Mountain States ACCUTEST LABORATORIES

03/12/12

Technical Report for

XTO Energy

FRU 197-33A

1103-03A

Accutest Job Number: D32508

Sampling Date: 03/05/12

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: **46**

ACCREDITED IN ACCORDANCE WITH nelac

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.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

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Sample Summary

XTO Energy

Job No: D32508

FRU 197-33A
Project No: 1103-03A

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
D32508-1	03/05/12	10:30	DS	03/07/12	SO	Soil	CUT 1 M/B DAY 13 (3/1)
D32508-2	03/05/12	10:45	DS	03/07/12	SO	Soil	CUT 1 M/B DAY 14 (3/2)

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	XTO Energy	**Job No**	D32508
Site:	FRU 197-33A	**Report Date**	3/12/2012 4:02:06 PM

On 03/07/2012, 2 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 D32508 was assigned to the project. The lab sample IDs, client sample IDs, 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:** GGB856

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D32470-2MS, D32470-2MSD were used as the QC samples indicated.

Extractables by GC By Method SW846-8015B

Matrix SO **Batch ID:** OP5509

- All samples were extracted and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D32508-1MS, D32508-1MSD were used as the QC samples indicated.

Wet Chemistry By Method SM19 2540B M

Matrix SO **Batch ID:** GN14007

- 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

Client Sample ID: CUT 1 M/B DAY 13 (3/1)
Lab Sample ID: D32508-1
Matrix: SO - Soil
Method: SW846 8015B
Project: FRU 197-33A

Date Sampled: 03/05/12
Date Received: 03/07/12
Percent Solids: 87.7

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15252.D	1	03/08/12	SK	n/a	n/a	GGB856
Run #2							

	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)	13.9	13	6.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	95%		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

Client Sample ID: CUT 1 M/B DAY 13 (3/1)
Lab Sample ID: D32508-1
Matrix: SO - Soil
Method: SW846-8015B SW846 3546
Project: FRU 197-33A

Date Sampled: 03/05/12
Date Received: 03/07/12
Percent Solids: 87.7

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH002121.D	1	03/09/12	TR	03/08/12	OP5509	GFH108
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	269	15	9.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	66%		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

Accutest Laboratories

Report of Analysis

Client Sample ID:	CUT 1 M/B DAY 14 (3/2)		
Lab Sample ID:	D32508-2	**Date Sampled:**	03/05/12
Matrix:	SO - Soil	**Date Received:**	03/07/12
Method:	SW846 8015B	**Percent Solids:**	87.4
Project:	FRU 197-33A		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15253.D	1	03/08/12	SK	n/a	n/a	GGB856
Run #2							

	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)	17.5	13	6.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	99%		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

Client Sample ID: CUT 1 M/B DAY 14 (3/2)
Lab Sample ID: D32508-2
Matrix: SO - Soil
Method: SW846-8015B SW846 3546
Project: FRU 197-33A

Date Sampled: 03/05/12
Date Received: 03/07/12
Percent Solids: 87.4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH002123.D	1	03/09/12	TR	03/08/12	OP5509	GFH108
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	314	15	9.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		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

Mountain States ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

PAGE 1 OF 1

ACCUTEST LABORATORIES

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 # D32508

Client / Reporting Information

Company Name: KRW CONSULTING
Street Address: 8000 W 14TH AVE STE 200
City: LAKEWOOD State: CO Zip: 80214
Project Contact: DWAYNE KNUDSON E-mail:
Phone #: 970 488 1098 Fax #:
Sampler(s) Name(s): DAVID SANDERS Phone #: 970 488 1098

Project Information

Project Name: XTO FRU 197-33A
Street:
City:
Project#: 1103-03A
Client PO#:
Project Manager: JOE HESS

Billing Information (If different from Report to)

Company Name: XTO ENERGY
Street Address: 21459 CR 5
City: RIFLE State: CO Zip: 81650
Attention: JESSICA DOOLING PO#:

Requested Analysis (see TEST CODE sheet)

TPH (GRO+DRO)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB- Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	LAB USE ONLY
	CUT 1 M/B DAY 13 (3/1)		3-5-12	10:30	DLS	SO	2					X					01
	CUT 1 M/B DAY 14 (3/2)		3-5-12	10:45	DLS	SO	2					X					02

3/7/12

Turnaround Time (Business days)

- [ ] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day RUSH
- [x] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] Commercial "B" +Narrative
- [ ] FULLT1 (Level 3+4)
- [ ] State Forms
- [ ] EDD Format
- [x] PDF

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

PLEASE EMAIL RESULTS TO KRW PICEANCE TEAM

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		3/6/12 1700	Rifle Service Center		3/6/12	American Courier
2						3/7/12
3	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By: James Penton 1357
4						
5	Relinquished by:	Date Time:	Received By:	Custody Seal # HD(LO	Intact / Not Intact	Preserved where applicable	On Ice	Cooler Temp. 4.0

D32508: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D32508 **Client:** KRW CONSULTING **Immediate Client Services Action Required:** No

Date / Time Received: 3/7/2012 1:57:00 PM **No. Coolers:** 1 **Client Service Action Required at Login:** No

Project: XTO FRU 197-33A **Airbill #'s:** HD/CO

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

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

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

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

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

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

Comments

Accutest Laboratories
V:(303) 425-6021
4036 Youngfield Street
F: (303) 425-6854
Wheat Ridge, CO
www/accutest.com

D32508: Chain of Custody
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Mountain States ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: D32508
Account: XTOKRWR XTO Energy
Project: FRU 197-33A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB856-MB	GB15245.D	1	03/08/12	SK	n/a	n/a	GGB856

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

D32508-1, D32508-2

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	93%	60-140%

Blank Spike Summary

Job Number: D32508
Account: XTOKRWR XTO Energy
Project: FRU 197-33A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB856-BS	GB15246.D	1	03/08/12	SK	n/a	n/a	GGB856

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

D32508-1, D32508-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	110	112	102	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	107%	60-140%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D32508
Account: XTOKRWR XTO Energy
Project: FRU 197-33A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D32470-2MS	GB15248.D	1	03/08/12	SK	n/a	n/a	GGB856
D32470-2MSD	GB15249.D	1	03/08/12	SK	n/a	n/a	GGB856
D32470-2	GB15247.D	1	03/08/12	SK	n/a	n/a	GGB856

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

D32508-1, D32508-2

CAS No.	Compound	D32470-2 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		158	161	102	162	103	1	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D32470-2	Limits
120-82-1	1,2,4-Trichlorobenzene	105%	106%	99%	60-140%

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GC Volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Judy Melson 03/09/12 10:50

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\030812\GB15252.D\FID1A.CH Vial: 10
Signal #2 : Y:\1\DATA\030812\GB15252.D\FID2B.CH
Acq On : 8 Mar 2012 4:52 pm Operator: StephK
Sample : D32508-1, 50X Inst : GC/MS Ins
Misc : GC2662,GGB856,5.011,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Mar 09 08:13:10 2012 Quant Results File: TB851GB851SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB851GB851SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Mar 08 14:42:16 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	2861828	94.866	%	m
10) S	1,2,4-Trichlorobenzene (P)	14.37	24228427	104.110	%	
	Target Compounds					
1) H	TVH-Gasoline	7.26	15688797	0.217	mg/L	
4) T	Methyl-t-butyl-ether	0.00	0	N.D.	ug/L	d
5) T	Benzene	4.13	150379	0.272	ug/L	
6) T	Toluene	7.65	2945090	5.380	ug/L	
7) T	Ethylbenzene	10.28	824744	1.803	ug/L	
8) T	m,p-Xylene	10.46	3819402	6.821	ug/L	
9) T	o-Xylene	10.96	355811	0.776	ug/L	
11) T	Naphthalene	14.55	1637678	6.268	ug/L	

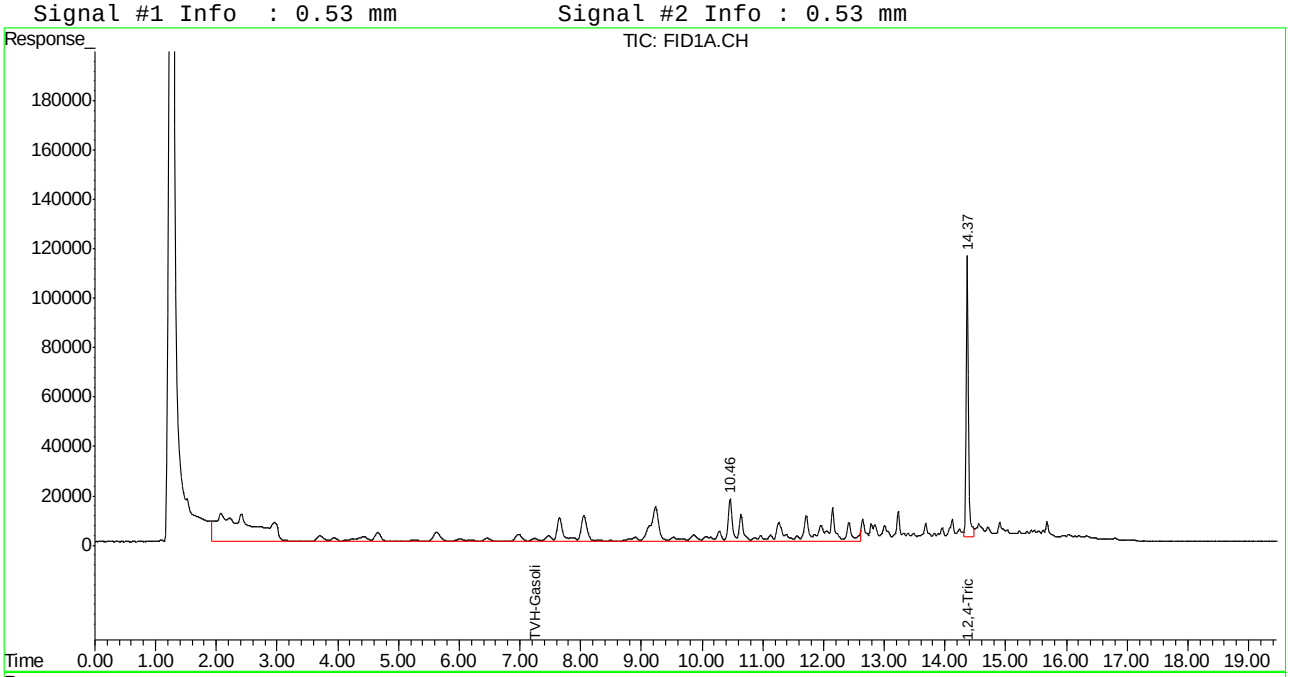
(f)=RT Delta > 1/2 Window (m)=manual int.
GB15252.D TB851GB851SOIL.M Fri Mar 09 09:09:26 2012 GC Page 1

