



11/17/11

## Technical Report for

**KRW Consulting, Inc.**

**XOM FRU 197-33A**

**1103-03A**

**Accutest Job Number: D29455**

**Sampling Date: 11/14/11**

### Report to:

**KRW Consulting, Inc.**  
**8000 West 14th Avenue Suite 200**  
**Lakewood, CO 80214**  
**cburger@krwconsulting.com; gknell@krwconsulting.com;**  
**dknudson@krwconsulting.com; jhess@krwconsulting.com;**  
**ATTN: Dwayne Knudson**

**Total number of pages in report: 57**



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: 303-425-6021**

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

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.  
Test results relate only to samples analyzed.

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Sample Summary

KRW Consulting, Inc.

Job No: D29455

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

Sample Number	Collected		Matrix Code Type	Client Sample ID
	Date	Time By	Received	
D29455-1	11/14/11	11:30 CB	11/15/11 SO	FRESH WATER SUBLINER

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

## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** KRW Consulting, Inc.

**Job No** D29455

**Site:** XOM FRU 197-33A

**Report Dat** 11/17/2011 5:19:11 PM

On 11/15/2011, 1 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 1 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D29455 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

### Volatiles by GCMS By Method SW846 8260B

<b>Matrix</b> SO	<b>Batch ID:</b> V3V843
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D29424-4MS, D29424-4MSD were used as the QC samples indicated.

### Volatiles by GC By Method SW846 8015B

<b>Matrix</b> SO	<b>Batch ID:</b> GGB792
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

### Extractables by GC By Method SW846-8015B

<b>Matrix</b> SO	<b>Batch ID:</b> OP4862
------------------	-------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D29455-1MS, D29455-1MSD were used as the QC samples indicated.

### Wet Chemistry By Method SM19 2540B M

<b>Matrix</b> SO	<b>Batch ID:</b> GN12524
------------------	--------------------------

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

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

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

## Sample Results

## Report of Analysis

Accutest Laboratories

## Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b>	FRESH WATER SUBLINER	<b>Date Sampled:</b>	11/14/11
<b>Lab Sample ID:</b>	D29455-1	<b>Date Received:</b>	11/15/11
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	88.3
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	XOM FRU 197-33A		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V14616.D	1	11/15/11	DC	n/a	n/a	V3V843
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.02 g	5.0 ml	100 ul
Run #2			

## Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	63	28	ug/kg	
108-88-3	Toluene	ND	130	63	ug/kg	
100-41-4	Ethylbenzene	43.0	130	31	ug/kg	J
1330-20-7	Xylene (total)	973	250	130	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	107%		61-130%
460-00-4	4-Bromofluorobenzene	124%		53-131%
17060-07-0	1,2-Dichloroethane-D4	106%		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

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## Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b>	FRESH WATER SUBLINER	<b>Date Sampled:</b>	11/14/11
<b>Lab Sample ID:</b>	D29455-1	<b>Date Received:</b>	11/15/11
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	88.3
<b>Method:</b>	SW846 8015B		
<b>Project:</b>	XOM FRU 197-33A		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB13947.D	1	11/17/11	SK	n/a	n/a	GGB792
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)	51.8	13	6.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	109%		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

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## Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b>	FRESH WATER SUBLINER	<b>Date Sampled:</b>	11/14/11
<b>Lab Sample ID:</b>	D29455-1	<b>Date Received:</b>	11/15/11
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	88.3
<b>Method:</b>	SW846-8015B SW846 3546		
<b>Project:</b>	XOM FRU 197-33A		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FI04509.D	1	11/16/11	CS	11/16/11	OP4862	GFI331
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)	2710	15	9.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	100%		61-142%		

ND = Not detected      MDL - Method Detection Limit  
RL = Reporting Limit  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound



## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody

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

[illegible]

## D29455: Chain of Custody

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## Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D29455

Client: KRW CONSULTING INC.

Immediate Client Services Action Required: No

Date / Time Received: 11/15/2011 12:00:00 P

No. Coolers: 1

Client Service Action Required at Login: No

Project: XOM FRU 197-33A

Airbill #'s: HD/CO

### Cooler Security

Y or N

Y or N

- |                           |                                     |                          |                       |                                     |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### Cooler Temperature

Y or N

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

### Quality Control Preservation

Y or N

N/A

- |                                 |                                     |                          |                                     |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/>            | <input type="checkbox"/> |                                     |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/>            | <input type="checkbox"/> |                                     |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                                     |
| 4. VOCs headspace free:         | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

### Sample Integrity - Documentation

Y or N

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

### Sample Integrity - Condition

Y or N

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

### Sample Integrity - Instructions

Y or N N/A

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

Comments

Accutest Laboratories  
V:(303) 425-6021

4036 Youngfield Street  
F: (303) 425-6854

Wheat Ridge, CO  
www.accutest.com

**D29455: Chain of Custody**  
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## GC/MS Volatiles

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### QC Data Summaries

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Includes the following where applicable:

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

**Method Blank Summary**

Page 1 of 1

**Job Number:** D29455  
**Account:** KRWCCOL KRW Consulting, Inc.  
**Project:** XOM FRU 197-33A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3V843-MB	3V14603.D	1	11/15/11	DC	n/a	n/a	V3V843

The QC reported here applies to the following samples:

Method: SW846 8260B

D29455-1

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	50	22	ug/kg	
100-41-4	Ethylbenzene	ND	100	25	ug/kg	
108-88-3	Toluene	ND	100	50	ug/kg	
1330-20-7	Xylene (total)	ND	200	100	ug/kg	

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	107% 61-130%
460-00-4	4-Bromofluorobenzene	101% 53-131%
17060-07-0	1,2-Dichloroethane-D4	103% 62-130%

## Blank Spike Summary

Page 1 of 1

**Job Number:** D29455  
**Account:** KRWCCOL KRW Consulting, Inc.  
**Project:** XOM FRU 197-33A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3V843-BS	3V14604.D	1	11/15/11	DC	n/a	n/a	V3V843

The QC reported here applies to the following samples:

Method: SW846 8260B

D29455-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	57.2	114	70-130
100-41-4	Ethylbenzene	50	57.2	114	70-130
108-88-3	Toluene	50	55.5	111	70-130
1330-20-7	Xylene (total)	150	174	116	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	105%	61-130%
460-00-4	4-Bromofluorobenzene	115%	53-131%
17060-07-0	1,2-Dichloroethane-D4	110%	62-130%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

**Job Number:** D29455  
**Account:** KRWCCOL KRW Consulting, Inc.  
**Project:** XOM FRU 197-33A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D29424-4MS	3V14606.D	1	11/15/11	DC	n/a	n/a	V3V843
D29424-4MSD	3V14607.D	1	11/15/11	DC	n/a	n/a	V3V843
D29424-4	3V14605.D	1	11/15/11	DC	n/a	n/a	V3V843

The QC reported here applies to the following samples:

Method: SW846 8260B

D29455-1

CAS No.	Compound	D29424-4 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		3080	3610	117	3610	117	0	70-134/30
100-41-4	Ethylbenzene	ND		3080	3540	115	3530	115	0	70-137/30
108-88-3	Toluene	ND		3080	3420	111	3380	110	1	70-130/30
1330-20-7	Xylene (total)	ND		9230	10700	116	10600	115	1	61-131/30

CAS No.	Surrogate Recoveries	MS	MSD	D29424-4	Limits
2037-26-5	Toluene-D8	103%	103%	108%	61-130%
460-00-4	4-Bromofluorobenzene	114%	114%	108%	53-131%
17060-07-0	1,2-Dichloroethane-D4	104%	102%	105%	62-130%

GC/MS Volatiles

Raw Data





## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V3111511.S\  
 Data File : 3V14616.D  
 Acq On : 15 Nov 2011 4:51 pm  
 Operator : DONC  
 Sample : D29455-1, 50x  
 Misc : MS2960,V3V843,5.024,,100,5,1  
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 16 11:01:34 2011  
 Quant Method : C:\msdchem\1\METHODS\V3AP830TVH830.M  
 Quant Title : 8260  
 QLast Update : Mon Nov 07 14:42:41 2011  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Pentafluorobenzene	11.886	168	351315	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	12.679	114	588778	50.00	ug/l	0.00
53) Chlorobenzene-d5	15.316	117	521257	50.00	ug/l	0.00
74) 1,4-Dichlorobenzene-d4	17.309	152	312378	50.00	ug/l	0.00

## System Monitoring Compounds

33) 1,2-Dichloroethane-d4	12.281	102	49300	53.12	ug/l	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	106.24%
61) Toluene-d8	14.071	98	830346	53.40	ug/l	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	106.80%
69) 4-Bromofluorobenzene	16.266	95	314649	62.19	ug/l	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	124.38%

## Target Compounds

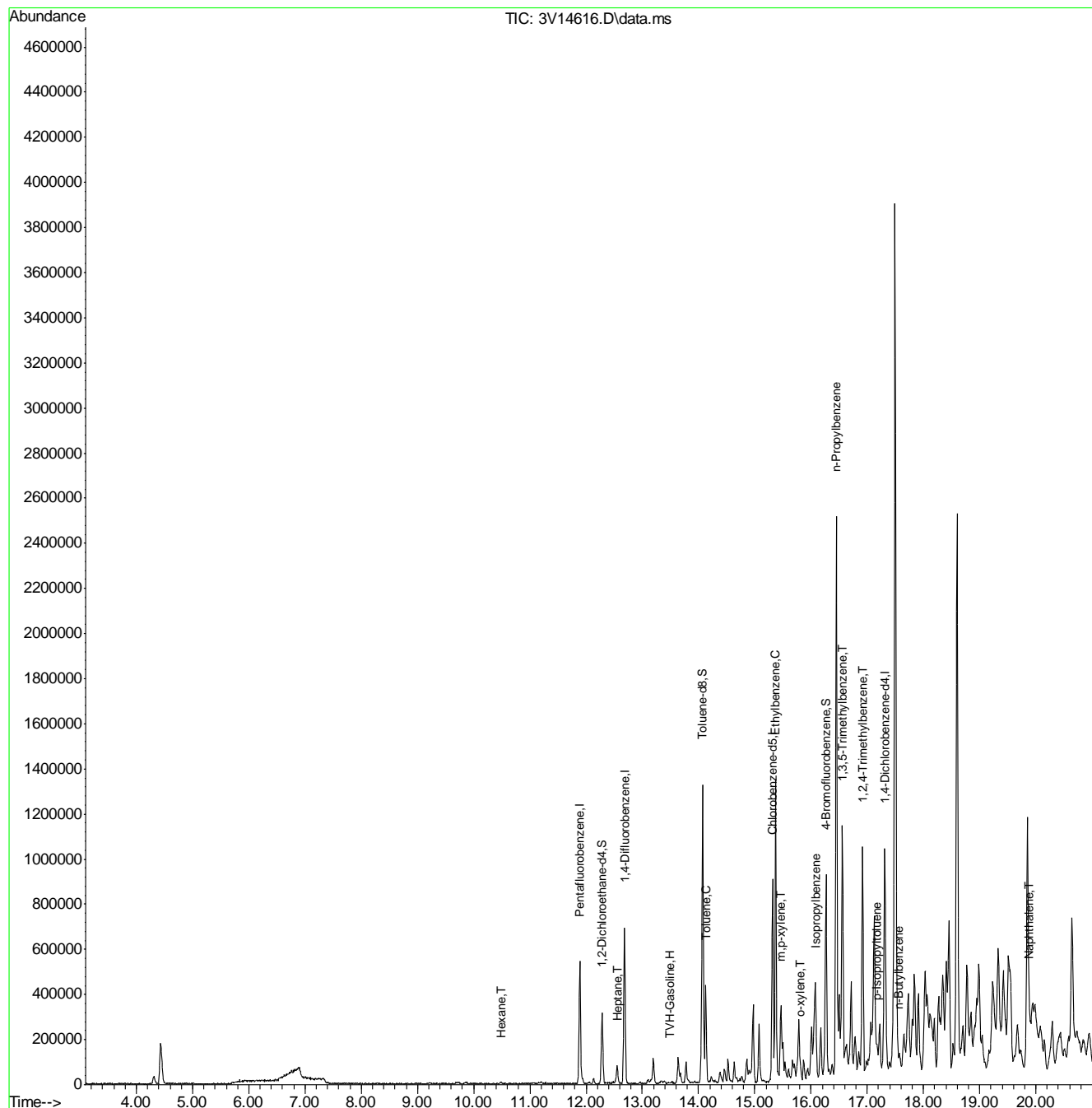
					Qvalue
1) TVH-Gasoline	13.491	TIC	17262324m	954.64	ug/l
41) Hexane	10.477	57	3594	0.71	ug/l 100
43) Heptane	12.554	43	29621	5.28	ug/l 96
62) Toluene	14.136	92	10548	0.99	ug/l 94
66) Ethylbenzene	15.381	91	13401	0.68	ug/l 94
68) Isopropylbenzene	16.093	105	9560	0.49	ug/l 90
72) m,p-xylene	15.464	106	100119	13.54	ug/l 98
73) o-xylene	15.814	106	15417	1.91	ug/l # 72
77) n-Propylbenzene	16.446	91	33682	1.43	ug/l 96
80) 1,3,5-Trimethylbenzene	16.558	105	530356	29.72	ug/l 98
82) 1,2,4-Trimethylbenzene	16.914	105	571801	30.23	ug/l 87
86) p-Isopropyltoluene	17.177	119	54193m	2.55	ug/l
88) n-Butylbenzene	17.566	91	33634	1.83	ug/l # 76
91) Naphthalene	19.892	128	245446	14.23	ug/l 100

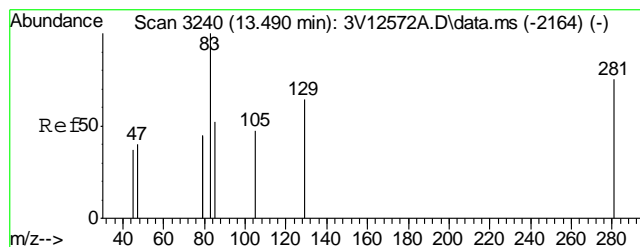
(#) = qualifier out of range (m) = manual integration (+) = signals summed

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V3111511.S\  
Data File : 3V14616.D  
Acq On : 15 Nov 2011 4:51 pm  
Operator : DONC  
Sample : D29455-1, 50x  
Misc : MS2960,V3V843,5.024,,100,5,1  
ALS Vial : 16 Sample Multiplier: 1

