Mountain States ACCUTEST LABORATORIES

04/20/12

Technical Report for

XTO Energy

FRU 297-8B

1106-06

Accutest Job Number: D33672

Sampling Date: 04/12/12

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: **91**

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), TX (T104704511-12-1)

Test results relate only to samples analyzed.

Sections: 1 2 3 4 5 6 7 8 9 10

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Sample Summary

XTO Energy

Job No: D33672

FRU 297-8B
Project No: 1106-06

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
D33672-1	04/12/12	15:10	CB	04/14/12	SO	Soil	CUT 1 MB 1:1
D33672-2	04/12/12	15:15	CB	04/14/12	SO	Soil	CUT 1 MB 2:1
D33672-3	04/12/12	15:20	CB	04/14/12	SO	Soil	CUT 2 MB 1:1
D33672-4	04/12/12	15:25	CB	04/14/12	SO	Soil	CUT 2 MB 2:1

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	XTO Energy	**Job No**	D33672
Site:	FRU 297-8B	**Report Date**	4/20/2012 12:11:59 PM

On 04/14/2012, 4 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 D33672 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 GCMS By Method SW846 8260B

Matrix SO **Batch ID:** V5V1260

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D33658-1MS, D33658-1MSD were used as the QC samples indicated.

Volatiles by GC By Method SW846 8015B

Matrix SO **Batch ID:** GGB877

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D33658-1MS, D33658-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846-8015B

Matrix SO **Batch ID:** OP5724

- All samples were extracted and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D33661-1MS, D33661-1MSD were used as the QC samples indicated.

Wet Chemistry By Method SM19 2540B M

Matrix SO **Batch ID:** GN14541

- 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.

Mountain States ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	CUT 1 MB 1:1		
Lab Sample ID:	D33672-1	**Date Sampled:**	04/12/12
Matrix:	SO - Soil	**Date Received:**	04/14/12
Method:	SW846 8260B	**Percent Solids:**	89.9
Project:	FRU 297-8B		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V20813.D	1	04/16/12	BD	n/a	n/a	V5V1260
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.01 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.061	0.027	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		61-130%
460-00-4	4-Bromofluorobenzene	91%		53-131%
17060-07-0	1,2-Dichloroethane-D4	114%		62-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CUT 1 MB 1:1		
Lab Sample ID:	D33672-1	**Date Sampled:**	04/12/12
Matrix:	SO - Soil	**Date Received:**	04/14/12
Method:	SW846 8015B	**Percent Solids:**	89.9
Project:	FRU 297-8B		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15735.D	1	04/16/12	SK	n/a	n/a	GGB877
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)	6.59	12	6.1	mg/kg	J

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 MB 1:1		
Lab Sample ID:	D33672-1	**Date Sampled:**	04/12/12
Matrix:	SO - Soil	**Date Received:**	04/14/12
Method:	SW846-8015B SW846 3546	**Percent Solids:**	89.9
Project:	FRU 297-8B		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH003473.D	1	04/19/12	AV	04/16/12	OP5724	GFH186
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)	253	15	9.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		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 MB 2:1		
Lab Sample ID:	D33672-2	**Date Sampled:**	04/12/12
Matrix:	SO - Soil	**Date Received:**	04/14/12
Method:	SW846 8260B	**Percent Solids:**	87.6
Project:	FRU 297-8B		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V20814.D	1	04/16/12	BD	n/a	n/a	V5V1260
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.08 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.063	0.028	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		61-130%
460-00-4	4-Bromofluorobenzene	90%		53-131%
17060-07-0	1,2-Dichloroethane-D4	117%		62-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CUT 1 MB 2:1		
Lab Sample ID:	D33672-2	**Date Sampled:**	04/12/12
Matrix:	SO - Soil	**Date Received:**	04/14/12
Method:	SW846 8015B	**Percent Solids:**	87.6
Project:	FRU 297-8B		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15736.D	1	04/16/12	SK	n/a	n/a	GGB877
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	8.77	13	6.3	mg/kg	J

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

Client Sample ID:	CUT 1 MB 2:1		
Lab Sample ID:	D33672-2	**Date Sampled:**	04/12/12
Matrix:	SO - Soil	**Date Received:**	04/14/12
Method:	SW846-8015B SW846 3546	**Percent Solids:**	87.6
Project:	FRU 297-8B		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH003475.D	1	04/19/12	AV	04/16/12	OP5724	GFH186
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)	463	15	9.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	89%		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 2 MB 1:1		
Lab Sample ID:	D33672-3	**Date Sampled:**	04/12/12
Matrix:	SO - Soil	**Date Received:**	04/14/12
Method:	SW846 8015B	**Percent Solids:**	87.0
Project:	FRU 297-8B		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15737.D	1	04/16/12	SK	n/a	n/a	GGB877
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	12.7	13	6.4	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	90%		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 2 MB 1:1		
Lab Sample ID:	D33672-3	**Date Sampled:**	04/12/12
Matrix:	SO - Soil	**Date Received:**	04/14/12
Method:	SW846-8015B SW846 3546	**Percent Solids:**	87.0
Project:	FRU 297-8B		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH003479.D	1	04/19/12	AV	04/16/12	OP5724	GFH186
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)	211	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

Accutest Laboratories

Report of Analysis

Client Sample ID:	CUT 2 MB 2:1		
Lab Sample ID:	D33672-4	**Date Sampled:**	04/12/12
Matrix:	SO - Soil	**Date Received:**	04/14/12
Method:	SW846 8015B	**Percent Solids:**	86.0
Project:	FRU 297-8B		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15738.D	1	04/16/12	SK	n/a	n/a	GGB877
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)	ND	13	6.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	89%		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 2 MB 2:1		
Lab Sample ID:	D33672-4	**Date Sampled:**	04/12/12
Matrix:	SO - Soil	**Date Received:**	04/14/12
Method:	SW846-8015B SW846 3546	**Percent Solids:**	86.0
Project:	FRU 297-8B		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH003481.D	1	04/19/12	AV	04/16/12	OP5724	GFH186
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)	395	15	10	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	76%		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

ACCUTEST LABORATORIES

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

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FED-EX Tracking # | Bottle Order Control #
Accutest Quote # | Accutest Job # D-33672

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): CRAIG BLAEGER Phone #: 970 488 1098

Project Information

Project Name: XTO FRU 297-8B
Street:
City:
Project#: 1106-06
Client PO#:
Project Manager: JOE HESS

Billing Information (If different from Report to)

Company Name: XTO ENERGY
Street Address: 21459 CR5
City: RIFLE State: CO Zip: 81650
Attention: JESSICA DOOLING PO#:

Requested Analysis (see TEST CODE sheet)

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	TPH (CARB+DRO)	BENZENE	LAB USE ONLY
	CUT 1 MB 1:1		4/12/12	3:10	CAB	SO						X					X	X	01
	CUT 1 MB 2:1		4/12/12	3:15	CAB	SO						X					X	X	02
	CUT 2 MB 1:1		4/12/12	3:20	CAB	SO						X					X		03
	CUT 2 MB 2:1		4/12/12	3:25	CAB	SO						X					X		04

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

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

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

Emergency & Rush T/A data available VIA Lablink

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		4/13/12 1430				
2						FedEx
3						
4						
5						

Custody Seal # | [ ] Intact [ ] Not Intact | Preserved where applicable | On Ice | Cooler Temp.

D33672: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D33672 **Client:** **Immediate Client Services Action Required:** No

Date / Time Received: 4/14/2012 **No. Coolers:** **Client Service Action Required at Login:** No

Project: **Airbill #'s:**

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

D33672: Chain of Custody
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Mountain States ACCUTEST LABORATORIES

GC/MS 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: D33672
Account: XTOKRWR XTO Energy
Project: FRU 297-8B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V1260-MB	5V20800.D	1	04/16/12	BD	n/a	n/a	V5V1260

The QC reported here applies to the following samples: **Method:** SW846 8260B

D33672-1, D33672-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	50	22	ug/kg	

CAS No.	Surrogate Recoveries		Limits
2037-26-5	Toluene-D8	91%	61-130%
460-00-4	4-Bromofluorobenzene	75%	53-131%
17060-07-0	1,2-Dichloroethane-D4	126%	62-130%

Blank Spike Summary

Job Number: D33672
Account: XTOKRWR XTO Energy
Project: FRU 297-8B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V1260-BS	5V20809.D	1	04/16/12	BD	n/a	n/a	V5V1260

The QC reported here applies to the following samples: **Method:** SW846 8260B

D33672-1, D33672-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	54.2	108	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	96%	61-130%
460-00-4	4-Bromofluorobenzene	93%	53-131%
17060-07-0	1,2-Dichloroethane-D4	105%	62-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D33672
Account: XTOKRWR XTO Energy
Project: FRU 297-8B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D33658-1MS	5V20810.D	1	04/16/12	BD	n/a	n/a	V5V1260
D33658-1MSD	5V20811.D	1	04/16/12	BD	n/a	n/a	V5V1260
D33658-1	5V20808.D	1	04/16/12	BD	n/a	n/a	V5V1260

The QC reported here applies to the following samples: **Method:** SW846 8260B

D33672-1, D33672-2

CAS No.	Compound	D33658-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		2660	2950	111	2800	105	5	70-134/30

CAS No.	Surrogate Recoveries	MS	MSD	D33658-1	Limits
2037-26-5	Toluene-D8	95%	93%	84%	61-130%
460-00-4	4-Bromofluorobenzene	103%	101%	81%	53-131%
17060-07-0	1,2-Dichloroethane-D4	102%	102%	95%	62-130%

Mountain States ACCUTEST LABORATORIES

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V5041612.S\
Data File : 5V20813.D
Acq On : 16 Apr 2012 7:04 pm
Operator : BRETD
Sample : D33672-1
Misc : MS3763,V5V1260,5.012,,100,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 17 06:45:57 2012
Quant Method : C:\msdchem\1\METHODS\V5AP1212TVH1212.M
Quant Title : 8260
QLast Update : Wed Mar 21 09:50:04 2012
Response via : Initial Calibration

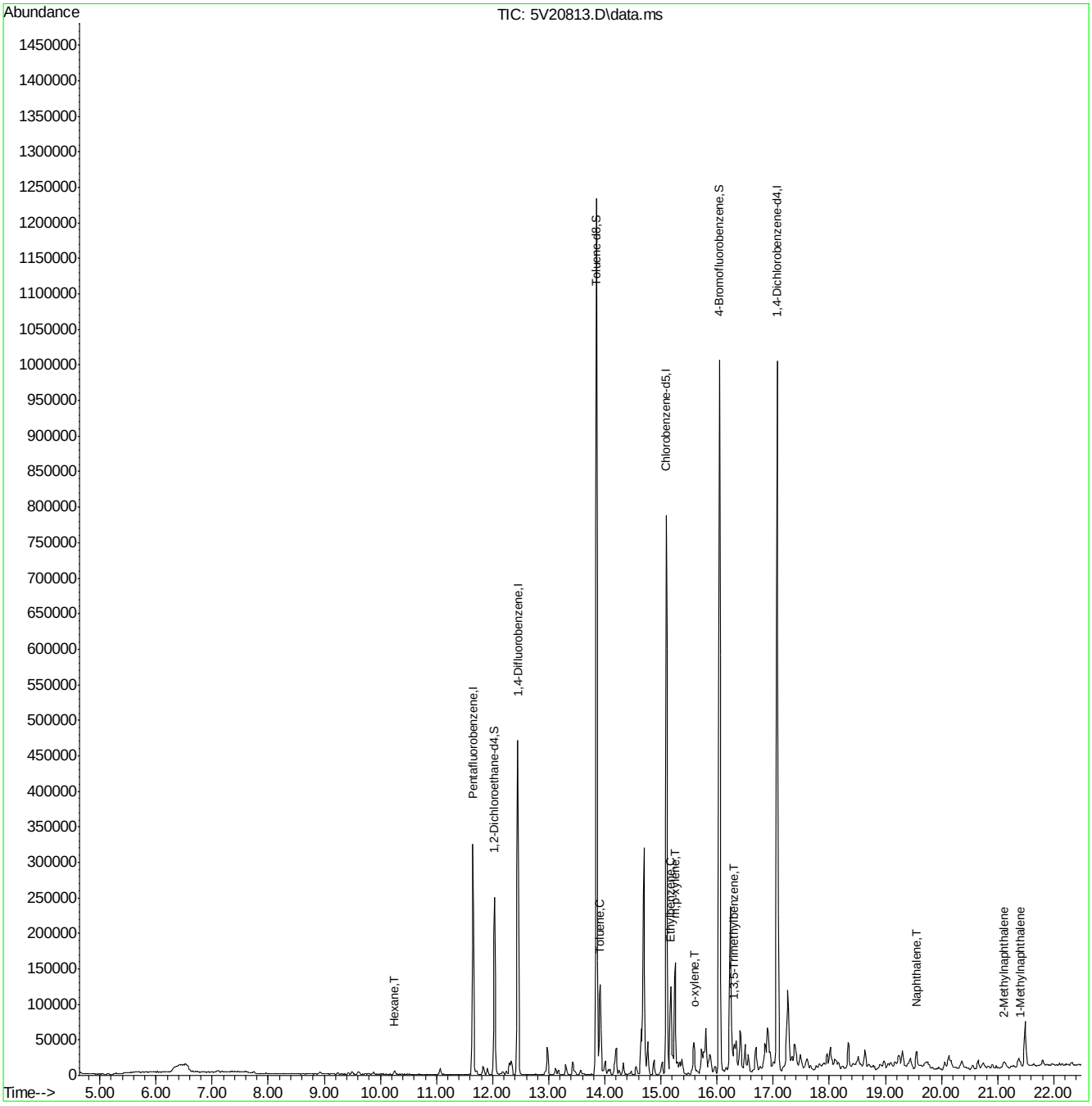
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Pentafluorobenzene	11.647	168	234422	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	12.446	114	393502	50.00	ug/l	0.00
53) Chlorobenzene-d5	15.095	117	487641	50.00	ug/l	0.00
74) 1,4-Dichlorobenzene-d4	17.070	152	331347	50.00	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	12.035	102	41788	57.03	ug/l	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 114.06%			
61) Toluene-d8	13.850	98	794405	46.88	ug/l	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 93.76%			
69) 4-Bromofluorobenzene	16.043	95	347641	45.55	ug/l	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 91.10%			
Target Compounds						Qvalue
41) Hexane	10.243	57	2263	1.21	ug/l	100
62) Toluene	13.908	92	40918	3.26	ug/l	99
66) Ethylbenzene	15.175	91	28649	1.24	ug/l	96
72) m,p-xylene	15.255	106	49941	5.19	ug/l	96
73) o-xylene	15.597	106	4216	0.47	ug/l	97
80) 1,3,5-Trimethylbenzene	16.305	105	26551	1.64	ug/l #	74
91) Naphthalene	19.559	128	8921	1.81	ug/l	100
94) 2-Methylnaphthalene	21.112	142	5677	1.64	ug/l	91
95) 1-Methylnaphthalene	21.408	142	3755	2.53	ug/l #	90

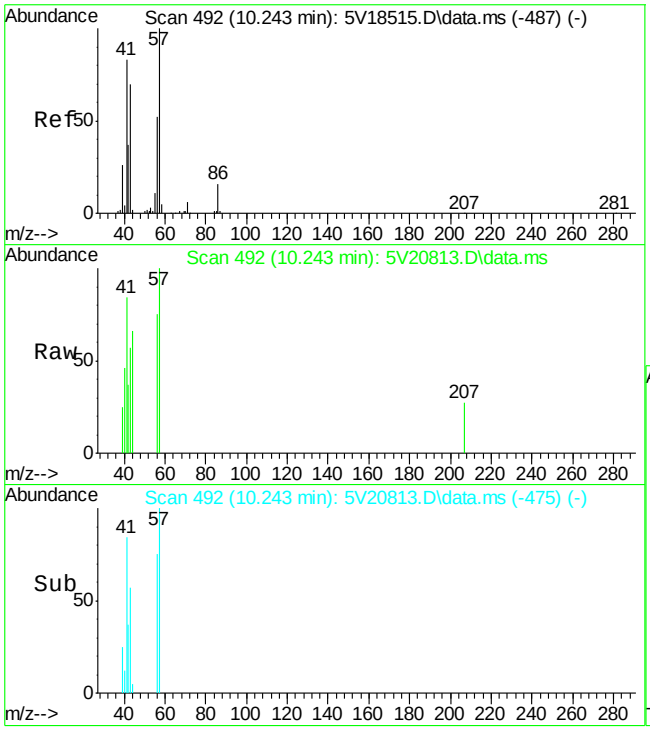
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V5041612.S\
Data File : 5V20813.D
Acq On : 16 Apr 2012 7:04 pm
Operator : BRETD
Sample : D33672-1
Misc : MS3763,V5V1260,5.012,,100,5,1
ALS Vial : 17 Sample Multiplier: 1

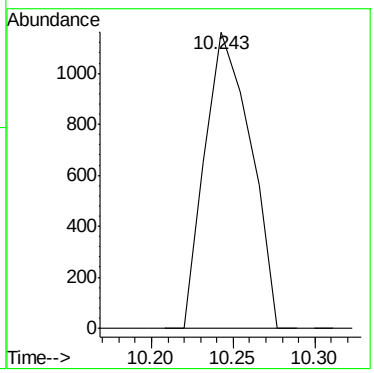
Quant Time: Apr 17 06:45:57 2012
Quant Method : C:\msdchem\1\METHODS\V5AP1212TVH1212.M
Quant Title : 8260
QLast Update : Wed Mar 21 09:50:04 2012
Response via : Initial Calibration

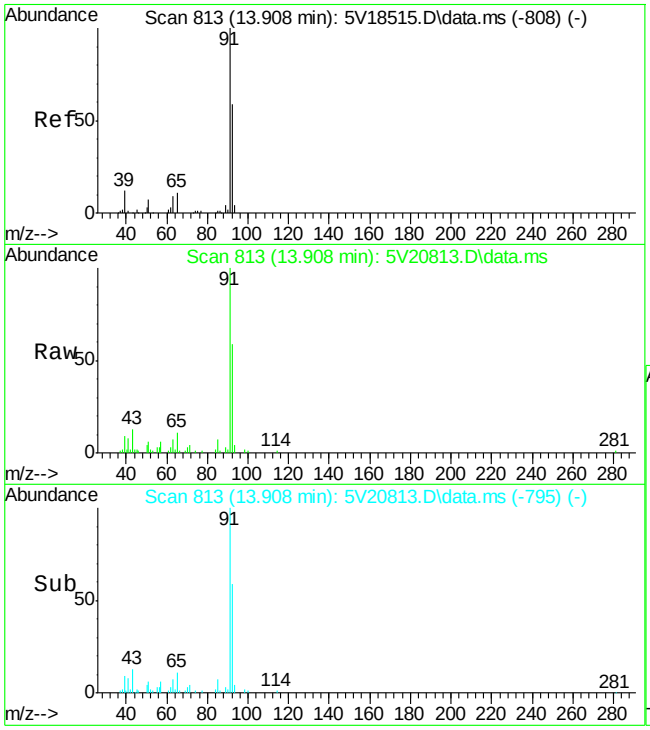




#41
Hexane
Concen: 1.21 ug/l
RT: 10.243 min Scan# 492
Delta R.T. -0.011 min
Lab File: 5V20813.D
Acq: 16 Apr 2012 7:04 pm

Tgt Ion: 57 Resp: 2263

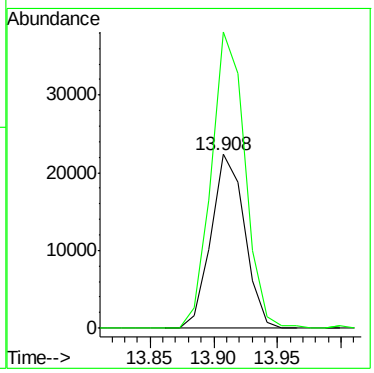


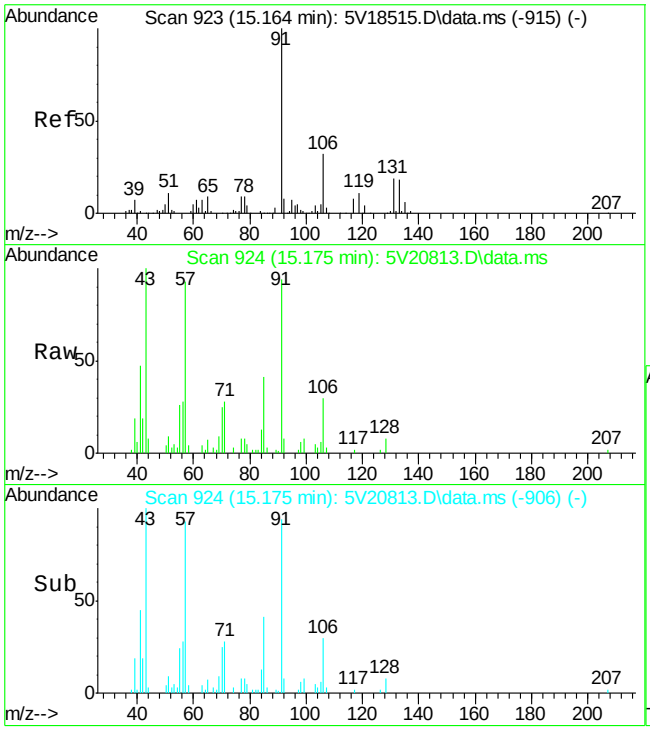


#62
Toluene
Concen: 3.26 ug/l
RT: 13.908 min Scan# 813
Delta R.T. 0.000 min
Lab File: 5V20813.D
Acq: 16 Apr 2012 7:04 pm

Tgt Ion: 92 Resp: 40918

Ion	Ratio	Lower	Upper
92	100		
91	170.9	149.8	189.8

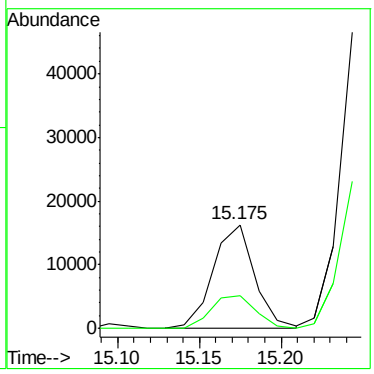


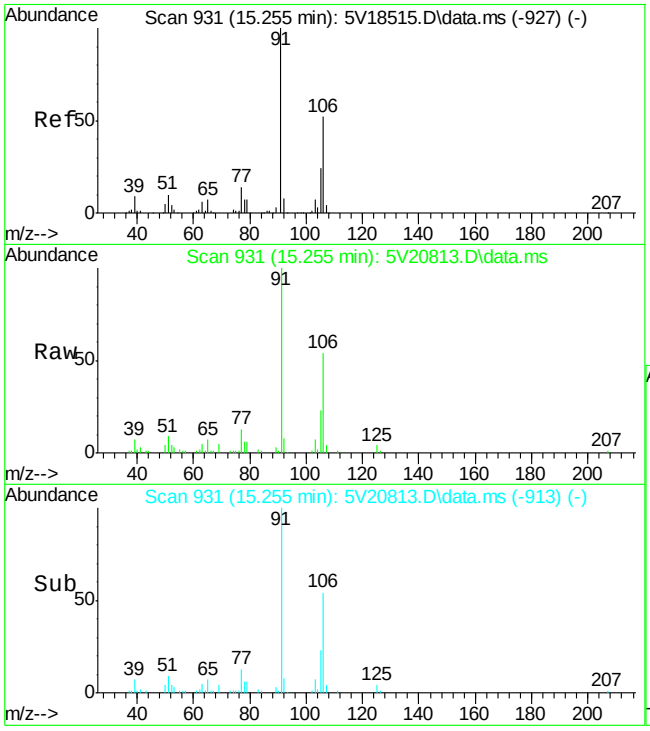


#66
Ethylbenzene
Concen: 1.24 ug/l
RT: 15.175 min Scan# 924
Delta R.T. 0.000 min
Lab File: 5V20813.D
Acq: 16 Apr 2012 7:04 pm

