

## **Nowell, Keith, Env. Health**

---

**From:** James Gribi <jgribi@gribiassociates.com>  
**Sent:** Tuesday, December 13, 2016 5:44 PM  
**To:** Nowell, Keith, Env. Health  
**Subject:** Atthowe Site, 3924 Market Street  
**Attachments:** Atthowe Market St Added Info Letter DRAFT 12-12-2016 v1.pdf

Hi Keith,

Attached please find a draft letter for the Atthowe site at 3924 Market Street. I am submitting it as a draft because I'm not exactly sure I have addressed all of your concerns (I would rather submit one final, if possible). Please let me know if you have questions or comments.

Thanks  
Jim

**James E. Gribi, PG**  
Principal / Senior Geologist  
Gribi Associates  
1090 Adams Street, Suite K  
Benicia, CA 94510

Phone: 707-748-7743  
Cell: 707-631-1505



December 12, 2016

Alameda County Department of  
Environmental Health  
1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor  
Alameda, CA 94502

Attention: Keith Nowell

Subject: Additional Information  
3924 Market Street, Oakland, California  
**ACEH RO# 0000490; Global ID: T0600101187**

Ladies and Gentlemen:

Gribi Associates is pleased to submit this letter on behalf of Mr. Scott Atthowe for the underground storage tank (UST) site located at 3924 Market Street, Oakland, California (Site) (see Figure 1, Figure 2, and Figure 3). This letter provides additional information requested by Alameda County Environmental Health (ACEH) staff as needed to evaluate the site for regulatory closure

In a recent telephone conversation with Mr. Keith Nowell of ACEH, Mr. Nowell requested the following additional information and clarification: (1) Whether electromagnetic surveys of below ground utilities and features had included assessment for possible fuel underground storage tanks along 40<sup>th</sup> Street; and (2) Whether laboratory chromatograms for the grab groundwater samples for B-4 and B-10, which showed elevated concentrations of TPH-G, actually indicated gasoline-range hydrocarbons, as opposed to the pervasive TPH-D/MO present in soil and groundwater samples in the impacted area.

### **Electromagnetic Survey**

On February 23, 2012, Foresite Engineering Surveys (Foresite) conducted an electromagnetic survey to assess whether or not underground storage tanks (USTs) or other underground anomalies were present inside or outside the Site building. Areas surveyed included the Site yard area on the southwest side of the Site, the adjoining sidewalk areas along both Market Street and 40<sup>th</sup> Street, and accessible areas inside the Site building. In addition, on January 20, 2013, Foresite conducted a detailed electromagnetic survey of Market Street and the adjoining sidewalk areas to locate below ground utilities in these areas. Utilities and features identified

by Foresite were identified on subsequent site plans. During these electromagnetic surveys, Forsite identified no potential underground storage tanks (USTs) or other unusual subsurface anomalies, either inside the Site building or in the onsite and offsite outside areas along Market Street or 40<sup>th</sup> Street.

### Laboratory Chromatograms

Included in Attachment A are the TPH-G/BTEX and TPH-D/MO laboratory chromatograms for grab groundwater samples from B-3, B-4, B-10, and B-11 (sample IDs: B-3-W, B-4-W, B-10-GW, and B-11-GW). These chromatograms are discussed below:

- **B-3-W; TPH-G=84 ug/L; TPH-D=2,400 ug/L, TPH-MO=3,100 ug/L:** The TPH-G/BTEX chromatogram shows low-level heavy end hydrocarbons. The TPH-D/MO chromatogram shows a single product with a broad carbon chain range (C13 to C40) in the diesel to motor oil range.
- **B-4-W; TPH-G=9,900 ug/L; TPH-D=4,700 ug/L, TPH-MO=5,100 ug/L:** The TPH-G/BTEX chromatogram shows moderate-level heavy end hydrocarbons (heavier than BTEX constituents). The TPH-D/MO chromatogram shows a single product with a broad carbon chain range (C13 to C40) in the diesel to motor oil range.
- **B-10-GW; TPH-G=69,000 ug/L, TPH-D=320,000 ug/L, TPH-MO=400,000 ug/L:** The TPH-G/VOC chromatogram shows detections in the medium to heavy carbon chain range. The raw data included with the TPH-G/VOC chromatogram indicates slight detections of miscellaneous VOCs (1,1,2-TCA, Isopropylbenzene, 1,1,2,2-PCA), but no significant BTEX or HVOC detections. The TPH-Carbon Chain chromatogram shows a single product with a broad carbon chain range in the diesel to motor oil range, with no significant gasoline-range hydrocarbons.
- **B-11-GW; TPH-G=390 ug/L, TPH-D=61,000 ug/L, TPH-MO=76,000 ug/L:** The TPH-G/BTEX chromatogram shows detections primarily in the heavy carbon chain range. The raw data included with the TPH-G/VOC chromatogram indicates very slight detections of miscellaneous heavy VOCs, but no BTEX or HVOC detections. The TPH-Carbon Chain chromatogram shows a single product with a broad carbon chain range in the diesel to motor oil range, with no significant gasoline-range hydrocarbons.

In summary, none of the chromatograms show two separate product peaks. If two different products (i.e. a gasoline- and a diesel/motor oil-range product), then we would expect to see two separate peaks on either or both the TPH-G or TPH-D/MO chromatograms (more likely on the TPH-D/MO and/or the TPH-Carbon Chain chromatograms than on the TPH-G

Alameda County Department of  
Environmental Health  
December 12, 2016  
Page 3

chromatograms). The fact that there are no two-peak chromatograms clearly indicates a single product in the TPH-D/MO range for all detections in the four samples.

We appreciate this opportunity to provide this letter for your review. Please contact us if there are questions or if additional information is required.

