



06/21/12

Technical Report for

XTO Energy

PCU 297-10B

1105-20A

Accutest Job Number: D35569

Sampling Date: 06/14/12

Report to:

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Total number of pages in report: 126



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.


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Certifications: CO, ID, NE, NM, ND (R-027) (PW), UT (NELAP CO00049), TX (T104704511-12-1)

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Test results relate only to samples analyzed.

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Sample Summary

XTO Energy

Job No: D35569

PCU 297-10B

Project No: 1105-20A

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
D35569-1	06/14/12	11:25	CB	06/16/12	SO	Soil	FW EAST SW NORTH 1/3 0'-5'
D35569-2	06/14/12	11:35	CB	06/16/12	SO	Soil	FW EAST SW NORTH 1/3 5'-15'
D35569-3	06/14/12	11:45	CB	06/16/12	SO	Soil	FW EAST SW NORTH 1/3 15'-18'
D35569-4	06/14/12	13:00	CB	06/16/12	SO	Soil	FW NORTH SW EAST 1/3 0'-12'
D35569-5	06/14/12	12:10	CB	06/16/12	SO	Soil	FW NORTH SW EAST 1/3 12'-15'
D35569-6	06/14/12	12:00	CB	06/16/12	SO	Soil	FW NORTH SW EAST 1/3 15'-18'
D35569-7	06/14/12	13:30	CB	06/16/12	SO	Soil	FW NORTH SW WEST 1/3 0'-5'
D35569-8	06/14/12	13:10	CB	06/16/12	SO	Soil	FW NORTH SW WEST 1/3 5'-11'
D35569-9	06/14/12	12:25	CB	06/16/12	SO	Soil	FW NORTH SW WEST 1/3 11'-14'
D35569-10	06/14/12	12:45	CB	06/16/12	SO	Soil	FW NORTH SW WEST 1/3 14'-18'

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



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: XTO Energy

Job No D35569

Site: PCU 297-10B

Report Date 6/21/2012 4:33:05 PM

On 06/16/2012, 10 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 4.8 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D35569 was assigned to the project. The lab sample IDs, client sample IDs, and date of sample collection are detailed in the report's Results Summary.

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

Volatiles by GC By Method SW846 8015B

Matrix SO

Batch ID: GGB908

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D35569-1MS, D35569-1MSD were used as the QC samples indicated.
- Sample(s) D35569-2, D35569-5, D35569-9 have surrogates outside control limits. Probable cause due to matrix interference.
- D35569-9 for 1,2,4 Trichlorobenzene: Outside control limits due to possible matrix interference.
- D35569-5 for 1,2,4 Trichlorobenzene: Outside control limits due to possible matrix interference.
- D35569-2 for 1,2,4 Trichlorobenzene: Outside control limits due to possible matrix interference.

Extractables by GC By Method SW846-8015B

Matrix SO

Batch ID: OP6079

- All samples were extracted and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D35569-1MS, D35569-1MSD were used as the QC samples indicated.
- The blank spike (BS) recovery(s) of TPH-DRO (C10-C28) are outside control limits.

Wet Chemistry By Method SM19 2540B M

Matrix SO

Batch ID: GN15461

- 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

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Report of Analysis

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Client Sample ID:	FW EAST SW NORTH 1/3 0' -5'					Date Sampled:	06/14/12
Lab Sample ID:	D35569-1					Date Received:	06/16/12
Matrix:	SO - Soil					Percent Solids:	93.7
Method:	SW846 8015B						
Project:	PCU 297-10B						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB16359.D	1	06/18/12	SK	n/a	n/a	GGB908
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	11	5.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	111%		60-140%		

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

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

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Report of Analysis

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Client Sample ID:	FW EAST SW NORTH 1/3 0' -5'					Date Sampled:	06/14/12
Lab Sample ID:	D35569-1					Date Received:	06/16/12
Matrix:	SO - Soil					Percent Solids:	93.7
Method:	SW846-8015B SW846 3546						
Project:	PCU 297-10B						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD14426.D	1	06/19/12	AW	06/18/12	OP6079	GFD755
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	18.2	7.1	4.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	75%		43-136%		

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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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

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Client Sample ID:	FW EAST SW NORTH 1/3 5'-15'					Date Sampled:	06/14/12
Lab Sample ID:	D35569-2					Date Received:	06/16/12
Matrix:	SO - Soil					Percent Solids:	94.8
Method:	SW846 8015B						
Project:	PCU 297-10B						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB16362.D	1	06/18/12	SK	n/a	n/a	GGB908
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	50.0 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	18.3	22	11	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	153% ^a		60-140%		

(a) Outside control limits due to possible matrix interference.

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

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Client Sample ID:	FW EAST SW NORTH 1/3 5'-15'			Date Sampled:	06/14/12
Lab Sample ID:	D35569-2			Date Received:	06/16/12
Matrix:	SO - Soil			Percent Solids:	94.8
Method:	SW846-8015B SW846 3546				
Project:	PCU 297-10B				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD14428.D	10	06/19/12	AW	06/18/12	OP6079	GFD755
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	3.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	33800	210	140	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	69%		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

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Client Sample ID:	FW EAST SW NORTH 1/3 15'-18'					Date Sampled:	06/14/12
Lab Sample ID:	D35569-3					Date Received:	06/16/12
Matrix:	SO - Soil					Percent Solids:	96.5
Method:	SW846 8015B						
Project:	PCU 297-10B						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB16363.D	1	06/18/12	SK	n/a	n/a	GGB908
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	11	5.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	135%		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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Client Sample ID:	FW EAST SW NORTH 1/3 15'-18'			Date Sampled:	06/14/12
Lab Sample ID:	D35569-3			Date Received:	06/16/12
Matrix:	SO - Soil			Percent Solids:	96.5
Method:	SW846-8015B SW846 3546				
Project:	PCU 297-10B				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD14594.D	10	06/21/12	AW	06/18/12	OP6079	GFD761
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	7380	69	45	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	79%		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

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Client Sample ID:	FW NORTH SW EAST 1/3 0'-12'					Date Sampled:	06/14/12
Lab Sample ID:	D35569-4					Date Received:	06/16/12
Matrix:	SO - Soil					Percent Solids:	94.6
Method:	SW846 8015B						
Project:	PCU 297-10B						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB16364.D	1	06/18/12	SK	n/a	n/a	GGB908
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	11	5.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	106%		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

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Client Sample ID: FW NORTH SW EAST 1/3 0'-12'
Lab Sample ID: D35569-4
Matrix: SO - Soil
Method: SW846-8015B SW846 3546
Project: PCU 297-10B

Date Sampled: 06/14/12
Date Received: 06/16/12
Percent Solids: 94.6

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD14432.D	1	06/19/12	AW	06/18/12	OP6079	GFD755
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	151	7.0	4.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	80%		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

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Report of Analysis

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Client Sample ID:	FW NORTH SW EAST 1/3 12'-15'					Date Sampled:	06/14/12
Lab Sample ID:	D35569-5					Date Received:	06/16/12
Matrix:	SO - Soil					Percent Solids:	96.5
Method:	SW846 8015B						
Project:	PCU 297-10B						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB16365.D	1	06/18/12	SK	n/a	n/a	GGB908
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)	11.7	11	5.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	150% ^a		60-140%		

(a) Outside control limits due to possible matrix interference.

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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Client Sample ID:	FW NORTH SW EAST 1/3 12'-15'					Date Sampled:	06/14/12
Lab Sample ID:	D35569-5					Date Received:	06/16/12
Matrix:	SO - Soil					Percent Solids:	96.5
Method:	SW846-8015B SW846 3546						
Project:	PCU 297-10B						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD14434.D	10	06/19/12	AW	06/18/12	OP6079	GFD755
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	3.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	36900	210	130	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	117%		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

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Client Sample ID:	FW NORTH SW EAST 1/3 15'-18'			Date Sampled:	06/14/12
Lab Sample ID:	D35569-6			Date Received:	06/16/12
Matrix:	SO - Soil			Percent Solids:	97.8
Method:	SW846 8015B				
Project:	PCU 297-10B				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB16366.D	1	06/18/12	SK	n/a	n/a	GGB908
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	10	5.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	110%		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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Client Sample ID:	FW NORTH SW EAST 1/3 15'-18'					Date Sampled:	06/14/12
Lab Sample ID:	D35569-6					Date Received:	06/16/12
Matrix:	SO - Soil					Percent Solids:	97.8
Method:	SW846-8015B SW846 3546						
Project:	PCU 297-10B						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD14596.D	5	06/21/12	AW	06/18/12	OP6079	GFD761
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	2710	34	22	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	103%		43-136%		

ND = Not detected MDL - Method Detection Limit
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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

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Client Sample ID:	FW NORTH SW WEST 1/3 0' -5'					Date Sampled:	06/14/12
Lab Sample ID:	D35569-7					Date Received:	06/16/12
Matrix:	SO - Soil					Percent Solids:	97.3
Method:	SW846 8015B						
Project:	PCU 297-10B						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB16367.D	1	06/18/12	SK	n/a	n/a	GGB908
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	11	5.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	97%		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

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Client Sample ID:	FW NORTH SW WEST 1/3 0' -5'					Date Sampled:	06/14/12
Lab Sample ID:	D35569-7					Date Received:	06/16/12
Matrix:	SO - Soil					Percent Solids:	97.3
Method:	SW846-8015B SW846 3546						
Project:	PCU 297-10B						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD14438.D	1	06/19/12	AW	06/18/12	OP6079	GFD755
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	32.4	6.8	4.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	90%		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

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Report of Analysis

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Client Sample ID: FW NORTH SW WEST 1/3 5'-11'
Lab Sample ID: D35569-8
Matrix: SO - Soil
Method: SW846 8015B
Project: PCU 297-10B

Date Sampled: 06/14/12
Date Received: 06/16/12
Percent Solids: 97.5

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB16368.D	1	06/18/12	SK	n/a	n/a	GGB908
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)	ND	10	5.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	101%		60-140%		

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

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

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	FW NORTH SW WEST 1/3 5'-11'					Date Sampled:	06/14/12
Lab Sample ID:	D35569-8					Date Received:	06/16/12
Matrix:	SO - Soil					Percent Solids:	97.5
Method:	SW846-8015B SW846 3546						
Project:	PCU 297-10B						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD14440.D	1	06/19/12	AW	06/18/12	OP6079	GFD755
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	65.1	6.8	4.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	78%		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

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Client Sample ID:	FW NORTH SW WEST 1/3 11'-14'					Date Sampled:	06/14/12
Lab Sample ID:	D35569-9					Date Received:	06/16/12
Matrix:	SO - Soil					Percent Solids:	94.5
Method:	SW846 8015B						
Project:	PCU 297-10B						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB16369.D	1	06/18/12	SK	n/a	n/a	GGB908
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)	21.4	11	5.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	148% ^a		60-140%		

(a) Outside control limits due to possible matrix interference.

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

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

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	FW NORTH SW WEST 1/3 11'-14'					Date Sampled:	06/14/12
Lab Sample ID:	D35569-9					Date Received:	06/16/12
Matrix:	SO - Soil					Percent Solids:	94.5
Method:	SW846-8015B SW846 3546						
Project:	PCU 297-10B						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD14442.D	10	06/19/12	AW	06/18/12	OP6079	GFD755
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	3.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	52200	210	140	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	124%		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

Page 1 of 1

Client Sample ID:	FW NORTH SW WEST 1/3 14' -18'			Date Sampled:	06/14/12
Lab Sample ID:	D35569-10			Date Received:	06/16/12
Matrix:	SO - Soil			Percent Solids:	97.1
Method:	SW846 8015B				
Project:	PCU 297-10B				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB16370.D	1	06/18/12	SK	n/a	n/a	GGB908
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	11	5.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	99%		60-140%		

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

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

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	FW NORTH SW WEST 1/3 14' -18'			Date Sampled:	06/14/12
Lab Sample ID:	D35569-10			Date Received:	06/16/12
Matrix:	SO - Soil			Percent Solids:	97.1
Method:	SW846-8015B SW846 3546				
Project:	PCU 297-10B				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD14444.D	1	06/19/12	AW	06/18/12	OP6079	GFD755
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	654	6.8	4.4	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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

PAGE 1 OF 1

4036 Youngfield Street, Wheat Ridge, CO 80033
TEL: 303-425-6021 FAX: 303-425-6854
www.accutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # D35569
Requested Analysis (see TEST CODE sheet)	
Matrix Codes	
DW - Drinking Water GW - Ground Water WW - Wastewater 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	
LAB USE ONLY	

Client / Reporting Information		Project Information	
Company Name KRW Consulting		Project Name XTO PCU 297-10B	
Street Address 8000 West 14th Street, Suite 200		Street Lakewood, CO 80214	
City Lakewood, CO 80214		City Lakewood, CO 80214	
Project Contact Dwayne Knudson		Project # 1105-20A	
Phone # 970-488-1088		Client Purchase Order # 21489 CR 5	
Sampler(s) Name(s) Craig Burger		Project Manager Joe Hess	
970-488-1088		Attention: Jessica Dooling	
Turnaround Time (Business days)		Data Deliverable Information	
Approved By (Accutest PM): / Date:		Comments / Special Instructions	
<input type="checkbox"/> Std. 10 Business Days <input checked="" type="checkbox"/> Std. 5 Business Days (By contract only) <input type="checkbox"/> 3 Day Emergency <input type="checkbox"/> 2 Day Emergency <input type="checkbox"/> 1 Day Emergency <input type="checkbox"/> Emergency & Rush T/A data available V/A Lablink		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> COMMBN <input type="checkbox"/> COMMBN+ <input type="checkbox"/> State Forms Required <input type="checkbox"/> Send Forms to State <input type="checkbox"/> Report by Fax <input checked="" type="checkbox"/> Report by PDF ONLY <input type="checkbox"/> EDD Format Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial BN = Results/QC/Narrative (+ chromatograms)	
Relinquished by Sampler: 1		Received By: 1	
Date Time: 6/15/12 1200		Date Time: 6/15/12	
Relinquished by Sampler: 2		Received By: 2	
Date Time:		Date Time:	
Relinquished by: 3		Received By: 3	
Date Time:		Date Time:	
Relinquished by: 4		Received By: 4	
Date Time:		Date Time:	
Custody Seal # 606x		Intact <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not Intact	
Preserved where applicable <input type="checkbox"/>		On lot <input checked="" type="checkbox"/>	
Cooler Temp. 4.8			

D35569: Chain of Custody

Page 1 of 2



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D35569

Client: KRW CONSULTING

Immediate Client Services Action Required: No

Date / Time Received: 6/16/2012 9:45:00 AM

No. Coolers: 1

Client Service Action Required at Login: No

Project: XTO PCU 297-10B

Airbill #'s: FedEx

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

D35569: Chain of Custody
Page 2 of 2

GC Volatiles

5

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Page 1 of 1

Job Number: D35569
Account: XTOKRWR XTO Energy
Project: PCU 297-10B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB908-MB	GB16357.D	1	06/18/12	SK	n/a	n/a	GGB908

The QC reported here applies to the following samples:

Method: SW846 8015B

D35569-1, D35569-2, D35569-3, D35569-4, D35569-5, D35569-6, D35569-7, D35569-8, D35569-9, D35569-10

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	122% 60-140%

Blank Spike Summary

Job Number: D35569
Account: XTOKRWR XTO Energy
Project: PCU 297-10B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB908-BS	GB16358.D	1	06/18/12	SK	n/a	n/a	GGB908

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

D35569-1, D35569-2, D35569-3, D35569-4, D35569-5, D35569-6, D35569-7, D35569-8, D35569-9, D35569-10

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	110	121	110	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	122%	60-140%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D35569
Account: XTOKRWR XTO Energy
Project: PCU 297-10B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D35569-1MS	GB16360.D	1	06/18/12	SK	n/a	n/a	GGB908
D35569-1MSD	GB16361.D	1	06/18/12	SK	n/a	n/a	GGB908
D35569-1	GB16359.D	1	06/18/12	SK	n/a	n/a	GGB908

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

D35569-1, D35569-2, D35569-3, D35569-4, D35569-5, D35569-6, D35569-7, D35569-8, D35569-9, D35569-10

CAS No.	Compound	D35569-1 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	124	136	109	135	109	1	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D35569-1	Limits
120-82-1	1,2,4-Trichlorobenzene	116%	115%	111%	60-140%

GC Volatiles

Raw Data



Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16359.D\FID1A.CH Vial: 7
 Signal #2 : Y:\1\DATA\061812\GB16359.D\FID2B.CH
 Acq On : 18 Jun 2012 2:04 pm Operator: StephK
 Sample : D35569-1, 50X Inst : GC/MS Ins
 Misc : GC2918,GGB908,5.023,,100,5,1 Multiplr: 1.00
 IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
 Quant Time: Jun 18 14:55:58 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
 Title : 8015B/8021B TVH/BTEX
 Last Update : Mon Jun 18 13:49:47 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	3484788	111.214	%
10) S	1,2,4-Trichlorobenzene (P)	14.32	19281664	118.636	%
Target Compounds					
1) H	TVH-Gasoline	7.23	4510001	<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	7.58	208055	0.525	ug/L
7) T	Ethylbenzene	0.00	0	N.D.	ug/L d
8) T	m,p-Xylene	10.41	182630	0.127	ug/L
9) T	o-Xylene	0.00	0	N.D.	ug/L d
11) T	Naphthalene	14.50	561908	2.848	ug/L

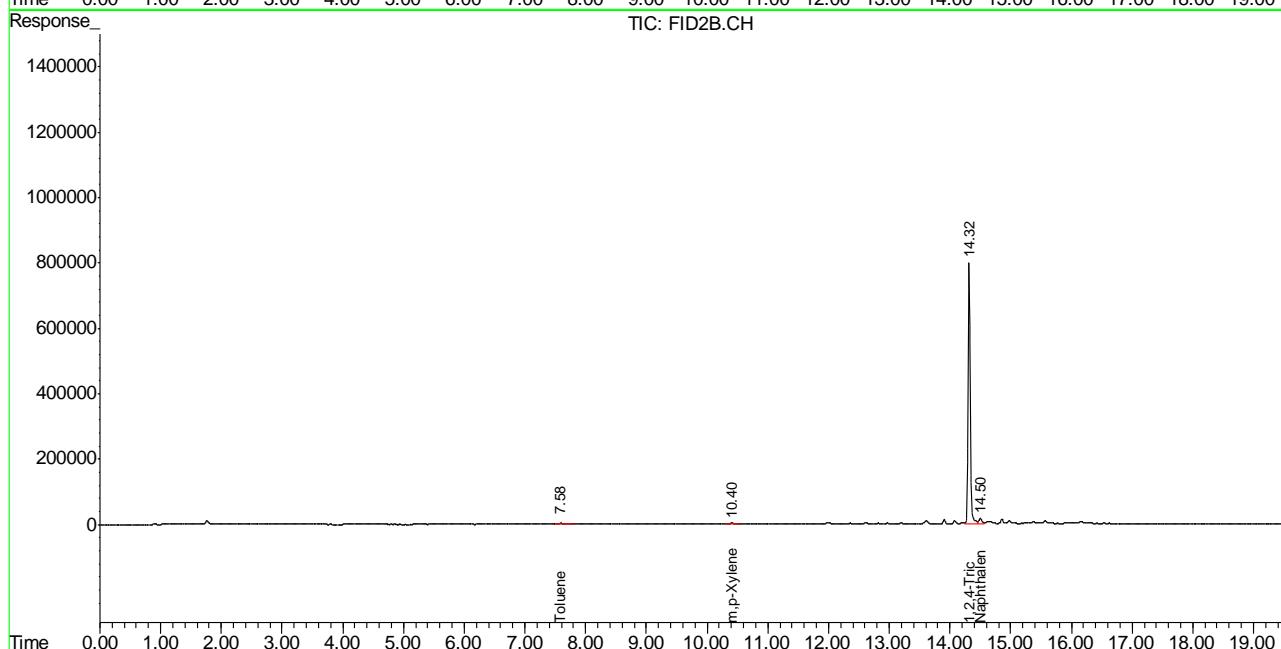
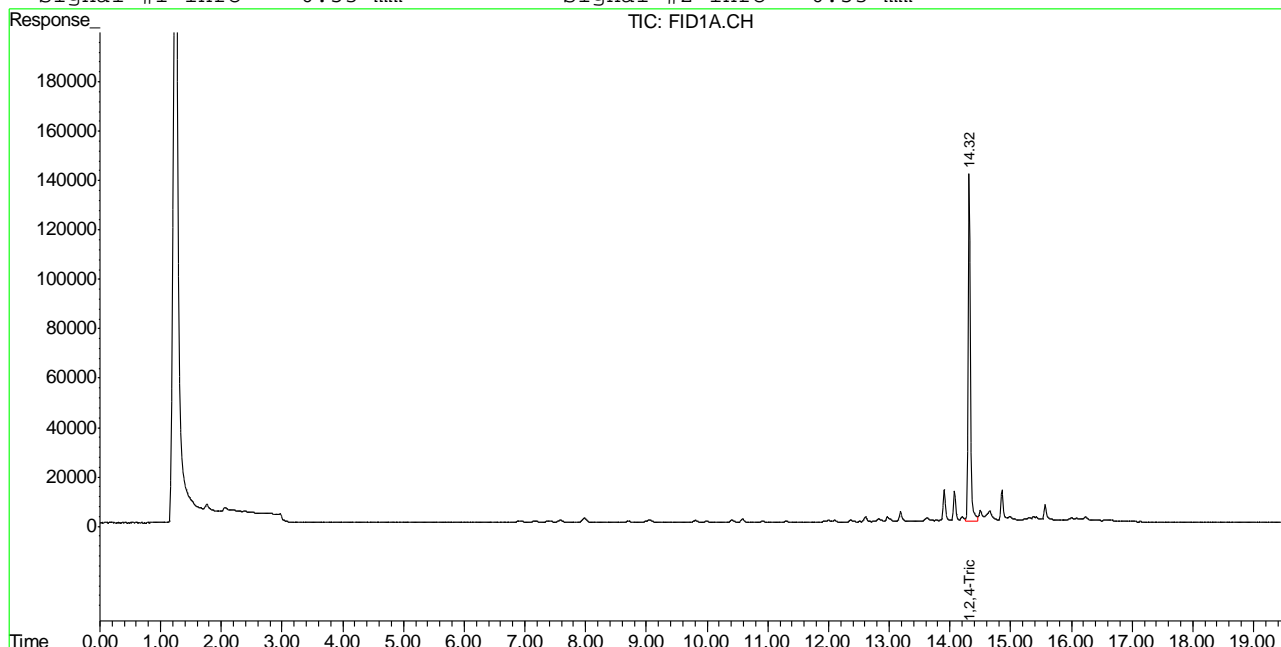
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 GB16359.D TB868GB868SOIL.M Tue Jun 19 10:02:51 2012 GC

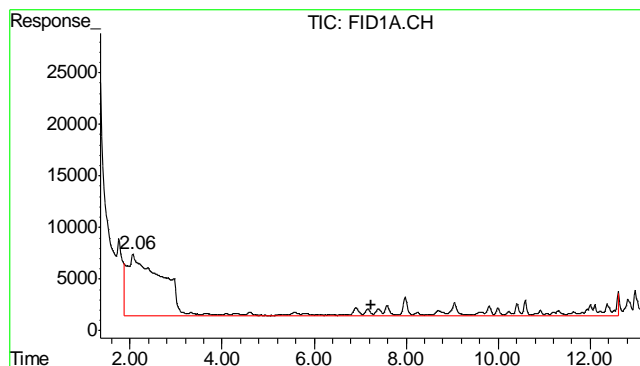
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16359.D\FID1A.CH Vial: 7
 Signal #2 : Y:\1\DATA\061812\GB16359.D\FID2B.CH
 Acq On : 18 Jun 2012 2:04 pm Operator: StephK
 Sample : D35569-1, 50X Inst : GC/MS Ins
 Misc : GC2918,GGB908,5.023,,100,5,1 Multiplr: 1.00
 IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
 Quant Time: Jun 18 13:58 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
 Title : 8015B/8021B TVH/BTEX
 Last Update : Mon Jun 18 13:49:47 2012
 Response via : Multiple Level Calibration
 DataAcq Meth : TVB4.M

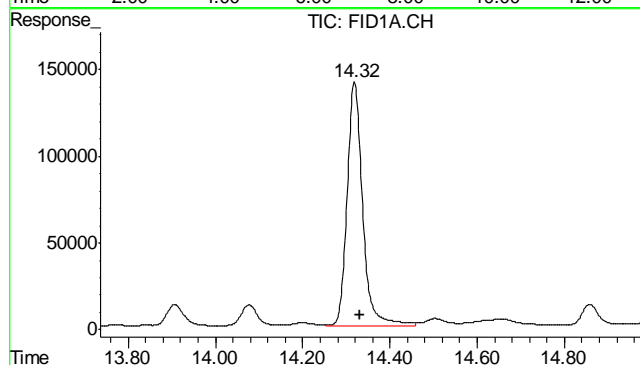
Volume Inj. :
 Signal #1 Phase : DB-624 Signal #2 Phase: DB-624
 Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm





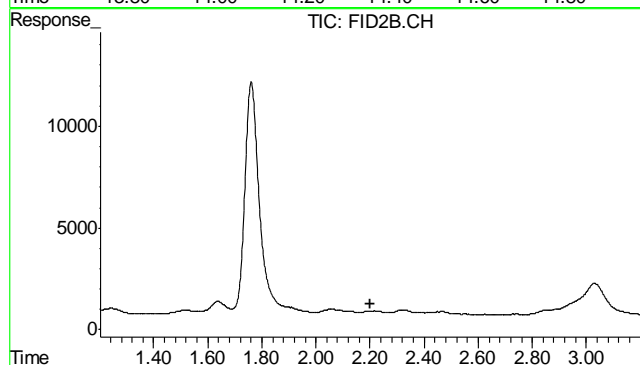
#1 TVH-Gasoline

R.T.: 7.230 min
Delta R.T.: 0.000 min
Response: 4510001
Conc: N.D.



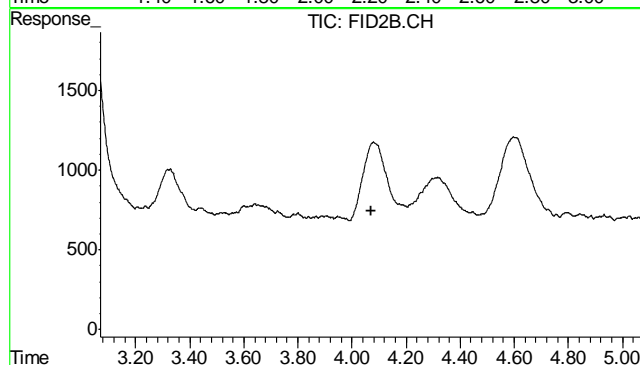
#2 1,2,4-Trichlorobenzene

R.T.: 14.319 min
Delta R.T.: -0.012 min
Response: 3484788
Conc: 111.21 %



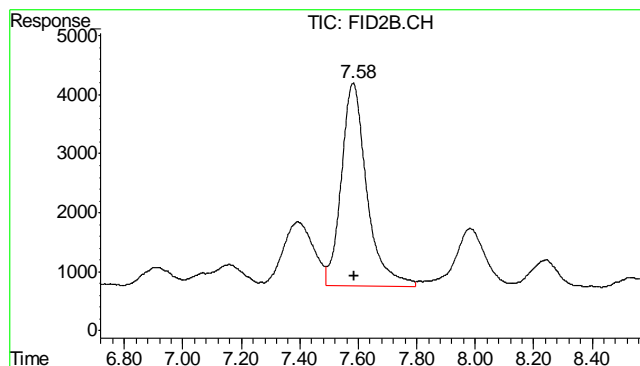
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T.: 2.202 min
Response: 0
Conc: N.D.



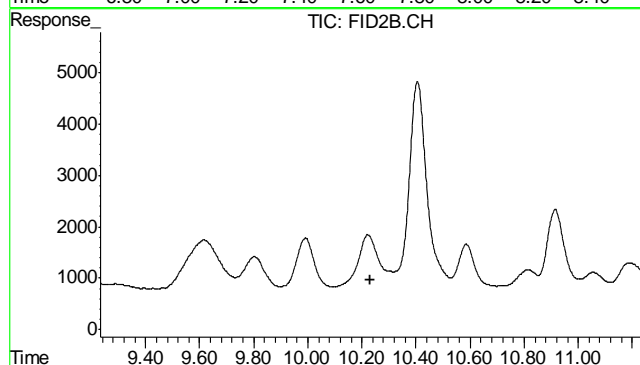
#5 Benzene

R.T.: 0.000 min
Exp R.T.: 4.070 min
Response: 0
Conc: N.D.



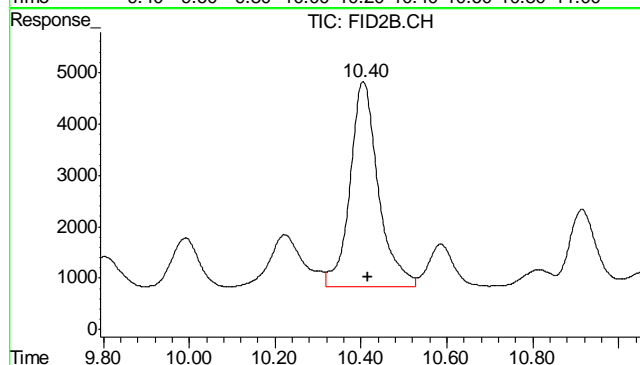
#6 Toluene

R.T.: 7.583 min
Delta R.T.: -0.005 min
Response: 208055
Conc: 0.53 ug/L



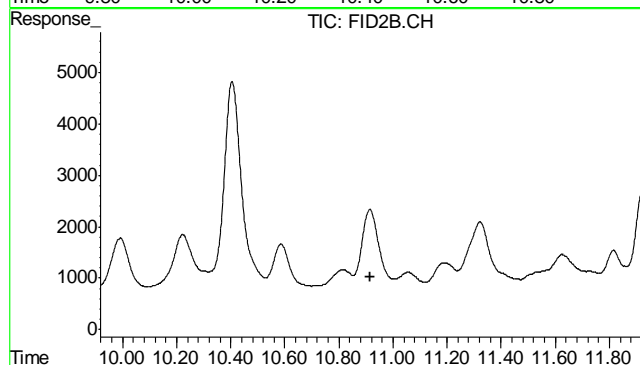
#7 Ethylbenzene

R.T.: 0.000 min
Exp R.T.: 10.232 min
Response: 0
Conc: N.D.



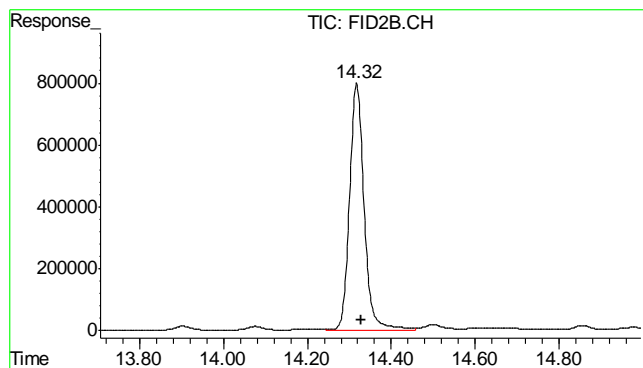
#8 m,p-Xylene

R.T.: 10.405 min
Delta R.T.: -0.010 min
Response: 182630
Conc: 0.13 ug/L



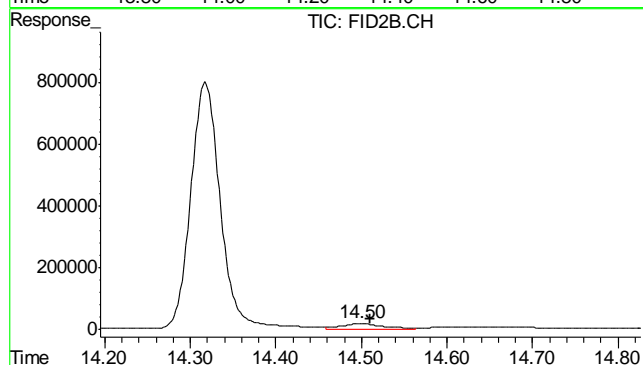
#9 o-Xylene

R.T.: 0.000 min
Exp R.T.: 10.917 min
Response: 0
Conc: N.D.