Tgt Ion: 91 Resp: 28649

Ion	Ratio	Lower	Upper
91	100		
106	33.8	11.7	51.7

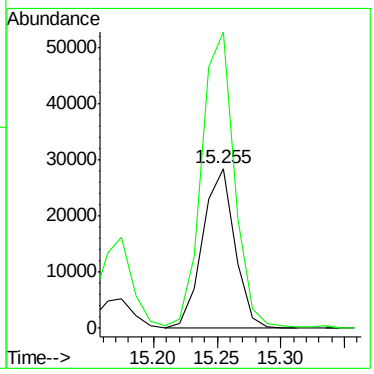


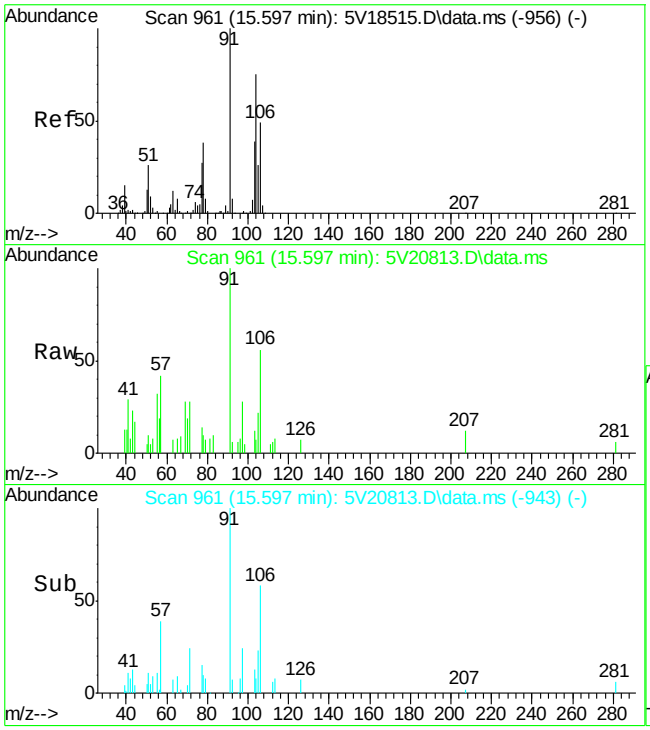


#72
m,p-xylene
Concen: 5.19 ug/l
RT: 15.255 min Scan# 931
Delta R.T. 0.000 min
Lab File: 5V20813.D
Acq: 16 Apr 2012 7:04 pm

Tgt Ion:106 Resp: 49941

Ion	Ratio	Lower	Upper
106	100		
91	190.4	177.1	217.1

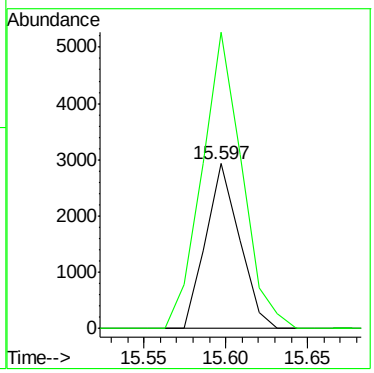


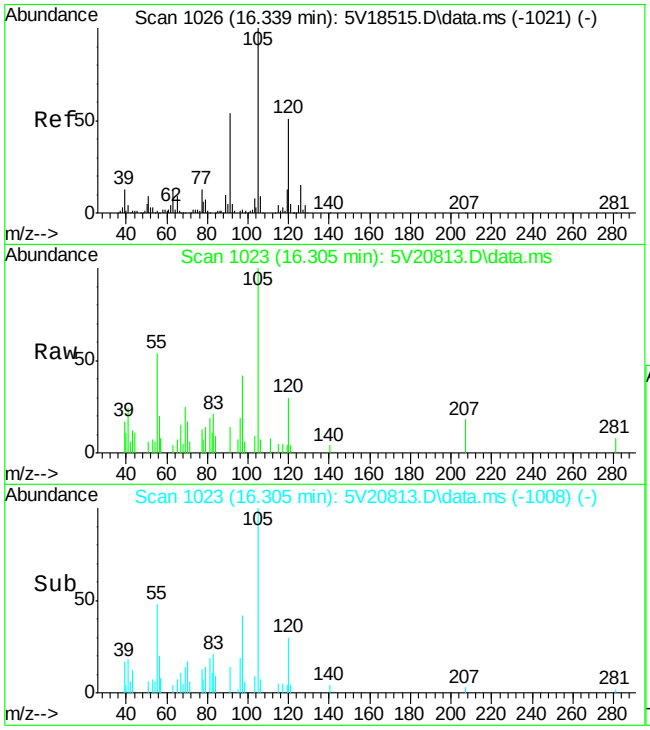


#73
o-xylene
Concen: 0.47 ug/l
RT: 15.597 min Scan# 961
Delta R.T. 0.000 min
Lab File: 5V20813.D
Acq: 16 Apr 2012 7:04 pm

Tgt Ion:106 Resp: 4216

Ion	Ratio	Lower	Upper
106	100		
91	212.4	166.6	249.8

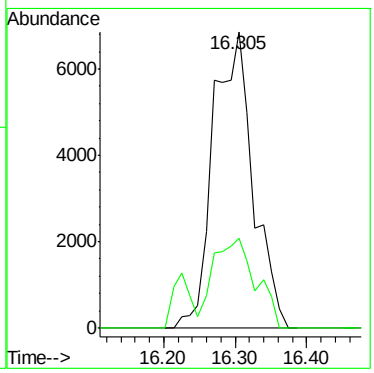


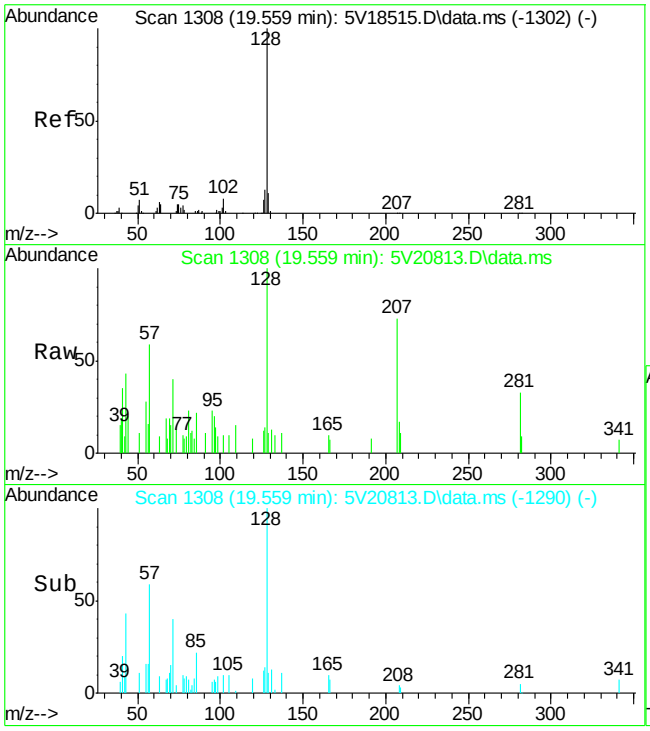


#80
1,3,5-Trimethylbenzene
Concen: 1.64 ug/l
RT: 16.305 min Scan# 1023
Delta R.T. -0.034 min
Lab File: 5V20813.D
Acq: 16 Apr 2012 7:04 pm

Tgt Ion:105 Resp: 26551

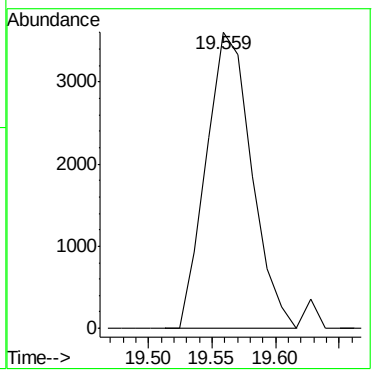
Ion	Ratio	Lower	Upper
105	100		
120	32.3	40.1	60.1#

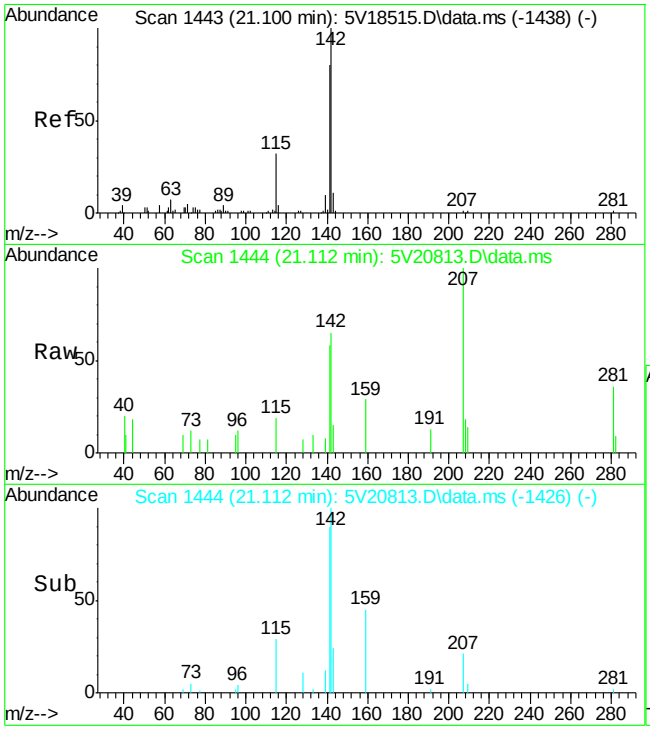




#91
Naphthalene
Concen: 1.81 ug/l
RT: 19.559 min Scan# 1308
Delta R.T. 0.001 min
Lab File: 5V20813.D
Acq: 16 Apr 2012 7:04 pm

Tgt Ion:128 Resp: 8921

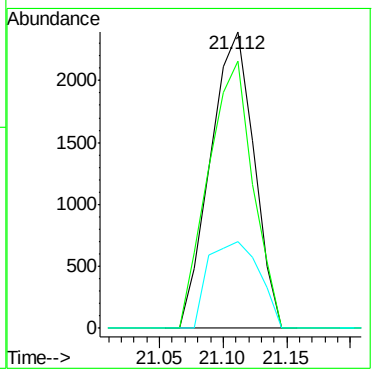


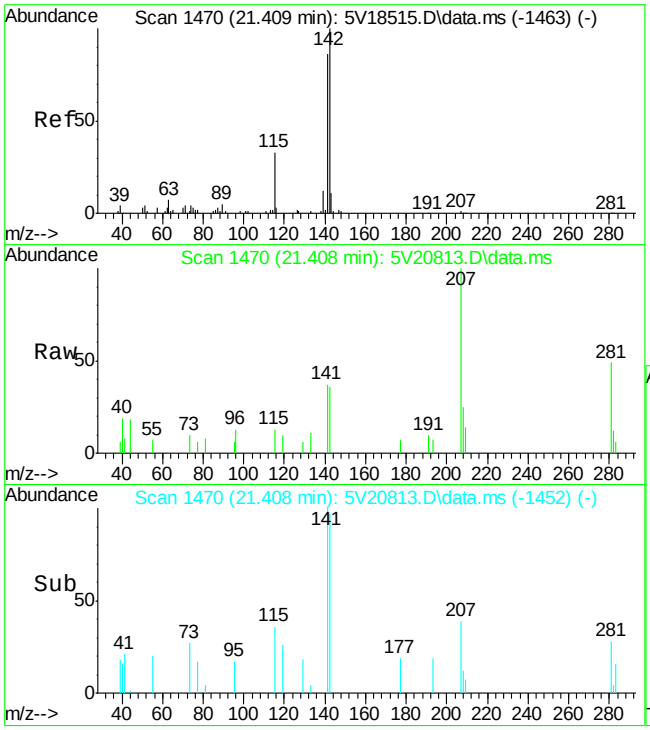


#94
2-Methylnaphthalene
Concen: 1.64 ug/l
RT: 21.112 min Scan# 1444
Delta R.T. 0.001 min
Lab File: 5V20813.D
Acq: 16 Apr 2012 7:04 pm

Tgt Ion:142 Resp: 5677

Ion	Ratio	Lower	Upper
142	100		
141	92.4	66.2	99.4
115	34.1	25.9	38.9

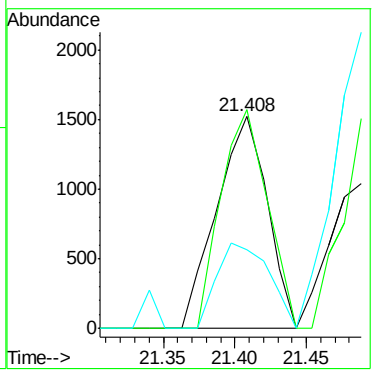




#95
1-Methylnaphthalene
Concen: 2.53 ug/l
RT: 21.408 min Scan# 1470
Delta R.T. 0.000 min
Lab File: 5V20813.D
Acq: 16 Apr 2012 7:04 pm

Tgt Ion:142 Resp: 3755

Ion	Ratio	Lower	Upper
142	100		
141	94.7	68.9	103.3
115	41.3	27.3	40.9#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V5041612.S\
Data File : 5V20814.D
Acq On : 16 Apr 2012 7:36 pm
Operator : BRETD
Sample : D33672-2
Misc : MS3763,V5V1260,5.080,,100,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 17 06:47:07 2012
Quant Method : C:\msdchem\1\METHODS\V5AP1212TVH1212.M
Quant Title : 8260
QLast Update : Wed Mar 21 09:50:04 2012
Response via : Initial Calibration

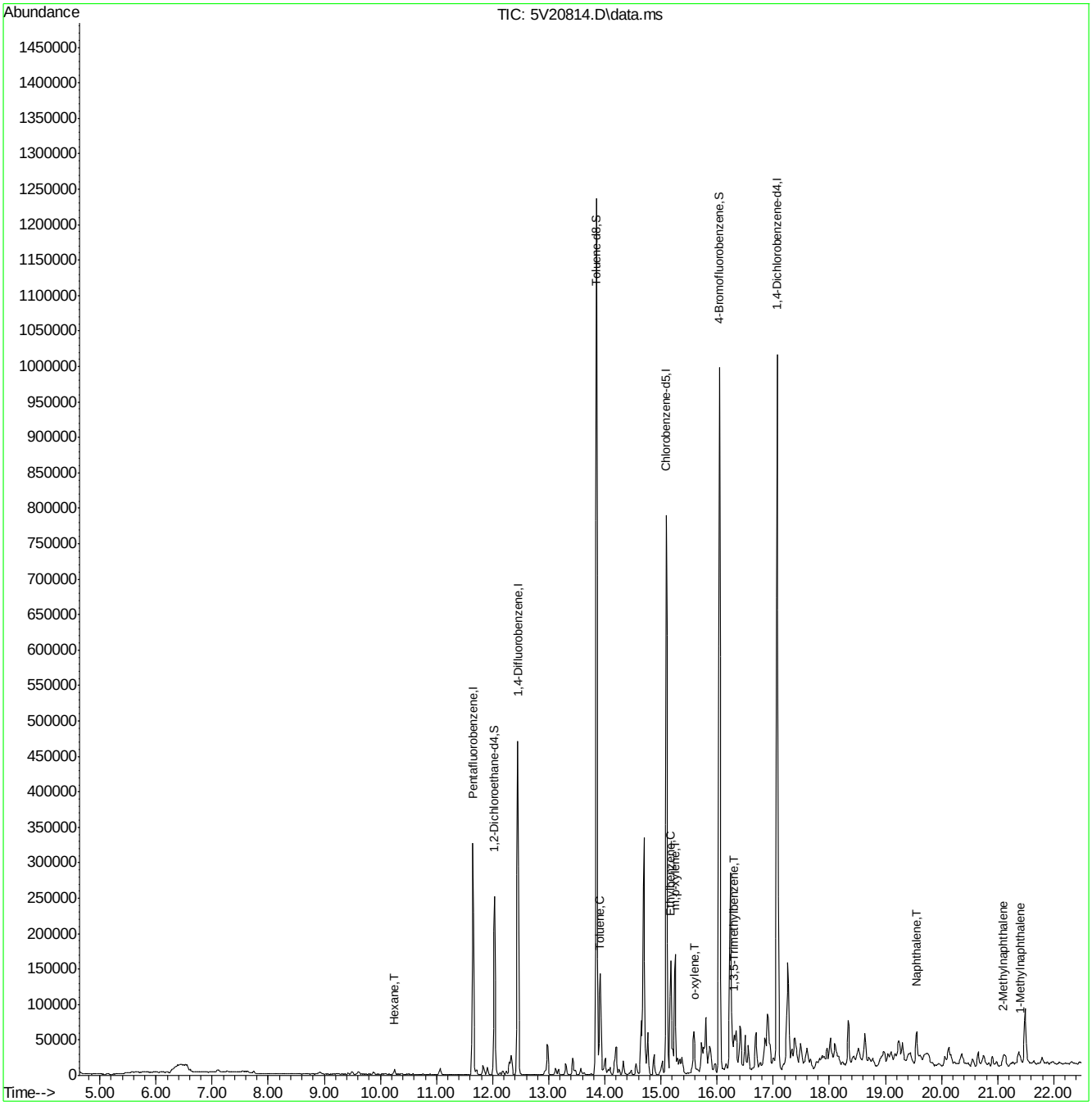
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Pentafluorobenzene	11.647	168	235313	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	12.446	114	393119	50.00	ug/l	0.00
53) Chlorobenzene-d5	15.095	117	488498	50.00	ug/l	0.00
74) 1,4-Dichlorobenzene-d4	17.070	152	331233	50.00	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	12.035	102	43031	58.63	ug/l	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 117.26%			
61) Toluene-d8	13.851	98	795373	46.86	ug/l	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 93.72%			
69) 4-Bromofluorobenzene	16.043	95	345431	45.18	ug/l	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 90.36%			
Target Compounds						Qvalue
41) Hexane	10.243	57	3352	1.44	ug/l	100
62) Toluene	13.908	92	39253	3.13	ug/l	98
66) Ethylbenzene	15.175	91	32888	1.42	ug/l	96
72) m,p-xylene	15.255	106	52900	5.49	ug/l	97
73) o-xylene	15.597	106	6029	0.66	ug/l	99
80) 1,3,5-Trimethylbenzene	16.305	105	38005	2.16	ug/l #	76
91) Naphthalene	19.559	128	19161	2.39	ug/l	100
94) 2-Methylnaphthalene	21.100	142	9314	2.67	ug/l #	92
95) 1-Methylnaphthalene	21.409	142	6176	3.03	ug/l #	88

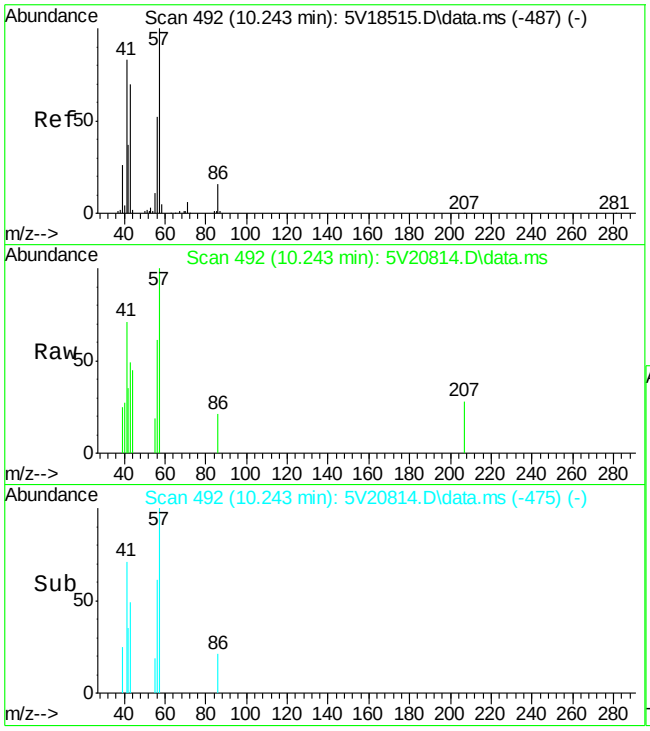
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V5041612.S\
Data File : 5V20814.D
Acq On : 16 Apr 2012 7:36 pm
Operator : BRETD
Sample : D33672-2
Misc : MS3763,V5V1260,5.080,,100,5,1
ALS Vial : 18 Sample Multiplier: 1

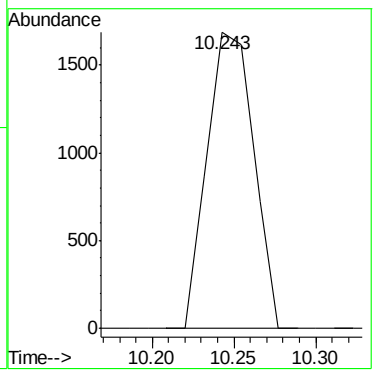
Quant Time: Apr 17 06:47:07 2012
Quant Method : C:\msdchem\1\METHODS\V5AP1212TVH1212.M
Quant Title : 8260
QLast Update : Wed Mar 21 09:50:04 2012
Response via : Initial Calibration

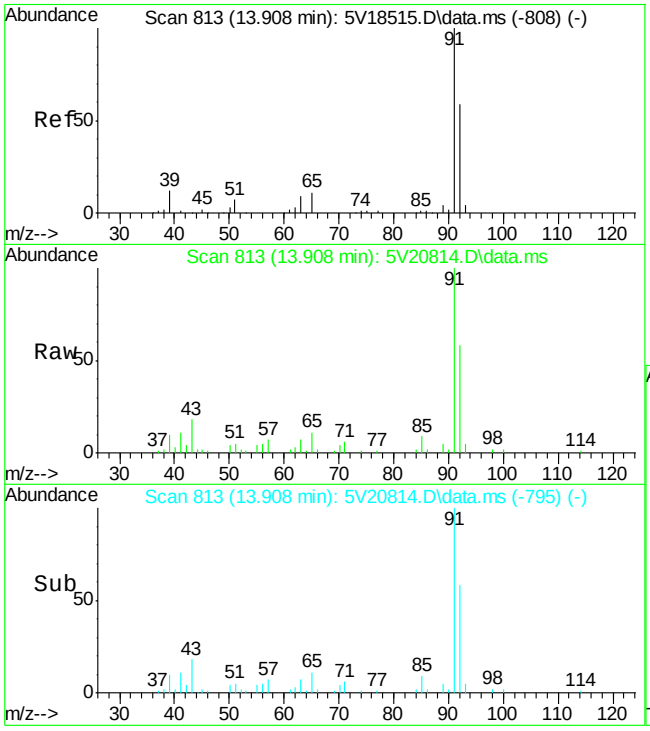




#41
Hexane
Concen: 1.44 ug/l
RT: 10.243 min Scan# 492
Delta R.T. -0.011 min
Lab File: 5V20814.D
Acq: 16 Apr 2012 7:36 pm

Tgt Ion: 57 Resp: 3352

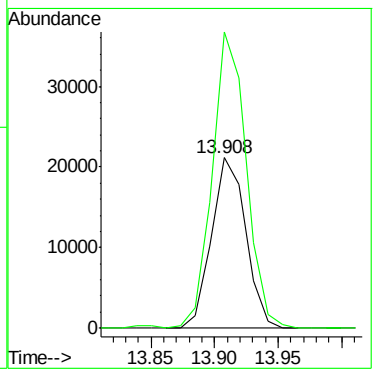


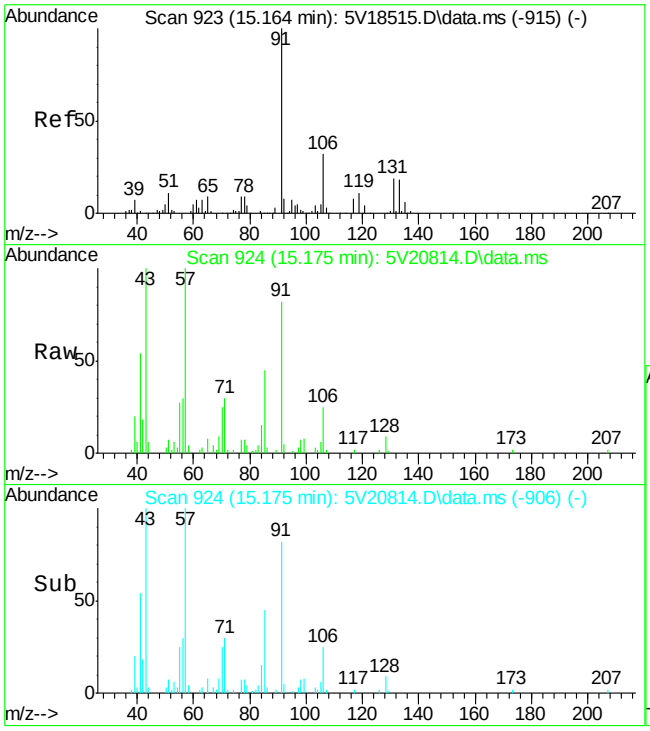


#62
Toluene
Concen: 3.13 ug/l
RT: 13.908 min Scan# 813
Delta R.T. 0.000 min
Lab File: 5V20814.D
Acq: 16 Apr 2012 7:36 pm

