United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street Building 201
Richmond, CA 94804

Date: 2/2/2012

Subject: Analytical Testing Results - Project R33911
SDG: 12027B

From: Brenda Bettencourt, Director
EPA Region 9 Laboratory
MTS-2

To: Richard Fetzer
US EPA Region 3, Eastern Response Branch
3HS31

Attached are the results from the analysis of samples from the **Dimock Residential Groundwater** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Analyses included in this report:

Extractable Petroleum Hydrocarbons by GC/FID

DIM0275879

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12027B
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/02/12 15:27
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
FB01	1201031-01	Water	01/23/12 14:42	01/27/12 09:52
FB02	1201031-02	Water	01/24/12 12:11	01/27/12 09:52
HW04	1201031-03	Water	01/24/12 14:33	01/27/12 09:52
HW19	1201031-04	Water	01/23/12 17:47	01/27/12 09:52
HW19-P	1201031-05	Water	01/23/12 19:07	01/27/12 09:52
FB03	1201033-01	Water	01/25/12 10:01	01/28/12 10:05
HW02	1201033-02	Water	01/25/12 12:58	01/28/12 10:05
HW02z	1201033-03	Water	01/25/12 12:59	01/28/12 10:05
HW08a	1201033-04	Water	01/25/12 11:46	01/28/12 10:05

SDG ID 12027B

Extractable Petroleum Hydrocarbons:
Insufficient sample volume was provided to perform a matrix spike / matrix spike duplicate set on any samples in this SDG.

Work Order(s)

1201031

1201033

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Region 9 Laboratory
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Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12027B
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/02/12 15:27
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1201031-01									**Water - Sampled: 01/23/12 14:42**
Sample ID: FB01						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2A0065	01/27/12	01/30/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			92 %	*60-127%*		"	"	"	
Lab ID: 1201031-02									**Water - Sampled: 01/24/12 12:11**
Sample ID: FB02						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	240	ug/L	B2A0065	01/27/12	01/30/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	950	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			86 %	*60-127%*		"	"	"	
Lab ID: 1201031-03									**Water - Sampled: 01/24/12 14:33**
Sample ID: HW04						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	240	ug/L	B2A0065	01/27/12	01/30/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	950	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			87 %	*60-127%*		"	"	"	
Lab ID: 1201031-04									**Water - Sampled: 01/23/12 17:47**
Sample ID: HW19						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2A0065	01/27/12	01/30/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			82 %	*60-127%*		"	"	"	
Lab ID: 1201031-05									**Water - Sampled: 01/23/12 19:07**
Sample ID: HW19-P						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	240	ug/L	B2A0065	01/27/12	01/30/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	950	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			90 %	*60-127%*		"	"	"	
Lab ID: 1201033-01									**Water - Sampled: 01/25/12 10:01**
Sample ID: FB03						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2A0071	01/30/12	01/31/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			96 %	*60-127%*		"	"	"	
Lab ID: 1201033-02									**Water - Sampled: 01/25/12 12:58**
Sample ID: HW02						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2A0071	01/30/12	01/31/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			97 %	*60-127%*		"	"	"	
Lab ID: 1201033-03									**Water - Sampled: 01/25/12 12:59**

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Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12027B
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/02/12 15:27
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1201033-03									**Water - Sampled: 01/25/12 12:59**
Sample ID: HW02z						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2A0071	01/30/12	01/31/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			91 %	*60-127%*		"	"	"	
Lab ID: 1201033-04									**Water - Sampled: 01/25/12 11:46**
Sample ID: HW08a						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2A0071	01/30/12	01/31/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			86 %	*60-127%*		"	"	"	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B2A0065 - 3520C CLLE - TPH - Extractable									**Prepared: 01/27/12 Analyzed: 01/30/12**	
							Extractable Petroleum Hydrocarbons by EPA Method 8015B - Quality Control			
Blank (B2A0065-BLK1)										
TPH - Diesel Range Organics	ND	U	250	ug/L						
TPH - Oil Range Organics	ND	U	1,000	"						
Surrogate: Hexacosane	*129*			"	*150*		86	*60-127*		
LCS (B2A0065-BS1)										
TPH - Diesel Range Organics	1,090		180	ug/L	1100		99	54-115		200
Surrogate: Hexacosane	*108*			"	*110*		98	*60-127*		
Batch B2A0071 - 3520C CLLE - TPH - Extractable									**Prepared: 01/30/12 Analyzed: 01/31/12**	
							Extractable Petroleum Hydrocarbons by EPA Method 8015B - Quality Control			
Blank (B2A0071-BLK1)										
TPH - Diesel Range Organics	ND	U	250	ug/L						
TPH - Oil Range Organics	ND	U	1,000	"						
Surrogate: Hexacosane	*145*			"	*150*		96	*60-127*		
LCS (B2A0071-BS1)										
TPH - Diesel Range Organics	1,220		250	ug/L	1500		82	54-115		200
Surrogate: Hexacosane	*130*			"	*150*		87	*60-127*		

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Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/02/12 15:27
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Qualifiers and Comments

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.

00217

ICF INTERNATIONAL

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

DATE: February ~~3~~ 2, 2012

TO: Richard Bauer, Chemistry TOM, EPA Region 9, Laboratory Section, MTS-2

FROM: Ziyad Rajabi, Organic Group Leader

SUBJECT: Analytical Results for TDF 01001084

As assigned under EPA Contract No. EP-W-06-041, TDF 01001084, ESAT completed analysis of four water samples for the Dimock Residential Groundwater Site project, Case R33911, SDG 12027B, Work Order 1201033 for extractable TPH following EPA Region 9 Laboratory SOP 385 based on method SW8015B. The draft analytical report and raw data package are attached.

If you have any questions regarding this information please contact me at extension 22390.

1201031 $

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EPA Region 9 Laboratory

DATA PACKAGE

Analysis:	**TPH-d**
Project Number:	**R33911**
SDG Number:	**12027B**
Work Order:	**1201033** 1201031
ESAT DCN:	**14459**

Contents

- **Review Forms**
- **Tracking Forms**
- ***Sample Preparation***
- **Data**
  -Initial Calibration Data
  -Sample Data
- ***Miscellaneous Data***
- **Standard Records**
- ***Canister Certification Data***

Sections in italics are included as applicable

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REVIEW FORMS

00002

General Project Management and ESAT Contractor Oversight Review

Project Number: R33911

SDG: 12027B

Analysis: extractable TPH

Number of Pages: 481

Reviewer: Bauer

- ☑ Review project notes and requirements (including TDF) and verify that correct analytical procedures and any special instructions were followed. Note any significant deviations or omissions in report narrative or return to contractor for correction.
- ☑ Review project memo field for each work order and include information pertinent to data users in report narrative. (Information important only to chemist reviewing the raw data package should be included in data package, but not in the report narrative).
- ☑ Review chain of custody documentation and verify that information in report corresponds correctly. Verify that any sample shipping or handling issues are properly documented and reported.
- ☑ Review analytical report and QC report and verify that qualifier flags for holding times, sample handling, surrogates, blanks, blank spikes, matrix QC, and calibration range have been appropriately applied.
- ☑ Review LIMS Data Entry table for unaddressed outliers.
- ☑ Verify that all major sections of data package are present.

Comments:

No MS/MSD - insufficient sample.

OK.

Reviewer Signature [signature] Date 2/2/12

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ESAT Region 9 | **ICF International**
Case: R33911 | **Analysis:** TPH-d | **TDF:** 01001084 | **Matrix:** water
DCN: 14459 | **Site:** Dimock Residential Groundwater Site | **SDG:** 12027B

ESAT REGION 9 DATA PACKAGE TECHNICAL REVIEW GUIDE

Reviewer: Package Prep (P): TD Technical (T): TL Final (F): gw
Date: 02-01-12 Date: 02-02-12 Date: 2/2/12

P T F N/A (indicates that the item is present and reviewed for accuracy and completeness)

Report Section

- ☑ ☑ ☑ ESAT Cover Memo (original)
- ☑ ☑ ☑ TDF included and requirements met (e.g. project analytes, project QLs, special procedures)
- ☑ ☑ ☑ Draft LIMS Report

Data Package Cover

- ☑ ☑ ☑ Case, SDG, Work Order(s), TDF#-DCN [First numbered page in the data package]

Review Forms

- ☑ ☑ ☑ EPA Review Form and Technical Review Guide included and complete.
- ☑ ☑ ☑ ☐ LIMS memo field; include as applicable.
- ☐ ☐ ☐ ☑ Discrepancy form(s) include as applicable
- ☑ ☑ ☑ ☐ Daily folder review forms are complete and reviewed; QC outliers noted
- ☑ ☑ ☑ ☐ Analysis matrix listing all analytical runs is included, as applicable

Tracking Forms

- ☑ ☑ ☑ Work Orders and Chains of Custody forms included and reviewed.
- ☑ ☑ ☑ Preparation and analyses performed within holding times. Qualify and/or explain deviations in memo field
- ☑ ☑ ☑ ☐ Cooler temperatures recorded on COC are within specification. Qualify and/or explain deviations in memo field

Sample Preparation

- ☑ ☑ ☑ ☐ Bench sheets and extraction logs, where applicable
- ☐ ☐ ☐ ☑ Sample cleanup data and records (e.g. GPC logs)
- ☐ ☐ ☐ ☑ Homogenization and Moisture data

Initial Calibration Data

Group ICAL data by instrument and analysis date:

- ☑ ☑ ☐ ☐ All ICALs associated with samples are present, reviewed, and pass SOP criteria. (If failure, discrepancy form must be included)
- ☑ ☑ ☐ ☐ Check for misidentification (e.g. isomers such as dichlorobenzene)

Sample Data

Group data for the following areas in sections by method, instrument, and analysis date.

Continuing Calibrations

- ☑ ☑ ☐ ☐ All CCALs associated with samples are present and meet SOP criteria. If not, discrepancy form included.
- ☑ ☑ ☐ Average RRFs from associated ICAL are correctly transposed to CCAL summary form
- ☑ ☑ ☐ CCAL RRFs and %Ds calculated correctly. Check at least 1 surrogate & 1 target analyte
- ☑ ☑ ☐ Check %Ds and RRFs against SOP criteria

ESAT Region 9 **ICF International**
Case: R33911 **Analysis:** TPH-d **TDF:** 01001084 **Matrix:** water
DCN: 14459 **Site:** Dimock Residential Groundwater Site **SDG:** 12027B

P T F N/A (indicates that the item is present and reviewed for accuracy and completeness)

Quantitation Limit Standards
☑ ☑ ☐ ☐ Percent recoveries of 60-140% met; outliers noted and flagged

Laboratory Control Samples
☑ ☑ ☑ Percent recoveries met. If not, discrepancy form included unless not required because: _____

Method Blanks
☑ ☑ ☑ Present and no target analyte results > ½ QL; if not, flag data as appropriate

MS/MSD or Duplicate Data
☐ ☐ ☐ ☑ Percent recoveries and RPDs were met; outliers are noted and flagged. Note significant deviations in LIMS memo field

Sample Data
☑ ☑ ☑ ☐ Bench sheet(s) and injection or run logs present for all samples
☐ ☐ ☐ ☑ Internal standards meet SOP criteria
☑ ☑ ☑ ☐ System Monitoring Compound/Surrogate recoveries met; outliers are noted and flagged
☑ ☑ ☐ All non-detects are reported as ND on the quantitation report and explained for QC samples
☑ ☑ ☐ Quantitation results are correctly calculated. Check at least one surrogate or one target analyte
☐ ☐ ☑ Mass spectral data are present for all target analytes
☑ ☑ ☐ ☐ Check for manual integrations (m) identified on quantitation reports. Verify presence of manual integration data, initialed and dated by a supervisor
☐ ☐ ☐ ☑ Compound concentrations exceeding the upper range of the instrument are reported from the dilution run
☑ ☑ Check for carry-over contamination
☐ ☐ ☐ ☑ Dilutions and reruns appropriate.
☐ ☐ ☑ TICs properly identified; TIC report and data present; proper TIC name used (Organics)
☑ ☑ ☑ ☐ QC outliers are appropriately flagged in LIMS

Miscellaneous Data
☐ ☐ ☐ ☑ Storage blank data present
☐ ☐ ☐ ☐ Other data, as applicable _____

Standards Records
☑ ☑ ☑ ☐ Standards records from LIMS (and logbook pages as needed)

Canister Certification Data (TO 15 only)
☐ ☐ ☐ ☑ Data and supporting QC present

For ESAT Files: ESAT Review form (original) and Cover Memo (copy)

WORK ORDER NOTES - 1201031

1201031 - US EPA Region 3, Eastern Response
Dimock Residential Groundwater

Edit Done

~~TPH DRO: Small background contamination in the blank. Contamination is < ½ QL. No affect on sample results is anticipated.~~ MS/MSD were not extracted due to insufficient amount of samples. TD 02/01/12

Blank B2A0065-Blk1- ok

WORK ORDER NOTES - 1201033

1201033 - US EPA Region 3, Eastern Response
Dimock Residential Groundwater

Vials 1201033-04G and 1201033-04H were received in a separate shipment on 1/30/12. These vials have the sample sample designation, collection time and date, and sample tag numbers as sample vials 1201033-04C and 1201033-04D that were received 1/28/12. They were added to this work order. Cooler 2 was added to this work order, and is the same cooler 2 on work order 1201034. - rjb 1/30/12.

TPH DRO: Small background contamination in the blank. Contamination is < ½ QL. No affect on sample results is anticipated. MS/MSD were not extracted due to insufficient amount of samples. TD 02/01/12

TPH DRO: A review of the blank contamination issue revealed that the methylene chloride used for the extraction was certified for BNA analysis and not TPH-DRO. Since the contamination in the blank and associated samples was <½ QL, samples were ND, and the BS recovery was acceptable, No affect on sample results is anticipated. ZAR 2/2/12

RSK-175: Small amount of methane contamination in the method blanks, < QL.
MS/MSD was not run due to insufficient sample volume. RH 02/01/12

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	TPH DRO	Analyst Initial	TD	Reviewer Initial	TR	Batch/ Sequence	2010031
Instrument ID	HP6890-4	Date Analyzed	01-23-12	Date	01-25-12	Chemstation Last Update	01/24/12 07:53:22
Cases				SDGs	ICAL 012312 [1201003]		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	✓	✓	Runlog (Present, legible, peer reviewed)
✓			Tune/ Degradation Standard
	✓	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	✓	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation. SCV
✓			QLS (level, frequency, and recovery) (include Chemstation summary)
	✓	✓	Method / Extraction / Storage Blanks (frequency and contamination levels) MB
✓			Surrogate Recoveries
✓			IS Areas (SOP criteria met)
✓			LCS (level, frequency, and recovery) (include Chemstation summary)
✓			MS/MSD
✓			Samples (within calibration range, results calculated correctly)
	✓	✓	Manual Integration Verified
✓			Standard Prep Log (all pages present, legible, peer reviewed, legible)
✓			Sample Prep/Extraction (all pages present, legible, peer reviewed)
			Others:

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion

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Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	**TPH DRO**	**Analyst Initial**	TD	**Reviewer Initial**	TR	**Batch/ Sequence**	2010046
Instrument ID	**AG7890-2**	**Date Analyzed**	01-30-12	**Date**	01/31/12	**Chemstation Last Update**	01/31/12 09:45:52
Cases				**SDGs**	**ICAL 013012DROA [1201006]**		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	✓	✓	Runlog (Present, legible, peer reviewed)
✓			Tune/ Degradation Standard
	✓	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	✓	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation. /SCV
✓			QLS (level, frequency, and recovery) (include Chemstation summary)
	✓	✓	Method / Extraction / Storage Blanks (frequency and contamination levels) /B
✓			Surrogate Recoveries
✓			IS Areas (SOP criteria met)
✓			LCS (level, frequency, and recovery) (include Chemstation summary)
✓			MS/MSD
✓			Samples (within calibration range, results calculated correctly)
	✓	✓	Manual Integration Verified
✓			Standard Prep Log (all pages present, legible, peer reviewed, legible)
✓			Sample Prep/Extraction (all pages present, legible, peer reviewed)
			Others:

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	TPH DRO	Analyst Initial	TD	Reviewer Initial	JK	Batch/ Sequence	B2A0065 2010050
Instrument ID	HP6890-4	Date Analyzed	01-30-12	Date	01/31/12	Chemstation Last Update	01/24/12 07:53:22
Cases	R12S30; R33911			SDGs	12027A; ~~11027B~~ 12027B TD 02-01-12		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	✓	✓	Runlog (Present, legible, peer reviewed)
✓			Tune/ Degradation Standard
	✓	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	✓	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
	✓	✓	QLS (level, frequency, and recovery) (include Chemstation summary)
	✓	✓	Method / Extraction / Storage Blanks (frequency and contamination levels)
	✓	✓	Surrogate Recoveries
✓			IS Areas (SOP criteria met)
	✓	✓	LCS (level, frequency, and recovery) (include Chemstation summary)
	✓	✓	MS/MSD
	✓	✓	Samples (within calibration range, results calculated correctly)
	✓	✓	Manual Integration Verified
✓			Standard Prep Log (all pages present, legible, peer reviewed, legible)
✓			Sample Prep/Extraction (all pages present, legible, peer reviewed)
			Others:

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion

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Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	**TPH DRO**	**Analyst Initial**	TD	**Reviewer Initial**	ZL	**Batch/ Sequence**	B2A0071 2010053
Instrument ID	**AG7890-2**	**Date Analyzed**	01-31-12	**Date**	02-01-12	**Chemstation Last Update**	01/31/12 09:45:52
Cases	**R33911**			**SDGs**	**12027B; 12030A**		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	✓	✓	Runlog (Present, legible, peer reviewed)
✓			Tune/ Degradation Standard
	✓	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	✓	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
	✓	✓	QLS (level, frequency, and recovery) (include Chemstation summary)
	✓	✓	Method / Extraction / Storage Blanks (frequency and contamination levels)
	✓	✓	Surrogate Recoveries
✓			IS Areas (SOP criteria met)
	✓	✓	LCS (level, frequency, and recovery) (include Chemstation summary)
✓			MS/MSD
	✓	✓	Samples (within calibration range, results calculated correctly)
	✓	✓	Manual Integration Verified
✓			Standard Prep Log (all pages present, legible, peer reviewed, legible)
✓			Sample Prep/Extraction (all pages present, legible, peer reviewed)
			Others:

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion
								Small background
								cont in blank &
								Samples. Discuss
								in MMO Sheet ZL

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USEPA Region 9 Laboratory
Organic Analysis Summary

Case: R33911
SDG: 12027B
Analysis: TPH DRO

TD

Sample ID	Sample Runs			
Instrument:	HP6890_4	AG7890-2	INSTRUMENT	INSTRUMENT
Analysis Date:	1/30/2012	1/31/2012		
Sequence:	2010050	2010053		
1201031-01	RPT			
1201031-02	RPT			
1201031-03	RPT			
1201031-04	RPT			
1201031-05	RPT			
B2A0065-BLK1	RPT			
B2A0065-BS1	RPT			
1201033-01		RPT		
1201033-02		RPT		
1201033-03		RPT		
1201033-04		RPT		
B2A0071-BLK1		RPT		
B2A0071-BS1		RPT		

Definitions

RPT	Report
NU	Not Used
OC	Over calibration
OTT	Out of tune time
nX	Dilution, where n is dilution factor

00011A 2/3/12

00238

SAMPLE TRACKING FORMS

: 00012

DIM0275879

DIM0275897

WORK ORDER

Printed: 1/27/2012 10:54:39AM

1201031

EPA Region 9 Laboratory

Client: US EPA Region 3, Eastern Response Branch (3HS **Project Number:** R33911
Project: Dimock Residential Groundwater

Report To:
US EPA Region 3, Eastern Response Branch (3HS31)
Richard Fetzer
100 Gypsum Road
Stroudsburg, PA 18360
Phone: (215) 341-6307
Fax: XX

Project Contact
US EPA Region 3, Eastern Response Branch (3HS31)
Richard Fetzer
100 Gypsum Road
Stroudsburg, PA 18360
Phone :(215) 341-6307
Fax: XX

Shipping Containers	Description	Temp C	Custody Seals?	Containers Intact?	Labels COC Agree?	Preservation Confirmed?	Received on Ice?	Comments
1Cooler	Default Cooler	3	Yes	Yes	Yes	No	Yes	
2Cooler	Default Cooler	2	Yes	Yes	Yes	No	Yes	

Date Due:	02/17/12 15:00 (21 day TAT)	SDG:	~~11027B~~ 12027B
Received By:	Richard Bauer	Date Received:	01/27/12 09:52
Logged In By:	Garrett Peterson	Date Logged In:	01/27/12 10:22

PD 02-01-12

Analysis	Hold Time Expires	Comments
1201031-01 FB01 [Water] Sampled 01/23/12 14:42 Pacific		
TPH - Extractable	01/30/12	
Dissolved HC Gases	02/06/12	5 day prelim results
TPH - Purgeable	02/06/12	
1201031-02 FB02 [Water] Sampled 01/24/12 12:11 Pacific		
TPH - Extractable	01/31/12	
TPH - Purgeable	02/07/12	
Dissolved HC Gases	02/07/12	5 day prelim results
1201031-03 HW04 [Water] Sampled 01/24/12 14:33 Pacific		
TPH - Purgeable	02/07/12	
TPH - Extractable	01/31/12	
Dissolved HC Gases	02/07/12	5 day prelim results
1201031-04 HW19 [Water] Sampled 01/23/12 17:47 Pacific		
TPH - Purgeable	02/06/12	
Dissolved HC Gases	02/06/12	5 day prelim results
TPH - Extractable	01/30/12	
1201031-05 HW19-P [Water] Sampled 01/23/12 19:07 Pacific		
TPH - Extractable	01/30/12	
TPH - Purgeable	02/06/12	
Dissolved HC Gases	02/06/12	5 day prelim results

WORK ORDER

1201031

EPA Region 9 Laboratory

Client: US EPA Region 3, Eastern Response Branch (3HS **Project Number:** R33911
Project: Dimock Residential Groundwater

Analysis	Hold Time Expires	Comments
Analysis	**Expires**	**Comments**
1201031-06 TB01 [Water] Sampled 01/23/12 12:30 Pacific		
Dissolved HC Gases	02/06/12	5 day prelim results

Reviewed By

Date

00013A

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case
Client No: CT5865
SDG No:
L

Date Shipped:	1/26/2012
Carrier Name:	FedEx
Airbill:	8417 6908 4279
Shipped to:	US EPA Region 9 Lab 1337 South 46th Street, Bldg 201 Richmond CA 94804 (510) 412-2389

Chain of Custody Record

Sampler Signature: B. Burton for Tom Sedlacek

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 B. Burton	1/26/12 08:00	Fed Ex 841769084279	
2			
3			
4 Fed Ex	→	RJM	1/27/12 0952

For Lab Use Only
Lab Contract No:
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		FOR LAB USE ONLY Sample Condition On Receipt
FB02	Aqueous/ Tom Sedlacek	L/G	DRO (7)	192 (-NA- / 1000mlAmber), 193 (-NA- / 1000mlAmber) (2)	FB02	S: 1/24/2012	12:11	
HW04	Drinking Water/ Mike Ferrier	L/G	DRO (7)	146 (-NA- / 1000mlAmber), 147 (-NA- / 1000mlAmber) (2)	HW04	S: 1/24/2012	14:33	

Cooler #1

08233

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s): B. Burton for Mike Ferrier	Cooler Temperature Upon Receipt: 3°C	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? YES / Shipment Iced? YES
DRO = 11-Diesel Range Organics				

TR Number: 3-043013577-012512-0009

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case
Client No: CT5865
SDG No:
L

Date Shipped:	1/25/2012
Carrier Name:	FedEx
Airbill:	7931 5621 5581
Shipped to:	US EPA Region 9 Lab 1337 South 46th Street, Bldg 201 Richmond CA 94804 (510) 412-2389

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 B. Burns	1/25/12 16:20	FedEx 7931 5621 5581	
2			
3			
4 FedEx		RMB	1/27/12 0952

Sample/ Signature: B. Burns for Bryan Berna

For Lab Use Only
Lab Contract No:
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		FOR LAB USE ONLY Sample Condition On Receipt
FB01	Aqueous/ Bryan Berna	L/G	DRO (7), GRO (7), RSK-175 (7)	167 (HCl / 40mlGlassVial), 168 (HCl / 40mlGlassVial), 80 (-NA- / 1000mlAmber), 81 (-NA- / 1000mlAmber), 84 (HCl / 40mlGlassVial), 85 (HCl / 40mlGlassVial) (6)	FB01	S: 1/23/2012	14:42	
FB02	Aqueous/ Tom Sedlacek	L/G	GRO (7), RSK-175 (7)	169 (HCl / 40mlGlassVial), 170 (HCl / 40mlGlassVial), 195 (HCl / 40mlGlassVial), 196 (HCl / 40mlGlassVial) (4)	FB02	S: 1/24/2012	12:11	Cooler #2
HW04	Drinking Water/ Mike Ferrier	L/G	GRO (7), RSK-175 (7)	148 (HCl / 40mlGlassVial), 149 (HCl / 40mlGlassVial), 150 (HCl / 40mlGlassVial), 151 (HCl / 40mlGlassVial) (4)	HW04	S: 1/24/2012	14:33	
HW19	Drinking Water/ Mike Ferrier	L/G	DRO (7), GRO (7), RSK-175 (7)	100 (-NA- / 1000mlAmber), 101 (HCl / 40mlGlassVial), 102 (HCl / 40mlGlassVial), 171 (HCl / 40mlGlassVial), 172 (HCl / 40mlGlassVial), 99 (-NA- / 1000mlAmber) (6)	HW19	S: 1/23/2012	17:47	
HW19-P	Drinking Water/ Mike Ferrier	L/G	DRO (7), GRO (7), RSK-175 (7)	114 (-NA- / 1000mlAmber), 115 (-NA- / 1000mlAmber), 116 (HCl / 40mlGlassVial), 117 (HCl / 40mlGlassVial), 118 (HCl / 40mlGlassVial), 119 (HCl / 40mlGlassVial) (6)	HW19-P	S: 1/23/2012	19:07	

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s): B. Burns for Tom Sedlacek B. Burns for Mike Ferrier	Cooler Temperature Upon Receipt: 2°C	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Yes / Shipment Iced? Yes

DRO = 11-Diesel Range Organics, GRO = 11-Gasoline Range Organics, RSK-175 = 11-Dissolved Gases_Meth,Ethe,Etha

TR Number: 3-043013577-012512-0004

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

F2/S1.047 Page 1 of 2

DIM0275879 DIM0275901

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case
Client No: CT5865
SDG No:
L

Date Shipped: 1/25/2012	**Chain of Custody Record**	Sampler Signature: B Burns	**For Lab Use Only**	
Carrier Name: FedEx	Relinquished By (Date / Time)	Received By (Date / Time)	Lab Contract No:	
Airbill: 7931 5621 5581	B Burns 1/25/12 16:20	FedEx 7931 5621 5581	Unit Price:	
Shipped to: US EPA Region 9 Lab, 1337 South 46th Street, Bldg 201, Richmond CA 94804, (510) 412-2389	2		Transfer To:	
	3		Lab Contract No:	
	4 FedEx →	RM 1/24/12 0952	Unit Price:	

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		FOR LAB USE ONLY Sample Condition On Receipt
TB01	Aqueous/ Brian Burns	L/G	RSK-175 (7)	6 (HCl / 40mlGlassVial), 7 (HCl / 40mlGlassVial) (2)	TB01	S: 1/23/2012	12:30	

cooler #2

08235

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 2°C	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? YES / Shipment Iced? YES

DRO = 11-Diesel Range Organics, GRO = 11-Gasoline Range Organics, RSK-175 = 11-Dissolved Gases_Meth,Ethe,Etha

TR Number: 3-043013577-012512-0004

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

F2V51.047 Page 2 of 2

DIM0275879

DIM0275902

1201033

EPA Region 9 Laboratory

Client: US EPA Region 3, Eastern Response Branch (3HS **Project Number:** R33911
Project: Dimock Residential Groundwater

Report To:
US EPA Region 3, Eastern Response Branch (3HS31)
Richard Fetzer
100 Gypsum Road
Stroudsburg, PA 18360
Phone: (215) 341-6307
Fax: XX

Project Contact
US EPA Region 3, Eastern Response Branch (3HS31)
Richard Fetzer
100 Gypsum Road
Stroudsburg, PA 18360
Phone :(215) 341-6307
Fax: XX

Shipping Containers	Description	Temp C	Custody Seals?	Containers Intact?	Labels COC Agree?	Preservation Confirmed?	Received on Ice?	Comments
1Cooler	Cooler	2	Yes	Yes	Yes	No	Yes	12027B

Date Due: 02/18/12 15:00 (21 day TAT) SDG: 11027B
Received By: Barbara Bates Date Received: 01/28/12 10:05
Logged In By: Richard Bauer Date Logged In: 01/30/12 08:22

TD 02-01-12 corrected in LIMS 2/2/12

Analysis	Hold Time Expires	Comments
1201033-01 FB03 [Water] Sampled 01/25/12 10:01 Pacific		
Dissolved HC Gases	02/08/12	5 day prelim results
TPH - Extractable	02/01/12	
TPH - Purgeable	02/08/12	
1201033-02 HW02 [Water] Sampled 01/25/12 12:58 Pacific		
Dissolved HC Gases	02/08/12	5 day prelim results
TPH - Extractable	02/01/12	
TPH - Purgeable	02/08/12	
1201033-03 HW02z [Water] Sampled 01/25/12 12:59 Pacific		
Dissolved HC Gases	02/08/12	5 day prelim results
TPH - Extractable	02/01/12	
TPH - Purgeable	02/08/12	
1201033-04 HW08a [Water] Sampled 01/25/12 11:46 Pacific		
Dissolved HC Gases	02/08/12	5 day prelim results
TPH - Extractable	02/01/12	
TPH - Purgeable	02/08/12	

Reviewed By Date

DIM0275879 DIM0275903

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case
Client No: CT5865
SDG No:
L

Date Shipped:	1/27/2012
Carrier Name:	FedEx
Airbill:	7931 6649 4730
Shipped to:	US EPA Region 9 Lab 1337 South 46th Street, Bldg 201 Richmond CA 94804 (510) 412-2389

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 [signature]	1/27/12 1700	Barbara Bates	1/28/12 10:05
2			
3			
4			

Sampler Signature: [signature] for Joel Munson

For Lab Use Only
Lab Contract No:
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		FOR LAB USE ONLY Sample Condition On Receipt
FB03	Aqueous/ Joel Munson	L/G	DRO (7), GRO (7), RSK-175 (7)	254 (-NA- / 1000mlAmber), 255 (-NA- / 1000mlAmber), 256 (HCl / 40mlGlassVial), 257 (HCl / 40mlGlassVial), 258 (HCl / 40mlGlassVial), 259 (HCl / 40mlGlassVial) (6)	FB33	S 1/25/2012	10:01	
HW02	Drinking Water/ Mike Ferrier	L/G	DRO (7), GRO (7), RSK-175 (7)	324 (-NA- / 1000mlAmber), 325 (-NA- / 1000mlAmber), 326 (HCl / 40mlGlassVial), 327 (HCl / 40mlGlassVial), 328 (HCl / 40mlGlassVial), 329 (HCl / 40mlGlassVial) (6)	HW02	S 1/25/2012	12:58	
HW03r	Drinking Water/ Mike Ferrier	L/G	DRO (7), GRO (7), RSK-175 (7)	359 (-NA- / 1000mlAmber), 360 (-NA- / 1000mlAmber), 361 (HCl / 40mlGlassVial), 362 (HCl / 40mlGlassVial), 363 (HCl / 40mlGlassVial), 364 (HCl / 40mlGlassVial) (6)	HW03r	S 1/25/2012	12:59	
HW03ra	Drinking Water/ Bryan Berra	L/G	DRO (7), GRO (7), RSK-175 (7)	289 (-NA- / 1000mlAmber), 290 (-NA- / 1000mlAmber), 291 (HCl / 40mlGlassVial), 292 (HCl / 40mlGlassVial), 293 (HCl / 40mlGlassVial), 294 (HCl / 40mlGlassVial) (6)	HW03ra	S 1/25/2012	11:40	

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s): [signature] for Bryan Berra	Cooler Temperature Upon Receipt: 2°C	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low M = Low/Medium H = High	Type/Designate: Composite = C Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

DRO = 11-Diesel Range Organics, GRO = 11-Gasoline Range Organics RSK-175 = 11-Dissolved Gases_Meth Ethe,Etha

TR Number: 3-043013577-012712-0003

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819, Phone 703/818-4200, Fax 703/818-4602

00237

DIM0275879

DIM0275904

00238

Sample Preparation

: 00019

DIM0275879 DIM0275905

PREPARATION BENCH SHEET

B2A0065

EPA Region 9 Laboratory **Printed: 1/27/2012 1:08:38PM**

Project: R12S30 - Whittier Narrows Winter FY12 Waste

Matrix: Water **Analysis: TPH - Extractable** **Prepared using: Extractables - 3520C CLLE** **Surrogate used: 1L27008**

Lab Number	Sample Name	Prepared	Initial Vol., mL	Final Vol.,mL	Spike ID	Source ID	uL Spike	uL Surrogate	Prepared By	pH	Initial wt., g	Final wt., g	Extraction Comments
1201030-01 A	EPAMW4-28-WATER	01/27/12 11:33	1039.7	3				500	SUL	6	1537.57	497.87	
1201031-01 A	FB01	01/27/12 11:33	987.56	3				500	SUL	5	1487.66	500.1	
1201031-02 A	FB02	01/27/12 11:33	1051.88	3				500	SUL	5	1554.21	502.33	
1201031-03 A	HW04	01/27/12 11:33	1050.29	3				500	SUL	6	1552.52	502.23	
1201031-04 A	HW19	01/27/12 11:33	1013.72	3				500	SUL	6	1514.52	500.8	
1201031-05 A	HW19-P	01/27/12 11:33	1051.19	3				500	SUL	6	1552.09	500.9	
B2A0065-BLK1	Blank	01/27/12 11:33	1000	3			0	500	SUL		1624	624	pH 5
B2A0065-BS1	LCS	01/27/12 11:33	1360	3	1H09011		500	500	SUL		1624	264	pH 5
B2A0065-MS1	Matrix Spike	01/27/12 11:33	559.61	3	1H09011	1201030-01	500	500	SUL		1556.79	997.18	pH 6
B2A0065-MSD1	Matrix Spike Dup	01/27/12 11:33	497.54	3	1H09011	1201030-01	500	500	SUL		997.18	499.64	pH 6

Spike Check witnessed [illegible] 1/27/12

Dimock & Whittier TPH, SDGs 11027B & 12027A. No MS/MSD for Dimock, per ZAR (extra QC bottles not provided). Split one bottle for Whittier MS/MSD. All samples adjsuted to pH <2. Glasswool rinsed 10/14/11.

TD 01-30-12

Preparation Reviewed By Date

PREPARATION BENCH SHEET

B2A0065

EPA Region 9 Laboratory

Project: -

Printed: 1/27/2012 1:08:38PM

Matrix: Water **Analysis:QC** **Prepared using: Extractables - 3520C CLLE** **Surrogate used: 1L27008**

Lab Number	Sample Name	Prepared	Initial Vol., mL	Final Vol.,mL	Spike ID	Source ID	uL Spike	uL Surrogate	Prepared By	pH	Initial wt., g	Final wt., g	Extraction Comments

Reagents

Reagent #	Description
1D15018	Sulfuric Acid 1:1
1F23003	Dichloromethane/LN:439 Recycled
1J04003	Sodium Sulfate/K19623

Start 01/27/12 1535
Stop 01/28/12 9:40
JA

08246

08521

TD 01-30-12
Preparation Reviewed By Date

PREPARATION BENCH SHEET

B2A0071

EPA Region 9 Laboratory

Printed: 1/30/2012 1:11:34PM

Project: R33911 - Dimock Residential Groundwater

Matrix: Water **Analysis: TPH - Extractable** **Prepared using: Extractables - 3520C CLLE** **Surrogate used: 1L27008**

Lab Number	Sample Name	Prepared	Initial Vol., mL	Final Vol.,mL	Spike ID	Source ID	uL Spike	uL Surrogate	Prepared By	pH	Initial wt., g	Final wt., g	Extraction Comments
1201033-01 B	FB03	01/30/12 11:07	992.44	3				500	SUL	5	1494.15	501.71	
1201033-02 B	HW02	01/30/12 11:07	981.45	3				500	SUL	6	1483.03	501.58	Yellow in color, with orange-colored particles
1201033-03 B	HW02z	01/30/12 11:07	1003.65	3				500	SUL	6	1505.88	502.23	Yellow in color, with orange-colored particles
1201033-04 B	HW08a	01/30/12 11:07	966.26	3				500	SUL	6	1469.8	503.54	Light yellow in color
1201034-01 A	FB04	01/30/12 11:07	973.84	3				500	SUL	5	1476.25	502.41	
1201034-02 A	HW05	01/30/12 11:07	1025.83	3				500	SUL	6	1526.95	501.12	Light yellow in color
1201034-03 A	HW06	01/30/12 11:07	1024.9	3				500	SUL	8	1527.92	503.02	Yellow in color, cloudy
1201034-04 A	HW12	01/30/12 11:07	977.96	3				500	SUL	7	1481.12	503.16	Yellow in color, with orange-colored particles
1201034-05 A	HW14-P	01/30/12 11:07	1042.38	3				500	SUL	6	1546.28	503.9	
1201034-06 A	HW14	01/30/12 11:07	1047.33	3				500	SUL	6	1552.2	504.87	
1201034-09 A	FB05	01/30/12 11:07	987.21	3				500	SUL	5	1490.4	503.19	
1201034-10 A	HW01	01/30/12 11:07	985.97	3				500	SUL	7	1489.44	503.47	
1201034-11 A	HW24-P	01/30/12 11:07	1056.02	3				500	SUL	8	1558.96	502.94	

00241

TD 01-31-12

Preparation Reviewed By Date

PREPARATION BENCH SHEET

B2A0071

EPA Region 9 Laboratory

Printed: 1/30/2012 1:11:34PM

Project: R33911 - Dimock Residential Groundwater

Matrix: Water **Analysis: TPH - Extractable** **Prepared using: Extractables - 3520C CLLE** **Surrogate used: 1L27008**

Lab Number	Sample Name	Prepared	Initial Vol., mL	Final Vol.,mL	Spike ID	Source ID	uL Spike	uL Surrogate	Prepared By	pH	Initial wt., g	Final wt., g	Extraction Comments
1201034-15 A	HW17	01/30/12 11:07	1047.68	3				500	SUL	7	1551.31	503.63	
1201034-16 A	HW24	01/30/12 11:07	1046.51	3				500	SUL	8	1549.8	503.29	
B2A0071-BLK1	Blank	01/30/12 11:07	1000	3			0	500	SUL		1624	624	pH 5
B2A0071-BS1	LCS	01/30/12 11:07	1000	3	1H09011		500	500	SUL		1624	624	pH 5

Spike Check witnessed by JH 1/30/12

Dimock TPH, SDGs 11027B & 12030A. All samples adjusted to pH <2. Glasswool rinsed 10/14/11. No MS/MSD for either SDG, per RJB (extra QC bottles not provided).

Reagents

Reagent #	Description
1D15018	Sulfuric Acid 1:1
1G13002	Dichloromethane/LN:444 Recycled
1J04003	Sodium Sulfate/K19623
ZA13011	Dichloromethane/LN DE934

00242

Start 1/30/12 1330
Stop 1/31/12 0730

00523

TD 01-31-12

Preparation Reviewed By Date

INITIAL CALIBRATION

Injection Log

Directory: C:\MSDCHEM\1\2012\DATA\012312401A

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	012312401.D	1.	2010031-IBL1	2A11003 IB	1/23/202021 12:38:5
2	2	012312402.D	1.	2010031-ICB1	2A11010 RT	1/23/202020 01:09:4
3	3	012312403.D	1.	2010031-CAL1	2A11004 DRO-QLS	1/23/202020 01:40:3
4	4	012312404.D	1.	2010031-CAL2	2A11006 DRO-B	1/23/202020 02:11:3
5	5	012312405.D	1.	2010031-CAL3	2A11005 DRO-CV	1/23/202020 02:42:3
6	6	012312406.D	1.	2010031-CAL4	2A11007 DRO-D	1/23/202020 03:13:2
7	7	012312407.D	1.	2010031-CAL5	2A11008 DRO-E	1/23/202020 03:44:1
8	8	012312408.D	1.	2010031-CAL6	2A11004 OIL-A	1/23/202020 04:15:0
9	9	012312409.D	1.	2010031-CAL7	2A11013 OIL-B	1/23/202020 04:46:0
10	10	012312410.D	1.	2010031-CAL8	2A11012 OIL-CV	1/23/202020 05:17:0
11	11	012312411.D	1.	2010031-CAL9	2A11014 OIL-D	1/23/202020 05:48:0
12	12	012312412.D	1.	2010031-CALA	2A11015 OIL-E	1/23/202020 06:18:5
13	13	012312413.D	1.	2010031-IBL2	2A11003 IB	1/23/202020 06:49:4
14	14	012312414.D	1.	2010031-SCV1	2A11009 DRO-SCV	1/23/202020 07:20:2
15	15	012312415.D	1.	2010031-SCV2	2A11019 OIL-SCV	1/23/202020 07:51:2
16	16	012312416.D	1.	2010031-ICB2	2A11022 Hydraulic Fluid	1/23/202020 08:22:0
17	17	012312417.D	1.	2010031-ICB3	2A11026 Mineral Spirit	1/23/202020 08:52:4
18	18	012312418.D	1.	2010031-ICB4	2A11027 Naphtha	1/23/202020 09:23:2
19	19	012312419.D	1.	2010031-ICB5	2A11021 Gas	1/23/202020 09:54:1
20	20	012312420.D	1.	2010031-ICB6	1G15010 Kerosene	1/23/202021 10:24:5
21	21	012312421.D	1.	2010031-ICB7	2A11023 Jet Fuel	1/23/202021 10:55:3
22	22	012312422.D	1.	2010031-ICB8	2A11028 Turpentine	1/23/202021 11:26:1
23	23	012312423.D	1.	2010031-ICB9	2A11029 Lacqure Thinner	1/23/202021 11:56:5
24	24	012312424.D	1.	2010031-ICBA	2A11025 Stoddard Solvent	1/24/202021 12:27:3
25	100	999911401.D	1.	PREP	PREP	1/23/202021 11:37:2
26	100	999911402.D	1.	PREP	PREP	1/23/202021 12:08:0

1201003

24 Jan 2012 07:41

TPH-D RESPONSE FACTOR REPORT

Instrument Name: AG6890-4
Title: GC TPH Method
Last update: Tue Jan 24 07:53:22 2012
data file 012312415.D

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Avg	%RSD
Diesel (TPH)							
ug/mL	50	150	500	1250	4000		
Calibration Files:	012312403.D	012312404.D	012312405.D	012312406.D	012312407.D		
RF:	3002244	2737937	2522478	2836850	2821117	2784125	6.28%
area:	150112204	410690495	1261239040	3546062604	11284466444		
OIL							
ug/mL	200	400	1000	4000	10000		
Calibration Files:	012312408.D	012312409.D	012312410.D	012312411.D	012312412.D		
RF:	1682110	2087824	1818987	1634457	1854471	1815570	9.79%
area:	336421936	835129619	1818986992	6537829751	18544706916		
Surrogate							
ug/mL	10	25	50	75	100		
Calibration Files:	012312403.D	012312404.D	012312405.D	012312406.D	012312407.D		
RF:	2533730	2411889	2527214	2735060	2619770	2565533	4.68%
area:	25337301	60297224	126360722	205129467	261976967		

Compound #1: Diesel (TPH) (Page 3)

Lvl ID	Conc	Response	Lvl ID	Conc	Response
50	50.000000	150112203.797			
150	150.000000	410690494.508			
500	500.000000	1261239040.225			
1250	1250.000000	3546062603.957			
4000	4000.000000	11284466443.724			
OIL1		129181401.916			
OIL2		313278379.446			
OIL3		664810636.683			
OIL4		2452972814.089			
OIL5		6436618239.382			

Area Correction Mass: 0.00 Correction Factor: 0.0000

	Sum?	Integration Parameter File	
Tgt			Browse...
Q1	☐		Browse...
Q2	☐		Browse...
Q3	☐		Browse...

Prev | Next | Plot | Page 1 | Page 2 | OK | Cancel | Help

Compound List Report AG6890-4

Method Path : C:\MSDCHEM\1\2012\METHOD\
Method File : 0123124DA.M
Title : GC TPH Method
Last Update : Tue Jan 24 07:53:22 2012
Response Via : Initial Calibration

Total Cpnds : 3

PK#		Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	HM	Diesel (TPH)	6.15	1.000	A	A	R
2	H	OIL	11.30	1.000	A	A	R
3	S	Surrogate	9.87	1.000	A	A	L

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

0123124DA.M Tue Jan 24 07:53:37 2012

Quantitation Report (Not Reviewed)

00248

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312401.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 12:38 pm Operator: TD
Sample : 2010031-IBL1 Inst : AG6890-4
Misc : 2A11003 IB
ALS Vial : 1 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:54:37 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	124423811	48.498 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	97.00%
Target Compounds			
1) HM Diesel (TPH)	6.15	28652976	10.292 ug/mL
2) H OIL	11.30	8967507	4.939 ug/mL

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

00029

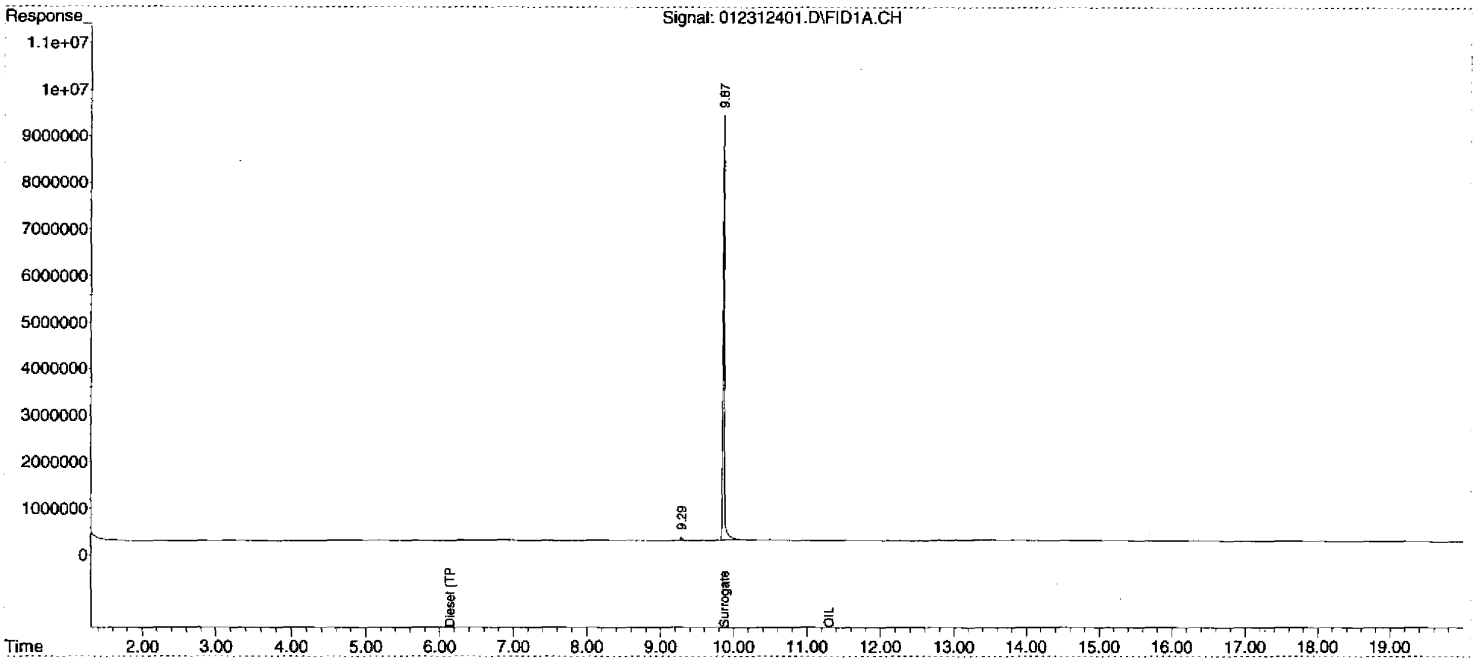
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312401.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 12:38 pm
Sample : 2010031-IBL1
Misc : 2A11003 IB
ALS Vial : 1 Sample Multiplier: 1

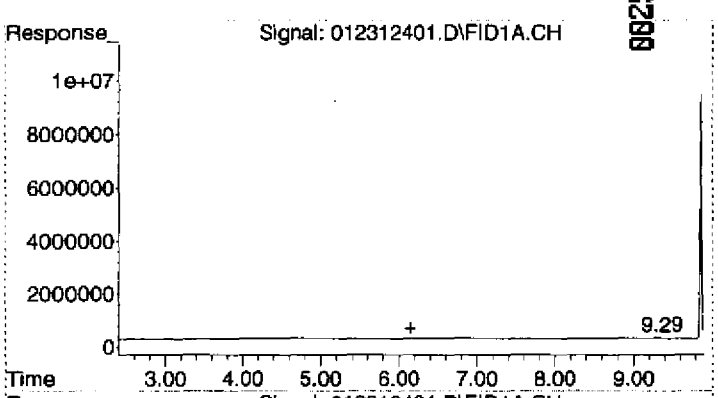
Operator: TD
Inst : AG6890-4

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:54:37 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

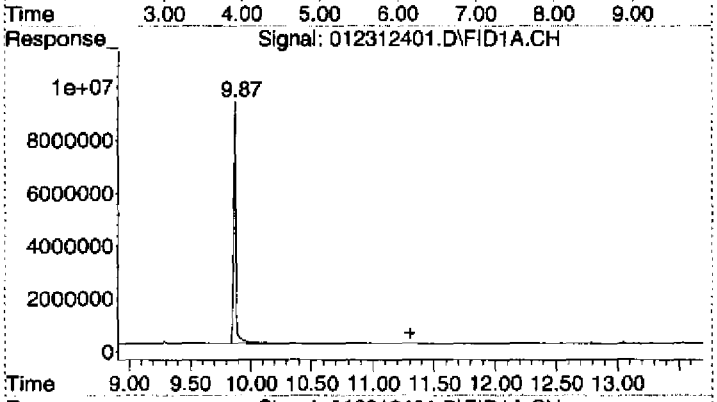


00249



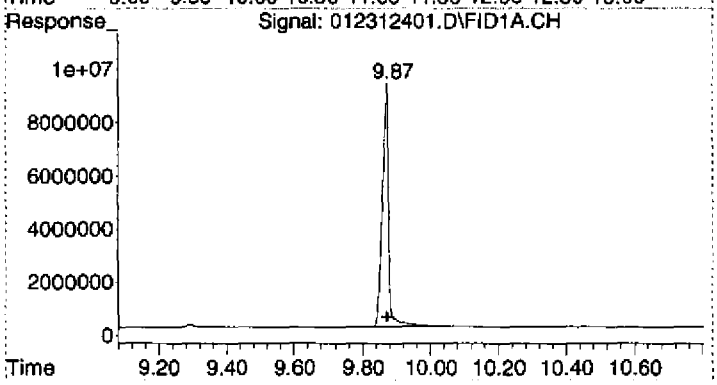
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 28652976
Conc: 10.29 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 8967507
Conc: 4.94 ug/mL m



#3 Surrogate

R.T.: 9.871 min
Delta R.T.: 0.001 min
Response: 124423811
Conc: 48.50 ug/mL

Quantitation Report (Not Reviewed)

00251

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312402.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 1:09 pm Operator: TD
Sample : 2010031-ICB1 Inst : AG6890-4
Misc : 2A11010 RT
ALS Vial : 2 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:54:41 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.86	46325748	18.057 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	36.11%#
Target Compounds			
1) HM Diesel (TPH)	6.15	402626292	144.615 ug/mL
2) H OIL	11.30	320212531	176.370 ug/mL

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

00032

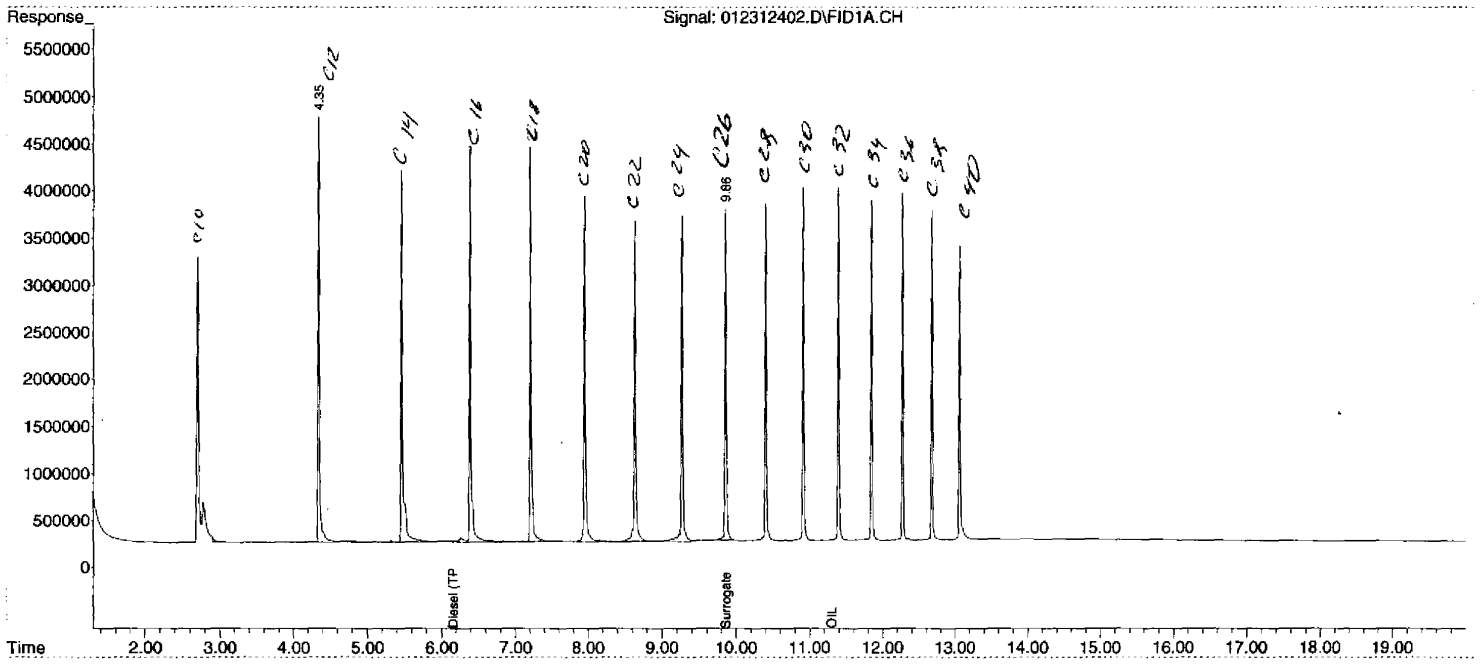
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312402.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 1:09 pm
Sample : 2010031-ICB1
Misc : 2A11010 RT
ALS Vial : 2 Sample Multiplier: 1

Operator: TD
Inst : AG6890-4

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:54:41 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

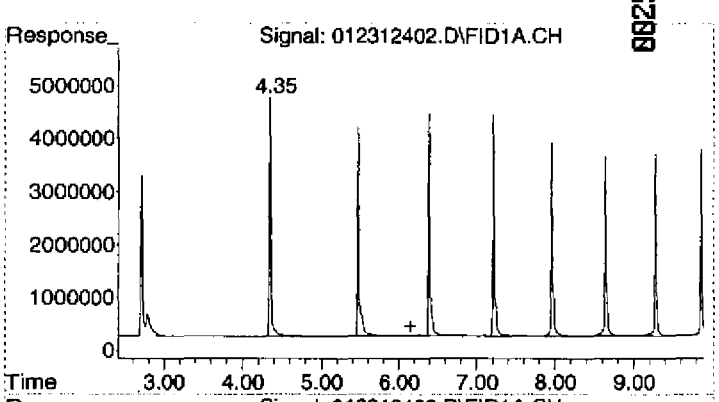


00252

0123124DA.M Tue Jan 24 07:54:42 2012 Page: 2

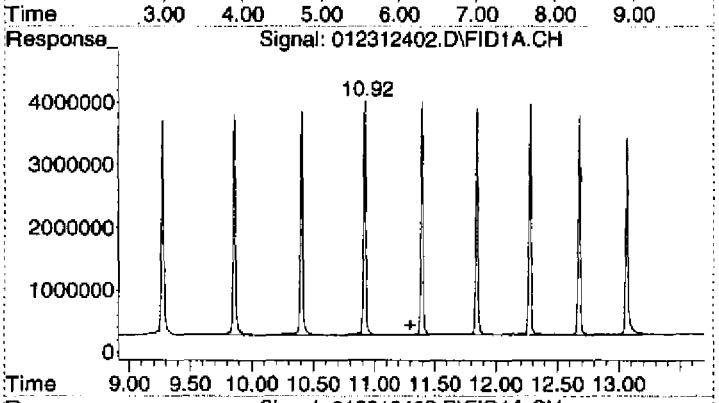
DIM0275919

DIM0275879



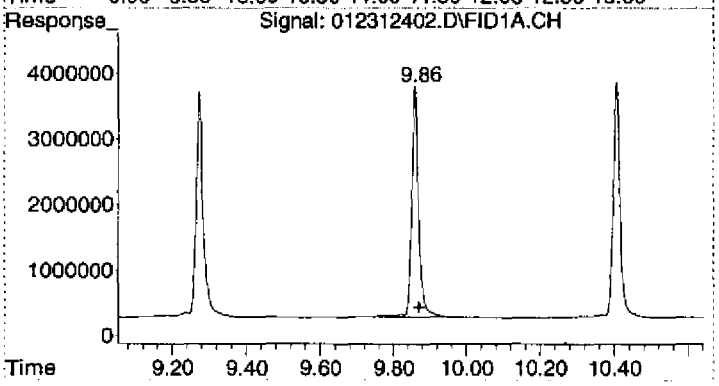
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 402626292
Conc: 144.62 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 320212531
Conc: 176.37 ug/mL m



#3 Surrogate

R.T.: 9.860 min
Delta R.T.: -0.011 min
Response: 46325748
Conc: 18.06 ug/mL

Quantitation Report (Not Reviewed)

00254

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312403.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 1:40 pm Operator: TD
Sample : 2010031-CAL1 Inst : AG6890-4
Misc : 2A11004 DRO-QLS
ALS Vial : 3 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:20 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.86f	25337301	7.905 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	15.81%#
Target Compounds			
1) HM Diesel (TPH)	6.15	150112204	48.732 ug/mL
2) H OIL	11.30	9457127	4.601 ug/mL

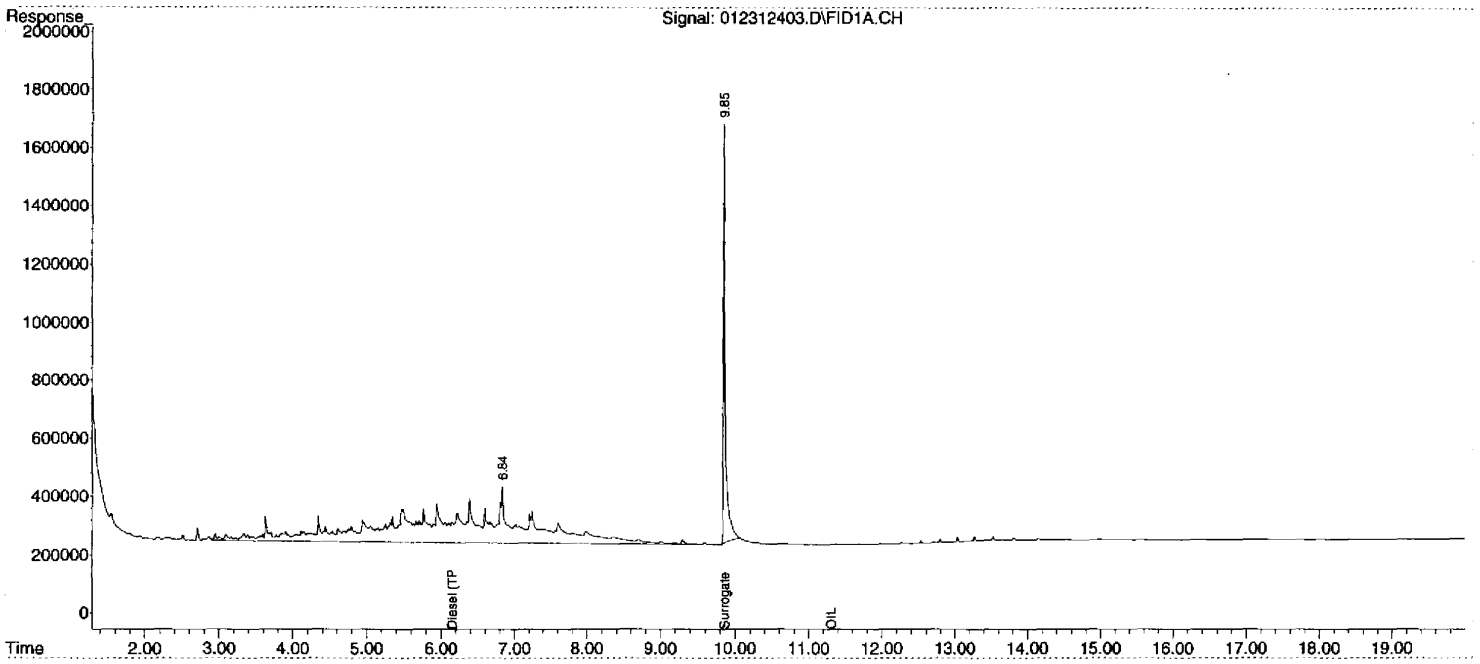
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

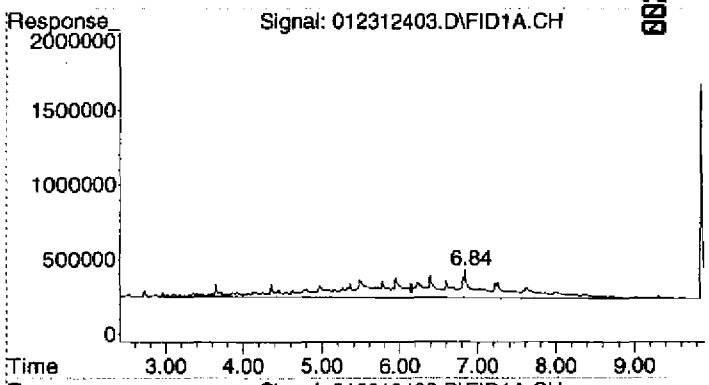
InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312403.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 1:40 pm Operator: TD
Sample : 2010031-CAL1 Inst : AG6890-4
Misc : 2A11004 DRO-QLS
ALS Vial : 3 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:20 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

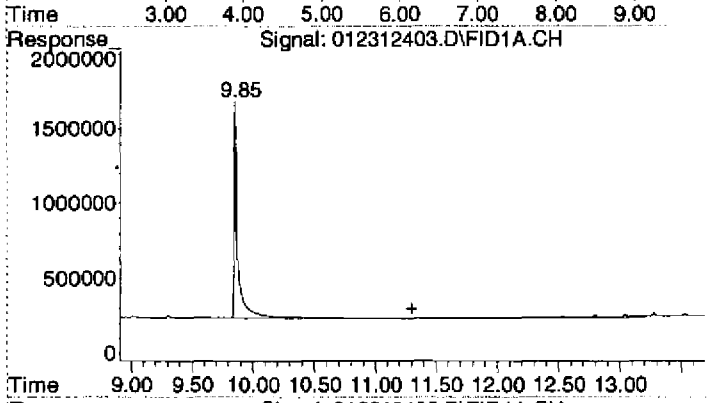


00255



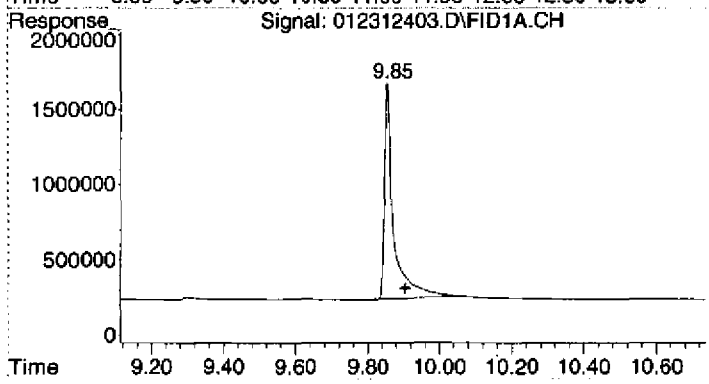
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 150112204
Conc: 48.73 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 9457127
Conc: 4.60 ug/mL m



#3 Surrogate

R.T.: 9.855 min
Delta R.T.: -0.049 min
Response: 25337301
Conc: 7.91 ug/mL

Quantitation Report (Not Reviewed)

00257

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312404.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 2:11 pm Operator: TD
Sample : 2010031-CAL2 Inst : AG6890-4
Misc : 2A11006 DRO-B
ALS Vial : 4 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:24 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.86	60297224	18.813 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	37.63%#
Target Compounds			
1) HM Diesel (TPH)	6.15	410690495	133.325 ug/mL
2) H OIL	11.30	12971906	6.311 ug/mL

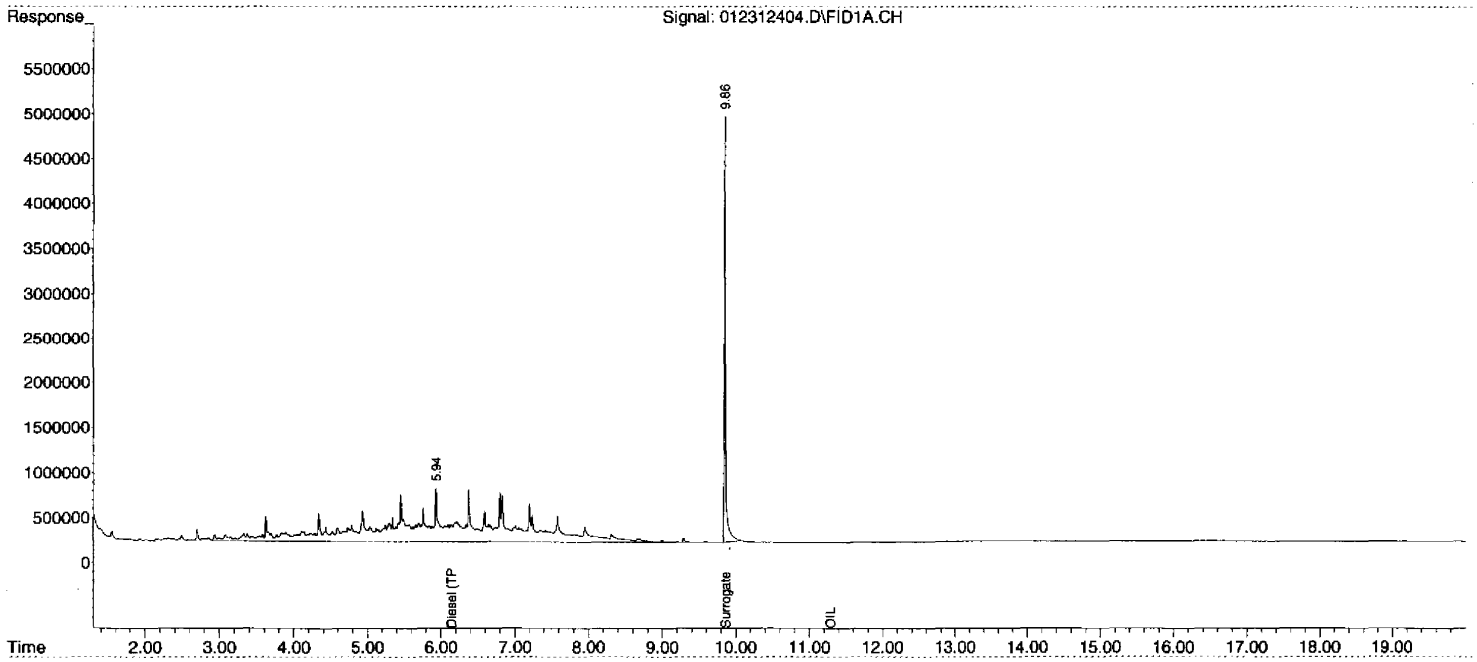
(f)=RT Delta > 1/2 Window (m)=manual int.

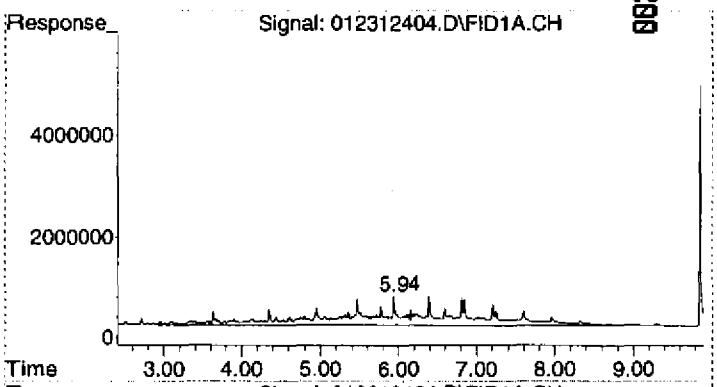
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312404.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 2:11 pm Operator: TD
Sample : 2010031-CAL2 Inst : AG6890-4
Misc : 2A11006 DRO-B
ALS Vial : 4 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:24 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

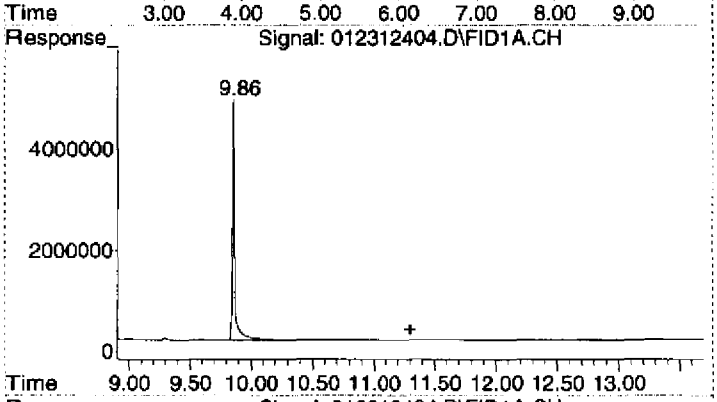
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





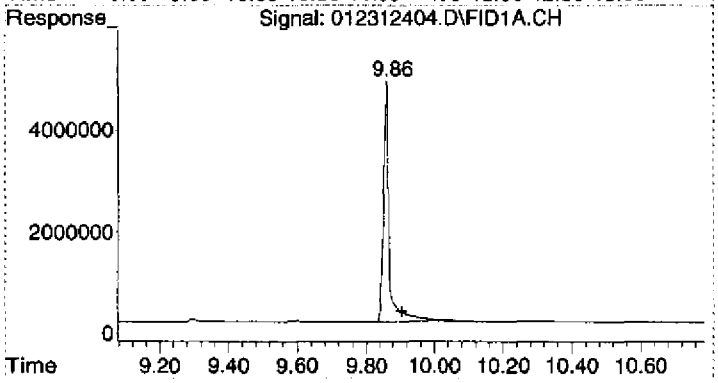
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 410690495
Conc: 133.33 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 12971906
Conc: 6.31 ug/mL m



#3 Surrogate

R.T.: 9.861 min
Delta R.T.: -0.044 min
Response: 60297224
Conc: 18.81 ug/mL

Quantitation Report (Not Reviewed)

00266

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312405.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 2:42 pm Operator: TD
Sample : 2010031-CAL3 Inst : AG6890-4
Misc : 2A11005 DRO-CV
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:28 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	126360722	39.425 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	78.85%
Target Compounds			
1) HM Diesel (TPH)	6.15	1261239040	409.444 ug/mL
2) H OIL	11.30	10980676	5.342 ug/mL

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

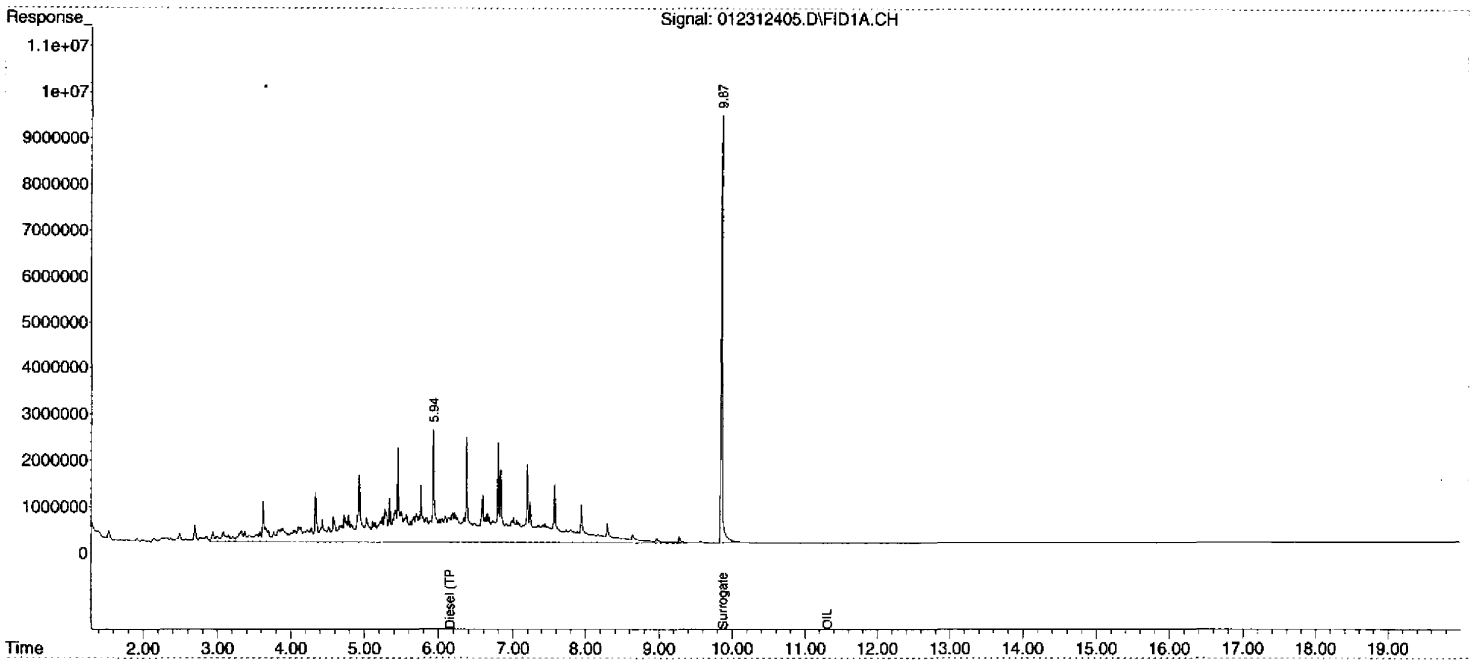
Quantitation Report (Not Reviewed)

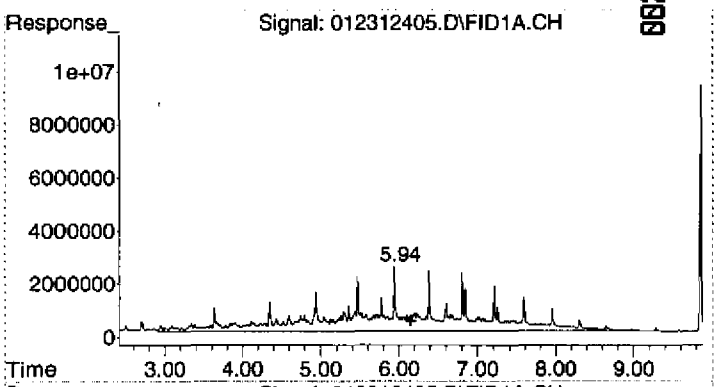
InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312405.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 2:42 pm
Sample : 2010031-CAL3
Misc : 2A11005 DRO-CV
ALS Vial : 5 Sample Multiplier: 1

Operator: TD
Inst : AG6890-4

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:28 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

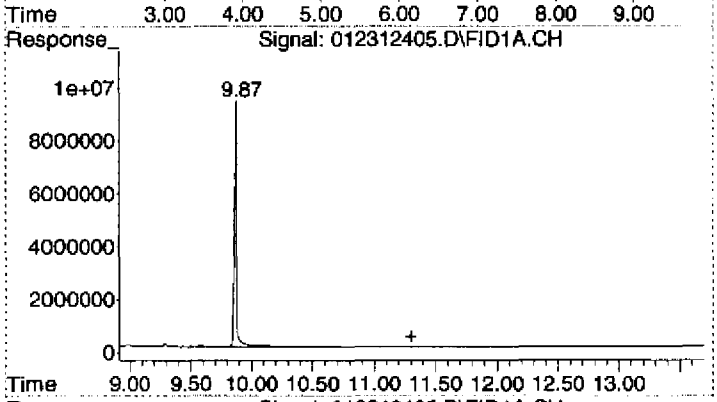
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





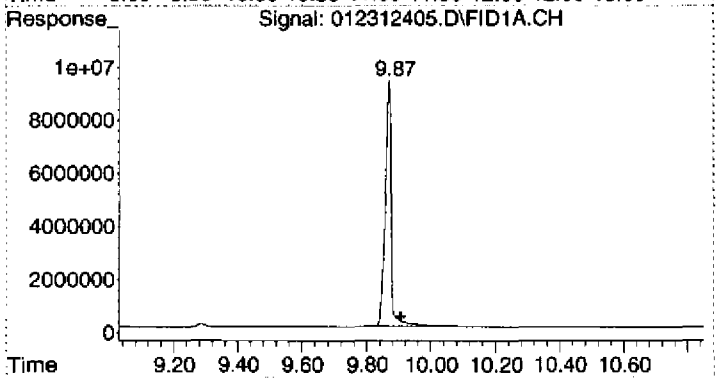
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 1261239040
Conc: 409.44 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 10980676
Conc: 5.34 ug/mL m



#3 Surrogate

R.T.: 9.870 min
Delta R.T.: -0.035 min
Response: 126360722
Conc: 39.43 ug/mL

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312406.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 3:13 pm Operator: TD
Sample : 2010031-CAL4 Inst : AG6890-4
Misc : 2A11007 DRO-D
ALS Vial : 6 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:32 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.88	205129467	64.001 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	128.00%#
Target Compounds			
1) HM Diesel (TPH)	6.15	3546062604	1151.182 ug/mL
2) H OIL	11.30	16930370	8.237 ug/mL

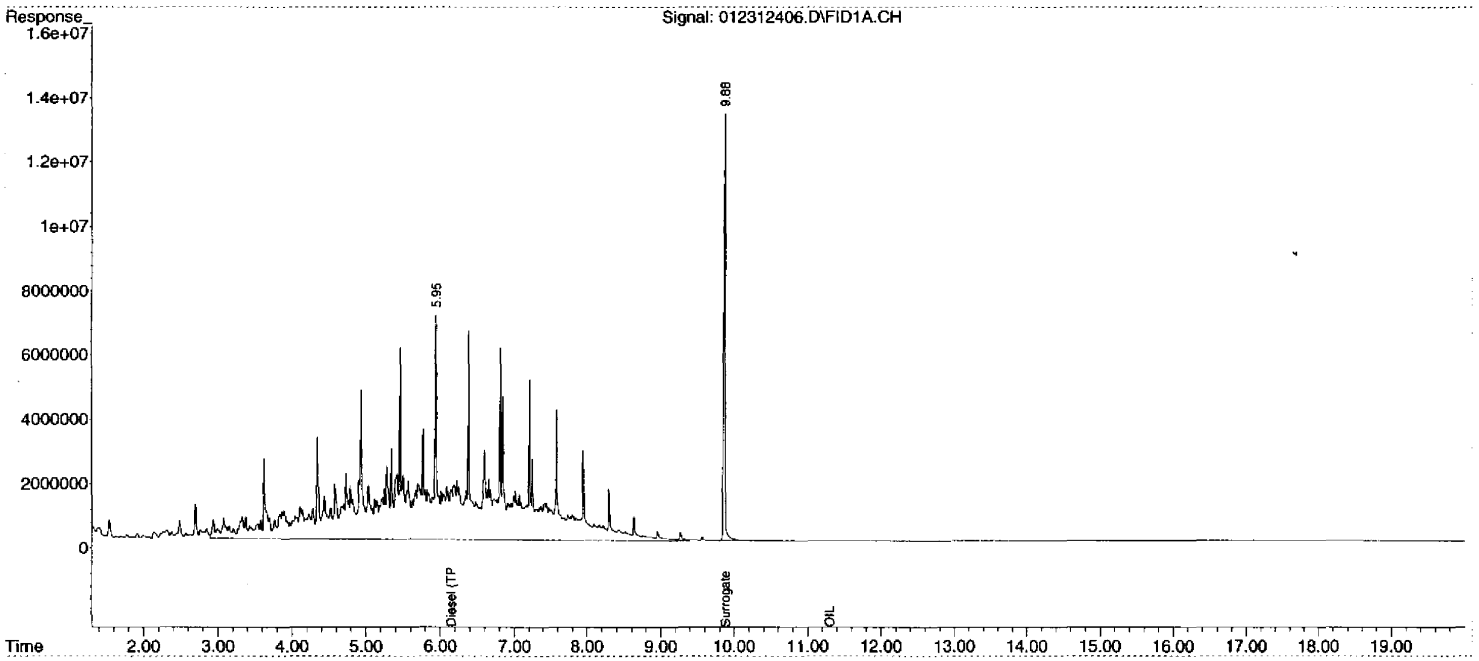
(f)=RT Delta > 1/2 Window (m)=manual int.

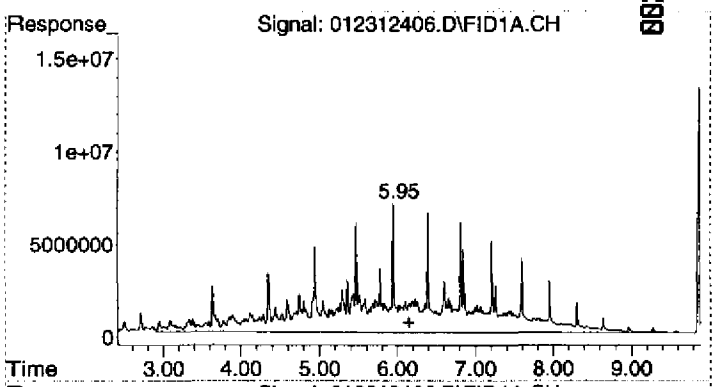
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312406.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 3:13 pm Operator: TD
Sample : 2010031-CAL4 Inst : AG6890-4
Misc : 2A11007 DRO-D
ALS Vial : 6 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:32 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

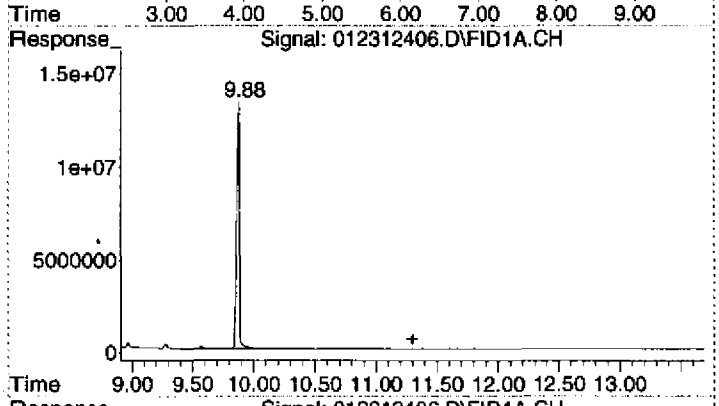
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





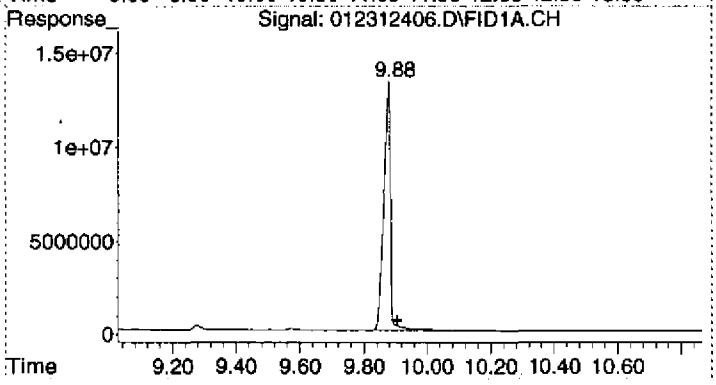
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 3546062604
Conc: 1151.18 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 16930370
Conc: 8.24 ug/mL m



#3 Surrogate

R.T.: 9.880 min
Delta R.T.: -0.025 min
Response: 205129467
Conc: 64.00 ug/mL

Quantitation Report (Not Reviewed)

00266

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312407.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 3:44 pm Operator: TD
Sample : 2010031-CAL5 Inst : AG6890-4
Misc : 2A11008 DRO-E
ALS Vial : 7 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:36 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.89	261976967	81.738 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery = 163.48%#	
Target Compounds			
1) HM Diesel (TPH)	6.15	11284466444	3663.350 ug/mL
2) H OIL	11.30	46229145	22.491 ug/mL

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

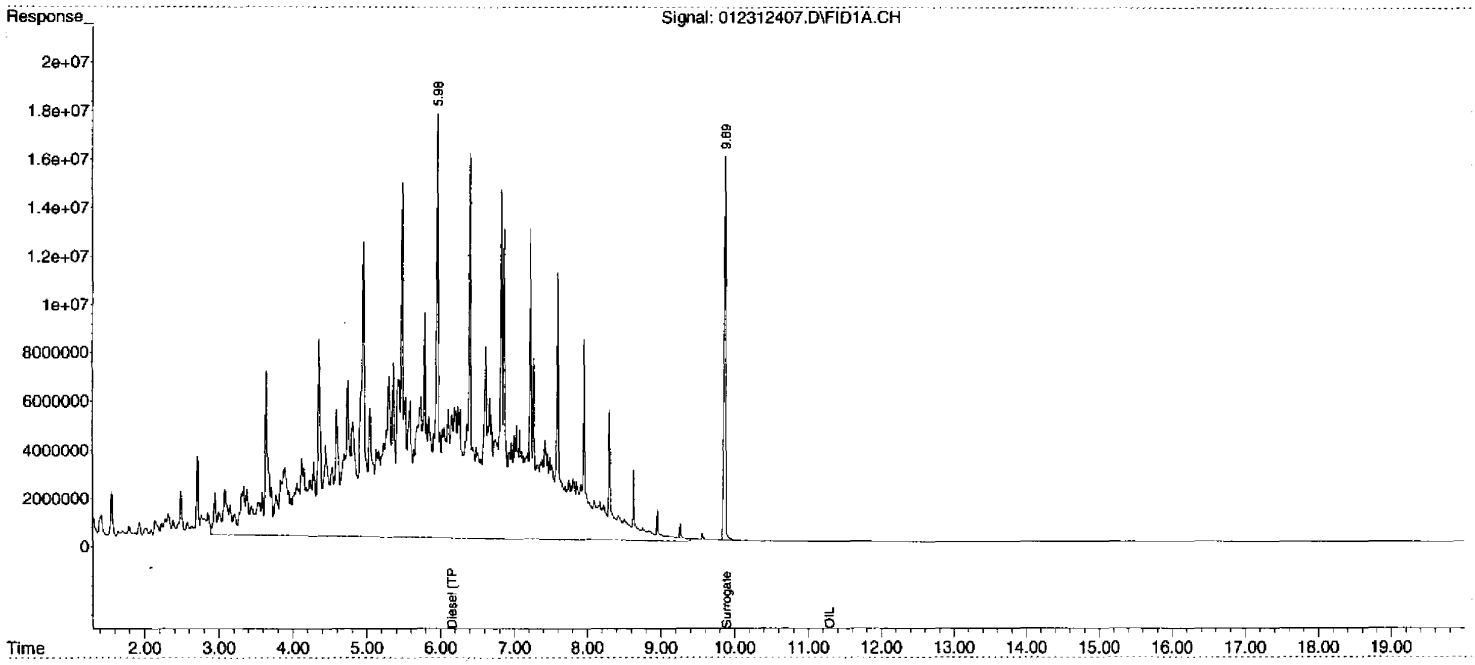
00047

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312407.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 3:44 pm Operator: TD
Sample : 2010031-CAL5 Inst : AG6890-4
Misc : 2A11008 DRO-E
ALS Vial : 7 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:36 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

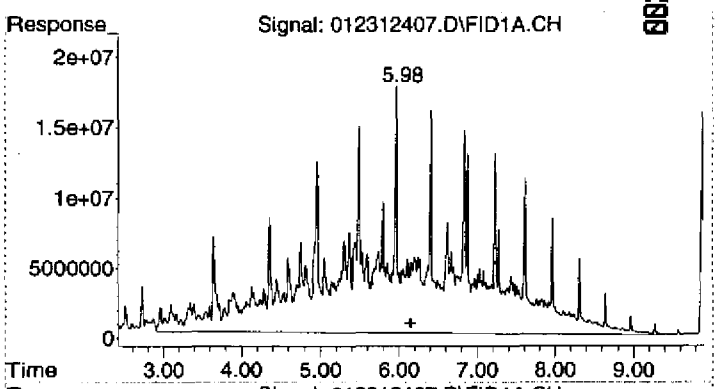
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



00267

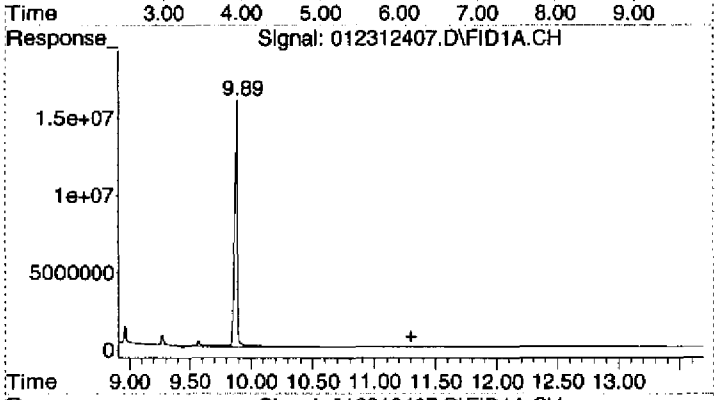
0123124DA.M Tue Jan 24 07:43:37 2012 Page: 2

DIM0275879 DIM0275934



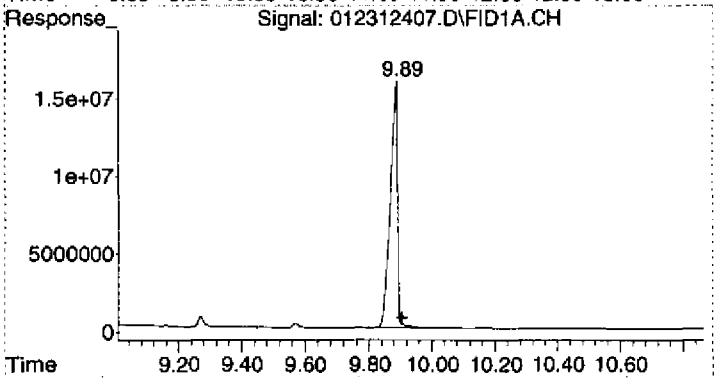
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 11284466444
Conc: 3663.35 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 46229145
Conc: 22.49 ug/mL m



#3 Surrogate

R.T.: 9.887 min
Delta R.T.: -0.018 min
Response: 261976967
Conc: 81.74 ug/mL

Quantitation Report (QT Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312408.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 4:15 pm
Sample : 2010031-CAL6
Misc : 2A11004 OIL-A
ALS Vial : 8 Sample Multiplier: 1

Operator: TD
Inst : AG6890-4

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:47:32 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	119952432	37.426 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	74.85%
Target Compounds			
1) HM Diesel (TPH)	6.15	129181402	41.937 ug/mL
2) H OIL	11.30	336421936	163.676 ug/mL

(m) =manual int.

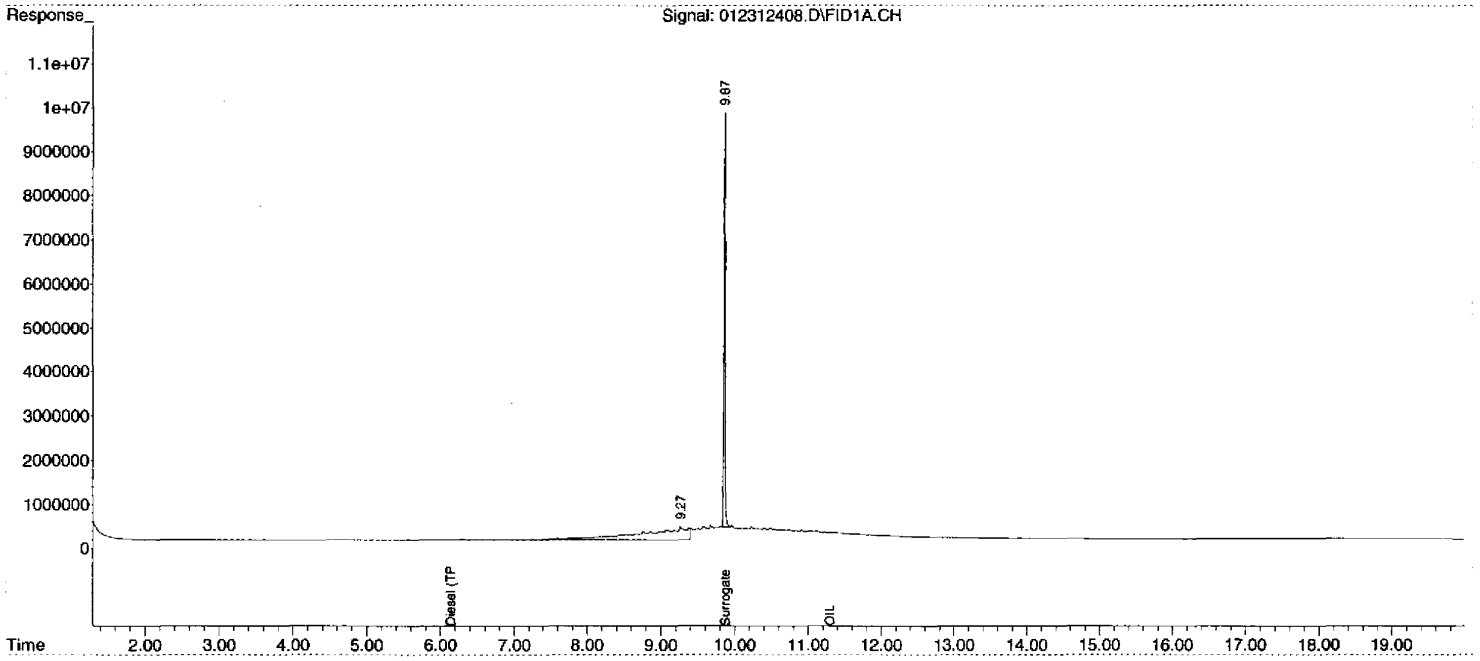
(f) =RT Delta > 1/2 Window

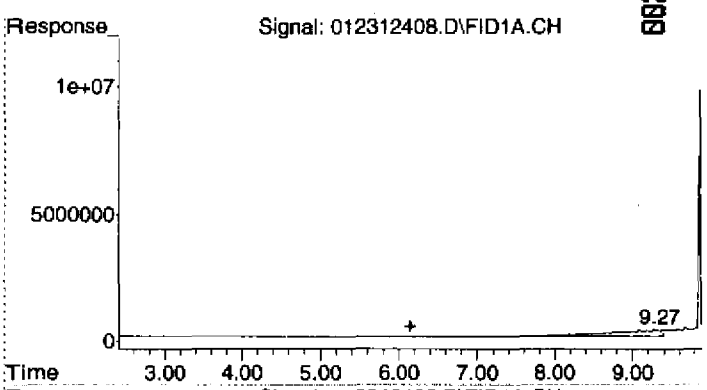
MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-24-12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 01/25/12

0123124DA.M Tue Jan 24 07:47:42 2012

Quantitation Report (QT Reviewed)

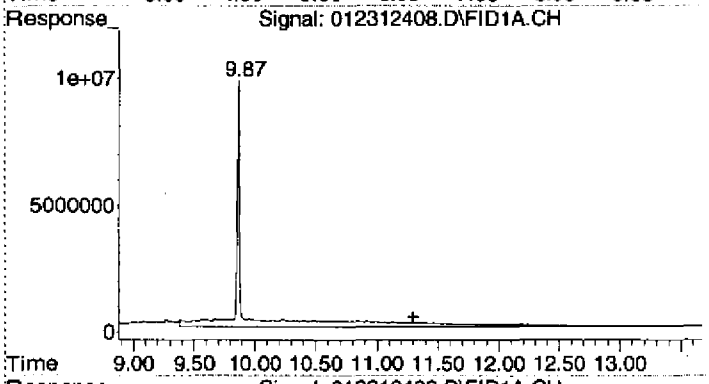
```
InstName  : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312408.D
Signal(s) : FID1A.CH
Acq On    : 23 Jan 2012   4:15 pm                    Operator: TD
Sample    : 2010031-CAL6                             Inst    : AG6890-4
Misc      : 2A11004 OIL-A
ALS Vial  : 8   Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:47:32 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title  : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj.  : 2 uL
Signal Phase : Rtx-1 15m
Signal Info  : 0.32 mm  0.1um
```





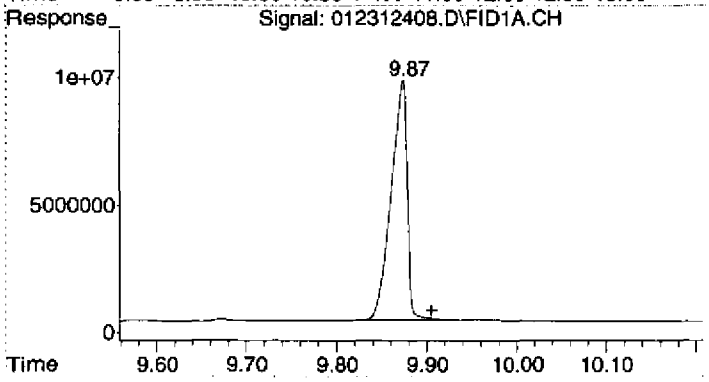
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 129181402
Conc: 41.94 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 336421936
Conc: 163.68 ug/mL m



#3 Surrogate

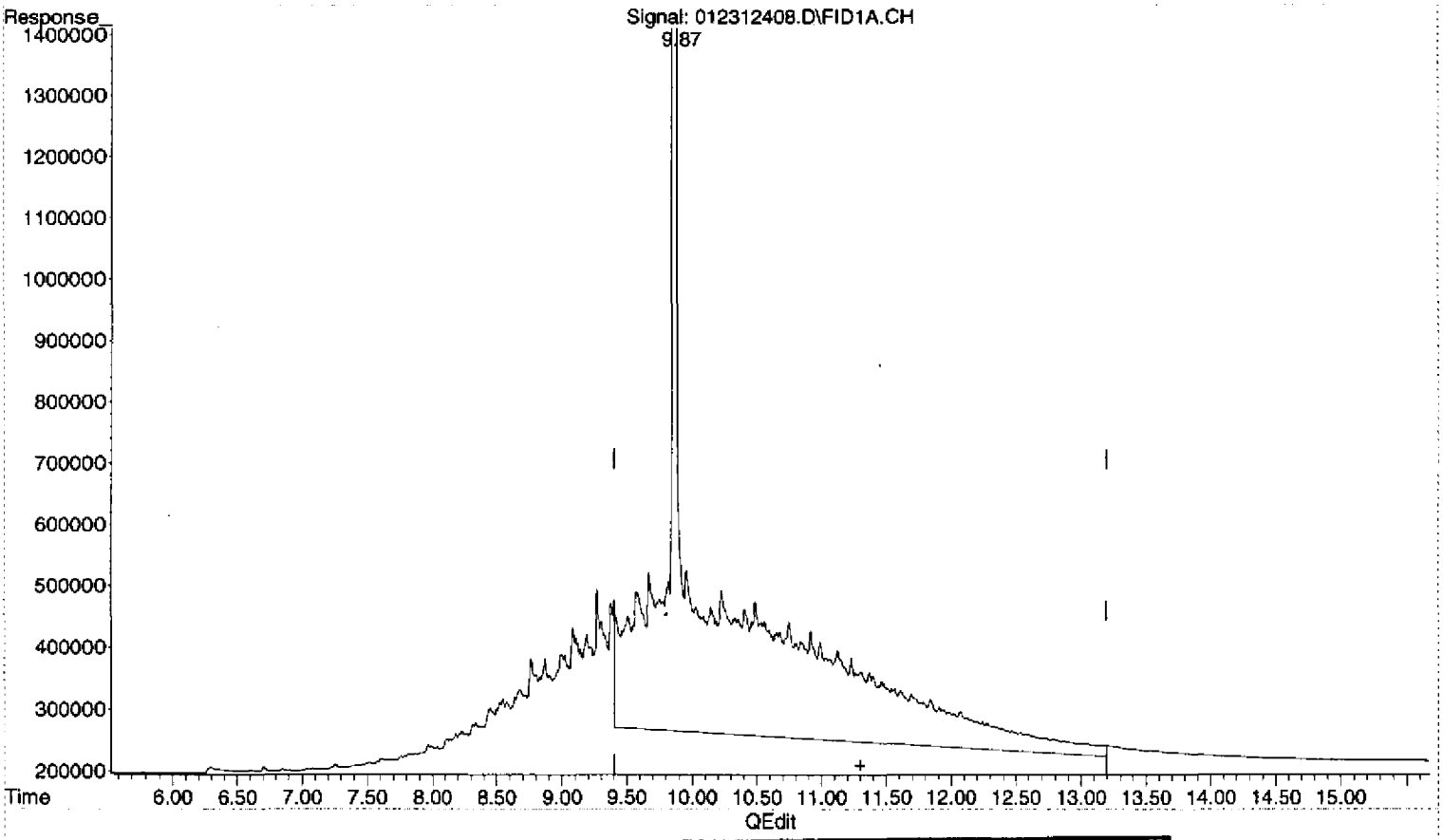
R.T.: 9.873 min
Delta R.T.: -0.032 min
Response: 119952432
Conc: 37.43 ug/mL

Quantitation Report (Qedit)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312408.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 4:15 pm Operator: TD
Sample : 2010031-CAL6 Inst : AG6890-4
Misc : 2A11004 OIL-A
ALS Vial : 8 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:40 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



(2) OIL (H)
11.30min 122.628ug/mL m
response 252051849

MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☑ Improper Baseline
☐ Other:
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

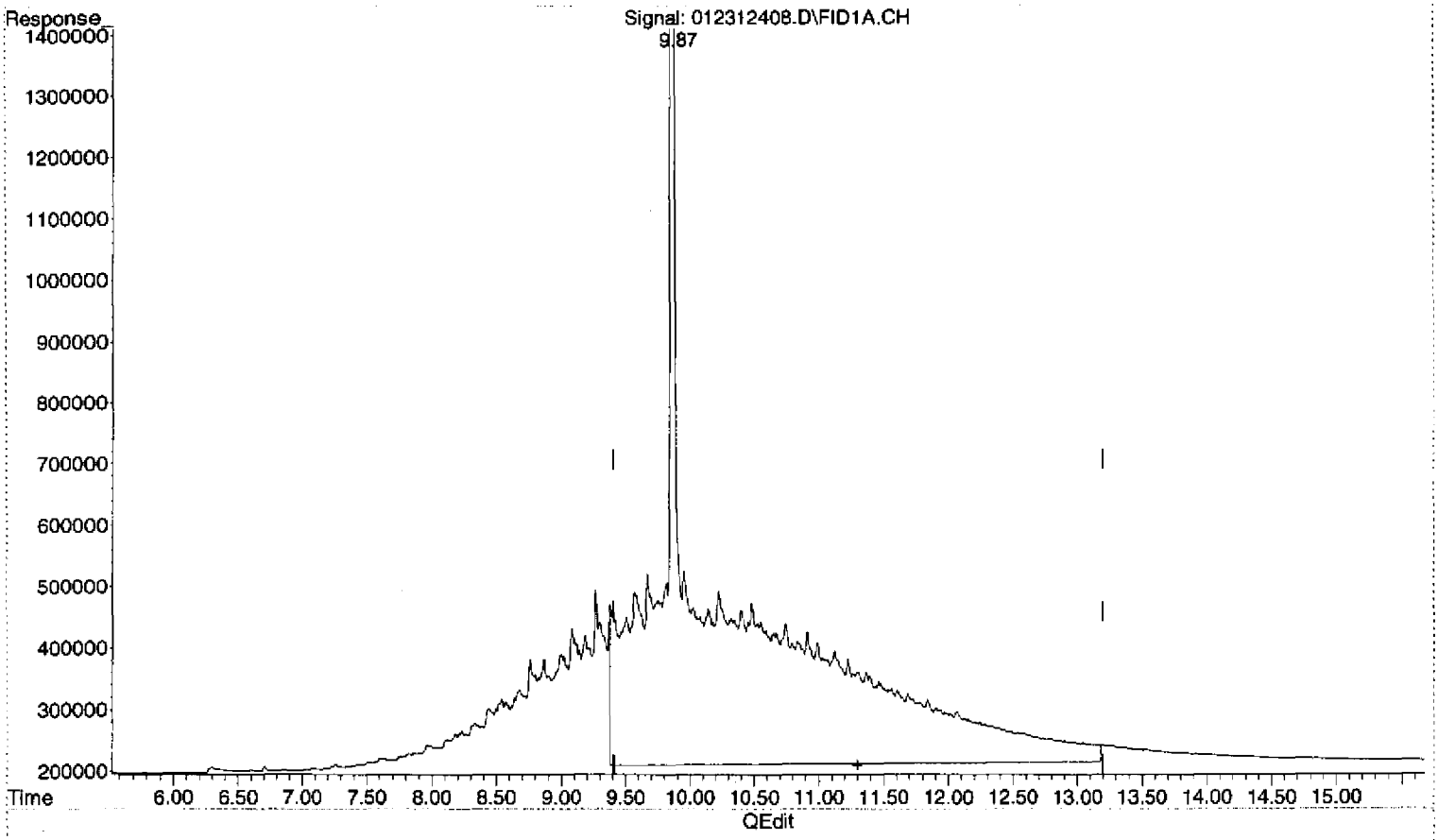
(+) = Expected Retention Time
0123124DA.M Tue Jan 24 07:47:23 2012

Quantitation Report (Qedit)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312408.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 4:15 pm Operator: TD
Sample : 2010031-CAL6 Inst : AG6890-4
Misc : 2A11004 OIL-A
ALS Vial : 8 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:40 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



(2) OIL (H)

11.30min 163.676ug/mL m

response 336421936

MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☑ After Manual Integration	
Manual integration(s) performed by:	
Analyst: TD	Date: 01-24-12
Manual integration(s) reviewed by:	
Reviewer: JK	Date: 01/25/12

(+) = Expected Retention Time
0123124DA.M Tue Jan 24 07:47:35 2012

Quantitation Report (Not Reviewed)

00274

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312408.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 4:15 pm Operator: TD
Sample : 2010031-CAL6 Inst : AG6890-4
Misc : 2A11004 OIL-A
ALS Vial : 8 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:40 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	119952432	37.426 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	74.85%
Target Compounds			
1) HM Diesel (TPH)	6.15	129181402	41.937 ug/mL
2) H OIL	11.30	252051849	122.628 ug/mL

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

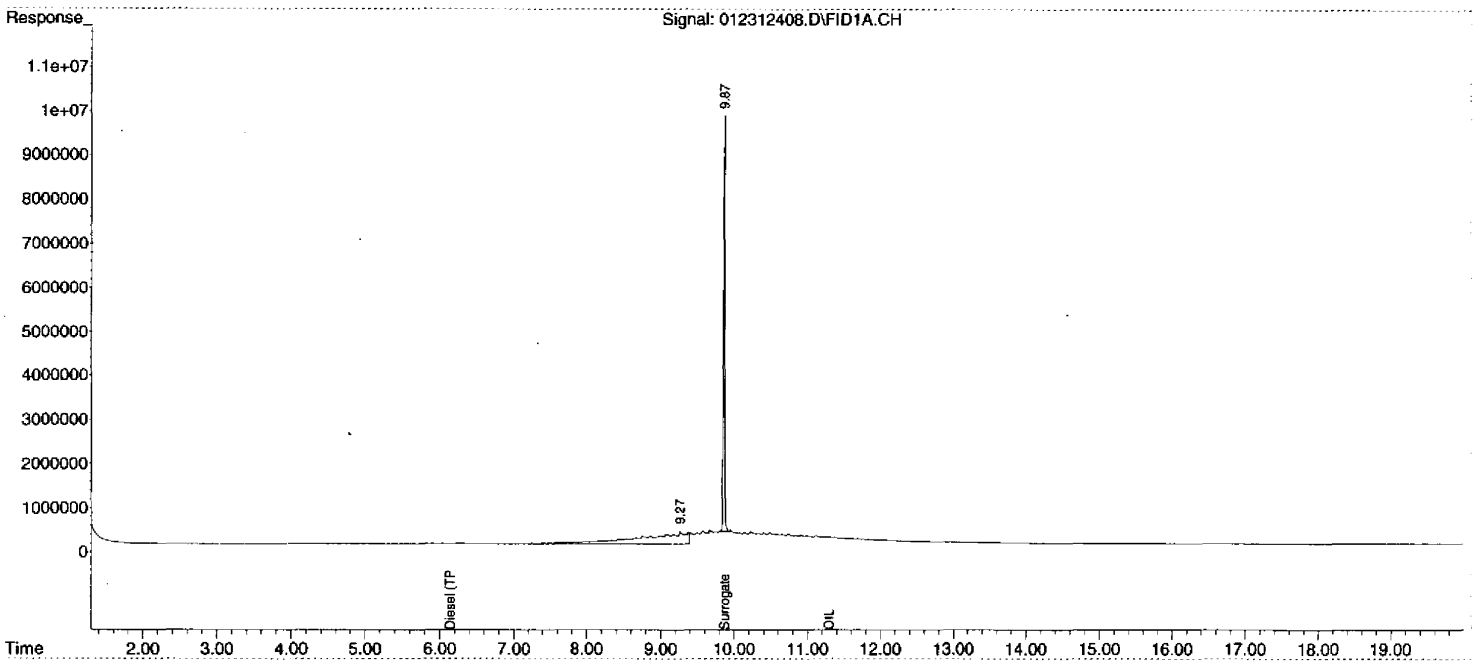
MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

Quantitation Report (Not Reviewed)

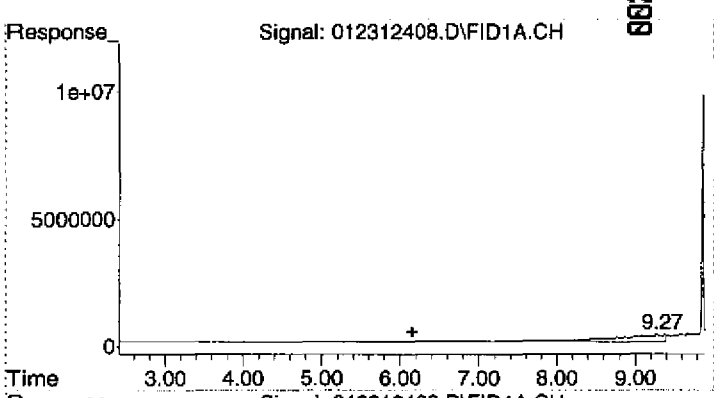
InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312408.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 4:15 pm Operator: TD
Sample : 2010031-CAL6 Inst : AG6890-4
Misc : 2A11004 OIL-A
ALS Vial : 8 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:40 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

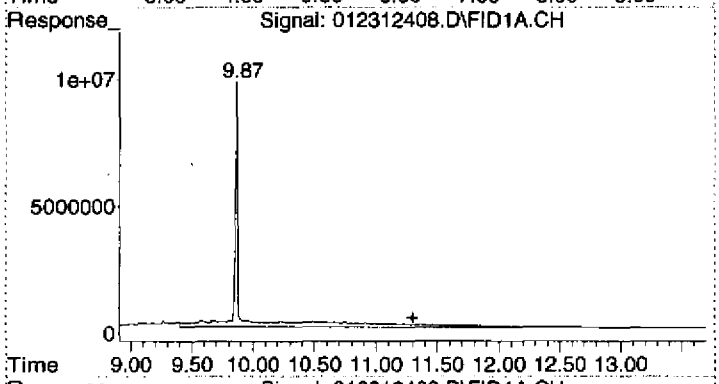


00275



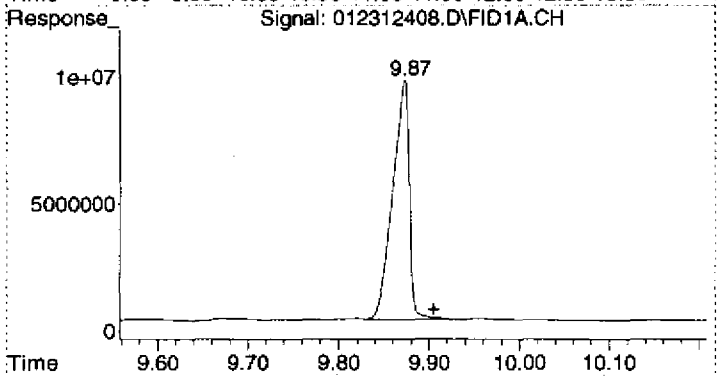
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 129181402
Conc: 41.94 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 252051849
Conc: 122.63 ug/mL m



#3 Surrogate

R.T.: 9.873 min
Delta R.T.: -0.032 min
Response: 119952432
Conc: 37.43 ug/mL

Quantitation Report (QT Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312409.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 4:46 pm Operator: TD
Sample : 2010031-CAL7 Inst : AG6890-4
Misc : 2A11013 OIL-B
ALS Vial : 9 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:48:12 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.88	145880686	45.515 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	91.03%
Target Compounds			
1) HM Diesel (TPH)	6.15	313278379	101.702 ug/mL
2) H OIL	11.30	835129619	406.307 ug/mL

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

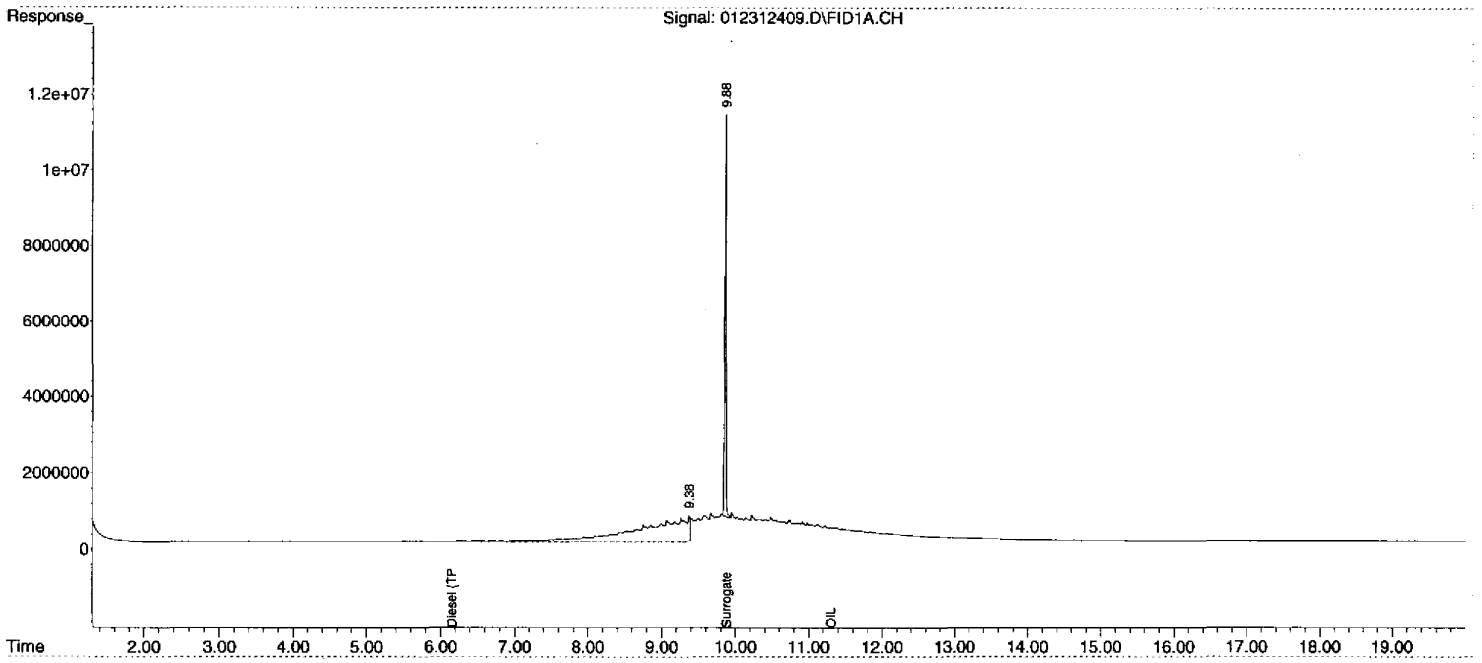
MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-24-12
Manual integration(s) reviewed by:
Reviewer: Date: 01/25/12

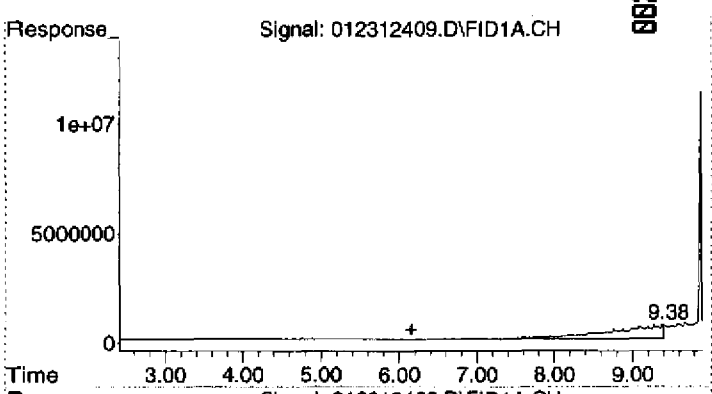
Quantitation Report (QT Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312409.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 4:46 pm Operator: TD
Sample : 2010031-CAL7 Inst : AG6890-4
Misc : 2A11013 OIL-B
ALS Vial : 9 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:48:12 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

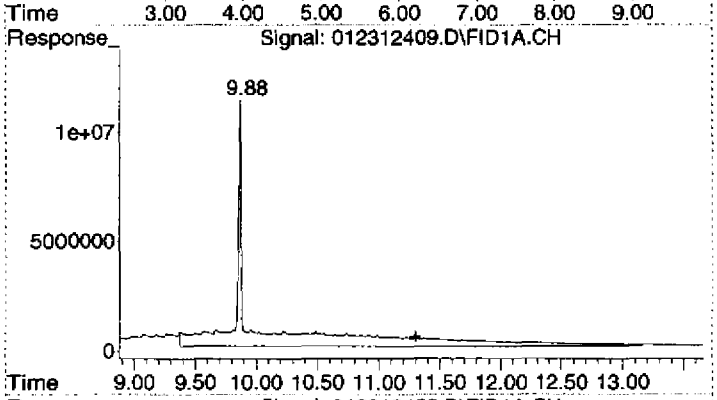
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





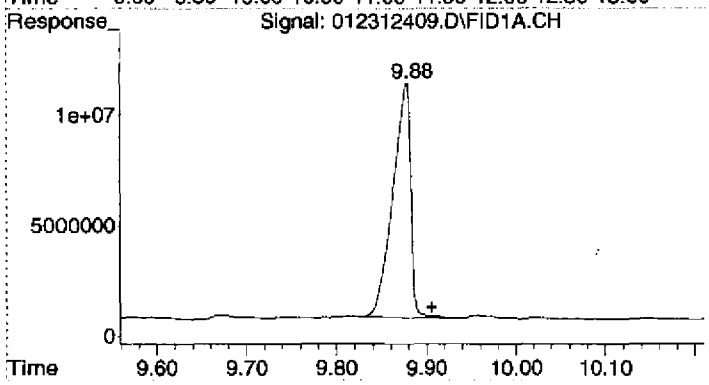
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 313278379
Conc: 101.70 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 835129619
Conc: 406.31 ug/mL m



#3 Surrogate

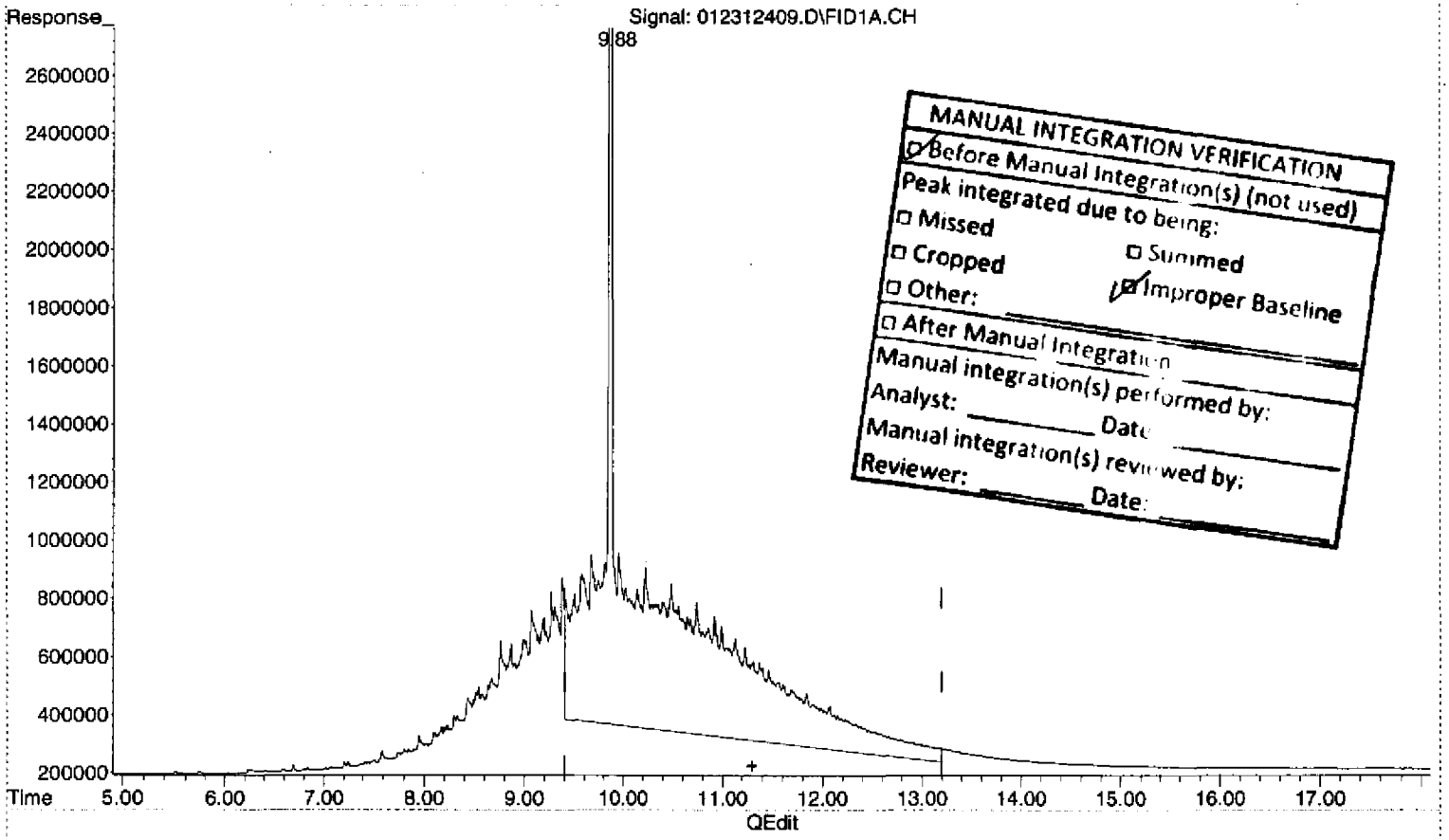
R.T.: 9.877 min
Delta R.T.: -0.028 min
Response: 145880686
Conc: 45.52 ug/mL

Quantitation Report (Qedit)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312409.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 4:46 pm
Operator: TD
Sample : 2010031-CAL7
Inst : AG6890-4
Misc : 2A11013 OIL-B
ALS Vial : 9 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:43 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☑ Improper Baseline
☐ Other:
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

(2) OIL (H)

11.30min 287.619ug/mL m

response 591175807

(+) = Expected Retention Time
0123124DA.M Tue Jan 24 07:48:03 2012

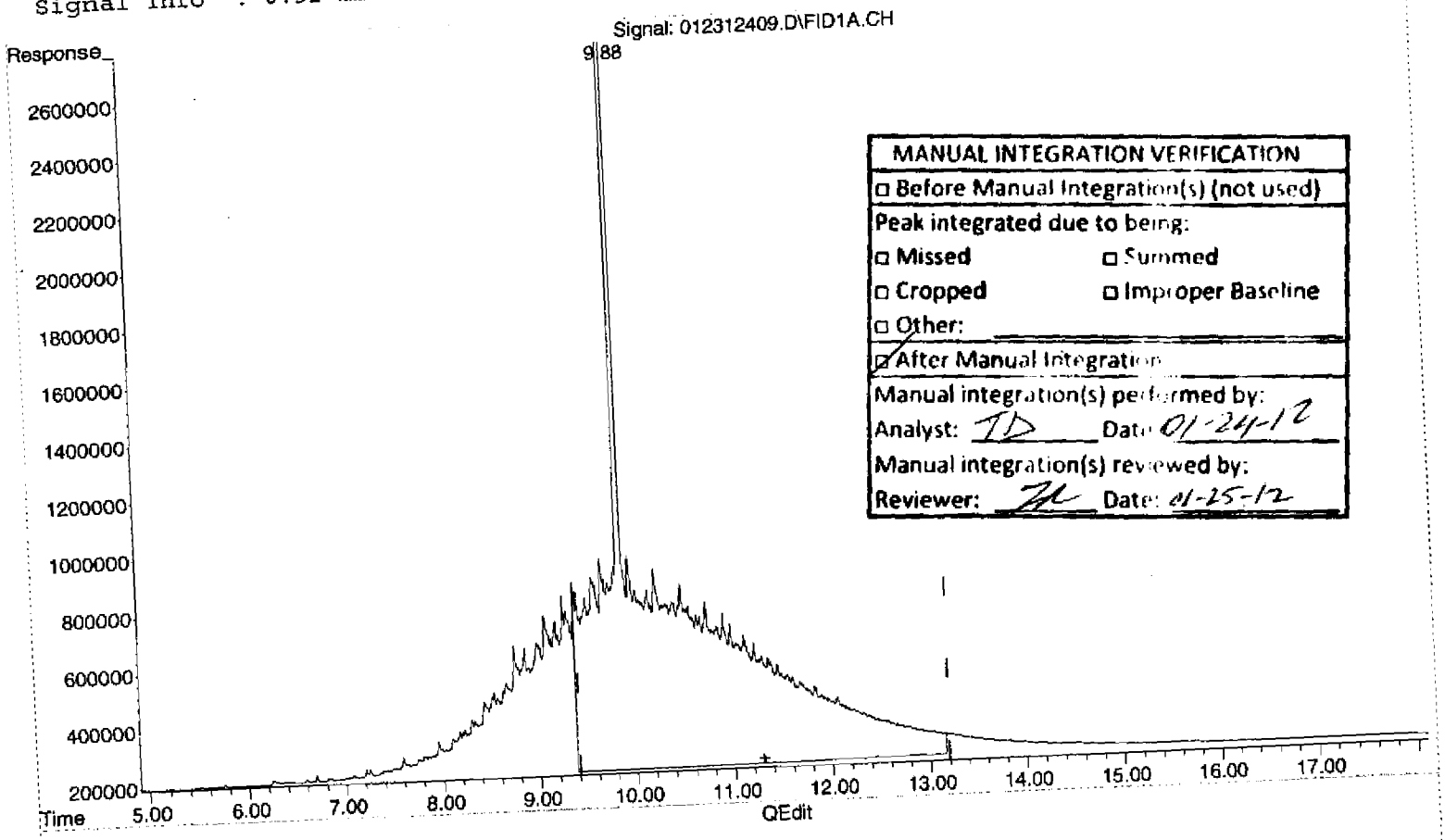
Quantitation Report (Qedit)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312409.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 4:46 pm
Sample : 2010031-CAL7
Misc : 2A11013 OIL-B
ALS Vial : 9 Sample Multiplier: 1

Operator: TD
Inst : AG6890-4

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:43 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-24-12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 01-25-12

(2) OIL (H)
11.30min 406.307ug/mL m
response 835129619

(+) = Expected Retention Time
0123124DA.M Tue Jan 24 07:48:17 2012

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312409.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 4:46 pm Operator: TD
Sample : 2010031-CAL7 Inst : AG6890-4
Misc : 2A11013 OIL-B
ALS Vial : 9 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:43 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.88	145880686	45.515 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery = 91.03%	
Target Compounds			
1) HM Diesel (TPH)	6.15	313278379	101.702 ug/mL
2) H OIL	11.30	591175807	287.619 ug/mL

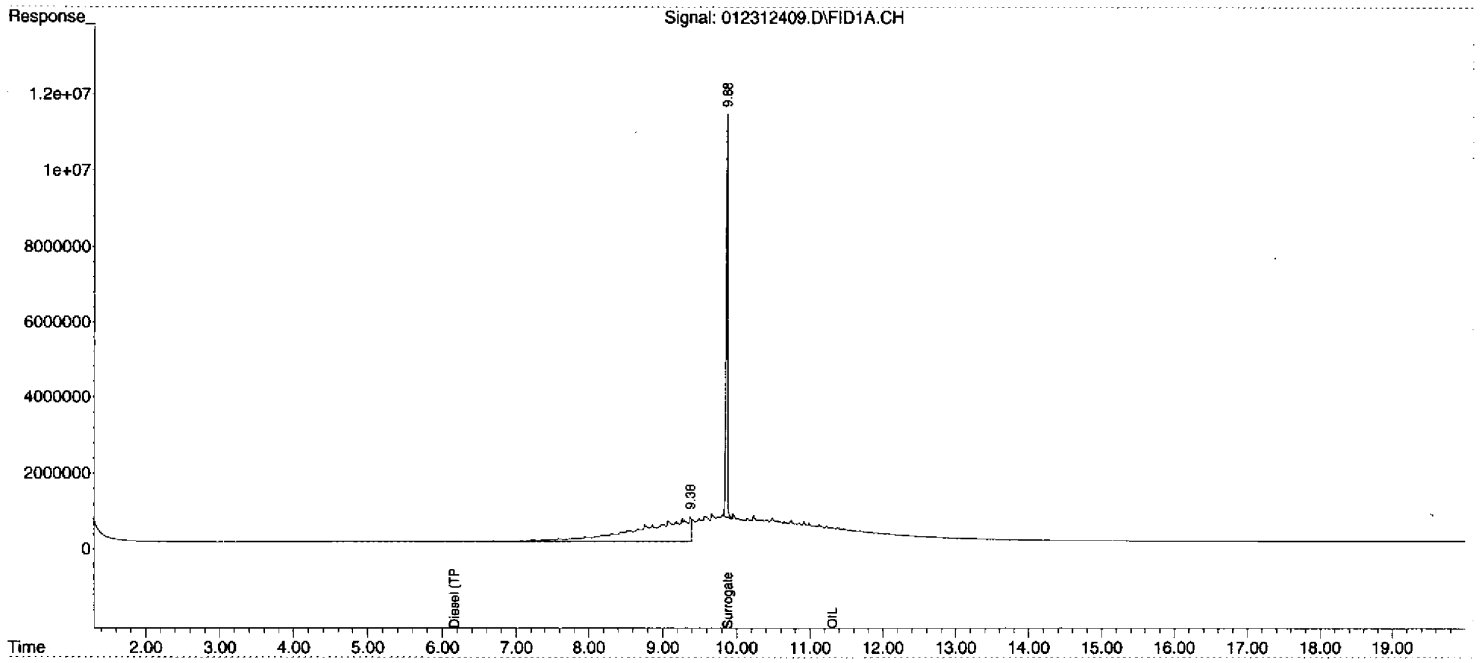
(f)=RT Delta > 1/2 Window (m)=manual int.