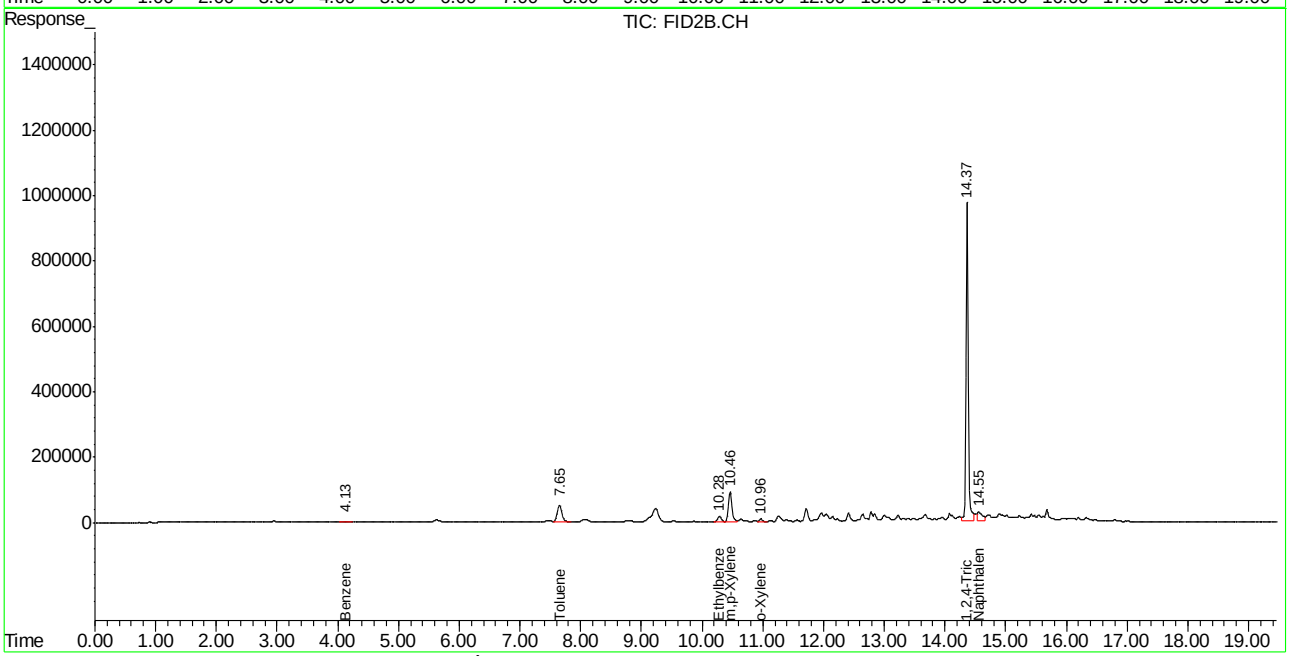
Quantitation Report (QT Reviewed)

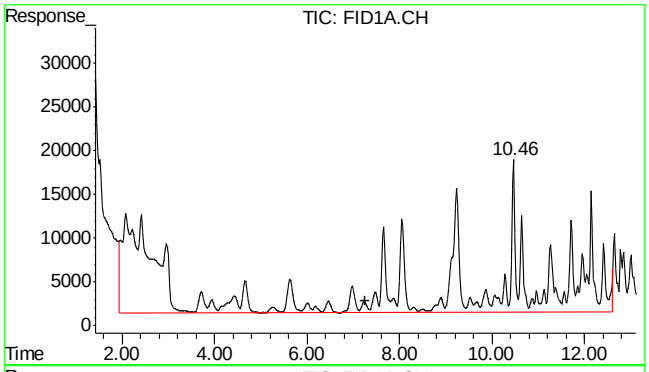
Signal #1 : Y:\1\DATA\030812\GB15252.D\FID1A.CH Vial: 10
Signal #2 : Y:\1\DATA\030812\GB15252.D\FID2B.CH
Acq On : 8 Mar 2012 4:52 pm Operator: StephK
Sample : D32508-1, 50X Inst : GC/MS Ins
Misc : GC2662,GGB856,5.011,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Mar 9 8:04 2012 Quant Results File: TB851GB851SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB851GB851SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Mar 08 14:42:16 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

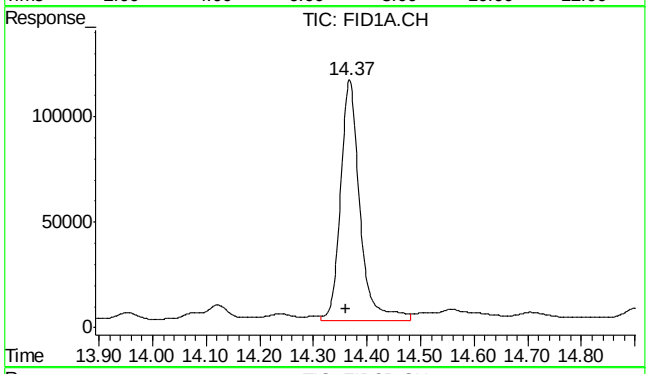






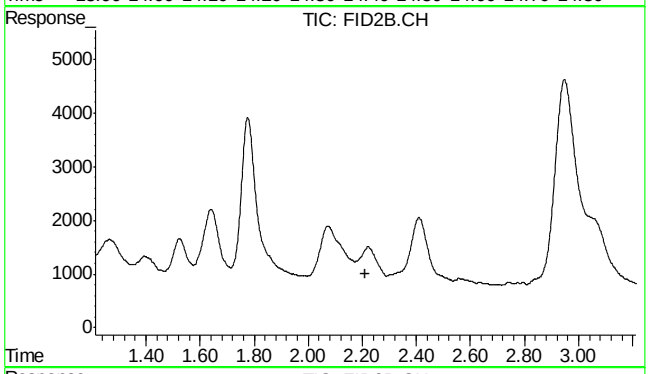
#1 TVH-Gasoline

R.T.: 7.265 min
Delta R.T.: 0.000 min
Response: 15688797
Conc: 0.22 mg/L m



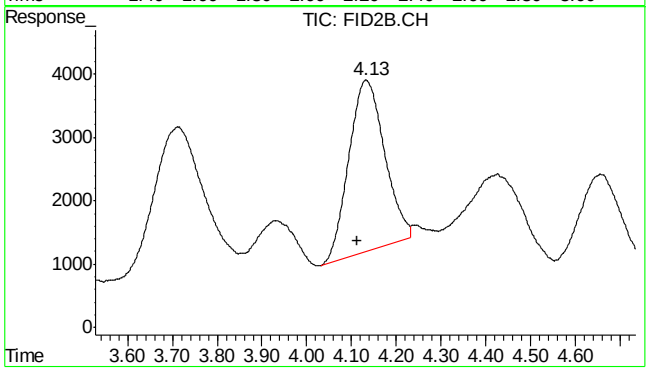
#2 1,2,4-Trichlorobenzene

R.T.: 14.367 min
Delta R.T.: 0.006 min
Response: 2861828
Conc: 94.87 % m



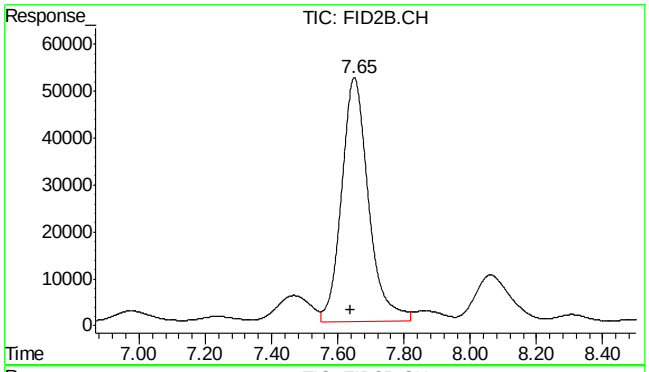
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T. : 2.213 min
Response: 0
Conc: N.D.



