SOVEREIGN CONSULTING INC.

November 8, 2016

Ms. Susan Bull
Maryland Department of the Environment
Oil Control Program
1800 Washington Boulevard, Suite 620
Baltimore, MD 21230

Re: **SITE STATUS REPORT: FOURTH QUARTER 2016**
Pilot Travel Center #290
31 Heather Lane
Perryville, Maryland
MDE Case #s: 97-0699CE / 2016-0422-CE (January 22, 2016 Incident)

Dear Ms. Bull:

Sovereign Consulting Inc. (Sovereign), on behalf of Pilot Corporation (Pilot), is submitting the attached Fourth Quarter 2016 Site Status Report. The report contains groundwater quality and monitoring data from the period of August 1, 2016 through October 31, 2016. Activities during this reporting period included monthly/ weekly monitoring of product levels, quarterly groundwater sampling, submittal of an Interim LNAPL Recovery Work Plan, submittal of a Final LNAPL Recovery Plan, and a Vac (DPVE) event on the tank field monitoring wells. The Interim LNAPL Recovery Plan, Final Recovery Work Plan, and Vac (DPVE) event are associated with the presence of LPH accumulation within the tank field. The results of the groundwater monitoring and sampling are summarized in the attached report. Operation details of the DPVE Remediation System are included in Table 2.

The DPVE Remediation System is currently on a long term shut down status in order to monitor product levels in the remediation recovery wells and the monitoring well network. Product levels in the site's monitoring wells have not exceeded 0.07 feet as of January 21, 2015. Specifications are being prepared for a replacement tank in place of the 21,000 gallon frac tank currently associated with the DPVE remediation system. The DPVE system remains on site as a contingency to address returning LNAPL, however, a request is forwarded herein to the MDE for consideration of No Further Action in the subject area.

Should you have any questions or require additional information, please feel free to contact the undersigned at (610) 524-8124.

Sincerely,
Sovereign Consulting Inc.

JR Williams
Environmental Scientist/ Project Manager

Enclosure
cc: Mr. Joey Cupp, Pilot Travel Centers
Ms. Jeannette DeBartolomeo, Maryland Department of the Environment

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SITE STATUS REPORT
FOURTH QUARTER 2016

Pilot Travel Center #290
31 Heather Lane
Perryville, Maryland

Prepared for:

Pilot Travel Centers, LLC
5508 Lonas Drive
Knoxville, Tennessee

Prepared by:

Sovereign Consulting Inc.
50 West Welsh Pool Rd
Suite 6
Exton, Pennsylvania

November 2016

Site Status Report
Pilot Travel Center #290
31 Heather Lane, Perryville, Maryland
August 1, 2016 through October 31, 2016

CONSULTANT: Sovereign Consulting, Inc.
PROJECT MANAGER: JR Williams
SITE MANAGER: Joey Cupp

SITE HISTORY:

06/05	Periodic annual inspection of the underground storage tank (UST) system by the Maryland Department of the Environment (MDE). A Compliance Inspection and Report of Observation were issued.
07/05	GES prepared a summary report to respond to the observations, and report the detection of liquid phase hydrocarbons (LPH).
07/05	High Intensity Target (HIT) event; 4,325 gallons of LPH and water recovered.
08/05	Monitoring wells MW-1 through MW-3 installed as part of site characterization activities.
09/05	HIT event; 4,205 gallons of LPH and water recovered.
10/05	Three additional groundwater monitoring wells (MW-4 through MW-6) were installed. LPH was detected at thicknesses ranging from 0.01 feet to 1.57 feet in monitoring well MW-2.
11/05	Groundwater samples were collected from monitoring wells MW-1, MW-3, MW-5, and MW-6.
12/05	Site Characterization Report (SCR) submitted to MDE.
01/06	HIT event; 580 gallons of LPH and water recovered.
02/06	HIT event; 4,650 gallons of LPH and water recovered.
05/06	HIT event; 831 gallons of LPH and water recovered.
08/06	Installation of passive skimmer in monitoring well MW-2.
05/08	Passive skimmer removed from well MW-2 for repair or replacement.
12/08	Begin installation of SpillBuster product recovery system.
1/09	Complete installation of SpillBuster product recovery system.
02/09	Abandonment and re-installation of MW-4, installation of MW-7 and MW-8.
5/19/09	LPH removal pump in MW-2 malfunctions. Pump is removed for repair.
8/09	Pump is re-installed.
10/29/09	LPH removal pump malfunctions. Pump is removed for repair.
3/2010	LPH removal pump is re-installed in MW-2.
9/3/2010	Complete installation of new monitoring wells MW-9 and MW-10
9/8/2010	Aquifer testing is attempted and fails.
9/13/2010	EFR conducted on MW-2, MW-8 and MW-10
9/14/2010	Slug testing is performed
11/29/2010	Corrective Action Plan submitted to MDE.
6/1/2011	Corrective Action Plan approved by MDE.
1/10/2012	MW-10 abandoned and reinstalled to 31 feet below grade as MW-10R.
5/9/2012	DPVE System Start-Up.
2/28/2014	System motor broken; system taken off-line and product monitored.
5/30/2014	System restarted when 0.10 feet of product was observed in MW-2.
6/25/2014	System taken off-line and product monitored per approved gauging schedule.
1/22/2016	Master diesel dispenser 19 compromised due to tractor-trailer driver running into pump island.
1/26/2016	MDE notified of the Master dispenser 19 incident by Pilot.

2/5/2016	Product Recovery Plan submitted to MDE.
2/8/2016	Product Recovery Plan approved by MDE.
2/8/2016	Vac event conducted on MW-2, TF-2, and MW-9.
2/12/2016	Soil Investigation Work Plan submitted to MDE.
2/17/2016	Weekly water level gauging initiated.
3/23/2016	Soil Investigation Work Plan approved by MDE.
4/18/2016	Subsurface Investigation work performed.
5/11/2016	Monthly water level gauging initiated.
6/21/2016	Subsurface Investigation Report submitted to MDE.
7/20/2016	Subsurface Investigation Report Addendum Section 4.2 submitted to MDE.
9/7/2016	Weekly water level gauging initiated due to presence of LPH in tank field monitoring wells.
9/20/2016	Vac (DVPE) event conducted on TF-1 and TF-2 due to LPH levels being >0.10'.
9/30/2016	Interim LNAPL Recovery Work Plan submitted to the MDE for LPH presence in tank field monitoring wells.
10/26/16	LNAPL Recovery Work Plan submitted to the MDE for LPH presence in the tank field monitoring wells.

REGULATORY INTERACTION:

Agency:	Maryland Department of the Environment
Agency Contact:	Susan Bull
MDE Case #	97-0699CE 2016-0422-CE (January 22, 2016 Incident)

REPORTING PERIOD ACTIVITIES:

Groundwater Sampling Frequency:	Quarterly
Analytical Laboratory / Methods:	Accutest Laboratories VO+10 by 8260B, TPH-GRO, and TPH-DRO
Gauging Frequency:	Monthly & Weekly
Other Activities:	Vac (DPVE) event, Interim LNAPL Recovery work plan, LNAPL Recovery work plan.

DATA SUMMARY:

Groundwater Sampling Date:	October 5, 2016
# of Wells / # Sampled:	12 / 10 TF-1 and TF-2 No samples collected due to presence of LPH.
Depth to Water (ft):	8.61 feet (TF-1) to 27.82 feet (MW-10R) feet below top of casing
Dissolved Benzene Range:	ND (MW-6) to 2.1 µg/l (MW-7)
Dissolved BTEX Range:	ND (MW-6) to 2.1 µg/l (MW-7)
Dissolved MTBE Range:	ND (MW-1, MW-2, MW-3, MW-6, MW-7, and MW-8) to 2.3 µg/l (MW-4R)
Dissolved TPH-DRO:	0.876 mg/l (MW-6) to 207 mg/l (MW-10R)
Dissolved TPH-GRO:	ND (MW-1, MW-3, MW-4R, MW-5, MW-6, MW-8, MW-9) to 0.980 mg/l (MW-10R)

LPH REMOVAL SUMMARY:

HIT Events:	17,569 gallons of LPH and groundwater recovered
SpillBuster Operation:	94 gallons of LPH recovered
DPVE Operation:	369,624 gallons of LPH and groundwater recovered

FUTURE ACTIVITIES:

Weekly/ Monthly well gauging and LPH monitoring
Quarterly gauging and sampling of monitoring wells
LPH Recovery in tank field monitoring wells
DPVE Frac Tank change out (Plan to be submitted to the MDE)

ATTACHMENTS:

LIST OF FIGURES

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Table 3	Monitoring Well Gauging Data
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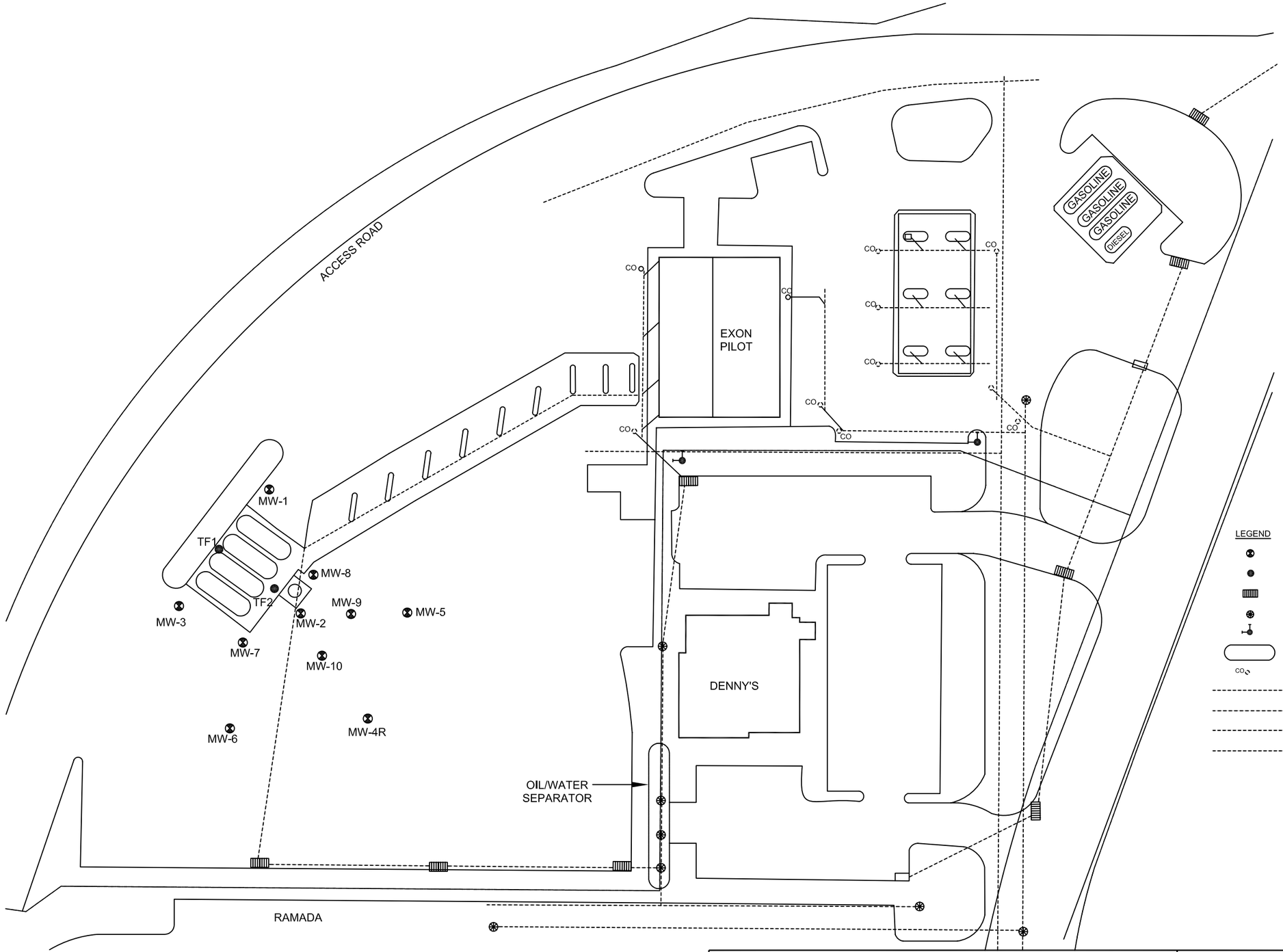
Appendix A	Laboratory Analytical Report and Chain-of-Custody Documentation

FIGURES



0 60
APPROXIMATE SCALE IN FEET

Sovereign Consulting Inc.
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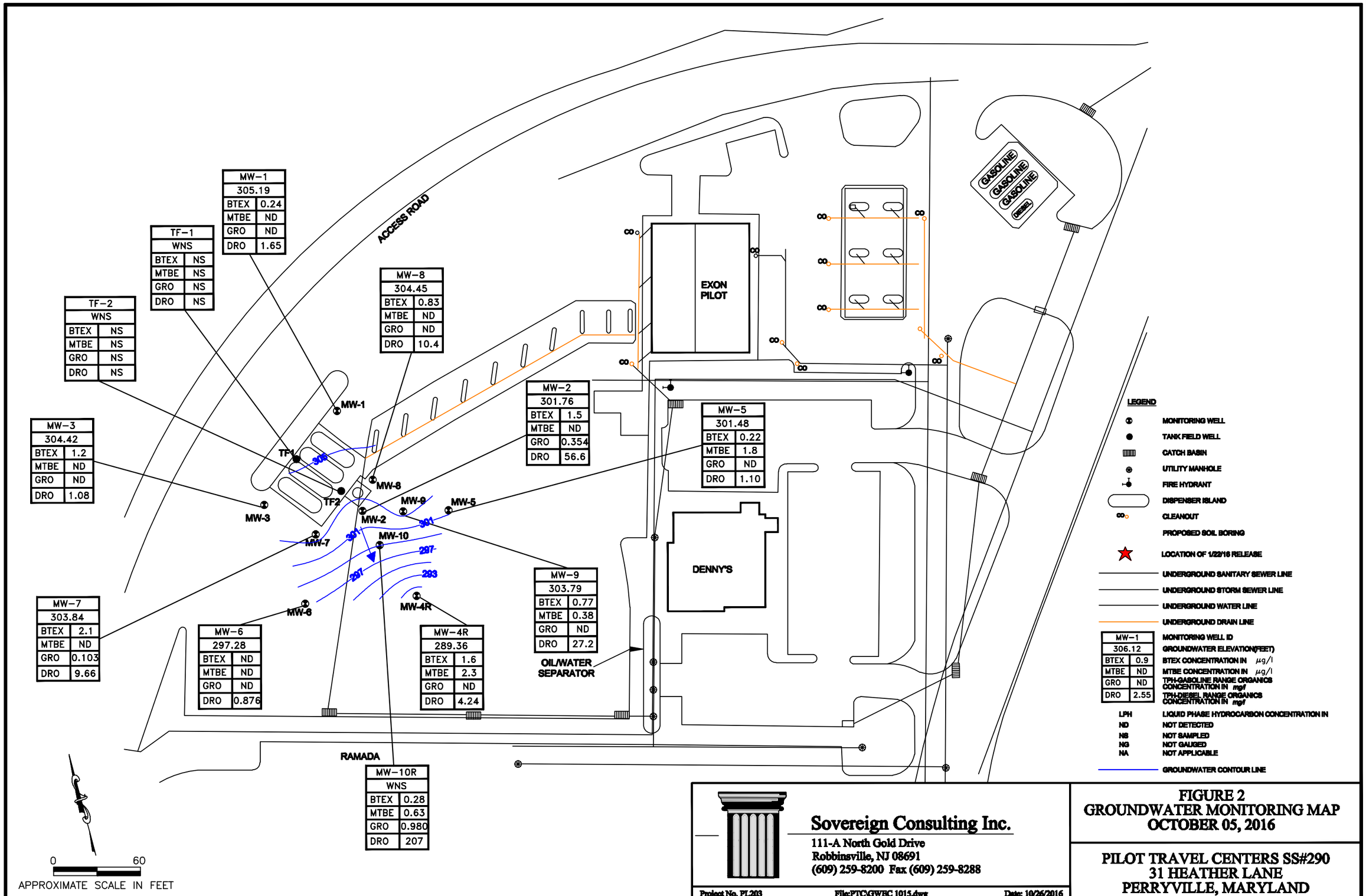
(609) 259-8200 Fax (609) 259-8288

Project No. PL203 File:PTC\SITE PLAN(new).dwg Date: 10/26/10

FIGURE 1
SITE PLAN

PILOT TRAVEL CENTERS SS#290
31 HEATHER LANE
PERRYVILLE, MARYLAND



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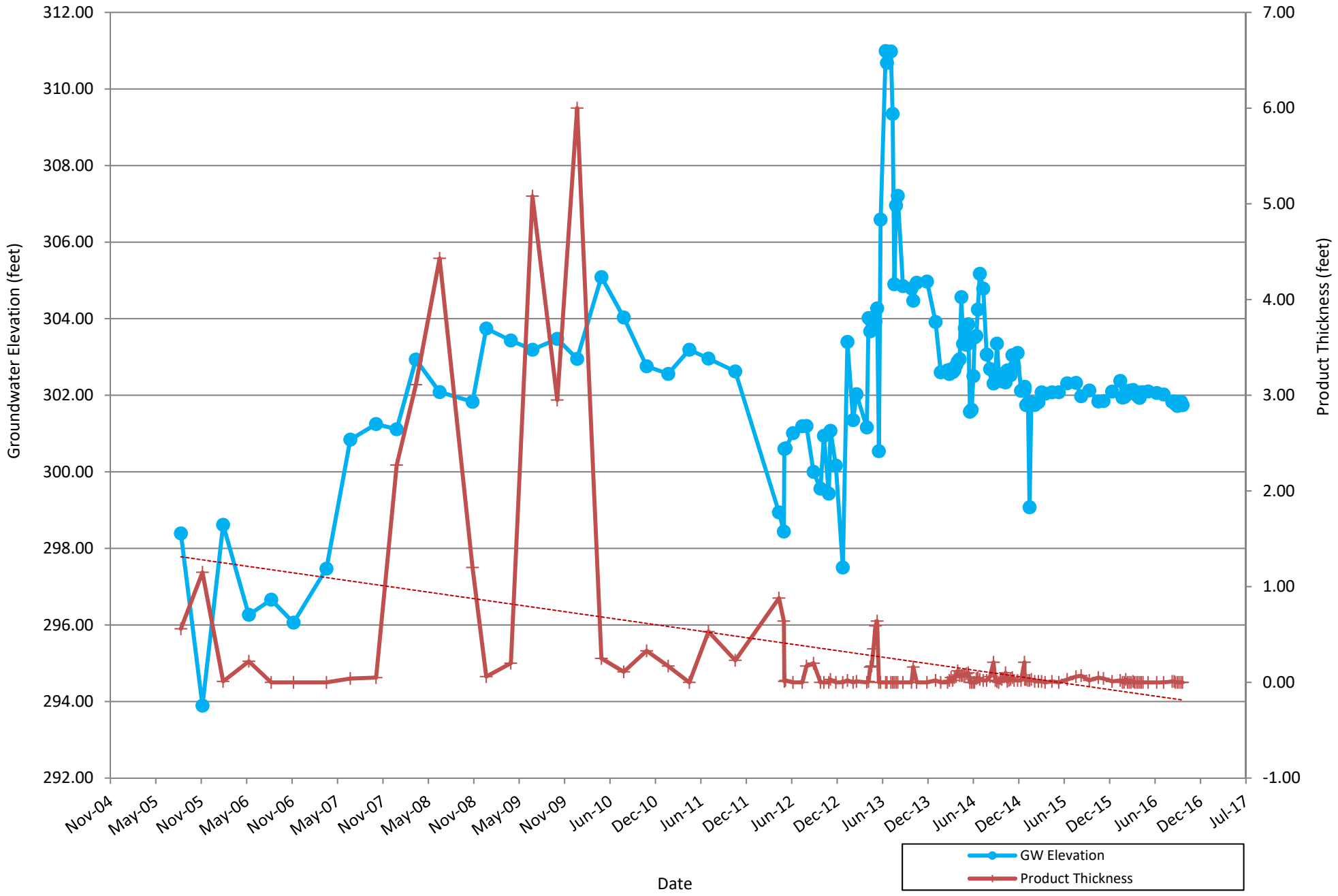
Project No. PL203 | File:PTC\GWBC 1015.dwg | Date: 10/26/2016

FIGURE 2
GROUNDWATER MONITORING MAP
OCTOBER 05, 2016

PILOT TRAVEL CENTERS SS#290
31 HEATHER LANE
PERRYVILLE, MARYLAND

Figure 3. Pilot Travel Center #290
31 Heather Lane, Perryville, MD
MW-2: Groundwater Elevation and Product Thickness vs. Time



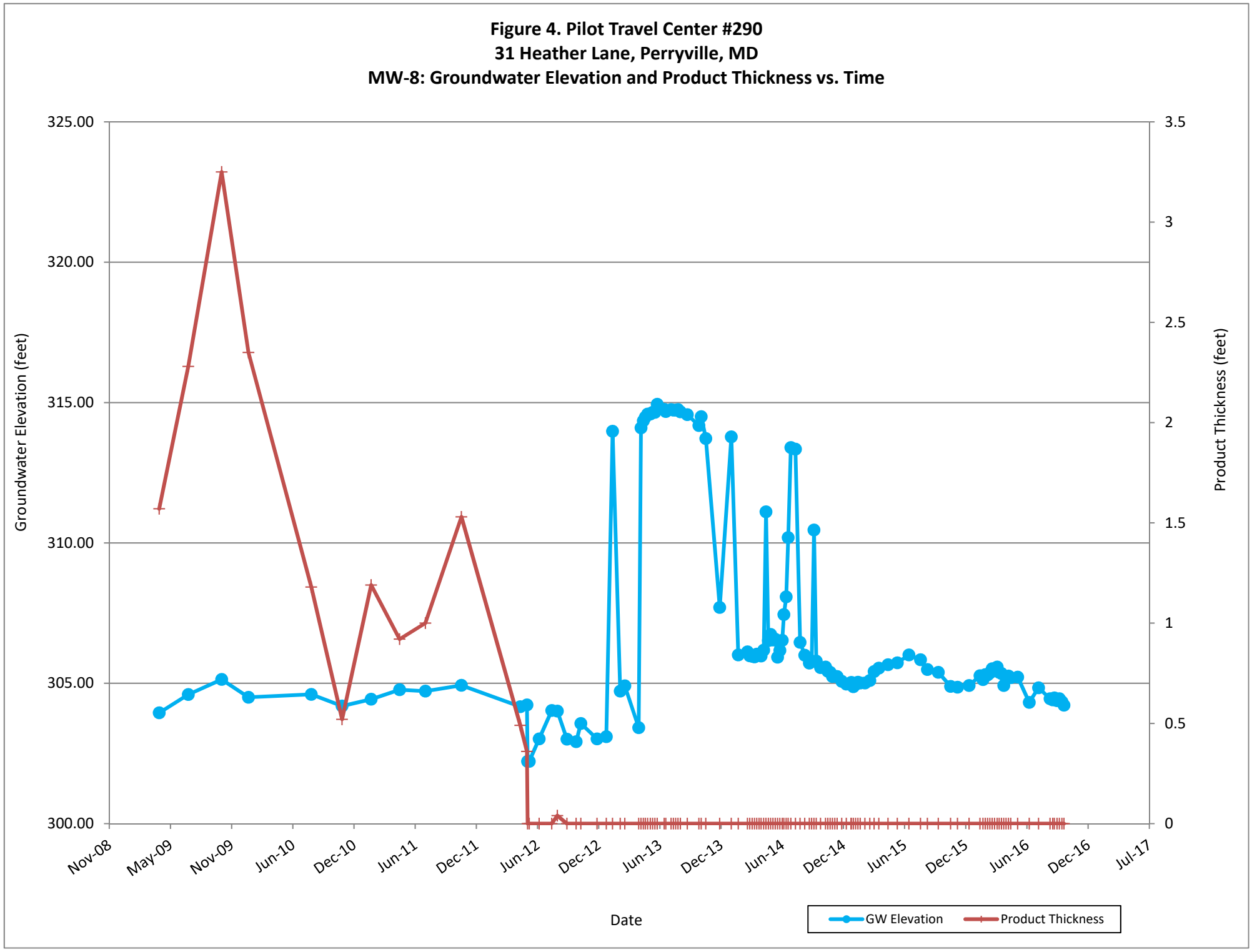


Figure 4. Pilot Travel Center #290
31 Heather Lane, Perryville, MD
MW-8: Groundwater Elevation and Product Thickness vs. Time
Groundwater Elevation (feet)
Product Thickness (feet)
325.00
320.00
315.00
310.00
305.00
300.00
3.5
3
2.5
2
1.5
1
0.5
0
Nov-08
May-09
Nov-09
Jun-10
Dec-10
Jun-11
Dec-11
Jun-12
Dec-12
Jun-13
Dec-13
Jun-14
Dec-14
Jun-15
Dec-15
Jun-16
Dec-16
Jul-17
Date
GW Elevation
Product Thickness

TABLES

Table 1

GROUNDWATER GAUGING AND ANALYTICAL DATA SUMMARY

Pilot Travel Center #290
31 Heather Lane
Perryville, Maryland

Well ID	Date	Well Elevation	DTW	Product Thickness	GW Elevation (Corrected)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	BTEX (µg/l)	MTBE (µg/l)	Naphthalene (ug/l)	TPH-GRO (mg/L)	TPH - DRO (mg/l)	Analytical Methods
						MDE Standards									
						5.0	1,000	700	10,000	NA	20	0.65	0.047	0.047	-
MW-1	08/18/05	317.72	12.27	0.00	305.45	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***0.17***	8260B/8015M
	11/14/05	317.72	12.59	0.00	305.13	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***0.23***	8260B/8015M
	02/06/06	317.72	11.82	0.00	305.90	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***0.15***	8260B/8015M
	05/22/06	317.72	12.47	0.00	305.25	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	<0.1	8260B/8015M
	08/21/06	317.72	12.20	0.00	305.52	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	<0.1	8260B/8015M
	11/20/06	317.72	11.71	0.00	306.01	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	<0.1	8260B/8015M
	04/03/07	317.72	11.45	0.00	306.27	<5.0	5.2	<5.0	6.5	11.7	<5.0	<5.0	NA	***0.43***	8260B/8015M
	07/09/07	317.72	12.27	0.00	305.45	<1.0	<1.0	<2.0	<2.0	ND	<1.0	<2.0	NA	***0.10 J***	8260B/8015M
	10/22/07	317.72	13.35	0.00	304.37	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***0.59***	8260B/8015M
	01/07/08	317.72	13.20	0.00	304.52	***14***	<5.0	<5.0	28	42	<5.0	***14***	NA	***0.72***	8260B/8015M
	04/01/08	317.72	11.47	0.00	306.25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	***0.94***	8260B/8015M
	07/07/08	317.72	11.27	0.00	306.45	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	***<5.0***	NA	***280***	8260B/8015M
	11/18/08	317.72	12.81	0.00	304.91	***23***	<5.0	<5.0	<5.0	23.0	<5.0	<5.0	NA	***6.2***	8260B/8015M
	01/13/09	317.72	12.69	0.00	305.03	***18***	<5.0	<5.0	<5.0	18.0	<5.0	<5.0	NA	***0.64***	8260B/8015M
	04/23/09	317.72	12.01	0.00	305.71	***17***	<5.0	<5.0	<5.0	17.0	<5.0	<5.0	***0.068***	***0.53***	8260B/8015M
	07/20/09	317.72	11.63	0.00	306.09	***7.8***	<5.0	<5.0	<5.0	7.8	<5.0	<5.0	<0.1	***0.14***	8260B/8015M
	10/29/09	317.72	12.15	0.00	305.57	***11.0***	<1.0	<1.0	<1.0	11.0	<1.0	<1.0	<0.1	***<1.1***	8260B/8015M
	01/18/10	317.72	NM	0.00	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	04/27/10	317.72	10.47	0.00	307.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	***0.85***	8260B/8015M
	07/27/10	317.72	12.08	0.00	305.64	***6.3***	<1.0	<1.0	<1.0	6.3	<1.0	1	<0.1	***2.20***	8260B/8015M
	10/28/10	317.72	12.61	0.00	305.11	***5.2***	<1.0	<1.0	<1.0	5.2	<1.0	<1.0	<0.050	***0.70***	8260B/8015M
	01/24/11	317.72	13.31	0.00	304.41	***10.9***	0.33 J	4.1	1.1	16.4	<1.0	NA	<0.011	***1.77***	8260B/8015M
	04/20/11	317.72	11.27	0.00	306.45	<1.0	<1.0	<1.0	<1.0	<1.0	0.31 J	NA	<0.011	***3.19***	8260B/8015M
	07/07/11	317.72	11.60	0.00	306.12	0.90J	<0.15	<0.21	<0.17	0.9	<1.0	<0.68	<0.016	***2.66***	8260B/8015M
	10/24/11	317.72	10.88	0.00	306.84	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<0.016	***2.12***	8260B/8015M
	01/09/12	317.72	11.39	0.00	306.33	1.4	<1.0	<1.0	<1.0	1.4	<1.0	NA	<0.016	***1.38***	8260B/8015M
	04/19/12	317.72	11.94	0.00	305.78	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<0.016	***2.61***	8260B/8015M
	07/23/12	317.72	12.65	0.00	305.07	2.9	<0.23	<0.23	<0.24	2.9	<0.16	NA	<0.040	***1.47***	8260B/8015M
	10/19/12	317.72	13.65	0.00	304.07	-	-	-	-	-	-	-	<0.040	***0.422***	8260B/8015M
	11/15/12	317.72	13.33	0.00	304.39	2.0	4.7	6.2	28.6	41.5	<0.16	NA	-	-	8260B/8015M
	01/23/13	317.72	11.94	0.00	305.78	<0.24	<0.23	<0.23	<0.24	ND	<0.16	<1.1	<0.040	***3.080***	8260B/8015M
	04/26/13	317.72	10.18	0.00	307.54	<0.24	<0.23	<0.23	<0.24	ND	<0.16	<1.1	<0.040	***0.762***	8260B/8015M
	07/19/13	317.72	5.85	0.00	311.87	<0.24	<0.23	<0.23	<0.24	ND	<0.16	<1.1	<0.038	***0.221***	8260B/8015M
	10/18/13	317.72	5.94	0.00	311.78	<0.28	<0.44	<0.21	<0.19	ND	<0.29	<0.25	<0.038	***0.497***	8260B/8015M
	01/17/14	317.72	8.11	0.00	309.61	<0.28	<0.44	<0.21	<0.19	ND	<0.29	<0.25	<0.038	***0.588***	8260B/8015M
	04/25/14	317.72	8.65	0.00	309.07	<0.28	<0.44	<0.21	<0.19	ND	<0.29	<0.25	<0.038	***0.268***	8260B/8015M
	07/08/14	317.72	7.21	0.00	310.51	<0.21	<0.22	1.9	7.9	9.8	<0.26	***5.5***	***0.333***	***0.980***	8260B/8015M
	10/14/14	317.72	10.71	0.00	307.01	0.65	<0.22	1.6	<0.20	2.3	<0.26	<0.34	<0.038	***0.575***	8260B/8015M
	01/15/15	317.72	11.64	0.00	306.08	<0.21	<0.22	<0.40	1.1	1.1	<0.26	0.54 J	<0.038	***15.4***	8260B/8015M
	04/08/15	317.72	9.51	0.00	308.21	<0.24	<0.16	0.82 J	0.66 J	1.5	<0.24	***7.0***	<0.038	***11.1***	8260B/8015M
	07/07/15	317.72	8.46	0.00	309.26	<0.24	7.4	7.2	34.8	49.4	<0.24	***3.8 J***	***0.379***	***12.2***	8260B/8015M
	10/05/15	317.72	16.44	0.00	301.28	<0.24	<0.16	<0.27	0.44 J	0.44	<0.24	***1.0 J***	<0.038	***2.91***	8260B/8015M
	01/06/16	317.72	11.70	0.00	306.02	<0.24	<0.16	<0.27	<0.17	ND	<0.24	<0.20	<0.038	***6.35***	8260B/8015M
	04/13/16	317.72	11.00	0.00	306.72	<0.24	<0.16	<0.27	<0.17	ND	<0.24	<0.20	<0.055	***9.65***	8260B/8015M
	07/06/16	317.72	11.41	0.00	306.31	<0.14	<0.23	<0.20	<0.21	ND	<0.34	<0.39	<0.10	***0.873***	8260B/8015M
	10/05/16	317.72	12.53	0.00	305.19	0.24	<0.23	<0.20	<0.21	0.24	<0.34	<0.39	<0.10	***1.65***	8260B/8015M

Table 1

GROUNDWATER GAUGING AND ANALYTICAL DATA SUMMARY

Pilot Travel Center #290
31 Heather Lane
Perryville, Maryland

Well ID	Date	Well Elevation	DTW	Product Thickness	GW Elevation (Corrected)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	BTEX (µg/l)	MTBE (µg/l)	Naphthalene (ug/l)	TPH-GRO (mg/L)	TPH - DRO (mg/l)	Analytical Methods
MW-2	08/18/05	315.76	17.79	0.56	298.39	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	11/14/05	315.76	22.73	1.15	293.89	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	02/06/06	315.76	17.15	0.01	298.62	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	05/22/06	315.76	19.66	0.22	296.27	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	08/21/06	315.76	19.10	0.00	296.66	<5.0	<5.0	<5.0	5.4	5.4	11	***15***	NA	<0.1	8260B/8015M
	11/20/06	315.76	19.70	0.00	296.06	<50	<50	<50	<50	ND	<50	<50	NA	***340***	8260B/8015M
	04/03/07	315.76	18.29	0.00	297.47	<5.0	5.4	7.8	32.2	45.4	<5.0	***19***	NA	***260***	8260B/8015M
	07/09/07	315.76	14.95	0.04	300.84	3.5	5.6	18.0	56.3	83.4	3	***49 B***	NA	***210***	8260B/8015M
	10/22/07	315.76	14.55	0.05	301.25	<5.0	<5.0	9.9	28.0	27.9	<5.0	***45***	NA	***210***	8260B/8015M
	01/14/08	315.76	16.35	2.27	301.11	***93***	280	78	750	1,201	<5.0	***230***	NA	***170***	8260B/8015M
	04/01/08	315.76	15.16	3.11	302.93	*<5.0*	890	420	4,000	5,310	<5.0	***460***	NA	***360***	8260B/8015M
	07/07/08	315.76	17.00	4.43	302.08	***54***	220	89	710	1,073	<5.0	***390***	NA	***44***	8260B/8015M
	11/18/08	315.76	14.83	1.20	301.83	***26***	29	21	134	210	<5.0	***130***	NA	***61***	8260B/8015M
	01/13/09	315.76	12.06	0.06	303.75	***<25***	55	46	336	437	<25	***270***	NA	***910***	8260B/8015M
	04/23/09	315.76	12.48	0.20	303.43	***18***	14	17	103	152	<5.0	***120***	***1.7***	***130***	8260B/8015M
	07/20/09	315.76	16.38	5.08	303.19	***27***	36	56	430	549	<5.0	***340***	***11.0***	***8800***	8260B/8015M
	10/29/09	315.76	14.50	2.95	303.47	***28***	17	52	270	367	<2.0	***240***	***7.7***	***2300***	8260B/8015M
	01/18/10	315.76	17.31	6.00	302.95	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	04/27/10	315.76	10.86	0.25	305.09	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	07/27/10	315.76	11.81	0.11	304.03	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	10/28/10	315.76	13.25	0.33	302.76	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	01/24/11	315.76	13.33	0.17	302.56	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	04/20/11	315.76	12.57	0.00	303.19	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	07/07/11	315.76	13.20	0.53	302.96	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	10/24/11	315.76	13.31	0.23	302.62	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	04/19/12	315.76	17.48	0.88	298.94	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	07/23/12	315.76	14.57	0.00	301.19	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	10/19/12	315.76	14.82	0.00	300.94	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	11/15/12	315.76	14.71	0.03	301.07	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	01/23/13	315.76	12.38	0.02	303.40	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	04/26/13	315.76	12.21	0.16	303.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	07/19/13	315.76	4.78	0.00	310.98	<0.24	0.26 J	0.97 J	6.4	7.63	ND	***6.3***	<0.038	***27.9***	8260B/8015M
	10/18/13	315.76	11.41	0.16	304.47	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	01/17/14	315.76	11.86	0.02	303.92	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	04/25/14	315.76	12.87	0.07	302.94	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	07/08/14	315.76	11.56	0.05	304.24	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	10/14/14	315.76	13.42	0.03	302.36	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	01/15/15	315.76	13.56	0.03	302.22	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	04/08/15	315.76	13.72	0.00	302.04	1.1	<0.16	0.76 J	2.4	4.26	<0.24	***74.2***	***1.70***	***743***	8260B/8015M
	07/07/15	315.76	13.47	0.03	302.31	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	10/05/15	315.76	13.65	0.02	302.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	01/06/16	315.76	13.67	0.01	302.10	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	04/13/16	315.76	13.74	0.00	302.02	1.3	0.17 J	<0.27	0.36	1.83	0.27	***132***	***0.559***	***325 a***	8260B/8015M
	07/06/16	315.76	13.70	Sheen	302.06	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	10/05/16	315.76	14.00	0.00	301.76	1.5	<0.23	<0.20	<0.21	1.5	<0.34	***136***	***0.354***	***56.6 a***	8260B/8015M

Table 1

GROUNDWATER GAUGING AND ANALYTICAL DATA SUMMARY

Pilot Travel Center #290
31 Heather Lane
Perryville, Maryland

Well ID	Date	Well Elevation	DTW	Product Thickness	GW Elevation (Corrected)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	BTEX (µg/l)	MTBE (µg/l)	Naphthalene (ug/l)	TPH-GRO (mg/L)	TPH - DRO (mg/l)	Analytical Methods
MW-3	08/18/05	316.12	11.00	0.00	305.12	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***0.42***	8260B/8015M
	11/14/05	316.12	11.47	0.00	304.65	<5.0	<5.0	<5.0	<5.0	ND	***23***	<5.0	NA	***0.58***	8260B/8015M
	02/06/06	316.12	10.36	0.00	305.76	<5.0	<5.0	<5.0	<5.0	ND	***20***	<5.0	NA	***0.71***	8260B/8015M
	05/22/06	316.12	11.06	0.00	305.06	<5.0	<5.0	<5.0	<5.0	ND	6.5	<5.0	NA	***0.24***	8260B/8015M
	08/21/06	316.12	10.80	0.00	305.32	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***0.71***	8260B/8015M
	11/20/06	316.12	10.27	0.00	305.85	<5.0	<5.0	<5.0	<5.0	ND	5.8	<5.0	NA	***0.66***	8260B/8015M
	04/03/07	316.12	10.38	0.00	305.74	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***0.50***	8260B/8015M
	07/09/07	316.12	10.89	0.00	305.23	0.90 J	<1.0	<2.0	<2.0	0.90 J	2.6	0.32 BJ	NA	***0.39***	8260B/8015M
	10/22/07	316.12	12.00	0.00	304.12	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***1.40***	8260B/8015M
	01/07/08	316.12	11.84	0.00	304.28	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***0.77***	8260B/8015M
	04/01/08	316.12	10.25	0.00	305.87	***14***	<5.0	<5.0	<5.0	14	<5.0	<5.0	NA	***0.93***	8260B/8015M
	07/07/08	316.12	10.10	0.00	306.02	***11***	<5.0	<5.1	<5.2	11	<5.0	<5.0	NA	***0.77***	8260B/8015M
	11/18/08	316.12	11.66	0.00	304.46	***8.3***	<5.0	<5.0	<5.0	8.3	<5.0	<5.0	NA	***0.66***	8260B/8015M
	01/13/09	316.12	11.57	0.00	304.55	***8.2***	<5.0	<5.0	<5.0	8.2	<5.0	<5.0	NA	***5.20***	8260B/8015M
	04/23/09	316.12	11.65	0.00	304.47	***6.5***	<5.0	<5.0	<5.0	6.5	<5.0	<5.0	<0.1	***1.60***	8260B/8015M
	07/20/09	316.12	10.32	0.00	305.80	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.1	***0.47***	8260B/8015M
	10/29/09	316.12	10.71	0.00	305.41	***5.4***	<1.0	<1.0	<1.0	5	<1.0	<1.0	<0.1	***2.20***	8260B/8015M
	01/18/10	316.12	10.58	0.00	305.54	***6.7***	<1.0	<1.0	<1.0	7	<1.0	<0.1	<0.1	***0.91***	8260B/8015M
	04/27/10	316.12	9.66	0.00	306.46	***6.1***	<1.0	<1.0	<1.0	6.1	<1.0	<1.0	<0.1	***1.40***	8260B/8015M
	07/27/10	316.12	10.60	0.00	305.52	3.7	<1.0	<1.0	<1.0	3.7	<1.0	<1.0	<0.1	***0.90***	8260B/8015M
	10/28/10	316.12	11.08	0.00	305.04	4.8	<1.0	<1.0	<1.0	4.8	<1.0	<1.0	<0.050	***1.20***	8260B/8015M
	01/24/11	316.12	12.04	0.00	304.08	***6.7***	<1.0	<1.0	<1.0	6.7	<1.0	NA	<0.011	***1.60***	8260B/8015M
	04/20/11	316.12	10.55	0.00	305.57	***7.5***	<1.0	<1.0	1.2	8.7	<1.0	NA	<0.011	***2.62***	8260B/8015M
	07/07/11	316.12	10.54	0.00	305.58	***6.7***	<0.15	<0.21	<0.17	6.7	<0.18	<0.68	<0.016	***1.81***	8260B/8015M
	10/24/11	316.12	9.37	0.00	306.75	3.7	<1.0	0.43	<1.0	4.1	<1.0	NA	<0.016	***1.76***	8260B/8015M
	01/09/12	316.12	10.21	0.00	305.91	3.2	<1.0	<1.0	<1.0	3.2	<1.0	NA	<0.016	***1.30***	8260B/8015M
	04/19/12	316.12	11.28	0.00	304.84	3.6	<1.0	<1.0	<1.0	3.6	<1.0	NA	<0.016	***2.16***	8260B/8015M
	07/23/12	316.12	11.58	0.00	304.54	3.1	<0.23	<0.23	<0.24	3.1	<0.16	NA	<0.040	***1.76***	8260B/8015M
	10/19/12	316.12	12.61	0.00	303.51	-	-	-	-	-	-	-	<0.040	***1.29***	8260B/8015M
	11/15/12	316.12	12.06	0.00	304.06	2.8	<0.23	0.32 J	0.63 J	3.4 J	<0.16	NA	-	-	8260B/8015M
	01/23/13	316.12	11.14	0.00	304.98	1.3	<0.23	0.78 J	1.20	3.28 J	<0.16	***2.1 J***	<0.040	***10.40***	8260B/8015M
	04/26/13	316.12	9.77	0.00	306.35	2.0	<0.23	0.27 J	<0.24	2.3	<0.16	<1.8	<0.040	***5.76***	8260B/8015M
	07/19/13	316.12	6.11	0.00	310.01	0.98 J	<0.23	1.40	0.76 J	3.14	<0.16	<1.1	<0.038	***2.49***	8260B/8015M
	10/18/13	316.12	7.08	0.00	309.04	1.4	<0.44	0.63 J	0.25 J	2.28	<0.29	***0.89 J***	<0.038	***1.91***	8260B/8015M
	01/17/14	316.12	9.90	0.00	306.22	3.3	<0.44	<0.21	<0.19	3.30	<0.29	<0.25	<0.038	***1.58***	8260B/8015M
	04/25/14	316.12	9.87	0.00	306.25	0.36J	<0.44	<0.21	<0.19	0.36	<0.29	<0.25	<0.038	***0.61***	8260B/8015M
	07/08/14	316.12	7.94	0.00	308.18	<0.21	<0.22	0.70 J	1.70	2.40	<0.26	<0.34	<0.038	***0.727***	8260B/8015M
	10/14/14	316.12	10.14	0.00	305.98	3.5	<0.22	<0.40	<0.20	3.50	<0.26	<0.34	<0.038	***0.852***	8260B/8015M
	01/15/15	316.12	10.88	0.00	305.24	2.7	<0.22	<0.40	<0.20	2.7	<0.26	<0.34	<0.038	***0.971***	8260B/8015M
	04/08/15	316.12	10.24	0.00	305.88	3.1	<0.16	<0.27	<0.17	3.1	<0.24	***0.74 J***	<0.038	***0.920***	8260B/8015M
	07/07/15	316.12	9.86	0.00	306.26	2.6	<0.16	<0.27	<0.17	2.6	<0.24	<0.20	<0.038	***0.965***	8260B/8015M
	10/05/15	316.12	10.72	0.00	305.40	1.6	<0.16	<0.27	0.33 J	1.9	<0.24	***0.77 J***	<0.038	***0.954***	8260B/8015M
	01/06/16	316.12	11.20	0.00	304.92	2.2	<0.16	<0.27	<0.17	2.2	<0.24	<0.20	<0.038	***1.70***	8260B/8015M
	04/13/16	316.12	10.75	0.00	305.37	1.2	<0.16	<0.27	<0.17	1.2	<0.24	<0.20	<0.055	***1.46***	8260B/8015M
	07/06/16	316.12	10.90	0.00	305.22	1.7	<0.23	<0.20	<0.21	1.7	<0.34	<0.39	<0.10	***1.10***	8260B/8015M
	10/05/16	316.12	11.70	0.00	304.42	1.2	<0.23	<0.20	<0.21	1.2	<0.34	***2.4***	<0.10	***1.08***	8260B/8015M

Table 1

GROUNDWATER GAUGING AND ANALYTICAL DATA SUMMARY

Pilot Travel Center #290
31 Heather Lane
Perryville, Maryland

Well ID	Date	Well Elevation	DTW	Product Thickness	GW Elevation (Corrected)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	BTEX (µg/l)	MTBE (µg/l)	Naphthalene (ug/l)	TPH-GRO (mg/L)	TPH - DRO (mg/l)	Analytical Methods
MW-4	11/14/05	Unknown	Dry	NA	Unknown	-	-	-	-	-	-	-	NA	-	8260B/8015M
	02/06/06	Unknown	24.22	0.00	Unknown	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	N/A	8260B/8015M
	05/22/06	Unknown	24.17	0.00	Unknown	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***5.0***	8260B/8015M
	08/21/06	Unknown	24.70	0.00	Unknown	-	-	-	-	-	-	-	NA	-	8260B/8015M
	04/03/07	Unknown	Dry	NA	Unknown	-	-	-	-	-	-	-	NA	-	8260B/8015M
	07/09/07	Unknown	24.20	0.00	Unknown	-	-	-	-	-	-	-	NA	-	8260B/8015M
	10/22/07	Unknown	23.02	0.00	Unknown	-	-	-	-	-	-	-	NA	-	8260B/8015M
	01/07/08	Unknown	24.26	0.00	Unknown	-	-	-	-	-	-	-	NA	-	8260B/8015M
	04/01/08	Unknown	24.20	0.00	Unknown	-	-	-	-	-	-	-	NA	-	8260B/8015M
	07/07/08	Unknown	24.12	0.00	Unknown	-	-	-	-	-	-	-	NA	-	8260B/8015M
	11/18/08	Unknown	23.31	0.00	Unknown	-	-	-	-	-	-	-	NA	-	8260B/8015M
	01/13/09	Unknown	23.38	0.00	Unknown	-	-	-	-	-	-	-	NA	-	8260B/8015M
MW-4R	04/23/09	315.69	26.32	0.00	289.37	<5.0	<5.0	<5.0	<5.0	ND	5.1	5.0	<0.1	***0.15***	8260B/8015M
	07/20/09	315.69	26.20	0.00	289.49	<5.0	<5.0	<5.0	<5.0	ND	<5.0	***20***	<0.1	***0.56***	8260B/8015M
	10/29/09	315.69	26.31	0.00	289.38	4.9	<1.0	<1.0	<1.0	4.9	5.0	***15***	<0.1	***0.55***	8260B/8015M
	01/18/10	315.69	23.35	0.00	292.34	4.6	<1.0	<1.0	<1.0	4.6	4.7	***15***	<0.1	***0.17***	8260B/8015M
	04/27/10	315.69	26.17	0.00	289.52	4.4	<1.0	<1.0	<1.0	4.4	4.4	***12***	<0.1	***0.45***	8260B/8015M
	07/27/10	315.69	26.20	0.00	289.49	4.1	<1.0	<1.0	<1.0	4.1	3.5	***14***	<0.1	***0.22***	8260B/8015M
	10/28/10	315.69	26.44	0.00	289.25	4.2	<1.0	<1.0	<1.0	4.2	3.8	***20***	<0.05	***0.28***	8260B/8015M
	01/24/11	315.69	26.60	0.00	289.09	3.7	<1.0	<1.0	<1.0	3.7	3.8	NA	<0.011	***0.81***	8260B/8015M
	04/20/11	315.69	26.11	0.00	289.58	4.0	<1.0	<1.0	<1.0	4.0	3.9	NA	<0.011	***2.43***	8260B/8015M
	07/07/11	315.69	26.20	0.00	289.49	3.7	<0.15	<0.21	<0.17	3.7	3.6	<0.68	<0.016	***2.84***	8260B/8015M
	10/24/11	315.69	26.34	0.00	289.35	4.1	<1.0	<1.0	<1.0	4.1	3.5	NA	<0.016	***1.41***	8260B/8015M
	01/09/12	315.69	26.28	0.00	289.41	4.0	0.24 J	<1.0	<1.0	4.2	3.4	NA	<0.016	***0.59***	8260B/8015M
	04/19/12	315.69	26.15	0.00	289.54	3.0	0.37 J	<1.0	<1.0	3.4	3.2	NA	<0.016	***1.84***	8260B/8015M
	07/23/12	315.69	26.47	0.00	289.22	3.8	0.55 J	<0.23	<0.24	4.4	4.4	NA	<0.040	***0.998***	8260B/8015M
	10/19/12	315.69	26.14	0.00	289.55	-	-	-	-	-	-	-	<0.040	***1.15***	8260B/8015M
	11/15/12	315.69	26.65	0.00	289.04	1.6	<0.23	<0.23	<0.24	1.6	3.0	NA	-	-	8260B/8015M
	01/23/13	315.69	28.17	0.00	287.52	1.3	<0.23	<0.23	<0.24	1.3	3.3	***4.8 J***	<0.040	***4.80***	8260B/8015M
	04/26/13	315.69	25.97	0.00	289.72	1.9	<0.23	<0.23	<0.24	1.9	3.7	***6.3***	<0.040	***1.29***	8260B/8015M
	07/19/13	315.69	25.55	0.00	290.14	1.4	0.59 J	<0.23	<0.24	1.99	2.6	***5.3***	<0.038	***0.927***	8260B/8015M
	10/18/13	315.69	25.71	0.00	289.98	2.1	<0.44	<0.21	<0.19	2.10	3.2	***7.7***	<0.038	***0.687***	8260B/8015M
	01/17/14	315.69	26.05	0.00	289.64	2.2	<0.44	<0.21	<0.19	2.20	3.0	***4.9 J***	<0.038	***1.690***	8260B/8015M
	04/25/14	315.69	26.14	0.00	289.55	2.0	<0.44	<0.21	<0.19	2.0	2.4	***4.9J***	<0.038	***1.990***	8260B/8015M
	07/08/14	315.69	25.93	0.00	289.76	2.1	<0.22	<0.40	<0.20	2.1	2.8	***6.1***	<0.038	***2.890***	8260B/8015M
	10/14/14	315.69	25.95	0.00	289.74	2.2	<0.22	<0.40	<0.20	2.2	2.5	***6.8***	<0.038	***0.876***	8260B/8015M
	01/15/15	315.69	26.34	0.00	289.35	2.2	0.59 J	<0.40	<0.20	2.79	3.6	***4.4 J***	<0.038	***3.48***	8260B/8015M
	04/08/15	315.69	25.82	0.00	289.87	1.2	0.48 J	<0.27	<0.17	1.68	1.6	***2.3 J***	<0.038	***9.39***	8260B/8015M
	07/07/15	315.69	25.76	0.00	289.93	2.0	0.31 J	<0.27	<0.17	2.31	2.7	***3.1 J***	<0.038	***1.41***	8260B/8015M
	10/05/15	315.69	26.10	0.00	289.59	2.6	<0.16	<0.27	0.26 J	2.86	3.4	***6.3***	<0.038	***1.19***	8260B/8015M
	01/06/16	315.69	26.30	0.00	289.39	2.2	10.7	<0.27	<0.17	12.9	2.6	***2.1 J***	<0.038	***5.59***	8260B/8015M
	04/13/16	315.69	26.24	0.00	289.45	2.0	1.6	<0.27	<0.17	3.6	2.4	***2.5 J***	<0.055	***8.26***	8260B/8015M
	07/06/16	315.69	26.13	0.00	289.56	2.1	0.24 J	<0.20	<0.21	2.34 J	2.9	***2.1 J***	<0.10	***3.84***	8260B/8015M
	10/05/16	315.69	26.33	0.00	289.36	1.6	<0.23	<0.20	<0.21	1.6	2.3	***2.3***	<0.10	***4.24***	8260B/8015M

Table 1

GROUNDWATER GAUGING AND ANALYTICAL DATA SUMMARY

Pilot Travel Center #290
31 Heather Lane
Perryville, Maryland

Well ID	Date	Well Elevation	DTW	Product Thickness	GW Elevation (Corrected)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	BTEX (µg/l)	MTBE (µg/l)	Naphthalene (ug/l)	TPH-GRO (mg/L)	TPH - DRO (mg/l)	Analytical Methods
MW-5	11/14/05	317.78	16.35	0.00	301.43	<5.0	<5.0	<5.0	<5.0	ND	7.8	<5.0	NA	***1.7***	8260B/8015M
	02/06/06	317.78	16.26	0.00	301.52	<5.0	<5.0	<5.0	<5.0	ND	5.7	<5.0	NA	***0.57***	8260B/8015M
	05/22/06	317.78	16.31	0.00	301.47	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***0.8***	8260B/8015M
	08/21/06	317.78	16.25	0.00	301.53	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***0.49***	8260B/8015M
	11/20/06	317.78	16.17	0.00	301.61	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***0.46***	8260B/8015M
	04/03/07	317.78	16.20	0.00	301.58	<5.0	<5.0	<5.0	6.1	6.1	<5.0	<5.0	NA	***0.49***	8260B/8015M
	07/09/07	317.78	16.19	0.00	301.59	<1.0	<1.0	<2.0	<2.0	ND	8.8	0.96 BJ	NA	***1.00***	8260B/8015M
	10/22/07	317.78	16.55	0.00	301.23	<5.0	<5.0	<5.0	16.0	16.0	5.2	***37***	NA	***6.80***	8260B/8015M
	01/07/08	317.78	16.53	0.00	301.25	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***1.20***	8260B/8015M
	04/01/08	317.78	16.20	0.00	301.58	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	***1.90***	8260B/8015M
	07/07/08	317.78	16.14	0.00	301.64	<5.0	<5.0	<5.0	<5.0	<5.0	7.5	<5.0	NA	***1.20***	8260B/8015M
	11/18/08	317.78	16.43	0.00	301.35	<5.0	<5.0	<5.0	<5.0	<5.0	5.9	<5.0	NA	***2.20***	8260B/8015M
	01/13/09	317.78	16.44	0.00	301.34	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	***2.40***	8260B/8015M
	04/23/09	317.78	16.44	0.00	301.34	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.1	***1.00***	8260B/8015M
	07/20/09	317.78	16.15	0.00	301.63	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.1	***1.10***	8260B/8015M
	10/29/09	317.78	16.24	0.00	301.54	2.6	<1.0	<1.0	<1.0	2.6	5.2	<1.0	<0.1	***1.40***	8260B/8015M
	01/18/10	317.78	16.20	0.00	301.58	3.5	<1.0	<1.0	<1.0	3.5	1.4	<0.1	<0.1	***0.90***	8260B/8015M
	04/27/10	317.78	16.04	0.00	301.74	3.1	<1.0	<1.0	<1.0	3.1	<1.0	<1.0	<0.1	***1.30***	8260B/8015M
	07/27/10	317.78	16.08	0.00	301.70	2.3	<1.0	<1.0	<1.0	2.3	1.3	***1.6***	<0.1	***0.82***	8260B/8015M
	10/28/10	317.78	17.51	0.00	300.27	<1.0	<1.0	<1.0	<1.0	<1.0	3.3	<1.0	<0.05	***1.80***	8260B/8015M
	01/24/11	317.78	16.49	0.00	301.29	1.1	<1.0	<1.0	<1.0	1.1	1.1	NA	<0.011	***2.82***	8260B/8015M
	04/20/11	317.78	16.22	0.00	301.56	1.5	<1.0	<1.0	<1.0	1.5	1.5	NA	<0.011	***4.93***	8260B/8015M
	07/07/11	317.78	16.19	0.00	301.59	0.88 J	<0.15	<0.21	<0.17	0.9	1.6	<0.68	<0.016	***4.41***	8260B/8015M
	10/24/11	317.78	16.08	0.00	301.70	1.9	<1.0	<1.0	<1.0	1.9	1.6	NA	<0.016	***2.42***	8260B/8015M
	01/09/12	317.78	16.14	0.00	301.64	1.1	<1.0	<1.0	<1.0	1.1	0.88	NA	<0.016	***2.09***	8260B/8015M
	04/19/12	317.78	16.26	0.00	301.52	0.78 J	<1.0	<1.0	<1.0	0.78 J	1.00	NA	<0.016	***2.80***	8260B/8015M
	07/23/12	317.78	16.37	0.00	301.41	0.70 J	<0.23	<0.23	<0.24	0.70 J	1.40	NA	<0.040	***2.78***	8260B/8015M
	10/19/12	317.78	16.74	0.00	301.04	-	-	-	-	-	-	-	<0.040	***1.41***	8260B/8015M
	11/15/12	317.78	16.62	0.00	301.16	0.37 J	<0.23	<0.23	<0.24	0.37 J	1.10	NA	-	-	8260B/8015M
	01/23/13	317.78	16.23	0.00	301.55	2.10	<0.23	0.25 J	0.41 J	2.76 J	0.67 J	***4.9 J***	<0.040	***3.01***	8260B/8015M
	04/26/13	317.78	16.05	0.00	301.73	2.20	<0.23	<0.23	<0.24	2.2	1.20	<1.1	<0.040	***1.69***	8260B/8015M
	07/19/13	317.78	15.65	0.00	302.13	<0.24	<0.28	<0.23	<0.24	ND	0.48 J	<1.1	<0.038	***0.38***	8260B/8015M
	10/18/13	317.78	15.73	0.00	302.05	0.67 J	<0.44	<0.21	<0.19	0.7	0.95 J	0.44 J	<0.038	***1.36***	8260B/8015M
	01/17/14	317.78	15.94	0.00	301.84	0.60 J	<0.44	<0.21	<0.19	0.6	0.69 J	<0.25	<0.038	***1.53***	8260B/8015M
	04/25/14	317.78	16.07	0.00	301.71	0.43 J	<0.44	<0.21	<0.19	0.43	0.43 J	0.35 J	<0.038	***1.04***	8260B/8015M
	07/08/14	317.78	16.00	0.00	301.78	0.36 J	<0.22	<0.40	<0.20	0.36	1.9	<0.34	<0.038	***1.25***	8260B/8015M
	10/14/14	317.78	16.70	0.00	301.08	0.22 J	<0.22	<0.40	<0.20	0.22	1.2	<0.34	<0.038	***1.06***	8260B/8015M
	01/15/15	317.78	16.17	0.00	301.61	<0.21	<0.22	<0.40	<0.20	ND	1.3	<0.34	<0.038	***1.26***	8260B/8015M
	04/08/15	317.78	16.12	0.00	301.66	<0.24	<0.16	<0.27	<0.17	ND	0.87 J	***1.4 J***	<0.038	***1.10***	8260B/8015M
	07/07/15	317.78	16.12	0.00	301.66	<0.24	<0.16	<0.27	<0.17	ND	0.96 J	***1.5 J***	<0.038	***1.27***	8260B/8015M
	10/05/15	317.78	16.14	0.00	301.64	0.38 J	<0.16	<0.27	<0.17	0.38	2.1	***0.94 J***	<0.038	***0.708***	8260B/8015M
	01/06/16	317.78	16.20	0.00	301.58	1.3	<0.16	<0.27	<0.17	1.3	<0.24	***1.6 J***	<0.038	***6.34***	8260B/8015M
	04/13/16	317.78	16.17	0.00	301.61	<0.24	<0.16	<0.27	<0.17	ND	0.7	<0.20	<0.055	***2.49***	8260B/8015M
	07/06/16	317.78	16.16	0.00	301.62	<0.14	<0.23	<0.20	<0.21	ND	1.6	<0.39	<0.10	***0.86***	8260B/8015M
	10/05/16	317.78	16.30	0.00	301.48	0.22	<0.23	<0.20	<0.21	0.22	1.8	<0.39	<0.10	***1.10***	8260B/8015M

Table 1

GROUNDWATER GAUGING AND ANALYTICAL DATA SUMMARY

Pilot Travel Center #290
31 Heather Lane
Perryville, Maryland

Well ID	Date	Well Elevation	DTW	Product Thickness	GW Elevation (Corrected)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	BTEX (µg/l)	MTBE (µg/l)	Naphthalene (ug/l)	TPH-GRO (mg/L)	TPH - DRO (mg/l)	Analytical Methods
MW-6	11/14/05	315.48	18.09	0.00	297.39	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***0.11***	8260B/8015M
	02/06/06	315.48	17.64	0.00	297.84	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	<0.11	8260B/8015M
	05/22/06	315.48	17.91	0.00	297.57	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***0.16***	8260B/8015M
	08/21/06	315.48	17.73	0.00	297.75	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***0.13***	8260B/8015M
	11/20/06	315.48	17.64	0.00	297.84	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***0.19***	8260B/8015M
	04/03/07	315.48	17.61	0.00	297.87	<5.0	<5.0	<5.0	5.7	5.7	<5.0	<5.0	NA	<0.1	8260B/8015M
	07/09/07	315.48	17.73	0.00	297.75	<1.0	<1.0	<2.0	<2.0	ND	<1.0	<2.0	NA	***0.072 J***	8260B/8015M
	10/22/07	315.48	18.30	0.00	297.18	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***0.60***	8260B/8015M
	01/07/08	315.48	18.35	0.00	297.13	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	NA	***0.23***	8260B/8015M
	04/01/08	315.48	17.77	0.00	297.71	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	***1.6***	8260B/8015M
	07/07/08	315.48	17.57	0.00	297.91	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	***0.13***	8260B/8015M
	11/18/08	315.48	18.2	0.00	297.28	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	***0.2***	8260B/8015M
	01/13/09	315.48	18.27	0.00	297.21	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	***0.44***	8260B/8015M
	04/23/09	315.48	18.11	0.00	297.37	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	ND	***0.25***	8260B/8015M
	07/20/09	315.48	17.68	0.00	297.80	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.1	***0.098***	8260B/8015M
	10/29/09	315.48	17.91	0.00	297.57	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	***0.26***	8260B/8015M
	01/18/10	315.48	17.73	0.00	297.75	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	***0.063***	8260B/8015M
	04/27/10	315.48	17.03	0.00	298.45	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	***0.77***	8260B/8015M
	07/27/10	315.48	17.08	0.00	298.40	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<0.05	8260B/8015M
	10/28/10	315.48	17.51	0.00	297.97	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.05	***0.58***	8260B/8015M
	01/24/11	315.48	NM	NM	NM	Frozen	Frozen	Frozen	Frozen	Frozen	Frozen	Frozen	Frozen	Frozen	8260B/8015M
	04/20/11	315.48	17.35	0.00	298.13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<0.011	***3.51***	8260B/8015M
	07/07/11	315.48	17.73	0.00	297.75	<0.22	<0.15	<0.21	<0.17	ND	<0.18	<0.68	<0.016	***3.57***	8260B/8015M
	10/24/11	315.48	17.46	0.00	298.02	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<0.016	***2.06***	8260B/8015M
	01/09/12	315.48	17.37	0.00	298.11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<0.016	***1.50***	8260B/8015M
	04/19/12	315.48	17.84	0.00	297.64	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<0.016	***1.05***	8260B/8015M
	07/23/12	315.48	18.18	0.00	297.30	<0.24	<0.23	<0.23	<0.24	<0.23	<0.16	NA	<0.040	***1.07***	8260B/8015M
	10/19/12	315.48	18.03	0.00	297.45	-	-	-	-	-	-	-	<0.040	***<0.053***	8260B/8015M
	11/15/12	315.48	18.49	0.00	296.99	<0.24	<0.23	<0.23	<0.24	<0.23	<0.16	NA	-	-	8260B/8015M
	01/23/13	315.48	18.24	0.00	297.24	<0.24	<0.23	<0.23	<0.24	ND	<0.16	<1.1	<0.040	***1.82***	8260B/8015M
	04/26/13	315.48	17.72	0.00	297.76	2.0	<0.23	<0.23	<0.24	2.0	<0.16	<1.1	<0.040	***0.677***	8260B/8015M
	07/19/13	315.48	16.59	0.00	298.89	<0.24	<0.23	<0.24	<0.24	ND	<0.16	<1.1	<0.38	***0.375***	8260B/8015M
	10/18/13	315.48	16.91	0.00	298.57	<0.28	<0.44	<0.21	<0.19	ND	<0.29	<0.25	<0.038	***0.557***	8260B/8015M
	01/17/14	315.48	17.55	0.00	297.93	<0.28	<0.44	<0.21	<0.19	ND	<0.29	<0.25	<0.038	***0.845***	8260B/8015M
	04/25/14	315.48	17.38	0.00	298.10	<0.28	<0.44	<0.21	<0.19	ND	<0.29	<0.25	<0.038	***0.809***	8260B/8015M
	07/08/14	315.48	17.28	0.00	298.20	0.27 J	<0.22	<0.40	<0.20	0.27	<0.26	<0.34	<0.038	<0.080	8260B/8015M
	10/14/14	315.48	17.78	0.00	297.70	0.22 J	<0.22	<0.40	<0.20	0.22	<0.26	<0.34	<0.038	***0.693***	8260B/8015M
	01/15/15	315.48	18.03	0.00	297.45	<0.21	<0.22	<0.40	<0.20	ND	<0.26	<0.34	<0.038	***0.499***	8260B/8015M
	04/08/15	315.48	17.70	0.00	297.78	<0.24	<0.16	<0.27	<0.17	ND	<0.24	<0.20	<0.038	***0.383***	8260B/8015M
	07/07/15	315.48	17.44	0.00	298.04	<0.24	<0.16	<0.27	<0.17	ND	<0.24	<0.20	<0.038	***0.432***	8260B/8015M
	10/05/15	315.48	17.81	0.00	297.67	0.30 J	<0.16	<0.27	<0.17	0.30	<0.24	<0.20	<0.038	***0.376***	8260B/8015M
	01/06/16	315.48	18.10	0.00	297.38	<0.24	0.18 J	<0.27	<0.17	0.18	<0.24	<0.20	<0.038	<0.064	8260B/8015M
	04/13/16	315.48	17.70	0.00	297.78	<0.24	<0.16	<0.27	<0.17	ND	<0.24	<0.20	<0.055	***5.50***	8260B/8015M
	07/06/16	315.48	17.74	0.00	297.74	0.21	<0.23	<0.20	<0.21	0.21	<0.34	<0.39	<0.10	***0.373***	8260B/8015M
	10/05/16	315.48	18.20	0.00	297.28	<0.14	<0.23	<0.20	<0.21	ND	<0.34	<0.39	<0.10	***0.876***	8260B/8015M

Table 1

GROUNDWATER GAUGING AND ANALYTICAL DATA SUMMARY

Pilot Travel Center #290
31 Heather Lane
Perryville, Maryland

Well ID	Date	Well Elevation	DTW	Product Thickness	GW Elevation (Corrected)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	BTEX (µg/l)	MTBE (µg/l)	Naphthalene (ug/l)	TPH-GRO (mg/L)	TPH - DRO (mg/l)	Analytical Methods
MW-7	04/23/09	317.09	15.16	0.00	301.93	***24***	<5.0	<5.0	<5.0	24	<5.0	<5.0	***0.13***	***2.3***	8260B/8015M
	07/20/09	317.09	16.29	0.00	300.8	***19***	<5.0	<5.0	<5.0	19	<5.0	<5.0	***0.14***	***1.6***	8260B/8015M
	10/29/09	317.09	17.17	0.00	299.92	***22***	<1.0	1.3	1.6	24.9	<1.0	<1.0	***0.19***	***3.2***	8260B/8015M
	01/18/10	317.09	17.11	0.00	299.98	***12***	<1.0	<1.0	1.1	13.1	<1.0	<0.1	***0.11***	***2.4***	8260B/8015M
	04/27/10	317.09	15.96	0.00	301.13	***13***	<1.0	<1.0	4	17	<1.0	***3.1***	<0.1	***2.8***	8260B/8015M
	07/27/10	317.09	17.08	0.00	300.01	***11***	<1.0	<1.0	1.1	12.1	<1.0	***1.1***	***0.11***	***1.8***	8260B/8015M
	10/28/10	317.09	17.03	0.00	300.06	***7.8***	<1.0	<1.0	1.2	9	<1.0	<1.0	***0.11***	***1.5***	8260B/8015M
	01/24/11	317.09	18.13	0.00	298.96	***5***	<1.0	<1.0	0.32 J	5.32	0.42 J	NA	<0.011	***2.66***	8260B/8015M
	04/20/11	317.09	15.99	0.00	301.1	4.7	<1.0	0.67 J	0.86 J	6.23	<1.0	NA	<0.011	***8.43***	8260B/8015M
	07/07/11	317.09	15.99	0.00	301.1	4.8	<0.15	0.70J	1.5	7.0	<1.0	***3.0 J***	<0.016	***9.61***	8260B/8015M
	10/24/11	317.09	14.79	0.00	302.3	2.2	<1.0	0.23 J	2.3	4.7	<1.0	NA	<0.016	***5.33***	8260B/8015M
	01/09/12	317.09	15.2	0.00	301.89	***6.3***	0.4	2.8	1.6	11.1	<1.0	NA	<0.016	***2.68***	8260B/8015M
	04/19/12	317.09	16.04	0.00	301.05	4.4	<1.0	1.4	0.53 J	6.3	<1.0	NA	<0.016	***5.02***	8260B/8015M
	07/23/12	317.09	16.26	0.00	300.83	2.7	<0.23	0.57 J	0.65 J	3.9	0.29 J	NA	<0.040	***7.42***	8260B/8015M
	10/19/12	317.09	17.17	0.00	299.92	-	-	-	-	-	-	-	<0.040	***2.95***	8260B/8015M
	11/15/12	317.09	16.09	0.00	301	3.5	<0.23	0.33 J	<0.24	3.83 J	0.21 J	NA	-	-	8260B/8015M
	01/23/13	317.09	13.38	0.00	303.71	1.4	0.50 J	0.25 J	0.26 J	2.41 J	<0.16	***1.8 J***	<0.040	***10.2***	8260B/8015M
	04/26/13	317.09	11.91	0.00	305.18	1.9	<0.23	2.0	3.1	7.0	<0.16	***12.9***	<0.040	***9.36***	8260B/8015M
	07/19/13	317.09	9.87	0.00	307.22	***8.4***	0.58 J	16.1	16.8	25.1	<0.16	***76.7***	***0.222***	***5.7***	8260B/8015M
	10/18/13	317.09	10.12	0.00	306.97	***5.9***	<0.44	5.0	4.6	15.5	<0.29	***26.6***	<0.038	***4.28***	8260B/8015M
	01/17/14	317.09	10.93	0.00	306.16	***5.7***	<0.44	3.8	2.4	11.9	<0.29	***19.9***	<0.038	***3.08***	8260B/8015M
	04/25/14	317.09	11.43	0.00	305.66	3.7	<0.44	3.3	0.92 J	7.92	<0.29	***5.7***	<0.038	***1.96***	8260B/8015M
	07/08/14	317.09	10.25	0.00	306.84	2.3	<0.22	0.83 J	<0.20	3.13	<0.26	***9.3***	<0.038	***1.89***	8260B/8015M
	10/14/14	317.09	12.11	0.00	304.98	3.5	<0.22	3.4	0.97 J	7.87	<0.26	***10.2***	<0.038	***1.89***	8260B/8015M
	01/15/15	317.09	13.22	0.00	303.87	1.5	<0.22	0.43 J	0.21 J	2.14	<0.26	<0.34	<0.038	***3.51***	8260B/8015M
	04/08/15	317.09	12.06	0.00	305.03	1.8	1.4	0.85 J	2.0	6.05	<0.24	***2.6 J***	<0.038	***3.61***	8260B/8015M
	07/07/15	317.09	11.14	0.00	305.95	***5.7***	8.1	5.3	4.0	23.1	<0.24	***8.6***	<0.038	***2.52***	8260B/8015M
	10/05/15	317.09	12.44	0.00	304.65	4.9	0.31 J	1.9	1.0	8.1	<0.24	***2.6 J***	<0.038	***2.90***	8260B/8015M
	01/06/16	317.09	12.90	0.00	304.19	3.4	0.96	0.76 J	1.4	6.6	<0.24	***4.9 J***	<0.038	***3.32***	8260B/8015M
	04/13/16	317.09	12.07	0.00	305.02	3.3	<0.19	2.1	0.94	6.3	<0.24	***5.5***	<0.055	***9.80***	8260B/8015M
	07/06/16	317.09	12.43	0.00	304.66	2.6	<0.23	1.1	0.52	4.22	<0.34	***1.5 J***	***0.145 J***	***6.79***	8260B/8015M
	10/05/16	317.09	13.25	0.00	303.84	2.1	<0.23	<0.20	<0.21	2.1	<0.34	***0.78***	***0.103***	***9.66***	8260B/8015M

Table 1

GROUNDWATER GAUGING AND ANALYTICAL DATA SUMMARY

Pilot Travel Center #290
31 Heather Lane
Perryville, Maryland

Well ID	Date	Well Elevation	DTW	Product Thickness	GW Elevation (Corrected)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	BTEX (µg/l)	MTBE (µg/l)	Naphthalene (ug/l)	TPH-GRO (mg/L)	TPH - DRO (mg/l)	Analytical Methods
MW-8	04/23/09	318.22	15.45	1.57	303.95	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	07/20/09	318.22	15.33	2.28	304.60	***52***	92	78	430	652	<5	***310***	***6.9***	***1000***	8260B/8015M
	10/29/09	318.22	15.52	3.25	305.14	***23***	42	64	308	437	<5.0	***230***	***12***	***4900***	8260B/8015M
	01/18/10	318.22	15.48	2.35	304.50	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	07/27/10	318.22	14.5	1.18	304.61	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	10/28/10	318.22	14.42	0.52	304.19	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	01/24/11	318.22	14.68	1.19	304.43	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	04/20/11	318.22	14.14	0.92	304.77	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	07/07/11	318.22	14.25	1.00	304.72	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	10/24/11	318.22	14.44	1.53	304.93	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	04/19/12	318.22	14.42	0.49	304.17	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	8260B/8015M
	07/23/12	318.22	14.19	0.00	304.03	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	10/19/12	318.22	14.65	0.00	303.57	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	01/23/13	318.22	4.24	0.00	313.98	<0.24	<0.23	<0.23	<0.24	ND	<0.16	1.3 J	<0.040	***20.4***	8260B/8015M
	04/26/13	318.22	3.87	0.00	314.35	<0.24	<0.23	<0.23	<0.24	ND	<0.16	<1.1	<0.040	***2.66***	8260B/8015M
	07/19/13	318.22	3.47	0.00	314.75	<0.24	<0.23	<0.23	<0.24	ND	<0.16	<1.1	<0.038	***0.202***	8260B/8015M
	10/18/13	318.22	3.72	0.00	314.50	<0.28	<0.44	<0.21	<0.19	ND	<0.29	<0.25	<0.038	***0.319***	8260B/8015M
	01/17/14	318.22	4.44	0.00	313.78	<0.28	<0.44	<0.21	<0.19	ND	<0.29	<0.25	<0.038	***0.717***	8260B/8015M
	04/25/14	318.22	12.04	0.00	306.18	<0.28	<0.44	1.1	0.62 J	1.72 J	<0.29	***5.6***	<0.038	***15.1***	8260B/8015M
	07/08/14	318.22	8.03	0.00	310.19	<0.21	<0.22	<0.40	4.7	4.7	<0.26	***1.2 J***	<0.038	***3.56***	8260B/8015M
	10/14/14	318.22	12.66	0.00	305.56	0.38 J	<0.22	<0.40	7.3	7.68	<0.26	***1.2 J***	<0.038	***13.0***	8260B/8015M
	01/15/15	318.22	13.19	0.00	305.03	1.6	<0.22	<0.40	1.6	3.2	<0.26	<0.34	<0.038	***6.53***	8260B/8015M
	04/08/15	318.22	12.68	0.00	305.54	2.6	0.34 J	1.8	1.9	6.64	0.40 J	<0.20	<0.038	***3.06***	8260B/8015M
	07/07/15	318.22	12.21	0.00	306.01	0.74	0.27 J	1.6	2.0	4.61	<0.24	***0.97 J***	<0.038	***4.28***	8260B/8015M
	10/05/15	318.22	12.83	0.00	305.39	2.0	<0.16	<0.27	2.0	4.0	<0.24	0.60 J	<0.038	***3.50***	8260B/8015M
	01/06/16	318.22	13.30	0.00	304.92	0.94	<0.16	<0.27	<0.17	0.94	<0.24	***1.4 J***	<0.038	***12.6***	8260B/8015M
	04/13/16	318.22	12.87	0.00	305.35	0.47	<0.16	<0.27	<0.17	0.47	0.28	<0.20	<0.055	***2.74***	8260B/8015M
	07/06/16	318.22	13.90	0.00	304.32	1.7	<0.23	<0.20	<0.21	1.7	<0.34	<0.39	<0.10	***3.76***	8260B/8015M
	10/05/16	318.22	13.77	0.00	304.45	0.83	<0.23	<0.20	<0.21	0.83	<0.34	***3.6***	<0.10	***10.4***	8260B/8015M

Table 1

GROUNDWATER GAUGING AND ANALYTICAL DATA SUMMARY

Pilot Travel Center #290
31 Heather Lane
Perryville, Maryland

Well ID	Date	Well Elevation	DTW	Product Thickness	GW Elevation (Corrected)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	BTEX (µg/l)	MTBE (µg/l)	Naphthalene (ug/l)	TPH-GRO (mg/L)	TPH - DRO (mg/l)	Analytical Methods
MW-9	10/28/10	317.73	18.96	0.00	298.77	3.3	<1.0	<1.0	<1.0	3.3	1.2	<1.0	<0.05	***3.2***	8260B/8015M
	01/24/11	317.73	DRY	NA	NM	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	8260B/8015M
	04/20/11	317.73	13.84	0.00	303.89	***6.8***	0.38 J	0.94 J	1.3	9.42	0.55 J	NA	<0.011	***9.23***	8260B/8015M
	07/07/11	317.73	13.82	0.00	303.91	***6.9***	<0.15	<0.21	<0.17	6.9	0.31 J	***5.1***	<0.016	***5.42***	8260B/8015M
	10/24/11	317.73	13.71	0.00	304.02	***6.2***	<1.0	0.48 J	0.57 J	7.25	<1.0	NA	<0.016	***7.18***	8260B/8015M
	01/09/12	317.73	13.84	0.00	303.89	4.8	<1.0	0.33 J	<1.0	5.13	0.34 J	NA	<0.016	***9.12***	8260B/8015M
	04/19/12	317.73	14	0.00	303.73	3.4	<1.0	<1.0	<1.0	3.4	0.42 J	NA	0.016	***5.15***	8260B/8015M
	07/23/12	317.73	21.39	0.00	296.34	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	10/19/12	317.73	DRY	NA	NM	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	8260B/8015M
	11/15/12	317.73	DRY	NA	NM	DRY	DRY	DRY	DRY	DRY	DRY	DRY	-	-	8260B/8015M
	01/23/13	317.73	13.04	0.00	304.69	2.6	<0.23	1.2	2.7	6.5	0.38 J	***11.1***	<0.040	***31.0***	8260B/8015M
	04/26/13	317.73	13.34	0.00	304.39	***5.8***	<0.23	1.6	2.4	9.8	0.82 J	***19.2***	<0.040	***6.2***	8260B/8015M
	07/19/13	317.73	13.05	0.00	304.68	<0.24	<0.23	3.4	1.6	5	0.41 J	***13.2***	<0.038	***7.07***	8260B/8015M
	10/18/13	317.73	13.17	0.00	304.56	2.4	<0.44	1	1.1	4.5	<0.29	***7.5***	<0.038	***3.14***	8260B/8015M
	01/17/14	317.73	13.33	0.00	304.40	4.0	<0.44	0.32 J	0.29 J	4.61	0.37 J	***11.4***	***0.214***	***4.59***	8260B/8015M
	04/25/14	317.73	13.55	0.00	304.18	2.3	<0.44	0.39 J	0.76 J	3.45	<0.29	***11***	***0.38***	***168***	8260B/8015M
	07/08/14	317.73	12.85	0.00	304.88	1.5	<0.22	0.44 J	0.91 J	2.85	<0.26	***26.1***	***0.346***	***89.2***	8260B/8015M
	10/14/14	317.73	13.52	0.00	304.21	3.0	<0.22	<0.40	0.23 J	3.23	<0.26	***6.0***	<0.038	***11.8***	8260B/8015M
	01/15/15	317.73	13.56	0.00	304.17	1.8	<0.22	<0.40	<0.20	1.8	0.37 J	***5.6***	<0.038	***5.07***	8260B/8015M
	04/08/15	317.73	13.53	0.00	304.20	2.4	<0.16	<0.27	<0.17	2.4	<0.24	***5.5***	<0.038	***11.1***	8260B/8015M
	07/07/15	317.73	13.28	0.00	304.45	2.1	<0.16	<0.27	<0.17	2.1	0.37 J	***3.7 J***	<0.038	***3.90***	8260B/8015M
	10/05/15	317.73	13.73	0.00	304.00	1.7	<0.16	<0.27	<0.17	1.7	<0.24	***3.2 J***	<0.038	***2.63***	8260B/8015M
	01/06/16	317.73	13.80	0.00	303.93	<0.24	<0.16	<0.27	<0.17	ND	0.78	<0.20	<0.038	***1.20***	8260B/8015M
	04/13/16	317.73	13.90	0.00	303.83	1.3	<0.16	<0.27	<0.17	1.3	<0.24	***0.95***	<0.055	***9.23***	8260B/8015M
	07/06/16	317.73	13.73	0.00	304.00	1.2	<0.23	<0.20	<0.21	1.2	<0.34	0.62	<0.10	***8.31***	8260B/8015M
	10/05/16	317.73	13.94	0.00	303.79	0.77	<0.23	<0.20	<0.21	0.77	0.38	***0.66***	<0.10	***27.2***	8260B/8015M

Table 1

GROUNDWATER GAUGING AND ANALYTICAL DATA SUMMARY

Pilot Travel Center #290
31 Heather Lane
Perryville, Maryland

Well ID	Date	Well Elevation	DTW	Product Thickness	GW Elevation (Corrected)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	BTEX (µg/l)	MTBE (µg/l)	Naphthalene (ug/l)	TPH-GRO (mg/L)	TPH - DRO (mg/l)	Analytical Methods
MW-10	10/28/10	317.19	23.07	0.00	294.12	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	01/24/11	317.19	23.84	0.00	293.35	***12.4***	<3.0	14.9	65.1	87.4	8.2 J	NA	***4.61***	NA	8260B/8015M
	04/20/11	317.19	DRY	NA	NM	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	8260B/8015M
	07/07/11	317.19	DRY	NA	NM	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	8260B/8015M
	10/24/11	317.19	DRY	NA	NM	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	8260B/8015M
MW-10R	04/19/12	Unknown	28.01	0.00	Unknown	0.63 J	<1.0	<1.0	<1.0	0.63 J	0.32 J	NA	<0.016	***5.06***	8260B/8015M
	07/23/12	Unknown	28.04	0.00	Unknown	***9.2***	<0.23	<0.23	<0.24	9.2	2.2	NA	***0.238***	***70.4***	8260B/8015M
	10/19/12	Unknown	28.71	0.00	Unknown	-	-	-	-	-	-	-	***0.205***	***3490 a***	8260B/8015M
	11/15/12	Unknown	28.53	0.03	Unknown	NS	NS	NS	NS	NS	NS	NS	-	-	8260B/8015M
	01/23/13	Unknown	27.52	0.00	Unknown	3.9	0.23	0.87 J	2.2	7.2 J	2.2	***20.3***	***0.936***	***766 a***	8260B/8015M
	04/26/13	Unknown	27.36	0.00	Unknown	***5.2***	<0.23	<0.23	1	6.2	1.7	***7.2***	<0.040	***54.9***	8260B/8015M
	07/19/13	Unknown	27.11	0.00	Unknown	***18.5***	<0.23	<0.23	1.3	19.8	1.3	***13.3***	***0.525***	***337***	8260B/8015M
	10/18/13	Unknown	27.28	0.00	Unknown	***12***	<0.44	<0.21	0.80 J	12.8	0.78 J	***7.1***	***4.48***	***116***	8260B/8015M
	01/17/14	Unknown	27.52	0.00	Unknown	***7.9***	<0.44	<0.21	<0.19	7.9	<0.29	***10.5***	***3.24***	***44.3***	8260B/8015M
	04/25/14	Unknown	27.82	0.00	Unknown	***5.7***	<0.44	<0.21	<0.19	5.7	0.50 J	***5.3***	***0.224***	***45.6***	8260B/8015M
	07/08/14	Unknown	27.39	0.00	Unknown	***6.1***	<0.22	<0.40	<0.20	6.1	0.45 J	***5.9***	<0.038	***26.7***	8260B/8015M
	10/14/14	Unknown	27.58	0.00	Unknown	4.7	<0.22	<0.40	<0.20	4.7	<0.26	***7.9***	<0.038	***23.7***	8260B/8015M
	01/15/15	Unknown	27.85	0.00	Unknown	2.7	<0.22	<0.40	<0.20	2.7	1.4	***3.0 J***	***0.220***	***15.4***	8260B/8015M
	04/08/15	Unknown	27.45	0.00	Unknown	3.8	<0.16	<0.27	<0.17	3.8	<0.24	***6.3***	<0.038	***41.7***	8260B/8015M
	07/07/15	Unknown	27.42	0.00	Unknown	3.9	<0.16	<0.27	<0.17	3.9	1.1	***4.0 J***	***0.729***	***14.3***	8260B/8015M
	10/05/15	Unknown	27.63	0.00	Unknown	3.2	0.24 J	<0.27	<0.17	3.44	<0.24	***2.7 J***	***0.452***	***42.0***	8260B/8015M
	01/06/16	Unknown	27.80	0.00	Unknown	2.0	0.72 J	<0.27	<0.17	2.72	0.57 J	***2.1 J***	***0.932***	***60.0***	8260B/8015M
	04/13/16	Unknown	27.65	0.00	Unknown	2.7	0.22 J	<0.27	<0.17	2.92	0.33	***0.92***	***1.37***	***86.2***	8260B/8015M
	07/06/16	Unknown	27.60	0.00	Unknown	2.6	<0.23	<0.20	<0.21	2.6	0.4 J	<0.39	***0.351***	***17.2***	8260B/8015M
	10/05/16	Unknown	27.82	0.00	Unknown	0.28	<0.23	<0.20	<0.21	0.28	0.63	<0.39	***0.980***	***207 a***	8260B/8015M

Table 1

GROUNDWATER GAUGING AND ANALYTICAL DATA SUMMARY

Pilot Travel Center #290
31 Heather Lane
Perryville, Maryland

Well ID	Date	Well Elevation	DTW	Product Thickness	GW Elevation (Corrected)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	BTEX (µg/l)	MTBE (µg/l)	Naphthalene (ug/l)	TPH-GRO (mg/L)	TPH - DRO (mg/l)	Analytical Methods
TF-1	01/23/13	Unknown	3.02	0.00	Unknown	<0.24	<0.23	1.5	1.9	3.4	<0.16	***6.3***	<0.040	***16.0***	8260B/8015M
	04/26/13	Unknown	2.72	0.00	Unknown	<0.24	0.77 J	1.9	8.2	10.87	<0.16	***5***	***0.216***	***13.3***	8260B/8015M
	07/19/13	Unknown	2.32	0.00	Unknown	<0.24	<0.23	0.84 J	1.6	1.24	<0.16	***4 J***	<0.038	***15.8***	8260B/8015M
	10/18/13	Unknown	2.59	0.00	Unknown	<0.28	<0.44	0.28 J	0.41 J	0.69	<0.29	***1.7 J***	<0.038	***3.9***	8260B/8015M
	01/17/14	Unknown	3.28	0.00	Unknown	0.60 J	5.0	1.3	7.9	14.8	<0.29	***2.3 J***	<0.038	***2.7***	8260B/8015M
	04/25/14	Unknown	5.39	0.00	Unknown	0.55	29.5	52.1	286	368.2	<0.29	***42.3***	***1.89***	***61.4***	8260B/8015M
	07/08/14	Unknown	3.73	0.00	Unknown	5.1	91.3	49.5	366	511.9	<0.26	***61.3***	***6.11***	***248 a***	8260B/8015M
	10/14/14	Unknown	6.11	0.00	Unknown	1.2	14.9	29.7	356	401.8	<0.26	***55.5***	***5.70***	***1370 a***	8260B/8015M
	01/15/15	Unknown	7.04	0.00	Unknown	2.3	4.2	12.8	170	189.3	<0.26	***24.2***	***1.25***	***328 a***	8260B/8015M
	04/08/15	Unknown	5.32	0.00	Unknown	<0.24	0.44 J	2.4	42.9	45.74	<0.24	***10.3***	***0.813***	***44.2***	8260B/8015M
	07/07/15	Unknown	5.00	0.00	Unknown	<0.24	0.39 J	2.3	22.5	25.19	<0.24	***9.1***	***0.455***	***29.5***	8260B/8015M
	10/05/15	Unknown	6.45	0.00	Unknown	1.3	<0.16	0.46 J	6.7	8.46	<0.24	***10.5***	<0.038	***7.75***	8260B/8015M
	01/06/16	Unknown	6.90	0.00	Unknown	1.7	31.6	23.6	126	182.9	<0.24	***11.0***	***1.02***	***24.0***	8260B/8015M
	04/13/16	Unknown	5.88	0.00	Unknown	***7.3***	69.6	41.8	177	295.7	<0.024	***14.1***	***1.36***	***196 a***	8260B/8015M
	07/06/16	Unknown	7.24	0.01	Unknown	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	10/05/16	Unknown	8.64	0.04	Unknown	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M

Table 1

GROUNDWATER GAUGING AND ANALYTICAL DATA SUMMARY

Pilot Travel Center #290
31 Heather Lane
Perryville, Maryland

Well ID	Date	Well Elevation	DTW	Product Thickness	GW Elevation (Corrected)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	BTEX (µg/l)	MTBE (µg/l)	Naphthalene (ug/l)	TPH-GRO (mg/L)	TPH - DRO (mg/l)	Analytical Methods
TF-2	01/23/13	Unknown	3.08	0.00	Unknown	0.30 J	<0.23	1.1	2.2	3.6	<0.16	***8.1***	<0.040	***49.3***	8260B/8015M
	04/26/13	Unknown	2.77	0.00	Unknown	<0.24	2.9	1.6	5.1	9.6	<0.16	***5.3***	<0.040	***11.5***	8260B/8015M
	07/19/13	Unknown	2.37	0.00	Unknown	<0.24	<0.23	1.5	3.2	4.7	<0.16	***12.7***	<0.038	***3.81***	8260B/8015M
	10/18/13	Unknown	2.65	0.00	Unknown	<0.28	<0.44	0.60 J	0.25 J	0.85	<0.29	***9.2***	<0.038	***2.26***	8260B/8015M
	01/17/14	Unknown	3.35	0.00	Unknown	<0.28	0.98 J	2.0	17	19.98	<0.29	***2.4 J***	<0.038	***5.02***	8260B/8015M
	04/25/14	Unknown	5.45	0.00	Unknown	0.73	1.2	1.7	9.1	12.73	<0.29	***3.0J***	***0.214***	***5.62***	8260B/8015M
	07/08/14	Unknown	3.77	0.00	Unknown	0.53	21.3	32.4	306	360.23	<0.26	***62.0***	***2.09***	***5.14***	8260B/8015M
	10/14/14	Unknown	6.19	0.00	Unknown	0.30 J	1.8	7.1	60.9	70.10	<0.26	***13.9***	***0.642***	***11.7***	8260B/8015M
	01/15/15	Unknown	7.09	0.00	Unknown	1.7	33.5	56.9	223	315.1	<0.26	***31.0***	***6.37***	***1290 a***	8260B/8015M
	04/08/15	Unknown	5.39	0.00	Unknown	0.40 J	6.5	21.3	84.6	112.80	<0.24	***14.1***	***1.15***	***189 a***	8260B/8015M
	07/07/15	Unknown	5.05	0.00	Unknown	2.0	2.5	19.8	63.0	87.3	<0.24	***13.9***	***0.773***	***11.6***	8260B/8015M
	10/05/15	Unknown	6.51	0.00	Unknown	1.4	0.20 J	3.2	7.4	12.2	<0.24	***8.2***	<0.038	***35.9***	8260B/8015M
	01/06/16	Unknown	6.93	0.02	Unknown	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	04/13/16	Unknown	5.95	0.00	Unknown	***12.4***	57	26.9	164.0	260.3	<0.24	13.5	***1.03***	***15.9***	8260B/8015M
	07/06/16	Unknown	7.27	Sheen	Unknown	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M
	10/05/16	Unknown	8.71	0.05	Unknown	NS	NS	NS	NS	NS	NS	NS	NS	NS	8260B/8015M

Notes:

TOC = Top of Casing 27.80
LPH = Liquid Phase Hydrocarbons (thickness in feet)
BTEX = Benzene, toluene, ethylbenzene and xylenes
MTBE = methyl tert butyl ether
TPH - GRO = total petroleum hydrocarbons - gasoline range organics
TPH - DRO = total petroleum hydrocarbons - diesel range organics
MDE Groundwater Standards for Type I and Type II Aquifers
Bolded values indicate concentrations above MDE standards.