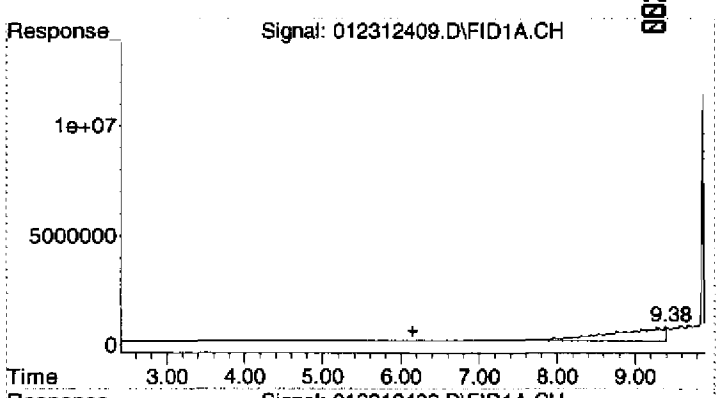
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

DIM0275879 DIM0275949

Quantitation Report (Not Reviewed)

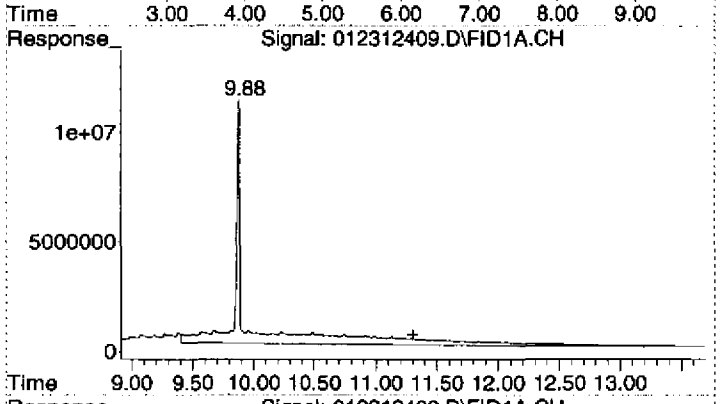
```
InstName  : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312409.D
Signal(s) : FID1A.CH
Acq On    : 23 Jan 2012   4:46 pm                    Operator: TD
Sample    : 2010031-CAL7                             Inst     : AG6890-4
Misc      : 2A11013 OIL-B
ALS Vial  : 9   Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:43 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title  : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj.  : 2 uL
Signal Phase : Rtx-1 15m
Signal Info  : 0.32 mm  0.1um
```





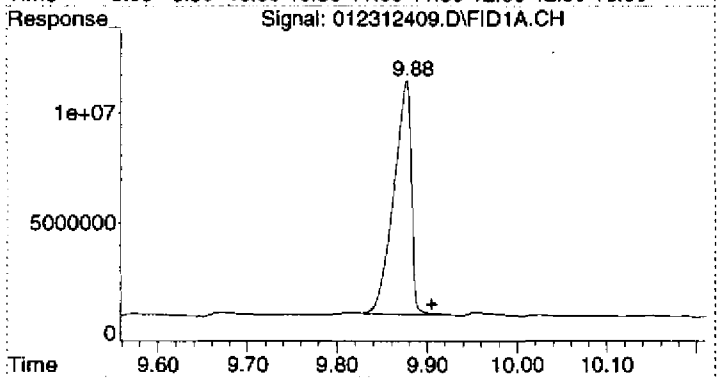
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 313278379
Conc: 101.70 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 591175807
Conc: 287.62 ug/mL m



#3 Surrogate

R.T.: 9.877 min
Delta R.T.: -0.028 min
Response: 145880686
Conc: 45.52 ug/mL

Quantitation Report (QT Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312410.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 5:17 pm Operator: TD
Sample : 2010031-CAL8 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:48:44 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.88	122519510	38.227 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	76.45%
Target Compounds			
1) HM Diesel (TPH)	6.15	664810637	215.822 ug/mL
2) H OIL	11.30	1818986992	884.974 ug/mL

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

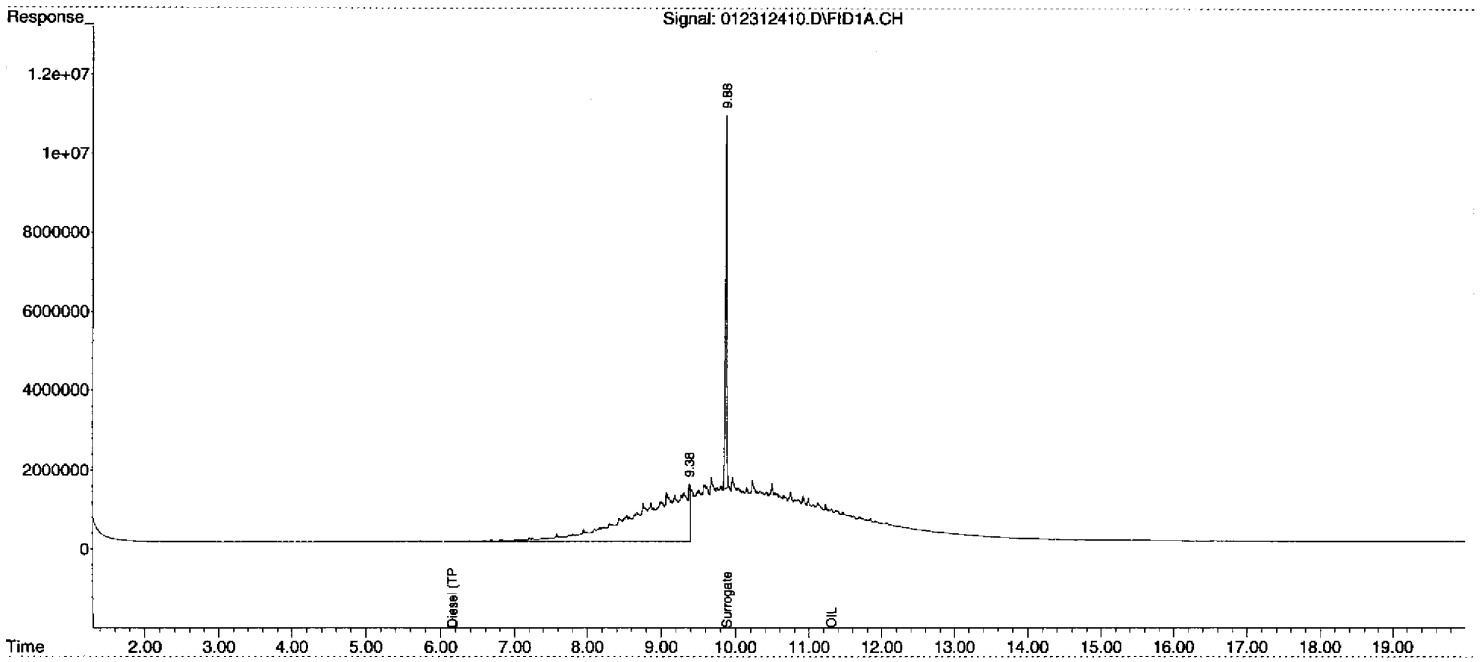
MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-24-12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 01/25/12

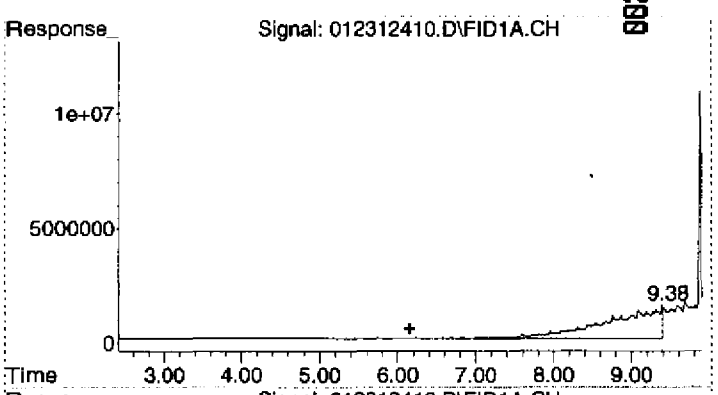
Quantitation Report (QT Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312410.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 5:17 pm Operator: TD
Sample : 2010031-CAL8 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:48:44 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

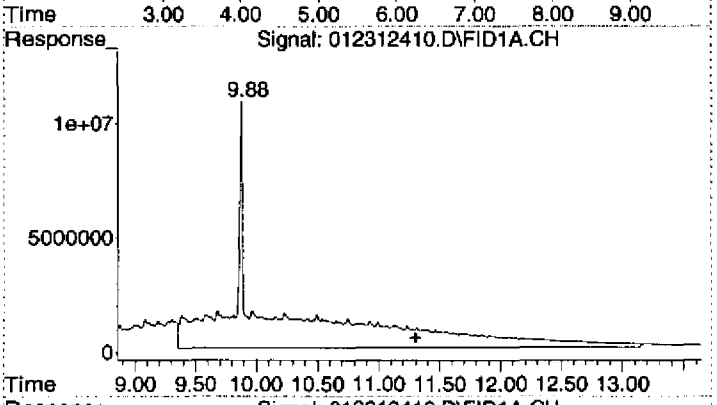
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





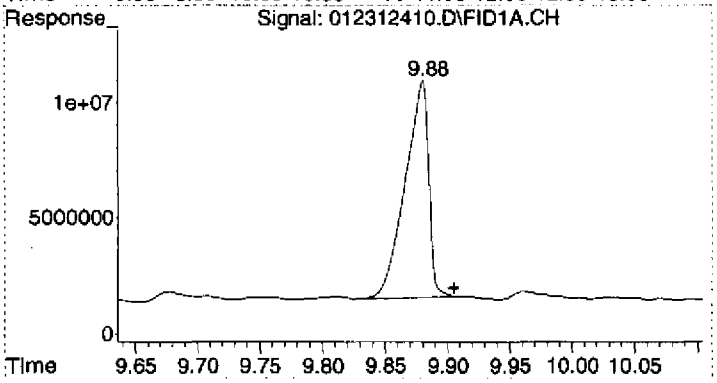
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 664810637
Conc: 215.82 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 1818986992
Conc: 884.97 ug/mL m



#3 Surrogate

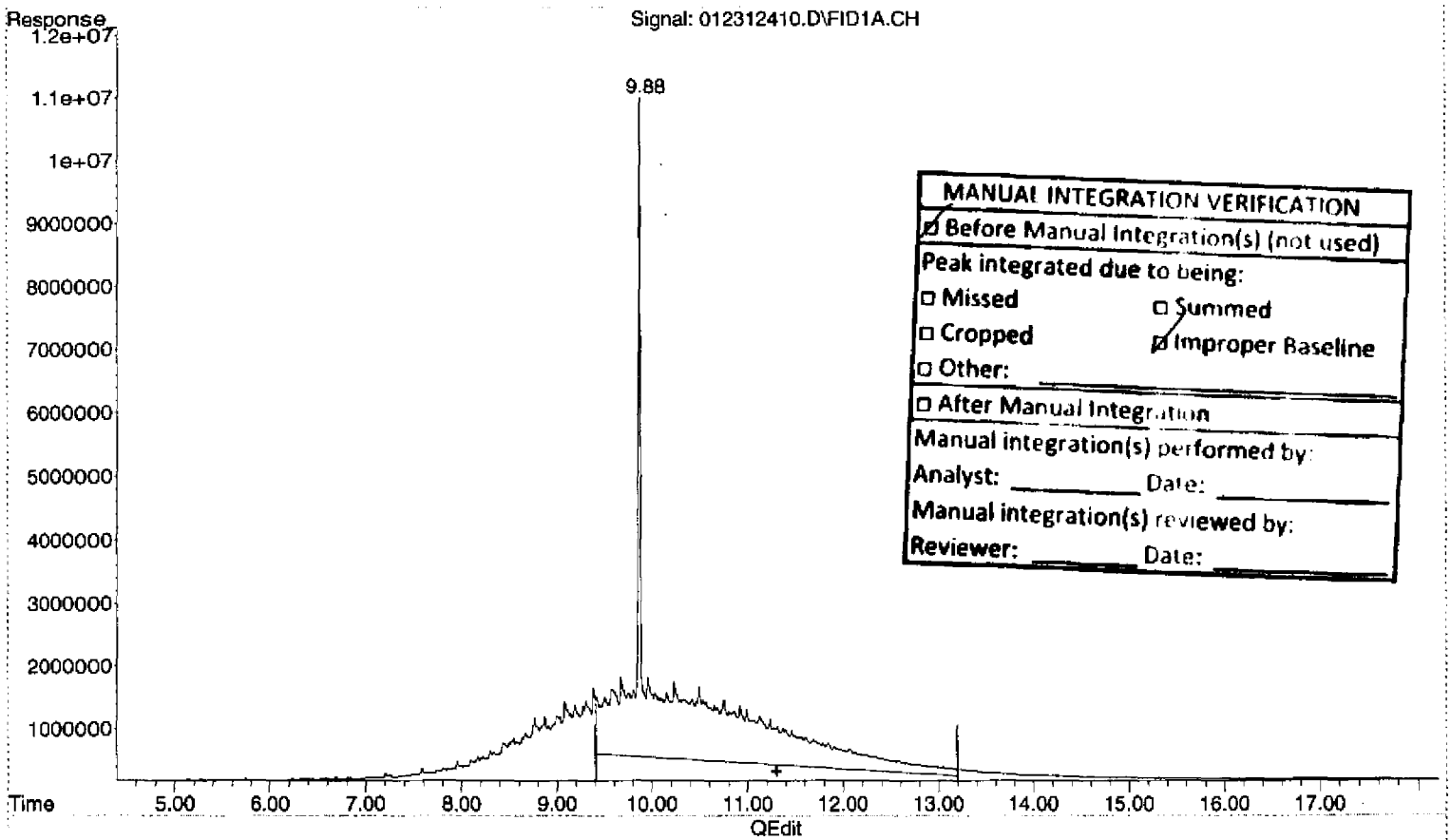
R.T.: 9.880 min
Delta R.T.: -0.025 min
Response: 122519510
Conc: 38.23 ug/mL

Quantitation Report (Qedit)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312410.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 5:17 pm Operator: TD
Sample : 2010031-CAL8 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:47 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☑ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

(2) OIL (H)

11.30min 620.632ug/mL m

response 1275654898

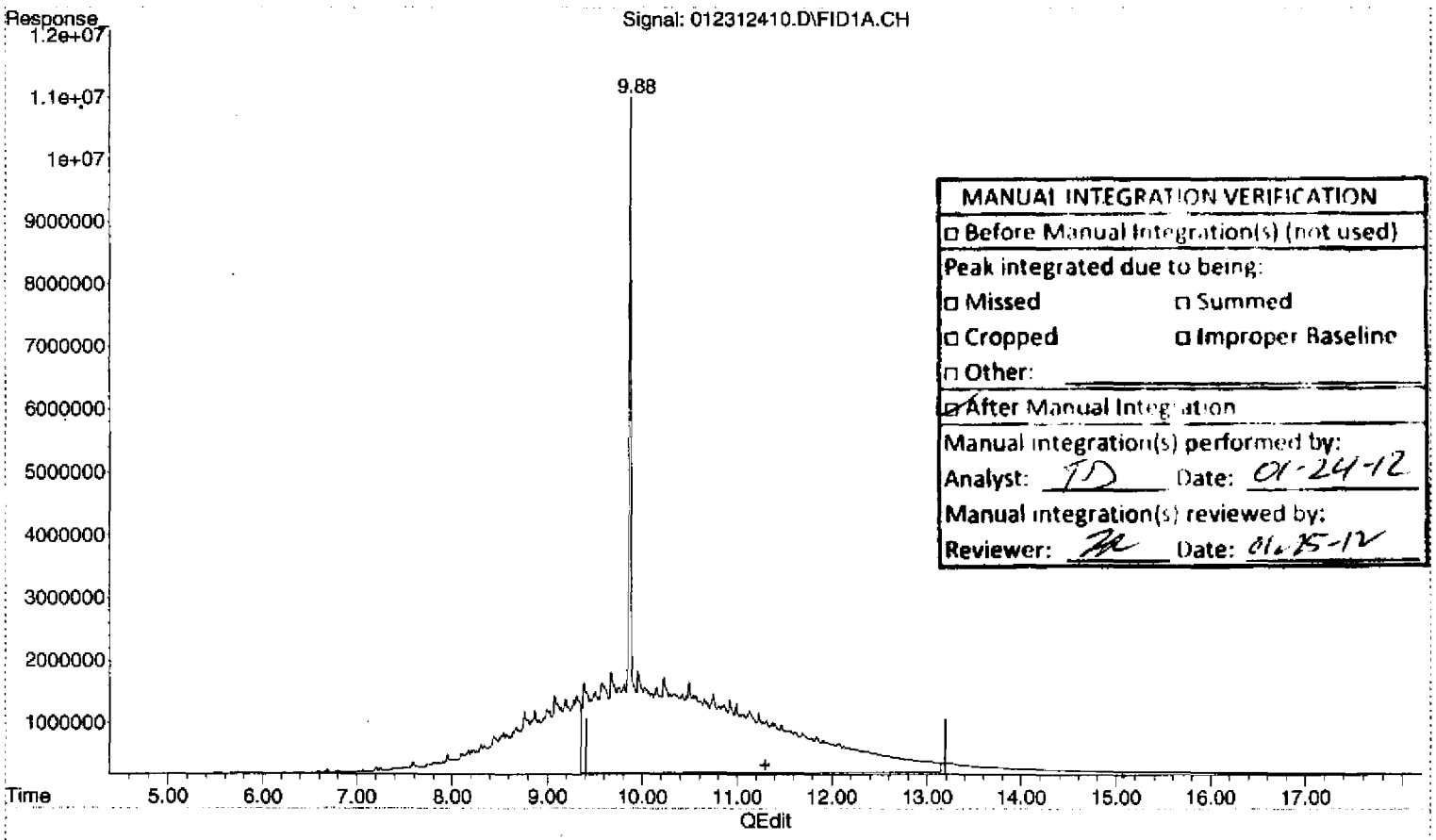
(+) = Expected Retention Time
0123124DA.M Tue Jan 24 07:48:38 2012

Quantitation Report (Qedit)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312410.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 5:17 pm Operator: TD
Sample : 2010031-CAL8 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:47 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-24-12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 01-25-12

(2) OIL (H)

11.30min 884.974ug/mL m

response 1818986992

(+) = Expected Retention Time
0123124DA.M Tue Jan 24 07:48:47 2012

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312410.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 5:17 pm Operator: TD
Sample : 2010031-CAL8 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:47 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.88	122519510	38.227 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	76.45%
Target Compounds			
1) HM Diesel (TPH)	6.15	664810637	215.822 ug/mL
2) H OIL	11.30	1275654898	620.632 ug/mL

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

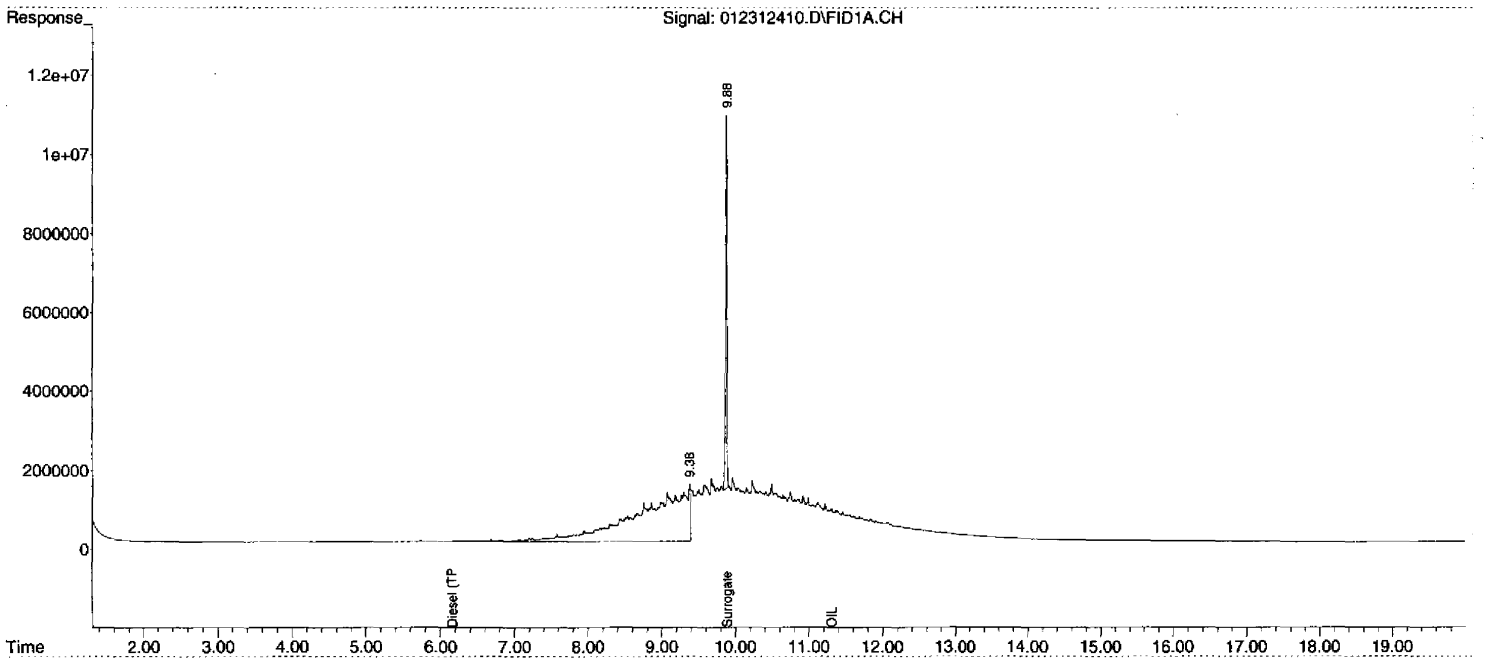
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

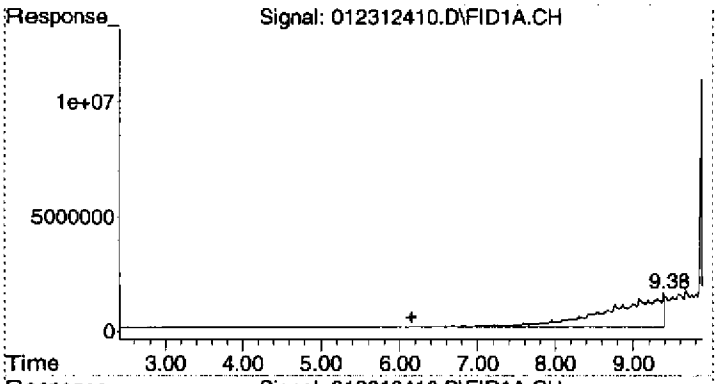
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312410.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 5:17 pm Operator: TD
Sample : 2010031-CAL8 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:47 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

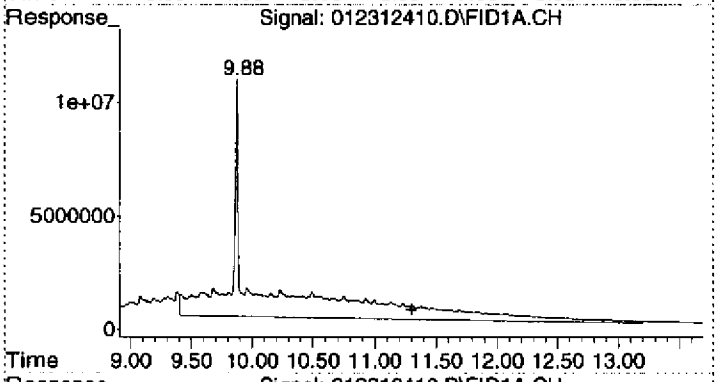
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





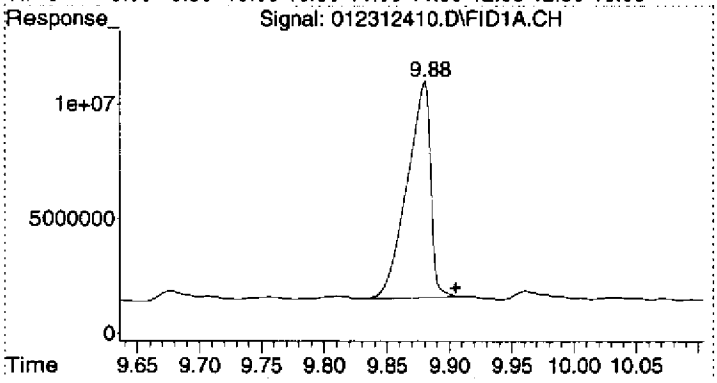
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 664810637
Conc: 215.82 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 1275654898
Conc: 620.63 ug/mL m



#3 Surrogate

R.T.: 9.880 min
Delta R.T.: -0.025 min
Response: 122519510
Conc: 38.23 ug/mL

Quantitation Report (QT Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312411.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 5:48 pm Operator: TD
Sample : 2010031-CAL9 Inst : AG6890-4
Misc : 2A11014 OIL-D
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:49:19 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.90	110226025	34.391 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery = 68.78%	
Target Compounds			
1) HM Diesel (TPH)	6.15	2452972814	796.325 ug/mL
2) H OIL	11.30	6537829751	3180.786 ug/mL

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

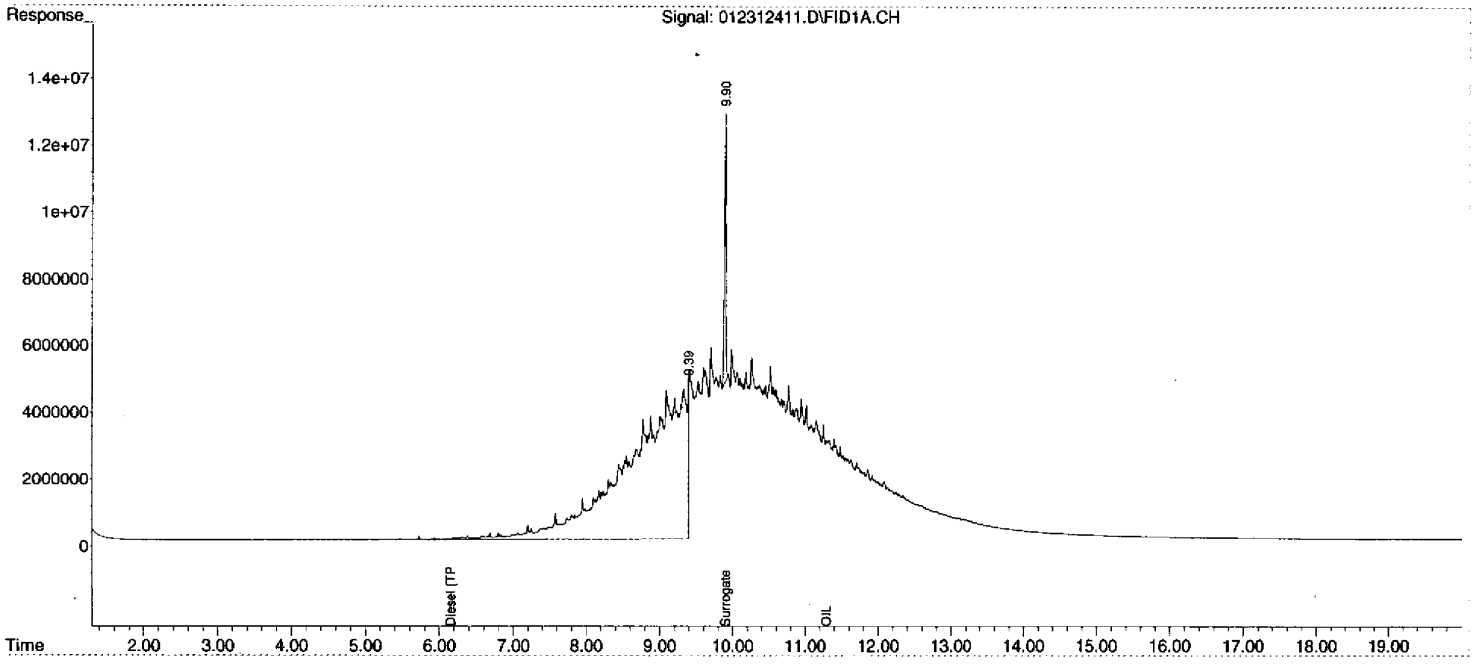
MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-24-12
Manual integration(s) reviewed by:
Reviewer: TR Date: 01-25-12

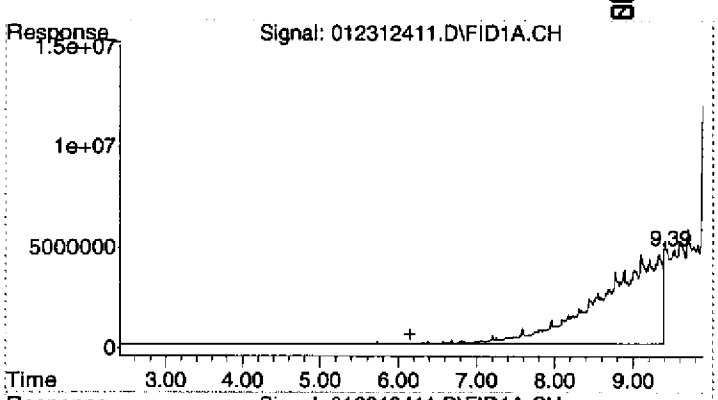
Quantitation Report (QT Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312411.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 5:48 pm Operator: TD
Sample : 2010031-CAL9 Inst : AG6890-4
Misc : 2A11014 OIL-D
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:49:19 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

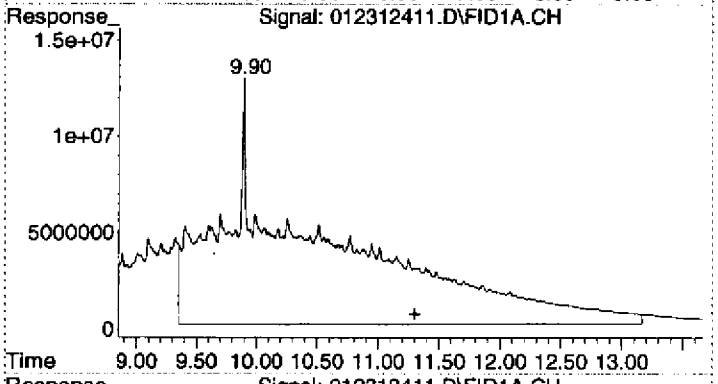
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





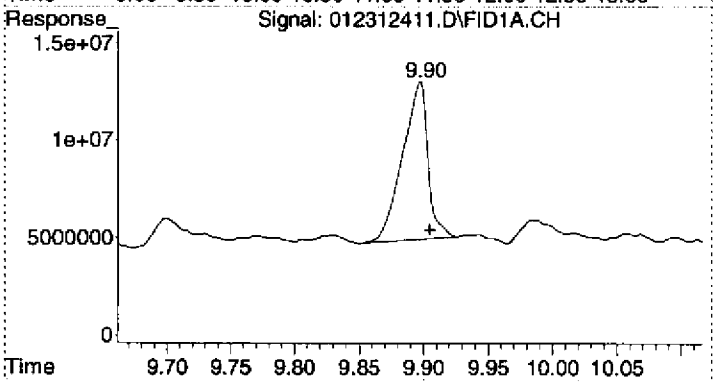
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 2452972814
Conc: 796.32 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 6537829751
Conc: 3180.79 ug/mL m



#3 Surrogate

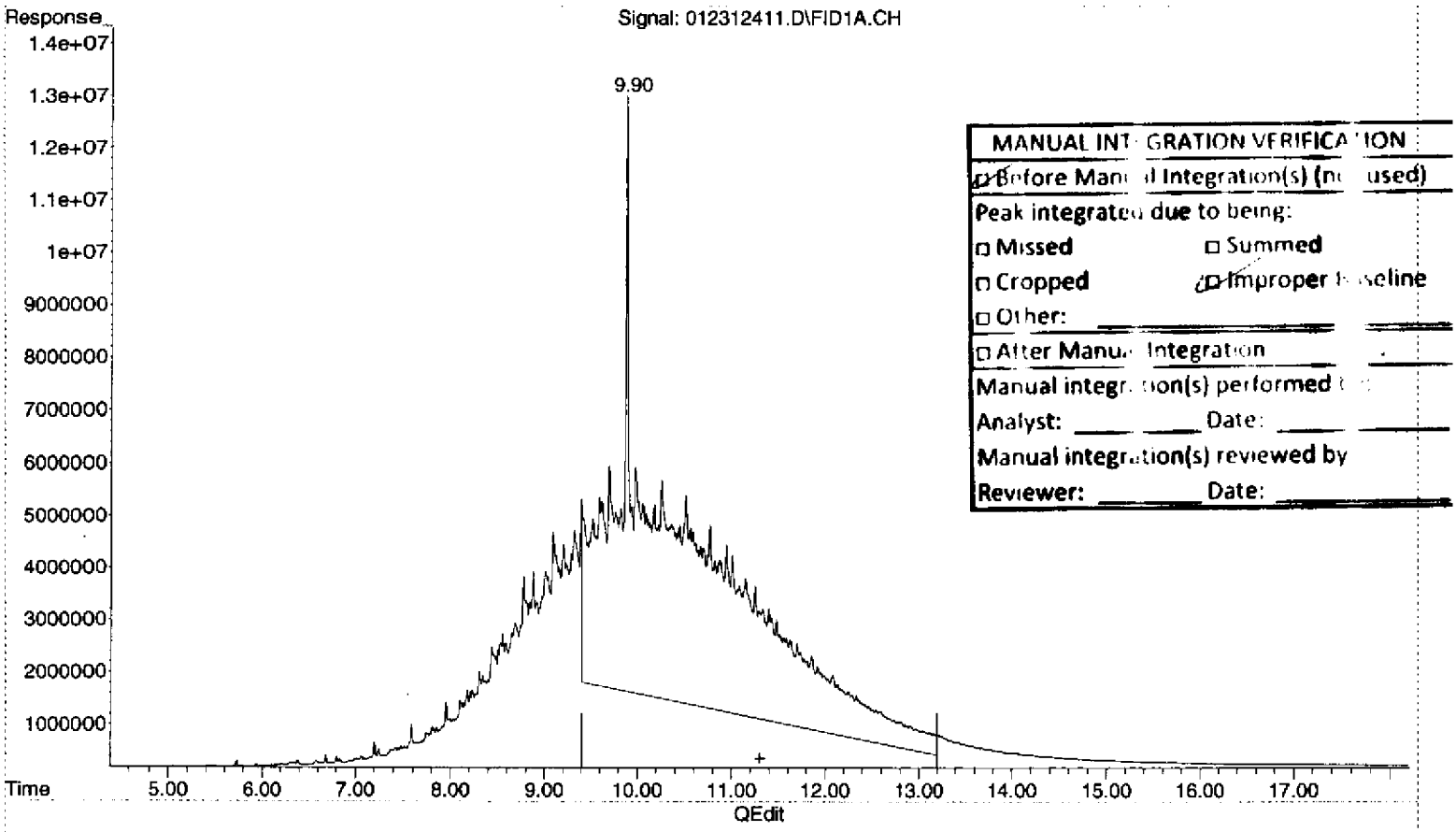
R.T.: 9.897 min
Delta R.T.: -0.008 min
Response: 110226025
Conc: 34.39 ug/mL

Quantitation Report (Qedit)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312411.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 5:48 pm Operator: TD
Sample : 2010031-CAL9 Inst : AG6890-4
Misc : 2A11014 OIL-D
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:51 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☑ Improper baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed
Analyst: _____ Date: _____
Manual integration(s) reviewed by
Reviewer: _____ Date: _____

(2) OIL (H)
11.30min 2209.395ug/mL m
response 4541218915

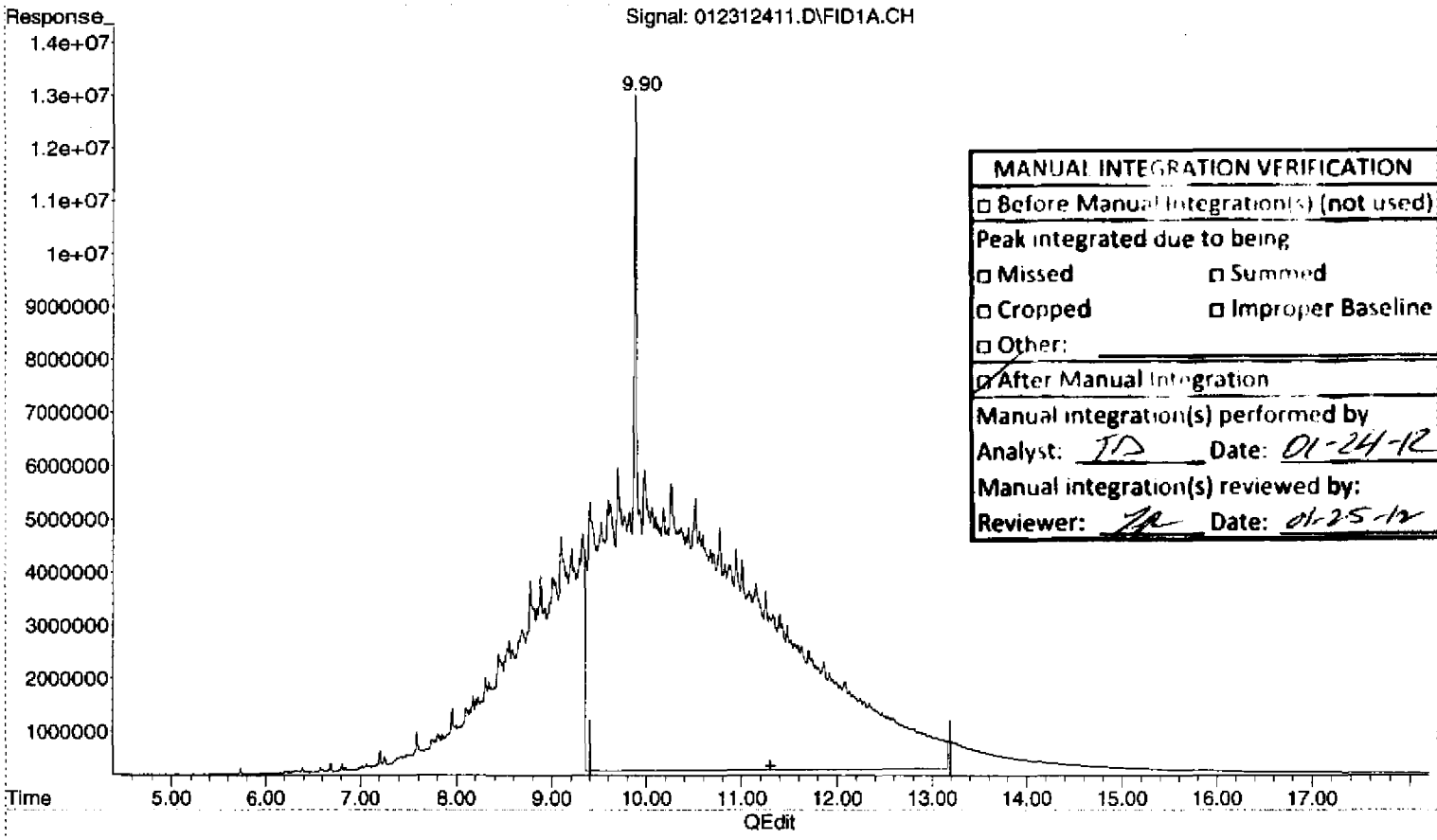
(+) = Expected Retention Time
0123124DA.M Tue Jan 24 07:49:10 2012

Quantitation Report (Qedit)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312411.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 5:48 pm Operator: TD
Sample : 2010031-CAL9 Inst : AG6890-4
Misc : 2A11014 OIL-D
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:51 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by
Analyst: TD Date: 01-24-12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 01-25-12

(2) OIL (H)
11.30min 3180.786ug/mL m
response 6537829751

(+) = Expected Retention Time
0123124DA.M Tue Jan 24 07:49:21 2012

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312411.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 5:48 pm Operator: TD
Sample : 2010031-CAL9 Inst : AG6890-4
Misc : 2A11014 OIL-D
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:51 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.90	110226025	34.391 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery = 68.78%	
Target Compounds			
1) HM Diesel (TPH)	6.15	2452972814	796.325 ug/mL
2) H OIL	11.30	4541218915	2209.395 ug/mL

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

MANUAL INTEGRATION VERIFICATION	
☑ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other: _____	
☐ After Manual Integration	
Manual integration(s) performed by:	
Analyst: _____	Date: _____
Manual integration(s) reviewed by:	
Reviewer: _____	Date: _____

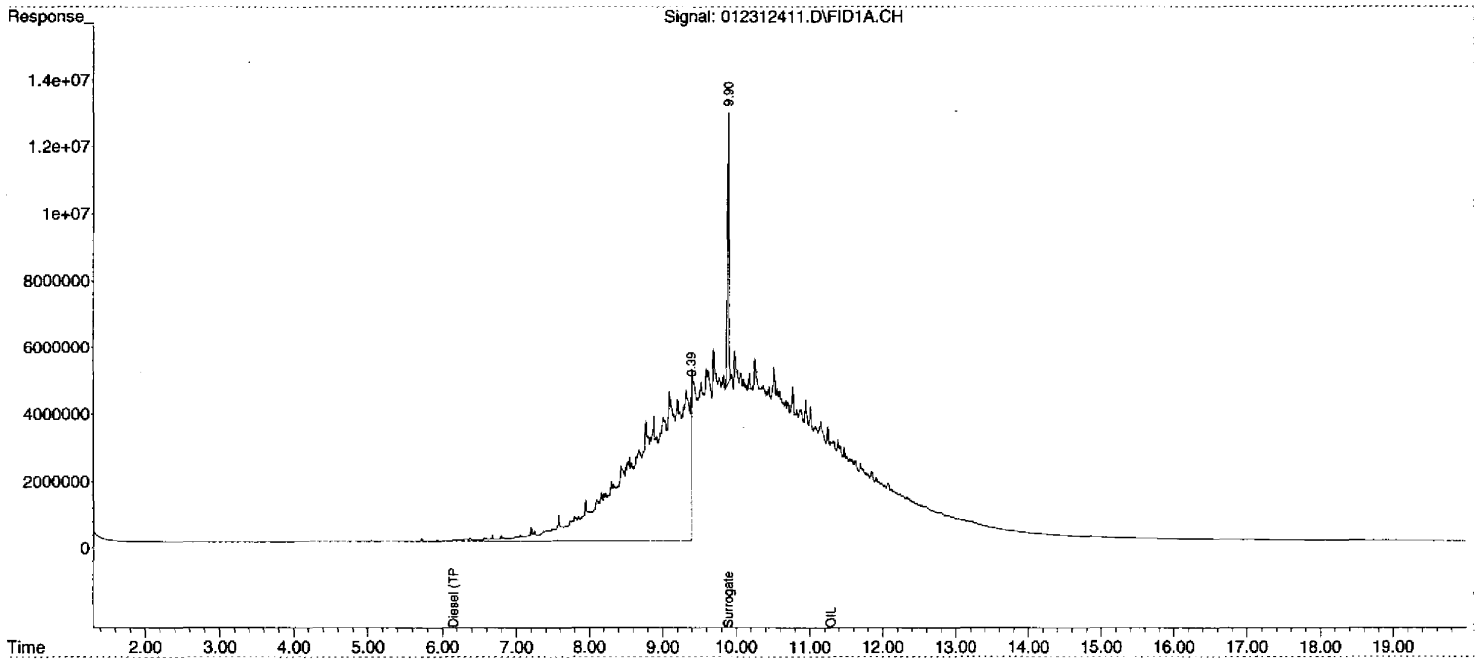
DIM0275879 DIM0275965

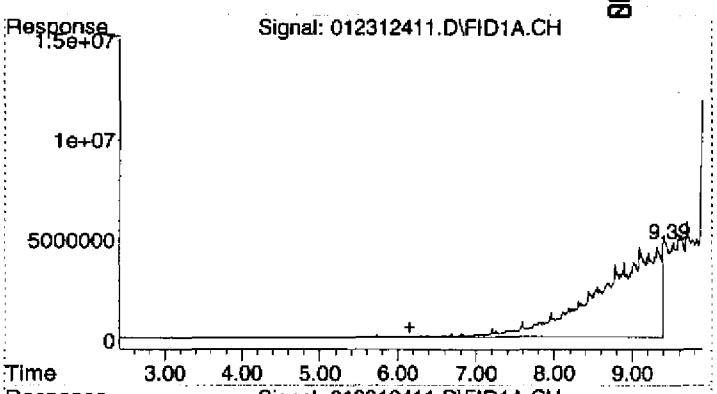
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312411.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 5:48 pm Operator: TD
Sample : 2010031-CAL9 Inst : AG6890-4
Misc : 2A11014 OIL-D
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:51 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

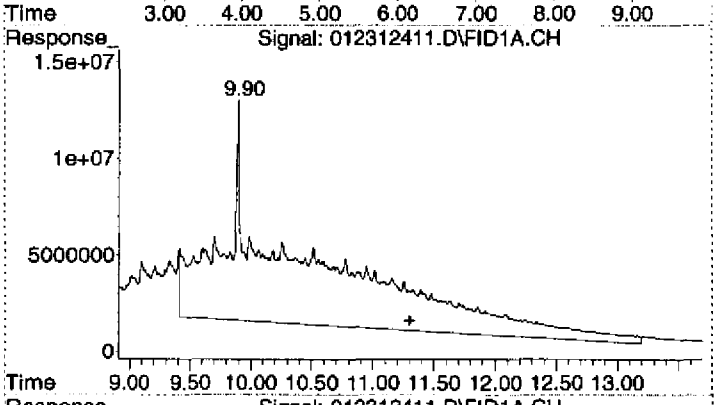
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





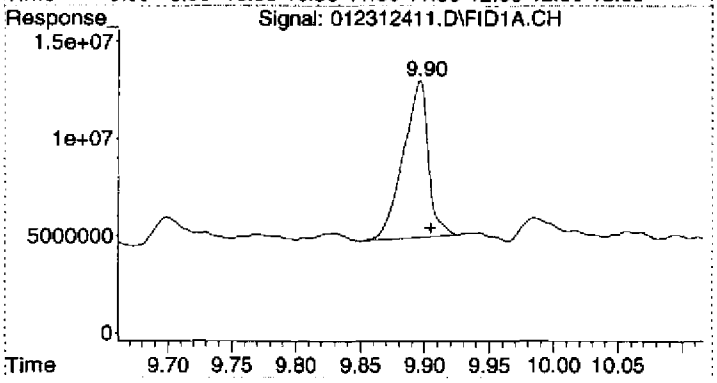
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 2452972814
Conc: 796.32 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 4541218915
Conc: 2209.39 ug/mL m



#3 Surrogate

R.T.: 9.897 min
Delta R.T.: -0.008 min
Response: 110226025
Conc: 34.39 ug/mL

Quantitation Report (QT Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312412.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 6:18 pm Operator: TD
Sample : 2010031-CALA Inst : AG6890-4
Misc : 2A11015 OIL-E
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:50:14 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

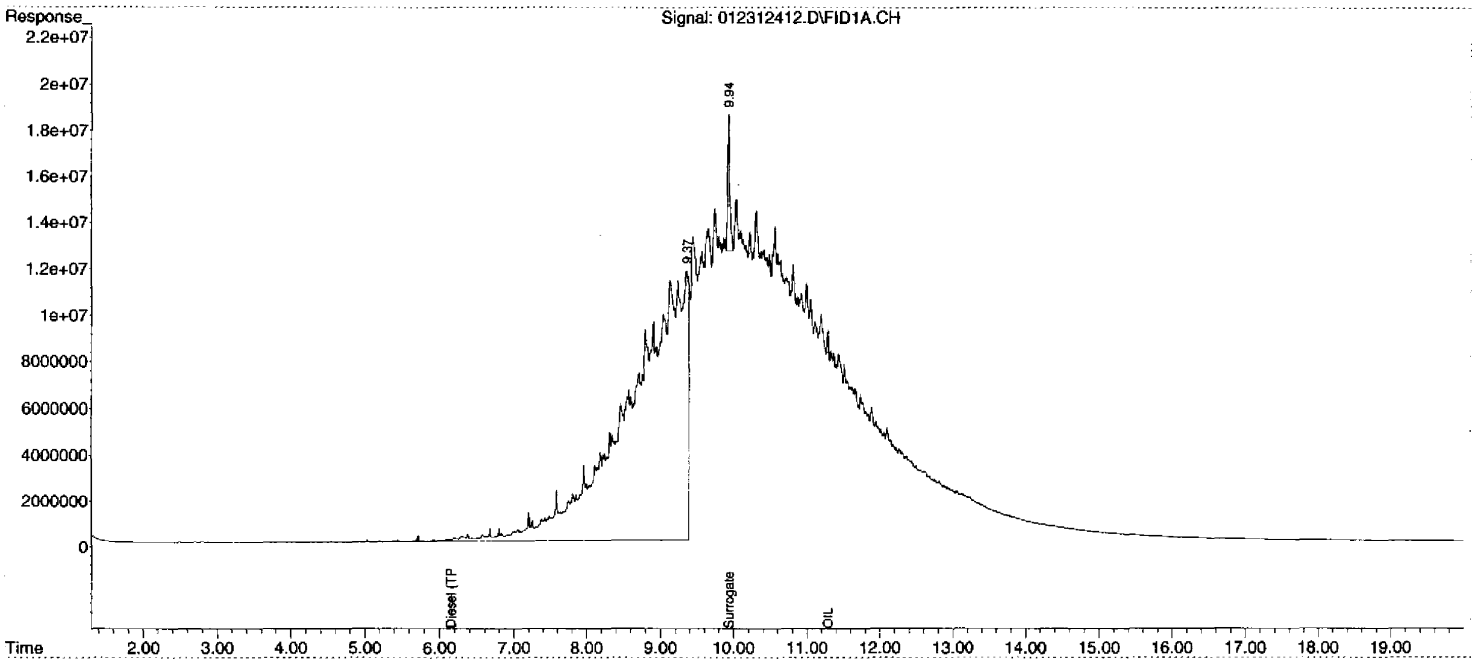
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.94	127201801	39.688 ug/mLm
Spiked Amount 50.000 Range 60 - 127		Recovery =	79.38%
Target Compounds			
1) HM Diesel (TPH)	6.15	6436618239	2089.561 ug/mL
2) H OIL	11.30	18544706916	9022.374 ug/mL

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

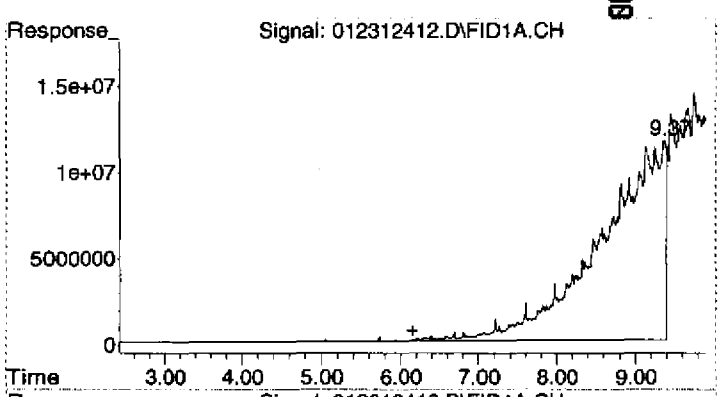
MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-24-12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 11-25-12

Quantitation Report (QT Reviewed)

```
InstName  : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312412.D
Signal(s) : FID1A.CH
Acq On    : 23 Jan 2012   6:18 pm                    Operator: TD
Sample    : 2010031-CALA                             Inst    : AG6890-4
Misc      : 2A11015 OIL-E
ALS Vial  : 12   Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:50:14 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title  : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj.  : 2 uL
Signal Phase : Rtx-1 15m
Signal Info  : 0.32 mm  0.1um
```

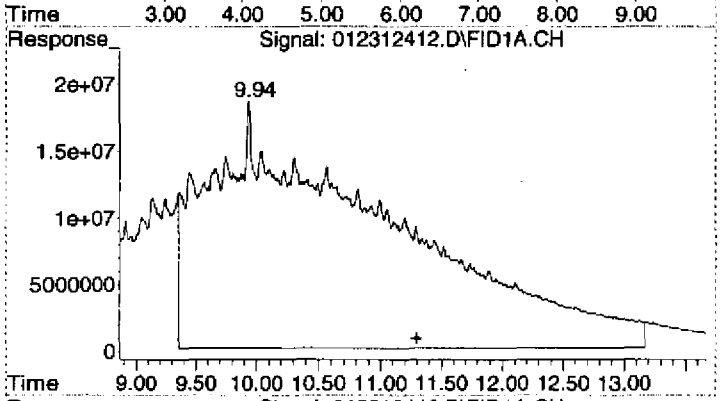


00302



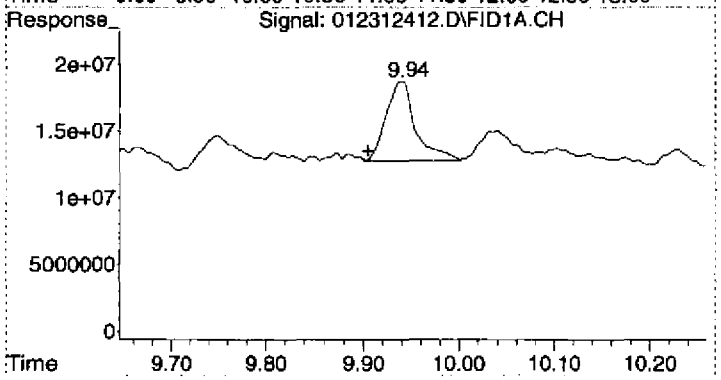
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 6436618239
Conc: 2089.56 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 18544706916
Conc: 9022.37 ug/mL m



#3 Surrogate

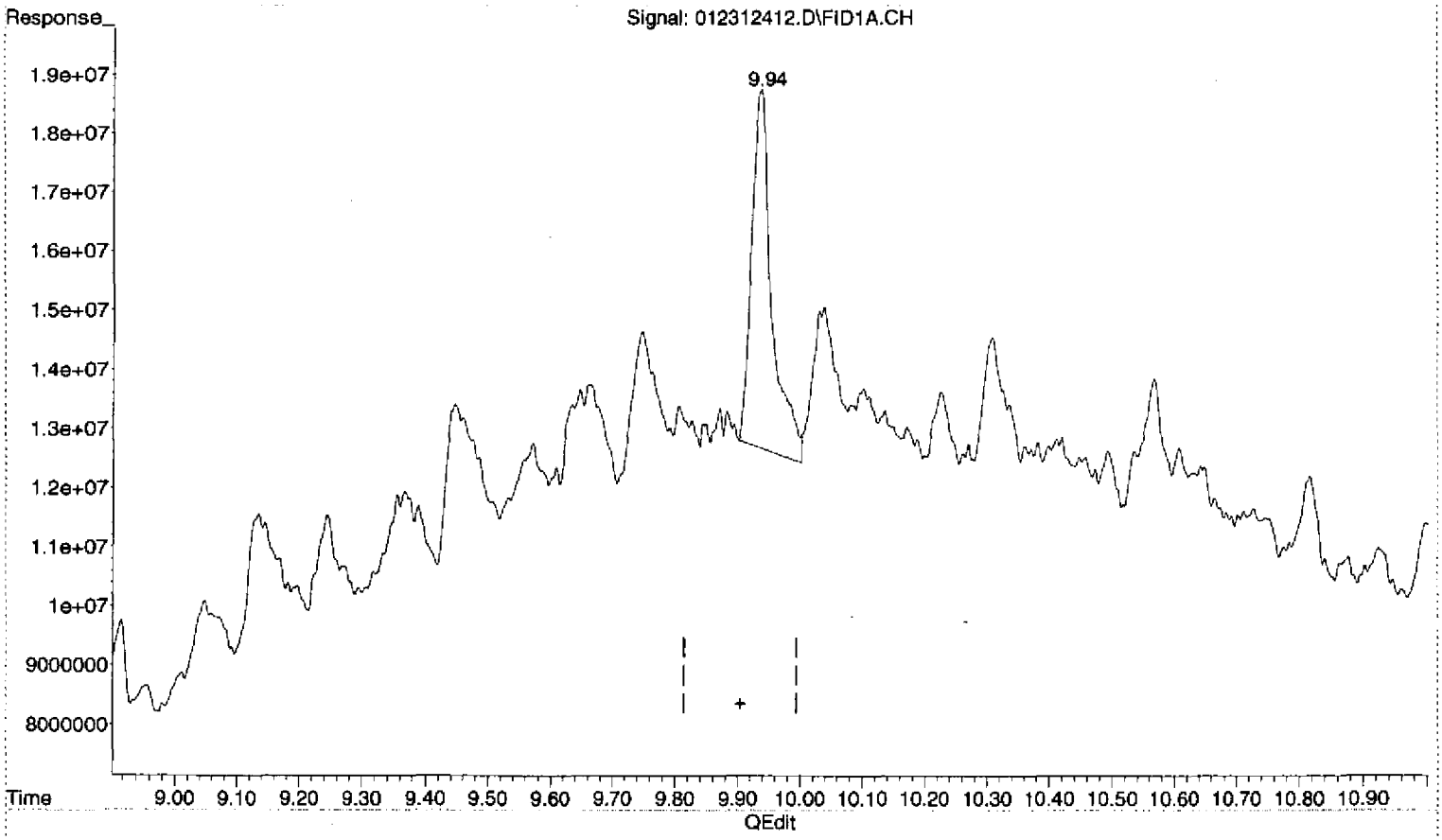
R.T.: 9.940 min
Delta R.T.: 0.035 min
Response: 127201801
Conc: 39.69 ug/mL m

Quantitation Report (Qedit)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312412.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 6:18 pm Operator: TD
Sample : 2010031-CALA Inst : AG6890-4
Misc : 2A11015 OIL-E
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:55 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



(3) Surrogate (S)
9.94min 42.590ug/mL
response 136503570

MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being
☐ Missed ☐ Summed
☐ Cropped ☑ Improper Baseline
☐ Other:
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

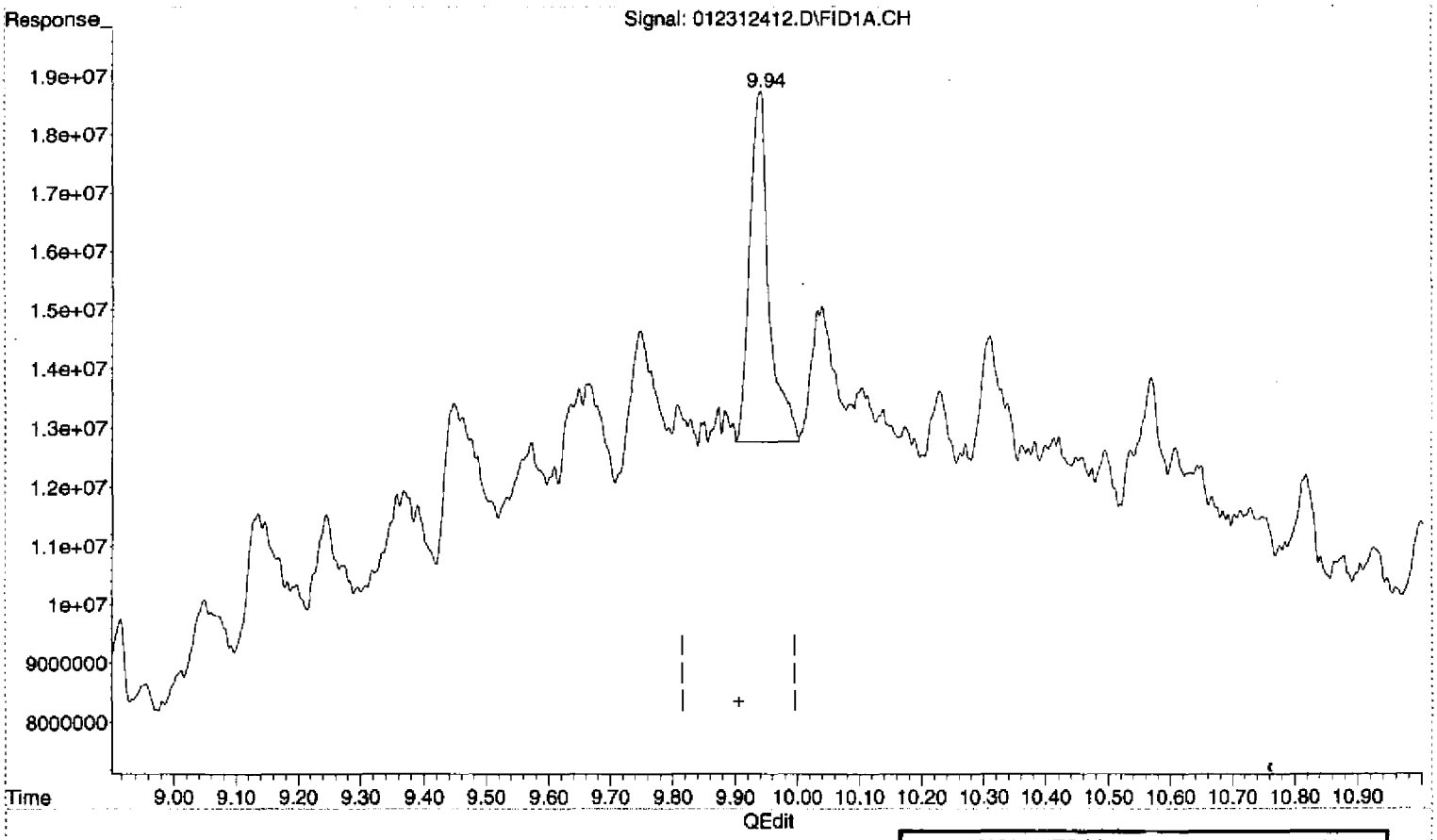
(+) = Expected Retention Time
0123124DA.M Tue Jan 24 07:49:51 2012

Quantitation Report (Qedit)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312412.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 6:18 pm Operator: TD
Sample : 2010031-CALA Inst : AG6890-4
Misc : 2A11015 OIL-E
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:55 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



(3) Surrogate (S)
9.94min 39.688ug/mL m
response 127201801

MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☑ After Manual Integration	
Manual integration(s) performed by	
Analyst: TD	Date: 01-24-12
Manual integration(s) reviewed by:	
Reviewer: [illegible]	Date: 01-25-12

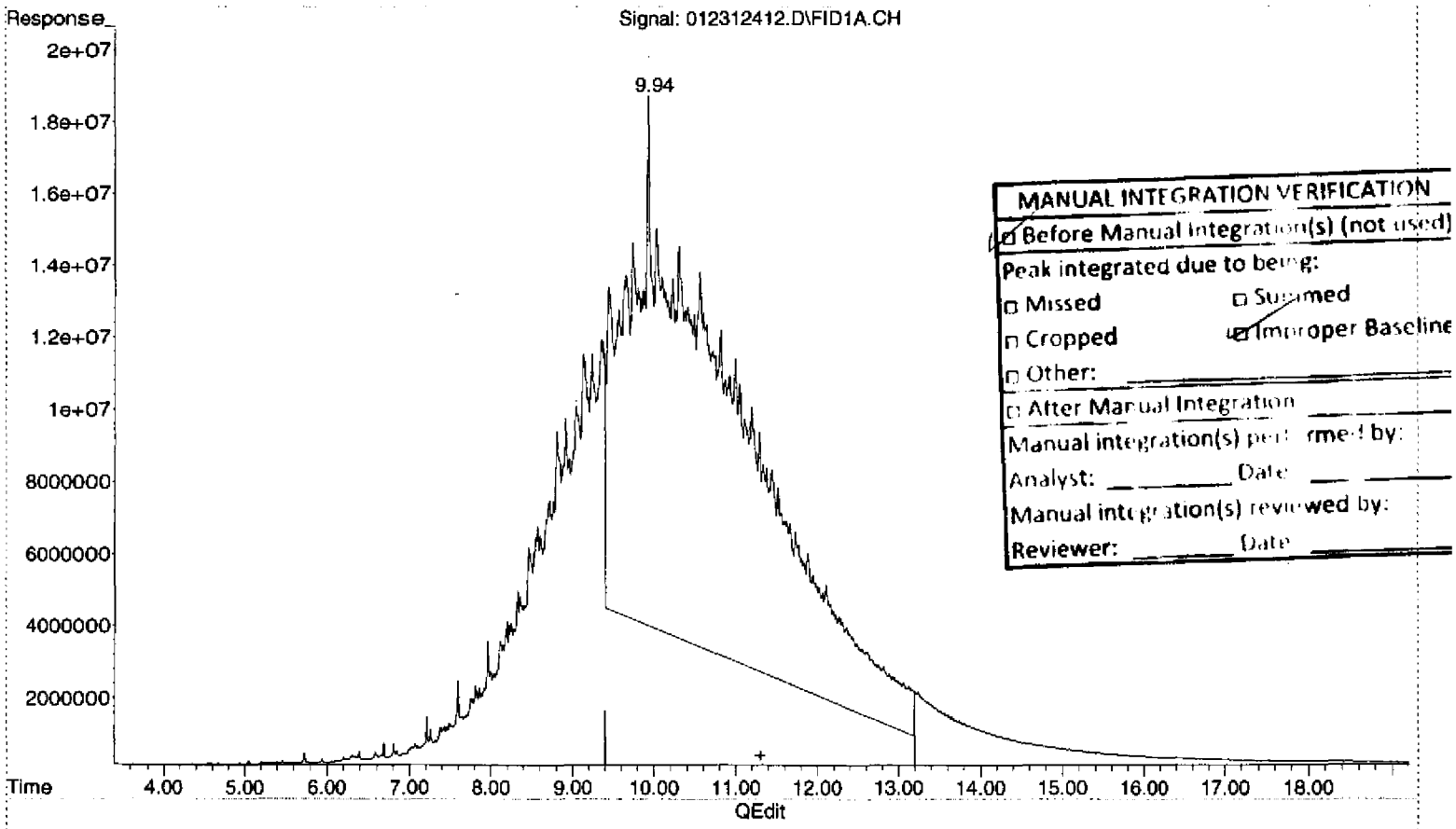
(+) = Expected Retention Time
0123124DA.M Tue Jan 24 07:49:58 2012

Quantitation Report (Qedit)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312412.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 6:18 pm Operator: TD
Sample : 2010031-CALA Inst : AG6890-4
Misc : 2A11015 OIL-E
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:55 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



(2) OIL (H)

11.30min 6162.520ug/mL m

response 12666525542

(+) = Expected Retention Time

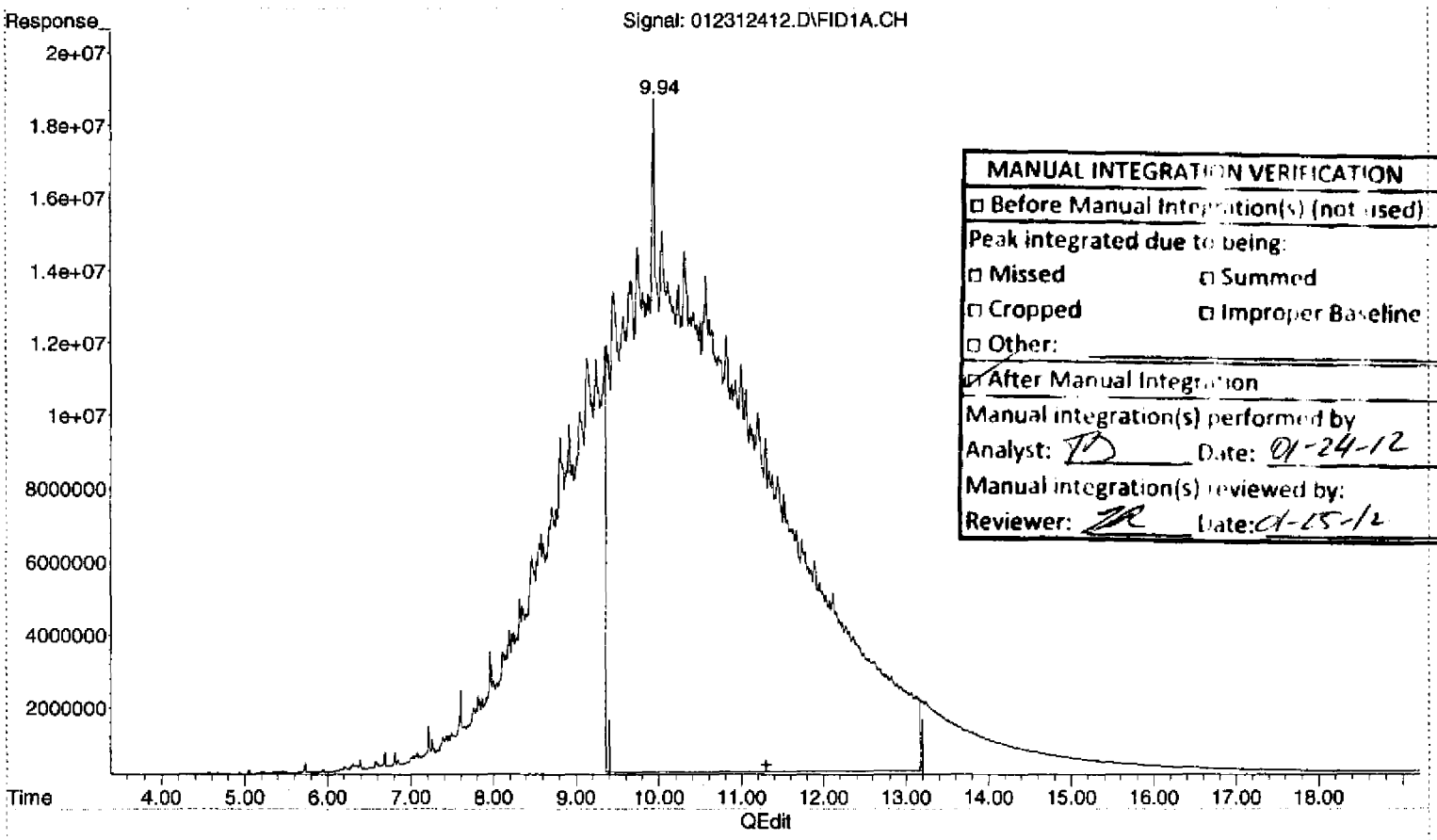
0123124DA.M Tue Jan 24 07:50:07 2012

Quantitation Report (Qedit)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312412.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 6:18 pm Operator: TD
Sample : 2010031-CALA Inst : AG6890-4
Misc : 2A11015 OIL-E
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:55 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by
Analyst: TD Date: 01-24-12
Manual integration(s) reviewed by:
Reviewer: ZR Date: 01-25-12

(2) OIL (H)
11.30min 9022.374ug/mL m
response 18544706916

(+) = Expected Retention Time
0123124DA.M Tue Jan 24 07:50:17 2012

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312412.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 6:18 pm Operator: TD
Sample : 2010031-CALA Inst : AG6890-4
Misc : 2A11015 OIL-E
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:55 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.94	136503570	42.590 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	85.18%
Target Compounds			
1) HM Diesel (TPH)	6.15	6436618239	2089.561 ug/mL
2) H OIL	11.30	12657223774	6157.995 ug/mL

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

MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

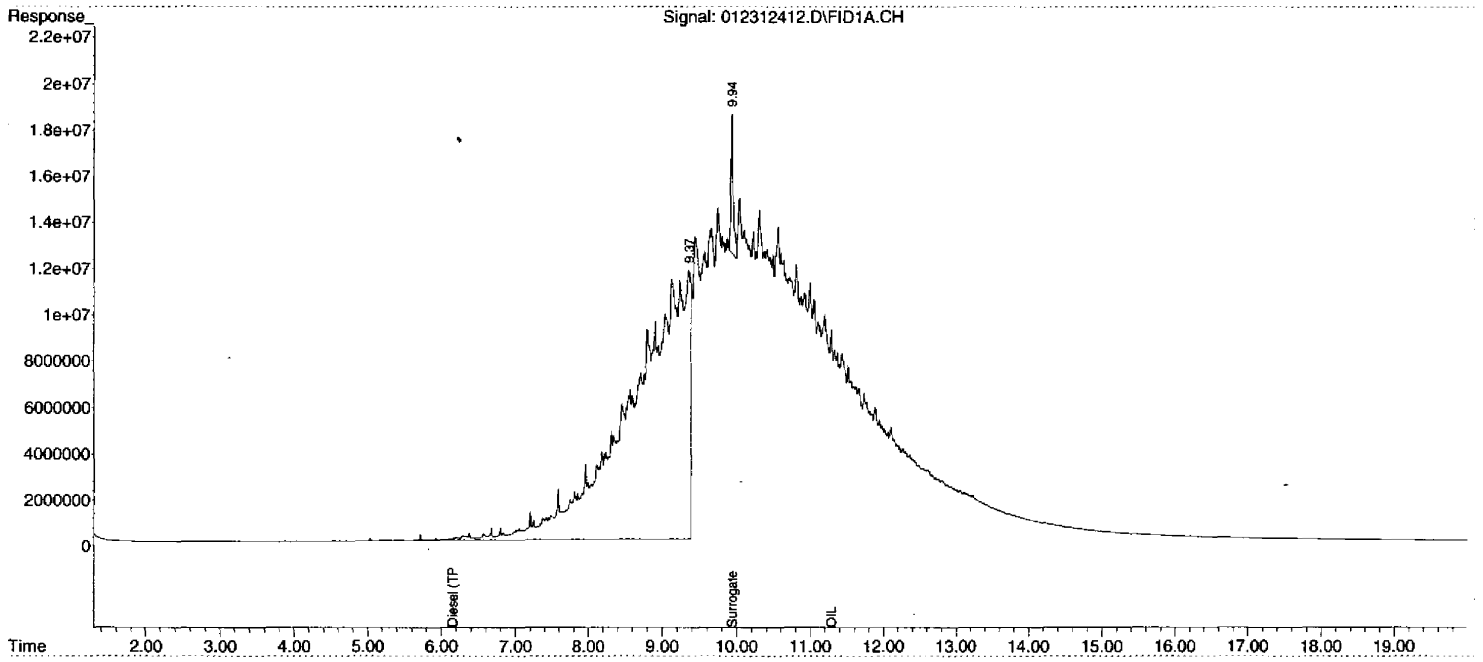
DIM0275879 DIM0275975

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312412.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 6:18 pm Operator: TD
Sample : 2010031-CALA Inst : AG6890-4
Misc : 2A11015 OIL-E
ALS Vial : 12 Sample Multiplier: 1

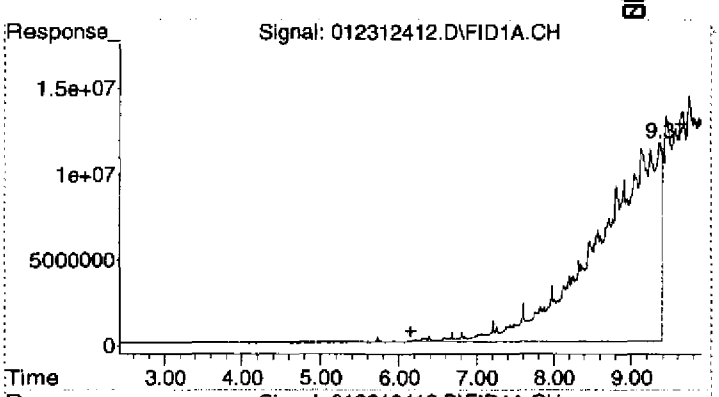
Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:43:55 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Fri Sep 23 07:10:22 2011
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



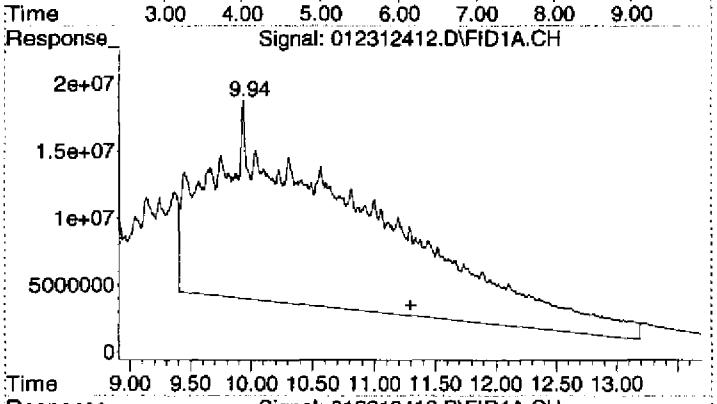
00309

0123124DA.M Tue Jan 24 07:43:56 2012 Page: 2



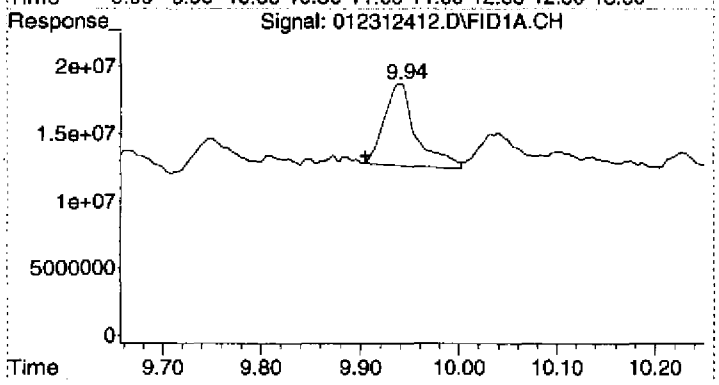
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 6436618239
Conc: 2089.56 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 12657223774
Conc: 6157.99 ug/mL m



#3 Surrogate

R.T.: 9.940 min
Delta R.T.: 0.035 min
Response: 136503570
Conc: 42.59 ug/mL

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312413.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 6:49 pm Operator: TD
Sample : 2010031-IBL2 Inst : AG6890-4
Misc : 2A11003 IB
ALS Vial : 13 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:54:45 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	150674084	58.730 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery = 117.46%	
Target Compounds			
1) HM Diesel (TPH)	6.15	4975233	1.787 ug/mL
2) H OIL	11.30	19688358	10.844 ug/mL

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

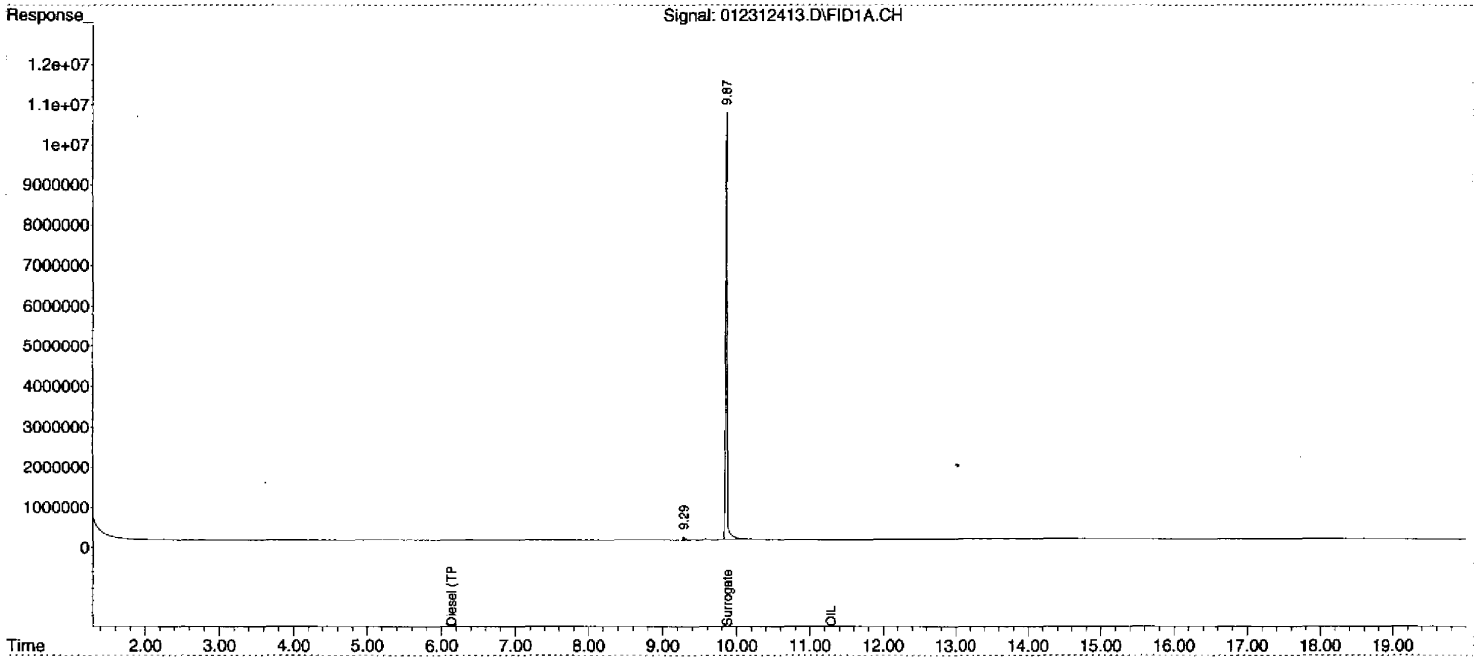
DIM0275879 DIM0275978

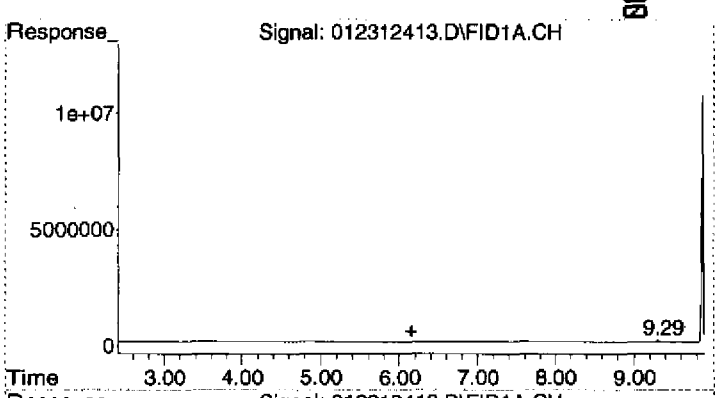
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312413.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 6:49 pm Operator: TD
Sample : 2010031-IBL2 Inst : AG6890-4
Misc : 2A11003 IB
ALS Vial : 13 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:54:45 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

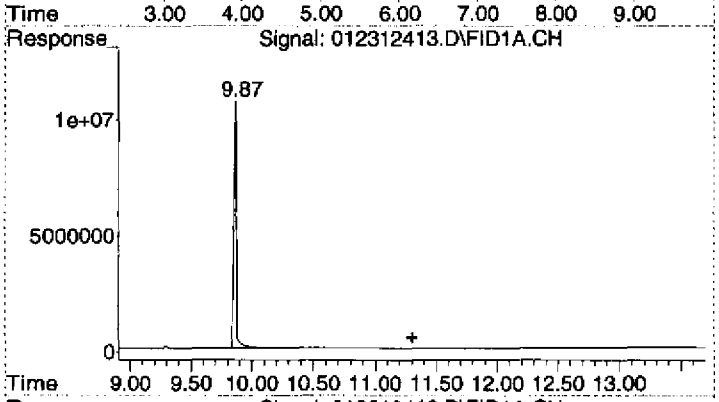
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





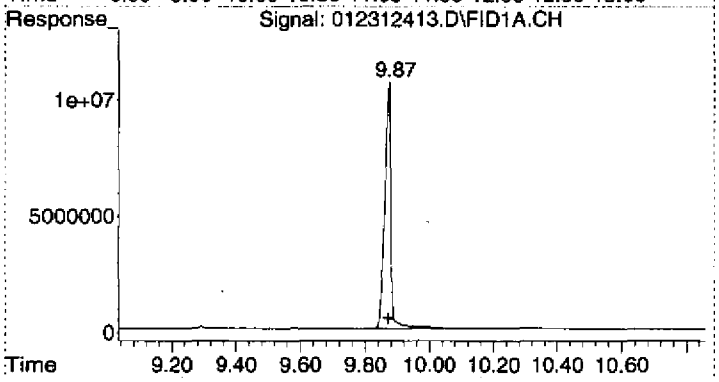
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 4975233
Conc: 1.79 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 19688358
Conc: 10.84 ug/mL m



#3 Surrogate

R.T.: 9.874 min
Delta R.T.: 0.004 min
Response: 150674084
Conc: 58.73 ug/mL

C:\MSDCHEM\1\2012\DATA\0123124DA\012312414.D

DIESEL SCV REPORT

Instrument Name: AG6890-4
Date Acquired: 1/23/2012 19:20
Acq. Method File: 0816104INST.M
Sample Name: 2010031-SCV1
Misc Info: 2A11009 DRO-SCV
Operator: TD

Name	Concentration ng/mL		% Recovery	QC Limits	STATUS
		Calculated			
Diesel (TPH)	500	583.62	116.72%	70 - 130	pass

1/24/2012 7:57 AM

C:\MSDChem\custrpt\DIESEL SCV RPT.CRT

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312414.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 7:20 pm Operator: TD
Sample : 2010031-SCV1 Inst : AG6890-4
Misc : 2A11009 DRO-SCV
ALS Vial : 14 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:54:49 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	150473134	58.652 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery = 117.30%	
Target Compounds			
1) HM Diesel (TPH)	6.15	1624868058	583.619 ug/mL
2) H OIL	11.30	18777965	10.343 ug/mL

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

$\frac{1624868058}{2.784E6} = 583.645$ TD 01-24-12

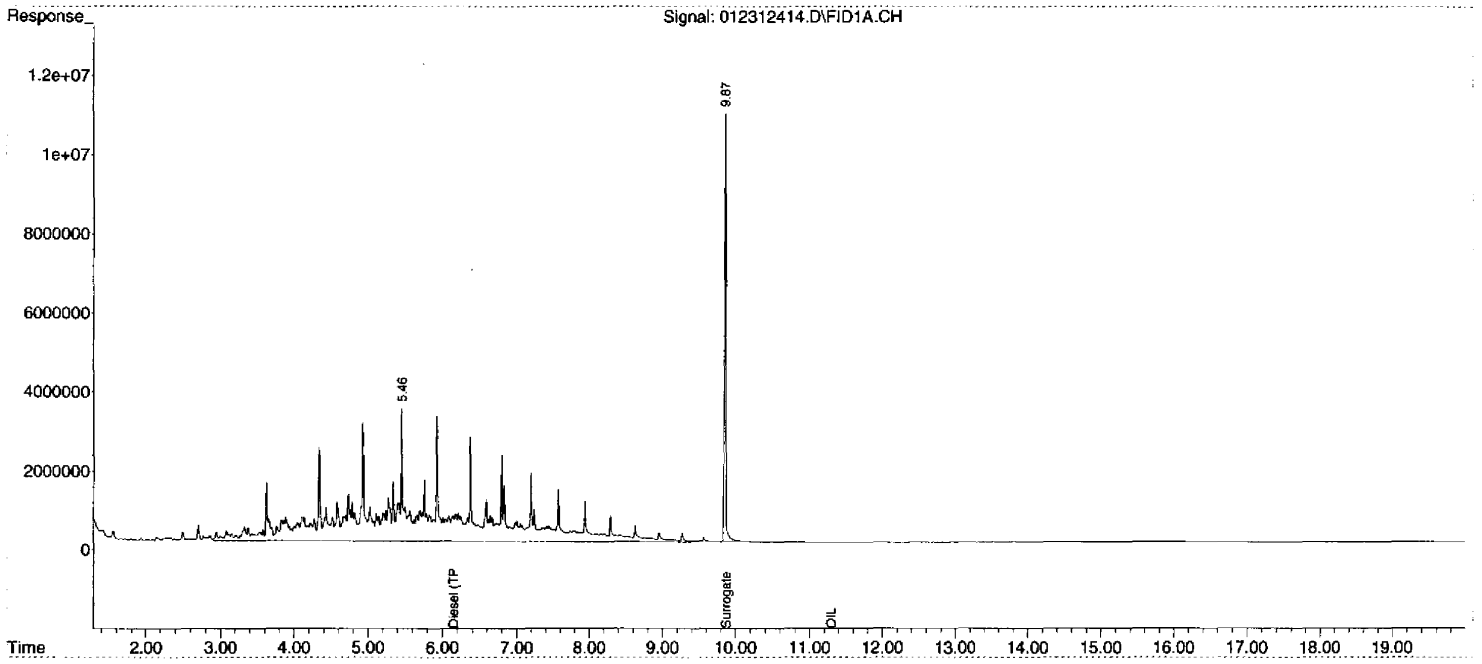
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312414.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 7:20 pm
Sample : 2010031-SCV1
Misc : 2A11009 DRO-SCV
ALS Vial : 14 Sample Multiplier: 1

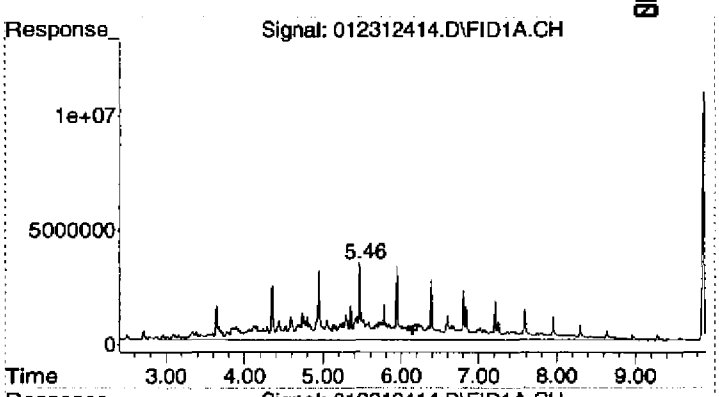
Operator: TD
Inst : AG6890-4

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:54:49 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

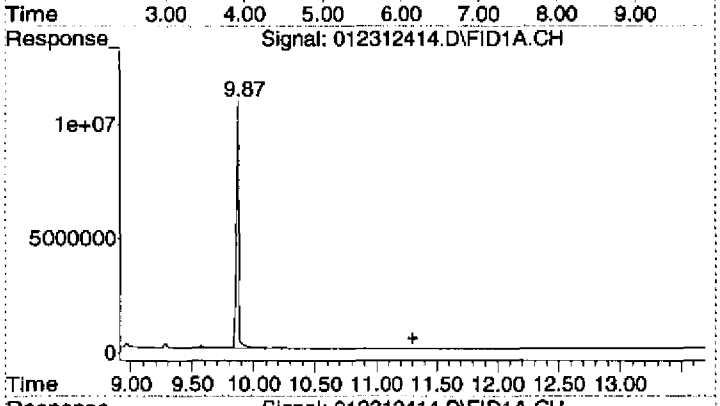


00316



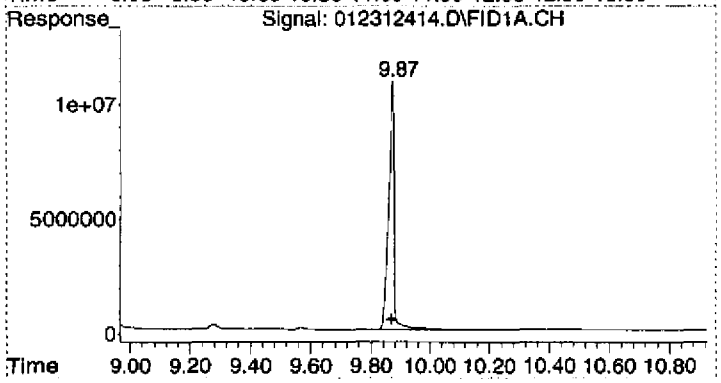
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 1624868058
Conc: 583.62 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 18777965
Conc: 10.34 ug/mL m



#3 Surrogate

R.T.: 9.873 min
Delta R.T.: 0.003 min
Response: 150473134
Conc: 58.65 ug/mL

C:\MSDCHEM\1\2012\DATA\0123124DA\012312415.D

OIL SCV REPORT

Instrument Name: AG6890-4
Date Acquired: 1/23/2012 19:51
Acq. Method File: 0816104INST.M
Sample Name: 2010031-SCV2
Misc Info: 2A11019 OIL-SCV
Operator: TD

Name	Concentration ng/mL	Calculated	% Recovery	QC Limits	STATUS
OIL	1000	995.72	99.57%	70 - 130	pass

1/24/2012 7:58 AM

C:\MSDChem\custrpt\OIL SCV RPT.CRT

Quantitation Report (QT Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312415.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 7:51 pm Operator: TD
Sample : 2010031-SCV2 Inst : AG6890-4
Misc : 2A11019 OIL-SCV
ALS Vial : 15 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:57:51 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	116670010	45.476 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	90.95%
Target Compounds			
1) HM Diesel (TPH)	6.15	228734540	82.157 ug/mL
2) H OIL	11.30	1807794836	995.718 ug/mL

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

$\frac{1807794836}{1.816E6} = 995.481$

TD 01-24-12

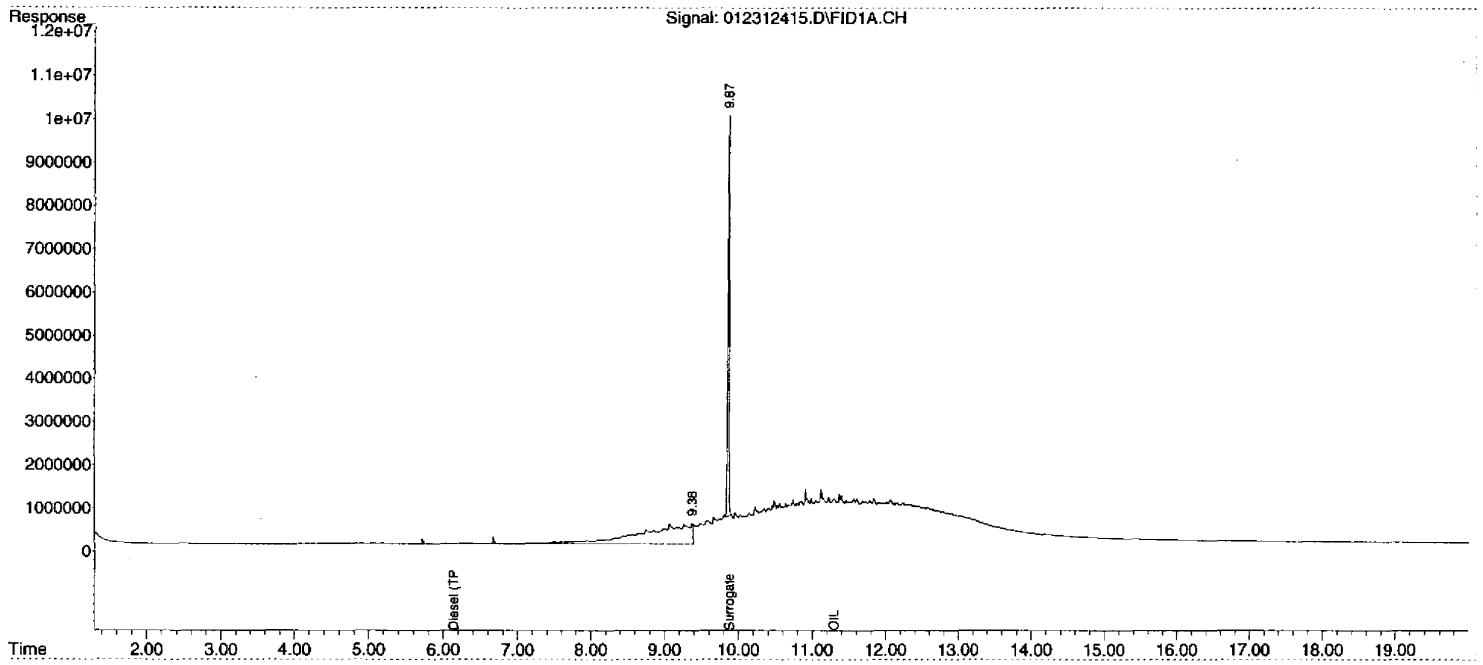
MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☑ After Manual Integration	
Manual integration(s) performed by:	
Analyst: TD	Date: 01-24-12
Manual integration(s) reviewed by:	
Reviewer: [illegible]	Date: 01-25-12

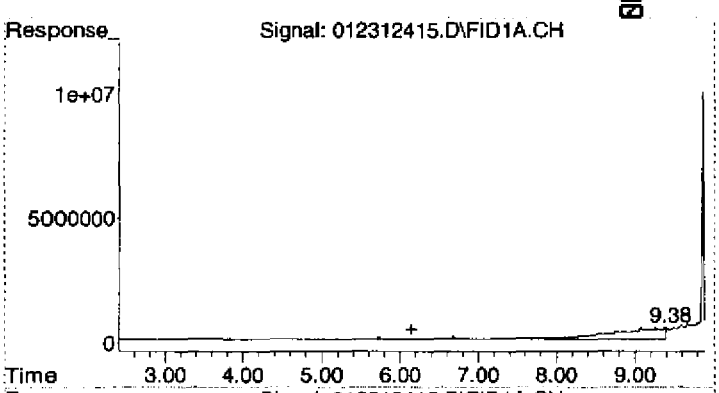
Quantitation Report (QT Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312415.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 7:51 pm Operator: TD
Sample : 2010031-SCV2 Inst : AG6890-4
Misc : 2A11019 OIL-SCV
ALS Vial : 15 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:57:51 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

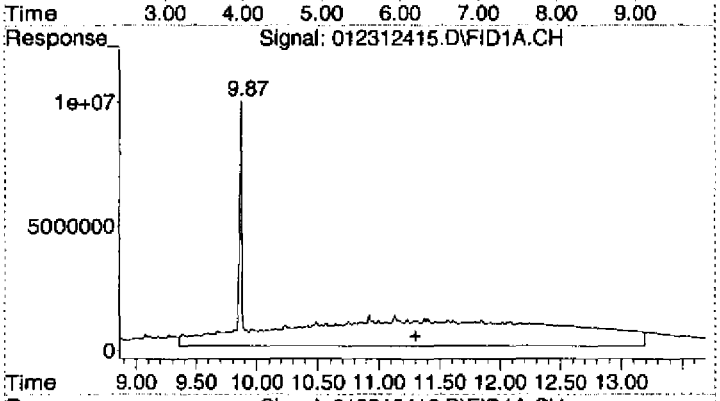
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





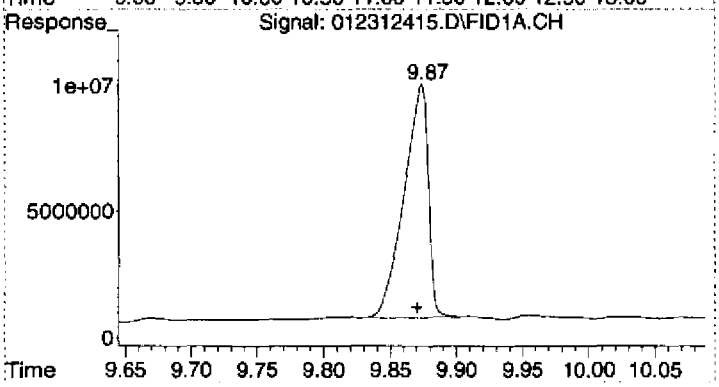
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 228734540
Conc: 82.16 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 1807794836
Conc: 995.72 ug/mL m



#3 Surrogate

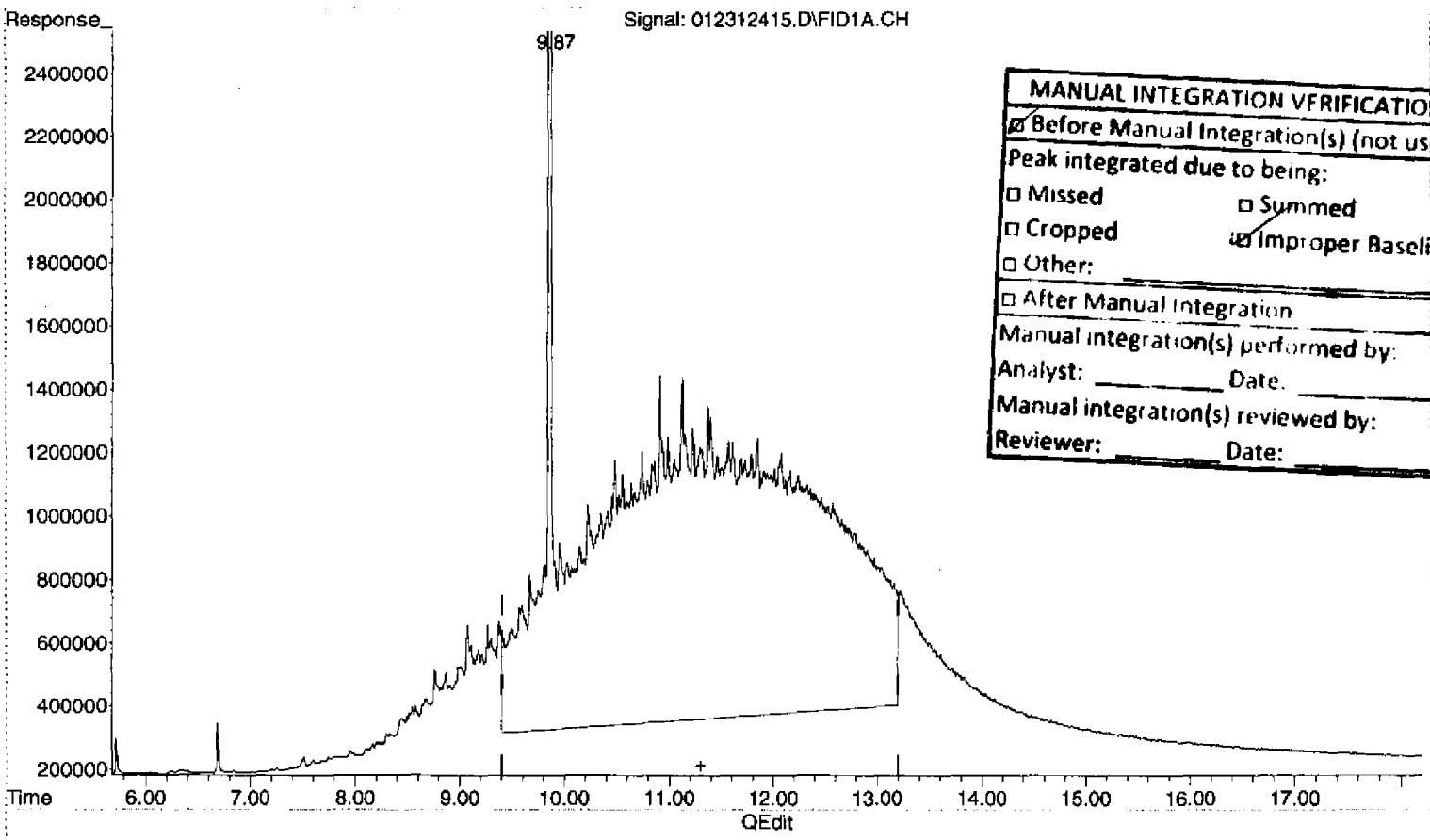
R.T.: 9.873 min
Delta R.T.: 0.003 min
Response: 116670010
Conc: 45.48 ug/mL

Quantitation Report (Qedit)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312415.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 7:51 pm Operator: TD
Sample : 2010031-SCV2 Inst : AG6890-4
Misc : 2A11019 OIL-SCV
ALS Vial : 15 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:54:53 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☑ Improper Baseline
☐ Other:
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

(2) OIL (H)
11.30min 802.429ug/mL m
response 1456865646

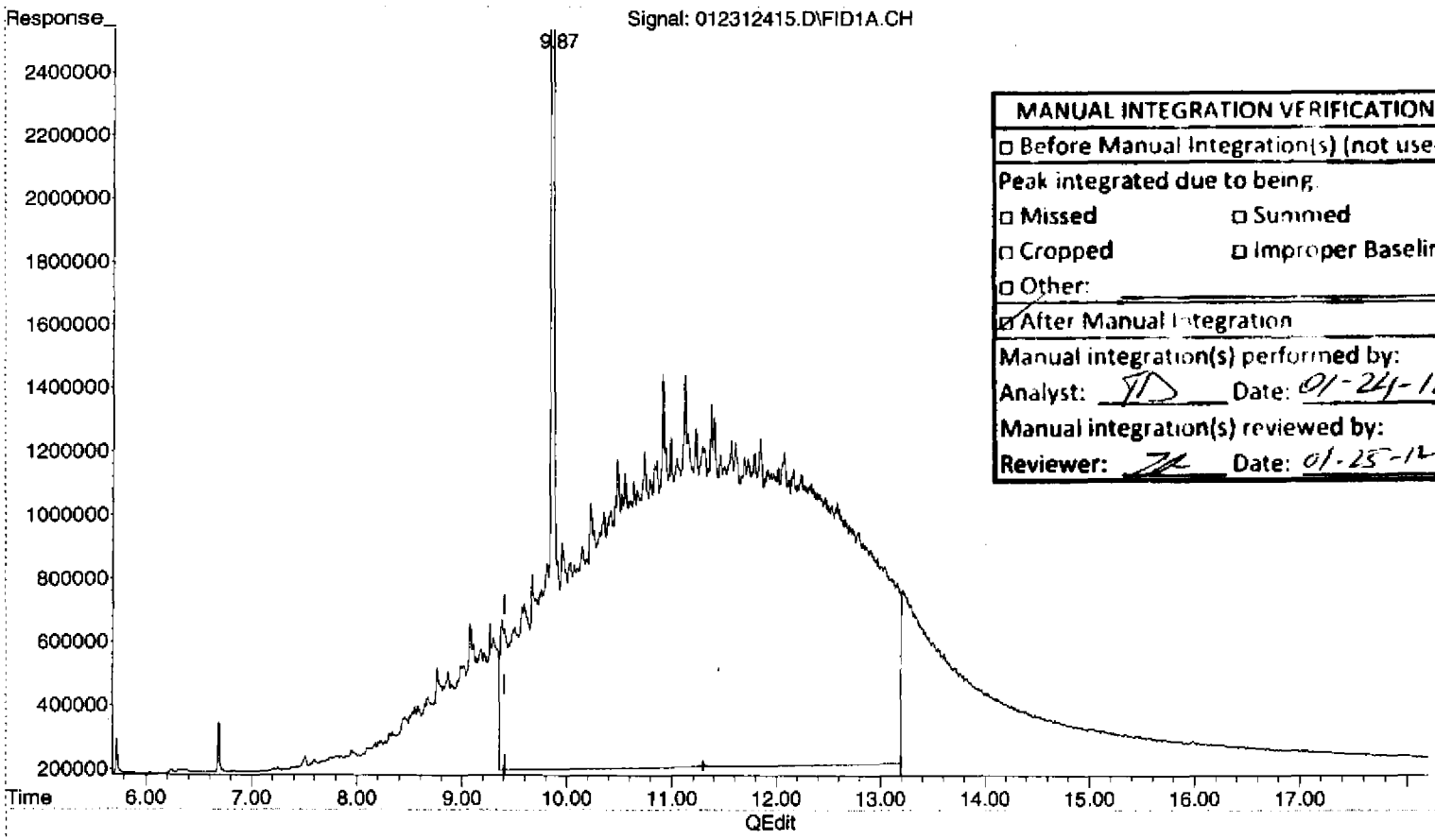
(+) = Expected Retention Time
0123124DA.M Tue Jan 24 07:57:42 2012

Quantitation Report (Qedit)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312415.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 7:51 pm Operator: TD
Sample : 2010031-SCV2 Inst : AG6890-4
Misc : 2A11019 OIL-SCV
ALS Vial : 15 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:54:53 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-24-12
Manual integration(s) reviewed by:
Reviewer: ZL Date: 01-25-12

(2) OIL (H)

11.30min 995.718ug/mL m

response 1807794836

(+) = Expected Retention Time
0123124DA.M Tue Jan 24 07:57:54 2012

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312415.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 7:51 pm Operator: TD
Sample : 2010031-SCV2 Inst : AG6890-4
Misc : 2A11019 OIL-SCV
ALS Vial : 15 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:54:53 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	116670010	45.476 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	90.95%
Target Compounds			
1) HM Diesel (TPH)	6.15	228734540	82.157 ug/mL
2) H OIL	11.30	1456865646	802.429 ug/mL

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

MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

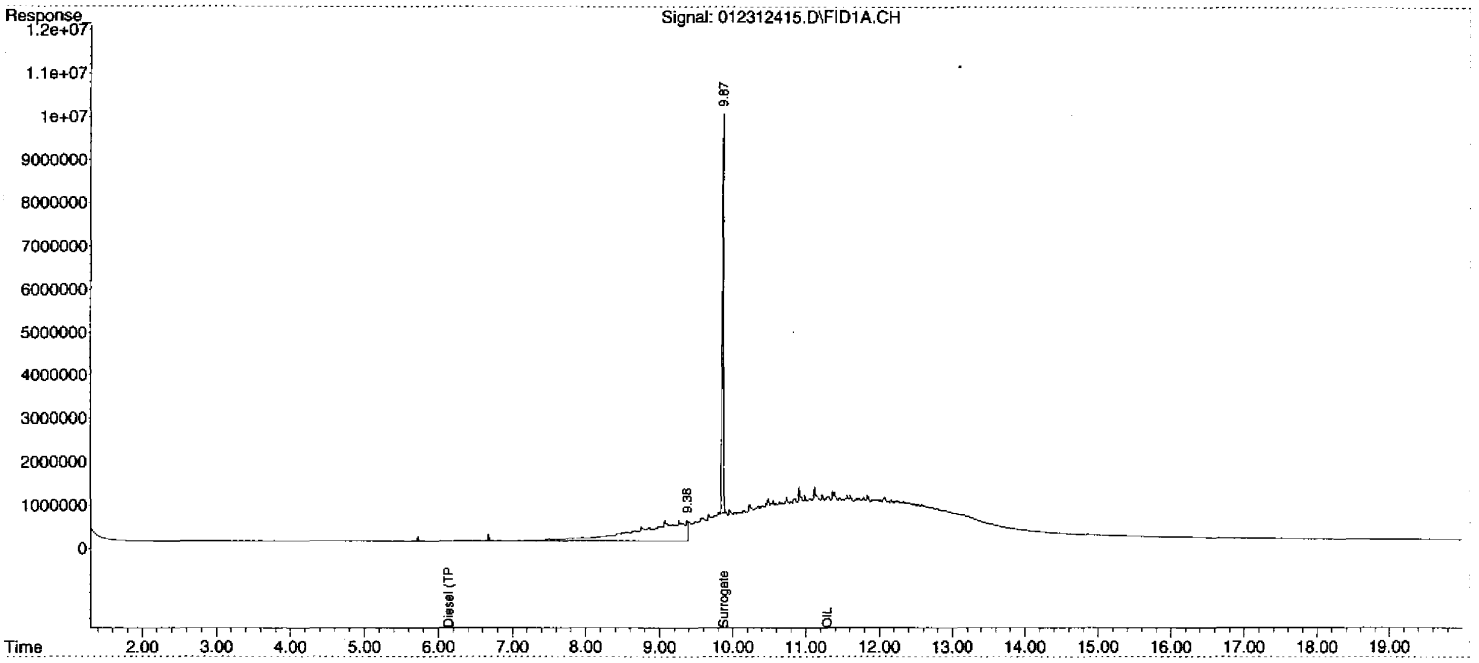
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312415.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 7:51 pm
Sample : 2010031-SCV2
Misc : 2A11019 OIL-SCV
ALS Vial : 15 Sample Multiplier: 1

Operator: TD
Inst : AG6890-4

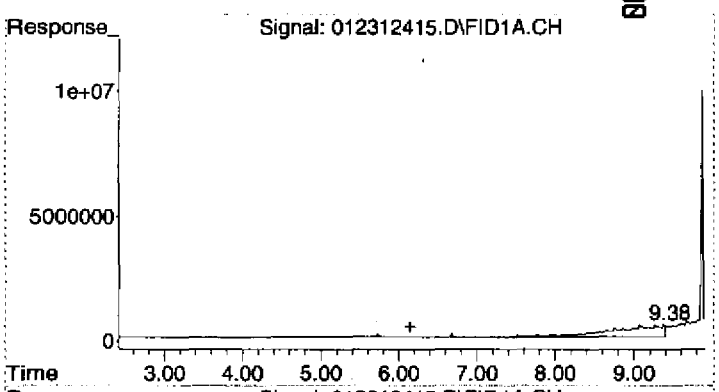
Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:54:53 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



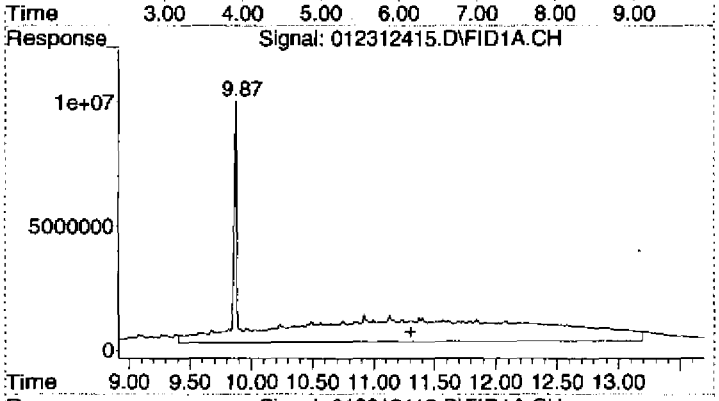
00325

0123124DA.M Tue Jan 24 07:54:54 2012



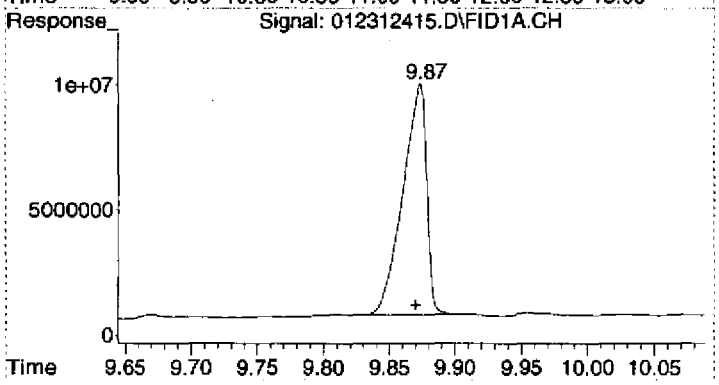
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 228734540
Conc: 82.16 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 1456865646
Conc: 802.43 ug/mL m



#3 Surrogate

R.T.: 9.873 min
Delta R.T.: 0.003 min
Response: 116670010
Conc: 45.48 ug/mL

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312416.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 8:22 pm Operator: TD
Sample : 2010031-ICB2 Inst : AG6890-4
Misc : 2A11022 Hydraulic Fluid
ALS Vial : 16 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:54:57 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	125926986	49.084 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	98.17%
Target Compounds			
1) HM Diesel (TPH)	6.15	680657441	244.478 ug/mL
2) H OIL	11.30	255231041	140.579 ug/mL

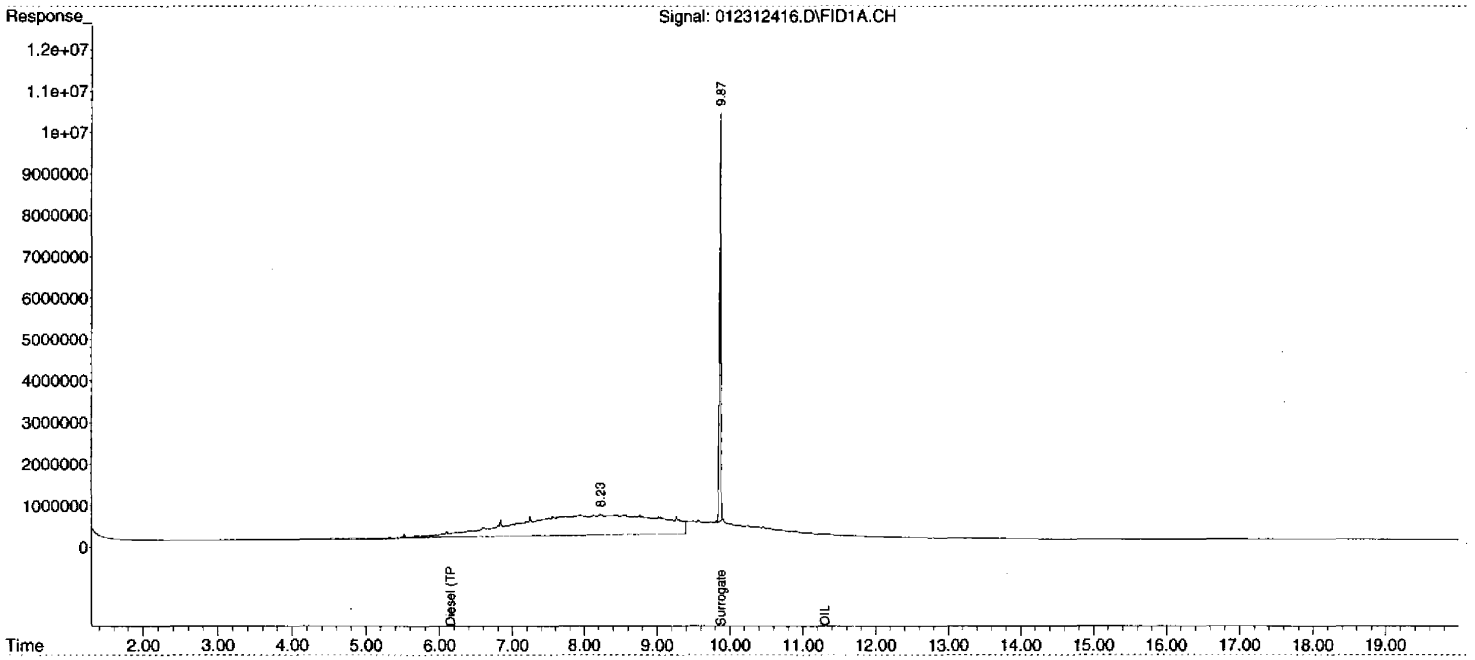
(f)=RT Delta > 1/2 Window (m)=manual int.

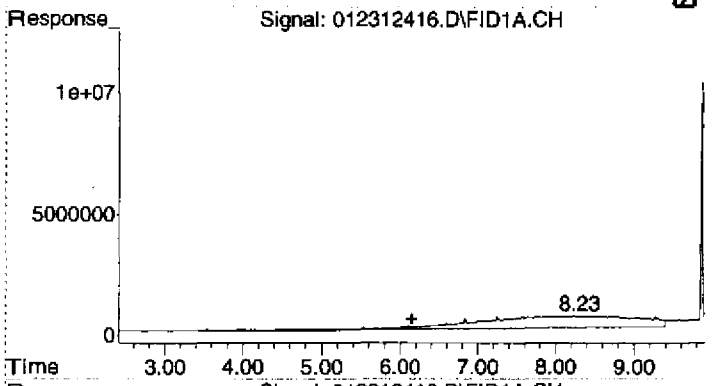
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312416.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 8:22 pm Operator: TD
Sample : 2010031-ICB2 Inst : AG6890-4
Misc : 2A11022 Hydraulic Fluid
ALS Vial : 16 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:54:57 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

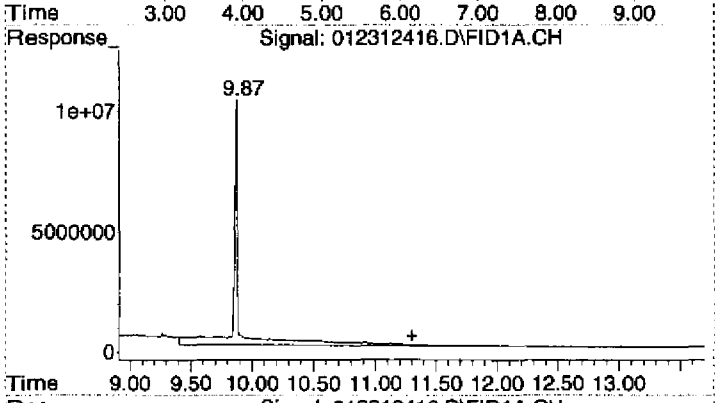
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





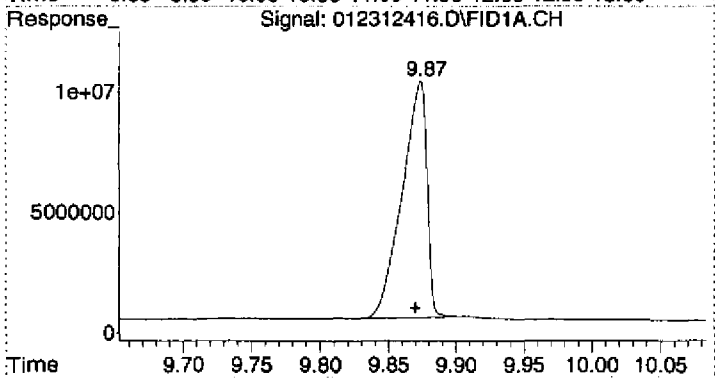
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 680657441
Conc: 244.48 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 255231041
Conc: 140.58 ug/mL m



#3 Surrogate

R.T.: 9.873 min
Delta R.T.: 0.003 min
Response: 125926986
Conc: 49.08 ug/mL

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312417.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 8:52 pm Operator: TD
Sample : 2010031-ICB3 Inst : AG6890-4
Misc : 2A11026 Mineral Spirit
ALS Vial : 17 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:55:01 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	151737100	59.144 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery = 118.29%	
Target Compounds			
1) HM Diesel (TPH)	6.15	1024932805	368.135 ug/mL
2) H OIL	11.30	13354727	7.356 ug/mL

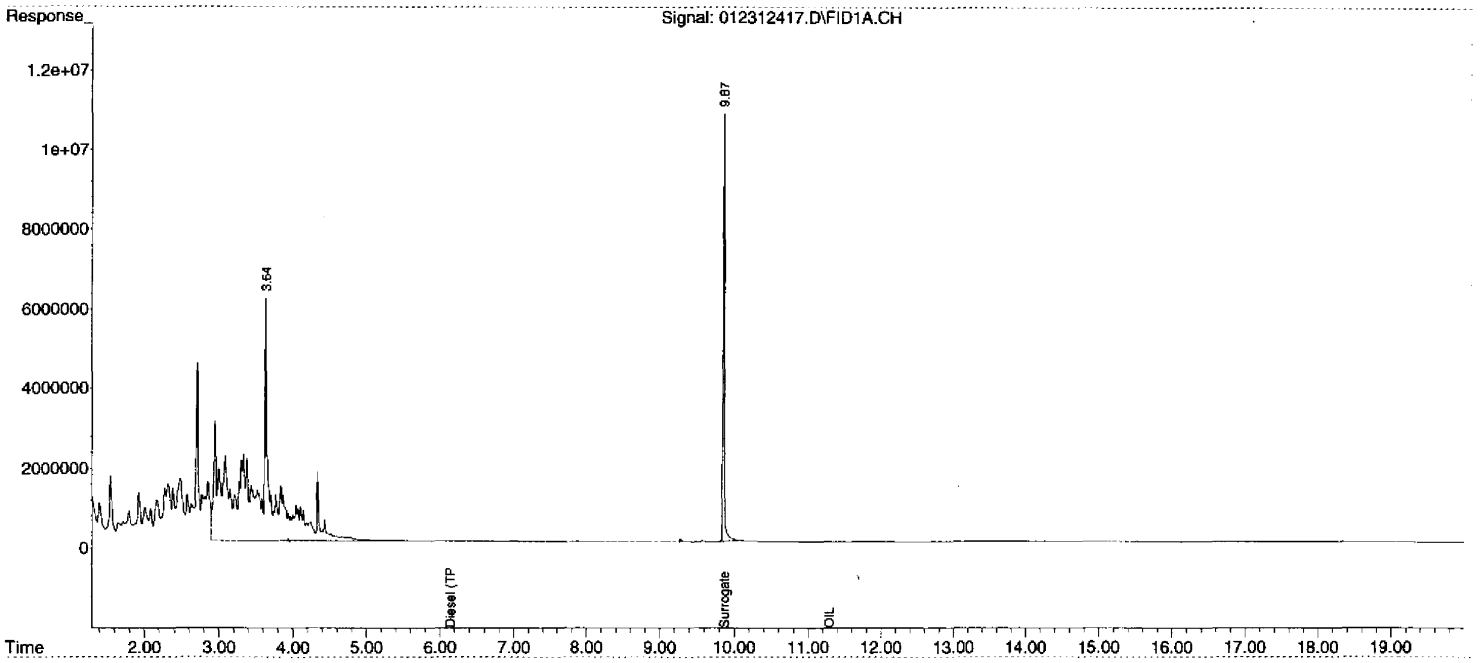
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

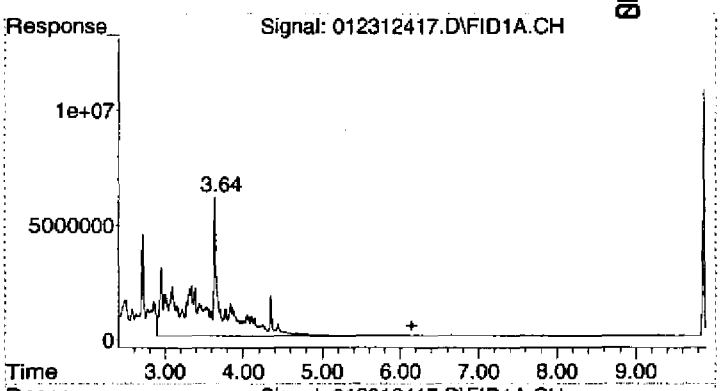
InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312417.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 8:52 pm
Operator: TD
Sample : 2010031-ICB3
Inst : AG6890-4
Misc : 2A11026 Mineral Spirit
ALS Vial : 17 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:55:01 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

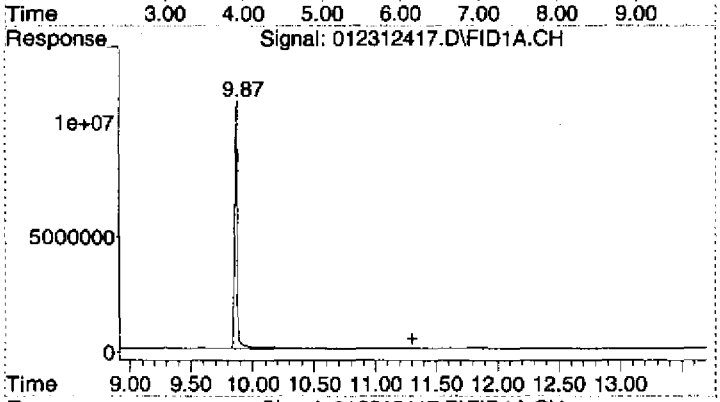


00331



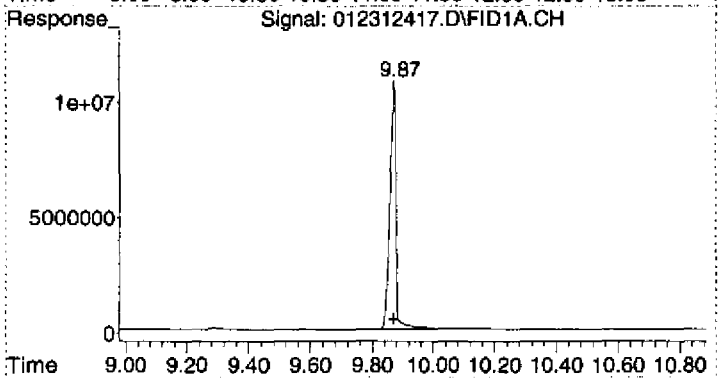
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 1024932805
Conc: 368.13 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 13354727
Conc: 7.36 ug/mL m



#3 Surrogate

R.T.: 9.873 min
Delta R.T.: 0.003 min
Response: 151737100
Conc: 59.14 ug/mL

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312418.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 9:23 pm Operator: TD
Sample : 2010031-ICB4 Inst : AG6890-4
Misc : 2A11027 Naphtha
ALS Vial : 18 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:55:05 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	145421009	56.683 ug/mL
Spiked Amount 50.000 Range 60 - 127 Recovery = 113.37%			
Target Compounds			
1) HM Diesel (TPH)	6.15	4920015	1.767 ug/mL
2) H OIL	11.30	14827454	8.167 ug/mL

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

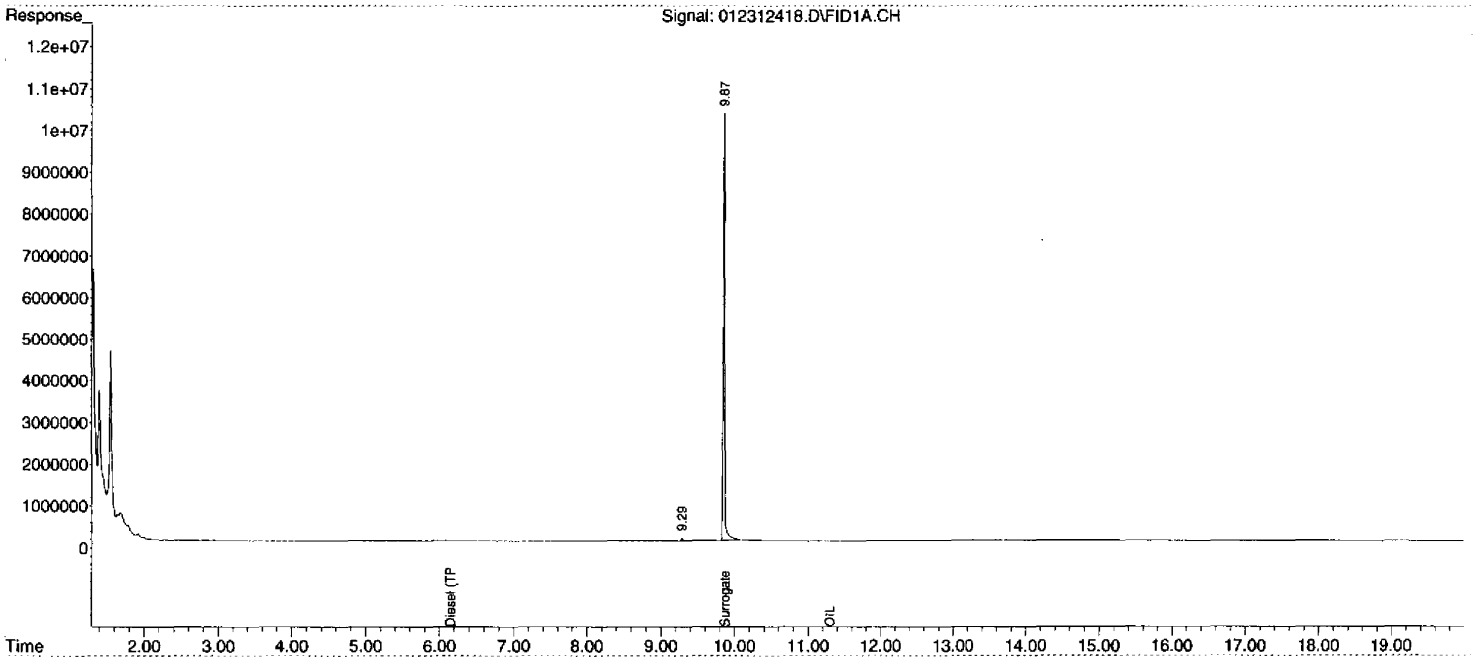
DIM0275879 DIM0276000

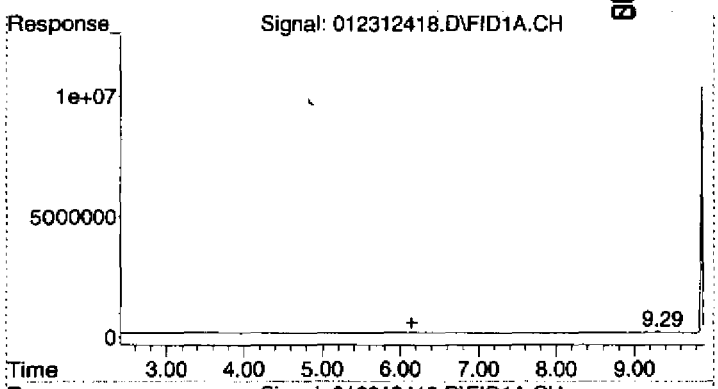
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312418.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 9:23 pm Operator: TD
Sample : 2010031-ICB4 Inst : AG6890-4
Misc : 2A11027 Naphtha
ALS Vial : 18 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:55:05 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

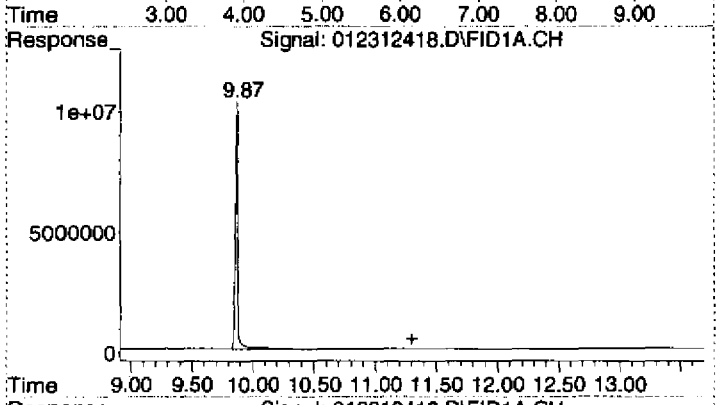
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





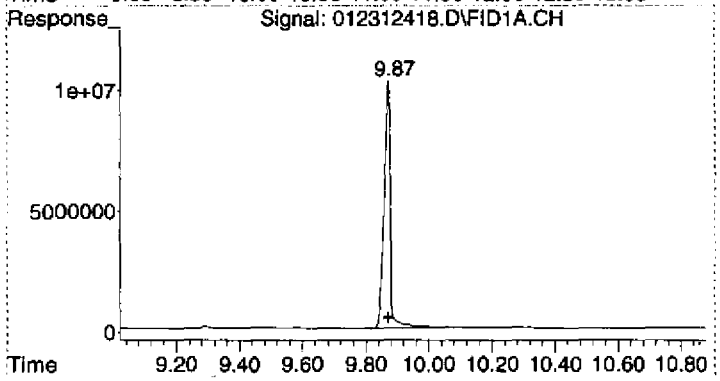
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 4920015
Conc: 1.77 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 14827454
Conc: 8.17 ug/mL m



#3 Surrogate

R.T.: 9.871 min
Delta R.T.: 0.000 min
Response: 145421009
Conc: 56.68 ug/mL

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312419.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 9:54 pm Operator: TD
Sample : 2010031-ICB5 Inst : AG6890-4
Misc : 2A11021 Gas
ALS Vial : 19 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:55:09 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	138454293	53.967 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery = 107.93%	
Target Compounds			
1) HM Diesel (TPH)	6.15	106072080	38.099 ug/mL
2) H OIL	11.30	13899362	7.656 ug/mL

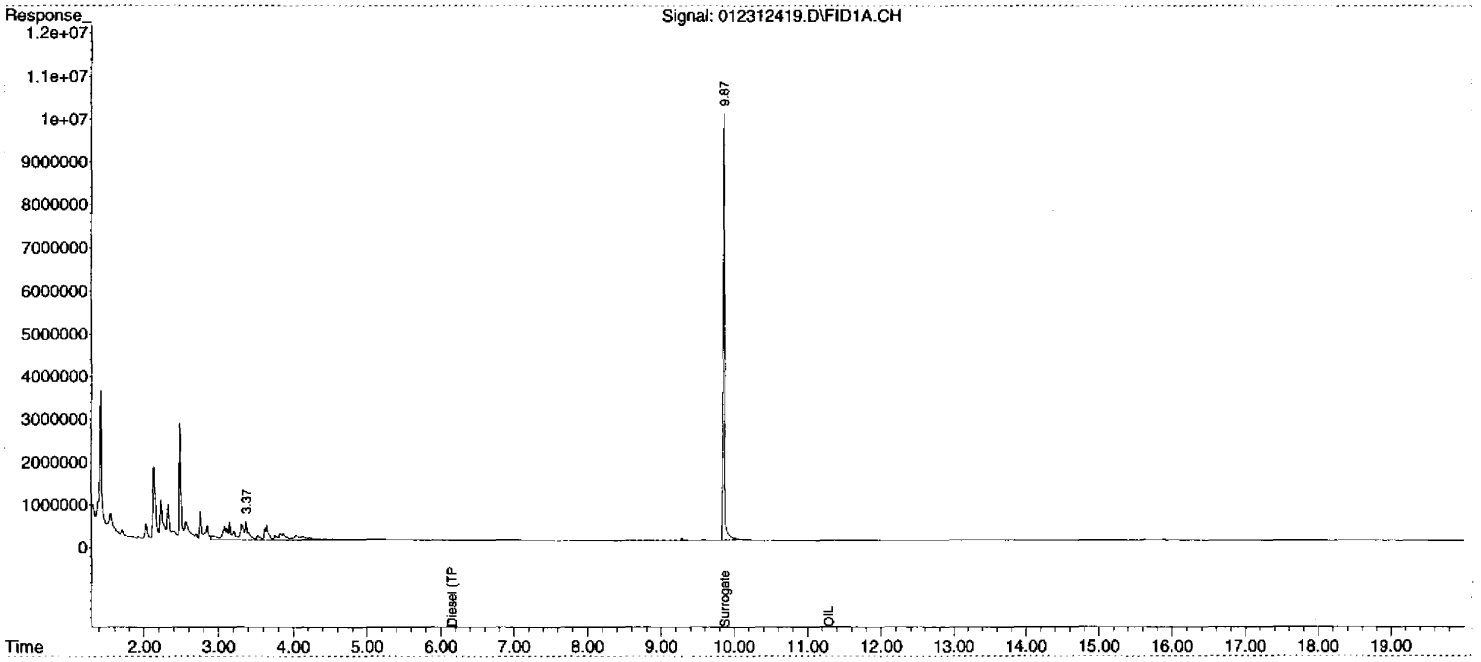
(f)=RT Delta > 1/2 Window (m)=manual int.

