



02/28/12

Technical Report for

XTO Energy

FRU 297-32A

1108-12A

Accutest Job Number: D32152

Sampling Date: 02/22/12

Report to:

KRW Consulting, Inc.
8000 West 14th Avenue
Lakewood, CO 80214
cburger@krwconsulting.com; gknell@krwconsulting.com;
dknudson@krwconsulting.com; jhess@krwconsulting.com;
ATTN: Dwayne Knudson

Total number of pages in report: 36



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)

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Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Sample Results	5
3.1: D32152-1: RP BERM SOUTH SIDE (-6")	6
Section 4: Misc. Forms	8
4.1: Chain of Custody	9
Section 5: GC Volatiles - QC Data Summaries	11
5.1: Method Blank Summary	12
5.2: Blank Spike Summary	13
5.3: Matrix Spike/Matrix Spike Duplicate Summary	14
Section 6: GC Volatiles - Raw Data	15
6.1: Samples	16
6.2: Method Blanks	21
Section 7: GC Semi-volatiles - QC Data Summaries	26
7.1: Method Blank Summary	27
7.2: Blank Spike Summary	28
7.3: Matrix Spike/Matrix Spike Duplicate Summary	29
Section 8: GC Semi-volatiles - Raw Data	30
8.1: Samples	31
8.2: Method Blanks	34



Sample Summary

XTO Energy

Job No: D32152

FRU 297-32A

Project No: 1108-12A

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
D32152-1	02/22/12	12:10 CB	02/24/12	SO	Soil	RP BERM SOUTH SIDE (-6")

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: XTO Energy**Job No** D32152**Site:** FRU 297-32A**Report Date** 2/28/2012 2:16:12 PM

On 02/24/2012, 1 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 2.2 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D32152 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:** GGB847

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D32152-1MS, D32152-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846-8015B

Matrix SO**Batch ID:** OP5427

- All samples were extracted and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D32157-9MS, D32157-9MSD were used as the QC samples indicated.

Wet Chemistry By Method SM19 2540B M

Matrix SO**Batch ID:** GN13831

- 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.

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	RP BERM SOUTH SIDE (-6")			Date Sampled:	02/22/12
Lab Sample ID:	D32152-1			Date Received:	02/24/12
Matrix:	SO - Soil			Percent Solids:	87.0
Method:	SW846 8015B				
Project:	FRU 297-32A				

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15063.D	1	02/25/12	SK	n/a	n/a	GGB847
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	13	6.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	94%		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:	RP BERM SOUTH SIDE (-6")			Date Sampled:	02/22/12
Lab Sample ID:	D32152-1			Date Received:	02/24/12
Matrix:	SO - Soil			Percent Solids:	87.0
Method:	SW846-8015B SW846 3546				
Project:	FRU 297-32A				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001706.D	1	02/27/12	TR	02/27/12	OP5427	GFH89
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)	232	15	9.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	86%		43-136%		

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

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Mountain States
4036 Youngfield Street Wheat Ridge, Co 80033
TEL. 303-425-6021 877-737-4521
FAX 303-425-6021

[illegible]

D32152: Chain of Custody

Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D32152

Client: KRW CONSULTING INC

Immediate Client Services Action Required: No

Date / Time Received: 2/24/2012 8:55:00 AM

No. Coolers: 1

Client Service Action Required at Login: No

Project: XTO FRU 297-32A

Airbill #'s: HD CO

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

5

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: D32152
Account: XTOKRWR XTO Energy
Project: FRU 297-32A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB847-MB	GB15061.D	1	02/25/12	SK	n/a	n/a	GGB847

The QC reported here applies to the following samples:

Method: SW846 8015B

D32152-1

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	95% 60-140%

Blank Spike Summary

Page 1 of 1

Job Number: D32152
Account: XTOKRWR XTO Energy
Project: FRU 297-32A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB847-BS	GB15062.D	1	02/25/12	SK	n/a	n/a	GGB847

The QC reported here applies to the following samples:

Method: SW846 8015B

D32152-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	110	110	100	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	108%	60-140%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D32152
Account: XTOKRWR XTO Energy
Project: FRU 297-32A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D32152-1MS	GB15064.D	1	02/25/12	SK	n/a	n/a	GGB847
D32152-1MSD	GB15065.D	1	02/25/12	SK	n/a	n/a	GGB847
D32152-1	GB15063.D	1	02/25/12	SK	n/a	n/a	GGB847

The QC reported here applies to the following samples:

Method: SW846 8015B

D32152-1

CAS No.	Compound	D32152-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		142	141	99	141	99	0	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D32152-1	Limits
120-82-1	1,2,4-Trichlorobenzene	102%	109%	94%	60-140%

GC Volatiles

Raw Data



Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\022512\GB15063.D\FID1A.CH Vial: 4
 Signal #2 : Y:\1\DATA\022512\GB15063.D\FID2B.CH
 Acq On : 25 Feb 2012 3:33 pm Operator: StephK
 Sample : D32152-1, 50X Inst : GC/MS Ins
 Misc : GC2635,GGB847,5.016,,100,5,1 Multiplr: 1.00
 IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
 Quant Time: Feb 27 11:51:01 2012 Quant Results File: TB846GB846SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB846GB846SOIL.M (Chemstation Integrator)
 Title : 8015B/8021B TVH/BTEX
 Last Update : Sat Feb 25 09:47:45 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	14.34	2695140	94.104	%
10) S	1,2,4-Trichlorobenzene (P)	14.34	21587250	94.851	%
Target Compounds					
1) H	TVH-Gasoline	7.28	5813401	<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	7.60	219347	0.415	ug/L
7) T	Ethylbenzene	0.00	0	N.D.	ug/L d
8) T	m,p-Xylene	10.43	244562	0.448	ug/L
9) T	o-Xylene	0.00	0	N.D.	ug/L d
11) T	Naphthalene	14.53	881058	3.667	ug/L