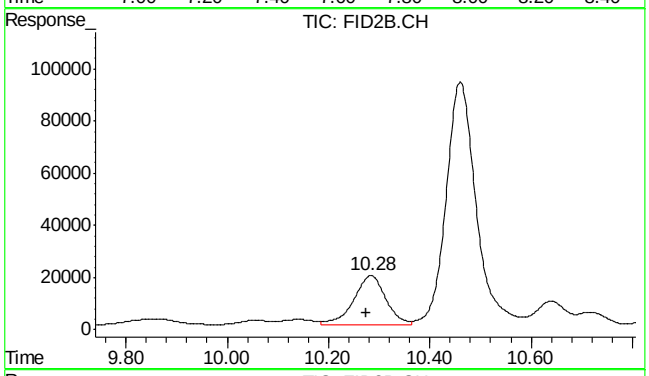
#5 Benzene

R.T.: 4.132 min
Delta R.T.: 0.019 min
Response: 150379
Conc: 0.27 ug/L



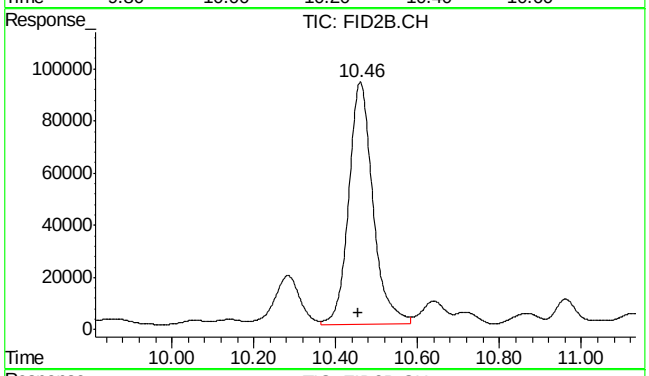
#6 Toluene

R.T.: 7.651 min
Delta R.T.: 0.012 min
Response: 2945090
Conc: 5.38 ug/L



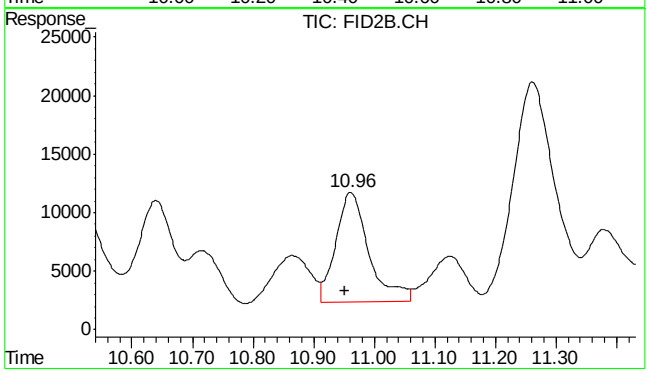
#7 Ethylbenzene

R.T.: 10.283 min
Delta R.T.: 0.010 min
Response: 824744
Conc: 1.80 ug/L



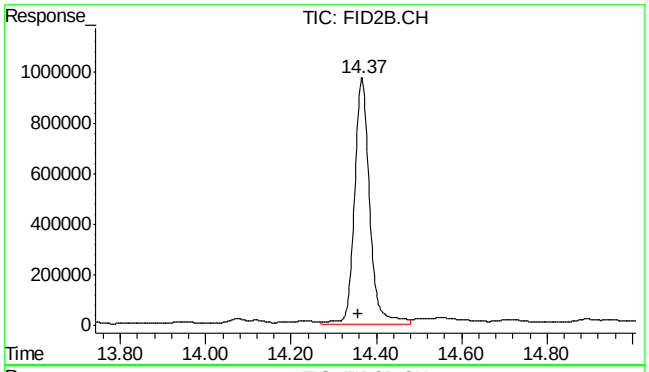
#8 m,p-Xylene

R.T.: 10.460 min
Delta R.T.: 0.006 min
Response: 3819402
Conc: 6.82 ug/L



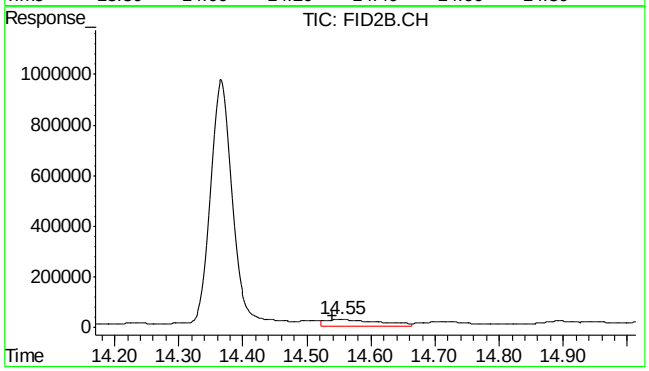
#9 o-Xylene

R.T.: 10.962 min
Delta R.T.: 0.010 min
Response: 355811
Conc: 0.78 ug/L



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

R.T.: 14.366 min
Delta R.T.: 0.008 min
Response: 24228427
Conc: 104.11 %



#11 Naphthalene

R.T.: 14.552 min
Delta R.T.: 0.011 min
Response: 1637678
Conc: 6.27 ug/L

Manual Integrations APPROVED (compounds with "m" flag)
Judy Melson 03/09/12 10:50

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\030812\GB15253.D\FID1A.CH Vial: 11
Signal #2 : Y:\1\DATA\030812\GB15253.D\FID2B.CH
Acq On : 8 Mar 2012 5:28 pm Operator: StephK
Sample : D32508-2, 50X Inst : GC/MS Ins
Misc : GC2662,GGB856,5.008,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Mar 09 08:13:14 2012 Quant Results File: TB851GB851SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB851GB851SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Mar 08 14:42:16 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	14.35	2976921	98.681	%	m
10) S	1,2,4-Trichlorobenzene (P)	14.35	26331958	113.148	%	
	Target Compounds					
1) H	TVH-Gasoline	7.26	19696265	0.273	mg/L	
4) T	Methyl-t-butyl-ether	0.00	0	N.D.	ug/L	d
5) T	Benzene	4.12	331694	0.599	ug/L	
6) T	Toluene	7.63	4029511	7.361	ug/L	
7) T	Ethylbenzene	10.27	1192690	2.608	ug/L	
8) T	m,p-Xylene	10.44	5418255	9.676	ug/L	
9) T	o-Xylene	10.95	569244	1.242	ug/L	
11) T	Naphthalene	14.54	3595989	13.762	ug/L	

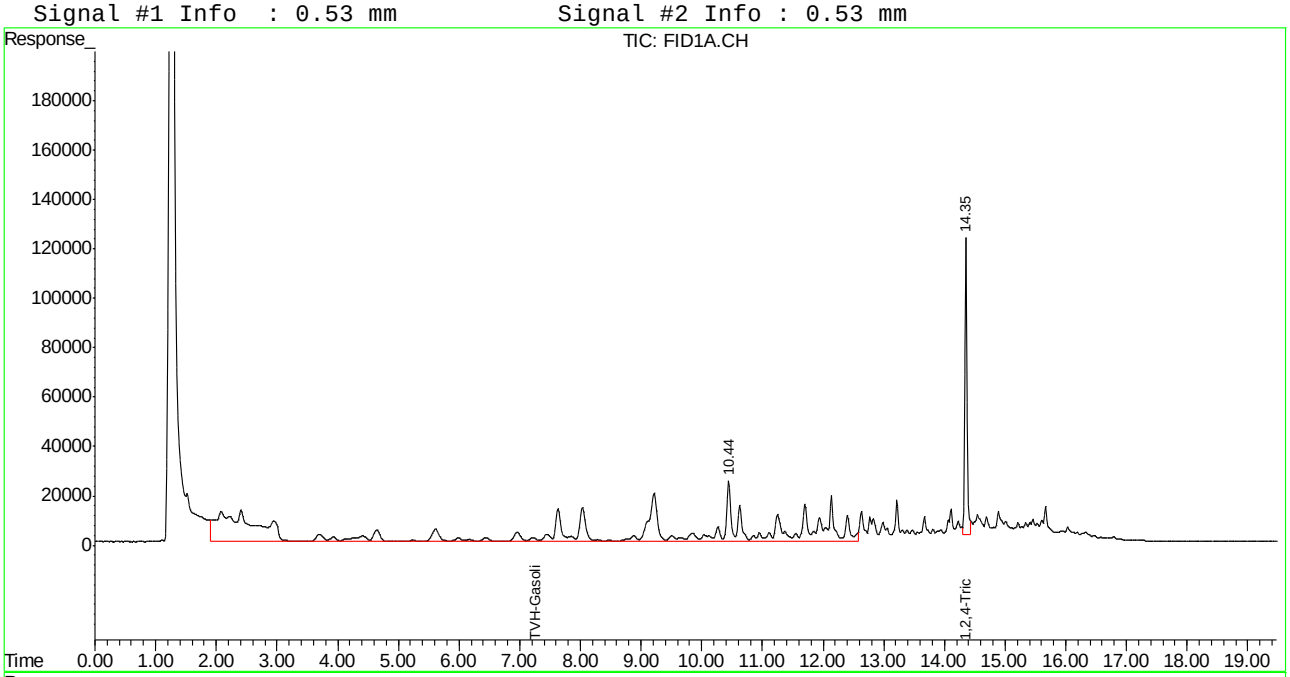
(f)=RT Delta > 1/2 Window (m)=manual int.
GB15253.D TB851GB851SOIL.M Fri Mar 09 09:09:29 2012 GC Page 1

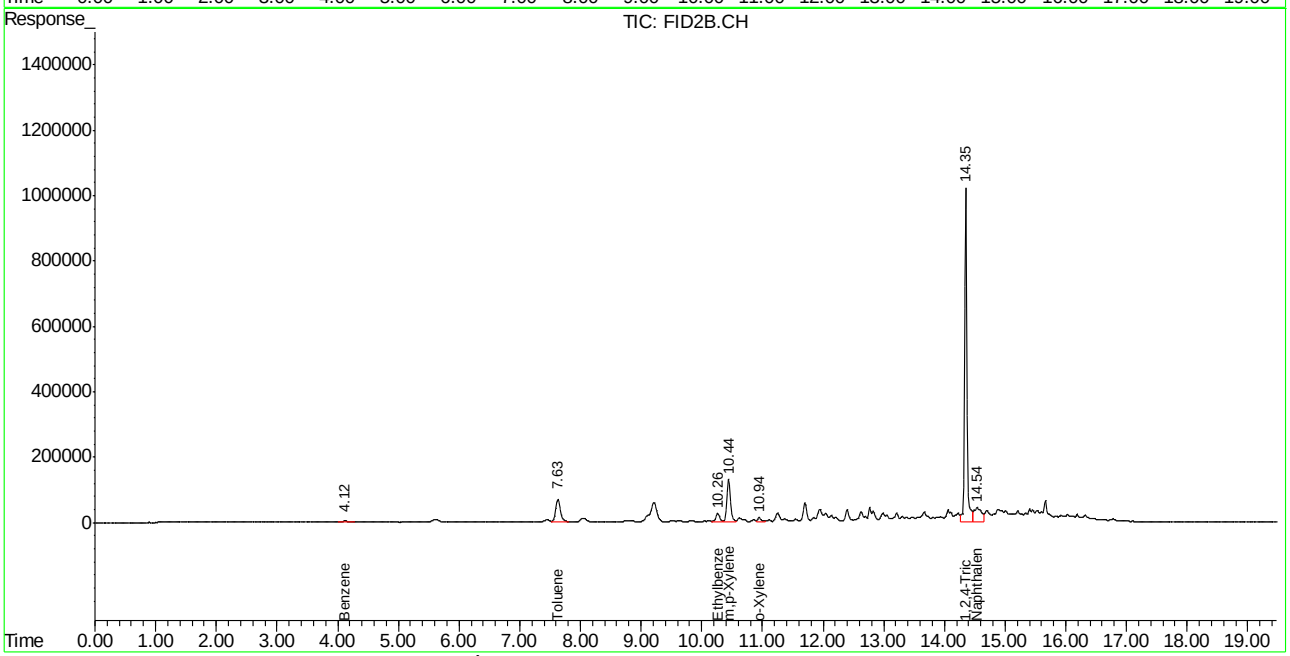
Quantitation Report (QT Reviewed)