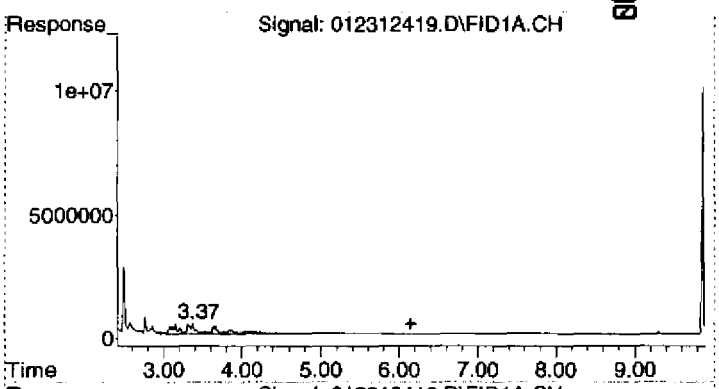
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312419.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 9:54 pm Operator: TD
Sample : 2010031-ICB5 Inst : AG6890-4
Misc : 2A11021 Gas
ALS Vial : 19 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:55:09 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

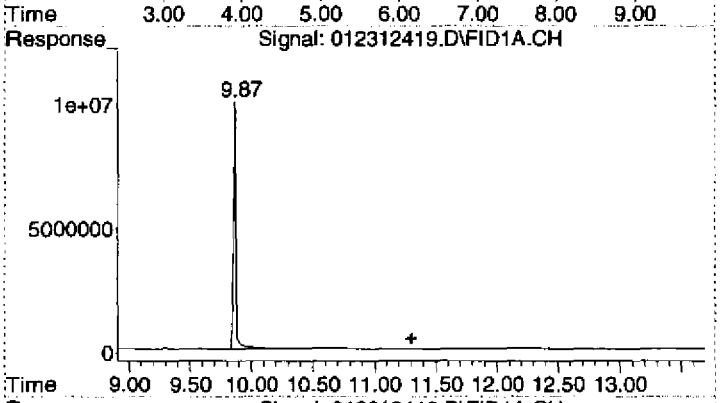
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





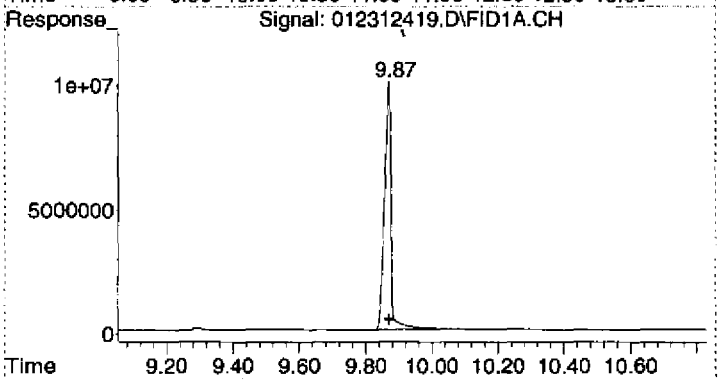
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 106072080
Conc: 38.10 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 13899362
Conc: 7.66 ug/mL m



#3 Surrogate

R.T.: 9.871 min
Delta R.T.: 0.000 min
Response: 138454293
Conc: 53.97 ug/mL

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312420.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 10:24 pm Operator: TD
Sample : 2010031-ICB6 Inst : AG6890-4
Misc : 1G15010 Kerosene
ALS Vial : 20 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:55:13 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	120243307	46.869 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	93.74%
Target Compounds			
1) HM Diesel (TPH)	6.15	1235915807	443.915 ug/mL
2) H OIL	11.30	13641579	7.514 ug/mL

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

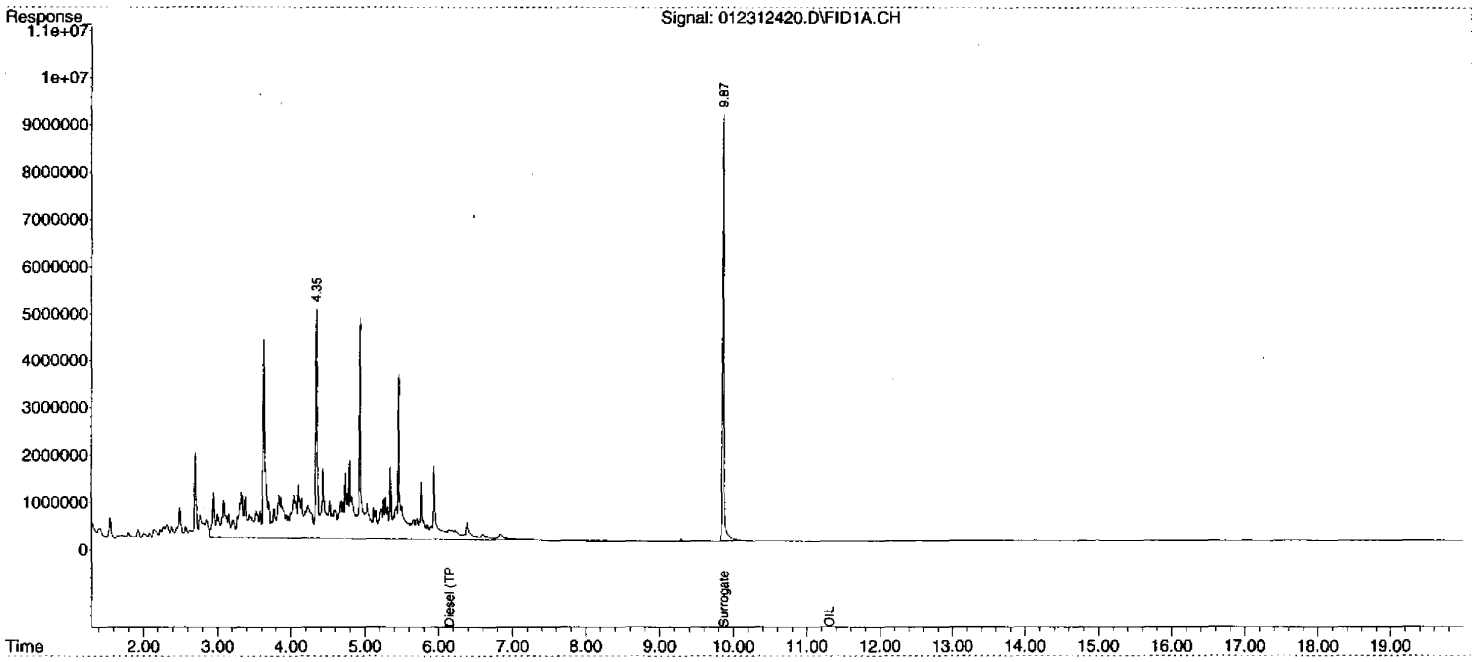
for pattern only
RD 01-24-12

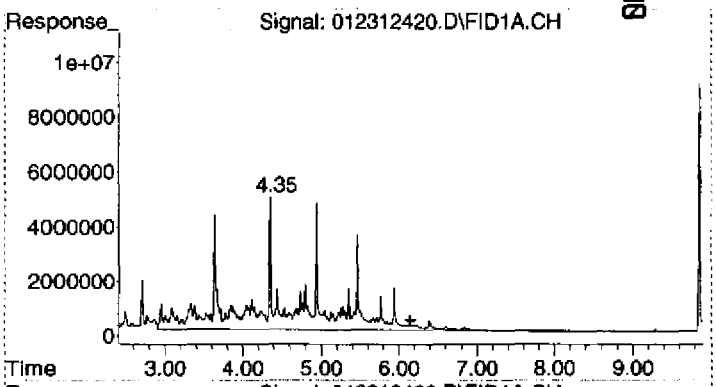
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312420.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 10:24 pm Operator: TD
Sample : 2010031-ICB6 Inst : AG6890-4
Misc : 1G15010 Kerosene
ALS Vial : 20 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:55:13 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

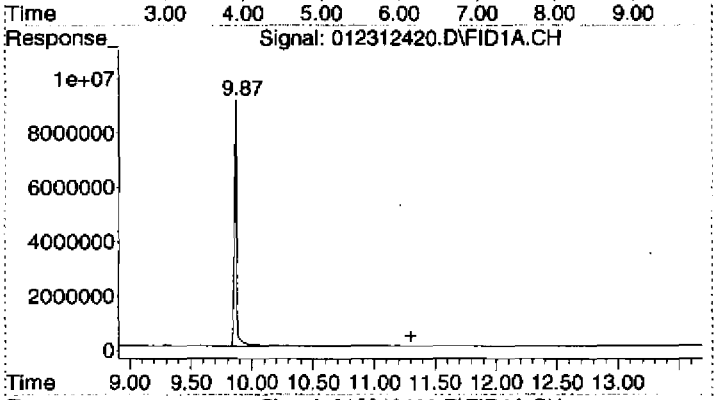
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





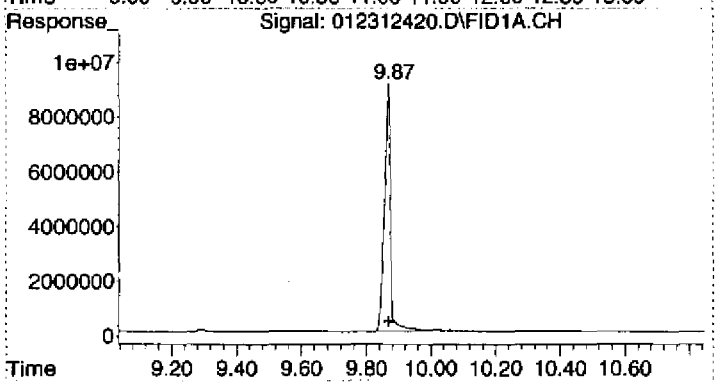
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 1235915807
Conc: 443.92 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 13641579
Conc: 7.51 ug/mL m



#3 Surrogate

R.T.: 9.869 min
Delta R.T.: -0.002 min
Response: 120243307
Conc: 46.87 ug/mL

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312421.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 10:55 pm Operator: TD
Sample : 2010031-ICB7 Inst : AG6890-4
Misc : 2A11023 Jet Fuel
ALS Vial : 21 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:55:17 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	140791599	54.878 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery = 109.76%	
Target Compounds			
1) HM Diesel (TPH)	6.15	1082120927	388.675 ug/mL
2) H OIL	11.30	12550961	6.913 ug/mL

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

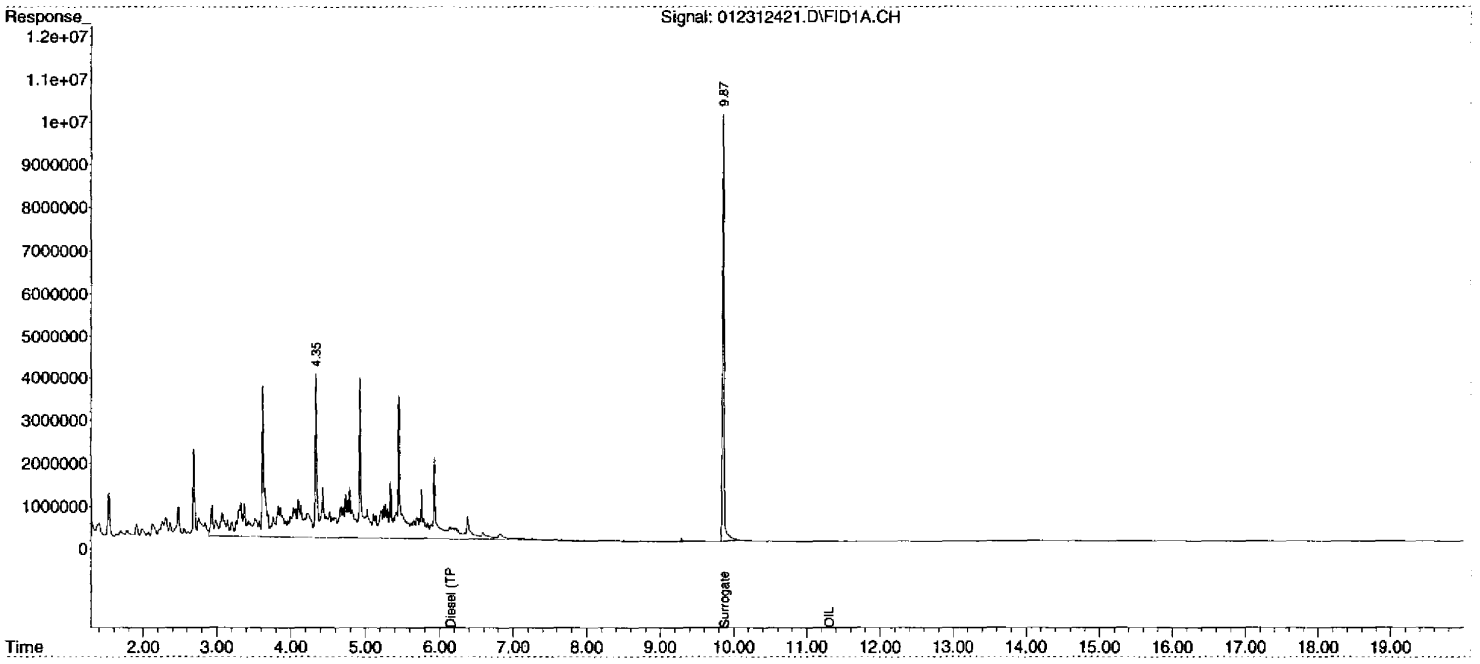
DIM0275879 DIM0276009

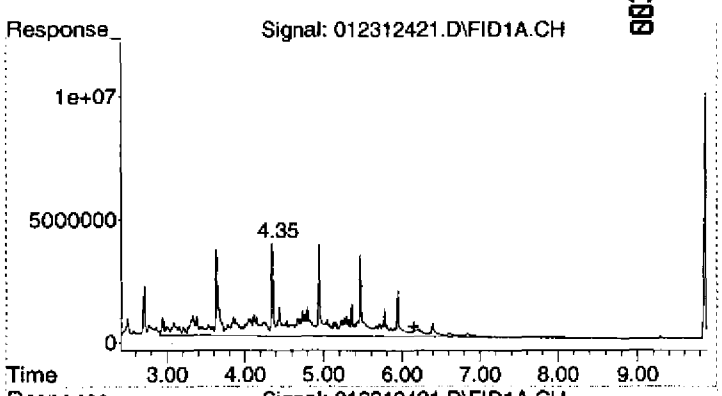
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312421.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 10:55 pm Operator: TD
Sample : 2010031-ICB7 Inst : AG6890-4
Misc : 2A11023 Jet Fuel
ALS Vial : 21 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:55:17 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

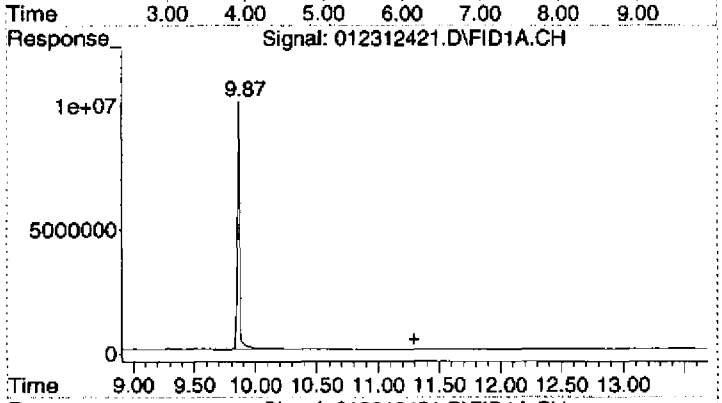
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





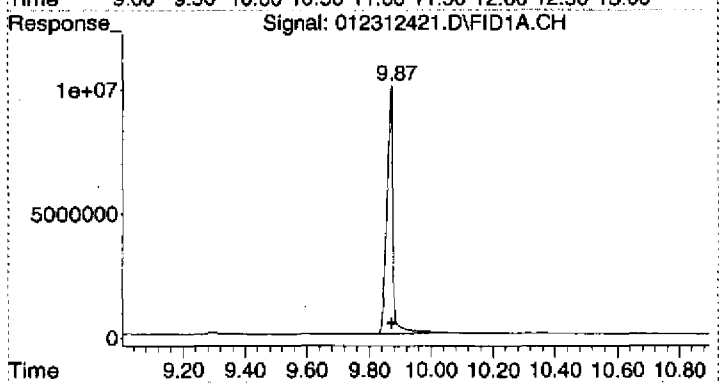
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 1082120927
Conc: 388.68 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 12550961
Conc: 6.91 ug/mL m



#3 Surrogate

R.T.: 9.871 min
Delta R.T.: 0.000 min
Response: 140791599
Conc: 54.88 ug/mL

Quantitation Report (Not Reviewed)

00345

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312422.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 11:26 pm Operator: TD
Sample : 2010031-ICB8 Inst : AG6890-4
Misc : 2A11028 Turpentine
ALS Vial : 22 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:55:21 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	143239115	55.832 ug/mL
Spiked Amount 50.000 Range 60 - 127 Recovery = 111.66%			
Target Compounds			
1) HM Diesel (TPH)	6.15	231665874	83.210 ug/mL
2) H OIL	11.30	11908426	6.559 ug/mL

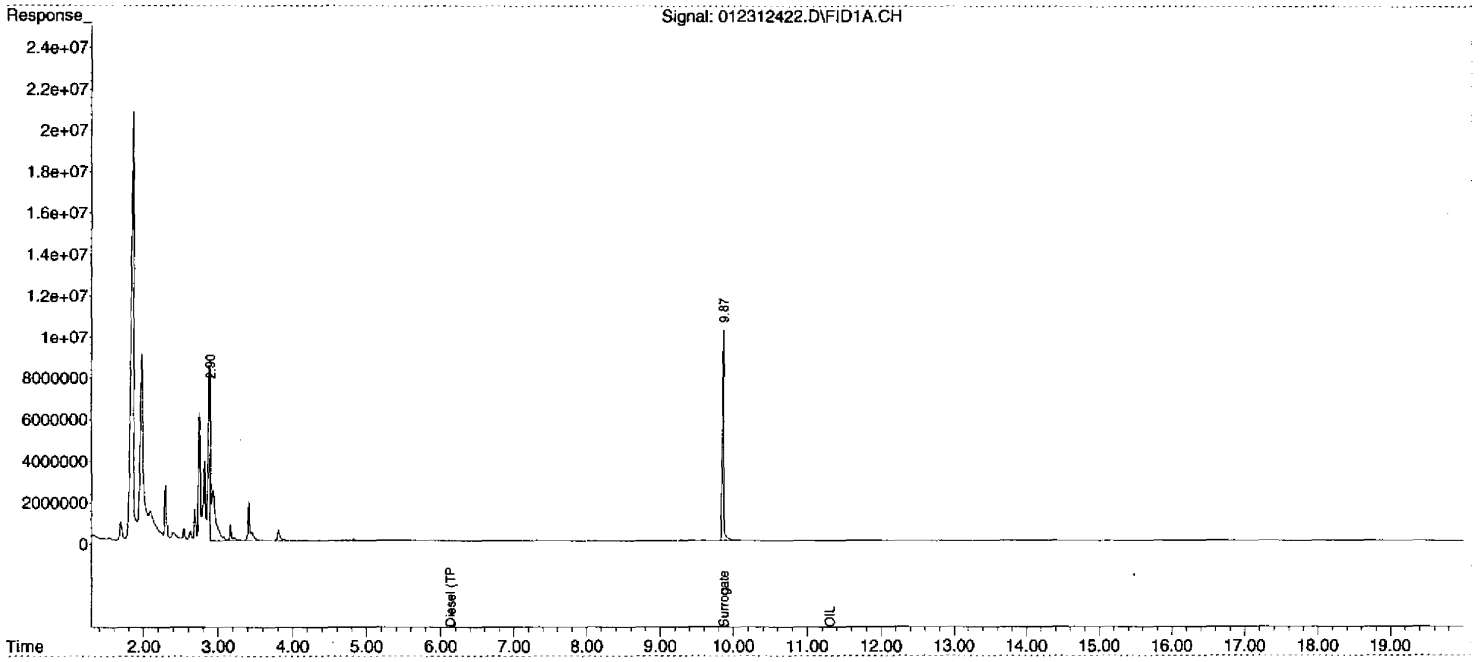
(f)=RT Delta > 1/2 Window (m)=manual int.

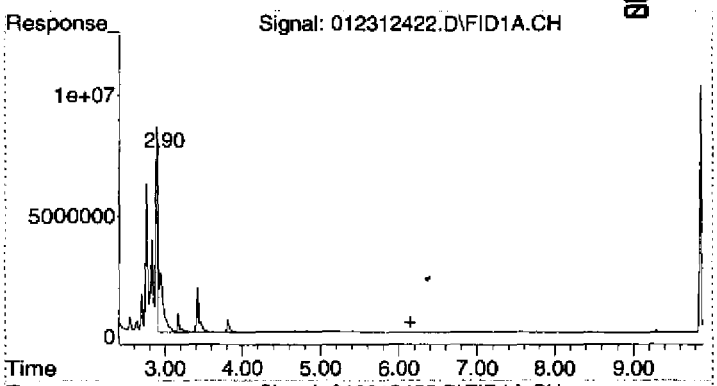
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312422.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 11:26 pm Operator: TD
Sample : 2010031-ICB8 Inst : AG6890-4
Misc : 2A11028 Turpentine
ALS Vial : 22 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:55:21 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

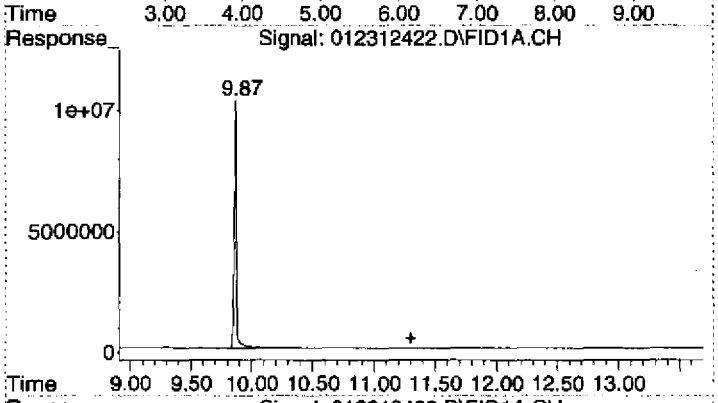
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





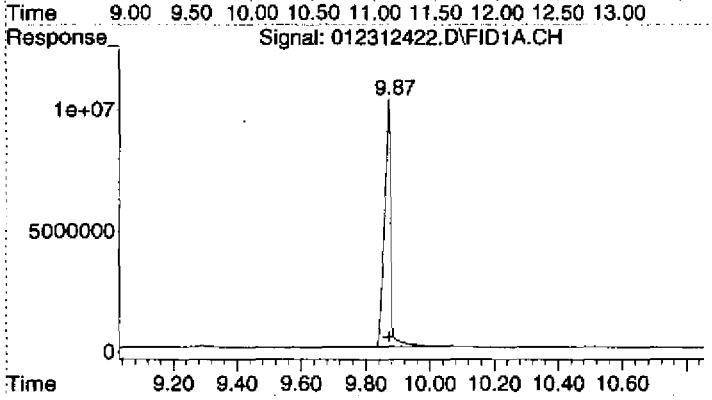
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 231665874
Conc: 83.21 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 11908426
Conc: 6.56 ug/mL m



#3 Surrogate

R.T.: 9.872 min
Delta R.T.: 0.001 min
Response: 143239115
Conc: 55.83 ug/mL

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312423.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 11:56 pm Operator: TD
Sample : 2010031-ICB9 Inst : AG6890-4
Misc : 2A11029 Lacqure Thinner
ALS Vial : 23 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:55:24 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	142869107	55.688 ug/mL
Spiked Amount 50.000 Range 60 - 127 Recovery = 111.38%			
Target Compounds			
1) HM Diesel (TPH)	6.15	14612726	5.249 ug/mL
2) H OIL	11.30	13370353	7.364 ug/mL

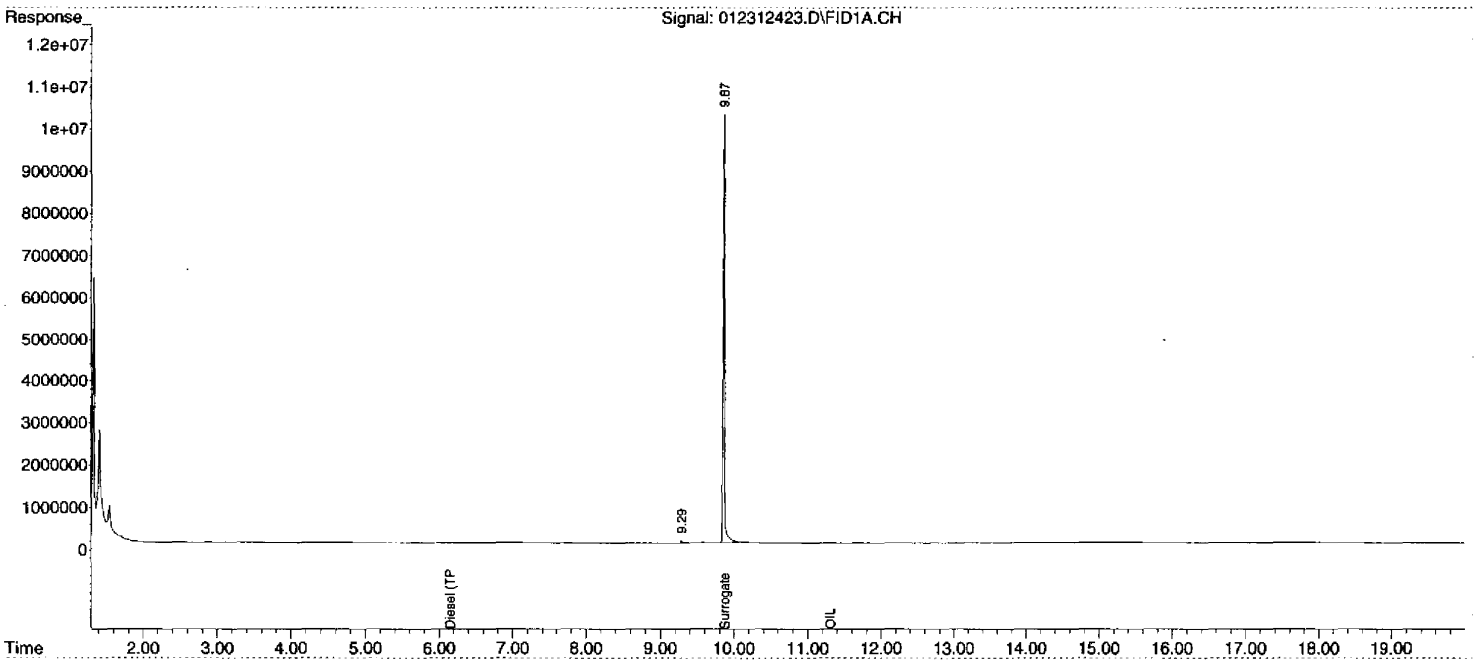
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312423.D
Signal(s) : FID1A.CH
Acq On : 23 Jan 2012 11:56 pm Operator: TD
Sample : 2010031-ICB9 Inst : AG6890-4
Misc : 2A11029 Lacqure Thinner
ALS Vial : 23 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:55:24 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

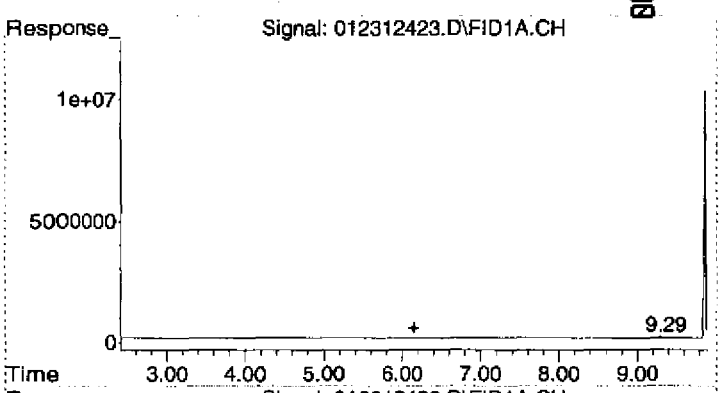
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



08349

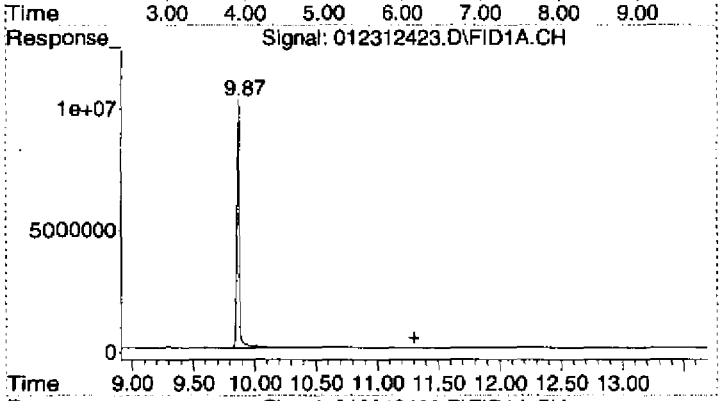
0123124DA.M Tue Jan 24 07:55:25 2012 Page: 2

DIM0275879 DIM0276016



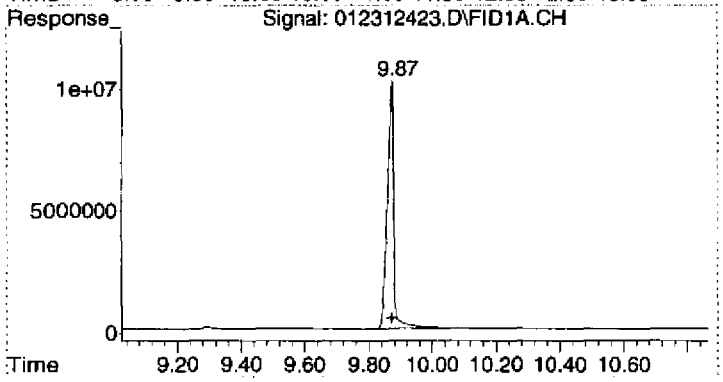
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 14612726
Conc: 5.25 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 13370353
Conc: 7.36 ug/mL m



#3 Surrogate

R.T.: 9.871 min
Delta R.T.: 0.000 min
Response: 142869107
Conc: 55.69 ug/mL

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312424.D
Signal(s) : FID1A.CH
Acq On : 24 Jan 2012 12:27 am Operator: TD
Sample : 2010031-ICBA Inst : AG6890-4
Misc : 2A11025 Stoddard Solvent
ALS Vial : 24 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:55:28 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	132064051	51.476 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery = 102.95%	
Target Compounds			
1) HM Diesel (TPH)	6.15	505118821	181.428 ug/mL
2) H OIL	11.30	13444860	7.405 ug/mL

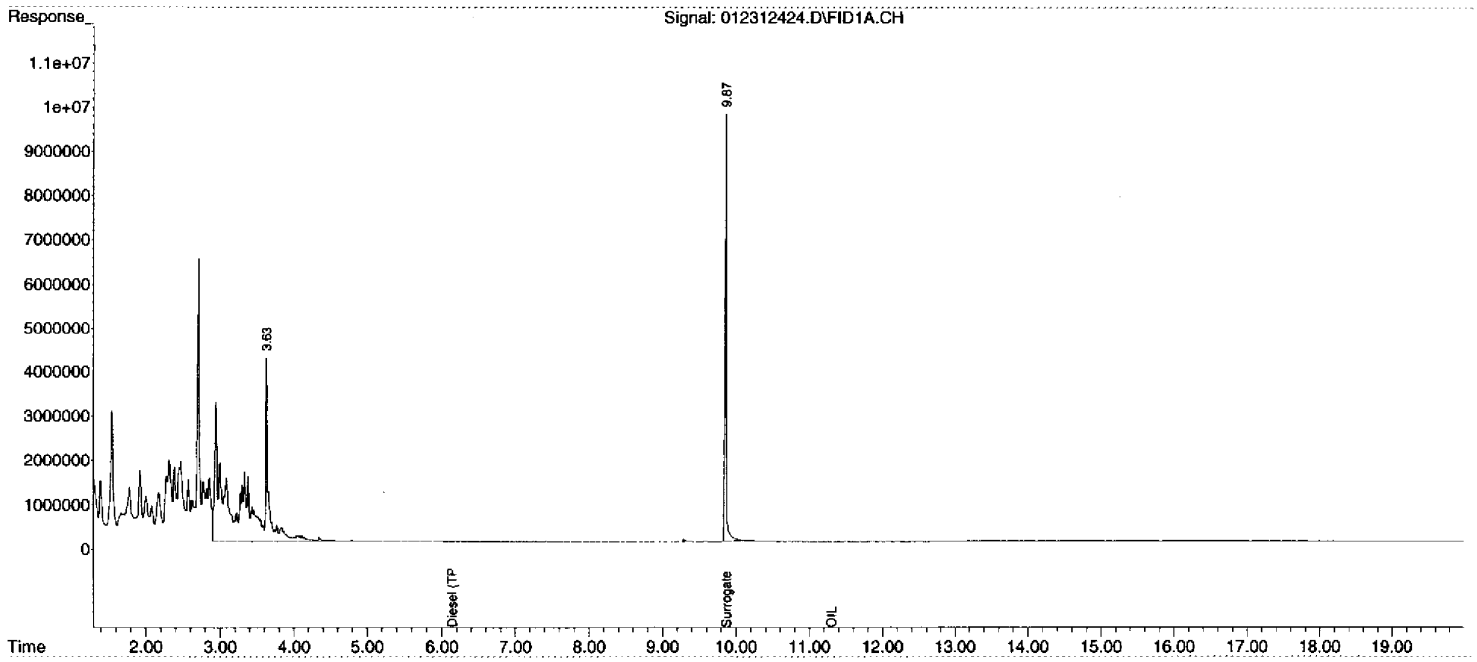
(f)=RT Delta > 1/2 Window (m)=manual int.

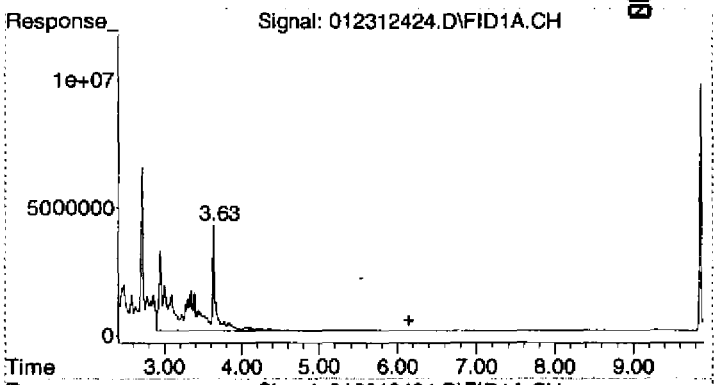
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\0123124DA\
Data File : 012312424.D
Signal(s) : FID1A.CH
Acq On : 24 Jan 2012 12:27 am Operator: TD
Sample : 2010031-ICBA Inst : AG6890-4
Misc : 2A11025 Stoddard Solvent
ALS Vial : 24 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 24 07:55:28 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

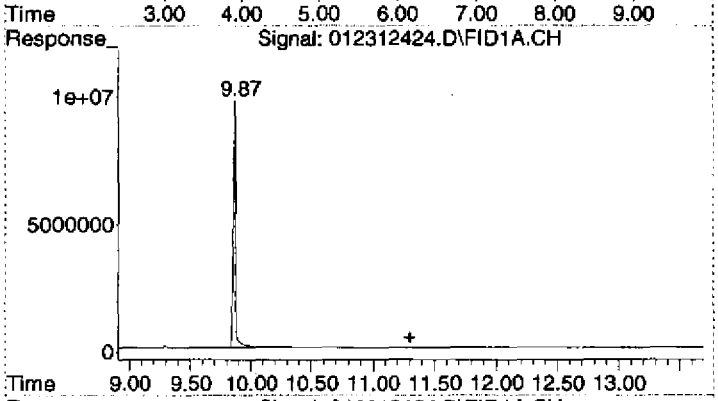
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





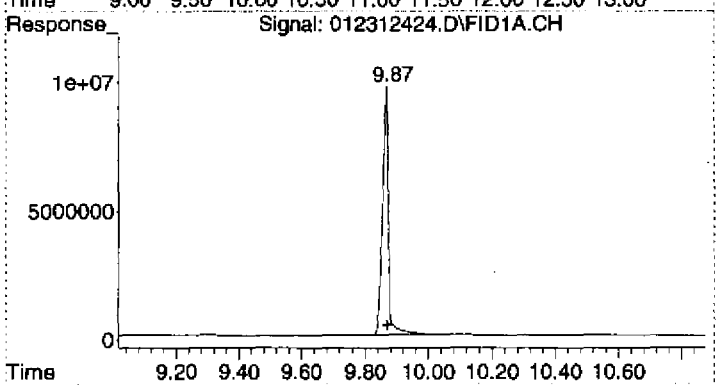
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 505118821
Conc: 181.43 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 13444860
Conc: 7.41 ug/mL m



#3 Surrogate

R.T.: 9.868 min
Delta R.T.: -0.002 min
Response: 132064051
Conc: 51.48 ug/mL

00354

INITIAL CALIBRATION

: 00133

DIM0276021

DIM0275879

Injection Log

Operator: TD
Directory: C:\msdchem\1\2012\DATA\013012DA\

Vial	File Name	Mult	Sample Info	Misc Info		Date Acquired
1	01301201.D	1	2010046-IBL1	2A11003	IB	30 Jan 2012 12:01 pm
2	01301202.D	1	2010046-ICB1	2A11010	RT	30 Jan 2012 12:18 pm
3	01301203.D	1	2010046-CAL1	2A11004	DRO-QLS	30 Jan 2012 12:36 pm
4	01301204.D	1	2010046-CAL2	2A11006	DRO-B	30 Jan 2012 12:54 pm
5	01301205.D	1	2010046-CAL3	2A11005	DRO-CV	30 Jan 2012 1:12 pm
6	01301206.D	1	2010046-CAL4	2A11007	DRO-D	30 Jan 2012 1:30 pm
7	01301207.D	1	2010046-CAL5	2A11008	DRO-E	30 Jan 2012 1:48 pm
8	01301208.D	1	2010046-CAL6	2A11004	OIL-A	30 Jan 2012 2:06 pm
9	01301209.D	1	2010046-CAL7	2A11013	OIL-B	30 Jan 2012 2:25 pm
10	01301210.D	1	2010046-CAL8	2A11012	OIL-CV	30 Jan 2012 2:43 pm
11	01301211.D	1	2010046-CAL9	2A11014	OIL-D	30 Jan 2012 3:01 pm
12	01301212.D	1	2010046-CALA	2A11015	OIL-E	30 Jan 2012 3:19 pm
13	01301213.D	1	2010046-IBL2	2A11003	IB	30 Jan 2012 3:37 pm
14	01301214.D	1	2010046-SCV1	2A11009	DRO SCV	30 Jan 2012 3:55 pm
15	01301215.D	1	2010046-SCV2	2A11019	OIL SCV	30 Jan 2012 4:13 pm
16	01301216.D	1	2010046-ICB2	2A11022	Hydraulic Fluid	30 Jan 2012 4:31 pm
17	01301217.D	1	2010046-ICB3	2A11026	Mineral Spirit	30 Jan 2012 4:49 pm
18	01301218.D	1	2010046-ICB4	2A11027	Naphtha	30 Jan 2012 5:07 pm
19	01301219.D	1	2010046-ICB5	2A11021	GAS	30 Jan 2012 5:25 pm
20	01301220.D	1	2010046-ICB6	1G15010	Kerosene	30 Jan 2012 5:43 pm
21	01301221.D	1	2010046-ICB7	2A11023	Jet Fuel	30 Jan 2012 6:02 pm
22	01301222.D	1	2010046-ICB8	2A11028	Turpentine	30 Jan 2012 6:20 pm
23	01301223.D	1	2010046-ICB9	2A11029	Lacqure Thinner	30 Jan 2012 6:38 pm
24	01301224.D	1	2010046-ICBA	2A11025	Stodard Solvent	30 Jan 2012 6:56 pm

1201006

Response Factor Report AG7890_2

Method Path : C:\msdchem\1\2012\METHOD\
Method File : 013012DROA.M
Title : GC TPH Method
Last Update : Tue Jan 31 09:45:52 2012
Response Via : Initial Calibration

Calibration Files
50 =01301203.D 150 =01301204.D 500 =01301205.D
1250 =01301206.D 4000 =01301207.D OIL1 =01301208.D

		Compound	50	150	500	1250	4000	OIL1	Avg		%RSD
1)	HM	Diesel (TPH)	4.006	3.630	3.163	3.526	3.617		3.588	E6	8.38
2)	H	OIL						1.883	1.915	E6	4.11
3)	S	Surrogate	3.698	3.473	3.358	3.655	3.578		3.552	E6	3.89

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report AG7890_2

Method Path : C:\msdchem\1\2012\METHOD\
Method File : 013012DROA.M
Title : GC TPH Method
Last Update : Tue Jan 31 09:45:52 2012
Response Via : Initial Calibration

Total Cpnds : 3

PK#	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1 HM	Diesel (TPH)	4.080	1.000	A	A	R
2 H	OIL	6.590	1.000	A	A	R
3 S	Surrogate	5.680	1.000	A	A	L

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

013012DROA.M Tue Jan 31 09:58:36 2012

Edit Compounds -- Compound #1 -- Diesel (TPH)

Search by: Ret Time | Name | Index | Find Compound

Compound Database
External Standard Compoun
Diesel (TPH)
OIL
Surrogate

Identification | Calibration | User-Defined | Advanced | Reporting

Name: Diesel (TPH) | Concentration Units: ug/mL | Compound Type: HM

Signals to Be Used for Quantitation

Ret Time: 4.080 | RRT:

Extract signals from: - 1.500 + 1.500 Min %

This is: 2.580 to 5.580 minutes

Quant signal: TIC | % Uncertainty

m/z | Relative Response: Rel

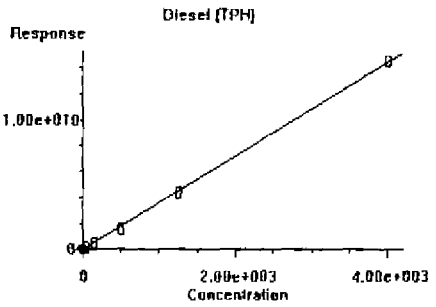
Target: TIC 100.00

Q1	0.00	0.00	20.00
Q2	0.00	0.00	20.00
Q3	0.00	0.00	20.00

Level	Concentration	Response
50	50.000000	200314592.35506
150	150.000000	544460939.14416
500	500.000000	1581624107.1364
1250	1250.000000	4407640392.9995
4000	4000.000000	14468039697.07
OIL1		
OIL2		
OIL3		
OIL4		
OIL5		

Quantitation Options

Quantitation type	Target compound
Sample ISTD Concentration	-1.000000
Measure response by	Area
Identify by	Best RT Match
Maximum number of hits	1
Subtraction Method	Extend Area Quant
Curve Fit	Avg of Response Factors
Weight	Equal weighting



OK | Cancel | Help | Print Calibration Curve | Copy Calibration Curve

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301201.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 12:01 pm
Operator : TD
Sample : 2010046-IBL1
Misc : 2A11003 IB
ALS Vial : 1 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:24 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.695	170061334	47.872 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	95.74%
Target Compounds			
1) HM Diesel (TPH)	4.080	11154728	3.108 ug/mL
2) H OIL	6.590	3238147	1.691 ug/mL

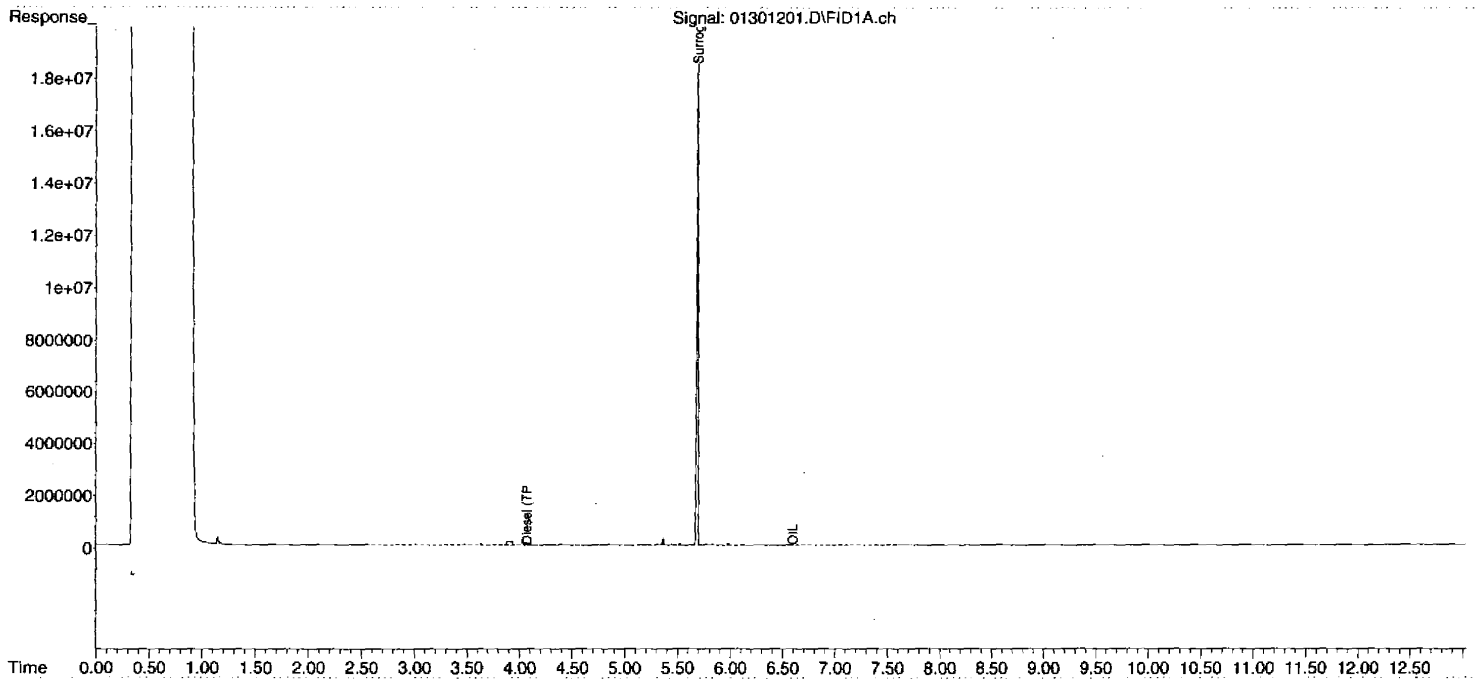
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

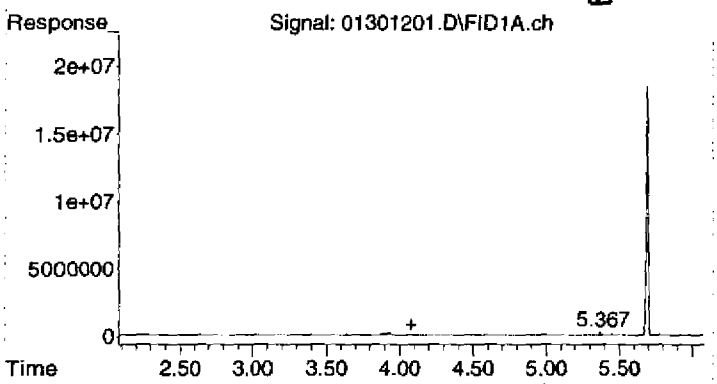
Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301201.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 12:01 pm
Operator : TD
Sample : 2010046-IBL1
Misc : 2A11003 IB
ALS Vial : 1 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:24 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

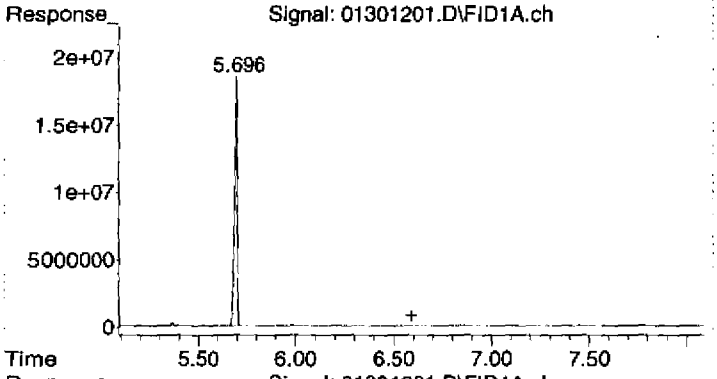


00360
DIM0276027
DIM0275879



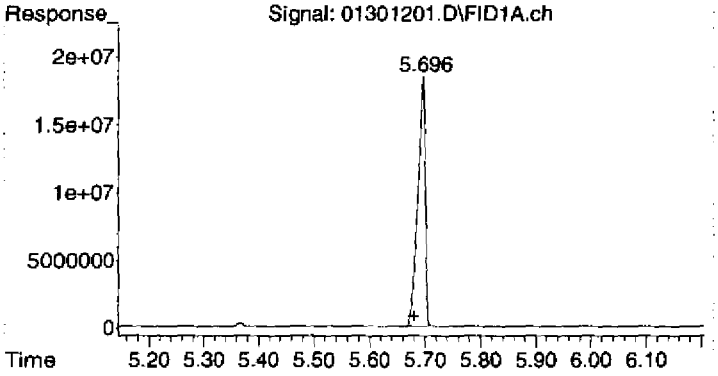
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 11154728
Conc: 3.11 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 3238147
Conc: 1.69 ug/mL



#3 Surrogate

R.T.: 5.695 min
Delta R.T.: 0.015 min
Response: 170061334
Conc: 47.87 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301202.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 12:18 pm
Operator : TD
Sample : 2010046-ICB1
Misc : 2A11010 RT
ALS Vial : 2 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:28 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.674	63016276	17.739 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	35.48%#
Target Compounds			
1) HM Diesel (TPH)	4.080	482105677	134.348 ug/mL
2) H OIL	6.590	451958354	236.025 ug/mL

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

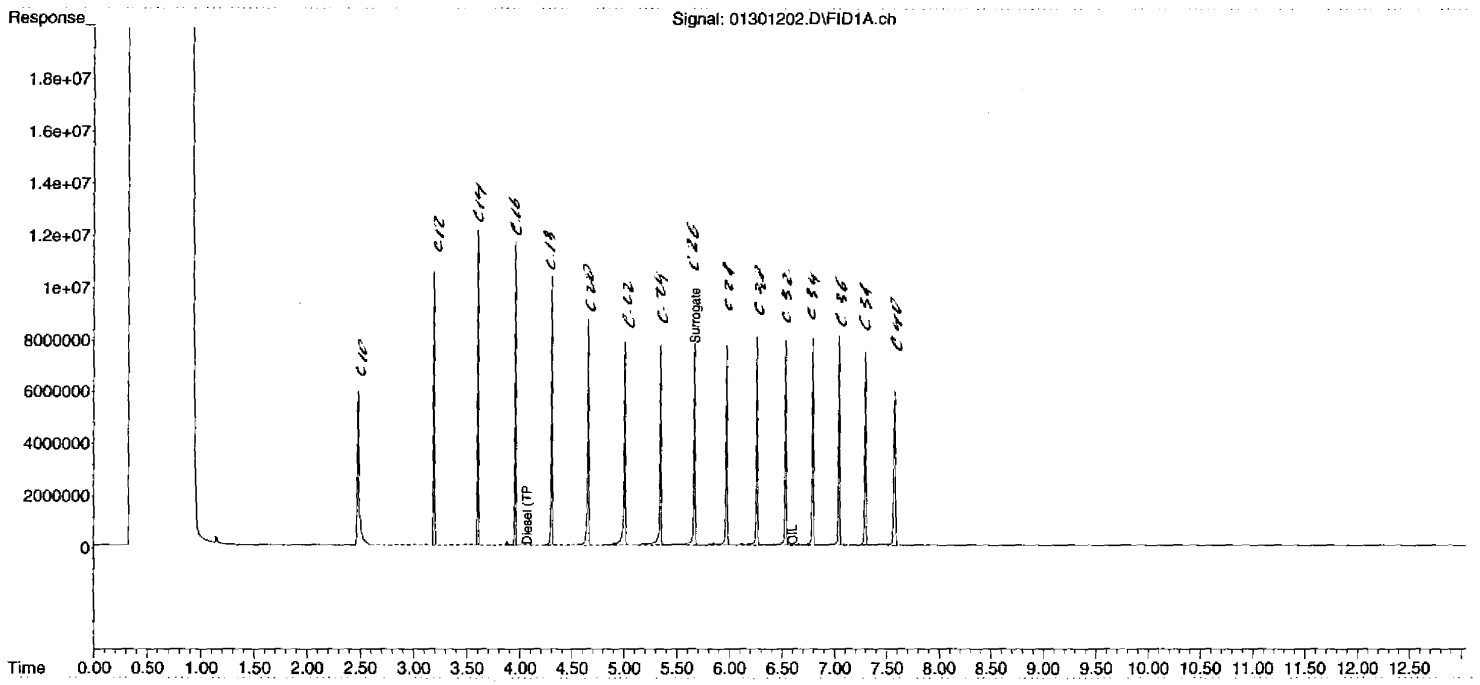
DIM0276029

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301202.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 12:18 pm
Operator : TD
Sample : 2010046-ICB1
Misc : 2A11010 RT
ALS Vial : 2 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:28 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

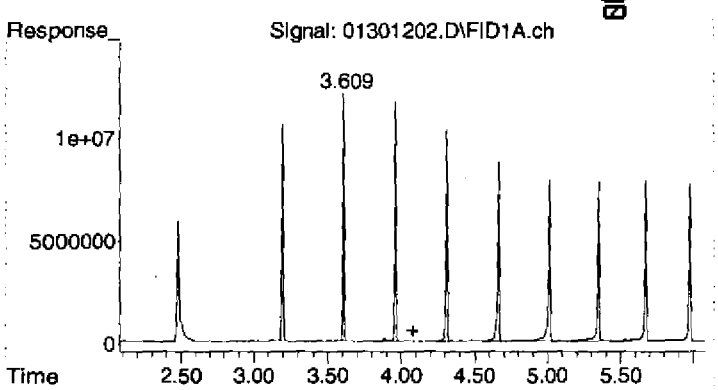
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



00363

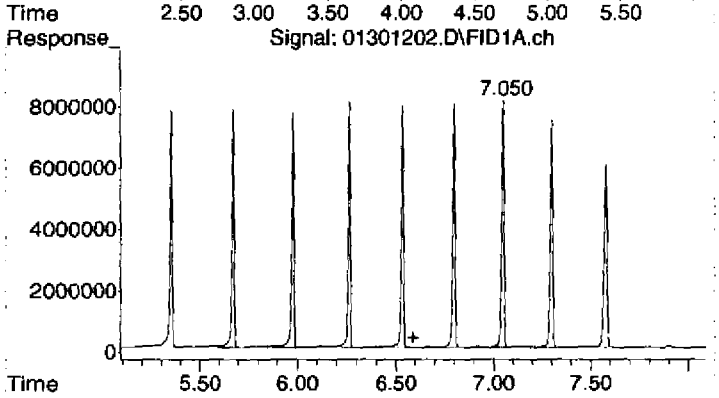
DIM0276030

DIM0275879



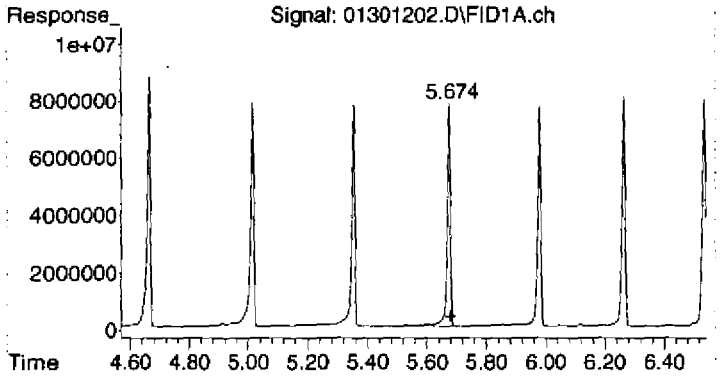
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 482105677
Conc: 134.35 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 451958354
Conc: 236.02 ug/mL



#3 Surrogate

R.T.: 5.674 min
Delta R.T.: -0.005 min
Response: 63016276
Conc: 17.74 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301203.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 12:36 pm
Operator : TD
Sample : 2010046-CAL1
Misc : 2A11004 DRO-QLS
ALS Vial : 3 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:31 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.670	36984079	9.197 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	18.39%#
Target Compounds			
1) HM Diesel (TPH)	4.080	200314592	58.211 ug/mL
2) H OIL	6.590	1833888	1.107 ug/mL

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

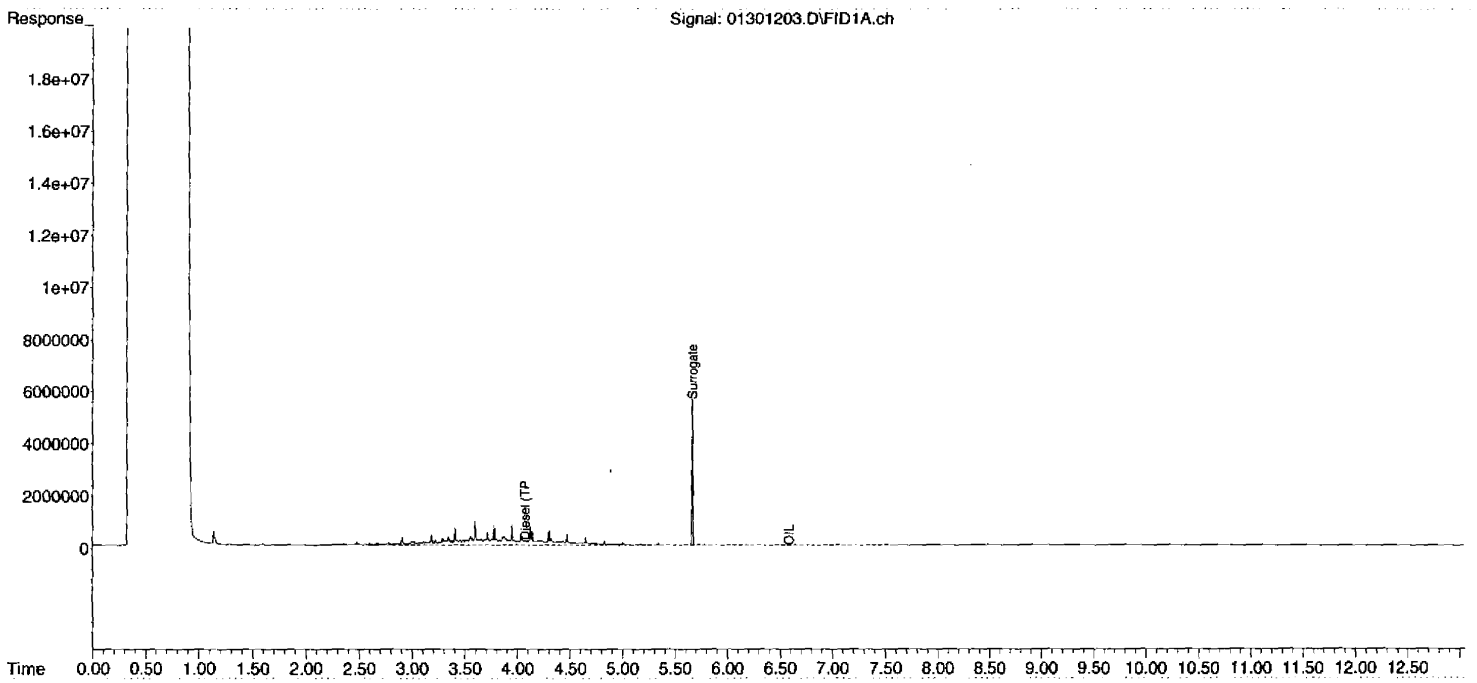
DIM0276032

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301203.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 12:36 pm
Operator : TD
Sample : 2010046-CAL1
Misc : 2A11004 DRO-QLS
ALS Vial : 3 Sample Multiplier: 1

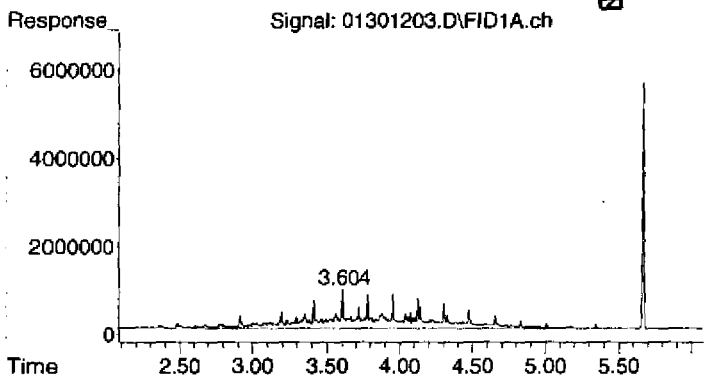
Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:31 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



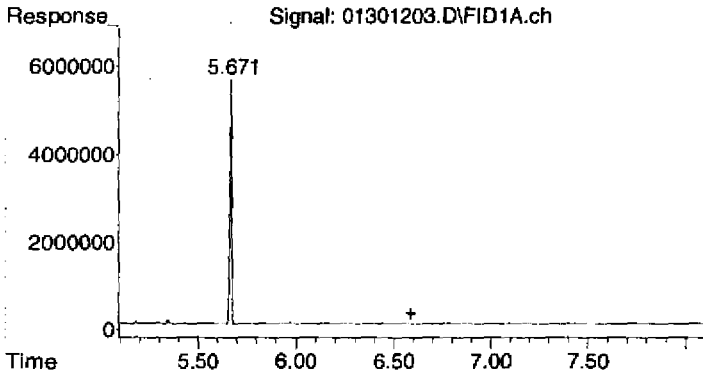
DIM0276033

DIM0275879



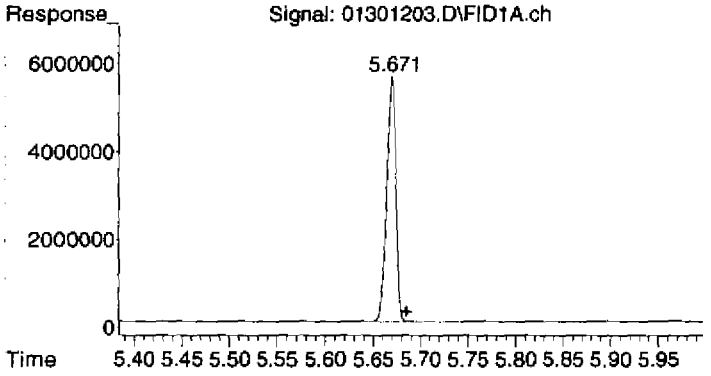
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 200314592
Conc: 58.21 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1833888
Conc: 1.11 ug/mL



#3 Surrogate

R.T.: 5.670 min
Delta R.T.: -0.015 min
Response: 36984079
Conc: 9.20 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301204.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 12:54 pm
Operator : TD
Sample : 2010046-CAL2
Misc : 2A11006 DRO-B
ALS Vial : 4 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:36 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.675	86828290	21.592 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	43.18%#
Target Compounds			
1) HM Diesel (TPH)	4.080	544460939	158.218 ug/mL
2) H OIL	6.590	2396182	1.447 ug/mL

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

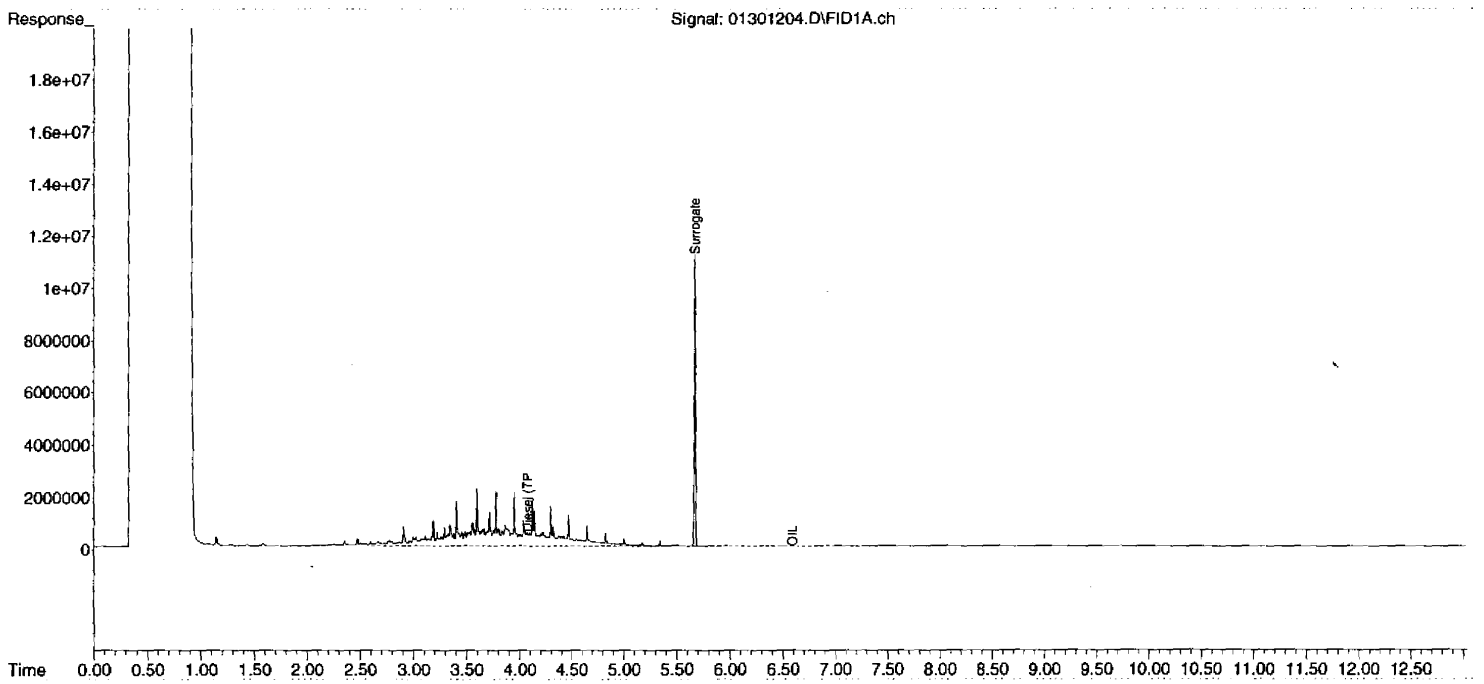
DIM0276035

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301204.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 12:54 pm
Operator : TD
Sample : 2010046-CAL2
Misc : 2A11006 DRO-B
ALS Vial : 4 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:36 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

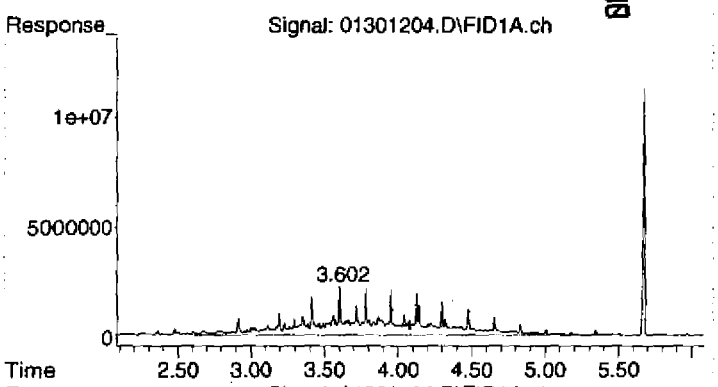
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



00369

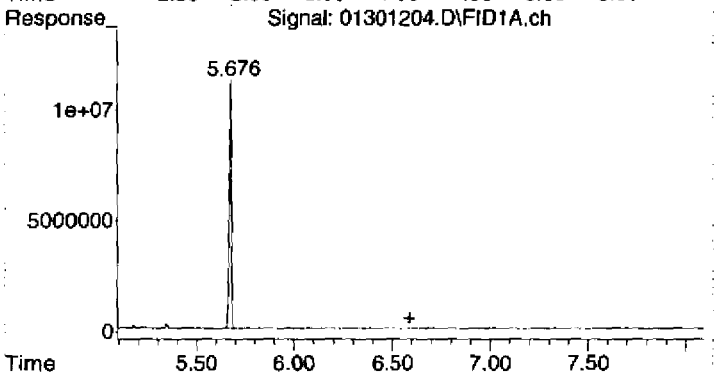
DIM0276036

DIM0275879



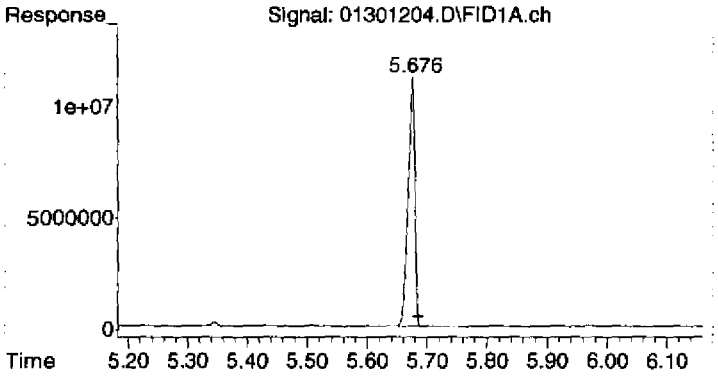
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 544460939
Conc: 158.22 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 2396182
Conc: 1.45 ug/mL



#3 Surrogate

R.T.: 5.675 min
Delta R.T.: -0.010 min
Response: 86828290
Conc: 21.59 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301205.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 1:12 pm
Operator : TD
Sample : 2010046-CAL3
Misc : 2A11005 DRO-CV
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:40 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.680	167895701	41.751 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	83.50%
Target Compounds			
1) HM Diesel (TPH)	4.080	1581624107	459.613 ug/mL
2) H OIL	6.590	3879417	2.342 ug/mL

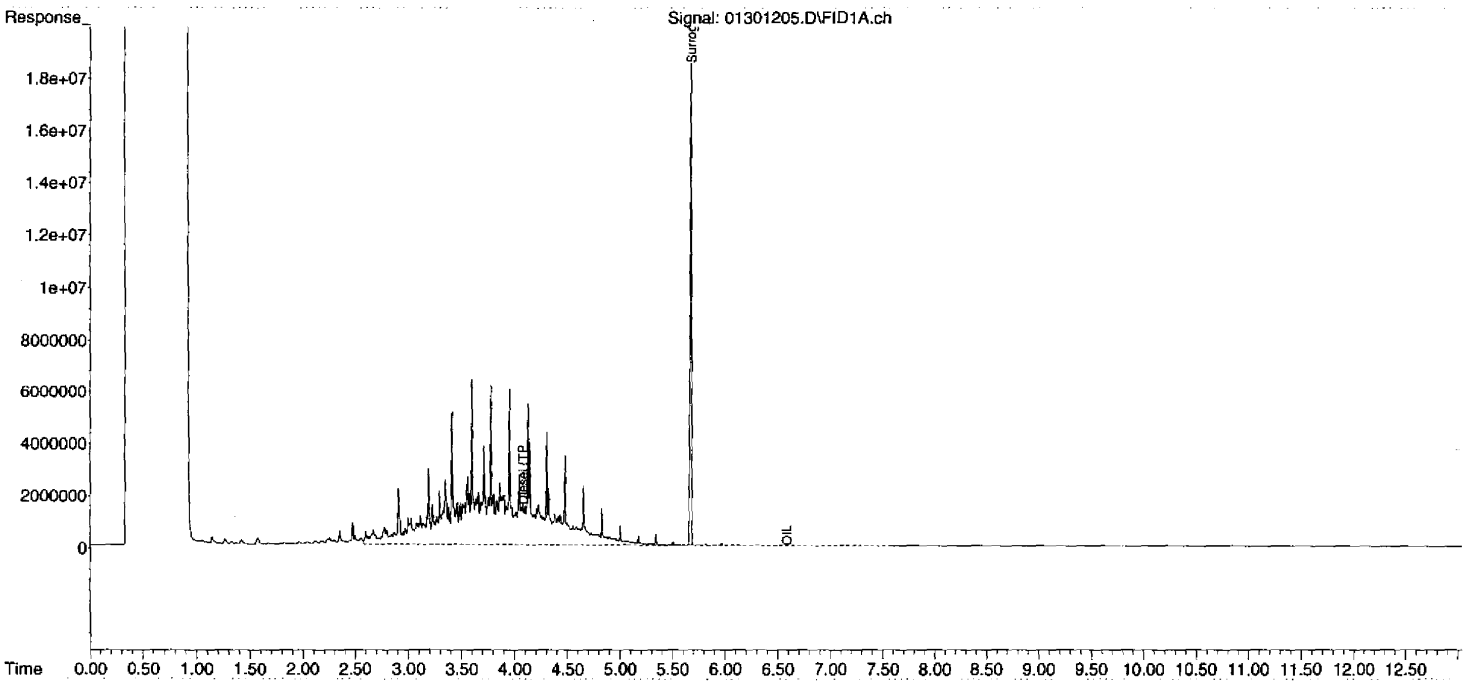
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301205.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 1:12 pm
Operator : TD
Sample : 2010046-CAL3
Misc : 2A11005 DRO-CV
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:40 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

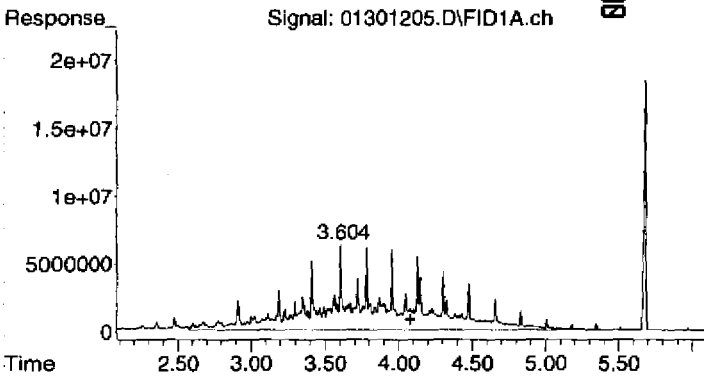
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



00372

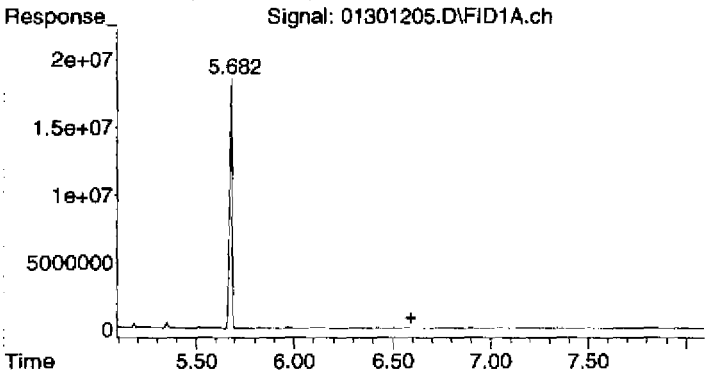
DIM0276039

DIM0275879



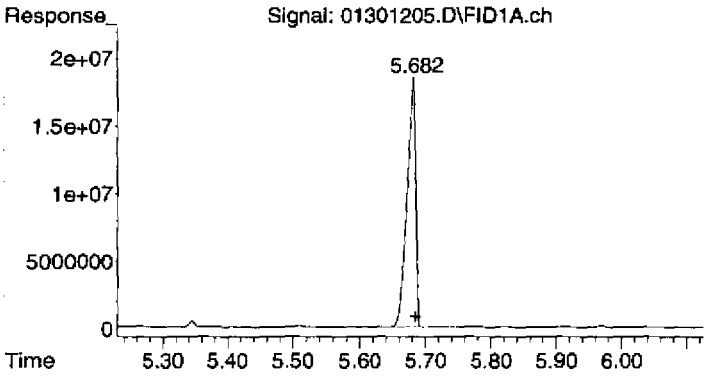
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1581624107
Conc: 459.61 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 3879417
Conc: 2.34 ug/mL



#3 Surrogate

R.T.: 5.680 min
Delta R.T.: -0.005 min
Response: 167895701
Conc: 41.75 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301206.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 1:30 pm
Operator : TD
Sample : 2010046-CAL4
Misc : 2A11007 DRO-D
ALS Vial : 6 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:44 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.685	274098828	68.160 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	136.32%#
Target Compounds			
1) HM Diesel (TPH)	4.080	4407640393	1280.841 ug/mL
2) H OIL	6.590	13182105	7.958 ug/mL

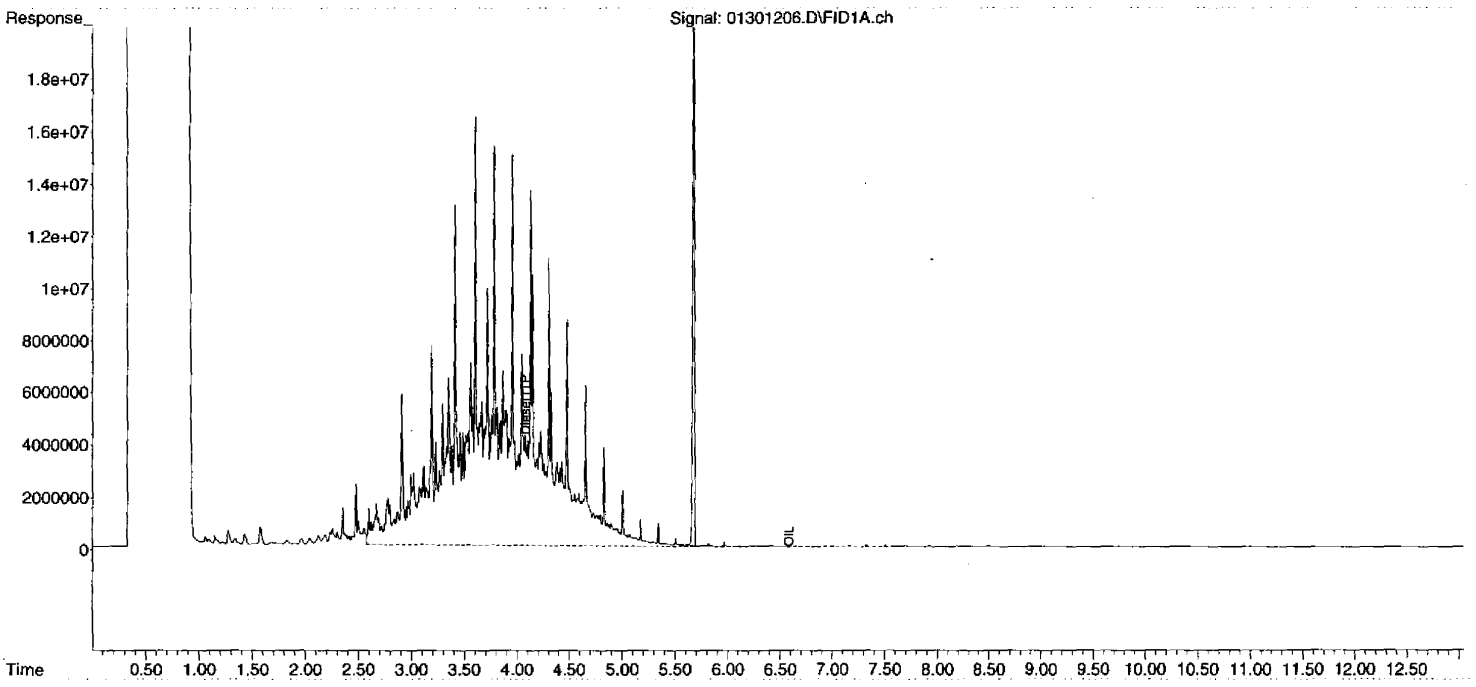
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301206.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 1:30 pm
Operator : TD
Sample : 2010046-CAL4
Misc : 2A11007 DRO-D
ALS Vial : 6 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:44 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

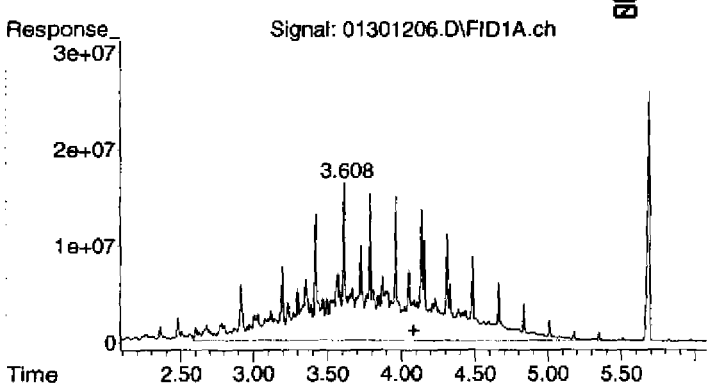
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



00375

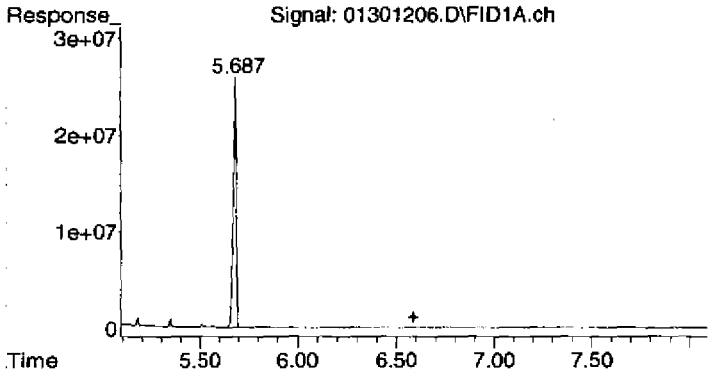
DIM0276042

DIM0275879



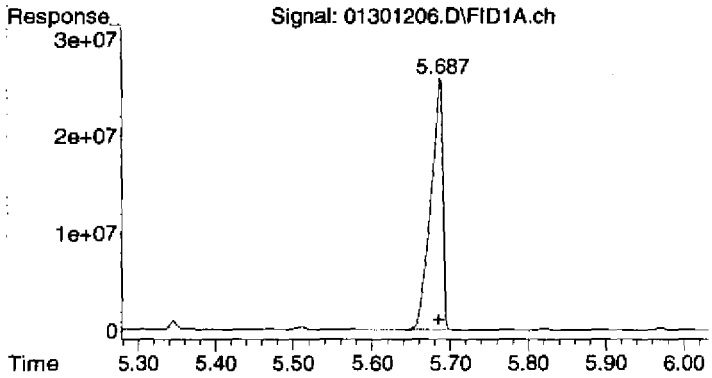
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 4407640393
Conc: 1280.84 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 13182105
Conc: 7.96 ug/mL



#3 Surrogate

R.T.: 5.685 min
Delta R.T.: 0.000 min
Response: 274098828
Conc: 68.16 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301207.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 1:48 pm
Operator : TD
Sample : 2010046-CAL5
Misc : 2A11008 DRO-E
ALS Vial : 7 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:48 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.689	357793068	88.973 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	177.95%#
Target Compounds			
1) HM Diesel (TPH)	4.080	14468099897	4204.367 ug/mL
2) H OIL	6.590	31531096	19.035 ug/mL

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

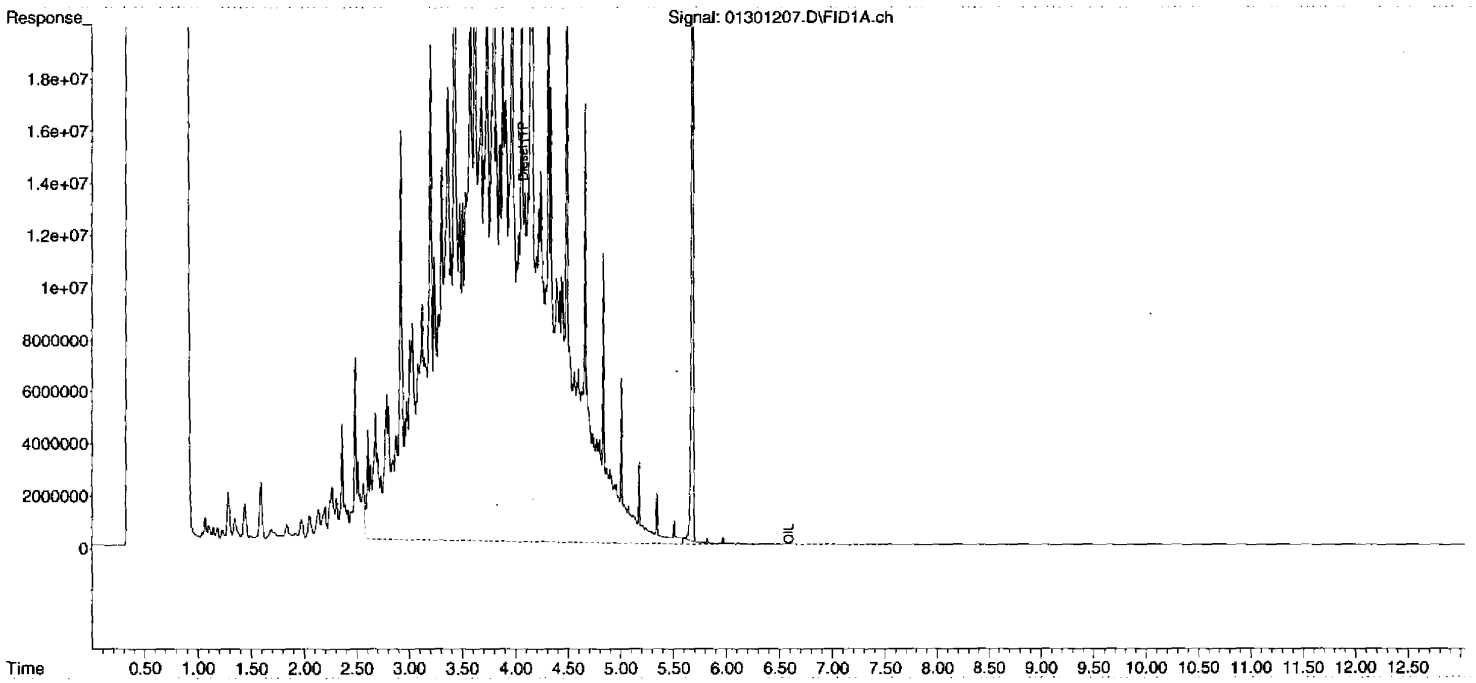
DIM0276044
DIM0275879

Quantitation Report (Not Reviewed)

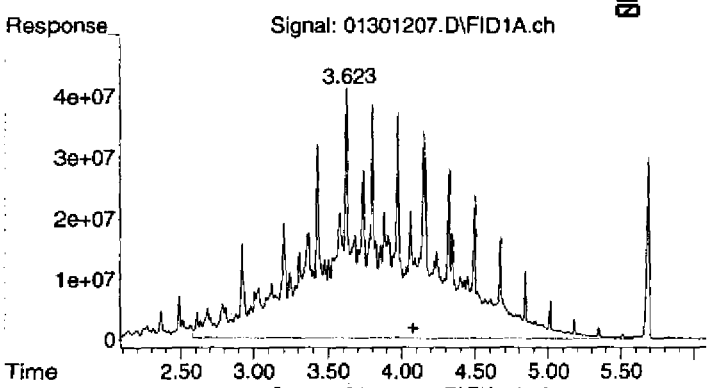
Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301207.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 1:48 pm
Operator : TD
Sample : 2010046-CAL5
Misc : 2A11008 DRO-E
ALS Vial : 7 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:48 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

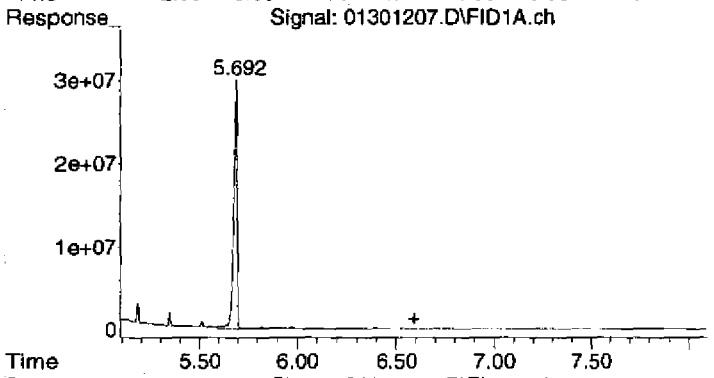


00378



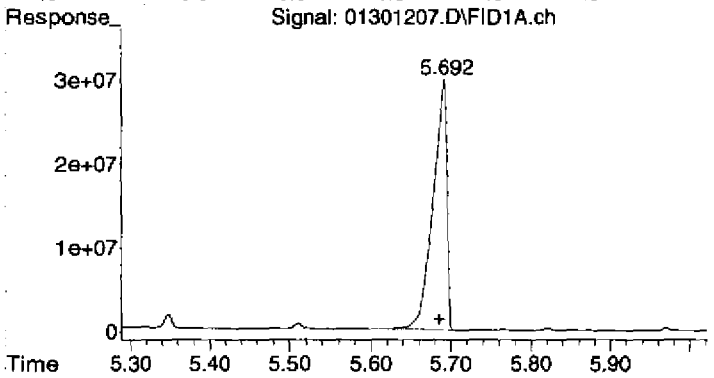
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 14468099897
Conc: 4204.37 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 31531096
Conc: 19.03 ug/mL



#3 Surrogate

R.T.: 5.689 min
Delta R.T.: 0.004 min
Response: 357793068
Conc: 88.97 ug/mL

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301208.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:06 pm
Operator : TD
Sample : 2010046-CAL6
Misc : 2A11004 OIL-A
ALS Vial : 8 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:40:50 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.680	157568506	39.183 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	78.37%
Target Compounds			
1) HM Diesel (TPH)	4.080	215783563	62.706 ug/mL
2) H OIL	6.590	376682402	227.394 ug/mLm

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

MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-31-12
Manual integration(s) reviewed by:
Reviewer: Th Date: 01/31/12

DIM0276047

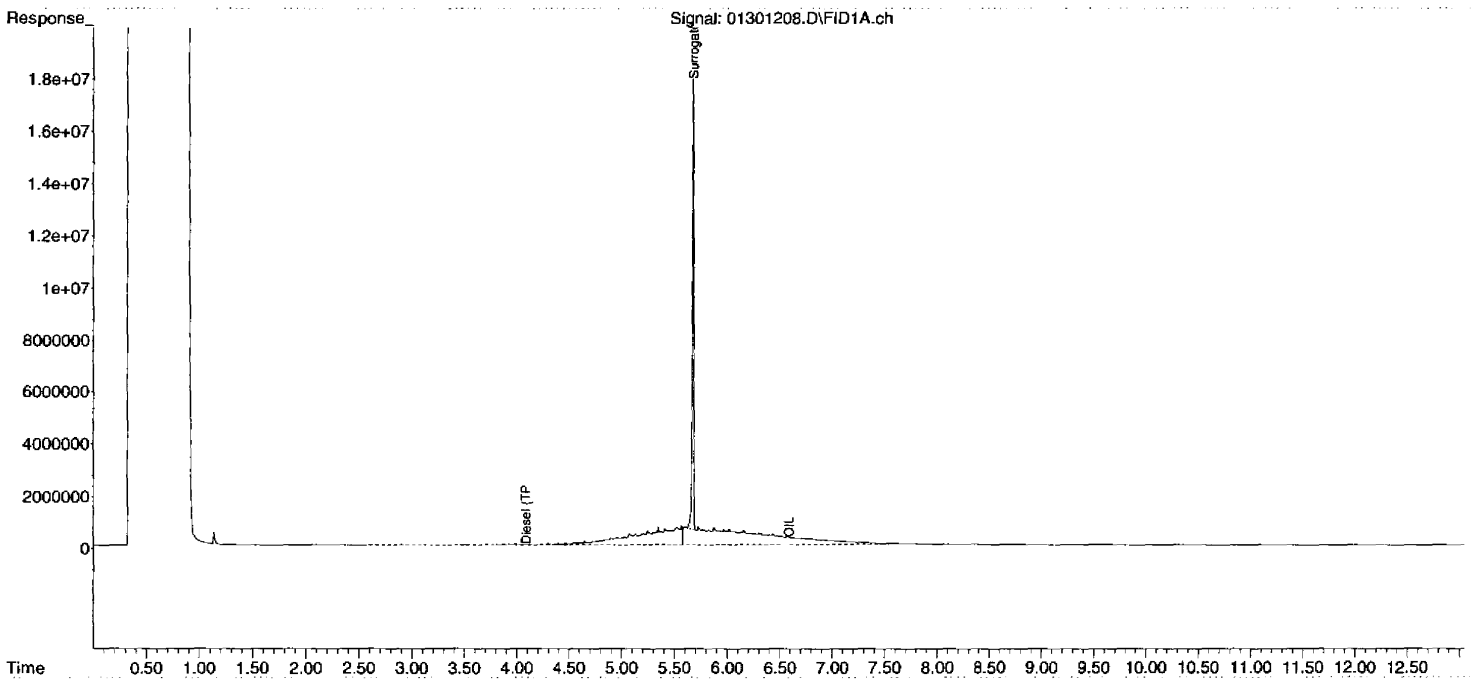
DIM0275879

Quantitation Report (QT Reviewed)

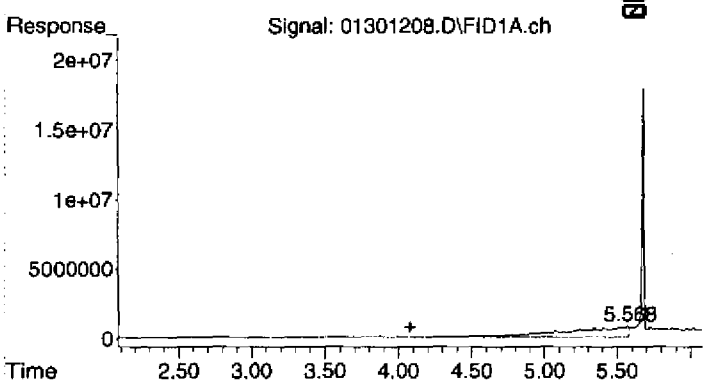
Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301208.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:06 pm
Operator : TD
Sample : 2010046-CAL6
Misc : 2A11004 OIL-A
ALS Vial : 8 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:40:50 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

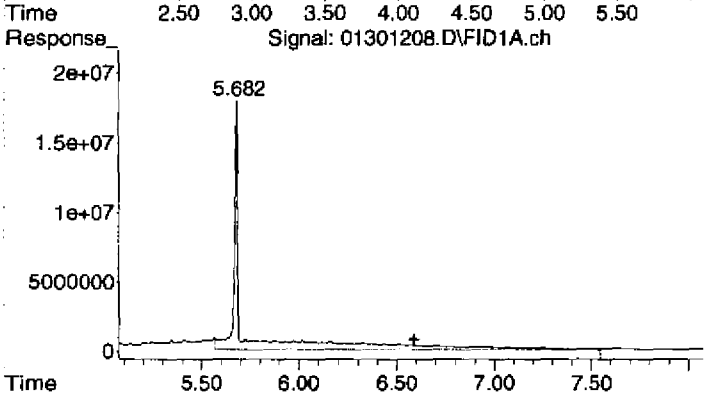


00381



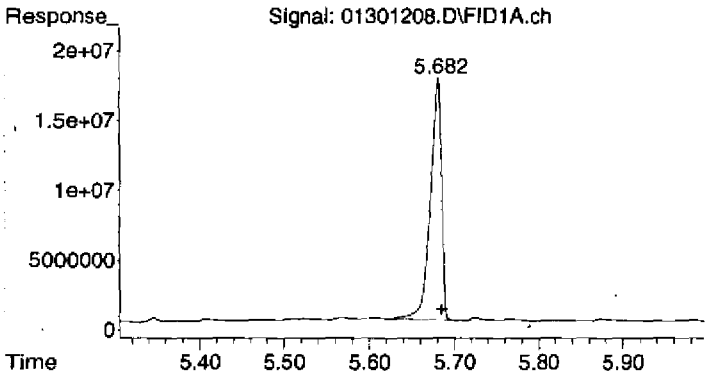
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 215783563
Conc: 62.71 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 376682402
Conc: 227.39 ug/mL m



#3 Surrogate

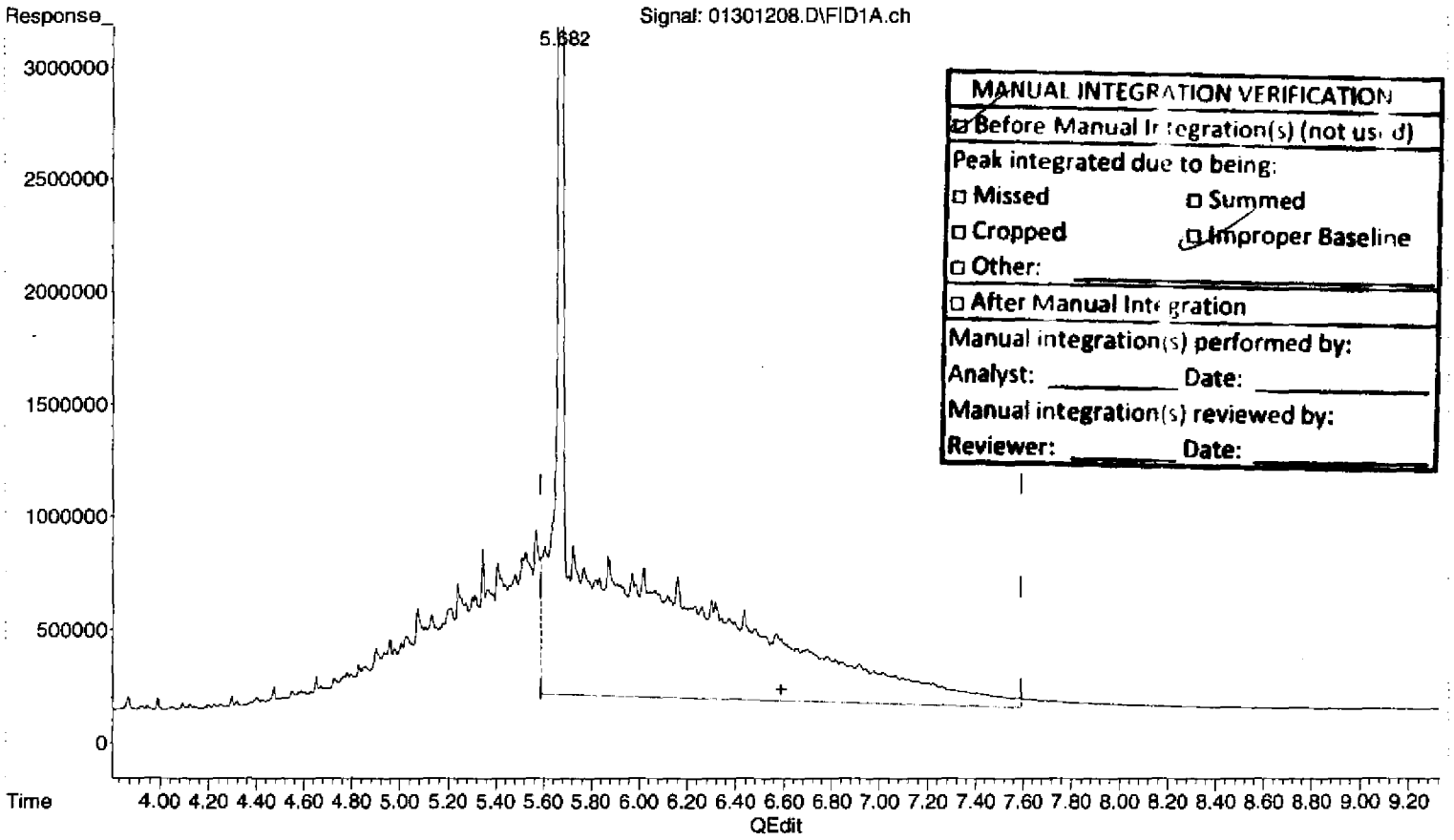
R.T.: 5.680 min
Delta R.T.: -0.005 min
Response: 157568506
Conc: 39.18 ug/mL

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301208.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:06 pm
Operator : TD
Sample : 2010046-CAL6
Misc : 2A11004 OIL-A
ALS Vial : 8 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:52 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☑ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

(2) OIL (H)

6.590min 201.886 ug/mL

response 334427629

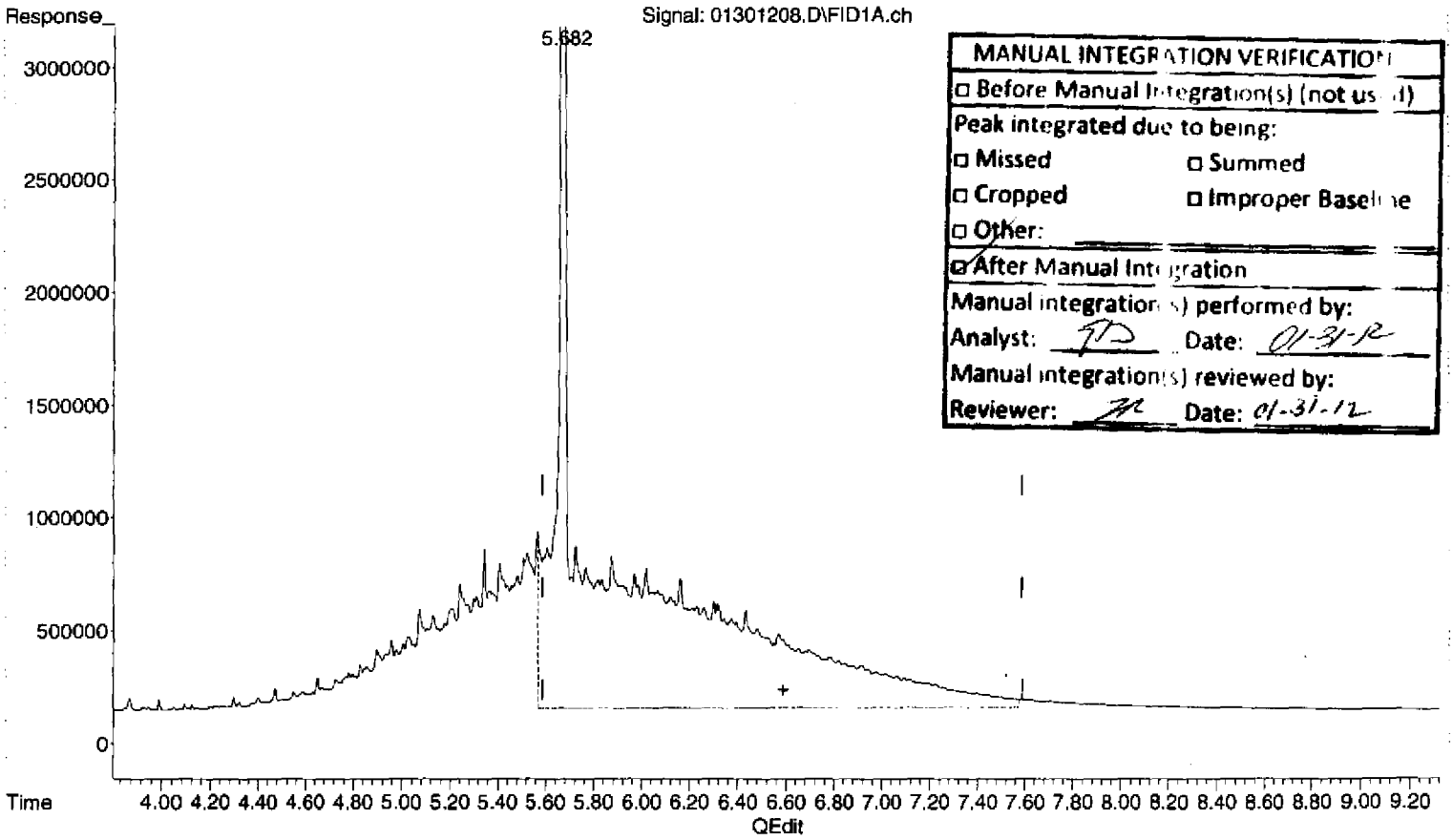
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301208.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:06 pm
Operator : TD
Sample : 2010046-CAL6
Misc : 2A11004 OIL-A
ALS Vial : 8 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:52 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-31-12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 01-31-12

(2) OIL (H)
6.590min 227.394 ug/mL m
response 376682402

(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:40:53 2012

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301208.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:06 pm
Operator : TD
Sample : 2010046-CAL6
Misc : 2A11004 OIL-A
ALS Vial : 8 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:52 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.680	157568506	39.183 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	78.37%
Target Compounds			
1) HM Diesel (TPH)	4.080	215783563	62.706 ug/mL
2) H OIL	6.590	334427629	201.886 ug/mL

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

MANUAL INTEGRATION VERIFICATION	
☑ Before Manual Integration	(not used)
Peak integrated due to being	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other: _____	
☐ After Manual Integration	
Manual integration(s) performed by:	
Analyst: _____	Date: _____
Manual integration(s) reviewed by:	
Reviewer: _____	Date: _____

00164

DIM0276052

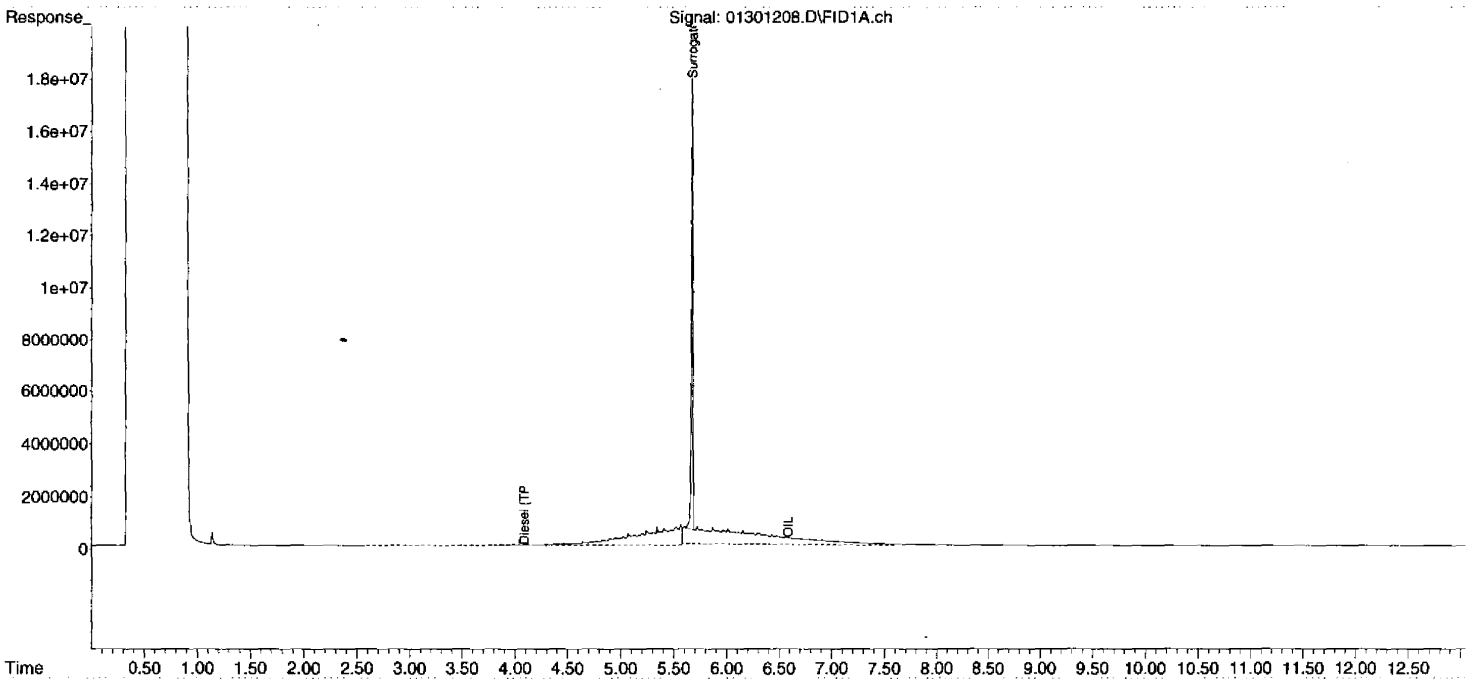
DIM0275879

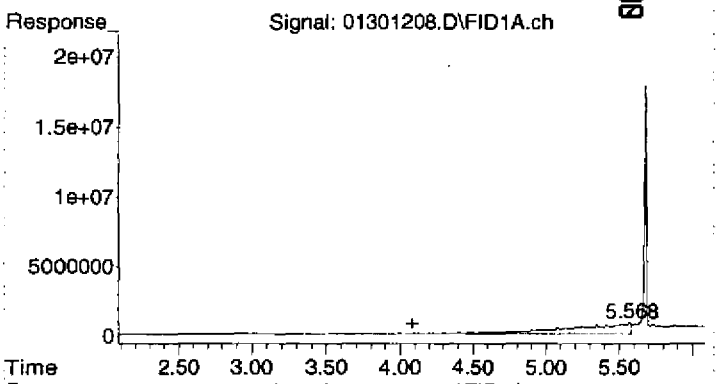
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301208.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:06 pm
Operator : TD
Sample : 2010046-CAL6
Misc : 2A11004 OIL-A
ALS Vial : 8 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:52 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

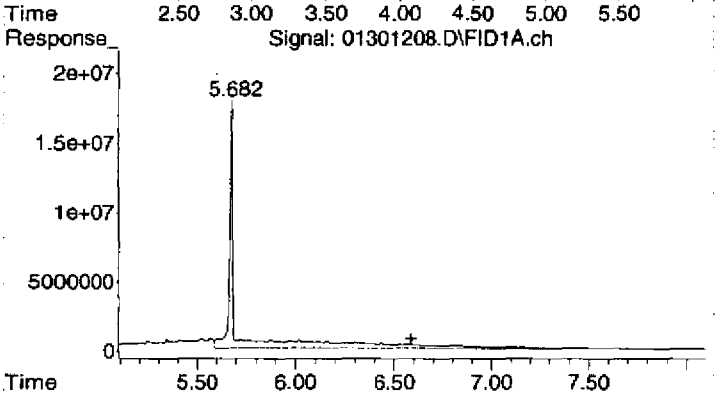
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





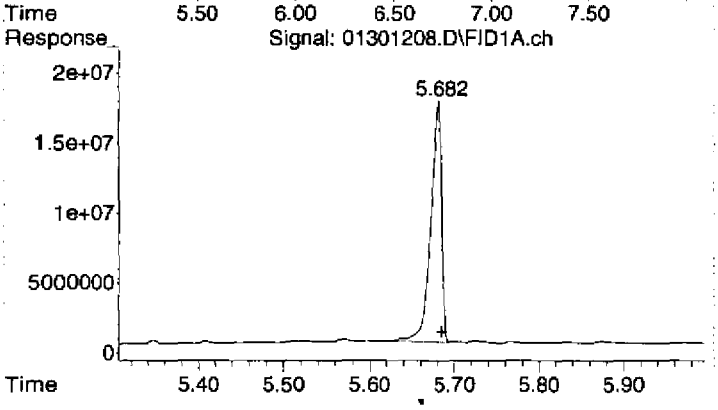
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 215783563
Conc: 62.71 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 334427629
Conc: 201.89 ug/mL



#3 Surrogate

R.T.: 5.680 min
Delta R.T.: -0.005 min
Response: 157568506
Conc: 39.18 ug/mL

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301209.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:25 pm
Operator : TD
Sample : 2010046-CAL7
Misc : 2A11013 OIL-B
ALS Vial : 9 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:41:24 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.684	172490443	42.893 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	85.79%
Target Compounds			
1) HM Diesel (TPH)	4.080	445604588	129.491 ug/mL
2) H OIL	6.590	778108292	469.726 ug/mLm

(m)=manual int.

(f)=RT Delta > 1/2 Window

MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peaks integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-31-12
Manual integration(s) reviewed by
Reviewer: Date: 01-31-12

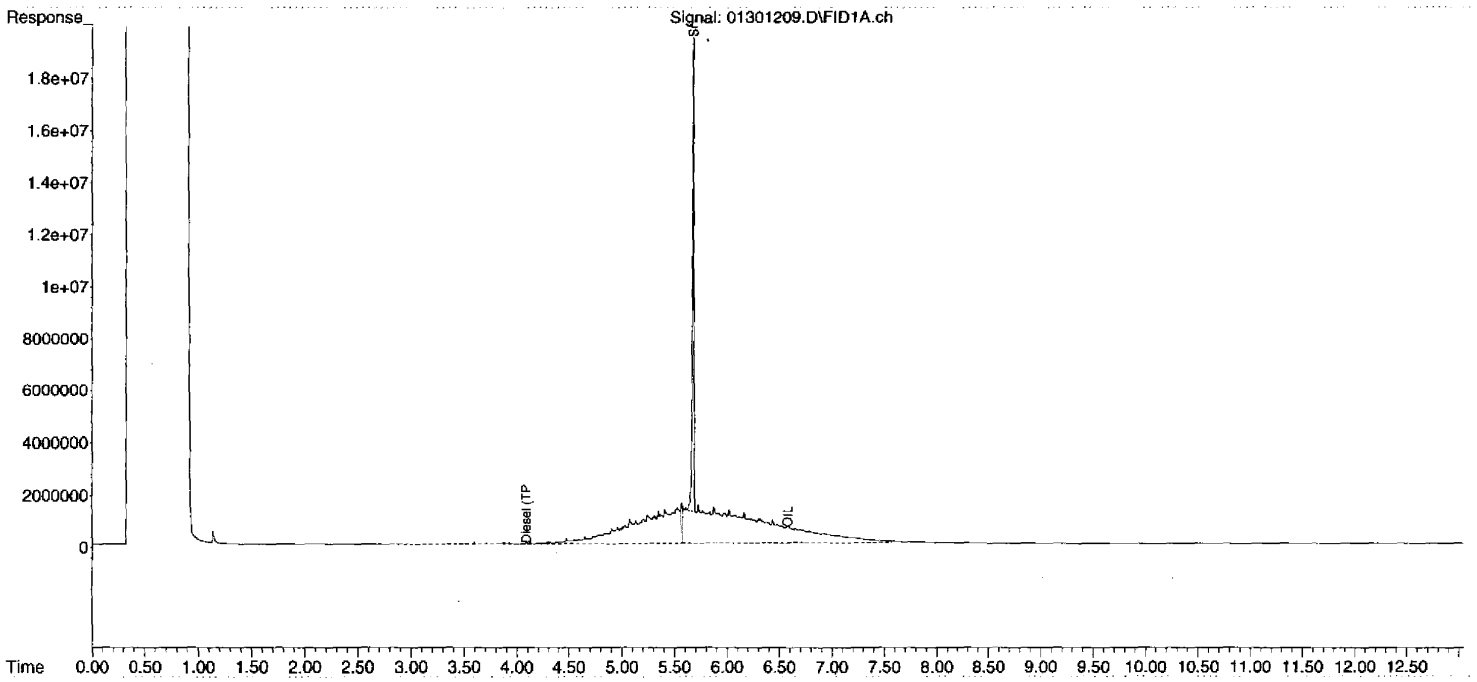
013012DROA.M Tue Jan 31 09:41:33 2012

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301209.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:25 pm
Operator : TD
Sample : 2010046-CAL7
Misc : 2A11013 OIL-B
ALS Vial : 9 Sample Multiplier: 1

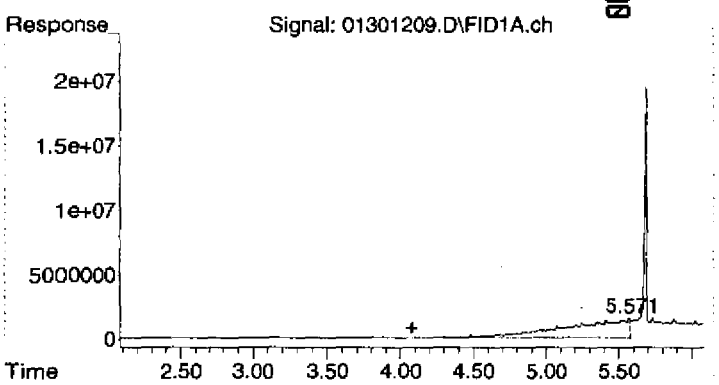
Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:41:24 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



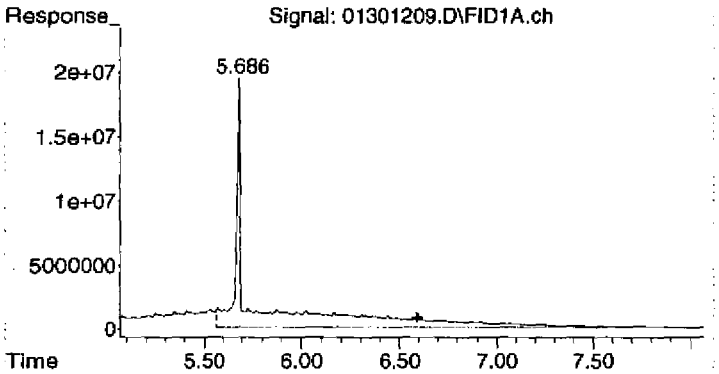
DIM0276056

DIM0275879



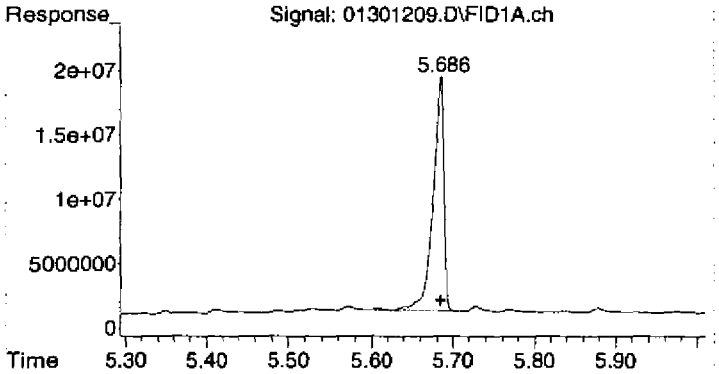
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 445604588
Conc: 129.49 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 778108292
Conc: 469.73 ug/mL m



#3 Surrogate

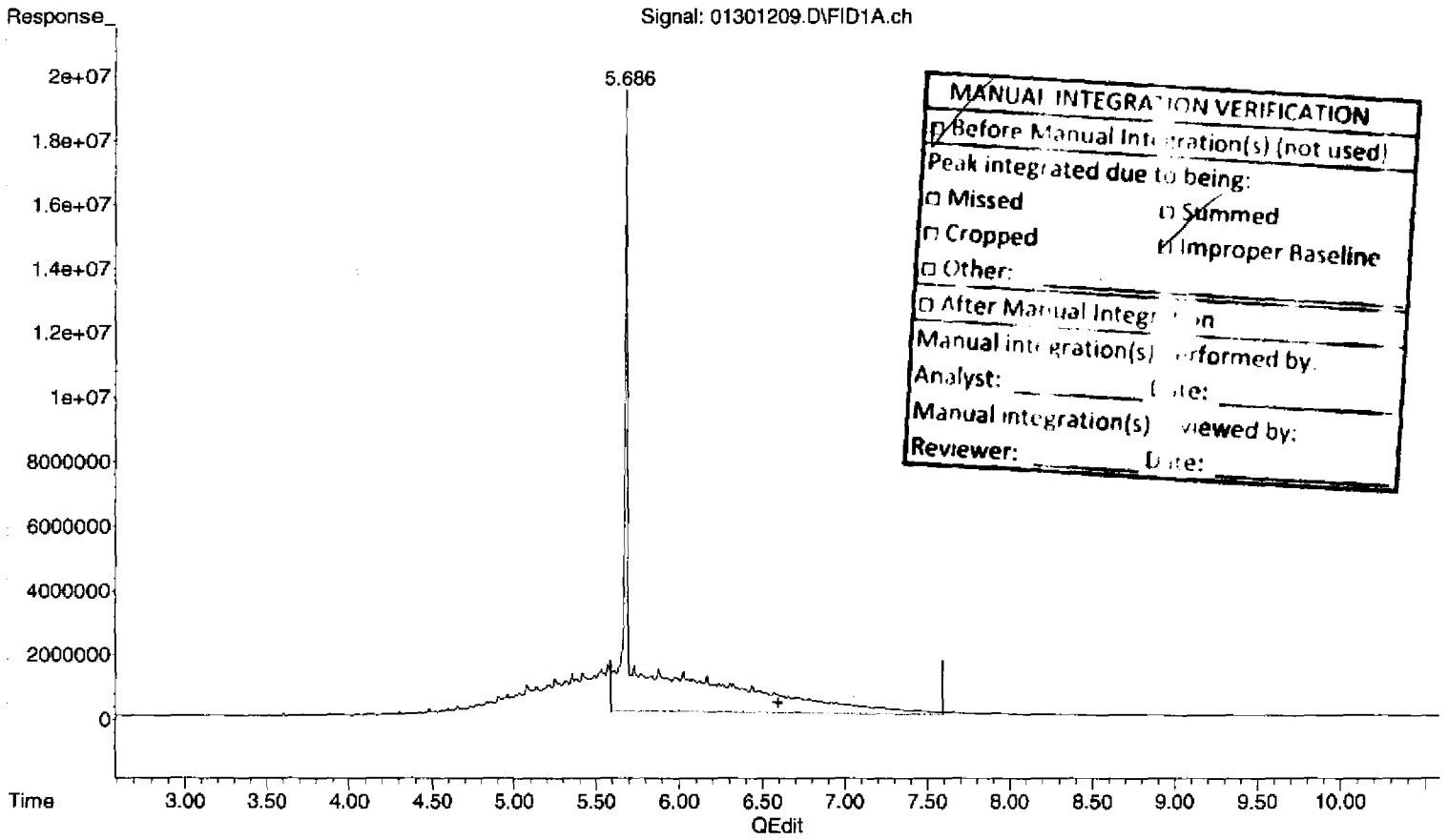
R.T.: 5.684 min
Delta R.T.: -0.002 min
Response: 172490443
Conc: 42.89 ug/mL

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301209.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:25 pm
Operator : TD
Sample : 2010046-CAL7
Misc : 2A11013 OIL-B
ALS Vial : 9 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:56 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☑ Improper Baseline
☐ Other:
☐ After Manual Integration
Manual integration(s) performed by
Analyst: Date:
Manual integration(s) viewed by:
Reviewer: Date:

(2) OIL (H)

6.590min 419.688 ug/mL

response 695219451

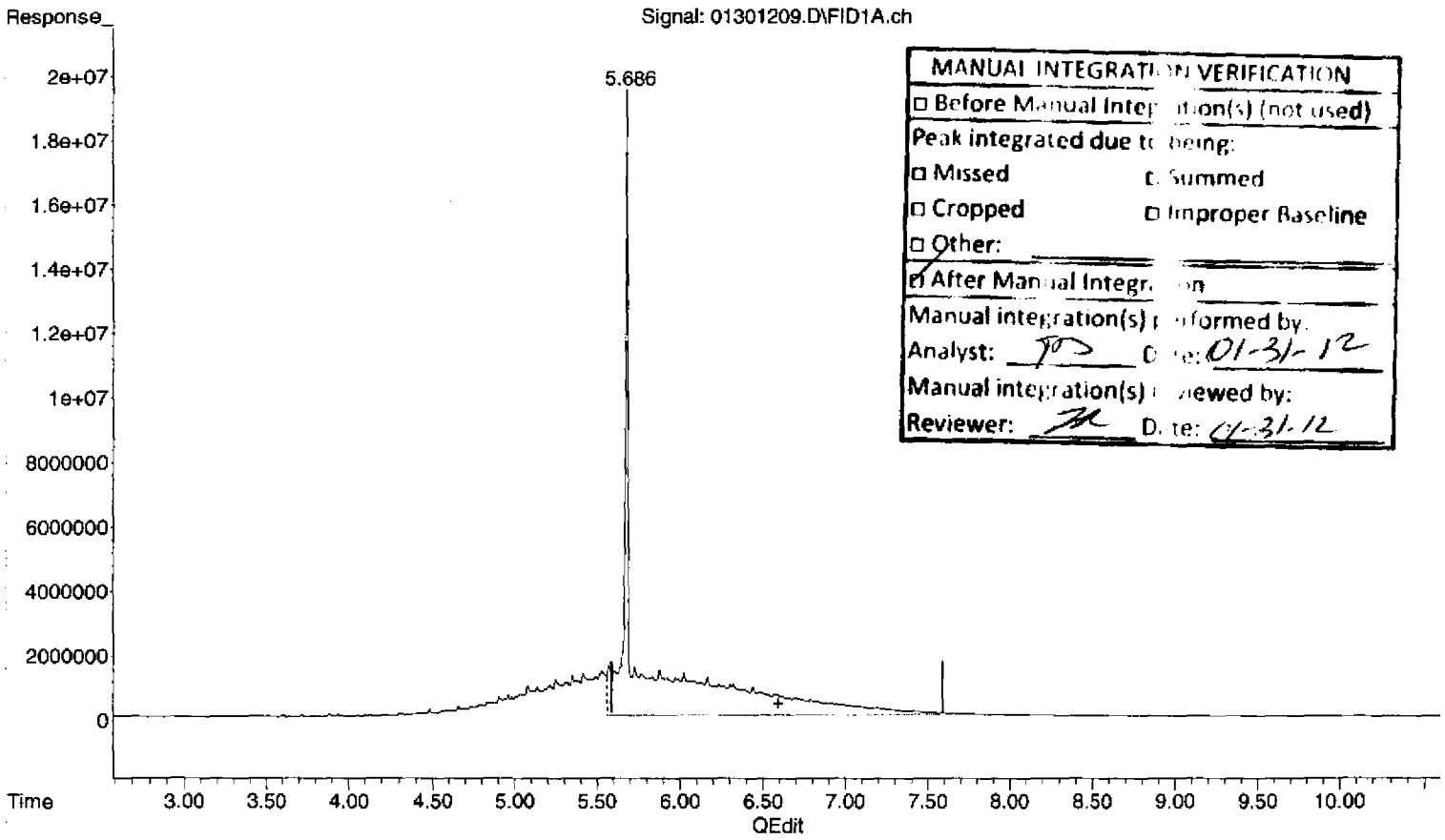
(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:41:15 2012

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301209.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:25 pm
Operator : TD
Sample : 2010046-CAL7
Misc : 2A11013 OIL-B
ALS Vial : 9 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:56 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: JTD Date: 01-31-12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 01-31-12

(2) OIL (H)

6.590min 469.726 ug/mL m

response 778108292

(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:41:27 2012

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301209.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:25 pm
Operator : TD
Sample : 2010046-CAL7
Misc : 2A11013 OIL-B
ALS Vial : 9 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:56 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.684	172490443	42.893 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	85.79%
Target Compounds			
1) HM Diesel (TPH)	4.080	445604588	129.491 ug/mL
2) H OIL	6.590	695219451	419.688 ug/mL

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

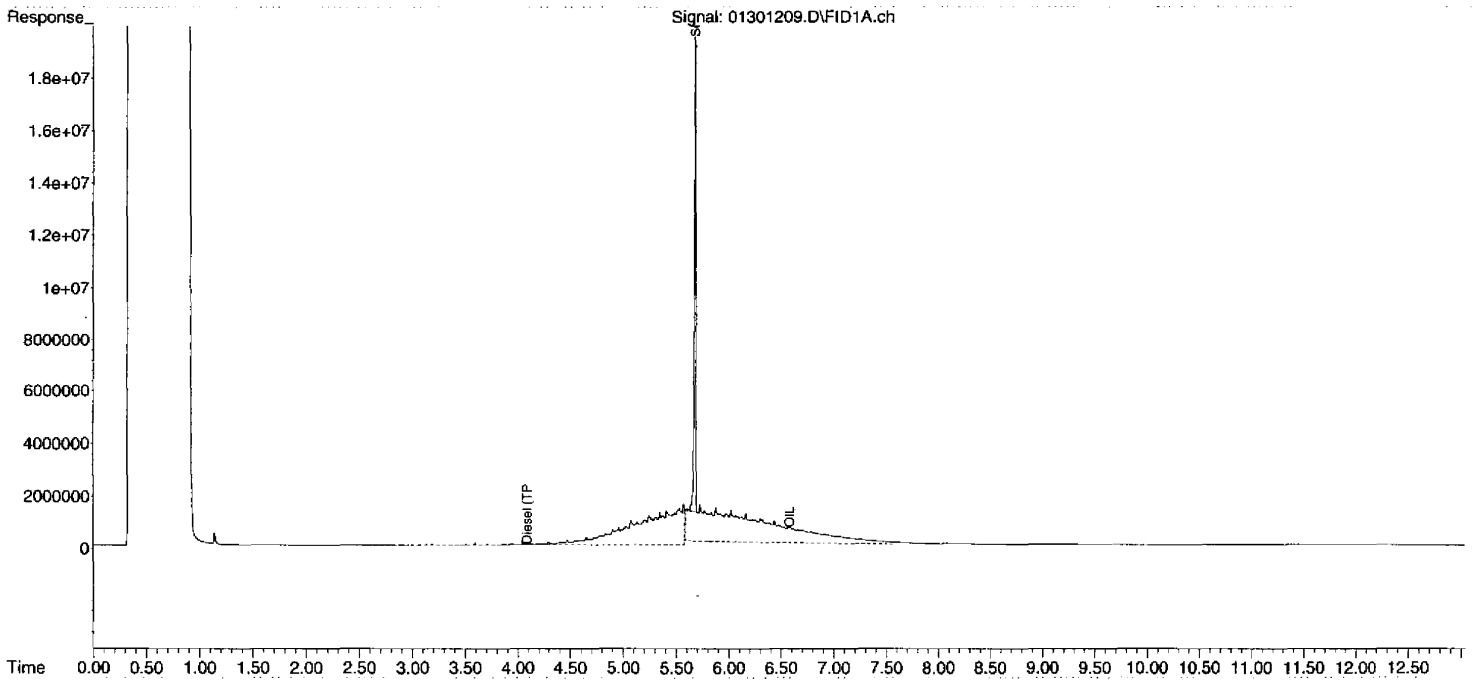
MANUAL INTEGRATION VERIFICATION	
☑ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other: _____	
☐ After Manual Integration	
Manual integration(s) performed by:	
Analyst: _____	Date: _____
Manual integration(s) reviewed by:	
Reviewer: _____	Date: _____

Quantitation Report (Not Reviewed)

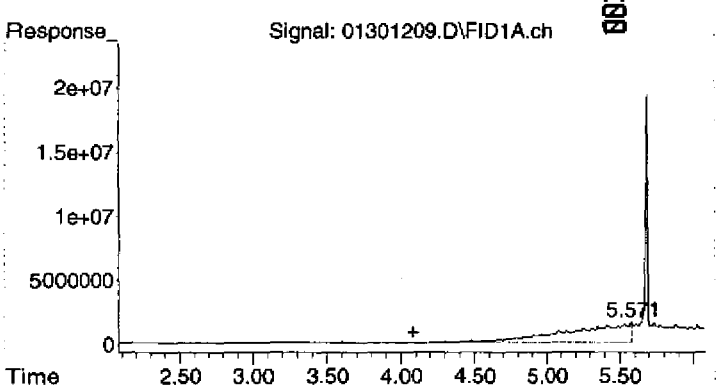
Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301209.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:25 pm
Operator : TD
Sample : 2010046-CAL7
Misc : 2A11013 OIL-B
ALS Vial : 9 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:56 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

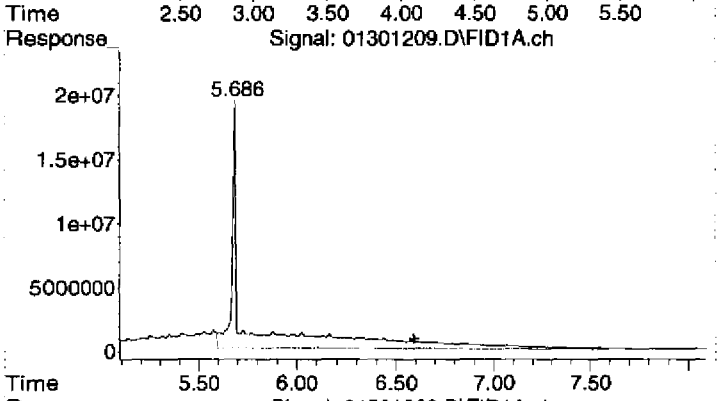


00394



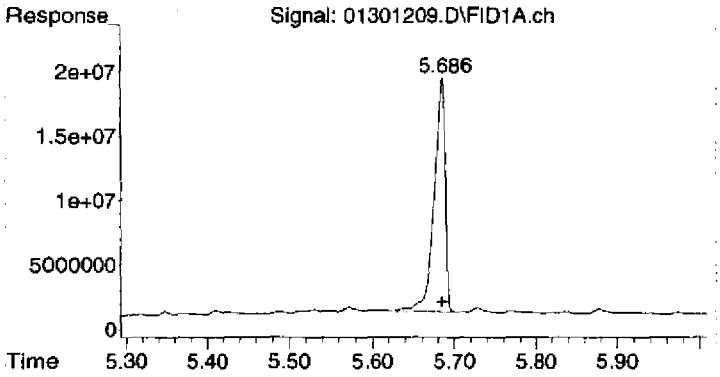
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 445604588
Conc: 129.49 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 695219451
Conc: 419.69 ug/mL



#3 Surrogate

R.T.: 5.684 min
Delta R.T.: -0.002 min
Response: 172490443
Conc: 42.89 ug/mL

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301210.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:43 pm
Operator : TD
Sample : 2010046-CAL8
Misc : 2A11012 OIL-CV
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:42:17 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.689	160244547	39.848 ug/mLm
Spiked Amount 50.000	Range 60 - 127	Recovery =	79.70%
Target Compounds			
1) HM Diesel (TPH)	4.080	1077798138	313.203 ug/mL
2) H OIL	6.590	2008952902	1212.758 ug/mLm