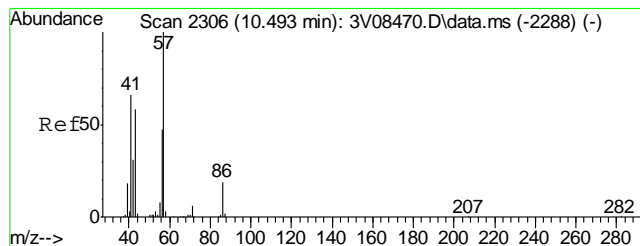
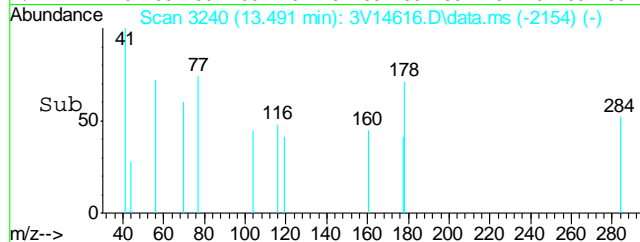
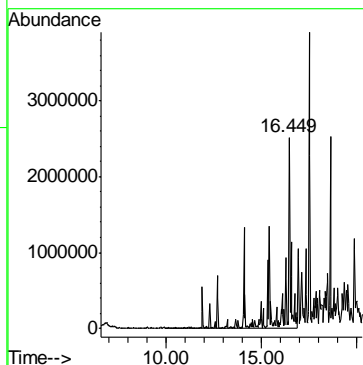
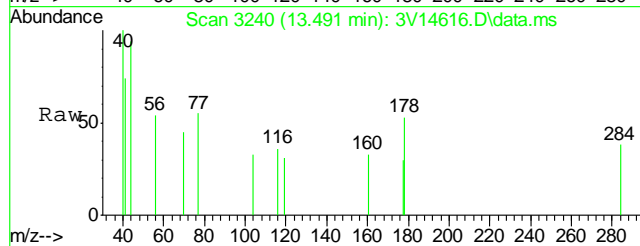
Quant Time: Nov 16 11:01:34 2011  
Quant Method : C:\msdchem\1\METHODS\V3AP830TVH830.M  
Quant Title : 8260  
QLast Update : Mon Nov 07 14:42:41 2011  
Response via : Initial Calibration





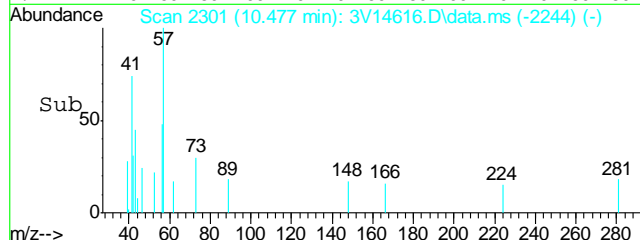
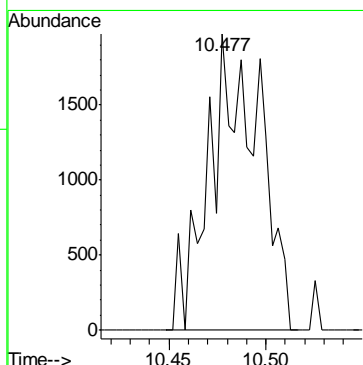
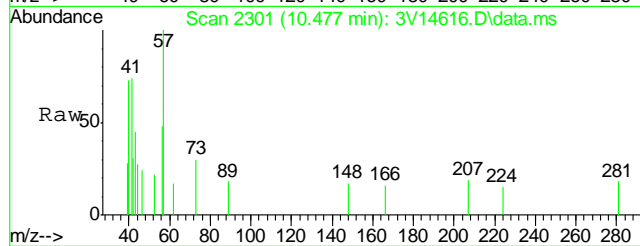
#1  
TVH-Gasoline  
Concen: 954.64 ug/l m  
RT: 13.491 min Scan# 3240  
Delta R.T. 0.000 min  
Lab File: 3V14616.D  
Acq: 15 Nov 2011 4:51 pm

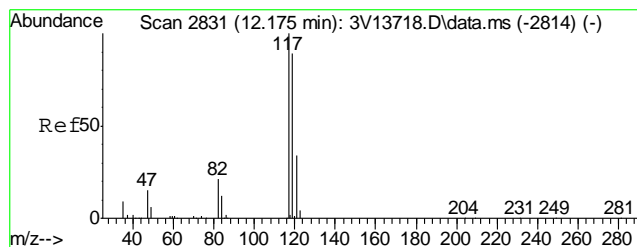
Tgt Ion:TIC Resp:17262324



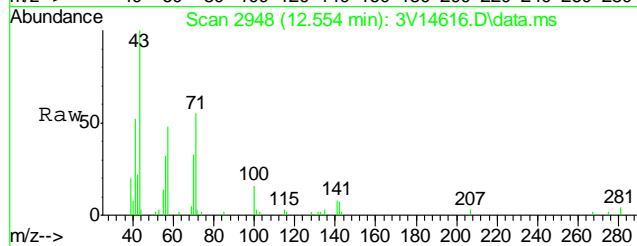
#41  
Hexane  
Concen: 0.71 ug/l  
RT: 10.477 min Scan# 2301  
Delta R.T. -0.016 min  
Lab File: 3V14616.D  
Acq: 15 Nov 2011 4:51 pm

Tgt Ion: 57 Resp: 3594

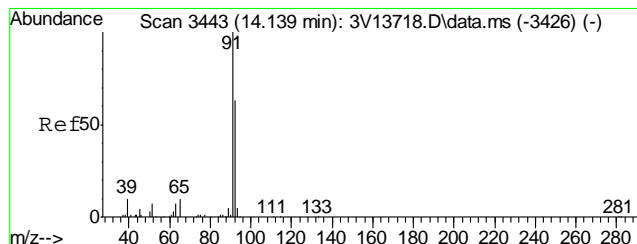
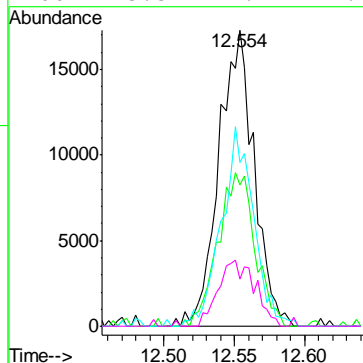
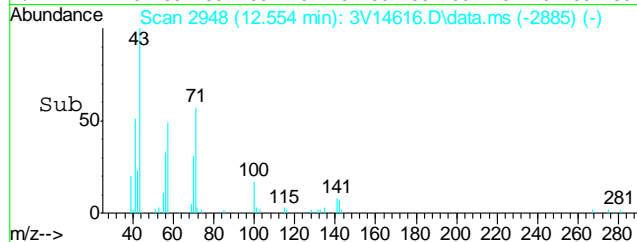




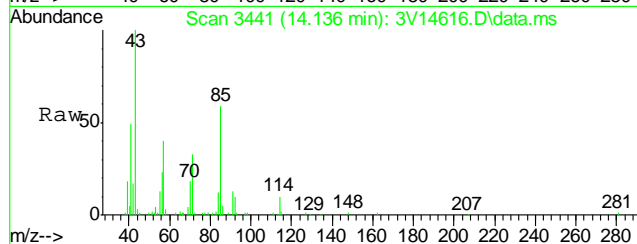
#43  
Heptane  
Concen: 5.28 ug/l  
RT: 12.554 min Scan# 2948  
Delta R.T. 0.003 min  
Lab File: 3V14616.D  
Acq: 15 Nov 2011 4:51 pm



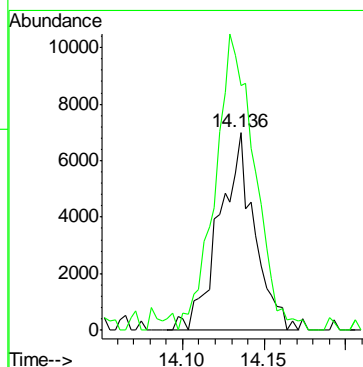
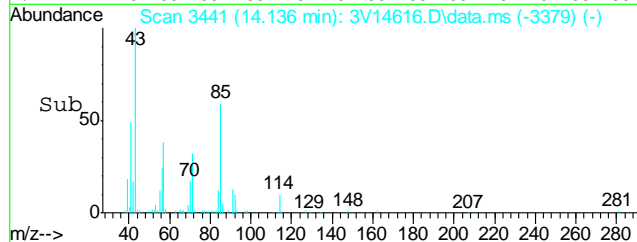
Tgt Ion	Ratio	Lower	Upper
43	100		
57	55.1	33.4	73.4
71	61.9	46.9	86.9
100	23.3	4.7	44.7

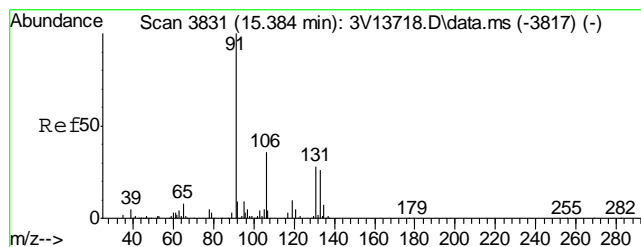


#62  
Toluene  
Concen: 0.99 ug/l  
RT: 14.136 min Scan# 3441  
Delta R.T. 0.000 min  
Lab File: 3V14616.D  
Acq: 15 Nov 2011 4:51 pm



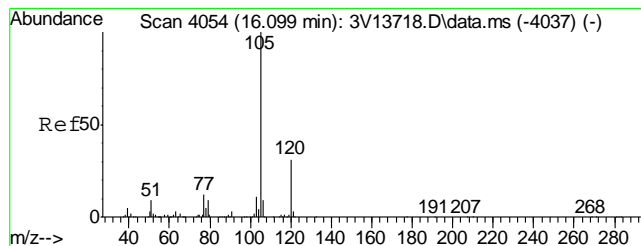
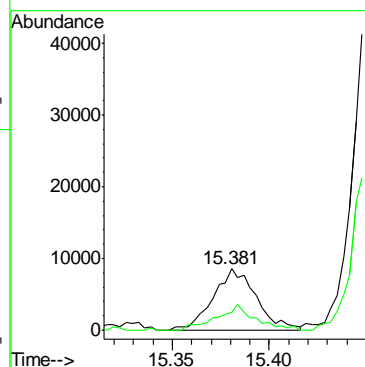
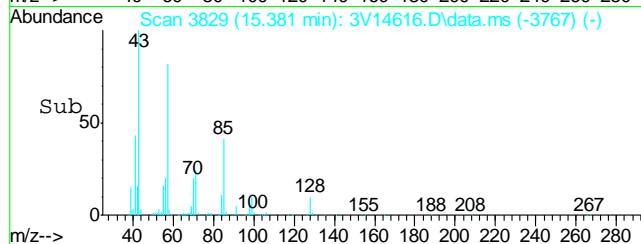
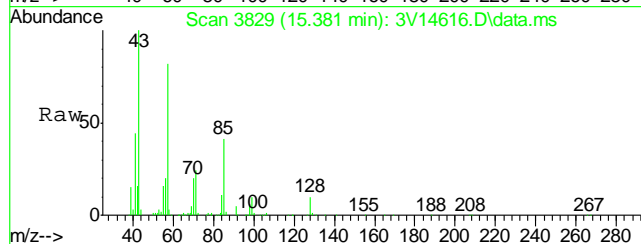
Tgt Ion	Ratio	Lower	Upper
92	100		
91	168.2	156.8	196.8





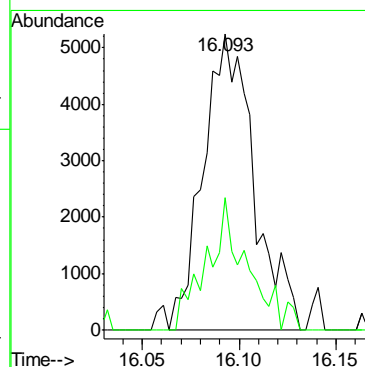
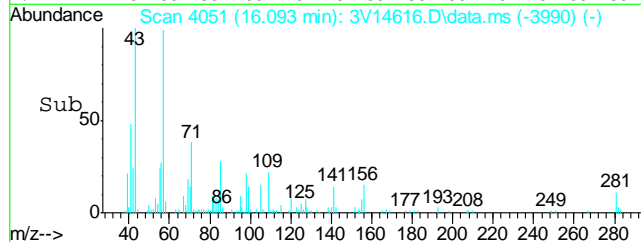
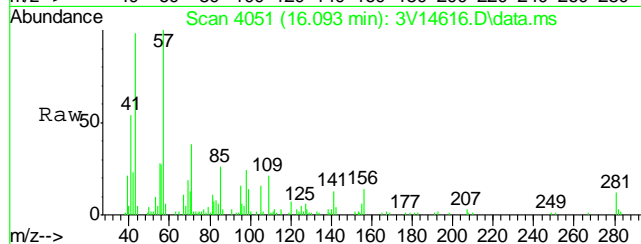
#66  
Ethylbenzene  
Concen: 0.68 ug/l  
RT: 15.381 min Scan# 3829  
Delta R.T. -0.002 min  
Lab File: 3V14616.D  
Acq: 15 Nov 2011 4:51 pm

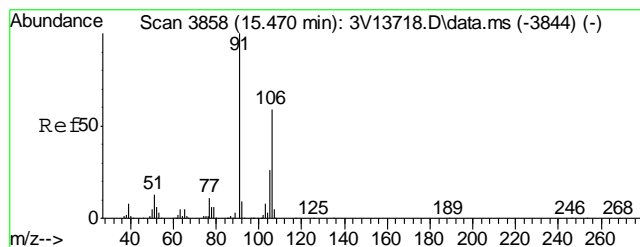
Tgt Ion: 91 Resp: 13401  
Ion Ratio Lower Upper  
91 100  
106 36.6 13.3 53.3



#68  
Isopropylbenzene  
Concen: 0.49 ug/l  
RT: 16.093 min Scan# 4051  
Delta R.T. -0.003 min  
Lab File: 3V14616.D  
Acq: 15 Nov 2011 4:51 pm

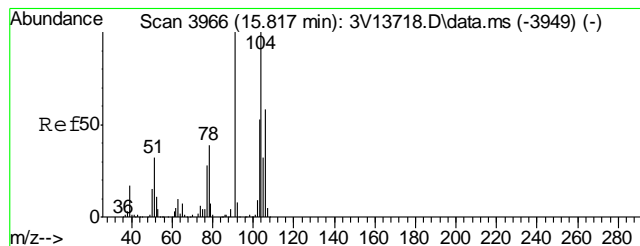
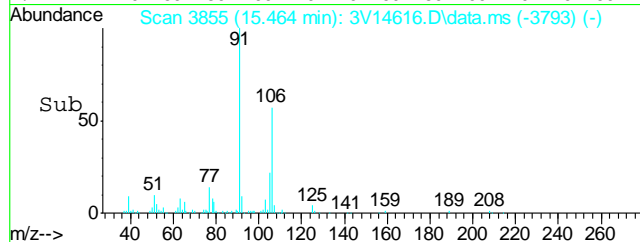
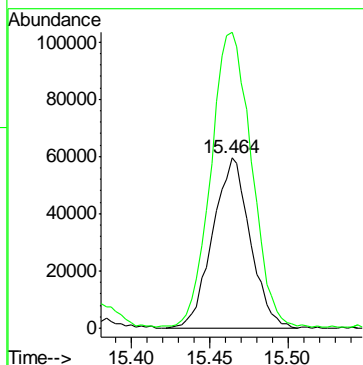
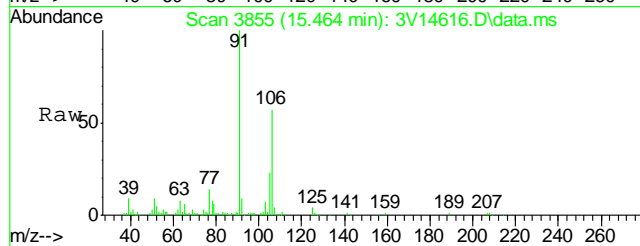
Tgt Ion: 105 Resp: 9560  
Ion Ratio Lower Upper  
105 100  
120 34.2 23.0 34.4





