6
90 4-Isopropyltoluene	119	12.750	12.750	(0.997)	994215	200.000	181.2
91 1,3-Dichlorobenzene	146	12.720	12.720	(0.995)	567218	200.000	192.6
94 n-Butylbenzene	91	13.158	13.158	(1.029)	1089581	200.000	187.8
93 1,4-Dichlorobenzene	146	12.811	12.811	(1.002)	510391	200.000	199.7
95 1,2-Dichlorobenzene	146	13.188	13.188	(1.031)	477746	200.000	192.5
96 1,2-Dibromo-3-chloropropane	157	13.967	13.967	(1.092)	33555	200.000	198.6
97 1,2,4-Trichlorobenzene	180	14.800	14.800	(1.157)	194484	200.000	208.7
98 Hexachlorobutadiene	225	14.971	14.971	(1.171)	191606	200.000	196.6
99 Naphthalene	128	15.050	15.050	(1.177)	214802	200.000	218.1
100 1,2,3-Trichlorobenzene	180	15.305	15.305	(1.197)	95209	200.000	206.3
156 Methyl Acetate	43	4.312	4.312	(0.582)	1009343	1000.00	969.7
157 Cyclohexane	56	6.740	6.740	(0.910)	700274	200.000	192.5
158 Methyl Cyclohexane	83	7.987	7.987	(1.078)	576218	200.000	198.9
32 Vinyl Acetate	43	5.499	5.499	(0.742)	258750	200.000	190.4
52 1,4-Dioxane	88	8.194	8.194	(1.007)	32858	4000.00	3801
21 tert-Butyl Alcohol	59	4.805	4.805	(1.021)	180393	2000.00	1905(QM)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
16	3-Chloro-1-propene	76	4.179	4.179	(0.564)	253718	200.000	191.3(M)
11	Acrolein	56	3.522	3.522	(0.475)	114106	875.000	827.0(M)
22	Acrylonitrile	53	4.793	4.793	(0.647)	918807	2000.00	1711
8	Ethyl Ether	59	3.339	3.339	(0.451)	255549	200.000	194.3
62	Ethyl methacrylate	69	9.423	9.423	(0.900)	217424	200.000	168.0
23	Hexane	57	5.164	5.164	(0.697)	585038	200.000	190.6
14	Iodomethane	142	3.777	3.777	(0.510)	494377	200.000	188.7
44	Isobutanol	41	7.409	7.409	(1.000)	280937	5000.00	4580
155	N-Heptane	41	7.993	7.993	(1.079)	489840	200.000	190.5
35	Tetrahydrofuran	42	6.740	6.740	(0.910)	191448	400.000	386.1
164	trans-1,4-Dichloro-2-butene	53	11.825	11.825	(0.925)	61411	200.000	196.3
169	Butadiene	39	2.201	2.201	(0.297)	501355	200.000	212.3
M 75	Xylenes (total)	106				925882	400.000	362.8

QC Flag Legend

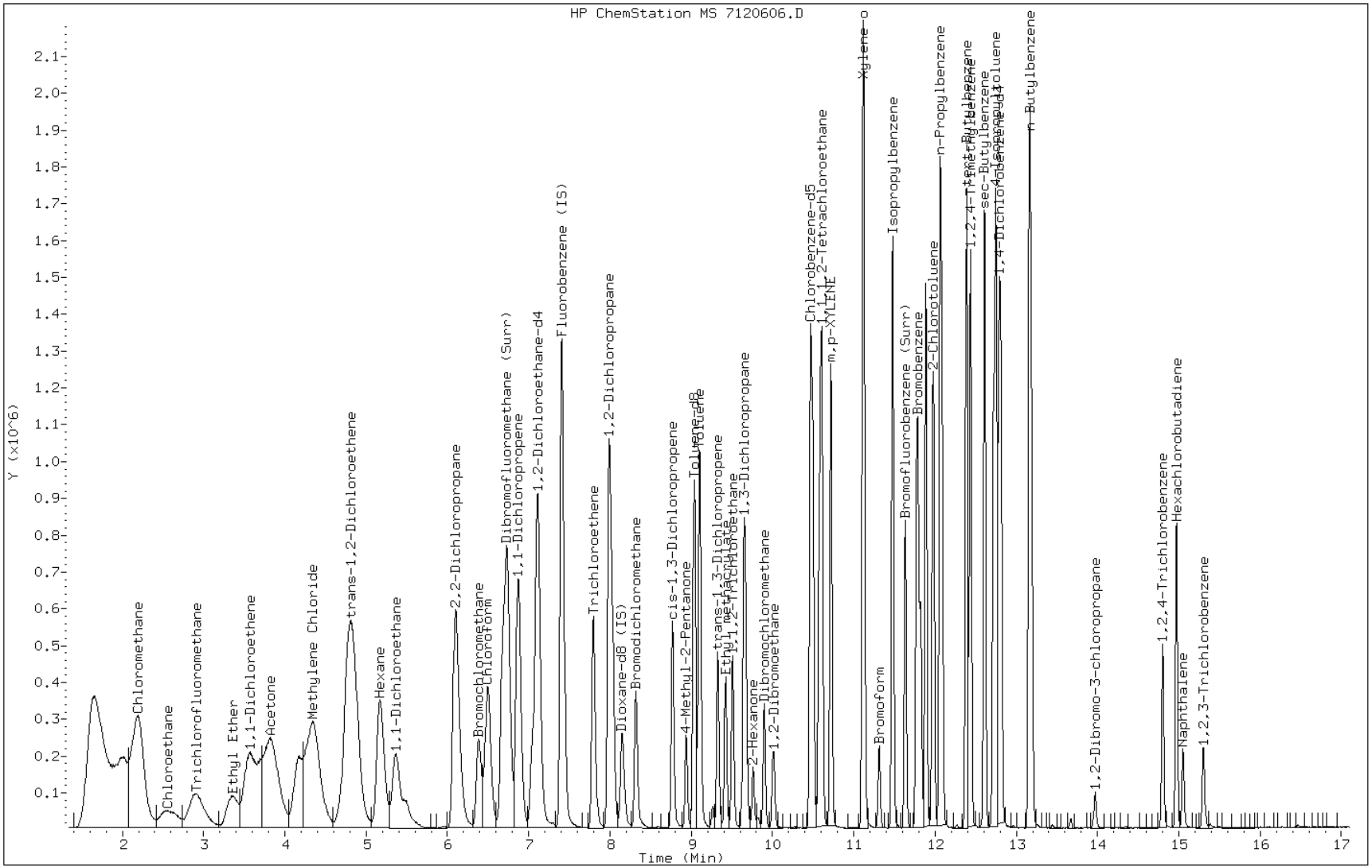
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 7120606.D

Date: 06-DEC-2013 08:53

Client ID: vstd40 Instrument: hp7.i

Sample Info: ICIS,vstd40 Operator: 034635



Manual Integration Report

Data File: 7120606.D
Inj. Date and Time: 06-DEC-2013 08:53
Instrument ID: hp7.i
Client ID: vstd40
Compound: 1 Dichlorodifluoromethane
CAS #: 75-71-8
Report Date: 12/09/2013

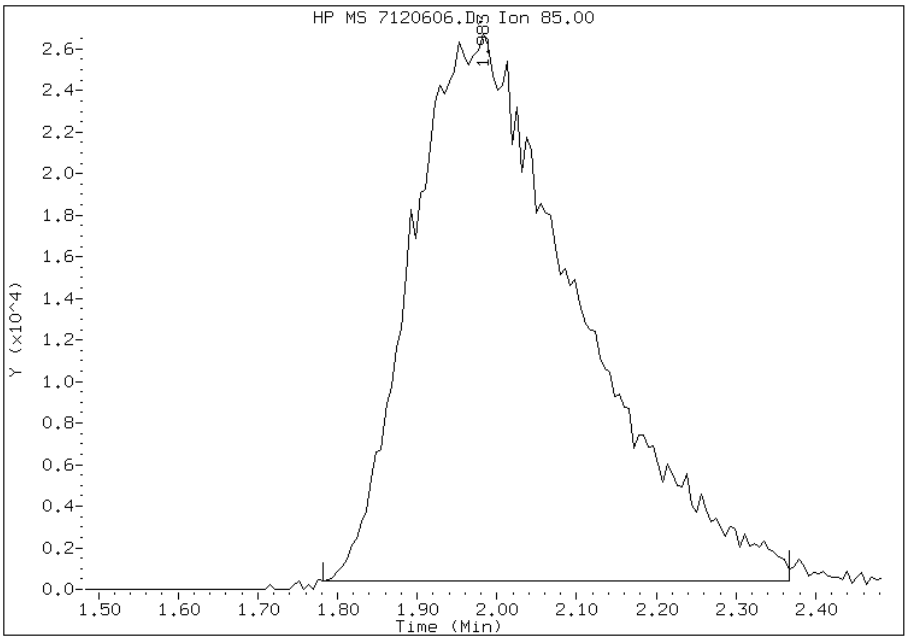
Processing Integration Results

RT: 1.98

Response: 385070

Amount: 0

Conc: 0



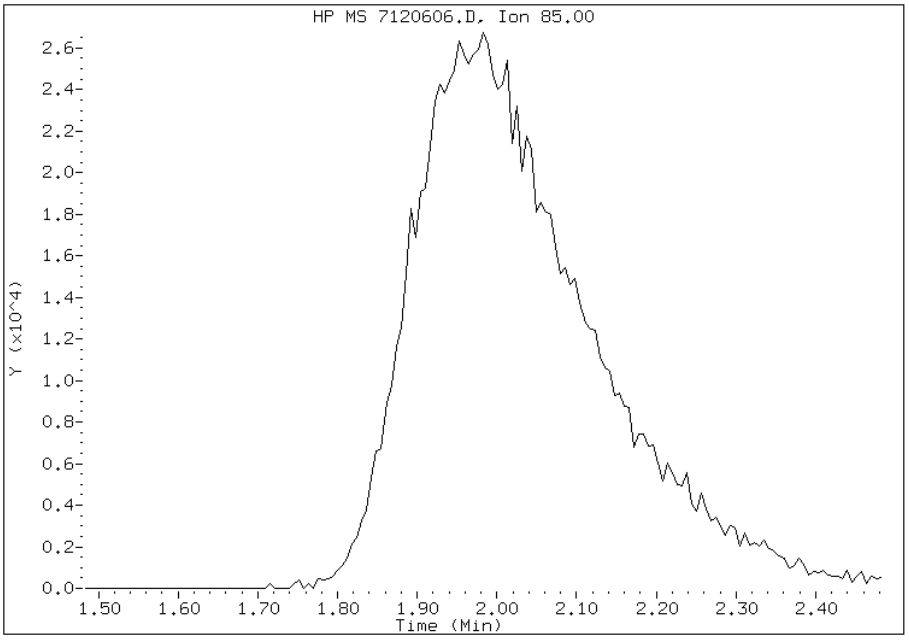
Manual Integration Results

RT: 1.98

Response: 405981

Amount: 194

Conc: 194



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:33
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120606.D
Inj. Date and Time: 06-DEC-2013 08:53
Instrument ID: hp7.i
Client ID: vstd40
Compound: 4 Bromomethane
CAS #: 74-83-9
Report Date: 12/09/2013

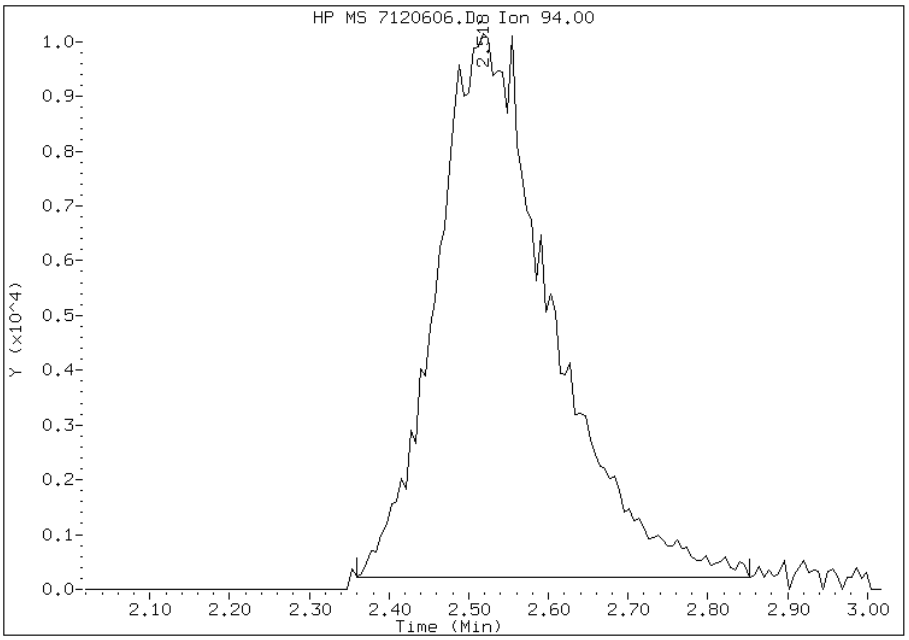
Processing Integration Results

RT: 2.52

Response: 100358

Amount: 0

Conc: 0



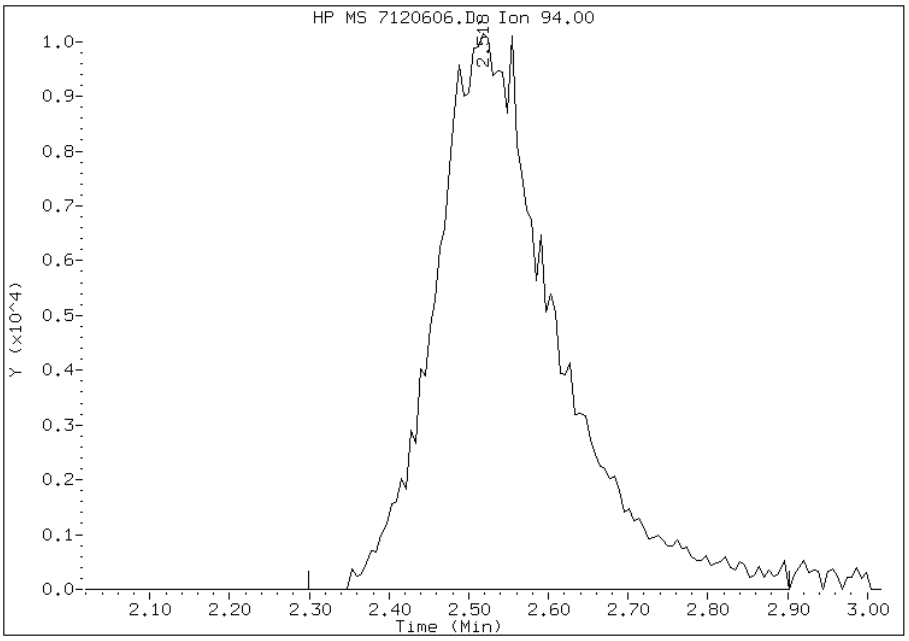
Manual Integration Results

RT: 2.52

Response: 108224

Amount: 213

Conc: 213



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:34
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120606.D
Inj. Date and Time: 06-DEC-2013 08:53
Instrument ID: hp7.i
Client ID: vstd40
Compound: 7 Dichlorofluoromethane
CAS #: 75-43-4
Report Date: 12/09/2013

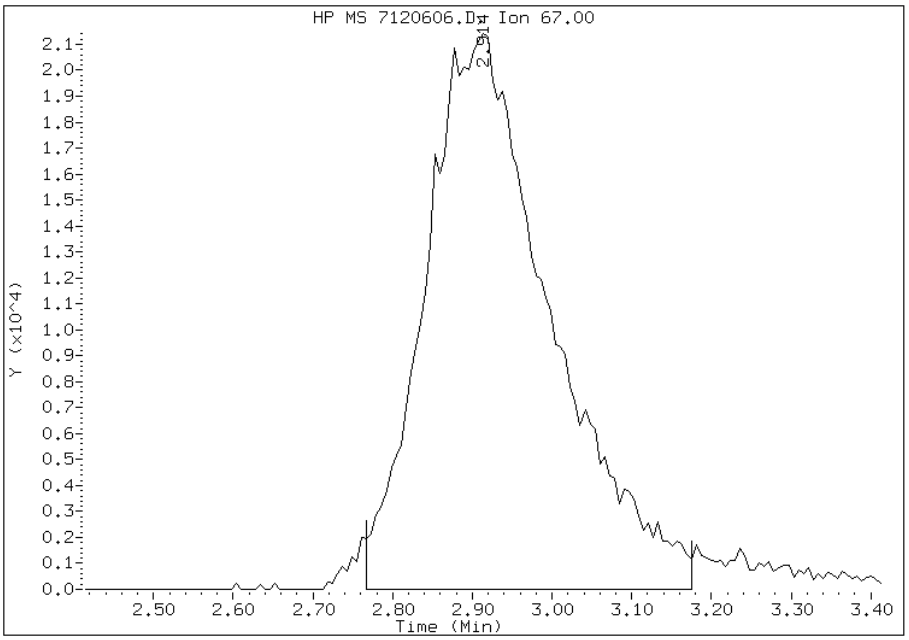
Processing Integration Results

RT: 2.91

Response: 235573

Amount: 0

Conc: 0



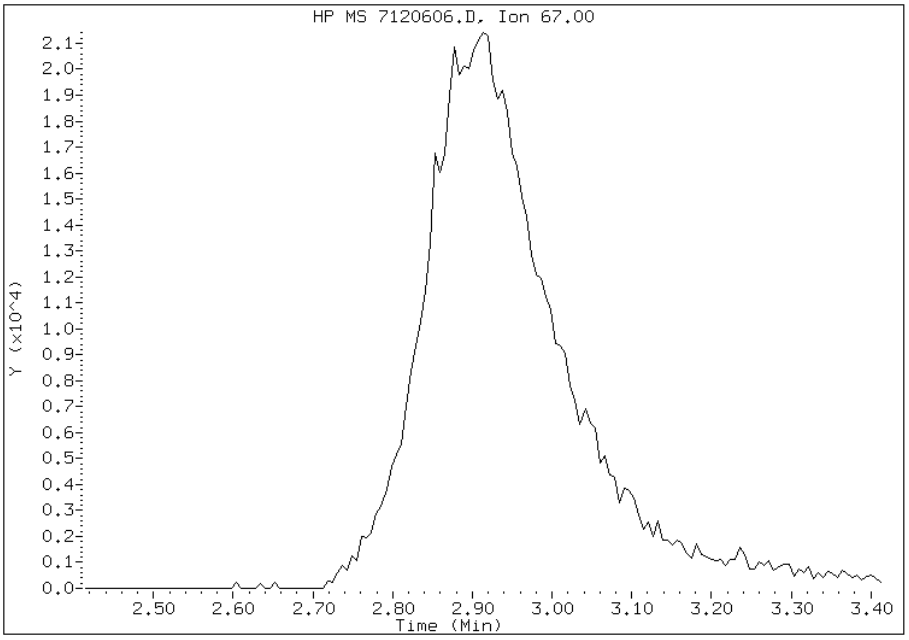
Manual Integration Results

RT: 2.91

Response: 250092

Amount: 203

Conc: 203



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:34
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120606.D
Inj. Date and Time: 06-DEC-2013 08:53
Instrument ID: hp7.i
Client ID: vstd40
Compound: 11 Acrolein
CAS #: 107-02-8
Report Date: 12/09/2013

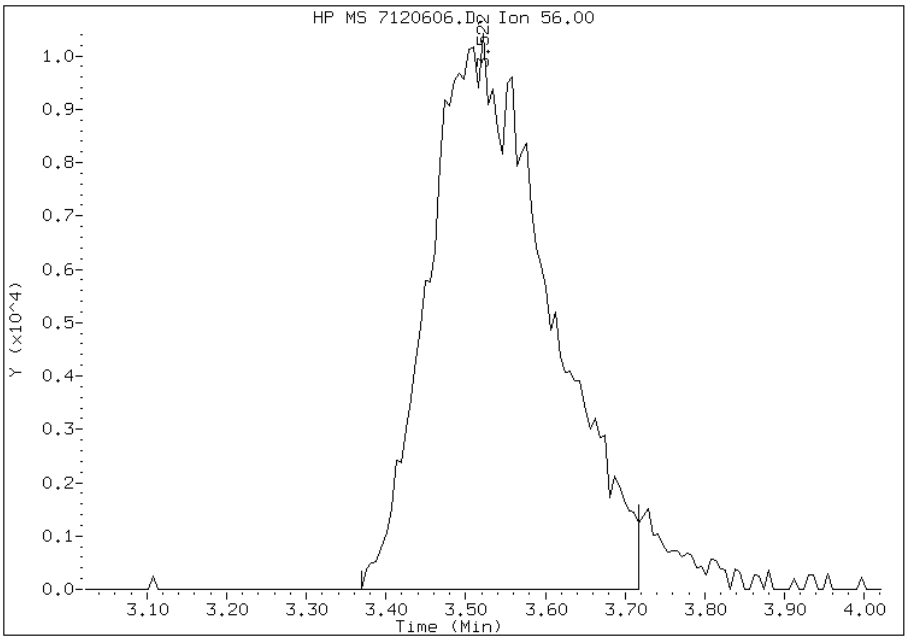
Processing Integration Results

RT: 3.52

Response: 109404

Amount: 0

Conc: 0



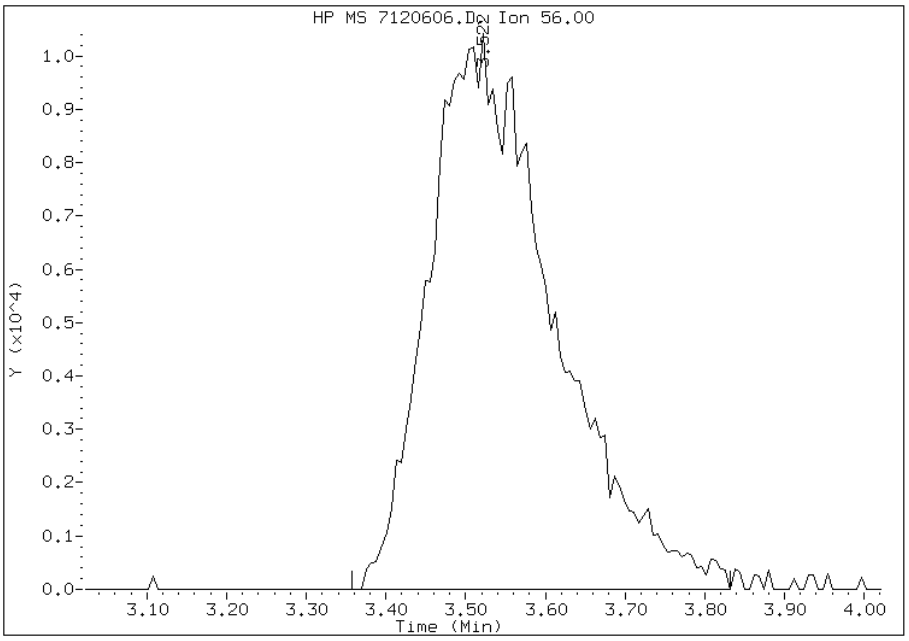
Manual Integration Results

RT: 3.52

Response: 114106

Amount: 827

Conc: 827



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:35
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120606.D
Inj. Date and Time: 06-DEC-2013 08:53
Instrument ID: hp7.i
Client ID: vstd40
Compound: 10 1,1,2-trichloro-1,2,2-trifluoro
CAS #: 76-13-1
Report Date: 12/09/2013

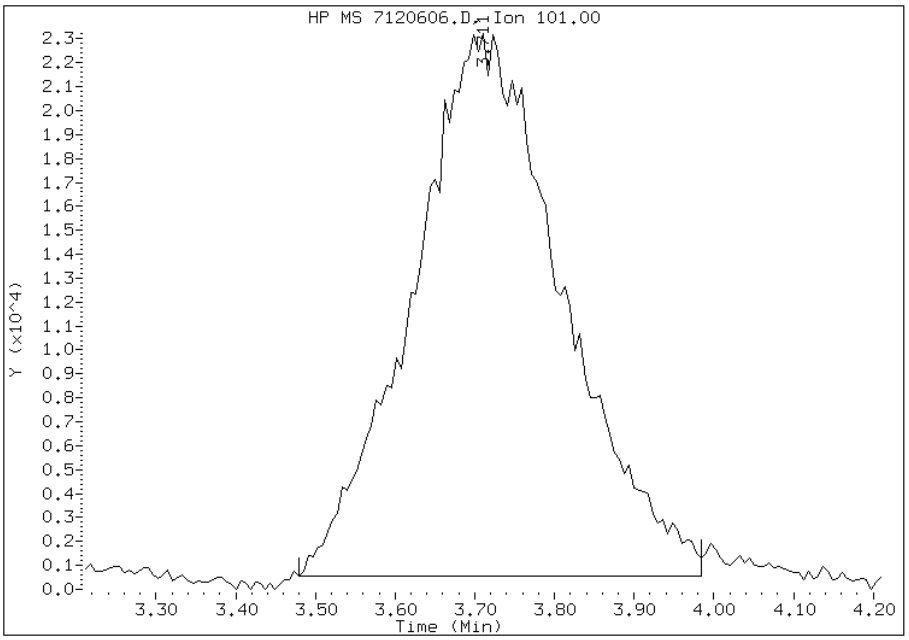
Processing Integration Results

RT: 3.71

Response: 298306

Amount: 0

Conc: 0



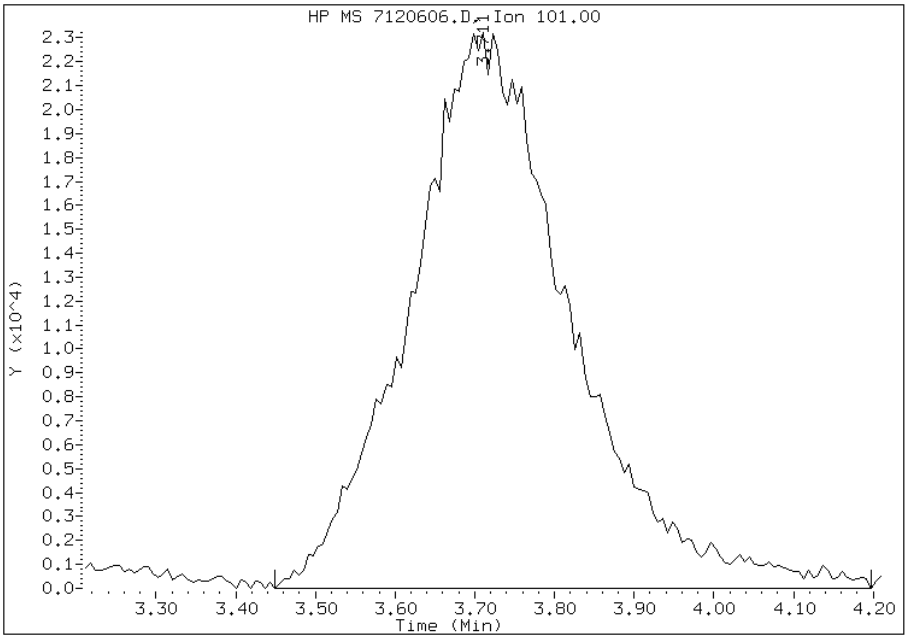
Manual Integration Results

RT: 3.71

Response: 326526

Amount: 199

Conc: 199



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:34
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120606.D
Inj. Date and Time: 06-DEC-2013 08:53
Instrument ID: hp7.i
Client ID: vstd40
Compound: 15 Carbon Disulfide
CAS #: 75-15-0
Report Date: 12/09/2013

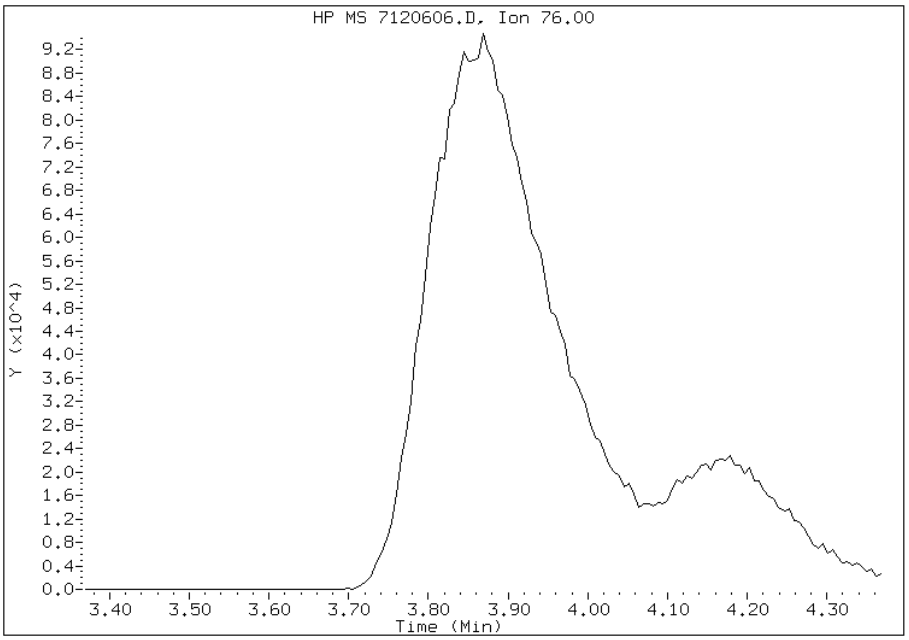
Processing Integration Results

RT: 3.87

Response: 1257928

Amount: 0

Conc: 0



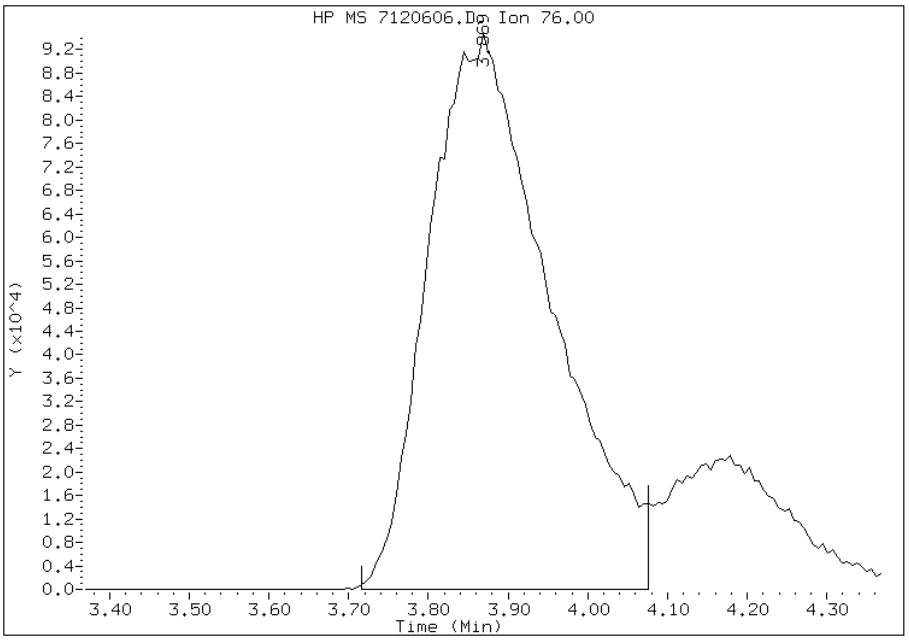
Manual Integration Results

RT: 3.87

Response: 1014622

Amount: 200

Conc: 200



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:34
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120606.D
Inj. Date and Time: 06-DEC-2013 08:53
Instrument ID: hp7.i
Client ID: vstd40
Compound: 16 3-Chloro-1-propene
CAS #: 107-05-1
Report Date: 12/09/2013

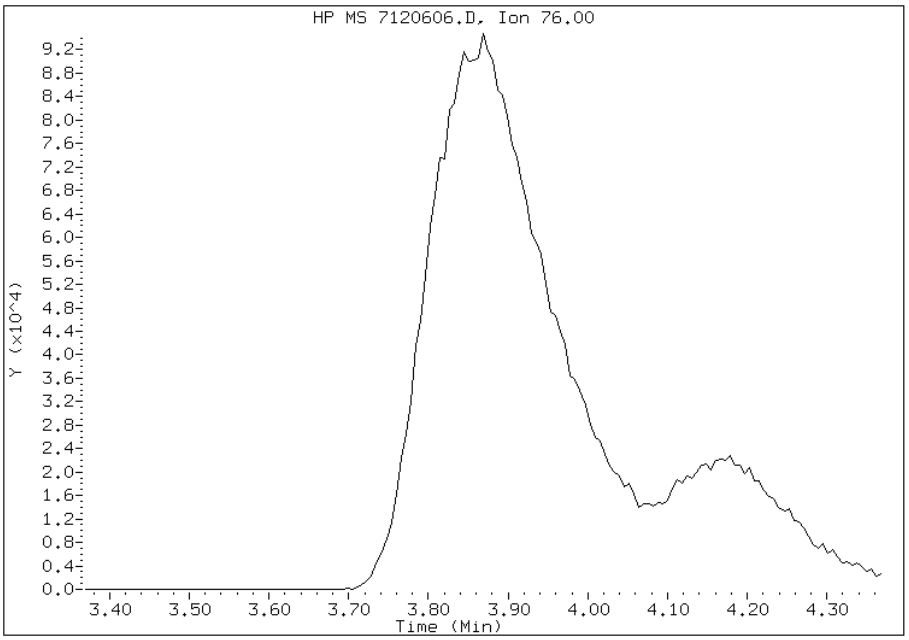
Processing Integration Results

RT: 3.87

Response: 1257928

Amount: 0

Conc: 0



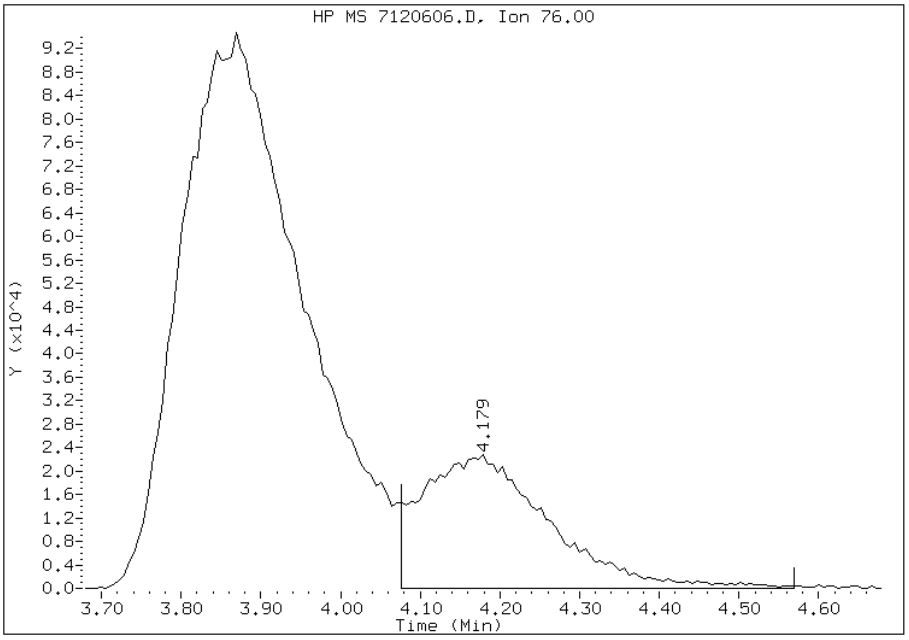
Manual Integration Results

RT: 4.18

Response: 253718

Amount: 191

Conc: 191



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:35
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120606.D
Inj. Date and Time: 06-DEC-2013 08:53
Instrument ID: hp7.i
Client ID: vstd40
Compound: 21 tert-Butyl Alcohol
CAS #: 75-65-0
Report Date: 12/09/2013

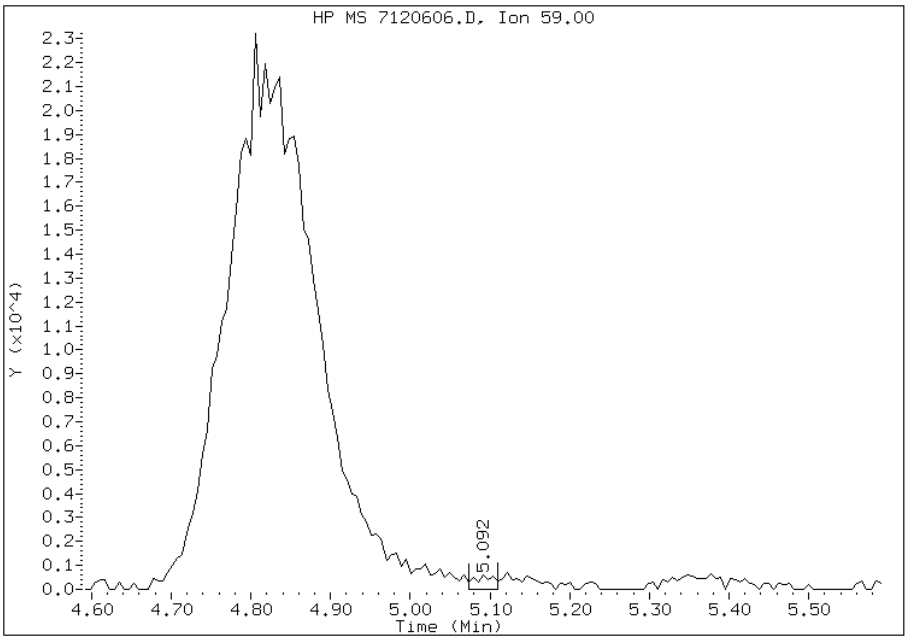
Processing Integration Results

RT: 5.09

Response: 1118

Amount: 0

Conc: 0



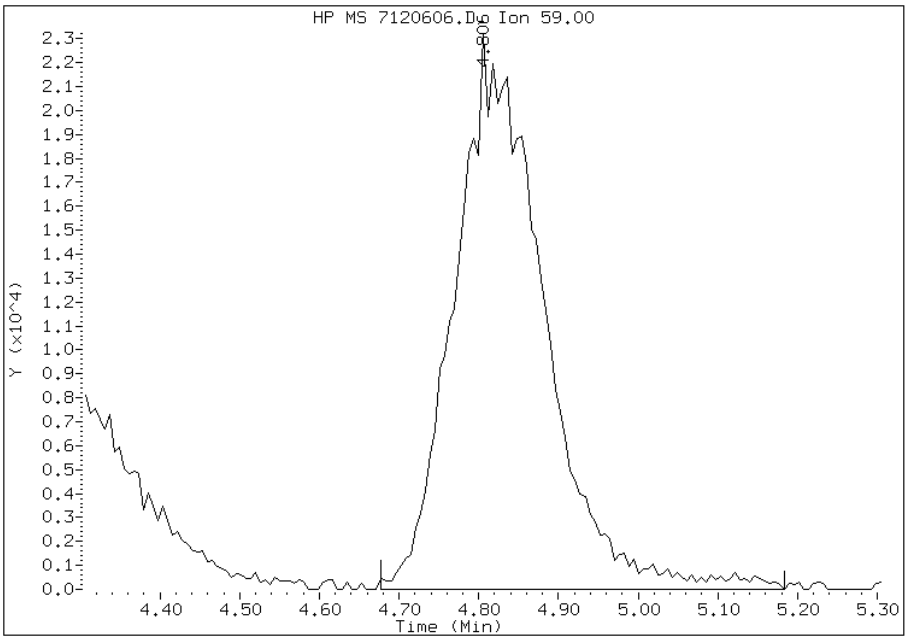
Manual Integration Results

RT: 4.81

Response: 180393

Amount: 1905

Conc: 1905



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 09:36
Manual Integration Reason: Peak Integrated Incorrectly

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\PITSVR06\D\chem\hp7.i\7120613d.b\7120607.D
Lab Smp Id: IC Client Smp ID: vstd59
Inj Date : 06-DEC-2013 09:23 MS Autotune Date: 29-AUG-2013 08:08
Operator : 034635 Inst ID: hp7.i
Smp Info : IC,vstd50
Misc Info : 7120613d.b,T8260bh2o.m,list1.sub
Comment :
Method : \\PITSVR06\D\chem\hp7.i\7120613d.b\T8260bh2o.m
Meth Date : 06-Dec-2013 16:16 journetp Quant Type: ISTD
Cal Date : 06-DEC-2013 11:22 Cal File: 7120609.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-088

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
*	46 Fluorobenzene (IS)	96	7.409	7.414	(1.000)	1228973	250.000	
*	69 Chlorobenzene-d5	119	10.469	10.468	(1.000)	324126	250.000	
*	92 1,4-Dichlorobenzene-d4	152	12.787	12.786	(1.000)	454149	250.000	
*	176 Dioxane-d8 (IS)	96	8.133	8.138	(1.000)	38168	5000.00	
*	177 TBA-d9 (IS)	65	4.702	4.688	(1.000)	350033	5000.00	
$	39 Dibromofluoromethane (Surr)	113	6.685	6.684	(0.902)	313080	250.000	239.0
$	43 1,2-Dichloroethane-d4	65	7.044	7.049	(0.951)	365285	250.000	241.0
$	59 Toluene-d8	98	9.039	9.038	(0.863)	1131376	250.000	225.2
$	80 Bromofluorobenzene (Surr)	95	11.631	11.630	(1.111)	460547	250.000	235.7
	1 Dichlorodifluoromethane	85	1.970	1.987	(0.266)	521816	250.000	243.2(QM)
	2 Chloromethane	50	2.025	2.048	(0.273)	1033054	250.000	239.0
	3 Vinyl Chloride	62	2.141	2.152	(0.289)	554567	250.000	242.1
	4 Bromomethane	94	2.500	2.523	(0.337)	139543	250.000	274.2
	5 Chloroethane	64	2.615	2.663	(0.353)	137112	250.000	220.4(Q)
	7 Dichlorofluoromethane	67	2.883	2.936	(0.389)	337285	250.000	269.7(M)
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.692	3.739	(0.498)	411041	250.000	243.7(QM)
	166 Trichlorofluoromethane	101	2.944	2.924	(0.397)	314951	250.000	301.3
	12 1,1-Dichloroethene	96	3.582	3.599	(0.484)	408467	250.000	233.5
	15 Carbon Disulfide	76	3.862	3.891	(0.521)	1305395	250.000	251.3(M)
	13 Acetone	43	3.777	3.788	(0.510)	110776	250.000	253.8
	18 Methylene Chloride	84	4.379	4.378	(0.591)	413496	250.000	224.8
	19 trans-1,2-Dichloroethene	96	4.781	4.798	(0.645)	426987	250.000	234.7(M)
	20 Methyl tert-butyl ether	73	4.860	4.859	(0.656)	847386	250.000	239.9
	24 1,1-Dichloroethane	63	5.359	5.382	(0.723)	823295	250.000	231.7
	27 2,2-Dichloropropane	77	6.101	6.106	(0.823)	551645	250.000	250.6
	28 cis-1,2-dichloroethene	96	6.107	6.106	(0.824)	460190	250.000	234.4
M	29 1,2-Dichloroethene (total)	96				887177	500.000	469.1
	30 Bromochloromethane	128	6.387	6.398	(0.862)	198935	250.000	232.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
31 2-Butanone	43	6.180	6.185	(0.834)	146267	250.000	262.7
37 Chloroform	83	6.503	6.507	(0.878)	654053	250.000	226.3
38 1,1,1-Trichloroethane	97	6.685	6.690	(0.902)	555028	250.000	238.7
40 1,1-Dichloropropene	75	6.874	6.878	(0.928)	468448	250.000	235.9
41 Carbon Tetrachloride	117	6.868	6.872	(0.927)	449776	250.000	241.4
42 Benzene	78	7.099	7.104	(0.958)	1363647	250.000	222.3
45 1,2-Dichloroethane	62	7.129	7.134	(0.962)	411704	250.000	230.6
47 Trichloroethene	130	7.798	7.797	(1.053)	394339	250.000	224.0
49 1,2-Dichloropropane	63	8.029	8.034	(1.084)	372244	250.000	237.7
50 Dibromomethane	93	8.145	8.150	(1.099)	189569	250.000	240.9
53 Bromodichloromethane	83	8.315	8.320	(1.122)	461172	250.000	244.5
57 cis-1,3-Dichloropropene	75	8.772	8.777	(1.184)	558015	250.000	255.4
58 4-Methyl-2-Pentanone	43	8.936	8.941	(0.854)	375560	250.000	259.6
60 Toluene	91	9.106	9.105	(0.870)	1301180	250.000	211.6
61 trans-1,3-Dichloropropene	75	9.325	9.330	(0.891)	426111	250.000	242.8
63 1,3-Dichloropropane	76	9.672	9.671	(0.924)	428042	250.000	254.9
64 1,1,2-Trichloroethane	97	9.508	9.507	(0.908)	269392	250.000	234.5
65 Tetrachloroethene	164	9.648	9.653	(0.922)	300576	250.000	231.7
66 2-Hexanone	43	9.763	9.762	(0.933)	261513	250.000	265.3
67 Dibromochloromethane	129	9.897	9.902	(0.945)	311252	250.000	240.4
68 1,2-Dibromoethane	107	10.013	10.011	(0.956)	290269	250.000	242.9
70 Chlorobenzene	112	10.499	10.498	(1.003)	871880	250.000	231.7
71 1,1,1,2-Tetrachloroethane	131	10.578	10.577	(1.010)	324291	250.000	233.2
72 Ethylbenzene	106	10.603	10.608	(1.013)	499916	250.000	221.9
73 m,p-XYLENE	106	10.718	10.723	(1.024)	638768	250.000	224.8
74 Xylene-o	106	11.114	11.113	(1.062)	658982	250.000	216.3
76 Styrene	104	11.126	11.131	(1.063)	976031	250.000	259.5
77 Bromoform	173	11.315	11.313	(1.081)	202232	250.000	263.2
78 Isopropylbenzene	105	11.479	11.478	(1.096)	1548567	250.000	255.6
79 Bromobenzene	156	11.789	11.788	(0.922)	412123	250.000	244.3
81 n-Propylbenzene	120	12.063	12.062	(0.943)	652769	250.000	236.3
82 2-Chlorotoluene	126	11.978	11.976	(0.937)	385145	250.000	235.3
83 1,1,2,2-Tetrachloroethane	83	11.771	11.770	(1.124)	326833	250.000	227.7
84 1,2,3-Trichloropropane	110	11.819	11.818	(0.924)	87409	250.000	254.2
85 4-Chlorotoluene	126	12.087	12.086	(0.945)	368322	250.000	230.3
86 1,3,5-Trimethylbenzene	105	12.063	12.062	(0.943)	1210998	250.000	215.7
87 tert-Butylbenzene	119	12.385	12.390	(0.969)	1140237	250.000	230.7
88 1,2,4-Trimethylbenzene	105	12.434	12.439	(0.972)	1220924	250.000	259.8
89 sec-Butylbenzene	105	12.604	12.609	(0.986)	1647343	250.000	211.8
90 4-Isopropyltoluene	119	12.750	12.755	(0.997)	1256902	250.000	211.1
91 1,3-Dichlorobenzene	146	12.726	12.725	(0.995)	740004	250.000	231.6
94 n-Butylbenzene	91	13.164	13.163	(1.029)	1330162	250.000	211.2
93 1,4-Dichlorobenzene	146	12.811	12.816	(1.002)	667512	250.000	240.7
95 1,2-Dichlorobenzene	146	13.188	13.187	(1.031)	617661	250.000	229.3
96 1,2-Dibromo-3-chloropropane	157	13.967	13.972	(1.092)	48112	250.000	252.0
97 1,2,4-Trichlorobenzene	180	14.800	14.799	(1.157)	267877	250.000	264.8
98 Hexachlorobutadiene	225	14.971	14.969	(1.171)	240109	250.000	227.0
99 Naphthalene	128	15.050	15.055	(1.177)	307249	250.000	287.5
100 1,2,3-Trichlorobenzene	180	15.305	15.304	(1.197)	141499	250.000	282.5
156 Methyl Acetate	43	4.288	4.299	(0.579)	1400199	1250.00	1282
157 Cyclohexane	56	6.740	6.751	(0.910)	894755	250.000	239.8
158 Methyl Cyclohexane	83	7.993	7.998	(1.079)	739267	250.000	248.8
32 Vinyl Acetate	43	5.499	5.498	(0.742)	370569	250.000	265.9
52 1,4-Dioxane	88	8.188	8.192	(1.007)	42365	5000.00	4720

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	21 tert-Butyl Alcohol	59	4.817	4.786	(1.025)	218449	2500.00	2240(Q)
	16 3-Chloro-1-propene	76	4.154	4.177	(0.561)	330567	250.000	243.1(M)
	11 Acrolein	56	3.516	3.545	(0.475)	155577	1000.00	1100(M)
	22 Acrylonitrile	53	4.787	4.810	(0.646)	1319024	2500.00	2395(M)
	8 Ethyl Ether	59	3.333	3.368	(0.450)	317910	250.000	235.7
	62 Ethyl methacrylate	69	9.423	9.421	(0.900)	367128	250.000	245.9
	23 Hexane	57	5.176	5.187	(0.699)	745401	250.000	236.8
	14 Iodomethane	142	3.801	3.806	(0.513)	628372	250.000	233.9
	44 Isobutanol	41	7.409	7.414	(1.000)	403221	6250.00	6411
	155 N-Heptane	41	7.993	7.998	(1.079)	629810	250.000	238.9
	35 Tetrahydrofuran	42	6.740	6.745	(0.910)	243590	500.000	479.1
	164 trans-1,4-Dichloro-2-butene	53	11.832	11.830	(0.925)	92291	250.000	271.8
	169 Butadiene	39	2.202	2.225	(0.297)	640883	250.000	269.6
M	75 Xylenes (total)	106				1297750	500.000	441.2