µg/l = micrograms per liter
mg/l = milligrams per liter
< = Concentration is less than the detection limit
J = Estimated values
NS = Not sampled
Sheen = Product level less than 0.01'

Table 2

DPE OPERATION DATA

Pilot Travel Center #290
31 Heather Lane
Perryville, MD

Date	Operating Status		Operating Hours	Cumulative Operating Hours	Downtime	Inlet Vacuum	MW-2 Vacuum	MW-8 Vacuum	Discharge Stack Temperature	Transfer Pump Total	GW Recovered	Cumulative GW Recovered	Pump Rate	Storage Tank Level	Storage Tank Volume	Process Vapor Concentration	TPH Recovery Vapor	TPH Recovery Cum.	Comments
	Arrival	Departure	(hours)	(hours)	(hours)	(in hg)	(in hg)	(in hg)	(ºF)	(gallons)	(gallons)	(gallons)	(gpm)	(inches)	(gallons)	(ppmv)	(lbs)	(lbs)	
5/9/2012		Off	1	0	0	9	9.0	9.0	-	323,610	0	0	-	-	-	**38.0**	0.069	0.1	
5/11/2012	On	On	48	48	0	8	6.0	7.0	130	325,580	1,970	1,970	0.68	12.00	2,146.3	**30.0**	2.601	2.7	
5/16/2012	On	On	120	168	0	9	6.0	8.0	125	329,310	3,730	5,700	0.52	31.68	5,805.6	30.0	6.502	9.2	
5/18/2012	On	On	48	216	0	8	2.5	7.5	125	330,960	1,650	7,350	0.57	38.28	7,094.3	30.0	2.601	11.8	
5/25/2012	Off	On	144	360	24	9	7.0	9.0	100	335,570	4,610	11,960	0.53	58.32	10,884.6	30.0	7.803	19.6	
6/1/2012	Off	On	8	368	160	9	5.0	9.0	145	335,880	310	12,270	0.65	58.32	10,884.6	30.0	0.433	20.0	
6/8/2012	On	On	168	536	0	8.5	3.0	7.5	125	343,060	7,180	19,450	0.71	52.08	9,925.0	30.0	9.103	29.1	Lorco disposed of 6,200 gallons from storage tank.
6/15/2012	Off	On	53	589	115	8.5	4.5	8.5	140	345,330	2,270	21,720	0.71	39.48	7,278.4	**10.0**	0.957	30.1	Lorco disposed of 6,200 gallons from storage tank.
6/22/2012	On	On	168	757	0	9	5.0	11.5	150	352,440	7,110	28,830	0.71	54.60	10,116.5	10.0	3.034	33.1	
6/28/2012	Off	Off	9	766	135	9	6.0	8.0	100	352,840	400	29,230	0.71	57.48	10,692.2	10.0	0.170	33.3	Lorco disposed of 6,489 gallons from storage tank.
7/10/2012	Off	On	0	766	288	10	6.0	13.5	110	352,850	10	29,240		57.48	10,692.2	10.0	0.000	33.3	
7/19/2012	Off	Off	0	766	216		0.0	0.0		352,860	10	29,250		57.48	10,692.2	10.0	0.000	33.3	
7/23/2012	Off	On	0	766	96		0.0	0.0								10.0	0.000	33.3	
7/30/2012	On	On	168	934	0	10	5.0	10.5	124	352,860	0	29,250		57.84	10,692.2	10.0	3.034	36.3	
8/9/2012	Off	On	0	934	240	9.5	6.0	10.0	90	352,860	0	29,250		23.64	3,964.6	10.0	0.000	36.3	Lorco disposed of 3,930 gallons from storage tank.
8/17/2012	On	On	192	1126	0	10	6.0	7.5	125	358,620	5,760	35,010	0.50	29.52	5,253.3	10.0	3.468	39.8	
8/24/2012	On	On	168	1294	0	9.5	5.0	6.0	120	363,150	4,530	39,540	0.45	49.68	8,664.9	10.0	3.034	42.8	Lorco disposed of 6,661 gallons from storage tank.
8/31/2012	On	On	168	1462	0	10	6.0	7.0	125	367,530	4,380	43,920	0.43	31.00	5,253.3	10.0	3.034	45.8	
9/7/2012	On	On	168	1630	0	9.5	6.0	7.5	120	371,750	4,220	48,140	0.42	51.00	8,859.0	10.0	3.034	48.9	
9/14/2012	On	On	168	1798	0	10	7.0	10.0	100	375,710	3,960	52,100	0.39	65.64	11,758.6	10.0	3.034	51.9	Lorco disposed of 6,320 gallons from storage tank.
9/21/2012	On	On	168	1966	0	9.5	8.0	8.0	100	379,940	4,230	56,330	0.42	46.20	8,019.1	10.0	3.034	54.9	Lorco disposed of 6,298 gallons from storage tank.
9/28/2012	On	On	168	2134	0	10	6.0	9.5	110	383,950	4,010	60,340	0.40	29.00	4,885.1	10.0	3.034	58.0	Raised tube in MW-2; was 18' from TOC, now 16' from TOC
10/5/2012	On	On	168	2302	0	8	6.0	8.0	108	387,670	3,720	64,060	0.37	49.20	8,590.3	**50.5**	15.324	73.3	Installed transformer in remediation shed.
10/12/2012	On	On	164	2466	4	7	5.0	5.0	80	391,120	3,450	67,510	0.35	64.44	11,463.0	50.5	14.959	88.3	Lorco disposed of 6,396 gallons from storage tank.
10/18/2012	On	Off	144	2610	0	9.5	6.5	7.5	98	395,640	4,520	72,030	0.52			50.5	13.135	101.4	System shut-down for Groundwater Sampling.
10/19/2012	Off	On	0	2610	28	8	5.0	6.5	94	395,650	10	72,040		45.24	7,828.7	50.5	0.000	101.4	Lorco disposed of 6,298 gallons from storage tank. System Restart.
10/26/2012	On	On	168	2778	0	6	6.5	0.0	100	399,500	3,850	75,890	0.38	22.08	3,964.6	50.5	15.324	116.7	
11/2/2012	Off	On	142	2920	26	8.5	6.0	6.0	85	402,765	3,265	79,155	0.38	34.44	6,173.8	**16.1**	4.129	120.9	System off on arrival. System restarted.
11/8/2012	On	On	144	3064	0	8	6.0	6.0	86	409,104	6,339	85,494	0.73	55.00	9,637.8	16.1	4.187	125.0	Lorco disposed of 6,443 gallons from the storage tank.
11/15/2012	Off	Off	65	3129	103					411,950	2,846	88,340	0.73	26.40	4,332.8	16.1	1.890	126.9	System found off on arrival.
11/21/2012	Off	On	0	3129	144	11	6.5	7.5	70	411,950	0	88,340				16.1	0.000	126.9	System restarted.
11/30/2012	Off	On	2	3131	214	10	6.0	6.5	76	412,040	90	88,430	0.75	27.48	4,676.1	16.1	0.058	127.0	System found off on arrival. Lorco disposed of 4678 gallons from storage tank. System restarted.
12/7/2012	On	On	168	3299	0	10	5.0	6.0	72	415,520	3,480	91,910	0.35	22.20	3,624.5	**4.4**	1.335	128.3	
12/21/2012	On	On	336	3635	0	9	6.0	7.5	80	421,240	5,720	97,630	0.28	52.08	9,054.7	4.4	2.670	131.0	Space heater put in compound for winter.
12/28/2012	On	On	168	3803	0	10.5	5.5	6.0	72	424,220	2,980	100,610	0.30	64.80	11,566.9	4.4	1.335	132.3	Lorco disposed of 6,348 gallons from the storage tank.
1/4/2013	Off	On	35	3838	133	15.5	12.0	14.0	80	430,380	6,160	106,770	2.93	59.16	10,412.1	**16.5**	1.043	133.4	Discharge Line to storage tank was insulated to prevent freezing.
1/11/2013	On	On	168	4006	0	9.5	6.0	5.5	74	439,180	8,800	115,570	0.87	96.24	17,358.2	16.5	5.007	138.4	Lorco disposed of 6,444 gallons from the storage tank.
1/18/2013	On	On	168	4174	0	9.5	6.5	5.0	64	448,130	8,950	124,520	0.89	91.92	16,621.8	**2.2**	0.668	139.0	Lorco disposed of 6,396 gallons from the storage tank.
1/22/2013	Off	Off	72	4246	96					455,000	6,870	131,390	1.59	76.08	13,665.6			139.0	System off on arrival due to icing issues. System will remain off until repairs can be made.
1/23/2013	Off	Off	0	4246	0					455,000	0	131,390		76.08	13,665.6			139.0	Lorco disposed of 6,348 gallons from the storage tank. Raised tube in MW-2; was 16' TOC, now 13.8' TOC.
1/29/2013	Off	On	0	4246	144	15	12.0	0.0	148	455,130	130	131,520		41.76	7,115.6	2.2	0.000	139.0	System repairs: replaced transfer pump; insulated compound; insulated/heat traced discharge line. Restart.
2/1/2013	On	On	72	4318	0	14.5	12.0	0.0	142	456,720	1,590	133,110	0.37	50.52	8,762.4	**2.2**	0.286	139.3	
2/8/2013	On	On	168	4486	0	15	12.0	0.0	150	459,770	3,050	136,160	0.30	64.92	11,566.4	**3.8**	1.153	140.5	
2/15/2013	Off	On	18	4504	150	12.5	10.0	0.0	118	460,110	340	136,500	0.32	65.52	11,662.8	3.8	0.122	140.6	System off on arrival from high level. Lorco disposed of 4,891 gallons from the storage tank.
2/22/2013	Off	On	28	4532	140	9	9.0	0.0	120	460,720	610	137,110	0.36	46.00	7,882.5	3.8	0.193	140.8	System off on arrival from high level.
3/1/2013	Off	On	1	4534	167	11	7.5	9.0	100	460,760	40	137,150	0.51	46.08	7,882.5	**3.4**	0.008	140.8	System off on arrival from high level. Altered drop tube depth in MW-2: 15 ft. Turned MW-8 on.
3/8/2013	On	On	166	4700	0	10	8.0	10.0	130	466,370	5,610	142,760	0.56	70.92	12,713.7	**1.0**	0.300	141.1	
3/15/2013	Off	On	72	4772	96	9	6.0	7.0	120	468,910	2,540	145,300	0.59	81.12	14,596.7	**1.8**	0.235	141.3	System off on arrival from high level. Lorco disposed of 6,396 gallons from the storage tank.
3/22/2013	Off	On	7	4779	161	9.5	7.0	8.5	120	469,180	270	145,570	0.66	49.68	8,567.3	**1.9**	0.023	141.4	System off on arrival from high level. Changed high level float switch in knock-out tank.
3/29/2013	On	On	167	4946	0	10	7.0	11.0	140	475,890	6,710	152,280	0.67	74.04	13,284.8	**2.2**	0.664	142.0	
4/5/2013	On	On	166	5112	0	9	5.5	7.0	112	483,747	7,857	160,137	0.79	101.50	18,370.8	**6.1**	1.827	143.9	Lorco disposed of 6,444 gallons from the storage tank.
4/12/2013	On	On	169	5281	0	8	3.5	4.0	135	493,099	9,352	169,489	0.92	59.40	10,412.1	**2.2**	0.672	144.5	Lorco disposed of XXXX gallons from the storage tank. Lowered vacuum to pull less water.
4/19/2013	Off	Off	108	5389	60					529,612	36,513	206,002	5.63	91.20	16,437.7	2.2	0.429	145.0	System shut off 4/16 because frac tank was full. Lorco disposed of 6,875 gallons from the storage tank.
4/26/2013	Off	Off	2	5391	168	10	7.0	0.0	132	529,770	159	206,160	1.39	32.64	5,459.5	**1.4**	0.005	145.0	Lorco disposed of 6, 266 gallons from the storage tank. Ran pump test to remove product from MW-2.
5/2/2013	Off	Off	1	5392	143	9.5	10.0	0.0	130	529,820	50	206,210	0.76	33.00	5,546.3	**0.1**	0.000	145.0	Ran pump test to remove product from MW-2.
5/9/2013	Off	Off	3	5395	165	9.5	7.0	0.0	139	529,948	128	206,338	0.74	33.00	5,546.3	0.1	0.001	145.0	Ran pump test to remove product from MW-2.
5/17/2013	Off	Off	1	5396	191	13.5	13.5	0.0	160	530,010	62	206,400	0.74	33.60	5,546.3	**3.8**	0.010	145.0	Ran pump test to remove product from MW-2.
5/24/2013	Off	On	1	5397	167	12.5	9.0	0.0	132	530,057	47	206,447	0.78	33.12	5,546.3	3.8	0.007	145.0	Ran pump test to remove product from MW-2. Installed high tank level float in frac tank.
5/31/2013	On	On	165	5562	0	13	12.0	0.0	160	534,350	4,293	210,740	0.43	22.44	3,624.5	3.8	1.132	146.1	Lorco disposed of 6,489 gallons from storage tank.
6/7/2013	On	On	168	5730	0	9.5	12.0	0.0	140	538,420	4,070	214,810	0.40	9.60	1,500.3	**0.3**	0.091	146.2	Lorco disposed of about 5,991 gallons from storage tank. Altered drop tube depth in MW-2: 10.5 ft.
6/14/2013	On	On	169	5899	0	14	11.0	0.0	142	546,800	8,380	223,190	0.83	51.60	8,957.3	**0.5**	0.152	146.4	
6/21/2013	On	On	166	6065	0	11	6.0	0.0	140	548,810	2,010	225,200	0.20	60.60	10,797.9	**0.5**	0.150	146.5	
6/28/2013	On	On	170	6235	0	10	6.0	0.0	153	549,130	320	225,520	0.03	62.40	11,086.7	**0.1**	0.031	146.5	
7/3/2013	On	On	118	6353	0	12	9.5	0.0	150	549,490	360	225,880	0.05	29.40	4,850.6	0.1	0.021	146.6	Lorco disposed of 6,628 gallons from the storage tank.
7/12/2013	On	On	218	6571	0	12	8.0	0.0	150	555,660	6,170	232,050	0.47	54.84	9,637.8	**0.6**	0.237	146.8	
7/18/2013	On	Off	144	6715	0					557,920	2,260	234,310	0.26			0.6	0.156	147.0	System shut down for upcoming GWS event.
7/19/2013	Off	On	0	6715	0	12	9.0	0.0	170	557,920	0	234,310		63.00	11,182.9	**0.7**	0.000	147.0	Lorco disposed of 6,442 gallons from the storage tank.
7/26/2013	On	On	161	6876	0	11	7.0	0.0	142	562,020	4,100	238,410	0.42	44.52	7,589.2	**0.7**	0.204	147.2	
8/2/2013	On	On	170	7046	0	11.5	12.0	0.0	155	569,440	7,420	245,830	0.73	69.36	12,523.1	**4.2**	1.290	148.4	
8/9/2013	On	On	165	7212	0	12	8.5	0.0	150	569,510	70	245,900	0.01	39.48	6,583.2	**0.0**	0.000	148.4	Lorco disposed of 6,295 gallons from the storage tank.
8/16/2013	Off	On	101	7313	67	16	16.0	0.0	160	571,680	2,170	248,070	0.36	47.28	8,078.5	0.0	0.000	148.4	
8/23/2013	On	On	166	7479	0	15	13.0	0.0	150	579,720	8,040	256,110	0.81	83.28	14,964.9	**34.1**	10.212	158.7	Lorco disposed of 6,295 gallons from the storage tank. 0.01 feet of product was detected in the storage tank.
8/30/2013	Off	Off	161	7640	7					587,426	7,706	263,816	0.80	87.00	15,701.3	34.1	9.929	168.6	System down on arrival due to high storage tank level.
9/4/2013	Off	On	0	7640	120	9.5	8.5	0.0	122	587,440	14	263,830	0.57			34.1	0.025	168.6	Lorco disposed of 6,500 gallons from the storage tank. System restarted.
9/6/2013	On	On	47	7688	0	7	6.5	0.0	126	588,950	1,510	265,340	0.53	58.80	10,218.9	34.1	2.919	171.5	
9/13/2013	Off	On	163	7851	5	6	6.0	0.0	120	592,880	3,930	269,270	0.40	74.40	13,284.8	**1.1**	0.324	171.9	Lorco disposed of 6,443 gallons from the storage tank.
9/20/2013	On	On	160	8011	0	7	6.0	0.0	125	596,650	3,770	273,040	0.39	55.80	9,831.7	1.1	0.318	172.2	

Table 2

DPE OPERATION DATA

Pilot Travel Center #290
31 Heather Lane
Perryville, MD

Date	Operating Status		Operating Hours	Cumulative Operating Hours	Downtime	Inlet Vacuum	MW-2 Vacuum	MW-8 Vacuum	Discharge Stack Temperature	Transfer Pump Total	GW Recovered	Cumulative GW Recovered	Pump Rate	Storage Tank Level	Storage Tank Volume	Process Vapor Concentration	TPH Recovery Vapor	TPH Recovery Cum.	Comments
	Arrival	Departure	[hours]	[hours]	[hours]	[in hg]	[in hg]	[in hg]	[ºF]	[gallons]	[gallons]	[gallons]	[gallons/min]	[inches]	[gallons]	[ppmv]	(lbs)	(lbs)	
9/26/2013	On	On	154	8165	0	6.5	6.0	0.0	130	599,960	3,310	276,350	0.36	67.80	12,141.3	1.1	0.305	172.5	Lorco disposed of 6,534 gallons from the storage tank.
10/4/2013	On	On	188	8353	0	7.5	6.0	0.0	132	603,699	3,739	280,089	0.33	45.96	7,882.5	**32.3**	10.980	183.5	Lorco disposed of 6,538 gallons from the storage tank.
10/11/2013	Off	Off	80	8433	88					605,120	1,421	281,510	0.30	14.40	2,210.4	32.3	4.679	188.1	System off on arrival due to KO tank high level. System left off for upcoming GWS event.
10/18/2013	Off	On	1	8434	167	7	6.5	0.0	122	605,150	30	281,540	0.71	14.40	2,210.4	**7.0**	0.009	188.1	System restarted after GWS event.
10/25/2013	On	On	164	8597	0	5	5.0	0.0	105	608,010	2,860	284,400	0.29	26.16	4,326.5	**9.1**	2.689	190.8	
11/1/2013	On	On	167	8764	0	8.5	7.0	0.0	132	611,020	3,010	287,410	0.30	37.20	6,238.5	**6.3**	1.896	192.7	
11/8/2013	On	On	168	8932	0	7	6.0	4.0	108	613,810	2,790	290,200	0.28	48.00	8,274.2	6.3	1.913	194.6	Lorco disposed of 6,394 gallons from the storage tank. Re-started MW-8; drop tube length = 6.5'.
11/15/2013	On	On	168	9100	0	7	7.0	5.5	105	616,887	3,077	293,277	0.31	20.40	3,272.2	6.3	1.908	196.6	
11/22/2013	Off	Off	101	9201	67					635,050	18,164	311,440	2.99	72.00	12,904.0	6.3	1.154	197.7	System down on arrival due to KO tank high level alarm. System left off pending storage tank vac out.
11/27/2013	Off	On	0	9202	120	5	4.5	2.5	100	635,150	100	311,540		72.00	12,904.0	6.3	0.005	197.7	Lorco disposed of 6,243 gallons from the storage tank. System restarted.
12/6/2013	Off	On	72	9273	145	2.5	2.5	2.0	100	650,680	15,530	327,070	3.62	54.00	9,443.7	6.3	0.814	198.5	System down on arrival due to high storage tank level. Lorco disposed of 6,360 gallons from the storage tank.
12/13/2013	On	On	167	9440	0	4	4.0	3.5	90	652,260	1,580	328,650	0.16	25.92	4,326.5	**8.1**	2.446	201.0	Lorco disposed of 3,794 gallons from the storage tank. Changed drop tube lengths: MW-2 = 11.5' and MW-8 = 10.5'.
12/20/1013	On	On	168	9609	0	5	4.5	5.5	96	654,820	2,560	331,210	0.25	13.80	2,210.1	8.1	2.462	203.4	
12/27/2013	On	On	169	9778	0	5	5.0	6.0	108	656,730	1,910	333,120	0.19	22.32	3,624.5	8.1	2.473	205.9	
1/2/2014	On	On	145	9922	0	5.5	5.0	6.5	106	658,370	1,640	334,760	0.19	29.16	4,850.6	8.1	2.118	208.0	Changed drop tube lengths: MW-2 = 12.5' and MW-8 = 11.5'.
1/10/2014	On	On	187	10109	0	5	5.0	6.0	100	661,070	2,700	337,460	0.24	39.48	6,583.2	**5.0**	1.690	209.7	
1/16/2014	Off	Off	94	10203	50	6	3.0	3.0	94	668,010	6,940	344,400	1.23	57.84	10,218.9	5.0	0.847	210.6	System down on arrival due to KO tank high level alarm. System left off for upcoming GWS event.
1/17/2014	Off	On	0	10203	24					668,010	0	344,400				5.0	0.000	210.6	System restart after GWS event.
1/24/2014	Off	On	47	10251	121					670,690	2,680	347,080	0.94	37.26	5,372.7	5.0	0.427	211.0	Lorco disposed of liquids from the storage tank on 1/20/2014. System off on arrival due to icing issues. System remains off pending replacement parts.
2/3/2014	On	On	233	10484	0	7	4.0	5.0		30	30	347,110	0.00	37.26	5,372.7	5.0	2.104	213.1	Replaced damaged parts. Changed drop tube lengths: MW-2 = 13' and MW-8 = 13'.
2/7/2014	On	On	92	10576	0	5.5	5.0	5.0		1,260	1,230	348,340	0.22	39.60	6,756.6	**3.0**	0.499	213.6	Placed sump pump in frac tank for circulation. Changed drop tube lengths: MW-2 = 14' and MW-8 = 14'.
2/14/2014	On	On	167	10743	0	6.5	4.0	4.5	80	4,501	3,241	351,581	0.32	55.80	9,792.9	3.0	0.907	214.5	
2/21/2014	On	On	167	10910	0	8	5.0	6.5	80	6,820	2,319	353,900	0.23	67.80	12,141.3	3.0	0.904	215.4	Lorco disposed of 6,293 gallons from the storage tank.
2/28/2014	Off	Off	123	11033	45					8,513	1,838	355,738		45.00	7,686.4	3.0	0.669	216.1	System down on arrival; suspected capacitor failure. System will remain off pending replacement parts. Lorco disposed of 6,238 gallons.
3/7/2014	Off	Off	0	11033	168						0	355,738		45.00	7,686.4			216.1	System will remain off pending replacement parts.
3/14/2014	Off	Off	0	11033	168						0	355,738		45.00	7,686.4			216.1	Temporary system shut-down to monitor product rebound.
3/21/2014	Off	Off	0	11033	168						0	355,738		45.00	7,686.4			216.1	Temporary system shut-down to monitor product rebound.
3/28/2014	Off	Off	0	11033	168						0	355,738		45.00	7,686.4			216.1	Temporary system shut-down to monitor product rebound.
4/4/2014	Off	Off	0	11033	168						0	355,738		45.00	7,686.4			216.1	Temporary system shut-down to monitor product rebound.
4/11/2014	Off	Off	0	11033	168						0	355,738		45.00	7,686.4			216.1	Temporary system shut-down to monitor product rebound.
4/17/2014	Off	Off	0	11033	144						0	355,738		45.00	7,686.4			216.1	Temporary system shut-down to monitor product rebound.
4/25/2014	Off	Off	0	11033	192						0	355,738		45.00	7,686.4			216.1	Temporary system shut-down to monitor product rebound.
5/2/2014	Off	Off	0	11033	168						0	355,738		45.00	7,686.4			216.1	Temporary system shut-down to monitor product rebound.
5/9/2014	Off	Off	0	11033	168						0	355,738		45.00	7,686.4			216.1	Temporary system shut-down to monitor product rebound.
5/16/2014	Off	Off	0	11033	168						0	355,738		45.00	7,686.4			216.1	Temporary system shut-down to monitor product rebound.
5/23/2014	Off	Off	0	11033	168						0	355,738		45.00	7,686.4			216.1	Temporary system shut-down to monitor product rebound.
5/30/2014	Off	On	1	11034	167	16	15.0	0.0	134	8,538	8,538	364,276	0.46	10.92	1,677.7	3.0	0.005	216.1	System restarted.
5/30/2014	On	On	0	11035	0	10	9.5	0.0	124	8,550	12	364,288	0.50	10.92	1,677.7	3.0	0.002	216.1	
6/6/2014	On	On	165	11200	0	11	10.0	0.0	140	10,716	2,166	366,454	0.22	22.68	3,800.3	3.0	0.895	217.0	
6/13/2014	On	On	169	11368	0	11	10.0	12.0	142	12,831	2,115	368,569	0.21	35.64	5,978.9	**31.0**	9.446	226.4	
6/20/2014	Off	On	63	11432	105	10	10.5	8.5	82	13,679	848	369,417	0.22	39.24	6,583.2	31.0	3.544	230.0	System down on arrival due to high knock out level alarm. System restarted.
6/25/2014	Off	Off	12	11444	108					13,863	184	369,601	0.25	41.52	6,934.1	31.0	0.678	230.6	System down on arrival due to high knock out level alarm. System left off to monitor product. Lorco disposed of 6,242 gallons.
7/2/2014	Off	Off	0	11444	168						0	369,601		10.80	1,677.7			230.6	Temporary system shut-down to monitor product rebound.
7/8/2014	Off	Off	0	11444	144						0	369,601		10.80	1,677.7			230.6	Temporary system shut-down to monitor product rebound.
7/16/2014	Off	Off	0	11444	192						0	369,601		10.80	1,677.7			230.6	Temporary system shut-down to monitor product rebound.
7/30/2014	Off	Off	0	11444	336						0	369,601		10.80	1,677.7			230.6	Temporary system shut-down to monitor product rebound.
8/13/2014	Off	Off	0	11444	336						0	369,601		10.80	1,677.7			230.6	Temporary system shut-down to monitor product rebound.
8/27/2014	Off	Off	0	11444	336						0	369,601		10.80	1,677.7			230.6	Temporary system shut-down to monitor product rebound.
9/10/2014	Off	Off	0.3	11444	336					13,871	9	369,610	0.48	11.88	1,855.2	31.0	0.017	230.7	System restarted to remove product from MW-2. System shut off before departure.
9/17/2014	Off	Off	0	11444	168						0	369,610		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
9/24/2014	Off	Off	0	11444	168						0	369,610		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
10/1/2014	Off	Off	0	11444	168						0	369,610		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
10/8/2014	Off	Off	0	11444	168						0	369,610		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
10/14/2014	Off	Off	0	11444	144						0	369,610		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
10/29/2014	Off	Off	0.5	11445	360					13,886	15	369,624	0.49	11.88	1,855.2	31.0	0.028	230.7	System restarted to remove product from MW-2. System shut off before departure.
11/5/2014	Off	Off	0	11445	168						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
11/12/2014	Off	Off	0	11445	168						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
11/19/2014	Off	Off	0	11445	168						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound. Turned on heat trace and heater for winterization.
11/26/2014	Off	Off	0	11445	168						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
12/3/2014	Off	Off	0	11445	168						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound. Response to alarm; sump overfill.
12/17/2014	Off	Off	0	11445	336						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
12/31/2014	Off	Off	0	11445	336						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
1/14/2015	Off	Off	0	11445	336						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound. Bailed product from MW-2.
1/21/2015	Off	Off	0	11445	168						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
1/28/2015	Off	Off	0	11445	168						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
2/4/2015	Off	Off	0	11445	168						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
2/11/2015	Off	Off	0	11445	168						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
2/25/2015	Off	Off	0	11445	336						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
3/12/2015	Off	Off	0	11445	360						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
3/25/2015	Off	Off	0	11445	312						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
4/8/2015	Off	Off	0	11445	336						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
5/6/2015	Off	Off	0	11445	672						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
6/3/2015	Off	Off	0	11445	672						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
7/7/2015	Off	Off	0	11445	816						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
8/12/2015	Off	Off	0	11445	864						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
9/2/2015	Off	Off	0	11445	504						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
10/5/2015	Off	Off	0	11445	792						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.

Table 2

DPE OPERATION DATA

Pilot Travel Center #290
31 Heather Lane
Perryville, MD

Date	Operating Status		Operating Hours	Cumulative Operating Hours	Downtime	Inlet Vacuum	MW-2 Vacuum	MW-8 Vacuum	Discharge Stack Temperature	Transfer Pump Total	GW Recovered	Cumulative GW Recovered	Pump Rate	Storage Tank Level	Storage Tank Volume	Process Vapor Concentration	TPH Recovery Vapor	TPH Recovery Cum.	Comments
	Arrival	Departure	(hours)	(hours)	(hours)	(in hg)	(in hg)	(in hg)	(°F)	(gallons)	(gallons)	(gallons)	(gpm)	(inches)	(gallons)	(ppmv)	(lbs)	(lbs)	
11/11/2015	Off	Off	0	11445	888						0	369,624		11.88	1,855.2			230.7	Temporary system shut-down to monitor product rebound.
12/2/2015	Off	Off	0	11445	504						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
1/6/2016	Off	Off	0	11445	840						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
2/3/2016	Off	Off	0	11445	672						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
2/8/2016	Off	Off	0	11445	120						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
2/17/2016	Off	Off	0	11445	216						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
2/24/2016	Off	Off	0	11445	168						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
3/2/2016	Off	Off	0	11445	168						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
3/9/2016	Off	Off	0	11445	168						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
3/16/2016	Off	Off	0	11445	168						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
3/23/2016	Off	Off	0	11445	168						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
3/31/2016	Off	Off	0	11445	192						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
4/6/2016	Off	Off	0	11445	144						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
4/13/2016	Off	Off	0	11445	168						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
4/20/2016	Off	Off	0	11445	168						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
4/27/2016	Off	Off	0	11445	168						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
5/4/2016	Off	Off	0	11445	168						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
5/11/2016	Off	Off	0	11445	168						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
6/1/2016	Off	Off	0	11445	504						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
7/6/2016	Off	Off	0	11445	840						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
8/3/2016	Off	Off	0	11445	672						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
9/7/2016	Off	Off	0	11445	840						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
9/15/2016	Off	Off	0	11445	192						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
9/20/2016	Off	Off	0	11445	120						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
9/28/2016	Off	Off	0	11445	192						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
10/5/2016	Off	Off	0	11445	168						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
10/13/2016	Off	Off	0	11445	192						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
10/19/2016	Off	Off	0	11445	144						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.
10/26/2016	Off	Off	0	11445	168						0	369,624		0.00	0.0			230.7	Temporary system shut-down to monitor product rebound.

Table 3

MONITORING WELL GAUGING DATA

Pilot Travel Center #290
31 Heather Lane
Perryville, Maryland

Date	MW-1			MW-2			MW-3			MW-4R			MW-5			MW-6			MW-7			MW-8			MW-9			MW-10			TF-1			TF-2		
	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness
	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)
05/09/12	12.26	--	0.00	17.80	17.16	0.64	11.28	--	0.00	28.02	--	0.00	15.02	--	0.00	17.90	--	0.00	15.94	--	0.00	14.26	13.90	0.36	--	--	--	--	--	--	8.38	8.37	0.01	8.46	--	0.00
05/11/12	12.62	--	0.00	15.17	15.16	0.01	11.46	--	0.00	26.54	--	0.00	16.37	--	0.00	18.03	--	0.00	16.15	--	0.00	16.00	--	0.00	21.29	--	0.00	28.37	--	0.00	8.31	8.29	0.02	8.39	--	0.00
05/16/12	12.60	--	0.00	15.16	15.14	0.02	11.42	--	0.00	26.55	--	0.00	16.33	--	0.00	18.01	--	0.00	16.13	--	0.00	16.00	--	0.00	21.28	--	0.00	28.34	--	0.00	8.30	--	0.00	8.40	--	0.00
06/15/12	12.57	--	0.00	14.75	--	0.00	11.34	--	0.00	28.10	--	0.00	16.35	--	0.00	--	--	--	16.06	--	0.00	15.20	--	0.00	21.30	--	0.00	--	--	--	7.91	--	0.00	8.00	--	0.00
07/23/12	12.65	--	0.00	14.57	--	0.00	11.58	--	0.00	26.47	--	0.00	16.37	--	0.00	18.18	--	0.00	16.26	--	0.00	14.19	--	0.00	21.39	--	0.00	28.04	--	0.00	10.30	--	0.00	10.42	--	0.00
08/09/12	12.73	--	0.00	14.69	14.52	0.17	11.67	--	0.00	26.30	--	0.00	16.35	--	0.00	18.02	--	0.00	16.26	--	0.00	14.21	14.17	0.04	21.65	--	0.00	28.05	--	0.00	10.12	10.09	0.03	10.21	--	0.00
09/07/12	13.40	--	0.00	15.91	15.71	0.20	12.15	--	0.00	26.31	--	0.00	16.75	--	0.00	18.22	--	0.00	16.94	--	0.00	15.21	--	0.00	dry	--	0.00	28.56	28.53	0.03	11.10	11.00	0.10	11.18	11.10	0.08
10/05/12	13.49	--	0.00	16.20	--	0.00	12.45	--	0.00	26.49	--	0.00	16.78	--	0.00	18.13	--	0.00	17.24	--	0.00	15.30	--	0.00	dry	--	0.00	28.76	28.66	0.1	11.00	--	0.00	11.12	--	0.00
11/08/12	13.36	--	0.00	16.33	--	0.00	12.01	--	sheen	26.41	--	0.00	16.78	--	0.00	18.23	--	0.00	16.30	--	0.00	--	--	--	dry	--	0.00	28.62	28.59	0.03	7.42	--	0.00	--	--	--
12/07/12	13.42	--	0.00	15.60	--	0.00	12.12	--	0.00	26.50	--	0.00	16.72	--	0.00	22.85	--	0.00	16.57	--	0.00	15.20	--	0.00	dry	--	0.00	28.47	--	0.00	9.80	--	0.00	9.90	--	0.00
01/04/13	12.59	--	0.00	18.26	--	0.00	11.59	--	0.00	26.13	--	0.00	16.32	--	0.00	18.40	--	0.00	14.00	--	0.00	15.12	--	0.00	14.01	--	0.00	27.45	--	0.00	3.82	--	0.00	--	--	--
01/23/13	11.94	--	0.00	12.38	12.36	0.02	11.14	--	0.00	28.17	--	0.00	16.23	--	0.00	18.24	--	0.00	13.38	--	0.00	4.24	--	0.00	13.04	--	0.00	27.52	--	0.00	3.02	--	0.00	3.08	--	0.00
02/15/13	11.89	--	0.00	14.41	--	0.00	10.75	--	0.00	26.48	--	0.00	16.40	--	0.00	18.03	--	0.00	13.73	--	0.00	13.50	--	0.00	13.97	--	0.00	28.21	--	0.00	5.11	--	0.00	5.17	--	0.00
03/01/13	11.82	--	0.00	13.74	--	sheen	10.66	--	0.00	26.33	--	0.00	16.24	--	0.00	17.95	--	0.00	13.87	--	0.00	13.31	--	0.00	13.79	--	0.00	28.06	--	0.00	5.88	--	0.00	5.92	--	0.00
04/12/13	11.07	--	0.00	14.60	--	0.00	10.89	--	0.00	26.15	--	0.00	16.52	--	0.00	17.43	--	0.00	13.89	--	0.00	14.80	--	0.00	dry	--	0.00	28.45	--	0.00	4.15	--	0.00	4.19	--	0.00
04/19/13	9.86	--	0.00	11.75	11.74	0.01	10.22	--	0.00	25.88	--	0.00	16.09	--	0.00	17.77	--	0.00	11.83	--	0.00	4.12	--	0.00	13.28	--	0.00	27.35	--	0.00	2.92	--	0.00	2.98	--	0.00
05/02/13	9.78	--	0.00	11.97	11.80	0.17	9.65	--	0.00	26.02	--	0.00	16.02	--	0.00	17.60	--	0.00	11.63	--	0.00	3.74	--	0.00	13.60	--	0.00	27.39	--	0.00	2.59	--	0.00	2.64	--	0.00
05/09/13	8.38	--	0.00	12.00	11.65	0.35	9.53	--	0.00	25.62	--	0.00	16.01	--	0.00	17.35	--	0.00	11.24	--	0.00	3.63	--	0.00	13.63	--	0.00	27.30	27.25	0.05	2.48	--	0.00	2.55	--	0.00
05/17/13	8.70	--	0.00	12.28	11.69	0.59	9.52	--	0.00	27.90	--	0.00	17.96	--	0.00	17.27	--	0.00	11.77	--	0.00	3.63	--	0.00	13.86	--	0.00	27.37	27.35	0.02	2.48	--	0.00	2.54	--	0.00
05/24/13	7.19	--	0.00	11.97	11.33	0.64	9.85	--	0.00	25.42	--	0.00	15.92	--	0.00	16.97	--	0.00	10.78	--	0.00	3.57	--	0.00	13.61	--	0.00	27.22	--	0.00	2.42	--	0.00	2.49	--	0.00
05/31/13	7.24	--	0.00	15.22	--	0.00	9.12	--	0.00	25.82	--	0.00	15.90	--	0.00	17.00	--	0.00	10.75	--	0.00	3.57	--	0.00	13.71	--	0.00	27.53	27.48	0.05	2.41	--	0.00	2.46	--	0.00
06/07/13	7.13	--	0.00	9.17	--	0.00	9.10	--	0.00	25.50	--	0.00	15.82	--	0.00	16.9	--	0.00	11.06	--	0.00	3.28	--	0.00	13.47	--	0.00	27.42	--	0.00	2.12	--	0.00	2.20	--	0.00
06/28/13	6.53	--	0.00	4.77	--	0.00	6.84	--	0.00	25.62	--	0.00	15.22	--	0.00	16.58	--	0.00	9.85	--	0.00	3.46	--	0.00	13.20	--	0.00	27.08	--	0.00	2.32	--	0.00	2.37	--	0.00
07/03/13	6.21	--	0.00	5.08	--	0.00	7.67	--	0.00	25.21	--	0.00	15.68	--	0.00	--	--	--	6.23	--	0.00	3.54	--	0.00	12.98	--	0.00	27.04	27.03	0.01	2.35	--	0.00	2.41	--	0.00
07/12/13	--	--	--	8.95	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.45	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
07/19/13	5.85	--	0.00	4.78	--	0.00	6.11	--	0.00	25.55	--	0.00	15.65	--	0.00	16.59	--	0.00	9.81	--	0.00	3.47	--	0.00	13.05	--	0.00	27.11	--	0.00	2.32	--	0.00	2.37	--	0.00
07/26/13	--	--	--	6.41	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	9.36	--	0.00	3.49	--	0.00	13.16	--	0.00	27.15	--	0.00	--	--	--	2.40	--	0.00
08/02/13	5.29	--	0.00	10.86	--	0.00	6.98	--	0.00	25.35	--	0.00	15.74	--	0.00	16.19	--	0.00	9.43	--	0.00	3.49	--	0.00	12.91	--	0.00	27.28	27.21	0.07	2.32	--	0.00	2.40	--	0.00
08/09/13	5.52	--	0.00	8.80	--	0.00	6.44	--	0.00	25.55	--	0.00	15.65	--	0.00	15.57	--	0.00	9.70	--	0.00	3.47	--	0.00	13.07	--	0.00	27.10	--	0.00	2.32	--	0.00	2.39	--	0.00
08/16/13	5.39	--	0.00	8.55	--	0.00	6.22	--	0.00	--	--	--	--	--	--	--	--	--	9.62	--	0.00	3.55	--	0.00	--	--	--	27.12	--	0.00	2.35	--	0.00	2.41	--	0.00
08/23/13	--	--	--	11.16	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/06/13	5.70	--	0.00	10.91	--	0.00	6.68	--	0.00	25.57	--	0.00	15.74	--	0.00	16.79	--	0.00	9.71	--	0.00	3.65	--	0.00	13.07	--	0.00	27.4	27.38	0.02	2.49	--	0.00	2.55	--	0.00
09/26/13	--	--	--	10.81	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.67	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
10/11/13	8.05	--	0.00	10.97	--	0.00	7.22	--	0.00	25.67	--	0.00	15.70	--	0.00	16.82	--	0.00	11.08	--	0.00	4.04	--	0.00	13.15	--	0.00	27.21	--	0.00	2.86	--	0.00	2.92	--	0.00
10/18/13	5.94	--	0.00	11.41	11.25	0.16	7.08	--	0.00	25.71	--	0.00	15.73	--	0.00	16.91	--	0.00	10.12	--	0.00	3.72	--	0.00	13.17	--	0.00	27.28	--	0.00	2.59	--	0.00	2.65	--	0.00
10/25/13	--	--	--	10.75	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.71	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
11/01/13	5.82	--	0.00	10.82	--	0.00	8.81	--	0.00	25.05	--	0.00	15.79	--	0.00	16.95	--	0.00	9.92	--	0.00	4.50	--	0.00	13.41	--	0.00	27.12	--	0.00	3.32	--	0.00	3.39	--	0.00
11/08/13	--	--	--	10.76	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.57	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
11/15/13	--	--	--	10.80	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.92	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
11/22/13	--	--	--	11.65	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.00	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
11/27/13	--	--	--	11.74	11.72	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.15	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/06/13	--	--	--	12.99	12.82	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.87	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/13/13	8.69	--	0.00	10.79	--	0.00	9.85	--	0.00	25.92	--	0.00	15.91	--	0.00	17.37	--	0.00	11.00	--	0.00	10.52	--	0.00	13.22	--	0.00	27.66	--	0.00	4.53	--	0.00	4.60	--	0.00
12/20/1013	--	--	--	11.92	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.40	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
12/27/13	--	--	--	11.92	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.55	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
01/02/14	--	--	--	11.92	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.50	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
01/10/14	--	--	--	12.84	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.80	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
01/16/14	--	--	--	11.75	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.68	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
02/03/14	--	--	--	11.95	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.00	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
02/07/14	9.65	--	0.00	13.16	--	0.00	9.81	--	0.00	26.25	--	0.00	16.04	--	0.00	17.58	--	0.00	11.77	--	0.00	12.21	--	0.00	13.84	--	0.00	19.97	--	0.00	4.58	--	0.00	4.64	--	0.00
02/21/14	--	--	--	13.41	13.40	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.25	--	0.00	--	--	--	27.95	--	0.00	--	--	--	--	--	--
02/28/14	--	--	--	13.14	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.48	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
03/07/14	9.96	--	0.00	13.11	--	0.00	9.93	--	0.00	26.21	--	0.00	15.97	--	0.00	17.52	--	0.00	11.40	--	0.00	12.10	--	0.00	13.62	--	0.00	27.78	--	0.00	5.25	--	0.00	5.31	--	0.00
03/14/14	--	--	--	13.22	13.20	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.24	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
03/21/14	--	--	--	13.12	13.07	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.26	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
03/28/14	--	--	--	13.17	13.15	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.28	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
04/04/14	9.27	--	0.00	13.14	13.09	0.05	10.14	--	0.00	26.18	--	0.00	16.00	--	0.00	17.55	--	0.00	11.54	--	0.00	12.18	--	0.00	13.64	--	0.00	27.78	--	0.00	5.34	--	0.00	5.41	--	0.00
04/11/14	--	--	--	13.02	12.96	0.06	--	--	--	--	--	--	--	--	--	--	--	--	11.55	--	0.00	12.18	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
04/17/14	--	--	--	12.97	12.85	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.25	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--

Table 3

MONITORING WELL GAUGING DATA

Pilot Travel Center #290
31 Heather Lane
Perryville, Maryland

Date	MW-1			MW-2			MW-3			MW-4R			MW-5			MW-6			MW-7			MW-8			MW-9			MW-10			TF-1			TF-2		
	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness
	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)
04/25/14	8.65	--	0.00	12.87	12.80	0.07	9.84	--	0.00	26.14	--	0.00	16.07	--	0.00	17.38	--	0.00	11.43	--	0.00	12.04	--	0.00	13.55	--	0.00	27.82	--	0.00	5.39	--	0.00	5.45	--	0.00
05/02/14	--	--	--	11.25	11.18	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.11	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
05/09/14	7.33	--	0.00	12.47	12.40	0.07	9.36	--	0.00	25.91	--	0.00	16.01	--	0.00	17.22	--	0.00	10.78	--	0.00	11.70	--	0.00	13.1	--	0.00	27.71	--	0.00	4.52	--	0.00	4.58	--	0.00
05/16/14	--	--	--	12.06	11.99	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.48	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
05/23/14	--	--	--	12.51	12.42	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.68	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
05/30/14	--	--	--	11.98	11.88	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.65	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
05/30/14	--	--	--	14.18	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/06/14	--	--	--	14.19	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.29	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
06/13/14	7.96	--	0.00	14.14	--	0.00	9.66	--	0.00	25.88	--	0.00	16.00	--	0.00	17.02	--	0.00	10.95	--	0.00	12.05	--	0.00	13.13	--	0.00	27.7	--	0.00	4.54	--	0.00	4.61	--	0.00
06/20/14	--	--	--	13.26	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.69	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
06/25/14	--	--	--	12.25	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.77	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
07/02/14	--	--	--	12.24	12.20	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.14	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
07/08/14	--	--	--	11.56	11.51	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.03	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
07/16/14	--	--	--	10.61	10.58	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.82	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
07/30/14	--	--	--	10.99	10.97	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.88	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
08/13/14	8.00	--	0.00	12.71	12.69	0.02	8.63	--	0.00	25.59	--	0.00	15.96	--	0.00	17.36	--	0.00	9.62	--	0.00	11.76	--	0.00	12.59	--	0.00	27.26	--	0.00	4.55	--	0.00	4.51	--	0.00
08/27/14	--	--	--	13.12	13.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.22	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
09/10/14	10.75	--	0.00	13.61	13.40	0.21	9.56	--	0.00	26.04	--	0.00	16.02	--	0.00	17.65	--	0.00	12.25	--	0.00	12.50	--	0.00	13.32	--	0.00	27.62	--	0.00	6.96	6.94	0.02	7.00	--	0.00
09/17/14	--	--	--	13.25	13.23	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.43	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
09/24/14	--	--	--	12.42	12.41	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.76	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
10/01/14	--	--	--	13.20	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.43	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
10/08/14	--	--	--	13.26	13.22	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.56	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
10/14/14	10.71	--	0.00	13.12	13.11	0.01	10.14	--	0.00	25.95	--	0.00	16.70	--	0.00	17.78	--	0.00	12.11	--	0.00	12.79	--	0.00	13.52	--	0.00	27.58	--	0.00	6.11	--	0.00	6.19	--	0.00
10/29/14	--	--	--	13.50	13.40	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.64	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
11/05/14	--	--	--	13.12	13.11	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.79	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
11/12/14	--	--	--	13.17	13.15	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.83	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
11/19/14	--	--	--	13.26	13.23	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.98	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
11/26/14	--	--	--	12.75	12.70	0.05	10.53	--	0.00	19.60	--	0.00	16.13	--	0.00	17.88	--	0.00	13.02	--	0.00	12.97	--	0.00	13.21	--	0.00	27.3	--	0.00	7.23	7.19	0.04	7.36	7.28	0.08
12/03/14	--	--	--	13.04	13.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.98	--	0.00	--	--	--	--	--	--	6.77	6.75	0.02	6.86	6.81	0.05
12/17/14	10.80	--	0.00	12.67	12.65	0.02	10.72	--	0.00	26.10	--	0.00	16.19	--	0.00	17.93	--	0.00	12.89	--	0.00	13.15	--	0.00	13.47	--	0.00	25.03	--	0.00	7.25	7.21	0.04	7.31	7.29	0.02
12/31/14	--	--	--	13.66	13.64	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.25	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
01/14/15	--	--	--	13.79	13.58	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.20	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
01/21/15	--	--	--	14.04	14.01	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.34	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
01/28/15	--	--	--	13.98	13.96	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.26	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
02/04/15	--	--	--	16.70	16.68	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.18	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
02/11/15	11.11	--	0.00	13.97	13.94	0.03	10.72	--	0.00	26.10	--	0.00	16.17	--	0.00	17.97	--	0.00	13.02	--	0.00	13.21	--	0.00	13.26	--	0.00	27.77	--	0.00	6.74	--	0.00	6.83	6.79	0.04
02/25/15	--	--	--	14.02	14.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.21	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
03/12/15	11.01	--	0.00	13.95	13.94	0.01	10.68	--	0.00	26.39	--	0.00	16.25	--	0.00	17.97	--	0.00	13.05	--	0.00	13.12	--	0.00	13.82	--	0.00	27.09	--	0.00	5.34	--	0.00	5.40	--	0.00
03/25/15	--	--	--	13.69	13.68	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.80	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
04/08/15	9.51	--	0.00	13.72	--	0.00	10.24	--	0.00	25.82	--	0.00	16.12	--	0.00	17.70	--	0.00	12.06	--	0.00	12.68	--	0.00	13.53	--	0.00	27.45	--	0.00	5.32	--	0.00	5.39	--	0.00
05/06/15	10.21	--	0.00	13.69	13.68	0.01	10.05	--	0.00	26.27	--	0.00	16.15	--	0.00	17.57	--	0.00	12.10	--	0.00	12.56	--	0.00	13.66	--	0.00	27.78	--	0.00	5.64	--	0.00	5.72	--	0.00
06/03/15	10.40	--	0.00	13.68	--	0.00	10.14	--	0.00	25.99	--	0.00	dry	--	0.00	dry	--	0.00	12.10	--	0.00	12.49	--	0.00	13.60	--	0.00	27.34	--	0.00	5.60	--	0.00	5.55	--	0.00
07/07/15	8.46	--	0.00	13.47	13.44	0.03	9.86	--	0.00	25.76	--	0.00	16.12	--	0.00	17.44	--	0.00	11.14	--	0.00	12.21	--	0.00	13.28	--	0.00	27.42	--	0.00	5.00	--	0.00	5.05	--	0.00
08/12/15	10.02	--	0.00	13.48	13.42	0.06	9.65	--	0.00	25.60	--	0.00	16.05	--	0.00	17.23	--	0.00	11.12	--	0.00	12.38	--	0.00	13.05	--	0.00	27.23	--	0.00	6.11	--	0.00	6.19	--	0.00
09/02/15	10.45	--	0.00	13.84	13.77	0.07	10.21	--	0.00	26.02	--	0.00	16.11	--	0.00	17.61	--	0.00	11.98	--	0.00	12.73	--	0.00	13.68	--	0.00	27.90	--	0.00	7.27	7.25	0.02	7.31	--	0.00
10/05/15	16.44	--	0.00	13.65	13.63	0.02	10.72	--	0.00	26.10	--	0.00	16.14	--	0.00	17.81	--	0.00	12.44	--	0.00	12.83	--	0.00	13.73	--	0.00	27.63	--	0.00	6.45	--	0.00	6.51	--	0.00
11/11/15	11.94	--	0.00	13.96	13.91	0.05	11.29	--	0.00	26.10	--	0.00	16.21	--	0.00	17.98	--	0.00	13.02	--	0.00	13.33	--	0.00	13.76	--	0.00	27.55	--	0.00	9.96	9.95	0.01	8.03	8.00	0.03
12/02/15	11.12	--	0.00	13.94	13.9	0.04	12.08	--	0.00	26.23	--	0.00	16.25	--	0.00	18.08	--	0.00	13.14	--	0.00	13.36	--	0.00	13.84	--	0.00	27.69	--	0.00	7.49	--	0.00	7.57	7.56	0.01
01/06/16	11.70	--	0.00	13.67	13.66	0.01	11.2	--	0.00	26.30	--	0.00	16.20	--	0.00	18.10	--	0.00	12.90	--	0.00	13.30	--	0.00	13.80	--	0.00	27.80	--	0.00	6.90	--	0.00	6.93	6.91	0.02
02/08/16	11.01	--	0.00	13.61	--	0.00	NG-I	--	0.00	26.58	--	0.00	16.20	--	0.00	13.34	--	0.00	12.61	--	0.00	13.22	--	0.00	14.00	--	0.00	27.70	--	0.00	6.10	--	0.00	6.15	--	0.00
2/17/2016	11.1	--	0.00	13.82	--	0.00	10.79	--	0.00	26.24	--	0.00	16.18	--	0.00	17.86	--	0.00	12.66	--	0.00	13.09	--	0.00	13.80	--	0.00	27.67	--	0.00	5.71	--	0.00	5.77	--	0.00
2/24/2016	10.41	--	0.00	13.81	--	0.00	10.74	--	0.00	26.00	--	0.00	16.19	--	0.00	15.8	--	0.00	12.4	--	0.00	12.91	--	0.00	13.74	--	0.00	27.26	--	0.00	5.82	--	0.00	5.85	--	0.00
3/2/2016	10.82	--	0.00	13.79	13.76	0.03	10.6	--	0.00	26.15	--	0.00	16.20	--	0.00	17.78	--	0.00	12.29	--	0.00	12.92	--	0.00	13.78	--	0.00	27.57	--	0.00	5.56	--	0.00	5.61	--	0.00
3/9/2016	10.45	--	0.00	13.70	--	0.00	10.32	--	0.00	26.22	--	0.00	16.18	--	0.00	17.73	--	0.00	12.24	--	0.00	12.85	--	0.00	13.79	--	0.00	27.65	--	0.00	5.69	--	0.00	5.72	--	0.00
3/16/2016	10.75	--	0.00	13.64	--	0.00	10.51	--	0.00	26.14	--	0.00	16.10	--	0.00	17.62	--	0.00	12.02	--	0.00	12.7	--	0.00	13.71	--	0.00	27.56	--	0.00	5.44	--	0.00	5.53	--	0.00
3/23/2016	10.45	--	0.00	13.65	--	0.00	10.48	--	0.00	26.19	--	0.00	16.13	--	0.00	17.67	--	0.00	11.97	--	0.00	12.71	--	0.00	13.75	--	0.00	27.60	--	0.00	5.57	--	0.00	5.65	--	0.00
3/31/2016	--	--	0.00	13.63	13.62	0.01	10.49	--	0.00	25.17	--	0.00	16.10	--	0.00	17.64	--	0.00	12.83	--	0.00	12.64	--	0.00	13.71	--	0.00	27.57	--	0.00	5.63	--	0.00	5.71	5.70	0.01
4/6/2016	10.85	--	0.00	13.71	13.70	0.01	10.69	--	0.00	26.24	--	0.00	16.19	--	0.00	17.73	--	0.00	12.79	--	0.00	12.83	--	0.00	13.80	--	0.00	27.62	--	0.00	5.79	--	0.00	5.85	--	0.00
4/13/2016	11.00	--	0.00	13.74	--	0.00	10.75	--	0.00	26.24	--	0.00	16.17	--	0.00	17.7	--	0.00	12.07	--	0.00	12.87	--	0.00	13.90	--	0.00	27.65	--	0.00	5.88	--	0.00	5.95	--	0.00
4/20/2016	11.07	--	0.00	13.79	--	0.00	10.65	--	0.00	26.20	--	0.00	16.16	--	0.00	17.65	--	0.00	12.21	--	0.00	13.30	--	0.00	13.70	--	0.00	27.65	--	0.00	6.21	--	0.00	6.25	--	0.00
4/27/2016	11.14	--	0.00	13.83	--	0.00	10.78	--	0.00	26.21	--	0.00	16.15	--	0.00	17.69	--	0.00	12.28	--	0.00	13.04	--	0.00	13.74	--	0.00	27.61	--	0.00	6.49	--	0.00	6.53	--	0.00

Table 3

MONITORING WELL GAUGING DATA

Pilot Travel Center #290
31 Heather Lane
Perryville, Maryland

Date	MW-1			MW-2			MW-3			MW-4R			MW-5			MW-6			MW-7			MW-8			MW-9			MW-10			TF-1			TF-2		
	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness	DTW	DTP	Product Thickness
	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)
5/4/2016	11.05	--	0.00	13.68	--	0.00	10.75	--	0.00	26.28	--	0.00	16.15	--	0.00	17.67	--	0.00	12.14	--	0.00	12.96	--	0.00	13.73	--	0.00	27.57	--	0.00	6.38	6.37	0.01	6.43	Sheen	Sheen
5/11/2016	11.17	--	0.00	13.68	Sheen	Sheen	10.84	--	0.00	26.18	--	0.00	16.15	--	0.00	17.72	--	0.00	12.30	--	0.00	13.02	--	0.00	13.74	--	0.00	27.60	--	0.00	6.32	6.31	0.01	6.37	--	0.00
6/1/2016	11.16	--	0.00	13.66	--	0.00	10.72	--	0.00	26.10	--	0.00	16.12	--	0.00	17.67	--	0.00	12.28	--	0.00	13.00	--	0.00	13.63	--	0.00	27.55	--	0.00	6.38	6.35	0.03	6.46	6.43	0.03
7/6/2016	11.41	--	0.00	13.70	Sheen	Sheen	10.90	--	0.00	26.13	--	0.00	16.16	--	0.00	17.74	--	0.00	12.43	--	0.00	13.90	--	0.00	13.73	--	0.00	27.60	--	0.00	7.24	7.23	0.01	7.27	Sheen	Sheen
8/3/2016	11.78	--	0.00	13.74	--	--	11.21	--	0.00	26.17	--	0.00	16.18	--	0.00	17.86	--	0.00	12.64	--	0.00	13.38	--	0.00	13.75	--	0.00	27.60	--	0.00	7.62	--	0.00	7.68	--	0.00
9/7/2016	12.22	--	0.00	13.94	13.93	0.01	11.56	--	0.00	26.27	--	0.00	16.26	--	0.00	18.03	--	0.00	13.03	--	0.00	13.77	--	0.00	13.92	13.90	0.02	27.78	--	0.00	9.11	9.01	0.10	9.16	9.08	0.08
9/15/2016	12.32	--	0.00	13.93	13.92	0.01	11.68	--	0.00	26.27	--	0.00	16.25	--	0.00	18.09	--	0.00	13.21	--	0.00	13.81	--	0.00	13.38	Sheen	Sheen	27.78	--	0.00	9.57	9.49	0.08	9.68	9.55	0.13
9/20/2016	12.38	--	0.00	13.99	Sheen	Sheen	11.68	--	0.00	26.25	--	0.00	16.24	--	0.00	18.08	--	0.00	13.17	--	0.00	13.74	--	0.00	13.88	--	0.00	27.77	--	0.00	8.81	8.77	0.04	8.91	8.84	0.07
9/28/2016	12.45	--	0.00	14.04	--	--	11.80	--	0.00	26.29	--	0.00	16.80	--	0.00	18.16	--	0.00	13.32	--	0.00	13.84	--	0.00	13.96	--	0.00	27.84	--	0.00	9.72	9.63	0.09	9.77	9.70	0.07
10/5/2016	12.53	--	0.00	14.00	--	--	11.70	--	0.00	26.33	--	0.00	16.30	--	0.00	18.20	--	0.00	13.25	--	0.00	13.77	--	0.00	13.94	--	0.00	27.82	--	0.00	8.64	8.6	0.04	8.71	8.66	0.05
10/13/2016	12.48	--	0.00	13.93	--	--	11.71	--	0.00	26.29	--	0.00	16.27	--	0.00	18.16	--	0.00	13.20	--	0.00	13.88	--	0.00	13.86	--	0.00	27.80	--	0.00	9.18	9.11	0.07	9.10	9.03	0.07
10/19/2016	12.63	--	0.00	14.02	--	--	11.91	--	0.00	26.32	--	0.00	16.34	--	0.00	18.22	--	0.00	13.37	--	0.00	14.00	--	0.00	13.90	--	0.00	27.85	--	0.00	9.54	9.47	0.07	9.61	9.53	0.08
10/26/2016	12.95	--	0.00	14.06	--	--	12.06	--	0.00	26.36	--	0.00	16.40	--	0.00	18.30	--	0.00	13.53	--	0.00	14.07	--	0.00	13.98	--	0.00	27.91	--	0.00	10.00	9.91	0.09	10.07	9.99	0.08

Table 4
Geochemical Parameters

Site Name:	Pilot #290					
Address:	Heather Lane, Perryville, MD					
Sovereign Project No.:	PL203.500					
Date/Time:	October 5, 2016					
Weather:	Clear, 60°s					
Sample Date:						
Well Permit #:						
Well#:	**MW-1**	**MW-2**	**MW-3**	**MW-4R**	**MW-5**	**MW-6**
Well Diameter (inches)	4	4	4	4	4	4
Pre-Purge Data:						
PID/FID Reading (mu):	NM	NM	NM	NM	NM	NM
Product Thickness (ft):	0.00	0.00	0.00	0.00	0.00	0.00
Total Depth of Well (ft):	19.60	24.10	24.55	32.65	23.68	24.42
Depth to Water (ft):	12.53	14.00	11.70	26.33	16.30	18.20
Volume of water in well (gallons):	4.60	6.57	8.35	4.11	4.80	4.04
pH:	5.05	6.04	5.40	4.67	5.79	4.32
Dissolved oxygen (mg/L):	8.21	8.14	2.09	4.17	8.32	8.73
Temperature (°C):	22.02	24.98	23.23	20.14	19.80	19.12
Turbidity NTU	932	118	226	84.4	108	39
Salinity %	0.32	0.20	0.26	0.24	0.40	0.30
ORP (mV)	NM	NM	NM	NM	NM	NM
Specific conductivity mS/cm	5.91	3.82	4.85	4.58	7.35	5.55
Post-Purge Data:						
Purge Start Time:	11:45	12:40	10:55	10:05	9:30	10:00
Purge Stop Time:	12:00	13:00	11:21	10:20	9:45	10:15
Purge Method:	submersible	submersible	submersible	submersible	submersible	submersible
Purge Rate (gpm):	1.0	1.0	1.0	1.0	1.0	1.0
Total Volume Purged (gallons):	14	20	26	13	15	14
Depth to Water After Purge (ft):	13.57	15.27	12.42	27.48	16.36	18.92
pH:	4.98	5.64	5.38	4.61	5.66	4.27
Dissolved oxygen (mg/L):	2.50	7.30	2.08	2.15	9.09	9.23
Temperature(°C):	21.87	26.03	23.95	19.78	21.13	19.02
Turbidity NTU	353	234	111	67	44.5	38.1
Salinity %	0.32	0.20	0.26	123	0.37	0.30
ORP (mV)	NM	NM	NM	NM	NM	NM
Specific conductivity mS/cm	5.97	3.79	4.94	4.33	6.76	5.58
Before Sampling Data:						
Depth to Water Before Sampling (ft):	13.55	15.25	12.42	27.44	16.36	18.90
Sampling Start Time:	12:05	13:05	11:25	10:30	9:50	10:20
After Sampling Data:						
Sampling End Time:	12:10	13:10	11:30	10:35	9:55	10:25
pH:	5.20	5.63	5.19	4.56	5.50	4.63
Dissolved oxygen (mg/L):	2.05	1.30	2.96	1.39	5.01	1.22
Temperature(°C):	22.48	24.41	24.35	19.72	20.63	21.19
Turbidity NTU	66.8	250	128	724	89.6	52.4
Salinity %	0.35	0.21	0.34	0.22	0.33	0.23
ORP (mV)	NM	NM	NM	NM	NM	NM
Specific conductivity mS/cm	6.45	3.93	6.32	4.22	6.06	4.31
Sample Method:	bailer	bailer	bailer	bailer	bailer	bailer
Field Observations						
Recharge	Good	Good	Good	Good	Good	Good
Sheen	None	None	None	None	None	None
Odor	None	Slight	None	None	None	None
Turbidity	Slight	Clear	Clear	Clear	Clear	Clear

Notes:

Pump = The purge device used was a Whale pump with dedicated polyethylene tubing.

Bailer = The sampling device used was a disposable, dedicated, teflon bailer.

mu - meter units, mS - milli Siemens,

mg/l - milligrams per liter, gpm - gallons per minute, °C - degrees Celcius, °F - degrees Fahrenheit

Table 4
Geochemical Parameters

Site Name:	Pilot #290					
Address:	Heather Lane, Perryville, MD					
Sovereign Project No.:	PL203.500					
Date/Time:	October 5, 2016					
Weather:	Clear, 60°s					
Sample Date:						
Well Permit #:						
Well#:	**MW-7**	**MW-8**	**MW-9**	**MW-10R**	**TF-1**	**TF-2**
Well Diameter (inches)	4	4	4	4	4	4
Pre-Purge Data:						
PID/FID Reading (mu):	NM	NM	NM	NM	NM	NM
Product Thickness (ft):	0.00	0.00	0.00	0.00	0.04	0.05
Total Depth of Well (ft):	24.15	24.58	24.34	31.22	14.31	15.05
Depth to Water (ft):	13.25	13.77	13.94	27.82	8.64	8.71
Volume of water in well (gallons):	7.09	7.03	6.76	2.21	3.69	4.12
pH:	5.44	5.61	5.93	5.64	NS	NS
Dissolved oxygen (mg/L):	1.55	8.62	8.86	9.27	NS	NS
Temperature (°C):	24.07	22.05	21.10	22.84	NS	NS
Turbidity NTU	99.8	112	98.2	126	NS	NS
Salinity %	0.21	0.10	0.37	0.27	NS	NS
ORP (mV)	NM	NM	NM	NM	NS	NS
Specific conductivity mS/cm	3.95	3.62	6.78	5.05	NS	NS
Post-Purge Data:						
Purge Start Time:	11:10	12:00	9:35	12:50	NS	NS
Purge Stop Time:	11:32	12:22	9:56	12:58	NS	NS
Purge Method:	submersible	submersible	submersible	submersible	NS	NS
Purge Rate (gpm):	1.0	1.0	1.0	1.0	NS	NS
Total Volume Purged (gallons):	22	22	20.5	8.0	NS	NS
Depth to Water After Purge (ft):	13.79	14.18	14.27	29.00	NS	NS
pH:	5.48	5.64	5.88	5.68	NS	NS
Dissolved oxygen (mg/L):	8.24	2.25	8.53	7.81	NS	NS
Temperature(°C):	24.08	21.96	21.93	21.82	NS	NS
Turbidity NTU	60.3	49.5	57.7	179	NS	NS
Salinity %	0.20	0.17	0.37	0.26	NS	NS
ORP (mV)	NM	NM	NM	NM	NS	NS
Specific conductivity mS/cm	3.87	3.31	6.68	4.98	NS	NS
Before Sampling Data:						
Depth to Water Before Sampling (ft):	13.75	14.18	14.27	28.97	NS	NS
Sampling Start Time:	11:35	12:25	10:00	13:20	NS	NS
After Sampling Data:						
Sampling End Time:	11:40	12:30	10:05	13:25	NS	NS
pH:	5.44	5.67	5.90	5.70	NS	NS
Dissolved oxygen (mg/L):	8.24	11.59	8.56	8.25	NS	NS
Temperature(°C):	22.31	23.47	21.42	21.25	NS	NS
Turbidity NTU	833	59.8	60.82	182	NS	NS
Salinity %	0.22	0.31	0.37	0.26	NS	NS
ORP (mV)	NM	NM	NM	NM	NS	NS
Specific conductivity mS/cm	4.15	4.36	6.71	4.88	NS	NS
Sample Method:	bailer	bailer	bailer	bailer	NS	NS
Field Observations						
Recharge	Good	Good	Good	Good	NS	NS
Sheen	None	None	None	None	NS	NS
Odor	None	None	Slight	None	NS	NS
Turbidity	Clear	Clear	Clear	Clear	NS	NS
Notes:						
Pump = The purge device used was a Whale pump with dedicated polyethylene tubing.						
Bailer = The sampling device used was a disposable, dedicated, teflon bailer.						
mu - meter units, mS - milli Siemens,						
mg/l - milligrams per liter, gpm - gallons per minute, °C - degrees Celcius, °F - degrees Fahrenheit						

APPENDIX A

Laboratory Analytical Report and Chain-of-Custody Documentation

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

e-Hardcopy 2.0
Automated Report

Technical Report for

Pilot Travel Centers LLC

SCNJCH: #290, Heather Lane, Perryville, MD

PL1203.500

SGS Accutest Job Number: JC29144

Sampling Date: 10/05/16

Report to:

Sovereign Consulting
100 Dobbs Lane Suite 212
Cherry Hill, NJ 08034
ewilliams@sovcon.com; jking@sovcon.com

ATTN: JR Williams

Total number of pages in report: 299

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Nancy Cole
Laboratory Director

Client Service contact: Marty Vitanza 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

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SGS Accutest

Sample Summary

Pilot Travel Centers LLC

Job No: JC29144

SCNJCH: #290, Heather Lane, Perryville, MD
Project No: PL1203.500

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC29144-1	10/05/16	12:05	BD/JW	10/06/16	AQ	Ground Water	MW-1
JC29144-2	10/05/16	13:05	BD/JW	10/06/16	AQ	Ground Water	MW-2
JC29144-3	10/05/16	11:25	BD/JW	10/06/16	AQ	Ground Water	MW-3
JC29144-4	10/05/16	10:30	BD/JW	10/06/16	AQ	Ground Water	MW-4R
JC29144-5	10/05/16	09:50	BD/JW	10/06/16	AQ	Ground Water	MW-5
JC29144-6	10/05/16	10:20	BD/JW	10/06/16	AQ	Ground Water	MW-6
JC29144-7	10/05/16	11:35	BD/JW	10/06/16	AQ	Ground Water	MW-7
JC29144-8	10/05/16	12:25	BD/JW	10/06/16	AQ	Ground Water	MW-8
JC29144-9	10/05/16	10:00	BD/JW	10/06/16	AQ	Ground Water	MW-9
JC29144-10	10/05/16	13:20	BD/JW	10/06/16	AQ	Ground Water	MW-10R

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Pilot Travel Centers LLC	**Job No**	JC29144
Site:	SCNJCH: #290, Heather Lane, Perryville, MD	**Report Date**	10/21/2016 10:09:59 A

On 10/06/2016, 10 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 4.9 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC29144 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** V2D6715

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC29144-5MS, JC29144-6DUP, JC29144-5MS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Tetrachloroethene are outside control limits.
- Matrix Spike Recovery(s) for Naphthalene are outside control limits. Outside control limits due to matrix interference.
- JC29144-5 for Tetrachloroethene: This compound in BS is outside in house QC limits bias high.
- JC29144-6 for Tetrachloroethene: This compound in BS is outside in house QC limits bias high.
- JC29144-7 for Tetrachloroethene: This compound in BS is outside in house QC limits bias high.
- JC29144-8 for Tetrachloroethene: This compound in BS is outside in house QC limits bias high.
- JC29144-9 for Tetrachloroethene: This compound in BS is outside in house QC limits bias high.
- JC29144-10 for Tetrachloroethene: This compound in BS is outside in house QC limits bias high.
- JC29144-4 for Tetrachloroethene: This compound in BS is outside in house QC limits bias high.
- JC29144-3 for Tetrachloroethene: This compound in BS is outside in house QC limits bias high.
- JC29144-2 for Tetrachloroethene: This compound in BS is outside in house QC limits bias high.
- JC29144-1 for Tetrachloroethene: This compound in BS is outside in house QC limits bias high.
- V2D6715-BS for Tetrachloroethene: High percent recoveries and no associated positive reported in the QC batch.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GUV5384

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC28880-10DUP, JC28880-3MS were used as the QC samples indicated.

Extractables by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** OP97612

- All samples were extracted within the recommended method holding time.
- Sample(s) JC29144-1MS, JC29144-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JC29144-2 for o-Terphenyl: Outside control limits due to matrix interference.
- JC29144-2 for o-Terphenyl: Outside control limits due to matrix interference.

Matrix: AQ **Batch ID:** OP97695

- All samples were extracted within the recommended method holding time.
- Sample(s) JC29450-2MSD, JC29450-2MS, JC29450-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for TPH-DRO (C10-C28) are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- RPD(s) for MSD for TPH-DRO (C10-C28) are outside control limits for sample OP97695-MSD. Outside control limits due to matrix interference.
- OP97695-MS for o-Terphenyl: Outside control limits due to matrix interference.
- OP97695-MS/MSD for 5a-Androstane: Outside control limits due to matrix interference.
- OP97695-MSD for TPH-DRO (C10-C28): Outside control limits due to matrix interference.
- OP97695-MSD for 5a-Androstane: Outside control limits due to matrix interference.
- OP97695-MS for Tetracosane-d50: Outside control limits due to matrix interference.

SGS Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS Accutest is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS Accutest indicated via signature on the report cover

Summary of Hits

Job Number: JC29144
Account: Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Collected: 10/05/16

3

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC29144-1	**MW-1**					
Benzene		0.24 J	0.50	0.14	ug/l	SW846 8260C
TPH-DRO (C10-C28)		1.65	0.025	0.019	mg/l	SW846 8015C
JC29144-2	**MW-2**					
Benzene		1.5	0.50	0.14	ug/l	SW846 8260C
n-Butylbenzene		1.6 J	2.0	0.28	ug/l	SW846 8260C
sec-Butylbenzene		3.8	2.0	1.0	ug/l	SW846 8260C
tert-Butylbenzene		0.86 J	2.0	0.28	ug/l	SW846 8260C
Isopropylbenzene		9.0	1.0	0.16	ug/l	SW846 8260C
Naphthalene		136	5.0	0.39	ug/l	SW846 8260C
n-Propylbenzene		10.3	2.0	0.17	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		102	2.0	0.26	ug/l	SW846 8260C
1,3,5-Trimethylbenzene		0.68 J	2.0	0.32	ug/l	SW846 8260C
TPH-GRO (C6-C10)		0.354	0.20	0.10	mg/l	SW846 8015C
TPH-DRO (C10-C28)		56.6	0.13	0.097	mg/l	SW846 8015C
JC29144-3	**MW-3**					
Benzene		1.2	0.50	0.14	ug/l	SW846 8260C
sec-Butylbenzene		2.1	2.0	1.0	ug/l	SW846 8260C
tert-Butylbenzene		0.47 J	2.0	0.28	ug/l	SW846 8260C
Isopropylbenzene		0.54 J	1.0	0.16	ug/l	SW846 8260C
Naphthalene		2.4 J	5.0	0.39	ug/l	SW846 8260C
TPH-DRO (C10-C28)		1.08	0.025	0.019	mg/l	SW846 8015C
JC29144-4	**MW-4R**					
Benzene		1.6	0.50	0.14	ug/l	SW846 8260C
sec-Butylbenzene		2.6	2.0	1.0	ug/l	SW846 8260C
tert-Butylbenzene		0.47 J	2.0	0.28	ug/l	SW846 8260C
Methyl Tert Butyl Ether		2.3	1.0	0.34	ug/l	SW846 8260C
Naphthalene		2.3 J	5.0	0.39	ug/l	SW846 8260C
TPH-DRO (C10-C28)		4.24	0.025	0.019	mg/l	SW846 8015C
JC29144-5	**MW-5**					
Benzene		0.22 J	0.50	0.14	ug/l	SW846 8260C
sec-Butylbenzene		2.3	2.0	1.0	ug/l	SW846 8260C
tert-Butylbenzene		0.34 J	2.0	0.28	ug/l	SW846 8260C
Isopropylbenzene		0.39 J	1.0	0.16	ug/l	SW846 8260C
Methyl Tert Butyl Ether		1.8	1.0	0.34	ug/l	SW846 8260C
TPH-DRO (C10-C28)		1.10	0.025	0.019	mg/l	SW846 8015C

Summary of Hits

Job Number: JC29144
Account: Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Collected: 10/05/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC29144-6	**MW-6**					
TPH-DRO (C10-C28)		0.876	0.025	0.019	mg/l	SW846 8015C
JC29144-7	**MW-7**					
Benzene		2.1	0.50	0.14	ug/l	SW846 8260C
n-Butylbenzene		1.3 J	2.0	0.28	ug/l	SW846 8260C
sec-Butylbenzene		4.1	2.0	1.0	ug/l	SW846 8260C
tert-Butylbenzene		0.95 J	2.0	0.28	ug/l	SW846 8260C
Isopropylbenzene		5.2	1.0	0.16	ug/l	SW846 8260C
Naphthalene		0.78 J	5.0	0.39	ug/l	SW846 8260C
n-Propylbenzene		3.7	2.0	0.17	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		0.50 J	2.0	0.26	ug/l	SW846 8260C
TPH-GRO (C6-C10)		0.103 J	0.20	0.10	mg/l	SW846 8015C
TPH-DRO (C10-C28)		9.66	0.025	0.019	mg/l	SW846 8015C
JC29144-8	**MW-8**					
Benzene		0.83	0.50	0.14	ug/l	SW846 8260C
Isopropylbenzene		0.84 J	1.0	0.16	ug/l	SW846 8260C
Naphthalene		3.6 J	5.0	0.39	ug/l	SW846 8260C
n-Propylbenzene		0.43 J	2.0	0.17	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		1.8 J	2.0	0.26	ug/l	SW846 8260C
TPH-DRO (C10-C28)		10.4	0.025	0.019	mg/l	SW846 8015C
JC29144-9	**MW-9**					
Benzene		0.77	0.50	0.14	ug/l	SW846 8260C
n-Butylbenzene		0.90 J	2.0	0.28	ug/l	SW846 8260C
sec-Butylbenzene		2.4	2.0	1.0	ug/l	SW846 8260C
tert-Butylbenzene		0.49 J	2.0	0.28	ug/l	SW846 8260C
Isopropylbenzene		1.0	1.0	0.16	ug/l	SW846 8260C
Methyl Tert Butyl Ether		0.38 J	1.0	0.34	ug/l	SW846 8260C
Naphthalene		0.66 J	5.0	0.39	ug/l	SW846 8260C
n-Propylbenzene		0.28 J	2.0	0.17	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		0.50 J	2.0	0.26	ug/l	SW846 8260C
TPH-DRO (C10-C28)		27.2	0.025	0.019	mg/l	SW846 8015C
JC29144-10	**MW-10R**					
Benzene		0.28 J	0.50	0.14	ug/l	SW846 8260C
sec-Butylbenzene		1.1 J	2.0	1.0	ug/l	SW846 8260C
tert-Butylbenzene		1.1 J	2.0	0.28	ug/l	SW846 8260C

Summary of Hits

Job Number: JC29144
Account: Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Collected: 10/05/16

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
Isopropylbenzene	0.35 J	1.0	0.16	ug/l	SW846 8260C
Methyl Tert Butyl Ether	0.63 J	1.0	0.34	ug/l	SW846 8260C
n-Propylbenzene	0.19 J	2.0	0.17	ug/l	SW846 8260C
TPH-GRO (C6-C10)	0.980	0.20	0.10	mg/l	SW846 8015C
TPH-DRO (C10-C28)	207	0.50	0.39	mg/l	SW846 8015C

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	JC29144-1	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D160385.D	1	10/19/16	AM	n/a	n/a	V2D6715
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	0.24	0.50	0.14	ug/l	J
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.46	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.55	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
74-83-9	Bromomethane	ND	2.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.28	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.54	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.17	ug/l	
75-00-3	Chloroethane	ND	1.0	0.44	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.96	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.18	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.29	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.41	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.23	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.21	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.70	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.36	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.33	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	JC29144-1	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.28	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.42	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.22	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.16	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.34	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.28	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.39	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.17	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	3.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.23	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene [a]	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.58	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.75	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.26	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.32	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	JC29144-1	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	104%		73-122%
2037-26-5	Toluene-D8	102%		84-119%
460-00-4	4-Bromofluorobenzene	105%		78-117%

(a) This compound in BS is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	JC29144-1	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV133779.D	1	10/07/16	HT	n/a	n/a	GUV5384
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	91%		55-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	JC29144-1	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z58183.D	1	10/10/16	TL	10/10/16	OP97612	G2Z2191
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	1.65	0.025	0.019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	76%		36-144%
16416-32-3	Tetracosane-d50	57%		32-138%
438-22-2	5a-Androstane	51%		31-136%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	JC29144-2	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D160386.D	1	10/19/16	AM	n/a	n/a	V2D6715
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	1.5	0.50	0.14	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.46	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.55	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
74-83-9	Bromomethane	ND	2.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.9	ug/l	
104-51-8	n-Butylbenzene	1.6	2.0	0.28	ug/l	J
135-98-8	sec-Butylbenzene	3.8	2.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	0.86	2.0	0.28	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.54	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.17	ug/l	
75-00-3	Chloroethane	ND	1.0	0.44	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.96	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.18	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.29	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.41	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.23	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.21	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.70	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.36	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.33	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	JC29144-2	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.28	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.42	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.22	ug/l	
98-82-8	Isopropylbenzene	9.0	1.0	0.16	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.34	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.28	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	136	5.0	0.39	ug/l	
103-65-1	n-Propylbenzene	10.3	2.0	0.17	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	3.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.23	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene [a]	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.58	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.75	ug/l	
95-63-6	1,2,4-Trimethylbenzene	102	2.0	0.26	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.68	2.0	0.32	ug/l	J
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	JC29144-2	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	104%		73-122%
2037-26-5	Toluene-D8	101%		84-119%
460-00-4	4-Bromofluorobenzene	101%		78-117%

(a) This compound in BS is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	JC29144-2	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV133786.D	1	10/07/16	HT	n/a	n/a	GUV5384
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.354	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	93%		55-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	JC29144-2	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z58186.D	1	10/10/16	TL	10/10/16	OP97612	G2Z2191
Run #2	2Z58203.D	5	10/11/16	TL	10/10/16	OP97612	G2Z2192

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	1000 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	56.6 [a]	0.13	0.097	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	163% [b]	186% [b]	36-144%
16416-32-3	Tetracosane-d50	70%	79%	32-138%
438-22-2	5a-Androstane	53%	63%	31-136%

(a) Result is from Run# 2
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	JC29144-3	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D160387.D	1	10/19/16	AM	n/a	n/a	V2D6715
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	1.2	0.50	0.14	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.46	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.55	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
74-83-9	Bromomethane	ND	2.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.28	ug/l	
135-98-8	sec-Butylbenzene	2.1	2.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	0.47	2.0	0.28	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.54	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.17	ug/l	
75-00-3	Chloroethane	ND	1.0	0.44	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.96	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.18	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.29	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.41	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.23	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.21	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.70	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.36	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.33	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	JC29144-3	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.28	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.42	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.22	ug/l	
98-82-8	Isopropylbenzene	0.54	1.0	0.16	ug/l	J
99-87-6	p-Isopropyltoluene	ND	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.34	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.28	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	2.4	5.0	0.39	ug/l	J
103-65-1	n-Propylbenzene	ND	2.0	0.17	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	3.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.23	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene [a]	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.58	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.75	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.26	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.32	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		76-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	JC29144-3	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	96%		73-122%
2037-26-5	Toluene-D8	100%		84-119%
460-00-4	4-Bromofluorobenzene	100%		78-117%

(a) This compound in BS is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	JC29144-3	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV133780.D	1	10/07/16	HT	n/a	n/a	GUV5384
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	92%		55-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	JC29144-3	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z58187.D	1	10/10/16	TL	10/10/16	OP97612	G2Z2191
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	1.08	0.025	0.019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	60%		36-144%
16416-32-3	Tetracosane-d50	52%		32-138%
438-22-2	5a-Androstane	46%		31-136%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-4R		
Lab Sample ID:	JC29144-4	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D160388.D	1	10/19/16	AM	n/a	n/a	V2D6715
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	1.6	0.50	0.14	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.46	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.55	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
74-83-9	Bromomethane	ND	2.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.28	ug/l	
135-98-8	sec-Butylbenzene	2.6	2.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	0.47	2.0	0.28	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.54	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.17	ug/l	
75-00-3	Chloroethane	ND	1.0	0.44	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.96	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.18	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.29	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.41	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.23	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.21	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.70	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.36	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.33	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4R		
Lab Sample ID:	JC29144-4	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.28	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.42	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.22	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.16	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.3	1.0	0.34	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.28	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	2.3	5.0	0.39	ug/l	J
103-65-1	n-Propylbenzene	ND	2.0	0.17	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	3.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.23	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene [a]	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.58	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.75	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.26	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.32	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		76-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4R		
Lab Sample ID:	JC29144-4	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	94%		73-122%
2037-26-5	Toluene-D8	100%		84-119%
460-00-4	4-Bromofluorobenzene	99%		78-117%

(a) This compound in BS is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-4R		
Lab Sample ID:	JC29144-4	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV133781.D	1	10/07/16	HT	n/a	n/a	GUV5384
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	92%		55-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-4R		
Lab Sample ID:	JC29144-4	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z58188.D	1	10/10/16	TL	10/10/16	OP97612	G2Z2191
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	4.24	0.025	0.019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	81%		36-144%
16416-32-3	Tetracosane-d50	47%		32-138%
438-22-2	5a-Androstane	38%		31-136%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	JC29144-5	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D160389.D	1	10/19/16	AM	n/a	n/a	V2D6715
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	0.22	0.50	0.14	ug/l	J
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.46	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.55	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
74-83-9	Bromomethane	ND	2.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.28	ug/l	
135-98-8	sec-Butylbenzene	2.3	2.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	0.34	2.0	0.28	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.54	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.17	ug/l	
75-00-3	Chloroethane	ND	1.0	0.44	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.96	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.18	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.29	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.41	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.23	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.21	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.70	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.36	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.33	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	JC29144-5	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.28	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.42	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.22	ug/l	
98-82-8	Isopropylbenzene	0.39	1.0	0.16	ug/l	J
99-87-6	p-Isopropyltoluene	ND	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.8	1.0	0.34	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.28	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.39	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.17	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	3.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.23	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene [a]	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.58	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.75	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.26	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.32	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		76-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	JC29144-5	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	93%		73-122%
2037-26-5	Toluene-D8	101%		84-119%
460-00-4	4-Bromofluorobenzene	100%		78-117%

(a) This compound in BS is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	JC29144-5	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV133782.D	1	10/07/16	HT	n/a	n/a	GUV5384
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	92%		55-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	JC29144-5	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z58191.D	1	10/11/16	TL	10/10/16	OP97612	G2Z2191
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	1.10	0.025	0.019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	67%		36-144%
16416-32-3	Tetracosane-d50	38%		32-138%
438-22-2	5a-Androstane	31%		31-136%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	JC29144-6	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D160390.D	1	10/19/16	AM	n/a	n/a	V2D6715
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	0.50	0.14	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.46	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.55	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
74-83-9	Bromomethane	ND	2.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.28	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.54	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.17	ug/l	
75-00-3	Chloroethane	ND	1.0	0.44	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.96	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.18	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.29	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.41	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.23	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.21	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.70	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.36	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.33	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	JC29144-6	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.28	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.42	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.22	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.16	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.34	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.28	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.39	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.17	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	3.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.23	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene [a]	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.58	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.75	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.26	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.32	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		76-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	JC29144-6	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	92%		73-122%
2037-26-5	Toluene-D8	100%		84-119%
460-00-4	4-Bromofluorobenzene	99%		78-117%

(a) This compound in BS is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	JC29144-6	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV133783.D	1	10/07/16	HT	n/a	n/a	GUV5384
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	92%		55-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	JC29144-6	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y80267.D	1	10/13/16	KP	10/12/16	OP97695	G2Y3091
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.876	0.025	0.019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		36-144%
16416-32-3	Tetracosane-d50	70%		32-138%
438-22-2	5a-Androstane	59%		31-136%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	JC29144-7	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D160391.D	1	10/19/16	AM	n/a	n/a	V2D6715
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	2.1	0.50	0.14	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.46	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.55	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
74-83-9	Bromomethane	ND	2.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.9	ug/l	
104-51-8	n-Butylbenzene	1.3	2.0	0.28	ug/l	J
135-98-8	sec-Butylbenzene	4.1	2.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	0.95	2.0	0.28	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.54	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.17	ug/l	
75-00-3	Chloroethane	ND	1.0	0.44	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.96	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.18	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.29	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.41	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.23	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.21	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.70	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.36	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.33	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	JC29144-7	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.28	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.42	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.22	ug/l	
98-82-8	Isopropylbenzene	5.2	1.0	0.16	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.34	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.28	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	0.78	5.0	0.39	ug/l	J
103-65-1	n-Propylbenzene	3.7	2.0	0.17	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	3.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.23	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene [a]	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.58	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.75	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50	2.0	0.26	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.32	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		76-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	JC29144-7	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	92%		73-122%
2037-26-5	Toluene-D8	99%		84-119%
460-00-4	4-Bromofluorobenzene	97%		78-117%