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

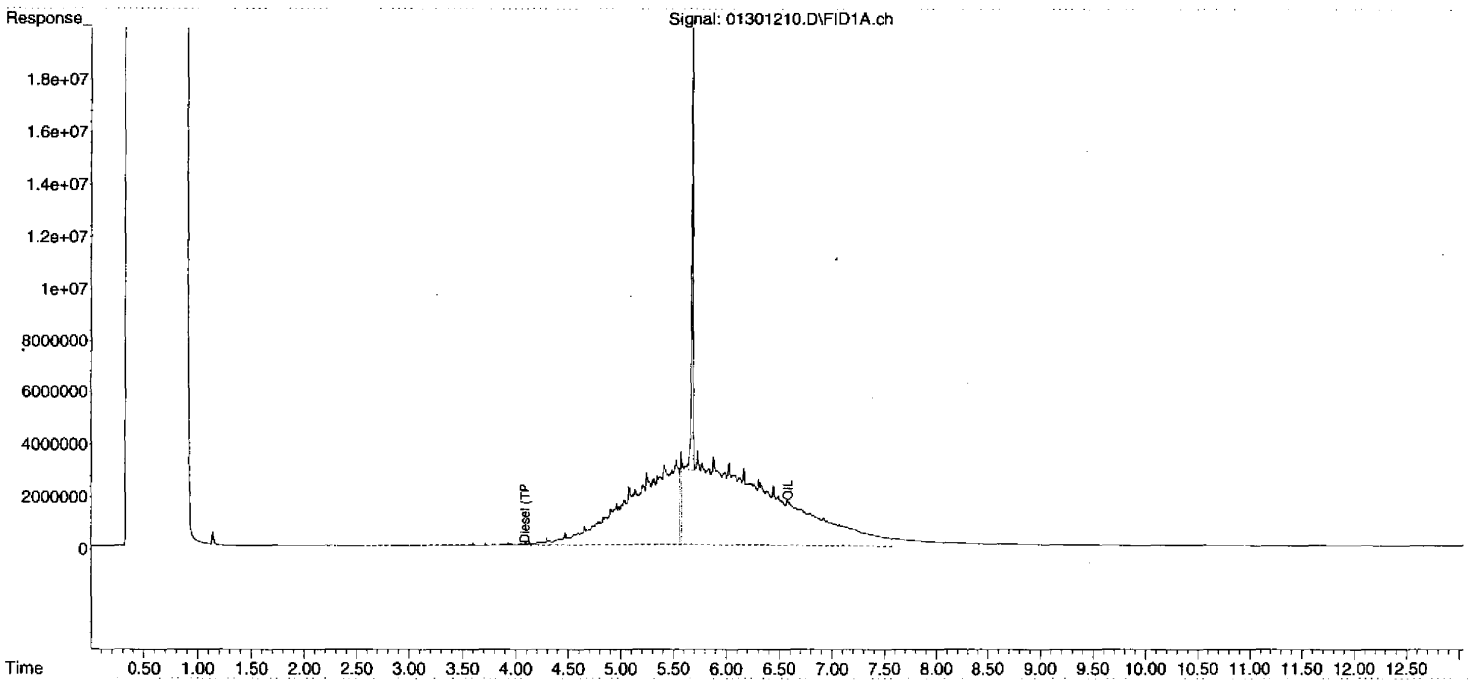
MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☑ After Manual Integration	
Manual integration(s) performed by:	
Analyst: TD	Date: 01-31-12
Manual integration(s) reviewed by:	
Reviewer: ZA	Date: 01-31-12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301210.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:43 pm
Operator : TD
Sample : 2010046-CAL8
Misc : 2A11012 OIL-CV
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:42:17 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

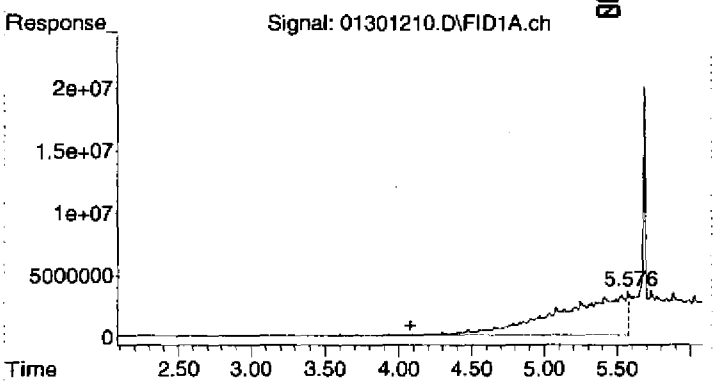


00397

013012DROA.M Tue Jan 31 09:42:26 2012 Page: 2

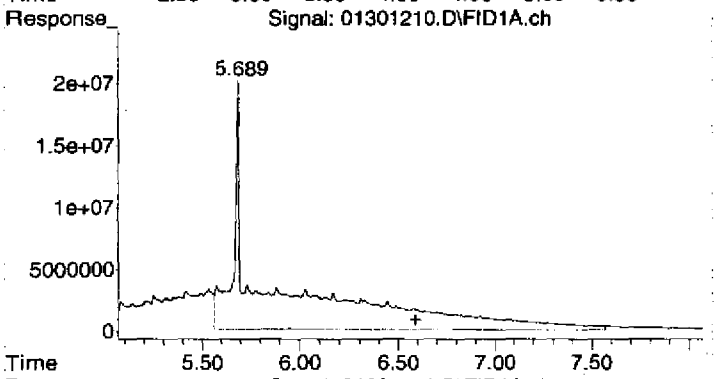
DIM0275879

DIM0276064



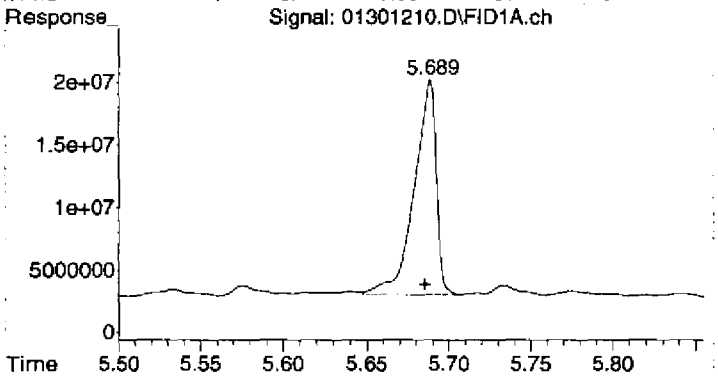
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1077798138
Conc: 313.20 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 2008952902
Conc: 1212.76 ug/mL m



#3 Surrogate

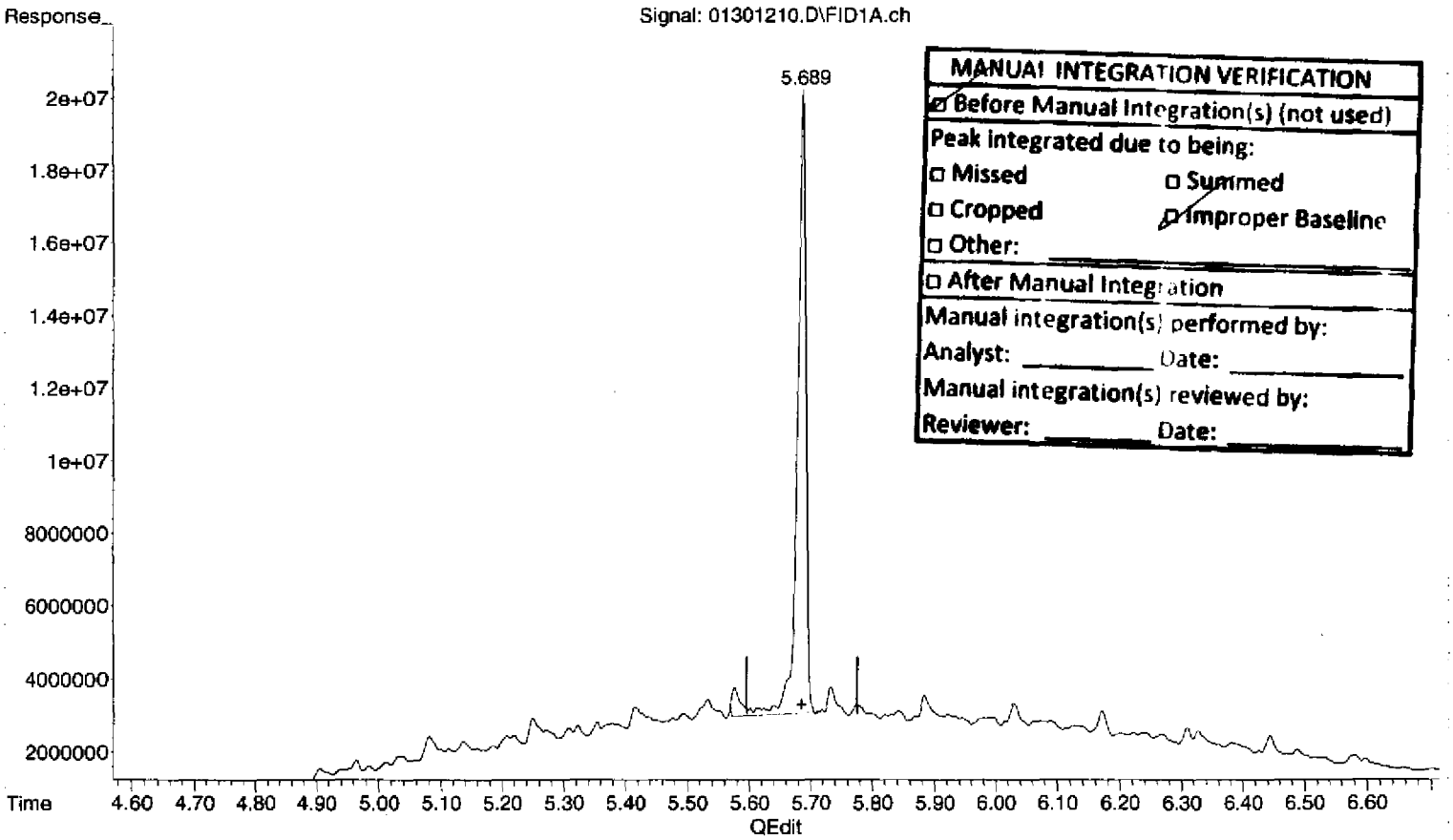
R.T.: 5.689 min
Delta R.T.: 0.003 min
Response: 160244547
Conc: 39.85 ug/mL m

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301210.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:43 pm
Operator : TD
Sample : 2010046-CAL8
Misc : 2A11012 OIL-CV
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:00 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☑ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

(3) Surrogate (S)

5.687min 42.423 ug/mL

response 170597358

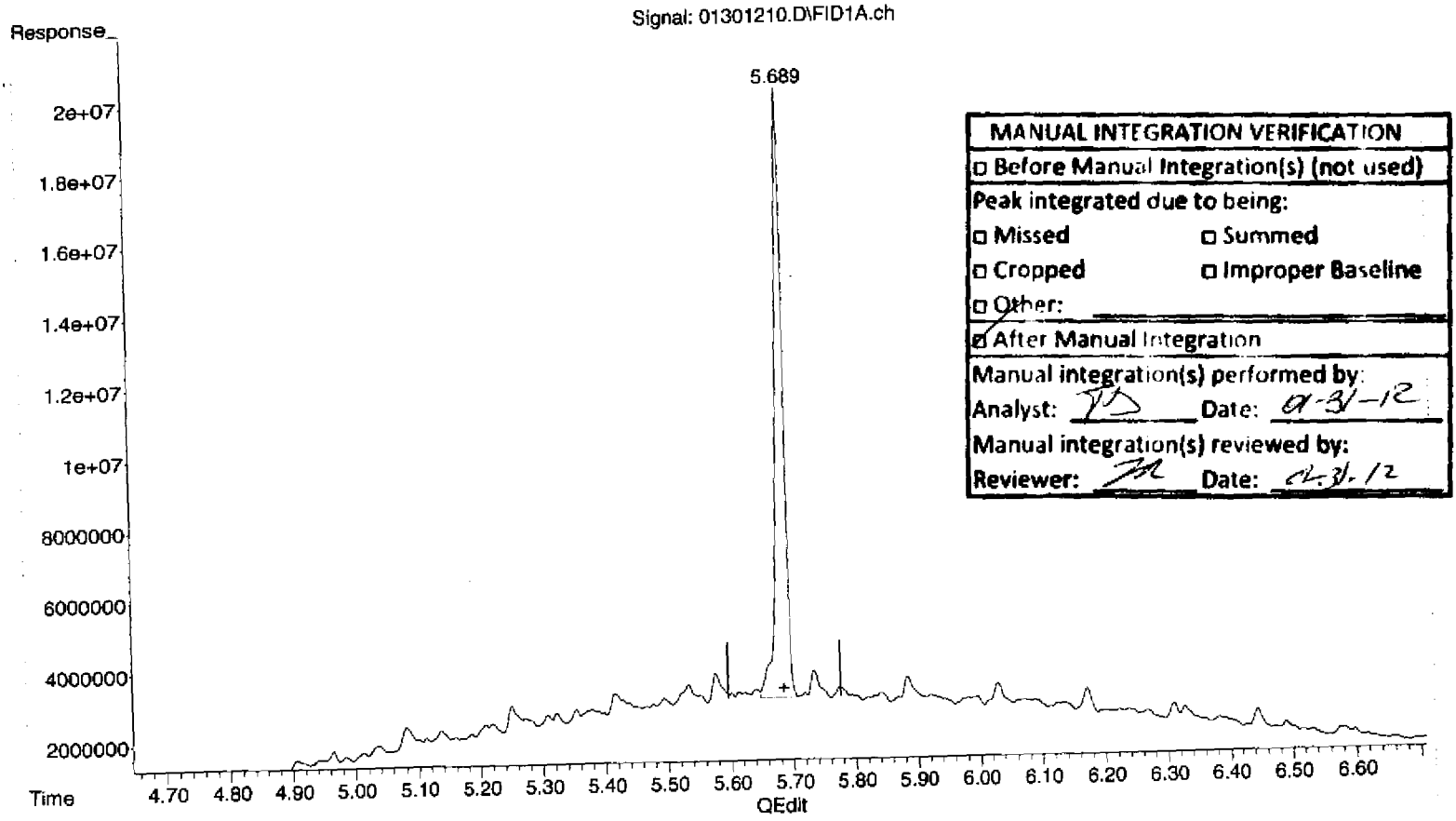
(+) = Expected Retention Time

Quantification Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301210.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:43 pm
Operator : TD
Sample : 2010046-CAL8
Misc : 2A11012 OIL-CV
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:00 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☑ After Manual Integration	
Manual integration(s) performed by:	
Analyst: TD	Date: 01-31-12
Manual integration(s) reviewed by:	
Reviewer: TR	Date: 02-31-12

(3) Surrogate (S)

5.689min 39.848 ug/mL m

response 160244547

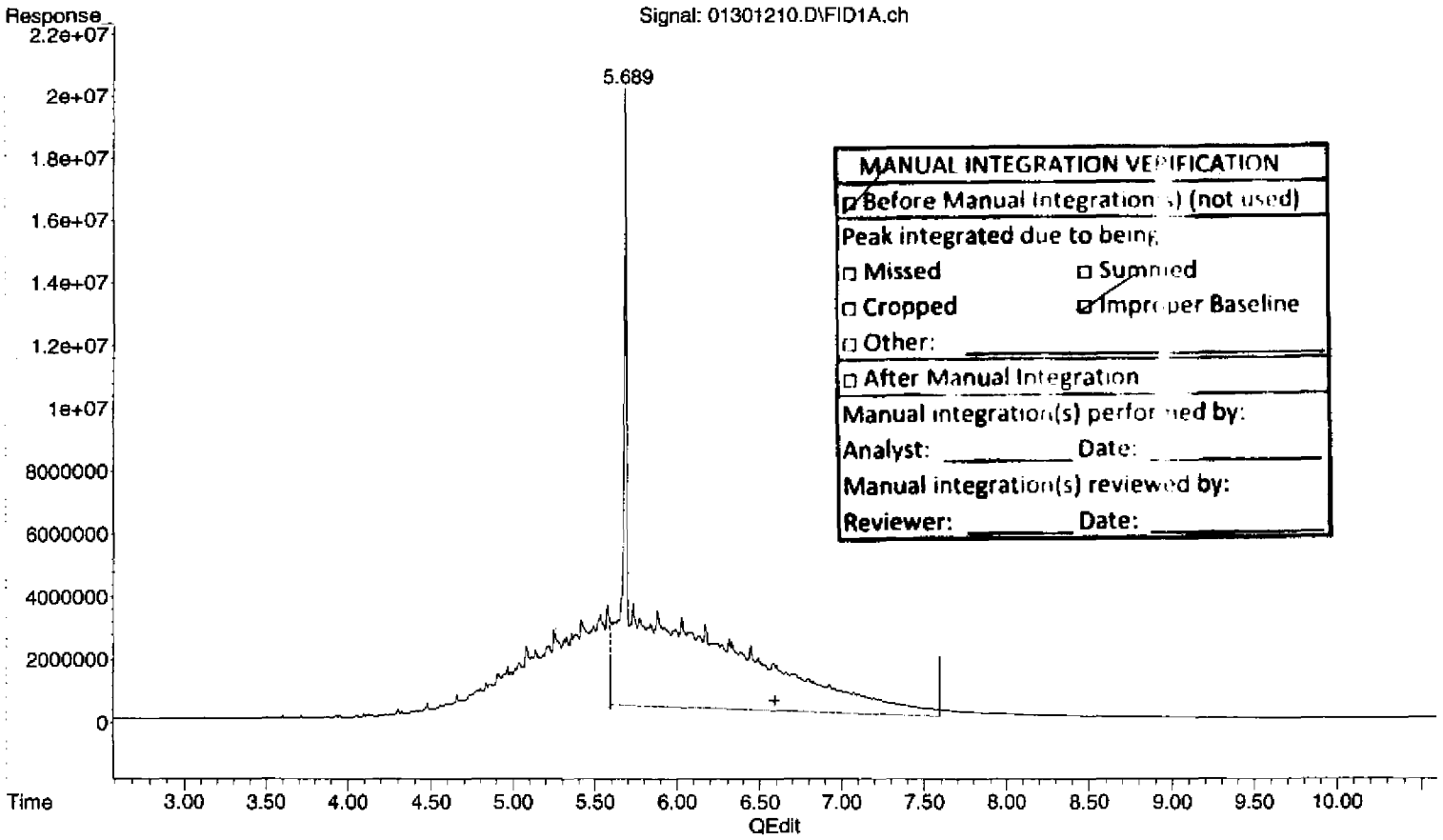
(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:41:57 2012

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301210.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:43 pm
Operator : TD
Sample : 2010046-CAL8
Misc : 2A11012 OIL-CV
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:00 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



(2) OIL (H)

6.590min 1020.179 ug/mL

response 1689943532

(+) = Expected Retention Time

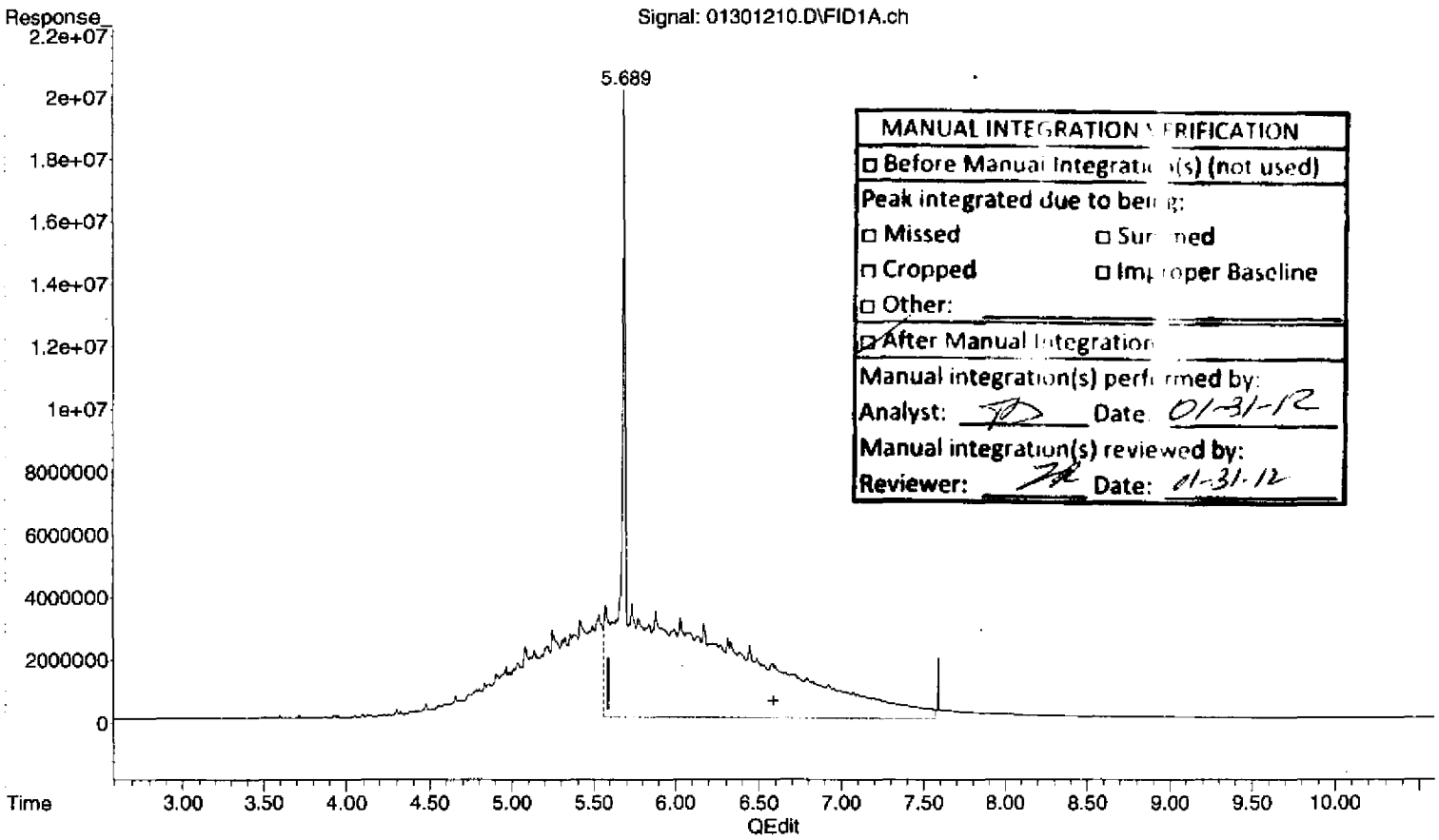
013012DROA.M Tue Jan 31 09:42:05 2012

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301210.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:43 pm
Operator : TD
Sample : 2010046-CAL8
Misc : 2A11012 OIL-CV
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:00 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-31-12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 01-31-12

(2) OIL (H)

6.590min 1212.758 ug/mL m

response 2008952902

(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:42:20 2012

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301210.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:43 pm
Operator : TD
Sample : 2010046-CAL8
Misc : 2A11012 OIL-CV
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:00 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.687	170597358	42.423 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	84.85%
Target Compounds			
1) HM Diesel (TPH)	4.080	1077798138	313.203 ug/mL
2) H OIL	6.590	1679590721	1013.930 ug/mL

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

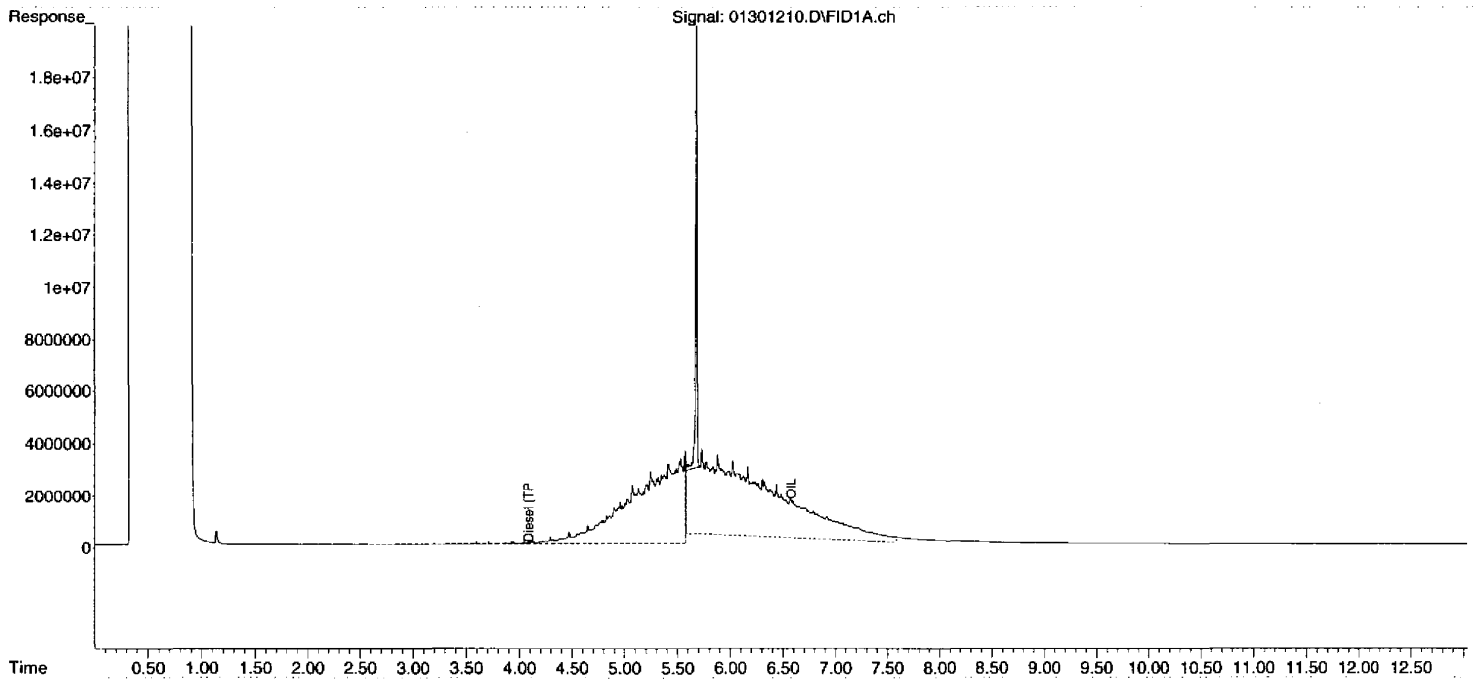
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

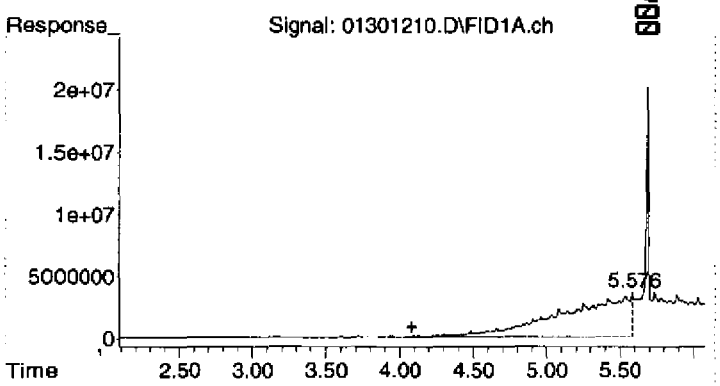
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301210.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 2:43 pm
Operator : TD
Sample : 2010046-CAL8
Misc : 2A11012 OIL-CV
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:00 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

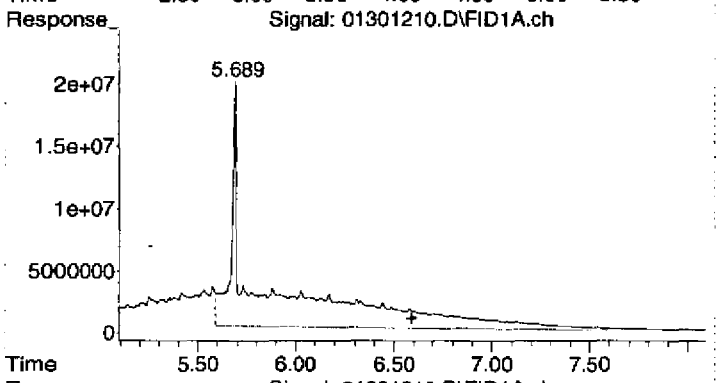
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





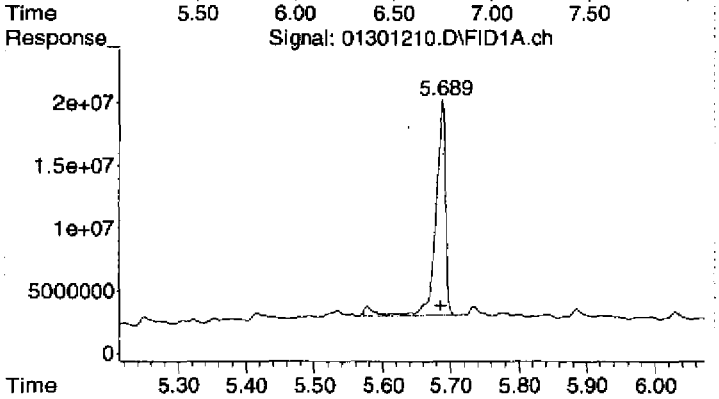
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1077798138
Conc: 313.20 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1679590721
Conc: 1013.93 ug/mL



#3 Surrogate

R.T.: 5.687 min
Delta R.T.: 0.001 min
Response: 170597358
Conc: 42.42 ug/mL

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301211.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:01 pm
Operator : TD
Sample : 2010046-CAL9
Misc : 2A11014 OIL-D
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:42:59 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.703	135092693	33.594 ug/mLm
Spiked Amount 50.000	Range 60 - 127	Recovery =	67.19%
Target Compounds			
1) HM Diesel (TPH)	4.080	3769249657	1095.327 ug/mL
2) H OIL	6.590	7194960306	4343.430 ug/mLm

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

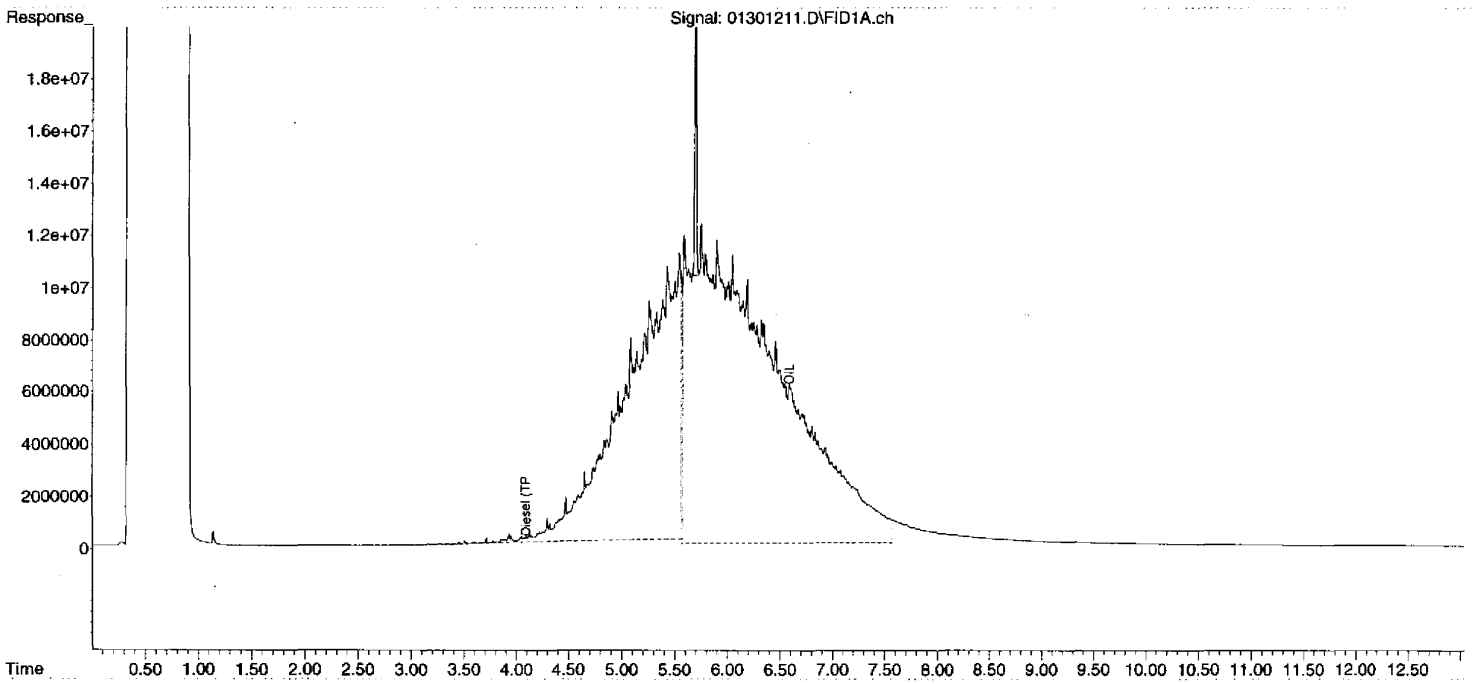
MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☑ After Manual Integration	
Manual integration(s) performed by:	
Analyst: TD	Date: 01-31-12
Manual integration(s) reviewed by:	
Reviewer: TR	Date: 01-31-12

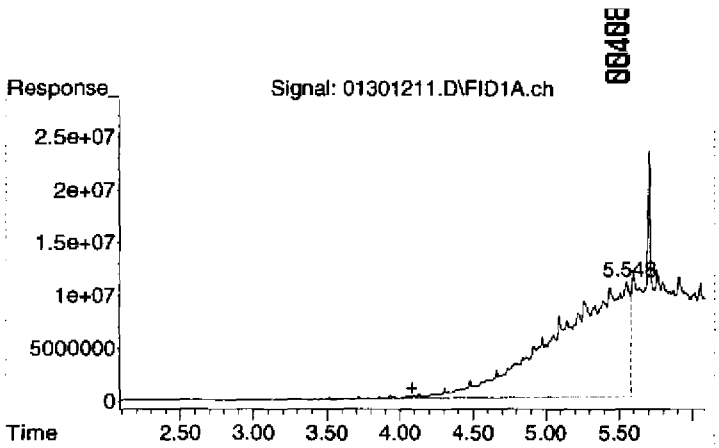
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301211.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:01 pm
Operator : TD
Sample : 2010046-CAL9
Misc : 2A11014 OIL-D
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:42:59 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

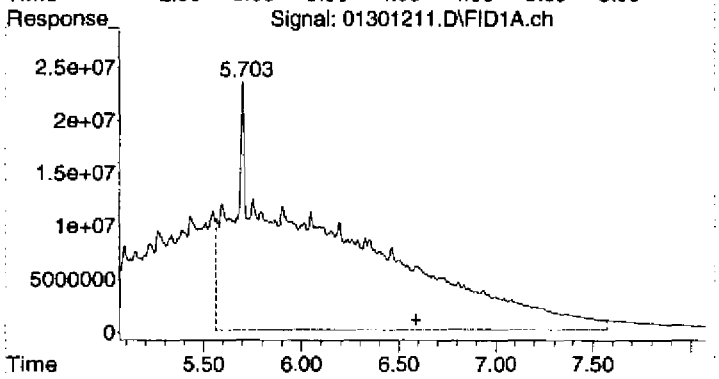
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





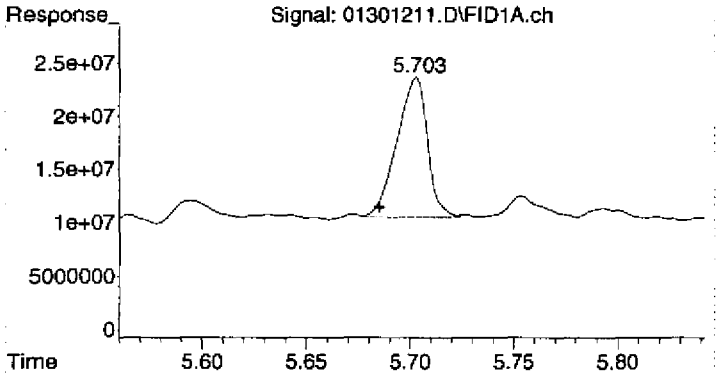
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 3769249657
Conc: 1095.33 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 7194960306
Conc: 4343.43 ug/mL m



#3 Surrogate

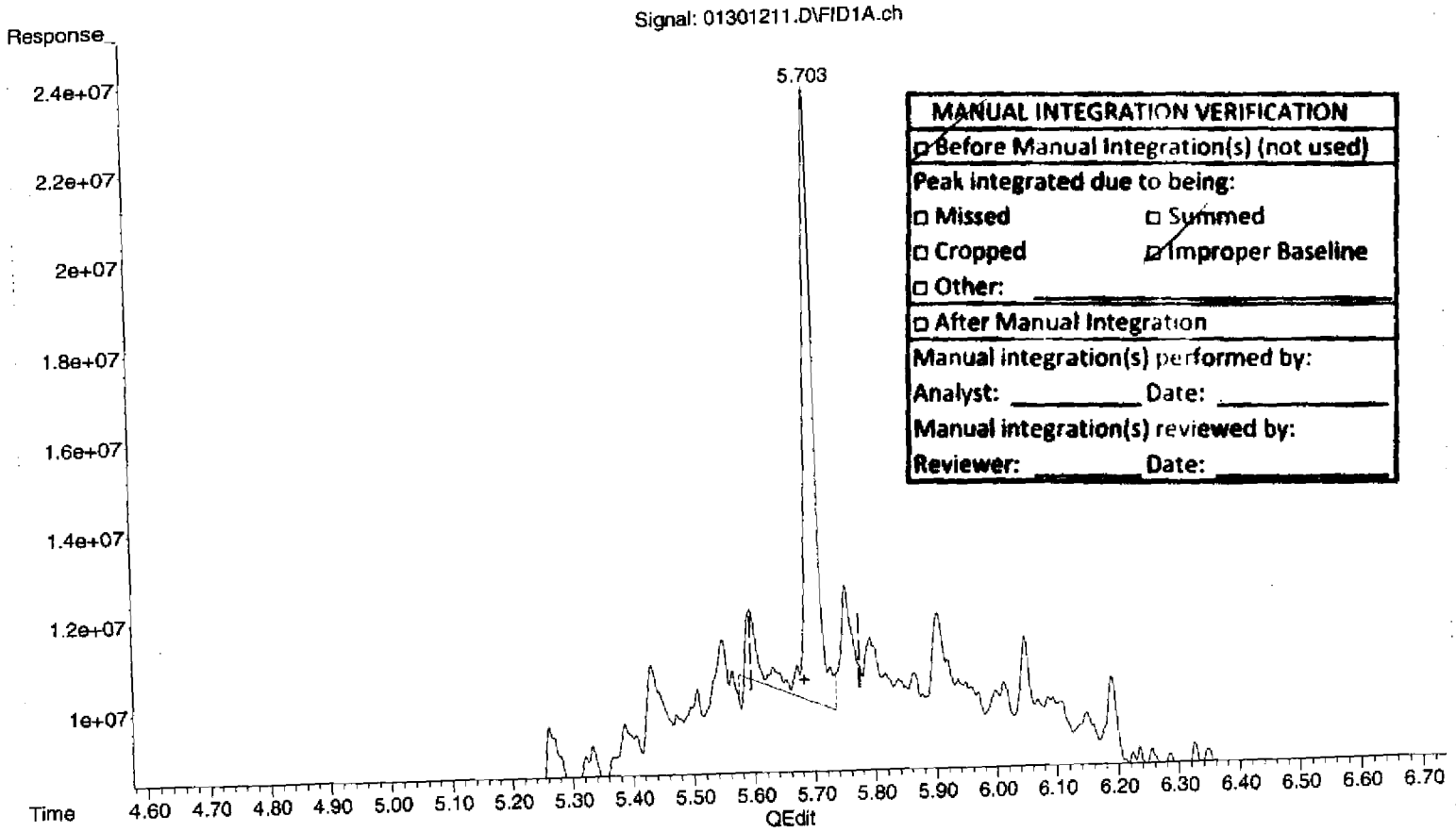
R.T.: 5.703 min
Delta R.T.: 0.018 min
Response: 135092693
Conc: 33.59 ug/mL m

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301211.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:01 pm
Operator : TD
Sample : 2010046-CAL9
Misc : 2A11014 OIL-D
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:04 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION	
☑ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☑ Improper Baseline
☐ Other:	
☐ After Manual Integration	
Manual integration(s) performed by:	
Analyst: _____	Date: _____
Manual integration(s) reviewed by:	
Reviewer: _____	Date: _____

(3) Surrogate (S)
5.702min 42.299 ug/mL
response 170098931

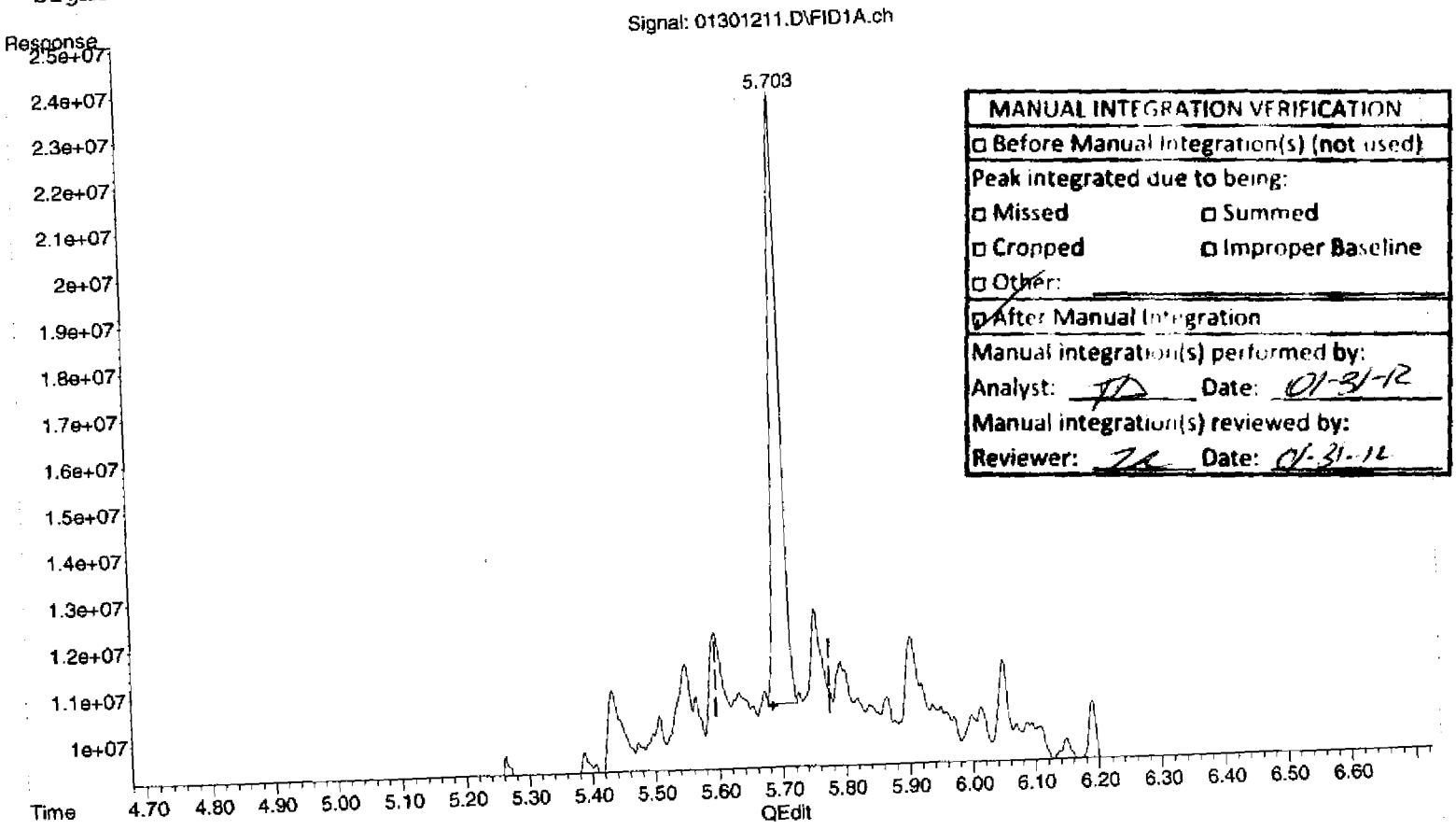
(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:42:34 2012

Quantification Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301211.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:01 pm
Operator : TD
Sample : 2010046-CAL9
Misc : 2A11014 OIL-D
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:04 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-31-12
Manual integration(s) reviewed by:
Reviewer: TD Date: 01-31-12

(3) Surrogate (S)
5.703min 33.594 ug/mL m
response 135092693

(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:42:46 2012

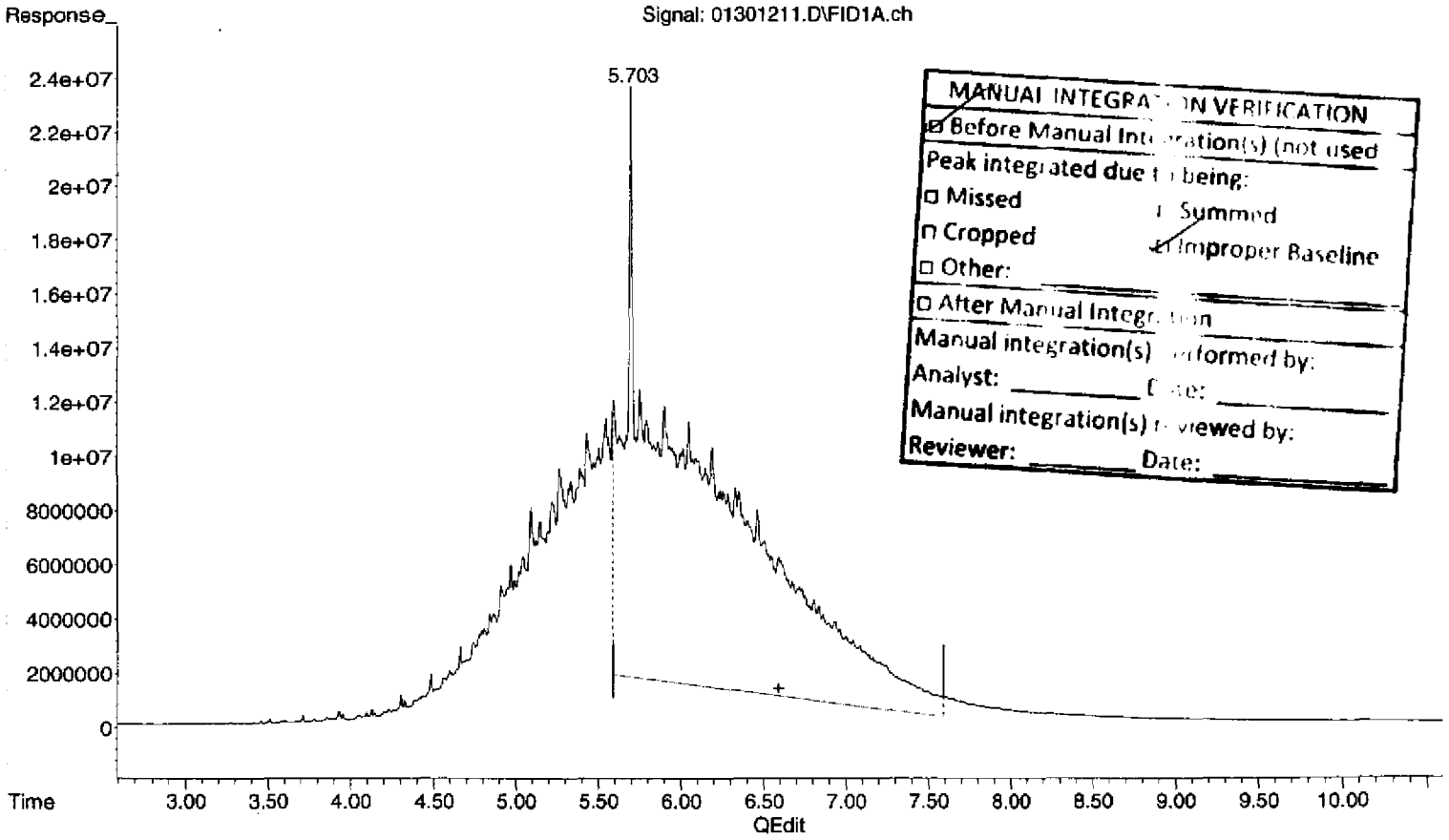
DIM0276077

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301211.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:01 pm
Operator : TD
Sample : 2010046-CAL9
Misc : 2A11014 OIL-D
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:04 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



(2) OIL (H)

6.590min 3598.484 ug/mL

response 5960946592

(+) = Expected Retention Time

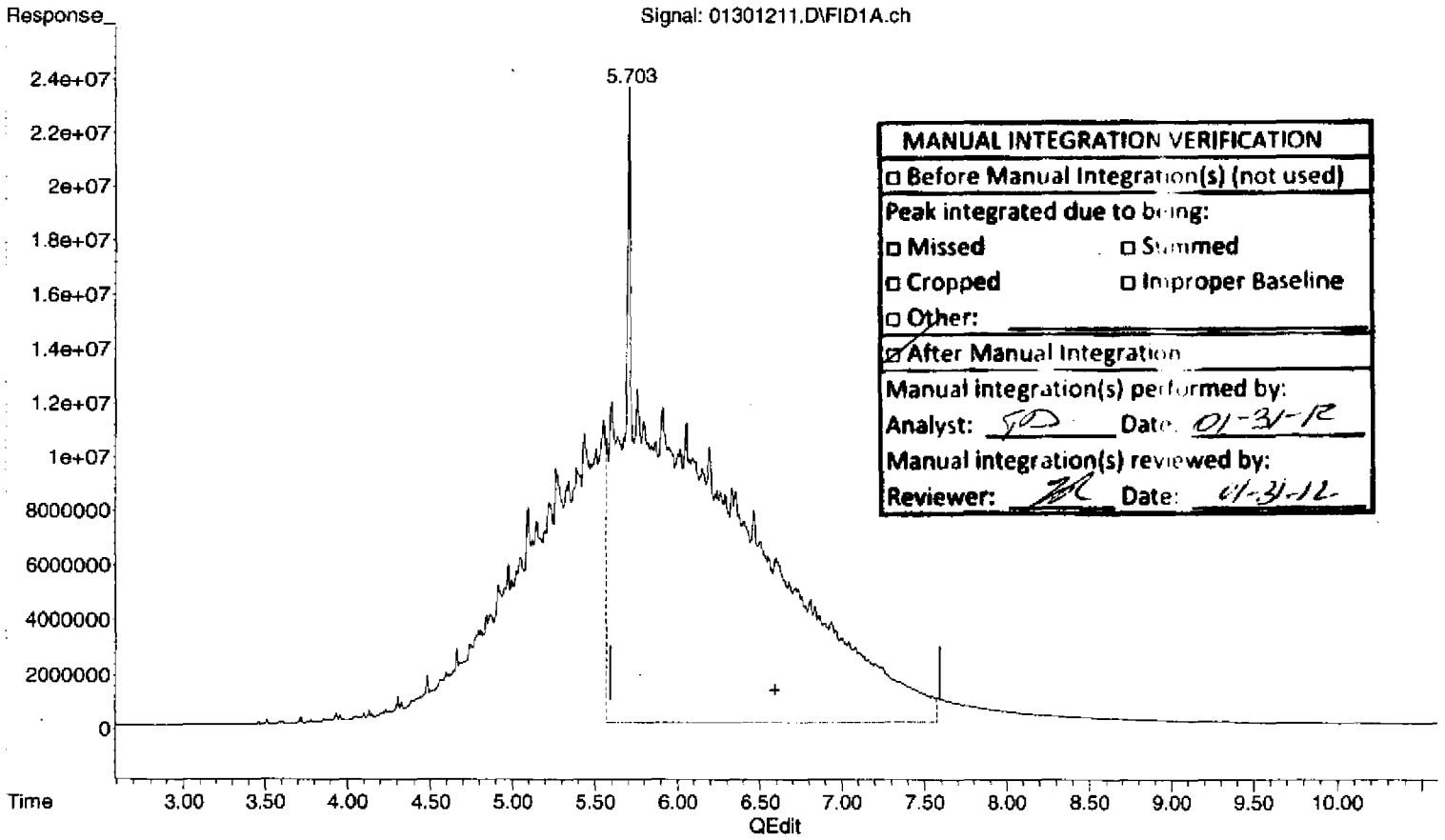
013012DROA.M Tue Jan 31 09:42:53 2012

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301211.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:01 pm
Operator : TD
Sample : 2010046-CAL9
Misc : 2A11014 OIL-D
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:04 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: SD Date: 01-31-12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 01-31-12

(2) OIL (H)
6.590min 4343.430 ug/mL m
response 7194960306

(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:43:02 2012

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301211.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:01 pm
Operator : TD
Sample : 2010046-CAL9
Misc : 2A11014 OIL-D
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:04 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.702	170098931	42.299 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	84.60%
Target Compounds			
1) HM Diesel (TPH)	4.080	3769249657	1095.327 ug/mL
2) H OIL	6.590	5925940354	3577.352 ug/mL

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

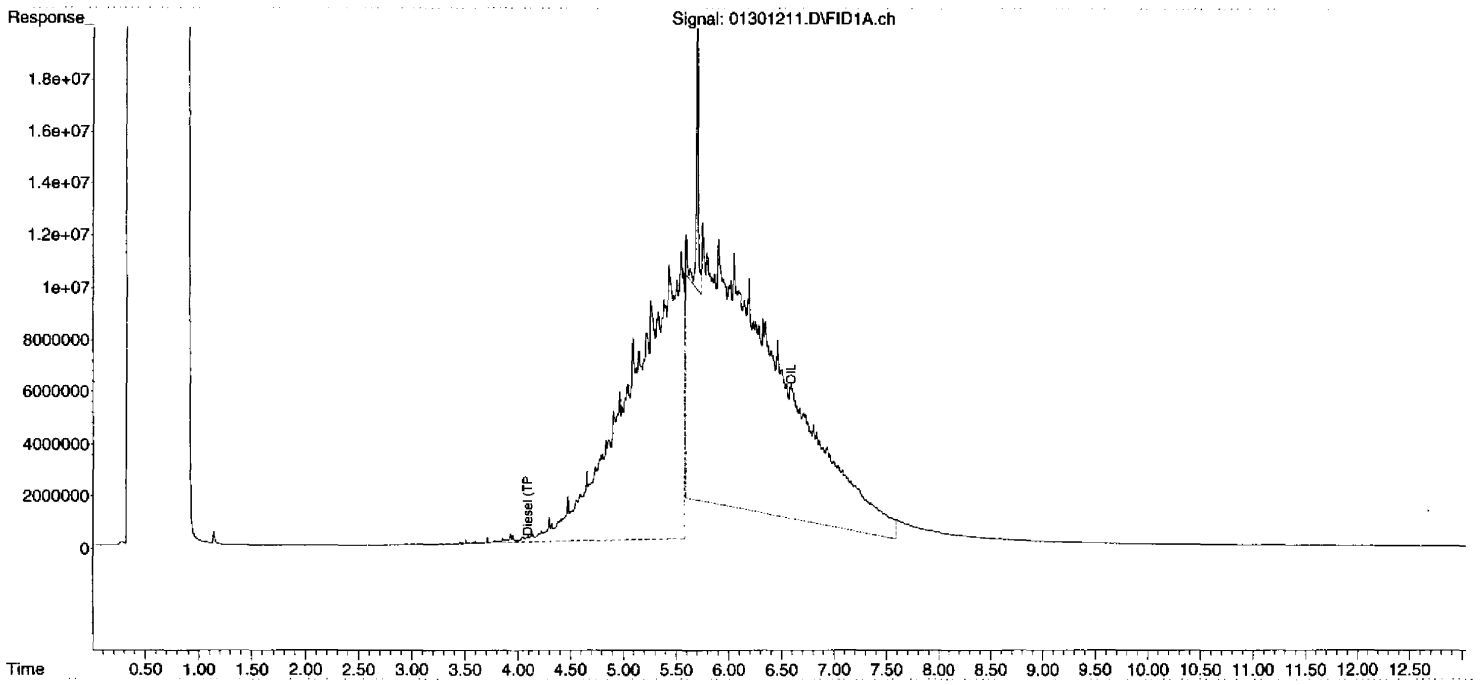
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

Quantitation Report (Not Reviewed)

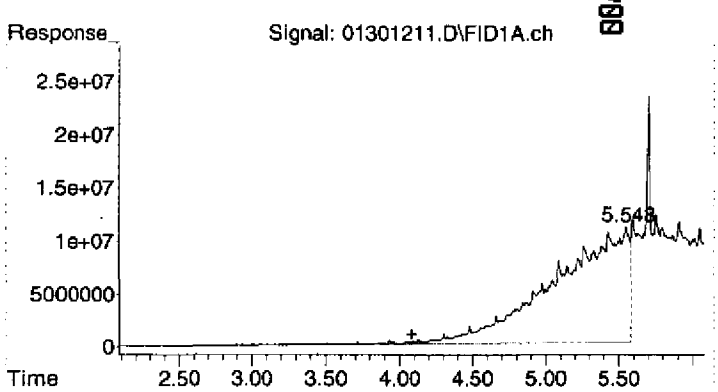
Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301211.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:01 pm
Operator : TD
Sample : 2010046-CAL9
Misc : 2A11014 OIL-D
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:04 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

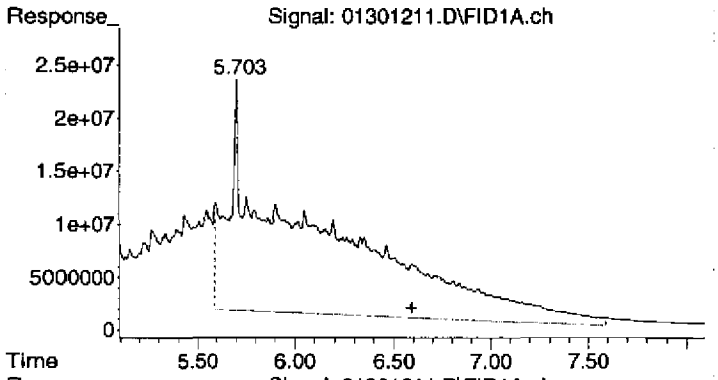


00414
DIM0275879
DIM0276081



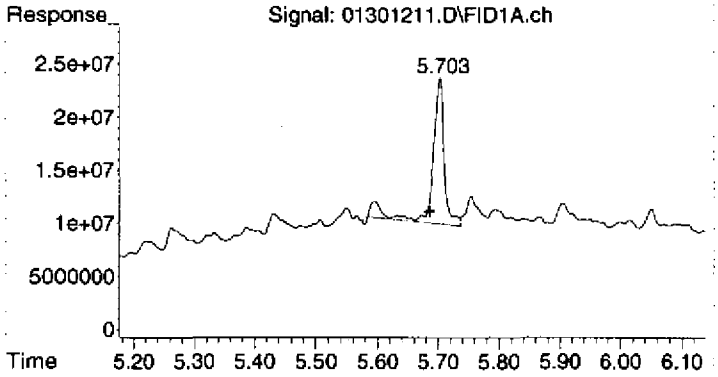
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 3769249657
Conc: 1095.33 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 5925940354
Conc: 3577.35 ug/mL



#3 Surrogate

R.T.: 5.702 min
Delta R.T.: 0.017 min
Response: 170098931
Conc: 42.30 ug/mL

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301212.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:19 pm
Operator : TD
Sample : 2010046-CALA
Misc : 2A11015 OIL-E
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:43:52 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.733f	126718804	31.511 ug/mLm
Spiked Amount 50.000	Range 60 - 127	Recovery =	63.02%
Target Compounds			
1) HM Diesel (TPH)	4.080	9392764819	2729.496 ug/mL
2) H OIL	6.590	19380021303	11699.267 ug/mLm

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

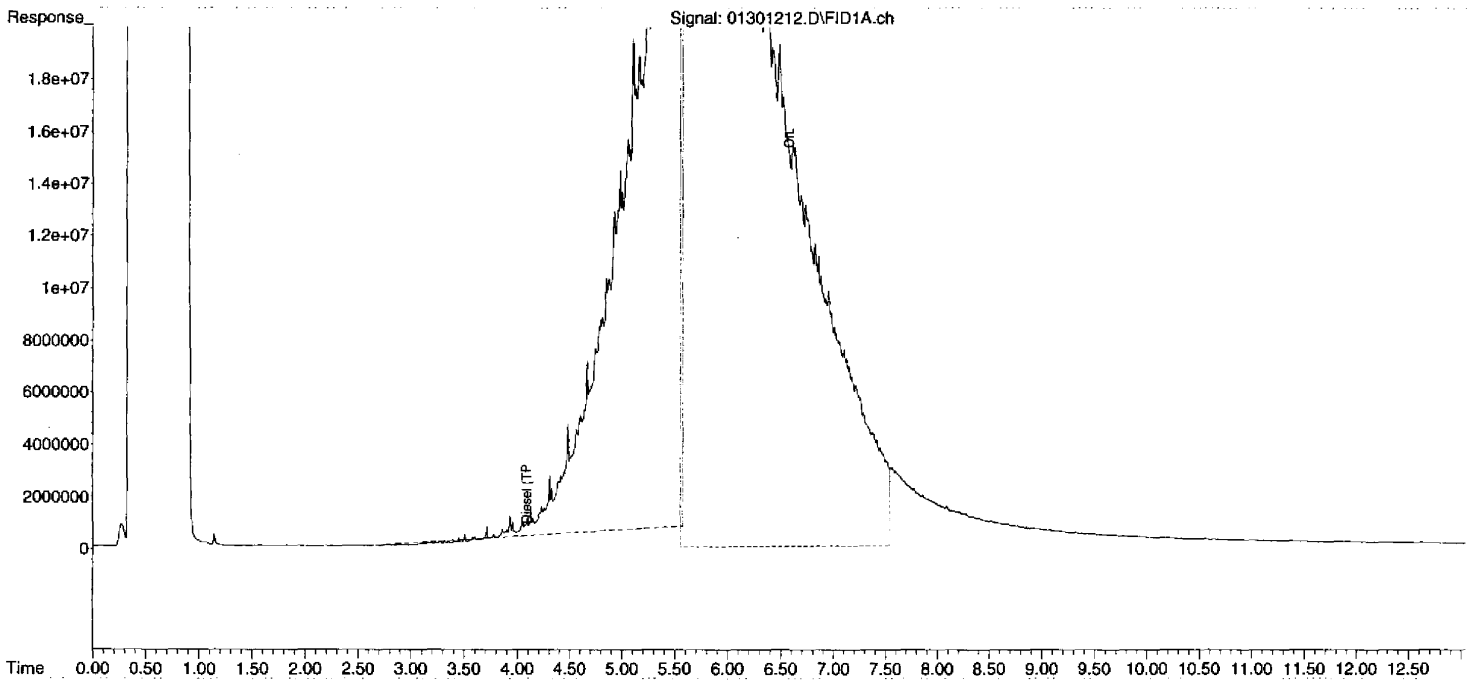
MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☑ After Manual Integration	
Manual integration(s) performed by:	
Analyst: TD	Date: 01-31-12
Manual integration(s) reviewed by:	
Reviewer: TL	Date: 01-31-12

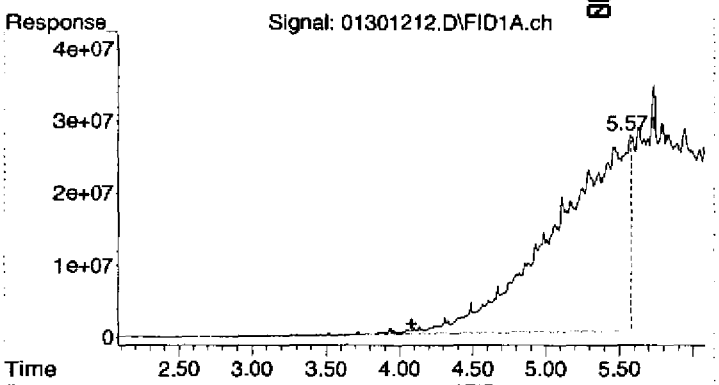
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301212.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:19 pm
Operator : TD
Sample : 2010046-CALA
Misc : 2A11015 OIL-E
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:43:52 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

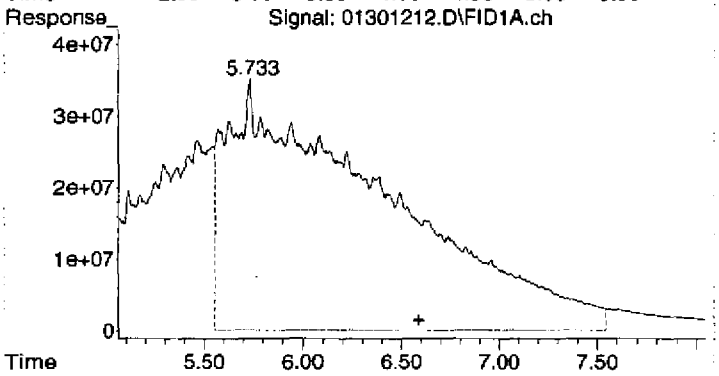
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





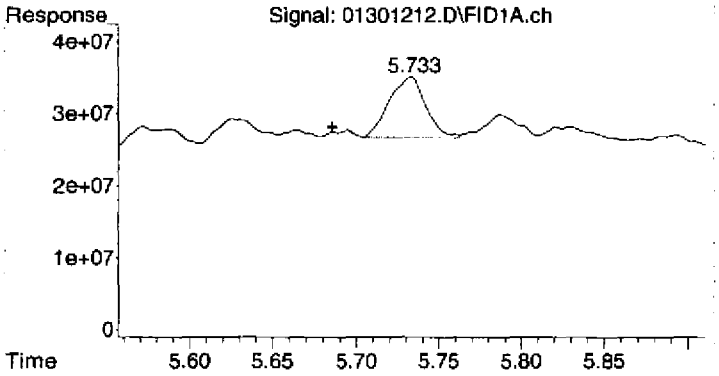
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 9392764819
Conc: 2729.50 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 19380021303
Conc: 11699.27 ug/mL m



#3 Surrogate

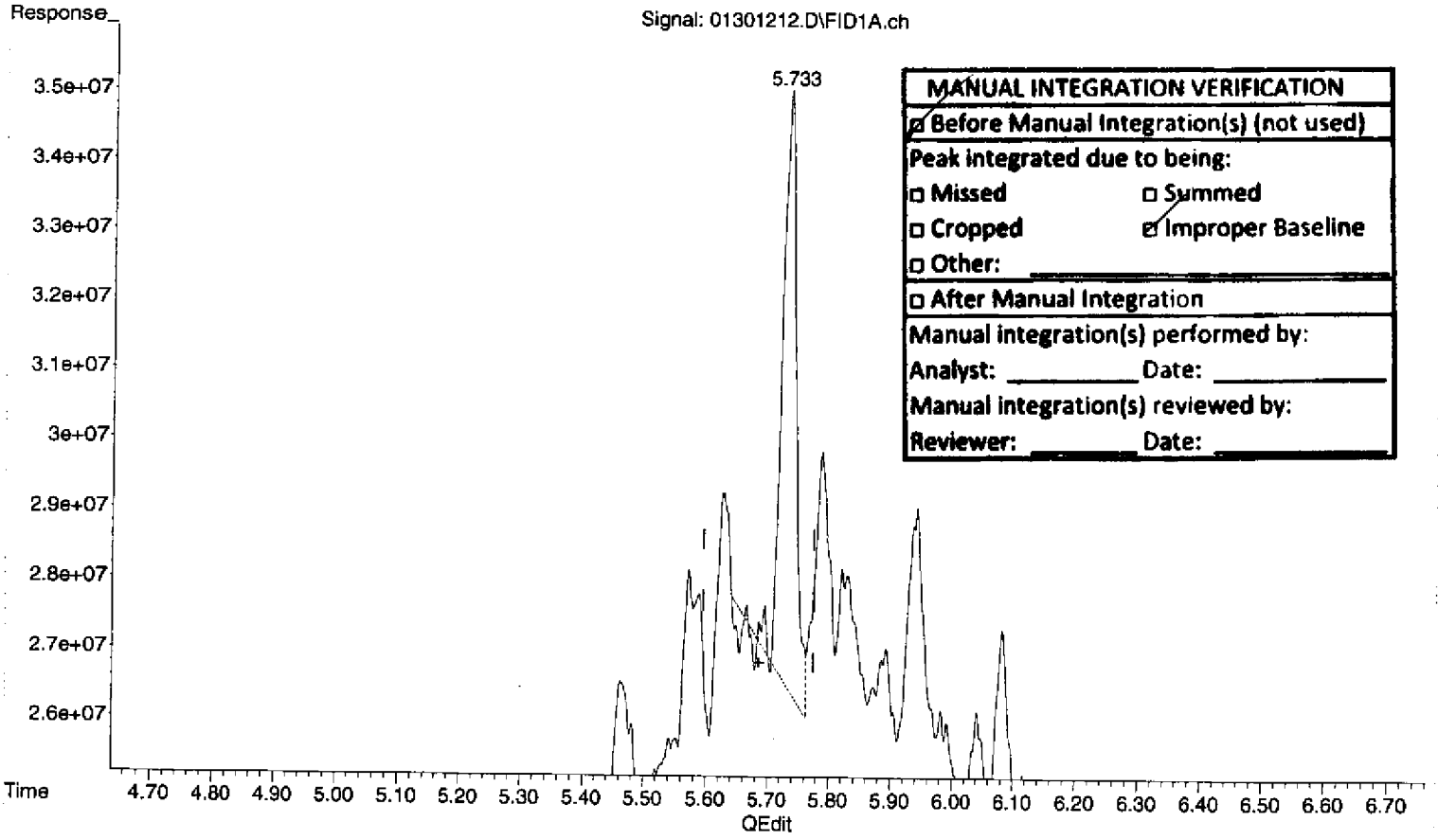
R.T.: 5.733 min
Delta R.T.: 0.048 min
Response: 126718804
Conc: 31.51 ug/mL m

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301212.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:19 pm
Operator : TD
Sample : 2010046-CALA
Misc : 2A11015 OIL-E
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:08 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☑ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

(3) Surrogate (S)
5.732min 35.476 ug/mL
response 142663830

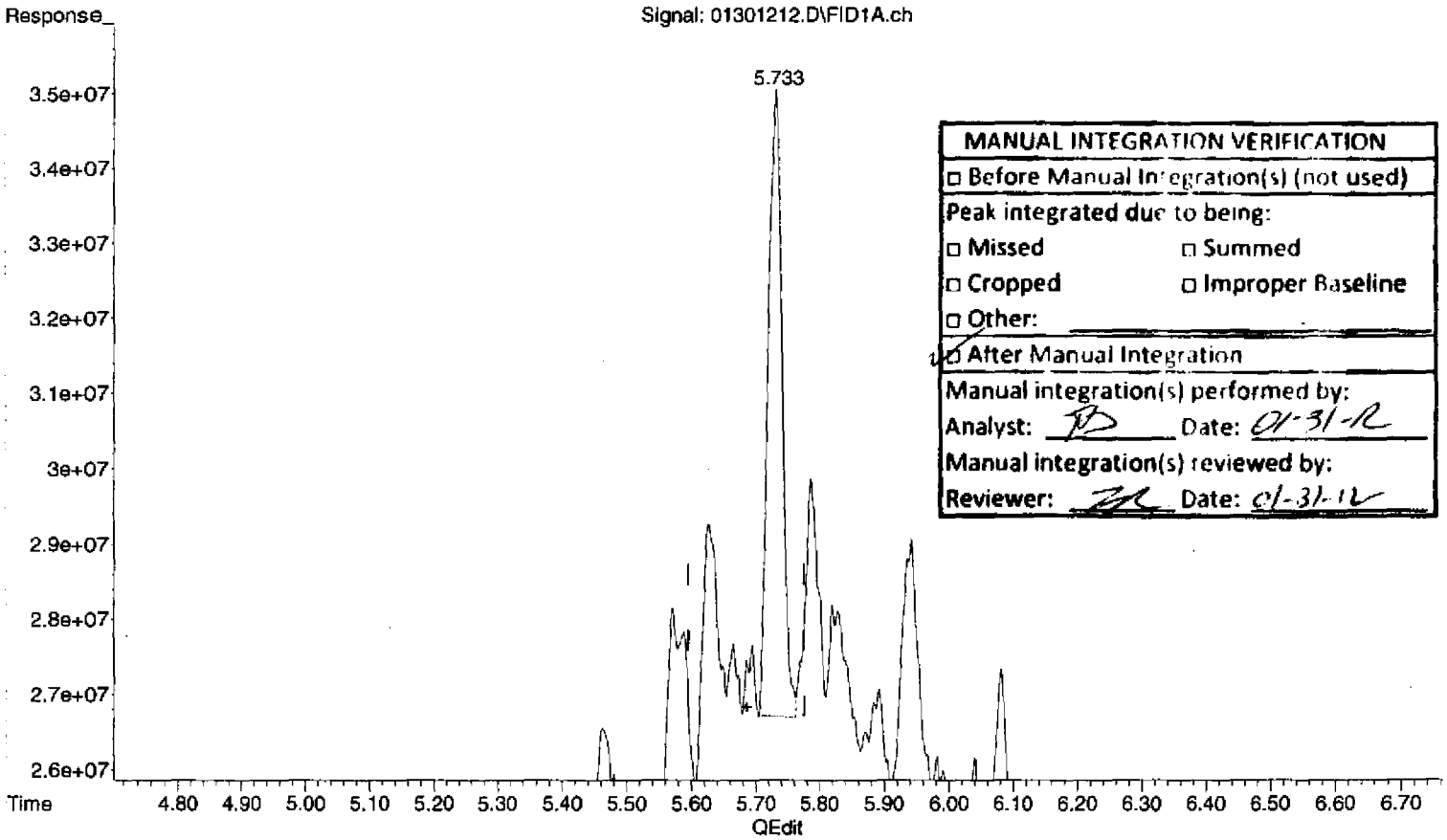
(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:43:19 2012

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301212.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:19 pm
Operator : TD
Sample : 2010046-CALA
Misc : 2A11015 OIL-E
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:08 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-31-12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 01-31-12

(3) Surrogate (S)
5.733min 31.511 ug/mL m
response 126718804

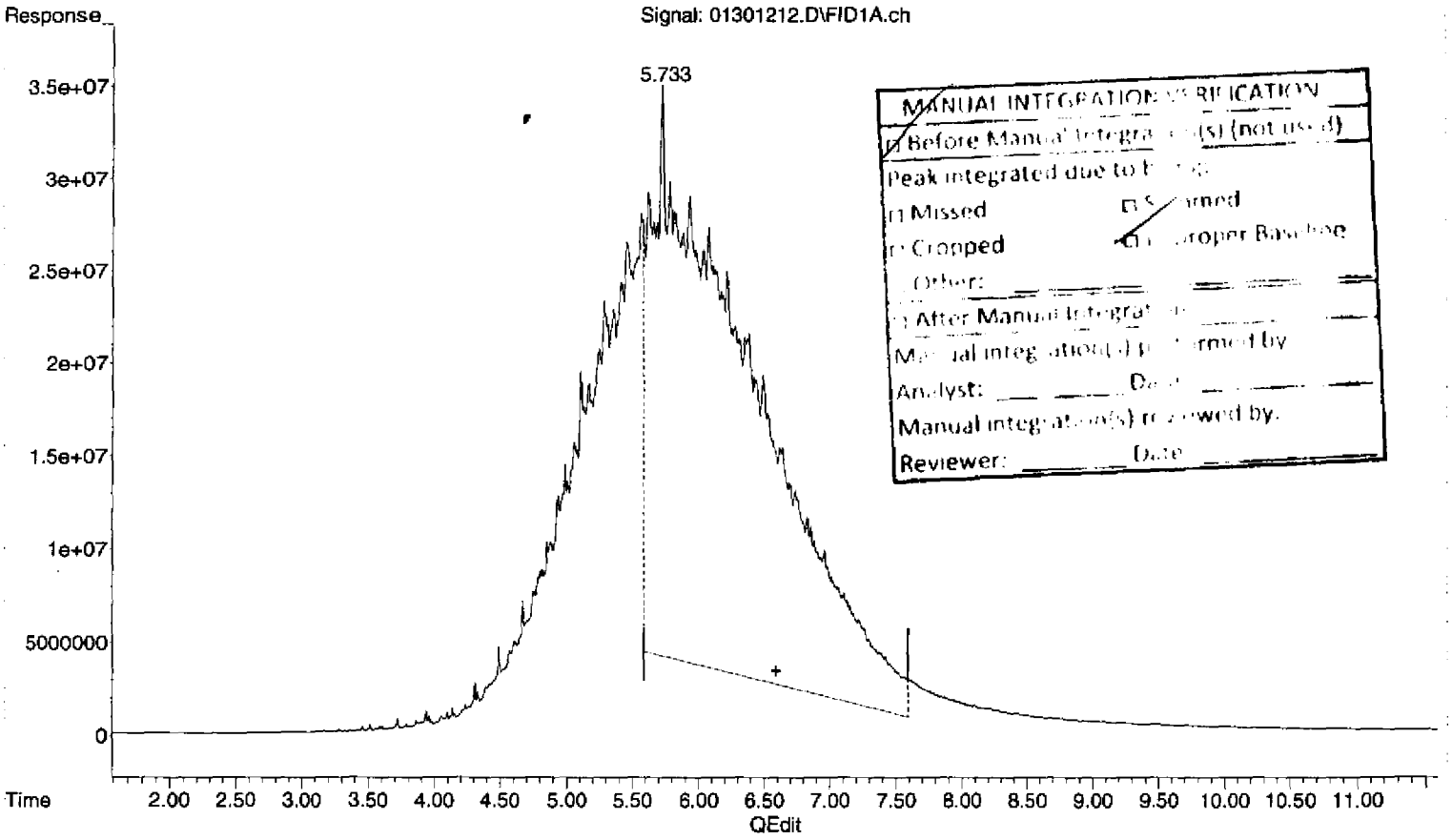
(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:43:31 2012

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301212.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:19 pm
Operator : TD
Sample : 2010046-CALA
Misc : 2A11015 OIL-E
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:08 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



(2) OIL (H)

6.590min 9510.942 ug/mL

response 15755026275

(+) = Expected Retention Time

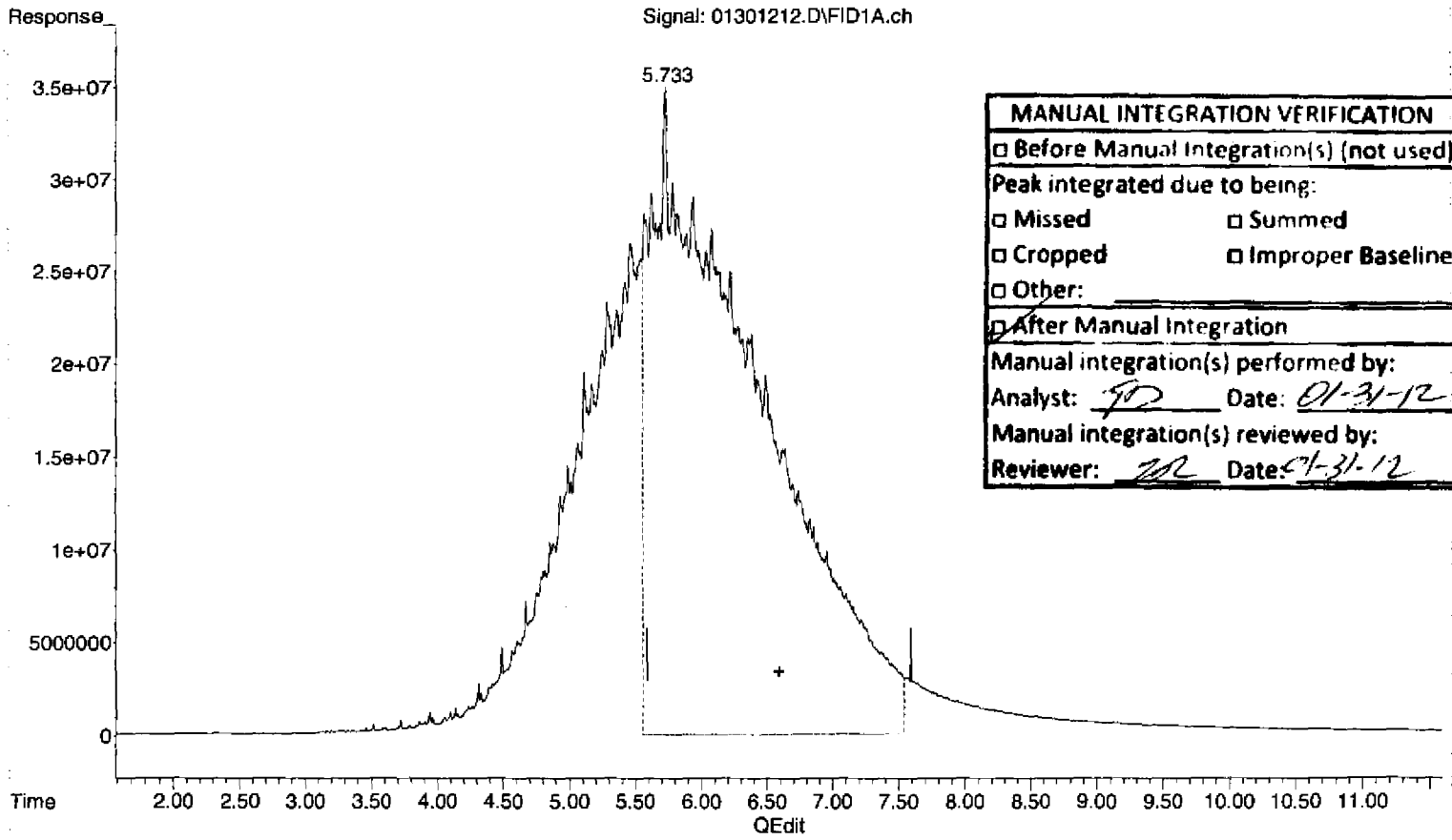
013012DROA.M Tue Jan 31 09:43:39 2012

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301212.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:19 pm
Operator : TD
Sample : 2010046-CALA
Misc : 2A11015 OIL-E
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:08 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-31-12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 01-31-12

(2) OIL (H)
6.590min 11699.267 ug/mL m
response 19380021303

(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:43:55 2012

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301212.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:19 pm
Operator : TD
Sample : 2010046-CALA
Misc : 2A11015 OIL-E
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:08 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate			
Spiked Amount 50.000	Range 60 - 127	5.732f	142663830 35.476 ug/mL
		Recovery =	70.95%
Target Compounds			
1) HM Diesel (TPH)	4.080	9392764819	2729.496 ug/mL
2) H OIL	6.590	15739081249	9501.316 ug/mL

(f)=RT Delta > 1/2 Window

(m)=manual int.

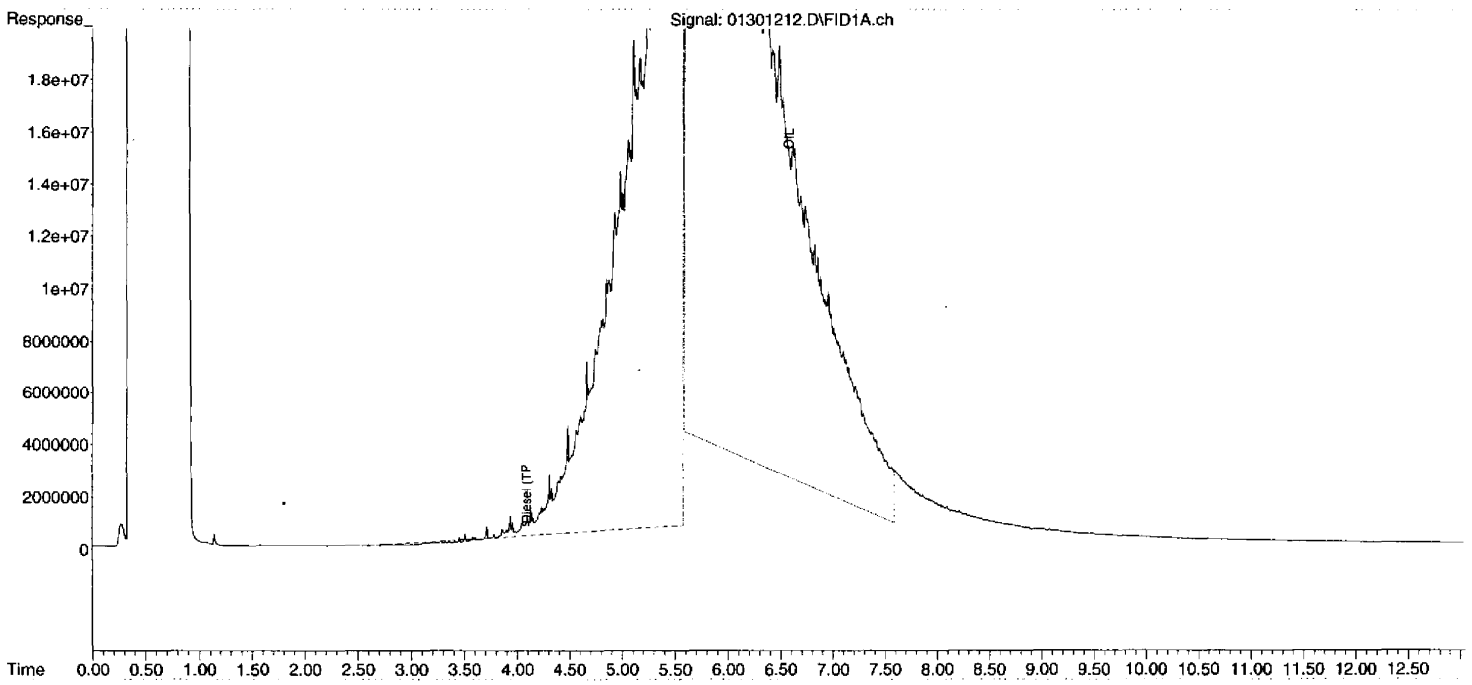
MANUAL INTEGRATION VERIFICATION	
☑ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☐ After Manual Integration	
Manual integration(s) performed by:	
Analyst: _____	Date: _____
Manual integration(s) reviewed by:	
Reviewer: _____	Date: _____

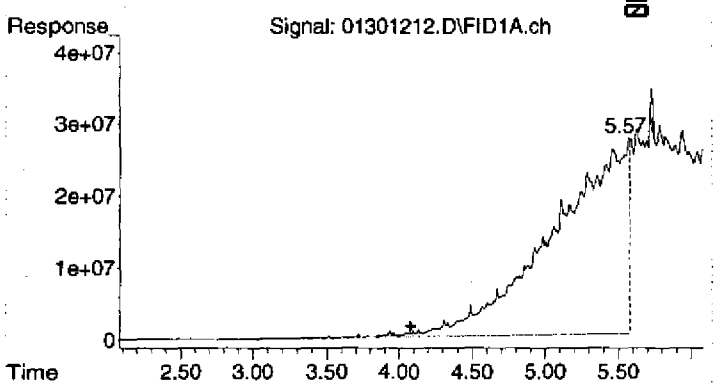
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301212.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:19 pm
Operator : TD
Sample : 2010046-CALA
Misc : 2A11015 OIL-E
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:39:08 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

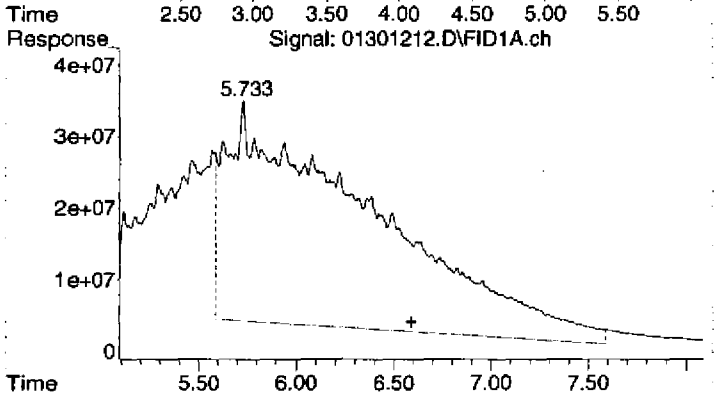
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





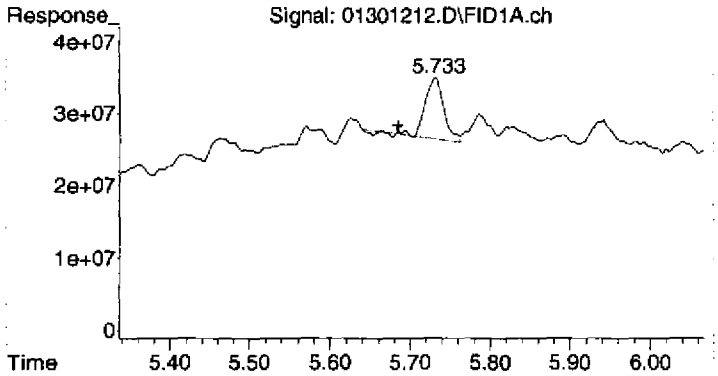
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 9392764819
Conc: 2729.50 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 15739081249
Conc: 9501.32 ug/mL



#3 Surrogate

R.T.: 5.732 min
Delta R.T.: 0.047 min
Response: 142663830
Conc: 35.48 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301213.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:37 pm
Operator : TD
Sample : 2010046-IBL2
Misc : 2A11003 IB
ALS Vial : 13 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 10:08:31 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.681	177903023	50.080 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery = 100.16%	
Target Compounds			
1) HM Diesel (TPH)	4.080	8587385	2.393 ug/mL
2) H OIL	6.590	30068396	15.703 ug/mL

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

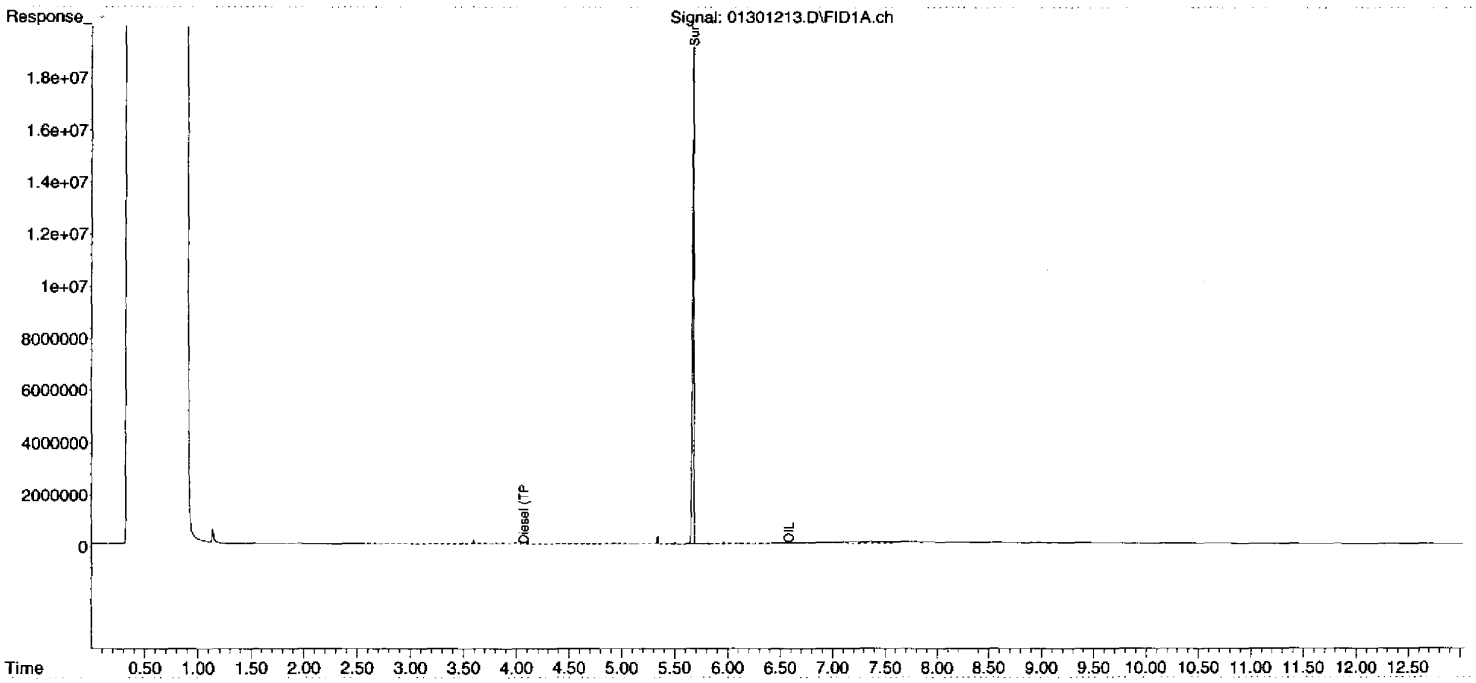
DIM0276093
DIM0275879

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301213.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:37 pm
Operator : TD
Sample : 2010046-IBL2
Misc : 2A11003 IB
ALS Vial : 13 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 10:08:31 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

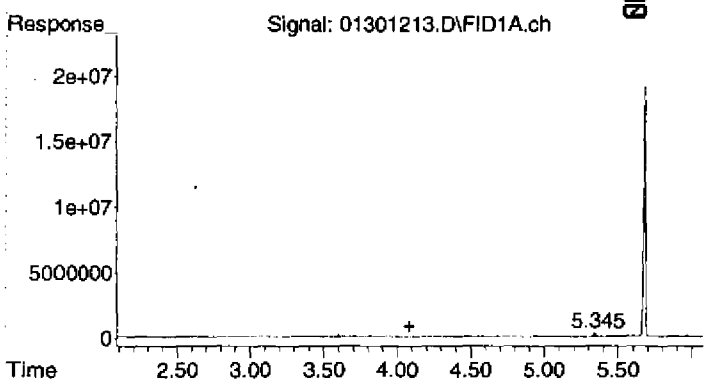


00427

013012DROA.M Tue Jan 31 10:08:32 2012 Page: 2

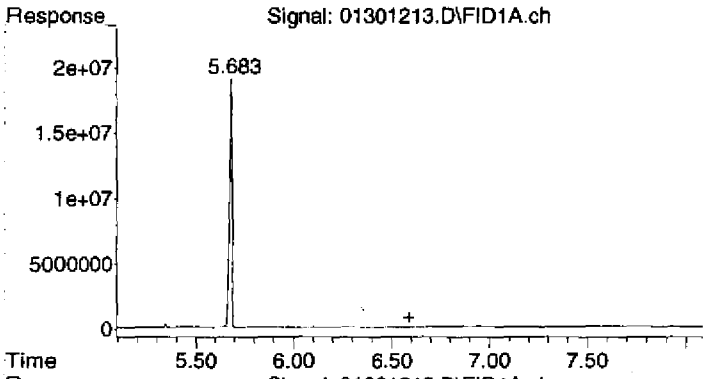
DIM0275879

DIM0276094



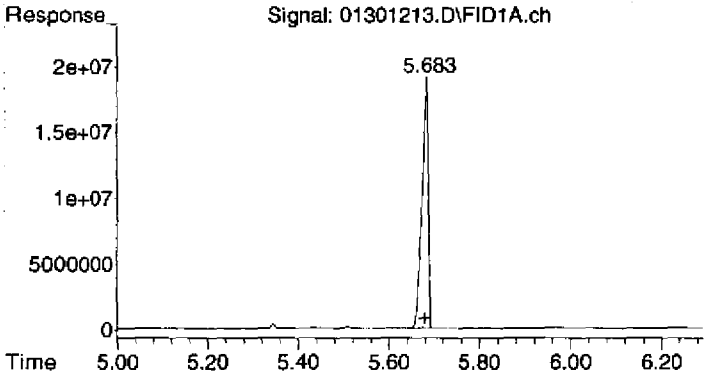
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 8587385
Conc: 2.39 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 30068396
Conc: 15.70 ug/mL



#3 Surrogate

R.T.: 5.681 min
Delta R.T.: 0.001 min
Response: 177903023
Conc: 50.08 ug/mL

C:\msdchem\1\2012\DATA\013012DA\01301214.D

DIESEL SCV REPORT

Instrument Name: AG7890_2
Date Acquired: 1/30/2012 15:55
Acq. Method File: 012712DROA.M
Sample Name: 2010046-SCV1
Misc Info: 2A11009 DRO SCV
Operator: TD

Name	Concentration ng/mL	Calculated	% Recovery	QC Limits	STATUS
Diesel (TPH)	500	502.93	100.59%	70 - 130	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301214.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:55 pm
Operator : TD
Sample : 2010046-SCV1
Misc : 2A11009 DRO SCV
ALS Vial : 14 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:36 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.681	183403369	51.628 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery = 103.26%	
Target Compounds			
1) HM Diesel (TPH)	4.080	1804770347	502.934 ug/mL
2) H OIL	6.590	16050841	8.382 ug/mL

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

$\frac{1804770347}{3.588E6} = 503.002$

TD 01-31-12

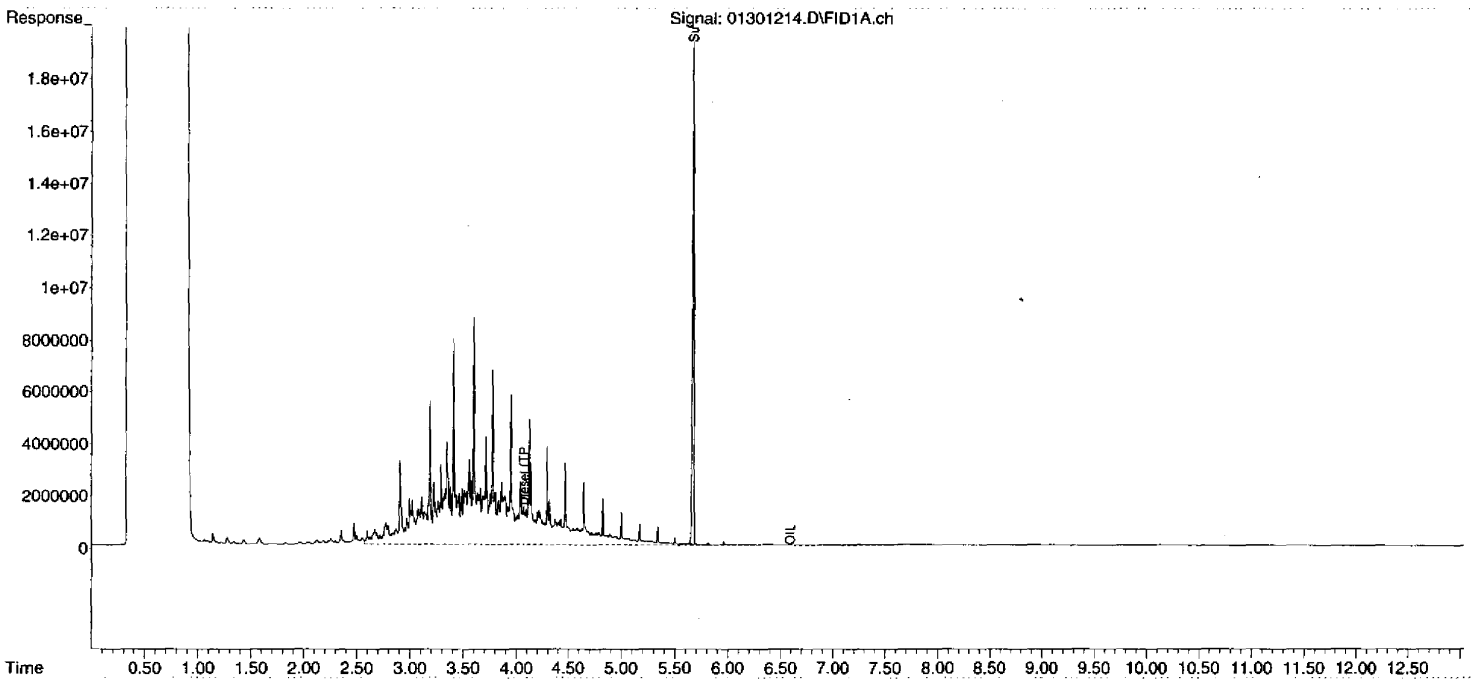
DIM0275879 DIM0276097

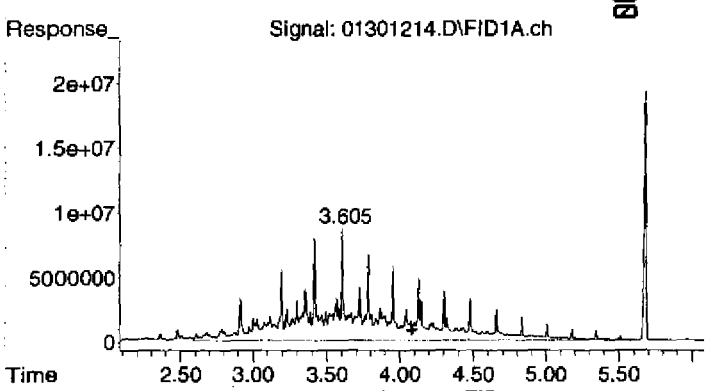
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301214.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 3:55 pm
Operator : TD
Sample : 2010046-SCV1
Misc : 2A11009 DRO SCV
ALS Vial : 14 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:36 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

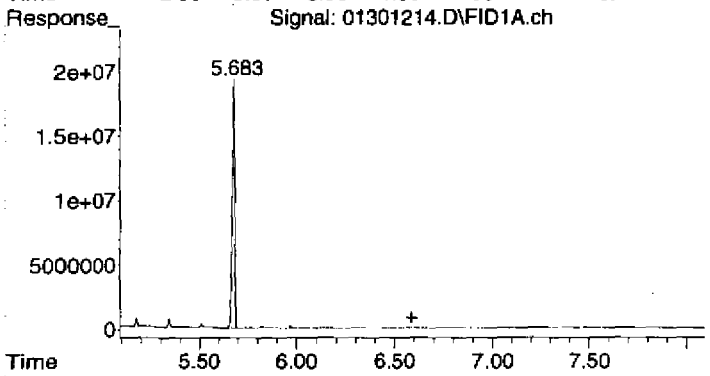
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





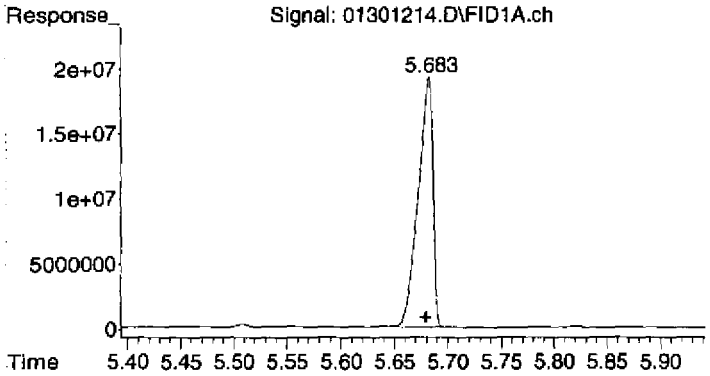
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1804770347
Conc: 502.93 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 16050841
Conc: 8.38 ug/mL



#3 Surrogate

R.T.: 5.681 min
Delta R.T.: 0.001 min
Response: 183403369
Conc: 51.63 ug/mL

C:\msdchem\1\2012\DATA\013012DA\01301215.D

OIL SCV REPORT

Instrument Name: AG7890_2
Date Acquired: 1/30/2012 16:13
Acq. Method File: 012712DROA.M
Sample Name: 2010046-SCV2
Misc Info: 2A11019 OIL SCV
Operator: TD

Name	Concentration ng/mL	Calculated	% Recovery	QC Limits	STATUS
OIL	1000	1158.75	115.88%	70 - 130	pass

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301215.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 4:13 pm
Operator : TD
Sample : 2010046-SCV2
Misc : 2A11019 OIL SCV
ALS Vial : 15 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:57:59 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.683	155490720	43.771 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	87.54%
Target Compounds			
1) HM Diesel (TPH)	4.080	383711158	106.929 ug/mL
2) H OIL	6.590	2218869255	1158.754 ug/mLm

(f)=RT Delta > 1/2 Window

(m)=manual int.

TD 0131-12

2218869255 / 1.915E6 = 1158.678

TD 01-31-12

MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☑ After Manual Integration	
Manual integration(s) performed by:	
Analyst: TD	Date: 01-31-12
Manual integration(s) reviewed by:	
Reviewer: [illegible]	Date: 01-31-12

013012DROA.M Tue Jan 31 09:58:08 2012

DIM0275879

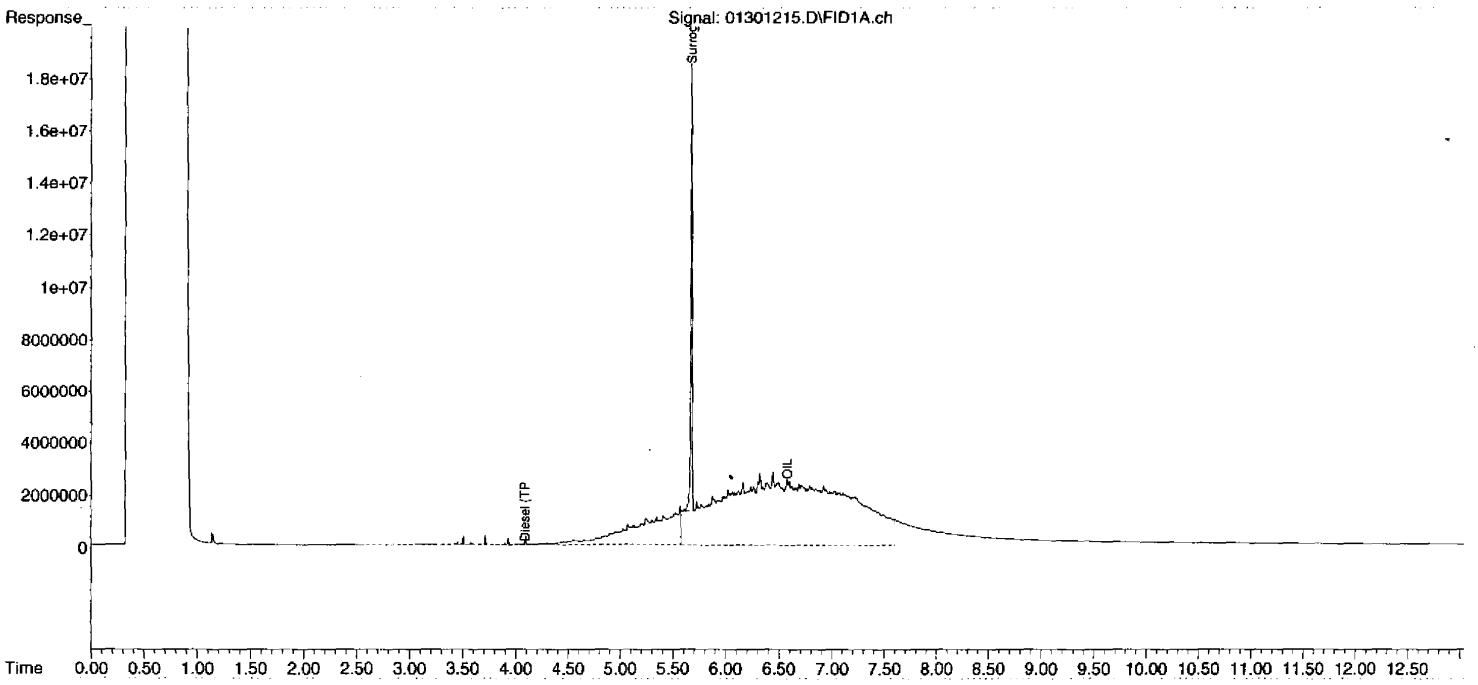
DIM0276101

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301215.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 4:13 pm
Operator : TD
Sample : 2010046-SCV2
Misc : 2A11019 OIL SCV
ALS Vial : 15 Sample Multiplier: 1

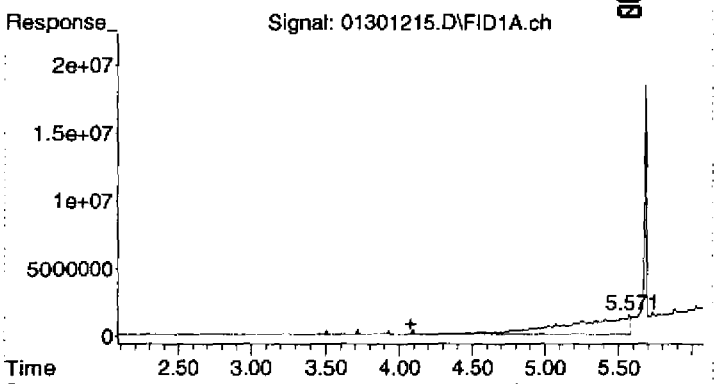
Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:57:59 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



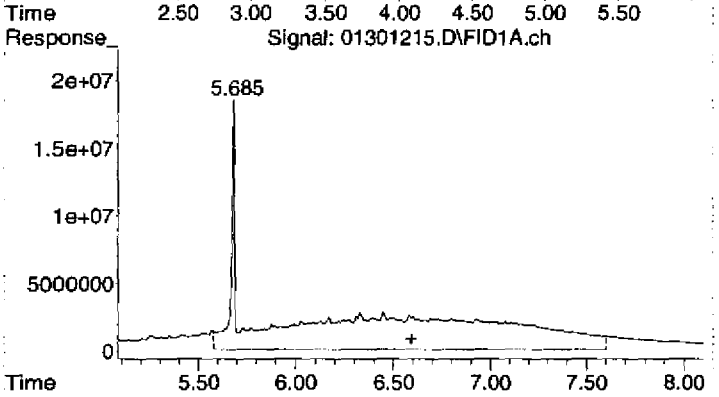
DIM0276102

DIM0275879



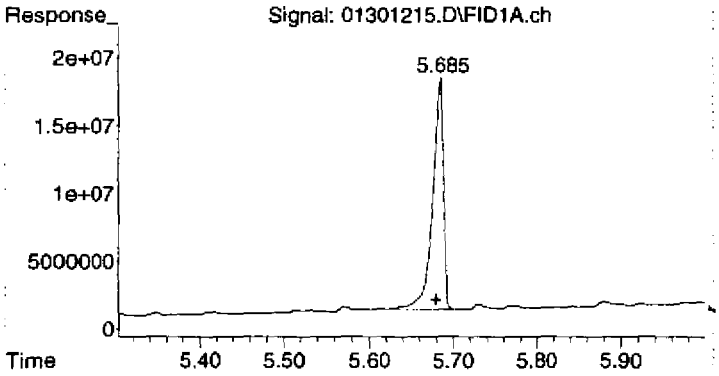
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 383711158
Conc: 106.93 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 2218869255
Conc: 1158.75 ug/mL m



#3 Surrogate

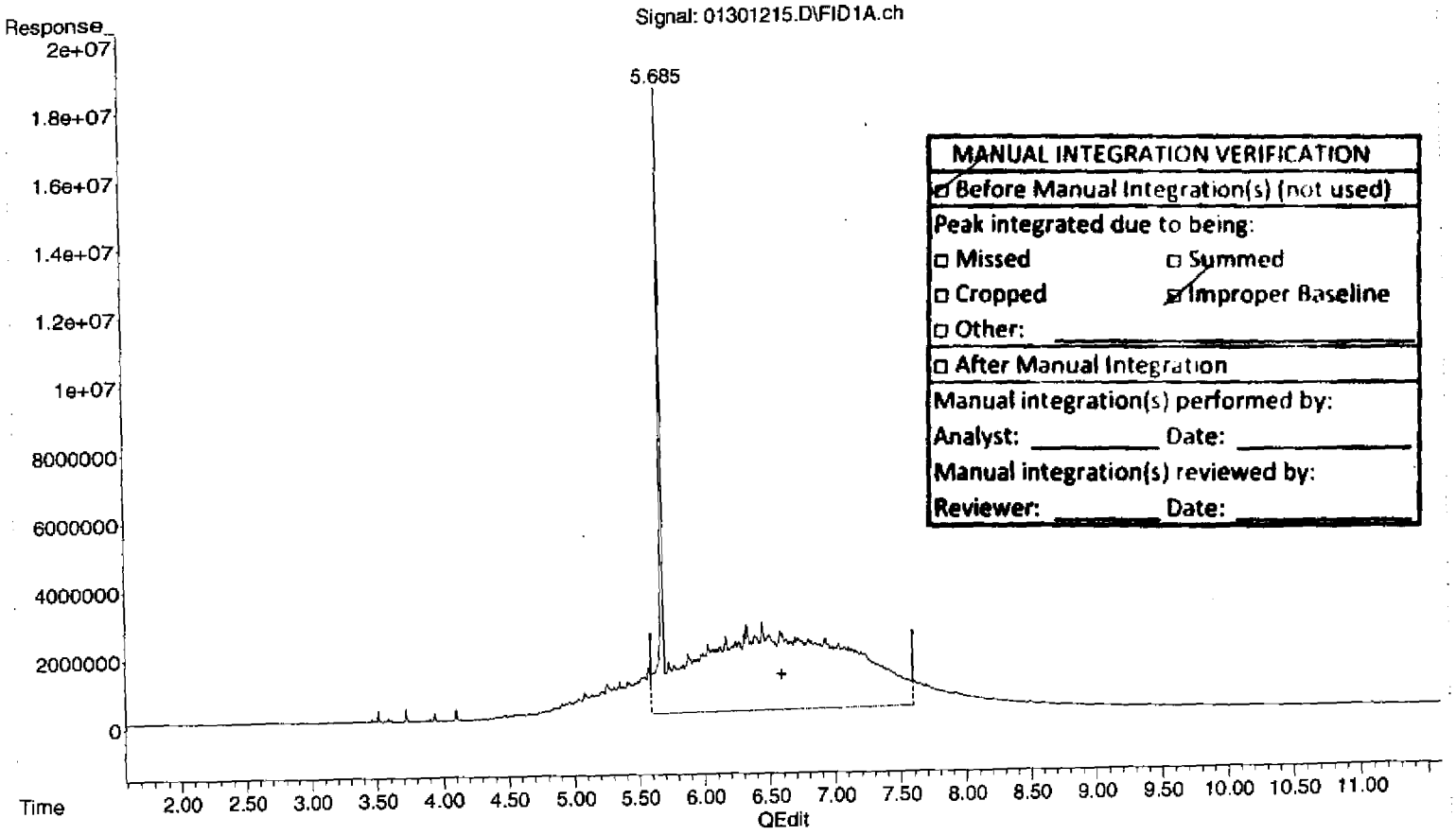
R.T.: 5.683 min
Delta R.T.: 0.004 min
Response: 155490720
Conc: 43.77 ug/mL

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301215.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 4:13 pm
Operator : TD
Sample : 2010046-SCV2
Misc : 2A11019 OIL SCV
ALS Vial : 15 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:40 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☑ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

(2) OIL (H)
6.590min 1021.637 ug/mL
response 1956308099

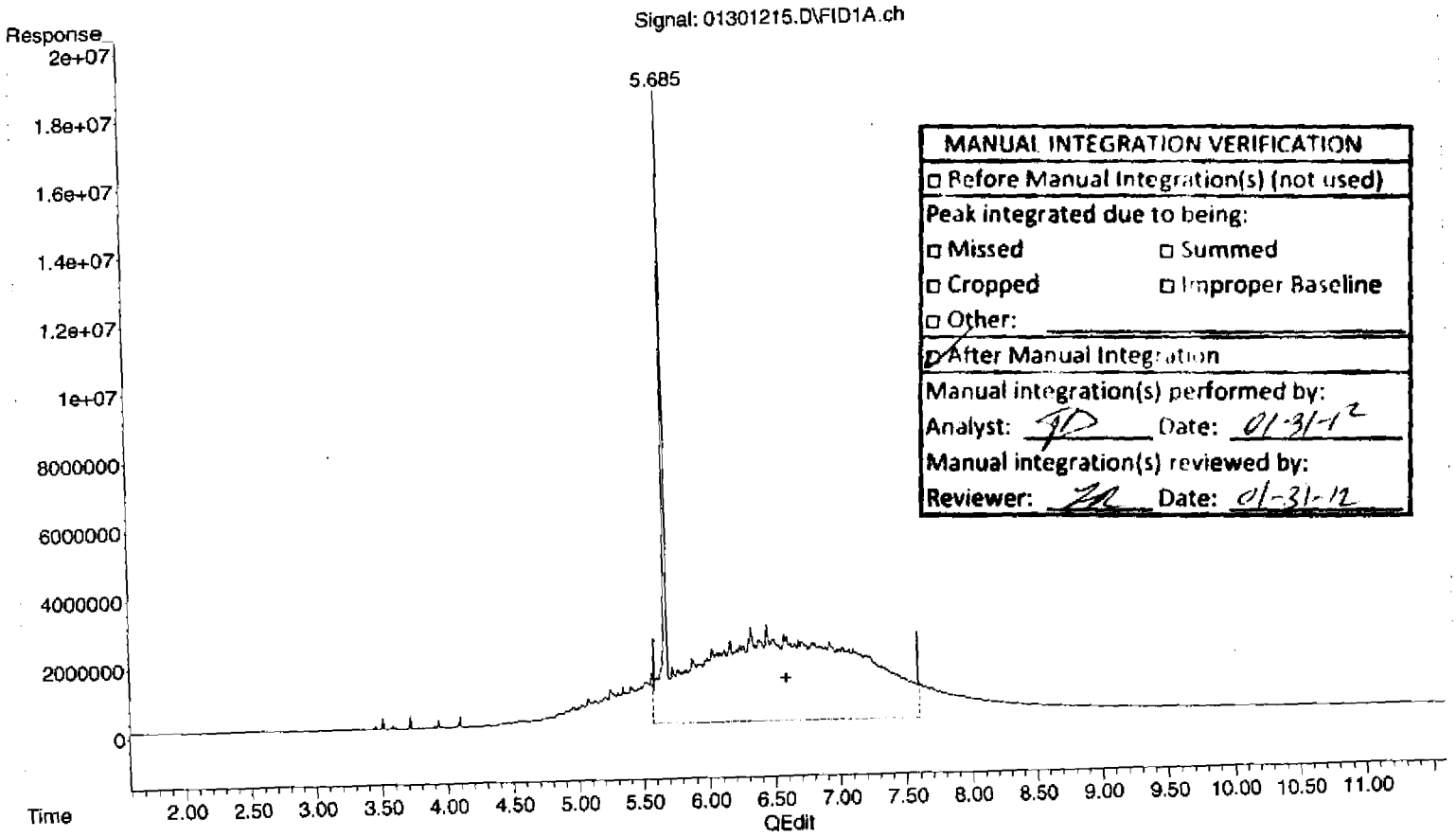
(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:57:37 2012

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301215.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 4:13 pm
Operator : TD
Sample : 2010046-SCV2
Misc : 2A11019 OIL SCV
ALS Vial : 15 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:40 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☑ After Manual Integration	
Manual integration(s) performed by:	
Analyst: TD	Date: 01-31-12
Manual integration(s) reviewed by:	
Reviewer: [illegible]	Date: 01-31-12

(2) OIL (H)

6.590min 1158.754 ug/mL m

response 2218869255

(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:58:02 2012

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301215.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 4:13 pm
Operator : TD
Sample : 2010046-SCV2
Misc : 2A11019 OIL SCV
ALS Vial : 15 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:40 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.683	155490720	43.771 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery = 87.54%	
Target Compounds			
1) HM Diesel (TPH)	4.080	383711158	106.929 ug/mL
2) H OIL	6.590	1956308099	1021.637 ug/mL

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

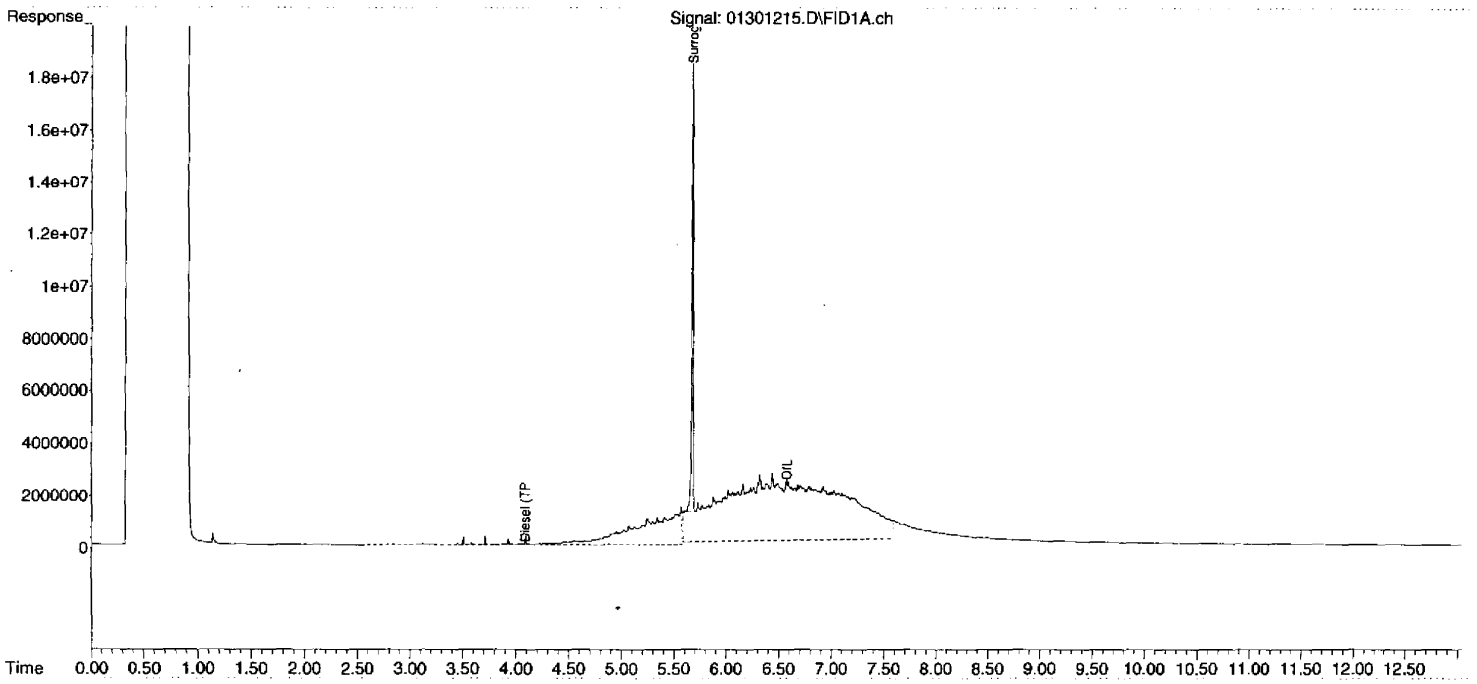
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

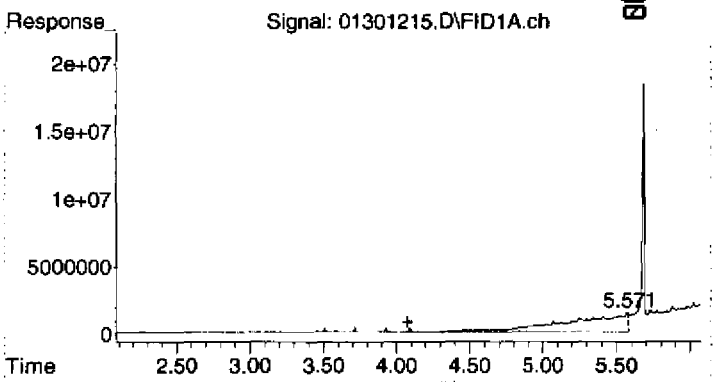
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301215.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 4:13 pm
Operator : TD
Sample : 2010046-SCV2
Misc : 2A11019 OIL SCV
ALS Vial : 15 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:40 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

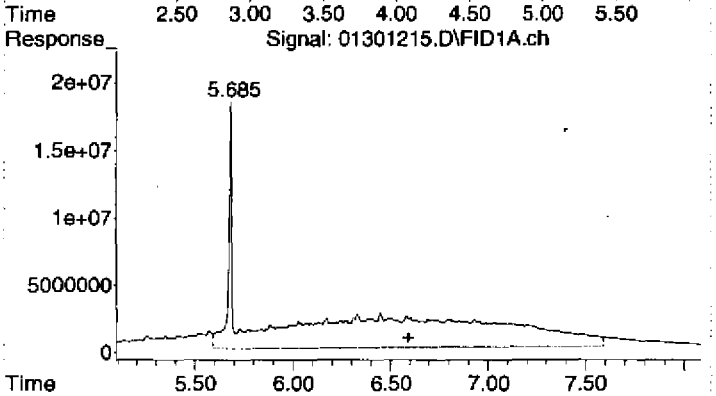
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





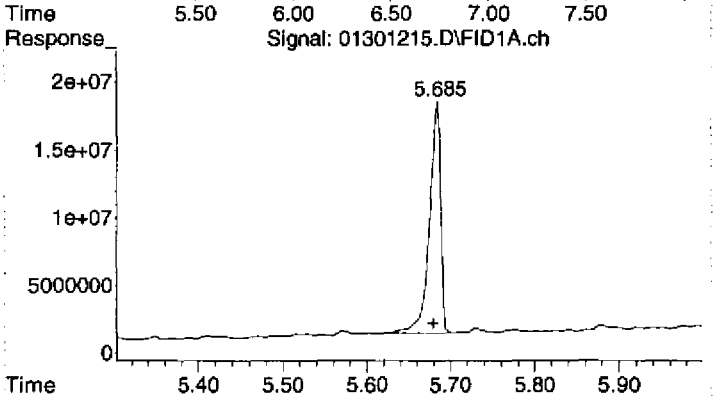
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 383711158
Conc: 106.93 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1956308099
Conc: 1021.64 ug/mL



#3 Surrogate

R.T.: 5.683 min
Delta R.T.: 0.004 min
Response: 155490720
Conc: 43.77 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301216.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 4:31 pm
Operator : TD
Sample : 2010046-ICB2
Misc : 2A11022 Hydraulic Fluid
ALS Vial : 16 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:44 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.688	249870344	70.338 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	140.68%#
Target Compounds			
1) HM Diesel (TPH)	4.080	1509377973	420.617 ug/mL
2) H OIL	6.590	406747007	212.414 ug/mL

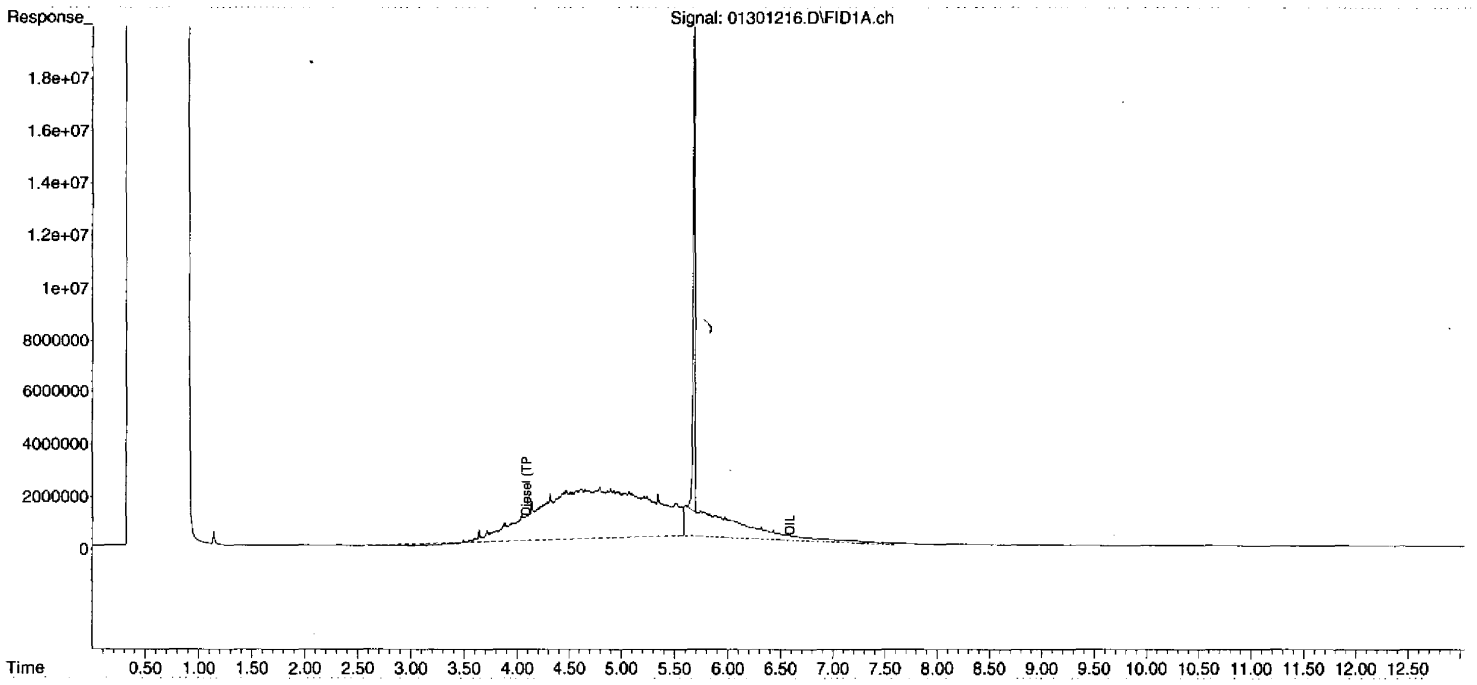
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

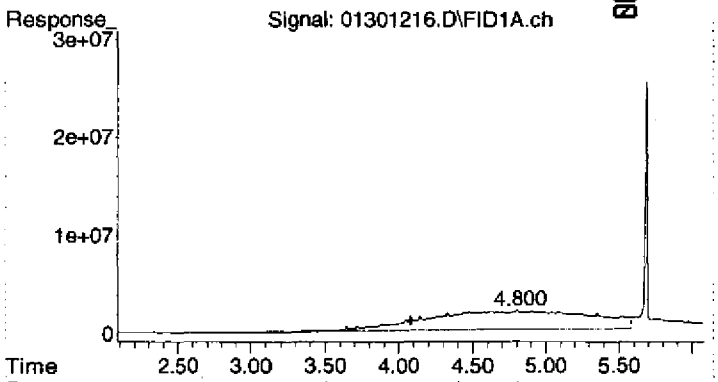
Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301216.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 4:31 pm
Operator : TD
Sample : 2010046-ICB2
Misc : 2A11022 Hydraulic Fluid
ALS Vial : 16 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:44 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

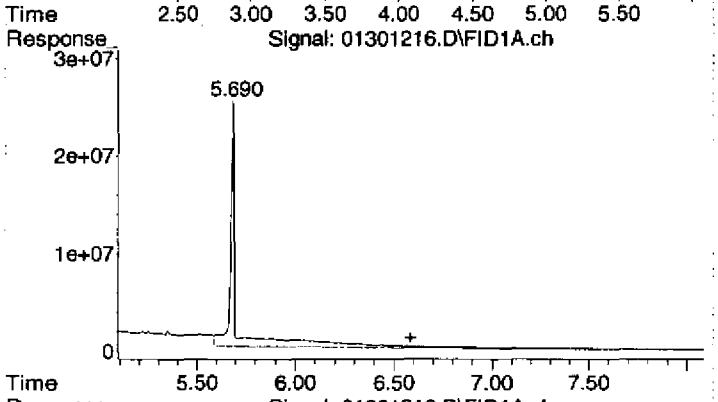


00443
DIM0275879
DIM0276110



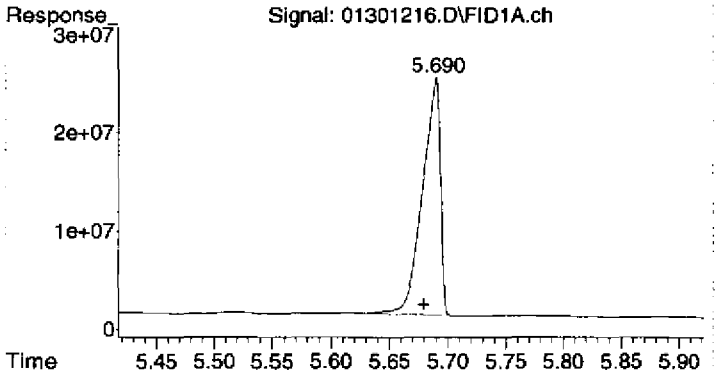
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1509377973
Conc: 420.62 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 406747007
Conc: 212.41 ug/mL



#3 Surrogate

R.T.: 5.688 min
Delta R.T.: 0.008 min
Response: 249870344
Conc: 70.34 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301217.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 4:49 pm
Operator : TD
Sample : 2010046-ICB3
Misc : 2A11026 Mineral Spirit
ALS Vial : 17 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:48 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.686	266828736	75.112 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery = 150.22%#	
Target Compounds			
1) HM Diesel (TPH)	4.080	1567461266	436.803 ug/mL
2) H OIL	6.590	9687685	5.059 ug/mL

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

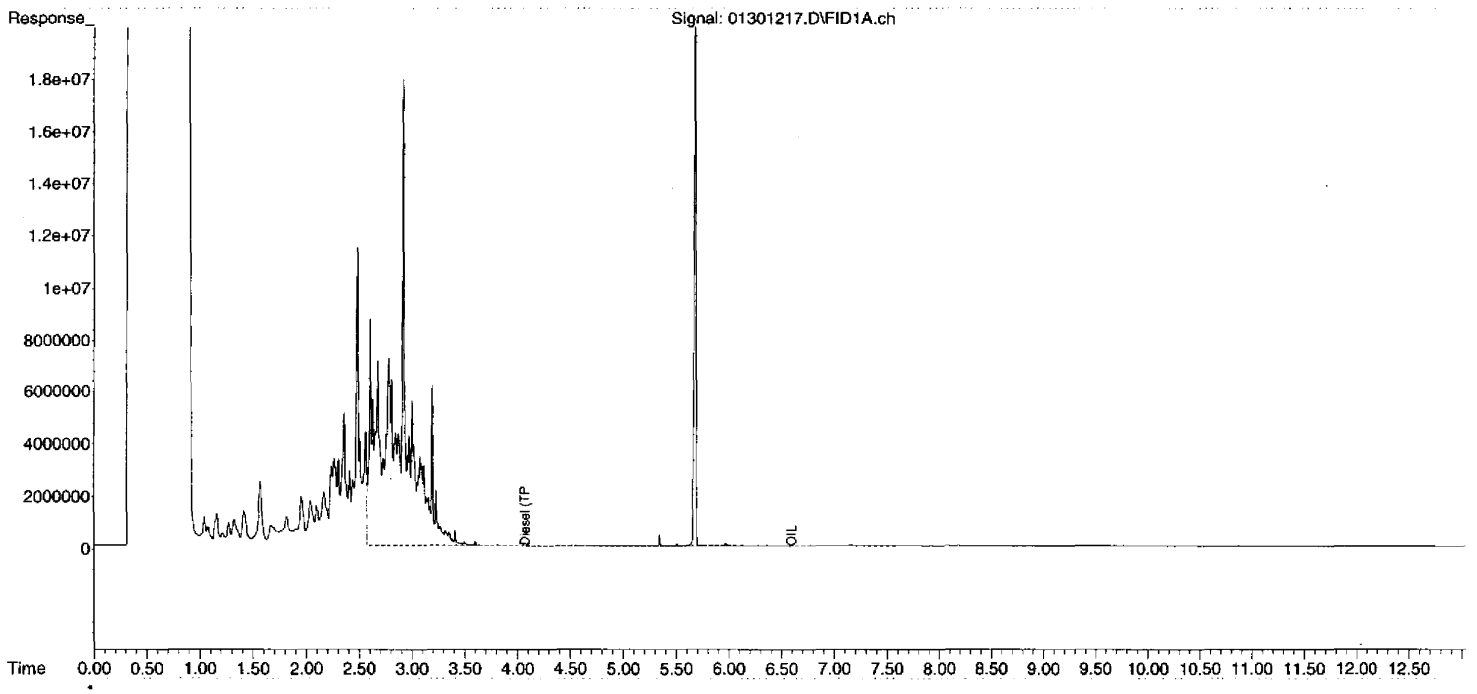
DIM0275879 DIM0276112

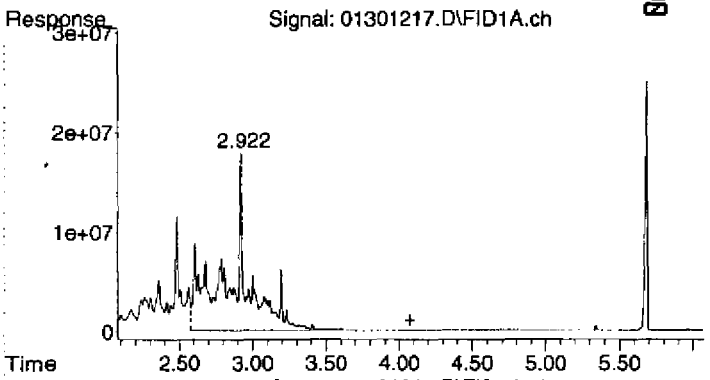
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301217.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 4:49 pm
Operator : TD
Sample : 2010046-ICB3
Misc : 2A11026 Mineral Spirit
ALS Vial : 17 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:48 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