QC Flag Legend

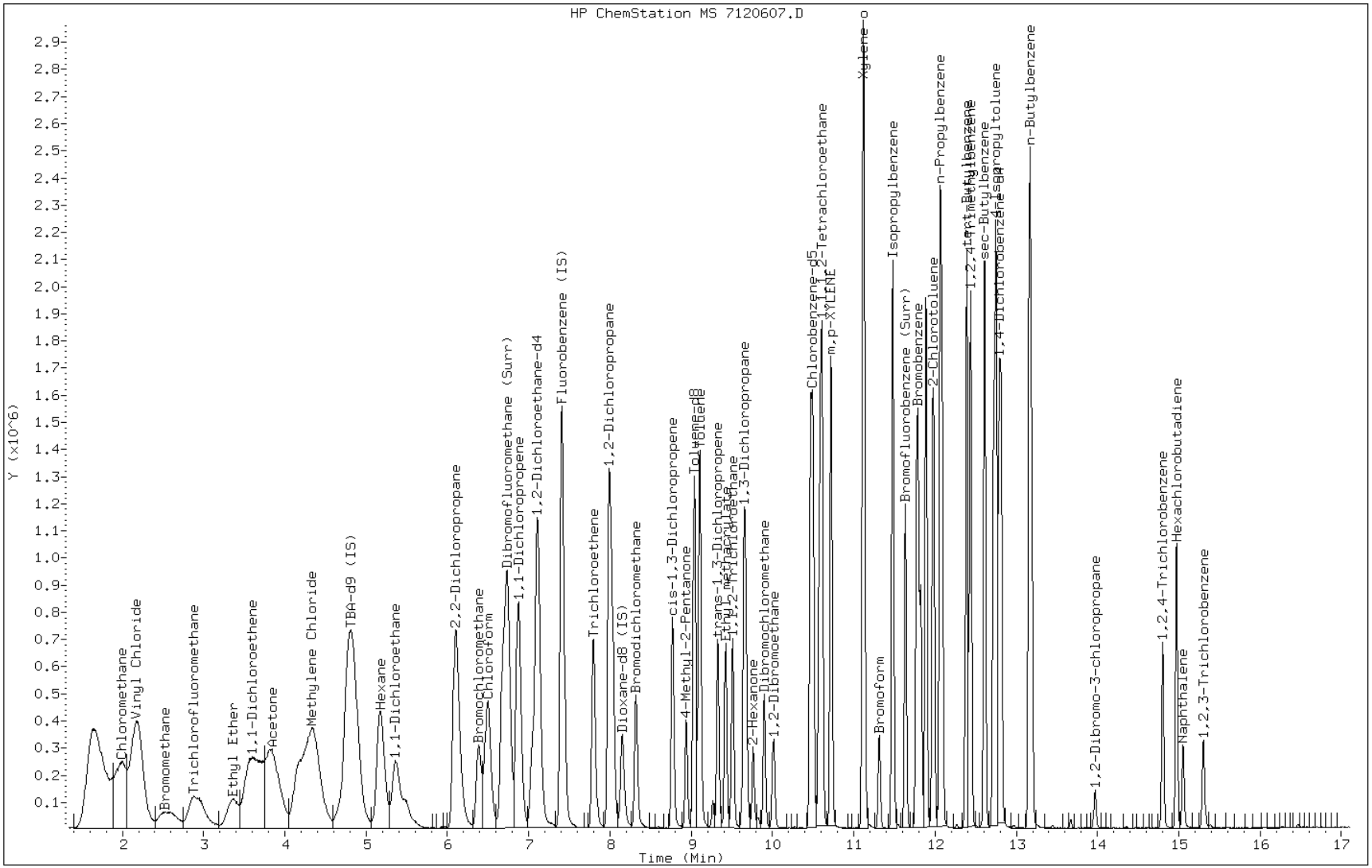
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 7120607.D

Date: 06-DEC-2013 09:23

Client ID: vstd59 Instrument: hp7.i

Sample Info: IC,vstd50 Operator: 034635



Manual Integration Report

Data File: 7120607.D
Inj. Date and Time: 06-DEC-2013 09:23
Instrument ID: hp7.i
Client ID: vstd59
Compound: 1 Dichlorodifluoromethane
CAS #: 75-71-8
Report Date: 12/09/2013

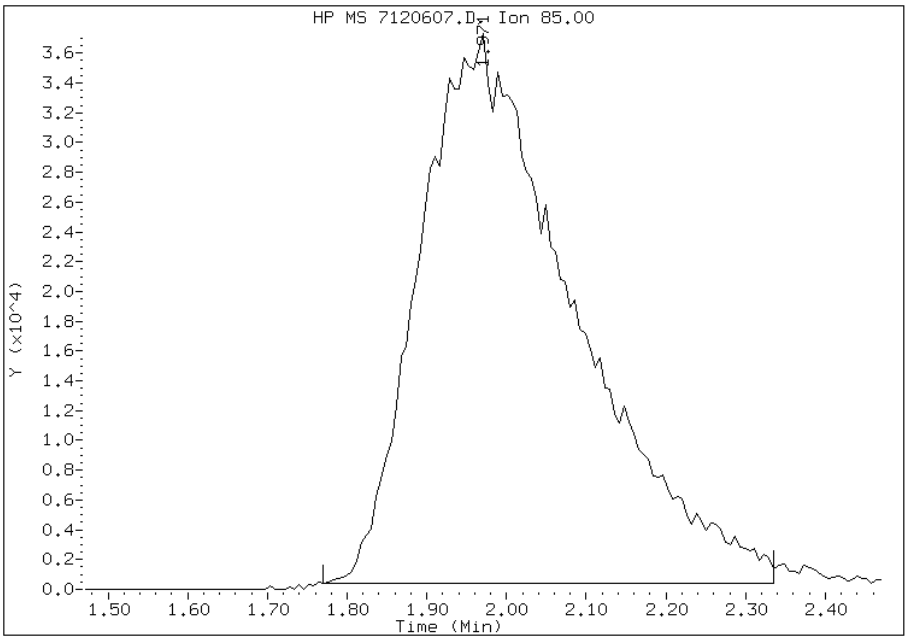
Processing Integration Results

RT: 1.97

Response: 499298

Amount: 236

Conc: 236



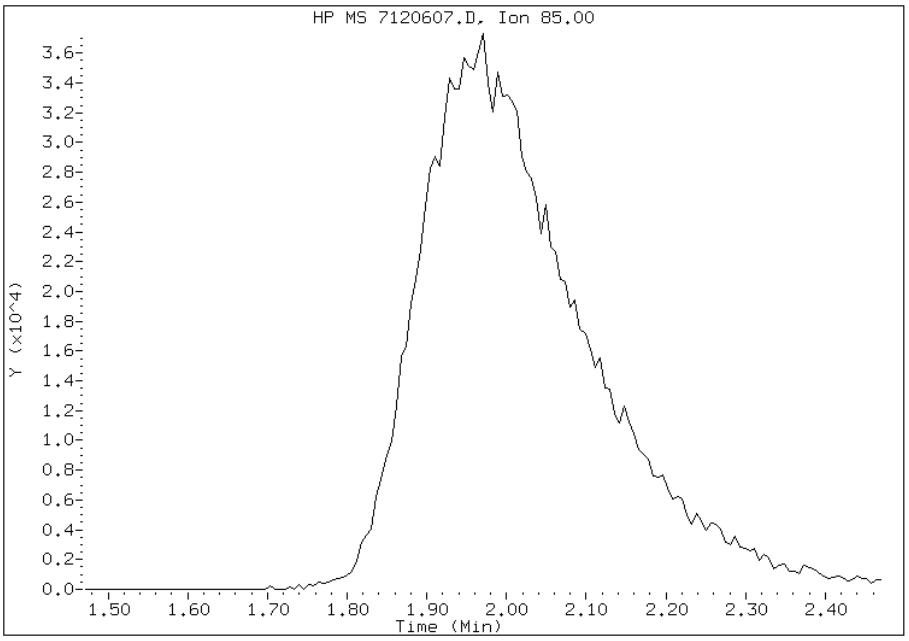
Manual Integration Results

RT: 1.97

Response: 521816

Amount: 243

Conc: 243



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 10:12
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120607.D
Inj. Date and Time: 06-DEC-2013 09:23
Instrument ID: hp7.i
Client ID: vstd59
Compound: 7 Dichlorofluoromethane
CAS #: 75-43-4
Report Date: 12/09/2013

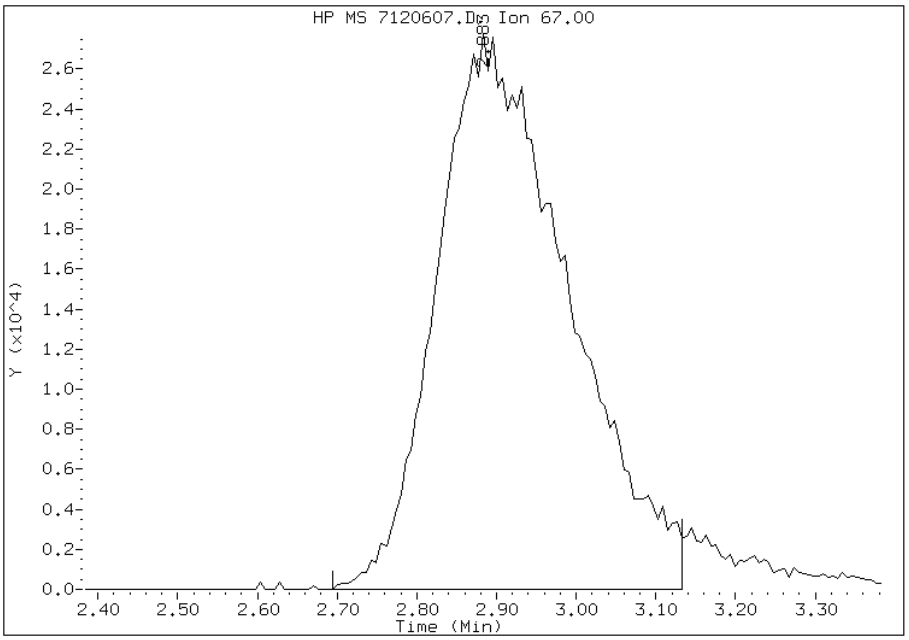
Processing Integration Results

RT: 2.88

Response: 318159

Amount: 226

Conc: 226



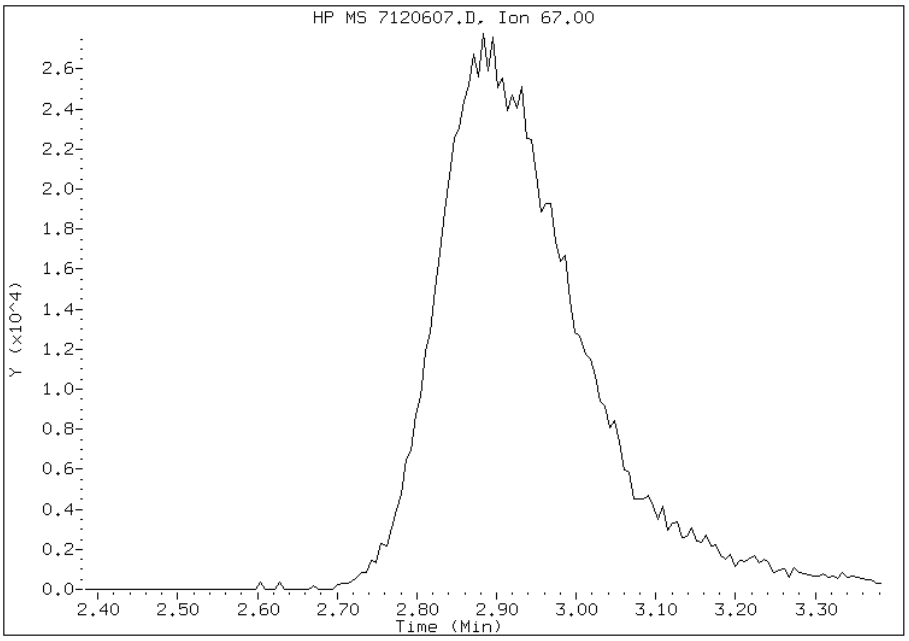
Manual Integration Results

RT: 2.88

Response: 337285

Amount: 270

Conc: 270



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 10:12
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120607.D
Inj. Date and Time: 06-DEC-2013 09:23
Instrument ID: hp7.i
Client ID: vstd59
Compound: 11 Acrolein
CAS #: 107-02-8
Report Date: 12/09/2013

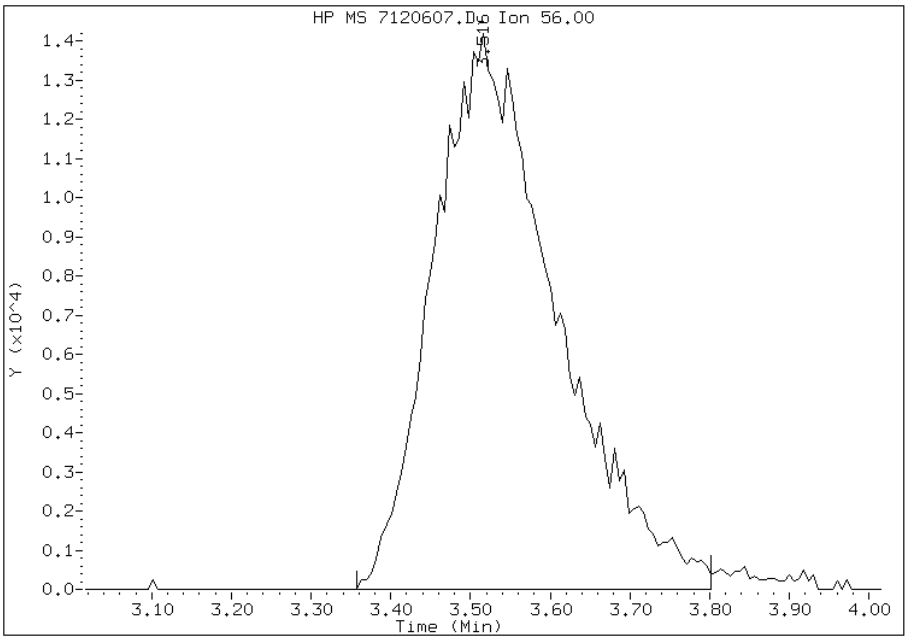
Processing Integration Results

RT: 3.52

Response: 152929

Amount: 1109

Conc: 1109



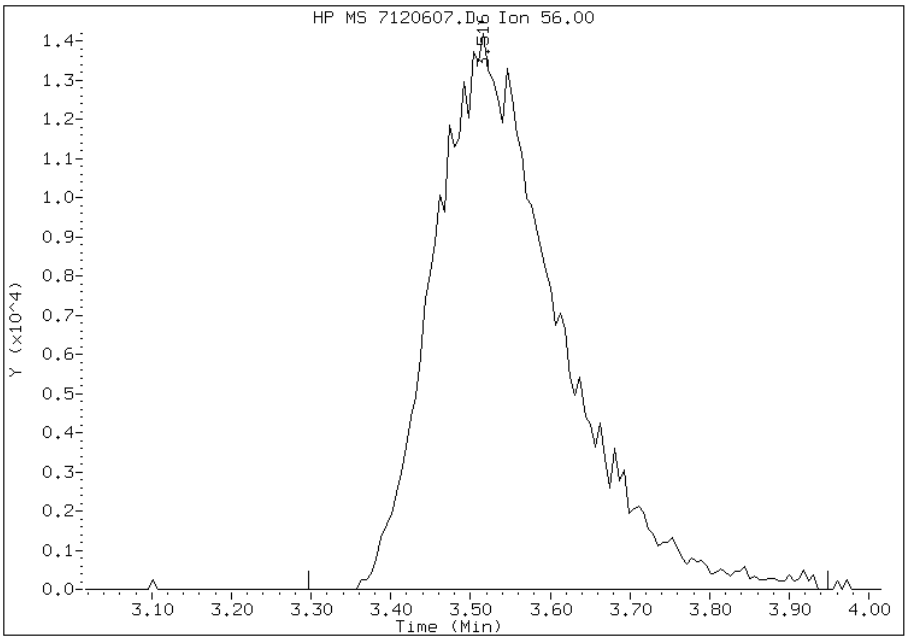
Manual Integration Results

RT: 3.52

Response: 155577

Amount: 1100

Conc: 1100



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 10:14
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120607.D
Inj. Date and Time: 06-DEC-2013 09:23
Instrument ID: hp7.i
Client ID: vstd59
Compound: 10 1,1,2-trichloro-1,2,2-trifluoro
CAS #: 76-13-1
Report Date: 12/09/2013

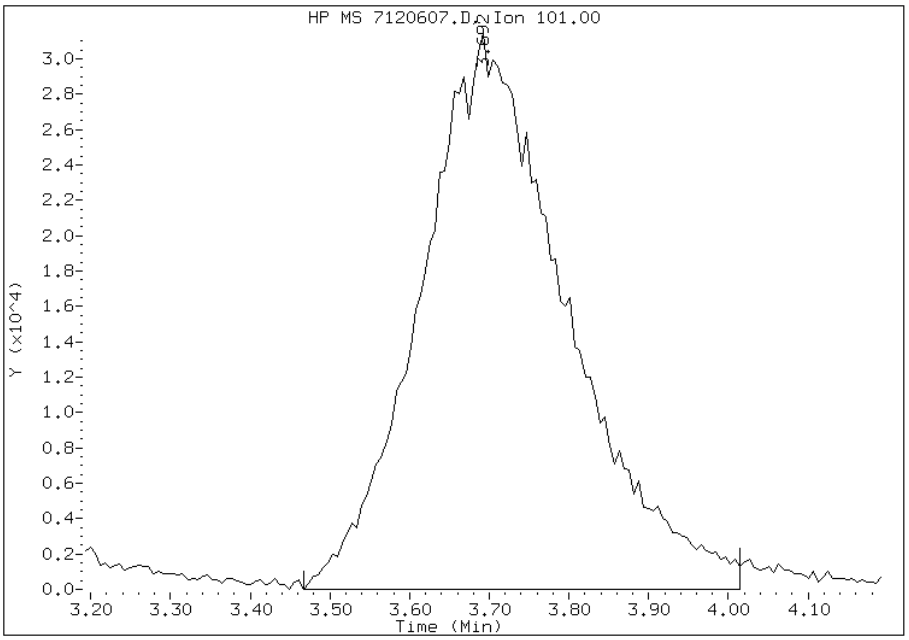
Processing Integration Results

RT: 3.69

Response: 400639

Amount: 231

Conc: 231



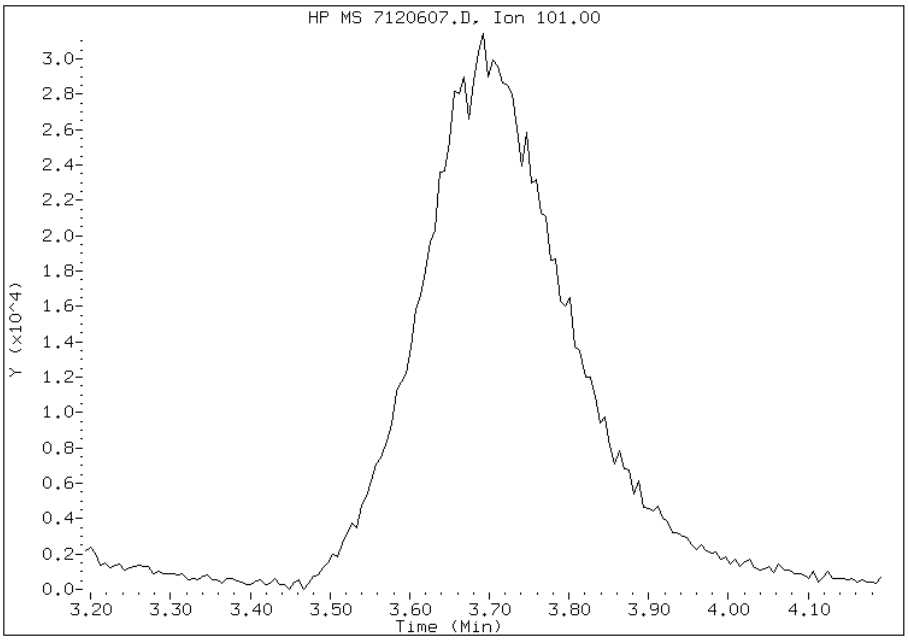
Manual Integration Results

RT: 3.69

Response: 411041

Amount: 244

Conc: 244



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 10:12
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120607.D
Inj. Date and Time: 06-DEC-2013 09:23
Instrument ID: hp7.i
Client ID: vstd59
Compound: 15 Carbon Disulfide
CAS #: 75-15-0
Report Date: 12/09/2013

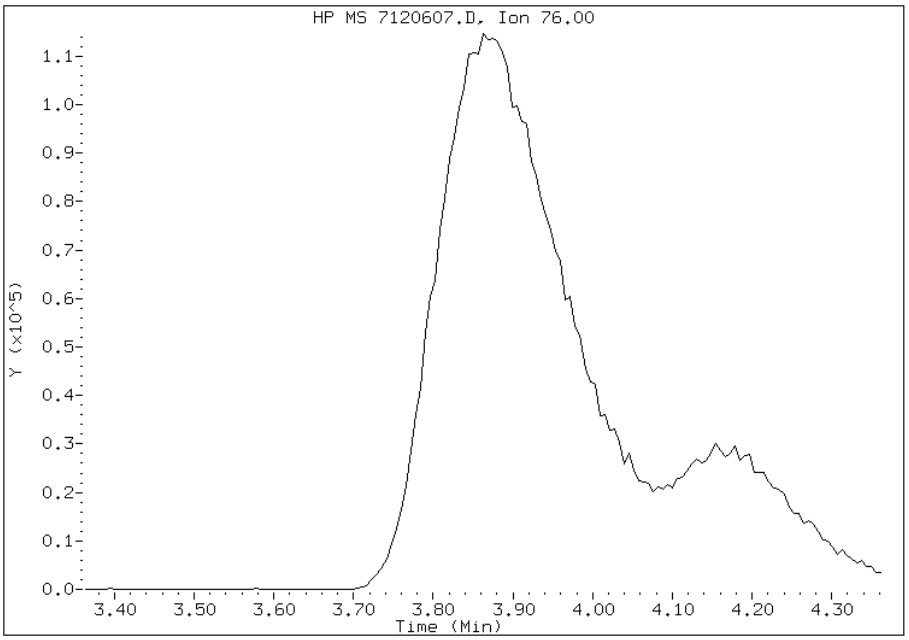
Processing Integration Results

RT: 3.86

Response: 1615381

Amount: 295

Conc: 295



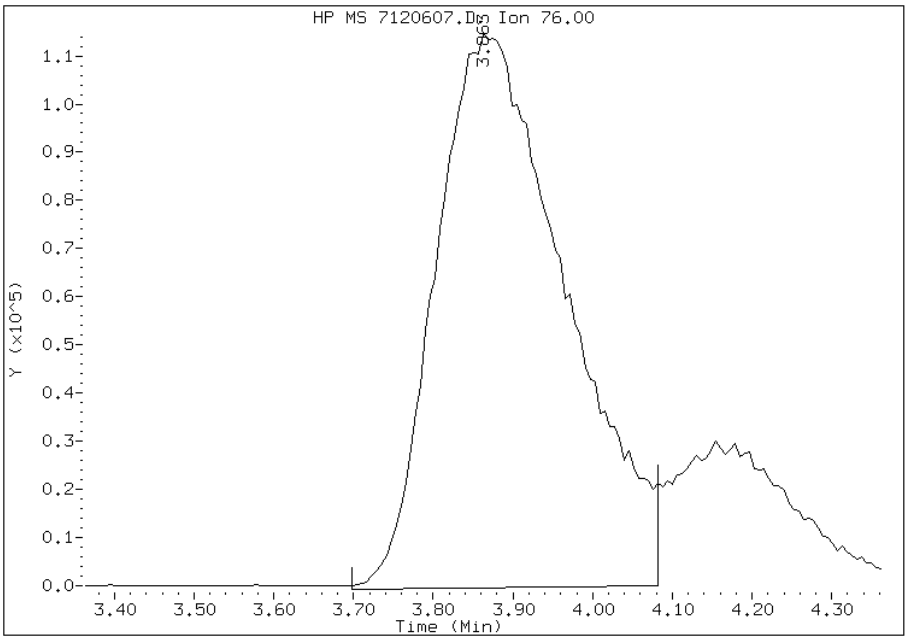
Manual Integration Results

RT: 3.86

Response: 1305395

Amount: 251

Conc: 251



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 10:13
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120607.D
Inj. Date and Time: 06-DEC-2013 09:23
Instrument ID: hp7.i
Client ID: vstd59
Compound: 16 3-Chloro-1-propene
CAS #: 107-05-1
Report Date: 12/09/2013

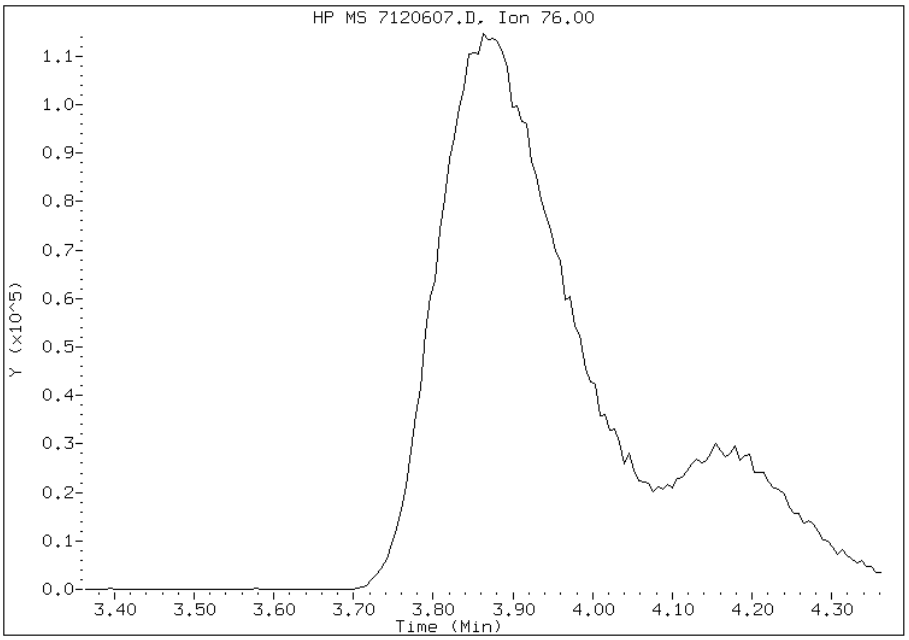
Processing Integration Results

RT: 3.86

Response: 1615381

Amount: 1180

Conc: 1180



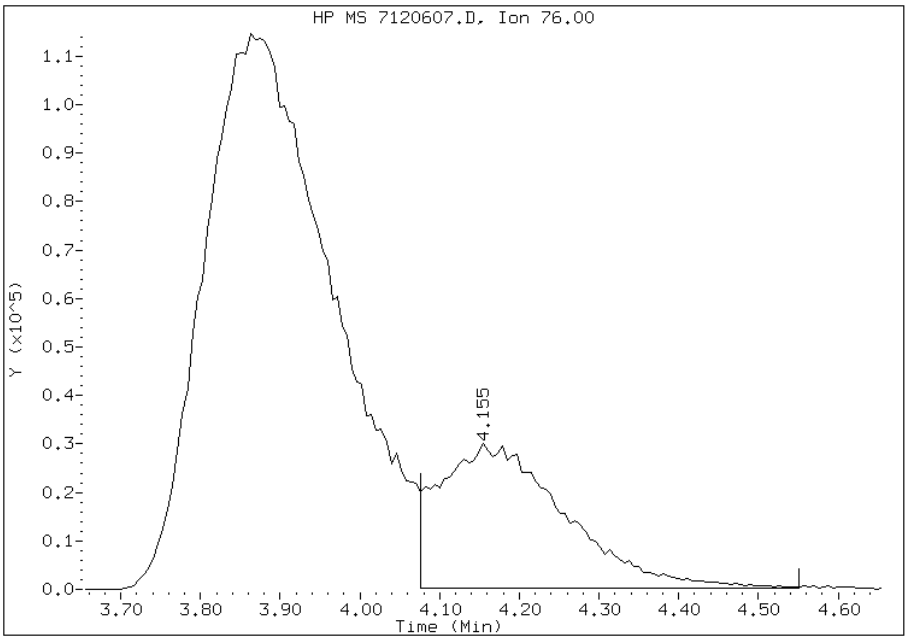
Manual Integration Results

RT: 4.15

Response: 330567

Amount: 243

Conc: 243



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 10:14
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120607.D
Inj. Date and Time: 06-DEC-2013 09:23
Instrument ID: hp7.i
Client ID: vstd59
Compound: 19 trans-1,2-Dichloroethene
CAS #: 156-60-5
Report Date: 12/09/2013

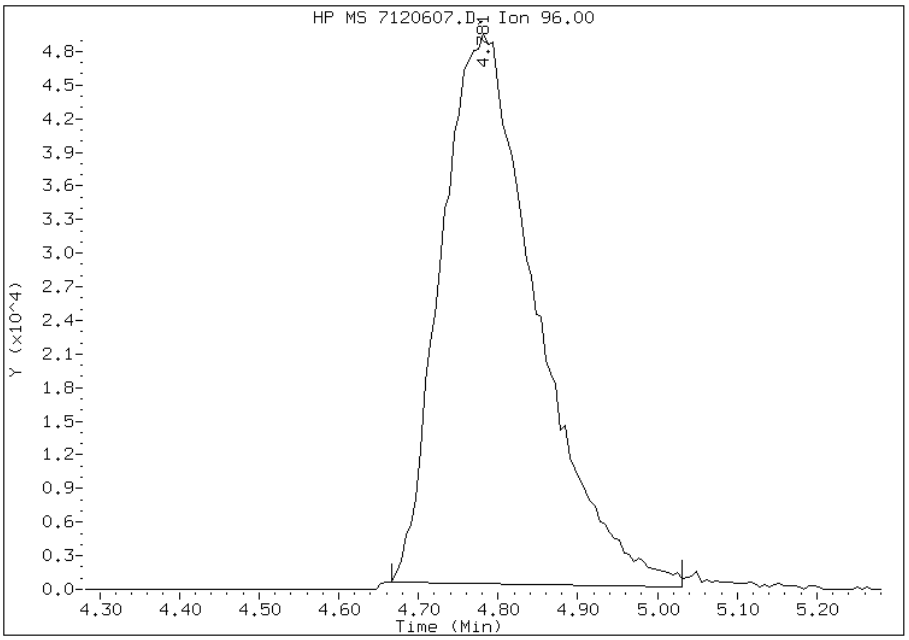
Processing Integration Results

RT: 4.78

Response: 411352

Amount: 222

Conc: 222



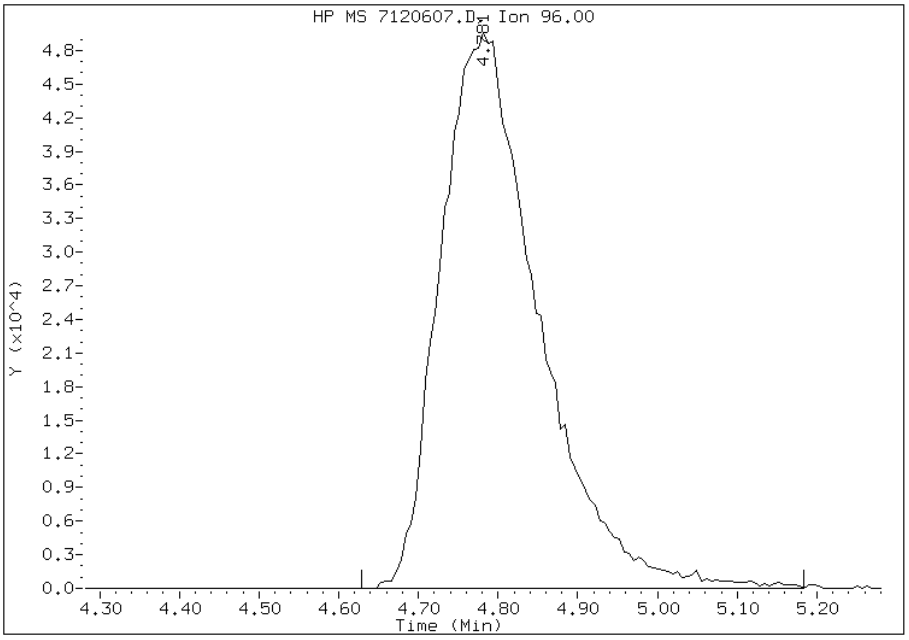
Manual Integration Results

RT: 4.78

Response: 426987

Amount: 235

Conc: 235



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 10:13
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120607.D
Inj. Date and Time: 06-DEC-2013 09:23
Instrument ID: hp7.i
Client ID: vstd59
Compound: 22 Acrylonitrile
CAS #: 107-13-1
Report Date: 12/09/2013

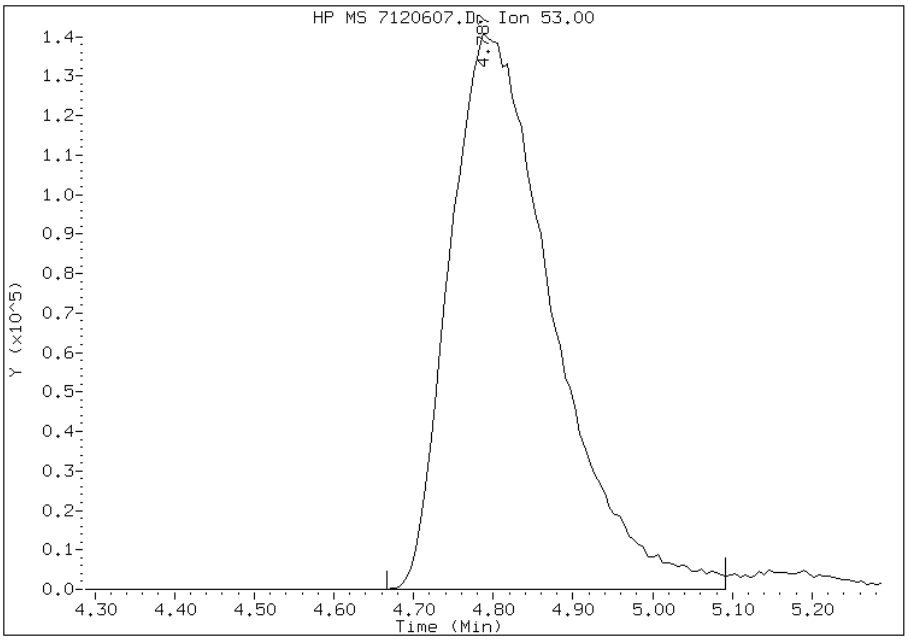
Processing Integration Results

RT: 4.79

Response: 1270768

Amount: 2422

Conc: 2422



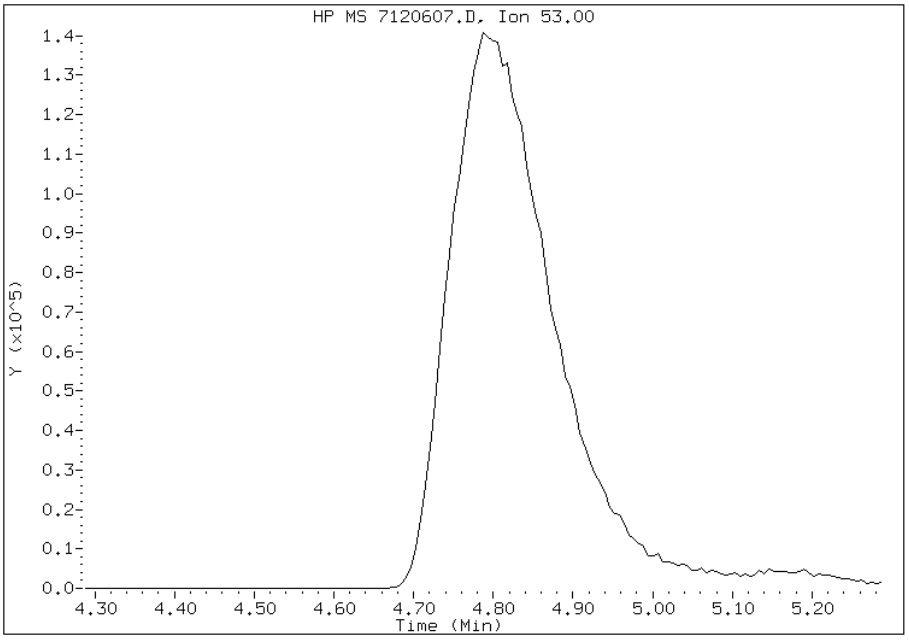
Manual Integration Results

RT: 4.79

Response: 1319024

Amount: 2395

Conc: 2395



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 10:15
Manual Integration Reason: Peak Integrated Incorrectly

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\PITSVR06\D\chem\hp7.i\7120613d.b\7120608.D
Lab Smp Id: IC Client Smp ID: vstd125
Inj Date : 06-DEC-2013 10:27 MS Autotune Date: 29-AUG-2013 08:08
Operator : 034635 Inst ID: hp7.i
Smp Info : IC,vstd125
Misc Info : 7120613d.b,T8260bh2o.m,list1.sub
Comment :
Method : \\PITSVR06\D\chem\hp7.i\7120613d.b\T8260bh2o.m
Meth Date : 06-Dec-2013 16:16 journetp Quant Type: ISTD
Cal Date : 06-DEC-2013 11:22 Cal File: 7120609.D
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-088

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
*	46 Fluorobenzene (IS)	96	7.407	7.414	(1.000)	1598323	250.000	
*	69 Chlorobenzene-d5	119	10.467	10.468	(1.000)	420231	250.000	
*	92 1,4-Dichlorobenzene-d4	152	12.791	12.786	(1.000)	568229	250.000	(Q)
*	176 Dioxane-d8 (IS)	96	8.137	8.138	(1.000)	84727	5000.00	
*	177 TBA-d9 (IS)	65	4.761	4.688	(1.000)	759358	5000.00	
$	39 Dibromofluoromethane (Surr)	113	6.677	6.684	(0.901)	1042993	625.000	612.2
$	43 1,2-Dichloroethane-d4	65	7.042	7.049	(0.951)	1356329	625.000	688.1
$	59 Toluene-d8	98	9.038	9.038	(0.863)	3204461	625.000	492.0
$	80 Bromofluorobenzene (Surr)	95	11.635	11.630	(1.112)	1532364	625.000	604.9
	1 Dichlorodifluoromethane	85	1.981	1.987	(0.267)	1642130	625.000	588.4
	2 Chloromethane	50	2.023	2.048	(0.273)	3203862	625.000	570.0
	3 Vinyl Chloride	62	2.212	2.152	(0.299)	1516042	625.000	508.8(M)
	4 Bromomethane	94	2.522	2.523	(0.341)	402608	625.000	606.4
	5 Chloroethane	64	2.638	2.663	(0.356)	460666	625.000	569.3(M)
	7 Dichlorofluoromethane	67	2.936	2.936	(0.396)	983091	625.000	613.3
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.721	3.739	(0.502)	1242280	625.000	566.4
	166 Trichlorofluoromethane	101	3.027	2.924	(0.409)	873614	625.000	642.6(QM)
	12 1,1-Dichloroethene	96	3.660	3.599	(0.494)	1688899	625.000	742.3
	15 Carbon Disulfide	76	3.994	3.891	(0.539)	3133102	625.000	463.8(M)
	13 Acetone	43	3.800	3.788	(0.513)	542837	625.000	624.8
	18 Methylene Chloride	84	4.366	4.378	(0.589)	1378349	625.000	576.0
	19 trans-1,2-Dichloroethene	96	4.749	4.798	(0.641)	1326048	625.000	560.4
	20 Methyl tert-butyl ether	73	4.858	4.859	(0.656)	3171653	625.000	690.3
	24 1,1-Dichloroethane	63	5.345	5.382	(0.722)	2685307	625.000	581.1
	27 2,2-Dichloropropane	77	6.081	6.106	(0.821)	1478107	625.000	516.3
	28 cis-1,2-dichloroethene	96	6.093	6.106	(0.823)	1496676	625.000	586.2
M	29 1,2-Dichloroethene (total)	96				2822724	1250.00	1147
	30 Bromochloromethane	128	6.373	6.398	(0.860)	704734	625.000	634.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
31 2-Butanone	43	6.178	6.185	(0.834)	897362	625.000	624.8
37 Chloroform	83	6.495	6.507	(0.877)	2085365	625.000	554.8
38 1,1,1-Trichloroethane	97	6.677	6.690	(0.901)	1734014	625.000	573.4
40 1,1-Dichloropropene	75	6.866	6.878	(0.927)	1548636	625.000	599.7
41 Carbon Tetrachloride	117	6.860	6.872	(0.926)	1493021	625.000	616.3
42 Benzene	78	7.097	7.104	(0.958)	5086560	625.000	637.7
45 1,2-Dichloroethane	62	7.127	7.134	(0.962)	1530098	625.000	658.8
47 Trichloroethene	130	7.797	7.797	(1.053)	1692097	625.000	739.1
49 1,2-Dichloropropane	63	8.028	8.034	(1.084)	1301818	625.000	639.2
50 Dibromomethane	93	8.149	8.150	(1.100)	755202	625.000	737.8
53 Bromodichloromethane	83	8.314	8.320	(1.122)	1647693	625.000	671.8
57 cis-1,3-Dichloropropene	75	8.770	8.777	(1.184)	1959682	625.000	689.6
58 4-Methyl-2-Pentanone	43	8.940	8.941	(0.854)	1693828	625.000	903.2
60 Toluene	91	9.105	9.105	(0.870)	4368940	625.000	664.9
61 trans-1,3-Dichloropropene	75	9.324	9.330	(0.891)	1543463	625.000	678.4
63 1,3-Dichloropropane	76	9.676	9.671	(0.924)	1509714	625.000	624.8
64 1,1,2-Trichloroethane	97	9.506	9.507	(0.908)	1030197	625.000	691.7
65 Tetrachloroethene	164	9.646	9.653	(0.922)	975966	625.000	580.4
66 2-Hexanone	43	9.762	9.762	(0.933)	1173433	625.000	624.5
67 Dibromochloromethane	129	9.901	9.902	(0.946)	1210660	625.000	721.3
68 1,2-Dibromoethane	107	10.011	10.011	(0.956)	1153083	625.000	744.1
70 Chlorobenzene	112	10.498	10.498	(1.003)	2999407	625.000	614.9
71 1,1,1,2-Tetrachloroethane	131	10.577	10.577	(1.010)	1067307	625.000	592.0
72 Ethylbenzene	106	10.607	10.608	(1.013)	1444593	625.000	494.6(Q)
73 m,p-XYLENE	106	10.723	10.723	(1.024)	1894487	625.000	514.4
74 Xylene-o	106	11.112	11.113	(1.062)	1720248	625.000	435.6
76 Styrene	104	11.136	11.131	(1.064)	2371507	625.000	616.4
77 Bromoform	173	11.313	11.313	(1.081)	925764	625.000	929.3
78 Isopropylbenzene	105	11.483	11.478	(1.097)	3725260	625.000	599.8
79 Bromobenzene	156	11.793	11.788	(0.922)	1197795	625.000	567.5
81 n-Propylbenzene	120	12.061	12.062	(0.943)	1643650	625.000	475.6
82 2-Chlorotoluene	126	11.982	11.976	(0.937)	1181807	625.000	577.0(Q)
83 1,1,2,2-Tetrachloroethane	83	11.769	11.770	(1.124)	1230611	625.000	661.4
84 1,2,3-Trichloropropane	110	11.818	11.818	(0.924)	401372	625.000	933.0(Q)
85 4-Chlorotoluene	126	12.092	12.086	(0.945)	1075966	625.000	537.7(Q)
86 1,3,5-Trimethylbenzene	105	12.061	12.062	(0.943)	2845397	625.000	405.0
87 tert-Butylbenzene	119	12.390	12.390	(0.969)	2963234	625.000	479.1
88 1,2,4-Trimethylbenzene	105	12.438	12.439	(0.972)	3061726	625.000	608.0
89 sec-Butylbenzene	105	12.609	12.609	(0.986)	3800181	625.000	390.5
90 4-Isopropyltoluene	119	12.755	12.755	(0.997)	2901211	625.000	389.4
91 1,3-Dichlorobenzene	146	12.724	12.725	(0.995)	2014284	625.000	503.8
94 n-Butylbenzene	91	13.162	13.163	(1.029)	2908341	625.000	369.1
93 1,4-Dichlorobenzene	146	12.815	12.816	(1.002)	1995197	625.000	575.0
95 1,2-Dichlorobenzene	146	13.193	13.187	(1.031)	1824538	625.000	541.3
96 1,2-Dibromo-3-chloropropane	157	13.965	13.972	(1.092)	363811	625.000	625.0
97 1,2,4-Trichlorobenzene	180	14.799	14.799	(1.157)	1370645	625.000	1083
98 Hexachlorobutadiene	225	14.969	14.969	(1.170)	802340	625.000	606.4
99 Naphthalene	128	15.048	15.055	(1.176)	2180646	625.000	1631
100 1,2,3-Trichlorobenzene	180	15.304	15.304	(1.196)	982382	625.000	1568
156 Methyl Acetate	43	4.286	4.299	(0.579)	6728909	3125.00	3124
157 Cyclohexane	56	6.732	6.751	(0.909)	2664865	625.000	549.3
158 Methyl Cyclohexane	83	7.985	7.998	(1.078)	2087147	625.000	540.2
32 Vinyl Acetate	43	5.479	5.498	(0.740)	1896597	625.000	1046
52 1,4-Dioxane	88	8.186	8.192	(1.006)	273991	12500.0	13750

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	21 tert-Butyl Alcohol	59	4.864	4.786	(1.022)	1390057	6250.00	6570(Q)
	16 3-Chloro-1-propene	76	4.116	4.177	(0.556)	1693007	625.000	957.2(QM)
	11 Acrolein	56	3.490	3.545	(0.471)	289573	1125.00	1574
	22 Acrylonitrile	53	4.797	4.810	(0.648)	5917080	6250.00	8261
	8 Ethyl Ether	59	3.325	3.368	(0.449)	1211471	625.000	690.7
	62 Ethyl methacrylate	69	9.427	9.421	(0.901)	1429930	625.000	738.6
	23 Hexane	57	5.156	5.187	(0.696)	2460572	625.000	601.1
	14 Iodomethane	142	3.940	3.806	(0.532)	2001024	625.000	572.7
	44 Isobutanol	41	7.401	7.414	(0.999)	1236089	15625.0	15110
	155 N-Heptane	41	7.991	7.998	(1.079)	1841984	625.000	537.3
	35 Tetrahydrofuran	42	6.732	6.745	(0.909)	722610	1250.00	1093
	164 trans-1,4-Dichloro-2-butene	53	11.836	11.830	(0.925)	455272	625.000	1072
	169 Butadiene	39	2.212	2.225	(0.299)	1854797	625.000	607.1
M	75 Xylenes (total)	106				3614735	1250.00	950.0

QC Flag Legend

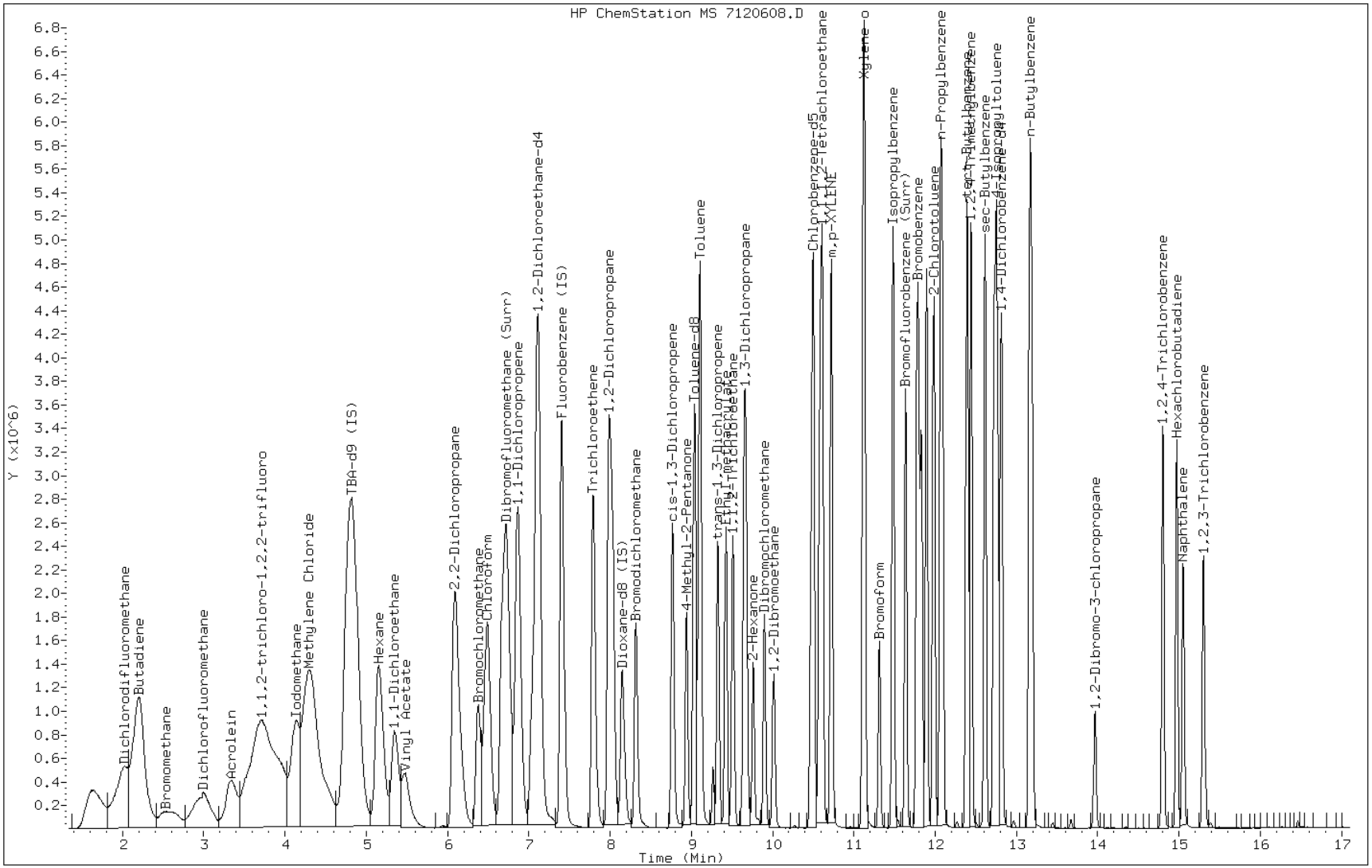
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 7120608.D

Date: 06-DEC-2013 10:27

Client ID: vstd125 Instrument: hp7.i

Sample Info: IC,vstd125 Operator: 034635



Manual Integration Report

Data File: 7120608.D
Inj. Date and Time: 06-DEC-2013 10:27
Instrument ID: hp7.i
Client ID: vstd125
Compound: 3 Vinyl Chloride
CAS #: 75-01-4
Report Date: 12/09/2013

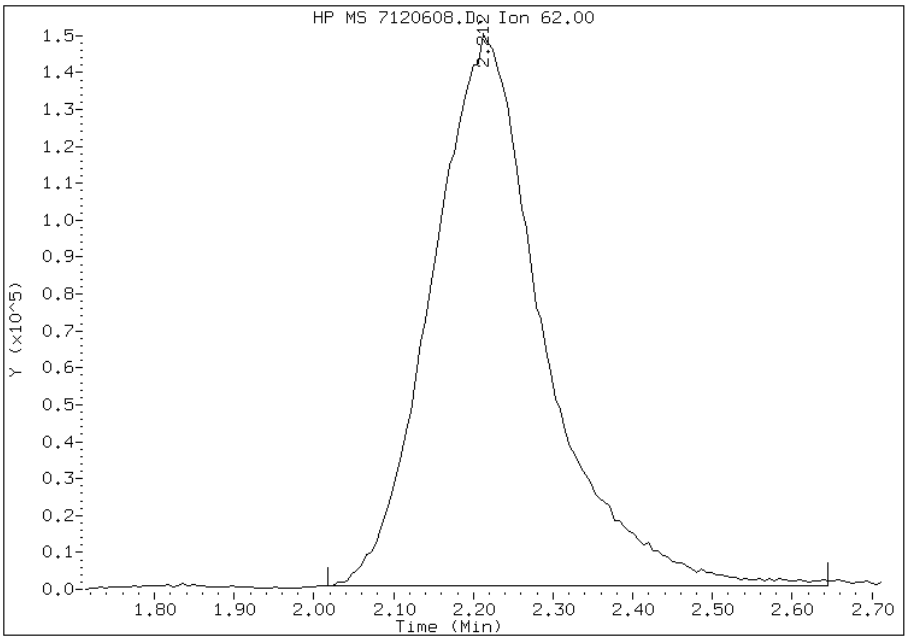
Processing Integration Results

RT: 2.21

Response: 1458968

Amount: 472

Conc: 472



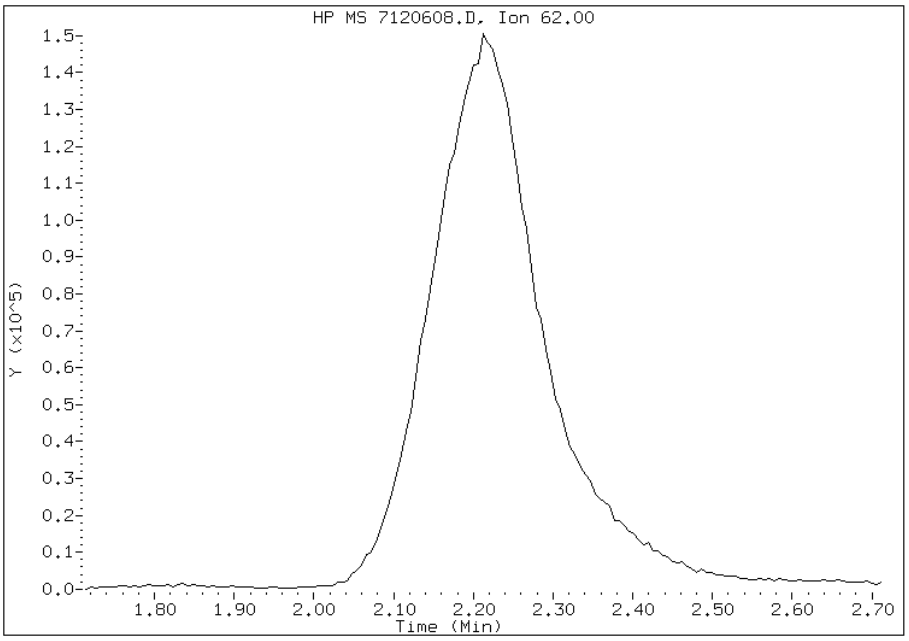
Manual Integration Results

RT: 2.21

Response: 1516042

Amount: 509

Conc: 509



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 10:55
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120608.D
Inj. Date and Time: 06-DEC-2013 10:27
Instrument ID: hp7.i
Client ID: vstd125
Compound: 5 Chloroethane
CAS #: 75-00-3
Report Date: 12/09/2013

