



02/20/12

Technical Report for

XTO Energy

FRU 297-28C

1108-08A

Accutest Job Number: D31746

Sampling Date: 02/08/12


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.

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Sample Summary

XTO Energy

Job No: D31746

FRU 297-28C

Project No: 1108-08A

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
D31746-1	02/08/12	00:00 CB	02/09/12	SO	Soil	FRESHWATER SUBLINER-2'-3'

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: XTO Energy**Job No** D31746**Site:** FRU 297-28C**Report Date** 2/20/2012 6:36:35 PM

On 02/09/2012, 1 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 4 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D31746 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:** GGB841

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D31745-1MS, D31745-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846-8015B

Matrix: SO**Batch ID:** OP5373

- All samples were extracted and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D31900-1MS, D31900-1MSD were used as the QC samples indicated.

Wet Chemistry By Method SM19 2540B M

Matrix: SO**Batch ID:** GN13717

- 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:	FRESHWATER SUBLINER-2'-3'	Date Sampled:	02/08/12
Lab Sample ID:	D31746-1	Date Received:	02/09/12
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8015B		
Project:	FRU 297-28C		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB14933.D	1	02/16/12	SK	n/a	n/a	GGB841
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	6.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	111%		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:	FRESHWATER SUBLINER-2'-3'	Date Sampled:	02/08/12
Lab Sample ID:	D31746-1	Date Received:	02/09/12
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846-8015B SW846 3546		
Project:	FRU 297-28C		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001395.D	1	02/18/12	TR	02/15/12	OP5373	GFH64
Run #2							

Run #	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)	13.2	15	9.8	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	65%		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

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # D31746

[illegible]

D31746: Chain of Custody

Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D31746

Client: KRW

Immediate Client Services Action Required: No

Date / Time Received: 2/9/2012 1:30:00 PM

No. Coolers: 1

Client Service Action Required at Login: No

Project: FRU 297-28C

Airbill #'s: 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

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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: D31746

Account: XTOKRWR XTO Energy

Project: FRU 297-28C

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB841-MB	GB14928.D	1	02/16/12	SK	n/a	n/a	GGB841

The QC reported here applies to the following samples:

Method: SW846 8015B

D31746-1

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	113% 60-140%

Blank Spike Summary

Page 1 of 1

Job Number: D31746

Account: XTOKRWR XTO Energy

Project: FRU 297-28C

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB841-BS	GB14929.D	1	02/16/12	SK	n/a	n/a	GGB841

The QC reported here applies to the following samples:

Method: SW846 8015B

D31746-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	110	108	98	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	123%	60-140%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D31746
Account: XTOKRWR XTO Energy
Project: FRU 297-28C

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D31745-1MS	GB14931.D	1	02/16/12	SK	n/a	n/a	GGB841
D31745-1MSD	GB14932.D	1	02/16/12	SK	n/a	n/a	GGB841
D31745-1	GB14930.D	1	02/16/12	SK	n/a	n/a	GGB841

The QC reported here applies to the following samples:

Method: SW846 8015B

D31746-1

CAS No.	Compound	D31745-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		138	130	94	128	93	2	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D31745-1	Limits
120-82-1	1,2,4-Trichlorobenzene	119%	121%	113%	60-140%

GC Volatiles

Raw Data



Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\021612\GB14933.D\FID1A.CH Vial: 9
 Signal #2 : Y:\1\DATA\021612\GB14933.D\FID2B.CH
 Acq On : 16 Feb 2012 3:26 pm Operator: StephK
 Sample : D31746-1, 50X Inst : GC/MS Ins
 Misc : GC2613,GGB841,5.008,,100,5,1 Multiplr: 1.00
 IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
 Quant Time: Feb 16 17:30:35 2012 Quant Results File: TB791GB791SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB791GB791SOIL.M (Chemstation Integrator)
 Title : 8015B/8021B TVH/BTEX
 Last Update : Thu Feb 16 10:13:29 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