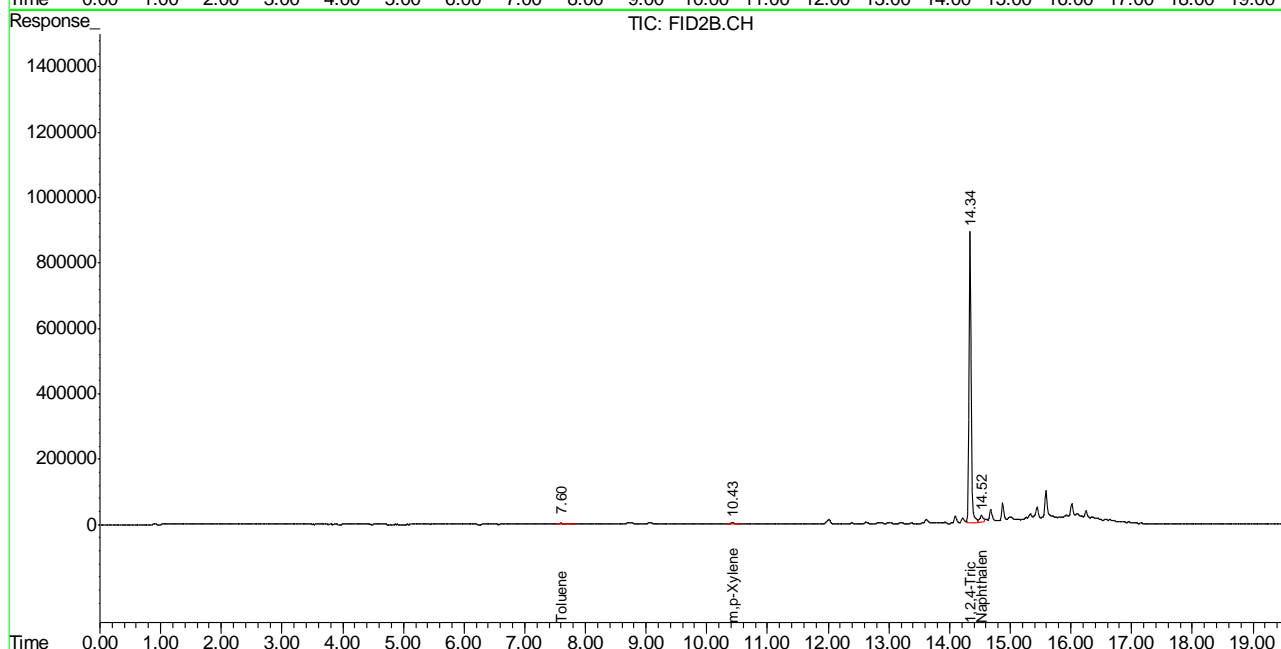
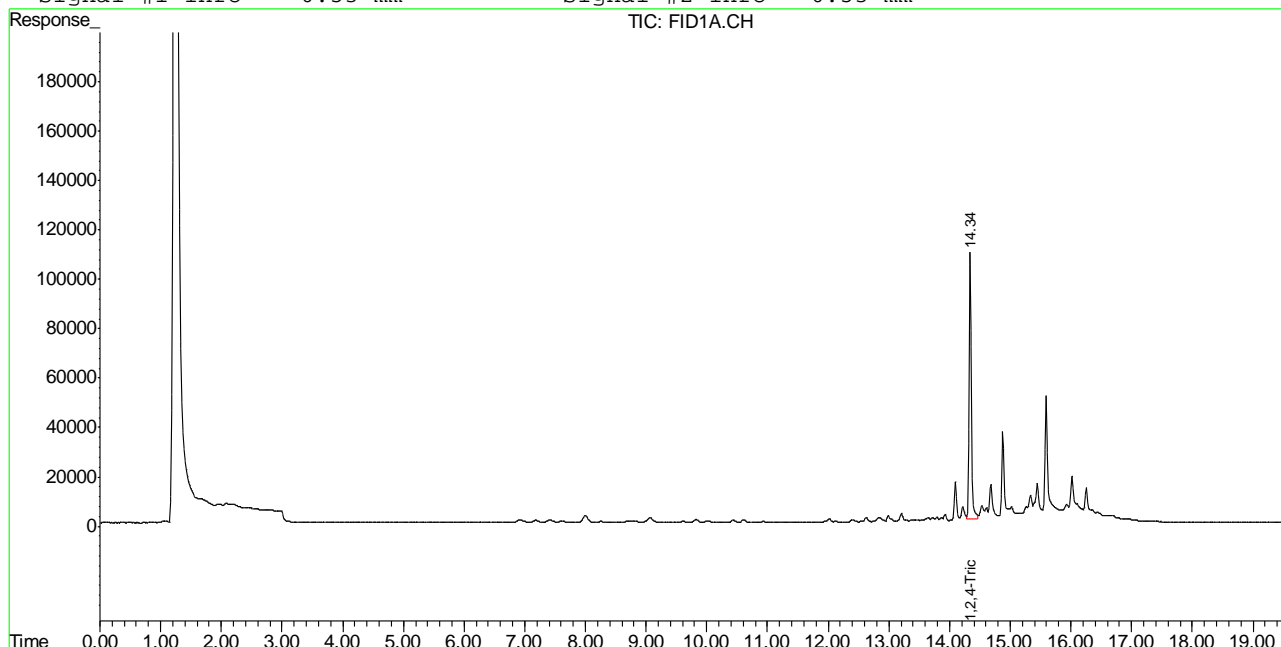
(f)=RT Delta > 1/2 Window (m)=manual int.
 GB15063.D TB846GB846SOIL.M Mon Feb 27 13:03:51 2012 GC

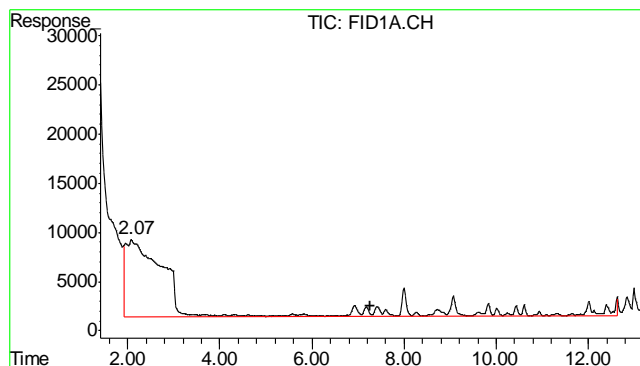
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\022512\GB15063.D\FID1A.CH Vial: 4
 Signal #2 : Y:\1\DATA\022512\GB15063.D\FID2B.CH
 Acq On : 25 Feb 2012 3:33 pm Operator: StephK
 Sample : D32152-1, 50X Inst : GC/MS Ins
 Misc : GC2635,GGB847,5.016,,100,5,1 Multiplr: 1.00
 IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
 Quant Time: Feb 27 10:56 2012 Quant Results File: TB846GB846SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB846GB846SOIL.M (Chemstation Integrator)
 Title : 8015B/8021B TVH/BTEX
 Last Update : Sat Feb 25 09:47:45 2012
 Response via : Multiple Level Calibration
 DataAcq Meth : TVB4.M