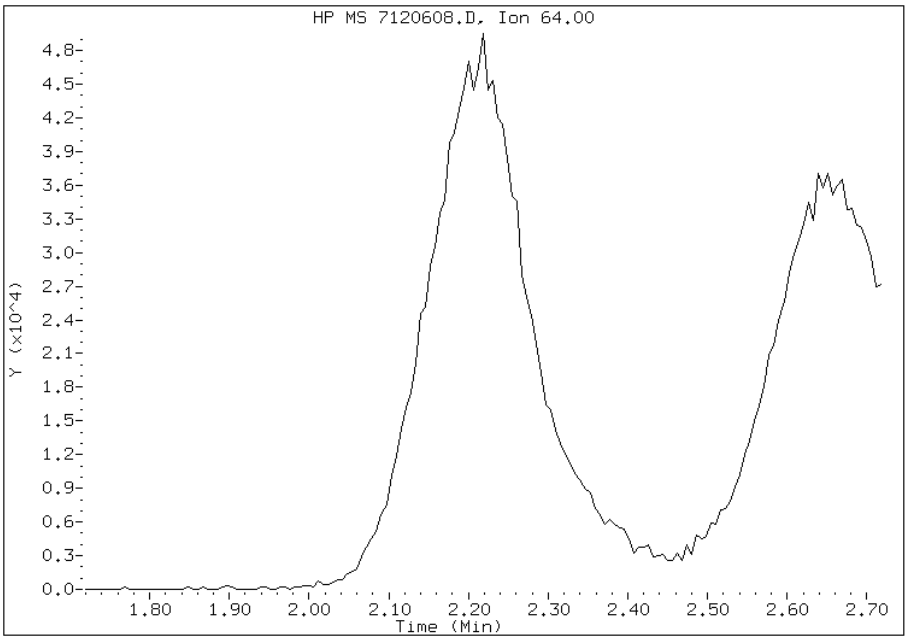
Processing Integration Results

RT: 2.22

Response: 846314

Amount: 1049

Conc: 1049



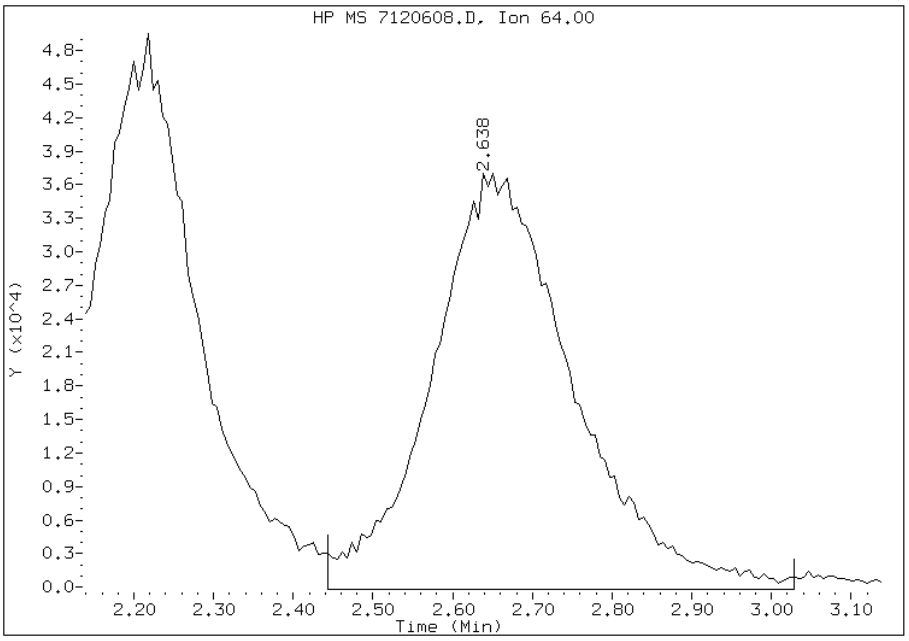
Manual Integration Results

RT: 2.64

Response: 460666

Amount: 569

Conc: 569



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 10:54
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120608.D
Inj. Date and Time: 06-DEC-2013 10:27
Instrument ID: hp7.i
Client ID: vstd125
Compound: 166 Trichlorofluoromethane
CAS #: 75-69-4
Report Date: 12/09/2013

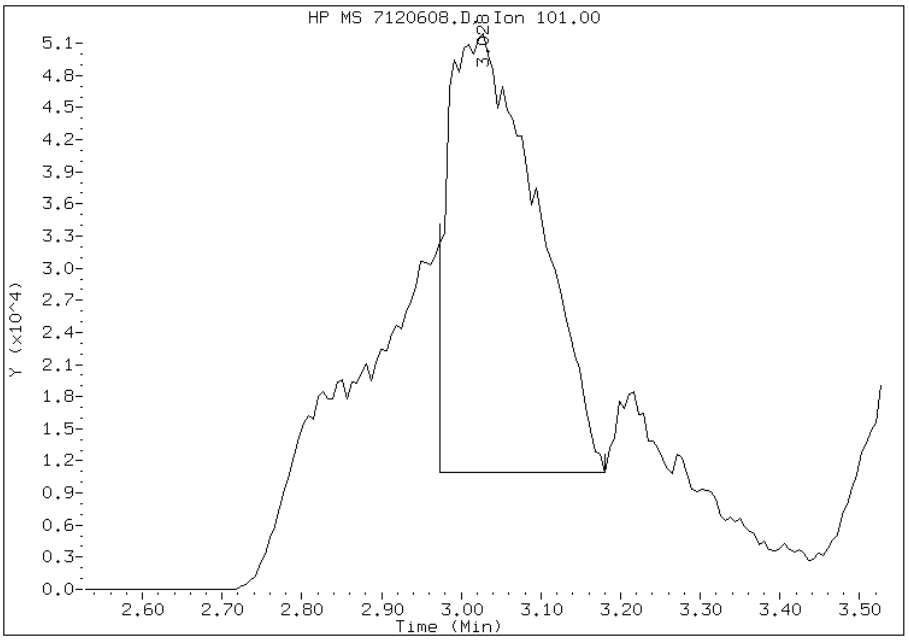
Processing Integration Results

RT: 3.03

Response: 319319

Amount: 233

Conc: 233



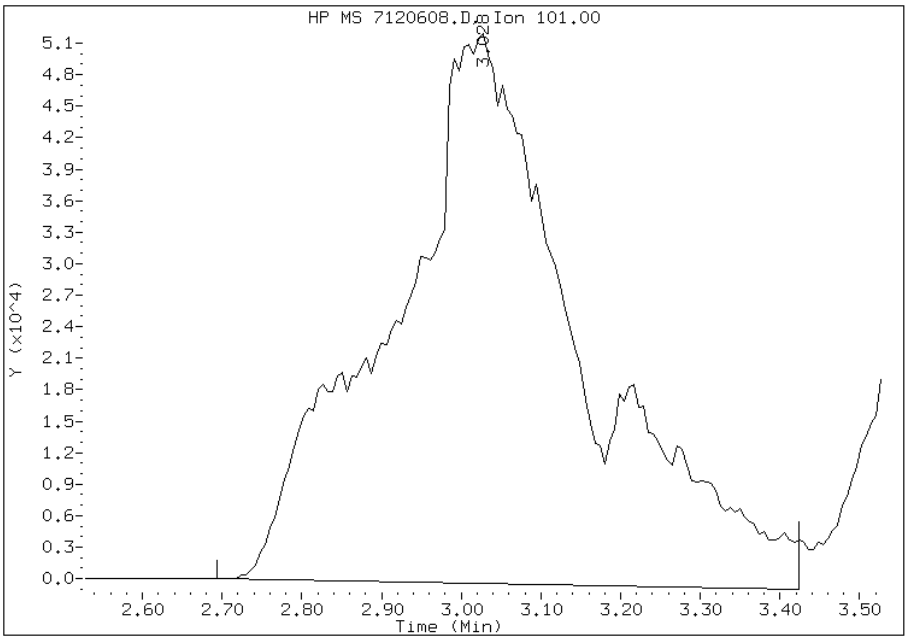
Manual Integration Results

RT: 3.03

Response: 873614

Amount: 643

Conc: 643



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 10:55
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120608.D
Inj. Date and Time: 06-DEC-2013 10:27
Instrument ID: hp7.i
Client ID: vstd125
Compound: 15 Carbon Disulfide
CAS #: 75-15-0
Report Date: 12/09/2013

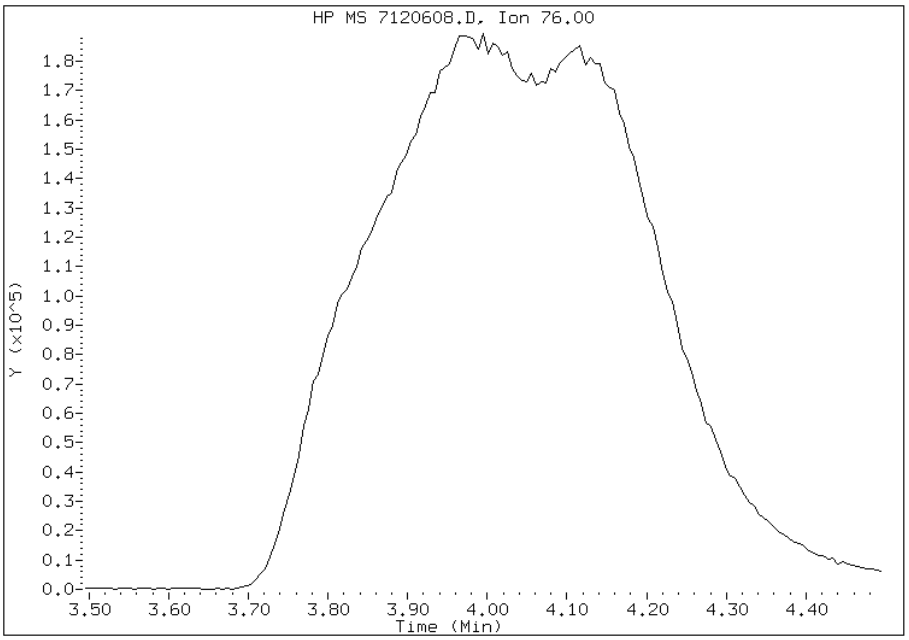
Processing Integration Results

RT: 3.99

Response: 4780338

Amount: 678

Conc: 678



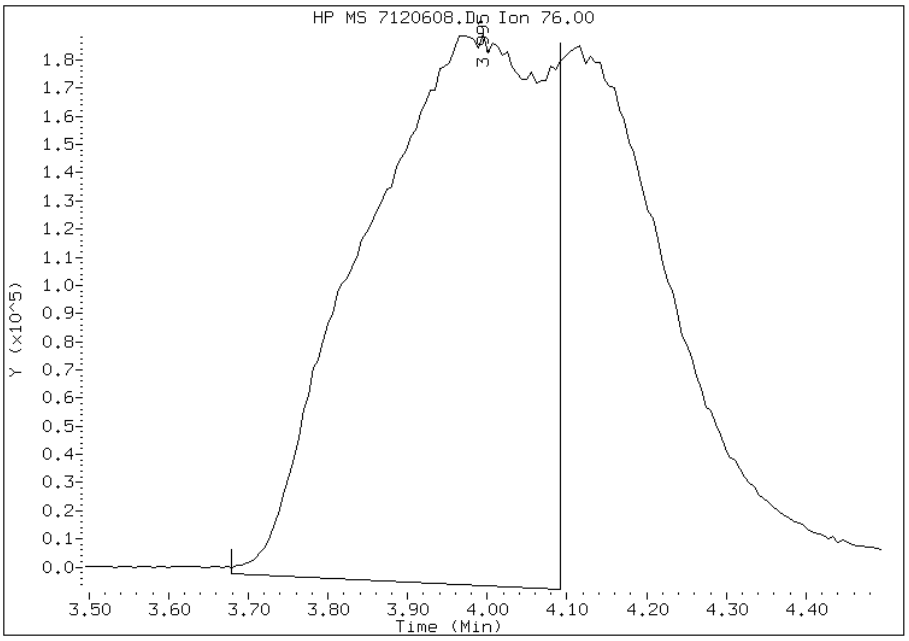
Manual Integration Results

RT: 3.99

Response: 3133102

Amount: 464

Conc: 464



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 10:57
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120608.D
Inj. Date and Time: 06-DEC-2013 10:27
Instrument ID: hp7.i
Client ID: vstd125
Compound: 16 3-Chloro-1-propene
CAS #: 107-05-1
Report Date: 12/09/2013

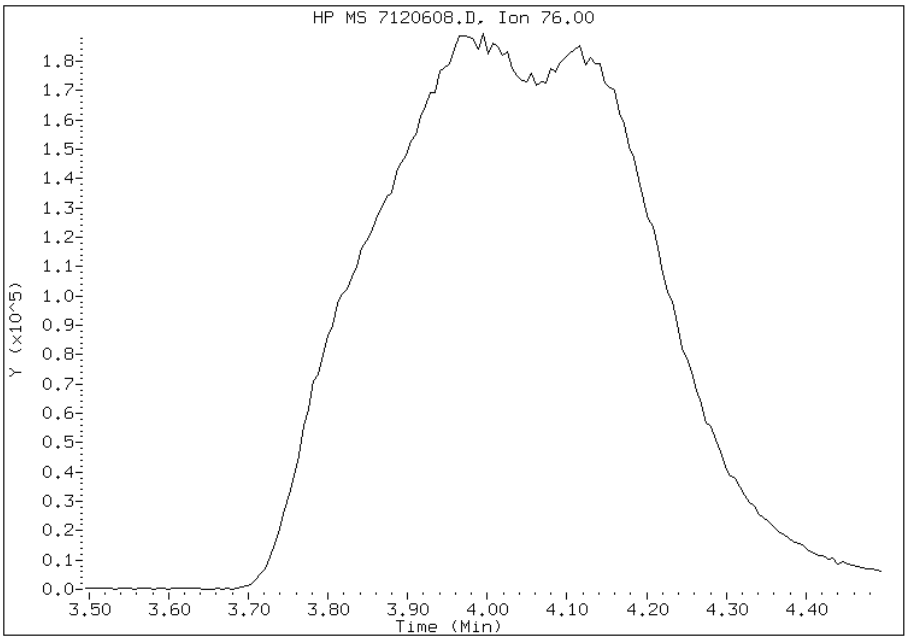
Processing Integration Results

RT: 3.99

Response: 4780338

Amount: 2703

Conc: 2703



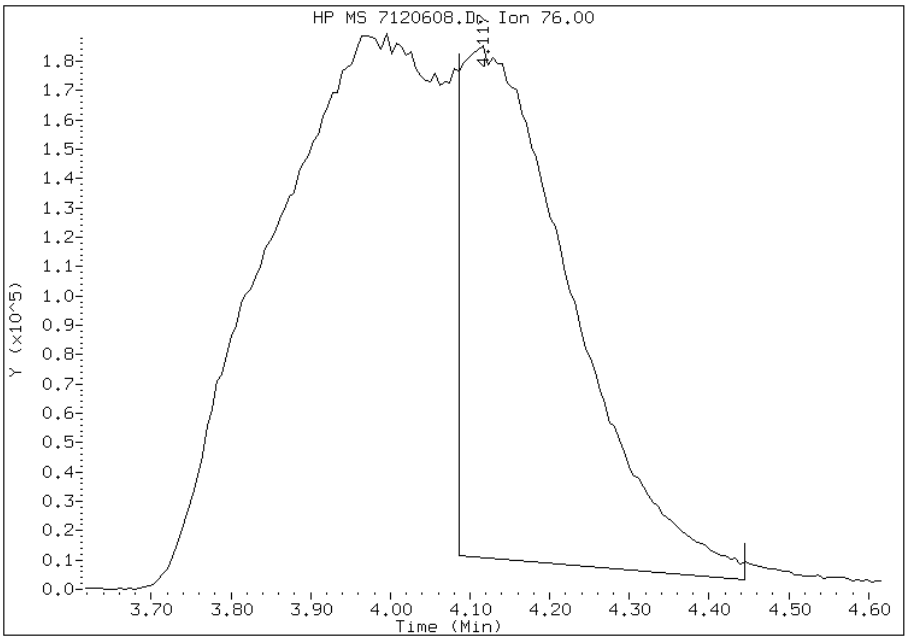
Manual Integration Results

RT: 4.12

Response: 1693007

Amount: 957

Conc: 957



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 10:56
Manual Integration Reason: Peak Integrated Incorrectly

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\PITSVR06\D\chem\hp7.i\7120613d.b\7120609.D
Lab Smp Id: IC Client Smp ID: vstd250
Inj Date : 06-DEC-2013 11:22 MS Autotune Date: 29-AUG-2013 08:08
Operator : 034635 Inst ID: hp7.i
Smp Info : IC,vstd250
Misc Info : 7120613d.b,T8260bh2o.m,list1.sub
Comment :
Method : \\PITSVR06\D\chem\hp7.i\7120613d.b\T8260bh2o.m
Meth Date : 06-Dec-2013 16:16 journetp Quant Type: ISTD
Cal Date : 06-DEC-2013 11:22 Cal File: 7120609.D
Als bottle: 8 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-088

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
*	46 Fluorobenzene (IS)	96	7.405	7.414	(1.000)	1296755	250.000	
*	69 Chlorobenzene-d5	119	10.464	10.468	(1.000)	343135	250.000	
*	92 1,4-Dichlorobenzene-d4	152	12.794	12.786	(1.000)	433534	250.000	(Q)
*	176 Dioxane-d8 (IS)	96	8.141	8.138	(1.000)	46081	5000.00	
*	177 TBA-d9 (IS)	65	4.947	4.688	(1.000)	329108	5000.00	
$	39 Dibromofluoromethane (Surr)	113	6.674	6.684	(0.901)	1531161	1250.00	1108
$	43 1,2-Dichloroethane-d4	65	7.040	7.049	(0.951)	1867401	1250.00	1168
$	59 Toluene-d8	98	9.041	9.038	(0.864)	4239287	1250.00	797.2
$	80 Bromofluorobenzene (Surr)	95	11.639	11.630	(1.112)	2076969	1250.00	1004
	1 Dichlorodifluoromethane	85	1.923	1.987	(0.260)	3225464	1250.00	1424
	2 Chloromethane	50	2.015	2.048	(0.272)	5745548	1250.00	1260
	3 Vinyl Chloride	62	2.191	2.152	(0.296)	3009411	1250.00	1245
	4 Bromomethane	94	2.477	2.523	(0.335)	839870	1250.00	1252
	5 Chloroethane	64	2.592	2.663	(0.350)	906498	1250.00	1381
	7 Dichlorofluoromethane	67	2.878	2.936	(0.389)	1639440	1250.00	1252
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.596	3.739	(0.486)	2239615	1250.00	1258
	166 Trichlorofluoromethane	101	2.903	2.924	(0.392)	1288442	1250.00	1168
	12 1,1-Dichloroethene	96	3.487	3.599	(0.471)	2265202	1250.00	1227
	15 Carbon Disulfide	76	3.779	3.891	(0.510)	7110359	1250.00	1298(M)
	13 Acetone	43	3.870	3.788	(0.523)	817619	1250.00	372.6
	18 Methylene Chloride	84	4.326	4.378	(0.584)	2463293	1250.00	1269
	19 trans-1,2-Dichloroethene	96	4.728	4.798	(0.639)	2624013	1250.00	1367
	20 Methyl tert-butyl ether	73	4.886	4.859	(0.660)	4858931	1250.00	1304
	24 1,1-Dichloroethane	63	5.336	5.382	(0.721)	4747329	1250.00	1266
	27 2,2-Dichloropropane	77	6.084	6.106	(0.822)	2871822	1250.00	1236
	28 cis-1,2-dichloroethene	96	6.097	6.106	(0.823)	2532390	1250.00	1222
M	29 1,2-Dichloroethene (total)	96				5156403	2500.00	2589
	30 Bromochloromethane	128	6.376	6.398	(0.861)	1215443	1250.00	1348(Q)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
31 2-Butanone	43	6.212	6.185	(0.839)	949060	1250.00	496.1
37 Chloroform	83	6.498	6.507	(0.878)	3534510	1250.00	1159
38 1,1,1-Trichloroethane	97	6.674	6.690	(0.901)	2921374	1250.00	1191
40 1,1-Dichloropropene	75	6.857	6.878	(0.926)	2468743	1250.00	1178
41 Carbon Tetrachloride	117	6.857	6.872	(0.926)	2552248	1250.00	1298
42 Benzene	78	7.088	7.104	(0.957)	7212883	1250.00	1115
45 1,2-Dichloroethane	62	7.125	7.134	(0.962)	2262810	1250.00	1201
47 Trichloroethene	130	7.788	7.797	(1.052)	2515433	1250.00	1354
49 1,2-Dichloropropane	63	8.031	8.034	(1.085)	1916041	1250.00	1160
50 Dibromomethane	93	8.147	8.150	(1.100)	1083055	1250.00	1304
53 Bromodichloromethane	83	8.317	8.320	(1.123)	2490833	1250.00	1252
57 cis-1,3-Dichloropropene	75	8.767	8.777	(1.184)	2744512	1250.00	1190
58 4-Methyl-2-Pentanone	43	8.950	8.941	(0.855)	1718040	1250.00	1122
60 Toluene	91	9.108	9.105	(0.870)	5554878	1250.00	1237
61 trans-1,3-Dichloropropene	75	9.327	9.330	(0.891)	2100460	1250.00	1131
63 1,3-Dichloropropane	76	9.674	9.671	(0.924)	1856465	1250.00	838.9
64 1,1,2-Trichloroethane	97	9.509	9.507	(0.909)	1351825	1250.00	1112
65 Tetrachloroethene	164	9.649	9.653	(0.922)	1428633	1250.00	1040
66 2-Hexanone	43	9.765	9.762	(0.933)	1194790	1250.00	652.5
67 Dibromochloromethane	129	9.899	9.902	(0.946)	1670765	1250.00	1219
68 1,2-Dibromoethane	107	10.014	10.011	(0.957)	1499058	1250.00	1185
70 Chlorobenzene	112	10.501	10.498	(1.003)	4050310	1250.00	1017
71 1,1,1,2-Tetrachloroethane	131	10.580	10.577	(1.011)	1571274	1250.00	1067
72 Ethylbenzene	106	10.610	10.608	(1.014)	1932610	1250.00	810.3(Q)
73 m,p-XYLENE	106	10.726	10.723	(1.025)	2643688	1250.00	879.1(Q)
74 Xylene-o	106	11.115	11.113	(1.062)	2353444	1250.00	729.8
76 Styrene	104	11.134	11.131	(1.064)	3107877	1250.00	1252
77 Bromoform	173	11.316	11.313	(1.081)	1182095	1250.00	1453
78 Isopropylbenzene	105	11.487	11.478	(1.098)	5012298	1250.00	1257
79 Bromobenzene	156	11.791	11.788	(0.922)	1716079	1250.00	1066
81 n-Propylbenzene	120	12.071	12.062	(0.943)	2246443	1250.00	852.0
82 2-Chlorotoluene	126	11.985	11.976	(0.937)	1744271	1250.00	1116(Q)
83 1,1,2,2-Tetrachloroethane	83	11.772	11.770	(1.125)	1217061	1250.00	801.1
84 1,2,3-Trichloropropane	110	11.821	11.818	(0.924)	441851	1250.00	1346
85 4-Chlorotoluene	126	12.095	12.086	(0.945)	1505400	1250.00	986.1(Q)
86 1,3,5-Trimethylbenzene	105	12.071	12.062	(0.943)	3810084	1250.00	710.9
87 tert-Butylbenzene	119	12.393	12.390	(0.969)	4685266	1250.00	992.9
88 1,2,4-Trimethylbenzene	105	12.442	12.439	(0.972)	4086785	1250.00	1254
89 sec-Butylbenzene	105	12.618	12.609	(0.986)	5179750	1250.00	697.6
90 4-Isopropyltoluene	119	12.764	12.755	(0.998)	3863210	1250.00	679.6
91 1,3-Dichlorobenzene	146	12.728	12.725	(0.995)	2641781	1250.00	866.1
94 n-Butylbenzene	91	13.166	13.163	(1.029)	3908406	1250.00	650.1
93 1,4-Dichlorobenzene	146	12.819	12.816	(1.002)	2749061	1250.00	1038
95 1,2-Dichlorobenzene	146	13.196	13.187	(1.031)	2300206	1250.00	894.4
96 1,2-Dibromo-3-chloropropane	157	13.969	13.972	(1.092)	347944	1250.00	460.8
97 1,2,4-Trichlorobenzene	180	14.802	14.799	(1.157)	1480141	1250.00	1533
98 Hexachlorobutadiene	225	14.972	14.969	(1.170)	1170674	1250.00	1160
99 Naphthalene	128	15.051	15.055	(1.176)	2020239	1250.00	1980
100 1,2,3-Trichlorobenzene	180	15.301	15.304	(1.196)	979519	1250.00	2049
156 Methyl Acetate	43	4.308	4.299	(0.582)	7124401	6250.00	3146
157 Cyclohexane	56	6.729	6.751	(0.909)	4145690	1250.00	1053
158 Methyl Cyclohexane	83	7.982	7.998	(1.078)	3217082	1250.00	1026
32 Vinyl Acetate	43	5.494	5.498	(0.742)	2063316	1250.00	1403
52 1,4-Dioxane	88	8.201	8.192	(1.007)	292860	25000.0	27020

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	21 tert-Butyl Alcohol	59	4.740	4.786	(0.958)	117784	12500.0	1284
	16 3-Chloro-1-propene	76	4.107	4.177	(0.555)	1794797	1250.00	1251(M)
	11 Acrolein	56	3.493	3.545	(0.472)	98926	1250.00	662.7
	22 Acrylonitrile	53	4.819	4.810	(0.651)	6604144	12500.0	11360
	8 Ethyl Ether	59	3.292	3.368	(0.445)	1061989	1250.00	746.3(QM)
	62 Ethyl methacrylate	69	9.430	9.421	(0.901)	1641261	1250.00	1038
	23 Hexane	57	5.123	5.187	(0.692)	4233883	1250.00	1275
	14 Iodomethane	142	3.718	3.806	(0.502)	3677783	1250.00	1297
	44 Isobutanol	41	7.398	7.414	(0.999)	1948807	31250.0	29360
	155 N-Heptane	41	7.989	7.998	(1.079)	2896497	1250.00	1041
	35 Tetrahydrofuran	42	6.729	6.745	(0.909)	1206519	2500.00	2249
	164 trans-1,4-Dichloro-2-butene	53	11.839	11.830	(0.925)	509048	1250.00	1570
	169 Butadiene	39	2.173	2.225	(0.293)	3362129	1250.00	1252
M	75 Xylenes (total)	106				4997132	2500.00	1609

QC Flag Legend

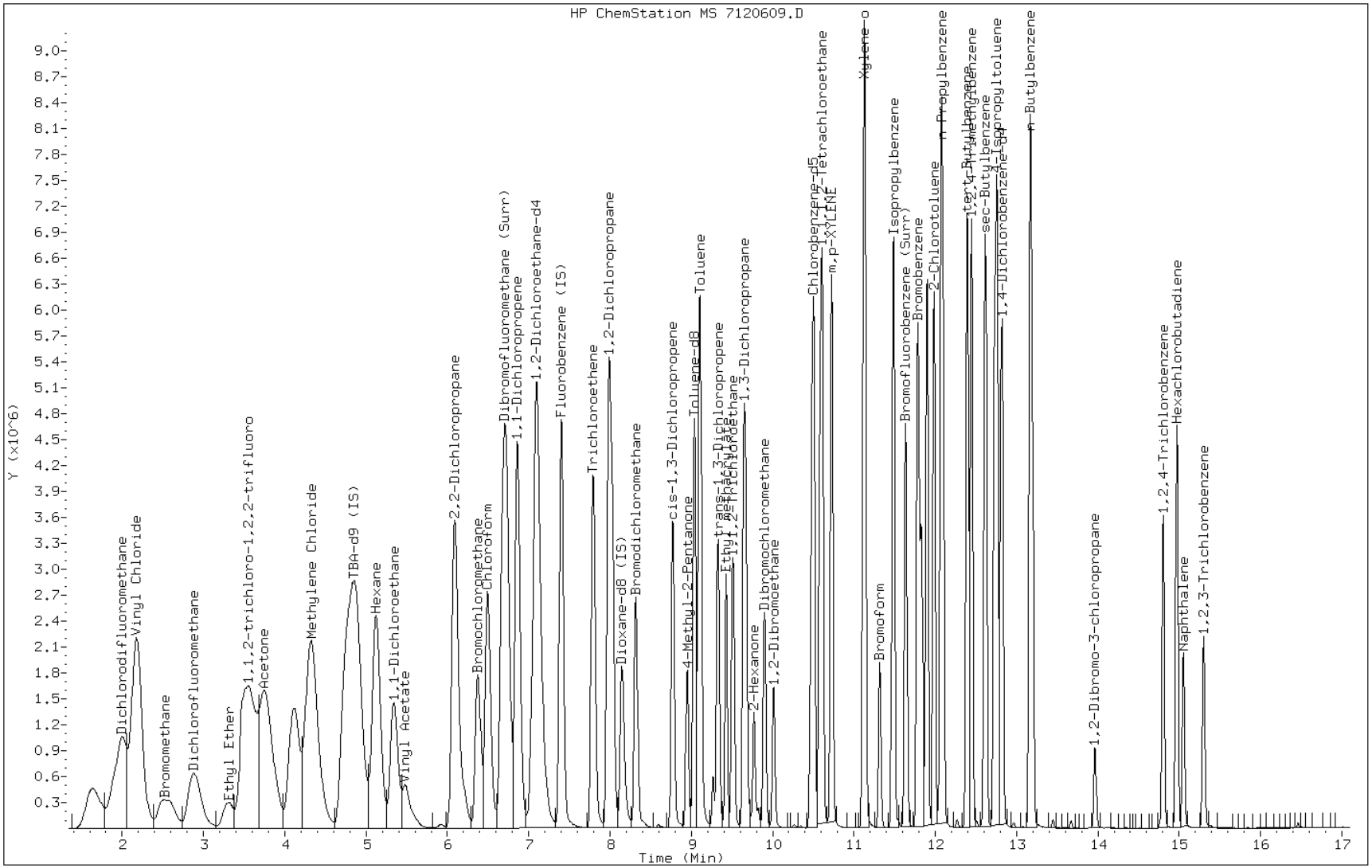
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 7120609.D

Date: 06-DEC-2013 11:22

Client ID: vstd250 Instrument: hp7.i

Sample Info: IC,vstd250 Operator: 034635



Manual Integration Report

Data File: 7120609.D
Inj. Date and Time: 06-DEC-2013 11:22
Instrument ID: hp7.i
Client ID: vstd250
Compound: 8 Ethyl Ether
CAS #: 60-29-7
Report Date: 12/09/2013

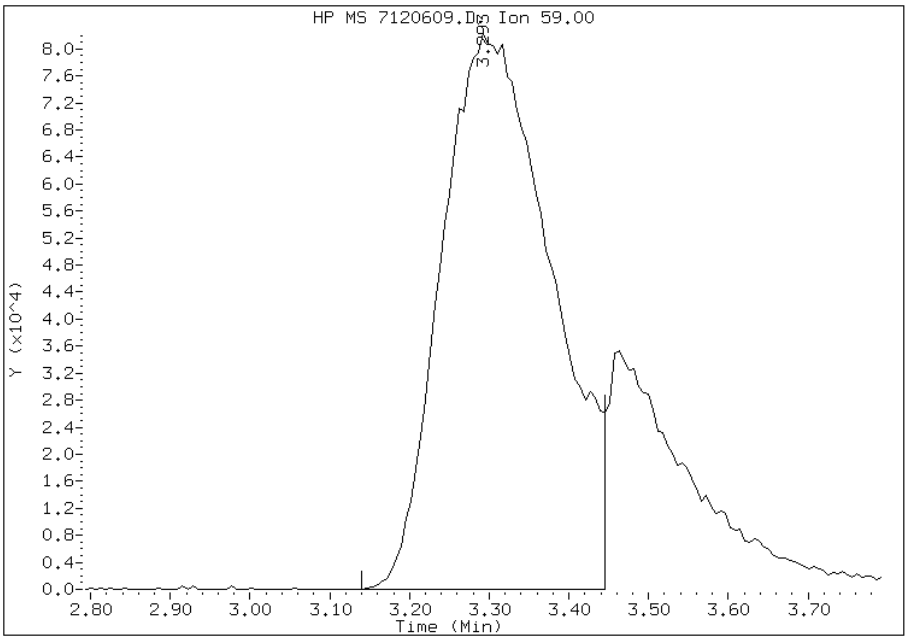
Processing Integration Results

RT: 3.29

Response: 796174

Amount: 560

Conc: 560



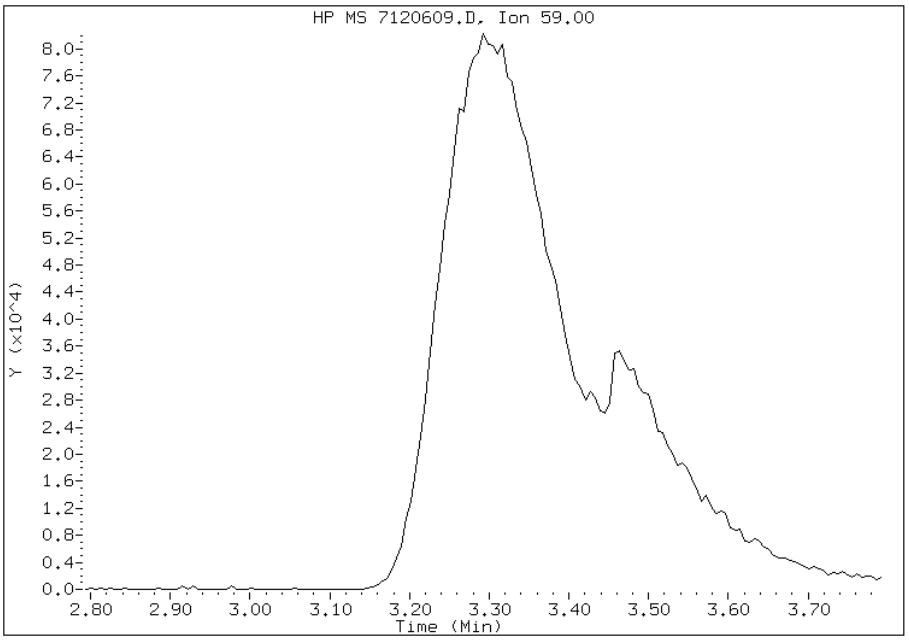
Manual Integration Results

RT: 3.29

Response: 1061989

Amount: 746

Conc: 746



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 11:53
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120609.D
Inj. Date and Time: 06-DEC-2013 11:22
Instrument ID: hp7.i
Client ID: vstd250
Compound: 15 Carbon Disulfide
CAS #: 75-15-0
Report Date: 12/09/2013

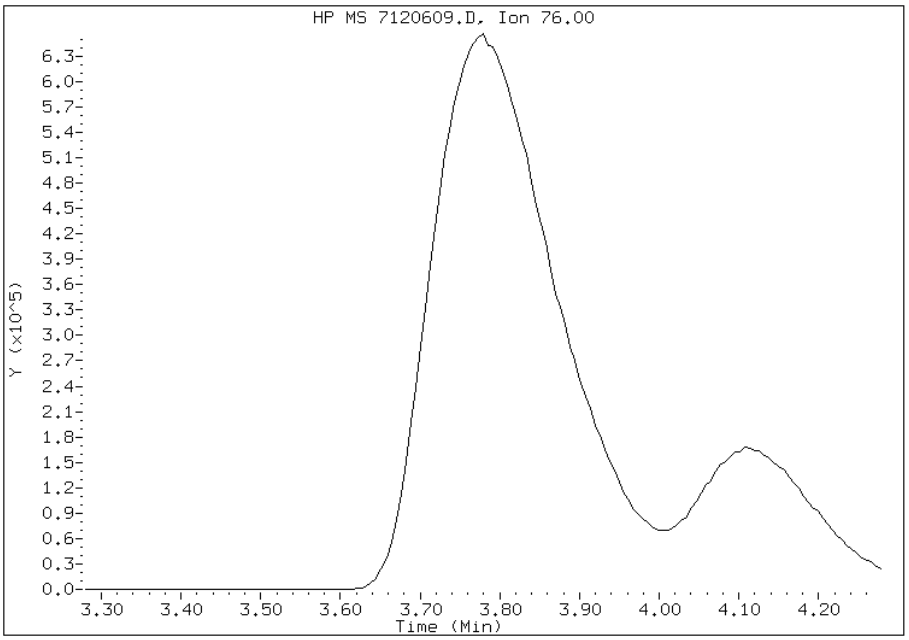
Processing Integration Results

RT: 3.78

Response: 9003367

Amount: 1653

Conc: 1653



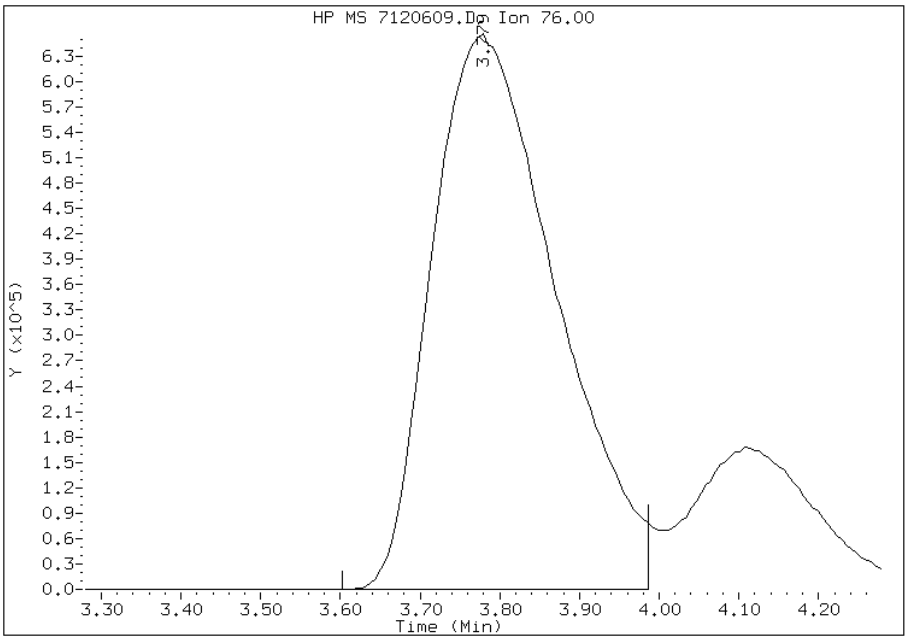
Manual Integration Results

RT: 3.78

Response: 7110359

Amount: 1298

Conc: 1298



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 11:52
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7120609.D
Inj. Date and Time: 06-DEC-2013 11:22
Instrument ID: hp7.i
Client ID: vstd250
Compound: 16 3-Chloro-1-propene
CAS #: 107-05-1
Report Date: 12/09/2013

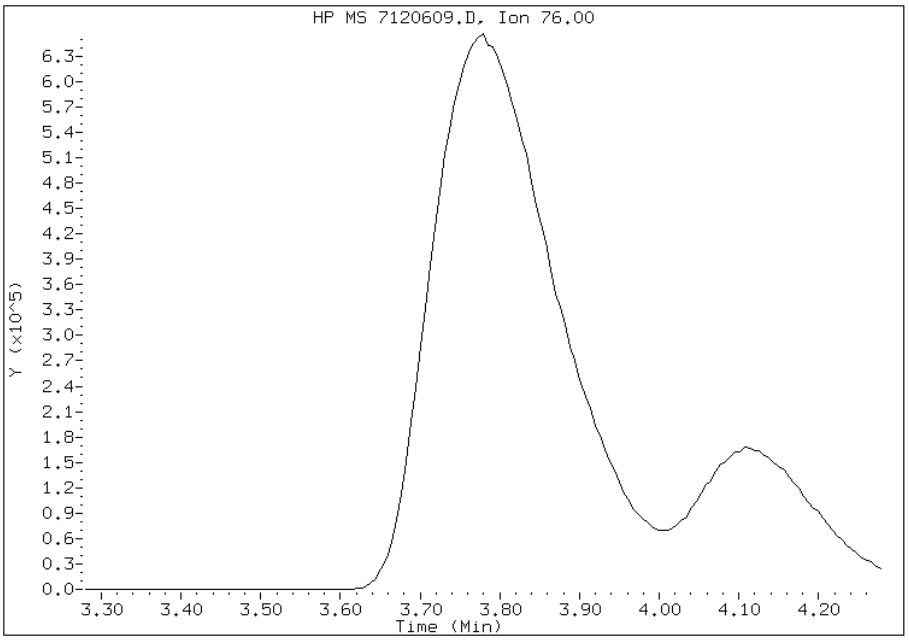
Processing Integration Results

RT: 3.78

Response: 9003367

Amount: 5764

Conc: 5764



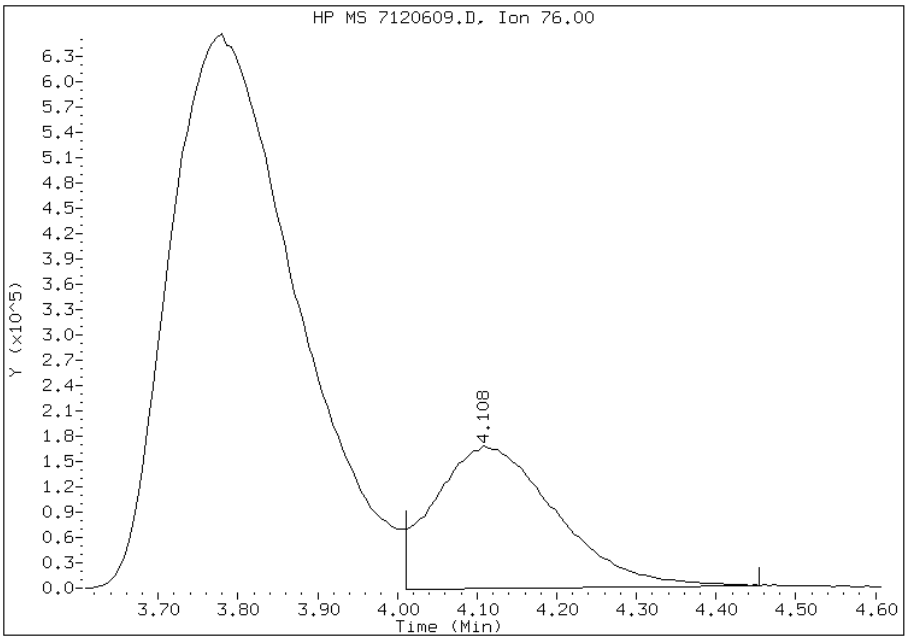
Manual Integration Results

RT: 4.11

Response: 1794797

Amount: 1251

Conc: 1251



Manually Integrated By: journetp
Modification Date: 06-Dec-2013 11:53
Manual Integration Reason: Peak Integrated Incorrectly

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Lab Sample ID: CCVIS 180-93329/2 Calibration Date: 12/27/2013 01:12

Instrument ID: HP4 Calib Start Date: 12/16/2013 11:04

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/16/2013 16:49

Lab File ID: 4122603.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	0.3258	0.3304		40.6	40.0	1.4	50.0
Chloromethane	Ave	0.4440	0.4784	0.1000	43.1	40.0	7.7	
Vinyl chloride	Ave	0.3753	0.4169		44.4	40.0	11.1	20.0
1,3-Butadiene	Ave	0.3758	0.3877		41.3	40.0	3.2	
Bromomethane	Ave	0.0627	0.0727		46.4	40.0	16.0	
Chloroethane	Ave	0.0619	0.0686		44.3	40.0	10.8	50.0
Trichlorofluoromethane	Ave	0.1633	0.1728		42.3	40.0	5.9	50.0
Ethyl ether	Ave	0.2497	0.2292		36.7	40.0	-8.2	50.0
Acrolein	Ave	0.0340	0.0317		163	175	-6.8	50.0
1,1-Dichloroethene	Ave	0.2953	0.3027		41.0	40.0	2.5	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2761	0.2967		43.0	40.0	7.4	50.0
Acetone	Ave	0.0840	0.1035		49.2	40.0	23.1	50.0
Iodomethane	Ave	0.3946	0.4166		42.2	40.0	5.6	50.0
Carbon disulfide	Ave	0.7032	0.7152		40.7	40.0	1.7	50.0
Allyl chloride	Ave	0.1646	0.1397		33.9	40.0	-15.1	50.0
Methyl acetate	Ave	0.1992	0.1609		162	200	-19.2	50.0
Methylene Chloride	Ave	0.3077	0.3133		40.7	40.0	1.8	50.0
tert-Butyl alcohol	Ave	1.342	1.259		375	400	-6.1	50.0
trans-1,2-Dichloroethene	Ave	0.2939	0.2883		39.2	40.0	-1.9	50.0
Acrylonitrile	Ave	0.0995	0.0896		360	400	-10.0	50.0
Methyl tert-butyl ether	Ave	0.5940	0.5531		37.2	40.0	-6.9	50.0
Hexane	Ave	0.5048	0.4776		37.8	40.0	-5.4	50.0
1,1-Dichloroethane	Ave	0.5004	0.4764	0.1000	38.1	40.0	-4.8	25.0
Vinyl acetate	Ave	0.3983	0.3533		35.5	40.0	-11.3	50.0
2,2-Dichloropropane	Ave	0.1776	0.1638		36.9	40.0	-7.8	50.0
cis-1,2-Dichloroethene	Ave	0.3101	0.3069		39.6	40.0	-1.1	50.0
2-Butanone (MEK)	Qua	0.1095	0.1219		44.4	40.0	11.1	50.0
Bromochloromethane	Ave	0.1311	0.1283		39.1	40.0	-2.1	50.0
Chloroform	Ave	0.4178	0.4015		38.4	40.0	-3.9	20.0
1,1,1-Trichloroethane	Ave	0.3049	0.3079		40.4	40.0	1.0	25.0
Cyclohexane	Ave	0.6533	0.6543		40.1	40.0	0.2	50.0
1,1-Dichloropropene	Ave	0.3428	0.3183		37.1	40.0	-7.2	50.0
Carbon tetrachloride	Ave	0.2646	0.2565		38.8	40.0	-3.1	25.0
Isobutyl alcohol	Ave	0.0057	0.0054		938	1000	-6.2	50.0
Benzene	Ave	1.096	1.114		40.7	40.0	1.7	25.0
1,2-Dichloroethane	Ave	0.2789	0.2660		38.1	40.0	-4.6	25.0
Trichloroethene	Ave	0.2748	0.2710		39.4	40.0	-1.4	25.0
Methylcyclohexane	Ave	0.5431	0.5384		39.7	40.0	-0.9	50.0
1,2-Dichloropropane	Ave	0.2895	0.2786		38.5	40.0	-3.8	20.0
Dibromomethane	Ave	0.1325	0.1276		38.5	40.0	-3.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Lab Sample ID: CCVIS 180-93329/2 Calibration Date: 12/27/2013 01:12

Instrument ID: HP4 Calib Start Date: 12/16/2013 11:04

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/16/2013 16:49

Lab File ID: 4122603.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	1.158	1.234		852	800	6.5	50.0
Dichlorobromomethane	Ave	0.2695	0.2558		38.0	40.0	-5.1	25.0
cis-1,3-Dichloropropene	Ave	0.3588	0.3573		39.8	40.0	-0.4	25.0
4-Methyl-2-pentanone (MIBK)	Qua	1.055	1.041		37.4	40.0	-6.5	50.0
Toluene	Ave	5.183	4.872		37.6	40.0	-6.0	20.0
trans-1,3-Dichloropropene	Ave	1.183	1.147		38.8	40.0	-3.0	25.0
Ethyl methacrylate	Ave	1.228	1.077		35.1	40.0	-12.3	50.0
1,1,2-Trichloroethane	Ave	0.9627	0.8788		36.5	40.0	-8.7	25.0
Tetrachloroethene	Ave	0.9550	0.9561		40.0	40.0	0.1	25.0
1,3-Dichloropropane	Ave	1.637	1.514		37.0	40.0	-7.5	50.0
2-Hexanone	Qua	0.8511	0.5841		28.4	40.0	-29.1	50.0
Chlorodibromomethane	Ave	0.7876	0.7519		38.2	40.0	-4.5	25.0
1,2-Dibromoethane	Ave	0.8578	0.7961		37.1	40.0	-7.2	50.0
Chlorobenzene	Ave	3.138	3.231	0.3000	41.2	40.0	2.9	
1,1,1,2-Tetrachloroethane	Ave	0.9407	0.9664		41.1	40.0	2.7	50.0
Ethylbenzene	Ave	1.735	1.784		41.1	40.0	2.8	20.0
m-Xylene & p-Xylene	Ave	2.141	2.246		42.0	40.0	4.9	25.0
o-Xylene	Ave	2.060	2.200		42.7	40.0	6.8	25.0
Styrene	Ave	3.260	3.607		44.3	40.0	10.6	25.0
Bromoform	Qua	0.4706	0.4358	0.1000	36.9	40.0	-7.9	
Isopropylbenzene	Ave	5.345	5.527		41.4	40.0	3.4	50.0
1,1,2,2-Tetrachloroethane	Ave	1.059	1.005	0.3000	38.0	40.0	-5.1	
Bromobenzene	Ave	0.9604	0.9282		38.7	40.0	-3.4	50.0
1,2,3-Trichloropropane	Ave	0.2427	0.2066		34.1	40.0	-14.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2063	0.1382		26.8	40.0	-33.0	50.0
N-Propylbenzene	Ave	1.198	1.221		40.8	40.0	1.9	50.0
2-Chlorotoluene	Ave	0.9817	0.9875		40.2	40.0	0.6	50.0
1,3,5-Trimethylbenzene	Ave	3.494	3.317		38.0	40.0	-5.1	50.0
4-Chlorotoluene	Ave	0.9574	0.9539		39.9	40.0	-0.4	50.0
tert-Butylbenzene	Ave	3.116	3.456		44.4	40.0	10.9	50.0
1,2,4-Trimethylbenzene	Ave	3.313	3.326		40.2	40.0	0.4	50.0
sec-Butylbenzene	Ave	4.573	4.464		39.0	40.0	-2.4	50.0
1,3-Dichlorobenzene	Ave	1.558	1.704		43.8	40.0	9.4	25.0
4-Isopropyltoluene	Ave	3.542	3.670		41.4	40.0	3.6	50.0
1,4-Dichlorobenzene	Ave	1.855	1.851		39.9	40.0	-0.2	25.0
n-Butylbenzene	Ave	3.286	3.568		43.4	40.0	8.6	50.0
1,2-Dichlorobenzene	Ave	1.549	1.564		40.4	40.0	0.9	25.0
1,2-Dibromo-3-Chloropropane	Qua	0.0744	0.0430		24.9	40.0	-37.8	50.0
1,2,4-Trichlorobenzene	Qua	0.3473	0.2867		33.3	40.0	-16.7	50.0
Hexachlorobutadiene	Ave	0.4468	0.3601		32.2	40.0	-19.4	50.0
Naphthalene	Qua	0.5666	0.4698		35.9	40.0	-10.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Lab Sample ID: CCVIS 180-93329/2 Calibration Date: 12/27/2013 01:12