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

R.T.: 14.318 min
 Delta R.T.: -0.011 min
 Response: 19281664
 Conc: 118.64 %



#11 Naphthalene

R.T.: 14.500 min
 Delta R.T.: -0.011 min
 Response: 561908
 Conc: 2.85 ug/L

6.1.1

6

Judy Melson
06/19/12 12:15

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16362.D\FID1A.CH Vial: 10
 Signal #2 : Y:\1\DATA\061812\GB16362.D\FID2B.CH
 Acq On : 18 Jun 2012 3:51 pm Operator: StephK
 Sample : D35569-2, 100X Inst : GC/MS Ins
 Misc : GC2918,GGB908,5.042,,50,5,1 Multiplr: 1.00
 IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
 Quant Time: Jun 19 08:35:34 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
 Title : 8015B/8021B TVH/BTEX
 Last Update : Mon Jun 18 13:49:47 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	4794056	152.998 %	m
10) S 1,2,4-Trichlorobenzene (P)	14.32	40566381	249.597 %	
Target Compounds				
1) H TVH-Gasoline	7.23	12549365	0.166 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	7.58	224382	0.566 ug/L	
7) T Ethylbenzene	0.00	0	N.D. ug/L	d
8) T m,p-Xylene	10.41	489355	0.967 ug/L	
9) T o-Xylene	10.91	141790	0.432 ug/L	
11) T Naphthalene	14.51	31723722	160.782 ug/L	

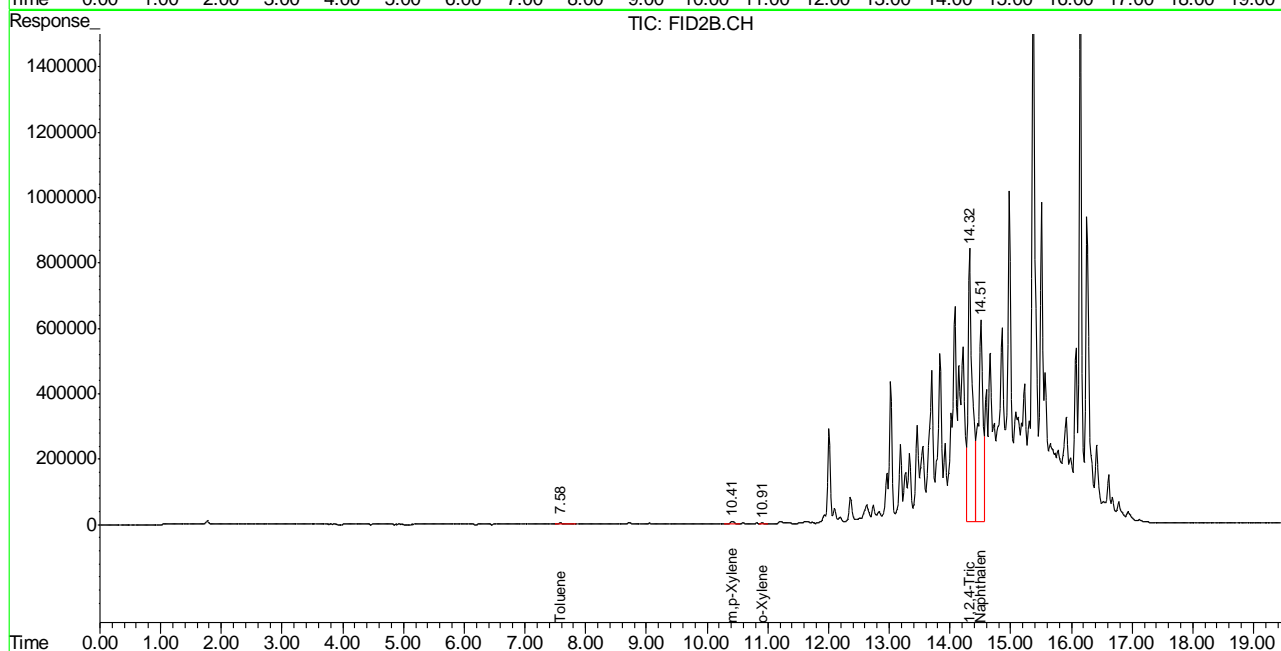
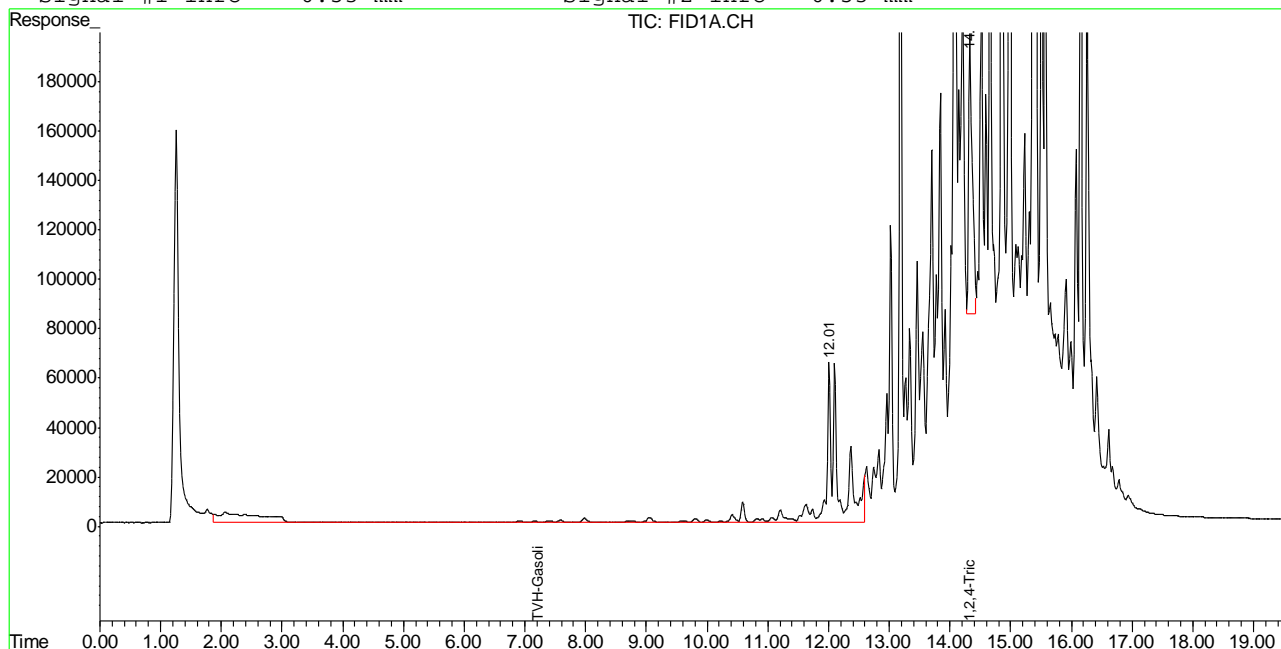
(f)=RT Delta > 1/2 Window (m)=manual int.
 GB16362.D TB868GB868SOIL.M Tue Jun 19 10:03:00 2012 GC

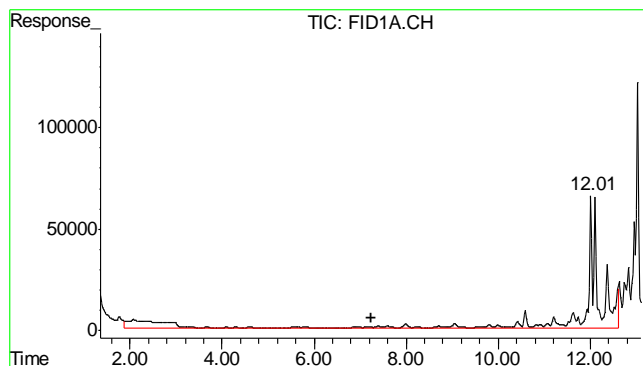
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16362.D\FID1A.CH Vial: 10
Signal #2 : Y:\1\DATA\061812\GB16362.D\FID2B.CH
Acq On : 18 Jun 2012 3:51 pm Operator: StephK
Sample : D35569-2, 100X Inst : GC/MS Ins
Misc : GC2918,GGB908,5.042,,50,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Jun 19 7:48 2012 Quant Results File: TB868GB868SOIL.RES

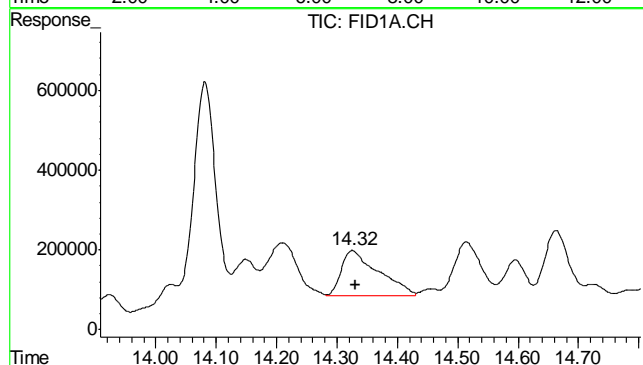
Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Mon Jun 18 13:49:47 2012
Response via : Multiple Level Calibration
DataAcq Meth : TVB4.M

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

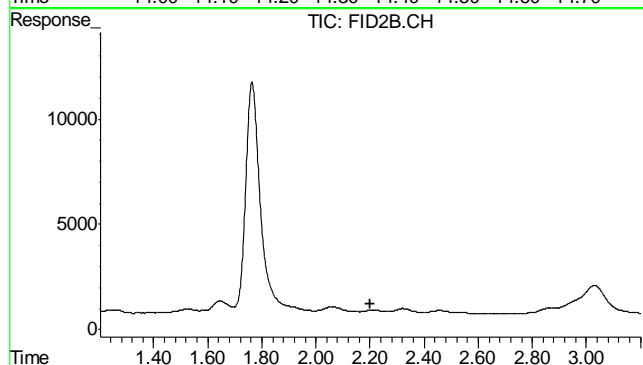




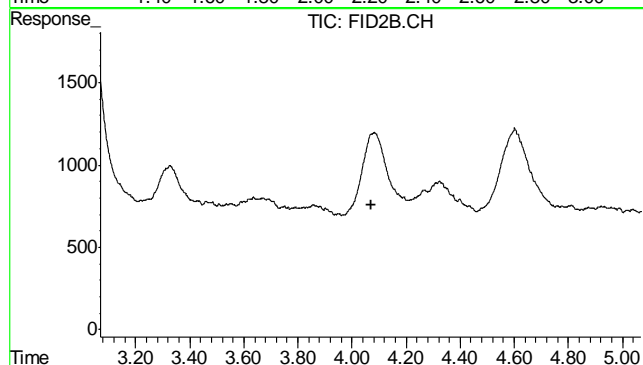
#1 TVH-Gasoline
 R.T.: 7.230 min
 Delta R.T.: 0.000 min
 Response: 12549365
 Conc: 0.17 mg/L m



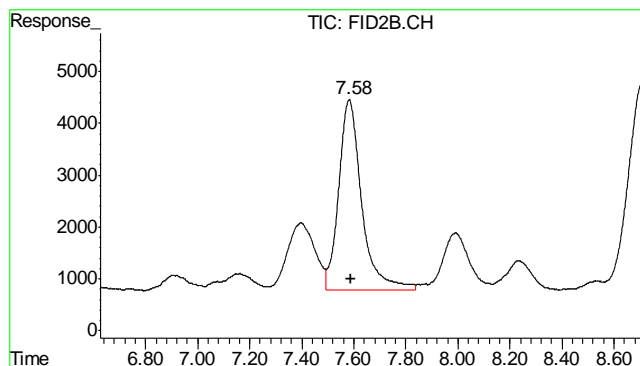
#2 1,2,4-Trichlorobenzene
 R.T.: 14.325 min
 Delta R.T.: -0.007 min
 Response: 4794056
 Conc: 153.00 % m



#4 Methyl-t-butyl-ether
 R.T.: 0.000 min
 Exp R.T.: 2.202 min
 Response: 0
 Conc: N.D.

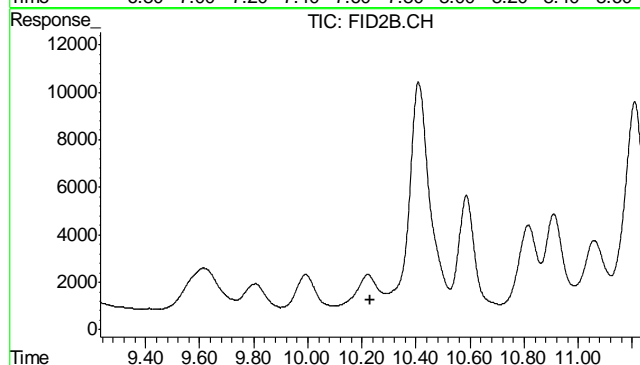


#5 Benzene
 R.T.: 0.000 min
 Exp R.T.: 4.070 min
 Response: 0
 Conc: N.D.



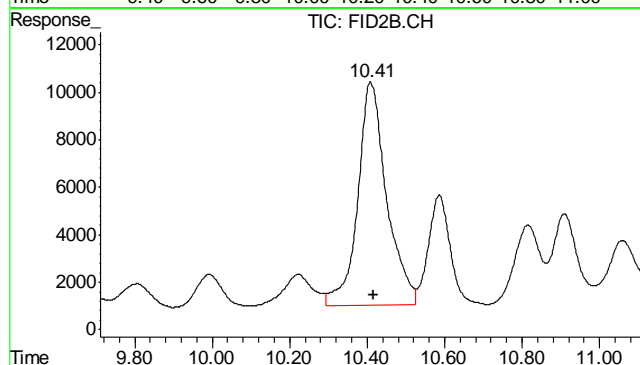
#6 Toluene

R.T.: 7.583 min
Delta R.T.: -0.005 min
Response: 224382
Conc: 0.57 ug/L



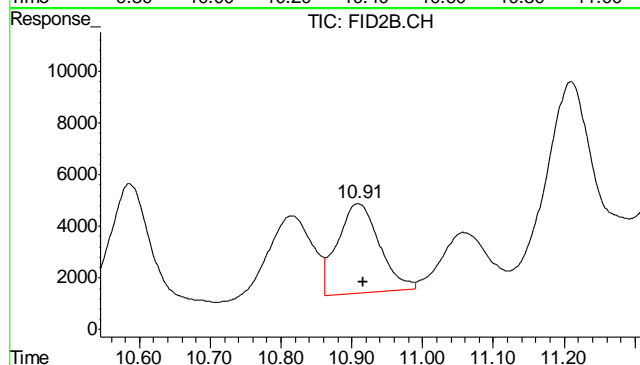
#7 Ethylbenzene

R.T.: 0.000 min
Exp R.T.: 10.232 min
Response: 0
Conc: N.D.



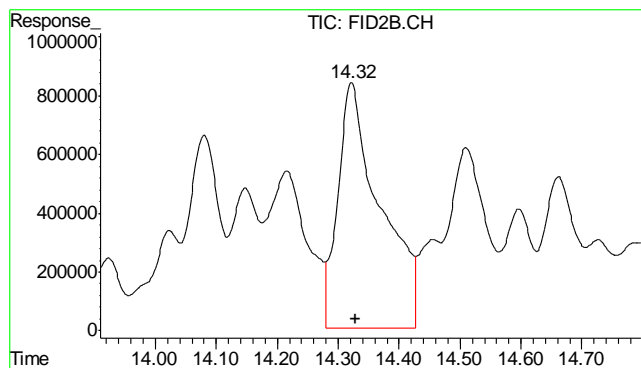
#8 m,p-Xylene

R.T.: 10.409 min
Delta R.T.: -0.006 min
Response: 489355
Conc: 0.97 ug/L



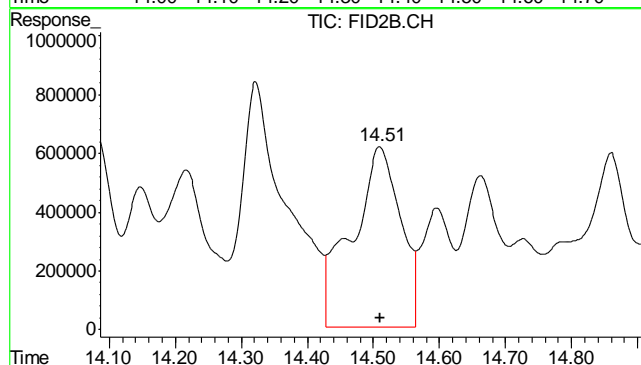
#9 o-Xylene

R.T.: 10.909 min
Delta R.T.: -0.008 min
Response: 141790
Conc: 0.43 ug/L



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

R.T.: 14.322 min
Delta R.T.: -0.007 min
Response: 40566381
Conc: 249.60 %



#11 Naphthalene

R.T.: 14.510 min
Delta R.T.: 0.000 min
Response: 31723722
Conc: 160.78 ug/L

6.12
6

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16363.D\FID1A.CH Vial: 11
Signal #2 : Y:\1\DATA\061812\GB16363.D\FID2B.CH
Acq On : 18 Jun 2012 4:26 pm Operator: StephK
Sample : D35569-3, 50X Inst : GC/MS Ins
Misc : GC2918,GGB908,5.010,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Jun 19 08:35:38 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Mon Jun 18 13:49:47 2012
Response via : Initial Calibration
DataAcq Meth : TVB4.M

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

Compound	R.T.	Response	Conc	Units

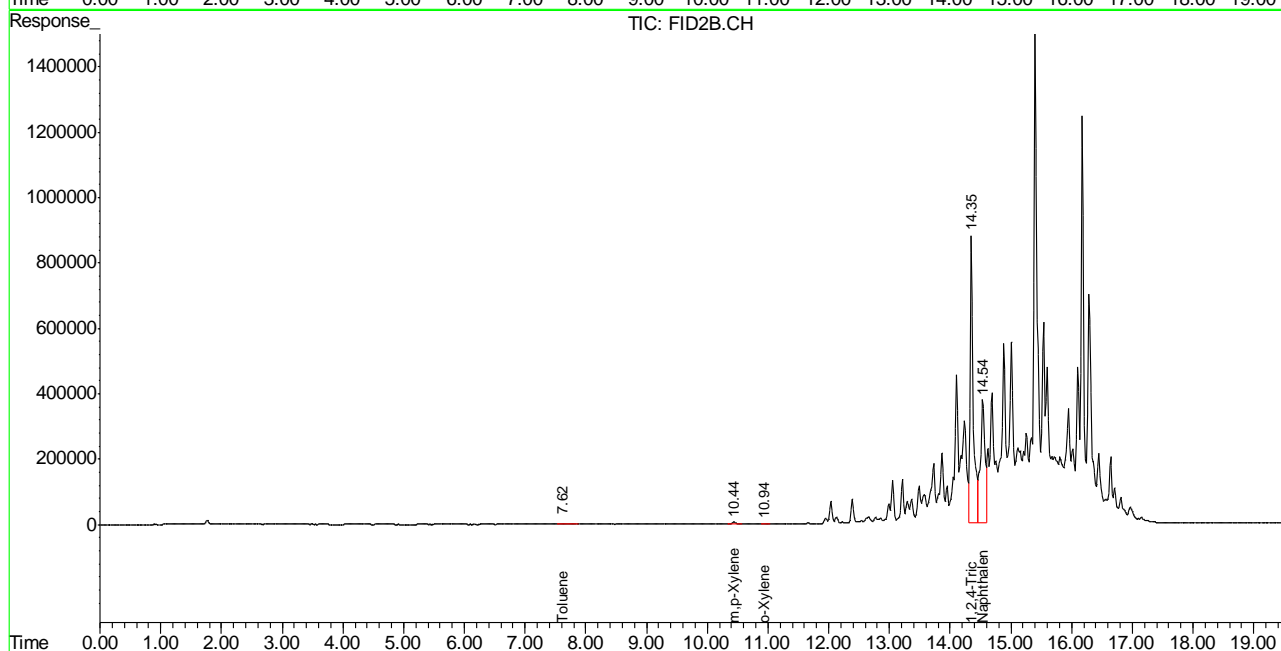
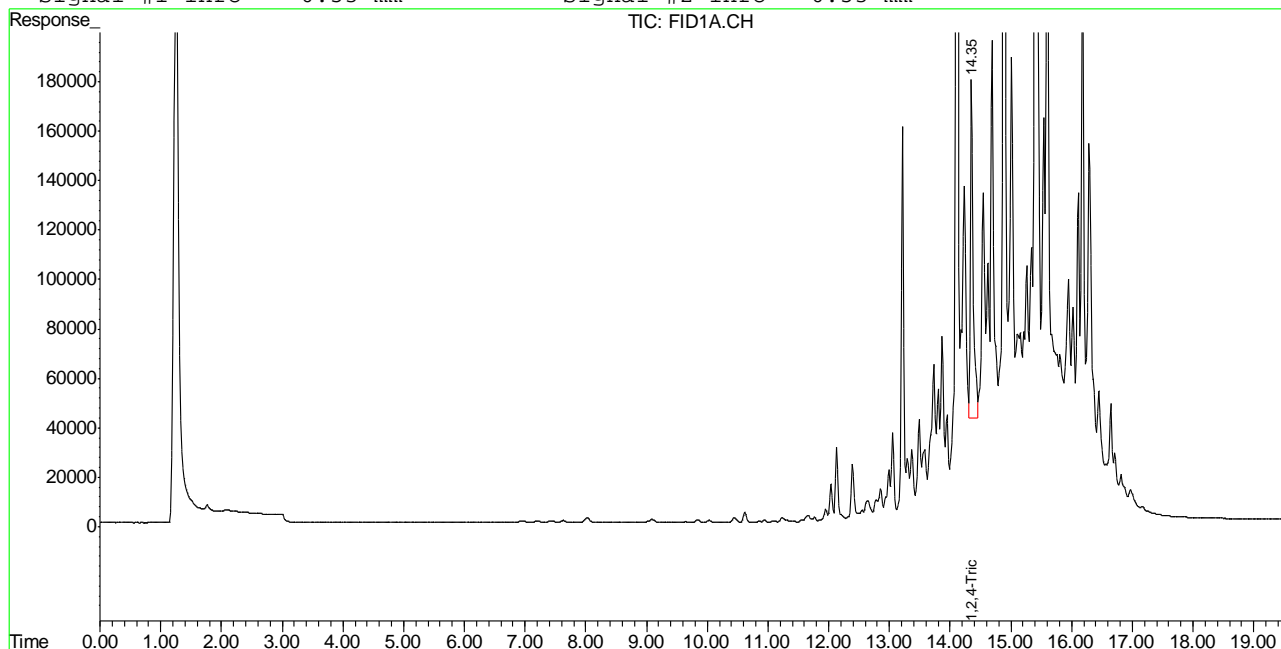
System Monitoring Compounds				
2) S 1,2,4-Trichlorobenzene	14.35	4239465	135.299 %	m
10) S 1,2,4-Trichlorobenzene (P)	14.35	30906875	190.164 %	
Target Compounds				
1) H TVH-Gasoline	7.23	7959669	<MDL	mg/L
4) T Methyl-t-butyl-ether	0.00	0	N.D.	ug/L d
5) T Benzene	0.00	0	N.D.	ug/L d
6) T Toluene	7.62	195915	0.494	ug/L
7) T Ethylbenzene	0.00	0	N.D.	ug/L d
8) T m,p-Xylene	10.44	330835	0.533	ug/L
9) T o-Xylene	10.94	100636	0.306	ug/L
11) T Naphthalene	14.54	18914878	95.864	ug/L

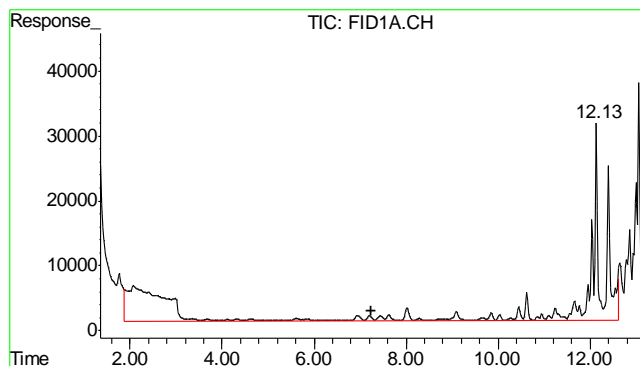
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16363.D\FID1A.CH Vial: 11
Signal #2 : Y:\1\DATA\061812\GB16363.D\FID2B.CH
Acq On : 18 Jun 2012 4:26 pm Operator: StephK
Sample : D35569-3, 50X Inst : GC/MS Ins
Misc : GC2918,GGB908,5.010,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Jun 19 7:48 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Mon Jun 18 13:49:47 2012
Response via : Multiple Level Calibration
DataAcq Meth : TVB4.M

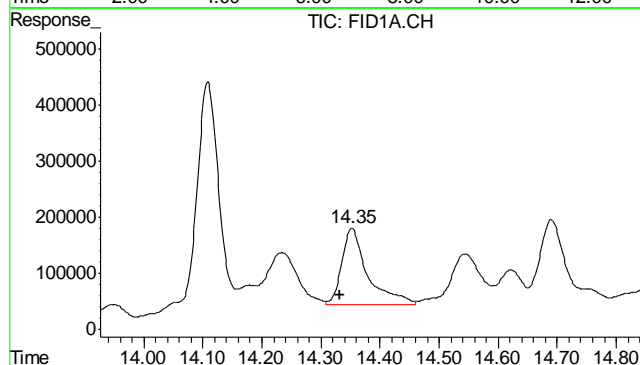
Volume Inj. :
Signal #1 Phase : DB-624 Signal #2 Phase: DB-624
Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm





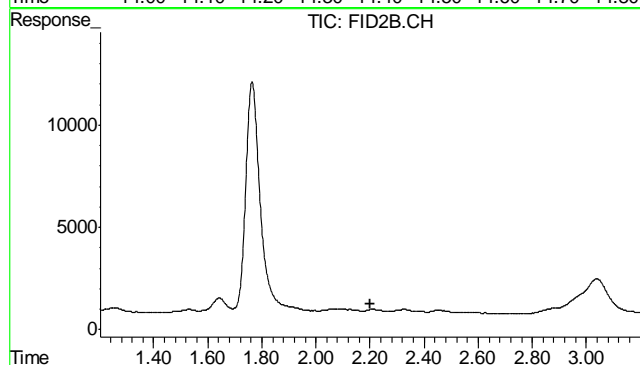
#1 TVH-Gasoline

R.T.: 7.230 min
Delta R.T.: 0.000 min
Response: 7959669
Conc: N.D.



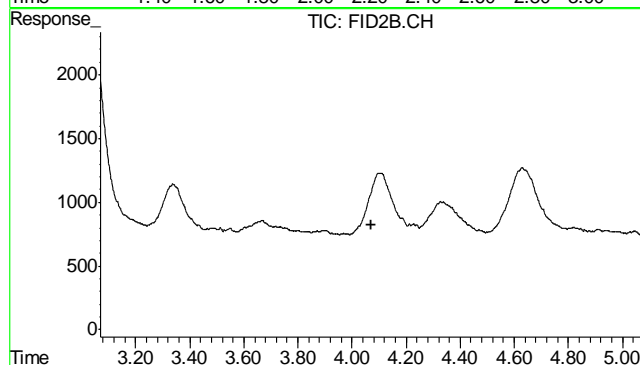
#2 1,2,4-Trichlorobenzene

R.T.: 14.352 min
Delta R.T.: 0.020 min
Response: 4239465
Conc: 135.30 % m



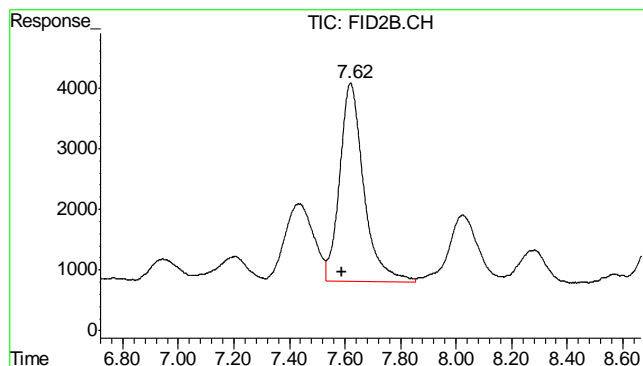
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T.: 2.202 min
Response: 0
Conc: N.D.



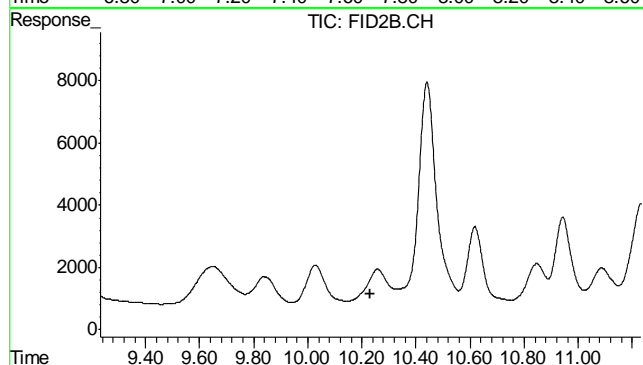
#5 Benzene

R.T.: 0.000 min
Exp R.T.: 4.070 min
Response: 0
Conc: N.D.



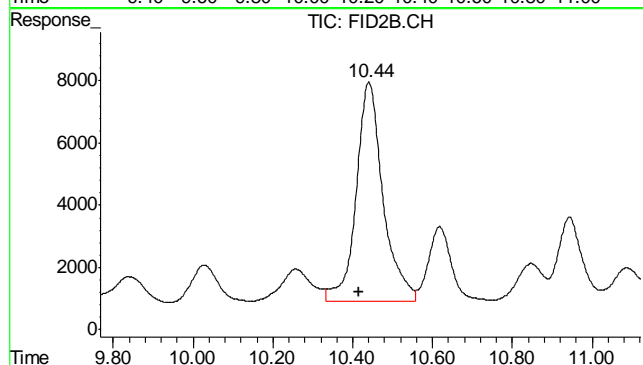
#6 Toluene

R.T.: 7.620 min
Delta R.T.: 0.032 min
Response: 195915
Conc: 0.49 ug/L



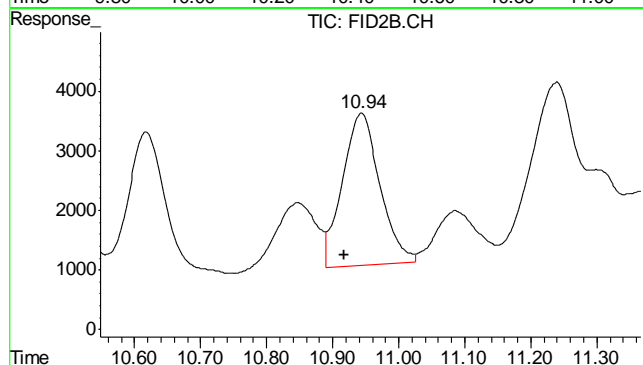
#7 Ethylbenzene

R.T.: 0.000 min
Exp R.T.: 10.232 min
Response: 0
Conc: N.D.