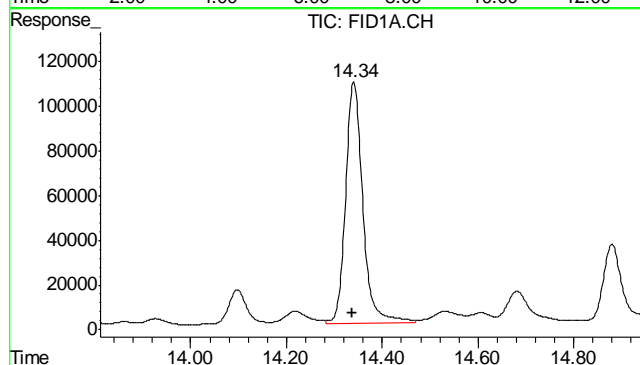
Volume Inj. :
 Signal #1 Phase : DB-624 Signal #2 Phase: DB-624
 Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm





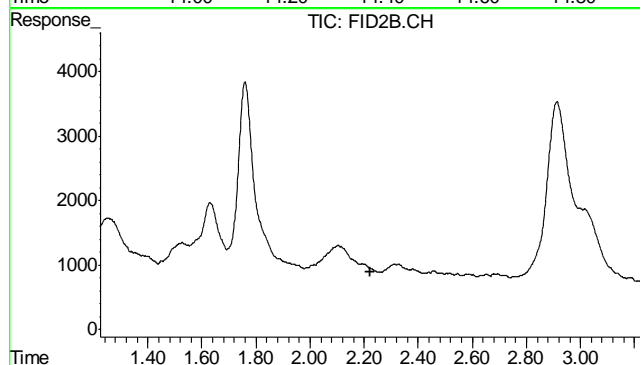
#1 TVH-Gasoline

R.T.: 7.275 min
Delta R.T.: 0.000 min
Response: 5813401
Conc: N.D.



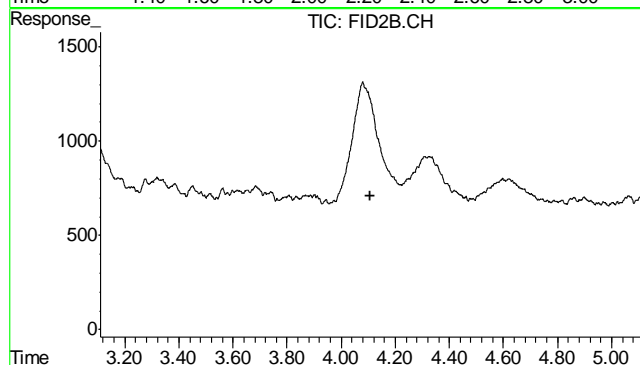
#2 1,2,4-Trichlorobenzene

R.T.: 14.341 min
Delta R.T.: 0.003 min
Response: 2695140
Conc: 94.10 %



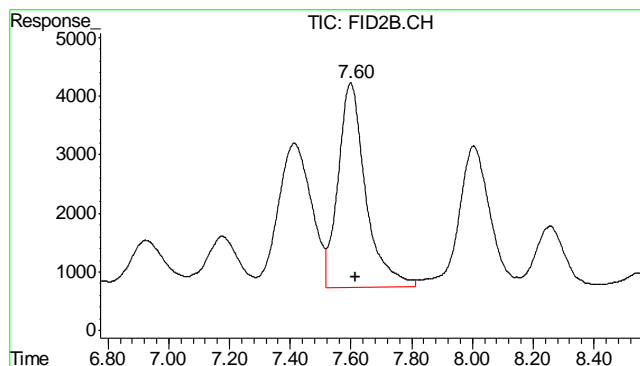
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T.: 2.224 min
Response: 0
Conc: N.D.



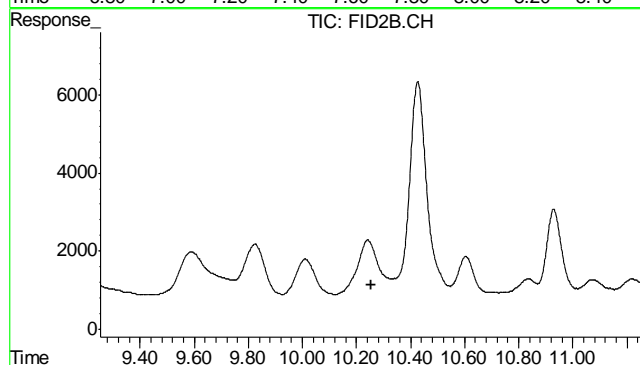
#5 Benzene

R.T.: 0.000 min
Exp R.T.: 4.108 min
Response: 0
Conc: N.D.



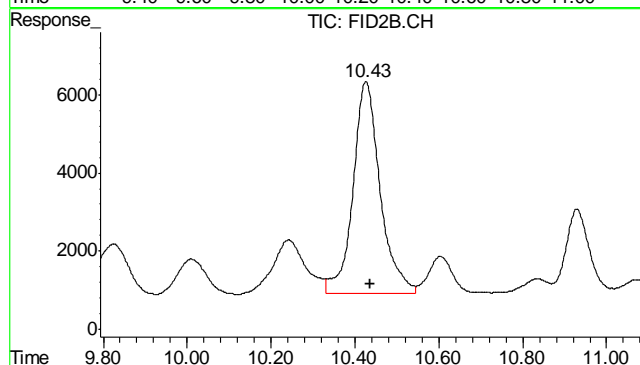
#6 Toluene

R.T.: 7.599 min
Delta R.T.: -0.016 min
Response: 219347
Conc: 0.42 ug/L



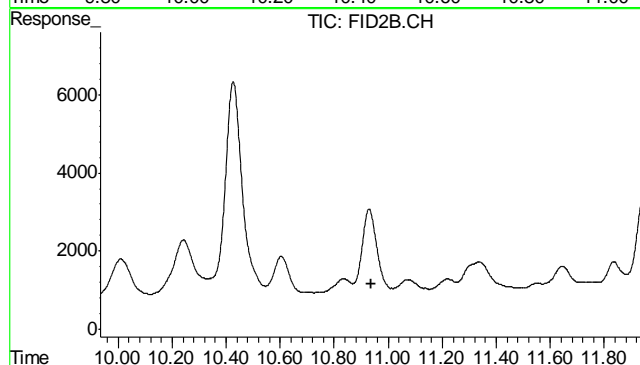
#7 Ethylbenzene

R.T.: 0.000 min
Exp R.T.: 10.253 min
Response: 0
Conc: N.D.