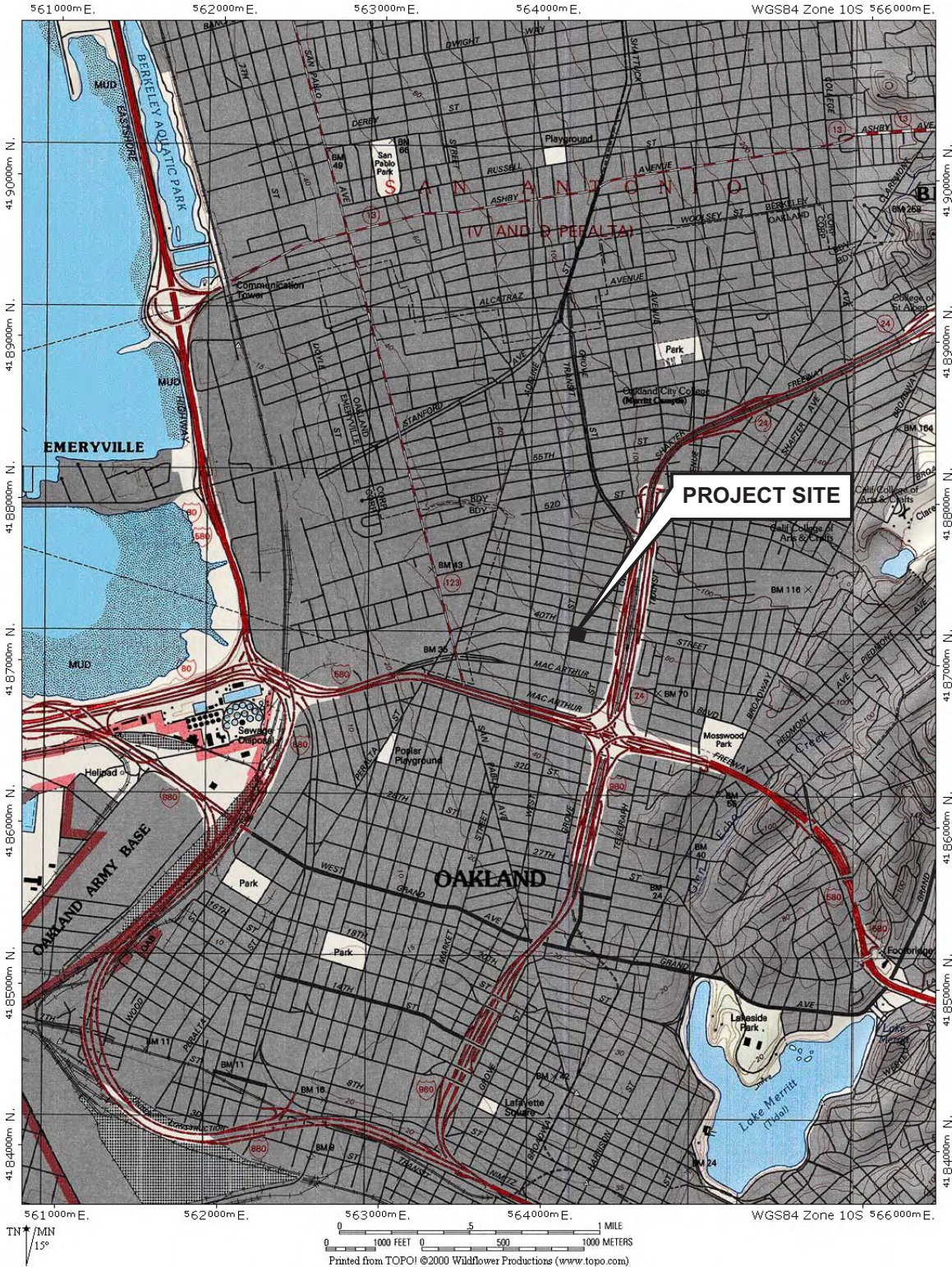
Very truly yours,

James E. Gribi  
Professional Geologist  
California No. 5843

Enclosure

C      Scott Atthowe, Atthowe Fine Arts

## FIGURES



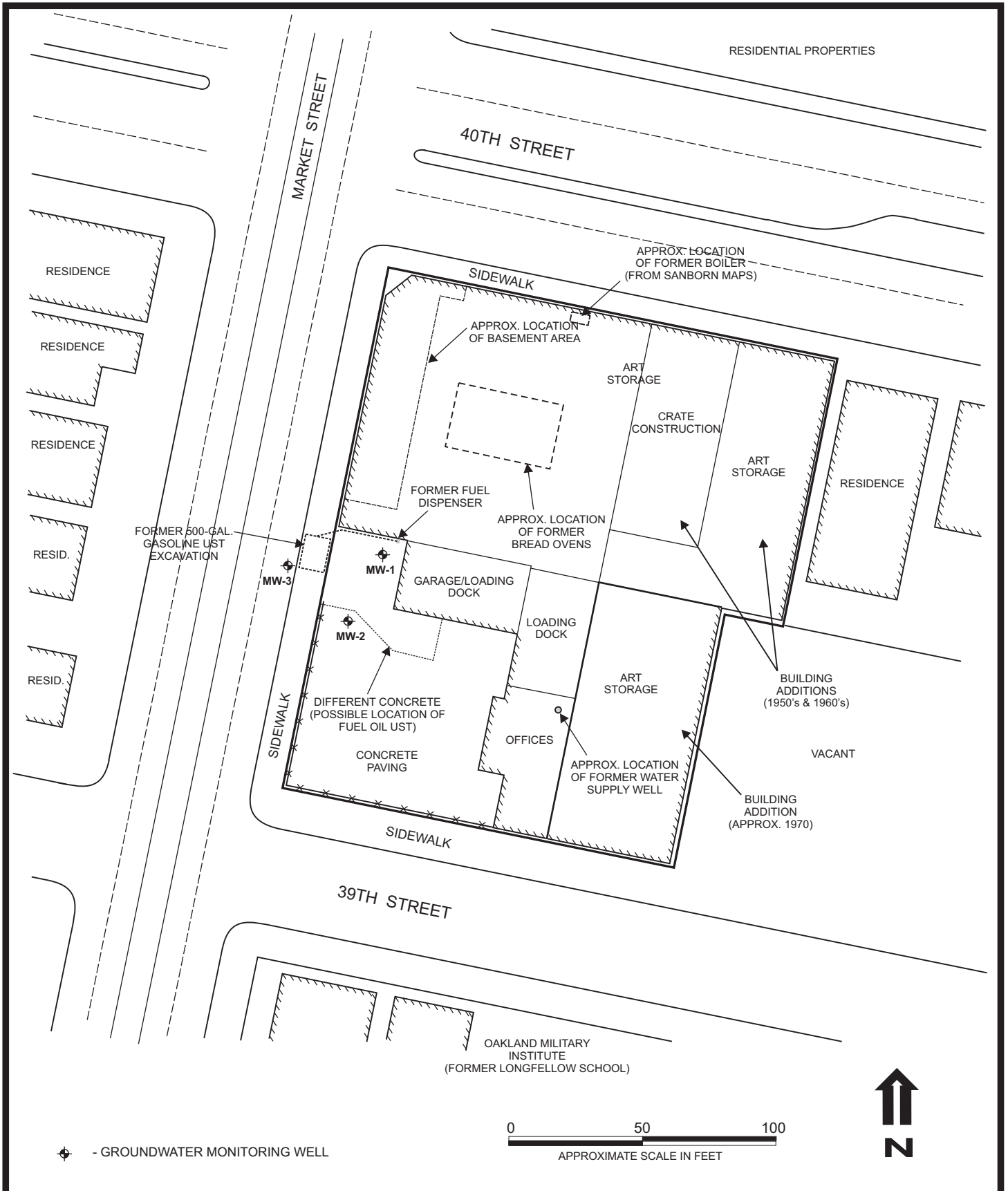
DESIGNED BY:	CHECKED BY: JEG
DRAWN BY: JEG	SCALE:
PROJECT NO:	

**SITE VICINITY MAP**

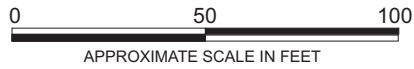
3924 MARKET STREET  
 OAKLAND, CALIFORNIA

DATE: 12/12/2016	FIGURE: 1
------------------	-----------

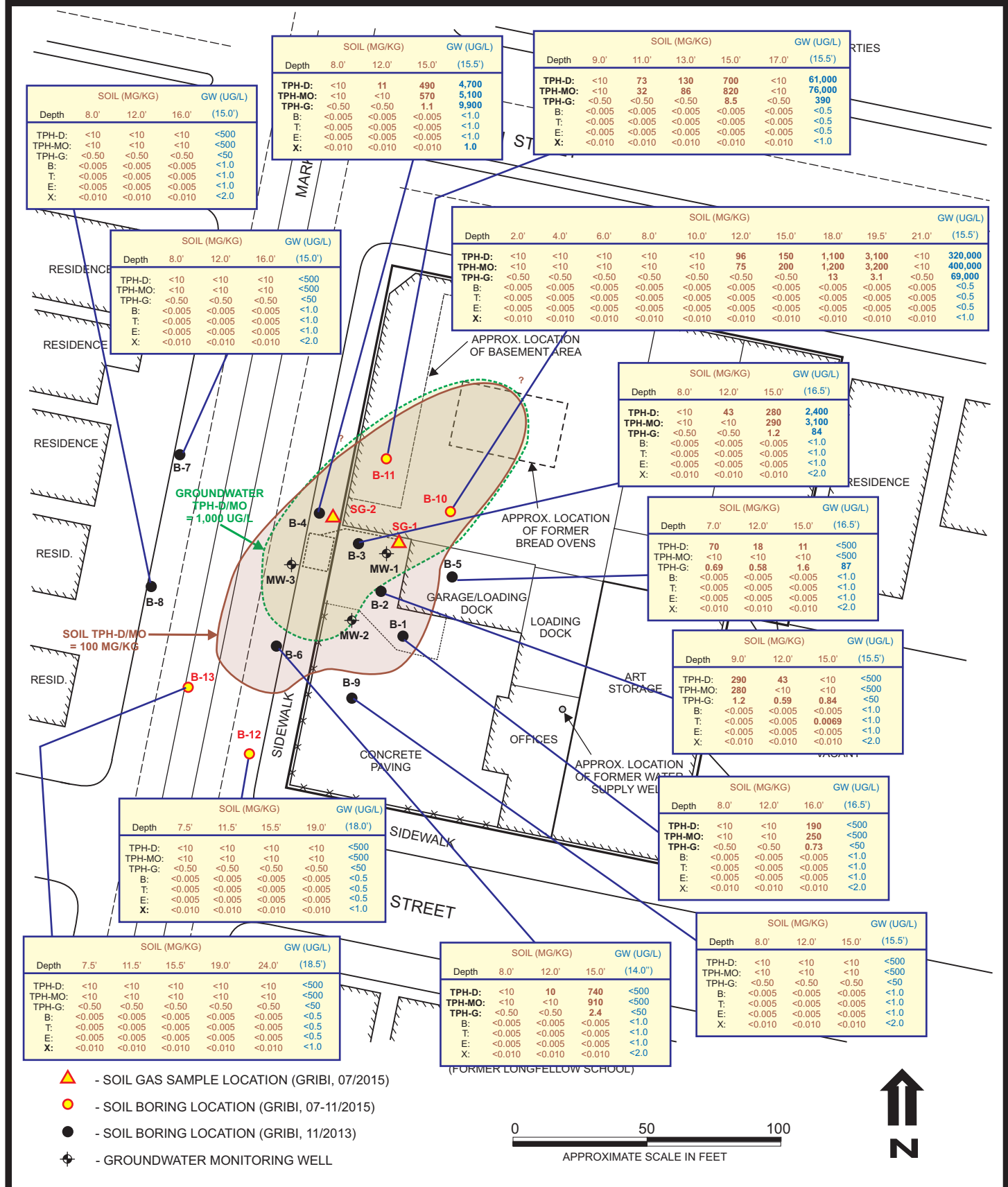




- GROUNDWATER MONITORING WELL



DESIGNED BY:	CHECKED BY: JEG	<b>SITE PLAN</b>	DATE: 12/12/2016	FIGURE: 2
DRAWN BY: JEG	SCALE:			
		3924 MARKET STREET OAKLAND, CALIFORNIA		



- ▲ - SOIL GAS SAMPLE LOCATION (GRIBI, 07/2015)
- - SOIL BORING LOCATION (GRIBI, 07-11/2015)
- - SOIL BORING LOCATION (GRIBI, 11/2013)
- ⊕ - GROUNDWATER MONITORING WELL

0 50 100  
APPROXIMATE SCALE IN FEET



DESIGNED BY:  
CHECKED BY: JEG  
DRAWN BY: JEG  
SCALE:

**SOIL & GRAB GROUNDWATER  
HYDROCARBON RESULTS**

3924 MARKET STREET  
OAKLAND, CALIFORNIA

DATE: 12/12/2016  
FIGURE: 3





**ATTACHMENT A**  
**LABORATORY CHROMATOGRAMS**

Quantitation Report

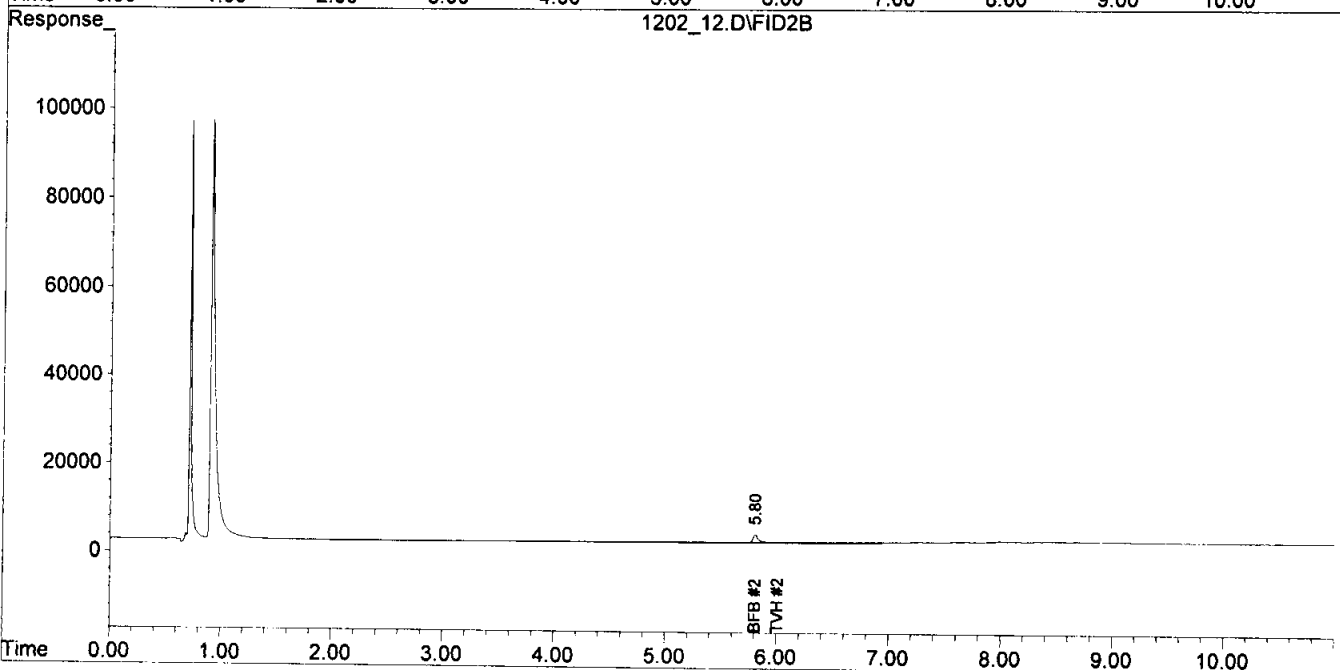
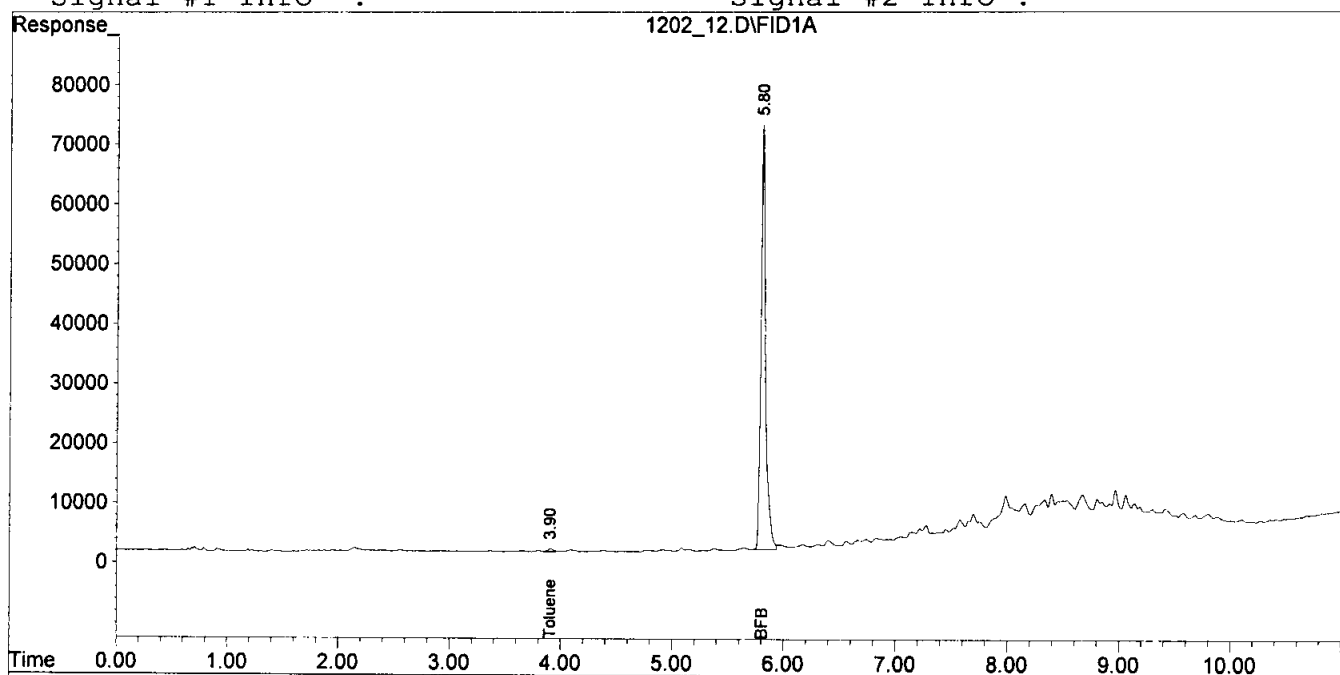
Data File : I:\BTEX-GRO\DATA\120213\1202\_12.D\FID1A.CH Vial: 8  
Acq On : 2 Dec 2013 7:47 pm Operator: jjs  
Sample : T132539-12 Inst : GC #2 BTE  
Misc : Multiplr: 1.00  
IntFile : rteint.p

Data File : I:\BTEX-GRO\DATA\120213\1202\_12.D\FID2B.CH Vial: 8  
Acq On : 2 Dec 113 7:47 pm Operator: jjs  
Sample : T132539-12 Inst : GC #2 BTE  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Dec 5 11:22 19113 Quant Results File: 110713.RES

Quant Method : I:\BTEX-GRO\METHODS\110713.M (RTE Integrator)  
Title :  
Last Update : Thu Nov 07 14:59:20 2013  
Response via : Multiple Level Calibration  
DataAcq Meth : 052312.M

TPH-G/BTEX CHROMATOGRAM

Volume Inj. : B-3-W (Groundwater, TPH-G=84 ug/L; TPH-D=2,400 ug/L, TPH-MO=3,100 ug/L)  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

