United States Environmental Protection Agency
Region 9 Laboratory

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

Date: **2/15/2012**

Subject: **Analytical Testing Results - Project R33911**
SDG: 12038C

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

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:** 12038C
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/15/12 17:08
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
EB02	1202017-01	Water	02/05/12 15:00	02/07/12 11:10
HW45	1202017-02	Water	02/06/12 10:28	02/07/12 11:10
HW45-P	1202017-03	Water	02/06/12 11:06	02/07/12 11:10

SDG ID 12038C

Work Order(s)

1202017

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:** 12038C
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/15/12 17:08
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1202017-01									**Water - Sampled: 02/05/12 15:00**
Sample ID: EB02									**Extractable Petroleum Hydrocarbons by EPA Method 8015B**
TPH - Diesel Range Organics		ND	U	250	ug/L	B2B0026	02/07/12	02/09/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			84 %	*60-127%*		"	"	"	
Lab ID: 1202017-02									**Water - Sampled: 02/06/12 10:28**
Sample ID: HW45									**Extractable Petroleum Hydrocarbons by EPA Method 8015B**
TPH - Diesel Range Organics		ND	U	250	ug/L	B2B0026	02/07/12	02/09/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			87 %	*60-127%*		"	"	"	
Lab ID: 1202017-03									**Water - Sampled: 02/06/12 11:06**
Sample ID: HW45-P									**Extractable Petroleum Hydrocarbons by EPA Method 8015B**
TPH - Diesel Range Organics		ND	U	250	ug/L	B2B0026	02/07/12	02/09/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			82 %	*60-127%*		"	"	"	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B2B0026 - 3520C CLLE - TPH - Extractable									**Prepared: 02/07/12 Analyzed: 02/09/12**	
								Extractable Petroleum Hydrocarbons by EPA Method 8015B - Quality Control		
Blank (B2B0026-BLK1)										
TPH - Diesel Range Organics	ND	U	250	ug/L						
TPH - Oil Range Organics	ND	U	1,000	"						
Surrogate: Hexacosane	*123*			"	*150*		82	*60-127*		
LCS (B2B0026-BS1)										
TPH - Diesel Range Organics	1,200		250	ug/L	1500		80	54-115		200
Surrogate: Hexacosane	*130*			"	*150*		86	*60-127*		
Matrix Spike (B2B0026-MS1)		**Source: 1202017-02**								
TPH - Diesel Range Organics	1,210		250	ug/L	1480	ND	82	67-110		20
Surrogate: Hexacosane	*126*			"	*148*		85	*60-127*		
Matrix Spike Dup (B2B0026-MSD1)		**Source: 1202017-02**								
TPH - Diesel Range Organics	1,200		250	ug/L	1460	ND	82	67-110	1	20
Surrogate: Hexacosane	*123*			"	*146*		85	*60-127*		

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Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12038C
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/15/12 17:08
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Qualifiers and Comments

U Not Detected

NR Not Reported

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

United States Environmental Protection Agency
Region 9 Laboratory

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

Date: 2/15/2012

Subject: Analytical Testing Results - Project R33911
SDG: 12039A

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

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:** 12039A
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/15/12 17:18
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
HW43	1202020-01	Water	02/06/12 12:06	02/08/12 09:50
HW43-P	1202020-02	Water	02/06/12 12:19	02/08/12 09:50
HW31	1202020-03	Water	02/06/12 18:20	02/08/12 09:50
HW31-P	1202020-04	Water	02/06/12 18:28	02/08/12 09:50
HW31z	1202020-05	Water	02/06/12 18:20	02/08/12 09:50
FB11	1202020-07	Water	02/06/12 14:36	02/08/12 09:50
HW30	1202020-08	Water	02/06/12 14:34	02/08/12 09:50
HW30-P	1202020-09	Water	02/06/12 15:00	02/08/12 09:50
HW15a	1202020-11	Water	02/07/12 10:47	02/08/12 09:50
HW15a-P	1202020-12	Water	02/07/12 10:55	02/08/12 09:50
FB12	1202023-01	Water	02/07/12 13:35	02/09/12 10:00
HW51	1202023-02	Water	02/07/12 13:48	02/09/12 10:00
HW51-P	1202023-03	Water	02/07/12 13:56	02/09/12 10:00
HW47	1202023-05	Water	02/08/12 11:50	02/09/12 10:00
HW47-P	1202023-06	Water	02/08/12 12:25	02/09/12 10:00
FB13	1202023-08	Water	02/08/12 09:00	02/09/12 10:00
HW38	1202023-09	Water	02/08/12 10:41	02/09/12 10:00
HW38-P	1202023-10	Water	02/08/12 10:52	02/09/12 10:00

SDG ID 12039A

Extractable Petroleum Hydrocarbons:
Samples 1202023-08, -09, and -10 were received at 8 degrees C, which is above the recommended temperature range of 2 - 6 degrees C. No significant impact is anticipated on the sample results.

Insufficient sample volume was provided to perform matrix spike / matrix spike duplicate (MS/MSD) analysis on any samples for this sample delivery group.

Work Order(s)

1202020

1202023

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Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12039A
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/15/12 17:18
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1202020-01									**Water - Sampled: 02/06/12 12:06**
Sample ID: HW43						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2B0037	02/08/12	02/09/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			85 %	*60-127%*		"	"	"	
Lab ID: 1202020-02									**Water - Sampled: 02/06/12 12:19**
Sample ID: HW43-P						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2B0037	02/08/12	02/09/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			94 %	*60-127%*		"	"	"	
Lab ID: 1202020-03									**Water - Sampled: 02/06/12 18:20**
Sample ID: HW31						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2B0037	02/08/12	02/09/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			103 %	*60-127%*		"	"	"	
Lab ID: 1202020-04									**Water - Sampled: 02/06/12 18:28**
Sample ID: HW31-P						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2B0037	02/08/12	02/09/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			87 %	*60-127%*		"	"	"	
Lab ID: 1202020-05									**Water - Sampled: 02/06/12 18:20**
Sample ID: HW31z						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	270	ug/L	B2B0037	02/08/12	02/09/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,100	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			101 %	*60-127%*		"	"	"	
Lab ID: 1202020-07									**Water - Sampled: 02/06/12 14:36**
Sample ID: FB11						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2B0037	02/08/12	02/09/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			87 %	*60-127%*		"	"	"	
Lab ID: 1202020-08									**Water - Sampled: 02/06/12 14:34**
Sample ID: HW30						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2B0037	02/08/12	02/09/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			89 %	*60-127%*		"	"	"	
Lab ID: 1202020-09									**Water - Sampled: 02/06/12 15:00**

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Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12039A
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/15/12 17:18
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1202020-09									**Water - Sampled: 02/06/12 15:00**
Sample ID: HW30-P						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2B0037	02/08/12	02/09/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			88 %	*60-127%*		"	"	"	
Lab ID: 1202020-11									**Water - Sampled: 02/07/12 10:47**
Sample ID: HW15a						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2B0037	02/08/12	02/09/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			97 %	*60-127%*		"	"	"	
Lab ID: 1202020-12									**Water - Sampled: 02/07/12 10:55**
Sample ID: HW15a-P						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	240	ug/L	B2B0037	02/08/12	02/09/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	950	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			95 %	*60-127%*		"	"	"	
Lab ID: 1202023-01									**Water - Sampled: 02/07/12 13:35**
Sample ID: FB12						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2B0043	02/09/12	02/10/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			92 %	*60-127%*		"	"	"	
Lab ID: 1202023-02									**Water - Sampled: 02/07/12 13:48**
Sample ID: HW51						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	260	ug/L	B2B0043	02/09/12	02/10/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,100	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			86 %	*60-127%*		"	"	"	
Lab ID: 1202023-03									**Water - Sampled: 02/07/12 13:56**
Sample ID: HW51-P						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2B0043	02/09/12	02/10/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			88 %	*60-127%*		"	"	"	
Lab ID: 1202023-05									**Water - Sampled: 02/08/12 11:50**
Sample ID: HW47						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2B0043	02/09/12	02/10/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			84 %	*60-127%*		"	"	"	
Lab ID: 1202023-06									**Water - Sampled: 02/08/12 12:25**

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Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/15/12 17:18
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1202023-06									**Water - Sampled: 02/08/12 12:25**
Sample ID: HW47-P						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2B0043	02/09/12	02/10/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			92 %	*60-127%*		"	"	"	
Lab ID: 1202023-08									**Water - Sampled: 02/08/12 09:00**
Sample ID: FB13						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2B0043	02/09/12	02/10/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			86 %	*60-127%*		"	"	"	
Lab ID: 1202023-09									**Water - Sampled: 02/08/12 10:41**
Sample ID: HW38						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	240	ug/L	B2B0043	02/09/12	02/10/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	950	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			96 %	*60-127%*		"	"	"	
Lab ID: 1202023-10									**Water - Sampled: 02/08/12 10:52**
Sample ID: HW38-P						**Extractable Petroleum Hydrocarbons by EPA Method 8015B**			
TPH - Diesel Range Organics		ND	U	250	ug/L	B2B0043	02/09/12	02/10/12	8015C/SOP385
TPH - Oil Range Organics		ND	U	1,000	"	"	"	"	8015C/SOP385
Surrogate: Hexacosane			88 %	*60-127%*		"	"	"	

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Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/15/12 17:18
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B2B0037 - 3520C CLLE - TPH - Extractable									**Prepared: 02/08/12 Analyzed: 02/09/12**	
									Extractable Petroleum Hydrocarbons by EPA Method 8015B - Quality Control	
Blank (B2B0037-BLK1)										
TPH - Diesel Range Organics	ND	U	250	ug/L						
TPH - Oil Range Organics	ND	U	1,000	"						
Surrogate: Hexacosane	*133*			"	*150*		89	*60-127*		
LCS (B2B0037-BS1)										
TPH - Diesel Range Organics	1,220		250	ug/L	1500		81	54-115		200
Surrogate: Hexacosane	*134*			"	*150*		89	*60-127*		
Batch B2B0043 - 3520C CLLE - TPH - Extractable									**Prepared: 02/09/12 Analyzed: 02/10/12**	
									Extractable Petroleum Hydrocarbons by EPA Method 8015B - Quality Control	
Blank (B2B0043-BLK1)										
TPH - Diesel Range Organics	ND	U	250	ug/L						
TPH - Oil Range Organics	ND	U	1,000	"						
Surrogate: Hexacosane	*132*			"	*150*		88	*60-127*		
LCS (B2B0043-BS1)										
TPH - Diesel Range Organics	1,220		250	ug/L	1500		82	54-115		200
Surrogate: Hexacosane	*137*			"	*150*		91	*60-127*		

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Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/15/12 17:18
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Qualifiers and Comments

U Not Detected

NR Not Reported

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

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 15, 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 twenty one water samples for the Dimock Residential Groundwater Site project, Case R33911, SDG 12038C and 12039A, Work Order 1202017, 1202020 and 1202023 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.

G:\USER\ESAT\# LAB DATA Deliverables\R33911\12038C-12039A-TPH-d-14504.docx

EPA Region 9 Laboratory

DATA PACKAGE

Analysis:	**TPH-d**
Project Number:	**R33911**
SDG Number:	**12038C, 12039a**
Work Order:	**1202017, 1202020, 1202023**
ESAT DCN:	**14504**

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

General Project Management and ESAT Contractor Oversight Review

Project Number: R33911

SDG: 12038C/12039A

Analysis: extractable TPH

Number of Pages: 417

Reviewer: Bave

- ☑ 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: Added narrative re: cooler temp. samples 1202023-08 → -10.
No MS/MSD for SDG 12039A. / TPH-Ext bottles (1L glass) for samples HW43 and HW43-P were received a day after VOA vials for RSK and TPH-gas for the same wells. TPH-Ext was logged in on work order 1202020 and ended up in different SDG than TPH-gas & RSK.

Reviewer Signature [signature] Date 2/15/12

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ESAT Region 9 | **ICF International**
Case: R33911 | **Analysis:** TPH-d | **TDF:** 01001084 | **Matrix:** water
DCN: 14504 | **Site:** Dimock Residential Groundwater Site | **SDG:** 12038C, 12039A

ESAT REGION 9 DATA PACKAGE TECHNICAL REVIEW GUIDE

Reviewer:	Package Prep (P): TD	Technical (T): SL	Final (F): [illegible]
	Date: 02-14-12	Date: 2/14/12	Date: 2/15/12

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: 14504 **Site:** Dimock Residential Groundwater Site **SDG:** 12038C, 12039A

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 - 1202023

1202023 - US EPA Region 3, Eastern Response
Dimock Residential Groundwater

TPH-Extractable: Extra bottles for QC were not provided; MS/MSD not extracted. SUL 2/9/12.

RSK-175: Small amount of methane contamination in the method blanks, < QL.
Extra vials for QC were not provided; MS/MSD not run RH 2/13/12

RSK-175: Methane result for sample 1202023-10 was flagged B since the concentration of this analyte in the sample was less than five time the concentration found in the associated field blank.

Samples 1202023-08-10 were received at 8 degrees C, which is above the recommended temperature range of 2 - 6 degrees C. No impact is anticipated on the sample result. TD 02/14/12

TPH GRO: Due to insufficient amount of samples No MS/MSD will be performed. Samples 1202023-08,-09,-10,-11 were received at 8 deg. C, above the recommended range of 0 to 6 deg. C. No impact is anticipated on the sample result.
YNB 02/14/12

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

C:\Users\tdadiomo\Desktop\TPH daily review.doc

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	TPH DRO	Analyst Initial	TD	Reviewer Initial	[illegible]	Batch/ Sequence	B2B0026; B2B0037 2020035
Instrument ID	AG7890-2	Date Analyzed	02-09-12	Date	2-10-12	Chemstation Last Update	01/31/12 09:45:52
Cases	R33911			SDGs	12038C; 12039A		

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

C:\Users\tdadiomo\Desktop\TPH daily review.doc

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	**TPH DRO**	**Analyst Initial**	TD/SUL	**Reviewer Initial**	[illegible]	**Batch/ Sequence**	B2B0043 2020040
Instrument ID	**AG7890-2**	**Date Analyzed**	02-10-12	**Date**	2-13-12	**Chemstation Last Update**	01/31/12 09:45:52
Cases	**R33911**			**SDGs**	**12039A**		

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)/ IB
	✓	✓	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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USEPA Region 9 Laboratory
Organic Analysis Summary

Case: R33911
SDG: 12038C/ 12039A
Analysis: TPH DRO

TD
SL

Sample ID	Sample Runs			
[redacted]	AG7890-2	AG7890-2	INSTRUMENT	INSTRUMENT
[redacted]	2/9/2012	2/10/2012		
[redacted]	2020035 SL	2020040		
1201017-01	RPT 2/14/12			
1201017-02	RPT			
B2B0026-MS1	RPT			
B2B0026-MSD1	RPT			
1201017-03	RPT			
1201020-01	RPT			
1201020-02	RPT			
1201020-03	RPT			
1201020-04	RPT			
1201020-05	RPT			
1201020-07	RPT			
1201020-08	RPT			
1201020-09	RPT			
1201020-11	RPT			
1201020-12	RPT			
B2B0026-BLK1	RPT			
B2B0026-BS1	RPT			
B2B0037-BLK1	RPT			
B2B0037-BS1	RPT			
1202023-01		RPT		
1202023-02		RPT		
1202023-03		RPT		
1202023-05		RPT		
1202023-06		RPT		
1202023-08		RPT		
1202023-09		RPT		
1202023-10		RPT		
B2B0043-BLK1		RPT		
B2B0043-BS1		RPT		

Definitions

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

SAMPLE TRACKING FORMS

WORK ORDER

Printed: 2/7/2012 12:37:55PM

1202017

EPA Region 9 Laboratory

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

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

Project Contact
US EPA Region 3, Eastern Response Branch
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	798023630362
2Cooler	Cooler	2	Yes	Yes	Yes	No	Yes	793193092019

Date Due:	02/29/12 15:00 (21 day TAT)	SDG:	12038C
Received By:	Richard Bauer	Date Received:	02/07/12 11:10
Logged In By:	Eloy Balderas	Date Logged In:	02/07/12 11:49

Analysis	Hold Time Expires	Comments
1202017-01 EB02 [Water] Sampled 02/05/12 15:00 Pacific		
TPH - Extractable	02/12/12	
TPH - Purgeable	02/19/12	
Dissolved HC Gases	02/19/12	5 day prelim results
1202017-02 HW45 [Water] Sampled 02/06/12 10:28 Pacific		**Lab QC sample**
TPH - Purgeable	02/20/12	
TPH - Extractable	02/13/12	
Dissolved HC Gases	02/20/12	5 day prelim results
1202017-03 HW45-P [Water] Sampled 02/06/12 11:06 Pacific		
Dissolved HC Gases	02/20/12	5 day prelim results
TPH - Purgeable	02/20/12	
TPH - Extractable	02/13/12	
1202017-04 TB24 [Water] Sampled 02/06/12 07:10 Pacific		
Dissolved HC Gases	02/20/12	5 day prelim results
TPH - Purgeable	02/20/12	
1202017-05 HW43 [Water] Sampled 02/06/12 12:06 Pacific		
Dissolved HC Gases	02/20/12	5 day prelim results
TPH - Purgeable	02/20/12	

WORK ORDER

Printed: 2/7/2012 12:37:55PM

1202017

EPA Region 9 Laboratory

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

Analysis	Hold Time Expires	Comments

Analysis	Expires	Comments
1202017-06 HW43-P [Water] Sampled 02/06/12 12:19 Pacific		
TPH - Purgeable	02/20/12	
Dissolved HC Gases	02/20/12	5 day prelim results
1202017-07 TB23 [Water] Sampled 02/06/12 07:05 Pacific		
Dissolved HC Gases	02/20/12	5 day prelim results
TPH - Purgeable	02/20/12	

Reviewed By

Date

Cooler #4

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/6/2012
CarrierName: FedEx
AirbillNo: 7931 9744 7284

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020612-160909-0120

Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412.2389

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
EB02	Aqueous/ Bryan Berna	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	3482 (HCl / 40mlGlassVial), 3483 (HCl / 40mlGlassVial), 3481 (-NA- / 1000mlAmber), 3482 (-NA- / 1000mlAmber), 3485 (HCl / 40mlGlassVial), 3486 (HCl / 40mlGlassVial) (6)	EB02	02/05/2012 15:00	
HW45	Drinking Water/ Tom Sedlacek	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7), RSK-175(7), RSK-175(7), RSK-175(7), RSK-175(7), GRO(7), GRO(7), GRO(7), GRO(7) 6 RSK, 6 GRO	3527 (HCl / 40mlGlassVial), 3528 (HCl / 40mlGlassVial), 3549 (HCl / 40mlGlassVial), 3550 (HCl / 40mlGlassVial), 3597 (HCl / 40mlGlassVial), 3598 (HCl / 40mlGlassVial), 3599 (HCl / 40mlGlassVial), 3600 (HCl / 40mlGlassVial), 3601 (HCl / 40mlGlassVial), 3602 (HCl / 40mlGlassVial), 3603 (HCl / 40mlGlassVial), 3604 (HCl / 40mlGlassVial) (12)	HW45	02/06/2012 10:28	

Sample(s) to be used for Lab QC: HW45

Custody seals intact & temp blank 2°C upon receipt @ lab RB 2/7/12

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
18	[signature]	2/6/12	→ FedEx				→		[signature] EPA R9 Lab	2/7/12	1110

00014

cooler #1

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/6/2012
CarrierName: FedEx
AirbillNo: 7931 9744 7284

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020612-160909-0120
Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412.2389

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
HW45-P	Drinking Water/ Dan Jacobsen	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	3587 (HCl / 40mlGlassVial), 3588 (HCl / 40mlGlassVial), 3585 (-NA- / 1000mlAmber), 3586 (-NA- / 1000mlAmber), 3589 (HCl / 40mlGlassVial), 3590 (HCl / 40mlGlassVial) (6)	HW45	02/06/2012 11:08	
TB24	Aqueous/ Christina Rice	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	3503 (HCl / 40mlGlassVial), 3504 (HCl / 40mlGlassVial), 3505 (HCl / 40mlGlassVial), 3506 (HCl / 40mlGlassVial) (4)	TB24	02/06/2012 07:10	

Special Instructions: custody seals intact and temp. blank 2°C upon receipt @ lab. RJB 2/7/12

Shipment for Case Complete? N
Samples Transferred From Chain of Custody #

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
10	[signature]	2/6/12	→			Fed Ex	→		[signature] EPA R9 Lab	2/7/12	1110

00015

Cooler #2

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/6/2012
CarrierName: FedEx
AirbillNo: 7980 2856 0848

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020612-173523-0126

Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412.2389

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
HW43	Drinking Water/ David Johnson	Grab	RSK-175(7), RSK-175(7), GRO(7)	3723 (HCl / 40mlGlassVial), 3724 (HCl / 40mlGlassVial), 3745 (HCl / 40mlGlassVial) (3)	HW43	02/06/2012 12:06	
HW43-P	Drinking Water/ Francisco Lapostol	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	3759 (HCl / 40mlGlassVial), 3760 (HCl / 40mlGlassVial), 3781 (HCl / 40mlGlassVial), 3782 (HCl / 40mlGlassVial) (4)	HW43	02/06/2012 12:19	
HW45	Drinking Water/ Tom Sedlacek	Grab	DRO(7), DRO(7), DRO(7), DRO(7), DRO(7), DRO(7)	3545 (-NA- / 1000mlAmber), 3546 (-NA- / 1000mlAmber), 3609 (-NA- / 1000mlAmber), 3610 (-NA- / 1000mlAmber), 3611 (-NA- / 1000mlAmber), 3612 (-NA- / 1000mlAmber) (6)	HW45	02/06/2012 10:28	
TB23	Aqueous/ Christina Rice	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	3496 (HCl / 40mlGlassVial), 3497 (HCl / 40mlGlassVial), 3498 (HCl / 40mlGlassVial), 3499 (HCl / 40mlGlassVial) (4)	TB23	02/06/2012 07:05	

Sample(s) to be used for Lab QC: HW45

Custody seal intact and temperature blank 2°C upon receipt @ lab. RM 2/7/12

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
17	[signature]	2/6/12	—	Fed Ex		→			RM EPA R9 Lab	2/7/12	1110

WORK ORDER

Printed: 2/8/2012 11:18:41AM

1202020

EPA Region 9 Laboratory

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

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

Project Contact
US EPA Region 3, Eastern Response Branch
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	4	Yes	Yes	Yes	No	Yes	793199237545
2Cooler	Cooler	3	Yes	Yes	Yes	No	Yes	798031383881
3Cooler	Cooler	3	Yes	Yes	Yes	No	Yes	793202422700
4Cooler	Cooler	3	Yes	Yes	Yes	No	Yes	798030340908

Date Due:	03/01/12 15:00 (21 day TAT)	SDG:	12039A
Received By:	Richard Bauer	Date Received:	02/08/12 09:50
Logged In By:	Jack Berges	Date Logged In:	02/08/12 10:15

Analysis	Hold Time Expires	Comments
1202020-01 HW43 [Water] Sampled 02/06/12 12:06 Eastern		
TPH - Extractable	02/13/12	
1202020-02 HW43-P [Water] Sampled 02/06/12 12:19 Eastern		
TPH - Extractable	02/13/12	
1202020-03 HW31 [Water] Sampled 02/06/12 18:20 Eastern		
TPH - Extractable	02/13/12	
TPH - Purgeable	02/20/12	
Dissolved HC Gases	02/20/12	5 day prelim results
1202020-04 HW31-P [Water] Sampled 02/06/12 18:28 Eastern		
TPH - Extractable	02/13/12	
TPH - Purgeable	02/20/12	
Dissolved HC Gases	02/20/12	5 day prelim results
1202020-05 HW31z [Water] Sampled 02/06/12 18:20 Eastern		
TPH - Purgeable	02/20/12	
TPH - Extractable	02/13/12	
Dissolved HC Gases	02/20/12	5 day prelim results

1202020

EPA Region 9 Laboratory

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

Analysis	Hold Time Expires	Comments

Analysis	Expires	Comments
1202020-06 TB25 [Water] Sampled 02/06/12 10:25 Eastern		
TPH - Purgeable	02/20/12	
Dissolved HC Gases	02/20/12	5 day prelim results
1202020-07 FB11 [Water] Sampled 02/06/12 14:36 Eastern		
TPH - Extractable	02/13/12	
TPH - Purgeable	02/20/12	
Dissolved HC Gases	02/20/12	5 day prelim results
1202020-08 HW30 [Water] Sampled 02/06/12 14:34 Eastern		
TPH - Purgeable	02/20/12	
Dissolved HC Gases	02/20/12	5 day prelim results
TPH - Extractable	02/13/12	
1202020-09 HW30-P [Water] Sampled 02/06/12 15:00 Eastern		
TPH - Extractable	02/13/12	
TPH - Purgeable	02/20/12	
Dissolved HC Gases	02/20/12	5 day prelim results
1202020-10 TB26 [Water] Sampled 02/06/12 10:30 Eastern		
Dissolved HC Gases	02/20/12	5 day prelim results
TPH - Purgeable	02/20/12	
1202020-11 HW15a [Water] Sampled 02/07/12 10:47 Eastern		
Dissolved HC Gases	02/21/12	5 day prelim results
TPH - Extractable	02/14/12	
TPH - Purgeable	02/21/12	
1202020-12 HW15a-P [Water] Sampled 02/07/12 10:55 Eastern		
Dissolved HC Gases	02/21/12	5 day prelim results
TPH - Purgeable	02/21/12	
TPH - Extractable	02/14/12	
1202020-13 TB28 [Water] Sampled 02/07/12 07:05 Eastern		
Dissolved HC Gases	02/21/12	5 day prelim results
TPH - Purgeable	02/21/12	

Reviewed By _____ Date _____

cooler #1

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/7/2012
CarrierName: FedEx
AirbillNo: 7931 9923 7545

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020712-125817-0138

Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412.2389

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
HW43	Drinking Water/ David Johnson	Grab	DRO(7), DRO(7)	3741 (-NA- / 1000mlAmber), 3742 (-NA- / 1000mlAmber) (2)	HW43	02/06/2012 12:06	
HW43-P	Drinking Water/ Francisco Laposlol	Grab	DRO(7), DRO(7)	3777 (-NA- / 1000mlAmber), 3778 (-NA- / 1000mlAmber) (2)	HW43	02/06/2012 12:19	

Custody seals intact and temp blank 4°C.

2/8/12

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: DRO=11-Diesel Range Organics

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
4	[signature]	2/7/12	—	Fed Ex					[signature]	2/8/12	0950

DIM0035998

DIM0036409

USEPA CLP Generic COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 3-020712-132522-0139

DateShipped: 2/7/2012
CarrierName: FedEx
AirbillNo: 7980 3138 3881

Case # CT5865

Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412.2389

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
HW31	Drinking Water/ Dan Jacobsen	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	3903 (HCl / 40mlGlassVial), 3904 (HCl / 40mlGlassVial), 3921 (-NA- / 1000mlAmber), 3922 (-NA- / 1000mlAmber), 3925 (HCl / 40mlGlassVial), 3926 (HCl / 40mlGlassVial) (6)	HW31	02/06/2012 18:20	
HW31-P	Drinking Water/ Francisco Lapostol	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	3975 (HCl / 40mlGlassVial), 3976 (HCl / 40mlGlassVial), 3993 (-NA- / 1000mlAmber), 3994 (-NA- / 1000mlAmber), 3997 (HCl / 40mlGlassVial), 3998 (HCl / 40mlGlassVial) (6)	HW31	02/06/2012 18:28	
HW31z	Drinking Water/ Dan Jacobsen	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	3939 (HCl / 40mlGlassVial), 3940 (HCl / 40mlGlassVial), 3957 (-NA- / 1000mlAmber), 3958 (-NA- / 1000mlAmber), 3961 (HCl / 40mlGlassVial), 3962 (HCl / 40mlGlassVial) (6)	HW31	02/06/2012 18:20	

Custody seals intact & temp blank 3°C [illegible] 2/8/12

Special Instructions:

Shipment for Case Complete? N
Samples Transferred From Chain of Custody #

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
18	[signature]	2/7/12			Fed Ex				[signature]	0950	2/8/12

COOLER #2

DIM0035998
DIM0036410

USEPA CLP Generic COC (LAB COPY)
DateShipped: 2/7/2012
CarrierName: FedEx
AirbillNo: 7980 3138 3881

CHAIN OF CUSTODY RECORD

Case # CT5865

No: 3-020712-132522-0139
Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412.2389

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
TB25	Aqueous/ Christina Rice	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	3510 (HCl / 40mlGlassVial), 3511 (HCl / 40mlGlassVial), 3512 (HCl / 40mlGlassVial), 3513 (HCl / 40mlGlassVial) (4)	TB25	02/06/2012 10:25	

Custody seals intact and temp blank 3°C upon receipt @ lab. RM 2/7/12

Special Instructions:

Shipment for Case Complete? N
Samples Transferred From Chain of Custody #

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
4	[illegible]	2/7/12	—			Fed Ex	—	→	RM EPA Rm Lab	2/8/12	0950

COOLER #2

00020

cooler #3

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/7/2012
CarrierName: FedEx
AirbillNo: 7932 0242 2700

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020712-161354-0146

Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412.2389

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
HW15a	Drinking Water/ Tom Sedlacek	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	4025 (HCl / 40mlGlassVial), 4026 (HCl / 40mlGlassVial), 4043 (-NA- / 1000mlAmber), 4044 (-NA- / 1000mlAmber), 4047 (HCl / 40mlGlassVial), 4048 (HCl / 40mlGlassVial) (6)	HW15a	02/07/2012 10:47	
HW15a-P	Drinking Water/ Dan Jacobsen	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	4061 (HCl / 40mlGlassVial), 4062 (HCl / 40mlGlassVial), 4079 (-NA- / 1000mlAmber), 4080 (-NA- / 1000mlAmber), 4083 (HCl / 40mlGlassVial), 4084 (HCl / 40mlGlassVial) (6)	HW15a	02/07/2012 10:55	
TB28	Aqueous/ Christina Rice	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	4015 (HCl / 40mlGlassVial), 4016 (HCl / 40mlGlassVial), 4017 (HCl / 40mlGlassVial), 4018 (HCl / 40mlGlassVial) (4)	TB28	02/07/2012 07:05	

Special Instructions: custody seals intact and temp. blank 3°C upon receipt. 2/8/12

Shipment for Case Complete? N
Samples Transferred From Chain of Custody #

Analysis Key: RSK-175=11-Dissolved Gases_Meth.Ethe.Etha. DRO=11-Diesel Range Organics. GRO=11-Gasoline Range Organics

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
16	[signature]	2/7/12				FedEx			[signature]	2/8/12	0950

00021

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/7/2012
CarrierName: FedEx
AirbillNo: 7980 3034 0908

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020712-123038-0134

Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412.2389

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
FB11	Aqueous/ Dan Jacobsen	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	3795 (HCl / 40mlGlassVial), 3796 (HCl / 40mlGlassVial), 3813 (-NA- / 1000mlAmber), 3814 (-NA- / 1000mlAmber), 3817 (HCl / 40mlGlassVial), 3818 (HCl / 40mlGlassVial) (6)	FB11	02/06/2012 14:36	
HW30	Drinking Water/ Tom Sedlacek	Grab	RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	3831 (HCl / 40mlGlassVial), 3849 (-NA- / 1000mlAmber), 3850 (-NA- / 1000mlAmber), 3853 (HCl / 40mlGlassVial), 3854 (HCl / 40mlGlassVial) (5)	HW30	02/06/2012 14:34	
HW30-P	Drinking Water/ Dan Jacobsen	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	3867 (HCl / 40mlGlassVial), 3868 (HCl / 40mlGlassVial), 3885 (-NA- / 1000mlAmber), 3886 (-NA- / 1000mlAmber), 3889 (HCl / 40mlGlassVial), 3890 (HCl / 40mlGlassVial) (6)	HW30	02/06/2012 15:00	

Special Instructions: Custody seals intact and temp blank 3°C upon receipt at lab RB 2/8/12

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
17	[signature]	2/7/12				Fed Ex			[signature] EPA R9 Lab	2/8/12	0950

COOLER #4

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/7/2012
CarrierName: FedEx
AirbillNo: 7980 3034 0908

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020712-123038-0134

Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412.2389

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
TB26	Aqueous/ Christina Rice	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	3517 (HCl / 40mlGlassVial), 3518 (HCl / 40mlGlassVial), 3519 (HCl / 40mlGlassVial), 3520 (HCl / 40mlGlassVial) (4)	TB26	02/06/2012 10:30	

Custody seals intact and temp. blank 3°C upon receipt at lab.
2/8/12

Special Instructions:

Shipment for Case Complete? N
Samples Transferred From Chain of Custody #

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
4	[illegible]	2/7/12	—		Fed Ex		—		[illegible] EPA R9 lab	2/8/12	1450

COOLER #4

DIM0035998
: 000023
DIM0036414

WORK ORDER

Printed: 2/9/2012 10:57:33AM

1202023

EPA Region 9 Laboratory

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

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

Project Contact
US EPA Region 3, Eastern Response Branch
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	3	Yes	Yes	Yes	No	Yes	798035457893
2Cooler	Cooler	2	Yes	Yes	Yes	No	Yes	793208287055
3Cooler	Cooler	8	Yes	Yes	Yes	No	Yes	798037594161

Date Due:	03/02/12 15:00 (21 day TAT)	SDG:	12039A
Received By:	Richard Bauer	Date Received:	02/09/12 10:00
Logged In By:	Chris Cagurangan	Date Logged In:	02/09/12 10:11

Analysis	Hold Time Expires	Comments
1202023-01 FB12 [Water] Sampled 02/07/12 13:35 Eastern		
TPH - Extractable	02/14/12	
Dissolved HC Gases	02/21/12	5 day prelim results
TPH - Purgeable	02/21/12	
1202023-02 HW51 [Water] Sampled 02/07/12 13:48 Eastern		
TPH - Purgeable	02/21/12	
TPH - Extractable	02/14/12	
Dissolved HC Gases	02/21/12	5 day prelim results
1202023-03 HW51-P [Water] Sampled 02/07/12 13:56 Eastern		
TPH - Extractable	02/14/12	
TPH - Purgeable	02/21/12	
Dissolved HC Gases	02/21/12	5 day prelim results
1202023-04 TB27 [Water] Sampled 02/07/12 07:00 Eastern		
TPH - Purgeable	02/21/12	
Dissolved HC Gases	02/21/12	5 day prelim results
1202023-05 HW47 [Water] Sampled 02/08/12 11:50 Eastern		
TPH - Purgeable	02/22/12	
TPH - Extractable	02/15/12	
Dissolved HC Gases	02/22/12	5 day prelim results

1202023

EPA Region 9 Laboratory

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

Analysis	Hold Time Expires	Comments

Analysis	Expires	Comments
1202023-06 HW47-P [Water] Sampled 02/08/12 12:25 Eastern		
Dissolved HC Gases	02/22/12	5 day prelim results
TPH - Purgeable	02/22/12	
TPH - Extractable	02/15/12	
1202023-07 TB29 [Water] Sampled 02/08/12 07:05 Eastern		
Dissolved HC Gases	02/22/12	5 day prelim results
TPH - Purgeable	02/22/12	
1202023-08 FB13 [Water] Sampled 02/08/12 09:00 Eastern		
TPH - Purgeable	02/22/12	
Dissolved HC Gases	02/22/12	5 day prelim results
TPH - Extractable	02/15/12	
1202023-09 HW38 [Water] Sampled 02/08/12 10:41 Eastern		
Dissolved HC Gases	02/22/12	5 day prelim results
TPH - Purgeable	02/22/12	
TPH - Extractable	02/15/12	
1202023-10 HW38-P [Water] Sampled 02/08/12 10:52 Eastern		
TPH - Extractable	02/15/12	
Dissolved HC Gases	02/22/12	5 day prelim results
TPH - Purgeable	02/22/12	
1202023-11 TB30 [Water] Sampled 02/08/12 07:10 Eastern		
TPH - Purgeable	02/22/12	
Dissolved HC Gases	02/22/12	5 day prelim results

Reviewed By Date

Cooler # 1

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/8/2012
CarrierName: FedEx
AirbillNo: 7980 3545 7893

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020812-110736-0153

Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412.2389

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
FB12	Aqueous/ Dan Jacobsen	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	4169 (HCl / 40mlGlassVial), 4170 (HCl / 40mlGlassVial), 4187 (-NA- / 1000mlAmber), 4188 (-NA- / 1000mlAmber), 4191 (HCl / 40mlGlassVial), 4192 (HCl / 40mlGlassVial) (6)	FB12	02/07/2012 13:35	
HW51	Drinking Water/ David Johnson	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	4097 (HCl / 40mlGlassVial), 4098 (HCl / 40mlGlassVial), 4115 (-NA- / 1000mlAmber), 4116 (-NA- / 1000mlAmber), 4119 (HCl / 40mlGlassVial), 4120 (HCl / 40mlGlassVial) (6)	HW51	02/07/2012 13:48	
HW51-P	Drinking Water/ Francisco Lapostol	Grab	RSK-175(7), RSK-175(7), DRO(7), GRO(7), GRO(7)	4133 (HCl / 40mlGlassVial), 4134 (HCl / 40mlGlassVial), 4152 (-NA- / 1000mlAmber), 4155 (HCl / 40mlGlassVial), 4156 (HCl / 40mlGlassVial) (5)	HW51	02/07/2012 13:56	

Custody seals intact and temp blank 3°C upon receipt @ lab [illegible] 2/9/12

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
AO 17	[illegible]	2/9/12				Fed Ex			[illegible] EPA Rm Lab	2/9/12	1400
DB 2/8/12											

cooler #1

USEPA CLP Generic COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 3-020812-110736-0153

DateShipped: 2/8/2012
CarrierName: FedEx
AirbillNo: 7980 3545 7893

Case #. CT5865

Lab: EPA R9 Laboratory
Lab Contact
Lab Phone: 510.412.2389

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
TB27	Aqueous/ Christina Rice	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	4008 (HCl / 40mlGlassVial), 4009 (HCl / 40mlGlassVial), 4010 (HCl / 40mlGlassVial), 4011 (HCl / 40mlGlassVial) (4)	TB27	02/07/2012 07:00	

Special Instructions: custody seals intact and temp blank 3°C upon receipt @ lab gas 2/8/12

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
4	[illegible]	2/8/12			Fed Ex				[illegible] EPA R9 Lab	2/8/12	[illegible]

00026

From: (304) 230-1230 Origin ID: BGMA
Brian BurrisSample Management Dim
TechLaw, Inc.
63 PENNFIELD RD

MONTROSE PA 18801

FedEx Express

Ship Date: 08FEB12
ActWgt: 52.0 LB
CAD: 8747913/NET3250
Dims: 18 X 14 X 12 IN

Delivery Address Bar Code

SHIP TO: (510) 412-2389 BILL SENDER
Sample Receiving
U.S. EPA Region 9 Laboratory
1337 S 46TH ST BLDG 201

RICHMOND, CA 94804

Ref # TL01-11-12-001
Invoice #
PO #
Dept #

THU - 09 FEB A2
PRIORITY OVERNIGHT
ASR
94804
CA-US
OAK

TRK# 7980 3545 7893
0201

XH JEMA

1. Select the 'Print' button to print 1 copy of each label.
2. The Return Shipment instructions, which provide your recipient with information on the returns process, will be printed with the label(s).
3. After printing, select your next step by clicking one of the displayed buttons.