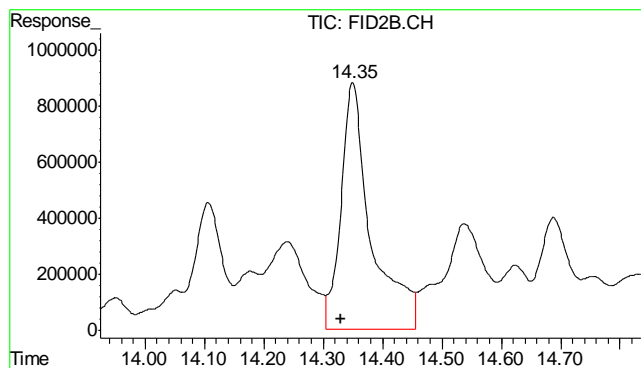
#8 m,p-Xylene

R.T.: 10.441 min
Delta R.T.: 0.025 min
Response: 330835
Conc: 0.53 ug/L



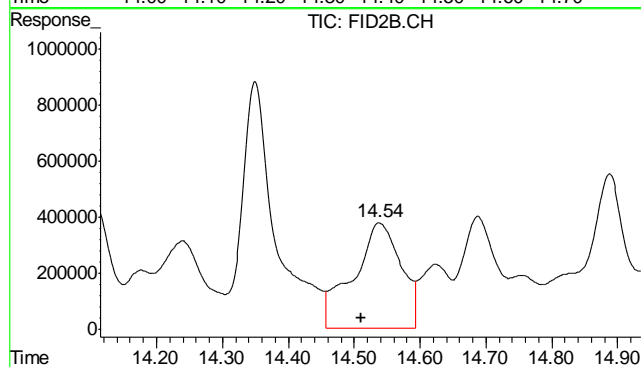
#9 o-Xylene

R.T.: 10.943 min
Delta R.T.: 0.026 min
Response: 100636
Conc: 0.31 ug/L



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

R.T.: 14.350 min
Delta R.T.: 0.021 min
Response: 30906875
Conc: 190.16 %



#11 Naphthalene

R.T.: 14.538 min
Delta R.T.: 0.028 min
Response: 18914878
Conc: 95.86 ug/L

6.1.3

6

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16364.D\FID1A.CH Vial: 12
Signal #2 : Y:\1\DATA\061812\GB16364.D\FID2B.CH
Acq On : 18 Jun 2012 5:02 pm Operator: StephK
Sample : D35569-4, 50X Inst : GC/MS Ins
Misc : GC2918,GGB908,5.047,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Jun 19 08:35:42 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Mon Jun 18 13:49:47 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	

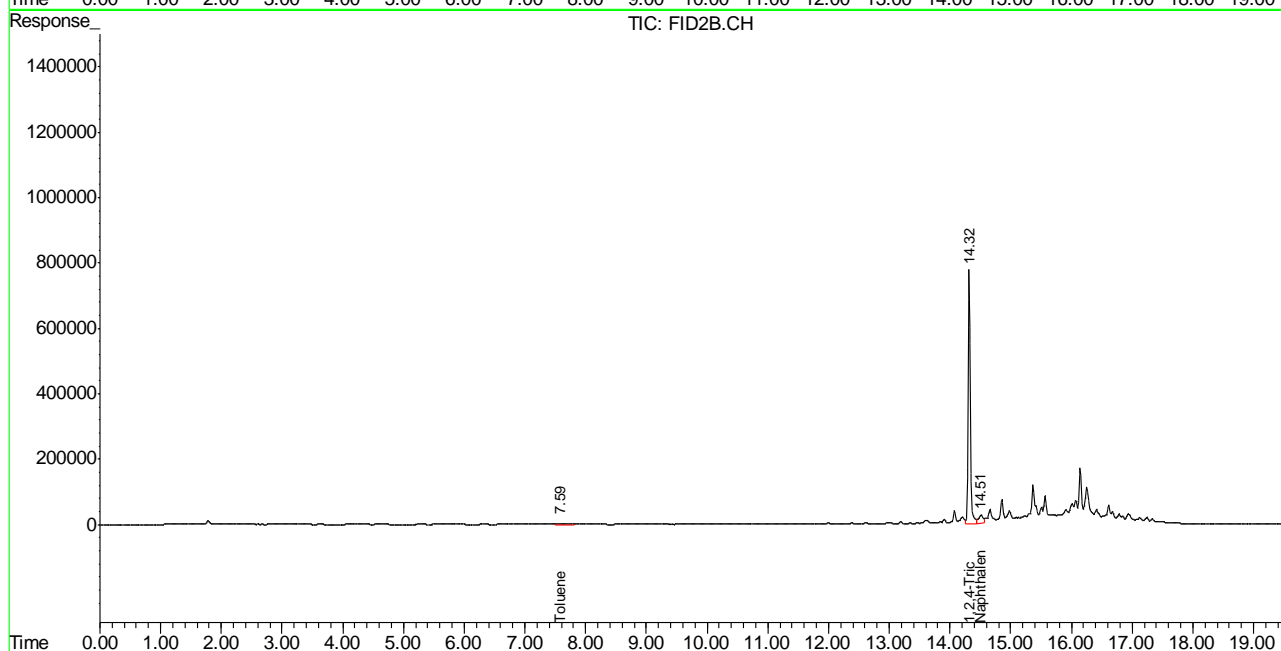
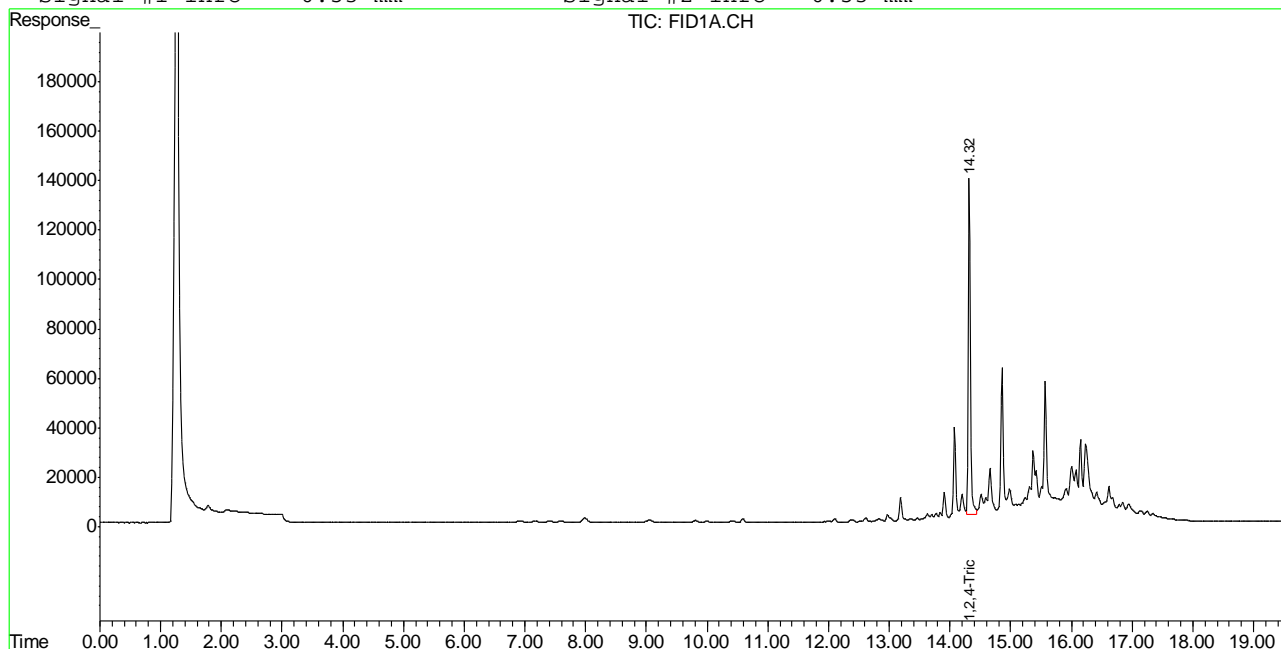
System Monitoring Compounds						
2) S	1,2,4-Trichlorobenzene	14.32	3306862	105.536 %	m	
10) S	1,2,4-Trichlorobenzene (P)	14.32	18911628	116.360 %		
Target Compounds						
1) H	TVH-Gasoline	7.23	4303214	<MDL	mg/L	
4) T	Methyl-t-butyl-ether	0.00	0	N.D.	ug/L	d
5) T	Benzene	0.00	0	N.D.	ug/L	d
6) T	Toluene	7.59	161310	0.407	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	14.51	1324772	6.714	ug/L	

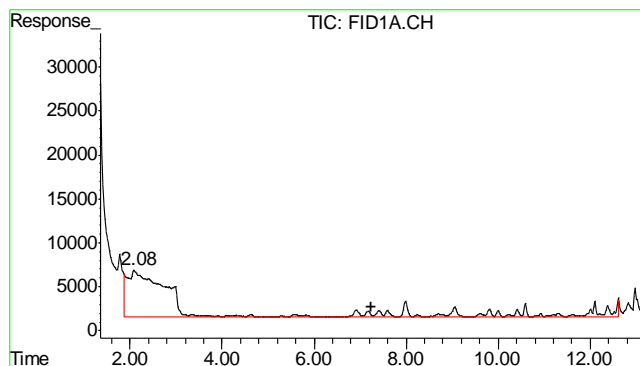
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16364.D\FID1A.CH Vial: 12
 Signal #2 : Y:\1\DATA\061812\GB16364.D\FID2B.CH
 Acq On : 18 Jun 2012 5:02 pm Operator: StephK
 Sample : D35569-4, 50X Inst : GC/MS Ins
 Misc : GC2918,GGB908,5.047,,100,5,1 Multiplr: 1.00
 IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
 Quant Time: Jun 19 7:48 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
 Title : 8015B/8021B TVH/BTEX
 Last Update : Mon Jun 18 13:49:47 2012
 Response via : Multiple Level Calibration
 DataAcq Meth : TVB4.M

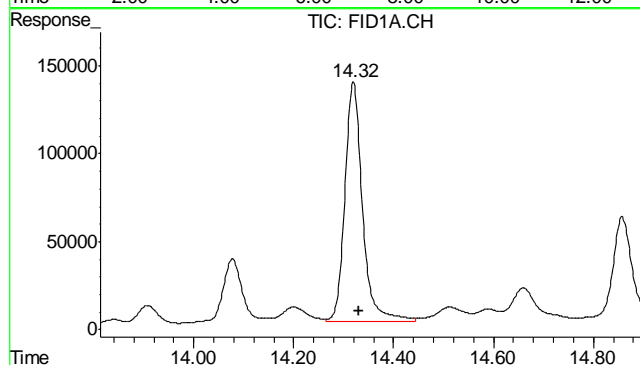
Volume Inj. :
 Signal #1 Phase : DB-624 Signal #2 Phase: DB-624
 Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm





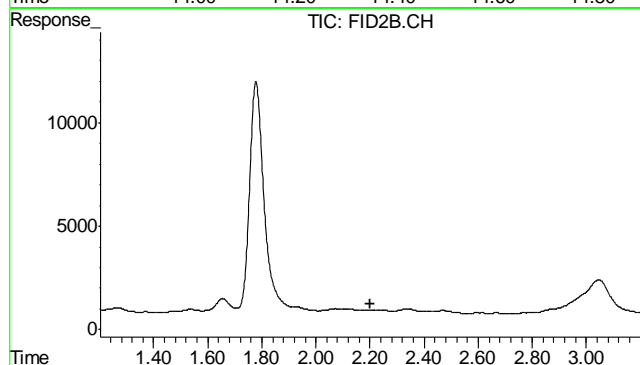
#1 TVH-Gasoline

R.T.: 7.230 min
Delta R.T.: 0.000 min
Response: 4303214
Conc: N.D.



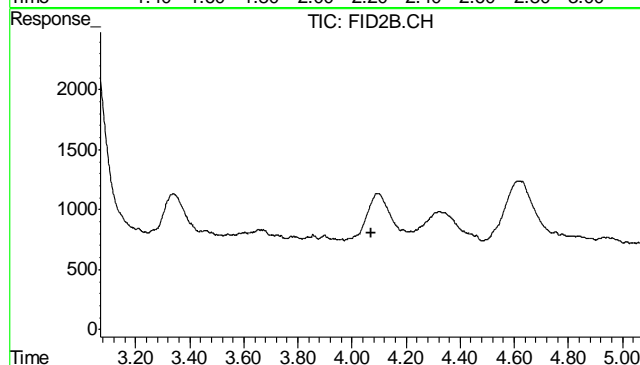
#2 1,2,4-Trichlorobenzene

R.T.: 14.319 min
Delta R.T.: -0.013 min
Response: 3306862
Conc: 105.54 % m



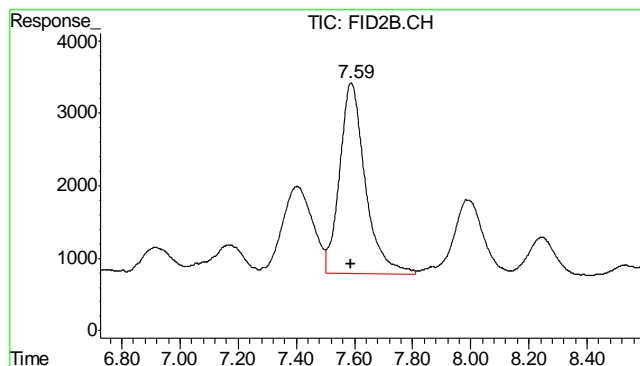
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T.: 2.202 min
Response: 0
Conc: N.D.



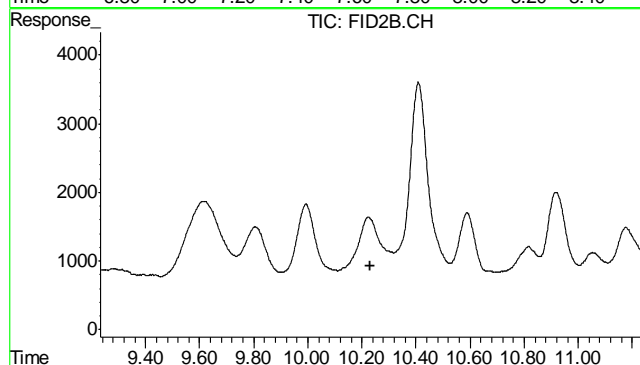
#5 Benzene

R.T.: 0.000 min
Exp R.T.: 4.070 min
Response: 0
Conc: N.D.



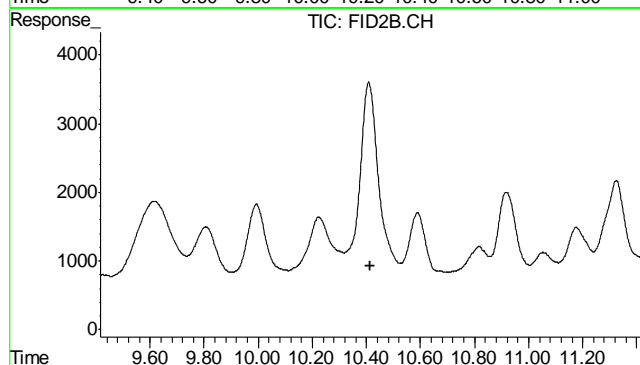
#6 Toluene

R.T.: 7.589 min
Delta R.T.: 0.000 min
Response: 161310
Conc: 0.41 ug/L



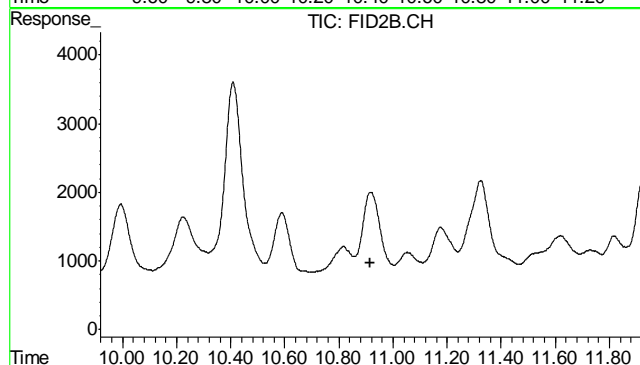
#7 Ethylbenzene

R.T.: 0.000 min
Exp R.T.: 10.232 min
Response: 0
Conc: N.D.



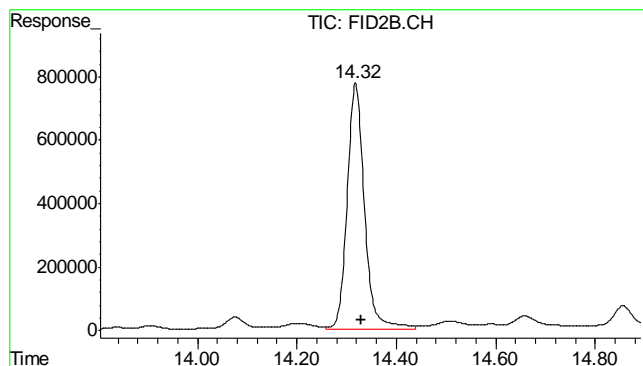
#8 m,p-Xylene

R.T.: 0.000 min
Exp R.T.: 10.415 min
Response: 0
Conc: N.D.



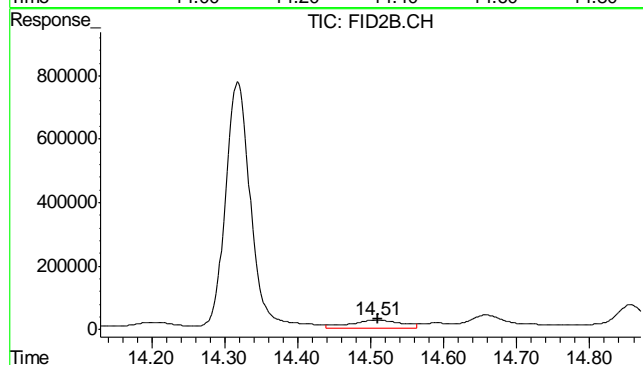
#9 o-Xylene

R.T.: 0.000 min
Exp R.T.: 10.917 min
Response: 0
Conc: N.D.



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

R.T.: 14.318 min
Delta R.T.: -0.011 min
Response: 18911628
Conc: 116.36 %



#11 Naphthalene

R.T.: 14.508 min
Delta R.T.: -0.002 min
Response: 1324772
Conc: 6.71 ug/L

6.1.4

6

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16365.D\FID1A.CH Vial: 13
Signal #2 : Y:\1\DATA\061812\GB16365.D\FID2B.CH
Acq On : 18 Jun 2012 5:37 pm Operator: StephK
Sample : D35569-5, 50X Inst : GC/MS Ins
Misc : GC2918,GGB908,5.057,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Jun 19 08:35:46 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Mon Jun 18 13:49:47 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

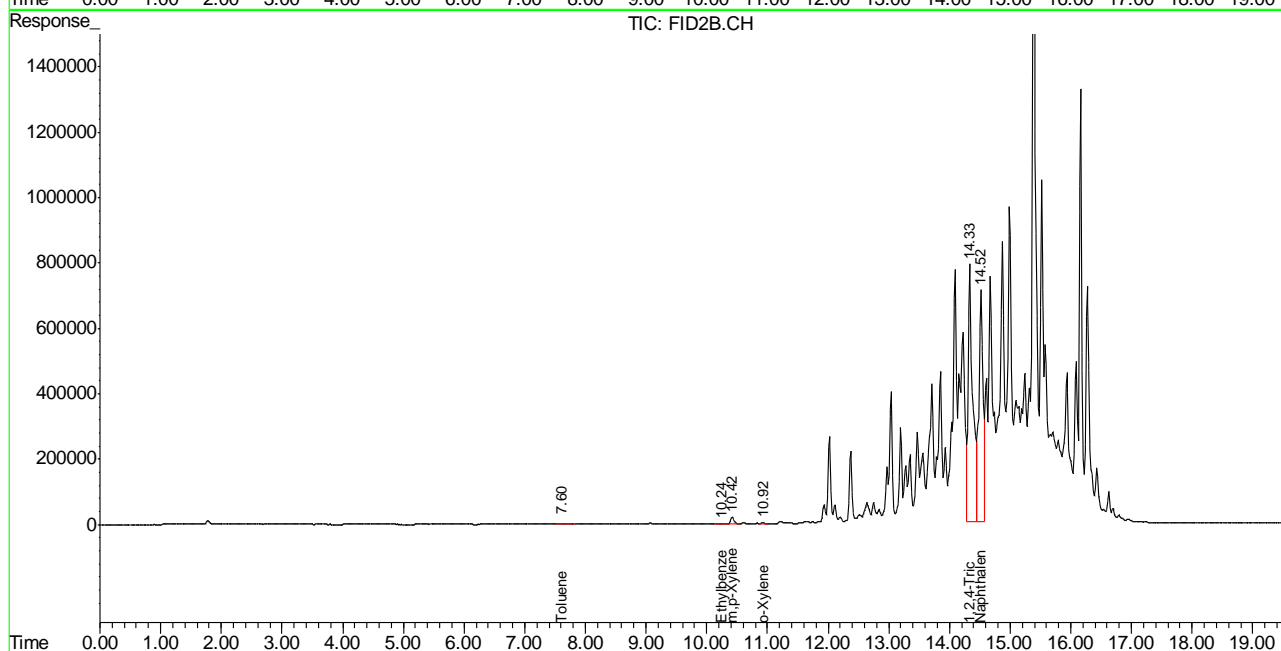
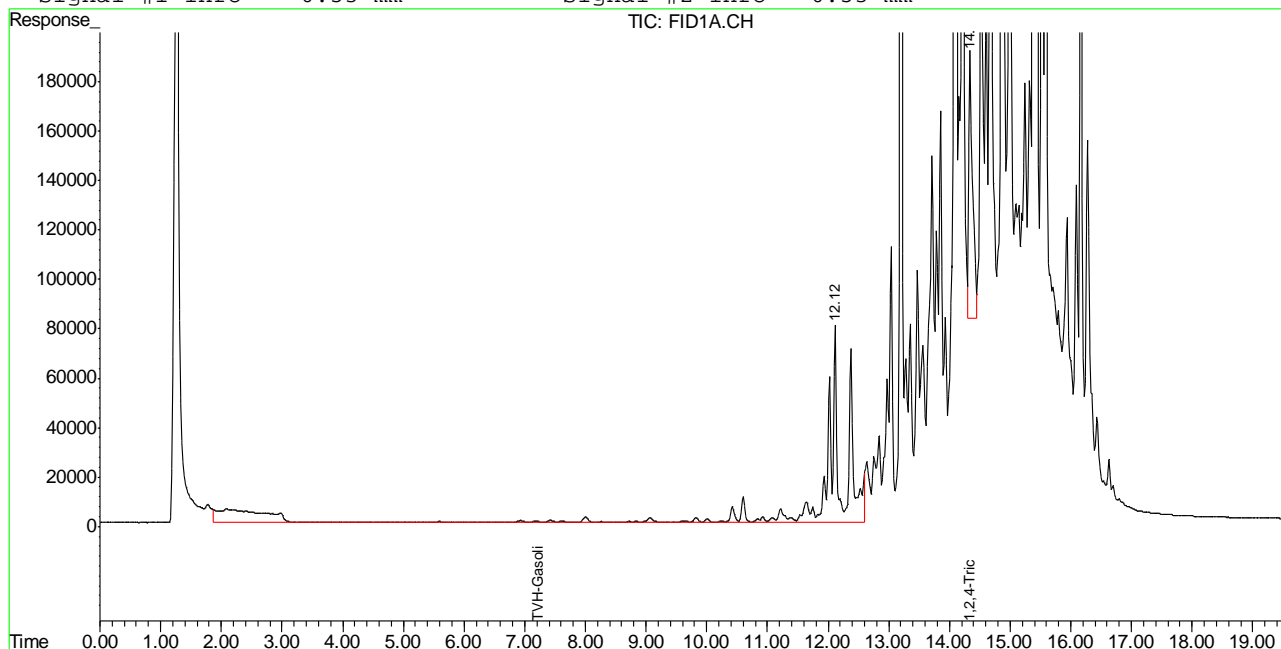
System Monitoring Compounds					
2) S	1,2,4-Trichlorobenzene	14.34	4703462	150.107 %	m
10) S	1,2,4-Trichlorobenzene (P)	14.33	39054276	240.293 %	
Target Compounds					
1) H	TVH-Gasoline	7.23	15995861	0.221 mg/L	
4) T	Methyl-t-butyl-ether	0.00	0	N.D. ug/L	d
5) T	Benzene	0.00	0	N.D. ug/L	d
6) T	Toluene	7.60	183241	0.462 ug/L	
7) T	Ethylbenzene	10.24	93929	0.278 ug/L	
8) T	m,p-Xylene	10.42	980354	2.312 ug/L	
9) T	o-Xylene	10.92	223814	0.682 ug/L	
11) T	Naphthalene	14.52	34863348	176.694 ug/L	

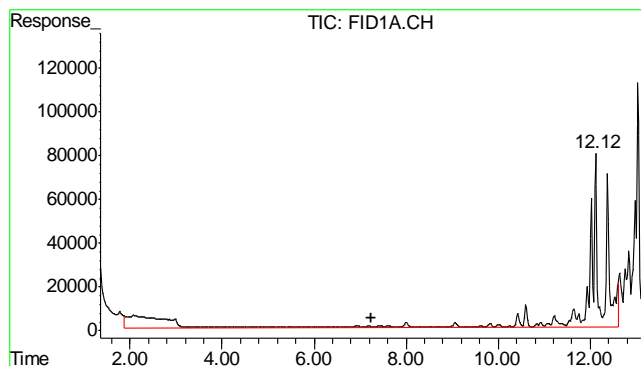
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16365.D\FID1A.CH Vial: 13
Signal #2 : Y:\1\DATA\061812\GB16365.D\FID2B.CH
Acq On : 18 Jun 2012 5:37 pm Operator: StephK
Sample : D35569-5, 50X Inst : GC/MS Ins
Misc : GC2918,GGB908,5.057,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Jun 19 7:49 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Mon Jun 18 13:49:47 2012
Response via : Multiple Level Calibration
DataAcq Meth : TVB4.M

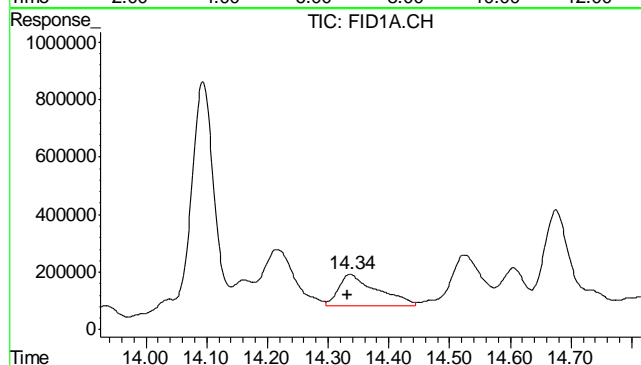
Volume Inj. :
Signal #1 Phase : DB-624 Signal #2 Phase: DB-624
Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm





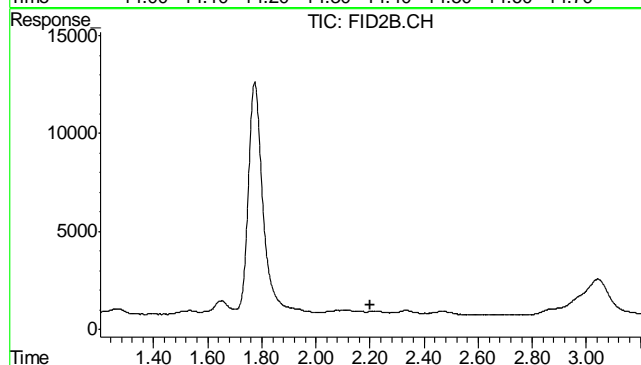
#1 TVH-Gasoline

R.T.: 7.230 min
Delta R.T.: 0.000 min
Response: 15995861
Conc: 0.22 mg/L m



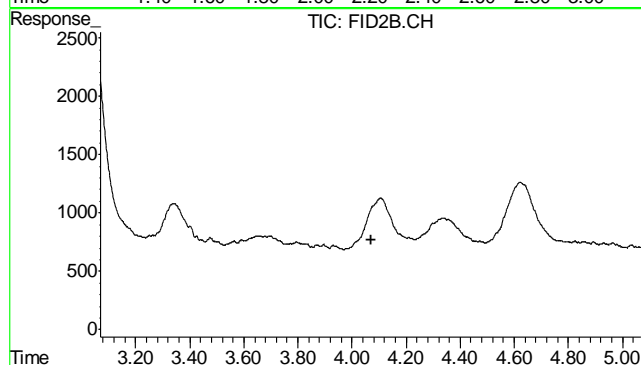
#2 1,2,4-Trichlorobenzene

R.T.: 14.335 min
Delta R.T.: 0.004 min
Response: 4703462
Conc: 150.11 % m



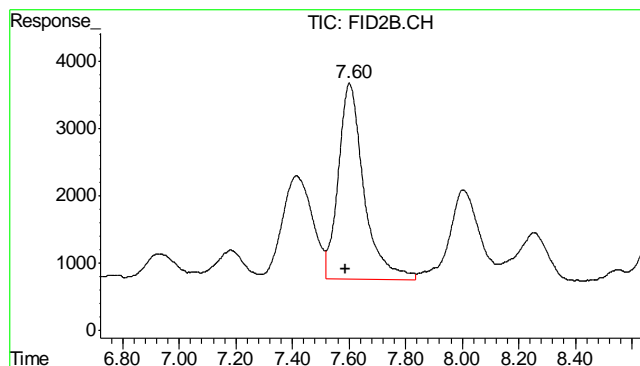
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T. : 2.202 min
Response: 0
Conc: N.D.



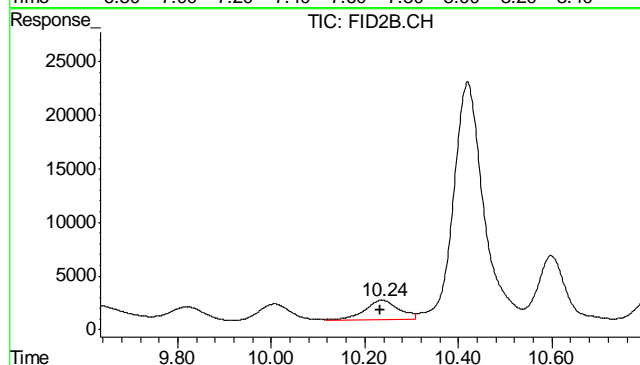
#5 Benzene

R.T.: 0.000 min
Exp R.T. : 4.070 min
Response: 0
Conc: N.D.



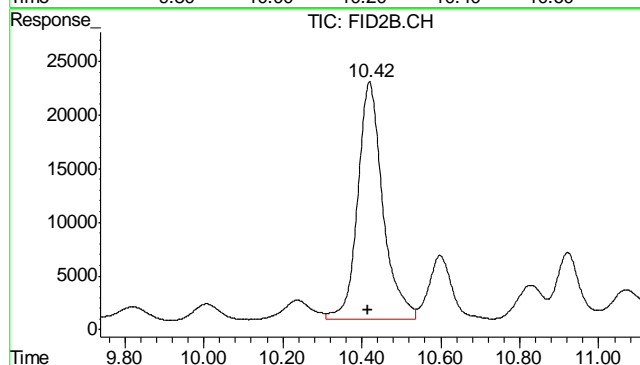
#6 Toluene

R.T.: 7.601 min
Delta R.T.: 0.013 min
Response: 183241
Conc: 0.46 ug/L



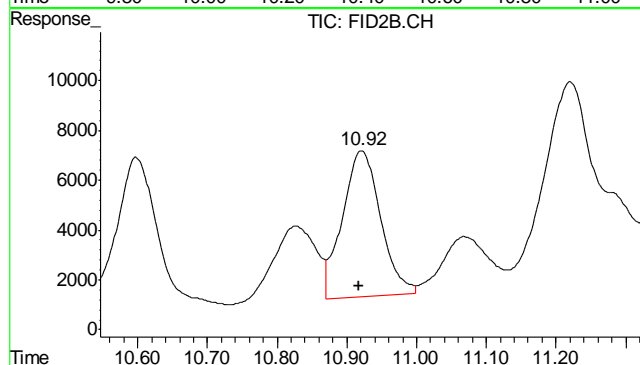
#7 Ethylbenzene

R.T.: 10.237 min
Delta R.T.: 0.005 min
Response: 93929
Conc: 0.28 ug/L



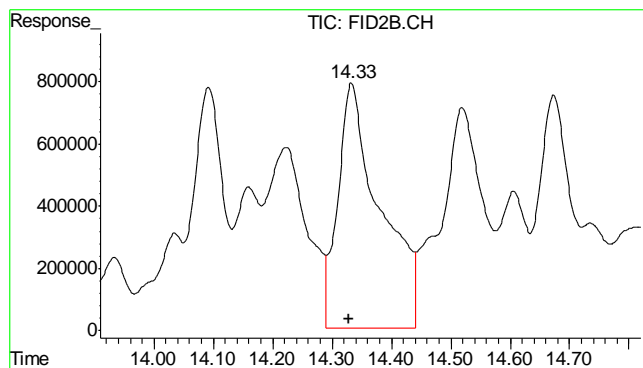
#8 m,p-Xylene

R.T.: 10.420 min
Delta R.T.: 0.004 min
Response: 980354
Conc: 2.31 ug/L



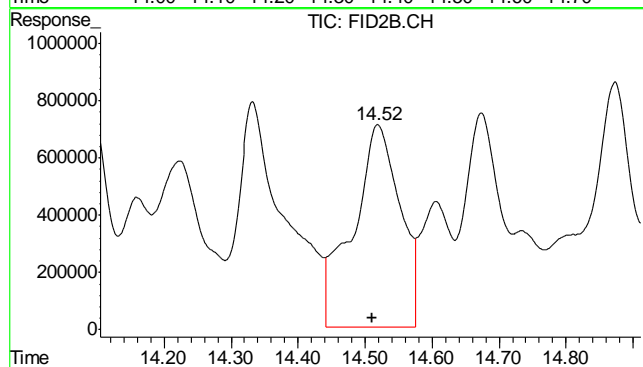
#9 o-Xylene

R.T.: 10.921 min
Delta R.T.: 0.004 min
Response: 223814
Conc: 0.68 ug/L



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

R.T.: 14.333 min
Delta R.T.: 0.004 min
Response: 39054276
Conc: 240.29 %



#11 Naphthalene

R.T.: 14.520 min
Delta R.T.: 0.009 min
Response: 34863348
Conc: 176.69 ug/L

6.1.5

6

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16366.D\FID1A.CH Vial: 14
Signal #2 : Y:\1\DATA\061812\GB16366.D\FID2B.CH
Acq On : 18 Jun 2012 6:13 pm Operator: StephK
Sample : D35569-6, 50X Inst : GC/MS Ins
Misc : GC2918,GGB908,5.014,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Jun 19 08:35:50 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Mon Jun 18 13:49:47 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

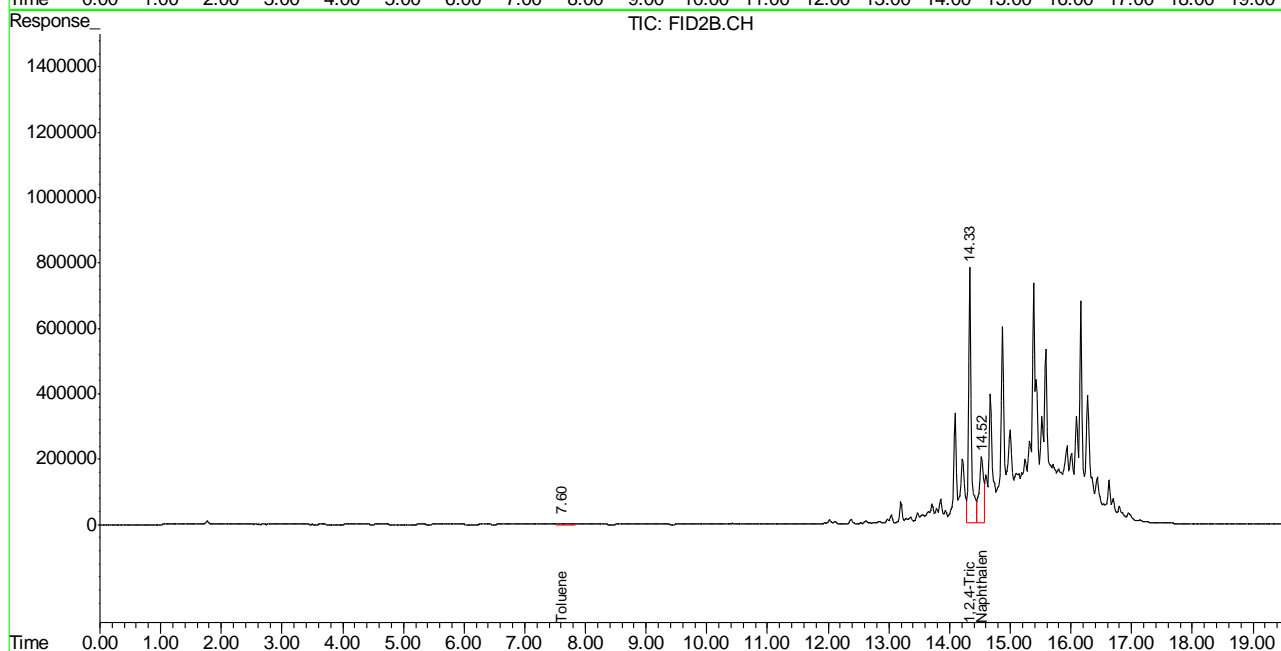
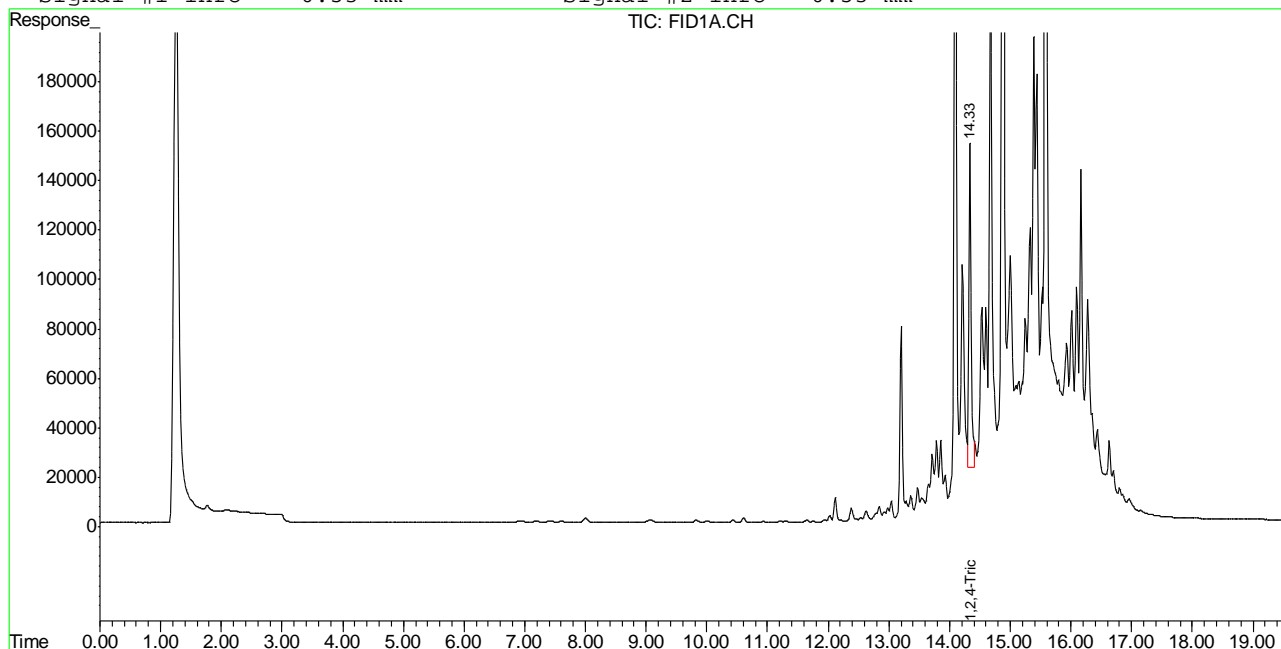
System Monitoring Compounds				
2) S 1,2,4-Trichlorobenzene	14.33	3443975	109.912 %	m
10) S 1,2,4-Trichlorobenzene (P)	14.33	23264245	143.140 %	
Target Compounds				
1) H TVH-Gasoline	7.23	5276580	<MDL	mg/L
4) T Methyl-t-butyl-ether	0.00	0	N.D.	ug/L d
5) T Benzene	0.00	0	N.D.	ug/L d
6) T Toluene	7.60	168842	0.426	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	14.53	10211498	51.754	ug/L