Instrument ID: HP4 Calib Start Date: 12/16/2013 11:04

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/16/2013 16:49

Lab File ID: 4122603.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Qua	0.2007	0.2113		43.9	40.0	9.8	50.0
Dibromofluoromethane (Surr)	Ave	0.2114	0.2131		40.3	40.0	0.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2178	0.2086		38.3	40.0	-4.2	25.0
Toluene-d8 (Surr)	Ave	4.243	3.977		37.5	40.0	-6.3	50.0
4-Bromofluorobenzene (Surr)	Ave	1.506	1.566		41.6	40.0	4.0	25.0

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\pitsvr06\d\chem\hp4.i\4122613d.b\4122603.D
Lab Smp Id: CCVIS Client Smp ID: CCVIS40
Inj Date : 27-DEC-2013 01:12
Operator : 430936 Inst ID: hp4.i
Smp Info : CCVIS
Misc Info : 4122613d.b,t8260bh2o.m,list1.sub
Comment :
Method : \\pitsvr06\d\chem\hp4.i\4122613d.b\T8260bh2o.m
Meth Date : 27-Dec-2013 03:56 hp4.i Quant Type: ISTD
Cal Date : 16-DEC-2013 11:28 Cal File: 4121604.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-530

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	
*	46 Fluorobenzene (IS)	96	7.669	7.669	(1.000)	1481187	250.000		
*	69 Chlorobenzene-d5	119	10.758	10.758	(1.000)	358888	250.000		
*	92 1,4-Dichlorobenzene-d4	152	13.093	13.093	(1.000)	493260	250.000		
*	176 Dioxane-d8 (IS)	96	8.405	8.405	(1.000)	55883	5000.00		(M)
*	177 TBA-d9 (IS)	65	4.847	4.847	(1.000)	384238	5000.00		
$	39 Dibromofluoromethane (Surr)	113	6.933	6.933	(0.904)	252502	200.000	201.6	
$	43 1,2-Dichloroethane-d4	65	7.304	7.304	(0.952)	247213	200.000	191.5	
$	59 Toluene-d8	98	9.317	9.317	(0.866)	1141859	200.000	187.4	
$	80 Bromofluorobenzene (Surr)	95	11.938	11.938	(1.110)	449698	200.000	208.1	
	1 Dichlorodifluoromethane	85	1.770	1.770	(0.231)	391530	200.000	202.8	
	2 Chloromethane	50	1.958	1.958	(0.255)	566894	200.000	215.5	
	3 Vinyl Chloride	62	2.123	2.123	(0.277)	493992	200.000	222.2	
	4 Bromomethane	94	2.494	2.494	(0.325)	86196	200.000	232.1	
	5 Chloroethane	64	2.615	2.615	(0.341)	81314	200.000	221.6	
	7 Dichlorofluoromethane	67	2.919	2.919	(0.381)	275091	200.000	257.7	
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.819	3.819	(0.498)	351513	200.000	214.9	
	166 Trichlorofluoromethane	101	2.968	2.968	(0.387)	204809	200.000	211.7	
	12 1,1-Dichloroethene	96	3.777	3.777	(0.493)	358634	200.000	205.0	
	15 Carbon Disulfide	76	4.123	4.123	(0.538)	847412	200.000	203.4	
	13 Acetone	43	3.971	3.971	(0.518)	122595	200.000	246.2	
	18 Methylene Chloride	84	4.598	4.598	(0.600)	371298	200.000	203.6	
	19 trans-1,2-Dichloroethene	96	5.005	5.005	(0.653)	341674	200.000	196.2	
	20 Methyl tert-butyl ether	73	5.054	5.054	(0.659)	655386	200.000	186.2	
	24 1,1-Dichloroethane	63	5.595	5.595	(0.730)	564446	200.000	190.4	
	27 2,2-Dichloropropane	77	6.337	6.337	(0.826)	194072	200.000	184.4	
	28 cis-1,2-dichloroethene	96	6.349	6.349	(0.828)	363623	200.000	197.9	
M	29 1,2-Dichloroethene (total)	96				705297	400.000	394.1	
	30 Bromochloromethane	128	6.641	6.641	(0.866)	151981	200.000	195.7	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
31	2-Butanone	43	6.422	6.422	(0.837)	144460	200.000	222.2
37	Chloroform	83	6.744	6.744	(0.879)	475710	200.000	192.2
38	1,1,1-Trichloroethane	97	6.939	6.939	(0.905)	364828	200.000	201.9
40	1,1-Dichloropropene	75	7.128	7.128	(0.929)	377152	200.000	185.7
41	Carbon Tetrachloride	117	7.128	7.128	(0.929)	303953	200.000	193.9
42	Benzene	78	7.359	7.359	(0.960)	1319711	200.000	203.3
45	1,2-Dichloroethane	62	7.389	7.389	(0.964)	315183	200.000	190.7
47	Trichloroethene	130	8.064	8.064	(1.052)	321115	200.000	197.2
49	1,2-Dichloropropane	63	8.295	8.295	(1.082)	330062	200.000	192.4
50	Dibromomethane	93	8.423	8.423	(1.098)	151189	200.000	192.6
53	Bromodichloromethane	83	8.587	8.587	(1.120)	303129	200.000	189.8
57	cis-1,3-Dichloropropene	75	9.049	9.049	(1.180)	423368	200.000	199.2
58	4-Methyl-2-Pentanone	43	9.207	9.207	(0.856)	298980	200.000	187.0
60	Toluene	91	9.378	9.378	(0.872)	1398788	200.000	188.0
61	trans-1,3-Dichloropropene	75	9.609	9.609	(0.893)	329254	200.000	193.9
63	1,3-Dichloropropane	76	9.955	9.955	(0.925)	434758	200.000	185.0
64	1,1,2-Trichloroethane	97	9.785	9.785	(0.910)	252325	200.000	182.6
65	Tetrachloroethene	164	9.931	9.931	(0.923)	274495	200.000	200.2
66	2-Hexanone	43	10.071	10.071	(0.936)	167700	200.000	141.8
67	Dibromochloromethane	129	10.180	10.180	(0.946)	215879	200.000	190.9
68	1,2-Dibromoethane	107	10.308	10.308	(0.958)	228570	200.000	185.6
70	Chlorobenzene	112	10.789	10.789	(1.003)	927538	200.000	205.9
71	1,1,1,2-Tetrachloroethane	131	10.861	10.861	(1.010)	277460	200.000	205.5
72	Ethylbenzene	106	10.892	10.892	(1.012)	512334	200.000	205.7
73	m,p-XYLENE	106	11.007	11.007	(1.023)	644955	200.000	209.8
74	Xylene-o	106	11.409	11.409	(1.060)	631692	200.000	213.6
76	Styrene	104	11.421	11.421	(1.062)	1035563	200.000	221.3
77	Bromoform	173	11.622	11.622	(1.080)	125107	200.000	184.2
78	Isopropylbenzene	105	11.774	11.774	(1.094)	1586882	200.000	206.8
79	Bromobenzene	156	12.096	12.096	(0.924)	366281	200.000	193.3
81	n-Propylbenzene	120	12.181	12.181	(0.930)	481823	200.000	203.8
82	2-Chlorotoluene	126	12.278	12.278	(0.938)	389682	200.000	201.2
83	1,1,2,2-Tetrachloroethane	83	12.059	12.059	(1.121)	288612	200.000	189.9
84	1,2,3-Trichloropropane	110	12.114	12.114	(0.925)	81530	200.000	170.3
85	4-Chlorotoluene	126	12.388	12.388	(0.946)	376403	200.000	199.3
86	1,3,5-Trimethylbenzene	105	12.351	12.351	(0.943)	1308891	200.000	189.8
87	tert-Butylbenzene	119	12.680	12.680	(0.968)	1363888	200.000	221.8
88	1,2,4-Trimethylbenzene	105	12.735	12.735	(0.973)	1312613	200.000	200.8
89	sec-Butylbenzene	105	12.905	12.905	(0.986)	1761502	200.000	195.2
90	4-Isopropyltoluene	119	13.045	13.045	(0.996)	1448176	200.000	207.2
91	1,3-Dichlorobenzene	146	13.033	13.033	(0.995)	672550	200.000	218.8
94	n-Butylbenzene	91	13.464	13.464	(1.028)	1408138	200.000	217.2
93	1,4-Dichlorobenzene	146	13.118	13.118	(1.002)	730394	200.000	199.5
95	1,2-Dichlorobenzene	146	13.501	13.501	(1.031)	616982	200.000	201.8
96	1,2-Dibromo-3-chloropropane	157	14.316	14.316	(1.093)	16982	200.000	124.4(M)
97	1,2,4-Trichlorobenzene	180	15.155	15.155	(1.157)	113147	200.000	166.6(M)
98	Hexachlorobutadiene	225	15.289	15.289	(1.168)	142092	200.000	161.2
99	Naphthalene	128	15.435	15.435	(1.179)	185384	200.000	179.4(M)
100	1,2,3-Trichlorobenzene	180	15.678	15.678	(1.197)	83359	200.000	219.6(M)
156	Methyl Acetate	43	4.494	4.494	(0.586)	953118	1000.00	807.7
157	Cyclohexane	56	7.000	7.000	(0.913)	775348	200.000	200.3
158	Methyl Cyclohexane	83	8.259	8.259	(1.077)	638016	200.000	198.3
32	Vinyl Acetate	43	5.723	5.723	(0.746)	418582	200.000	177.4
52	1,4-Dioxane	88	8.459	8.459	(1.007)	55160	4000.00	4260

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
21	tert-Butyl Alcohol	59	4.975	4.975	(1.026)	193531	2000.00	1877
16	3-Chloro-1-propene	76	4.385	4.385	(0.572)	165510	200.000	169.7(Q)
11	Acrolein	56	3.679	3.679	(0.480)	164256	875.000	815.7
22	Acrylonitrile	53	5.011	5.011	(0.653)	1061290	2000.00	1800
8	Ethyl Ether	59	3.473	3.473	(0.453)	271623	200.000	183.6
62	Ethyl methacrylate	69	9.694	9.694	(0.901)	309144	200.000	175.3
23	Hexane	57	5.407	5.407	(0.705)	565956	200.000	189.2
14	Iodomethane	142	4.020	4.020	(0.524)	493602	200.000	211.1
44	Isobutanol	41	7.340	7.340	(0.957)	159474	5000.00	4688
155	N-Heptane	41	7.669	7.669	(1.000)	318731	200.000	199.2
35	Tetrahydrofuran	42	7.000	7.000	(0.913)	173649	400.000	358.3
164	trans-1,4-Dichloro-2-butene	53	12.145	12.145	(0.928)	54528	200.000	133.9
169	Butadiene	39	2.159	2.159	(0.282)	459364	200.000	206.3
M 75	Xylenes (total)	106				1276647	400.000	423.4

QC Flag Legend

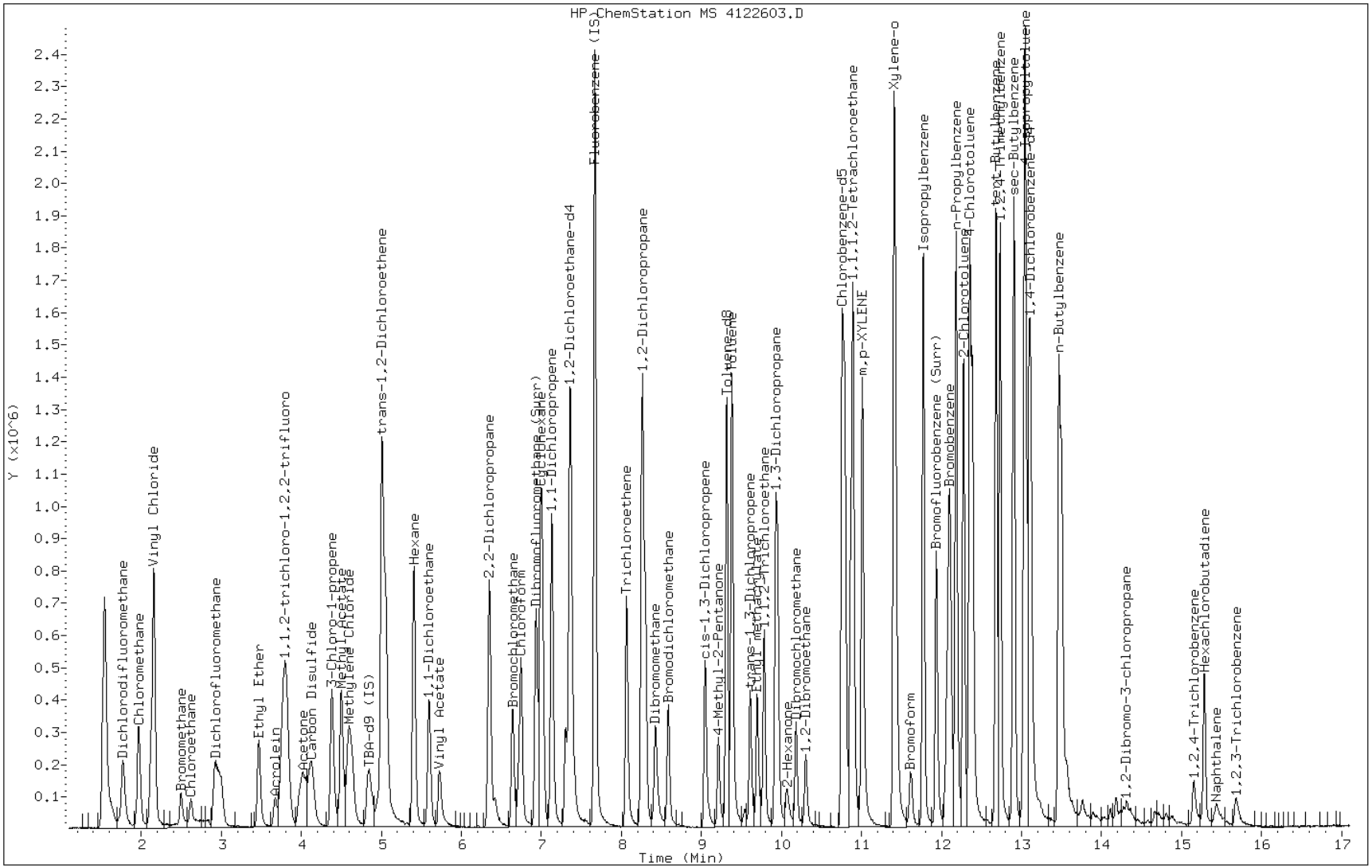
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 4122603.D

Date: 27-DEC-2013 01:12

Client ID: CCVIS40 Instrument: hp4.i

Sample Info: CCVIS Operator: 430936



Manual Integration Report

Data File: 4122603.D
Inj. Date and Time: 27-DEC-2013 01:12
Instrument ID: hp4.i
Client ID: CCVIS40
Compound: 96 1,2-Dibromo-3-chloropropane
CAS #: 96-12-8
Report Date: 12/27/2013

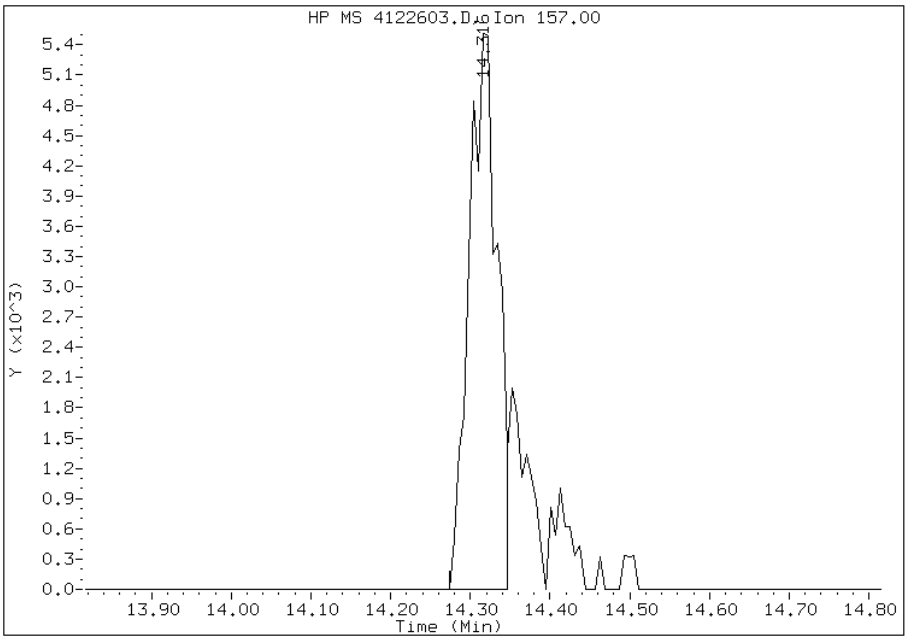
Processing Integration Results

RT: 14.32

Response: 13849

Amount: 102

Conc: 102



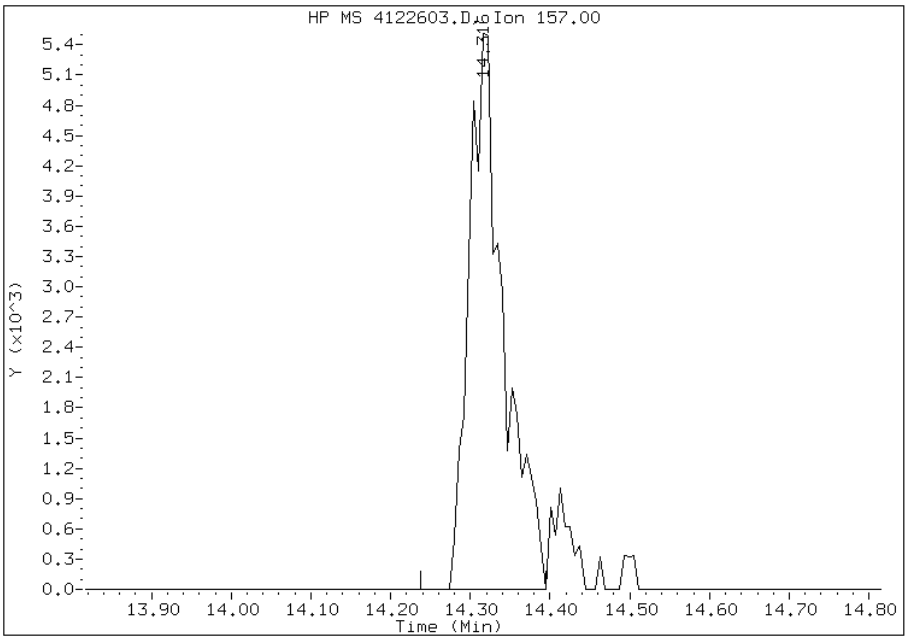
Manual Integration Results

RT: 14.32

Response: 16982

Amount: 124

Conc: 124



Manually Integrated By: zukowskim
Modification Date: 27-Dec-2013 00:46
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4122603.D
Inj. Date and Time: 27-DEC-2013 01:12
Instrument ID: hp4.i
Client ID: CCVIS40
Compound: 97 1,2,4-Trichlorobenzene
CAS #: 120-82-1
Report Date: 12/27/2013

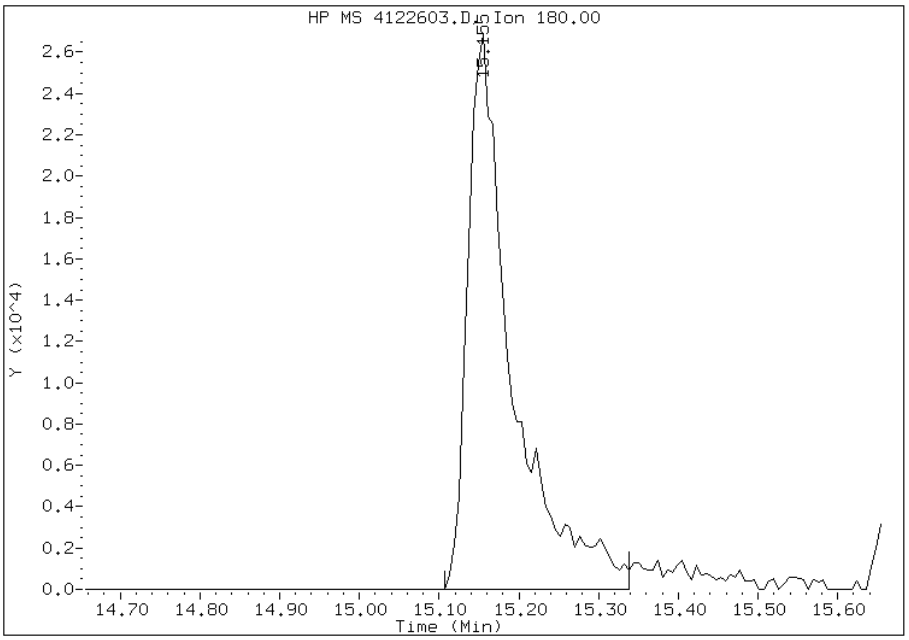
Processing Integration Results

RT: 15.16

Response: 105363

Amount: 156

Conc: 156



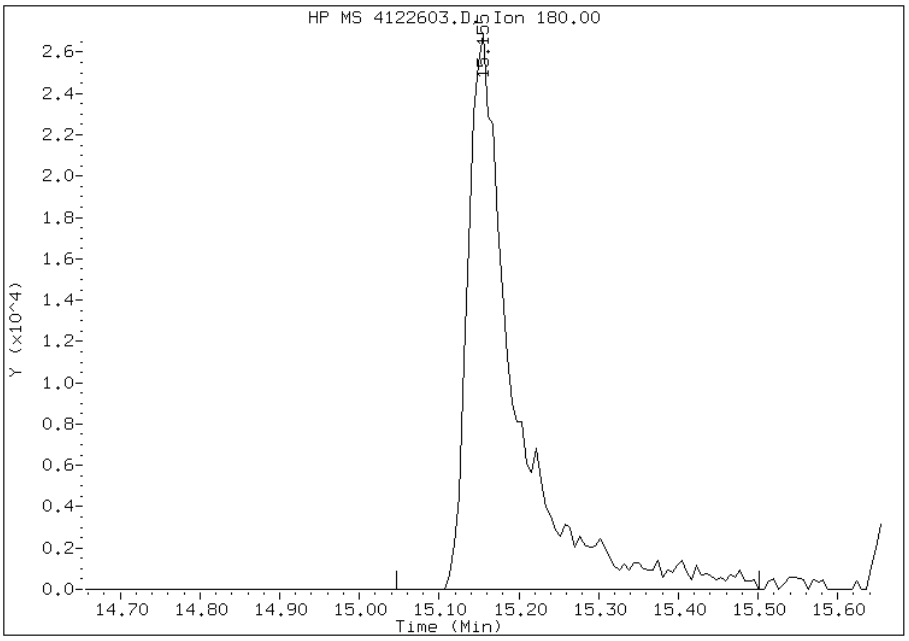
Manual Integration Results

RT: 15.16

Response: 113147

Amount: 167

Conc: 167



Manually Integrated By: zukowskim
Modification Date: 27-Dec-2013 00:46
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4122603.D
Inj. Date and Time: 27-DEC-2013 01:12
Instrument ID: hp4.i
Client ID: CCVIS40
Compound: 99 Naphthalene
CAS #: 91-20-3
Report Date: 12/27/2013

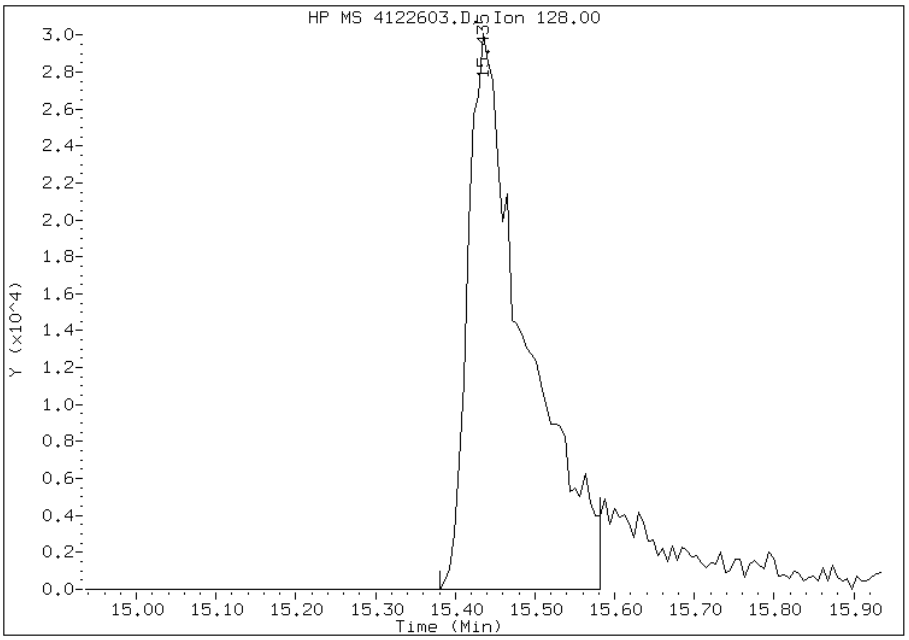
Processing Integration Results

RT: 15.44

Response: 152224

Amount: 146

Conc: 146



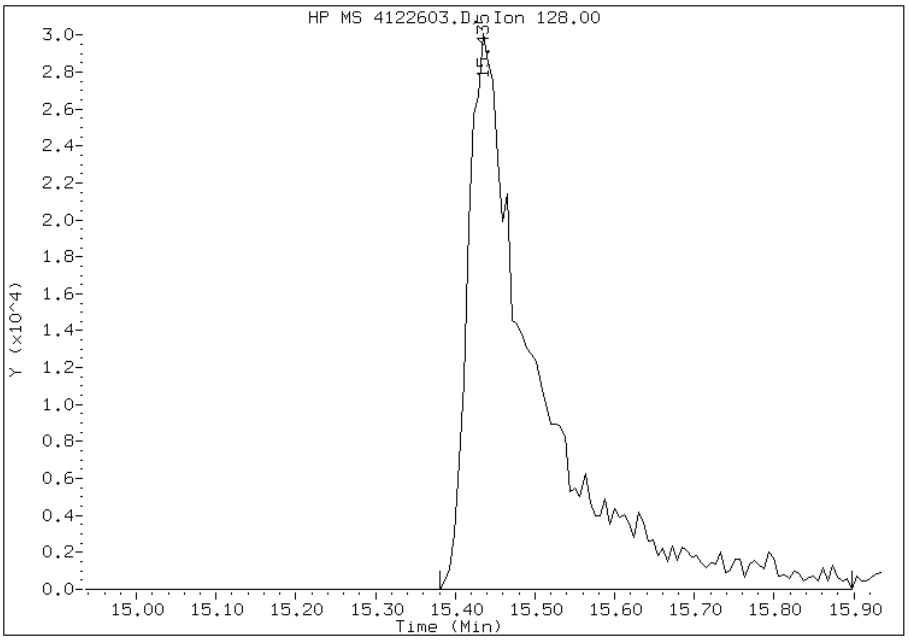
Manual Integration Results

RT: 15.44

Response: 185384

Amount: 179

Conc: 179



Manually Integrated By: zukowskim
Modification Date: 27-Dec-2013 00:47
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 4122603.D
Inj. Date and Time: 27-DEC-2013 01:12
Instrument ID: hp4.i
Client ID: CCVIS40
Compound: 100 1,2,3-Trichlorobenzene
CAS #: 87-61-6
Report Date: 12/27/2013

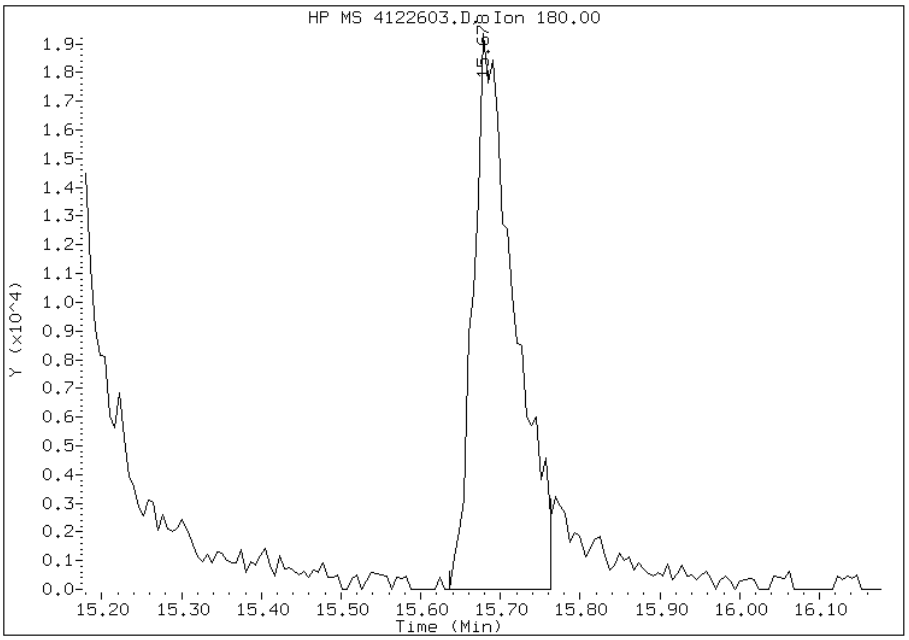
Processing Integration Results

RT: 15.68

Response: 70144

Amount: 184

Conc: 184



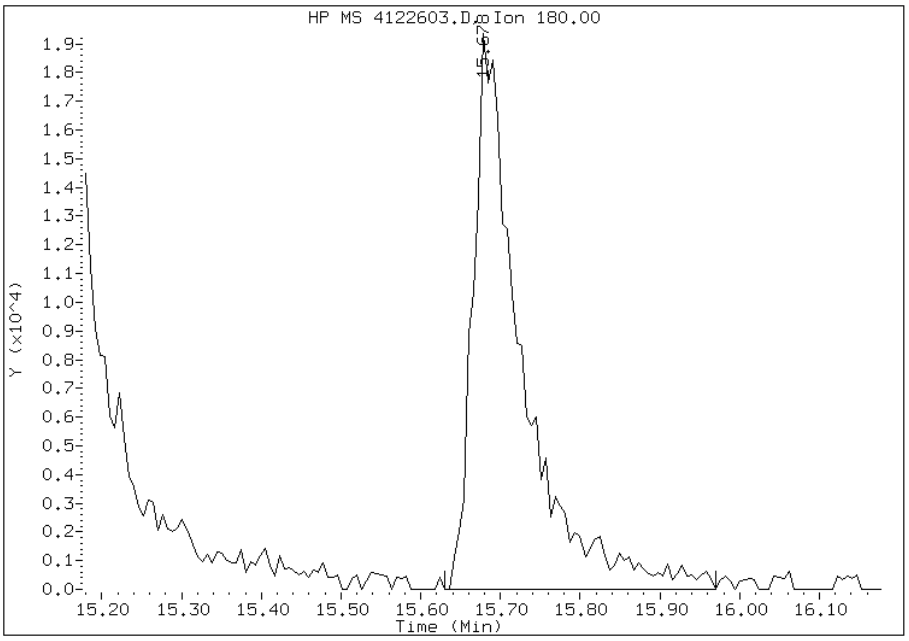
Manual Integration Results

RT: 15.68

Response: 83359

Amount: 220

Conc: 220



Manually Integrated By: zukowskim
Modification Date: 27-Dec-2013 00:47
Manual Integration Reason: Peak Integrated Incorrectly

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Lab Sample ID: CCVIS 180-93330/2 Calibration Date: 12/27/2013 00:00

Instrument ID: HP7 Calib Start Date: 12/06/2013 07:32

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/06/2013 11:22

Lab File ID: 7122603.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	0.4365	0.3962		36.3	40.0	-9.2	50.0
Chloromethane	Ave	0.8792	0.7955	0.1000	36.2	40.0	-9.5	
Vinyl chloride	Ave	0.4660	0.4040		34.7	40.0	-13.3	20.0
1,3-Butadiene	Qua	0.5553	0.4927		39.8	40.0	-0.6	
Bromomethane	Qua	0.1280	0.1210		46.1	40.0	15.1	
Chloroethane	Ave	0.1266	0.1180		37.3	40.0	-6.7	50.0
Trichlorofluoromethane	Ave	0.2126	0.2028		38.2	40.0	-4.6	50.0
Ethyl ether	Ave	0.2743	0.1688		24.6	40.0	-38.5	50.0
Acrolein	Ave	0.0288	0.0272		166	175	-5.4	50.0
1,1-Dichloroethene	Ave	0.3559	0.3304		37.1	40.0	-7.2	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.3431	0.2927		34.1	40.0	-14.7	50.0
Iodomethane	Ave	0.5465	0.5428		39.7	40.0	-0.7	50.0
Acetone	Qua	0.1051	0.0963		43.9	40.0	9.7	50.0
Carbon disulfide	Ave	1.056	1.066		40.4	40.0	0.9	50.0
Allyl chloride	Ave	0.2767	0.2626		38.0	40.0	-5.1	50.0
Methyl acetate	Qua	0.2504	0.1384		129	200	-35.6	50.0
Methylene Chloride	Ave	0.3743	0.3455		36.9	40.0	-7.7	50.0
trans-1,2-Dichloroethene	Ave	0.3701	0.3692		39.9	40.0	-0.3	50.0
Acrylonitrile	Ave	0.1069	0.0705		264	400	-34.1	50.0
tert-Butyl alcohol	Ave	1.393	1.328		381	400	-4.7	50.0
Methyl tert-butyl ether	Ave	0.7186	0.5400		30.1	40.0	-24.9	50.0
Hexane	Ave	0.6403	0.5163		32.3	40.0	-19.4	50.0
1,1-Dichloroethane	Ave	0.7228	0.6462	0.1000	35.8	40.0	-10.6	25.0
Vinyl acetate	Ave	0.2835	0.3800		53.6	40.0	34.0	50.0
cis-1,2-Dichloroethene	Ave	0.3993	0.3676		36.8	40.0	-7.9	50.0
2,2-Dichloropropane	Ave	0.4478	0.4668		41.7	40.0	4.2	50.0
2-Butanone (MEK)	Qua	0.1362	0.1059		38.5	40.0	-3.6	50.0
Bromochloromethane	Ave	0.1739	0.1463		33.7	40.0	-15.9	50.0
Chloroform	Ave	0.5879	0.5077		34.5	40.0	-13.6	20.0
1,1,1-Trichloroethane	Ave	0.4730	0.4664		39.4	40.0	-1.4	25.0
Cyclohexane	Ave	0.7588	0.6723		35.4	40.0	-11.4	50.0
Carbon tetrachloride	Ave	0.3789	0.3790		40.0	40.0	0.0	25.0
1,1-Dichloropropene	Ave	0.4039	0.3409		33.8	40.0	-15.6	50.0
Benzene	Ave	1.248	1.080		34.6	40.0	-13.5	25.0
1,2-Dichloroethane	Ave	0.3633	0.2778		30.6	40.0	-23.5	25.0
Isobutyl alcohol	Ave	0.0128	0.0110		858	1000	-14.2	50.0
Trichloroethene	Ave	0.3581	0.3350		37.4	40.0	-6.5	25.0
Methylcyclohexane	Ave	0.6044	0.5705		37.8	40.0	-5.6	50.0
1,2-Dichloropropane	Ave	0.3185	0.2689		33.8	40.0	-15.6	20.0
Dibromomethane	Ave	0.1601	0.1248		31.2	40.0	-22.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Lab Sample ID: CCVIS 180-93330/2 Calibration Date: 12/27/2013 00:00

Instrument ID: HP7 Calib Start Date: 12/06/2013 07:32

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/06/2013 11:22

Lab File ID: 7122603.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	1.176	1.504		1020	800	27.9	50.0
Dichlorobromomethane	Ave	0.3836	0.3460		36.1	40.0	-9.8	25.0
cis-1,3-Dichloropropene	Ave	0.4445	0.4075		36.7	40.0	-8.3	25.0
4-Methyl-2-pentanone (MIBK)	Ave	1.116	0.9119		32.7	40.0	-18.3	50.0
Toluene	Qua	4.498	4.154		34.7	40.0	-13.2	20.0
trans-1,3-Dichloropropene	Ave	1.353	1.106		32.7	40.0	-18.3	25.0
Ethyl methacrylate	Ave	1.152	0.8211		28.5	40.0	-28.7	50.0
1,1,2-Trichloroethane	Ave	0.8860	0.6999		31.6	40.0	-21.0	25.0
Tetrachloroethene	Ave	1.000	1.023		40.9	40.0	2.2	25.0
1,3-Dichloropropane	Qua	1.434	1.063		32.8	40.0	-18.0	50.0
2-Hexanone	Qua	0.8010	0.6505		35.9	40.0	-10.3	50.0
Chlorodibromomethane	Ave	0.999	0.8672		34.7	40.0	-13.2	25.0
1,2-Dibromoethane	Ave	0.9218	0.7206		31.3	40.0	-21.8	50.0
Chlorobenzene	Ave	2.902	2.724	0.3000	37.5	40.0	-6.1	
1,1,1,2-Tetrachloroethane	Ave	1.073	1.007		37.5	40.0	-6.2	50.0
Ethylbenzene	Ave	1.738	1.593		36.7	40.0	-8.3	20.0
m-Xylene & p-Xylene	Ave	2.191	2.017		36.8	40.0	-8.0	25.0
o-Xylene	Ave	2.349	2.011		34.2	40.0	-14.4	25.0
Styrene	Qua	3.140	2.927		37.4	40.0	-6.4	25.0
Bromoform	Ave	0.5927	0.4695	0.1000	31.7	40.0	-20.8	
Isopropylbenzene	Qua	5.148	5.106		41.5	40.0	3.7	50.0
1,1,2,2-Tetrachloroethane	Ave	1.107	0.6244	0.3000	22.6	40.0	-43.6	
Bromobenzene	Ave	0.9286	1.187		51.1	40.0	27.9	50.0
1,2,3-Trichloropropane	Ave	0.1893	0.1715		36.3	40.0	-9.4	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1869	0.1475		31.6	40.0	-21.1	50.0
2-Chlorotoluene	Ave	0.9011	1.168		51.9	40.0	29.7	50.0
1,3,5-Trimethylbenzene	Ave	3.091	3.626		46.9	40.0	17.3	50.0
N-Propylbenzene	Ave	1.520	1.909		50.2	40.0	25.6	50.0
4-Chlorotoluene	Ave	0.8803	1.063		48.3	40.0	20.8	50.0
tert-Butylbenzene	Ave	2.721	3.462		50.9	40.0	27.2	50.0
1,2,4-Trimethylbenzene	Qua	2.846	3.367		52.1	40.0	30.2	50.0
sec-Butylbenzene	Ave	4.281	4.916		45.9	40.0	14.8	50.0
1,3-Dichlorobenzene	Ave	1.759	1.773		40.3	40.0	0.8	25.0
4-Isopropyltoluene	Ave	3.278	3.588		43.8	40.0	9.5	50.0
1,4-Dichlorobenzene	Ave	1.527	1.539		40.3	40.0	0.8	25.0
n-Butylbenzene	Ave	3.467	3.244		37.4	40.0	-6.4	50.0
1,2-Dichlorobenzene	Ave	1.483	1.220		32.9	40.0	-17.8	25.0
1,2-Dibromo-3-Chloropropane	Qua	0.1158	0.0606		25.7	40.0	-35.8	50.0
1,2,4-Trichlorobenzene	Ave	0.5568	0.3578		25.7	40.0	-35.7	50.0
Hexachlorobutadiene	Ave	0.5094	0.3065		21.1	40.0	-39.8	50.0
Naphthalene	Ave	0.5883	0.4285		29.1	40.0	-27.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Lab Sample ID: CCVIS 180-93330/2 Calibration Date: 12/27/2013 00:00

Instrument ID: HP7 Calib Start Date: 12/06/2013 07:32

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/06/2013 11:22

Lab File ID: 7122603.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.2757	0.1417		20.6	40.0	-48.6	50.0
Dibromofluoromethane (Surr)	Ave	0.2665	0.2525		37.9	40.0	-5.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3083	0.2512		32.6	40.0	-18.5	25.0
Toluene-d8 (Surr)	Ave	3.874	3.745		38.7	40.0	-3.4	50.0
4-Bromofluorobenzene (Surr)	Ave	1.507	1.376		36.5	40.0	-8.7	25.0

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\pitsvr06\d\chem\hp7.i\7122613d.b\7122603.D
Lab Smp Id: CCVIS Client Smp ID: CCVIS40
Inj Date : 27-DEC-2013 00:00 MS Autotune Date: 29-AUG-2013 08:08
Operator : 430936 Inst ID: hp7.i
Smp Info : CCVIS
Misc Info : 7122613d.b,T8260bh2o.m,list1.sub
Comment :
Method : \\pitsvr06\d\chem\hp7.i\7122613d.b\T8260bh2o.m
Meth Date : 27-Dec-2013 04:01 hp7.i Quant Type: ISTD
Cal Date : 06-DEC-2013 11:22 Cal File: 7120609.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-530

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
*	46 Fluorobenzene (IS)	96	7.396	7.396	(1.000)	1001549	250.000	
*	69 Chlorobenzene-d5	119	10.462	10.462	(1.000)	259498	250.000	
*	92 1,4-Dichlorobenzene-d4	152	12.786	12.786	(1.000)	265379	250.000	
*	176 Dioxane-d8 (IS)	96	8.126	8.126	(1.000)	17736	5000.00	
*	177 TBA-d9 (IS)	65	4.725	4.725	(1.000)	217146	5000.00	(M)
$	39 Dibromofluoromethane (Surr)	113	6.672	6.672	(0.902)	202306	200.000	189.5
$	43 1,2-Dichloroethane-d4	65	7.037	7.037	(0.951)	201287	200.000	163.0
$	59 Toluene-d8	98	9.032	9.032	(0.863)	777358	200.000	193.3
$	80 Bromofluorobenzene (Surr)	95	11.630	11.630	(1.112)	285600	200.000	182.6
	1 Dichlorodifluoromethane	85	1.933	1.933	(0.261)	317468	200.000	181.5(Q)
	2 Chloromethane	50	2.000	2.000	(0.270)	637359	200.000	180.9
	3 Vinyl Chloride	62	2.128	2.128	(0.288)	323705	200.000	173.4
	4 Bromomethane	94	2.480	2.480	(0.335)	96977	200.000	230.3
	5 Chloroethane	64	2.602	2.602	(0.352)	94573	200.000	186.5
	7 Dichlorofluoromethane	67	2.858	2.858	(0.386)	194994	200.000	188.4
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.679	3.679	(0.497)	234555	200.000	170.6
	166 Trichlorofluoromethane	101	2.827	2.827	(0.382)	162502	200.000	190.8
	12 1,1-Dichloroethene	96	3.539	3.539	(0.479)	264687	200.000	185.6
	15 Carbon Disulfide	76	3.819	3.819	(0.516)	854015	200.000	201.8(M)
	13 Acetone	43	3.801	3.801	(0.514)	77187	200.000	219.4
	18 Methylene Chloride	84	4.342	4.342	(0.587)	276845	200.000	184.6
	19 trans-1,2-Dichloroethene	96	4.756	4.756	(0.643)	295785	200.000	199.5
	20 Methyl tert-butyl ether	73	4.835	4.835	(0.654)	432639	200.000	150.3
	24 1,1-Dichloroethane	63	5.346	5.346	(0.723)	517783	200.000	178.8
	27 2,2-Dichloropropane	77	6.088	6.088	(0.823)	373994	200.000	208.5
	28 cis-1,2-dichloroethene	96	6.082	6.082	(0.822)	294565	200.000	184.1
M	29 1,2-Dichloroethene (total)	96				590350	400.000	383.6
	30 Bromochloromethane	128	6.374	6.374	(0.862)	117208	200.000	168.3

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
31 2-Butanone	43	6.167	6.167	(0.834)	84884	200.000	192.7
37 Chloroform	83	6.489	6.489	(0.877)	406784	200.000	172.7
38 1,1,1-Trichloroethane	97	6.672	6.672	(0.902)	373719	200.000	197.2
40 1,1-Dichloropropene	75	6.861	6.861	(0.928)	273136	200.000	168.8
41 Carbon Tetrachloride	117	6.854	6.854	(0.927)	303635	200.000	200.0
42 Benzene	78	7.092	7.092	(0.959)	865010	200.000	173.1
45 1,2-Dichloroethane	62	7.122	7.122	(0.963)	222560	200.000	152.9
47 Trichloroethene	130	7.785	7.785	(1.053)	268393	200.000	187.1
49 1,2-Dichloropropane	63	8.023	8.023	(1.085)	215475	200.000	168.8
50 Dibromomethane	93	8.144	8.144	(1.101)	99986	200.000	155.9
53 Bromodichloromethane	83	8.315	8.315	(1.124)	277250	200.000	180.4
57 cis-1,3-Dichloropropene	75	8.765	8.765	(1.185)	326535	200.000	183.4
58 4-Methyl-2-Pentanone	43	8.935	8.935	(0.854)	189308	200.000	163.5
60 Toluene	91	9.099	9.099	(0.870)	862444	200.000	173.6
61 trans-1,3-Dichloropropene	75	9.324	9.324	(0.891)	229574	200.000	163.4
63 1,3-Dichloropropane	76	9.671	9.671	(0.924)	220587	200.000	164.0
64 1,1,2-Trichloroethane	97	9.507	9.507	(0.909)	145288	200.000	158.0
65 Tetrachloroethene	164	9.647	9.647	(0.922)	212320	200.000	204.4
66 2-Hexanone	43	9.762	9.762	(0.933)	135040	200.000	179.3
67 Dibromochloromethane	129	9.896	9.896	(0.946)	180026	200.000	173.7
68 1,2-Dibromoethane	107	10.006	10.006	(0.956)	149595	200.000	156.3
70 Chlorobenzene	112	10.498	10.498	(1.003)	565506	200.000	187.7
71 1,1,1,2-Tetrachloroethane	131	10.578	10.578	(1.011)	208979	200.000	187.7
72 Ethylbenzene	106	10.602	10.602	(1.013)	330742	200.000	183.4
73 m,p-XYLENE	106	10.717	10.717	(1.024)	418626	200.000	184.1
74 Xylene-o	106	11.113	11.113	(1.062)	417469	200.000	171.2
76 Styrene	104	11.125	11.125	(1.063)	607663	200.000	187.2
77 Bromoform	173	11.314	11.314	(1.081)	97470	200.000	158.4
78 Isopropylbenzene	105	11.478	11.478	(1.097)	1060069	200.000	207.5
79 Bromobenzene	156	11.788	11.788	(0.922)	252088	200.000	255.7
81 n-Propylbenzene	120	12.062	12.062	(0.943)	405353	200.000	251.2
82 2-Chlorotoluene	126	11.977	11.977	(0.937)	248037	200.000	259.3
83 1,1,2,2-Tetrachloroethane	83	11.770	11.770	(1.125)	129630	200.000	112.8
84 1,2,3-Trichloropropane	110	11.819	11.819	(0.924)	36419	200.000	181.2
85 4-Chlorotoluene	126	12.086	12.086	(0.945)	225711	200.000	241.5
86 1,3,5-Trimethylbenzene	105	12.062	12.062	(0.943)	769735	200.000	234.6
87 tert-Butylbenzene	119	12.384	12.384	(0.969)	735029	200.000	254.5
88 1,2,4-Trimethylbenzene	105	12.433	12.433	(0.972)	714863	200.000	260.4
89 sec-Butylbenzene	105	12.603	12.603	(0.986)	1043687	200.000	229.6
90 4-Isopropyltoluene	119	12.749	12.749	(0.997)	761846	200.000	218.9
91 1,3-Dichlorobenzene	146	12.719	12.719	(0.995)	376450	200.000	201.6
94 n-Butylbenzene	91	13.163	13.163	(1.029)	688615	200.000	187.1
93 1,4-Dichlorobenzene	146	12.810	12.810	(1.002)	326630	200.000	201.6
95 1,2-Dichlorobenzene	146	13.187	13.187	(1.031)	258926	200.000	164.5
96 1,2-Dibromo-3-chloropropane	157	13.972	13.972	(1.093)	12862	200.000	128.4
97 1,2,4-Trichlorobenzene	180	14.799	14.799	(1.157)	75967	200.000	128.5
98 Hexachlorobutadiene	225	14.970	14.970	(1.171)	65069	200.000	105.3
99 Naphthalene	128	15.055	15.055	(1.177)	90961	200.000	145.6
100 1,2,3-Trichlorobenzene	180	15.304	15.304	(1.197)	30089	200.000	102.8
156 Methyl Acetate	43	4.281	4.281	(0.579)	554351	1000.00	643.8
157 Cyclohexane	56	6.727	6.727	(0.910)	538692	200.000	177.2
158 Methyl Cyclohexane	83	7.980	7.980	(1.079)	457077	200.000	188.8
32 Vinyl Acetate	43	5.486	5.486	(0.742)	304447	200.000	268.1
52 1,4-Dioxane	88	8.181	8.181	(1.007)	21338	4000.00	5116

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
21	tert-Butyl Alcohol	59	4.804	4.804	(1.017)	115330	2000.00	1906(Q)
16	3-Chloro-1-propene	76	4.141	4.141	(0.560)	210434	200.000	189.9(QM)
11	Acrolein	56	3.521	3.521	(0.476)	95457	875.000	827.9(M)
22	Acrylonitrile	53	4.780	4.780	(0.646)	564583	2000.00	1319
8	Ethyl Ether	59	3.332	3.332	(0.451)	135272	200.000	123.1(M)
62	Ethyl methacrylate	69	9.422	9.422	(0.901)	170451	200.000	142.6
23	Hexane	57	5.151	5.151	(0.697)	413708	200.000	161.3
14	Iodomethane	142	3.758	3.758	(0.508)	434946	200.000	198.7
44	Isobutanol	41	7.402	7.402	(1.001)	219885	5000.00	4290
155	N-Heptane	41	7.986	7.986	(1.080)	370039	200.000	172.2
35	Tetrahydrofuran	42	6.727	6.727	(0.910)	145331	400.000	350.7
164	trans-1,4-Dichloro-2-butene	53	11.831	11.831	(0.925)	31306	200.000	157.8
169	Butadiene	39	2.182	2.182	(0.295)	394760	200.000	198.8
M 75	Xylenes (total)	106				836095	400.000	355.2