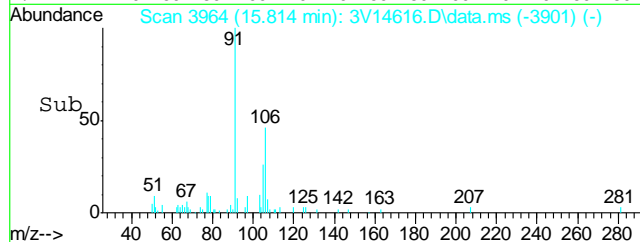
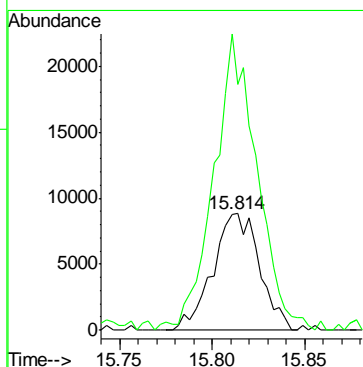
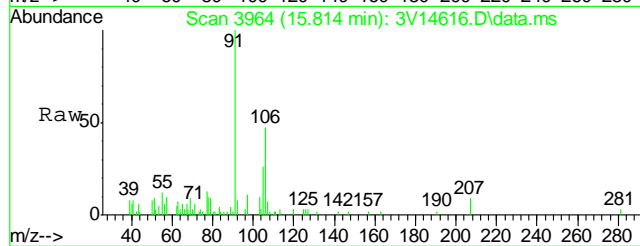
#72  
m,p-xylene  
Concen: 13.54 ug/l  
RT: 15.464 min Scan# 3855  
Delta R.T. -0.002 min  
Lab File: 3V14616.D  
Acq: 15 Nov 2011 4:51 pm

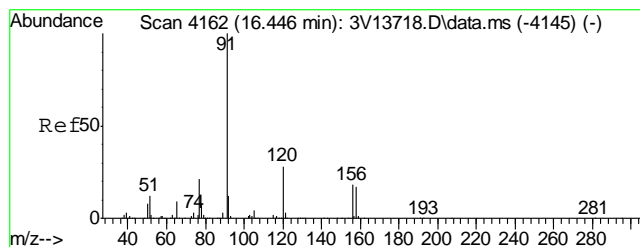
Tgt Ion:106 Resp: 100119  
Ion Ratio Lower Upper  
106 100  
91 187.6 164.7 204.7



#73  
o-xylene  
Concen: 1.91 ug/l  
RT: 15.814 min Scan# 3964  
Delta R.T. 0.001 min  
Lab File: 3V14616.D  
Acq: 15 Nov 2011 4:51 pm

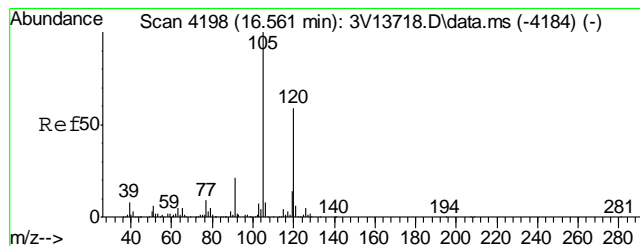
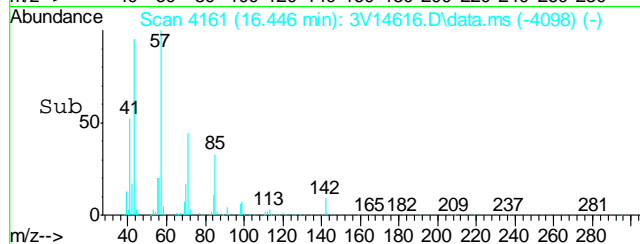
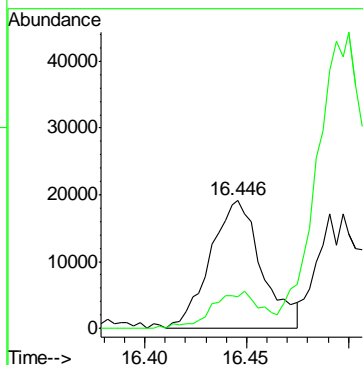
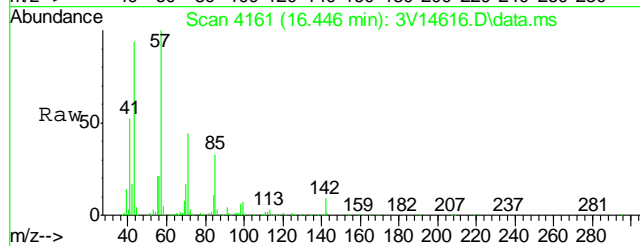
Tgt Ion:106 Resp: 15417  
Ion Ratio Lower Upper  
106 100  
91 235.8 154.8 232.2#





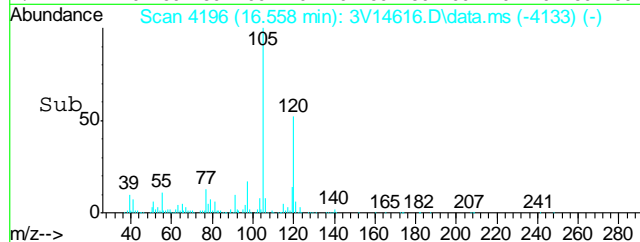
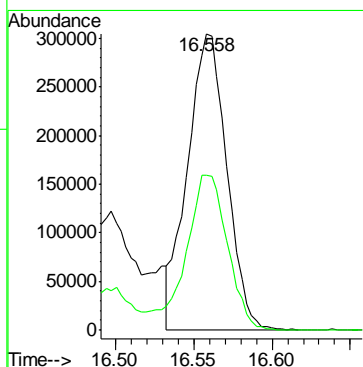
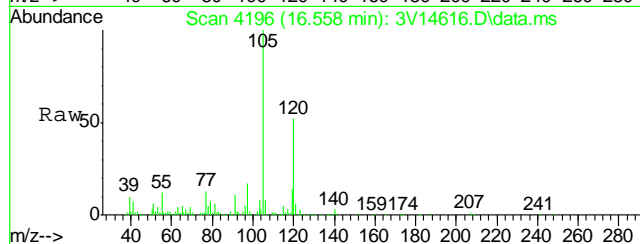
#77  
n-Propylbenzene  
Concen: 1.43 ug/l  
RT: 16.446 min Scan# 4161  
Delta R.T. 0.001 min  
Lab File: 3V14616.D  
Acq: 15 Nov 2011 4:51 pm

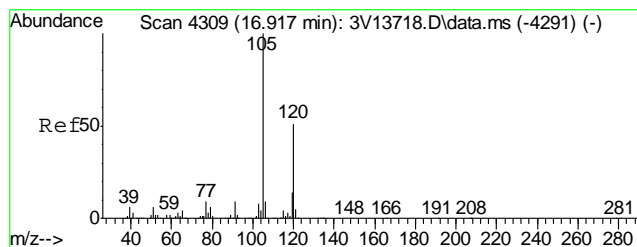
Tgt Ion: 91 Resp: 33682  
Ion Ratio Lower Upper  
91 100  
120 27.8 20.8 31.2



#80  
1,3,5-Trimethylbenzene  
Concen: 29.72 ug/l  
RT: 16.558 min Scan# 4196  
Delta R.T. 0.001 min  
Lab File: 3V14616.D  
Acq: 15 Nov 2011 4:51 pm

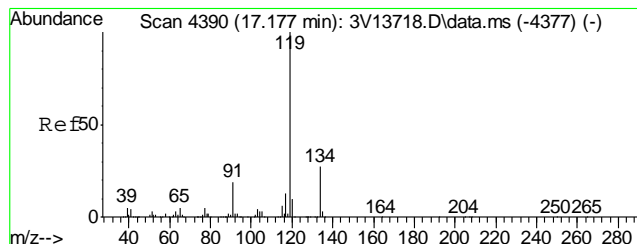
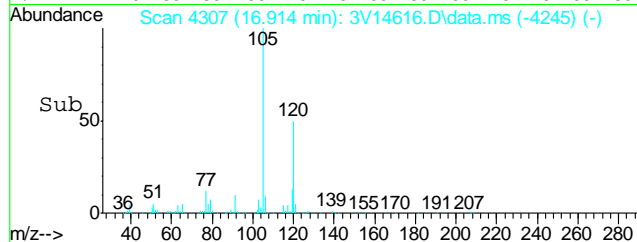
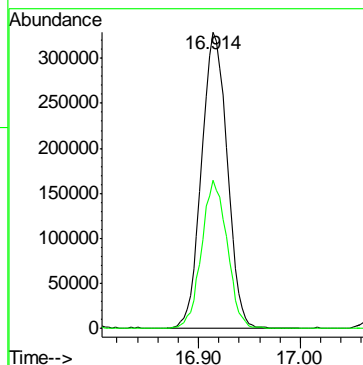
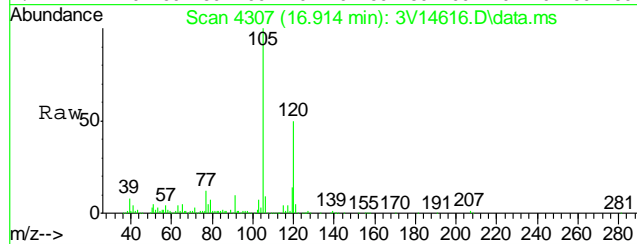
Tgt Ion: 105 Resp: 530356  
Ion Ratio Lower Upper  
105 100  
120 53.6 43.8 65.8





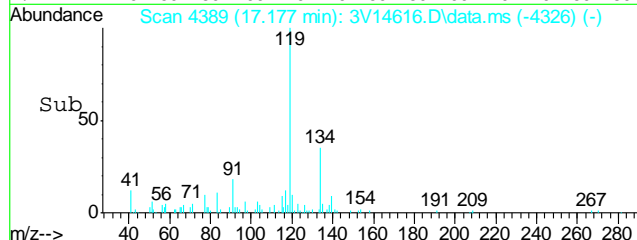
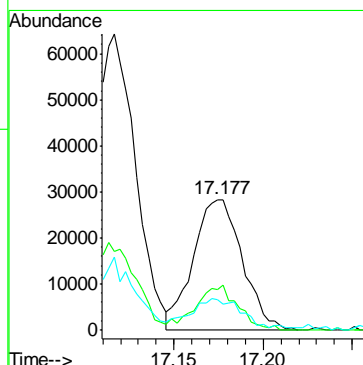
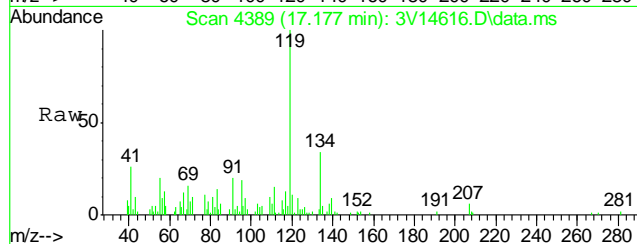
#82  
1,2,4-Trimethylbenzene  
Concen: 30.23 ug/l  
RT: 16.914 min Scan# 4307  
Delta R.T. 0.000 min  
Lab File: 3V14616.D  
Acq: 15 Nov 2011 4:51 pm

Tgt Ion	Ratio	Lower	Upper
105	100		
120	49.6	47.8	71.6

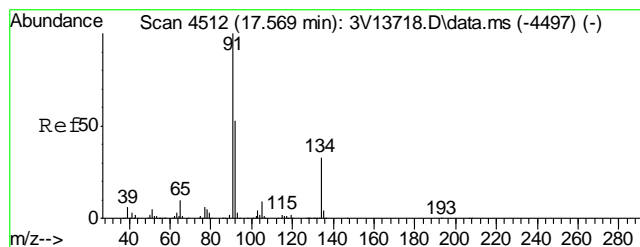


#86  
p-Isopropyltoluene  
Concen: 2.55 ug/l m  
RT: 17.177 min Scan# 4389  
Delta R.T. 0.003 min  
Lab File: 3V14616.D  
Acq: 15 Nov 2011 4:51 pm

Tgt Ion	Ratio	Lower	Upper
119	100		
134	61.1	23.4	35.0#
91	47.3	16.3	24.5#

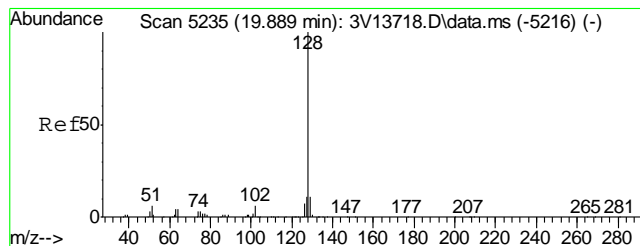
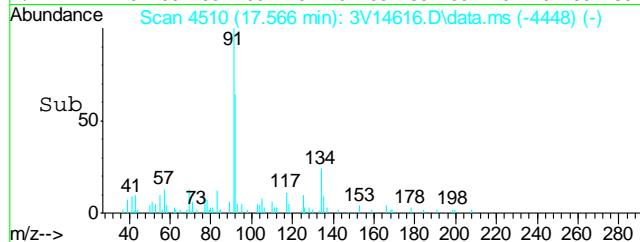
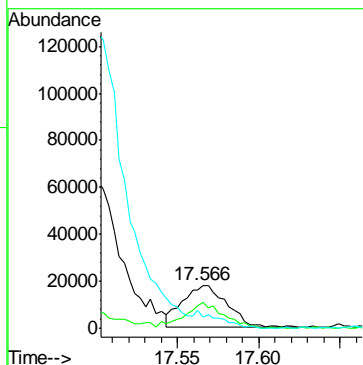
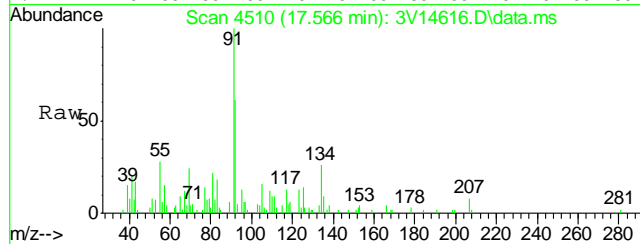






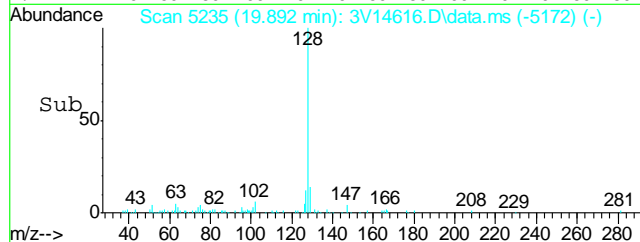
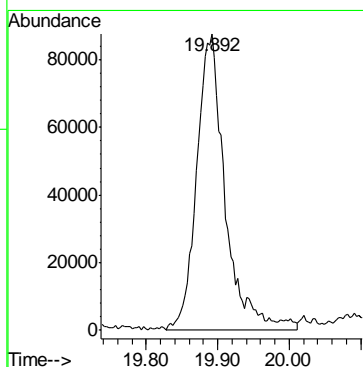
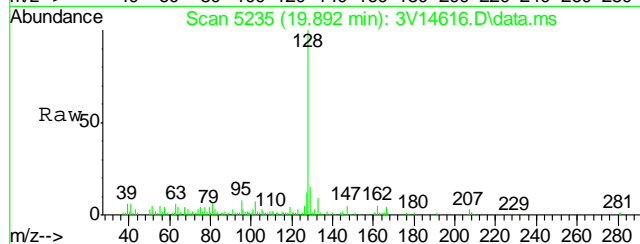
#88  
n-Butylbenzene  
Concen: 1.83 ug/l  
RT: 17.566 min Scan# 4510  
Delta R.T. 0.000 min  
Lab File: 3V14616.D  
Acq: 15 Nov 2011 4:51 pm