Tgt Ion: 92 Resp: 39253

Ion	Ratio	Lower	Upper
92	100		
91	173.2	149.8	189.8

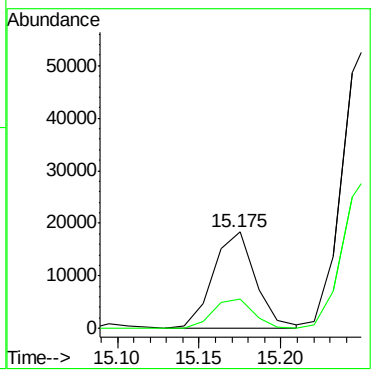


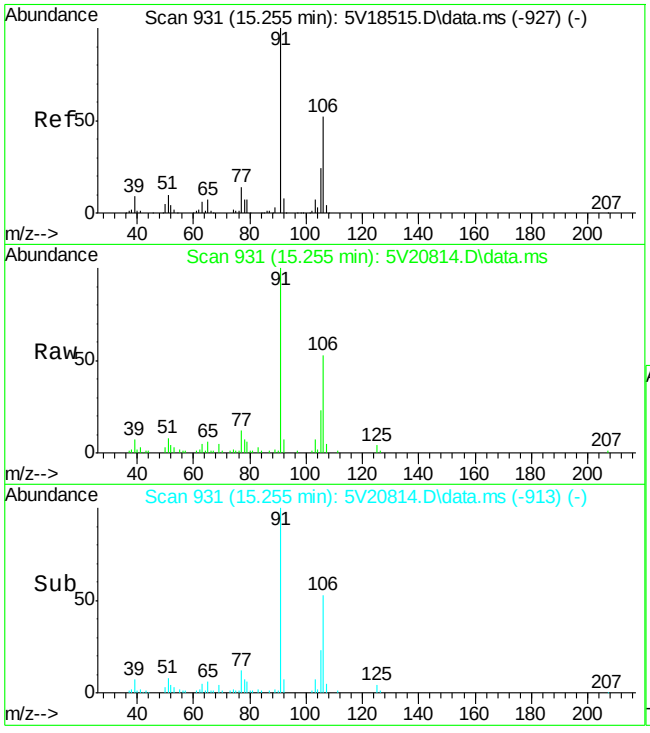


#66
Ethylbenzene
Concen: 1.42 ug/l
RT: 15.175 min Scan# 924
Delta R.T. 0.000 min
Lab File: 5V20814.D
Acq: 16 Apr 2012 7:36 pm

Tgt Ion: 91 Resp: 32888

Ion	Ratio	Lower	Upper
91	100		
106	29.2	11.7	51.7

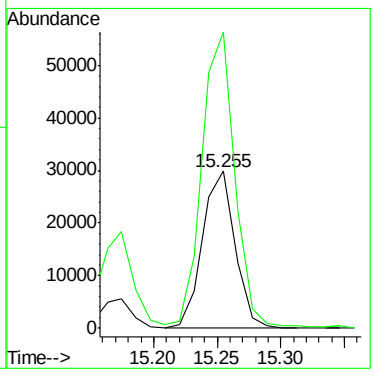


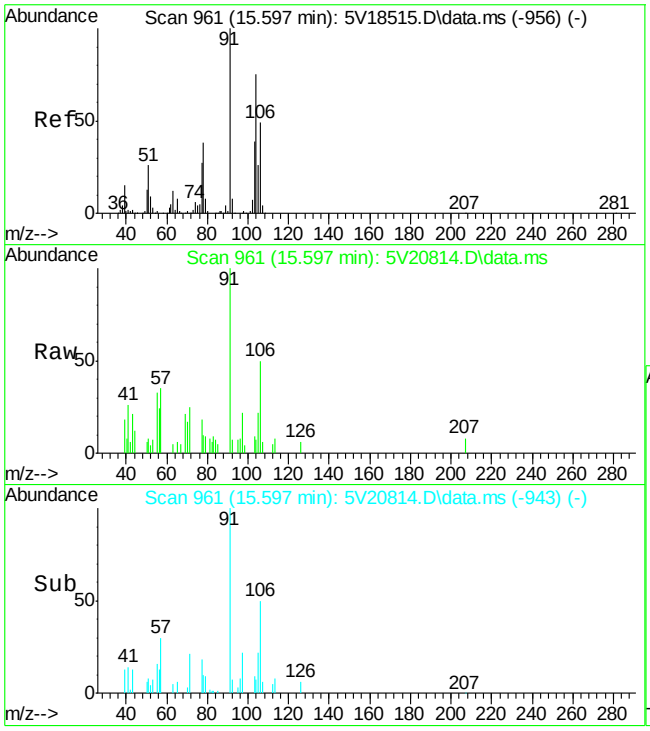


#72
m,p-xylene
Concen: 5.49 ug/l
RT: 15.255 min Scan# 931
Delta R.T. 0.000 min
Lab File: 5V20814.D
Acq: 16 Apr 2012 7:36 pm

Tgt Ion:106 Resp: 52900

Ion	Ratio	Lower	Upper
106	100		
91	192.4	177.1	217.1

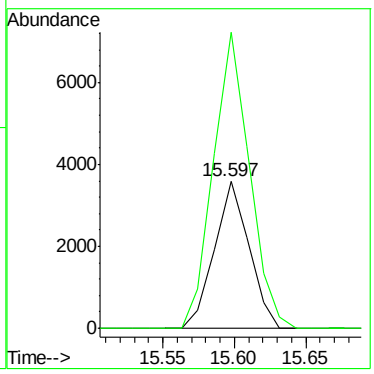


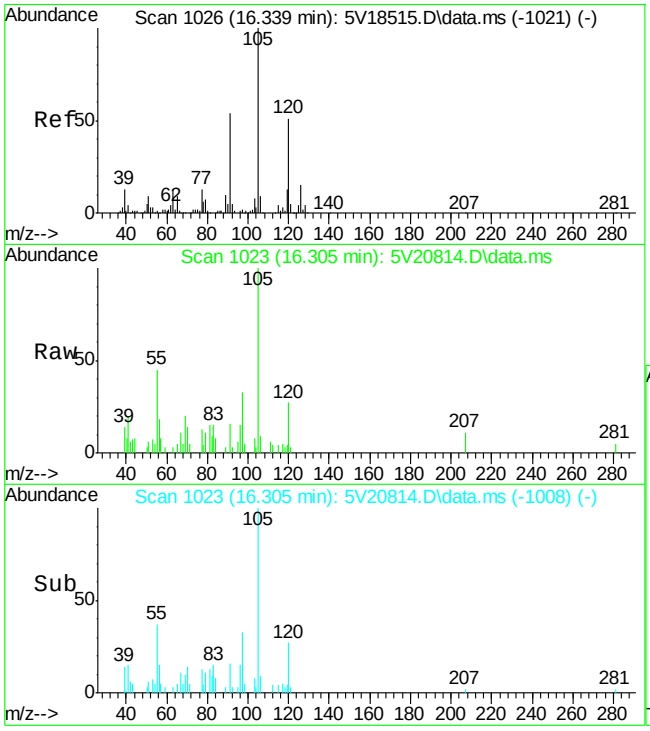


#73
o-xylene
Concen: 0.66 ug/l
RT: 15.597 min Scan# 961
Delta R.T. 0.000 min
Lab File: 5V20814.D
Acq: 16 Apr 2012 7:36 pm

Tgt Ion:106 Resp: 6029

Ion	Ratio	Lower	Upper
106	100		
91	210.4	166.6	249.8

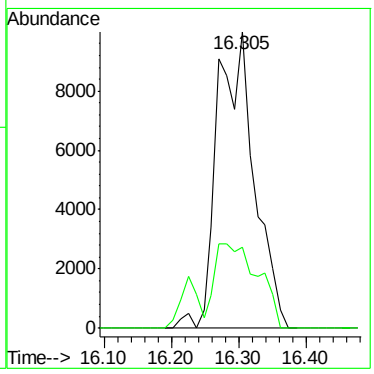


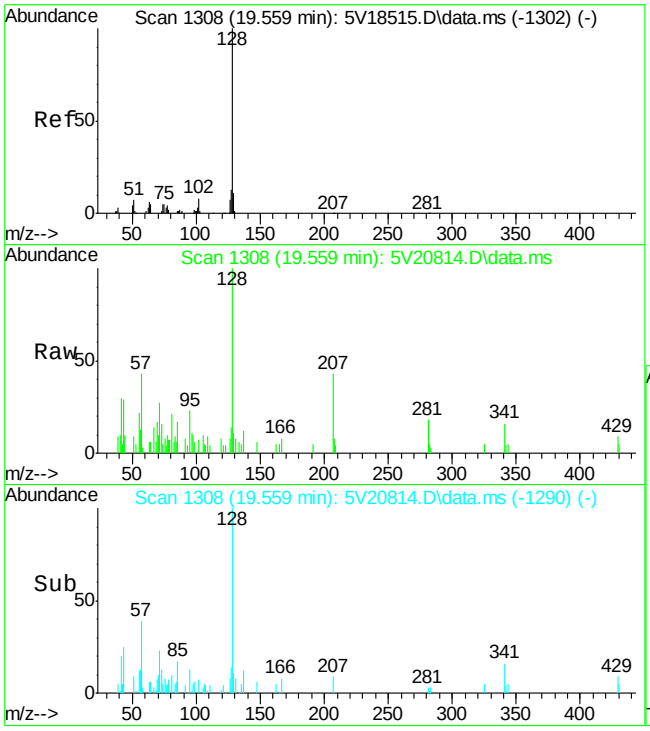


#80
1,3,5-Trimethylbenzene
Concen: 2.16 ug/l
RT: 16.305 min Scan# 1023
Delta R.T. -0.034 min
Lab File: 5V20814.D
Acq: 16 Apr 2012 7:36 pm

Tgt Ion:105 Resp: 38005

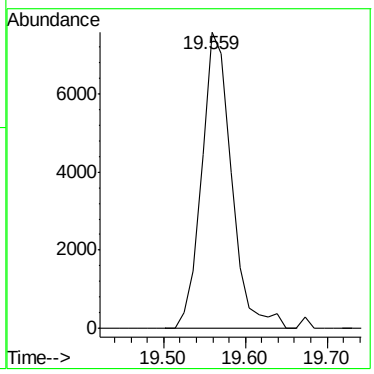
Ion	Ratio	Lower	Upper
105	100		
120	33.6	40.1	60.1#

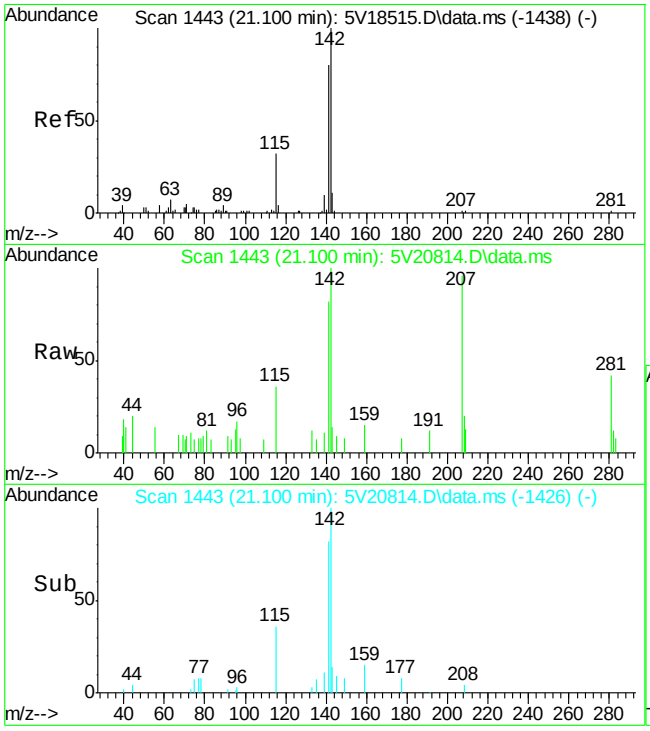




#91
Naphthalene
Concen: 2.39 ug/l
RT: 19.559 min Scan# 1308
Delta R.T. 0.001 min
Lab File: 5V20814.D
Acq: 16 Apr 2012 7:36 pm

Tgt Ion:128 Resp: 19161

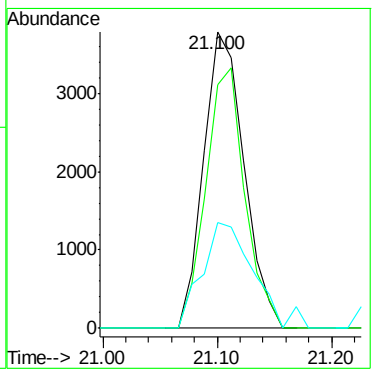


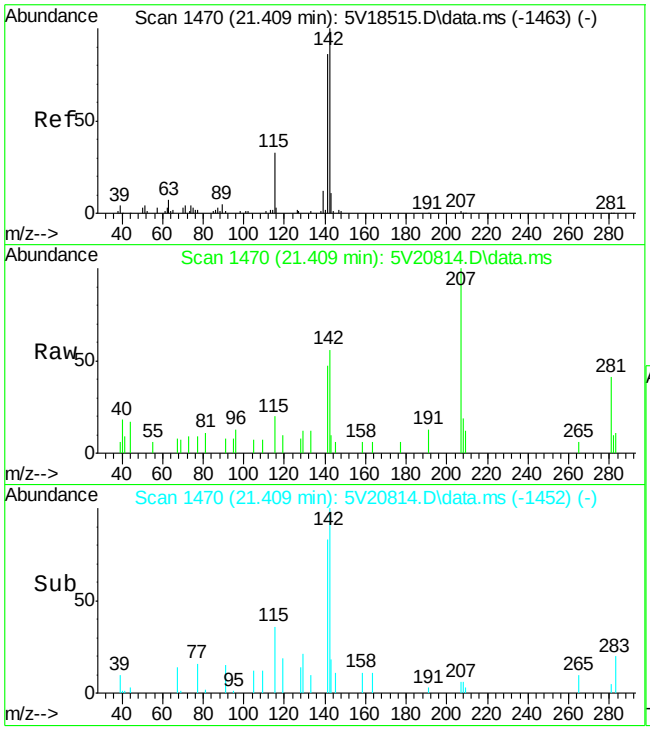


#94
2-Methylnaphthalene
Concen: 2.67 ug/l
RT: 21.100 min Scan# 1443
Delta R.T. -0.011 min
Lab File: 5V20814.D
Acq: 16 Apr 2012 7:36 pm

Tgt Ion:142 Resp: 9314

Ion	Ratio	Lower	Upper
142	100		
141	84.8	66.2	99.4
115	45.7	25.9	38.9#

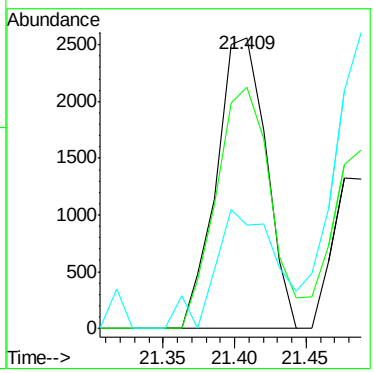




#95
1-Methylnaphthalene
Concen: 3.03 ug/l
RT: 21.409 min Scan# 1470
Delta R.T. 0.001 min
Lab File: 5V20814.D
Acq: 16 Apr 2012 7:36 pm

Tgt Ion:142 Resp: 6176

Ion	Ratio	Lower	Upper
142	100		
141	91.0	68.9	103.3
115	50.3	27.3	40.9#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V5041612.S\
Data File : 5V20800.D
Acq On : 16 Apr 2012 11:50 am
Operator : BRETD
Sample : MB
Misc : MS3763,V5V1260,5.00,,100,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 17 06:32:59 2012
Quant Method : C:\msdchem\1\METHODS\V5AP1212TVH1212.M
Quant Title : 8260
QLast Update : Wed Mar 21 09:50:04 2012
Response via : Initial Calibration

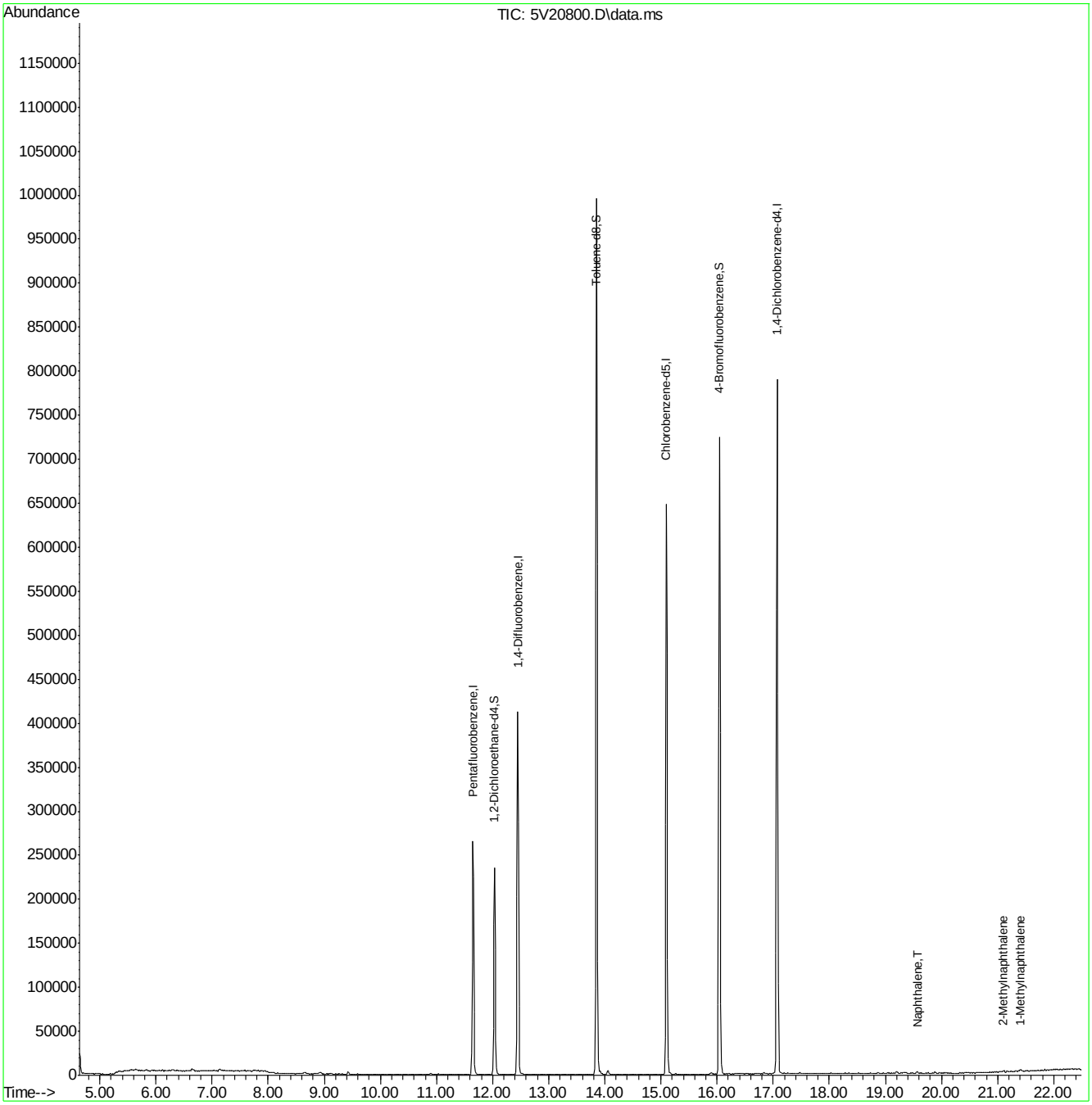
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Pentafluorobenzene	11.647	168	192886	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	12.447	114	329204	50.00	ug/l	0.00
53) Chlorobenzene-d5	15.095	117	397008	50.00	ug/l	0.00
74) 1,4-Dichlorobenzene-d4	17.070	152	253385	50.00	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	12.036	102	37721	63.05	ug/l	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 126.10%			
61) Toluene-d8	13.851	98	624971	45.30	ug/l	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 90.60%			
69) 4-Bromofluorobenzene	16.043	95	232351	37.39	ug/l	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 74.78%			
Target Compounds						Qvalue
91) Naphthalene	19.571	128	3158	1.54	ug/l	100
94) 2-Methylnaphthalene	21.101	142	1880	0.71	ug/l #	74
95) 1-Methylnaphthalene	21.409	142	1637	2.20	ug/l #	86

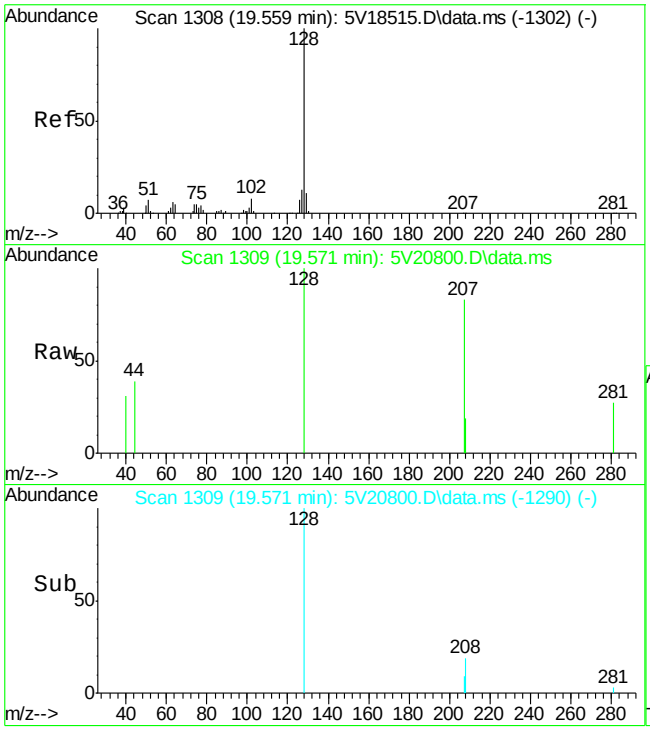
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V5041612.S\
Data File : 5V20800.D
Acq On : 16 Apr 2012 11:50 am
Operator : BRETD
Sample : MB
Misc : MS3763,V5V1260,5.00,,100,5,1
ALS Vial : 4 Sample Multiplier: 1

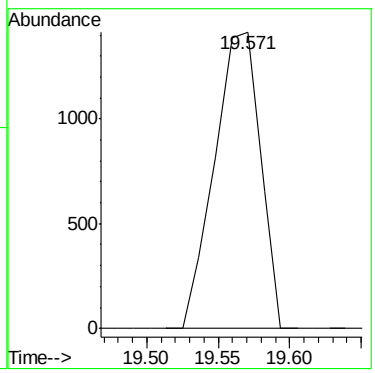
Quant Time: Apr 17 06:32:59 2012
Quant Method : C:\msdchem\1\METHODS\V5AP1212TVH1212.M
Quant Title : 8260
QLast Update : Wed Mar 21 09:50:04 2012
Response via : Initial Calibration

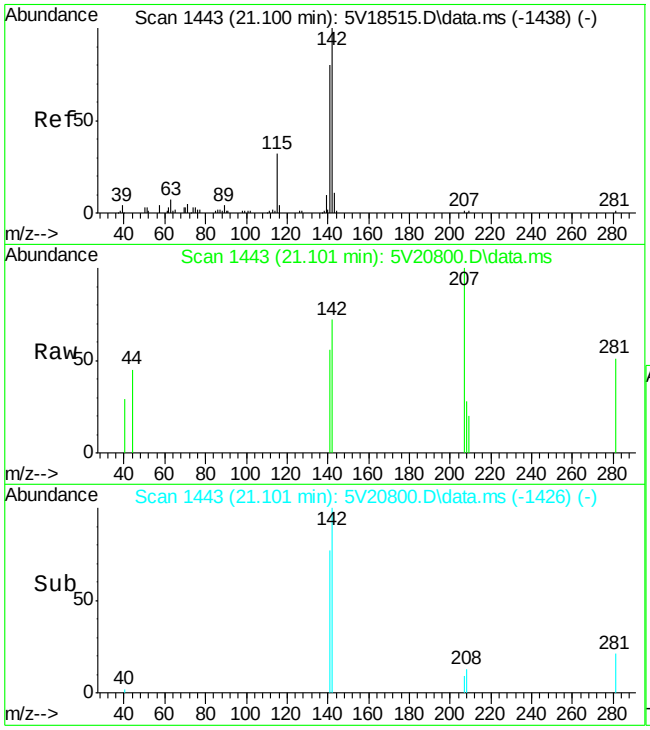




#91
Naphthalene
Concen: 1.54 ug/l
RT: 19.571 min Scan# 1309
Delta R.T. 0.013 min
Lab File: 5V20800.D
Acq: 16 Apr 2012 11:50 am