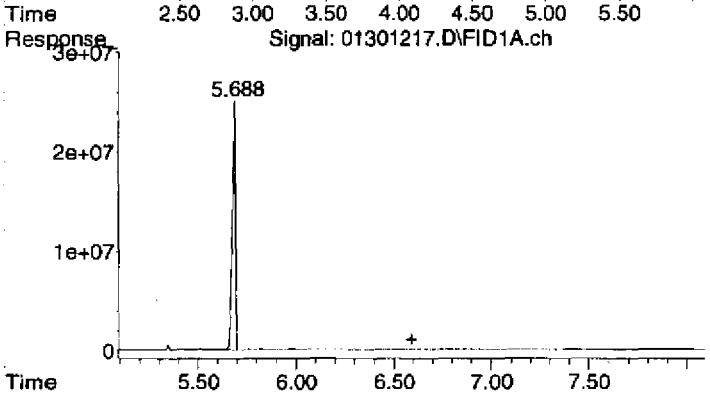
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





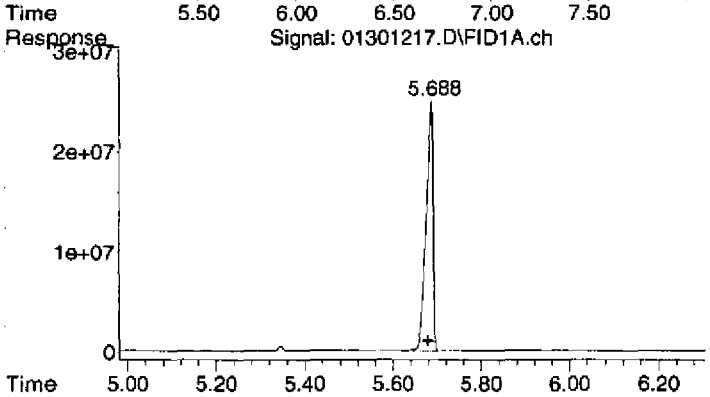
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1567461266
Conc: 436.80 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 9687685
Conc: 5.06 ug/mL



#3 Surrogate

R.T.: 5.686 min
Delta R.T.: 0.006 min
Response: 266828736
Conc: 75.11 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301218.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 5:07 pm
Operator : TD
Sample : 2010046-ICB4
Misc : 2A11027 Naphtha
ALS Vial : 18 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:52 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.683	242678788	68.314 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	136.63%#
Target Compounds			
1) HM Diesel (TPH)	4.080	11281427	3.144 ug/mL
2) H OIL	6.590	7226736	3.774 ug/mL

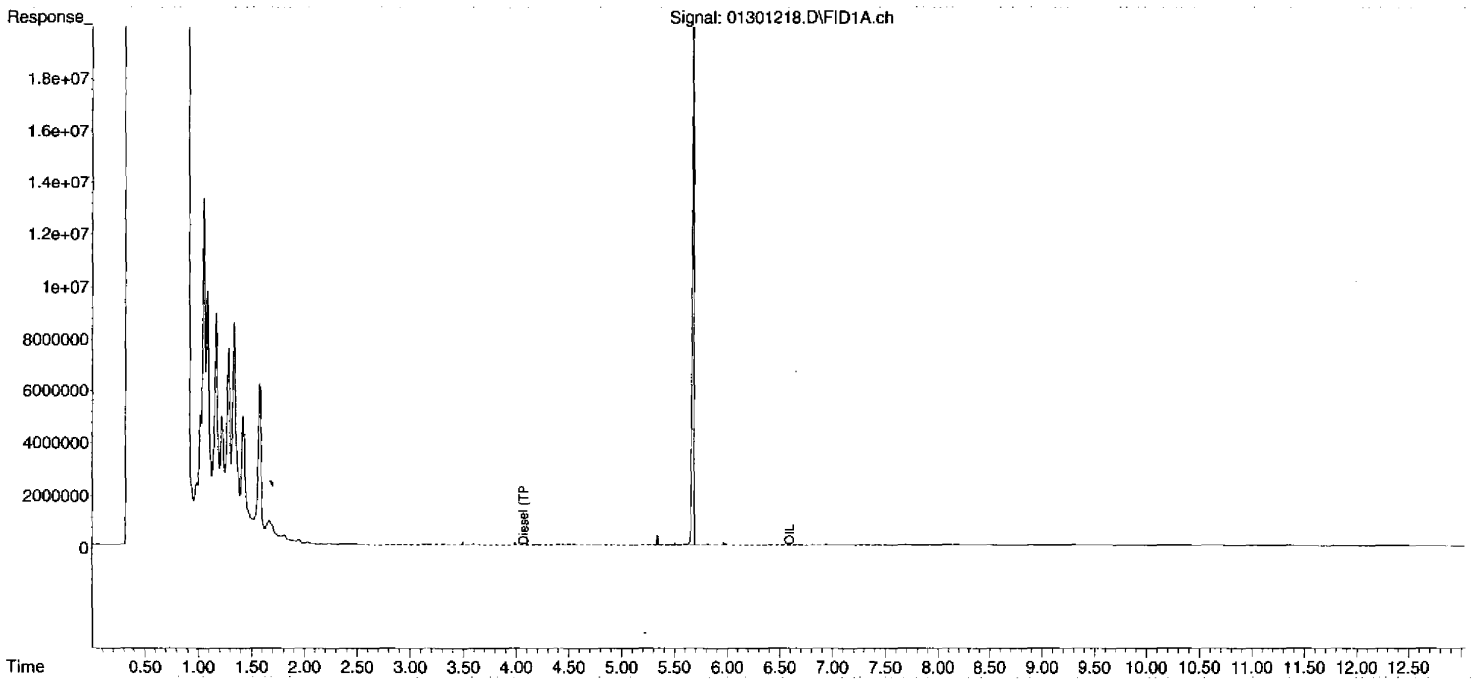
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

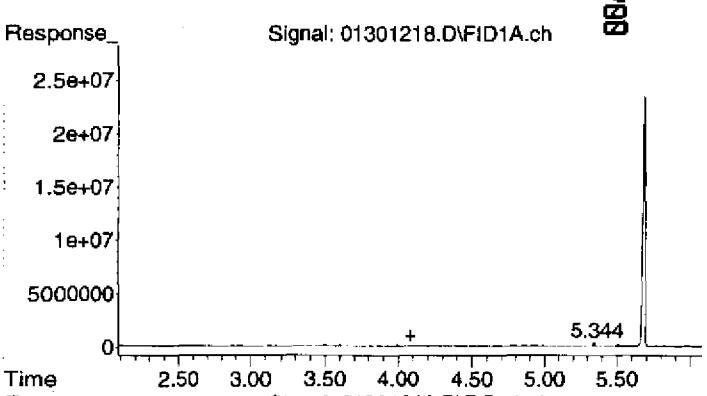
Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301218.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 5:07 pm
Operator : TD
Sample : 2010046-ICB4
Misc : 2A11027 Naphtha
ALS Vial : 18 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:52 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

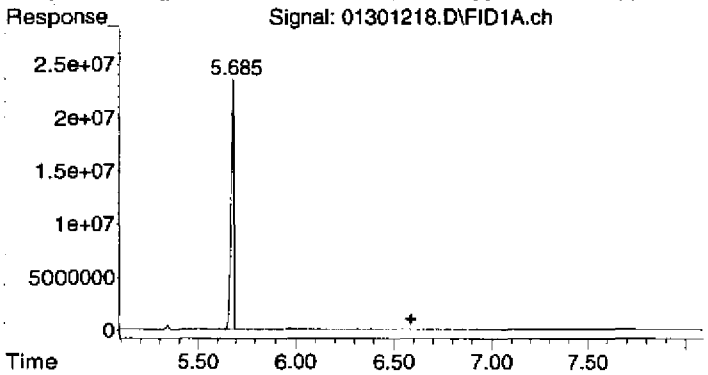


DIM0275879
DIM0276116



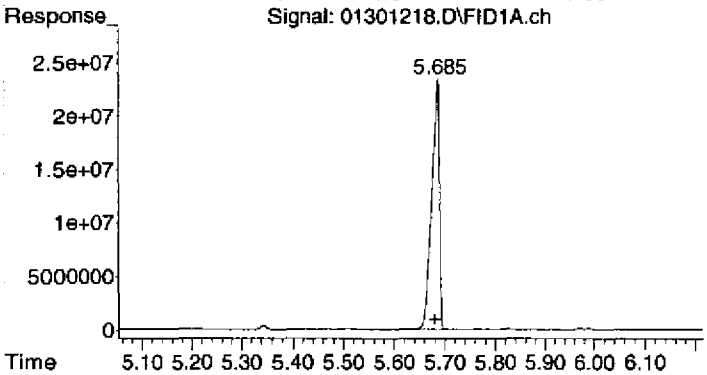
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 11281427
Conc: 3.14 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 7226736
Conc: 3.77 ug/mL



#3 Surrogate

R.T.: 5.683 min
Delta R.T.: 0.003 min
Response: 242678788
Conc: 68.31 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301219.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 5:25 pm
Operator : TD
Sample : 2010046-ICB5
Misc : 2A11021 GAS
ALS Vial : 19 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:56 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.684	251694403	70.852 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	141.70%#
Target Compounds			
1) HM Diesel (TPH)	4.080	182560315	50.874 ug/mL
2) H OIL	6.590	6625782	3.460 ug/mL

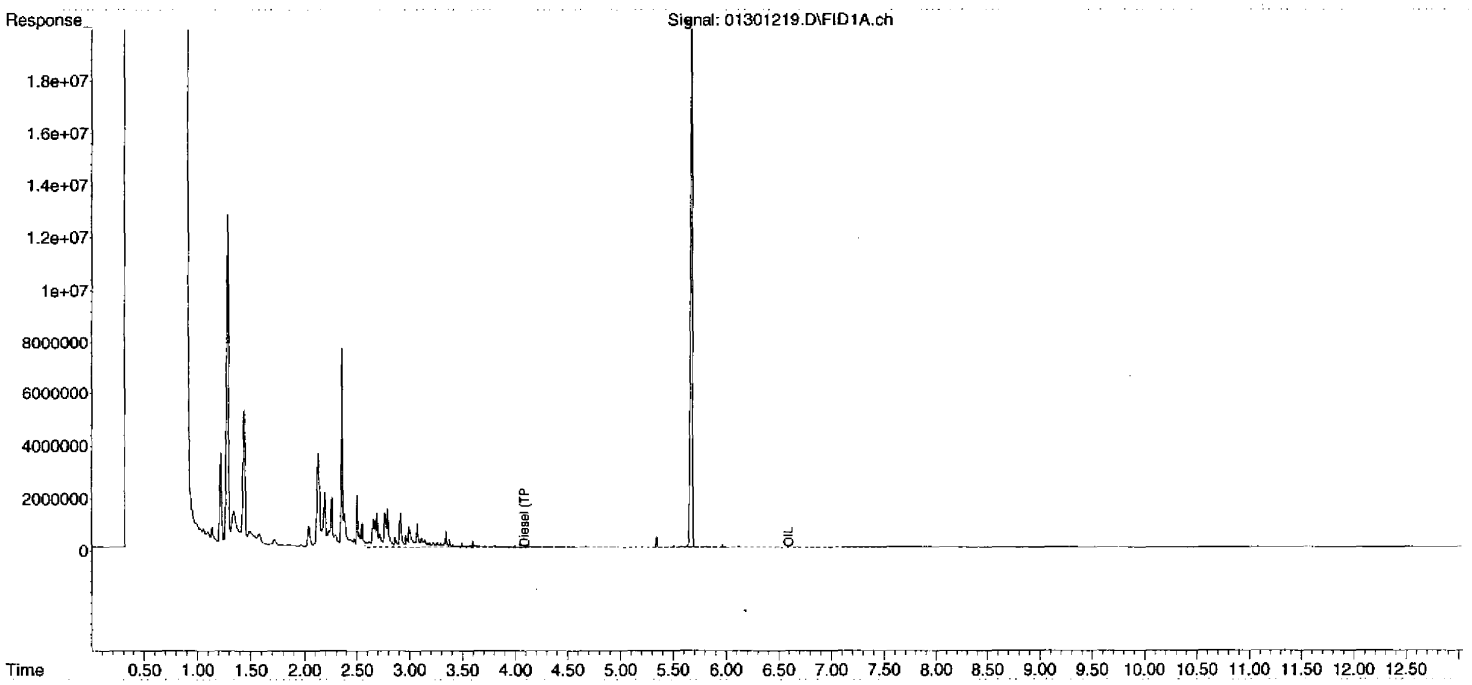
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301219.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 5:25 pm
Operator : TD
Sample : 2010046-ICB5
Misc : 2A11021 GAS
ALS Vial : 19 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:56 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



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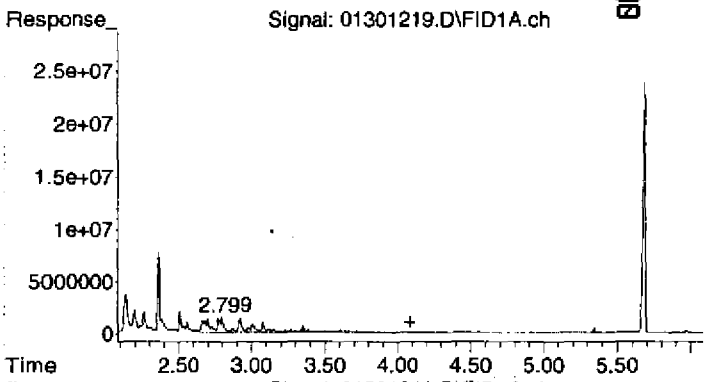
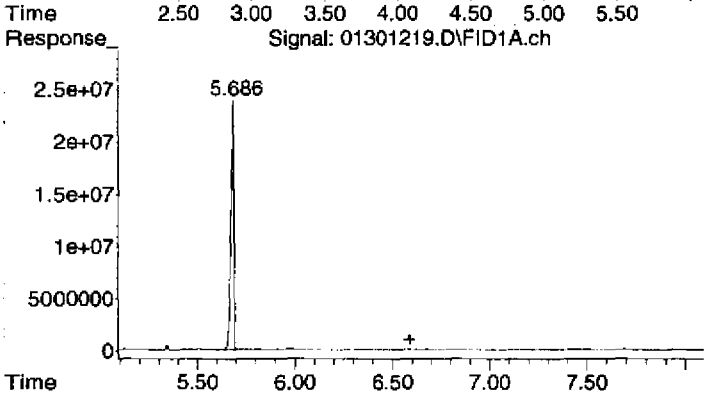


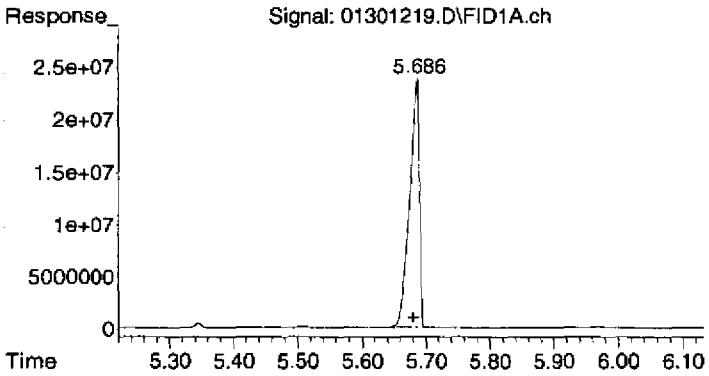
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 182560315
Conc: 50.87 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 6625782
Conc: 3.46 ug/mL



#3 Surrogate

R.T.: 5.684 min
Delta R.T.: 0.004 min
Response: 251694403
Conc: 70.85 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301220.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 5:43 pm
Operator : TD
Sample : 2010046-ICB6
Misc : 1G15010 Kerosene
ALS Vial : 20 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:47:00 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.684	247044705	69.543 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	139.09%#
Target Compounds			
1) HM Diesel (TPH)	4.080	2293312814	639.076 ug/mL
2) H OIL	6.590	6057939	3.164 ug/mL

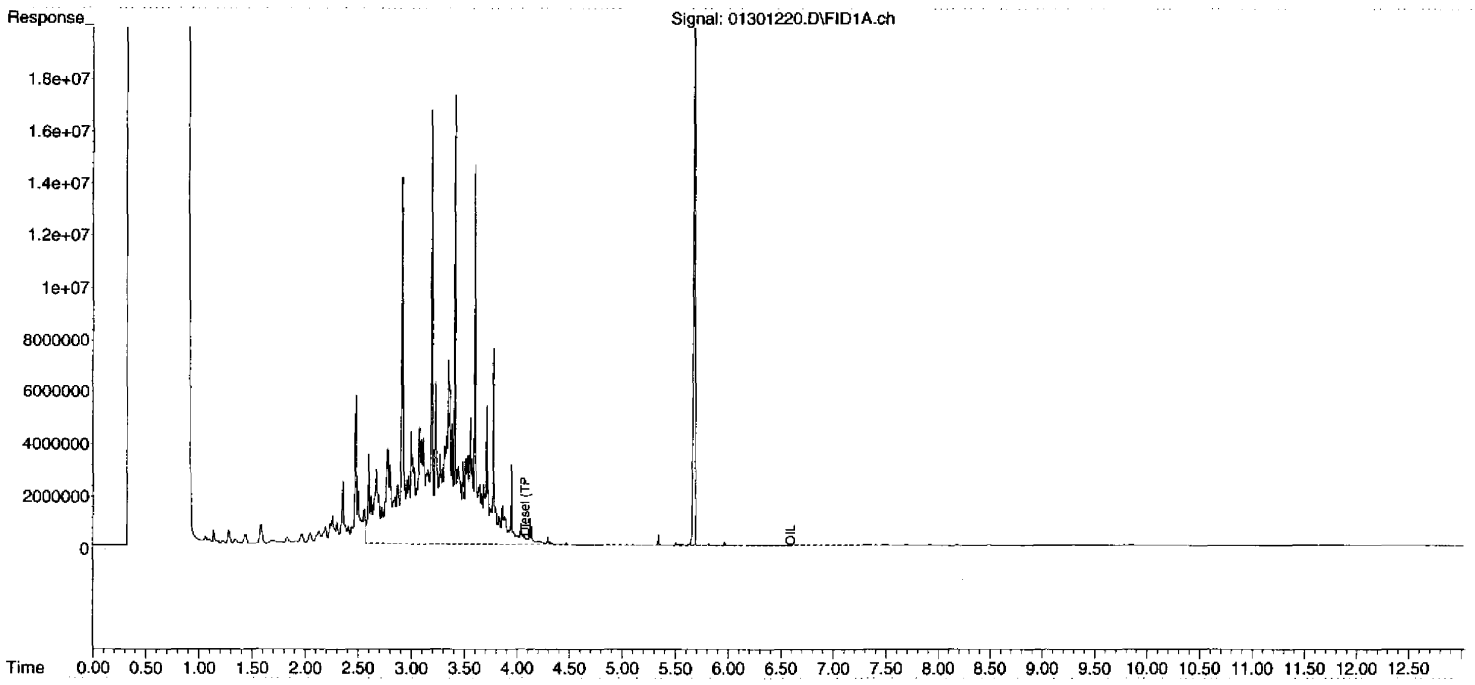
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

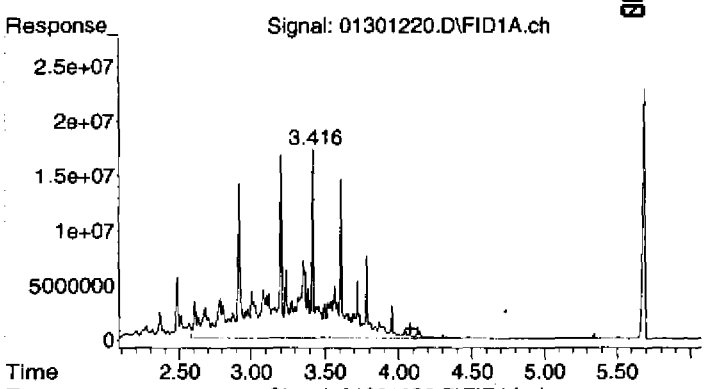
Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301220.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 5:43 pm
Operator : TD
Sample : 2010046-ICB6
Misc : 1G15010 Kerosene
ALS Vial : 20 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:47:00 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

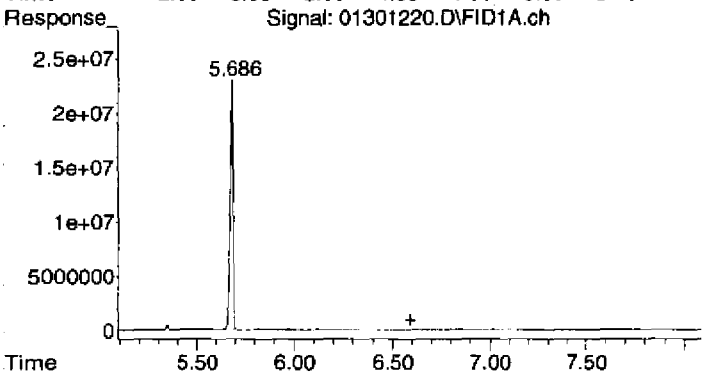


00455



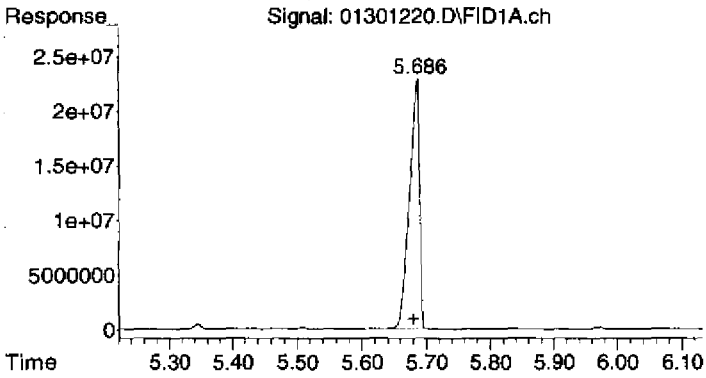
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 2293312814
Conc: 639.08 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 6057939
Conc: 3.16 ug/mL



#3 Surrogate

R.T.: 5.684 min
Delta R.T.: 0.004 min
Response: 247044705
Conc: 69.54 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301221.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 6:02 pm
Operator : TD
Sample : 2010046-ICB7
Misc : 2A11023 Jet Fuel
ALS Vial : 21 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:47:04 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.685	261592238	73.638 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	147.28%#
Target Compounds			
1) HM Diesel (TPH)	4.080	1936982088	539.777 ug/mL
2) H OIL	6.590	7147624	3.733 ug/mL

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

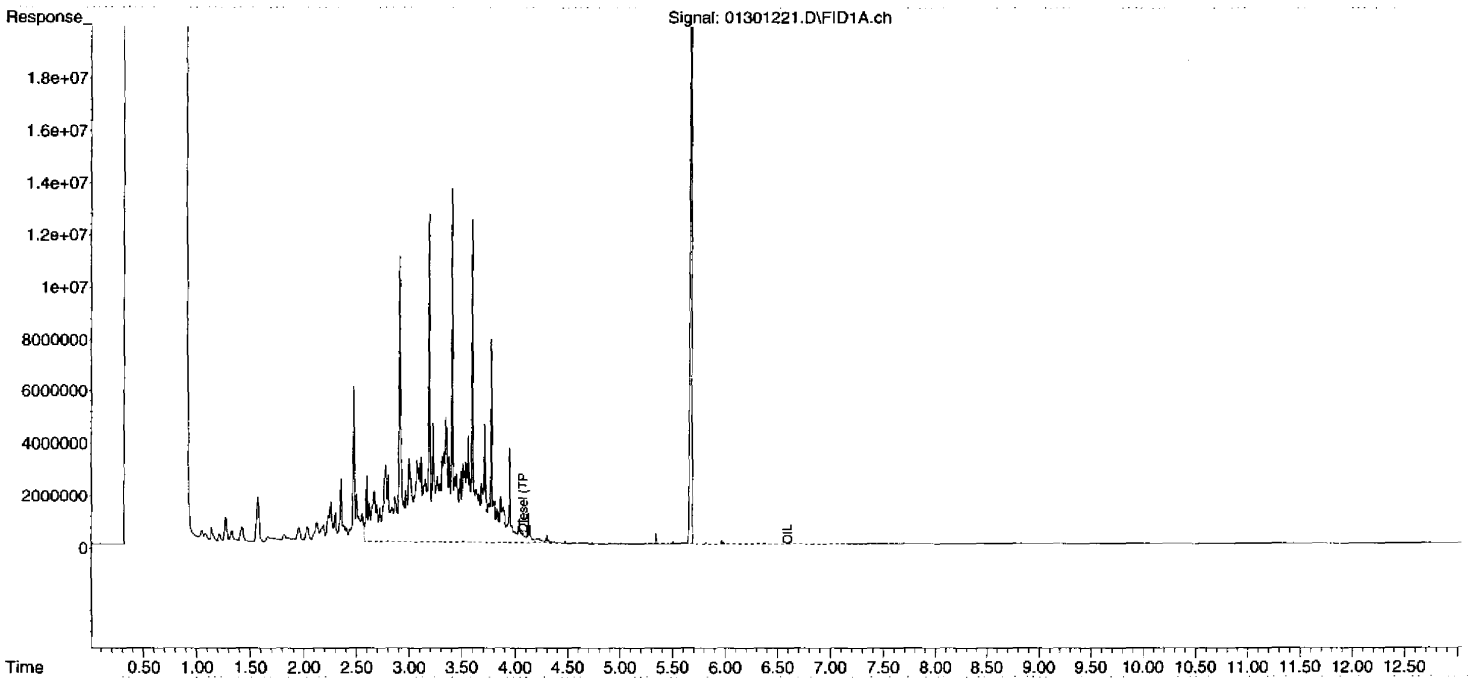
DIM0275879 DIM0276124

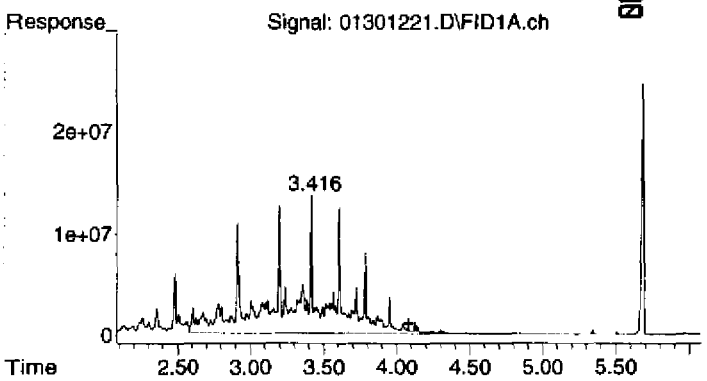
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301221.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 6:02 pm
Operator : TD
Sample : 2010046-ICB7
Misc : 2A11023 Jet Fuel
ALS Vial : 21 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:47:04 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

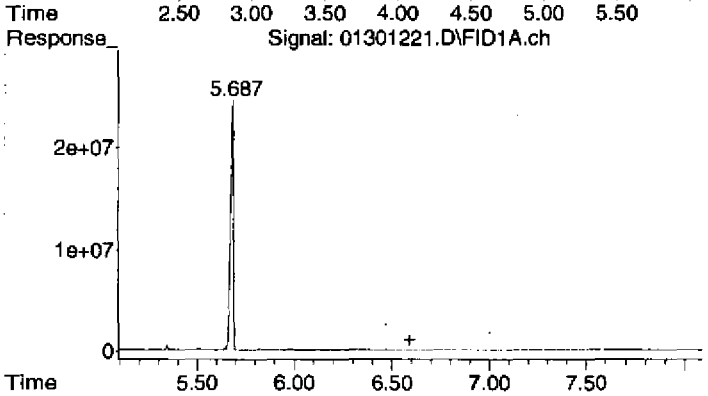
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





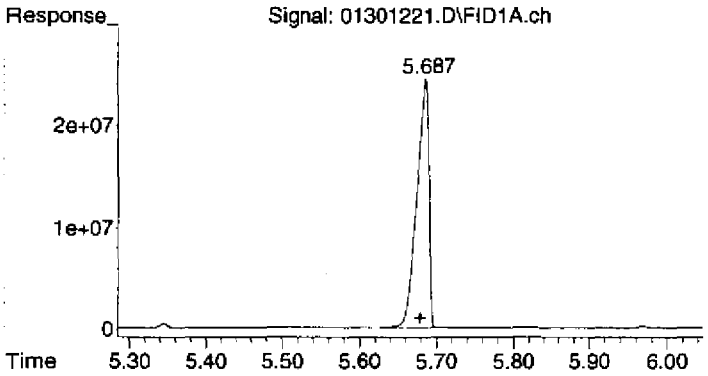
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1936982088
Conc: 539.78 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 7147624
Conc: 3.73 ug/mL



#3 Surrogate

R.T.: 5.685 min
Delta R.T.: 0.005 min
Response: 261592238
Conc: 73.64 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301222.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 6:20 pm
Operator : TD
Sample : 2010046-ICB8
Misc : 2A11028 Turpentine
ALS Vial : 22 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:47:08 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.685	261523791	73.619 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	147.24%#
Target Compounds			
1) HM Diesel (TPH)	4.080	543847919	151.554 ug/mL
2) H OIL	6.590	8098057	4.229 ug/mL

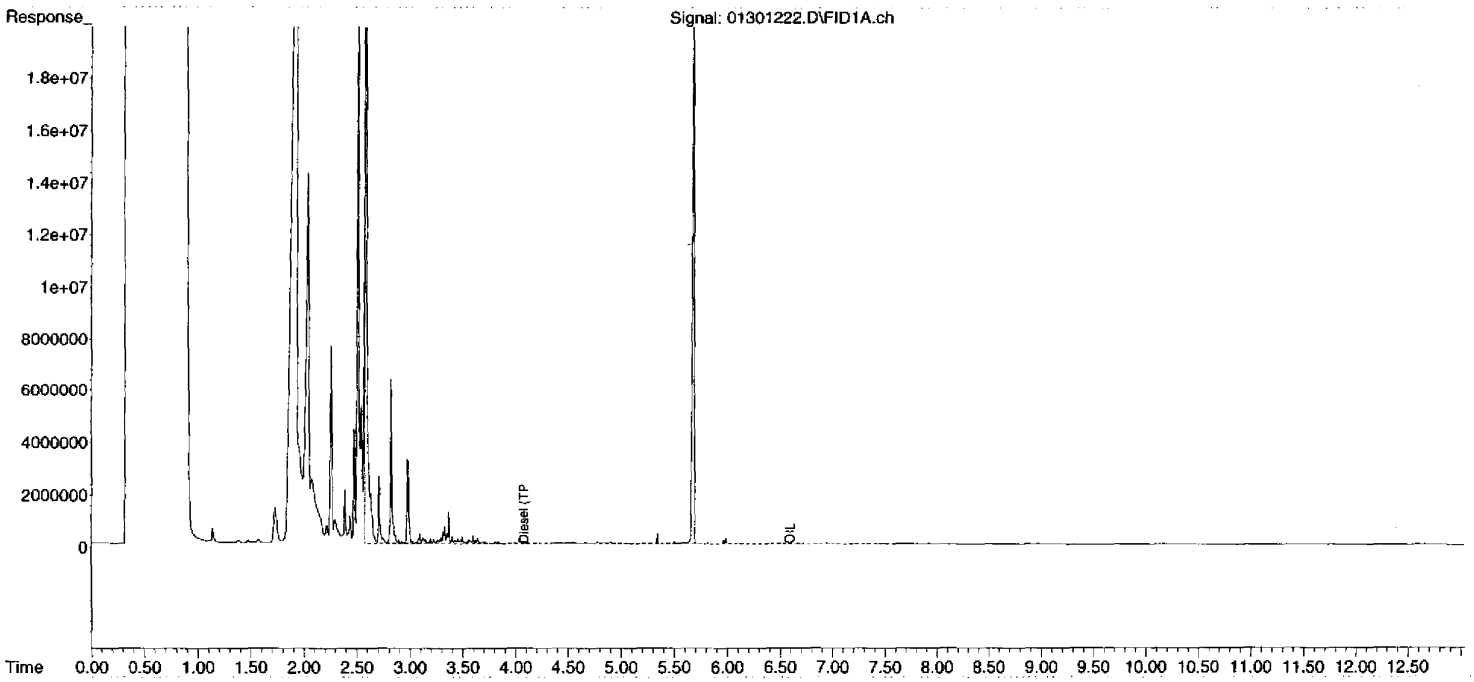
(f)=RT Delta > 1/2 Window (m)=manual int.

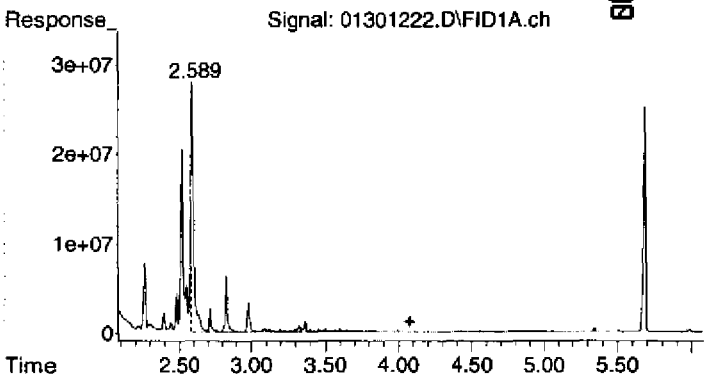
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301222.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 6:20 pm
Operator : TD
Sample : 2010046-ICB8
Misc : 2A11028 Turpentine
ALS Vial : 22 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:47:08 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

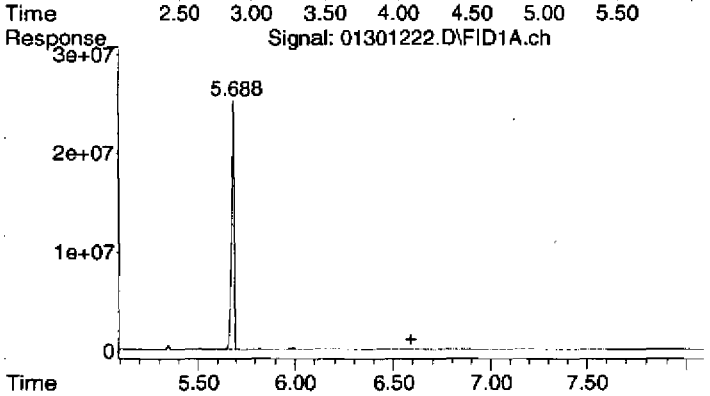
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





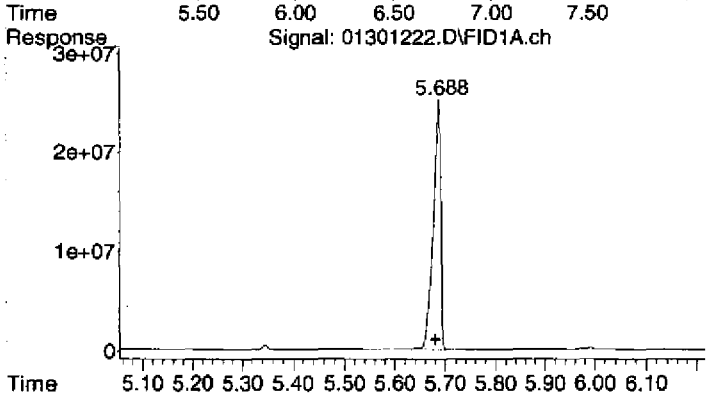
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 543847919
Conc: 151.55 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 8098057
Conc: 4.23 ug/mL



#3 Surrogate

R.T.: 5.685 min
Delta R.T.: 0.006 min
Response: 261523791
Conc: 73.62 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301223.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 6:38 pm
Operator : TD
Sample : 2010046-ICB9
Misc : 2A11029 Lacqure Thinner
ALS Vial : 23 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:47:12 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.684	231921813	65.286 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	130.57%#
Target Compounds			
1) HM Diesel (TPH)	4.080	10435482	2.908 ug/mL
2) H OIL	6.590	7970634	4.162 ug/mL

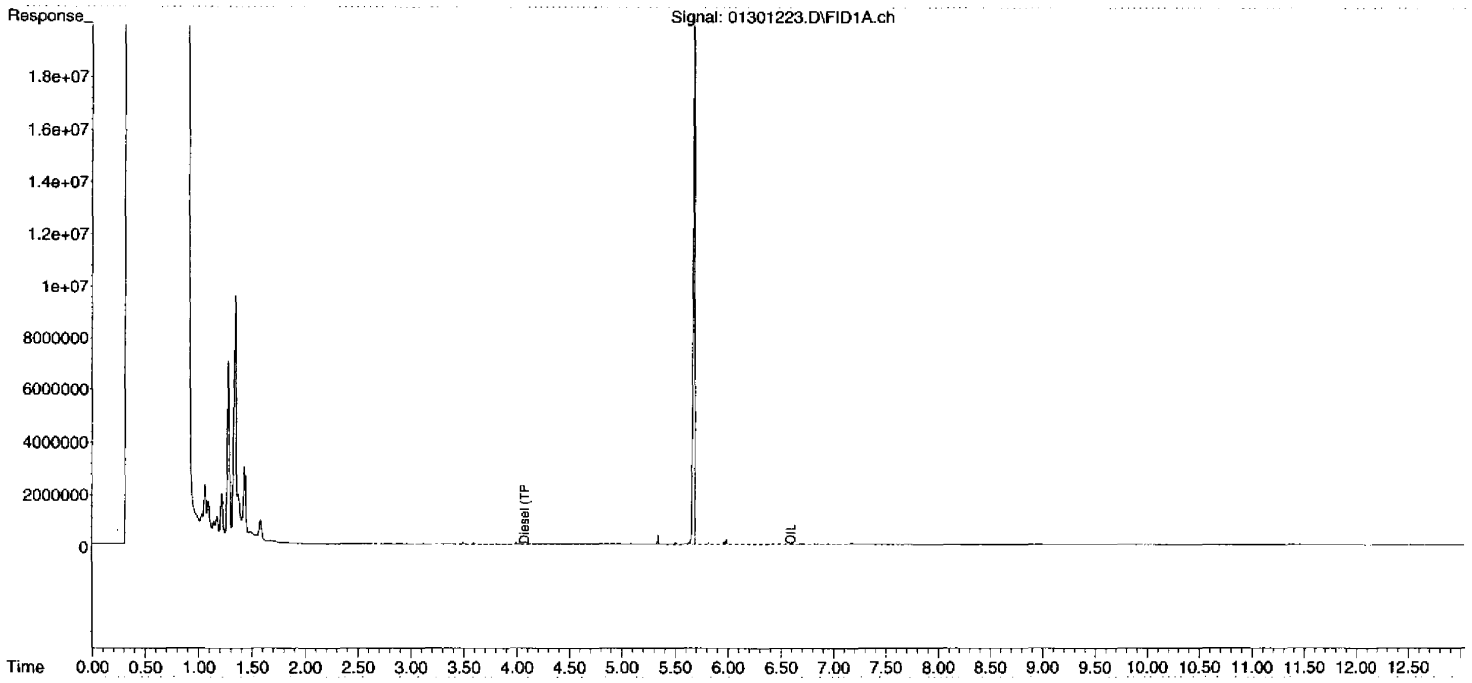
(f)=RT Delta > 1/2 Window (m)=manual int.

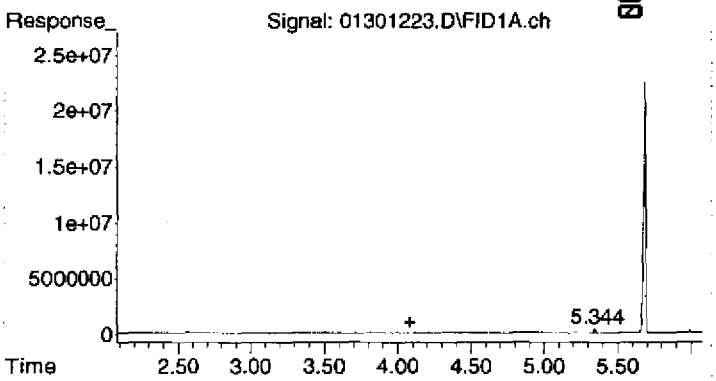
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301223.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 6:38 pm
Operator : TD
Sample : 2010046-ICB9
Misc : 2A11029 Lacqure Thinner
ALS Vial : 23 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:47:12 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

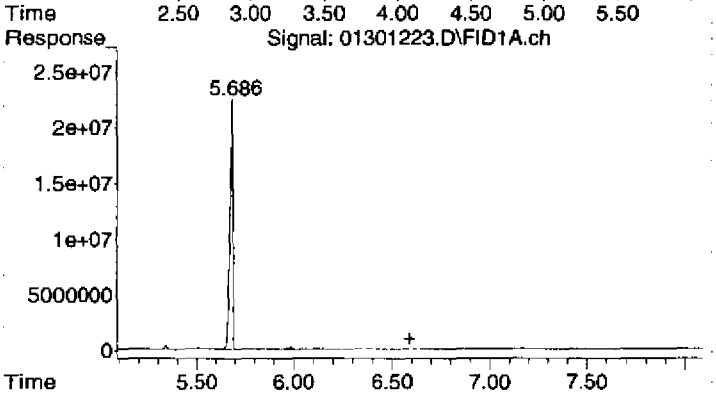
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





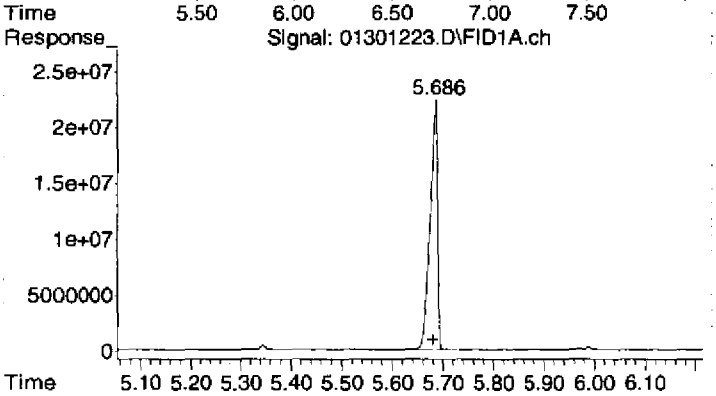
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 10435482
Conc: 2.91 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 7970634
Conc: 4.16 ug/mL



#3 Surrogate

R.T.: 5.684 min
Delta R.T.: 0.004 min
Response: 231921813
Conc: 65.29 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301224.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 6:56 pm
Operator : TD
Sample : 2010046-ICBA
Misc : 2A11025 Stodard Solvent
ALS Vial : 24 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:47:16 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.684	236480516	66.569 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	133.14%#
Target Compounds			
1) HM Diesel (TPH)	4.080	747257494	208.238 ug/mL
2) H OIL	6.590	7986945	4.171 ug/mL

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

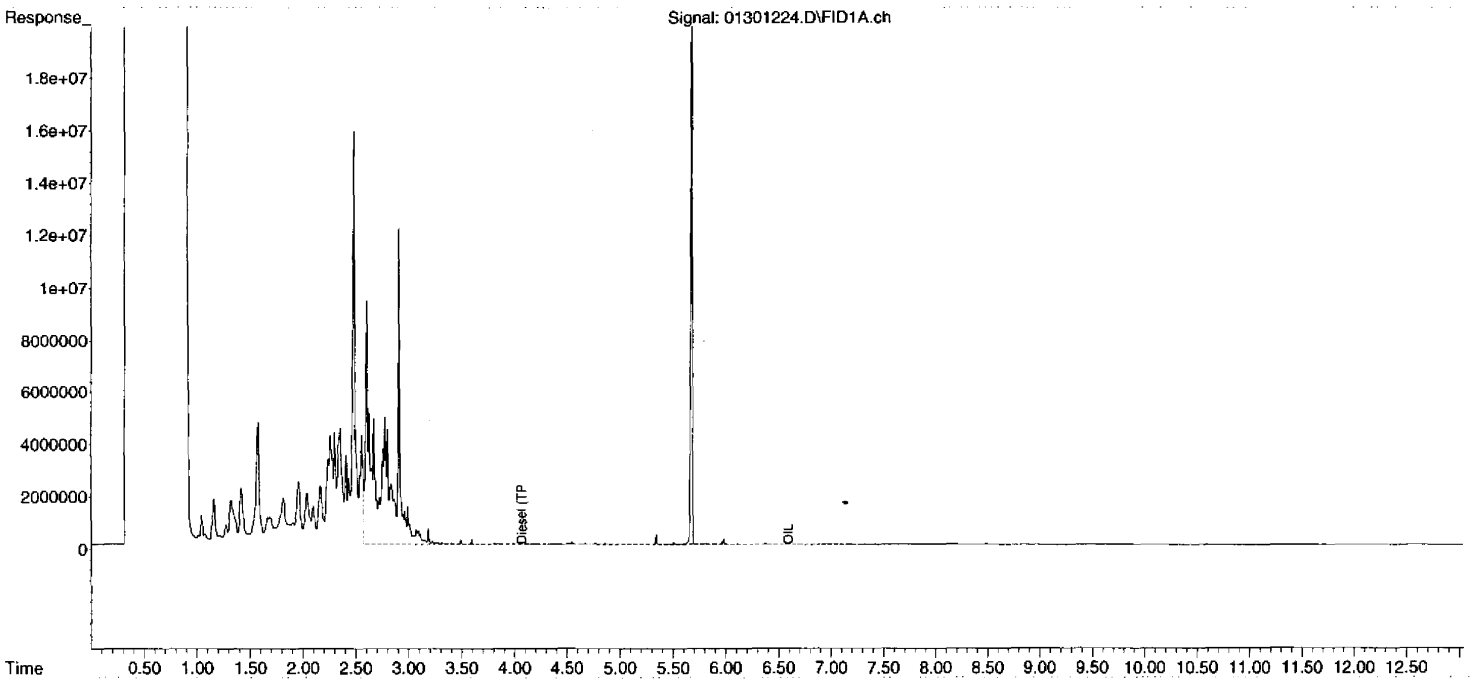
DIM0275879 DIM0276133

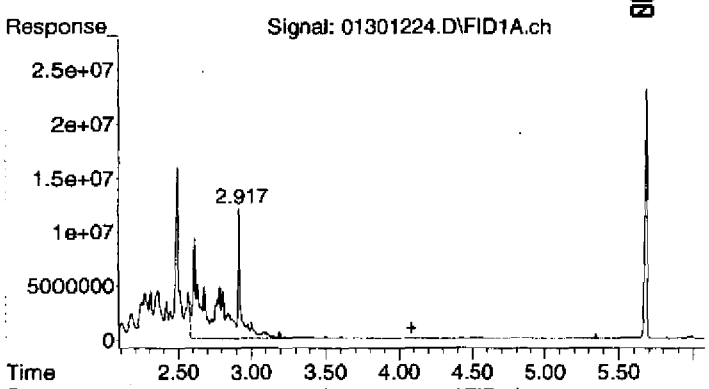
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301224.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 6:56 pm
Operator : TD
Sample : 2010046-ICBA
Misc : 2A11025 Stodard Solvent
ALS Vial : 24 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:47:16 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

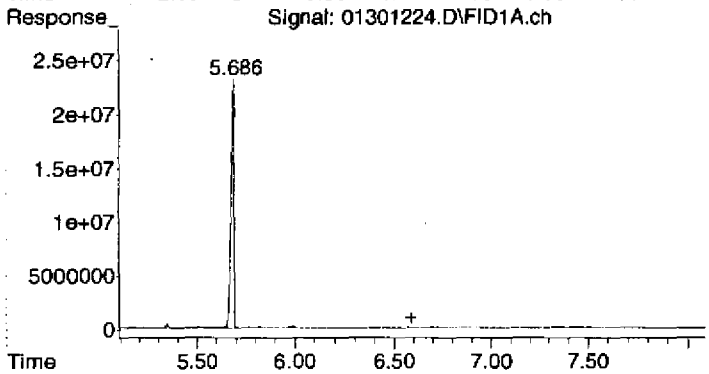
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





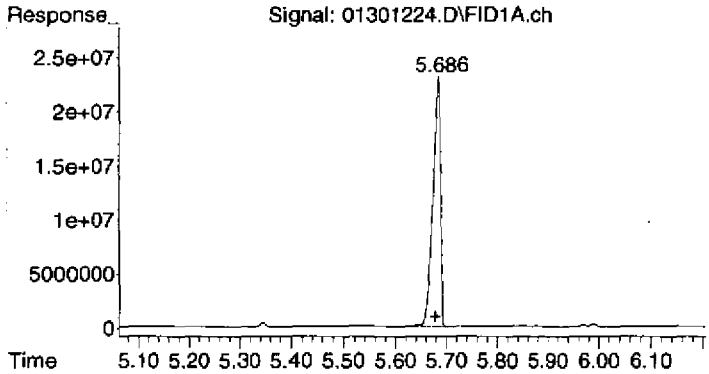
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 747257494
Conc: 208.24 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 7986945
Conc: 4.17 ug/mL



#3 Surrogate

R.T.: 5.684 min
Delta R.T.: 0.004 min
Response: 236480516
Conc: 66.57 ug/mL

00469

SDG: 12027B
Instrument: HP 6890-4
Analysis Date: 01-30-12

SAMPLE DATA

00247

DIM0276136

DIM0275879

Injection Log

Directory: C:\MSDCHEM\1\2012\DATA\013012\ROA

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	013012401.D	1.	2010050-IBL1	2A11003 IB	1/30/202021 12:39:1
2	2	013012402.D	1.	2010050-CCV1	2A11005 DRO-CV	1/30/202020 01:09:5
3	3	013012403.D	1.	2010050-LCV1	2A11004 DRO-QLS	1/30/202020 01:40:5
4	4	013012404.D	1.	2010050-CCV2	2A11012 OIL-CV	1/30/202020 02:11:4
5	5	013012405.D	1.	2010050-LCV2	2A11004 OIL-A	1/30/202020 02:42:5
6	6	013012406.D	1.	B2A0065-BLK1	BLK	1/30/202020 03:13:4
7	7	013012407.D	1.	B2A0065-BS1	BS	1/30/202020 03:44:5
8	8	013012408.D	1.	B2A0065-MS1	EPAW4-28-WATER	1/30/202020 04:15:5
9	9	013012409.D	1.	B2A0065-MSD1	EPAW4-28-WATER	1/30/202020 04:46:5
10	10	013012410.D	1.	1201030-01	EPAW4-28-WATER	1/30/202020 05:17:5
11	11	013012411.D	1.	1201031-01	FB01	1/30/202020 05:48:5
12	12	013012412.D	1.	1201031-02	FB02	1/30/202020 06:19:4
13	13	013012413.D	1.	1201031-03	HW04	1/30/202020 06:50:4
14	14	013012414.D	1.	1201031-04	HW19	1/30/202020 07:21:3
15	15	013012415.D	1.	1201031-05	HW19-P	1/30/202020 07:52:3
16	16	013012416.D	1.	2010050-IBL2	2A11003 IB	1/30/202020 08:23:1
17	17	013012417.D	1.	2010050-CCV3	2A11005 DRO-CV	1/30/202020 08:54:0
18	18	013012418.D	1.	2010050-CCV4	2A11012 OIL-CV	1/30/202020 09:24:5
19	19	013012419.D	1.	2010050-CCV5	2A11005 DRO-CV	1/30/202020 09:55:4
20	20	013012420.D	1.	2010050-CCV6	2A11012 OIL-CV	1/30/202021 10:26:2
21	100	999911401.D	1.	PREP	PREP	1/30/202021 11:37:4
22	100	999911402.D	1.	PREP	PREP	1/30/202021 12:08:1

TPH-D RESPONSE FACTOR REPORT

Instrument Name: AG6890-4
Title: GC TPH Method
Last update: Tue Jan 24 07:53:22 2012
data file 012312415.D

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Avg	%RSD
Diesel (TPH)							
ug/mL	50	150	500	1250	4000		
Calibration Files:	012312403.D	012312404.D	012312405.D	012312406.D	012312407.D		
RF:	3002244	2737937	2522478	2836850	2821117	2784125	6.28%
area:	150112204	410690495	1261239040	3546062604	11284466444		
OIL							
ug/mL	200	400	1000	4000	10000		
Calibration Files:	012312408.D	012312409.D	012312410.D	012312411.D	012312412.D		
RF:	1682110	2087824	1818987	1634457	1854471	1815570	9.79%
area:	336421936	835129619	1818986992	6537829751	18544706916		
Surrogate							
ug/mL	10	25	50	75	100		
Calibration Files:	012312403.D	012312404.D	012312405.D	012312406.D	012312407.D		
RF:	2533730	2411889	2527214	2735060	2619770	2565533	4.68%
area:	25337301	60297224	126360722	205129467	261976967		

GC QA-QC Check Report

08472

Daily Calibration File : C:\MSDCHEM\1\2012\DATA\013012DROA\013012402.D
Time Acquired : 30 Jan 2012 1:09 pm

File	Sample	Surrogate Recovery %	Internal Standard Responses
013012406.D			
	B2A0065-BL	86	
013012407.D			
	B2A0065-BS	98	
013012408.D			
	B2A0065-MS	93	
013012409.D			
	B2A0065-MSD	88	
013012410.D			
	1201030-01	101	
013012411.D			
	1201031-01	92	
013012412.D			
	1201031-02	86	
013012413.D			
	1201031-03	87	
013012414.D			
	1201031-04	82	
013012415.D			
	1201031-05	90	

(fails) - fails 12hr time check * - fails criteria

Created: Tue Jan 31 08:32:01 2012 AG6890-4

Quantitation Report (Not Reviewed)

00473

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012401.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 12:39 pm Operator: TD
Sample : 2010050-IBL1 Inst : AG6890-4
Misc : 2A11003 IB
ALS Vial : 1 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 30 13:16:47 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	114568584	44.657 ug/mL
Spiked Amount 50.000 Range 60 - 127 Recovery = 89.31%			
Target Compounds			
1) HM Diesel (TPH)	6.15	4603436	1.653 ug/mL
2) H OIL	11.30	14235254	7.841 ug/mL

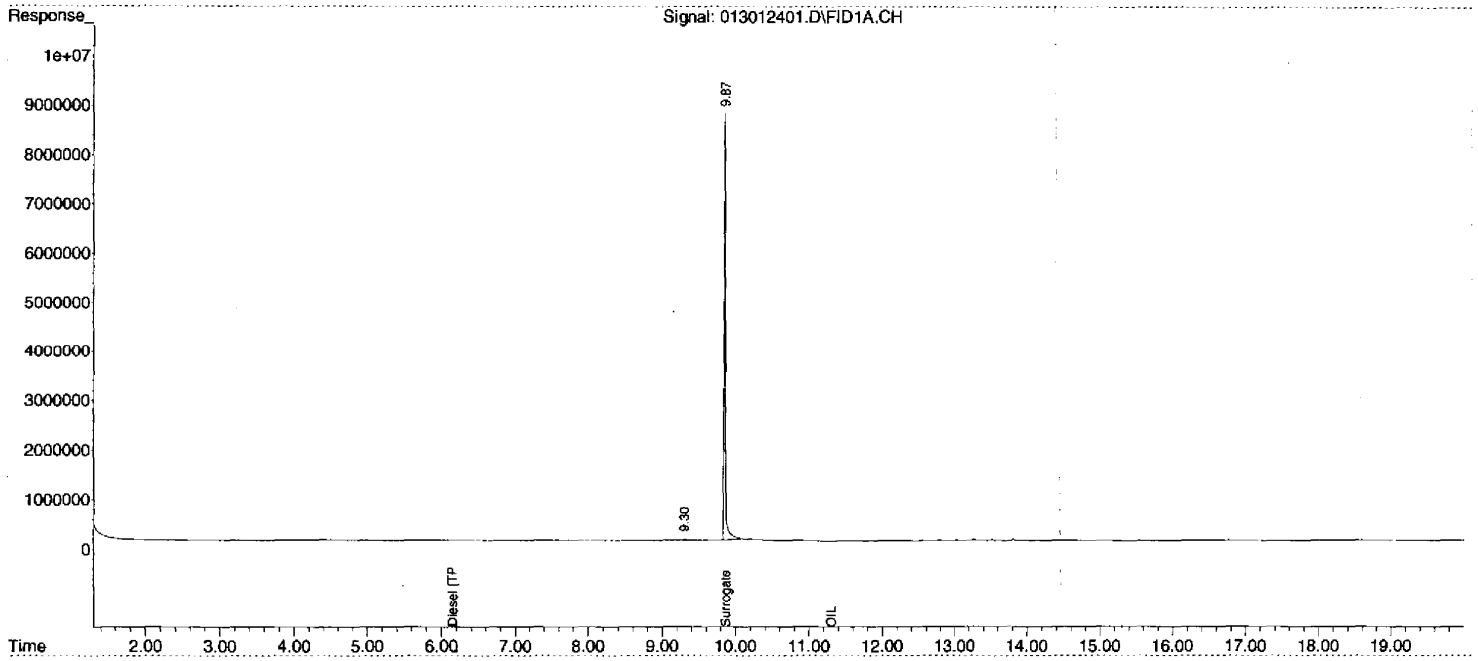
(f)=RT Delta > 1/2 Window (m)=manual int.

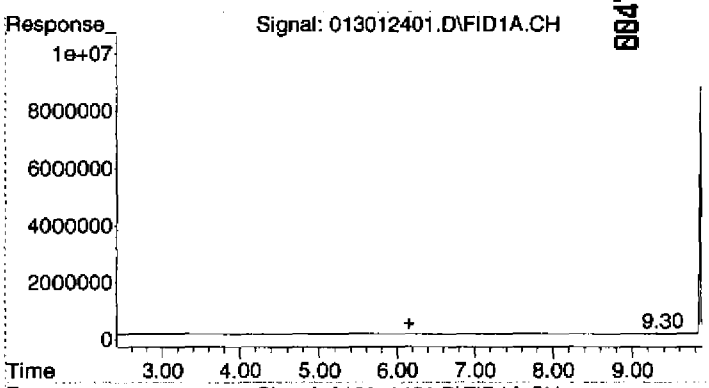
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012401.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 12:39 pm Operator: TD
Sample : 2010050-IBL1 Inst : AG6890-4
Misc : 2A11003 IB
ALS Vial : 1 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 30 13:16:47 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

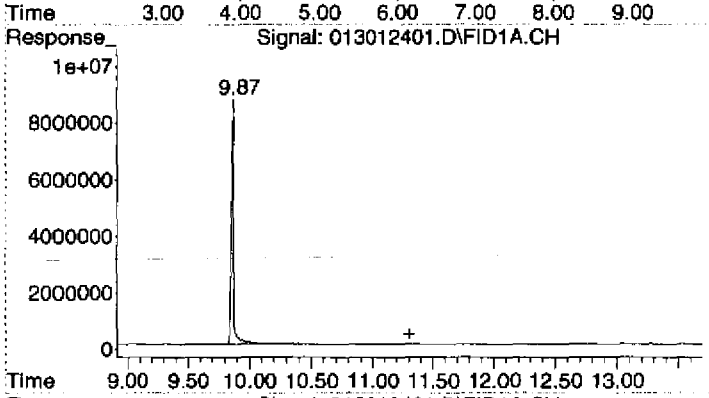
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





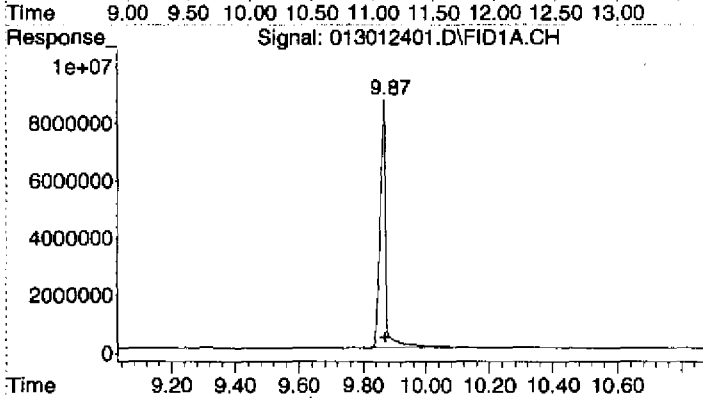
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 4603436
Conc: 1.65 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 14235254
Conc: 7.84 ug/mL m



#3 Surrogate

R.T.: 9.866 min
Delta R.T.: -0.004 min
Response: 114568584
Conc: 44.66 ug/mL

DIM0275879 DIM0276142

Evaluate Continuing Calibration Report

00476

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012402.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 1:09 pm Operator: TD
Sample : 2010050-CCV1 Inst : AG6890-4
Misc : 2A11005 DRO-CV
ALS Vial : 2 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 30 13:53:29 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Min. RRF : 0.000 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 350%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 HM	Diesel (TPH)	2.784	2.995 E6	-7.6	119	0.00
2 H	OIL	1.816	0.000 E6	100.0#	120	0.00
3 S	Surrogate	2.566	2.841 E6	-10.7	112	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

00477

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012402.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 1:09 pm Operator: TD
Sample : 2010050-CCV1 Inst : AG6890-4
Misc : 2A11005 DRO-CV
ALS Vial : 2 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 30 13:53:29 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	142034973	55.363 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery = 110.73%	
Target Compounds			
1) HM Diesel (TPH)	6.15	1497660559	537.929 ug/mL
2) H OIL	11.30	13164918	7.251 ug/mL

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

$\frac{1497660559}{2784125} = 538.047$

TD 01-31-12

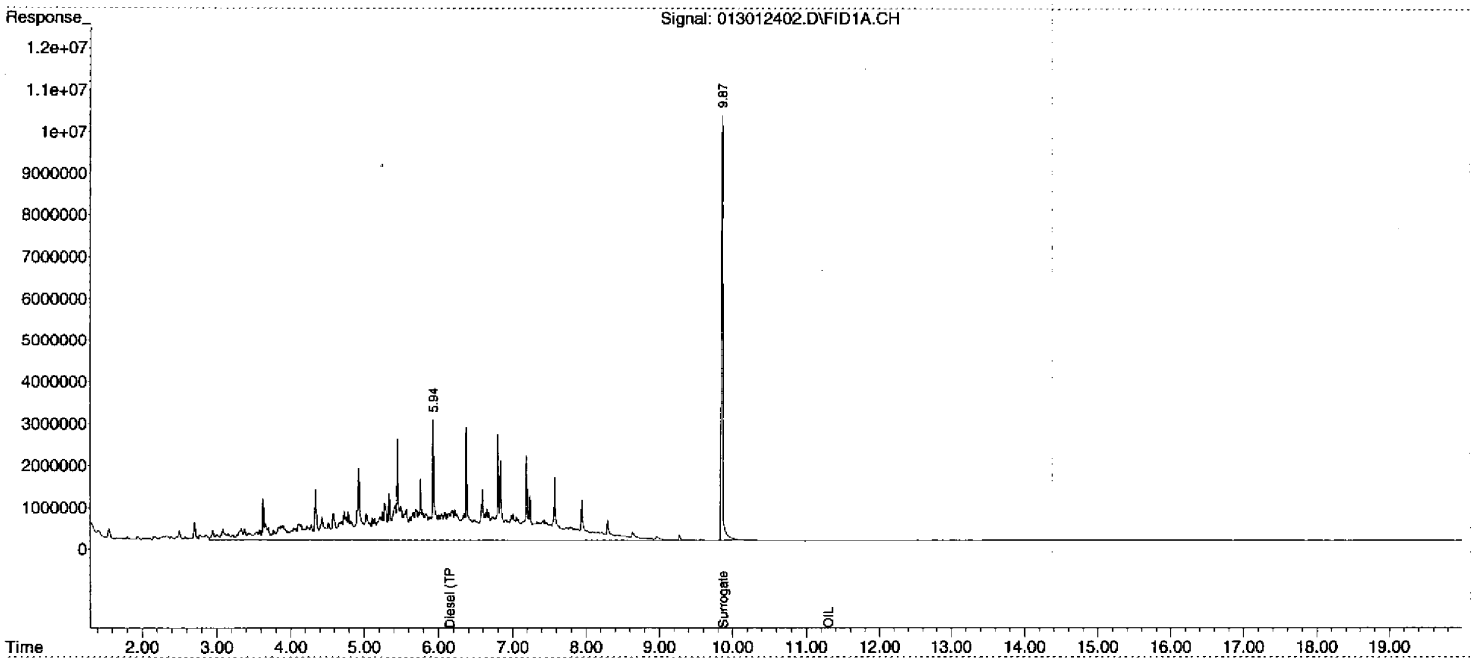
00255

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012402.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 1:09 pm Operator: TD
Sample : 2010050-CCV1 Inst : AG6890-4
Misc : 2A11005 DRO-CV
ALS Vial : 2 Sample Multiplier: 1

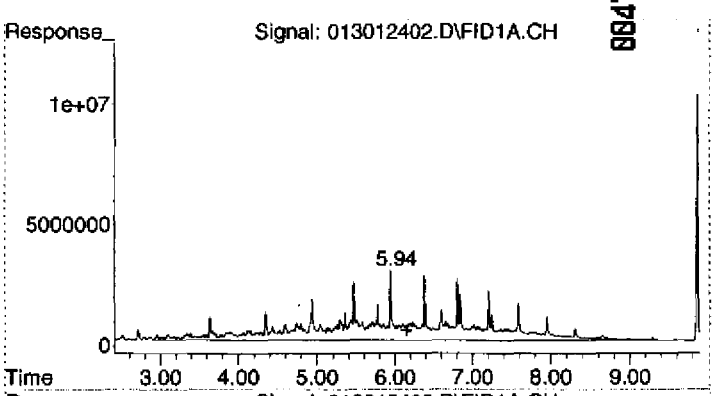
Integration File: HEXACOSANE.E
Quant Time: Jan 30 13:53:29 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



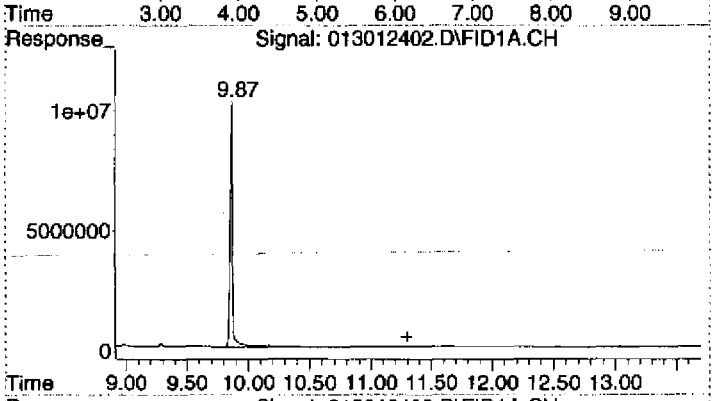
00478

0123124DA.M Mon Jan 30 13:53:31 2012 Page: 2



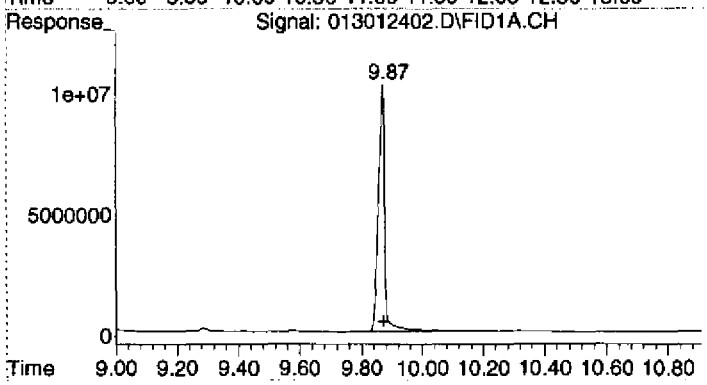
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 1497660559
Conc: 537.93 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 13164918
Conc: 7.25 ug/mL m



#3 Surrogate

R.T.: 9.869 min
Delta R.T.: -0.001 min
Response: 142034973
Conc: 55.36 ug/mL

C:\MSDCHEM\1\2012\DATA\013012DROA\013012403.D

DIESEL QLS REPORT

Instrument Name: AG6890-4
Date Acquired: 1/30/2012 13:40
Acq. Method File: 0816104INST.M
Sample Name: 2010050-LCV1
Misc Info: 2A11004 DRO-QLS
Operator: TD

Name	Concentration ng/mL	Calculated	% Recovery	QC Limits	STATUS
Diesel (TPH)	50	55.62	111.24%	60 - 140	pass

1/30/2012 2:21 PM

C:\MSDChem\custrpt\DIESEL QLS RPT.CRT

Quantitation Report (Not Reviewed)

00481

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012403.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 1:40 pm Operator: TD
Sample : 2010050-LCV1 Inst : AG6890-4
Misc : 2A11004 DRO-QLS
ALS Vial : 3 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 30 14:20:50 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.85	17871053	6.966 ug/mL
Spiked Amount 50.000 Range 60 - 127 Recovery = 13.93%#			
Target Compounds			
1) HM Diesel (TPH)	6.15	154854745	55.621 ug/mL
2) H OIL	11.30	11239117	6.190 ug/mL

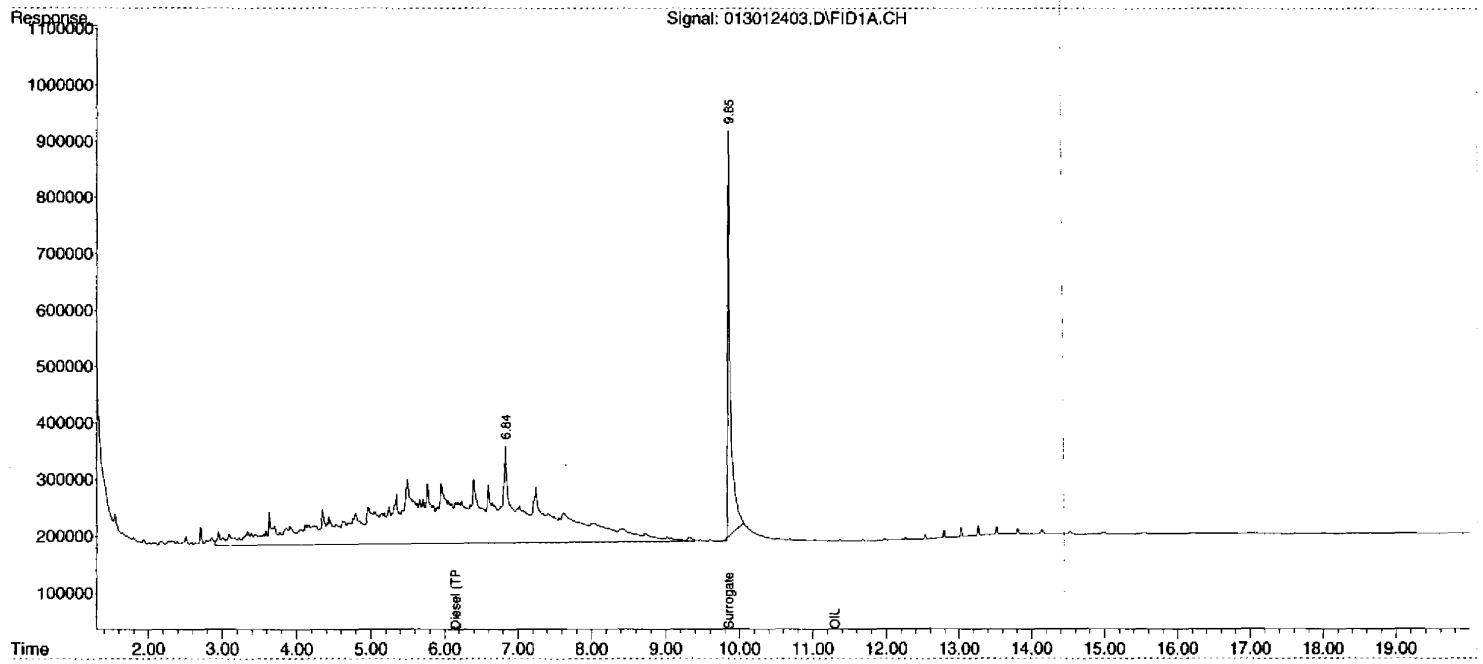
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012403.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 1:40 pm Operator: TD
Sample : 2010050-LCV1 Inst : AG6890-4
Misc : 2A11004 DRO-QLS
ALS Vial : 3 Sample Multiplier: 1

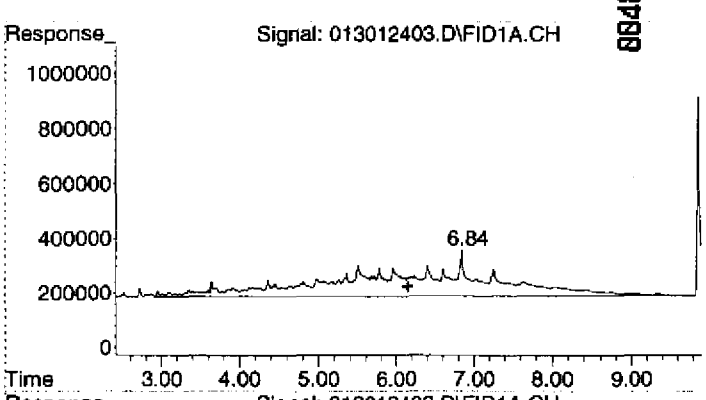
Integration File: HEXACOSANE.E
Quant Time: Jan 30 14:20:50 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



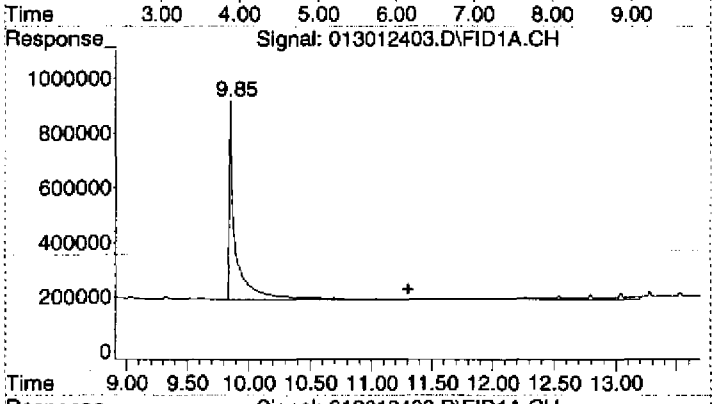
00482

0123124DA.M Mon Jan 30 14:20:52 2012 Page: 2



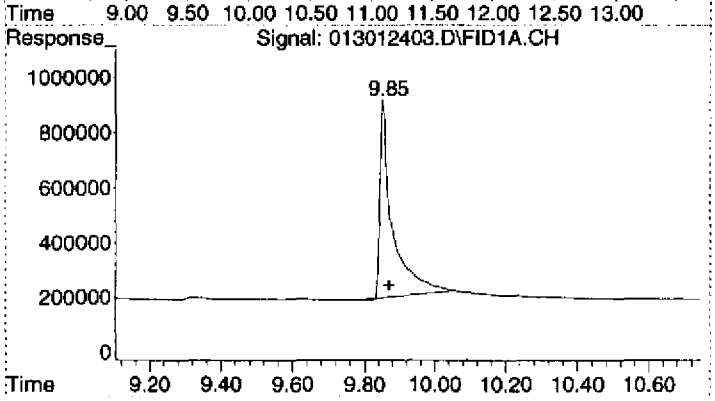
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 154854745
Conc: 55.62 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 11239117
Conc: 6.19 ug/mL m



#3 Surrogate

R.T.: 9.853 min
Delta R.T.: -0.017 min
Response: 17871053
Conc: 6.97 ug/mL

Evaluate Continuing Calibration Report

PB80

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012404.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 2:11 pm Operator: TD
Sample : 2010050-CCV2 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 4 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:21:33 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Min. RRF : 0.000 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 350%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 HM	Diesel (TPH)	2.784	0.000 E6	100.0#	93	0.00
2 H	OIL	1.816	1.694 E6	6.7	93	0.00
3 S	Surrogate	2.566	0.000 E6	100.0#	91	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

0123124DA.M Tue Jan 31 08:21:58 2012

00262

Quantitation Report (QT Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012404.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 2:11 pm Operator: TD
Sample : 2010050-CCV2 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 4 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:21:33 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

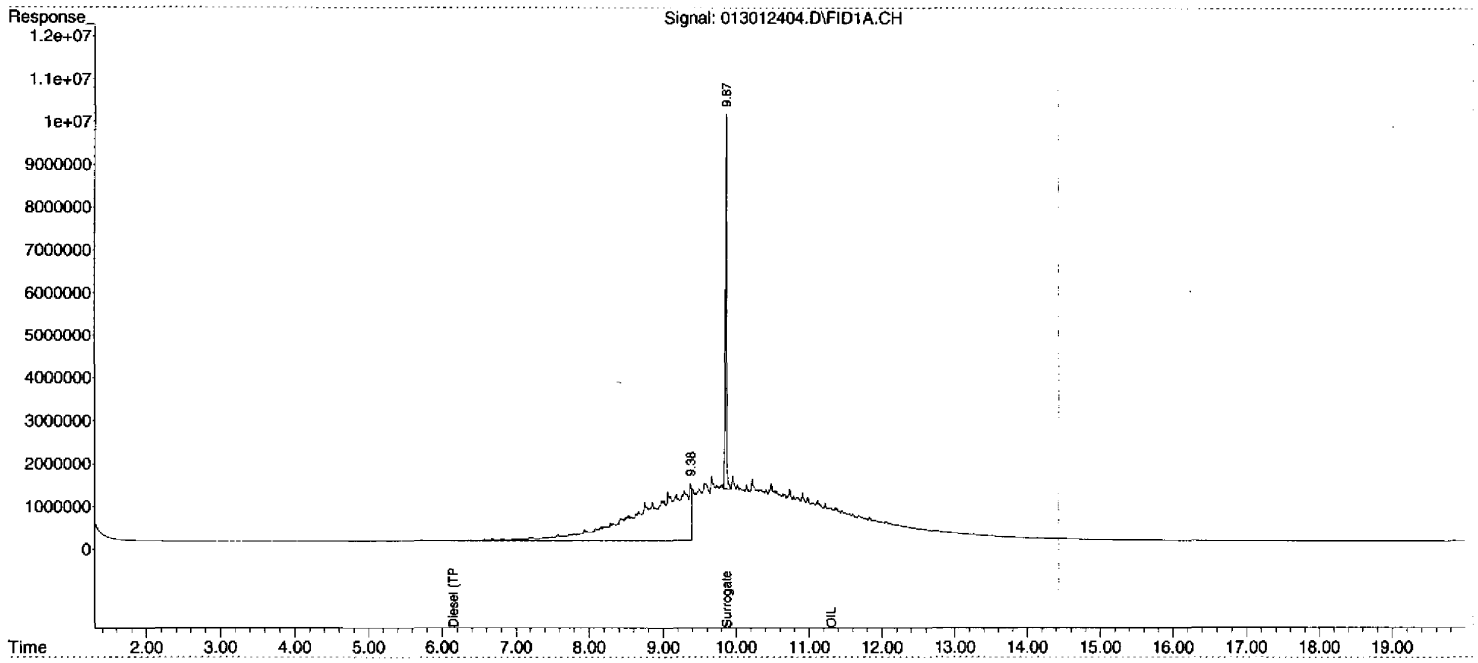
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	111596722	43.498 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	87.00%
Target Compounds			
1) HM Diesel (TPH)	6.15	619438771	222.490 ug/mL
2) H OIL	11.30	1694133046	933.114 ug/mL

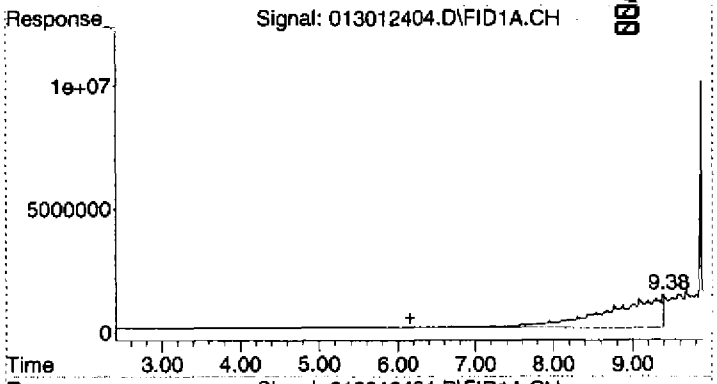
(f)=RT Delta > 1/2 Window (m)=manual int.

MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-31-12
Manual integration(s) reviewed by:
Reviewer: ZA Date: 01-31-12

Quantitation Report (QT Reviewed)

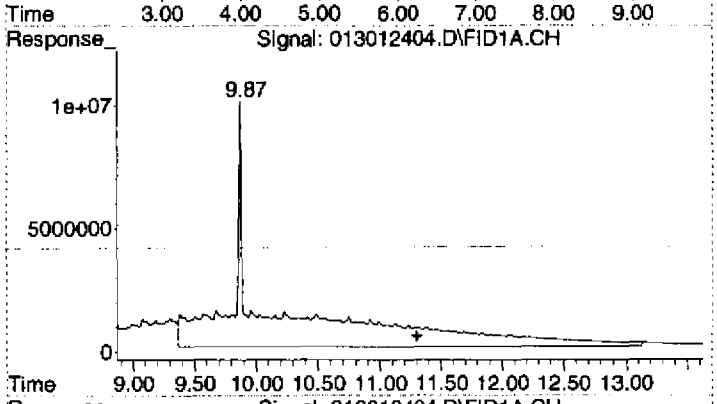
```
InstName  : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012404.D
Signal(s) : FID1A.CH
Acq On    : 30 Jan 2012   2:11 pm                    Operator: TD
Sample    : 2010050-CCV2                             Inst     : AG6890-4
Misc      : 2A11012 OIL-CV
ALS Vial  : 4   Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:21:33 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title  : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj.  : 2 uL
Signal Phase : Rtx-1 15m
Signal Info  : 0.32 mm  0.1um
```





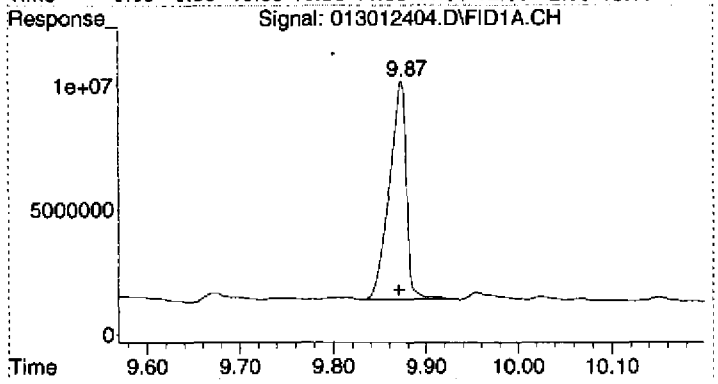
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 619438771
Conc: 222.49 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 1694133046
Conc: 933.11 ug/mL m



#3 Surrogate

R.T.: 9.873 min
Delta R.T.: 0.002 min
Response: 111596722
Conc: 43.50 ug/mL

DIM0275879 DIM0276154

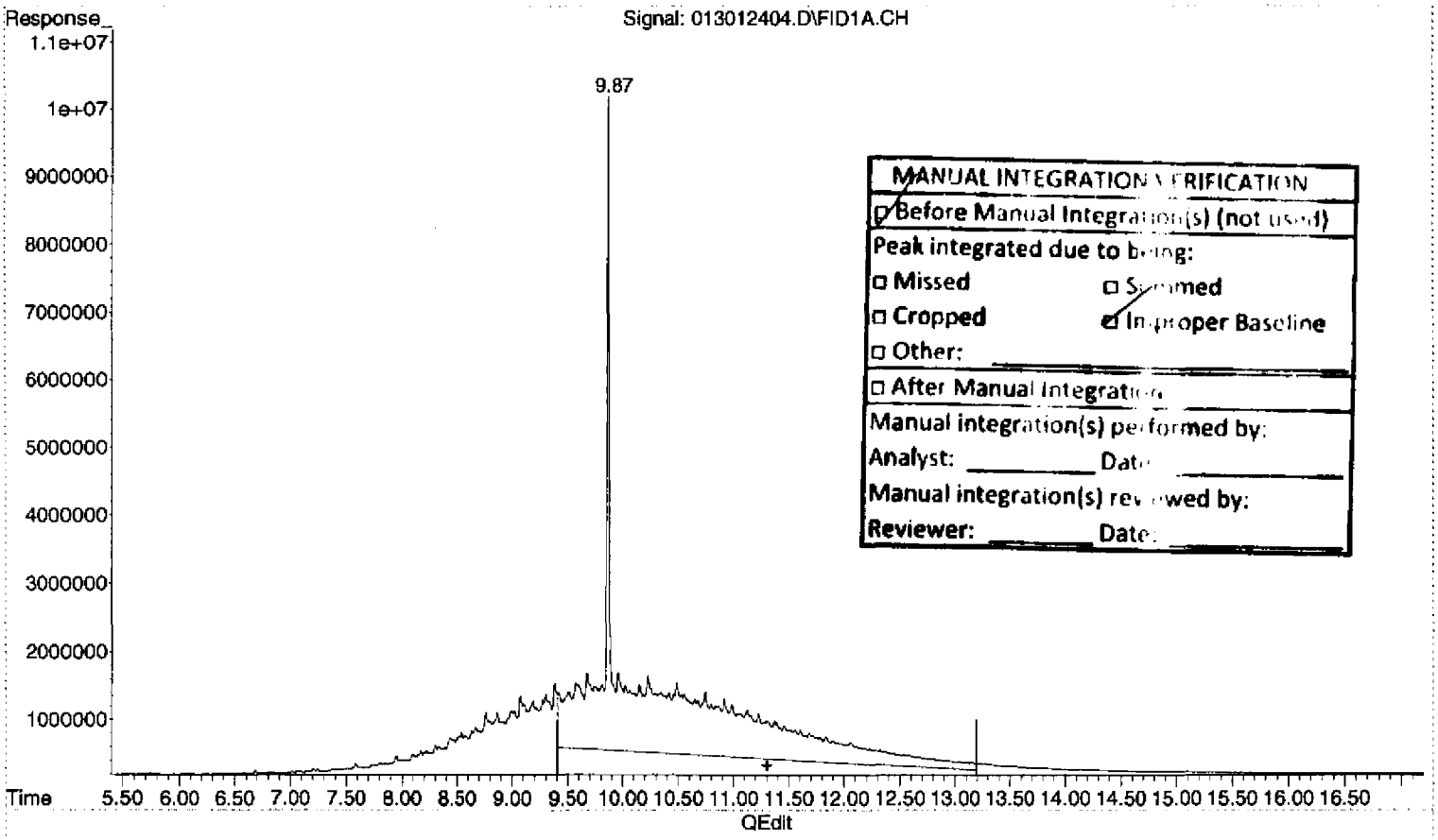
Quantitation Report (Qedit)

00488

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012404.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 2:11 pm Operator: TD
Sample : 2010050-CCV2 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 4 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:20:59 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Skimmed
☐ Cropped ☑ Improper Baseline
☐ Other:
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

(2) OIL (H)

11.30min 656.018ug/mL m

response 1191046855

(+) = Expected Retention Time
0123124DA.M Tue Jan 31 08:21:24 2012 Page: 1

00266

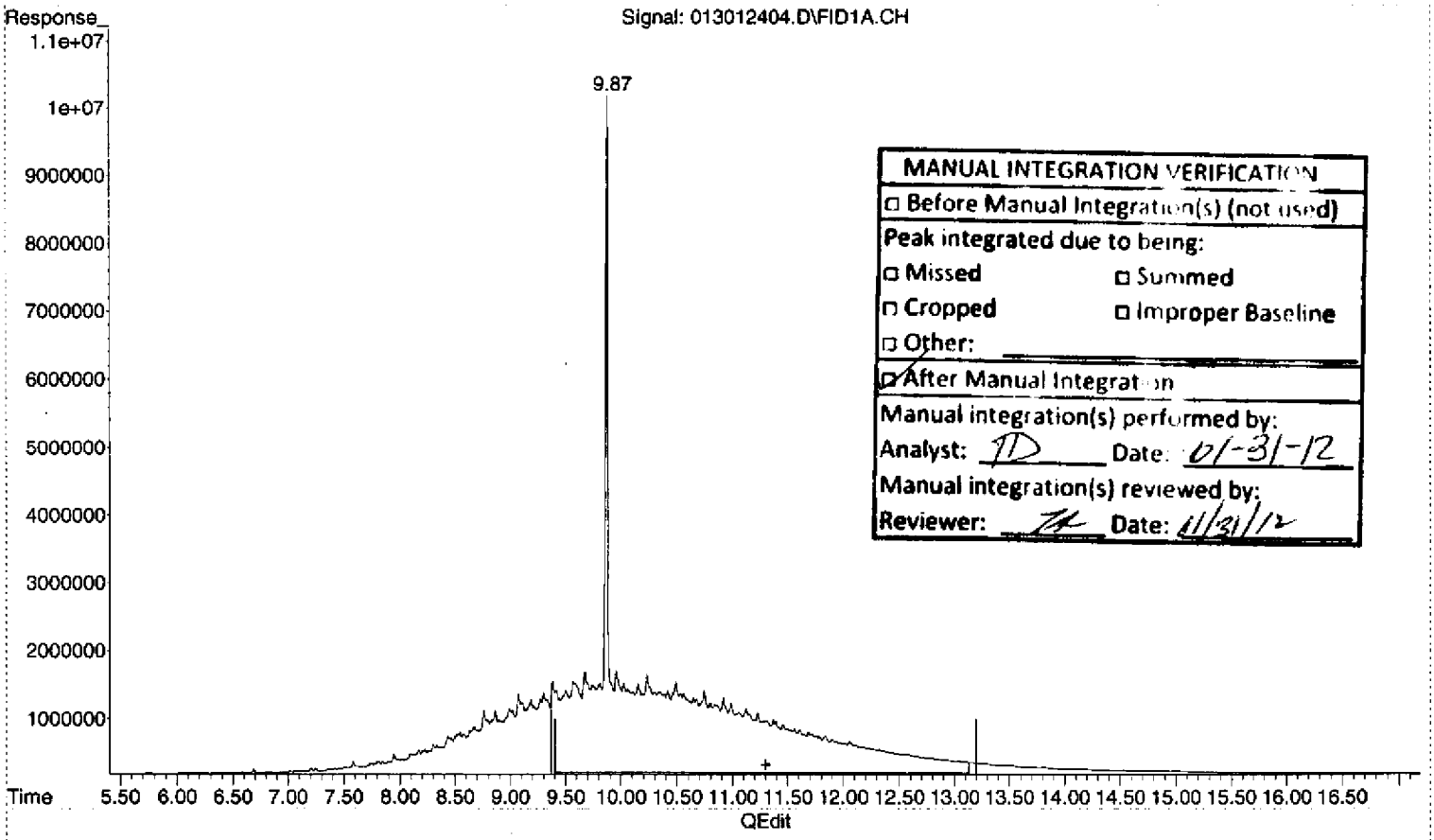
Quantitation Report (Qedit)

00489

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012404.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 2:11 pm Operator: TD
Sample : 2010050-CCV2 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 4 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:20:59 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-31-12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 01/31/12

(2) OIL (H)

11.30min 933.114ug/mL m

response 1694133046

(+) = Expected Retention Time
0123124DA.M Tue Jan 31 08:21:36 2012 Page: 1

00267

Quantitation Report (Not Reviewed)

00490

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012404.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 2:11 pm Operator: TD
Sample : 2010050-CCV2 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 4 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:20:59 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	111596722	43.498 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery = 87.00%	
Target Compounds			
1) HM Diesel (TPH)	6.15	619438771	222.490 ug/mL
2) H OIL	11.30	1191046855	656.018 ug/mL

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

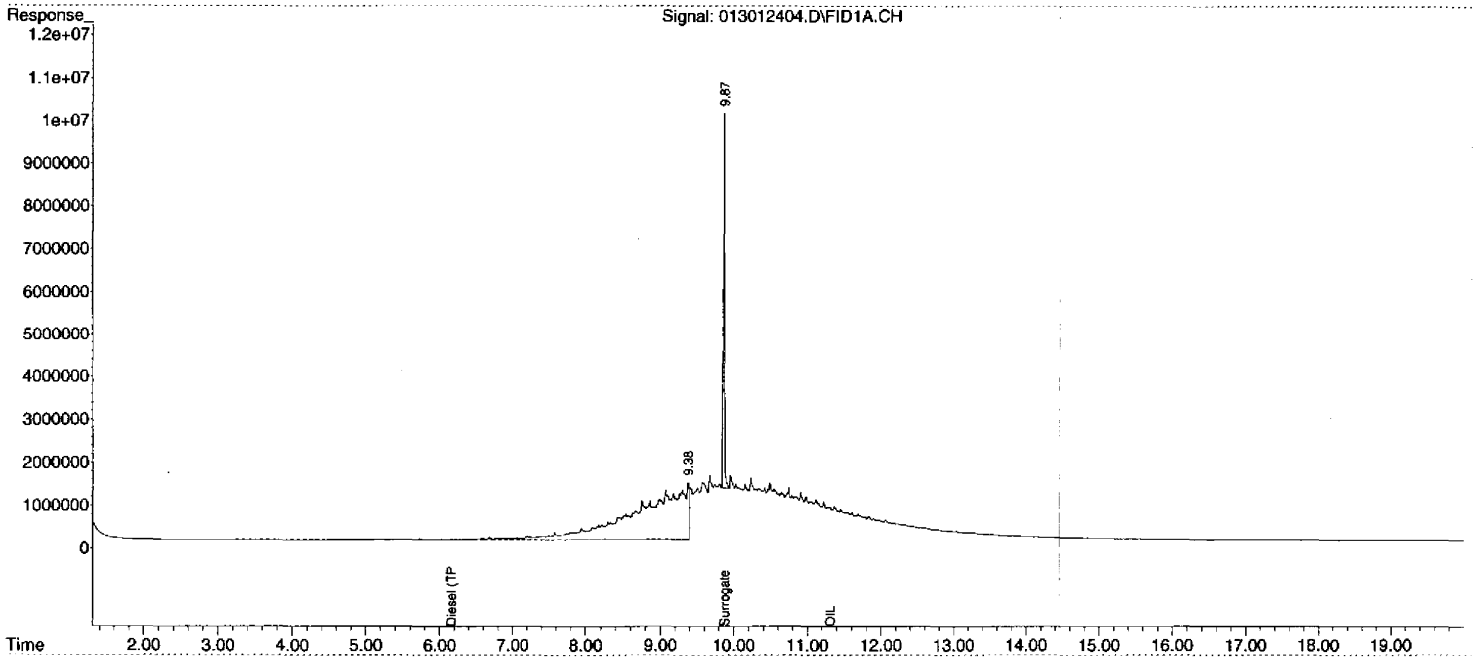
MANUAL INTEGRATION VERIFICATION	
☑ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☐ After Manual Integration	
Manual integration(s) performed by:	
Analyst: _____	Date: _____
Manual integration(s) reviewed by:	
Reviewer: _____	Date: _____

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012404.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 2:11 pm Operator: TD
Sample : 2010050-CCV2 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 4 Sample Multiplier: 1

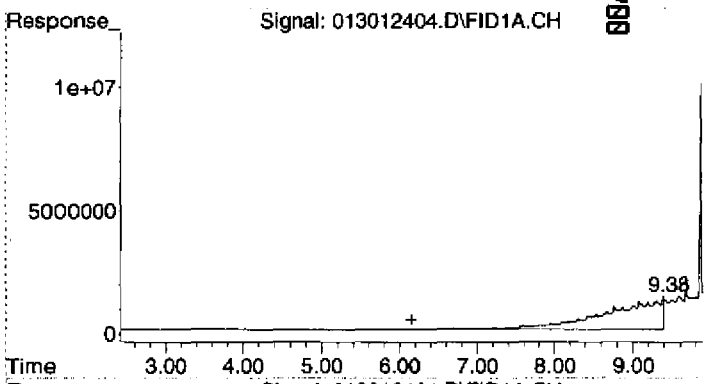
Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:20:59 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



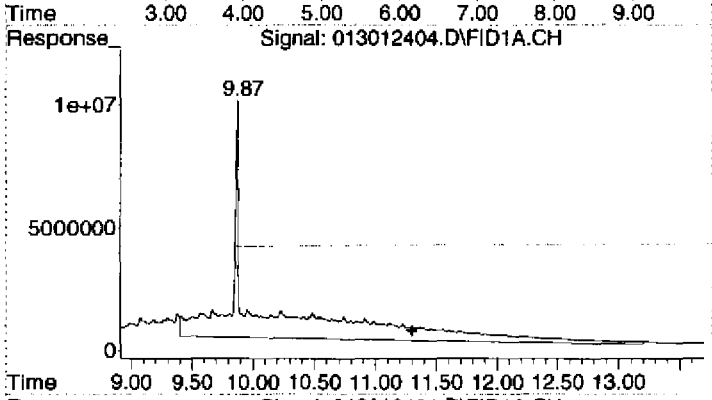
00491

0123124DA.M Tue Jan 31 08:21:01 2012 Page: 2



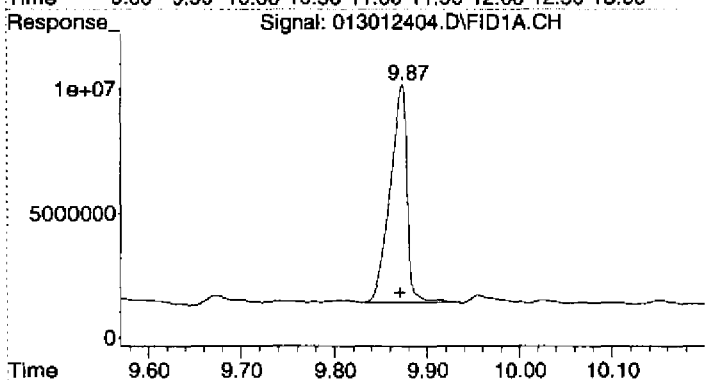
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 619438771
Conc: 222.49 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 1191046855
Conc: 656.02 ug/mL m



#3 Surrogate

R.T.: 9.873 min
Delta R.T.: 0.002 min
Response: 111596722
Conc: 43.50 ug/mL

OIL QLS REPORT

Instrument Name: AG6890-4
Date Acquired: 1/30/2012 14:42
Acq. Method File: 0816104INST.M
Sample Name: 2010050-LCV2
Misc Info: 2A11004 OIL-A
Operator: TD

Name	Concentration ng/mL	Calculated	% Recovery	QC Limits	STATUS
OIL	200	200.45	100.23%	60 - 140	pass

Quantitation Report (QT Reviewed)

00494

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012405.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 2:42 pm Operator: TD
Sample : 2010050-LCV2 Inst : AG6890-4
Misc : 2A11004 OIL-A
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:22:42 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	119427509	46.551 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	93.10%
Target Compounds			
1) HM Diesel (TPH)	6.15	135467659	48.657 ug/mL
2) H OIL	11.30	363934889	200.452 ug/mL

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

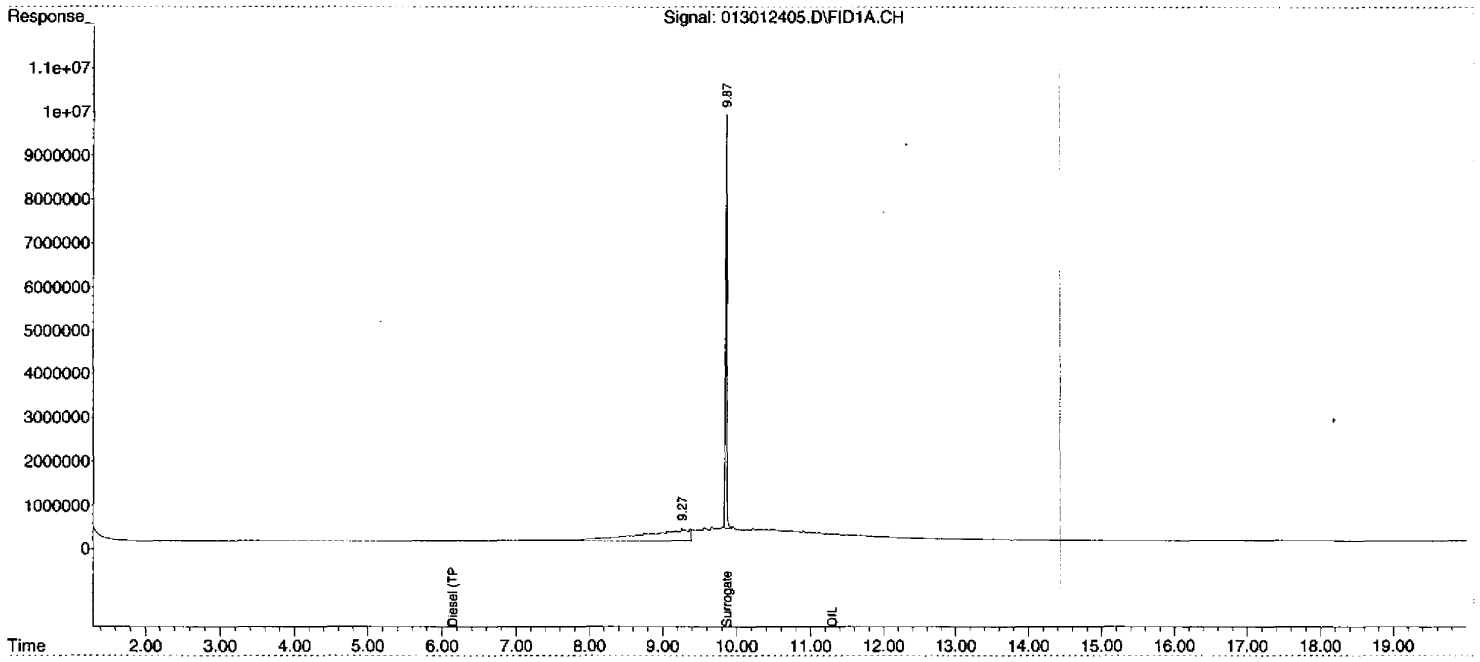
MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-31-12
Manual integration(s) reviewed by:
Reviewer: TK Date: 01-31-12

Quantitation Report (QT Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012405.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 2:42 pm Operator: TD
Sample : 2010050-LCV2 Inst : AG6890-4
Misc : 2A11004 OIL-A
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:22:42 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

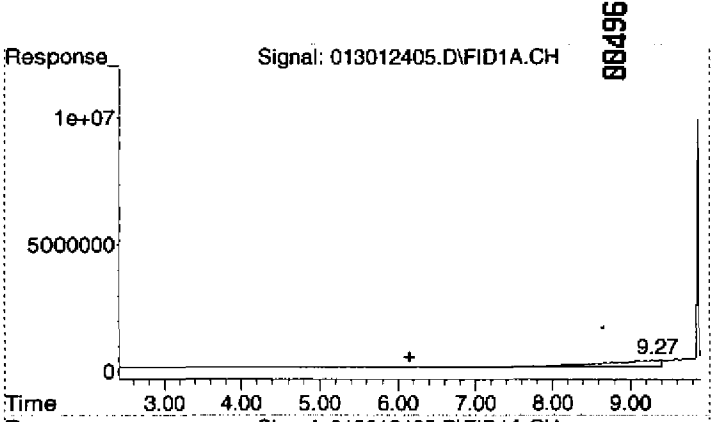
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



00495

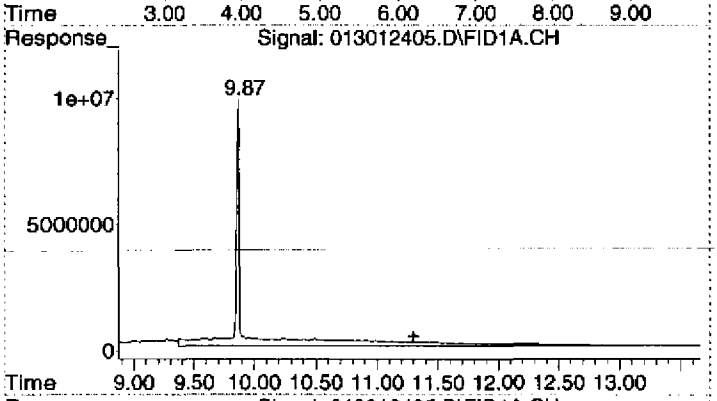
0123124DA.M Tue Jan 31 08:23:00 2012 Page: 2

DIM0275879 DIM0276162



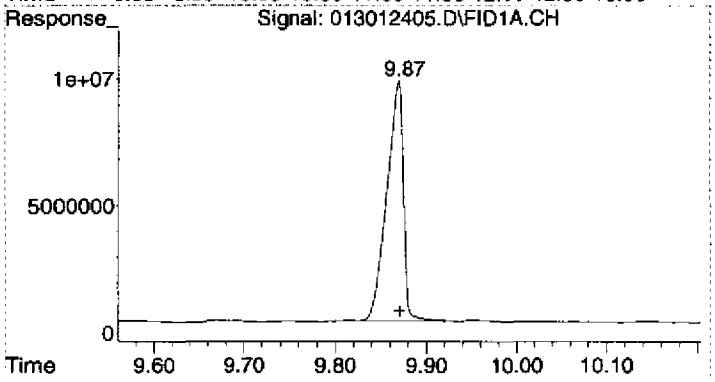
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 135467659
Conc: 48.66 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 363934889
Conc: 200.45 ug/mL m



#3 Surrogate

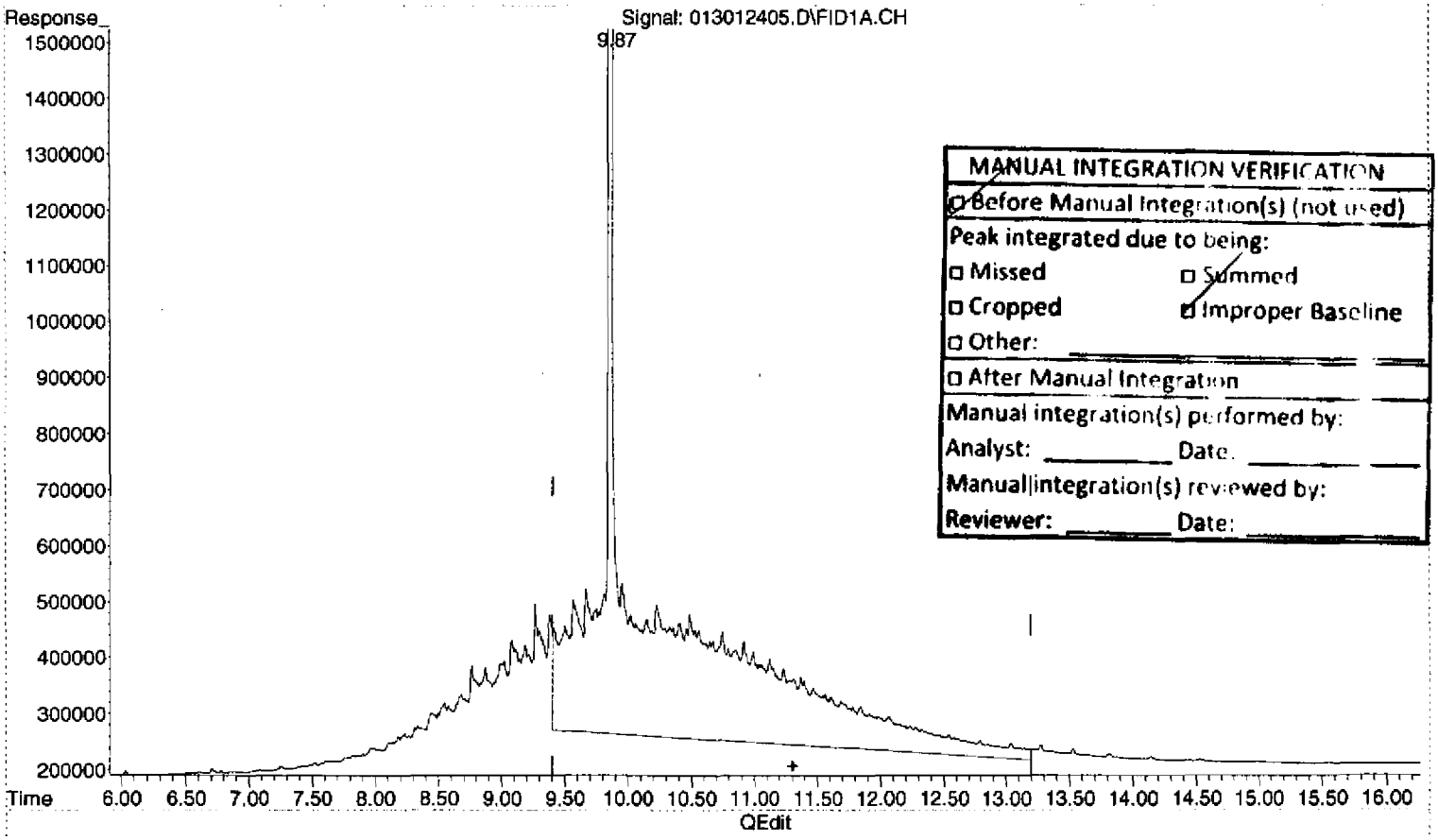
R.T.: 9.869 min
Delta R.T.: -0.001 min
Response: 119427509
Conc: 46.55 ug/mL

Quantitation Report (Qedit)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012405.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 2:42 pm Operator: TD
Sample : 2010050-LCV2 Inst : AG6890-4
Misc : 2A11004 OIL-A
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:22:10 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☑ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

(2) OIL (H)

11.30min 143.735ug/mL m

response 260961244

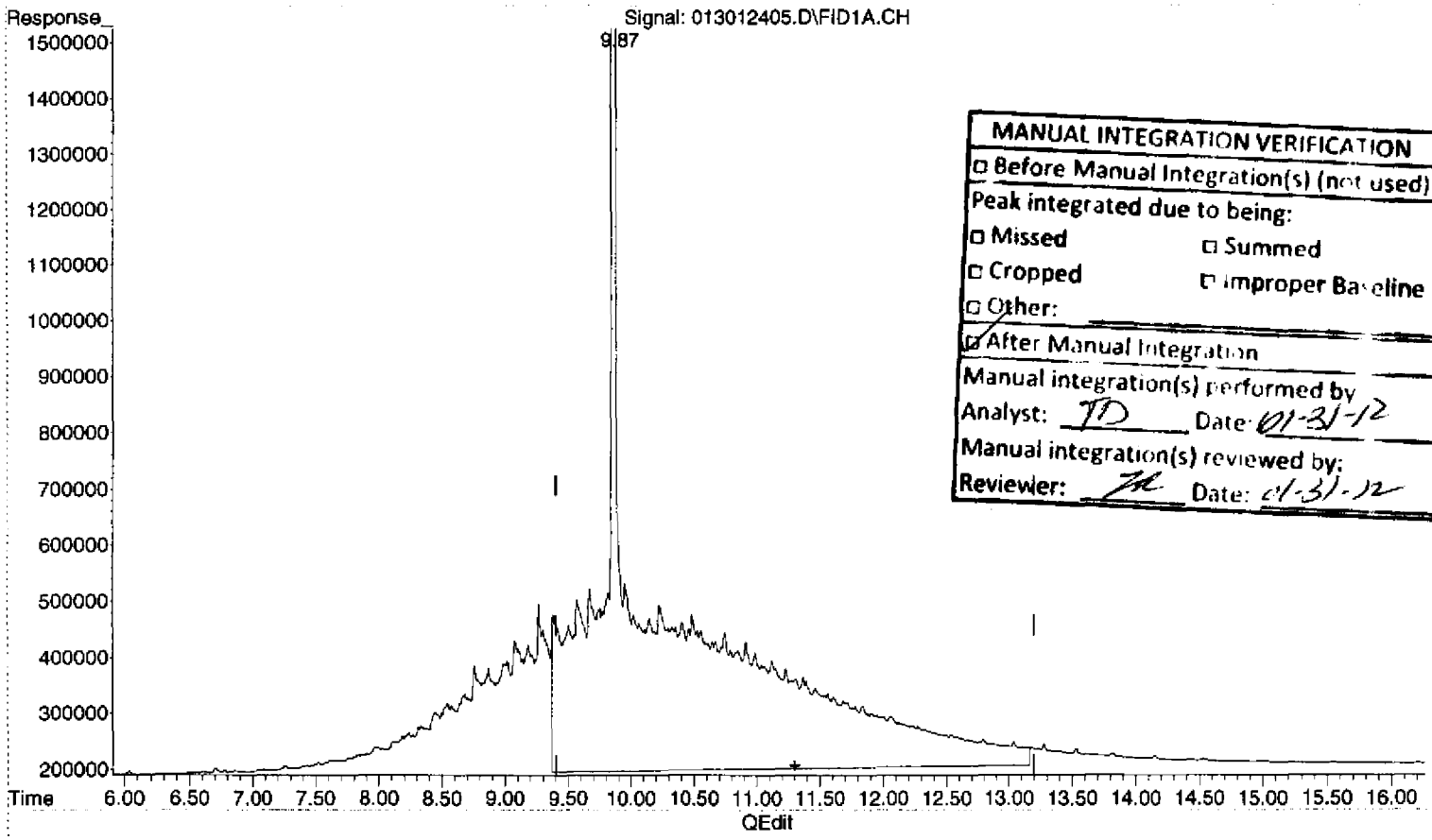
(+) = Expected Retention Time
0123124DA.M Tue Jan 31 08:22:28 2012

Quantitation Report (Qedit)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012405.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 2:42 pm Operator: TD
Sample : 2010050-LCV2 Inst : AG6890-4
Misc : 2A11004 OIL-A
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:22:10 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used):
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by
Analyst: TD Date: 01-31-12
Manual integration(s) reviewed by:
Reviewer: TK Date: 01-31-12

(2) OIL (H)

11.30min 200.452ug/mL m

response 363934889

(+) = Expected Retention Time
0123124DA.M Tue Jan 31 08:22:45 2012

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012405.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 2:42 pm
Sample : 2010050-LCV2
Misc : 2A11004 OIL-A
ALS Vial : 5 Sample Multiplier: 1

Operator: TD
Inst : AG6890-4

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:22:10 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	119427509	46.551 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	93.10%
Target Compounds			
1) HM Diesel (TPH)	6.15	135467659	48.657 ug/mL
2) H OIL	11.30	260961244	143.735 ug/mL

(f)=RT Delta > 1/2 Window

(m)=manual int.

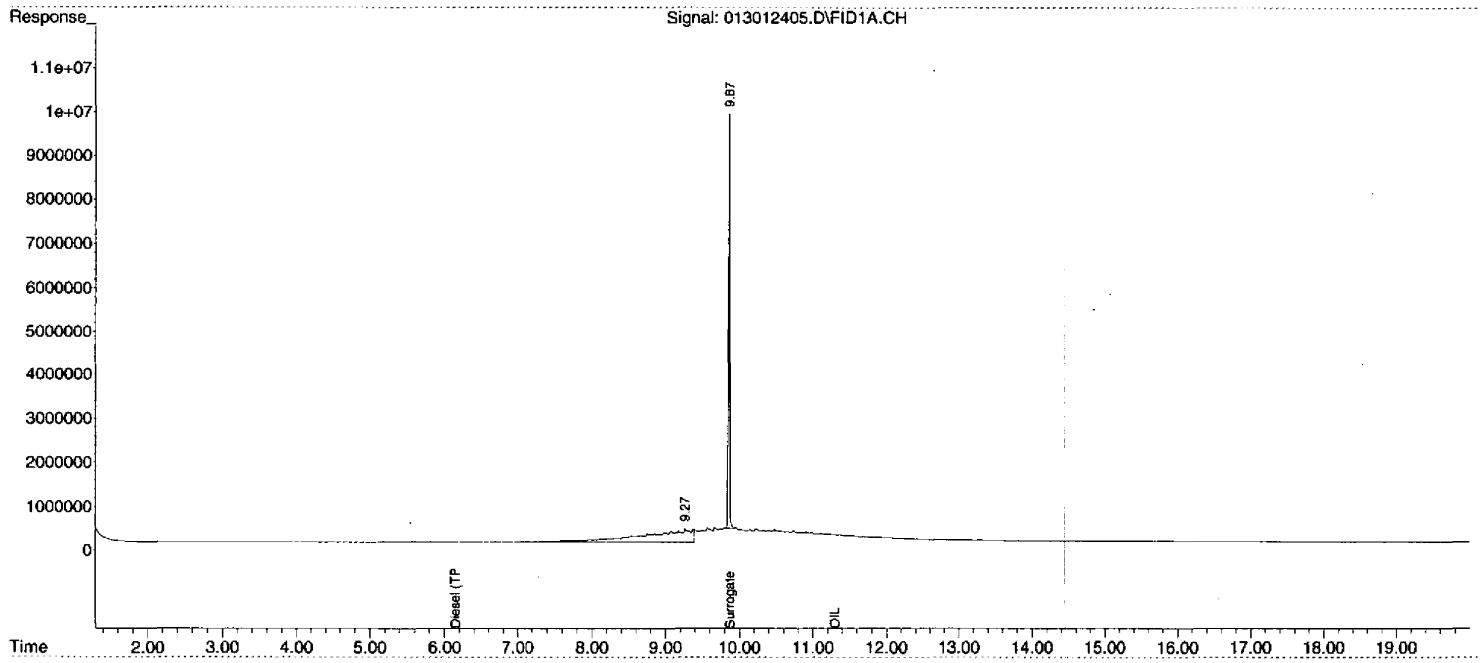
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

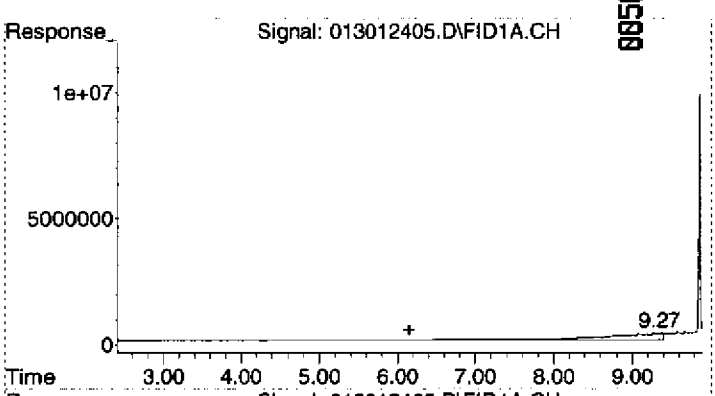
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012405.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 2:42 pm Operator: TD
Sample : 2010050-LCV2 Inst : AG6890-4
Misc : 2A11004 OIL-A
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:22:10 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

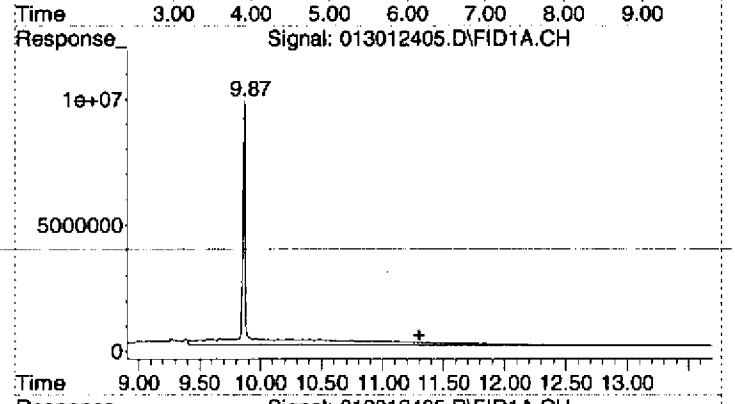
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





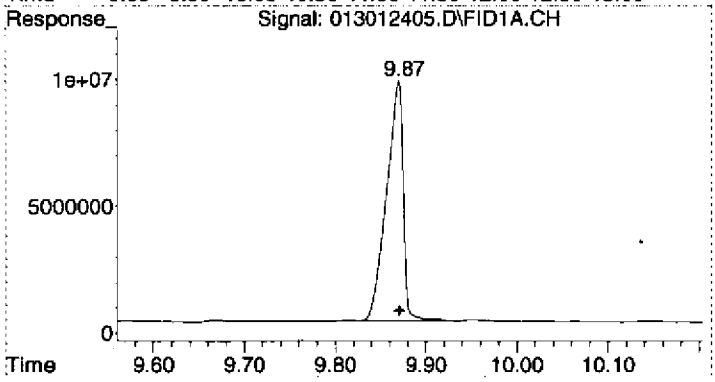
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 135467659
Conc: 48.66 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 260961244
Conc: 143.74 ug/mL m



#3 Surrogate

R.T.: 9.869 min
Delta R.T.: -0.001 min
Response: 119427509
Conc: 46.55 ug/mL

Quantitation Report (Not Reviewed)

00582

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012406.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 3:13 pm Operator: TD
Sample : B2A0065-BLK1 Inst : AG6890-4
Misc : BLK
ALS Vial : 6 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:23:31 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.86	109891585	42.834 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	85.67%
Target Compounds			
1) HM Diesel (TPH)	6.15	16346067	5.871 ug/mL
2) H OIL	11.30	16011920	8.819 ug/mL

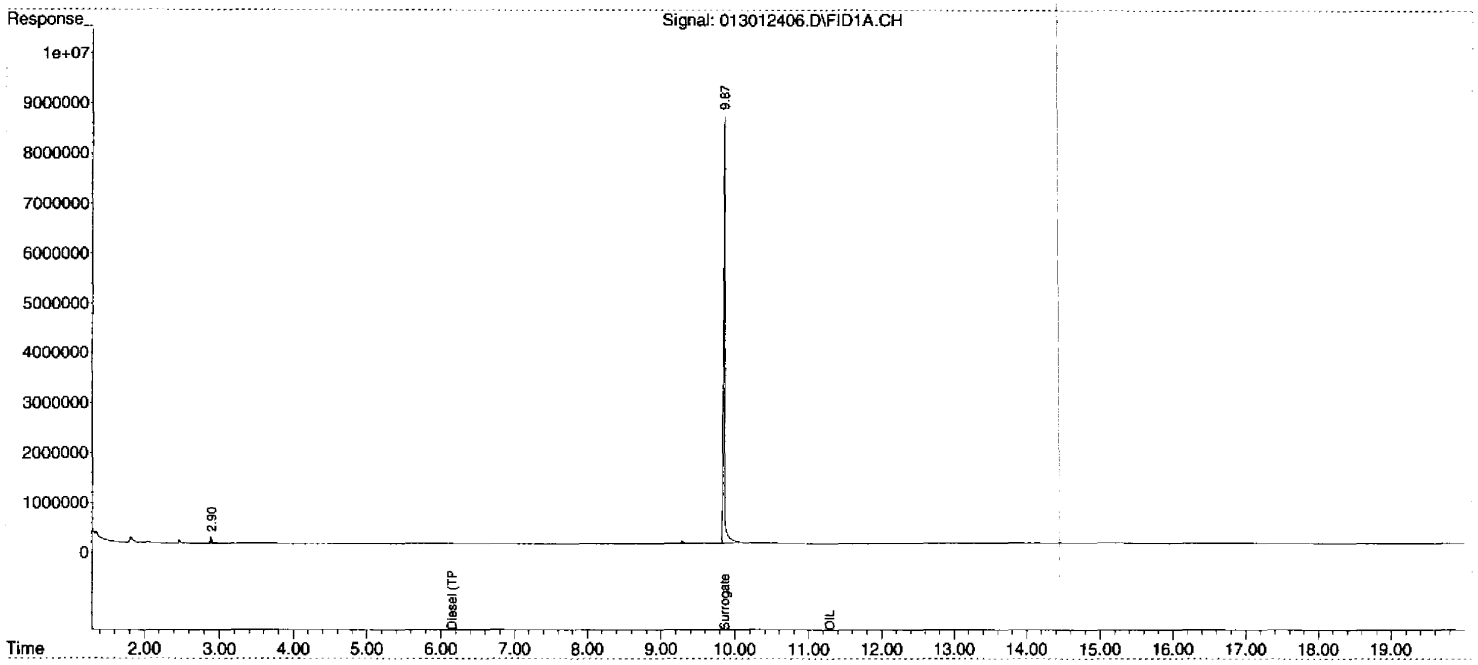
(f)=RT Delta > 1/2 Window (m)=manual int.

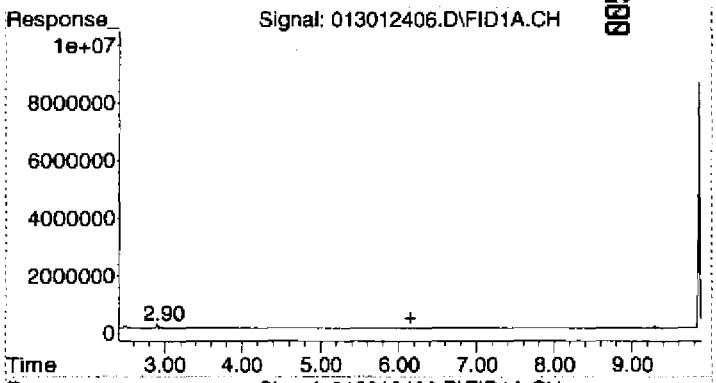
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012406.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 3:13 pm Operator: TD
Sample : B2A0065-BLK1 Inst : AG6890-4
Misc : BLK
ALS Vial : 6 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:23:31 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

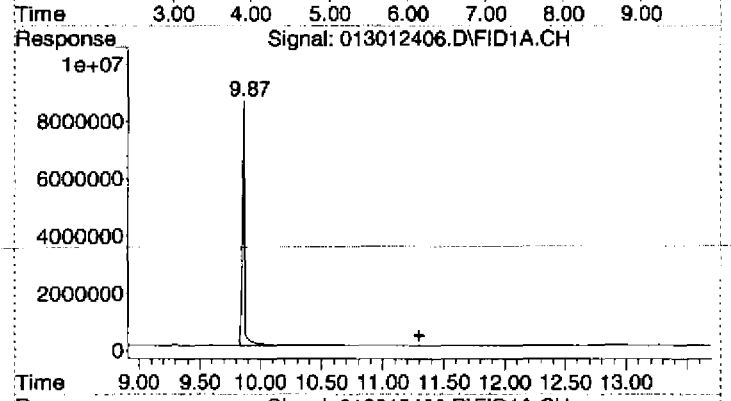
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





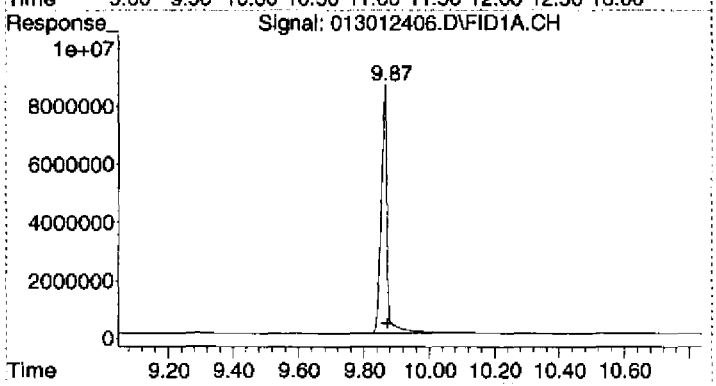
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 16346067
Conc: 5.87 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 16011920
Conc: 8.82 ug/mL m



#3 Surrogate

R.T.: 9.865 min
Delta R.T.: -0.006 min
Response: 109891585
Conc: 42.83 ug/mL

DIESEL LCS REPORT

Instrument Name: AG6890-4
Date Acquired: 1/30/2012 15:44
Acq. Method File: 0816104INST.M
Sample Name: B2A0065-BS1
Misc Info: BS
Operator: TD

Name	Concentration ng/mL	Calculated	% Recovery	QC Limits	STATUS
Diesel (TPH)	500	495.17	99.03%	54-115%	pass

1/31/2012 8:26 AM

C:\MSDChem\custrpt\DIESEL LCS-WATER RPT.CRT

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012407.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 3:44 pm Operator: TD
Sample : B2A0065-BS1 Inst : AG6890-4
Misc : BS
ALS Vial : 7 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:23:36 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	125968107	49.100 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	98.20%
Target Compounds			
1) HM Diesel (TPH)	6.15	1378605713	495.167 ug/mL
2) H OIL	11.30	12651723	6.968 ug/mL

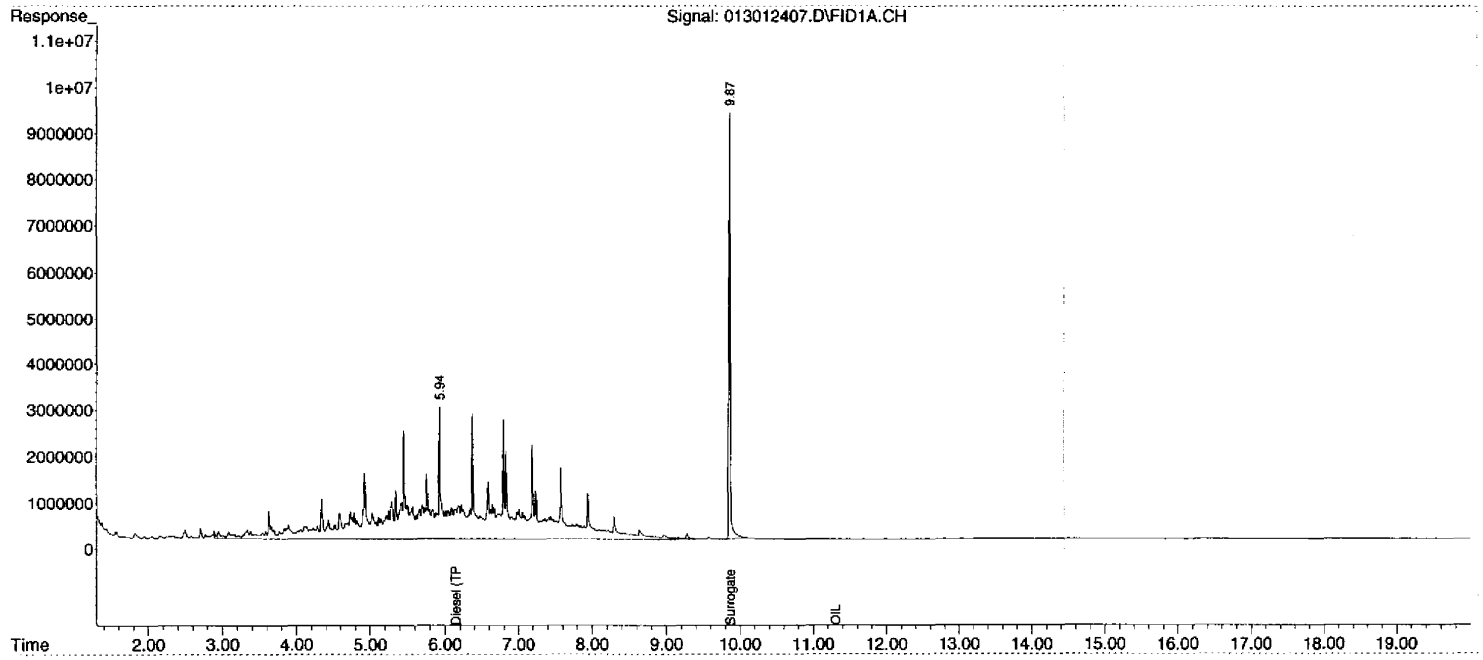
(f)=RT Delta > 1/2 Window (m)=manual int.

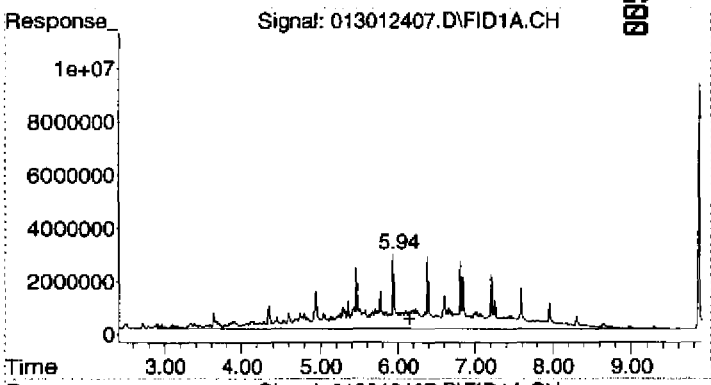
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012407.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 3:44 pm Operator: TD
Sample : B2A0065-BS1 Inst : AG6890-4
Misc : BS
ALS Vial : 7 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:23:36 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

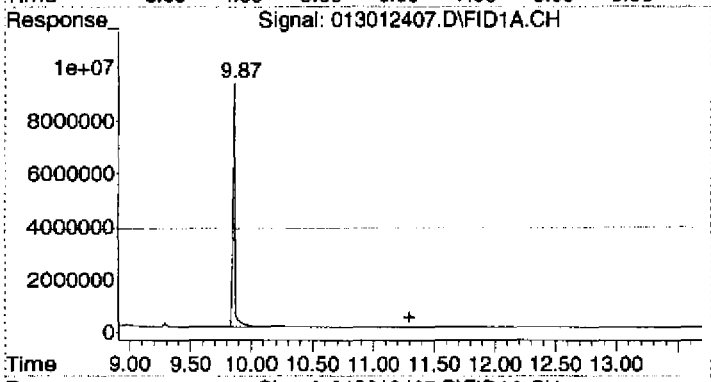
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





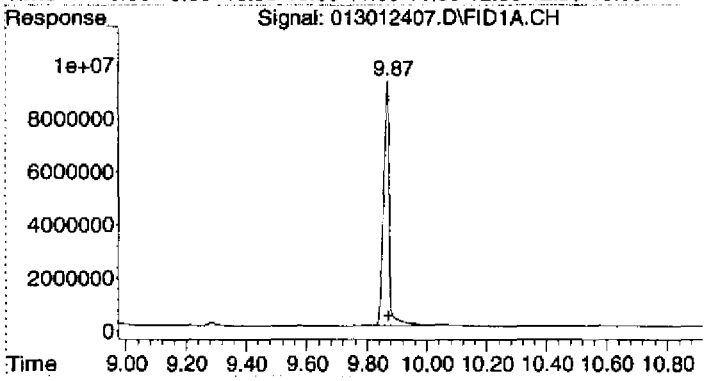
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 1378605713
Conc: 495.17 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 12651723
Conc: 6.97 ug/mL m



#3 Surrogate

R.T.: 9.868 min
Delta R.T.: -0.002 min
Response: 125968107
Conc: 49.10 ug/mL

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012411.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 5:48 pm Operator: TD
Sample : 1201031-01 Inst : AG6890-4
Misc : FB01
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:23:56 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.86	118388644	46.146 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	92.29%
Target Compounds			
1) HM Diesel (TPH)	6.15	50840464	18.261 ug/mL
2) H OIL	11.30	17685060	9.741 ug/mL

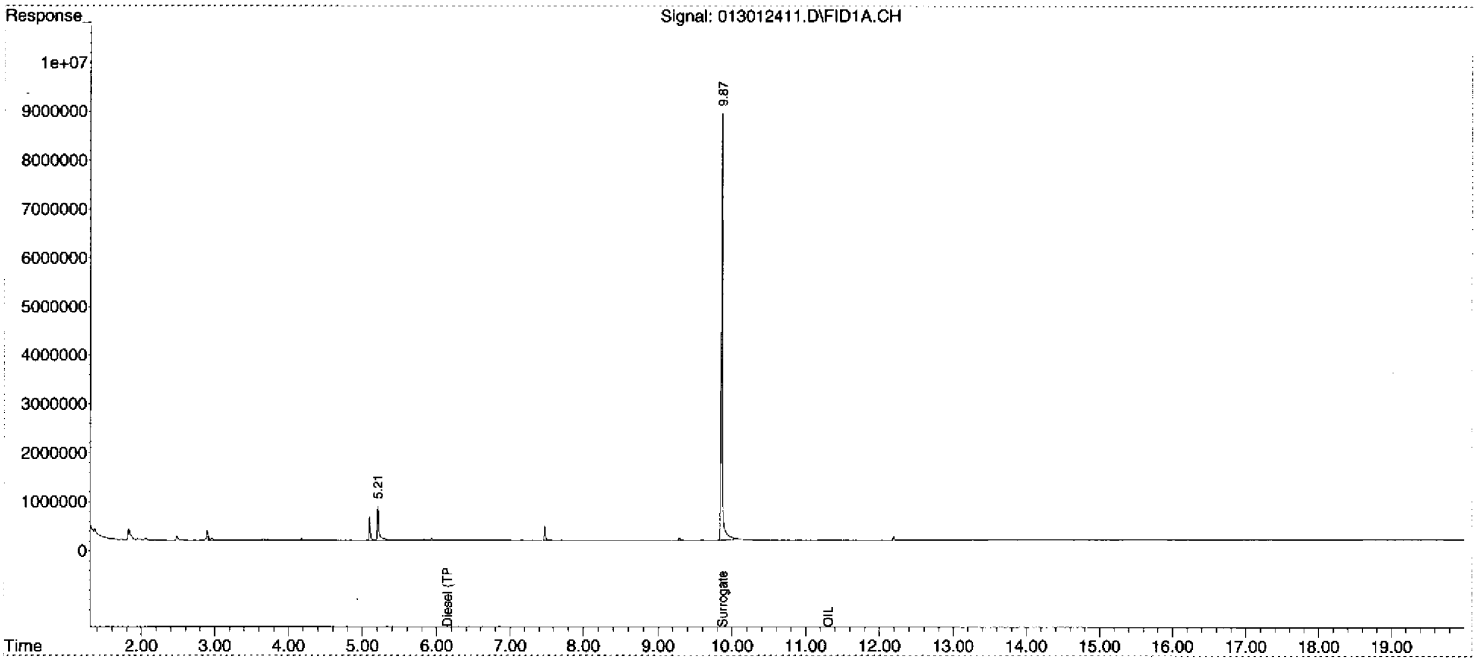
(f)=RT Delta > 1/2 Window (m)=manual int.