(a) This compound in BS is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	JC29144-7	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV133773.D	1	10/07/16	HT	n/a	n/a	GUV5384
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.103	0.20	0.10	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	91%		55-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	JC29144-7	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z58193.D	1	10/11/16	TL	10/10/16	OP97612	G2Z2191
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	9.66	0.025	0.019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		36-144%
16416-32-3	Tetracosane-d50	41%		32-138%
438-22-2	5a-Androstane	41%		31-136%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	JC29144-8	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D160392.D	1	10/19/16	AM	n/a	n/a	V2D6715
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	0.83	0.50	0.14	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.46	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.55	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
74-83-9	Bromomethane	ND	2.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.28	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.54	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.17	ug/l	
75-00-3	Chloroethane	ND	1.0	0.44	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.96	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.18	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.29	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.41	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.23	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.21	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.70	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.36	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.33	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	JC29144-8	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.28	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.42	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.22	ug/l	
98-82-8	Isopropylbenzene	0.84	1.0	0.16	ug/l	J
99-87-6	p-Isopropyltoluene	ND	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.34	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.28	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	3.6	5.0	0.39	ug/l	J
103-65-1	n-Propylbenzene	0.43	2.0	0.17	ug/l	J
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	3.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.23	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene [a]	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.58	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.75	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.8	2.0	0.26	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.32	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		76-120%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	JC29144-8	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	92%		73-122%
2037-26-5	Toluene-D8	100%		84-119%
460-00-4	4-Bromofluorobenzene	98%		78-117%

(a) This compound in BS is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	JC29144-8	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV133784.D	1	10/07/16	HT	n/a	n/a	GUV5384
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	91%		55-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	JC29144-8	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z58194.D	1	10/11/16	TL	10/10/16	OP97612	G2Z2191
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	10.4	0.025	0.019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%		36-144%
16416-32-3	Tetracosane-d50	42%		32-138%
438-22-2	5a-Androstane	40%		31-136%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	JC29144-9	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D160393.D	1	10/19/16	AM	n/a	n/a	V2D6715
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	0.77	0.50	0.14	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.46	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.55	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
74-83-9	Bromomethane	ND	2.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.9	ug/l	
104-51-8	n-Butylbenzene	0.90	2.0	0.28	ug/l	J
135-98-8	sec-Butylbenzene	2.4	2.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	0.49	2.0	0.28	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.54	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.17	ug/l	
75-00-3	Chloroethane	ND	1.0	0.44	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.96	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.18	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.29	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.41	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.23	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.21	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.70	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.36	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.33	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	JC29144-9	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.28	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.42	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.22	ug/l	
98-82-8	Isopropylbenzene	1.0	1.0	0.16	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.38	1.0	0.34	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.28	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	0.66	5.0	0.39	ug/l	J
103-65-1	n-Propylbenzene	0.28	2.0	0.17	ug/l	J
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	3.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.23	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene [a]	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.58	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.75	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50	2.0	0.26	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.32	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		76-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	JC29144-9	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	94%		73-122%
2037-26-5	Toluene-D8	99%		84-119%
460-00-4	4-Bromofluorobenzene	98%		78-117%

(a) This compound in BS is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	JC29144-9	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV133785.D	1	10/07/16	HT	n/a	n/a	GUV5384
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	92%		55-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	JC29144-9	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z58195.D	1	10/11/16	TL	10/10/16	OP97612	G2Z2191
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	27.2	0.025	0.019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	125%		36-144%
16416-32-3	Tetracosane-d50	53%		32-138%
438-22-2	5a-Androstane	66%		31-136%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-10R		
Lab Sample ID:	JC29144-10	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D160394.D	1	10/19/16	AM	n/a	n/a	V2D6715
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	0.28	0.50	0.14	ug/l	J
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.46	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.55	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
74-83-9	Bromomethane	ND	2.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.28	ug/l	
135-98-8	sec-Butylbenzene	1.1	2.0	1.0	ug/l	J
98-06-6	tert-Butylbenzene	1.1	2.0	0.28	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.54	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.17	ug/l	
75-00-3	Chloroethane	ND	1.0	0.44	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.96	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.18	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.29	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.41	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.23	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.21	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.70	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.36	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.33	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10R		
Lab Sample ID:	JC29144-10	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.28	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.42	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.22	ug/l	
98-82-8	Isopropylbenzene	0.35	1.0	0.16	ug/l	J
99-87-6	p-Isopropyltoluene	ND	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.63	1.0	0.34	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.28	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.39	ug/l	
103-65-1	n-Propylbenzene	0.19	2.0	0.17	ug/l	J
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	3.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.23	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene [a]	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.58	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.75	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.26	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.32	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		76-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10R		
Lab Sample ID:	JC29144-10	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	94%		73-122%
2037-26-5	Toluene-D8	102%		84-119%
460-00-4	4-Bromofluorobenzene	108%		78-117%

(a) This compound in BS is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-10R		
Lab Sample ID:	JC29144-10	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV133774.D	1	10/07/16	HT	n/a	n/a	GUV5384
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.980	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	92%		55-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	MW-10R		
Lab Sample ID:	JC29144-10	**Date Sampled:**	10/05/16
Matrix:	AQ - Ground Water	**Date Received:**	10/06/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z58196.D	1	10/11/16	TL	10/10/16	OP97612	G2Z2191
Run #2	2Z58204.D	20	10/11/16	TL	10/10/16	OP97612	G2Z2192

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	1000 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	207 [a]	0.50	0.39	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%	85%	36-144%
16416-32-3	Tetracosane-d50	74%	94%	32-138%
438-22-2	5a-Androstane	68%	85%	31-136%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

Parameter Certification Exceptions

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Methylene bromide	74-95-3	SW846 8260C	AQ	Accutest is not certified for this parameter.[a]

(a) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

ACCUTEST

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3479

Accutest Job #: JC29144

Client / Reporting Information

Consultants Name: Sovereign Consulting Inc.
Address: 50 West Welsh Pool Rd
City: Exton, PA Zip: 19341
Project Contact: JR Williams
Phone #: (610) 524-8124
email : ewilliams@sovcon.com
Collected by: JW, BD

Project Information

Project Name: Pilot Perryville, Center SS#290
Street
City: Perryville State: MD
Project Manager: JR Williams
Project PL203.500
Location ID #
Client Purchase Order #

Analytical Information

Field ID / Point of Collection	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Preservation HCL	NaOH	HNO3	H2SO4	None	B8015DRO (TPH DRO)	V8015GRO (TPH GRO)	V8260MDVO (MD VOCs, Oxygenates, Naphthalene)	
MW - 1	10/5/16	1205	BD/JW	GW	7	X					X	X	X	-1
MW - 2		1305		GW		X					X	X	X	-2
MW - 3		1125		GW		X					X	X	X	-3
MW - 4R		1030		GW		X					X	X	X	-4
MW - 5		0950		GW		X					X	X	X	-5
MW - 6		1020		GW		X					X	X	X	-6
MW - 7		1135		GW		X					X	X	X	-7

Turnaround Information

- [x] Std. 15 Day Turnaround — Approved By:
- [ ] 7 Day *EMERGENCY*
- [ ] 4 Day *EMERGENCY*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency T/A is for FAX or Lablink Data

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] Full Deliverables
- [ ] NJ Reduced
- [ ] FULL CLP
- [ ] State Forms
- [ ] Disk Deliverable Format
- [ ] EDD Format

NJ Reduce = Results + QC Summary + Partial Raw data

Accutest Log-in Information

E9
V182

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
	10/6/16 1200 (1545)	1	2	10-9-16 1700	
Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by Sampler:	Date Time:	Received By: 5	Seal # 430,924 Intact	Preserve where applicable ☐	On Ice ☑ Temp. 04.0 03.9

INITIAL ASESSMENT 1BJM

LABEL VERIFICATION JV

5.2 5

JC29144: Chain of Custody
Page 1 of 3

ACCUTEST

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3479

Accutest Job #: JC29144

Client / Reporting Information

Consultants Name: Sovereign Consulting Inc.
Address: 50 West Welsh Pool Rd
City: Exton, PA Zip: 19341
Project Contact: JR Williams
Phone #: 856-325-2099
email : ewilliams@sovcon.com
Collected by: JW, DT

Project Information

Project Name: Pilot Perryville, Center SS#290
Street
City: Perryville State: MD
Project Manager: JR Williams
Project PL203.500
Location ID #
Client Purchase Order #

Analytical Information

Field ID / Point of Collection	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	HCL	NaOH	HNO3	H2SO4	None	B8015DRO (TPH DRO)	V8015GRO (TPH GRO)	V8260MDVO (MD VOCs, Oxygenates, Naphthalene)												
MW - 8	10/5/16	1225	BD/JW	GW	7	X					X	X	X	-8											
MW - 9	↓	1000	↓	GW	↓	X					X	X	X	-9											
MW - 10R	↓	1320	↓	GW	↓	X					X	X	X	-10											
~~TF - 1~~				~~GW~~		~~X~~					~~X~~	~~X~~	~~X~~												BD
~~TF - 2~~				~~GW~~		~~X~~					~~X~~	~~X~~	~~X~~												BD

Turnaround Information

- [x] Std. 15 Day Turnaround — Approved By:
- [ ] 7 Day *EMERGENCY*
- [ ] 4 Day *EMERGENCY*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency T/A is for FAX or Lablink Data

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] Full Deliverables
- [ ] NJ Reduced
- [ ] FULL CLP
- [ ] State Forms
- [ ] Disk Deliverable Format_____
- [ ] EDD Format_____

NJ Reduce = Results + QC Summary + Partial Raw data

Accutest Log-in Information

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
	10/6/16 1200	1	2 10-9-16	1320	2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
		3	4		4
Relinquished by Sampler:	Date Time:	Received By:	Seal # 430,924	Preserve where applicable ☐	On Ice ☐ Temp. 04.0 03.9
		5			

Page 1

SGS Accutest Sample Receipt Summary

Job Number: JC29144 **Client:** _____ **Project:** _____

Date / Time Received: 10/6/2016 5:00:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (4.0); Cooler 2: (3.9);

Cooler Temps (Corrected) °C: Cooler 1: (4.9); Cooler 2: (4.8);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	2		

Quality Control _Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Internal Sample Tracking Chronicle

Pilot Travel Centers LLC

Job No: JC29144

SCNJCH: #290, Heather Lane, Perryville, MD
Project No: PL1203.500

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC29144-1 MW-1	Collected: 05-OCT-16 12:05 By: BD/JW		Received: 06-OCT-16 By: TH			
JC29144-1	SW846 8015C	07-OCT-16 19:53	HT			V8015GRO
JC29144-1	SW846 8015C	10-OCT-16 19:47	TL	10-OCT-16	NG	B8015DRO
JC29144-1	SW846 8260C	19-OCT-16 00:54	AM			V8260MDVO
JC29144-2 MW-2	Collected: 05-OCT-16 13:05 By: BD/JW		Received: 06-OCT-16 By: TH			
JC29144-2	SW846 8015C	07-OCT-16 23:30	HT			V8015GRO
JC29144-2	SW846 8015C	10-OCT-16 21:26	TL	10-OCT-16		
JC29144-2	SW846 8015C	11-OCT-16 10:32	TL	10-OCT-16	NG	B8015DRO
JC29144-2	SW846 8260C	19-OCT-16 01:24	AM			V8260MDVO
JC29144-3 MW-3	Collected: 05-OCT-16 11:25 By: BD/JW		Received: 06-OCT-16 By: TH			
JC29144-3	SW846 8015C	07-OCT-16 20:22	HT			V8015GRO
JC29144-3	SW846 8015C	10-OCT-16 21:59	TL	10-OCT-16	NG	B8015DRO
JC29144-3	SW846 8260C	19-OCT-16 01:54	AM			V8260MDVO
JC29144-4 MW-4R	Collected: 05-OCT-16 10:30 By: BD/JW		Received: 06-OCT-16 By: TH			
JC29144-4	SW846 8015C	07-OCT-16 20:51	HT			V8015GRO
JC29144-4	SW846 8015C	10-OCT-16 22:32	TL	10-OCT-16	NG	B8015DRO
JC29144-4	SW846 8260C	19-OCT-16 02:24	AM			V8260MDVO
JC29144-5 MW-5	Collected: 05-OCT-16 09:50 By: BD/JW		Received: 06-OCT-16 By: TH			
JC29144-5	SW846 8015C	07-OCT-16 21:27	HT			V8015GRO
JC29144-5	SW846 8015C	11-OCT-16 00:10	TL	10-OCT-16	NG	B8015DRO
JC29144-5	SW846 8260C	19-OCT-16 02:54	AM			V8260MDVO
JC29144-6 MW-6	Collected: 05-OCT-16 10:20 By: BD/JW		Received: 06-OCT-16 By: TH			
JC29144-6	SW846 8015C	07-OCT-16 21:56	HT			V8015GRO

Internal Sample Tracking Chronicle

Pilot Travel Centers LLC

Job No: JC29144

SCNJCH: #290, Heather Lane, Perryville, MD
Project No: PL1203.500

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC29144-6	SW846 8015C	13-OCT-16 17:46	KP	12-OCT-16	RF	B8015DRO
JC29144-6	SW846 8260C	19-OCT-16 03:24	AM			V8260MDVO
JC29144-7 MW-7	Collected: 05-OCT-16 11:35 By: BD/JW		Received: 06-OCT-16 By: TH			
JC29144-7	SW846 8015C	07-OCT-16 16:45	HT			V8015GRO
JC29144-7	SW846 8015C	11-OCT-16 01:16	TL	10-OCT-16	NG	B8015DRO
JC29144-7	SW846 8260C	19-OCT-16 03:54	AM			V8260MDVO
JC29144-8 MW-8	Collected: 05-OCT-16 12:25 By: BD/JW		Received: 06-OCT-16 By: TH			
JC29144-8	SW846 8015C	07-OCT-16 22:25	HT			V8015GRO
JC29144-8	SW846 8015C	11-OCT-16 01:50	TL	10-OCT-16	NG	B8015DRO
JC29144-8	SW846 8260C	19-OCT-16 04:24	AM			V8260MDVO
JC29144-9 MW-9	Collected: 05-OCT-16 10:00 By: BD/JW		Received: 06-OCT-16 By: TH			
JC29144-9	SW846 8015C	07-OCT-16 22:54	HT			V8015GRO
JC29144-9	SW846 8015C	11-OCT-16 02:23	TL	10-OCT-16	NG	B8015DRO
JC29144-9	SW846 8260C	19-OCT-16 04:54	AM			V8260MDVO
JC29144-10 MW-10R	Collected: 05-OCT-16 13:20 By: BD/JW		Received: 06-OCT-16 By: TH			
JC29144-10	SW846 8015C	07-OCT-16 17:21	HT			V8015GRO
JC29144-10	SW846 8015C	11-OCT-16 02:56	TL	10-OCT-16		
JC29144-10	SW846 8015C	11-OCT-16 11:05	TL	10-OCT-16	NG	B8015DRO
JC29144-10	SW846 8260C	19-OCT-16 05:23	AM			V8260MDVO

SGS Accutest Internal Chain of Custody

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Received: 10/06/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC29144-1.1	Secured Storage	Vikas Parikh	10/10/16 04:17	Retrieve from Storage
JC29144-1.1	Vikas Parikh		10/10/16 12:30	Depleted
JC29144-1.1.1	Vikas Parikh	Organics Prep	10/10/16 04:26	Extract from JC29144-1.1
JC29144-1.1.1	Organics Prep	Nicholas Goydish	10/10/16 14:47	Extract from JC29144-1.1
JC29144-1.1.1	Nicholas Goydish	Extract Storage	10/10/16 14:47	Return to Storage
JC29144-1.1.1	Extract Storage	Krimesh Patel	10/11/16 08:38	Retrieve from Storage
JC29144-1.1.1	Krimesh Patel	GC2Z	10/11/16 08:38	Load on Instrument
JC29144-1.2	Secured Storage	Vikas Parikh	10/10/16 04:17	Retrieve from Storage
JC29144-1.2	Vikas Parikh		10/10/16 12:30	Depleted
JC29144-1.2.1	Vikas Parikh	Organics Prep	10/10/16 04:26	Extract from JC29144-1.2
JC29144-1.2.1	Organics Prep	Nicholas Goydish	10/10/16 14:47	Extract from JC29144-1.2
JC29144-1.2.1	Nicholas Goydish	Extract Storage	10/10/16 14:47	Return to Storage
JC29144-1.2.1	Extract Storage	Krimesh Patel	10/11/16 08:38	Retrieve from Storage
JC29144-1.2.1	Krimesh Patel	GC2Z	10/11/16 08:38	Load on Instrument
JC29144-1.3	Secured Storage	Tracy Karpinski	10/18/16 15:26	Retrieve from Storage
JC29144-1.3	Tracy Karpinski	GCMS2D	10/18/16 15:26	Load on Instrument
JC29144-1.3	GCMS2D	Alexis Jones	10/19/16 15:06	Unload from Instrument
JC29144-1.3	Alexis Jones	Secured Storage	10/19/16 15:06	Return to Storage
JC29144-1.6	Secured Storage	Harrison Tsai	10/07/16 15:46	Retrieve from Storage
JC29144-1.6	Harrison Tsai	GCUV	10/07/16 15:46	Load on Instrument
JC29144-1.6	GCUV	Harrison Tsai	10/10/16 10:27	Unload from Instrument
JC29144-1.6	Harrison Tsai	Secured Storage	10/10/16 10:27	Return to Storage
JC29144-2.1	Secured Storage	Vikas Parikh	10/10/16 04:17	Retrieve from Storage
JC29144-2.1	Vikas Parikh		10/10/16 12:30	Depleted
JC29144-2.1.1	Vikas Parikh	Organics Prep	10/10/16 04:26	Extract from JC29144-2.1
JC29144-2.1.1	Organics Prep	Nicholas Goydish	10/10/16 14:47	Extract from JC29144-2.1
JC29144-2.1.1	Nicholas Goydish	Extract Storage	10/10/16 14:47	Return to Storage
JC29144-2.1.1	Extract Storage	Krimesh Patel	10/11/16 08:38	Retrieve from Storage
JC29144-2.1.1	Krimesh Patel	GC2Z	10/11/16 08:38	Load on Instrument
JC29144-2.3	Secured Storage	Tracy Karpinski	10/18/16 15:26	Retrieve from Storage
JC29144-2.3	Tracy Karpinski	GCMS2D	10/18/16 15:26	Load on Instrument
JC29144-2.3	GCMS2D	Alexis Jones	10/19/16 15:06	Unload from Instrument
JC29144-2.3	Alexis Jones	Secured Storage	10/19/16 15:06	Return to Storage
JC29144-2.6	Secured Storage	Harrison Tsai	10/07/16 15:46	Retrieve from Storage
JC29144-2.6	Harrison Tsai	GCUV	10/07/16 15:46	Load on Instrument

SGS Accutest Internal Chain of Custody

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Received: 10/06/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC29144-2.6	GCUV	Harrison Tsai	10/10/16 10:27	Unload from Instrument
JC29144-2.6	Harrison Tsai	Secured Storage	10/10/16 10:27	Return to Storage
JC29144-3.1	Secured Storage	Vikas Parikh	10/10/16 04:17	Retrieve from Storage
JC29144-3.1	Vikas Parikh		10/10/16 12:30	Depleted
JC29144-3.1.1	Vikas Parikh	Organics Prep	10/10/16 04:26	Extract from JC29144-3.1
JC29144-3.1.1	Organics Prep	Nicholas Goydish	10/10/16 14:47	Extract from JC29144-3.1
JC29144-3.1.1	Nicholas Goydish	Extract Storage	10/10/16 14:47	Return to Storage
JC29144-3.1.1	Extract Storage	Krimesh Patel	10/11/16 08:38	Retrieve from Storage
JC29144-3.1.1	Krimesh Patel	GC2Z	10/11/16 08:38	Load on Instrument
JC29144-3.3	Secured Storage	Tracy Karpinski	10/18/16 15:26	Retrieve from Storage
JC29144-3.3	Tracy Karpinski	GCMS2D	10/18/16 15:26	Load on Instrument
JC29144-3.3	GCMS2D	Alexis Jones	10/19/16 15:06	Unload from Instrument
JC29144-3.3	Alexis Jones	Secured Storage	10/19/16 15:06	Return to Storage
JC29144-3.5	Secured Storage	Harrison Tsai	10/07/16 15:46	Retrieve from Storage
JC29144-3.5	Harrison Tsai	GCUV	10/07/16 15:46	Load on Instrument
JC29144-3.5	GCUV	Harrison Tsai	10/10/16 10:27	Unload from Instrument
JC29144-3.5	Harrison Tsai	Secured Storage	10/10/16 10:27	Return to Storage
JC29144-4.2	Secured Storage	Vikas Parikh	10/10/16 04:17	Retrieve from Storage
JC29144-4.2	Vikas Parikh		10/10/16 12:30	Depleted
JC29144-4.2.1	Vikas Parikh	Organics Prep	10/10/16 04:26	Extract from JC29144-4.2
JC29144-4.2.1	Organics Prep	Nicholas Goydish	10/10/16 14:47	Extract from JC29144-4.2
JC29144-4.2.1	Nicholas Goydish	Extract Storage	10/10/16 14:47	Return to Storage
JC29144-4.2.1	Extract Storage	Krimesh Patel	10/11/16 08:38	Retrieve from Storage
JC29144-4.2.1	Krimesh Patel	GC2Z	10/11/16 08:38	Load on Instrument
JC29144-4.3	Secured Storage	Tracy Karpinski	10/18/16 15:26	Retrieve from Storage
JC29144-4.3	Tracy Karpinski	GCMS2D	10/18/16 15:26	Load on Instrument
JC29144-4.3	GCMS2D	Alexis Jones	10/19/16 15:06	Unload from Instrument
JC29144-4.3	Alexis Jones	Secured Storage	10/19/16 15:06	Return to Storage
JC29144-4.6	Secured Storage	Harrison Tsai	10/07/16 15:46	Retrieve from Storage
JC29144-4.6	Harrison Tsai	GCUV	10/07/16 15:46	Load on Instrument
JC29144-4.6	GCUV	Harrison Tsai	10/10/16 10:27	Unload from Instrument
JC29144-4.6	Harrison Tsai	Secured Storage	10/10/16 10:27	Return to Storage
JC29144-5.1	Secured Storage	Vikas Parikh	10/10/16 04:17	Retrieve from Storage
JC29144-5.1	Vikas Parikh		10/10/16 12:30	Depleted

SGS Accutest Internal Chain of Custody

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Received: 10/06/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC29144-5.1.1	Vikas Parikh	Organics Prep	10/10/16 04:26	Extract from JC29144-5.1
JC29144-5.1.1	Organics Prep	Nicholas Goydish	10/10/16 14:47	Extract from JC29144-5.1
JC29144-5.1.1	Nicholas Goydish	Extract Storage	10/10/16 14:47	Return to Storage
JC29144-5.1.1	Extract Storage	Krimesh Patel	10/11/16 08:38	Retrieve from Storage
JC29144-5.1.1	Krimesh Patel	GC2Z	10/11/16 08:38	Load on Instrument
JC29144-5.3	Secured Storage	Tracy Karpinski	10/18/16 15:26	Retrieve from Storage
JC29144-5.3	Tracy Karpinski	GCMS2D	10/18/16 15:26	Load on Instrument
JC29144-5.3	GCMS2D	Alexis Jones	10/19/16 15:06	Unload from Instrument
JC29144-5.3	Alexis Jones	Secured Storage	10/19/16 15:06	Return to Storage
JC29144-5.5	Secured Storage	Alexis Jones	10/19/16 15:49	Retrieve from Storage
JC29144-5.5	Alexis Jones	GCMS2D	10/19/16 15:49	Load on Instrument
JC29144-5.5	GCMS2D	Tracy Karpinski	10/20/16 08:41	Unload from Instrument
JC29144-5.5	Tracy Karpinski	Secured Storage	10/20/16 08:41	Return to Storage
JC29144-5.6	Secured Storage	Harrison Tsai	10/07/16 15:46	Retrieve from Storage
JC29144-5.6	Harrison Tsai	GCUV	10/07/16 15:46	Load on Instrument
JC29144-5.6	GCUV	Harrison Tsai	10/10/16 10:27	Unload from Instrument
JC29144-5.6	Harrison Tsai	Secured Storage	10/10/16 10:27	Return to Storage
JC29144-6.1	Secured Storage	Allan Chung-yew	10/12/16 15:22	Retrieve from Storage
JC29144-6.1	Allan Chung-yew		10/12/16 20:47	Depleted
JC29144-6.1.1	Allan Chung-yew	Organics Prep	10/12/16 15:22	Extract from JC29144-6.1
JC29144-6.1.1	Organics Prep	Ryan Fantasia	10/13/16 00:07	Extract from JC29144-6.1
JC29144-6.1.1	Ryan Fantasia	Extract Storage	10/13/16 00:07	Return to Storage
JC29144-6.1.1	Extract Storage	Krimesh Patel	10/13/16 16:59	Retrieve from Storage
JC29144-6.1.1	Krimesh Patel	GC2Y	10/13/16 16:59	Load on Instrument
JC29144-6.2	Secured Storage	Vikas Parikh	10/10/16 04:17	Retrieve from Storage
JC29144-6.2	Vikas Parikh		10/10/16 12:30	Depleted
JC29144-6.2.1	Vikas Parikh	Organics Prep	10/10/16 04:26	Extract from JC29144-6.2
JC29144-6.2.1	Organics Prep	Nicholas Goydish	10/10/16 14:47	Extract from JC29144-6.2
JC29144-6.2.1	Nicholas Goydish	Extract Storage	10/10/16 14:47	Return to Storage
JC29144-6.2.1	Extract Storage	Krimesh Patel	10/11/16 08:38	Retrieve from Storage
JC29144-6.2.1	Krimesh Patel	GC2Z	10/11/16 08:38	Load on Instrument
JC29144-6.3	Secured Storage	Tracy Karpinski	10/18/16 15:26	Retrieve from Storage
JC29144-6.3	Tracy Karpinski	GCMS2D	10/18/16 15:26	Load on Instrument
JC29144-6.3	GCMS2D	Alexis Jones	10/19/16 15:06	Unload from Instrument
JC29144-6.3	Alexis Jones	Secured Storage	10/19/16 15:06	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Received: 10/06/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC29144-6.4	Secured Storage	Harrison Tsai	10/07/16 15:46	Retrieve from Storage
JC29144-6.4	Harrison Tsai	GCUV	10/07/16 15:46	Load on Instrument
JC29144-6.4	GCUV	Harrison Tsai	10/10/16 10:27	Unload from Instrument
JC29144-6.4	Harrison Tsai	Secured Storage	10/10/16 10:27	Return to Storage
JC29144-6.5	Secured Storage	Alexis Jones	10/19/16 15:49	Retrieve from Storage
JC29144-6.5	Alexis Jones	GCMS2D	10/19/16 15:49	Load on Instrument
JC29144-6.5	GCMS2D	Tracy Karpinski	10/20/16 08:41	Unload from Instrument
JC29144-6.5	Tracy Karpinski	Secured Storage	10/20/16 08:41	Return to Storage
JC29144-7.2	Secured Storage	Vikas Parikh	10/10/16 04:17	Retrieve from Storage
JC29144-7.2	Vikas Parikh		10/10/16 12:30	Depleted
JC29144-7.2.1	Vikas Parikh	Organics Prep	10/10/16 04:26	Extract from JC29144-7.2
JC29144-7.2.1	Organics Prep	Nicholas Goydish	10/10/16 14:47	Extract from JC29144-7.2
JC29144-7.2.1	Nicholas Goydish	Extract Storage	10/10/16 14:47	Return to Storage
JC29144-7.2.1	Extract Storage	Krimesh Patel	10/11/16 08:38	Retrieve from Storage
JC29144-7.2.1	Krimesh Patel	GC2Z	10/11/16 08:38	Load on Instrument
JC29144-7.3	Secured Storage	Tracy Karpinski	10/18/16 15:26	Retrieve from Storage
JC29144-7.3	Tracy Karpinski	GCMS2D	10/18/16 15:26	Load on Instrument
JC29144-7.3	GCMS2D	Alexis Jones	10/19/16 15:06	Unload from Instrument
JC29144-7.3	Alexis Jones	Secured Storage	10/19/16 15:06	Return to Storage
JC29144-7.6	Secured Storage	Harrison Tsai	10/07/16 15:46	Retrieve from Storage
JC29144-7.6	Harrison Tsai	GCUV	10/07/16 15:46	Load on Instrument
JC29144-7.6	GCUV	Harrison Tsai	10/10/16 10:27	Unload from Instrument
JC29144-7.6	Harrison Tsai	Secured Storage	10/10/16 10:27	Return to Storage
JC29144-8.2	Secured Storage	Vikas Parikh	10/10/16 04:17	Retrieve from Storage
JC29144-8.2	Vikas Parikh		10/10/16 12:30	Depleted
JC29144-8.2.1	Vikas Parikh	Organics Prep	10/10/16 04:26	Extract from JC29144-8.2
JC29144-8.2.1	Organics Prep	Nicholas Goydish	10/10/16 14:47	Extract from JC29144-8.2
JC29144-8.2.1	Nicholas Goydish	Extract Storage	10/10/16 14:47	Return to Storage
JC29144-8.2.1	Extract Storage	Krimesh Patel	10/11/16 08:38	Retrieve from Storage
JC29144-8.2.1	Krimesh Patel	GC2Z	10/11/16 08:38	Load on Instrument
JC29144-8.3	Secured Storage	Tracy Karpinski	10/18/16 15:26	Retrieve from Storage
JC29144-8.3	Tracy Karpinski	GCMS2D	10/18/16 15:26	Load on Instrument
JC29144-8.3	GCMS2D	Alexis Jones	10/19/16 15:06	Unload from Instrument
JC29144-8.3	Alexis Jones	Secured Storage	10/19/16 15:06	Return to Storage
JC29144-8.6	Secured Storage	Harrison Tsai	10/07/16 15:46	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Received: 10/06/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC29144-8.6	Harrison Tsai	GCUV	10/07/16 15:46	Load on Instrument
JC29144-8.6	GCUV	Harrison Tsai	10/10/16 10:27	Unload from Instrument
JC29144-8.6	Harrison Tsai	Secured Storage	10/10/16 10:27	Return to Storage
JC29144-9.2	Secured Storage	Vikas Parikh	10/10/16 04:17	Retrieve from Storage
JC29144-9.2	Vikas Parikh		10/10/16 12:30	Depleted
JC29144-9.2.1	Vikas Parikh	Organics Prep	10/10/16 04:26	Extract from JC29144-9.2
JC29144-9.2.1	Organics Prep	Nicholas Goydish	10/10/16 14:47	Extract from JC29144-9.2
JC29144-9.2.1	Nicholas Goydish	Extract Storage	10/10/16 14:47	Return to Storage
JC29144-9.2.1	Extract Storage	Krimesh Patel	10/11/16 08:38	Retrieve from Storage
JC29144-9.2.1	Krimesh Patel	GC2Z	10/11/16 08:38	Load on Instrument
JC29144-9.3	Secured Storage	Tracy Karpinski	10/18/16 15:26	Retrieve from Storage
JC29144-9.3	Tracy Karpinski	GCMS2D	10/18/16 15:26	Load on Instrument
JC29144-9.3	GCMS2D	Alexis Jones	10/19/16 15:06	Unload from Instrument
JC29144-9.3	Alexis Jones	Secured Storage	10/19/16 15:06	Return to Storage
JC29144-9.4	Secured Storage	Harrison Tsai	10/07/16 15:46	Retrieve from Storage
JC29144-9.4	Harrison Tsai	GCUV	10/07/16 15:46	Load on Instrument
JC29144-9.4	GCUV	Harrison Tsai	10/10/16 10:27	Unload from Instrument
JC29144-9.4	Harrison Tsai	Secured Storage	10/10/16 10:27	Return to Storage
JC29144-10.2	Secured Storage	Vikas Parikh	10/10/16 04:17	Retrieve from Storage
JC29144-10.2	Vikas Parikh		10/10/16 12:30	Depleted
JC29144-10.2.1	Vikas Parikh	Organics Prep	10/10/16 04:26	Extract from JC29144-10.2
JC29144-10.2.1	Organics Prep	Nicholas Goydish	10/10/16 14:47	Extract from JC29144-10.2
JC29144-10.2.1	Nicholas Goydish	Extract Storage	10/10/16 14:47	Return to Storage
JC29144-10.2.1	Extract Storage	Krimesh Patel	10/11/16 08:38	Retrieve from Storage
JC29144-10.2.1	Krimesh Patel	GC2Z	10/11/16 08:38	Load on Instrument
JC29144-10.4	Secured Storage	Harrison Tsai	10/07/16 15:46	Retrieve from Storage
JC29144-10.4	Harrison Tsai	GCUV	10/07/16 15:46	Load on Instrument
JC29144-10.4	GCUV	Harrison Tsai	10/10/16 10:27	Unload from Instrument
JC29144-10.4	Harrison Tsai	Secured Storage	10/10/16 10:27	Return to Storage
JC29144-10.5	Secured Storage	Tracy Karpinski	10/18/16 15:26	Retrieve from Storage
JC29144-10.5	Tracy Karpinski	GCMS2D	10/18/16 15:26	Load on Instrument
JC29144-10.5	GCMS2D	Alexis Jones	10/19/16 15:06	Unload from Instrument
JC29144-10.5	Alexis Jones	Secured Storage	10/19/16 15:06	Return to Storage

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D6715-MB1	2D160382.D	1	10/18/16	AM	n/a	n/a	V2D6715

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-6, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	0.50	0.14	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.46	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.55	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
74-83-9	Bromomethane	ND	2.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.28	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.54	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.17	ug/l	
75-00-3	Chloroethane	ND	1.0	0.44	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.96	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.18	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.29	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.41	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.23	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.21	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.70	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.36	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.33	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.28	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.42	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.19	ug/l	

Method Blank Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D6715-MB1	2D160382.D	1	10/18/16	AM	n/a	n/a	V2D6715

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-6, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.22	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.16	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.34	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.28	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.39	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.17	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	3.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.23	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.58	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.75	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.26	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.32	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.21	ug/l	

Method Blank Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D6715-MB1	2D160382.D	1	10/18/16	AM	n/a	n/a	V2D6715

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-6, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	101%	76-120%
17060-07-0	1,2-Dichloroethane-D4	104%	73-122%
2037-26-5	Toluene-D8	100%	84-119%
460-00-4	4-Bromofluorobenzene	106%	78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D6715-MB2	2D160404.D	1	10/19/16	AM	n/a	n/a	V2D6715

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC29144-6DUP, JC29144-5MS

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	0.50	0.14	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.46	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.55	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
74-83-9	Bromomethane	ND	2.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.28	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	1.0	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.54	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.17	ug/l	
75-00-3	Chloroethane	ND	1.0	0.44	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.96	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.18	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.29	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.41	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.23	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.21	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.70	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.36	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.33	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.28	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.42	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.19	ug/l	

Method Blank Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D6715-MB2	2D160404.D	1	10/19/16	AM	n/a	n/a	V2D6715

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC29144-6DUP, JC29144-5MS

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.22	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.16	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.34	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.28	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.39	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.17	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	3.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.23	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.58	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.75	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.26	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.32	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.21	ug/l	

Method Blank Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D6715-MB2	2D160404.D	1	10/19/16	AM	n/a	n/a	V2D6715

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC29144-6DUP, JC29144-5MS

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	76-120%
17060-07-0	1,2-Dichloroethane-D4	105%	73-122%
2037-26-5	Toluene-D8	99%	84-119%
460-00-4	4-Bromofluorobenzene	100%	78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D6715-BS	2D160383.D	1	10/18/16	AM	n/a	n/a	V2D6715

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-6, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	39.0	78	60-143
71-43-2	Benzene	50	48.0	96	79-117
108-86-1	Bromobenzene	50	47.9	96	80-116
74-97-5	Bromochloromethane	50	49.0	98	85-121
75-27-4	Bromodichloromethane	50	47.4	95	82-122
75-25-2	Bromoform	50	46.8	94	78-127
74-83-9	Bromomethane	50	42.0	84	62-141
78-93-3	2-Butanone (MEK)	50	45.9	92	74-132
104-51-8	n-Butylbenzene	50	50.1	100	80-122
135-98-8	sec-Butylbenzene	50	49.6	99	80-121
98-06-6	tert-Butylbenzene	50	50.6	101	79-124
56-23-5	Carbon tetrachloride	50	45.4	91	76-132
108-90-7	Chlorobenzene	50	46.8	94	84-117
75-00-3	Chloroethane	50	47.0	94	69-140
67-66-3	Chloroform	50	50.6	101	82-124
74-87-3	Chloromethane	50	44.5	89	55-129
95-49-8	o-Chlorotoluene	50	48.0	96	81-115
106-43-4	p-Chlorotoluene	50	48.9	98	78-116
108-20-3	Di-Isopropyl ether	50	50.0	100	70-130
96-12-8	1,2-Dibromo-3-chloropropane	50	48.3	97	73-123
124-48-1	Dibromochloromethane	50	48.4	97	81-122
106-93-4	1,2-Dibromoethane	50	47.5	95	81-119
95-50-1	1,2-Dichlorobenzene	50	47.9	96	83-116
541-73-1	1,3-Dichlorobenzene	50	46.2	92	81-115
106-46-7	1,4-Dichlorobenzene	50	47.3	95	81-114
75-71-8	Dichlorodifluoromethane	50	43.7	87	45-138
75-34-3	1,1-Dichloroethane	50	50.6	101	79-125
107-06-2	1,2-Dichloroethane	50	48.9	98	77-127
75-35-4	1,1-Dichloroethene	50	46.7	93	71-131
156-59-2	cis-1,2-Dichloroethene	50	49.7	99	75-118
156-60-5	trans-1,2-Dichloroethene	50	46.0	92	75-120
78-87-5	1,2-Dichloropropane	50	47.3	95	79-120
142-28-9	1,3-Dichloropropane	50	48.0	96	80-117
594-20-7	2,2-Dichloropropane	50	43.4	87	62-136
563-58-6	1,1-Dichloropropene	50	48.8	98	84-127
10061-01-5	cis-1,3-Dichloropropene	50	48.9	98	82-120

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D6715-BS	2D160383.D	1	10/18/16	AM	n/a	n/a	V2D6715

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-6, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	48.5	97	78-120
100-41-4	Ethylbenzene	50	47.5	95	81-116
87-68-3	Hexachlorobutadiene	50	46.9	94	72-127
98-82-8	Isopropylbenzene	50	49.5	99	80-120
99-87-6	p-Isopropyltoluene	50	49.4	99	82-122
1634-04-4	Methyl Tert Butyl Ether	100	95.1	95	77-120
108-10-1	4-Methyl-2-pentanone(MIBK)	50	49.6	99	77-128
74-95-3	Methylene bromide	50	47.7	95	82-118
75-09-2	Methylene chloride	50	45.9	92	78-122
91-20-3	Naphthalene	50	49.7	99	73-128
103-65-1	n-Propylbenzene	50	49.9	100	81-121
100-42-5	Styrene	50	50.2	100	82-118
75-65-0	Tert Butyl Alcohol	250	239	96	73-130
994-05-8	tert-Amyl Methyl Ether	50	45.5	91	76-125
637-92-3	tert-Butyl Ethyl Ether	50	50.7	101	77-127
630-20-6	1,1,1,2-Tetrachloroethane	50	47.7	95	80-119
79-34-5	1,1,2,2-Tetrachloroethane	50	47.1	94	76-118
127-18-4	Tetrachloroethene	50	70.7	141* [a]	73-133
108-88-3	Toluene	50	46.0	92	82-119
87-61-6	1,2,3-Trichlorobenzene	50	52.4	105	75-128
120-82-1	1,2,4-Trichlorobenzene	50	54.3	109	77-129
71-55-6	1,1,1-Trichloroethane	50	50.1	100	81-132
79-00-5	1,1,2-Trichloroethane	50	47.5	95	80-119
79-01-6	Trichloroethene	50	50.3	101	83-119
75-69-4	Trichlorofluoromethane	50	42.8	86	66-137
96-18-4	1,2,3-Trichloropropane	50	48.0	96	78-118
95-63-6	1,2,4-Trimethylbenzene	50	50.5	101	82-120
108-67-8	1,3,5-Trimethylbenzene	50	48.9	98	81-120
75-01-4	Vinyl chloride	50	43.1	86	58-131
	m,p-Xylene	100	96.7	97	83-117
95-47-6	o-Xylene	50	50.3	101	85-122
1330-20-7	Xylene (total)	150	147	98	84-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D6715-BS	2D160383.D	1	10/18/16	AM	n/a	n/a	V2D6715

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-6, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	76-120%
17060-07-0	1,2-Dichloroethane-D4	105%	73-122%
2037-26-5	Toluene-D8	99%	84-119%
460-00-4	4-Bromofluorobenzene	102%	78-117%

(a) High percent recoveries and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC29144-5MS	2D160412.D	1	10/19/16	AM	n/a	n/a	V2D6715
JC29144-5	2D160389.D	1	10/19/16	AM	n/a	n/a	V2D6715

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-6, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Compound	JC29144-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
67-64-1	Acetone	ND		50	37.1	74	49-155
71-43-2	Benzene	0.22	J	50	41.6	83	46-141
108-86-1	Bromobenzene	ND		50	43.0	86	75-122
74-97-5	Bromochloromethane	ND		50	44.4	89	80-124
75-27-4	Bromodichloromethane	ND		50	41.7	83	77-125
75-25-2	Bromoform	ND		50	43.0	86	71-129
74-83-9	Bromomethane	ND		50	34.1	68	58-147
78-93-3	2-Butanone (MEK)	ND		50	44.0	88	62-146
104-51-8	n-Butylbenzene	ND		50	44.6	89	68-136
135-98-8	sec-Butylbenzene	2.3		50	47.2	90	70-132
98-06-6	tert-Butylbenzene	0.34	J	50	47.2	94	70-133
56-23-5	Carbon tetrachloride	ND		50	39.5	79	67-142
108-90-7	Chlorobenzene	ND		50	41.5	83	76-124
75-00-3	Chloroethane	ND		50	37.4	75	62-150
67-66-3	Chloroform	ND		50	42.7	85	76-129
74-87-3	Chloromethane	ND		50	32.0	64	51-133
95-49-8	o-Chlorotoluene	ND		50	44.1	88	73-123
106-43-4	p-Chlorotoluene	ND		50	42.5	85	72-123
108-20-3	Di-Isopropyl ether	ND		50	41.9	84	67-131
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	60.5	121	68-127
124-48-1	Dibromochloromethane	ND		50	43.8	88	76-125
106-93-4	1,2-Dibromoethane	ND		50	44.9	90	75-121
95-50-1	1,2-Dichlorobenzene	ND		50	44.4	89	76-121
541-73-1	1,3-Dichlorobenzene	ND		50	41.6	83	74-121
106-46-7	1,4-Dichlorobenzene	ND		50	42.4	85	74-120
75-71-8	Dichlorodifluoromethane	ND		50	30.7	61	40-149
75-34-3	1,1-Dichloroethane	ND		50	41.2	82	73-131
107-06-2	1,2-Dichloroethane	ND		50	44.0	88	70-132
75-35-4	1,1-Dichloroethene	ND		50	39.0	78	64-140
156-59-2	cis-1,2-Dichloroethene	ND		50	42.5	85	59-131
156-60-5	trans-1,2-Dichloroethene	ND		50	38.0	76	68-127
78-87-5	1,2-Dichloropropane	ND		50	40.8	82	75-124
142-28-9	1,3-Dichloropropane	ND		50	44.2	88	75-119
594-20-7	2,2-Dichloropropane	ND		50	40.5	81	57-145
563-58-6	1,1-Dichloropropene	ND		50	42.7	85	76-137
10061-01-5	cis-1,3-Dichloropropene	ND		50	42.5	85	77-123

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC29144-5MS	2D160412.D	1	10/19/16	AM	n/a	n/a	V2D6715
JC29144-5	2D160389.D	1	10/19/16	AM	n/a	n/a	V2D6715

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-6, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Compound	JC29144-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
10061-02-6	trans-1,3-Dichloropropene	ND		50	41.4	83	73-121
100-41-4	Ethylbenzene	ND		50	42.1	84	46-141
87-68-3	Hexachlorobutadiene	ND		50	42.5	85	60-137
98-82-8	Isopropylbenzene	0.39	J	50	46.1	91	70-129
99-87-6	p-Isopropyltoluene	ND		50	45.6	91	72-132
1634-04-4	Methyl Tert Butyl Ether	1.8		100	86.7	85	68-125
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	50.8	102	73-135
74-95-3	Methylene bromide	ND		50	44.4	89	77-121
75-09-2	Methylene chloride	ND		50	39.2	78	73-127
91-20-3	Naphthalene	ND		50	72.3	145* [a]	63-139
103-65-1	n-Propylbenzene	ND		50	44.8	90	66-136
100-42-5	Styrene	ND		50	44.1	88	74-126
75-65-0	Tert Butyl Alcohol	ND		250	253	101	68-134
994-05-8	tert-Amyl Methyl Ether	ND		50	42.4	85	72-127
637-92-3	tert-Butyl Ethyl Ether	ND		50	44.0	88	73-128
630-20-6	1,1,1,2-Tetrachloroethane	ND		50	44.7	89	75-123
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	49.6	99	71-121
127-18-4	Tetrachloroethene	ND		50	41.4	83	58-147
108-88-3	Toluene	ND		50	40.2	80	58-137
87-61-6	1,2,3-Trichlorobenzene	ND		50	65.5	131	69-132
120-82-1	1,2,4-Trichlorobenzene	ND		50	59.4	119	71-133
71-55-6	1,1,1-Trichloroethane	ND		50	41.7	83	72-143
79-00-5	1,1,2-Trichloroethane	ND		50	43.1	86	75-122
79-01-6	Trichloroethene	ND		50	44.8	90	63-139
75-69-4	Trichlorofluoromethane	ND		50	35.3	71	57-151
96-18-4	1,2,3-Trichloropropane	ND		50	48.6	97	73-121
95-63-6	1,2,4-Trimethylbenzene	ND		50	45.9	92	50-145
108-67-8	1,3,5-Trimethylbenzene	ND		50	45.0	90	63-135
75-01-4	Vinyl chloride	ND		50	32.8	66	51-141
	m,p-Xylene	ND		100	86.4	86	46-144
95-47-6	o-Xylene	ND		50	46.0	92	63-137
1330-20-7	Xylene (total)	ND		150	132	88	52-141

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC29144-5MS	2D160412.D	1	10/19/16	AM	n/a	n/a	V2D6715
JC29144-5	2D160389.D	1	10/19/16	AM	n/a	n/a	V2D6715

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-6, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Surrogate Recoveries	MS	JC29144-5	Limits
1868-53-7	Dibromofluoromethane	99%	95%	76-120%
17060-07-0	1,2-Dichloroethane-D4	102%	93%	73-122%
2037-26-5	Toluene-D8	98%	101%	84-119%
460-00-4	4-Bromofluorobenzene	99%	100%	78-117%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC29144-6DUP	2D160414.D	1	10/19/16	AM	n/a	n/a	V2D6715
JC29144-6	2D160390.D	1	10/19/16	AM	n/a	n/a	V2D6715

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-6, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Compound	JC29144-6 ug/l	Q	DUP ug/l	Q	RPD	Limits
67-64-1	Acetone	ND		ND		nc	13
71-43-2	Benzene	ND		ND		nc	12
108-86-1	Bromobenzene	ND		ND		nc	20
74-97-5	Bromochloromethane	ND		ND		nc	20
75-27-4	Bromodichloromethane	ND		ND		nc	20
75-25-2	Bromoform	ND		ND		nc	20
74-83-9	Bromomethane	ND		ND		nc	20
78-93-3	2-Butanone (MEK)	ND		ND		nc	20
104-51-8	n-Butylbenzene	ND		ND		nc	20
135-98-8	sec-Butylbenzene	ND		ND		nc	20
98-06-6	tert-Butylbenzene	ND		ND		nc	20
56-23-5	Carbon tetrachloride	ND		ND		nc	20
108-90-7	Chlorobenzene	ND		ND		nc	20
75-00-3	Chloroethane	ND		ND		nc	20
67-66-3	Chloroform	ND		ND		nc	20
74-87-3	Chloromethane	ND		ND		nc	20
95-49-8	o-Chlorotoluene	ND		ND		nc	20
106-43-4	p-Chlorotoluene	ND		ND		nc	20
108-20-3	Di-Isopropyl ether	ND		ND		nc	20
96-12-8	1,2-Dibromo-3-chloropropane	ND		ND		nc	20
124-48-1	Dibromochloromethane	ND		ND		nc	20
106-93-4	1,2-Dibromoethane	ND		ND		nc	20
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	20
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	20
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	20
75-71-8	Dichlorodifluoromethane	ND		ND		nc	20
75-34-3	1,1-Dichloroethane	ND		ND		nc	20
107-06-2	1,2-Dichloroethane	ND		ND		nc	20
75-35-4	1,1-Dichloroethene	ND		ND		nc	20
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	15
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	20
78-87-5	1,2-Dichloropropane	ND		ND		nc	20
142-28-9	1,3-Dichloropropane	ND		ND		nc	20
594-20-7	2,2-Dichloropropane	ND		ND		nc	20
563-58-6	1,1-Dichloropropene	ND		ND		nc	20
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	20

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC29144-6DUP	2D160414.D	1	10/19/16	AM	n/a	n/a	V2D6715
JC29144-6	2D160390.D	1	10/19/16	AM	n/a	n/a	V2D6715

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-6, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Compound	JC29144-6 ug/l	Q	DUP ug/l	Q	RPD	Limits
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	20
100-41-4	Ethylbenzene	ND		ND		nc	11
87-68-3	Hexachlorobutadiene	ND		ND		nc	20
98-82-8	Isopropylbenzene	ND		ND		nc	20
99-87-6	p-Isopropyltoluene	ND		ND		nc	20
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	12
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	20
74-95-3	Methylene bromide	ND		ND		nc	20
75-09-2	Methylene chloride	ND		ND		nc	20
91-20-3	Naphthalene	ND		ND		nc	12
103-65-1	n-Propylbenzene	ND		ND		nc	20
100-42-5	Styrene	ND		ND		nc	20
75-65-0	Tert Butyl Alcohol	ND		ND		nc	20
994-05-8	tert-Amyl Methyl Ether	ND		ND		nc	20
637-92-3	tert-Butyl Ethyl Ether	ND		ND		nc	20
630-20-6	1,1,1,2-Tetrachloroethane	ND		ND		nc	20
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	20
127-18-4	Tetrachloroethene	ND		ND		nc	11
108-88-3	Toluene	ND		ND		nc	15
87-61-6	1,2,3-Trichlorobenzene	ND		ND		nc	20
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	20
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	20
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	20
79-01-6	Trichloroethene	ND		ND		nc	14
75-69-4	Trichlorofluoromethane	ND		ND		nc	20
96-18-4	1,2,3-Trichloropropane	ND		ND		nc	20
95-63-6	1,2,4-Trimethylbenzene	ND		ND		nc	20
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	20
75-01-4	Vinyl chloride	ND		ND		nc	20
	m,p-Xylene	ND		ND		nc	13
95-47-6	o-Xylene	ND		ND		nc	12
1330-20-7	Xylene (total)	ND		ND		nc	16

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC29144-6DUP	2D160414.D	1	10/19/16	AM	n/a	n/a	V2D6715
JC29144-6	2D160390.D	1	10/19/16	AM	n/a	n/a	V2D6715

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-6, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Surrogate Recoveries	DUP	JC29144-6	Limits
1868-53-7	Dibromofluoromethane	97%	95%	76-120%
17060-07-0	1,2-Dichloroethane-D4	100%	92%	73-122%
2037-26-5	Toluene-D8	97%	100%	84-119%
460-00-4	4-Bromofluorobenzene	97%	99%	78-117%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample: V2D6705-BFB
Lab File ID: 2D160157.D
Instrument ID: GCMS2D
Injection Date: 10/11/16
Injection Time: 16:24

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	21058	16.8		Pass
75	30.0 - 60.0% of mass 95	56632	45.3		Pass
95	Base peak, 100% relative abundance	125141	100.0		Pass
96	5.0 - 9.0% of mass 95	8210	6.56		Pass
173	Less than 2.0% of mass 174	304	0.24	(0.27) [a]	Pass
174	50.0 - 120.0% of mass 95	110594	88.4		Pass
175	5.0 - 9.0% of mass 174	8375	6.69	(7.57) [a]	Pass
176	95.0 - 101.0% of mass 174	107224	85.7	(97.0) [a]	Pass
177	5.0 - 9.0% of mass 176	7096	5.67	(6.62) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2D6705-IC6705	2D160158.D	10/11/16	16:58	00:34	Initial cal 0.2
V2D6705-IC6705	2D160159.D	10/11/16	17:28	01:04	Initial cal 0.5
V2D6705-IC6705	2D160160.D	10/11/16	17:58	01:34	Initial cal 1
V2D6705-IC6705	2D160161.D	10/11/16	18:28	02:04	Initial cal 2
V2D6705-IC6705	2D160162.D	10/11/16	18:58	02:34	Initial cal 5
V2D6705-IC6705	2D160163.D	10/11/16	19:28	03:04	Initial cal 10
V2D6705-IC6705	2D160164.D	10/11/16	19:58	03:34	Initial cal 20
V2D6705-ICC6705	2D160165.D	10/11/16	20:28	04:04	Initial cal 50
V2D6705-IC6705	2D160166.D	10/11/16	20:58	04:34	Initial cal 100
V2D6705-IC6705	2D160167.D	10/11/16	21:28	05:04	Initial cal 200

Instrument Performance Check (BFB)

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample: V2D6705-BFB2
Lab File ID: 2D160173.D
Instrument ID: GCMS2D
Injection Date: 10/12/16
Injection Time: 10:00

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	20501	16.6		Pass
75	30.0 - 60.0% of mass 95	54493	44.2		Pass
95	Base peak, 100% relative abundance	123405	100.0		Pass
96	5.0 - 9.0% of mass 95	8145	6.60		Pass
173	Less than 2.0% of mass 174	374	0.30	(0.35) [a]	Pass
174	50.0 - 120.0% of mass 95	107946	87.5		Pass
175	5.0 - 9.0% of mass 174	8053	6.53	(7.46) [a]	Pass
176	95.0 - 101.0% of mass 174	106229	86.1	(98.4) [a]	Pass
177	5.0 - 9.0% of mass 176	7170	5.81	(6.75) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2D6705-ICV6705	2D160174.D	10/12/16	10:32	00:32	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample: V2D6715-BFB
Lab File ID: 2D160379.D
Instrument ID: GCMS2D
Injection Date: 10/18/16
Injection Time: 21:14

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	25365	17.9		Pass
75	30.0 - 60.0% of mass 95	63872	45.1		Pass
95	Base peak, 100% relative abundance	141709	100.0		Pass
96	5.0 - 9.0% of mass 95	9363	6.61		Pass
173	Less than 2.0% of mass 174	797	0.56	(0.67) [a]	Pass
174	50.0 - 120.0% of mass 95	119744	84.5		Pass
175	5.0 - 9.0% of mass 174	8967	6.33	(7.49) [a]	Pass
176	95.0 - 101.0% of mass 174	116747	82.4	(97.5) [a]	Pass
177	5.0 - 9.0% of mass 176	7709	5.44	(6.60) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2D6715-CC6705	2D160380.D	10/18/16	21:44	00:30	Continuing cal 50
V2D6715-MB1	2D160382.D	10/18/16	22:53	01:39	Method Blank
V2D6715-BS	2D160383.D	10/18/16	23:23	02:09	Blank Spike
ZZZZZZ	2D160384A.D	10/19/16	00:24	03:10	(unrelated sample)
JC29144-1	2D160385.D	10/19/16	00:54	03:40	MW-1
JC29144-2	2D160386.D	10/19/16	01:24	04:10	MW-2
JC29144-3	2D160387.D	10/19/16	01:54	04:40	MW-3
JC29144-4	2D160388.D	10/19/16	02:24	05:10	MW-4R
JC29144-5	2D160389.D	10/19/16	02:54	05:40	MW-5
JC29144-6	2D160390.D	10/19/16	03:24	06:10	MW-6
JC29144-7	2D160391.D	10/19/16	03:54	06:40	MW-7
JC29144-8	2D160392.D	10/19/16	04:24	07:10	MW-8
JC29144-9	2D160393.D	10/19/16	04:54	07:40	MW-9
JC29144-10	2D160394.D	10/19/16	05:23	08:09	MW-10R
ZZZZZZ	2D160395.D	10/19/16	05:53	08:39	(unrelated sample)
ZZZZZZ	2D160396.D	10/19/16	06:23	09:09	(unrelated sample)
ZZZZZZ	2D160397.D	10/19/16	06:53	09:39	(unrelated sample)
ZZZZZZ	2D160398.D	10/19/16	07:23	10:09	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample: V2D6715-BFB2
Lab File ID: 2D160401.D
Instrument ID: GCMS2D
Injection Date: 10/19/16
Injection Time: 12:31

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	24565	17.2		Pass
75	30.0 - 60.0% of mass 95	64384	45.0		Pass
95	Base peak, 100% relative abundance	143229	100.0		Pass
96	5.0 - 9.0% of mass 95	9690	6.77		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	121549	84.9		Pass
175	5.0 - 9.0% of mass 174	9239	6.45	(7.60) [a]	Pass
176	95.0 - 101.0% of mass 174	118432	82.7	(97.4) [a]	Pass
177	5.0 - 9.0% of mass 176	7887	5.51	(6.66) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2D6715-CC6705	2D160402.D	10/19/16	13:02	00:31	Continuing cal 20
V2D6715-MB2	2D160404.D	10/19/16	14:08	01:37	Method Blank
V2D6715-BS2	2D160405.D	10/19/16	14:43	02:12	Blank Spike
ZZZZZZ	2D160407.D	10/19/16	15:43	03:12	(unrelated sample)
ZZZZZZ	2D160408.D	10/19/16	16:14	03:43	(unrelated sample)
ZZZZZZ	2D160409.D	10/19/16	16:44	04:13	(unrelated sample)
ZZZZZZ	2D160410.D	10/19/16	17:14	04:43	(unrelated sample)
ZZZZZZ	2D160411.D	10/19/16	17:44	05:13	(unrelated sample)
JC29144-5MS	2D160412.D	10/19/16	18:14	05:43	Matrix Spike
JC29144-6DUP	2D160414.D	10/19/16	19:14	06:43	Duplicate

Volatile Internal Standard Area Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	V2D6715-CC6705	**Injection Date:**	10/18/16
Lab File ID:	2D160380.D	**Injection Time:**	21:44
Instrument ID:	GCMS2D	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	111099	7.42	298203	10.14	461113	11.29	439668	15.51	243577	18.30
Upper Limit [a]	222198	7.92	596406	10.64	922226	11.79	879336	16.01	487154	18.80
Lower Limit [b]	55550	6.92	149102	9.64	230557	10.79	219834	15.01	121789	17.80

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2D6715-MB1	117323	7.42	328705	10.14	490814	11.29	475909	15.51	245335	18.30
V2D6715-BS	109458	7.43	309679	10.14	477112	11.29	456299	15.51	243494	18.30
ZZZZZZ	119447	7.42	315409	10.14	473259	11.29	481519	15.51	249875	18.30
JC29144-1	122422	7.42	318114	10.14	482728	11.29	487204	15.51	255514	18.30
JC29144-2	133708	7.42	320176	10.14	478252	11.29	464299	15.51	256442	18.30
JC29144-3	110488	7.41	331455	10.14	487916	11.29	484828	15.51	267937	18.30
JC29144-4	111405	7.42	330874	10.14	479288	11.29	474716	15.51	265588	18.30
JC29144-5	108173	7.42	329433	10.14	480442	11.29	482579	15.51	260709	18.30
JC29144-6	109952	7.42	329835	10.14	470464	11.29	469455	15.51	259404	18.30
JC29144-7	117836	7.42	336939	10.14	484308	11.29	480842	15.51	267782	18.30
JC29144-8	112795	7.42	333587	10.14	479724	11.29	478486	15.51	264912	18.30
JC29144-9	110667	7.42	334453	10.14	485200	11.29	478901	15.51	268331	18.30
JC29144-10	116990	7.42	330719	10.14	476693	11.29	478277	15.51	255135	18.30
ZZZZZZ	111658	7.42	337552	10.14	493994	11.29	487614	15.51	277233	18.30
ZZZZZZ	118916	7.41	351057	10.13	519691	11.29	505883	15.51	272992	18.30
ZZZZZZ	123265	7.41	349915	10.13	516000	11.29	514803	15.51	272072	18.30
ZZZZZZ	130543	7.41	350258	10.13	517223	11.29	512705	15.51	280106	18.30

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	V2D6715-CC6705	**Injection Date:**	10/19/16
Lab File ID:	2D160402.D	**Injection Time:**	13:02
Instrument ID:	GCMS2D	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	138993	7.42	325079	10.13	487065	11.29	463165	15.50	251322	18.29
Upper Limit [a]	277986	7.92	650158	10.63	974130	11.79	926330	16.00	502644	18.79
Lower Limit [b]	69497	6.92	162540	9.63	243533	10.79	231583	15.00	125661	17.79

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2D6715-MB2	148257	7.42	334376	10.13	490578	11.29	472287	15.51	262044	18.29
V2D6715-BS2	132434	7.43	315706	10.13	477112	11.29	464207	15.51	248519	18.29
ZZZZZZ	137802	7.42	333706	10.13	492350	11.29	475933	15.51	263630	18.29
ZZZZZZ	135326	7.42	330750	10.13	487542	11.29	472795	15.51	263081	18.29
ZZZZZZ	135949	7.42	336046	10.13	494129	11.29	467819	15.51	260467	18.29
ZZZZZZ	134653	7.42	339678	10.14	497481	11.29	475470	15.51	264384	18.29
ZZZZZZ	125821	7.42	333604	10.13	490738	11.29	452357	15.50	251016	18.29
JC29144-5MS	121863	7.42	319472	10.13	480707	11.29	448804	15.50	235753	18.29
JC29144-6DUP	125368	7.42	338958	10.13	493792	11.28	465232	15.50	261223	18.29

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC29144-1	2D160385.D	101	104	102	105
JC29144-2	2D160386.D	103	104	101	101
JC29144-3	2D160387.D	97	96	100	100
JC29144-4	2D160388.D	96	94	100	99
JC29144-5	2D160389.D	95	93	101	100
JC29144-6	2D160390.D	95	92	100	99
JC29144-7	2D160391.D	96	92	99	97
JC29144-8	2D160392.D	94	92	100	98
JC29144-9	2D160393.D	96	94	99	98
JC29144-10	2D160394.D	96	94	102	108
JC29144-5MS	2D160412.D	99	102	98	99
JC29144-6DUP	2D160414.D	97	100	97	97
V2D6715-BS	2D160383.D	102	105	99	102
V2D6715-MB1	2D160382.D	101	104	100	106
V2D6715-MB2	2D160404.D	98	105	99	100

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	76-120%
S2 = 1,2-Dichloroethane-D4	73-122%
S3 = Toluene-D8	84-119%
S4 = 4-Bromofluorobenzene	78-117%

Initial Calibration Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample: V2D6705-ICC6705
Lab FileID: 2D160165.D

Response Factor Report MS2D

```
Method       : C:\MSDCHEM\1\METHODS\M2D6705.M (RTE Integrator)
Title        : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
Last Update  : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration

Calibration Files
1   =2D160160.D  2   =2D160161.D  100 =2D160166.D  50  =2D160165.D
20  =2D160164.D  200 =2D160167.D  5   =2D160162.D  0.5 =2D160159.D
10  =2D160163.D  0.2 =2D160158.D      =                =

Compound
        1     2     100   50    20    200   5     0.5   10    0.2    Avg   %RSD
-------------------------------------------------------------------------------

1) I   tert butyl alcohol-d9 ----------------ISTD---------------------
2)  tertiary butyl alcohol
           0.957 1.012 0.987 1.006 0.972 0.989       0.991        0.988    1.89
3)  ethyl alcohol
     0.141 0.130 0.123 0.120 0.122 0.107 0.124       0.129        0.125    7.64
4)  1,4-dioxane
           0.081 0.102 0.098 0.095 0.098 0.093       0.093        0.094    7.18

5) I   pentafluorobenzene    ----------------ISTD---------------------
6)  chlorodifluoromethane
                 0.546 0.518 0.500 0.509 0.461       0.488        0.504    5.73
7)  dichlorodifluoromethane
           0.607 0.673 0.668 0.665 0.613 0.617       0.637        0.640    4.45
8)  chloromethane
     0.819 0.820 0.855 0.850 0.838 0.743 0.818 0.912 0.824        0.831    5.35
9)  vinyl chloride
     0.737 0.750 0.772 0.795 0.774 0.685 0.738       0.770        0.753    4.49
10)  bromomethane
     0.491 0.482 0.383 0.431 0.453       0.450       0.451        0.449    7.89
11)  chloroethane
     0.318 0.342 0.337 0.346 0.351 0.276 0.346 0.338 0.367        0.336    7.73
12)  trichlorofluoromethane
     0.670 0.659 0.684 0.704 0.700 0.614 0.698       0.713        0.680    4.73
13)  ethyl ether
     0.238 0.223 0.247 0.248 0.248 0.227 0.242 0.221 0.263        0.240    5.76
14)  acrolein
     0.084 0.080 0.080 0.082 0.081 0.071 0.086 0.084 0.088        0.082    5.89
15)  1,1-dichloroethene
     0.456 0.425 0.450 0.450 0.465 0.407 0.467 0.434 0.491        0.450    5.54
16)  2-chloropropane
                                                                  0.000   -1.00
17)  acetone
                 0.036 0.044 0.052 0.036 0.041       0.047        0.043   15.00
18)  allyl chloride
           0.249 0.269 0.272 0.281 0.253 0.282       0.313        0.274    7.69
19)  acetonitrile
                 0.033 0.034 0.037 0.029 0.037       0.038        0.035    9.19
20)  iodomethane
     0.875 0.850 0.918 0.903 0.908 0.838 0.899       0.948        0.892    4.06
21)  carbon disulfide
     1.867 1.691 1.718 1.738 1.801 1.522 1.807 1.743 1.885        1.752    6.20
22)  methylene chloride
           0.586 0.512 0.522 0.538 0.464 0.592       0.587        0.543    8.89
23)  methyl acetate
```

```
                    0.057 0.057 0.056 0.051 0.056       0.060        0.056    4.96
24)  1-chloropropane
                                                                     0.000   -1.00
25)  methyl tert butyl ether
      1.202 1.189 1.233 1.256 1.275 1.079 1.265 1.209 1.325        1.226    5.66
26)  trans-1,2-dichloroethene
      0.489 0.465 0.452 0.467 0.480 0.406 0.490 0.430 0.526 0.520  0.473    7.89
27)  di-isopropyl ether
      1.581 1.553 1.536 1.612 1.668 1.329 1.625 1.519 1.704 1.372  1.550    7.75
28)  2-butanone
                    0.042 0.044 0.048 0.041 0.039       0.041        0.042    7.41
29)  1,1-dichloroethane
      0.882 0.863 0.852 0.882 0.890 0.775 0.899 0.761 0.955        0.862    7.03
30)  chloroprene
             0.596 0.655 0.666 0.679 0.597 0.636       0.690        0.646    5.84
31)  acrylonitrile
      0.135 0.132 0.141 0.142 0.144 0.127 0.146 0.131 0.151        0.139    5.75
32)  vinyl acetate
                    0.067 0.066 0.063 0.061 0.055       0.062        0.062    7.25
33)  ethyl tert-butyl ether
      1.338 1.329 1.480 1.481 1.478 1.312 1.412 1.290 1.465        1.398    5.77
34)  ethyl acetate
             0.040 0.046 0.047 0.050 0.041 0.049       0.049        0.046    9.36
35)  2,2-dichloropropane
      0.716 0.660 0.619 0.649 0.679 0.538 0.702       0.717        0.660    9.10
36)  cis-1,2-dichloroethene
      0.530 0.495 0.521 0.527 0.525 0.474 0.520 0.469 0.560 0.485  0.511    5.66
37)  propionitrile
      0.047 0.047 0.048 0.049 0.050 0.045 0.051       0.052        0.049    4.96
38)  tert-Butyl Formate
      0.343 0.366 0.417 0.410 0.399 0.374 0.399       0.407        0.389    6.57
39)  bromochloromethane
      0.243 0.225 0.246 0.244 0.246 0.227 0.242 0.206 0.261        0.238    6.73
40)  tetrahydrofuran
             0.109 0.104 0.104 0.106 0.092 0.117       0.115        0.107    7.71
41)  chloroform
      0.878 0.780 0.783 0.799 0.820 0.710 0.823 0.793 0.867        0.806    6.22
42)  dibromofluoromethane (s)
      0.493 0.490 0.483 0.488 0.488 0.477 0.495 0.494 0.497 0.493  0.490    1.26
43)  1,2-dichloroethane-d4 (s)
      0.489 0.489 0.479 0.483 0.489 0.468 0.487 0.488 0.486 0.485  0.484    1.33
44)  freon 113
             0.376 0.390 0.393 0.404 0.339 0.381       0.398        0.383    5.65
45)  methacrylonitrile
             0.130 0.156 0.153 0.151 0.148 0.139       0.156        0.147    6.55
46)  1,1,1-trichloroethane
      0.646 0.631 0.658 0.666 0.662 0.596 0.652 0.605 0.705        0.647    5.10
47)  cyclohexane
      0.661 0.640 0.701 0.715 0.722 0.620 0.688 0.686 0.715        0.683    5.23
48)  isobutyl alcohol
                                                                     0.000   -1.00
49)  iso-octane
      1.824 1.773 1.999 2.021 2.065 1.722 1.923       2.062        1.924    7.02
50)  tert-amyl alcohol
             0.014 0.016 0.015 0.015 0.014 0.014       0.015        0.015    4.65

51) I   1,4-difluorobenzene   ----------------ISTD---------------------
52)  epichlorohydrin
             0.022 0.023 0.022 0.023 0.021 0.023       0.023        0.022    4.01
53)  n-butyl alcohol
```

Initial Calibration Summary

Job Number: JC29144 **Sample:** V2D6705-ICC6705
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D160165.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

```
      0.006 0.005 0.006 0.006 0.006 0.006 0.006       0.006        0.006    6.66
54)  carbon tetrachloride
      0.455 0.396 0.405 0.410 0.425 0.363 0.428 0.393 0.445        0.413    6.87
55)  1,1-dichloropropene
      0.389 0.362 0.383 0.385 0.390 0.353 0.390 0.331 0.409        0.377    6.29
56)  hexane   **This compound does not meet IC QC criteria**
      0.405 0.385 0.435 0.433 0.439 0.387 0.418       0.447        0.419    5.73
57)  benzene
      1.286 1.173 1.164 1.199 1.239 1.044 1.231 1.130 1.303        1.197    6.72
58)  tert-amyl methyl ether
      0.819 0.815 0.824 0.826 0.869 0.727 0.857 0.802 0.878        0.824    5.43
59)  heptane
      0.231 0.215 0.235 0.237 0.241 0.213 0.228 0.197 0.245        0.227    6.88
60)  isopropyl acetate
      0.448 0.437 0.432 0.430 0.435 0.389 0.434       0.441        0.431    4.12
61)  1,2-dichloroethane
      0.360 0.341 0.335 0.343 0.357 0.303 0.360       0.379        0.347    6.53
62)  ethyl acrylate
                    0.293 0.284 0.284 0.264 0.256       0.282        0.277    5.10
63)  trichloroethene
      0.285 0.279 0.317 0.310 0.307 0.296 0.295 0.274 0.317 0.270  0.295    5.96
64)  2-nitropropane
            0.056 0.057 0.055 0.052 0.052 0.055       0.057        0.055    3.64
65)  2-chloroethyl vinyl ether
      0.144 0.143 0.167 0.169 0.172 0.142 0.156       0.165        0.157    7.91
66)  methyl methacrylate
                    0.164 0.162 0.165 0.150 0.153       0.165        0.160    4.18
67)  1,2-dichloropropane
      0.339 0.321 0.319 0.328 0.341 0.288 0.339       0.356        0.329    6.18
68)  dibromomethane
      0.182 0.176 0.180 0.182 0.183 0.165 0.191 0.168 0.193        0.180    5.16
69)  methylcyclohexane
      0.525 0.491 0.591 0.585 0.583 0.518 0.544       0.573        0.551    6.73
70)  bromodichloromethane
      0.401 0.389 0.410 0.413 0.415 0.380 0.409       0.426        0.405    3.63
71)  cis-1,3-dichloropropene
      0.482 0.447 0.501 0.499 0.507 0.458 0.486 0.427 0.515        0.480    6.22
72)  toluene-d8 (s)
      1.226 1.205 1.191 1.198 1.210 1.182 1.224 1.216 1.204 1.192  1.205    1.19
73)  4-methyl-2-pentanone
            0.087 0.099 0.097 0.100 0.092 0.094       0.101        0.096    5.51
74)  toluene
      0.758 0.696 0.721 0.727 0.739 0.661 0.732 0.706 0.767 0.789  0.730    5.07
75)  3-methyl-1-butanol
      0.010 0.009 0.010 0.009 0.009 0.009 0.009 0.010 0.009        0.009    4.78
76)  trans-1,3-dichloropropene
      0.405 0.381 0.441 0.438 0.434 0.399 0.406 0.376 0.437        0.413    6.18
77)  ethyl methacrylate
                    0.349 0.348 0.337 0.316 0.300       0.331        0.330    5.82
78)  1,1,2-trichloroethane
      0.235 0.219 0.229 0.229 0.233 0.205 0.238 0.202 0.243 0.221  0.225    6.08
79)  2-hexanone
                    0.085 0.088 0.096 0.081 0.075       0.085        0.085    8.17

80) I   chlorobenzene-d5      ----------------ISTD---------------------
81)  3,3-Dimethyl-1-butanol
      0.023 0.019 0.022 0.021 0.020 0.022 0.020       0.020        0.021    6.95
82)  tetrachloroethene
      0.288 0.271 0.274 0.277 0.298 0.262 0.273 0.230 0.287 0.293  0.275    7.02
83)  1,3-dichloropropane
```

Initial Calibration Summary

Job Number: JC29144 **Sample:** V2D6705-ICC6705
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D160165.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

```
       0.435 0.416 0.418 0.429 0.442 0.374 0.444 0.400 0.455 0.460  0.427    6.14
 84)  butyl acetate
              0.148 0.175 0.175 0.174 0.161 0.155       0.171        0.165    6.58
 85)  dibromochloromethane
       0.321 0.309 0.325 0.323 0.324 0.303 0.320 0.280 0.338        0.316    5.27
 86)  1,2-dibromoethane
       0.275 0.252 0.283 0.280 0.278 0.263 0.274       0.290        0.275    4.34
 87)  n-butyl ether
       1.203 1.181 1.266 1.312 1.332 1.124 1.246       1.367        1.254    6.55
 88)  chlorobenzene
       0.895 0.825 0.823 0.835 0.860 0.746 0.862 0.816 0.902 0.979  0.854    7.31
 89)  1,1,1,2-tetrachloroethane
       0.333 0.304 0.329 0.328 0.329 0.310 0.327 0.312 0.351        0.325    4.39
 90)  ethylbenzene
       1.423 1.344 1.359 1.407 1.462 1.235 1.424 1.334 1.535 1.585  1.411    7.19
 91)  m,p-xylene
       0.527 0.512 0.525 0.540 0.554 0.477 0.541 0.472 0.586 0.553  0.529    6.61
 92)  o-xylene
       0.525 0.502 0.557 0.575 0.580 0.513 0.567 0.487 0.604 0.509  0.542    7.26
 93)  styrene
       0.824 0.823 0.909 0.941 0.959 0.810 0.920       0.996        0.898    7.85
 94)  butyl acrylate
                    0.570 0.559 0.529 0.550 0.451       0.506        0.527    8.31
 95)  bromoform
       0.211 0.214 0.238 0.230 0.226 0.227 0.227       0.236        0.226    4.14

 96) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
 97)  isopropylbenzene
       2.557 2.465 2.774 2.827 2.836 2.519 2.669       2.929        2.697    6.29
 98)  4-bromofluorobenzene (s)
       0.945 0.931 0.889 0.916 0.926 0.875 0.937 0.924 0.940 0.919  0.920    2.43
 99)  cyclohexanone
       0.078 0.072 0.072 0.084 0.094 0.071 0.082 0.071 0.081        0.078    9.98
100)  cis-1,4-dichloro-2-butene
                                                                    0.000   -1.00
101)  bromobenzene
       0.785 0.742 0.747 0.761 0.764 0.674 0.753 0.665 0.799 0.795  0.749    6.12
102)  1,1,2,2-tetrachloroethane
       0.733 0.677 0.676 0.683 0.680 0.621 0.700 0.580 0.721        0.674    7.05
103)  trans-1,4-dichloro-2-butene
                    0.140 0.134 0.124 0.134 0.101       0.117        0.125   11.45
104)  1,2,3-trichloropropane
       0.148 0.152 0.152 0.155 0.161 0.137 0.167       0.171        0.156    6.90
105)  n-propylbenzene
       3.172 2.988 3.187 3.286 3.394 2.837 3.281 2.766 3.566 3.408  3.189    8.06
106)  2-chlorotoluene
       0.706 0.668 0.709 0.719 0.714 0.657 0.697 0.633 0.762 0.675  0.694    5.29
107)  4-chlorotoluene
       2.088 1.928 1.980 2.045 2.086 1.809 2.080 1.829 2.197 2.147  2.019    6.43
108)  1,3,5-trimethylbenzene
       2.193 2.136 2.332 2.371 2.429 2.107 2.350 1.944 2.532 2.381  2.278    7.79
109)  tert-butylbenzene
       1.840 1.741 2.116 2.095 2.046 1.997 1.913       2.086        1.979    6.85
110)  pentachloroethane
       0.516 0.480 0.484 0.481 0.439 0.429 0.496 0.430 0.517        0.475    7.23
111)  1,2,4-trimethylbenzene
       2.278 2.233 2.370 2.447 2.526 2.108 2.405 1.966 2.653 2.498  2.348    8.78
112)  sec-butylbenzene
       3.017 2.923 3.248 3.290 3.317 2.960 3.129 2.607 3.411 3.017  3.092    7.70
113)  1,3-dichlorobenzene
```

Initial Calibration Summary

Job Number: JC29144 **Sample:** V2D6705-ICC6705
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D160165.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

```
       1.516 1.445 1.442 1.466 1.513 1.296 1.495 1.457 1.578 1.674  1.488    6.59
114)  p-isopropyltoluene
       2.380 2.307 2.731 2.744 2.729 2.447 2.535       2.815        2.586    7.46
115)  1,4-dichlorobenzene
       1.522 1.401 1.450 1.449 1.452 1.335 1.409 1.463 1.514        1.444    3.99
116)  1,2-dichlorobenzene
       1.529 1.340 1.463 1.483 1.493 1.316 1.449 1.335 1.554 1.642  1.460    7.19
117)  benzyl chloride
       1.222 1.123 1.230 1.202 1.180 1.118 1.128 1.175 1.167        1.172    3.59
118)  n-butylbenzene
       1.280 1.215 1.514 1.510 1.506 1.352 1.331       1.499        1.401    8.61
119)  1,2-dibromo-3-chloropropane
             0.113 0.139 0.132 0.123 0.133 0.114       0.127        0.126    7.78
120)  1,3,5-trichlorobenzene
       1.127 1.060 1.350 1.348 1.295 1.179 1.153       1.281        1.224    8.89
121)  hexachlorobutadiene
       0.592 0.563 0.655 0.648 0.642 0.572 0.611       0.645        0.616    5.95
122)  naphthalene
                   1.754 1.677 1.522 1.602 1.222       1.433        1.535   12.39
123)  2-ethylhexyl acrylate
                                                                    0.000   -1.00
124)  1,2,4-trichlorobenzene
       0.757 0.729 1.120 1.080 1.001 0.996 0.824       0.943        0.931   15.72
125)  1,2,3-trichlorobenzene
       0.600 0.595 0.895 0.851 0.803 0.810 0.661       0.760        0.747   15.39
126)  hexachloroethane
       0.470 0.456 0.554 0.535 0.505 0.527 0.483       0.511        0.505    6.69
 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M2D6705.M         Thu Oct 13 14:15:03 2016   MS2D
```

6.8.1

6

Initial Calibration Verification

Job Number: JC29144 **Sample:** V2D6705-ICV6705
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D160174.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\2D160174.D Vial: 2
Acq On : 12 Oct 2016 10:32 am Operator: Adilm
Sample : icv6705-50 Inst : MS2D
Misc : ms7656,v2d6705,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint1.p

Method : C:\MSDCHEM\1\METHODS\M2D6705.M (RTE Integrator)
Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
Last Update : Thu Oct 13 14:13:36 2016
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	106	0.00	7.40
2		tertiary butyl alcohol	0.988	1.025	-3.7	110	0.00	7.53
3		ethyl alcohol	0.125	0.104	16.8	91	-0.01	6.02
4		1,4-dioxane	0.094	0.095	-1.1	102	0.00	12.21
5	I	pentafluorobenzene	1.000	1.000	0.0	104	0.00	10.11
6		chlorodifluoromethane	0.504	0.486	3.6	98	0.00	3.87
7		dichlorodifluoromethane	0.640	0.475	25.8	74	0.00	3.86
8		chloromethane	0.831	0.720	13.4	88	0.00	4.19
9		vinyl chloride	0.753	0.640	15.0	84	0.00	4.44
10		bromomethane	0.449	0.390	13.1	95	0.00	5.09
11		chloroethane	0.336	0.323	3.9	97	0.00	5.27
12		trichlorofluoromethane	0.680	0.553	18.7	82	0.00	5.78
13		ethyl ether	0.240	0.234	2.5	98	0.00	6.20
14		acrolein	0.082	0.090	-9.8	114	0.00	6.45
15		1,1-dichloroethene	0.450	0.446	0.9	103	0.00	6.63
16	m	2-chloropropane		----------NA----------				
17		acetone	0.043	0.045	-4.7	106	0.00	6.69
18		allyl chloride	0.274	0.272	0.7	104	0.00	7.21
19		acetonitrile	0.035	0.032	8.6	100	0.00	7.16
20		iodomethane	0.892	0.892	0.0	103	0.00	6.91
21		carbon disulfide	1.752	1.733	1.1	104	0.00	7.05
22		methylene chloride	0.543	0.506	6.8	101	0.00	7.41
23		methyl acetate	0.056	0.056	0.0	103	0.00	7.21
24	m	1-chloropropane		----------NA----------				
25		methyl tert butyl ether	1.226	1.219	0.8	101	0.00	7.83
26		trans-1,2-dichloroethene	0.473	0.437	7.6	98	0.00	7.85
27		di-isopropyl ether	1.550	1.537	0.8	99	0.00	8.56
28		2-butanone	0.042	0.045	-7.1	105	0.00	9.40
29		1,1-dichloroethane	0.862	0.840	2.6	99	0.00	8.51
30		chloroprene	0.646	0.610	5.6	96	0.00	8.65
31		acrylonitrile	0.139	0.142	-2.2	104	0.00	7.80
32		vinyl acetate	0.062	0.067	-8.1	105	0.00	8.53
33		ethyl tert-butyl ether	1.398	1.483	-6.1	104	0.00	9.12
34		ethyl acetate	0.046	0.047	-2.2	104	0.00	9.44
35		2,2-dichloropropane	0.660	0.689	-4.4	111	0.00	9.43
36		cis-1,2-dichloroethene	0.511	0.509	0.4	101	0.00	9.41
37		propionitrile	0.049	0.049	0.0	105	0.00	9.50
38		tert-Butyl Formate	0.389	0.316	18.8	80	0.00	9.96
39		bromochloromethane	0.238	0.239	-0.4	102	0.00	9.79
40		tetrahydrofuran	0.107	0.106	0.9	106	0.00	9.86
41		chloroform	0.806	0.797	1.1	104	0.00	9.87

Initial Calibration Verification

Job Number: JC29144 **Sample:** V2D6705-ICV6705
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D160174.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

42	S	dibromofluoromethane (s)	0.490	0.478	2.4	102	0.00	10.12
43	S	1,2-dichloroethane-d4 (s)	0.484	0.478	1.2	103	0.00	10.65
44		freon 113	0.383	0.341	11.0	91	0.00	6.63
45		methacrylonitrile	0.147	0.149	-1.4	102	0.00	9.74
46		1,1,1-trichloroethane	0.647	0.672	-3.9	105	0.00	10.20
47		cyclohexane	0.683	0.614	10.1	89	0.00	10.30
48		isobutyl alcohol		----------NA----------				
49	m	iso-octane	1.924	1.663	13.6	86	0.00	10.83
50		tert-amyl alcohol	0.015	0.016	-6.7	116	0.00	10.64
51	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	11.27
52		epichlorohydrin	0.022	0.023	-4.5	108	0.00	12.93
53		n-butyl alcohol	0.006	0.006	0.0	105	0.00	11.44
54		carbon tetrachloride	0.413	0.403	2.4	102	0.00	10.45
55		1,1-dichloropropene	0.377	0.379	-0.5	102	0.00	10.43
56		hexane	0.419	0.283	32.5#	68	0.00	8.24
57		benzene	1.197	1.168	2.4	101	0.00	10.76
58		tert-amyl methyl ether	0.824	0.829	-0.6	104	0.00	10.86
59		heptane	0.227	0.197	13.2	86	0.00	11.05
60		isopropyl acetate	0.431	0.426	1.2	102	0.00	10.73
61		1,2-dichloroethane	0.347	0.340	2.0	102	0.00	10.77
62		ethyl acrylate	0.277	0.289	-4.3	105	0.00	11.76
63		trichloroethene	0.295	0.310	-5.1	103	0.00	11.70
64		2-nitropropane	0.055	0.056	-1.8	105	0.00	12.75
65		2-chloroethyl vinyl ether	0.157	0.170	-8.3	104	0.00	12.80
66		methyl methacrylate	0.160	0.162	-1.3	103	0.00	12.11
67		1,2-dichloropropane	0.329	0.310	5.8	98	0.00	12.05
68		dibromomethane	0.180	0.178	1.1	101	0.00	12.23
69		methylcyclohexane	0.551	0.482	12.5	85	0.00	12.01
70		bromodichloromethane	0.405	0.393	3.0	98	0.00	12.42
71		cis-1,3-dichloropropene	0.480	0.508	-5.8	105	0.00	13.06
72	S	toluene-d8 (s)	1.205	1.197	0.7	103	0.00	13.47
73		4-methyl-2-pentanone	0.096	0.098	-2.1	104	0.00	13.24
74		toluene	0.730	0.714	2.2	101	0.00	13.57
75		3-methyl-1-butanol	0.009	0.010	-11.1	108	0.00	13.27
76		trans-1,3-dichloropropene	0.413	0.440	-6.5	104	0.00	13.84
77		ethyl methacrylate	0.330	0.335	-1.5	100	0.00	13.89
78		1,1,2-trichloroethane	0.225	0.225	0.0	102	0.00	14.11
79		2-hexanone	0.085	0.089	-4.7	104	0.00	14.41
80	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	15.49
81		3,3-Dimethyl-1-butanol	0.021	0.022	-4.8	109	0.00	14.64
82		tetrachloroethene	0.275	0.267	2.9	99	0.00	14.34
83		1,3-dichloropropane	0.427	0.420	1.6	101	0.00	14.36
84		butyl acetate	0.165	0.173	-4.8	102	0.00	14.54
85		dibromochloromethane	0.316	0.323	-2.2	103	0.00	14.69
86		1,2-dibromoethane	0.275	0.275	0.0	101	0.00	14.89
87	m	n-butyl ether	1.254	1.526	-21.7	120	0.00	15.53
88		chlorobenzene	0.854	0.836	2.1	103	0.00	15.53
89		1,1,1,2-tetrachloroethane	0.325	0.324	0.3	102	0.00	15.62
90		ethylbenzene	1.411	1.385	1.8	101	0.00	15.64
91		m,p-xylene	0.529	0.537	-1.5	102	0.00	15.79
92		o-xylene	0.542	0.569	-5.0	102	0.00	16.33
93		styrene	0.898	0.934	-4.0	102	0.00	16.34
94		butyl acrylate	0.527	0.562	-6.6	103	0.00	16.16
95		bromoform	0.226	0.231	-2.2	103	0.00	16.62
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	18.28
97		isopropylbenzene	2.697	2.797	-3.7	103	0.00	16.77
98	S	4-bromofluorobenzene (s)	0.920	0.889	3.4	101	0.00	16.99

Initial Calibration Verification

Job Number: JC29144 **Sample:** V2D6705-ICV6705
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D160174.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

99	m	cyclohexanone	0.078	0.089	-14.1	110	0.00	16.94
100		cis-1,4-dichloro-2-butene		----------NA----------				
101		bromobenzene	0.749	0.746	0.4	102	0.00	17.20
102		1,1,2,2-tetrachloroethane	0.674	0.661	1.9	101	0.00	17.12
103		trans-1,4-dichloro-2-bute	0.125	0.150	-20.0	117	0.00	17.18
104		1,2,3-trichloropropane	0.156	0.152	2.6	102	0.00	17.20
105		n-propylbenzene	3.189	3.295	-3.3	104	0.00	17.26
106		2-chlorotoluene	0.694	0.698	-0.6	101	0.00	17.40
107		4-chlorotoluene	2.019	1.981	1.9	101	0.00	17.52
108		1,3,5-trimethylbenzene	2.278	2.349	-3.1	103	0.00	17.44
109		tert-butylbenzene	1.979	2.074	-4.8	103	0.00	17.83
110		pentachloroethane	0.475	0.520	-9.5	113	0.00	17.88
111		1,2,4-trimethylbenzene	2.348	2.462	-4.9	105	0.00	17.87
112		sec-butylbenzene	3.092	3.230	-4.5	102	0.00	18.06
113		1,3-dichlorobenzene	1.488	1.438	3.4	102	0.00	18.22
114		p-isopropyltoluene	2.586	2.746	-6.2	104	0.00	18.19
115		1,4-dichlorobenzene	1.444	1.434	0.7	103	0.00	18.30
116		1,2-dichlorobenzene	1.460	1.477	-1.2	104	0.00	18.69
117		benzyl chloride	1.172	1.410	-20.3	122	0.00	18.43
118		n-butylbenzene	1.401	1.488	-6.2	103	0.00	18.60
119		1,2-dibromo-3-chloropropa	0.126	0.133	-5.6	105	0.00	19.42
120		1,3,5-trichlorobenzene	1.224	1.415	-15.6	109	0.00	19.60
121		hexachlorobutadiene	0.616	0.638	-3.6	103	0.00	20.30
122		naphthalene	1.535	1.707	-11.2	106	0.00	20.44
123		2-ethylhexyl acrylate		----------NA----------				
124		1,2,4-trichlorobenzene	0.931	1.128	-21.2	109	0.00	20.18
125	m	1,2,3-trichlorobenzene	0.747	0.872	-16.7	107	0.00	20.65
126		hexachloroethane	0.505	0.546	-8.1	106	0.00	18.95