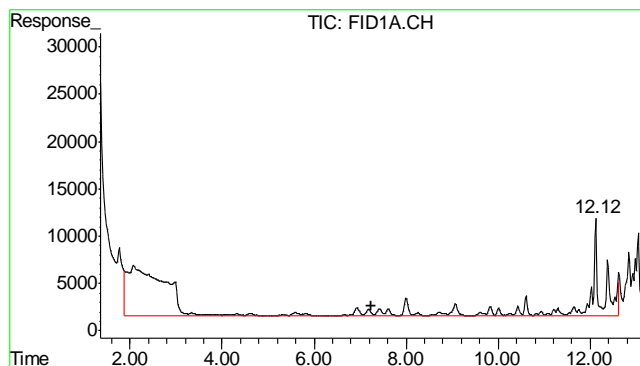
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16366.D\FID1A.CH Vial: 14
Signal #2 : Y:\1\DATA\061812\GB16366.D\FID2B.CH
Acq On : 18 Jun 2012 6:13 pm Operator: StephK
Sample : D35569-6, 50X Inst : GC/MS Ins
Misc : GC2918,GGB908,5.014,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Jun 19 7:49 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Mon Jun 18 13:49:47 2012
Response via : Multiple Level Calibration
DataAcq Meth : TVB4.M

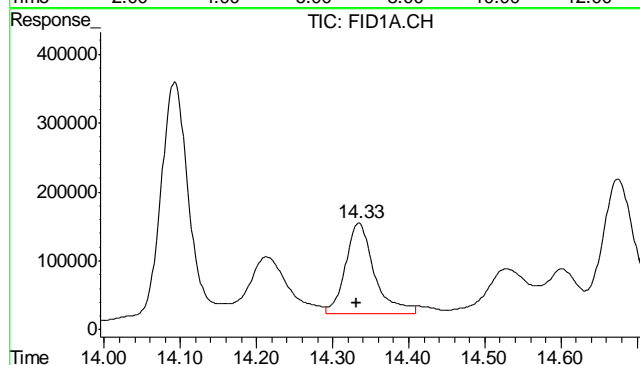
Volume Inj. :
Signal #1 Phase : DB-624 Signal #2 Phase: DB-624
Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm





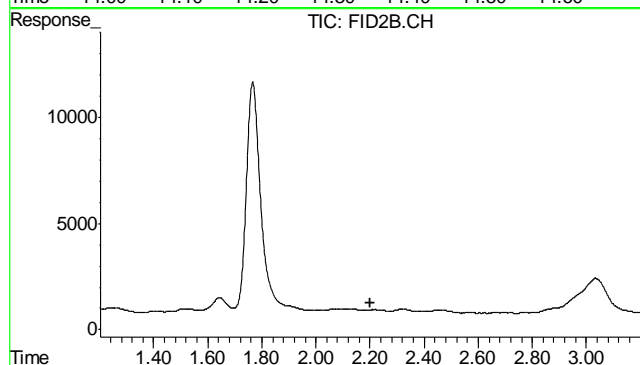
#1 TVH-Gasoline

R.T.: 7.230 min
Delta R.T.: 0.000 min
Response: 5276580
Conc: N.D.



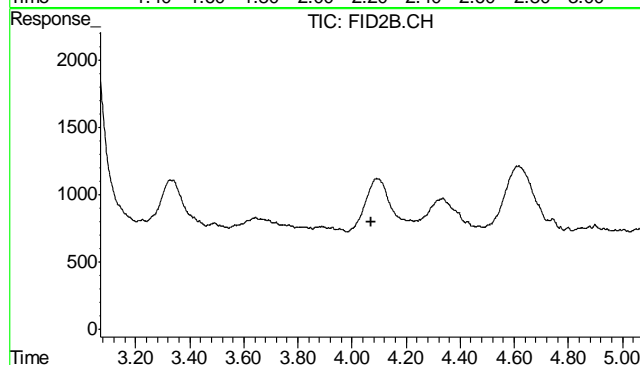
#2 1,2,4-Trichlorobenzene

R.T.: 14.334 min
Delta R.T.: 0.003 min
Response: 3443975
Conc: 109.91 % m



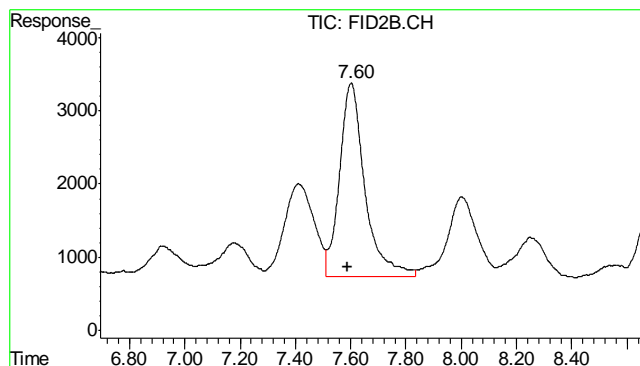
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T.: 2.202 min
Response: 0
Conc: N.D.



#5 Benzene

R.T.: 0.000 min
Exp R.T.: 4.070 min
Response: 0
Conc: N.D.



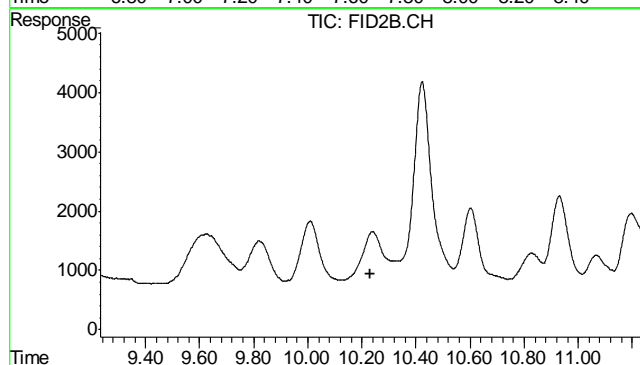
#6 Toluene

R.T.: 7.602 min

Delta R.T.: 0.014 min

Response: 168842

Conc: 0.43 ug/L



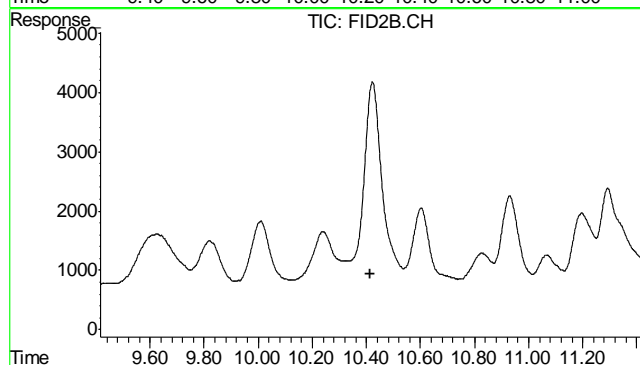
#7 Ethylbenzene

R.T.: 0.000 min

Exp R.T. : 10.232 min

Response: 0

Conc: N.D.



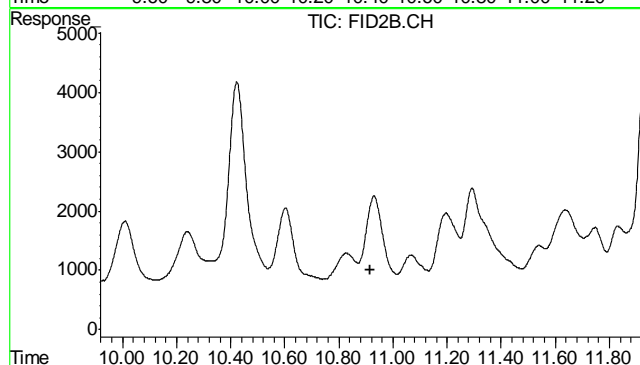
#8 m,p-Xylene

R.T.: 0.000 min

Exp R.T. : 10.415 min

Response: 0

Conc: N.D.



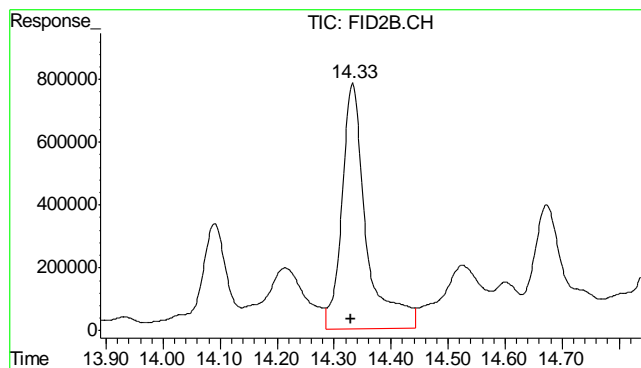
#9 o-Xylene

R.T.: 0.000 min

Exp R.T. : 10.917 min

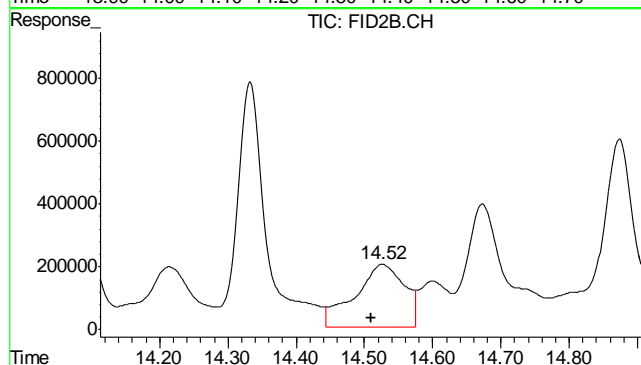
Response: 0

Conc: N.D.



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

R.T.: 14.333 min
Delta R.T.: 0.004 min
Response: 23264245
Conc: 143.14 %



#11 Naphthalene

R.T.: 14.526 min
Delta R.T.: 0.015 min
Response: 10211498
Conc: 51.75 ug/L

6.16

6

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16367.D\FID1A.CH Vial: 15
Signal #2 : Y:\1\DATA\061812\GB16367.D\FID2B.CH
Acq On : 18 Jun 2012 6:48 pm Operator: StephK
Sample : D35569-7, 50X Inst : GC/MS Ins
Misc : GC2918,GGB908,5.023,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Jun 19 08:35:54 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Mon Jun 18 13:49:47 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	

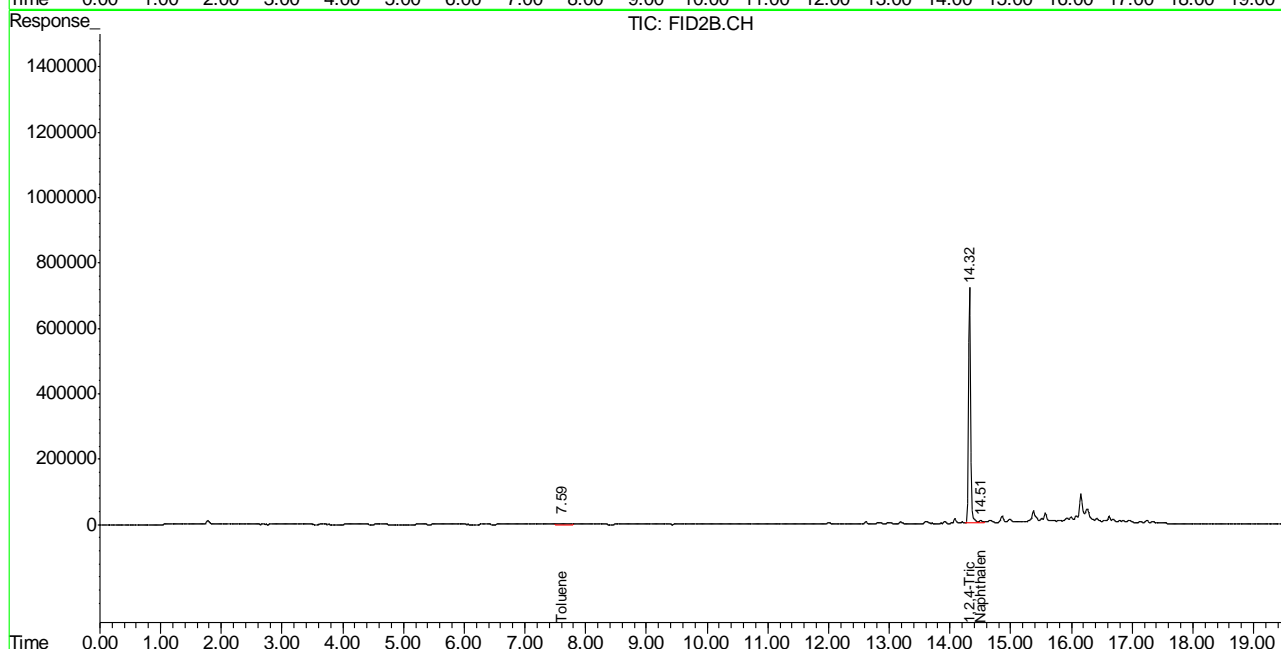
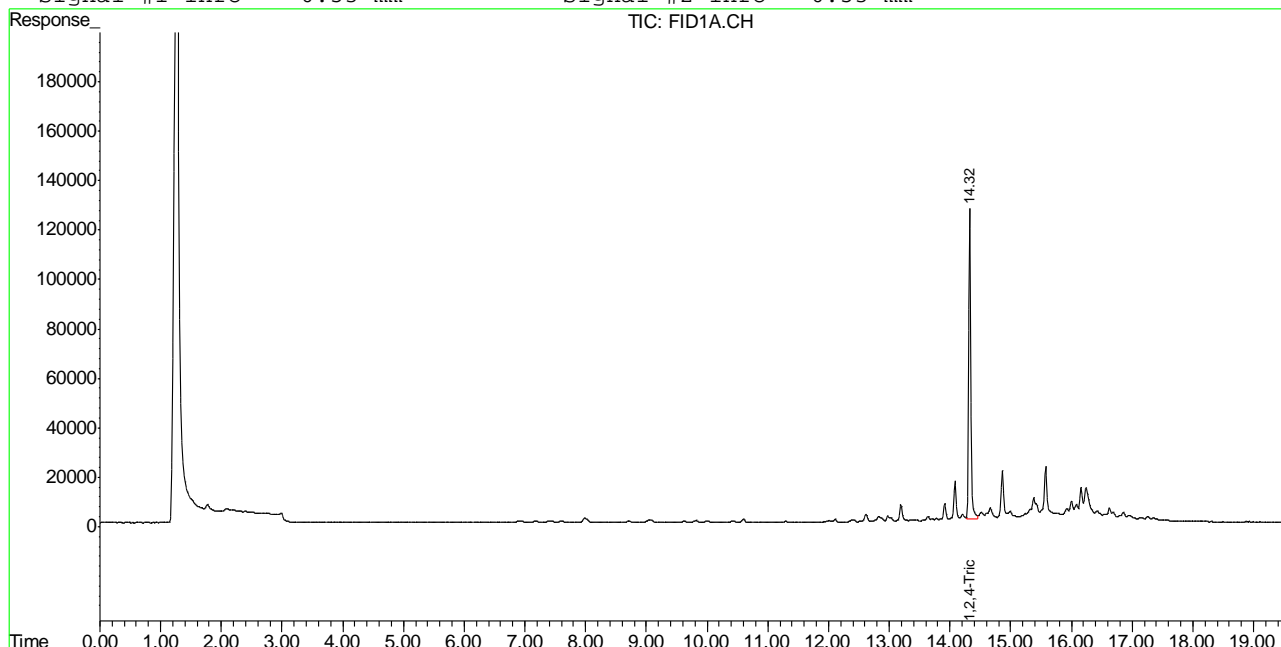
System Monitoring Compounds						
2) S	1,2,4-Trichlorobenzene	14.32	3038631	96.975 %	m	
10) S	1,2,4-Trichlorobenzene (P)	14.32	17102889	105.231 %		
Target Compounds						
1) H	TVH-Gasoline	7.23	4539405	<MDL	mg/L	
4) T	Methyl-t-butyl-ether	0.00	0	N.D.	ug/L d	
5) T	Benzene	0.00	0	N.D.	ug/L d	
6) T	Toluene	7.59	157626	0.398	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	14.51	310039	1.571	ug/L	

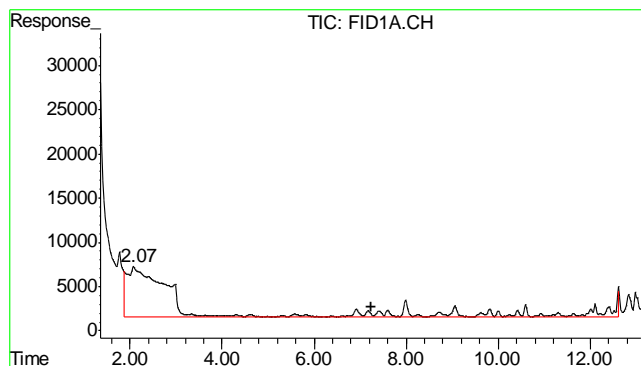
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16367.D\FID1A.CH Vial: 15
 Signal #2 : Y:\1\DATA\061812\GB16367.D\FID2B.CH
 Acq On : 18 Jun 2012 6:48 pm Operator: StephK
 Sample : D35569-7, 50X Inst : GC/MS Ins
 Misc : GC2918,GGB908,5.023,,100,5,1 Multiplr: 1.00
 IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
 Quant Time: Jun 19 7:49 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
 Title : 8015B/8021B TVH/BTEX
 Last Update : Mon Jun 18 13:49:47 2012
 Response via : Multiple Level Calibration
 DataAcq Meth : TVB4.M

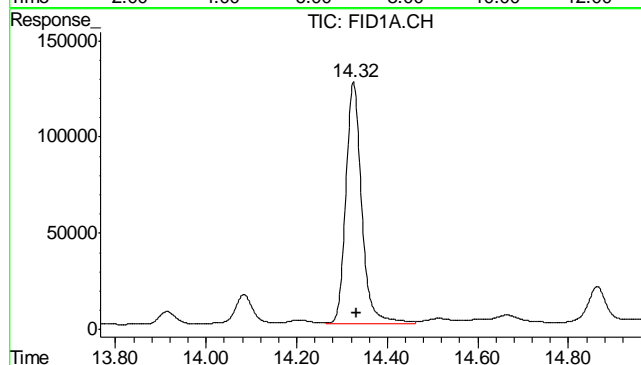
Volume Inj. :
 Signal #1 Phase : DB-624 Signal #2 Phase: DB-624
 Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm





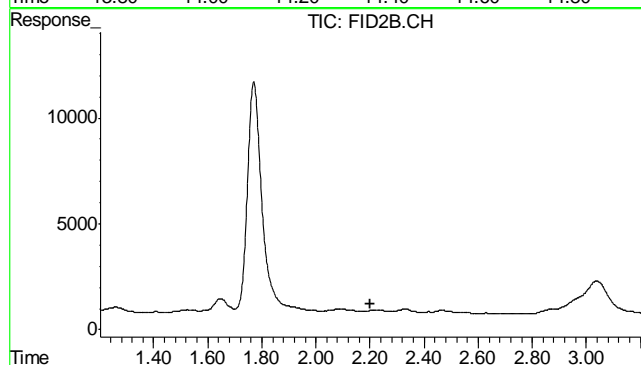
#1 TVH-Gasoline

R.T.: 7.230 min
Delta R.T.: 0.000 min
Response: 4539405
Conc: N.D.



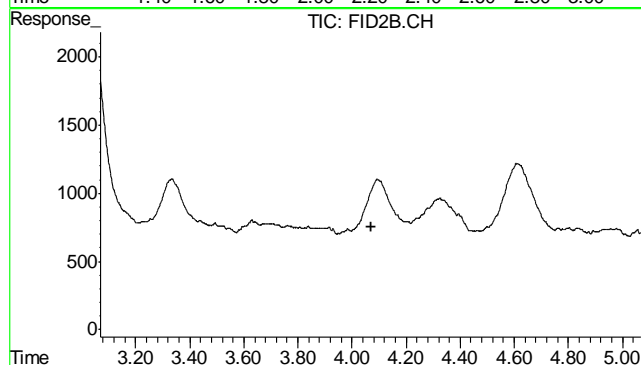
#2 1,2,4-Trichlorobenzene

R.T.: 14.324 min
Delta R.T.: -0.007 min
Response: 3038631
Conc: 96.98 % m



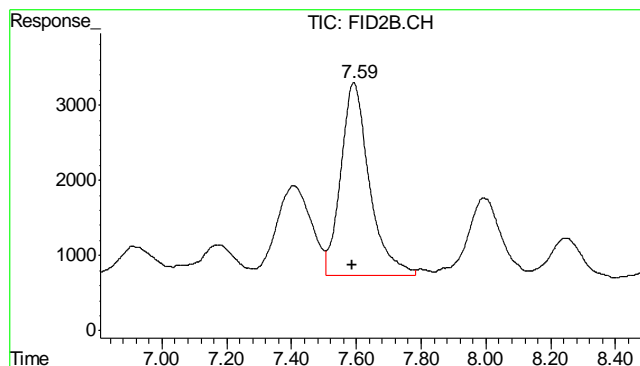
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T.: 2.202 min
Response: 0
Conc: N.D.



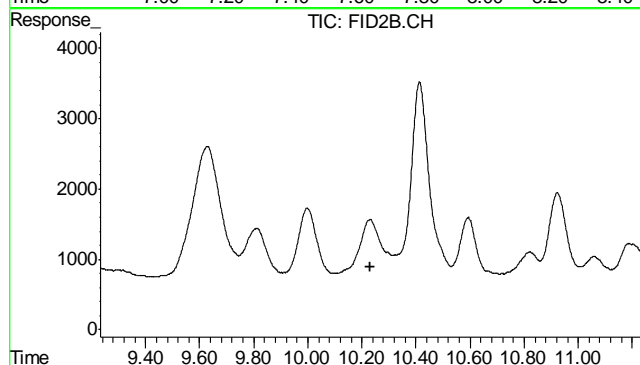
#5 Benzene

R.T.: 0.000 min
Exp R.T.: 4.070 min
Response: 0
Conc: N.D.



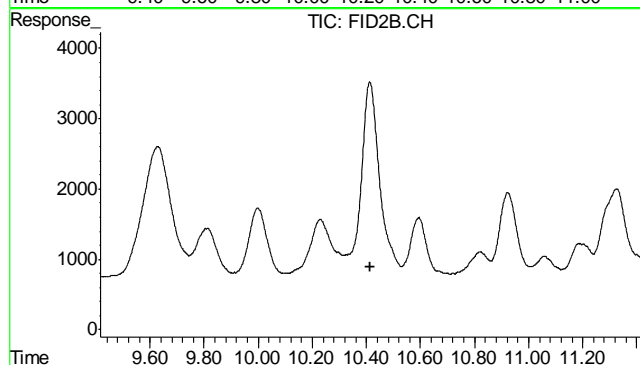
#6 Toluene

R.T.: 7.592 min
Delta R.T.: 0.004 min
Response: 157626
Conc: 0.40 ug/L



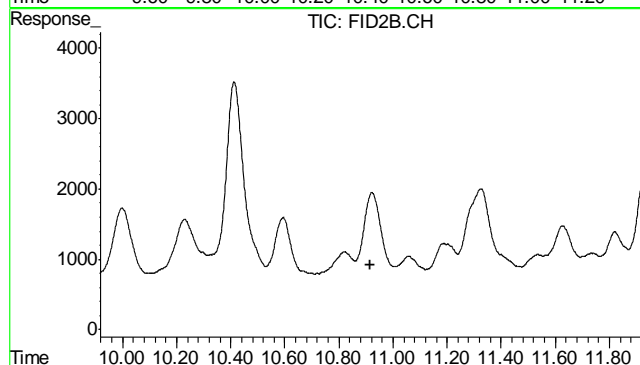
#7 Ethylbenzene

R.T.: 0.000 min
Exp R.T.: 10.232 min
Response: 0
Conc: N.D.



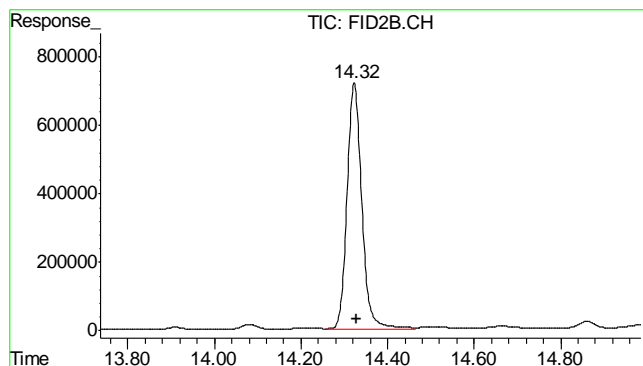
#8 m,p-Xylene

R.T.: 0.000 min
Exp R.T.: 10.415 min
Response: 0
Conc: N.D.



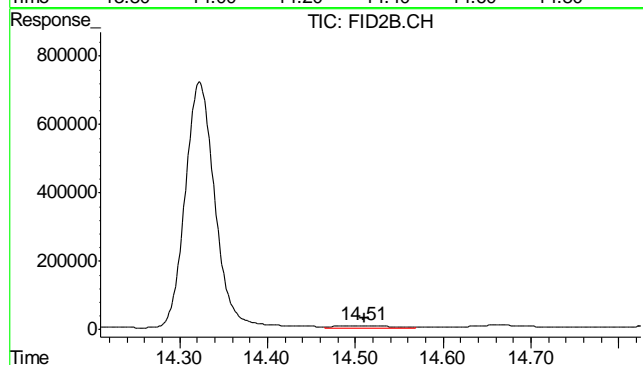
#9 o-Xylene

R.T.: 0.000 min
Exp R.T.: 10.917 min
Response: 0
Conc: N.D.



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

R.T.: 14.323 min
 Delta R.T.: -0.006 min
 Response: 17102889
 Conc: 105.23 %



#11 Naphthalene

R.T.: 14.508 min
 Delta R.T.: -0.003 min
 Response: 310039
 Conc: 1.57 ug/L

6.1.7

6

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16368.D\FID1A.CH Vial: 16
Signal #2 : Y:\1\DATA\061812\GB16368.D\FID2B.CH
Acq On : 18 Jun 2012 7:24 pm Operator: StephK
Sample : D35569-8, 50X Inst : GC/MS Ins
Misc : GC2918,GGB908,5.074,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Jun 19 08:35:58 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Mon Jun 18 13:49:47 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

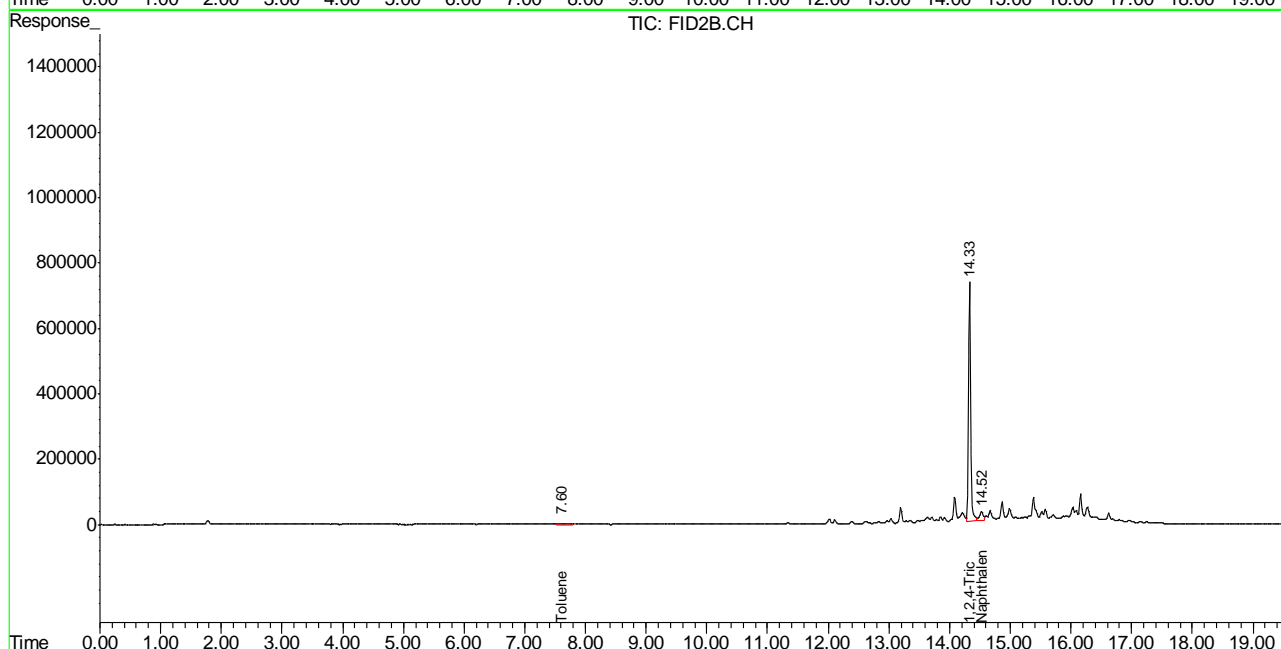
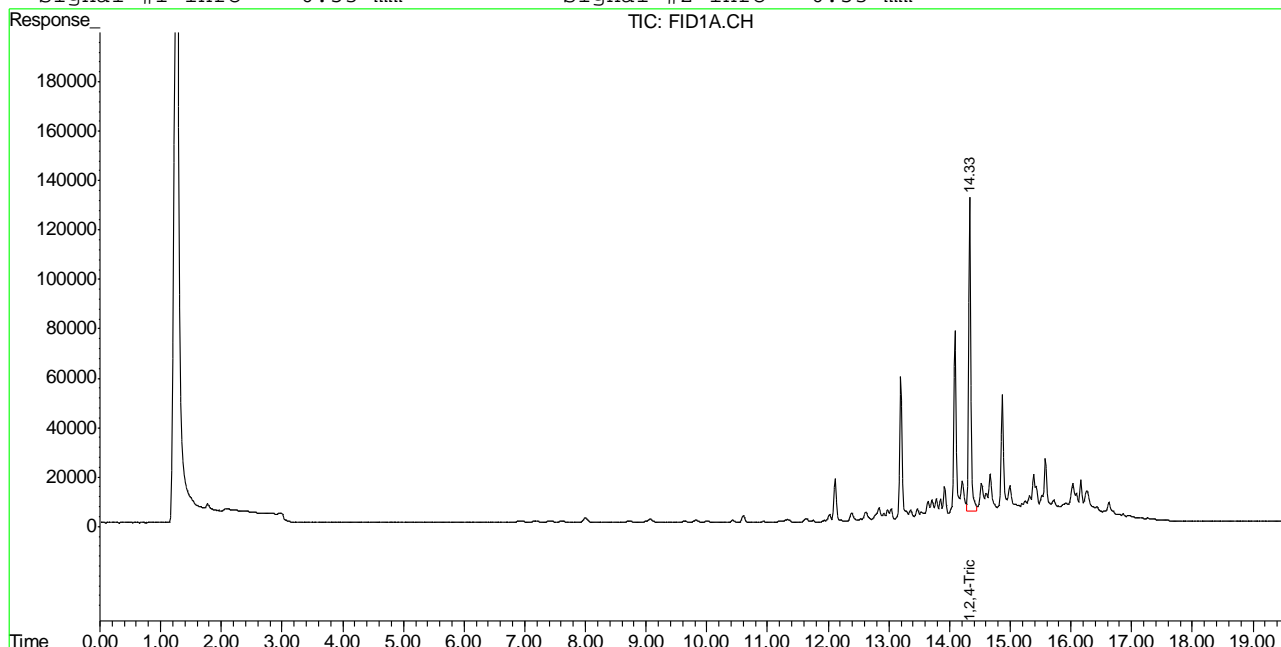
System Monitoring Compounds				
2) S 1,2,4-Trichlorobenzene	14.33	3161464	100.896 %	m
10) S 1,2,4-Trichlorobenzene (P)	14.33	17752432	109.227 %	
Target Compounds				
1) H TVH-Gasoline	7.23	5794783	<MDL	mg/L
4) T Methyl-t-butyl-ether	0.00	0	N.D.	ug/L d
5) T Benzene	0.00	0	N.D.	ug/L d
6) T Toluene	7.60	171596	0.433	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	14.52	1280983	6.492	ug/L

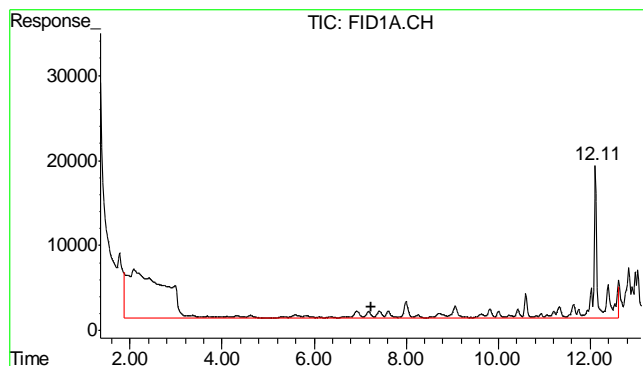
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16368.D\FID1A.CH Vial: 16
 Signal #2 : Y:\1\DATA\061812\GB16368.D\FID2B.CH
 Acq On : 18 Jun 2012 7:24 pm Operator: StephK
 Sample : D35569-8, 50X Inst : GC/MS Ins
 Misc : GC2918,GGB908,5.074,,100,5,1 Multiplr: 1.00
 IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
 Quant Time: Jun 19 7:49 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
 Title : 8015B/8021B TVH/BTEX
 Last Update : Mon Jun 18 13:49:47 2012
 Response via : Multiple Level Calibration
 DataAcq Meth : TVB4.M

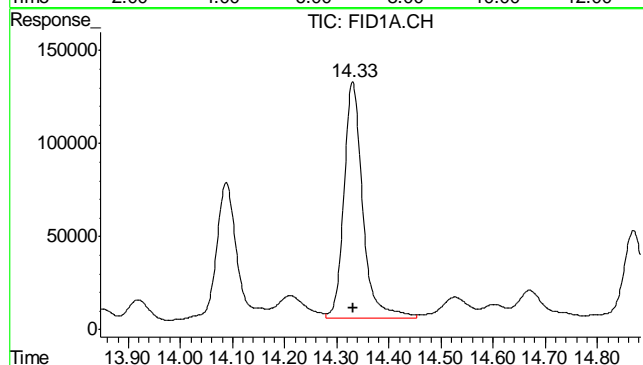
Volume Inj. :
 Signal #1 Phase : DB-624 Signal #2 Phase: DB-624
 Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm





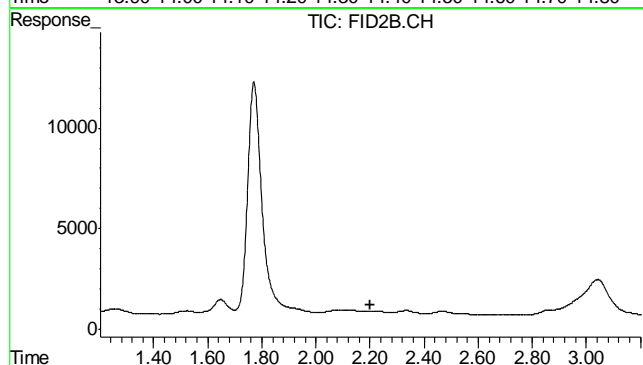
#1 TVH-Gasoline

R.T.: 7.230 min
Delta R.T.: 0.000 min
Response: 5794783
Conc: N.D.