Note: To review or print individual labels, select the Label button under each label image above.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Cooler # 1

3°C

DIM0035998

Cooler #2

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/8/2012
CarrierName: FedEx
AirbillNo: 7932 0828 7055

CHAIN OF CUSTODY RECORD

Case # CT5865

No: 3-020812-171732-0160

Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412 2389

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
HW47	Drinking Water/ David Johnson	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	4336 (HCl / 40mlGlassVial), 4337 (HCl / 40mlGlassVial), 4354 (-NA- / 1000mlAmber), 4355 (-NA- / 1000mlAmber), 4358 (HCl / 40mlGlassVial), 4359 (HCl / 40mlGlassVial) (6)	HW47	02/08/2012 11:50	
HW47-P	Drinking Water/ Francisco Lapostol	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	4370 (HCl / 40mlGlassVial), 4371 (HCl / 40mlGlassVial), 4388 (-NA- / 1000mlAmber), 4389 (-NA- / 1000mlAmber), 4392 (HCl / 40mlGlassVial), 4393 (HCl / 40mlGlassVial) (6)	HW47-P	02/08/2012 12:25	
TB29	Aqueous/ Christina Rice	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	4202 (HCl / 40mlGlassVial), 4203 (HCl / 40mlGlassVial), 4204 (HCl / 40mlGlassVial), 4205 (HCl / 40mlGlassVial) (4)	TB29	02/08/2012 07:05	

Custody seals intact and temp blank 2°C upon receipt @ lab [illegible] 7/9/12

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
16	[illegible]	2/8/12			Fed Ex				[illegible] USEPA Ex Lab	7/9/12	1000

DIM0036420

From: (304) 230-1230 Origin ID: BGMA
Brian BurrisSample Management, Dim
TechLaw, Inc.
63 PENNFIELD RD

MONTROSE, PA 18801

FedEx Express

J12101112190220

Ship Date: 08FEB12
ActWgt: 45.0 LB
CAD: 8747913/INET3250

Dims: 18 X 14 X 12 IN

Delivery Address Bar Code

Ref # TL01-11-12-001
Invoice #
PO #
Dept #

SHIP TO: (510) 412-2389 BILL SENDER

Sample Receiving
U.S. EPA Region 9 Laboratory
1337 S 46TH ST BLDG 201

RICHMOND, CA 94804

THU - 09 FEB A2
PRIORITY OVERNIGHT
ASR
94804
CA-US
OAK

TRK# 7932 0828 7055
0201

XH JEMA

1. Select the 'Print' button to print 1 copy of each label.
2. The Return Shipment instructions, which provide your recipient with information on the returns process, will be printed with the label(s)
3. After printing, select your next step by clicking one of the displayed buttons.

Note: To review or print individual labels, select the Label button under each label image above.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide

Cooler #2

Cooler #3

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/8/2012
CarrierName: FedEx
AirbillNo. 7980 3759 4161

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020812-161703-0156

Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412.2389

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
FB13	Aqueous/ Dan Jacobsen	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	4233 (HCl / 40mlGlassVial), 4234 (HCl / 40mlGlassVial), 4251 (-NA- / 1000mlAmber), 4252 (-NA- / 1000mlAmber), 4255 (HCl / 40mlGlassVial), 4256 (HCl / 40mlGlassVial) (6)	FB13	02/08/2012 09:00	
HW38	Drinking Water/ Tom Sedlacek	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	4267 (HCl / 40mlGlassVial), 4268 (HCl / 40mlGlassVial), 4285 (-NA- / 1000mlAmber), 4286 (-NA- / 1000mlAmber), 4289 (HCl / 40mlGlassVial), 4290 (HCl / 40mlGlassVial) (6)	HW38	02/08/2012 10:41	
HW38-P	Drinking Water/ Dan Jacobsen	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	4301 (HCl / 40mlGlassVial), 4302 (HCl / 40mlGlassVial), 4319 (-NA- / 1000mlAmber), 4320 (-NA- / 1000mlAmber), 4323 (HCl / 40mlGlassVial), 4324 (HCl / 40mlGlassVial) (6)	HW38-P	02/08/2012 10:52	

Custody seals intact and temp blank 8°C upon Receipt @ KB 2/9/12

Special Instructions

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
18	[illegible]	2/8/12	—	Fed Ex					[illegible] EPA R9 Lab	2/9/12	1000

00029

DIM0035998

DIM0036422

Cooler #'s

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/8/2012
CarrierName: FedEx
AirbillNo: 7980 3759 4161

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020812-161703-0156

Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412.2389

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
TB30	Aqueous/ Christina Rice	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	4209 (HCl / 40mlGlassVial), 4210 (HCl / 40mlGlassVial), 4211 (HCl / 40mlGlassVial), 4212 (HCl / 40mlGlassVial) (4)	TB30	02/08/2012 07:10	
			custody seals intact and temp blank 8°C upon receipt @ lab.				

Special Instructions:

Shipment for Case Complete? N
Samples Transferred From Chain of Custody #

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
4	[signature]	2/9/12	Fed Ex						[signature] EPA R9 Lab	2/9/12	1000

From: (304) 230-1230 Origin ID: BGMA
Brian BurnsSample Management_Dim
TechLaw, Inc.
63 PENNFIELD RD

MONTROSE, PA 18801

Ship Date: 08FEB12
ActWgt: 25.0 LB
CAD: 8747913/INET3250
Dims: 18 X 14 X 12 IN

Delivery Address Bar Code

SHIP TO: (510) 412-2389 BILL SENDER
Sample Receiving
U.S. EPA Region 9 Laboratory
1337 S 46TH ST BLDG 201

RICHMOND, CA 94804

Ref # TL01-11-12-001
Invoice #
PO #
Dept #

TRK# 7980 3759 4161
0201

THU - 09 FEB A2
PRIORITY OVERNIGHT
ASR
94804
CA-US
OAK

XH JEMA

1. Select the 'Print' button to print 1 copy of each label.
2. The Return Shipment instructions, which provide your recipient with information on the returns process, will be printed with the label(s).
3. After printing, select your next step by clicking one of the displayed buttons.

Note: To review or print individual labels, select the Label button under each label image above.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

cooler #3

8°C

Sample Preparation

DIM0035998

DIM0036425

PREPARATION BENCH SHEET

B2B0026

EPA Region 9 Laboratory **Printed: 2/7/2012 2:14:03PM**

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
1202014-03RE1 A	HW09-P	02/07/12 13:08	1038.72	3				500	LA	5	1543.42	504.7	This sample in refrig 48h in case original is contaminated.
1202017-01 A	EB02	02/07/12 13:08	1025.31	3				500	LA	5	1528.51	503.2	
1202017-02 B	HW45	02/07/12 13:08	1006.39	3				500	LA	5	1509.71	503.32	
1202017-03 B	HW45-P	02/07/12 13:08	1024.88	3				500	LA	5	1528.17	503.29	
B2B0026-BLK1	Blank	02/07/12 13:08	1000	3			0	500	LA	5	1622	622	
B2B0026-BS1	LCS	02/07/12 13:08	1000	3	1H09011		500	500	LA	5	1622	622	
B2B0026-MS1	Matrix Spike	02/07/12 13:08	1010.96	3	1H09011	1202017-02	500	500	LA	5	1514.65	503.69	
B2B0026-MSD1	Matrix Spike Dup	02/07/12 13:08	1029.55	3	1H09011	1202017-02	500	500	LA	5	1533.72	504.17	

Dimock TPH, SDG 12038C. All samples adjusted to pH <2. Glasswool rinsed 10/14/11.

Spike witnessed by SVR 2/7/12

Reagents

Reagent #	Description
1D15018	Sulfuric Acid 1:1
1K30041	Sodium Sulfate/K28619
2A13011	Dichloromethane/LN:DE934

Cm @ 14:00
Stop 0800 2/8/12

TD 02-09-12
Preparation Reviewed By Date

PREPARATION BENCH SHEET

B2B0037

EPA Region 9 Laboratory **Printed: 2/8/2012 2:22:31PM**

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
1202020-01 A	HW43	02/08/12 12:56	1034.02	3				500	LA	7	1538.44	504.42	
1202020-02 A	HW43-P	02/08/12 12:56	1044.75	3				500	LA	7	1549.68	504.93	
1202020-03 A	HW31	02/08/12 12:56	1047.67	3				500	LA	7	1552.15	504.48	
1202020-04 A	HW31-P	02/08/12 12:56	1043.03	3				500	LA	7	1546.8	503.77	
1202020-05 A	HW31z	02/08/12 12:56	911.3	3				500	LA	7	1414.89	503.59	
1202020-07 A	FB11	02/08/12 12:56	1009.82	3				500	LA	5	1514.49	504.67	
1202020-08 A	HW30	02/08/12 12:56	982.91	3				500	LA	7	1486.67	503.76	
1202020-09 A	HW30-P	02/08/12 12:56	1018.55	3				500	LA	7	1520.68	502.13	
1202020-11 A	HW15a	02/08/12 12:56	1049.51	3				500	LA	7	1550.3	500.79	
1202020-12 A	HW15a-P	02/08/12 12:56	1053.61	3				500	LA	7	1554.61	501	
B2B0037-BLK1	Blank	02/08/12 12:56	1000	3			0	500	LA	5	1624	624	pH 5
B2B0037-BS1	LCS	02/08/12 12:56	1000	3	1H09011		500	500	LA	5	1624	624	pH 5

Dimock TPH, SDG 12039A. Extra bottles for MS/MSD not provided. All samples adjusted to pH <2. Glasswool rinsed 10/14/11.

Start 14:30
Stop 0840 ~~2/10/12~~ 2/9/12

TD 02-09-12
Preparation Reviewed By Date

PREPARATION BENCH SHEET

B2B0037

EPA Region 9 Laboratory

Printed: 2/8/2012 2:22:31PM

Project: -

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	ùL Spike	uL Surrogate	Prepared By	pH	Initial wt., g	Final wt., g	Extraction Comments

Reagents

Reagent #	Description
1D15018	Sulfuric Acid 1:1
1K30041	Sodium Sulfate/K28619
2A13011	Dichloromethane/LN:DE934

Spike witnessed by SUL 2/3/12

TD 02-09-12

Preparation Reviewed By Date

PREPARATION BENCH SHEET

B2B0043

EPA Region 9 Laboratory **Printed: 2/9/2012 1:56:24PM**

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
1202023-01 A	FB12	02/09/12 11:36	1015.77	3				500	SUL	5	1517.7	501.93	
1202023-02 A	HW51	02/09/12 11:36	949.52	3				500	SUL	7	1450.75	501.23	
1202023-03 A	HW51-P	02/09/12 11:36	1041.33	3				500	SUL	7	1540.7	499.37	
1202023-05 A	HW47	02/09/12 11:36	1035.65	3				500	SUL	7	1539.74	504.09	Cloudy, yellow in color
1202023-06 A	HW47-P	02/09/12 11:36	1045.44	3				500	SUL	7	1546.99	501.55	
1202023-08 A	FB13	02/09/12 11:36	1016.65	3				500	SUL	5	1520.98	504.33	
1202023-09 A	HW38	02/09/12 11:36	1052.77	3				500	SUL	7	1554.13	501.36	
1202023-10 A	HW38-P	02/09/12 11:36	1016.38	3				500	SUL	7	1518.47	502.09	
B2B0043-BLK1	Blank	02/09/12 11:36	1000	3			0	500	SUL		1624	624	pH 5
B2B0043-BS1	LCS	02/09/12 11:36	1000	3	2B03002		500	500	SUL		1624	624	pH 5

Spikes witnessed by SL 2/09/12

Dicmock TPH, SDG 12039A. Extra bottles for MS/MSD not provided. All samples adjusted to pH <2. Glasswool rinsed 10/14/11.

Reagents

Reagent #	Description
D15018	Sulfuric Acid 1:1
K30041	Sodium Sulfate/K28619
2A1301I	Dichloromethane/LN:DE934

Start 2/9/12 1400
Stop 2/10/12 0800

TD 02-10-12

Preparation Reviewed By Date

INITIAL CALIBRATION

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)
  - DIL
  - 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

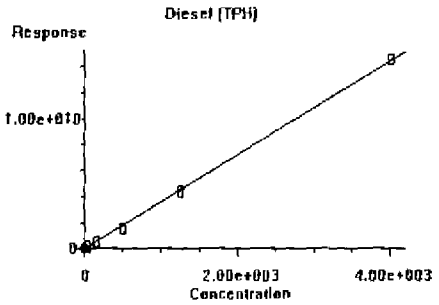
m/z | Relative Response: Rel

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	200314582.35506
150	150.000000	544460939.14416
500	500.000000	1561624107.1356
1250	1250.000000	4407640392.3954
4000	4000.000000	14468099897.07
DIL1		
DIL2		
DIL3		
DIL4		
DIL5		

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	External 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

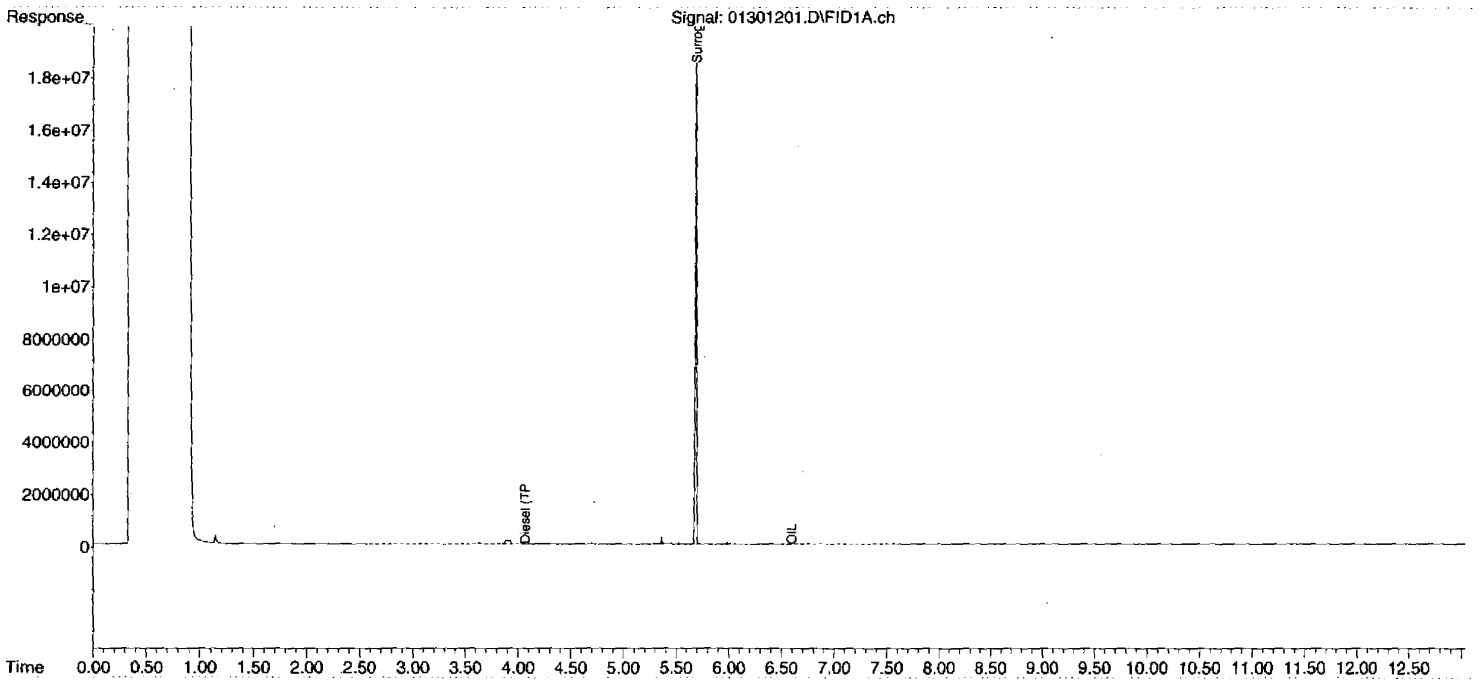
(f)=RT Delta > 1/2 Window (m)=manual int.

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

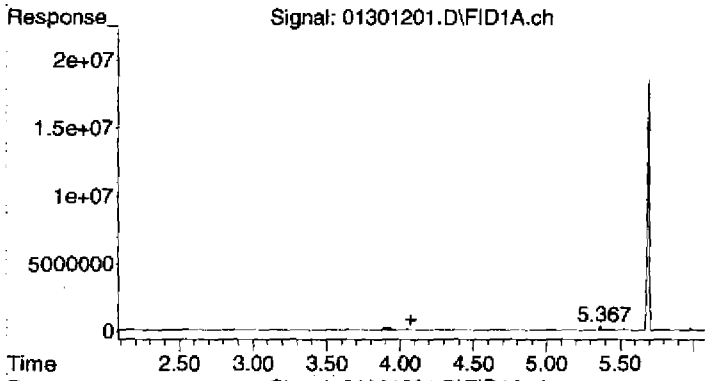
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um



DIM0036437

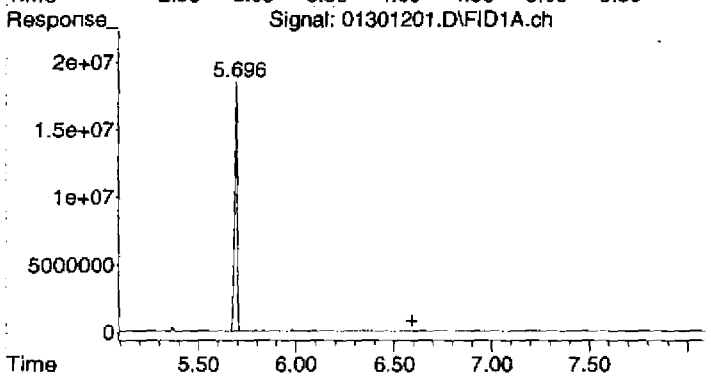
DIM0035998

00042



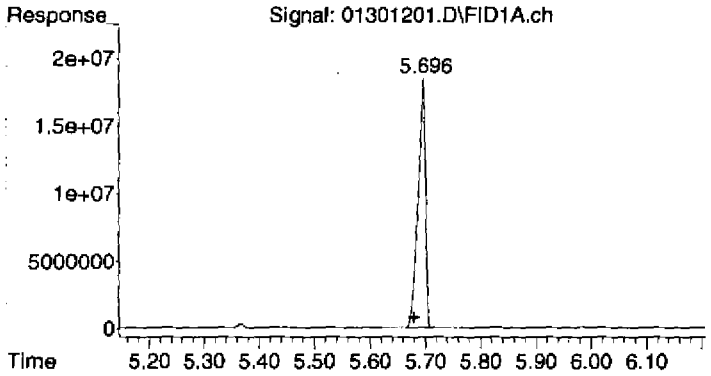
#1 Diesel (TPH)

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

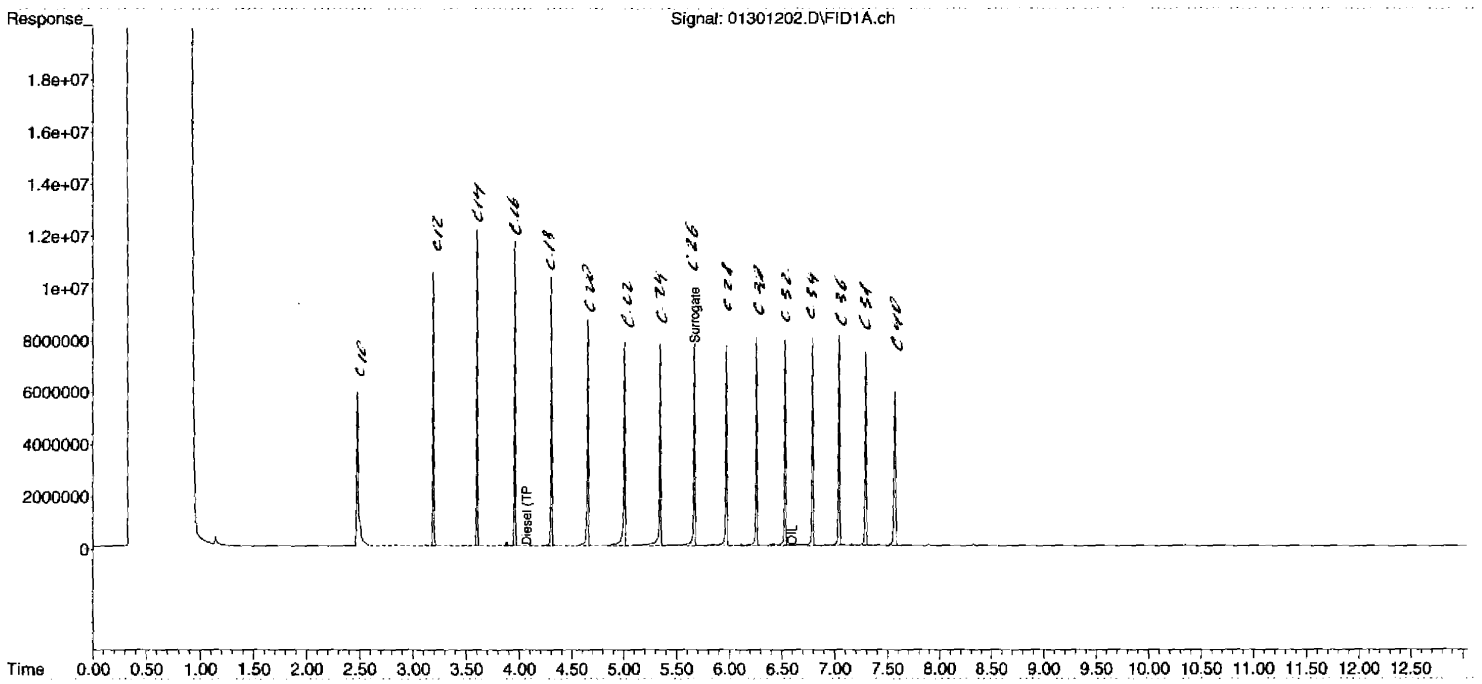
(f)=RT Delta > 1/2 Window (m)=manual int.

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

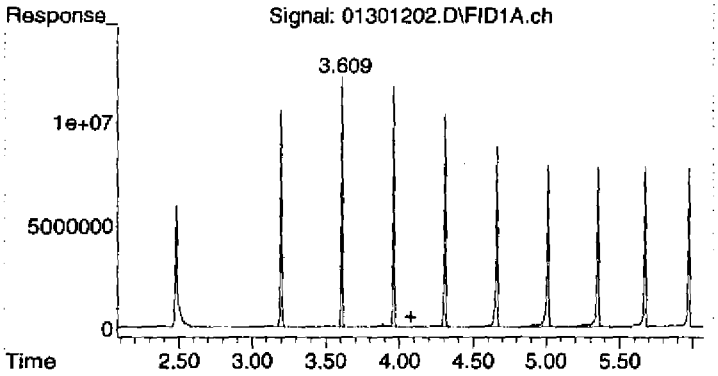
Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:46:28 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

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



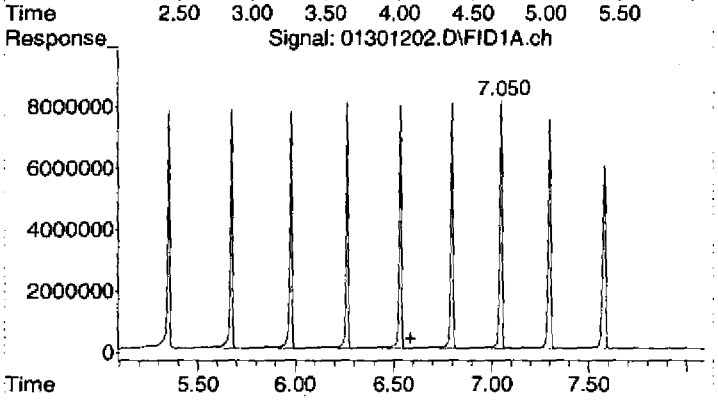
DIM0036440

DIM0035998



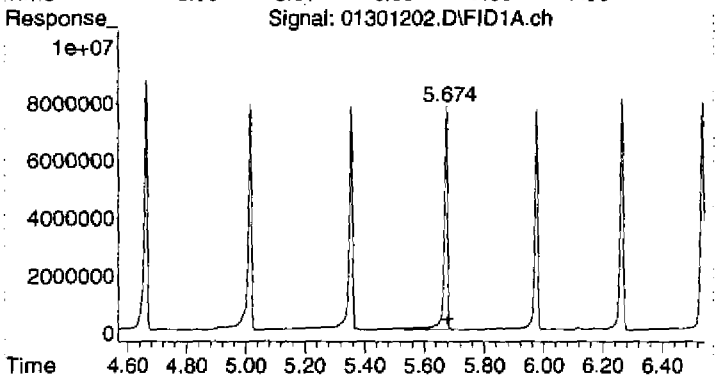
#1 Diesel (TPH)

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

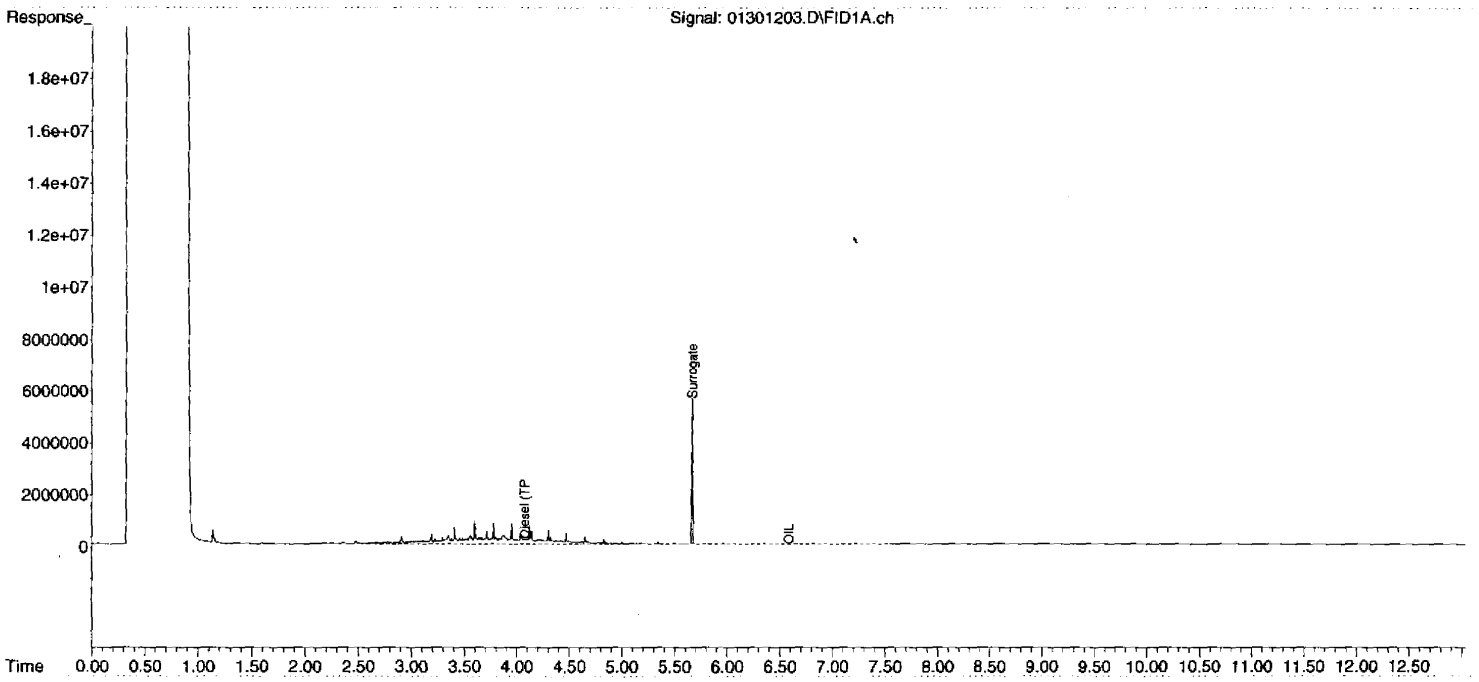
(f)=RT Delta > 1/2 Window (m)=manual int.

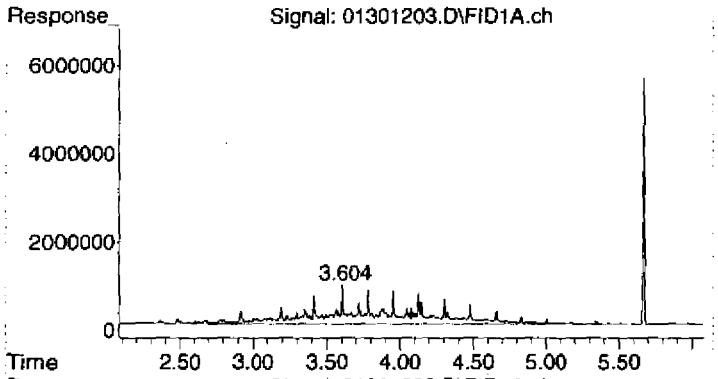
Quantitation Report (Not Reviewed)

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

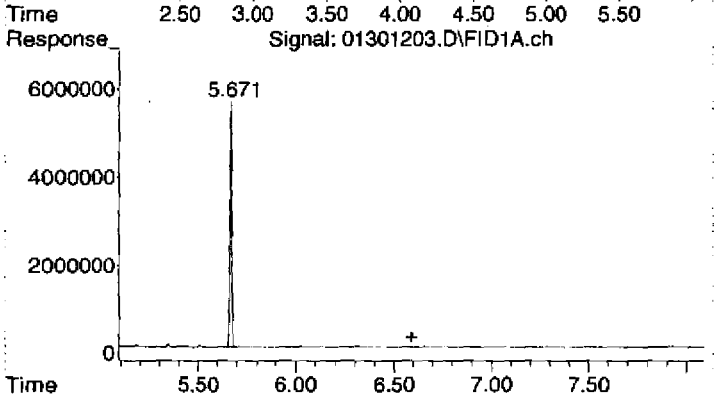
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





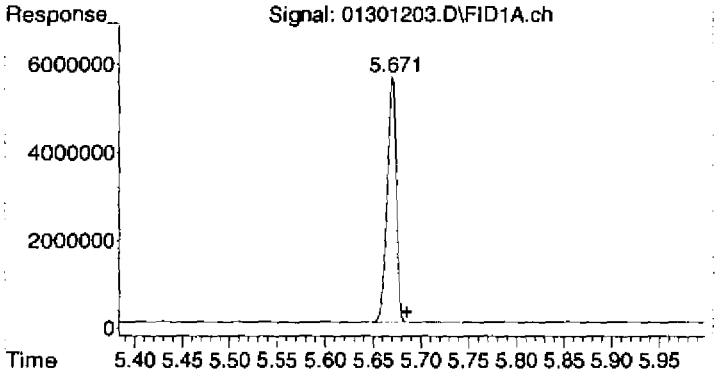
#1 Diesel (TPH)

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

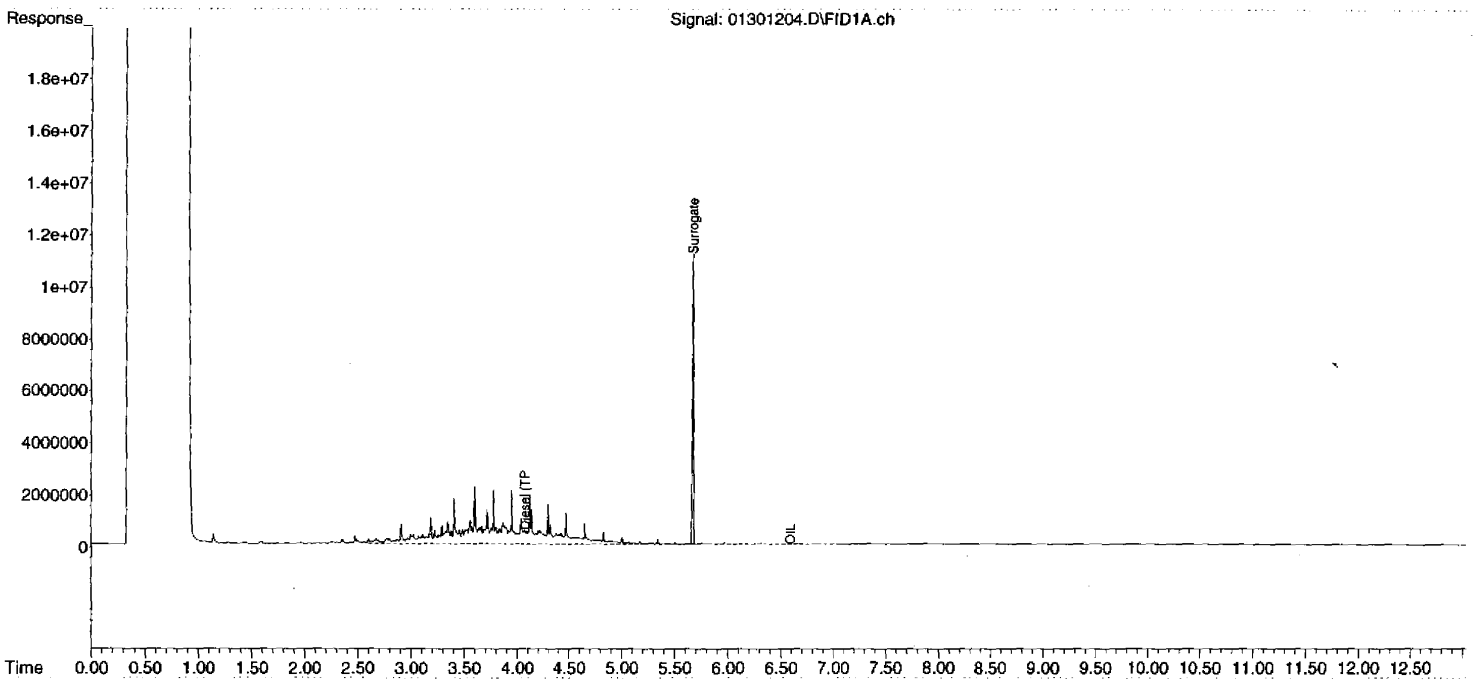
(f)=RT Delta > 1/2 Window (m)=manual int.