Tgt Ion: 91 Resp: 33634  
Ion Ratio Lower Upper  
91 100  
92 54.7 41.5 62.3  
134 0.0 25.4 38.0#



#91  
Naphthalene  
Concen: 14.23 ug/l  
RT: 19.892 min Scan# 5235  
Delta R.T. 0.003 min  
Lab File: 3V14616.D  
Acq: 15 Nov 2011 4:51 pm

Tgt Ion: 128 Resp: 245446



## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V3111511.S\  
Data File : 3V14603.D  
Acq On : 15 Nov 2011 10:08 am  
Operator : DONC  
Sample : MB, MEB111511  
Misc : MS2960,V3V843,5,,100,5,1  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 16 10:42:05 2011  
Quant Method : C:\msdchem\1\METHODS\V3AP830TVH830.M  
Quant Title : 8260  
QLast Update : Mon Nov 07 14:42:41 2011  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Pentafluorobenzene	11.886	168	303292	50.00	ug/l	0.00
35) 1,4-Difluorobenzene	12.682	114	500893	50.00	ug/l	0.00
53) Chlorobenzene-d5	15.316	117	426853	50.00	ug/l	0.00
74) 1,4-Dichlorobenzene-d4	17.309	152	218836	50.00	ug/l	0.00

## System Monitoring Compounds

33) 1,2-Dichloroethane-d4	12.280	102	41291	51.54	ug/l	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	103.08%
61) Toluene-d8	14.074	98	678798	53.31	ug/l	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	106.62%
69) 4-Bromofluorobenzene	16.263	95	209067	50.46	ug/l	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	100.92%

## Target Compounds

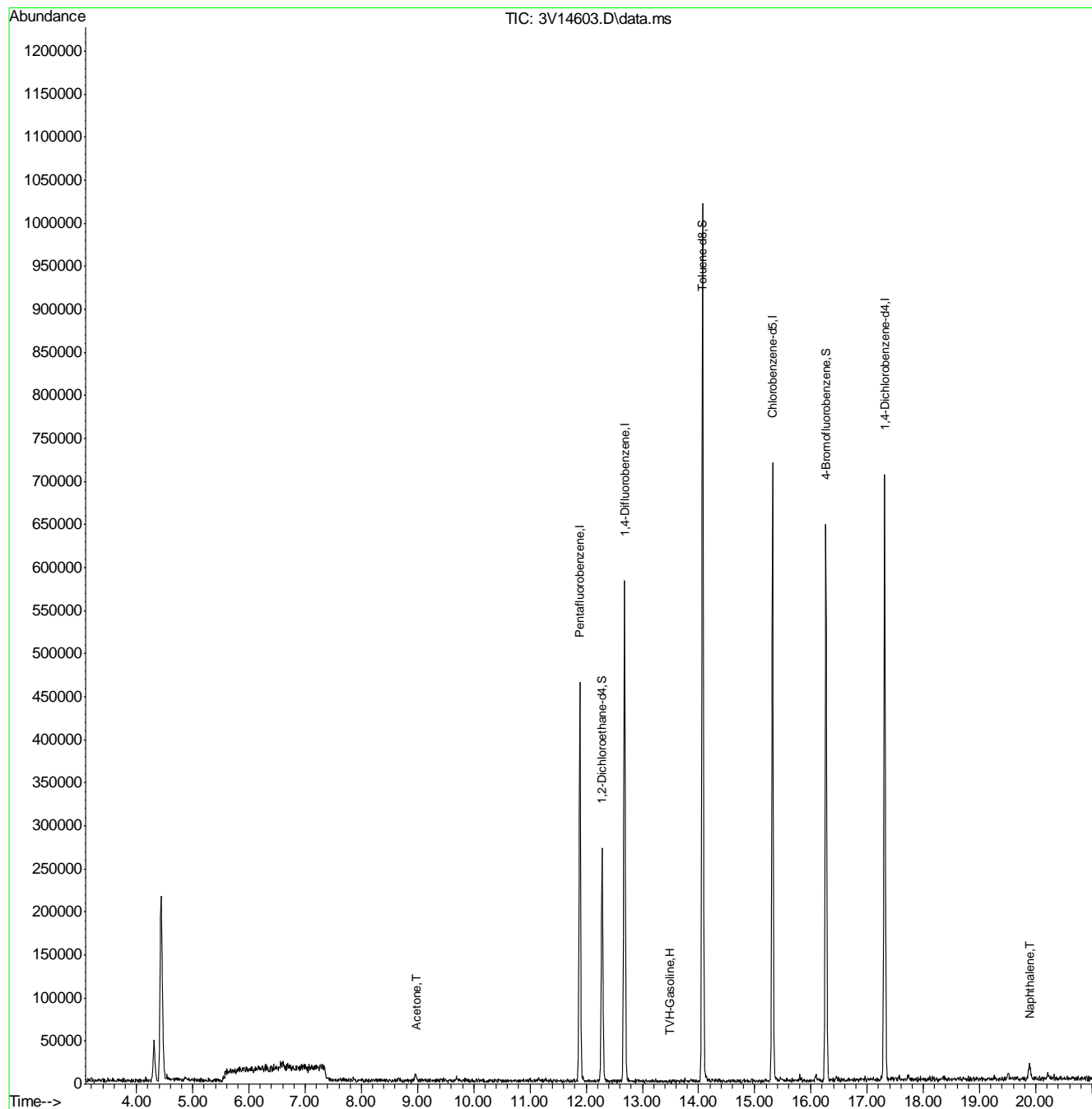
					Qvalue
1) TVH-Gasoline	13.491	TIC	153884m	21.10	ug/l
15) Acetone	8.963	58	3103	2.57	ug/l
91) Naphthalene	19.892	128	21200	1.75	ug/l

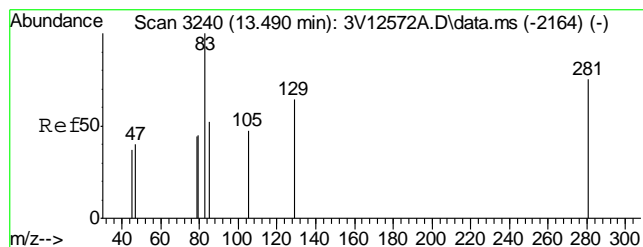
(#) = qualifier out of range (m) = manual integration (+) = signals summed

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V3111511.S\  
Data File : 3V14603.D  
Acq On : 15 Nov 2011 10:08 am  
Operator : DONC  
Sample : MB, MEB111511  
Misc : MS2960,V3V843,5,,100,5,1  
ALS Vial : 3 Sample Multiplier: 1

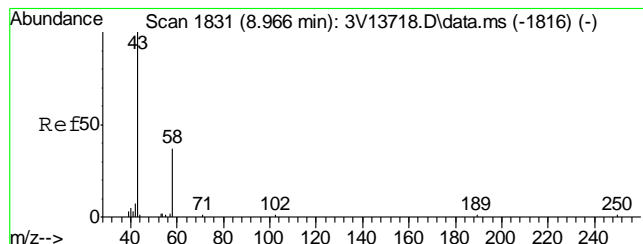
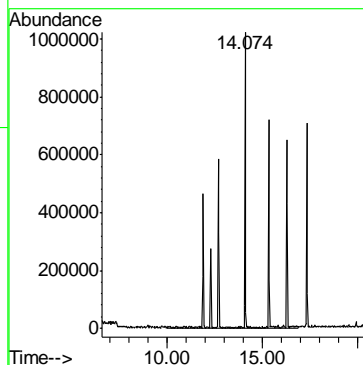
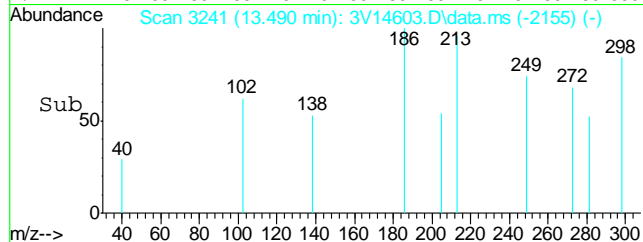
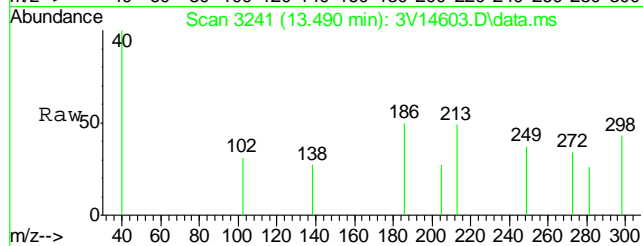
Quant Time: Nov 16 10:42:05 2011  
Quant Method : C:\msdchem\1\METHODS\V3AP830TVH830.M  
Quant Title : 8260  
QLast Update : Mon Nov 07 14:42:41 2011  
Response via : Initial Calibration





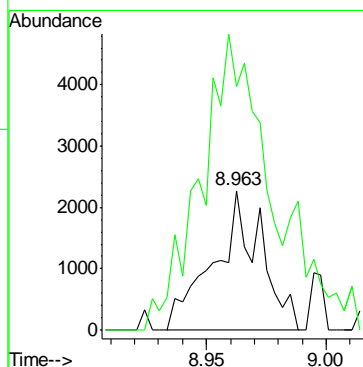
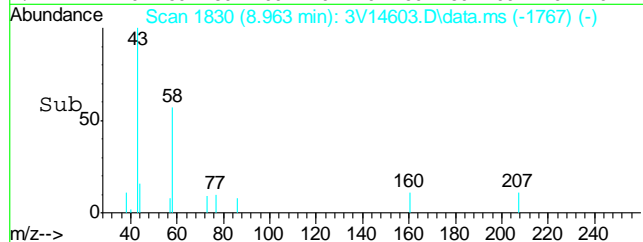
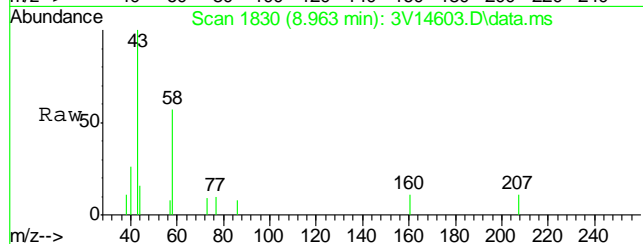
#1  
TVH-Gasoline  
Concen: 21.10 ug/l m  
RT: 13.491 min Scan# 3241  
Delta R.T. 0.000 min  
Lab File: 3V14603.D  
Acq: 15 Nov 2011 10:08 am

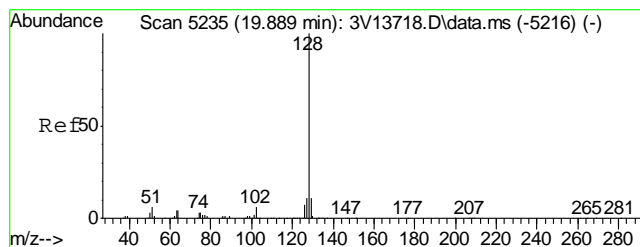
Tgt Ion:TIC Resp: 153884



#15  
Acetone  
Concen: 2.57 ug/l  
RT: 8.963 min Scan# 1830  
Delta R.T. 0.001 min  
Lab File: 3V14603.D  
Acq: 15 Nov 2011 10:08 am

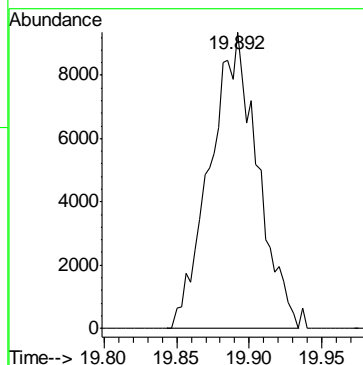
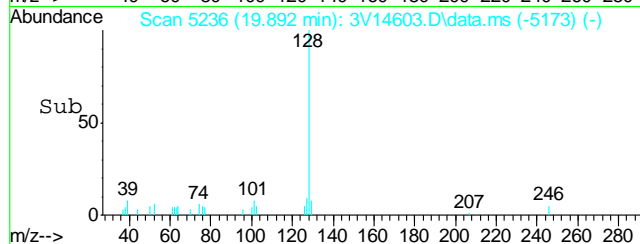
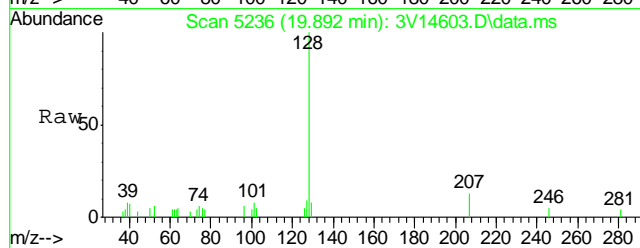
Tgt Ion: 58 Resp: 3103  
Ion Ratio Lower Upper  
58 100  
43 330.0 314.5 354.5





#91  
Naphthalene  
Concen: 1.75 ug/l  
RT: 19.892 min Scan# 5236  
Delta R.T. 0.003 min  
Lab File: 3V14603.D  
Acq: 15 Nov 2011 10:08 am

Tgt Ion:128 Resp: 21200



## GC Volatiles

## QC Data Summaries

Includes the following where applicable:

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

**Method Blank Summary**

Page 1 of 1

**Job Number:** D29455**Account:** KRWCCOL KRW Consulting, Inc.**Project:** XOM FRU 197-33A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB792-MB	GB13942.D	1	11/17/11	SK	n/a	n/a	GGB792

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

D29455-1

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

CAS No.	Surrogate Recoveries	Limits
120-82-1	1,2,4-Trichlorobenzene	92% 60-140%

Blank Spike/Blank Spike Duplicate Summary

Job Number: D29455  
Account: KRWCCOL KRW Consulting, Inc.  
Project: XOM FRU 197-33A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB792-BS	GB13943.D	1	11/17/11	SK	n/a	n/a	GGB792
GGB792-BSD	GB13944.D	1	11/17/11	SK	n/a	n/a	GGB792

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

D29455-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	110	110	100	111	101	1	70-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
120-82-1	1,2,4-Trichlorobenzene	105%	104%	60-140%



GC Volatiles

Raw Data

∞

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\111711\GRO\GB13947.D\FID1A.CH Vial: 9  
Signal #2 : Y:\1\DATA\111711\GRO\GB13947.D\FID2B.CH  
Acq On : 17 Nov 2011 3:14 pm Operator: StephK  
Sample : D29455-1, 50X Inst : GC/MS Ins  
Misc : GC2417,GGB792,5.024,,100,5,1 Multiplr: 1.00  
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E  
Quant Time: Nov 17 14:35:32 2011 Quant Results File: TB791GB791SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB791GB791SOIL.M (Chemstation Integrator)  
Title : 8015B/8021B TVH/BTEX  
Last Update : Thu Nov 17 12:48:56 2011  
Response via : Initial Calibration  
DataAcq Meth : TVB4.M