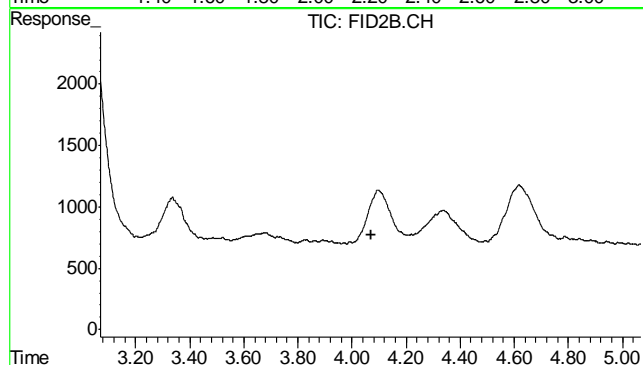
#2 1,2,4-Trichlorobenzene

R.T.: 14.330 min
Delta R.T.: -0.002 min
Response: 3161464
Conc: 100.90 % m



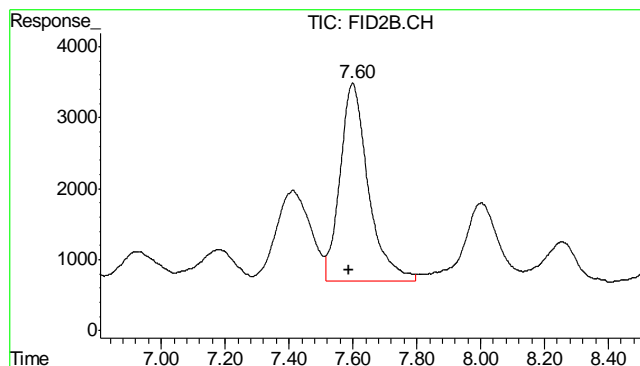
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T.: 2.202 min
Response: 0
Conc: N.D.



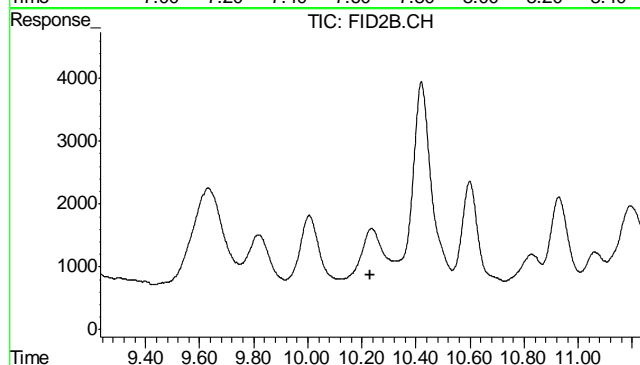
#5 Benzene

R.T.: 0.000 min
Exp R.T.: 4.070 min
Response: 0
Conc: N.D.



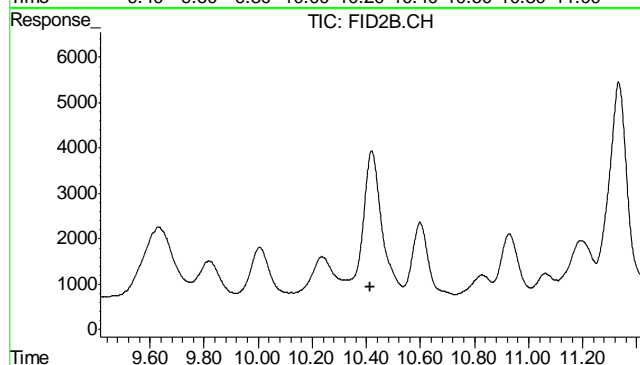
#6 Toluene

R.T.: 7.600 min
Delta R.T.: 0.012 min
Response: 171596
Conc: 0.43 ug/L



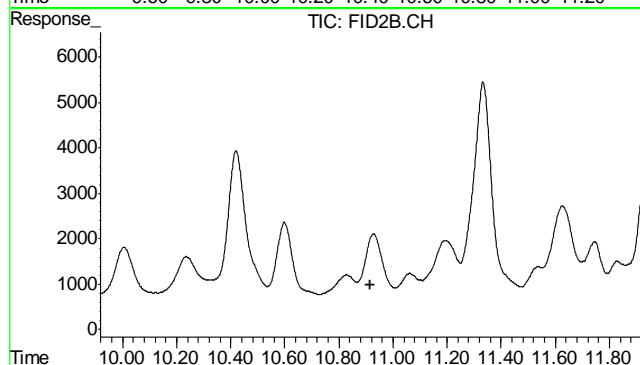
#7 Ethylbenzene

R.T.: 0.000 min
Exp R.T.: 10.232 min
Response: 0
Conc: N.D.



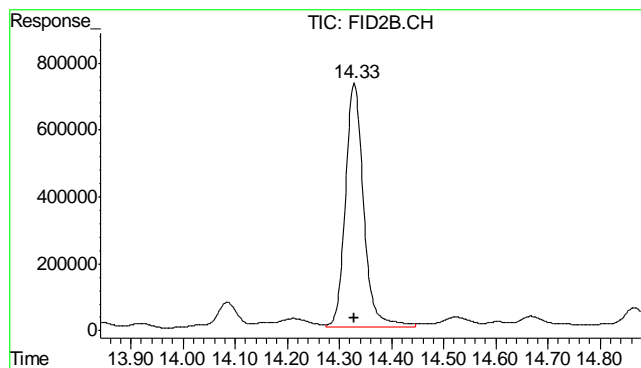
#8 m,p-Xylene

R.T.: 0.000 min
Exp R.T.: 10.415 min
Response: 0
Conc: N.D.



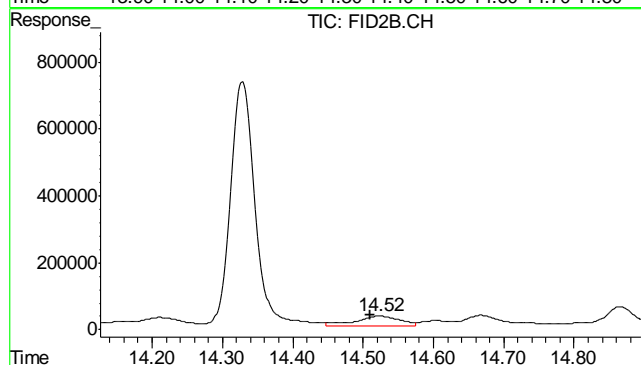
#9 o-Xylene

R.T.: 0.000 min
Exp R.T.: 10.917 min
Response: 0
Conc: N.D.



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

R.T.: 14.329 min
Delta R.T.: 0.000 min
Response: 17752432
Conc: 109.23 %



#11 Naphthalene

R.T.: 14.524 min
Delta R.T.: 0.013 min
Response: 1280983
Conc: 6.49 ug/L

6.18

6

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16369.D\FID1A.CH Vial: 17
Signal #2 : Y:\1\DATA\061812\GB16369.D\FID2B.CH
Acq On : 18 Jun 2012 7:59 pm Operator: StephK
Sample : D35569-9, 50X Inst : GC/MS Ins
Misc : GC2918,GGB908,5.021,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Jun 19 08:36:02 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Mon Jun 18 13:49:47 2012
Response via : Initial Calibration
DataAcq Meth : TVB4.M

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

Compound	R.T.	Response	Conc	Units

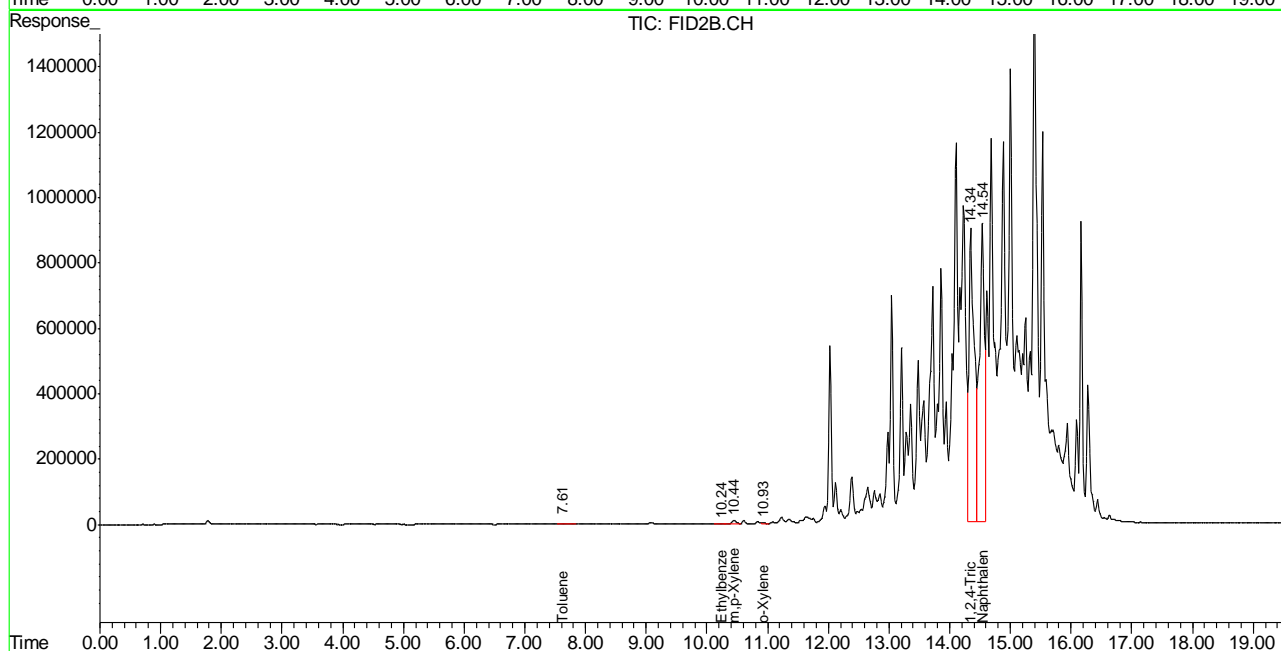
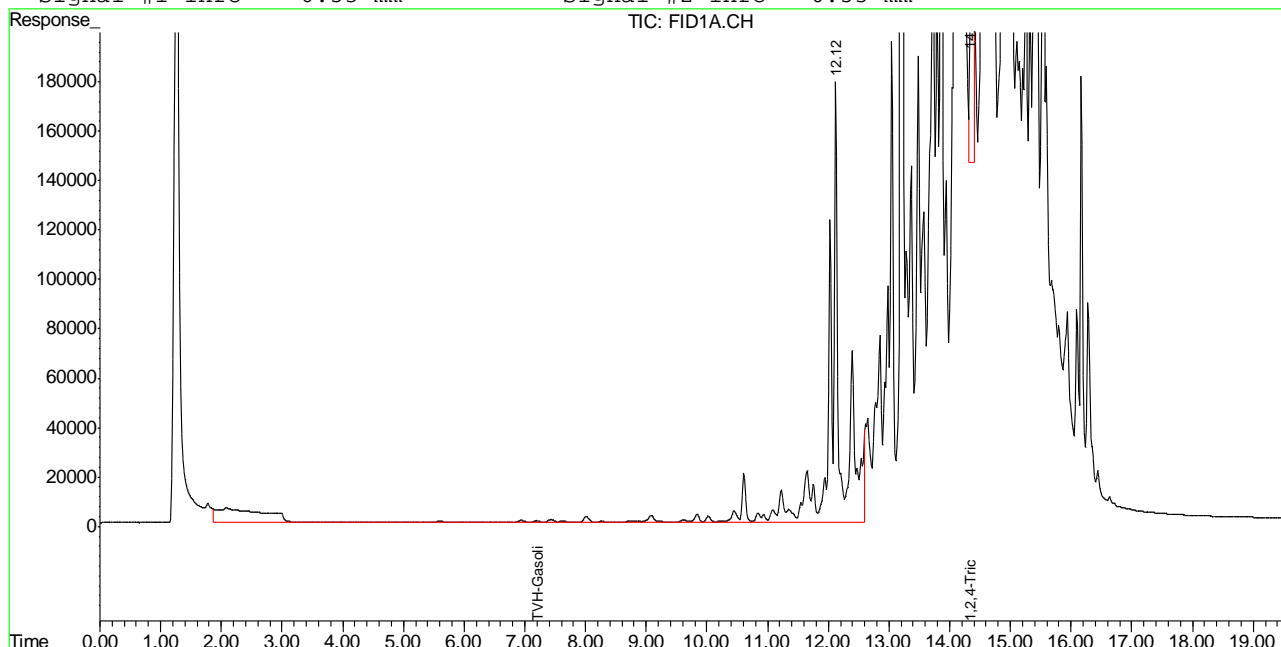
System Monitoring Compounds				
2) S 1,2,4-Trichlorobenzene	14.35	4646321	148.284 %	m
10) S 1,2,4-Trichlorobenzene (P)	14.34	54297636	334.083 %	
Target Compounds				
1) H TVH-Gasoline	7.23	26249146	0.384 mg/L	
4) T Methyl-t-butyl-ether	0.00	0	N.D. ug/L	d
5) T Benzene	0.00	0	N.D. ug/L	d
6) T Toluene	7.61	185844	0.469 ug/L	
7) T Ethylbenzene	10.24	85739	0.253 ug/L	
8) T m,p-Xylene	10.44	744360	1.666 ug/L	
9) T o-Xylene	10.93	219748	0.669 ug/L	
11) T Naphthalene	14.54	50550508	256.200 ug/L	

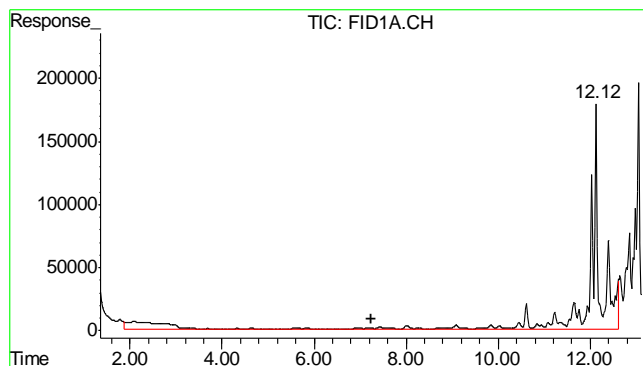
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16369.D\FID1A.CH Vial: 17
 Signal #2 : Y:\1\DATA\061812\GB16369.D\FID2B.CH
 Acq On : 18 Jun 2012 7:59 pm Operator: StephK
 Sample : D35569-9, 50X Inst : GC/MS Ins
 Misc : GC2918,GGB908,5.021,,100,5,1 Multiplr: 1.00
 IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
 Quant Time: Jun 19 7:50 2012 Quant Results File: TB868GB868SOIL.RES

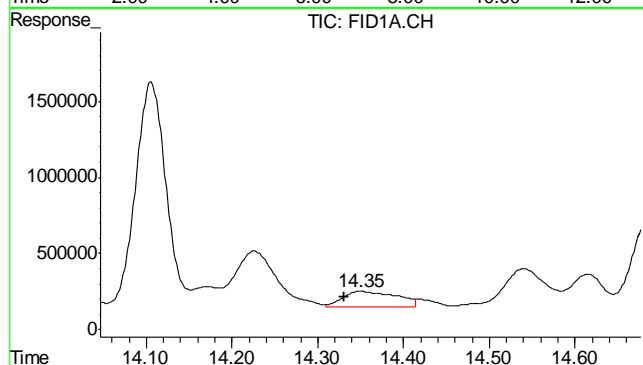
Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
 Title : 8015B/8021B TVH/BTEX
 Last Update : Mon Jun 18 13:49:47 2012
 Response via : Multiple Level Calibration
 DataAcq Meth : TVB4.M

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

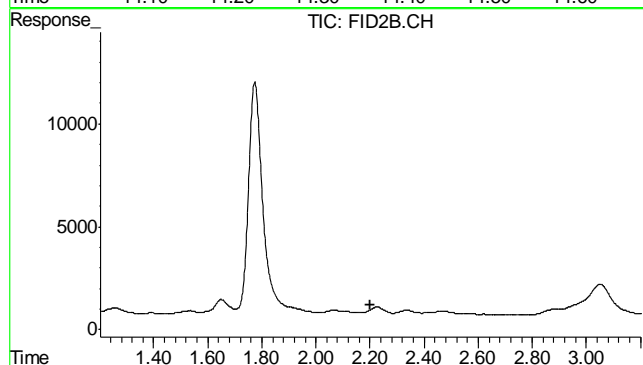




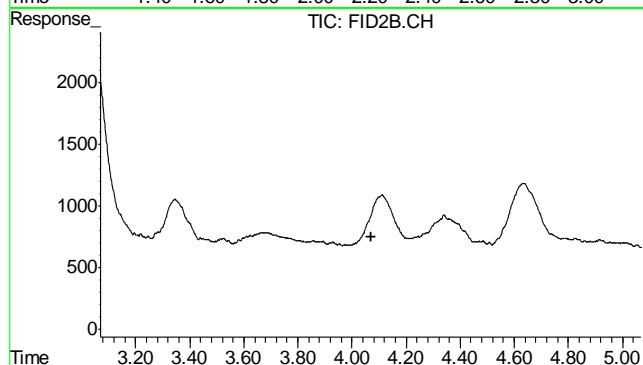
#1 TVH-Gasoline
 R.T.: 7.230 min
 Delta R.T.: 0.000 min
 Response: 26249146
 Conc: 0.38 mg/L m



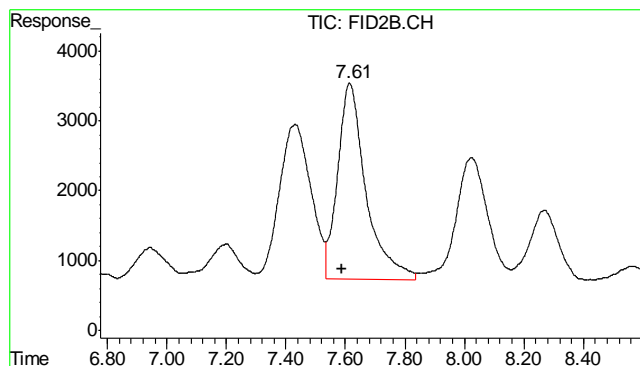
#2 1,2,4-Trichlorobenzene
 R.T.: 14.348 min
 Delta R.T.: 0.017 min
 Response: 4646321
 Conc: 148.28 % m



#4 Methyl-t-butyl-ether
 R.T.: 0.000 min
 Exp R.T.: 2.202 min
 Response: 0
 Conc: N.D.

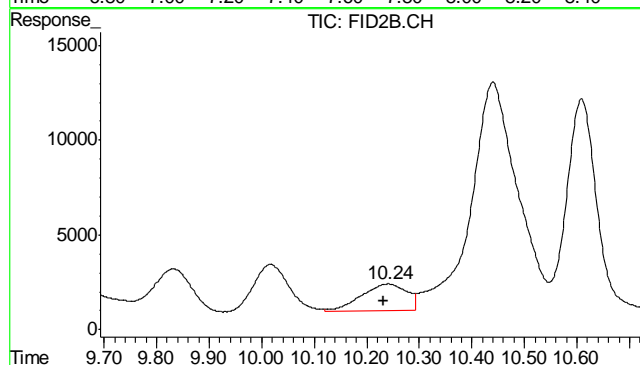


#5 Benzene
 R.T.: 0.000 min
 Exp R.T.: 4.070 min
 Response: 0
 Conc: N.D.



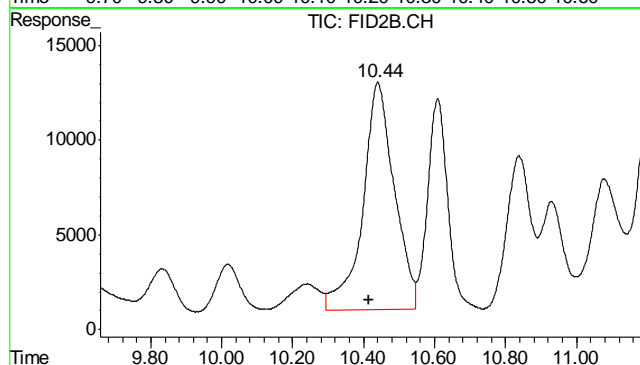
#6 Toluene

R.T.: 7.614 min
Delta R.T.: 0.026 min
Response: 185844
Conc: 0.47 ug/L



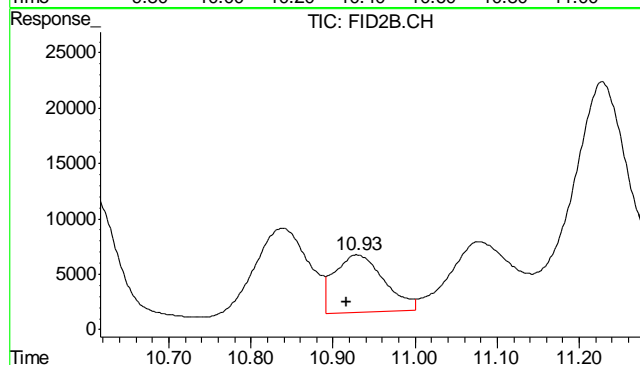
#7 Ethylbenzene

R.T.: 10.241 min
Delta R.T.: 0.009 min
Response: 85739
Conc: 0.25 ug/L



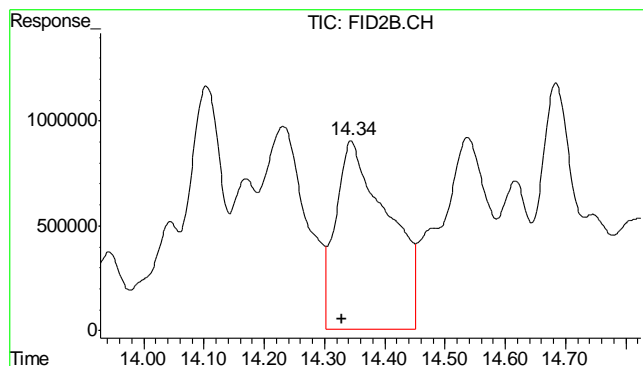
#8 m,p-Xylene

R.T.: 10.440 min
Delta R.T.: 0.025 min
Response: 744360
Conc: 1.67 ug/L



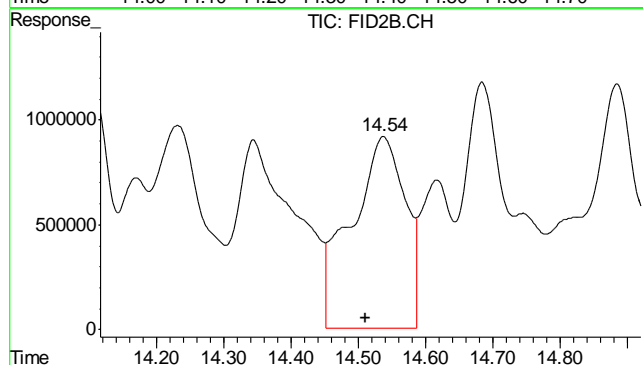
#9 o-Xylene

R.T.: 10.930 min
Delta R.T.: 0.012 min
Response: 219748
Conc: 0.67 ug/L



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

R.T.: 14.345 min
Delta R.T.: 0.016 min
Response: 54297636
Conc: 334.08 %



#11 Naphthalene

R.T.: 14.537 min
Delta R.T.: 0.027 min
Response: 50550508
Conc: 256.20 ug/L

6.1.9

6

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16370.D\FID1A.CH Vial: 18
Signal #2 : Y:\1\DATA\061812\GB16370.D\FID2B.CH
Acq On : 18 Jun 2012 8:34 pm Operator: StephK
Sample : D35569-10, 50X Inst : GC/MS Ins
Misc : GC2918,GGB908,5.017,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Jun 19 08:36:06 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Mon Jun 18 13:49:47 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	

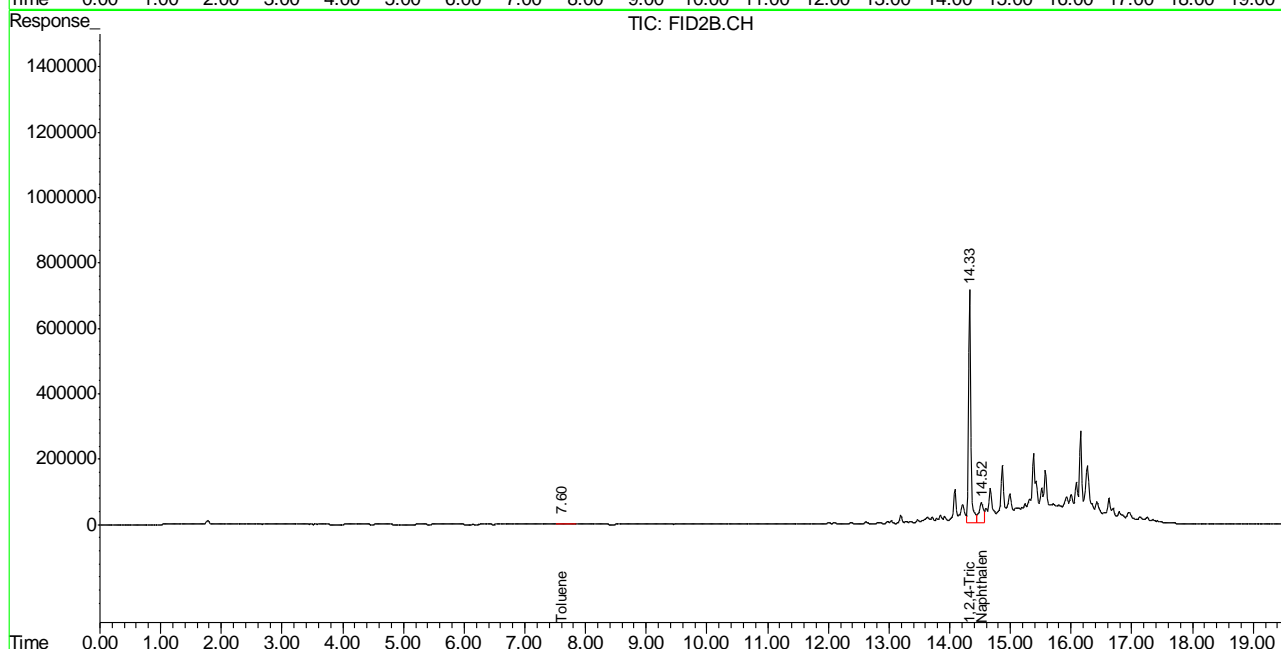
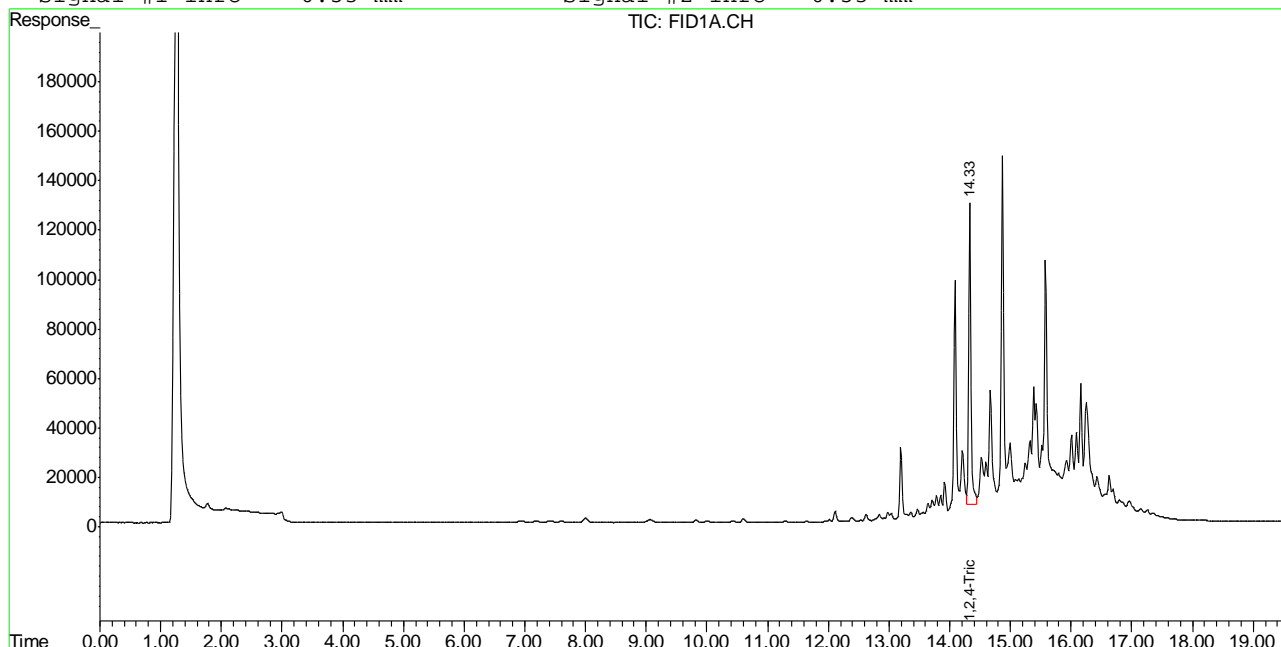
System Monitoring Compounds						
2) S	1,2,4-Trichlorobenzene	14.33	3115948	99.443 %	m	
10) S	1,2,4-Trichlorobenzene (P)	14.33	18611533	114.513 %		
Target Compounds						
1) H	TVH-Gasoline	7.23	5005694	<MDL	mg/L	
4) T	Methyl-t-butyl-ether	0.00	0	N.D.	ug/L	d
5) T	Benzene	0.00	0	N.D.	ug/L	d
6) T	Toluene	7.60	156233	0.394	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	14.52	3239622	16.419	ug/L	

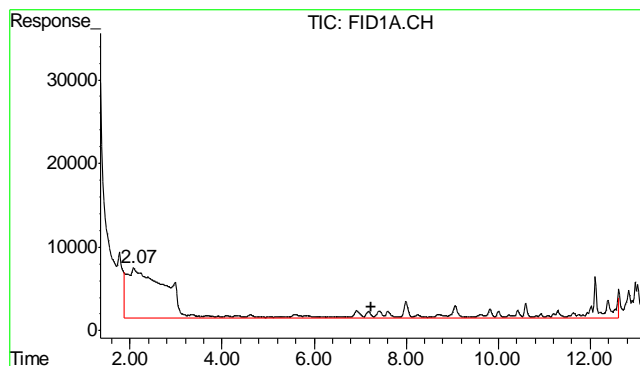
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16370.D\FID1A.CH Vial: 18
 Signal #2 : Y:\1\DATA\061812\GB16370.D\FID2B.CH
 Acq On : 18 Jun 2012 8:34 pm Operator: StephK
 Sample : D35569-10, 50X Inst : GC/MS Ins
 Misc : GC2918,GGB908,5.017,,100,5,1 Multiplr: 1.00
 IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
 Quant Time: Jun 19 7:50 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
 Title : 8015B/8021B TVH/BTEX
 Last Update : Mon Jun 18 13:49:47 2012
 Response via : Multiple Level Calibration
 DataAcq Meth : TVB4.M

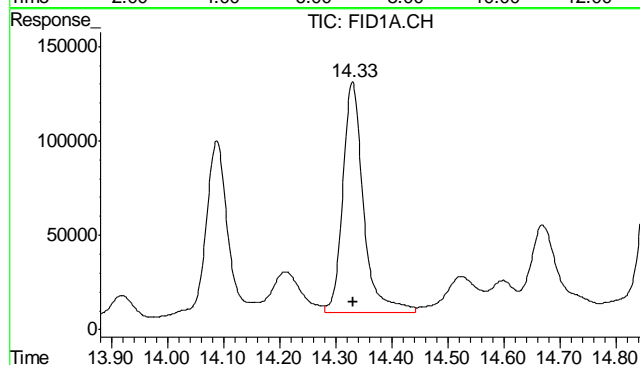
Volume Inj. :
 Signal #1 Phase : DB-624 Signal #2 Phase: DB-624
 Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm





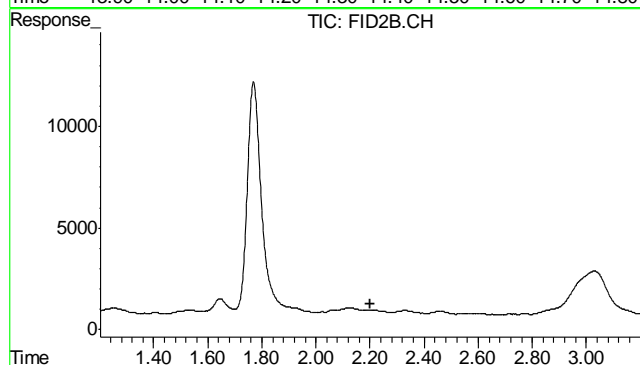
#1 TVH-Gasoline

R.T.: 7.230 min
Delta R.T.: 0.000 min
Response: 5005694
Conc: N.D.