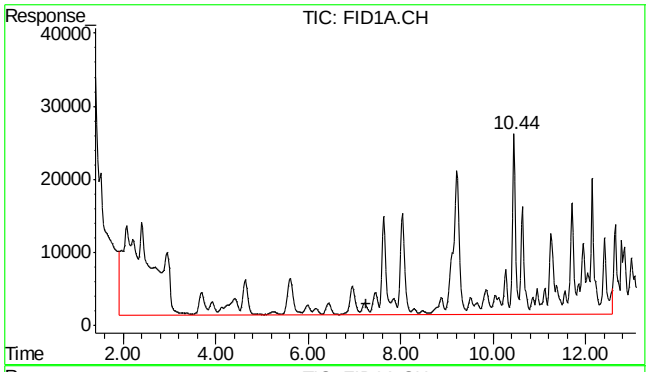
Signal #1 : Y:\1\DATA\030812\GB15253.D\FID1A.CH Vial: 11
Signal #2 : Y:\1\DATA\030812\GB15253.D\FID2B.CH
Acq On : 8 Mar 2012 5:28 pm Operator: StephK
Sample : D32508-2, 50X Inst : GC/MS Ins
Misc : GC2662,GGB856,5.008,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Mar 9 8:04 2012 Quant Results File: TB851GB851SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB851GB851SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Mar 08 14:42:16 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

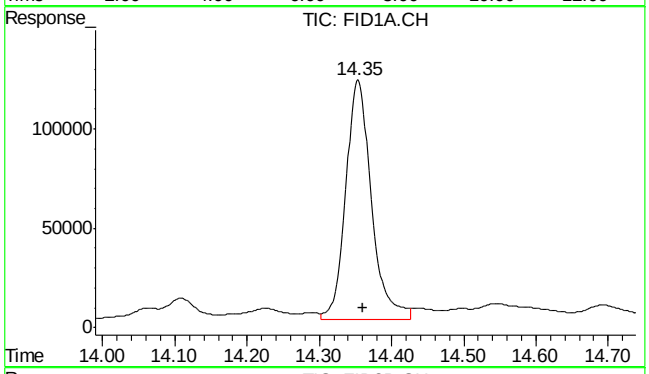






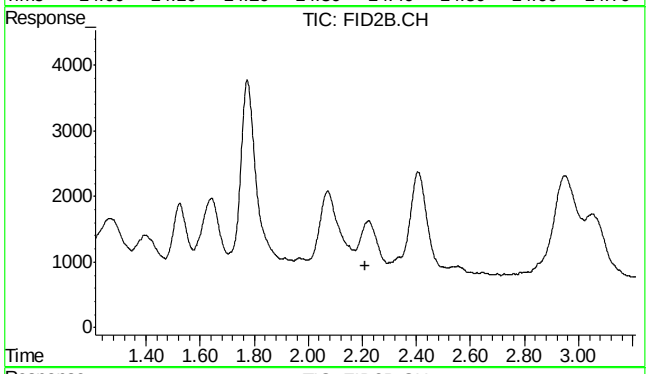
#1 TVH-Gasoline

R.T.: 7.265 min
Delta R.T.: 0.000 min
Response: 19696265
Conc: 0.27 mg/L m



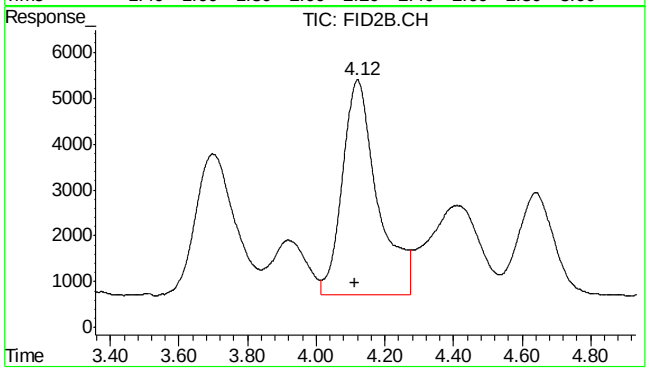
#2 1,2,4-Trichlorobenzene

R.T.: 14.353 min
Delta R.T.: -0.008 min
Response: 2976921
Conc: 98.68 % m



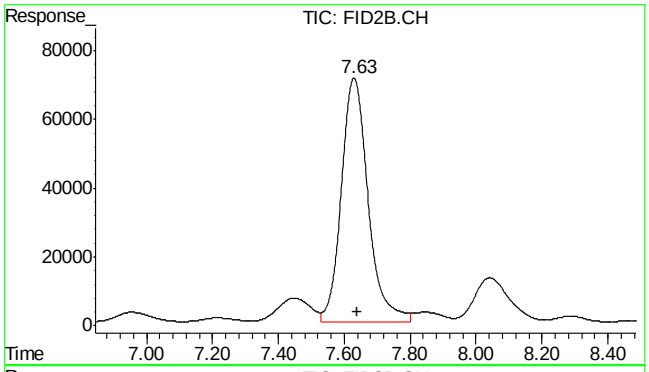
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T. : 2.213 min
Response: 0
Conc: N.D.