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

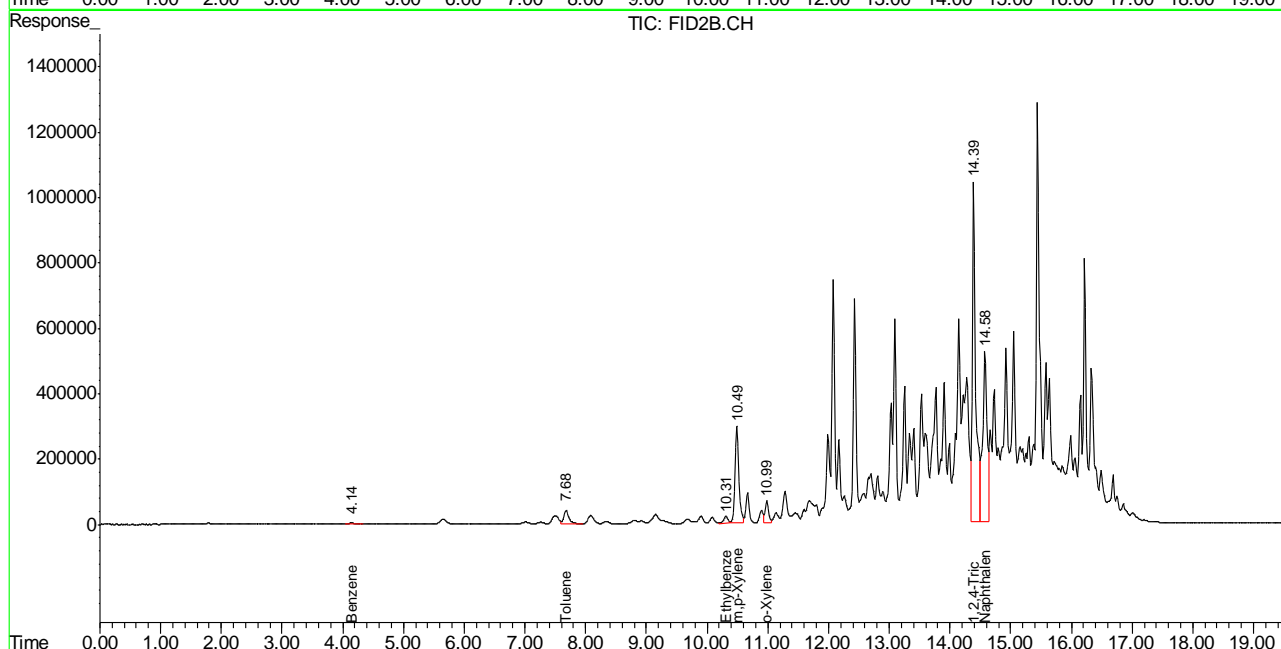
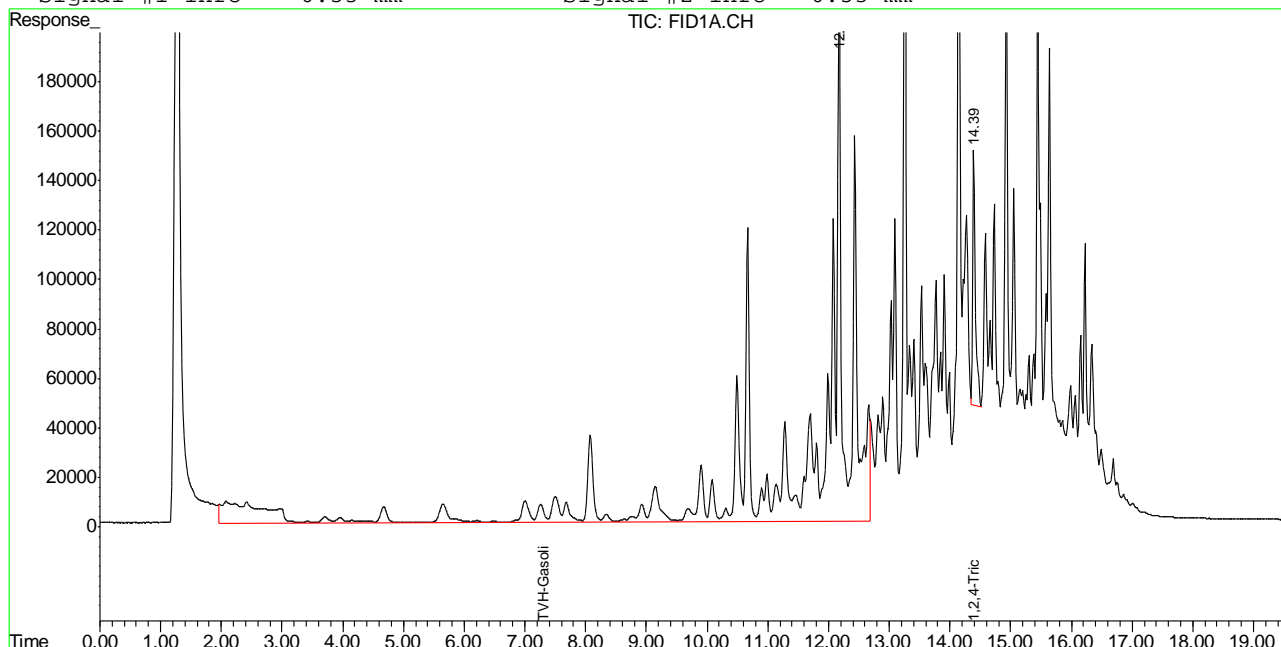
Compound	R.T.	Response	Conc	Units
-----				
System Monitoring Compounds				
2) S 1,2,4-Trichlorobenzene	14.39	3196643	109.268 %	m
10) S 1,2,4-Trichlorobenzene (P)	14.39	40441902	175.957 %	
Target Compounds				
1) H TVH-Gasoline	7.32	58608938	0.823 mg/L	
4) T Methyl-t-butyl-ether	0.00	0	N.D. ug/L	d
5) T Benzene	4.14	291271	0.509 ug/L	
6) T Toluene	7.68	2537656	4.478 ug/L	
7) T Ethylbenzene	10.31	1052327	2.159 ug/L	
8) T m,p-Xylene	10.49	13132981	23.156 ug/L	
9) T o-Xylene	10.99	2594842	5.323 ug/L	
11) T Naphthalene	14.58	25380142	98.604 ug/L	

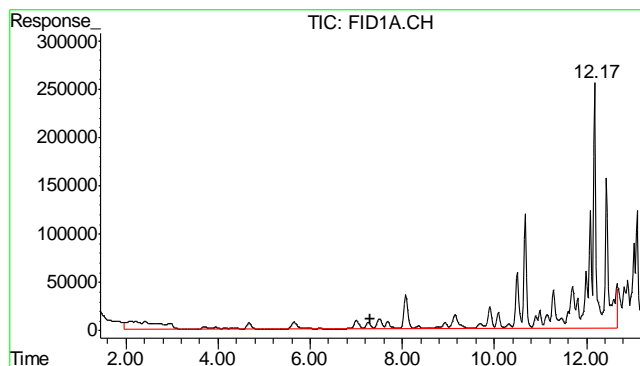
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\111711\GRO\GB13947.D\FID1A.CH Vial: 9  
 Signal #2 : Y:\1\DATA\111711\GRO\GB13947.D\FID2B.CH  
 Acq On : 17 Nov 2011 3:14 pm Operator: StephK  
 Sample : D29455-1, 50X Inst : GC/MS Ins  
 Misc : GC2417,GGB792,5.024,,100,5,1 Multiplr: 1.00  
 IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E  
 Quant Time: Nov 17 14:35 2011 Quant Results File: TB791GB791SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB791GB791SOIL.M (Chemstation Integrator)  
 Title : 8015B/8021B TVH/BTEX  
 Last Update : Thu Nov 17 12:48:56 2011  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TVB4.M

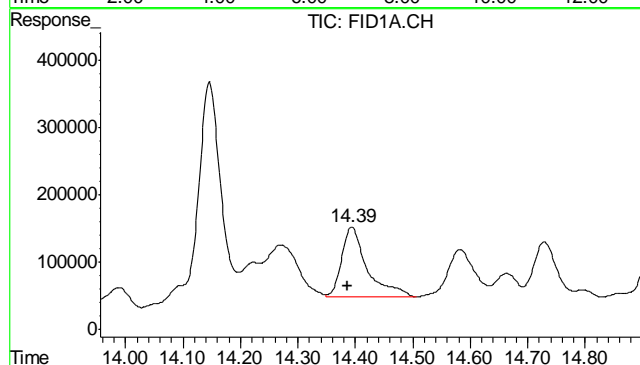
Volume Inj. :  
 Signal #1 Phase : DB-624 Signal #2 Phase: DB-624  
 Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm





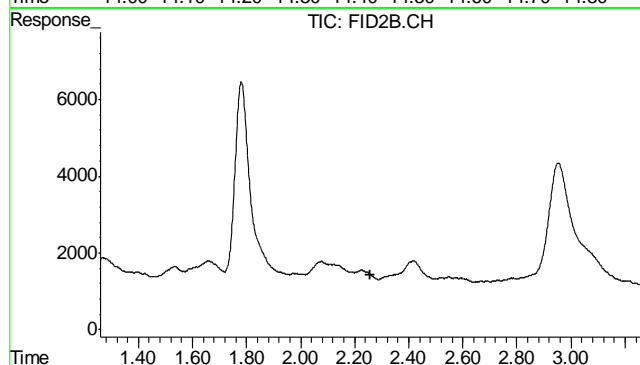
#1 TVH-Gasoline

R.T.: 7.315 min  
 Delta R.T.: 0.000 min  
 Response: 58608938  
 Conc: 0.82 mg/L m



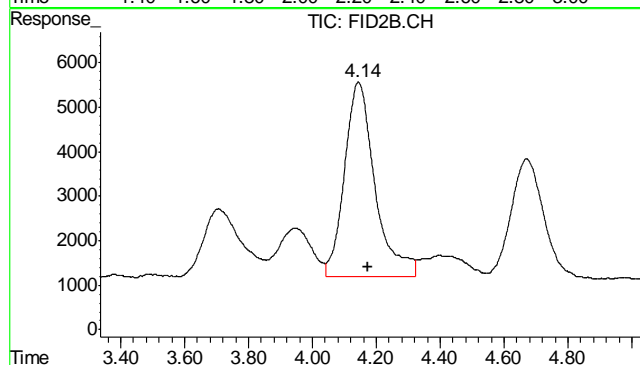
#2 1,2,4-Trichlorobenzene

R.T.: 14.393 min  
 Delta R.T.: 0.006 min  
 Response: 3196643  
 Conc: 109.27 % m



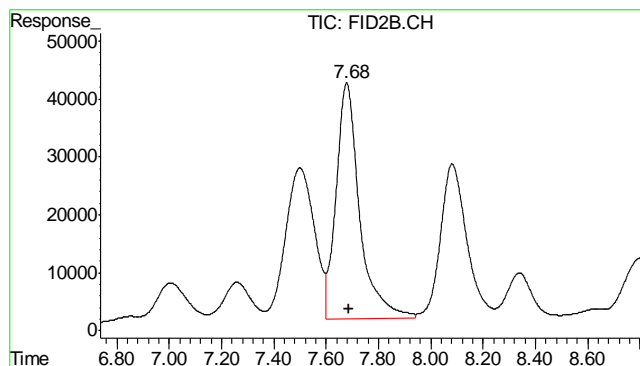
#4 Methyl-t-butyl-ether

R.T.: 0.000 min  
 Exp R.T.: 2.258 min  
 Response: 0  
 Conc: N.D.