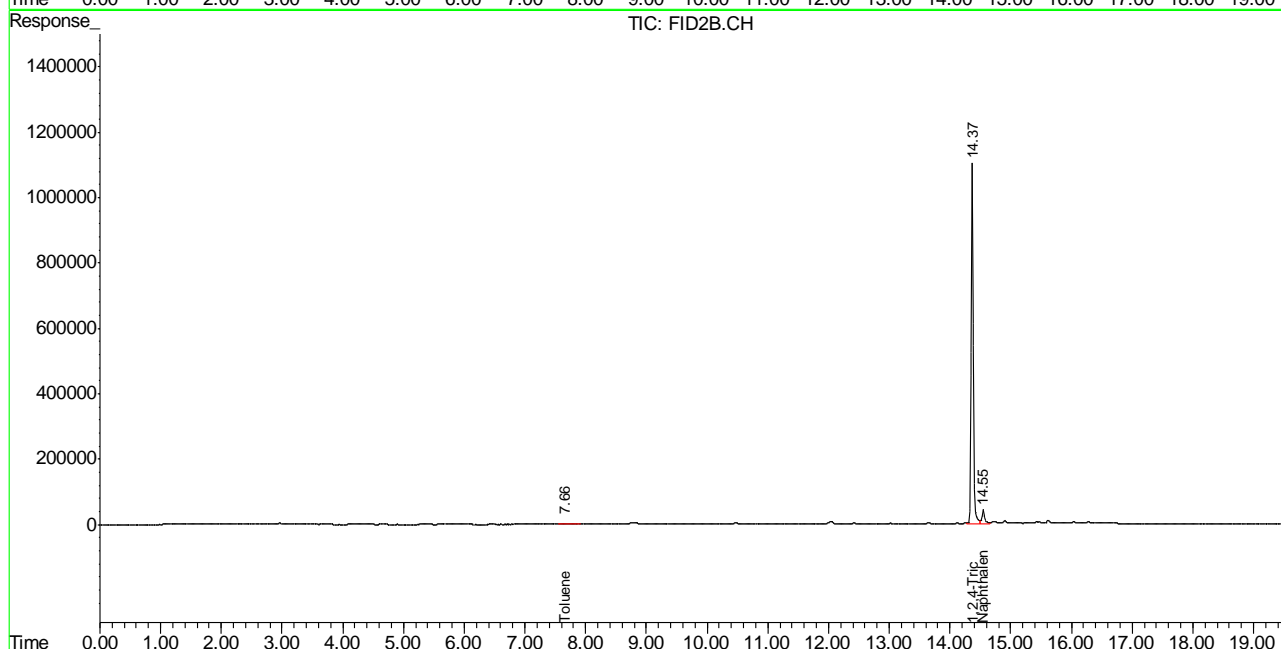
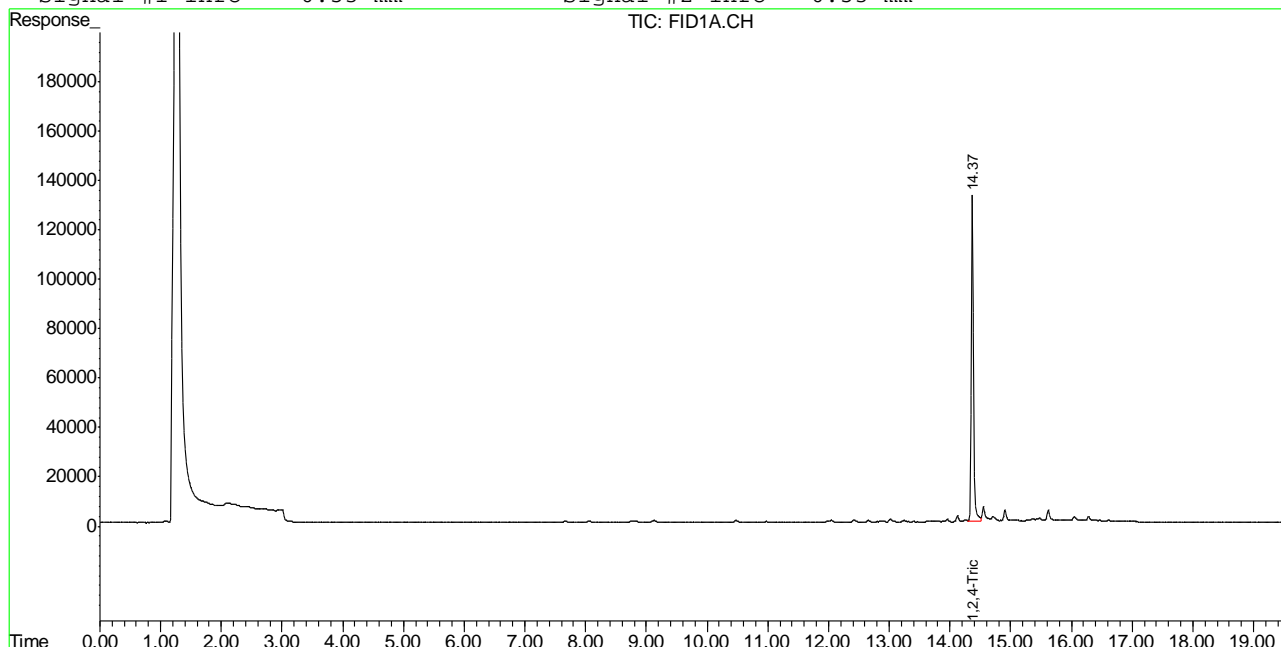
System Monitoring Compounds					
2) S	1,2,4-Trichlorobenzene	14.37	3252467	111.176	%
10) S	1,2,4-Trichlorobenzene (P)	14.37	26540825	115.475	%
Target Compounds					
1) H	TVH-Gasoline	7.32	5001725	<MDL	mg/L
4) T	Methyl-t-butyl-ether	0.00	0	N.D.	ug/L d
5) T	Benzene	0.00	0	N.D.	ug/L d
6) T	Toluene	7.66	155848	0.275	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	14.55	1294059	5.028	ug/L

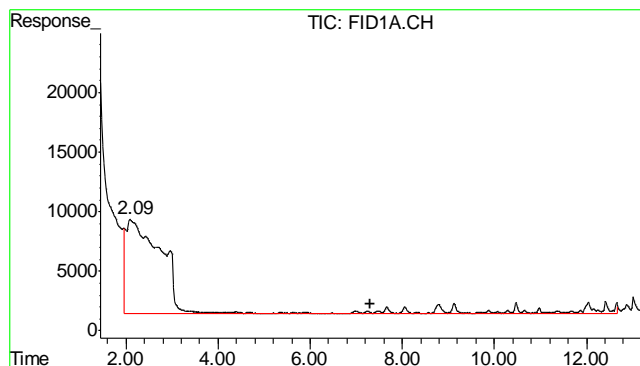
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\021612\GB14933.D\FID1A.CH Vial: 9
 Signal #2 : Y:\1\DATA\021612\GB14933.D\FID2B.CH
 Acq On : 16 Feb 2012 3:26 pm Operator: StephK
 Sample : D31746-1, 50X Inst : GC/MS Ins
 Misc : GC2613,GGB841,5.008,,100,5,1 Multiplr: 1.00
 IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
 Quant Time: Feb 16 16:31 2012 Quant Results File: TB791GB791SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB791GB791SOIL.M (Chemstation Integrator)
 Title : 8015B/8021B TVH/BTEX
 Last Update : Thu Feb 16 10:13:29 2012
 Response via : Multiple Level Calibration
 DataAcq Meth : TVB4.M

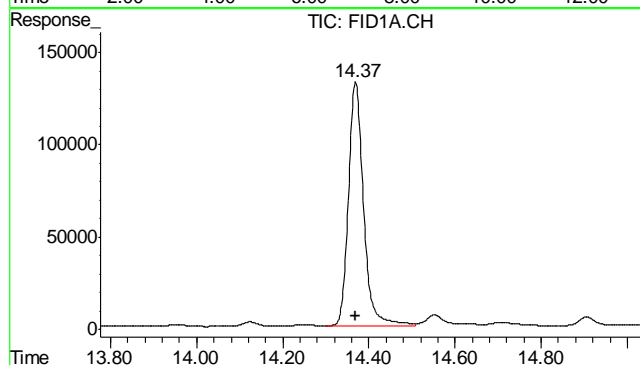
Volume Inj. :
 Signal #1 Phase : DB-624 Signal #2 Phase: DB-624
 Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm





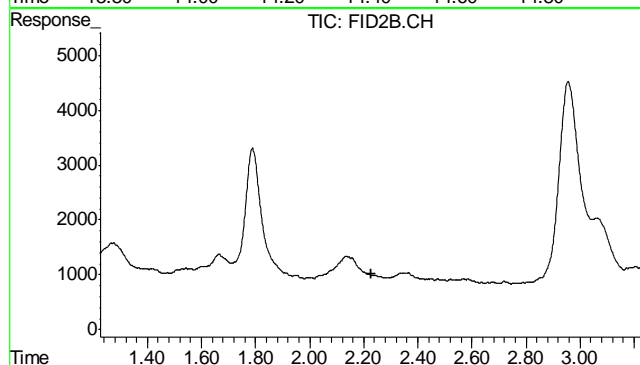
#1 TVH-Gasoline

R.T.: 7.315 min
Delta R.T.: 0.000 min
Response: 5001725
Conc: N.D.