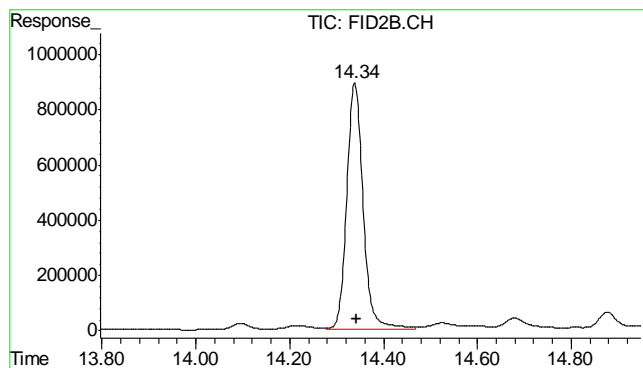
#8 m,p-Xylene

R.T.: 10.426 min
Delta R.T.: -0.009 min
Response: 244562
Conc: 0.45 ug/L



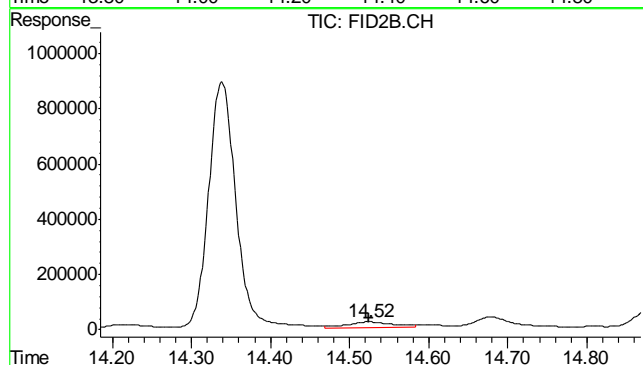
#9 o-Xylene

R.T.: 0.000 min
Exp R.T.: 10.935 min
Response: 0
Conc: N.D.



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

R.T.: 14.339 min
Delta R.T.: -0.005 min
Response: 21587250
Conc: 94.85 %



#11 Naphthalene

R.T.: 14.525 min
Delta R.T.: 0.000 min
Response: 881058
Conc: 3.67 ug/L

6.1.1

6

Judy Melson
02/27/12 14:32

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\022512\GB15061.D\FID1A.CH Vial: 2
Signal #2 : Y:\1\DATA\022512\GB15061.D\FID2B.CH
Acq On : 25 Feb 2012 2:21 pm Operator: StephK
Sample : MB, S Inst : GC/MS Ins
Misc : GC2635,GGB847,5.000,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Feb 27 11:50:53 2012 Quant Results File: TB846GB846SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB846GB846SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Sat Feb 25 09:47:45 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

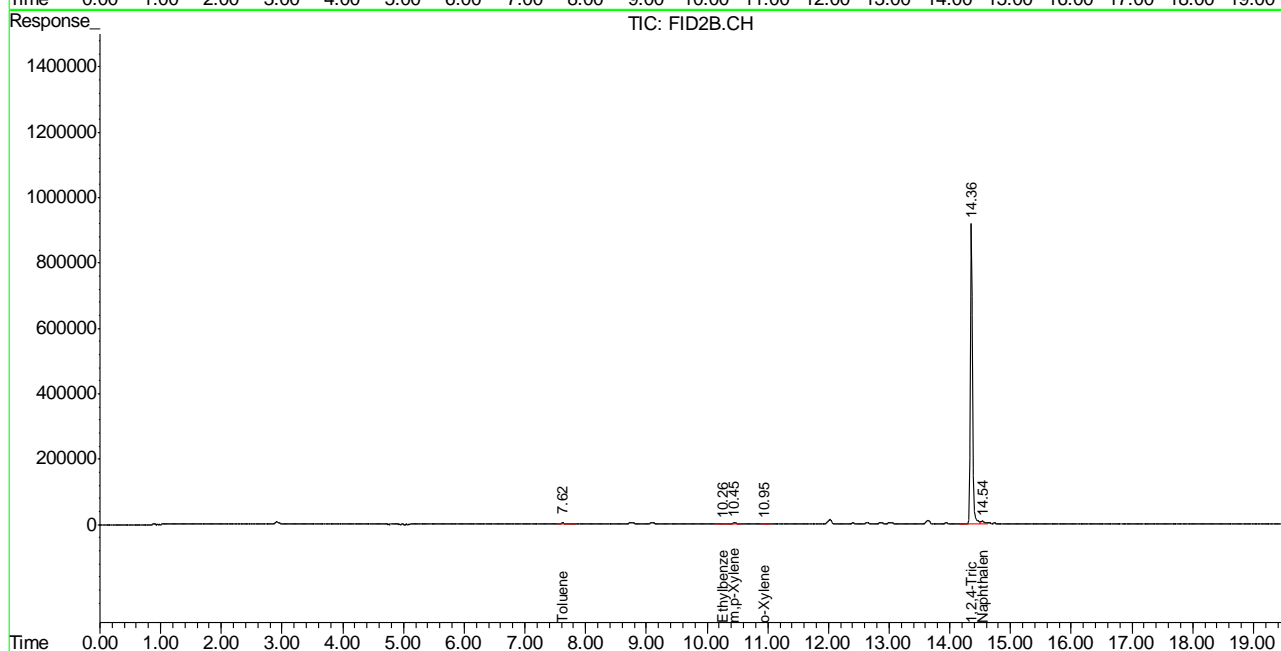
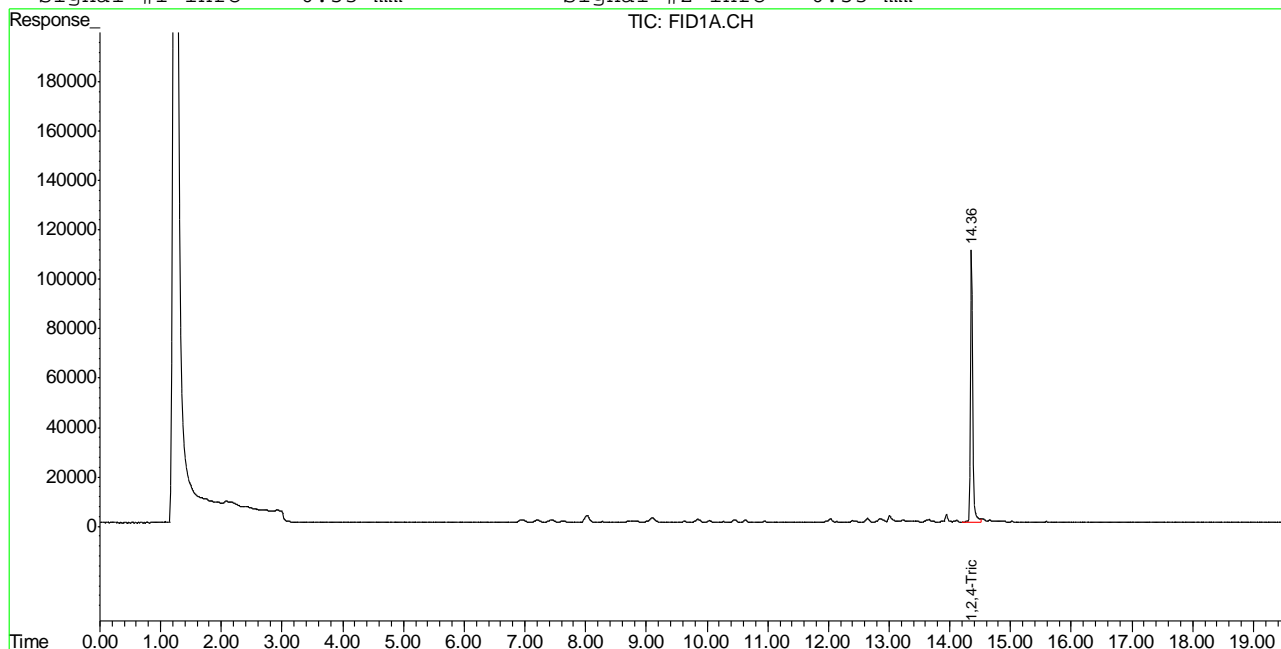
System Monitoring Compounds					
2) S	1,2,4-Trichlorobenzene	14.36	2730244	95.330 %	m
10) S	1,2,4-Trichlorobenzene (P)	14.36	22006829	96.695 %	
Target Compounds					
1) H	TVH-Gasoline	7.28	5922349	<MDL	mg/L
4) T	Methyl-t-butyl-ether	0.00	0	N.D.	ug/L d
5) T	Benzene	0.00	0	N.D.	ug/L d
6) T	Toluene	7.62	230202	0.436	ug/L
7) T	Ethylbenzene	10.26	88201	0.202	ug/L
8) T	m,p-Xylene	10.45	251802	0.461	ug/L
9) T	o-Xylene	10.95	83058	0.189	ug/L
11) T	Naphthalene	14.54	331521	1.380	ug/L