Tgt Ion:128 Resp: 3158

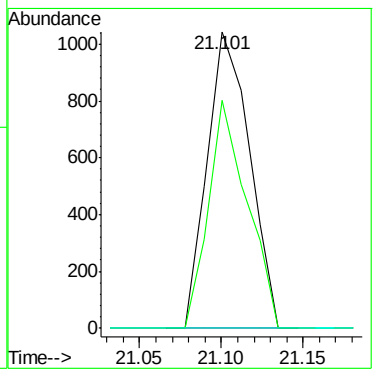


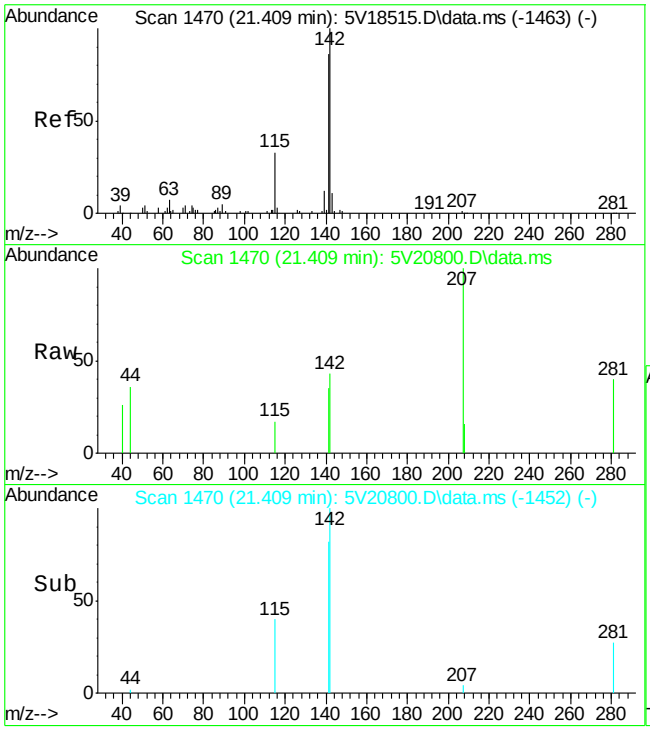


#94
2-Methylnaphthalene
Concen: 0.71 ug/l
RT: 21.101 min Scan# 1443
Delta R.T. -0.010 min
Lab File: 5V20800.D
Acq: 16 Apr 2012 11:50 am

Tgt Ion:142 Resp: 1880

Ion	Ratio	Lower	Upper
142	100		
141	70.3	66.2	99.4
115	0.0	25.9	38.9#

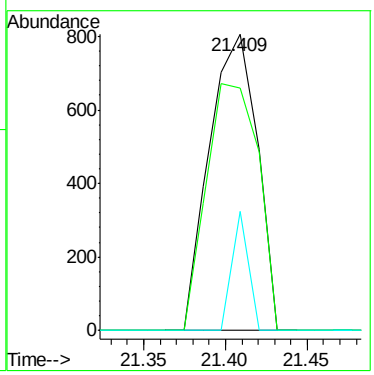




#95
1-Methylnaphthalene
Concen: 2.20 ug/l
RT: 21.409 min Scan# 1470
Delta R.T. 0.001 min
Lab File: 5V20800.D
Acq: 16 Apr 2012 11:50 am

Tgt Ion:142 Resp: 1637

Ion	Ratio	Lower	Upper
142	100		
141	90.5	68.9	103.3
115	13.6	27.3	40.9#



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: D33672
Account: XTOKRWR XTO Energy
Project: FRU 297-8B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB877-MB	GB15725.D	1	04/16/12	SK	n/a	n/a	GGB877

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

D33672-1, D33672-2, D33672-3, D33672-4

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: D33672
Account: XTOKRWR XTO Energy
Project: FRU 297-8B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB877-BS	GB15726.D	1	04/16/12	SK	n/a	n/a	GGB877

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

D33672-1, D33672-2, D33672-3, D33672-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	110	118	107	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	102%	60-140%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D33672
Account: XTOKRWR XTO Energy
Project: FRU 297-8B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D33658-1MS	GB15728.D	1	04/16/12	SK	n/a	n/a	GGB877
D33658-1MSD	GB15729.D	1	04/16/12	SK	n/a	n/a	GGB877
D33658-1	GB15727.D	1	04/16/12	SK	n/a	n/a	GGB877

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

D33672-1, D33672-2, D33672-3, D33672-4

CAS No.	Compound	D33658-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		117	134	114	133	114	1	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D33658-1	Limits
120-82-1	1,2,4-Trichlorobenzene	102%	102%	96%	60-140%

Mountain States ACCUTEST LABORATORIES

GC Volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Judy Melson 04/17/12 11:29

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\041612\GB15735.D\FID1A.CH Vial: 14
Signal #2 : Y:\1\DATA\041612\GB15735.D\FID2B.CH
Acq On : 16 Apr 2012 6:02 pm Operator: StephK
Sample : D33672-1, 50X Inst : GC/MS Ins
Misc : GC2758,GGB877,5.012,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Apr 17 08:40:10 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Apr 12 09:39:07 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	14.33	2967969	94.720	%	m
10) S	1,2,4-Trichlorobenzene (P)	14.33	16332262	100.489	%	
	Target Compounds					
1) H	TVH-Gasoline	7.23	8883224	0.108	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	7.59	767722	1.937	ug/L	
7) T	Ethylbenzene	10.23	282077	0.834	ug/L	
8) T	m,p-Xylene	10.41	1380041	3.407	ug/L	
9) T	o-Xylene	10.92	120284	0.366	ug/L	
11) T	Naphthalene	14.51	614062	3.112	ug/L	

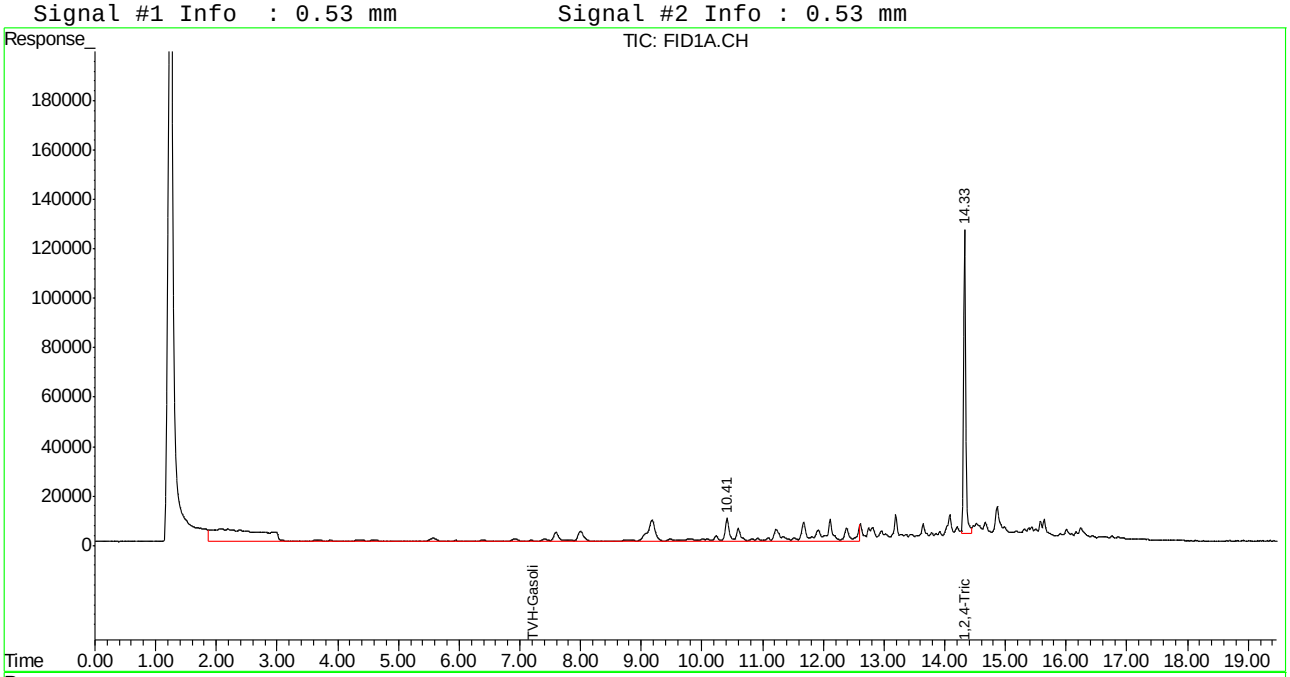
(f)=RT Delta > 1/2 Window (m)=manual int.

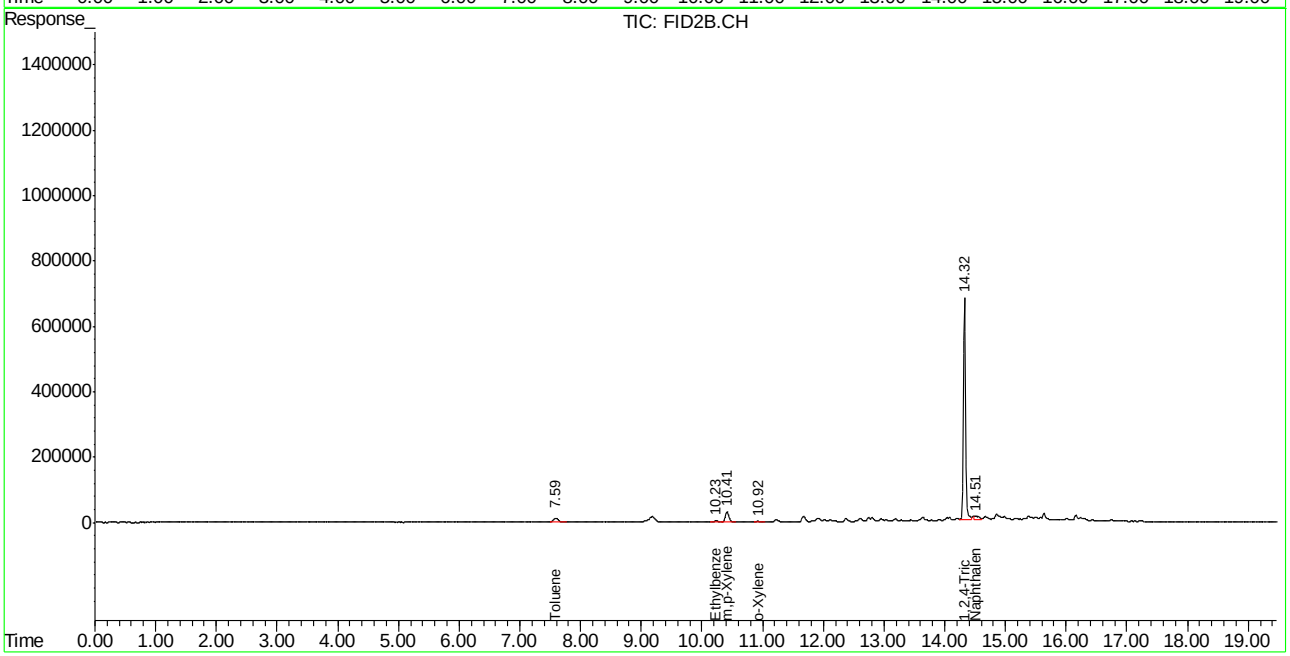
Quantitation Report (QT Reviewed)

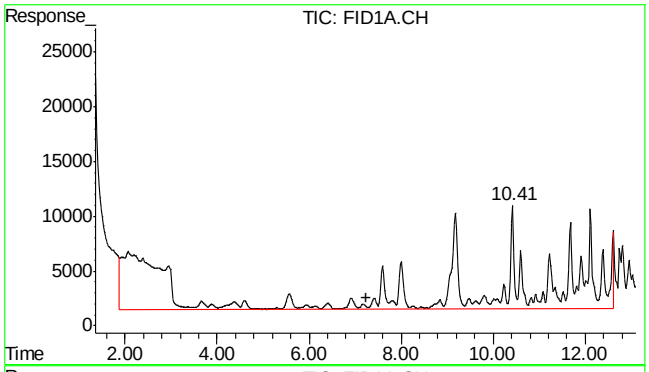
Signal #1 : Y:\1\DATA\041612\GB15735.D\FID1A.CH Vial: 14
Signal #2 : Y:\1\DATA\041612\GB15735.D\FID2B.CH
Acq On : 16 Apr 2012 6:02 pm Operator: StephK
Sample : D33672-1, 50X Inst : GC/MS Ins
Misc : GC2758,GGB877,5.012,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Apr 17 6:55 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Apr 12 09:39:07 2012
Response via : Multiple Level Calibration
DataAcq Meth : TVB4.M

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

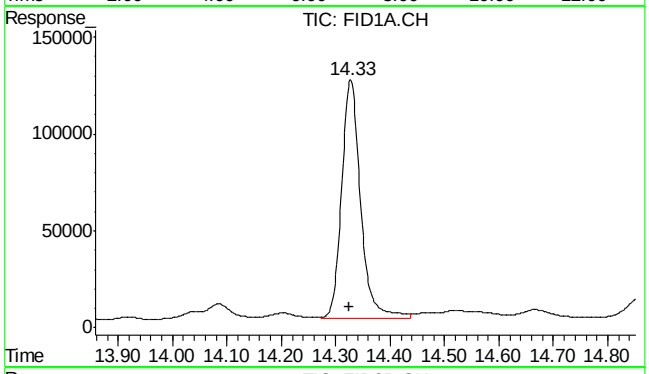






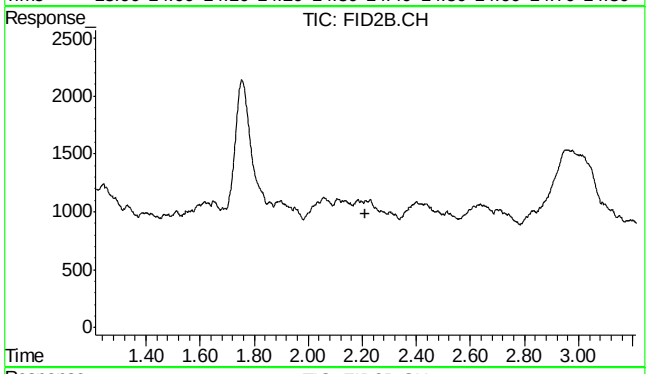
#1 TVH-Gasoline

R.T.: 7.230 min
Delta R.T.: 0.000 min
Response: 8883224
Conc: 0.11 mg/L m



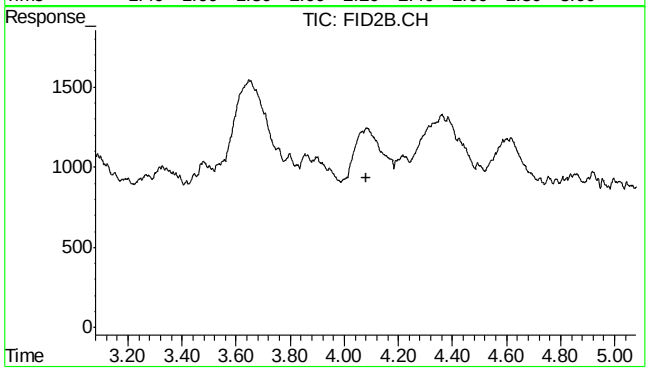
#2 1,2,4-Trichlorobenzene

R.T.: 14.327 min
Delta R.T.: 0.001 min
Response: 2967969
Conc: 94.72 % m



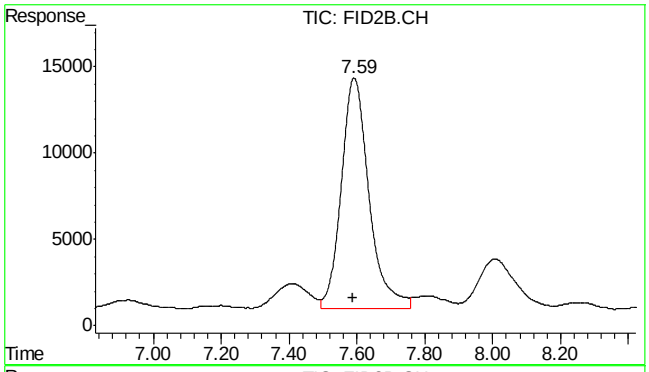
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T. : 2.212 min
Response: 0
Conc: N.D.



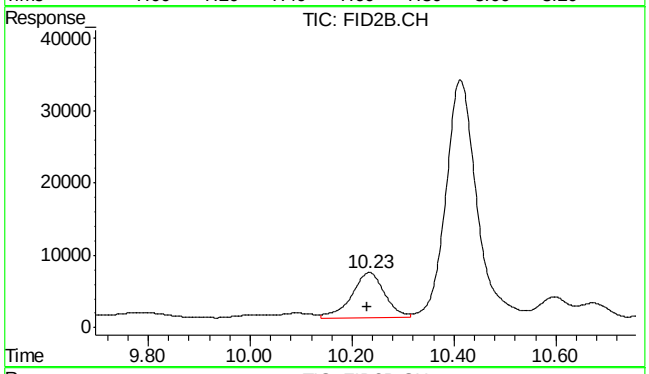
#5 Benzene

R.T.: 0.000 min
Exp R.T. : 4.079 min
Response: 0
Conc: N.D.



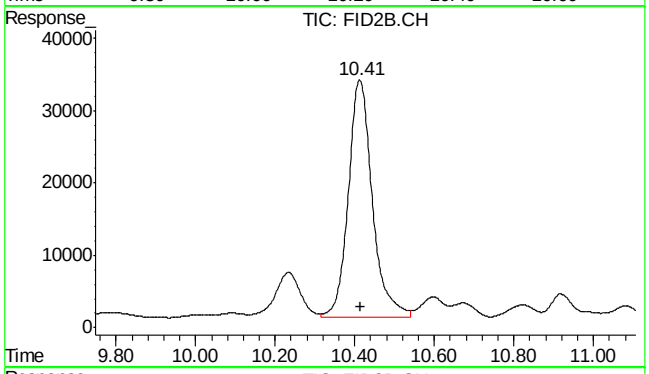
#6 Toluene

R.T.: 7.591 min
Delta R.T.: 0.004 min
Response: 767722
Conc: 1.94 ug/L



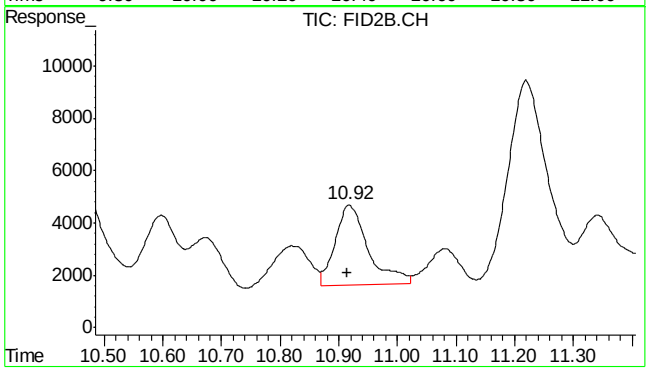
#7 Ethylbenzene

R.T.: 10.234 min
Delta R.T.: 0.004 min
Response: 282077
Conc: 0.83 ug/L



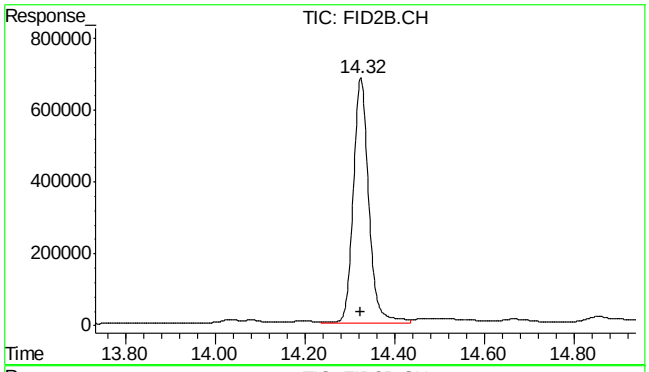
#8 m,p-Xylene

R.T.: 10.413 min
Delta R.T.: 0.000 min
Response: 1380041
Conc: 3.41 ug/L



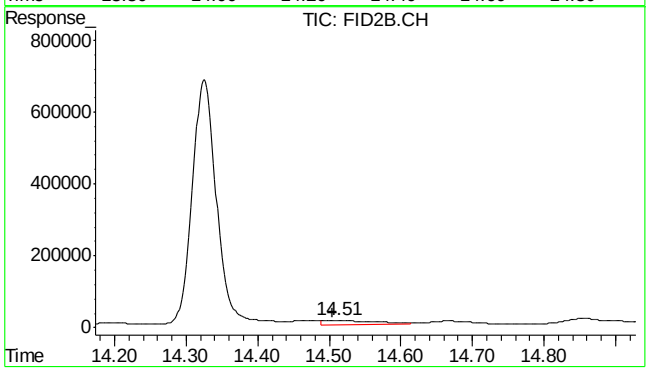
#9 o-Xylene

R.T.: 10.918 min
Delta R.T.: 0.005 min
Response: 120284
Conc: 0.37 ug/L



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

R.T.: 14.325 min
Delta R.T.: 0.001 min
Response: 16332262
Conc: 100.49 %



#11 Naphthalene

R.T.: 14.512 min
Delta R.T.: 0.007 min
Response: 614062
Conc: 3.11 ug/L

Manual Integrations APPROVED (compounds with "m" flag)
Judy Melson
04/17/12 11:29

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\041612\GB15736.D\FID1A.CH Vial: 15
Signal #2 : Y:\1\DATA\041612\GB15736.D\FID2B.CH
Acq On : 16 Apr 2012 6:38 pm Operator: StephK
Sample : D33672-2, 50X Inst : GC/MS Ins
Misc : GC2758,GGB877,5.080,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Apr 17 08:40:14 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Apr 12 09:39:07 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	2946080	94.022	%	m
10) S	1,2,4-Trichlorobenzene (P)	14.33	16486373	101.437	%	
	Target Compounds					
1) H	TVH-Gasoline	7.23	10820026	0.139	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	7.61	846507	2.136	ug/L	
7) T	Ethylbenzene	10.24	353907	1.046	ug/L	
8) T	m,p-Xylene	10.42	1653769	4.157	ug/L	
9) T	o-Xylene	10.93	176267	0.537	ug/L	
11) T	Naphthalene	14.52	1248570	6.328	ug/L	

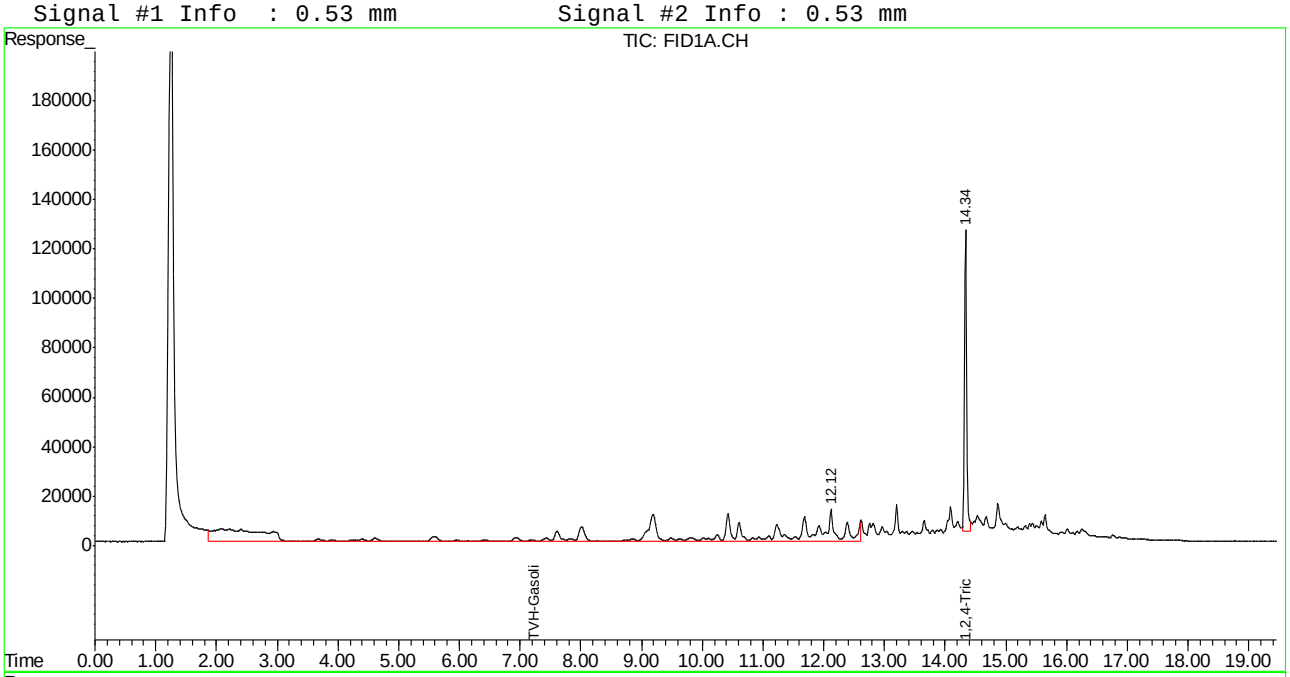
(f)=RT Delta > 1/2 Window (m)=manual int.