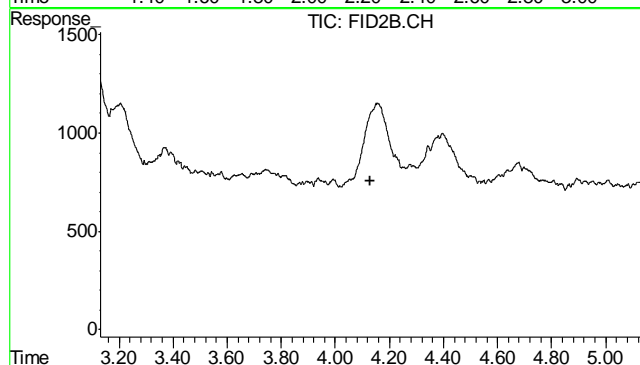
#2 1,2,4-Trichlorobenzene

R.T.: 14.369 min
Delta R.T.: 0.000 min
Response: 3252467
Conc: 111.18 %



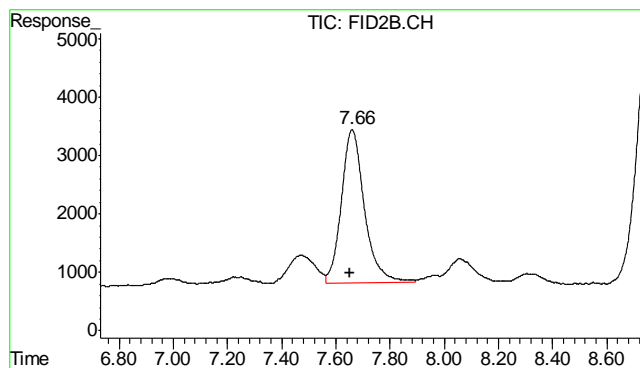
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T.: 2.226 min
Response: 0
Conc: N.D.



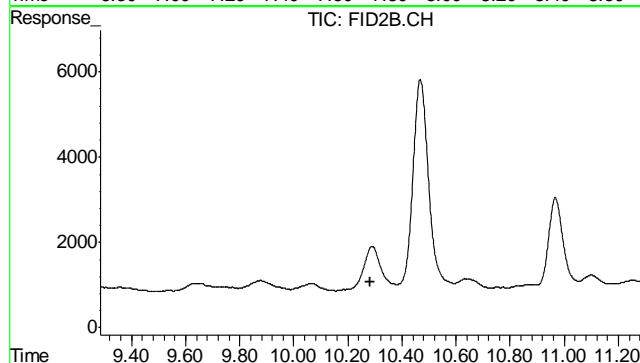
#5 Benzene

R.T.: 0.000 min
Exp R.T.: 4.130 min
Response: 0
Conc: N.D.



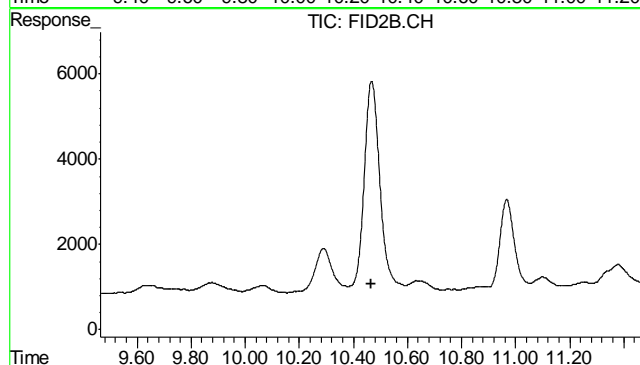
#6 Toluene

R.T.: 7.660 min
Delta R.T.: 0.009 min
Response: 155848
Conc: 0.28 ug/L



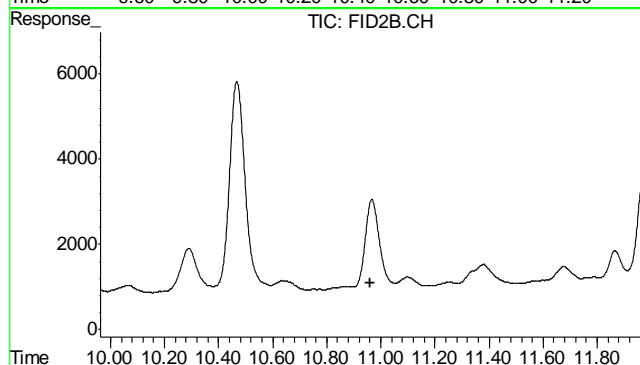
#7 Ethylbenzene

R.T.: 0.000 min
Exp R.T. : 10.284 min
Response: 0
Conc: N.D.



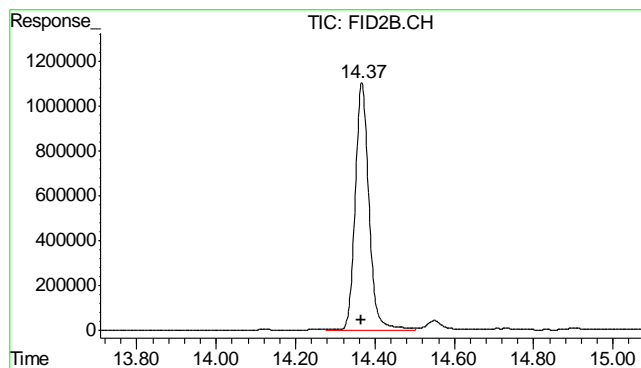
#8 m,p-Xylene

R.T.: 0.000 min
Exp R.T. : 10.464 min
Response: 0
Conc: N.D.



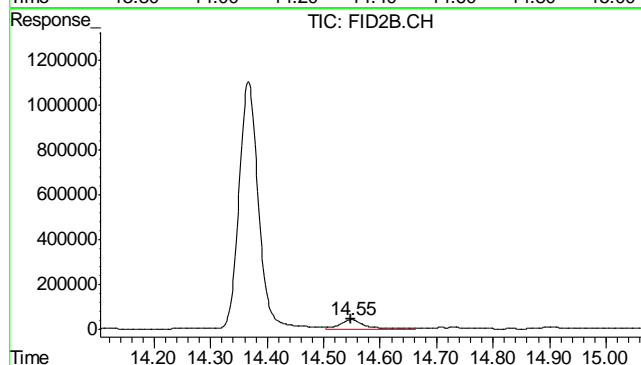
#9 o-Xylene

R.T.: 0.000 min
Exp R.T. : 10.962 min
Response: 0
Conc: N.D.