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

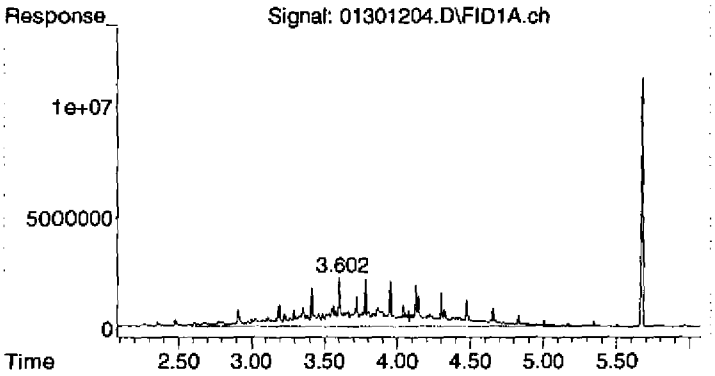
Integration File: HEXACOSANE.E
Quant Time: Jan 31 09:38:36 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Mon Jan 30 08:25:03 2012
Response via : Initial Calibration
Integrator: ChemStation

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



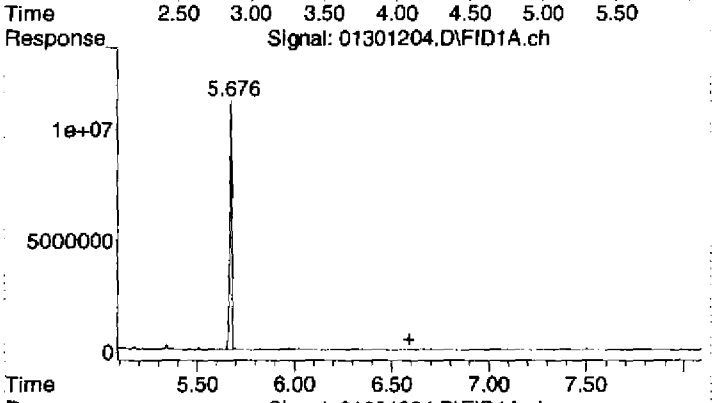
DIM0036446

DIM0035998



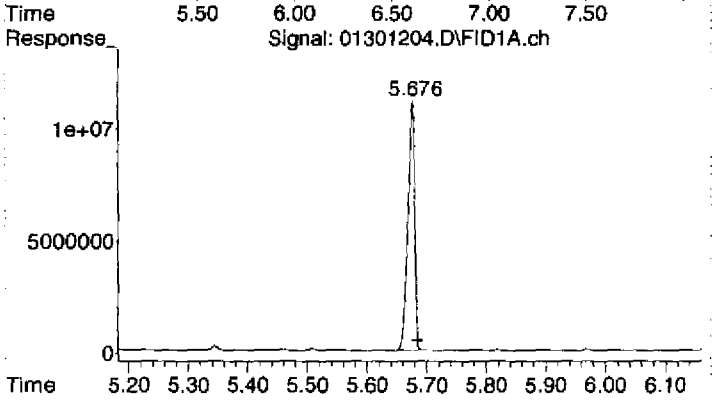
#1 Diesel (TPH)

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

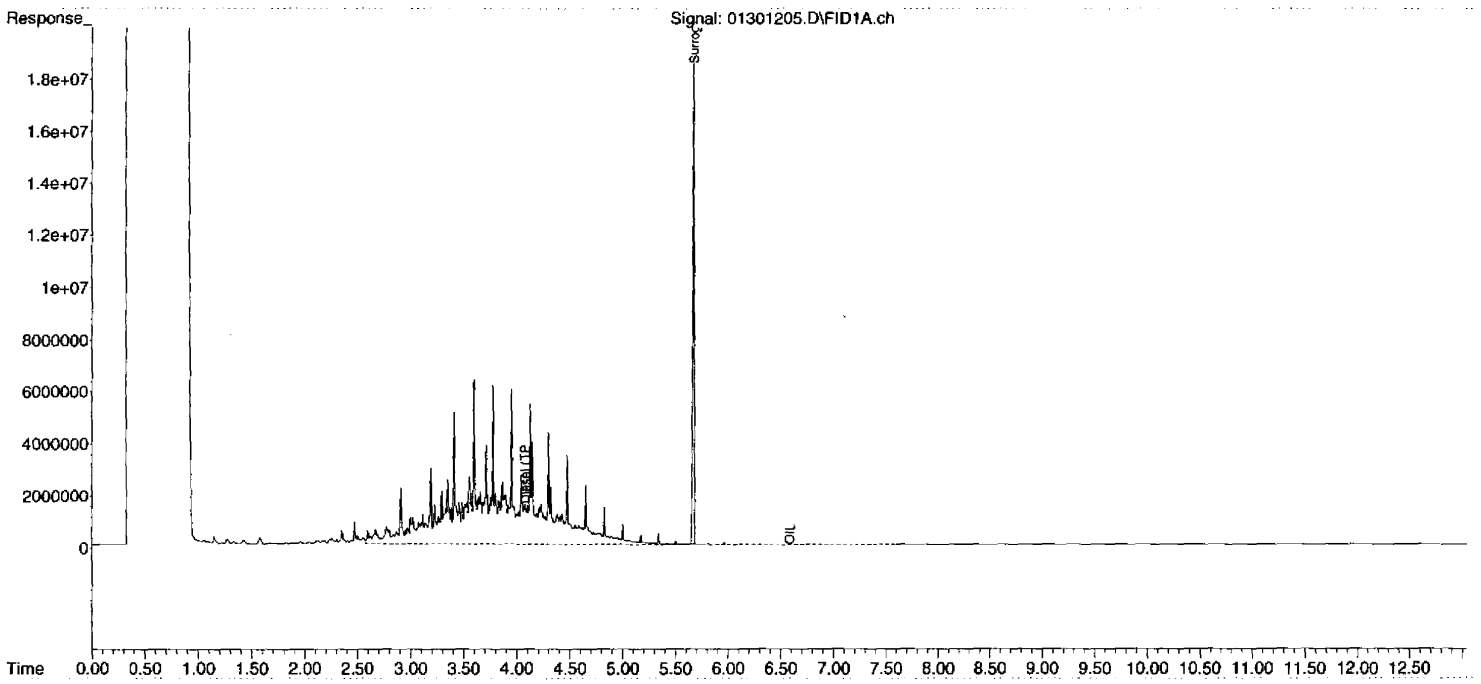
(f)=RT Delta > 1/2 Window (m)=manual int.

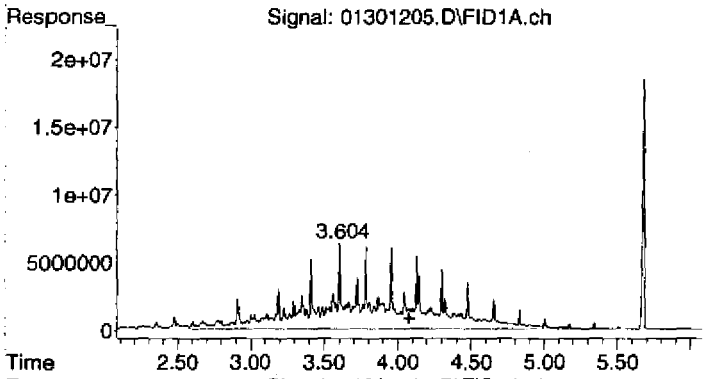
Quantitation Report (Not Reviewed)

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

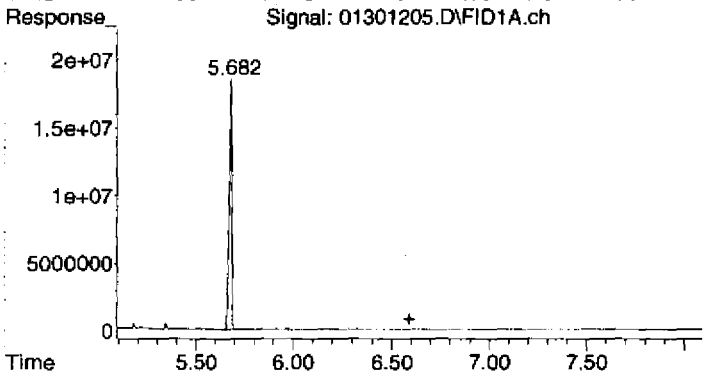
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





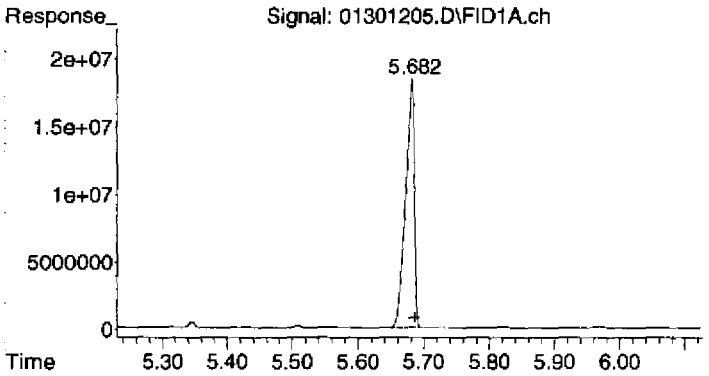
#1 Diesel (TPH)

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

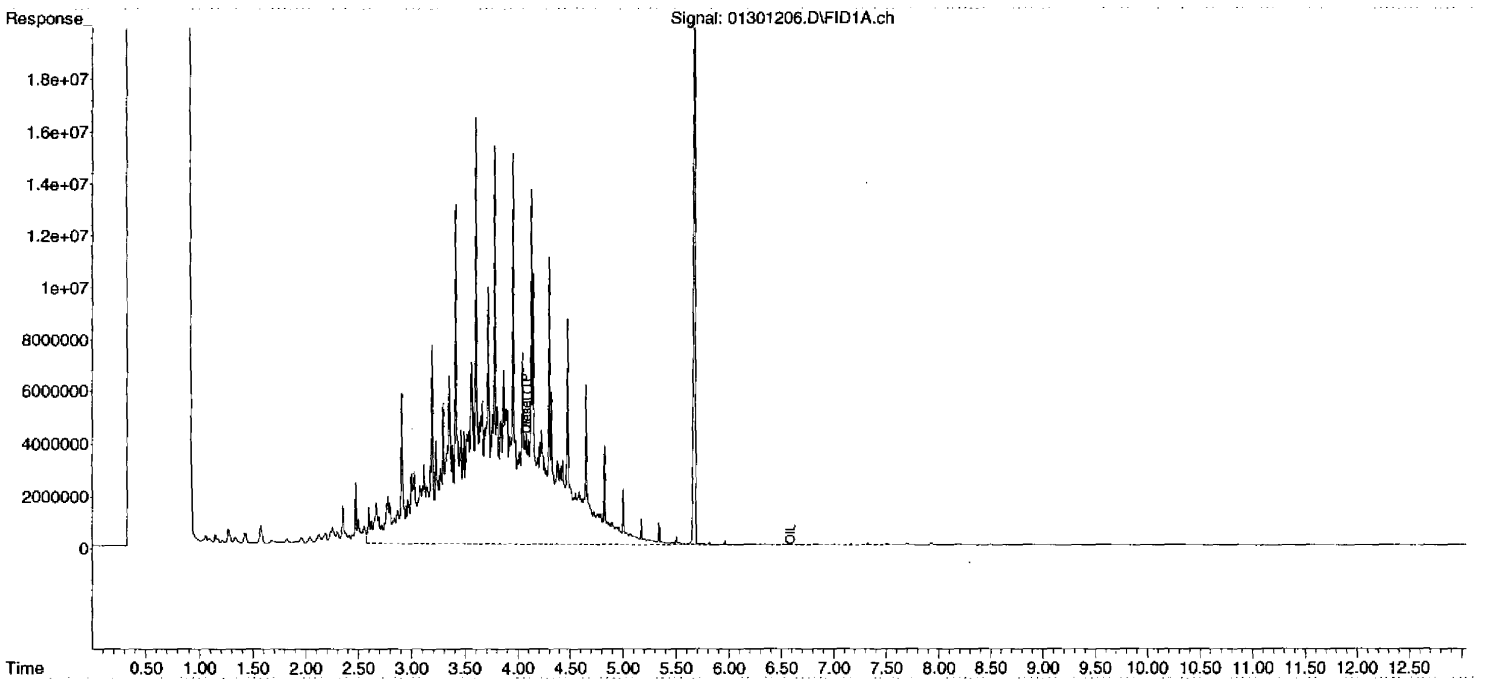
(f)=RT Delta > 1/2 Window (m)=manual int.

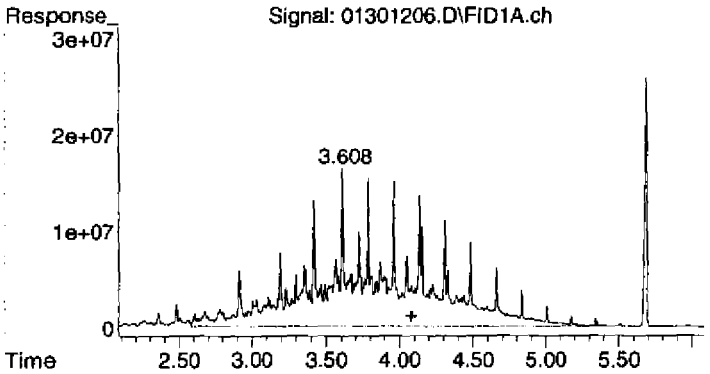
Quantitation Report (Not Reviewed)

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

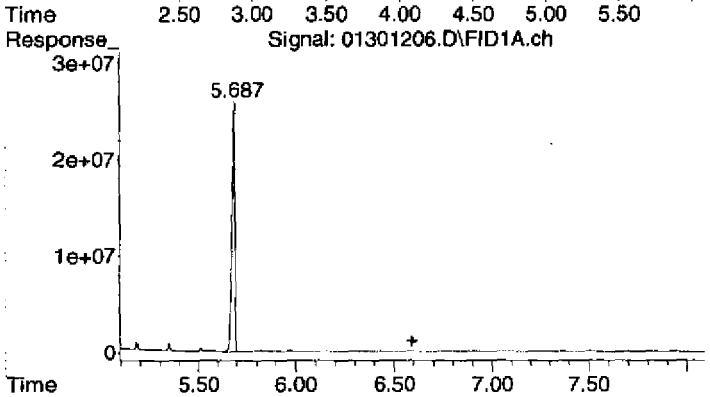
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





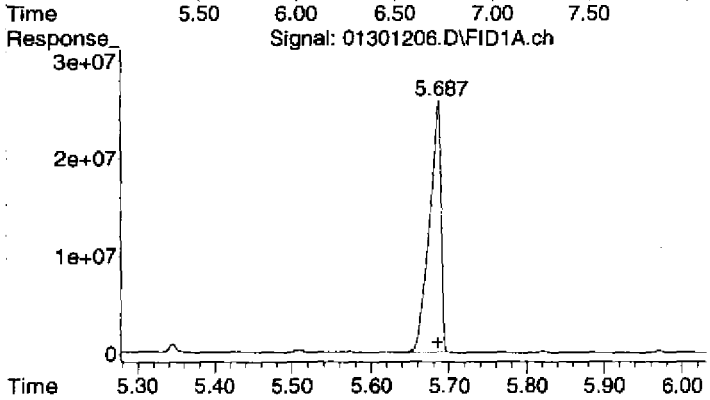
#1 Diesel (TPH)

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

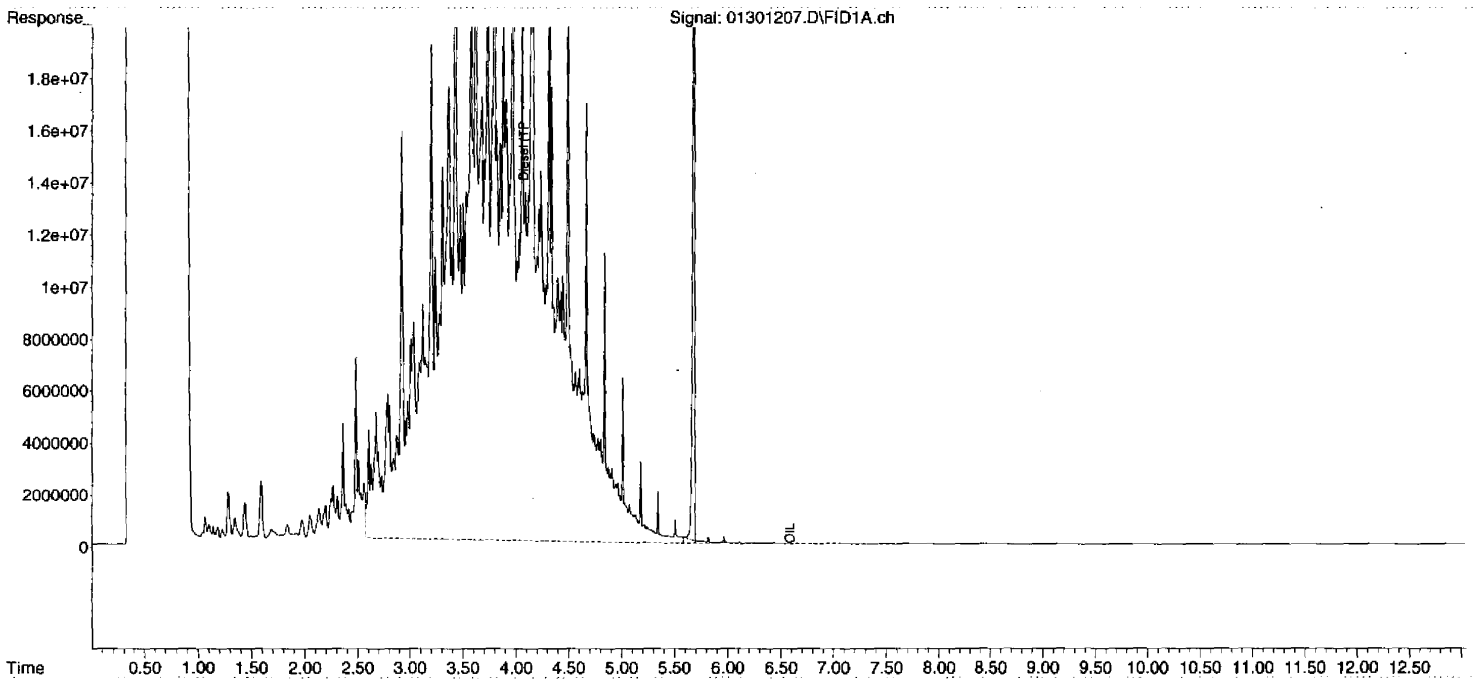
(f)=RT Delta > 1/2 Window (m)=manual int.

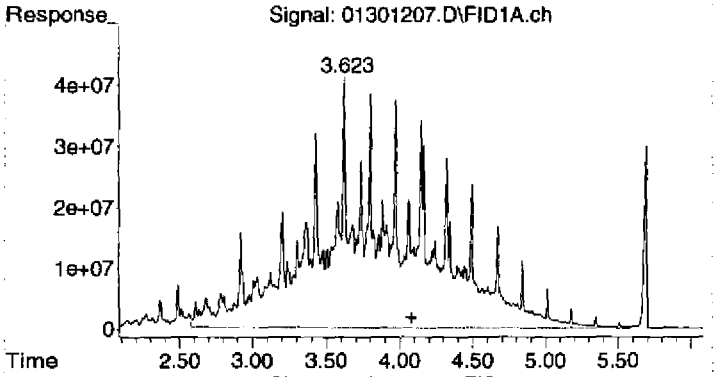
Quantitation Report (Not Reviewed)

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

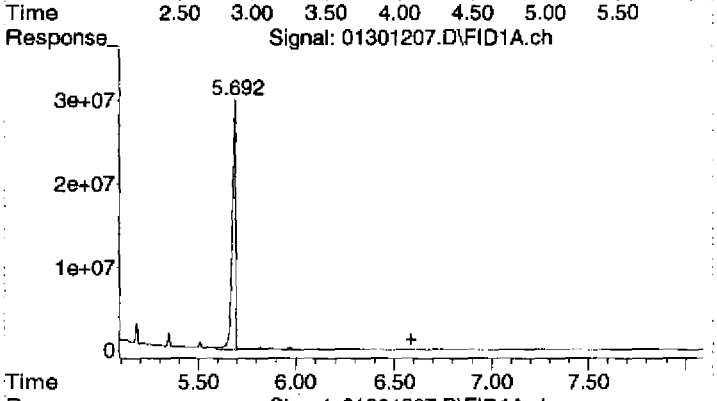
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





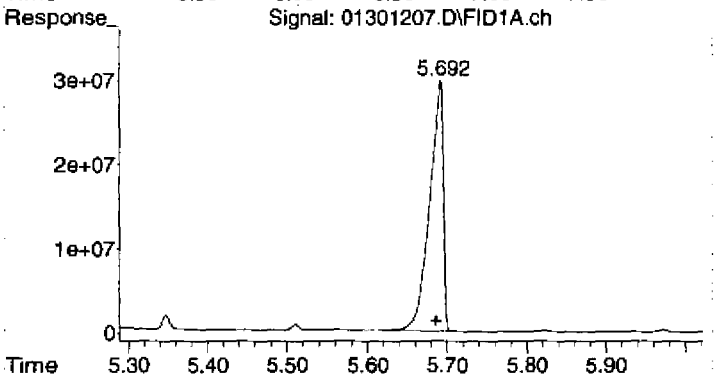
#1 Diesel (TPH)

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.

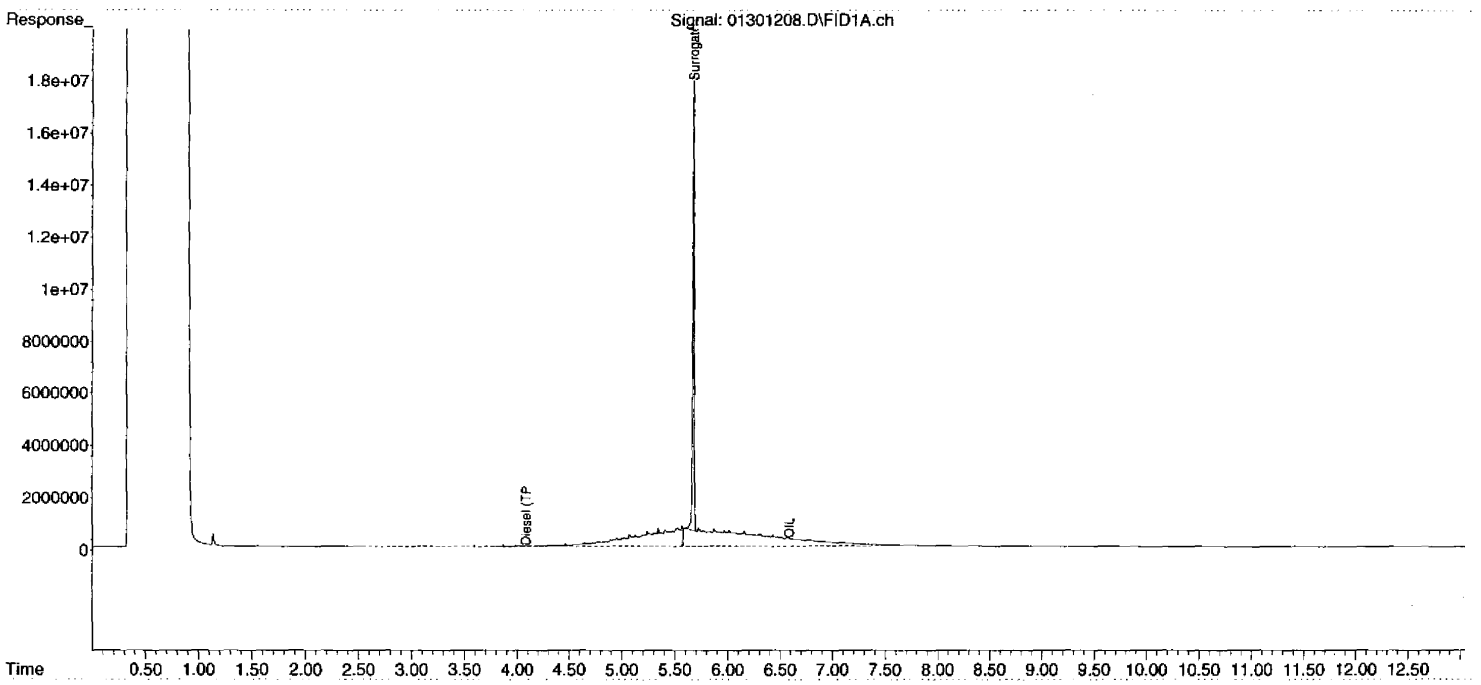
MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☑ After Manual Integration	
Manual integration(s) performed by:	
Analyst: TD	Date: 01-31-12
Manual integration(s) reviewed by:	
Reviewer: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

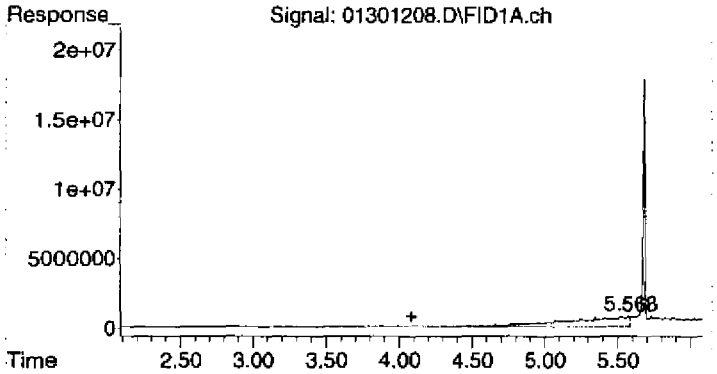
Quantitation Report (QT Reviewed)

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

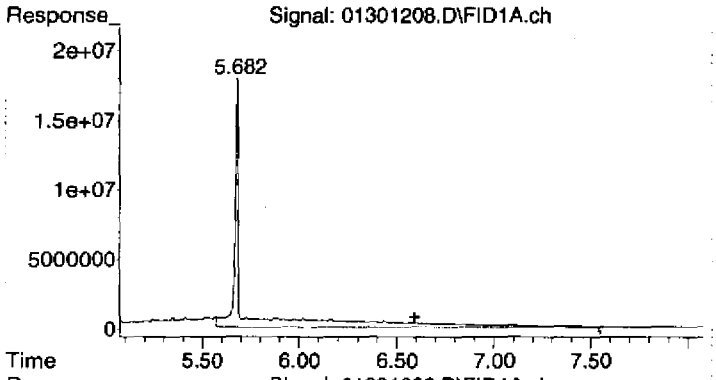
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





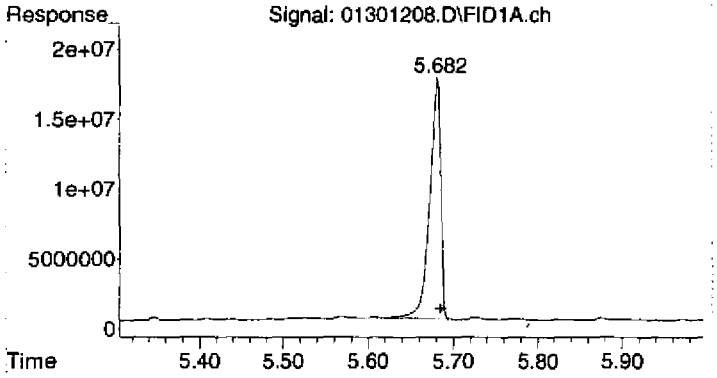
#1 Diesel (TPH)

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

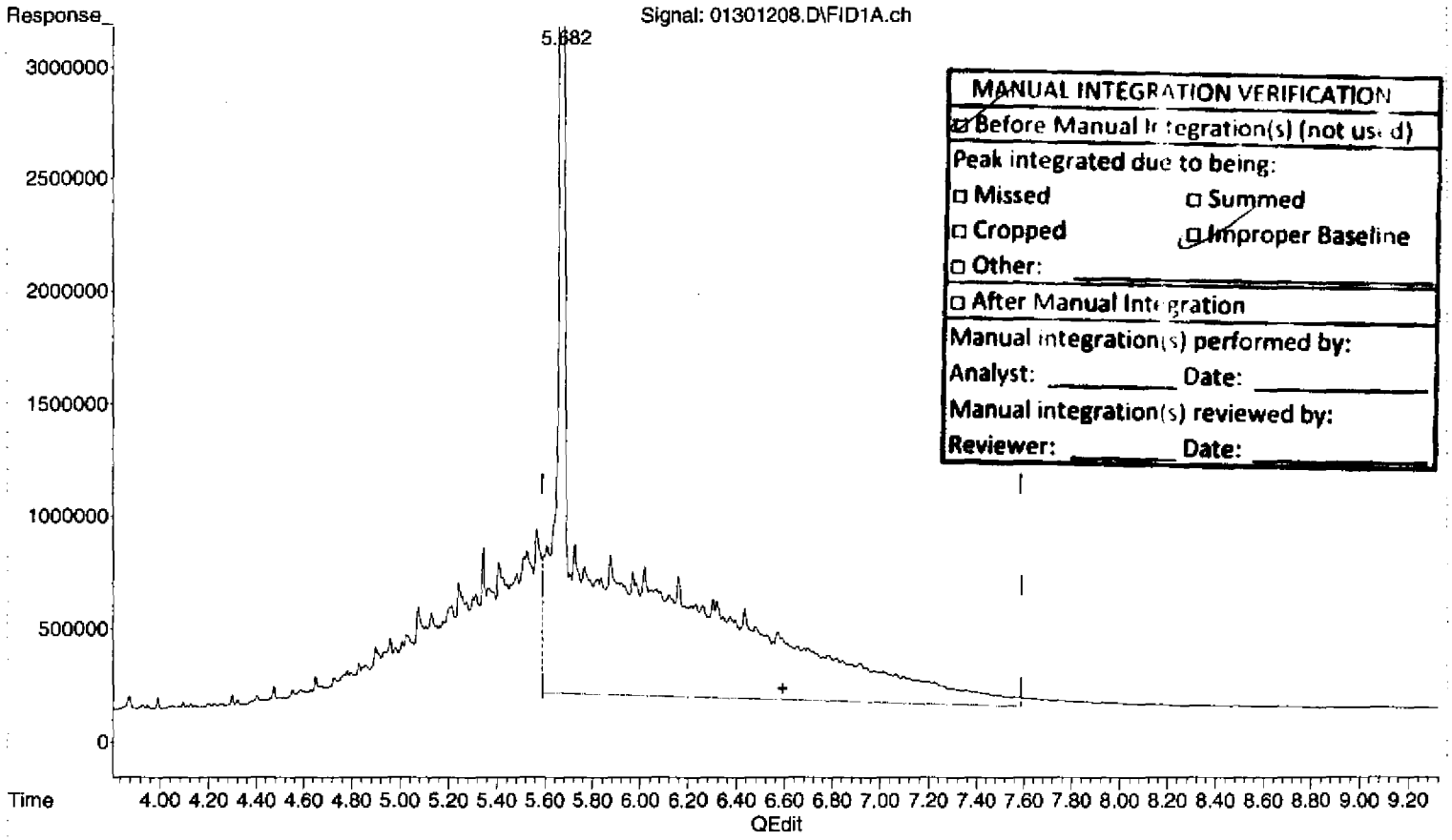
R.T.: 5.680 min
Delta R.T.: -0.005 min
Response: 157568506
Conc: 39.18 ug/mL

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

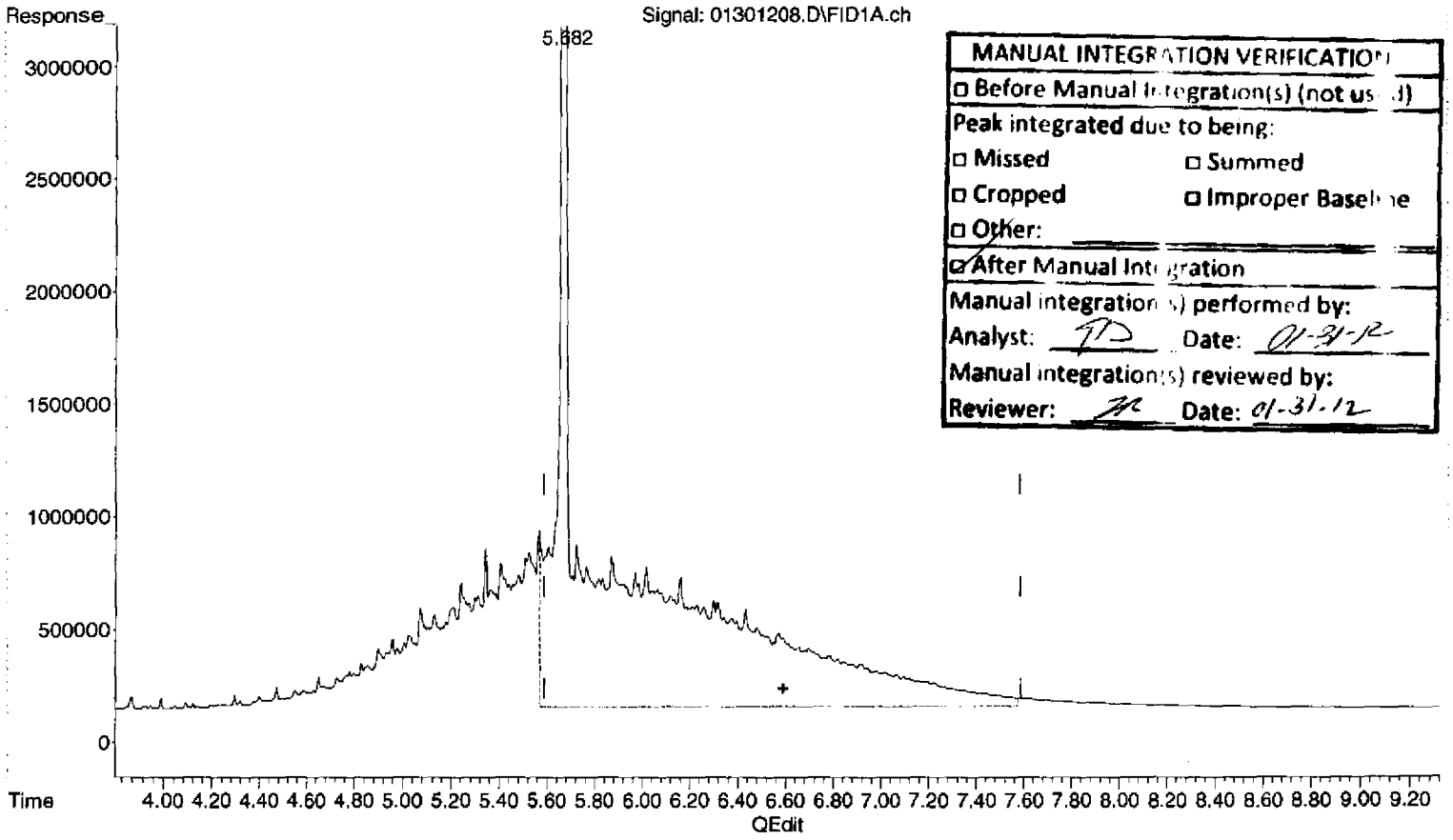
013012DROA.M Tue Jan 31 09:40:42 2012

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



(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.