QC Flag Legend

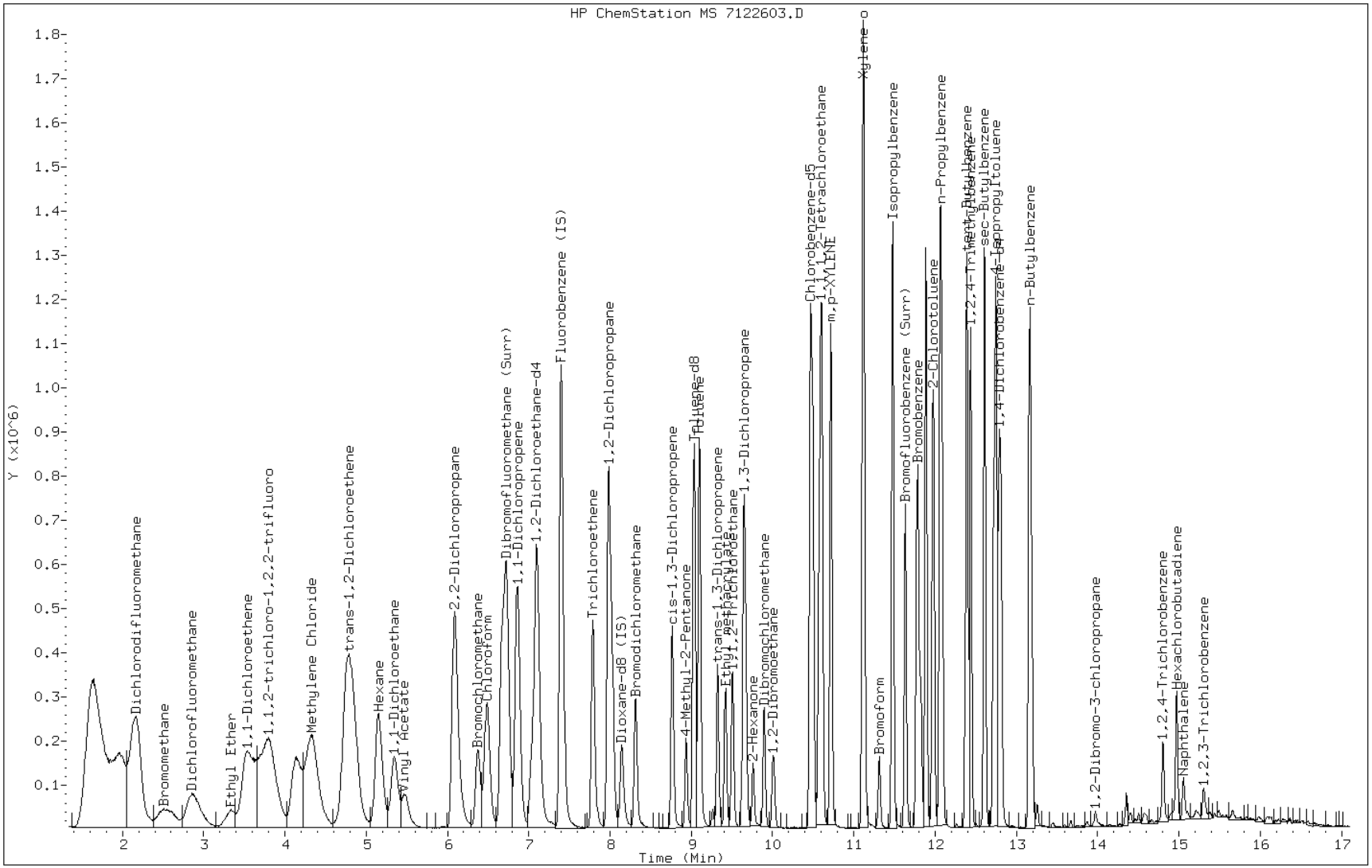
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 7122603.D

Date: 27-DEC-2013 00:00

Client ID: CCVIS40 Instrument: hp7.i

Sample Info: CCVIS Operator: 430936



Manual Integration Report

Data File: 7122603.D
Inj. Date and Time: 27-DEC-2013 00:00
Instrument ID: hp7.i
Client ID: CCVIS40
Compound: 8 Ethyl Ether
CAS #: 60-29-7
Report Date: 12/27/2013

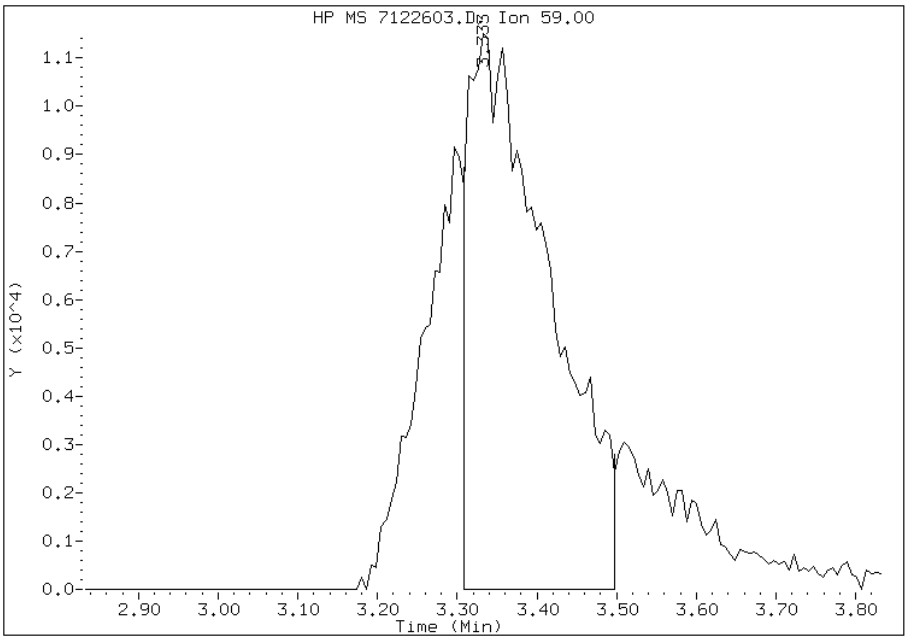
Processing Integration Results

RT: 3.33

Response: 83055

Amount: 76

Conc: 76



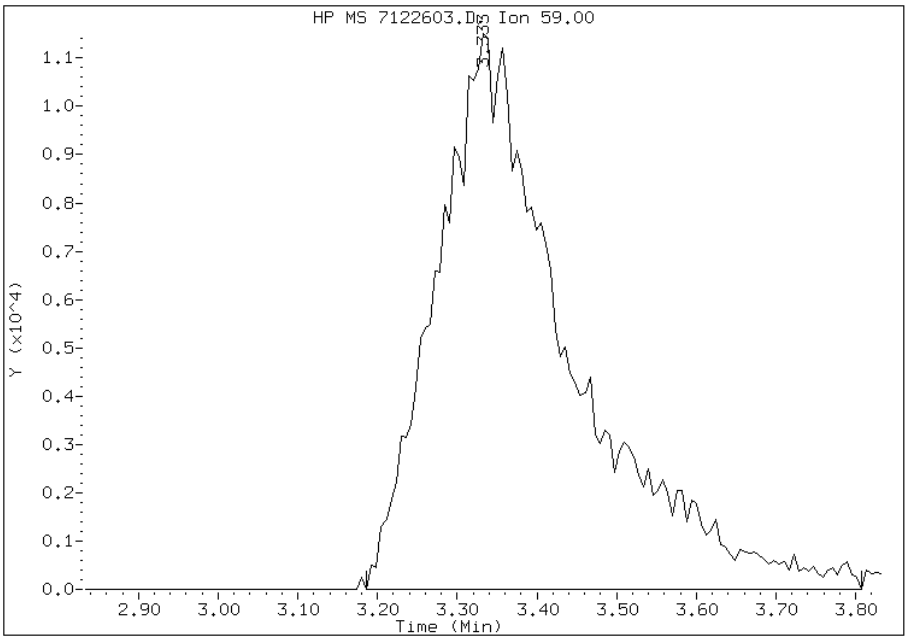
Manual Integration Results

RT: 3.33

Response: 135272

Amount: 123

Conc: 123



Manually Integrated By: zukowskim
Modification Date: 27-Dec-2013 00:32
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7122603.D
Inj. Date and Time: 27-DEC-2013 00:00
Instrument ID: hp7.i
Client ID: CCVIS40
Compound: 11 Acrolein
CAS #: 107-02-8
Report Date: 12/27/2013

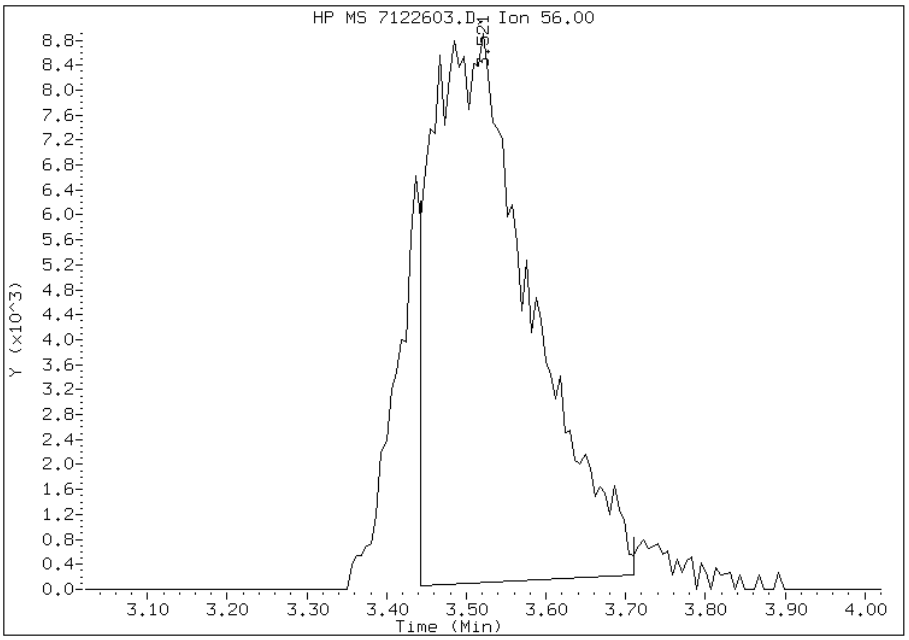
Processing Integration Results

RT: 3.52

Response: 77755

Amount: 674

Conc: 674



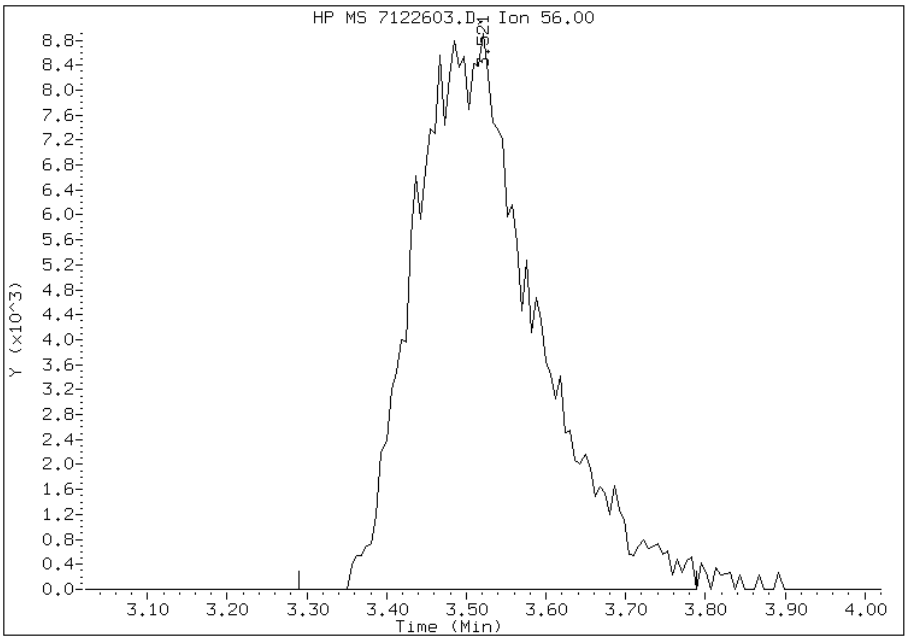
Manual Integration Results

RT: 3.52

Response: 95457

Amount: 828

Conc: 828



Manually Integrated By: zukowskim
Modification Date: 27-Dec-2013 00:32
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7122603.D
Inj. Date and Time: 27-DEC-2013 00:00
Instrument ID: hp7.i
Client ID: CCVIS40
Compound: 15 Carbon Disulfide
CAS #: 75-15-0
Report Date: 12/27/2013

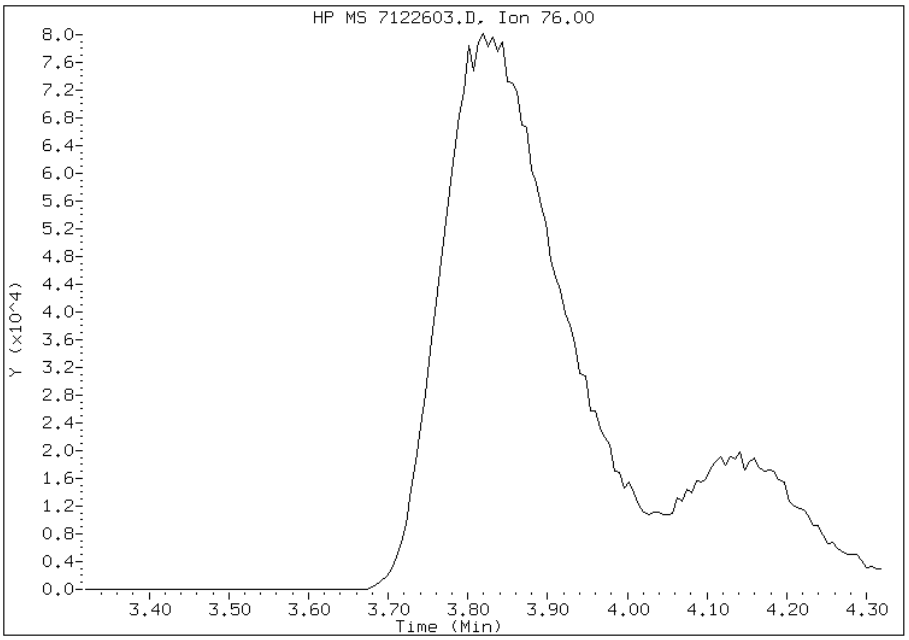
Processing Integration Results

RT: 3.82

Response: 1055872

Amount: 249

Conc: 249



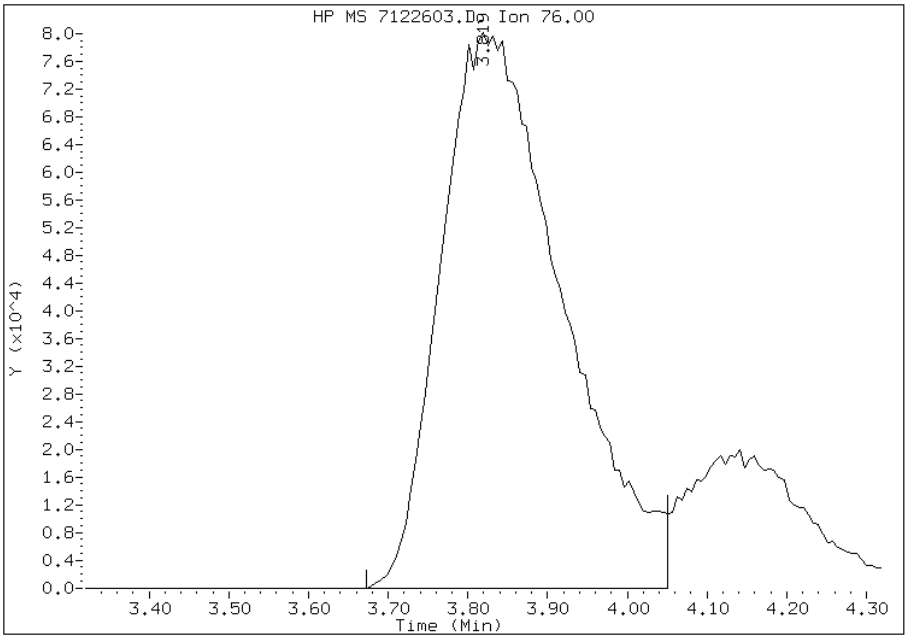
Manual Integration Results

RT: 3.82

Response: 854015

Amount: 202

Conc: 202



Manually Integrated By: zukowskim
Modification Date: 27-Dec-2013 00:31
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: 7122603.D
Inj. Date and Time: 27-DEC-2013 00:00
Instrument ID: hp7.i
Client ID: CCVIS40
Compound: 16 3-Chloro-1-propene
CAS #: 107-05-1
Report Date: 12/27/2013

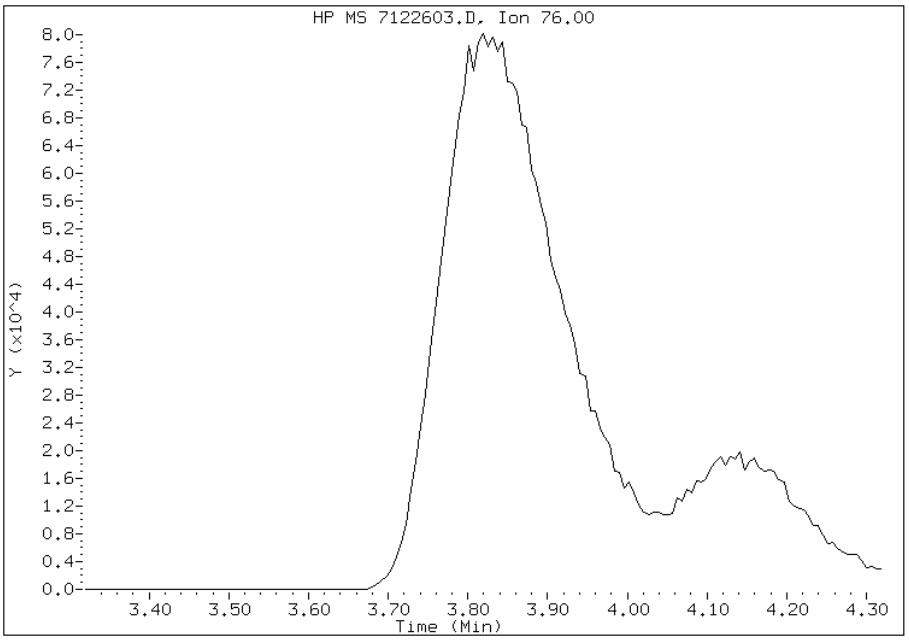
Processing Integration Results

RT: 3.82

Response: 1055872

Amount: 953

Conc: 953



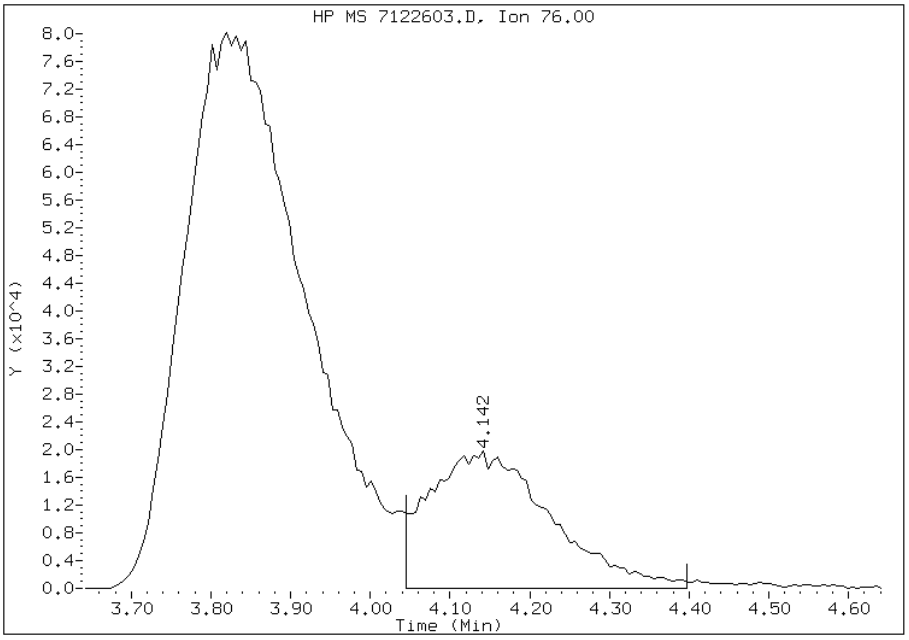
Manual Integration Results

RT: 4.14

Response: 210434

Amount: 190

Conc: 190



Manually Integrated By: zukowskim
Modification Date: 27-Dec-2013 00:32
Manual Integration Reason: Peak Integrated Incorrectly

TestAmerica Pittsburgh

Data file : \\PITSVR06\D\chem\hp4.i\4121613d.b\4121601.D
Lab Smp Id: BFB Client Smp ID: 31019D
Inj Date : 16-DEC-2013 09:18
Operator : 034635 Inst ID: hp4.i
Smp Info : BFB
Misc Info : 4121613d.b,tBFB.m,all.sub
Comment :
Method : \\PITSVR06\D\chem\hp4.i\4121613d.b\tBFB.m
Meth Date : 17-Jul-2013 09:39 journetp Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-088

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.702	9.030	-0.328	95	92768			100.00- 100.00	100.00
8.702	9.030	-0.328	50	15402			15.00- 40.00	16.60
8.702	9.030	-0.328	75	36040			30.00- 60.00	38.85
8.702	9.030	-0.328	96	5760			5.00- 9.00	6.21
8.702	9.030	-0.328	173	810			0.00- 2.00	1.11
8.702	9.030	-0.328	174	73192			50.00- 100.00	78.90
8.702	9.030	-0.328	175	6017			5.00- 9.00	8.22
8.702	9.030	-0.328	176	69656			95.00- 101.00	95.17
8.702	9.030	-0.328	177	4867			5.00- 9.00	6.99

Data File: 4121601.D

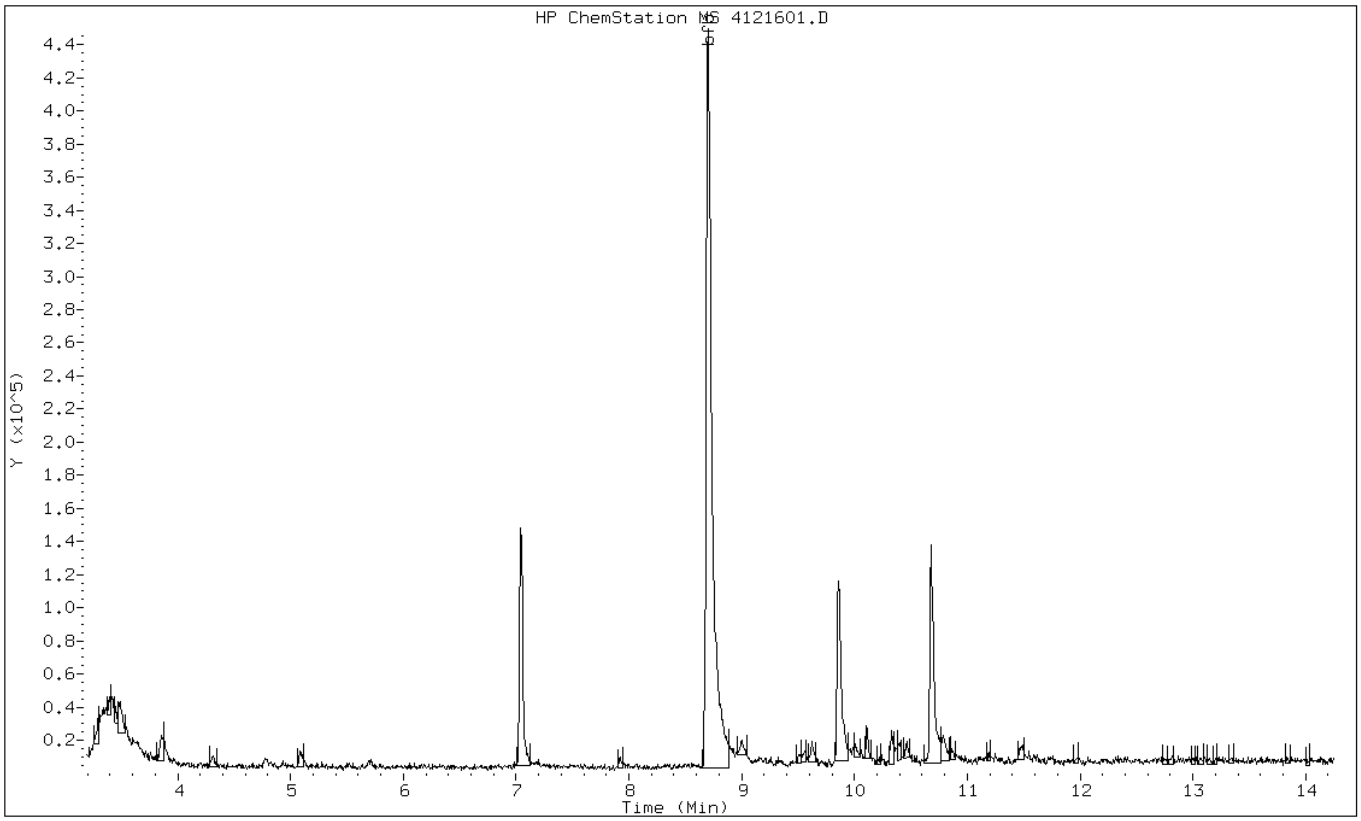
Date: 16-DEC-2013 09:18

Client ID: 31019D

Instrument: hp4.i

Sample Info: BFB

Operator: 034635



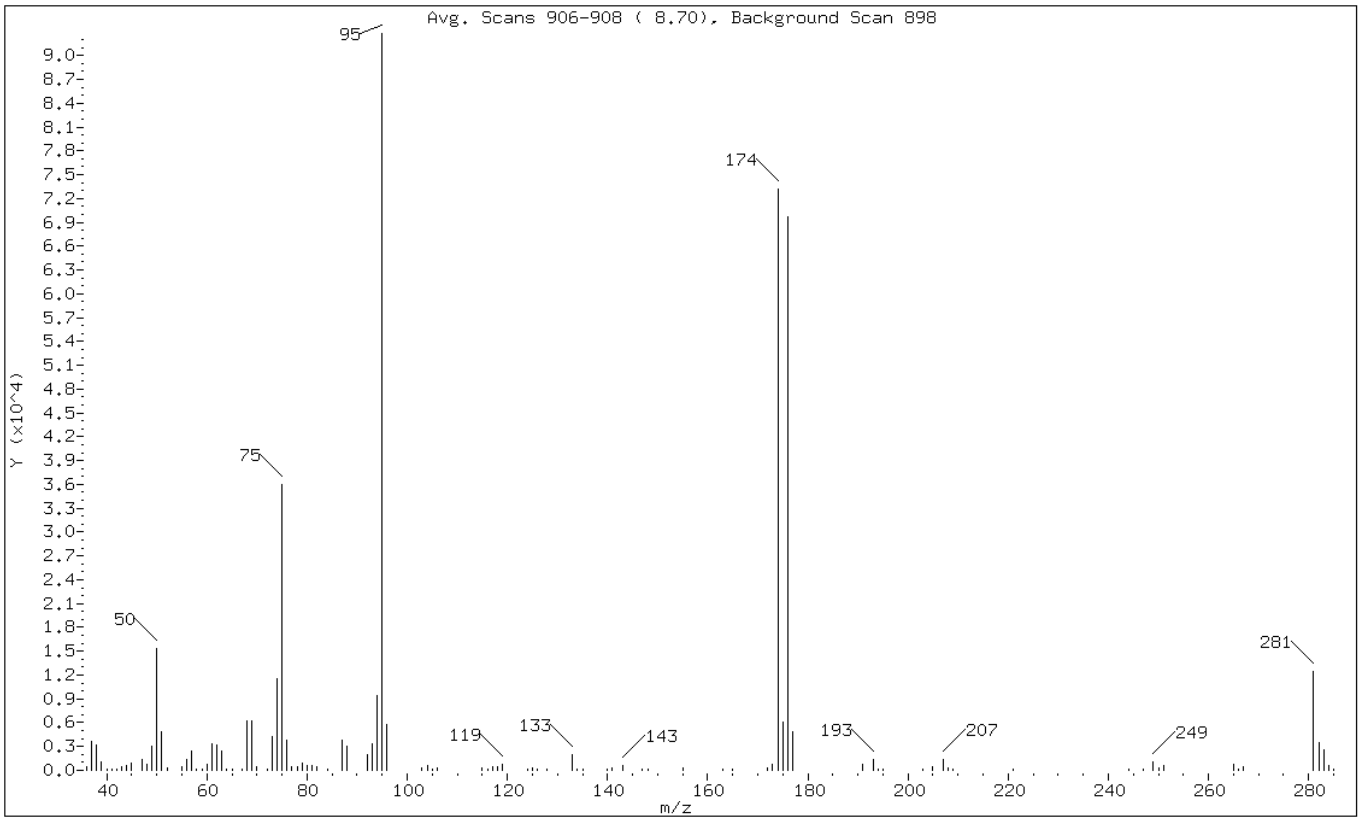
Data File: 4121601.D

Date: 16-DEC-2013 09:18

Client ID: 31019D Instrument: hp4.i

Sample Info: BFB Operator: 034635

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.60
75	30.00 - 60.00% of mass 95	38.85
96	5.00 - 9.00% of mass 95	6.21
173	Less than 2.00% of mass 174	0.87 (1.11)
174	50.00 - 100.00% of mass 95	78.90
175	5.00 - 9.00% of mass 174	6.49 (8.22)
176	95.00 - 101.00% of mass 174	75.09 (95.17)
177	5.00 - 9.00% of mass 176	5.25 (6.99)

Data File: 4121601.D

Date: 16-DEC-2013 09:18

Client ID: 31019D Instrument: hp4.i

Sample Info: BFB Operator: 034635

Data File: \\PITSVR06\D\chem\hp4.i\4121613d.b\4121601.D
Spectrum: Avg. Scans 906-908 (8.70), Background Scan 898
Location of Maximum: 95.00
Number of points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	500	65.00	115	105.00	133	176.00	69656
37.00	3637	67.00	138	106.00	302	177.00	4867
38.00	3169	68.00	6176	115.00	240	191.00	811
39.00	1129	69.00	6202	116.00	147	193.00	1379
40.00	176	70.00	382	117.00	505	194.00	125
41.00	124	72.00	143	118.00	503	195.00	155
42.00	110	73.00	4293	119.00	695	203.00	107
43.00	411	74.00	11512	124.00	142	205.00	398
44.00	645	75.00	36040	125.00	369	207.00	1338
45.00	929	76.00	3836	126.00	193	208.00	252
47.00	1304	77.00	522	128.00	126	209.00	224
48.00	748	78.00	482	133.00	1974	221.00	118
49.00	3083	79.00	868	134.00	105	244.00	112
50.00	15402	80.00	638	135.00	172	247.00	116
51.00	4825	81.00	669	140.00	117	249.00	1044
52.00	248	82.00	465	141.00	262	250.00	275
55.00	381	84.00	100	143.00	626	251.00	577
56.00	1333	87.00	3812	147.00	102	265.00	802
57.00	2415	88.00	2988	148.00	153	266.00	106
58.00	134	92.00	2002	155.00	282	267.00	474
59.00	107	93.00	3410	163.00	177	281.00	12478
60.00	786	94.00	9437	165.00	125	282.00	3522
61.00	3354	95.00	92768	172.00	286	283.00	2620
62.00	3239	96.00	5760	173.00	810	284.00	542
63.00	2486	103.00	319	174.00	73192	285.00	135
64.00	115	104.00	550	175.00	6017		

TestAmerica Pittsburgh

Data file : \\pitsvr06\d\chem\hp4.i\4122613d.b\4122601.D
Lab Smp Id: BFB Client Smp ID: 31019D
Inj Date : 26-DEC-2013 23:52
Operator : 430936 Inst ID: hp4.i
Smp Info : BFB
Misc Info : 4122613d.b,tBFB.m,all.sub
Comment :
Method : \\PITSVR06\D\chem\hp4.i\4122613d.b\tBFB.m
Meth Date : 17-Jul-2013 09:39 journetp Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-530

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.685	9.030	-0.345	95	260864			100.00- 100.00	100.00
8.685	9.030	-0.345	50	47472			15.00- 40.00	18.20
8.685	9.030	-0.345	75	106896			30.00- 60.00	40.98
8.685	9.030	-0.345	96	18488			5.00- 9.00	7.09
8.685	9.030	-0.345	173	1614			0.00- 2.00	0.77
8.685	9.030	-0.345	174	210816			50.00- 100.00	80.81
8.685	9.030	-0.345	175	14688			5.00- 9.00	6.97
8.685	9.030	-0.345	176	203200			95.00- 101.00	96.39
8.685	9.030	-0.345	177	14040			5.00- 9.00	6.91

Data File: 4122601.D

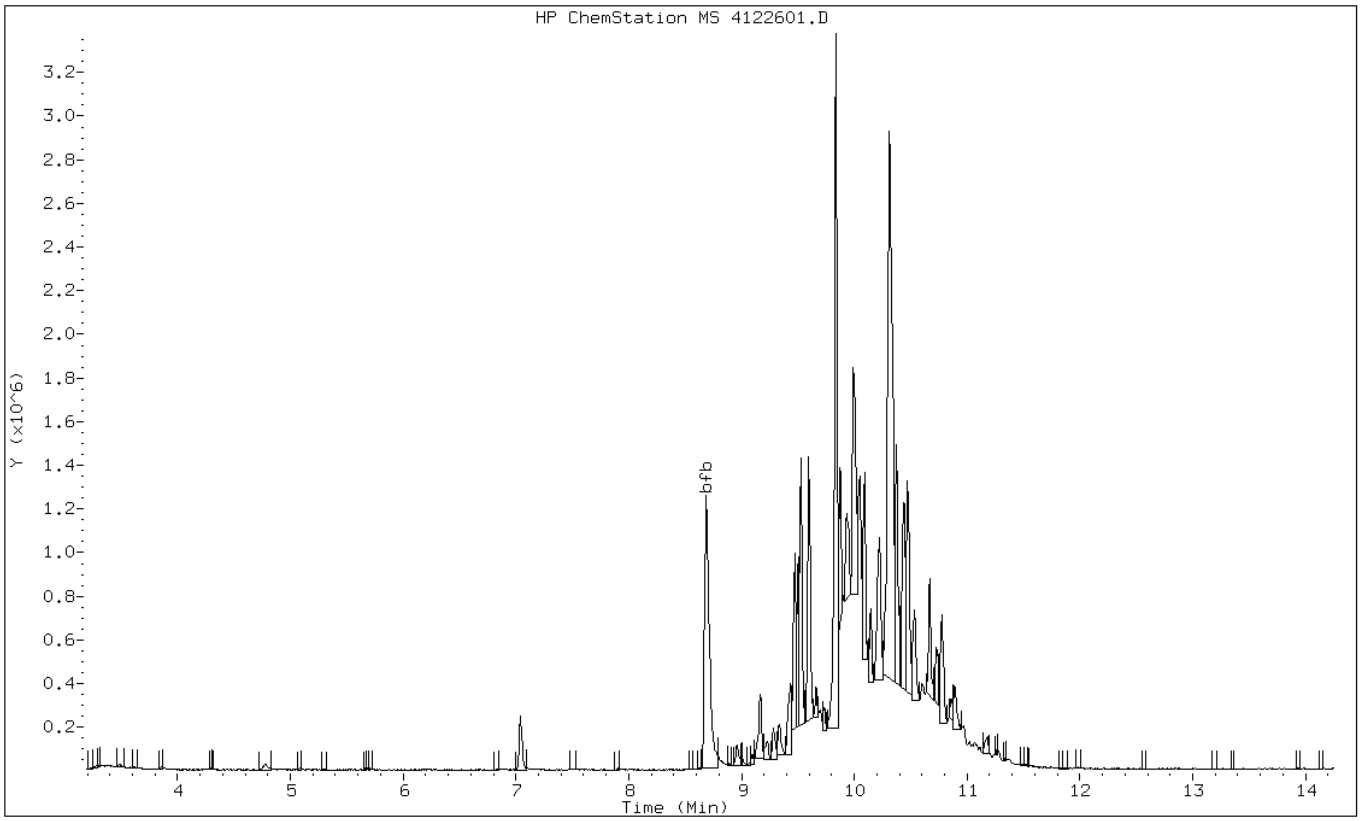
Date: 26-DEC-2013 23:52

Client ID: 31019D

Instrument: hp4.i

Sample Info: BFB

Operator: 430936



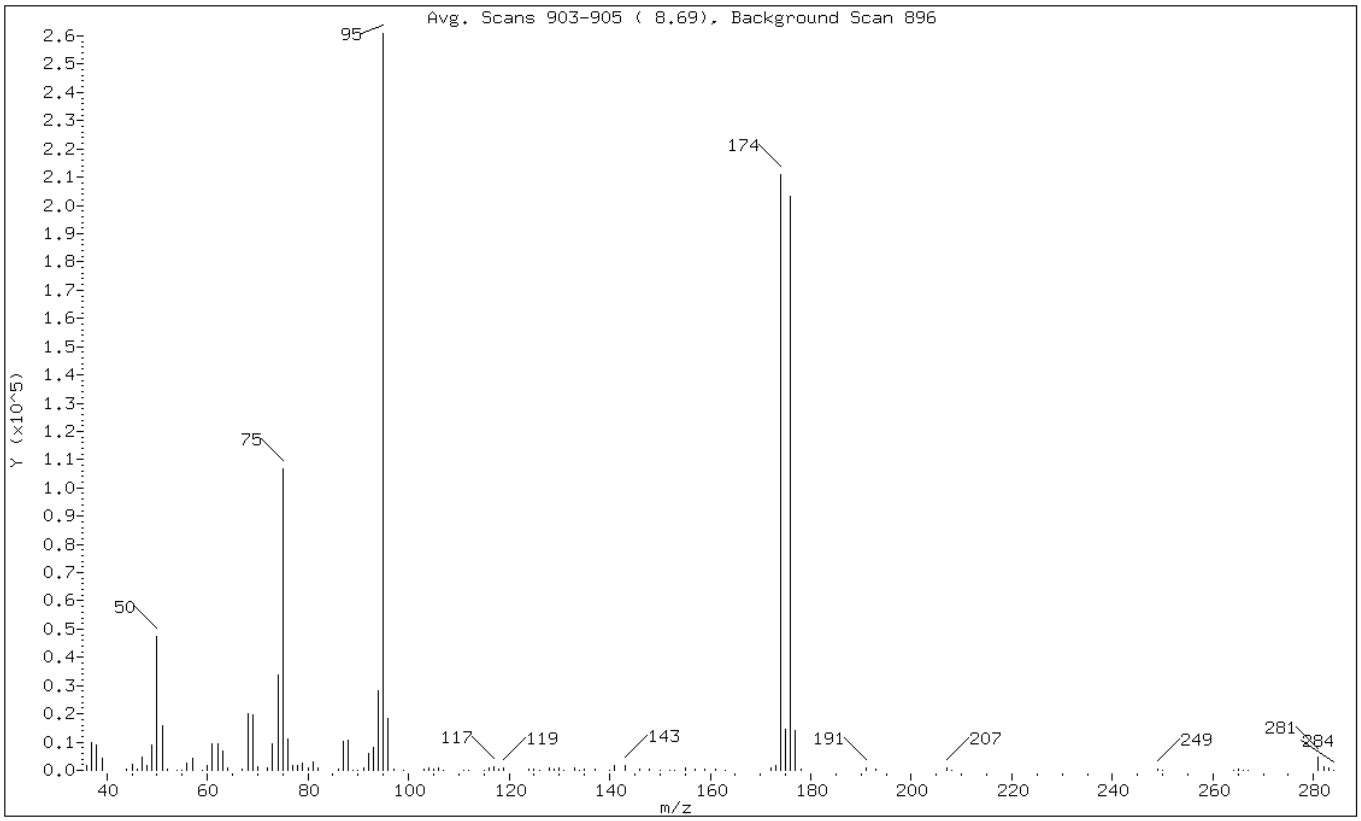
Data File: 4122601.D

Date: 26-DEC-2013 23:52

Client ID: 31019D Instrument: hp4.i

Sample Info: BFB Operator: 430936

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.20
75	30.00 - 60.00% of mass 95	40.98
96	5.00 - 9.00% of mass 95	7.09
173	Less than 2.00% of mass 174	0.62 (0.77)
174	50.00 - 100.00% of mass 95	80.81
175	5.00 - 9.00% of mass 174	5.63 (6.97)
176	95.00 - 101.00% of mass 174	77.89 (96.39)
177	5.00 - 9.00% of mass 176	5.38 (6.91)

Data File: 4122601.D

Date: 26-DEC-2013 23:52

Client ID: 31019D Instrument: hp4.i

Sample Info: BFB Operator: 430936

Data File: \\pitsvr06\d\chem\hp4.i\4122613d.b\4122601.D
Spectrum: Avg. Scans 903-905 (8.69), Background Scan 896
Location of Maximum: 95.00
Number of points: 108

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1720	73.00	9551	111.00	173	159.00	284
37.00	9790	74.00	33760	112.00	135	161.00	477
38.00	8934	75.00	106896	115.00	107	163.00	196
39.00	4272	76.00	10953	116.00	845	172.00	857
44.00	314	77.00	1776	117.00	1438	173.00	1614
45.00	2250	78.00	1551	118.00	340	174.00	210816
46.00	253	79.00	2629	119.00	993	175.00	14688
47.00	4522	80.00	963	124.00	225	176.00	203200
48.00	1762	81.00	2837	125.00	296	177.00	14040
49.00	9109	82.00	703	126.00	135	178.00	493
50.00	47472	86.00	363	128.00	702	191.00	886
51.00	15593	87.00	10380	129.00	385	193.00	464
52.00	637	88.00	10659	130.00	892	207.00	672
54.00	100	89.00	119	131.00	120	208.00	158
55.00	200	90.00	140	133.00	855	249.00	602
56.00	2706	91.00	797	134.00	126	250.00	121
57.00	4478	92.00	6026	135.00	248	264.00	101
59.00	174	93.00	8216	137.00	240	265.00	394
60.00	1823	94.00	28032	140.00	167	266.00	140
61.00	9356	95.00	260864	141.00	1558	267.00	156
62.00	9311	96.00	18488	143.00	1719	281.00	4808
63.00	6749	97.00	613	146.00	246	282.00	1133
64.00	699	99.00	134	148.00	555	283.00	672
67.00	441	103.00	307	150.00	102	284.00	164
68.00	20072	104.00	723	152.00	112		
69.00	19560	105.00	303	153.00	131		
70.00	1448	106.00	658	155.00	750		
72.00	1032	107.00	101	157.00	562		

TestAmerica Pittsburgh

Data file : \\PITSVR06\D\chem\hp7.i\7120613d.b\7120601.D
Lab Smp Id: BFB Client Smp ID: 31019D
Inj Date : 06-DEC-2013 06:25 MS Autotune Date: 29-AUG-2013 08:08
Operator : 430936 Inst ID: hp7.i
Smp Info : BFB
Misc Info : 7120613d.b,TBFB.m,all.sub
Comment :
Method : \\pitsvr06\d\chem\hp7.i\7120613d.b\TBFB.m
Meth Date : 02-Jul-2013 09:22 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TAIPIT0078

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
11.636	11.610	0.026	95	287232			100.00- 100.00	100.00
11.636	11.610	0.026	50	82328			15.00- 40.00	28.66
11.636	11.610	0.026	75	147328			30.00- 60.00	51.29
11.636	11.610	0.026	96	20240			5.00- 9.00	7.05
11.636	11.610	0.026	173	1406			0.00- 2.00	0.60
11.636	11.610	0.026	174	235072			50.00- 100.00	81.84
11.636	11.610	0.026	175	19216			5.00- 9.00	8.17
11.636	11.610	0.026	176	233472			95.00- 101.00	99.32
11.636	11.610	0.026	177	16960			5.00- 9.00	7.26

Data File: 7120601.D

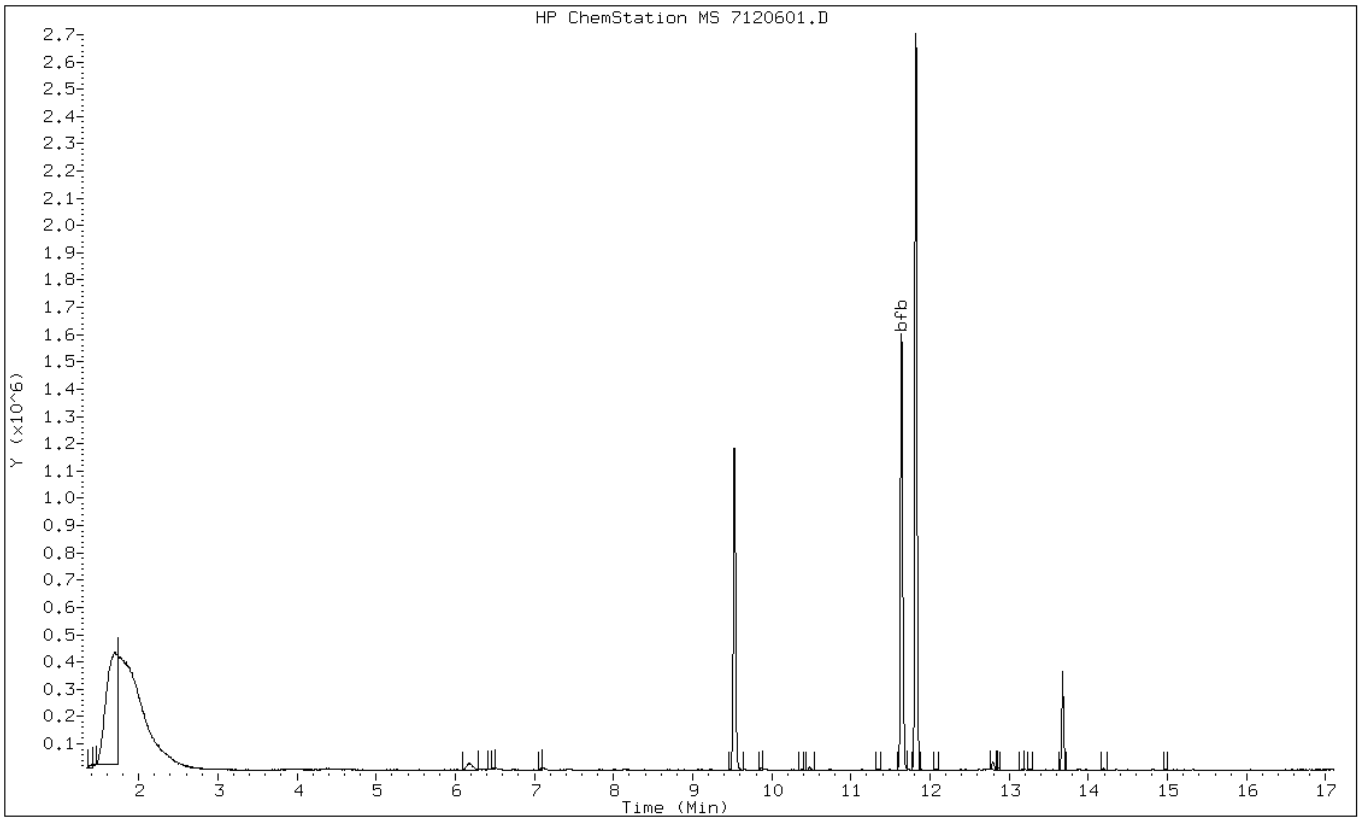
Date: 06-DEC-2013 06:25

Client ID: 31019D

Instrument: hp7.i

Sample Info: BFB

Operator: 430936



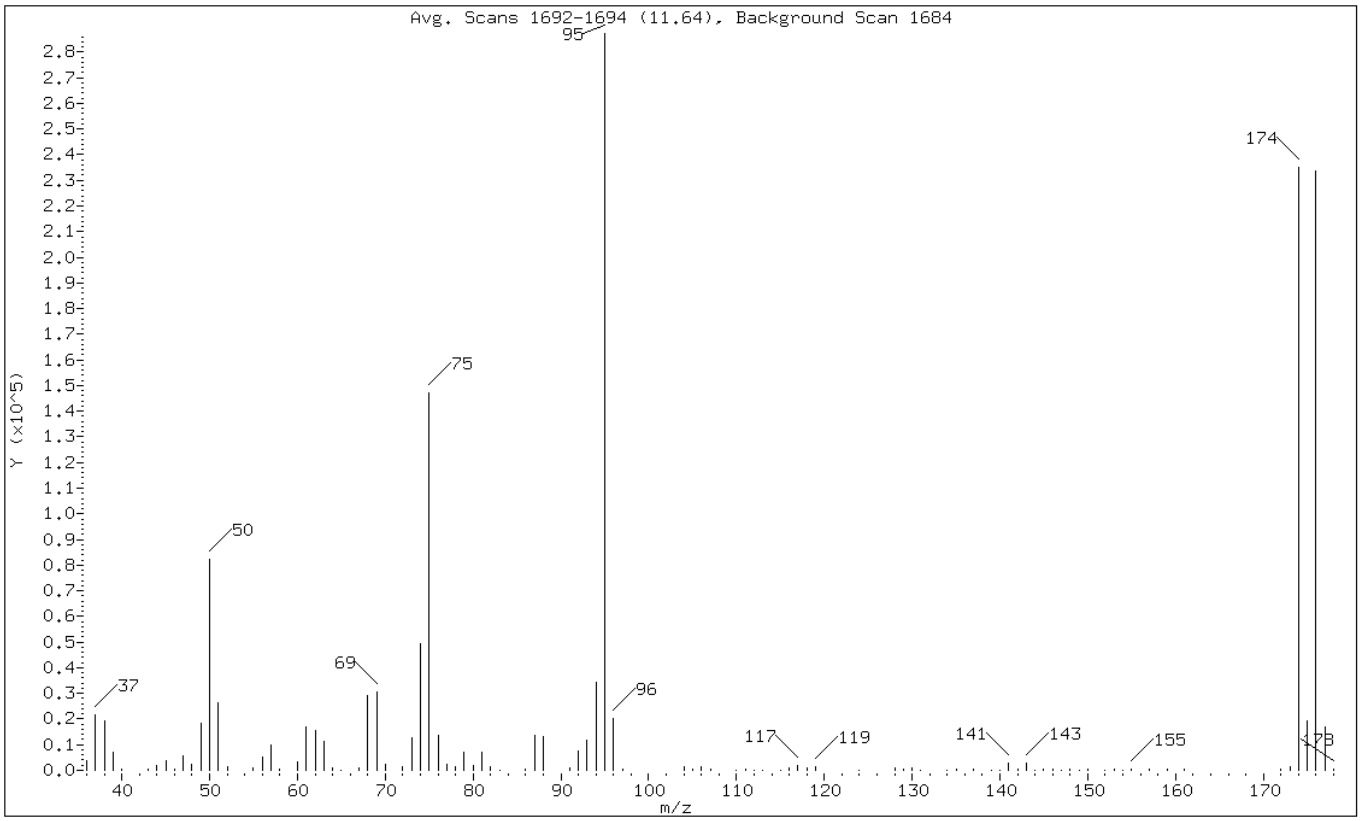
Data File: 7120601.D

Date: 06-DEC-2013 06:25

Client ID: 31019D Instrument: hp7.i

Sample Info: BFB Operator: 430936

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	28.66
75	30.00 - 60.00% of mass 95	51.29
96	5.00 - 9.00% of mass 95	7.05
173	Less than 2.00% of mass 174	0.49 (0.60)
174	50.00 - 100.00% of mass 95	81.84
175	5.00 - 9.00% of mass 174	6.69 (8.17)
176	95.00 - 101.00% of mass 174	81.28 (99.32)
177	5.00 - 9.00% of mass 176	5.90 (7.26)