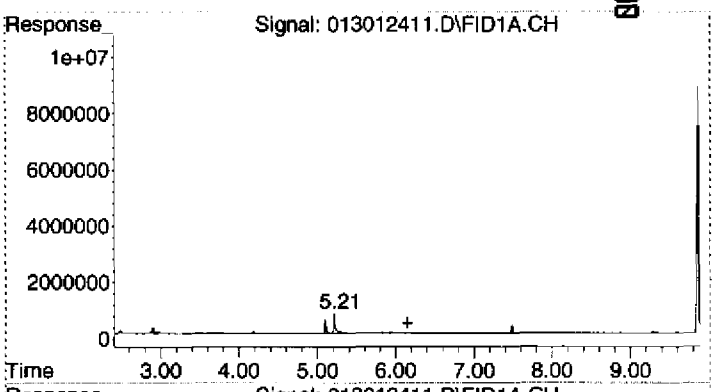
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012411.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 5:48 pm Operator: TD
Sample : 1201031-01 Inst : AG6890-4
Misc : FB01
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:23:56 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

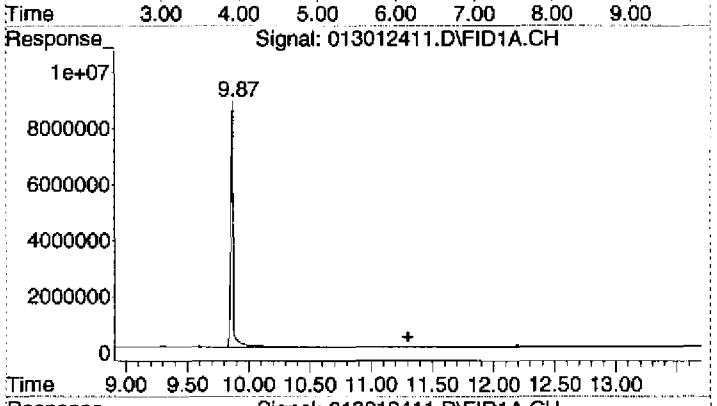
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





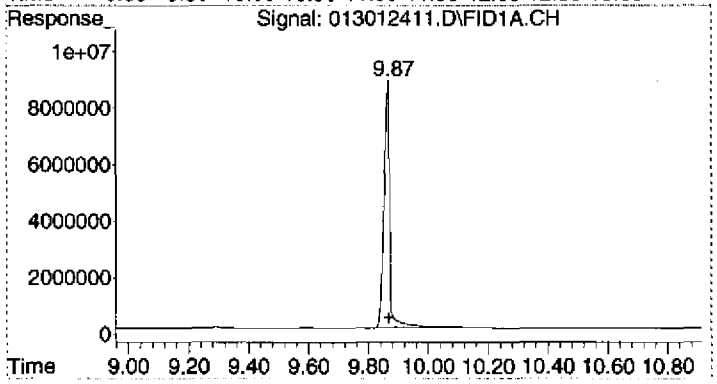
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 50840464
Conc: 18.26 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 17685060
Conc: 9.74 ug/mL m



#3 Surrogate

R.T.: 9.865 min
Delta R.T.: -0.006 min
Response: 118388644
Conc: 46.15 ug/mL

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012412.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 6:19 pm Operator: TD
Sample : 1201031-02 Inst : AG6890-4
Misc : FB02
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:01 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	109727812	42.770 ug/mL
Spiked Amount 50.000 Range 60 - 127 Recovery = 85.54%			
Target Compounds			
1) HM Diesel (TPH)	6.15	56244486	20.202 ug/mL
2) H OIL	11.30	12570474	6.924 ug/mL

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

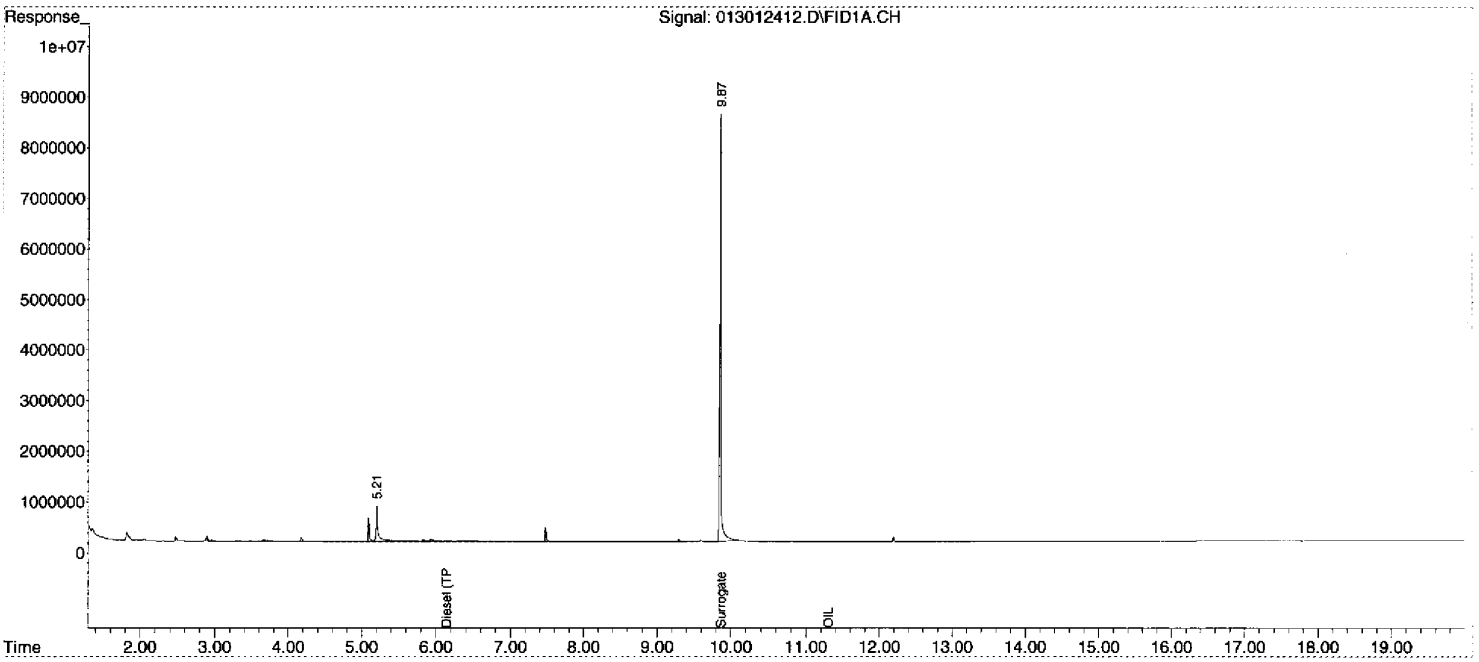
DIM0275879 DIM0276179

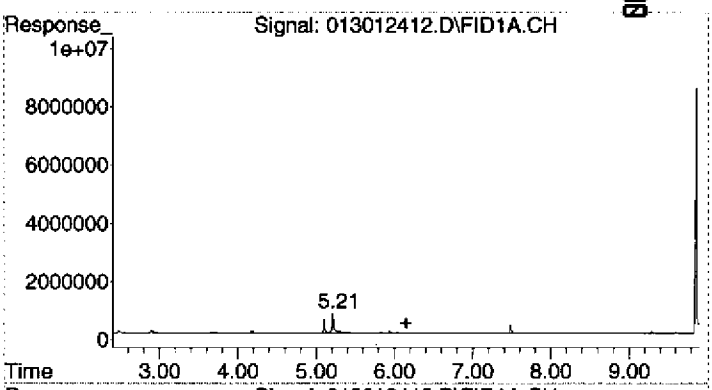
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012412.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 6:19 pm Operator: TD
Sample : 1201031-02 Inst : AG6890-4
Misc : FB02
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:01 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

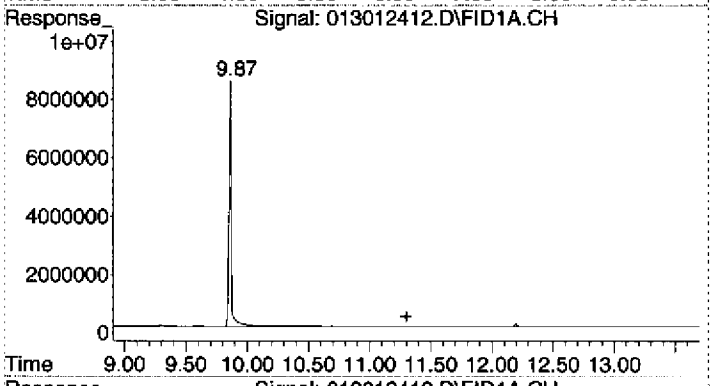
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





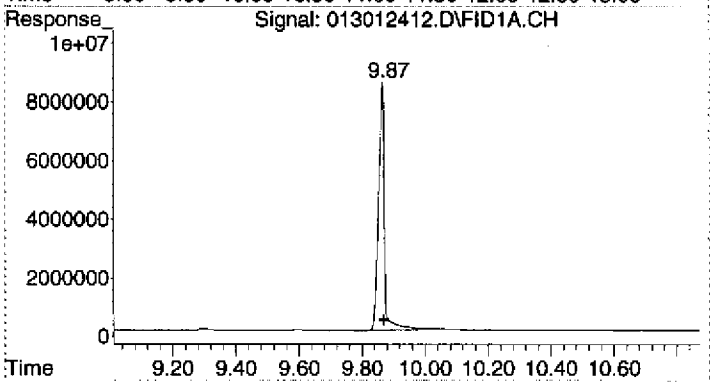
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 56244486
Conc: 20.20 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 12570474
Conc: 6.92 ug/mL m



#3 Surrogate

R.T.: 9.865 min
Delta R.T.: -0.005 min
Response: 109727812
Conc: 42.77 ug/mL

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012413.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 6:50 pm Operator: TD
Sample : 1201031-03 Inst : AG6890-4
Misc : HW04
ALS Vial : 13 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:06 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.86	111755031	43.560 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	87.12%
Target Compounds			
1) HM Diesel (TPH)	6.15	28708898	10.312 ug/mL
2) H OIL	11.30	12480508	6.874 ug/mL

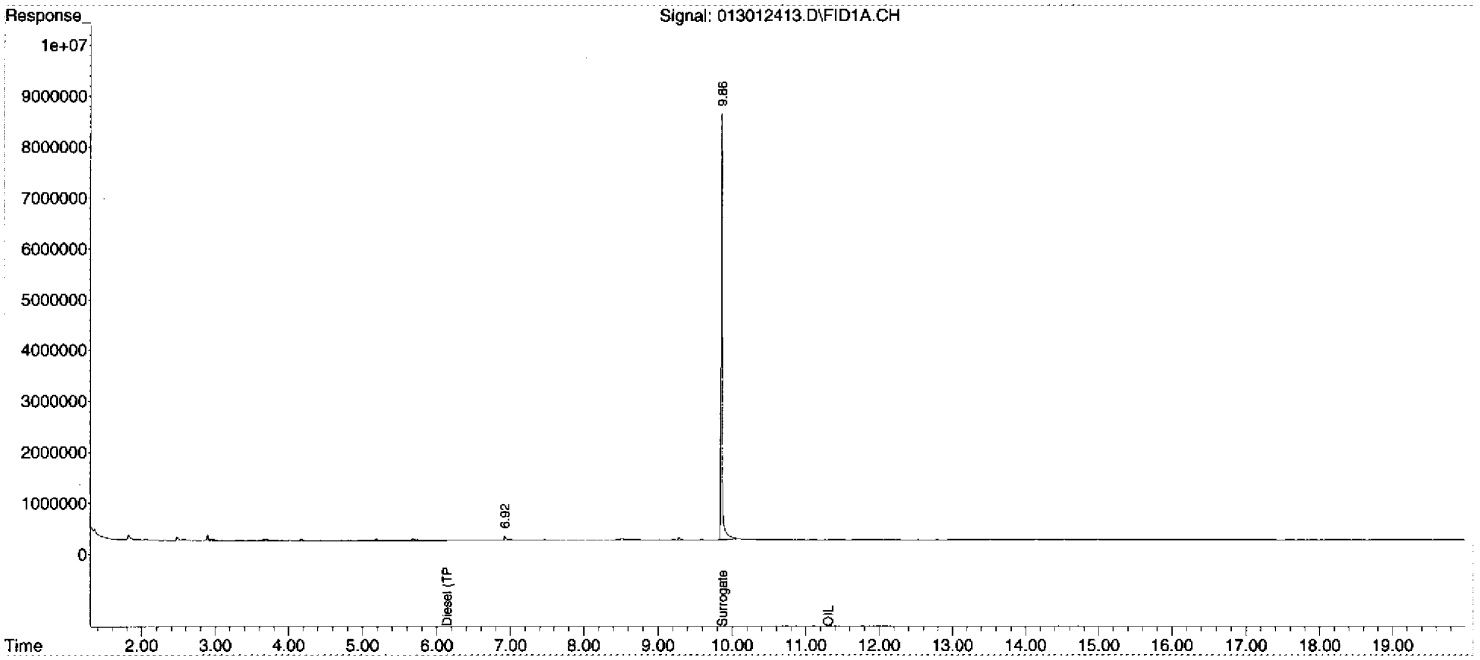
(f)=RT Delta > 1/2 Window (m)=manual int.

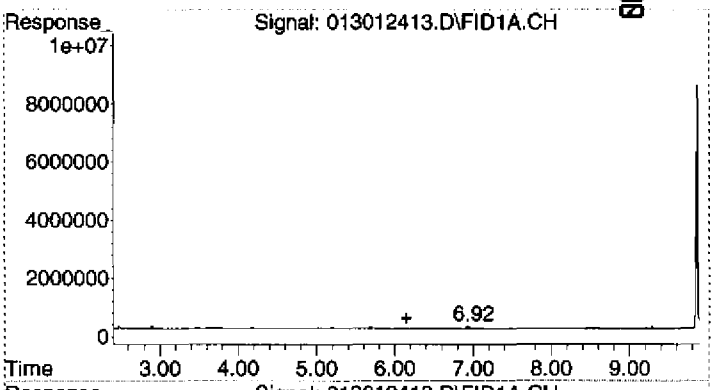
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012413.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 6:50 pm Operator: TD
Sample : 1201031-03 Inst : AG6890-4
Misc : HW04
ALS Vial : 13 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:06 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

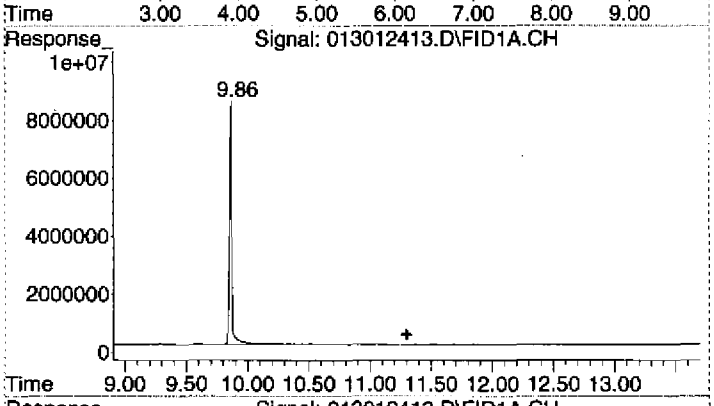
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





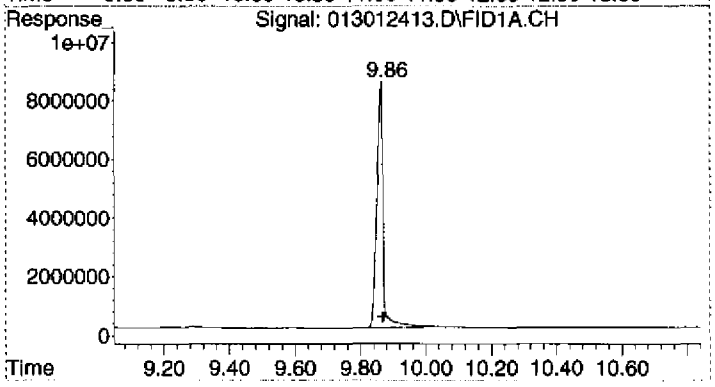
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 28708898
Conc: 10.31 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 12480508
Conc: 6.87 ug/mL m



#3 Surrogate

R.T.: 9.864 min
Delta R.T.: -0.006 min
Response: 111755031
Conc: 43.56 ug/mL

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012414.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 7:21 pm Operator: TD
Sample : 1201031-04 Inst : AG6890-4
Misc : HW19
ALS Vial : 14 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:11 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.86	105798172	41.238 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	82.48%
Target Compounds			
1) HM Diesel (TPH)	6.15	36252898	13.021 ug/mL
2) H OIL	11.30	19535212	10.760 ug/mL

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

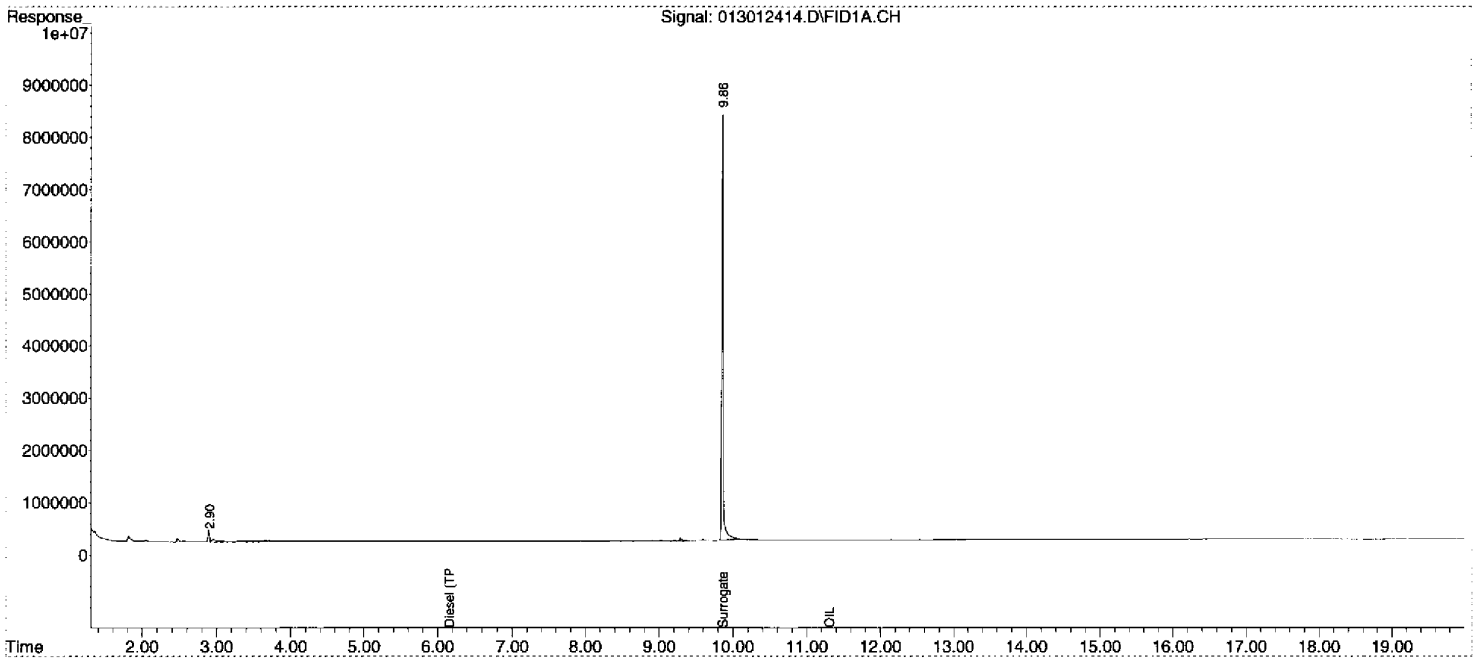
DIM0275879 DIM0276185

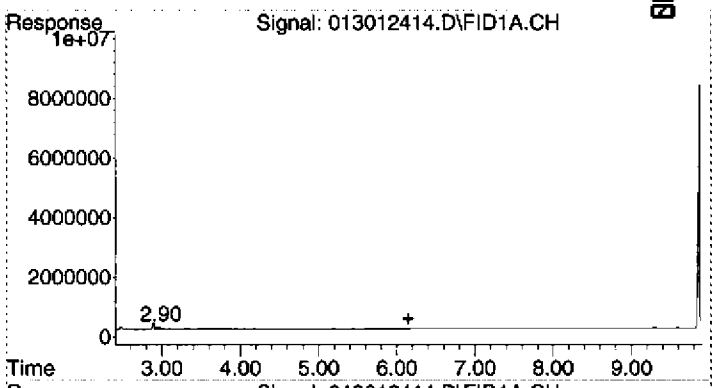
Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012414.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 7:21 pm Operator: TD
Sample : 1201031-04 Inst : AG6890-4
Misc : HW19
ALS Vial : 14 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:11 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

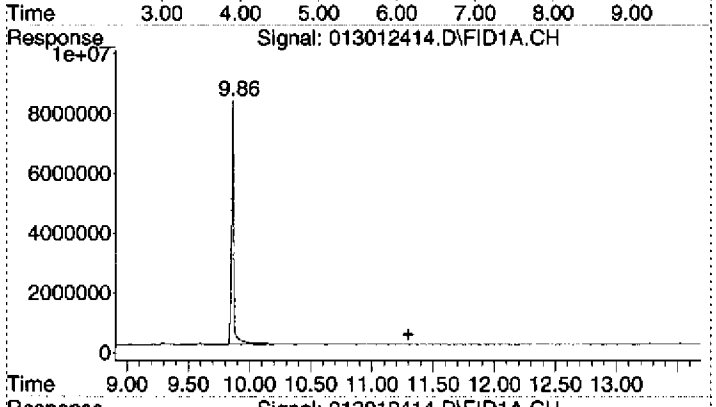
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





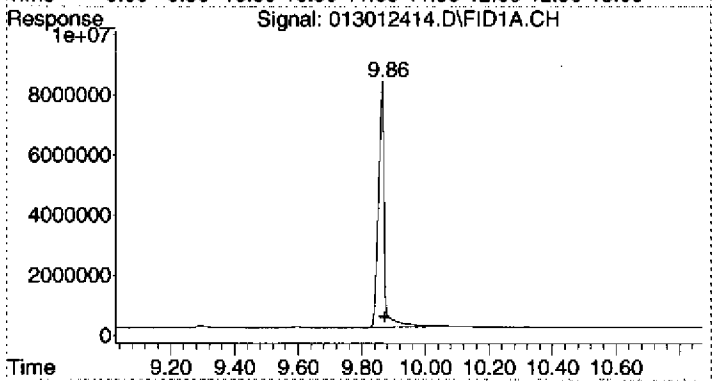
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 36252898
Conc: 13.02 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 19535212
Conc: 10.76 ug/mL m



#3 Surrogate

R.T.: 9.864 min
Delta R.T.: -0.006 min
Response: 105798172
Conc: 41.24 ug/mL

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012415.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 7:52 pm Operator: TD
Sample : 1201031-05 Inst : AG6890-4
Misc : HW19-P
ALS Vial : 15 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:16 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.86	115169934	44.891 ug/mL
Spiked Amount 50.000 Range 60 - 127 Recovery = 89.78%			
Target Compounds			
1) HM Diesel (TPH)	6.15	22401421	8.046 ug/mL
2) H OIL	11.30	18380963	10.124 ug/mL

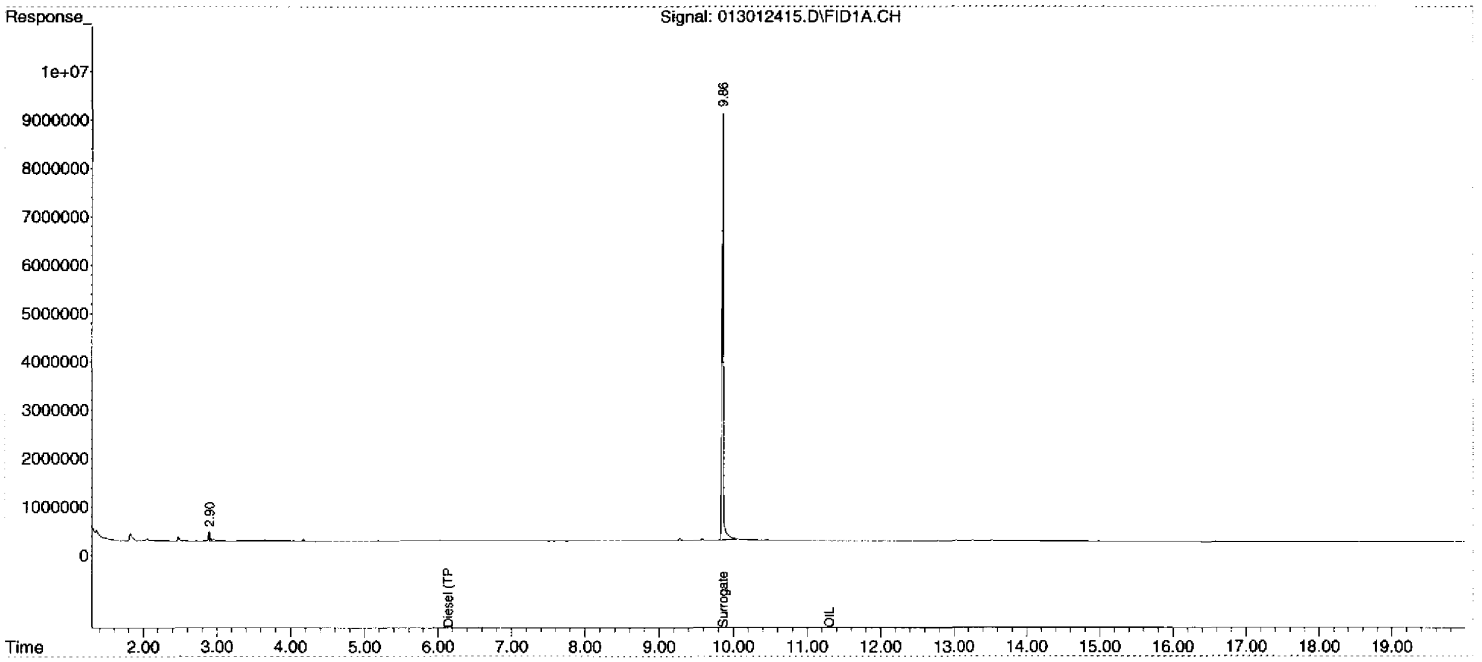
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012415.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 7:52 pm Operator: TD
Sample : 1201031-05 Inst : AG6890-4
Misc : HW19-P
ALS Vial : 15 Sample Multiplier: 1

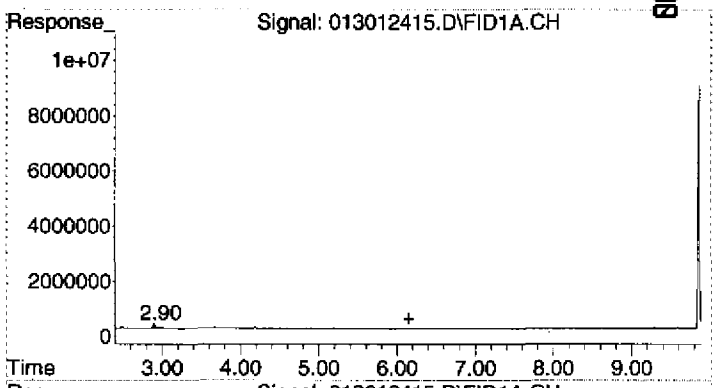
Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:16 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



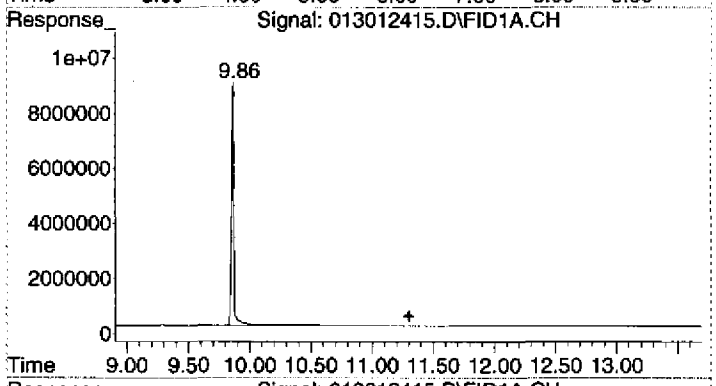
00522

00523



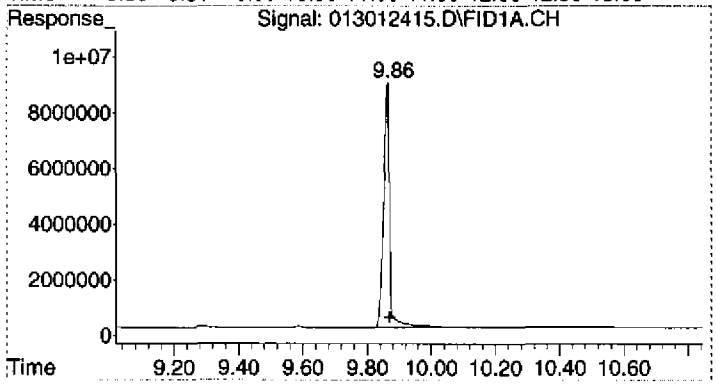
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 22401421
Conc: 8.05 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 18380963
Conc: 10.12 ug/mL m



#3 Surrogate

R.T.: 9.864 min
Delta R.T.: -0.006 min
Response: 115169934
Conc: 44.89 ug/mL

JS 2/3/12

00300A

Quantitation Report (Not Reviewed)

0054

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012416.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 8:23 pm Operator: TD
Sample : 2010050-IBL2 Inst : AG6890-4
Misc : 2A11003 IB
ALS Vial : 16 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:21 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	140400199	54.726 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	109.45%
Target Compounds			
1) HM Diesel (TPH)	6.15	12261875	4.404 ug/mL
2) H OIL	11.30	11628585	6.405 ug/mL

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

00331

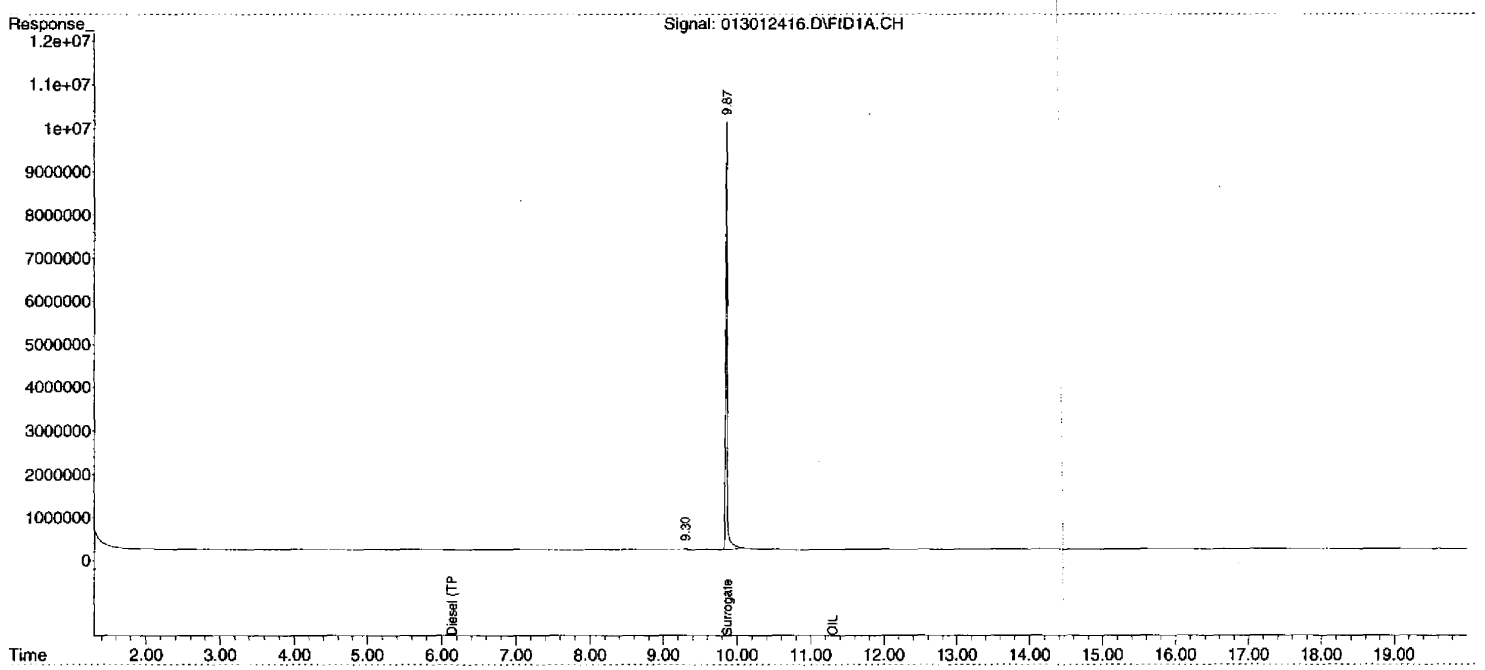
DIM0275879 DIM0276191

Quantitation Report (Not Reviewed)

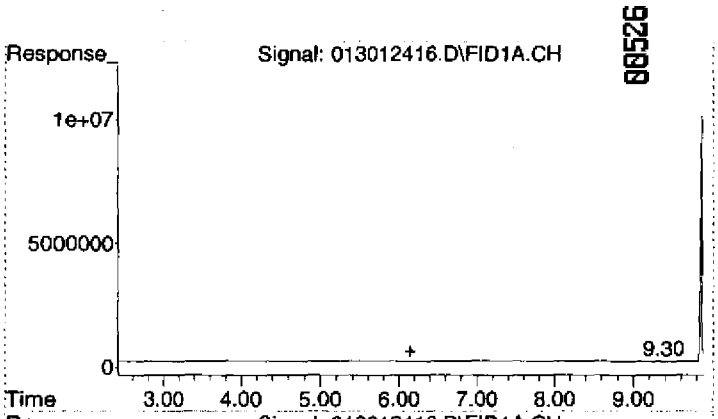
InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012416.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 8:23 pm Operator: TD
Sample : 2010050-IBL2 Inst : AG6890-4
Misc : 2A11003 IB
ALS Vial : 16 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:21 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

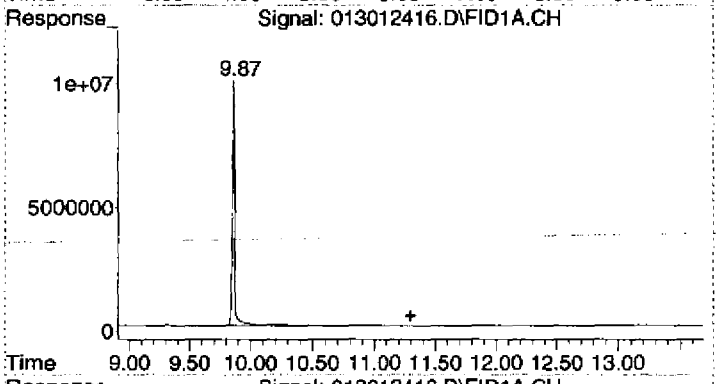


DIM0275879
DIM0276192



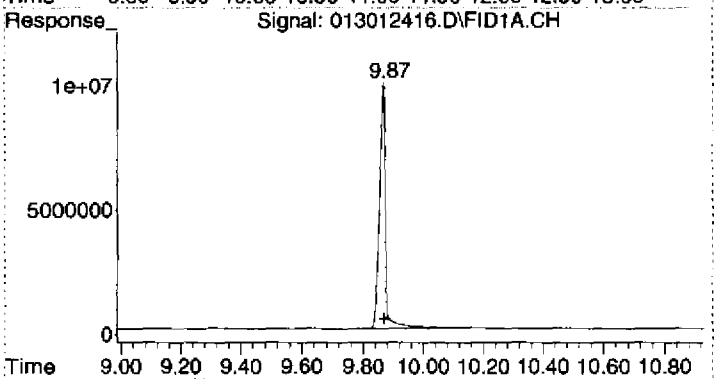
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 12261875
Conc: 4.40 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 11628585
Conc: 6.40 ug/mL m



#3 Surrogate

R.T.: 9.868 min
Delta R.T.: -0.002 min
Response: 140400199
Conc: 54.73 ug/mL

DIM0276193

DIM0275879

Evaluate Continuing Calibration Report

08527

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012417.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 8:54 pm Operator: TD
Sample : 2010050-CCV3 Inst : AG6890-4
Misc : 2A11005 DRO-CV
ALS Vial : 17 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:26 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Min. RRF : 0.000 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 350%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 HM	Diesel (TPH)	2.784	3.219 E6	-15.6	128	0.00
2 H	OIL	1.816	0.000 E6	100.0#	116	0.00
3 S	Surrogate	2.566	3.083 E6	-20.1	122	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

0123124DA.M Tue Jan 31 08:30:23 2012

Quantitation Report (Not Reviewed)

00528

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012417.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 8:54 pm Operator: TD
Sample : 2010050-CCV3 Inst : AG6890-4
Misc : 2A11005 DRO-CV
ALS Vial : 17 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:26 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	154157023	60.088 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery = 120.18%	
Target Compounds			
1) HM Diesel (TPH)	6.15	1609702032	578.172 ug/mL
2) H OIL	11.30	12740557	7.017 ug/mL

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

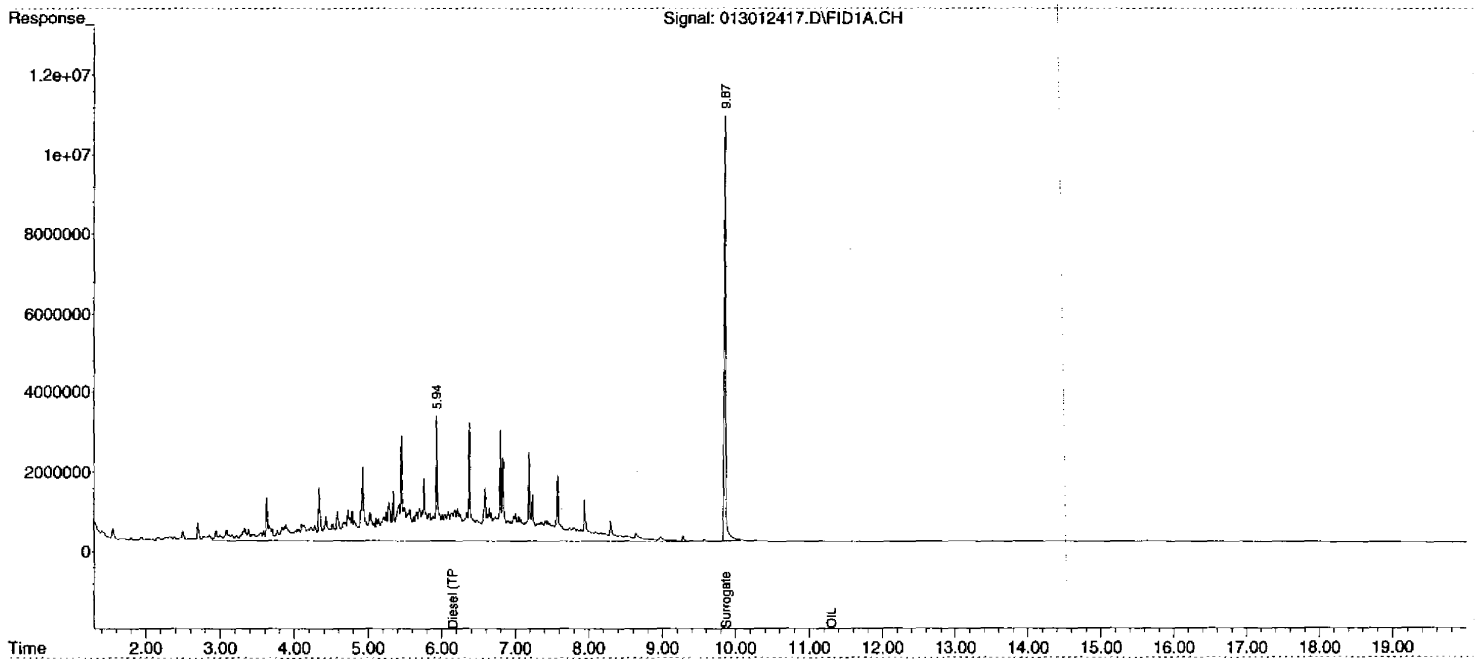
00305

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012417.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 8:54 pm Operator: TD
Sample : 2010050-CCV3 Inst : AG6890-4
Misc : 2A11005 DRO-CV
ALS Vial : 17 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:26 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

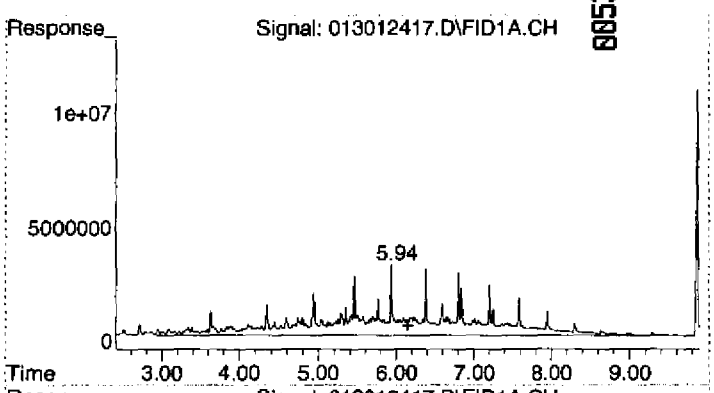
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



00529

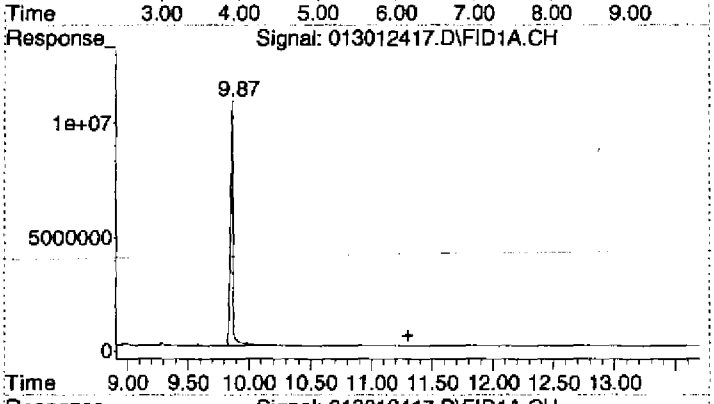
DIM0276196

DIM0275879



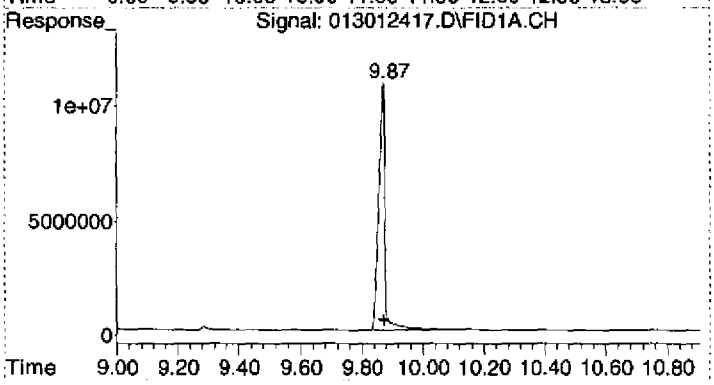
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 1609702032
Conc: 578.17 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 12740557
Conc: 7.02 ug/mL m



#3 Surrogate

R.T.: 9.869 min
Delta R.T.: 0.000 min
Response: 154157023
Conc: 60.09 ug/mL

Evaluate Continuing Calibration Report

00531

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012418.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 9:24 pm Operator: TD
Sample : 2010050-CCV4 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 18 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:28:48 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Min. RRF : 0.000 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 350%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 HM	Diesel (TPH)	2.784	0.000 E6	100.0#	105	0.00
2 H	OIL	1.816	1.847 E6	-1.7	102	0.00
3 S	Surrogate	2.566	0.000 E6	100.0#	103	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

00326

Quantitation Report (QT Reviewed)

00532

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012418.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 9:24 pm Operator: TD
Sample : 2010050-CCV4 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 18 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:28:48 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	125644302	48.974 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	97.95%
Target Compounds			
1) HM Diesel (TPH)	6.15	699005661	251.068 ug/mL
2) H OIL	11.30	1847226865	1017.436 ug/mL

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

MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☑ After Manual Integration	
Manual integration(s) performed by:	
Analyst: TD	Date: 01-31-12
Manual integration(s) reviewed by:	
Reviewer:	Date:

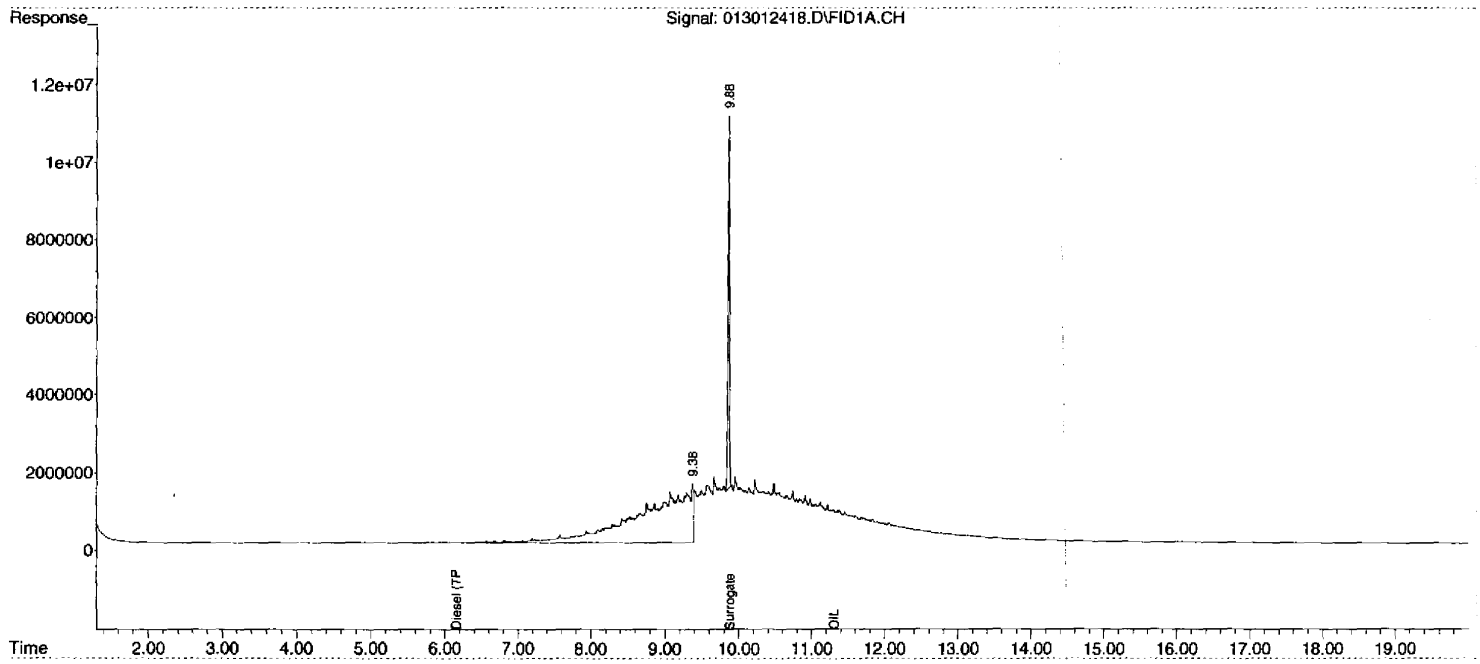
DIM0275879 DIM0276199

Quantitation Report (QT Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012418.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 9:24 pm Operator: TD
Sample : 2010050-CCV4 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 18 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:28:48 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

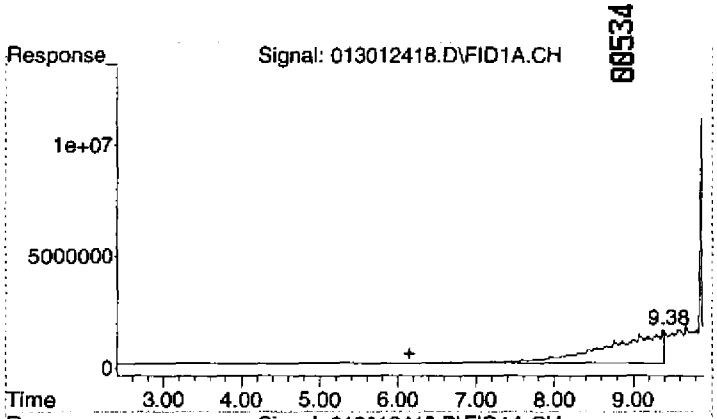
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



00533

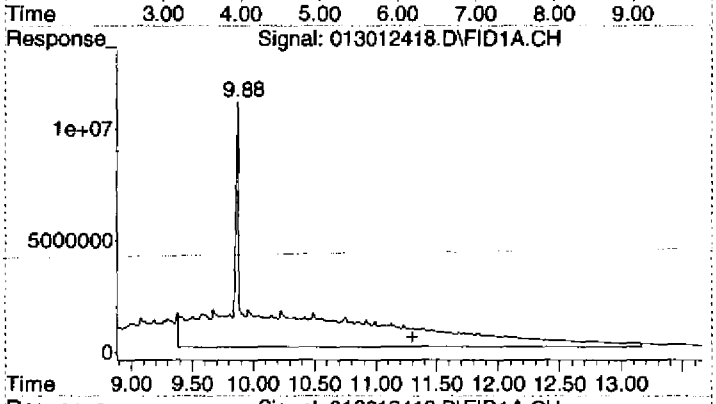
DIM0276200

DIM0275879



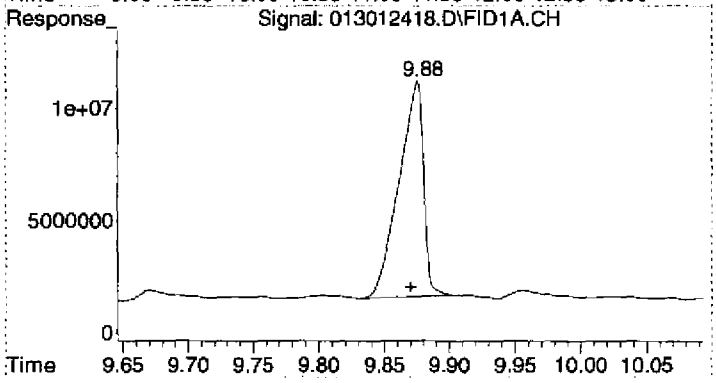
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 699005661
Conc: 251.07 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 1847226865
Conc: 1017.44 ug/mL m



#3 Surrogate

R.T.: 9.875 min
Delta R.T.: 0.004 min
Response: 125644302
Conc: 48.97 ug/mL

Quantitation Report (Qedit)

08535

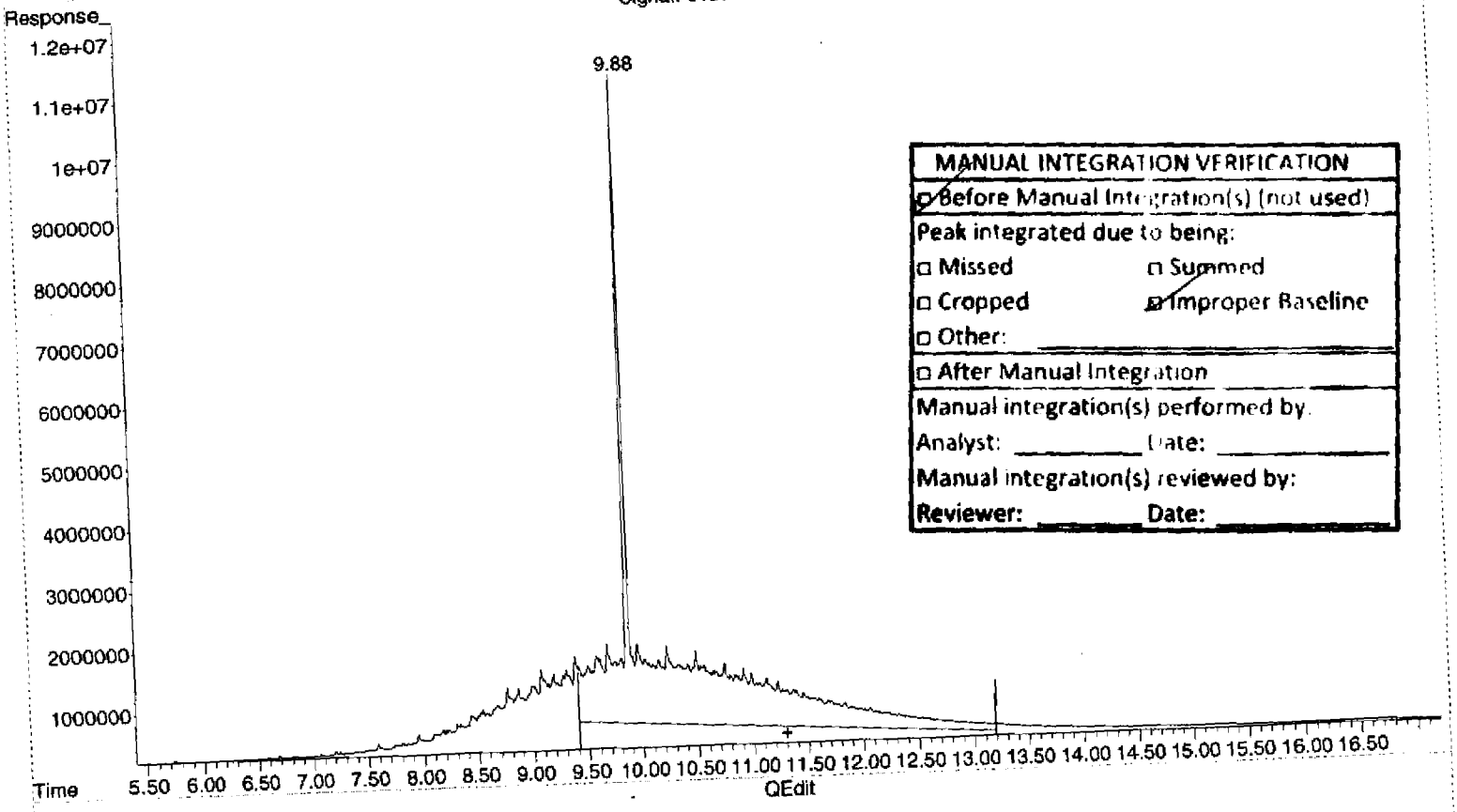
InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012418.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 9:24 pm
Sample : 2010050-CCV4
Misc : 2A11012 OIL-CV
ALS Vial : 18 Sample Multiplier: 1

Operator: TD
Inst : AG6890-4

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:31 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Signal: 013012418.D\FID1A.CH



MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☑ Improper Baseline
☐ Other:
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

(2) OIL (H)

11.30min 719.190ug/mL m

response 1305738932

(+) = Expected Retention Time
0123124DA.M Tue Jan 31 08:28:37 2012

: 03312

DIM0276202

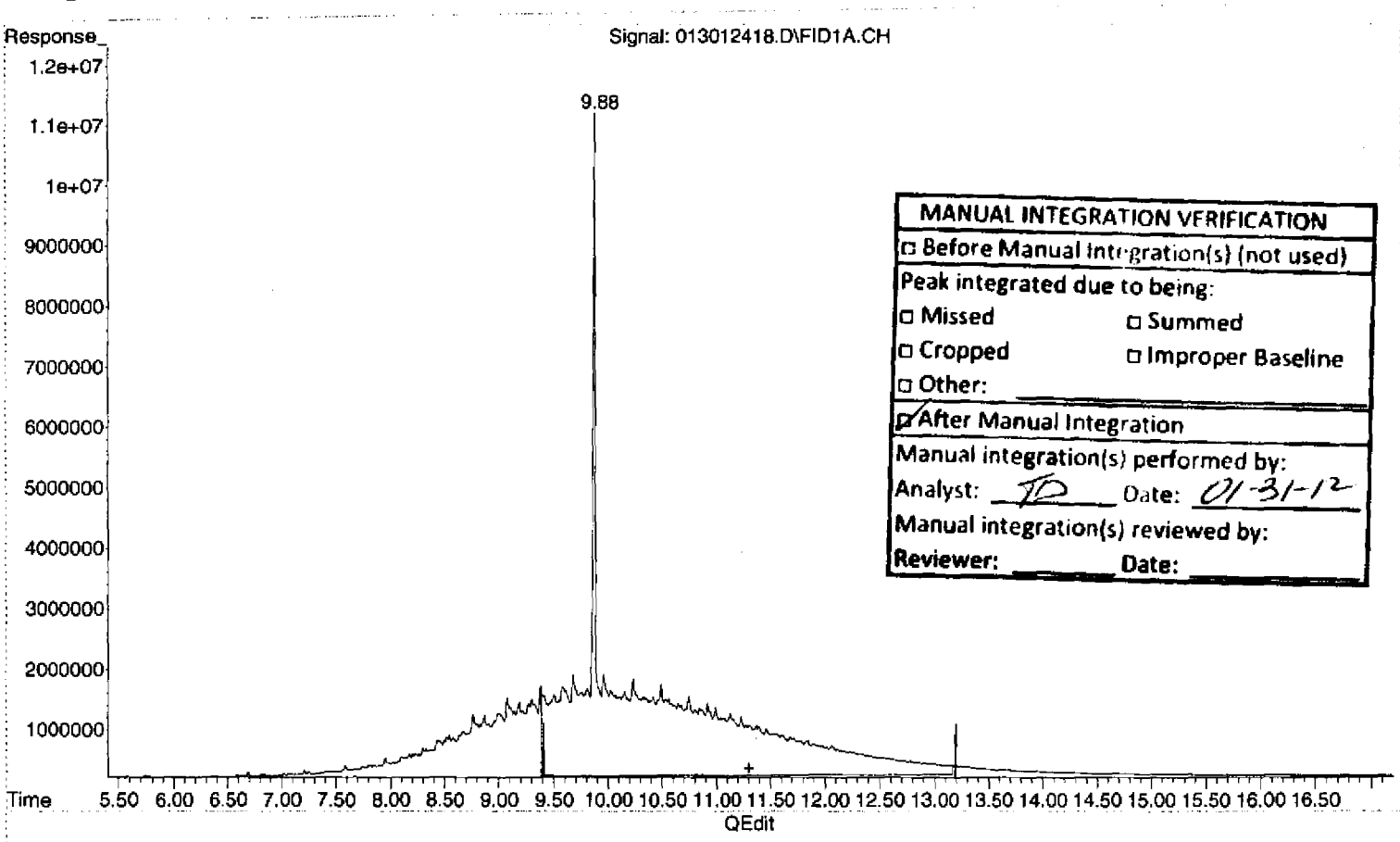
Quantitation Report (Qedit)

00536

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012418.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 9:24 pm Operator: TD
Sample : 2010050-CCV4 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 18 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:31 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-31-12
Manual integration(s) reviewed by:
Reviewer: Date:

(2) OIL (H)

11.30min 1017.436ug/mL m

response 1847226865

(+) = Expected Retention Time

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012418.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 9:24 pm Operator: TD
Sample : 2010050-CCV4 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 18 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:31 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	125644302	48.974 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	97.95%
Target Compounds			
1) HM Diesel (TPH)	6.15	699005661	251.068 ug/mL
2) H OIL	11.30	1305738932	719.190 ug/mL

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

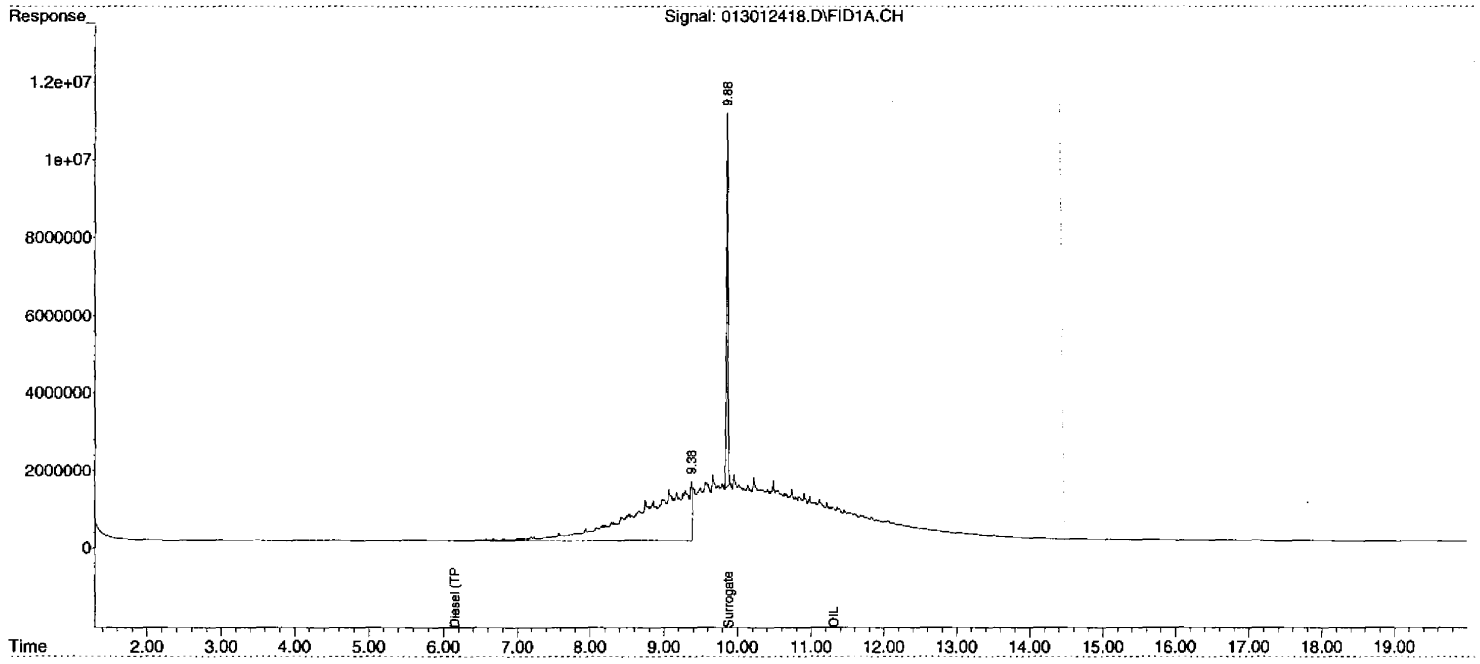
MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

Quantitation Report (Not Reviewed)

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012418.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 9:24 pm Operator: TD
Sample : 2010050-CCV4 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 18 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:31 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

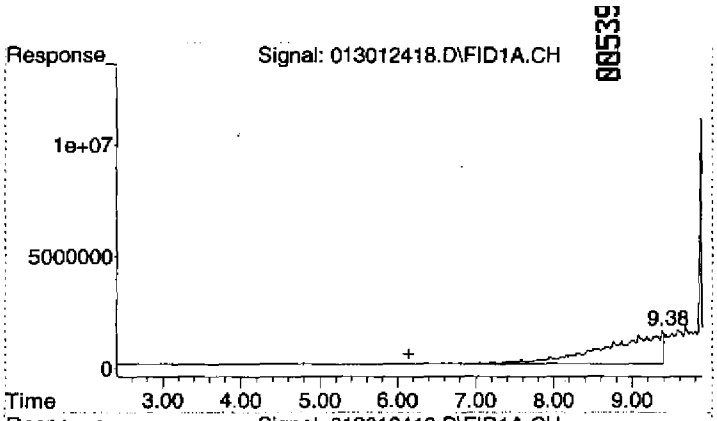
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



00538

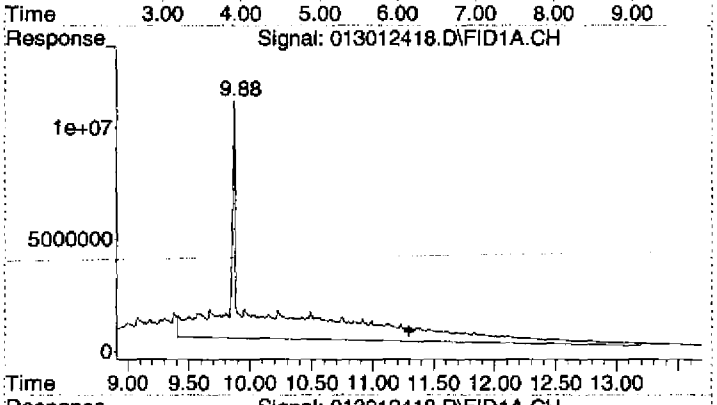
DIM0276205

DIM0275879



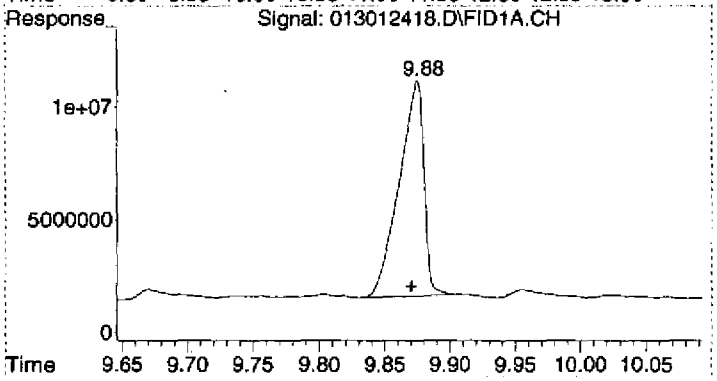
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 699005661
Conc: 251.07 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 1305738932
Conc: 719.19 ug/mL m



#3 Surrogate

R.T.: 9.875 min
Delta R.T.: 0.004 min
Response: 125644302
Conc: 48.97 ug/mL

Quantitation Report (Not Reviewed)

00548

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012419.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 9:55 pm Operator: TD
Sample : 2010050-CCV5 Inst : AG6890-4
Misc : 2A11005 DRO-CV
ALS Vial : 19 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:36 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	134261565	52.333 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery = 104.67%	
Target Compounds			
1) HM Diesel (TPH)	6.15	1434850695	515.369 ug/mL
2) H OIL	11.30	12601189	6.941 ug/mL

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

Not reviewed

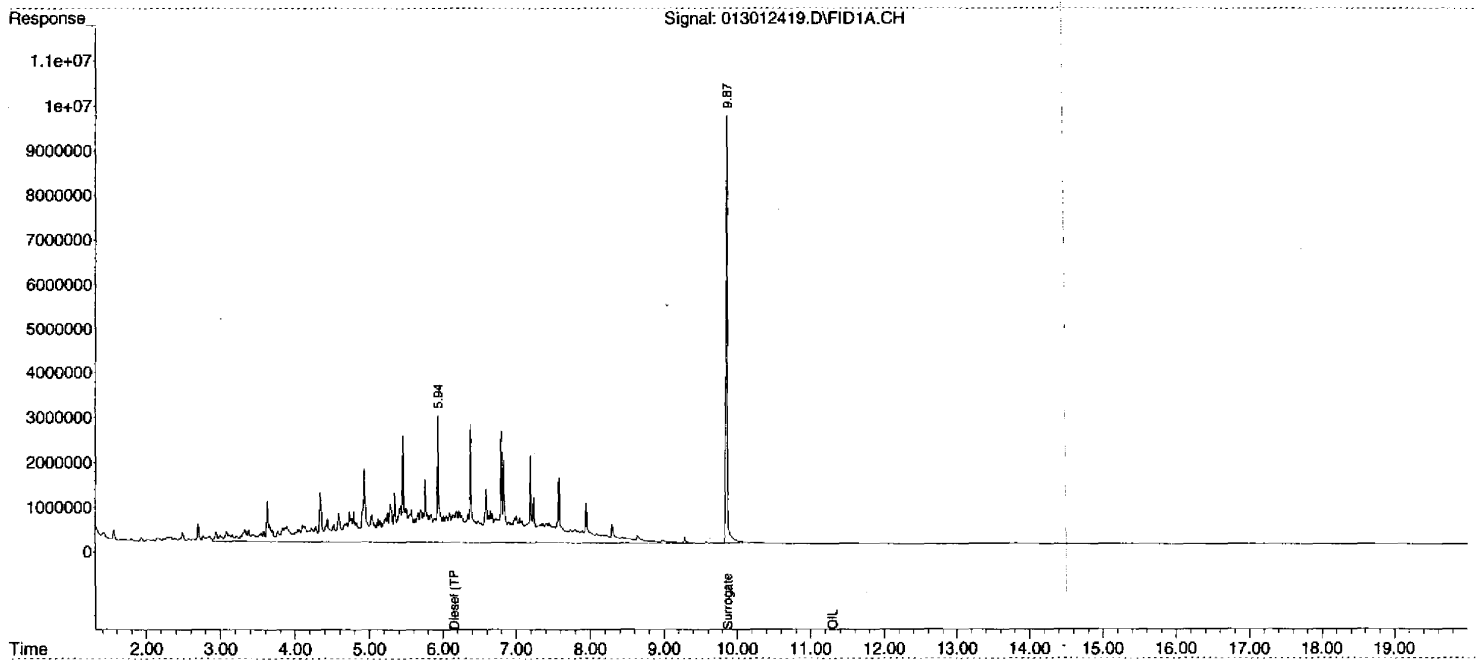
00317

Quantitation Report (Not Reviewed)

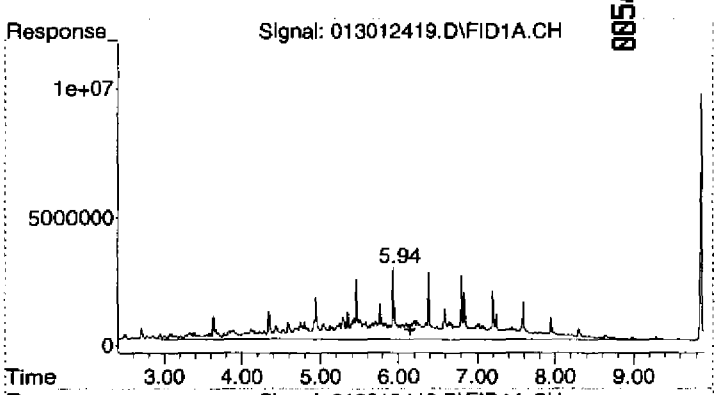
InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012419.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 9:55 pm Operator: TD
Sample : 2010050-CCV5 Inst : AG6890-4
Misc : 2A11005 DRO-CV
ALS Vial : 19 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:36 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

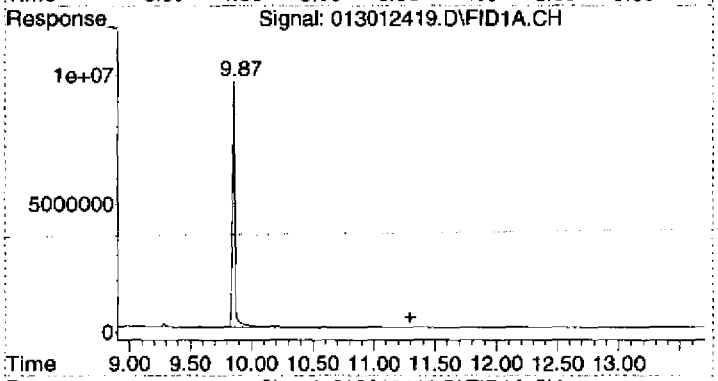


00541



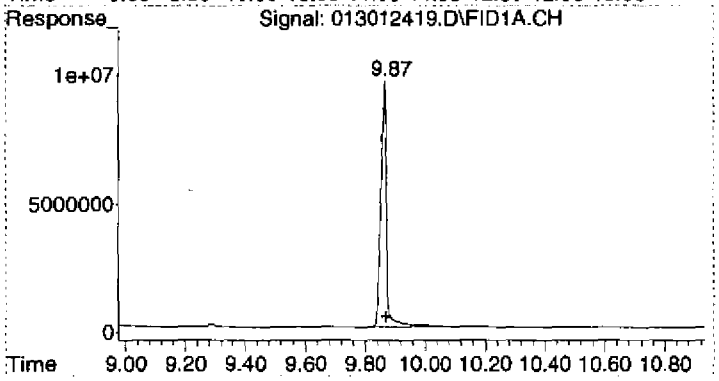
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 1434850695
Conc: 515.37 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 12601189
Conc: 6.94 ug/mL m



#3 Surrogate

R.T.: 9.867 min
Delta R.T.: -0.003 min
Response: 134261565
Conc: 52.33 ug/mL

DIM0276209
DIM0275879

Quantitation Report (Not Reviewed)

08543

InstName : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012420.D
Signal(s) : FID1A.CH
Acq On : 30 Jan 2012 10:26 pm Operator: TD
Sample : 2010050-CCV6 Inst : AG6890-4
Misc : 2A11012 OIL-CV
ALS Vial : 20 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:41 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	9.87	115380819	44.973 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	89.95%
Target Compounds			
1) HM Diesel (TPH)	6.15	621091793	223.083 ug/mL
2) H OIL	11.30	1172994615	646.075 ug/mL

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

not evaluated

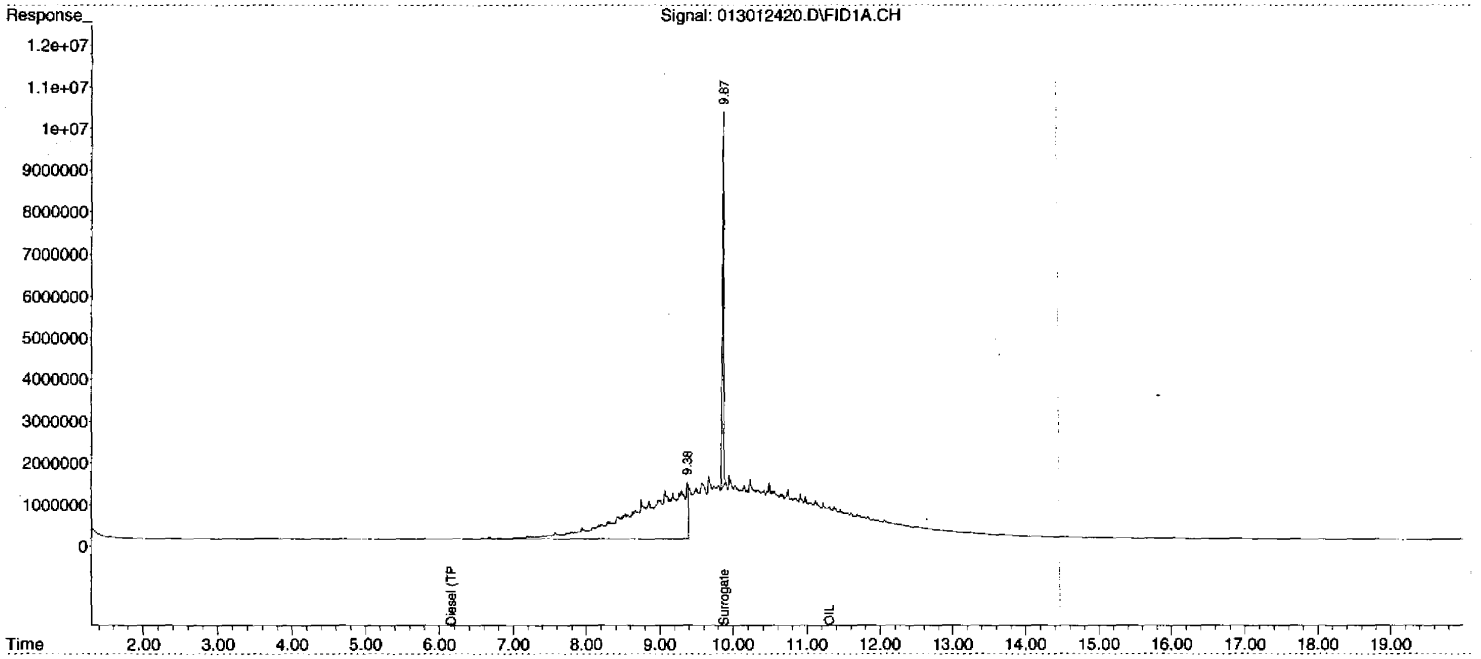
00329

DIM0276210

DIM0275879

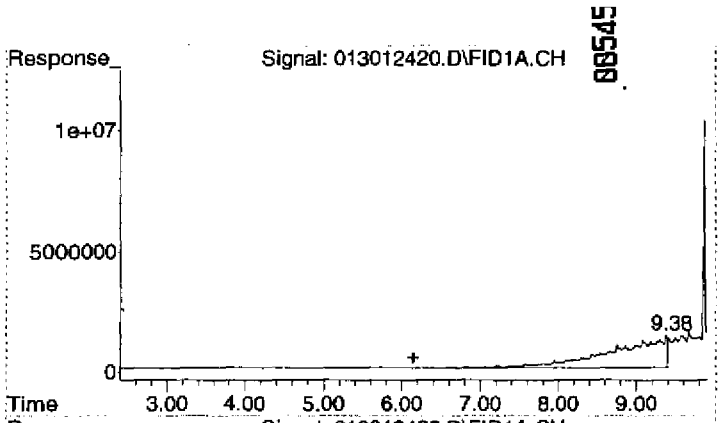
Quantitation Report (Not Reviewed)

```
InstName  : AG6890-4
Data Path : C:\MSDCHEM\1\2012\DATA\013012DROA\
Data File : 013012420.D
Signal(s) : FID1A.CH
Acq On    : 30 Jan 2012  10:26 pm                    Operator: TD
Sample    : 2010050-CCV6                             Inst    : AG6890-4
Misc      : 2A11012 OIL-CV
ALS Vial  : 20   Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 08:24:41 2012
Quant Method : C:\MSDCHEM\1\2012\METHOD\0123124DA.M
Quant Title  : GC TPH Method
QLast Update : Tue Jan 24 07:53:22 2012
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped
DataAcq Meth:0816104INST.M

Volume Inj.  : 2 uL
Signal Phase : Rtx-1 15m
Signal Info  : 0.32 mm  0.1um
```



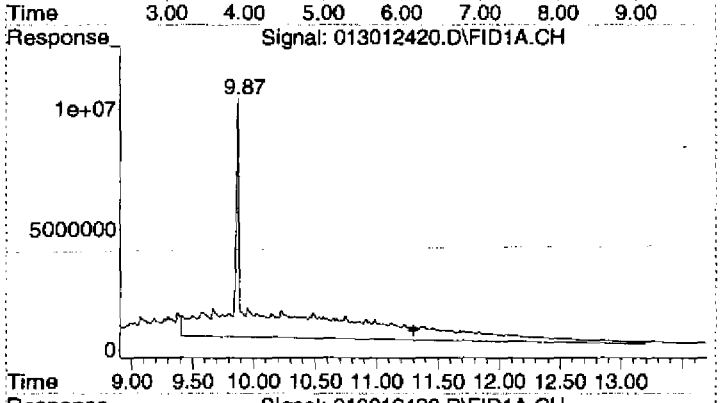
DIM0276211

DIM0275879



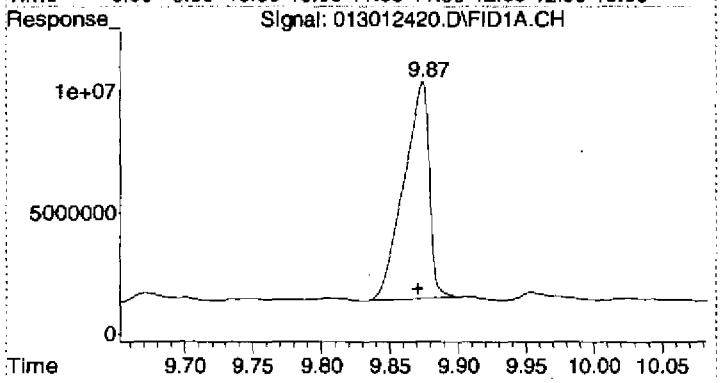
#1 Diesel (TPH)

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 621091793
Conc: 223.08 ug/mL m



#2 OIL

R.T.: 11.300 min
Delta R.T.: 0.000 min
Response: 1172994615
Conc: 646.08 ug/mL m



#3 Surrogate

R.T.: 9.874 min
Delta R.T.: 0.003 min
Response: 115380819
Conc: 44.97 ug/mL

00546

SDG: 12027B
Instrument: AG 7890-2
Analysis Date: 01-31-12

SAMPLE DATA

00323

DIM0276213

DIM0275879

Injection Log

Operator: TD
Directory: C:\msdchem\1\2012\DATA\013112DA\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	01311201.D	1	2010053-IBL1	2A11003 IB	31 Jan 2012 12:05 pm
2	01311202.D	1	2010053-CCV1	2A11005 DRO-CV	31 Jan 2012 12:23 pm
3	01311203.D	1	2010053-LCV1	2A11004 DRO-QLS	31 Jan 2012 12:41 pm
4	01311204.D	1	2010053-CCV2	2A11012 OIL-CV	31 Jan 2012 12:59 pm
5	01311205.D	1	2010053-LCV2	2A11011 OIL-A	31 Jan 2012 1:17 pm
6	01311206.D	1	B2A0071-BLK1	RB	31 Jan 2012 1:35 pm
7	01311207.D	1	B2A0071-BS1	BS	31 Jan 2012 1:53 pm
8	01311208.D	1	1201033-01	FB03	31 Jan 2012 2:11 pm
9	01311209.D	1	1201033-02	HW02	31 Jan 2012 2:29 pm
10	01311210.D	1	1201033-03	HW02z	31 Jan 2012 2:47 pm
11	01311211.D	1	1201033-04	HW08a	31 Jan 2012 3:05 pm
12	01311212.D	1	1201034-01	FB04	31 Jan 2012 3:23 pm
13	01311213.D	1	1201034-02	HW5	31 Jan 2012 3:41 pm
14	01311214.D	1	1201034-03	HW6	31 Jan 2012 3:59 pm
15	01311215.D	1	1201034-04	HW12	31 Jan 2012 4:17 pm
16	01311216.D	1	1201034-05	HW14-P	31 Jan 2012 4:35 pm
17	01311217.D	1	1201034-06	HW14	31 Jan 2012 4:53 pm
18	01311218.D	1	1201034-09	FB05	31 Jan 2012 5:11 pm
19	01311219.D	1	1201034-10	HW01	31 Jan 2012 5:29 pm
20	01311220.D	1	1201034-11	HW24-P	31 Jan 2012 5:47 pm
21	01311221.D	1	1201034-15	HW17	31 Jan 2012 6:05 pm
22	01311222.D	1	1201034-16	HW24	31 Jan 2012 6:23 pm
23	01311223.D	1	2010053-IBL2	2A11003 IB	31 Jan 2012 6:41 pm
24	01311224.D	1	2010053-CCV3	2A11005 DRO-CV	31 Jan 2012 6:59 pm
25	01311225.D	1	2010053-CCV4	2A11012 OIL-CV	31 Jan 2012 7:17 pm
26	01311226.D	1	2010053-CCV5	2A11005 DRO-CV	31 Jan 2012 7:35 pm
27	01311227.D	1	2010053-CCV6	2A11012 OIL-CV	31 Jan 2012 7:53 pm

Response Factor Report AG7890_2

Method Path : C:\msdchem\1\2012\METHOD\
Method File : 013012DROA.M
Title : GC TPH Method
Last Update : Tue Jan 31 09:45:52 2012
Response Via : Initial Calibration

Calibration Files

50	=01301203.D	150	=01301204.D	500	=01301205.D
1250	=01301206.D	4000	=01301207.D	OIL1	=01301208.D

	Compound	50	150	500	1250	4000	OIL1	Avg	%RSD
1) HM	Diesel (TPH)	4.006	3.630	3.163	3.526	3.617		3.588 E6	8.38
2) H	OIL						1.883	1.915 E6	4.11
3) S	Surrogate	3.698	3.473	3.358	3.655	3.578		3.552 E6	3.89

(#) = Out of Range ### Number of calibration levels exceeded format ###

GC QA-QC Check Report

00545

Daily Calibration File : C:\msdchem\1\2012\DATA\013112DA\01311202.D
Time Acquired : 31 Jan 2012 12:23 pm

File	Sample	Surrogate Recovery %	Internal Standard Responses
01311206.D			
	B2A0071-BL	96	
01311207.D			
	B2A0071-BS	87	
01311208.D			
	1201033-01	96	
01311209.D			
	1201033-02	97	
01311210.D			
	1201033-03	91	
01311211.D			
	1201033-04	86	
01311212.D			
	1201034-01	94	
01311213.D			
	1201034-02	94	
01311214.D			
	1201034-03	86	
01311215.D			
	1201034-04	97	
01311216.D			
	1201034-05	98	
01311217.D			
	1201034-06	93	
01311218.D			
	1201034-09	95	
01311219.D			
	1201034-10	94	
01311220.D			
	1201034-11	87	
01311221.D			
	1201034-15	88	
01311222.D			
	1201034-16	90	

(fails) - fails 12hr time check * - fails criteria

Created: Wed Feb 01 08:16:30 2012 AG7890_2

00326

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311201.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 12:05 pm Operator: TD
Sample : 2010053-IBL1 Inst : AG7890_2
Misc : 2A11003 IB
ALS Vial : 1 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:26 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.719	174480015	49.116 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	98.23%
Target Compounds			
1) HM Diesel (TPH)	4.080	15857224	4.419 ug/mL
2) H OIL	6.590	6399812	3.342 ug/mL

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

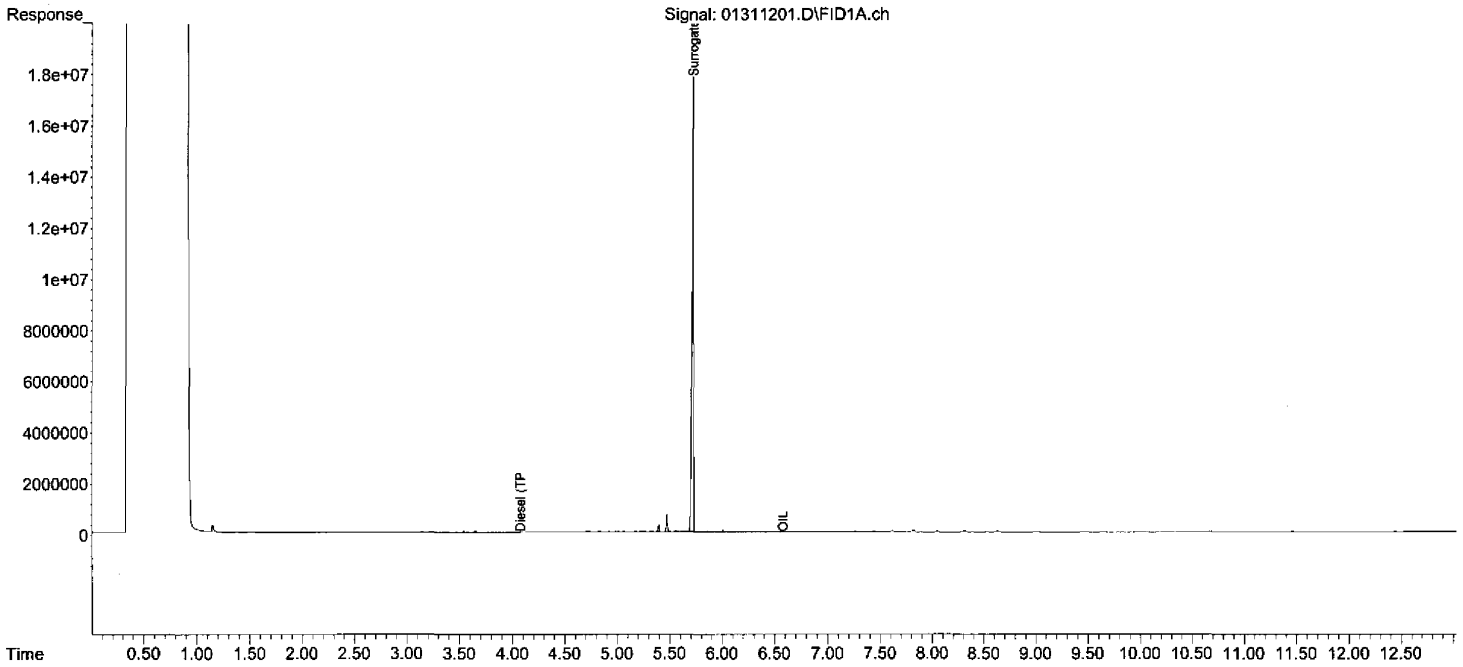
DIM0275879 DIM0276217

Quantitation Report (Not Reviewed)

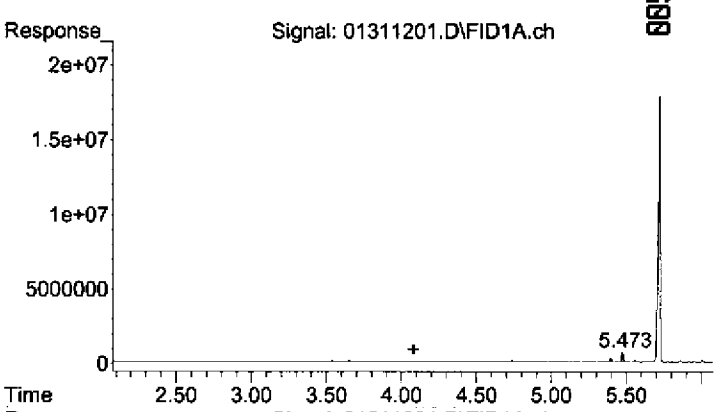
Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311201.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 12:05 pm
Operator: TD
Sample : 2010053-IBL1
Inst : AG7890_2
Misc : 2A11003 IB
ALS Vial : 1 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:26 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

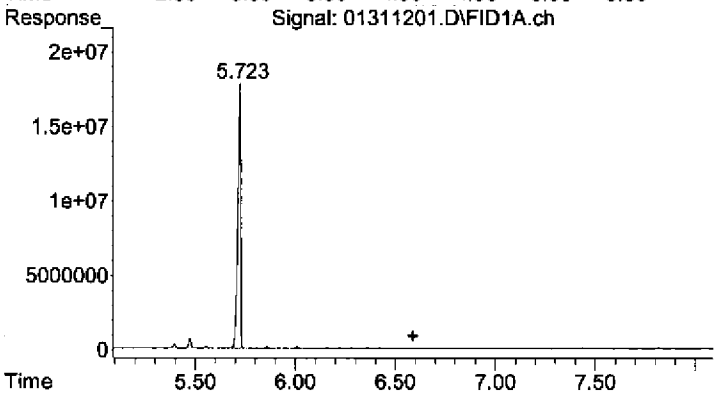


00551



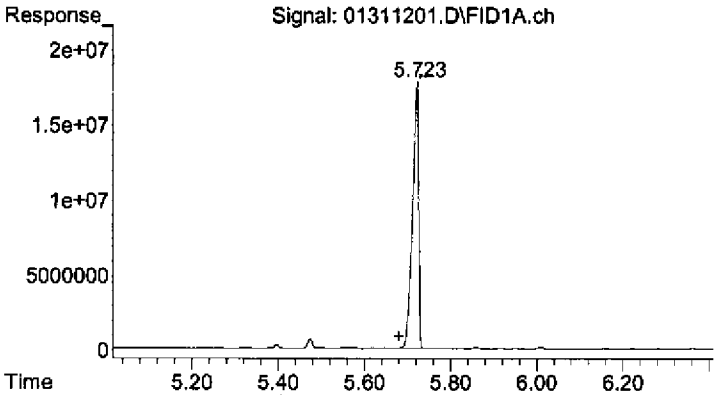
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 15857224
Conc: 4.42 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 6399812
Conc: 3.34 ug/mL



#3 Surrogate

R.T.: 5.719 min
Delta R.T.: 0.040 min
Response: 174480015
Conc: 49.12 ug/mL

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311202.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 12:23 pm Operator: TD
Sample : 2010053-CCV1 Inst : AG7890_2
Misc : 2A11005 DRO-CV
ALS Vial : 2 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:30 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Min. RRF : 0.000 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 350%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 HM	Diesel (TPH)	3.588	3.454 E6	3.7	109	0.00
2 H	OIL	1.915	0.000 E6	100.0#	215	0.00
3 S	Surrogate	3.552	3.597 E6	-1.3	107	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

DIM0275879 DIM0276220

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311202.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 12:23 pm Operator: TD
Sample : 2010053-CCV1 Inst : AG7890_2
Misc : 2A11005 DRO-CV
ALS Vial : 2 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:30 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.683	179839252	50.625 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery = 101.25%	
Target Compounds			
1) HM Diesel (TPH)	4.080	1727196284	481.317 ug/mL ✓
2) H OIL	6.590	8329687	4.350 ug/mL

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

$$\frac{1727196284}{3.588E6} = 481.381$$

TD 02-01-12

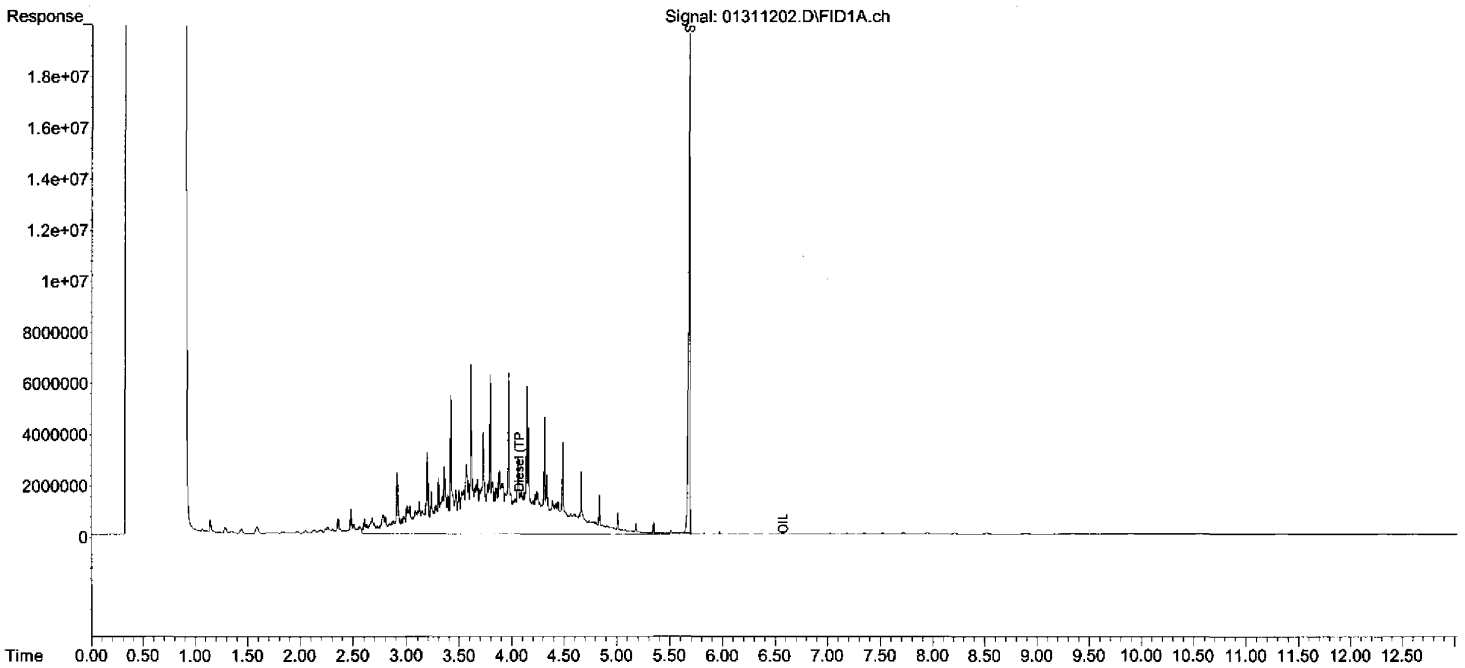
DIM0275879 DIM0276221

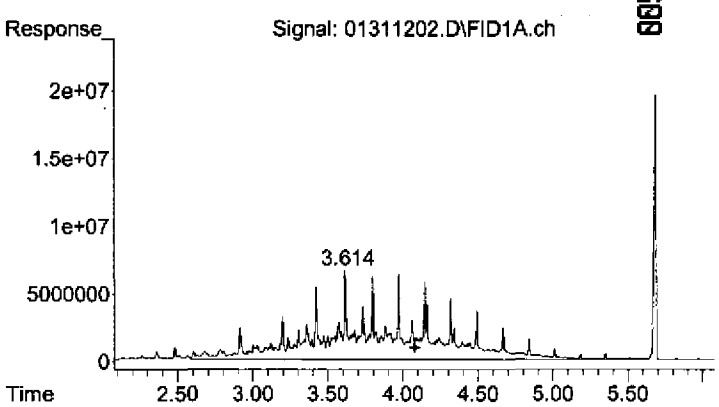
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311202.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 12:23 pm
Operator: TD
Sample : 2010053-CCV1
Inst : AG7890_2
Misc : 2A11005 DRO-CV
ALS Vial : 2 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:30 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

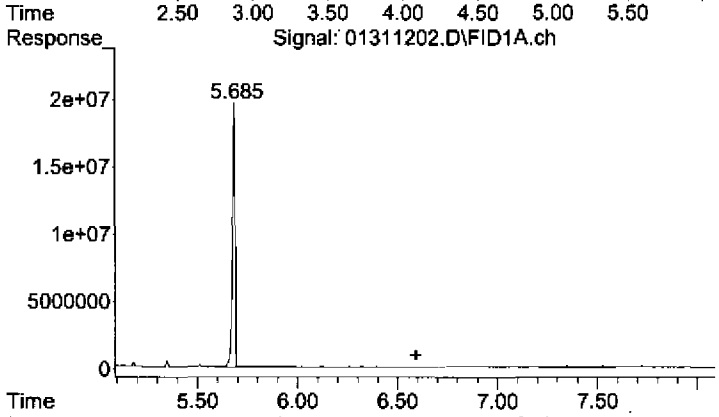
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





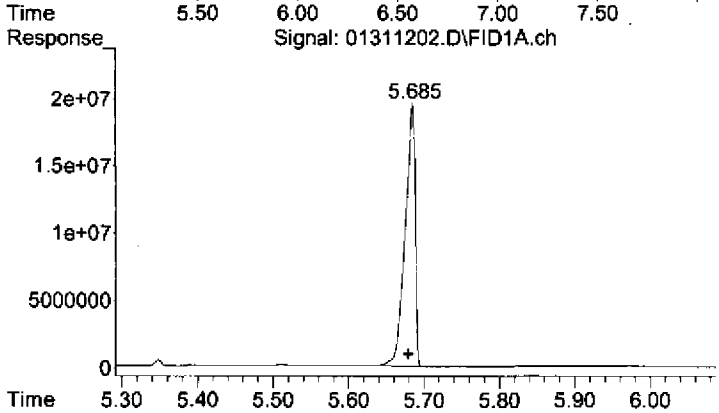
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1727196284
Conc: 481.32 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 8329687
Conc: 4.35 ug/mL



#3 Surrogate

R.T.: 5.683 min
Delta R.T.: 0.003 min
Response: 179839252
Conc: 50.62 ug/mL

C:\msdchem\1\2012\DATA\013112DA\01311203.D

Instrument Name: AG7890_2
Date Acquired: 1/31/2012 12:41
Acq. Method File: 012712DROA.M
Sample Name: 2010053-LCV1
Misc Info: 2A11004 DRO-QLS
Operator: TD

Name	Concentration ng/mL	Calculated	% Recovery	QC Limits	STATUS
Diesel (TPH)	50	55.50	111.01%	60 - 140	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311203.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 12:41 pm Operator: TD
Sample : 2010053-LCV1 Inst : AG7890_2
Misc : 2A11004 DRO-QLS
ALS Vial : 3 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:34 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.671	37412415	10.532 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	21.06%#
Target Compounds			
1) HM Diesel (TPH)	4.080	199172499	55.503 ug/mL
2) H OIL	6.590	3007720	1.571 ug/mL

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

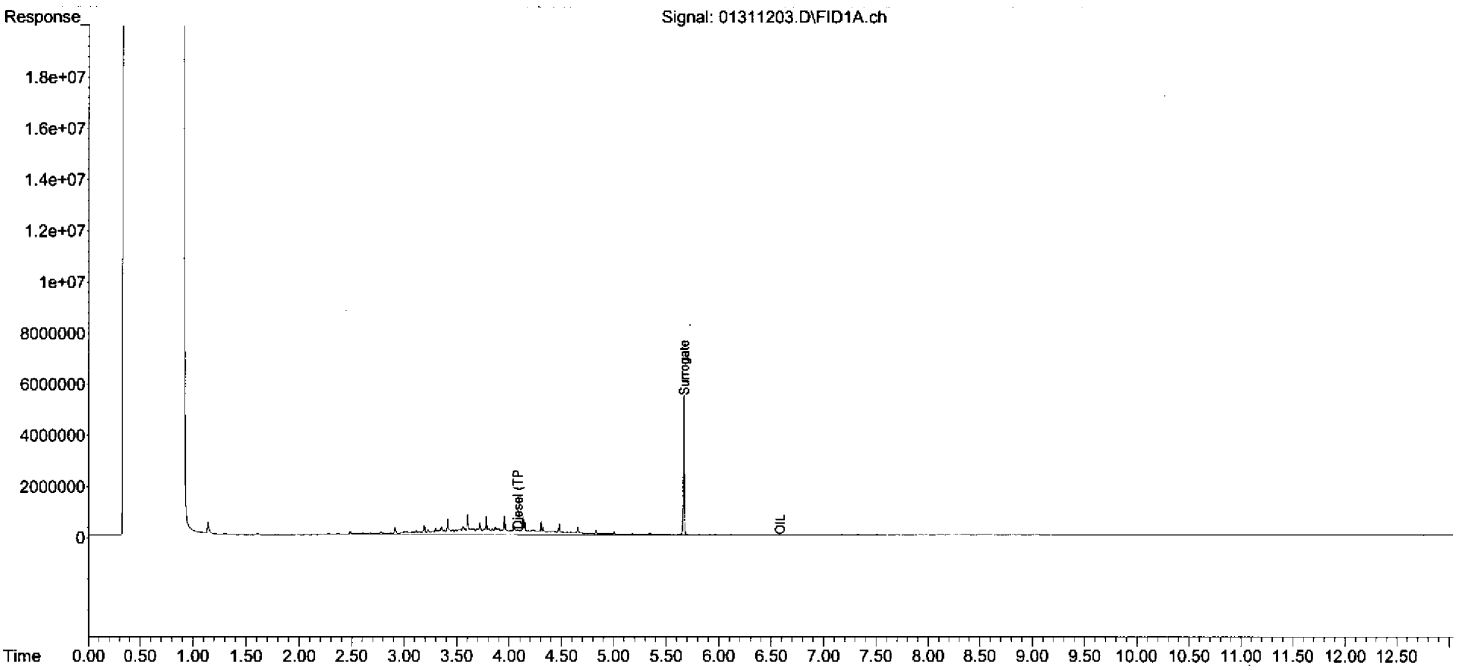
DIM0275879 DIM0276225

Quantitation Report (Not Reviewed)

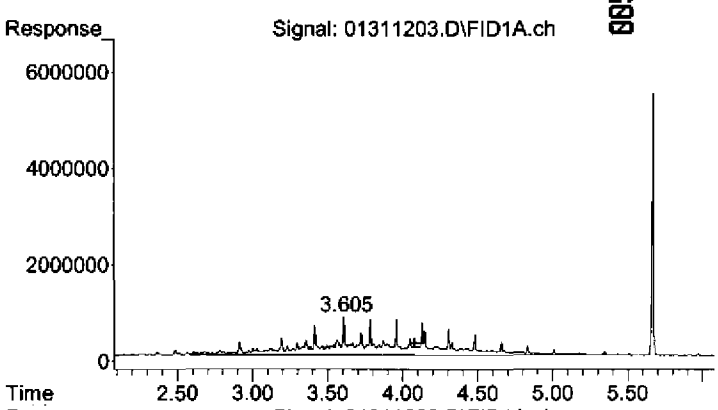
Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311203.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 12:41 pm
Operator: TD
Sample : 2010053-LCV1
Inst : AG7890_2
Misc : 2A11004 DRO-QLS
ALS Vial : 3 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:34 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

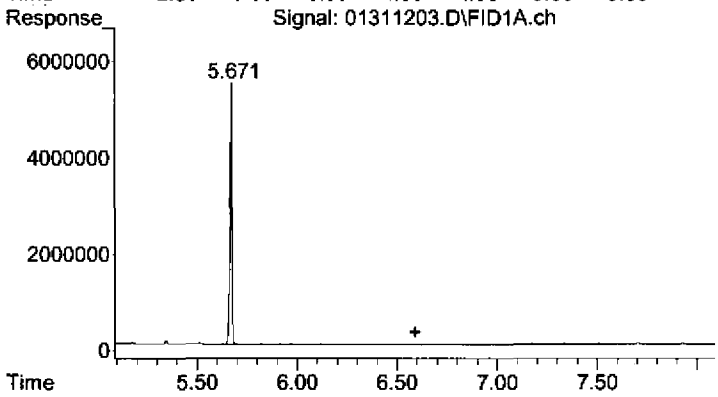


00559



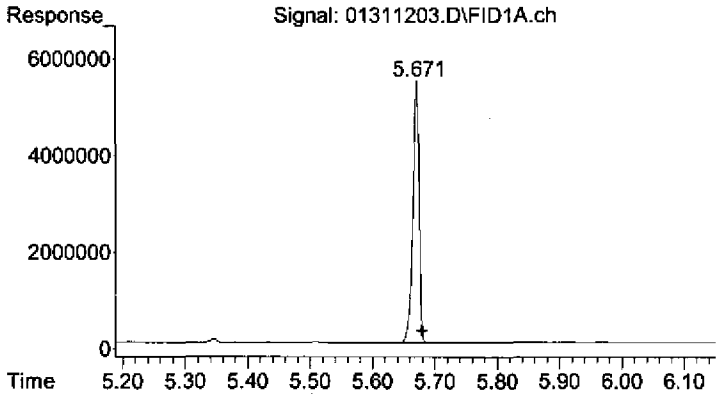
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 199172499
Conc: 55.50 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 3007720
Conc: 1.57 ug/mL



#3 Surrogate

R.T.: 5.671 min
Delta R.T.: -0.009 min
Response: 37412415
Conc: 10.53 ug/mL

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311204.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 12:59 pm
Operator: TD
Sample : 2010053-CCV2
Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 4 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:44:10 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Min. RRF : 0.000 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 350%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 HM	Diesel (TPH)	3.588	0.000 E6	100.0#	0#	0.00
2 H	OIL	1.915	1.790 E6	6.5	89	0.00
3 S	Surrogate	3.552	0.000 E6	100.0#	90	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311204.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 12:59 pm Operator: TD
Sample : 2010053-CCV2 Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 4 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:44:10 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.688	144006989	40.538 ug/mLm
Spiked Amount 50.000	Range 60 - 127	Recovery =	81.08%
Target Compounds			
1) HM Diesel (TPH)	4.080	961961727	268.069 ug/mL
2) H OIL	6.590	1790196076	934.889 ug/mLm

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

MANUAL INTEGRATION VERIFICATION

☐ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☐ Improper Baseline

☐ Other: _____

☑ After Manual Integration

Manual integration(s) performed by:

Analyst: TD Date: 02 01 12

Manual integration(s) reviewed by:

Reviewer: ZR Date: 02/01/12

DIM0275879 DIM0276229

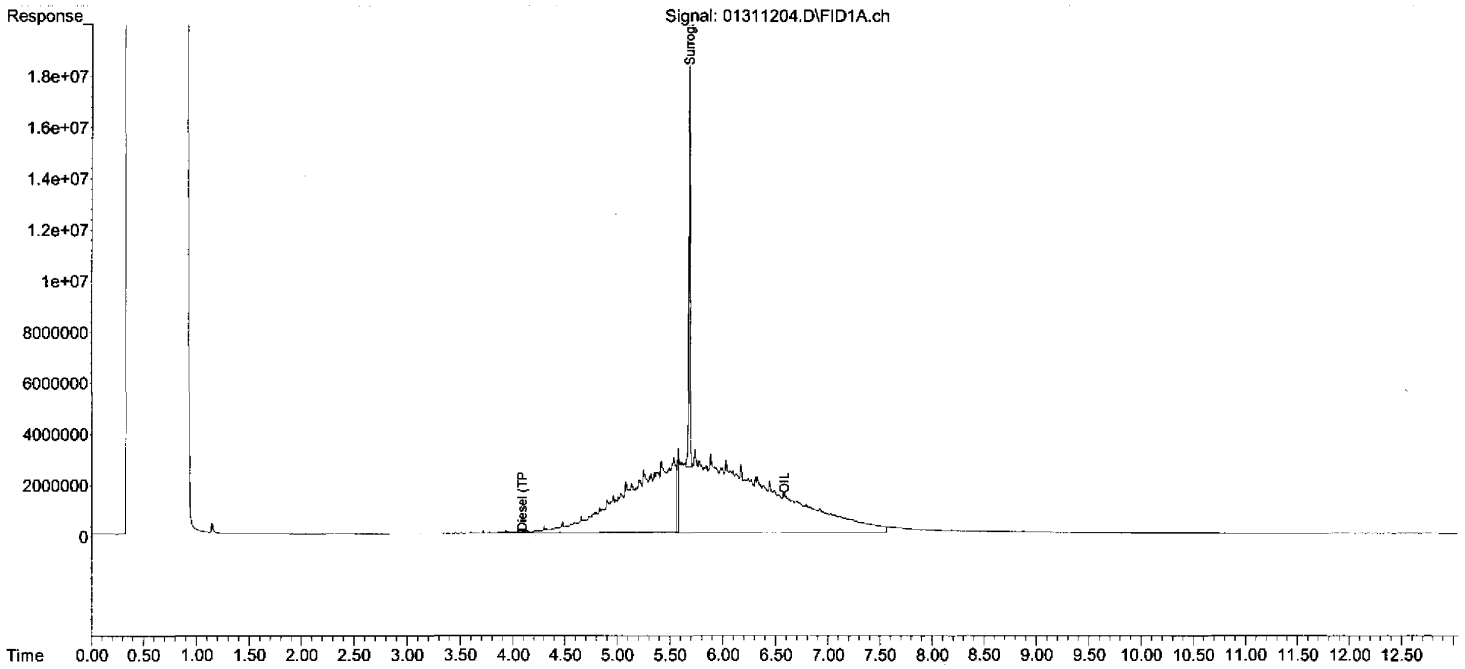
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311204.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 12:59 pm
Sample : 2010053-CCV2
Misc : 2A11012 OIL-CV
ALS Vial : 4 Sample Multiplier: 1

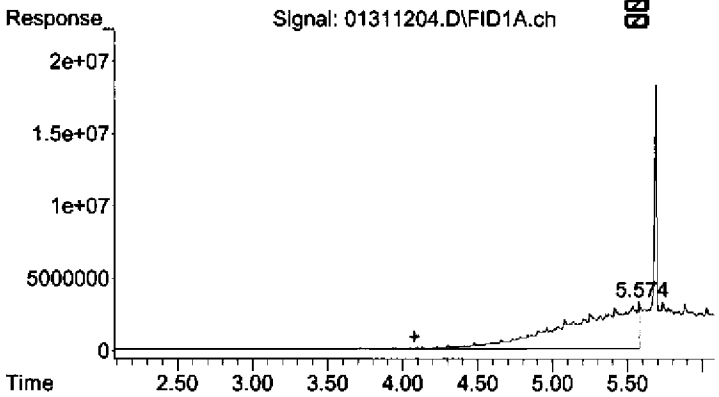
Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:44:10 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

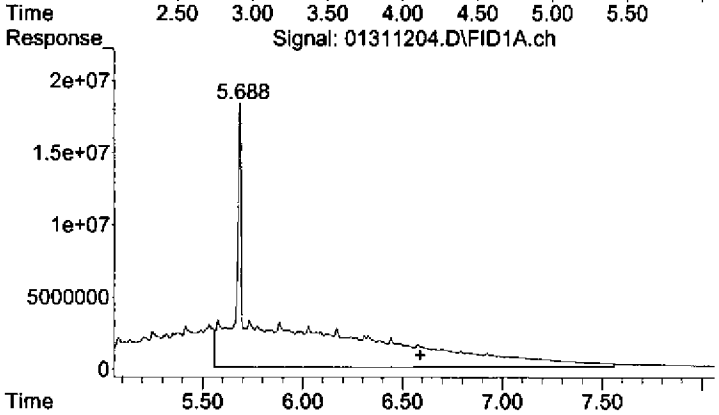


00563



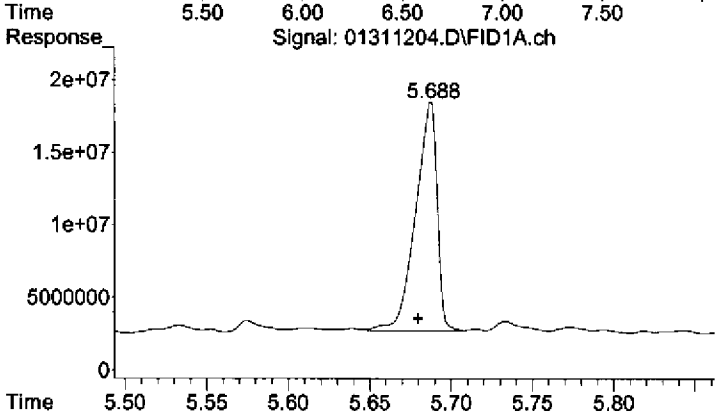
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 961961727
Conc: 268.07 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1790196076
Conc: 934.89 ug/mL m



#3 Surrogate

R.T.: 5.688 min
Delta R.T.: 0.008 min
Response: 144006989
Conc: 40.54 ug/mL m

Quantitation Report (Qedit)

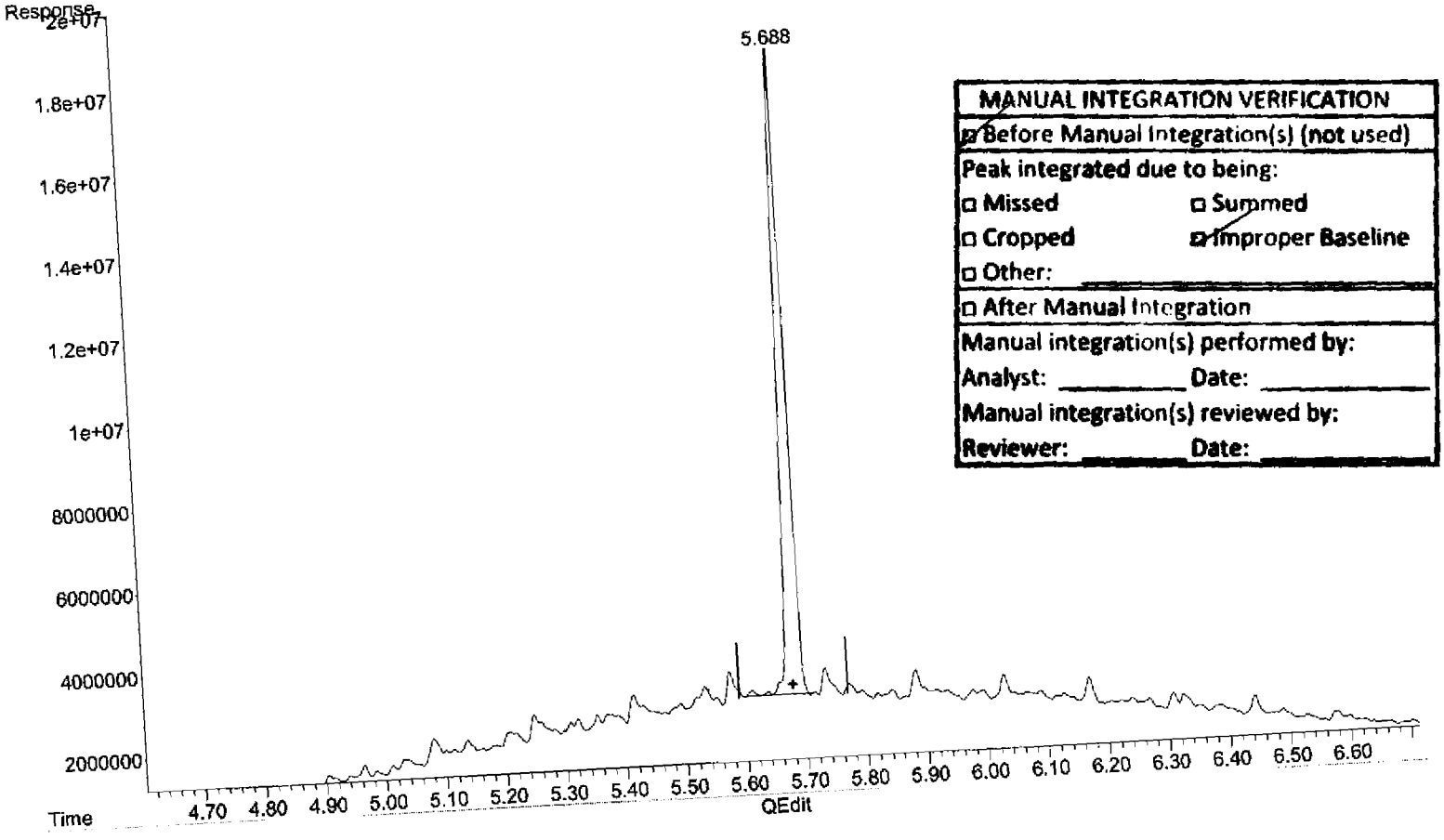
Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311204.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 12:59 pm
Sample : 2010053-CCV2
Misc : 2A11012 OIL-CV
ALS Vial : 4 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:38 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Signal: 01311204.D\FID1A.ch



MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☑ Improper Baseline
☐ Other:
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

(3) Surrogate (S)

5.686min 40.227 ug/mL

response 142902979

(+) = Expected Retention Time
013012DROA.M Tue Jan 31 15:42:31 2012

DIM0276233

DIM0275879

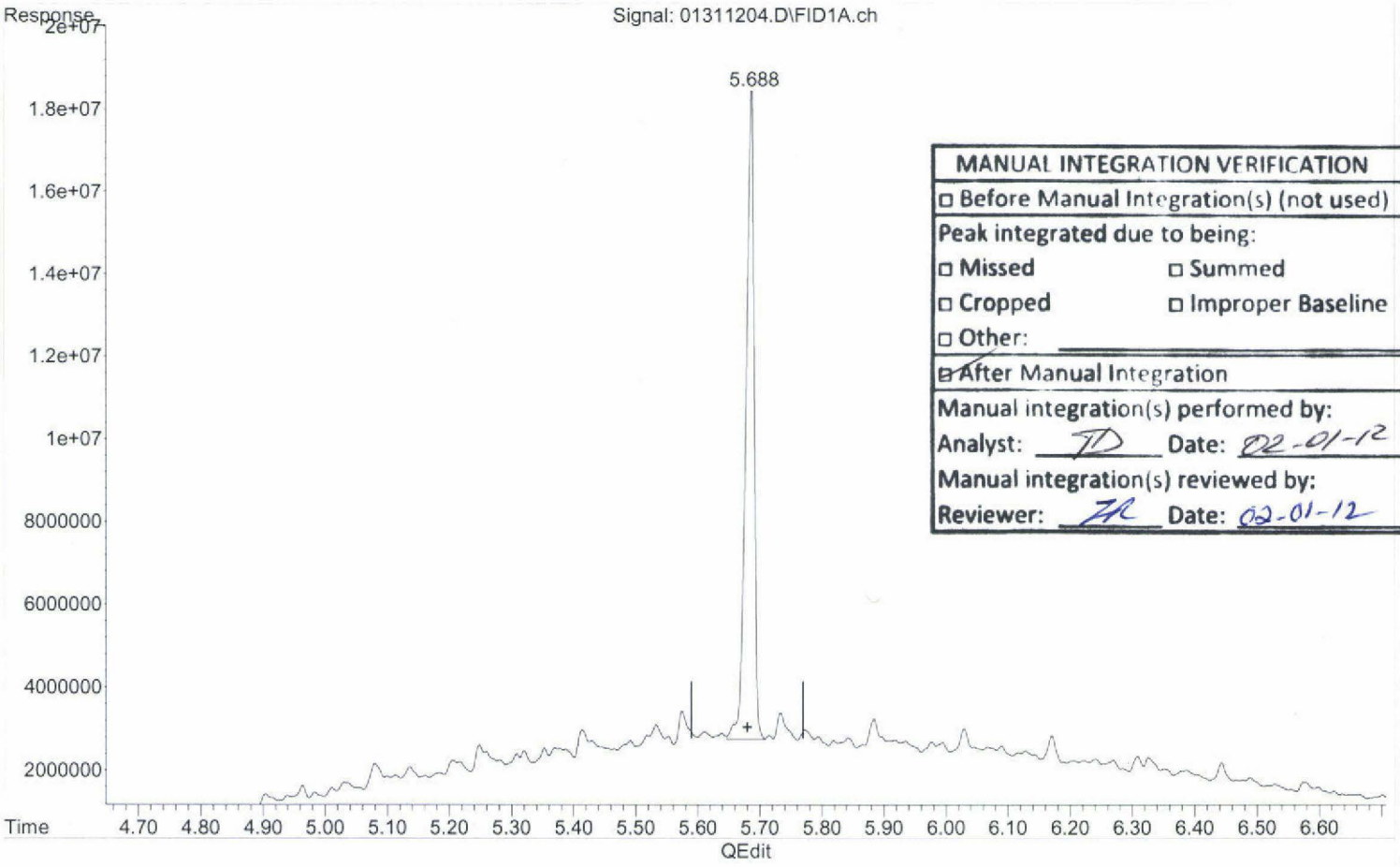
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311204.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 12:59 pm
Sample : 2010053-CCV2
Misc : 2A11012 OIL-CV
ALS Vial : 4 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:38 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☑ After Manual Integration	
Manual integration(s) performed by:	
Analyst: TD	Date: 02-01-12
Manual integration(s) reviewed by:	
Reviewer: ZR	Date: 02-01-12

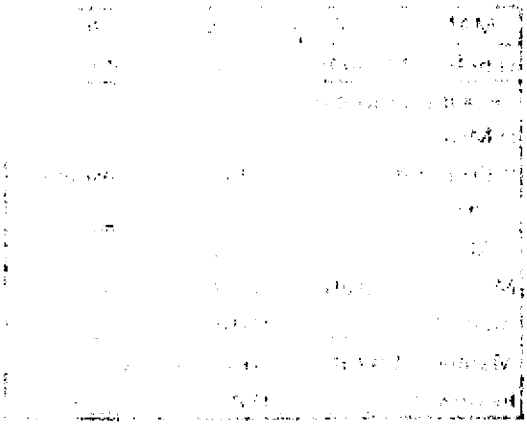
(3) Surrogate (S)

5.688min 40.538 ug/mL m

response 144006989

(+) = Expected Retention Time

013012DROA.M Tue Jan 31 15:43:51 2012



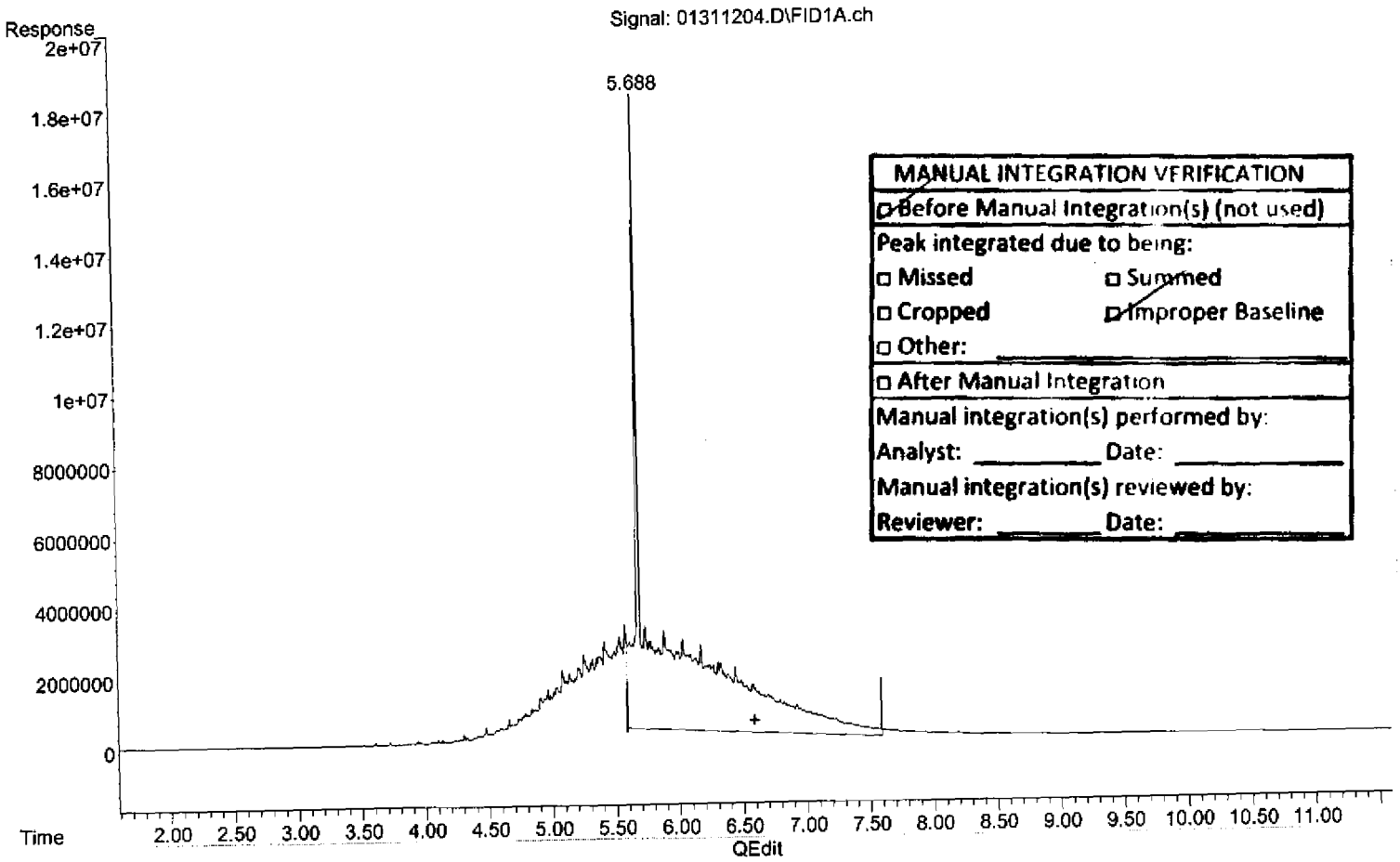
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311204.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 12:59 pm
Sample : 2010053-CCV2
Misc : 2A11012 OIL-CV
ALS Vial : 4 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:38 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

(2) OIL (H)

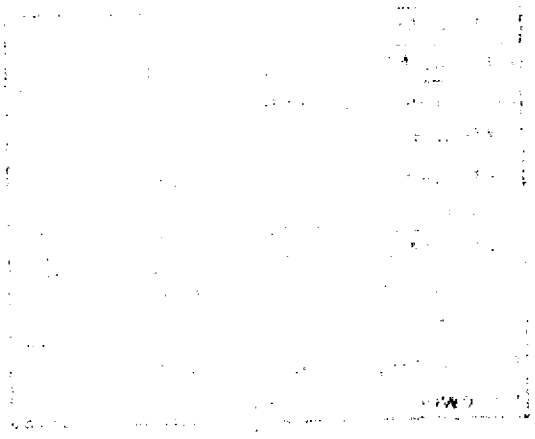
6.590min 785.884 ug/mL

response 1504869446

(+) = Expected Retention Time
013012DROA.M Tue Jan 31 15:44:01 2012

DIM0276237

DIM0275879



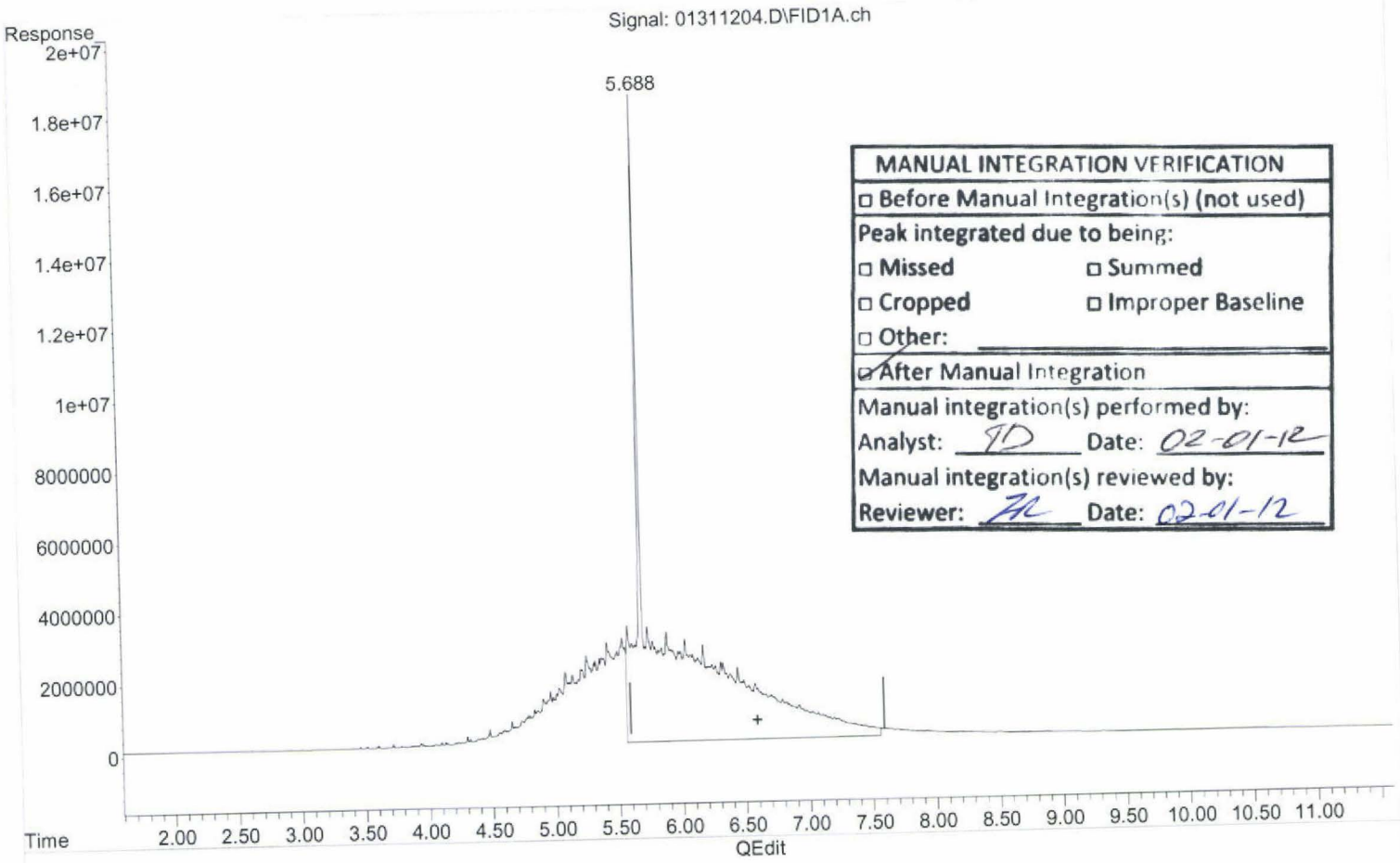
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311204.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 12:59 pm
Sample : 2010053-CCV2
Misc : 2A11012 OIL-CV
ALS Vial : 4 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:38 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☑ After Manual Integration	
Manual integration(s) performed by:	
Analyst: TD	Date: 02-01-12
Manual integration(s) reviewed by:	
Reviewer: ZR	Date: 02-01-12

(2) OIL (H)