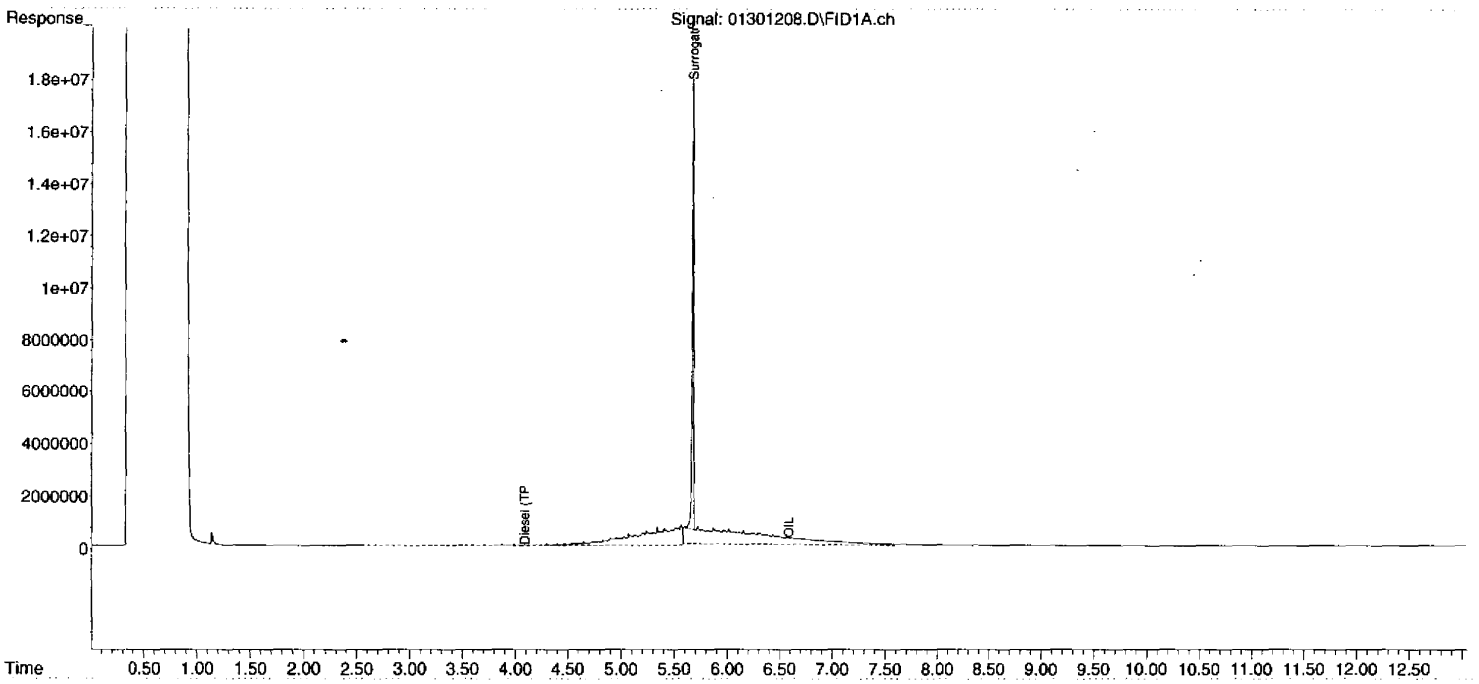
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration (not used)
Peak integrated due to being
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____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

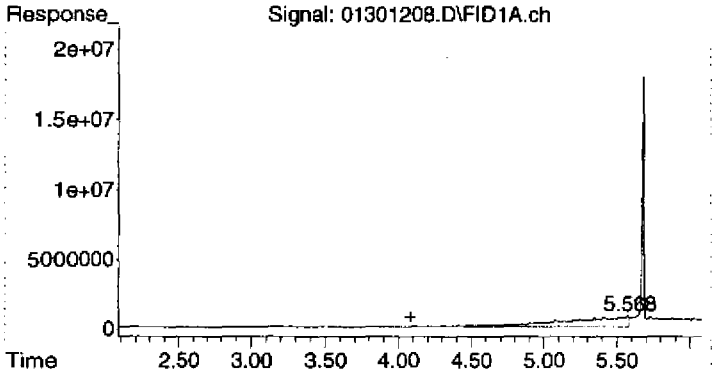
Quantitation Report (Not Reviewed)

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

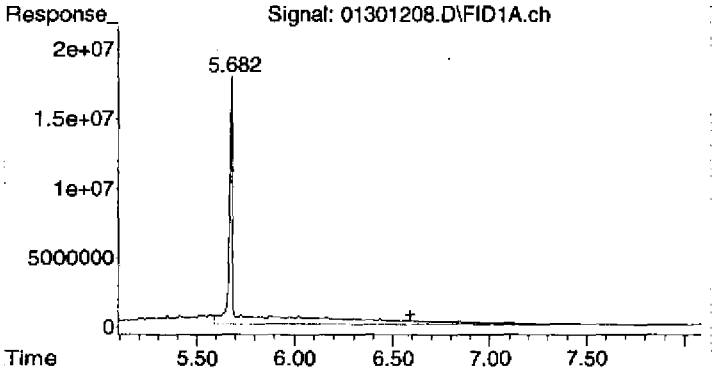
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





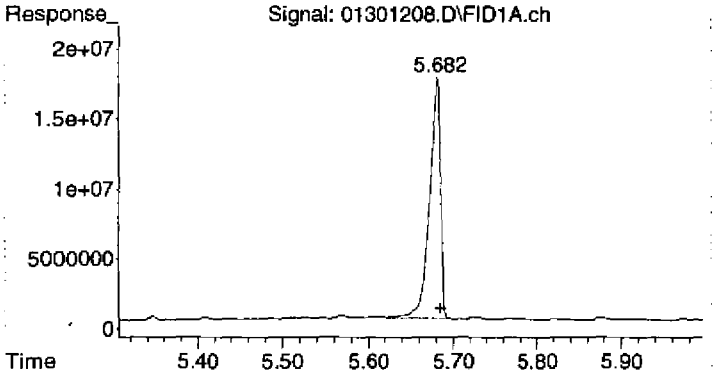
#1 Diesel (TPH)

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

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

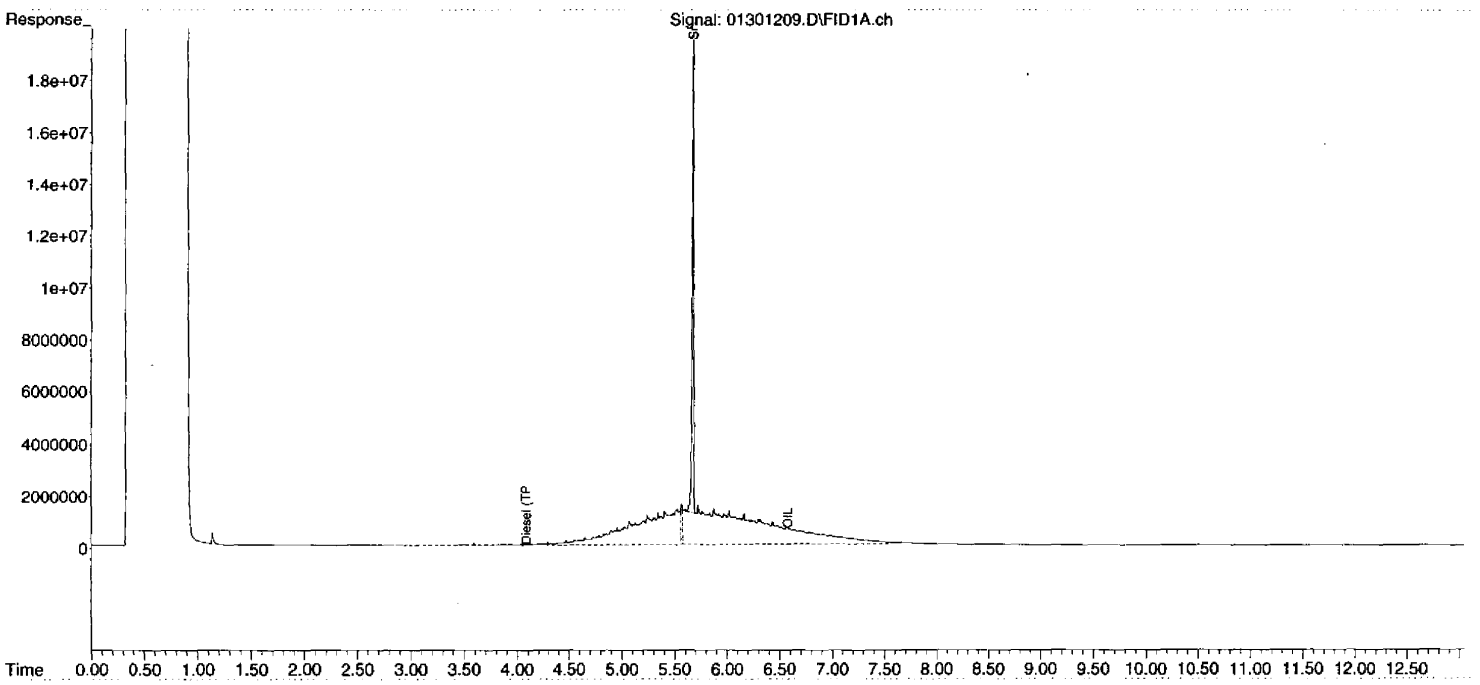
MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peaks integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-31-12
Manual integration(s) reviewed by
Reviewer: [illegible]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

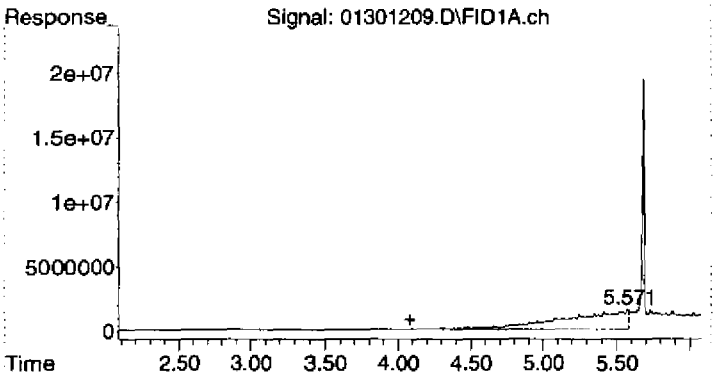
Quantitation Report (QT Reviewed)

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

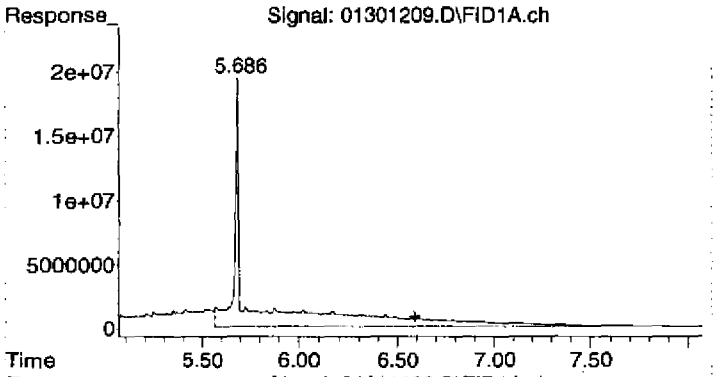
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





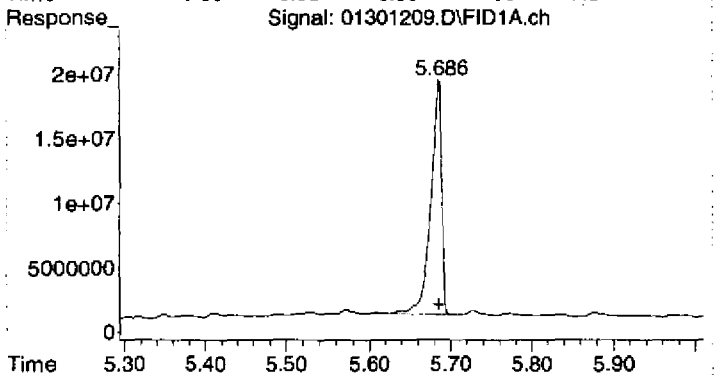
#1 Diesel (TPH)

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

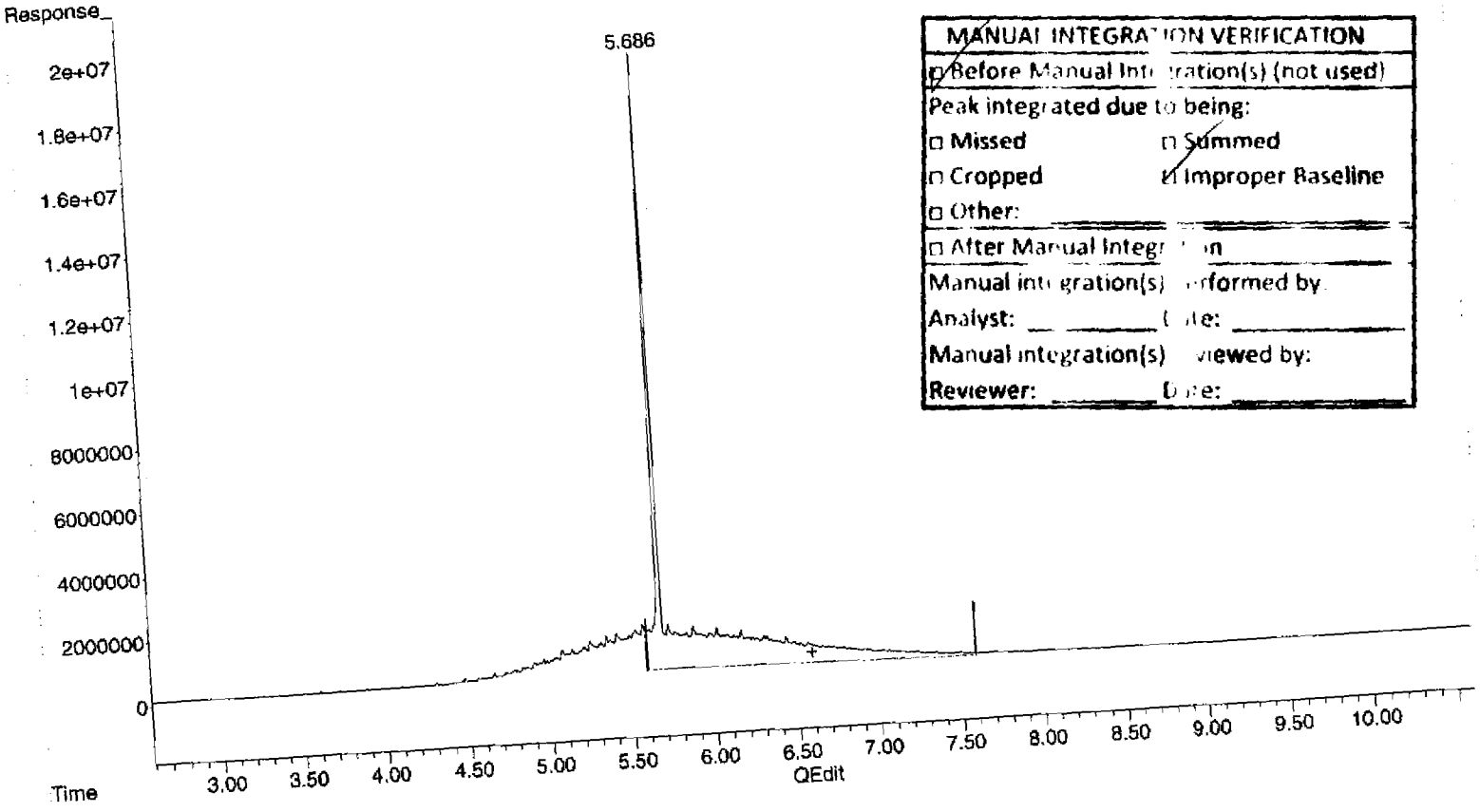
Quantitation Report (Qedit)

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

Signal: 01301209.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)
6.590min 419.688 ug/mL
response 695219451

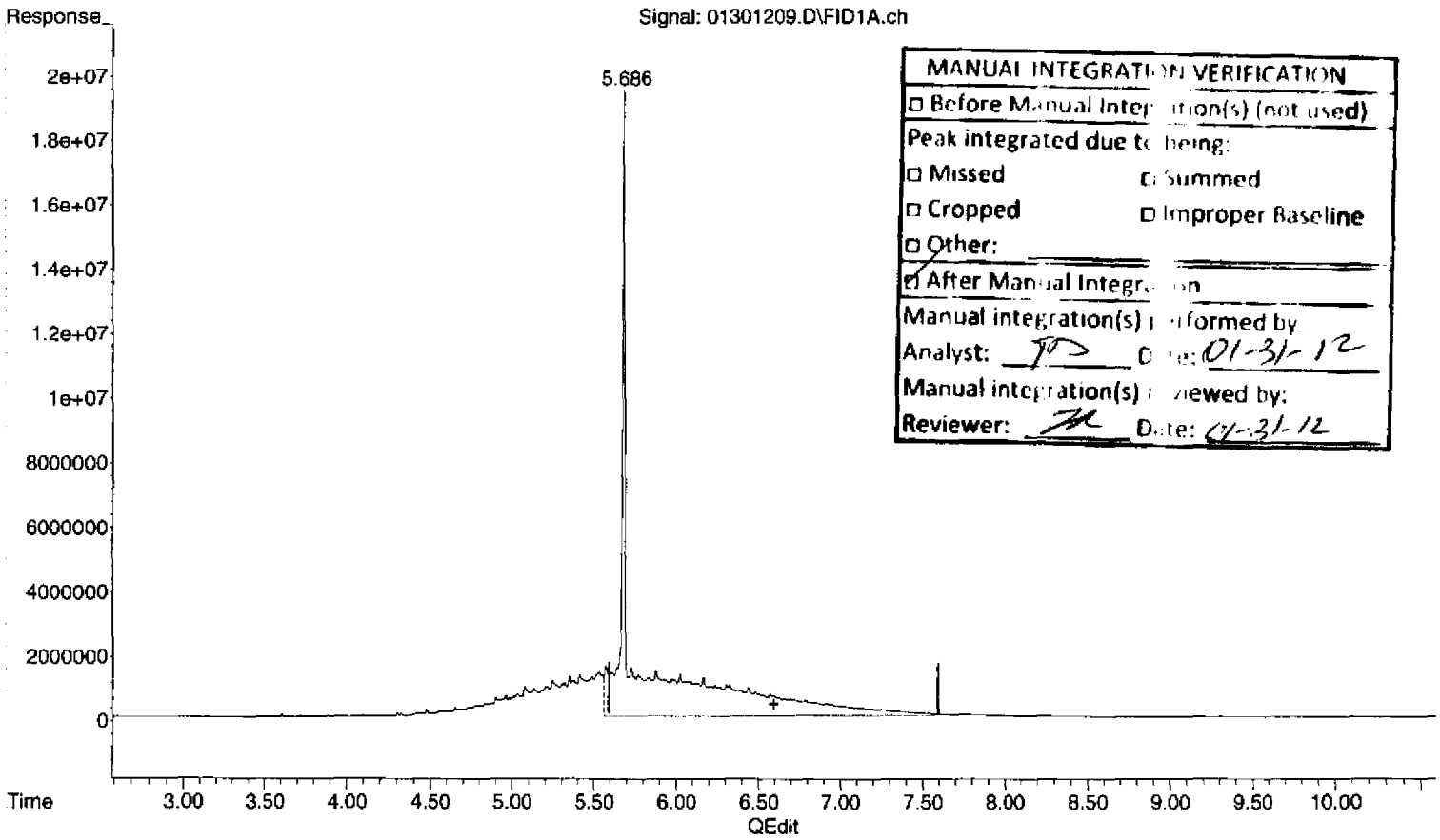
(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:41:15 2012

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: TD 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.

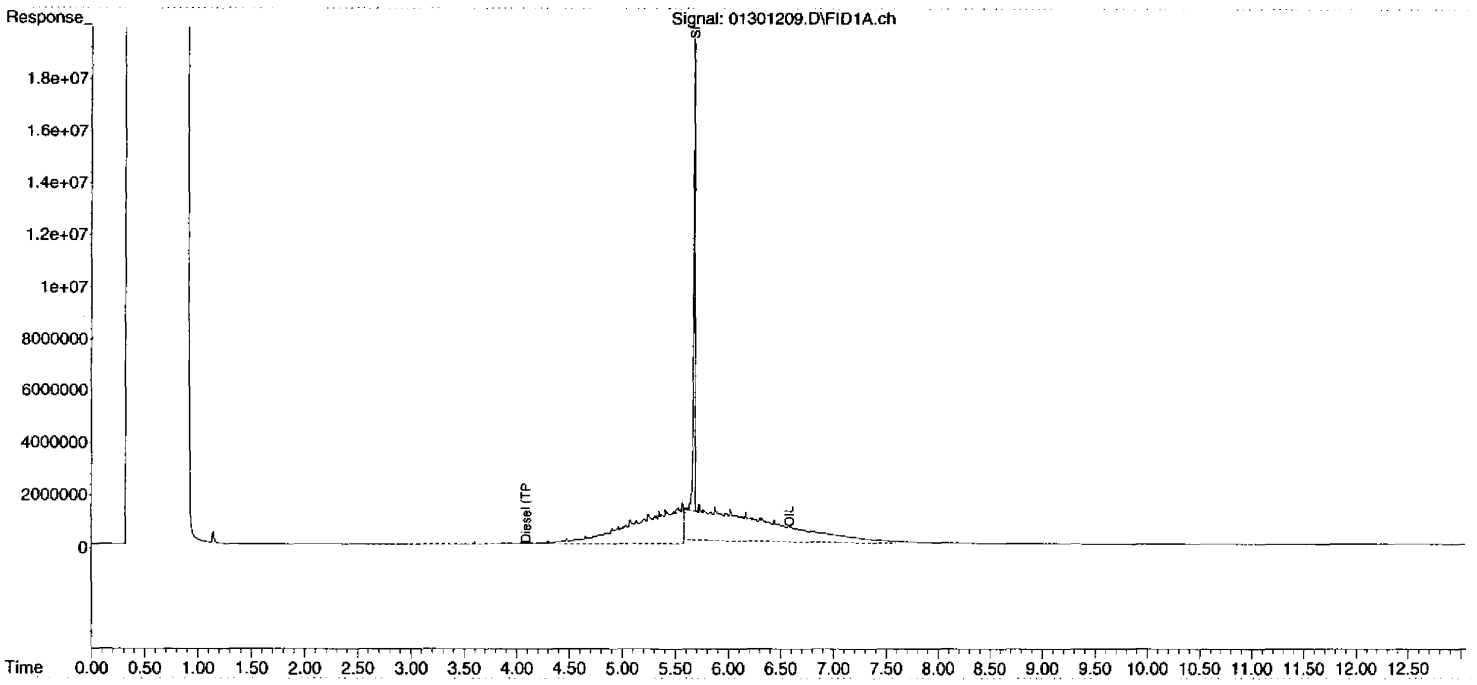
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: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

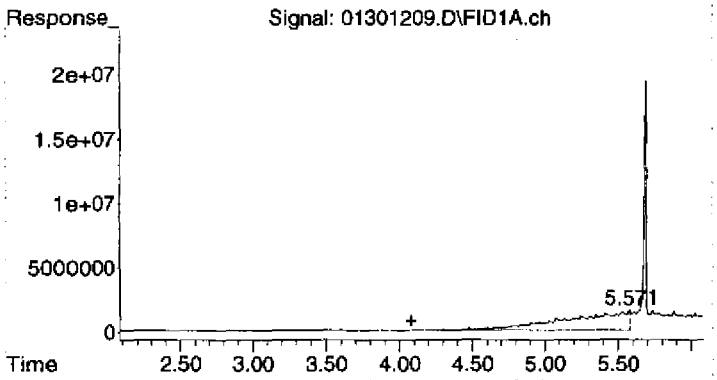
Quantitation Report (Not Reviewed)

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

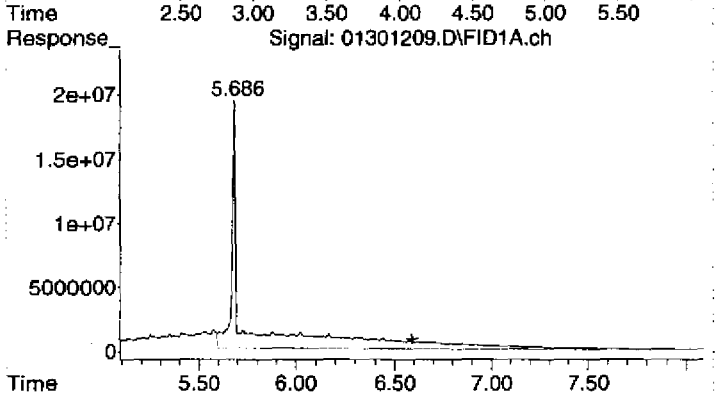
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





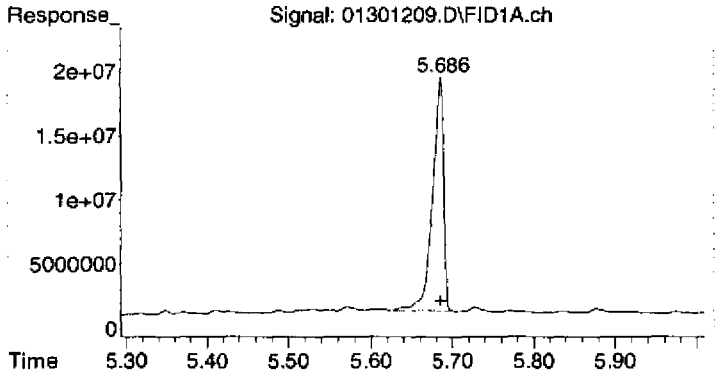
#1 Diesel (TPH)

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.

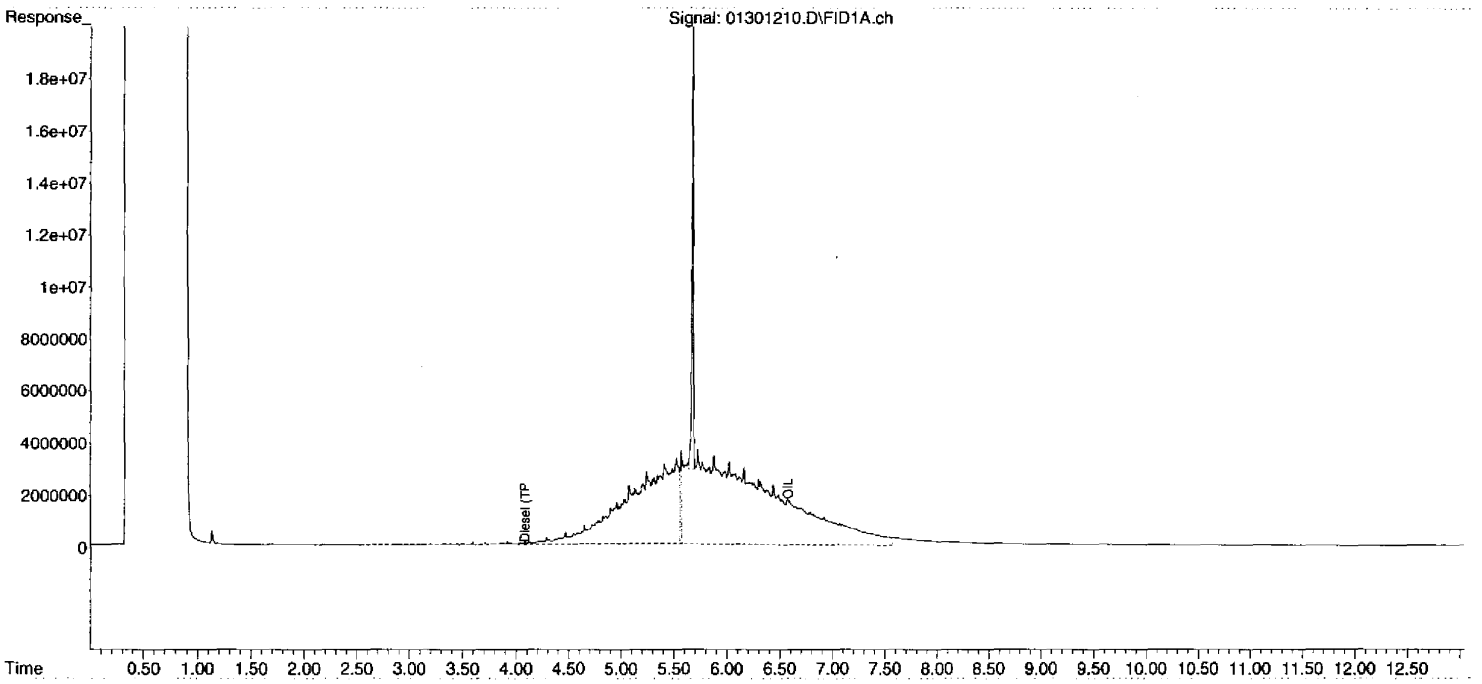
MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☑ After Manual Integration	
Manual integration(s) performed by:	
Analyst: TD	Date: 01-31-12
Manual integration(s) reviewed by:	
Reviewer: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

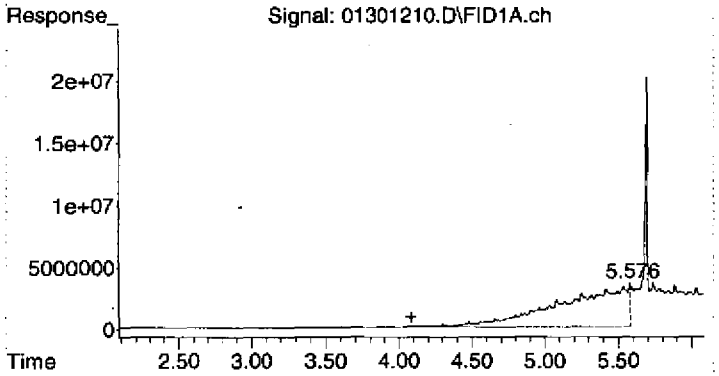
Quantitation Report (QT Reviewed)

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

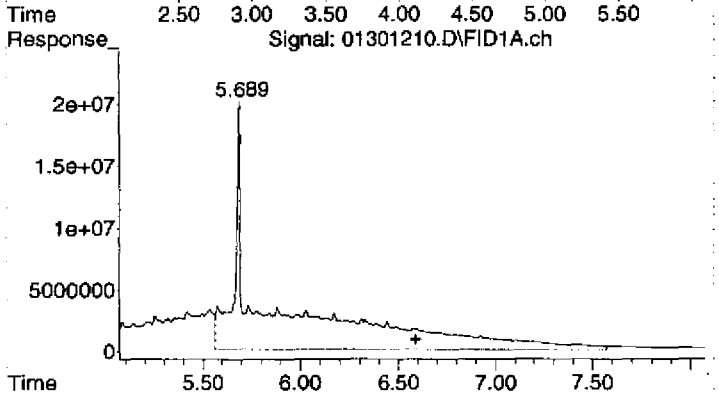
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





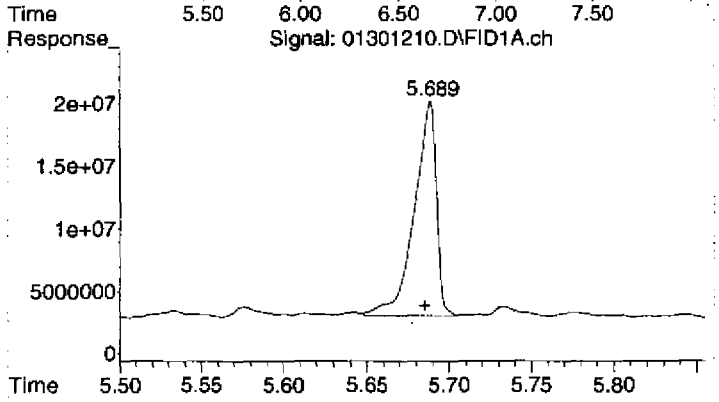
#1 Diesel (TPH)

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

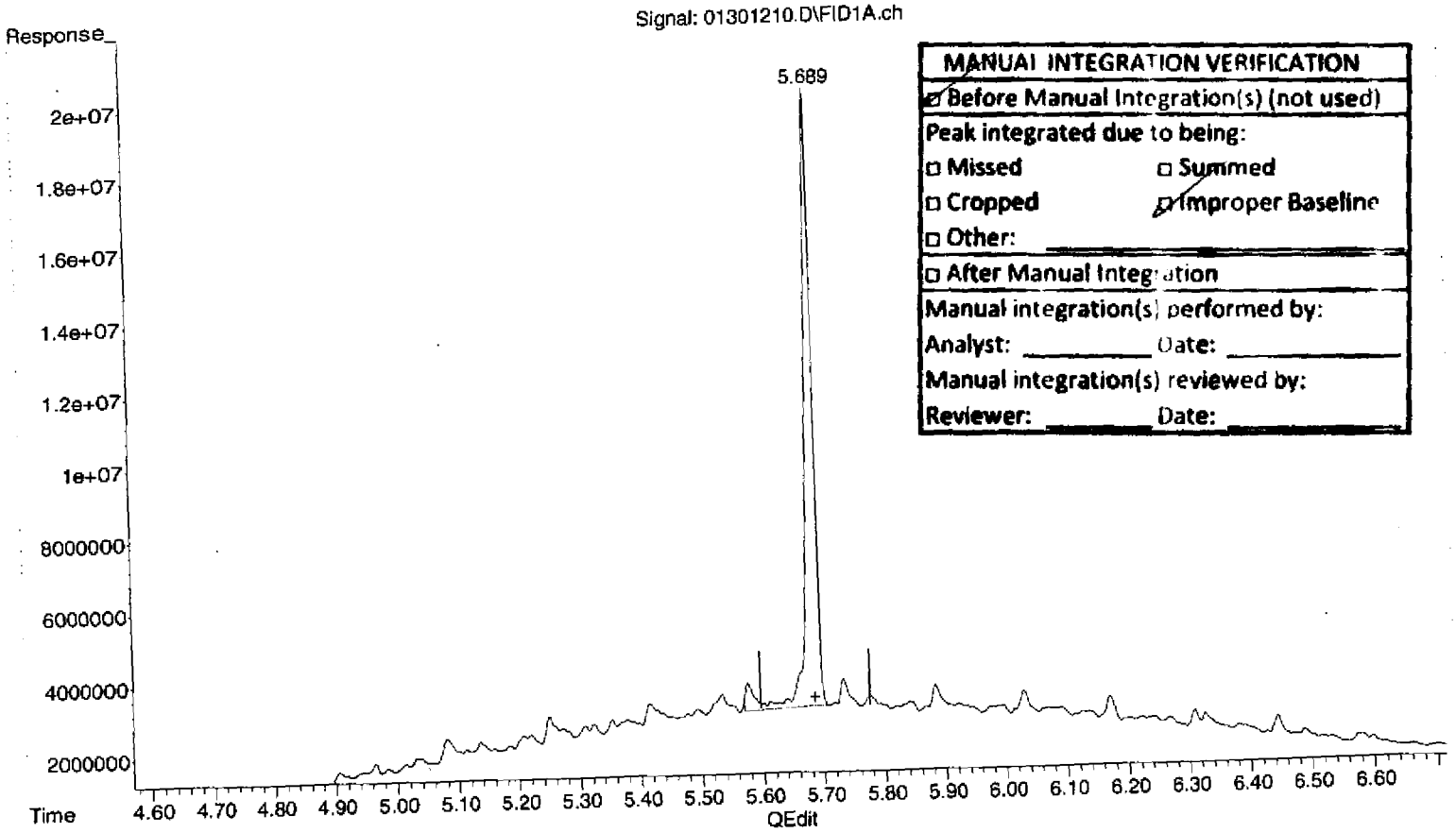
Quantitation Report (Qedit)

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

Signal: 01301210.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)

5.687min 42.423 ug/mL

response 170597358

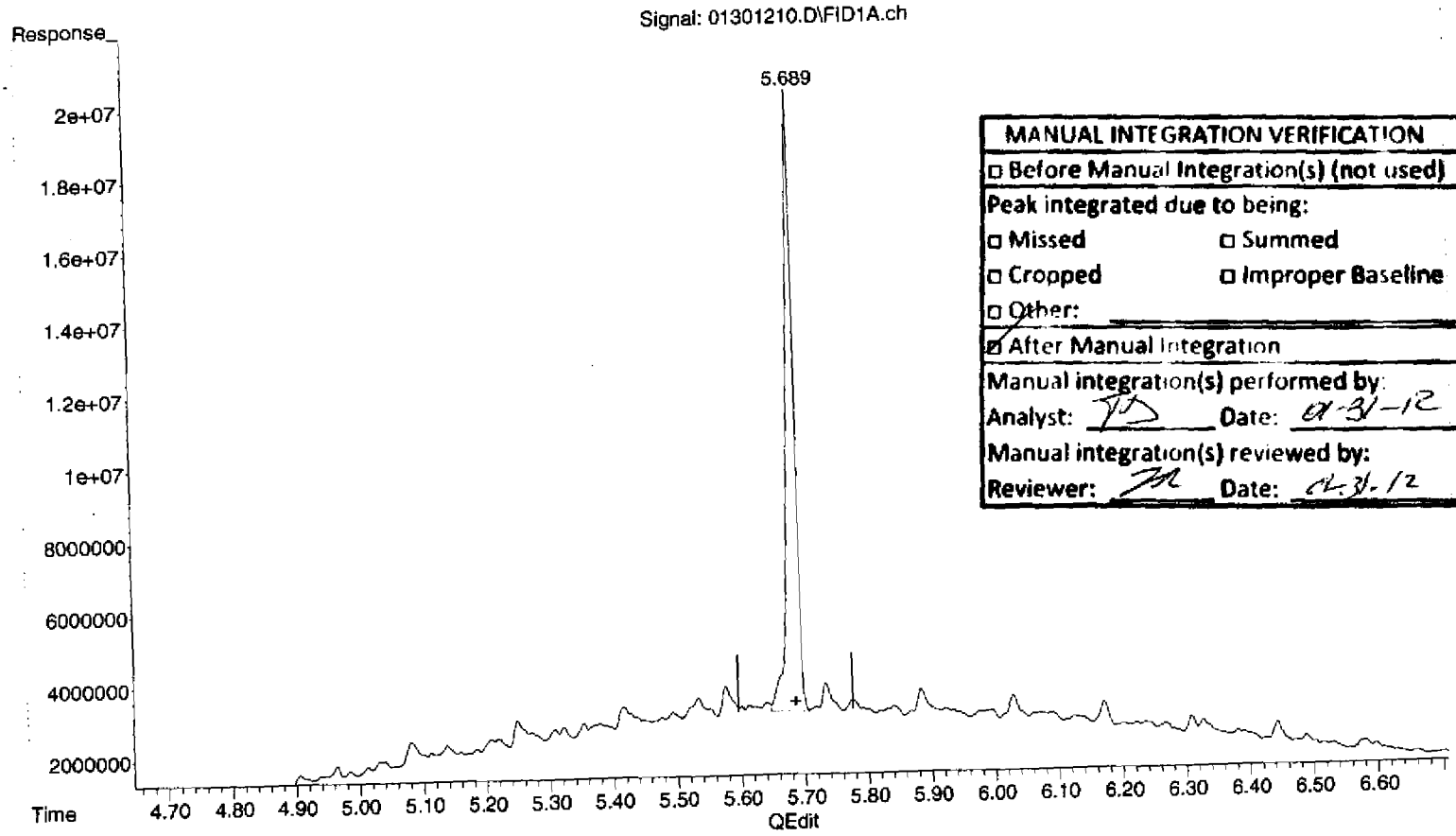
(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:41:43 2012

