



11/06/12

Technical Report for

XTO Energy

PCU 297-10B

1105-20A

Accutest Job Number: D40439

Sampling Date: 10/29/12

Report to:

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Total number of pages in report: 37



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


Brad Madadian
Laboratory Director

Client Service contact: Renea Jackson 303-425-6021

Certifications: CO, ID, NE, NM, ND (R-027) (PW), UT (NELAP CO00049), TX (T104704511-12-1)

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Test results relate only to samples analyzed.

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Sample Summary

XTO Energy

Job No: D40439

PCU 297-10B

Project No: 1105-20A

Sample Number	Collected		Matrix Code	Type	Client Sample ID
	Date	Time By			
D40439-1	10/29/12	14:10 DS	10/31/12	SO Soil	FW EXCAVATED MAT'L (10/29)

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: XTO Energy

Job No D40439

Site: PCU 297-10B

Report Date 11/6/2012 12:57:19 PM

On 10/31/2012, 1 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 3.5 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D40439 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

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 GC By Method SW846 8015B

Matrix SO	Batch ID: GGB1000
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D40436-1MS, D40436-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846-8015B

Matrix SO	Batch ID: OP6912
------------------	-------------------------

- All samples were extracted and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D40494-1MS, D40494-1MSD were used as the QC samples indicated.
- The matrix spike (MS) recovery(s) of TPH-DRO (C10-C28) are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Wet Chemistry By Method SM19 2540B M

Matrix SO	Batch ID: GN17501
------------------	--------------------------

- The data for SM19 2540B M meets quality control requirements.

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's 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.

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

Summary of Hits

Job Number: D40439
Account: XTO Energy
Project: PCU 297-10B
Collected: 10/29/12



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Analyte						
D40439-1	FW EXCAVATED MAT'L (10/29)					
TPH-DRO (C10-C28)		1050	15	10	mg/kg	SW846-8015B

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	FW EXCAVATED MAT'L (10/29)			Date Sampled:	10/29/12
Lab Sample ID:	D40439-1			Date Received:	10/31/12
Matrix:	SO - Soil			Percent Solids:	85.9
Method:	SW846 8015B				
Project:	PCU 297-10B				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB18313.D	1	11/01/12	SK	n/a	n/a	GGB1000
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.1 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	13	6.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	93%		60-140%		

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

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	FW EXCAVATED MAT'L (10/29)					Date Sampled:	10/29/12
Lab Sample ID:	D40439-1					Date Received:	10/31/12
Matrix:	SO - Soil					Percent Solids:	85.9
Method:	SW846-8015B SW846 3546						
Project:	PCU 297-10B						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD19187.D	1	11/06/12	AV	11/05/12	OP6912	GFD968
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	1050	15	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	90%		35-130%		

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

Misc. Forms

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Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D40439

Client:

Immediate Client Services Action Required: No

Date / Time Received: 10/31/2012 3:45:00 PM

No. Coolers: 1

Client Service Action Required at Login: No

Project:

Airbill #'s: hdco

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Cooler temp verification:			Infrared gun
3. Cooler media:			Ice (bag)

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:			Intact

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume rec'd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

Accutest Laboratories
V:(303) 425-6021

4036 Youngfield Street
F: (303) 425-6854

Wheat Ridge, CO
www.accutest.com

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 1

Job Number: D40439
Account: XTOKRWR XTO Energy
Project: PCU 297-10B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB1000-MB	GB18306.D	1	11/01/12	SK	n/a	n/a	GGB1000

The QC reported here applies to the following samples:

Method: SW846 8015B

D40439-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	10	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
120-82-1	1,2,4-Trichlorobenzene	88% 60-140%

Blank Spike Summary

Page 1 of 1

Job Number: D40439
Account: XTOKRWR XTO Energy
Project: PCU 297-10B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB1000-BS	GB18307.D	1	11/01/12	SK	n/a	n/a	GGB1000

The QC reported here applies to the following samples:

Method: SW846 8015B

D40439-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	110	124	113	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	105%	60-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D40439
Account: XTOKRWR XTO Energy
Project: PCU 297-10B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D40436-1MS	GB18309.D	1	11/01/12	SK	n/a	n/a	GGB1000
D40436-1MSD	GB18310.D	1	11/01/12	SK	n/a	n/a	GGB1000
D40436-1	GB18308.D	1	11/01/12	SK	n/a	n/a	GGB1000

The QC reported here applies to the following samples:

Method: SW846 8015B

D40439-1

CAS No.	Compound	D40436-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		125	141	112	137	109	3	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D40436-1	Limits
120-82-1	1,2,4-Trichlorobenzene	105%	97%	89%	60-140%

* = Outside of Control Limits.

GC Volatiles

Raw Data

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Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\110112\GB18313.D\FID1A.CH Vial: 10
Signal #2 : Y:\1\DATA\110112\GB18313.D\FID2B.CH
Acq On : 1 Nov 2012 9:21 pm Operator: StephK
Sample : D40439-1, 50X Inst : GC/MS Ins
Misc : GC3218,GGB1000,5.058,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Nov 02 08:41:04 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Nov 01 17:08:46 2012
Response via : Initial Calibration
DataAcq Meth : TVB4.M

Volume Inj. :
Signal #1 Phase : DB-624 Signal #2 Phase: DB-624
Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm

Compound		R.T.	Response	Conc	Units

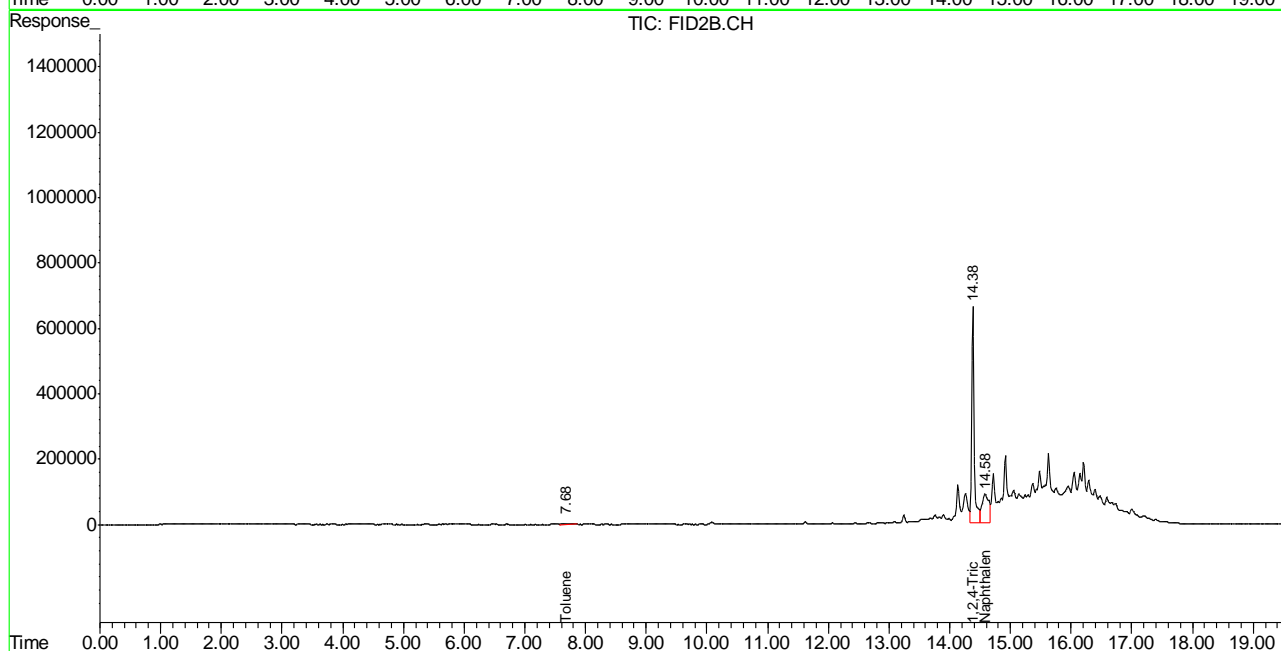
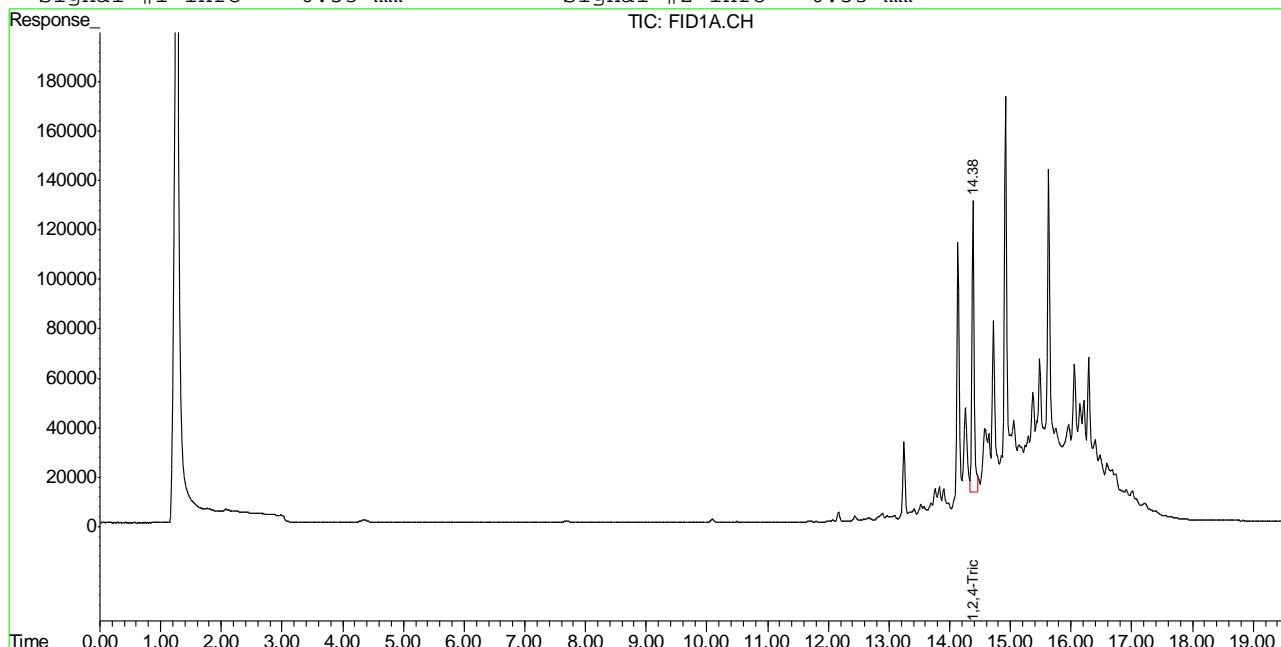
System Monitoring Compounds					
2) S	1,2,4-Trichlorobenzene	14.38	2913983	92.997 %	m
10) S	1,2,4-Trichlorobenzene (P)	14.38	18063212	111.139 %	
Target Compounds					
1) H	TVH-Gasoline	7.23	4156273	<MDL	mg/L
4) T	Methyl-t-butyl-ether	0.00	0	N.D.	ug/L d
5) T	Benzene	0.00	0	N.D.	ug/L d
6) T	Toluene	7.68	143432	0.362	ug/L
7) T	Ethylbenzene	0.00	0	N.D.	ug/L d
8) T	m,p-Xylene	0.00	0	N.D.	ug/L d
9) T	o-Xylene	0.00	0	N.D.	ug/L d
11) T	Naphthalene	14.58	6966747	35.309	ug/L

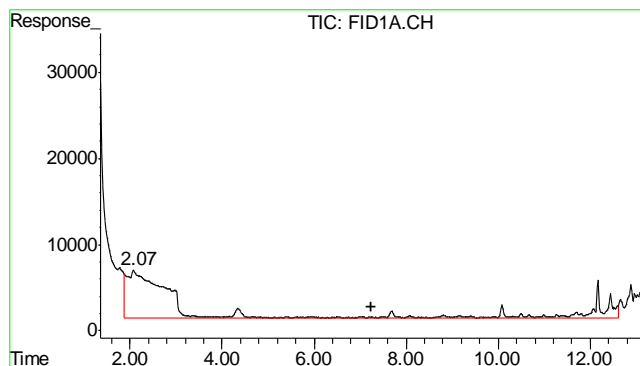
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\110112\GB18313.D\FID1A.CH Vial: 10
 Signal #2 : Y:\1\DATA\110112\GB18313.D\FID2B.CH
 Acq On : 1 Nov 2012 9:21 pm Operator: StephK
 Sample : D40439-1, 50X Inst : GC/MS Ins
 Misc : GC3218,GGB1000,5.058,,100,5,1 Multiplr: 1.00
 IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
 Quant Time: Nov 2 8:55 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
 Title : 8015B/8021B TVH/BTEX
 Last Update : Thu Nov 01 17:08:46 2012
 Response via : Multiple Level Calibration
 DataAcq Meth : TVB4.M

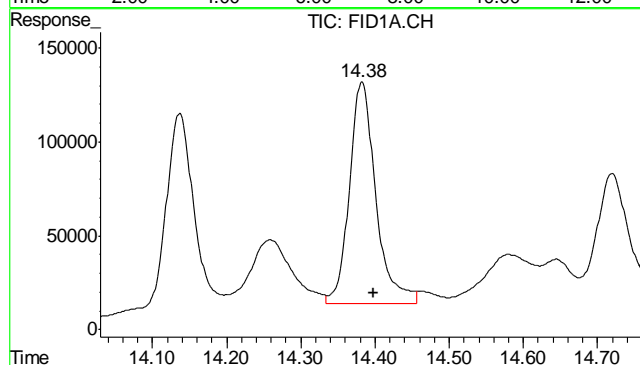
Volume Inj. :
 Signal #1 Phase : DB-624 Signal #2 Phase: DB-624
 Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm





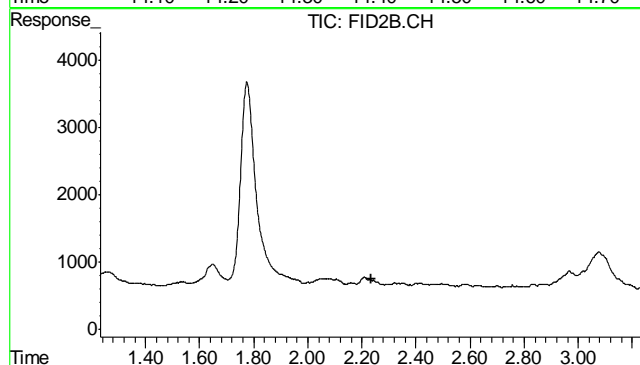
#1 TVH-Gasoline

R.T.: 7.230 min
Delta R.T.: 0.000 min
Response: 4156273
Conc: N.D.



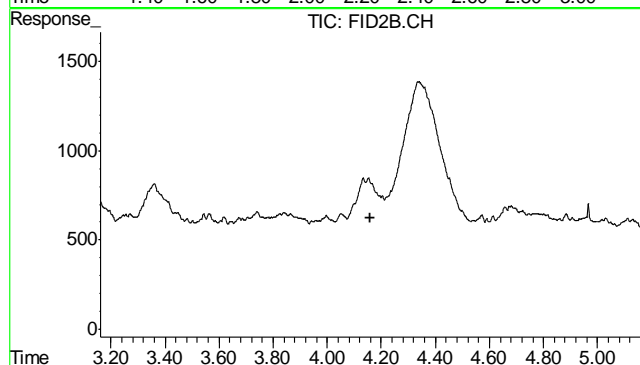
#2 1,2,4-Trichlorobenzene

R.T.: 14.382 min
Delta R.T.: -0.016 min
Response: 2913983
Conc: 93.00 % m



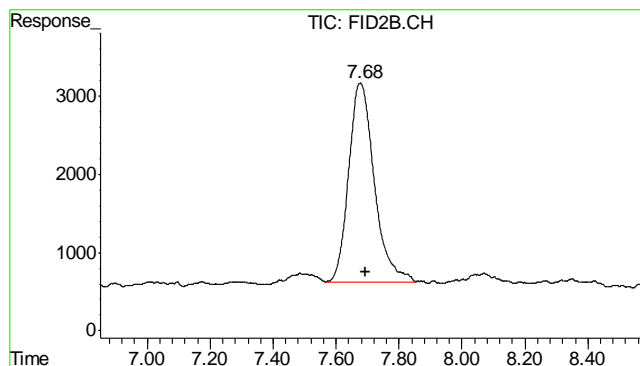
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T.: 2.233 min
Response: 0
Conc: N.D.



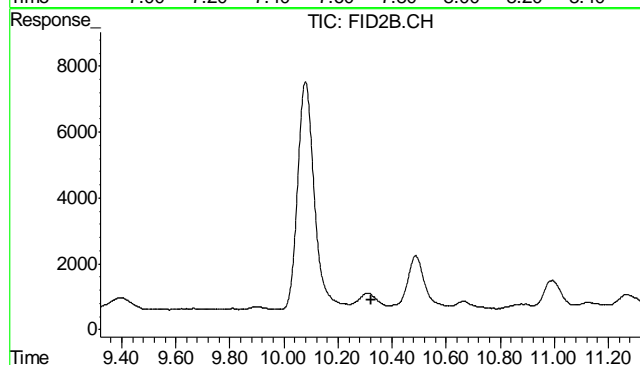
#5 Benzene

R.T.: 0.000 min
Exp R.T.: 4.161 min
Response: 0
Conc: N.D.



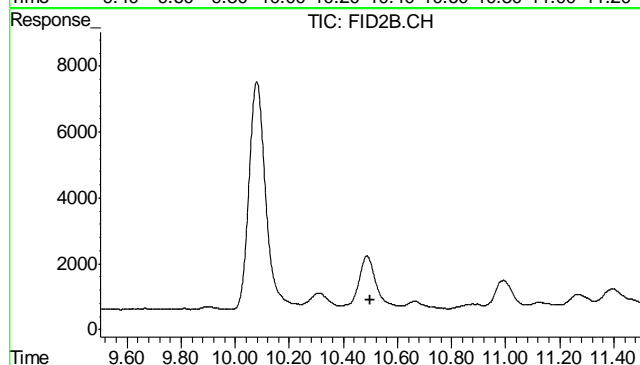
#6 Toluene

R.T.: 7.677 min
Delta R.T.: -0.019 min
Response: 143432
Conc: 0.36 ug/L



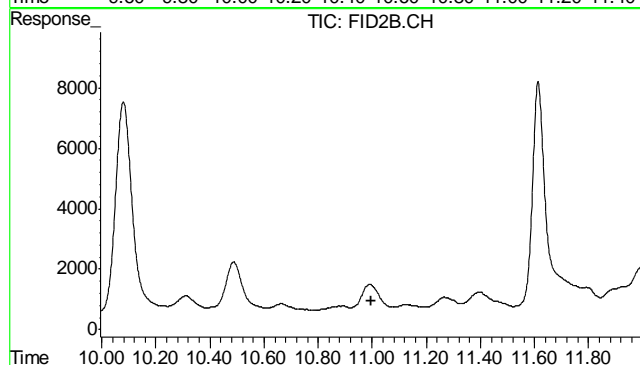
#7 Ethylbenzene

R.T.: 0.000 min
Exp R.T. : 10.322 min
Response: 0
Conc: N.D.



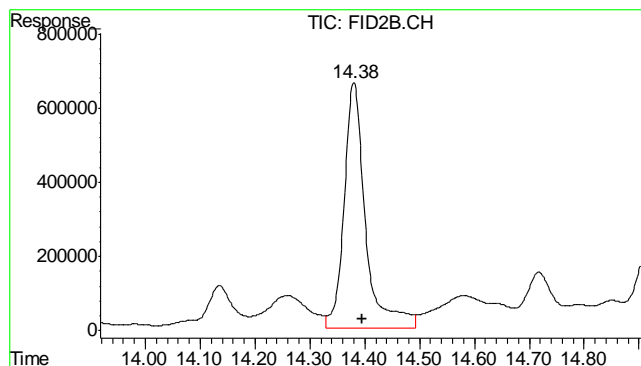
#8 m,p-Xylene

R.T.: 0.000 min
Exp R.T. : 10.501 min
Response: 0
Conc: N.D.