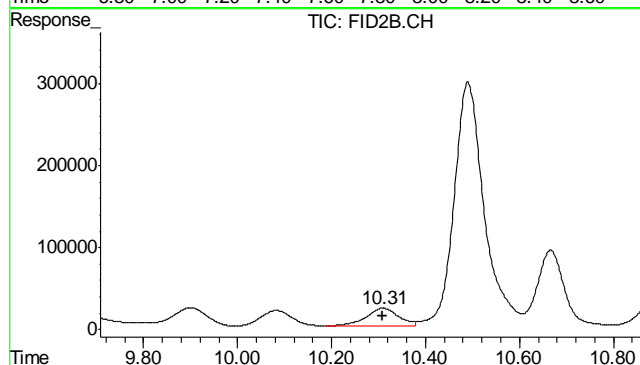
#5 Benzene

R.T.: 4.144 min  
 Delta R.T.: -0.029 min  
 Response: 291271  
 Conc: 0.51 ug/L



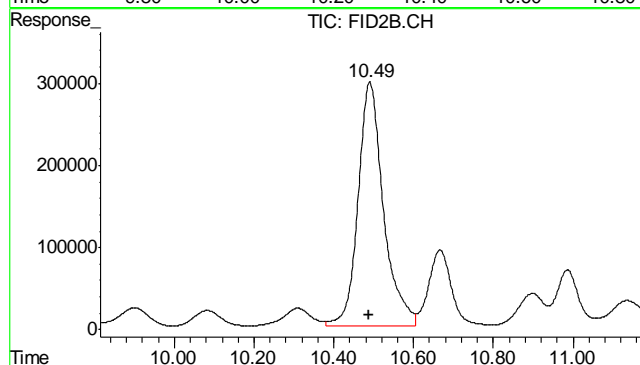
#6 Toluene

R.T.: 7.678 min  
Delta R.T.: -0.006 min  
Response: 2537656  
Conc: 4.48 ug/L



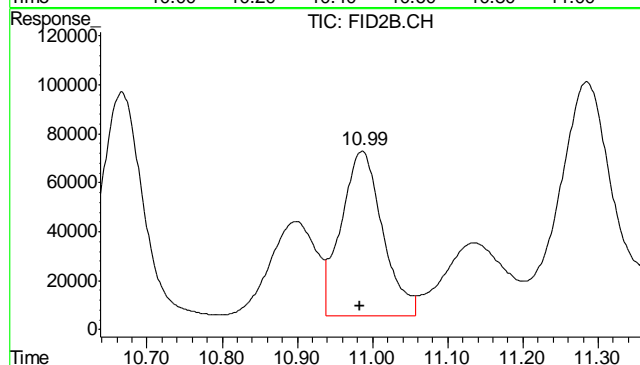
#7 Ethylbenzene

R.T.: 10.310 min  
Delta R.T.: 0.001 min  
Response: 1052327  
Conc: 2.16 ug/L



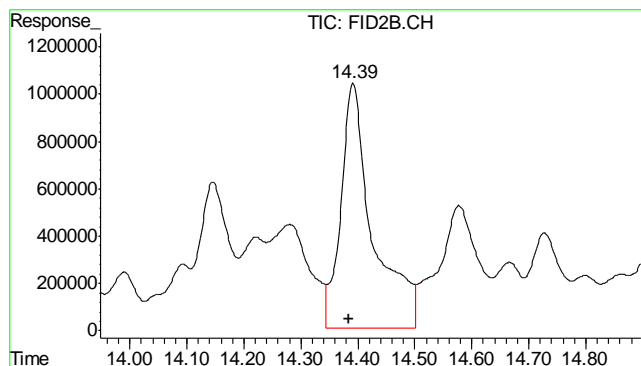
#8 m,p-Xylene

R.T.: 10.490 min  
Delta R.T.: 0.002 min  
Response: 13132981  
Conc: 23.16 ug/L



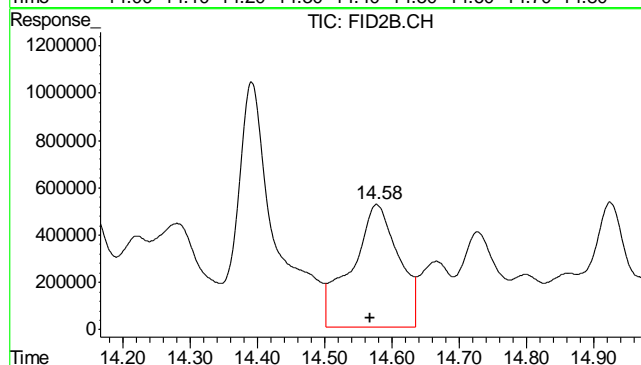
#9 o-Xylene

R.T.: 10.986 min  
Delta R.T.: 0.003 min  
Response: 2594842  
Conc: 5.32 ug/L



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

R.T.: 14.392 min  
Delta R.T.: 0.007 min  
Response: 40441902  
Conc: 175.96 %



#11 Naphthalene

R.T.: 14.578 min  
Delta R.T.: 0.011 min  
Response: 25380142  
Conc: 98.60 ug/L

8.1.1

8

## Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\111711\GRO\GB13942.D\FID1A.CH Vial: 4  
Signal #2 : Y:\1\DATA\111711\GRO\GB13942.D\FID2B.CH  
Acq On : 17 Nov 2011 12:16 pm Operator: StephK  
Sample : MB, S Inst : GC/MS Ins  
Misc : GC2417,GGB792,5.000,,100,5,1 Multiplr: 1.00  
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E  
Quant Time: Nov 17 11:54:05 2011 Quant Results File: TB791GB791SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB791GB791SOIL.M (Chemstation Integrator)  
Title : 8015B/8021B TVH/BTEX  
Last Update : Thu Nov 17 11:10:39 2011  
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	14.40	2690529	91.968	%
10) S 1,2,4-Trichlorobenzene (P)	14.39	22171556	96.465	%
Target Compounds				
1) H TVH-Gasoline	7.32	6776636	<MDL	mg/L
4) T Methyl-t-butyl-ether	0.00	0	N.D.	ug/L d
5) T Benzene	0.00	0	N.D.	ug/L d
6) T Toluene	7.70	282845	0.499	ug/L
7) T Ethylbenzene	10.32	119087	0.244	ug/L
8) T m,p-Xylene	10.50	384533	0.251	ug/L
9) T o-Xylene	0.00	0	N.D.	ug/L d
11) T Naphthalene	14.58	173745	0.675	ug/L m

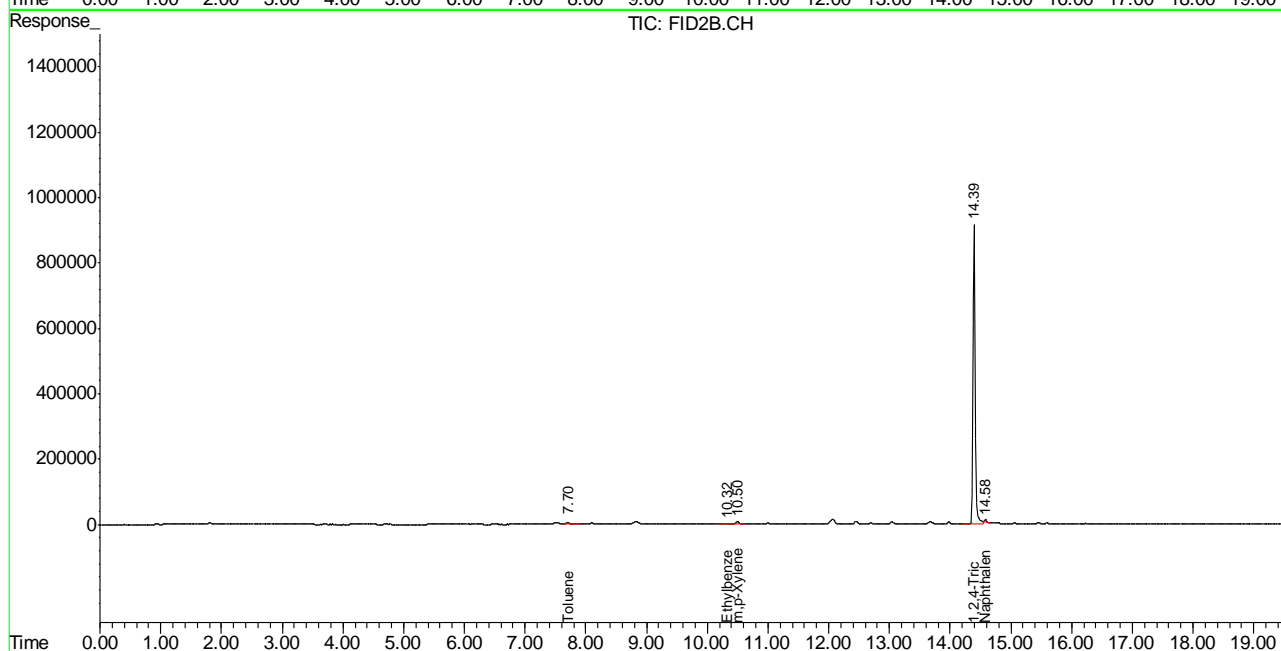
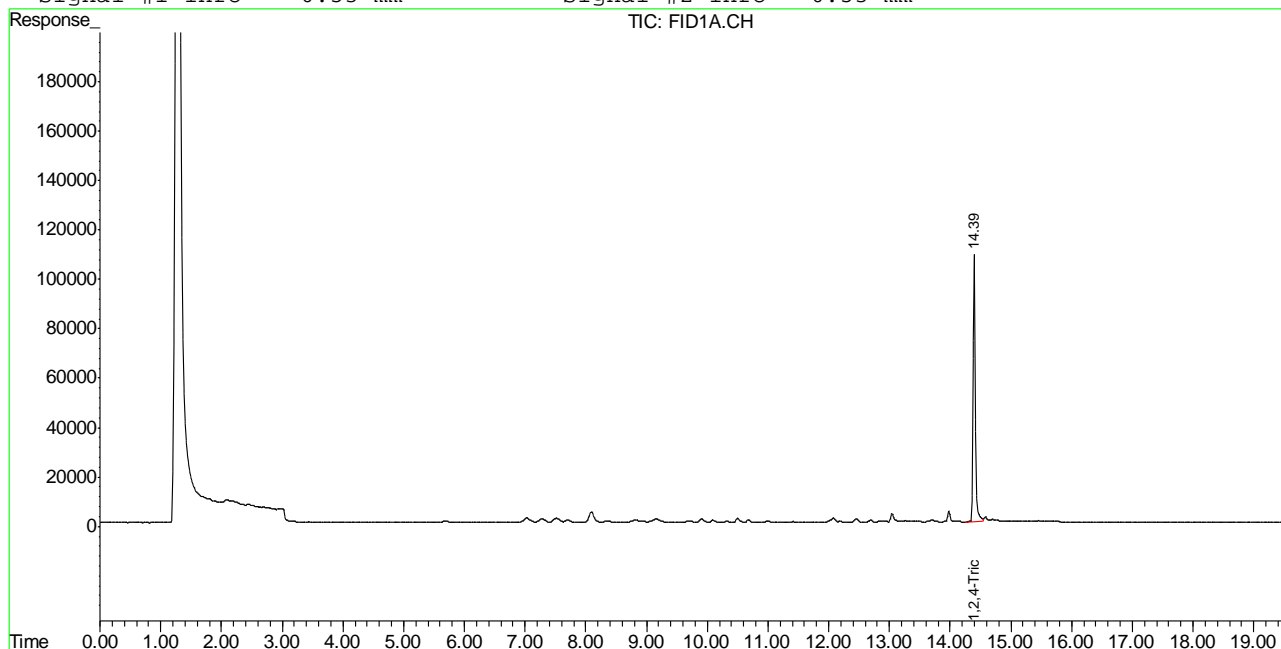
-----  
(f)=RT Delta > 1/2 Window (m)=manual int.  
GB13942.D TB791GB791SOIL.M Thu Nov 17 15:48:47 2011 GC

## Quantitation Report (QT Reviewed)

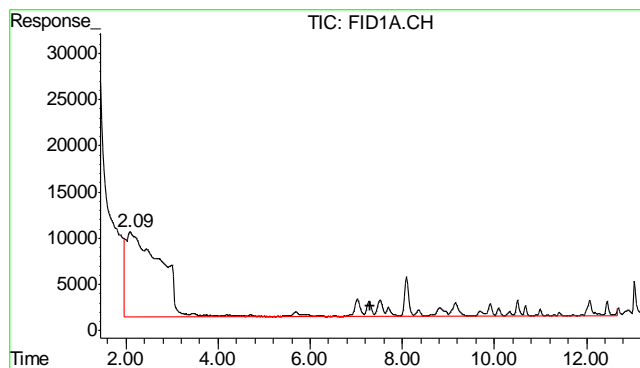
Signal #1 : Y:\1\DATA\111711\GRO\GB13942.D\FID1A.CH Vial: 4  
Signal #2 : Y:\1\DATA\111711\GRO\GB13942.D\FID2B.CH  
Acq On : 17 Nov 2011 12:16 pm Operator: StephK  
Sample : MB, S Inst : GC/MS Ins  
Misc : GC2417,GGB792,5.000,,100,5,1 Multiplr: 1.00  
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E  
Quant Time: Nov 17 11:53 2011 Quant Results File: TB791GB791SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB791GB791SOIL.M (Chemstation Integrator)  
Title : 8015B/8021B TVH/BTEX  
Last Update : Thu Nov 17 11:10:39 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : TVB4.M

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

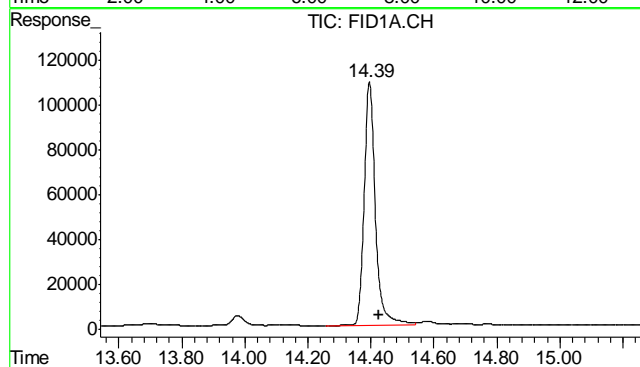






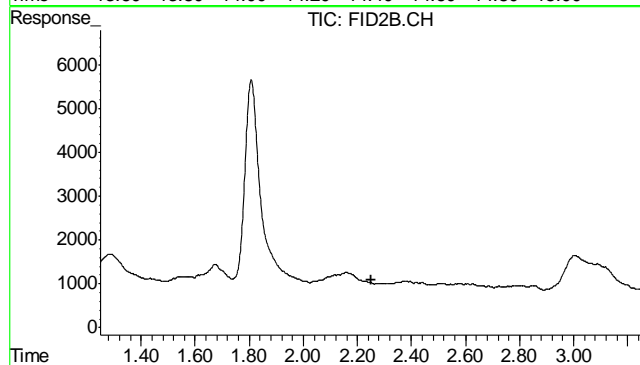
#1 TVH-Gasoline

R.T.: 7.315 min  
Delta R.T.: 0.000 min  
Response: 6776636  
Conc: N.D.



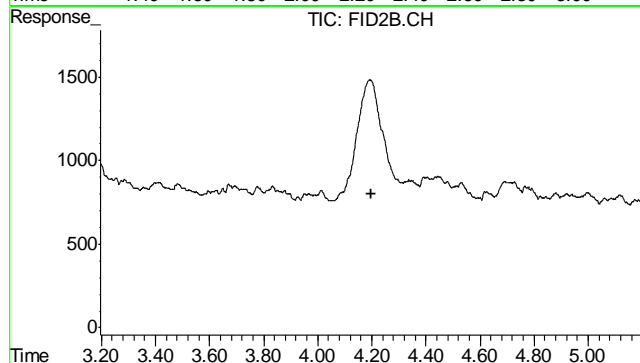
#2 1,2,4-Trichlorobenzene

R.T.: 14.396 min  
Delta R.T.: -0.030 min  
Response: 2690529  
Conc: 91.97 %



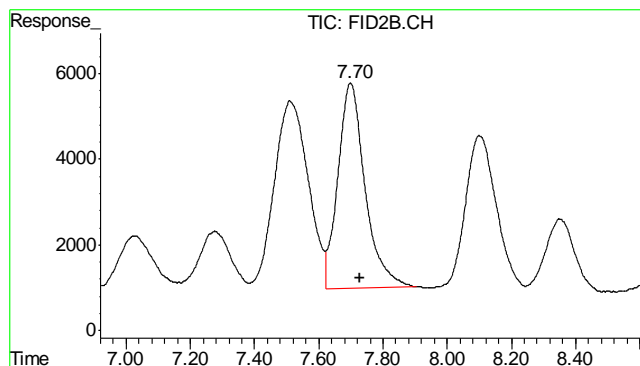
#4 Methyl-t-butyl-ether

R.T.: 0.000 min  
Exp R.T.: 2.249 min  
Response: 0  
Conc: N.D.



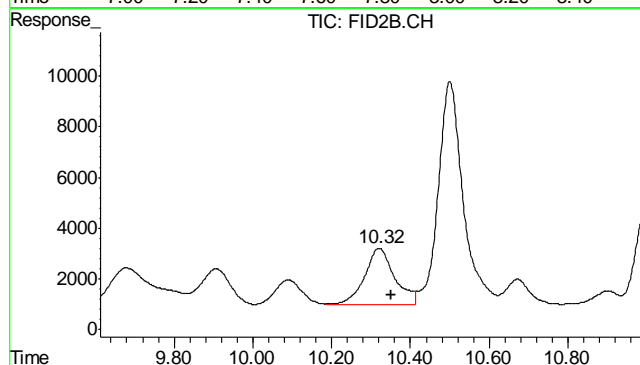
#5 Benzene

R.T.: 0.000 min  
Exp R.T.: 4.196 min  
Response: 0  
Conc: N.D.