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

R.T.: 14.367 min
 Delta R.T.: 0.001 min
 Response: 26540825
 Conc: 115.48 %



#11 Naphthalene

R.T.: 14.550 min
 Delta R.T.: 0.002 min
 Response: 1294059
 Conc: 5.03 ug/L

6.1.1

6

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\021612\GB14928.D\FID1A.CH Vial: 4
 Signal #2 : Y:\1\DATA\021612\GB14928.D\FID2B.CH
 Acq On : 16 Feb 2012 12:19 pm Operator: StephK
 Sample : MB, S Inst : GC/MS Ins
 Misc : GC2613,GGB841,5.000,,100,5,1 Multiplr: 1.00
 IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
 Quant Time: Feb 16 17:29:50 2012 Quant Results File: TB791GB791SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB791GB791SOIL.M (Chemstation Integrator)
 Title : 8015B/8021B TVH/BTEX
 Last Update : Thu Feb 16 10:13:29 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	3312854	113.240	%
10) S 1,2,4-Trichlorobenzene (P)	14.36	27239671	118.516	%
Target Compounds				
1) H TVH-Gasoline	7.32	5125510	<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	7.64	158099	0.279	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	14.54	436467	1.696	ug/L

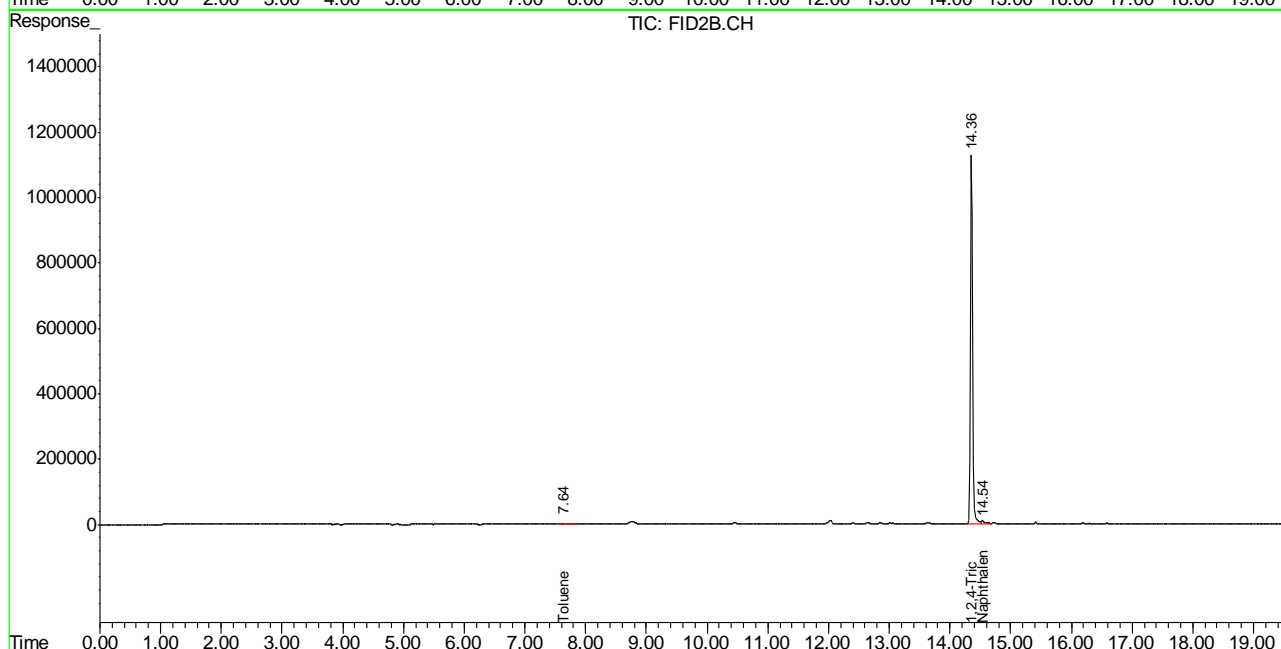
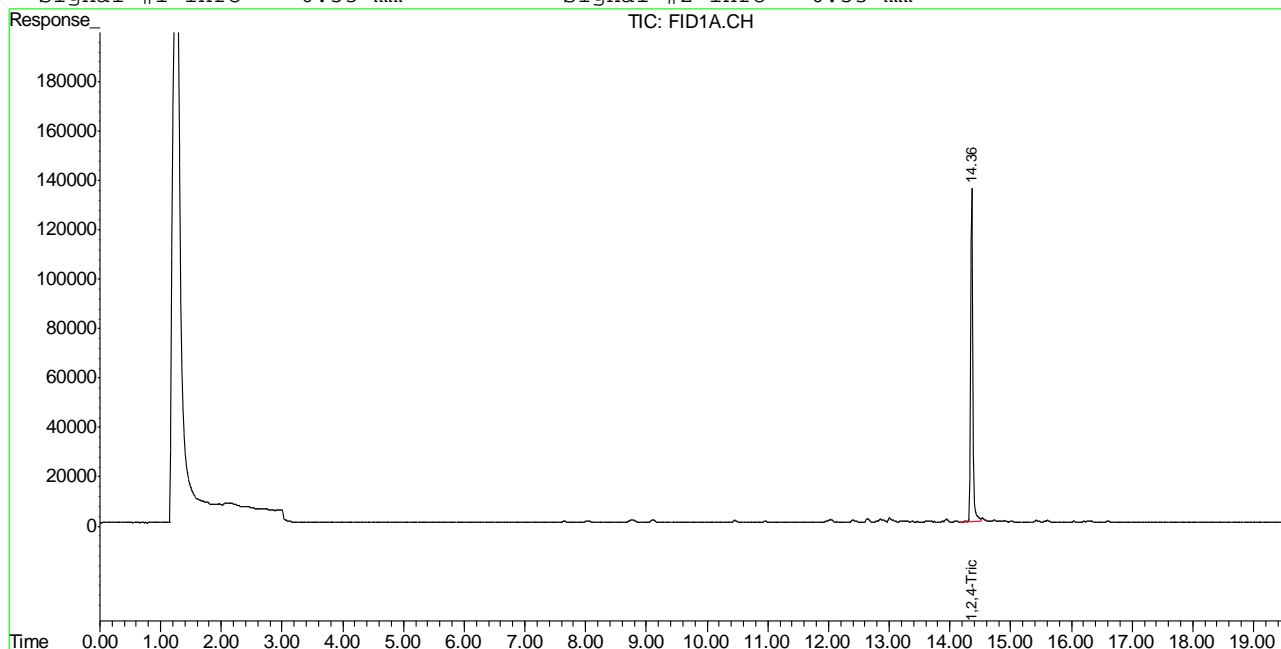
(f)=RT Delta > 1/2 Window (m)=manual int.
 GB14928.D TB791GB791SOIL.M Fri Feb 17 09:15:02 2012 GC