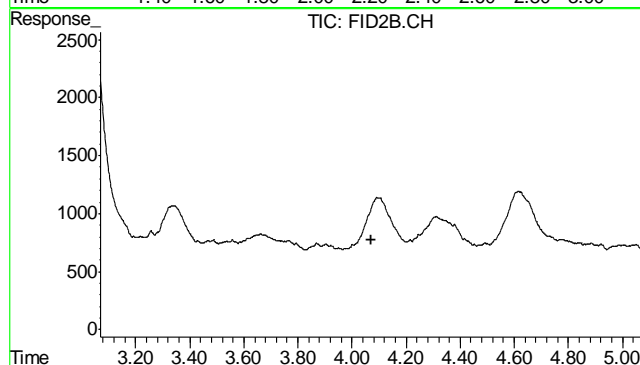
#2 1,2,4-Trichlorobenzene

R.T.: 14.329 min
Delta R.T.: -0.002 min
Response: 3115948
Conc: 99.44 % m



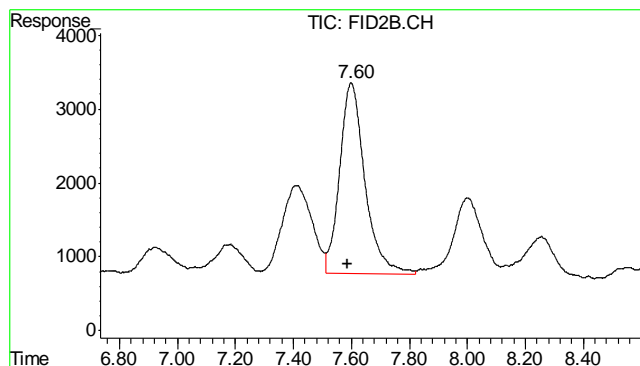
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T.: 2.202 min
Response: 0
Conc: N.D.



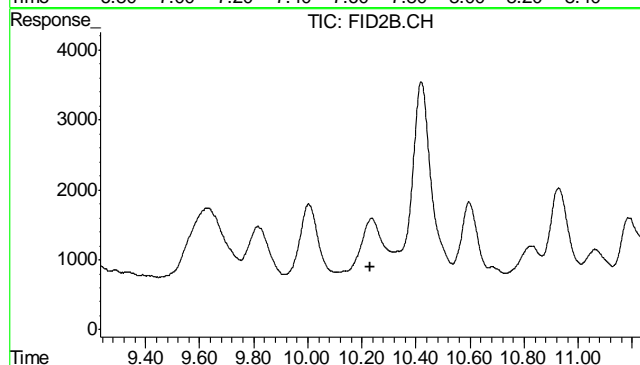
#5 Benzene

R.T.: 0.000 min
Exp R.T.: 4.070 min
Response: 0
Conc: N.D.



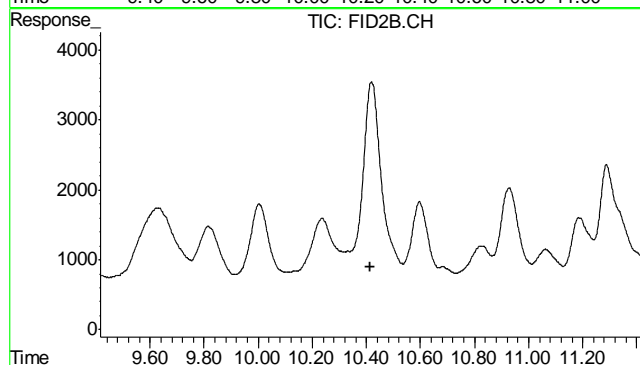
#6 Toluene

R.T.: 7.599 min
Delta R.T.: 0.011 min
Response: 156233
Conc: 0.39 ug/L



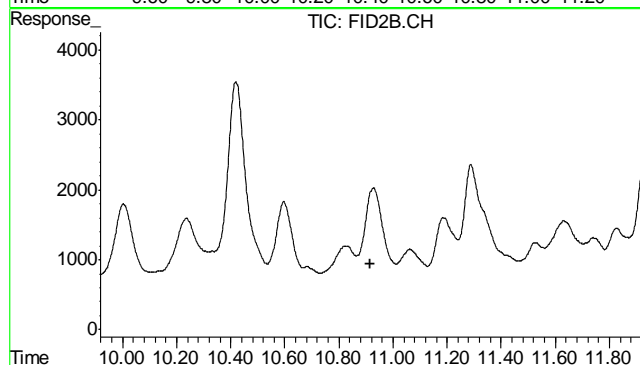
#7 Ethylbenzene

R.T.: 0.000 min
Exp R.T.: 10.232 min
Response: 0
Conc: N.D.



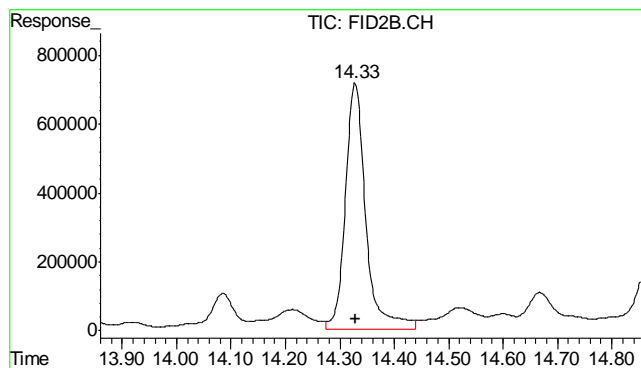
#8 m,p-Xylene

R.T.: 0.000 min
Exp R.T.: 10.415 min
Response: 0
Conc: N.D.



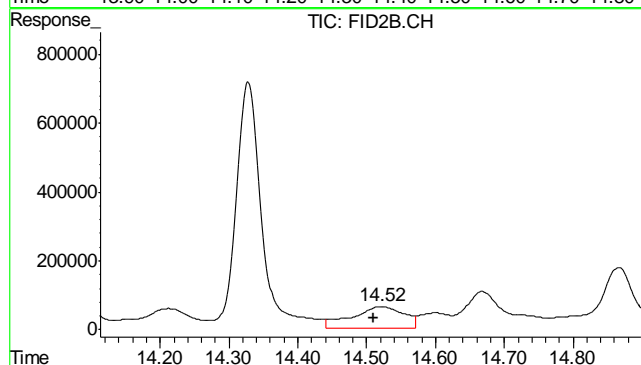
#9 o-Xylene

R.T.: 0.000 min
Exp R.T.: 10.917 min
Response: 0
Conc: N.D.



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

R.T.: 14.328 min
Delta R.T.: 0.000 min
Response: 18611533
Conc: 114.51 %



#11 Naphthalene

R.T.: 14.521 min
Delta R.T.: 0.011 min
Response: 3239622
Conc: 16.42 ug/L

6.1.10

6

Judy Melson
06/19/12 12:15

Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16357.D\FID1A.CH Vial: 5
Signal #2 : Y:\1\DATA\061812\GB16357.D\FID2B.CH
Acq On : 18 Jun 2012 12:53 pm Operator: StephK
Sample : MB Inst : GC/MS Ins
Misc : GC2918,GGB908,5.000,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Jun 18 13:50:04 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Mon Jun 18 13:49:47 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	3836027	122.424	%	m
10) S	1,2,4-Trichlorobenzene (P)	14.32	21039858	129.454	%	
Target Compounds						
1) H	TVH-Gasoline	7.23	4590501	<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	7.59	224307	0.566	ug/L	
7) T	Ethylbenzene	0.00	0	N.D.	ug/L	d
8) T	m,p-Xylene	10.41	189652	0.146	ug/L	
9) T	o-Xylene	0.00	0	N.D.	ug/L	d
11) T	Naphthalene	14.50	257442	1.305	ug/L	

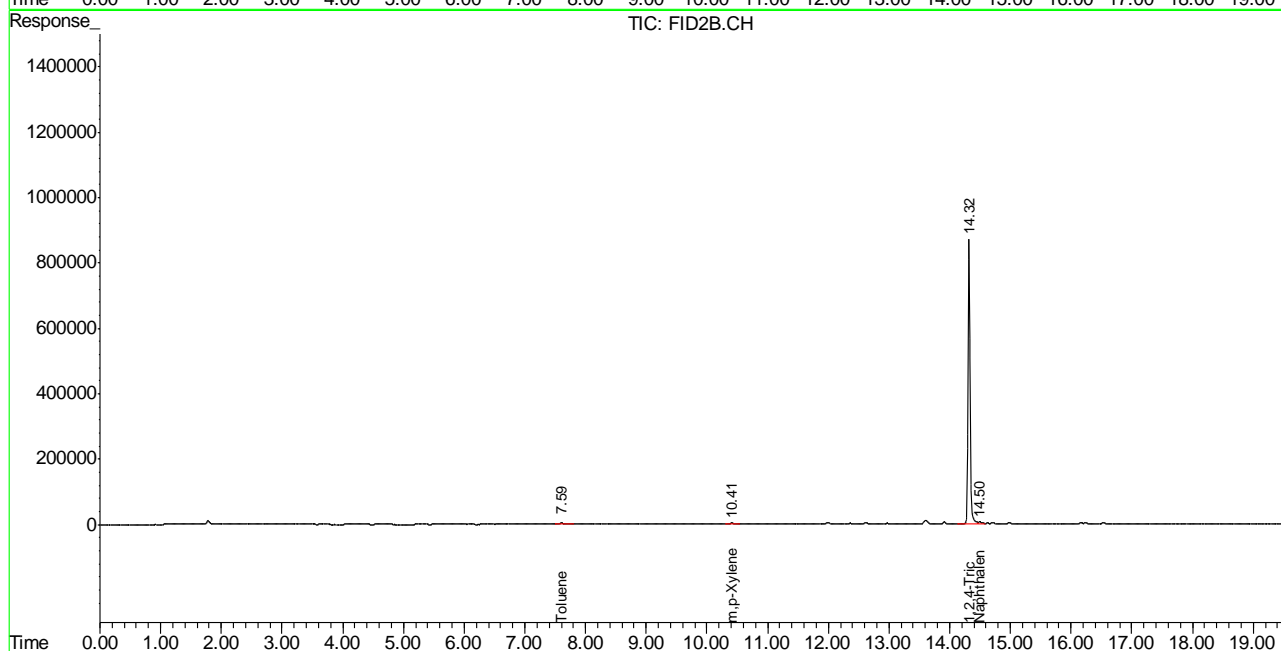
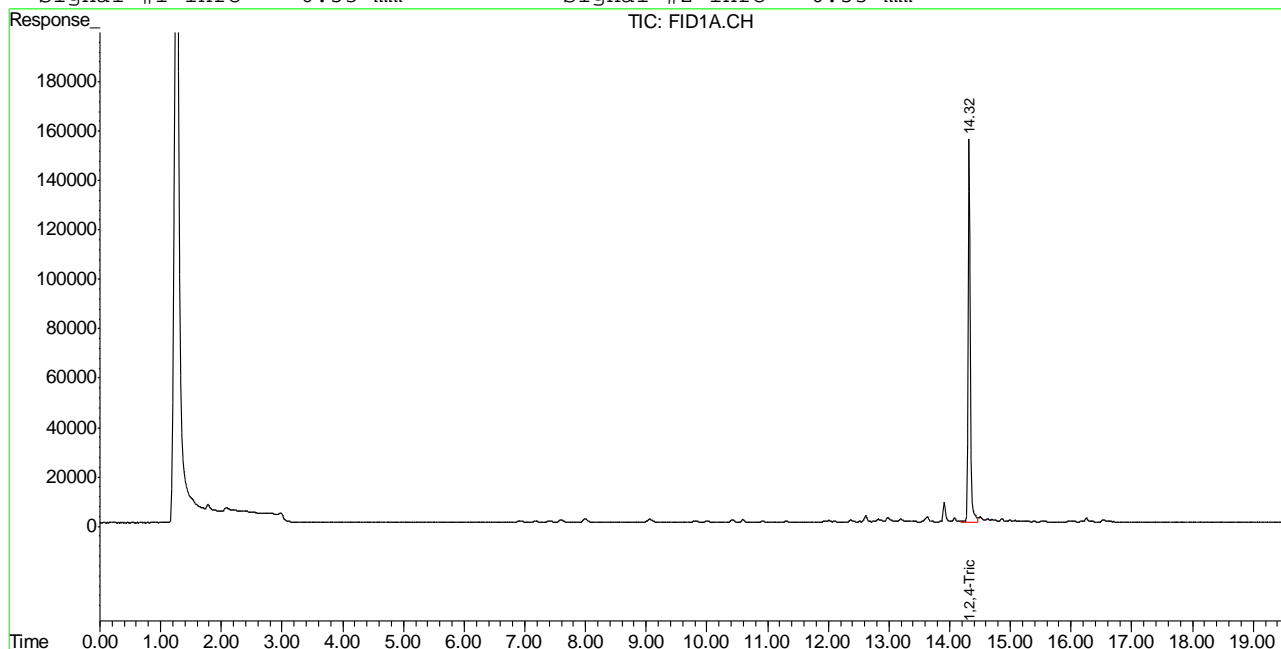
(f)=RT Delta > 1/2 Window (m)=manual int.
GB16357.D TB868GB868SOIL.M Tue Jun 19 10:02:45 2012 GC

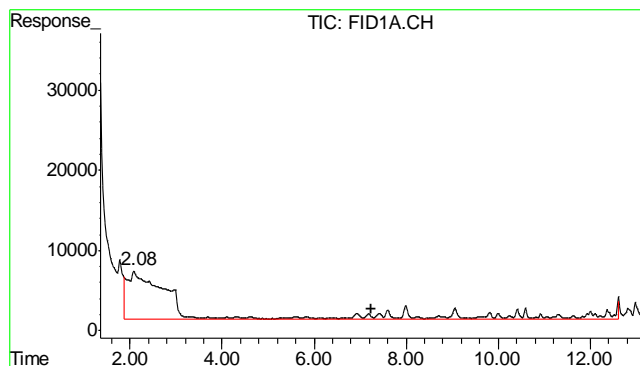
Quantitation Report (QT Reviewed)

Signal #1 : Y:\1\DATA\061812\GB16357.D\FID1A.CH Vial: 5
Signal #2 : Y:\1\DATA\061812\GB16357.D\FID2B.CH
Acq On : 18 Jun 2012 12:53 pm Operator: StephK
Sample : MB Inst : GC/MS Ins
Misc : GC2918,GGB908,5.000,,100,5,1 Multiplr: 1.00
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E
Quant Time: Jun 18 12:53 2012 Quant Results File: TB868GB868SOIL.RES

Quant Method : C:\MSDCHEM\1...\TB868GB868SOIL.M (Chemstation Integrator)
Title : 8015B/8021B TVH/BTEX
Last Update : Mon Jun 18 13:49:47 2012
Response via : Multiple Level Calibration
DataAcq Meth : TVB4.M

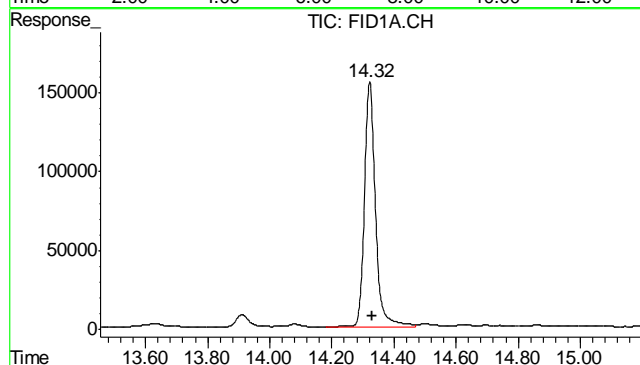
Volume Inj. :
Signal #1 Phase : DB-624 Signal #2 Phase: DB-624
Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm





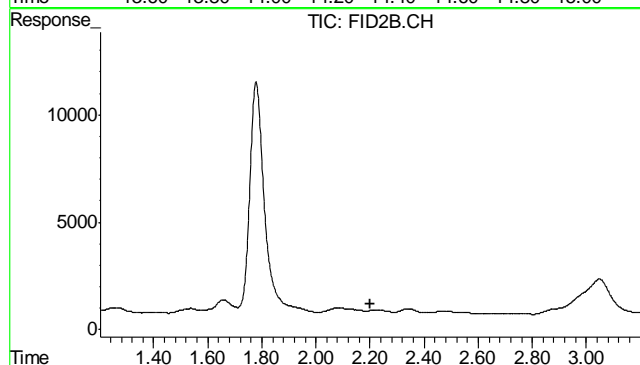
#1 TVH-Gasoline

R.T.: 7.230 min
Delta R.T.: 0.000 min
Response: 4590501
Conc: N.D.



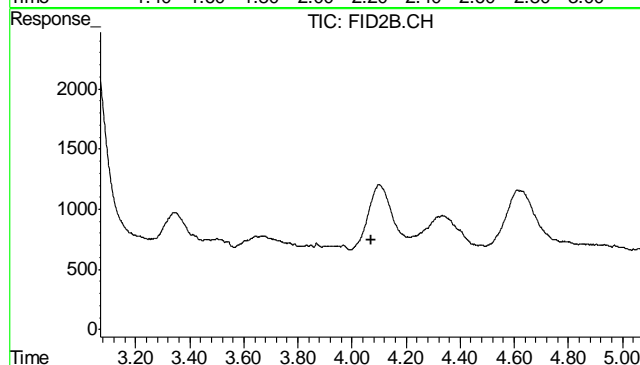
#2 1,2,4-Trichlorobenzene

R.T.: 14.321 min
Delta R.T.: -0.010 min
Response: 3836027
Conc: 122.42 % m



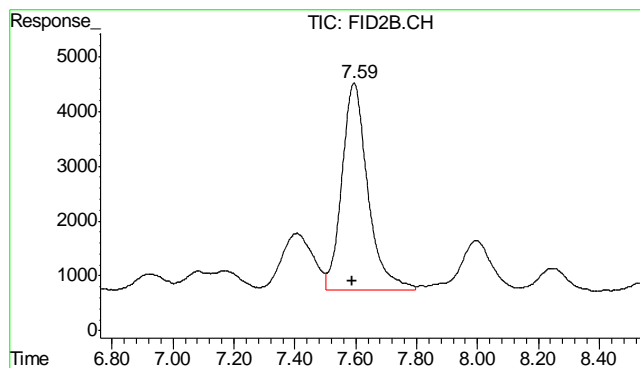
#4 Methyl-t-butyl-ether

R.T.: 0.000 min
Exp R.T.: 2.202 min
Response: 0
Conc: N.D.



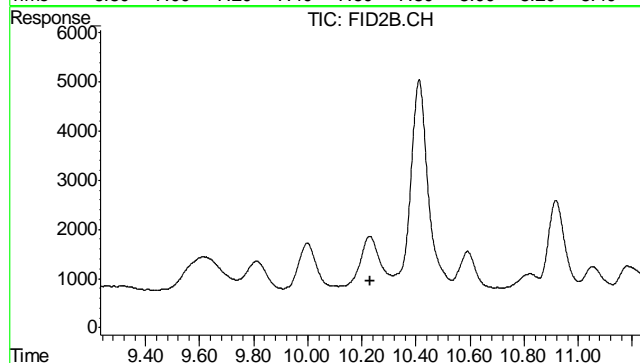
#5 Benzene

R.T.: 0.000 min
Exp R.T.: 4.070 min
Response: 0
Conc: N.D.



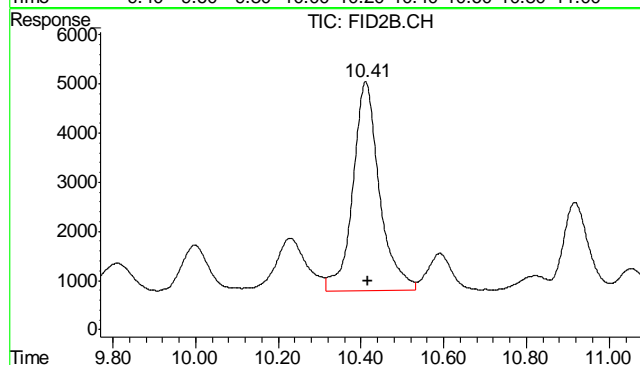
#6 Toluene

R.T.: 7.595 min
Delta R.T.: 0.006 min
Response: 224307
Conc: 0.57 ug/L



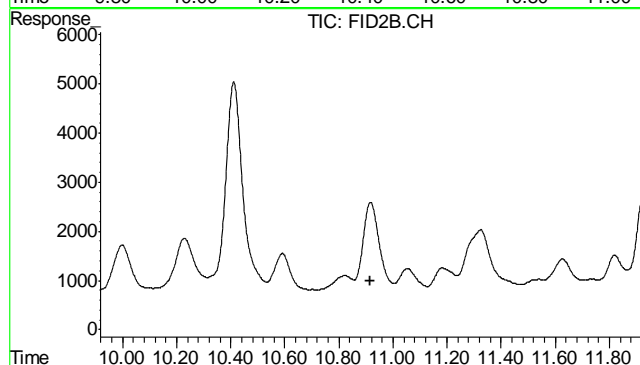
#7 Ethylbenzene

R.T.: 0.000 min
Exp R.T.: 10.232 min
Response: 0
Conc: N.D.



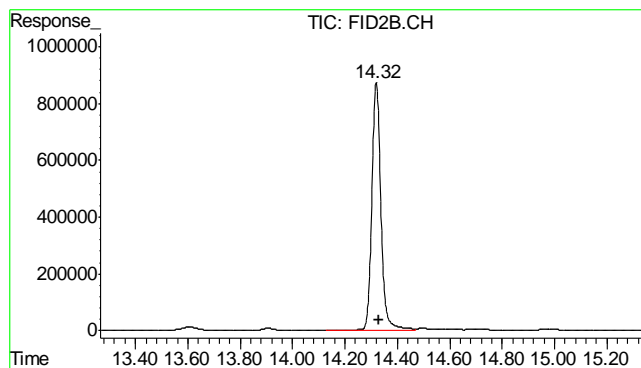
#8 m,p-Xylene

R.T.: 10.411 min
Delta R.T.: -0.004 min
Response: 189652
Conc: 0.15 ug/L



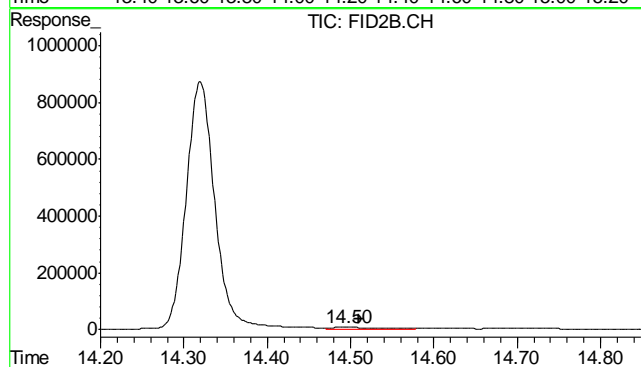
#9 o-Xylene

R.T.: 0.000 min
Exp R.T.: 10.917 min
Response: 0
Conc: N.D.



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

R.T.: 14.320 min
Delta R.T.: -0.009 min
Response: 21039858
Conc: 129.45 %



#11 Naphthalene

R.T.: 14.496 min
Delta R.T.: -0.014 min
Response: 257442
Conc: 1.30 ug/L

6.2.1

6

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Page 1 of 1

Job Number: D35569
Account: XTOKRWR XTO Energy
Project: PCU 297-10B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6079-MB	FD14418.D	1	06/19/12	AW	06/18/12	OP6079	GFD755

The QC reported here applies to the following samples:

Method: SW846-8015B

D35569-1, D35569-2, D35569-3, D35569-4, D35569-5, D35569-6, D35569-7, D35569-8, D35569-9, D35569-10

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	6.7	4.3	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	96% 43-136%

Blank Spike Summary

Job Number: D35569
Account: XTOKRWR XTO Energy
Project: PCU 297-10B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6079-BS	FD14420.D	1	06/19/12	AW	06/18/12	OP6079	GFD755

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

D35569-1, D35569-2, D35569-3, D35569-4, D35569-5, D35569-6, D35569-7, D35569-8, D35569-9, D35569-10

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	667	366	55*	58-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	71%	43-136%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D35569
Account: XTOKRWR XTO Energy
Project: PCU 297-10B

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6079-MS	FD14422.D	1	06/19/12	AW	06/18/12	OP6079	GFD755
OP6079-MSD	FD14424.D	1	06/19/12	AW	06/18/12	OP6079	GFD755
D35569-1	FD14426.D	1	06/19/12	AW	06/18/12	OP6079	GFD755

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

D35569-1, D35569-2, D35569-3, D35569-4, D35569-5, D35569-6, D35569-7, D35569-8, D35569-9, D35569-10

CAS No.	Compound	D35569-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	18.2		711	431	58	527	72	20	20-183/43

CAS No.	Surrogate Recoveries	MS	MSD	D35569-1	Limits
84-15-1	o-Terphenyl	74%	86%	75%	43-136%

GC Semi-volatiles

Raw Data

∞

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14426.D Vial: 5
Acq On : 6-19-2012 02:55:38 PM Operator: alexwl
Sample : D35569-1 Inst : FID5
Misc : OP6079,GFD755,30.03,,,1,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 19 15:26:57 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Initial Calibration
DataAcq Meth : DRODUAL.M

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S O-Terphenyl	9.60	65344242	1505.062 mg/L m
Target Compounds			
2) H TPH-DRO (c10-c28)	7.40	21259489	511.962 mg/L

8.1.1

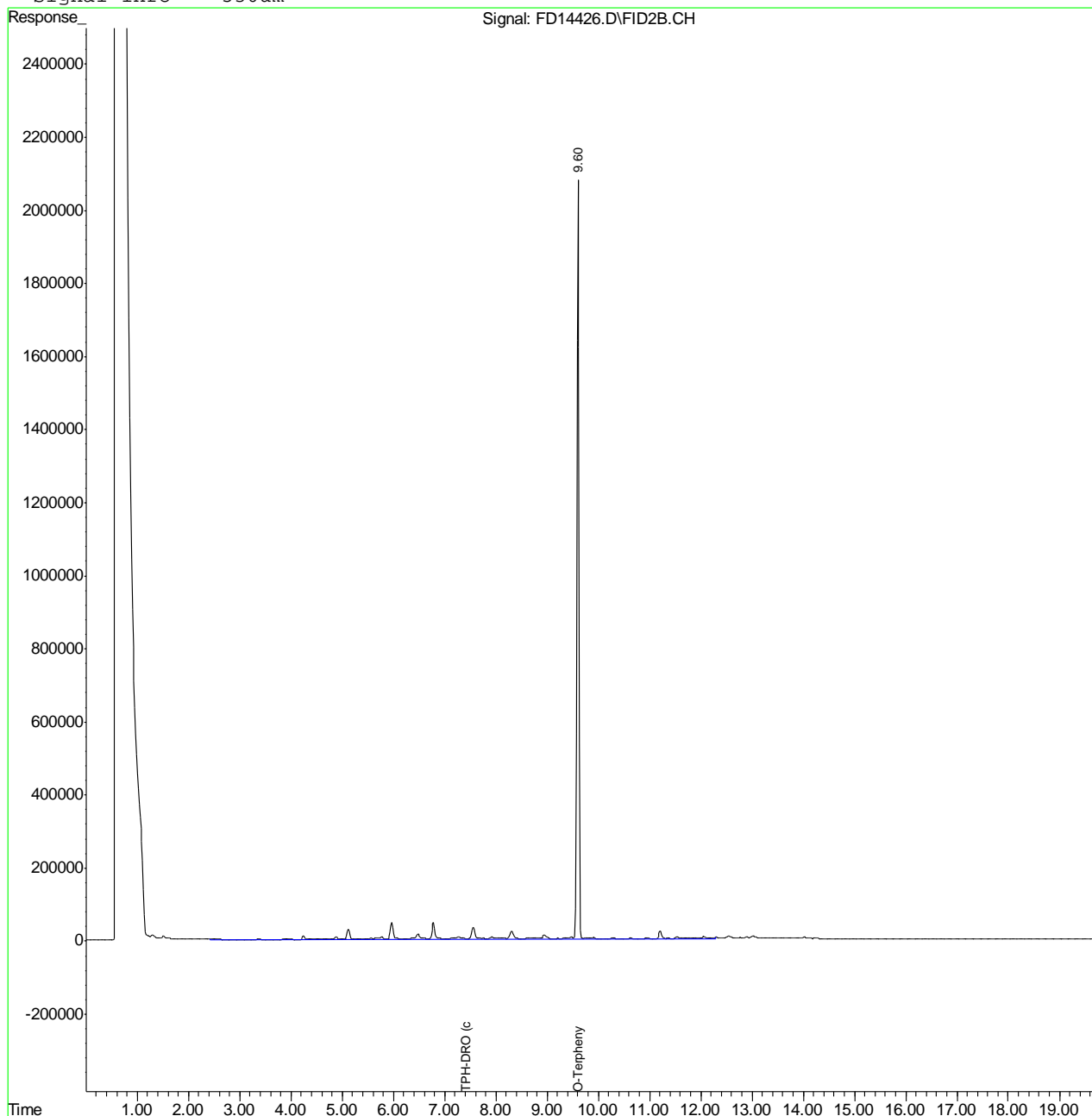
8

Quantitation Report (QT Reviewed)

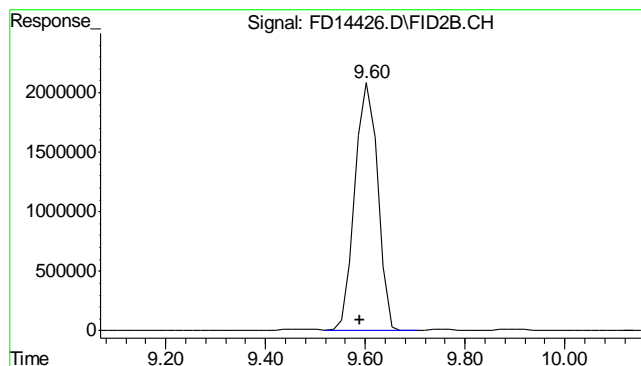
Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14426.D Vial: 57
 Acq On : 6-19-2012 02:55:38 PM Operator: alexwl
 Sample : D35569-1 Inst : FID5
 Misc : OP6079,GFD755,30.03,,,1,1 Multiplr: 1.00
 IntFile : autoint1.e
 Quant Time: Jun 19 15:27 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
 Title : 8015B TEH
 Last Update : Tue Jun 12 11:16:41 2012
 Response via : Multiple Level Calibration
 DataAcq Meth : DRODUAL.M