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2D160165.D M2D6705.M Thu Oct 13 16:53:00 2016 MS2D

6.8.2

6

Continuing Calibration Summary

Job Number: JC29144 **Sample:** V2D6715-CC6705
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D160380.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\2D\v2d6714-6715\2D160380.D Vial: 25
Acq On    : 18 Oct 2016   9:44 pm                    Operator: Adilm
Sample    : cc6705-50                                Inst    : MS2D
Misc      : ms8031,v2d6715,5,,,,1                    Multiplr: 1.00
MS Integration Params: rteint1.p

Method       : C:\MSDCHEM\1\METHODS\M2D6705.M (RTE Integrator)
Title        : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
Last Update  : Thu Oct 13 14:13:36 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	116	0.02	7.42
2		tertiary butyl alcohol	0.988	0.961	2.7	113	0.02	7.55
3		ethyl alcohol	0.125	0.138	-10.4	132	0.02	6.04
4		1,4-dioxane	0.094	0.095	-1.1	112	0.03	12.24
5	I	pentafluorobenzene	1.000	1.000	0.0	107	0.03	10.14
6		chlorodifluoromethane	0.504	0.518	-2.8	107	0.02	3.89
7		dichlorodifluoromethane	0.640	0.536	16.2	86	0.01	3.87
8		chloromethane	0.831	0.802	3.5	101	0.02	4.21
9		vinyl chloride	0.753	0.717	4.8	97	0.02	4.47
10		bromomethane	0.449	0.401	10.7	100	0.03	5.12
11		chloroethane	0.336	0.338	-0.6	105	0.03	5.30
12		trichlorofluoromethane	0.680	0.643	5.4	98	0.03	5.80
13		ethyl ether	0.240	0.249	-3.8	108	0.03	6.23
14		acrolein	0.082	0.078	4.9	103	0.02	6.47
15		1,1-dichloroethene	0.450	0.440	2.2	105	0.03	6.66
16	m	2-chloropropane		----------NA----------				
17		acetone	0.043	0.037	14.0	89	0.03	6.72
18		allyl chloride	0.274	0.286	-4.4	113	0.03	7.24
19		acetonitrile	0.035	0.037	-5.7	118	0.03	7.19
20		iodomethane	0.892	0.903	-1.2	108	0.03	6.95
21		carbon disulfide	1.752	1.711	2.3	106	0.03	7.08
22		methylene chloride	0.543	0.553	-1.8	114	0.02	7.44
23		methyl acetate	0.056	0.058	-3.6	109	0.03	7.24
24	m	1-chloropropane		----------NA----------				
25		methyl tert butyl ether	1.226	1.316	-7.3	113	0.03	7.86
26		trans-1,2-dichloroethene	0.473	0.474	-0.2	109	0.02	7.87
27		di-isopropyl ether	1.550	1.681	-8.5	112	0.03	8.58
28		2-butanone	0.042	0.042	0.0	103	0.03	9.43
29		1,1-dichloroethane	0.862	0.921	-6.8	112	0.03	8.54
30		chloroprene	0.646	0.653	-1.1	105	0.03	8.68
31		acrylonitrile	0.139	0.154	-10.8	117	0.03	7.82
32		vinyl acetate	0.062	0.059	4.8	96	0.03	8.56
33		ethyl tert-butyl ether	1.398	1.530	-9.4	111	0.03	9.15
34		ethyl acetate	0.046	0.049	-6.5	112	0.03	9.47
35		2,2-dichloropropane	0.660	0.637	3.5	106	0.03	9.46
36		cis-1,2-dichloroethene	0.511	0.544	-6.5	111	0.03	9.44
37		propionitrile	0.049	0.052	-6.1	115	0.03	9.53
38		tert-Butyl Formate	0.389	0.398	-2.3	104	0.03	9.99
39		bromochloromethane	0.238	0.255	-7.1	112	0.03	9.81
40		tetrahydrofuran	0.107	0.117	-9.3	121	0.02	9.88
41		chloroform	0.806	0.834	-3.5	112	0.03	9.90

Continuing Calibration Summary

Job Number: JC29144 **Sample:** V2D6715-CC6705
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D160380.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

42	S	dibromofluoromethane (s)	0.490	0.505	-3.1	111	0.03	10.14
43	S	1,2-dichloroethane-d4 (s)	0.484	0.510	-5.4	114	0.03	10.68
44		freon 113	0.383	0.344	10.2	94	0.03	6.66
45		methacrylonitrile	0.147	0.161	-9.5	114	0.02	9.77
46		1,1,1-trichloroethane	0.647	0.673	-4.0	109	0.03	10.23
47		cyclohexane	0.683	0.633	7.3	95	0.03	10.33
48		isobutyl alcohol		----------NA----------				
49	m	iso-octane	1.924	1.897	1.4	101	0.03	10.86
50		tert-amyl alcohol	0.015	0.016	-6.7	116	0.03	10.66
51	I	1,4-difluorobenzene	1.000	1.000	0.0	110	0.03	11.29
52		epichlorohydrin	0.022	0.022	0.0	106	0.03	12.96
53		n-butyl alcohol	0.006	0.006	0.0	114	0.03	11.47
54		carbon tetrachloride	0.413	0.401	2.9	107	0.03	10.48
55		1,1-dichloropropene	0.377	0.377	0.0	107	0.03	10.46
56		hexane	0.419	0.396	5.5	100	0.03	8.27
57		benzene	1.197	1.202	-0.4	110	0.03	10.79
58		tert-amyl methyl ether	0.824	0.828	-0.5	110	0.03	10.88
59		heptane	0.227	0.216	4.8	100	0.03	11.08
60		isopropyl acetate	0.431	0.435	-0.9	111	0.03	10.76
61		1,2-dichloroethane	0.347	0.355	-2.3	113	0.03	10.80
62		ethyl acrylate	0.277	0.287	-3.6	111	0.03	11.78
63		trichloroethene	0.295	0.306	-3.7	108	0.03	11.72
64		2-nitropropane	0.055	0.058	-5.5	116	0.03	12.78
65		2-chloroethyl vinyl ether	0.157	0.157	0.0	102	0.03	12.83
66		methyl methacrylate	0.160	0.164	-2.5	111	0.03	12.14
67		1,2-dichloropropane	0.329	0.336	-2.1	113	0.03	12.08
68		dibromomethane	0.180	0.183	-1.7	110	0.03	12.26
69		methylcyclohexane	0.551	0.582	-5.6	109	0.03	12.04
70		bromodichloromethane	0.405	0.421	-4.0	112	0.03	12.45
71		cis-1,3-dichloropropene	0.480	0.502	-4.6	110	0.03	13.09
72	S	toluene-d8 (s)	1.205	1.192	1.1	109	0.03	13.49
73		4-methyl-2-pentanone	0.096	0.103	-7.3	116	0.03	13.27
74		toluene	0.730	0.713	2.3	108	0.02	13.59
75		3-methyl-1-butanol	0.009	0.010	-11.1	112	0.03	13.29
76		trans-1,3-dichloropropene	0.413	0.431	-4.4	108	0.02	13.86
77		ethyl methacrylate	0.330	0.351	-6.4	111	0.02	13.91
78		1,1,2-trichloroethane	0.225	0.230	-2.2	110	0.02	14.13
79		2-hexanone	0.085	0.085	0.0	106	0.02	14.43
80	I	chlorobenzene-d5	1.000	1.000	0.0	105	0.02	15.51
81		3,3-Dimethyl-1-butanol	0.021	0.022	-4.8	112	0.02	14.66
82		tetrachloroethene	0.275	0.365	-32.7#	138	0.03	14.37
83		1,3-dichloropropane	0.427	0.444	-4.0	108	0.03	14.39
84		butyl acetate	0.165	0.174	-5.5	104	0.03	14.56
85		dibromochloromethane	0.316	0.331	-4.7	108	0.03	14.72
86		1,2-dibromoethane	0.275	0.282	-2.5	106	0.02	14.91
87	m	n-butyl ether	1.254	1.385	-10.4	111	0.02	15.55
88		chlorobenzene	0.854	0.851	0.4	107	0.02	15.55
89		1,1,1,2-tetrachloroethane	0.325	0.354	-8.9	113	0.02	15.64
90		ethylbenzene	1.411	1.436	-1.8	107	0.02	15.66
91		m,p-xylene	0.529	0.545	-3.0	106	0.02	15.81
92		o-xylene	0.542	0.585	-7.9	107	0.02	16.35
93		styrene	0.898	0.962	-7.1	107	0.02	16.36
94		butyl acrylate	0.527	0.613	-16.3	115	0.02	16.18
95		bromoform	0.226	0.236	-4.4	107	0.02	16.65
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	109	0.02	18.30
97		isopropylbenzene	2.697	2.807	-4.1	108	0.02	16.79
98	S	4-bromofluorobenzene (s)	0.920	0.920	0.0	109	0.02	17.01

Continuing Calibration Summary

Job Number: JC29144 **Sample:** V2D6715-CC6705
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D160380.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

99	m	cyclohexanone	0.078	0.037	52.6#	47#	0.02	16.96
100		cis-1,4-dichloro-2-butene		----------NA----------				
101		bromobenzene	0.749	0.749	0.0	107	0.02	17.22
102		1,1,2,2-tetrachloroethane	0.674	0.687	-1.9	109	0.02	17.14
103		trans-1,4-dichloro-2-bute	0.125	0.124	0.8	101	0.02	17.20
104		1,2,3-trichloropropane	0.156	0.158	-1.3	110	0.02	17.22
105		n-propylbenzene	3.189	3.225	-1.1	107	0.02	17.28
106		2-chlorotoluene	0.694	0.703	-1.3	106	0.02	17.42
107		4-chlorotoluene	2.019	2.043	-1.2	109	0.02	17.54
108		1,3,5-trimethylbenzene	2.278	2.347	-3.0	107	0.02	17.46
109		tert-butylbenzene	1.979	2.072	-4.7	107	0.02	17.85
110		pentachloroethane	0.475	0.277	41.7#	62	0.02	17.90
111		1,2,4-trimethylbenzene	2.348	2.414	-2.8	107	0.02	17.89
112		sec-butylbenzene	3.092	3.196	-3.4	105	0.02	18.08
113		1,3-dichlorobenzene	1.488	1.461	1.8	108	0.02	18.23
114		p-isopropyltoluene	2.586	2.631	-1.7	104	0.02	18.21
115		1,4-dichlorobenzene	1.444	1.443	0.1	108	0.02	18.32
116		1,2-dichlorobenzene	1.460	1.472	-0.8	108	0.02	18.71
117		benzyl chloride	1.172	1.088	7.2	98	0.02	18.45
118		n-butylbenzene	1.401	1.470	-4.9	106	0.02	18.62
119		1,2-dibromo-3-chloropropa	0.126	0.131	-4.0	108	0.02	19.44
120		1,3,5-trichlorobenzene	1.224	1.237	-1.1	100	0.02	19.62
121		hexachlorobutadiene	0.616	0.591	4.1	99	0.02	20.32
122		naphthalene	1.535	1.608	-4.8	104	0.02	20.45
123		2-ethylhexyl acrylate		----------NA----------				
124		1,2,4-trichlorobenzene	0.931	1.035	-11.2	104	0.02	20.20
125	m	1,2,3-trichlorobenzene	0.747	0.811	-8.6	104	0.02	20.67
126		hexachloroethane	0.505	0.514	-1.8	104	0.02	18.96

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2D160165.D M2D6705.M Wed Oct 19 11:15:59 2016

6.8.3

6

Continuing Calibration Summary

Job Number: JC29144 **Sample:** V2D6715-CC6705
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D160402.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2D\v2d6715\2D160402.D Vial: 2
Acq On : 19 Oct 2016 1:02 pm Operator: Adilm
Sample : cc6705-20 Inst : MS2D
Misc : ms8420,v2d6715,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint1.p

Method : C:\MSDCHEM\1\METHODS\M2D6705.M (RTE Integrator)
Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
Last Update : Thu Oct 13 14:13:36 2016
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	140	0.02	7.42
2		tertiary butyl alcohol	0.988	1.226	-24.1#	171	0.02	7.55
3		ethyl alcohol	0.125	0.093	25.6#	107	0.00	6.03
4		1,4-dioxane	0.094	0.093	1.1	137	0.02	12.23
5	I	pentafluorobenzene	1.000	1.000	0.0	114	0.02	10.13
6		chlorodifluoromethane	0.504	0.553	-9.7	126	0.00	3.88
7		dichlorodifluoromethane	0.640	0.573	10.5	98	0.01	3.87
8		chloromethane	0.831	0.738	11.2	101	0.00	4.20
9		vinyl chloride	0.753	0.704	6.5	104	0.00	4.46
10		bromomethane	0.449	0.412	8.2	104	0.02	5.11
11		chloroethane	0.336	0.334	0.6	109	0.02	5.29
12		trichlorofluoromethane	0.680	0.671	1.3	110	0.02	5.79
13		ethyl ether	0.240	0.212	11.7	98	0.02	6.22
14		acrolein	0.082	0.089	-8.5	125	0.01	6.46
15		1,1-dichloroethene	0.450	0.424	5.8	104	0.02	6.65
16	m	2-chloropropane		----------NA----------				
17		acetone	0.043	0.038	11.6	82	0.02	6.72
18		allyl chloride	0.274	0.275	-0.4	112	0.02	7.23
19		acetonitrile	0.035	0.039	-11.4	120	0.03	7.19
20		iodomethane	0.892	0.842	5.6	106	0.02	6.94
21		carbon disulfide	1.752	1.619	7.6	103	0.02	7.07
22		methylene chloride	0.543	0.493	9.2	105	0.02	7.43
23		methyl acetate	0.056	0.064	-14.3	129	0.02	7.23
24	m	1-chloropropane		----------NA----------				
25		methyl tert butyl ether	1.226	1.270	-3.6	114	0.02	7.85
26		trans-1,2-dichloroethene	0.473	0.446	5.7	106	0.02	7.87
27		di-isopropyl ether	1.550	1.636	-5.5	112	0.02	8.57
28		2-butanone	0.042	0.043	-2.4	104	0.02	9.42
29		1,1-dichloroethane	0.862	0.851	1.3	109	0.02	8.53
30		chloroprene	0.646	0.674	-4.3	113	0.02	8.67
31		acrylonitrile	0.139	0.156	-12.2	123	0.02	7.82
32		vinyl acetate	0.062	0.067	-8.1	121	0.02	8.56
33		ethyl tert-butyl ether	1.398	1.478	-5.7	114	0.02	9.14
34		ethyl acetate	0.046	0.053	-15.2	121	0.03	9.47
35		2,2-dichloropropane	0.660	0.709	-7.4	119	0.02	9.46
36		cis-1,2-dichloroethene	0.511	0.504	1.4	110	0.02	9.43
37		propionitrile	0.049	0.057	-16.3	130	0.02	9.53
38		tert-Butyl Formate	0.389	0.277	28.8#	79	0.03	9.98
39		bromochloromethane	0.238	0.240	-0.8	111	0.02	9.81
40		tetrahydrofuran	0.107	0.128	-19.6	137	0.02	9.88
41		chloroform	0.806	0.782	3.0	109	0.02	9.89

Continuing Calibration Summary

Job Number: JC29144 **Sample:** V2D6715-CC6705
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D160402.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

42	S	dibromofluoromethane (s)	0.490	0.484	1.2	113	0.02	10.14
43	S	1,2-dichloroethane-d4 (s)	0.484	0.510	-5.4	119	0.02	10.67
44		freon 113	0.383	0.394	-2.9	111	0.02	6.65
45		methacrylonitrile	0.147	0.165	-12.2	125	0.02	9.76
46		1,1,1-trichloroethane	0.647	0.639	1.2	110	0.02	10.22
47		cyclohexane	0.683	0.660	3.4	104	0.02	10.32
48		isobutyl alcohol		----------NA----------				
49	m	iso-octane	1.924	2.136	-11.0	118	0.02	10.85
50		tert-amyl alcohol	0.015	0.017	-13.3	134	0.02	10.65
51	I	1,4-difluorobenzene	1.000	1.000	0.0	114	0.02	11.29
52		epichlorohydrin	0.022	0.024	-9.1	123	0.02	12.95
53		n-butyl alcohol	0.006	0.007	-16.7	141	0.02	11.47
54		carbon tetrachloride	0.413	0.410	0.7	110	0.02	10.47
55		1,1-dichloropropene	0.377	0.386	-2.4	113	0.02	10.45
56		hexane	0.419	0.454	-8.4	118	0.02	8.26
57		benzene	1.197	1.181	1.3	109	0.02	10.78
58		tert-amyl methyl ether	0.824	0.854	-3.6	112	0.02	10.88
59		heptane	0.227	0.256	-12.8	121	0.02	11.07
60		isopropyl acetate	0.431	0.473	-9.7	124	0.02	10.75
61		1,2-dichloroethane	0.347	0.362	-4.3	115	0.02	10.79
62		ethyl acrylate	0.277	0.292	-5.4	117	0.02	11.78
63		trichloroethene	0.295	0.301	-2.0	112	0.02	11.72
64		2-nitropropane	0.055	0.064	-16.4	140	0.02	12.77
65		2-chloroethyl vinyl ether		----------NA----------				
66		methyl methacrylate	0.160	0.176	-10.0	122	0.02	12.13
67		1,2-dichloropropane	0.329	0.329	0.0	110	0.02	12.07
68		dibromomethane	0.180	0.186	-3.3	116	0.02	12.25
69		methylcyclohexane	0.551	0.667	-21.1#	130	0.02	12.03
70		bromodichloromethane	0.405	0.409	-1.0	112	0.02	12.45
71		cis-1,3-dichloropropene	0.480	0.505	-5.2	113	0.02	13.09
72	S	toluene-d8 (s)	1.205	1.192	1.1	112	0.02	13.48
73		4-methyl-2-pentanone	0.096	0.109	-13.5	124	0.02	13.26
74		toluene	0.730	0.707	3.2	109	0.02	13.58
75		3-methyl-1-butanol	0.009	0.011	-22.2#	135	0.02	13.28
76		trans-1,3-dichloropropene	0.413	0.443	-7.3	116	0.02	13.85
77		ethyl methacrylate	0.330	0.354	-7.3	120	0.02	13.91
78		1,1,2-trichloroethane	0.225	0.232	-3.1	114	0.02	14.13
79		2-hexanone	0.085	0.089	-4.7	107	0.02	14.42
80	I	chlorobenzene-d5	1.000	1.000	0.0	108	0.02	15.50
81		3,3-Dimethyl-1-butanol	0.021	0.024	-14.3	128	0.02	14.65
82		tetrachloroethene	0.275	0.279	-1.5	101	0.02	14.36
83		1,3-dichloropropane	0.427	0.461	-8.0	113	0.02	14.38
84		butyl acetate	0.165	0.189	-14.5	117	0.02	14.55
85		dibromochloromethane	0.316	0.338	-7.0	113	0.02	14.71
86		1,2-dibromoethane	0.275	0.295	-7.3	115	0.02	14.90
87	m	n-butyl ether	1.254	1.353	-7.9	110	0.02	15.54
88		chlorobenzene	0.854	0.847	0.8	106	0.02	15.54
89		1,1,1,2-tetrachloroethane	0.325	0.346	-6.5	114	0.02	15.63
90		ethylbenzene	1.411	1.463	-3.7	108	0.02	15.65
91		m,p-xylene	0.529	0.558	-5.5	109	0.02	15.80
92		o-xylene	0.542	0.591	-9.0	110	0.02	16.34
93		styrene	0.898	0.962	-7.1	108	0.02	16.35
94		butyl acrylate	0.527	0.591	-12.1	121	0.02	16.18
95		bromoform	0.226	0.246	-8.8	117	0.02	16.64
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	109	0.02	18.29
97		isopropylbenzene	2.697	2.915	-8.1	112	0.02	16.79
98	S	4-bromofluorobenzene (s)	0.920	0.933	-1.4	110	0.02	17.00

Continuing Calibration Summary

Job Number: JC29144 **Sample:** V2D6715-CC6705
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D160402.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

99	m	cyclohexanone	0.078	0.041	47.4#	48#	0.02	16.95
100		cis-1,4-dichloro-2-butene		----------NA----------				
101		bromobenzene	0.749	0.753	-0.5	107	0.02	17.22
102		1,1,2,2-tetrachloroethane	0.674	0.772	-14.5	124	0.02	17.13
103		trans-1,4-dichloro-2-bute	0.125	0.158	-26.4#	138	0.02	17.20
104		1,2,3-trichloropropane	0.156	0.181	-16.0	122	0.02	17.22
105		n-propylbenzene	3.189	3.394	-6.4	109	0.01	17.27
106		2-chlorotoluene	0.694	0.716	-3.2	109	0.02	17.42
107		4-chlorotoluene	2.019	2.088	-3.4	109	0.02	17.53
108		1,3,5-trimethylbenzene	2.278	2.462	-8.1	110	0.02	17.46
109		tert-butylbenzene	1.979	2.117	-7.0	113	0.02	17.84
110		pentachloroethane	0.475	0.510	-7.4	127	0.01	17.89
111		1,2,4-trimethylbenzene	2.348	2.523	-7.5	109	0.01	17.88
112		sec-butylbenzene	3.092	3.352	-8.4	110	0.02	18.07
113		1,3-dichlorobenzene	1.488	1.472	1.1	106	0.01	18.23
114		p-isopropyltoluene	2.586	2.775	-7.3	111	0.02	18.20
115		1,4-dichlorobenzene	1.444	1.431	0.9	107	0.02	18.32
116		1,2-dichlorobenzene	1.460	1.510	-3.4	110	0.02	18.71
117		benzyl chloride	1.172	1.472	-25.6#	136	0.02	18.44
118		n-butylbenzene	1.401	1.542	-10.1	112	0.02	18.62
119		1,2-dibromo-3-chloropropa	0.126	0.168	-33.3#	149	0.01	19.43
120		1,3,5-trichlorobenzene	1.224	1.309	-6.9	110	0.01	19.61
121		hexachlorobutadiene	0.616	0.658	-6.8	112	0.02	20.32
122		naphthalene	1.535	2.314	-50.7#	166	0.02	20.45
123		2-ethylhexyl acrylate		----------NA----------				
124		1,2,4-trichlorobenzene	0.931	1.180	-26.7#	128	0.02	20.20
125	m	1,2,3-trichlorobenzene	0.747	1.053	-41.0#	143	0.02	20.67
126		hexachloroethane	0.505	0.538	-6.5	116	0.01	18.96

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2D160164.D M2D6705.M Wed Oct 19 16:50:29 2016 ACC-VOA-DP

6.8.4

6

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160385.D
Acq On : 19 Oct 2016 12:54 am
Operator : Adilm
Sample : jc29144-1
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Oct 19 11:17:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration

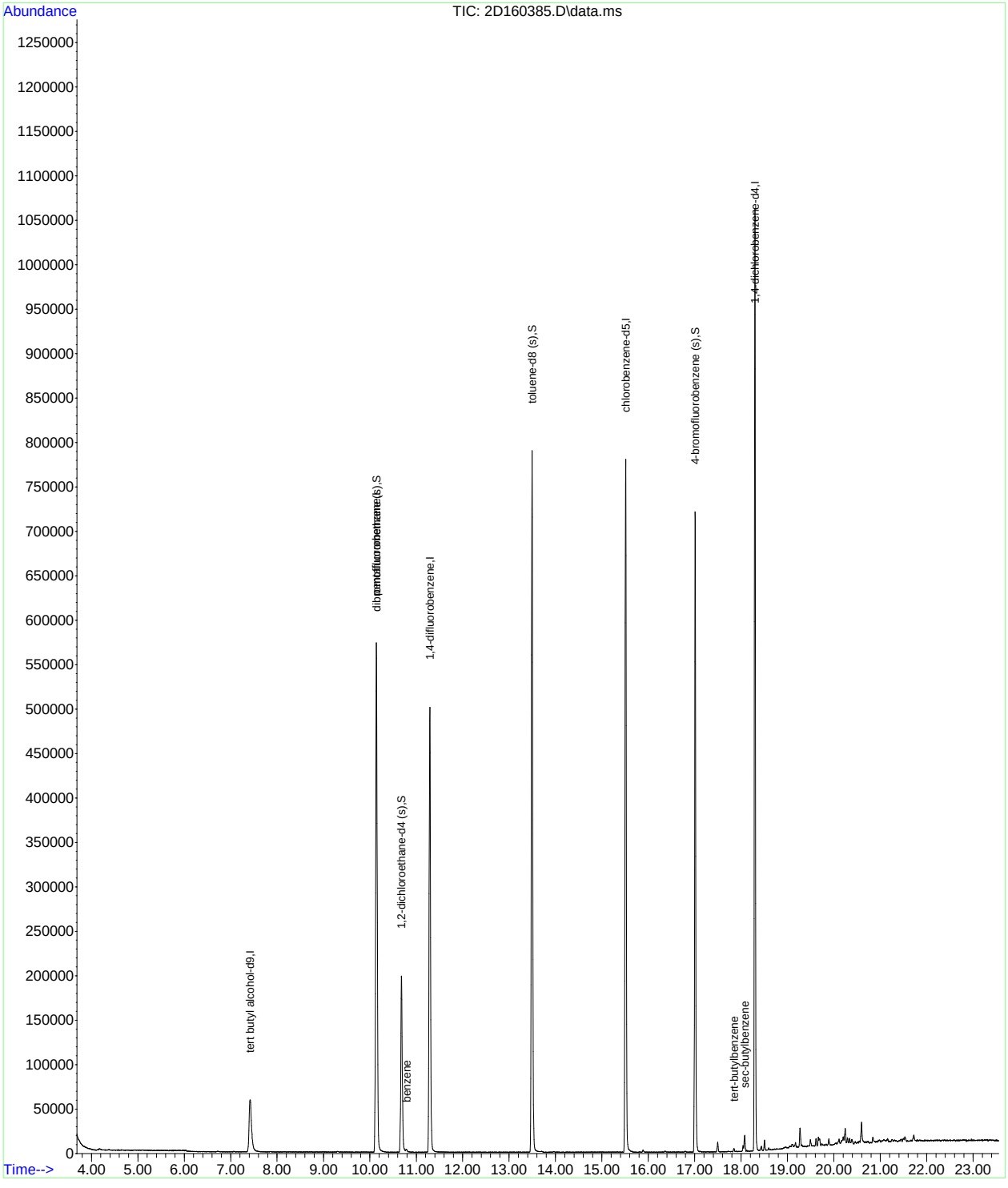
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.418	65	122422	500.00	ug/L	0.02
5) pentafluorobenzene	10.139	168	318114	50.00	ug/L	0.03
51) 1,4-difluorobenzene	11.292	114	482728	50.00	ug/L	0.03
80) chlorobenzene-d5	15.513	117	487204	50.00	ug/L	0.03
96) 1,4-dichlorobenzene-d4	18.297	152	255514	50.00	ug/L	0.02
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.144	113	157996	50.71	ug/L	0.03
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.42%			
43) 1,2-dichloroethane-d4 (s)	10.679	65	160477	52.09	ug/L	0.02
Spiked Amount 50.000	Range 73 - 122		Recovery = 104.18%			
72) toluene-d8 (s)	13.494	98	593545	51.03	ug/L	0.03
Spiked Amount 50.000	Range 84 - 119		Recovery = 102.06%			
98) 4-bromofluorobenzene (s)	17.007	95	247786	52.70	ug/L	0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 105.40%			
Target Compounds						Qvalue
57) benzene	10.789	78	2772	0.24	ug/L	99
109) tert-butylbenzene	17.846	119	2006	0.20	ug/L	93
112) sec-butylbenzene	18.077	105	11772	0.75	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

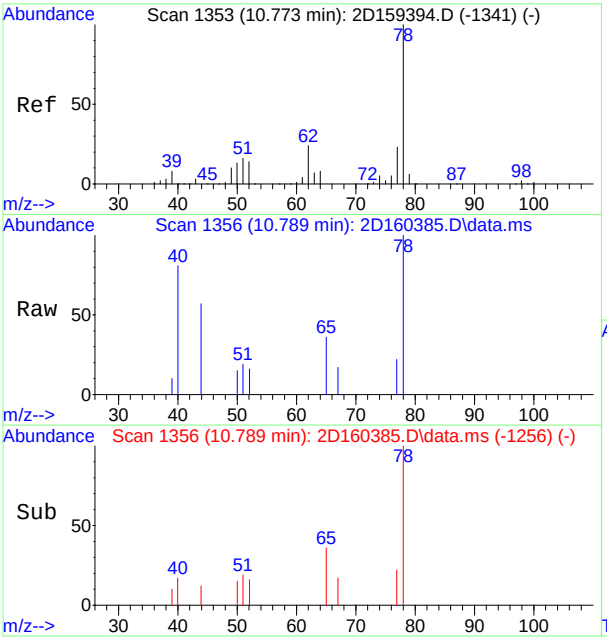
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160385.D
Acq On : 19 Oct 2016 12:54 am
Operator : Adilm
Sample : jc29144-1
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Oct 19 11:17:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration



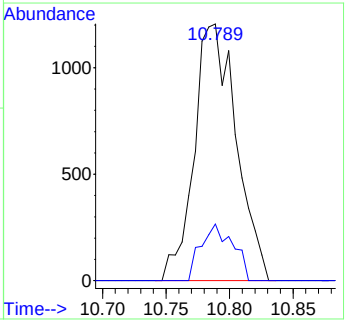
SGS ACCUTEST JC29144

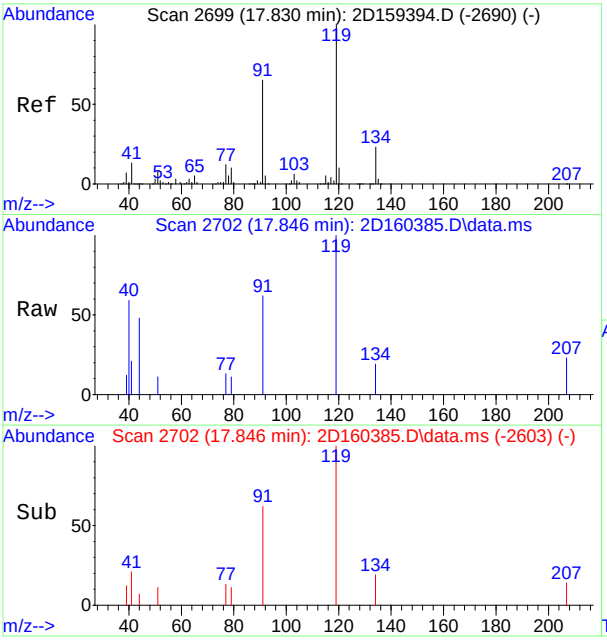


#57
benzene
Concen: 0.24 ug/L
RT: 10.789 min Scan# 1356
Delta R.T. 0.026 min
Lab File: 2D160385.D
Acq: 19 Oct 2016 12:54 am

Tgt Ion: 78 Resp: 2772

Ion	Ratio	Lower	Upper
78	100		
77	22.1	0.0	52.5

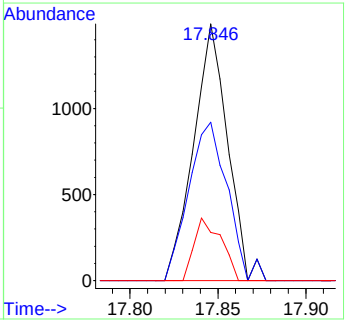


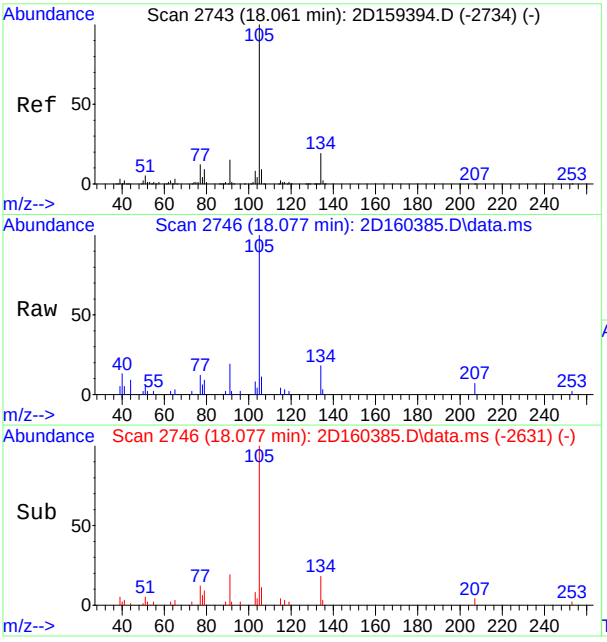


#109
tert-butylbenzene
Concen: 0.20 ug/L
RT: 17.846 min Scan# 2702
Delta R.T. 0.021 min
Lab File: 2D160385.D
Acq: 19 Oct 2016 12:54 am

Tgt Ion:119 Resp: 2006

Ion	Ratio	Lower	Upper
119	100		
91	61.7	36.4	96.4
134	18.8	0.0	54.0

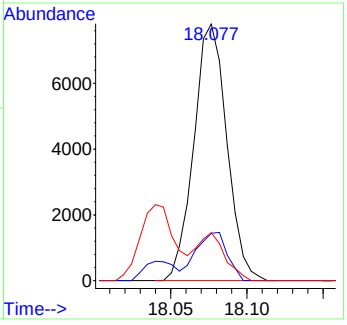




#112
sec-butylbenzene
Concen: 0.75 ug/L
RT: 18.077 min Scan# 2746
Delta R.T. 0.021 min
Lab File: 2D160385.D
Acq: 19 Oct 2016 12:54 am

Tgt Ion:105 Resp: 11772

Ion	Ratio	Lower	Upper
105	100		
134	18.4	0.0	49.4
91	18.6	0.0	45.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160386.D
Acq On : 19 Oct 2016 1:24 am
Operator : Adilm
Sample : jc29144-2
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Oct 19 11:18:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.423	65	133708	500.00	ug/L	0.02
5) pentafluorobenzene	10.139	168	320176	50.00	ug/L	0.03
51) 1,4-difluorobenzene	11.292	114	478252	50.00	ug/L	0.03
80) chlorobenzene-d5	15.513	117	464299	50.00	ug/L	0.03
96) 1,4-dichlorobenzene-d4	18.297	152	256442	50.00	ug/L	0.02
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.144	113	161387	51.46	ug/L	0.03
Spiked Amount 50.000	Range 76 - 120		Recovery = 102.92%			
43) 1,2-dichloroethane-d4 (s)	10.684	65	161456	52.07	ug/L	0.03
Spiked Amount 50.000	Range 73 - 122		Recovery = 104.14%			
72) toluene-d8 (s)	13.494	98	579588	50.30	ug/L	0.03
Spiked Amount 50.000	Range 84 - 119		Recovery = 100.60%			
98) 4-bromofluorobenzene (s)	17.007	95	237671	50.36	ug/L	0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.72%			
Target Compounds						Qvalue
17) acetone	6.720	58	1239	4.52	ug/L #	75
47) cyclohexane	10.322	84	40694	9.30	ug/L #	74
57) benzene	10.789	78	17474	1.53	ug/L	96
69) methylcyclohexane	12.037	83	37878	7.18	ug/L	95
97) isopropylbenzene	16.797	105	123857	8.95	ug/L	100
105) n-propylbenzene	17.285	91	167897	10.27	ug/L	97
108) 1,3,5-trimethylbenzene	17.463	105	7965	0.68	ug/L	100
109) tert-butylbenzene	17.846	119	8733	0.86	ug/L	99
111) 1,2,4-trimethylbenzene	17.888	105	1229851	102.11	ug/L	100
112) sec-butylbenzene	18.077	105	60215	3.80	ug/L	98
118) n-butylbenzene	18.622	92	11138	1.55	ug/L	98
122) naphthalene	20.457	128	1072225	136.20	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.2

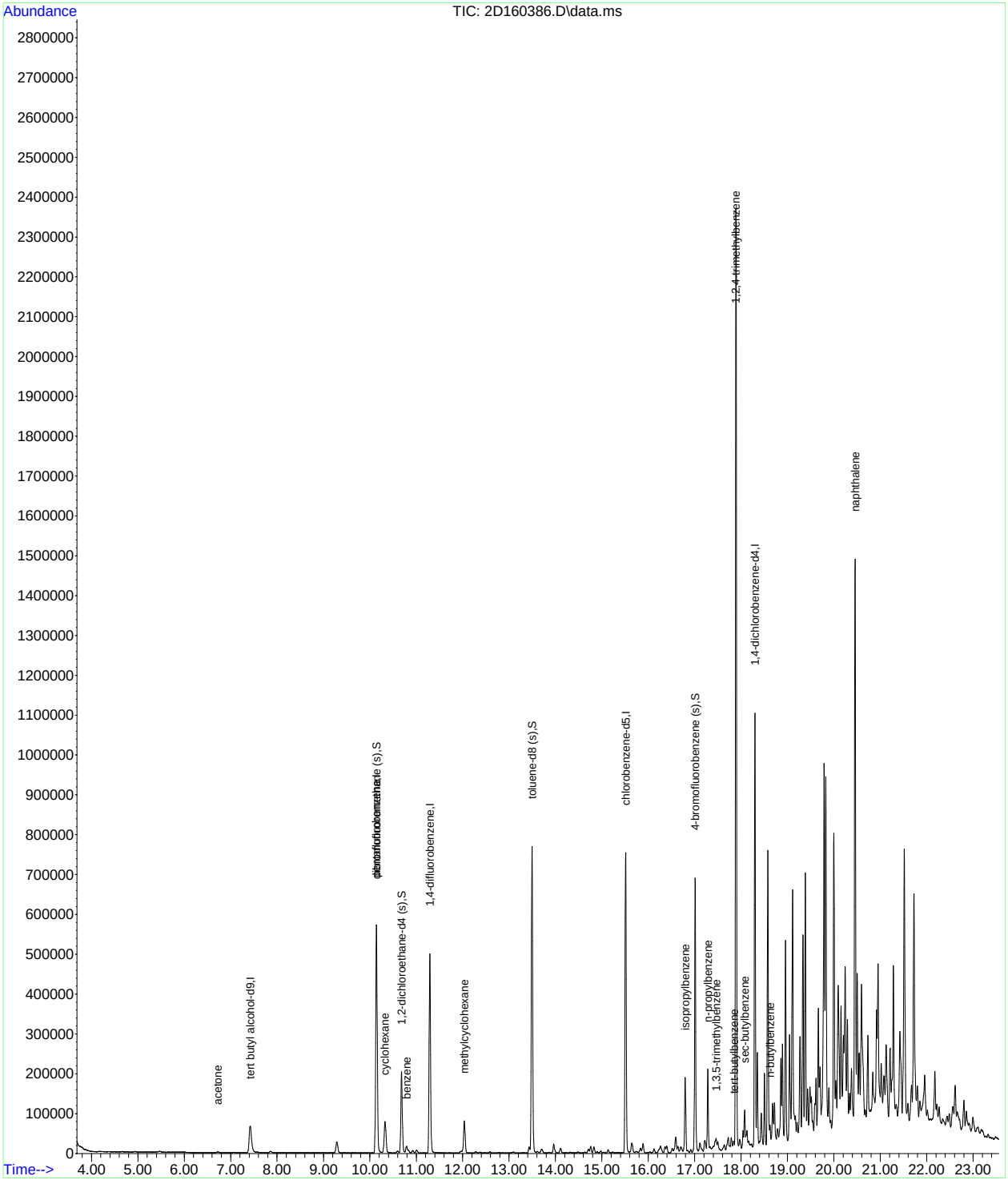
7

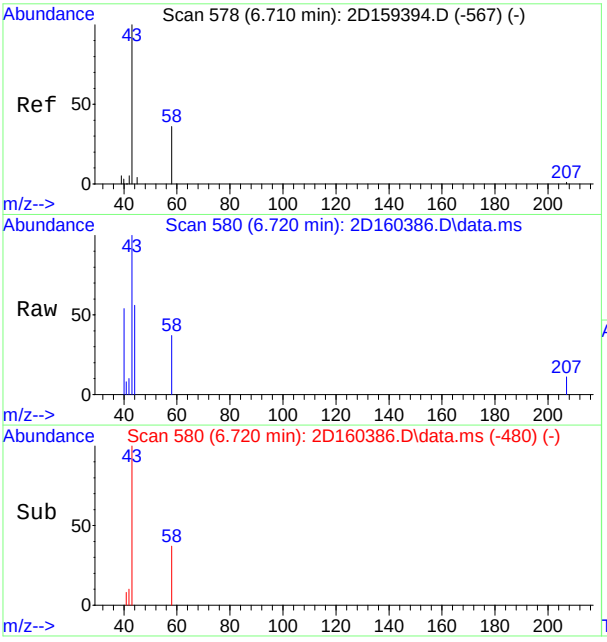
SGS ACCUTEST JC29144

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160386.D
Acq On : 19 Oct 2016 1:24 am
Operator : Adilm
Sample : jc29144-2
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Oct 19 11:18:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration

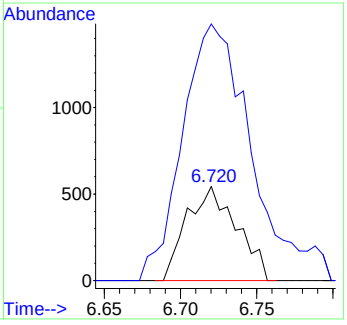


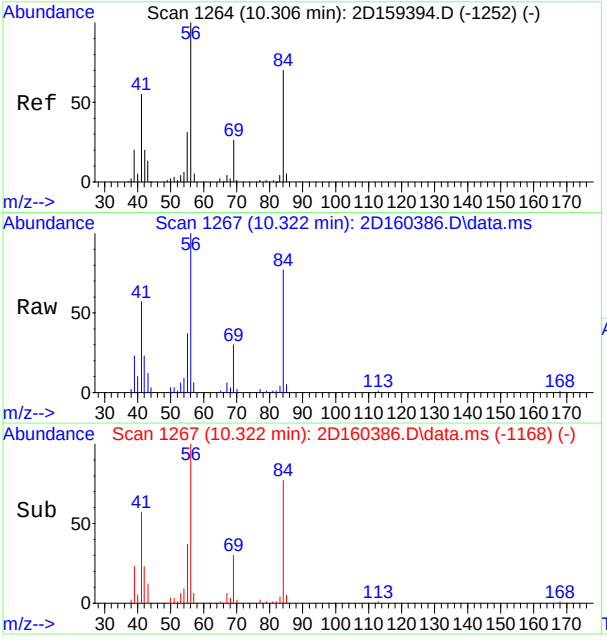


#17
acetone
Concen: 4.52 ug/L
RT: 6.720 min Scan# 580
Delta R.T. 0.026 min
Lab File: 2D160386.D
Acq: 19 Oct 2016 1:24 am

Tgt Ion: 58 Resp: 1239

Ion	Ratio	Lower	Upper
58	100		
43	241.9	259.0	319.0#

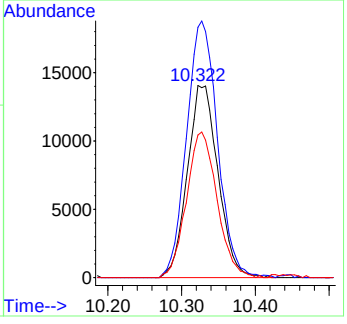




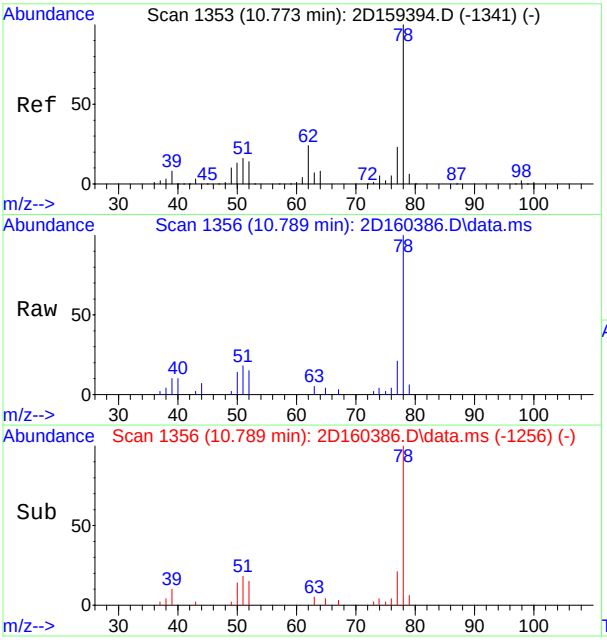
#47
cyclohexane
Concen: 9.30 ug/L
RT: 10.322 min Scan# 1267
Delta R.T. 0.021 min
Lab File: 2D160386.D
Acq: 19 Oct 2016 1:24 am

Tgt Ion: 84 Resp: 40694

Ion	Ratio	Lower	Upper
84	100		
56	130.3	140.6	200.6#
41	74.3	64.6	124.6



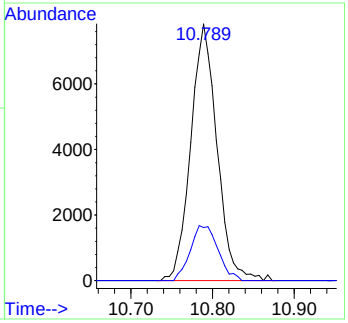
SGS ACCUTEST JC29144

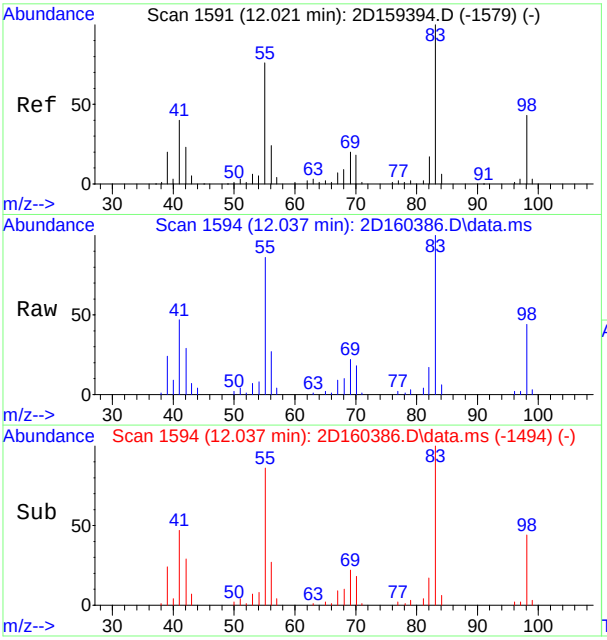


#57
benzene
Concen: 1.53 ug/L
RT: 10.789 min Scan# 1356
Delta R.T. 0.026 min
Lab File: 2D160386.D
Acq: 19 Oct 2016 1:24 am

Tgt Ion: 78 Resp: 17474

Ion	Ratio	Lower	Upper
78	100		
77	20.7	0.0	52.5

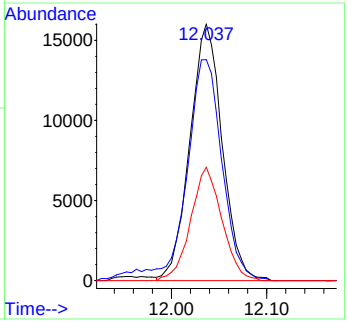


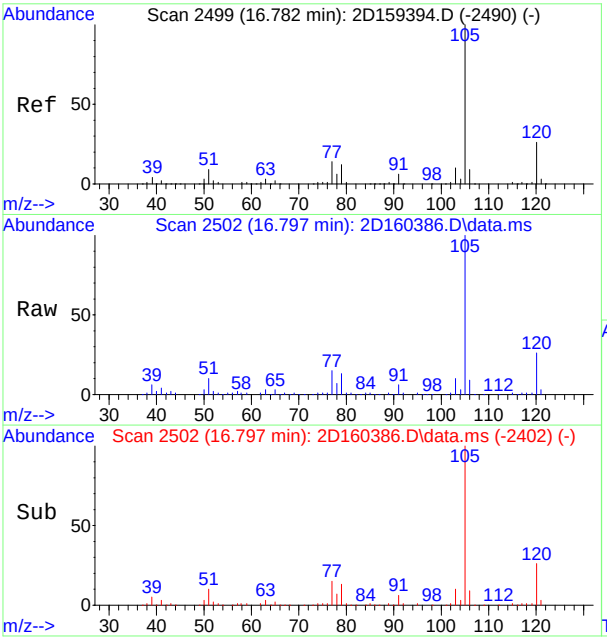


#69
methylcyclohexane
Concen: 7.18 ug/L
RT: 12.037 min Scan# 1594
Delta R.T. 0.026 min
Lab File: 2D160386.D
Acq: 19 Oct 2016 1:24 am

Tgt Ion: 83 Resp: 37878

Ion	Ratio	Lower	Upper
83	100		
55	86.1	51.1	111.1
98	44.2	11.5	71.5

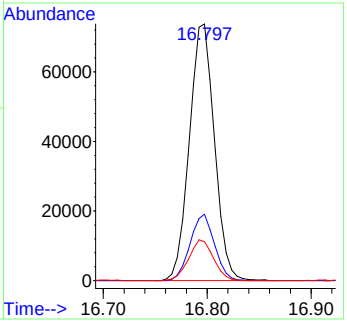


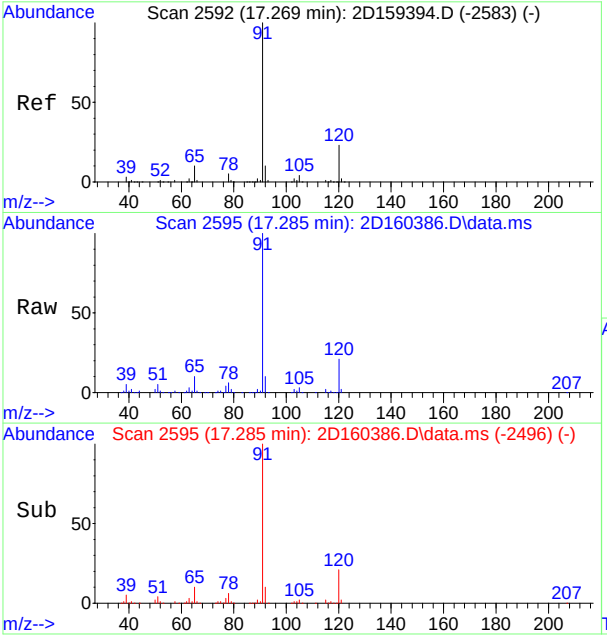


#97
isopropylbenzene
Concen: 8.95 ug/L
RT: 16.797 min Scan# 2502
Delta R.T. 0.026 min
Lab File: 2D160386.D
Acq: 19 Oct 2016 1:24 am

Tgt Ion:105 Resp: 123857

Ion	Ratio	Lower	Upper
105	100		
120	25.9	0.0	56.0
77	15.2	0.0	45.4

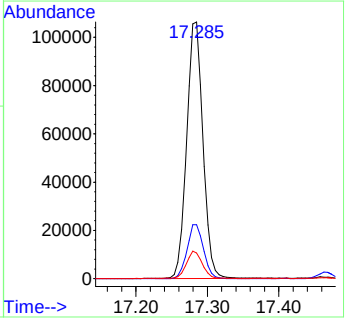


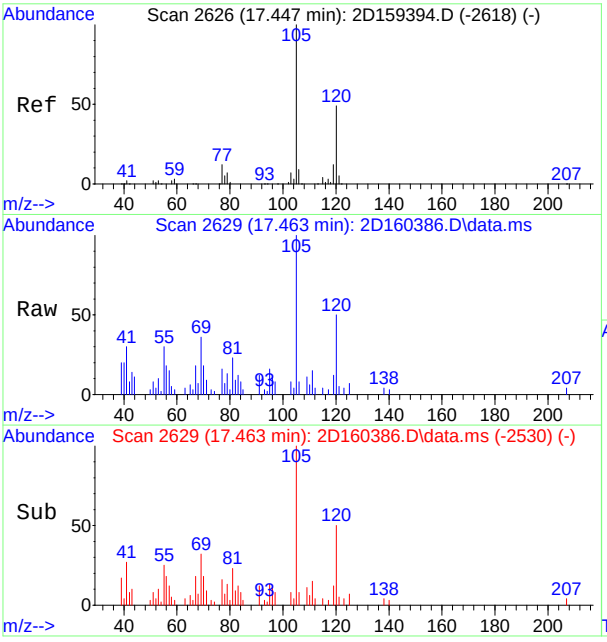


#105
n-propylbenzene
Concen: 10.27 ug/L
RT: 17.285 min Scan# 2595
Delta R.T. 0.021 min
Lab File: 2D160386.D
Acq: 19 Oct 2016 1:24 am

Tgt Ion: 91 Resp: 167897

Ion	Ratio	Lower	Upper
91	100		
120	21.1	0.0	53.1
65	10.0	0.0	40.0

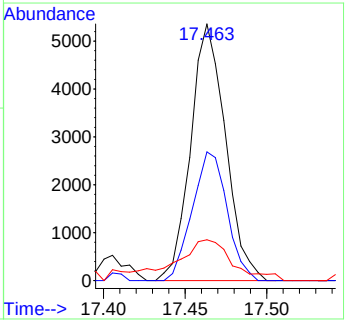


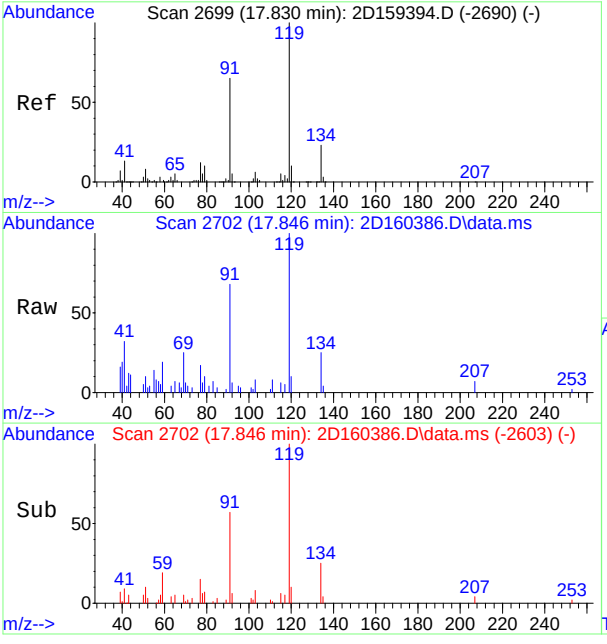


#108
1,3,5-trimethylbenzene
Concen: 0.68 ug/L
RT: 17.463 min Scan# 2629
Delta R.T. 0.021 min
Lab File: 2D160386.D
Acq: 19 Oct 2016 1:24 am

Tgt Ion:105 Resp: 7965

Ion	Ratio	Lower	Upper
105	100		
120	50.2	20.1	80.1
77	13.2	0.0	42.5

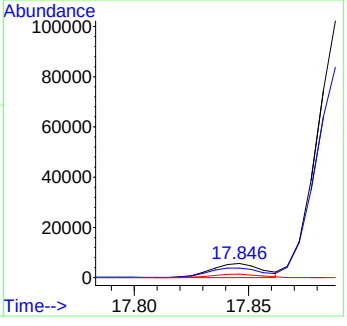


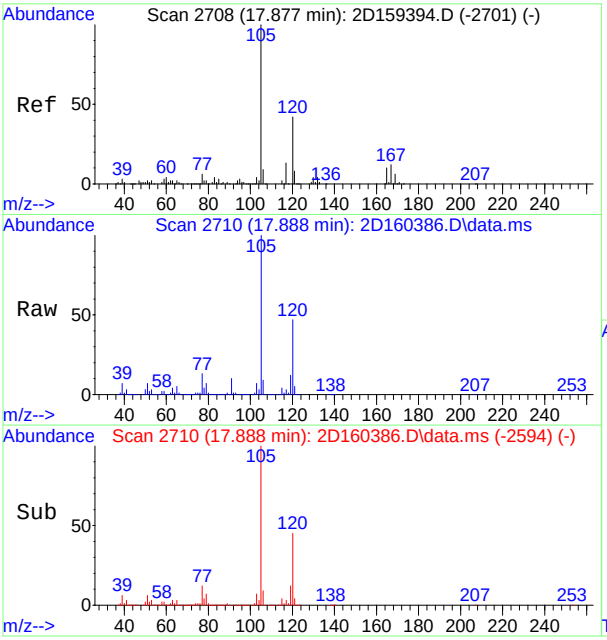


#109
tert-butylbenzene
Concen: 0.86 ug/L
RT: 17.846 min Scan# 2702
Delta R.T. 0.021 min
Lab File: 2D160386.D
Acq: 19 Oct 2016 1:24 am

Tgt Ion:119 Resp: 8733

Ion	Ratio	Lower	Upper
119	100		
91	65.2	36.4	96.4
134	24.6	0.0	54.0

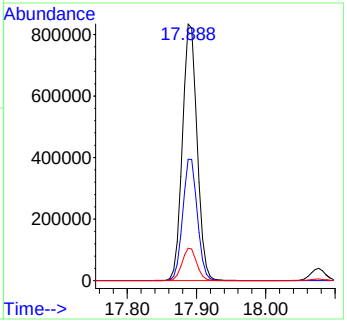


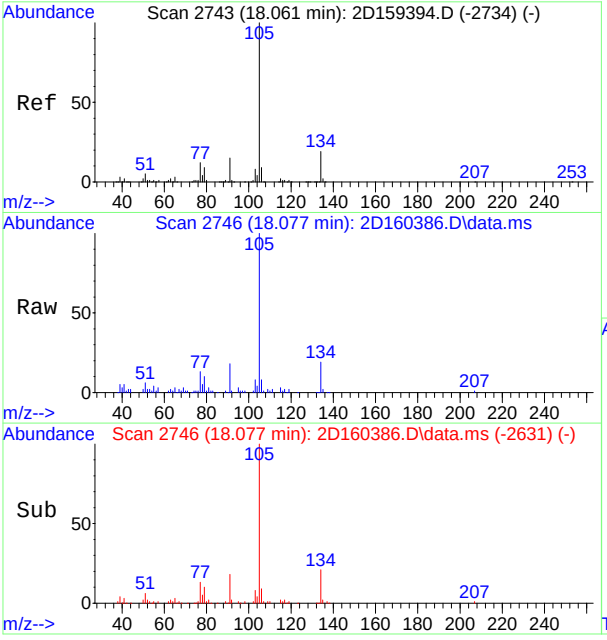


#111
1,2,4-trimethylbenzene
Concen: 102.11 ug/L
RT: 17.888 min Scan# 2710
Delta R.T. 0.016 min
Lab File: 2D160386.D
Acq: 19 Oct 2016 1:24 am

Tgt Ion:105 Resp: 1229851

Ion	Ratio	Lower	Upper
105	100		
120	47.3	17.3	77.3
77	12.7	0.0	42.1

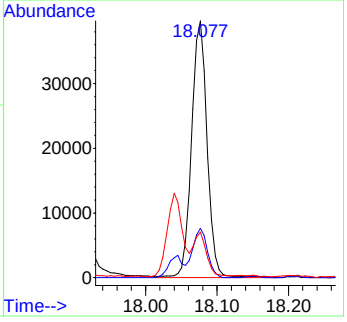




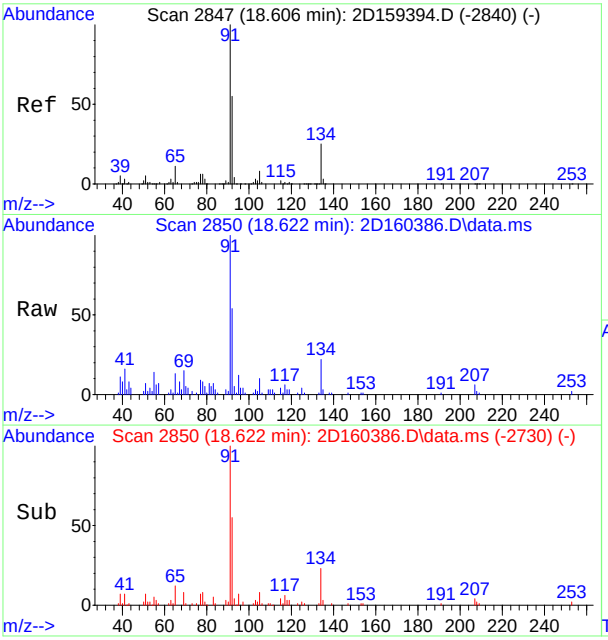
#112
sec-butylbenzene
Concen: 3.80 ug/L
RT: 18.077 min Scan# 2746
Delta R.T. 0.021 min
Lab File: 2D160386.D
Acq: 19 Oct 2016 1:24 am

Tgt Ion:105 Resp: 60215

Ion	Ratio	Lower	Upper
105	100		
134	19.2	0.0	49.4
91	17.2	0.0	45.2



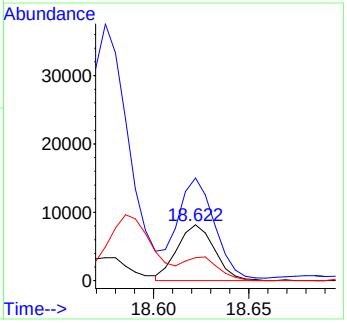
SGS ACCUTEST JC29144

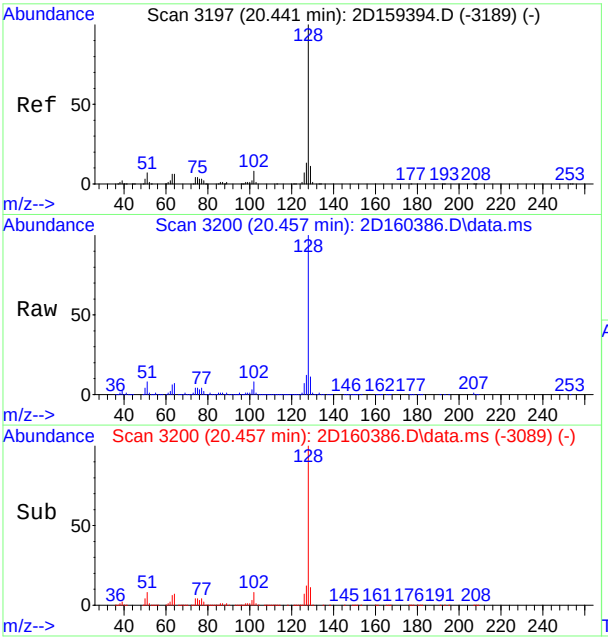


#118
n-butylbenzene
Concen: 1.55 ug/L
RT: 18.622 min Scan# 2850
Delta R.T. 0.021 min
Lab File: 2D160386.D
Acq: 19 Oct 2016 1:24 am

Tgt Ion: 92 Resp: 11138

Ion	Ratio	Lower	Upper
92	100		
91	177.8	149.7	209.7
134	41.1	15.5	75.5

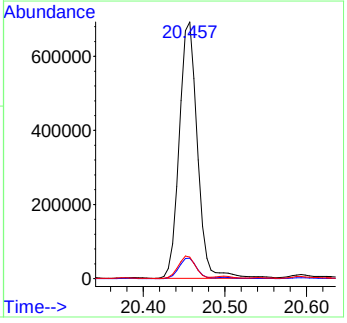




#122
naphthalene
Concen: 136.20 ug/L
RT: 20.457 min Scan# 3200
Delta R.T. 0.021 min
Lab File: 2D160386.D
Acq: 19 Oct 2016 1:24 am

Tgt Ion:128 Resp: 1072225

Ion	Ratio	Lower	Upper
128	100		
102	8.0	0.0	37.6
51	8.3	0.0	37.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160387.D
Acq On : 19 Oct 2016 1:54 am
Operator : Adilm
Sample : jc29144-3
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Oct 19 11:19:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.412	65	110488	500.00	ug/L	0.01
5) pentafluorobenzene	10.139	168	331455	50.00	ug/L	0.03
51) 1,4-difluorobenzene	11.292	114	487916	50.00	ug/L	0.03
80) chlorobenzene-d5	15.513	117	484828	50.00	ug/L	0.03
96) 1,4-dichlorobenzene-d4	18.297	152	267937	50.00	ug/L	0.02
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.144	113	157481	48.51	ug/L	0.03
Spiked Amount 50.000	Range 76 - 120		Recovery = 97.02%			
43) 1,2-dichloroethane-d4 (s)	10.679	65	153574	47.84	ug/L	0.02
Spiked Amount 50.000	Range 73 - 122		Recovery = 95.68%			
72) toluene-d8 (s)	13.494	98	587620	49.99	ug/L	0.03
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.98%			
98) 4-bromofluorobenzene (s)	17.007	95	246732	50.04	ug/L	0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.08%			
Target Compounds						Qvalue
57) benzene	10.789	78	14558	1.25	ug/L	95
97) isopropylbenzene	16.792	105	7835	0.54	ug/L	98
109) tert-butylbenzene	17.846	119	4984	0.47	ug/L	97
112) sec-butylbenzene	18.077	105	33976	2.05	ug/L	98
122) naphthalene	20.457	128	19974	2.43	ug/L	97

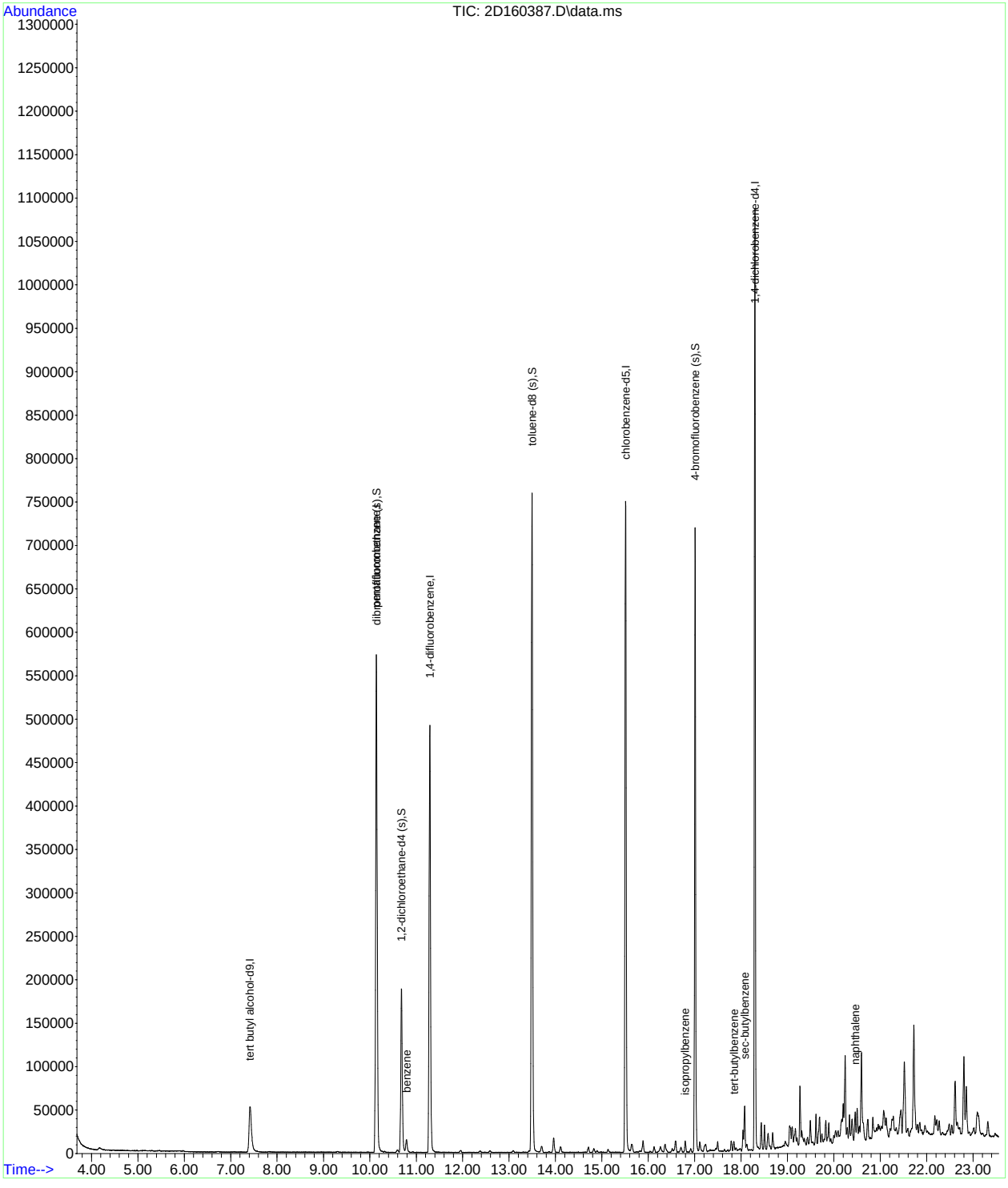
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC29144

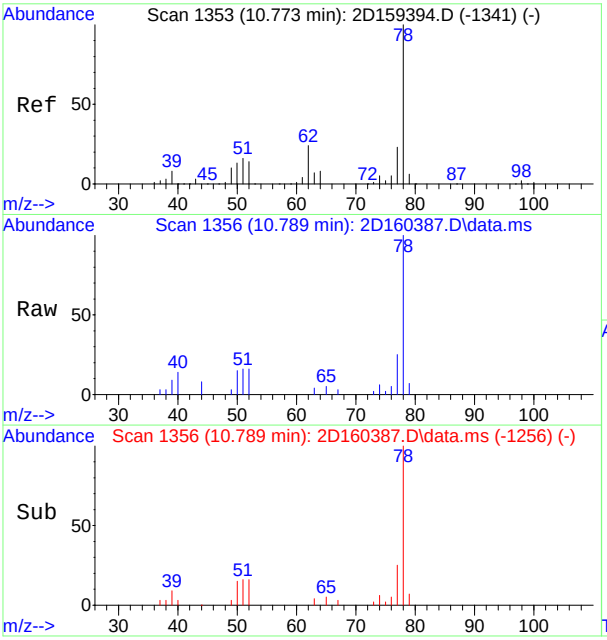
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160387.D
Acq On : 19 Oct 2016 1:54 am
Operator : Adilm
Sample : jc29144-3
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Oct 19 11:19:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration



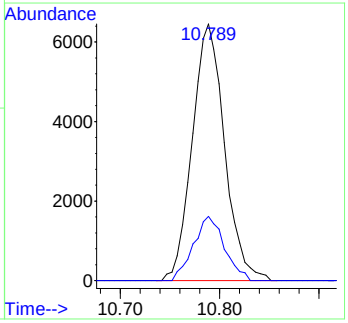
SGS ACCUTEST JC29144

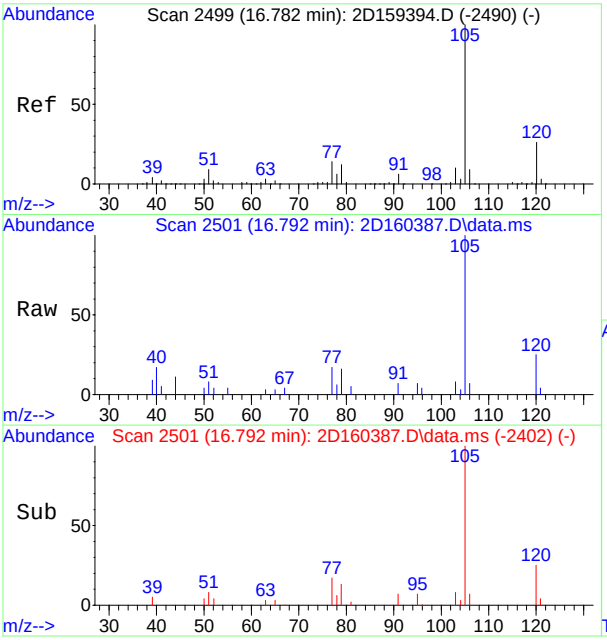


#57
benzene
Concen: 1.25 ug/L
RT: 10.789 min Scan# 1356
Delta R.T. 0.026 min
Lab File: 2D160387.D
Acq: 19 Oct 2016 1:54 am

Tgt Ion: 78 Resp: 14558

Ion	Ratio	Lower	Upper
78	100		
77	25.1	0.0	52.5

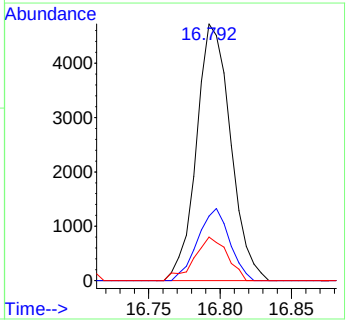


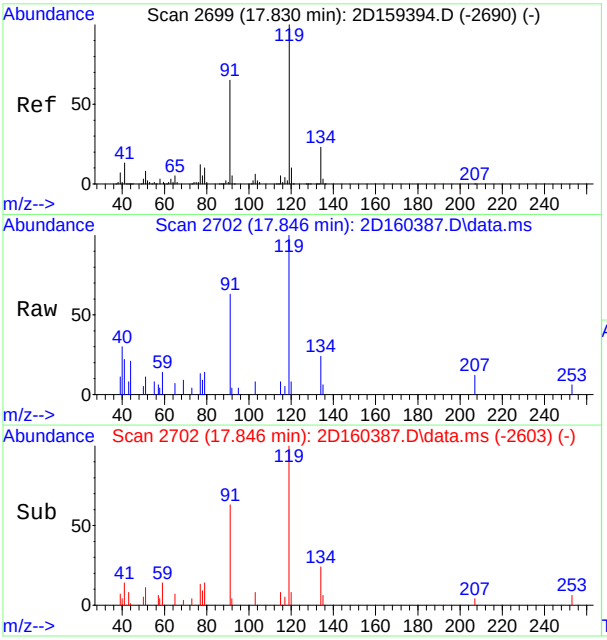


#97
isopropylbenzene
Concen: 0.54 ug/L
RT: 16.792 min Scan# 2501
Delta R.T. 0.021 min
Lab File: 2D160387.D
Acq: 19 Oct 2016 1:54 am

Tgt Ion:105 Resp: 7835

Ion	Ratio	Lower	Upper
105	100		
120	25.2	0.0	56.0
77	17.0	0.0	45.4

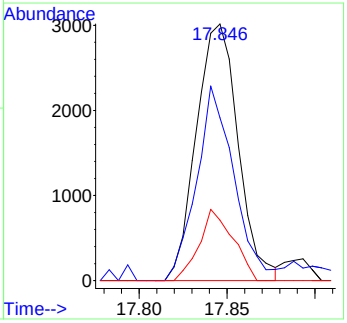


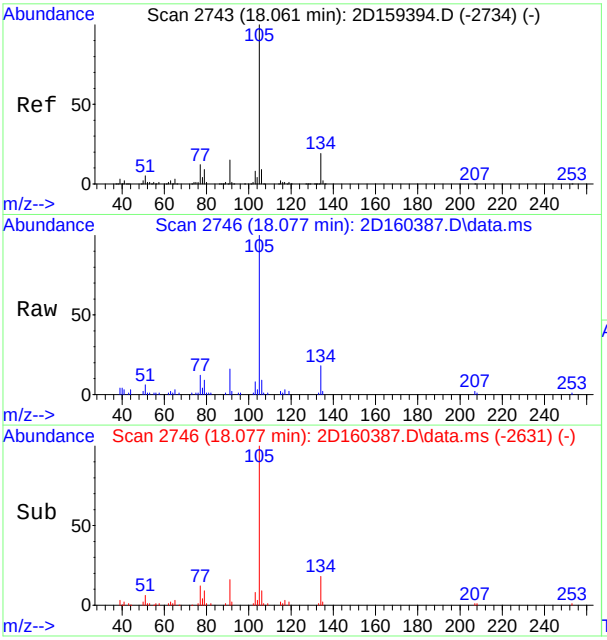


#109
tert-butylbenzene
Concen: 0.47 ug/L
RT: 17.846 min Scan# 2702
Delta R.T. 0.021 min
Lab File: 2D160387.D
Acq: 19 Oct 2016 1:54 am

Tgt Ion:119 Resp: 4984

Ion	Ratio	Lower	Upper
119	100		
91	63.4	36.4	96.4
134	23.6	0.0	54.0

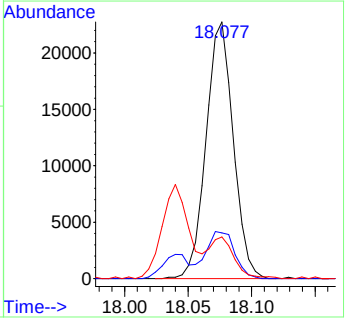


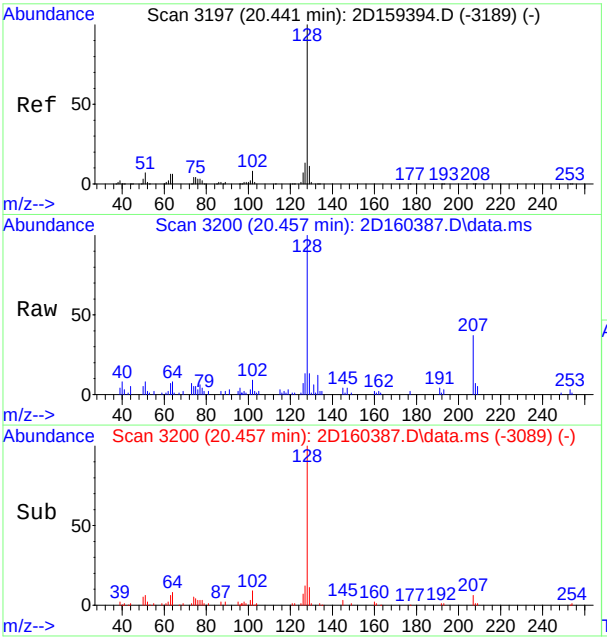


#112
sec-butylbenzene
Concen: 2.05 ug/L
RT: 18.077 min Scan# 2746
Delta R.T. 0.021 min
Lab File: 2D160387.D
Acq: 19 Oct 2016 1:54 am

Tgt Ion:105 Resp: 33976

Ion	Ratio	Lower	Upper
105	100		
134	17.8	0.0	49.4
91	15.6	0.0	45.2

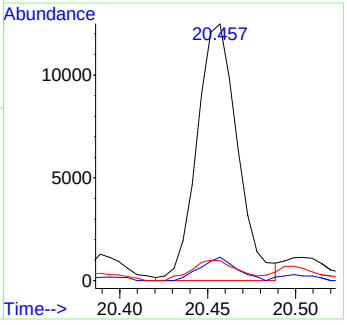




#122
naphthalene
Concen: 2.43 ug/L
RT: 20.457 min Scan# 3200
Delta R.T. 0.021 min
Lab File: 2D160387.D
Acq: 19 Oct 2016 1:54 am

Tgt Ion:128 Resp: 19974

Ion	Ratio	Lower	Upper
128	100		
102	9.3	0.0	37.6
51	7.9	0.0	37.7



SGS ACCUTEST JC29144

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160388.D
Acq On : 19 Oct 2016 2:24 am
Operator : Adilm
Sample : jc29144-4
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Oct 19 11:19:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.423	65	111405	500.00	ug/L	0.02
5) pentafluorobenzene	10.139	168	330874	50.00	ug/L	0.03
51) 1,4-difluorobenzene	11.292	114	479288	50.00	ug/L	0.03
80) chlorobenzene-d5	15.513	117	474716	50.00	ug/L	0.03
96) 1,4-dichlorobenzene-d4	18.297	152	265588	50.00	ug/L	0.02
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.144	113	156264	48.22	ug/L	0.03
Spiked Amount 50.000	Range 76 - 120		Recovery = 96.44%			
43) 1,2-dichloroethane-d4 (s)	10.679	65	150069	46.83	ug/L	0.02
Spiked Amount 50.000	Range 73 - 122		Recovery = 93.66%			
72) toluene-d8 (s)	13.494	98	575636	49.85	ug/L	0.03
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.70%			
98) 4-bromofluorobenzene (s)	17.007	95	241896	49.49	ug/L	0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 98.98%			
Target Compounds						Qvalue
25) methyl tert butyl ether	7.858	73	18721	2.31	ug/L	99
57) benzene	10.789	78	18916	1.65	ug/L	93
109) tert-butylbenzene	17.846	119	4985	0.47	ug/L	94
112) sec-butylbenzene	18.077	105	42651	2.60	ug/L	99
118) n-butylbenzene	18.627	92	1561	0.21	ug/L	86
122) naphthalene	20.457	128	19157	2.35	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

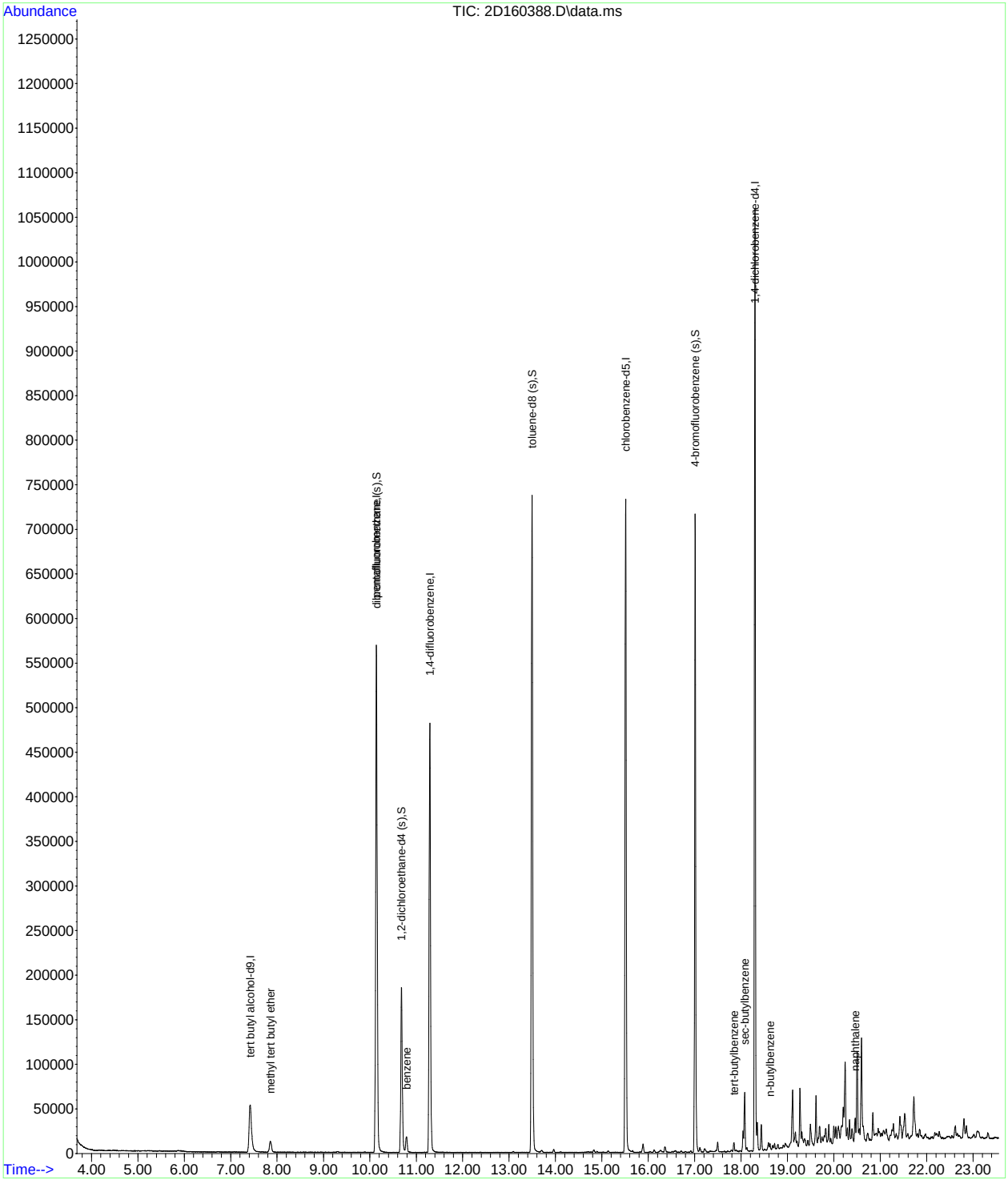
7.1.4

7

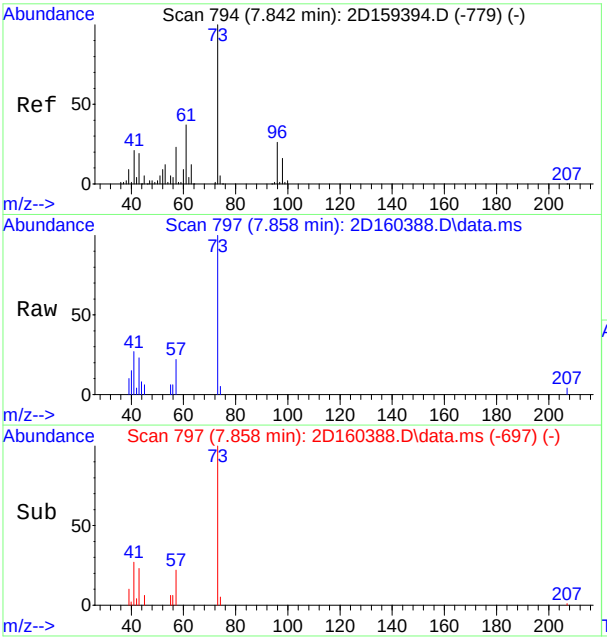
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160388.D
Acq On : 19 Oct 2016 2:24 am
Operator : Adilm
Sample : jc29144-4
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Oct 19 11:19:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration



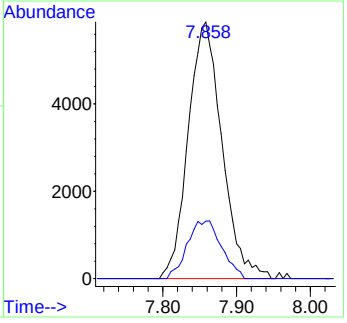
SGS ACCUTEST JC29144

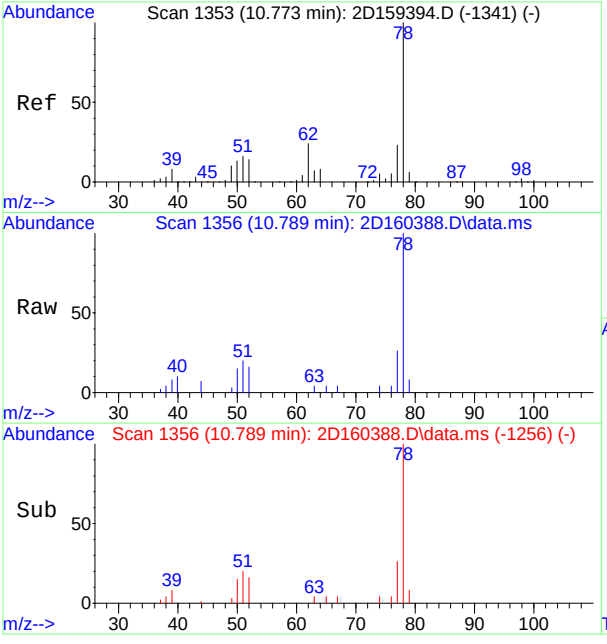


#25
methyl tert butyl ether
Concen: 2.31 ug/L
RT: 7.858 min Scan# 797
Delta R.T. 0.026 min
Lab File: 2D160388.D
Acq: 19 Oct 2016 2:24 am

Tgt Ion: 73 Resp: 18721

Ion	Ratio	Lower	Upper
73	100		
57	22.3	0.0	52.9

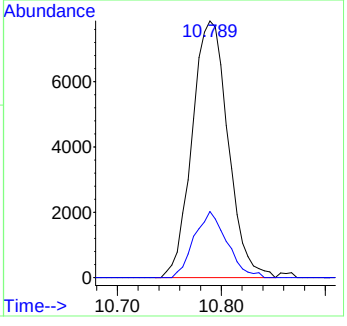


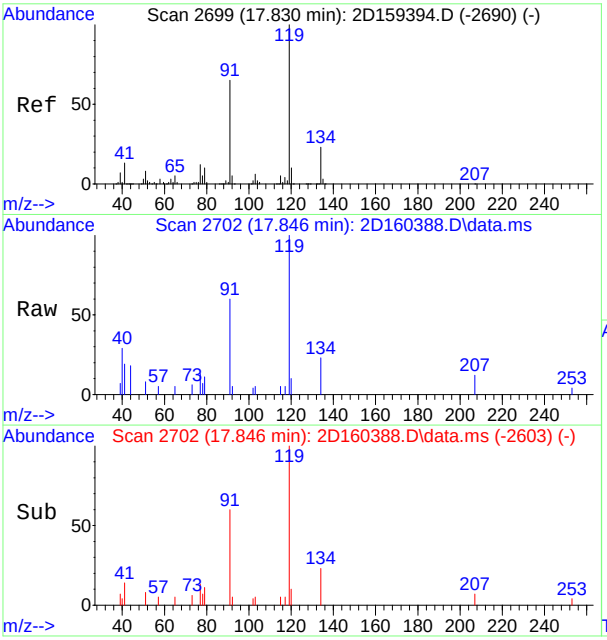


#57
benzene
Concen: 1.65 ug/L
RT: 10.789 min Scan# 1356
Delta R.T. 0.026 min
Lab File: 2D160388.D
Acq: 19 Oct 2016 2:24 am

Tgt Ion: 78 Resp: 18916

Ion	Ratio	Lower	Upper
78	100		
77	25.8	0.0	52.5

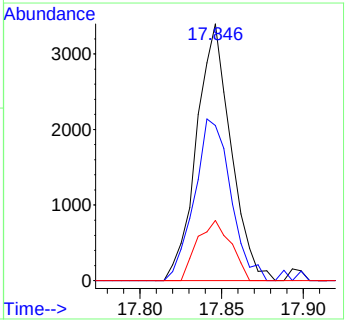


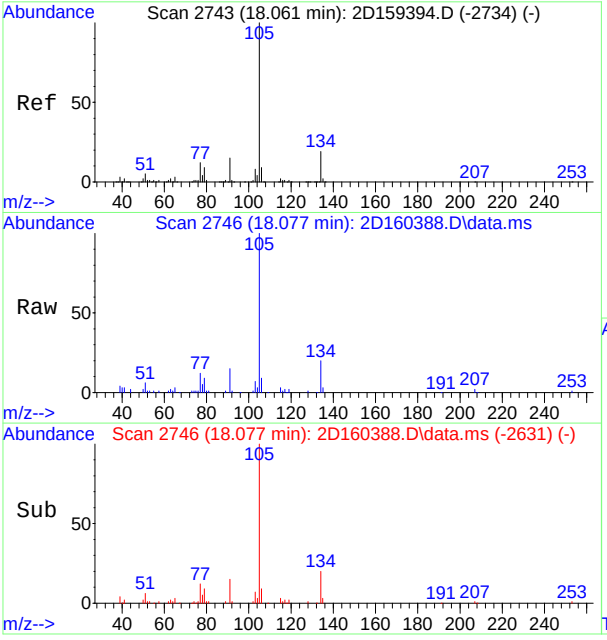


#109
tert-butylbenzene
Concen: 0.47 ug/L
RT: 17.846 min Scan# 2702
Delta R.T. 0.021 min
Lab File: 2D160388.D
Acq: 19 Oct 2016 2:24 am