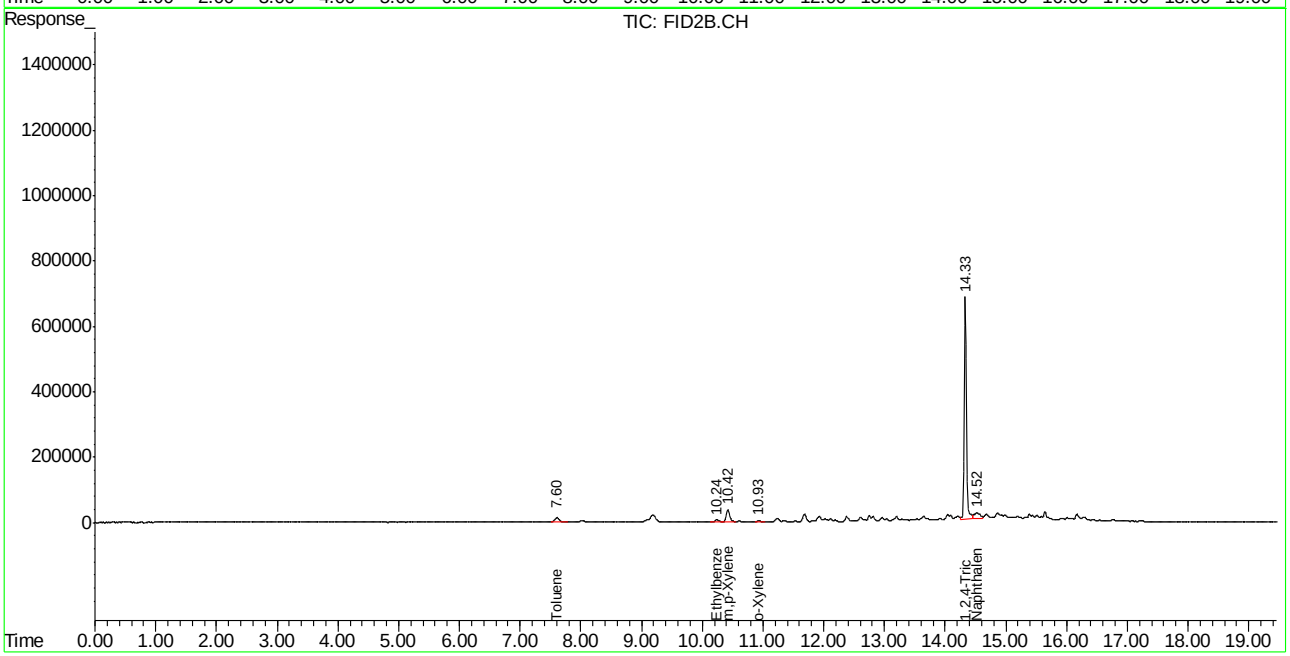
Quantitation Report (QT Reviewed)

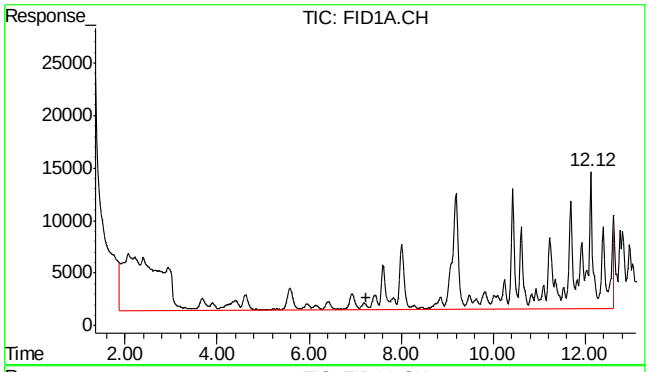
Signal #1 : Y:\1\DATA\041612\GB15736.D\FID1A.CH Vial: 15
Signal #2 : Y:\1\DATA\041612\GB15736.D\FID2B.CH
Acq On : 16 Apr 2012 6:38 pm Operator: StephK
Sample : D33672-2, 50X Inst : GC/MS Ins
Misc : GC2758,GGB877,5.080,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Apr 17 6:55 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Apr 12 09:39:07 2012
Response via : Multiple Level Calibration
DataAcq Meth : TVB4.M

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

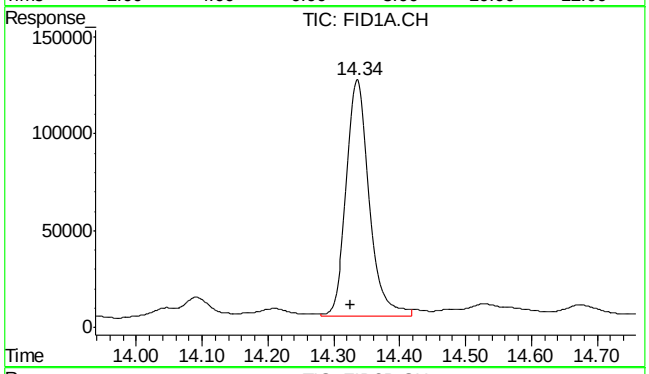






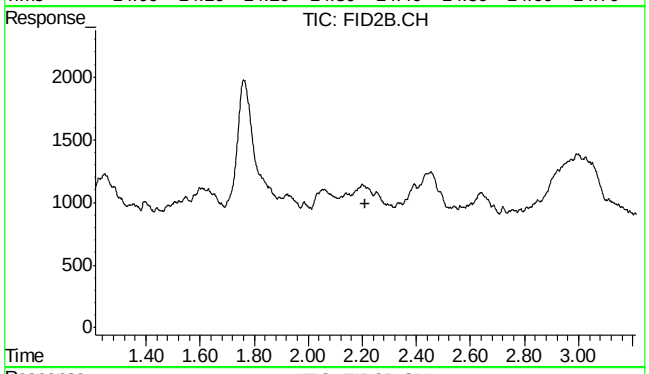
#1 TVH-Gasoline

R.T.: 7.230 min
Delta R.T.: 0.000 min
Response: 10820026
Conc: 0.14 mg/L m



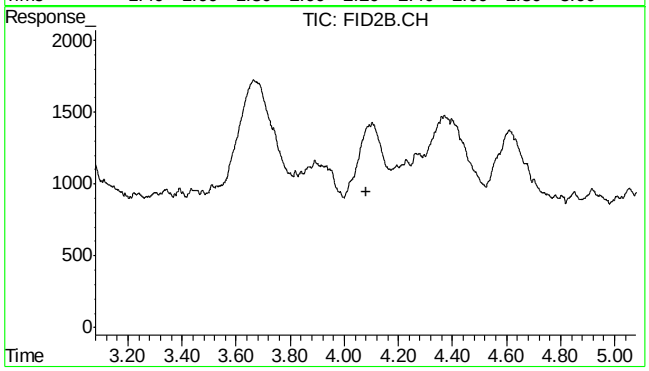
#2 1,2,4-Trichlorobenzene

R.T.: 14.336 min
Delta R.T.: 0.010 min
Response: 2946080
Conc: 94.02 % m



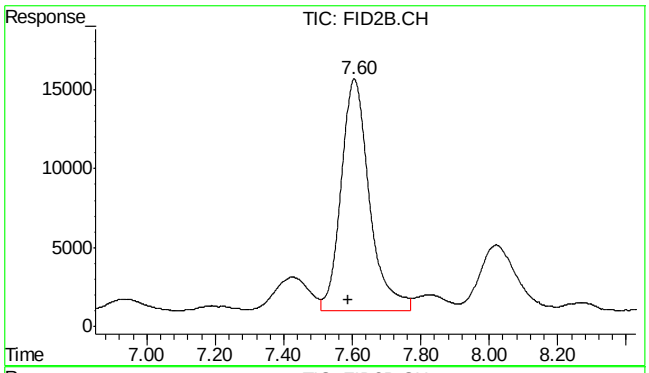
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T. : 2.212 min
Response: 0
Conc: N.D.



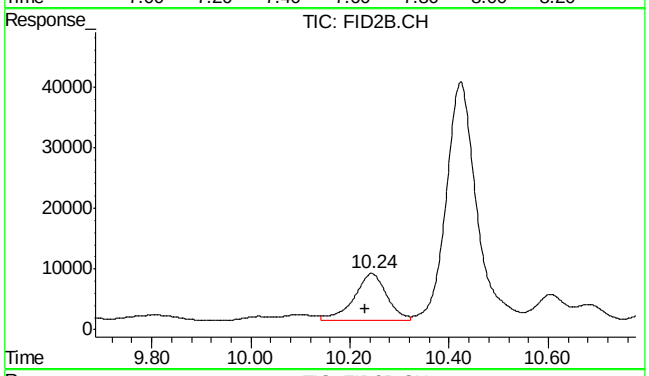
#5 Benzene

R.T.: 0.000 min
Exp R.T. : 4.079 min
Response: 0
Conc: N.D.



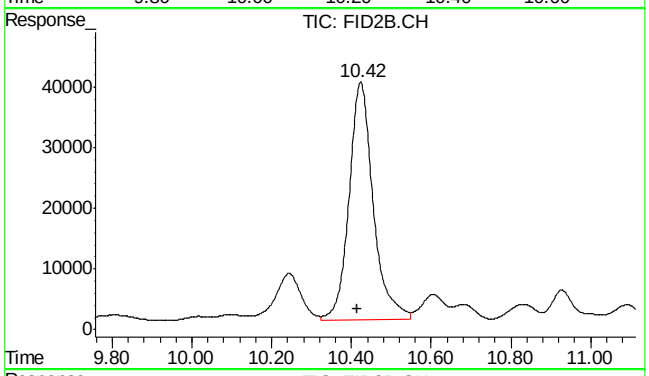
#6 Toluene

R.T.: 7.605 min
Delta R.T.: 0.018 min
Response: 846507
Conc: 2.14 ug/L



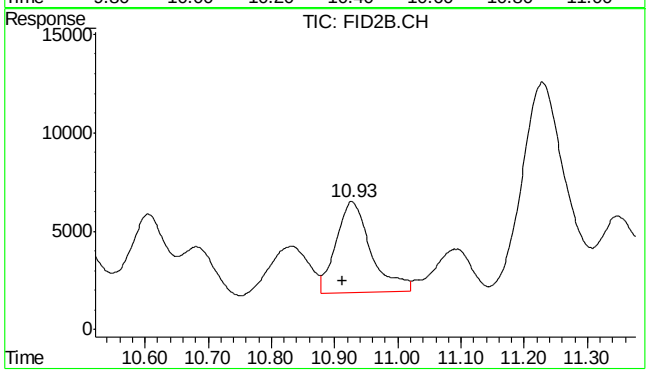
#7 Ethylbenzene

R.T.: 10.244 min
Delta R.T.: 0.014 min
Response: 353907
Conc: 1.05 ug/L



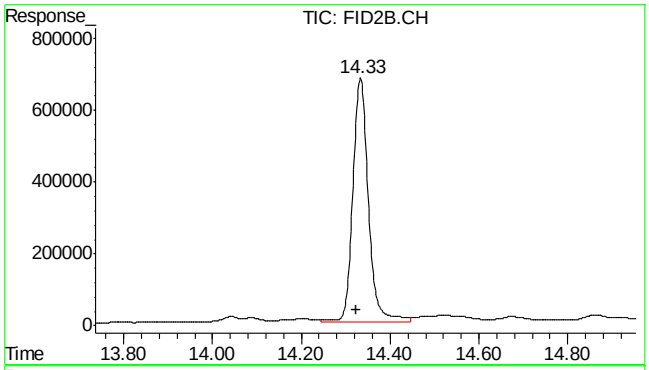
#8 m,p-Xylene

R.T.: 10.423 min
Delta R.T.: 0.010 min
Response: 1653769
Conc: 4.16 ug/L



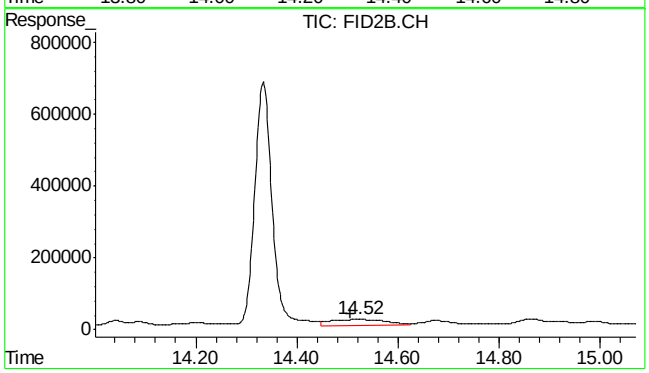
#9 o-Xylene

R.T.: 10.928 min
Delta R.T.: 0.014 min
Response: 176267
Conc: 0.54 ug/L



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

R.T.: 14.334 min
Delta R.T.: 0.010 min
Response: 16486373
Conc: 101.44 %



#11 Naphthalene

R.T.: 14.521 min
Delta R.T.: 0.016 min
Response: 1248570
Conc: 6.33 ug/L

Manual Integrations APPROVED (compounds with "m" flag)
Judy Melson 04/17/12 11:29

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\041612\GB15737.D\FID1A.CH Vial: 16
Signal #2 : Y:\1\DATA\041612\GB15737.D\FID2B.CH
Acq On : 16 Apr 2012 7:13 pm Operator: StephK
Sample : D33672-3, 50X Inst : GC/MS Ins
Misc : GC2758,GGB877,5.056,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Apr 17 08:40:18 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Apr 12 09:39:07 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	2822413	90.075	%	m
10) S	1,2,4-Trichlorobenzene (P)	14.34	16402914	100.924	%	
	Target Compounds					
1) H	TVH-Gasoline	7.23	14551294	0.198	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	2006710	5.064	ug/L	
7) T	Ethylbenzene	10.25	601815	1.779	ug/L	
8) T	m,p-Xylene	10.43	2665014	6.928	ug/L	
9) T	o-Xylene	10.94	218945	0.667	ug/L	
11) T	Naphthalene	14.48	394623	2.000	ug/L	

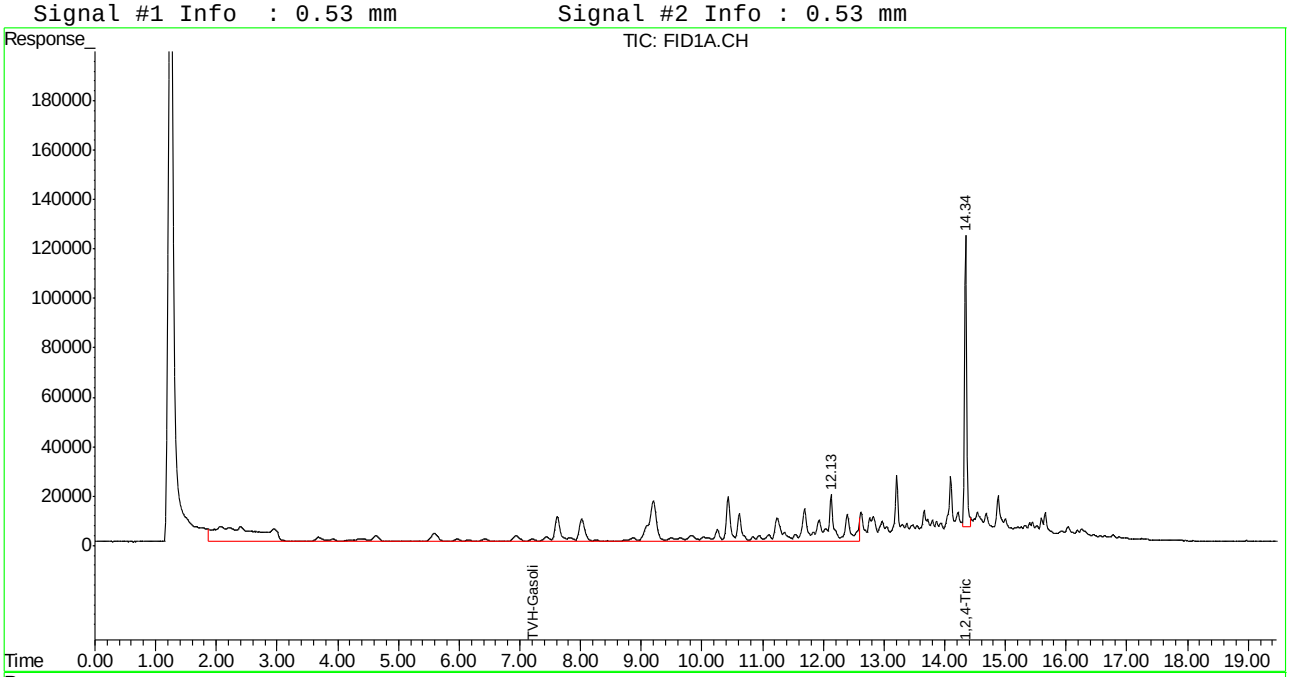
(f)=RT Delta > 1/2 Window (m)=manual int.
GB15737.D TB868GB868SOIL.M Tue Apr 17 09:10:04 2012 GC Page 1

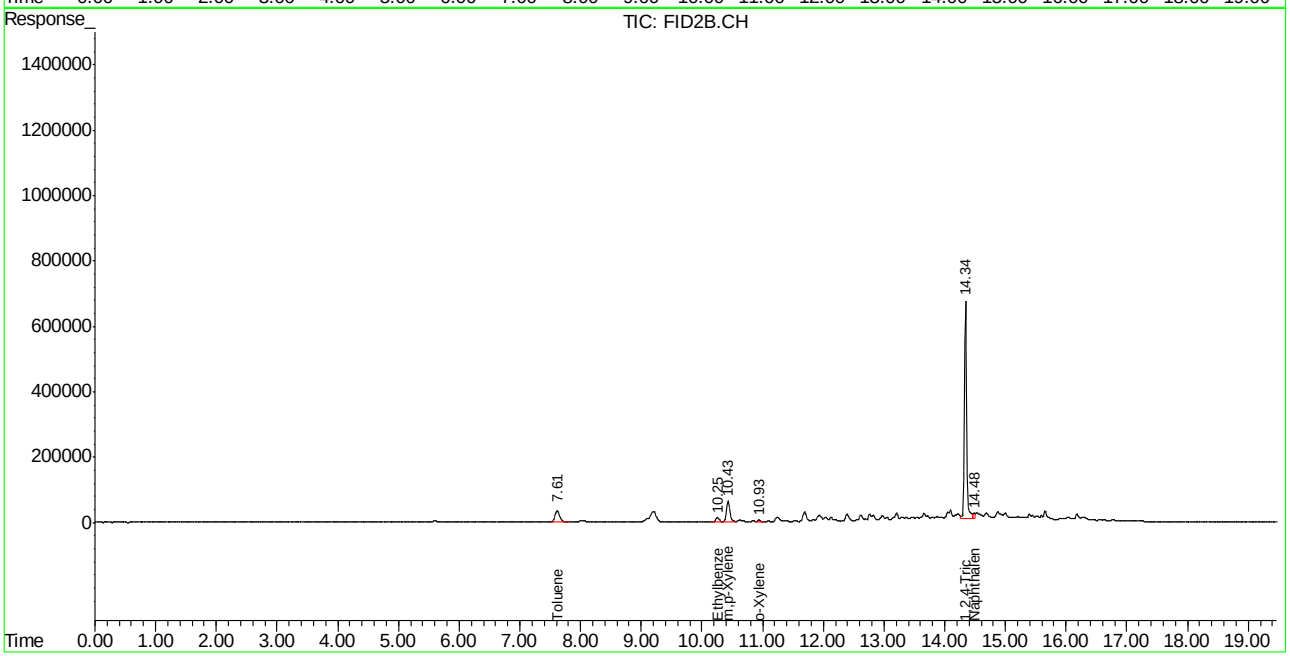
Quantitation Report (QT Reviewed)

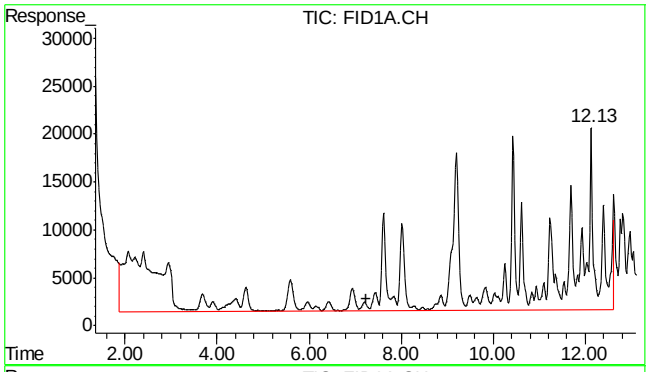
Signal #1 : Y:\1\DATA\041612\GB15737.D\FID1A.CH Vial: 16
Signal #2 : Y:\1\DATA\041612\GB15737.D\FID2B.CH
Acq On : 16 Apr 2012 7:13 pm Operator: StephK
Sample : D33672-3, 50X Inst : GC/MS Ins
Misc : GC2758,GGB877,5.056,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Apr 17 6:55 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Apr 12 09:39:07 2012
Response via : Multiple Level Calibration
DataAcq Meth : TVB4.M

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

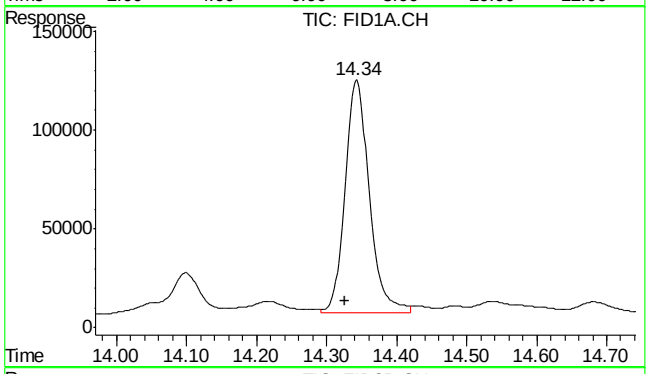






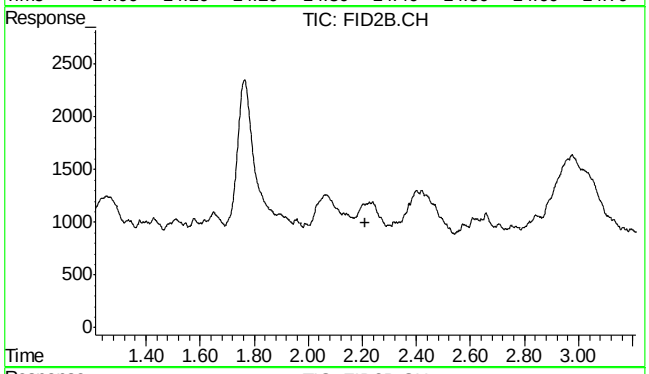
#1 TVH-Gasoline

R.T.: 7.230 min
Delta R.T.: 0.000 min
Response: 14551294
Conc: 0.20 mg/L m



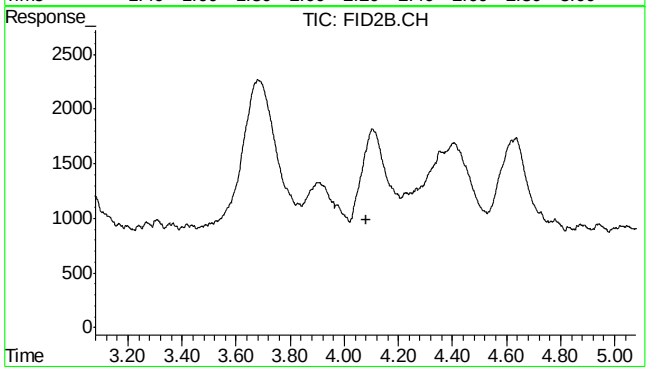
#2 1,2,4-Trichlorobenzene

R.T.: 14.343 min
Delta R.T.: 0.017 min
Response: 2822413
Conc: 90.08 % m



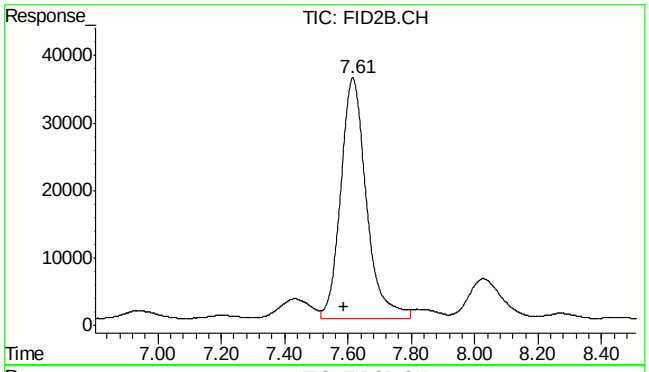
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T. : 2.212 min
Response: 0
Conc: N.D.



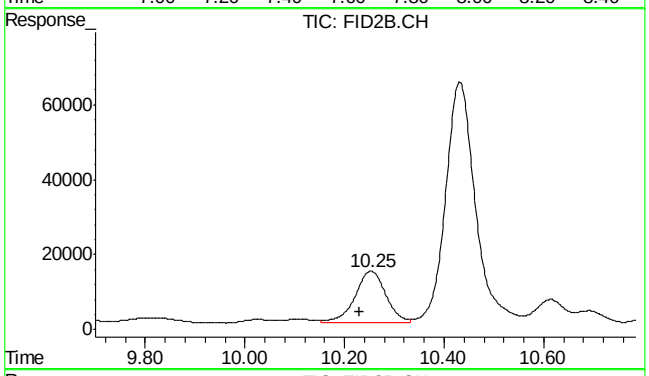
#5 Benzene

R.T.: 0.000 min
Exp R.T. : 4.079 min
Response: 0
Conc: N.D.