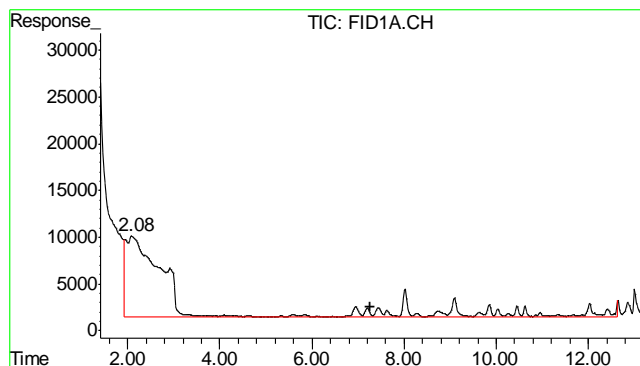
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\022512\GB15061.D\FID1A.CH Vial: 2
Signal #2 : Y:\1\DATA\022512\GB15061.D\FID2B.CH
Acq On : 25 Feb 2012 2:21 pm Operator: StephK
Sample : MB, S Inst : GC/MS Ins
Misc : GC2635,GGB847,5.000,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Feb 27 10:56 2012 Quant Results File: TB846GB846SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB846GB846SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Sat Feb 25 09:47:45 2012
Response via : Multiple Level Calibration
DataAcq Meth : TVB4.M

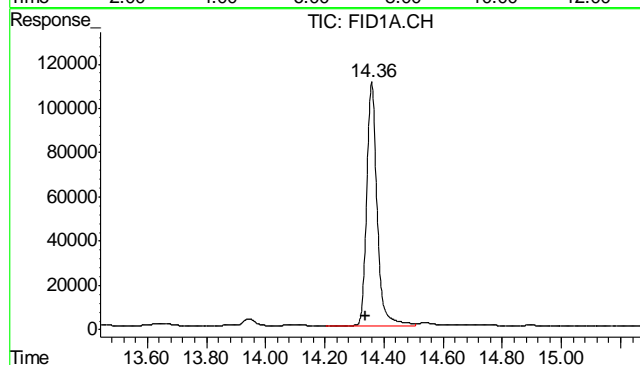
Volume Inj. :
Signal #1 Phase : DB-624 Signal #2 Phase: DB-624
Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm





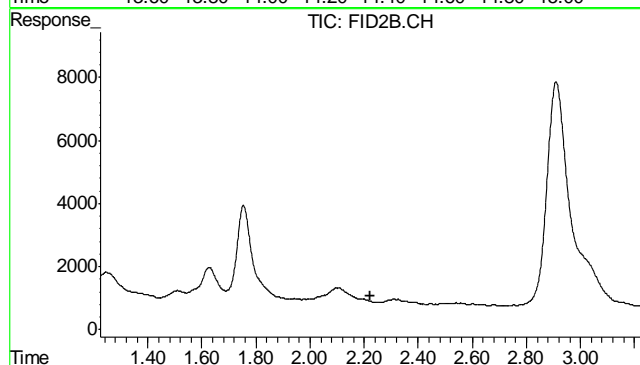
#1 TVH-Gasoline

R.T.: 7.275 min
Delta R.T.: 0.000 min
Response: 5922349
Conc: N.D.



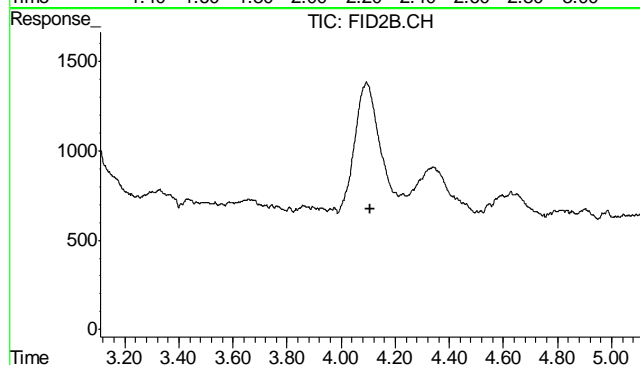
#2 1,2,4-Trichlorobenzene

R.T.: 14.358 min
Delta R.T.: 0.020 min
Response: 2730244
Conc: 95.33 % m



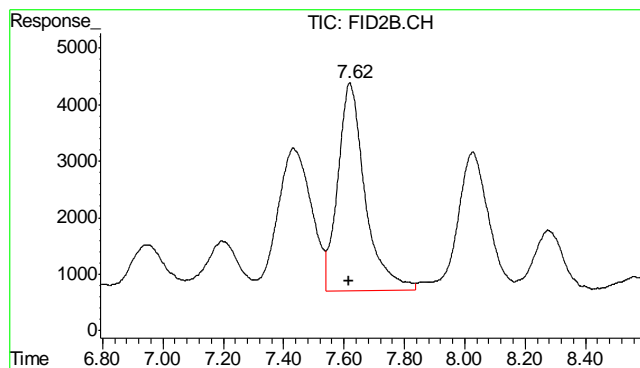
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T.: 2.224 min
Response: 0
Conc: N.D.