Data File: 7120601.D

Date: 06-DEC-2013 06:25

Client ID: 31019D Instrument: hp7.i

Sample Info: BFB Operator: 430936

Data File: \\PITSVR06\D\chem\hp7.i\7120613d.b\7120601.D
Spectrum: Avg. Scans 1692-1694 (11.64), Background Scan 1684
Location of Maximum: 95.00
Number of points: 98

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3661	67.00	849	97.00	590	142.00	362
37.00	21680	68.00	29000	104.00	1212	143.00	2645
38.00	19104	69.00	30480	105.00	310	144.00	91
39.00	7222	70.00	2339	106.00	1200	145.00	281
40.00	268	72.00	1542	107.00	367	146.00	295
43.00	435	73.00	12860	110.00	170	147.00	204
44.00	1656	74.00	49440	111.00	276	148.00	586
45.00	3887	75.00	147328	112.00	164	149.00	154
46.00	353	76.00	13602	113.00	166	150.00	317
47.00	5867	77.00	2297	115.00	186	152.00	67
48.00	2486	78.00	1313	116.00	874	153.00	281
49.00	18328	79.00	7004	117.00	1672	154.00	198
50.00	82328	80.00	1961	118.00	1015	155.00	637
51.00	26464	81.00	6902	119.00	1435	157.00	464
52.00	1220	82.00	1357	124.00	227	159.00	286
55.00	962	83.00	224	128.00	922	161.00	461
56.00	5026	86.00	386	129.00	529	172.00	423
57.00	10069	87.00	13792	130.00	872	173.00	1406
58.00	454	88.00	12980	131.00	226	174.00	235072
60.00	3169	91.00	946	134.00	85	175.00	19216
61.00	16872	92.00	7662	135.00	499	176.00	233472
62.00	15589	93.00	11877	137.00	547	177.00	16960
63.00	11064	94.00	34224	139.00	69	178.00	449
64.00	1119	95.00	287232	140.00	140		
65.00	107	96.00	20240	141.00	2818		

TestAmerica Pittsburgh

Data file : \\pitsvr06\d\chem\hp7.i\7122613d.b\7122601.D
Lab Smp Id: BFB Client Smp ID: 31019D
Inj Date : 26-DEC-2013 22:45 MS Autotune Date: 29-AUG-2013 08:08
Operator : 430936 Inst ID: hp7.i
Smp Info : BFB
Misc Info : 7122613d.b,TBFB.m,all.sub
Comment :
Method : \\pitsvr06\d\chem\hp7.i\7122613d.b\TBFB.m
Meth Date : 02-Jul-2013 09:22 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
11.637	11.610	0.027	95	255616			100.00- 100.00	100.00(a)
11.637	11.610	0.027	50	63760			15.00- 40.00	24.94
11.637	11.610	0.027	75	121568			30.00- 60.00	47.56
11.637	11.610	0.027	96	17624			5.00- 9.00	6.89
11.637	11.610	0.027	173	1486			0.00- 2.00	0.65
11.637	11.610	0.027	174	229248			50.00- 100.00	89.68
11.637	11.610	0.027	175	17056			5.00- 9.00	7.44
11.637	11.610	0.027	176	230144			95.00- 101.00	100.39
11.637	11.610	0.027	177	15976			5.00- 9.00	6.94

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: 7122601.D

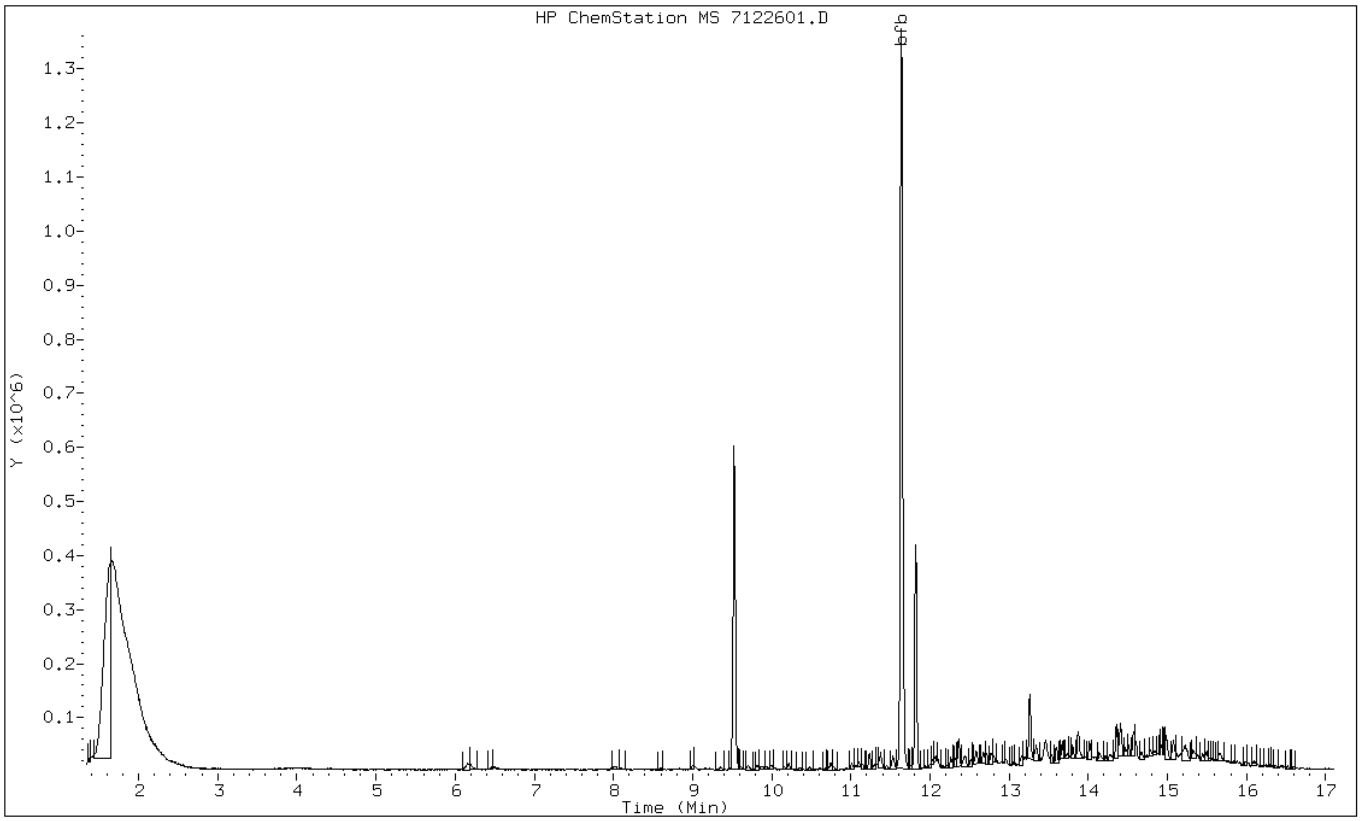
Date: 26-DEC-2013 22:45

Client ID: 31019D

Instrument: hp7.i

Sample Info: BFB

Operator: 430936



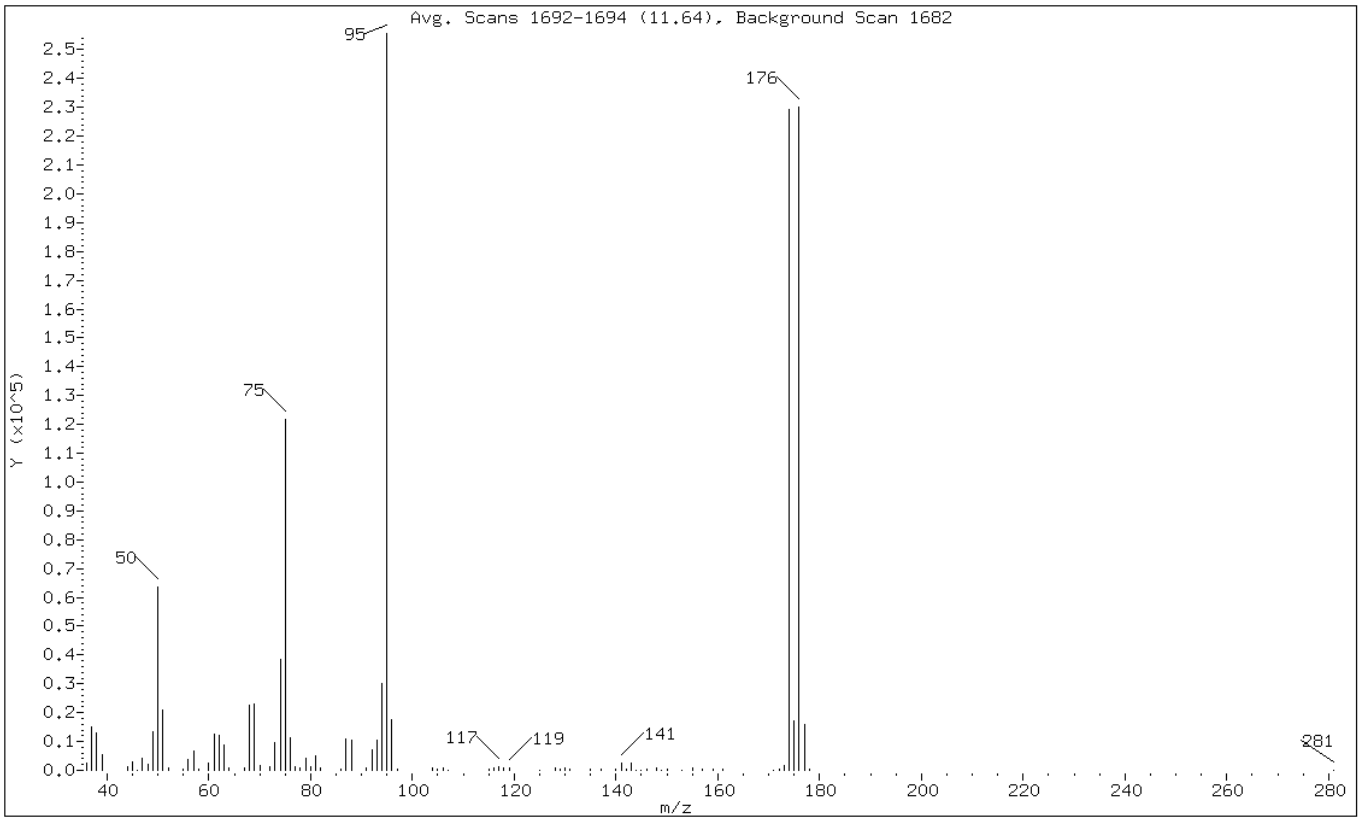
Data File: 7122601.D

Date: 26-DEC-2013 22:45

Client ID: 31019D Instrument: hp7.i

Sample Info: BFB Operator: 430936

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	24.94
75	30.00 - 60.00% of mass 95	47.56
96	5.00 - 9.00% of mass 95	6.89
173	Less than 2.00% of mass 174	0.58 (0.65)
174	50.00 - 100.00% of mass 95	89.68
175	5.00 - 9.00% of mass 174	6.67 (7.44)
176	95.00 - 101.00% of mass 174	90.04 (100.39)
177	5.00 - 9.00% of mass 176	6.25 (6.94)

Data File: 7122601.D

Date: 26-DEC-2013 22:45

Client ID: 31019D Instrument: hp7.i

Sample Info: BFB Operator: 430936

Data File: \\pitsvr06\d\chem\hp7.i\7122613d.b\7122601.D
Spectrum: Avg. Scans 1692-1694 (11.64), Background Scan 1682
Location of Maximum: 95.00
Number of points: 87

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2613	67.00	649	95.00	255616	143.00	2456
37.00	14901	68.00	22672	96.00	17624	144.00	113
38.00	13066	69.00	22864	97.00	524	145.00	83
39.00	5284	70.00	1521	104.00	875	146.00	503
44.00	1106	72.00	1214	105.00	263	148.00	648
45.00	2855	73.00	9760	106.00	837	149.00	177
46.00	137	74.00	38584	107.00	123	150.00	244
47.00	4089	75.00	121568	115.00	346	153.00	198
48.00	2078	76.00	11122	116.00	735	155.00	721
49.00	13559	77.00	1360	117.00	1151	157.00	515
50.00	63760	78.00	783	118.00	702	159.00	374
51.00	20912	79.00	4244	119.00	974	161.00	341
52.00	888	80.00	1301	125.00	167	171.00	86
55.00	577	81.00	4872	128.00	830	172.00	453
56.00	3953	82.00	832	129.00	486	173.00	1486
57.00	6884	86.00	300	130.00	876	174.00	229248
58.00	263	87.00	11037	131.00	387	175.00	17056
60.00	2553	88.00	10428	135.00	406	176.00	230144
61.00	12640	91.00	794	137.00	580	177.00	15976
62.00	11969	92.00	7108	140.00	251	178.00	548
63.00	8866	93.00	10343	141.00	2511	281.00	143
64.00	797	94.00	30304	142.00	343		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-93329/3

Matrix: Water Lab File ID: 4122605.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/27/2013 02:10

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 93329 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	5.0	U	5.0	0.99
108-88-3	Toluene	5.0	U	5.0	0.85
100-41-4	Ethylbenzene	5.0	U	5.0	0.62
1330-20-7	Xylenes, Total	10	U	10	2.0
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
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
91-20-3	Naphthalene	5.0	U	5.0	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		62-123
2037-26-5	Toluene-d8 (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	90		75-120
1868-53-7	Dibromofluoromethane (Surr)	96		80-120

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\pitsvr06\d\chem\hp4.i\4122613d.b\4122605.D
Lab Smp Id: MB
Inj Date : 27-DEC-2013 02:10
Operator : 430936 Inst ID: hp4.i
Smp Info : MB
Misc Info : 4122613d.b,t8260bh2o.m,list1.sub
Comment :
Method : \\pitsvr06\d\chem\hp4.i\4122613d.b\T8260bh2o.m
Meth Date : 27-Dec-2013 03:56 hp4.i Quant Type: ISTD
Cal Date : 16-DEC-2013 11:28 Cal File: 4121604.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-530

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

							CONCENTRATIONS		
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng)	FINAL (ng)	
*	46 Fluorobenzene (IS)	96	7.680	7.669	(1.000)	1598721	250.000		
*	69 Chlorobenzene-d5	119	10.775	10.758	(1.000)	328595	250.000		(Q)
*	92 1,4-Dichlorobenzene-d4	152	13.128	13.093	(1.000)	365747	250.000		(QM)
*	176 Dioxane-d8 (IS)	96	8.409	8.405	(1.000)	36079	5000.00		(Q)
*	177 TBA-d9 (IS)	65	4.754	4.847	(1.000)	337518	5000.00		(H)
$	39 Dibromofluoromethane (Surr)	113	6.938	6.933	(0.903)	324062	239.721	239.7	
$	43 1,2-Dichloroethane-d4	65	7.315	7.304	(0.952)	335759	241.013	241.0	
$	59 Toluene-d8	98	9.322	9.317	(0.865)	1472445	263.999	264.0	
$	80 Bromofluorobenzene (Surr)	95	11.961	11.938	(1.110)	446812	225.784	225.8	
	1 Dichlorodifluoromethane	85	Compound Not Detected.						
	2 Chloromethane	50	Compound Not Detected.						
	3 Vinyl Chloride	62	Compound Not Detected.						
	4 Bromomethane	94	Compound Not Detected.						
	5 Chloroethane	64	Compound Not Detected.						
	7 Dichlorofluoromethane	67	Compound Not Detected.						
	10 1,1,2-trichloro-1,2,2-trifluor	101	Compound Not Detected.						
	166 Trichlorofluoromethane	101	Compound Not Detected.						
	12 1,1-Dichloroethene	96	Compound Not Detected.						
	15 Carbon Disulfide	76	Compound Not Detected.						
	13 Acetone	43	Compound Not Detected.						
	18 Methylene Chloride	84	Compound Not Detected.						
	19 trans-1,2-Dichloroethene	96	Compound Not Detected.						
	20 Methyl tert-butyl ether	73	Compound Not Detected.						
	24 1,1-Dichloroethane	63	Compound Not Detected.						
	27 2,2-Dichloropropane	77	Compound Not Detected.						
	28 cis-1,2-dichloroethene	96	Compound Not Detected.						
M	29 1,2-Dichloroethene (total)	96	Compound Not Detected.						
	30 Bromochloromethane	128	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ng)
31	2-Butanone	43	Compound Not Detected.					
37	Chloroform	83	Compound Not Detected.					
38	1,1,1-Trichloroethane	97	Compound Not Detected.					
40	1,1-Dichloropropene	75	Compound Not Detected.					
41	Carbon Tetrachloride	117	Compound Not Detected.					
42	Benzene	78	Compound Not Detected.					
45	1,2-Dichloroethane	62	Compound Not Detected.					
47	Trichloroethene	130	Compound Not Detected.					
49	1,2-Dichloropropane	63	Compound Not Detected.					
50	Dibromomethane	93	Compound Not Detected.					
53	Bromodichloromethane	83	Compound Not Detected.					
57	cis-1,3-Dichloropropene	75	Compound Not Detected.					
58	4-Methyl-2-Pentanone	43	Compound Not Detected.					
60	Toluene	91	Compound Not Detected.					
61	trans-1,3-Dichloropropene	75	Compound Not Detected.					
63	1,3-Dichloropropane	76	Compound Not Detected.					
64	1,1,2-Trichloroethane	97	Compound Not Detected.					
65	Tetrachloroethene	164	Compound Not Detected.					
66	2-Hexanone	43	Compound Not Detected.					
67	Dibromochloromethane	129	Compound Not Detected.					
68	1,2-Dibromoethane	107	Compound Not Detected.					
70	Chlorobenzene	112	Compound Not Detected.					
71	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
72	Ethylbenzene	106	Compound Not Detected.					
73	m,p-XYLENE	106	Compound Not Detected.					
74	Xylene-o	106	Compound Not Detected.					
76	Styrene	104	Compound Not Detected.					
77	Bromoform	173	Compound Not Detected.					
78	Isopropylbenzene	105	Compound Not Detected.					
79	Bromobenzene	156	Compound Not Detected.					
81	n-Propylbenzene	120	Compound Not Detected.					
82	2-Chlorotoluene	126	Compound Not Detected.					
83	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
84	1,2,3-Trichloropropane	110	Compound Not Detected.					
85	4-Chlorotoluene	126	Compound Not Detected.					
86	1,3,5-Trimethylbenzene	105	Compound Not Detected.					
87	tert-Butylbenzene	119	Compound Not Detected.					
88	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
89	sec-Butylbenzene	105	Compound Not Detected.					
90	4-Isopropyltoluene	119	Compound Not Detected.					
91	1,3-Dichlorobenzene	146	Compound Not Detected.					
94	n-Butylbenzene	91	Compound Not Detected.					
93	1,4-Dichlorobenzene	146	Compound Not Detected.					
95	1,2-Dichlorobenzene	146	Compound Not Detected.					
96	1,2-Dibromo-3-chloropropane	157	Compound Not Detected.					
97	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
98	Hexachlorobutadiene	225	Compound Not Detected.					
99	Naphthalene	128	Compound Not Detected.					
100	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
156	Methyl Acetate	43	Compound Not Detected.					
157	Cyclohexane	56	Compound Not Detected.					
158	Methyl Cyclohexane	83	Compound Not Detected.					
32	Vinyl Acetate	43	Compound Not Detected.					
52	1,4-Dioxane	88	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ng)
21	tert-Butyl Alcohol	59	Compound Not Detected.					
16	3-Chloro-1-propene	76	Compound Not Detected.					
11	Acrolein	56	Compound Not Detected.					
22	Acrylonitrile	53	Compound Not Detected.					
8	Ethyl Ether	59	Compound Not Detected.					
62	Ethyl methacrylate	69	Compound Not Detected.					
23	Hexane	57	Compound Not Detected.					
14	Iodomethane	142	Compound Not Detected.					
44	Isobutanol	41	Compound Not Detected.					
155	N-Heptane	41	Compound Not Detected.					
35	Tetrahydrofuran	42	Compound Not Detected.					
164	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.					
169	Butadiene	39	Compound Not Detected.					
M 75	Xylenes (total)	106	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 4122605.D

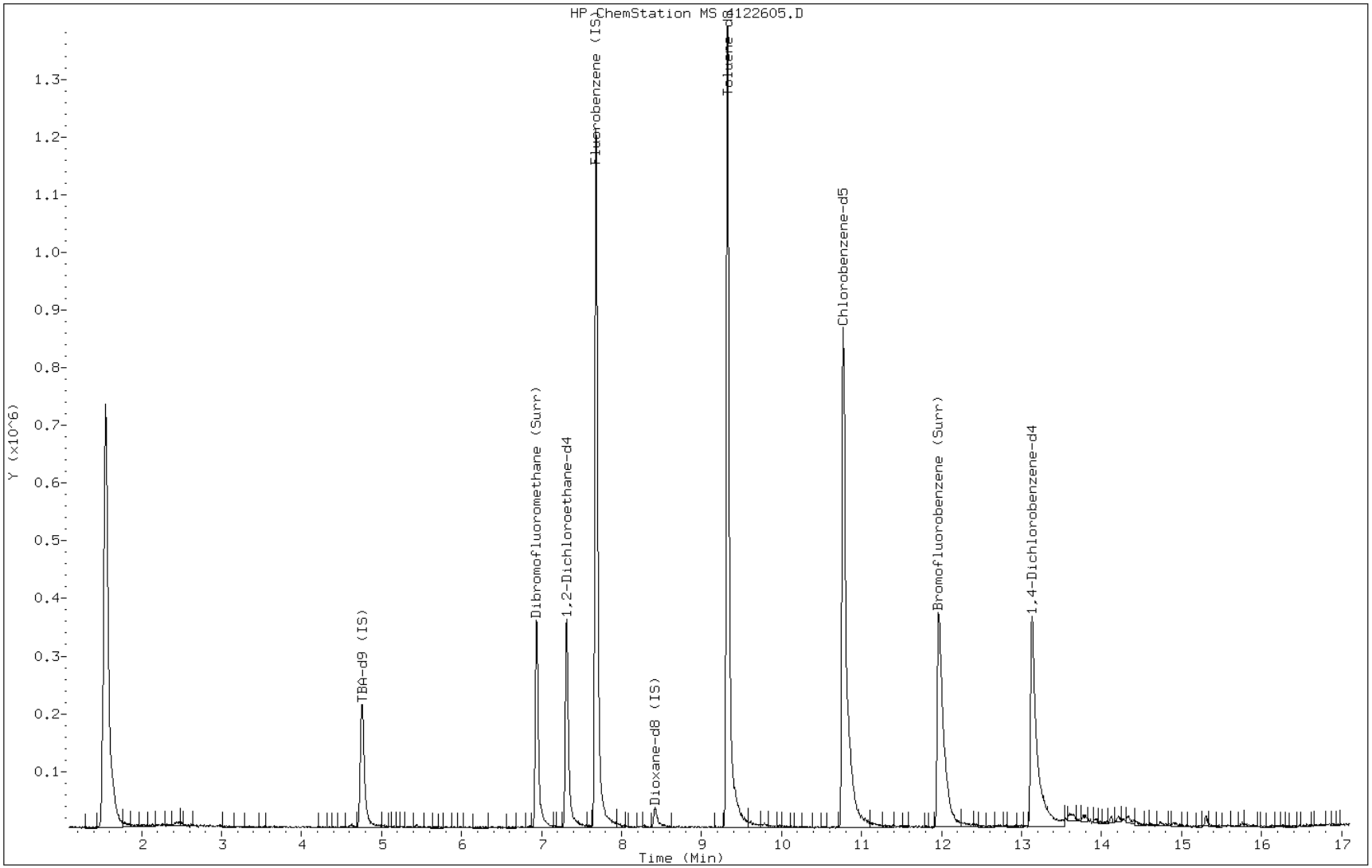
Date: 27-DEC-2013 02:10

Client ID:

Instrument: hp4.i

Sample Info: MB

Operator: 430936



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-93330/3

Matrix: Water Lab File ID: 7122607.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/27/2013 01:59

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 93330 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	5.0	U	5.0	0.99
108-88-3	Toluene	5.0	U	5.0	0.85
100-41-4	Ethylbenzene	5.0	U	5.0	0.62
1330-20-7	Xylenes, Total	10	U	10	2.0
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
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
91-20-3	Naphthalene	2.64	J	5.0	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		62-123
2037-26-5	Toluene-d8 (Surr)	96		80-120
460-00-4	4-Bromofluorobenzene (Surr)	88		75-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\pitsvr06\d\chem\hp7.i\7122613d.b\7122607.D
Lab Smp Id: MB
Inj Date : 27-DEC-2013 01:59 MS Autotune Date: 29-AUG-2013 08:08
Operator : 430936 Inst ID: hp7.i
Smp Info : MB
Misc Info : 7122613d.b,T8260bh2o.m,list1.sub
Comment :
Method : \\pitsvr06\d\chem\hp7.i\7122613d.b\T8260bh2o.m
Meth Date : 27-Dec-2013 04:01 hp7.i Quant Type: ISTD
Cal Date : 06-DEC-2013 11:22 Cal File: 7120609.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-530

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)	
*	46 Fluorobenzene (IS)	96	7.412	7.396	(1.000)	1127735	250.000		
*	69 Chlorobenzene-d5	119	10.472	10.462	(1.000)	272982	250.000		
*	92 1,4-Dichlorobenzene-d4	152	12.790	12.786	(1.000)	284209	250.000		
*	176 Dioxane-d8 (IS)	96	8.136	8.126	(1.000)	29018	5000.00		
*	177 TBA-d9 (IS)	65	4.589	4.725	(1.000)	249052	5000.00		(H)
$	39 Dibromofluoromethane (Surr)	113	6.688	6.672	(0.902)	308842	256.949	256.9	
$	43 1,2-Dichloroethane-d4	65	7.053	7.037	(0.952)	288688	207.582	207.6	
$	59 Toluene-d8	98	9.042	9.032	(0.863)	1013692	239.608	239.6	
$	80 Bromofluorobenzene (Surr)	95	11.634	11.630	(1.111)	360484	219.075	219.1	
	1 Dichlorodifluoromethane	85	Compound Not Detected.						
	2 Chloromethane	50	Compound Not Detected.						
	3 Vinyl Chloride	62	Compound Not Detected.						
	4 Bromomethane	94	Compound Not Detected.						
	5 Chloroethane	64	Compound Not Detected.						
	7 Dichlorofluoromethane	67	Compound Not Detected.						
	10 1,1,2-trichloro-1,2,2-trifluor	101	Compound Not Detected.						
	166 Trichlorofluoromethane	101	Compound Not Detected.						
	12 1,1-Dichloroethene	96	Compound Not Detected.						
	15 Carbon Disulfide	76	Compound Not Detected.						
	13 Acetone	43	Compound Not Detected.						
	18 Methylene Chloride	84	Compound Not Detected.						
	19 trans-1,2-Dichloroethene	96	Compound Not Detected.						
	20 Methyl tert-butyl ether	73	Compound Not Detected.						
	24 1,1-Dichloroethane	63	Compound Not Detected.						
	27 2,2-Dichloropropane	77	Compound Not Detected.						
	28 cis-1,2-dichloroethene	96	Compound Not Detected.						
M	29 1,2-Dichloroethene (total)	96	Compound Not Detected.						
	30 Bromochloromethane	128	Compound Not Detected.						

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
31 2-Butanone	43	Compound Not Detected.					
37 Chloroform	83	Compound Not Detected.					
38 1,1,1-Trichloroethane	97	Compound Not Detected.					
40 1,1-Dichloropropene	75	Compound Not Detected.					
41 Carbon Tetrachloride	117	Compound Not Detected.					
42 Benzene	78	Compound Not Detected.					
45 1,2-Dichloroethane	62	Compound Not Detected.					
47 Trichloroethene	130	Compound Not Detected.					
49 1,2-Dichloropropane	63	Compound Not Detected.					
50 Dibromomethane	93	Compound Not Detected.					
53 Bromodichloromethane	83	Compound Not Detected.					
57 cis-1,3-Dichloropropene	75	Compound Not Detected.					
58 4-Methyl-2-Pentanone	43	Compound Not Detected.					
60 Toluene	91	Compound Not Detected.					
61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
63 1,3-Dichloropropane	76	Compound Not Detected.					
64 1,1,2-Trichloroethane	97	Compound Not Detected.					
65 Tetrachloroethene	164	Compound Not Detected.					
66 2-Hexanone	43	Compound Not Detected.					
67 Dibromochloromethane	129	Compound Not Detected.					
68 1,2-Dibromoethane	107	Compound Not Detected.					
70 Chlorobenzene	112	Compound Not Detected.					
71 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
72 Ethylbenzene	106	Compound Not Detected.					
73 m,p-XYLENE	106	Compound Not Detected.					
74 Xylene-o	106	Compound Not Detected.					
76 Styrene	104	Compound Not Detected.					
77 Bromoform	173	Compound Not Detected.					
78 Isopropylbenzene	105	Compound Not Detected.					
79 Bromobenzene	156	Compound Not Detected.					
81 n-Propylbenzene	120	Compound Not Detected.					
82 2-Chlorotoluene	126	Compound Not Detected.					
83 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
84 1,2,3-Trichloropropane	110	Compound Not Detected.					
85 4-Chlorotoluene	126	Compound Not Detected.					
86 1,3,5-Trimethylbenzene	105	Compound Not Detected.					
87 tert-Butylbenzene	119	Compound Not Detected.					
88 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
89 sec-Butylbenzene	105	Compound Not Detected.					
90 4-Isopropyltoluene	119	Compound Not Detected.					
91 1,3-Dichlorobenzene	146	Compound Not Detected.					
94 n-Butylbenzene	91	Compound Not Detected.					
93 1,4-Dichlorobenzene	146	Compound Not Detected.					
95 1,2-Dichlorobenzene	146	Compound Not Detected.					
96 1,2-Dibromo-3-chloropropane	157	Compound Not Detected.					
97 1,2,4-Trichlorobenzene	180	14.810	14.799	(1.158)	7080	11.1851	11.18
98 Hexachlorobutadiene	225	14.968	14.970	(1.170)	9078	13.7174	13.72
99 Naphthalene	128	15.065	15.055	(1.178)	8837	13.2131	13.21
100 1,2,3-Trichlorobenzene	180	15.308	15.304	(1.197)	9229	29.4472	29.45
156 Methyl Acetate	43	Compound Not Detected.					
157 Cyclohexane	56	Compound Not Detected.					
158 Methyl Cyclohexane	83	Compound Not Detected.					
32 Vinyl Acetate	43	Compound Not Detected.					
52 1,4-Dioxane	88	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ng)
21	tert-Butyl Alcohol	59	Compound Not Detected.					
16	3-Chloro-1-propene	76	Compound Not Detected.					
11	Acrolein	56	Compound Not Detected.					
22	Acrylonitrile	53	Compound Not Detected.					
8	Ethyl Ether	59	Compound Not Detected.					
62	Ethyl methacrylate	69	Compound Not Detected.					
23	Hexane	57	Compound Not Detected.					
14	Iodomethane	142	Compound Not Detected.					
44	Isobutanol	41	Compound Not Detected.					
155	N-Heptane	41	Compound Not Detected.					
35	Tetrahydrofuran	42	Compound Not Detected.					
164	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.					
169	Butadiene	39	Compound Not Detected.					
M 75	Xylenes (total)	106	Compound Not Detected.					

QC Flag Legend

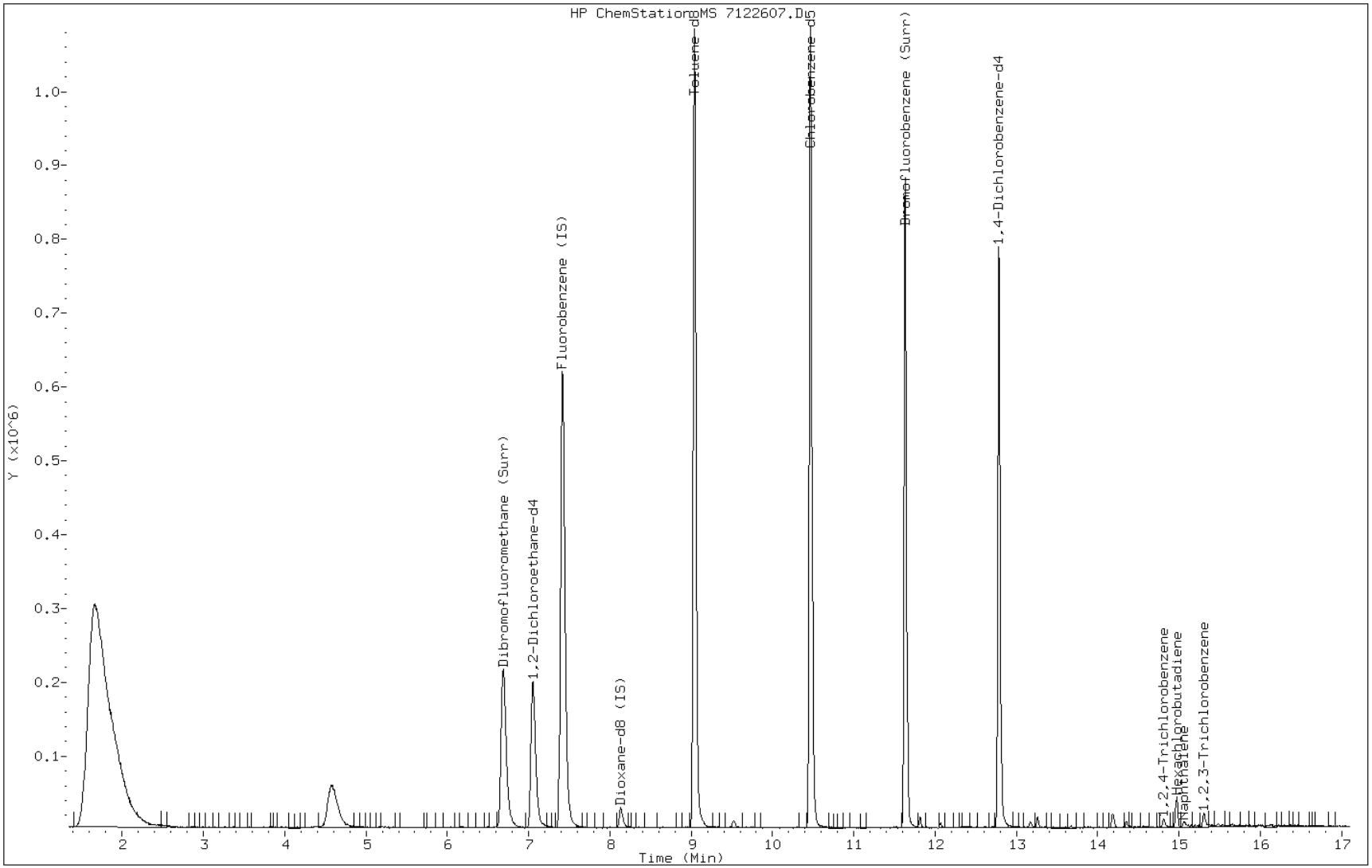
H - Operator selected an alternate compound hit.

Data File: 7122607.D

Date: 27-DEC-2013 01:59

Client ID: Instrument: hp7.i

Sample Info: MB Operator: 430936



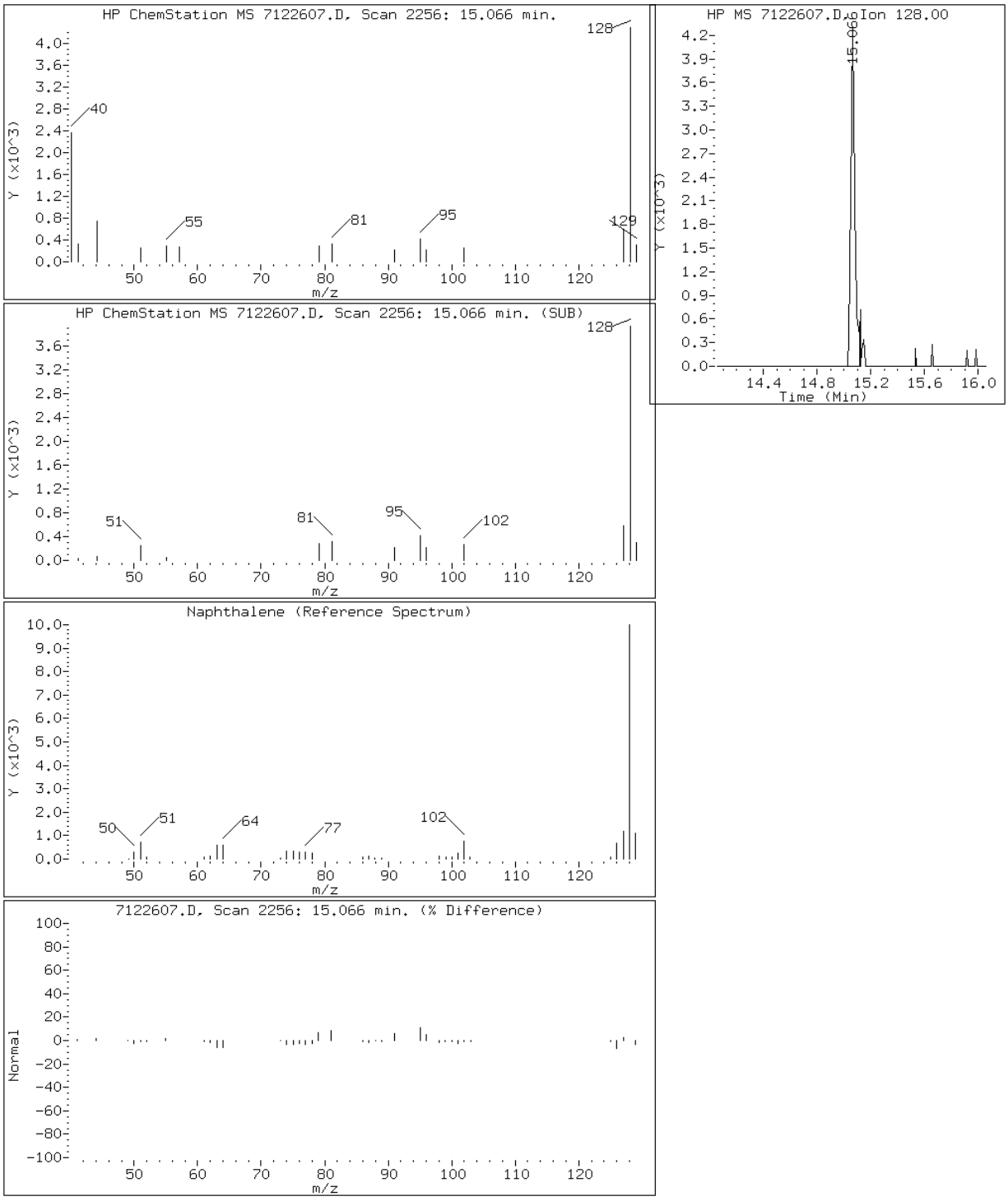
Data File: 7122607.D

Date: 27-DEC-2013 01:59

Client ID: Instrument: hp7.i

Sample Info: MB Operator: 430936

99 Naphthalene



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-93329/6

Matrix: Water Lab File ID: 4122610.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/27/2013 04:04

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.: 93329 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	41.2		5.0	0.99
108-88-3	Toluene	38.0		5.0	0.85
100-41-4	Ethylbenzene	42.8		5.0	0.62
1330-20-7	Xylenes, Total	86.0		10	2.0
98-82-8	Isopropylbenzene	41.6		5.0	0.53
1634-04-4	Methyl tert-butyl ether	39.7		5.0	1.0
95-63-6	1,2,4-Trimethylbenzene	40.2		5.0	0.52
108-67-8	1,3,5-Trimethylbenzene	37.3		5.0	0.59
91-20-3	Naphthalene	34.2		5.0	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		62-123
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene (Surr)	103		75-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\pitsvr06\d\chem\hp4.i\4122613d.b\4122610.D
Lab Smp Id: LCS
Inj Date : 27-DEC-2013 04:04
Operator : 430936 Inst ID: hp4.i
Smp Info : LCS
Misc Info : 4122613d.b,t8260bh2o.m,list1.sub
Comment :
Method : \\pitsvr06\d\chem\hp4.i\4122613d.b\T8260bh2o.m
Meth Date : 27-Dec-2013 03:56 hp4.i Quant Type: ISTD
Cal Date : 16-DEC-2013 11:28 Cal File: 4121604.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-530

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

						CONCENTRATIONS	
		QUANT SIG				ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT RESPONSE	(ng)	(ng)
*	46 Fluorobenzene (IS)	96	7.670	7.669	(1.000) 1445659	250.000	
*	69 Chlorobenzene-d5	119	10.759	10.758	(1.000) 358594	250.000	
*	92 1,4-Dichlorobenzene-d4	152	13.095	13.093	(1.000) 507774	250.000	
*	176 Dioxane-d8 (IS)	96	8.406	8.405	(1.000) 51527	5000.00	
*	177 TBA-d9 (IS)	65	4.854	4.847	(1.000) 373991	5000.00	
$	39 Dibromofluoromethane (Surr)	113	6.928	6.933	(0.903) 312911	255.980	256.0
$	43 1,2-Dichloroethane-d4	65	7.305	7.304	(0.952) 331586	263.219	263.2
$	59 Toluene-d8	98	9.318	9.317	(0.866) 1397810	229.651	229.6
$	80 Bromofluorobenzene (Surr)	95	11.933	11.938	(1.109) 555835	257.378	257.4
	1 Dichlorodifluoromethane	85	1.771	1.770	(0.231) 394471	209.356	209.4
	2 Chloromethane	50	1.966	1.958	(0.256) 585293	227.942	227.9
	3 Vinyl Chloride	62	2.124	2.123	(0.277) 493471	227.398	227.4
	4 Bromomethane	94	2.495	2.494	(0.325) 84321	232.616	232.6
	5 Chloroethane	64	2.616	2.615	(0.341) 79714	222.533	222.5
	7 Dichlorofluoromethane	67	2.927	2.919	(0.382) 262121	251.638	251.6
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.802	3.819	(0.496) 354403	221.956	222.0
	166 Trichlorofluoromethane	101	2.969	2.968	(0.387) 186977	198.047	198.0
	12 1,1-Dichloroethene	96	3.772	3.777	(0.492) 365617	214.127	214.1
	15 Carbon Disulfide	76	4.119	4.123	(0.537) 891352	219.208	219.2
	13 Acetone	43	3.997	3.971	(0.521) 96005	197.556	197.6
	18 Methylene Chloride	84	4.599	4.598	(0.600) 379674	213.367	213.4
	19 trans-1,2-Dichloroethene	96	5.000	5.005	(0.652) 365446	214.996	215.0
	20 Methyl tert-butyl ether	73	5.067	5.054	(0.661) 682249	198.628	198.6
	24 1,1-Dichloroethane	63	5.602	5.595	(0.730) 589077	203.586	203.6
	27 2,2-Dichloropropane	77	6.344	6.337	(0.827) 223498	217.631	217.6
	28 cis-1,2-dichloroethene	96	6.356	6.349	(0.829) 371982	207.417	207.4
M	29 1,2-Dichloroethene (total)	96			737428	422.414	422.4
	30 Bromochloromethane	128	6.642	6.641	(0.866) 155038	204.569	204.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
31	2-Butanone	43	6.429	6.422	(0.838)	129999	206.616	206.6
37	Chloroform	83	6.746	6.744	(0.879)	484936	200.741	200.7
38	1,1,1-Trichloroethane	97	6.946	6.939	(0.906)	364085	206.473	206.5
40	1,1-Dichloropropene	75	7.135	7.128	(0.930)	400371	201.956	202.0
41	Carbon Tetrachloride	117	7.129	7.128	(0.929)	312601	204.316	204.3
42	Benzene	78	7.360	7.359	(0.960)	1306606	206.249	206.2
45	1,2-Dichloroethane	62	7.390	7.389	(0.964)	323730	200.722	200.7
47	Trichloroethene	130	8.065	8.064	(1.052)	320998	201.987	202.0
49	1,2-Dichloropropane	63	8.302	8.295	(1.082)	317854	189.893	189.9
50	Dibromomethane	93	8.424	8.423	(1.098)	160683	209.735	209.7
53	Bromodichloromethane	83	8.588	8.587	(1.120)	317299	203.576	203.6
57	cis-1,3-Dichloropropene	75	9.050	9.049	(1.180)	425162	204.926	204.9
58	4-Methyl-2-Pentanone	43	9.215	9.207	(0.856)	302733	189.317	189.3(Q)
60	Toluene	91	9.385	9.378	(0.872)	1413467	190.134	190.1
61	trans-1,3-Dichloropropene	75	9.610	9.609	(0.893)	328287	193.525	193.5
63	1,3-Dichloropropane	76	9.951	9.955	(0.925)	443769	189.050	189.0
64	1,1,2-Trichloroethane	97	9.786	9.785	(0.910)	258374	187.118	187.1
65	Tetrachloroethene	164	9.932	9.931	(0.923)	267913	195.590	195.6
66	2-Hexanone	43	10.072	10.071	(0.936)	180102	151.639	151.6
67	Dibromochloromethane	129	10.182	10.180	(0.946)	218149	193.110	193.1
68	1,2-Dibromoethane	107	10.303	10.308	(0.958)	233929	190.114	190.1
70	Chlorobenzene	112	10.790	10.789	(1.003)	924241	205.323	205.3
71	1,1,1,2-Tetrachloroethane	131	10.863	10.861	(1.010)	280182	207.655	207.6
72	Ethylbenzene	106	10.893	10.892	(1.012)	532596	213.989	214.0
73	m,p-XYLENE	106	11.009	11.007	(1.023)	662114	215.581	215.6
74	Xylene-o	106	11.404	11.409	(1.060)	634036	214.595	214.6
76	Styrene	104	11.428	11.421	(1.062)	1046471	223.813	223.8
77	Bromoform	173	11.617	11.622	(1.080)	122469	180.770	180.8
78	Isopropylbenzene	105	11.775	11.774	(1.094)	1595455	208.111	208.1
79	Bromobenzene	156	12.091	12.096	(0.923)	366750	188.015	188.0
81	n-Propylbenzene	120	12.182	12.181	(0.930)	488747	200.861	200.9
82	2-Chlorotoluene	126	12.280	12.278	(0.938)	393276	197.245	197.2
83	1,1,2,2-Tetrachloroethane	83	12.061	12.059	(1.121)	294753	194.090	194.1
84	1,2,3-Trichloropropane	110	12.115	12.114	(0.925)	84475	171.380	171.4
85	4-Chlorotoluene	126	12.389	12.388	(0.946)	403397	207.446	207.4
86	1,3,5-Trimethylbenzene	105	12.353	12.351	(0.943)	1322723	186.373	186.4
87	tert-Butylbenzene	119	12.681	12.680	(0.968)	1195210	188.848	188.8
88	1,2,4-Trimethylbenzene	105	12.736	12.735	(0.973)	1352788	201.039	201.0
89	sec-Butylbenzene	105	12.906	12.905	(0.986)	1775187	191.133	191.1
90	4-Isopropyltoluene	119	13.046	13.045	(0.996)	1480697	205.843	205.8
91	1,3-Dichlorobenzene	146	13.034	13.033	(0.995)	668527	211.263	211.3
94	n-Butylbenzene	91	13.466	13.464	(1.028)	1447421	216.842	216.8
93	1,4-Dichlorobenzene	146	13.119	13.118	(1.002)	638296	169.396	169.4
95	1,2-Dichlorobenzene	146	13.502	13.501	(1.031)	586865	186.488	186.5
96	1,2-Dibromo-3-chloropropane	157	14.323	14.316	(1.094)	17933	127.557	127.6(M)
97	1,2,4-Trichlorobenzene	180	15.156	15.155	(1.157)	110031	158.208	158.2(M)
98	Hexachlorobutadiene	225	15.290	15.289	(1.168)	137675	151.704	151.7
99	Naphthalene	128	15.442	15.435	(1.179)	182066	170.917	170.9(M)
100	1,2,3-Trichlorobenzene	180	15.685	15.678	(1.198)	79320	202.835	202.8(M)
156	Methyl Acetate	43	4.502	4.494	(0.587)	1041902	904.620	904.6
157	Cyclohexane	56	7.001	7.000	(0.913)	797912	211.195	211.2
158	Methyl Cyclohexane	83	8.260	8.259	(1.077)	671575	213.851	213.8
32	Vinyl Acetate	43	5.730	5.723	(0.747)	427738	185.702	185.7
52	1,4-Dioxane	88	8.455	8.459	(1.006)	50567	4235.70	4236

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ng)
21	tert-Butyl Alcohol	59	4.970	4.975	(1.024)	185641	1849.93	1850
16	3-Chloro-1-propene	76	4.386	4.385	(0.572)	192766	202.557	202.6
11	Acrolein	56	3.675	3.679	(0.479)	172704	878.759	878.8
22	Acrylonitrile	53	5.019	5.011	(0.654)	1121856	1949.75	1950
8	Ethyl Ether	59	3.474	3.473	(0.453)	270739	187.536	187.5
62	Ethyl methacrylate	69	9.695	9.694	(0.901)	311540	176.833	176.8
23	Hexane	57	5.408	5.407	(0.705)	586929	201.084	201.1
14	Iodomethane	142	4.003	4.020	(0.522)	500003	219.130	219.1
44	Isobutanol	41	7.348	7.340	(0.958)	164620	4958.81	4959
155	N-Heptane	41	7.670	7.669	(1.000)	326669	209.172	209.2
35	Tetrahydrofuran	42	7.001	7.000	(0.913)	181341	383.404	383.4
164	trans-1,4-Dichloro-2-butene	53	12.146	12.145	(0.928)	67396	160.811	160.8(M)
169	Butadiene	39	2.160	2.159	(0.282)	485262	223.325	223.3
M 75	Xylenes (total)	106				1296150	430.176	430.2