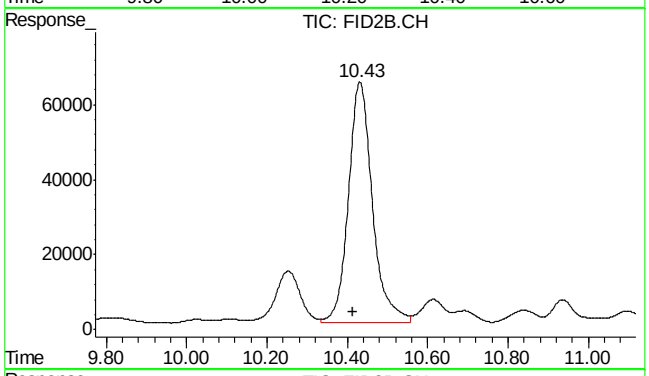
#6 Toluene

R.T.: 7.616 min
Delta R.T.: 0.028 min
Response: 2006710
Conc: 5.06 ug/L



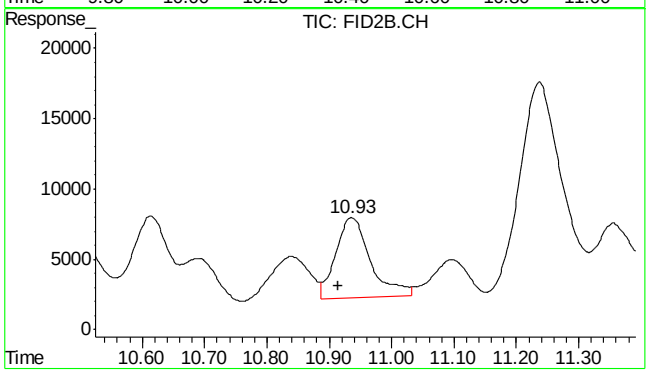
#7 Ethylbenzene

R.T.: 10.253 min
Delta R.T.: 0.023 min
Response: 601815
Conc: 1.78 ug/L



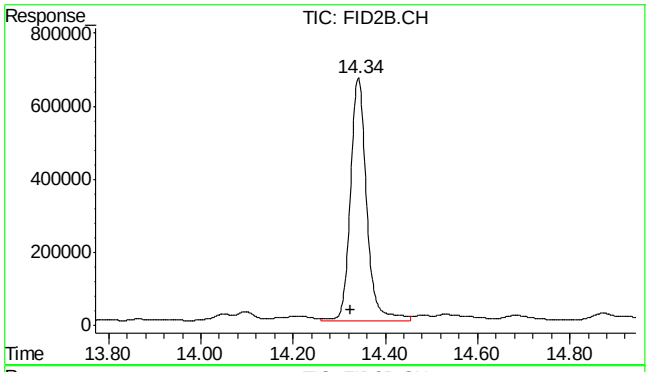
#8 m,p-Xylene

R.T.: 10.431 min
Delta R.T.: 0.018 min
Response: 2665014
Conc: 6.93 ug/L



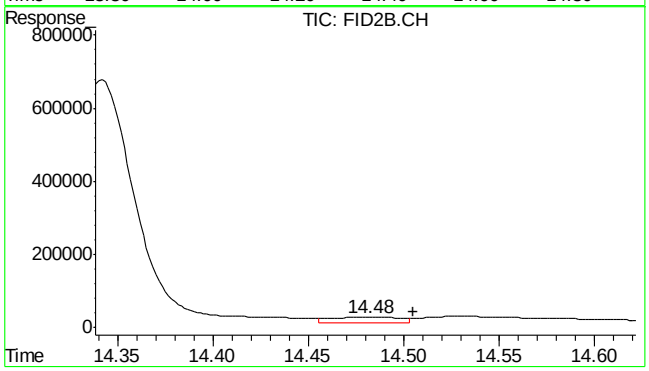
#9 o-Xylene

R.T.: 10.936 min
Delta R.T.: 0.023 min
Response: 218945
Conc: 0.67 ug/L



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

R.T.: 14.342 min
Delta R.T.: 0.018 min
Response: 16402914
Conc: 100.92 %



#11 Naphthalene

R.T.: 14.482 min
Delta R.T.: -0.024 min
Response: 394623
Conc: 2.00 ug/L

Manual Integrations APPROVED (compounds with "m" flag)
Judy Melson 04/17/12 11:29

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\041612\GB15738.D\FID1A.CH Vial: 17
Signal #2 : Y:\1\DATA\041612\GB15738.D\FID2B.CH
Acq On : 16 Apr 2012 7:48 pm Operator: StephK
Sample : D33672-4, 50X Inst : GC/MS Ins
Misc : GC2758,GGB877,5.038,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Apr 17 08:40:22 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Apr 12 09:39:07 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	2802710	89.446	%	m
10) S	1,2,4-Trichlorobenzene (P)	14.34	15811068	97.282	%	
	Target Compounds					
1) H	TVH-Gasoline	7.23	8379043	<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	7.61	567357	1.432	ug/L	
7) T	Ethylbenzene	10.25	221439	0.655	ug/L	
8) T	m,p-Xylene	10.43	999137	2.364	ug/L	
9) T	o-Xylene	10.93	123423	0.376	ug/L	
11) T	Naphthalene	14.53	764500	3.875	ug/L	

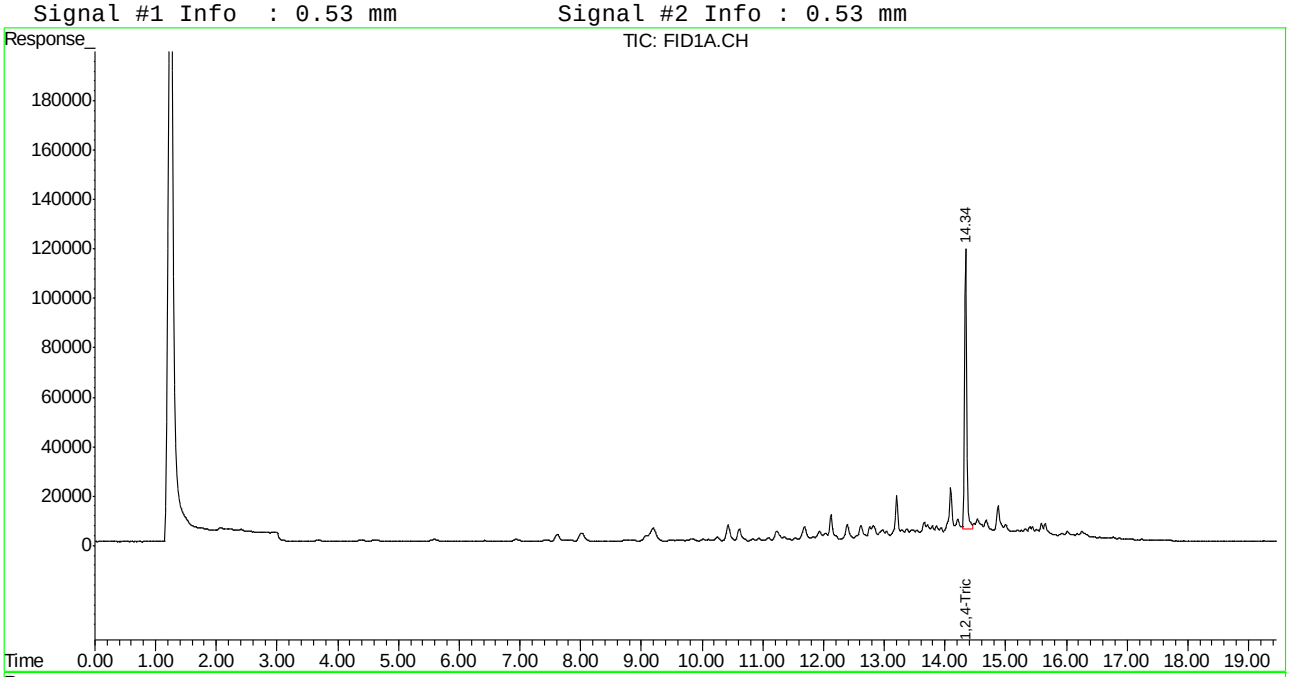
(f)=RT Delta > 1/2 Window (m)=manual int.

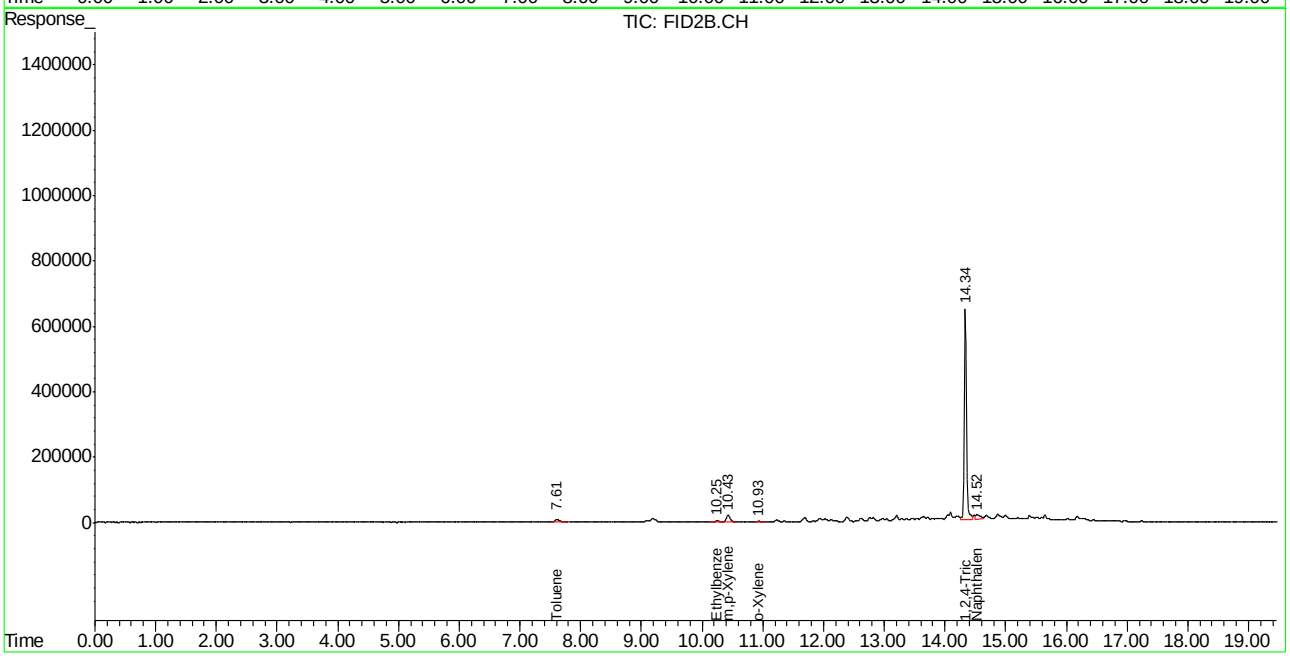
Quantitation Report (QT Reviewed)

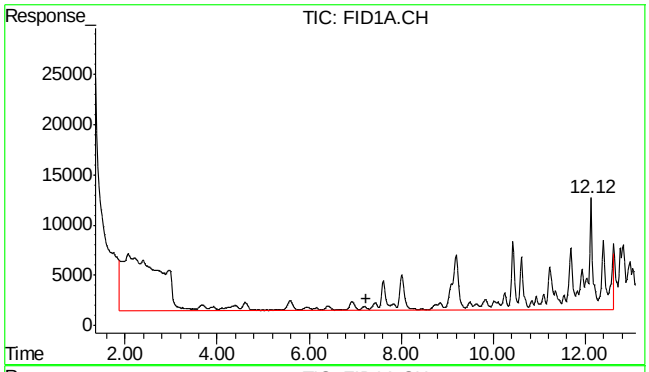
Signal #1 : Y:\1\DATA\041612\GB15738.D\FID1A.CH Vial: 17
Signal #2 : Y:\1\DATA\041612\GB15738.D\FID2B.CH
Acq On : 16 Apr 2012 7:48 pm Operator: StephK
Sample : D33672-4, 50X Inst : GC/MS Ins
Misc : GC2758,GGB877,5.038,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Apr 17 6:56 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Apr 12 09:39:07 2012
Response via : Multiple Level Calibration
DataAcq Meth : TVB4.M

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

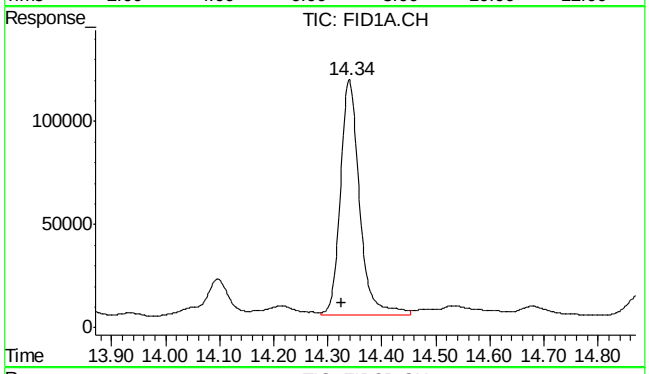






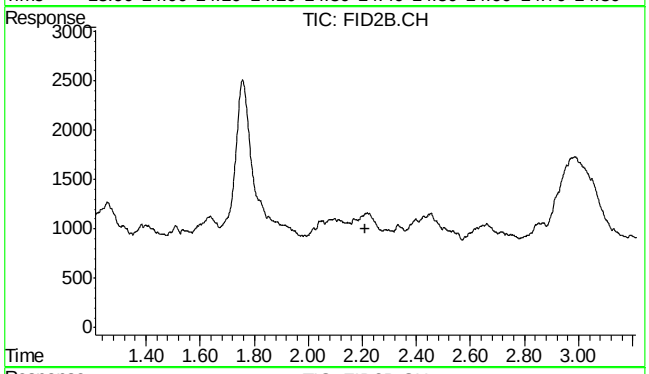
#1 TVH-Gasoline

R.T.: 7.230 min
Delta R.T.: 0.000 min
Response: 8379043
Conc: N.D.



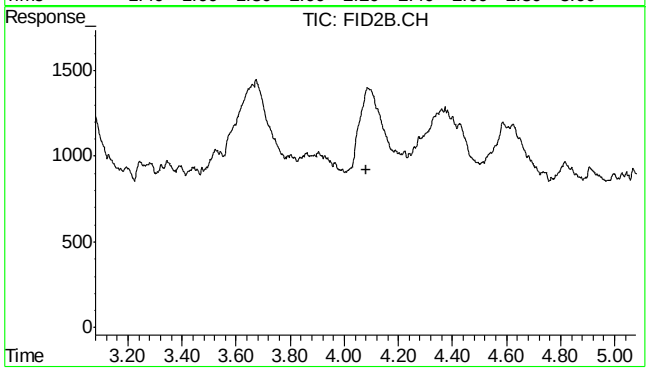
#2 1,2,4-Trichlorobenzene

R.T.: 14.339 min
Delta R.T.: 0.014 min
Response: 2802710
Conc: 89.45 % m



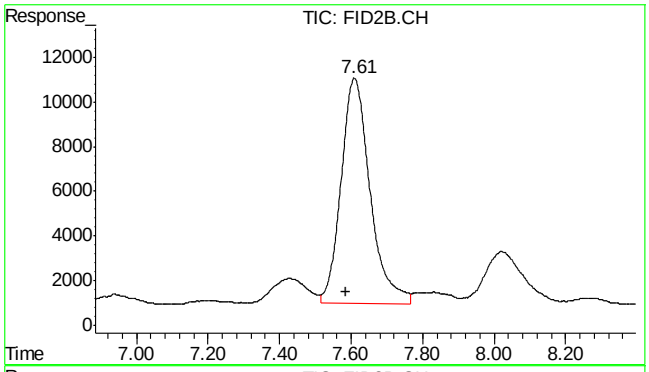
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T. : 2.212 min
Response: 0
Conc: N.D.



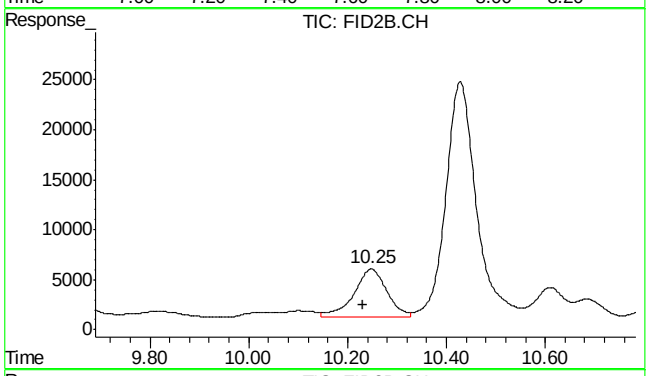
#5 Benzene

R.T.: 0.000 min
Exp R.T. : 4.079 min
Response: 0
Conc: N.D.



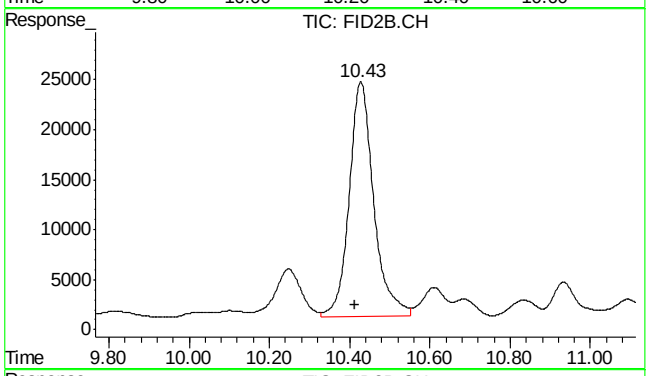
#6 Toluene

R.T.: 7.609 min
Delta R.T.: 0.021 min
Response: 567357
Conc: 1.43 ug/L



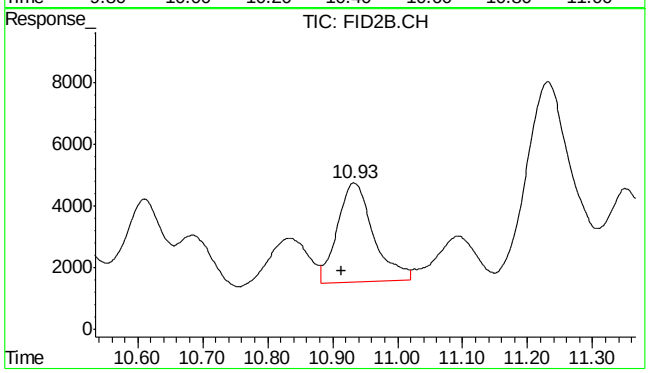
#7 Ethylbenzene

R.T.: 10.249 min
Delta R.T.: 0.019 min
Response: 221439
Conc: 0.65 ug/L



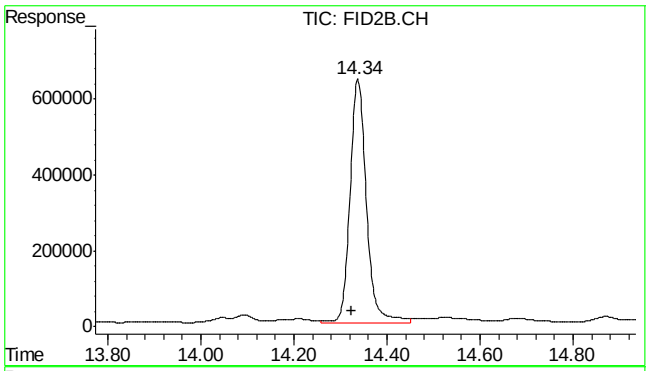
#8 m,p-Xylene

R.T.: 10.428 min
Delta R.T.: 0.015 min
Response: 999137
Conc: 2.36 ug/L



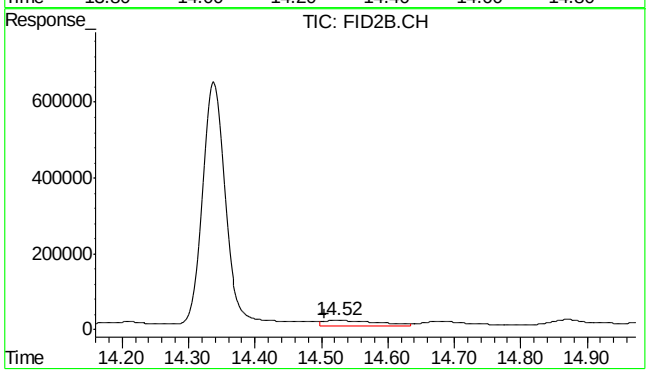
#9 o-Xylene

R.T.: 10.933 min
Delta R.T.: 0.019 min
Response: 123423
Conc: 0.38 ug/L



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

R.T.: 14.338 min
Delta R.T.: 0.014 min
Response: 15811068
Conc: 97.28 %



#11 Naphthalene

R.T.: 14.526 min
Delta R.T.: 0.020 min
Response: 764500
Conc: 3.87 ug/L

Manual Integrations APPROVED (compounds with "m" flag)
Judy Melson 04/17/12 11:29

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\041612\GB15725.D\FID1A.CH Vial: 4
Signal #2 : Y:\1\DATA\041612\GB15725.D\FID2B.CH
Acq On : 16 Apr 2012 12:07 pm Operator: StephK
Sample : MB Inst : GC/MS Ins
Misc : GC2758,GGB877,5.000,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Apr 16 13:26:01 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Apr 12 09:39:07 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	14.32	2905230	92.718	%	m
10) S	1,2,4-Trichlorobenzene (P)	14.32	15643897	96.254	%	
	Target Compounds					
1) H	TVH-Gasoline	7.23	3839622	<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	108790	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	14.50	227054	1.151	ug/L	

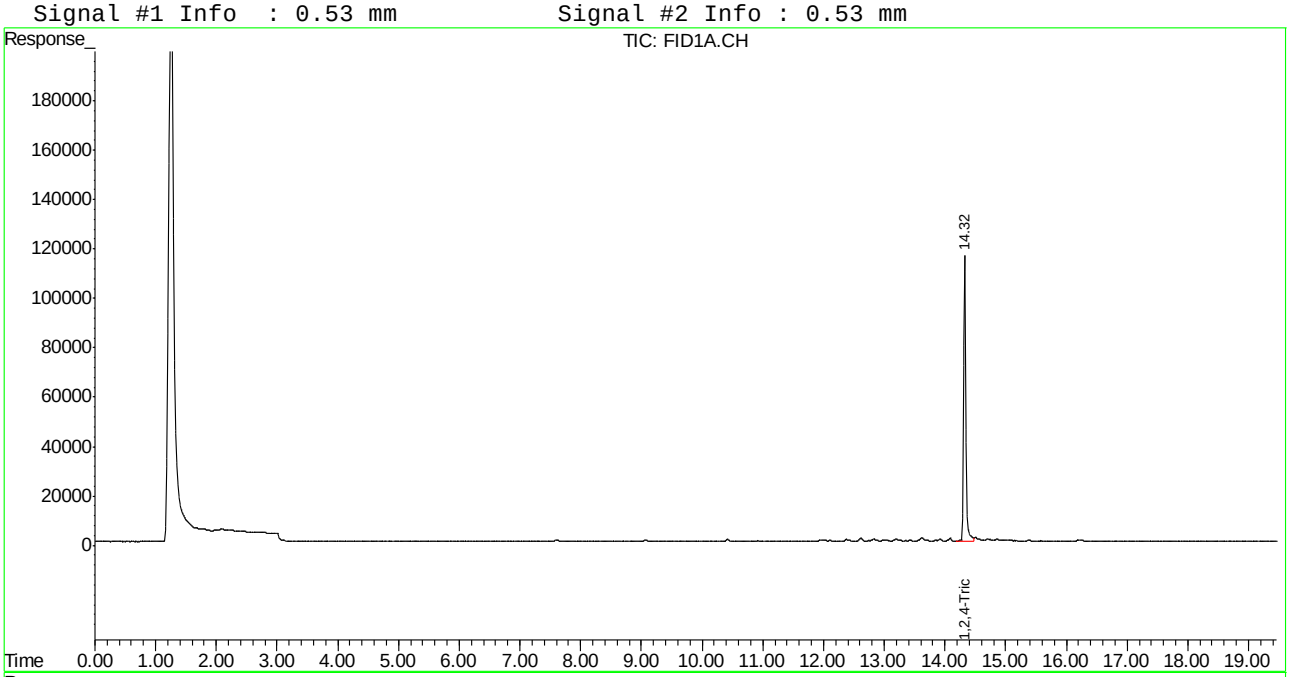
(f)=RT Delta > 1/2 Window (m)=manual int.