Tgt Ion:119 Resp: 4985

Ion	Ratio	Lower	Upper
119	100		
91	60.4	36.4	96.4
134	23.5	0.0	54.0

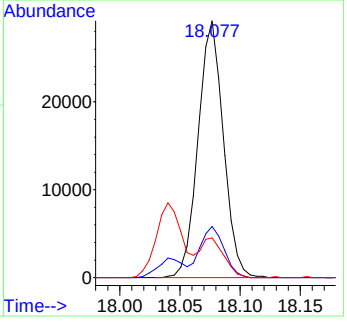


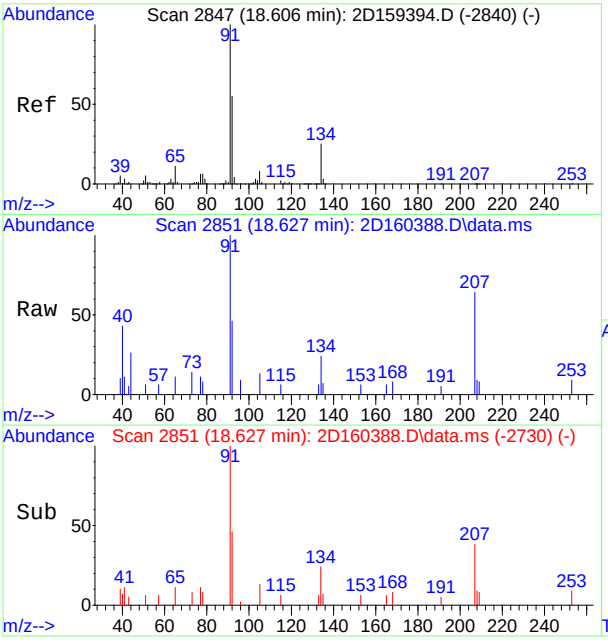


#112
sec-butylbenzene
Concen: 2.60 ug/L
RT: 18.077 min Scan# 2746
Delta R.T. 0.021 min
Lab File: 2D160388.D
Acq: 19 Oct 2016 2:24 am

Tgt Ion:105 Resp: 42651

Ion	Ratio	Lower	Upper
105	100		
134	19.9	0.0	49.4
91	15.1	0.0	45.2

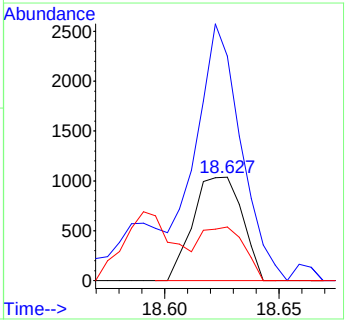


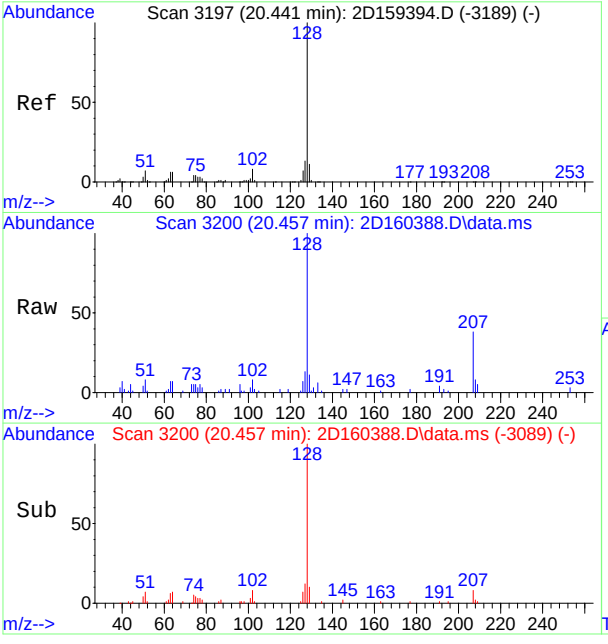


#118
n-butylbenzene
Concen: 0.21 ug/L
RT: 18.627 min Scan# 2851
Delta R.T. 0.026 min
Lab File: 2D160388.D
Acq: 19 Oct 2016 2:24 am

Tgt Ion: 92 Resp: 1561

Ion	Ratio	Lower	Upper
92	100		
91	201.7	149.7	209.7
134	51.7	15.5	75.5

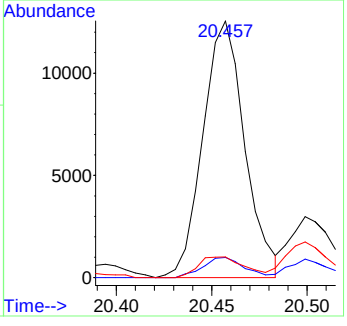




#122
naphthalene
Concen: 2.35 ug/L
RT: 20.457 min Scan# 3200
Delta R.T. 0.021 min
Lab File: 2D160388.D
Acq: 19 Oct 2016 2:24 am

Tgt Ion:128 Resp: 19157

Ion	Ratio	Lower	Upper
128	100		
102	7.9	0.0	37.6
51	8.1	0.0	37.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160389.D
Acq On : 19 Oct 2016 2:54 am
Operator : Adilm
Sample : jc29144-5
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Oct 19 11:20:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration

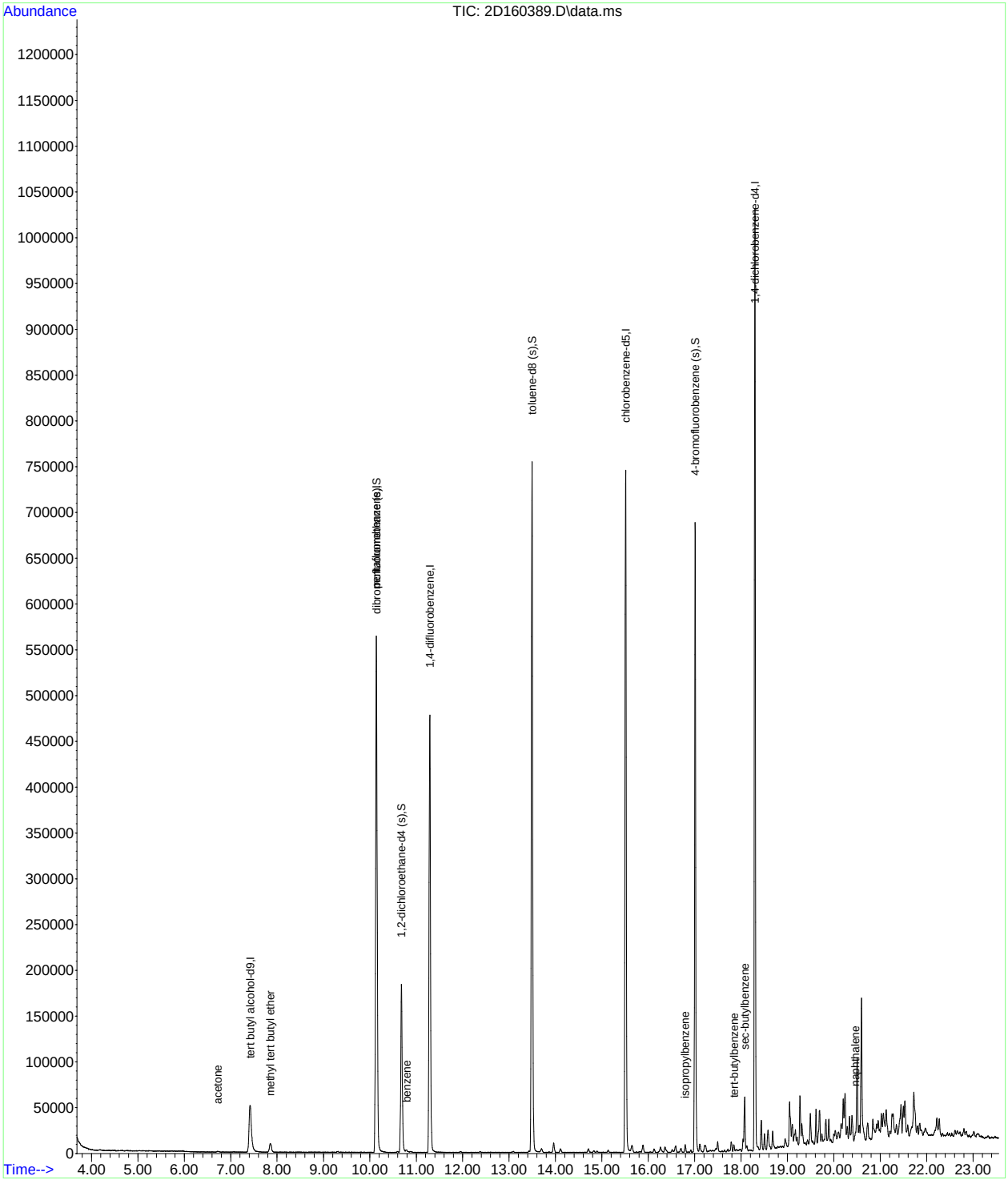
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.423	65	108173	500.00	ug/L	0.02
5) pentafluorobenzene	10.139	168	329433	50.00	ug/L	0.03
51) 1,4-difluorobenzene	11.292	114	480442	50.00	ug/L	0.03
80) chlorobenzene-d5	15.513	117	482579	50.00	ug/L	0.03
96) 1,4-dichlorobenzene-d4	18.297	152	260709	50.00	ug/L	0.02
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.144	113	153432	47.55	ug/L	0.03
Spiked Amount 50.000	Range 76 - 120		Recovery = 95.10%			
43) 1,2-dichloroethane-d4 (s)	10.679	65	148130	46.43	ug/L	0.02
Spiked Amount 50.000	Range 73 - 122		Recovery = 92.86%			
72) toluene-d8 (s)	13.494	98	581741	50.26	ug/L	0.03
Spiked Amount 50.000	Range 84 - 119		Recovery = 100.52%			
98) 4-bromofluorobenzene (s)	17.007	95	238892	49.79	ug/L	0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.58%			
Target Compounds						Qvalue
17) acetone	6.720	58	172	0.61	ug/L #	18
25) methyl tert butyl ether	7.853	73	14768	1.83	ug/L	99
57) benzene	10.789	78	2523	0.22	ug/L	95
97) isopropylbenzene	16.792	105	5505	0.39	ug/L	96
109) tert-butylbenzene	17.846	119	3546	0.34	ug/L	97
112) sec-butylbenzene	18.077	105	37799	2.34	ug/L	99
122) naphthalene	20.457	128	2917	0.36	ug/L	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

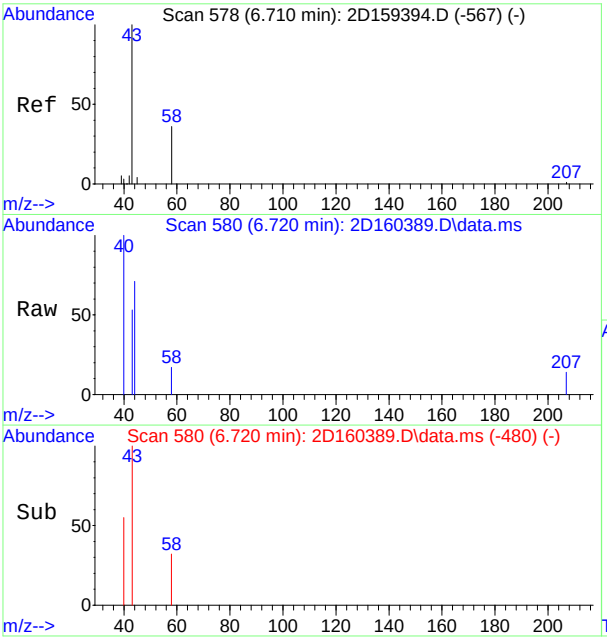
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160389.D
Acq On : 19 Oct 2016 2:54 am
Operator : Adilm
Sample : jc29144-5
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Oct 19 11:20:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration



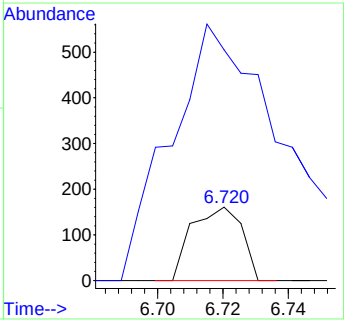
SGS ACCUTEST JC29144

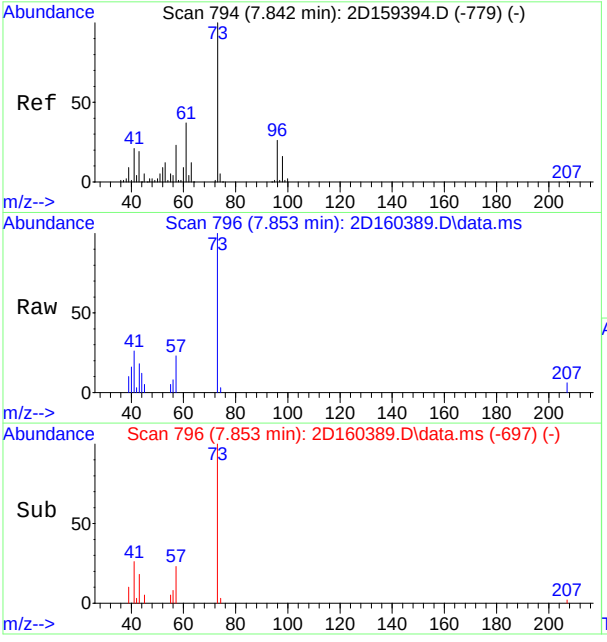


#17
acetone
Concen: 0.61 ug/L
RT: 6.720 min Scan# 580
Delta R.T. 0.026 min
Lab File: 2D160389.D
Acq: 19 Oct 2016 2:54 am

Tgt Ion: 58 Resp: 172

Ion	Ratio	Lower	Upper
58	100		
43	132.3	259.0	319.0#

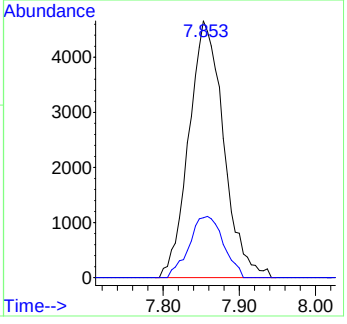


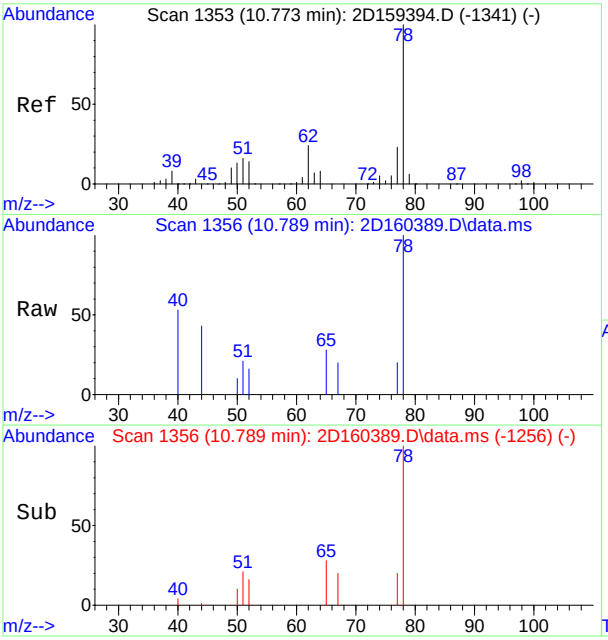


#25
methyl tert butyl ether
Concen: 1.83 ug/L
RT: 7.853 min Scan# 796
Delta R.T. 0.021 min
Lab File: 2D160389.D
Acq: 19 Oct 2016 2:54 am

Tgt Ion: 73 Resp: 14768

Ion	Ratio	Lower	Upper
73	100		
57	23.4	0.0	52.9

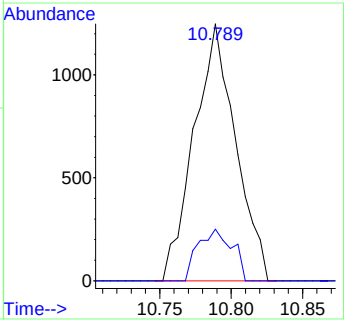


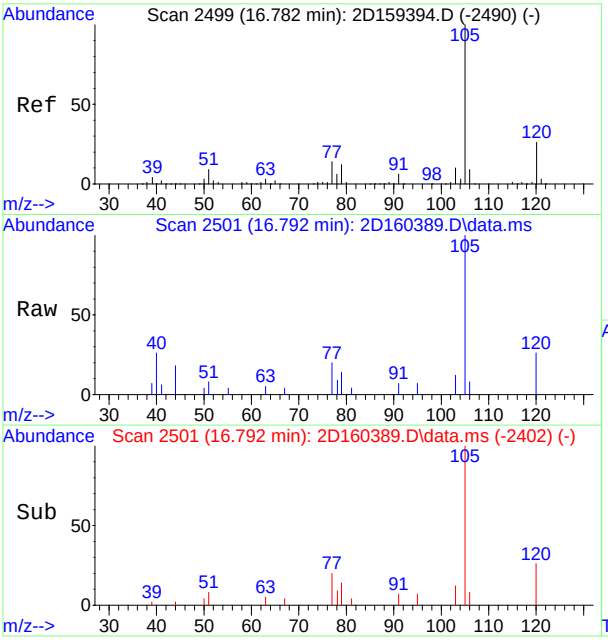


#57
benzene
Concen: 0.22 ug/L
RT: 10.789 min Scan# 1356
Delta R.T. 0.026 min
Lab File: 2D160389.D
Acq: 19 Oct 2016 2:54 am

Tgt Ion: 78 Resp: 2523

Ion	Ratio	Lower	Upper
78	100		
77	20.1	0.0	52.5

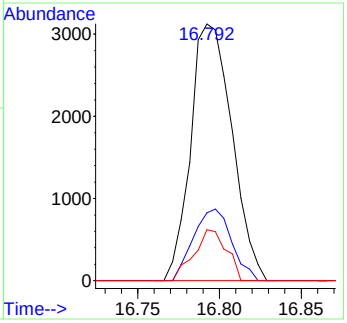


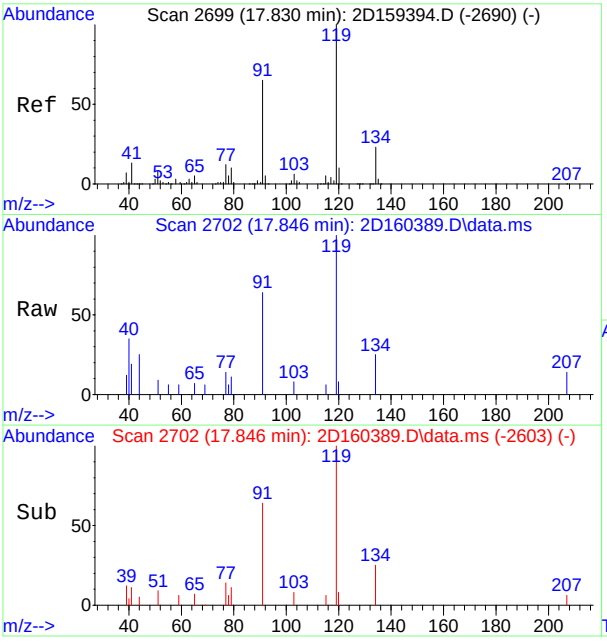


#97
isopropylbenzene
Concen: 0.39 ug/L
RT: 16.792 min Scan# 2501
Delta R.T. 0.021 min
Lab File: 2D160389.D
Acq: 19 Oct 2016 2:54 am

Tgt Ion:105 Resp: 5505

Ion	Ratio	Lower	Upper
105	100		
120	26.4	0.0	56.0
77	19.8	0.0	45.4

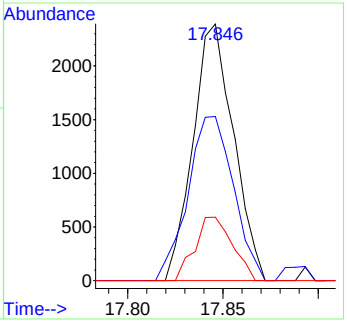


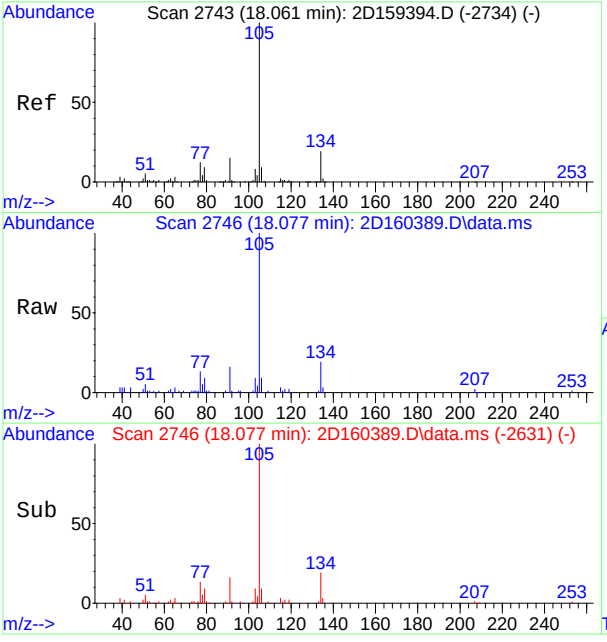


#109
tert-butylbenzene
Concen: 0.34 ug/L
RT: 17.846 min Scan# 2702
Delta R.T. 0.021 min
Lab File: 2D160389.D
Acq: 19 Oct 2016 2:54 am

Tgt Ion:119 Resp: 3546

Ion	Ratio	Lower	Upper
119	100		
91	63.9	36.4	96.4
134	24.7	0.0	54.0

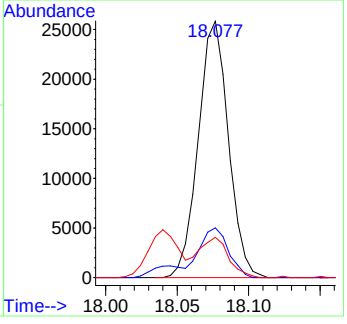


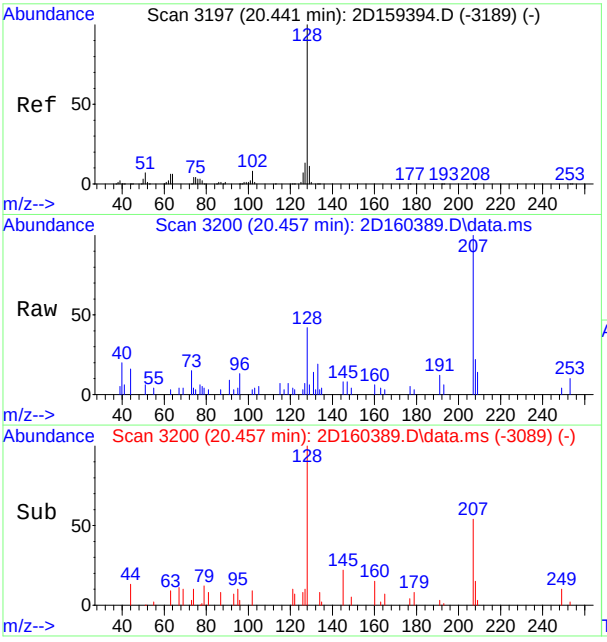


#112
sec-butylbenzene
Concen: 2.34 ug/L
RT: 18.077 min Scan# 2746
Delta R.T. 0.021 min
Lab File: 2D160389.D
Acq: 19 Oct 2016 2:54 am

Tgt Ion:105 Resp: 37799

Ion	Ratio	Lower	Upper
105	100		
134	19.5	0.0	49.4
91	15.7	0.0	45.2

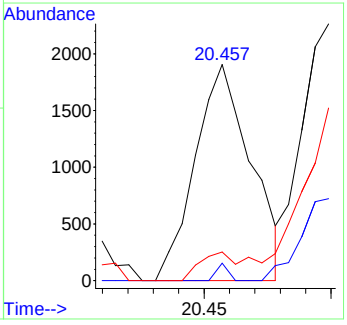




#122
naphthalene
Concen: 0.36 ug/L
RT: 20.457 min Scan# 3200
Delta R.T. 0.021 min
Lab File: 2D160389.D
Acq: 19 Oct 2016 2:54 am

Tgt Ion:128 Resp: 2917

Ion	Ratio	Lower	Upper
128	100		
102	8.1	0.0	37.6
51	13.2	0.0	37.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160390.D
Acq On : 19 Oct 2016 3:24 am
Operator : Adilm
Sample : jc29144-6
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Oct 19 11:20:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration

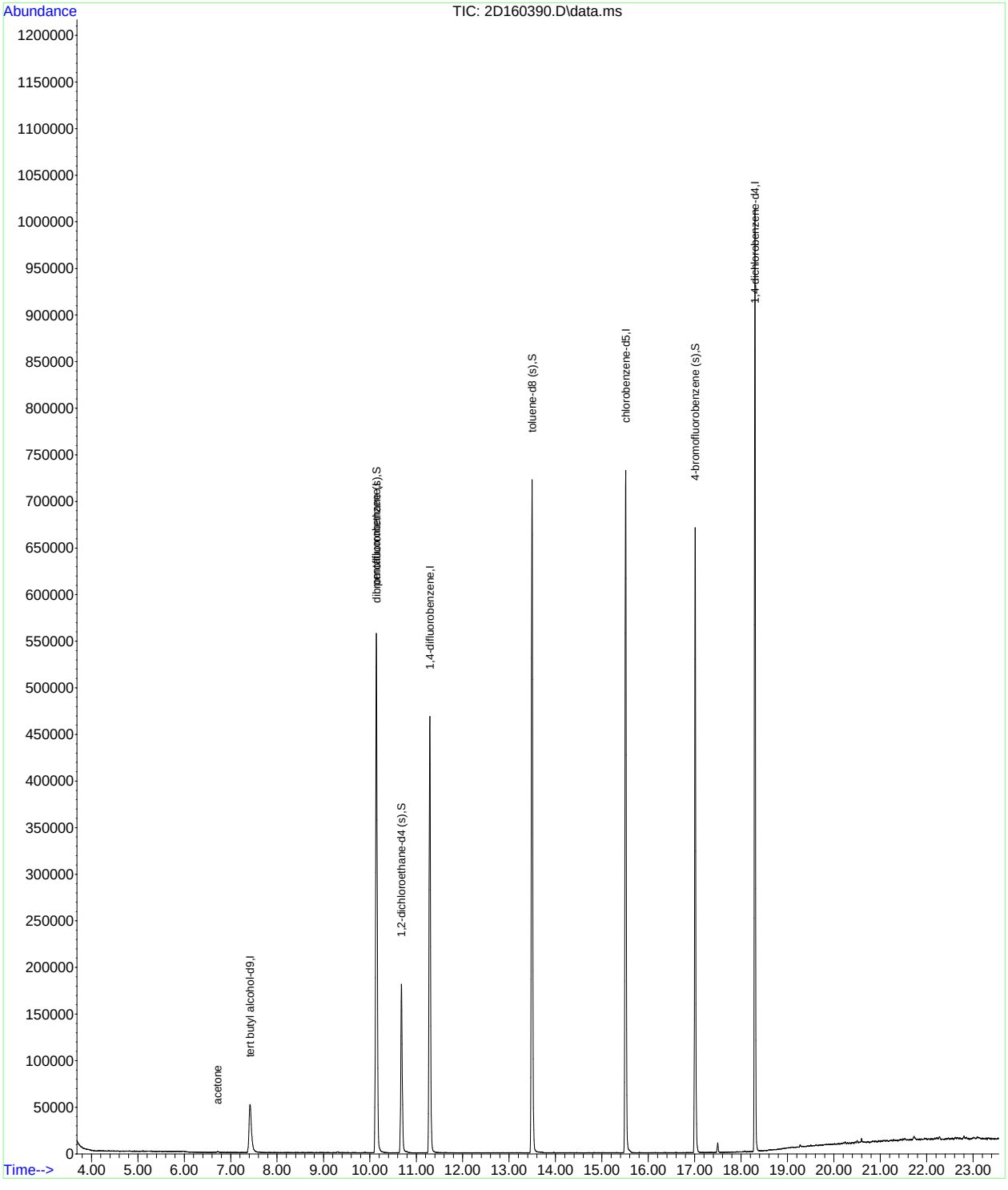
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.418	65	109952	500.00	ug/L	0.02
5) pentafluorobenzene	10.139	168	329835	50.00	ug/L	0.03
51) 1,4-difluorobenzene	11.292	114	470464	50.00	ug/L	0.03
80) chlorobenzene-d5	15.513	117	469455	50.00	ug/L	0.03
96) 1,4-dichlorobenzene-d4	18.297	152	259404	50.00	ug/L	0.02
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.144	113	152933	47.34	ug/L	0.03
Spiked Amount 50.000	Range 76 - 120		Recovery = 94.68%			
43) 1,2-dichloroethane-d4 (s)	10.679	65	146774	45.95	ug/L	0.02
Spiked Amount 50.000	Range 73 - 122		Recovery = 91.90%			
72) toluene-d8 (s)	13.494	98	564860	49.83	ug/L	0.03
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.66%			
98) 4-bromofluorobenzene (s)	17.007	95	235584	49.35	ug/L	0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 98.70%			
Target Compounds						Qvalue
17) acetone	6.715	58	371	1.31	ug/L #	49

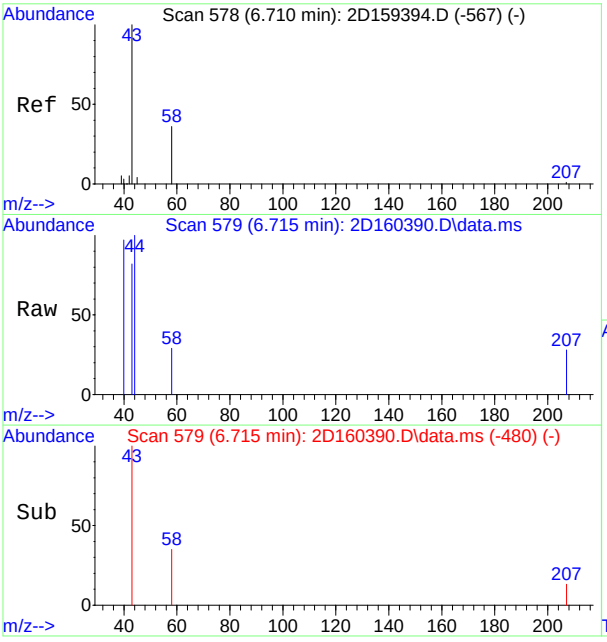
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160390.D
Acq On : 19 Oct 2016 3:24 am
Operator : Adilm
Sample : jc29144-6
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Oct 19 11:20:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration

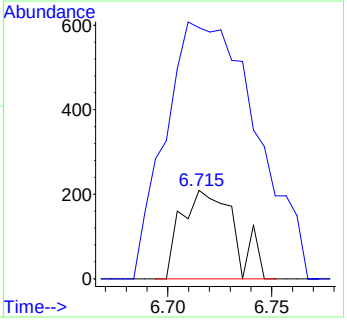




#17
acetone
Concen: 1.31 ug/L
RT: 6.715 min Scan# 579
Delta R.T. 0.021 min
Lab File: 2D160390.D
Acq: 19 Oct 2016 3:24 am

Tgt Ion: 58 Resp: 371

Ion	Ratio	Lower	Upper
58	100		
43	190.4	259.0	319.0#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160391.D
Acq On : 19 Oct 2016 3:54 am
Operator : Adilm
Sample : jc29144-7
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Oct 19 11:21:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.418	65	117836	500.00	ug/L	0.02
5) pentafluorobenzene	10.139	168	336939	50.00	ug/L	0.03
51) 1,4-difluorobenzene	11.292	114	484308	50.00	ug/L	0.03
80) chlorobenzene-d5	15.513	117	480842	50.00	ug/L	0.03
96) 1,4-dichlorobenzene-d4	18.297	152	267782	50.00	ug/L	0.02
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.144	113	157918	47.85	ug/L	0.03
Spiked Amount 50.000	Range 76 - 120		Recovery = 95.70%			
43) 1,2-dichloroethane-d4 (s)	10.684	65	150447	46.11	ug/L	0.03
Spiked Amount 50.000	Range 73 - 122		Recovery = 92.22%			
72) toluene-d8 (s)	13.494	98	579614	49.67	ug/L	0.03
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.34%			
98) 4-bromofluorobenzene (s)	17.007	95	239117	48.52	ug/L	0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 97.04%			
Target Compounds						Qvalue
17) acetone	6.720	58	334	1.16	ug/L #	49
47) cyclohexane	10.322	84	5419	1.18	ug/L #	69
57) benzene	10.789	78	24613	2.12	ug/L	97
69) methylcyclohexane	12.037	83	7996	1.50	ug/L	93
97) isopropylbenzene	16.797	105	75625	5.24	ug/L	98
105) n-propylbenzene	17.285	91	62560	3.66	ug/L	97
109) tert-butylbenzene	17.846	119	10051	0.95	ug/L	97
111) 1,2,4-trimethylbenzene	17.893	105	6305	0.50	ug/L	96
112) sec-butylbenzene	18.077	105	68720	4.15	ug/L	98
118) n-butylbenzene	18.622	92	9960	1.33	ug/L	93
122) naphthalene	20.457	128	6398	0.78	ug/L	98

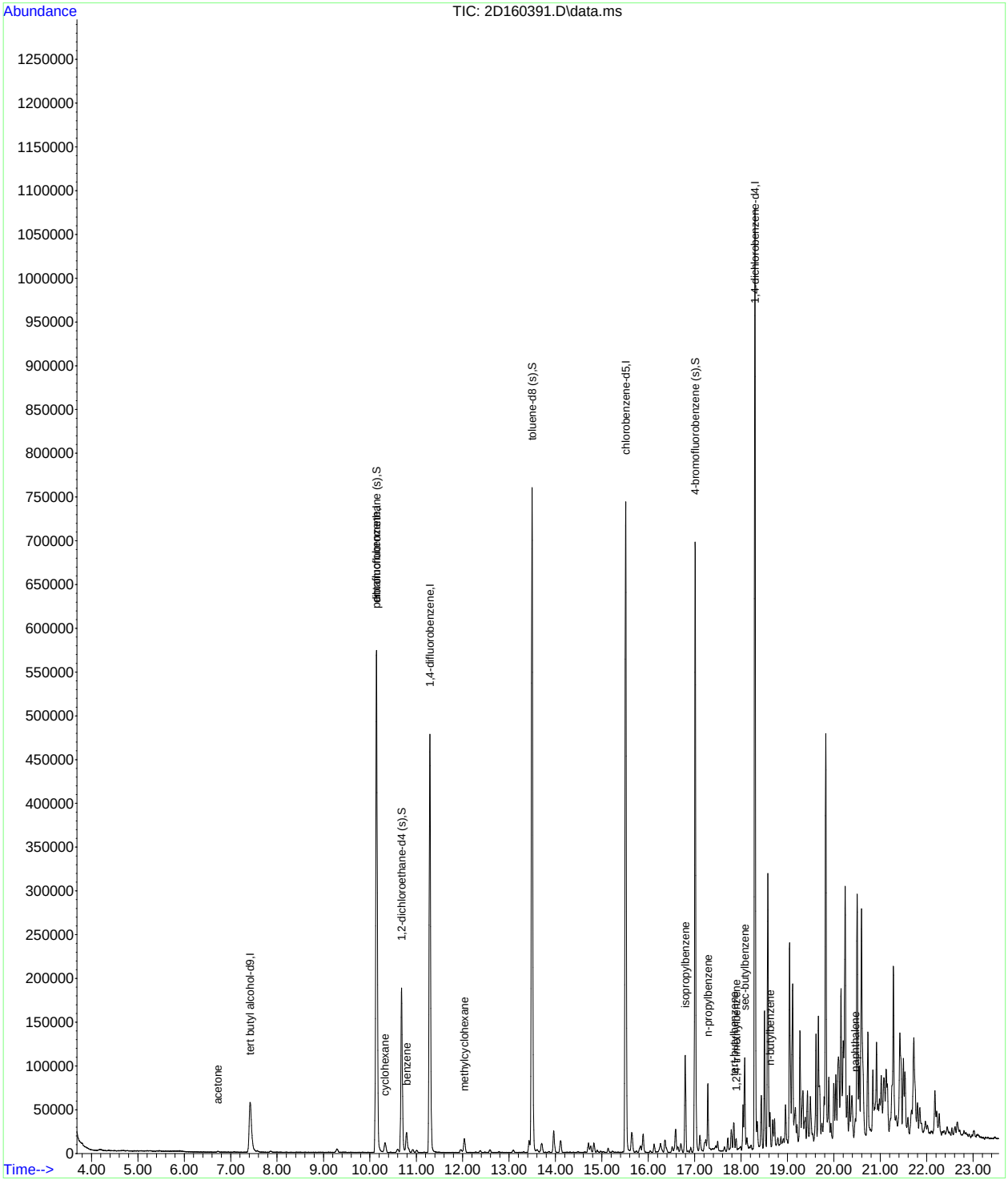
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC29144

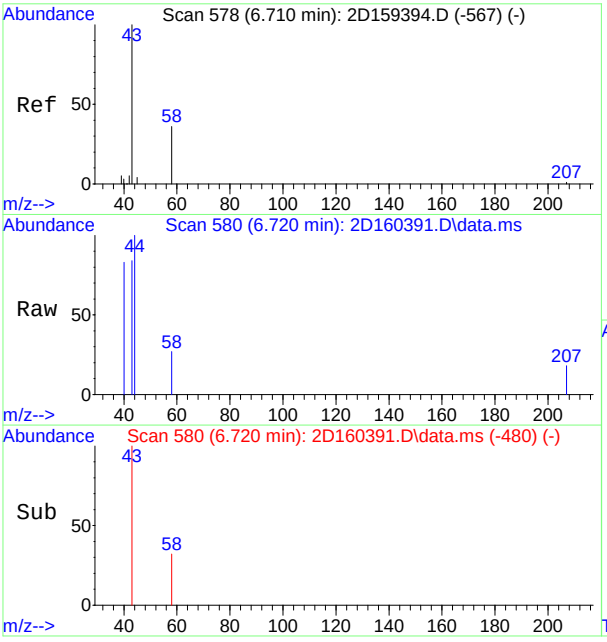
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160391.D
Acq On : 19 Oct 2016 3:54 am
Operator : Adilm
Sample : jc29144-7
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Oct 19 11:21:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration



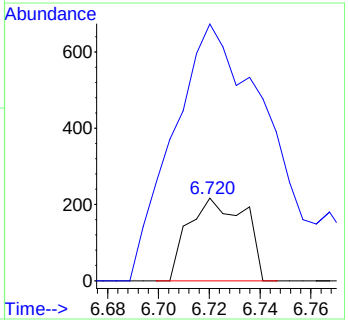
M2D6705.M Wed Oct 19 11:26:28 2016 Page: 2

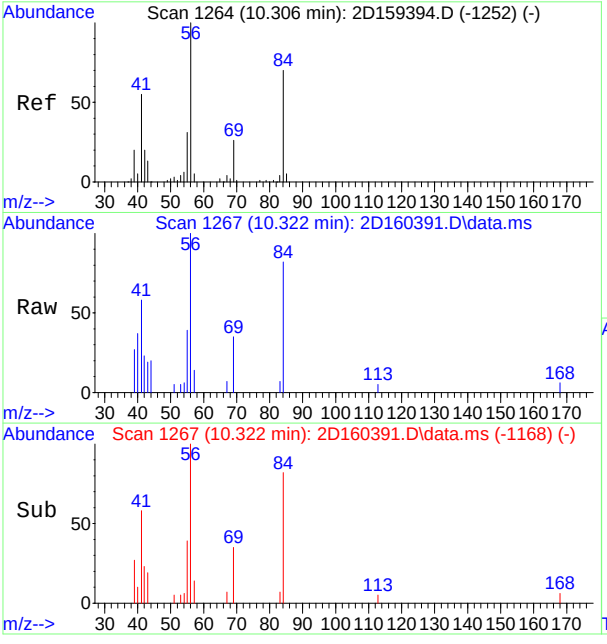


#17
acetone
Concen: 1.16 ug/L
RT: 6.720 min Scan# 580
Delta R.T. 0.026 min
Lab File: 2D160391.D
Acq: 19 Oct 2016 3:54 am

Tgt Ion: 58 Resp: 334

Ion	Ratio	Lower	Upper
58	100		
43	190.8	259.0	319.0#

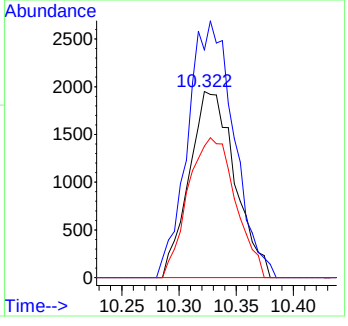


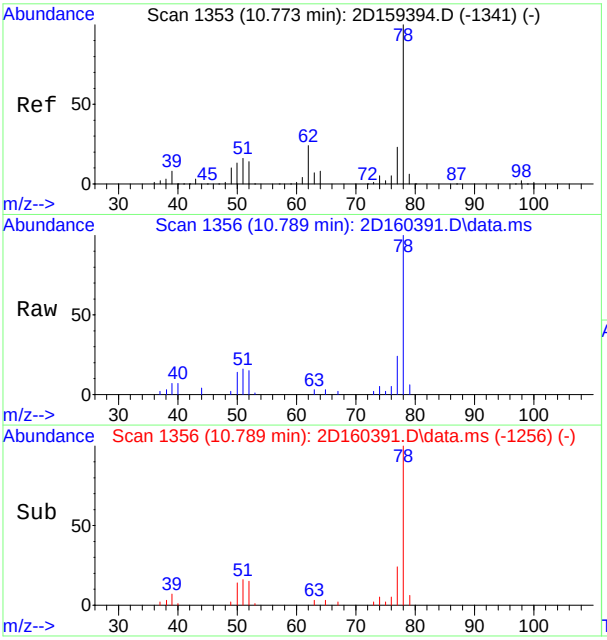


#47
cyclohexane
Concen: 1.18 ug/L
RT: 10.322 min Scan# 1267
Delta R.T. 0.021 min
Lab File: 2D160391.D
Acq: 19 Oct 2016 3:54 am

Tgt Ion: 84 Resp: 5419

Ion	Ratio	Lower	Upper
84	100		
56	122.4	140.6	200.6#
41	70.6	64.6	124.6

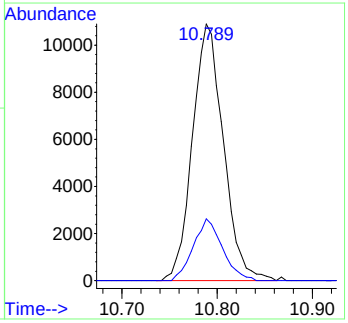


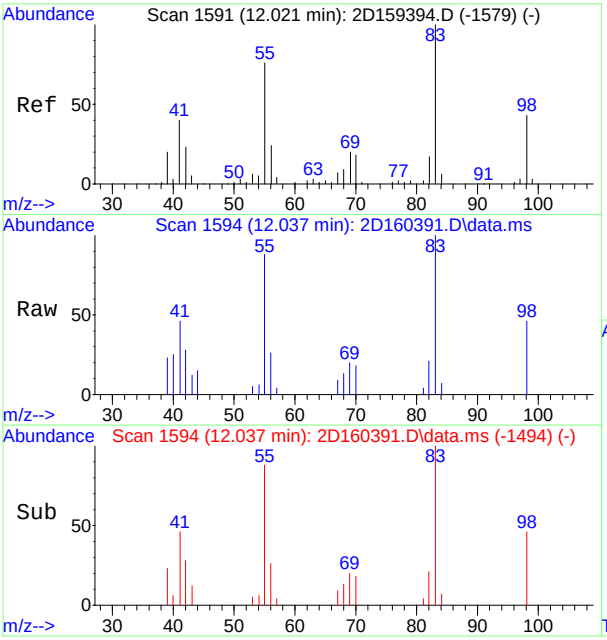


#57
benzene
Concen: 2.12 ug/L
RT: 10.789 min Scan# 1356
Delta R.T. 0.026 min
Lab File: 2D160391.D
Acq: 19 Oct 2016 3:54 am

Tgt Ion: 78 Resp: 24613

Ion	Ratio	Lower	Upper
78	100		
77	24.1	0.0	52.5

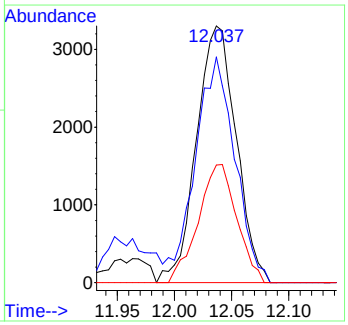


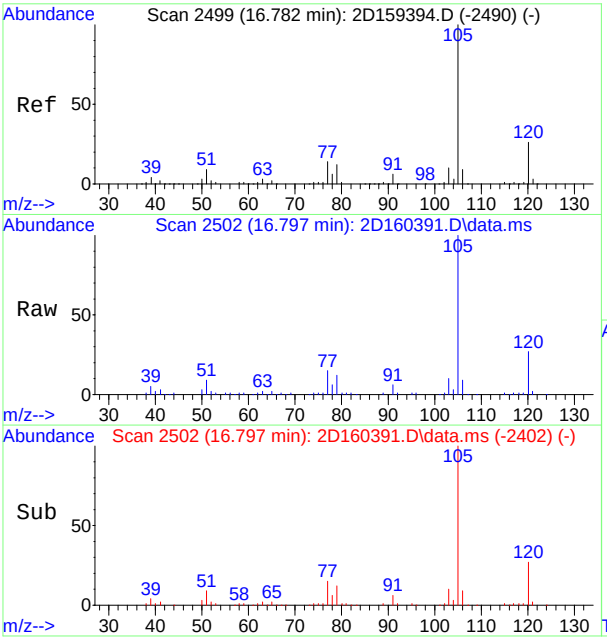


#69
methylcyclohexane
Concen: 1.50 ug/L
RT: 12.037 min Scan# 1594
Delta R.T. 0.026 min
Lab File: 2D160391.D
Acq: 19 Oct 2016 3:54 am

Tgt Ion: 83 Resp: 7996

Ion	Ratio	Lower	Upper
83	100		
55	87.8	51.1	111.1
98	45.9	11.5	71.5

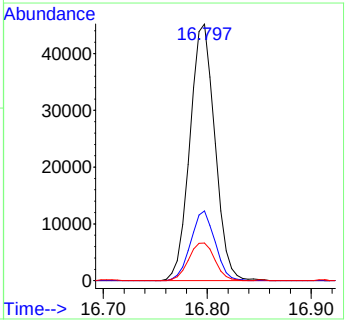


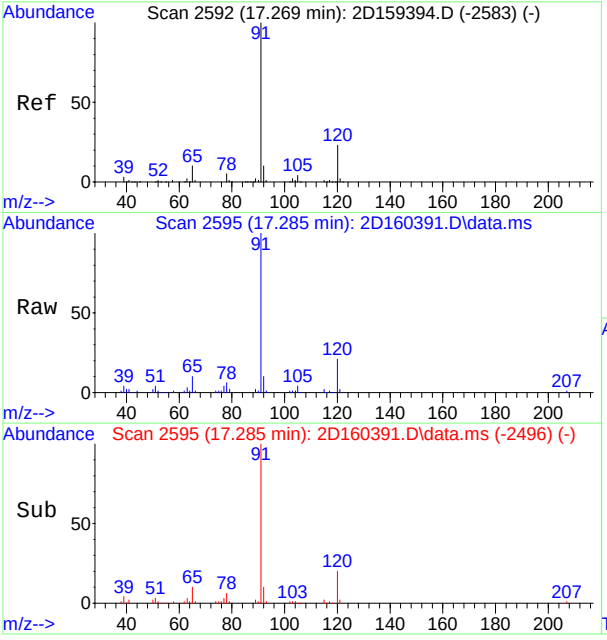


#97
isopropylbenzene
Concen: 5.24 ug/L
RT: 16.797 min Scan# 2502
Delta R.T. 0.026 min
Lab File: 2D160391.D
Acq: 19 Oct 2016 3:54 am

Tgt Ion:105 Resp: 75625

Ion	Ratio	Lower	Upper
105	100		
120	27.1	0.0	56.0
77	14.7	0.0	45.4

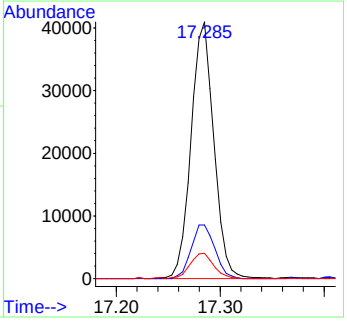


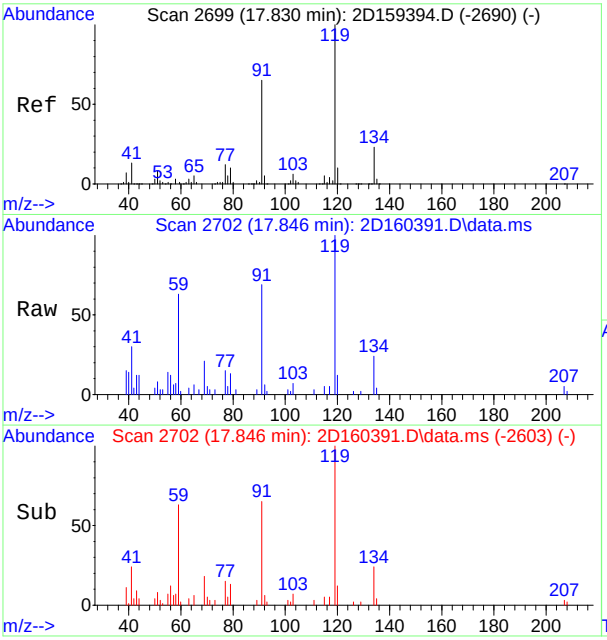


#105
n-propylbenzene
Concen: 3.66 ug/L
RT: 17.285 min Scan# 2595
Delta R.T. 0.021 min
Lab File: 2D160391.D
Acq: 19 Oct 2016 3:54 am

Tgt Ion: 91 Resp: 62560

Ion	Ratio	Lower	Upper
91	100		
120	20.9	0.0	53.1
65	9.9	0.0	40.0

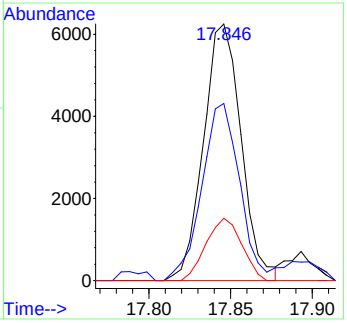


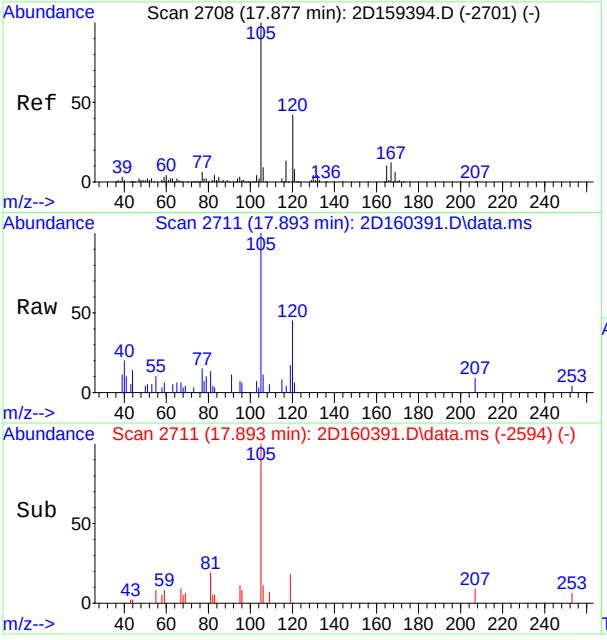


#109
tert-butylbenzene
Concen: 0.95 ug/L
RT: 17.846 min Scan# 2702
Delta R.T. 0.021 min
Lab File: 2D160391.D
Acq: 19 Oct 2016 3:54 am

Tgt Ion:119 Resp: 10051

Ion	Ratio	Lower	Upper
119	100		
91	69.0	36.4	96.4
134	24.3	0.0	54.0

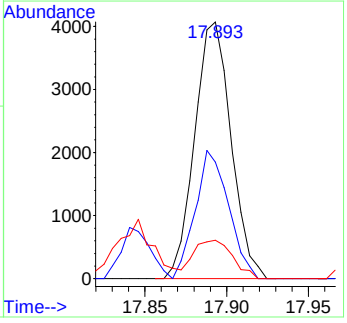


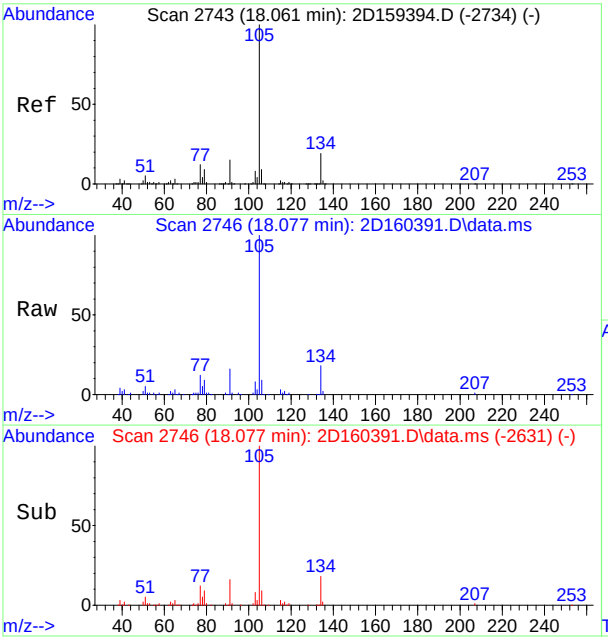


#111
1,2,4-trimethylbenzene
Concen: 0.50 ug/L
RT: 17.893 min Scan# 2711
Delta R.T. 0.021 min
Lab File: 2D160391.D
Acq: 19 Oct 2016 3:54 am

Tgt Ion:105 Resp: 6305

Ion	Ratio	Lower	Upper
105	100		
120	45.4	17.3	77.3
77	14.9	0.0	42.1

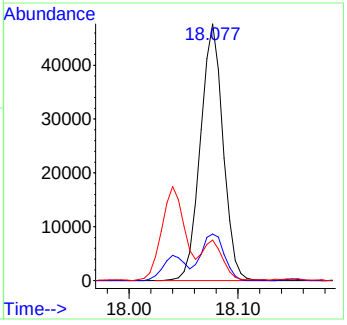


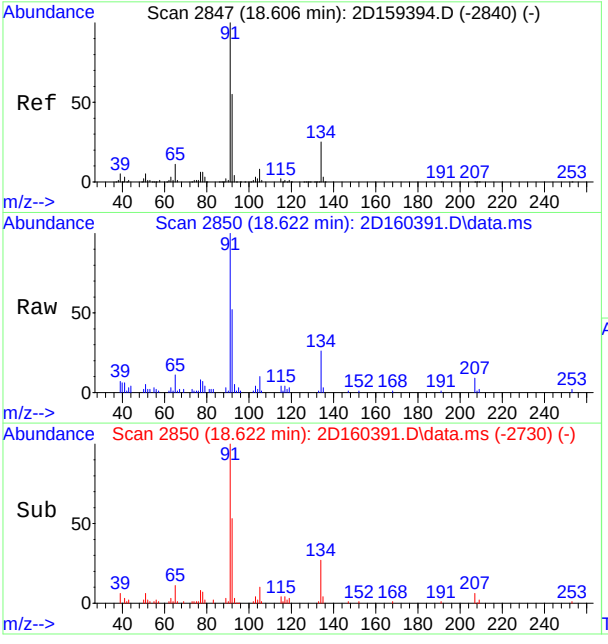


#112
sec-butylbenzene
Concen: 4.15 ug/L
RT: 18.077 min Scan# 2746
Delta R.T. 0.021 min
Lab File: 2D160391.D
Acq: 19 Oct 2016 3:54 am

Tgt Ion:105 Resp: 68720

Ion	Ratio	Lower	Upper
105	100		
134	18.2	0.0	49.4
91	15.3	0.0	45.2

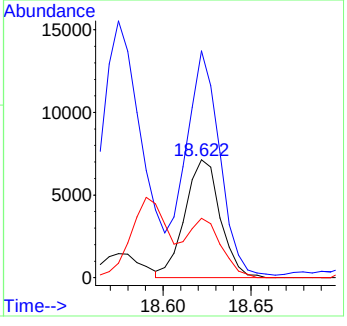


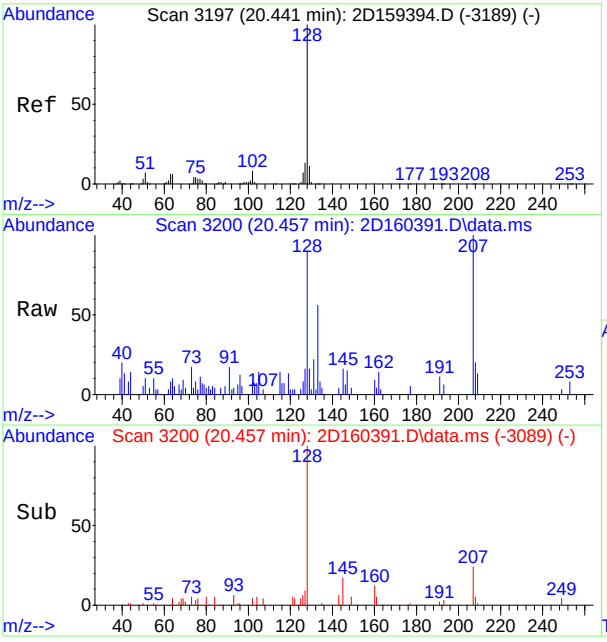


#118
n-butylbenzene
Concen: 1.33 ug/L
RT: 18.622 min Scan# 2850
Delta R.T. 0.021 min
Lab File: 2D160391.D
Acq: 19 Oct 2016 3:54 am

Tgt Ion: 92 Resp: 9960

Ion	Ratio	Lower	Upper
92	100		
91	190.0	149.7	209.7
134	50.4	15.5	75.5

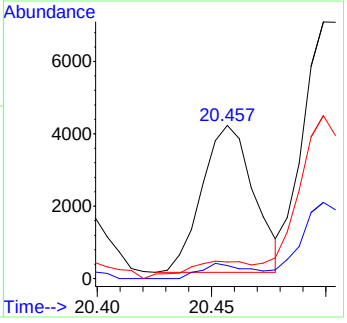




#122
naphthalene
Concen: 0.78 ug/L
RT: 20.457 min Scan# 3200
Delta R.T. 0.021 min
Lab File: 2D160391.D
Acq: 19 Oct 2016 3:54 am

Tgt Ion:128 Resp: 6398

Ion	Ratio	Lower	Upper
128	100		
102	8.9	0.0	37.6
51	8.2	0.0	37.7



7.1.7

7

SGS ACCUTEST JC29144

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160392.D
Acq On : 19 Oct 2016 4:24 am
Operator : Adilm
Sample : jc29144-8
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Oct 19 11:21:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration

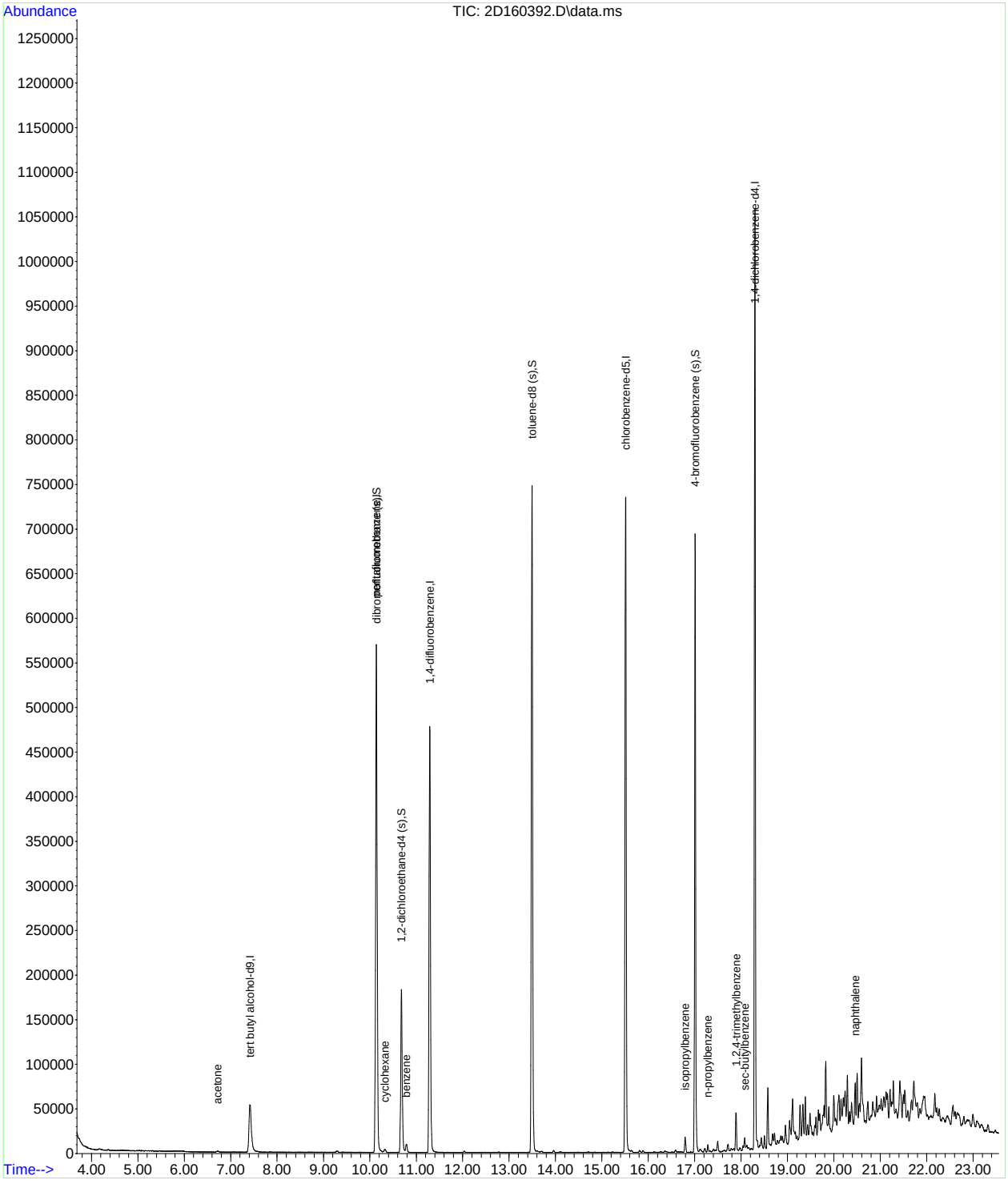
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.418	65	112795	500.00	ug/L	0.02
5) pentafluorobenzene	10.139	168	333587	50.00	ug/L	0.03
51) 1,4-difluorobenzene	11.292	114	479724	50.00	ug/L	0.03
80) chlorobenzene-d5	15.513	117	478486	50.00	ug/L	0.03
96) 1,4-dichlorobenzene-d4	18.297	152	264912	50.00	ug/L	0.02
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.144	113	154312	47.23	ug/L	0.03
Spiked Amount 50.000	Range 76 - 120		Recovery = 94.46%			
43) 1,2-dichloroethane-d4 (s)	10.679	65	148360	45.92	ug/L	0.02
Spiked Amount 50.000	Range 73 - 122		Recovery = 91.84%			
72) toluene-d8 (s)	13.494	98	579165	50.11	ug/L	0.03
Spiked Amount 50.000	Range 84 - 119		Recovery = 100.22%			
98) 4-bromofluorobenzene (s)	17.007	95	238805	48.98	ug/L	0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 97.96%			
Target Compounds						Qvalue
17) acetone	6.715	58	609	2.13	ug/L #	45
47) cyclohexane	10.322	84	1773	0.39	ug/L #	57
57) benzene	10.784	78	9486	0.83	ug/L	98
97) isopropylbenzene	16.792	105	11935	0.84	ug/L	99
105) n-propylbenzene	17.280	91	7290	0.43	ug/L	97
111) 1,2,4-trimethylbenzene	17.893	105	22072	1.77	ug/L	97
112) sec-butylbenzene	18.077	105	8595	0.52	ug/L	95
122) naphthalene	20.457	128	29385	3.61	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

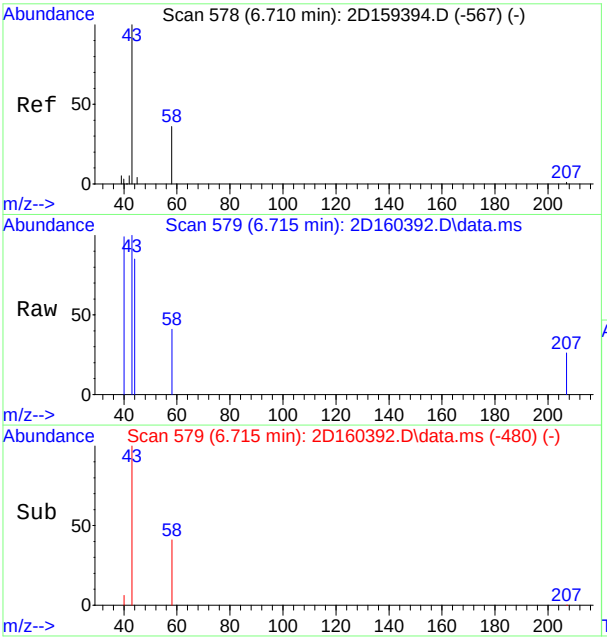
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160392.D
Acq On : 19 Oct 2016 4:24 am
Operator : Adilm
Sample : jc29144-8
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Oct 19 11:21:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration



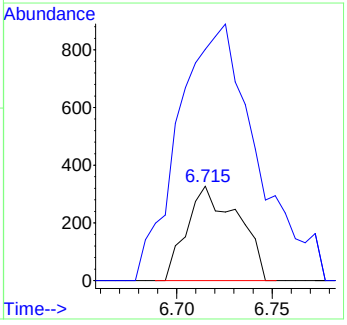
SGS ACCUTEST JC29144

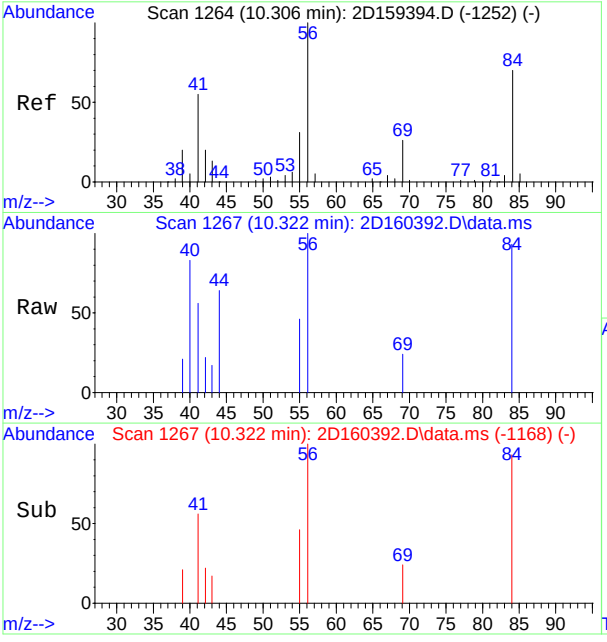


#17
acetone
Concen: 2.13 ug/L
RT: 6.715 min Scan# 579
Delta R.T. 0.021 min
Lab File: 2D160392.D
Acq: 19 Oct 2016 4:24 am

Tgt Ion: 58 Resp: 609

Ion	Ratio	Lower	Upper
58	100		
43	184.4	259.0	319.0#

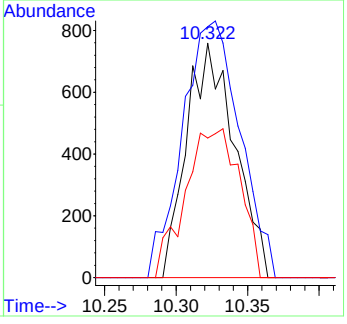


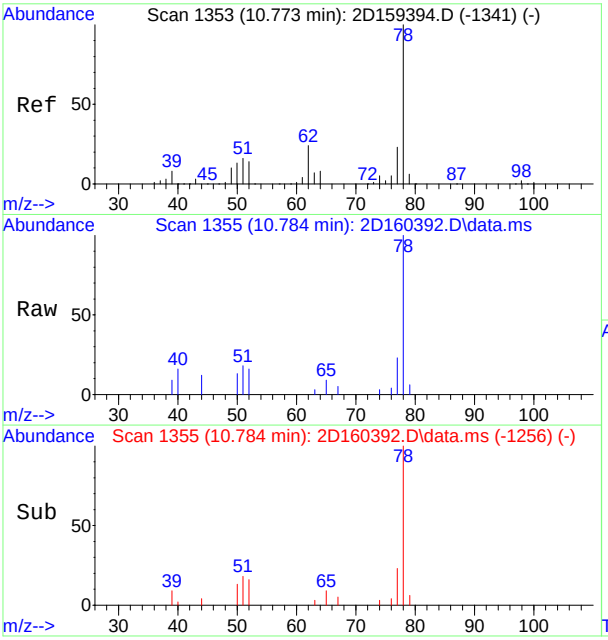


#47
cyclohexane
Concen: 0.39 ug/L
RT: 10.322 min Scan# 1267
Delta R.T. 0.021 min
Lab File: 2D160392.D
Acq: 19 Oct 2016 4:24 am

Tgt Ion: 84 Resp: 1773

Ion	Ratio	Lower	Upper
84	100		
56	107.1	140.6	200.6#
41	59.6	64.6	124.6#

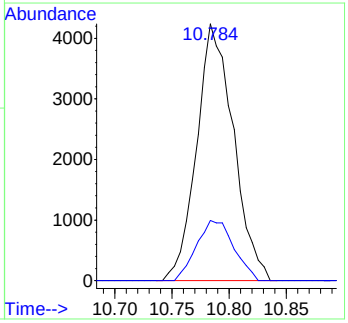


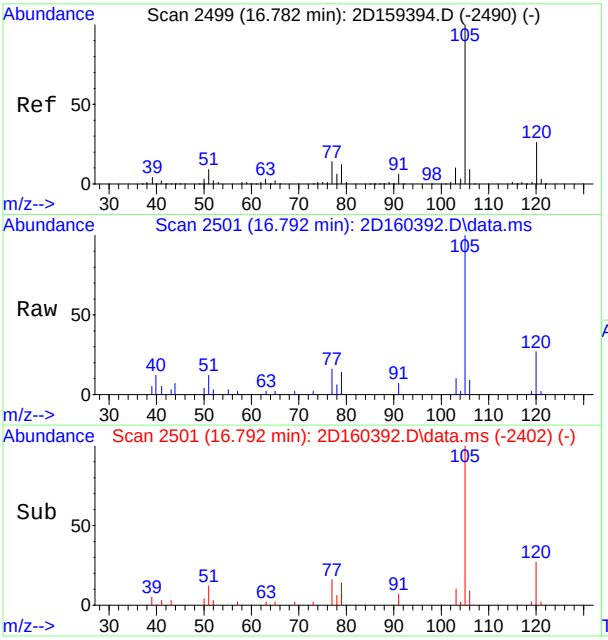


#57
benzene
Concen: 0.83 ug/L
RT: 10.784 min Scan# 1355
Delta R.T. 0.021 min
Lab File: 2D160392.D
Acq: 19 Oct 2016 4:24 am

Tgt Ion: 78 Resp: 9486

Ion	Ratio	Lower	Upper
78	100		
77	23.4	0.0	52.5

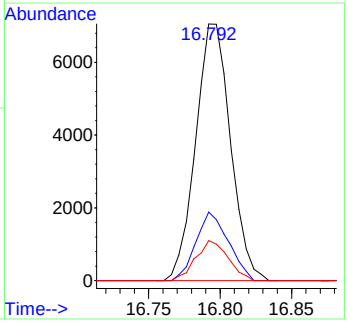


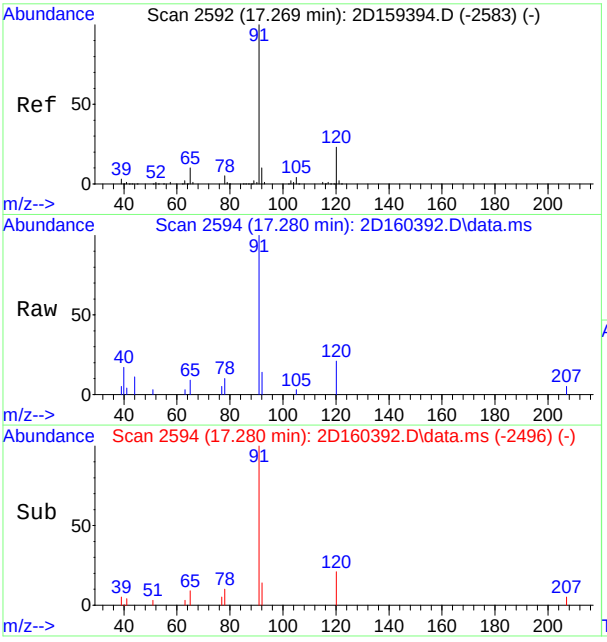


#97
isopropylbenzene
Concen: 0.84 ug/L
RT: 16.792 min Scan# 2501
Delta R.T. 0.021 min
Lab File: 2D160392.D
Acq: 19 Oct 2016 4:24 am

Tgt Ion:105 Resp: 11935

Ion	Ratio	Lower	Upper
105	100		
120	26.8	0.0	56.0
77	15.6	0.0	45.4

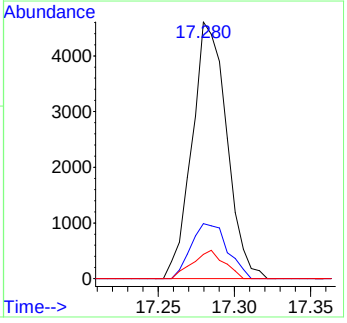


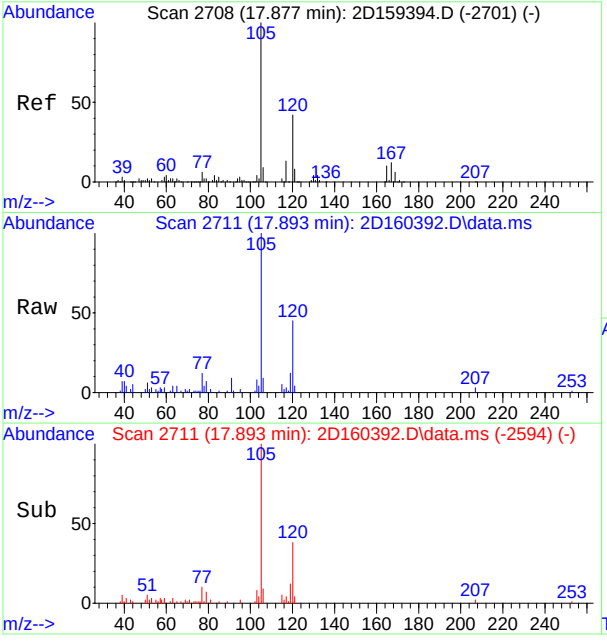


#105
n-propylbenzene
Concen: 0.43 ug/L
RT: 17.280 min Scan# 2594
Delta R.T. 0.016 min
Lab File: 2D160392.D
Acq: 19 Oct 2016 4:24 am

Tgt Ion: 91 Resp: 7290

Ion	Ratio	Lower	Upper
91	100		
120	21.4	0.0	53.1
65	9.5	0.0	40.0

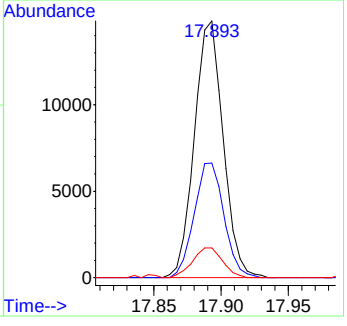


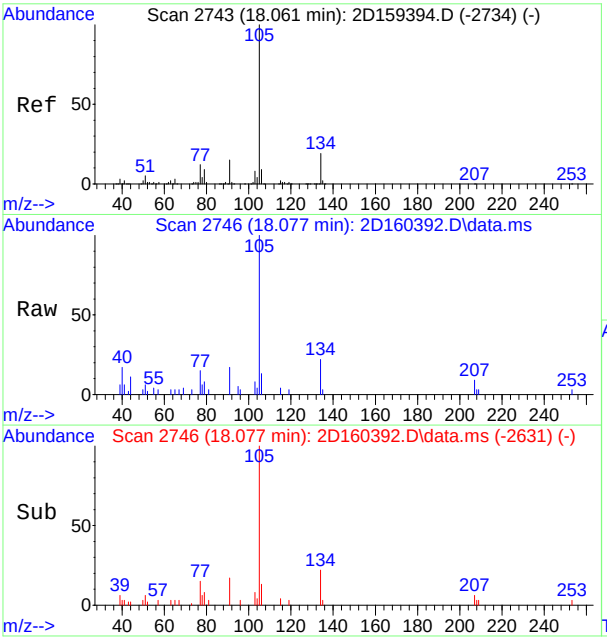


#111
1,2,4-trimethylbenzene
Concen: 1.77 ug/L
RT: 17.893 min Scan# 2711
Delta R.T. 0.021 min
Lab File: 2D160392.D
Acq: 19 Oct 2016 4:24 am

Tgt Ion:105 Resp: 22072

Ion	Ratio	Lower	Upper
105	100		
120	44.6	17.3	77.3
77	11.6	0.0	42.1

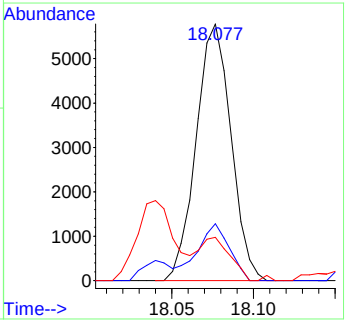


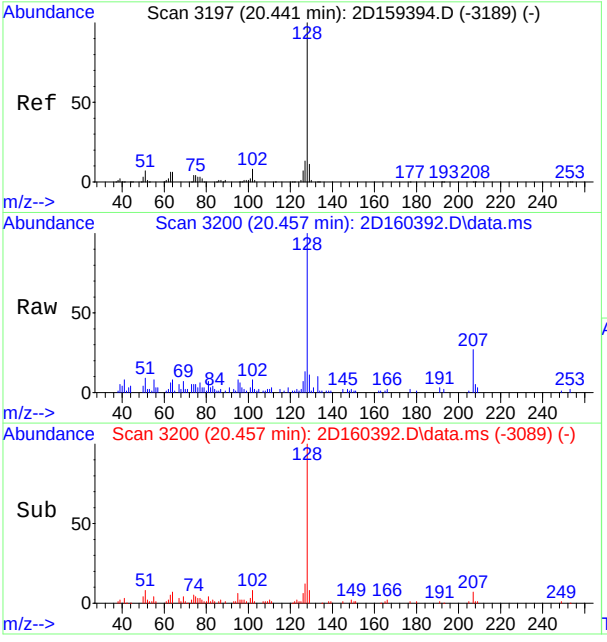


#112
sec-butylbenzene
Concen: 0.52 ug/L
RT: 18.077 min Scan# 2746
Delta R.T. 0.021 min
Lab File: 2D160392.D
Acq: 19 Oct 2016 4:24 am

Tgt Ion:105 Resp: 8595

Ion	Ratio	Lower	Upper
105	100		
134	22.2	0.0	49.4
91	16.9	0.0	45.2

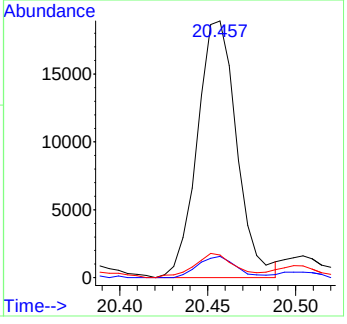




#122
naphthalene
Concen: 3.61 ug/L
RT: 20.457 min Scan# 3200
Delta R.T. 0.021 min
Lab File: 2D160392.D
Acq: 19 Oct 2016 4:24 am

Tgt Ion:128 Resp: 29385

Ion	Ratio	Lower	Upper
128	100		
102	8.3	0.0	37.6
51	8.8	0.0	37.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160393.D
Acq On : 19 Oct 2016 4:54 am
Operator : Adilm
Sample : jc29144-9
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Oct 19 11:22:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration

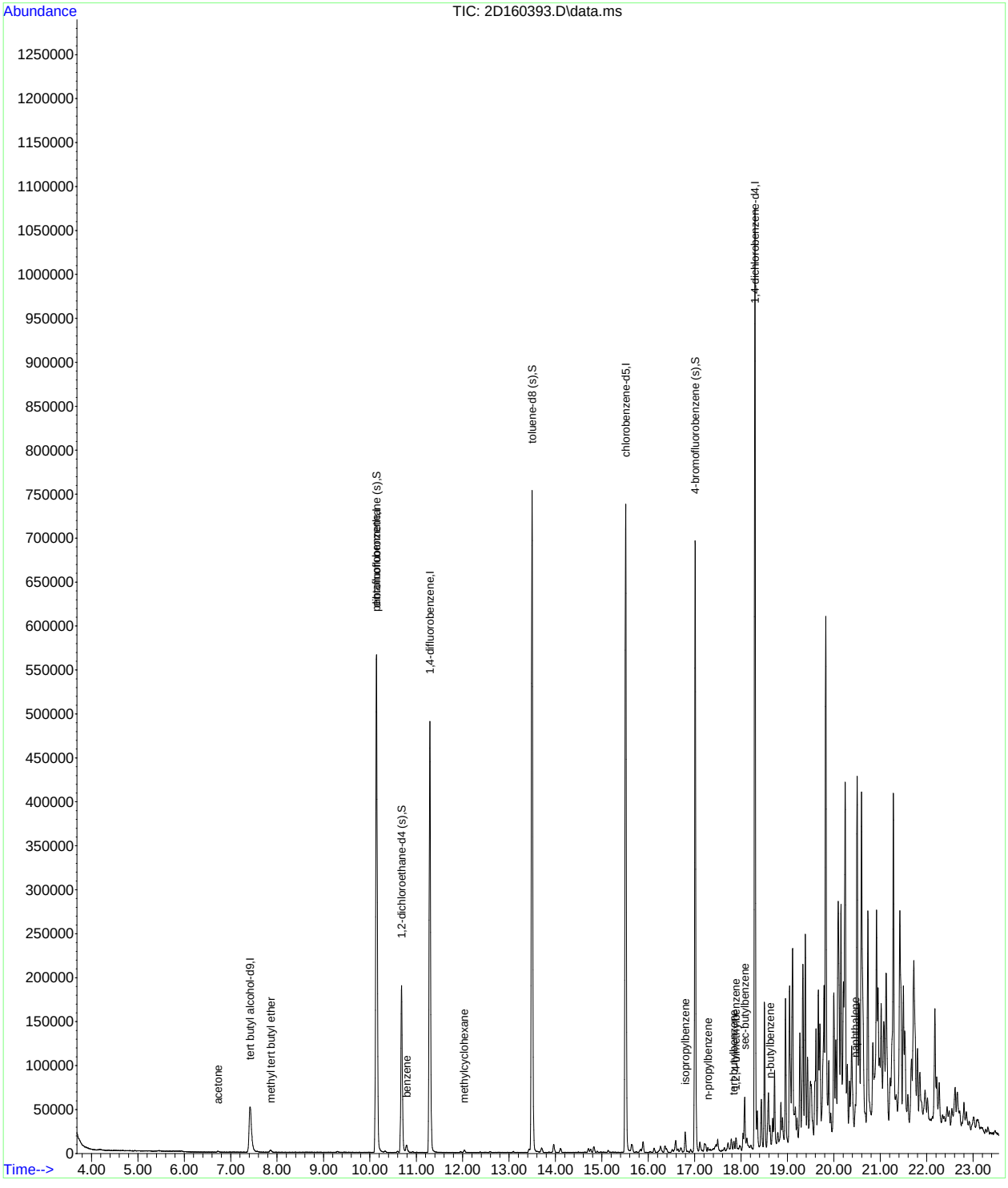
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.418	65	110667	500.00	ug/L	0.02
5) pentafluorobenzene	10.139	168	334453	50.00	ug/L	0.03
51) 1,4-difluorobenzene	11.292	114	485200	50.00	ug/L	0.03
80) chlorobenzene-d5	15.513	117	478901	50.00	ug/L	0.03
96) 1,4-dichlorobenzene-d4	18.297	152	268331	50.00	ug/L	0.02
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.144	113	156969	47.92	ug/L	0.03
Spiked Amount 50.000	Range 76 - 120		Recovery = 95.84%			
43) 1,2-dichloroethane-d4 (s)	10.684	65	152111	46.96	ug/L	0.03
Spiked Amount 50.000	Range 73 - 122		Recovery = 93.92%			
72) toluene-d8 (s)	13.494	98	580646	49.67	ug/L	0.03
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.34%			
98) 4-bromofluorobenzene (s)	17.007	95	241548	48.91	ug/L	0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 97.82%			
Target Compounds						Qvalue
17) acetone	6.726	58	444	1.55	ug/L #	32
25) methyl tert butyl ether	7.869	73	3138	0.38	ug/L	72
57) benzene	10.789	78	8955	0.77	ug/L	93
69) methylcyclohexane	12.032	83	1434	0.27	ug/L	91
97) isopropylbenzene	16.797	105	15040	1.04	ug/L	98
105) n-propylbenzene	17.285	91	4781	0.28	ug/L	97
109) tert-butylbenzene	17.841	119	5234	0.49	ug/L	88
111) 1,2,4-trimethylbenzene	17.888	105	6278	0.50	ug/L	97
112) sec-butylbenzene	18.077	105	39035	2.35	ug/L	99
118) n-butylbenzene	18.622	92	6733	0.90	ug/L	96
122) naphthalene	20.457	128	5399	0.66	ug/L	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

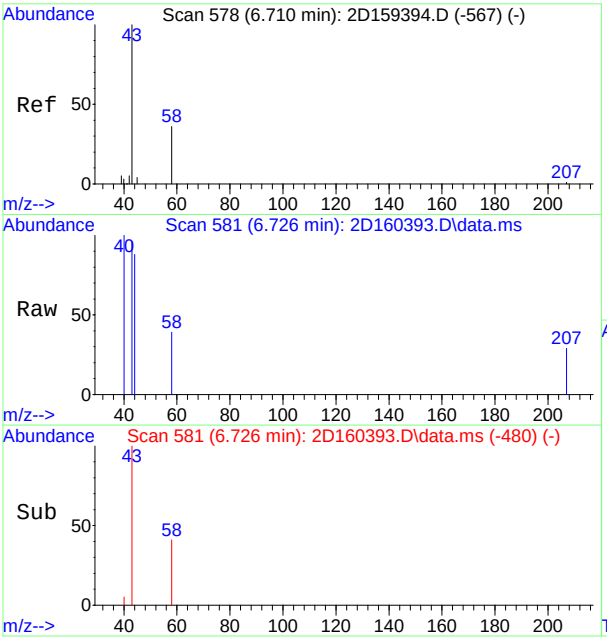
Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160393.D
Acq On : 19 Oct 2016 4:54 am
Operator : Adilm
Sample : jc29144-9
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Oct 19 11:22:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration



M2D6705.M Wed Oct 19 11:26:35 2016 Page: 2

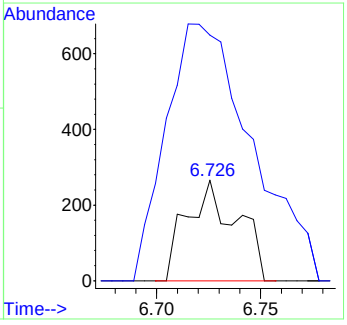
SGS ACCUTEST JC29144

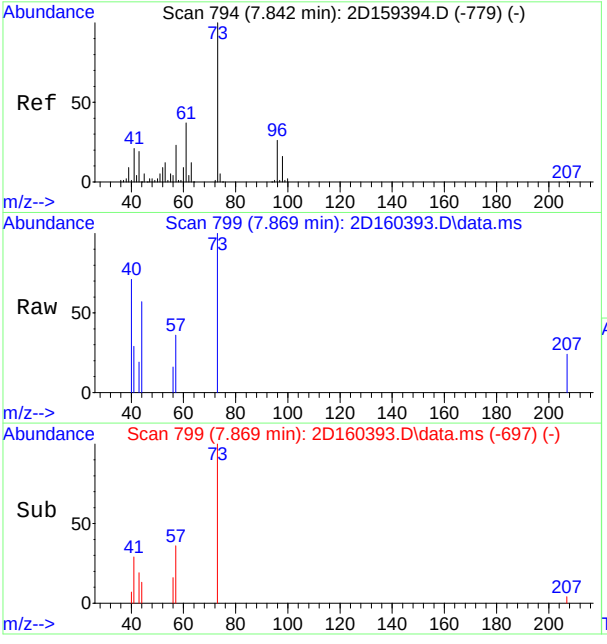


#17
acetone
Concen: 1.55 ug/L
RT: 6.726 min Scan# 581
Delta R.T. 0.032 min
Lab File: 2D160393.D
Acq: 19 Oct 2016 4:54 am