QC Flag Legend

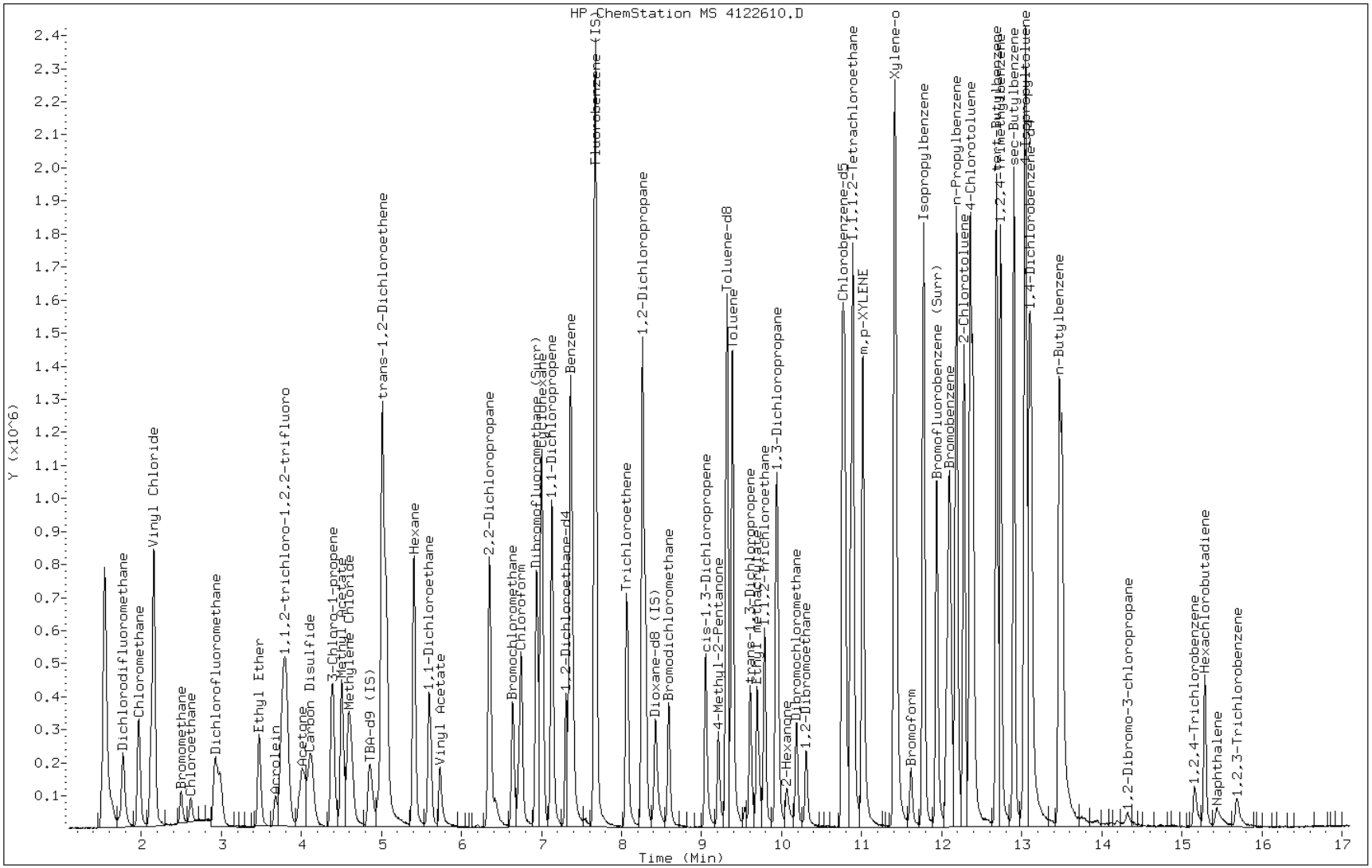
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 4122610.D

Date: 27-DEC-2013 04:04

Client ID: Instrument: hp4.i

Sample Info: LCS Operator: 430936



Manual Integration Report

Data File: 4122610.D
Inj. Date and Time: 27-DEC-2013 04:04
Instrument ID: hp4.i
Client ID:
Compound: 99 Naphthalene
CAS #: 91-20-3
Report Date: 12/27/2013

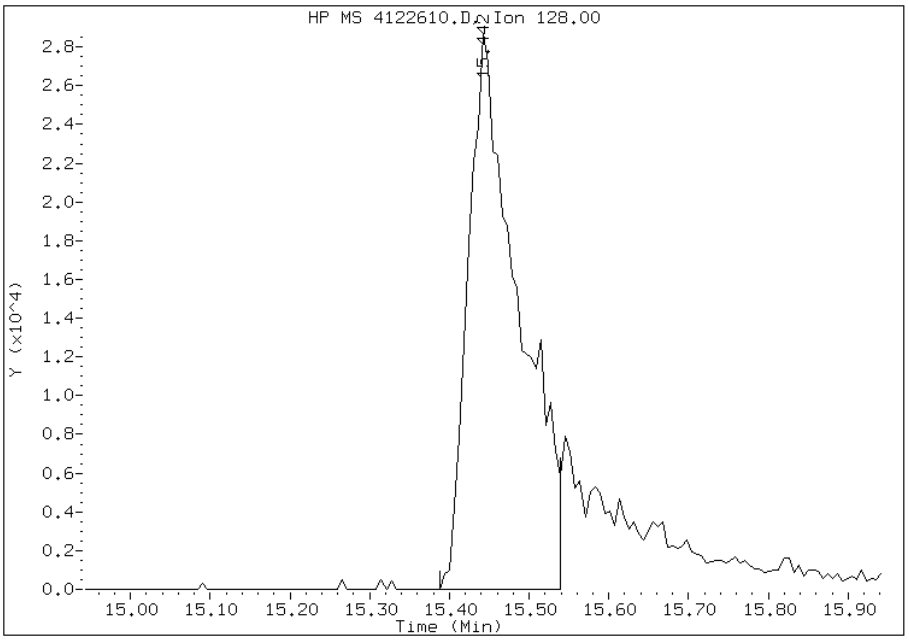
Processing Integration Results

RT: 15.44

Response: 128856

Amount: 119

Conc: 119



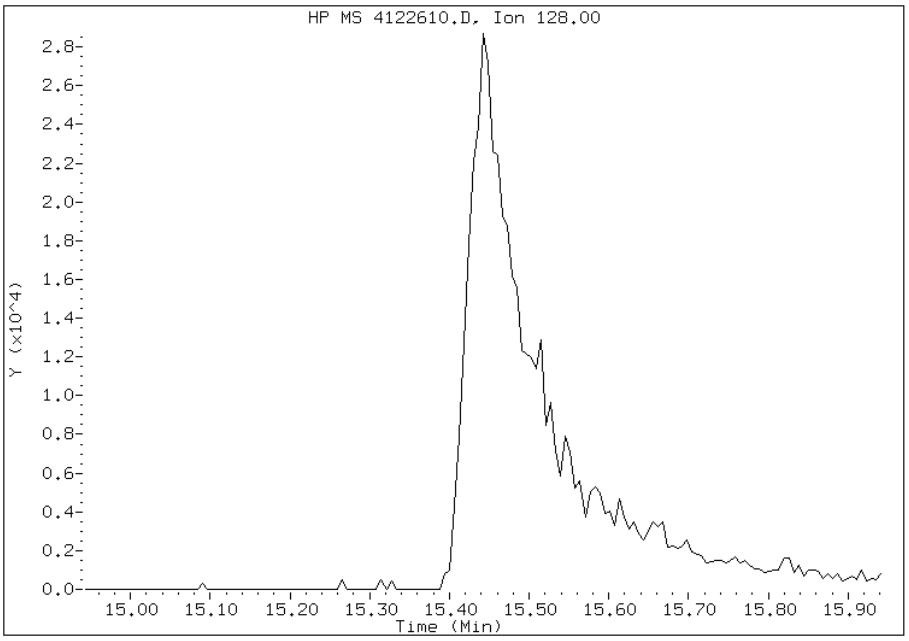
Manual Integration Results

RT: 15.44

Response: 182066

Amount: 171

Conc: 171



Manually Integrated By: zukowskim
Modification Date: 27-Dec-2013 03:52
Manual Integration Reason: Peak Integrated Incorrectly

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-93330/7

Matrix: Water Lab File ID: 7122611.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/27/2013 03:47

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 93330 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	35.1		5.0	0.99
108-88-3	Toluene	33.9		5.0	0.85
100-41-4	Ethylbenzene	35.6		5.0	0.62
1330-20-7	Xylenes, Total	71.2		10	2.0
98-82-8	Isopropylbenzene	43.3		5.0	0.53
1634-04-4	Methyl tert-butyl ether	33.8		5.0	1.0
95-63-6	1,2,4-Trimethylbenzene	52.3		5.0	0.52
108-67-8	1,3,5-Trimethylbenzene	46.5		5.0	0.59
91-20-3	Naphthalene	31.6		5.0	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		62-123
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene (Surr)	89		75-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\pitsvr06\d\chem\hp7.i\7122613d.b\7122611.D
Lab Smp Id: LCS
Inj Date : 27-DEC-2013 03:47 MS Autotune Date: 29-AUG-2013 08:08
Operator : 430936 Inst ID: hp7.i
Smp Info : LCS
Misc Info : 7122613d.b,T8260bh2o.m,list1.sub
Comment :
Method : \\pitsvr06\d\chem\hp7.i\7122613d.b\T8260bh2o.m
Meth Date : 27-Dec-2013 04:01 hp7.i Quant Type: ISTD
Cal Date : 06-DEC-2013 11:22 Cal File: 7120609.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-530

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
*	46 Fluorobenzene (IS)	96	7.397	7.396	(1.000)	934497	250.000	
*	69 Chlorobenzene-d5	119	10.469	10.462	(1.000)	246893	250.000	
*	92 1,4-Dichlorobenzene-d4	152	12.786	12.786	(1.000)	265960	250.000	
*	176 Dioxane-d8 (IS)	96	8.127	8.126	(1.000)	25210	5000.00	
*	177 TBA-d9 (IS)	65	4.714	4.725	(1.000)	231918	5000.00	
$	39 Dibromofluoromethane (Surr)	113	6.673	6.672	(0.902)	246759	247.749	247.7
$	43 1,2-Dichloroethane-d4	65	7.031	7.037	(0.951)	233594	202.699	202.7
$	59 Toluene-d8	98	9.033	9.032	(0.863)	878162	229.507	229.5
$	80 Bromofluorobenzene (Surr)	95	11.631	11.630	(1.111)	331818	222.963	223.0
	1 Dichlorodifluoromethane	85	1.927	1.933	(0.261)	309727	189.809	189.8(Q)
	2 Chloromethane	50	1.994	2.000	(0.270)	636150	193.561	193.6
	3 Vinyl Chloride	62	2.140	2.128	(0.289)	347982	199.767	199.8
	4 Bromomethane	94	2.493	2.480	(0.337)	96359	246.876	246.9
	5 Chloroethane	64	2.591	2.602	(0.350)	90517	191.316	191.3
	7 Dichlorofluoromethane	67	2.864	2.858	(0.387)	191626	199.016	199.0
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.655	3.679	(0.494)	290437	226.477	226.5(Q)
	166 Trichlorofluoromethane	101	2.846	2.827	(0.385)	148115	186.357	186.4(M)
	12 1,1-Dichloroethene	96	3.521	3.539	(0.476)	266707	200.495	200.5
	15 Carbon Disulfide	76	3.819	3.819	(0.516)	879168	222.622	222.6
	13 Acetone	43	3.795	3.801	(0.513)	50449	155.003	155.0
	18 Methylene Chloride	84	4.330	4.342	(0.585)	285759	204.265	204.3
	19 trans-1,2-Dichloroethene	96	4.738	4.756	(0.641)	299179	216.250	216.2
	20 Methyl tert-butyl ether	73	4.841	4.835	(0.655)	454570	169.223	169.2
	24 1,1-Dichloroethane	63	5.340	5.346	(0.722)	516529	191.189	191.2
	27 2,2-Dichloropropane	77	6.076	6.088	(0.822)	372431	222.512	222.5
	28 cis-1,2-dichloroethene	96	6.095	6.082	(0.824)	298816	200.185	200.2
M	29 1,2-Dichloroethene (total)	96				597995	416.435	416.4
	30 Bromochloromethane	128	6.374	6.374	(0.862)	123260	189.652	189.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
31	2-Butanone	43	6.174	6.167	(0.835)	68502	167.980	168.0
37	Chloroform	83	6.490	6.489	(0.877)	407646	185.504	185.5
38	1,1,1-Trichloroethane	97	6.673	6.672	(0.902)	377563	213.549	213.5
40	1,1-Dichloropropene	75	6.861	6.861	(0.928)	264932	175.480	175.5
41	Carbon Tetrachloride	117	6.855	6.854	(0.927)	302543	213.586	213.6
42	Benzene	78	7.092	7.092	(0.959)	819442	175.717	175.7
45	1,2-Dichloroethane	62	7.117	7.122	(0.962)	203966	150.212	150.2
47	Trichloroethene	130	7.786	7.785	(1.053)	250338	187.015	187.0
49	1,2-Dichloropropane	63	8.023	8.023	(1.085)	202271	169.876	169.9
50	Dibromomethane	93	8.139	8.144	(1.100)	96579	161.382	161.4
53	Bromodichloromethane	83	8.309	8.315	(1.123)	259060	180.659	180.6
57	cis-1,3-Dichloropropene	75	8.765	8.765	(1.185)	304661	183.357	183.4
58	4-Methyl-2-Pentanone	43	8.936	8.935	(0.854)	181891	165.087	165.1(Q)
60	Toluene	91	9.100	9.099	(0.869)	802531	169.711	169.7
61	trans-1,3-Dichloropropene	75	9.325	9.324	(0.891)	208495	155.991	156.0
63	1,3-Dichloropropane	76	9.672	9.671	(0.924)	209544	163.790	163.8
64	1,1,2-Trichloroethane	97	9.507	9.507	(0.908)	136393	155.874	155.9
65	Tetrachloroethene	164	9.641	9.647	(0.921)	202034	204.484	204.5
66	2-Hexanone	43	9.763	9.762	(0.933)	115948	163.227	163.2
67	Dibromochloromethane	129	9.897	9.896	(0.945)	168555	170.923	170.9
68	1,2-Dibromoethane	107	10.006	10.006	(0.956)	141143	155.036	155.0
70	Chlorobenzene	112	10.493	10.498	(1.002)	532640	185.850	185.8
71	1,1,1,2-Tetrachloroethane	131	10.572	10.578	(1.010)	205918	194.392	194.4
72	Ethylbenzene	106	10.602	10.602	(1.013)	305382	177.955	178.0
73	m,p-XYLENE	106	10.718	10.717	(1.024)	397503	183.698	183.7
74	Xylene-o	106	11.114	11.113	(1.062)	399947	172.378	172.4
76	Styrene	104	11.126	11.125	(1.063)	575425	186.062	186.1
77	Bromoform	173	11.314	11.314	(1.081)	93645	159.998	160.0
78	Isopropylbenzene	105	11.479	11.478	(1.096)	1041545	216.528	216.5
79	Bromobenzene	156	11.783	11.788	(0.922)	243976	246.977	247.0
81	n-Propylbenzene	120	12.063	12.062	(0.943)	404200	249.890	249.9
82	2-Chlorotoluene	126	11.971	11.977	(0.936)	242268	252.724	252.7
83	1,1,2,2-Tetrachloroethane	83	11.771	11.770	(1.124)	130650	119.521	119.5
84	1,2,3-Trichloropropane	110	11.819	11.819	(0.924)	38573	191.559	191.6(Q)
85	4-Chlorotoluene	126	12.087	12.086	(0.945)	215500	230.110	230.1
86	1,3,5-Trimethylbenzene	105	12.056	12.062	(0.943)	764235	232.430	232.4
87	tert-Butylbenzene	119	12.385	12.384	(0.969)	739861	255.576	255.6
88	1,2,4-Trimethylbenzene	105	12.434	12.433	(0.972)	719378	261.716	261.7
89	sec-Butylbenzene	105	12.604	12.603	(0.986)	1058143	232.318	232.3
90	4-Isopropyltoluene	119	12.750	12.749	(0.997)	770913	221.057	221.0
91	1,3-Dichlorobenzene	146	12.720	12.719	(0.995)	382083	204.184	204.2
94	n-Butylbenzene	91	13.164	13.163	(1.029)	719231	195.017	195.0
93	1,4-Dichlorobenzene	146	12.811	12.810	(1.002)	328111	202.027	202.0
95	1,2-Dichlorobenzene	146	13.188	13.187	(1.031)	270081	171.194	171.2
96	1,2-Dibromo-3-chloropropane	157	13.973	13.972	(1.093)	14534	142.442	142.4
97	1,2,4-Trichlorobenzene	180	14.800	14.799	(1.157)	86334	145.751	145.8
98	Hexachlorobutadiene	225	14.970	14.970	(1.171)	80930	130.681	130.7
99	Naphthalene	128	15.056	15.055	(1.177)	98896	158.016	158.0
100	1,2,3-Trichlorobenzene	180	15.311	15.304	(1.197)	34386	117.244	117.2
156	Methyl Acetate	43	4.282	4.281	(0.579)	590086	734.052	734.0
157	Cyclohexane	56	6.727	6.727	(0.910)	542718	191.330	191.3
158	Methyl Cyclohexane	83	7.981	7.980	(1.079)	478780	211.929	211.9
32	Vinyl Acetate	43	5.480	5.486	(0.741)	273987	258.552	258.6
52	1,4-Dioxane	88	8.187	8.181	(1.007)	27363	4615.58	4616

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ng)
21	tert-Butyl Alcohol	59	4.854	4.804	(1.030)	120704	1867.90	1868(Q)
16	3-Chloro-1-propene	76	4.124	4.141	(0.558)	193224	186.848	186.8
11	Acrolein	56	3.491	3.521	(0.472)	98927	919.585	919.6(M)
22	Acrylonitrile	53	4.787	4.780	(0.647)	605760	1516.59	1516
8	Ethyl Ether	59	3.339	3.332	(0.451)	126921	123.771	123.8(M)
62	Ethyl methacrylate	69	9.416	9.422	(0.899)	160227	140.878	140.9
23	Hexane	57	5.152	5.151	(0.697)	418148	174.703	174.7
14	Iodomethane	142	3.746	3.758	(0.507)	453990	222.242	222.2
44	Isobutanol	41	7.397	7.402	(1.000)	215596	4507.80	4508
155	N-Heptane	41	7.981	7.986	(1.079)	367786	183.487	183.5
35	Tetrahydrofuran	42	6.727	6.727	(0.910)	146591	379.166	379.2
164	trans-1,4-Dichloro-2-butene	53	11.831	11.831	(0.925)	30533	153.557	153.6
169	Butadiene	39	2.153	2.182	(0.291)	407575	222.272	222.3
M 75	Xylenes (total)	106				797450	356.077	356.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 7122611.D

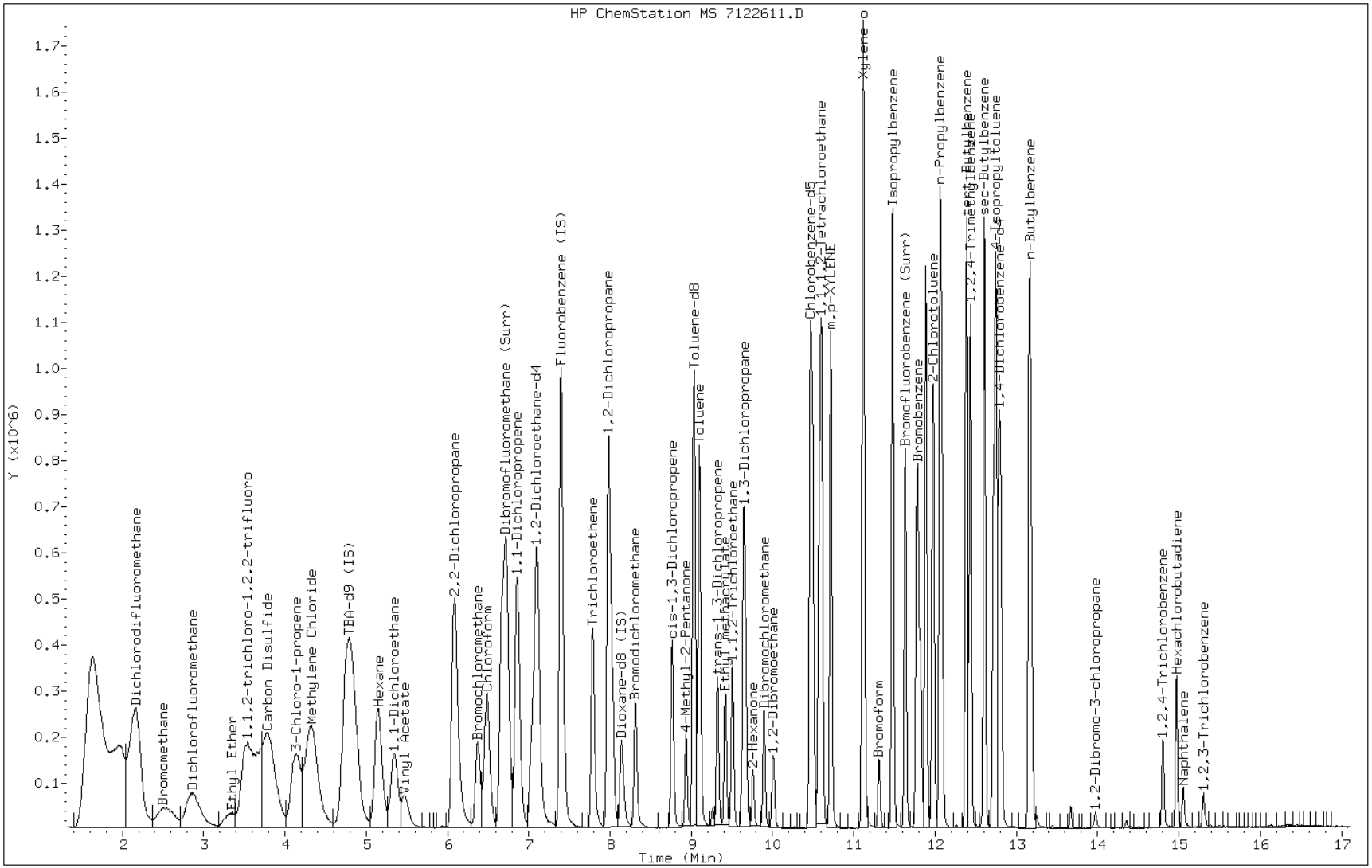
Date: 27-DEC-2013 03:47

Client ID:

Instrument: hp7.i

Sample Info: LCS

Operator: 430936



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-28282-1

SDG No.:

Client Sample ID: HD-MW-125-01-0 MS | Lab Sample ID: 180-28282-1 MS

Matrix: Water | Lab File ID: 4122611.D

Analysis Method: 8260B | Date Collected: 12/18/2013 13:03

Sample wt/vol: 5(mL) | Date Analyzed: 12/27/2013 04:30

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.: 93329 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	41.0		5.0	0.99
108-88-3	Toluene	37.7		5.0	0.85
100-41-4	Ethylbenzene	42.3		5.0	0.62
1330-20-7	Xylenes, Total	85.8		10	2.0
98-82-8	Isopropylbenzene	41.8		5.0	0.53
1634-04-4	Methyl tert-butyl ether	38.4		5.0	1.0
95-63-6	1,2,4-Trimethylbenzene	37.8		5.0	0.52
108-67-8	1,3,5-Trimethylbenzene	36.4		5.0	0.59
91-20-3	Naphthalene	36.8		5.0	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		62-123
2037-26-5	Toluene-d8 (Surr)	91		80-120
460-00-4	4-Bromofluorobenzene (Surr)	104		75-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\pitsvr06\d\chem\hp4.i\4122613d.b\4122611.D
Lab Smp Id: 180-258282-B-1 MS
Inj Date : 27-DEC-2013 04:30
Operator : 430936 Inst ID: hp4.i
Smp Info : 180-258282-B-1 MS
Misc Info : 4122613d.b,t8260bh2o.m,list1.sub
Comment :
Method : \\pitsvr06\d\chem\hp4.i\4122613d.b\T8260bh2o.m
Meth Date : 27-Dec-2013 03:56 hp4.i Quant Type: ISTD
Cal Date : 16-DEC-2013 11:28 Cal File: 4121604.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-530

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
*	46 Fluorobenzene (IS)	96	7.675	7.669	(1.000)	1428047	250.000	
*	69 Chlorobenzene-d5	119	10.764	10.758	(1.000)	353737	250.000	
*	92 1,4-Dichlorobenzene-d4	152	13.093	13.093	(1.000)	519207	250.000	
*	176 Dioxane-d8 (IS)	96	8.405	8.405	(1.000)	51177	5000.00	
*	177 TBA-d9 (IS)	65	4.853	4.847	(1.000)	389325	5000.00	
$	39 Dibromofluoromethane (Surr)	113	6.933	6.933	(0.903)	311333	257.830	257.8
$	43 1,2-Dichloroethane-d4	65	7.310	7.304	(0.952)	326701	262.539	262.5
$	59 Toluene-d8	98	9.317	9.317	(0.866)	1365677	227.453	227.4
$	80 Bromofluorobenzene (Surr)	95	11.938	11.938	(1.109)	553160	259.656	259.6
	1 Dichlorodifluoromethane	85	1.770	1.770	(0.231)	386680	207.752	207.8
	2 Chloromethane	50	1.964	1.958	(0.256)	555929	219.177	219.2
	3 Vinyl Chloride	62	2.123	2.123	(0.277)	518427	241.845	241.8
	4 Bromomethane	94	2.493	2.494	(0.325)	80828	225.730	225.7
	5 Chloroethane	64	2.627	2.615	(0.342)	80732	228.154	228.2
	7 Dichlorofluoromethane	67	2.919	2.919	(0.380)	257455	250.209	250.2
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.819	3.819	(0.498)	363891	230.709	230.7
	166 Trichlorofluoromethane	101	2.962	2.968	(0.386)	242792	260.338	260.3
	12 1,1-Dichloroethene	96	3.758	3.777	(0.490)	396613	235.145	235.1
	15 Carbon Disulfide	76	4.111	4.123	(0.536)	888364	221.167	221.2
	13 Acetone	43	3.977	3.971	(0.518)	95630	199.211	199.2
	18 Methylene Chloride	84	4.592	4.598	(0.598)	366242	208.357	208.4
	19 trans-1,2-Dichloroethene	96	4.999	5.005	(0.651)	351759	209.496	209.5
	20 Methyl tert-butyl ether	73	5.060	5.054	(0.659)	651613	192.048	192.0
	24 1,1-Dichloroethane	63	5.601	5.595	(0.730)	637564	223.061	223.1
	27 2,2-Dichloropropane	77	6.337	6.337	(0.826)	205704	202.775	202.8(Q)
	28 cis-1,2-dichloroethene	96	6.349	6.349	(0.827)	1907736	1076.87	1077
M	29 1,2-Dichloroethene (total)	96				2259495	1286.37	1286
	30 Bromochloromethane	128	6.641	6.641	(0.865)	150565	201.117	201.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
31	2-Butanone	43	6.428	6.422	(0.838)	116791	189.863	189.9
37	Chloroform	83	6.744	6.744	(0.879)	470514	197.173	197.2
38	1,1,1-Trichloroethane	97	6.939	6.939	(0.904)	360585	207.010	207.0
40	1,1-Dichloropropene	75	7.134	7.128	(0.929)	374356	191.163	191.2
41	Carbon Tetrachloride	117	7.127	7.128	(0.929)	310047	205.146	205.1
42	Benzene	78	7.365	7.359	(0.960)	1282377	204.921	204.9
45	1,2-Dichloroethane	62	7.389	7.389	(0.963)	310257	194.741	194.7
47	Trichloroethene	130	8.064	8.064	(1.051)	4318386	2750.85	2751
49	1,2-Dichloropropane	63	8.295	8.295	(1.081)	318772	192.790	192.8
50	Dibromomethane	93	8.429	8.423	(1.098)	152761	201.854	201.8
53	Bromodichloromethane	83	8.587	8.587	(1.119)	310011	201.353	201.4
57	cis-1,3-Dichloropropene	75	9.049	9.049	(1.179)	408267	199.209	199.2
58	4-Methyl-2-Pentanone	43	9.213	9.207	(0.856)	305318	193.245	193.2(Q)
60	Toluene	91	9.384	9.378	(0.872)	1382322	188.498	188.5
61	trans-1,3-Dichloropropene	75	9.609	9.609	(0.893)	322477	192.710	192.7
63	1,3-Dichloropropane	76	9.955	9.955	(0.925)	425687	183.837	183.8
64	1,1,2-Trichloroethane	97	9.785	9.785	(0.909)	243776	178.970	179.0
65	Tetrachloroethene	164	9.931	9.931	(0.923)	299089	221.348	221.3
66	2-Hexanone	43	10.071	10.071	(0.936)	181127	154.388	154.4
67	Dibromochloromethane	129	10.186	10.180	(0.946)	207106	185.852	185.8
68	1,2-Dibromoethane	107	10.308	10.308	(0.958)	235333	193.881	193.9
70	Chlorobenzene	112	10.788	10.789	(1.002)	916642	206.431	206.4
71	1,1,1,2-Tetrachloroethane	131	10.861	10.861	(1.009)	267911	201.287	201.3
72	Ethylbenzene	106	10.892	10.892	(1.012)	518739	211.283	211.3
73	m,p-XYLENE	106	11.013	11.007	(1.023)	654173	215.920	215.9
74	Xylene-o	106	11.403	11.409	(1.059)	620505	212.899	212.9
76	Styrene	104	11.427	11.421	(1.062)	1025869	222.419	222.4
77	Bromoform	173	11.615	11.622	(1.079)	121231	181.356	181.4
78	Isopropylbenzene	105	11.774	11.774	(1.094)	1581406	209.111	209.1
79	Bromobenzene	156	12.090	12.096	(0.923)	370705	185.858	185.8
81	n-Propylbenzene	120	12.181	12.181	(0.930)	497700	200.037	200.0
82	2-Chlorotoluene	126	12.278	12.278	(0.938)	388279	190.450	190.4
83	1,1,2,2-Tetrachloroethane	83	12.059	12.059	(1.120)	288947	192.879	192.9
84	1,2,3-Trichloropropane	110	12.114	12.114	(0.925)	83830	166.326	166.3
85	4-Chlorotoluene	126	12.388	12.388	(0.946)	396190	199.254	199.2
86	1,3,5-Trimethylbenzene	105	12.357	12.351	(0.944)	1322253	182.204	182.2
87	tert-Butylbenzene	119	12.686	12.680	(0.969)	1188524	183.656	183.6
88	1,2,4-Trimethylbenzene	105	12.734	12.735	(0.973)	1299295	188.838	188.8
89	sec-Butylbenzene	105	12.905	12.905	(0.986)	1773205	186.715	186.7
90	4-Isopropyltoluene	119	13.051	13.045	(0.997)	1490802	202.684	202.7
91	1,3-Dichlorobenzene	146	13.032	13.033	(0.995)	657256	203.128	203.1
94	n-Butylbenzene	91	13.464	13.464	(1.028)	1418686	207.857	207.8
93	1,4-Dichlorobenzene	146	13.118	13.118	(1.002)	689439	178.940	178.9
95	1,2-Dichlorobenzene	146	13.501	13.501	(1.031)	590102	183.387	183.4
96	1,2-Dibromo-3-chloropropane	157	14.334	14.316	(1.095)	16961	118.263	118.3(M)
97	1,2,4-Trichlorobenzene	180	15.161	15.155	(1.158)	116525	163.356	163.4(M)
98	Hexachlorobutadiene	225	15.289	15.289	(1.168)	143921	155.095	155.1
99	Naphthalene	128	15.441	15.435	(1.179)	199826	183.809	183.8(M)
100	1,2,3-Trichlorobenzene	180	15.684	15.678	(1.198)	84710	211.957	212.0(Q)
156	Methyl Acetate	43	4.506	4.494	(0.587)	996141	875.555	875.6
157	Cyclohexane	56	7.006	7.000	(0.913)	797330	213.644	213.6
158	Methyl Cyclohexane	83	8.259	8.259	(1.076)	674763	217.516	217.5
32	Vinyl Acetate	43	5.729	5.723	(0.746)	409044	179.776	179.8
52	1,4-Dioxane	88	8.465	8.459	(1.007)	50541	4262.48	4262

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ng)
	21 tert-Butyl Alcohol	59	4.975	4.975	(1.025)	193694	1854.16	1854
	16 3-Chloro-1-propene	76	4.391	4.385	(0.572)	188097	200.089	200.1
	11 Acrolein	56	3.673	3.679	(0.479)	167812	864.398	864.4
	22 Acrylonitrile	53	5.011	5.011	(0.653)	1081305	1902.45	1902
	8 Ethyl Ether	59	3.473	3.473	(0.452)	269469	188.958	189.0
	62 Ethyl methacrylate	69	9.694	9.694	(0.901)	303088	174.398	174.4
	23 Hexane	57	5.400	5.407	(0.704)	565445	196.113	196.1
	14 Iodomethane	142	4.014	4.020	(0.523)	488413	216.691	216.7
	44 Isobutanol	41	7.340	7.340	(0.956)	168083	5125.57	5126
	155 N-Heptane	41	7.669	7.669	(0.999)	305812	198.232	198.2
	35 Tetrahydrofuran	42	7.000	7.000	(0.912)	192516	412.050	412.0
	164 trans-1,4-Dichloro-2-butene	53	12.145	12.145	(0.928)	60428	141.010	141.0
	169 Butadiene	39	2.159	2.159	(0.281)	485069	225.990	226.0
M	75 Xylenes (total)	106				1274678	428.819	428.8

QC Flag Legend

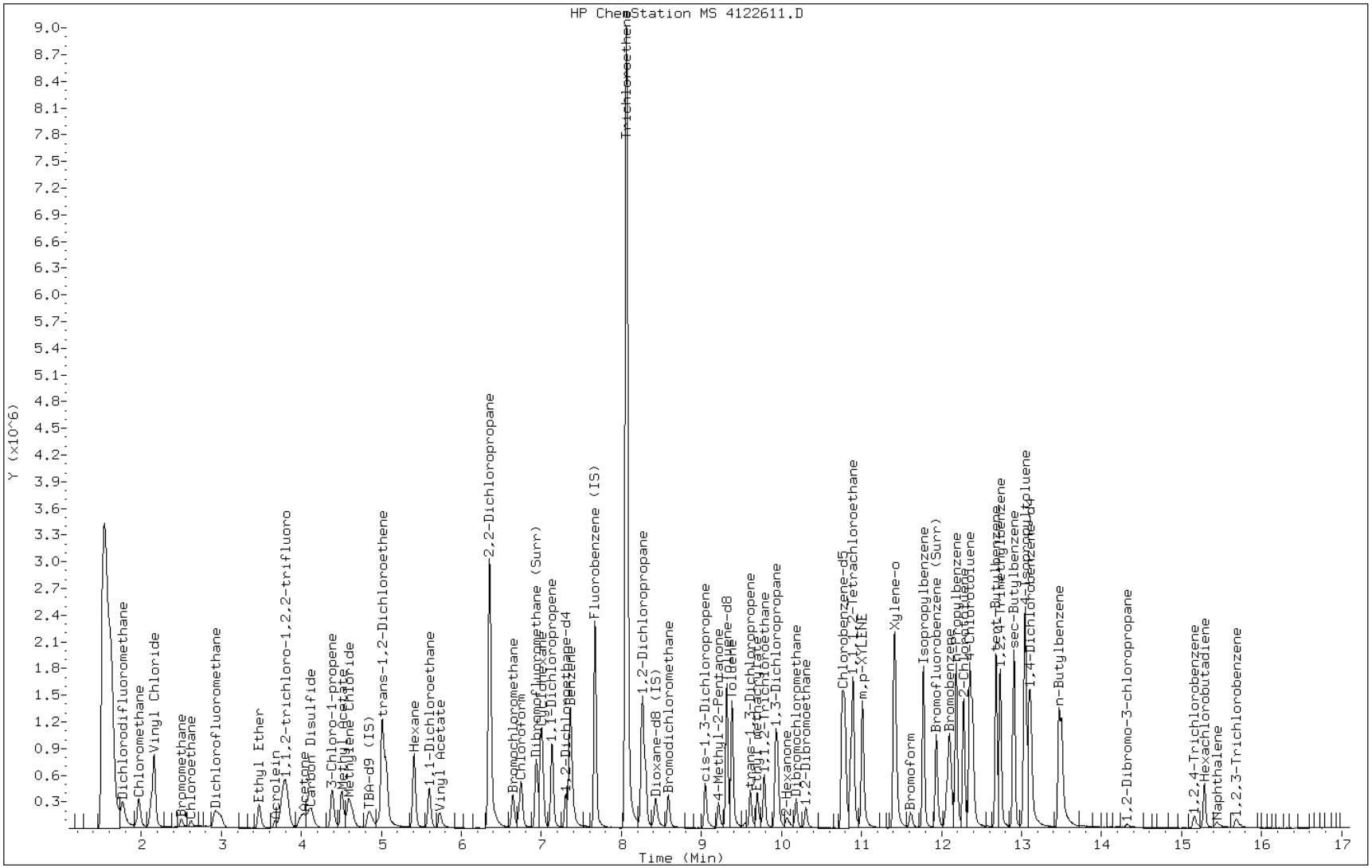
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 4122611.D

Date: 27-DEC-2013 04:30

Client ID: Instrument: hp4.i

Sample Info: 180-258282-B-1 MS Operator: 430936



Manual Integration Report

Data File: 4122611.D
Inj. Date and Time: 27-DEC-2013 04:30
Instrument ID: hp4.i
Client ID:
Compound: 99 Naphthalene
CAS #: 91-20-3
Report Date: 12/27/2013

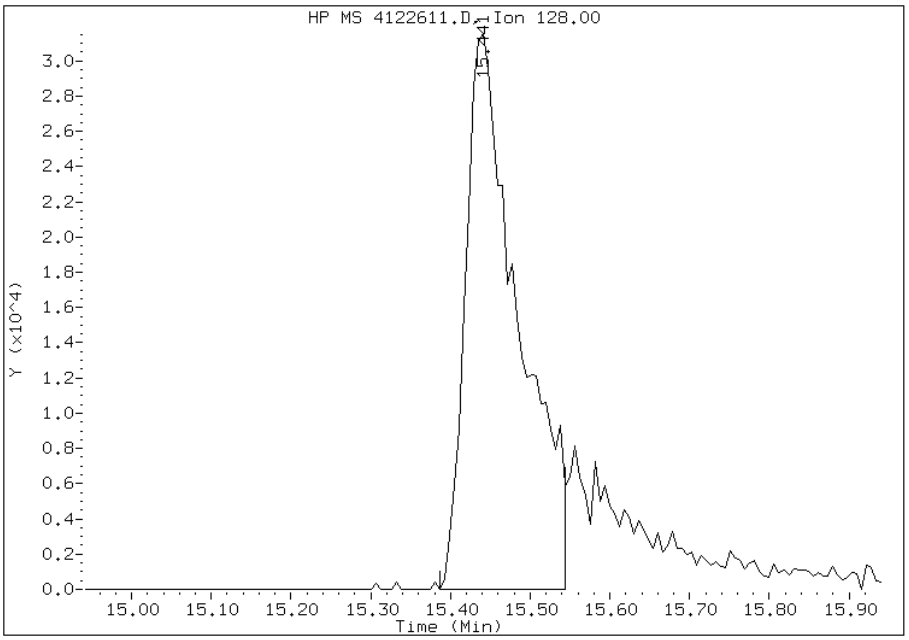
Processing Integration Results

RT: 15.44

Response: 147062

Amount: 134

Conc: 134



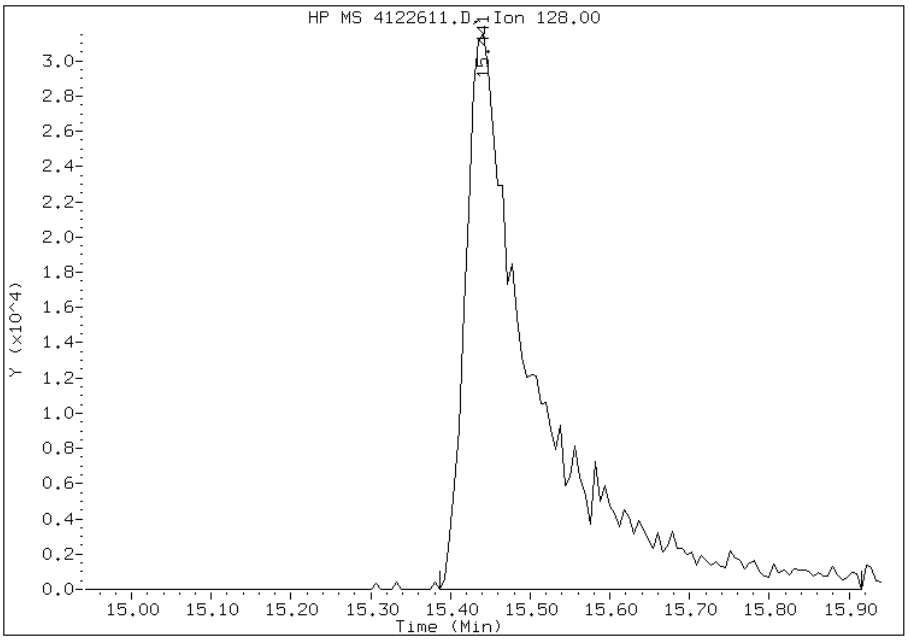
Manual Integration Results

RT: 15.44

Response: 199826

Amount: 184

Conc: 184



Manually Integrated By: zukowskim
Modification Date: 27-Dec-2013 04:28
Manual Integration Reason: Peak Integrated Incorrectly

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-28282-1

SDG No.:

Client Sample ID: | Lab Sample ID: 180-28341-C-1 MS

Matrix: Water | Lab File ID: 7122610.D

Analysis Method: 8260B | Date Collected: 12/19/2013 10:05

Sample wt/vol: 5(mL) | Date Analyzed: 12/27/2013 03:20

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.: 93330 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	35.0		5.0	0.99
108-88-3	Toluene	33.8		5.0	0.85
100-41-4	Ethylbenzene	35.7		5.0	0.62
1330-20-7	Xylenes, Total	70.6		10	2.0
98-82-8	Isopropylbenzene	40.9		5.0	0.53
1634-04-4	Methyl tert-butyl ether	32.2		5.0	1.0
95-63-6	1,2,4-Trimethylbenzene	51.4		5.0	0.52
108-67-8	1,3,5-Trimethylbenzene	45.6		5.0	0.59
91-20-3	Naphthalene	2.12	J	5.0	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		62-123
2037-26-5	Toluene-d8 (Surr)	91		80-120
460-00-4	4-Bromofluorobenzene (Surr)	87		75-120
1868-53-7	Dibromofluoromethane (Surr)	95		80-120

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\pitsvr06\d\chem\hp7.i\7122613d.b\7122610.D
Lab Smp Id: 180-28341-C-1 MS
Inj Date : 27-DEC-2013 03:20 MS Autotune Date: 29-AUG-2013 08:08
Operator : 430936 Inst ID: hp7.i
Smp Info : 180-28341-C-1 MS
Misc Info : 7122613d.b,T8260bh2o.m,list1.sub
Comment :
Method : \\pitsvr06\d\chem\hp7.i\7122613d.b\T8260bh2o.m
Meth Date : 27-Dec-2013 04:01 hp7.i Quant Type: ISTD
Cal Date : 06-DEC-2013 11:22 Cal File: 7120609.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-530

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
*	46 Fluorobenzene (IS)	96	7.397	7.396	(1.000)	991610	250.000	
*	69 Chlorobenzene-d5	119	10.463	10.462	(1.000)	267295	250.000	
*	92 1,4-Dichlorobenzene-d4	152	12.787	12.786	(1.000)	275666	250.000	
*	176 Dioxane-d8 (IS)	96	8.133	8.126	(1.000)	22462	5000.00	
*	177 TBA-d9 (IS)	65	4.733	4.725	(1.000)	240746	5000.00	
$	39 Dibromofluoromethane (Surr)	113	6.673	6.672	(0.902)	251086	237.574	237.6
$	43 1,2-Dichloroethane-d4	65	7.032	7.037	(0.951)	249860	204.326	204.3
$	59 Toluene-d8	98	9.034	9.032	(0.863)	941700	227.327	227.3
$	80 Bromofluorobenzene (Surr)	95	11.631	11.630	(1.112)	348980	216.596	216.6
	1 Dichlorodifluoromethane	85	1.928	1.933	(0.261)	287362	165.960	166.0(Q)
	2 Chloromethane	50	2.001	2.000	(0.271)	580163	166.358	166.4
	3 Vinyl Chloride	62	2.135	2.128	(0.289)	341486	184.747	184.7
	4 Bromomethane	94	2.476	2.480	(0.335)	94312	225.724	225.7
	5 Chloroethane	64	2.585	2.602	(0.350)	95553	190.328	190.3(M)
	7 Dichlorofluoromethane	67	2.835	2.858	(0.383)	184897	180.024	180.0
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.638	3.679	(0.492)	286921	210.849	210.8(M)
	166 Trichlorofluoromethane	101	2.841	2.827	(0.384)	148426	175.992	176.0(M)
	12 1,1-Dichloroethene	96	3.534	3.539	(0.478)	261860	185.513	185.5
	15 Carbon Disulfide	76	3.808	3.819	(0.515)	875638	208.957	209.0
	13 Acetone	43	3.790	3.801	(0.512)	56752	164.338	164.3
	18 Methylene Chloride	84	4.350	4.342	(0.588)	280921	189.241	189.2
	19 trans-1,2-Dichloroethene	96	4.733	4.756	(0.640)	302116	205.795	205.8
	20 Methyl tert-butyl ether	73	4.848	4.835	(0.655)	458435	160.833	160.8
	24 1,1-Dichloroethane	63	5.335	5.346	(0.721)	525829	183.421	183.4
	27 2,2-Dichloropropane	77	6.077	6.088	(0.822)	379637	213.753	213.8
	28 cis-1,2-dichloroethene	96	6.083	6.082	(0.822)	304180	192.042	192.0
M	29 1,2-Dichloroethene (total)	96				606296	397.837	397.8
	30 Bromochloromethane	128	6.369	6.374	(0.861)	121185	175.720	175.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
31 2-Butanone	43	6.181	6.167	(0.836)	80842	185.807	185.8
37 Chloroform	83	6.485	6.489	(0.877)	421160	180.615	180.6
38 1,1,1-Trichloroethane	97	6.667	6.672	(0.901)	382171	203.705	203.7
40 1,1-Dichloropropene	75	6.856	6.861	(0.927)	277914	173.476	173.5
41 Carbon Tetrachloride	117	6.856	6.854	(0.927)	311012	206.918	206.9
42 Benzene	78	7.087	7.092	(0.958)	866512	175.109	175.1
45 1,2-Dichloroethane	62	7.118	7.122	(0.962)	224398	155.741	155.7
47 Trichloroethene	130	7.787	7.785	(1.053)	263790	185.714	185.7
49 1,2-Dichloropropane	63	8.018	8.023	(1.084)	216524	171.372	171.4
50 Dibromomethane	93	8.140	8.144	(1.100)	99877	157.280	157.3
53 Bromodichloromethane	83	8.310	8.315	(1.123)	278625	183.112	183.1
57 cis-1,3-Dichloropropene	75	8.766	8.765	(1.185)	323895	183.705	183.7
58 4-Methyl-2-Pentanone	43	8.936	8.935	(0.854)	192186	161.117	161.1(Q)
60 Toluene	91	9.101	9.099	(0.870)	864482	168.845	168.8
61 trans-1,3-Dichloropropene	75	9.320	9.324	(0.891)	224108	154.875	154.9
63 1,3-Dichloropropane	76	9.673	9.671	(0.924)	229449	165.709	165.7
64 1,1,2-Trichloroethane	97	9.502	9.507	(0.908)	147202	155.386	155.4
65 Tetrachloroethene	164	9.642	9.647	(0.922)	213274	199.385	199.4
66 2-Hexanone	43	9.758	9.762	(0.933)	122955	160.137	160.1
67 Dibromochloromethane	129	9.892	9.896	(0.945)	180156	168.743	168.7
68 1,2-Dibromoethane	107	10.007	10.006	(0.956)	153154	155.388	155.4
70 Chlorobenzene	112	10.494	10.498	(1.003)	575144	185.363	185.4
71 1,1,1,2-Tetrachloroethane	131	10.573	10.578	(1.010)	210851	183.856	183.8
72 Ethylbenzene	106	10.603	10.602	(1.013)	331541	178.452	178.4
73 m,p-XYLENE	106	10.719	10.717	(1.024)	429592	183.374	183.4
74 Xylene-o	106	11.108	11.113	(1.062)	425853	169.534	169.5
76 Styrene	104	11.127	11.125	(1.063)	617787	184.082	184.1
77 Bromoform	173	11.309	11.314	(1.081)	97468	153.819	153.8
78 Isopropylbenzene	105	11.473	11.478	(1.097)	1080957	204.711	204.7
79 Bromobenzene	156	11.784	11.788	(0.922)	254698	248.753	248.8
81 n-Propylbenzene	120	12.057	12.062	(0.943)	411998	245.743	245.7
82 2-Chlorotoluene	126	11.972	11.977	(0.936)	250283	251.892	251.9
83 1,1,2,2-Tetrachloroethane	83	11.771	11.770	(1.125)	131415	111.045	111.0
84 1,2,3-Trichloropropane	110	11.820	11.819	(0.924)	37476	179.558	179.6
85 4-Chlorotoluene	126	12.088	12.086	(0.945)	228594	235.498	235.5
86 1,3,5-Trimethylbenzene	105	12.057	12.062	(0.943)	777185	228.046	228.0
87 tert-Butylbenzene	119	12.386	12.384	(0.969)	742379	247.416	247.4
88 1,2,4-Trimethylbenzene	105	12.434	12.433	(0.972)	734001	256.802	256.8
89 sec-Butylbenzene	105	12.605	12.603	(0.986)	1080708	228.918	228.9
90 4-Isopropyltoluene	119	12.751	12.749	(0.997)	781610	216.233	216.2
91 1,3-Dichlorobenzene	146	12.720	12.719	(0.995)	371866	191.728	191.7
94 n-Butylbenzene	91	13.158	13.163	(1.029)	686513	179.592	179.6
93 1,4-Dichlorobenzene	146	12.812	12.810	(1.002)	320316	190.284	190.3
95 1,2-Dichlorobenzene	146	13.183	13.187	(1.031)	234893	143.648	143.6
96 1,2-Dibromo-3-chloropropane	157	13.974	13.972	(1.093)	5984	65.2943	65.29(M)
97 1,2,4-Trichlorobenzene	180	14.813	14.799	(1.158)	6574	10.7076	10.71
98 Hexachlorobutadiene	225	14.971	14.970	(1.171)	11018	17.1647	17.16
99 Naphthalene	128	15.075	15.055	(1.179)	6872	10.5935	10.59(M)
100 1,2,3-Trichlorobenzene	180	15.306	15.304	(1.197)	5266	17.3231	17.32(Q)
156 Methyl Acetate	43	4.283	4.281	(0.579)	610883	716.367	716.4
157 Cyclohexane	56	6.722	6.727	(0.909)	542025	180.080	180.1
158 Methyl Cyclohexane	83	7.981	7.980	(1.079)	481204	200.734	200.7
32 Vinyl Acetate	43	5.475	5.486	(0.740)	297681	264.732	264.7
52 1,4-Dioxane	88	8.188	8.181	(1.007)	20442	3870.00	3870

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ng)
	21 tert-Butyl Alcohol	59	4.842	4.804	(1.023)	122144	1820.87	1821(Q)
	16 3-Chloro-1-propene	76	4.124	4.141	(0.558)	187854	171.193	171.2
	11 Acrolein	56	3.474	3.521	(0.470)	93694	820.778	820.8(M)
	22 Acrylonitrile	53	4.769	4.780	(0.645)	580440	1369.50	1369
	8 Ethyl Ether	59	3.285	3.332	(0.444)	121686	111.831	111.8(Q)
	62 Ethyl methacrylate	69	9.417	9.422	(0.900)	176784	143.571	143.6
	23 Hexane	57	5.140	5.151	(0.695)	448710	176.674	176.7
	14 Iodomethane	142	3.735	3.758	(0.505)	451594	208.336	208.3
	44 Isobutanol	41	7.391	7.402	(0.999)	237598	4681.70	4682
	155 N-Heptane	41	7.981	7.986	(1.079)	383340	180.231	180.2
	35 Tetrahydrofuran	42	6.722	6.727	(0.909)	148920	363.005	363.0
	164 trans-1,4-Dichloro-2-butene	53	11.832	11.831	(0.925)	28121	136.447	136.4
	169 Butadiene	39	2.166	2.182	(0.293)	391866	199.333	199.3
M	75 Xylenes (total)	106				855445	352.909	352.9