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

(3) Surrogate (S)
5.689min 39.848 ug/mL m
response 160244547

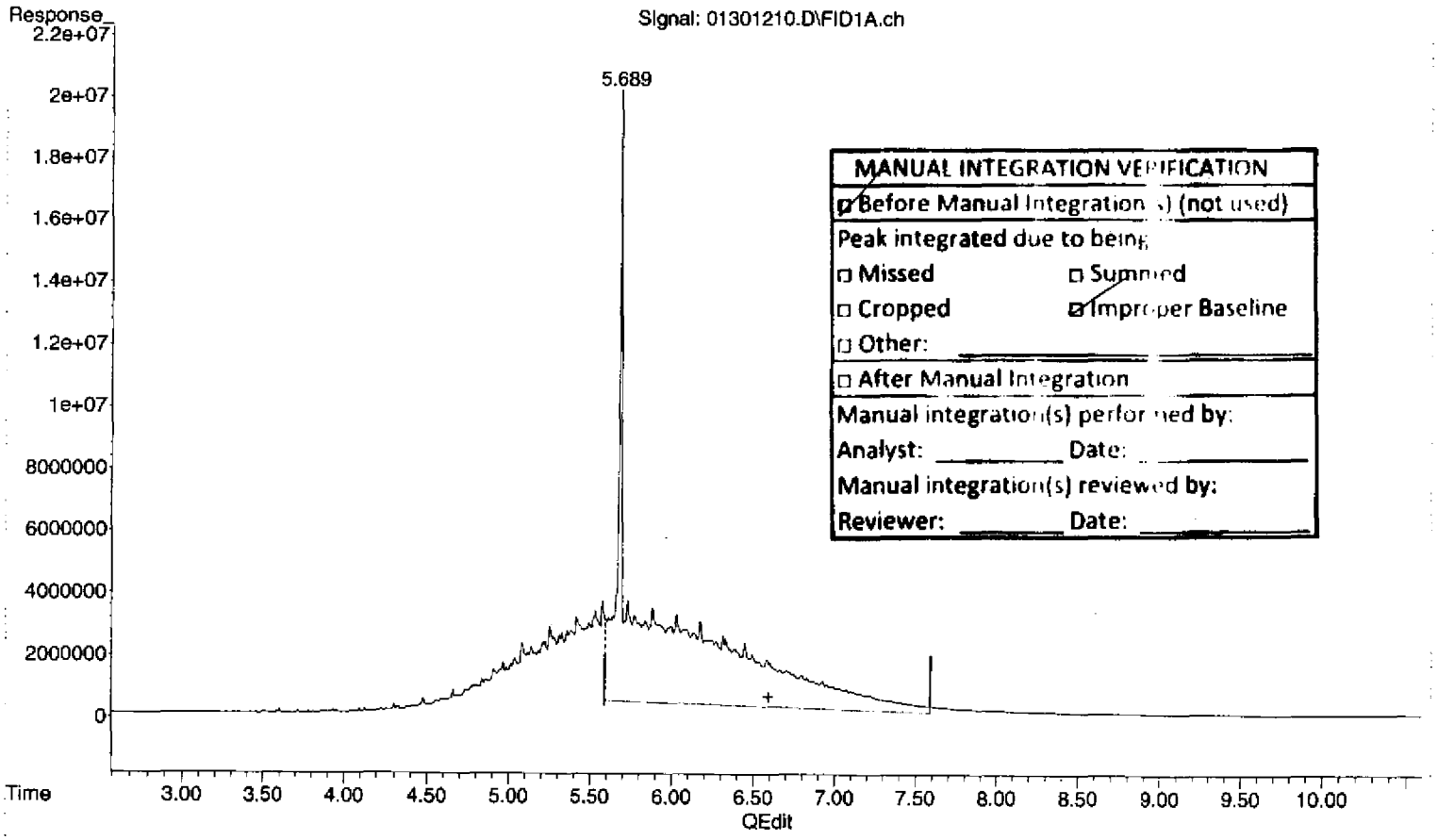
(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:41:57 2012

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

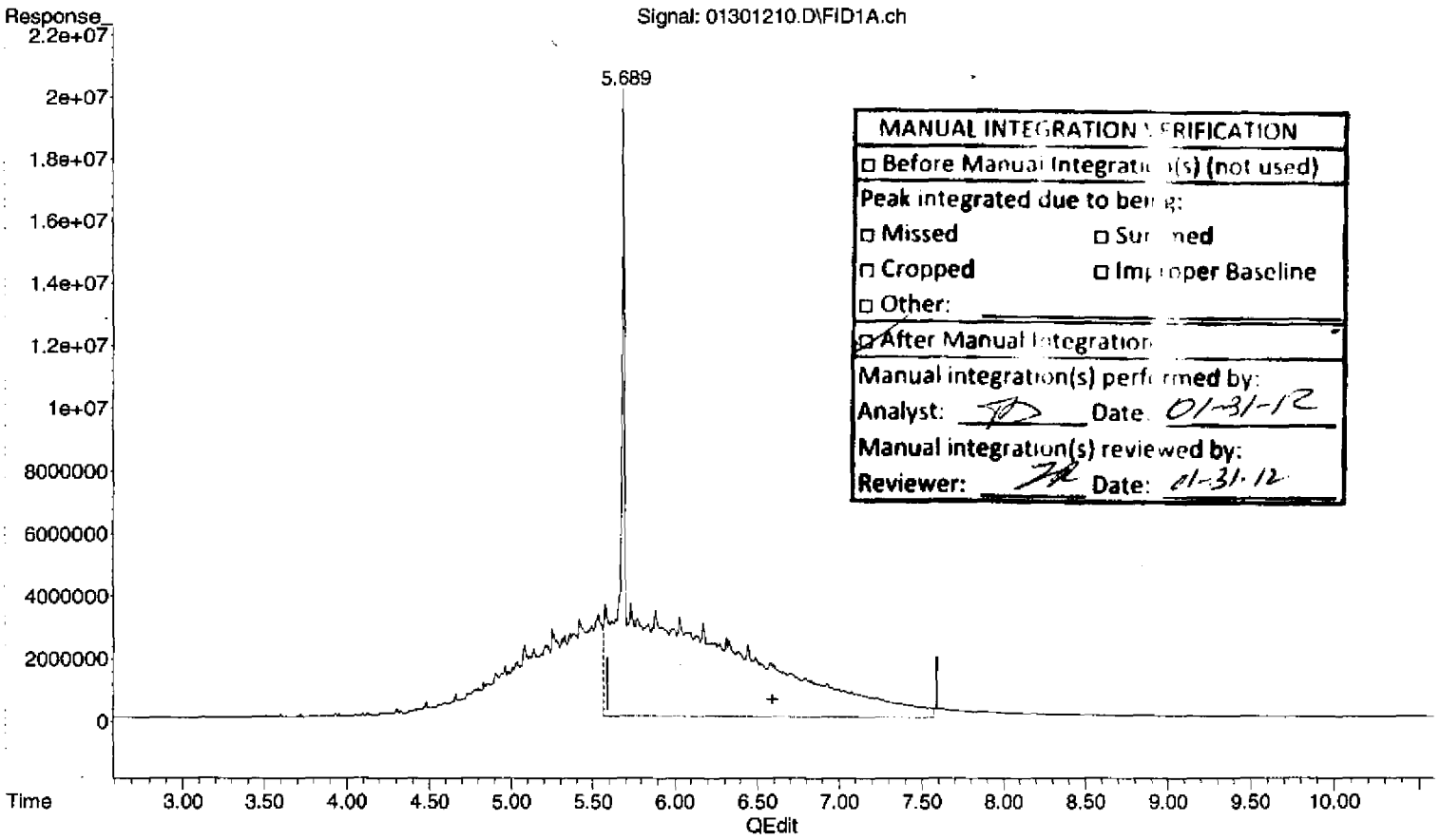
013012DROA.M Tue Jan 31 09:42:05 2012

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: TR 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.

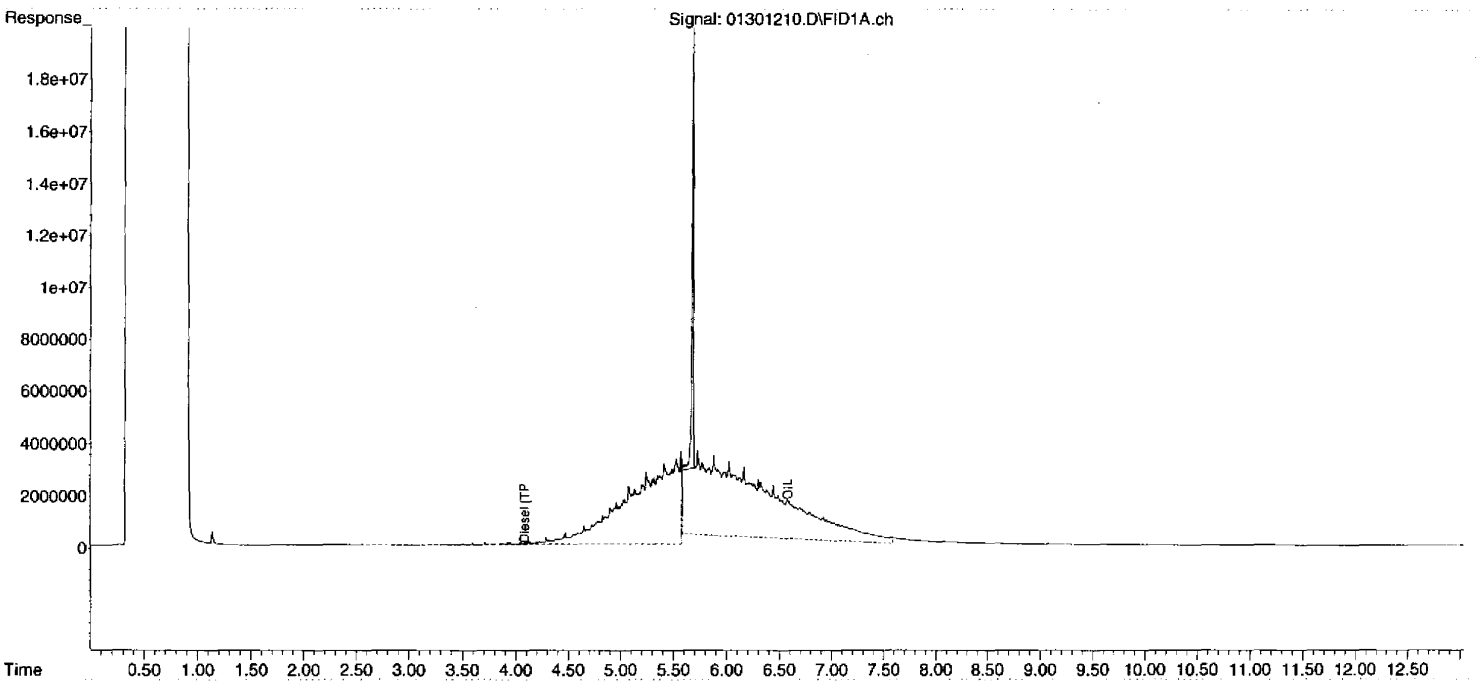
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by.
Reviewer: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

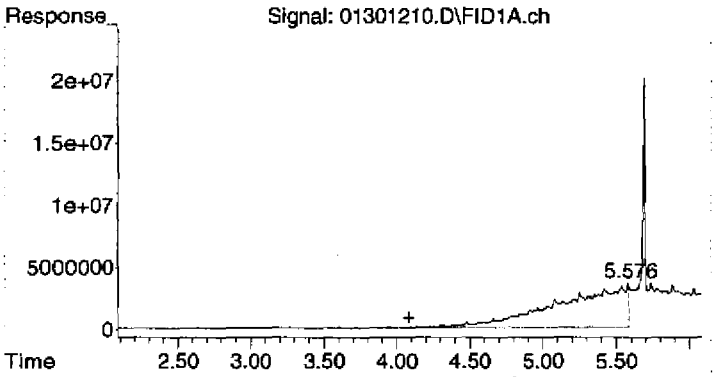
Quantitation Report (Not Reviewed)

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

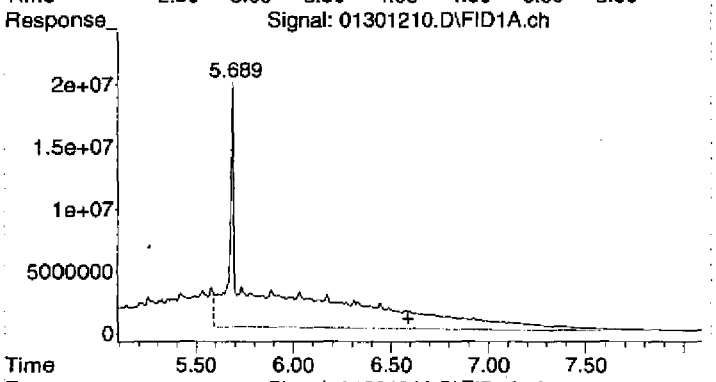
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





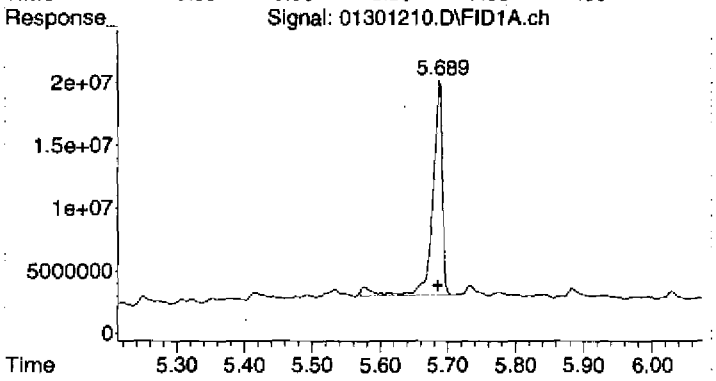
#1 Diesel (TPH)

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.

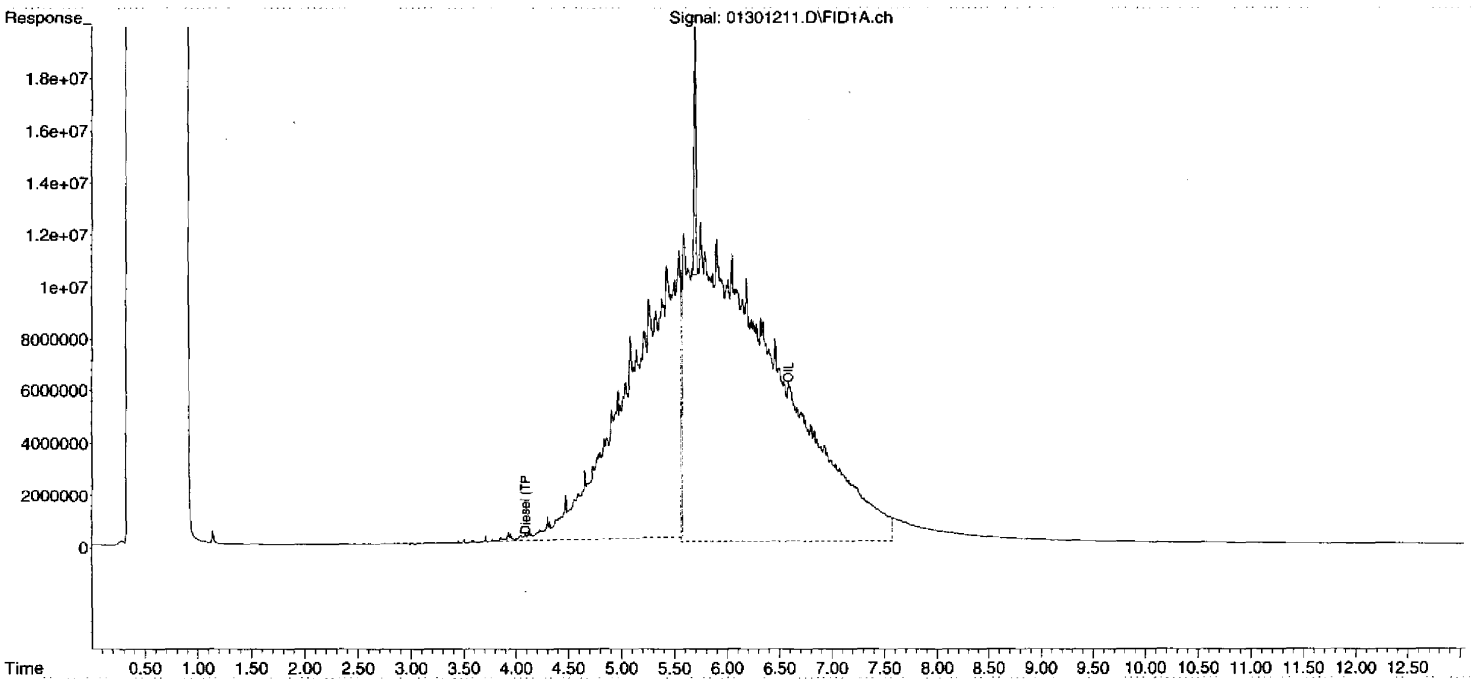
MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-31-12
Manual integration(s) reviewed by:
Reviewer: [illegible]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

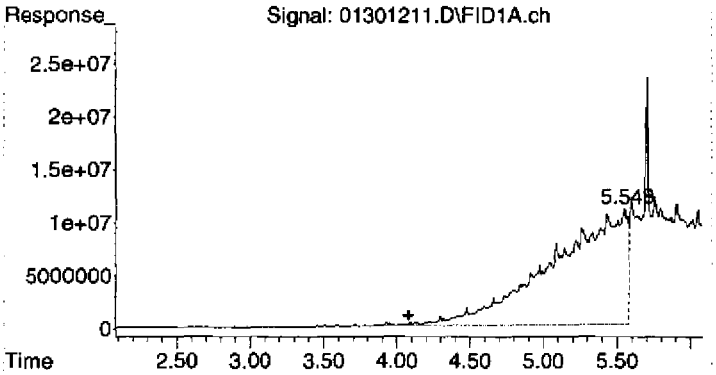
Quantitation Report (QT Reviewed)

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

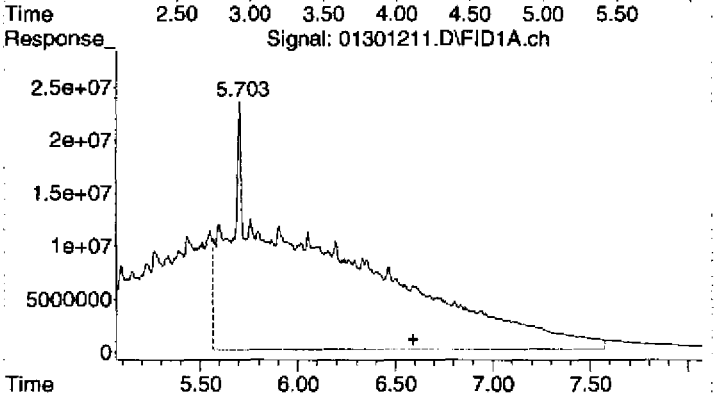
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





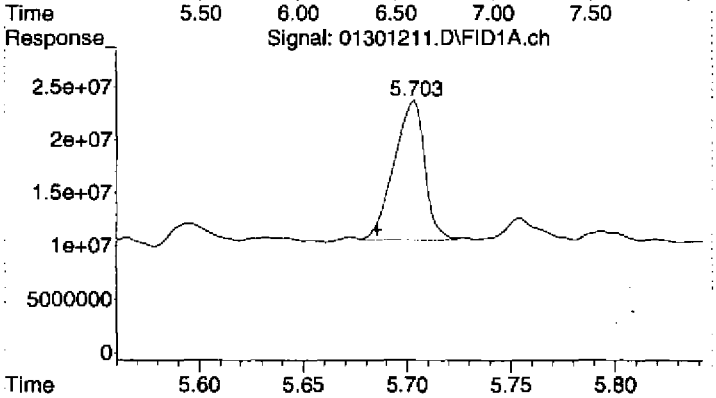
#1 Diesel (TPH)

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

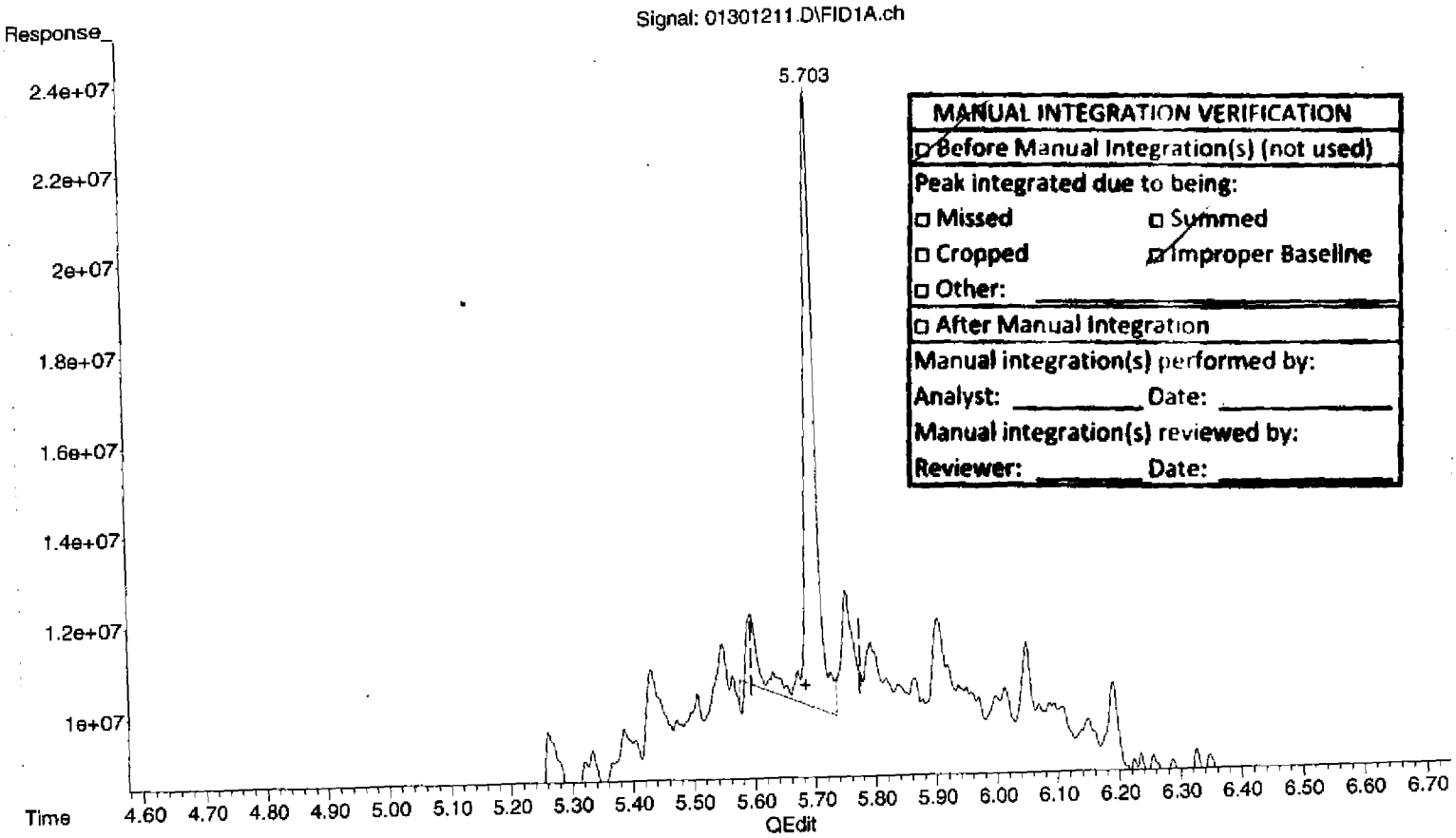
R.T.: 5.703 min
Delta R.T.: 0.018 min
Response: 135092693
Conc: 33.59 ug/mL m

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

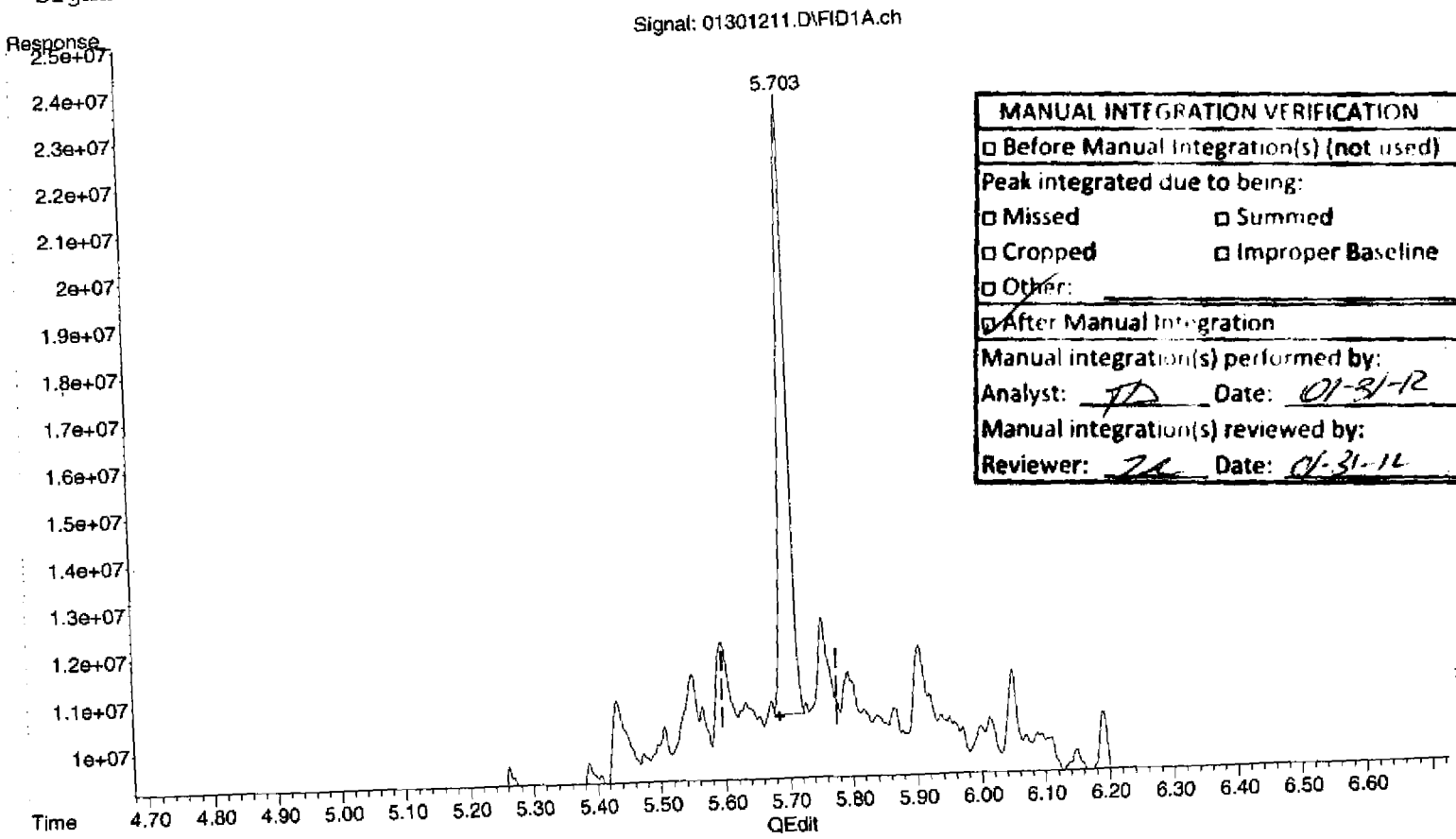
DIM0036486

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: TD	Date: 01-31-12
Manual integration(s) reviewed by:	
Reviewer: [illegible]	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

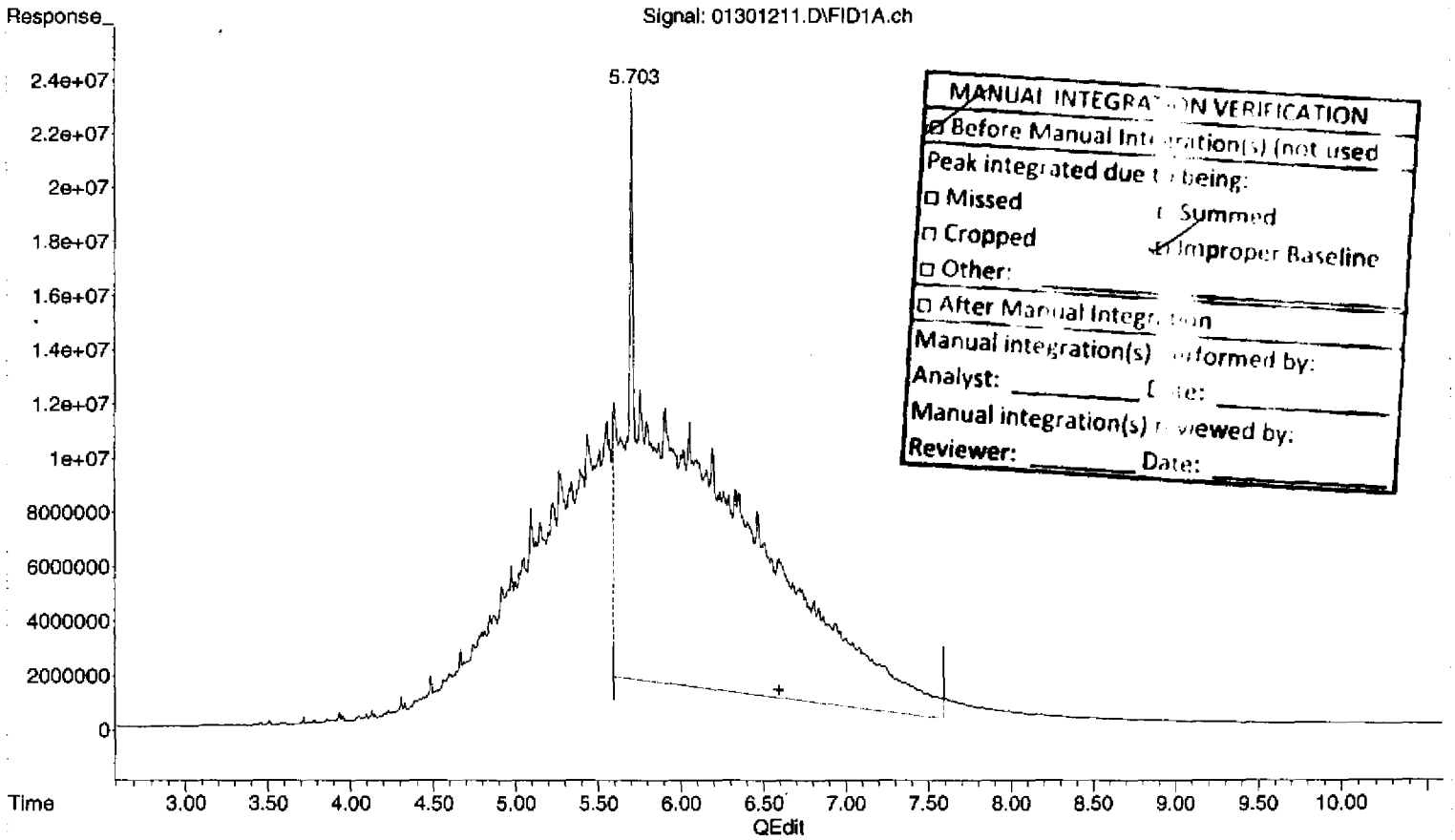
DIM0036487

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: _____

(2) OIL (H)

6.590min 3598.484 ug/mL

response 5960946592

(+) = Expected Retention Time

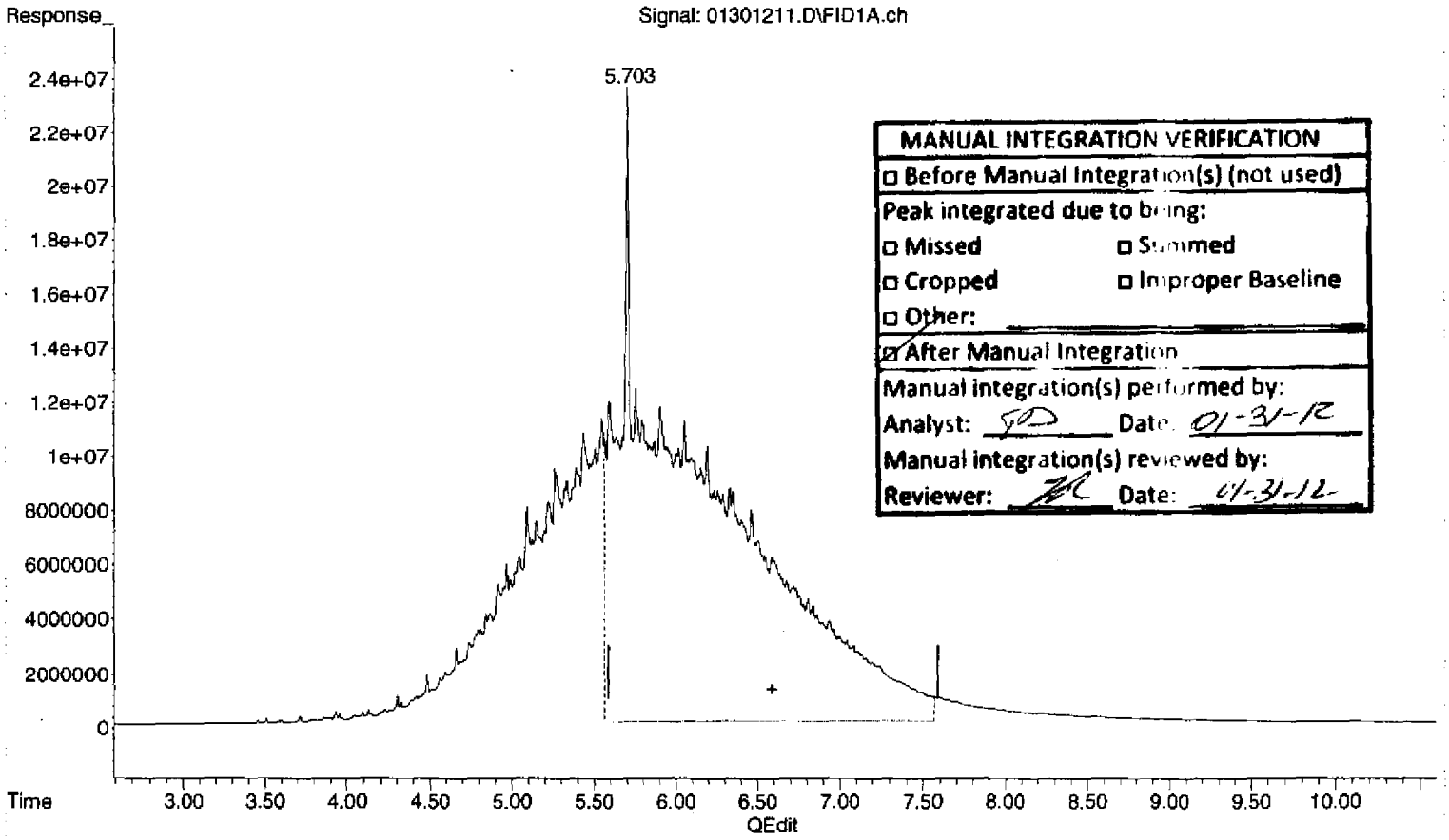
013012DROA.M Tue Jan 31 09:42:53 2012

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.