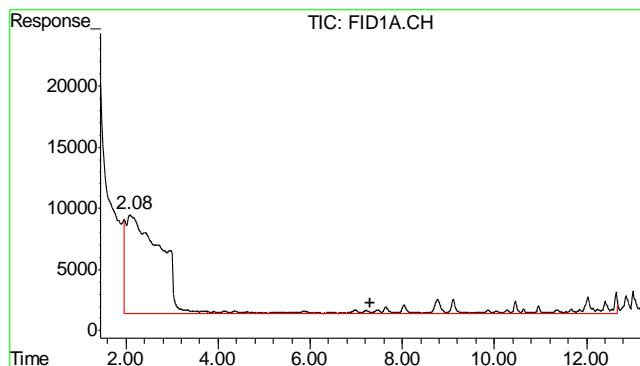
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\021612\GB14928.D\FID1A.CH Vial: 4
Signal #2 : Y:\1\DATA\021612\GB14928.D\FID2B.CH
Acq On : 16 Feb 2012 12:19 pm Operator: StephK
Sample : MB, S Inst : GC/MS Ins
Misc : GC2613,GGB841,5.000,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Feb 16 16:29 2012 Quant Results File: TB791GB791SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB791GB791SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Feb 16 10:13:29 2012
Response via : Multiple Level Calibration
DataAcq Meth : TVB4.M

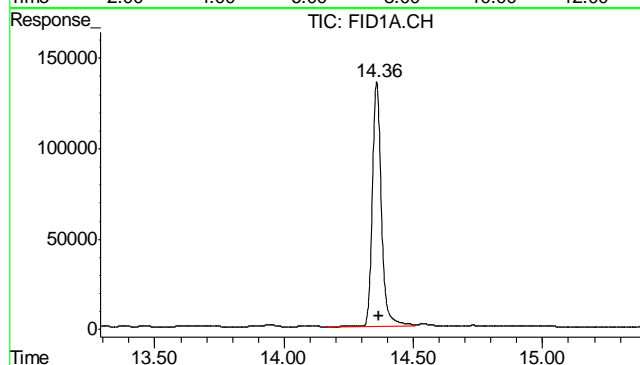
Volume Inj. :
Signal #1 Phase : DB-624 Signal #2 Phase: DB-624
Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm





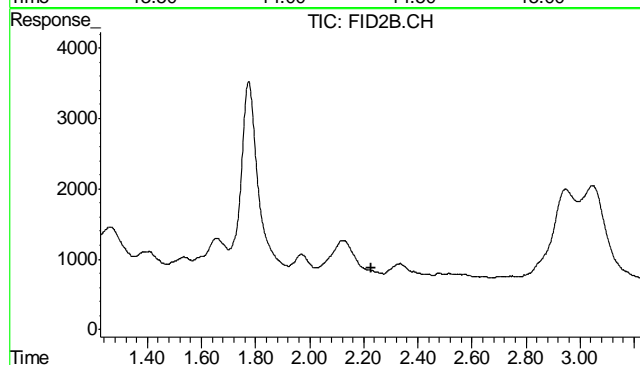
#1 TVH-Gasoline

R.T.: 7.315 min
Delta R.T.: 0.000 min
Response: 5125510
Conc: N.D.



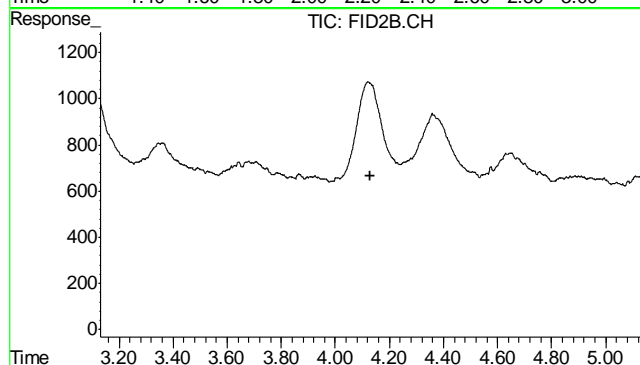
#2 1,2,4-Trichlorobenzene

R.T.: 14.358 min
Delta R.T.: -0.010 min
Response: 3312854
Conc: 113.24 %



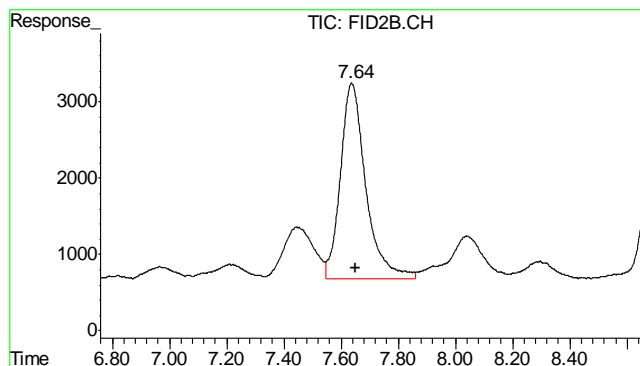
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T.: 2.226 min
Response: 0
Conc: N.D.



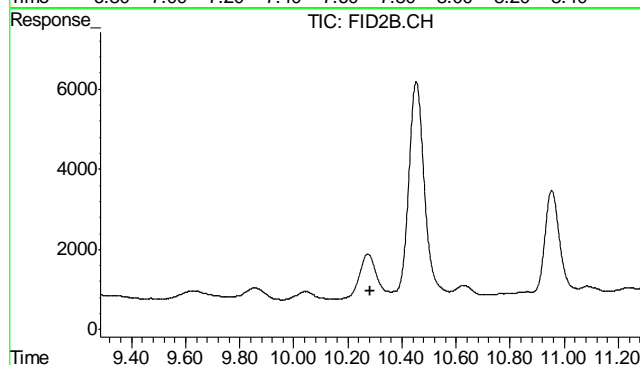
#5 Benzene

R.T.: 0.000 min
Exp R.T.: 4.130 min
Response: 0
Conc: N.D.