Tgt Ion: 58 Resp: 444

Ion	Ratio	Lower	Upper
58	100		
43	158.6	259.0	319.0#

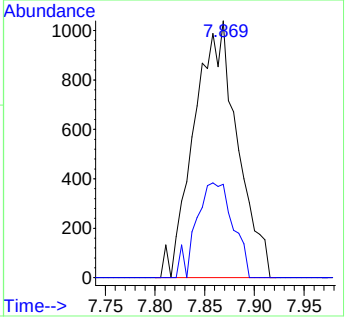


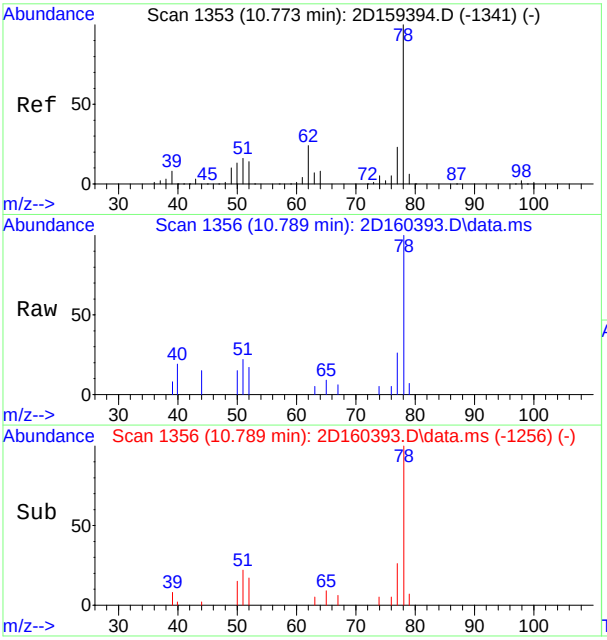


#25
methyl tert butyl ether
Concen: 0.38 ug/L
RT: 7.869 min Scan# 799
Delta R.T. 0.037 min
Lab File: 2D160393.D
Acq: 19 Oct 2016 4:54 am

Tgt Ion: 73 Resp: 3138

Ion	Ratio	Lower	Upper
73	100		
57	36.4	0.0	52.9

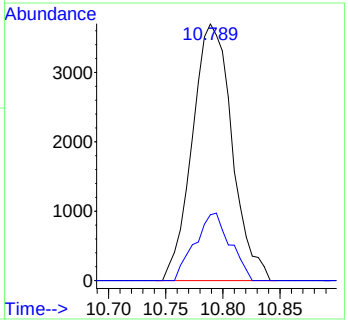


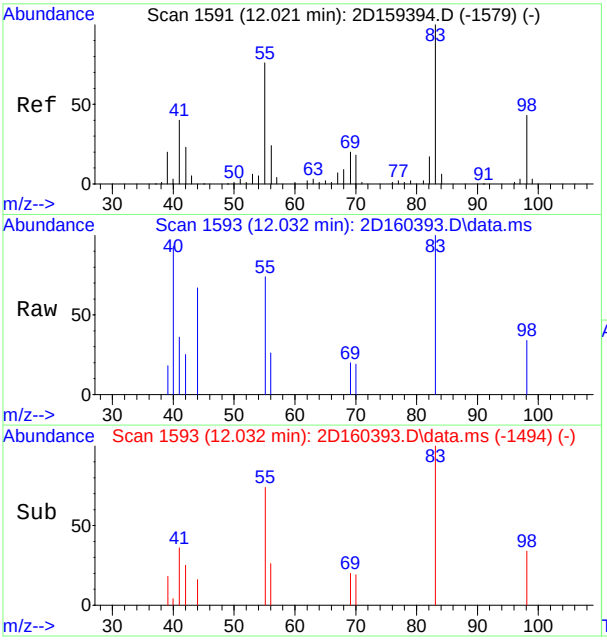


#57
benzene
Concen: 0.77 ug/L
RT: 10.789 min Scan# 1356
Delta R.T. 0.026 min
Lab File: 2D160393.D
Acq: 19 Oct 2016 4:54 am

Tgt Ion: 78 Resp: 8955

Ion	Ratio	Lower	Upper
78	100		
77	25.7	0.0	52.5

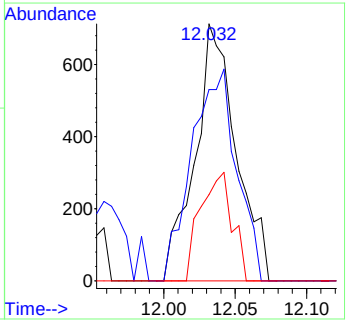


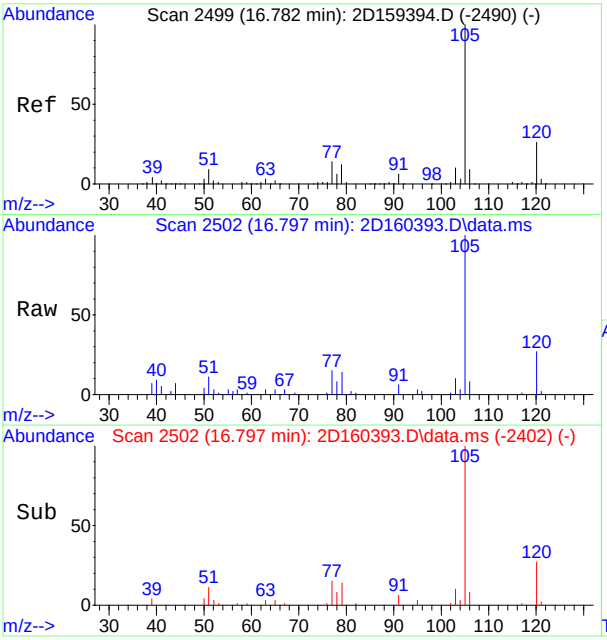


#69
methylcyclohexane
Concen: 0.27 ug/L
RT: 12.032 min Scan# 1593
Delta R.T. 0.021 min
Lab File: 2D160393.D
Acq: 19 Oct 2016 4:54 am

Tgt Ion: 83 Resp: 1434

Ion	Ratio	Lower	Upper
83	100		
55	74.5	51.1	111.1
98	33.5	11.5	71.5

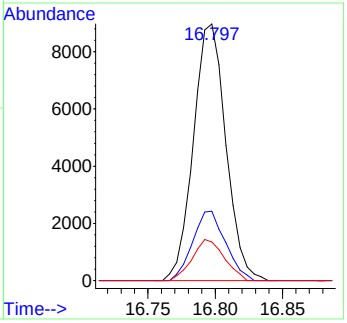


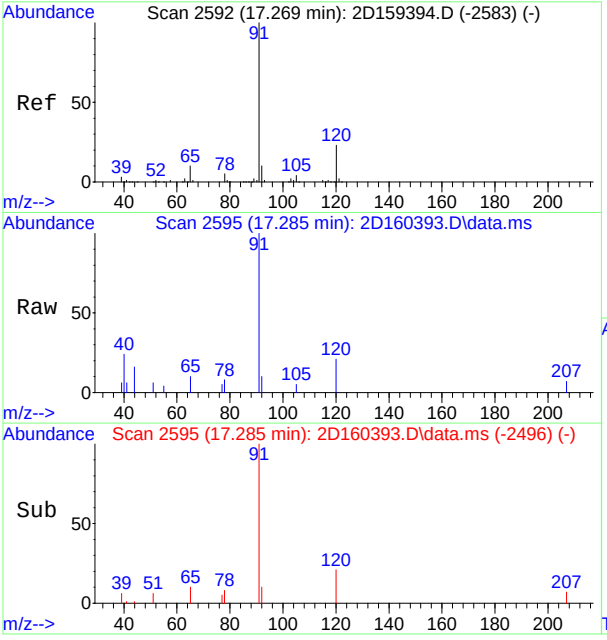


#97
isopropylbenzene
Concen: 1.04 ug/L
RT: 16.797 min Scan# 2502
Delta R.T. 0.026 min
Lab File: 2D160393.D
Acq: 19 Oct 2016 4:54 am

Tgt Ion:105 Resp: 15040

Ion	Ratio	Lower	Upper
105	100		
120	27.0	0.0	56.0
77	15.1	0.0	45.4

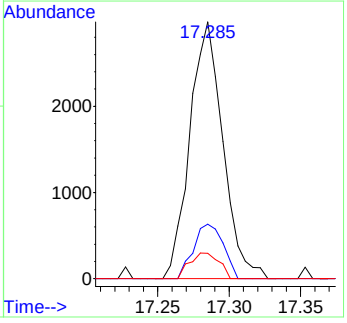


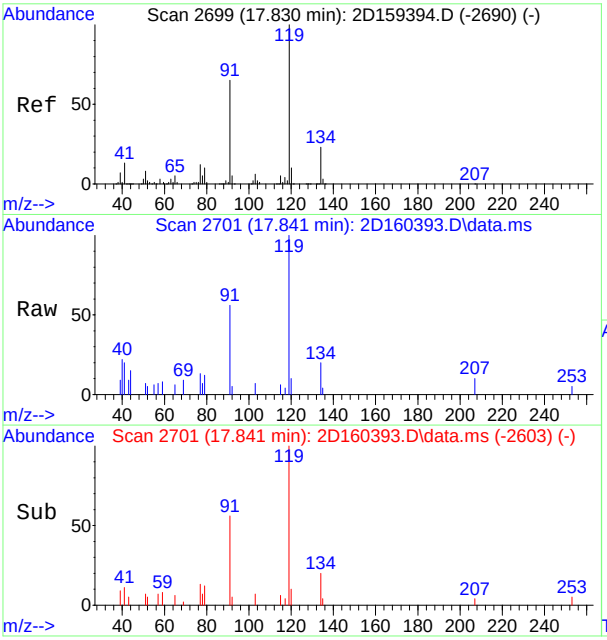


#105
n-propylbenzene
Concen: 0.28 ug/L
RT: 17.285 min Scan# 2595
Delta R.T. 0.021 min
Lab File: 2D160393.D
Acq: 19 Oct 2016 4:54 am

Tgt Ion: 91 Resp: 4781

Ion	Ratio	Lower	Upper
91	100		
120	21.2	0.0	53.1
65	9.9	0.0	40.0

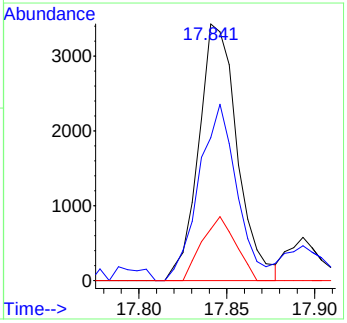


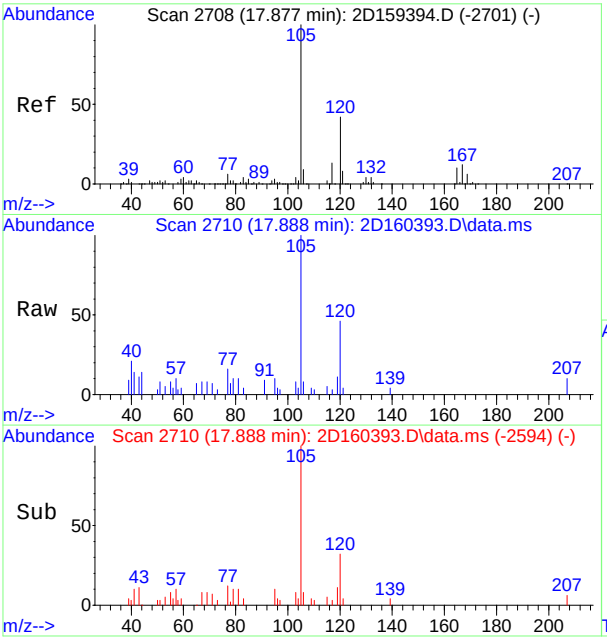


#109
tert-butylbenzene
Concen: 0.49 ug/L
RT: 17.841 min Scan# 2701
Delta R.T. 0.016 min
Lab File: 2D160393.D
Acq: 19 Oct 2016 4:54 am

Tgt Ion:119 Resp: 5234

Ion	Ratio	Lower	Upper
119	100		
91	55.7	36.4	96.4
134	20.0	0.0	54.0

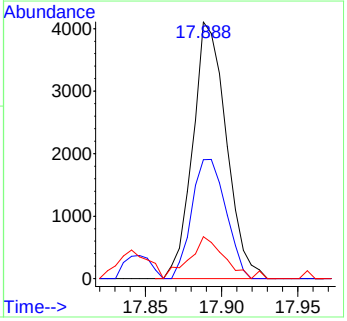


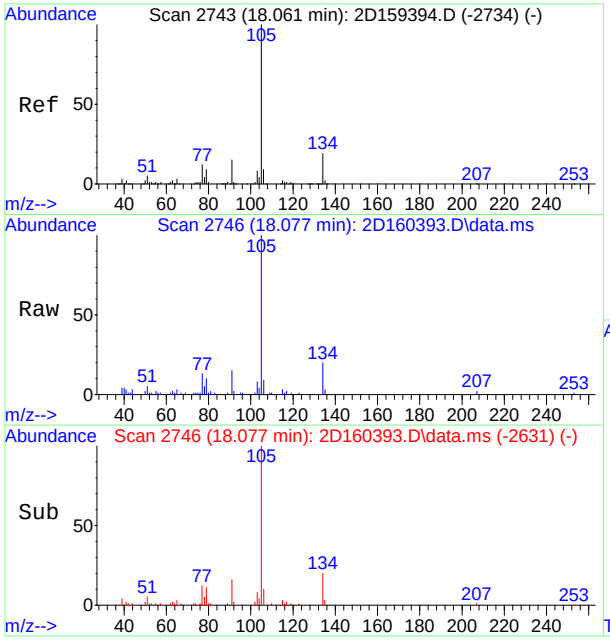


#111
1,2,4-trimethylbenzene
Concen: 0.50 ug/L
RT: 17.888 min Scan# 2710
Delta R.T. 0.016 min
Lab File: 2D160393.D
Acq: 19 Oct 2016 4:54 am

Tgt Ion:105 Resp: 6278

Ion	Ratio	Lower	Upper
105	100		
120	46.3	17.3	77.3
77	16.4	0.0	42.1

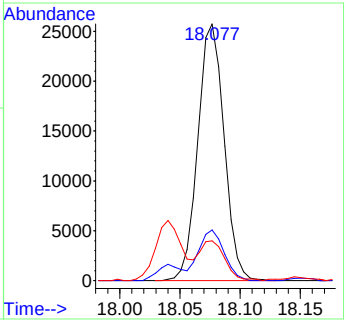


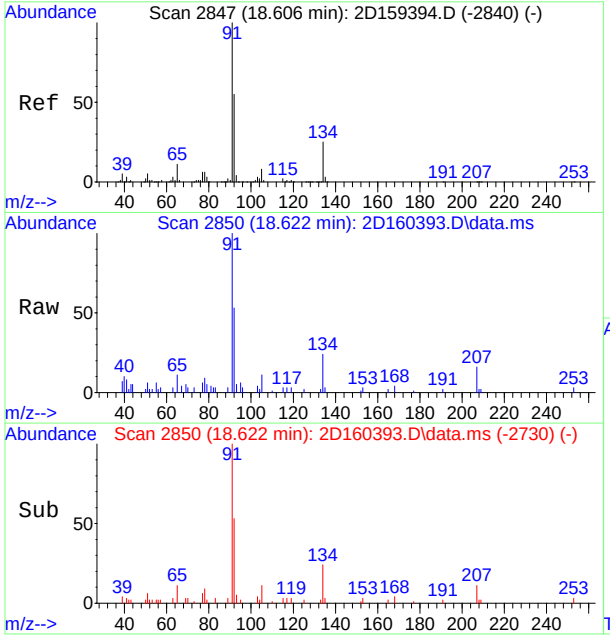


#112
sec-butylbenzene
Concen: 2.35 ug/L
RT: 18.077 min Scan# 2746
Delta R.T. 0.021 min
Lab File: 2D160393.D
Acq: 19 Oct 2016 4:54 am

Tgt Ion:105 Resp: 39035

Ion	Ratio	Lower	Upper
105	100		
134	19.7	0.0	49.4
91	14.9	0.0	45.2

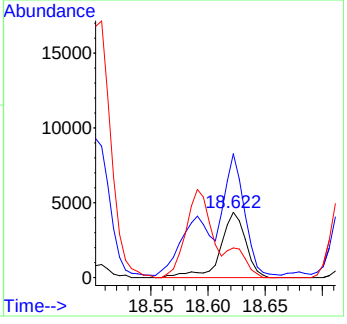


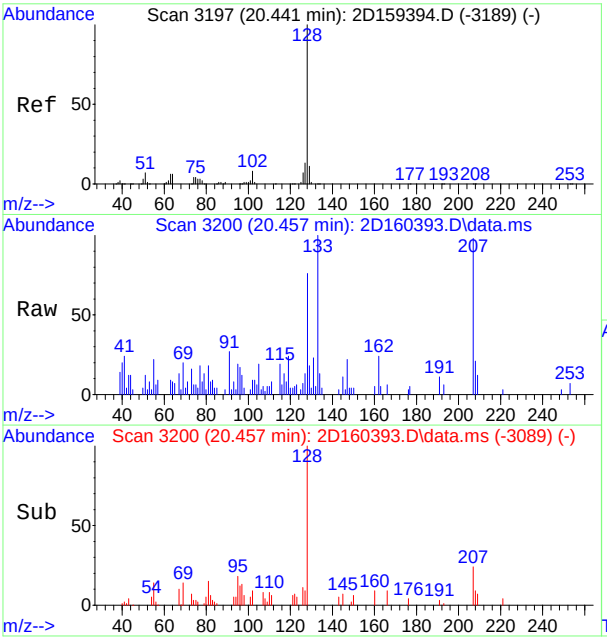


#118
n-butylbenzene
Concen: 0.90 ug/L
RT: 18.622 min Scan# 2850
Delta R.T. 0.021 min
Lab File: 2D160393.D
Acq: 19 Oct 2016 4:54 am

Tgt Ion: 92 Resp: 6733

Ion	Ratio	Lower	Upper
92	100		
91	186.2	149.7	209.7
134	45.5	15.5	75.5

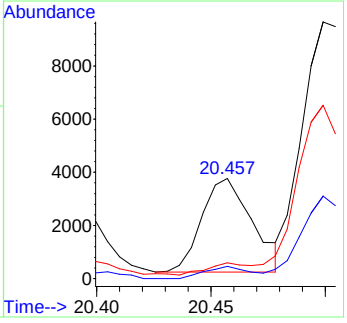




#122
naphthalene
Concen: 0.66 ug/L
RT: 20.457 min Scan# 3200
Delta R.T. 0.021 min
Lab File: 2D160393.D
Acq: 19 Oct 2016 4:54 am

Tgt Ion:128 Resp: 5399

Ion	Ratio	Lower	Upper
128	100		
102	13.1	0.0	37.6
51	11.5	0.0	37.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160394.D
Acq On : 19 Oct 2016 5:23 am
Operator : Adilm
Sample : jc29144-10
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Oct 20 08:20:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration

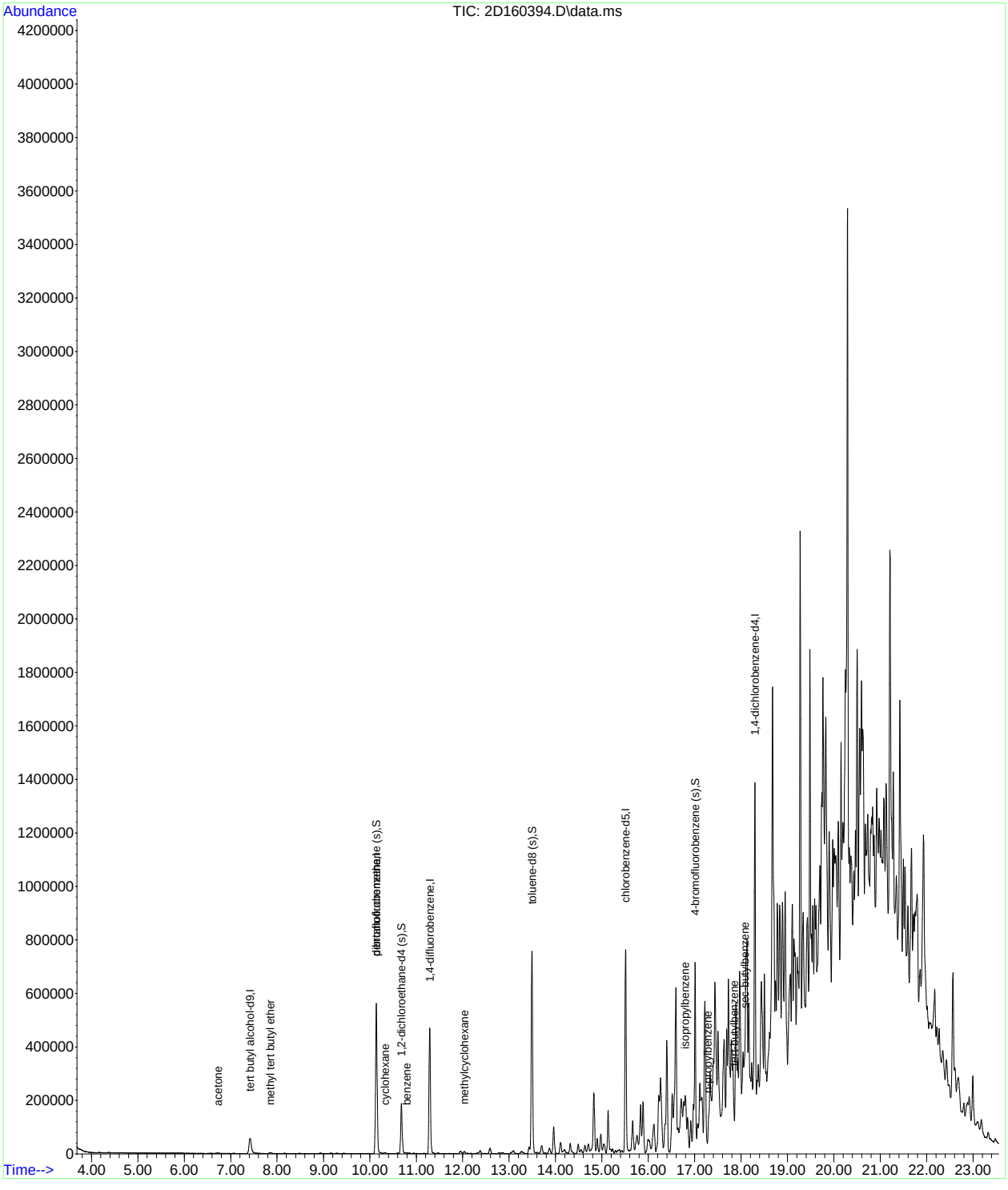
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.418	65	116990	500.00	ug/L	0.02
5) pentafluorobenzene	10.139	168	330719	50.00	ug/L	0.03
51) 1,4-difluorobenzene	11.292	114	476693	50.00	ug/L	0.03
80) chlorobenzene-d5	15.508	117	478277	50.00	ug/L	0.02
96) 1,4-dichlorobenzene-d4	18.297	152	255135	50.00	ug/L	0.02
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.139	113	154983	47.85	ug/L	0.02
Spiked Amount 50.000	Range 76 - 120		Recovery = 95.70%			
43) 1,2-dichloroethane-d4 (s)	10.679	65	150887	47.11	ug/L	0.02
Spiked Amount 50.000	Range 73 - 122		Recovery = 94.22%			
72) toluene-d8 (s)	13.494	98	585258	50.96	ug/L	0.03
Spiked Amount 50.000	Range 84 - 119		Recovery = 101.92%			
98) 4-bromofluorobenzene (s)	17.007	95	252871	53.86	ug/L	0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 107.72%			
Target Compounds						Qvalue
17) acetone	6.726	58	1138	4.02	ug/L #	68
25) methyl tert butyl ether	7.853	73	5088	0.63	ug/L	88
47) cyclohexane	10.327	84	1484	0.33	ug/L #	71
57) benzene	10.789	78	3146	0.28	ug/L	98
69) methylcyclohexane	12.037	83	2571	0.49	ug/L	82
97) isopropylbenzene	16.792	105	4820	0.35	ug/L	93
105) n-propylbenzene	17.280	91	3146	0.19	ug/L	92
109) tert-butylbenzene	17.846	119	11413	1.13	ug/L	93
112) sec-butylbenzene	18.077	105	17627	1.12	ug/L	91

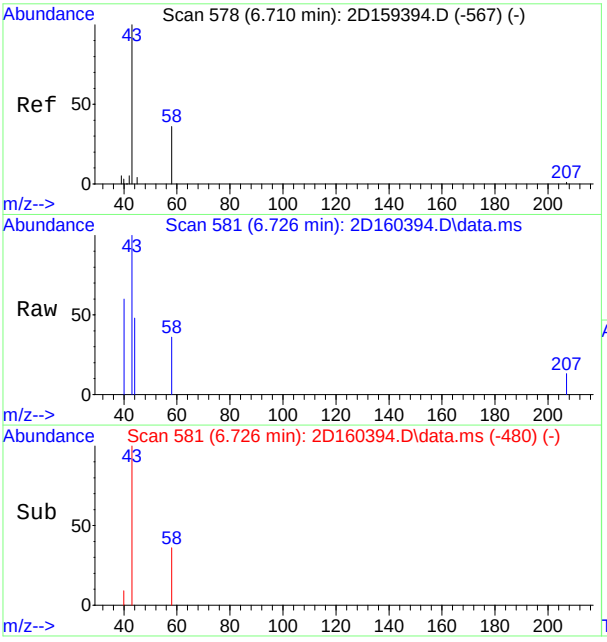
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160394.D
Acq On : 19 Oct 2016 5:23 am
Operator : Adilm
Sample : jc29144-10
Misc : ms8040,v2d6715,5,,,,1
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Oct 20 08:20:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration

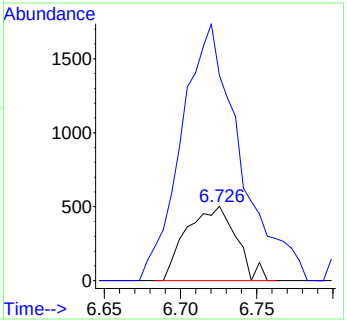


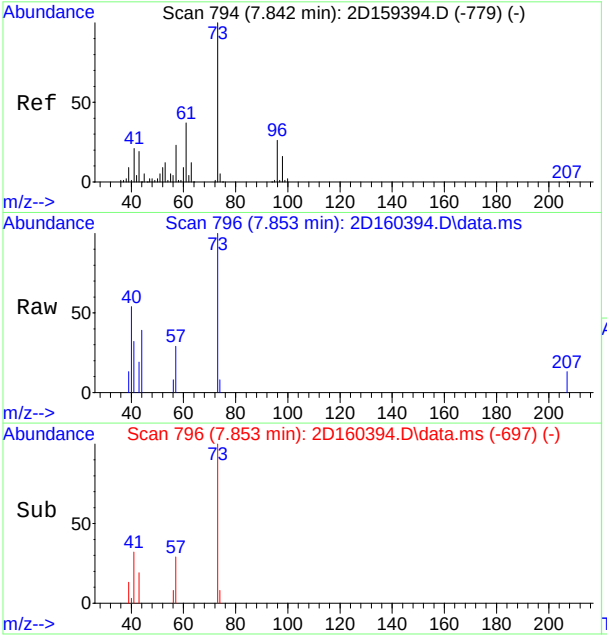


#17
acetone
Concen: 4.02 ug/L
RT: 6.726 min Scan# 581
Delta R.T. 0.031 min
Lab File: 2D160394.D
Acq: 19 Oct 2016 5:23 am

Tgt Ion: 58 Resp: 1138

Ion	Ratio	Lower	Upper
58	100		
43	228.0	259.0	319.0#

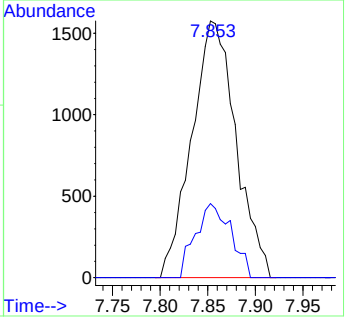


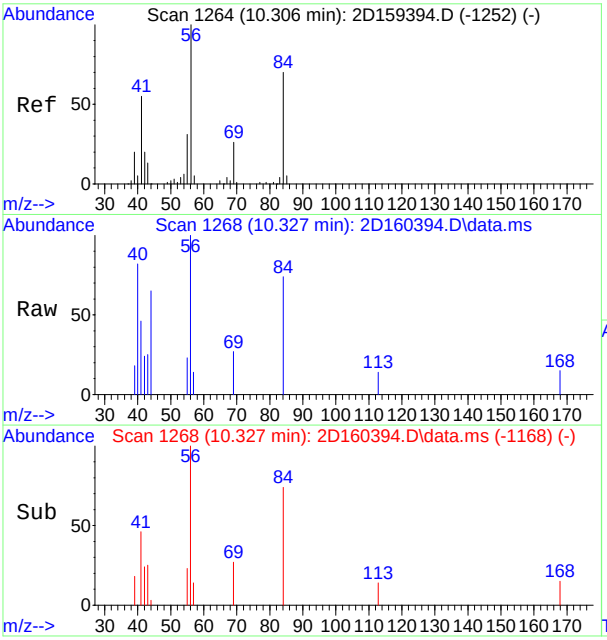


#25
methyl tert butyl ether
Concen: 0.63 ug/L
RT: 7.853 min Scan# 796
Delta R.T. 0.021 min
Lab File: 2D160394.D
Acq: 19 Oct 2016 5:23 am

Tgt Ion: 73 Resp: 5088

Ion	Ratio	Lower	Upper
73	100		
57	28.8	0.0	52.9

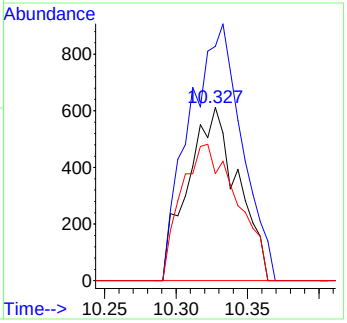


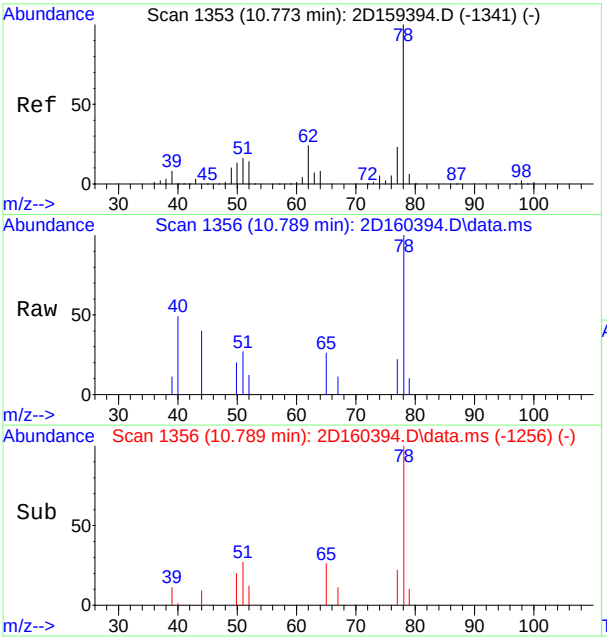


#47
cyclohexane
Concen: 0.33 ug/L
RT: 10.327 min Scan# 1268
Delta R.T. 0.026 min
Lab File: 2D160394.D
Acq: 19 Oct 2016 5:23 am

Tgt Ion: 84 Resp: 1484

Ion	Ratio	Lower	Upper
84	100		
56	135.3	140.6	200.6#
41	61.8	64.6	124.6#

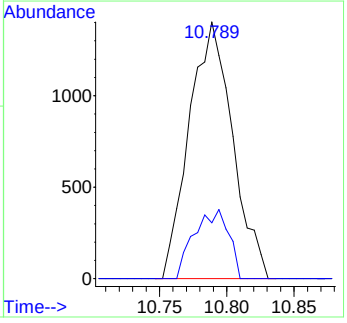


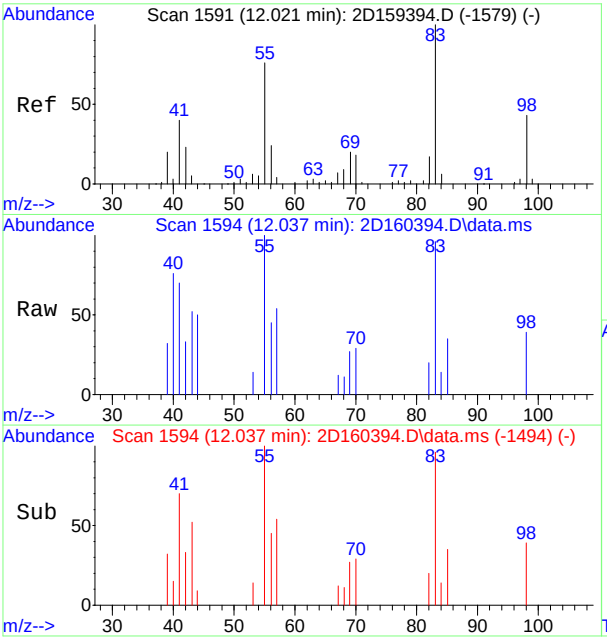


#57
benzene
Concen: 0.28 ug/L
RT: 10.789 min Scan# 1356
Delta R.T. 0.026 min
Lab File: 2D160394.D
Acq: 19 Oct 2016 5:23 am

Tgt Ion: 78 Resp: 3146

Ion	Ratio	Lower	Upper
78	100		
77	21.7	0.0	52.5

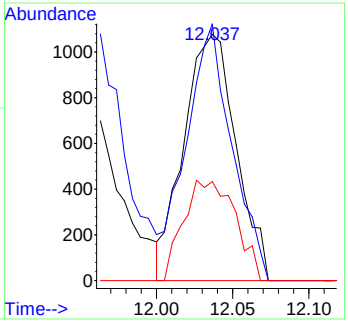


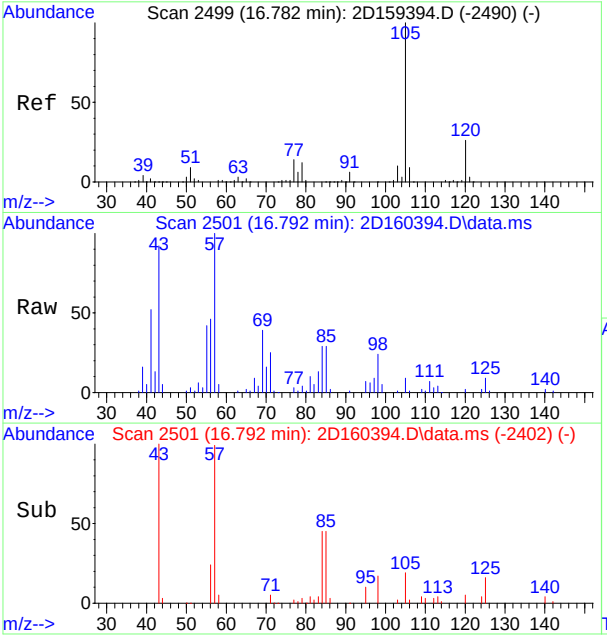


#69
methylcyclohexane
Concen: 0.49 ug/L
RT: 12.037 min Scan# 1594
Delta R.T. 0.026 min
Lab File: 2D160394.D
Acq: 19 Oct 2016 5:23 am

Tgt Ion: 83 Resp: 2571

Ion	Ratio	Lower	Upper
83	100		
55	104.3	51.1	111.1
98	40.2	11.5	71.5

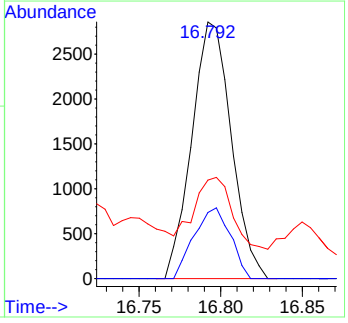


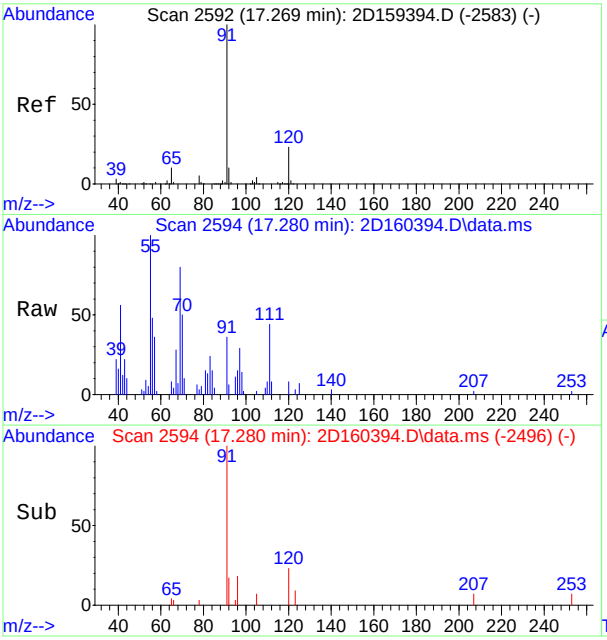


#97
isopropylbenzene
Concen: 0.35 ug/L
RT: 16.792 min Scan# 2501
Delta R.T. 0.021 min
Lab File: 2D160394.D
Acq: 19 Oct 2016 5:23 am

Tgt Ion:105 Resp: 4820

Ion	Ratio	Lower	Upper
105	100		
120	25.7	0.0	56.0
77	22.9	0.0	45.4

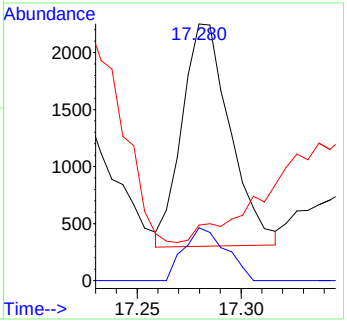


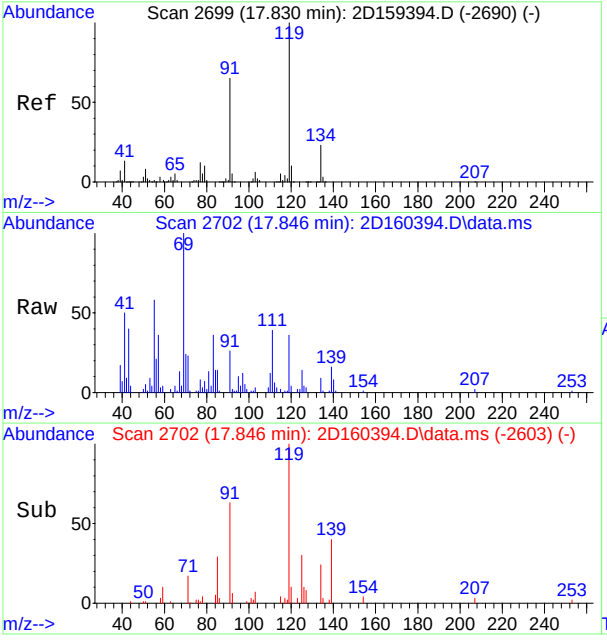


#105
n-propylbenzene
Concen: 0.19 ug/L
RT: 17.280 min Scan# 2594
Delta R.T. 0.016 min
Lab File: 2D160394.D
Acq: 19 Oct 2016 5:23 am

Tgt Ion: 91 Resp: 3146

Ion	Ratio	Lower	Upper
91	100		
120	25.4	0.0	53.1
65	4.1	0.0	40.0

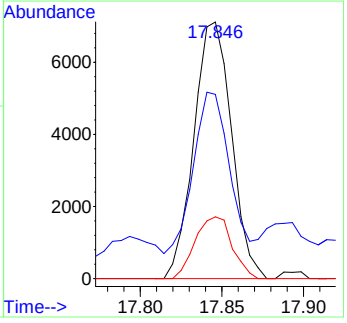


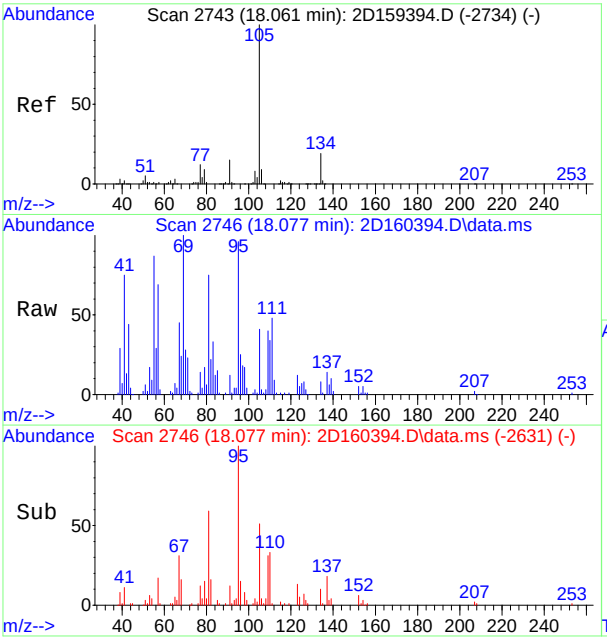


#109
tert-butylbenzene
Concen: 1.13 ug/L
RT: 17.846 min Scan# 2702
Delta R.T. 0.021 min
Lab File: 2D160394.D
Acq: 19 Oct 2016 5:23 am

Tgt Ion:119 Resp: 11413

Ion	Ratio	Lower	Upper
119	100		
91	58.8	36.4	96.4
134	24.1	0.0	54.0

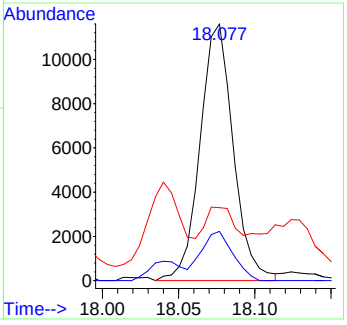




#112
sec-butylbenzene
Concen: 1.12 ug/L
RT: 18.077 min Scan# 2746
Delta R.T. 0.021 min
Lab File: 2D160394.D
Acq: 19 Oct 2016 5:23 am

Tgt Ion:105 Resp: 17627

Ion	Ratio	Lower	Upper
105	100		
134	19.2	0.0	49.4
91	6.6	0.0	45.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160382.D
Acq On : 18 Oct 2016 10:53 pm
Operator : Adilm
Sample : mb1
Misc : ms3,v2d6715,5,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Oct 19 11:16:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.418	65	117323	500.00	ug/L	0.02
5) pentafluorobenzene	10.139	168	328705	50.00	ug/L	0.03
51) 1,4-difluorobenzene	11.292	114	490814	50.00	ug/L	0.03
80) chlorobenzene-d5	15.513	117	475909	50.00	ug/L	0.03
96) 1,4-dichlorobenzene-d4	18.297	152	245335	50.00	ug/L	0.02
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.144	113	162630	50.51	ug/L	0.03
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.02%			
43) 1,2-dichloroethane-d4 (s)	10.679	65	164806	51.77	ug/L	0.02
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.54%			
72) toluene-d8 (s)	13.494	98	591961	50.06	ug/L	0.03
Spiked Amount 50.000	Range 84 - 119		Recovery = 100.12%			
98) 4-bromofluorobenzene (s)	17.007	95	238358	52.79	ug/L	0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 105.58%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

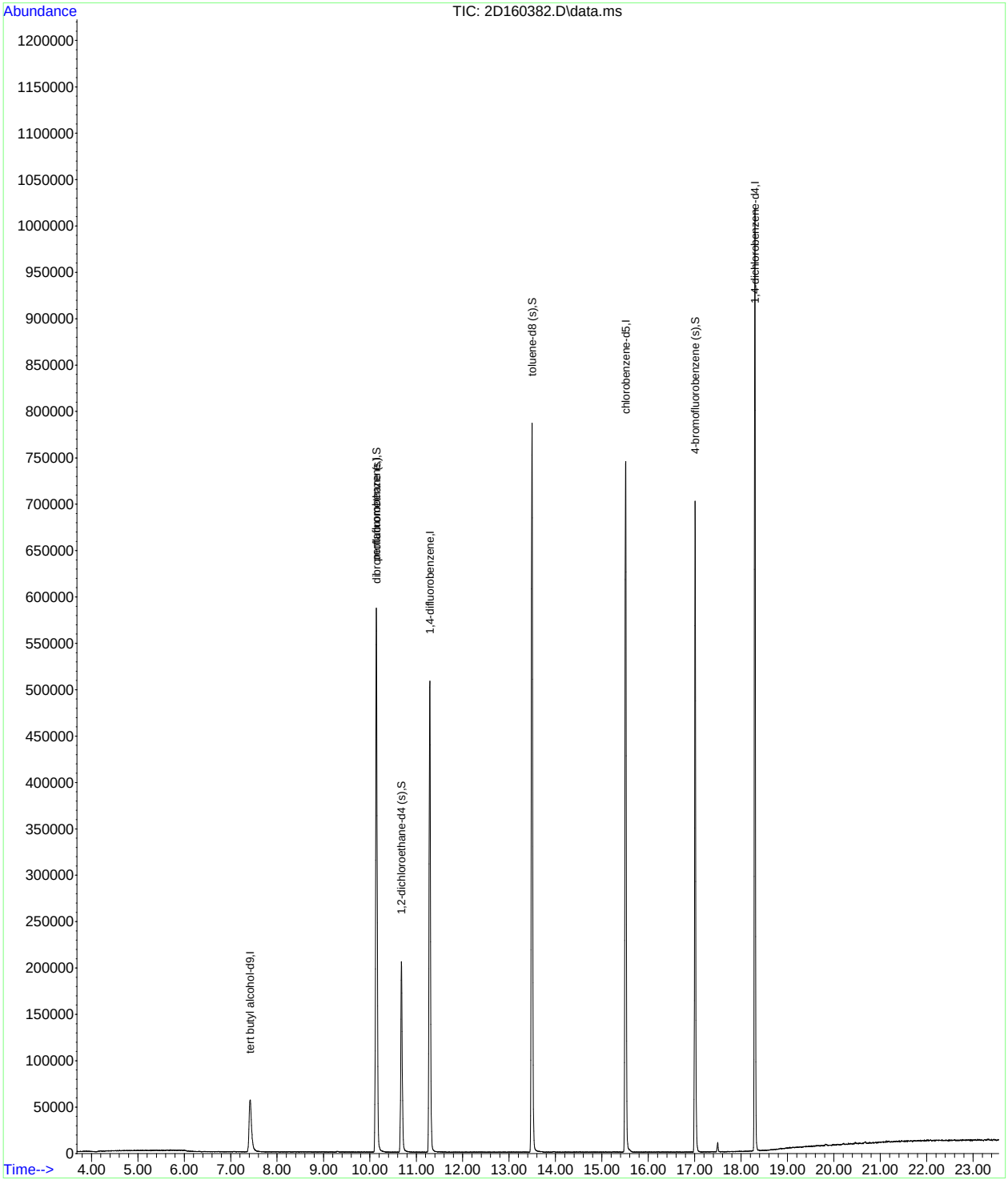
7.2.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2D\v2d6714-6715\
Data File : 2D160382.D
Acq On : 18 Oct 2016 10:53 pm
Operator : Adilm
Sample : mb1
Misc : ms3,v2d6715,5,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Oct 19 11:16:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6705.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 13 14:13:36 2016
Response via : Initial Calibration



GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV5384-MB2	UV133769.D	1	10/07/16	HT	n/a	n/a	GUV5384

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC29144-7, JC29144-10

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries		Limits
98-08-8	aaa-Trifluorotoluene	88%	55-130%

Method Blank Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV5384-MB3	UV133778.D	1	10/07/16	HT	n/a	n/a	GUV5384

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-6, JC29144-8, JC29144-9

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries		Limits
98-08-8	aaa-Trifluorotoluene	91%	55-130%

Method Blank Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV5384-MB1	UV133759.D	1	10/07/16	HT	n/a	n/a	GUV5384

The QC reported here applies to the following samples: **Method:** SW846 8015C

GUV5384-BS, JC28880-10DUP, JC28880-3MS

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries		Limits
98-08-8	aaa-Trifluorotoluene	88%	55-130%

8.1.3

8

Blank Spike Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV5384-BS	UV133760.D	1	10/07/16	HT	n/a	n/a	GUV5384

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-6, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	8	7.59	95	71-132

CAS No.	Surrogate Recoveries	BSP	Limits
98-08-8	aaa-Trifluorotoluene	100%	55-130%

8.2.1

8

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC28880-3MS	UV133767.D	1	10/07/16	HT	n/a	n/a	GUV5384
JC28880-3	UV133761.D	1	10/07/16	HT	n/a	n/a	GUV5384

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-6, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Compound	JC28880-3 mg/l	Q	Spike mg/l	MS mg/l	MS %	Limits
	TPH-GRO (C6-C10)	ND		8	7.83	98	49-131

CAS No.	Surrogate Recoveries	MS	JC28880-3	Limits
98-08-8	aaa-Trifluorotoluene	99%	89%	55-130%

8.3.1

8

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC28880-10DUP	UV133763.D	1	10/07/16	HT	n/a	n/a	GUV5384
JC28880-10	UV133762.D	1	10/07/16	HT	n/a	n/a	GUV5384

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-6, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Compound	JC28880-10 mg/l	Q	DUP mg/l	Q	RPD	Limits
	TPH-GRO (C6-C10)	ND		ND		nc	8

CAS No.	Surrogate Recoveries	DUP	JC28880-10	Limits
98-08-8	aaa-Trifluorotoluene	93%	93%	55-130%

8.4.1

8

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Method: SW846 8015C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
JC29144-1	UV133779.D	91
JC29144-2	UV133786.D	93
JC29144-3	UV133780.D	92
JC29144-4	UV133781.D	92
JC29144-5	UV133782.D	92
JC29144-6	UV133783.D	92
JC29144-7	UV133773.D	91
JC29144-8	UV133784.D	91
JC29144-9	UV133785.D	92
JC29144-10	UV133774.D	92
GUV5384-BS	UV133760.D	100
GUV5384-MB2	UV133769.D	88
GUV5384-MB3	UV133778.D	91
JC28880-10DUP	UV133763.D	93
JC28880-3MS	UV133767.D	99
GUV5384-MB1	UV133759.D	88

Surrogate Compounds	Recovery Limits
S1 = aaa-Trifluorotoluene	55-130%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	GUV5384-CC5078	**Injection Date:**	10/07/16
Lab File ID:	UV133758.D	**Injection Time:**	08:50
Instrument ID:	GCUV	**Method:**	SW846 8015C

	S1 [a] **RT**
Check Std	11.06

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GUV5384-MB1	UV133759.D	10/07/16	09:26	11.06
GUV5384-BS	UV133760.D	10/07/16	09:55	11.06
JC28880-3	UV133761.D	10/07/16	10:31	11.06
JC28880-10	UV133762.D	10/07/16	11:00	11.06
JC28880-10DUP	UV133763.D	10/07/16	11:36	11.06
ZZZZZZ	UV133764.D	10/07/16	12:05	11.06
ZZZZZZ	UV133765.D	10/07/16	12:34	11.06
ZZZZZZ	UV133766.D	10/07/16	13:03	11.06
JC28880-3MS	UV133767.D	10/07/16	13:32	11.06

Surrogate Compounds

S1 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	GUV5384-CC5078	**Injection Date:**	10/07/16
Lab File ID:	UV133768.D	**Injection Time:**	14:05
Instrument ID:	GCUV	**Method:**	SW846 8015C

	S1 [a] **RT**
Check Std	11.06

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GUV5384-MB2	UV133769.D	10/07/16	14:42	11.06
ZZZZZZ	UV133770.D	10/07/16	15:18	11.06
JC29144-7	UV133773.D	10/07/16	16:45	11.05
JC29144-10	UV133774.D	10/07/16	17:21	11.05
ZZZZZZ	UV133775.D	10/07/16	17:50	11.05
ZZZZZZ	UV133776.D	10/07/16	18:19	11.05

Surrogate Compounds

S1 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	GUV5384-CC5078	**Injection Date:**	10/07/16
Lab File ID:	UV133777.D	**Injection Time:**	18:48
Instrument ID:	GCUV	**Method:**	SW846 8015C

	S1 [a] **RT**
Check Std	11.05

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GUV5384-MB3	UV133778.D	10/07/16	19:24	11.06
JC29144-1	UV133779.D	10/07/16	19:53	11.06
JC29144-3	UV133780.D	10/07/16	20:22	11.06
JC29144-4	UV133781.D	10/07/16	20:51	11.06
JC29144-5	UV133782.D	10/07/16	21:27	11.06
JC29144-6	UV133783.D	10/07/16	21:56	11.06
JC29144-8	UV133784.D	10/07/16	22:25	11.06
JC29144-9	UV133785.D	10/07/16	22:54	11.06
JC29144-2	UV133786.D	10/07/16	23:30	11.06

Surrogate Compounds

S1 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample: GUV5078-ICC5078
Lab FileID: UV127091.D

```
                         Response Factor Report  GCUV

 Method       : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
 Title        : Method SW846 8015B (GRO)
 Last Update  : Wed Nov 18 08:28:12 2015
 Response via : Initial Calibration

 Calibration Files
 0.2    =UV127088.D   0.8    =UV127089.D   4      =UV127090.D
 8    =UV127091.D  20   =UV127092.D  40   =UV127094.D  30   =UV127093.D

     Compound           0.2   0.8   4     8     20    40    30     Avg   %RSD
 ---------------------------------------------------------------------------
 1)H TPH-GRO (C6-C10)  1.757 1.745 1.589 1.557 1.573 1.608 1.537 1.624 E4   5.52
 2)H TPH-GRO (C6-C12)  1.676 1.439 1.349 1.364 1.415 1.449 1.396 1.441 E4   7.61
 3)S a,a,a-Trifluoroto 1.719 1.795 1.844 1.910 2.037 2.119 2.128 1.936 E4   8.35
---------------------------------------------------------------------------

                                                   Average  % RSD =   7.2

 ( 100.0 %)  3 of   3 compounds'% RSD >  0
---------------------------------------------------------------------------
(#) = Out of Range

          MUV5078.M         Wed Nov 18 08:29:45 2015   GCSY
```

8.7.1

8

Initial Calibration Verification

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample: GUV5078-ICV5078
Lab FileID: UV127097.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\UV127097.D                    Vial: 13
Acq On    : 17 Nov 2015   7:01 pm                     Operator: JAYC
Sample    : ICV5078-8000                              Inst    : GCUV
Misc      : GC47028,GUV5078,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015B (GRO)
Last Update  : Wed Nov 18 08:28:12 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 H	TPH-GRO (C6-C10)	16.236	14.975 E3	7.8	96	0.00
2 H	TPH-GRO (C6-C12)	14.411	14.907 E3	-3.4	109	0.00
3 S	a,a,a-Trifluorotoluene	19.360	18.599 E3	3.9	97	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
UV127091.D MUV5078.M Wed Nov 18 08:33:06 2015 GCSY

8.7.2

8

Continuing Calibration Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Sample: GUV5384-CC5078
Lab FileID: UV133758.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\UV133758.D                    Vial: 4
Acq On    :  7 Oct 2016   8:50 am                     Operator: HARRISOT
Sample    : CC5078-4000                               Inst    : GCUV
Misc      : GC49328,GUV5384,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 H	TPH-GRO (C6-C10)	16.236	16.888 E3	-4.0	106	0.00
2 H	TPH-GRO (C6-C12)	14.411	15.870 E3	-10.1	118	0.00
3 S	a,a,a-Trifluorotoluene	19.360	18.254 E3	5.7	99	0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
UV127090.D MUV5078.M Fri Oct 07 14:57:11 2016 GCSY

8.7.3

8

Continuing Calibration Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Sample: GUV5384-CC5078
Lab FileID: UV133768.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\UV133768.D                    Vial: 14
Acq On    :  7 Oct 2016   2:05 pm                     Operator: HARRISOT
Sample    : CC5078-8000                               Inst    : GCUV
Misc      : GC49339,GUV5384,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 H	TPH-GRO (C6-C10)	16.236	17.417 E3	-7.3	112	0.00
2 H	TPH-GRO (C6-C12)	14.411	16.444 E3	-14.1	121	0.00
3 S	a,a,a-Trifluorotoluene	19.360	19.719 E3	-1.9	103	0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
UV127091.D MUV5078.M Fri Oct 07 14:56:21 2016 GCSY

8.7.4

8

Continuing Calibration Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Sample: GUV5384-CC5078
Lab FileID: UV133777.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\UV133777.D                    Vial: 23
Acq On    :  7 Oct 2016   6:48 pm                     Operator: HARRISOT
Sample    : CC5078-4000                               Inst    : GCUV
Misc      : GC49362,GUV5384,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	H	TPH-GRO (C6-C10)	16.236	17.721 E3	-9.1	112	0.00
2	H	TPH-GRO (C6-C12)	14.411	16.695 E3	-15.8#	124	0.00
3	S	a,a,a-Trifluorotoluene	19.360	19.133 E3	1.2	104	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
UV127090.D MUV5078.M Wed Oct 12 09:19:12 2016 GCSY

8.7.5

8

Continuing Calibration Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Sample: GUV5384-CC5078
Lab FileID: UV133787.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\UV133787.D                    Vial: 33
Acq On    :  7 Oct 2016  11:59 pm                     Operator: HARRISOT
Sample    : CC5078-8000                               Inst    : GCUV
Misc      : GC49368,GUV5384,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 H	TPH-GRO (C6-C10)	16.236	16.903 E3	-4.1	109	0.00
2 H	TPH-GRO (C6-C12)	14.411	16.000 E3	-11.0	117	0.00
3 S	a,a,a-Trifluorotoluene	19.360	19.731 E3	-1.9	103	0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
UV127091.D MUV5078.M Mon Oct 10 11:05:05 2016 GCSY

8.7.6

8

GC Volatiles

Raw Data

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV133779.D                    Vial: 25
Acq On    :  7 Oct 2016   7:53 pm                     Operator: HARRISOT
Sample    : JC29144-1                                 Inst    : GCUV
Misc      : GC49368,GUV5384,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Oct 10  8:55 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.06        5311629  274.366 ug/l
Spiked Amount   300.000                   Recovery      =   91.46%

Target Compounds
```

9.1.1

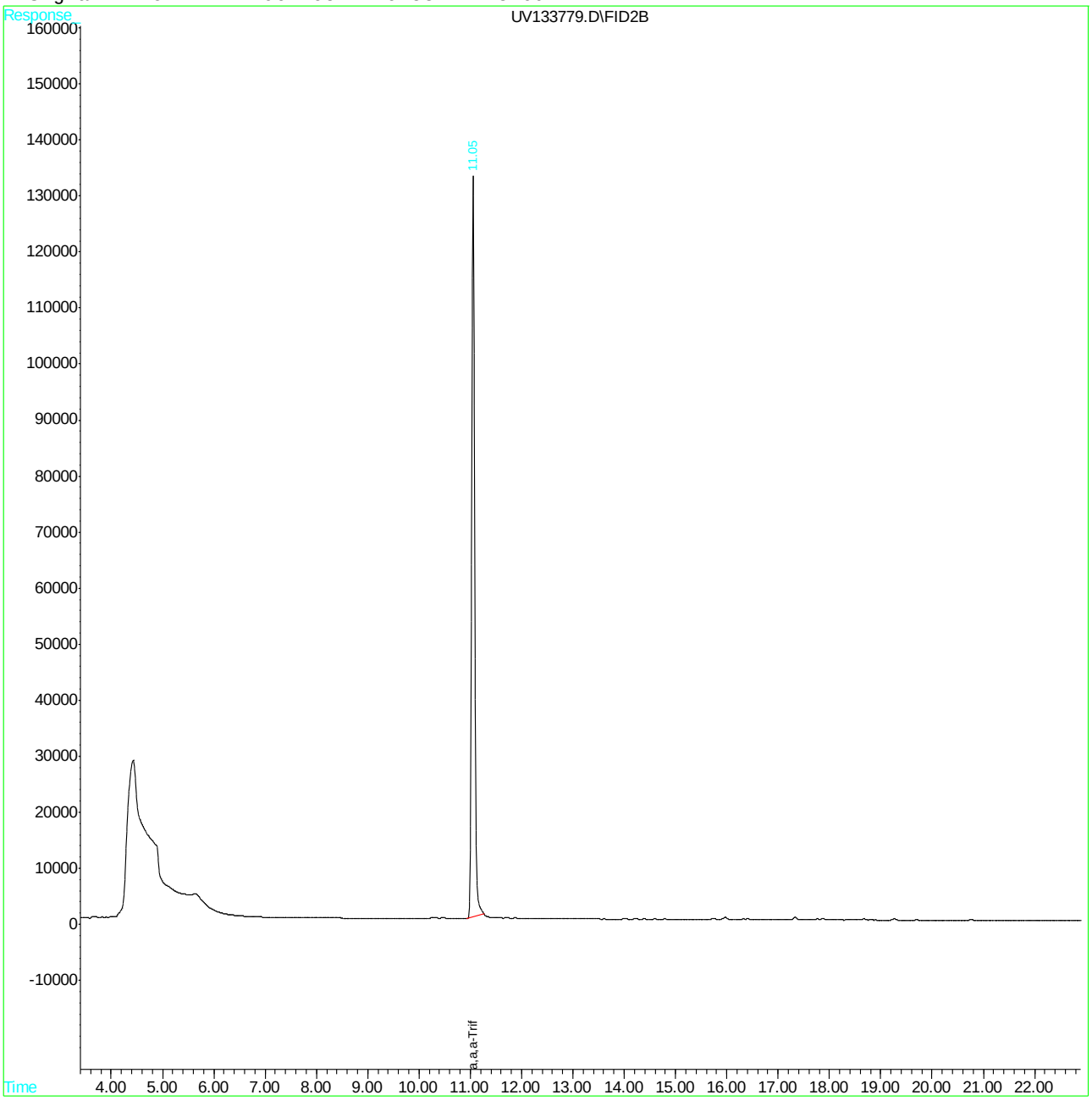
9

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV133779.D Vial: 25
Acq On : 7 Oct 2016 7:53 pm Operator: HARRISOT
Sample : JC29144-1 Inst : GCUV
Misc : GC49368,GUV5384,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 10 8:55 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV133786.D                    Vial: 32
Acq On    :  7 Oct 2016  11:30 pm                     Operator: HARRISOT
Sample    : JC29144-2                                 Inst    : GCUV
Misc      : GC49368,GUV5384,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Oct 10  8:57 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um
```

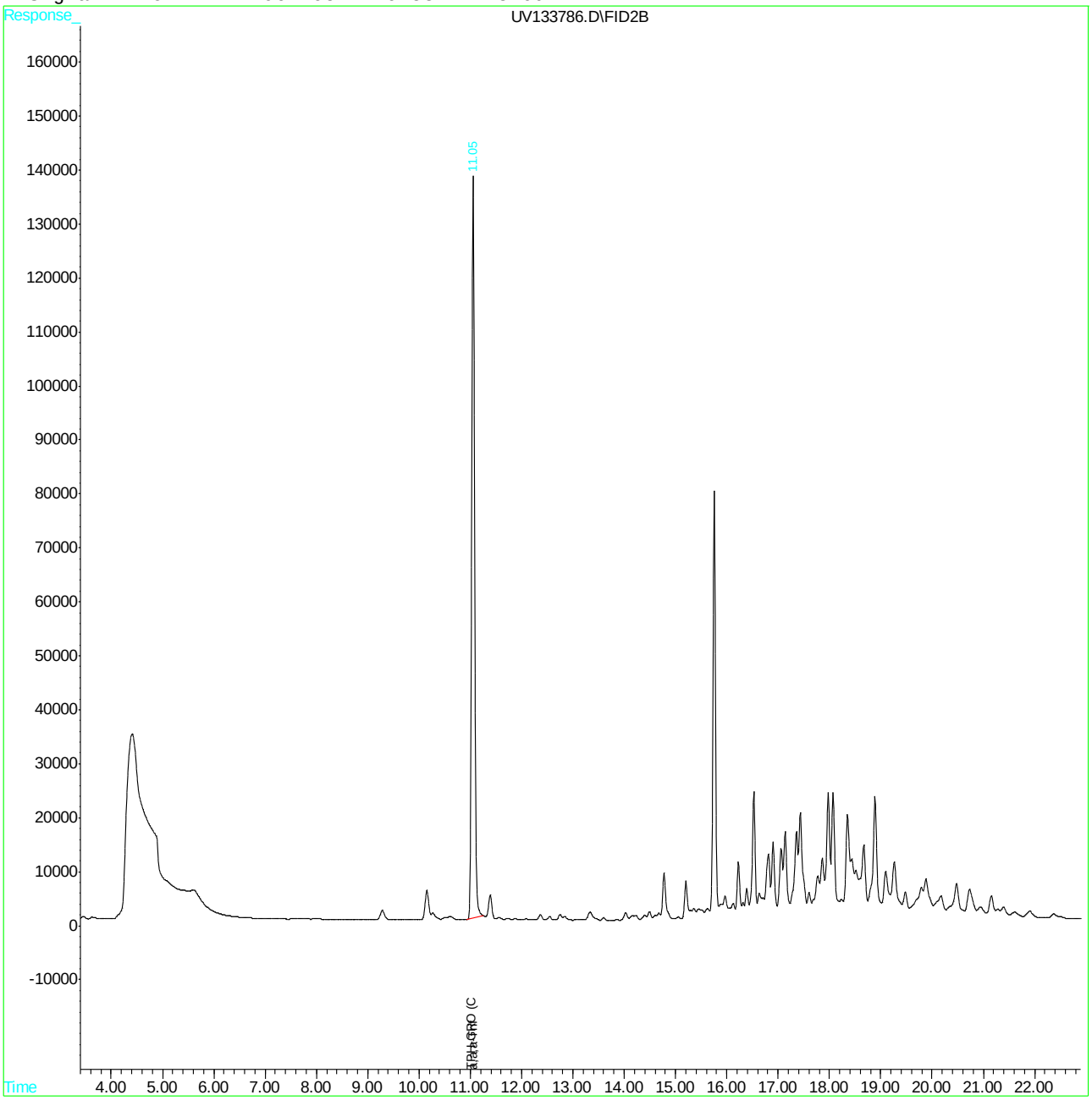
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	11.06	5390541	278.443 ug/l
Spiked Amount 300.000		Recovery =	92.81%
Target Compounds			
1) H TPH-GRO (C6-C10)	11.00	5750831	354.192 ug/l

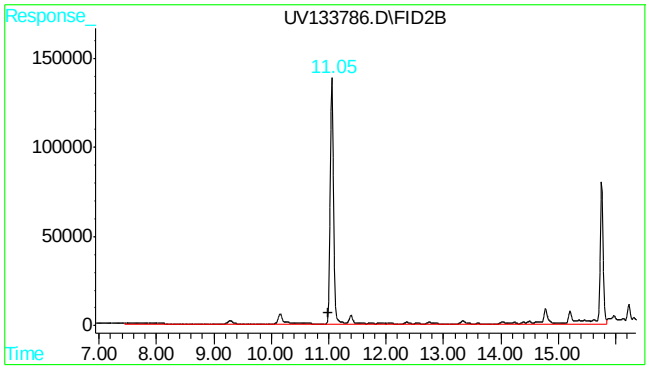
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV133786.D Vial: 32
Acq On : 7 Oct 2016 11:30 pm Operator: HARRISOT
Sample : JC29144-2 Inst : GCUV
Misc : GC49368,GUV5384,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 10 8:57 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um






```
#1  TPH-GRO (C6-C10)

      R.T.:  11.000 min
Delta R.T.:   0.000 min
  Response:   5750831
      Conc: 354.19 ug/l m
```

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV133780.D                    Vial: 26
Acq On    :  7 Oct 2016   8:22 pm                     Operator: HARRISOT
Sample    : JC29144-3                                 Inst    : GCUV
Misc      : GC49368,GUV5384,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Oct 10  8:55 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.06        5320278  274.813 ug/l
Spiked Amount   300.000                   Recovery      =   91.60%

Target Compounds
```

9.1.3

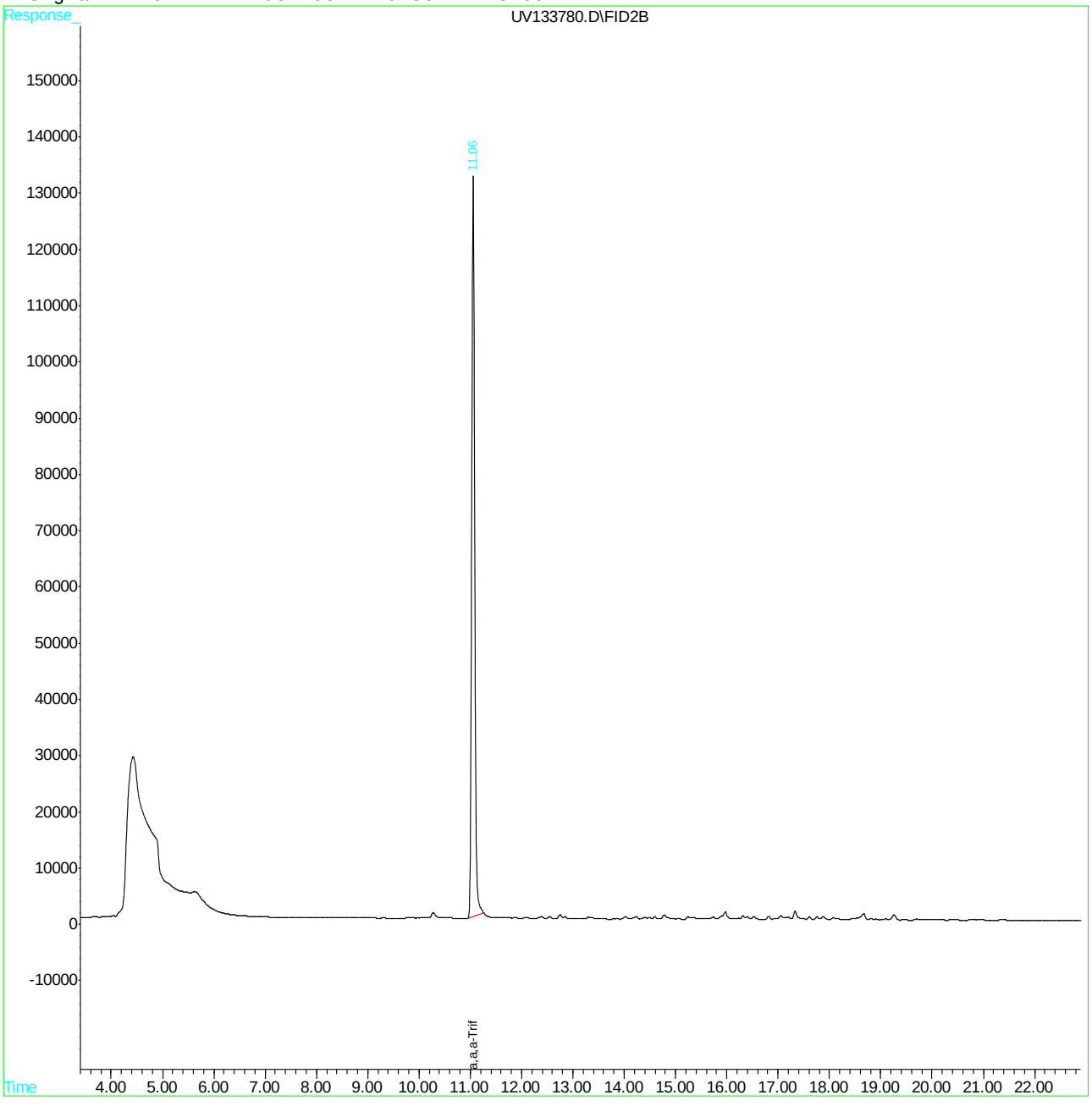
9

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV133780.D Vial: 26
Acq On : 7 Oct 2016 8:22 pm Operator: HARRISOT
Sample : JC29144-3 Inst : GCUV
Misc : GC49368,GUV5384,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 10 8:55 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV133781.D                    Vial: 27
Acq On    :  7 Oct 2016   8:51 pm                     Operator: HARRISOT
Sample    : JC29144-4                                 Inst    : GCUV
Misc      : GC49368,GUV5384,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Oct 10  8:55 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.06        5352707  276.488 ug/l
Spiked Amount   300.000                   Recovery      =   92.16%

Target Compounds
```

9.1.4

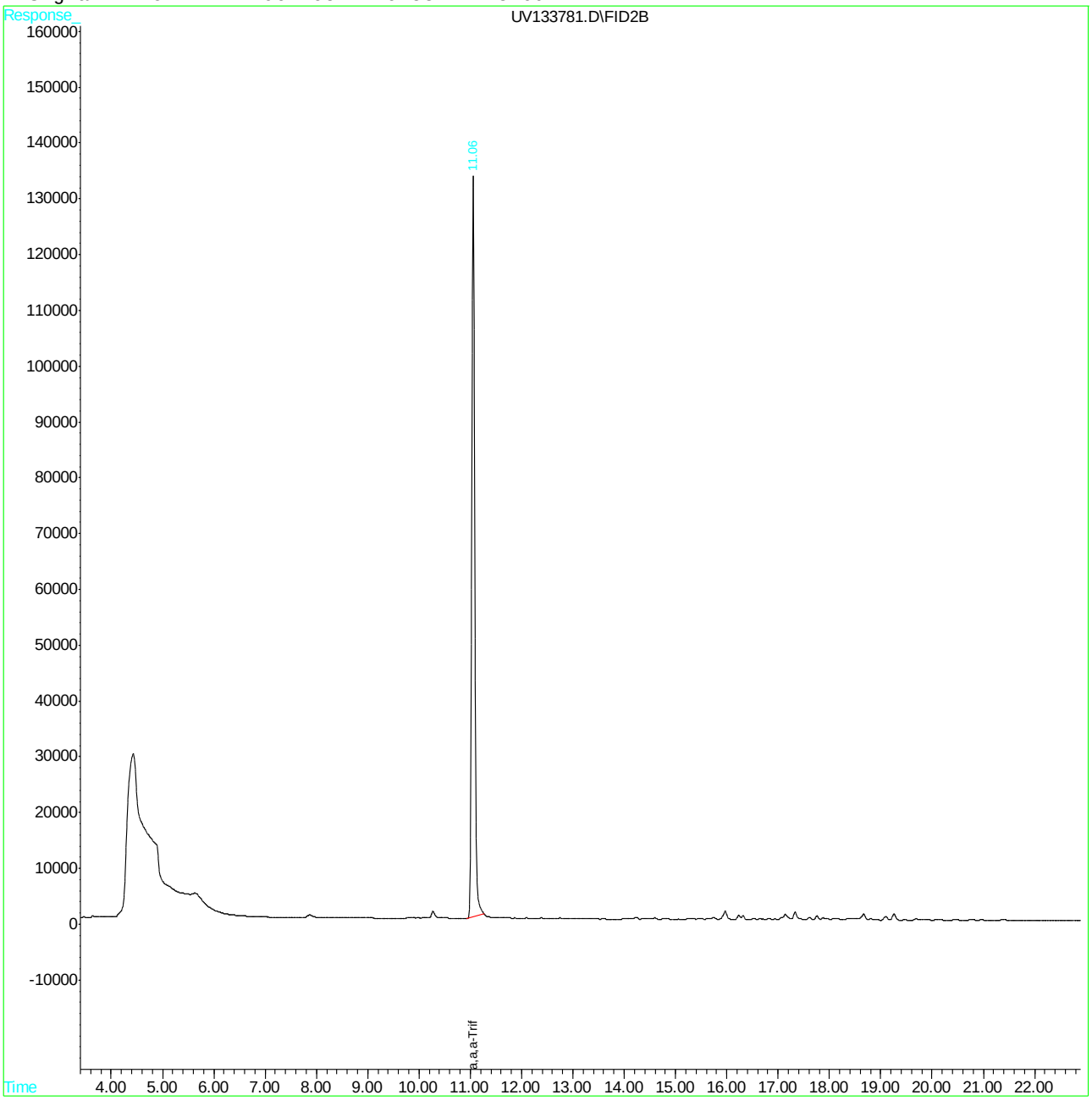
9

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV133781.D Vial: 27
Acq On : 7 Oct 2016 8:51 pm Operator: HARRISOT
Sample : JC29144-4 Inst : GCUV
Misc : GC49368,GUV5384,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 10 8:55 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV133782.D                    Vial: 28
Acq On    :  7 Oct 2016   9:27 pm                     Operator: HARRISOT
Sample    : JC29144-5                                 Inst    : GCUV
Misc      : GC49368,GUV5384,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Oct 10  8:56 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.06        5331661  275.401 ug/l
Spiked Amount   300.000                   Recovery      =   91.80%

Target Compounds
```

9.1.5

9

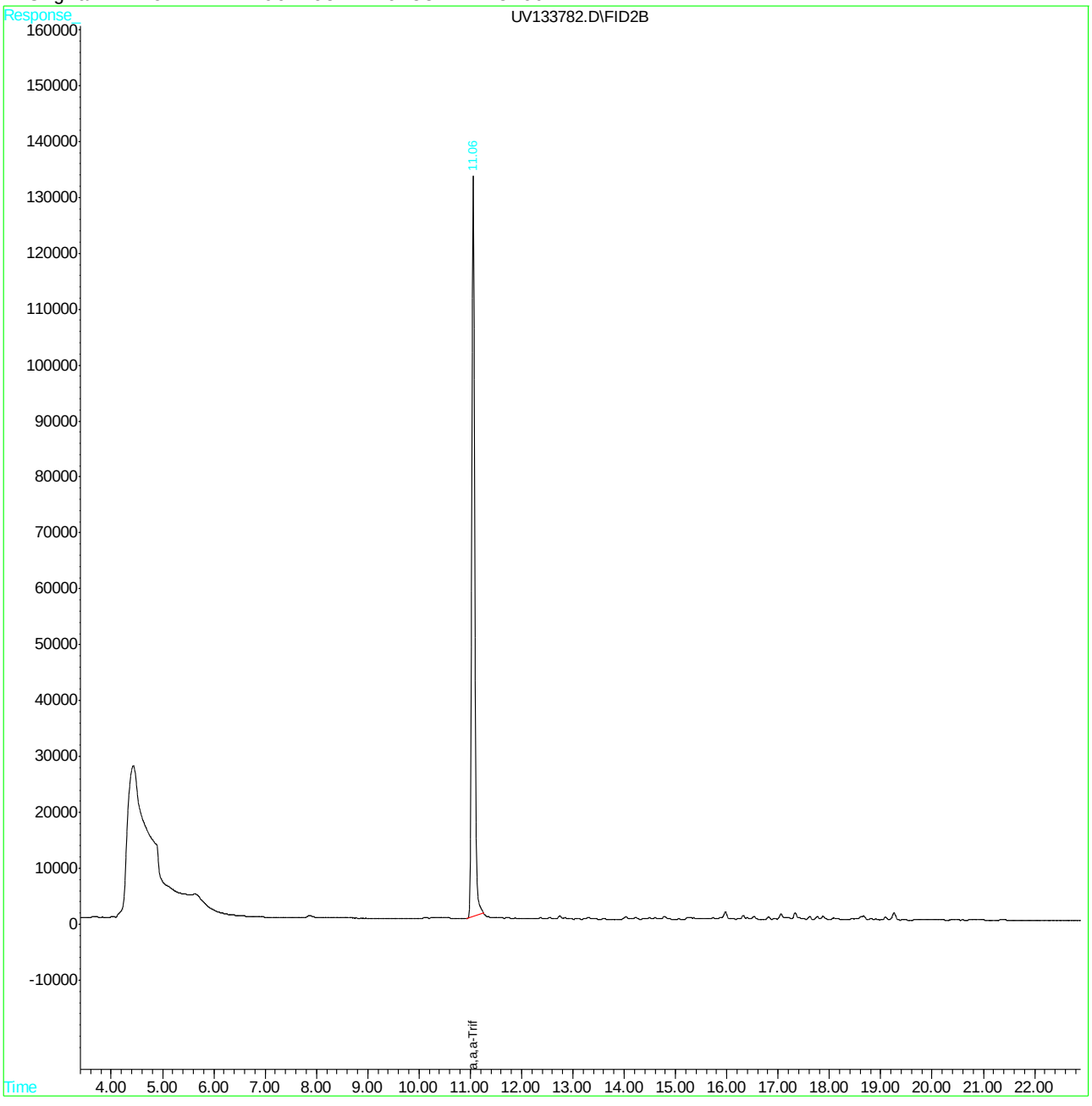
SGS ACCUTEST JC29144

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV133782.D Vial: 28
Acq On : 7 Oct 2016 9:27 pm Operator: HARRISOT
Sample : JC29144-5 Inst : GCUV
Misc : GC49368,GUV5384,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 10 8:56 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV133783.D                    Vial: 29
Acq On    :  7 Oct 2016   9:56 pm                     Operator: HARRISOT
Sample    : JC29144-6                                 Inst    : GCUV
Misc      : GC49368,GUV5384,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Oct 10  8:56 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.06        5353423  276.525 ug/l
Spiked Amount   300.000                   Recovery      =   92.17%

Target Compounds
```

9.1.6

6

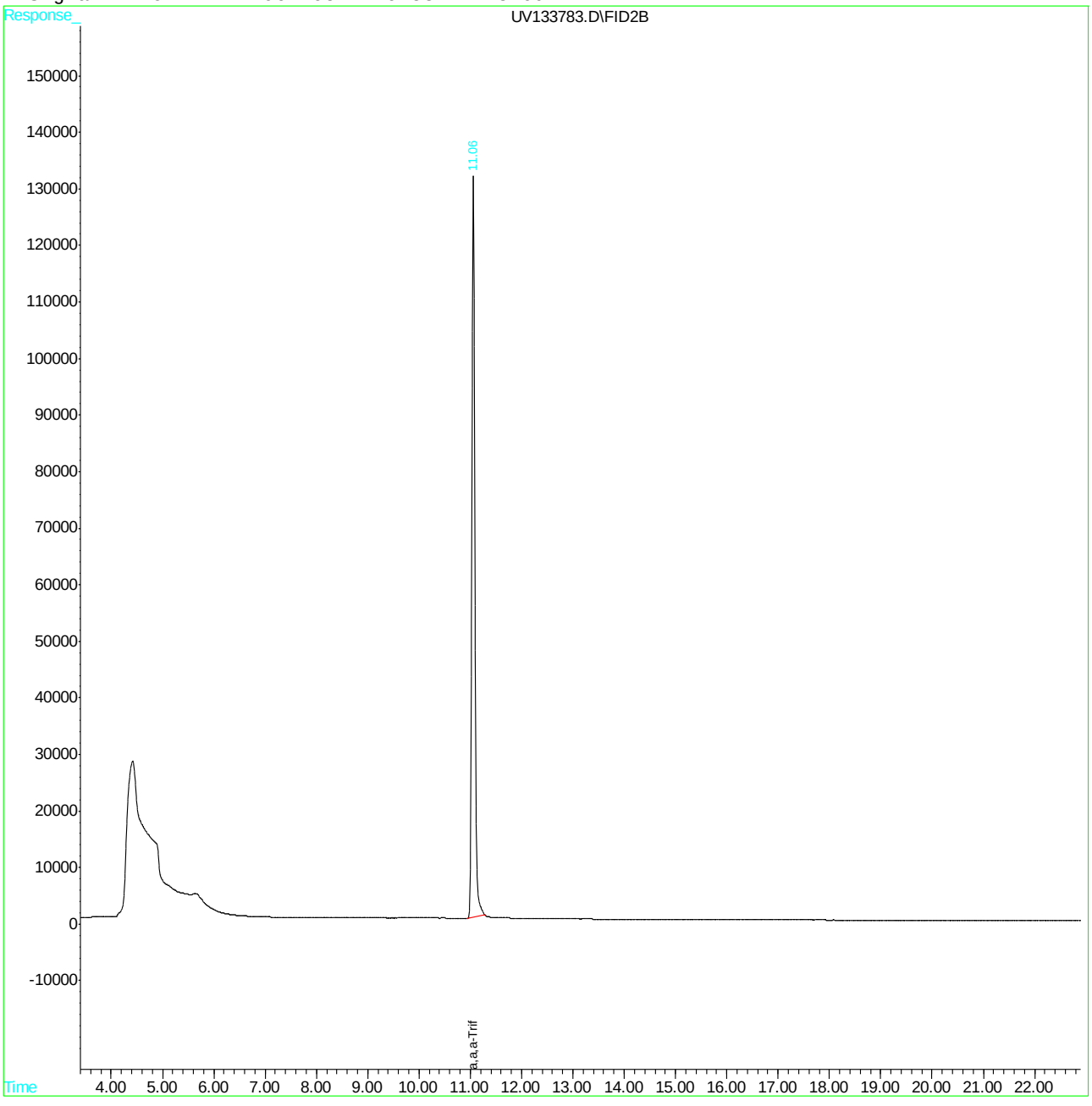
```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window                                (m)=manual int.
UV133783.D  MUV5078.M      Mon Oct 10 08:56:25 2016      GCSY
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV133783.D Vial: 29
Acq On : 7 Oct 2016 9:56 pm Operator: HARRISOT
Sample : JC29144-6 Inst : GCUV
Misc : GC49368,GUV5384,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 10 8:56 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV133773.D                    Vial: 19
Acq On    :  7 Oct 2016   4:45 pm                     Operator: HARRISOT
Sample    : JC29144-7                                 Inst    : GCUV
Misc      : GC49368,GUV5384,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Oct 10  8:53 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.05        5313623  274.469 ug/l
Spiked Amount   300.000                   Recovery      =   91.49%

Target Compounds
 1) H   TPH-GRO (C6-C10)            11.00        1665533  102.580 ug/l
```

9.1.7

9

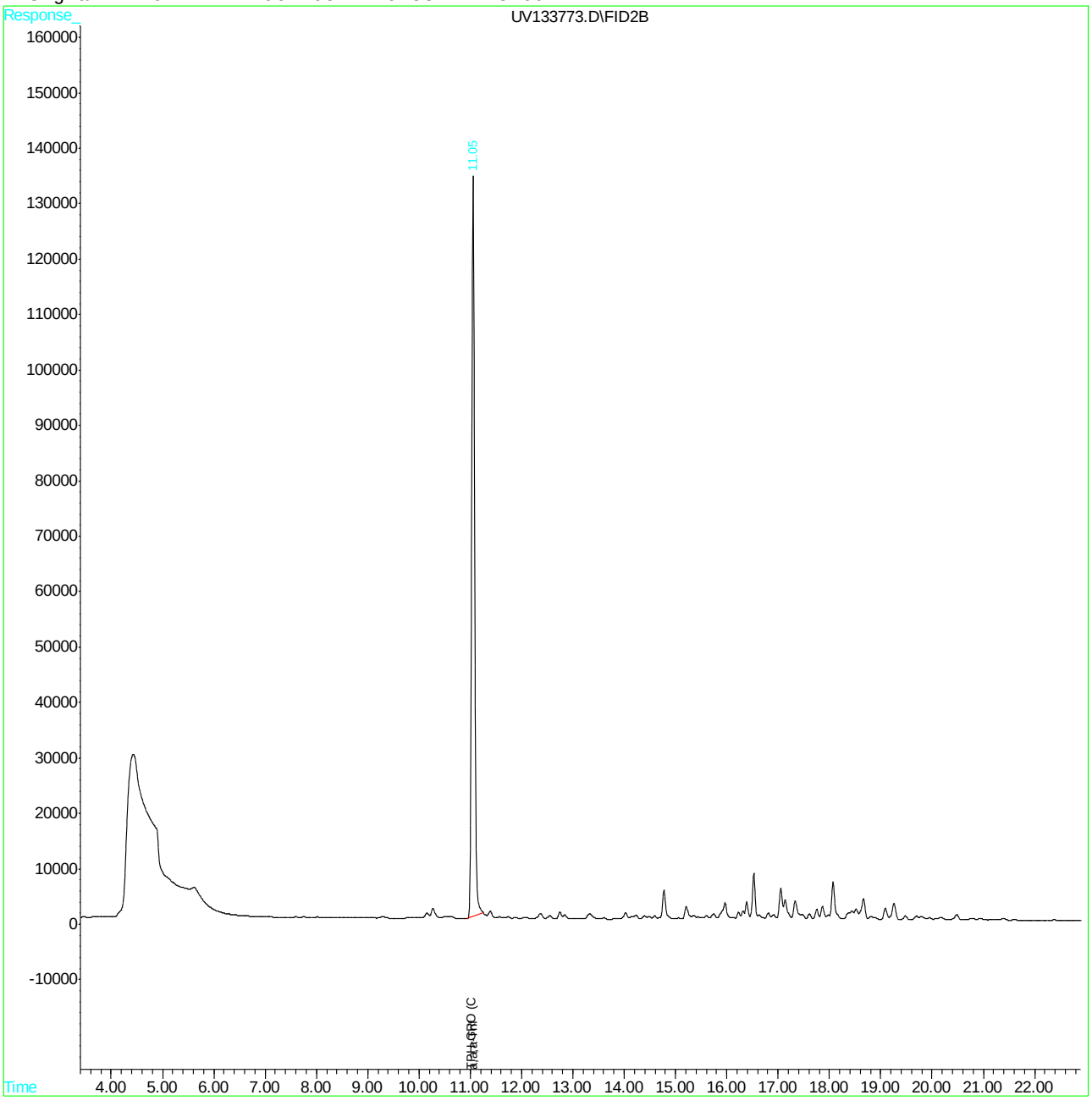
SGS ACCUTEST JC29144

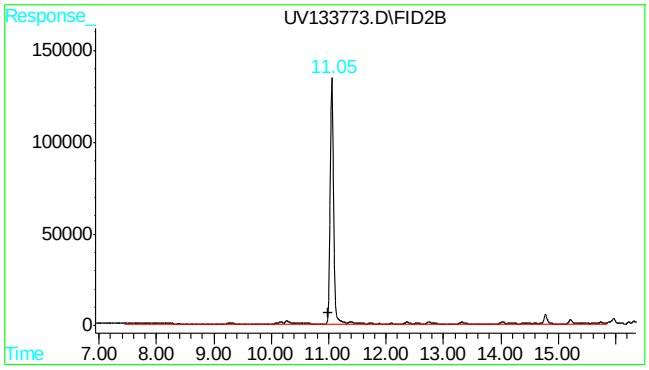
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV133773.D Vial: 19
Acq On : 7 Oct 2016 4:45 pm Operator: HARRISOT
Sample : JC29144-7 Inst : GCUV
Misc : GC49368,GUV5384,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 10 8:53 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um





#1 TPH-GRO (C6-C10)

R.T.: 11.000 min
Delta R.T.: 0.000 min
Response: 1665533
Conc: 102.58 ug/l m

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV133784.D                    Vial: 30
Acq On    :  7 Oct 2016  10:25 pm                     Operator: HARRISOT
Sample    : JC29144-8                                 Inst    : GCUV
Misc      : GC49368,GUV5384,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Oct 10  8:56 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.06        5286159  273.051 ug/l
Spiked Amount   300.000                   Recovery      =   91.02%