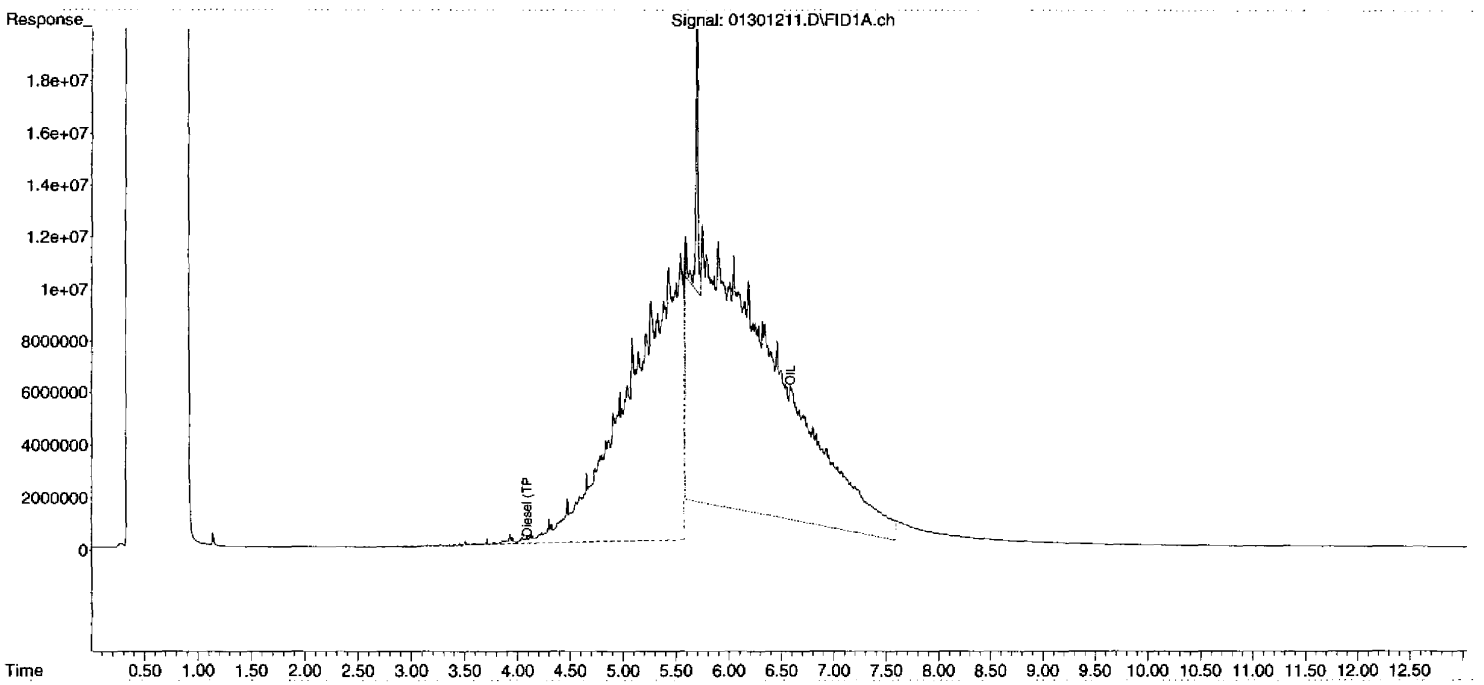
MANUAL INTEGRATION VERIFICATION	
☑ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☐ After Manual Integration	
Manual integration(s) performed by:	
Analyst: _____	Date: _____
Manual integration(s) reviewed by:	
Reviewer: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

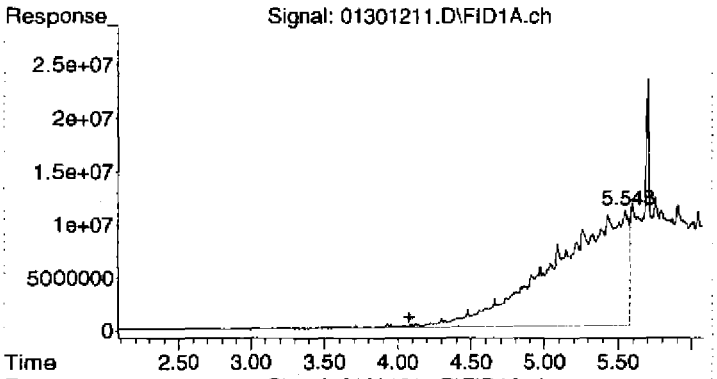
Quantitation Report (Not Reviewed)

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

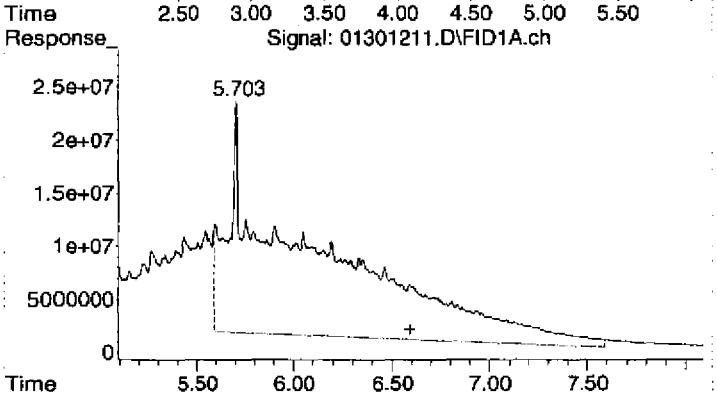
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





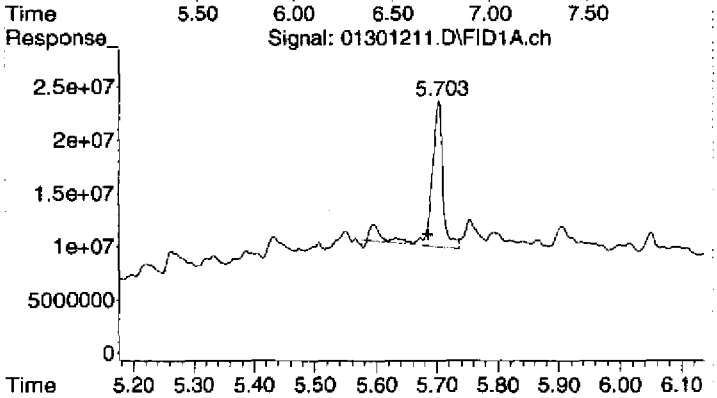
#1 Diesel (TPH)

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:

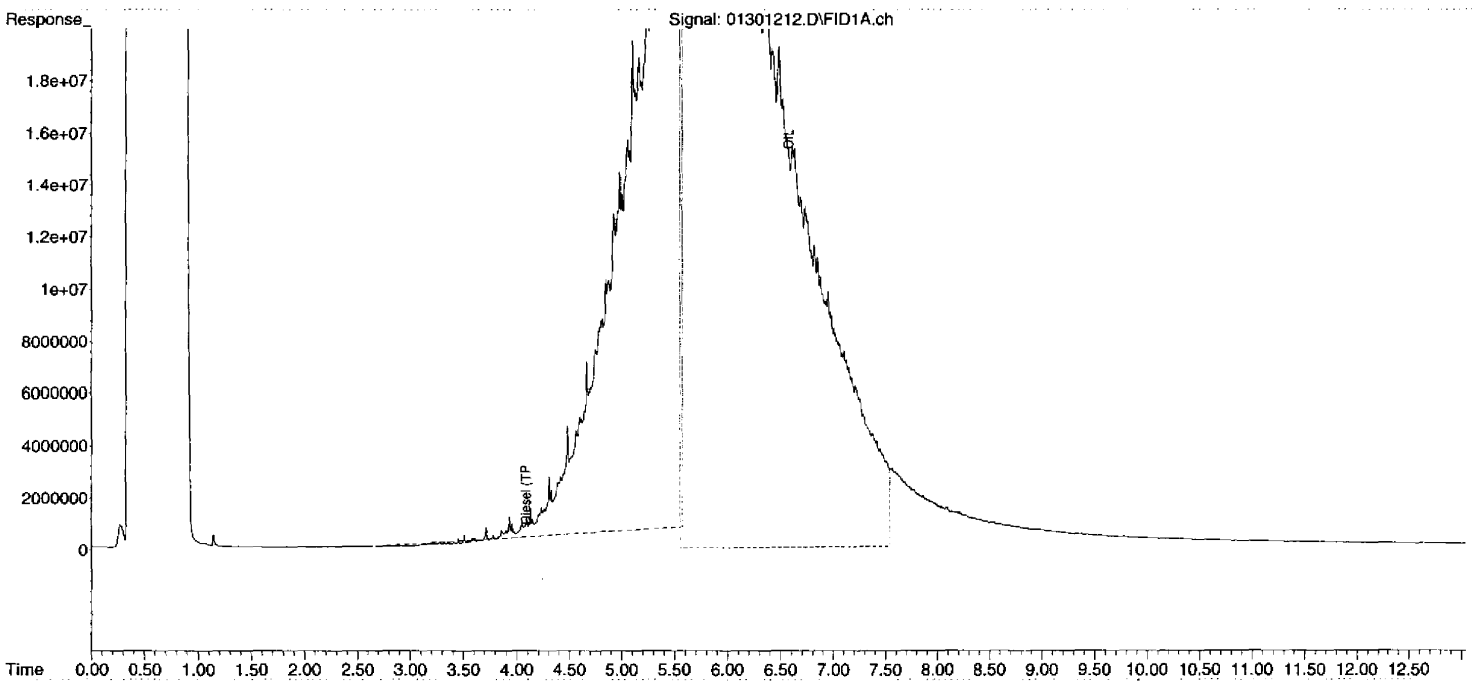
Reviewer: TL Date: 01-31-12

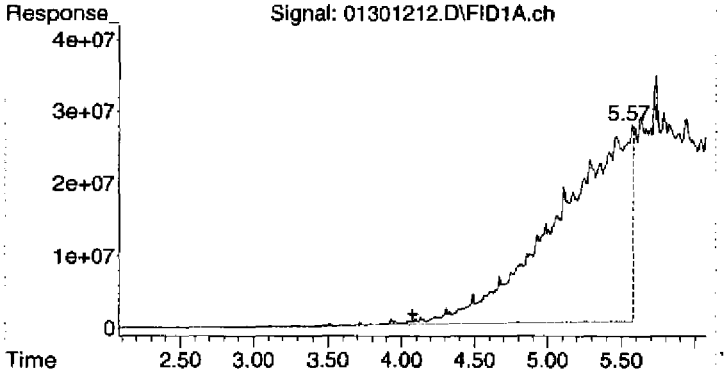
Quantitation Report (QT Reviewed)

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

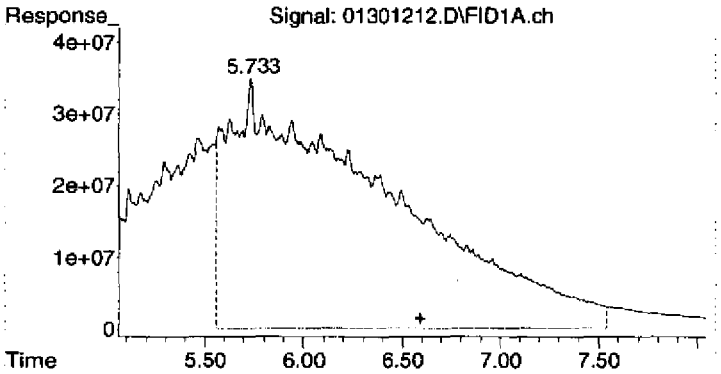
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





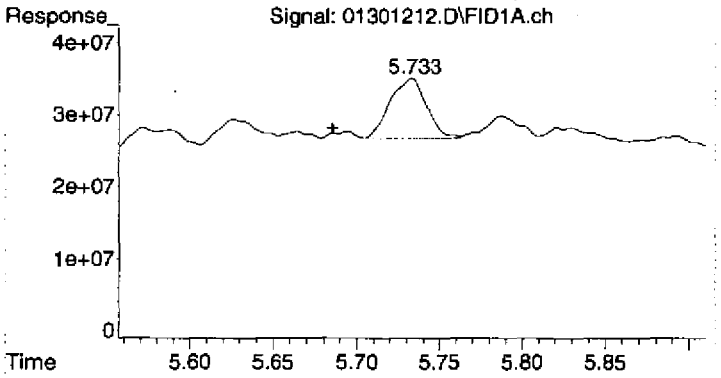
#1 Diesel (TPH)

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

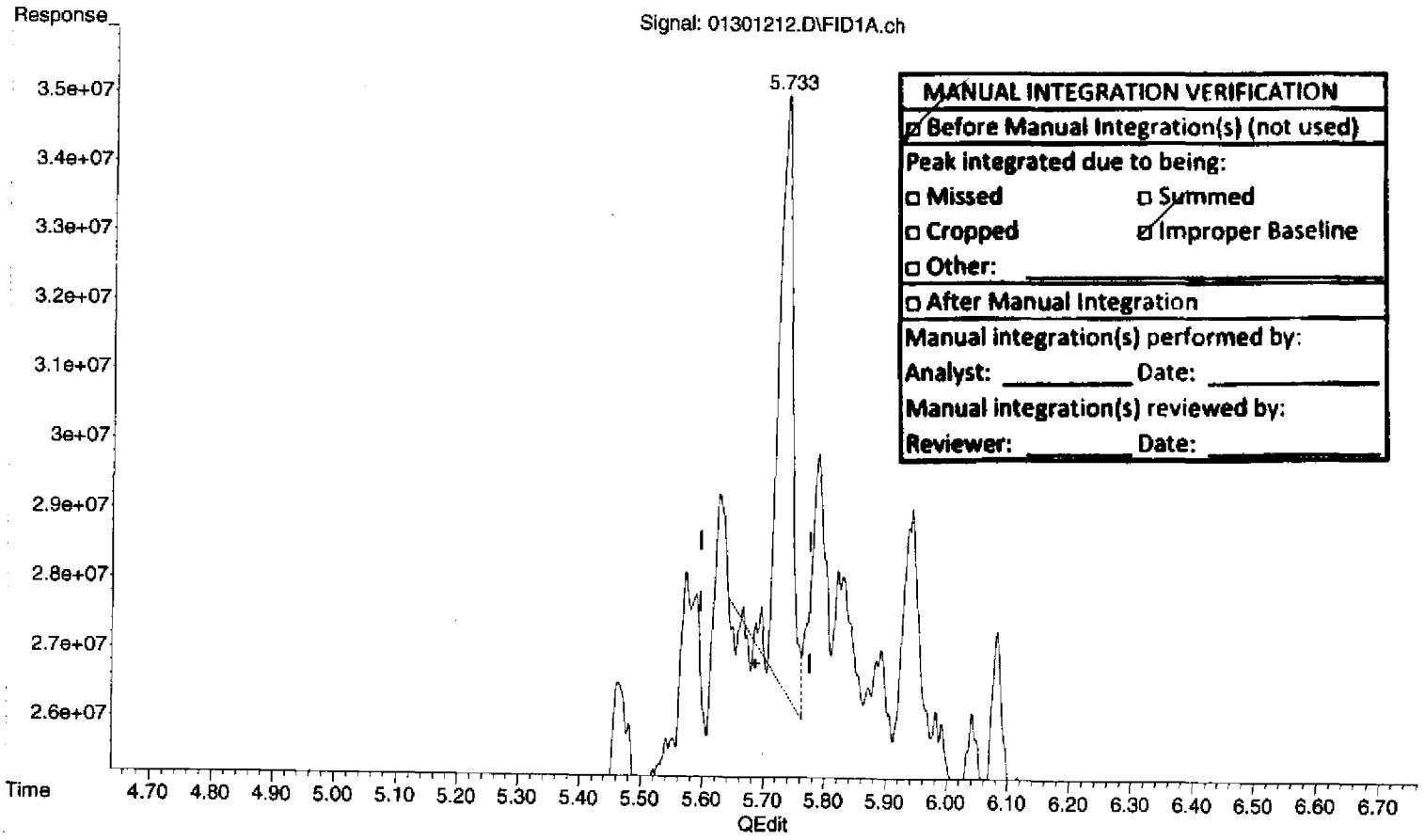
R.T.: 5.733 min
Delta R.T.: 0.048 min
Response: 126718804
Conc: 31.51 ug/mL m

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

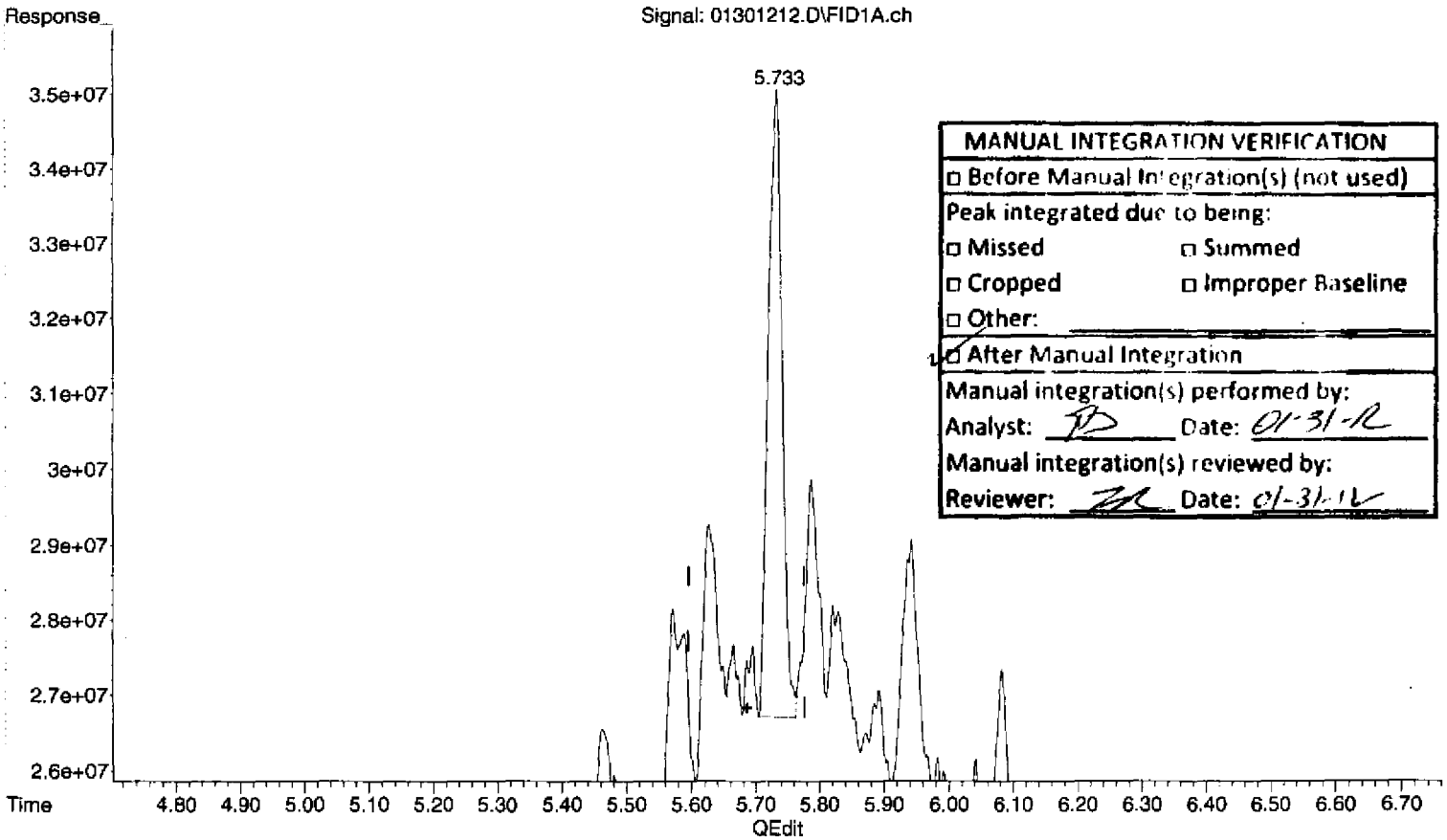
(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:43:19 2012

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

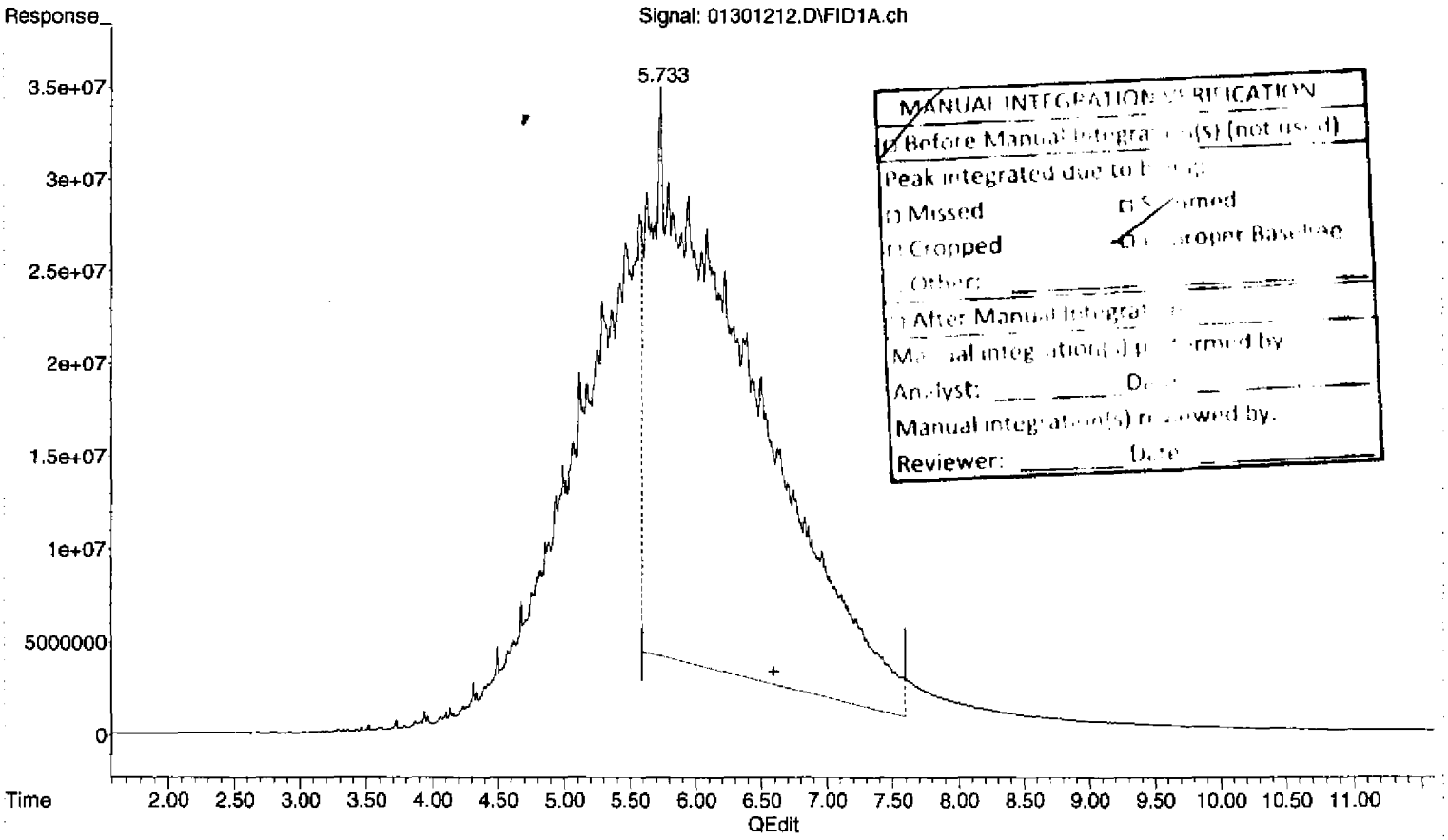
(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:43:31 2012

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

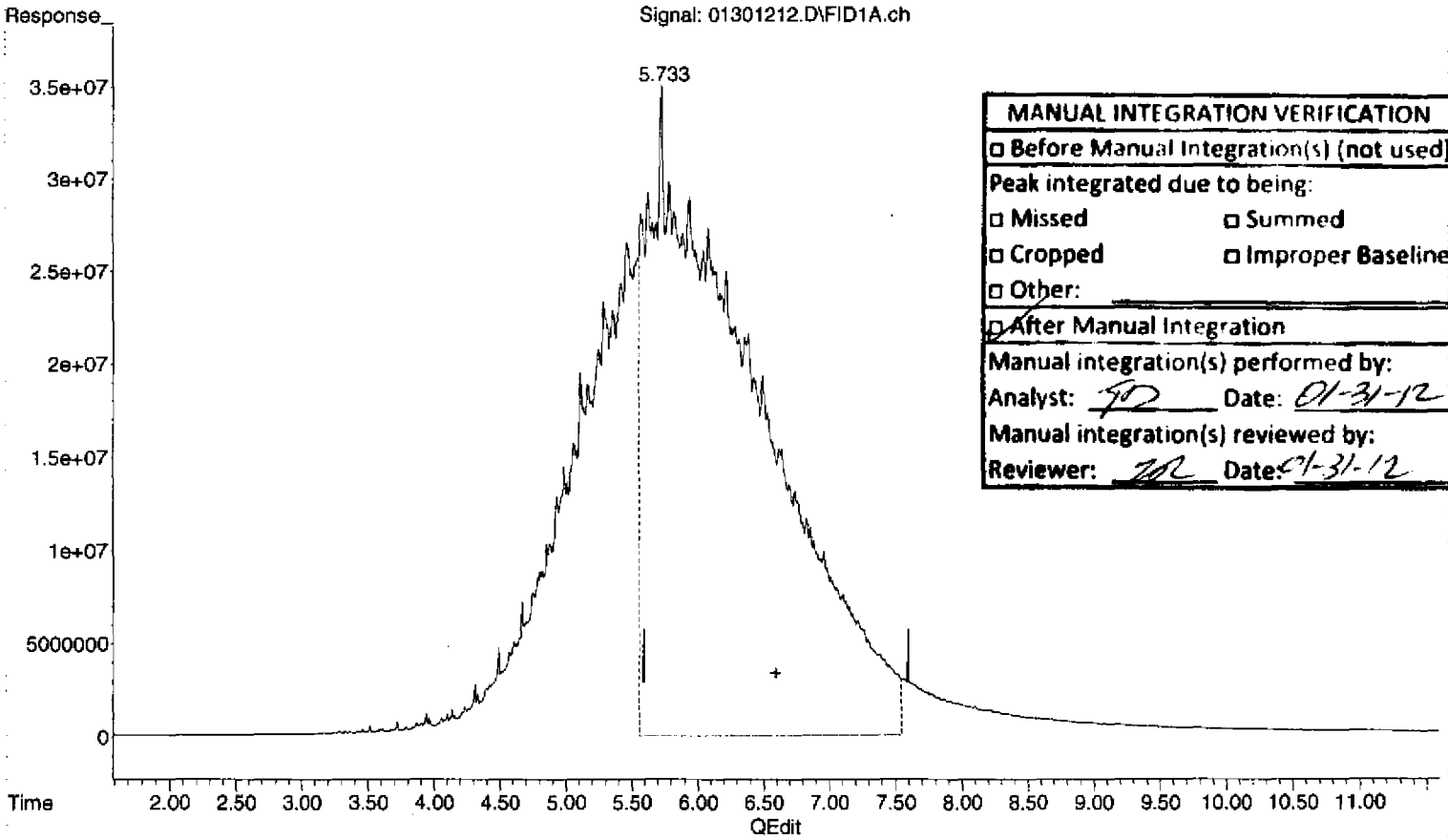
013012DROA.M Tue Jan 31 09:43:39 2012

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: ZR 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	5.732f	142663830	35.476 ug/mL
Spiked Amount 50.000	Range 60 - 127	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.

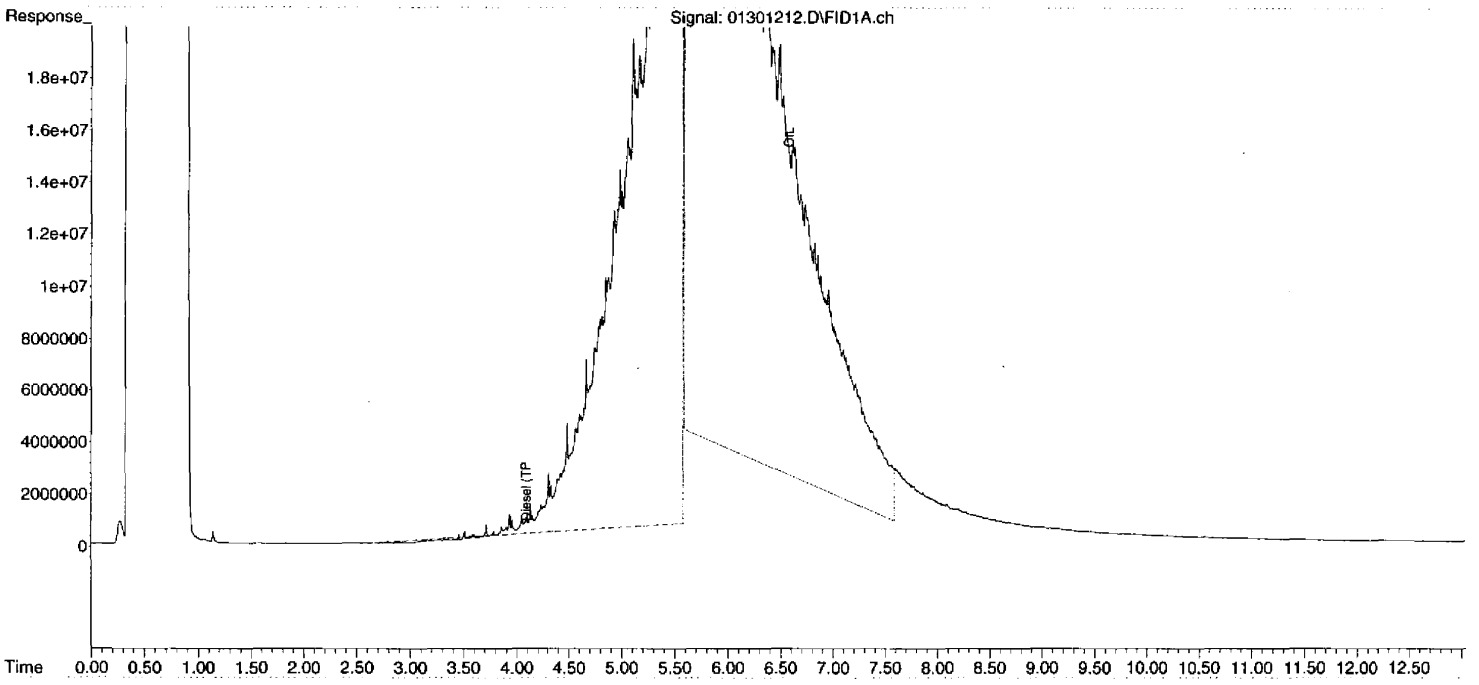
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: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

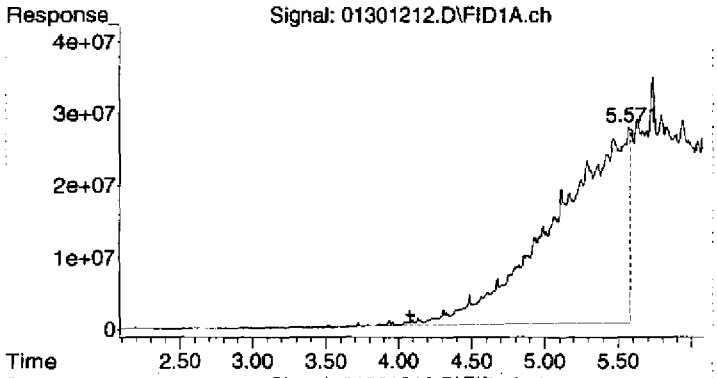
Quantitation Report (Not Reviewed)

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

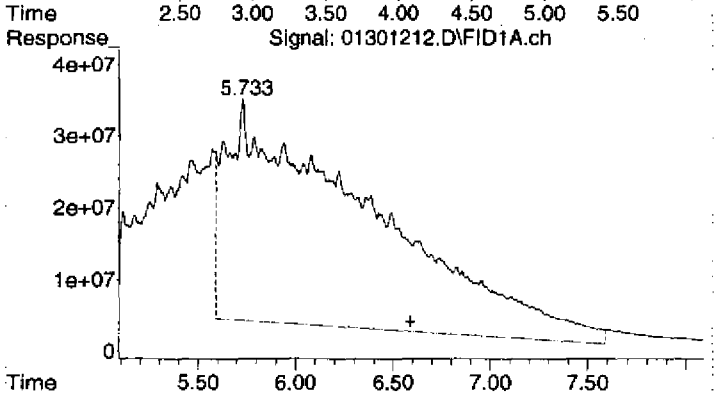
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





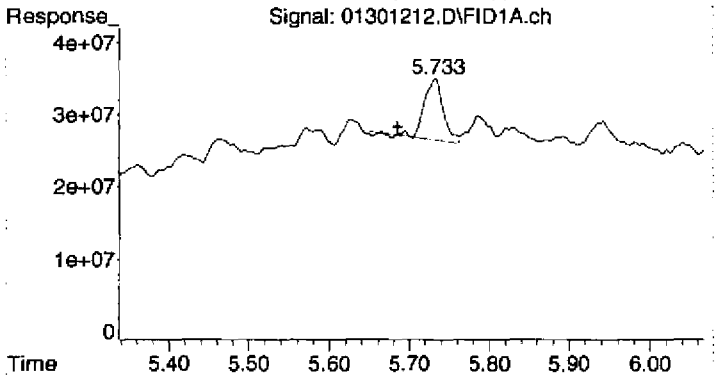
#1 Diesel (TPH)

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

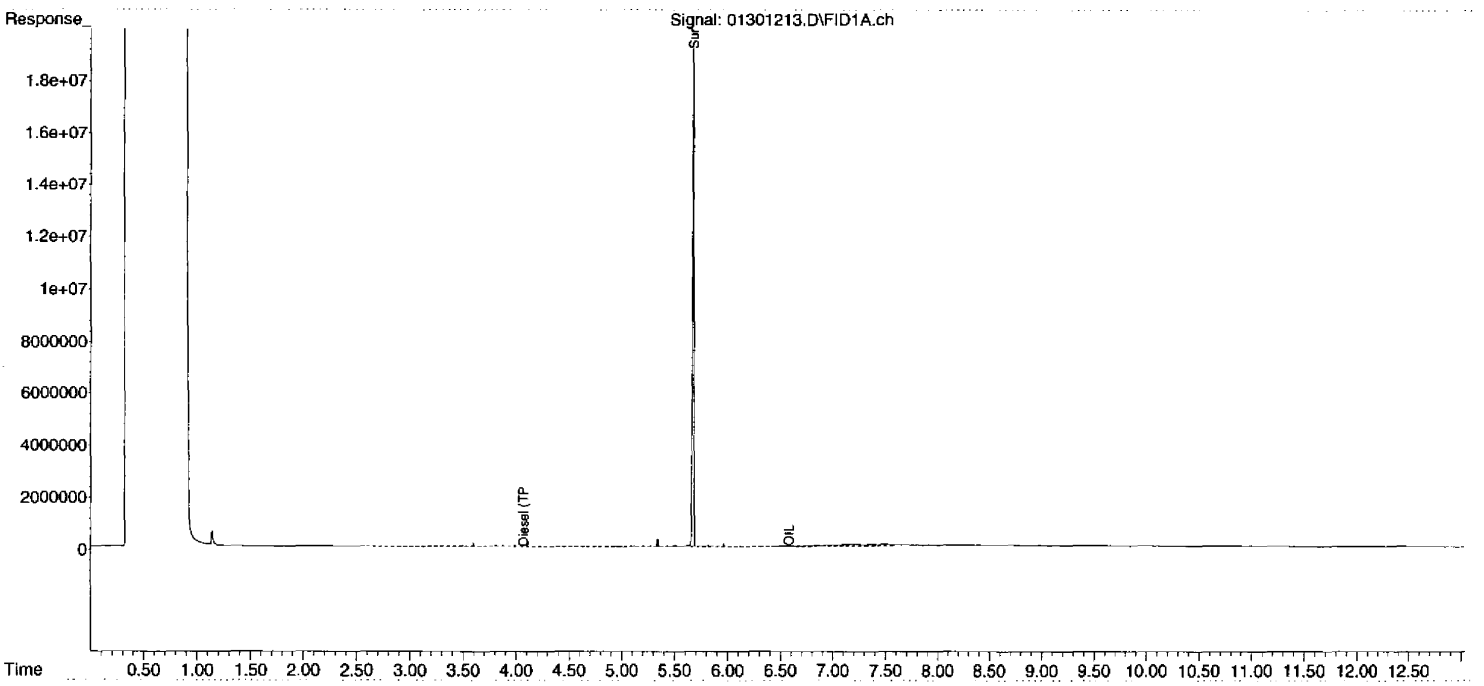
(f)=RT Delta > 1/2 Window (m)=manual int.

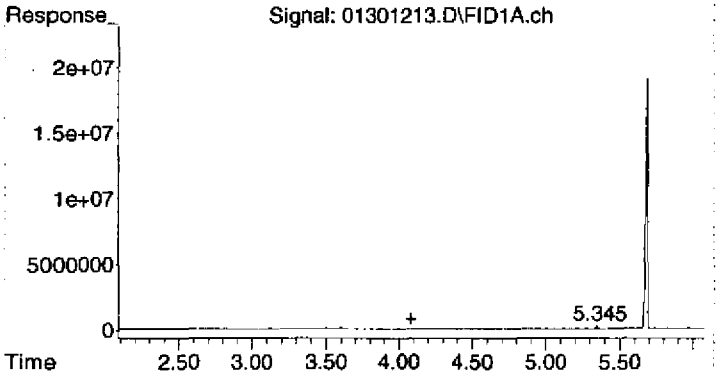
Quantitation Report (Not Reviewed)

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

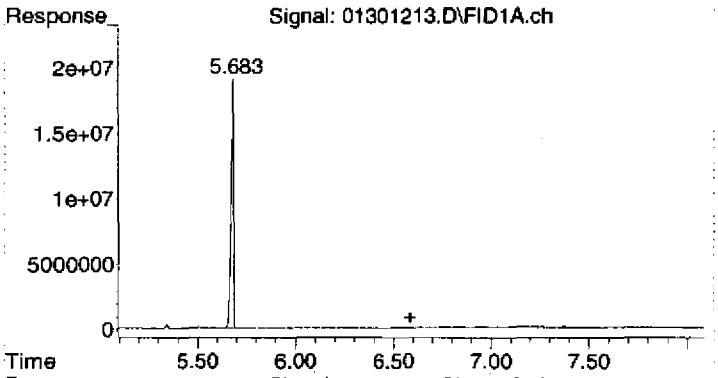
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





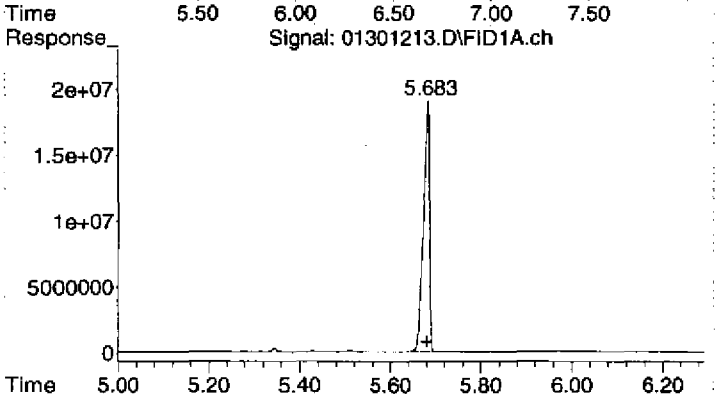
#1 Diesel (TPH)

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

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.