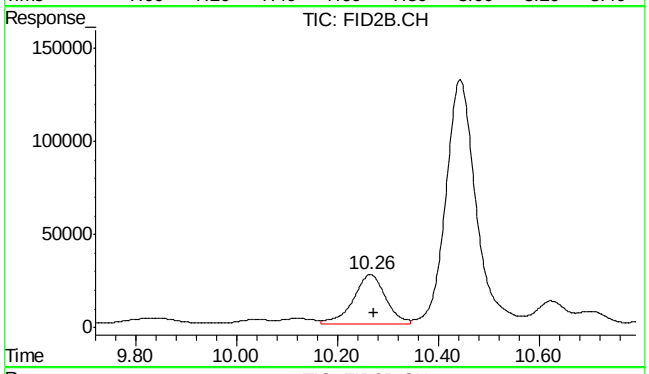
#5 Benzene

R.T.: 4.121 min
Delta R.T.: 0.007 min
Response: 331694
Conc: 0.60 ug/L



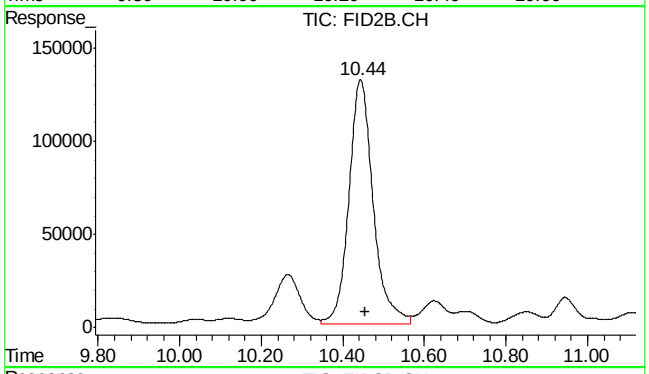
#6 Toluene

R.T.: 7.629 min
Delta R.T.: -0.009 min
Response: 4029511
Conc: 7.36 ug/L



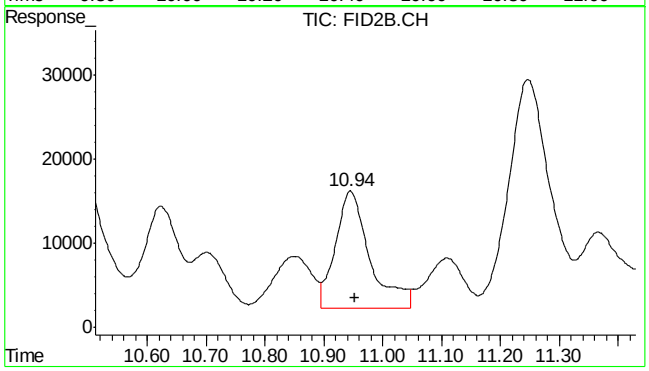
#7 Ethylbenzene

R.T.: 10.265 min
Delta R.T.: -0.008 min
Response: 1192690
Conc: 2.61 ug/L



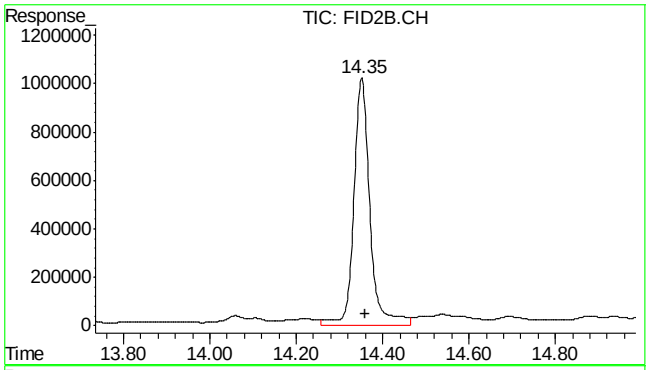
#8 m,p-Xylene

R.T.: 10.443 min
Delta R.T.: -0.011 min
Response: 5418255
Conc: 9.68 ug/L



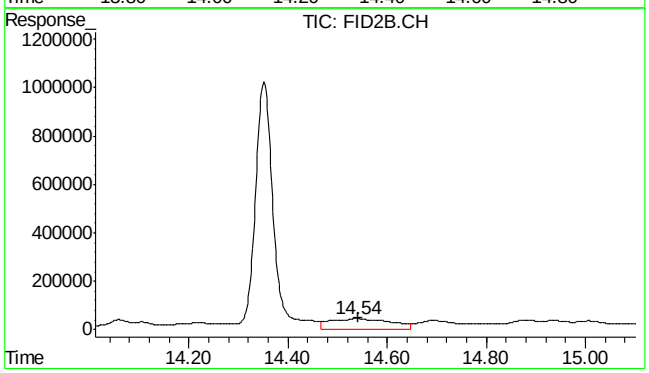
#9 o-Xylene

R.T.: 10.945 min
Delta R.T.: -0.007 min
Response: 569244
Conc: 1.24 ug/L



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

R.T.: 14.352 min
Delta R.T.: -0.007 min
Response: 26331958
Conc: 113.15 %



#11 Naphthalene

R.T.: 14.539 min
Delta R.T.: -0.002 min
Response: 3595989
Conc: 13.76 ug/L

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\030812\GB15245.D\FID1A.CH Vial: 3
Signal #2 : Y:\1\DATA\030812\GB15245.D\FID2B.CH
Acq On : 8 Mar 2012 12:42 pm Operator: StephK
Sample : MB Inst : GC/MS Ins
Misc : GC2662,GGB856,5.000,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Mar 08 14:42:31 2012 Quant Results File: TB851GB851SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB851GB851SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Mar 08 14:42:16 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	14.35	2798501	92.766	%	
10) S	1,2,4-Trichlorobenzene (P)	14.35	23053106	99.059	%	
	Target Compounds					
1) H	TVH-Gasoline	7.26	6374786	<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	200654	0.367	ug/L	
7) T	Ethylbenzene	0.00	0	N.D.	ug/L	d
8) T	m,p-Xylene	10.45	226358	0.404	ug/L	
9) T	o-Xylene	10.95	85597	0.187	ug/L	
11) T	Naphthalene	14.53	314629	1.204	ug/L	

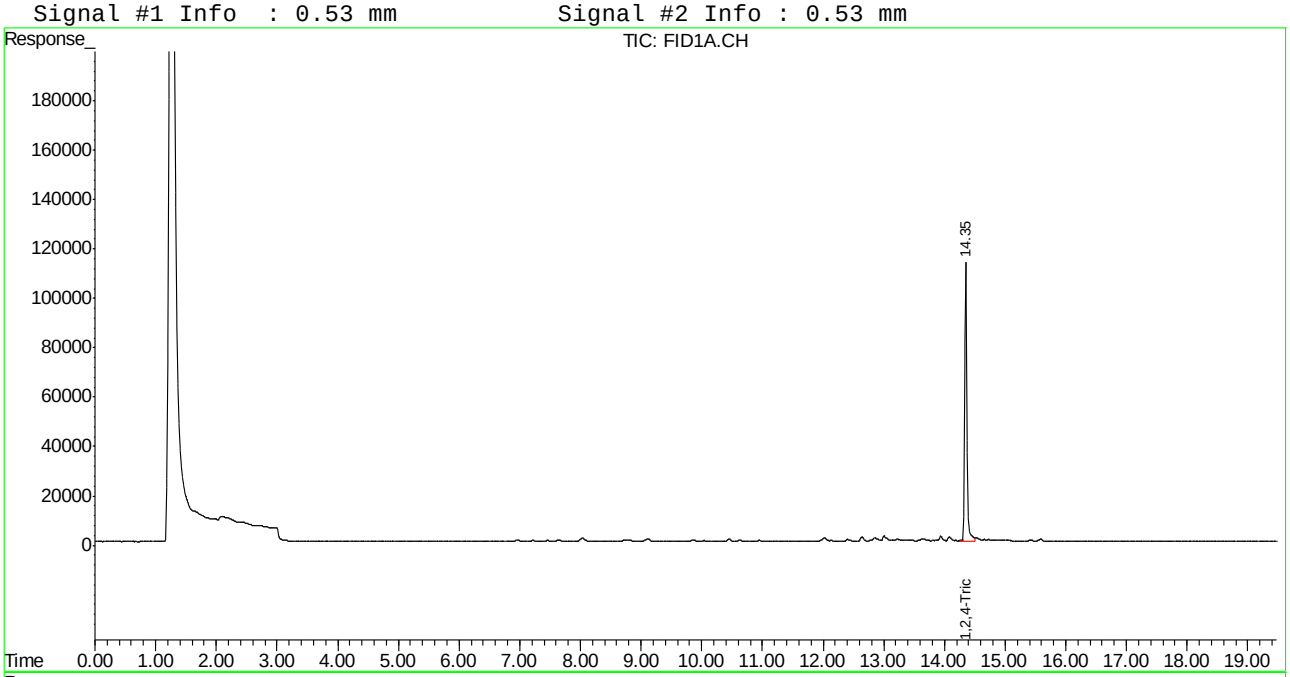
(f)=RT Delta > 1/2 Window (m)=manual int.

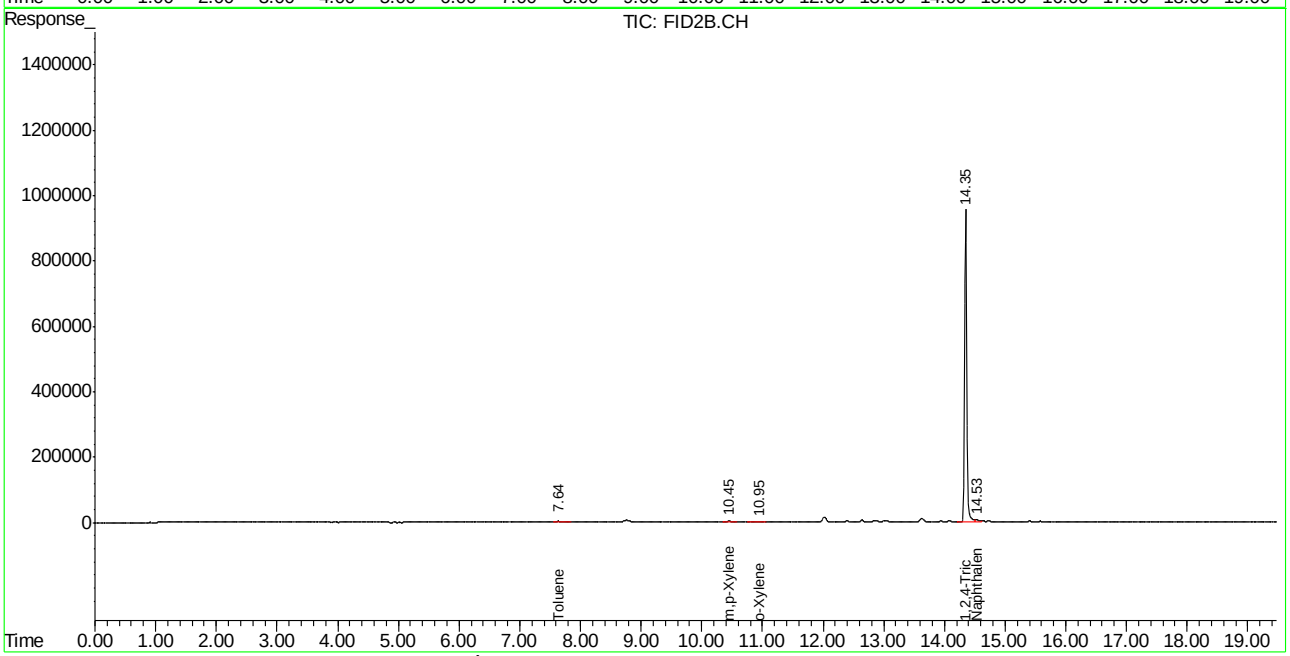
Quantitation Report (QT Reviewed)

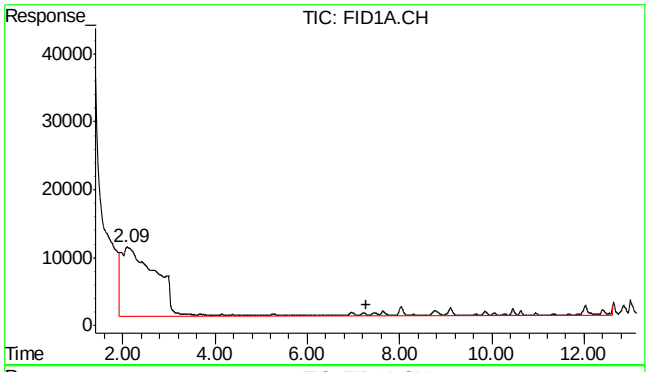
Signal #1 : Y:\1\DATA\030812\GB15245.D\FID1A.CH Vial: 3
Signal #2 : Y:\1\DATA\030812\GB15245.D\FID2B.CH
Acq On : 8 Mar 2012 12:42 pm Operator: StephK
Sample : MB Inst : GC/MS Ins
Misc : GC2662,GGB856,5.000,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Mar 8 13:45 2012 Quant Results File: TB851GB851SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB851GB851SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Mar 08 14:42:16 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