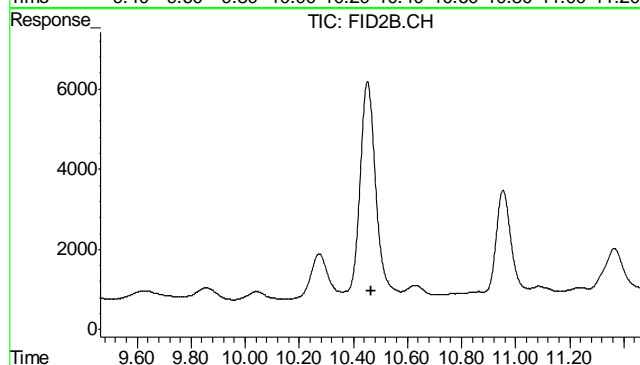
#6 Toluene

R.T.: 7.637 min
Delta R.T.: -0.014 min
Response: 158099
Conc: 0.28 ug/L



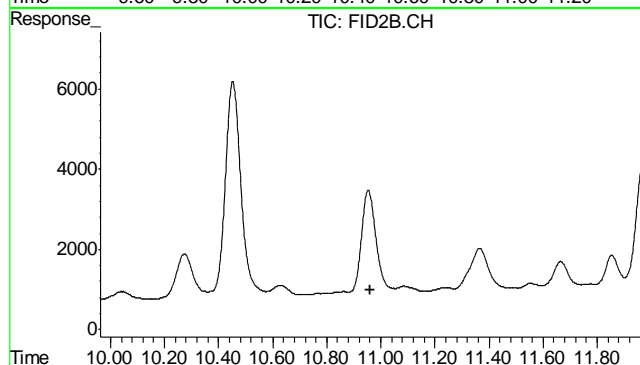
#7 Ethylbenzene

R.T.: 0.000 min
Exp R.T. : 10.284 min
Response: 0
Conc: N.D.



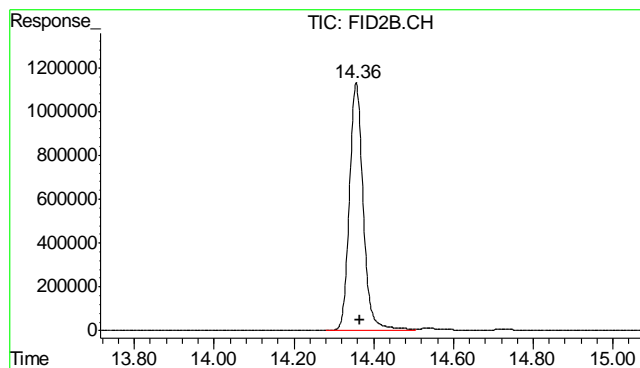
#8 m,p-Xylene

R.T.: 0.000 min
Exp R.T. : 10.464 min
Response: 0
Conc: N.D.



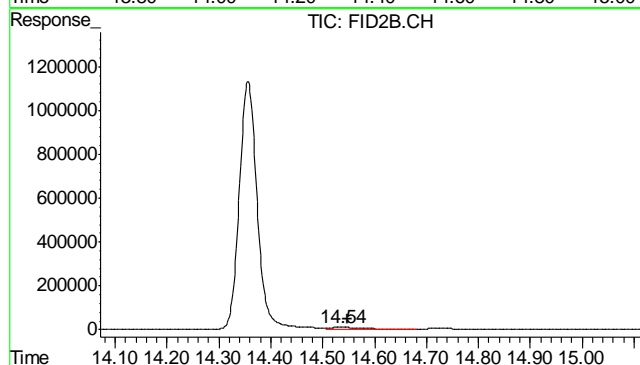
#9 o-Xylene

R.T.: 0.000 min
Exp R.T. : 10.962 min
Response: 0
Conc: N.D.



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

R.T.: 14.356 min
Delta R.T.: -0.010 min
Response: 27239671
Conc: 118.52 %



#11 Naphthalene

R.T.: 14.537 min
Delta R.T.: -0.011 min
Response: 436467
Conc: 1.70 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: D31746
Account: XTOKRWR XTO Energy
Project: FRU 297-28C

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5373-MB	FH001361.D	1	02/17/12	TR	02/15/12	OP5373	GFH64

The QC reported here applies to the following samples:

Method: SW846-8015B

D31746-1

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	91% 43-136%

Blank Spike Summary

Page 1 of 1

Job Number: D31746
Account: XTOKRWR XTO Energy
Project: FRU 297-28C

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5373-BS	FH001363.D	1	02/17/12	TR	02/15/12	OP5373	GFH64

The QC reported here applies to the following samples:

Method: SW846-8015B

D31746-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	667	554	83	58-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	89%	43-136%

7.2.1

7

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D31746
Account: XTOKRWR XTO Energy
Project: FRU 297-28C

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5373-MS	FH001365.D	1	02/17/12	TR	02/15/12	OP5373	GFH64
OP5373-MSD	FH001367.D	1	02/17/12	TR	02/15/12	OP5373	GFH64
D31900-1	FH001413.D	1	02/18/12	TR	02/15/12	OP5373	GFH68

The QC reported here applies to the following samples:

Method: SW846-8015B

D31746-1

CAS No.	Compound	D31900-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	107		771	584	62	679	74	15	20-183/43

CAS No.	Surrogate Recoveries	MS	MSD	D31900-1	Limits
84-15-1	o-Terphenyl	75%	82%	82%	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\FH021712\
 Data File : FH001395.D
 Signal(s) : FID1A.ch
 Acq On : 18 Feb 2012 3:23 am
 Operator : tedr
 Sample : D31746-1
 Misc : OP5373,GFH64,30.09,,,2,1
 ALS Vial : 70 Sample Multiplier: 1

Integration File: events.e
 Quant Time: Feb 20 11:51:07 2012
 Quant Method : C:\msdchem\1\METHODS\DRO-GFH34F.M
 Quant Title : DRO-ORO FRONT
 QLast Update : Tue Jan 31 13:20:35 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	12.451	950761932	646.742 ug/ml
Target Compounds			
1) H TPH-DRO (C10-C28)	10.011	213520947	175.156 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