$\frac{1804770347}{3.588E6} = 503.002$

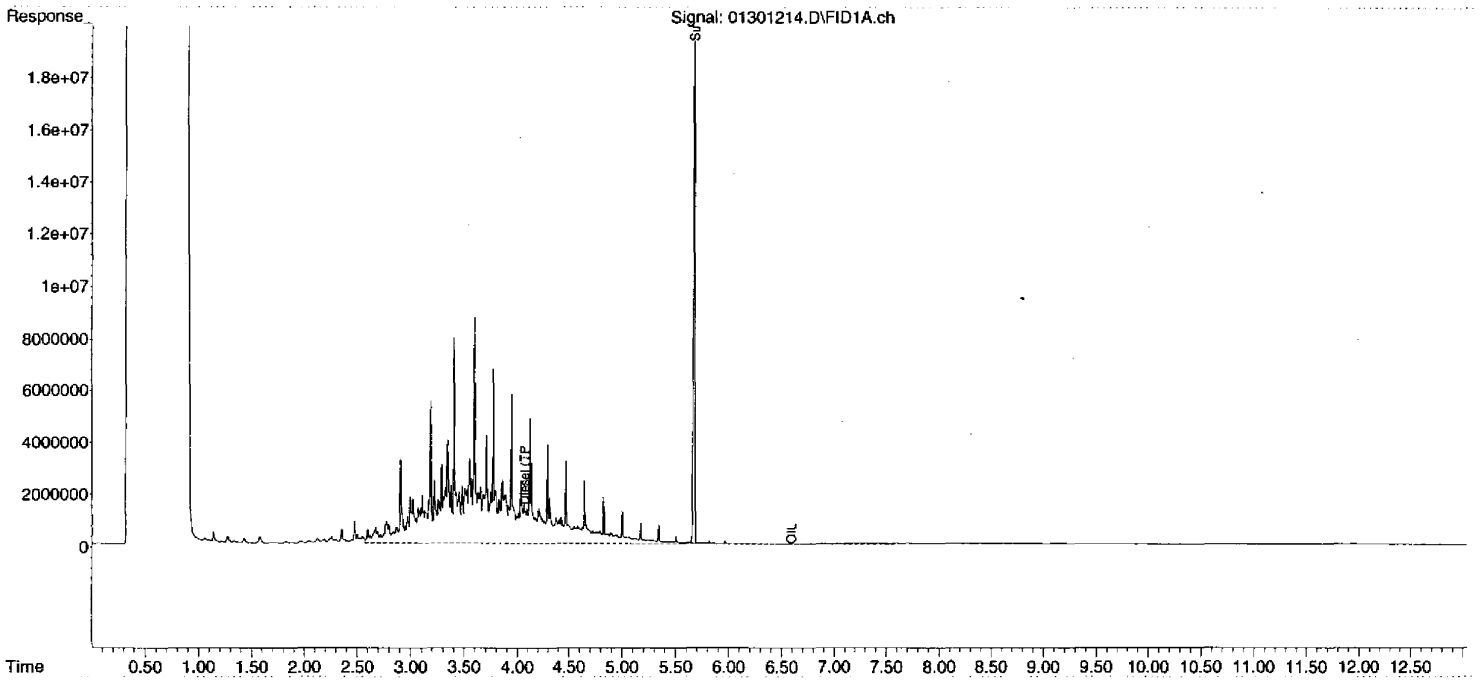
TD 01-31-12

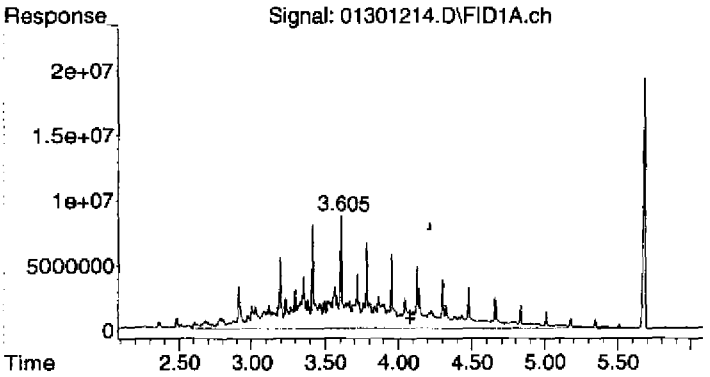
Quantitation Report (Not Reviewed)

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

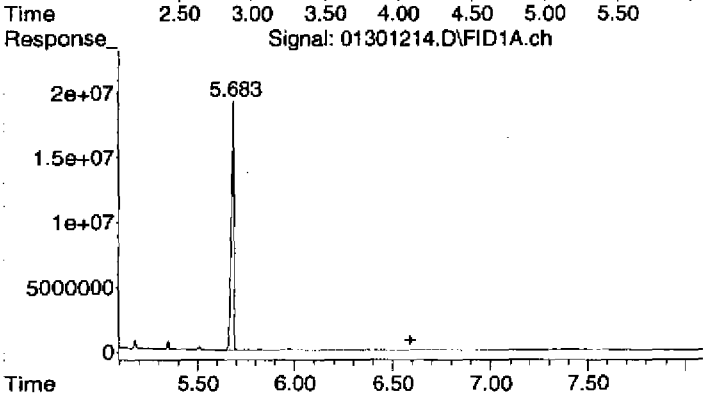
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





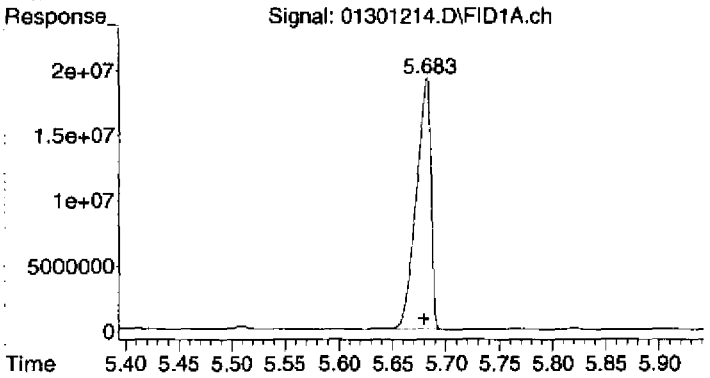
#1 Diesel (TPH)

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

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 01-31-12

$\frac{2218869255}{1.915E6} = 1158.6\%$

TD 01-31-12

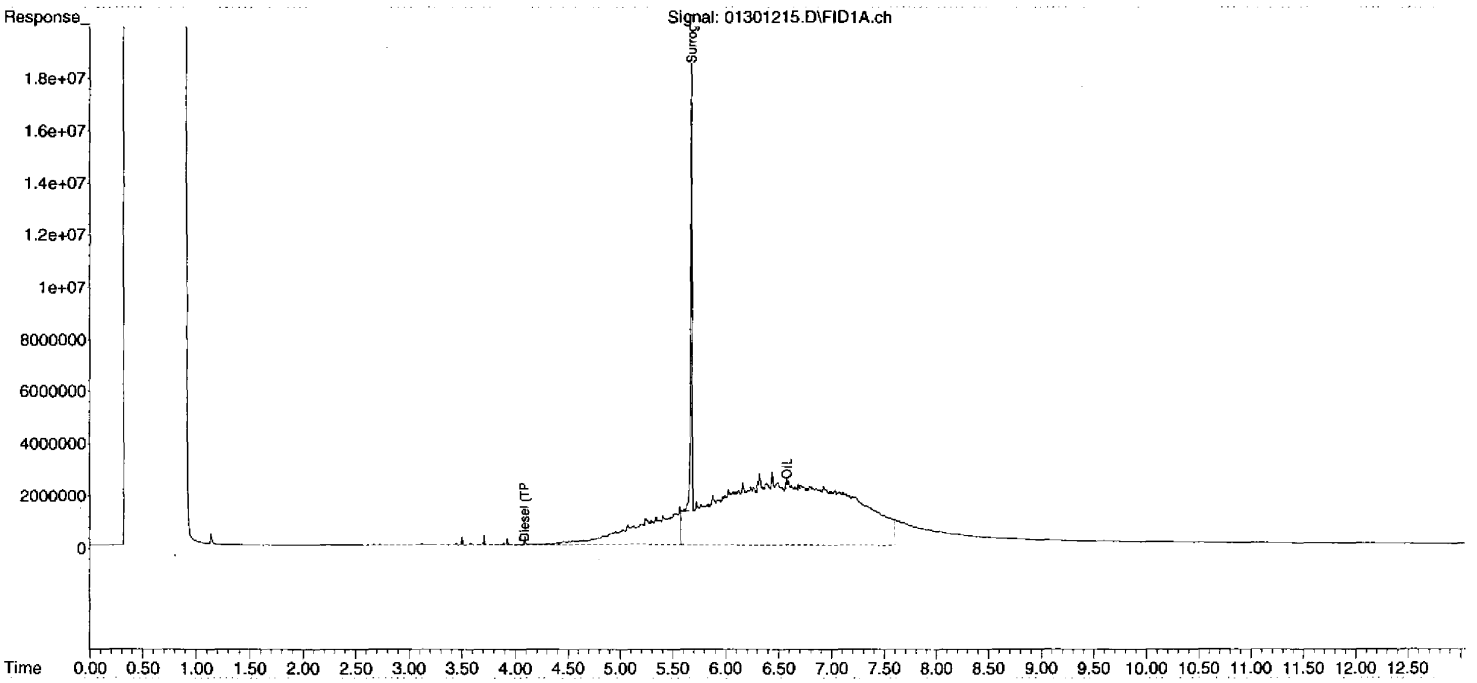
MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 01-31-12
Manual integration(s) reviewed by:
Reviewer: [illegible]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

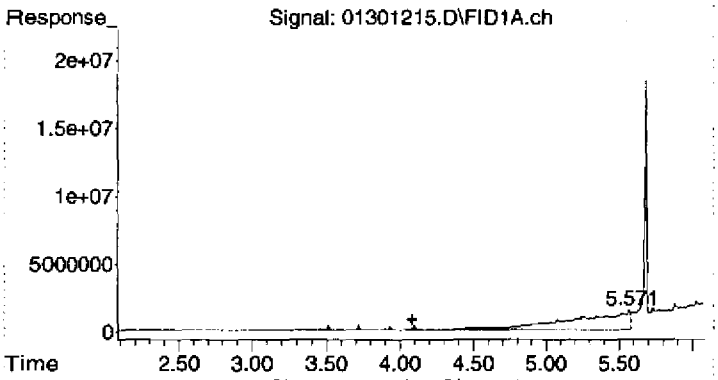
Quantitation Report (QT Reviewed)

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

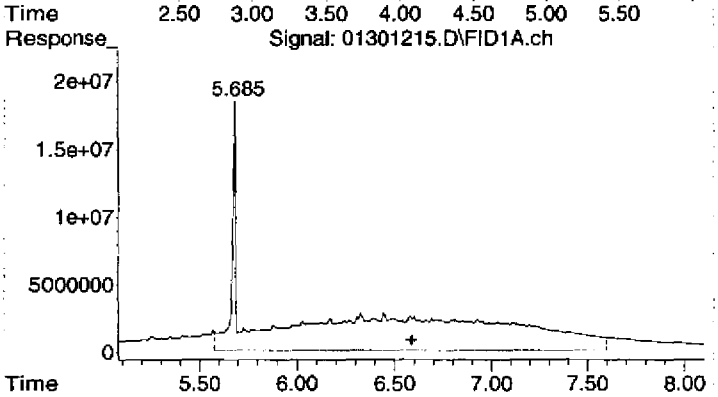
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





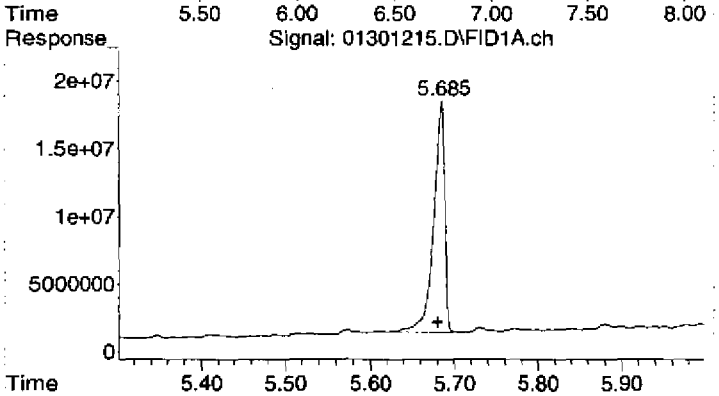
#1 Diesel (TPH)

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

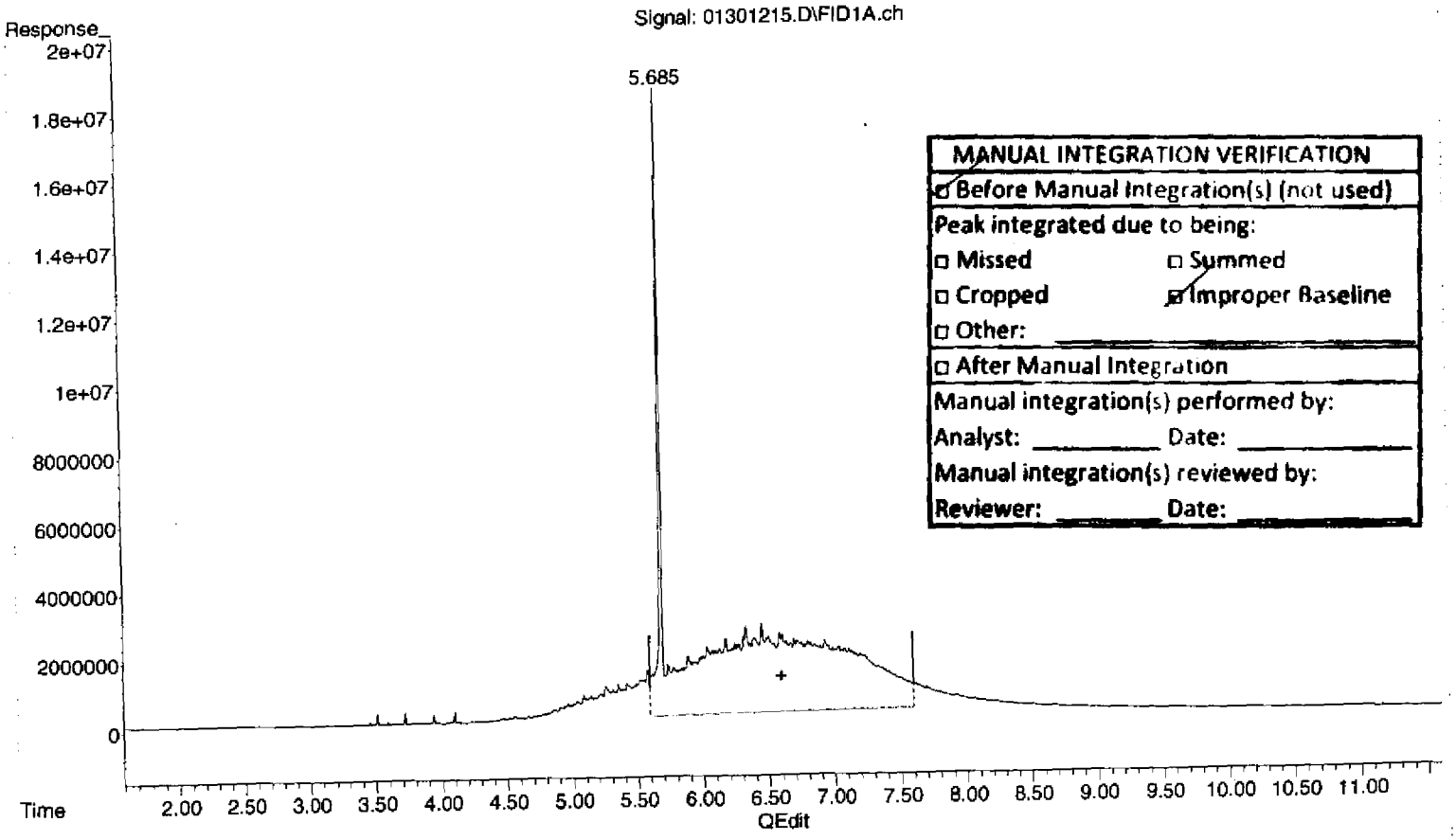
R.T.: 5.683 min
Delta R.T.: 0.004 min
Response: 155490720
Conc: 43.77 ug/mL

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

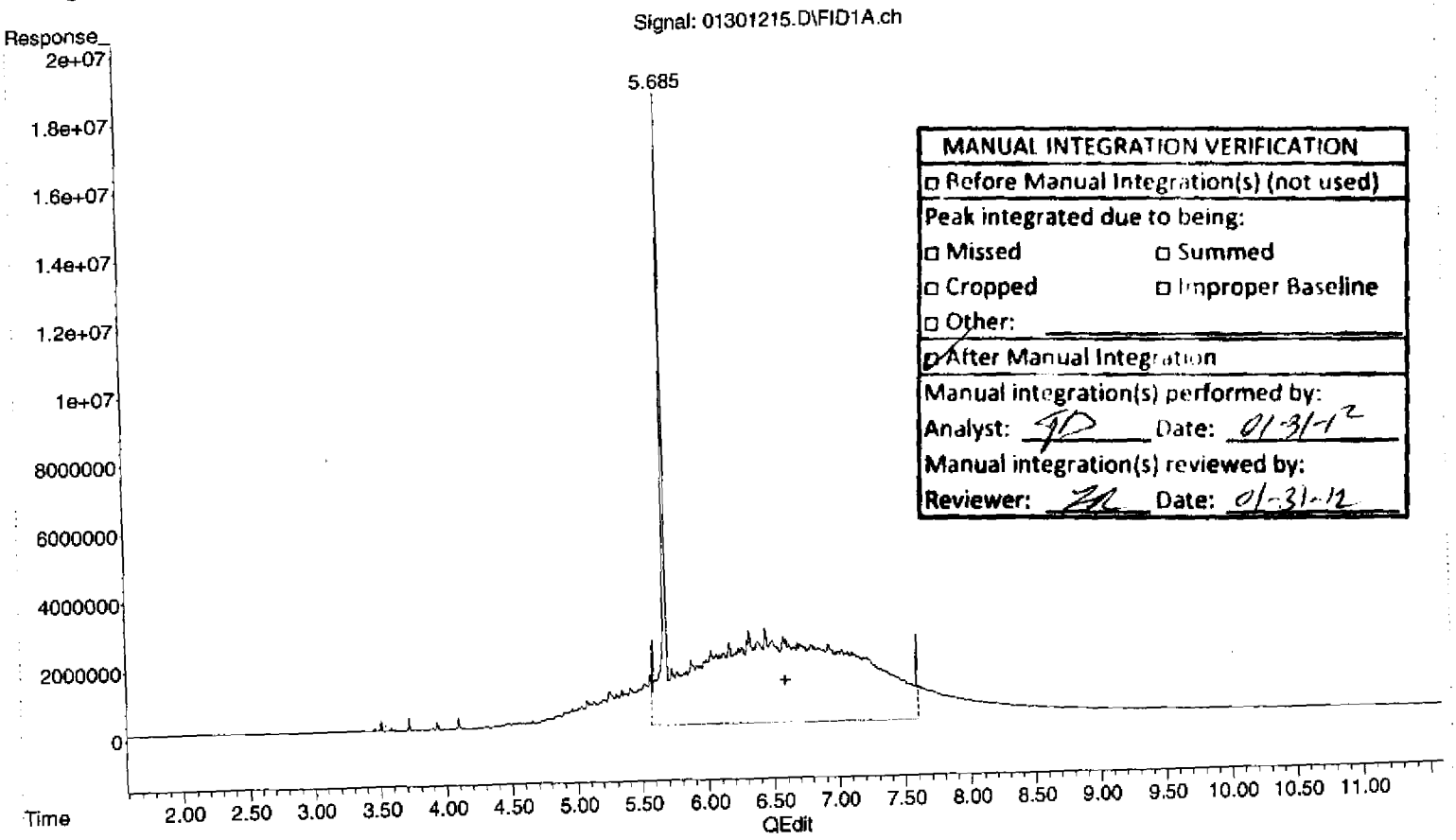
(+) = Expected Retention Time
013012DROA.M Tue Jan 31 09:57:37 2012

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: ZL 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.

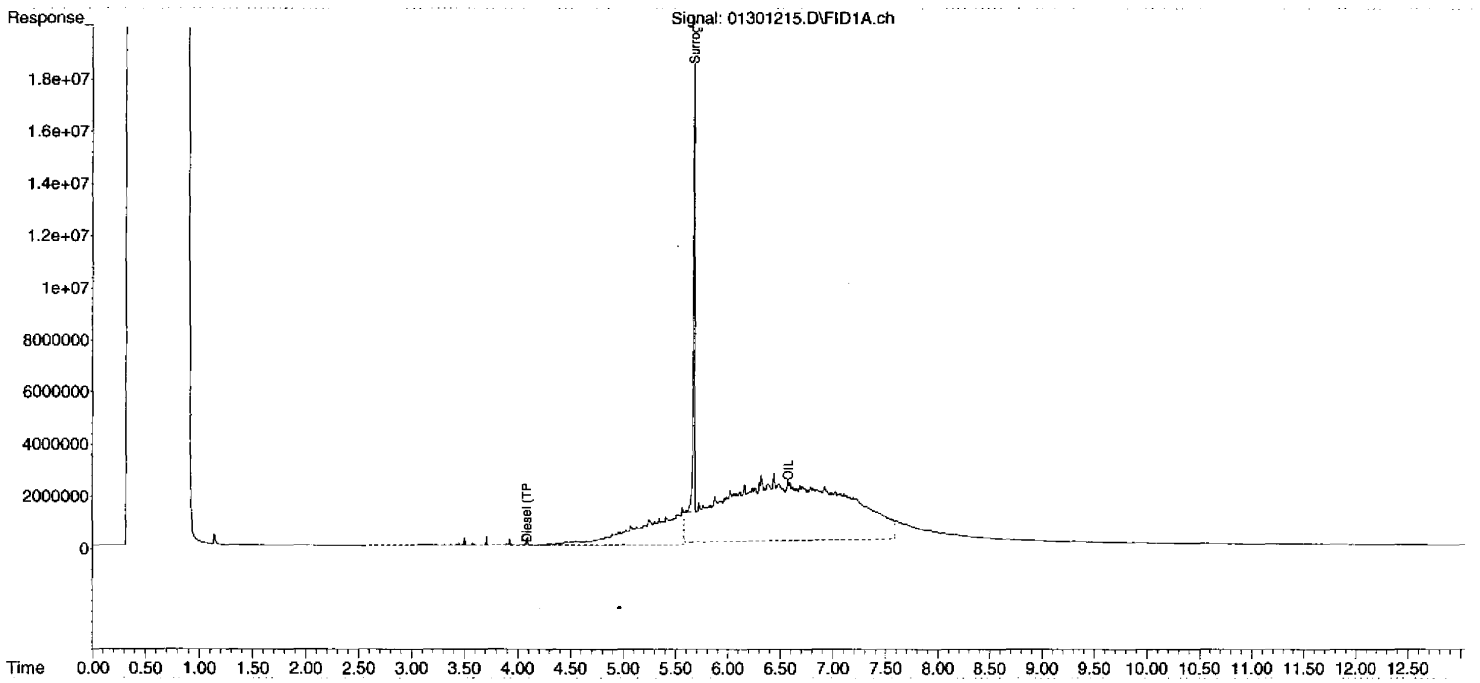
MANUAL INTEGRATION VERIFICATION	
☑ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other: _____	
☐ After Manual Integration	
Manual integration(s) performed by:	
Analyst: _____	Date: _____
Manual integration(s) reviewed by:	
Reviewer: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

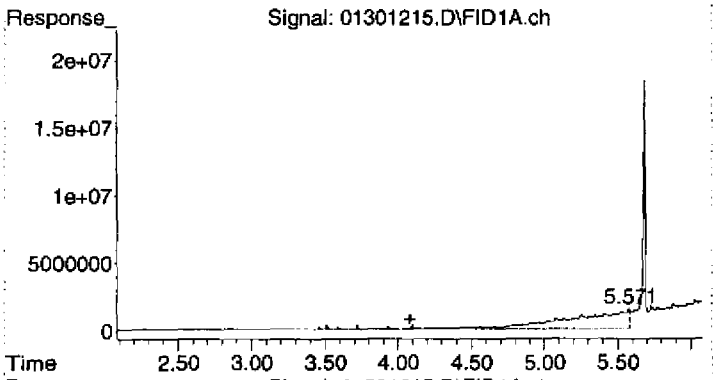
Quantitation Report (Not Reviewed)

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

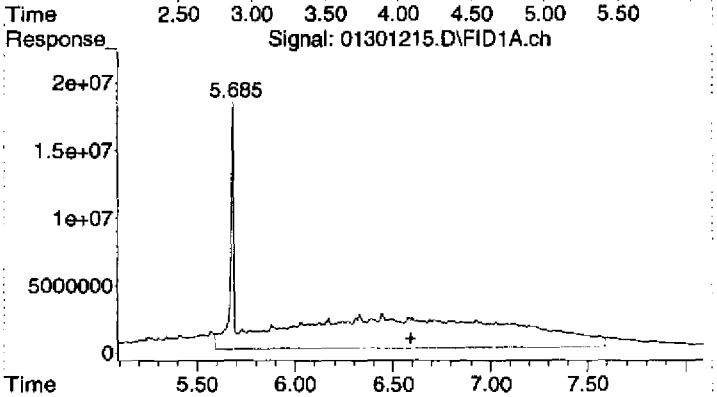
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





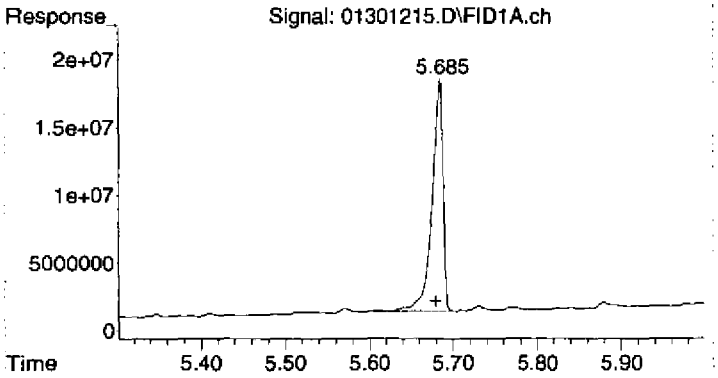
#1 Diesel (TPH)

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

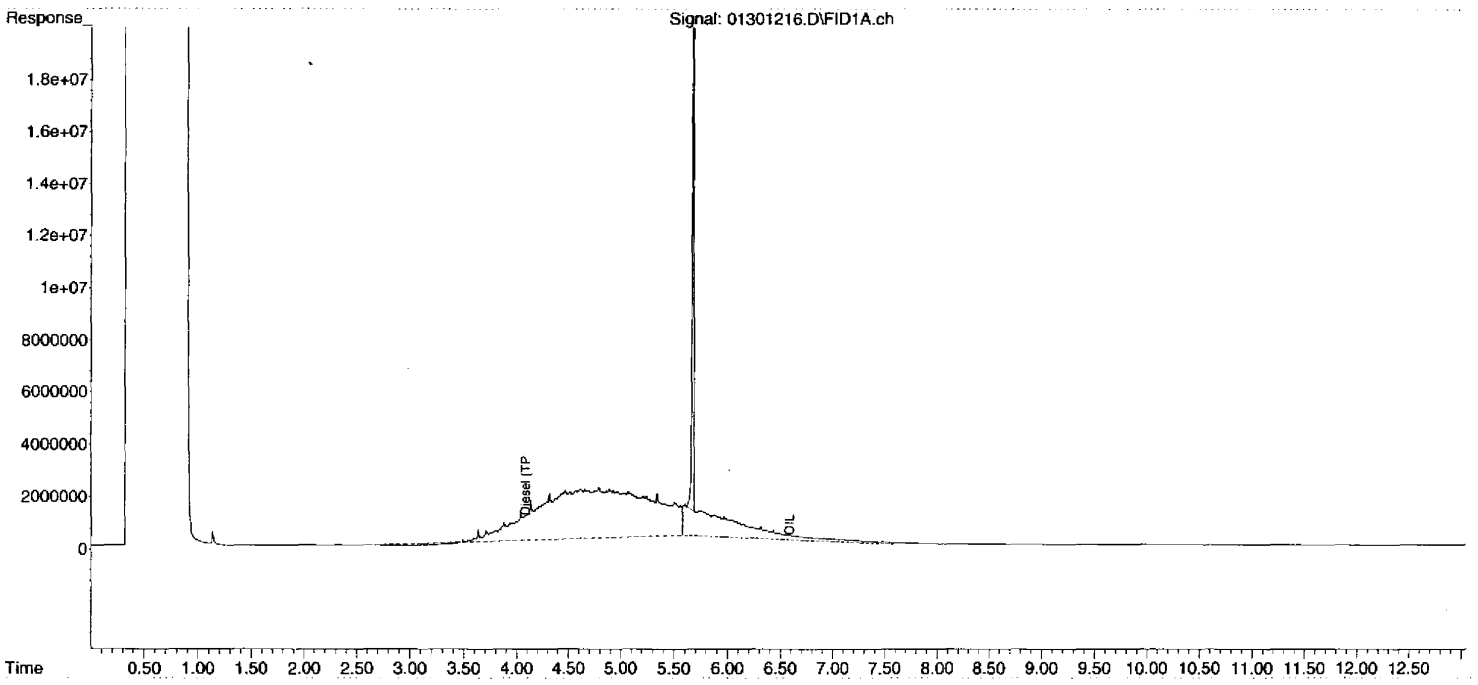
(f)=RT Delta > 1/2 Window (m)=manual int.

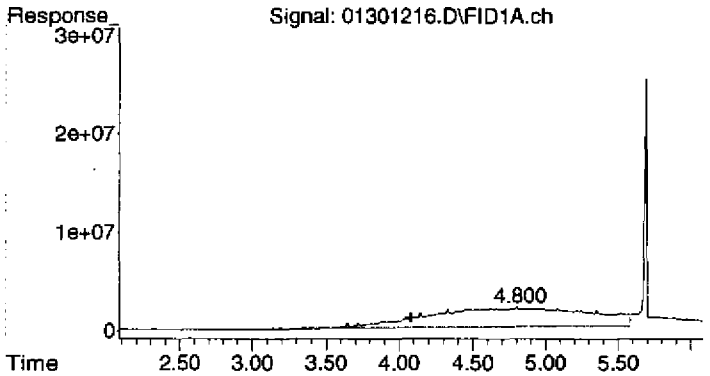
Quantitation Report (Not Reviewed)

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

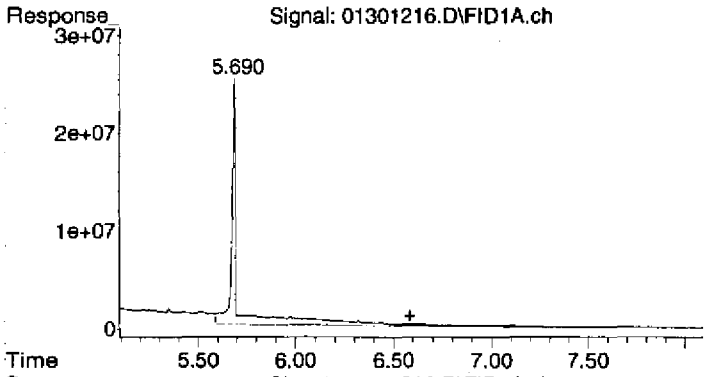
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





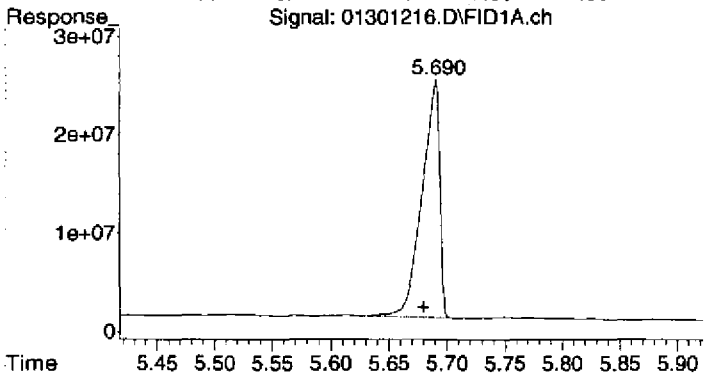
#1 Diesel (TPH)

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

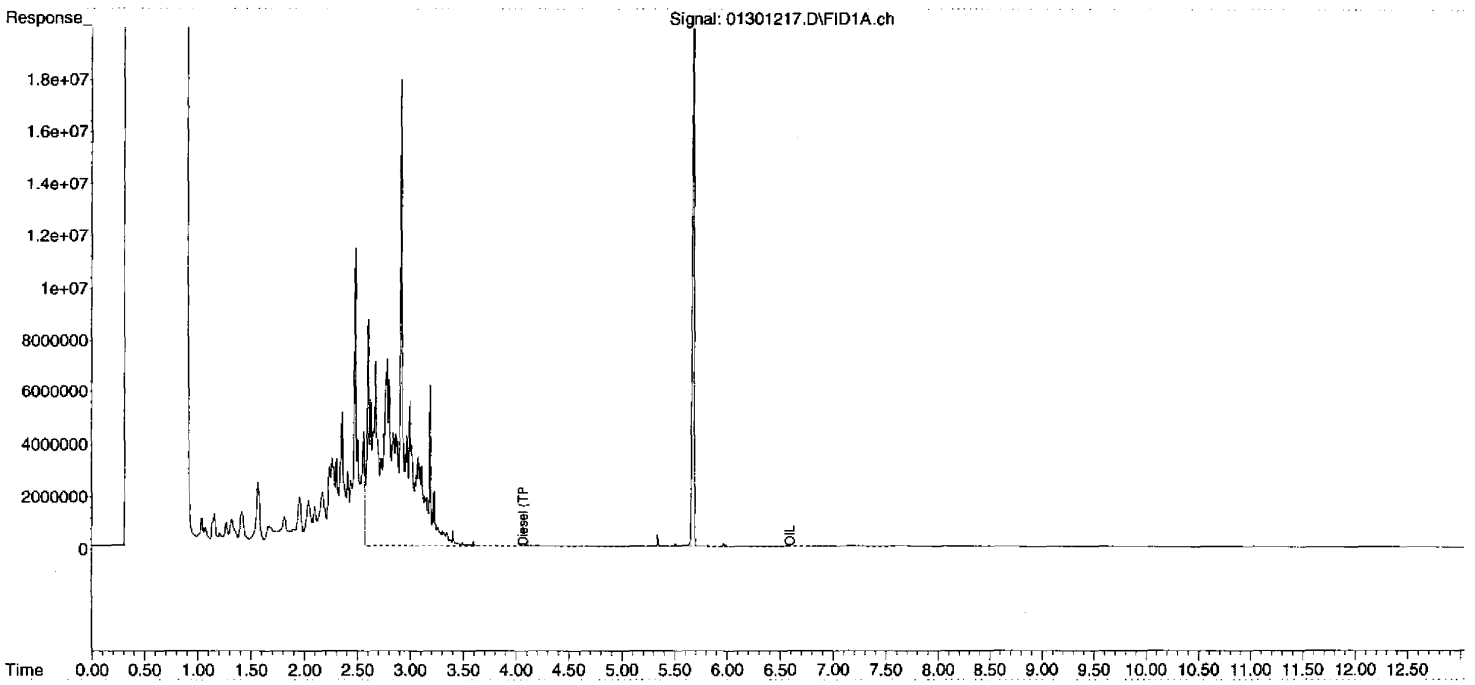
(f)=RT Delta > 1/2 Window (m)=manual int.