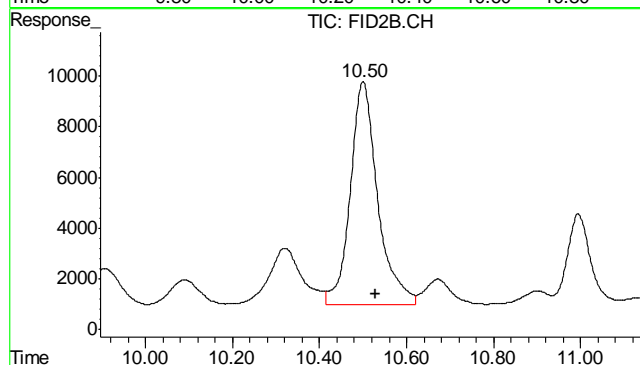
#6 Toluene

R.T.: 7.699 min  
Delta R.T.: -0.029 min  
Response: 282845  
Conc: 0.50 ug/L



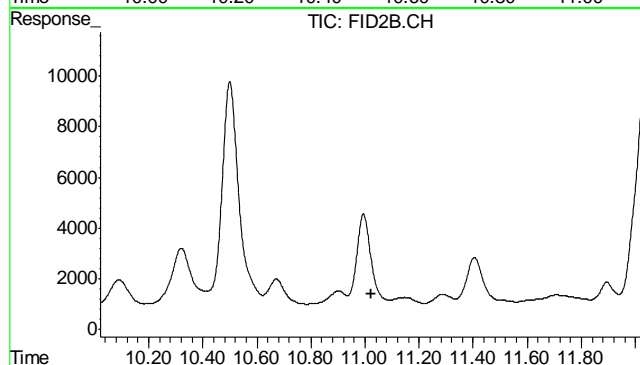
#7 Ethylbenzene

R.T.: 10.321 min  
Delta R.T.: -0.030 min  
Response: 119087  
Conc: 0.24 ug/L



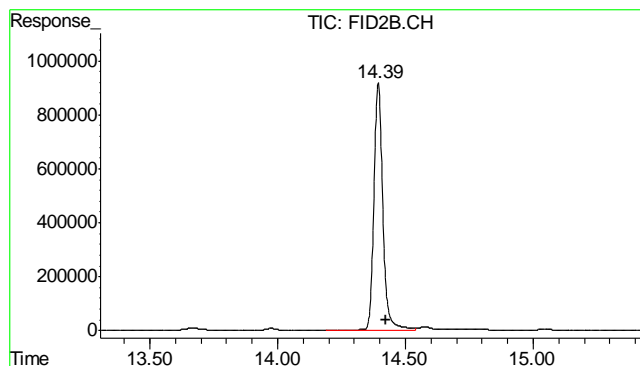
#8 m,p-Xylene

R.T.: 10.500 min  
Delta R.T.: -0.029 min  
Response: 384533  
Conc: 0.25 ug/L



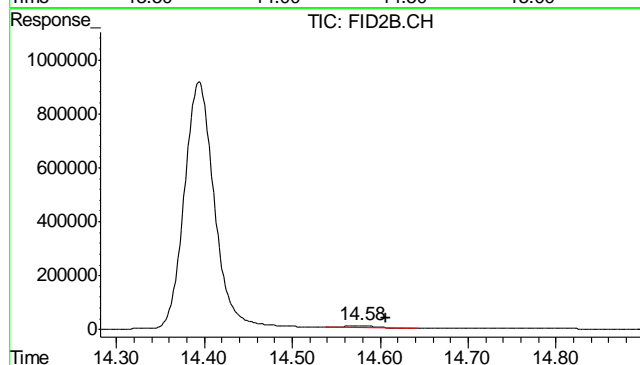
#9 o-Xylene

R.T.: 0.000 min  
Exp R.T.: 11.021 min  
Response: 0  
Conc: N.D.



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

R.T.: 14.394 min  
Delta R.T.: -0.029 min  
Response: 22171556  
Conc: 96.47 %



#11 Naphthalene

R.T.: 14.577 min  
Delta R.T.: -0.029 min  
Response: 173745  
Conc: 0.68 ug/L m

8.2.1

8

## GC Semi-volatiles

### QC Data Summaries

---

Includes the following where applicable:

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

**Method Blank Summary**

Page 1 of 1

**Job Number:** D29455  
**Account:** KRWCCOL KRW Consulting, Inc.  
**Project:** XOM FRU 197-33A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4862-MB	F104505.D	1	11/16/11	CS	11/16/11	OP4862	GFI331

The QC reported here applies to the following samples:

Method: SW846-8015B

D29455-1

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

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	116% 61-142%

9.1.1

9

## Blank Spike Summary

Page 1 of 1

**Job Number:** D29455

**Account:** KRWCCOL KRW Consulting, Inc.

**Project:** XOM FRU 197-33A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4862-BS	FI04506.D	1	11/16/11	CS	11/16/11	OP4862	GFI331

The QC reported here applies to the following samples:

Method: SW846-8015B

D29455-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	667	606	91	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	125%	61-142%

9.2.1

9

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D29455  
Account: KRWCCOL KRW Consulting, Inc.  
Project: XOM FRU 197-33A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4862-MS	FI04507.D	1	11/16/11	CS	11/16/11	OP4862	GFI331
OP4862-MSD	FI04508.D	1	11/16/11	CS	11/16/11	OP4862	GFI331
D29455-1	FI04509.D	1	11/16/11	CS	11/16/11	OP4862	GFI331

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

D29455-1

CAS No.	Compound	D29455-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	2710		755	2930	29	3150	58	7	24-157/35

CAS No.	Surrogate Recoveries	MS	MSD	D29455-1	Limits
84-15-1	o-Terphenyl	81%	88%	100%	61-142%

GC Semi-volatiles

Raw Data



Quantitation Report (QT Reviewed)

Data File : E:\DATA\FI111611\FI04509.D Vial: 12  
Acq On : 16 Nov 2011 4:33 pm Operator: CHAVALIT  
Sample : D29455-1 Inst : FID6  
Misc : OP4862,GFI331,30.02,,,2,1 Multiplr: 1.00  
IntFile : autoint1.e  
Quant Time: Nov 17 08:17:22 2011 Quant Results File: DF-GFI308.RES

Quant Method : C:\MSDCHEM\1\METHODS\DF-GFI308.M (Chemstation Integrator)  
Title : 8015B TEH  
Last Update : Mon Nov 14 09:02:05 2011  
Response via : Initial Calibration  
DataAcq Meth : FR\_BASE2.M

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

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
1) S O-Terphenyl	13.58	55742388	1001.857 mg/L m
Target Compounds			
2) H TPH-DRO (c10-c28)	11.79	1992403391	35906.284 mg/L

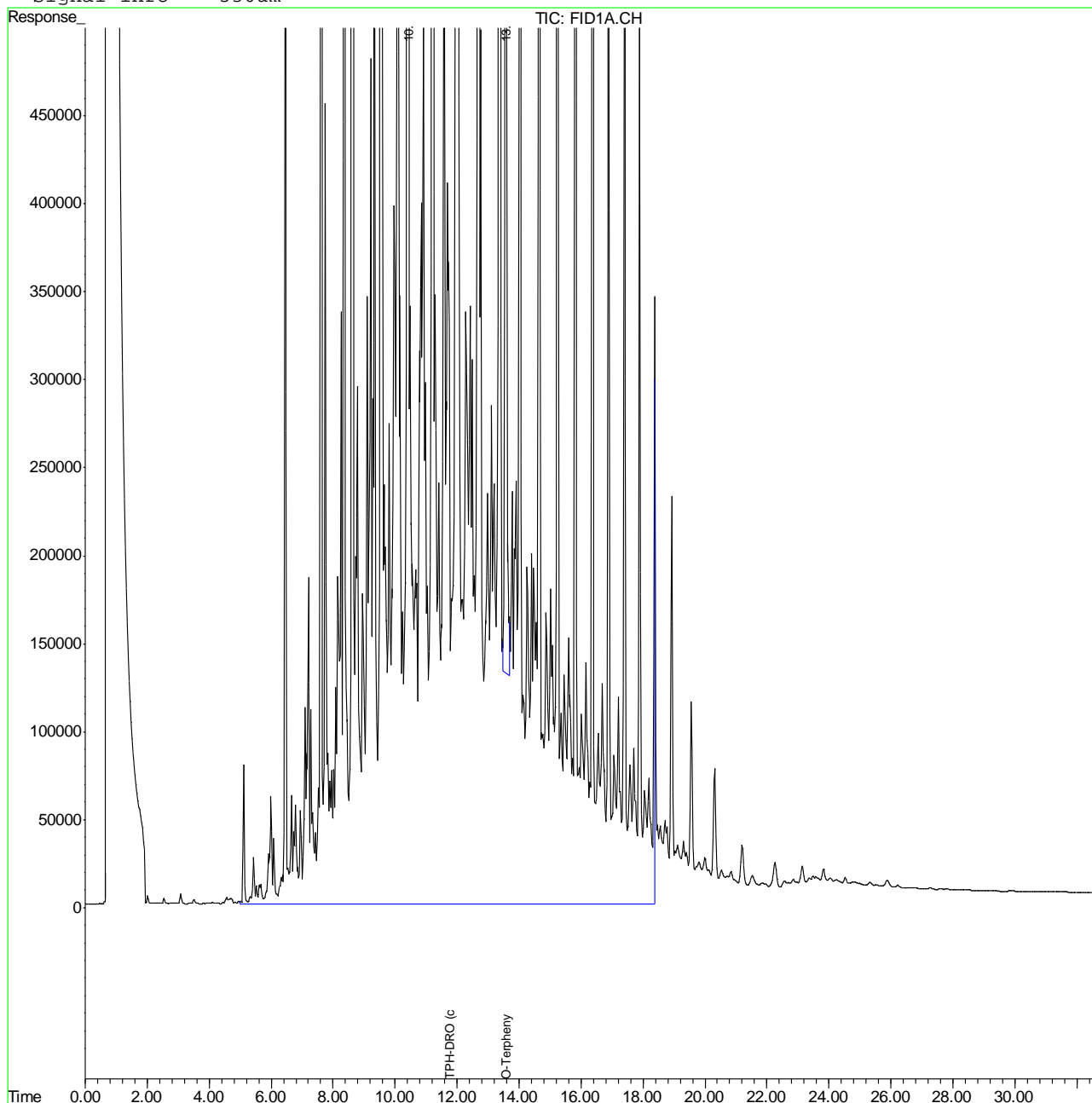
10.1.1  
10

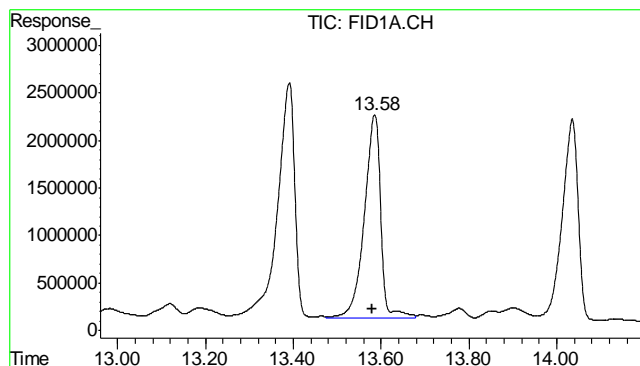
## Quantitation Report (QT Reviewed)

Data File : E:\DATA\FI111611\FI04509.D Vial: 12  
Acq On : 16 Nov 2011 4:33 pm Operator: CHAVALIT  
Sample : D29455-1 Inst : FID6  
Misc : OP4862,GFI331,30.02,,,2,1 Multiplr: 1.00  
IntFile : autoint1.e  
Quant Time: Nov 17 8:19 2011 Quant Results File: DF-GFI308.RES

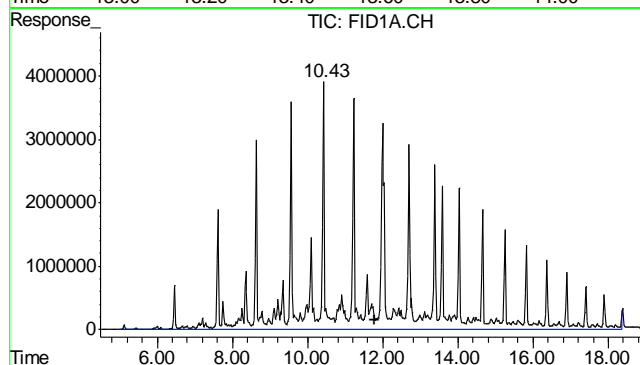
Quant Method : C:\MSDCHEM\1\METHODS\DF-GFI308.M (Chemstation Integrator)  
Title : 8015B TEH  
Last Update : Mon Nov 14 09:02:05 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : FR\_BASE2.M

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

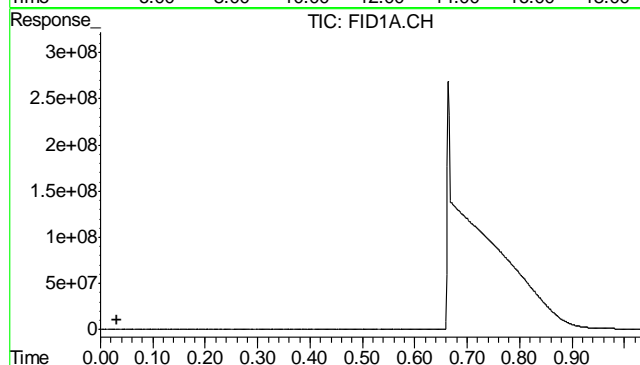




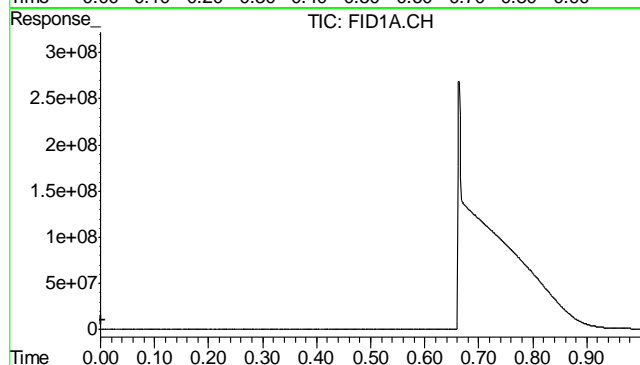
#1 O-Terphenyl  
 R.T.: 13.585 min  
 Delta R.T.: 0.005 min  
 Response: 55742388  
 Conc: 1001.86 mg/L m



#2 TPH-DRO (c10-c28)  
 R.T.: 11.790 min  
 Delta R.T.: 0.000 min  
 Response: 1992403391  
 Conc: 35906.28 mg/L m

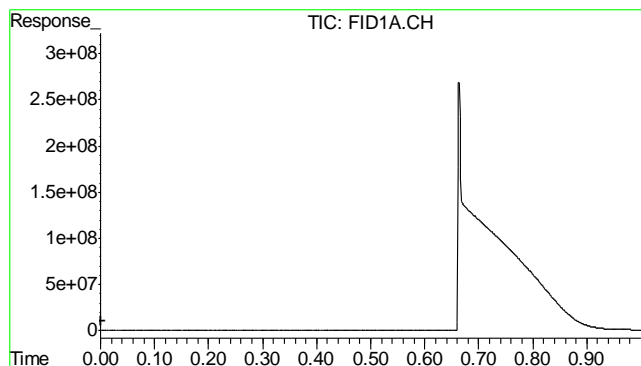


#9 5a-Androstane  
 R.T.: 0.000 min  
 Exp R.T.: 0.032 min  
 Response: 0  
 Conc: N.D.

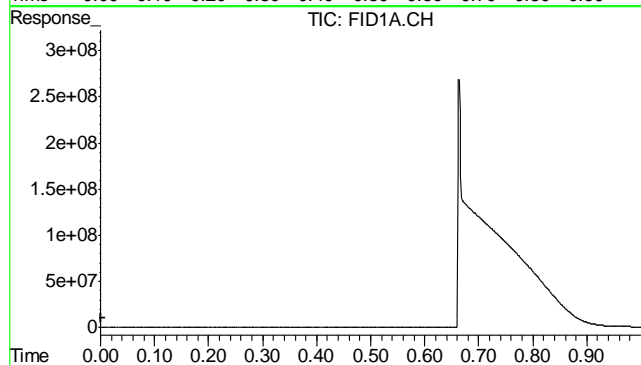


#10 2-Fluorophenol  
 R.T.: 0.000 min  
 Exp R.T.: 0.000 min  
 Response: 0  
 Conc: N.D.