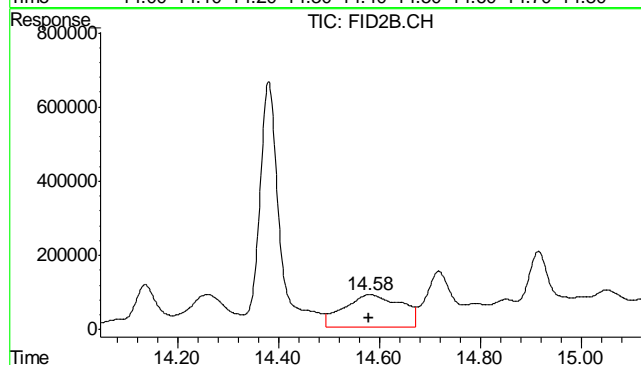
#9 o-Xylene

R.T.: 0.000 min
Exp R.T. : 10.995 min
Response: 0
Conc: N.D.



#10 1,2,4-Trichlorobenzene (P)

R.T.: 14.381 min
 Delta R.T.: -0.016 min
 Response: 18063212
 Conc: 111.14 %



#11 Naphthalene

R.T.: 14.581 min
 Delta R.T.: 0.002 min
 Response: 6966747
 Conc: 35.31 ug/L

7.1.1
7

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\110112\GB18306.D\FID1A.CH Vial: 3
Signal #2 : Y:\1\DATA\110112\GB18306.D\FID2B.CH
Acq On : 1 Nov 2012 5:13 pm Operator: StephK
Sample : MB Inst : GC/MS Ins
Misc : GC3218,GGB1000,5.000,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Nov 02 08:40:36 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Nov 01 17:08:46 2012
Response via : Initial Calibration
DataAcq Meth : TVB4.M

Volume Inj. :
Signal #1 Phase : DB-624 Signal #2 Phase: DB-624
Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm

Compound	R.T.	Response	Conc	Units

System Monitoring Compounds				
2) S 1,2,4-Trichlorobenzene	14.39	2744573	87.591	%
10) S 1,2,4-Trichlorobenzene (P)	14.39	14699109	90.441	%
Target Compounds				
1) H TVH-Gasoline	7.23	4085168	<MDL	mg/L
4) T Methyl-t-butyl-ether	0.00	0	N.D.	ug/L d
5) T Benzene	0.00	0	N.D.	ug/L d
6) T Toluene	7.70	190497	0.481	ug/L
7) T Ethylbenzene	0.00	0	N.D.	ug/L d
8) T m,p-Xylene	0.00	0	N.D.	ug/L d
9) T o-Xylene	0.00	0	N.D.	ug/L d
11) T Naphthalene	14.57	180343	0.914	ug/L

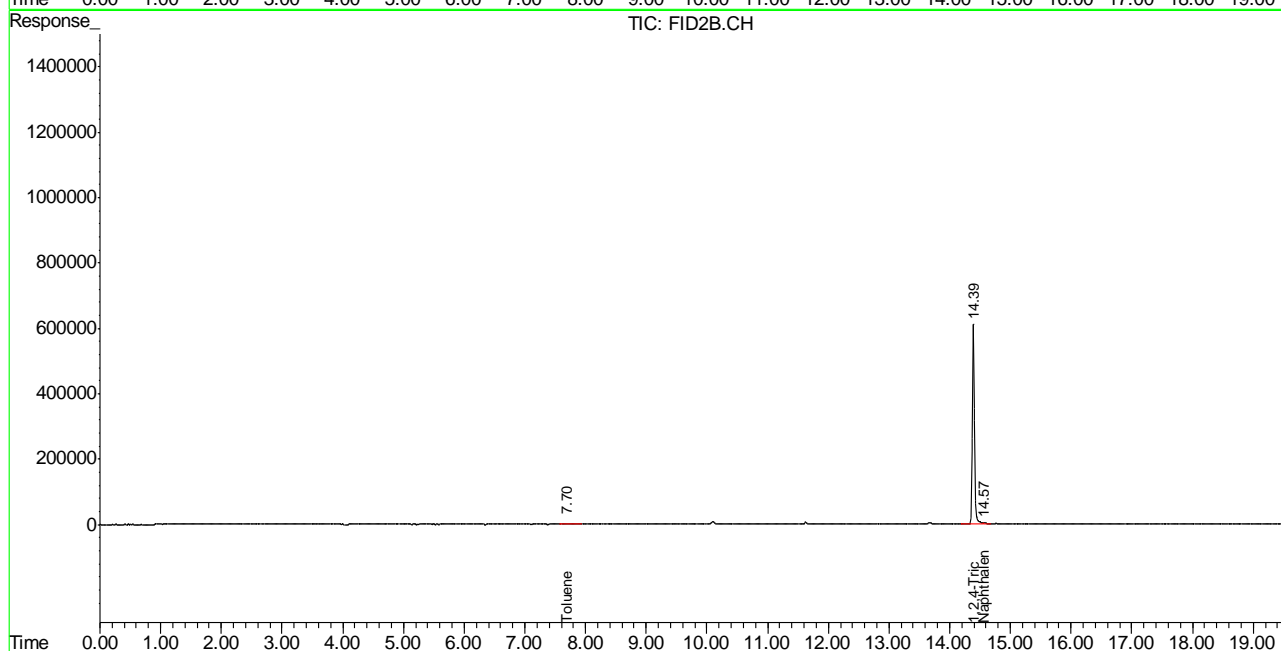
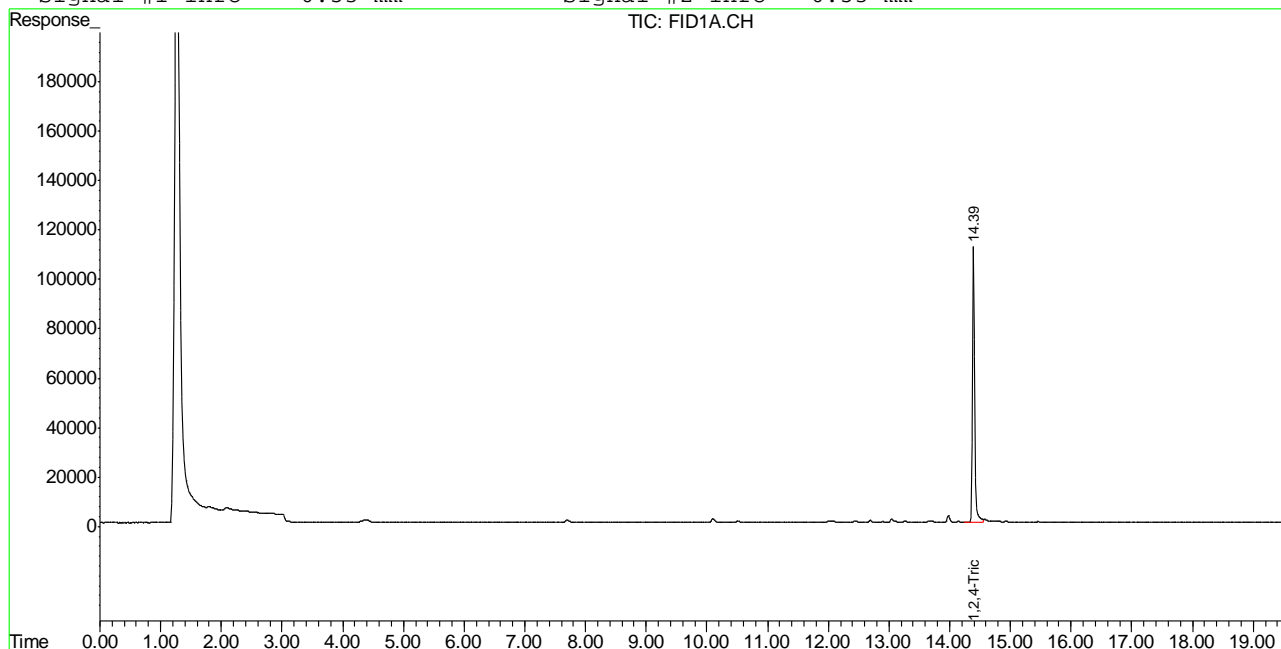
(f)=RT Delta > 1/2 Window (m)=manual int.
GB18306.D TB868GB868SOIL.M Fri Nov 02 08:49:22 2012 GC