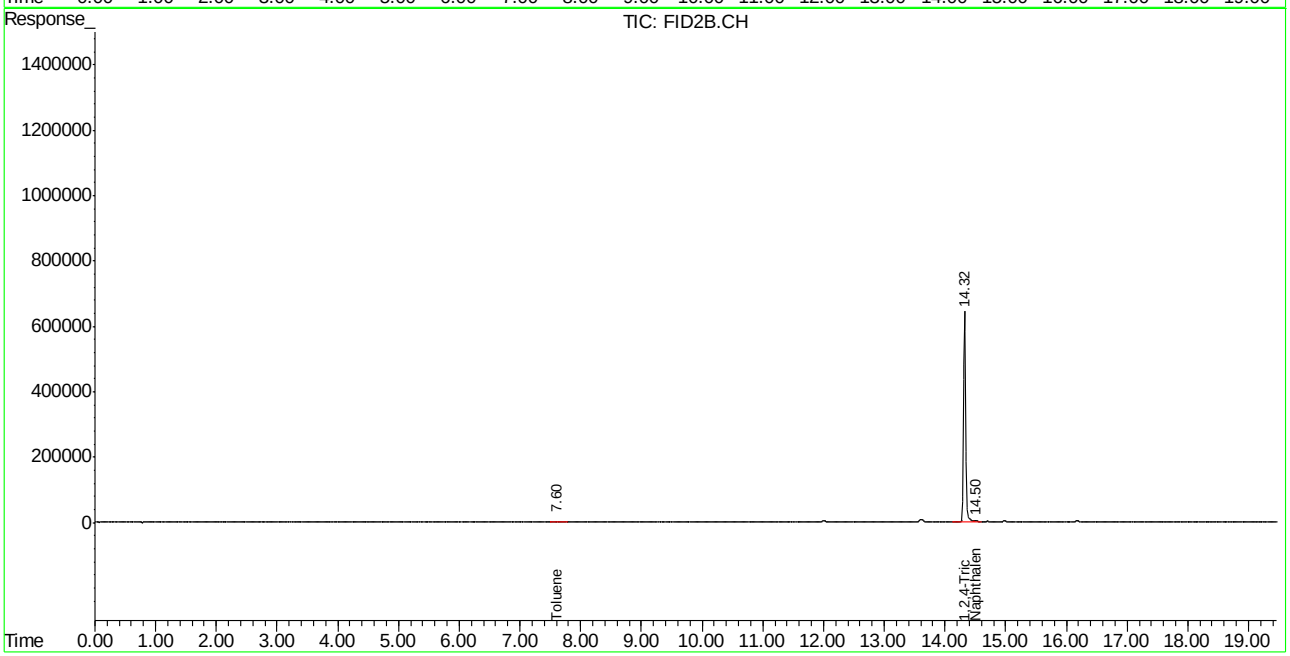
Quantitation Report (QT Reviewed)

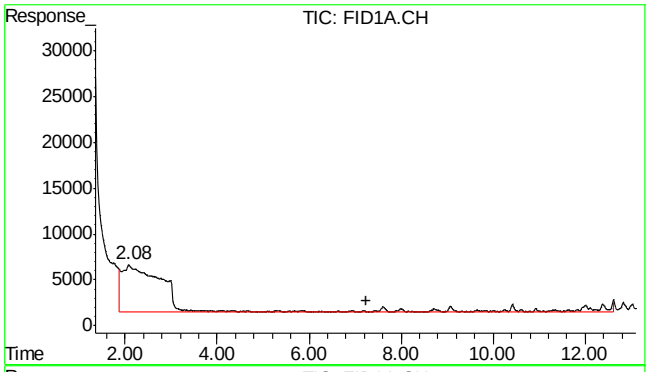
Signal #1 : Y:\1\DATA\041612\GB15725.D\FID1A.CH Vial: 4
Signal #2 : Y:\1\DATA\041612\GB15725.D\FID2B.CH
Acq On : 16 Apr 2012 12:07 pm Operator: StephK
Sample : MB Inst : GC/MS Ins
Misc : GC2758,GGB877,5.000,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Apr 16 11:34 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Thu Apr 12 09:39:07 2012
Response via : Multiple Level Calibration
DataAcq Meth : TVB4.M

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

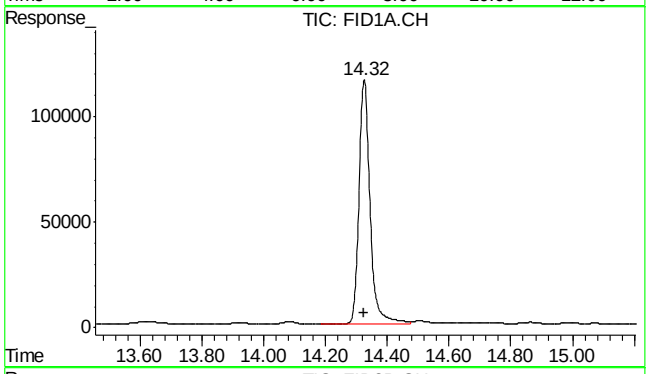






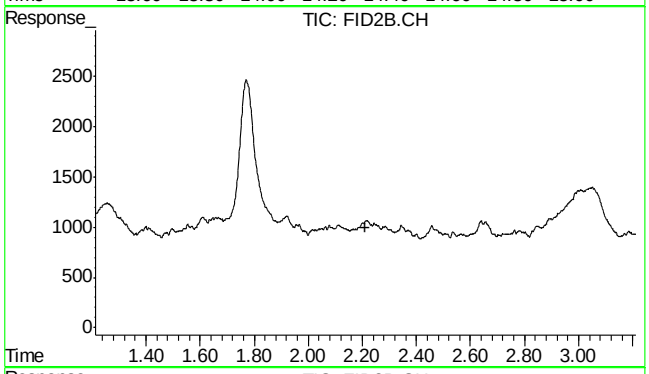
#1 TVH-Gasoline

R.T.: 7.230 min
Delta R.T.: 0.000 min
Response: 3839622
Conc: N.D.



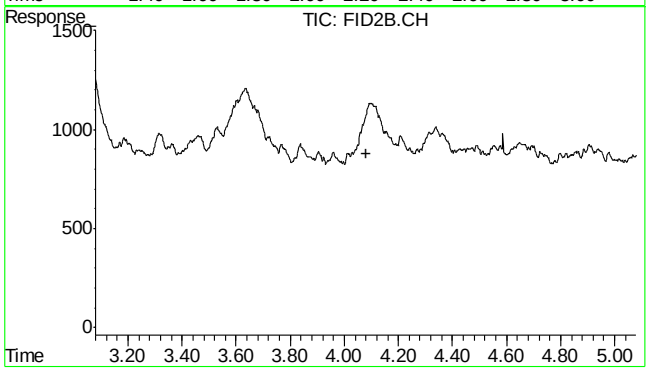
#2 1,2,4-Trichlorobenzene

R.T.: 14.325 min
Delta R.T.: 0.000 min
Response: 2905230
Conc: 92.72 % m



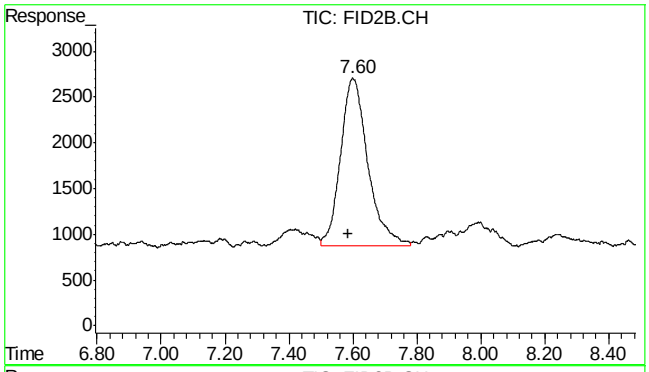
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T. : 2.212 min
Response: 0
Conc: N.D.



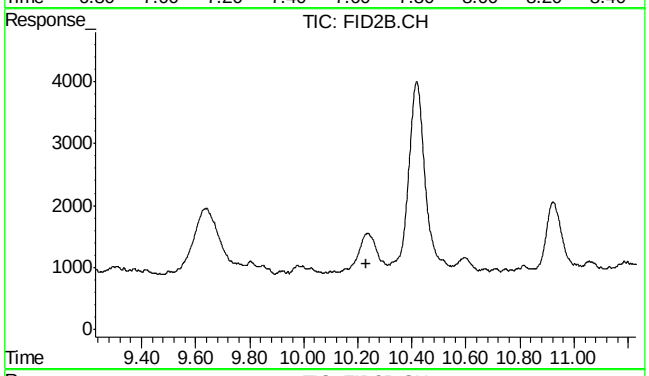
#5 Benzene

R.T.: 0.000 min
Exp R.T. : 4.079 min
Response: 0
Conc: N.D.



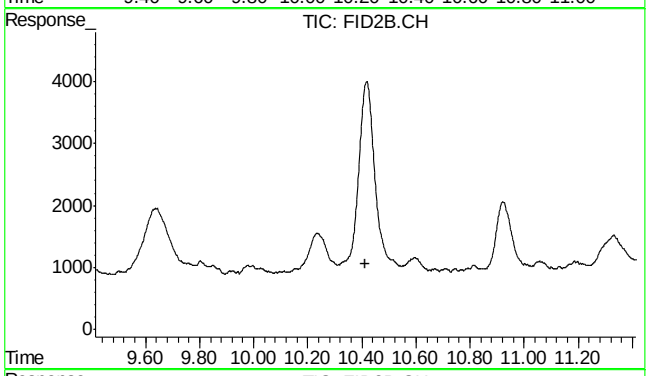
#6 Toluene

R.T.: 7.600 min
Delta R.T.: 0.012 min
Response: 108790
Conc: 0.27 ug/L



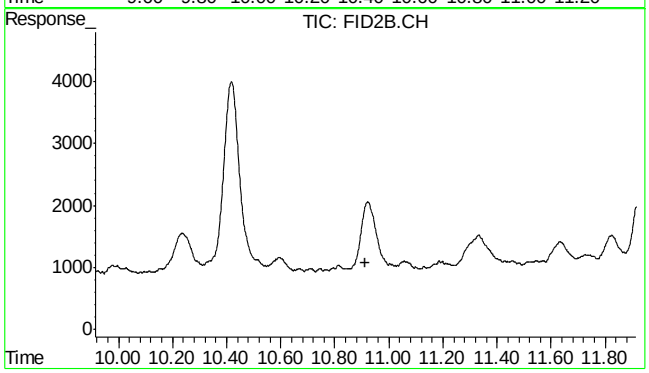
#7 Ethylbenzene

R.T.: 0.000 min
Exp R.T. : 10.230 min
Response: 0
Conc: N.D.



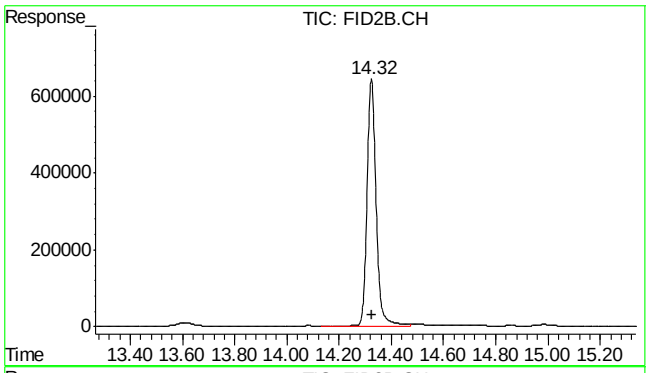
#8 m,p-Xylene

R.T.: 0.000 min
Exp R.T. : 10.414 min
Response: 0
Conc: N.D.



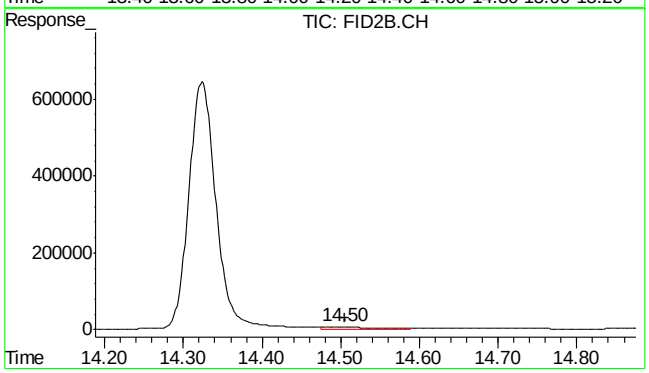
#9 o-Xylene

R.T.: 0.000 min
Exp R.T. : 10.914 min
Response: 0
Conc: N.D.



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

R.T.:	14.324 min
Delta R.T.:	0.000 min
Response:	15643897
Conc:	96.25 %



#11 Naphthalene

R.T.:	14.503 min
Delta R.T.:	-0.002 min
Response:	227054
Conc:	1.15 ug/L

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: D33672
Account: XTOKRWR XTO Energy
Project: FRU 297-8B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5724-MB	FH003447.D	1	04/19/12	AV	04/16/12	OP5724	GFH186

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

D33672-1, D33672-2, D33672-3, D33672-4

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	107%	43-136%

Blank Spike Summary

Job Number: D33672
Account: XTOKRWR XTO Energy
Project: FRU 297-8B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5724-BS	FH003451.D	1	04/19/12	AV	04/16/12	OP5724	GFH186

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

D33672-1, D33672-2, D33672-3, D33672-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	667	574	86	58-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	106%	43-136%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D33672
Account: XTOKRWR XTO Energy
Project: FRU 297-8B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5724-MS	FH003453.D	1	04/19/12	AV	04/16/12	OP5724	GFH186
OP5724-MSD	FH003455.D	1	04/19/12	AV	04/16/12	OP5724	GFH186
D33661-1	FH003469.D	1	04/19/12	AV	04/16/12	OP5724	GFH186

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

D33672-1, D33672-2, D33672-3, D33672-4

CAS No.	Compound	D33661-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	33.3		699	433	57	483	64	11	20-183/43

CAS No.	Surrogate Recoveries	MS	MSD	D33661-1	Limits
84-15-1	o-Terphenyl	66%	72%	41%* [a]	43-136%

(a) Outside control limits due to possible matrix interference. Sample being re-extracted.

Mountain States ACCUTEST LABORATORIES

GC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH041912\
Data File : FH003473.D
Signal(s) : FID1A.ch
Acq On : 19 Apr 2012 7:13 pm
Operator : ashleyv
Sample : D33672-1
Misc : OP5724,GFH186,30.05,,,2.00,1
ALS Vial : 15 Sample Multiplier: 1

Integration File: events.e
Quant Time: Apr 20 09:05:04 2012
Quant Method : C:\msdchem\1\METHODS\DRO-GFH160F.M
Quant Title : DRO-ORO FRONT
QLast Update : Mon Apr 09 09:27:25 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	12.371	759093433	820.394 ug/ml
Target Compounds				
1) H	TPH-DRO (C10-C28)	9.890	3373938284	3420.060 ug/ml

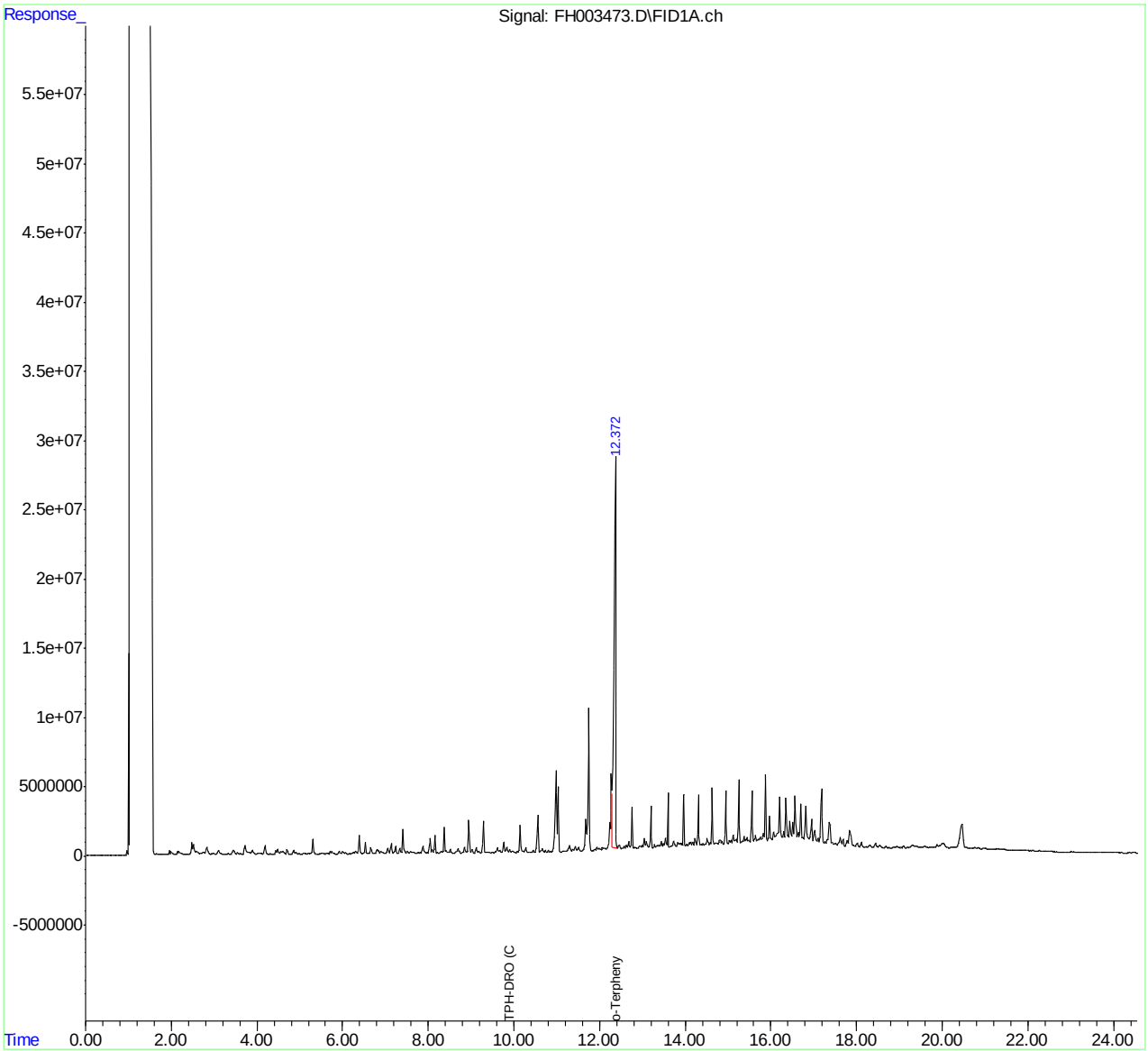
(f)=RT Delta > 1/2 Window (m)=manual int.

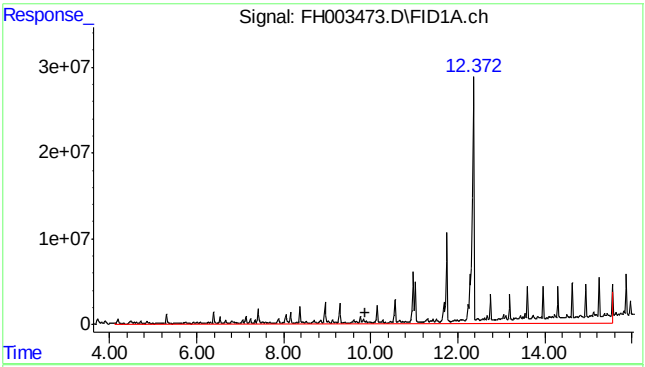
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH041912\
Data File : FH003473.D
Signal(s) : FID1A.ch
Acq On : 19 Apr 2012 7:13 pm
Operator : ashleyv
Sample : D33672-1
Misc : OP5724,GFH186,30.05,,,2.00,1
ALS Vial : 15 Sample Multiplier: 1

Integration File: events.e
Quant Time: Apr 20 09:05:04 2012
Quant Method : C:\msdchem\1\METHODS\DRO-GFH160F.M
Quant Title : DRO-ORO FRONT
QLast Update : Mon Apr 09 09:27:25 2012
Response via : Initial Calibration
Integrator: ChemStation

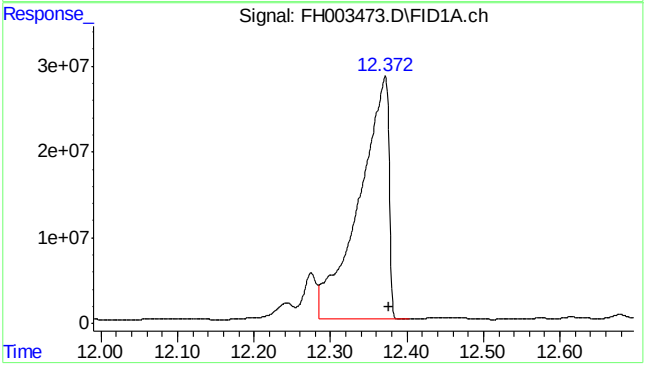
Volume Inj. :
Signal Phase :
Signal Info :





#1 TPH-DRO (C10-C28)

R.T.: 9.890 min
Delta R.T.: 0.000 min
Response: 3373938284
Conc: 3420.06 ug/ml m



#2 o-Terphenyl

R.T.: 12.371 min
Delta R.T.: -0.006 min
Response: 759093433
Conc: 820.39 ug/ml

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH041912\
Data File : FH003475.D
Signal(s) : FID1A.ch
Acq On : 19 Apr 2012 7:48 pm
Operator : ashleyv
Sample : D33672-2
Misc : OP5724,GFH186,30.00,,,2.00,1
ALS Vial : 16 Sample Multiplier: 1

Integration File: events.e
Quant Time: Apr 20 09:05:51 2012
Quant Method : C:\msdchem\1\METHODS\DRO-GFH160F.M
Quant Title : DRO-ORO FRONT
QLast Update : Mon Apr 09 09:27:25 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	12.379	827080349	893.871 ug/ml
Target Compounds				
1) H	TPH-DRO (C10-C28)	9.890	5998824016	6080.827 ug/ml

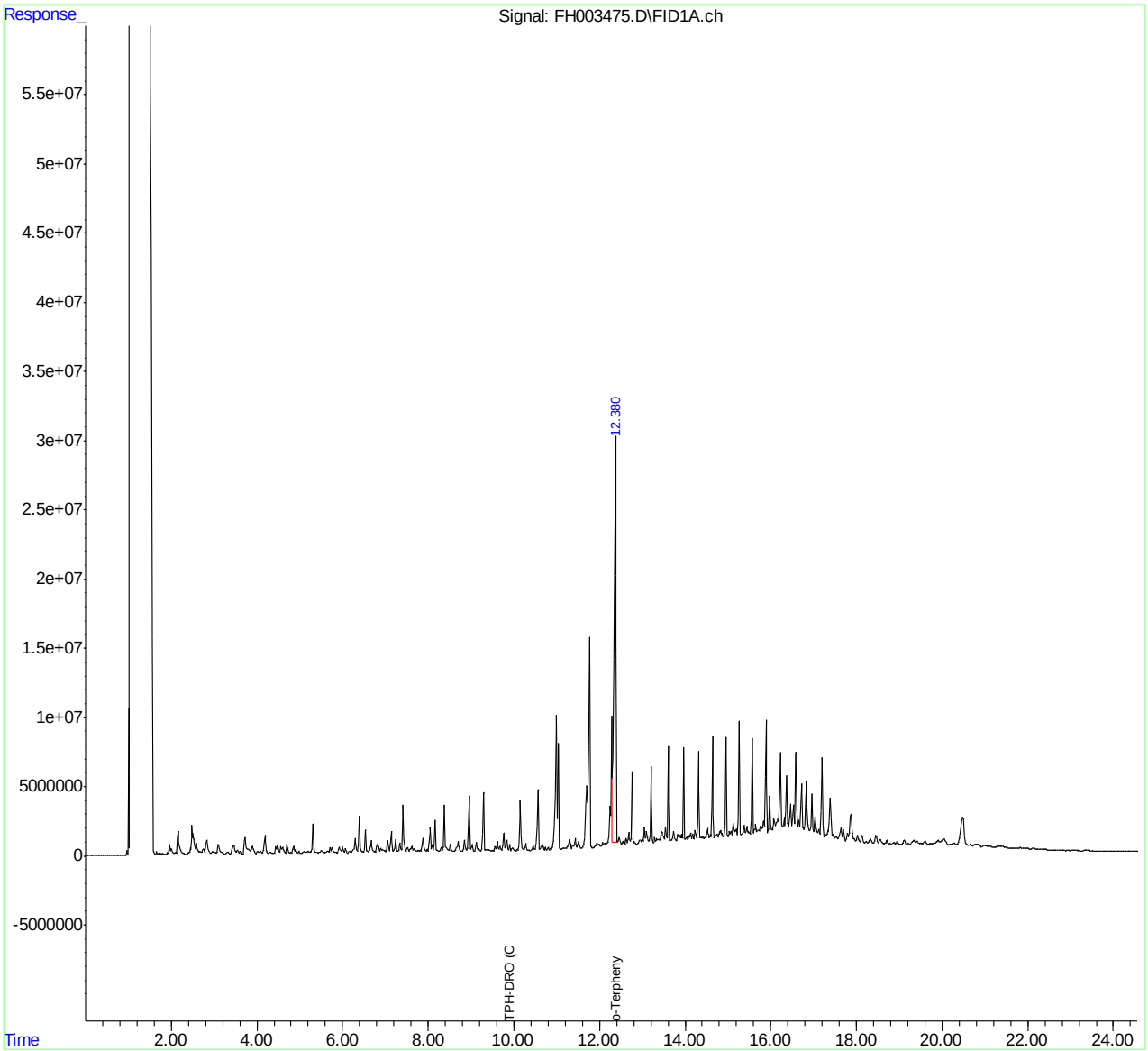
(f)=RT Delta > 1/2 Window (m)=manual int.