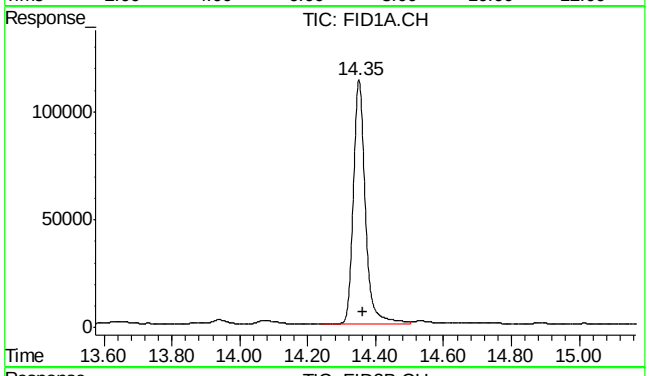






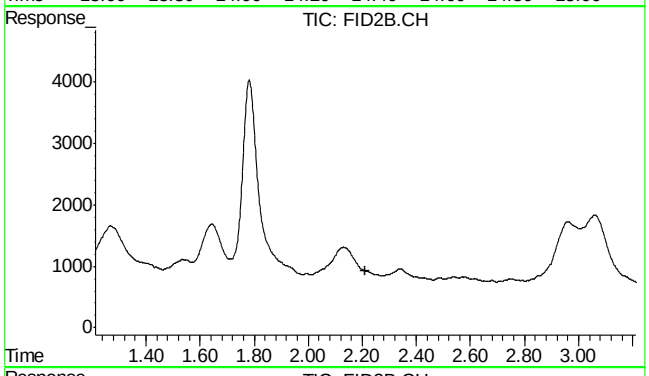
#1 TVH-Gasoline

R.T.: 7.265 min
Delta R.T.: 0.000 min
Response: 6374786
Conc: N.D.



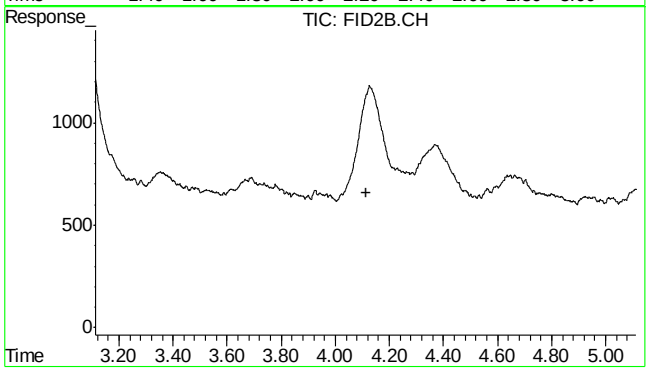
#2 1,2,4-Trichlorobenzene

R.T.: 14.351 min
Delta R.T.: -0.010 min
Response: 2798501
Conc: 92.77 %



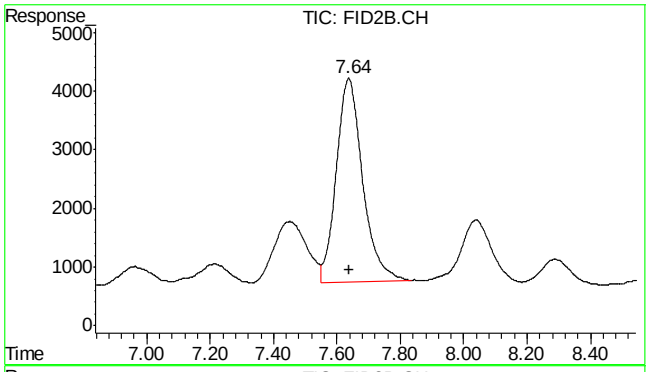
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T. : 2.213 min
Response: 0
Conc: N.D.



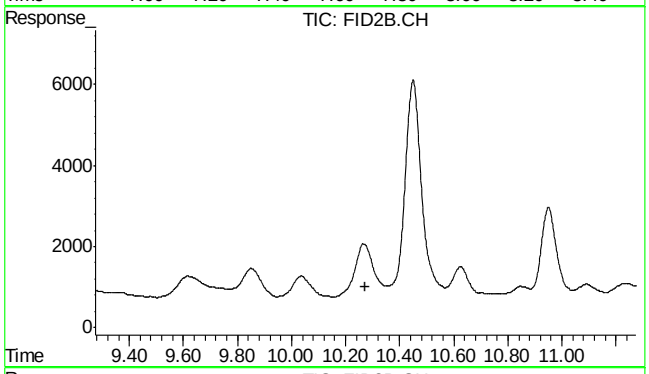
#5 Benzene

R.T.: 0.000 min
Exp R.T. : 4.113 min
Response: 0
Conc: N.D.



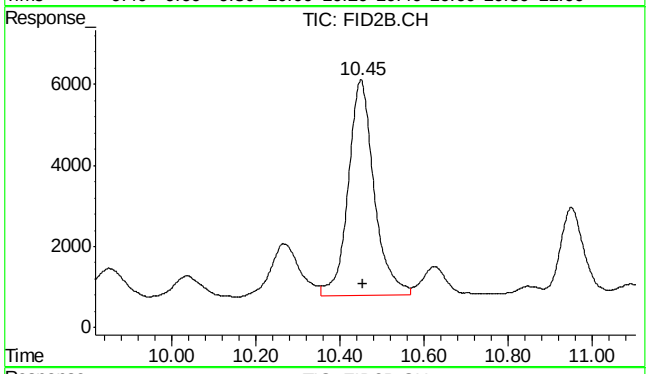
#6 Toluene

R.T.: 7.638 min
Delta R.T.: 0.000 min
Response: 200654
Conc: 0.37 ug/L



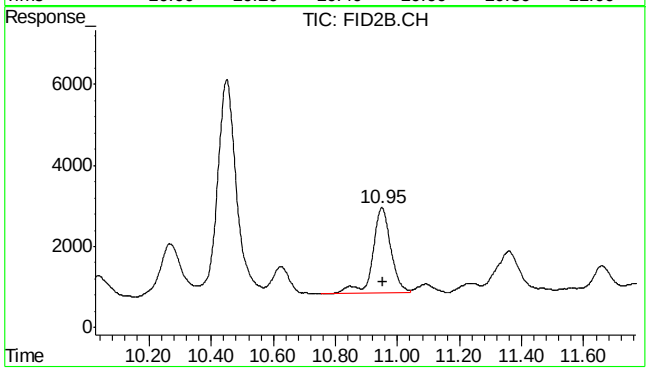
#7 Ethylbenzene

R.T.: 0.000 min
Exp R.T. : 10.273 min
Response: 0
Conc: N.D.



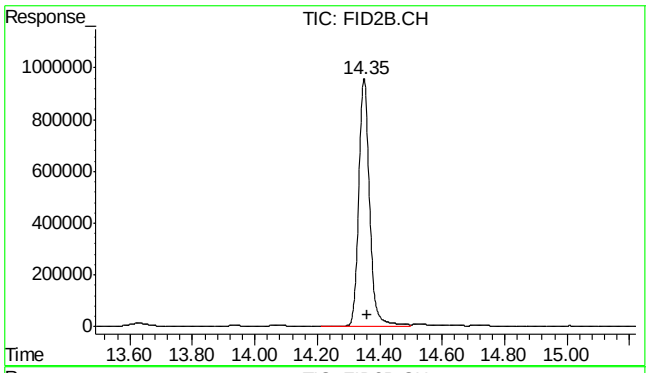
#8 m,p-Xylene

R.T.: 10.449 min
Delta R.T.: -0.005 min
Response: 226358
Conc: 0.40 ug/L



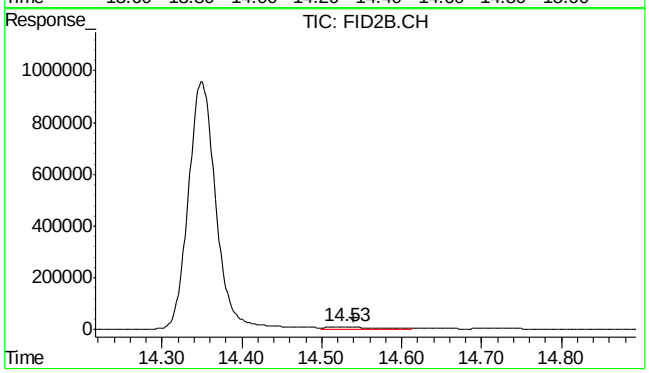
#9 o-Xylene

R.T.: 10.950 min
Delta R.T.: -0.002 min
Response: 85597
Conc: 0.19 ug/L



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

R.T.: 14.350 min
Delta R.T.: -0.009 min
Response: 23053106
Conc: 99.06 %



#11 Naphthalene

R.T.: 14.530 min
Delta R.T.: -0.011 min
Response: 314629
Conc: 1.20 ug/L

6.2.1

6

Mountain States ACCUTEST LABORATORIES

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

Job Number: D32508
Account: XTOKRWR XTO Energy
Project: FRU 197-33A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5509-MB	FH002155.D	1	03/12/12	TR	03/08/12	OP5509	GFH110

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

D32508-1, D32508-2

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	123%	43-136%

Blank Spike Summary

Job Number: D32508
Account: XTOKRWR XTO Energy
Project: FRU 197-33A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5509-BS	FH002115.D	1	03/09/12	TR	03/08/12	OP5509	GFH108

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

D32508-1, D32508-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	667	538	81	58-130

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

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D32508
Account: XTOKRWR XTO Energy
Project: FRU 197-33A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5509-MS	FH002117.D	1	03/09/12	TR	03/08/12	OP5509	GFH108
OP5509-MSD	FH002119.D	1	03/09/12	TR	03/08/12	OP5509	GFH108
D32508-1	FH002121.D	1	03/09/12	TR	03/08/12	OP5509	GFH108

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

D32508-1, D32508-2

CAS No.	Compound	D32508-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	269		758	849	77	928	87	9	20-183/43

CAS No.	Surrogate Recoveries	MS	MSD	D32508-1	Limits
84-15-1	o-Terphenyl	73%	75%	66%	43-136%