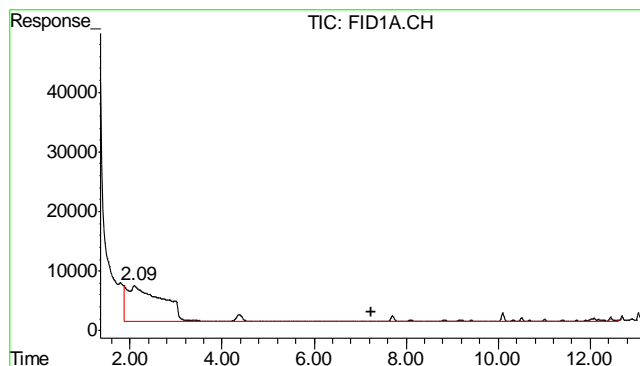
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\110112\GB18306.D\FID1A.CH Vial: 3
Signal #2 : Y:\1\DATA\110112\GB18306.D\FID2B.CH
Acq On : 1 Nov 2012 5:13 pm Operator: StephK
Sample : MB Inst : GC/MS Ins
Misc : GC3218,GGB1000,5.000,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Nov 2 8:53 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Nov 01 17:08:46 2012
Response via : Multiple Level Calibration
DataAcq Meth : TVB4.M

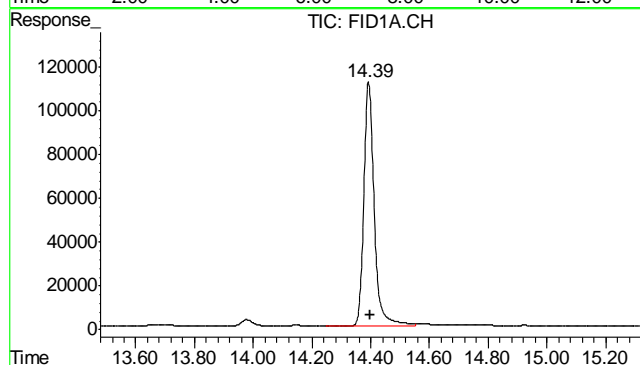
Volume Inj. :
Signal #1 Phase : DB-624 Signal #2 Phase: DB-624
Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm





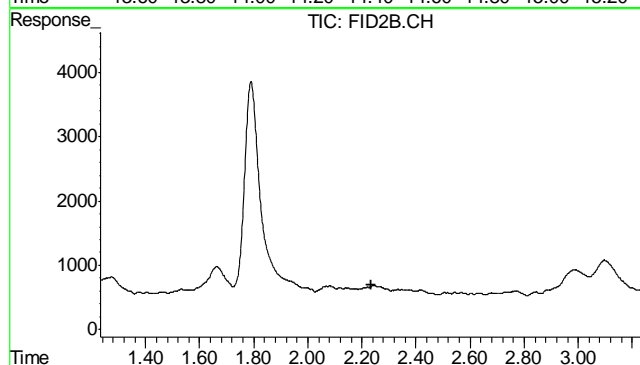
#1 TVH-Gasoline

R.T.: 7.230 min
Delta R.T.: 0.000 min
Response: 4085168
Conc: N.D.



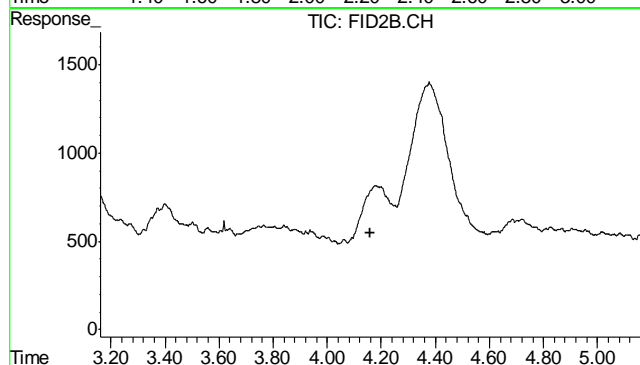
#2 1,2,4-Trichlorobenzene

R.T.: 14.393 min
Delta R.T.: -0.005 min
Response: 2744573
Conc: 87.59 %



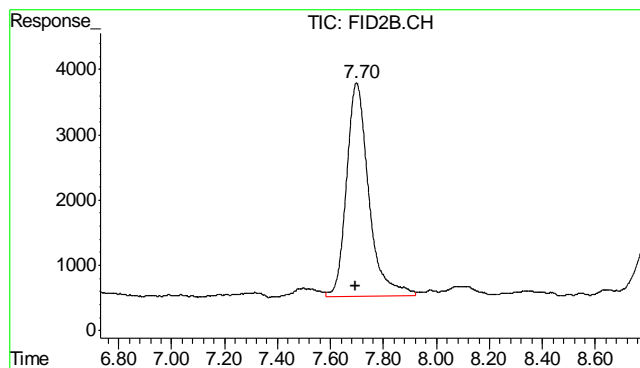
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T.: 2.233 min
Response: 0
Conc: N.D.