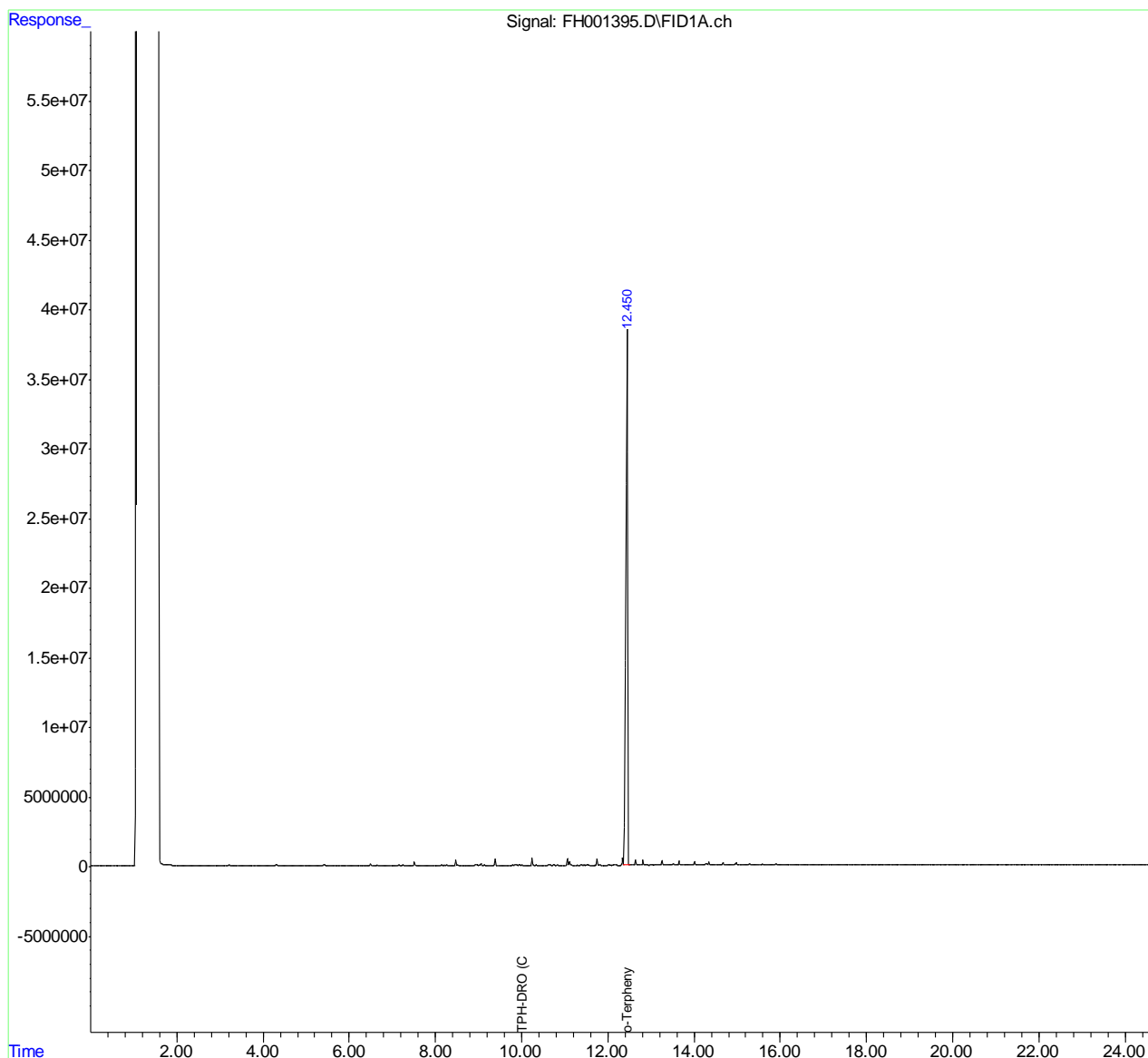
8.1.1
8

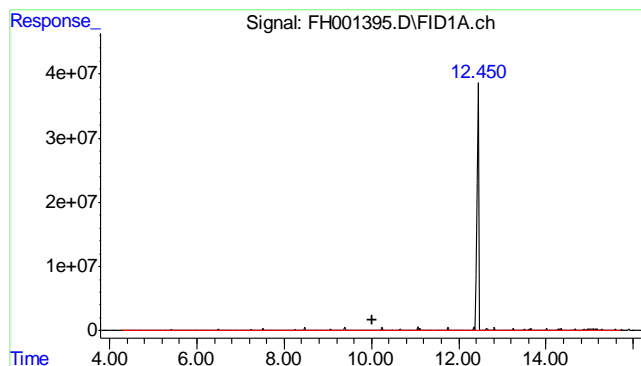
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH021712\
Data File : FH001395.D
Signal(s) : FID1A.ch
Acq On : 18 Feb 2012 3:23 am
Operator : tedr
Sample : D31746-1
Misc : OP5373,GFH64,30.09,,,2,1
ALS Vial : 70 Sample Multiplier: 1

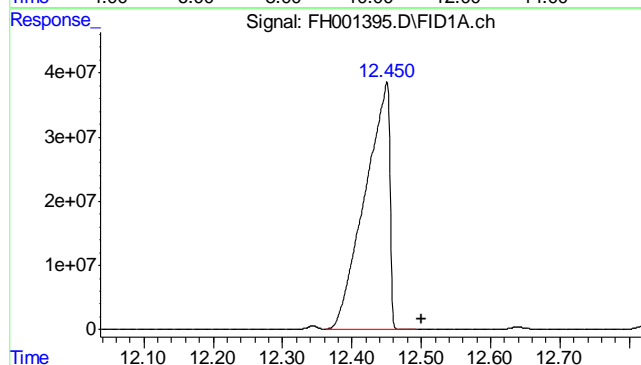
Integration File: events.e
Quant Time: Feb 20 11:51:07 2012
Quant Method : C:\msdchem\1\METHODS\DRO-GFH34F.M
Quant Title : DRO-ORO FRONT
QLast Update : Tue Jan 31 13:20:35 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :





#1 TPH-DRO (C10-C28)
 R.T.: 10.011 min
 Delta R.T.: 0.000 min
 Response: 213520947
 Conc: 175.16 ug/ml m



#2 o-Terphenyl
 R.T.: 12.451 min
 Delta R.T.: -0.049 min
 Response: 950761932
 Conc: 646.74 ug/ml

8.1.1

8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH021712\
Data File : FH001361.D
Signal(s) : FID1A.ch
Acq On : 17 Feb 2012 5:20 pm
Operator : tedr
Sample : OP5373-MB
Misc : OP5373,GFH64,30.00,,,2,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Feb 18 16:22:59 2012
Quant Method : C:\msdchem\1\METHODS\DRO-GFH34F.M
Quant Title : DRO-ORO FRONT
QLast Update : Tue Jan 31 13:20:35 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	12.465	1333828445	907.317 ug/ml
Target Compounds			
1) H TPH-DRO (C10-C28)	10.011	27311873	22.404 ug/ml