Mountain States ACCUTEST LABORATORIES

GC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH030912\
Data File : FH002121.D
Signal(s) : FID1A.ch
Acq On : 9 Mar 2012 1:33 pm
Operator : tedr
Sample : D32508-1
Misc : OP5509,GFH108,30.02,,,2,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 09 16:04:46 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	12.437	974872867	663.143 ug/ml
Target Compounds				
1) H	TPH-DRO (C10-C28)	10.011	4311104833	3536.487 ug/ml

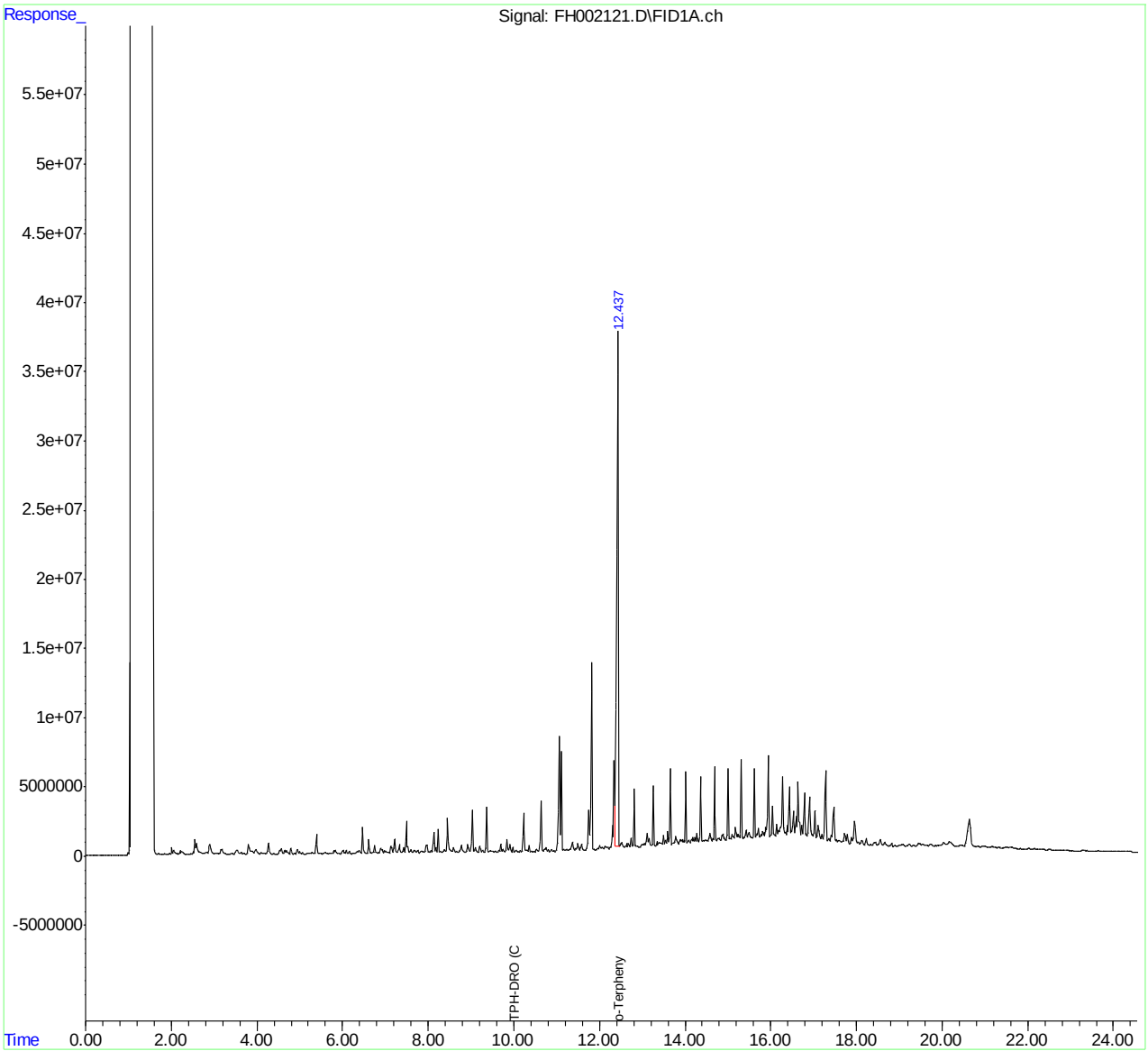
(f)=RT Delta > 1/2 Window (m)=manual int.

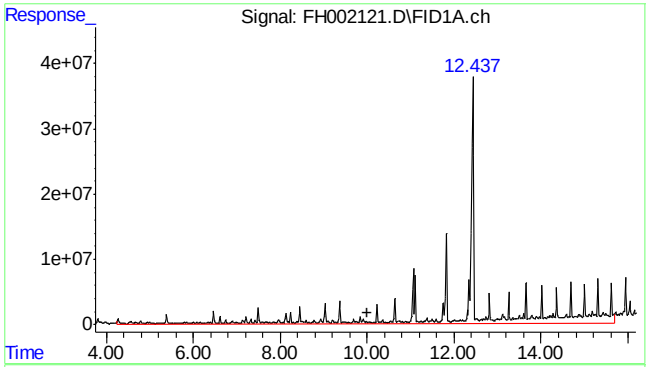
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH030912\
Data File : FH002121.D
Signal(s) : FID1A.ch
Acq On : 9 Mar 2012 1:33 pm
Operator : tedr
Sample : D32508-1
Misc : OP5509,GFH108,30.02,,,2,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 09 16:04:46 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

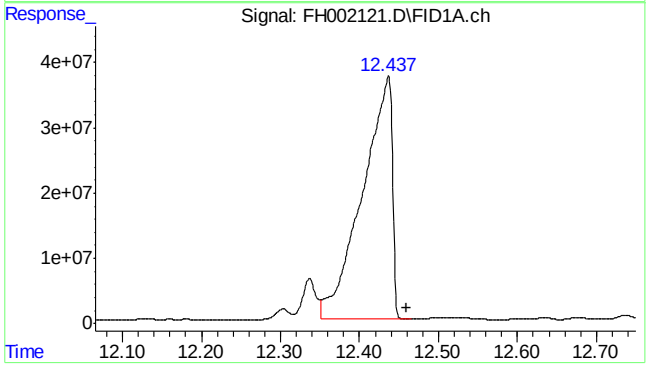
Volume Inj. :
Signal Phase :
Signal Info :





#1 TPH-DRO (C10-C28)

R.T.: 10.011 min
Delta R.T.: 0.000 min
Response: 4311104833
Conc: 3536.49 ug/ml m



#2 o-Terphenyl

R.T.: 12.437 min
Delta R.T.: -0.023 min
Response: 974872867
Conc: 663.14 ug/ml

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH030912\
Data File : FH002123.D
Signal(s) : FID1A.ch
Acq On : 9 Mar 2012 2:08 pm
Operator : tedr
Sample : D32508-2
Misc : OP5509,GFH108,30.02,,,2,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 09 16:05:26 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	12.441	1074242921	730.738	ug/ml
Target Compounds					
1) H	TPH-DRO (C10-C28)	10.011	5018509601	4116.785	ug/ml

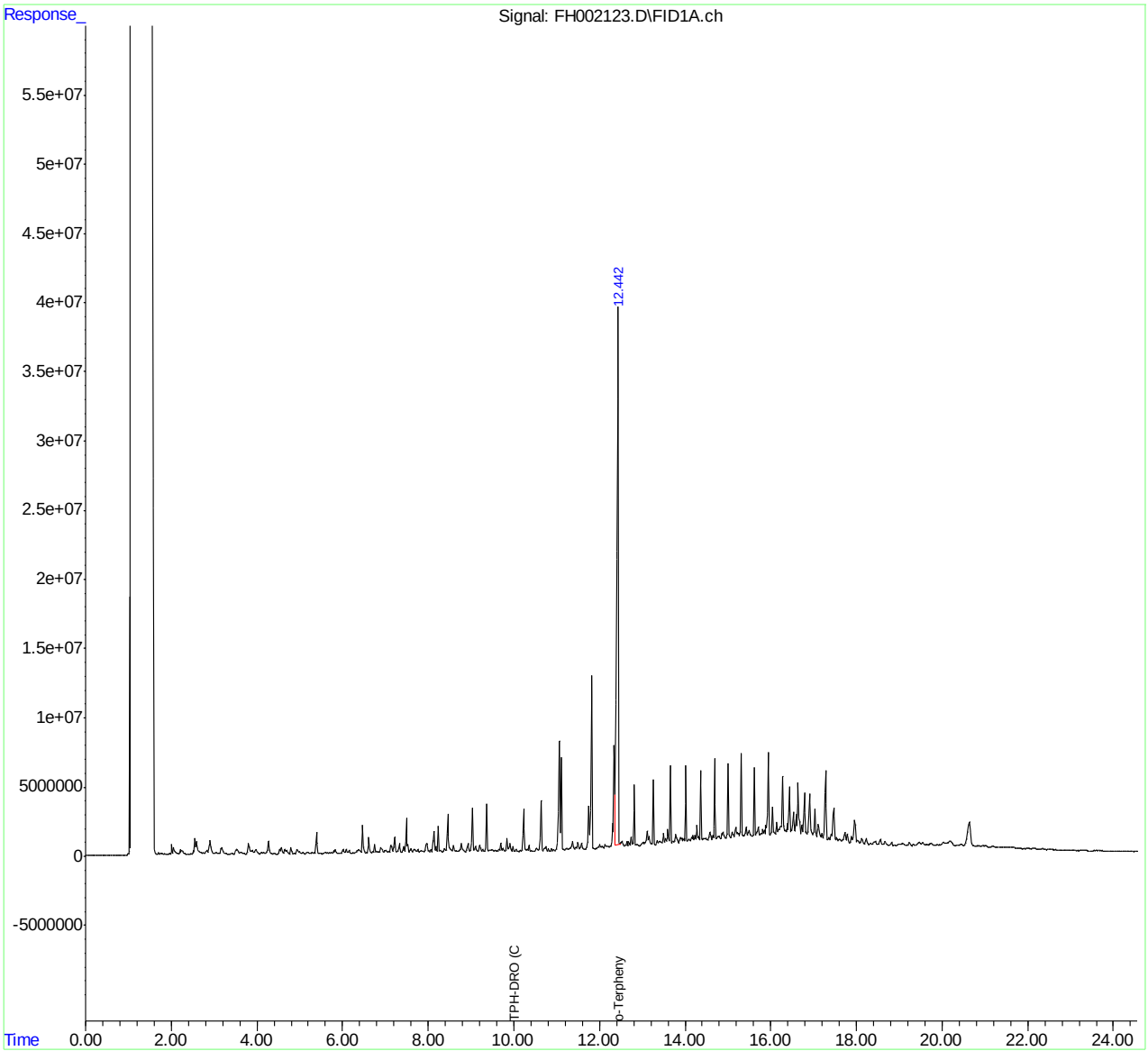
(f)=RT Delta > 1/2 Window (m)=manual int.