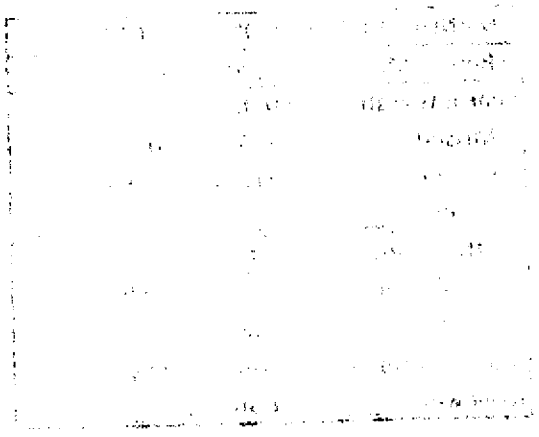
6.590min 934.889 ug/mL m

response 1790196076

(+) = Expected Retention Time
013012DROA.M Tue Jan 31 15:44:14 2012

DIM0276239

DIM0275879



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311204.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 12:59 pm Operator: TD
Sample : 2010053-CCV2 Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 4 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:38 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.686	142902979	40.227 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	80.45%
Target Compounds			
1) HM Diesel (TPH)	4.080	961961727	268.069 ug/mL
2) H OIL	6.590	1505973456	786.460 ug/mL

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

MANUAL INTEGRATION VERIFICATION	
☑ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other: _____	
☐ After Manual Integration	
Manual integration(s) performed by:	
Analyst: _____	Date: _____
Manual integration(s) reviewed by:	
Reviewer: _____	Date: _____

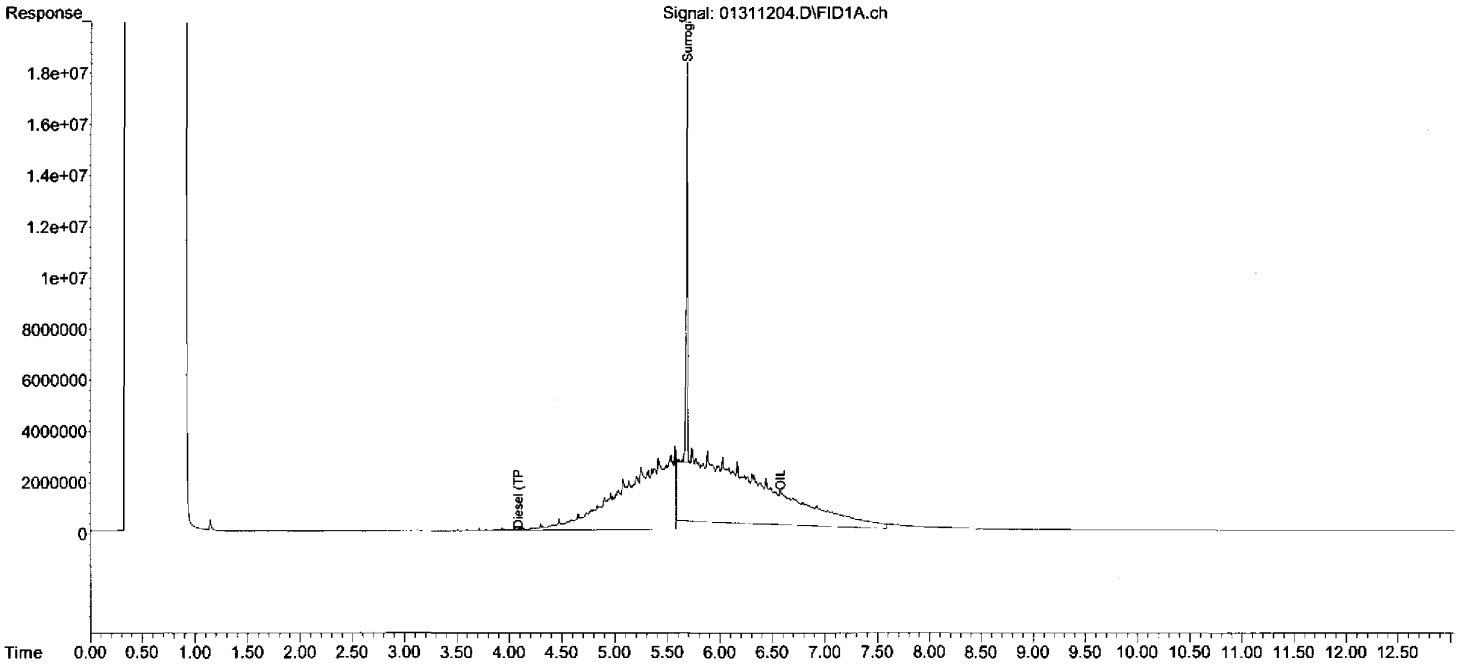
Quantitation Report (Not Reviewed)

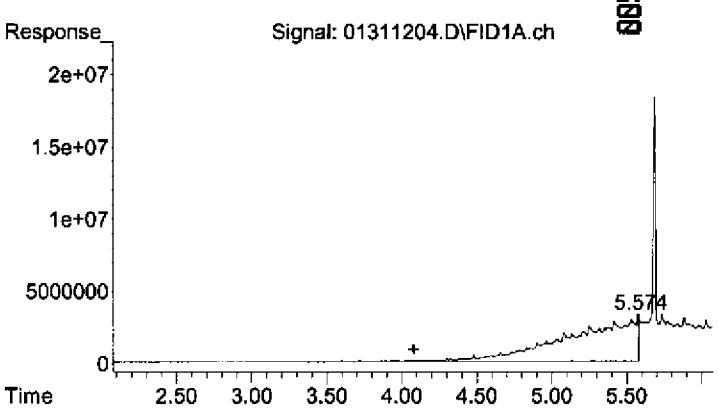
Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311204.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 12:59 pm
Sample : 2010053-CCV2
Misc : 2A11012 OIL-CV
ALS Vial : 4 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:38 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

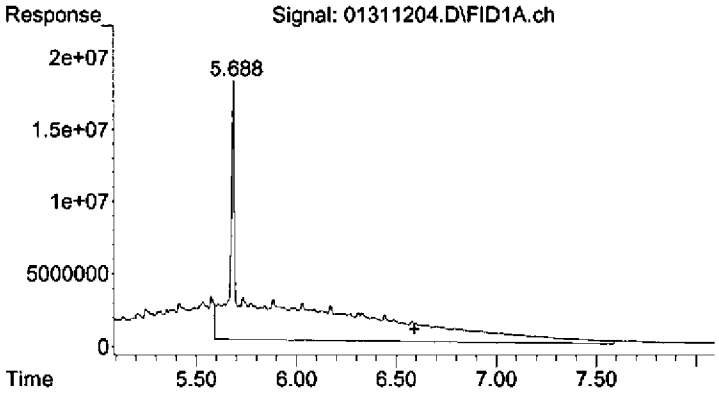
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





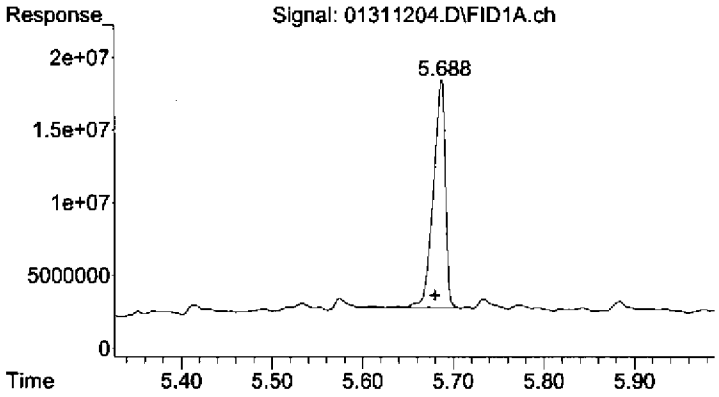
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 961961727
Conc: 268.07 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1505973456
Conc: 786.46 ug/mL



#3 Surrogate

R.T.: 5.686 min
Delta R.T.: 0.006 min
Response: 142902979
Conc: 40.23 ug/mL

C:\msdchem\1\2012\DATA\013112DA\01311205.D

Instrument Name: AG7890_2
Date Acquired: 1/31/2012 13:17
Acq. Method File: 012712DROA.M
Sample Name: 2010053-LCV2
Misc Info: 2A11011 OIL-A
Operator: TD

Name	Concentration ng/mL	Calculated	% Recovery	QC Limits	STATUS
OIL	200	203.40	101.70%	60 - 140	pass

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311205.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 1:17 pm Operator: TD
Sample : 2010053-LCV2 Inst : AG7890_2
Misc : 2A11011 OIL-A
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:45:50 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

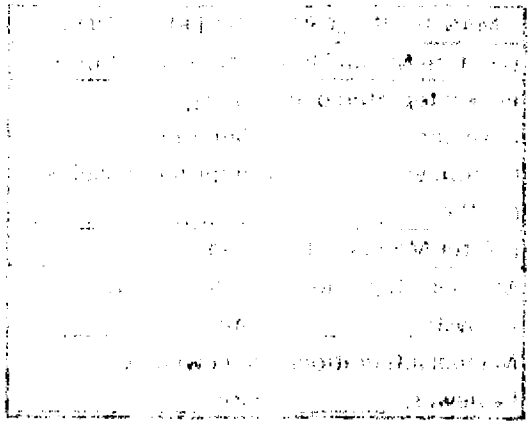
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.681	162338082	45.698 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	91.40%
Target Compounds			
1) HM Diesel (TPH)	4.080	222580215	62.026 ug/mL
2) H OIL	6.590	389490910	203.403 ug/mLm

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

MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 02-01-12
Manual integration(s) reviewed by:
Reviewer: ZL Date: 02-01-12

DIM0275879 DIM0276245

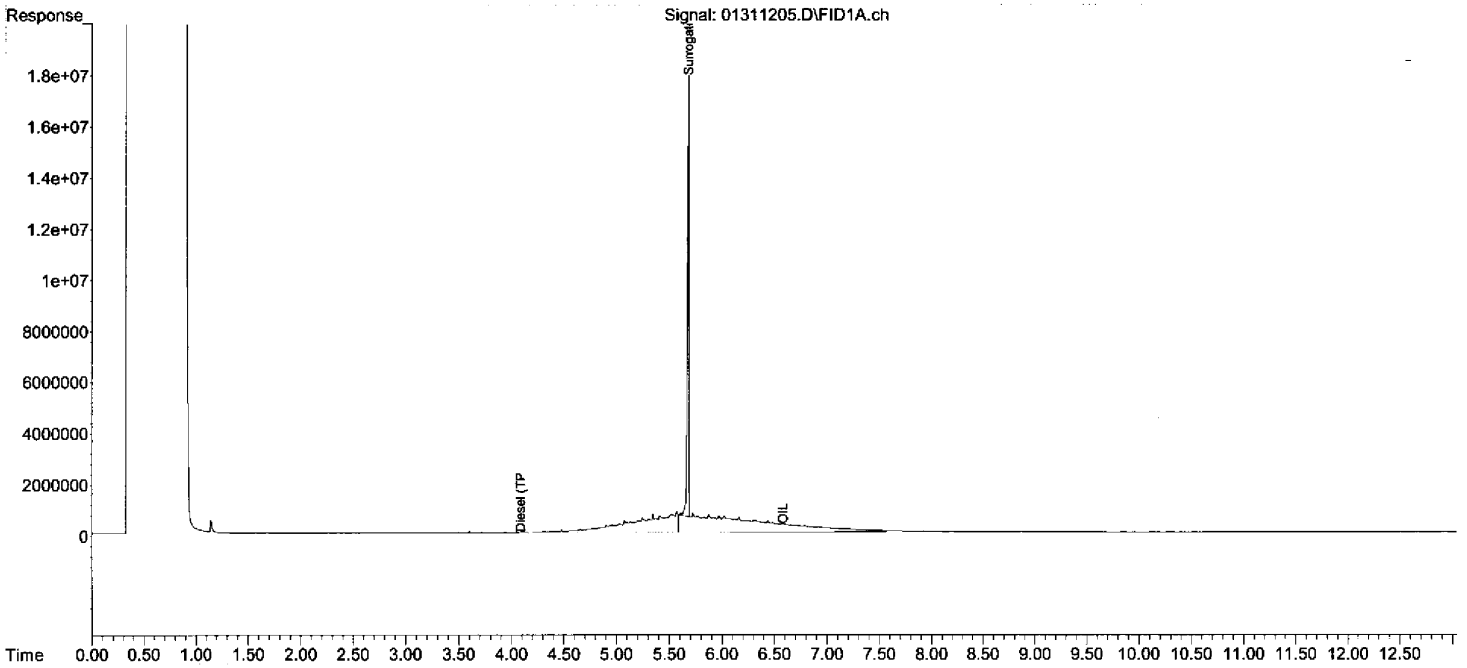


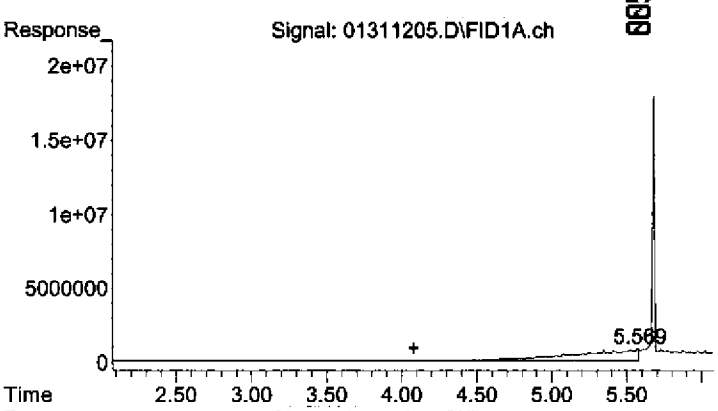
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311205.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 1:17 pm
Operator: TD
Sample : 2010053-LCV2
Inst : AG7890_2
Misc : 2A11011 OIL-A
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:45:50 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

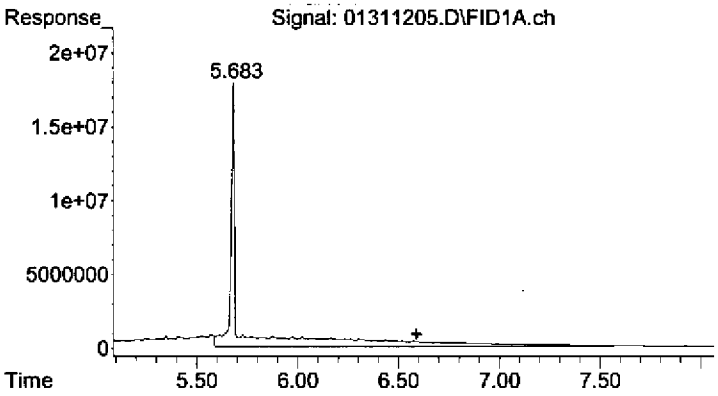
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





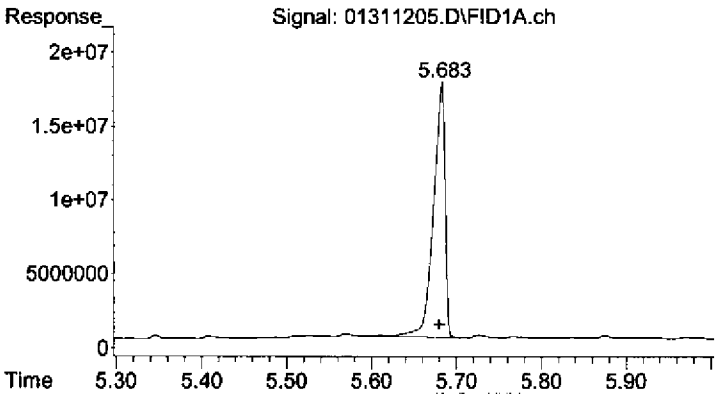
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 222580215
Conc: 62.03 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 389490910
Conc: 203.40 ug/mL m



#3 Surrogate

R.T.: 5.681 min
Delta R.T.: 0.001 min
Response: 162338082
Conc: 45.70 ug/mL

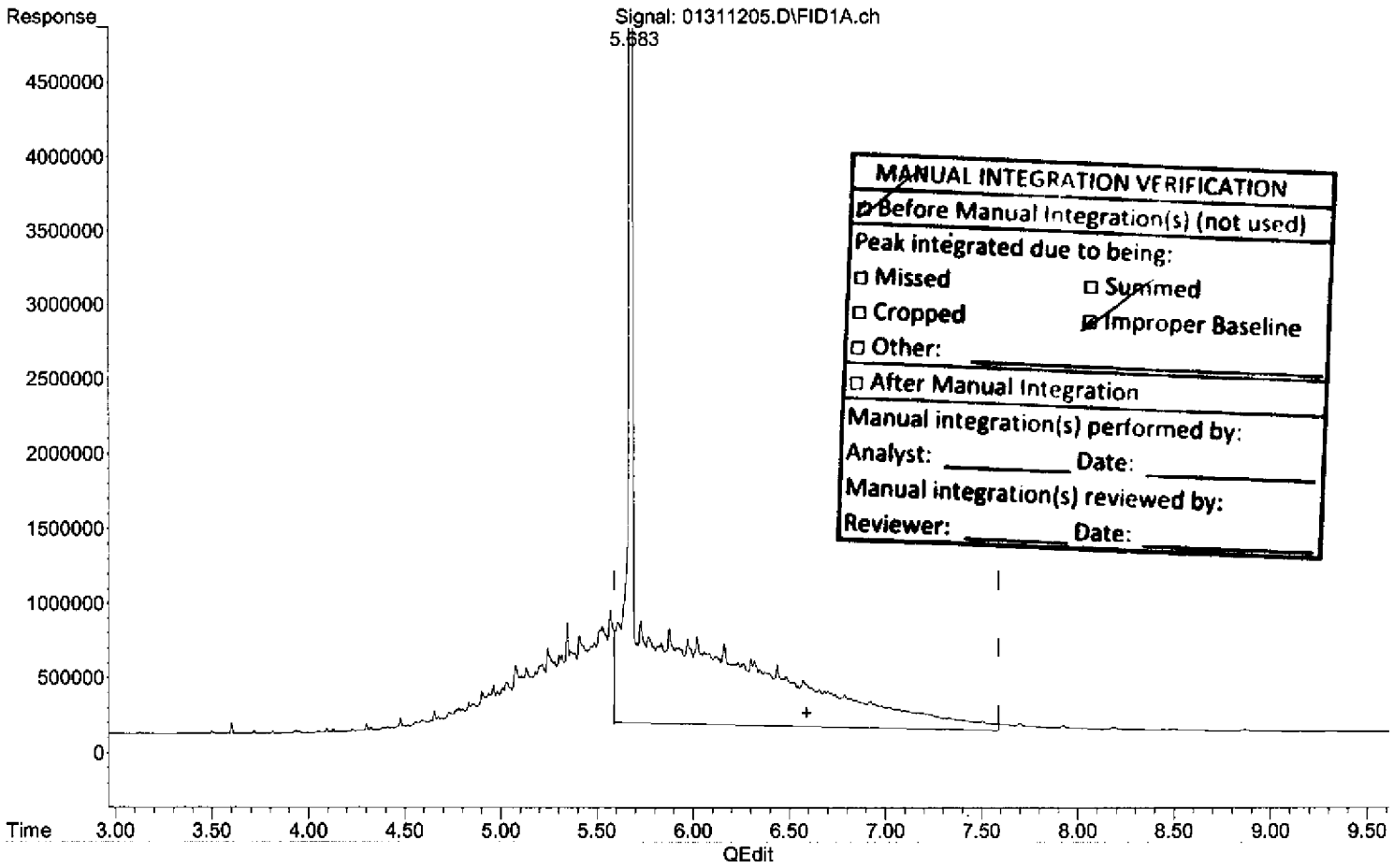
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311205.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 1:17 pm
Sample : 2010053-LCV2
Misc : 2A11011 OIL-A
ALS Vial : 5 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:42 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☑ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

(2) OIL (H)

6.590min 179.358 ug/mL

response 343447874

(+) = Expected Retention Time
013012DROA.M Tue Jan 31 15:45:41 2012

Page: 1

Quantitation Report (Qedit)

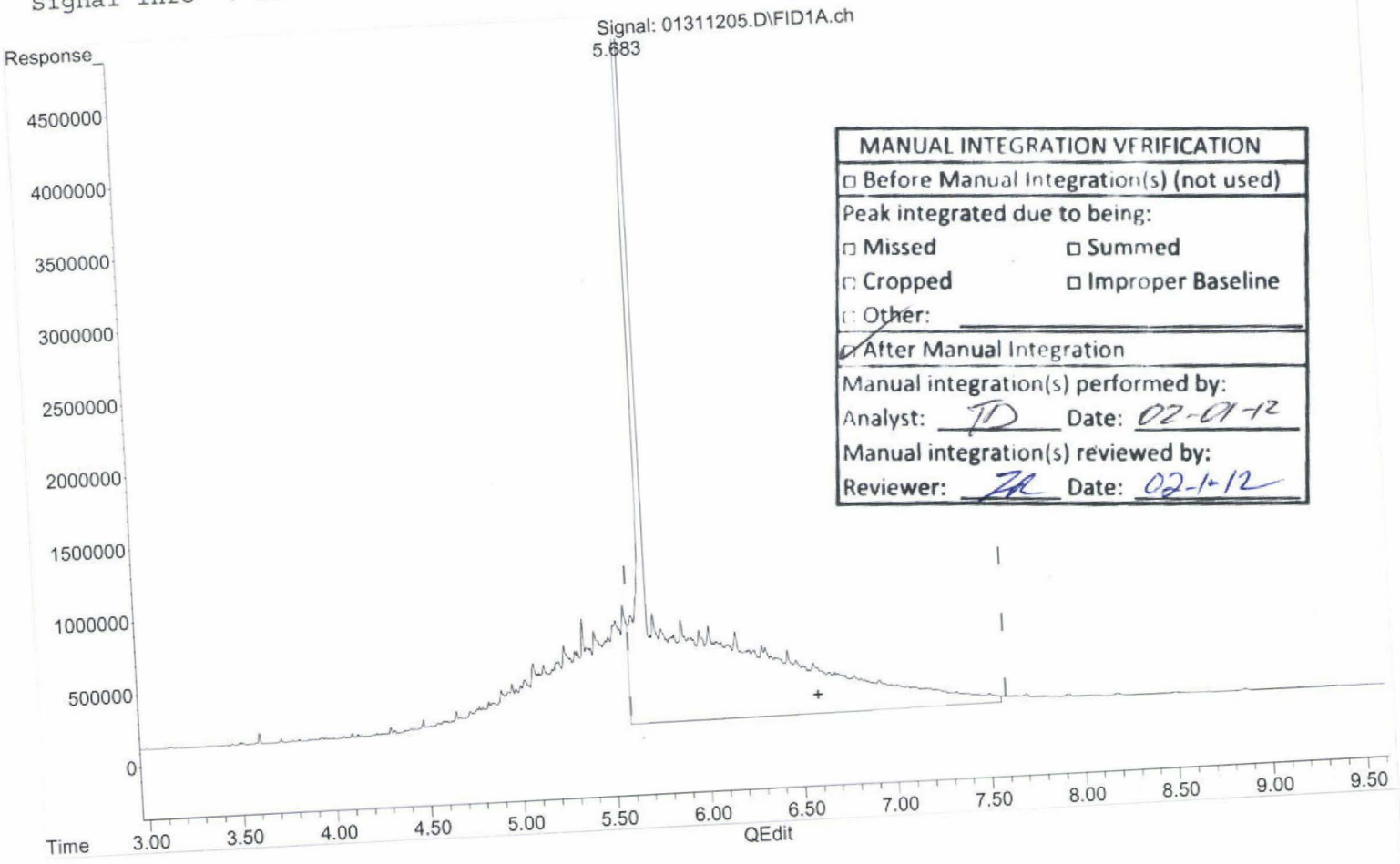
00577

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311205.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 1:17 pm
Sample : 2010053-LCV2
Misc : 2A11011 OIL-A
ALS Vial : 5 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:42 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☑ After Manual Integration	
Manual integration(s) performed by:	
Analyst: TD	Date: 02-01-12
Manual integration(s) reviewed by:	
Reviewer: ZR	Date: 02-1-12

(2) OIL (H)

6.590min 203.403 ug/mL m

response 389490910

(+) = Expected Retention Time

013012DROA.M Tue Jan 31 15:45:54 2012

00354

DIM0276251

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311205.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 1:17 pm Operator: TD
Sample : 2010053-LCV2 Inst : AG7890_2
Misc : 2A11011 OIL-A
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:42 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.681	162338082	45.698 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	91.40%
Target Compounds			
1) HM Diesel (TPH)	4.080	222580215	62.026 ug/mL
2) H OIL	6.590	343447874	179.358 ug/mL

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

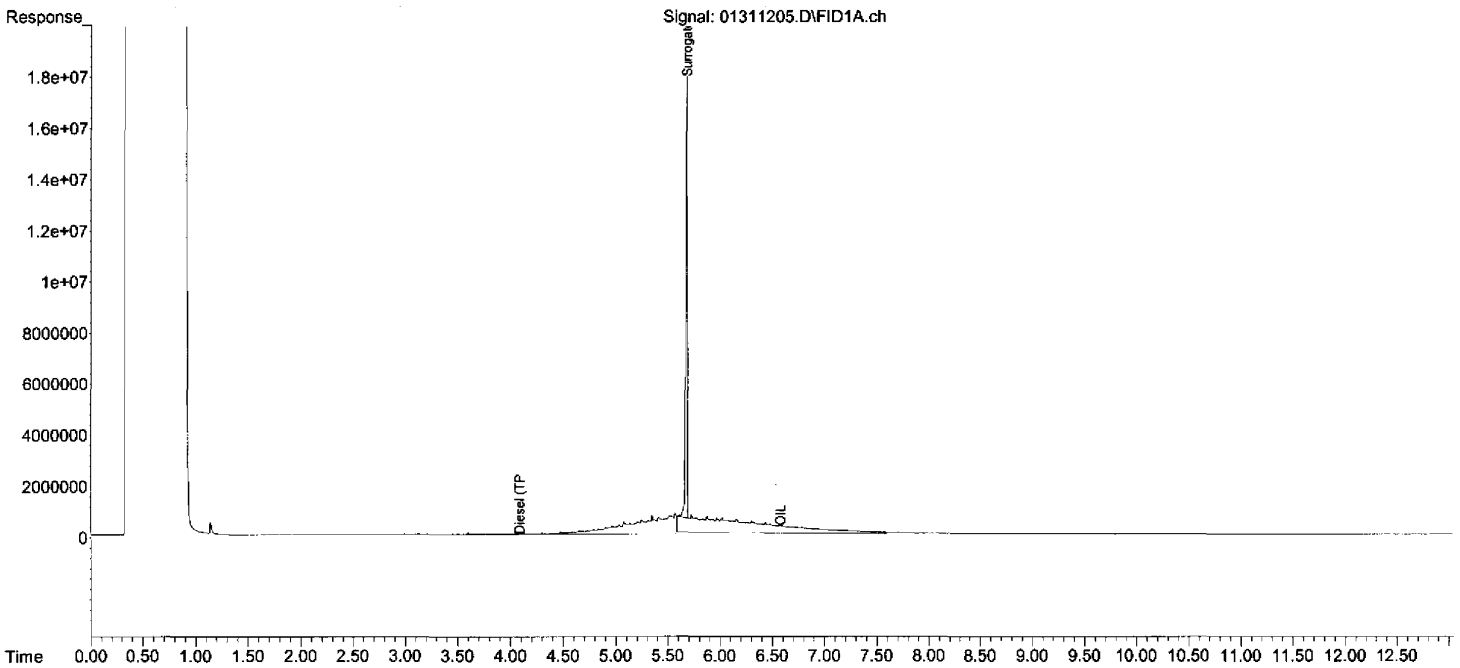
MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other: _____	
☐ After Manual Integration	
Manual integration(s) performed by:	
Analyst: _____	Date: _____
Manual integration(s) reviewed by:	
Reviewer: _____	Date: _____

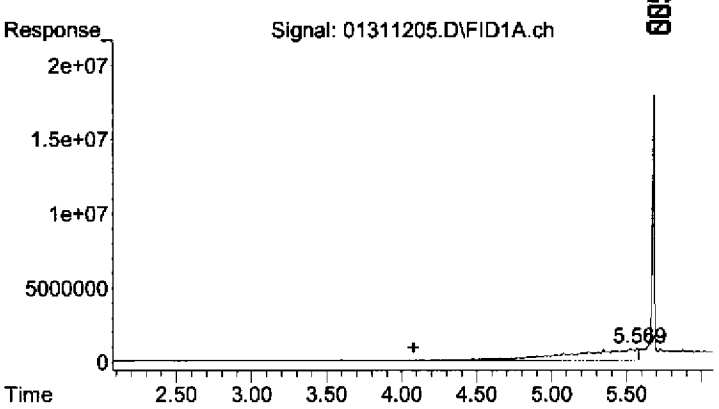
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311205.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 1:17 pm
Operator: TD
Sample : 2010053-LCV2
Inst : AG7890_2
Misc : 2A11011 OIL-A
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:42 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

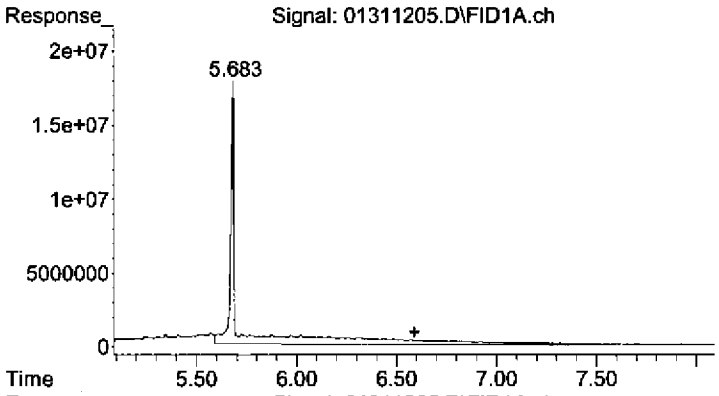
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





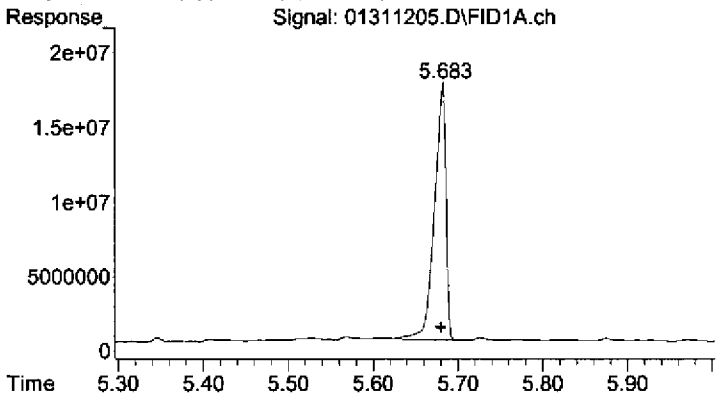
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 222580215
Conc: 62.03 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 343447874
Conc: 179.36 ug/mL



#3 Surrogate

R.T.: 5.681 min
Delta R.T.: 0.001 min
Response: 162338082
Conc: 45.70 ug/mL

Quantitation Report (Not Reviewed)

00581

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311206.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 1:35 pm Operator: TD
Sample : B2A0071-BLK1 Inst : AG7890_2
Misc : RB
ALS Vial : 6 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:46 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.679	171185825	48.189 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	96.38%
Target Compounds			
1) HM Diesel (TPH)	4.080	41911707	11.680 ug/mL
2) H OIL	6.590	4369305	2.282 ug/mL

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

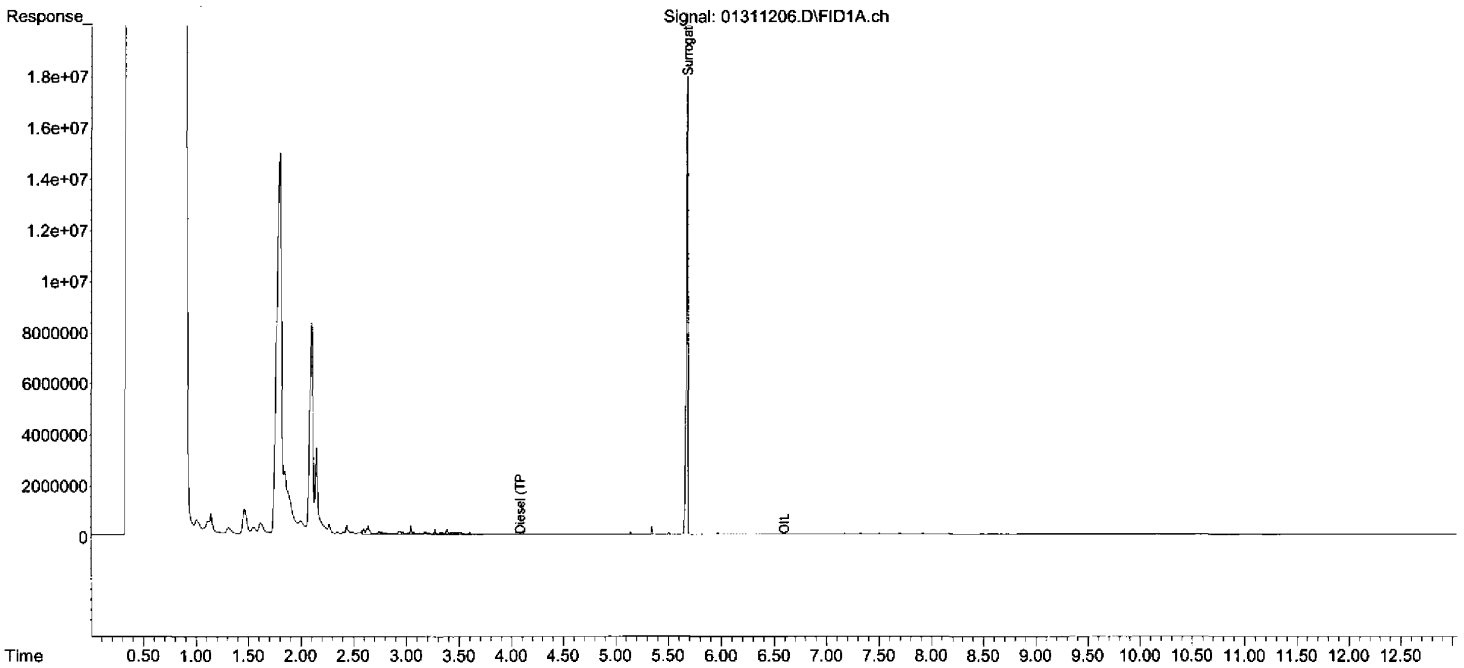
Quantitation Report (Not Reviewed)

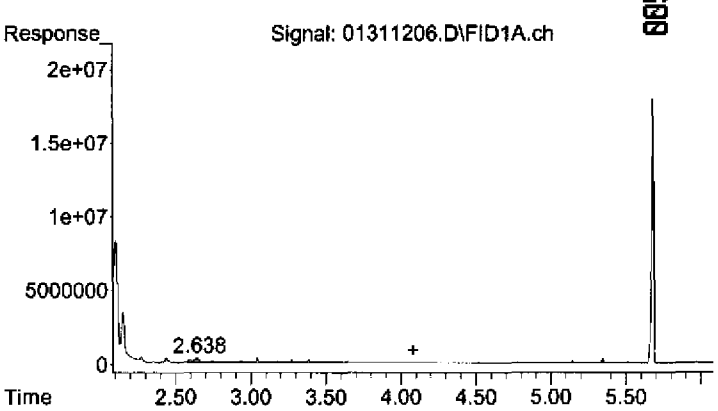
Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311206.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 1:35 pm
Sample : B2A0071-BLK1
Misc : RB
ALS Vial : 6 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:46 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

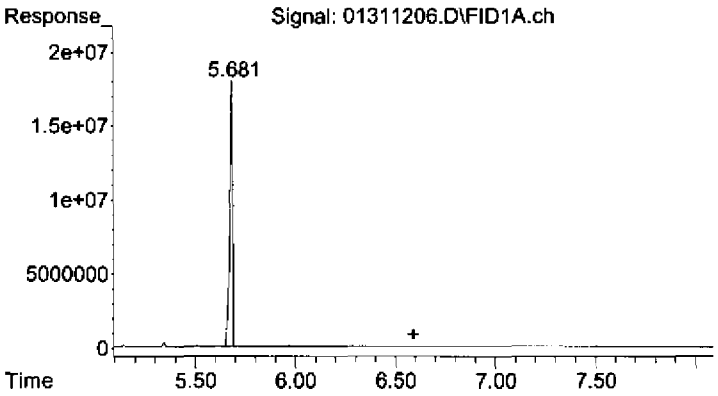
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





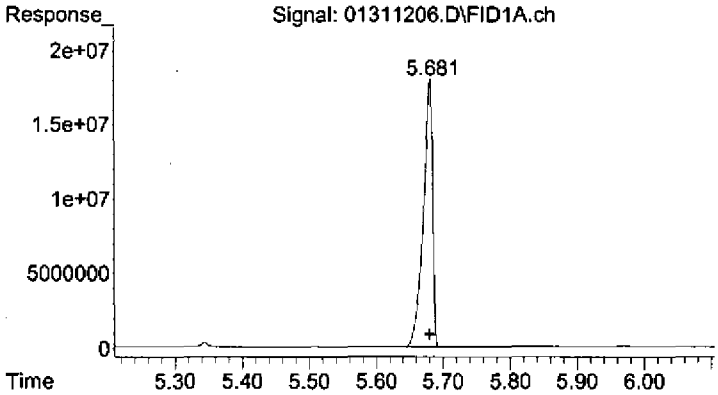
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 41911707
Conc: 11.68 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 4369305
Conc: 2.28 ug/mL



#3 Surrogate

R.T.: 5.679 min
Delta R.T.: 0.000 min
Response: 171185825
Conc: 48.19 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311207.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 1:53 pm Operator: TD
Sample : B2A0071-BS1 Inst : AG7890_2
Misc : BS
ALS Vial : 7 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:50 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.678	153947853	43.336 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	86.67%
Target Compounds			
1) HM Diesel (TPH)	4.080	1464661525	408.156 ug/mL
2) H OIL	6.590	6104938	3.188 ug/mL

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

DIM0275879 DIM0276259

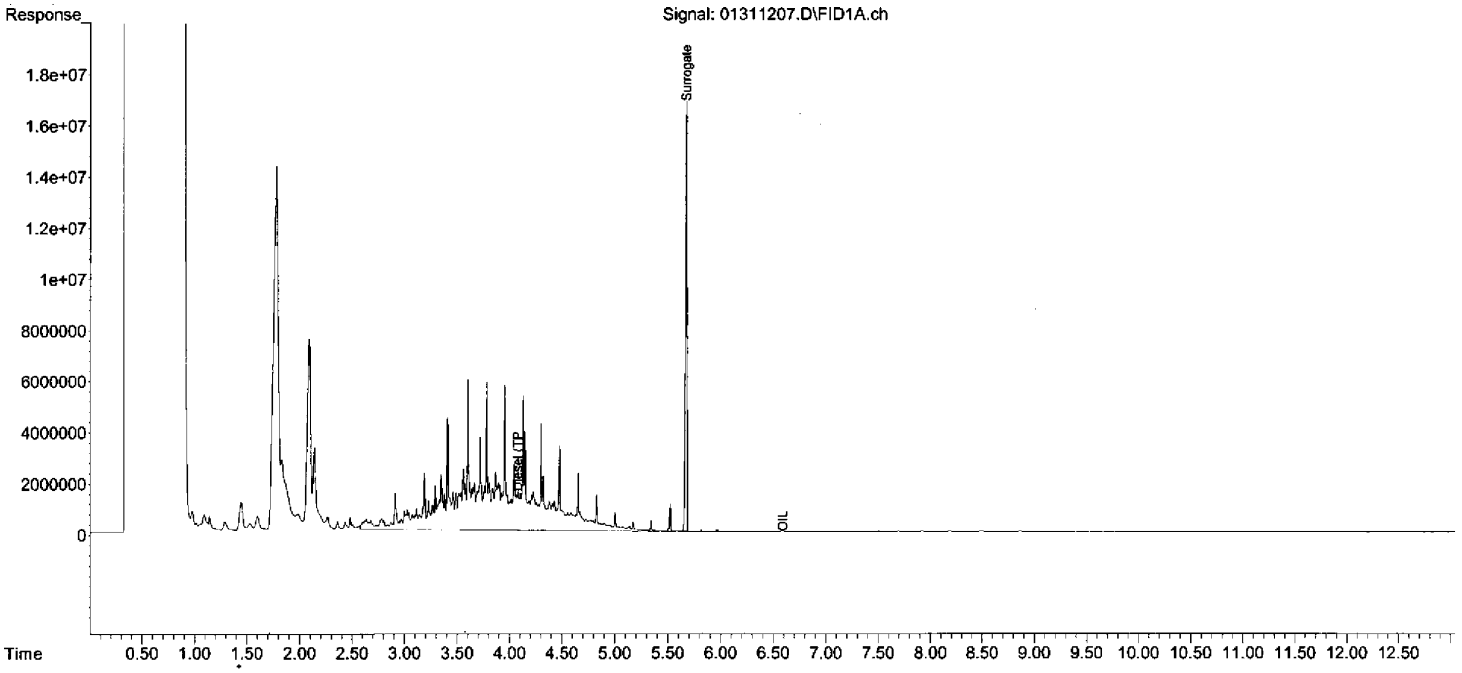
Quantitation Report (Not Reviewed)

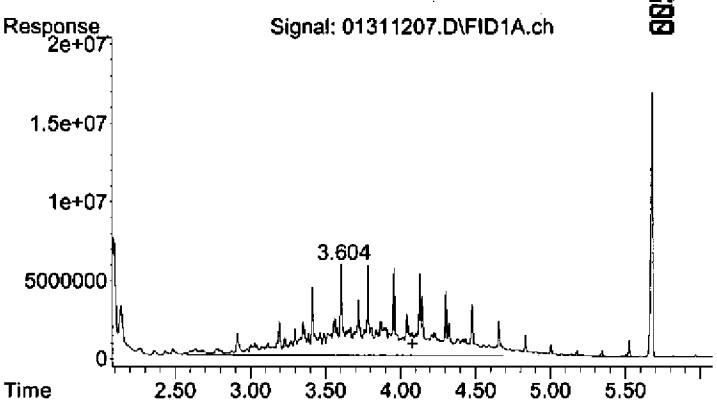
Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311207.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 1:53 pm
Sample : B2A0071-BS1
Misc : BS
ALS Vial : 7 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:50 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

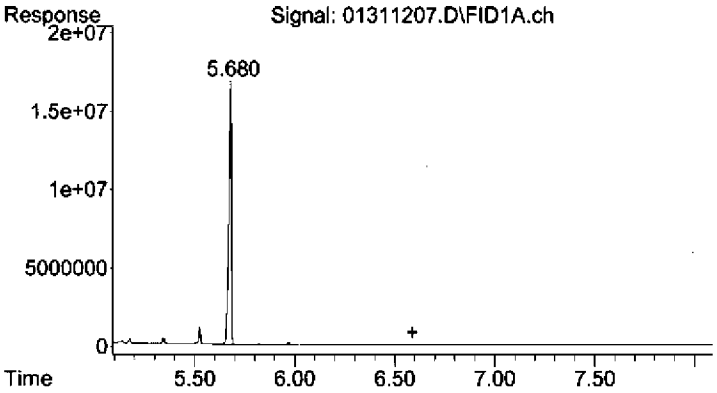
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





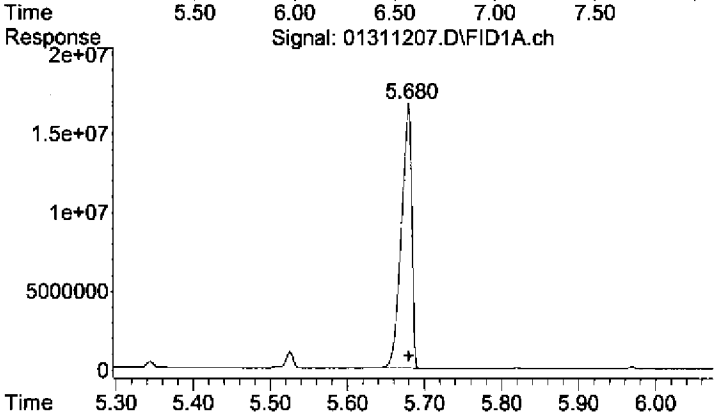
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1464661525
Conc: 408.16 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 6104938
Conc: 3.19 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.001 min
Response: 153947853
Conc: 43.34 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311208.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 2:11 pm Operator: TD
Sample : 1201033-01 Inst : AG7890_2
Misc : FB03
ALS Vial : 8 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:54 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.679	170714078	48.056 ug/mL
Spiked Amount 50.000 Range 60 - 127 Recovery = 96.11%			
Target Compounds			
1) HM Diesel (TPH)	4.080	97002285	27.032 ug/mL
2) H OIL	6.590	5735932	2.995 ug/mL

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

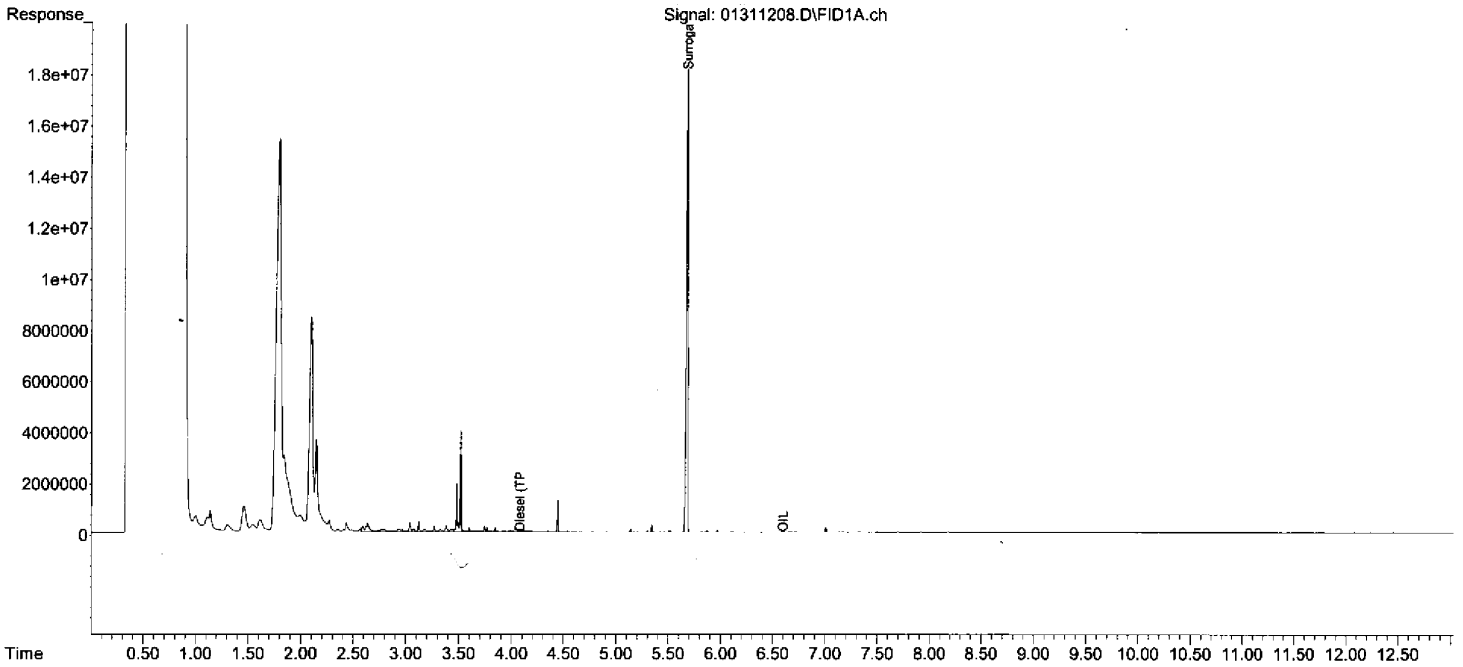
DIM0275879 DIM0276262

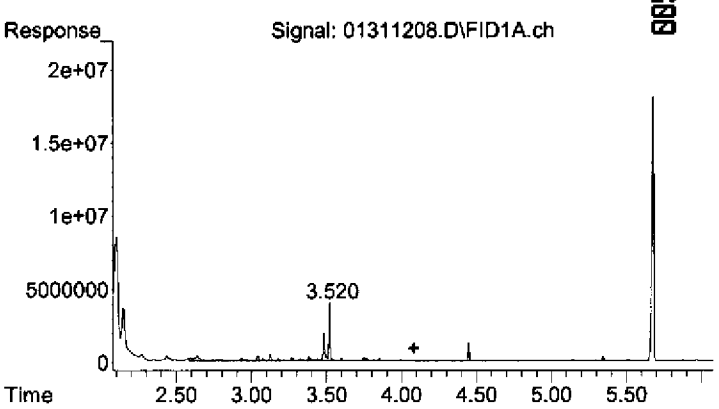
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311208.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 2:11 pm
Operator: TD
Sample : 1201033-01
Inst : AG7890_2
Misc : FB03
ALS Vial : 8 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:54 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

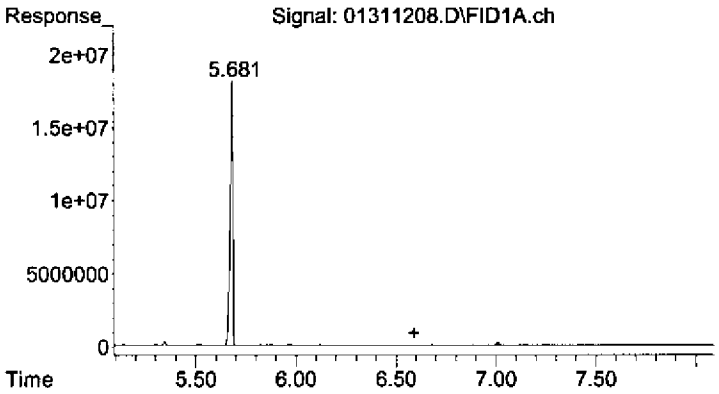
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





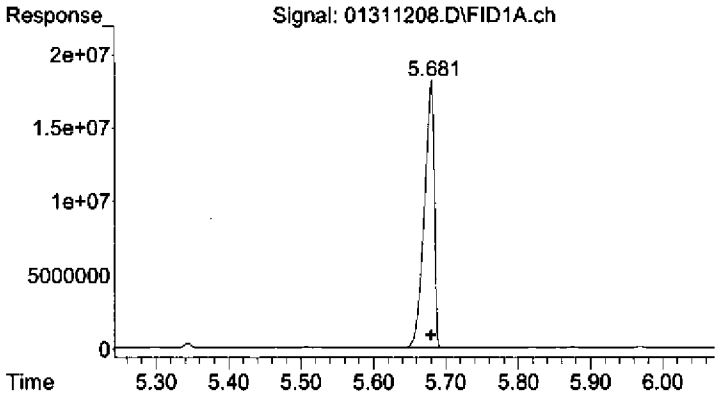
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 97002285
Conc: 27.03 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 5735932
Conc: 3.00 ug/mL



#3 Surrogate

R.T.: 5.679 min
Delta R.T.: 0.000 min
Response: 170714078
Conc: 48.06 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311209.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 2:29 pm Operator: TD
Sample : 1201033-02 Inst : AG7890_2
Misc : HW02
ALS Vial : 9 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:58 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.680	171579520	48.300 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	96.60%
Target Compounds			
1) HM Diesel (TPH)	4.080	49163358	13.700 ug/mL
2) H OIL	6.590	4698806	2.454 ug/mL

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

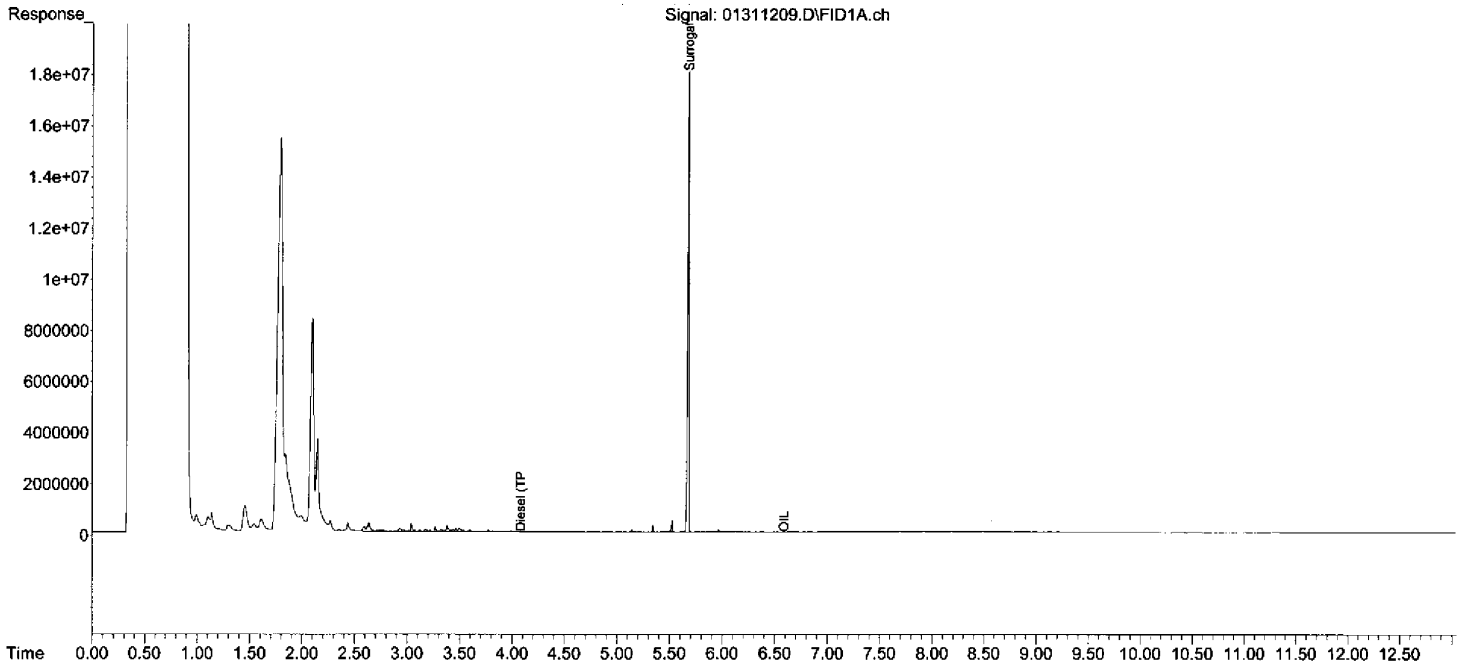
DIM0275879 DIM0276265

Quantitation Report (Not Reviewed)

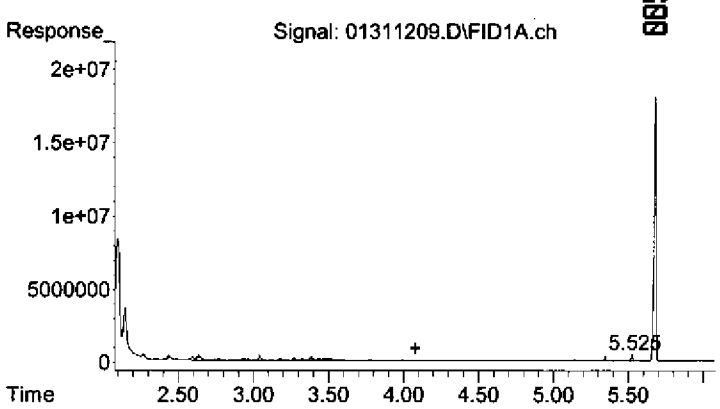
Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311209.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 2:29 pm
Operator: TD
Sample : 1201033-02
Inst : AG7890_2
Misc : HW02
ALS Vial : 9 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:39:58 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

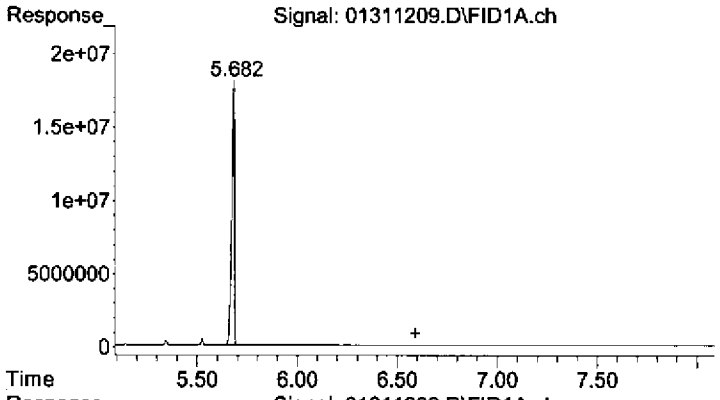


00591



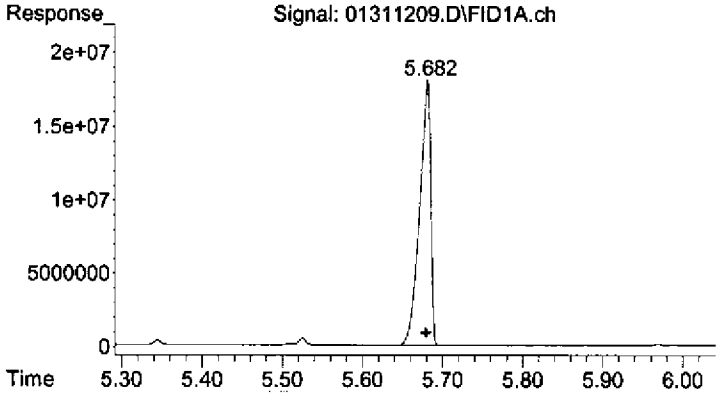
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 49163358
Conc: 13.70 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 4698806
Conc: 2.45 ug/mL



#3 Surrogate

R.T.: 5.680 min
Delta R.T.: 0.000 min
Response: 171579520
Conc: 48.30 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311210.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 2:47 pm Operator: TD
Sample : 1201033-03 Inst : AG7890_2
Misc : HW02z
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:40:02 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.679	161372056	45.426 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	90.85%
Target Compounds			
1) HM Diesel (TPH)	4.080	49686543	13.846 ug/mL
2) H OIL	6.590	4773887	2.493 ug/mL

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

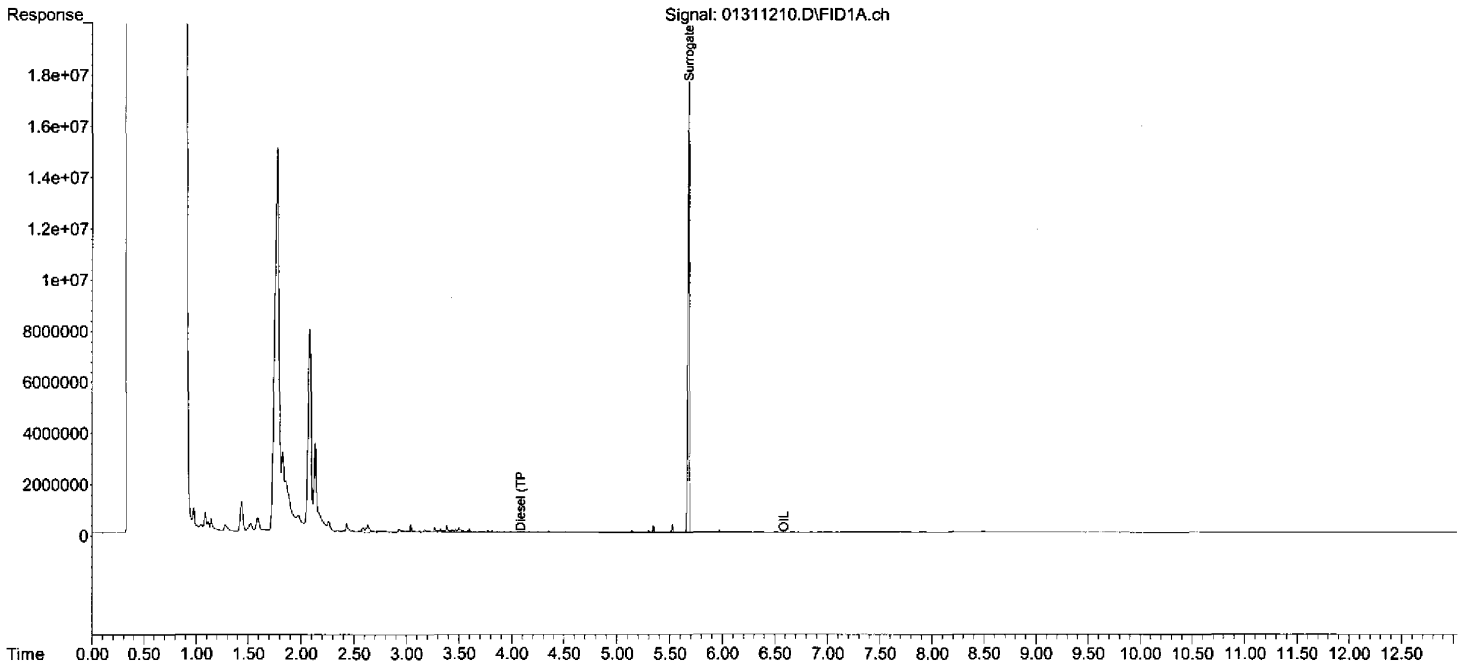
DIM0275879 DIM0276268

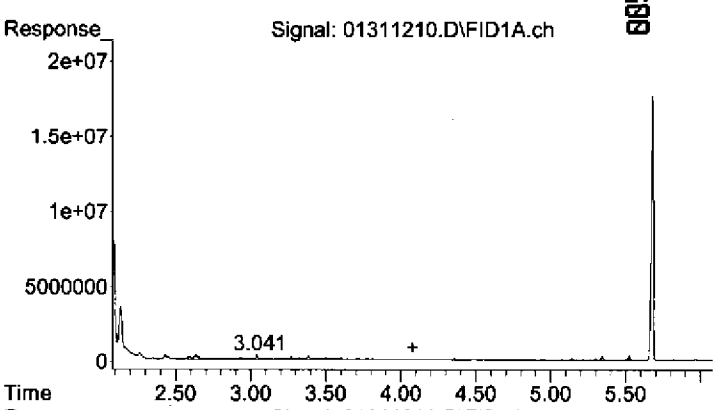
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311210.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 2:47 pm
Operator: TD
Sample : 1201033-03
Inst : AG7890_2
Misc : HW02z
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:40:02 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

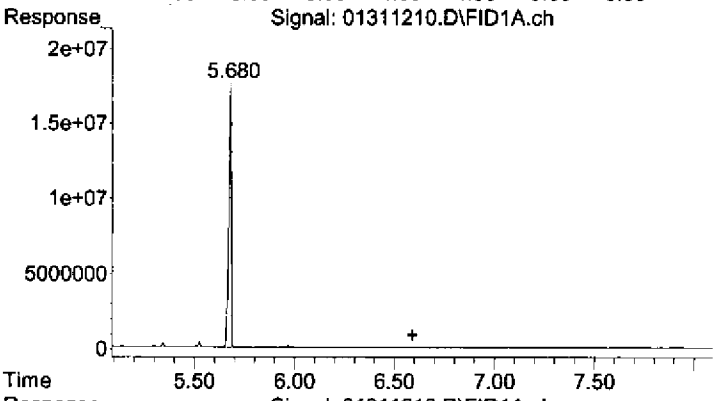
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





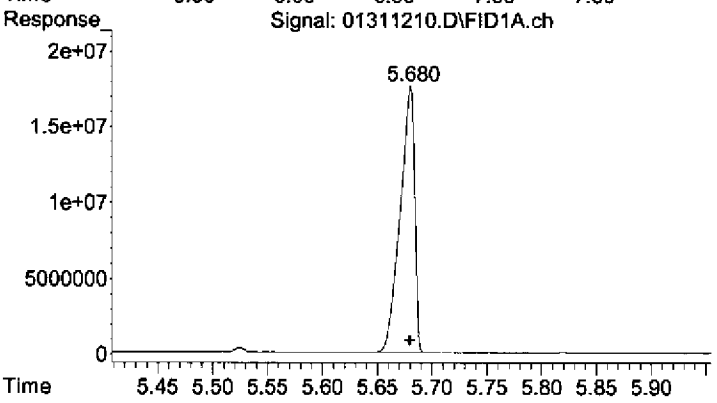
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 49686543
Conc: 13.85 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 4773887
Conc: 2.49 ug/mL



#3 Surrogate

R.T.: 5.679 min
Delta R.T.: -0.001 min
Response: 161372056
Conc: 45.43 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311211.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 3:05 pm Operator: TD
Sample : 1201033-04 Inst : AG7890_2
Misc : HW08a
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:40:06 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.678	153506456	43.212 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	86.42%
Target Compounds			
1) HM Diesel (TPH)	4.080	73731763	20.547 ug/mL
2) H OIL	6.590	12450665	6.502 ug/mL

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

DIM0275879 DIM0276271

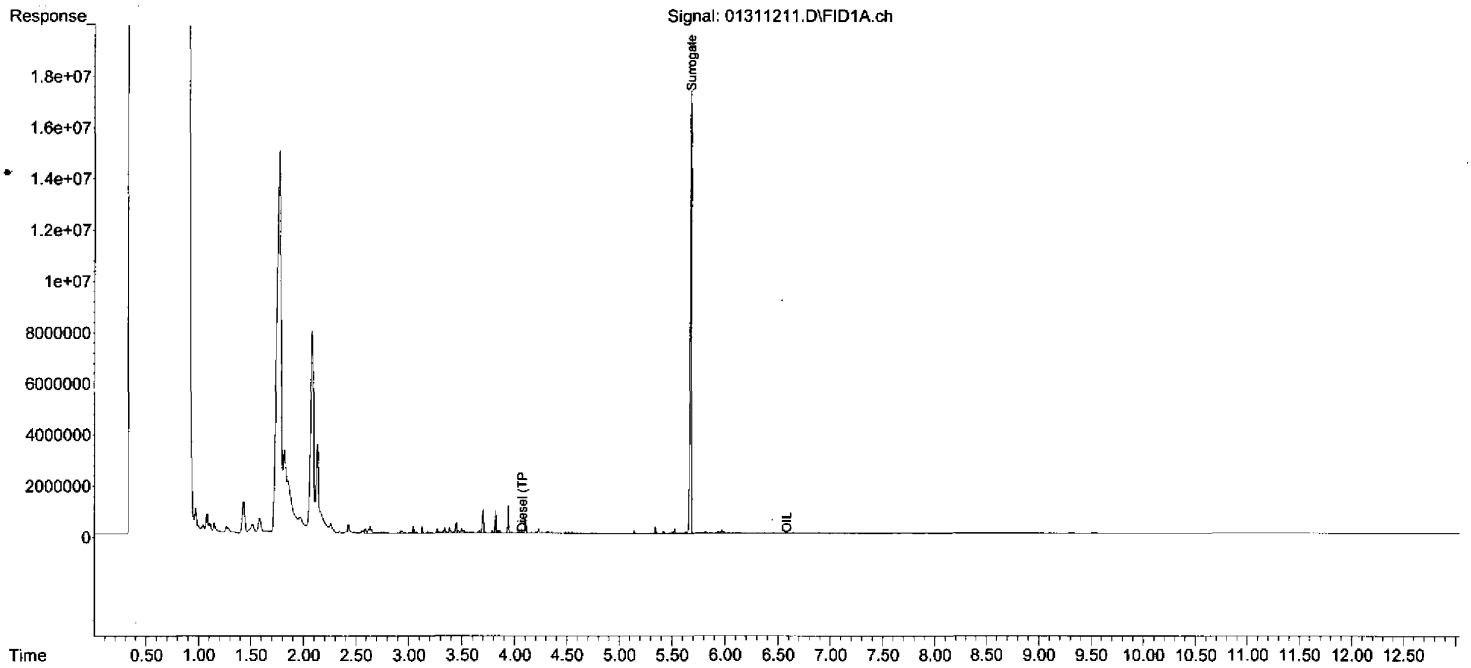
Quantitation Report (Not Reviewed)

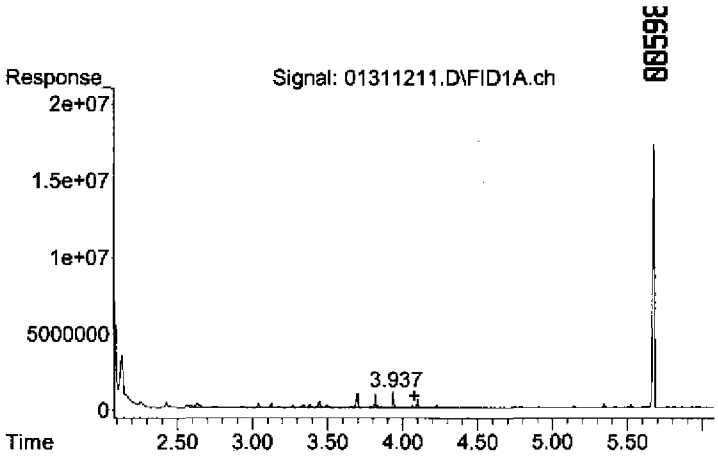
Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311211.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 3:05 pm
Sample : 1201033-04
Misc : HW08a
ALS Vial : 11 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Jan 31 15:40:06 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

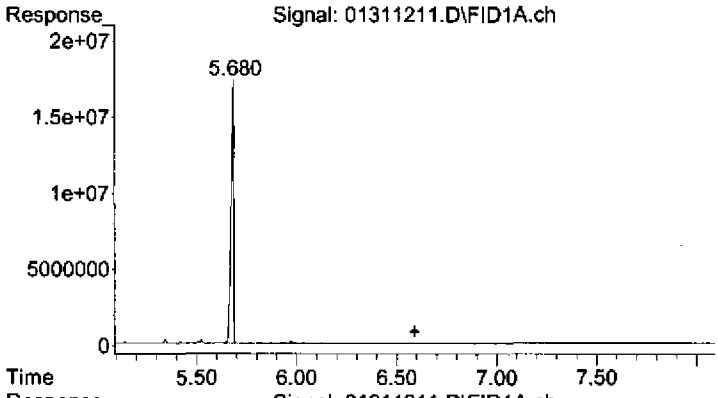
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





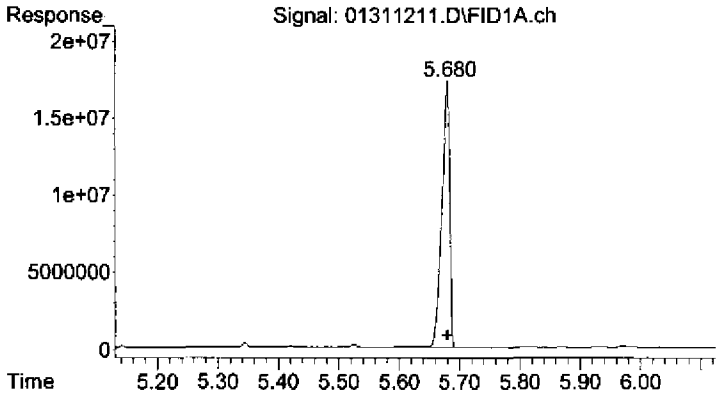
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 73731763
Conc: 20.55 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 12450665
Conc: 6.50 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.001 min
Response: 153506456
Conc: 43.21 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311223.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 6:41 pm Operator: TD
Sample : 2010053-IBL2 Inst : AG7890_2
Misc : 2A11003 IB
ALS Vial : 23 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 01 07:39:08 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.679	178393919	50.218 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	100.44%
Target Compounds			
1) HM Diesel (TPH)	4.080	4941932	1.377 ug/mL
2) H OIL	6.590	2879471	1.504 ug/mL

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

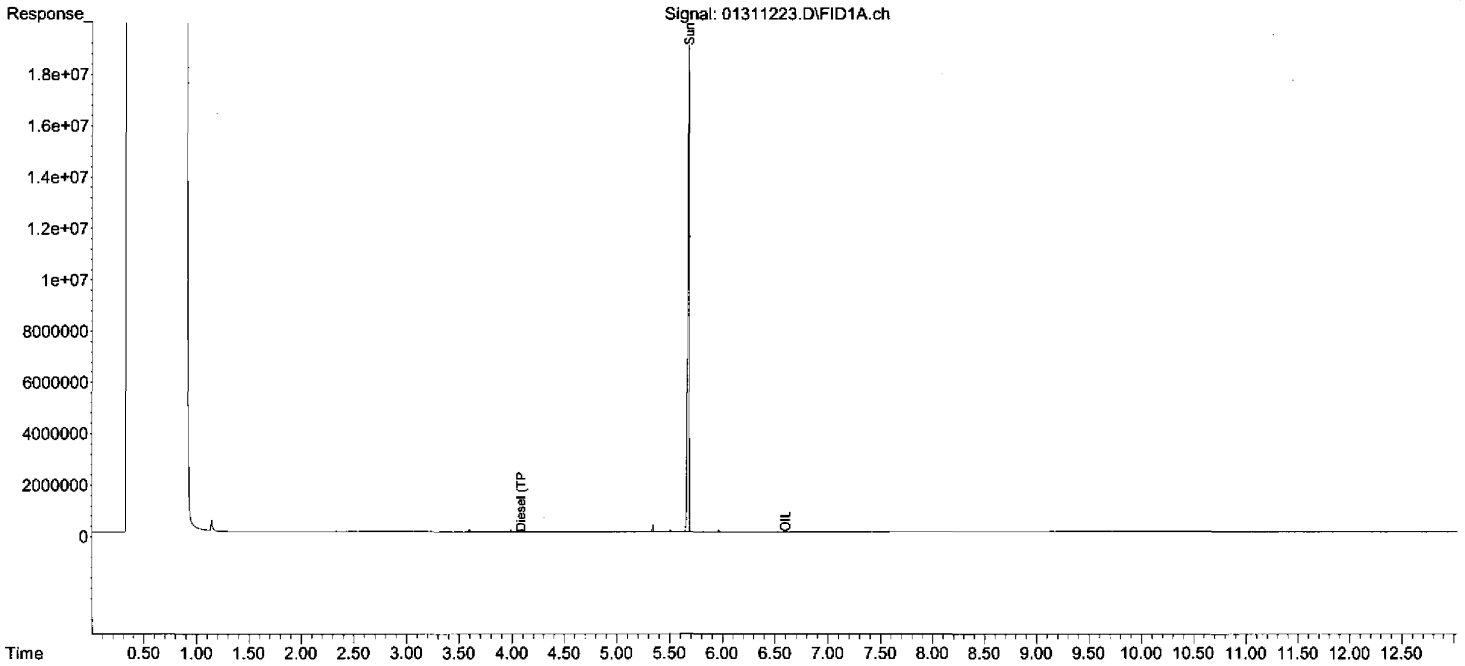
DIM0275879 DIM0276274

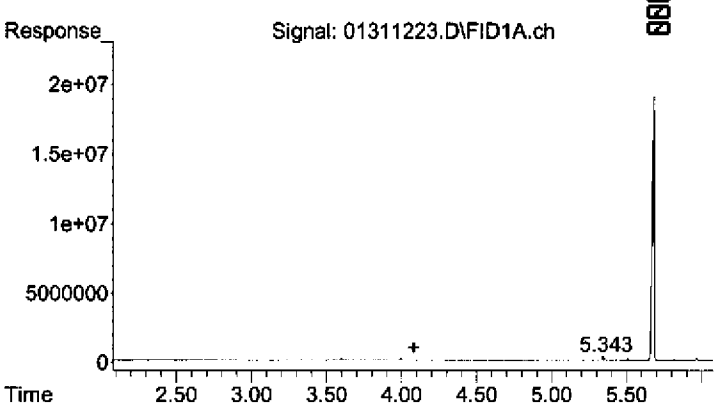
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311223.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 6:41 pm Operator: TD
Sample : 2010053-IBL2 Inst : AG7890_2
Misc : 2A11003 IB
ALS Vial : 23 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 01 07:39:08 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

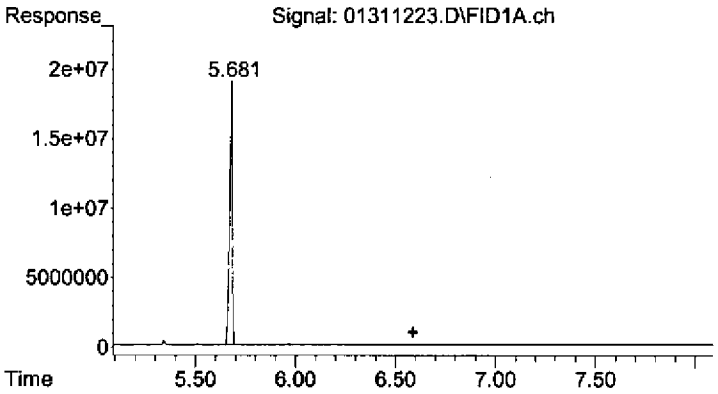
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





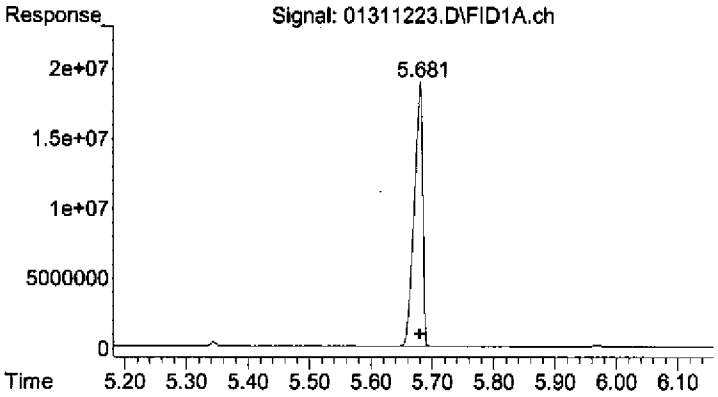
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 4941932
Conc: 1.38 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 2879471
Conc: 1.50 ug/mL



#3 Surrogate

R.T.: 5.679 min
Delta R.T.: 0.000 min
Response: 178393919
Conc: 50.22 ug/mL

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311224.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 6:59 pm
Operator: TD
Sample : 2010053-CCV3
Inst : AG7890_2
Misc : 2A11005 DRO-CV
ALS Vial : 24 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 01 07:39:13 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Min. RRF : 0.000 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 350%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 HM	Diesel (TPH)	3.588	3.788 E6	-5.6	120	0.00
2 H	OIL	1.915	0.000 E6	100.0#	137	0.00
3 S	Surrogate	3.552	4.050 E6	-14.0	121	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311224.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 6:59 pm Operator: TD
Sample : 2010053-CCV3 Inst : AG7890_2
Misc : 2A11005 DRO-CV
ALS Vial : 24 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 01 07:39:13 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.681	202510995	57.007 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery = 114.01%	
Target Compounds			
1) HM Diesel (TPH)	4.080	1894215302	527.860 ug/mL
2) H OIL	6.590	5299938	2.768 ug/mL

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

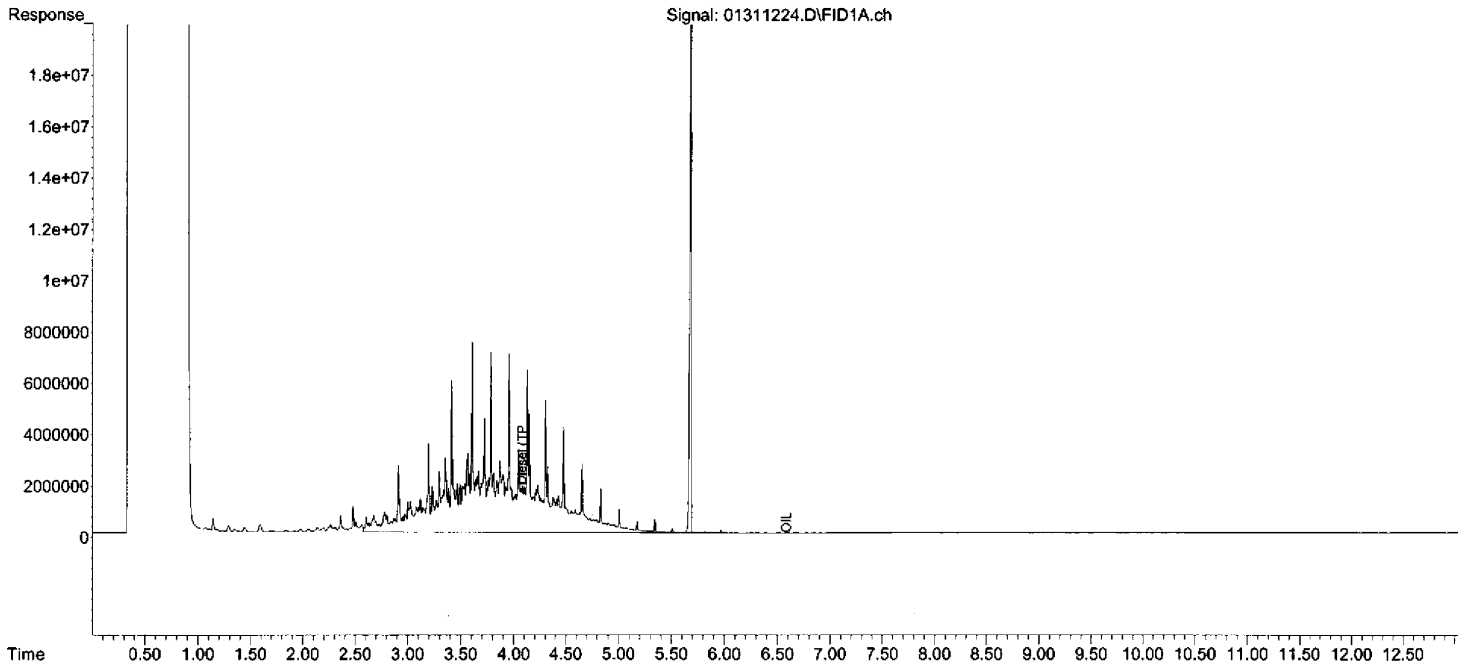
DIM0275879 DIM0276278

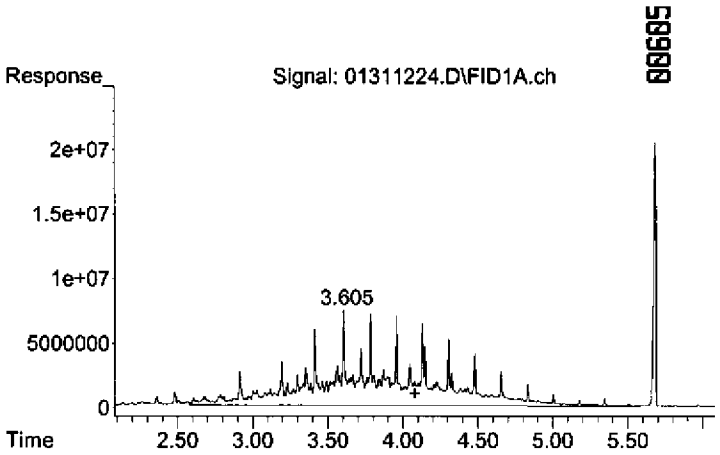
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311224.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 6:59 pm
Operator: TD
Sample : 2010053-CCV3
Inst : AG7890_2
Misc : 2A11005 DRO-CV
ALS Vial : 24 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 01 07:39:13 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

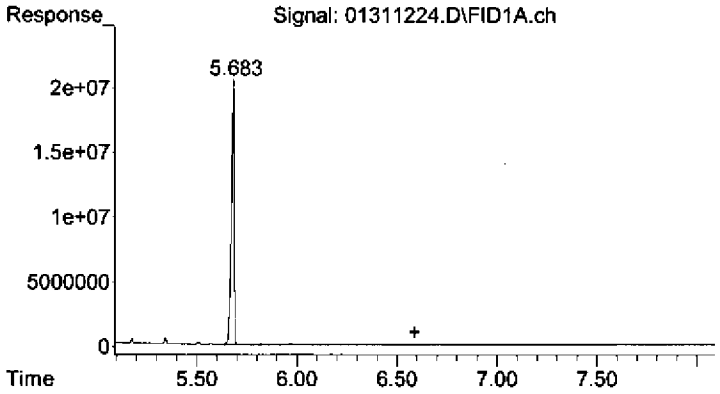
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





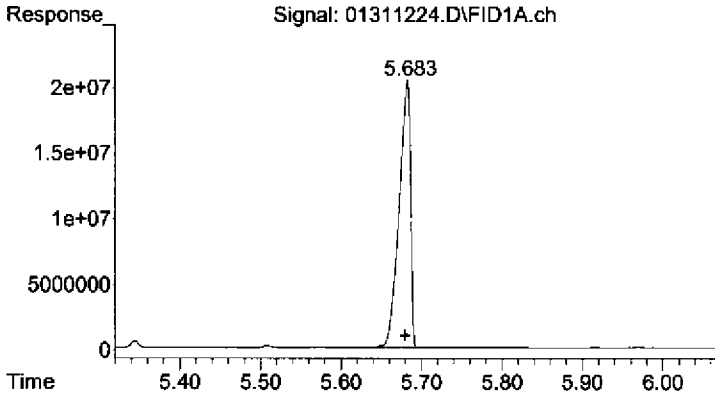
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1894215302
Conc: 527.86 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 5299938
Conc: 2.77 ug/mL



#3 Surrogate

R.T.: 5.681 min
Delta R.T.: 0.001 min
Response: 202510995
Conc: 57.01 ug/mL

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311225.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 7:17 pm Operator: TD
Sample : 2010053-CCV4 Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 25 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 01 08:13:18 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Min. RRF : 0.000 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 350%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 HM	Diesel (TPH)	3.588	0.000 E6	100.0#	0#	0.00
2 H	OIL	1.915	2.017 E6	-5.3	100	0.00
3 S	Surrogate	3.552	0.000 E6	100.0#	99	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

DIM0275879 DIM0276281

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311225.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 7:17 pm Operator: TD
Sample : 2010053-CCV4 Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 25 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 01 08:13:18 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.688	158791132	44.700 ug/mLm
Spiked Amount 50.000 Range 60 - 127		Recovery = 89.40%	
Target Compounds			
1) HM Diesel (TPH)	4.080	1065650486	296.964 ug/mL
2) H OIL	6.590	2017135321	1053.403 ug/mLm

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

MANUAL INTEGRATION VERIFICATION

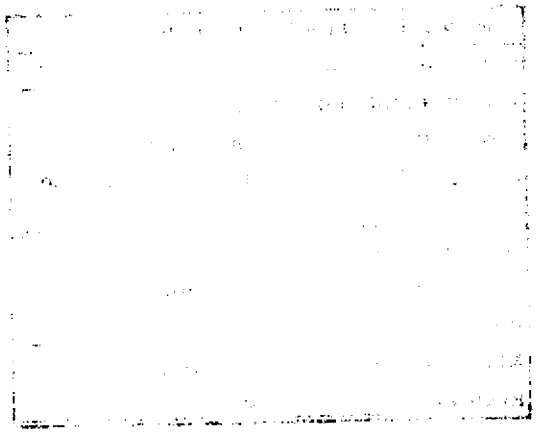
☐ Before Manual Integration(s) (not used)

Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____

☑ After Manual Integration

Manual integration(s) performed by:
Analyst: TD Date: 02-01-12
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

DIM0275879 DIM0276282

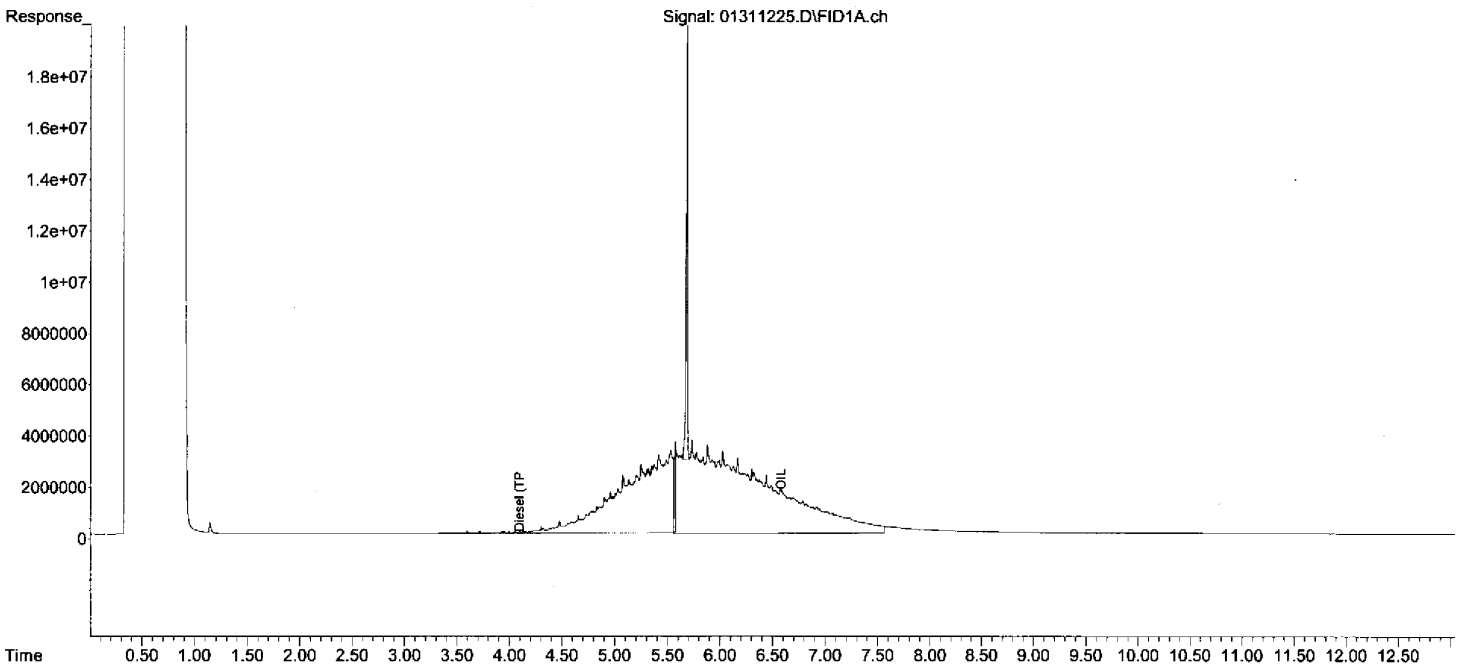


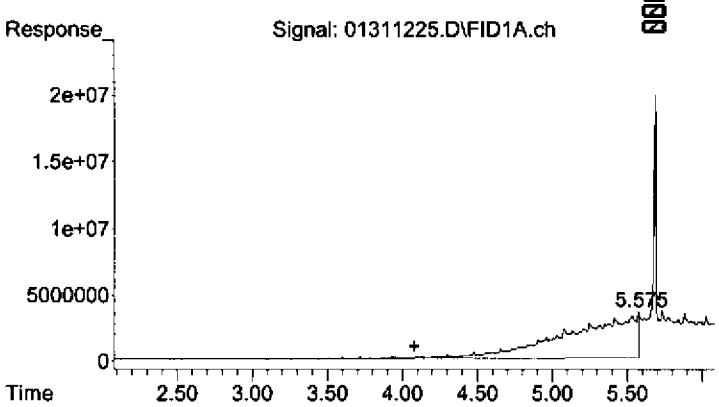
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311225.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 7:17 pm
Operator: TD
Sample : 2010053-CCV4
Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 25 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 01 08:13:18 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

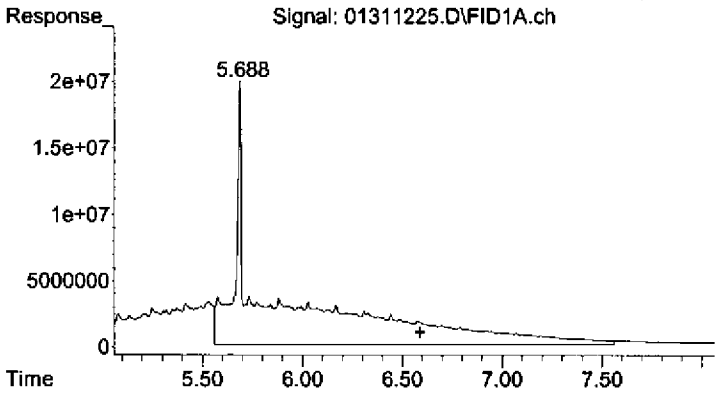
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





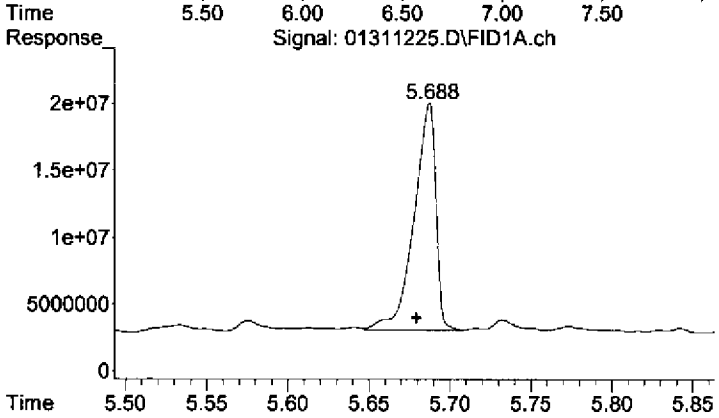
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1065650486
Conc: 296.96 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 2017135321
Conc: 1053.40 ug/mL m



#3 Surrogate

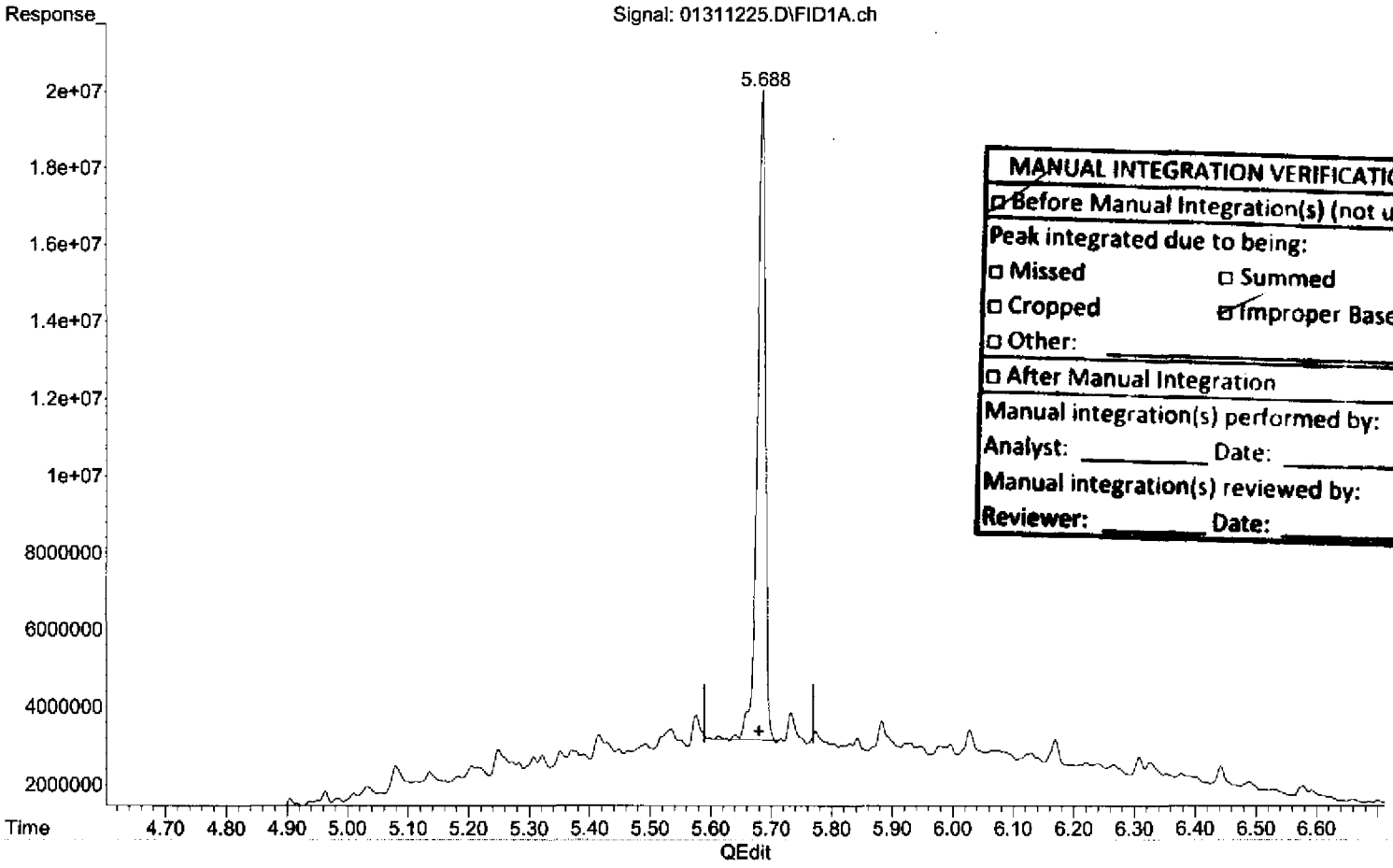
R.T.: 5.688 min
Delta R.T.: 0.008 min
Response: 158791132
Conc: 44.70 ug/mL m

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311225.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 7:17 pm
Operator: TD
Sample : 2010053-CCV4
Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 25 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 01 07:39:18 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☑ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

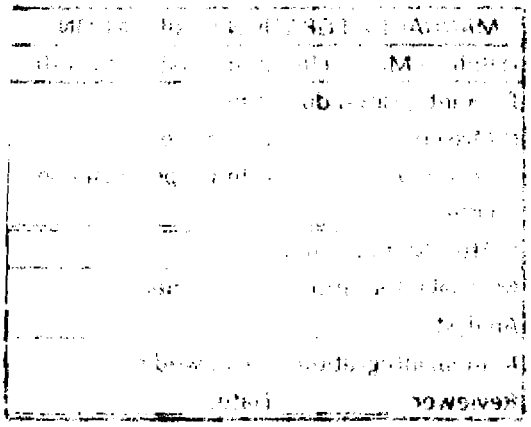
(3) Surrogate (S)

5.686min 44.185 ug/mL

response 156961664

(+) = Expected Retention Time

013012DROA.M Wed Feb 01 08:12:48 2012



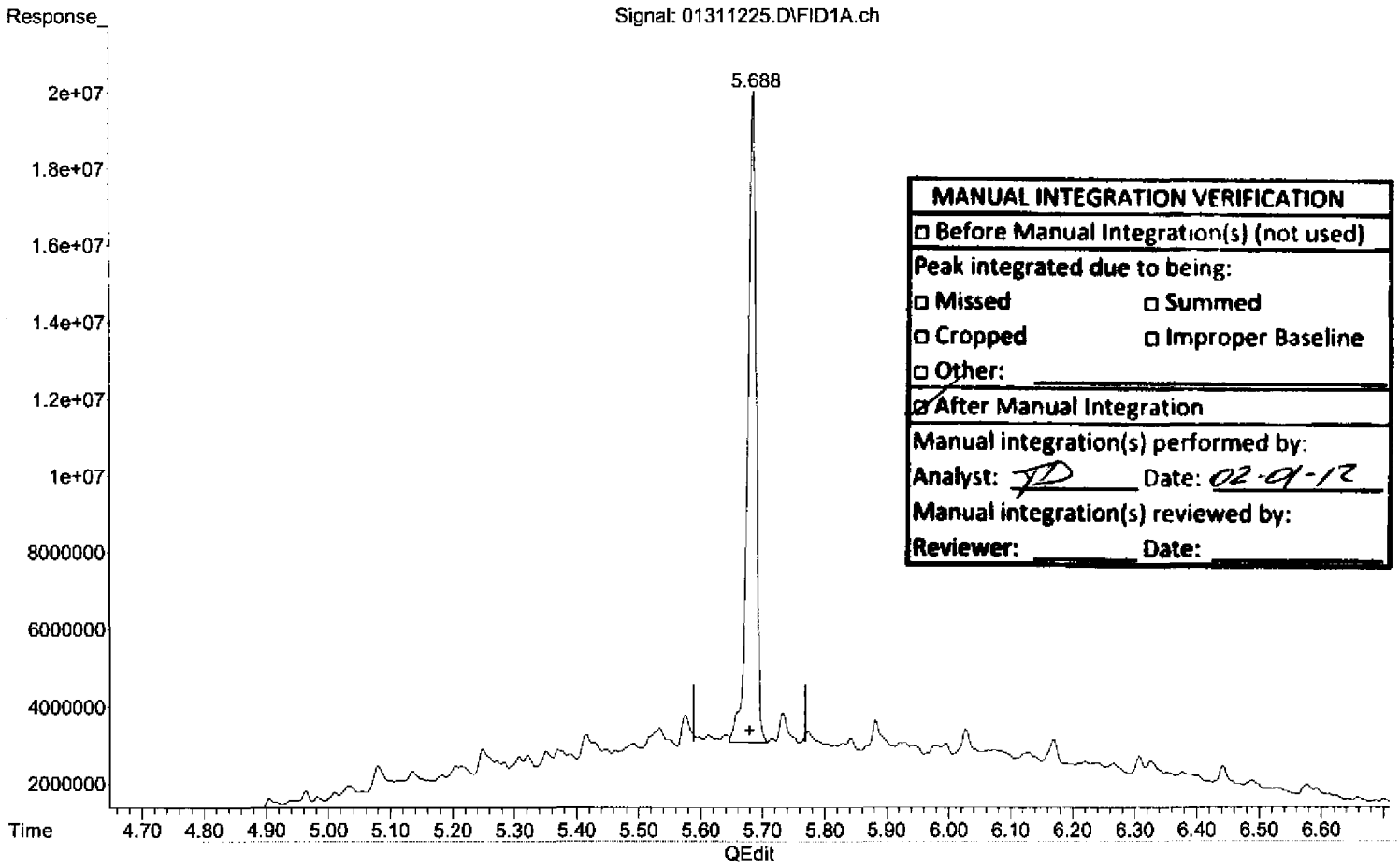
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311225.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 7:17 pm
Sample : 2010053-CCV4
Misc : 2A11012 OIL-CV
ALS Vial : 25 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 01 08:13:18 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☑ After Manual Integration	
Manual integration(s) performed by:	
Analyst: TD	Date: 02-01-12
Manual integration(s) reviewed by:	
Reviewer:	Date:

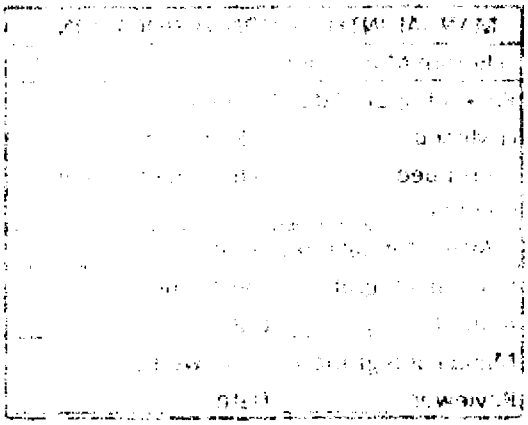
(3) Surrogate (S)

5.688min 44.700 ug/mL m

response 158791132

(+) = Expected Retention Time

013012DROA.M Wed Feb 01 10:17:36 2012



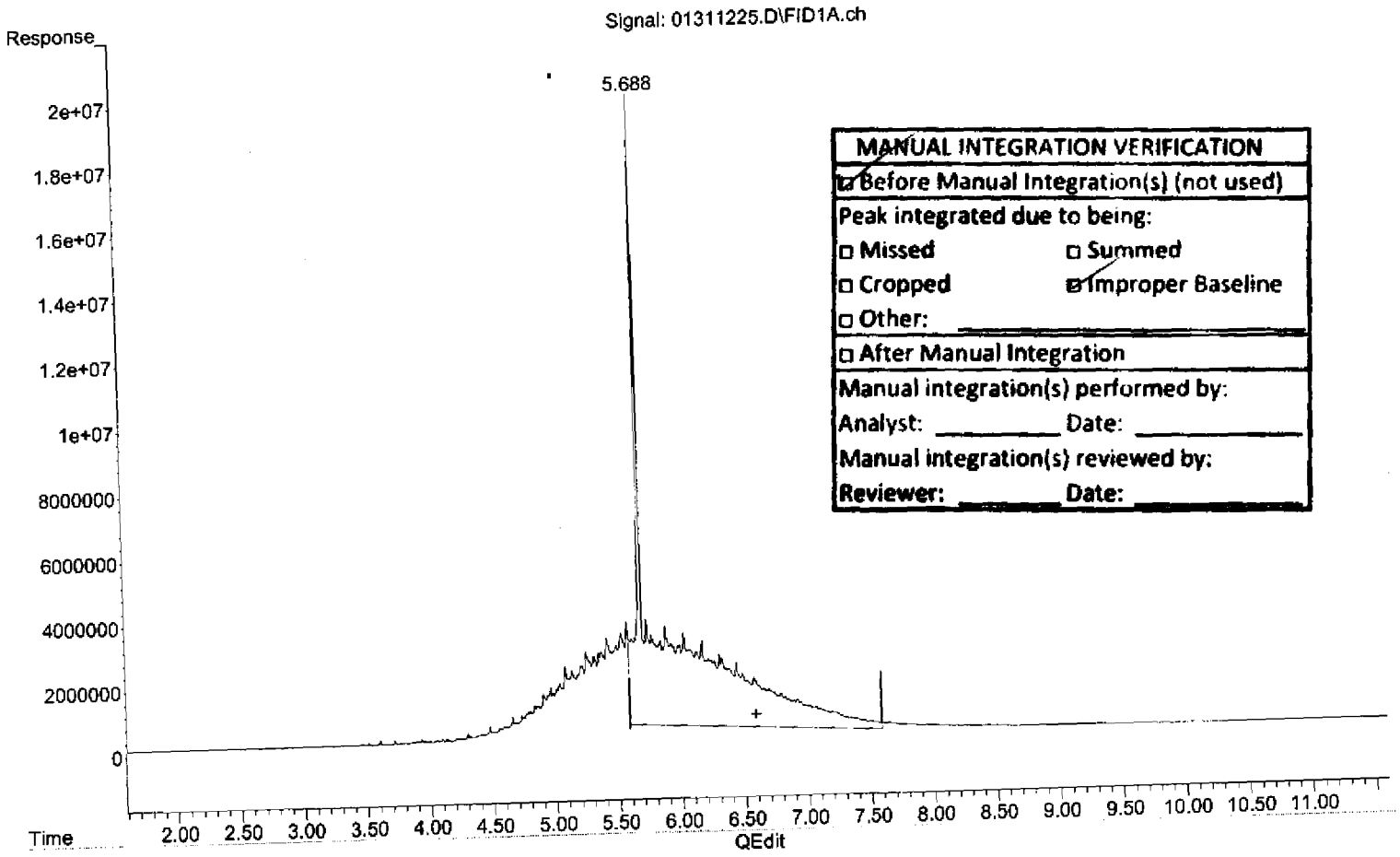
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311225.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 7:17 pm
Sample : 2010053-CCV4
Misc : 2A11012 OIL-CV
ALS Vial : 25 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 01 07:39:18 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION	
☑ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☑ Improper Baseline
☐ Other:	
☐ After Manual Integration	
Manual integration(s) performed by:	
Analyst: _____	Date: _____
Manual integration(s) reviewed by:	
Reviewer: _____	Date: _____

(2) OIL (H)

6.590min 873.184 ug/mL

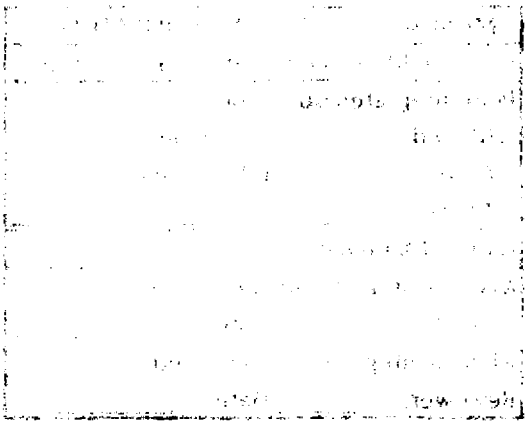
response 1672038065

(+) = Expected Retention Time
013012DROA.M Wed Feb 01 08:13:10 2012

00367

DIM0276290

DIM0275879



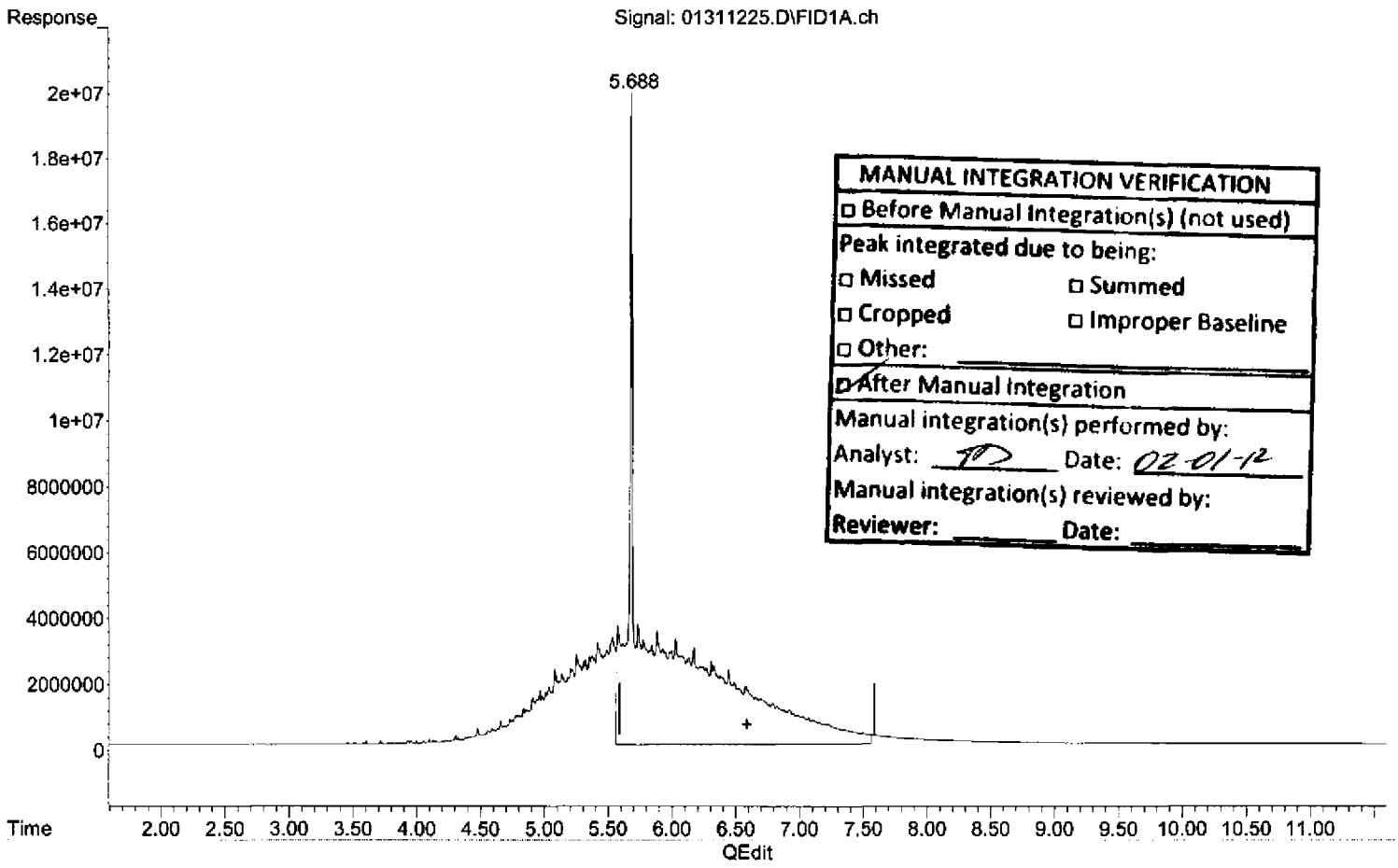
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311225.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 7:17 pm
Sample : 2010053-CCV4
Misc : 2A11012 OIL-CV
ALS Vial : 25 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 01 07:39:18 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 02-01-12
Manual integration(s) reviewed by:
Reviewer: Date:

(2) OIL (H)

6.590min 1053.403 ug/mL m

response 2017135321

(+) = Expected Retention Time
013012DROA.M Wed Feb 01 08:13:21 2012

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311225.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 7:17 pm Operator: TD
Sample : 2010053-CCV4 Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 25 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 01 07:39:18 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.686	156961664	44.185 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	88.37%
Target Compounds			
1) HM Diesel (TPH)	4.080	1065650486	296.964 ug/mL
2) H OIL	6.590	1673867534	874.139 ug/mL

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

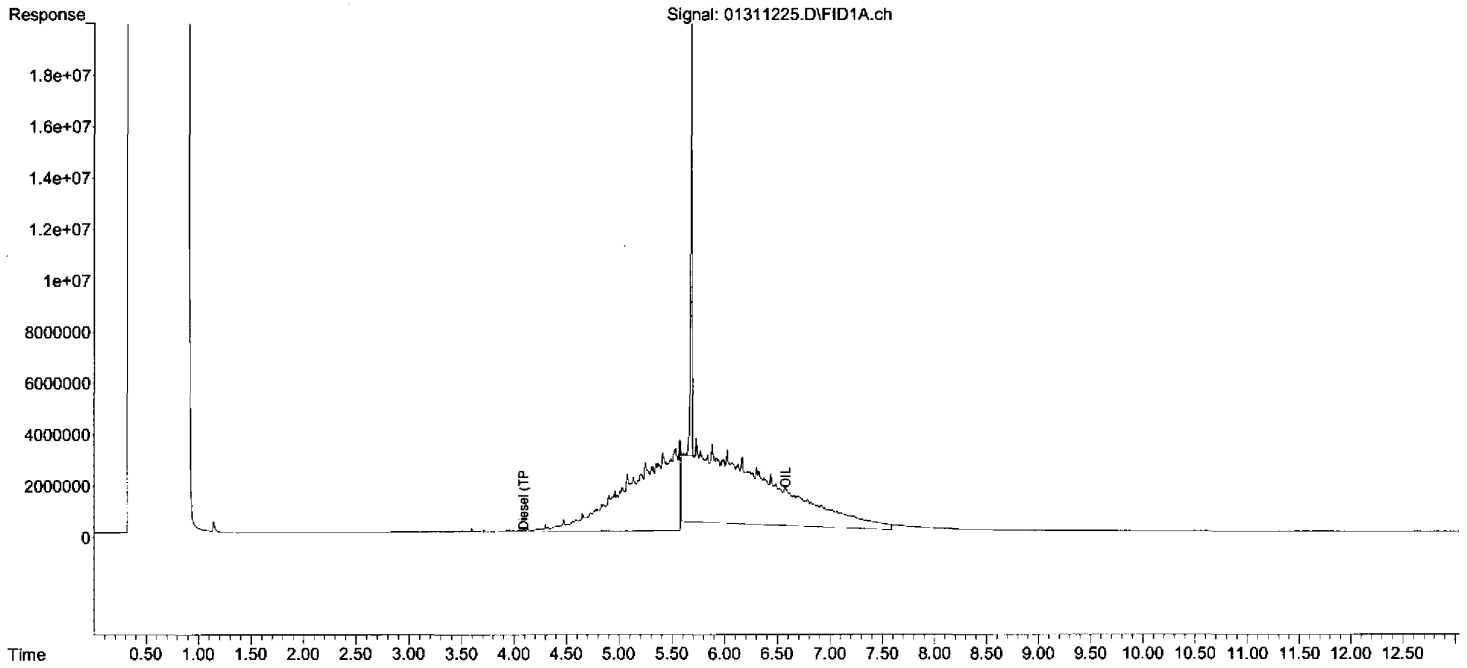
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

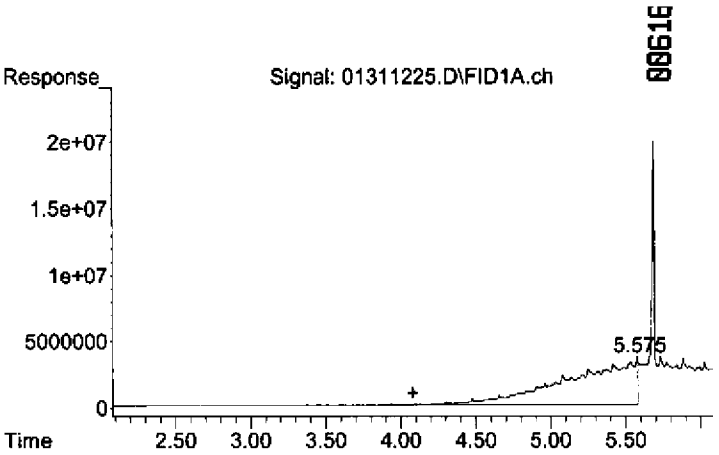
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311225.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 7:17 pm Operator: TD
Sample : 2010053-CCV4 Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 25 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 01 07:39:18 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

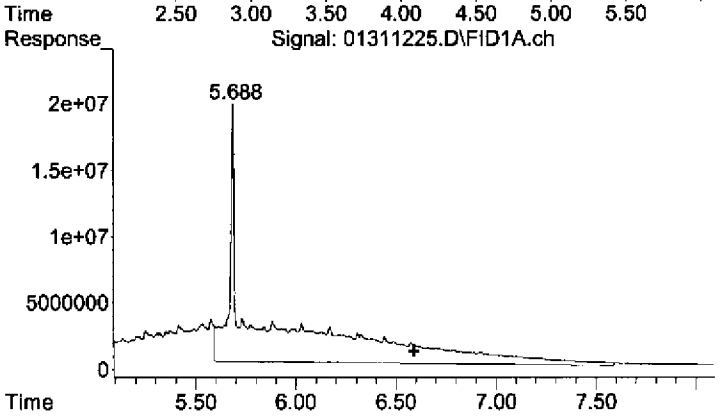
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





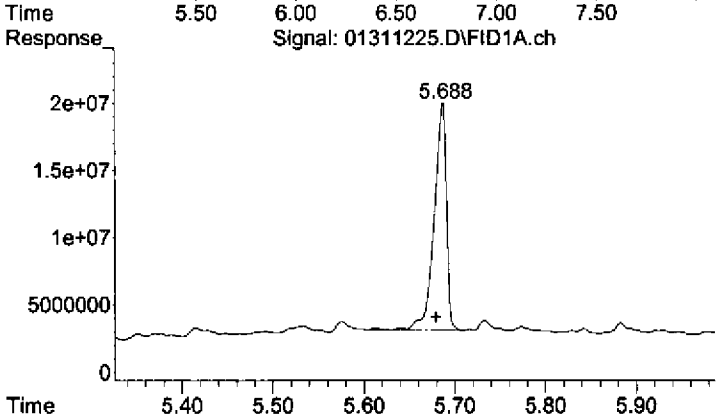
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1065650486
Conc: 296.96 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1673867534
Conc: 874.14 ug/mL



#3 Surrogate

R.T.: 5.686 min
Delta R.T.: 0.006 min
Response: 156961664
Conc: 44.18 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311226.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 7:35 pm Operator: TD
Sample : 2010053-CCV5 Inst : AG7890_2
Misc : 2A11005 DRO-CV
ALS Vial : 26 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 01 07:39:23 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.680	186959982	52.629 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery = 105.26%	
Target Compounds			
1) HM Diesel (TPH)	4.080	1796410121	500.604 ug/mL
2) H OIL	6.590	5646131	2.949 ug/mL

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

not valuated

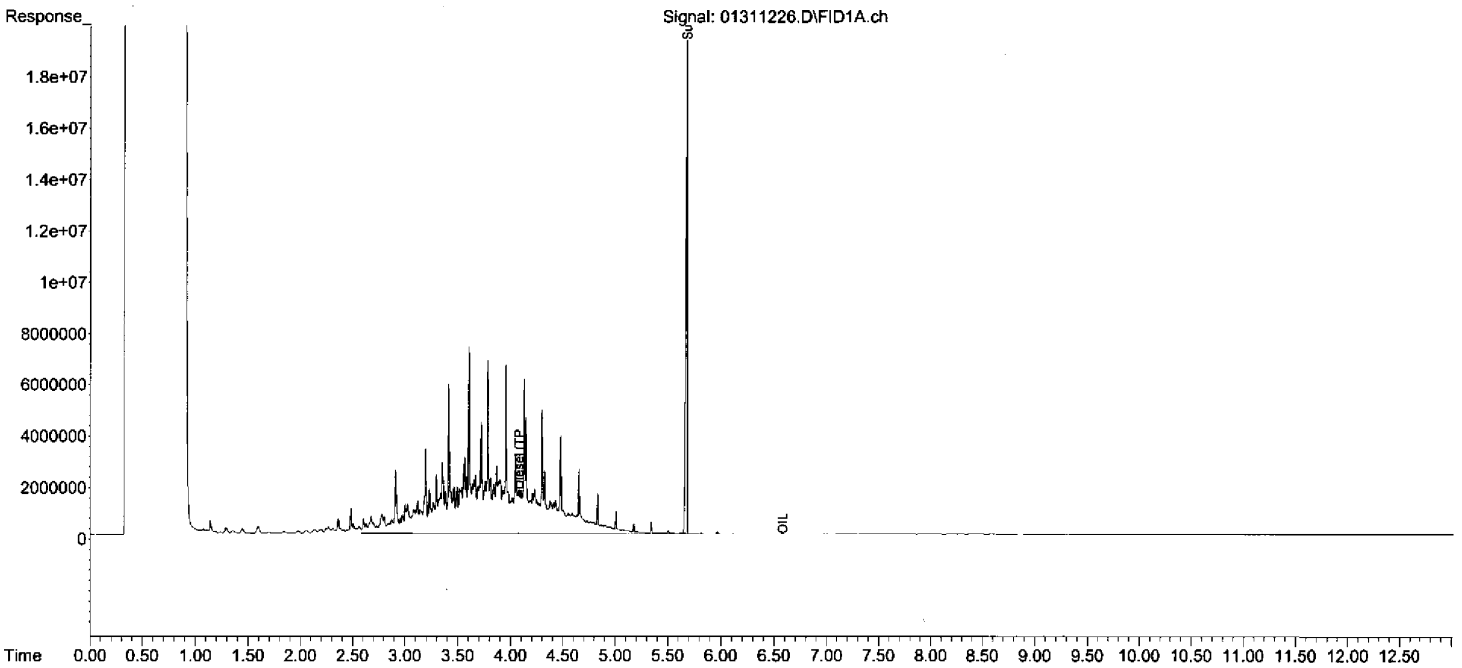
DIM0275879 DIM0276297

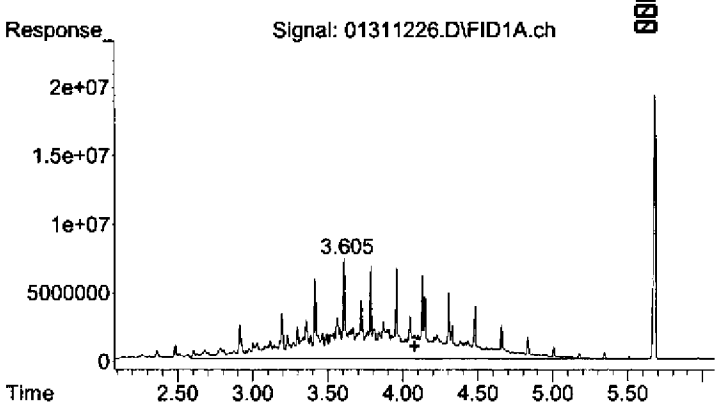
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311226.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 7:35 pm
Operator: TD
Sample : 2010053-CCV5
Inst : AG7890_2
Misc : 2A11005 DRO-CV
ALS Vial : 26 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 01 07:39:23 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

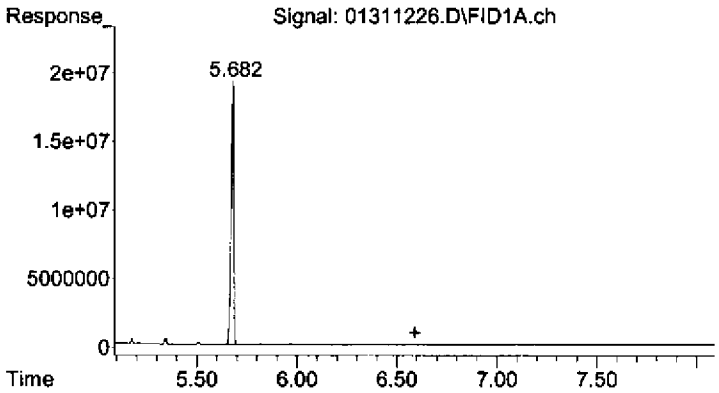
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





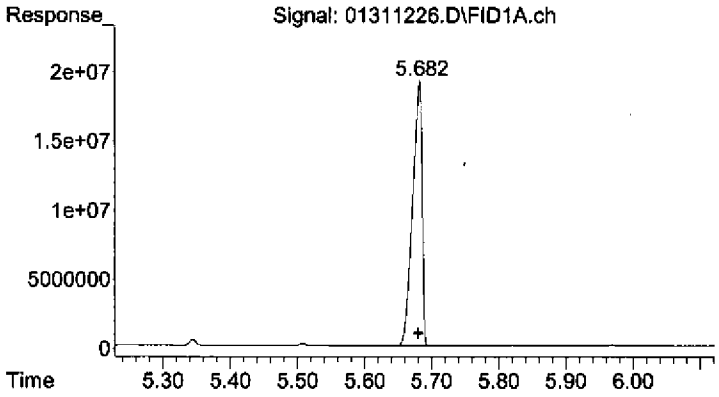
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1796410121
Conc: 500.60 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 5646131
Conc: 2.95 ug/mL



#3 Surrogate

R.T.: 5.680 min
Delta R.T.: 0.000 min
Response: 186959982
Conc: 52.63 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311227.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 7:53 pm Operator: TD
Sample : 2010053-CCV6 Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 27 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 01 07:39:28 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S Surrogate	5.686	159899904	45.012 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	90.02%
Target Compounds			
1) HM Diesel (TPH)	4.080	1068965714	297.888 ug/mL
2) H OIL	6.590	1665816247	869.934 ug/mL

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

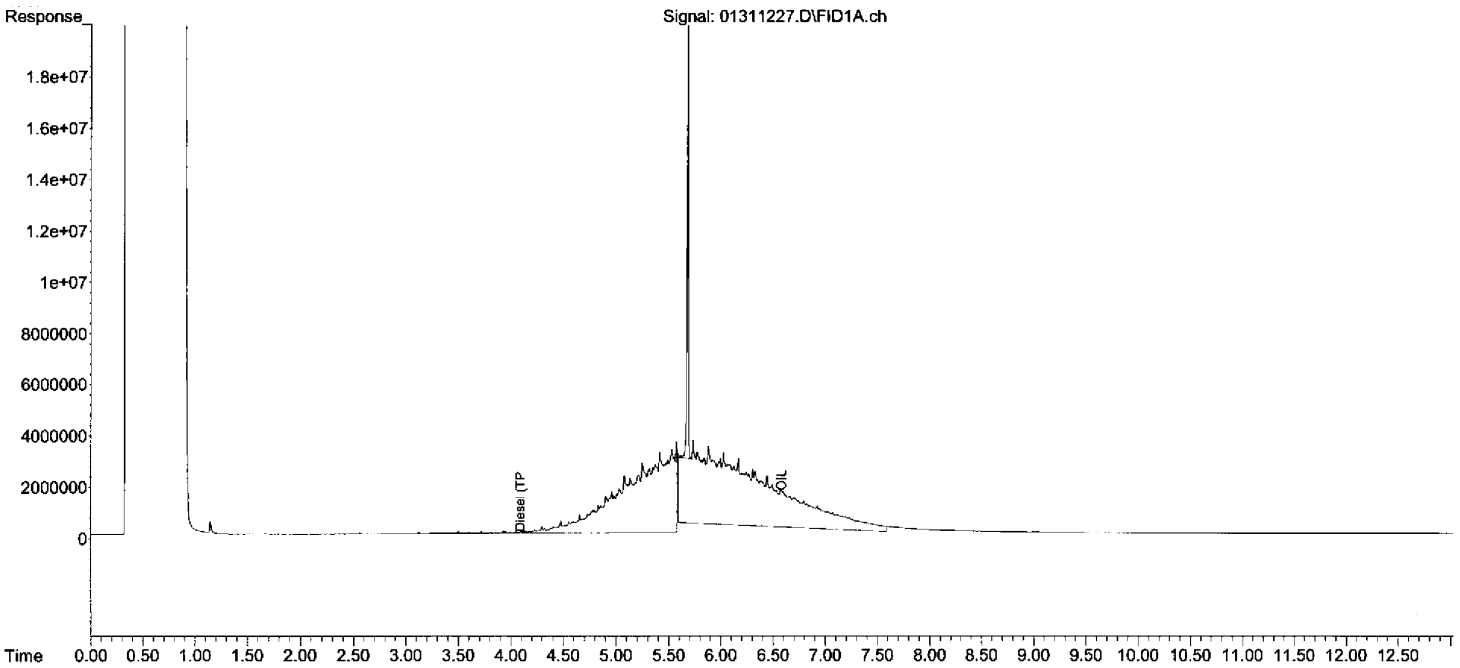
not reviewed

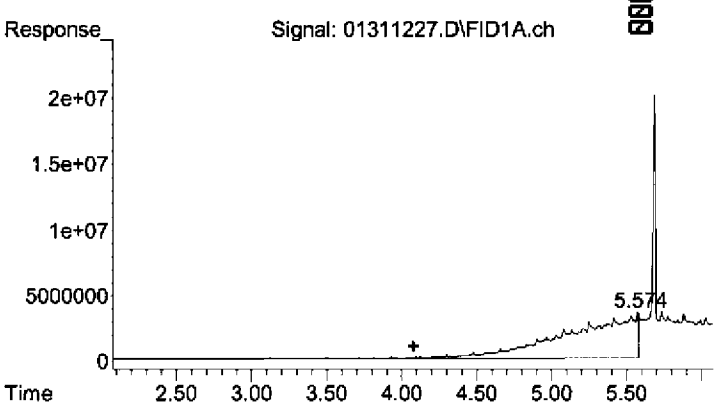
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\013112DA\
Data File : 01311227.D
Signal(s) : FID1A.ch
Acq On : 31 Jan 2012 7:53 pm
Operator: TD
Sample : 2010053-CCV6
Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 27 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 01 07:39:28 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

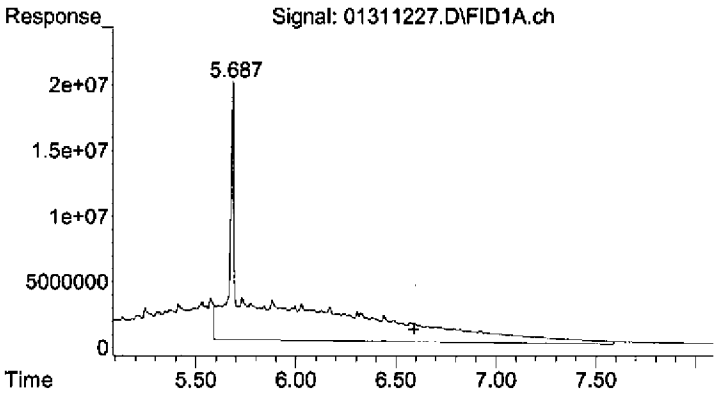
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





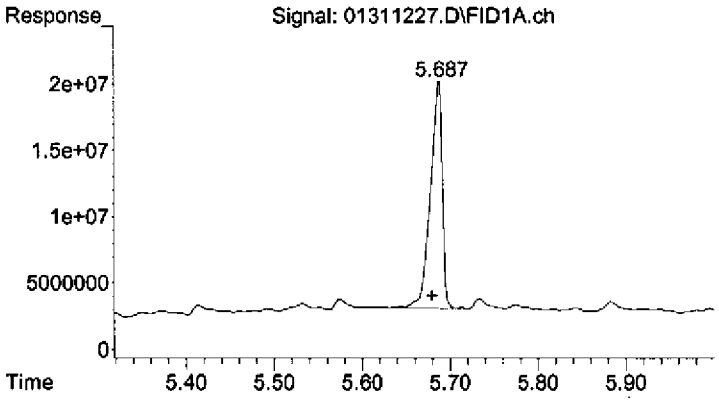
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1068965714
Conc: 297.89 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1665816247
Conc: 869.93 ug/mL



#3 Surrogate

R.T.: 5.686 min
Delta R.T.: 0.006 min
Response: 159899904
Conc: 45.01 ug/mL

MISCELLANEOUS DATA

00624

O.K. to use
8/29/11

LCS REPORT

Instrument Name: AG5975B
Sample Name: BIH0017-BS1
Misc Info: SOLVENT CHECK **LN:444**
Date Acquired: 8/17/2011 16:52
Operator: rh
Spike Volume: **500** uL
Surr. Volume: **500** uL

#	Name	Ret Time	Concentration	Amount	%R	QC Limit			STATUS
2)	1,4-Dioxane	4.32	9.6	10.0	96%	64 - 144	64	144	pass
4)	1,4-Dioxane-d8	4.28	4.1	5.0	81%	20 - 185	20	185	pass
5)	2-Fluorophenol	6.56	47.0	50.0	94%	27 - 115	27	115	pass
6)	Phenol-d5	7.84	46.9	50.0	94%	20 - 129	20	129	pass
7)	Phenol	7.86	44.1	50.0	88%	42 - 110	42	110	pass
8)	bis(2-Chloroethyl)ether	8.01	9.8	10.0	98%	42 - 110	42	110	pass
9)	2-Chlorophenol-d4	8.11	47.4	50.0	95%	25 - 120	25	120	pass
10)	2-Chlorophenol	8.14	44.6	50.0	89%	42 - 110	42	110	pass
11)	1,3-Dichlorobenzene	8.37	6.4	10.0	64%	30 - 110	30	110	pass
12)	1,4-Dichlorobenzene	8.47	6.6	10.0	66%	31 - 110	31	110	pass
13)	Benzyl alcohol	8.63	47.5	50.0	95%	40 - 112	40	112	pass
14)	1,2-Dichlorobenzene-d4	8.69	38.1	50.0	76%	20 - 123	20	123	pass
15)	1,2-Dichlorobenzene	8.71	6.9	10.0	69%	31 - 110	31	110	pass
16)	2-Methylphenol	8.77	43.0	50.0	86%	48 - 110	48	110	pass
17)	Bis(2-chloro-1-methylethyl) ether	8.82	9.3	10.0	93%	26 - 150	26	150	pass
18)	3&4-Methylphenol	9.00	47.5	50.0	95%	61 - 114	61	114	pass
19)	N-Nitrosodipropylamine	9.04	9.4	10.0	94%	45 - 110	45	110	pass
20)	Hexachloroethane	9.25	6.3	10.0	63%	24 - 110	24	110	pass
21)	Nitrobenzene-d5	9.29	42.4	50.0	85%	20 - 144	20	144	pass
23)	Nitrobenzene	9.31	9.5	10.0	95%	49 - 111	49	111	pass
24)	Isophorone	9.69	9.9	10.0	99%	40 - 110	40	110	pass
25)	2-Nitrophenol	9.82	44.5	50.0	89%	49 - 110	49	110	pass
26)	2,4-Dimethylphenol	9.84	44.0	50.0	88%	26 - 122	26	122	pass
27)	bis(2-Chloroethoxy)methane	9.99	9.8	10.0	98%	50 - 110	50	110	pass
28)	2,4-Dichlorophenol	10.19	44.5	50.0	89%	49 - 110	49	110	pass
29)	1,2,4-Trichlorobenzene	10.34	6.7	10.0	67%	35 - 110	35	110	pass
30)	Naphthalene	10.48	7.8	10.0	78%	44 - 110	44	110	pass
31)	4-Chloroaniline	10.54	44.1	50.0	88%	50 - 176	50	176	pass
32)	Hexachlorobutadiene	10.67	6.1	10.0	61%	26 - 110	26	110	pass
33)	4-Chloro-3-methylphenol	11.29	48.1	50.0	96%	49 - 110	49	110	pass
34)	2-Methylnaphthalene	11.60	7.7	10.0	77%	41 - 110	41	110	pass
35)	1-Methylnaphthalene	11.76	7.9	10.0	79%	45 - 104	45	104	pass
37)	Hexachlorocyclopentadiene	11.86	18.0	50.0	36%	20 - 110	20	110	pass
38)	2,4,6-Trichlorophenol	12.05	47.0	50.0	94%	50 - 110	50	110	pass
39)	2,4,5-Trichlorophenol	12.11	49.4	50.0	99%	49 - 112	49	112	pass
40)	2-Fluorobiphenyl	12.18	40.9	50.0	82%	26 - 127	26	127	pass
41)	2-Chloronaphthalene	12.40	8.0	10.0	80%	42 - 110	42	110	pass
42)	2-Nitroaniline	12.56	52.1	50.0	104%	47 - 119	47	119	pass
43)	Dimethyl phthalate	12.82	11.4	10.0	114%	57 - 118	57	118	pass
44)	2,6-Dinitrotoluene	12.93	10.7	10.0	107%	57 - 119	57	119	pass
45)	Acenaphthylene	13.10	8.9	10.0	89%	42 - 110	42	110	pass
46)	3-Nitroaniline	13.23	49.7	50.0	99%	20 - 194	20	194	pass
47)	2,4-Dinitrophenol	13.39	39.8	50.0	80%	20 - 174	20	174	pass
48)	Acenaphthene	13.38	11.1	10.0	111%	52 - 139	52	139	pass
49)	4-Nitrophenol	13.47	50.4	50.0	101%	47 - 133	47	133	pass
50)	2,4-Dinitrotoluene	13.60	11.1	10.0	111%	55 - 122	55	122	pass
51)	Dibenzofuran	13.66	9.3	10.0	93%	46 - 112	46	112	pass
52)	Diethyl phthalate	13.99	11.4	10.0	114%	50 - 131	50	131	pass
53)	4-Chlorophenyl phenyl ether	14.20	9.3	10.0	93%	49 - 110	49	110	pass