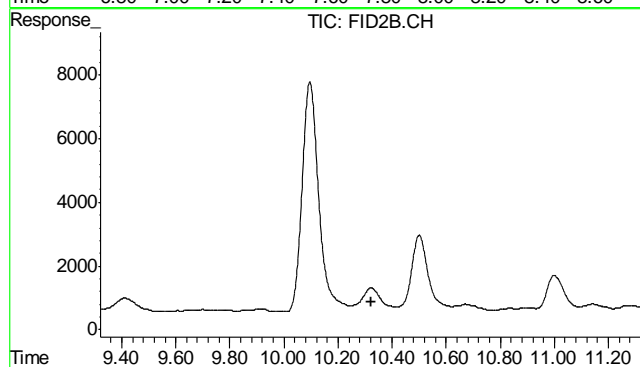
#5 Benzene

R.T.: 0.000 min
Exp R.T.: 4.161 min
Response: 0
Conc: N.D.



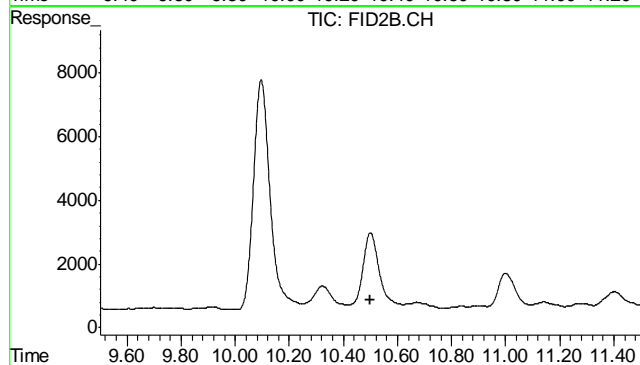
#6 Toluene

R.T.: 7.698 min
Delta R.T.: 0.003 min
Response: 190497
Conc: 0.48 ug/L



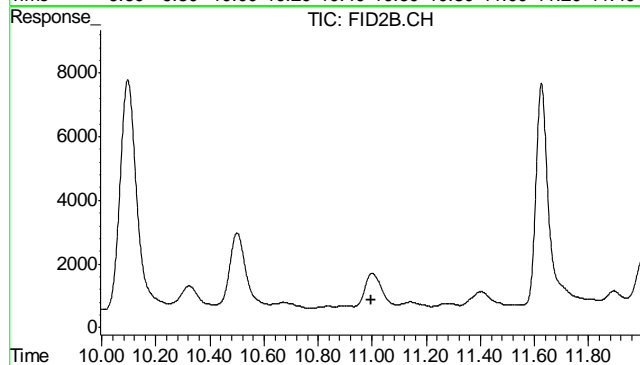
#7 Ethylbenzene

R.T.: 0.000 min
Exp R.T. : 10.322 min
Response: 0
Conc: N.D.



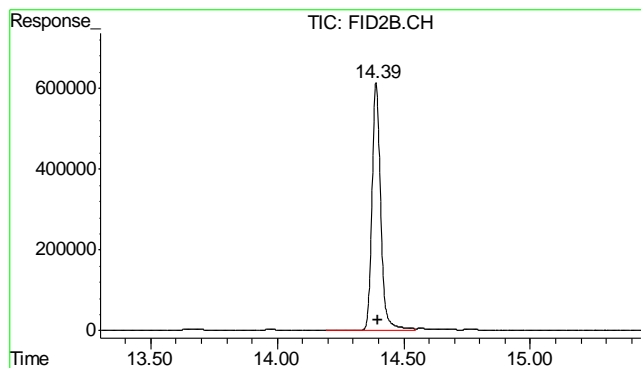
#8 m,p-Xylene

R.T.: 0.000 min
Exp R.T. : 10.501 min
Response: 0
Conc: N.D.



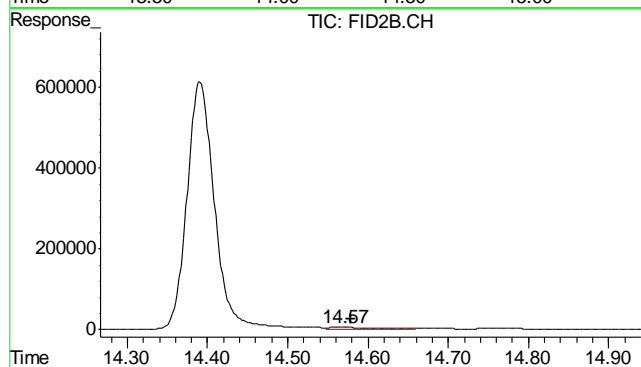
#9 o-Xylene

R.T.: 0.000 min
Exp R.T. : 10.995 min
Response: 0
Conc: N.D.



#10 1,2,4-Trichlorobenzene (P)

R.T.: 14.391 min
Delta R.T.: -0.005 min
Response: 14699109
Conc: 90.44 %



#11 Naphthalene

R.T.: 14.570 min
Delta R.T.: -0.009 min
Response: 180343
Conc: 0.91 ug/L

7.2.1

7

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 1

Job Number: D40439
Account: XTOKRWR XTO Energy
Project: PCU 297-10B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6912-MB	FD19165.D	1	11/05/12	AV	11/05/12	OP6912	GFD968

The QC reported here applies to the following samples:

Method: SW846-8015B

D40439-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	13	8.7	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	108% 35-130%

8.1.1

8

Blank Spike Summary

Page 1 of 1

Job Number: D40439
Account: XTOKRWR XTO Energy
Project: PCU 297-10B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6912-BS	FD19166.D	1	11/05/12	AV	11/05/12	OP6912	GFD968

The QC reported here applies to the following samples:

Method: SW846-8015B

D40439-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	667	611	92	48-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	104%	35-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D40439
Account: XTOKRWR XTO Energy
Project: PCU 297-10B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6912-MS	FD19172.D	20	11/05/12	AV	11/05/12	OP6912	GFD968
OP6912-MSD	FD19173.D	20	11/05/12	AV	11/05/12	OP6912	GFD968
D40494-1	FD19174.D	20	11/05/12	AV	11/05/12	OP6912	GFD968

The QC reported here applies to the following samples:

Method: SW846-8015B

D40439-1

CAS No.	Compound	D40494-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	9240		747	7870	-183* a	9440	27	18	20-168/30

CAS No.	Surrogate Recoveries	MS	MSD	D40494-1	Limits
84-15-1	o-Terphenyl	93%	121%	113%	35-130%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.