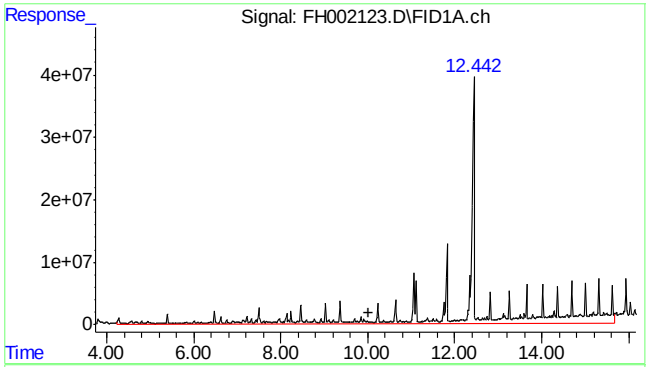
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH030912\
Data File : FH002123.D
Signal(s) : FID1A.ch
Acq On : 9 Mar 2012 2:08 pm
Operator : tedr
Sample : D32508-2
Misc : OP5509,GFH108,30.02,,,2,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 09 16:05:26 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

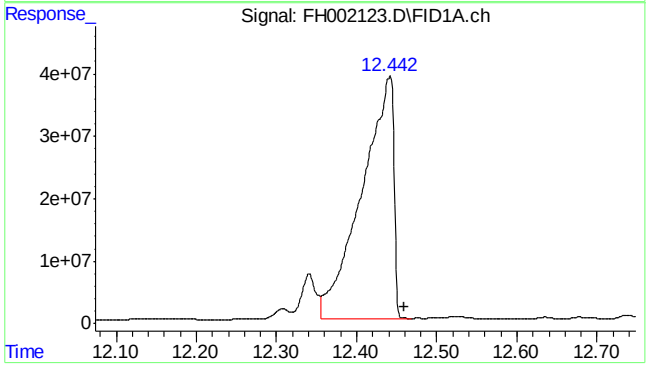
Volume Inj. :
Signal Phase :
Signal Info :





#1 TPH-DRO (C10-C28)

R.T.: 10.011 min
Delta R.T.: 0.000 min
Response: 5018509601
Conc: 4116.79 ug/ml m



#2 o-Terphenyl

R.T.: 12.441 min
Delta R.T.: -0.019 min
Response: 1074242921
Conc: 730.74 ug/ml

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH031212\
Data File : FH002155.D
Signal(s) : FID1A.ch
Acq On : 12 Mar 2012 10:23 am
Operator : tedr
Sample : OP5509-MB
Misc : OP5509,GFH110,30.00,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 12 15:00:33 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	12.470	1804312275	1227.356	ug/ml
Target Compounds					
1) H	TPH-DRO (C10-C28)	10.011	46183645	37.885	ug/ml

(f)=RT Delta > 1/2 Window (m)=manual int.

8.2.1

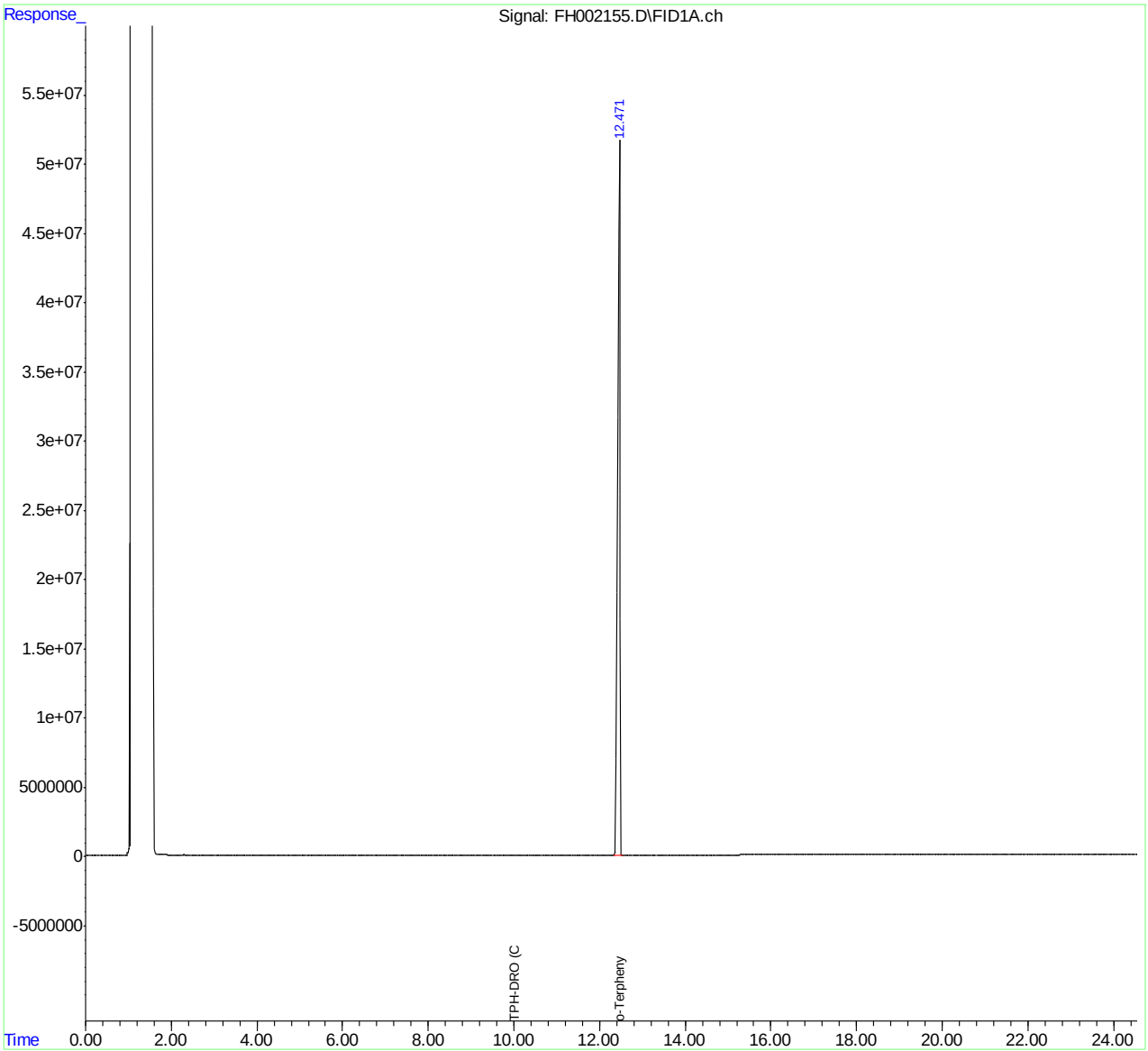
8

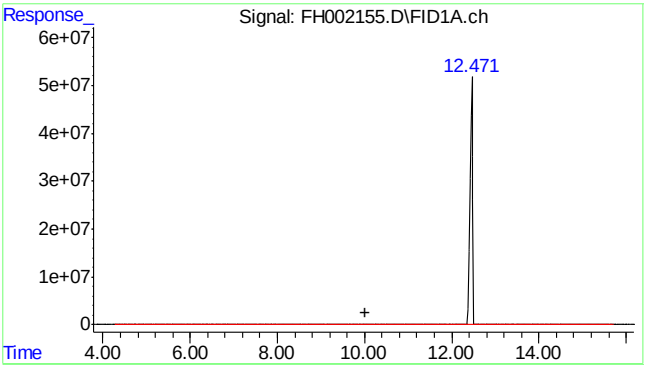
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH031212\
Data File : FH002155.D
Signal(s) : FID1A.ch
Acq On : 12 Mar 2012 10:23 am
Operator : tedr
Sample : OP5509-MB
Misc : OP5509,GFH110,30.00,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 12 15:00:33 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

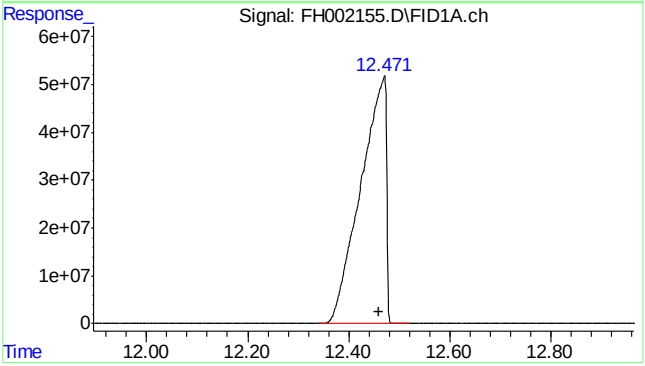
Volume Inj. :
Signal Phase :
Signal Info :





#1 TPH-DRO (C10-C28)

R.T.: 10.011 min
Delta R.T.: 0.000 min
Response: 46183645
Conc: 37.89 ug/ml m



#2 o-Terphenyl

R.T.: 12.470 min
Delta R.T.: 0.010 min
Response: 1804312275
Conc: 1227.36 ug/ml