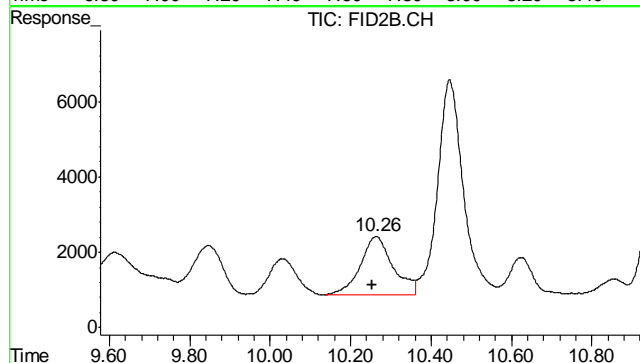
#5 Benzene

R.T.: 0.000 min
Exp R.T.: 4.108 min
Response: 0
Conc: N.D.



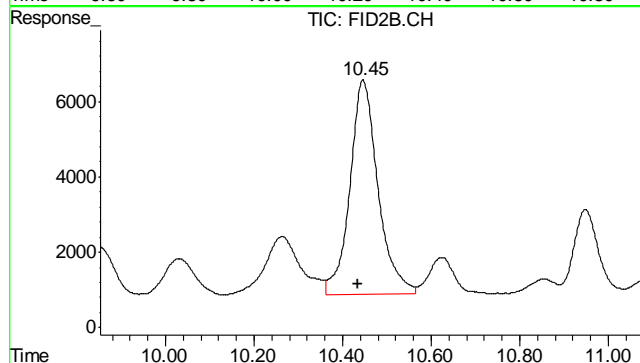
#6 Toluene

R.T.: 7.619 min
Delta R.T.: 0.004 min
Response: 230202
Conc: 0.44 ug/L



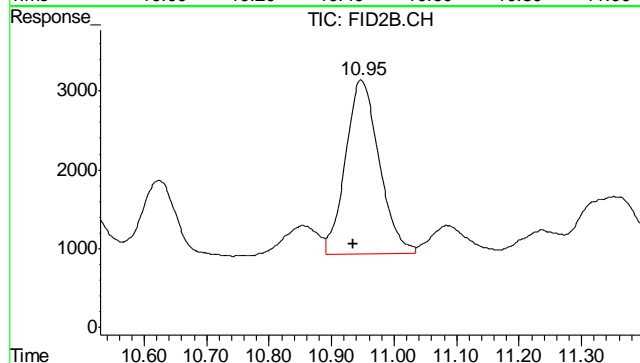
#7 Ethylbenzene

R.T.: 10.263 min
Delta R.T.: 0.010 min
Response: 88201
Conc: 0.20 ug/L



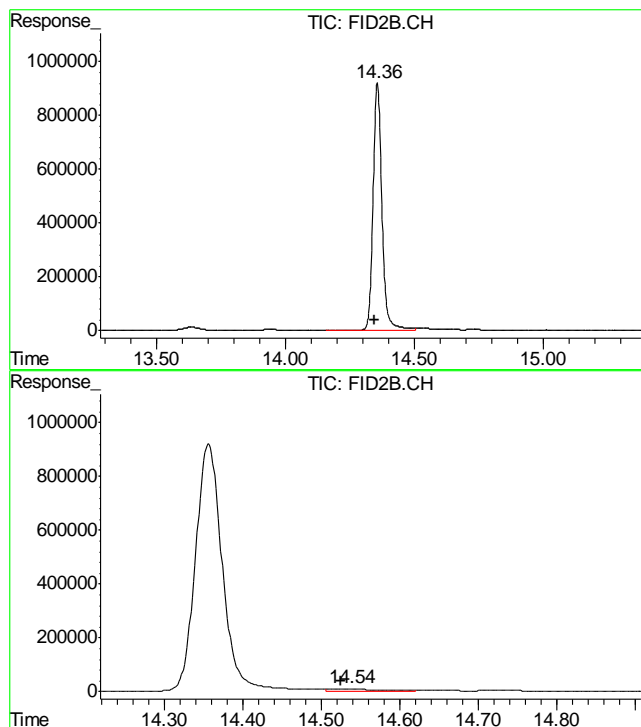
#8 m,p-Xylene

R.T.: 10.447 min
Delta R.T.: 0.011 min
Response: 251802
Conc: 0.46 ug/L



#9 o-Xylene

R.T.: 10.948 min
Delta R.T.: 0.013 min
Response: 83058
Conc: 0.19 ug/L



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

R.T.: 14.356 min
Delta R.T.: 0.013 min
Response: 22006829
Conc: 96.69 %

#11 Naphthalene

R.T.: 14.537 min
Delta R.T.: 0.012 min
Response: 331521
Conc: 1.38 ug/L

6.2.1
6

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: D32152
Account: XTOKRWR XTO Energy
Project: FRU 297-32A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5427-MB	FH001696.D	1	02/27/12	TR	02/27/12	OP5427	GFH89

The QC reported here applies to the following samples:

Method: SW846-8015B

D32152-1

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	86% 43-136%

Blank Spike Summary

Page 1 of 1

Job Number: D32152
Account: XTOKRWR XTO Energy
Project: FRU 297-32A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5427-BS	FH001698.D	1	02/27/12	TR	02/27/12	OP5427	GFH89

The QC reported here applies to the following samples:

Method: SW846-8015B

D32152-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	667	567	85	58-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	91%	43-136%

7.2.1

7

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D32152
Account: XTOKRWR XTO Energy
Project: FRU 297-32A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5427-MS	FH001700.D	1	02/27/12	TR	02/27/12	OP5427	GFH89
OP5427-MSD	FH001702.D	1	02/27/12	TR	02/27/12	OP5427	GFH89
D32157-9	FH001704.D	1	02/27/12	TR	02/27/12	OP5427	GFH89

The QC reported here applies to the following samples:

Method: SW846-8015B

D32152-1

CAS No.	Compound	D32157-9 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	317		840	970	78	944	74	3	20-183/43

CAS No.	Surrogate Recoveries	MS	MSD	D32157-9	Limits
84-15-1	o-Terphenyl	73%	70%	73%	43-136%

7.3.1

7

GC Semi-volatiles

Raw Data

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH022712.SEC\
 Data File : FH001706.D
 Signal(s) : FID2B.ch
 Acq On : 27 Feb 2012 8:43 pm
 Operator : tedr
 Sample : D32152-1
 Misc : OP5427,GFH89,30.07,,,2,1
 ALS Vial : 8 Sample Multiplier: 1