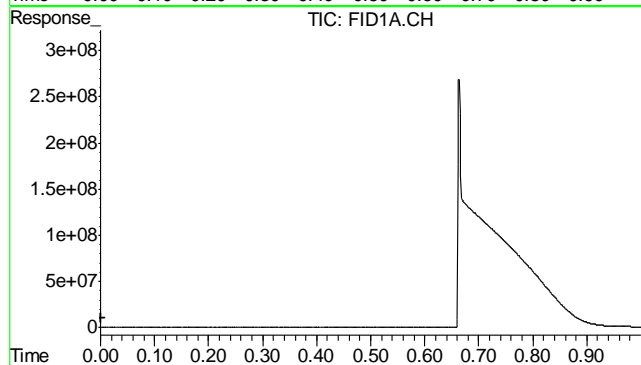
10.1.1  
 10



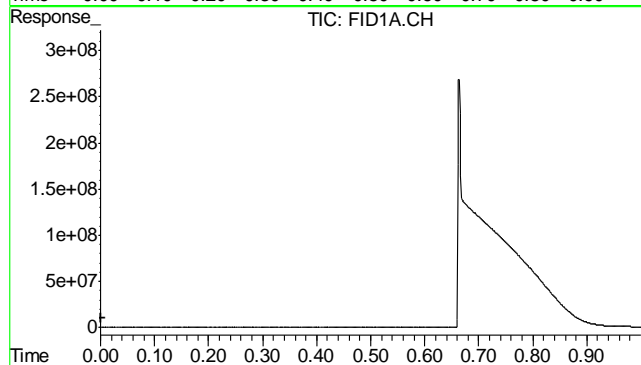
#11 Phenol-d5  
 R.T.: 0.000 min  
 Exp R.T. : 0.000 min  
 Response: 0  
 Conc: N.D.



#12 Nitrobenzene-d5  
 R.T.: 0.000 min  
 Exp R.T. : 0.000 min  
 Response: 0  
 Conc: N.D.

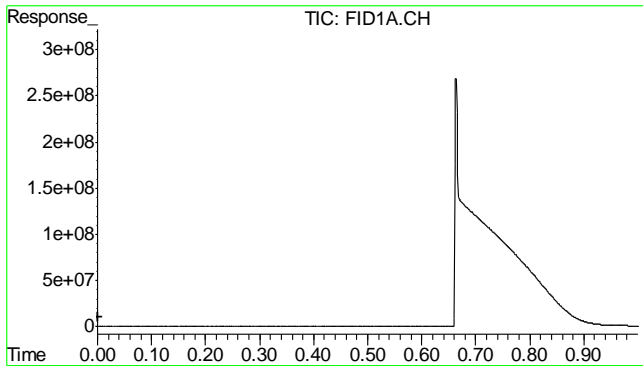


#13 2-Fluorobiphenyl  
 R.T.: 0.000 min  
 Exp R.T. : 0.000 min  
 Response: 0  
 Conc: N.D.



#14 2,4,6-Tribromophenol  
 R.T.: 0.000 min  
 Exp R.T. : 0.000 min  
 Response: 0  
 Conc: N.D.

10.1.1  
 10



#15 Terphenyl-d14

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

10.1.1  
10

Judy Melson  
11/17/11 11:54

## Quantitation Report (QT Reviewed)

Data File : E:\DATA\FI111611\FI04505.D Vial: 8  
Acq On : 16 Nov 2011 1:54 pm Operator: CHAVALIT  
Sample : OP4862-MB Inst : FID6  
Misc : OP4862,GFI331,30.00,,,2,1 Multiplr: 1.00  
IntFile : autoint1.e  
Quant Time: Nov 17 08:15:36 2011 Quant Results File: DF-GFI308.RES

Quant Method : C:\MSDCHEM\1\METHODS\DF-GFI308.M (Chemstation Integrator)  
Title : 8015B TEH  
Last Update : Mon Nov 14 09:02:05 2011  
Response via : Initial Calibration  
DataAcq Meth : FR\_BASE2.M

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

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
1) S O-Terphenyl	13.59	64387669	1157.238 mg/L m

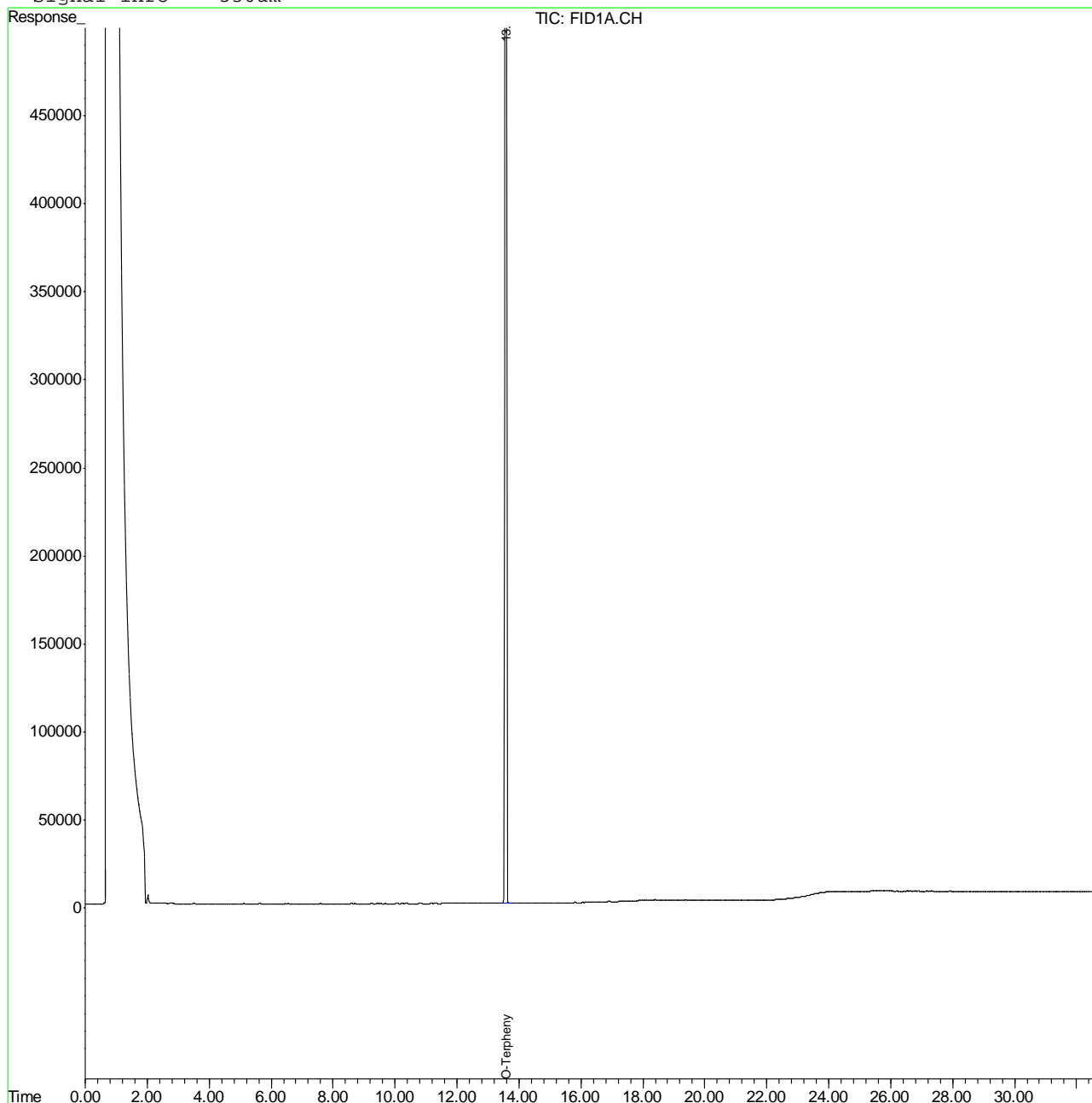
Target Compounds

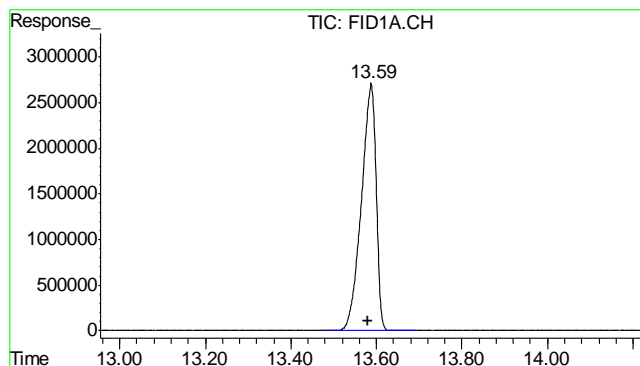
## Quantitation Report (QT Reviewed)

Data File : E:\DATA\FI111611\FI04505.D Vial: 8  
Acq On : 16 Nov 2011 1:54 pm Operator: CHAVALIT  
Sample : OP4862-MB Inst : FID6  
Misc : OP4862,GFI331,30.00,,,2,1 Multiplr: 1.00  
IntFile : autoint1.e  
Quant Time: Nov 17 8:17 2011 Quant Results File: DF-GFI308.RES

Quant Method : C:\MSDCHEM\1\METHODS\DF-GFI308.M (Chemstation Integrator)  
Title : 8015B TEH  
Last Update : Mon Nov 14 09:02:05 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : FR\_BASE2.M

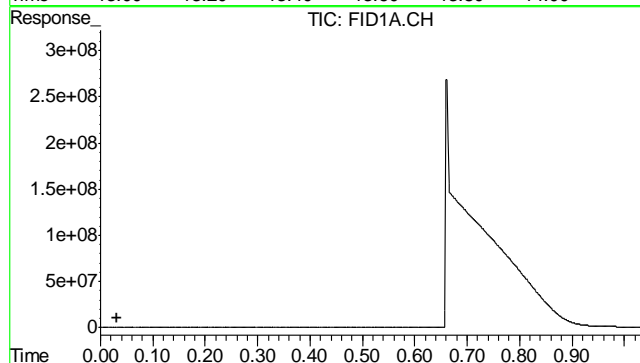
Volume Inj. : 1ul  
Signal Phase : RTX-5  
Signal Info : 530um





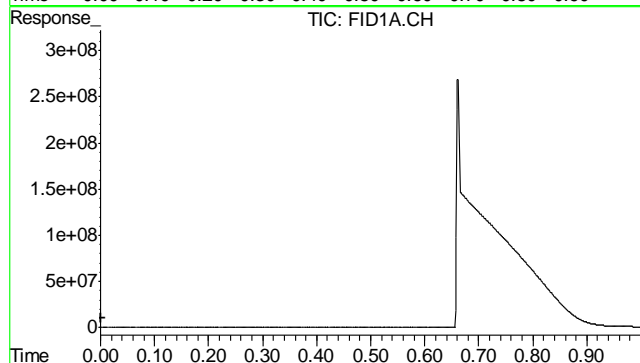
#1 O-Terphenyl

R.T.: 13.588 min  
Delta R.T.: 0.008 min  
Response: 64387669  
Conc: 1157.24 mg/L m



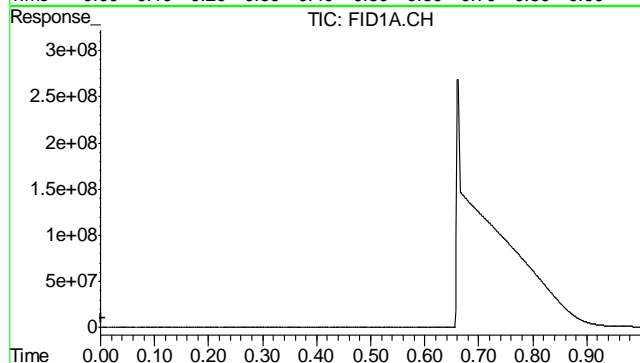
#9 5a-Androstane

R.T.: 0.000 min  
Exp R.T. : 0.032 min  
Response: 0  
Conc: N.D.



#10 2-Fluorophenol

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

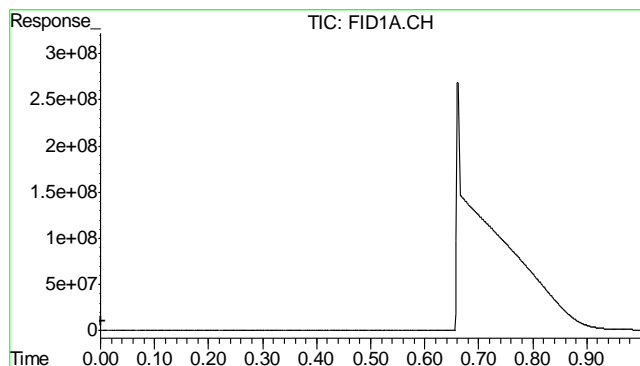


#11 Phenol-d5

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

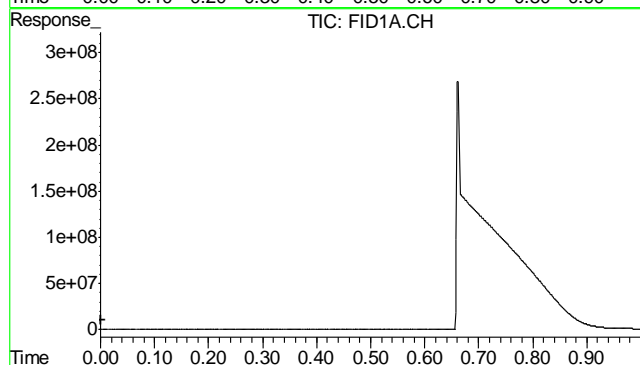
10.2.1  
10





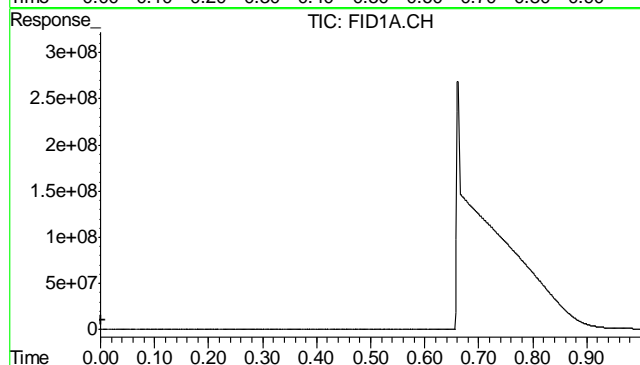
#12 Nitrobenzene-d5

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



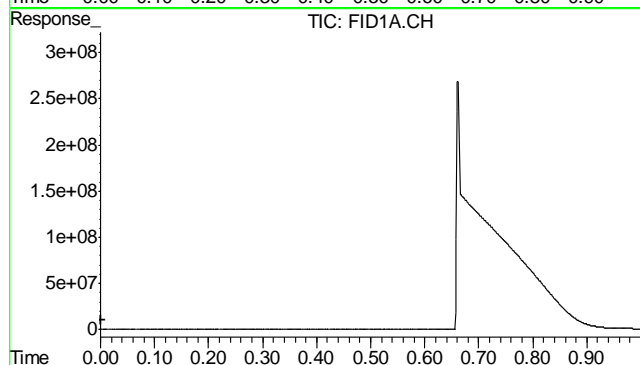
#13 2-Fluorobiphenyl

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



#14 2,4,6-Tribromophenol

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



#15 Terphenyl-d14

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