GC Semi-volatiles

Raw Data

6

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\NOV\FD110512\FD19187.D Vial: 24
Acq On : 11-6-2012 01:26:27 AM Operator: ashleyv
Sample : D40439-1 Inst : FID5
Misc : OP6912,GFD968,30.08,,,2,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Nov 06 09:36:12 2012 Quant Results File: DRO-GFD823F.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD823F.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Thu Nov 01 16:47:14 2012
Response via : Initial Calibration
DataAcq Meth : DRO_FR.M

Volume Inj. : 1ul
Signal Phase : RTX-5
Signal Info : 530um

Compound	R.T.	Response	Conc Units

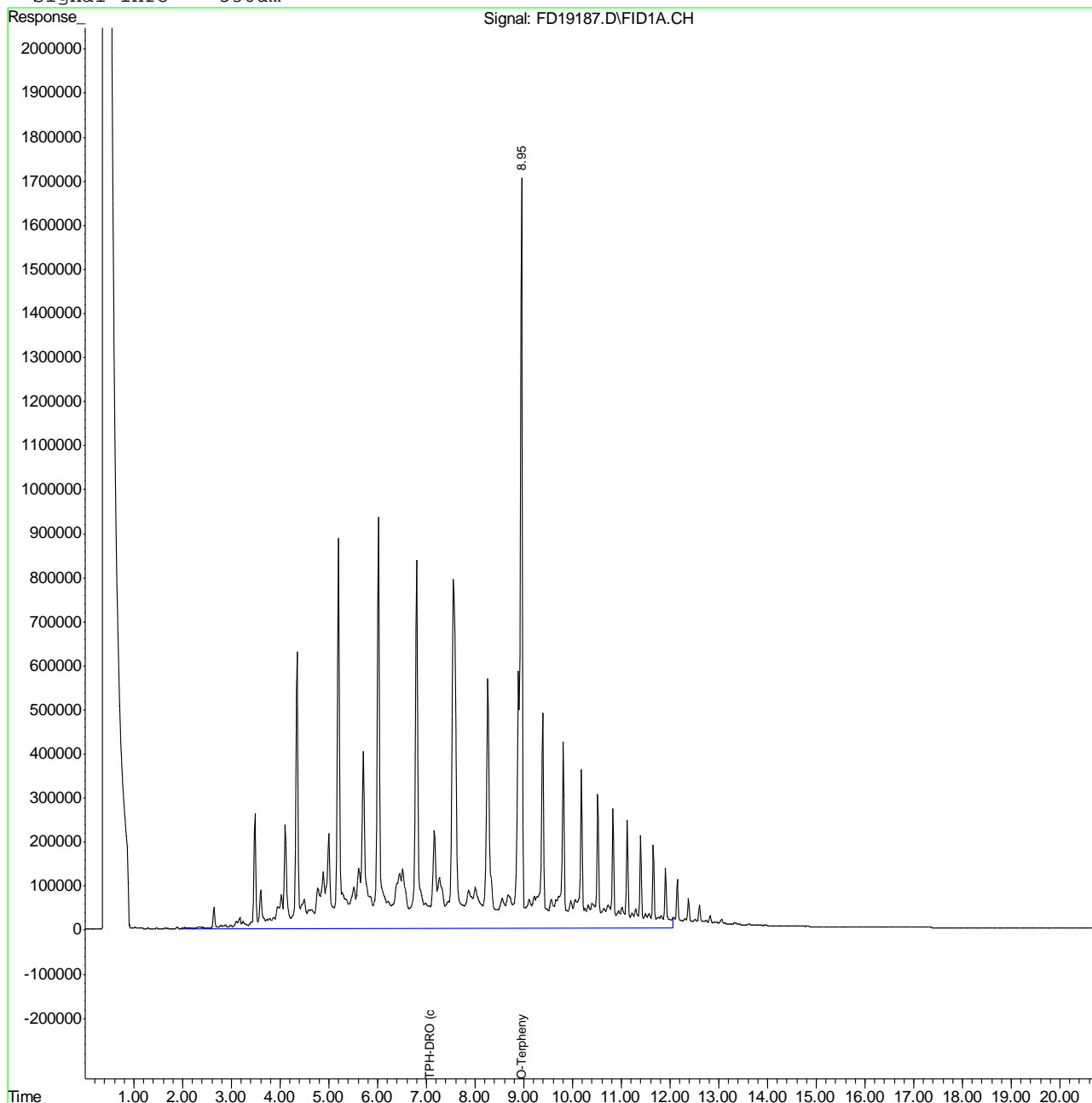
System Monitoring Compounds			
1) S O-Terphenyl	8.95	42721413	904.376 mg/L
Target Compounds			
2) H TPH-DRO (c10-c28)	7.08	520881027	13527.523 mg/L

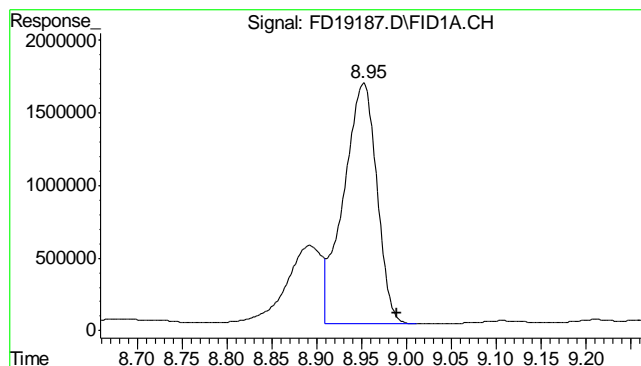
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\NOV\FD110512\FD19187.D Vial: 24
Acq On : 11-6-2012 01:26:27 AM Operator: ashleyv
Sample : D40439-1 Inst : FID5
Misc : OP6912,GFD968,30.08,,,2,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Nov 6 9:45 2012 Quant Results File: DRO-GFD823F.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD823F.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Thu Nov 01 16:47:14 2012
Response via : Multiple Level Calibration
DataAcq Meth : DRO_FR.M

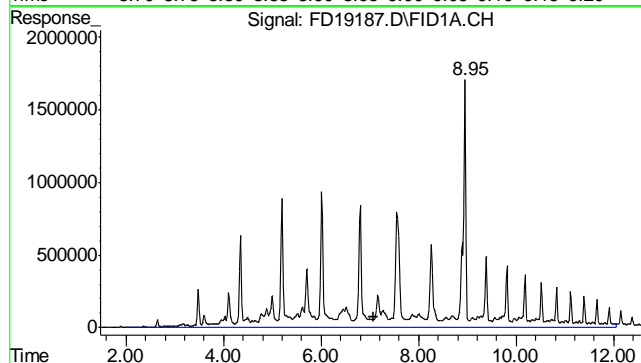
Volume Inj. : 1ul
Signal Phase : RTX-5
Signal Info : 530um





#1 O-Terphenyl

R.T.: 8.952 min
 Delta R.T.: -0.038 min
 Response: 42721413
 Conc: 904.38 mg/L



#2 TPH-DRO (c10-c28)

R.T.: 7.075 min
 Delta R.T.: 0.000 min
 Response: 520881027
 Conc: 13527.52 mg/L m

9.1.1
9

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\NOV\FD110512\FD19165.D Vial: 3
Acq On : 11-5-2012 03:10:23 PM Operator: ashleyv
Sample : OP6912-MB Inst : FID5
Misc : OP6912,GFD968,30.00,,,2,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Nov 05 17:15:20 2012 Quant Results File: DRO-GFD823F.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD823F.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Thu Nov 01 16:47:14 2012
Response via : Initial Calibration
DataAcq Meth : DRO_FR.M