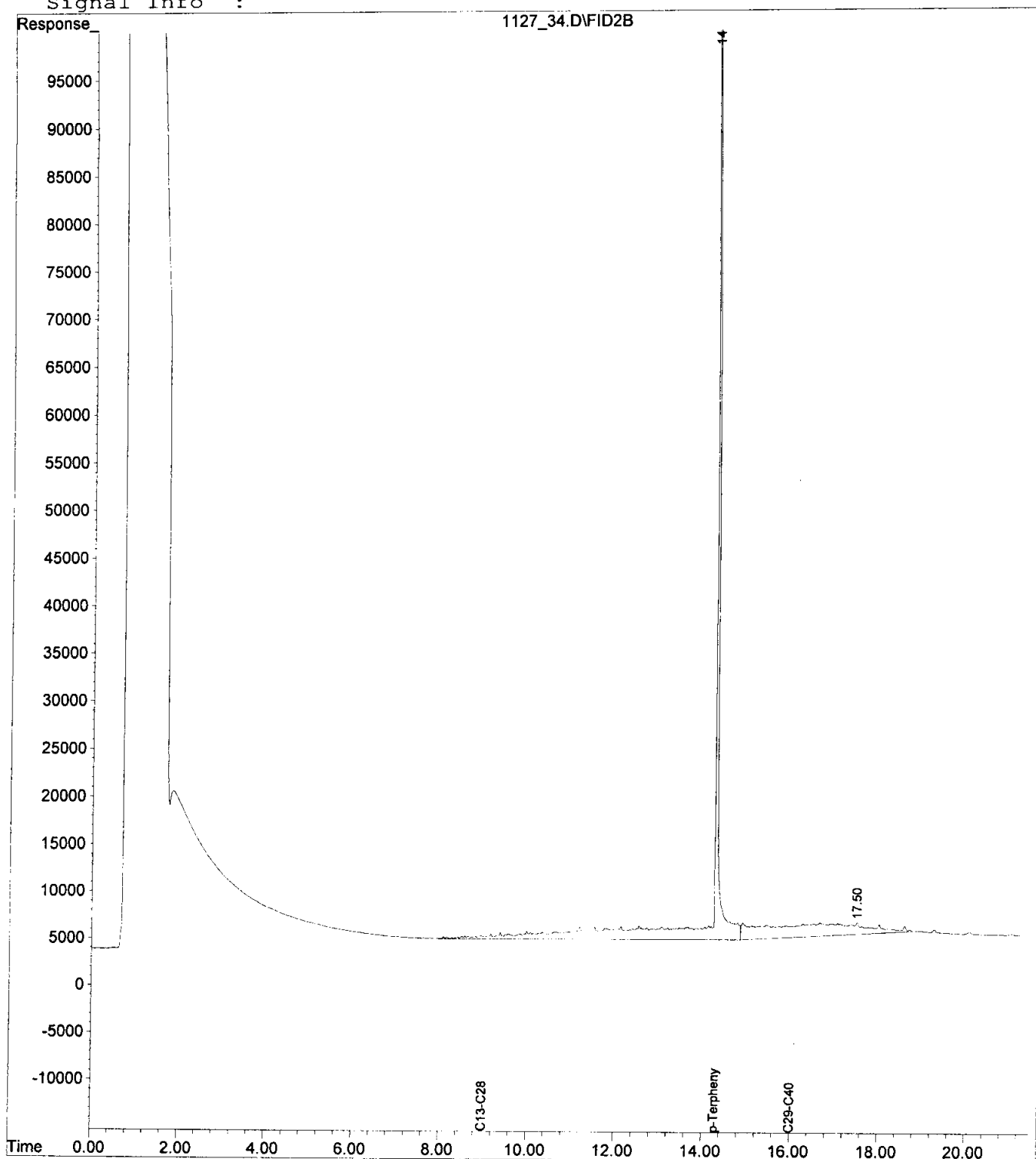


Quantitation Report

Data File : Q:\DRO-1\DATA\DATA20~1\112513\1127\_34.D Vial: 34  
Acq On : 28 Nov 20113 1:33 pm Operator: RL  
Sample : T132539-12 Inst : Diesel #1  
Misc : Multiplr: 1.00  
IntFile : EVENTS.E  
Quant Time: Dec 3 9:20 19113 Quant Results File: CC072313.RES

Quant Method : Q:\DRO-1\METHODS\CC072313.M (Chemstation Integrator)  
Title : EPH - Extended Run  
Last Update : Thu Jan 26 08:54:52 2012  
Response via : Multiple Level Calibration  
DataAcq Meth : CC083110.M

Volume Inj. : TPH-D/MO CHROMATOGRAM  
Signal Phase : B-3-W (Groundwater, TPH-G=84 ug/L; TPH-D=2,400 ug/L, TPH-MO=3,100 ug/L)  
Signal Info :



Quantitation Report

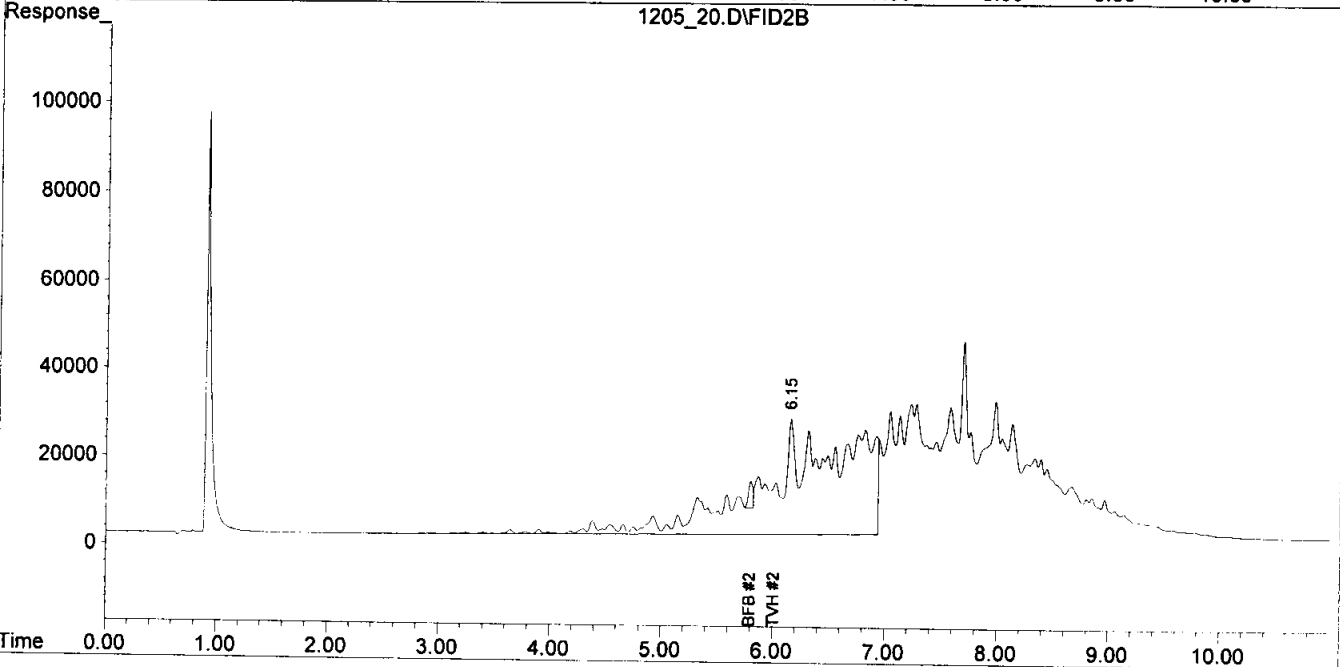
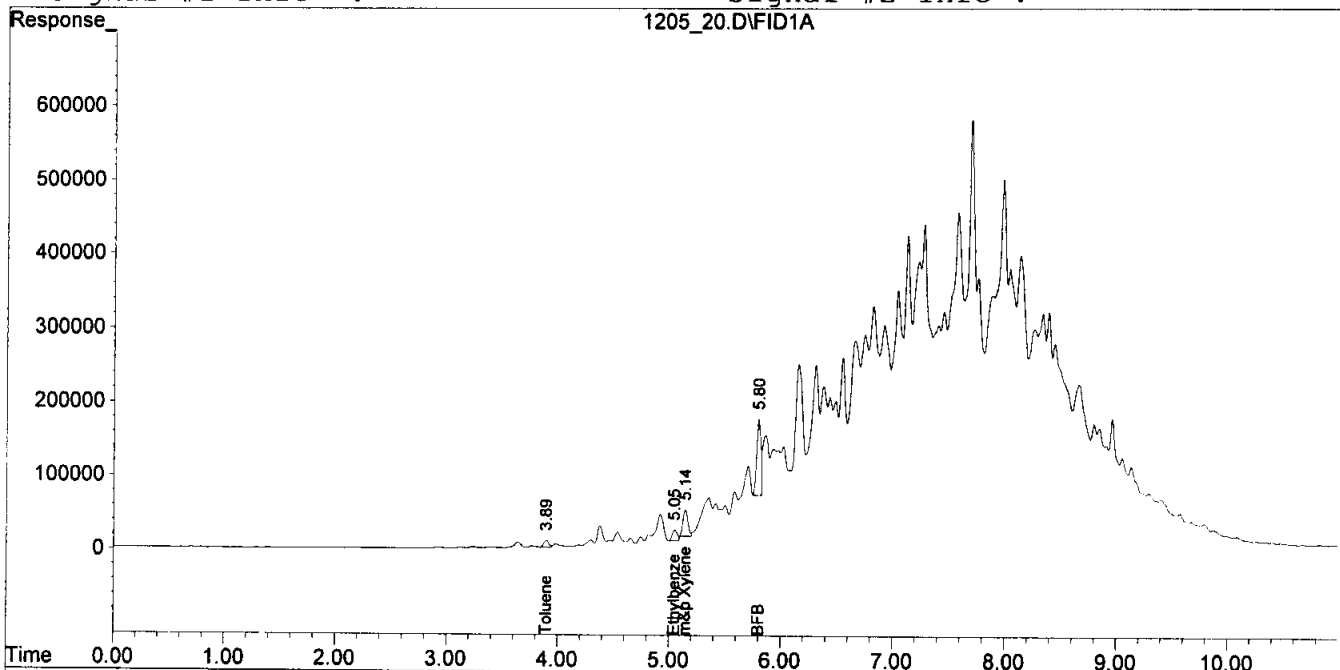
Data File : I:\BTEX-GRO\DATA\120513\1205\_20.D\FID1A.CH Vial: 20  
Acq On : 5 Dec 2013 3:20 pm Operator: jjs  
Sample : T132539-16 Inst : GC #2 BTE  
Misc : 1:1 Multiplr: 1.00  
IntFile : rteint.p

Data File : I:\BTEX-GRO\DATA\120513\1205\_20.D\FID2B.CH Vial: 20  
Acq On : 5 Dec 113 3:20 pm Operator: jjs  
Sample : T132539-16 Inst : GC #2 BTE  
Misc : 1:1 Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Dec 5 15:00 19113 Quant Results File: 110713.RES

Quant Method : I:\BTEX-GRO\METHODS\110713.M (RTE Integrator)  
Title :  
Last Update : Thu Nov 07 14:59:20 2013  
Response via : Multiple Level Calibration  
DataAcq Meth : 052312.M

TPH-G/BTEX CHROMATOGRAM

Volume Inj. : B-4-W (Groundwater, TPH-G=9,900 ug/L; TPH-D=4,700 ug/L, TPH-MO=5,100 ug/L)  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :



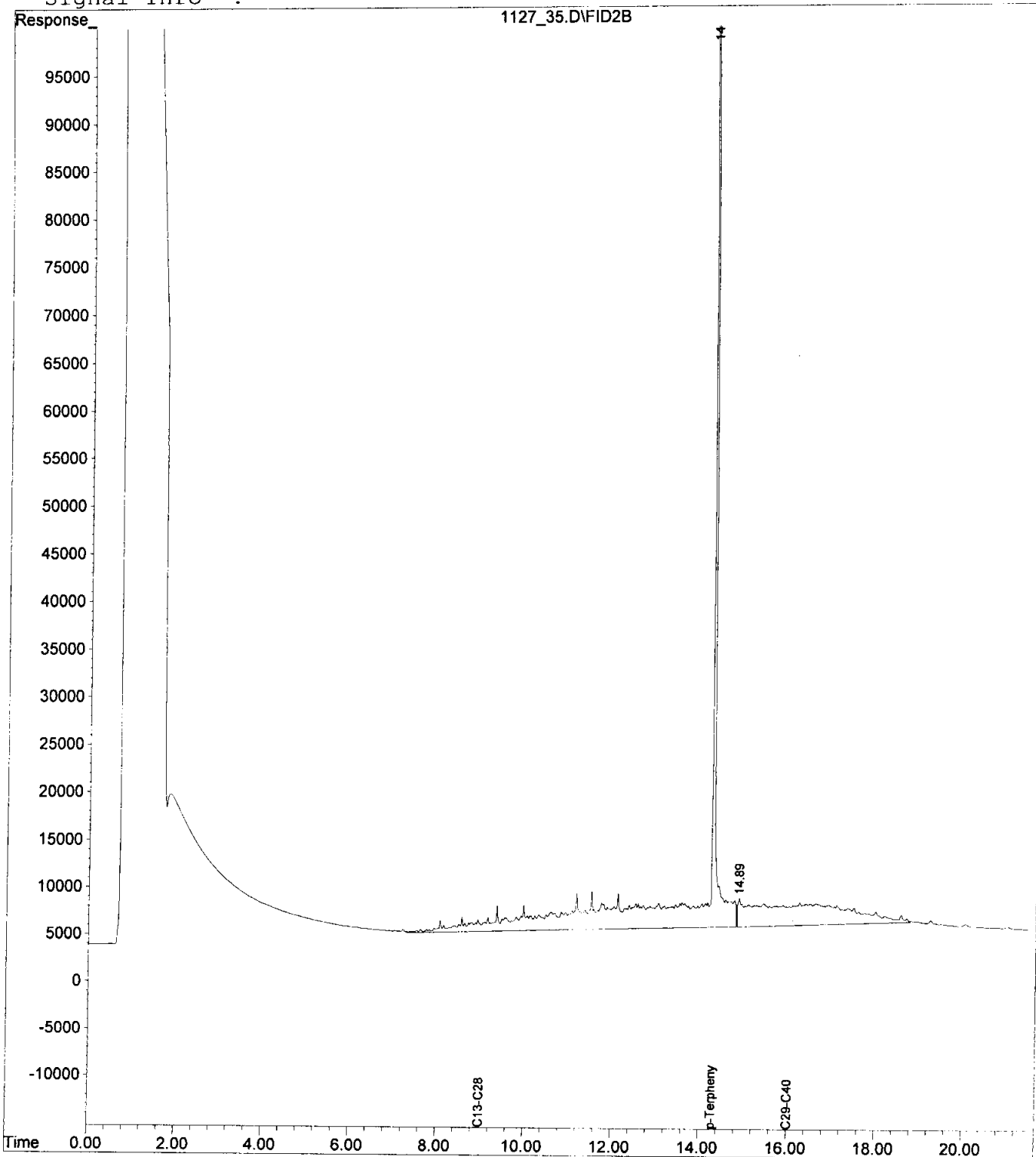
Quantitation Report

Data File : Q:\DRO-1\DATA\DATA20~1\112513\1127\_35.D Vial: 35  
Acq On : 28 Nov 2011 2:01 pm Operator: RL  
Sample : T132539-16 Inst : Diesel #1  
Misc : Multiplr: 1.00  
IntFile : EVENTS.E  
Quant Time: Dec 3 9:21 19113 Quant Results File: CC072313.RES

Quant Method : Q:\DRO-1\METHODS\CC072313.M (Chemstation Integrator)  
Title : EPH - Extended Run  
Last Update : Thu Jan 26 08:54:52 2012  
Response via : Multiple Level Calibration  
DataAcq Meth : CC083110.M

TPH-D/MO CHROMATOGRAM

Volume Inj. : B-4-W (Groundwater, TPH-G=9,900 ug/L; TPH-D=4,700 ug/L, TPH-MO=5,100 ug/L)  
Signal Phase :  
Signal Info :



Data File : I:\GCMS-1\DATA\072015\0720\_44.D  
 Acq On : 21 Jul 2015 3:14 pm  
 Sample : T151699-21

Vial: 24  
 Operator: ANDIE  
 Inst : GCMS # 1  
 Multipl: 1.00

MS  
 Qua **TPH-G/VOCs CHROMATOGRAM**  
**B-10-GW (Groundwater, TPH-G=69,000 ug/L, TPH-D=320,000 ug/L, TPH-MO=400,000 ug/L)**

Quant Method : I:\GCMS-1\METHODS\1\_071715.M (RTE Integrator)  
 Title : SW-846 Method 8260  
 Last Update : Wed Jun 17 10:56:32 2015  
 Response via : Initial Calibration  
 DataAcq Meth : 1\_022013

Sample contained a bi-layer, may have caused matrix interference w/ Surrs

**APPROVED**  
 By Andrea Martinez at 2:45 pm, Jul 21, 2015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Pentafluorobenzene	6.01	168	113096	8.00	ug/Kg	-0.01
25) 1,4-Difluorobenzene	7.13	114	146344	8.00	ug/Kg	0.00
40) Chlorobenzene-d5	11.49	82	42386	8.00	ug/Kg	0.00
65) 1,4-dichlorobenzene-d4	14.90	152	12648	8.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) Dibromofluoromethane	5.29	113	40349	7.51	ug/Kg	0.00
Spiked Amount	8.000	Range	86 - 118	Recovery	=	93.88%
36) Toluene-d8	9.57	98	105282	6.12	ug/Kg	-0.01
Spiked Amount	8.000	Range	86 - 115	Recovery	=	76.50%#
53) 4-Bromofluorobenzene	13.23	95	98043	25.59	ug/Kg	0.08
Spiked Amount	8.000	Range	86 - 115	Recovery	=	319.88%#

Target Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue
1) Gasoline	13.23	TIC	463431634m	<del>11204.92</del>	ug/L		Dilution
3) Dichlorodifluoromethane	0.00	85	0	N.D.			
4) Chloromethane	1.65	50	853	N.D.			
5) Vinyl chloride	0.00	62	0	N.D.			
6) Bromomethane	0.00	96	0	N.D.			
7) Chloroethane	0.00	64	0	N.D.	d		
8) Ethanol	0.00	45	0	N.D.			
9) Trichlorofluoromethane	0.00	101	0	N.D.			
10) 1,1-Dichloroethene	0.00	96	0	N.D.			
11) Methylene chloride	0.00	84	0	N.D.	d		
12) Freon 113	0.00	151	0	N.D.			
13) TBA	0.00	59	0	N.D.			
14) MTBE	0.00	73	0	N.D.			
15) trans-1,2-Dichloroethene	0.00	96	0	N.D.			
16) 1,1-Dichloroethane	0.00	63	0	N.D.			
17) Diisopropyl ether	0.00	45	0	N.D.			
18) ETBE	0.00	59	0	N.D.			
19) 2,2-Dichloropropane	0.00	77	0	N.D.			
20) cis-1,2-Dichloroethene	0.00	96	0	N.D.			
21) Bromochloromethane	0.00	128	0	N.D.			
22) Chloroform	0.00	83	0	N.D.			
24) 1,1,1-Trichloroethane	0.00	97	0	N.D.			
26) Carbon tetrachloride	0.00	117	0	N.D.			
27) 1,1-Dichloropropene	0.00	75	0	N.D.			
28) Benzene	6.69	78	3937	N.D.			
29) TAME	0.00	73	0	N.D.			
30) 1,2-Dichloroethane	0.00	62	0	N.D.			
31) Trichloroethene	0.00	130	0	N.D.			
32) 1,2-Dichloropropane	0.00	63	0	N.D.			
33) Dibromomethane	0.00	93	0	N.D.			
34) Bromodichloromethane	0.00	83	0	N.D.	d		
35) cis-1,3-Dichloropropene	0.00	75	0	N.D.			
37) Toluene	0.00	92	0	N.D.	d		
38) trans-1,3-Dichloropropene	0.00	75	0	N.D.			
39) 1,1,2-Trichloroethane	9.46	83	18967	10.31	ug/Kg#	39	
41) Tetrachloroethene	0.00	166	0	N.D.			
42) 1,3-Dichloropropane	0.00	76	0	N.D.			
43) Dibromochloromethane	0.00	129	0	N.D.			
44) 1,2-Dibromoethane	0.00	107	0	N.D.			
45) Chlorobenzene	11.51	112	1591	N.D.			
46) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.			
47) Ethylbenzene	0.00	91	0	N.D.	d		
48) m,p-Xylenes	12.14	106	580	N.D.			
49) o-Xylene	0.00	106	0	N.D.	d		
50) Styrene	0.00	104	0	N.D.			
51) Bromoform	0.00	173	0	N.D.			
52) Isopropylbenzene	13.16	105	134046	6.75	ug/Kg	96	
54) Bromobenzene	0.00	156	0	N.D.			