QC Flag Legend

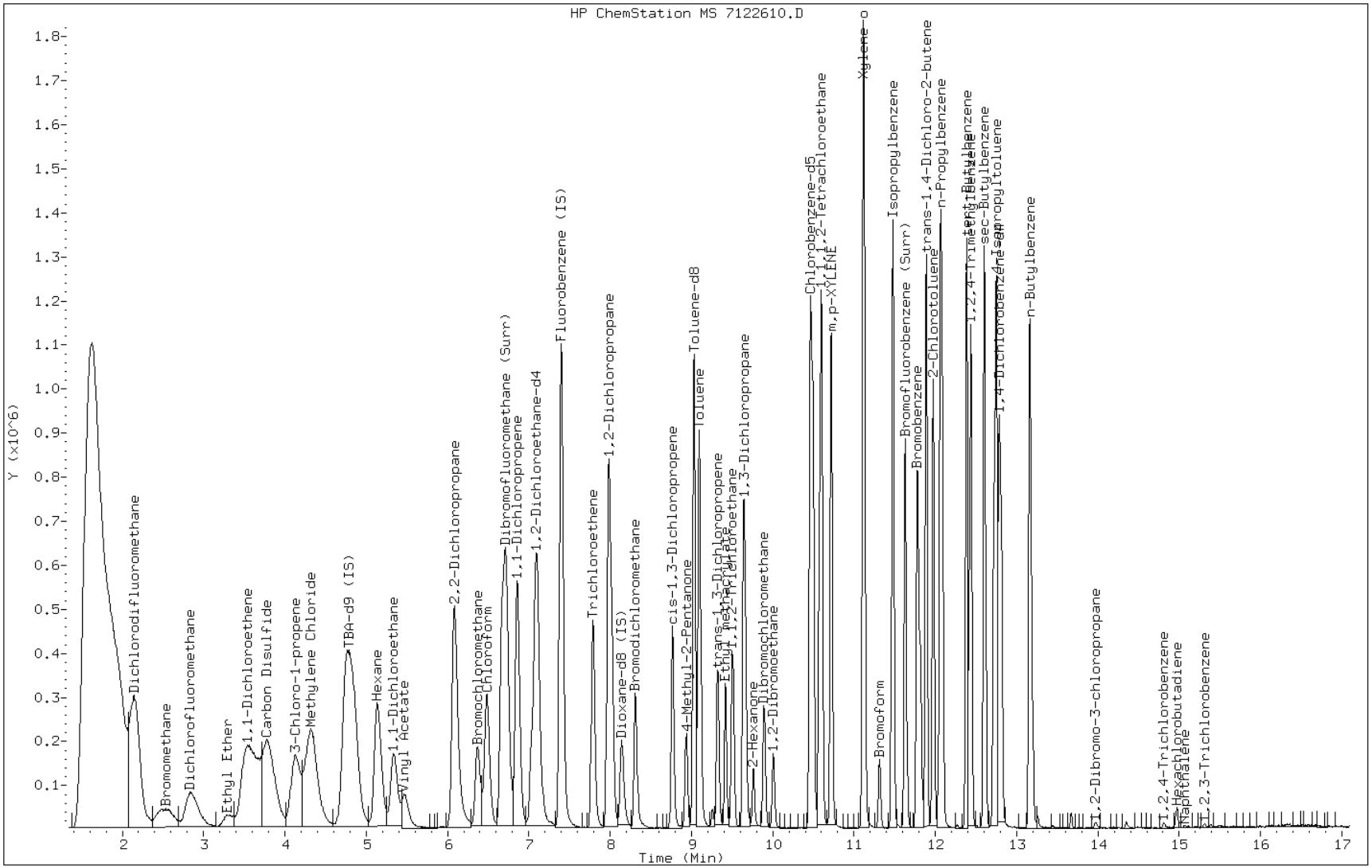
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 7122610.D

Date: 27-DEC-2013 03:20

Client ID: Instrument: hp7.i

Sample Info: 180-28341-C-1 MS Operator: 430936



Manual Integration Report

Data File: 7122610.D
Inj. Date and Time: 27-DEC-2013 03:20
Instrument ID: hp7.i
Client ID:
Compound: 99 Naphthalene
CAS #: 91-20-3
Report Date: 12/27/2013

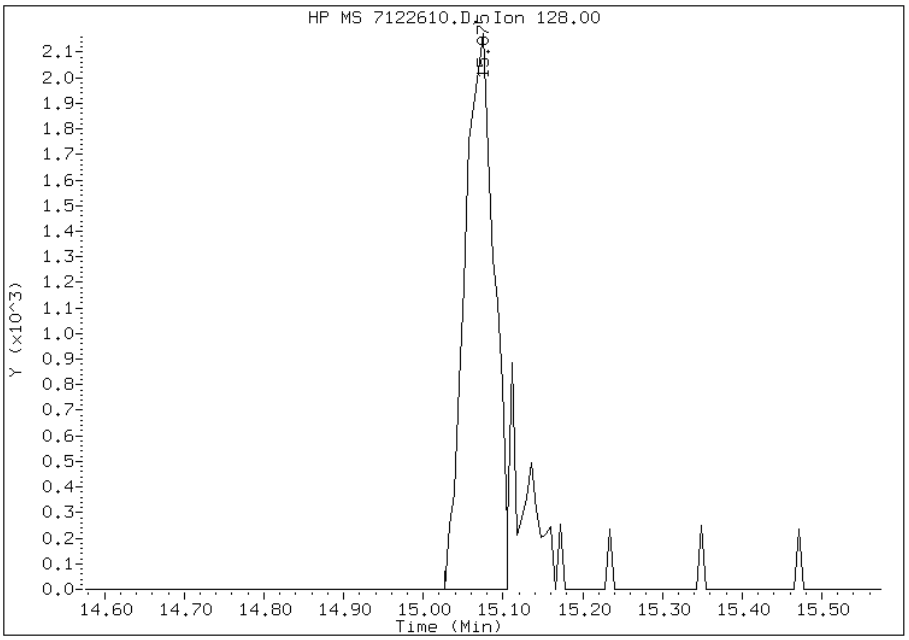
Processing Integration Results

RT: 15.08

Response: 5700

Amount: 9

Conc: 9



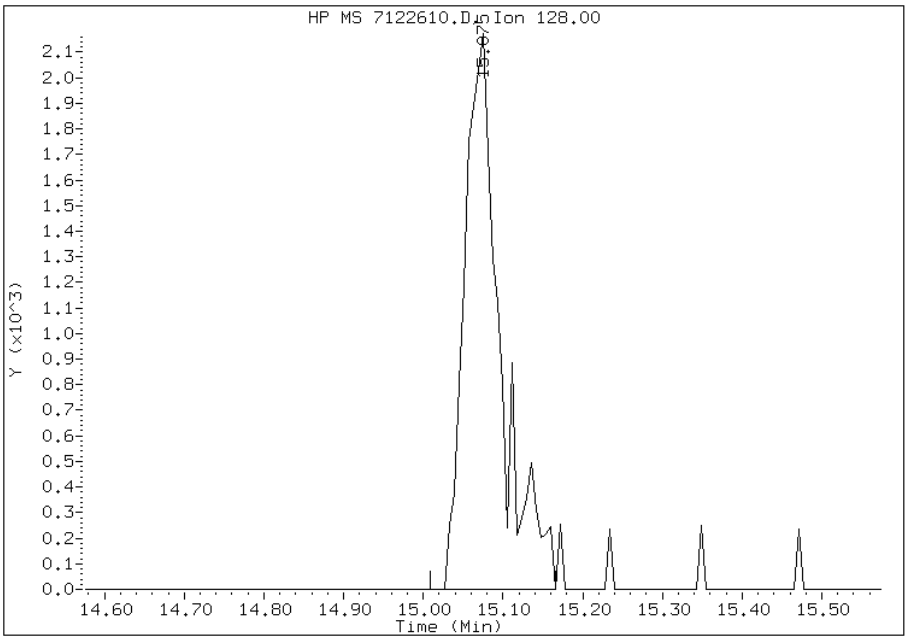
Manual Integration Results

RT: 15.08

Response: 6872

Amount: 11

Conc: 11



Manually Integrated By: zukowskim
Modification Date: 27-Dec-2013 04:01
Manual Integration Reason: Peak Integrated Incorrectly

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-28282-1

SDG No.:

Client Sample ID: HD-MW-125-01-0 MSD | Lab Sample ID: 180-28282-1 MSD

Matrix: Water | Lab File ID: 4122612.D

Analysis Method: 8260B | Date Collected: 12/18/2013 13:03

Sample wt/vol: 5(mL) | Date Analyzed: 12/27/2013 04:57

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.: 93329 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	41.2		5.0	0.99
108-88-3	Toluene	37.7		5.0	0.85
100-41-4	Ethylbenzene	40.8		5.0	0.62
1330-20-7	Xylenes, Total	83.7		10	2.0
98-82-8	Isopropylbenzene	40.8		5.0	0.53
1634-04-4	Methyl tert-butyl ether	38.7		5.0	1.0
95-63-6	1,2,4-Trimethylbenzene	40.0		5.0	0.52
108-67-8	1,3,5-Trimethylbenzene	37.6		5.0	0.59
91-20-3	Naphthalene	39.7		5.0	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		62-123
2037-26-5	Toluene-d8 (Surr)	91		80-120
460-00-4	4-Bromofluorobenzene (Surr)	102		75-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\pitsvr06\d\chem\hp4.i\4122613d.b\4122612.D
Lab Smp Id: 180-28282-C-1 MSD
Inj Date : 27-DEC-2013 04:57
Operator : 430936 Inst ID: hp4.i
Smp Info : 180-28282-C-1 MSD
Misc Info : 4122613d.b,t8260bh2o.m,list1.sub
Comment :
Method : \\pitsvr06\d\chem\hp4.i\4122613d.b\T8260bh2o.m
Meth Date : 27-Dec-2013 03:56 hp4.i Quant Type: ISTD
Cal Date : 16-DEC-2013 11:28 Cal File: 4121604.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-530

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
* 46	Fluorobenzene (IS)	96	7.672	7.669	(1.000)	1506299	250.000	
* 69	Chlorobenzene-d5	119	10.762	10.758	(1.000)	377678	250.000	
* 92	1,4-Dichlorobenzene-d4	152	13.091	13.093	(1.000)	524247	250.000	
* 176	Dioxane-d8 (IS)	96	8.414	8.405	(1.000)	45997	5000.00	
* 177	TBA-d9 (IS)	65	4.850	4.847	(1.000)	411406	5000.00	
$ 39	Dibromofluoromethane (Surr)	113	6.930	6.933	(0.903)	322938	253.547	253.5
$ 43	1,2-Dichloroethane-d4	65	7.301	7.304	(0.952)	321192	244.703	244.7
$ 59	Toluene-d8	98	9.314	9.317	(0.866)	1459418	227.658	227.6
$ 80	Bromofluorobenzene (Surr)	95	11.935	11.938	(1.109)	579347	254.710	254.7
1	Dichlorodifluoromethane	85	1.767	1.770	(0.230)	383646	195.414	195.4
2	Chloromethane	50	1.956	1.958	(0.255)	570535	213.250	213.2
3	Vinyl Chloride	62	2.120	2.123	(0.276)	518023	229.102	229.1
4	Bromomethane	94	2.491	2.494	(0.325)	80598	213.394	213.4
5	Chloroethane	64	2.613	2.615	(0.341)	76571	205.153	205.2
7	Dichlorofluoromethane	67	2.911	2.919	(0.379)	271593	250.237	250.2
10	1,1,2-trichloro-1,2,2-trifluor	101	3.811	3.819	(0.497)	361817	217.477	217.5
166	Trichlorofluoromethane	101	2.953	2.968	(0.385)	210051	213.530	213.5
12	1,1-Dichloroethene	96	3.762	3.777	(0.490)	388297	218.255	218.2
15	Carbon Disulfide	76	4.102	4.123	(0.535)	925478	218.438	218.4
13	Acetone	43	3.981	3.971	(0.519)	93052	183.771	183.8
18	Methylene Chloride	84	4.583	4.598	(0.597)	364430	196.556	196.6
19	trans-1,2-Dichloroethene	96	4.996	5.005	(0.651)	364049	205.552	205.6
20	Methyl tert-butyl ether	73	5.057	5.054	(0.659)	692701	193.552	193.6
24	1,1-Dichloroethane	63	5.598	5.595	(0.730)	667368	221.359	221.4
27	2,2-Dichloropropane	77	6.340	6.337	(0.826)	226245	211.437	211.4(Q)
28	cis-1,2-dichloroethene	96	6.353	6.349	(0.828)	1998224	1069.36	1069
M 29	1,2-Dichloroethene (total)	96				2362273	1274.91	1275
30	Bromochloromethane	128	6.638	6.641	(0.865)	159855	202.434	202.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
31	2-Butanone	43	6.426	6.422	(0.838)	129624	198.661	198.7
37	Chloroform	83	6.742	6.744	(0.879)	489616	194.519	194.5
38	1,1,1-Trichloroethane	97	6.936	6.939	(0.904)	386429	210.322	210.3
40	1,1-Dichloropropene	75	7.131	7.128	(0.929)	405768	196.439	196.4
41	Carbon Tetrachloride	117	7.125	7.128	(0.929)	320676	201.156	201.2
42	Benzene	78	7.356	7.359	(0.959)	1360268	206.076	206.1
45	1,2-Dichloroethane	62	7.386	7.389	(0.963)	333533	198.475	198.5
47	Trichloroethene	130	8.061	8.064	(1.051)	4459612	2693.23	2693
49	1,2-Dichloropropane	63	8.299	8.295	(1.082)	350251	200.824	200.8
50	Dibromomethane	93	8.420	8.423	(1.097)	158195	198.175	198.2
53	Bromodichloromethane	83	8.584	8.587	(1.119)	327019	201.366	201.4
57	cis-1,3-Dichloropropene	75	9.047	9.049	(1.179)	454335	210.171	210.2
58	4-Methyl-2-Pentanone	43	9.211	9.207	(0.856)	328014	194.363	194.4(Q)
60	Toluene	91	9.381	9.378	(0.872)	1476412	188.566	188.6
61	trans-1,3-Dichloropropene	75	9.606	9.609	(0.893)	332939	186.350	186.4
63	1,3-Dichloropropane	76	9.953	9.955	(0.925)	458451	185.436	185.4
64	1,1,2-Trichloroethane	97	9.782	9.785	(0.909)	268292	184.483	184.5
65	Tetrachloroethene	164	9.934	9.931	(0.923)	311443	215.880	215.9
66	2-Hexanone	43	10.062	10.071	(0.935)	194760	155.410	155.4
67	Dibromochloromethane	129	10.184	10.180	(0.946)	224329	188.547	188.5
68	1,2-Dibromoethane	107	10.305	10.308	(0.958)	242066	186.786	186.8
70	Chlorobenzene	112	10.792	10.789	(1.003)	959756	202.439	202.4
71	1,1,1,2-Tetrachloroethane	131	10.865	10.861	(1.010)	289373	203.630	203.6
72	Ethylbenzene	106	10.895	10.892	(1.012)	534315	203.832	203.8
73	m,p-XYLENE	106	11.011	11.007	(1.023)	673489	208.204	208.2
74	Xylene-o	106	11.406	11.409	(1.060)	655591	210.678	210.7
76	Styrene	104	11.424	11.421	(1.062)	1074363	218.167	218.2
77	Bromoform	173	11.619	11.622	(1.080)	129036	180.834	180.8
78	Isopropylbenzene	105	11.771	11.774	(1.094)	1648322	204.143	204.1
79	Bromobenzene	156	12.099	12.096	(0.924)	388909	193.110	193.1
81	n-Propylbenzene	120	12.185	12.181	(0.931)	510722	203.297	203.3
82	2-Chlorotoluene	126	12.276	12.278	(0.938)	399860	194.245	194.2
83	1,1,2,2-Tetrachloroethane	83	12.063	12.059	(1.121)	312364	195.293	195.3
84	1,2,3-Trichloropropane	110	12.118	12.114	(0.926)	86865	170.691	170.7
85	4-Chlorotoluene	126	12.391	12.388	(0.947)	402127	200.295	200.3
86	1,3,5-Trimethylbenzene	105	12.355	12.351	(0.944)	1378500	188.129	188.1
87	tert-Butylbenzene	119	12.683	12.680	(0.969)	1238216	189.495	189.5
88	1,2,4-Trimethylbenzene	105	12.732	12.735	(0.973)	1389495	200.006	200.0
89	sec-Butylbenzene	105	12.908	12.905	(0.986)	1842995	192.198	192.2
90	4-Isopropyltoluene	119	13.048	13.045	(0.997)	1516816	204.238	204.2
91	1,3-Dichlorobenzene	146	13.030	13.033	(0.995)	668310	204.558	204.6
94	n-Butylbenzene	91	13.468	13.464	(1.029)	1447876	210.095	210.1
93	1,4-Dichlorobenzene	146	13.121	13.118	(1.002)	700850	180.153	180.2
95	1,2-Dichlorobenzene	146	13.504	13.501	(1.032)	615143	189.331	189.3
96	1,2-Dibromo-3-chloropropane	157	14.313	14.316	(1.093)	18134	125.013	125.0
97	1,2,4-Trichlorobenzene	180	15.158	15.155	(1.158)	124735	172.329	172.3(M)
98	Hexachlorobutadiene	225	15.292	15.289	(1.168)	157124	167.695	167.7
99	Naphthalene	128	15.438	15.435	(1.179)	217752	198.684	198.7(M)
100	1,2,3-Trichlorobenzene	180	15.687	15.678	(1.198)	93372	231.680	231.7(Q)
156	Methyl Acetate	43	4.498	4.494	(0.586)	1033462	861.169	861.2
157	Cyclohexane	56	6.997	7.000	(0.912)	816158	207.328	207.3
158	Methyl Cyclohexane	83	8.262	8.259	(1.077)	701905	214.511	214.5
32	Vinyl Acetate	43	5.726	5.723	(0.746)	448757	186.984	187.0
52	1,4-Dioxane	88	8.457	8.459	(1.005)	52394	4916.37	4916

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ng)
	21 tert-Butyl Alcohol	59	4.966	4.975	(1.024)	208244	1886.45	1886
	16 3-Chloro-1-propene	76	4.382	4.385	(0.571)	182004	183.550	183.5
	11 Acrolein	56	3.665	3.679	(0.478)	166202	811.631	811.6
	22 Acrylonitrile	53	5.015	5.011	(0.654)	1161772	1937.84	1938
	8 Ethyl Ether	59	3.464	3.473	(0.452)	276700	183.949	183.9
	62 Ethyl methacrylate	69	9.697	9.694	(0.901)	339635	183.039	183.0
	23 Hexane	57	5.404	5.407	(0.704)	600779	197.543	197.5
	14 Iodomethane	142	4.011	4.020	(0.523)	510303	214.641	214.6
	44 Isobutanol	41	7.344	7.340	(0.957)	173305	5010.26	5010
	155 N-Heptane	41	7.666	7.669	(0.999)	331119	203.486	203.5
	35 Tetrahydrofuran	42	6.997	7.000	(0.912)	196193	398.106	398.1
	164 trans-1,4-Dichloro-2-butene	53	12.142	12.145	(0.928)	69911	161.570	161.6(M)
	169 Butadiene	39	2.156	2.159	(0.281)	496957	219.500	219.5
M	75 Xylenes (total)	106				1329080	418.883	418.9

QC Flag Legend

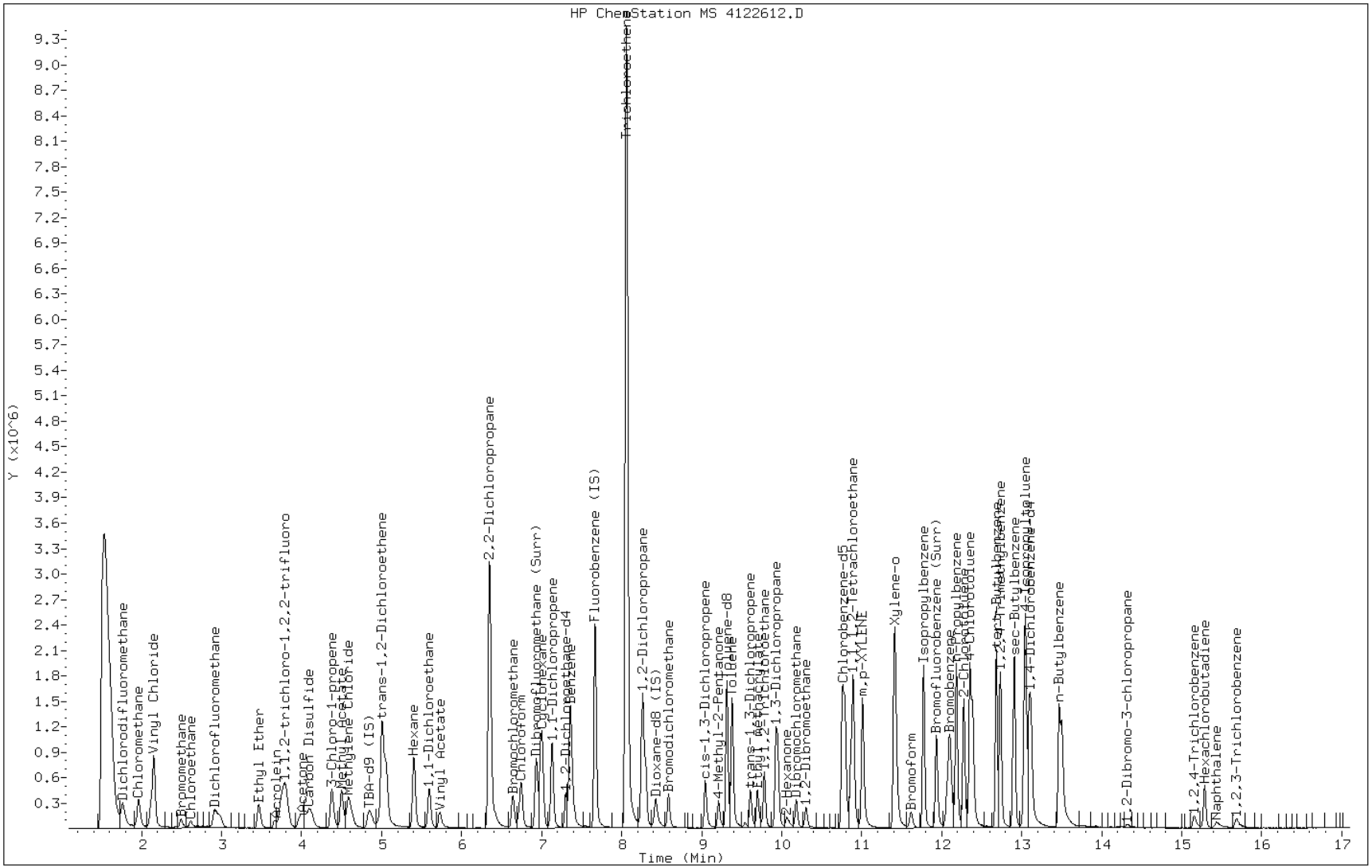
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 4122612.D

Date: 27-DEC-2013 04:57

Client ID: Instrument: hp4.i

Sample Info: 180-28282-C-1 MSD Operator: 430936



Manual Integration Report

Data File: 4122612.D
Inj. Date and Time: 27-DEC-2013 04:57
Instrument ID: hp4.i
Client ID:
Compound: 99 Naphthalene
CAS #: 91-20-3
Report Date: 12/27/2013

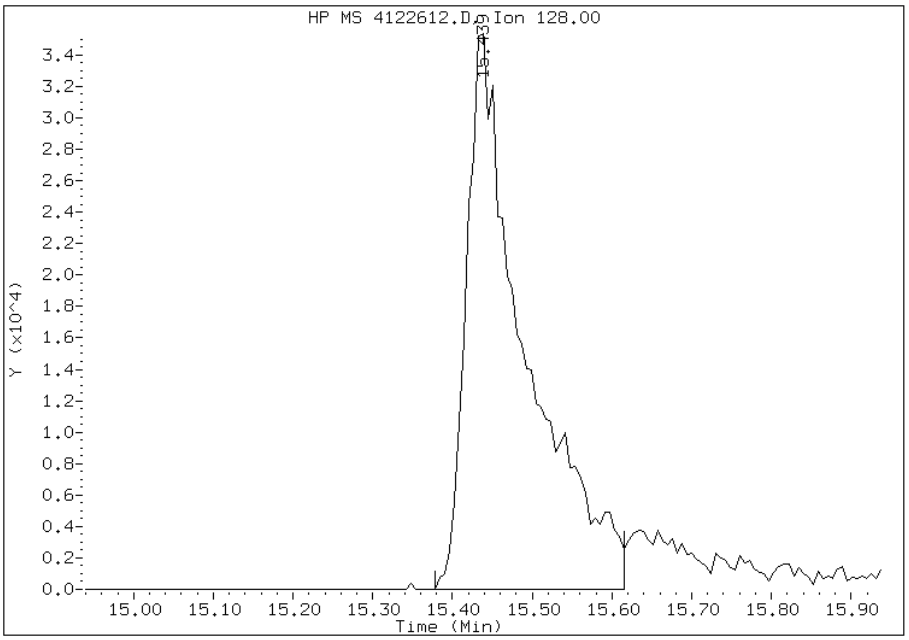
Processing Integration Results

RT: 15.44

Response: 183079

Amount: 166

Conc: 166



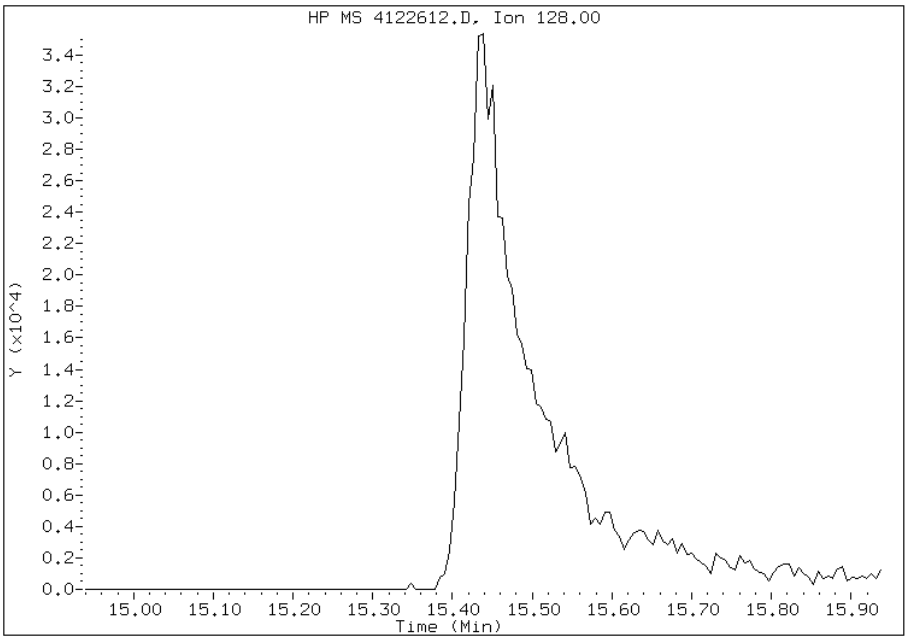
Manual Integration Results

RT: 15.44

Response: 217752

Amount: 199

Conc: 199



Manually Integrated By: zukowskim
Modification Date: 27-Dec-2013 04:29
Manual Integration Reason: Peak Integrated Incorrectly

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-28282-1

SDG No.:

Client Sample ID: | Lab Sample ID: 180-28341-D-1 MSD

Matrix: Water | Lab File ID: 7122612.D

Analysis Method: 8260B | Date Collected: 12/19/2013 10:05

Sample wt/vol: 5(mL) | Date Analyzed: 12/27/2013 04:17

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 93330 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	35.3		5.0	0.99
108-88-3	Toluene	34.7		5.0	0.85
100-41-4	Ethylbenzene	36.1		5.0	0.62
1330-20-7	Xylenes, Total	71.9		10	2.0
98-82-8	Isopropylbenzene	41.8		5.0	0.53
1634-04-4	Methyl tert-butyl ether	32.5		5.0	1.0
95-63-6	1,2,4-Trimethylbenzene	50.7		5.0	0.52
108-67-8	1,3,5-Trimethylbenzene	44.5		5.0	0.59
91-20-3	Naphthalene	52.7		5.0	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		62-123
2037-26-5	Toluene-d8 (Surr)	93		80-120
460-00-4	4-Bromofluorobenzene (Surr)	87		75-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120

TestAmerica Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\pitsvr06\d\chem\hp7.i\7122613d.b\7122612.D
Lab Smp Id: 180-28341-D-1 MSD
Inj Date : 27-DEC-2013 04:17 MS Autotune Date: 29-AUG-2013 08:08
Operator : 430936 Inst ID: hp7.i
Smp Info : 180-28341-D-1 MSD
Misc Info : 7122613d.b,T8260bh2o.m,list1.sub
Comment :
Method : \\pitsvr06\d\chem\hp7.i\7122613d.b\T8260bh2o.m
Meth Date : 27-Dec-2013 04:01 hp7.i Quant Type: ISTD
Cal Date : 06-DEC-2013 11:22 Cal File: 7120609.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: list1.sub
Target Version: 4.14
Processing Host: PITPC-530

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
*	46 Fluorobenzene (IS)	96	7.396	7.396	(1.000)	1036366	250.000	
*	69 Chlorobenzene-d5	119	10.468	10.462	(1.000)	268911	250.000	
*	92 1,4-Dichlorobenzene-d4	152	12.786	12.786	(1.000)	294089	250.000	
*	176 Dioxane-d8 (IS)	96	8.132	8.126	(1.000)	25938	5000.00	
*	177 TBA-d9 (IS)	65	4.798	4.725	(1.000)	246267	5000.00	
$	39 Dibromofluoromethane (Surr)	113	6.672	6.672	(0.902)	269297	243.801	243.8
$	43 1,2-Dichloroethane-d4	65	7.031	7.037	(0.951)	258626	202.361	202.4
$	59 Toluene-d8	98	9.032	9.032	(0.863)	968278	232.338	232.3
$	80 Bromofluorobenzene (Surr)	95	11.630	11.630	(1.111)	354370	218.620	218.6
	1 Dichlorodifluoromethane	85	1.927	1.933	(0.261)	282425	156.065	156.1(Q)
	2 Chloromethane	50	1.994	2.000	(0.270)	608795	167.030	167.0
	3 Vinyl Chloride	62	2.127	2.128	(0.288)	347823	180.049	180.0
	4 Bromomethane	94	2.474	2.480	(0.335)	96028	219.207	219.2
	5 Chloroethane	64	2.571	2.602	(0.348)	91025	173.479	173.5(Q)
	7 Dichlorofluoromethane	67	2.857	2.858	(0.386)	185400	172.290	172.3
	10 1,1,2-trichloro-1,2,2-trifluor	101	3.618	3.679	(0.489)	290122	203.994	204.0(Q)
	166 Trichlorofluoromethane	101	2.833	2.827	(0.383)	139570	158.344	158.3
	12 1,1-Dichloroethene	96	3.514	3.539	(0.475)	270052	183.054	183.0
	15 Carbon Disulfide	76	3.788	3.819	(0.512)	904681	206.565	206.6(M)
	13 Acetone	43	3.794	3.801	(0.513)	59949	166.091	166.1
	18 Methylene Chloride	84	4.336	4.342	(0.586)	295409	190.407	190.4
	19 trans-1,2-Dichloroethene	96	4.749	4.756	(0.642)	313687	204.449	204.4
	20 Methyl tert-butyl ether	73	4.853	4.835	(0.656)	483957	162.454	162.4
	24 1,1-Dichloroethane	63	5.346	5.346	(0.723)	560498	187.071	187.1
	27 2,2-Dichloropropane	77	6.076	6.088	(0.822)	389464	209.817	209.8
	28 cis-1,2-dichloroethene	96	6.094	6.082	(0.824)	324645	196.111	196.1
M	29 1,2-Dichloroethene (total)	96				638332	400.560	400.6
	30 Bromochloromethane	128	6.368	6.374	(0.861)	129058	179.054	179.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
31	2-Butanone	43	6.179	6.167	(0.835)	81034	178.617	178.6
37	Chloroform	83	6.489	6.489	(0.877)	443312	181.905	181.9
38	1,1,1-Trichloroethane	97	6.666	6.672	(0.901)	386514	197.123	197.1
40	1,1-Dichloropropene	75	6.860	6.861	(0.928)	296355	176.998	177.0
41	Carbon Tetrachloride	117	6.854	6.854	(0.927)	311424	198.245	198.2
42	Benzene	78	7.085	7.092	(0.958)	913585	176.648	176.6
45	1,2-Dichloroethane	62	7.110	7.122	(0.961)	229916	152.680	152.7
47	Trichloroethene	130	7.785	7.785	(1.053)	279921	188.560	188.6
49	1,2-Dichloropropane	63	8.022	8.023	(1.085)	223333	169.128	169.1
50	Dibromomethane	93	8.144	8.144	(1.101)	107570	162.079	162.1
53	Bromodichloromethane	83	8.314	8.315	(1.124)	290590	182.728	182.7
57	cis-1,3-Dichloropropene	75	8.764	8.765	(1.185)	338804	183.862	183.9
58	4-Methyl-2-Pentanone	43	8.935	8.935	(0.854)	204733	170.604	170.6(Q)
60	Toluene	91	9.099	9.099	(0.869)	892422	173.336	173.3
61	trans-1,3-Dichloropropene	75	9.324	9.324	(0.891)	234975	161.409	161.4
63	1,3-Dichloropropane	76	9.671	9.671	(0.924)	232652	167.046	167.0
64	1,1,2-Trichloroethane	97	9.507	9.507	(0.908)	152379	159.884	159.9
65	Tetrachloroethene	164	9.640	9.647	(0.921)	225479	209.528	209.5
66	2-Hexanone	43	9.762	9.762	(0.933)	124555	161.160	161.2
67	Dibromochloromethane	129	9.896	9.896	(0.945)	182320	169.743	169.7
68	1,2-Dibromoethane	107	10.005	10.006	(0.956)	158770	160.118	160.1
70	Chlorobenzene	112	10.492	10.498	(1.002)	583509	186.929	186.9
71	1,1,1,2-Tetrachloroethane	131	10.577	10.578	(1.010)	220773	191.351	191.4
72	Ethylbenzene	106	10.602	10.602	(1.013)	337328	180.476	180.5
73	m,p-XYLENE	106	10.717	10.717	(1.024)	441798	187.451	187.4
74	Xylene-o	106	11.113	11.113	(1.062)	435286	172.248	172.2
76	Styrene	104	11.125	11.125	(1.063)	627889	186.498	186.5
77	Bromoform	173	11.313	11.314	(1.081)	100891	158.264	158.3
78	Isopropylbenzene	105	11.478	11.478	(1.096)	1105447	209.209	209.2
79	Bromobenzene	156	11.788	11.788	(0.922)	263833	241.533	241.5
81	n-Propylbenzene	120	12.062	12.062	(0.943)	432302	241.701	241.7
82	2-Chlorotoluene	126	11.976	11.977	(0.937)	259392	244.706	244.7
83	1,1,2,2-Tetrachloroethane	83	11.770	11.770	(1.124)	140196	117.753	117.8
84	1,2,3-Trichloropropane	110	11.818	11.819	(0.924)	40489	181.842	181.8
85	4-Chlorotoluene	126	12.086	12.086	(0.945)	236293	228.180	228.2
86	1,3,5-Trimethylbenzene	105	12.062	12.062	(0.943)	808304	222.320	222.3
87	tert-Butylbenzene	119	12.384	12.384	(0.969)	794860	248.312	248.3
88	1,2,4-Trimethylbenzene	105	12.433	12.433	(0.972)	774228	253.316	253.3
89	sec-Butylbenzene	105	12.609	12.603	(0.986)	1131328	224.628	224.6
90	4-Isopropyltoluene	119	12.749	12.749	(0.997)	825003	213.940	213.9
91	1,3-Dichlorobenzene	146	12.719	12.719	(0.995)	410863	198.563	198.6
94	n-Butylbenzene	91	13.163	13.163	(1.029)	773365	189.639	189.6
93	1,4-Dichlorobenzene	146	12.810	12.810	(1.002)	350980	195.438	195.4
95	1,2-Dichlorobenzene	146	13.187	13.187	(1.031)	288759	165.527	165.5
96	1,2-Dibromo-3-chloropropane	157	13.972	13.972	(1.093)	15966	141.633	141.6
97	1,2,4-Trichlorobenzene	180	14.799	14.799	(1.157)	141457	215.969	216.0
98	Hexachlorobutadiene	225	14.970	14.970	(1.171)	117533	171.632	171.6
99	Naphthalene	128	15.049	15.055	(1.177)	182406	263.571	263.6
100	1,2,3-Trichlorobenzene	180	15.304	15.304	(1.197)	77361	238.545	238.5
156	Methyl Acetate	43	4.275	4.281	(0.578)	644807	723.415	723.4
157	Cyclohexane	56	6.720	6.727	(0.909)	563466	179.119	179.1
158	Methyl Cyclohexane	83	7.980	7.980	(1.079)	501637	200.221	200.2
32	Vinyl Acetate	43	5.467	5.486	(0.739)	312380	265.806	265.8
52	1,4-Dioxane	88	8.186	8.181	(1.007)	24592	4031.75	4032

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ng)
	21 tert-Butyl Alcohol	59	4.901	4.804	(1.022)	146883	2140.58	2140(M)
	16 3-Chloro-1-propene	76	4.117	4.141	(0.557)	212290	185.107	185.1(M)
	11 Acrolein	56	3.514	3.521	(0.475)	94610	793.010	793.0(M)
	22 Acrylonitrile	53	4.792	4.780	(0.648)	635100	1433.75	1434
	8 Ethyl Ether	59	3.308	3.332	(0.447)	122976	108.136	108.1(M)
	62 Ethyl methacrylate	69	9.421	9.422	(0.900)	180244	145.502	145.5
	23 Hexane	57	5.133	5.151	(0.694)	468147	176.367	176.4
	14 Iodomethane	142	3.727	3.758	(0.504)	464207	204.907	204.9
	44 Isobutanol	41	7.396	7.402	(1.000)	241573	4554.46	4554
	155 N-Heptane	41	7.974	7.986	(1.078)	392378	176.514	176.5
	35 Tetrahydrofuran	42	6.720	6.727	(0.909)	149727	349.210	349.2
	164 trans-1,4-Dichloro-2-butene	53	11.830	11.831	(0.925)	30868	140.393	140.4
	169 Butadiene	39	2.164	2.182	(0.293)	397019	192.536	192.5
M	75 Xylenes (total)	106				877084	359.700	359.7

QC Flag Legend

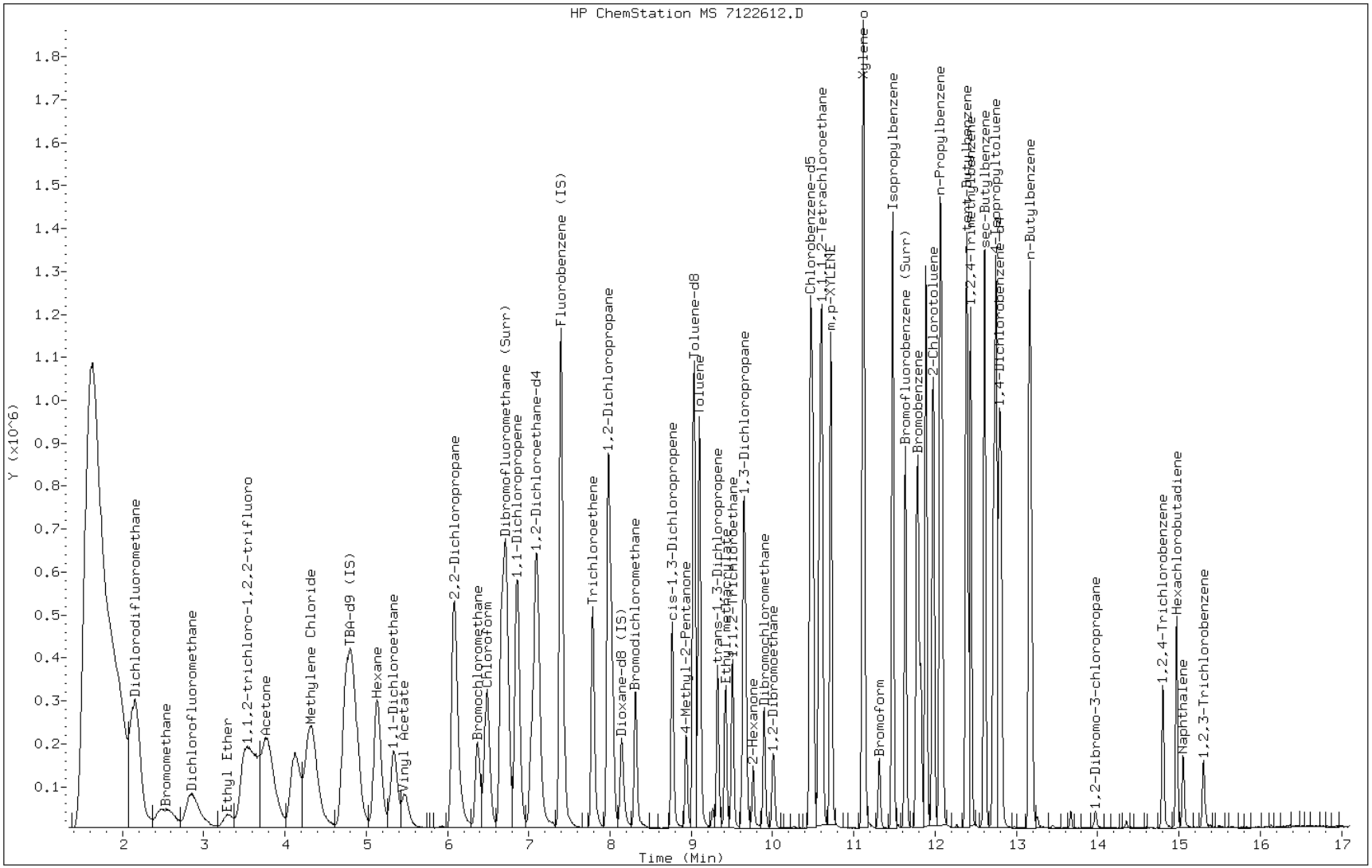
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 7122612.D

Date: 27-DEC-2013 04:17

Client ID: Instrument: hp7.i

Sample Info: 180-28341-D-1 MSD Operator: 430936



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Instrument ID: HP4 Start Date: 12/16/2013 09:18

Analysis Batch Number: 92621 End Date: 12/16/2013 18:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-92621/1		12/16/2013 09:18	1	4121601.D	DB-624 0.18(mm)
IC 180-92621/2		12/16/2013 11:04	1	4121603.D	DB-624 0.18(mm)
IC 180-92621/3		12/16/2013 11:28	1	4121604.D	DB-624 0.18(mm)
IC 180-92621/4		12/16/2013 11:53	1	4121605.D	DB-624 0.18(mm)
ICIS 180-92621/5		12/16/2013 12:20	1	4121606.D	DB-624 0.18(mm)
IC 180-92621/7		12/16/2013 14:07	1	4121608.D	DB-624 0.18(mm)
IC 180-92621/8		12/16/2013 14:35	1	4121609.D	DB-624 0.18(mm)
IC 180-92621/6		12/16/2013 16:49	1	4121613.D	DB-624 0.18(mm)
ICV 180-92621/9		12/16/2013 18:10	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Instrument ID: HP4 Start Date: 12/26/2013 23:52

Analysis Batch Number: 93329 End Date: 12/27/2013 11:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-93329/1		12/26/2013 23:52	1	4122601.D	DB-624 0.18(mm)
CCVIS 180-93329/2		12/27/2013 01:12	1	4122603.D	DB-624 0.18(mm)
MB 180-93329/3		12/27/2013 02:10	1	4122605.D	DB-624 0.18(mm)
180-28282-1	HD-MW-125-01-0	12/27/2013 02:44	1	4122606.D	DB-624 0.18(mm)
180-28282-3	TRIP BLANK	12/27/2013 03:10	1	4122607.D	DB-624 0.18(mm)
LCS 180-93329/6		12/27/2013 04:04	1	4122610.D	DB-624 0.18(mm)
180-28282-1 MS	HD-MW-125-01-0 MS	12/27/2013 04:30	1	4122611.D	DB-624 0.18(mm)
180-28282-1 MSD	HD-MW-125-01-0 MSD	12/27/2013 04:57	1	4122612.D	DB-624 0.18(mm)
ZZZZZ		12/27/2013 05:53	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 06:15	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 06:38	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 07:07	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 07:33	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 08:00	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 08:52	5		DB-624 0.18(mm)
ZZZZZ		12/27/2013 09:18	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 09:45	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 10:11	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 11:30	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Instrument ID: HP7 Start Date: 12/06/2013 06:25

Analysis Batch Number: 91778 End Date: 12/06/2013 15:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-91778/1		12/06/2013 06:25	1	7120601.D	DB-624 0.18(mm)
IC 180-91778/2		12/06/2013 07:32	1	7120603.D	DB-624 0.18(mm)
IC 180-91778/3		12/06/2013 08:01	1	7120604.D	DB-624 0.18(mm)
IC 180-91778/4		12/06/2013 08:28	1	7120605.D	DB-624 0.18(mm)
ICIS 180-91778/5		12/06/2013 08:53	1	7120606.D	DB-624 0.18(mm)
IC 180-91778/6		12/06/2013 09:23	1	7120607.D	DB-624 0.18(mm)
IC 180-91778/7		12/06/2013 10:27	1	7120608.D	DB-624 0.18(mm)
IC 180-91778/8		12/06/2013 11:22	1	7120609.D	DB-624 0.18(mm)
ICV 180-91778/9		12/06/2013 14:39	1		DB-624 0.18(mm)
ICV 180-91778/10		12/06/2013 15:22	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-28282-1

SDG No.:

Instrument ID: HP7 Start Date: 12/26/2013 22:45

Analysis Batch Number: 93330 End Date: 12/27/2013 10:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-93330/1		12/26/2013 22:45	1	7122601.D	DB-624 0.18(mm)
CCVIS 180-93330/2		12/27/2013 00:00	1	7122603.D	DB-624 0.18(mm)
MB 180-93330/3		12/27/2013 01:59	1	7122607.D	DB-624 0.18(mm)
ZZZZZ		12/27/2013 02:25	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 02:54	1		DB-624 0.18(mm)
180-28341-C-1 MS		12/27/2013 03:20	1	7122610.D	DB-624 0.18(mm)
LCS 180-93330/7		12/27/2013 03:47	1	7122611.D	DB-624 0.18(mm)
180-28341-D-1 MSD		12/27/2013 04:17	1	7122612.D	DB-624 0.18(mm)
ZZZZZ		12/27/2013 05:43	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 06:09	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 06:36	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 07:03	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 07:30	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 07:56	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 08:23	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 08:49	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 09:16	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 09:43	1		DB-624 0.18(mm)
ZZZZZ		12/27/2013 10:08	1		DB-624 0.18(mm)
180-28282-2	HD-MW-160-01-0	12/27/2013 10:39	1	7122626.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: Emily Wade	Date Submitted: 12/18/2013	COC No: TAP121820131
Leidos	Tel/Fax: 717-901-8100	Lab Contact: Jill Colussy	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			
(717) 901-8102 FAX	☐ 2 weeks			Container No. 1
Project Name: HD Bldg 45 UST Characterization	☐ 1 week			SDG No.
Site: York PA	☐ 2 days			
Quote # 18012593-0	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	PADEP UST Shortlist Unleaded (8260B)	Sample Specific Notes:
HD-MW-125-01-0	12/18/2013	13:03	Groundwater	Water	3	X	
HD-MW-160-01-0	12/18/2013	11:19	Groundwater	Water	3	X	
Trip Blank 1	12/18/2013	13:50	Trip Blank	Water	2	X	
Temp Blank 1	12/18/2013	13:55	Temp Blank	Water	1		

180-28282 Chain of Custody

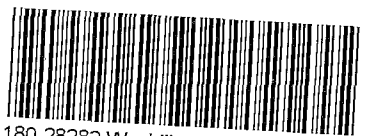
Preservation Used: 1= Ice, 2= HCL, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Unpreserved 7=Na2S2O3	2	6	4	6	6	5	5	6	4	4	4	4	4	4	4	4	4	4
Field Filter	N	N	Y	N	Y	N	N	N	Y	N	Y	N	Y	N	Y	N	Y	N

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:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by: Emily Wade	Leidos	12/18/2013/14:00	Received by: FedEx		
Relinquished by:	Company:	Date/Time:	Received by:	Company: THAgh	Date/Time: 12/19/13 10:00
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:



FedEx Express **US Airbill**

8629 1566 4050

0200 Form ID No.

FedEx Retrieval Copy

1 From

Date 12/18/13 Sender's FedEx Account Number

Sender's Name Emily Wade Phone 717 425-8894

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 412 963-2444

Company Test America - Pittsburgh

Recipient's Address

We cannot deliver to P.D. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address 301 Alpha Drive

To request a package be held at a specific FedEx location, print FedEx address here.

City Pittsburgh State PA ZIP 15238

Uncorrected temp 3-6 °C

Thermometer ID 4

CF -.1 Initials TN

PT-WI-SR-001 effective 7/26/13

4a Express Package Service *Packages up to 150 lbs.*

1 [X] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

5 [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

6 [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.

3 [ ] FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service *Packages over 150 lbs.*

7 [ ] FedEx 1Day Freight* — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

8 [ ] FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

83 [ ] FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

* Call for Confirmation. ** To most locations.

5 Packaging

6 [ ] FedEx Envelope* 2 [ ] FedEx Pak* Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak. 3 [ ] FedEx Box 4 [ ] FedEx Tube 1 [X] Other

* Declared value limit $500.

6 Special Handling Include FedEx address in Section 3.

3 [ ] SATURDAY Delivery — Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.

1 [ ] HOLD Weekday at FedEx Location — Not available for FedEx First Overnight.

31 [ ] HOLD Saturday at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

[X] No 4 [ ] Yes As per attached Shipper's Declaration. [ ] Yes Shipper's Declaration not required. 6 [ ] Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging. [ ] Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below. Obtain Recip. Acct. No. [ ]

1 [ ] Sender Acct. No. in Section 1 will be billed. 2 [X] Recipient 3 [ ] Third Party 4 [ ] Credit Card 5 [ ] Cash/Check

Total Packages 1 Total Weight 1 X

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details. Credit Card Auth.

8 Residential Delivery Signature Options *If you require a signature, check Direct or Indirect.*

[ ] No Signature Required — Package may be left without obtaining a signature for delivery.

10 [ ] Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*

34 [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. *Fee applies.*

520

Rev. Date 10/06•Part #158281•©1994–2006 FedEx•PRINTED IN U.S.A. SRY

Login Sample Receipt Checklist

Client: Leidos, Inc.

Job Number: 180-28282-1

Login Number: 28282

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

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	