Volume Inj. : 1ul
Signal Phase : RTX-5
Signal Info : 530um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S O-Terphenyl	8.98	50988063	1079.374 mg/L
Target Compounds			
2) H TPH-DRO (c10-c28)	7.08	606347	15.747 mg/L

9.2.1

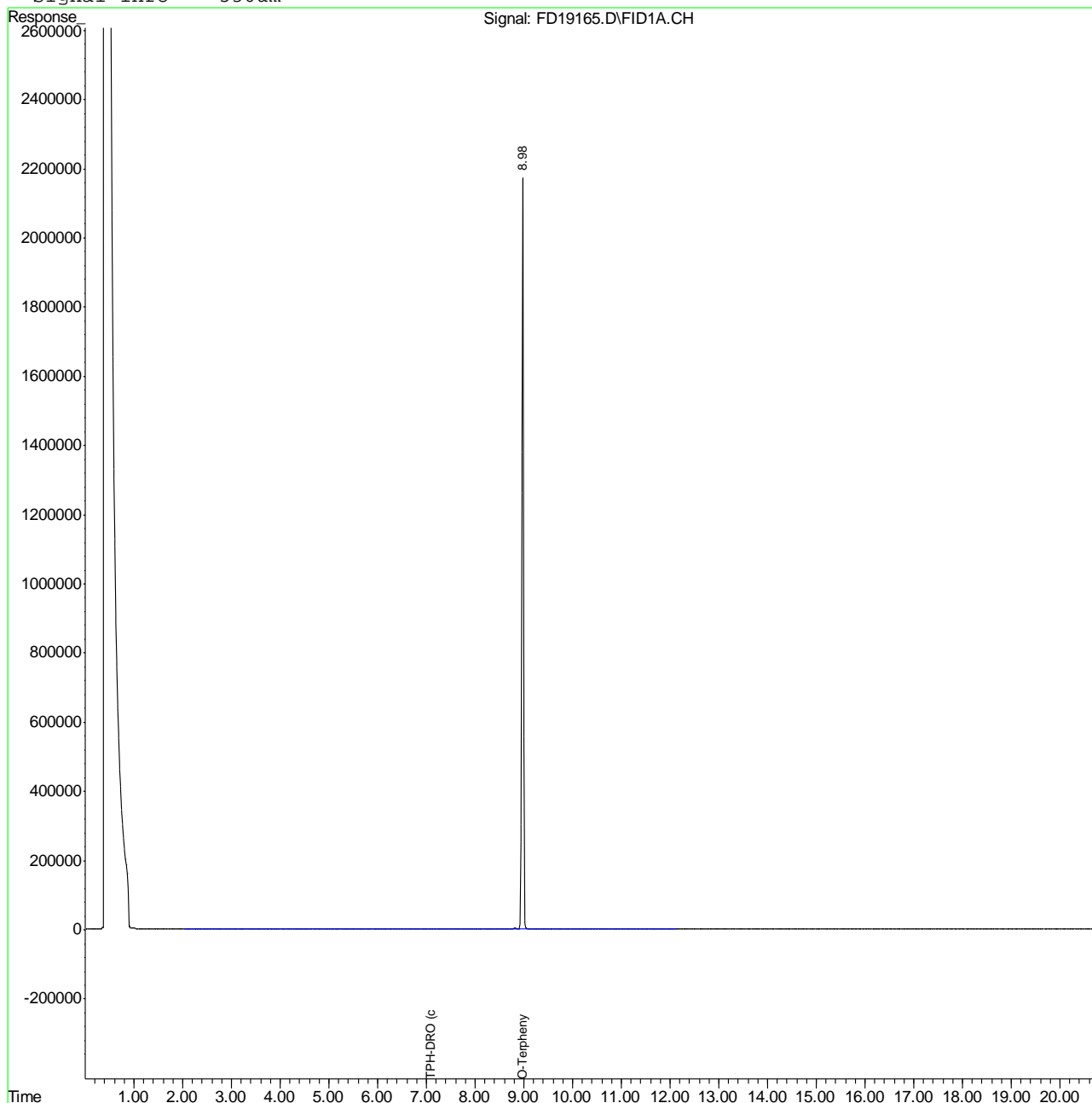
9

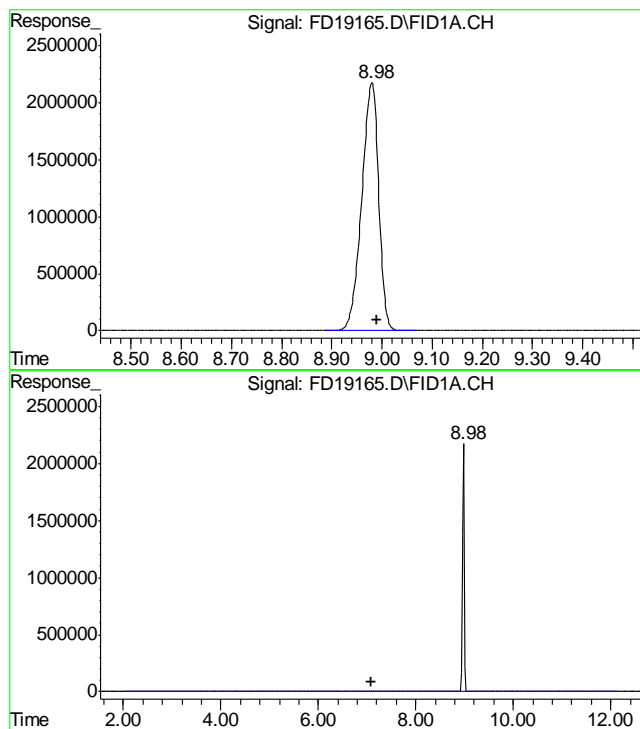
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\NOV\FD110512\FD19165.D Vial: 3
Acq On : 11-5-2012 03:10:23 PM Operator: ashleyv
Sample : OP6912-MB Inst : FID5
Misc : OP6912,GFD968,30.00,,,2,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Nov 5 17:15 2012 Quant Results File: DRO-GFD823F.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD823F.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Thu Nov 01 16:47:14 2012
Response via : Multiple Level Calibration
DataAcq Meth : DRO_FR.M

Volume Inj. : 1ul
Signal Phase : RTX-5
Signal Info : 530um





#1 O-Terphenyl

R.T.: 8.980 min
Delta R.T.: -0.010 min
Response: 50988063
Conc: 1079.37 mg/L

#2 TPH-DRO (c10-c28)

R.T.: 7.075 min
Delta R.T.: 0.000 min
Response: 606347
Conc: 15.75 mg/L m