Data File : I:\GCMS-1\DATA\072015\0720\_44.D  
 Acq On : 21 Jul 2015 3:14 pm  
 Sample : T151699-21

Vial: 24  
 Operator: ANDIE  
 Inst : GCMS # 1

MS  
 Qu **TPH-G/VOCs CHROMATOGRAM**  
**B-10-GW (Groundwater, TPH-G=69,000 ug/L, TPH-D=320,000 ug/L, TPH-MO=400,000 ug/L)**

Quant Method : I:\GCMS-1\METHODS\1\_071715.M (RTE Integrator)  
 Title : SW-846 Method 8260  
 Last Update : Wed Jun 17 10:56:32 2015  
 Response via : Initial Calibration  
 DataAcq Meth : 1\_022013

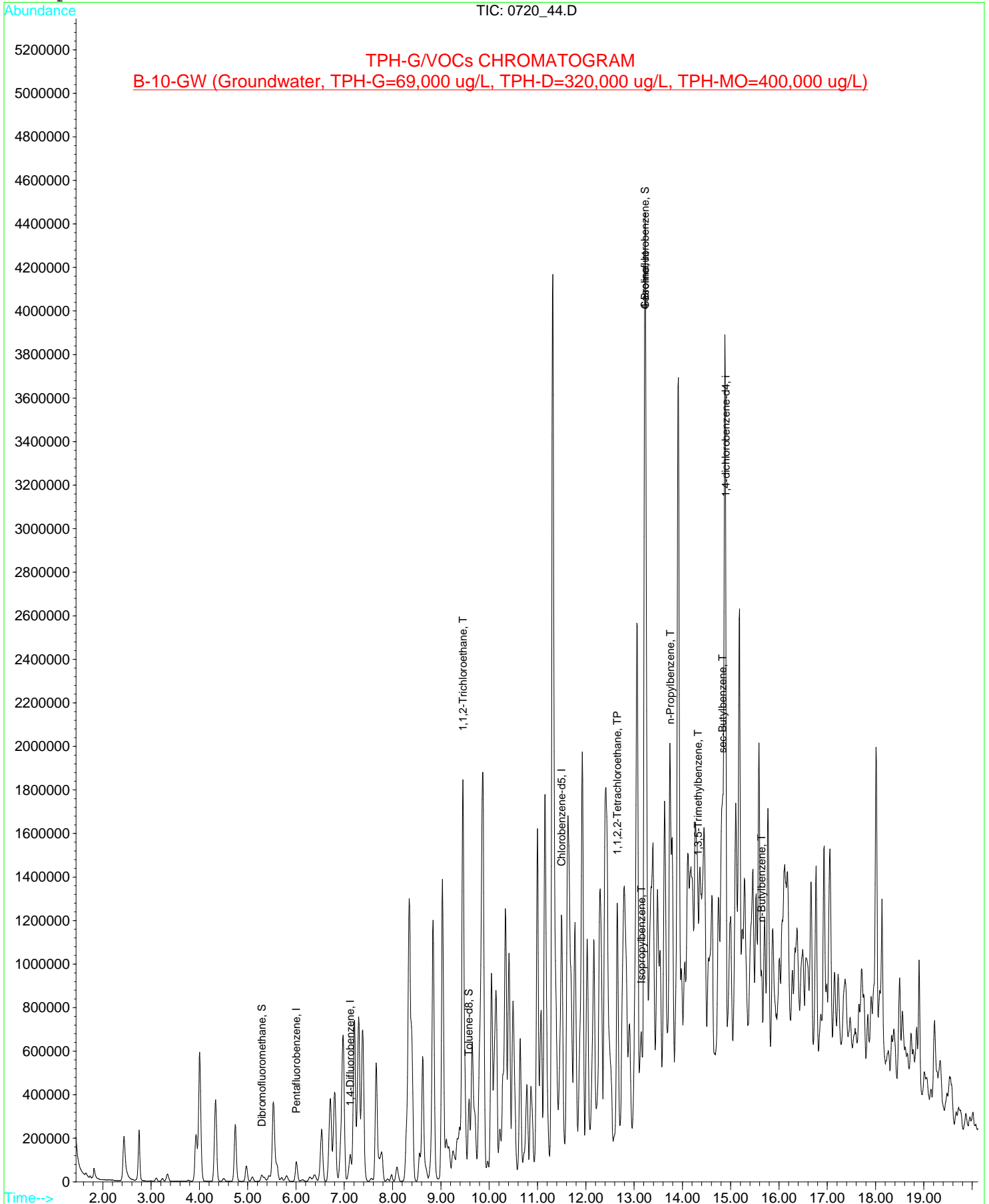
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
55) 1,1,2,2-Tetrachloroethane	12.65	83	149534	86.92	ug/Kg#	63
56) 1,2,3-Trichloropropane	0.00	75	0	N.D.		
57) n-Propylbenzene	13.76	91	102701	4.51	ug/Kg	99
58) 2-Chlorotoluene	0.00	91	0	N.D.	d	
59) 4-Chlorotoluene	0.00	91	0	N.D.	d	
60) 1,3,5-Trimethylbenzene	14.33	105	131551m	9.15	ug/Kg	
61) tert-Butylbenzene	0.00	91	0	N.D.		
62) 1,2,4-Trimethylbenzene	14.69	105	1351	N.D.		
63) sec-Butylbenzene	14.82	105	288479m	13.37	ug/Kg	
64) 1,3-Dichlorobenzene	0.00	146	0	N.D.		
66) p-Isopropyltoluene	0.00	119	0	N.D.	d	
67) 1,4-Dichlorobenzene	0.00	146	0	N.D.		
68) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
69) n-Butylbenzene	15.65	91	180973	32.95	ug/Kg	77
70) 1,2-Dibromo-3-chloropropan	0.00	75	0	N.D.	d	
71) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.	d	
72) Hexachlorobutadiene	0.00	190	0	N.D.		
73) Naphthalene	0.00	128	0	<del>N.D. d</del>		41.30
74) 1,2,3-Trichlorobenzene	0.00	180	0	N.D.	d	

Data File : I:\GCMS-1\DATA\072015\0720\_44.D  
Acq On : 21 Jul 2015 3:14 pm  
Sample : T151699-21  
Misc :  
MS Integration Params: rteint.p  
Quant Time: Jul 21 14:43 19115

Vial: 24  
Operator: ANDIE  
Inst : GCMS # 1  
Multiplr: 1.00

Quant Results File: 1\_071715.RES

Method : I:\GCMS-1\METHODS\1\_071715.M (RTE Integrator)  
Title : SW-846 Method 8260  
Last Update : Wed Jun 17 10:56:32 2015  
Response via : Initial Calibration