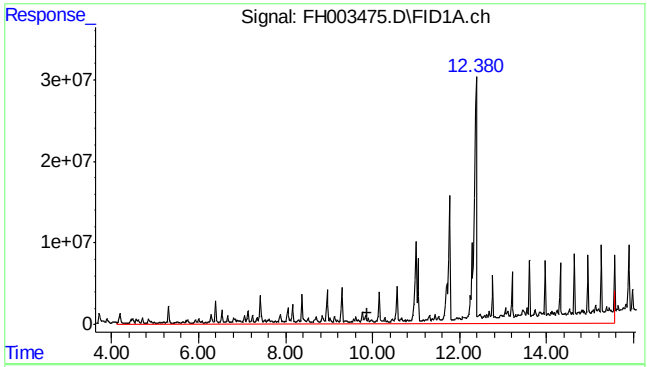
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH041912\
Data File : FH003475.D
Signal(s) : FID1A.ch
Acq On : 19 Apr 2012 7:48 pm
Operator : ashleyv
Sample : D33672-2
Misc : OP5724,GFH186,30.00,,,2.00,1
ALS Vial : 16 Sample Multiplier: 1

Integration File: events.e
Quant Time: Apr 20 09:05:51 2012
Quant Method : C:\msdchem\1\METHODS\DRO-GFH160F.M
Quant Title : DRO-ORO FRONT
QLast Update : Mon Apr 09 09:27:25 2012
Response via : Initial Calibration
Integrator: ChemStation

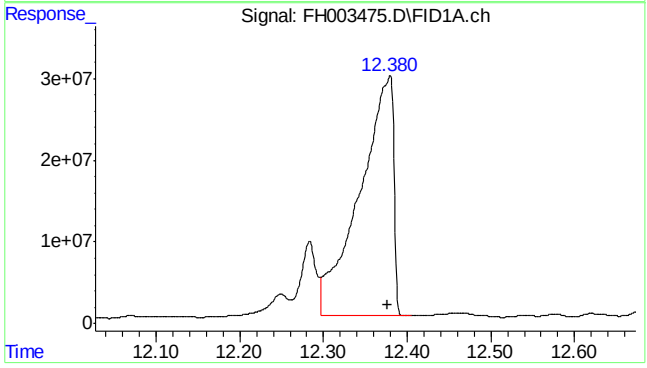
Volume Inj. :
Signal Phase :
Signal Info :





#1 TPH-DRO (C10-C28)

R.T.: 9.890 min
Delta R.T.: 0.000 min
Response: 5998824016
Conc: 6080.83 ug/ml m



#2 o-Terphenyl

R.T.: 12.379 min
Delta R.T.: 0.002 min
Response: 827080349
Conc: 893.87 ug/ml

Manual Integrations APPROVED (compounds with "m" flag)
Judy Melson 04/20/12 10:42

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH041912\
Data File : FH003479.D
Signal(s) : FID1A.ch
Acq On : 19 Apr 2012 8:59 pm
Operator : ashleyv
Sample : D33672-3
Misc : OP5724,GFH186,30.05,,,2.00,1
ALS Vial : 18 Sample Multiplier: 1

Integration File: events.e
Quant Time: Apr 20 09:08:51 2012
Quant Method : C:\msdchem\1\METHODS\DRO-GFH160F.M
Quant Title : DRO-ORO FRONT
QLast Update : Mon Apr 09 09:27:25 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	12.370	798376999	862.850	ug/mlm
Target Compounds					
1) H	TPH-DRO (C10-C28)	9.890	2717178694	2754.322	ug/ml

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

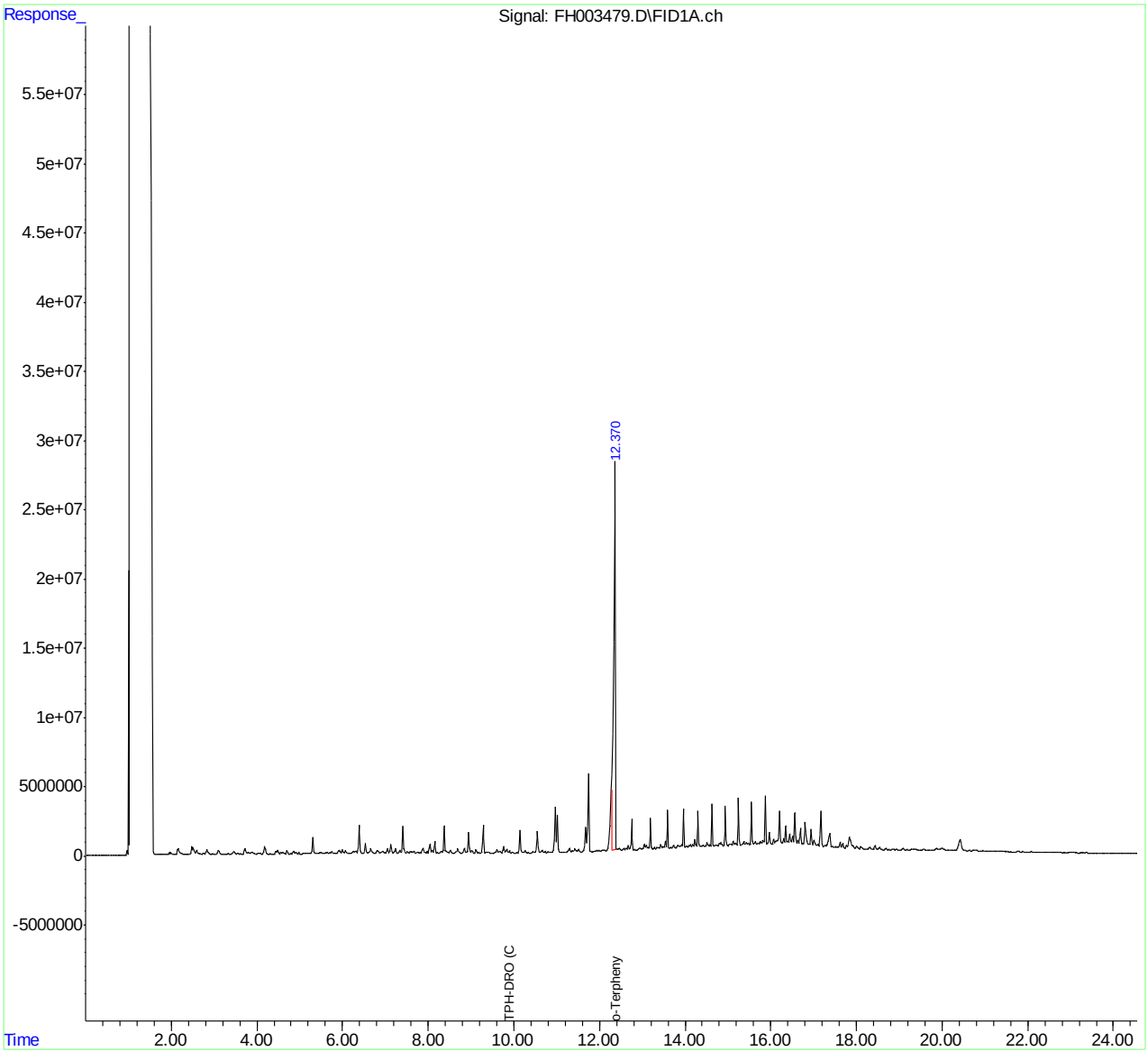
10.1.3 10

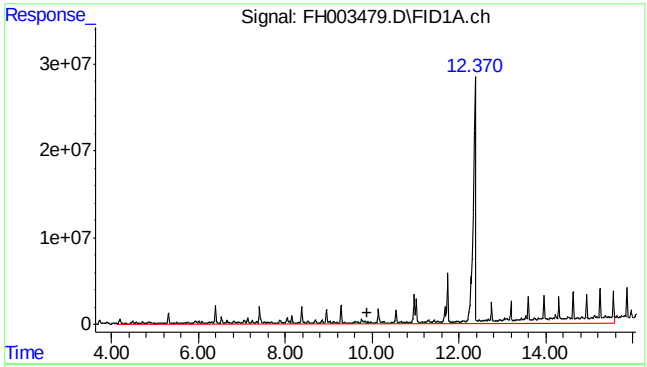
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH041912\
Data File : FH003479.D
Signal(s) : FID1A.ch
Acq On : 19 Apr 2012 8:59 pm
Operator : ashleyv
Sample : D33672-3
Misc : OP5724,GFH186,30.05,,,2.00,1
ALS Vial : 18 Sample Multiplier: 1

Integration File: events.e
Quant Time: Apr 20 09:08:51 2012
Quant Method : C:\msdchem\1\METHODS\DRO-GFH160F.M
Quant Title : DRO-ORO FRONT
QLast Update : Mon Apr 09 09:27:25 2012
Response via : Initial Calibration
Integrator: ChemStation

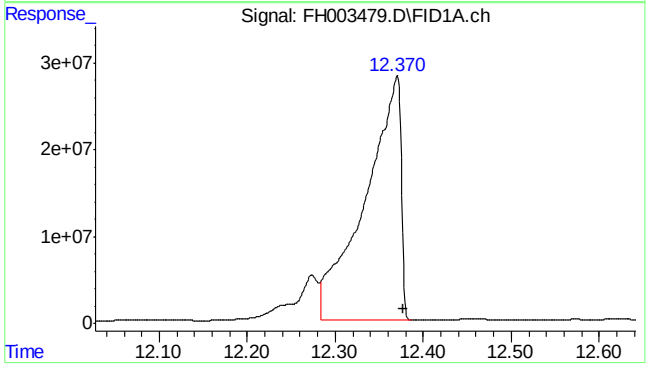
Volume Inj. :
Signal Phase :
Signal Info :





#1 TPH-DRO (C10-C28)

R.T.: 9.890 min
Delta R.T.: 0.000 min
Response: 2717178694
Conc: 2754.32 ug/ml m



#2 o-Terphenyl

R.T.: 12.370 min
Delta R.T.: -0.007 min
Response: 798376999
Conc: 862.85 ug/ml m

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH041912\
Data File : FH003481.D
Signal(s) : FID1A.ch
Acq On : 19 Apr 2012 9:34 pm
Operator : ashleyv
Sample : D33672-4
Misc : OP5724,GFH186,30.07,,,2.00,1
ALS Vial : 19 Sample Multiplier: 1

Integration File: events.e
Quant Time: Apr 20 09:10:25 2012
Quant Method : C:\msdchem\1\METHODS\DRO-GFH160F.M
Quant Title : DRO-ORO FRONT
QLast Update : Mon Apr 09 09:27:25 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	12.365	702631610	759.373 ug/ml
Target Compounds				
1) H	TPH-DRO (C10-C28)	9.890	5038161703	5107.033 ug/ml

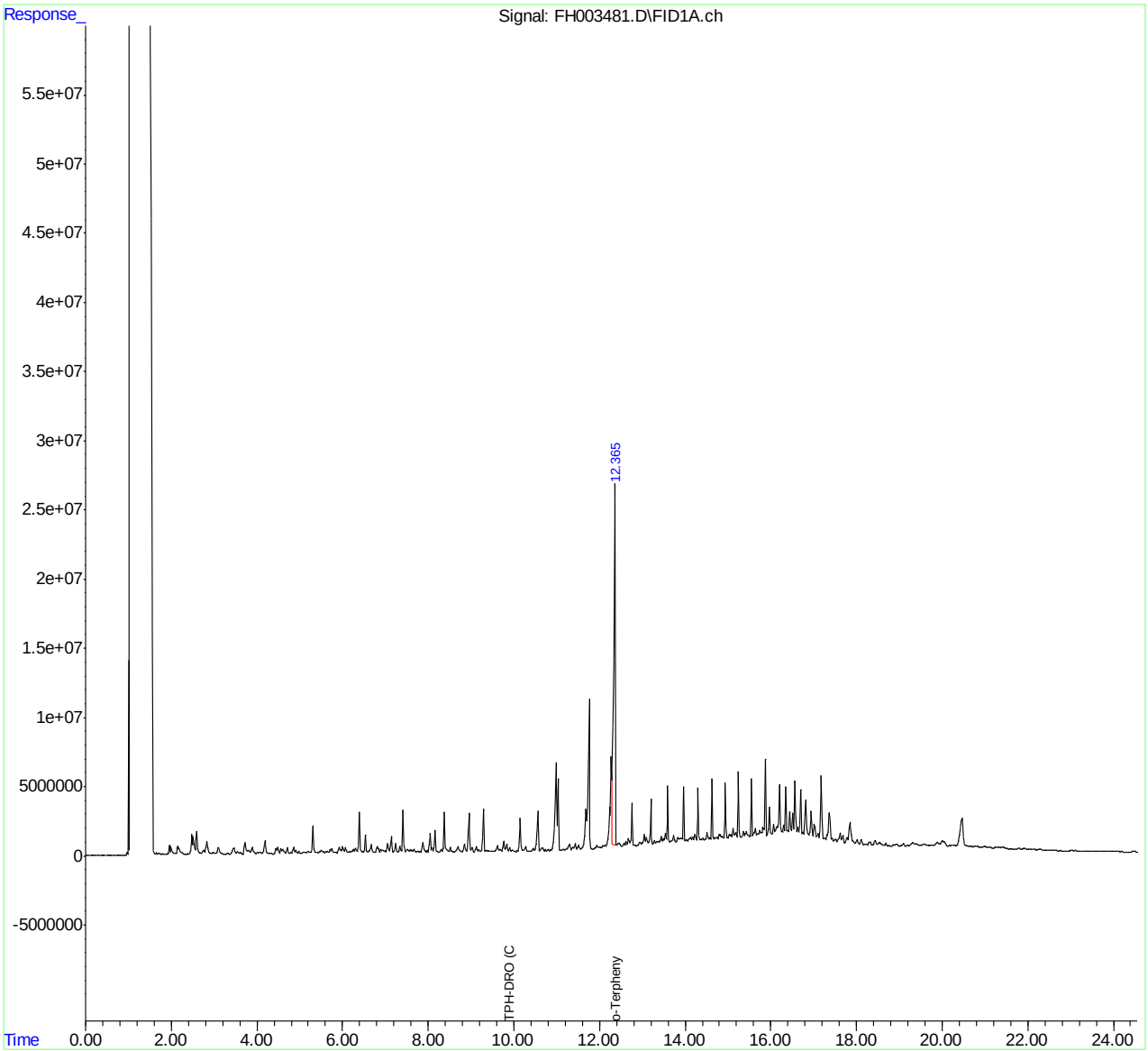
(f)=RT Delta > 1/2 Window (m)=manual int.

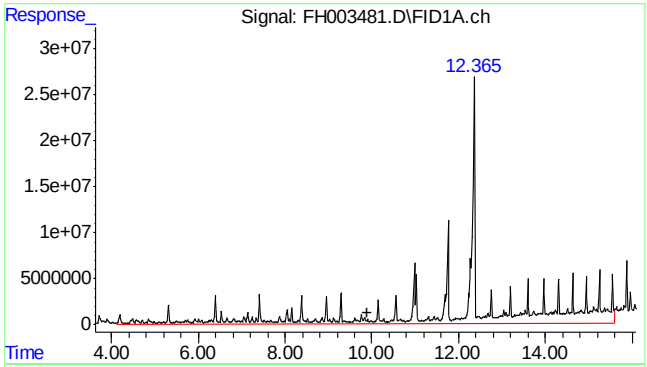
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH041912\
Data File : FH003481.D
Signal(s) : FID1A.ch
Acq On : 19 Apr 2012 9:34 pm
Operator : ashleyv
Sample : D33672-4
Misc : OP5724,GFH186,30.07,,,2.00,1
ALS Vial : 19 Sample Multiplier: 1

Integration File: events.e
Quant Time: Apr 20 09:10:25 2012
Quant Method : C:\msdchem\1\METHODS\DRO-GFH160F.M
Quant Title : DRO-ORO FRONT
QLast Update : Mon Apr 09 09:27:25 2012
Response via : Initial Calibration
Integrator: ChemStation

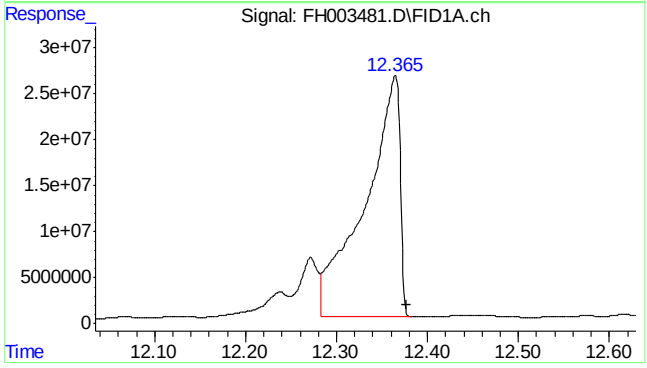
Volume Inj. :
Signal Phase :
Signal Info :





#1 TPH-DRO (C10-C28)

R.T.: 9.890 min
Delta R.T.: 0.000 min
Response: 5038161703
Conc: 5107.03 ug/ml m



#2 o-Terphenyl

R.T.: 12.365 min
Delta R.T.: -0.012 min
Response: 702631610
Conc: 759.37 ug/ml

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH041912\
Data File : FH003447.D
Signal(s) : FID1A.ch
Acq On : 19 Apr 2012 11:51 am
Operator : ashleyv
Sample : OP5724-MB
Misc : OP5724,GFH186,30.00,,,2.00,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: events.e
Quant Time: Apr 20 08:25:37 2012
Quant Method : C:\msdchem\1\METHODS\DRO-GFH160F.M
Quant Title : DRO-ORO FRONT
QLast Update : Mon Apr 09 09:27:25 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	12.383	985860041	1065.473	ug/ml
Target Compounds					
1) H	TPH-DRO (C10-C28)	9.890	25006040	25.348	ug/ml

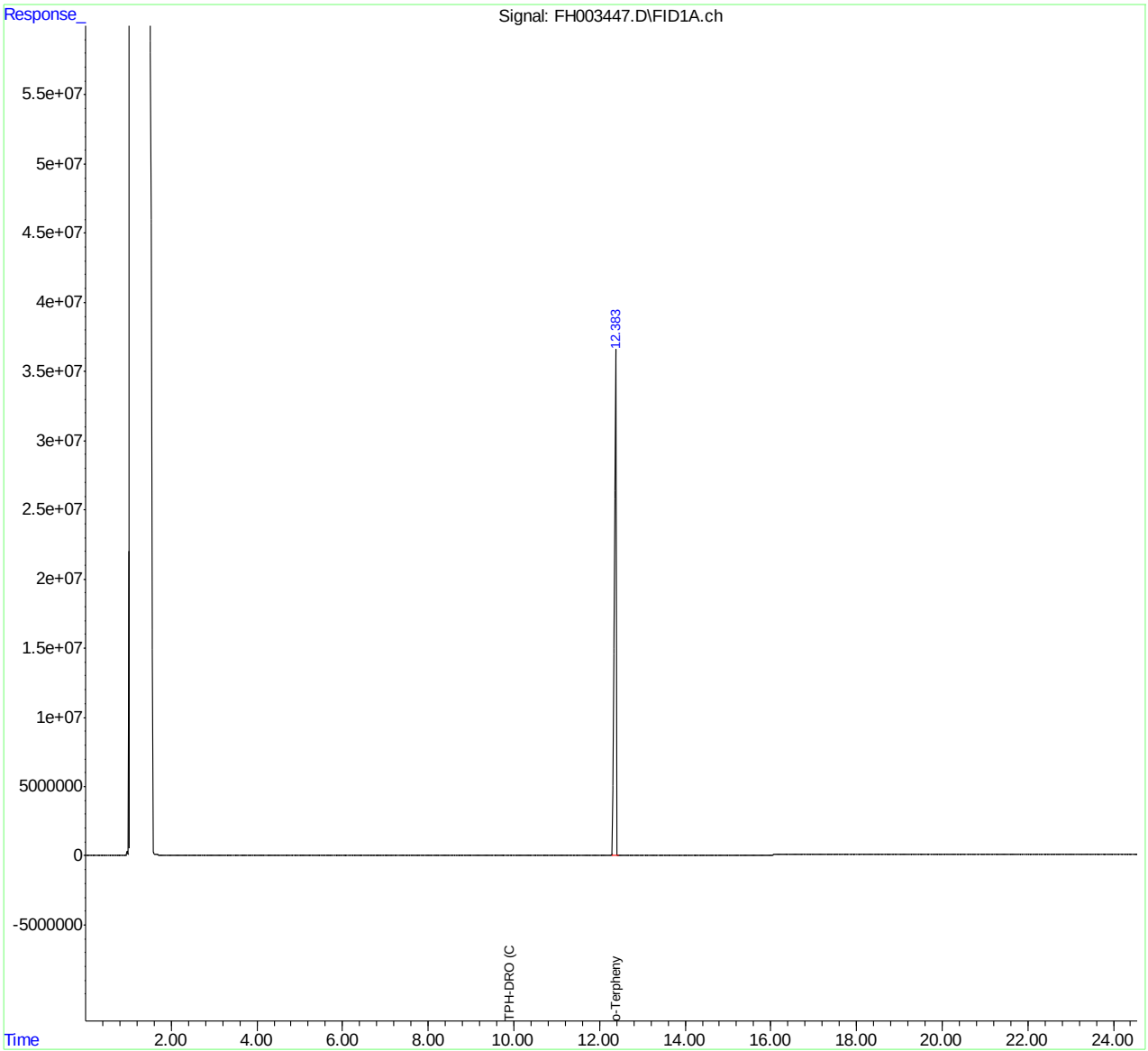
(f)=RT Delta > 1/2 Window (m)=manual int.

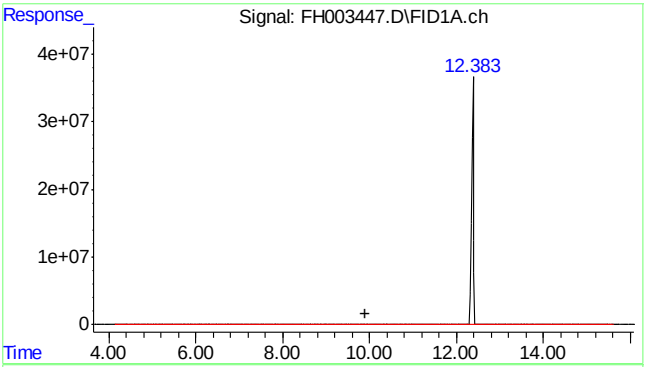
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\FH041912\
Data File : FH003447.D
Signal(s) : FID1A.ch
Acq On : 19 Apr 2012 11:51 am
Operator : ashleyv
Sample : OP5724-MB
Misc : OP5724,GFH186,30.00,,,2.00,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: events.e
Quant Time: Apr 20 08:25:37 2012
Quant Method : C:\msdchem\1\METHODS\DRO-GFH160F.M
Quant Title : DRO-ORO FRONT
QLast Update : Mon Apr 09 09:27:25 2012
Response via : Initial Calibration
Integrator: ChemStation

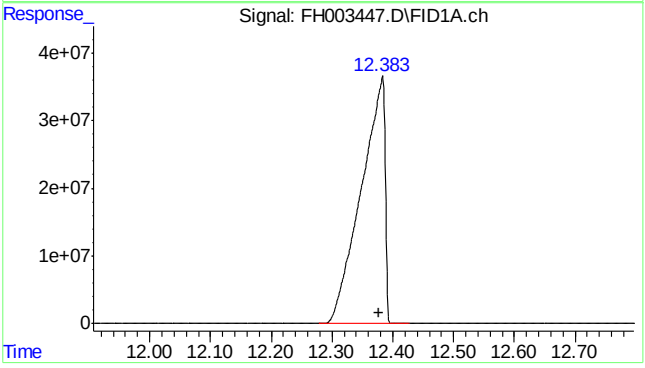
Volume Inj. :
Signal Phase :
Signal Info :





#1 TPH-DRO (C10-C28)

R.T.: 9.890 min
Delta R.T.: 0.000 min
Response: 25006040
Conc: 25.35 ug/ml m



#2 o-Terphenyl

R.T.: 12.383 min
Delta R.T.: 0.006 min
Response: 985860041
Conc: 1065.47 ug/ml