Target Compounds
```

9.1.8

9

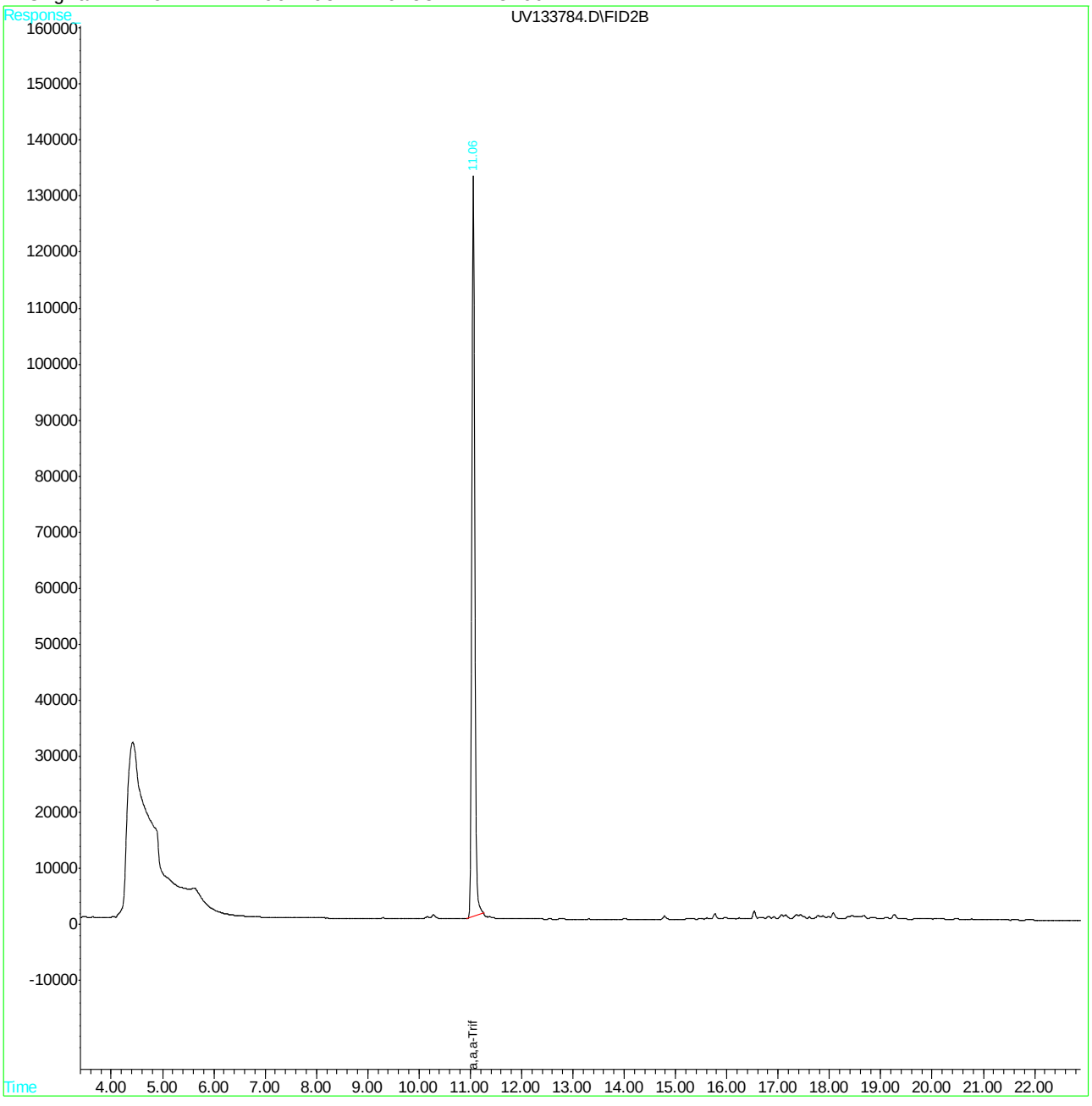
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV133784.D
Acq On : 7 Oct 2016 10:25 pm
Sample : JC29144-8
Misc : GC49368,GUV5384,5.0,,,,1
IntFile : autoint1.e
Quant Time: Oct 10 8:56 2016 Quant Results File: MUV5078.RES

Vial: 30
Operator: HARRISOT
Inst : GCUV
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV133785.D                    Vial: 31
Acq On    :  7 Oct 2016  10:54 pm                     Operator: HARRISOT
Sample    : JC29144-9                                 Inst    : GCUV
Misc      : GC49368,GUV5384,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Oct 10 11:00 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.06        5330703  275.352 ug/l
Spiked Amount   300.000                   Recovery      =   91.78%

Target Compounds
```

9.1.9

9

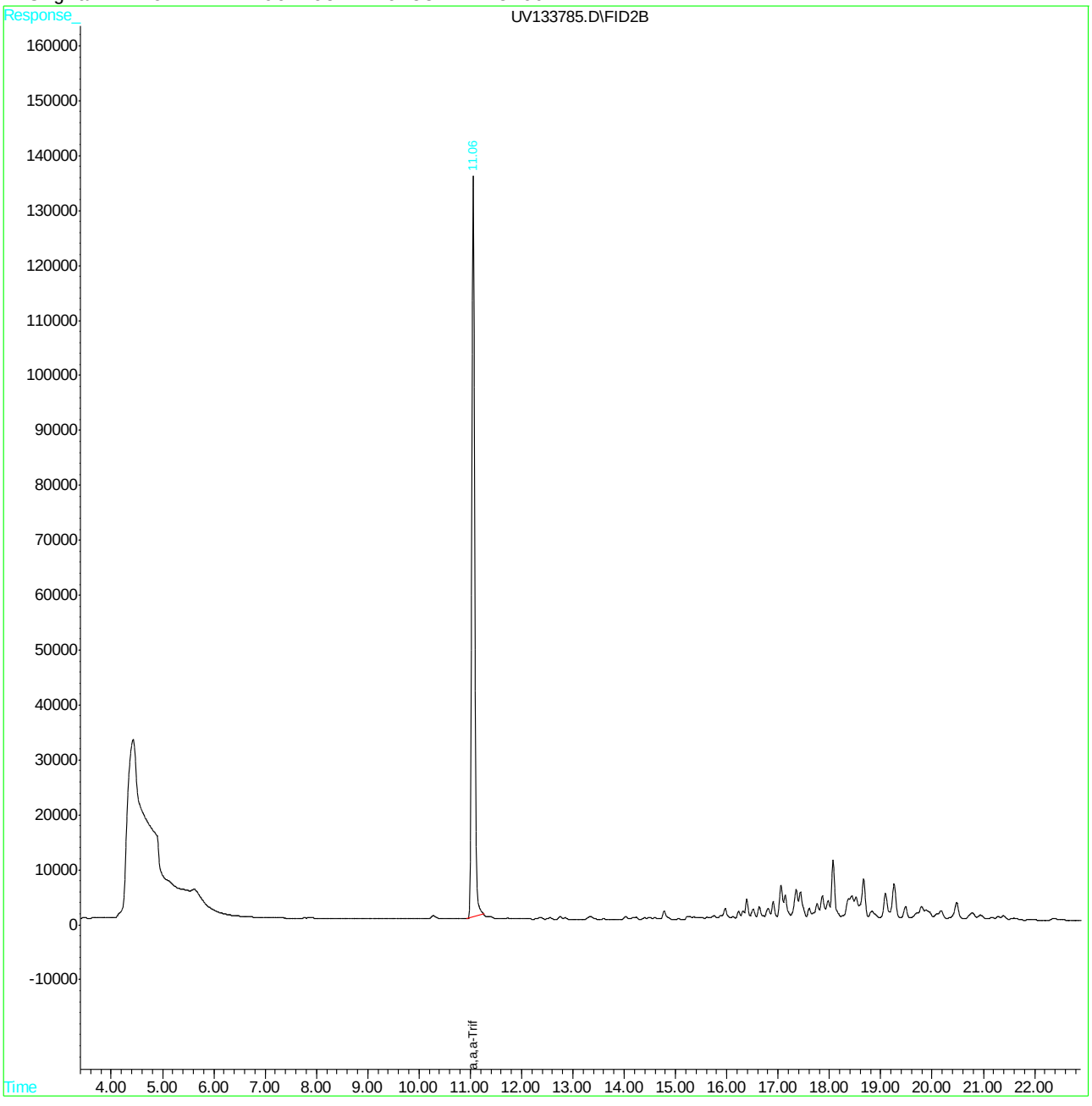
```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window                                (m)=manual int.
UV133785.D  MUV5078.M      Mon Oct 10 11:00:05 2016      GCSY
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV133785.D Vial: 31
Acq On : 7 Oct 2016 10:54 pm Operator: HARRISOT
Sample : JC29144-9 Inst : GCUV
Misc : GC49368,GUV5384,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 10 11:00 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

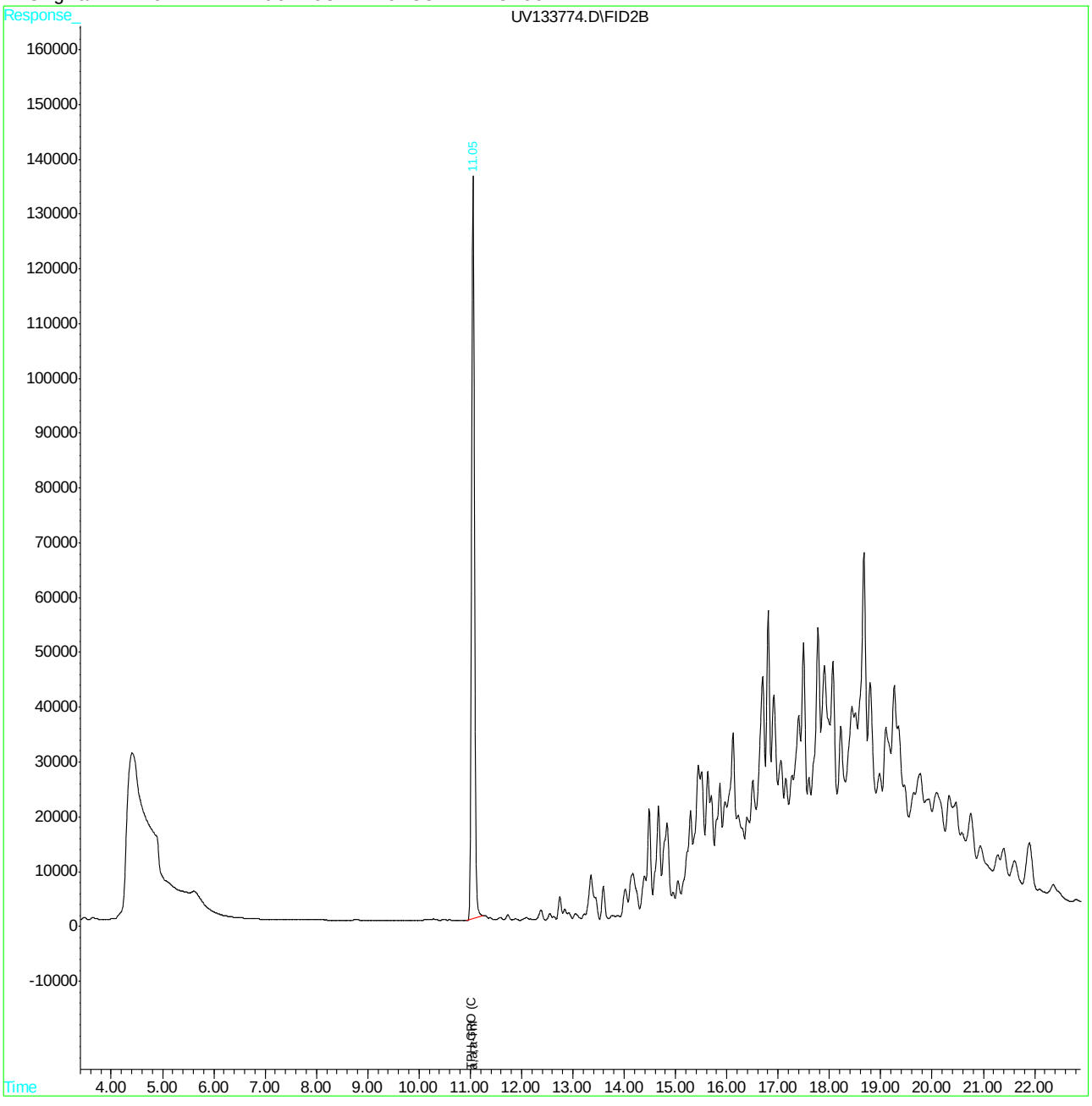
```
Data File : C:\HPCHEM\1\DATA\UV133774.D                    Vial: 20
Acq On    :  7 Oct 2016   5:21 pm                     Operator: HARRISOT
Sample    : JC29144-10                                Inst    : GCUV
Misc      : GC49368,GUV5384,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Oct 10  8:54 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.05        5324115  275.011 ug/l
Spiked Amount   300.000                   Recovery      =   91.67%

Target Compounds
 1) H   TPH-GRO (C6-C10)            11.00       15913008  980.078 ug/l
```

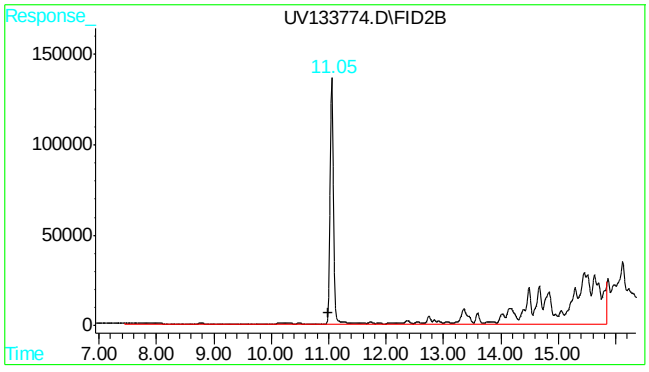
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV133774.D Vial: 20
Acq On : 7 Oct 2016 5:21 pm Operator: HARRISOT
Sample : JC29144-10 Inst : GCUV
Misc : GC49368,GUV5384,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 10 8:54 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um





#1 TPH-GRO (C6-C10)

R.T.: 11.000 min
Delta R.T.: 0.000 min
Response: 15913008
Conc: 980.08 ug/l m

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV133769.D                    Vial: 15
Acq On    :  7 Oct 2016   2:42 pm                     Operator: HARRISOT
Sample    : MB2                                       Inst    : GCUV
Misc      : GC49339,GUV5384,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Oct 10  8:52 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.06        5088990  262.866 ug/l
Spiked Amount   300.000                   Recovery      =   87.62%

Target Compounds
```

9.2.1

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window                                (m)=manual int.
UV133769.D  MUV5078.M      Mon Oct 10 08:53:02 2016      GCSY
```

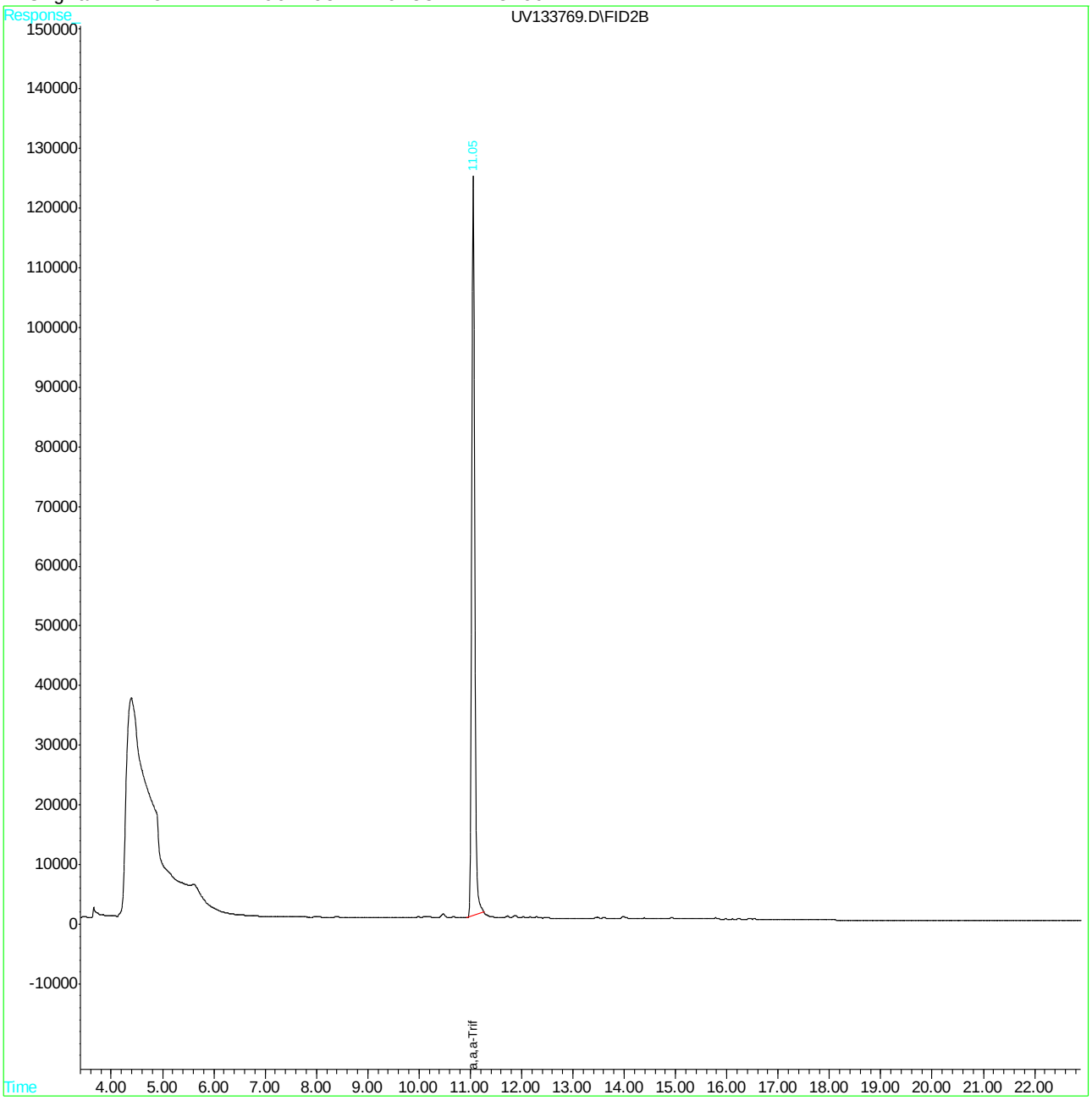

SGS ACCUTEST JC29144

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV133769.D
Vial: 15
Acq On : 7 Oct 2016 2:42 pm
Operator: HARRISOT
Sample : MB2
Inst : GCUV
Misc : GC49339,GUV5384,5.0,,,,1
Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 10 8:52 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV133778.D                    Vial: 24
Acq On    :  7 Oct 2016   7:24 pm                     Operator: HARRISOT
Sample    : MB3                                       Inst    : GCUV
Misc      : GC49362,GUV5384,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Oct 10  8:55 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.06        5278701  272.666 ug/l
Spiked Amount   300.000                   Recovery      =   90.89%

Target Compounds
```

9.2.2

9

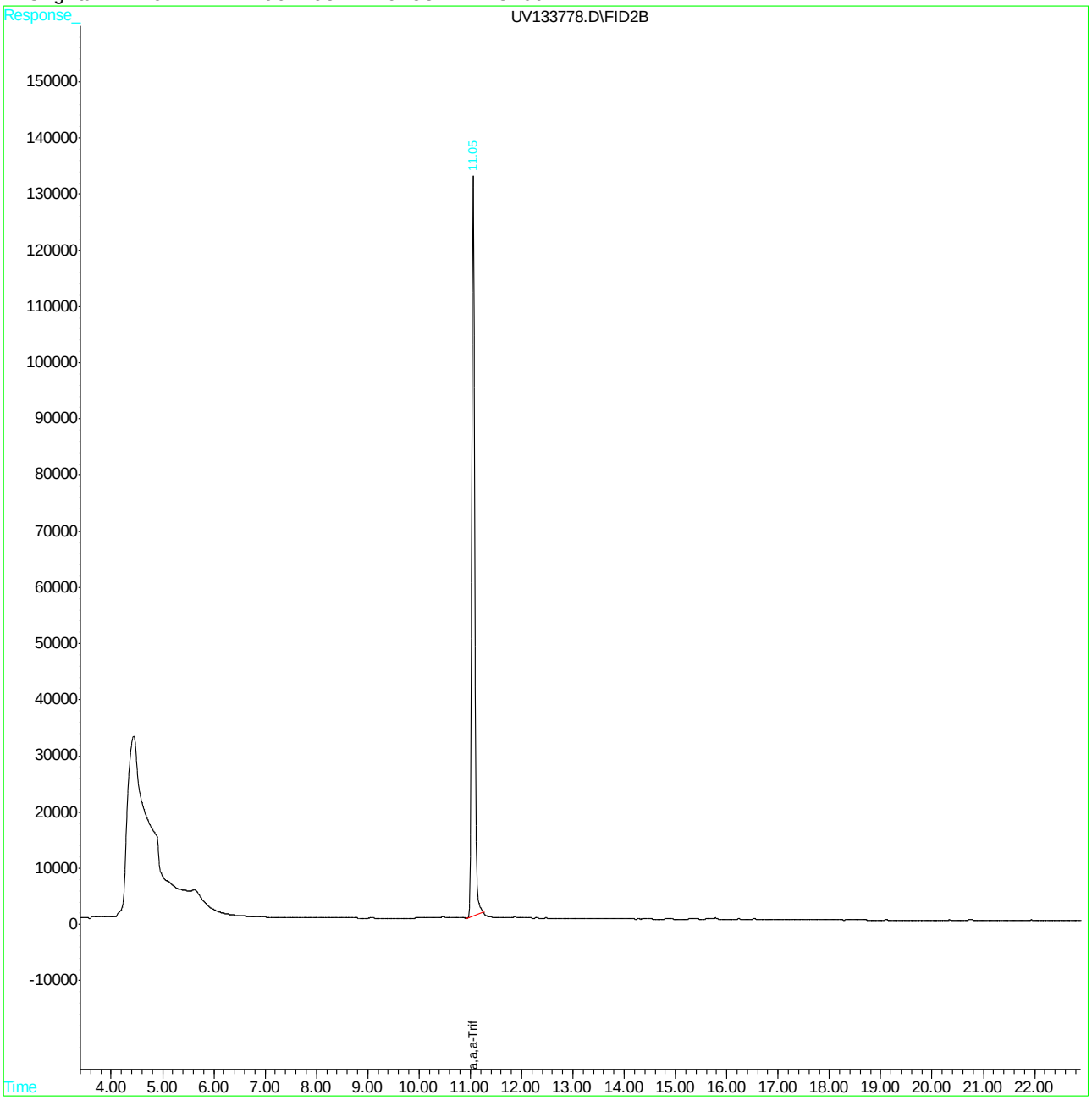
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV133778.D
Acq On : 7 Oct 2016 7:24 pm
Sample : MB3
Misc : GC49362,GUV5384,5.0,,,,1
IntFile : autoint1.e
Quant Time: Oct 10 8:55 2016 Quant Results File: MUV5078.RES

Vial: 24
Operator: HARRISOT
Inst : GCUV
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97612-MB1	2Z58181.D	1	10/10/16	TL	10/10/16	OP97612	G2Z2191

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.025	0.019	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	73%	36-144%
16416-32-3	Tetracosane-d50	64%	32-138%
438-22-2	5a-Androstane	53%	31-136%

Method Blank Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97695-MB1	2Y80265.D	1	10/13/16	KP	10/12/16	OP97695	G2Y3091

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC29144-6

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.025	0.019	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	70%	36-144%
16416-32-3	Tetracosane-d50	55%	32-138%
438-22-2	5a-Androstane	45%	31-136%

Blank Spike Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97612-BS1	2Z58182.D	1	10/10/16	TL	10/10/16	OP97612	G2Z2191

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-DRO (C10-C28)	1	0.465	47	15-111

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	63%	36-144%
16416-32-3	Tetracosane-d50	47%	32-138%
438-22-2	5a-Androstane	41%	31-136%

10.2.1

10

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97695-BS1	2Y80266.D	1	10/13/16	KP	10/12/16	OP97695	G2Y3091

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC29144-6

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-DRO (C10-C28)	1	0.599	60	15-111

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	74%	36-144%
16416-32-3	Tetracosane-d50	77%	32-138%
438-22-2	5a-Androstane	68%	31-136%

10.2.2

10

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97612-MS	2Z58184.D	1	10/10/16	TL	10/10/16	OP97612	G2Z2191
OP97612-MSD	2Z58185.D	1	10/10/16	TL	10/10/16	OP97612	G2Z2191
JC29144-1	2Z58183.D	1	10/10/16	TL	10/10/16	OP97612	G2Z2191

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC29144-1, JC29144-2, JC29144-3, JC29144-4, JC29144-5, JC29144-7, JC29144-8, JC29144-9, JC29144-10

CAS No.	Compound	JC29144-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	1.65		2	2.64	50	2	2.76	56	4	23-160/31

CAS No.	Surrogate Recoveries	MS	MSD	JC29144-1	Limits
84-15-1	o-Terphenyl	79%	80%	76%	36-144%
16416-32-3	Tetracosane-d50	74%	75%	57%	32-138%
438-22-2	5a-Androstane	69%	70%	51%	31-136%

10.3.1

10

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97695-MS	2Y80268.D	1	10/13/16	KP	10/12/16	OP97695	G2Y3091
OP97695-MSD	2Y80269.D	1	10/13/16	KP	10/12/16	OP97695	G2Y3091
JC29450-2	2Y80270.D	1	10/13/16	KP	10/12/16	OP97695	G2Y3091
JC29450-2	2Y80289.D	20	10/14/16	KP	10/12/16	OP97695	G2Y3092

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC29144-6

CAS No.	Compound	JC29450-2 mg/l	Q	Spike mg/l	MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	2540 [c]		2	4840	128500*	2 [a]	1730	-27000*	95* [b]	23-160/31

CAS No.	Surrogate Recoveries	MS	MSD	JC29450-2	JC29450-2	Limits
84-15-1	o-Terphenyl	1104%* [b]	103%	498%* [b]	0%* [d]	36-144%
16416-32-3	Tetracosane-d50	486%* [b]	130%	475%* [b]	0%* [d]	32-138%
438-22-2	5a-Androstane	734%* [b]	155%* [b]	478%* [b]	0%* [d]	31-136%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Outside control limits due to matrix interference.
(c) Result is from Run #2.
(d) Outside control limits due to dilution.

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Method: SW846 8015C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]	S3 [a]
JC29144-1	2Z58183.D	76	57	51
JC29144-2	2Z58203.D	186* [b]	79	63
JC29144-2	2Z58186.D	163* [b]	70	53
JC29144-3	2Z58187.D	60	52	46
JC29144-4	2Z58188.D	81	47	38
JC29144-5	2Z58191.D	67	38	31
JC29144-6	2Y80267.D	88	70	59
JC29144-7	2Z58193.D	73	41	41
JC29144-8	2Z58194.D	91	42	40
JC29144-9	2Z58195.D	125	53	66
JC29144-10	2Z58204.D	85	94	85
JC29144-10	2Z58196.D	92	74	68
OP97612-BS1	2Z58182.D	63	47	41
OP97612-MB1	2Z58181.D	73	64	53
OP97612-MS	2Z58184.D	79	74	69
OP97612-MSD	2Z58185.D	80	75	70
OP97695-BS1	2Y80266.D	74	77	68
OP97695-MB1	2Y80265.D	70	55	45
OP97695-MS	2Y80268.D	1104* [b]	486* [b]	734* [b]
OP97695-MSD	2Y80269.D	103	130	155* [b]

Surrogate Compounds		Recovery Limits
S1 =	o-Terphenyl	36-144%
S2 =	Tetracosane-d50	32-138%
S3 =	5a-Androstane	31-136%

(a) Recovery from GC signal #1
(b) Outside control limits due to matrix interference.

GC Surrogate Retention Time Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	G2Y3091-CC3089	**Injection Date:**	10/13/16
Lab File ID:	2Y80253.D	**Injection Time:**	10:00
Instrument ID:	GC2Y	**Method:**	SW846 8015C

	S1 [a] RT	S2 [a] RT	S3 [a] RT
Check Std	8.29	10.28	8.95

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [a] RT
G2Y3091-RT	2Y80255.D	10/13/16	11:09			
ZZZZZZ	2Y80256.D	10/13/16	11:42	8.28	10.28	8.94
ZZZZZZ	2Y80257.D	10/13/16	12:15	8.28	10.28	8.95
ZZZZZZ	2Y80258.D	10/13/16	12:48	8.28	10.28	8.95
ZZZZZZ	2Y80259.D	10/13/16	13:21	8.28	10.28	8.94
ZZZZZZ	2Y80260.D	10/13/16	13:54	8.28	10.28	8.95
ZZZZZZ	2Y80261.D	10/13/16	14:27	8.28	10.28	8.95
ZZZZZZ	2Y80262.D	10/13/16	15:00	8.28	10.28	8.95

Surrogate Compounds

S1 = o-Terphenyl
S2 = Tetracosane-d50
S3 = 5a-Androstane

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	G2Y3091-CC3089	**Injection Date:**	10/13/16
Lab File ID:	2Y80263.D	**Injection Time:**	15:33
Instrument ID:	GC2Y	**Method:**	SW846 8015C

	S1 [a] RT	S2 [a] RT	S3 [a] RT
Check Std	8.28	10.28	8.94

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [a] RT
OP97695-MB1	2Y80265.D	10/13/16	16:40	8.28	10.28	8.94
OP97695-BS1	2Y80266.D	10/13/16	17:13	8.28	10.28	8.95
JC29144-6	2Y80267.D	10/13/16	17:46	8.28	10.28	8.95
OP97695-MS	2Y80268.D	10/13/16	18:19	8.24	10.25	8.94
OP97695-MSD	2Y80269.D	10/13/16	18:52	8.28	10.26	8.93
JC29450-2	2Y80270.D	10/13/16	19:25	8.29	10.27	8.94

Surrogate Compounds

S1 = o-Terphenyl
S2 = Tetracosane-d50
S3 = 5a-Androstane

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	G2Z2191-CC2189	**Injection Date:**	10/10/16
Lab File ID:	2Z58168.D	**Injection Time:**	10:01
Instrument ID:	GC2Z	**Method:**	SW846 8015C

	S1 [a] RT	S2 [a] RT	S3 [a] RT
Check Std	8.00	10.03	8.66

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [a] RT
G2Z2191-RT	2Z58170.D	10/10/16	11:07			
OP97597-MB1	2Z58171.D	10/10/16	11:40	7.99	10.02	8.66
OP97597-BS1	2Z58172.D	10/10/16	12:13	7.99	10.02	8.66
ZZZZZZ	2Z58173.D	10/10/16	12:46	7.99	10.02	8.66
ZZZZZZ	2Z58174.D	10/10/16	13:19	7.99	10.02	8.65
JC29149-1	2Z58175.D	10/10/16	13:52	7.99	10.02	8.65
OP97597-MS	2Z58176.D	10/10/16	15:57	7.99	10.02	8.65
OP97597-MSD	2Z58177.D	10/10/16	16:30	7.98	10.01	8.65
ZZZZZZ	2Z58178.D	10/10/16	17:03	7.98	10.01	8.65

Surrogate Compounds

S1 = o-Terphenyl
S2 = Tetracosane-d50
S3 = 5a-Androstane

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	G2Z2191-CC2189	**Injection Date:**	10/10/16
Lab File ID:	2Z58179.D	**Injection Time:**	17:35
Instrument ID:	GC2Z	**Method:**	SW846 8015C

	S1 [a] RT	S2 [a] RT	S3 [a] RT
Check Std	7.98	10.01	8.65

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [a] RT
OP97612-MB1	2Z58181.D	10/10/16	18:41	7.98	10.01	8.65
OP97612-BS1	2Z58182.D	10/10/16	19:14	7.98	10.01	8.65
JC29144-1	2Z58183.D	10/10/16	19:47	7.99	10.01	8.65
OP97612-MS	2Z58184.D	10/10/16	20:20	7.99	10.01	8.65
OP97612-MSD	2Z58185.D	10/10/16	20:53	7.99	10.01	8.65
JC29144-2	2Z58186.D	10/10/16	21:26	7.98	10.04	8.68
JC29144-3	2Z58187.D	10/10/16	21:59	7.98	10.01	8.65
JC29144-4	2Z58188.D	10/10/16	22:32	7.99	10.02	8.66

Surrogate Compounds

S1 = o-Terphenyl
S2 = Tetracosane-d50
S3 = 5a-Androstane

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	G2Z2191-CC2189	**Injection Date:**	10/10/16
Lab File ID:	2Z58189.D	**Injection Time:**	23:05
Instrument ID:	GC2Z	**Method:**	SW846 8015C

	S1 [a] RT	S2 [a] RT	S3 [a] RT
Check Std	7.98	10.01	8.65

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [a] RT
JC29144-5	2Z58191.D	10/11/16	00:10	7.98	10.01	8.65
JC29144-7	2Z58193.D	10/11/16	01:16	8.00	10.02	8.66
JC29144-8	2Z58194.D	10/11/16	01:50	8.00	10.02	8.67
JC29144-9	2Z58195.D	10/11/16	02:23	8.03	10.02	8.70
JC29144-10	2Z58196.D	10/11/16	02:56	7.99	10.08	8.61

Surrogate Compounds

S1 = o-Terphenyl
S2 = Tetracosane-d50
S3 = 5a-Androstane

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	G2Z2192-CC2189	**Injection Date:**	10/11/16
Lab File ID:	2Z58199.D	**Injection Time:**	08:40
Instrument ID:	GC2Z	**Method:**	SW846 8015C

	S1 [a] RT	S2 [a] RT	S3 [a] RT
Check Std	7.98	10.01	8.65

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [a] RT
G2Z2192-RT	2Z58201.D	10/11/16	09:26			
JC29144-2	2Z58203.D	10/11/16	10:32	7.99	10.01	8.66
JC29144-10	2Z58204.D	10/11/16	11:05	7.96	10.01	8.70
OP97643-MB1	2Z58206.D	10/11/16	12:11	7.98	10.01	8.65
OP97643-BS1	2Z58207.D	10/11/16	12:44	7.98	10.01	8.65
JC29030-1	2Z58208.D	10/11/16	13:17	7.98	10.01	8.65
OP97643-MS	2Z58209.D	10/11/16	13:49	7.98	10.01	8.65
OP97643-MSD	2Z58210.D	10/11/16	14:23	7.98	10.01	8.65

Surrogate Compounds

S1 = o-Terphenyl
S2 = Tetracosane-d50
S3 = 5a-Androstane

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample: G2Y3089-ICC3089
Lab FileID: 2Y80208.D

Response Factor Report GC2Y2Z

Method : C:\MSDCHEM\1\METHODS\DRO2Y3089.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 12 09:57:12 2016
Response via : Initial Calibration

Calibration Files
250 =2Y80206.D 500 =2Y80207.D 1000=2Y80208.D 2500=2Y80209.D
5000=2Y80210.D 100 =2Y80205.D 10k =2Y80211.D 50k =2Y80212.D 25 =2Y80203.D 50 =2Y80204.D

Compound	250	500	1000	2500	5000	100	10k	50k	25	50	Avg	%RSD
1) TPH-DRO	2.154	1.933	1.931	1.901	1.941	1.644	2.143	1.873	1.393	1.524	1.844 E6	13.53
2) TPH-DRO (C10	2.154	1.933	1.931	1.901	1.941	1.644	2.143	1.873	1.393	1.524	1.844 E6	13.53
3) TPH (C12-C40	2.154	1.933	1.931	1.901	1.941	1.644	2.143	1.873	1.393	1.524	1.844 E6	13.53
4) TPH-ORO (>C2	2.154	1.933	1.931	1.901	1.941	1.644	2.143	1.873	1.393	1.524	1.844 E6	13.53
5) TPH-HRO (C18	2.154	1.933	1.931	1.901	1.941	1.644	2.143	1.873	1.393	1.524	1.844 E6	13.53
6) TPH-DRO (C10	2.154	1.933	1.931	1.901	1.941	1.644	2.143	1.873	1.393	1.524	1.844 E6	13.53
7) TPH-ORO (C20	2.154	1.933	1.931	1.901	1.941	1.644	2.143	1.873	1.393	1.524	1.844 E6	13.53
8) TPH (C9-C16)	2.154	1.933	1.931	1.901	1.941	1.644	2.143	1.873	1.393	1.524	1.844 E6	13.53
9) o-Terphenyl	2.520	2.491	2.512	2.548	2.583	2.195			2.058	1.906	2.352 E6	11.07
10) 5a-Androstan	2.430	2.275	2.313	2.252	2.250	2.064			1.910	1.821	2.164 E6	9.76
11) Tetracosane-	1.849	1.809	1.823	1.860	1.860	1.579			1.310	1.469	1.695 E6	12.62

(#) = Out of Range ### Number of calibration levels exceeded format ###

DRO2Y3089.M Thu Oct 13 10:09:03 2016 RPT1

10.6.1
10

Initial Calibration Verification

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample: G2Y3089-ICV3089
Lab FileID: 2Y80213.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Y3089\2Y80213.D          Vial: 16
Acq On    : 11 Oct 2016   4:01 pm                    Operator: thomasl
Sample    : icv3089-1000                             Inst    : GC2Y2Z
Misc      : op97494,g2y3089,200,,,1,1                Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Y3089.M (Chemstation Integrator)
Title        :
Last Update  : Wed Oct 12 09:57:12 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.844	1.875 E6	-1.7	97	0.00	2.60-11.80
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl		----------NA----------				
10	S	5a-Androstane		----------NA----------				
11	S	Tetracosane-d50		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Y80208.D DRO2Y3089.M Thu Oct 13 10:08:52 2016 RPT1

10.6.2

10

Continuing Calibration Summary

Job Number: JC29144 **Sample:** G2Y3091-CC3089
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2Y80253.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Y3091\2Y80253.D          Vial: 3
Acq On    : 13 Oct 2016  10:00 am                    Operator: krimeshp
Sample    : cc3089-500                               Inst    : GC2Y2Z
Misc      : op97666,g2y3091,10.0,,,1,1               Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Y3089.M (Chemstation Integrator)
Title        :
Last Update  : Thu Oct 13 14:58:12 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.844	1.651 E6	10.5	85	0.00	2.60-11.80
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	2.352	2.028 E6	13.8	81	0.00	8.26- 8.31
10	S	5a-Androstane	2.164	1.920 E6	11.3	84	0.00	8.92- 8.98
11	S	Tetracosane-d50	1.695	1.701 E6	-0.4	94	0.00	10.25-10.31

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Y80207.D DRO2Y3089.M Thu Oct 13 16:14:10 2016 RPT1

10.6.3 10

Continuing Calibration Summary

Job Number: JC29144 **Sample:** G2Y3091-CC3089
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2Y80263.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Y3091\2Y80263.D          Vial: 4
Acq On    : 13 Oct 2016   3:33 pm                    Operator: krimeshp
Sample    : cc3089-1000                              Inst    : GC2Y2Z
Misc      : op97666,g2y3091,10.9,,,1,1               Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Y3089.M (Chemstation Integrator)
Title        :
Last Update  : Thu Oct 13 14:58:12 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.844	1.670 E6	9.4	87	0.00	2.60-11.80
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	2.352	2.044 E6	13.1	81	0.00	8.25- 8.31
10	S	5a-Androstane	2.164	1.922 E6	11.2	83	0.00	8.91- 8.97
11	S	Tetracosane-d50	1.695	1.729 E6	-2.0	95	0.00	10.25-10.31

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Y80208.D DRO2Y3089.M Thu Oct 13 16:13:50 2016 RPT1

10.6.4 10

Continuing Calibration Summary

Job Number: JC29144 **Sample:** G2Y3091-CC3089
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2Y80271.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Y3091\2Y80271.D          Vial: 3
Acq On    : 13 Oct 2016   7:58 pm                    Operator: krimeshp
Sample    : cc3089-500                               Inst    : GC2Y2Z
Misc      : op97695,g2y3091,1000,,,1,1               Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Y3089.M (Chemstation Integrator)
Title        :
Last Update  : Fri Oct 14 14:13:37 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.844	1.646 E6	10.7	85	0.00	2.60-11.80
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	2.352	2.063 E6	12.3	83	0.00	8.25- 8.31
10	S	5a-Androstane	2.164	1.929 E6	10.9	85	0.00	8.91- 8.97
11	S	Tetracosane-d50	1.695	1.725 E6	-1.8	95	0.00	10.25-10.31

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Y80207.D DRO2Y3089.M Fri Oct 14 16:01:55 2016 RPT1

10.6.5 10

Initial Calibration Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample: G2Z2189-ICC2189
Lab FileID: 2Z58148.D

```
                         Response Factor Report  GC2Y2Z

 Method       : C:\MSDCHEM\1\METHODS\DRO2Z2189.M (Chemstation Integrator)
 Title        :
 Last Update  : Tue Oct 11 10:16:47 2016
 Response via : Initial Calibration

 Calibration Files
 250 =2Z58146.D   500 =2Z58147.D   1000=2Z58148.D   2500=2Z58149.D
 5000=2Z58150.D  100 =2Z58145.D  10k =2Z58151.D  50k =2Z58152.D  25  =2Z58143.D  50  =2Z58144.D

 Compound        250   500   1000  2500  5000  100   10k   50k    25     50     Avg   %RSD
 ---------------------------------------------------------------------------
 1) TPH-DRO      1.501 1.483 1.443 1.427 1.461 1.381 1.508 1.448 1.291 1.345 1.429 E6  4.92
 2) TPH-DRO (C10 1.501 1.483 1.443 1.427 1.461 1.381 1.508 1.448 1.291 1.345 1.429 E6  4.92
 3) TPH (C12-C40 1.501 1.483 1.443 1.427 1.461 1.381 1.508 1.448 1.291 1.345 1.429 E6  4.92
 4) TPH-ORO (>C2 1.501 1.483 1.443 1.427 1.461 1.381 1.508 1.448 1.291 1.345 1.429 E6  4.92
 5) TPH-HRO (C18 1.501 1.483 1.443 1.427 1.461 1.381 1.508 1.448 1.291 1.345 1.429 E6  4.92
 6) TPH-DRO (C10 1.501 1.483 1.443 1.427 1.461 1.381 1.508 1.448 1.291 1.345 1.429 E6  4.92
 7) TPH-ORO (C20 1.501 1.483 1.443 1.427 1.461 1.381 1.508 1.448 1.291 1.345 1.429 E6  4.92
 8) TPH (C9-C16) 1.501 1.483 1.443 1.427 1.461 1.381 1.508 1.448 1.291 1.345 1.429 E6  4.92
 9) o-Terphenyl  1.973 2.013 1.971 1.943 2.004 1.862             1.677 1.786 1.904 E6  6.27
10) 5a-Androstan 1.898 1.894 1.810 1.787 1.797 1.815             1.612 1.741 1.794 E6  5.05
11) Tetracosane- 1.612 1.598 1.522 1.517 1.547 1.518             1.386 1.452 1.519 E6  4.85
---------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          DRO2Z2189.M        Tue Oct 11 10:18:19 2016   RPT1
```

10.6.6

10

Initial Calibration Verification

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample: G2Z2189-ICV2189
Lab FileID: 2Z58153.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Z2189\2Z58153.D          Vial: 62
Acq On    : 07 Oct 2016   9:20 pm                    Operator: thomasl
Sample    : icv2189-1000                             Inst    : GC2Y2Z
Misc      : op97487,g2z2189,300,,,1,1                Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Z2189.M (Chemstation Integrator)
Title        :
Last Update  : Tue Oct 11 10:16:47 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.429	1.493 E6	-4.5	103	0.00	2.20-11.60
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl		----------NA----------				
10	S	5a-Androstane		----------NA----------				
11	S	Tetracosane-d50		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Z58148.D DRO2Z2189.M Tue Oct 11 10:17:33 2016 RPT1

10.6.7

10

Continuing Calibration Summary

Job Number: JC29144 **Sample:** G2Z2191-CC2189
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2Z58168.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Z2191\2Z58168.D          Vial: 3
Acq On    : 10 Oct 2016  10:01 am                    Operator: thomasl
Sample    : cc2189-500                               Inst    : GC2Y2Z
Misc      : op97597,g2z2191,300,,,1,1                Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Z2189.M (Chemstation Integrator)
Title        :
Last Update  : Tue Oct 11 10:16:47 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.429	1.385 E6	3.1	93	0.00	2.20-11.60
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	1.904	1.842 E6	3.3	91	0.00	7.97- 8.03
10	S	5a-Androstane	1.794	1.663 E6	7.3	88	0.00	8.63- 8.69
11	S	Tetracosane-d50	1.519	1.475 E6	2.9	92	0.00	10.00-10.06

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Z58147.D DRO2Z2189.M Tue Oct 11 12:23:50 2016 RPT1

10.6.8 10

Continuing Calibration Summary

Job Number: JC29144 **Sample:** G2Z2191-CC2189
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2Z58179.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Z2191\2Z58179.D          Vial: 4
Acq On    : 10 Oct 2016   5:35 pm                    Operator: thomasl
Sample    : cc2189-1000                              Inst    : GC2Y2Z
Misc      : op97597,g2z2191,300,,,1,1                Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Z2189.M (Chemstation Integrator)
Title        :
Last Update  : Tue Oct 11 10:16:47 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.429	1.418 E6	0.8	98	0.00	2.20-11.60
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	1.904	1.829 E6	3.9	93	0.00	7.95- 8.01
10	S	5a-Androstane	1.794	1.749 E6	2.5	97	0.00	8.62- 8.68
11	S	Tetracosane-d50	1.519	1.513 E6	0.4	99	0.00	9.98-10.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Z58148.D DRO2Z2189.M Tue Oct 11 12:23:22 2016 RPT1

10.6.9 10

Continuing Calibration Summary

Job Number: JC29144 **Sample:** G2Z2191-CC2189
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2Z58189.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Z2191\2Z58189.D          Vial: 3
Acq On    : 10 Oct 2016  11:05 pm                    Operator: thomasl
Sample    : cc2189-500                               Inst    : GC2Y2Z
Misc      : op97612,g2z2191,1000,,,1,1               Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Z2189.M (Chemstation Integrator)
Title        :
Last Update  : Tue Oct 11 10:16:47 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.429	1.386 E6	3.0	93	0.00	2.20-11.60
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	1.904	1.863 E6	2.2	93	0.00	7.95- 8.01
10	S	5a-Androstane	1.794	1.712 E6	4.6	90	0.00	8.62- 8.68
11	S	Tetracosane-d50	1.519	1.518 E6	0.1	95	-0.01	9.98-10.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Z58147.D DRO2Z2189.M Tue Oct 11 12:23:51 2016 RPT1

10.6.10 10

Continuing Calibration Summary

Job Number: JC29144 **Sample:** G2Z2191-CC2189
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2Z58198.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Z2191\2Z58198.D          Vial: 4
Acq On    : 11 Oct 2016   4:02 am                    Operator: thomasl
Sample    : cc2189-1000                              Inst    : GC2Y2Z
Misc      : op97612,g2z2191,1000,,,1,1               Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Z2189.M (Chemstation Integrator)
Title        :
Last Update  : Tue Oct 11 10:16:47 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.429	1.408 E6	1.5	98	0.00	2.20-11.60
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	1.904	1.870 E6	1.8	95	0.00	7.95- 8.01
10	S	5a-Androstane	1.794	1.752 E6	2.3	97	0.00	8.62- 8.68
11	S	Tetracosane-d50	1.519	1.549 E6	-2.0	102	0.00	9.98-10.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Z58148.D DRO2Z2189.M Tue Oct 11 12:23:21 2016 RPT1

10.6.11

10

Continuing Calibration Summary

Job Number: JC29144
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Sample: G2Z2192-CC2189
Lab FileID: 2Z58199.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Z2192\2Z58199.D          Vial: 3
Acq On    : 11 Oct 2016   8:40 am                    Operator: thomasl
Sample    : cc2189-500                               Inst    : GC2Y2Z
Misc      : op97612,g2z2192,1000,,,1,1               Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Z2189.M (Chemstation Integrator)
Title        :
Last Update  : Tue Oct 11 10:16:47 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.429	1.437 E6	-0.6	97	0.00	2.20-11.60
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	1.904	1.966 E6	-3.3	98	0.00	7.95- 8.01
10	S	5a-Androstane	1.794	1.768 E6	1.4	93	-0.01	8.62- 8.68
11	S	Tetracosane-d50	1.519	1.566 E6	-3.1	98	-0.01	9.98-10.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Z58147.D DRO2Z2189.M Tue Oct 11 16:20:48 2016 RPT1

10.6.12 10

Continuing Calibration Summary

Job Number: JC29144 **Sample:** G2Z2192-CC2189
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2Z58211.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Z2192\2Z58211.D          Vial: 4
Acq On    : 11 Oct 2016   2:55 pm                    Operator: thomasl
Sample    : cc2189-1000                              Inst    : GC2Y2Z
Misc      : op97643,g2z2192,300,,,1,1                Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Z2189.M (Chemstation Integrator)
Title        :
Last Update  : Tue Oct 11 10:16:47 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.429	1.459 E6	-2.1	101	0.00	2.20-11.60
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	1.904	1.930 E6	-1.4	98	0.00	7.95- 8.01
10	S	5a-Androstane	1.794	1.838 E6	-2.5	102	-0.01	8.62- 8.68
11	S	Tetracosane-d50	1.519	1.566 E6	-3.1	103	-0.01	9.98-10.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Z58148.D DRO2Z2189.M Tue Oct 11 16:18:26 2016 RPT1

10.6.13 10

GC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58183.D
Signal(s) : FID2B.CH
Acq On : 10 Oct 2016 7:47 pm
Operator : thomasl
Sample : jc29144-1
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 68 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 11:31:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S o-Terphenyl	7.99	72180703	37.916 PPM
Spiked Amount 50.000		Recovery	= 75.83%
10) S 5a-Androstane	8.65	46030450	25.656 PPM
Spiked Amount 50.000		Recovery	= 51.31%
11) S Tetracosane-d50	10.01	43216690	28.449 PPM
Spiked Amount 50.000		Recovery	= 56.90%
Target Compounds			
1) H TPH-DRO	6.90	2351572389	1645.792 PPM
2) H TPH-DRO (C10-C44)	10.50	2720354336	1903.891 PPM

(f)=RT Delta > 1/2 Window (m)=manual int.

11.1.1

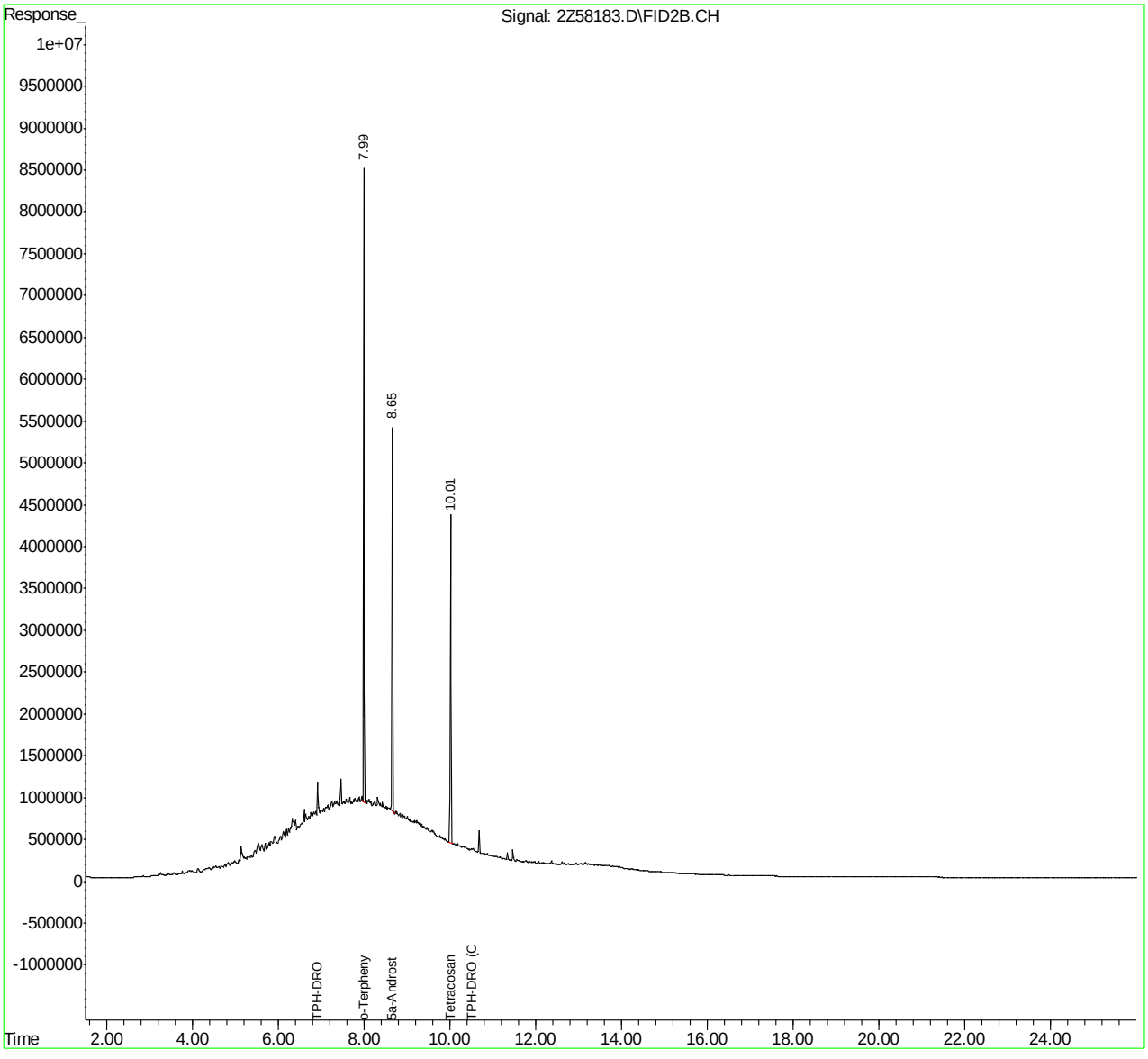
11

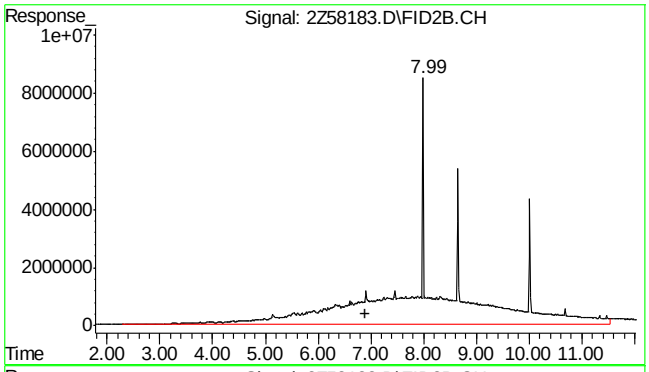
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58183.D
Signal(s) : FID2B.CH
Acq On : 10 Oct 2016 7:47 pm
Operator : thomasl
Sample : jc29144-1
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 68 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 11:31:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

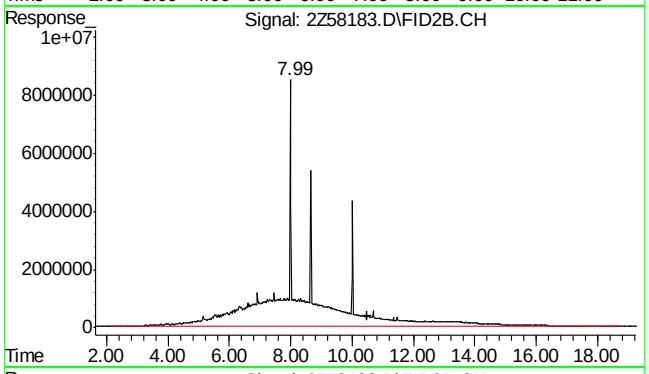
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





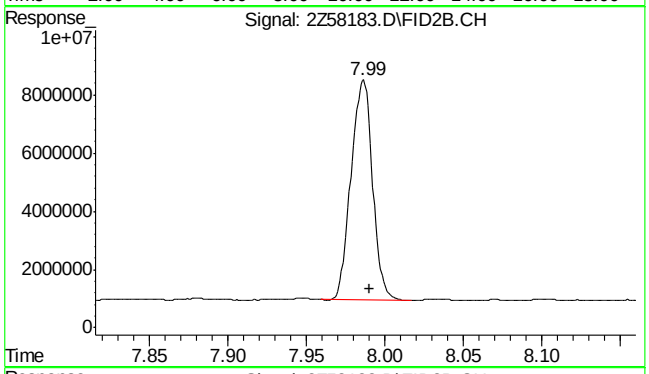
#1 TPH-DRO

R.T.: 6.900 min
Delta R.T.: 0.000 min
Response: 2351572389
Conc: 1645.79 PPM m



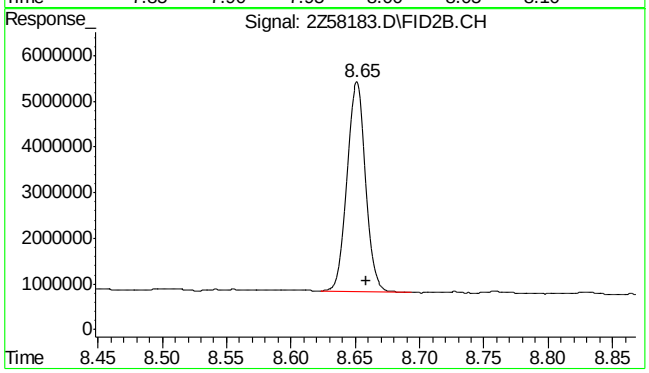
#2 TPH-DRO (C10-C44)

R.T.: 10.500 min
Delta R.T.: 0.000 min
Response: 2720354336
Conc: 1903.89 PPM m



#9 o-Terphenyl

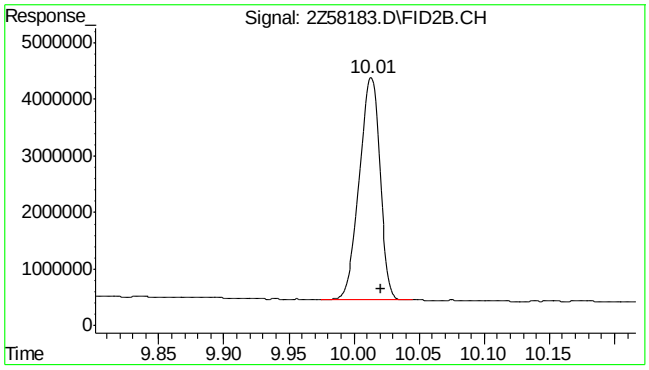
R.T.: 7.986 min
Delta R.T.: -0.003 min
Response: 72180703
Conc: 37.92 PPM



#10 5a-Androstane

R.T.: 8.652 min
Delta R.T.: -0.006 min
Response: 46030450
Conc: 25.66 PPM

SGS ACCUTEST JC29144



#11 Tetracosane-d50

R.T.:	10.013 min
Delta R.T.:	-0.007 min
Response:	43216690
Conc:	28.45 PPM

11.1.1

11

SGS ACCUTEST JC29144

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/13/16 10:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58186.D
Signal(s) : FID2B.CH
Acq On : 10 Oct 2016 9:26 pm
Operator : thomasl
Sample : jc29144-2
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 71 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 11:43:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	7.98	154721982	81.275	PPM	m
Spiked Amount 50.000		Recovery = 162.55%			
10) S 5a-Androstane	8.68f	47920150	26.709	PPM	m
Spiked Amount 50.000		Recovery = 53.42%			
11) S Tetracosane-d50	10.04f	53039780	34.915	PPM	m
Spiked Amount 50.000		Recovery = 69.83%			
Target Compounds					
1) H TPH-DRO	6.90	80828419032	56569.276	PPM	
2) H TPH-DRO (C10-C44)	10.50	81599865213	57109.187	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

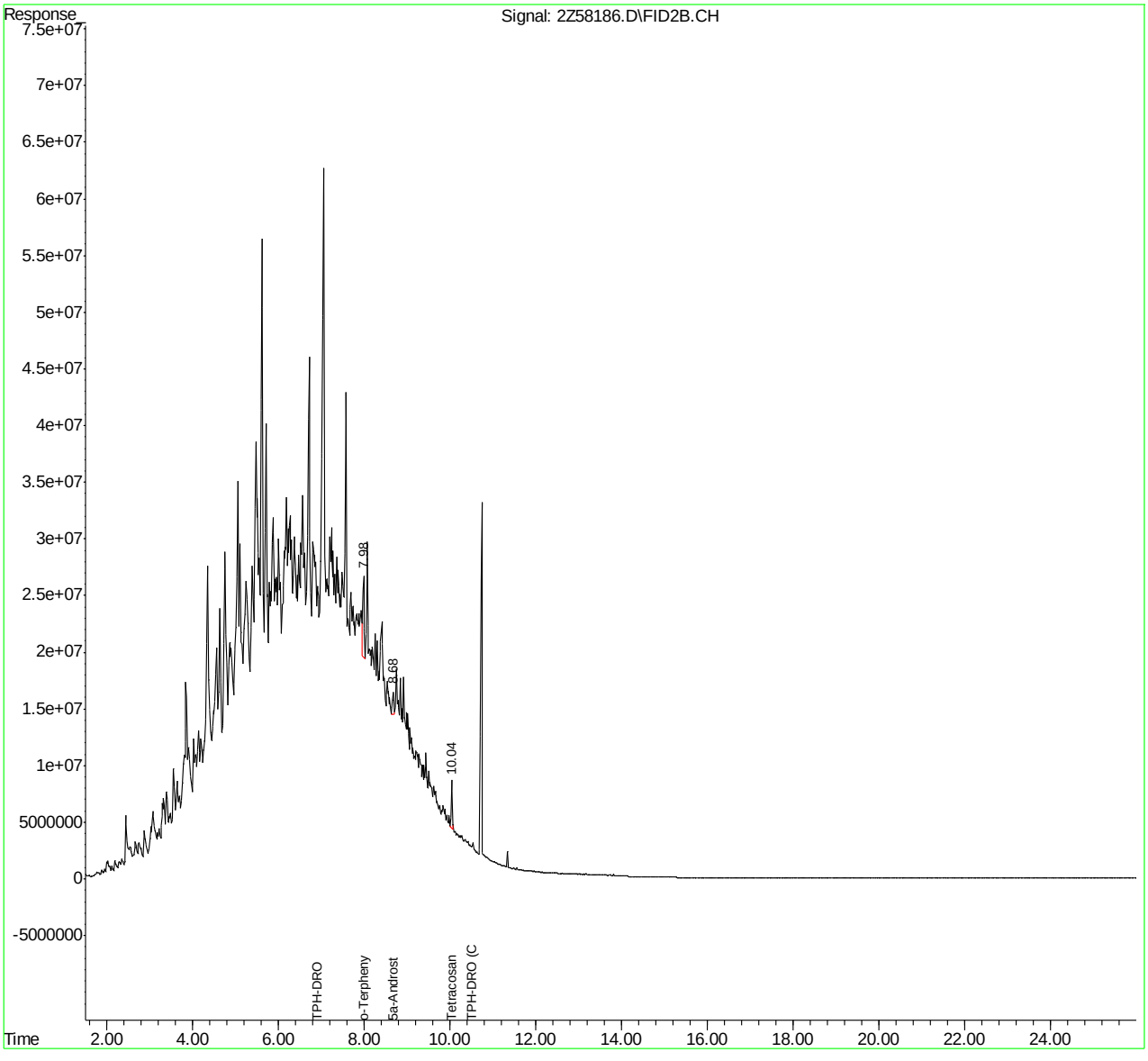
11.1.2 11

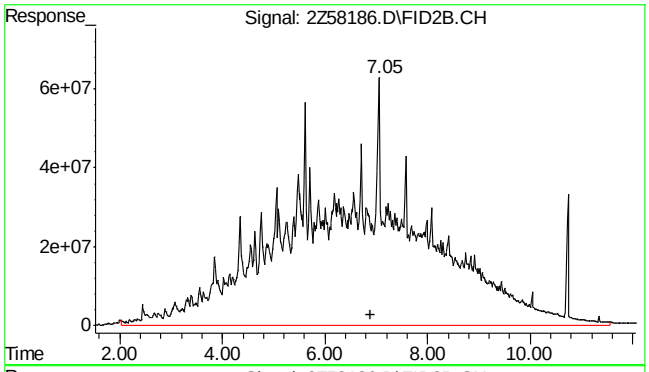
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58186.D
Signal(s) : FID2B.CH
Acq On : 10 Oct 2016 9:26 pm
Operator : thomasl
Sample : jc29144-2
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 71 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 11:43:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

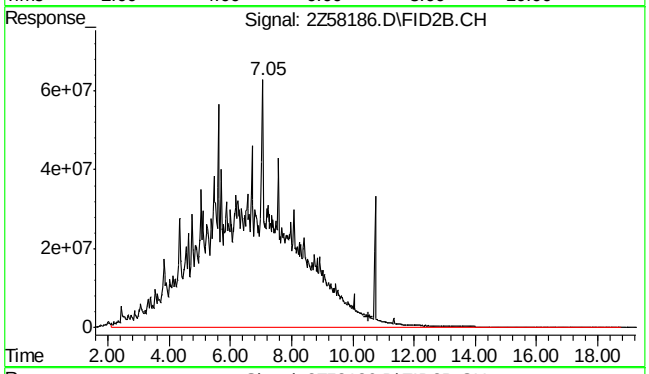
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





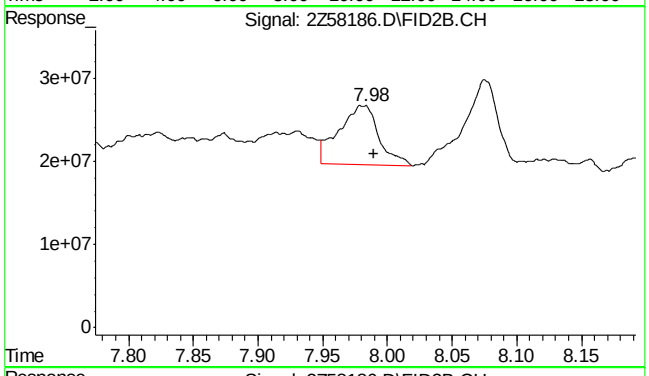
#1 TPH-DRO

R.T.: 6.900 min
Delta R.T.: 0.000 min
Response: 80828419032
Conc: 56569.28 PPM m



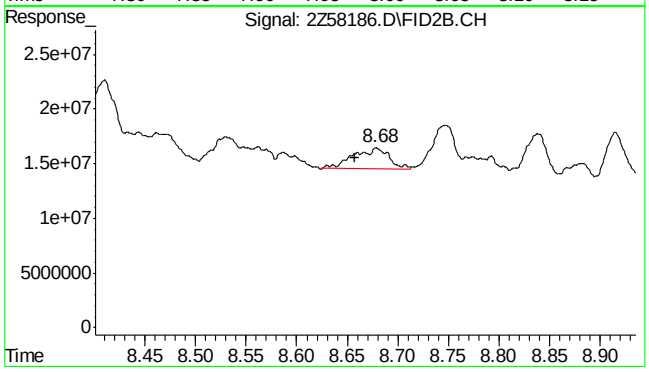
#2 TPH-DRO (C10-C44)

R.T.: 10.500 min
Delta R.T.: 0.000 min
Response: 81599865213
Conc: 57109.19 PPM m



#9 o-Terphenyl

R.T.: 7.983 min
Delta R.T.: -0.007 min
Response: 154721982
Conc: 81.28 PPM m



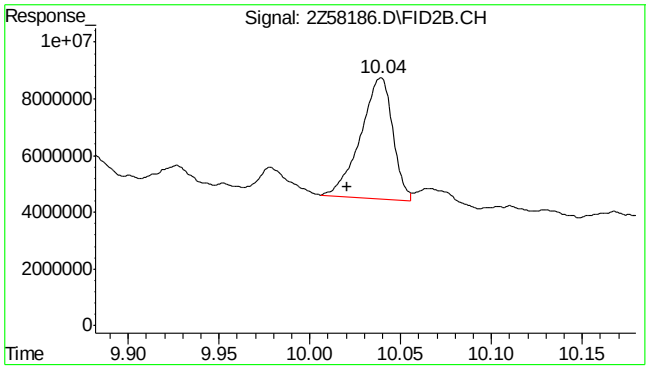
#10 5a-Androstane

R.T.: 8.677 min
Delta R.T.: 0.019 min
Response: 47920150
Conc: 26.71 PPM m

11.1.2

11

SGS ACCUTEST JC29144



#11 Tetracosane-d50

R.T.: 10.039 min
Delta R.T.: 0.019 min
Response: 53039780
Conc: 34.91 PPM m

11.1.2

11

SGS ACCUTEST JC29144

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/13/16 10:43

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2192\
Data File : 2Z58203.D
Signal(s) : FID2B.CH
Acq On : 11 Oct 2016 10:32 am
Operator : thomasl
Sample : jc29144-2
Misc : op97612,g2z2192,1000,,,1,5
ALS Vial : 81 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 16:34:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	7.99	35483666	18.640	PPM	m
Spiked Amount 50.000		Recovery =	37.28%		
10) S 5a-Androstane	8.66	11363928	6.334	PPM	m
Spiked Amount 50.000		Recovery =	12.67%		
11) S Tetracosane-d50	10.01	12053449	7.935	PPM	
Spiked Amount 50.000		Recovery =	15.87%		
Target Compounds					
1) H TPH-DRO	6.90	16160404856	11310.161	PPM	
2) H TPH-DRO (C10-C44)	10.50	16320686106	11422.336	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

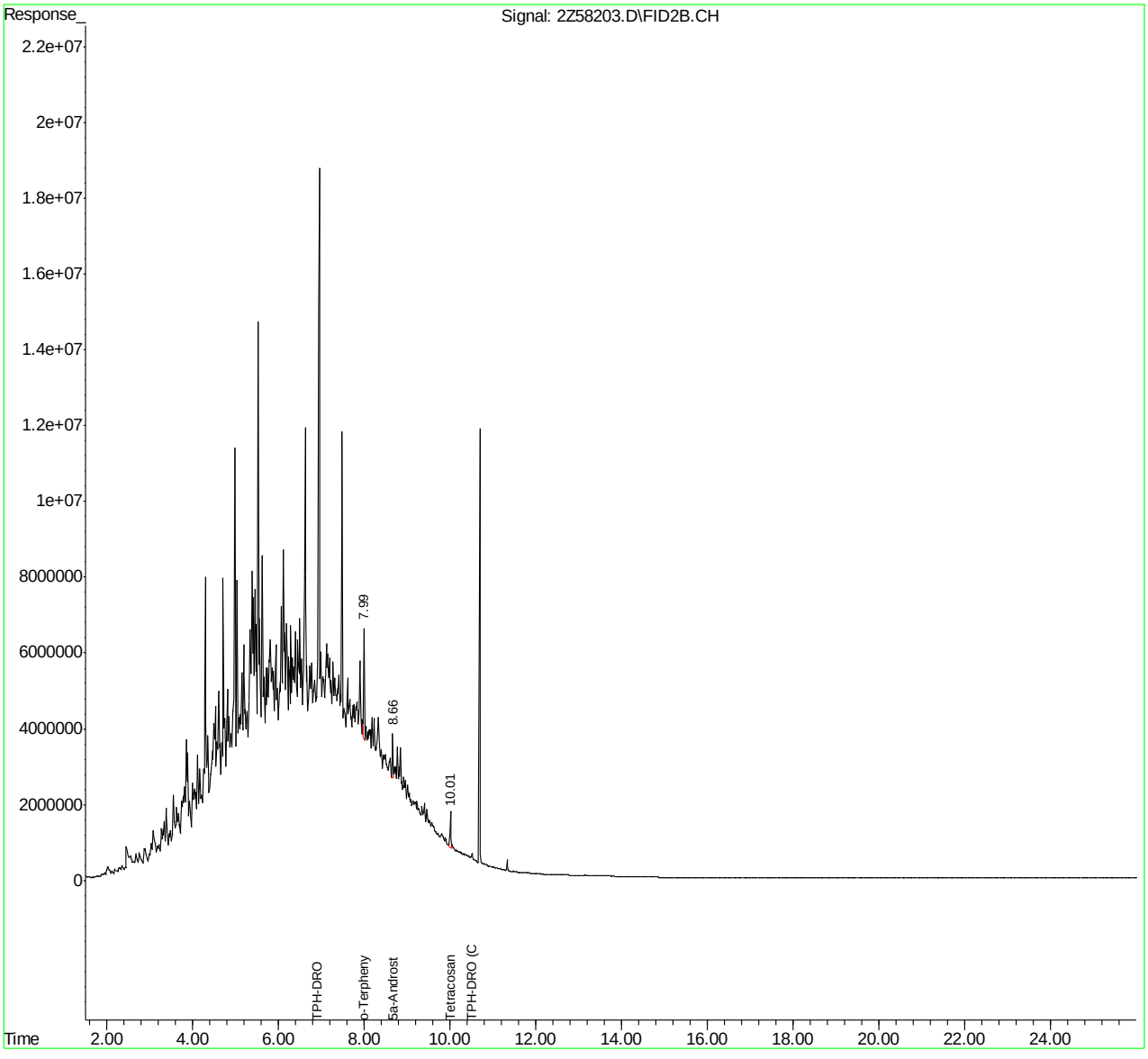
11.1.3 11

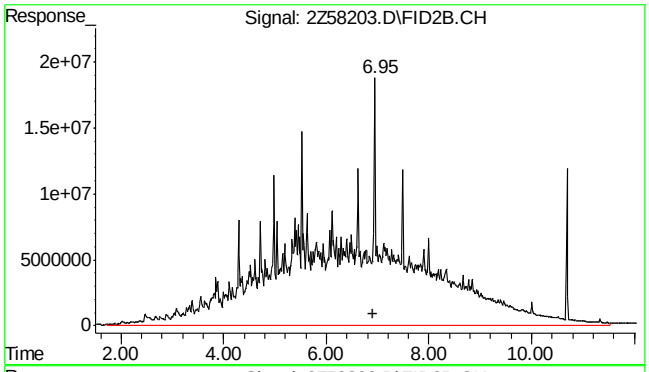
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2192\
Data File : 2Z58203.D
Signal(s) : FID2B.CH
Acq On : 11 Oct 2016 10:32 am
Operator : thomasl
Sample : jc29144-2
Misc : op97612,g2z2192,1000,,,1,5
ALS Vial : 81 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 16:34:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

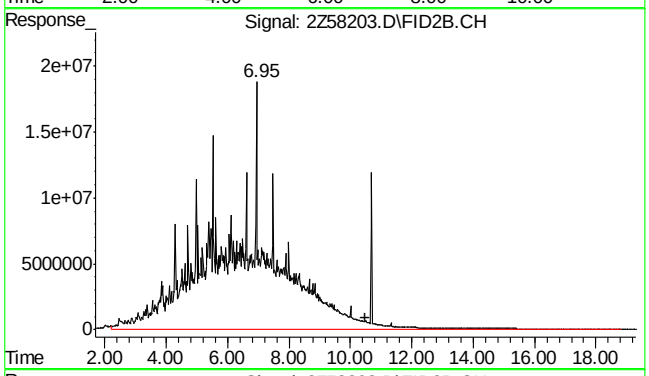
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





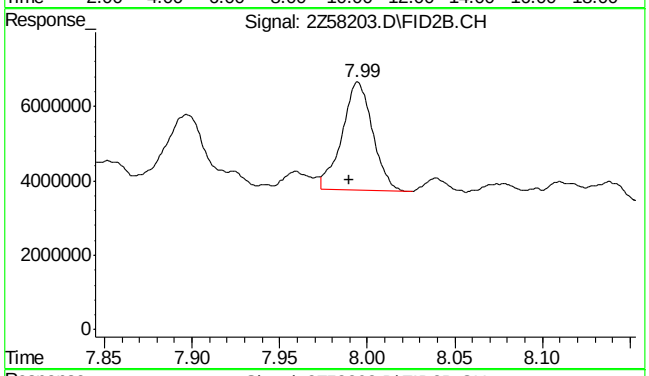
#1 TPH-DRO

R.T.: 6.900 min
Delta R.T.: 0.000 min
Response: 16160404856
Conc: 11310.16 PPM m



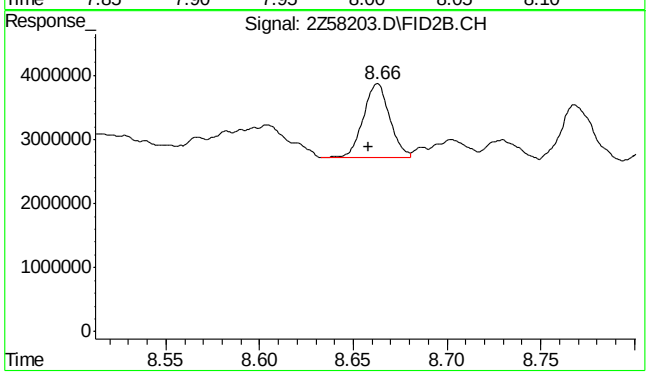
#2 TPH-DRO (C10-C44)

R.T.: 10.500 min
Delta R.T.: 0.000 min
Response: 16320686106
Conc: 11422.34 PPM m



#9 o-Terphenyl

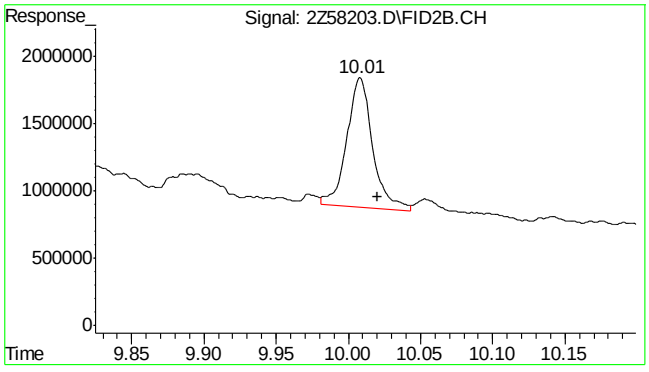
R.T.: 7.994 min
Delta R.T.: 0.004 min
Response: 35483666
Conc: 18.64 PPM m



#10 5a-Androstane

R.T.: 8.663 min
Delta R.T.: 0.005 min
Response: 11363928
Conc: 6.33 PPM m

SGS ACCUTEST JC29144



#11 Tetracosane-d50

R.T.: 10.008 min
Delta R.T.: -0.012 min
Response: 12053449
Conc: 7.93 PPM

11.1.3

11

SGS ACCUTEST JC29144

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/13/16 10:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58187.D
Signal(s) : FID2B.CH
Acq On : 10 Oct 2016 9:59 pm
Operator : thomasl
Sample : jc29144-3
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 11:46:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc Units	
System Monitoring Compounds				
9) S o-Terphenyl	7.98	57216472	30.056 PPM	m
Spiked Amount 50.000		Recovery	= 60.11%	
10) S 5a-Androstane	8.65	40824038	22.754 PPM	
Spiked Amount 50.000		Recovery	= 45.51%	
11) S Tetracosane-d50	10.01	39154476	25.775 PPM	
Spiked Amount 50.000		Recovery	= 51.55%	
Target Compounds				
1) H TPH-DRO	6.90	1543797198	1080.455 PPM	
2) H TPH-DRO (C10-C44)	10.50	1759352561	1231.316 PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

11.1.4 11

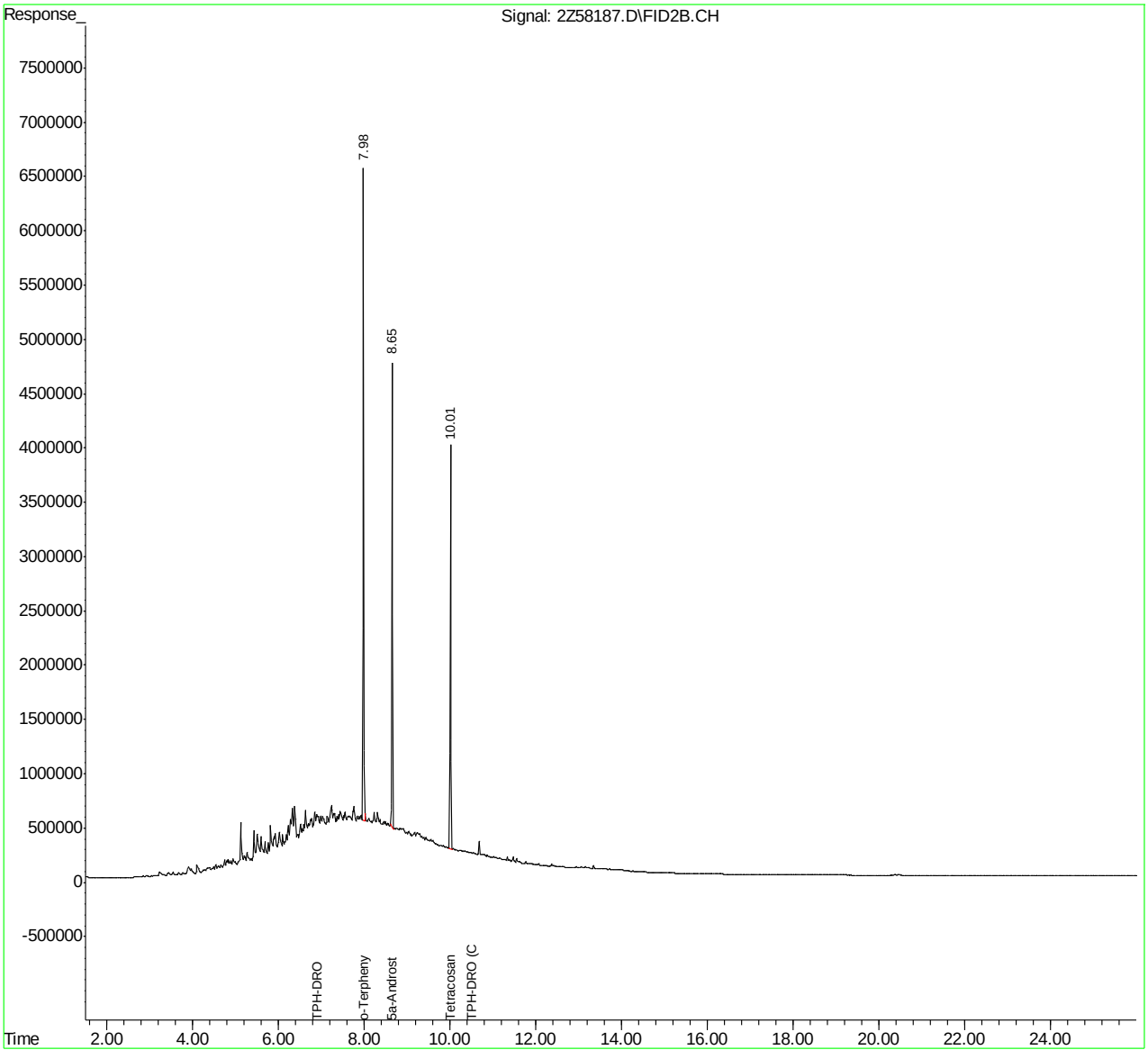
SGS ACCUTEST JC29144

Quantitation Report (QT Reviewed)

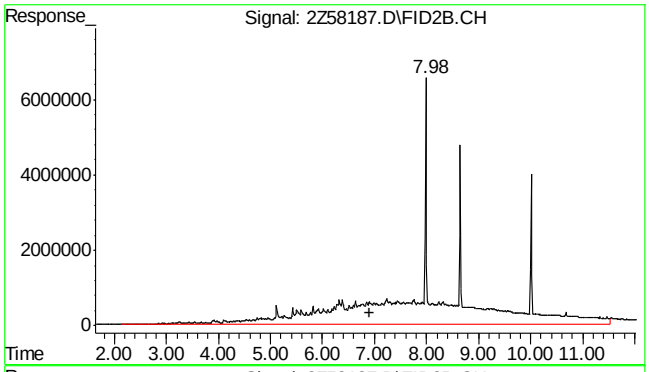
Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58187.D
Signal(s) : FID2B.CH
Acq On : 10 Oct 2016 9:59 pm
Operator : thomasl
Sample : jc29144-3
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 11:46:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

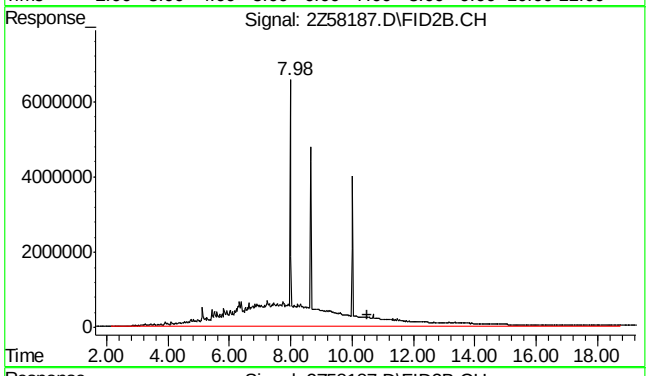


SGS ACCUTEST JC29144



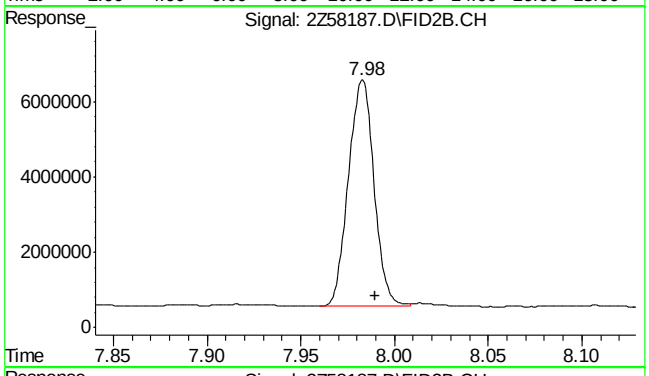
#1 TPH-DRO

R.T.: 6.900 min
Delta R.T.: 0.000 min
Response: 1543797198
Conc: 1080.46 PPM m



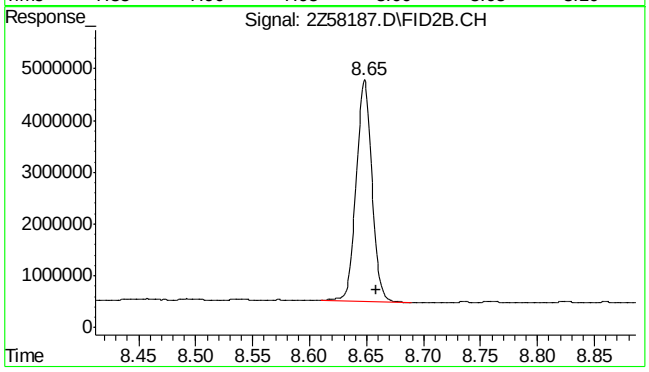
#2 TPH-DRO (C10-C44)

R.T.: 10.500 min
Delta R.T.: 0.000 min
Response: 1759352561
Conc: 1231.32 PPM m



#9 o-Terphenyl

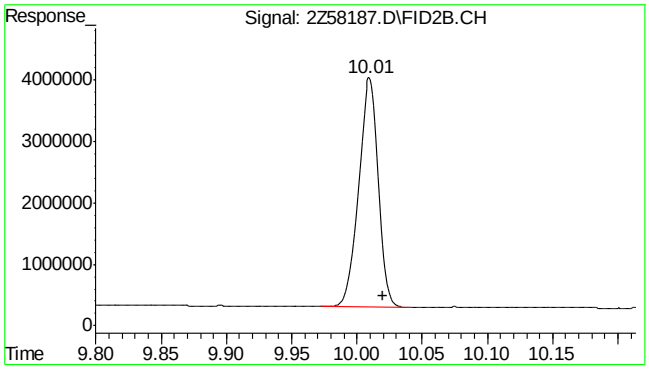
R.T.: 7.983 min
Delta R.T.: -0.007 min
Response: 57216472
Conc: 30.06 PPM m



#10 5a-Androstane

R.T.: 8.648 min
Delta R.T.: -0.010 min
Response: 40824038
Conc: 22.75 PPM

SGS ACCUTEST JC29144



#11 Tetracosane-d50

R.T.: 10.010 min
Delta R.T.: -0.011 min
Response: 39154476
Conc: 25.77 PPM

11.1.4

11

SGS ACCUTEST JC29144

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/13/16 10:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58188.D
Signal(s) : FID2B.CH
Acq On : 10 Oct 2016 10:32 pm
Operator : thomasl
Sample : jc29144-4
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 11:48:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	7.99	77355403	40.635	PPM	
Spiked Amount 50.000		Recovery	= 81.27%		
10) S 5a-Androstane	8.66	33799584	18.839	PPM	m
Spiked Amount 50.000		Recovery	= 37.68%		
11) S Tetracosane-d50	10.02	36055539	23.735	PPM	m
Spiked Amount 50.000		Recovery	= 47.47%		
Target Compounds					
1) H TPH-DRO	6.90	6056642549	4238.854	PPM	
2) H TPH-DRO (C10-C44)	10.50	10370566443	7258.034	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

11.1.5 11

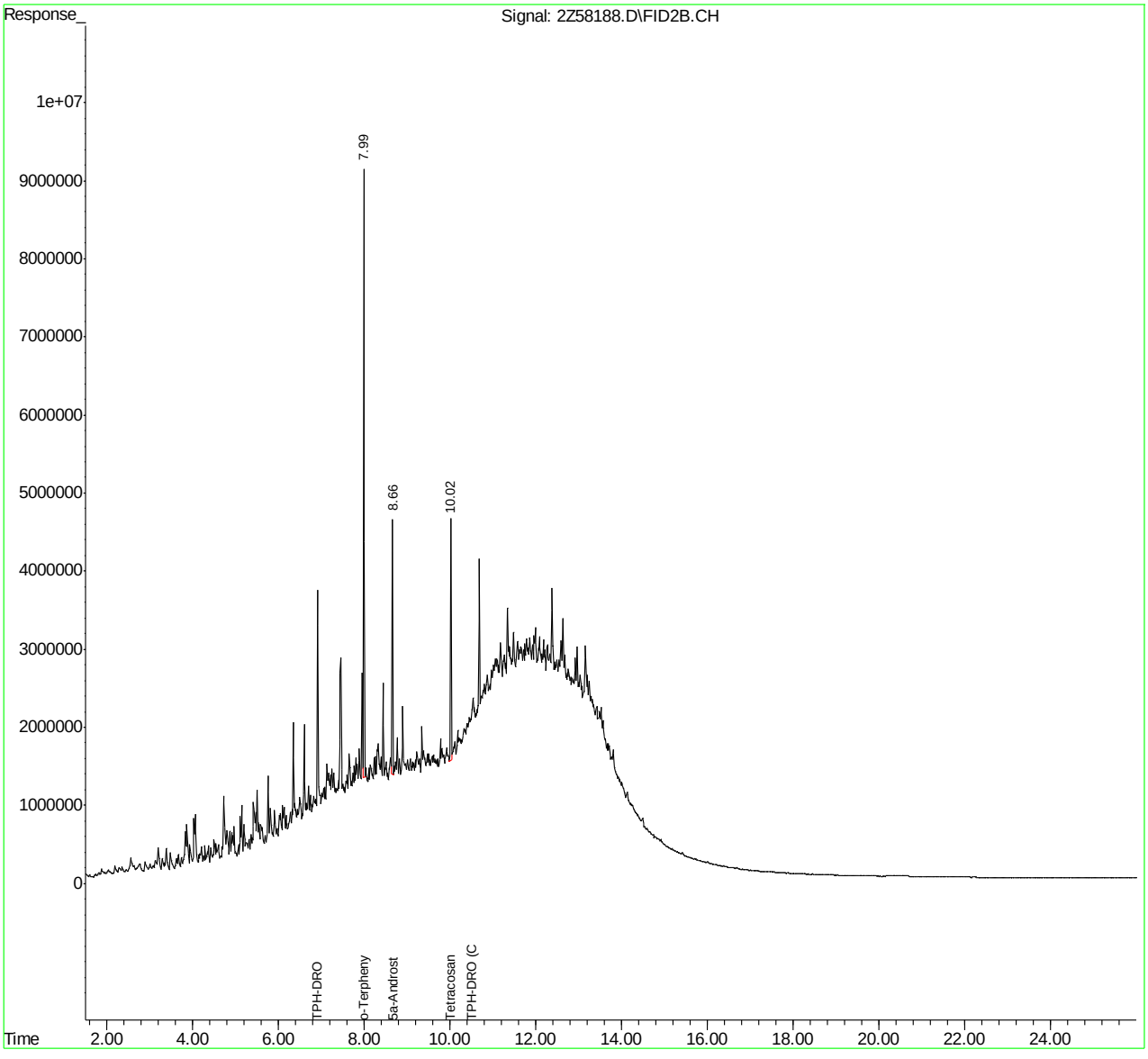
SGS ACCUTEST JC29144

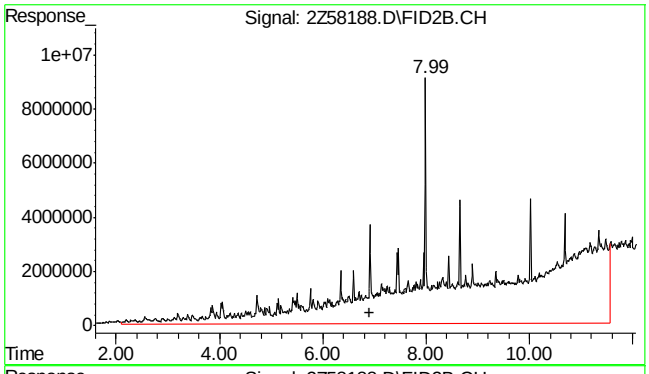
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58188.D
Signal(s) : FID2B.CH
Acq On : 10 Oct 2016 10:32 pm
Operator : thomasl
Sample : jc29144-4
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 11:48:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

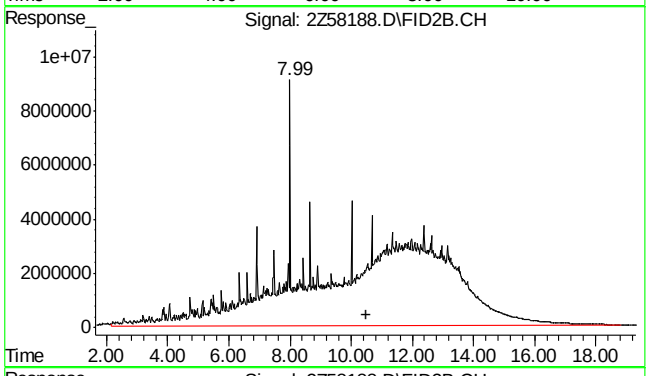
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





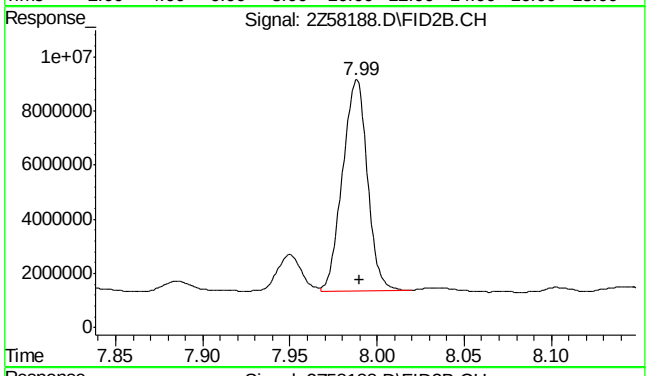
#1 TPH-DRO

R.T.: 6.900 min
Delta R.T.: 0.000 min
Response: 6056642549
Conc: 4238.85 PPM m



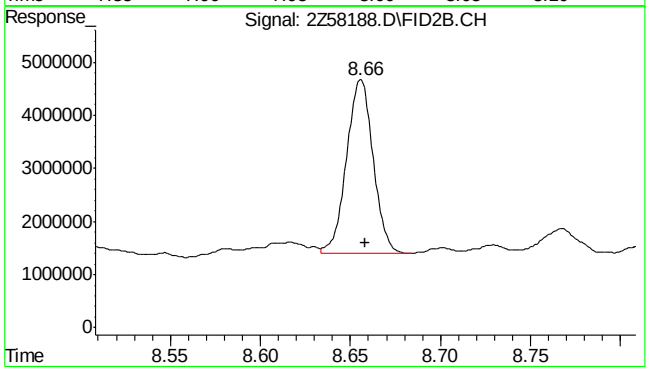
#2 TPH-DRO (C10-C44)

R.T.: 10.500 min
Delta R.T.: 0.000 min
Response: 10370566443
Conc: 7258.03 PPM m



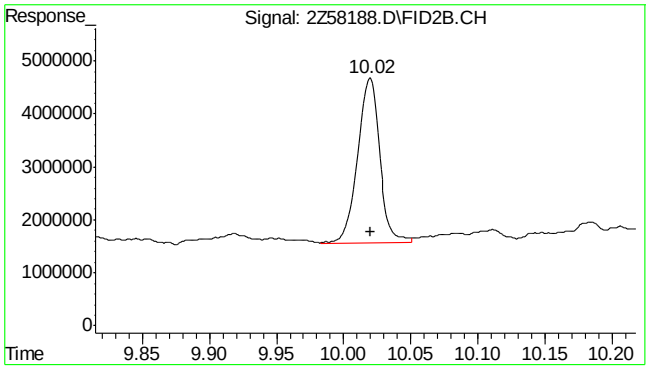
#9 o-Terphenyl

R.T.: 7.988 min
Delta R.T.: -0.001 min
Response: 77355403
Conc: 40.63 PPM



#10 5a-Androstane

R.T.: 8.656 min
Delta R.T.: -0.003 min
Response: 33799584
Conc: 18.84 PPM m



#11 Tetracosane-d50

R.T.: 10.019 min
Delta R.T.: -0.001 min
Response: 36055539
Conc: 23.73 PPM m

11.1.5

11

SGS ACCUTEST JC29144

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58191.D
Signal(s) : FID2B.CH
Acq On : 11 Oct 2016 12:10 am
Operator : thomasl
Sample : jc29144-5
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 74 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 11:51:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S o-Terphenyl	7.98	64165631	33.706 PPM
Spiked Amount 50.000		Recovery	= 67.41%
10) S 5a-Androstane	8.65	27417993	15.282 PPM
Spiked Amount 50.000		Recovery	= 30.56%
11) S Tetracosane-d50	10.01	29178198	19.207 PPM
Spiked Amount 50.000		Recovery	= 38.41%
Target Compounds			
1) H TPH-DRO	6.90	1576382375	1103.261 PPM
2) H TPH-DRO (C10-C44)	10.50	1852262599	1296.341 PPM

(f)=RT Delta > 1/2 Window (m)=manual int.