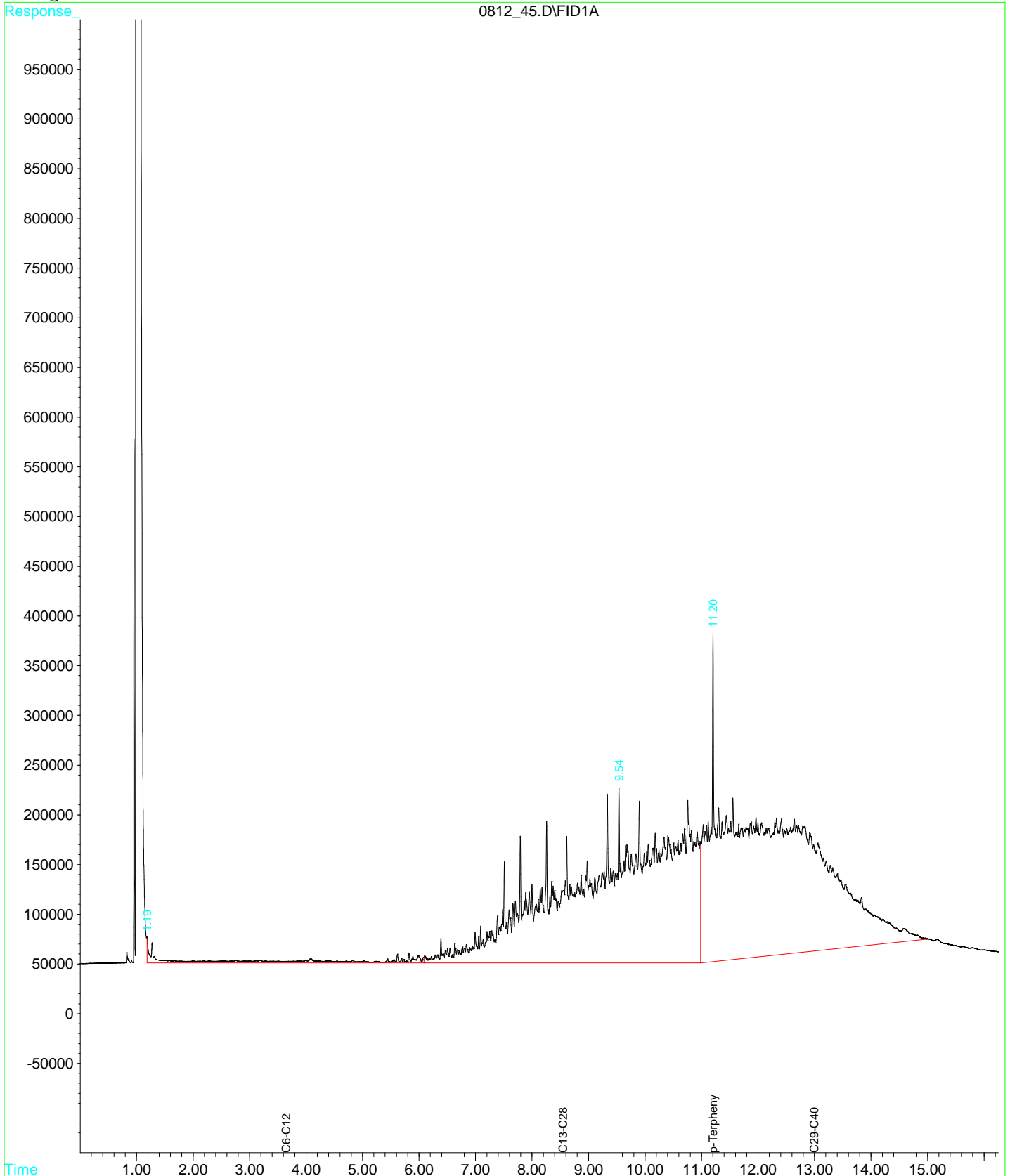


Data File : I:\DRO-5\DATA20~1\081215\0812\_45.D  
Acq On : 8-13-2015 3:30:34 AM  
Sample : T151699-21 10X  
Misc :  
IntFile : EVENTS.E  
Quant Time: Aug 13 11:40 19115

Vial: 26  
Operator: DAVID  
Inst : HP G1530A  
Multiplr: 1.00

Quant Method : Q:\DRO-5\METHODS\CC081315.M (Chemstation Integrator)  
Title : EPH - Extended Run  
Last Update : Thu Aug 13 11:18:25 2015  
Response via : Multiple Level Calibration  
DataAcq Meth : CC010915.M

Volume Inj. :  
Signal Phase : **CARBON CHAIN (USEPA METHOD 8015)**  
Signal Info : **B-10-GW (Groundwater, TPH-G=69,000 ug/L, TPH-D=320,000 ug/L, TPH-MO=400,000 ug/L)**



Data File : I:\GCMS-1\DATA\072015\0720\_45.D  
 Acq On : 21 Jul 2015 3:40 pm  
 Sample : T151699-22

Vial: 25  
 Operator: ANDIE  
 Inst : GCMS # 1

MS  
 Qua **TPH-G/VOCs CHROMATOGRAM**  
**B-11-GW (Groundwater, TPH-G=390 ug/L, TPH-D=61,000 ug/L, TPH-MO=76,000 ug/L)**

Quant Method : I:\GCMS-1\METHODS\1\_071715.M (RTE Integrator)  
 Title : SW-846 Method 8260  
 Last Update : Wed Jun 17 10:56:32 2015  
 Response via : Initial Calibration  
 DataAcq Meth : 1\_022013

RR for C.O

**APPROVED**

By Andrea Martinez at 12:04 pm, Jul 21, 2015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Pentafluorobenzene	6.01	168	140467	8.00	ug/Kg	0.00
25) 1,4-Difluorobenzene	7.13	114	174585	8.00	ug/Kg	0.00
40) Chlorobenzene-d5	11.48	82	56151	8.00	ug/Kg	-0.01
65) 1,4-dichlorobenzene-d4	14.89	152	47700	8.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) Dibromofluoromethane	5.30	113	44816	6.72	ug/Kg	0.00
Spiked Amount	8.000	Range	86 - 118	Recovery	=	84.00%#
36) Toluene-d8	9.57	98	168649	8.22	ug/Kg	0.00
Spiked Amount	8.000	Range	86 - 115	Recovery	=	102.75%
53) 4-Bromofluorobenzene	13.15	95	44081	8.68	ug/Kg	0.00
Spiked Amount	8.000	Range	86 - 115	Recovery	=	108.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
1) Gasoline	14.88	TIC	10228880m	247.32	ug/L	
3) Dichlorodifluoromethane	0.00	85	0	N.D.		
4) Chloromethane	1.64	50	1430	N.D.		
5) Vinyl chloride	0.00	62	0	N.D.		
6) Bromomethane	0.00	96	0	N.D.		
7) Chloroethane	2.22	64	258	N.D.		
8) Ethanol	0.00	45	0	N.D.		
9) Trichlorofluoromethane	0.00	101	0	N.D.		
10) 1,1-Dichloroethene	0.00	96	0	N.D.		
11) Methylene chloride	0.00	84	0	N.D.	d	
12) Freon 113	0.00	151	0	N.D.		
13) TBA	0.00	59	0	N.D.		
14) MTBE	0.00	73	0	N.D.		
15) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
16) 1,1-Dichloroethane	0.00	63	0	N.D.		
17) Diisopropyl ether	0.00	45	0	N.D.		
18) ETBE	0.00	59	0	N.D.		
19) 2,2-Dichloropropane	0.00	77	0	N.D.		
20) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
21) Bromochloromethane	0.00	128	0	N.D.		
22) Chloroform	0.00	83	0	N.D.		
24) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
26) Carbon tetrachloride	0.00	117	0	N.D.		
27) 1,1-Dichloropropene	0.00	75	0	N.D.		
28) Benzene	0.00	78	0	N.D.		
29) TAME	7.12	73	269	N.D.		
30) 1,2-Dichloroethane	0.00	62	0	N.D.		
31) Trichloroethene	0.00	130	0	N.D.		
32) 1,2-Dichloropropane	0.00	63	0	N.D.		
33) Dibromomethane	0.00	93	0	N.D.		
34) Bromodichloromethane	0.00	83	0	N.D.		
35) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
37) Toluene	9.66	92	1674	N.D.		
38) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
39) 1,1,2-Trichloroethane	0.00	83	0	N.D.		
41) Tetrachloroethene	0.00	166	0	N.D.		
42) 1,3-Dichloropropene	0.00	76	0	N.D.		
43) Dibromochloromethane	0.00	129	0	N.D.		
44) 1,2-Dibromoethane	0.00	107	0	N.D.		
45) Chlorobenzene	0.00	112	0	N.D.		
46) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		
47) Ethylbenzene	11.85	91	980	N.D.		
48) m,p-Xylenes	0.00	106	0	N.D.		
49) o-Xylene	0.00	106	0	N.D.		
50) Styrene	0.00	104	0	N.D.		
51) Bromoform	0.00	173	0	N.D.		
52) Isopropylbenzene	13.15	105	19909	0.76	ug/Kg	99
54) Bromobenzene	0.00	156	0	N.D.		

Data File : I:\GCMS-1\DATA\072015\0720\_45.D

Vial: 25

Acq On : 21 Jul 2015 3:40 pm

Operator: ANDIE

Sample : T151699-22

Inst : GCMS # 1

Mis

TPH-G/VOCs CHROMATOGRAM	
B-11-GW (Groundwater, TPH-G=390 ug/L, TPH-D=61,000 ug/L, TPH-MO=76,000 ug/L)	

Quant Method : I:\GCMS-1\METHODS\1\_071715.M (RTE Integrator)