Integration File: events.e
 Quant Time: Feb 28 08:35:55 2012
 Quant Method : C:\msdchem\1\METHODS\DRO-GFH33R.M
 Quant Title : DRO-ORO REAR
 QLast Update : Tue Jan 31 11:32:12 2012
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
2) s o-Terphenyl	12.284	1256668894	856.127 ug/ml
Target Compounds			
1) H TPH-DRO (C10-C28)	9.850	3767644654	3029.732 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

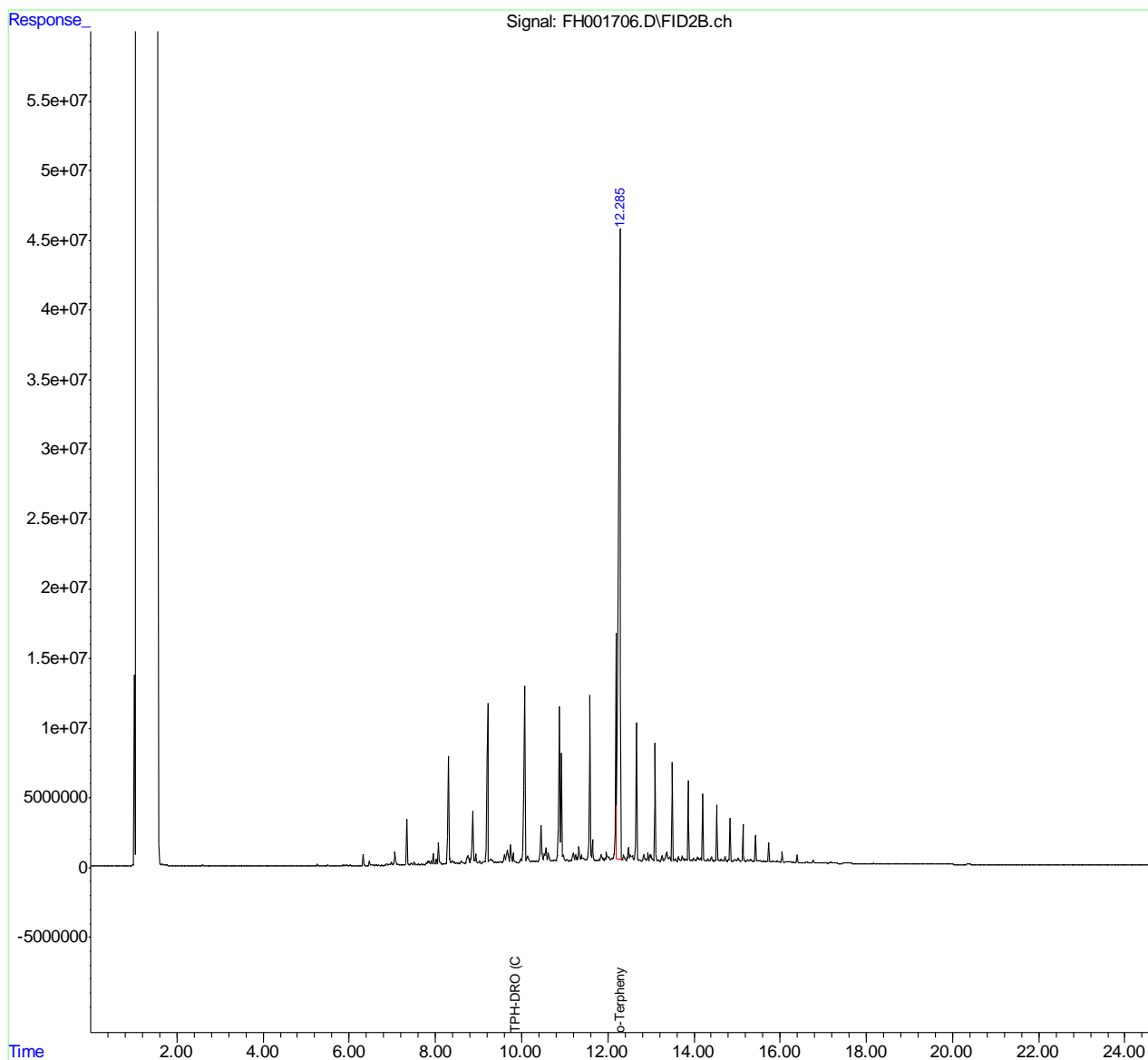
8.1.1
8

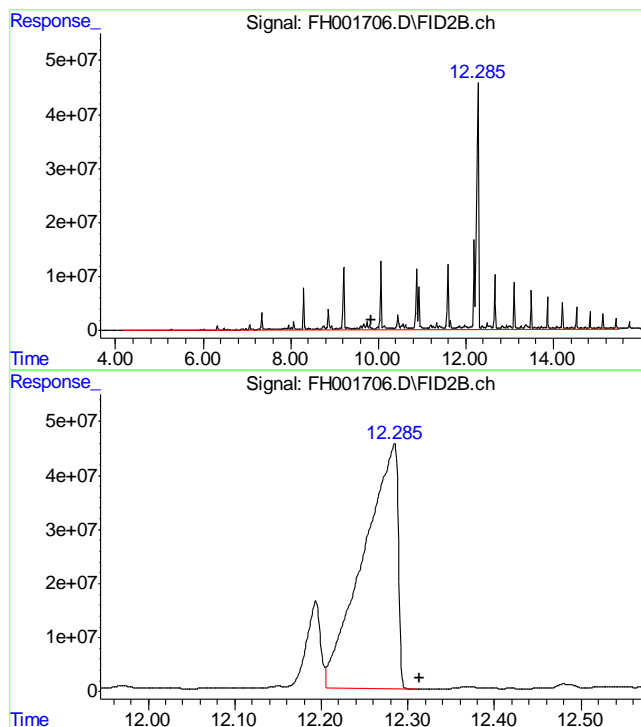
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH022712.SEC\
Data File : FH001706.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2012 8:43 pm
Operator : tedr
Sample : D32152-1
Misc : OP5427,GFH89,30.07,,,2,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: events.e
Quant Time: Feb 28 08:35:55 2012
Quant Method : C:\msdchem\1\METHODS\DRO-GFH33R.M
Quant Title : DRO-ORO REAR
QLast Update : Tue Jan 31 11:32:12 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :





#1 TPH-DRO (C10-C28)