(f)=RT Delta > 1/2 Window

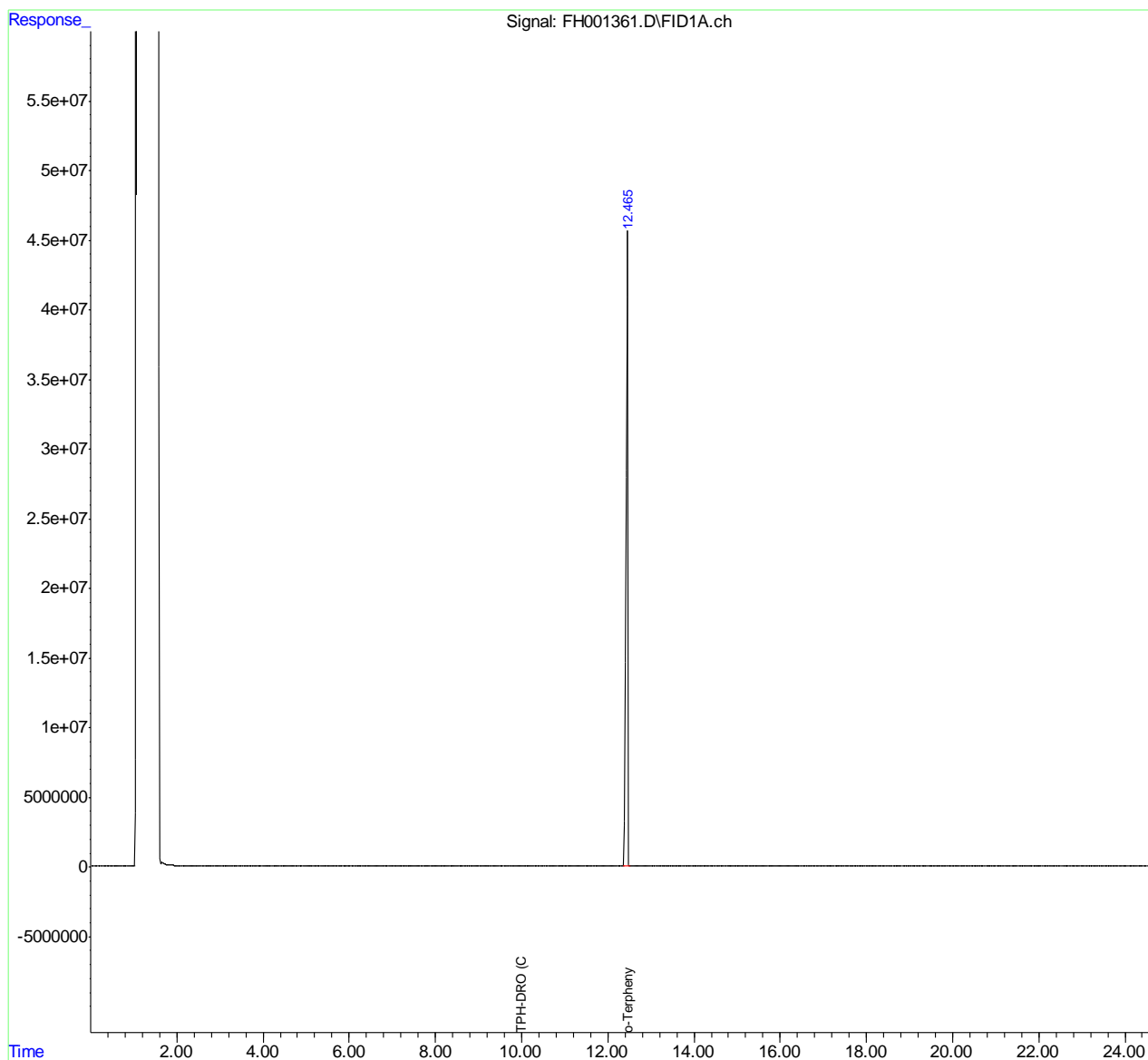
(m)=manual int.

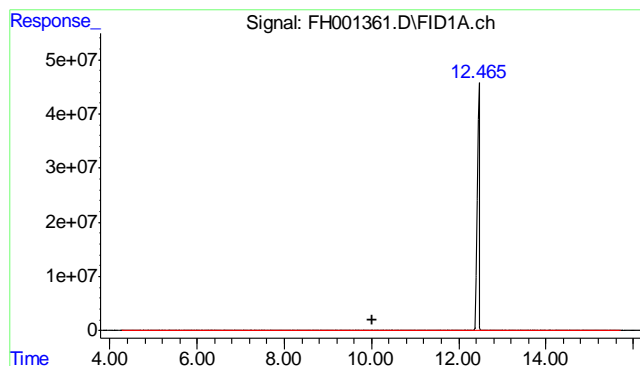
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH021712\
Data File : FH001361.D
Signal(s) : FID1A.ch
Acq On : 17 Feb 2012 5:20 pm
Operator : tedr
Sample : OP5373-MB
Misc : OP5373,GFH64,30.00,,,2,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Feb 18 16:22:59 2012
Quant Method : C:\msdchem\1\METHODS\DRO-GFH34F.M
Quant Title : DRO-ORO FRONT
QLast Update : Tue Jan 31 13:20:35 2012
Response via : Initial Calibration
Integrator: ChemStation

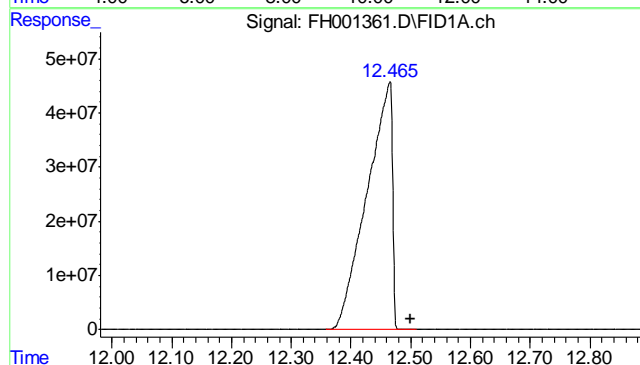
Volume Inj. :
Signal Phase :
Signal Info :





#1 TPH-DRO (C10-C28)

R.T.: 10.011 min
Delta R.T.: 0.000 min
Response: 27311873
Conc: 22.40 ug/ml m



#2 o-Terphenyl

R.T.: 12.465 min
Delta R.T.: -0.035 min
Response: 1333828445
Conc: 907.32 ug/ml

8.2.1

8