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

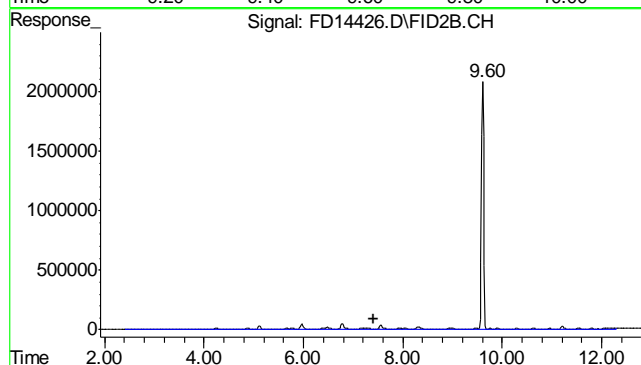


8.1.1
8



#1 O-Terphenyl

R.T.: 9.602 min
 Delta R.T.: 0.012 min
 Response: 65344242
 Conc: 1505.06 mg/L m



#2 TPH-DRO (c10-c28)

R.T.: 7.400 min
 Delta R.T.: 0.000 min
 Response: 21259489
 Conc: 511.96 mg/L m

8.1.1

8

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14428.D Vial: 5
Acq On : 6-19-2012 03:22:10 PM Operator: alexwl
Sample : D35569-2 Inst : FID5
Misc : OP6079,GFD755,30.10,,,3,10 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 11:50:52 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Initial Calibration
DataAcq Meth : DRODUAL.M

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S O-Terphenyl	9.59	2010430	46.306 mg/L m
Target Compounds			
2) H TPH-DRO (c10-c28)	7.40	1336916635	32195.079 mg/L

8.12

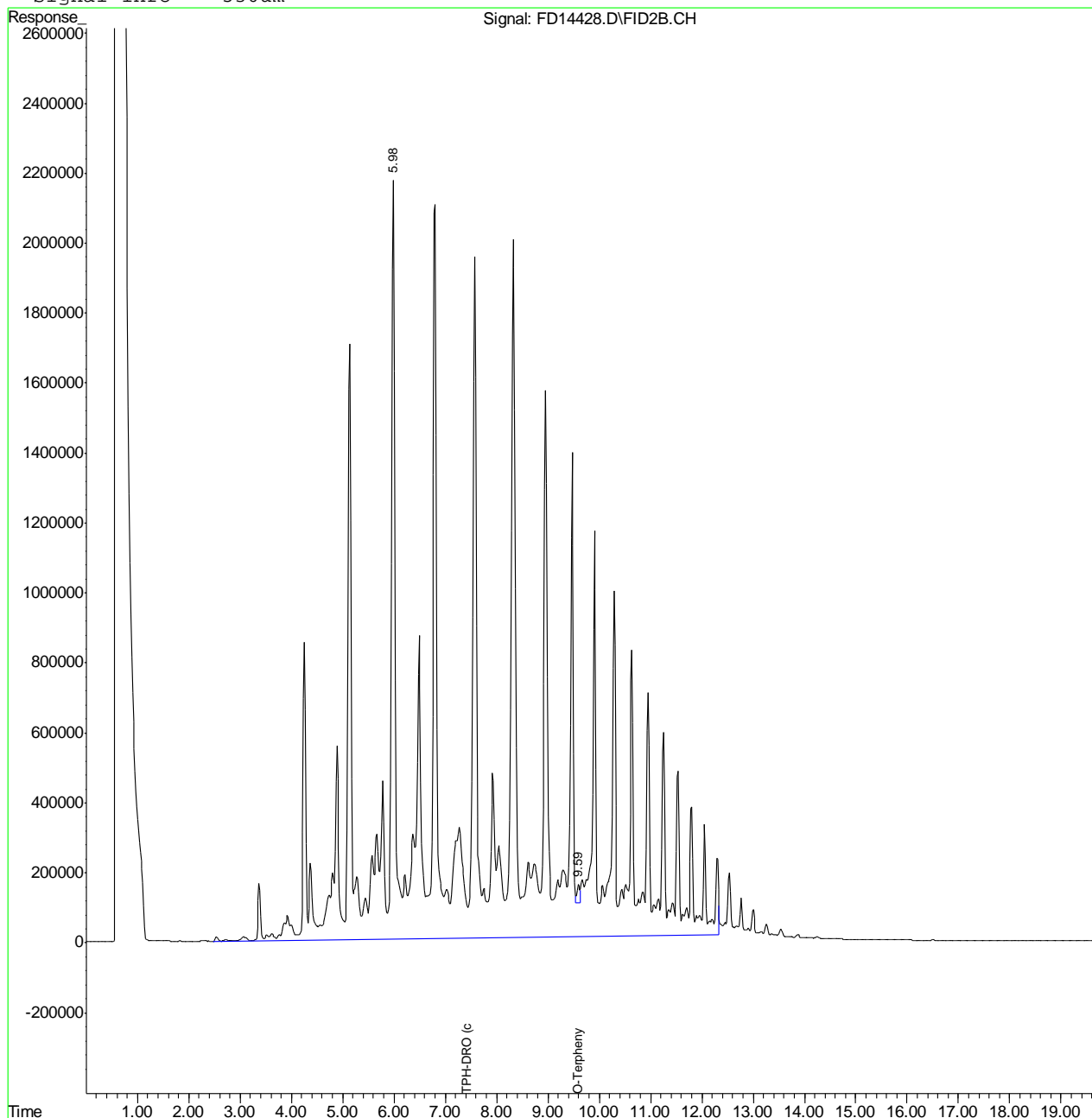
8

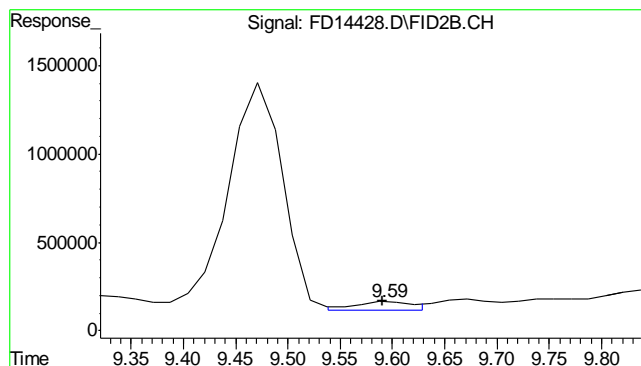
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14428.D Vial: 58
Acq On : 6-19-2012 03:22:10 PM Operator: alexwl
Sample : D35569-2 Inst : FID5
Misc : OP6079,GFD755,30.10,,,3,10 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 13:18 2012 Quant Results File: DRO-GFD743R.RES

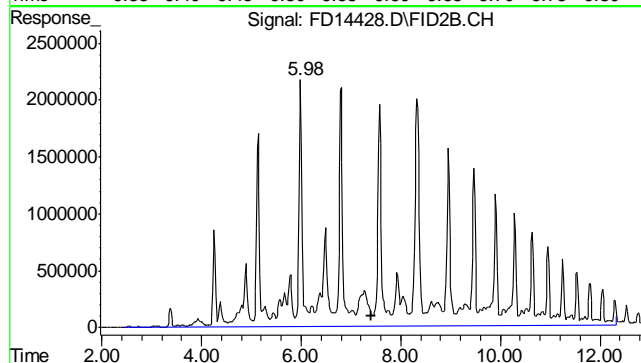
Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Multiple Level Calibration
DataAcq Meth : DRODUAL.M

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





#1 O-Terphenyl
 R.T.: 9.592 min
 Delta R.T.: 0.002 min
 Response: 2010430
 Conc: 46.31 mg/L m



#2 TPH-DRO (c10-c28)
 R.T.: 7.400 min
 Delta R.T.: 0.000 min
 Response: 1336916635
 Conc: 32195.08 mg/L m

8.12
 8

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD062112.SEC\FD14594.D Vial: 5
Acq On : 6-21-2012 02:23:27 PM Operator: alexwl
Sample : D35569-3 Inst : FID5
Misc : OP6079,GFD761,30.02,,,1,10 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 21 14:59:49 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Initial Calibration
DataAcq Meth : DRODUAL.M

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S O-Terphenyl	9.60	6827964	157.267 mg/L m
Target Compounds			
2) H TPH-DRO (c10-c28)	7.40	887612229	21375.115 mg/L

8.1.3

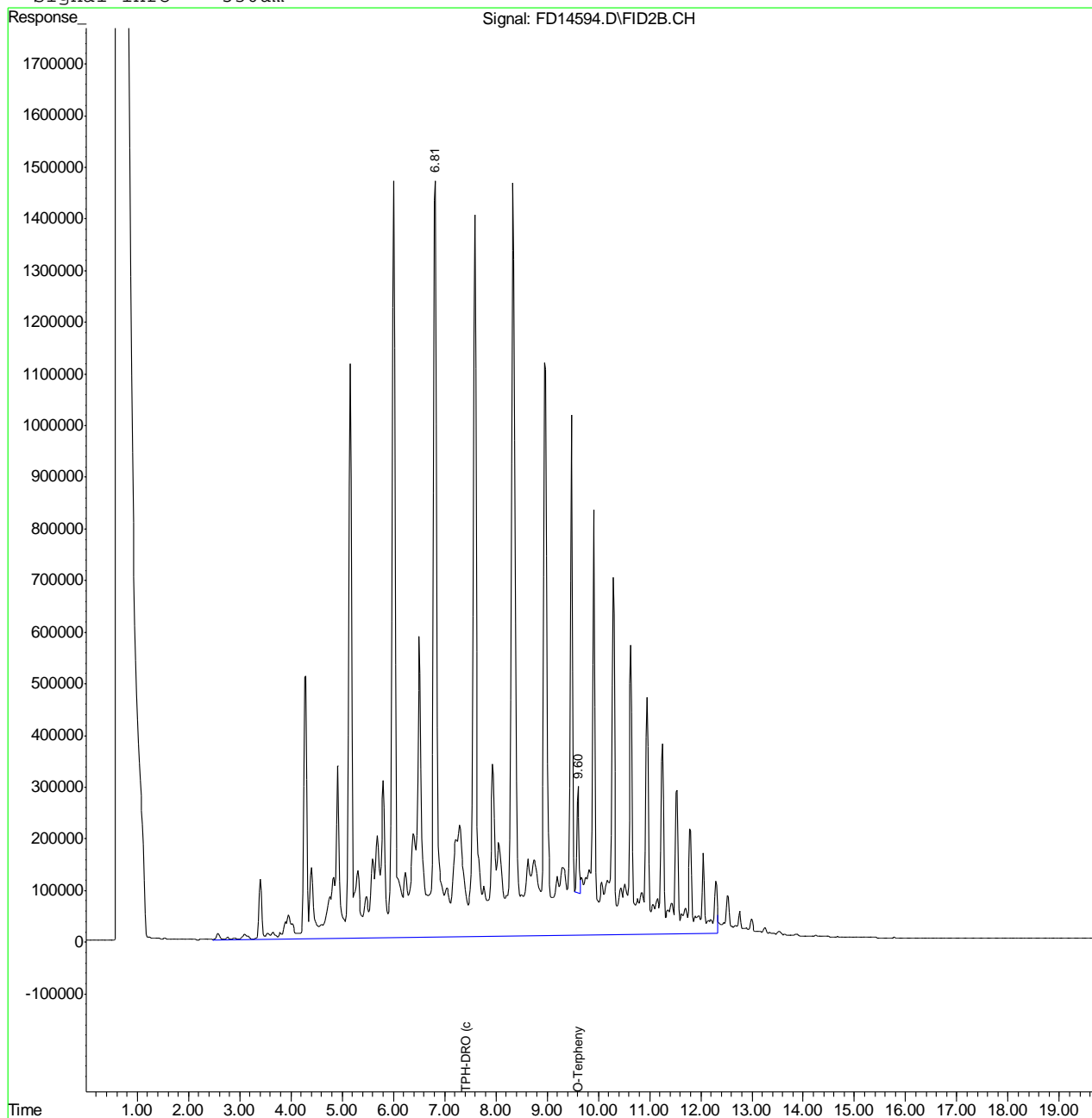
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Quantitation Report (QT Reviewed)

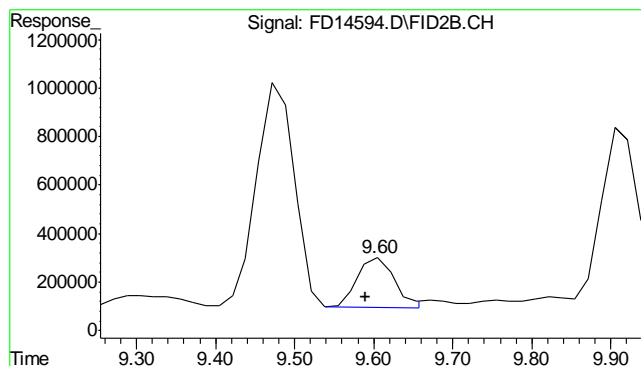
Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD062112.SEC\FD14594.D Vial: 53
Acq On : 6-21-2012 02:23:27 PM Operator: alexwl
Sample : D35569-3 Inst : FID5
Misc : OP6079,GFD761,30.02,,,1,10 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 21 15:00 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Multiple Level Calibration
DataAcq Meth : DRODUAL.M

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

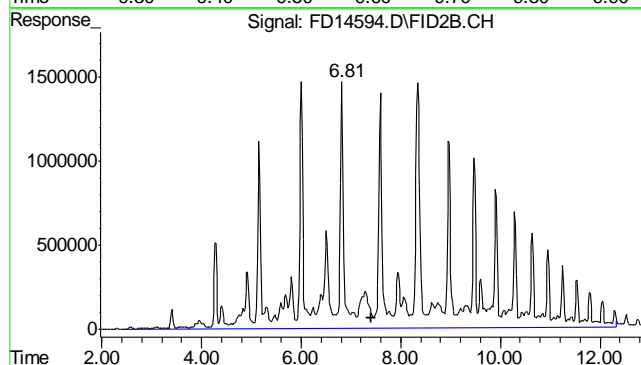


8.1.3
8



#1 O-Terphenyl

R.T.: 9.602 min
Delta R.T.: 0.012 min
Response: 6827964
Conc: 157.27 mg/L m



#2 TPH-DRO (c10-c28)

R.T.: 7.400 min
Delta R.T.: 0.000 min
Response: 887612229
Conc: 21375.11 mg/L m

8.1.3

8

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14432.D Vial: 60
Acq On : 6-19-2012 04:15:13 PM Operator: alexwl
Sample : D35569-4 Inst : FID5
Misc : OP6079,GFD755,30.06,,,1,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 11:55:43 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Initial Calibration
DataAcq Meth : DRODUAL.M

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

Compound	R.T.	Response	Conc Units

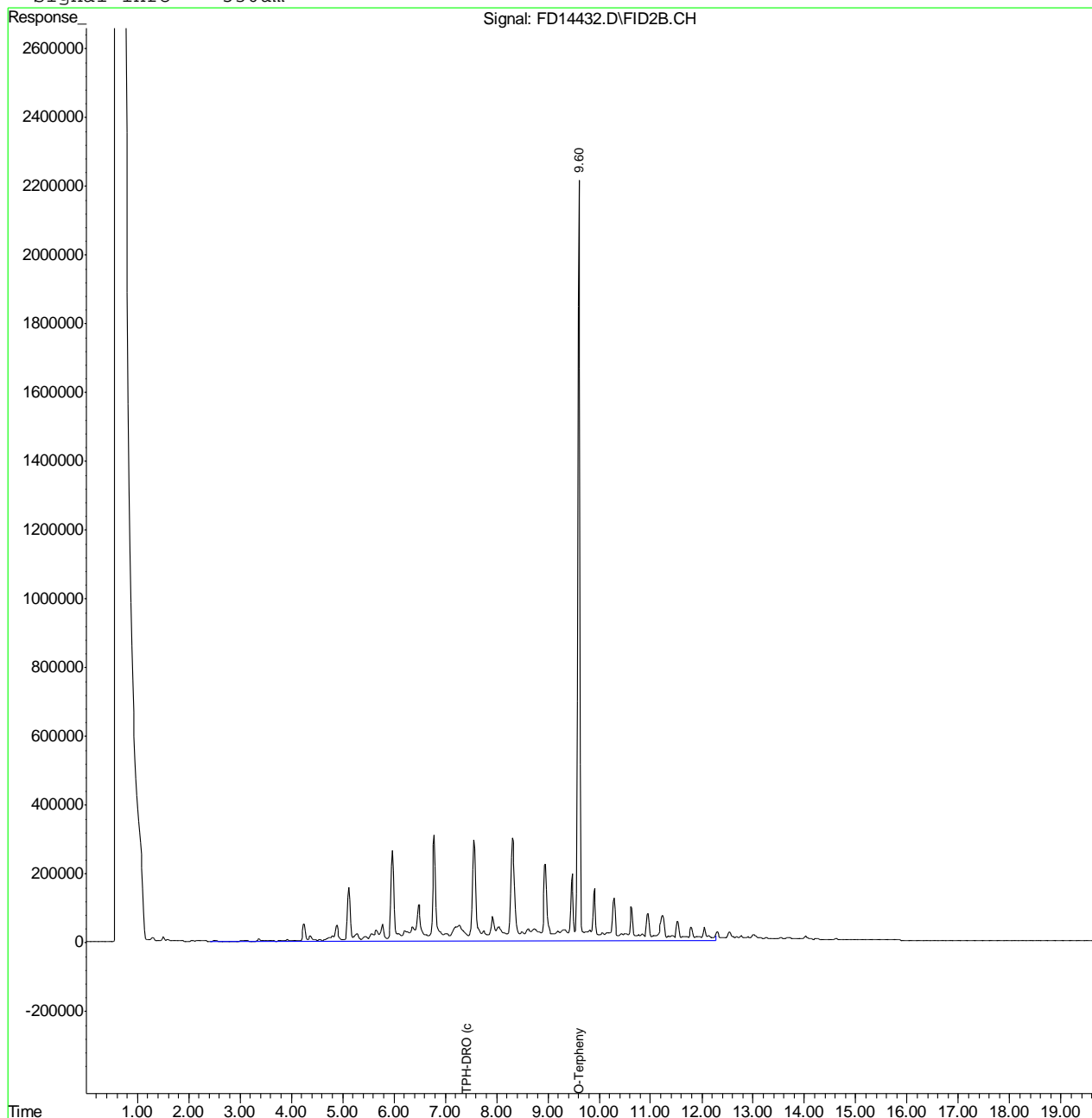
System Monitoring Compounds			
1) S O-Terphenyl	9.61	69477192	1600.255 mg/L
Target Compounds			
2) H TPH-DRO (c10-c28)	7.40	178537161	4299.459 mg/L

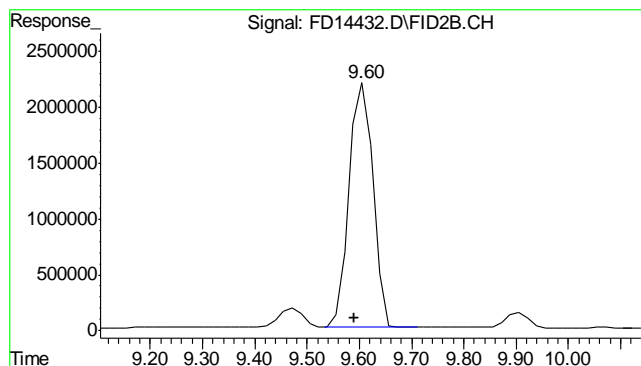
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14432.D Vial: 60
Acq On : 6-19-2012 04:15:13 PM Operator: alexwl
Sample : D35569-4 Inst : FID5
Misc : OP6079,GFD755,30.06,,,1,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 11:56 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Multiple Level Calibration
DataAcq Meth : DRODUAL.M

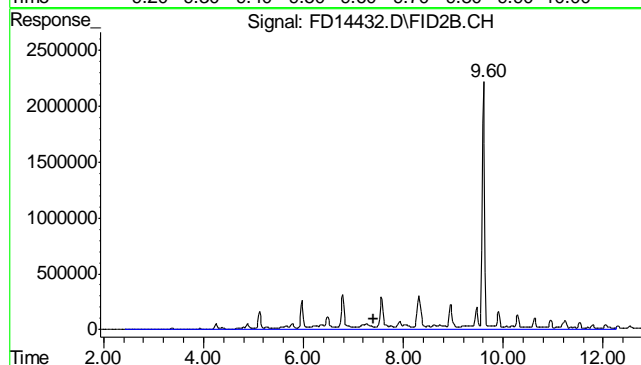
Volume Inj. : 1ul
Signal Phase : RTX-5
Signal Info : 530um





#1 O-Terphenyl

R.T.: 9.610 min
 Delta R.T.: 0.020 min
 Response: 69477192
 Conc: 1600.25 mg/L



#2 TPH-DRO (c10-c28)

R.T.: 7.400 min
 Delta R.T.: 0.000 min
 Response: 178537161
 Conc: 4299.46 mg/L m

8.1.4
8

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14434.D Vial: 6
Acq On : 6-19-2012 04:41:47 PM Operator: alexwl
Sample : D35569-5 Inst : FID5
Misc : OP6079,GFD755,30.05,,,3,10 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 11:56:42 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Initial Calibration
DataAcq Meth : DRODUAL.M

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S O-Terphenyl	9.59	3397288	78.249 mg/L m
Target Compounds			
2) H TPH-DRO (c10-c28)	7.40	1481686008	35681.356 mg/L

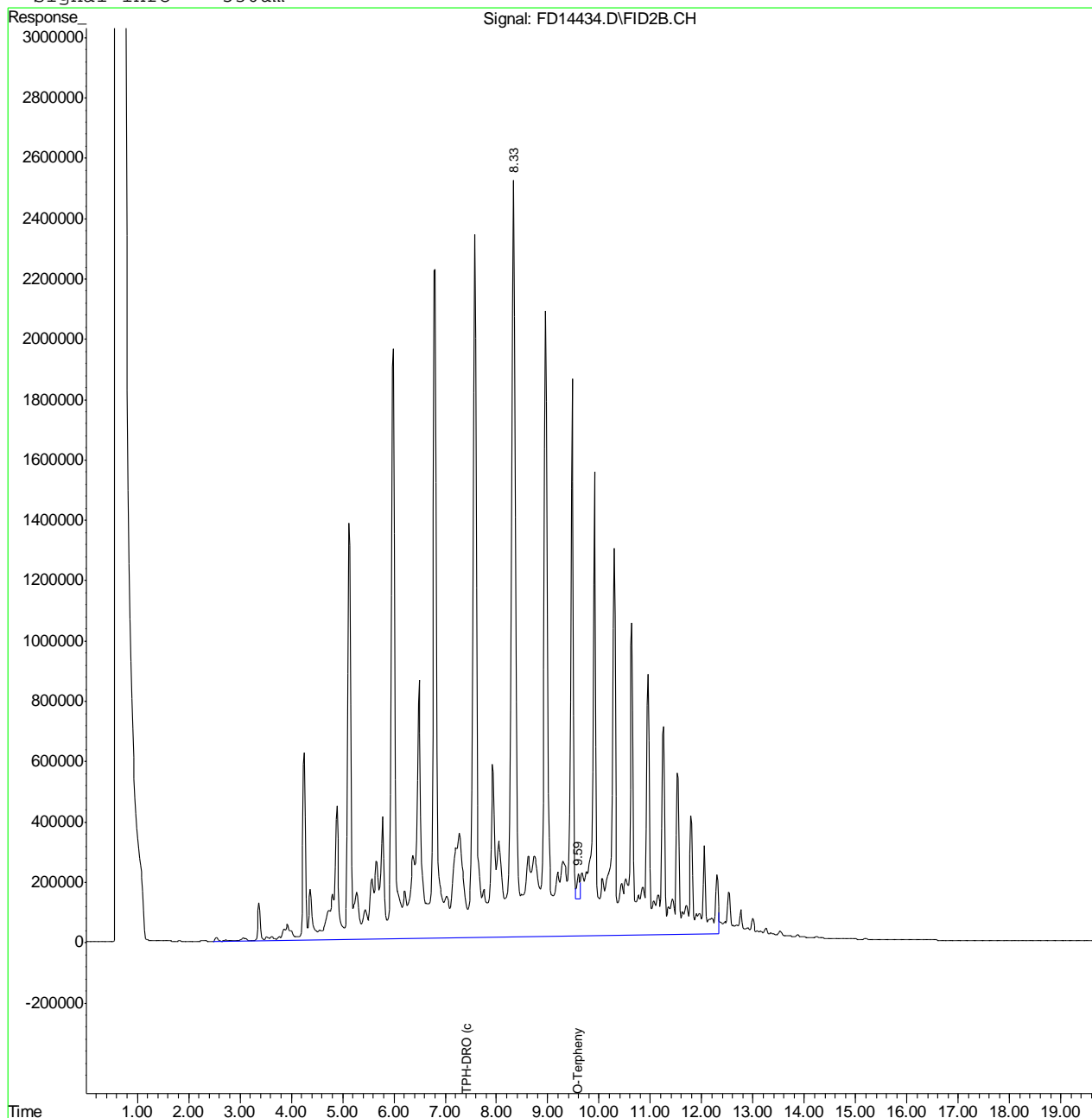
8.15
8

Quantitation Report (QT Reviewed)

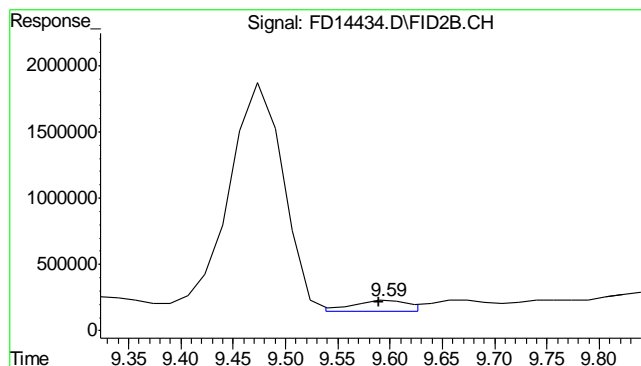
Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14434.D Vial: 61
 Acq On : 6-19-2012 04:41:47 PM Operator: alexwl
 Sample : D35569-5 Inst : FID5
 Misc : OP6079,GFD755,30.05,,,3,10 Multiplr: 1.00
 IntFile : autoint1.e
 Quant Time: Jun 20 13:19 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
 Title : 8015B TEH
 Last Update : Tue Jun 12 11:16:41 2012
 Response via : Multiple Level Calibration
 DataAcq Meth : DRODUAL.M

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

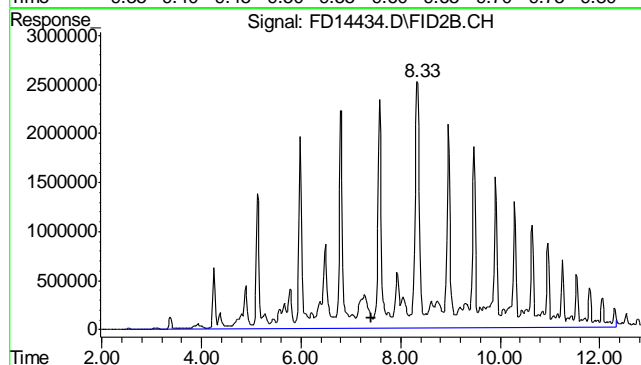


8.15
8



#1 O-Terphenyl

R.T.: 9.593 min
 Delta R.T.: 0.003 min
 Response: 3397288
 Conc: 78.25 mg/L m



#2 TPH-DRO (c10-c28)

R.T.: 7.400 min
 Delta R.T.: 0.000 min
 Response: 1481686008
 Conc: 35681.36 mg/L m

8.15
8

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD062112.SEC\FD14596.D Vial: 5
Acq On : 6-21-2012 02:49:45 PM Operator: alexwl
Sample : D35569-6 Inst : FID5
Misc : OP6079,GFD761,30.14,,,1,5 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 21 16:17:49 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Initial Calibration
DataAcq Meth : DRODUAL.M

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S O-Terphenyl	9.60	17854679	411.243 mg/L m
Target Compounds			
2) H TPH-DRO (c10-c28)	7.40	664516801	16002.622 mg/L

8.16

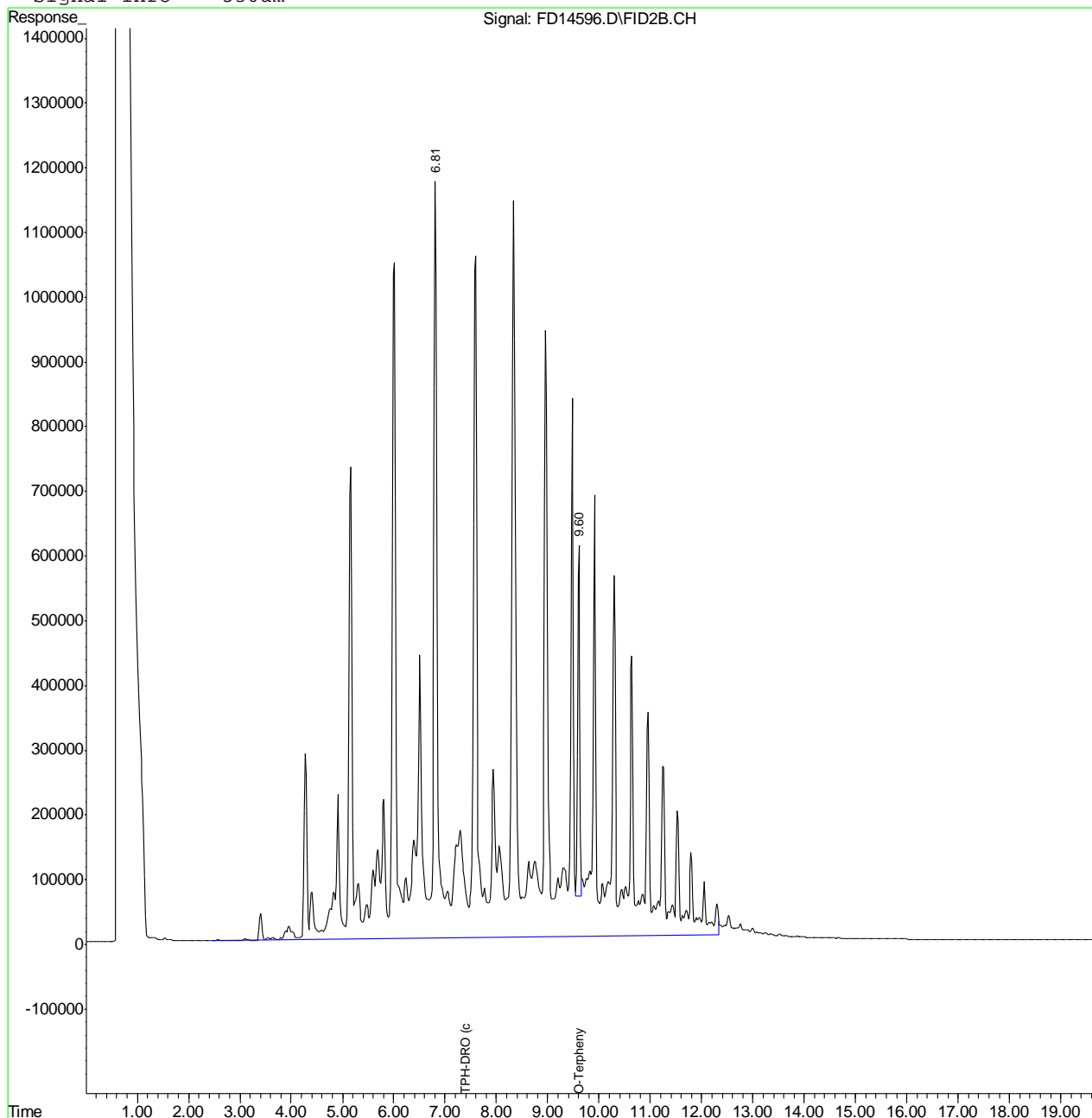
8

Quantitation Report (QT Reviewed)

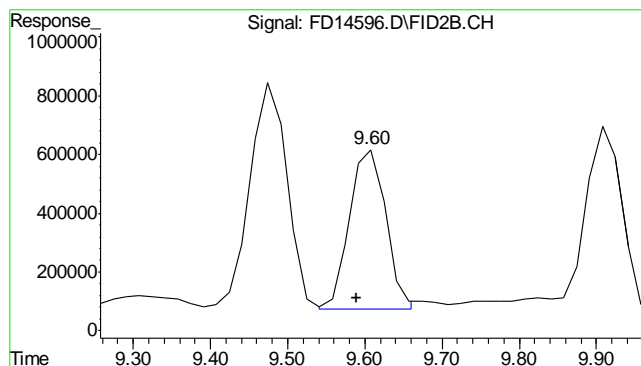
Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD062112.SEC\FD14596.D Vial: 54
 Acq On : 6-21-2012 02:49:45 PM Operator: alexwl
 Sample : D35569-6 Inst : FID5
 Misc : OP6079,GFD761,30.14,,,1,5 Multiplr: 1.00
 IntFile : autoint1.e
 Quant Time: Jun 21 16:18 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
 Title : 8015B TEH
 Last Update : Tue Jun 12 11:16:41 2012
 Response via : Multiple Level Calibration
 DataAcq Meth : DRODUAL.M

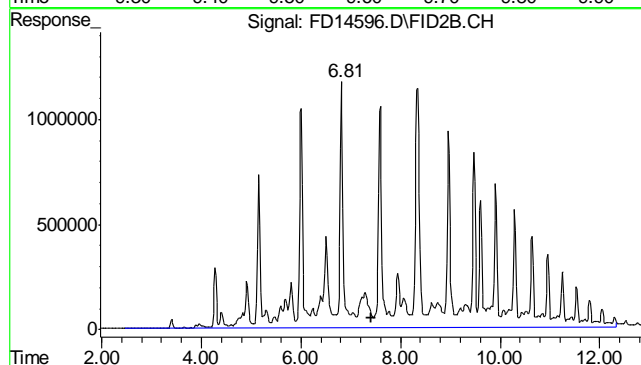
Volume Inj. : 1ul
 Signal Phase : RTX-5
 Signal Info : 530um