R.T.: 9.850 min

Delta R.T.: 0.000 min

Response: 3767644654

Conc: 3029.73 ug/ml m

#2 o-Terphenyl

R.T.: 12.284 min

Delta R.T.: -0.030 min

Response: 1256668894

Conc: 856.13 ug/ml

8.1.1

8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH022712.SEC\
Data File : FH001696.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2012 5:45 pm
Operator : tedr
Sample : OP5427-MB
Misc : OP5427,GFH89,30.00,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: events.e
Quant Time: Feb 27 18:26:59 2012
Quant Method : C:\msdchem\1\METHODS\DRO-GFH33R.M
Quant Title : DRO-ORO REAR
QLast Update : Tue Jan 31 11:32:12 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
2) s o-Terphenyl	12.281	1265950919	862.450 ug/ml
Target Compounds			
1) H TPH-DRO (C10-C28)	9.850	19958884	16.050 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

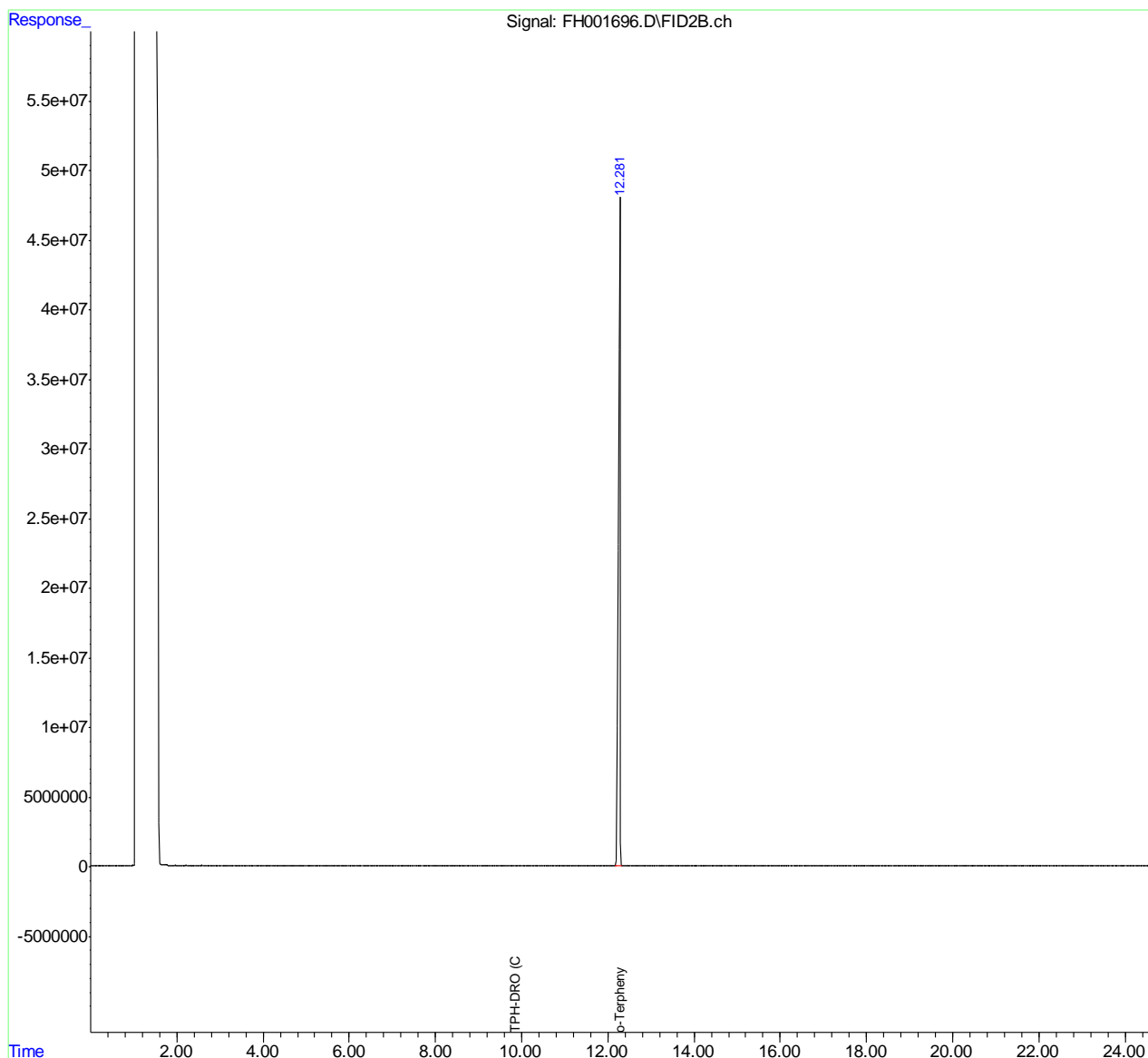
8.2.1
8

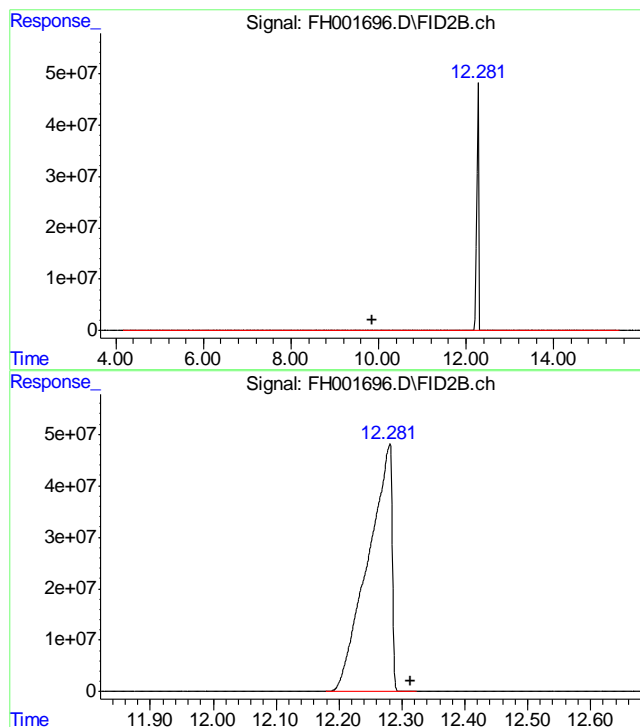
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH022712.SEC\
Data File : FH001696.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2012 5:45 pm
Operator : tedr
Sample : OP5427-MB
Misc : OP5427,GFH89,30.00,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: events.e
Quant Time: Feb 27 18:26:59 2012
Quant Method : C:\msdchem\1\METHODS\DRO-GFH33R.M
Quant Title : DRO-ORO REAR
QLast Update : Tue Jan 31 11:32:12 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :





#1 TPH-DRO (C10-C28)

R.T.: 9.850 min
Delta R.T.: 0.000 min
Response: 19958884
Conc: 16.05 ug/ml m

#2 o-Terphenyl

R.T.: 12.281 min
Delta R.T.: -0.033 min
Response: 1265950919
Conc: 862.45 ug/ml

8.2.1

8