11.1.6

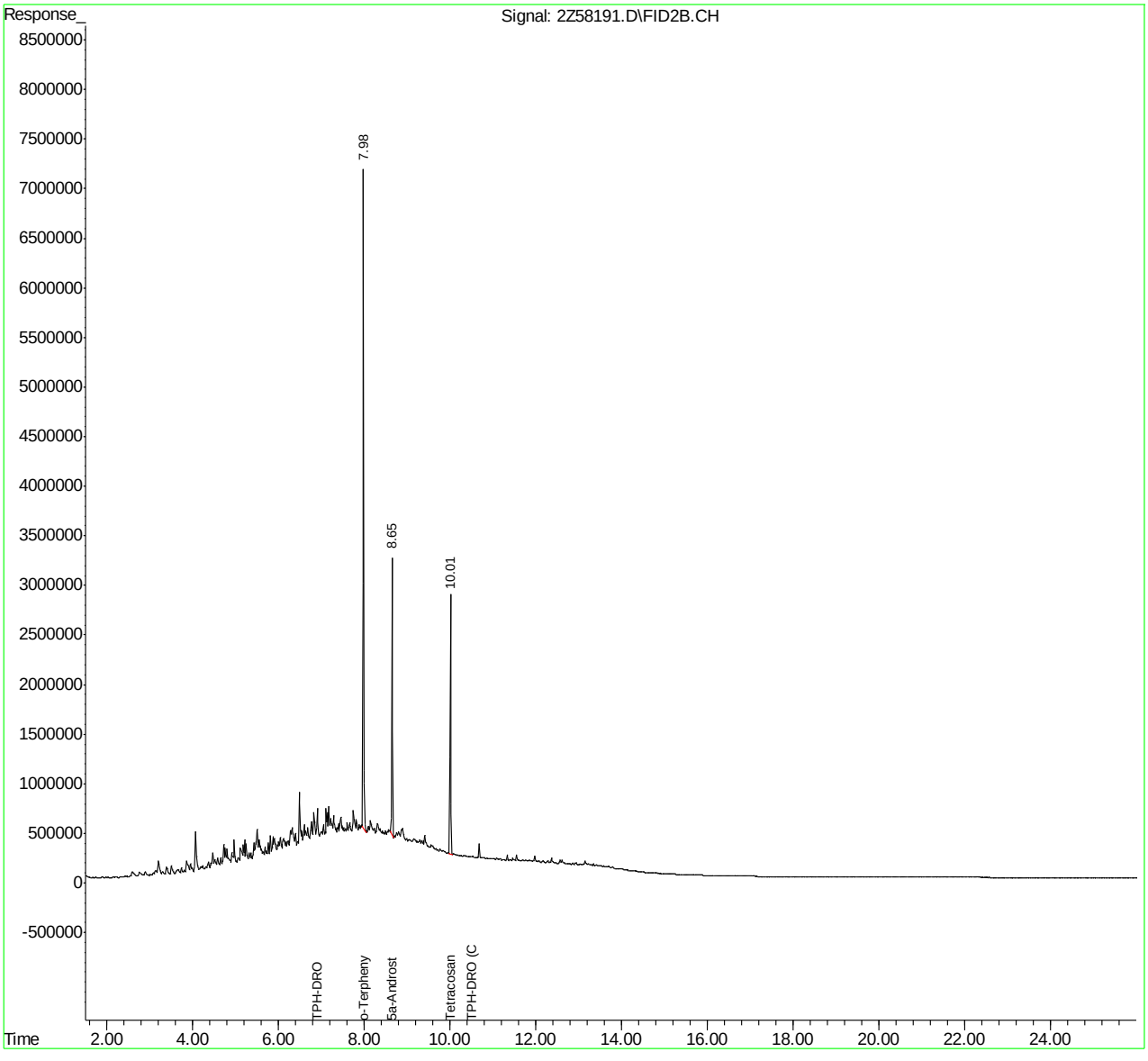
11

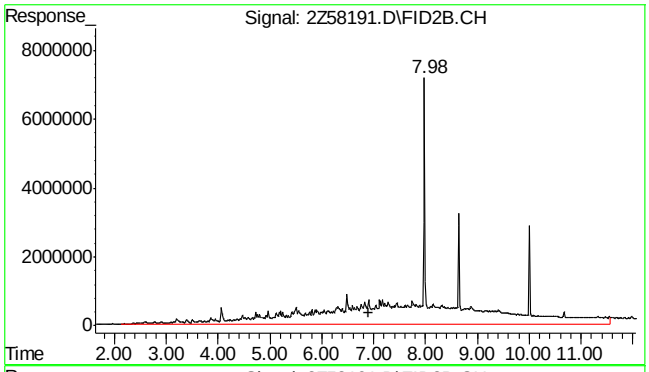
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58191.D
Signal(s) : FID2B.CH
Acq On : 11 Oct 2016 12:10 am
Operator : thomasl
Sample : jc29144-5
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 74 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 11:51:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

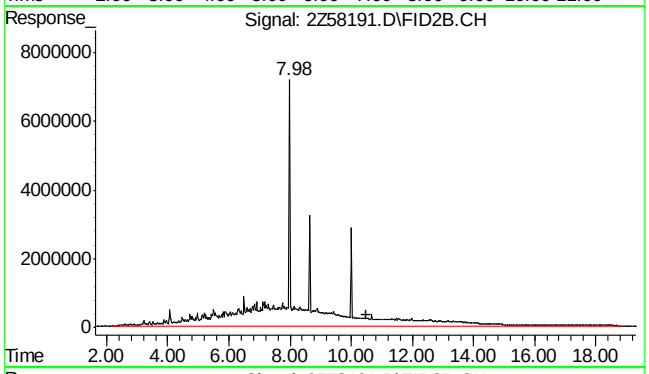
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





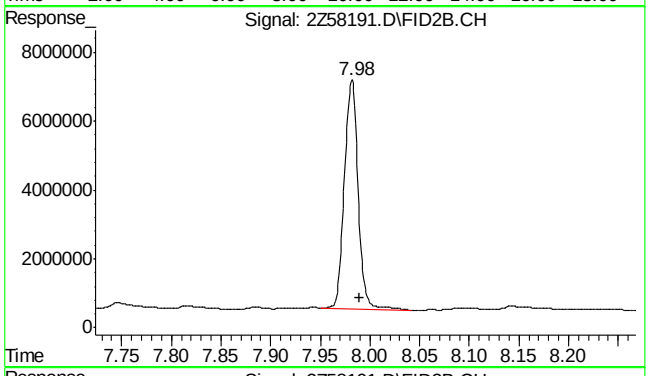
#1 TPH-DRO

R.T.: 6.900 min
Delta R.T.: 0.000 min
Response: 1576382375
Conc: 1103.26 PPM m



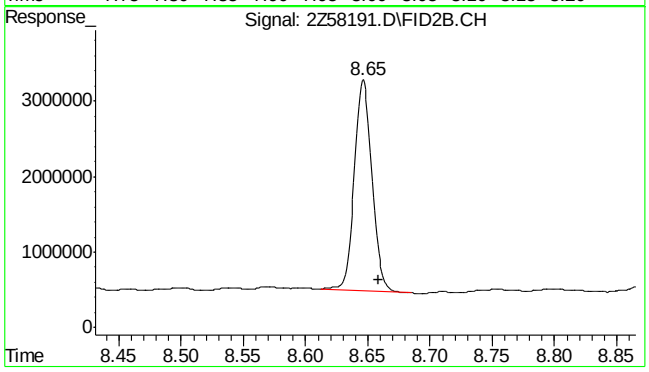
#2 TPH-DRO (C10-C44)

R.T.: 10.500 min
Delta R.T.: 0.000 min
Response: 1852262599
Conc: 1296.34 PPM m



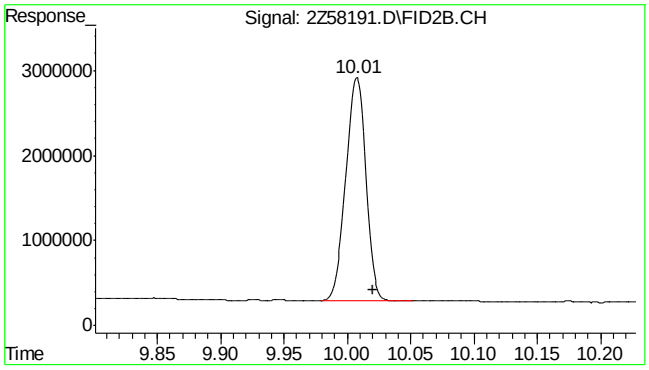
#9 o-Terphenyl

R.T.: 7.982 min
Delta R.T.: -0.008 min
Response: 64165631
Conc: 33.71 PPM



#10 5a-Androstane

R.T.: 8.646 min
Delta R.T.: -0.012 min
Response: 27417993
Conc: 15.28 PPM



#11 Tetracosane-d50

R.T.: 10.008 min
Delta R.T.: -0.013 min
Response: 29178198
Conc: 19.21 PPM

11.1.6

11

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/14/16 16:26

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y3091\
Data File : 2Y80267.D
Signal(s) : FID1A.CH
Acq On : 13 Oct 2016 5:46 pm
Operator : krimeshp
Sample : jc29144-6
Misc : op97695,g2y3091,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 14 08:49:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y3089.M
Quant Title :
QLast Update : Thu Oct 13 16:51:45 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc Units	
System Monitoring Compounds				
9) S o-Terphenyl	8.28	102971760	43.786 PPM	m
Spiked Amount 50.000		Recovery	= 87.57%	
10) S 5a-Androstane	8.95	64154712	29.643 PPM	
Spiked Amount 50.000		Recovery	= 59.29%	
11) S Tetracosane-d50	10.28	59448719	35.075 PPM	
Spiked Amount 50.000		Recovery	= 70.15%	
Target Compounds				
1) H TPH-DRO	7.20	1614476171	875.623 PPM	
2) H TPH-DRO (C10-C44)	11.30	3474584575	1884.467 PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

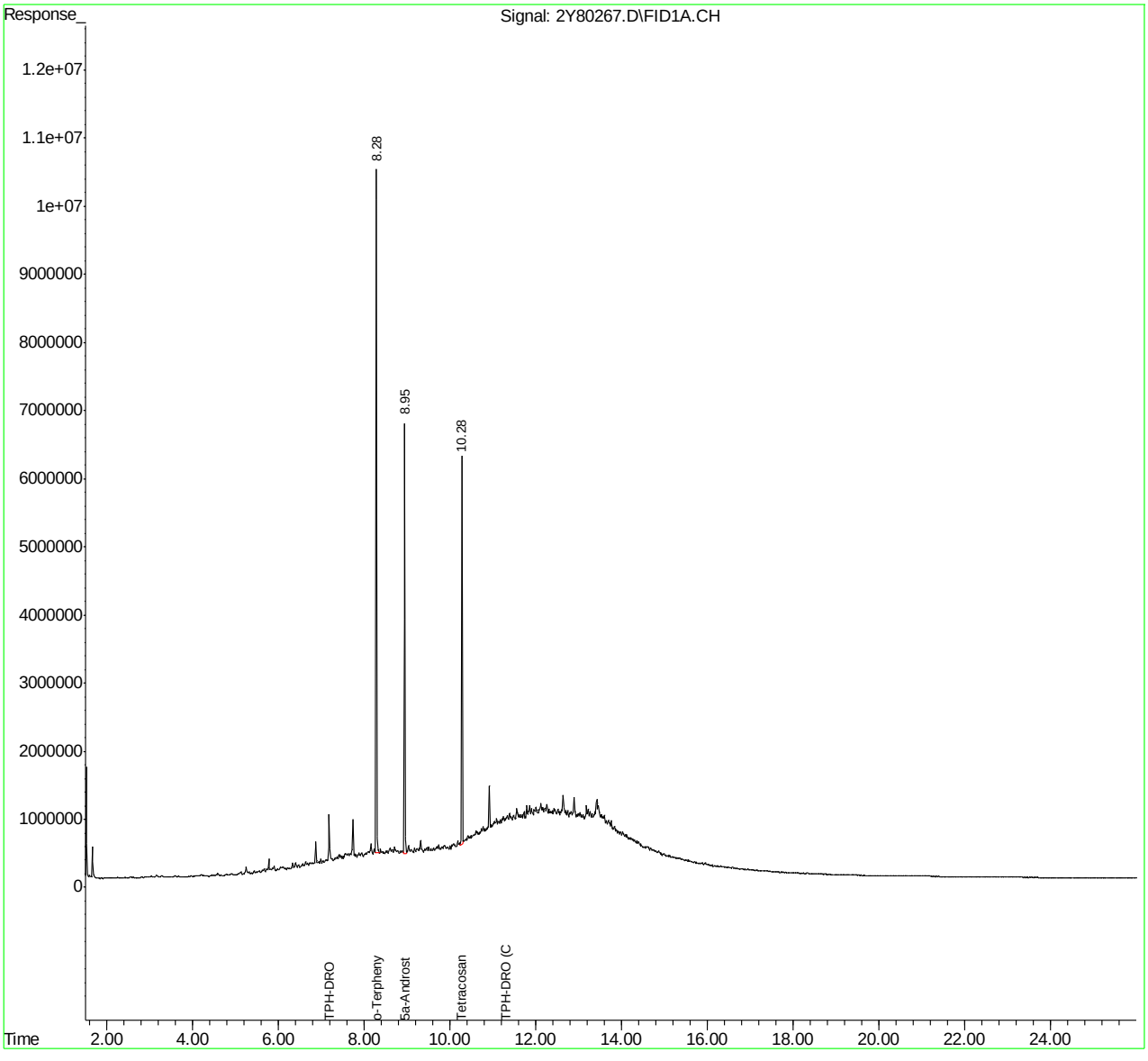
11.1.7 11

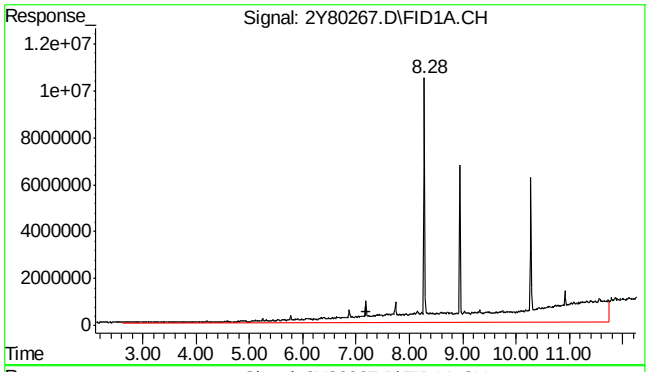
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y3091\
Data File : 2Y80267.D
Signal(s) : FID1A.CH
Acq On : 13 Oct 2016 5:46 pm
Operator : krimeshp
Sample : jc29144-6
Misc : op97695,g2y3091,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 14 08:49:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y3089.M
Quant Title :
QLast Update : Thu Oct 13 16:51:45 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

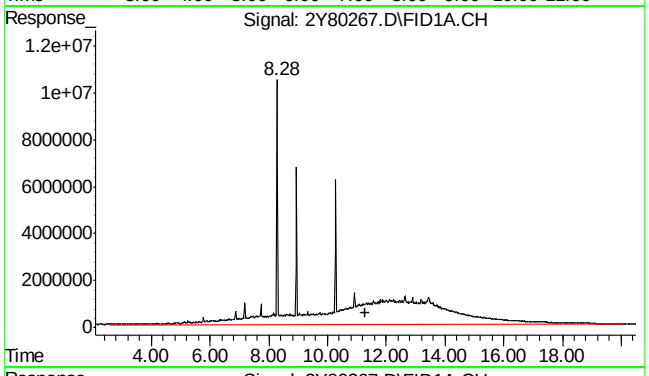
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





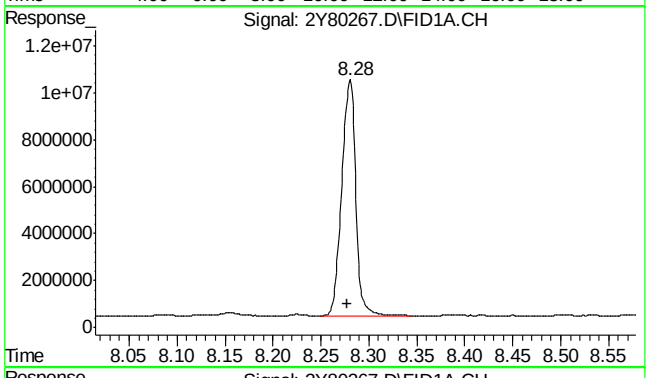
#1 TPH-DRO

R.T.: 7.200 min
Delta R.T.: 0.000 min
Response: 1614476171
Conc: 875.62 PPM m



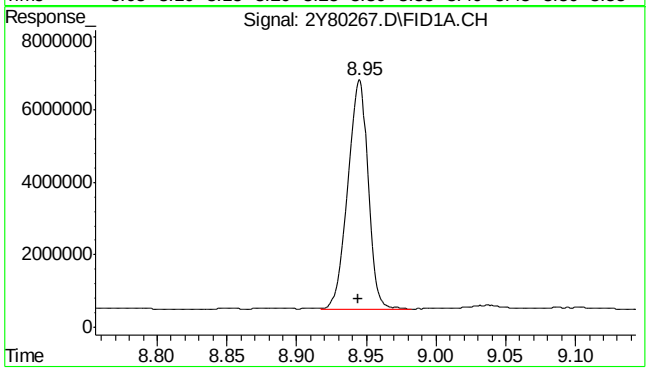
#2 TPH-DRO (C10-C44)

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 3474584575
Conc: 1884.47 PPM m



#9 o-Terphenyl

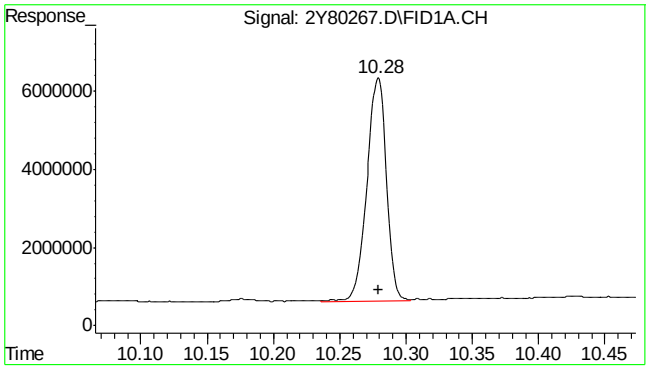
R.T.: 8.280 min
Delta R.T.: 0.002 min
Response: 102971760
Conc: 43.79 PPM m



#10 5a-Androstane

R.T.: 8.945 min
Delta R.T.: 0.001 min
Response: 64154712
Conc: 29.64 PPM

SGS ACCUTEST JC29144



#11 Tetracosane-d50

R.T.: 10.279 min
Delta R.T.: 0.000 min
Response: 59448719
Conc: 35.08 PPM

11.1.7

11

SGS ACCUTEST JC29144

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/13/16 10:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58193.D
Signal(s) : FID2B.CH
Acq On : 11 Oct 2016 1:16 am
Operator : thomasl
Sample : jc29144-7
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 76 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 12:07:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.00	69185862	36.343	PPM	m
Spiked Amount 50.000		Recovery =	72.69%		
10) S 5a-Androstane	8.66	37100205	20.678	PPM	m
Spiked Amount 50.000		Recovery =	41.36%		
11) S Tetracosane-d50	10.02	31315210	20.614	PPM	m
Spiked Amount 50.000		Recovery =	41.23%		
Target Compounds					
1) H TPH-DRO	6.90	13802865478	9660.193	PPM	
2) H TPH-DRO (C10-C44)	10.50	17229083384	12058.095	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

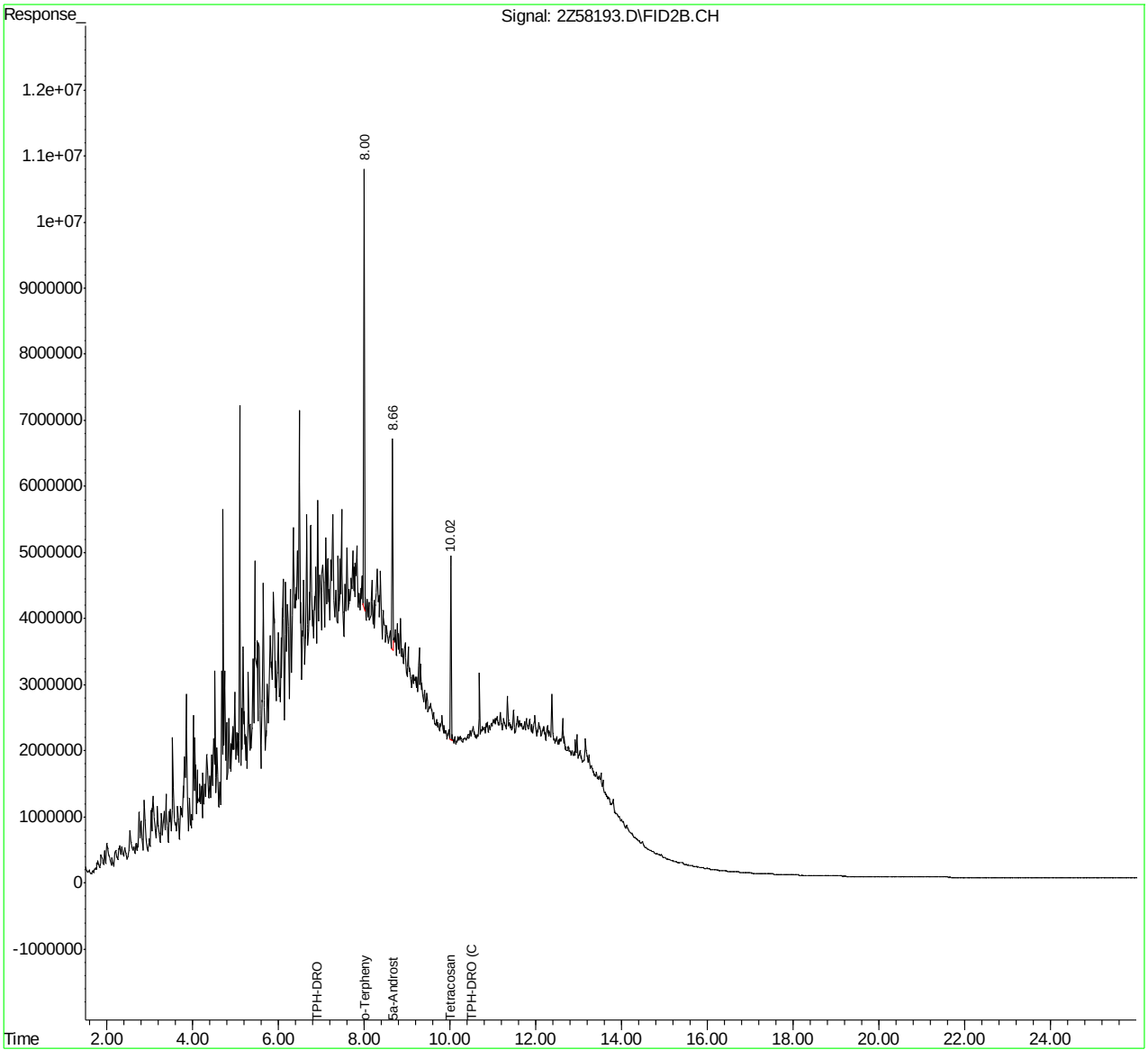
11.1.8 11

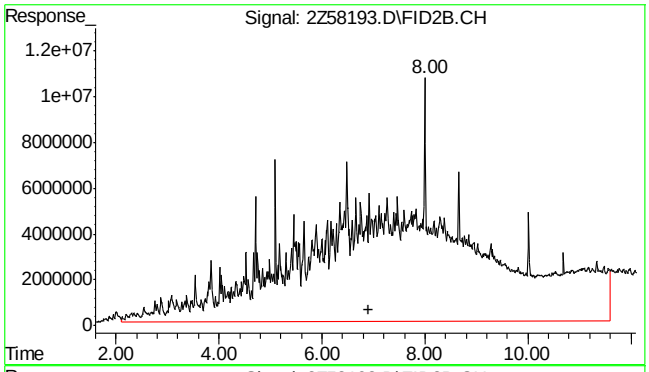
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58193.D
Signal(s) : FID2B.CH
Acq On : 11 Oct 2016 1:16 am
Operator : thomasl
Sample : jc29144-7
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 76 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 12:07:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

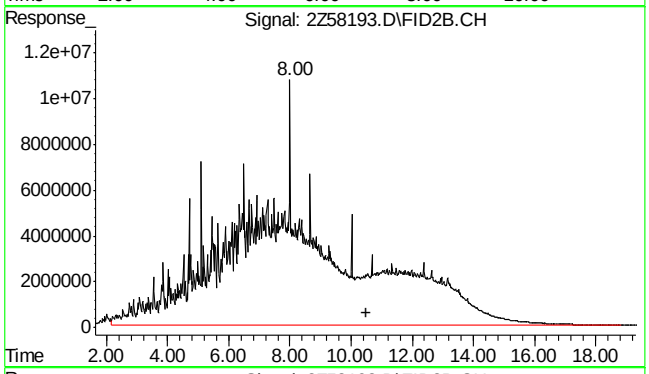
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





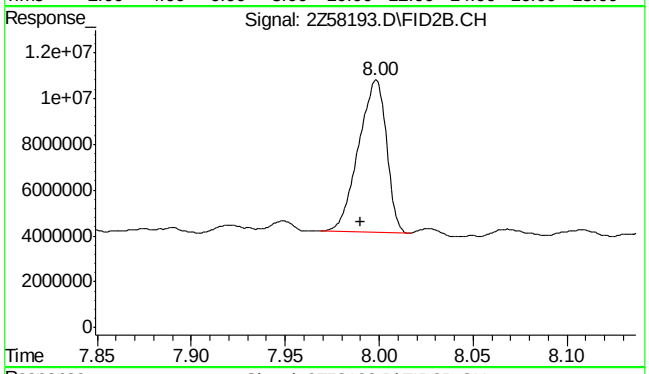
#1 TPH-DRO

R.T.: 6.900 min
Delta R.T.: 0.000 min
Response: 13802865478
Conc: 9660.19 PPM m



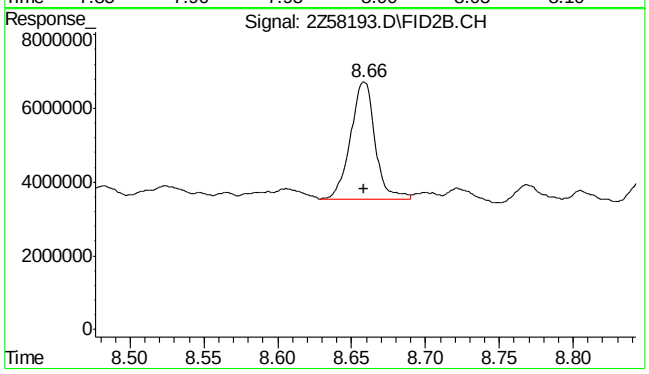
#2 TPH-DRO (C10-C44)

R.T.: 10.500 min
Delta R.T.: 0.000 min
Response: 17229083384
Conc: 12058.10 PPM m



#9 o-Terphenyl

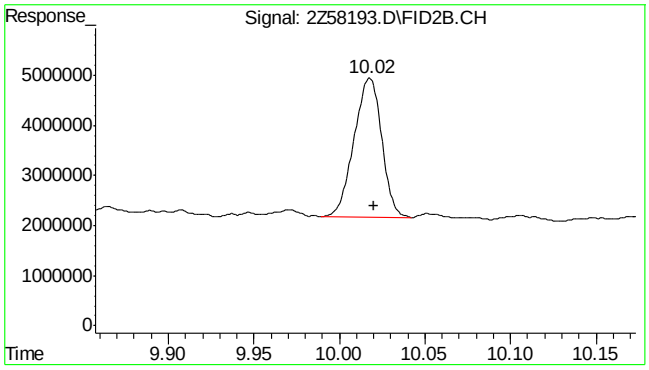
R.T.: 7.998 min
Delta R.T.: 0.008 min
Response: 69185862
Conc: 36.34 PPM m



#10 5a-Androstane

R.T.: 8.658 min
Delta R.T.: 0.000 min
Response: 37100205
Conc: 20.68 PPM m

SGS ACCUTEST JC29144



#11 Tetracosane-d50

R.T.: 10.018 min
Delta R.T.: -0.003 min
Response: 31315210
Conc: 20.61 PPM m

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/13/16 10:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58194.D
Signal(s) : FID2B.CH
Acq On : 11 Oct 2016 1:50 am
Operator : thomasl
Sample : jc29144-8
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 77 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 12:10:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.00	86644053	45.514	PPM	m
Spiked Amount 50.000		Recovery =	91.03%		
10) S 5a-Androstane	8.67	35660801	19.876	PPM	m
Spiked Amount 50.000		Recovery =	39.75%		
11) S Tetracosane-d50	10.02	31711877	20.875	PPM	m
Spiked Amount 50.000		Recovery =	41.75%		
Target Compounds					
1) H TPH-DRO	6.90	14860373472	10400.309	PPM	
2) H TPH-DRO (C10-C44)	10.50	15370019042	10756.994	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

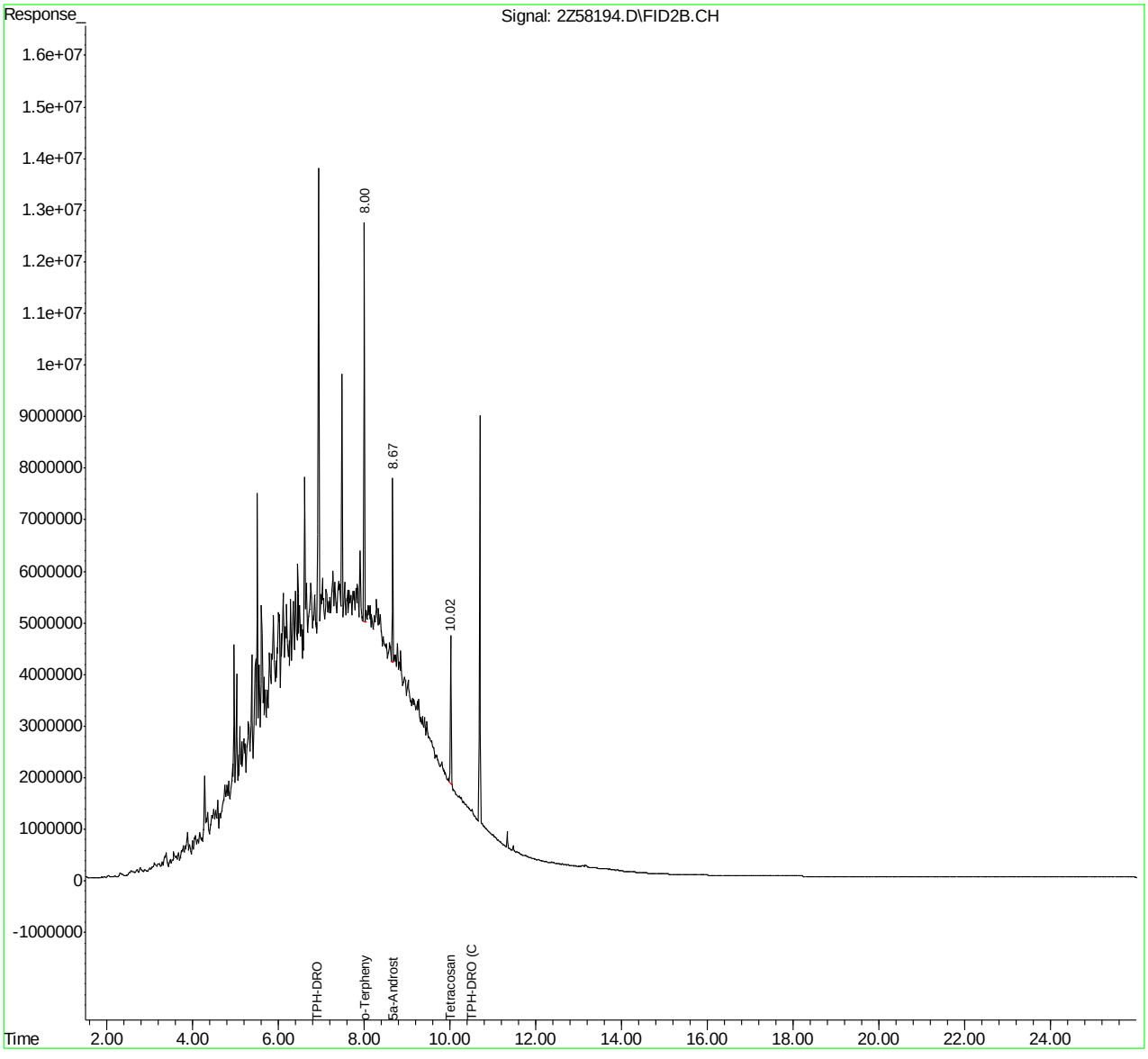
11.1.9 11

Quantitation Report (QT Reviewed)

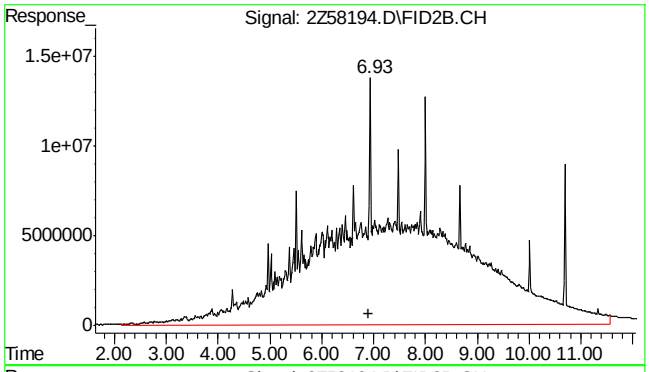
Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58194.D
Signal(s) : FID2B.CH
Acq On : 11 Oct 2016 1:50 am
Operator : thomasl
Sample : jc29144-8
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 77 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 12:10:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

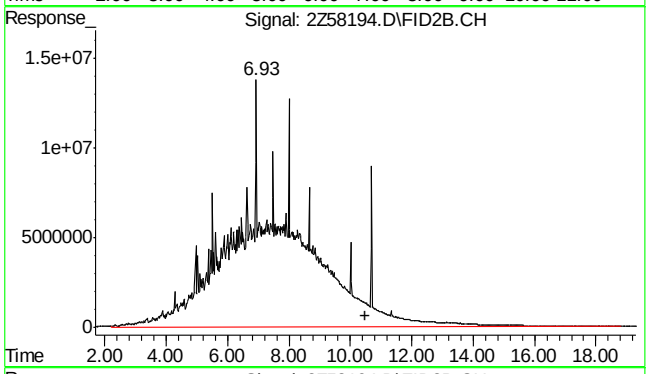


SGS ACCUTEST JC29144



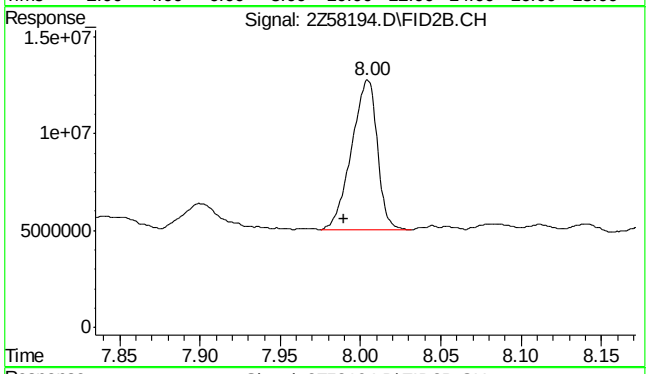
#1 TPH-DRO

R.T.: 6.900 min
Delta R.T.: 0.000 min
Response: 14860373472
Conc: 10400.31 PPM m



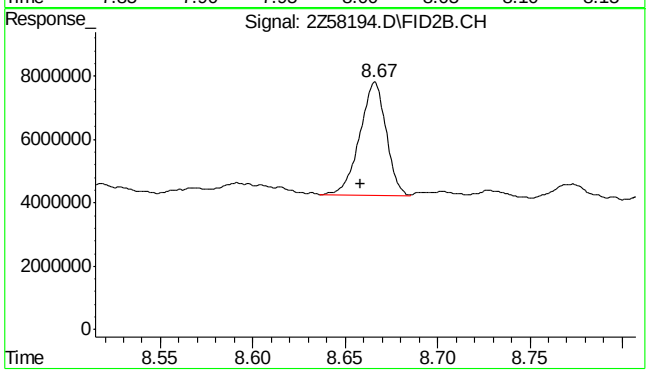
#2 TPH-DRO (C10-C44)

R.T.: 10.500 min
Delta R.T.: 0.000 min
Response: 15370019042
Conc: 10756.99 PPM m



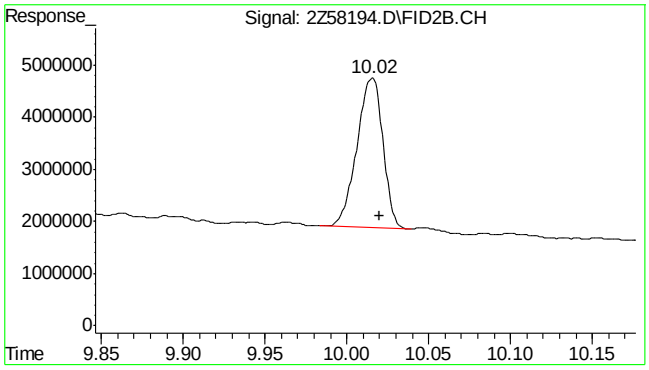
#9 o-Terphenyl

R.T.: 8.004 min
Delta R.T.: 0.014 min
Response: 86644053
Conc: 45.51 PPM m



#10 5a-Androstane

R.T.: 8.666 min
Delta R.T.: 0.008 min
Response: 35660801
Conc: 19.88 PPM m



#11 Tetracosane-d50

R.T.: 10.016 min
Delta R.T.: -0.005 min
Response: 31711877
Conc: 20.88 PPM m

11.1.9

11

SGS ACCUTEST JC29144

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/13/16 10:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58195.D
Signal(s) : FID2B.CH
Acq On : 11 Oct 2016 2:23 am
Operator : thomasl
Sample : jc29144-9
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 78 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 12:14:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.03f	119327680	62.683	PPM	m
Spiked Amount 50.000		Recovery = 125.37%			
10) S 5a-Androstane	8.70f	58900501	32.829	PPM	m
Spiked Amount 50.000		Recovery = 65.66%			
11) S Tetracosane-d50	10.02	40462384	26.636	PPM	m
Spiked Amount 50.000		Recovery = 53.27%			
Target Compounds					
1) H TPH-DRO	6.90	38919699578	27238.677	PPM	
2) H TPH-DRO (C10-C44)	10.50	41840846482	29283.096	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

11.1.10 11

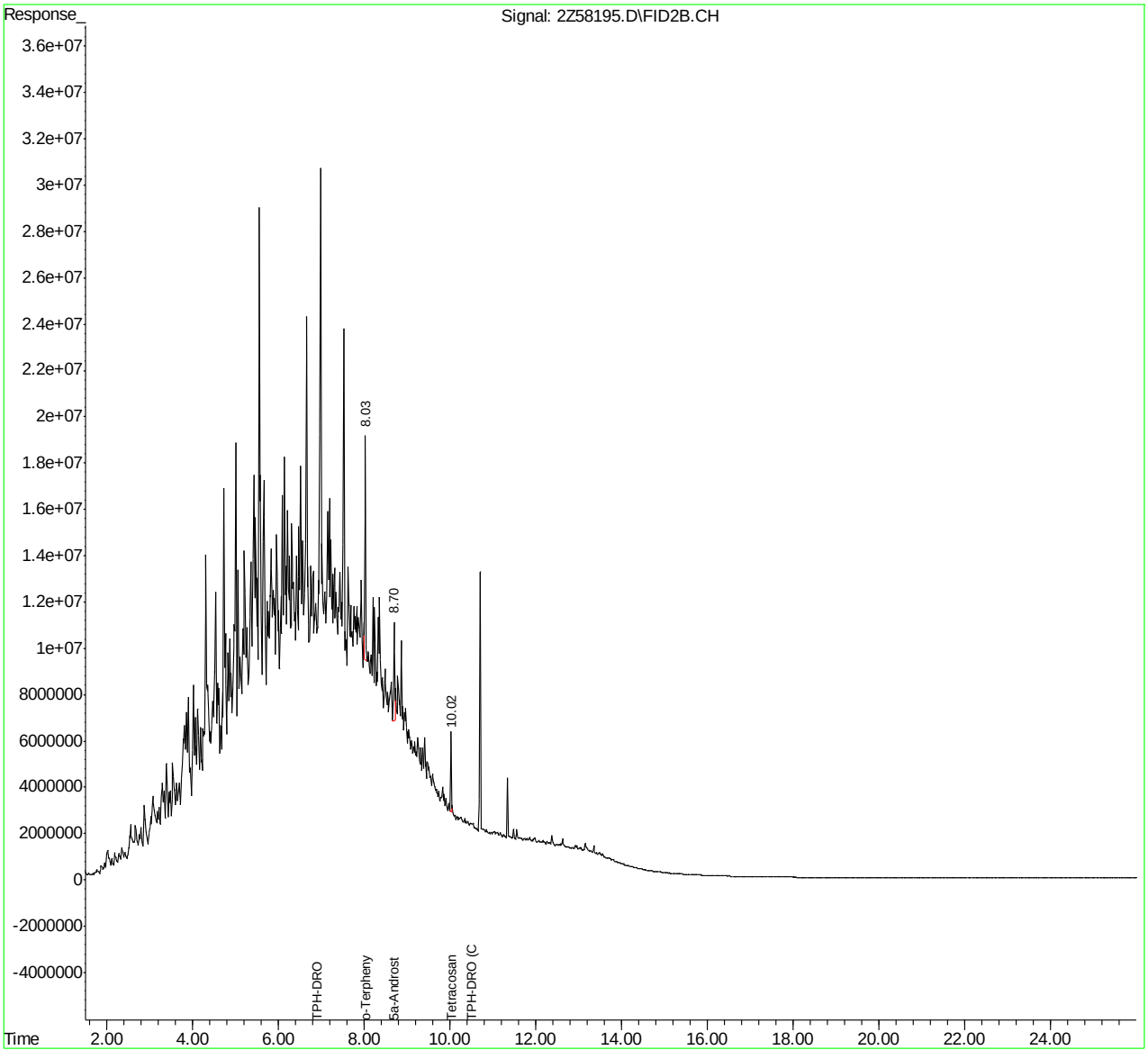
SGS ACCUTEST JC29144

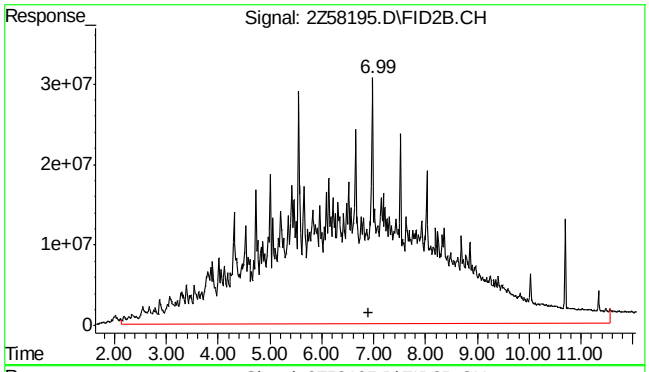
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58195.D
Signal(s) : FID2B.CH
Acq On : 11 Oct 2016 2:23 am
Operator : thomasl
Sample : jc29144-9
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 78 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 12:14:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

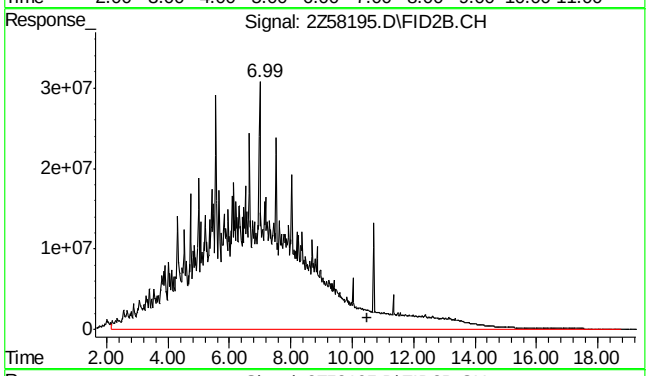
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





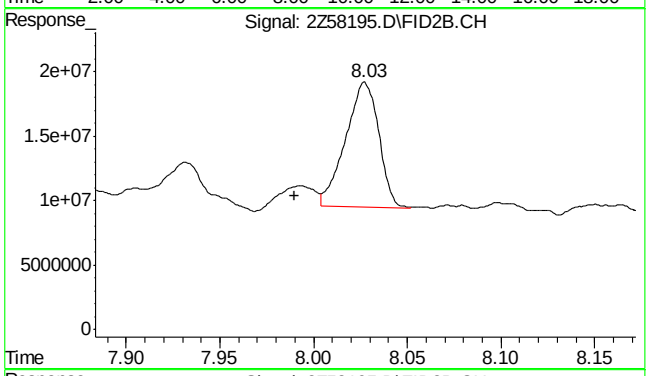
#1 TPH-DRO

R.T.: 6.900 min
Delta R.T.: 0.000 min
Response: 38919699578
Conc: 27238.68 PPM m



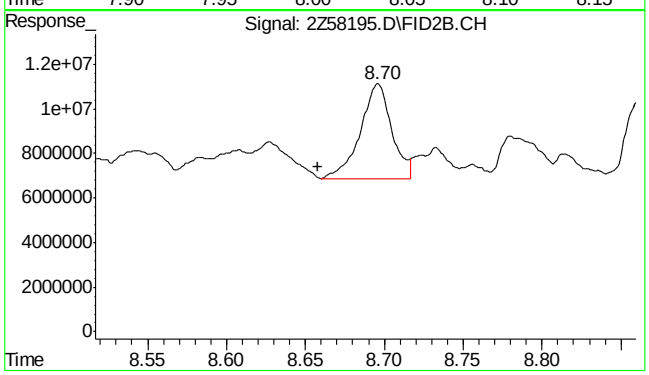
#2 TPH-DRO (C10-C44)

R.T.: 10.500 min
Delta R.T.: 0.000 min
Response: 41840846482
Conc: 29283.10 PPM m



#9 o-Terphenyl

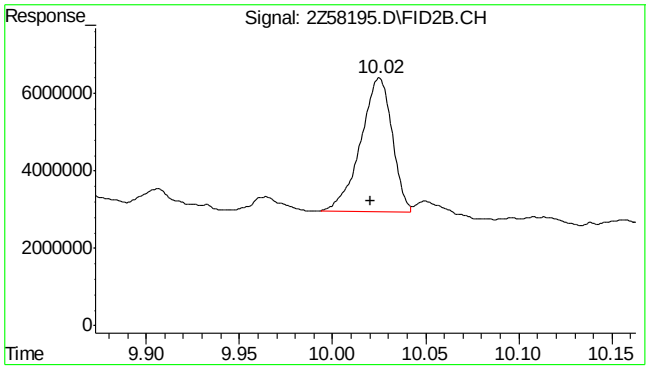
R.T.: 8.027 min
Delta R.T.: 0.037 min
Response: 119327680
Conc: 62.68 PPM m



#10 5a-Androstane

R.T.: 8.696 min
Delta R.T.: 0.037 min
Response: 58900501
Conc: 32.83 PPM m

SGS ACCUTEST JC29144



#11 Tetracosane-d50

R.T.: 10.025 min
Delta R.T.: 0.005 min
Response: 40462384
Conc: 26.64 PPM m

11.1.10

11

SGS ACCUTEST JC29144

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/13/16 10:43

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2191\
Data File : 2Z58196.D
Signal(s) : FID2B.CH
Acq On : 11 Oct 2016 2:56 am
Operator : thomasl
Sample : jc29144-10
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 79 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 13:03:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	7.99	87258086	45.837	PPM	m
Spiked Amount 50.000		Recovery =	91.67%		
10) S 5a-Androstane	8.61f	60953927	33.973	PPM	m
Spiked Amount 50.000		Recovery =	67.95%		
11) S Tetracosane-d50	10.08f	55964497	36.840	PPM	m
Spiked Amount 50.000		Recovery =	73.68%		
Target Compounds					
1) H TPH-DRO	6.90	3.0599e+011	214152.808	PPM	
2) H TPH-DRO (C10-C44)	10.50	3.13195e+011	219195.357	PPM	
4) H TPH-ORO (>C28-C40)	13.60	3401690843	2380.737	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

11.1.11

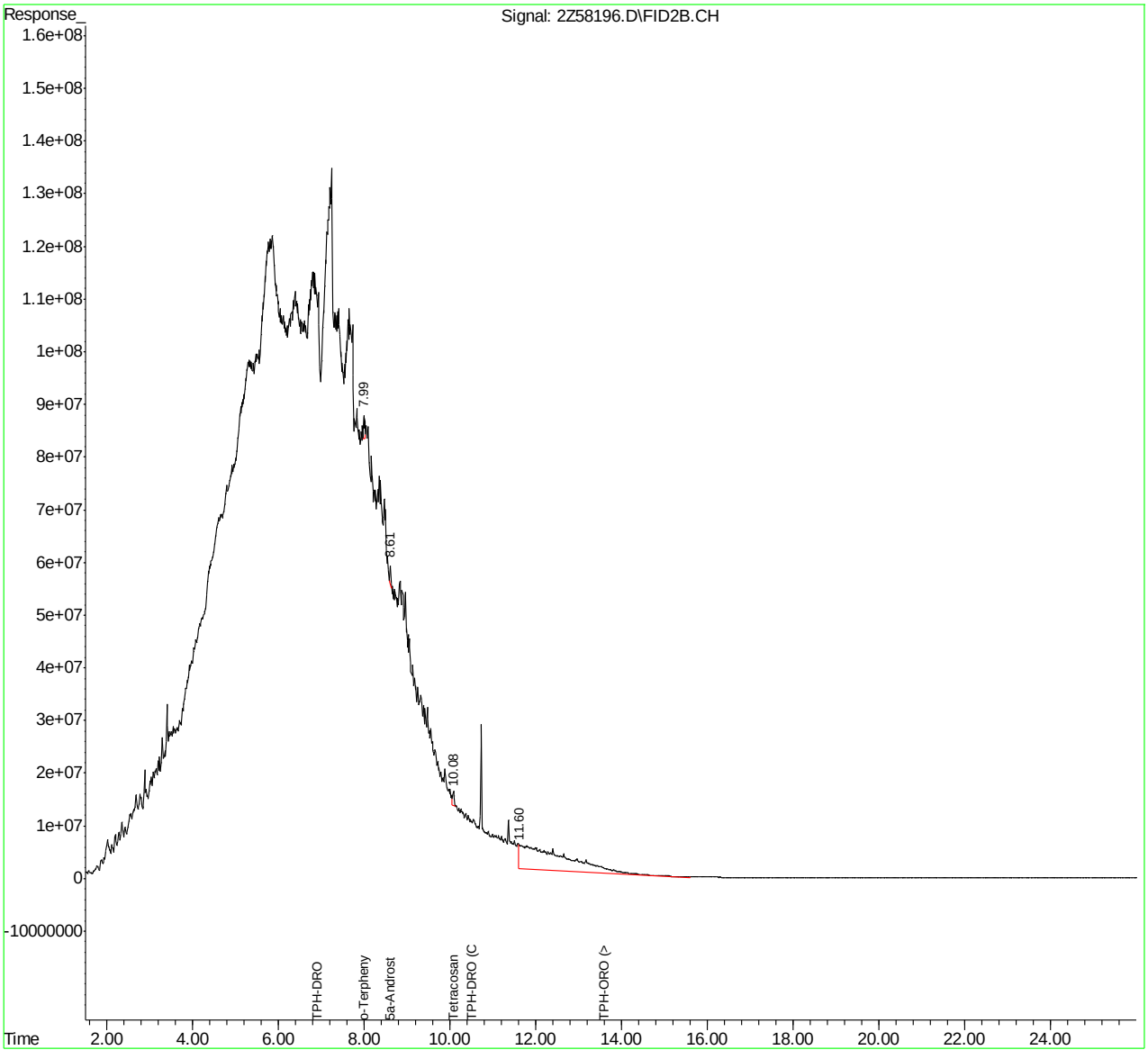
11

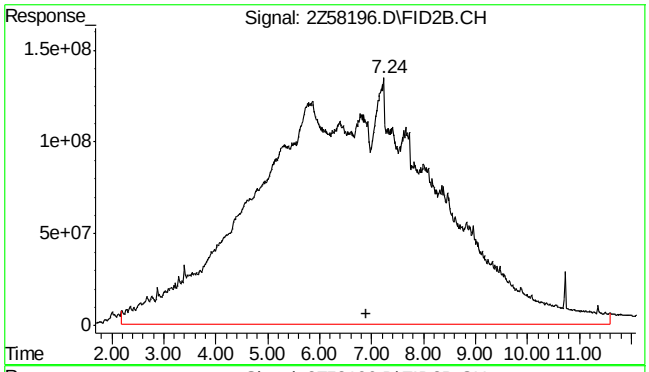
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2191\
Data File : 2Z58196.D
Signal(s) : FID2B.CH
Acq On : 11 Oct 2016 2:56 am
Operator : thomasl
Sample : jc29144-10
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 79 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 13:03:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

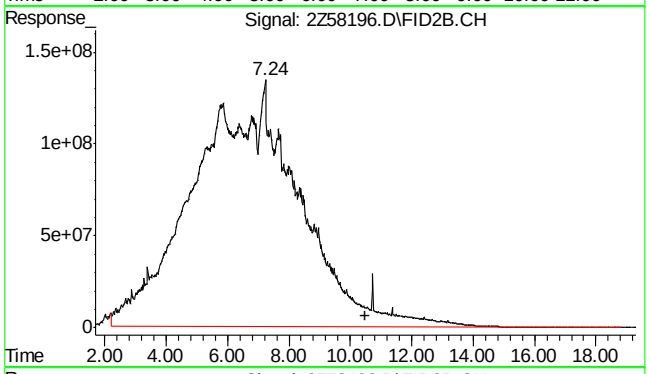
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





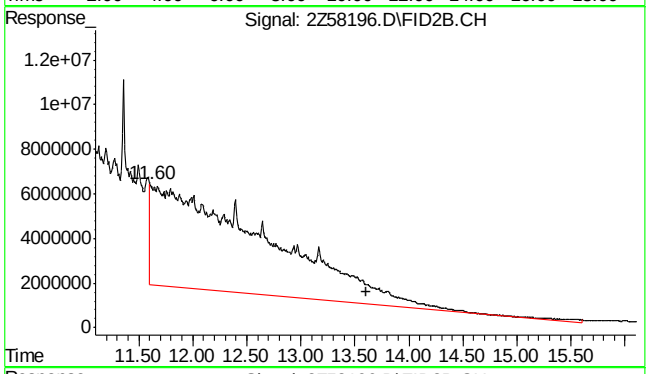
#1 TPH-DRO

R.T.: 6.900 min
Delta R.T.: 0.000 min
Response: 3.0599e+011
Conc: 214152.81 PPM m



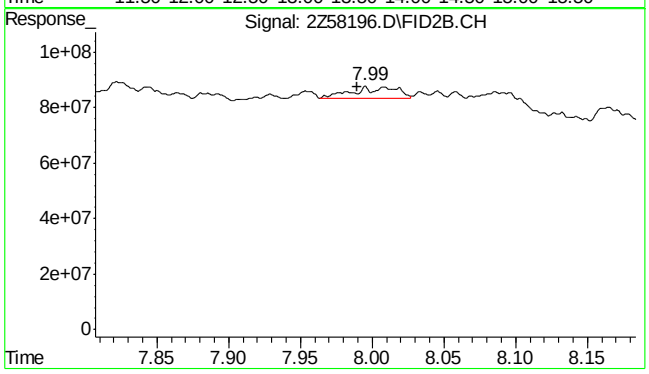
#2 TPH-DRO (C10-C44)

R.T.: 10.500 min
Delta R.T.: 0.000 min
Response: 3.13195e+011
Conc: 219195.36 PPM m



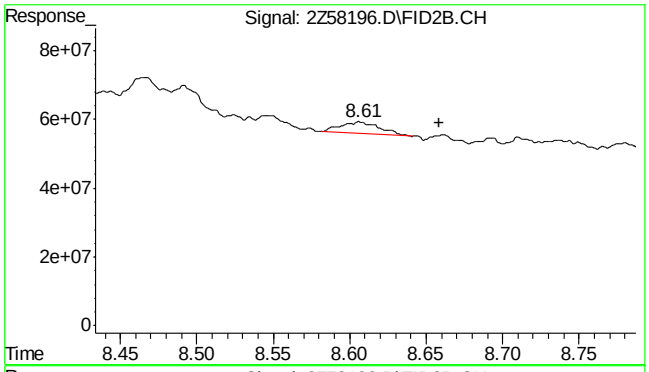
#4 TPH-ORO (>C28-C40)

R.T.: 13.600 min
Delta R.T.: 0.000 min
Response: 3401690843
Conc: 2380.74 PPM m



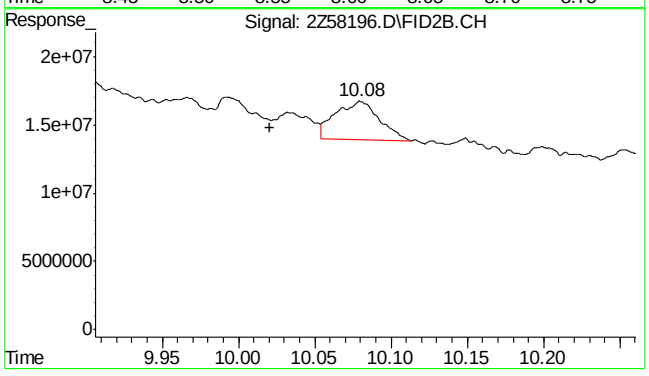
#9 o-Terphenyl

R.T.: 7.995 min
Delta R.T.: 0.005 min
Response: 87258086
Conc: 45.84 PPM m



#10 5a-Androstane

R.T.: 8.606 min
Delta R.T.: -0.052 min
Response: 60953927
Conc: 33.97 PPM m



#11 Tetracosane-d50

R.T.: 10.079 min
Delta R.T.: 0.059 min
Response: 55964497
Conc: 36.84 PPM m

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/13/16 10:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2192\
Data File : 2Z58204.D
Signal(s) : FID2B.CH
Acq On : 11 Oct 2016 11:05 am
Operator : thomasl
Sample : jc29144-3
Misc : op97612,g2z2192,1000,,,1,20
ALS Vial : 82 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 15:10:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	7.96f	4057018	2.131	PPM	m
Spiked Amount 50.000		Recovery =	4.26%		
10) S 5a-Androstane	8.70f	3811607	2.124	PPM	m
Spiked Amount 50.000		Recovery =	4.25%		
11) S Tetracosane-d50	10.01	3567484	2.348	PPM	
Spiked Amount 50.000		Recovery =	4.70%		
Target Compounds					
1) H TPH-DRO	6.90	14769281390	10336.557	PPM	
2) H TPH-DRO (C10-C44)	10.50	15336040025	10733.214	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

11.1.12 11

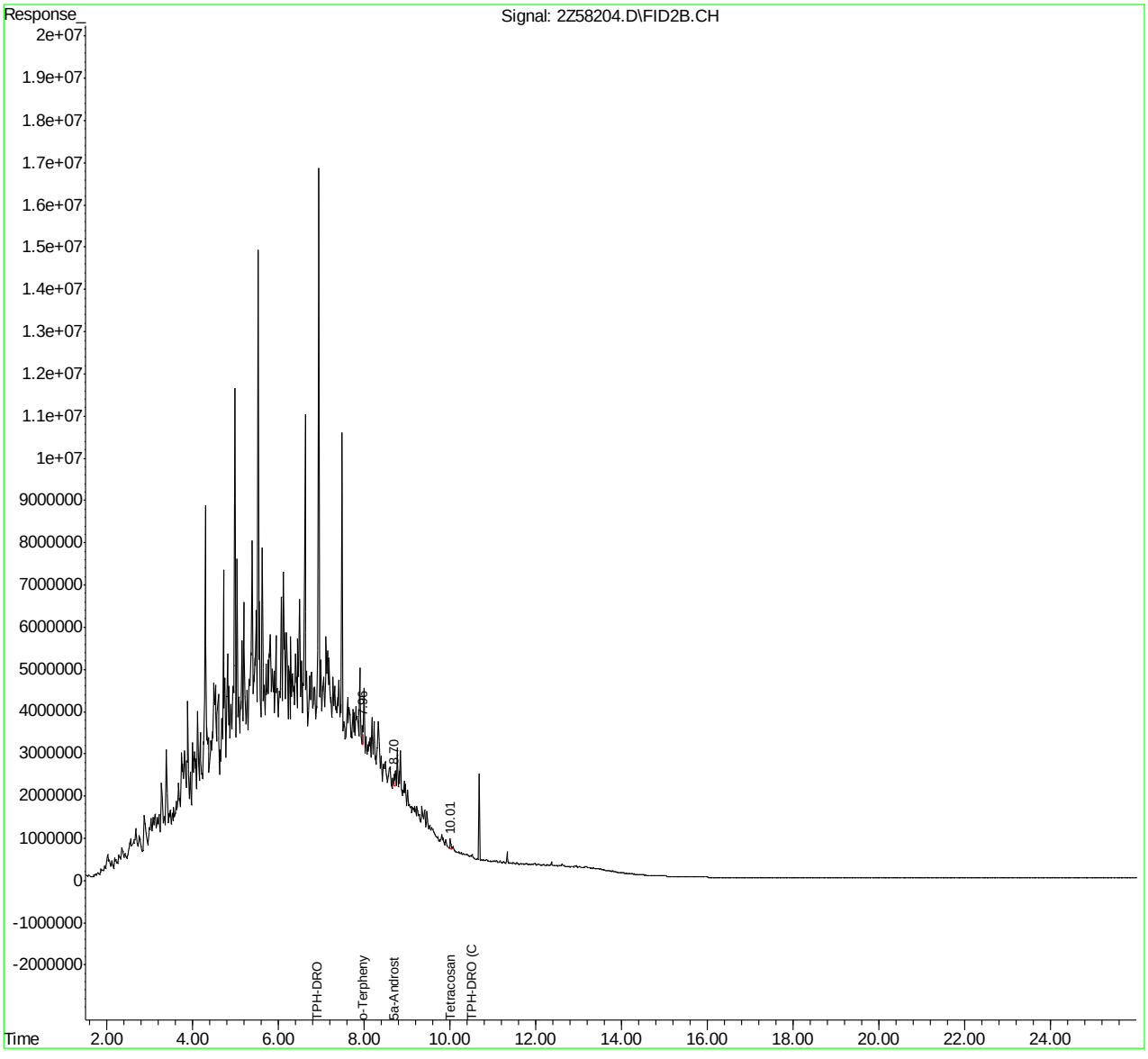
SGS ACCUTEST JC29144

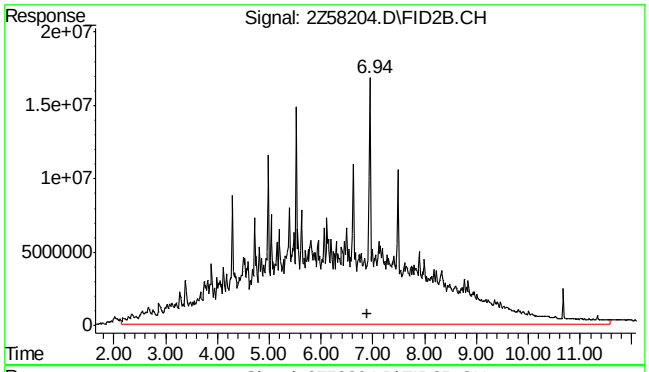
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2192\
Data File : 2Z58204.D
Signal(s) : FID2B.CH
Acq On : 11 Oct 2016 11:05 am
Operator : thomasl
Sample : jc29144-3
Misc : op97612,g2z2192,1000,,,1,20
ALS Vial : 82 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 11 15:10:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

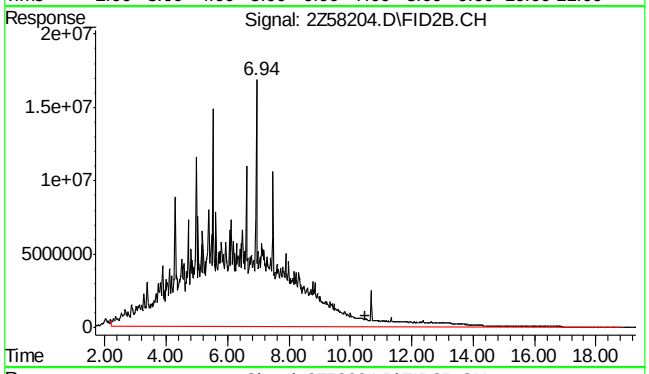
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





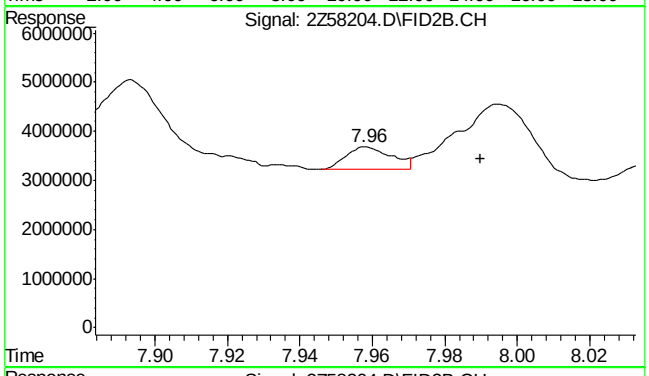
#1 TPH-DRO

R.T.: 6.900 min
Delta R.T.: 0.000 min
Response: 14769281390
Conc: 10336.56 PPM m



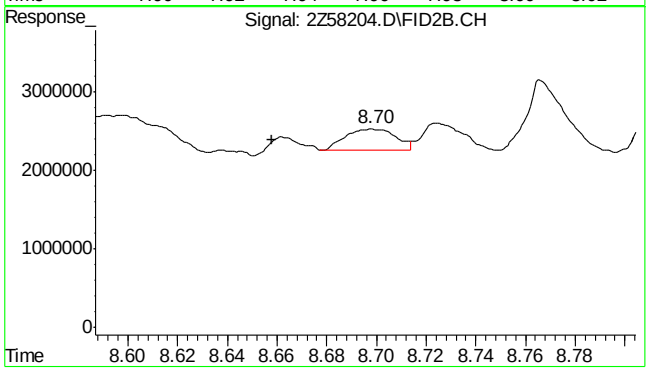
#2 TPH-DRO (C10-C44)

R.T.: 10.500 min
Delta R.T.: 0.000 min
Response: 15336040025
Conc: 10733.21 PPM m



#9 o-Terphenyl

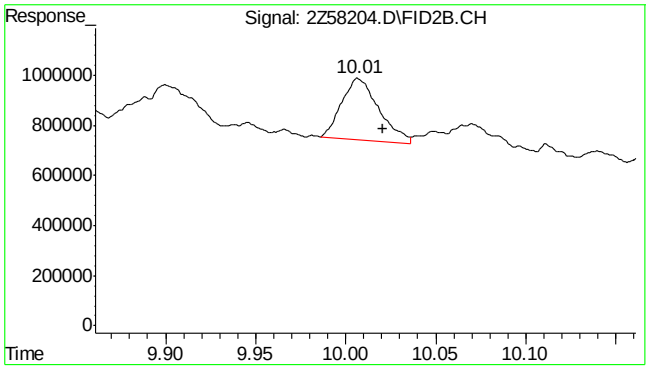
R.T.: 7.958 min
Delta R.T.: -0.032 min
Response: 4057018
Conc: 2.13 PPM m



#10 5a-Androstane

R.T.: 8.698 min
Delta R.T.: 0.039 min
Response: 3811607
Conc: 2.12 PPM m

11.1.12 11



#11 Tetracosane-d50

R.T.: 10.007 min
Delta R.T.: -0.014 min
Response: 3567484
Conc: 2.35 PPM

11.1.12

11

SGS ACCUTEST JC29144

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y3091\
Data File : 2Y80265.D
Signal(s) : FID1A.CH
Acq On : 13 Oct 2016 4:40 pm
Operator : krimeshp
Sample : op97695-mb1
Misc : op97695,g2y3091,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 14 08:48:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y3089.M
Quant Title :
QLast Update : Thu Oct 13 16:51:45 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S o-Terphenyl	8.28	82394012	35.036 PPM
Spiked Amount 50.000		Recovery =	70.07%
10) S 5a-Androstane	8.94	48536251	22.426 PPM
Spiked Amount 50.000		Recovery =	44.85%
11) S Tetracosane-d50	10.28	46945855	27.699 PPM
Spiked Amount 50.000		Recovery =	55.40%
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

11.2.1

11

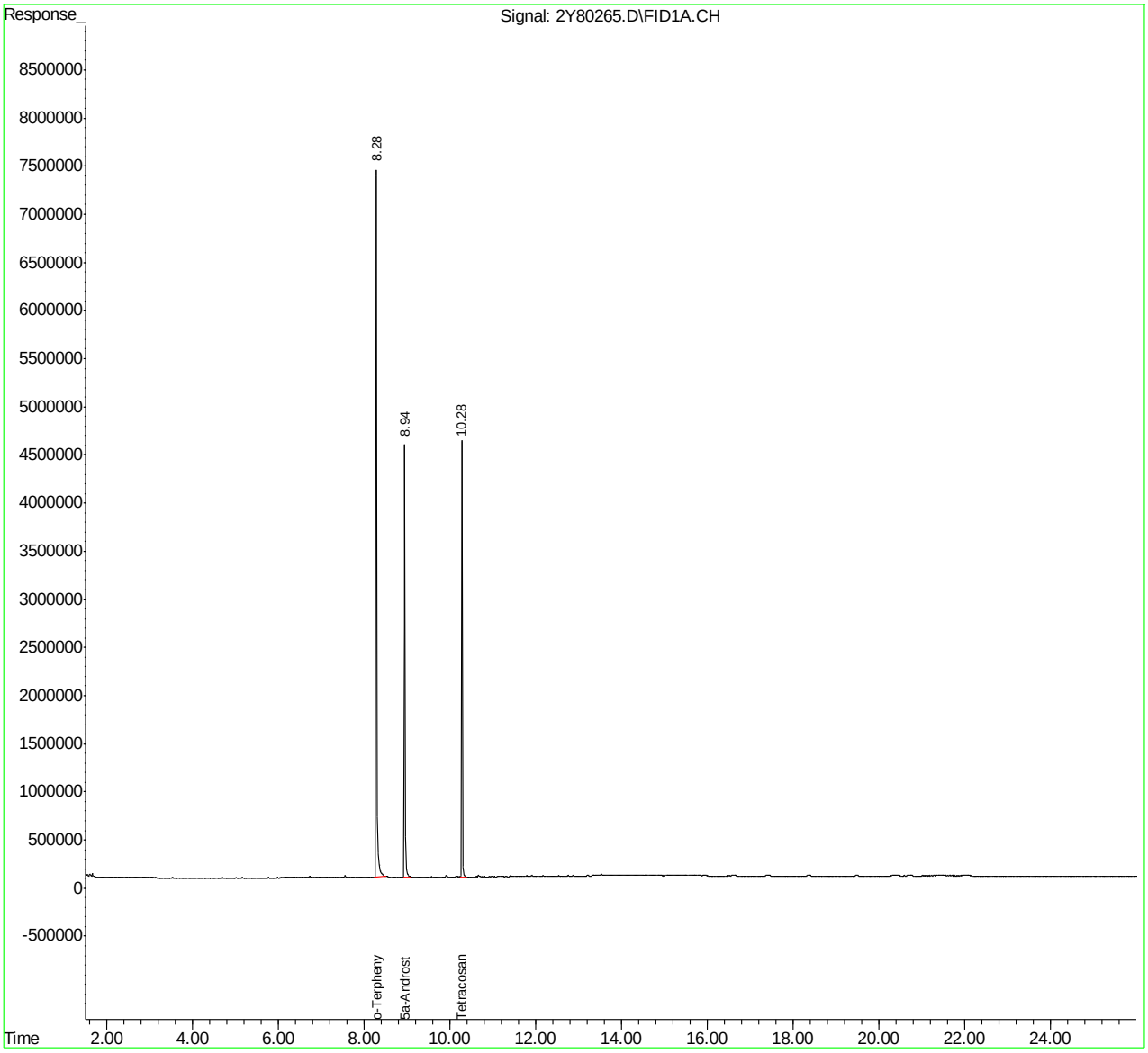
SGS ACCUTEST JC29144

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y3091\
Data File : 2Y80265.D
Signal(s) : FID1A.CH
Acq On : 13 Oct 2016 4:40 pm
Operator : krimeshp
Sample : op97695-mb1
Misc : op97695,g2y3091,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

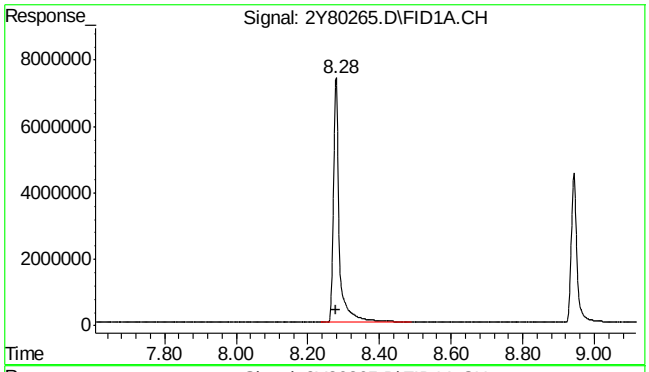
Integration File: autoint1.e
Quant Time: Oct 14 08:48:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y3089.M
Quant Title :
QLast Update : Thu Oct 13 16:51:45 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um



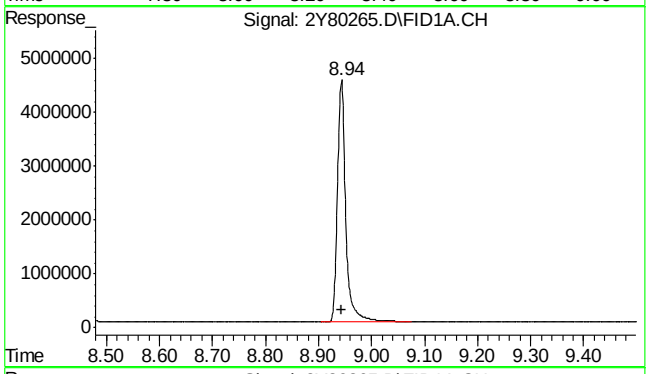
DRO2Y3089.M Fri Oct 14 08:48:10 2016 RPT1

SGS ACCUTEST JC29144



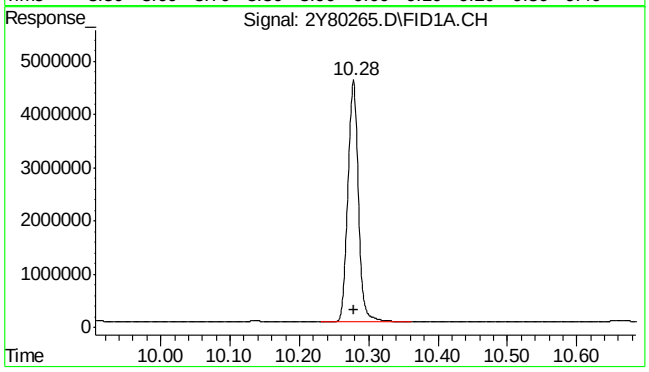
#9 o-Terphenyl

R.T.: 8.279 min
Delta R.T.: 0.001 min
Response: 82394012
Conc: 35.04 PPM



#10 5a-Androstane

R.T.: 8.944 min
Delta R.T.: 0.000 min
Response: 48536251
Conc: 22.43 PPM



#11 Tetracosane-d50

R.T.: 10.278 min
Delta R.T.: 0.000 min
Response: 46945855
Conc: 27.70 PPM

SGS ACCUTEST JC29144

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58181.D
Signal(s) : FID2B.CH
Acq On : 10 Oct 2016 6:41 pm
Operator : thomasl
Sample : op97612-mb1
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 66 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 20 10:06:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S o-Terphenyl	7.98	69261861	36.383 PPM
Spiked Amount 50.000		Recovery =	72.77%
10) S 5a-Androstane	8.65	47798155	26.641 PPM
Spiked Amount 50.000		Recovery =	53.28%
11) S Tetracosane-d50	10.01	48327753	31.813 PPM
Spiked Amount 50.000		Recovery =	63.63%
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

11.2.2

11

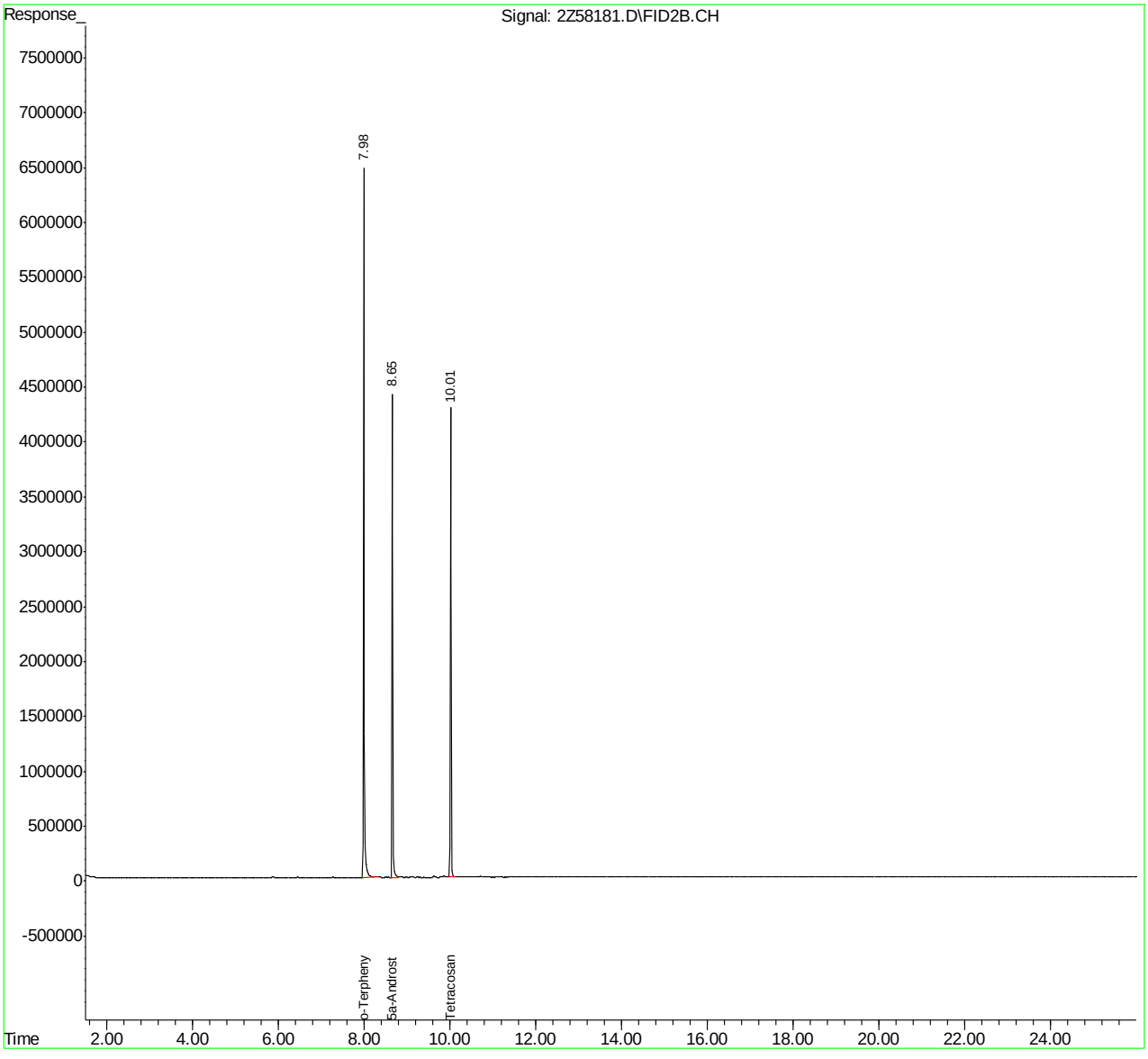
SGS ACCUTEST JC29144

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z2191\
Data File : 2Z58181.D
Signal(s) : FID2B.CH
Acq On : 10 Oct 2016 6:41 pm
Operator : thomasl
Sample : op97612-mb1
Misc : op97612,g2z2191,1000,,,1,1
ALS Vial : 66 Sample Multiplier: 1

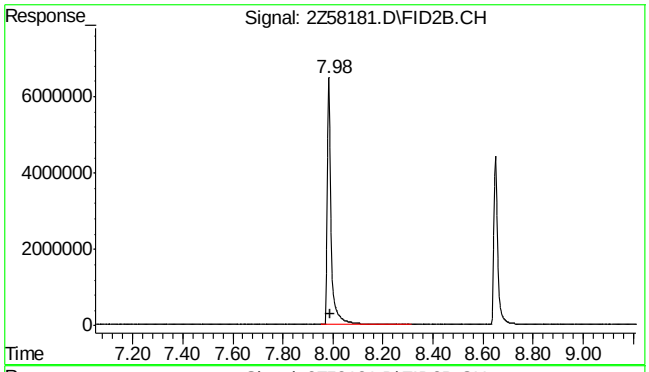
Integration File: autoint1.e
Quant Time: Oct 20 10:06:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2189.M
Quant Title :
QLast Update : Tue Oct 11 10:16:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um



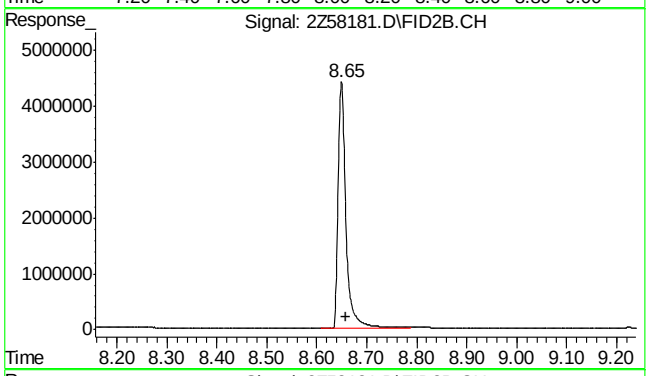
DRO2Z2189.M Thu Oct 20 10:06:15 2016 RPT1

SGS ACCUTEST JC29144



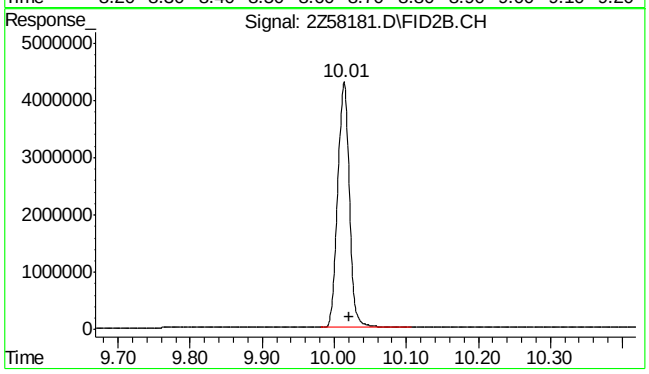
#9 o-Terphenyl

R.T.: 7.984 min
Delta R.T.: -0.006 min
Response: 69261861
Conc: 36.38 PPM



#10 5a-Androstane

R.T.: 8.650 min
Delta R.T.: -0.008 min
Response: 47798155
Conc: 26.64 PPM



#11 Tetracosane-d50

R.T.: 10.014 min
Delta R.T.: -0.007 min
Response: 48327753
Conc: 31.81 PPM

SGS ACCUTEST JC29144