54)	4-Nitroaniline	14.24	48.4	50.0	97%	20 - 146	20	146	pass
55)	Fluorene	14.23	9.9	10.0	99%	52 - 117	52	117	pass
56)	2,4,6-Tribromophenol	14.63	55.9	50.0	112%	20 - 159	20	159	pass
58)	4,6-Dinitro-2-methylphenol	14.29	56.7	50.0	113%	31 - 158	31	158	pass
59)	Diphenyl amine	14.39	9.1	10.0	91%	37 - 110	37	110	pass
60)	4-Bromophenyl phenyl ether	15.02	10.1	10.0	101%	53 - 124	53	124	pass
61)	Hexachlorobenzene	15.16	10.8	10.0	108%	54 - 120	54	120	pass
62)	Pentachlorophenol	15.48	48.6	50.0	97%	41 - 136	41	136	pass
63)	Phenanthrene	15.84	10.7	10.0	107%	56 - 134	56	134	pass
64)	Anthracene	15.92	10.7	10.0	107%	56 - 127	56	127	pass
65)	Carbazole	16.17	11.3	10.0	113%	20 - 157	20	157	pass
66)	Di-n-butyl phthalate	16.69	12.0	10.0	120%	55 - 153	55	153	pass
67)	Fluoranthene	17.81	11.1	10.0	111%	55 - 141	55	141	pass
69)	Pyrene	18.20	11.0	10.0	110%	55 - 141	55	141	pass
70)	Terphenyl-d14	18.41	52.0	50.0	104%	21 - 158	21	158	pass
71)	Butyl benzyl phthalate	19.17	11.4	10.0	114%	59 - 152	59	152	pass
72)	3,3'-Dichlorobenzidine	20.09	41.2	50.0	82%	20 - 167	20	167	pass
73)	bis(2-Ethylhexyl) phthalate	20.08	12.0	10.0	120%	62 - 160	62	160	pass
74)	Benzo(a)anthracene	20.17	10.7	10.0	107%	61 - 126	61	126	pass
75)	Chrysene	20.22	11.3	10.0	113%	62 - 128	62	128	pass
77)	Di-n-octyl phthalate	21.08	10.9	10.0	109%	48 - 166	48	166	pass
78)	Benzo(b)fluoranthene	21.85	10.7	10.0	107%	51 - 128	51	128	pass
79)	Benzo(k)fluoranthene	21.89	11.2	10.0	112%	51 - 123	51	123	pass
80)	Benzo(a)pyrene	22.40	9.4	10.0	94%	41 - 110	41	110	pass
81)	Indeno(1,2,3-cd)pyrene	24.58	9.7	10.0	97%	41 - 111	41	111	pass
82)	Dibenz(a,h)anthracene	24.58	10.3	10.0	103%	42 - 122	42	122	pass
83)	Benzo(g,h,i)perylene	25.20	9.8	10.0	98%	32 - 123	32	123	pass

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\2011\DATA\081711\
Data File : 081711B08.D
Acq On : 17 Aug 2011 4:52 pm
Sample : BIH0017-BS1
Misc : SOLVENT CHECK LN:444
DataAcq Meth:081711BB.M

Operator: rh
Inst : AG5975B
Multiplr: 1.00

Quant Time: Aug 29 10:32:11 2011
Quant Method : D:\MSDCHEM\2011\METHODS\081711BB.M
Quant Title : CLP BNA Calibration
QLast Update : Mon Jul 25 08:15:58 2011
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dioxane-d8 (IS)	4.277	64	91474	5.00	ug/mL	0.00
3) 1,4-Dichlorobenzene-d4	8.448	152	1169680	20.00	ug/mL	0.00
21) Naphthalene-d8	10.444	136	4026040	20.00	ug/mL	0.00
36) Acenaphthene-d10	13.329	164	2248732	20.00	ug/mL	0.00
57) Phenanthrene-d10	15.796	188	3660739	20.00	ug/mL	0.00
68) Chrysene-d12	20.183	240	3088918	20.00	ug/mL	-0.01
76) Perylene-d12	22.498	264	2718992	20.00	ug/mL	0.00
System Monitoring Compounds						
4) 1,4-Dioxane-d8	4.277	64	91474	4.06	ug/mL	0.00
Spiked Amount 5.000	Range 20 - 185		Recovery = 81.20%			
5) 2-Fluorophenol	6.557	112	3261961	46.98	ug/mL	0.00
Spiked Amount 50.000	Range 27 - 115		Recovery = 93.96%			
6) Phenol-d5	7.843	99	3972382	46.91	ug/mL	0.01
Spiked Amount 50.000	Range 20 - 129		Recovery = 93.82%			
9) 2-Chlorophenol-d4	8.111	132	3219420	47.35	ug/mL	0.00
Spiked Amount 50.000	Range 25 - 120		Recovery = 94.70%			
14) 1,2-Dichlorobenzene-d4	8.692	152	1878484	38.15	ug/mL	0.00
Spiked Amount 50.000	Range 20 - 123		Recovery = 76.30%			
22) Nitrobenzene-d5	9.286	82	3497387	42.41	ug/mL	0.00
Spiked Amount 50.000	Range 20 - 144		Recovery = 84.82%			
40) 2-Fluorobiphenyl	12.183	172	5946789	40.88	ug/mL	0.00
Spiked Amount 50.000	Range 26 - 127		Recovery = 81.76%			
56) 2,4,6-Tribromophenol	14.633	330	1029561	55.94	ug/mL	0.00
Spiked Amount 50.000	Range 20 - 159		Recovery = 111.88%			
70) Terphenyl-d14	18.414	244	6559075	51.96	ug/mL	0.00
Spiked Amount 50.000	Range 21 - 158		Recovery = 103.92%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.323	88	252289	9.65	ug/mL	100
7) Phenol	7.860	94	3957626	44.13	ug/mL	98
8) bis(2-Chloroethyl)ether	8.006	93	696702	9.79	ug/mL	99
10) 2-Chlorophenol	8.140	128	3436148	44.61	ug/mL	98
11) 1,3-Dichlorobenzene	8.367	146	543480	6.41	ug/mL	99
12) 1,4-Dichlorobenzene	8.471	146	557143	6.57	ug/mL	99
13) Benzyl alcohol	8.628	108	1987723	47.48	ug/mL	98
15) 1,2-Dichlorobenzene	8.710	146	544925	6.86	ug/mL	97
16) 2-Methylphenol	8.768	107	2504859	43.02	ug/mL	99
17) Bis(2-chloro-1-methyle...	8.820	45	1377456	9.34	ug/mL	100
18) 3&4-Methylphenol	9.001	107	3546046	47.47	ug/mL	91
19) N-Nitrosodipropylamine	9.036	70	465197	9.42	ug/mL	95
20) Hexachloroethane	9.245	117	211554	6.27	ug/mL	98
23) Nitrobenzene	9.315	77	712284	9.50	ug/mL	99
24) Isophorone	9.687	82	1315440	9.89	ug/mL	99
25) 2-Nitrophenol	9.821	139	1769994	44.48	ug/mL	96
26) 2,4-Dimethylphenol	9.844	122	2789953	43.98	ug/mL	99
27) bis(2-Chloroethoxy)met...	9.990	93	799175	9.76	ug/mL	100
28) 2,4-Dichlorophenol	10.193	162	2664422	44.54	ug/mL	99
29) 1,2,4-Trichlorobenzene	10.345	180	467774	6.68	ug/mL	100
30) Naphthalene	10.479	128	1583493	7.84	ug/mL	99
31) 4-Chloroaniline	10.537	127	3737509	44.08	ug/mL	98
32) Hexachlorobutadiene	10.671	225	235960	6.06	ug/mL	99
33) 4-Chloro-3-methylphenol	11.293	107	2795139	48.09	ug/mL	100
34) 2-Methylnaphthalene	11.596	142	1023266	7.72	ug/mL	100

DIM0275879 DIM0276307

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\2011\DATA\081711\
Data File : 081711B08.D
Acq On : 17 Aug 2011 4:52 pm
Sample : BIH0017-BS1
Misc : SOLVENT CHECK LN:444
DataAcq Meth:081711BB.M

Operator: rh
Inst : AG5975B
Multiplr: 1.00

Quant Time: Aug 29 10:32:11 2011
Quant Method : D:\MSDCHEM\2011\METHODS\081711BB.M
Quant Title : CLP BNA Calibration
QLast Update : Mon Jul 25 08:15:58 2011
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
35)	1-Methylnaphthalene	11.764	142	1009101	7.94	ug/mL	100
37)	Hexachlorocyclopentadiene	11.863	237	685714	17.99	ug/mL	100
38)	2,4,6-Trichlorophenol	12.049	196	2044640	47.03	ug/mL	100
39)	2,4,5-Trichlorophenol	12.108	196	2119736	49.44	ug/mL	100
41)	2-Chloronaphthalene	12.404	162	1000693	7.98	ug/mL	100
42)	2-Nitroaniline	12.556	65	2186170	52.11	ug/mL	97
43)	Dimethyl phthalate	12.823	163	1561471	11.35	ug/mL	100
44)	2,6-Dinitrotoluene	12.928	165	358774	10.73	ug/mL	97
45)	Acenaphthylene	13.097	152	1713215	8.87	ug/mL	100
46)	3-Nitroaniline	13.230	138	1782778	49.70	ug/mL	100
47)	2,4-Dinitrophenol	13.388	184	613811	39.82	ug/mL#	62
48)	Acenaphthene	13.382	154	1328768	11.15	ug/mL	84
49)	4-Nitrophenol	13.475	109	804148	50.41	ug/mL	93
50)	2,4-Dinitrotoluene	13.603	165	461014	11.07	ug/mL	98
51)	Dibenzofuran	13.661	168	1588398	9.33	ug/mL	97
52)	Diethyl phthalate	13.987	149	1548803	11.36	ug/mL	99
53)	4-Chlorophenyl phenyl ...	14.202	204	637704	9.32	ug/mL	99
54)	4-Nitroaniline	14.243	138	1394192	48.36	ug/mL	94
55)	Fluorene	14.231	166	1371159	9.92	ug/mL	99
58)	4,6-Dinitro-2-methylph...	14.289	198	1274469	56.66	ug/mL	94
59)	Diphenyl amine	14.394	169	1030122	9.06	ug/mL	99
60)	4-Bromophenyl phenyl e...	15.017	248	389287	10.09	ug/mL	99
61)	Hexachlorobenzene	15.162	284	447655	10.83	ug/mL	99
62)	Pentachlorophenol	15.476	266	1176420	48.58	ug/mL	99
63)	Phenanthrene	15.837	178	1995182	10.66	ug/mL	100
64)	Anthracene	15.918	178	1940376	10.71	ug/mL	99
65)	Carbazole	16.174	167	1770640	11.29	ug/mL	100
66)	Di-n-butyl phthalate	16.686	149	2501930	11.97	ug/mL	100
67)	Fluoranthene	17.809	202	2216808	11.14	ug/mL	99
69)	Pyrene	18.199	202	2242985	10.98	ug/mL	99
71)	Butyl benzyl phthalate	19.171	149	1007976	11.41	ug/mL	99
72)	3,3'-Dichlorobenzidine	20.090	252	1858953	41.22	ug/mL	99
73)	bis(2-Ethylhexyl) phth...	20.084	149	1409611	12.02	ug/mL	100
74)	Benzo(a)anthracene	20.165	228	1760333	10.70	ug/mL	100
75)	Chrysene	20.224	228	1742265	11.25	ug/mL	99
77)	Di-n-octyl phthalate	21.085	149	2128168	10.86	ug/mL	99
78)	Benzo(b)fluoranthene	21.853	252	1580306	10.66	ug/mL	99
79)	Benzo(k)fluoranthene	21.893	252	1653272	11.20	ug/mL	100
80)	Benzo(a)pyrene	22.400	252	1254301	9.36	ug/mL	99
81)	Indeno(1,2,3-cd)pyrene	24.581	276	1210220	9.66	ug/mL	99
82)	Dibenz(a,h)anthracene	24.581	278	1030803	10.29	ug/mL	100
83)	Benzo(g,h,i)perylene	25.204	276	1061854	9.80	ug/mL	99

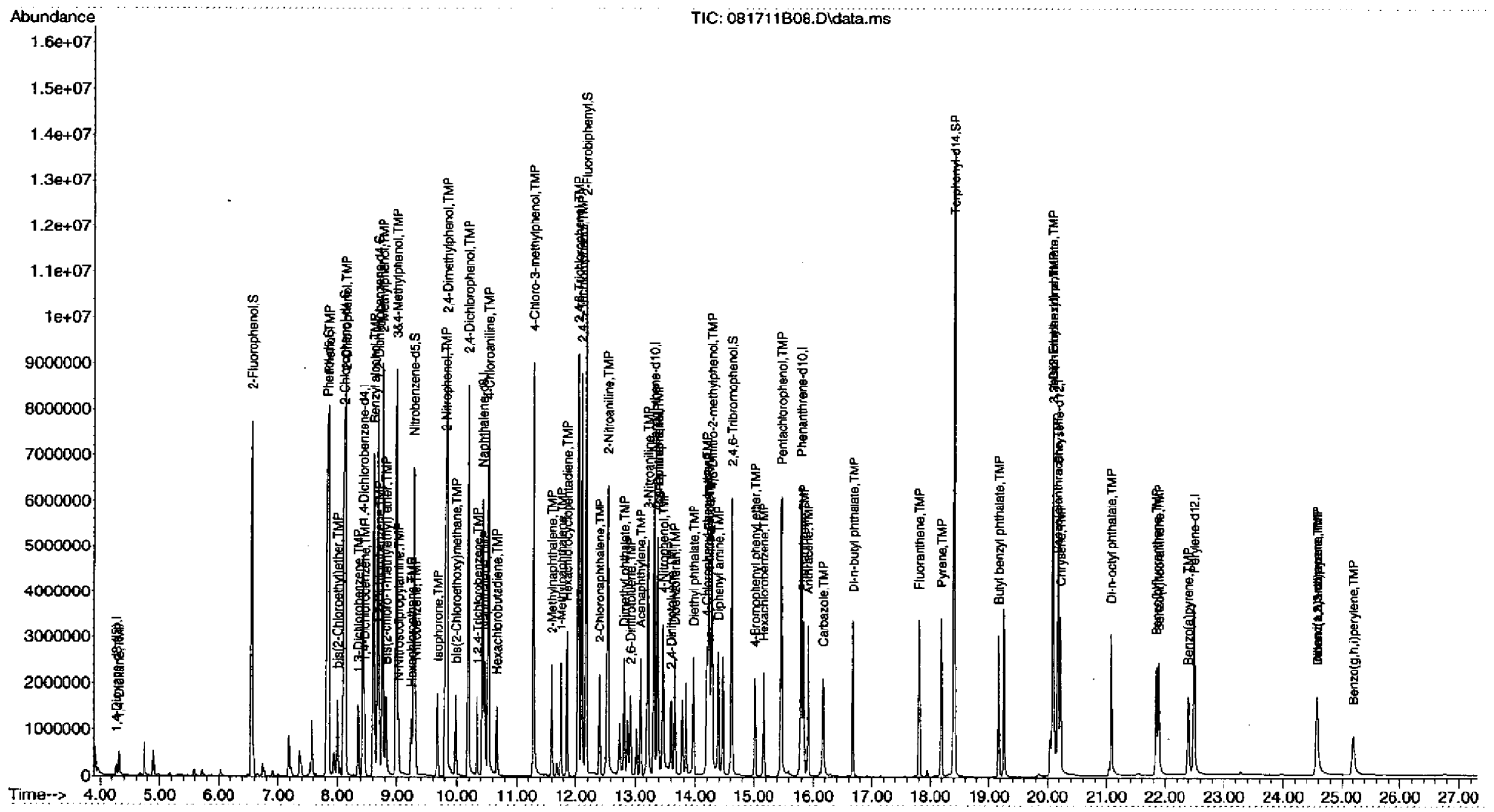
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\2011\DATA\081711\
Data File : 081711B08.D
Acq On : 17 Aug 2011 4:52 pm
Sample : BIH0017-BS1
Misc : SOLVENT CHECK LN:444
DataAcq Meth:081711BB.M

Operator: rh
Inst : AG5975B
Multiplr: 1.00

Quant Time: Aug 29 10:32:11 2011
Quant Method : D:\MSDCHEM\2011\METHODS\081711BB.M
Quant Title : CLP BNA Calibration
QLast Update : Mon Jul 25 08:15:58 2011
Response via : Initial Calibration



081711BB.M Mon Aug 29 10:32:13 2011

Page: 3

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\2011\DATA\081711\
Data File : 081711B07.D
Acq On : 17 Aug 2011 4:19 pm
Sample : BIH0017-BLK1
Misc : SOLVENT CHECK LN:444
DataAcq Meth:081711BB.M

Operator: rh
Inst : AG5975B
Multiplr: 1.00

Quant Time: Aug 29 10:32:01 2011
Quant Method : D:\MSDCHEM\2011\METHODS\081711BB.M
Quant Title : CLP BNA Calibration
QLast Update : Mon Jul 25 08:15:58 2011
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dioxane-d8 (IS)	4.271	64	88980	5.00	ug/mL	0.00
3) 1,4-Dichlorobenzene-d4	8.442	152	1198339	20.00	ug/mL	-0.01
21) Naphthalene-d8	10.444	136	4011500	20.00	ug/mL	0.00
36) Acenaphthene-d10	13.324	164	2215363	20.00	ug/mL	-0.01
57) Phenanthrene-d10	15.796	188	3526283	20.00	ug/mL	0.00
68) Chrysene-d12	20.183	240	3105258	20.00	ug/mL	-0.01
76) Perylene-d12	22.499	264	2632376	20.00	ug/mL	0.00
System Monitoring Compounds						
4) 1,4-Dioxane-d8	4.271	64	88980	3.85	ug/mL	0.00
Spiked Amount 5.000	Range 20 - 185		Recovery = 77.00%			
5) 2-Fluorophenol	6.551	112	3086421	43.39	ug/mL	0.00
Spiked Amount 50.000	Range 27 - 115		Recovery = 86.78%			
6) Phenol-d5	7.831	99	3678250	42.39	ug/mL	0.00
Spiked Amount 50.000	Range 20 - 129		Recovery = 84.78%			
9) 2-Chlorophenol-d4	8.105	132	3042838	43.69	ug/mL	0.00
Spiked Amount 50.000	Range 25 - 120		Recovery = 87.38%			
14) 1,2-Dichlorobenzene-d4	8.687	152	1525563	30.24	ug/mL	-0.01
Spiked Amount 50.000	Range 20 - 123		Recovery = 60.48%			
22) Nitrobenzene-d5	9.280	82	3184382	38.75	ug/mL	0.00
Spiked Amount 50.000	Range 20 - 144		Recovery = 77.50%			
40) 2-Fluorobiphenyl	12.183	172	5207935	36.34	ug/mL	0.00
Spiked Amount 50.000	Range 26 - 127		Recovery = 72.68%			
56) 2,4,6-Tribromophenol	14.627	330	715514	39.46	ug/mL	-0.01
Spiked Amount 50.000	Range 20 - 159		Recovery = 78.92%			
70) Terphenyl-d14	18.414	244	6410784	50.52	ug/mL	0.00
Spiked Amount 50.000	Range 21 - 158		Recovery = 101.04%			
Target Compounds						Qvalue
66) Di-n-butyl phthalate	16.681	149	80814	0.40	ug/mL	99

L 1/2 gl

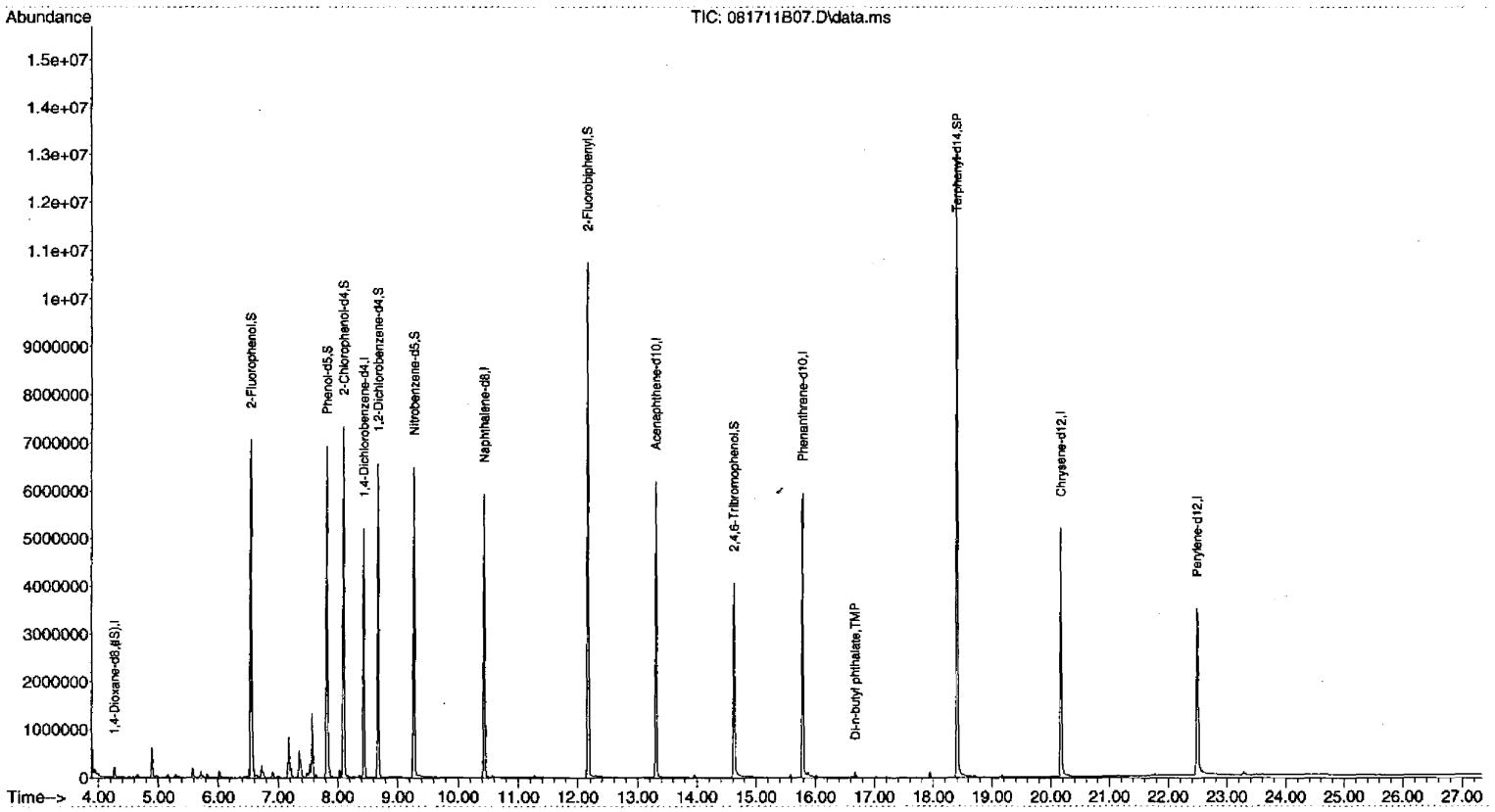
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\2011\DATA\081711\
Data File : 081711B07.D
Acq On : 17 Aug 2011 4:19 pm
Sample : BIH0017-BLK1
Misc : SOLVENT CHECK LN:444
DataAcq Meth:081711BB.M

Operator: rh
Inst : AG5975B
Multiplr: 1.00

Quant Time: Aug 29 10:32:01 2011
Quant Method : D:\MSDCHEM\2011\METHODS\081711BB.M
Quant Title : CLP BNA Calibration
QLast Update : Mon Jul 25 08:15:58 2011
Response via : Initial Calibration



00631

081711BB.M Mon Aug 29 10:32:04 2011 Page: 2

LSC Area Percent Report

Data Path : D:\MSDCHEM\2011\DATA\081711\
Data File : 081711B07.D
Acq On : 17 Aug 2011 4:19 pm
Operator : rh
Sample : BIH0017-BLK1
Misc : SOLVENT CHECK LN:444
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : D:\MSDCHEM\2011\METHODS\081711BB.M
Title : CLP BNA Calibration

Signal : TIC: 081711B07.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.271	61	66	73	rBV	216425	312526	1.45%	0.207%
2	4.899	169	174	182	rBV	604930	902599	4.18%	0.597%
3	5.586	283	292	297	rBV	192051	276608	1.28%	0.183%
4	6.551	451	458	469	rBV	7059800	10715988	49.66%	7.082%
5	6.732	484	489	492	rBV	242106	339512	1.57%	0.224%
6	7.186	561	567	571	rBV	835548	1209037	5.60%	0.799%
7	7.221	571	573	582	rVB	196327	257194	1.19%	0.170%
8	7.360	592	597	612	rVB3	541326	1234300	5.72%	0.816%
9	7.546	624	629	632	rVV	277287	450569	2.09%	0.298%
10	7.587	632	636	643	rVB	1320104	1846866	8.56%	1.221%
11	7.831	665	678	692	rBV	6945957	10514249	48.72%	6.949%
12	8.105	718	725	734	rBV	7318635	11035099	51.14%	7.293%
13	8.442	776	783	801	rVB	5203270	7186366	33.30%	4.749%
14	8.687	818	825	836	rBV	6565648	9350853	43.33%	6.180%
15	9.280	919	927	939	rBV	6497178	9812816	45.47%	6.485%
16	10.444	1119	1127	1139	rBV	5931050	8597724	39.84%	5.682%
17	12.183	1417	1426	1442	rBV	10756748	15322813	71.00%	10.127%
18	13.324	1614	1622	1643	rBV	6192323	9183046	42.55%	6.069%
19	14.627	1839	1846	1875	rBV	4063705	6429215	29.79%	4.249%
20	15.796	2038	2047	2058	rBV	5937936	9008075	41.74%	5.953%
21	15.883	2059	2062	2082	rVB	82871	223807	1.04%	0.148%
22	18.414	2487	2497	2512	rBV2	13077992	21580233	100.00%	14.262%
23	20.183	2792	2801	2830	rBV	5196202	8367225	38.77%	5.530%
24	22.499	3190	3199	3230	rBV	3469194	7154177	33.15%	4.728%

Sum of corrected areas: 151310897

No reportable TICS.

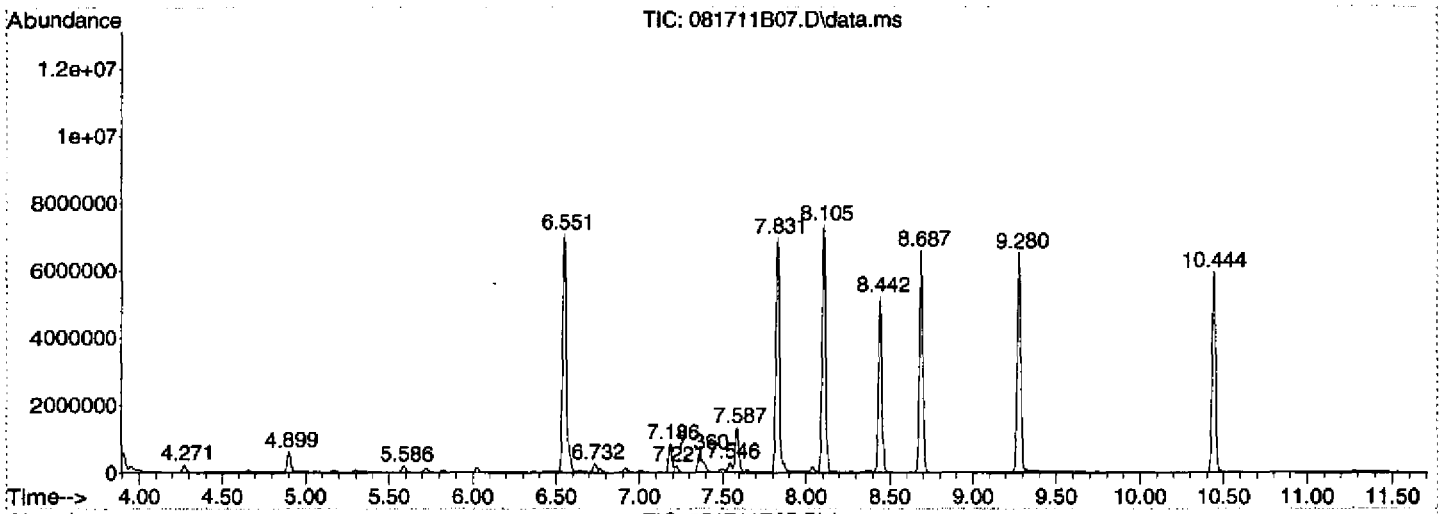
RW
2/1/12

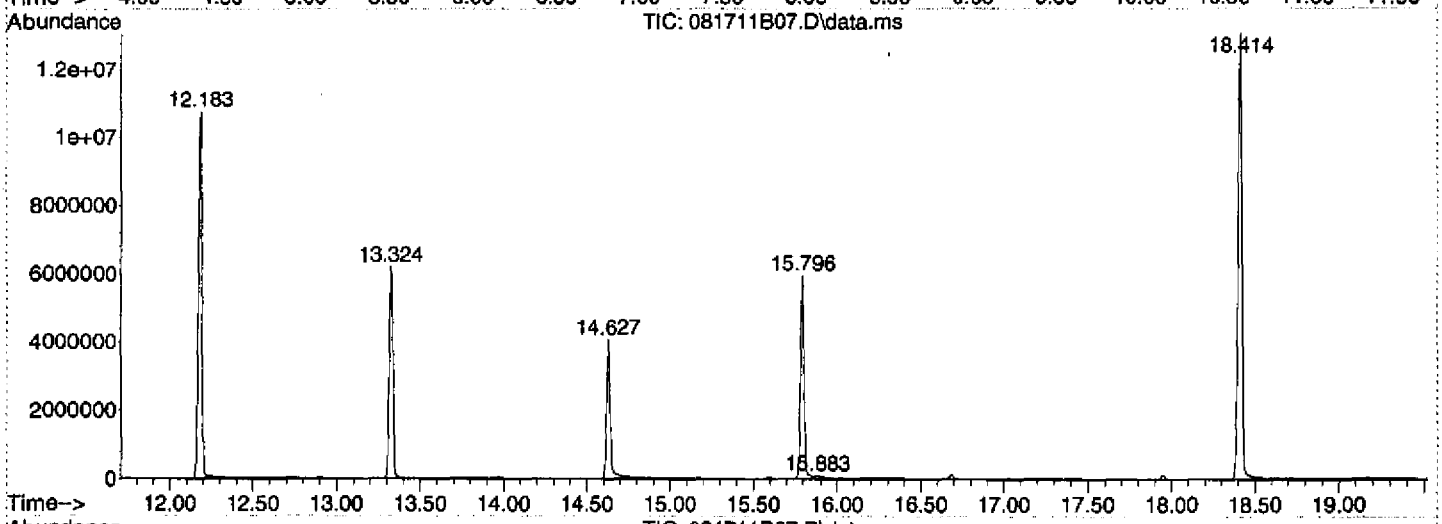
LSC Report - Integrated Chromatogram

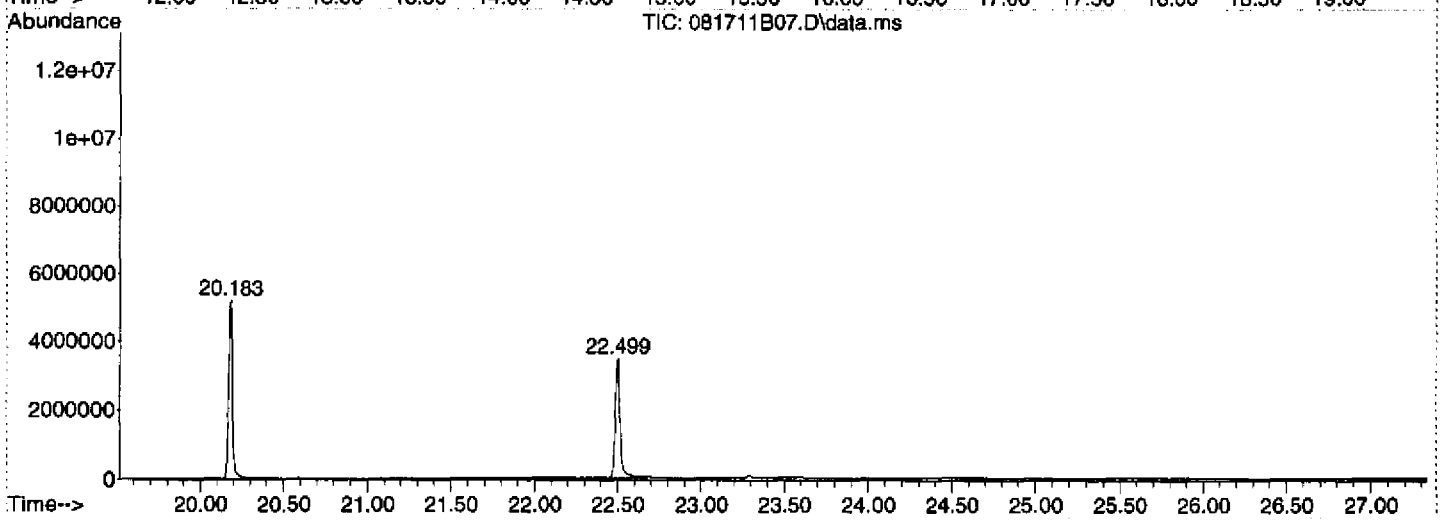
Data Path : D:\MSDCHEM\2011\DATA\081711\
Data File : 081711B07.D
Acq On : 17 Aug 2011 4:19 pm
Operator : rh
Sample : BIH0017-BLK1
Misc : SOLVENT CHECK LN:444
ALS Vial : 11 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\2011\METHODS\081711BB.M
Quant Title : CLP BNA Calibration

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P







Data Path : D:\MSDCHEM\2011\DATA\081711\
Data File : 081711B07.D
Acq On : 17 Aug 2011 4:19 pm
Operator : rh
Sample : BIH0017-BLK1
Misc : SOLVENT CHECK LN:444
ALS Vial : 11 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\2011\METHODS\081711BB.M
Quant Title : CLP BNA Calibration

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P

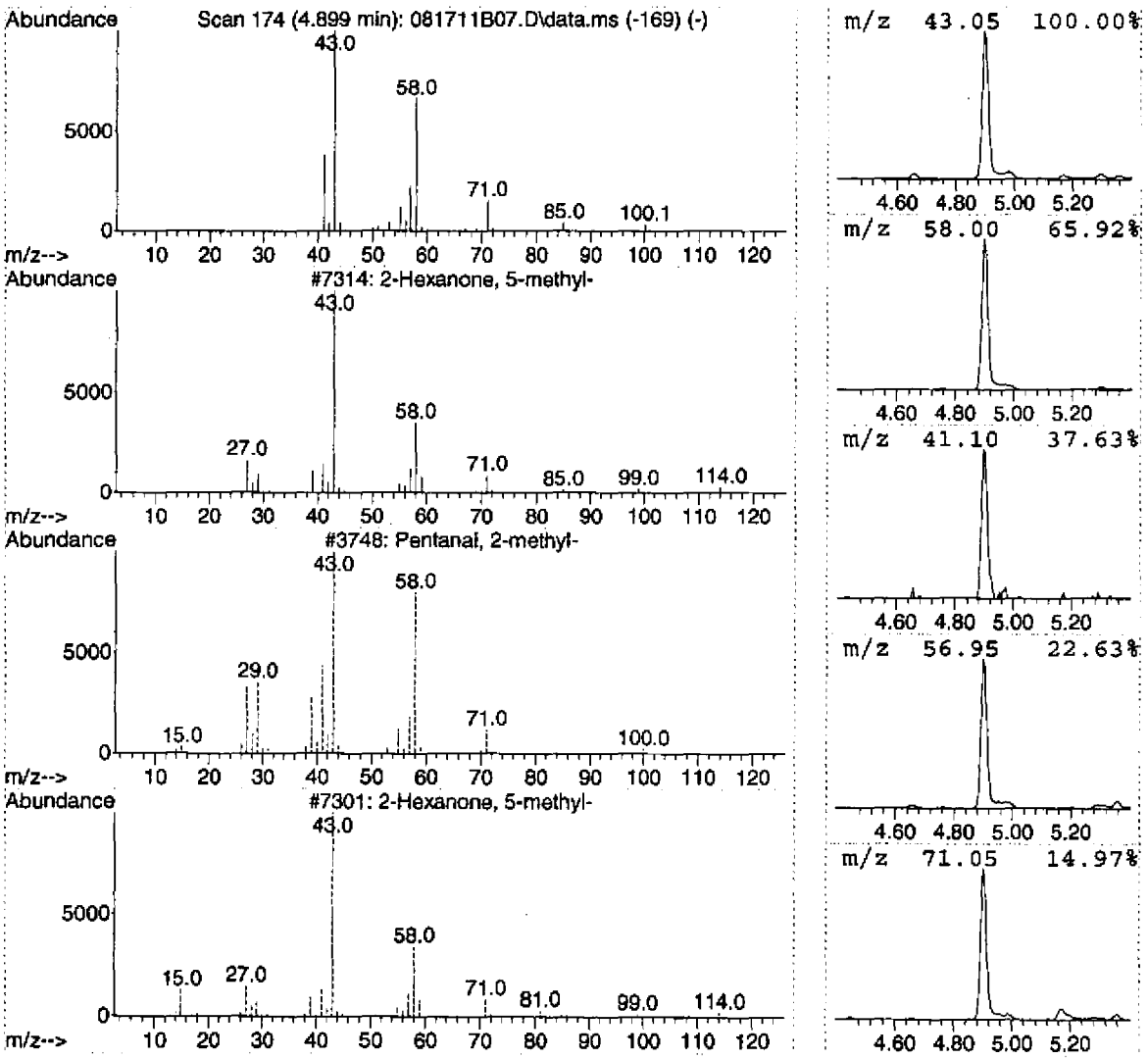
****
Peak Number 1 2-Hexanone, 5-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.899	14.44 ug/mL	902599	1,4-Dioxane-d8 (IS)	4.271

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Hexanone, 5-methyl-	114	C7H14O	000110-12-3	74
2	Pentanal, 2-methyl-	100	C6H12O	000123-15-9	74
3	2-Hexanone, 5-methyl-	114	C7H14O	000110-12-3	56
4	Oxirane, 2-methyl-2-(1-methyleth...	100	C6H12O	072221-03-5	40
5	Pentanal, 2,4-dimethyl-	114	C7H14O	027944-79-2	39

Conc. to low

Aldol



Data Path : D:\MSDCHEM\2011\DATA\081711\
Data File : 081711B07.D
Acq On : 17 Aug 2011 4:19 pm
Operator : rh
Sample : BIH0017-BLK1
Misc : SOLVENT CHECK LN:444
ALS Vial : 11 Sample Multiplier: 1

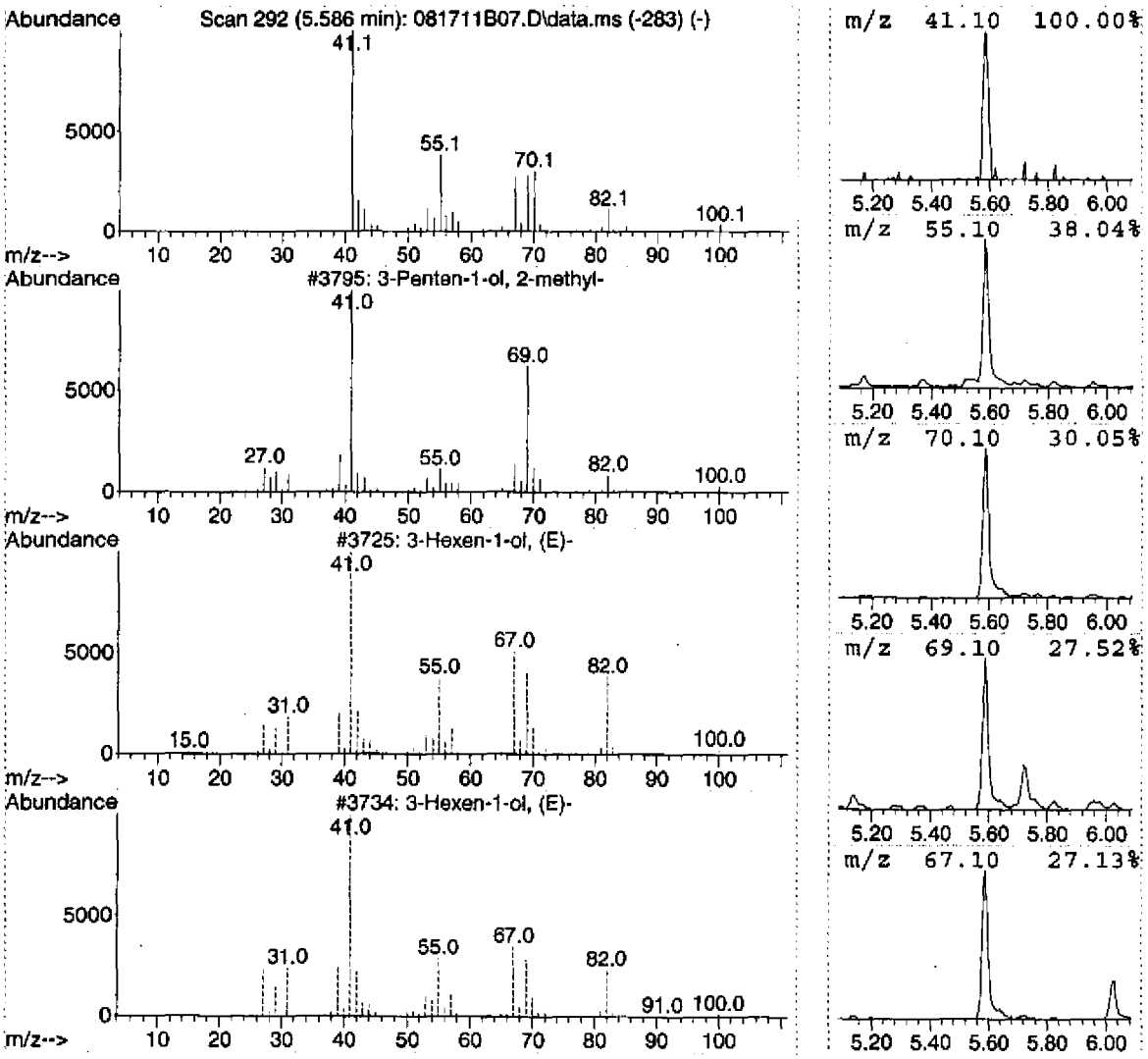
Quant Method : D:\MSDCHEM\2011\METHODS\081711BB.M
Quant Title : CLP BNA Calibration

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 3-Penten-1-ol, 2-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.586	4.43 ug/mL	276608	1,4-Dioxane-d8 (IS)	4.271

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Penten-1-ol, 2-methyl-	100	C6H12O	062238-37-3	59
2	3-Hexen-1-ol, (E)-	100	C6H12O	000928-97-2	47
3	3-Hexen-1-ol, (E)-	100	C6H12O	000928-97-2	40
4	1-Pentene, 3-ethyl-	98	C7H14	004038-04-4	28
5	3-Hexen-1-ol	100	C6H12O	000544-12-7	25



9 Quant. to 10 V.

Data Path : D:\MSDCHEM\2011\DATA\081711\
Data File : 081711B07.D
Acq On : 17 Aug 2011 4:19 pm
Operator : rh
Sample : BIH0017-BLK1
Misc : SOLVENT CHECK LN:444
ALS Vial : 11 Sample Multiplier: 1

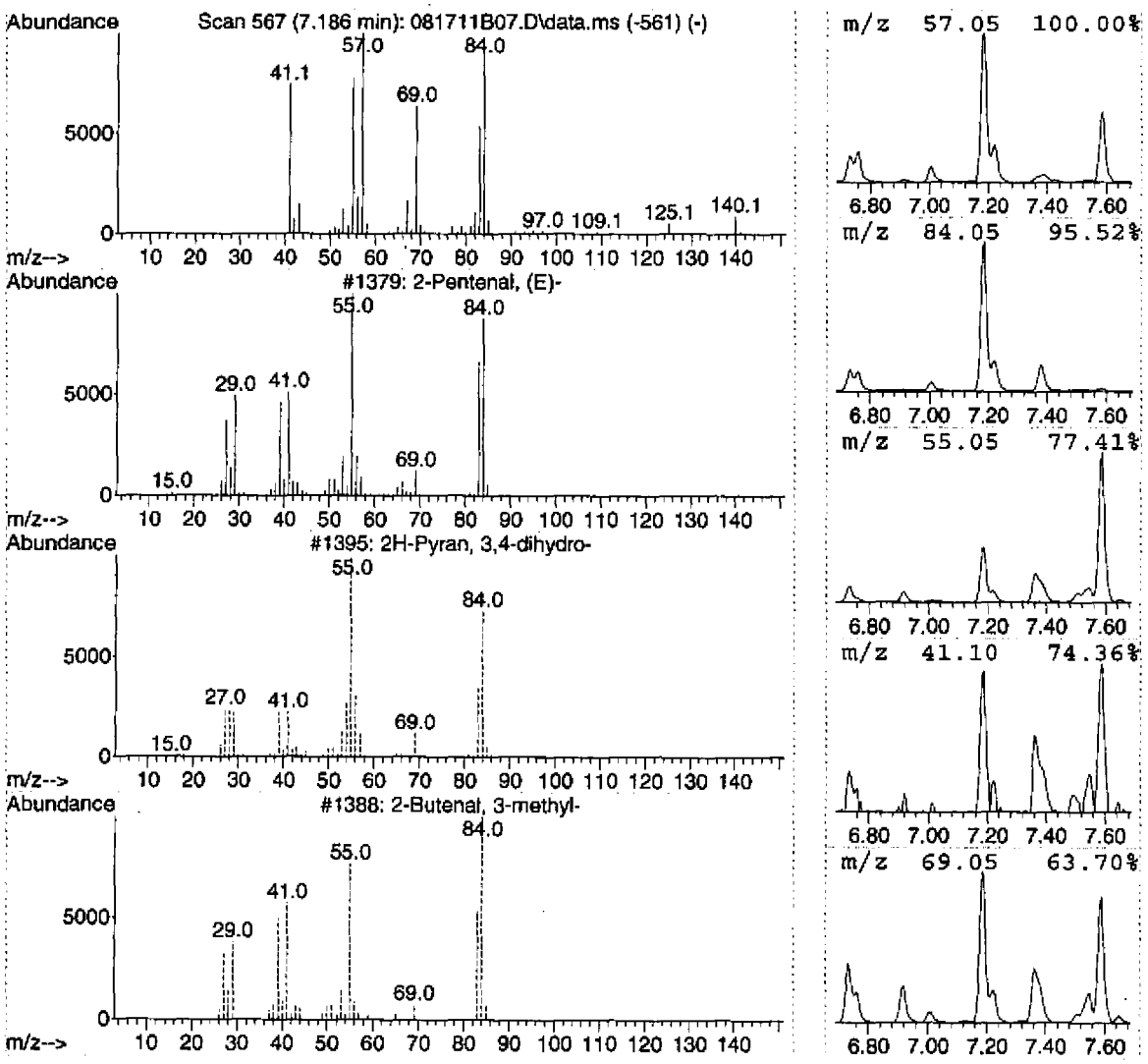
Quant Method : D:\MSDCHEM\2011\METHODS\081711BB.M
Quant Title : CLP BNA Calibration

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 3 2-Pentenal, (E)- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.186	3.36 ug/mL	1209040	1,4-Dichlorobenzene-d4	8.442

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentenal, (E)-	84	C5H8O	001576-87-0	64
2	2H-Pyran, 3,4-dihydro-	84	C5H8O	000110-87-2	59
3	2-Butenal, 3-methyl-	84	C5H8O	000107-86-8	58
4	Cyclopentane, 1,2,3,4,5-pentamet...	140	C10H20	1000152-79-7	53
5	1H-Imidazole, 4,5-dihydro-2-methyl-	84	C4H8N2	000534-26-9	50



quant. to low.

Library Search Compound Report

Data Path : D:\MSDCHEM\2011\DATA\081711\
Data File : 081711B07.D
Acq On : 17 Aug 2011 4:19 pm
Operator : rh
Sample : BIH0017-BLK1
Misc : SOLVENT CHECK LN:444
ALS Vial : 11 Sample Multiplier: 1

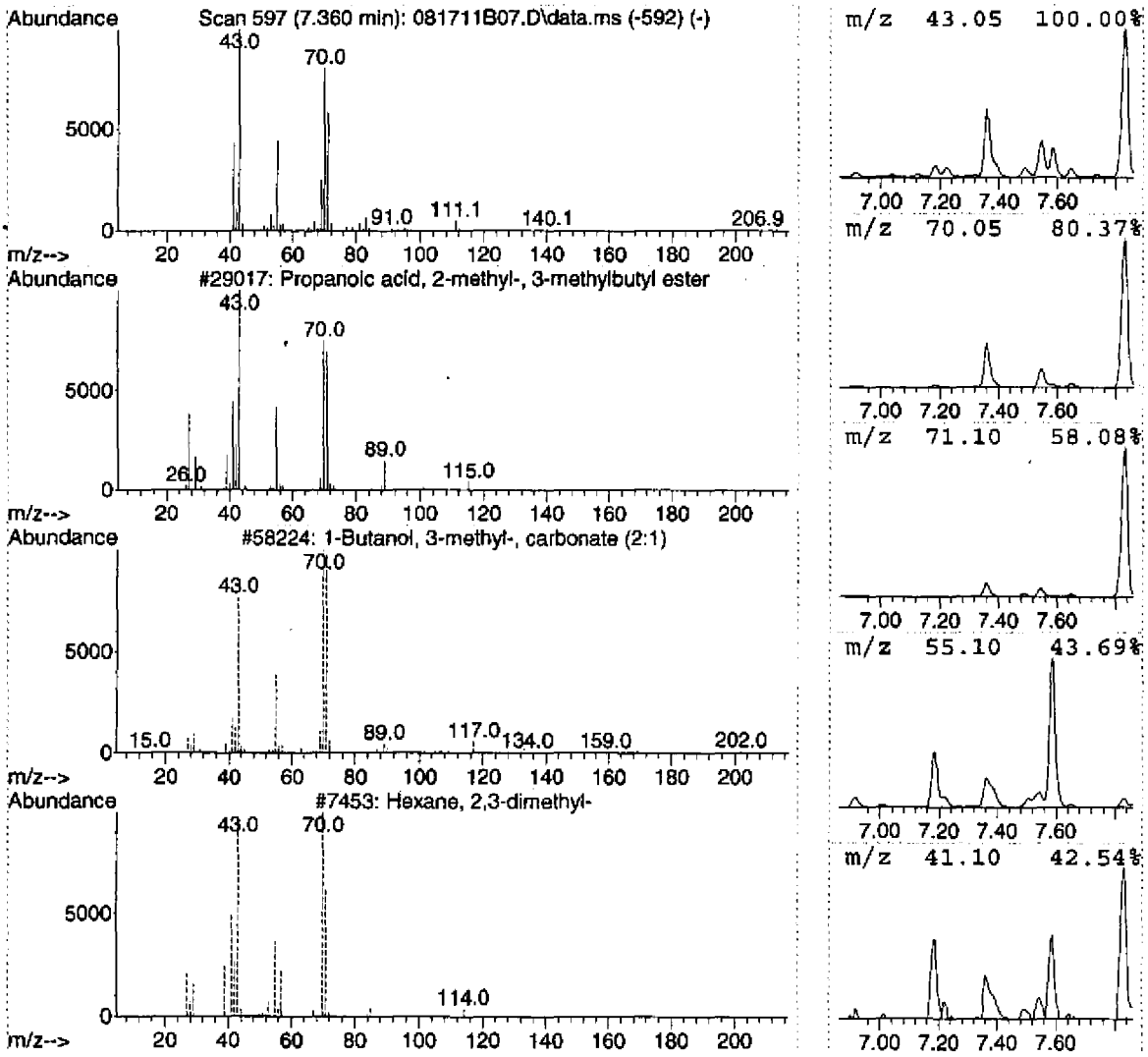
Quant Method : D:\MSDCHEM\2011\METHODS\081711BB.M
Quant Title : CLP BNA Calibration

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 4 Propanoic acid, 2-methyl-, ... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.360	3.44 ug/mL	1234300	1,4-Dichlorobenzene-d4	8.442

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanoic acid, 2-methyl-, 3-met...	158	C9H18O2	002050-01-3	72
2	1-Butanol, 3-methyl-, carbonate ...	202	C11H22O3	002050-95-5	56
3	Hexane, 2,3-dimethyl-	114	C8H18	000584-94-1	56
4	3,4-Diethyl hexane	142	C10H22	019398-77-7	56
5	2-Nonene, 3-methyl-, (E)-	140	C10H20	017003-99-5	53



quant. to low.

Data Path : D:\MSDCHEM\2011\DATA\081711\
Data File : 081711B07.D
Acq On : 17 Aug 2011 4:19 pm
Operator : rh
Sample : BIH0017-BLK1
Misc : SOLVENT CHECK LN:444
ALS Vial : 11 Sample Multiplier: 1

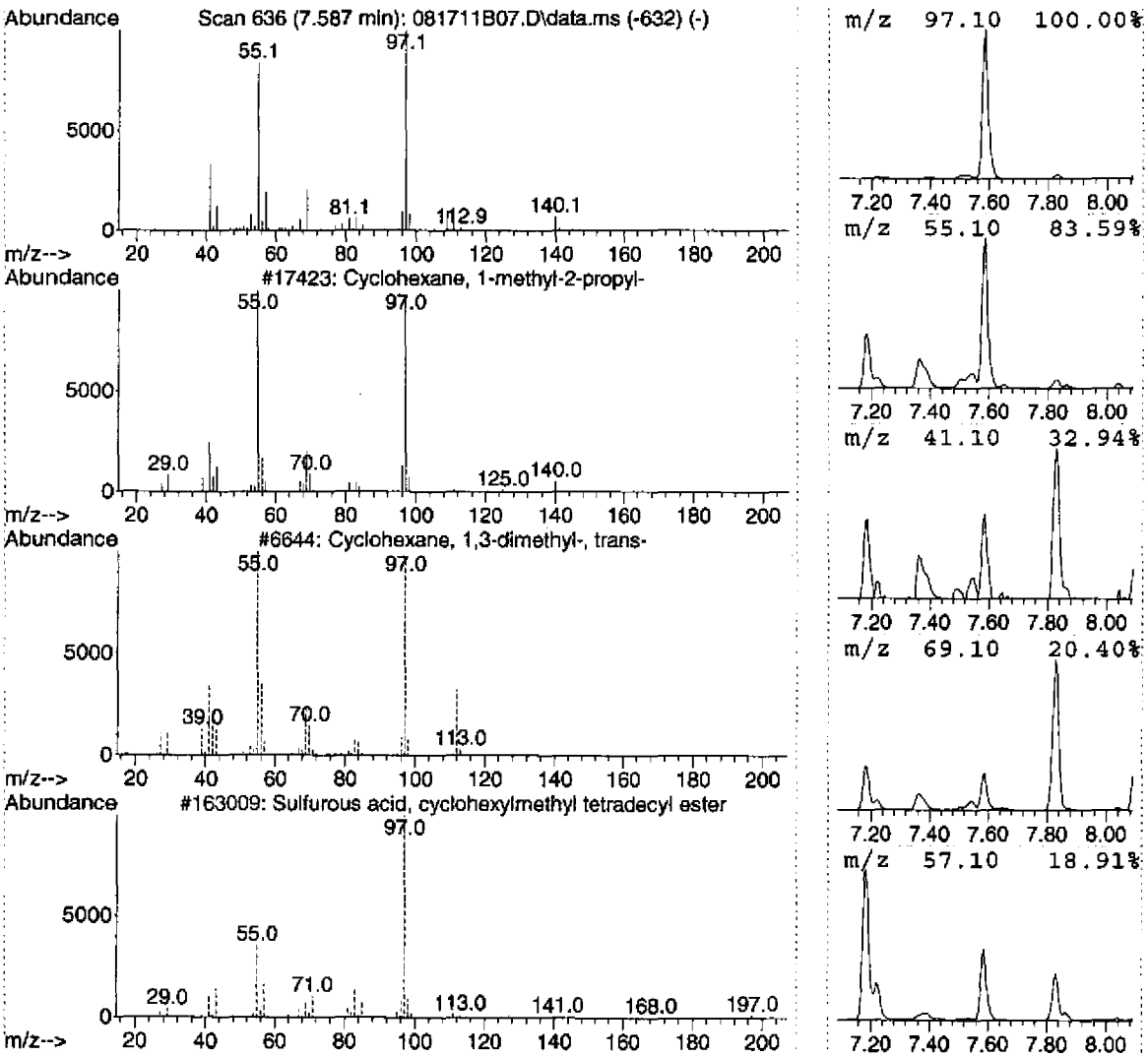
Quant Method : D:\MSDCHEM\2011\METHODS\081711BB.M
Quant Title : CLP BNA Calibration

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 Cyclohexane, 1-methyl-2-pro... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.587	5.14 ug/mL	1846870	1,4-Dichlorobenzene-d4	8.442

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	72
2	Cyclohexane, 1,3-dimethyl-, trans-	112	C8H16	002207-03-6	64
3	Sulfurous acid, cyclohexylmethyl...	374	C21H42O3S	1000309-22-2	64
4	Cyclohexane, 1,3-dimethyl-, trans-	112	C8H16	002207-03-6	64
5	Cyclohexane, 1,3-dimethyl-, trans-	112	C8H16	002207-03-6	64



Solvent

Tentatively Identified Compound (LSC) summary

Data Path : D:\MSDCHEM\2011\DATA\081711\
Data File : 081711B07.D
Acq On : 17 Aug 2011 4:19 pm
Operator : rh
Sample : BIH0017-BLK1
Misc : SOLVENT CHECK LN:444
ALS Vial : 11 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\2011\METHODS\081711BB.M
Quant Title : CLP BNA Calibration

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
2-Hexanone, 5-m...	4.899	2.5	ug/mL	902599	2	8.442	7186370	20.0
3-Penten-1-ol, ...	5.586	0.8	ug/mL	276608	2	8.442	7186370	20.0
2-Pentenal, (E)-	7.186	3.4	ug/mL	1209040	2	8.442	7186370	20.0
Propanoic acid,...	7.360	3.4	ug/mL	1234300	2	8.442	7186370	20.0
Cyclohexane, 1-...	7.587	5.1	ug/mL	1846870	2	8.442	7186370	20.0

081711BB.M Wed Feb 01 12:59:48 2012

00645

Standard Records

00415

DIM0275879 DIM0276320

Analytical Standard Record

EPA Region 9 Laboratory

0C16026

Description:	GAS:Unleaded Gasoline Composite S	**Expires:**	04/30/16
Standard Type:	Analyte Spike	**Prepared:**	03/16/10
Solvent:	Solvent Lot # MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	03/16/10 13:06 by YNB
Vendor:	Restek	**Lot Numb**	A066488

Cat # 30205, Lot # A066488; bar code AU002205

Analyte	CAS Number	Concentration (ppm)
TPH as Gasoline	8006-61-9	50000

Certificate of Analysis

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

Catalog No. : 30205 **Lot No.:** A066488
Description : Unleaded Gasoline Composite Standard
Expiration Date[1]: April 2016 **Storage:** Freezer

Elution Order	Compound	CAS #	Percent Purity 2	Concentration 3 (weight/volume)	% Uncertainty 4 (95% C.L.; K=2)
1	Unleaded Gasoline Composite	8006-61-9	----%	50,000.000 ug/ml	+/-0.64 %
Solvent:	P&T Methanol	67-56-1	99%		

Column:
105m x .53mm x 3.0um
Rtx-502.2 (cat.#10910)

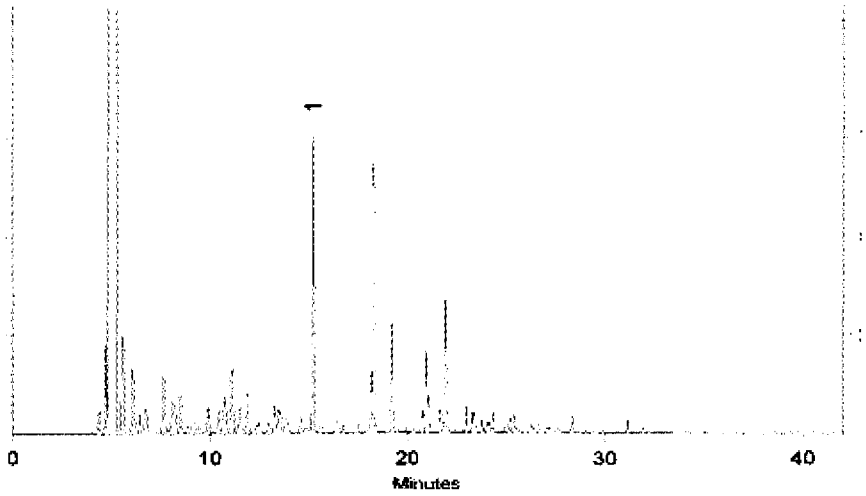
Carrier Gas:
hydrogen @ 40 cm/sec.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



John Lidgett
John Lidgett - QA Analyst **Date Passed:** 03/26/2009 **Balance:** 1121472889

Manufactured under Restek's ISO 9001-2000 Registered Quality System Certificate #FMB0397

1 Expiration date of the unopened ampule stored at recommended temperature.
2A Purity was determined by one or more of the following techniques: GC/FID, HPLC, GC/ECD, GC/MS. Value rounded to the nearest whole number. In addition to detectors listed above, chemical identity and purity are confirmed using one or more of the following: MS, DSC, solid probe MS, GC/FPD, GC/NPD, GC/TC, FTIR, melting point, refractive index, and Karl Fisher. See data pack or contact Restek for further details.
2B Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities.
2C Compounds with a listed purity of less than 99% may be salts, derivatives, or hydrates. The listed purity is actually a correction factor that was used to calculate the amount of compound necessary to acheive the desired concentration of the parent compound.
3 Based upon gravimetric preparation with balance calibration verified using NIST traceable weights (seven mass levels).
4 Uncertainties determined using repeatability and reproducibility data for balances and glassware from measurement systems analysis methodology, balance and glassware tolerances, raw material purity, and, where applicable, eccentricity and linearity values from an accredited calibration laboratory.

Analytical Standard Record

EPA Region 9 Laboratory

0F23019

Description:	DRO:Florida TRPH Standard, Stock	**Expires:**	05/31/16
Standard Type:	Other Solution	**Prepared:**	06/23/10
Solvent:	hexane	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	06/23/10 10:40 by YNB
Vendor:	Restek	**Lot Numbe**	A067369

Restek 31266, Lot# A067369 in hexane, bar code #AU002553

Analyte	CAS Number	Concentration (ppm)
Tetradecane (C14)	629-59-4	500
Tetracosane	000646-31-1	500
Octane (C8)	111-65-9	500
Octadecane	000593-45-3	500
Octacosane	000630-02-4	500
Hexadecane (C16)	544-76-3	500
Hexacosane	630-01-3	500
Eicosane (C20)	112-95-8	500
Dodecane	000112-40-3	500
Docosane	000629-97-0	500
Decane	000124-18-5	500

Certificate of Analysis

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

Catalog No. : 31266 **Lot No.:** A067369
Description : Florida TRPH Standard
Expiration Date[1]: May 2016 **Storage:** Room Temperature
Handling: Warm & Sonicate prior to use

Elution Order	Compound	CAS #	Percent Purity [2]	Concentration [3] (weight/volume)	% Uncertainty [4] (95% C.L.: K=2)
1	n-Octane (C8)	111-65-9	99%	500.000 ug/ml	+/-0.63 %
2	n-Decane (C10)	124-18-5	99%	500.300 ug/ml	+/-0.63 %
3	n-Dodecane (C12)	112-40-3	99%	500.200 ug/ml	+/-0.63 %
4	n-Tetradecane (C14)	629-59-4	99%	500.500 ug/ml	+/-0.63 %
5	n-Hexadecane (C16)	544-76-3	98%	500.780 ug/ml	+/-0.63 %
6	n-Octadecane (C18)	593-45-3	97%	500.035 ug/ml	+/-0.63 %
7	n-Eicosane (C20)	112-95-8	99%	500.000 ug/ml	+/-0.63 %
8	n-Docosane (C22)	629-97-0	99%	500.000 ug/ml	+/-0.63 %
9	n-Tetracosane (C24)	646-31-1	99%	500.000 ug/ml	+/-0.63 %
10	n-Hexacosane (C26)	630-01-3	99%	500.800 ug/ml	+/-0.63 %
11	n-Octacosane (C28)	630-02-4	99%	500.100 ug/ml	+/-0.63 %
12	n-Triacontane (C30)	638-68-6	99%	500.700 ug/ml	+/-0.63 %
13	n-Dotriacontane (C32)	544-85-4	99%	500.600 ug/ml	+/-0.63 %
14	n-Tetratriacontane (C34)	14167-59-0	99%	500.300 ug/ml	+/-0.63 %
15	n-Hexatriacontane (C36)	630-06-8	99%	500.000 ug/ml	+/-0.63 %
16	n-Octatriacontane (C38)	7194-85-6	99%	500.000 ug/ml	+/-0.63 %
17	n-Tetracontane (C40)	4181-95-7	99%	500.100 ug/ml	+/-0.63 %
Solvent:	Hexane	110-54-3	99%		

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

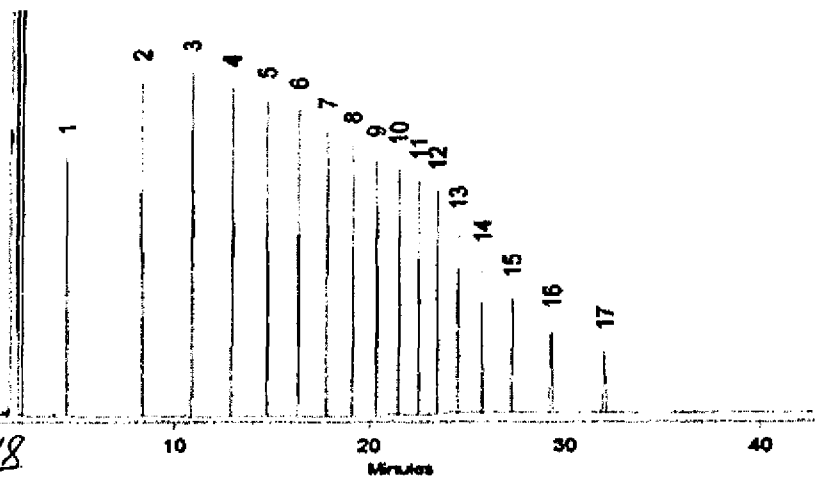
Carrier Gas:
hydrogen @ 40cm/sec.

Temp. Program:
40°C (hold 4 min.) to 330°C
@ 15°C/min (hold 20 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



411 002552 | CF73018
3 | 19
4 | 20
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09645

Analytical Standard Record

EPA Region 9 Laboratory

1A18025

Description:	DRO:Hydraulic Fluid, Stock	**Expires:**	01/22/14
Standard Type:	Other Solution	**Prepared:**	01/18/11
Solvent:	Solvent Lot # MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/18/11 12:45 by YNB
Vendor:	AccuStandard	**Lot Numbe**	B4010223

Cat.# FU-020D-40X, Lot # B4010223. bar code AU003118 C

Analyte	CAS Number	Concentration (ppm)
Hydraulic Fluid	64742-54-7	20000

09429

DIM0275879

DIM0276325

125 Market Street
New Haven, CT 06513
USA

AccuStandard®, Inc.

Tel (203)786-5290
Fax (203)786-5287
Website AccuStandard.com

CERTIFICATE OF ANALYSIS

CATALOG NO: FU-020-D-40X
DESCRIPTION: Hydraulic Fluid
LOT: B4010223
SOLVENT: Dichloromethane

DATE CERTIFIED: Jan 22, 2004
EXPIRATION: Jan 22, 2014
SAMPLE SIZE: 1 mL
STORAGE CONDITION: Ambient
HAZARDS: POISON

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
Hydraulic Fluid	64742-54-7	Tech	20.00	20.00

AU 003118 A | 1A18023
B | 24
C | 25

Please note:
A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

AccuStandard follows U.S. conventions in reporting numerical values on both certificates and labels:

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

1. All weights are traceable through NIST, Test No.822/254480
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty calculated for this product is ±2% which is the Combined Uncertainty uc(y). It represents an estimated standard deviation equal to the positive square root of the total variance of the uncertainty of components. The Expanded Uncertainty is U which is Uc(y) *K where K is the coverage factor at the 95% confidence level (K=2).

Certified by: R. Cooper
Russ Cooper, QC Manager

For use in routine laboratory analysis.
Alteration of any information contained herein without written permission from AccuStandard strictly prohibited.
AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001

Analytical Standard Record

EPA Region 9 Laboratory

1A18028

Description:	DRO:Turbine (Jet) Fuel, Stock	**Expires:**	06/04/18
Standard Type:	Other Solution	**Prepared:**	01/18/11
Solvent:	Solvent Lot # MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/18/11 12:50 by YNB
Vendor:	AccuStandard	**Lot Numbe**	B8060056

Cat.# FU-006-40X, Lot # B8060059, bar code #AU003117C

Analyte	CAS Number	Concentration (ppm)
Jet Fuel	94114-58-6	20000

125 Market Street
New Haven, CT 06513
USA

AccuStandard, Inc.

Tel (203)786-5290
Fax (203)786-5287
Website AccuStandard.com

CERTIFICATE OF ANALYSIS

CATALOG NO: FU-006-40X
DESCRIPTION: Turbine (Jet) fuel
LOT: B8060056
SOLVENT: Methanol

DATE CERTIFIED: Jun 4, 2008
EXPIRATION: Jun 4, 2018
SAMPLE SIZE: 1 mL
STORAGE CONDITION: Ambient
HAZARDS: POISON

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
Turbine (Jet) fuel	N/A	Tech	20.01	20.01

AU003117 A	1A18026
B	27
C	28

Please note:
A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

AccuStandard follows U.S. conventions in reporting numerical values on both certificates and labels:

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

1. All weights are traceable through NIST, Test No.822/272103-05
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty calculated for this product is ±2% which is the Combined Uncertainty uc(y). It represents an estimated standard deviation equal to the positive square root of the total variance of the uncertainty of components. The Expanded Uncertainty is U which is Uc(y) *K where K is the coverage factor at the 95% confidence level (K=2).

Certified by: R. Cooper
Russ Cooper, QC Manager

For use in routine laboratory analysis.
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AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001

OR-ORG/NO-001
Rev. 7/10

Analytical Standard Record

EPA Region 9 Laboratory

1B16005

Description:	DRO:Turpentine, Stock	**Expires:**	11/21/18
Standard Type:	Other Solution	**Prepared:**	02/16/11
Solvent:	Solvent Lot # MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	02/16/11 12:36 by YNB
Vendor:	AccuStandard	**Lot Numbe**	A9020099

Cat.# HS-004S-40X, Lot # A9020099, bar code AU003356 (2)

Analyte	CAS Number	Concentration (ppm)
Turpentine	8006-64-2	20000

125 Market Street
New Haven, CT 06513
USA

AccuStandard, Inc.

Tel (203)786-5290
Fax (203)786-5287
Website AccuStandard.com

CERTIFICATE OF ANALYSIS

CATALOG NO: HS-004S-40X
DESCRIPTION: Turpentine
LOT: A9020099
SOLVENT: Methanol

DATE CERTIFIED: Nov 21, 2008
EXPIRATION: Nov 21, 2018
SAMPLE SIZE: 1 mL
STORAGE CONDITION: Ambient
HAZARDS: POISON

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
Turpentine	8006-64-2	Tech	20.00	20.00

AU 003356 (1) | 13/6004
(2) | 5

Please note:
A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

AccuStandard follows U.S. conventions in reporting numerical values on both certificates and labels:

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

1. All weights are traceable through NIST, Test No.822/254480
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty calculated for this product is ±2% which is the Combined Uncertainty uc(y). It represents an estimated standard deviation equal to the positive square root of the total variance of the uncertainty of components. The Expanded Uncertainty is U which is Uc(y) *K where K is the coverage factor at the 95% confidence level (K=2).

Certified by: R. Cooper
Russ Cooper, QC Manager

For use in routine laboratory analysis.
Alteration of any information contained herein without written permission from AccuStandard strictly prohibited.

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001

OR-ORG/INO-001
Rev. 7/10

Analytical Standard Record

EPA Region 9 Laboratory

1B18007

Description:	DRO:Composite #2 Diesil Fuel Solution, !	**Expires:**	10/30/13
Standard Type:	Other Solution	**Prepared:**	02/18/11
Solvent:	Solvent DCM	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	02/18/11 09:08 by YNB
Vendor:	Ultra Scientific	**Lot Numbe**	CD-2271A

Ultra Scientific RGO-616 Lot# CD-2271 for QCS

Analyte	CAS Number	Concentration (ppm)
TPH as Diesel	68334-30-5	50000

ULTRA SCIENTIFIC
Analytical Solutions

Certificate of Analysis

Composite #2 Diesel Fuel Solution

Product Number: RGO-616 **Page:** 1 of 1

Lot Number: CD-2271A **Lot Issue Date:** Sep-2010 **Expiration Date:** Oct-2013

This Certified Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
diesel fuel #2 (composite)	068334-30-5	N960035	50135 ± 251 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage: Store at Room Temperature (18-25° C)

A4002868
1B18004
open 02.18.11
JAB

1B18005
6
7
8

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

ACCREDITED

ISO 17025:2005 Accredited A2LA Cert. No. 0851-01

ISO 9001:2008 Registered TUV USA, Inc. Cert. No. 09-1009

250 Smith Street, North Kingstown, RI 02852 USA
401-294-9400 Fax: 295-2330
www.ultrasci.com

William J. Leary
Quality Assurance Manager

00426

Analytical Standard Record

EPA Region 9 Laboratory

1C22011

Description:	OIL:Motor Oil Composite Standard, Stock	**Expires:**	10/31/17
Standard Type:	Other Solution	**Prepared:**	03/22/11
Solvent:	Solvent Lot #	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	03/22/11 11:00 by YNB
Vendor:	Restek	**Lot Numbe**	A076871

Cat.# 31464, Lot # A076871 Bar code#AU003405

Analyte	CAS Number	Concentration (ppm)
TPH as Motor Oil	TPHOIL	50000
TPH - Oil Range Organics	TPH-ORO	50000

RESTEK

Certificate of Analysis

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

Catalog No. : 31464 **Lot No.:** A076871
Description : Motor Oil Composite Standard
Container Size : 2 mL **Pkg Amt:** > 2 mL
Expiration Date : [1] October 2017 **Storage:** Room Temperature

Elution Order	Compound	CAS #	Percent Purity [2]	Grav. Conc. [3] (weight/volume)	% Grav Uncert. [4] (95 % C.I. K=2)
1	Motor Oil Composite	64742-65-0	----%	50,000.000 ug/ml	+/-0.59 %
Solvent:	Methylene Chloride	75-09-2	99%		

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

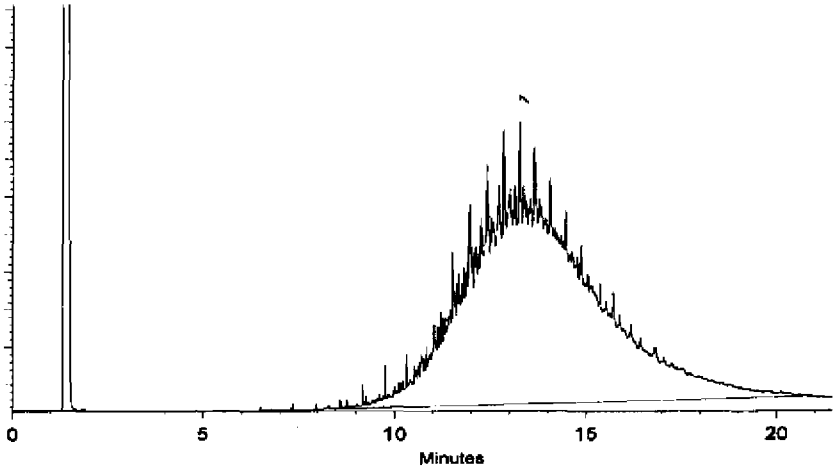
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 5 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Adam Clark - QA Analyst **Date Passed:** 16-Sep-2010 **Balance:** 1128342313

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

1 Expiration date of the unopened ampule stored at the recommended storage condition.
2A Purity is determined by one or more of the following techniques: GC/FID, HPLC, GC/ECD, GC/MS. Value is rounded to the nearest whole number. Chemical identity is confirmed using GC/MS. See data pack or contact provider for further details.
2B Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities.
2C The following types of compounds will have a listed purity of less than 99%: Aldehyde/Ketone-DNPH compounds, Bromides, Chlorides, HCL salts, HBR salts, sulfates, hydrates, and other compounds as necessary. The listed purity is a correction factor that is equivalent to the percentage of parent compound in the molecule. This correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution. The concentration listed on the certificate is the concentration of the parent compound in the solution.
2D Purity of isomeric compounds is reported as the sum of the isomers. Value is rounded to the nearest whole number after summation.
3 Based upon gravimetric preparation with balance calibration verified using NIST traceable weights (seven mass levels) and/or class A glassware used for dilutions.
4 Uncertainties determined using data for balances and glassware from measurement systems analysis methodology, raw material purity, and, when significant, equipment tolerances or calibration results.

AU003401	1C22007
2	8
3	9
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5	11

00655

Analytical Standard Record

EPA Region 9 Laboratory

1C22012

Description:	OIL:Motor Oil Composite Standard, Stock	**Expires:**	12/31/17
Standard Type:	Other Solution	**Prepared:**	03/22/11
Solvent:	Solvent Lot #	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	03/22/11 11:01 by YNB
Vendor:	Restek	**Lot Numbe**	A077845

Cat.# 31464, Lot # A077845 Bar code#AU003447

Analyte	CAS Number	Concentration (ppm)
TPH as Motor Oil	TPHOIL	50000
TPH - Oil Range Organics	TPH-ORO	50000

00429

RESTEK

Certificate of Analysis

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

Catalog No. : 31464 **Lot No.:** A077845

Description : Motor Oil Composite Standard

SV Mix, UST method, Motor Oil Composite, 50,000ug/mL, methylene chloride, 1ml

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : [1] December 2017 **Storage:** 25°C nominal

Elution Order	Compound	CAS #	Percent Purity [2]	Grav. Conc. [3] (weight/volume)	% Grav. Uncert. [4] (95% C.L.; K=2)
1	Motor Oil Composite	64742-65-0	----%	50,000.0 ug/ml	+/-0.59 %
Solvent:	Methylene Chloride	75-09-2	99%		

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

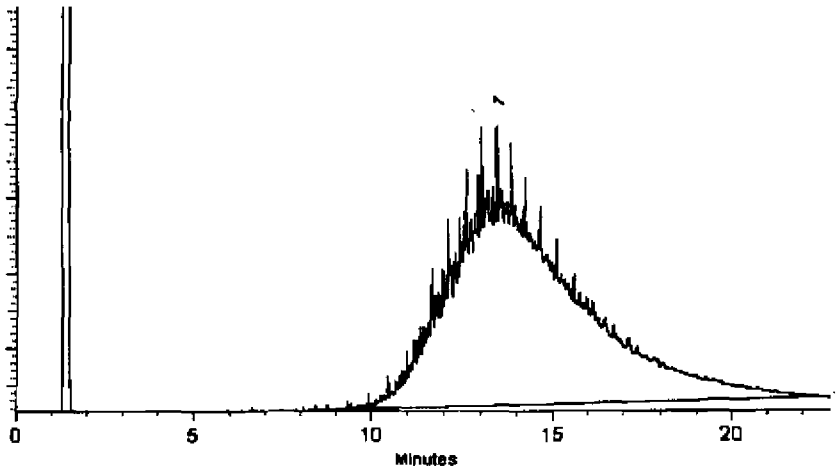
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 5 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Diane Shaffer
Diane Shaffer - QA Analyst

Date Passed: 10-Nov-2010 **Balance:** 1128360905

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

1 Expiration date of the unopened ampule stored at the recommended storage condition.

2A Purity is determined by one or more of the following techniques: GC/FID, HPLC, GC/ECD, GC/MS. Value is rounded to the nearest whole number. Chemical identity is confirmed using GC/MS. See data pack or contact provider for further details.

2B Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities.

2C The following types of compounds will have a listed purity of less than 99%: Aldehyde/Ketone-DNPH compounds, Bromides, Chlorides, HCL salts, HBR salts, sulfates, hydrates, and other compounds as necessary. The listed purity is a correction factor that is equivalent to the percentage of parent compound in the molecule. This correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution. The concentration listed on the certificate is the concentration of the parent compound in the solution.

2D Purity of isomeric compounds is reported as the sum of the isomers. Value is rounded to the nearest whole number after summation.

3 Based upon gravimetric preparation with balance calibration verified using NIST traceable weights (seven mass levels) and/or class A glassware used for dilutions.

4 Uncertainties determined using data for balances and glassware from measurement systems analysis methodology, raw material purity, and, when significant, equipment tolerances or calibration results.

A4003447	1C22012
46	13
48	14
49	15
43	16

RESTEK

Certificate of Analysis

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

Catalog No. : 31464 **Lot No.:** A077845

Description : Motor Oil Composite Standard

SV Mix, UST method, Motor Oil Composite, 50,000ug/mL, methylene chloride, 1ml

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : [1] December 2017 **Storage:** 25°C nominal

Elution Order	Compound	CAS #	Percent Purity [2]	Grav. Conc. [3] (weight/volume)	% Grav Uncert [4] (95% C.L. K=2)
1	Motor Oil Composite	64742-65-0	----%	50,000.0 ug/ml	+/-0.59 %
Solvent:	Methylene Chloride	75-09-2	99%		

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

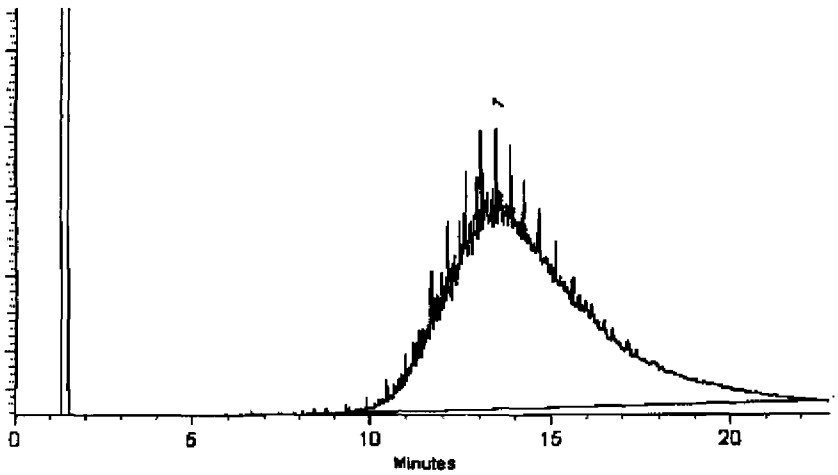
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 5 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Diane Shaffer
Diane Shaffer - QA Analyst

Date Passed: 10-Nov-2010 **Balance:** 1128360905

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

1 Expiration date of the unopened ampule stored at the recommended storage condition.

2A Purity is determined by one or more of the following techniques: GC/FID, HPLC, GC/ECD, GC/MS. Value is rounded to the nearest whole number. Chemical identity is confirmed using GC/MS. See data pack or contact provider for further details.

2B Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities.

2C The following types of compounds will have a listed purity of less than 99%: Aldehyde/Ketone-DNPH compounds, Bromides, Chlorides, HCL salts, HBR salts, sulfates, hydrates, and other compounds as necessary. The listed purity is a correction factor that is equivalent to the percentage of parent compound in the molecule. This correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution. The concentration listed on the certificate is the concentration of the parent compound in the solution.

2D Purity of isomeric compounds is reported as the sum of the isomers. Value is rounded to the nearest whole number after summation.

3 Based upon gravimetric preparation with balance calibration verified using NIST traceable weights (seven mass levels) and/or class A glassware used for dilutions.

4 Uncertainties determined using data for balances and glassware from measurement systems analysis methodology, raw material purity, and, when significant, equipment tolerances or calibration results.

A4003447	1C22012
46	13
45	14
44	15
43	16

Analytical Standard Record

EPA Region 9 Laboratory

1C22013

Description:	OIL:Motor Oil Composite Standard, Stock	**Expires:**	12/31/17
Standard Type:	Other Solution	**Prepared:**	03/22/11
Solvent:	Solvent Lot #	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	03/22/11 11:02 by YNB
Vendor:	Restek	**Lot Numbe**	A077845

Cat.# 31464, Lot # A077845 Bar code#AU003446

Analyte	CAS Number	Concentration (ppm)
TPH as Motor Oil	TPHOIL	50000
TPH - Oil Range Organics	TPH-ORO	50000

Certificate of Analysis

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

Catalog No.: 31258 **Lot No.:** A069478
Description: Diesel Fuel #2 Composite Standard
Expiration Date[1]: September 2016 **Storage:** Room Temperature

Elution Order	Compound	CAS #	Percent Purity 2	Concentration 3 (weight/volume)	% Uncertainty 4 (95% C.L.; K=2)
1	Diesel Fuel #2 Composite	68334-30-5	----%	50,000.000 ug/ml	+/-0.58 %
Solvent:	Methylene Chloride	75-09-2	99%		

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10233)

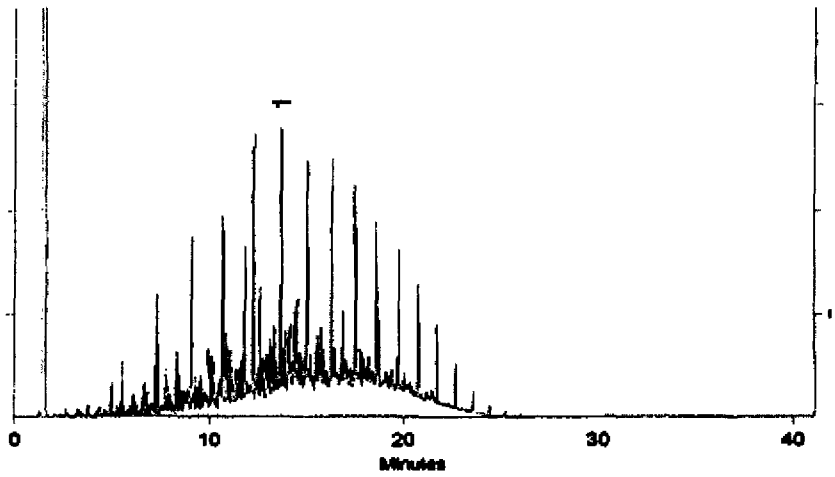
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Sara Eyster QA Analyst **Date Passed:** 08/18/2009 **Balance:** 1128342313

Manufactured under Restek's ISO 9001-2000 Registered Quality System Certificate #FMB0397

1 Expiration date of the unopened ampule stored at recommended temperature.
2A Purity was determined by one or more of the following techniques: GC/FID, HPLC, GC/ECD, GC/MS. Value rounded to the nearest whole number. In addition to detectors listed above, chemical identity and purity are confirmed using one or more of the following: MS, DSC, solid probe MS, GC/FPD, GC/NPD, GC/TC, FTIR, melting point, refractive index, and Karl Fisher. See data pack or contact Restek for further details.
2B Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities.
2C Compounds with a listed purity of less than 99% may be salts, derivatives, or hydrates. The listed purity is actually a correction factor that was used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound.
2D Purity of isomeric compounds is reported as the sum of the isomers. Value is rounded to the nearest whole number after summation.
3 Based upon gravimetric preparation with balance calibration verified using NIST traceable weights (seven mass levels).
4 Uncertainties determined using repeatability and reproducibility data for balances and glassware from measurement systems analysis methodology, balance and glassware tolerances, raw material purity, and, where applicable, eccentricity and linearity values from an accredited calibration laboratory.

AU003406		1C2207
	7	1C2208
	8	19
	9	20
	10	21

Analytical Standard Record

EPA Region 9 Laboratory

1C22019

Description:	DRO:Diesel Fuel #2 Composite Standard	**Expires:**	09/30/16
Standard Type:	Analyte Spike	**Prepared:**	03/22/11
Solvent:	DCM	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	03/22/11 11:15 by YNB
Vendor:	Restek	**Lot Numbe**	A069478

Restek Cat. No. 31258 Lot#: A06947 Bar Code : AU003408

Analyte	CAS Number	Concentration (ppm)
TPH as Diesel	68334-30-5	50000
TPH - Diesel Range Organics	TPH-DRO	50000

Certificate of Analysis

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

Catalog No. : 31258 **Lot No.:** A069478
Description : Diesel Fuel #2 Composite Standard
Expiration Date[1]: September 2016 **Storage:** Room Temperature

Elution Order	Compound	CAS #	Percent Purity 2	Concentration 3 (weight/volume)	% Uncertainty 4 (95% C.L : K=2)
1	Diesel Fuel #2 Composite	68334-30-5	----%	50,000.000 ug/ml	+/-0.58 %
Solvent:	Methylene Chloride	75-09-2	99%		

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10233)

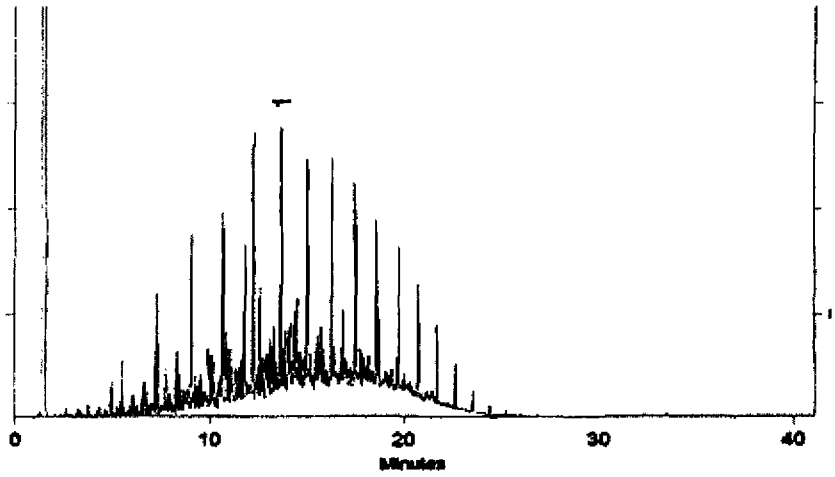
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Sara Eyster
Sara Eyster QA Analyst **Date Passed:** 08/18/2009 **Balance:** 1128342313

Manufactured under Restek's ISO 9001-2000 Registered Quality System Certificate #FMB0397

1 Expiration date of the unopened ampule stored at recommended temperature.
2A Purity was determined by one or more of the following techniques: GC/FID, HPLC, GC/ECD, GC/MS. Value rounded to the nearest whole number. In addition to detectors listed above, chemical identity and purity are confirmed using one or more of the following: MS, DSC, solid probe MS, GC/FPD, GC/NPD, GC/TC, FTIR, melting point, refractive index, and Karl Fisher. See data pack or contact Restek for further details.
2B Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities.
2C Compounds with a listed purity of less than 99% may be salts, derivatives, or hydrates. The listed purity is actually a correction factor that was used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound.
2D Purity of isomeric compounds is reported as the sum of the isomers. Value is rounded to the nearest whole number after summation.
3 Based upon gravimetric preparation with balance calibration verified using NIST traceable weights (seven mass levels).
4 Uncertainties determined using repeatability and reproducibility data for balances and glassware from measurement systems analysis methodology, balance and glassware tolerances, raw material purity, and, where applicable, eccentricity and linearity values from an accredited calibration laboratory.

AU003406	1C22017
7	1C22018
8	19
9	20
10	21

Analytical Standard Record

EPA Region 9 Laboratory

1C22020

Description:	DRO:Diesel Fuel #2 Composite Standard	**Expires:**	09/30/16
Standard Type:	Analyte Spike	**Prepared:**	03/22/11
Solvent:	DCM	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	03/22/11 11:15 by YNB
Vendor:	Restek	**Lot Numbe**	A069478

Restek Cat. No. 31258 Lot#: A06947 Bar Code : AU003409

Analyte	CAS Number	Concentration (ppm)
TPH as Diesel	68334-30-5	50000
TPH - Diesel Range Organics	TPH-DRO	50000

Certificate of Analysis

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

Catalog No. : 31258 **Lot No.**: A069478
Description : Diesel Fuel #2 Composite Standard
Expiration Date[1]: September 2016 **Storage:** Room Temperature

Elution Order	Compound	CAS #	Percent Purity [2]	Concentration [3] (weight/volume)	% Uncertainty [4] (95% C.I. ; K=2)
1	Diesel Fuel #2 Composite	68334-30-5	----%	50,000.000 ug/ml	+/-0.58 %
Solvent:	Methylene Chloride	75-09-2	99%		

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10233)

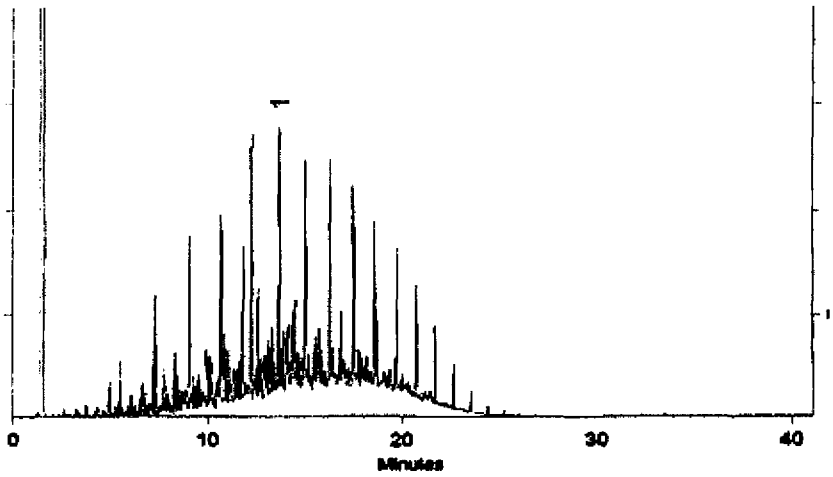
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Sara Eyster
Sara Eyster / QA Analyst **Date Passed:** 08/18/2009 **Balance:** 1128342313

Manufactured under Restek's ISO 9001-2000 Registered Quality System Certificate #FMB0397

1 Expiration date of the unopened ampule stored at recommended temperature.
2A Purity was determined by one or more of the following techniques: GC/FID, HPLC, GC/ECD, GC/MS. Value rounded to the nearest whole number. In addition to detectors listed above, chemical identity and purity are confirmed using one or more of the following: MS, DSC, solid probe MS, GC/FPD, GC/NPD, GC/TC, FTIR, melting point, refractive index, and Karl Fisher. See data pack or contact Restek for further details.
2B Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities.
2C Compounds with a listed purity of less than 99% may be salts, derivatives, or hydrates. The listed purity is actually a correction factor that was used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound.
2D Purity of isomeric compounds is reported as the sum of the isomers. Value is rounded to the nearest whole number after summation.
3 Based upon gravimetric preparation with balance calibration verified using NIST traceable weights (seven mass levels).
4 Uncertainties determined using repeatability and reproducibility data for balances and glassware from measurement systems analysis methodology, balance and glassware tolerances, raw material purity, and, where applicable, eccentricity and linearity values from an accredited calibration laboratory.

AU003406	102017
7	102018
8	19
9	20
10	21

Analytical Standard Record

EPA Region 9 Laboratory

1C22021

Description:	DRO:Diesel Fuel #2 Composite Standard	**Expires:**	09/30/16
Standard Type:	Analyte Spike	**Prepared:**	03/22/11
Solvent:	DCM	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	03/22/11 11:15 by YNB
Vendor:	Restek	**Lot Numbe**	A069478

Restek Cat. No. 31258 Lot#: A06947 Bar Code : AU003410

Analyte	CAS Number	Concentration (ppm)
TPH as Diesel	68334-30-5	50000
TPH - Diesel Range Organics	TPH-DRO	50000

Certificate of Analysis

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

Catalog No.: 31258 **Lot No.:** A069478
Description: Diesel Fuel #2 Composite Standard
Expiration Date[1]**:** September 2016 **Storage:** Room Temperature

Elution Order	Compound	CAS #	Percent Purity [2]	Concentration [3] (weight/volume)	% Uncertainty [4] (95% C.L.: K=2)
1	Diesel Fuel #2 Composite	68334-30-5	----%	50,000.000 ug/ml	+/-0.58 %
Solvent:	Methylene Chloride	75-09-2	99%		

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10233)

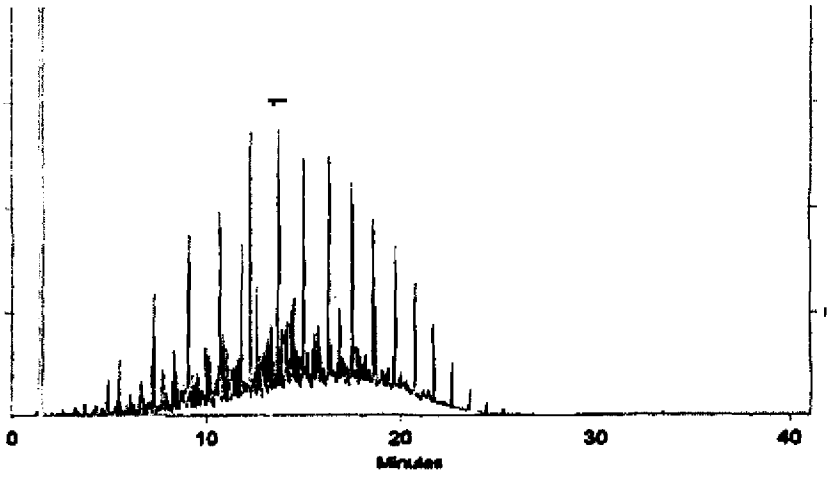
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Sara Eyster QA Analyst **Date Passed:** 08/18/2009 **Balance:** 1128342313

Manufactured under Restek's ISO 9001-2000 Registered Quality System Certificate #FMB0397

1 Expiration date of the unopened ampule stored at recommended temperature.
2A Purity was determined by one or more of the following techniques: GC/FID, HPLC, GC/ECD, GC/MS. Value rounded to the nearest whole number. In addition to detectors listed above, chemical identity and purity are confirmed using one or more of the following: MS, DSC, solid probe MS, GC/FPD, GC/NPD, GC/TC, FTIR, melting point, refractive index, and Karl Fisher. See data pack or contact Restek for further details.
2B Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities.
2C Compounds with a listed purity of less than 99% may be salts, derivatives, or hydrates. The listed purity is actually a correction factor that was used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound.
2D Purity of isomeric compounds is reported as the sum of the isomers. Value is rounded to the nearest whole number after summation.
3 Based upon gravimetric preparation with balance calibration verified using NIST traceable weights (seven mass levels).
4 Uncertainties determined using repeatability and reproducibility data for balances and glassware from measurement systems analysis methodology, balance and glassware tolerances, raw material purity, and, where applicable, eccentricity and linearity values from an accredited calibration laboratory.

A4003440	1C22022
41	23
42	24
48	25
49	26
50	27
57	28
52	29

Analytical Standard Record

EPA Region 9 Laboratory

1C22023

Description:	DRO:Diesel Fuel #2 Composite Standard	**Expires:**	09/30/16
Standard Type:	Analyte Spike	**Prepared:**	03/22/11
Solvent:	DCM	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	03/22/11 11:19 by YNB
Vendor:	Restek	**Lot Numbe**	A069478

Restek Cat. No. 31258 Lot#: A06947 Bar Code : AU003441

Analyte	CAS Number	Concentration (ppm)
TPH as Diesel	68334-30-5	50000
TPH - Diesel Range Organics	TPH-DRO	50000

Analytical Standard Record

EPA Region 9 Laboratory

1C22024

Description:	DRO:Diesel Fuel #2 Composite Standard	**Expires:**	09/30/16
Standard Type:	Analyte Spike	**Prepared:**	03/22/11
Solvent:	DCM	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	03/22/11 11:19 by YNB
Vendor:	Restek	**Lot Numbe**	A069478

Restek Cat. No. 31258 Lot#: A06947 Bar Code : AU003442

Analyte	CAS Number	Concentration (ppm)
TPH as Diesel	68334-30-5	50000
TPH - Diesel Range Organics	TPH-DRO	50000

Certificate of Analysis

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

Catalog No.: 31258 **Lot No.:** A069478
Description: Diesel Fuel #2 Composite Standard
Expiration Date[1]**:** September 2016 **Storage:** Room Temperature

Elution Order	Compound	CAS #	Percent Purity [2]	Concentration [3] (weight/volume)	% Uncertainty [4] (95% C.L.; K=2)
1	Diesel Fuel #2 Composite	68334-30-5	----%	50,000.000 ug/ml	+/-0.58 %
Solvent:	Methylene Chloride	75-09-2	99%		

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10233)

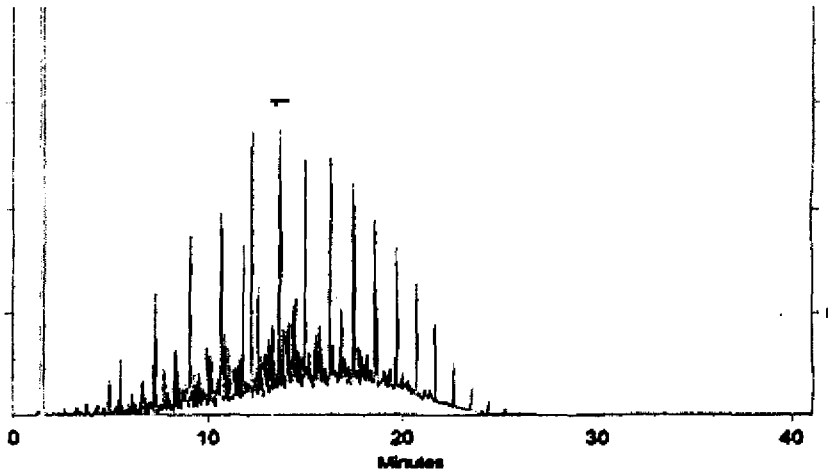
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Sara Eyster
Sara Eyster QA Analyst **Date Passed:** 08/18/2009 **Balance:** 1128342313

Manufactured under Restek's ISO 9001-2000 Registered Quality System Certificate #FM80397

1 Expiration date of the unopened ampule stored at recommended temperature.
2A Purity was determined by one or more of the following techniques: GC/FID, HPLC, GC/ECD, GC/MS. Value rounded to the nearest whole number. In addition to detectors listed above, chemical identity and purity are confirmed using one or more of the following: MS, DSC, solid probe MS, GC/FPD, GC/NPD, GC/TC, FTIR, melting point, refractive index, and Karl Fisher. See data pack or contact Restek for further details.
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2D Purity of isomeric compounds is reported as the sum of the isomers. Value is rounded to the nearest whole number after summation.
3 Based upon gravimetric preparation with balance calibration verified using NIST traceable weights (seven mass levels).
4 Uncertainties determined using repeatability and reproducibility data for balances and glassware from measurement systems analysis methodology, balance and glassware tolerances, raw material purity, and, where applicable, eccentricity and linearity values from an accredited calibration laboratory.

A4003440	1C22022
41	23
42	24
48	25
49	26
50	27
57	28
52	29

Analytical Standard Record

EPA Region 9 Laboratory

1C22031

Description:	OIL:Motor Oil SAE 50W	**Expires:**	03/02/14
Standard Type:	Other Solution	**Prepared:**	03/22/11
Solvent:	Methylene Chloride	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	03/22/11 11:56 by YNB
Vendor:	Spex	**Lot Numbe**	R1110303014

Motor Oil, SAE S-050W-20K, bar code #AU003438

Analyte	CAS Number	Concentration (ppm)
TPH as Motor Oil	TPHOIL	20000
TPH - Oil Range Organics	TPH-ORO	20000

SPEXertificate®

Certificate of Reference Material

For Use With Analytical Methods

PART NUMBER S-050W-20K
LOT NUMBER R1110303014
SHIP DATE - 3/3/2011
EXPIRATION DATE - 3/2/2014
Standard Solution Matrix - Methylene Chloride

STARTING MATERIALS

Compound	CAS #	% Purity	Amount used per ml	Final Concentration
Motor Oil, SAE 50W	---	100	20000 µg	20000 µg/ml

AU003437	1C22030
38	31
39	32

This product was manufactured to the standards specified in our ISO-9001, ISO 17025 and Guide 34 quality system.

ISO Guide 34 -Reference Materials Manufacturer Certificate # 2495.01, ISO 17025 -Chemical Testing Certificate # 2495.02

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732-549-7144 1-800-LAB-SPEX FAX: 732-603-9647
www.spexcertiprep.com

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Analytical Standard Record

EPA Region 9 Laboratory

1G15006

Description:	DRO:hexacosane_stock 5000 mg/L	Expires:	01/15/12
Standard Type:	Reference Materia	Prepared:	07/15/11
Solvent:	DCM Lot # DE038	Prepared By:	Lorraine Avalos
Final Volume (mls):	10	Department:	Extractables
Vials:	1	Last Edit:	07/15/11 14:28 by LA

n Hexacosane Lot# 4513A Biomedical (50 mg in to 10 mL of DCM)

Analyte	CAS Number	Concentration	Units	SRM Control Limits
Hexacosane	630-01-3	5000	ppm	0-200

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
3D21001	DRO:N-Hexacosane, Neat	04/21/03	** Vendor **	12/31/30	05/22/08 14:25 by TD	0.05

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

1G15010

Description:	DRO:KERO _071511-CV	Expires:	01/15/12
Standard Type:	Calibration Standa	Prepared:	07/15/11
Solvent:	DCM Lot # DE038	Prepared By:	Lorraine Avalos
Final Volume (mls):	25	Department:	Extractables
Vials:	1	Last Edit:	07/15/11 16:57 by LA

Analyte	CAS Number	Concentration	Units
TPH as Kerosene	8008-20-6	500	ppm
Hexacosane	630-01-3	50	ppm

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
9B04015	DRO: Kerosene Composite St.	02/04/09	** Vendor **	03/30/14	02/04/09 14:34 by LA	0.25
1G15006	DRO:hexacosane_stock 5000 mg/L	07/15/11	Lorraine Avalos	01/15/12	07/15/11 14:28 by LA	0.25

Reviewed By _____ Date _____

Analytical Standard Record

EPA Region 9 Laboratory

1H09011

Description:	DRO:TPH_080911MS 3000ug/mL in DCI	**Expires:**	02/09/12
Standard Type:	Analyte Spike	**Prepared:**	08/09/11
Solvent:	DCM Lot #DE038	**Prepared By:**	Susan Lepe
Final Volume (mls):	50	**Department:**	Extractables
Vials:	1	**Last Edit:**	08/11/11 08:03 by SUL
Vendor:	Restek	**Lot Numbe**	A069478

Matrix spike for TPH-d. For check: brought 250ul spike to 1.5ml with DCM. OK to use 8/11/11.

Analyte	CAS Number	Concentration (ppm)
TPH as Diesel	68334-30-5	3000
TPH - Diesel Range Organics	TPH-DRO	3000

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1C22019	DRO:Diesel Fuel #2 Composite Standa	03/22/11	** Vendor **	02/09/12	08/09/11 11:26 by SUL	1
1C22020	DRO:Diesel Fuel #2 Composite Standa	03/22/11	** Vendor **	02/09/12	08/09/11 11:26 by SUL	1
1C22021	DRO:Diesel Fuel #2 Composite Standa	03/22/11	** Vendor **	02/09/12	08/09/11 11:27 by SUL	1

Analytical Standard Record

EPA Region 9 Laboratory

1I23004

Description:	GRO:Stoddard Solvent, Stock	**Expires:**	04/26/20
Standard Type:	Other Solution	**Prepared:**	09/23/11
Solvent:	Solvent Lot # MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	09/23/11 08:04 by TD
Vendor:	AccuStandard	**Lot Numbe**	HS-005S-40X

Cat.# HS-005S-40X,

Analyte	CAS Number	Concentration (ppm)
Stoddard solvent	8052-41-3	20000

125 Market Street
New Haven, CT 06513
USA

AccuStandard®, Inc.

Tel (203)786-5290
Fax (203)786-5287
Website AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: HS-005S-40X
Description: Stoddard Solvent
Lot: B0100498
Solvent: Methanol

Date Certified: Apr 26, 2010
Expiration: Apr 26, 2020
Sample Size: 1 mL
Storage Condition: Ambient
Hazards: POISON

[X] Included on ISO/IEC 17025 Scope of Accreditation
[X] Included on ISO Guide 34 Scope of Accreditation

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
Stoddard Solvent	8052-41-3	Tech	20.02	20.02

I23004
I23002 (HB)
A110035 5

AccuStandard follows U.S. conventions in reporting numerical values on both certificates and labels:

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

1. All weights are traceable through NIST, Test No822/254480
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.
3. A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

For use in routine laboratory analysis.

See reverse side for additional information
Refer to the MSDS for additional safety information

Certified by: R. Cooper
Russ Cooper, QC Manager

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001

QR-ORG/NO-001
Rev 7/10

89675

Analytical Standard Record

EPA Region 9 Laboratory

1I23008

Description:	GASGRO:Mineral Spirits, Stock	Expires:	05/09/18
Standard Type:	Other	Prepared:	09/23/11
Solvent:	Solvent Lot # MeOH	Prepared By:	** Vendor **
Final Volume (mls):	1	Department:	Extractables
Vials:	1	Last Edit:	09/23/11 10:12 by TD

Cat.# HS-002S-40X, Lot # B8050069; bar code # AU003886 A

Analyte	CAS Number	Concentration	Units
Mineral spirits	64475-85-0	20000	ppm

Reviewed By Date

98459

DIM0275879

DIM0276356

125 Market Street
New Haven, CT 06513
USA

AccuStandard®, Inc.

Tel (203)786-5290
Fax (203)786-5287
Website AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: HS-002S-40X
Description: Mineral Spirits
Lot: B8050069
Solvent: Methanol

Date Certified: May 9, 2008
Expiration: May 9, 2018
Sample Size: 1 mL
Storage Condition: Ambient
Hazards: POISON

[X] Included on ISO/IEC 17025 Scope of Accreditation
[X] Included on ISO Guide 34 Scope of Accreditation

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
Mineral Spirits	8030-30-6	Tech	20.02	20.02

1I23009
1I23008
~~1I23009~~
4U003886 (A-B)

AccuStandard follows U.S. conventions in reporting numerical values on both certificates and labels:

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

1. All weights are traceable through NIST, Test No822/272103-05
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.
3. A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

For use in routine laboratory analysis.

See reverse side for additional information
Refer to the MSDS for additional safety information

Certified by: R. Cooper
Russ Cooper, QC Manager

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001

QR-ORGANO-001
Rev 7/10

125 Market Street
New Haven, CT 06513
USA

AccuStandard, Inc.

Tel (203)786-5290
Fax (203)786-5287
Website AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: HS-003S-40X
Description: Naphtha
Lot: 211091015
Solvent: Methanol

Date Certified: Sep 1, 2011
Expiration: Sep 1, 2021
Sample Size: 1 mL
Storage Condition: Ambient
Hazards: HIGHLY FLAMMABLE

[X] Included on ISO/IEC 17025 Scope of Accreditation
[X] Included on ISO Guide 34 Scope of Accreditation

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
Naphtha	64742-89-8	Tech	20.02	20.02

1I23010
1I23011
AU003883(A-B)

AccuStandard follows U.S. conventions in reporting numerical values on both certificates and labels:

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

1. All weights are traceable through NIST, Test No822/272103-05
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.
3. A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

For use in routine laboratory analysis.

See reverse side for additional information
Refer to the MSDS for additional safety information

Certified by: R. Cooper
Russ Cooper, QC Manager

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001

DR-ORG/NO-001
Rev. 7/10

Analytical Standard Record

EPA Region 9 Laboratory

1I23010

Description:	GASDRO:Naphtha, Stock	Expires:	09/01/21
Standard Type:	Other	Prepared:	09/23/11
Solvent:	Solvent Lot # MeOH	Prepared By:	** Vendor **
Final Volume (mls):	1	Department:	Extractables
Vials:	1	Last Edit:	09/23/11 10:21 by TD

Cat.# HS-003S-40X, Lot # 211091015 bar code #AU003883 A

Analyte	CAS Number	Concentration	Units
Naptha	8030-30-6	20002	ppm

Reviewed By Date

125 Market Street
New Haven, CT 06513
USA

AccuStandard, Inc.

Tel (203)786-5290
Fax (203)786-5287
Website AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: HS-001S-40X
Description: Lacquer Thinner
Lot: B9040308
Solvent: Methanol

Date Certified: Apr 30, 2009
Expiration: Apr 30, 2019
Sample Size: 1 mL
Storage Condition: Ambient
Hazards: POISON

[X] Included on ISO/IEC 17025 Scope of Accreditation
[X] Included on ISO Guide 34 Scope of Accreditation

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
Lacquer Thinner	N/A	Tech	20.01	20.01

II23012
II23013
AU003884 (A-B)

AccuStandard follows U.S. conventions in reporting numerical values on both certificates and labels:

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

1. All weights are traceable through NIST, Test No822/272103-05
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.
3. A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

For use in routine laboratory analysis.

See reverse side for additional information
Refer to the MSDS for additional safety information

Certified by: R. Cooper
Russ Cooper, QC Manager

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001

OR-ORG/INO-001
Rev 7/10

00454

Analytical Standard Record

EPA Region 9 Laboratory

1I23012

Description:	GASDRO:Lacquer Thinner, Stock	Expires:	04/30/19
Standard Type:	Other	Prepared:	09/23/11
Solvent:	Solvent Lot # MeOH	Prepared By:	** Vendor **
Final Volume (mls):	1	Department:	Extractables
Vials:	1	Last Edit:	09/23/11 10:23 by TD

Cat.# HS-001S-40X, Lot # B9040308; bar code #AU003884 A

Analyte	CAS Number	Concentration	Units
Lacquer thinner	64742-89-8	20000	ppm

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

1L27008

Description:	DRO_122711_SURR 300ug/mL DCM/Ac	**Expires:**	06/27/12
Standard Type:	Surrogate Spike	**Prepared:**	12/27/11
Solvent:	DCM:ACE 2:1	**Prepared By:**	Susan Lepe
Final Volume (mls):	100	**Department:**	Extractables
Vials:	1	**Last Edit:**	12/27/11 13:23 by SUL
Vendor:	Burdick & Jackson	**Lot Numbe**	#DE391

Conc:300 ug/ml DCM (1E16003) and Acetone (9I29020) 2:1. Dissolved 30 mg of n-Hexacosane in 2:1 DCM/Acetone, raised volume to 100 ml. 250ul surr into1.5ml DCM for check. Check OK 12/27/11 (new instrument).

Analyte	CAS Number	Concentration (ppm)
Hexacosane	630-01-3	300

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
3D21001	DRO:N-Hexacosane, Neat	04/21/03	** Vendor **	12/31/30	11/08/11 16:15 by jad	0.03

Analytical Standard Record

EPA Region 9 Laboratory

2A11002

Description:	DRO:hexacosane_stock 5000 mg/L	**Expires:**	07/11/12
Standard Type:	Reference Material	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 10:27 by YNB
Vendor:	ICN Biomedical	**Lot Numbe**	4513A

n Hexacosane Lot# 4513A Biomedical (50 mg in to 10 mL of DCM)

Analyte	CAS Number	Concentration (ppm)	SRM Control Limits
Hexacosane	630-01-3	5000	0-200

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
3D21001	DRO:N-Hexacosane, Neat	04/21/03	** Vendor **	12/31/30	11/08/11 16:15 by jad	0.05

Analytical Standard Record

EPA Region 9 Laboratory

2A11003

Description:	DRO:DRO_011112-IB	**Expires:**	07/11/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	50	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/12/12 10:44 by YNB
Vendor:	Restek	**Lot Numbe**	DE391

Analyte	CAS Number	Concentration (ppm)
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.5

Analytical Standard Record

EPA Region 9 Laboratory

2A11003

Description:	DRO:DRO_011112-IB	**Expires:**	01/15/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	50	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 10:47 by YNB
Vendor:	Restek	**Lot Numbe**	DE391

Analyte	CAS Number	Concentration (ppm)
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.5

Analytical Standard Record

EPA Region 9 Laboratory

2A11004

Description:	DRO:DRO_011112-QLS	**Expires:**	07/11/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	25	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 10:51 by YNB
Vendor:	*Prepared*	**Lot Numbe**	A069478

Analyte	CAS Number	Concentration (ppm)
TPH as Diesel	68334-30-5	50
TPH - Diesel Range Organics	TPH-DRO	50
Hexacosane	630-01-3	10

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1C22023	DRO:Diesel Fuel #2 Composite Standa	03/22/11	** Vendor **	09/30/16	03/22/11 11:19 by YNB	0.025
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.05

Analytical Standard Record

EPA Region 9 Laboratory

2A11005

Description:	DRO:DRO_011112-CV	**Expires:**	07/11/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	25	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 10:53 by YNB
Vendor:	*Prepared*	**Lot Numbe**	A069478

Analyte	CAS Number	Concentration (ppm)
TPH as Diesel	68334-30-5	500
TPH - Diesel Range Organics	TPH-DRO	500
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1C22023	DRO:Diesel Fuel #2 Composite Standa	03/22/11	** Vendor **	09/30/16	03/22/11 11:19 by YNB	0.25
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.25

Analytical Standard Record

EPA Region 9 Laboratory

2A11006

Description:	DRO:DRO_011112-B	**Expires:**	07/11/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 11:11 by YNB
Vendor:	*Prepared*	**Lot Numbe**	A069478

Analyte	CAS Number	Concentration (ppm)
TPH as Diesel	68334-30-5	150
TPH - Diesel Range Organics	TPH-DRO	150
Hexacosane	630-01-3	25

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1C22023	DRO:Diesel Fuel #2 Composite Standa	03/22/11	** Vendor **	09/30/16	03/22/11 11:19 by YNB	0.03
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.05

Analytical Standard Record

EPA Region 9 Laboratory

2A11007

Description:	DRO:DRO_011112-D	**Expires:**	07/11/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 11:13 by YNB
Vendor:	*Prepared*	**Lot Numbe**	A069478

Analyte	CAS Number	Concentration (ppm)
TPH as Diesel	68334-30-5	1250
TPH - Diesel Range Organics	TPH-DRO	1250
Hexacosane	630-01-3	75

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1C22023	DRO:Diesel Fuel #2 Composite Standa	03/22/11	** Vendor **	09/30/16	03/22/11 11:19 by YNB	0.25
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.15

Analytical Standard Record

EPA Region 9 Laboratory

2A11008

Description:	DRO:DRO_011112-E	**Expires:**	07/11/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 11:18 by YNB
Vendor:	*Prepared*	**Lot Numbe**	A069478

Analyte	CAS Number	Concentration (ppm)
TPH as Diesel	68334-30-5	4000
TPH - Diesel Range Organics	TPH-DRO	4000
Hexacosane	630-01-3	100

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1C22024	DRO:Diesel Fuel #2 Composite Standar	03/22/11	** Vendor **	09/30/16	03/22/11 11:19 by YNB	0.8
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.2

Analytical Standard Record

EPA Region 9 Laboratory

2A11009

Description:	DRO:DRO_SCV_ 500/50 mg/L	**Expires:**	07/11/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM DE931	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 11:35 by YNB
Vendor:	Ultra Scientific	**Lot Numbe**	CD2271A

Analyte	CAS Number	Concentration (ppm)
TPH as Diesel	68334-30-5	500
TPH - Diesel Range Organics	TPH-DRO	500
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1B18007	DRO:Composite #2 Diesil Fuel Solutio	02/18/11	** Vendor **	10/30/13	02/21/11 10:57 by YNB	0.1
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.1

Analytical Standard Record

EPA Region 9 Laboratory

2A11010

Description:	DRO:DRO_011112-RT	**Expires:**	07/11/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 11:40 by YNB
Vendor:	Restek	**Lot Numbe**	A067369

400 mL of St. to 10 ml

Analyte	CAS Number	Concentration (ppm)
Tetradecane (C14)	629-59-4	20
Tetracosane	000646-31-1	20
Octane (C8)	111-65-9	20
Octadecane	000593-45-3	20
Octacosane	000630-02-4	20
Hexadecane (C16)	544-76-3	20
Hexacosane	630-01-3	20
Eicosane (C20)	112-95-8	20
Dodecane	000112-40-3	20
Docosane	000629-97-0	20
Decane	000124-18-5	20

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
0F23019	DRO:Florida TRPH Standard, Stock	06/23/10	** Vendor **	05/31/16	06/23/10 10:40 by YNB	0.4

Analytical Standard Record

EPA Region 9 Laboratory

2A11011

Description:	OIL:OIL_011112-QLS	**Expires:**	07/11/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	25	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 11:56 by YNB
Vendor:	Restek	**Lot Numbe**	A077845

Analyte	CAS Number	Concentration (ppm)
TPH as Motor Oil	TPHOIL	200
TPH - Oil Range Organics	TPH-ORO	200
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1C22013	OIL:Motor Oil Composite Standard, St	03/22/11	** Vendor **	12/31/17	03/22/11 11:02 by YNB	0.1
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.25

Analytical Standard Record

EPA Region 9 Laboratory

2A11012

Description:	OIL:OIL_011112-CV	**Expires:**	07/11/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	25	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 11:58 by YNB
Vendor:	Restek	**Lot Numbe**	A077845

Analyte	CAS Number	Concentration (ppm)
TPH as Motor Oil	TPHOIL	1000
TPH - Oil Range Organics	TPH-ORO	1000
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1C22013	OIL:Motor Oil Composite Standard, St	03/22/11	** Vendor **	12/31/17	03/22/11 11:02 by YNB	0.5
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.25

Analytical Standard Record

EPA Region 9 Laboratory

2A11013

Description:	OIL:OIL_011112-B	**Expires:**	07/11/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 12:00 by YNB
Vendor:	Restek	**Lot Numbe**	A077845

Analyte	CAS Number	Concentration (ppm)
TPH as Motor Oil	TPHOIL	400
TPH - Oil Range Organics	TPH-ORO	400
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1C22013	OIL:Motor Oil Composite Standard, St	03/22/11	** Vendor **	12/31/17	03/22/11 11:02 by YNB	0.08
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.1

Analytical Standard Record

EPA Region 9 Laboratory

2A11014

Description:	OIL:OIL_011112-D	**Expires:**	07/11/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 12:01 by YNB
Vendor:	Restek	**Lot Numbe**	A077845

Analyte	CAS Number	Concentration (ppm)
TPH as Motor Oil	TPHOIL	4000
TPH - Oil Range Organics	TPH-ORO	4000
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1C22013	OIL:Motor Oil Composite Standard, St	03/22/11	** Vendor **	12/31/17	03/22/11 11:02 by YNB	0.8
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.1

Analytical Standard Record

EPA Region 9 Laboratory

2A11015

Description:	OIL:OIL_011112-E	**Expires:**	07/11/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE931	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 12:03 by YNB
Vendor:	Restek	**Lot Numbe**	A077845

Analyte	CAS Number	Concentration (ppm)
TPH as Motor Oil	TPHOIL	10000
TPH - Oil Range Organics	TPH-ORO	10000
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1C22011	OIL:Motor Oil Composite Standard, St	03/22/11	** Vendor **	10/31/17	03/22/11 11:00 by YNB	1
1C22012	OIL:Motor Oil Composite Standard, St	03/22/11	** Vendor **	12/31/17	03/22/11 11:01 by YNB	1
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.1

Analytical Standard Record

EPA Region 9 Laboratory

2A11019

Description:	OIL:OIL_SCV_ 1000/50 mg/L	**Expires:**	07/11/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DF391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 12:53 by YNB
Vendor:	Local Source	**Lot Numbe**	R1040302006

Analyte	CAS Number	Concentration (ppm)
TPH as Motor Oil	TPHOIL	1000
TPH - Oil Range Organics	TPH-ORO	1000
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1C22031	OIL:Motor Oil SAE 50W	03/22/11	** Vendor **	03/02/14	03/22/11 11:56 by YNB	0.5
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.1

Analytical Standard Record

EPA Region 9 Laboratory

2A11021

Description:	DRO:GAS_011112	**Expires:**	07/11/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 13:06 by YNB
Vendor:	Restek	**Lot Numbe**	A066488

Analyte	CAS Number	Concentration (ppm)
TPH as Gasoline	8006-61-9	500
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
0C16026	GAS:Unleaded Gasoline Composite Sta	03/16/10	** Vendor **	04/30/16	11/07/11 16:03 by jad	0.1
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.1

Analytical Standard Record

EPA Region 9 Laboratory

2A11022

Description:	DRO:Hydraulic Fluid_011112-500 ug/mL	**Expires:**	07/11/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 13:09 by YNB
Vendor:	Restek	**Lot Numbe**	B4010223

AccuStandard FU-020-D-40

Analyte	CAS Number	Concentration (ppm)
Hydraulic Fluid	64742-54-7	500
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1A18025	DRO:Hydraulic Fluid, Stock	01/18/11	** Vendor **	01/22/14	01/18/11 12:45 by YNB	0.25
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.1

Analytical Standard Record

EPA Region 9 Laboratory

2A11023

Description:	DRO:Jet Fuel_011112-500 ug/mL	**Expires:**	07/11/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 13:12 by YNB
Vendor:	Restek	**Lot Numbe**	B8060056

AccuStandard FU-006-40X

Analyte	CAS Number	Concentration (ppm)
Jet Fuel	94114-58-6	500
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1A18028	DRO:Turbine (Jet) Fuel, Stock	01/18/11	** Vendor **	06/04/18	01/18/11 12:50 by YNB	0.25
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.1

Analytical Standard Record

EPA Region 9 Laboratory

2A11025

Description:	DRO:Stoddard Solvent_500 mg/L	**Expires:**	07/10/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 13:33 by YNB
Vendor:	*Prepared*	**Lot Numbe**	B0100498

AccuStandard HS-005S-40X

Analyte	CAS Number	Concentration (ppm)
Stoddard solvent	8052-41-3	500
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1I23004	GRO:Stoddard Solvent, Stock	09/23/11	** Vendor **	04/26/20	09/23/11 10:18 by TD	0.25
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.1

Analytical Standard Record

EPA Region 9 Laboratory

2A11026

Description:	DRO: Mineral Spirit_500 mg/L	**Expires:**	07/10/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 13:18 by YNB
Vendor:	Restek	**Lot Numbe**	B8050069

AccuStandard HS-002S-40X

Analyte	CAS Number	Concentration (ppm)
Mineral spirits	64475-85-0	500
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1I23008	GASGRO:Mineral Spirits, Stock	09/23/11	** Vendor **	05/09/18	09/23/11 10:12 by TD	0.25
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.1

Analytical Standard Record

EPA Region 9 Laboratory

2A11027

Description:	DRO:Naphtha_500 mg/L	**Expires:**	07/10/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 13:20 by YNB
Vendor:	*Prepared*	**Lot Numbe**	211091015

AccuStandard HS-003S-40X

Analyte	CAS Number	Concentration (ppm)
Naptha	8030-30-6	500
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.1
1I23010	GASDRO:Naphtha, Stock	09/23/11	** Vendor **	09/01/21	09/23/11 10:21 by TD	0.25

Analytical Standard Record

EPA Region 9 Laboratory

2A11028

Description:	DRO:Turpentine_500 mg/L	**Expires:**	07/10/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 13:21 by YNB
Vendor:	*Prepared*	**Lot Numbe**	A9020099

AccuStandard HS-004S-40X

Analyte	CAS Number	Concentration (ppm)
Turpentine	8006-64-2	500
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1B16005	DRO:Turpentine, Stock	02/16/11	** Vendor **	11/21/18	02/16/11 12:36 by YNB	0.25
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.1

Analytical Standard Record

EPA Region 9 Laboratory

2A11029

Description:	DRO:Lacquer Thinner_500 mg/L	**Expires:**	07/10/12
Standard Type:	Other Solution	**Prepared:**	01/11/12
Solvent:	DCM Lot # DE391	**Prepared By:**	Yelena Borinshteyn
Final Volume (mls):	10	**Department:**	Extractables
Vials:	1	**Last Edit:**	01/11/12 13:22 by YNB
Vendor:	*Prepared*	**Lot Numbe**	B9040308

AccuStandard HS-001S-40X

Analyte	CAS Number	Concentration (ppm)
Lacquer thinner	64742-89-8	500
Hexacosane	630-01-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1123012	GASDRO:Lacquer Thinner, Stock	09/23/11	** Vendor **	04/30/19	09/23/11 10:23 by TD	0.25
2A11002	DRO:hexacosane_stock 5000 mg/L	01/11/12	Yelena Borinshteyn	07/11/12	01/11/12 10:27 by YNB	0.1

Analytical Standard Record

EPA Region 9 Laboratory

3D21001

Description:	DRO:N-Hexacosane, Neat	**Expires:**	12/31/30
Standard Type:	Other Solution	**Prepared:**	04/21/03
Solvent:	Solvent Lot #	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	05/22/08 14:25 by TD
Vendor:	ICN Biomedical	**Lot Numb**	4513A

N-Hexacosane Neat, used for diesel surrogate, Lot No. 4513A

Analyte	CAS Number	Concentration (ppm)
Hexacosane	630-01-3	1000000

Certificate of Analysis

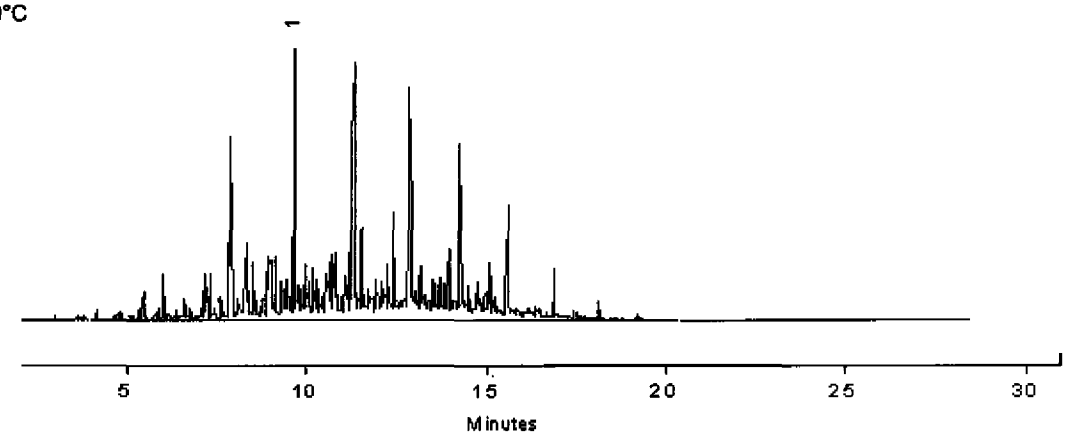
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

Catalog No.: 31256 **Lot No.:** A050037
Description: Kerosene Composite Standard
Expiration Date[1]**:** March 2014 **Storage:** Room Temperature

Elution Order	Compound	CAS #	Percent Purity [2]	Concentration (weight/volume) [3]	Percent Uncertainty [4]
1	Kerosene Composite	8008-20-6	99%	50,000.000 ug/ml	+/-0.10 %
Solvent:	Methylene Chloride	75-09-2	99%		

Column: 30m x .25mm x .5um
Rtx-5 (cat.# 10238)
Carrier Gas: hydrogen @ 40cm/sec.
Temp. Program: 40°C (hold 2 min.) to 330°C @ 10°C/min.
Inj. Temp: 250°C
Det. Temp: 300°C
Det. Type: FID



Sara Eyster
Sara Eyster QA Analyst

Balance 1119141429

1 Expiration date of the unopened ampul stored at recommended temperature.
2 Purity was determined by one or more of the following techniques: GC/FID, HPLC, GC/ECD, GC/MS. Value rounded to the nearest LOWER whole percentage. In addition to detectors listed above, chemical identity and purity are confirmed using 1 or more of the following: MS, DSC, solid probe MS, GC/FPD, GC/NPD, GC/TC, FTIR, melting point, refractive index, and Karl Fisher. See data pack or contact Restek for further details.
3 Based upon gravimetric preperation with balance calibration verified using NIST traceable weights (seven mass levels).
4 Percent Uncertainty based upon balance AND ASTM Class A volumetric glassware accuracy.

ISO 9001 REGISTERED

Manufactured under Restek's ISO 9001 Registered Quality System Certificate #FM80397

Analytical Standard Record

EPA Region 9 Laboratory

9B04015

Description:	DRO: Kerosene Composite St.	**Expires:**	03/30/14
Standard Type:	Analyte Spike	**Prepared:**	02/04/09
Solvent:	DCM	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Extractables
Vials:	1	**Last Edit:**	02/04/09 14:34 by LA
Vendor:	Restek	**Lot Numb**	A050037

CAT 31256, LOT A050037

Analyte	CAS Number	Concentration (ppm)
TPH as Kerosene	8008-20-6	50000