8.16
8



#1 O-Terphenyl
R.T.: 9.603 min
Delta R.T.: 0.013 min
Response: 17854679
Conc: 411.24 mg/L m



#2 TPH-DRO (c10-c28)
R.T.: 7.400 min
Delta R.T.: 0.000 min
Response: 664516801
Conc: 16002.62 mg/L m

8.16
8

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14438.D Vial: 63
Acq On : 6-19-2012 05:35:07 PM Operator: alexwl
Sample : D35569-7 Inst : FID5
Misc : OP6079,GFD755,30.01,,,1,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 13:12:01 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Initial Calibration
DataAcq Meth : DRODUAL.M

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S O-Terphenyl	9.61	78449302	1806.908 mg/L
Target Compounds			
2) H TPH-DRO (c10-c28)	7.40	39264322	945.547 mg/L

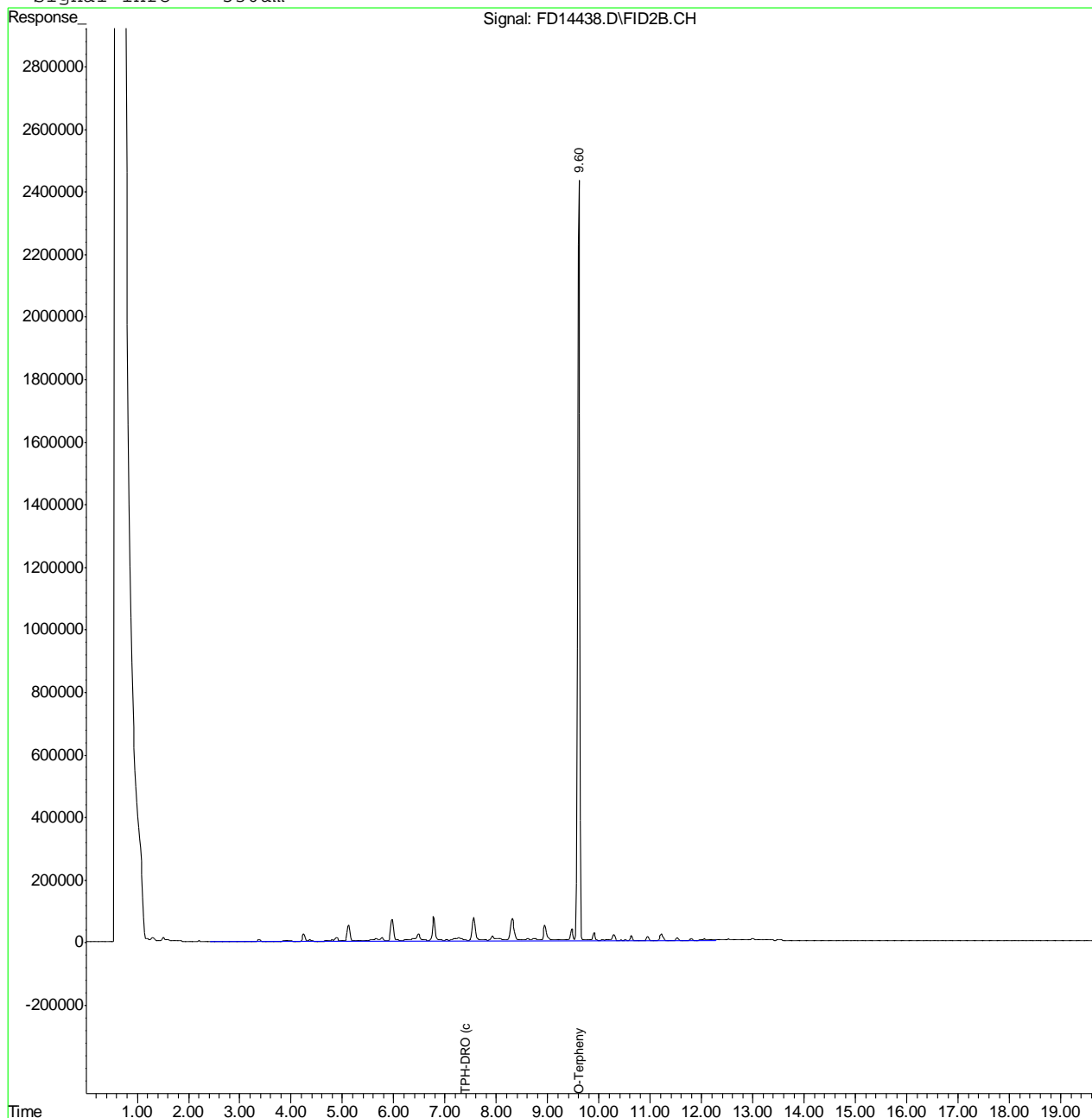
8.1.7
8

Quantitation Report (QT Reviewed)

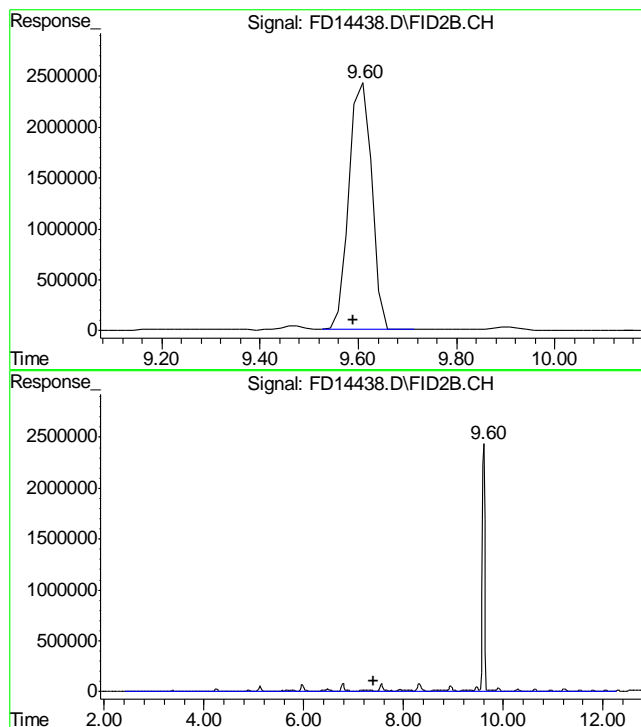
Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14438.D Vial: 63
 Acq On : 6-19-2012 05:35:07 PM Operator: alexwl
 Sample : D35569-7 Inst : FID5
 Misc : OP6079,GFD755,30.01,,,1,1 Multiplr: 1.00
 IntFile : autoint1.e
 Quant Time: Jun 20 13:12 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
 Title : 8015B TEH
 Last Update : Tue Jun 12 11:16:41 2012
 Response via : Multiple Level Calibration
 DataAcq Meth : DRODUAL.M

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



8.1.7
8



#1 O-Terphenyl

R.T.: 9.611 min
 Delta R.T.: 0.021 min
 Response: 78449302
 Conc: 1806.91 mg/L

#2 TPH-DRO (c10-c28)

R.T.: 7.400 min
 Delta R.T.: 0.000 min
 Response: 39264322
 Conc: 945.55 mg/L m

8.17
8

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14440.D Vial: 64
Acq On : 6-19-2012 06:01:38 PM Operator: alexwl
Sample : D35569-8 Inst : FID5
Misc : OP6079,GFD755,30.02,,,1,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 13:12:59 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Initial Calibration
DataAcq Meth : DRODUAL.M

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S O-Terphenyl	9.61	67823985	1562.177 mg/L
Target Compounds			
2) H TPH-DRO (c10-c28)	7.40	79109916	1905.093 mg/L

8.18

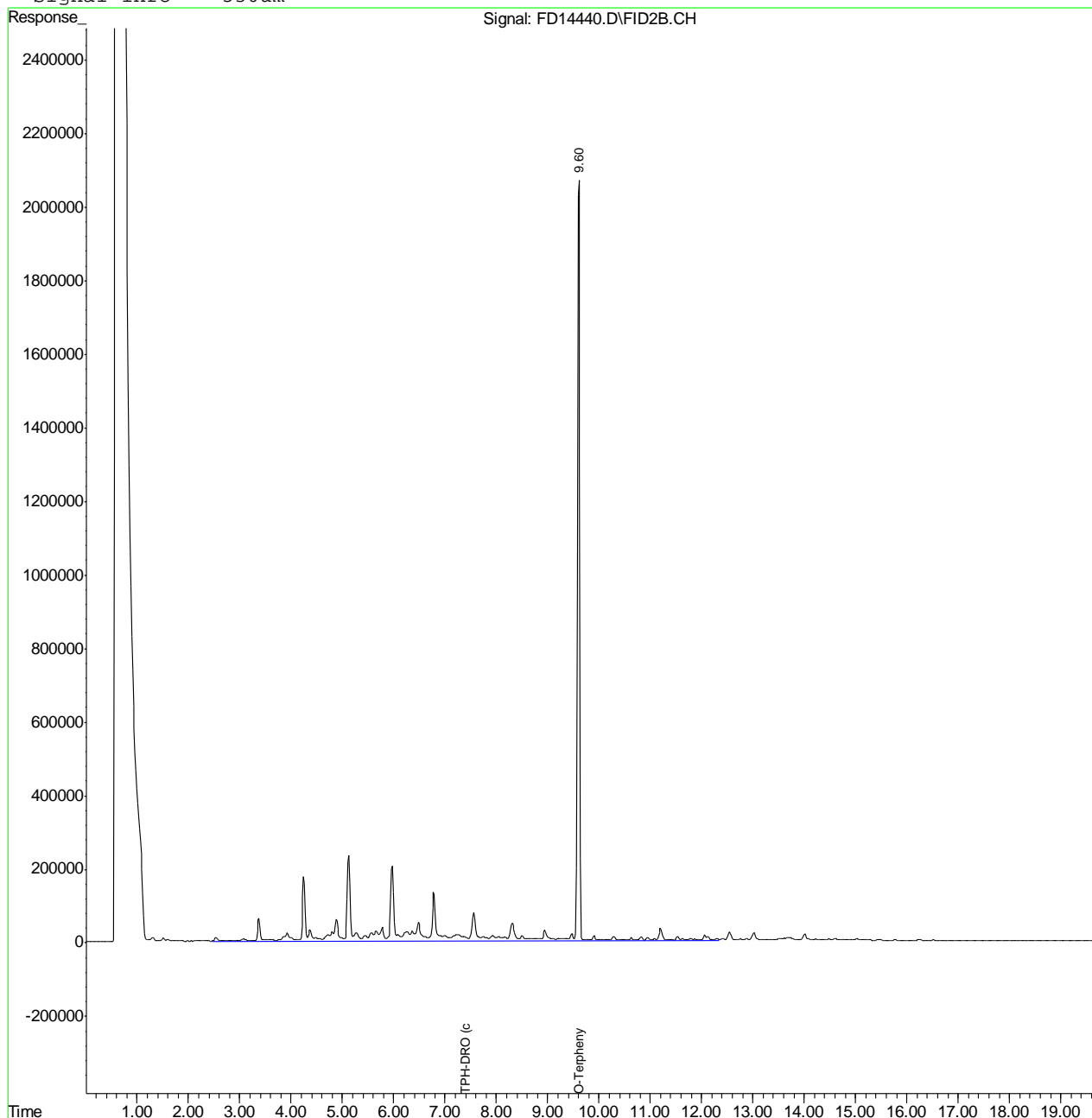
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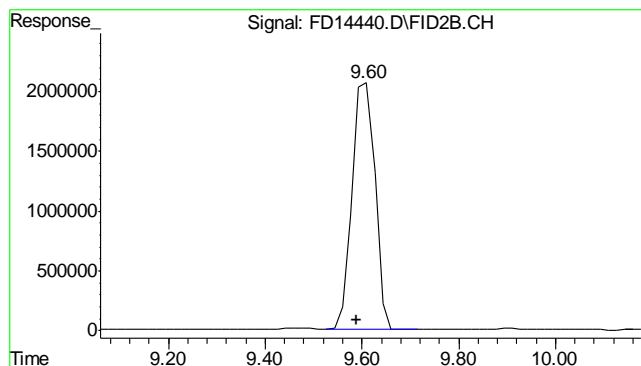
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14440.D Vial: 64
Acq On : 6-19-2012 06:01:38 PM Operator: alexwl
Sample : D35569-8 Inst : FID5
Misc : OP6079,GFD755,30.02,,,1,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 13:13 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Multiple Level Calibration
DataAcq Meth : DRODUAL.M

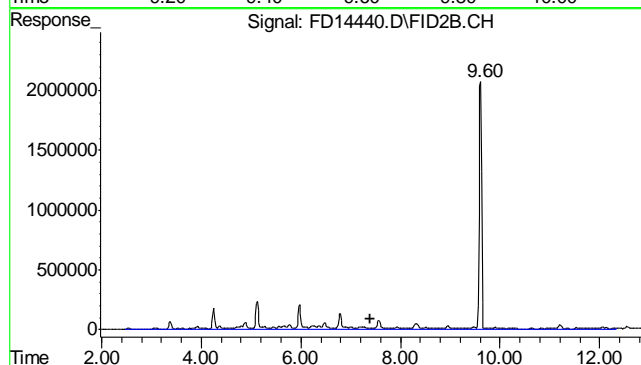
Volume Inj. : 1ul
Signal Phase : RTX-5
Signal Info : 530um





#1 O-Terphenyl

R.T.: 9.609 min
 Delta R.T.: 0.019 min
 Response: 67823985
 Conc: 1562.18 mg/L



#2 TPH-DRO (c10-c28)

R.T.: 7.400 min
 Delta R.T.: 0.000 min
 Response: 79109916
 Conc: 1905.09 mg/L m

8.18

8

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14442.D Vial: 6
Acq On : 6-19-2012 06:28:04 PM Operator: alexwl
Sample : D35569-9 Inst : FID5
Misc : OP6079,GFD755,30.03,,,3,10 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 13:14:32 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Initial Calibration
DataAcq Meth : DRODUAL.M

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S O-Terphenyl	9.59	3579815	82.453 mg/L m
Target Compounds			
2) H TPH-DRO (c10-c28)	7.40	2050021434	49367.777 mg/L

8.1.9

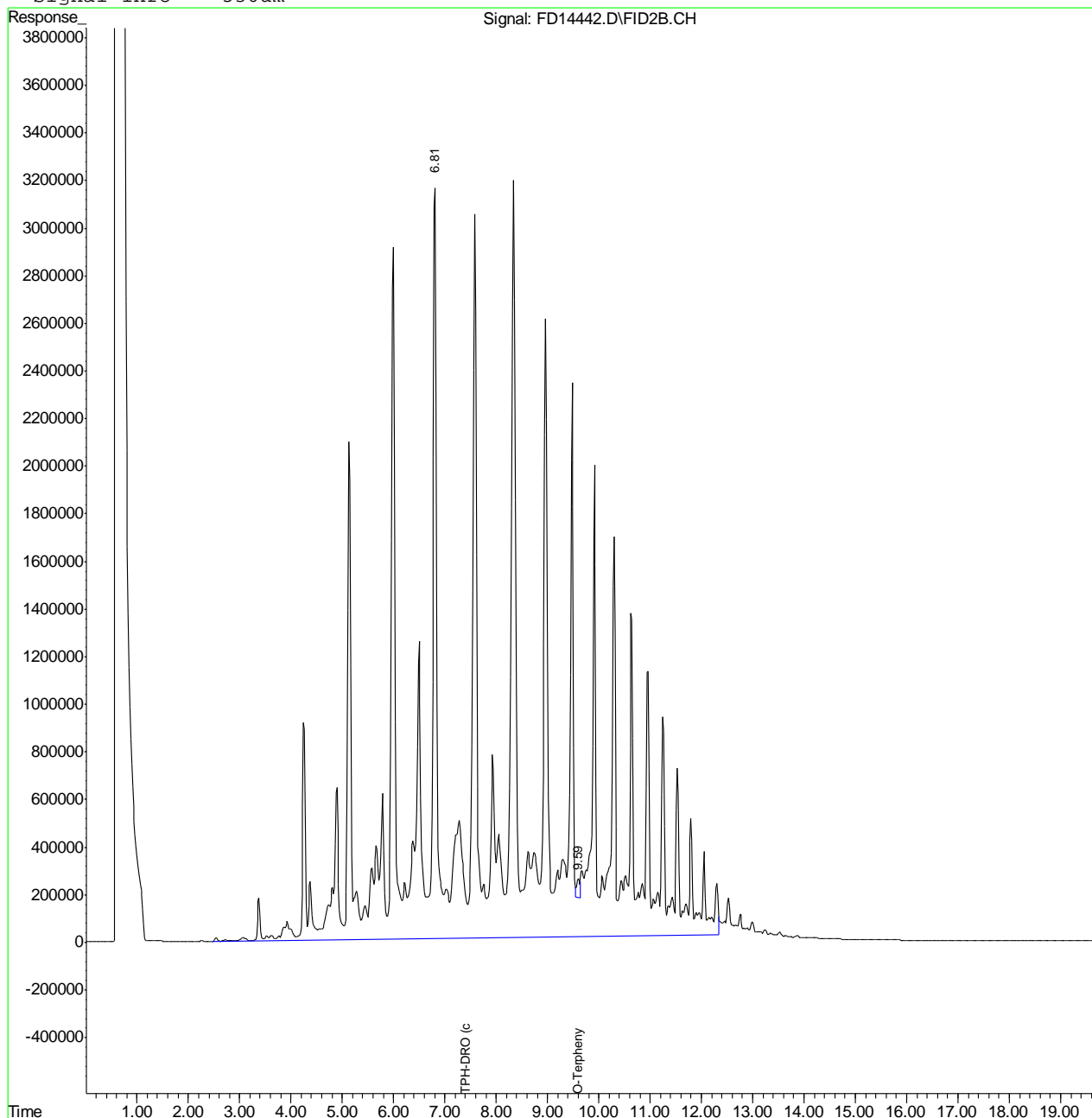
8

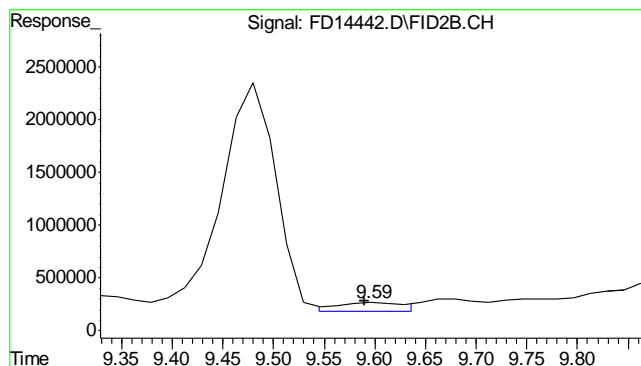
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14442.D Vial: 65
Acq On : 6-19-2012 06:28:04 PM Operator: alexwl
Sample : D35569-9 Inst : FID5
Misc : OP6079,GFD755,30.03,,,3,10 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 13:15 2012 Quant Results File: DRO-GFD743R.RES

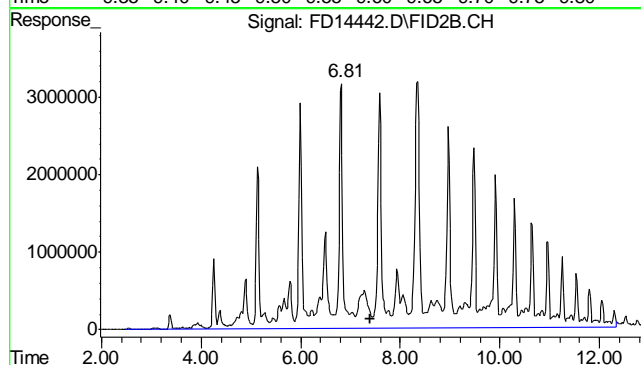
Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Multiple Level Calibration
DataAcq Meth : DRODUAL.M

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





#1 O-Terphenyl
 R.T.: 9.594 min
 Delta R.T.: 0.004 min
 Response: 3579815
 Conc: 82.45 mg/L m



#2 TPH-DRO (c10-c28)
 R.T.: 7.400 min
 Delta R.T.: 0.000 min
 Response: 2050021434
 Conc: 49367.78 mg/L m

8.19
8

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14444.D Vial: 6
Acq On : 6-19-2012 06:54:31 PM Operator: alexwl
Sample : D35569-10 Inst : FID5
Misc : OP6079,GFD755,30.09,,,1,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 13:15:53 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Initial Calibration
DataAcq Meth : DRODUAL.M

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S O-Terphenyl	9.60	70986378	1635.016 mg/L m
Target Compounds			
2) H TPH-DRO (c10-c28)	7.40	793846479	19117.086 mg/L

8.1.10

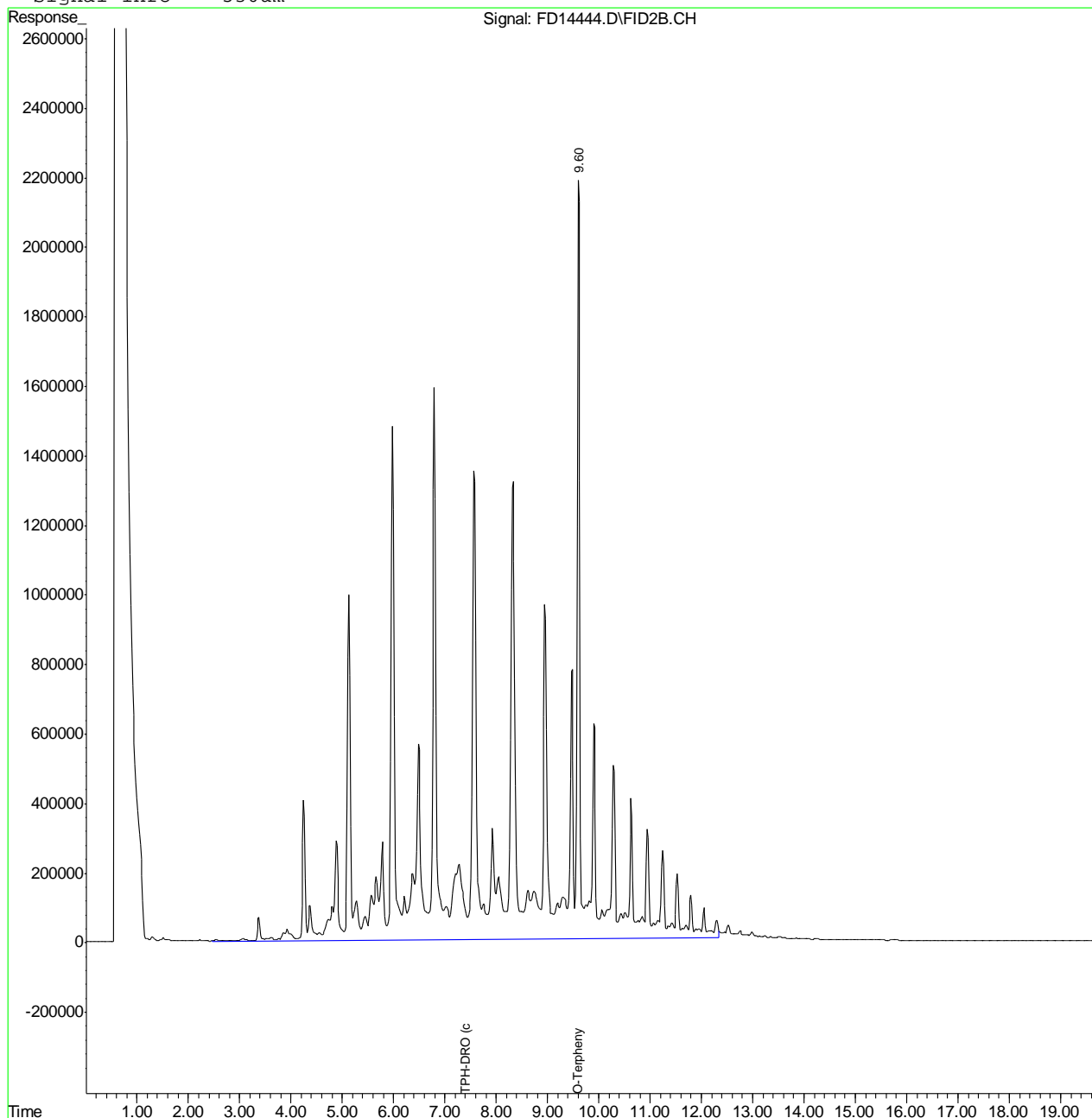
8

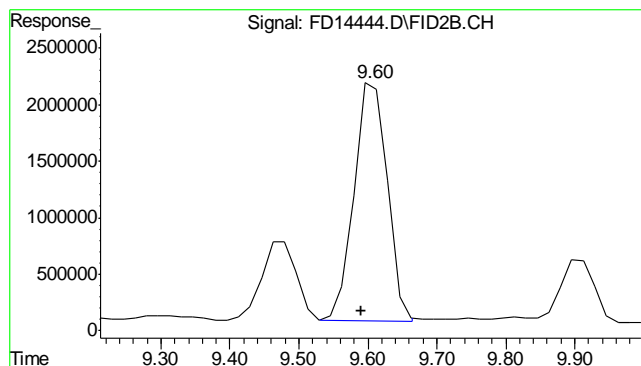
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14444.D Vial: 66
Acq On : 6-19-2012 06:54:31 PM Operator: alexwl
Sample : D35569-10 Inst : FID5
Misc : OP6079,GFD755,30.09,,,1,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 13:16 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Multiple Level Calibration
DataAcq Meth : DRODUAL.M

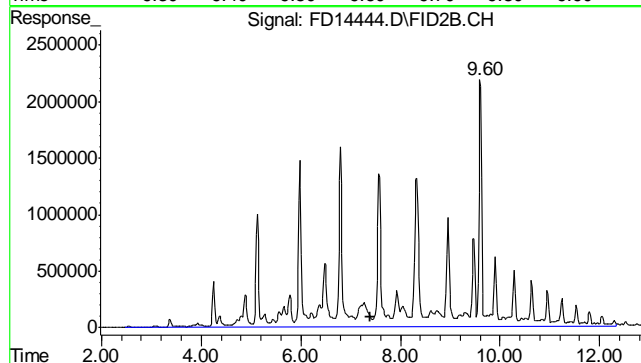
Volume Inj. : 1ul
Signal Phase : RTX-5
Signal Info : 530um





#1 O-Terphenyl

R.T.: 9.603 min
 Delta R.T.: 0.013 min
 Response: 70986378
 Conc: 1635.02 mg/L m



#2 TPH-DRO (c10-c28)

R.T.: 7.400 min
 Delta R.T.: 0.000 min
 Response: 793846479
 Conc: 19117.09 mg/L m

8.1.10
8

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14418.D Vial: 53
Acq On : 6-19-2012 01:09:59 PM Operator: alexwl
Sample : OP6079-MB Inst : FID5
Misc : OP6079,GFD755,30.00,,,1,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 11:45:39 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Initial Calibration
DataAcq Meth : DRODUAL.M

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

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S O-Terphenyl	9.61	83642452	1926.521 mg/L
Target Compounds			
2) H TPH-DRO (c10-c28)	7.40	2289509	55.135 mg/L

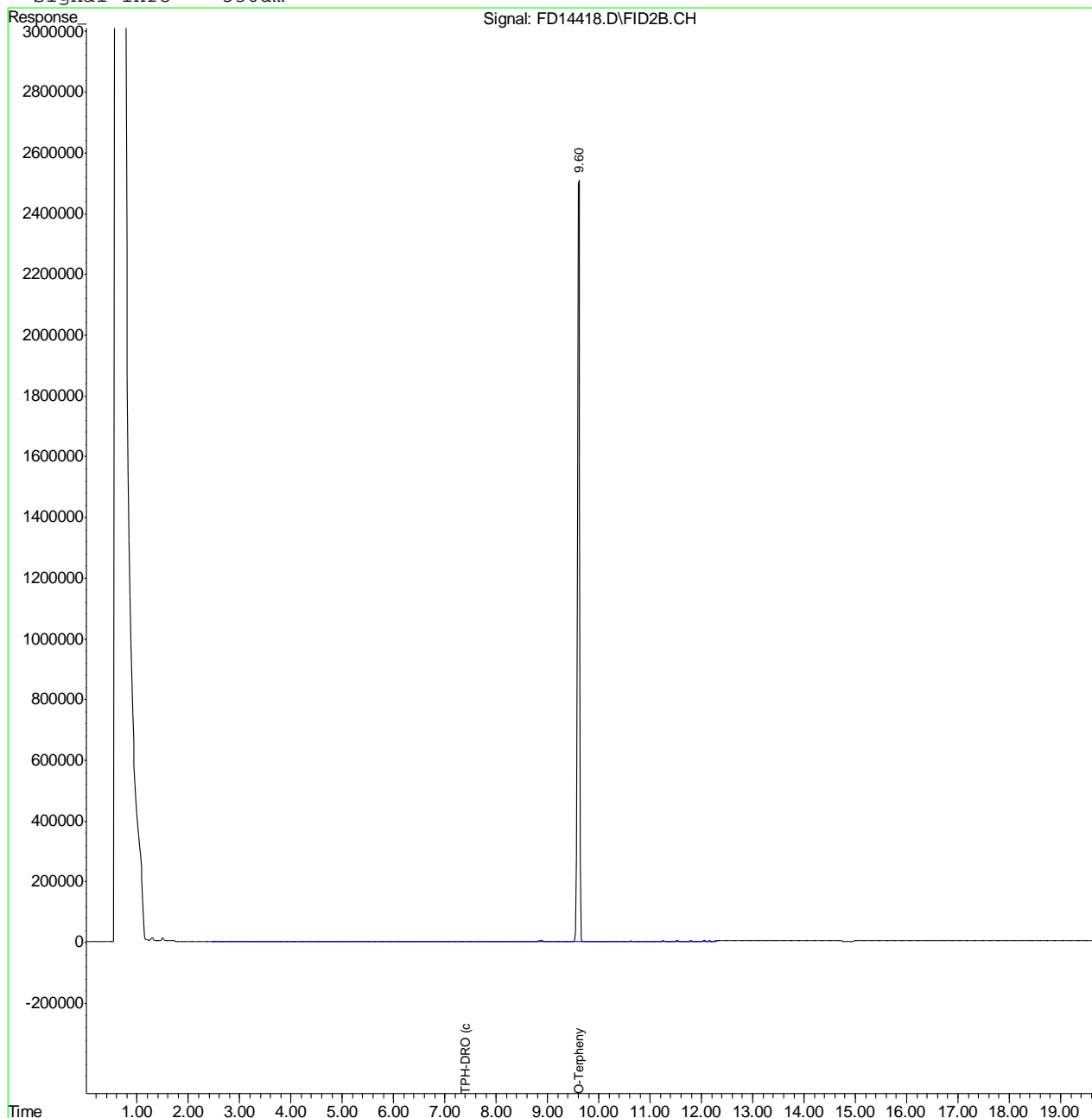
(f)=RT Delta > 1/2 Window (m)=manual int.
FD14418.D DRO-GFD743R.M Wed Jun 20 14:00:35 2012 GC

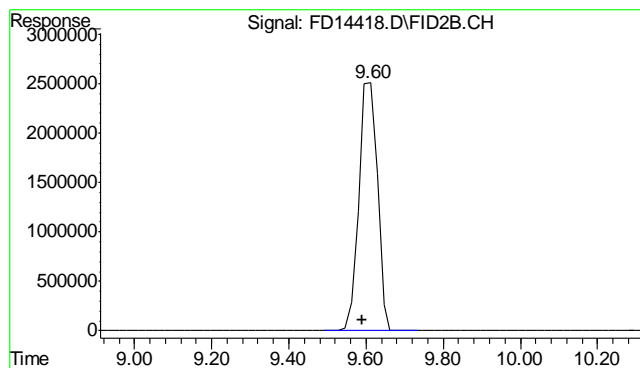
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\2\DATA\2012\JUNE\FD061912.SEC\FD14418.D Vial: 53
Acq On : 6-19-2012 01:09:59 PM Operator: alexwl
Sample : OP6079-MB Inst : FID5
Misc : OP6079,GFD755,30.00,,,1,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 11:46 2012 Quant Results File: DRO-GFD743R.RES

Quant Method : C:\MSDCHEM\2...\DRO-GFD743R.M (Chemstation Integrator)
Title : 8015B TEH
Last Update : Tue Jun 12 11:16:41 2012
Response via : Multiple Level Calibration
DataAcq Meth : DRODUAL.M

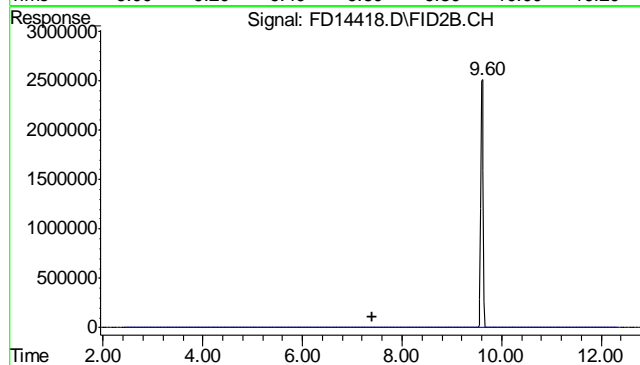
Volume Inj. : 1ul
Signal Phase : RTX-5
Signal Info : 530um





#1 O-Terphenyl

R.T.: 9.611 min
Delta R.T.: 0.021 min
Response: 83642452
Conc: 1926.52 mg/L



#2 TPH-DRO (c10-c28)

R.T.: 7.400 min
Delta R.T.: 0.000 min
Response: 2289509
Conc: 55.14 mg/L m

8.2.1

8