Title : SW-846 Method 8260

Last Update : Wed Jun 17 10:56:32 2015

Response via : Initial Calibration

DataAcq Meth : 1\_022013

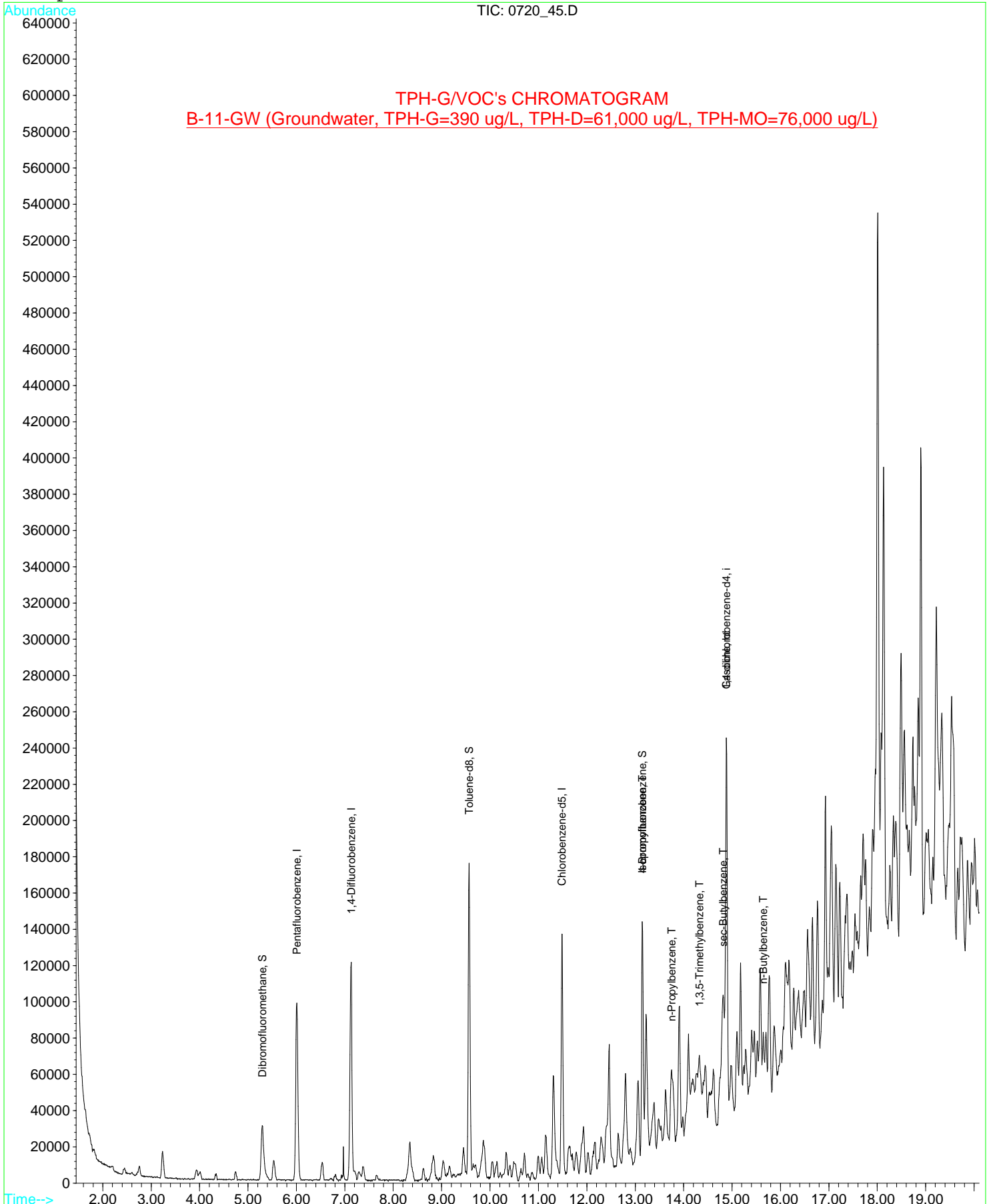
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
55) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	d	
56) 1,2,3-Trichloropropane	0.00	75	0	N.D.		
57) n-Propylbenzene	13.75	91	16895	0.56	ug/Kg	91
58) 2-Chlorotoluene	13.85	91	802	N.D.		
59) 4-Chlorotoluene	13.91	91	1160	N.D.		
60) 1,3,5-Trimethylbenzene	14.33	105	25540m	1.34	ug/Kg	
61) tert-Butylbenzene	0.00	91	0	N.D.	d	
62) 1,2,4-Trimethylbenzene	0.00	105	0	N.D.		
63) sec-Butylbenzene	14.82	105	34850m	1.22	ug/Kg	
64) 1,3-Dichlorobenzene	0.00	146	0	N.D.		
66) p-Isopropyltoluene	15.09	119	4365	N.D.		
67) 1,4-Dichlorobenzene	0.00	146	0	N.D.		
68) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
69) n-Butylbenzene	15.65	91	22653	1.09	ug/Kg	76
70) 1,2-Dibromo-3-chloropropan	0.00	75	0	N.D.		
71) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
72) Hexachlorobutadiene	0.00	190	0	N.D.		
73) Naphthalene	0.00	128	0	N.D.	d	
74) 1,2,3-Trichlorobenzene	18.46	180	577	N.D.		

Data File : I:\GCMS-1\DATA\072015\0720\_45.D  
Acq On : 21 Jul 2015 3:40 pm  
Sample : T151699-22  
Misc :  
MS Integration Params: rteint.p  
Quant Time: Jul 21 11:08 19115

Vial: 25  
Operator: ANDIE  
Inst : GCMS # 1  
Multiplr: 1.00

Quant Results File: 1\_071715.RES

Method : I:\GCMS-1\METHODS\1\_071715.M (RTE Integrator)  
Title : SW-846 Method 8260  
Last Update : Wed Jun 17 10:56:32 2015  
Response via : Initial Calibration



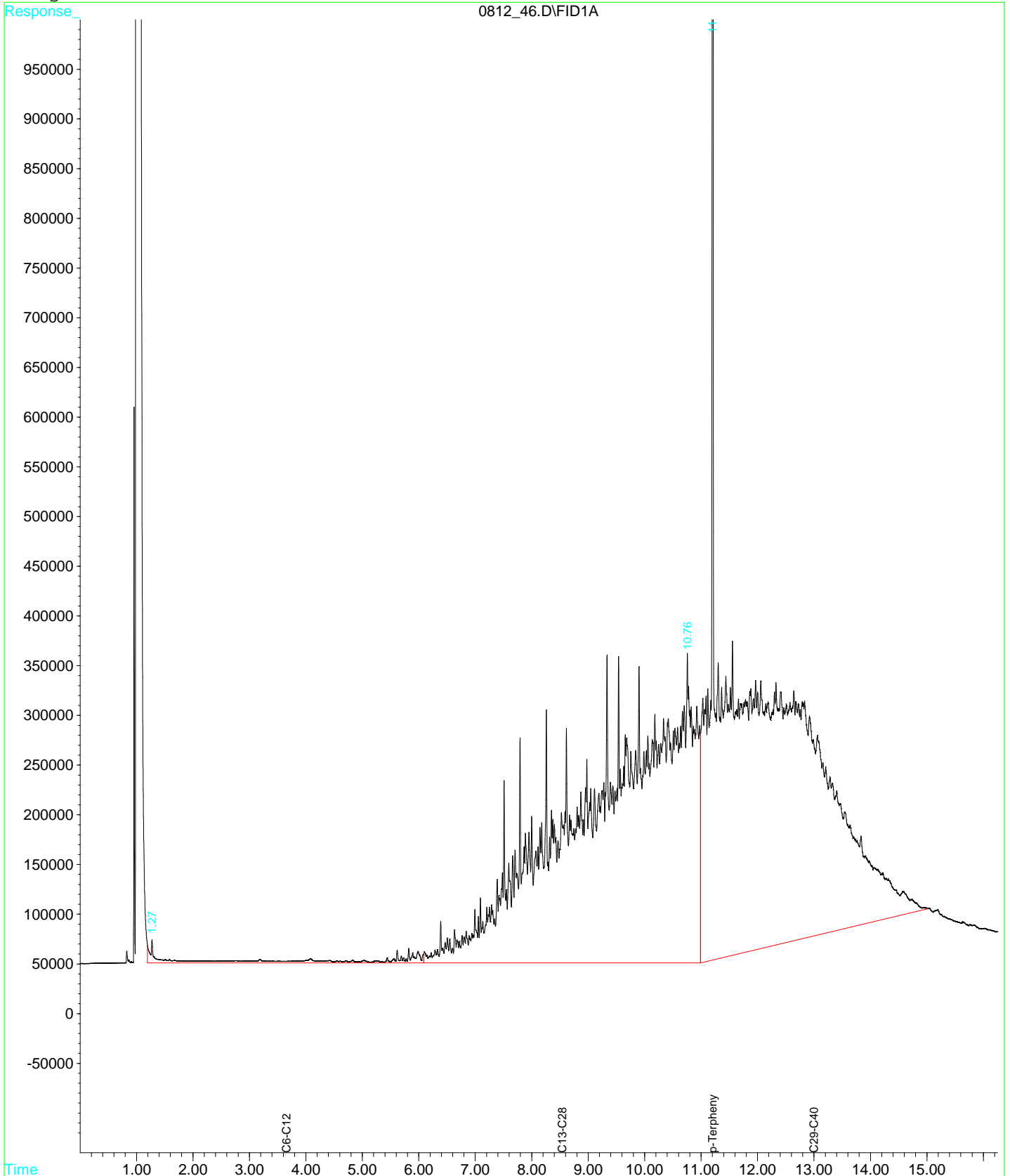
**TPH-G/VOC's CHROMATOGRAM**  
**B-11-GW (Groundwater, TPH-G=390 ug/L, TPH-D=61,000 ug/L, TPH-MO=76,000 ug/L)**

Data File : I:\DRO-5\DATA20~1\081215\0812\_46.D  
Acq On : 8-13-2015 3:55:15 AM  
Sample : T151699-22  
Misc :  
IntFile : EVENTS.E  
Quant Time: Aug 13 11:42 19115

Vial: 27  
Operator: DAVID  
Inst : HP G1530A  
Multiplr: 1.00

Quant Method : Q:\DRO-5\METHODS\CC081315.M (Chemstation Integrator)  
Title : EPH - Extended Run  
Last Update : Thu Aug 13 11:18:25 2015  
Response via : Multiple Level Calibration  
DataAcq Meth : CC010915.M

Volume Inj. :  
Signal Phase : **CARBON CHAIN (USEPA METHOD 8015)**  
Signal Info : **B-11-GW (Groundwater, TPH-G=390 ug/L, TPH-D=61,000 ug/L, TPH-MO=76,000 ug/L)**



Quantitation Report

Data File : I:\DRO-5\DATA20~1\080715\0807\_54B.D  
Acq On : 8-8-2015 3:52:30 PM  
Sample : 8015 500PPM CC  
Misc :  
IntFile : EVENTS.E  
Quant Time: Aug 10 8:44 19115

Vial: 2  
Operator: DAVID  
Inst : HP G1530A  
Multiplr: 1.00

Quant Results File: 050115.RES

Quant Method : Q:\DRO-5\METHODS\050115.M (Chemstation Integrator)  
Title : EPH - Extended Run  
Last Update : Fri May 01 10:45:43 2015  
Response via : Multiple Level Calibration  
DataAcq Meth : CC010615.M

Volume Inj. :  
Signal Phase :  
Signal Info :