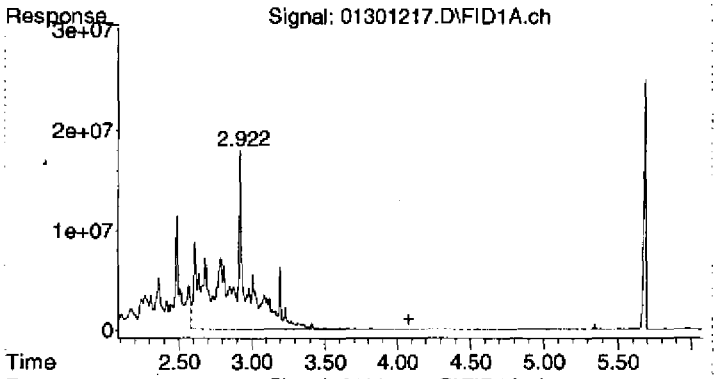
Quantitation Report (Not Reviewed)

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

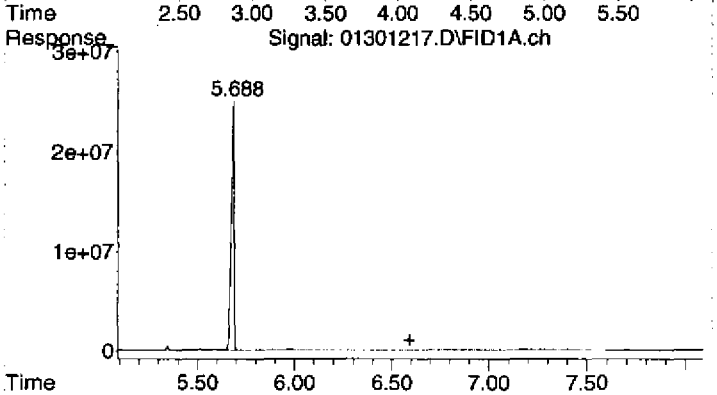
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





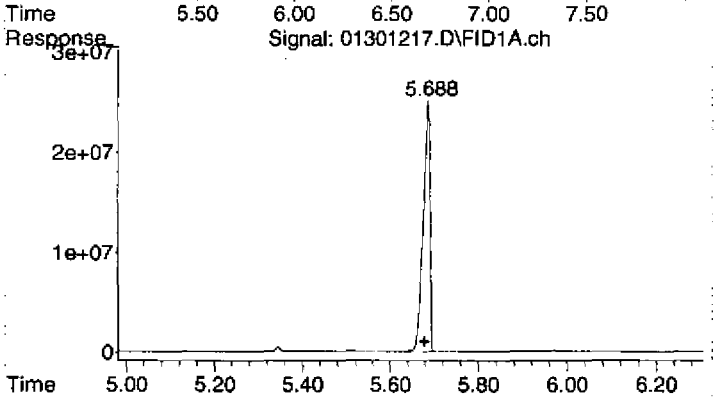
#1 Diesel (TPH)

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

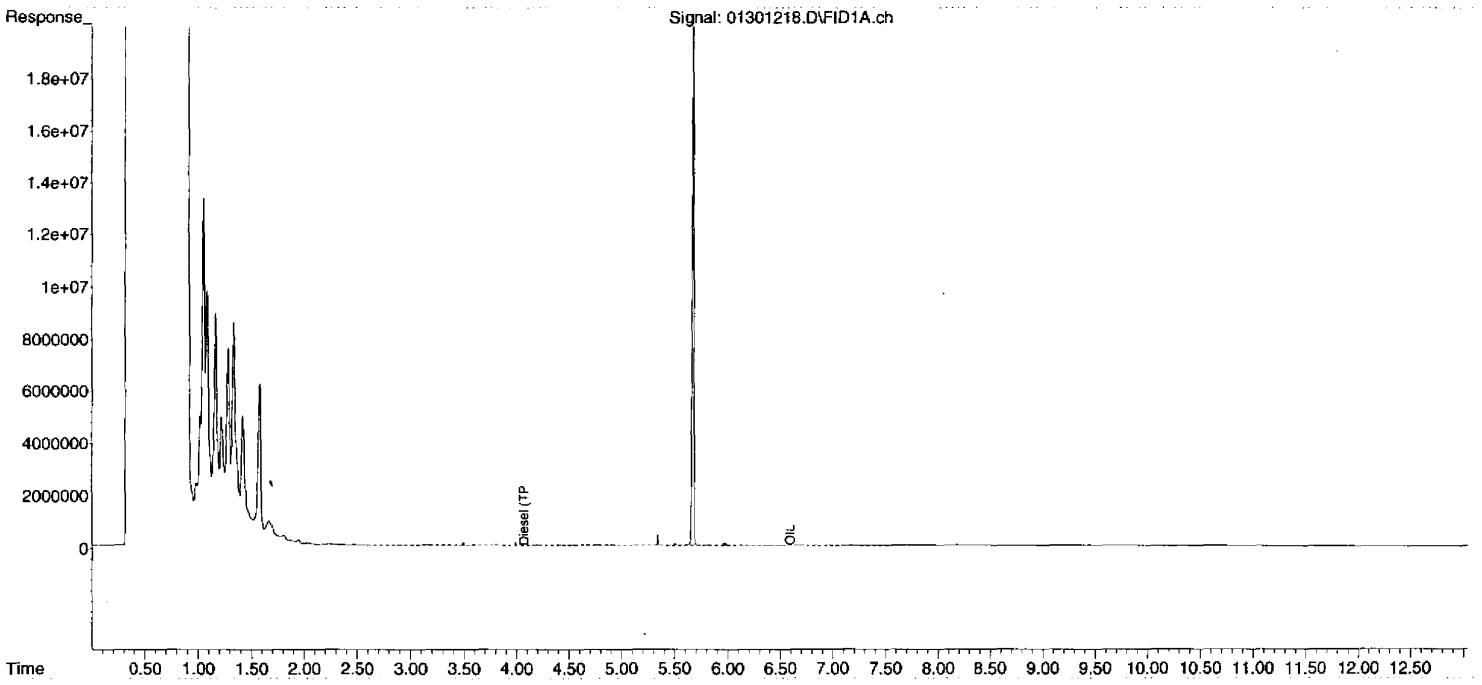
(f)=RT Delta > 1/2 Window (m)=manual int.

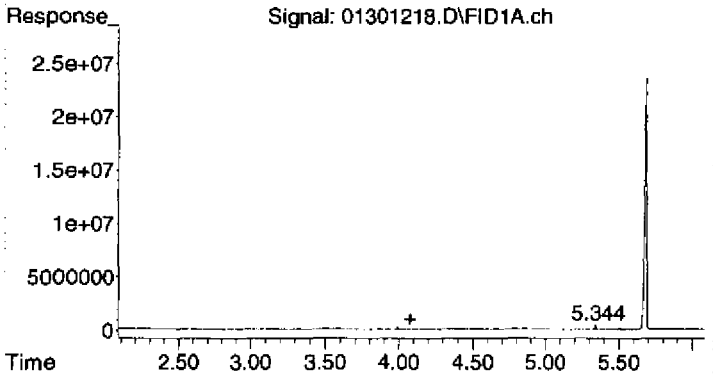
Quantitation Report (Not Reviewed)

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

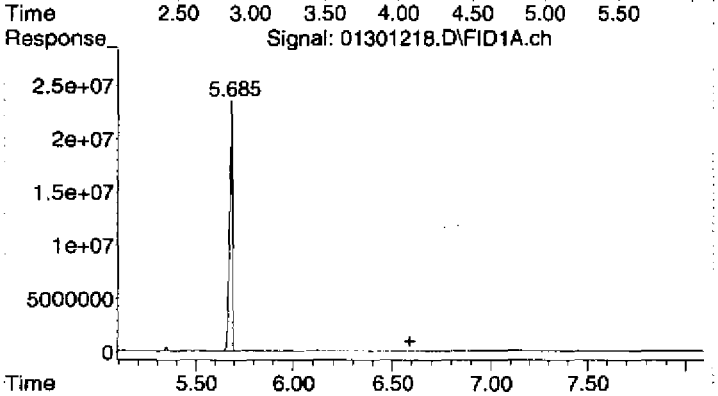
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





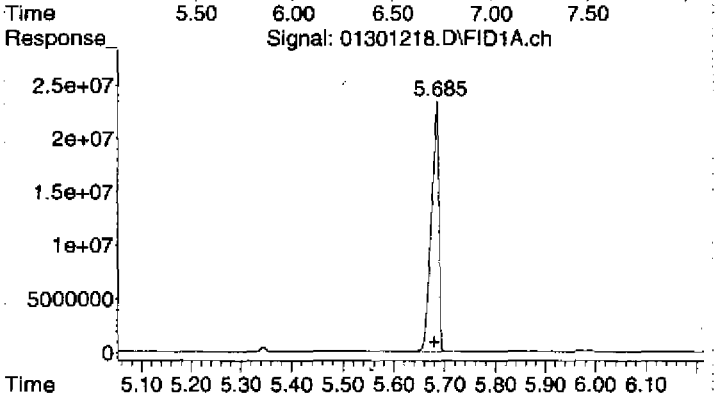
#1 Diesel (TPH)

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

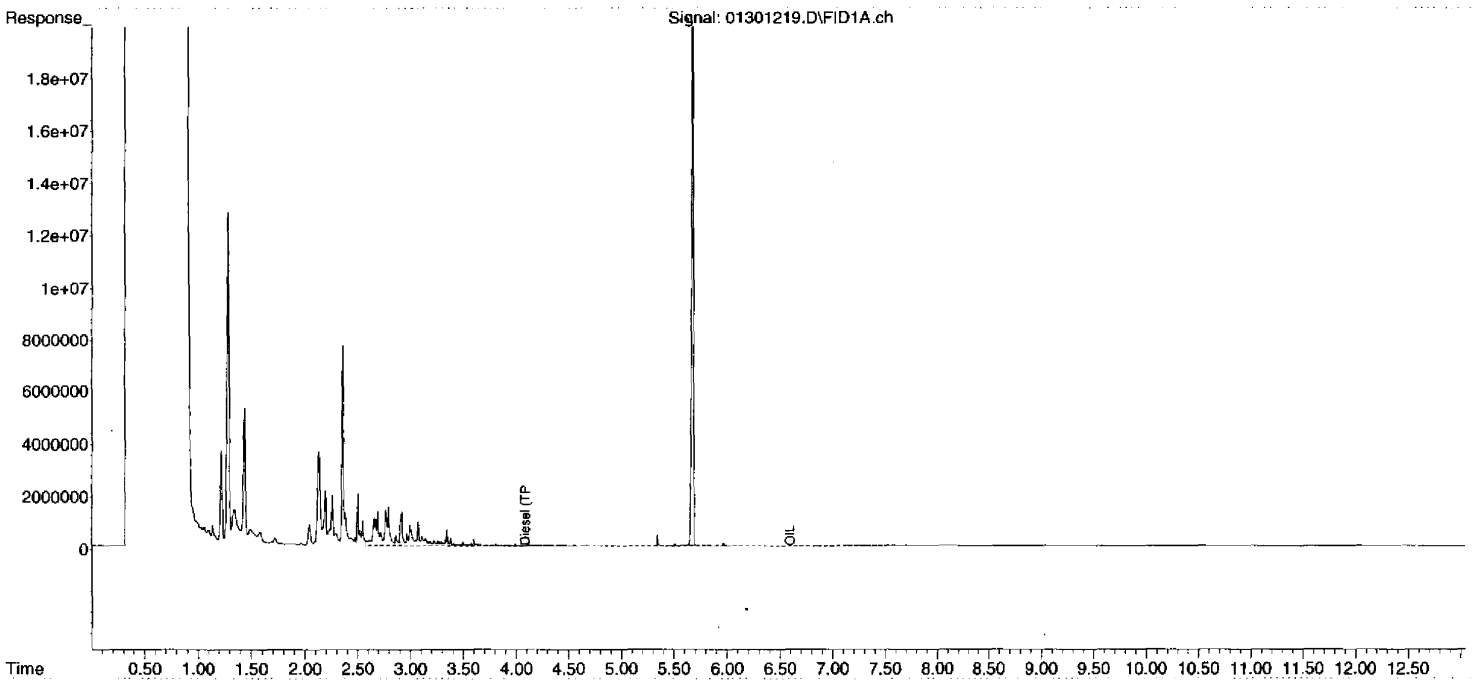
(f)=RT Delta > 1/2 Window (m)=manual int.

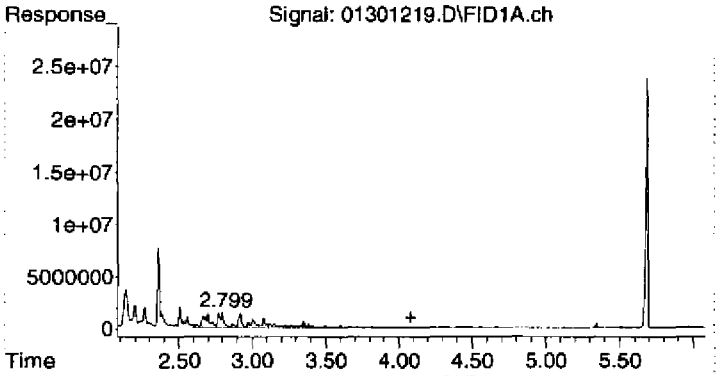
Quantitation Report (Not Reviewed)

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

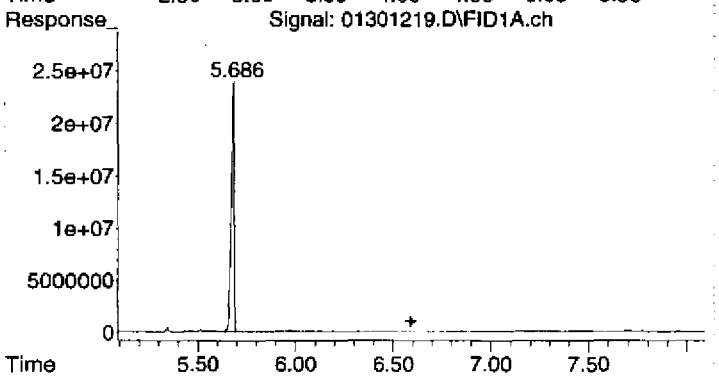
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





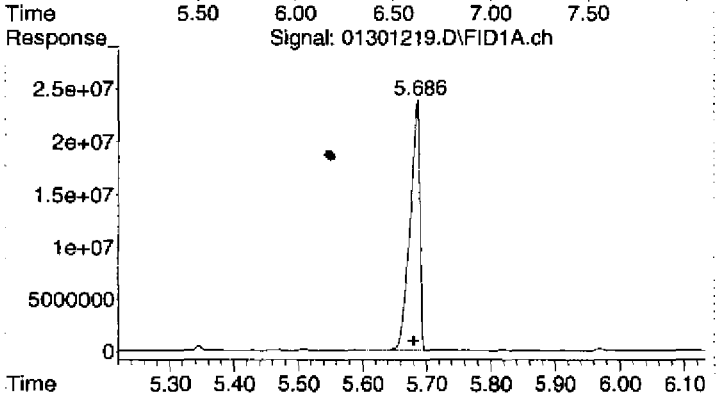
#1 Diesel (TPH)

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

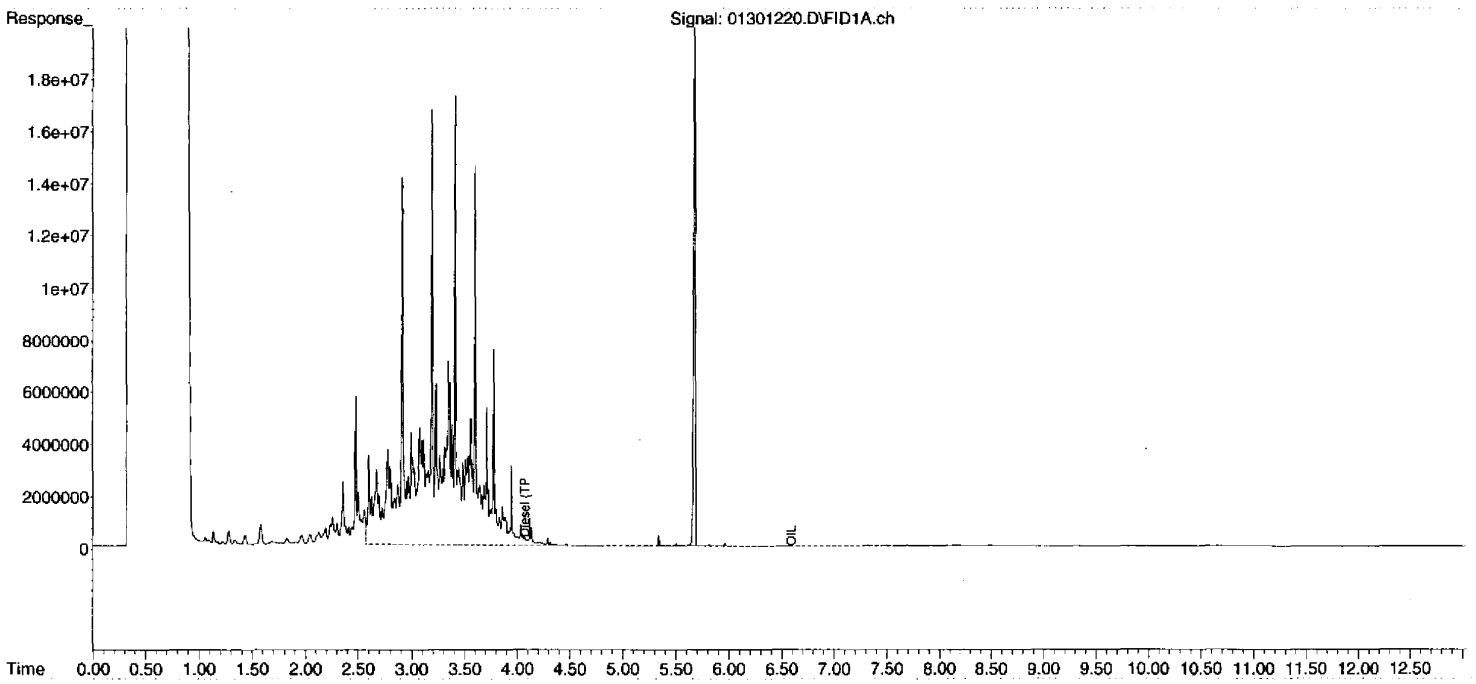
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

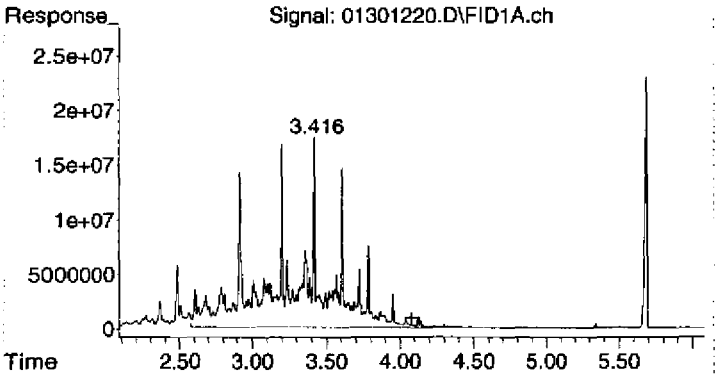
Data Path : C:\msdchem\1\2012\DATA\013012DA\
Data File : 01301220.D
Signal(s) : FID1A.ch
Acq On : 30 Jan 2012 5:43 pm
Operator : TD
Sample : 2010046-ICB6
Misc : 1G15010 Kerosene
ALS Vial : 20 Sample Multiplier: 1

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

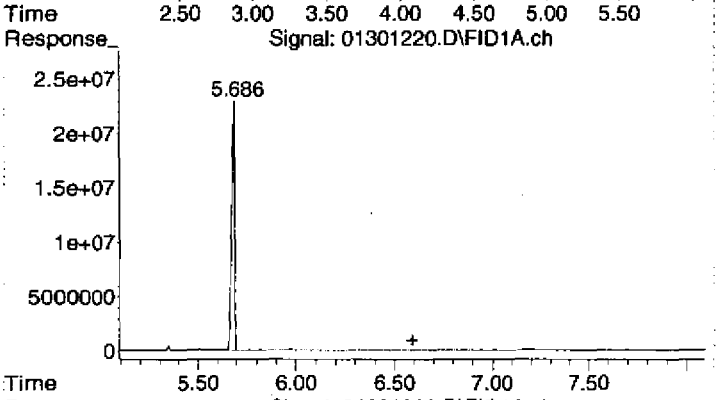


DIM0035998 DIM0036532



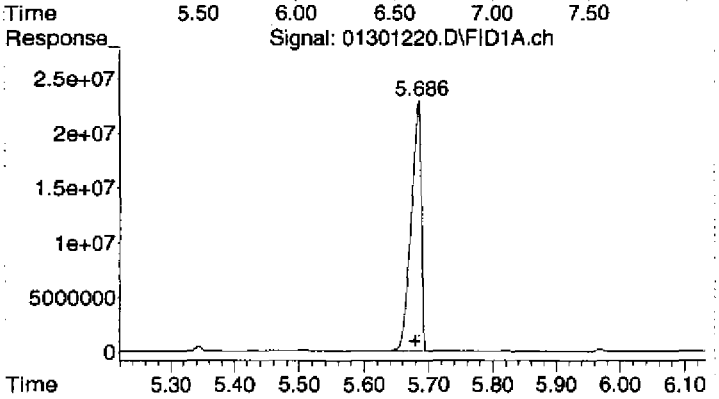
#1 Diesel (TPH)

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

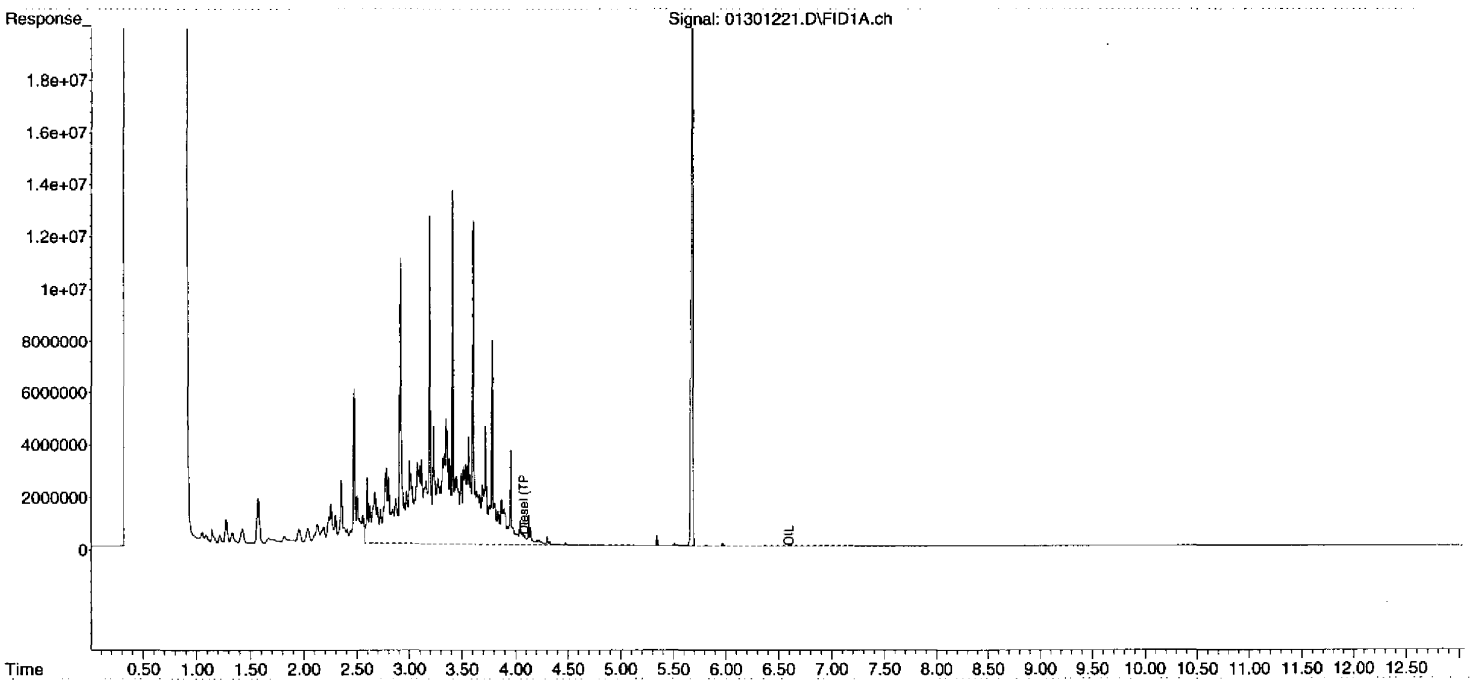
(f)=RT Delta > 1/2 Window (m)=manual int.

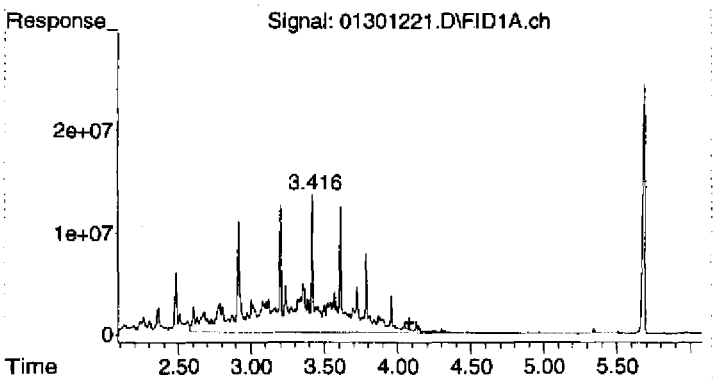
Quantitation Report (Not Reviewed)

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

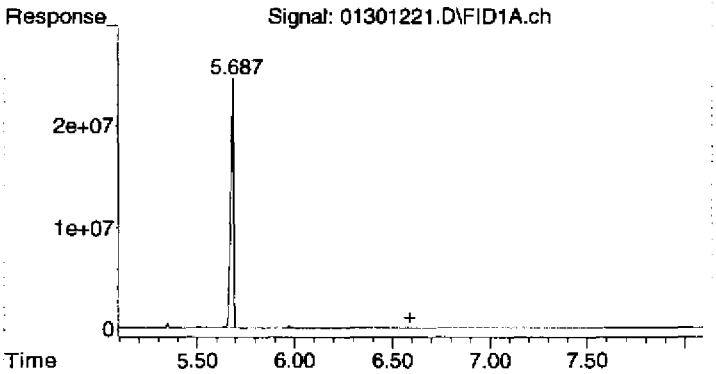
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





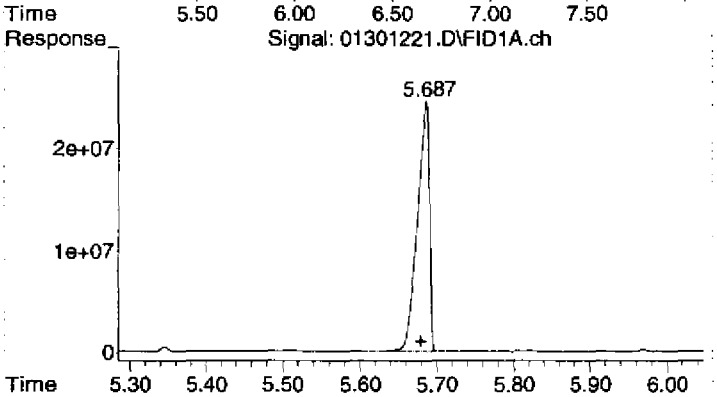
#1 Diesel (TPH)

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

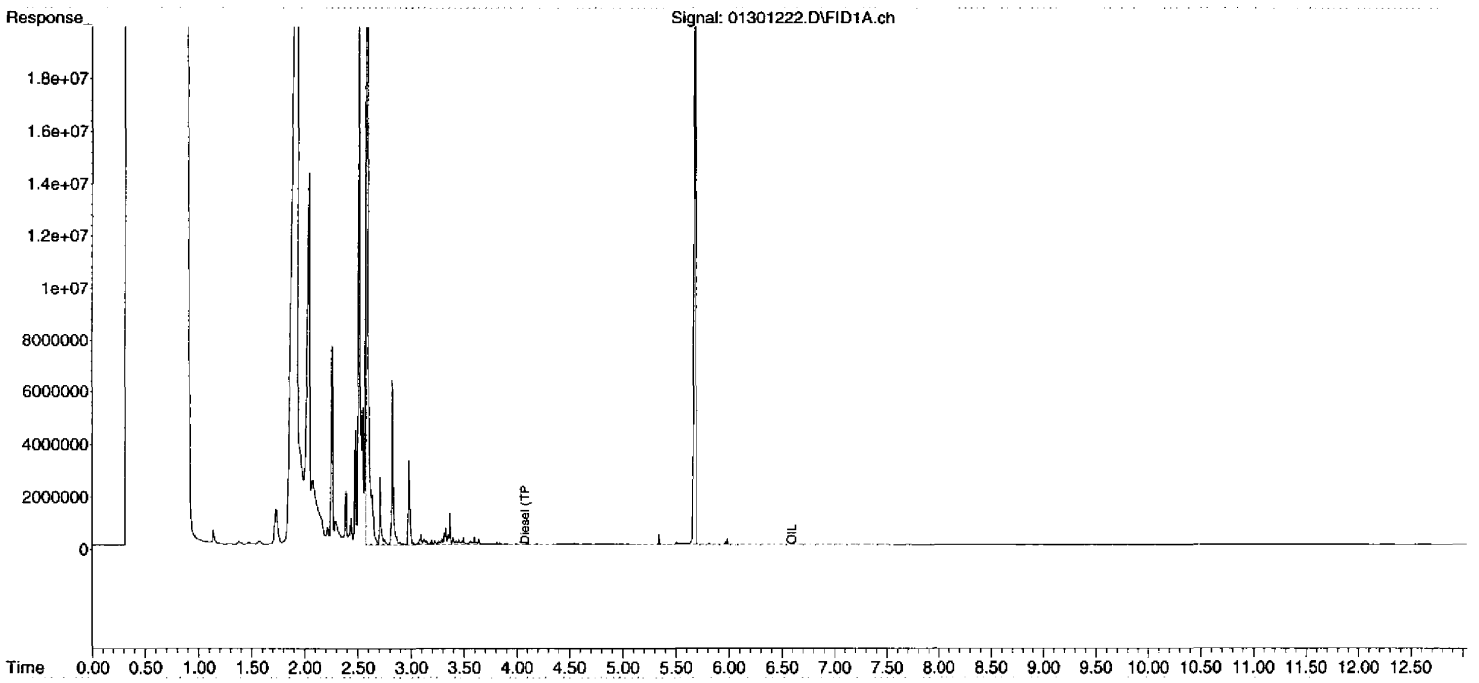
(f)=RT Delta > 1/2 Window (m)=manual int.

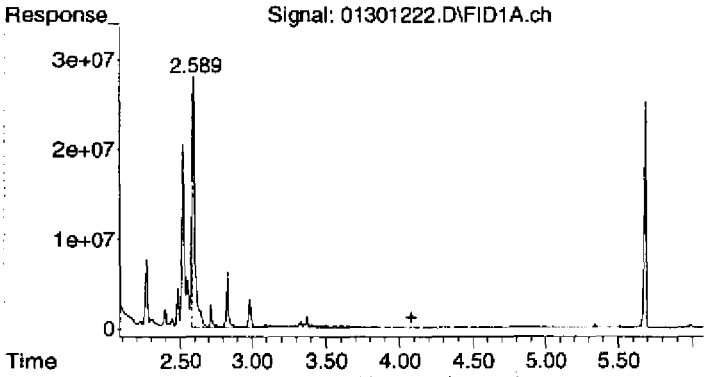
Quantitation Report (Not Reviewed)

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

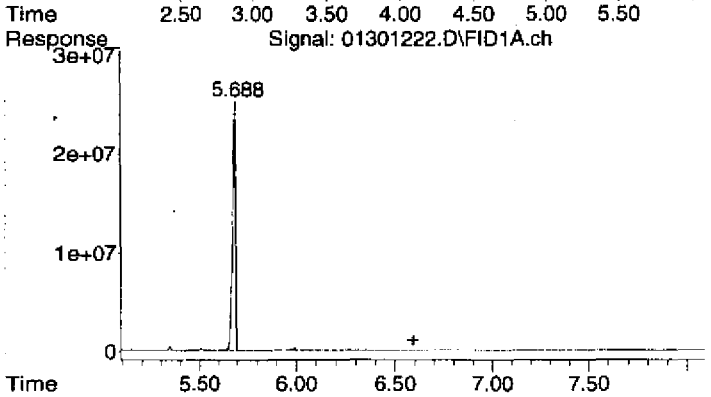
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





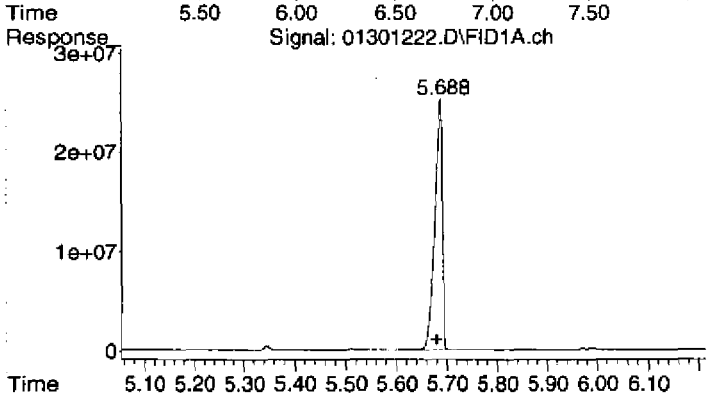
#1 Diesel (TPH)

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.

DIM0035998

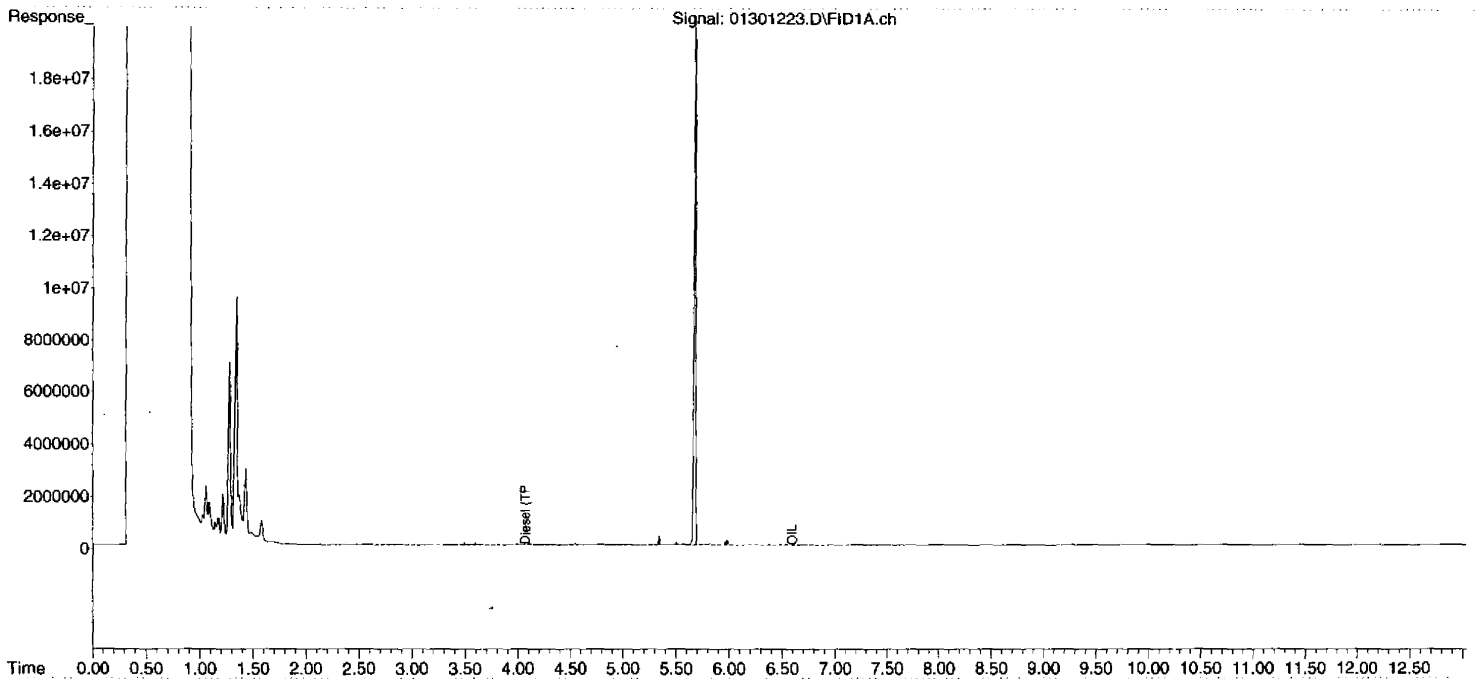
DIM0036540

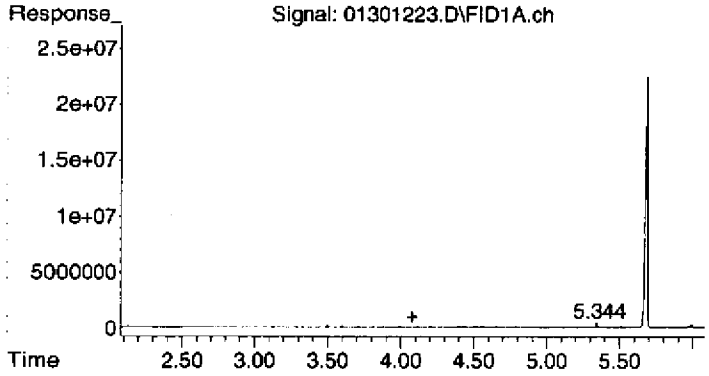
Quantitation Report (Not Reviewed)

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

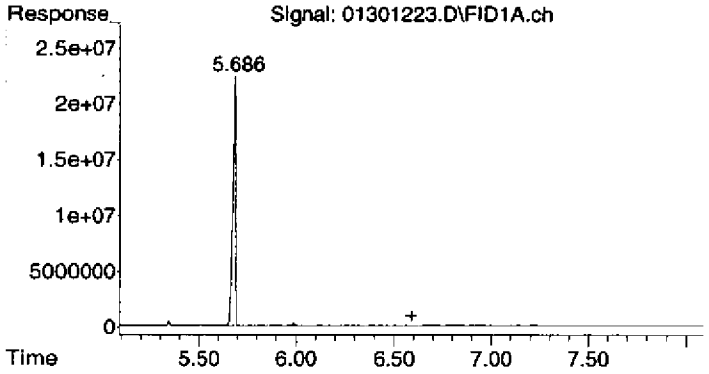
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





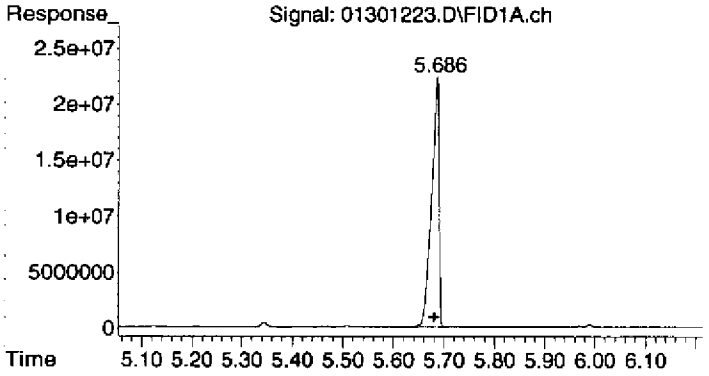
#1 Diesel (TPH)

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

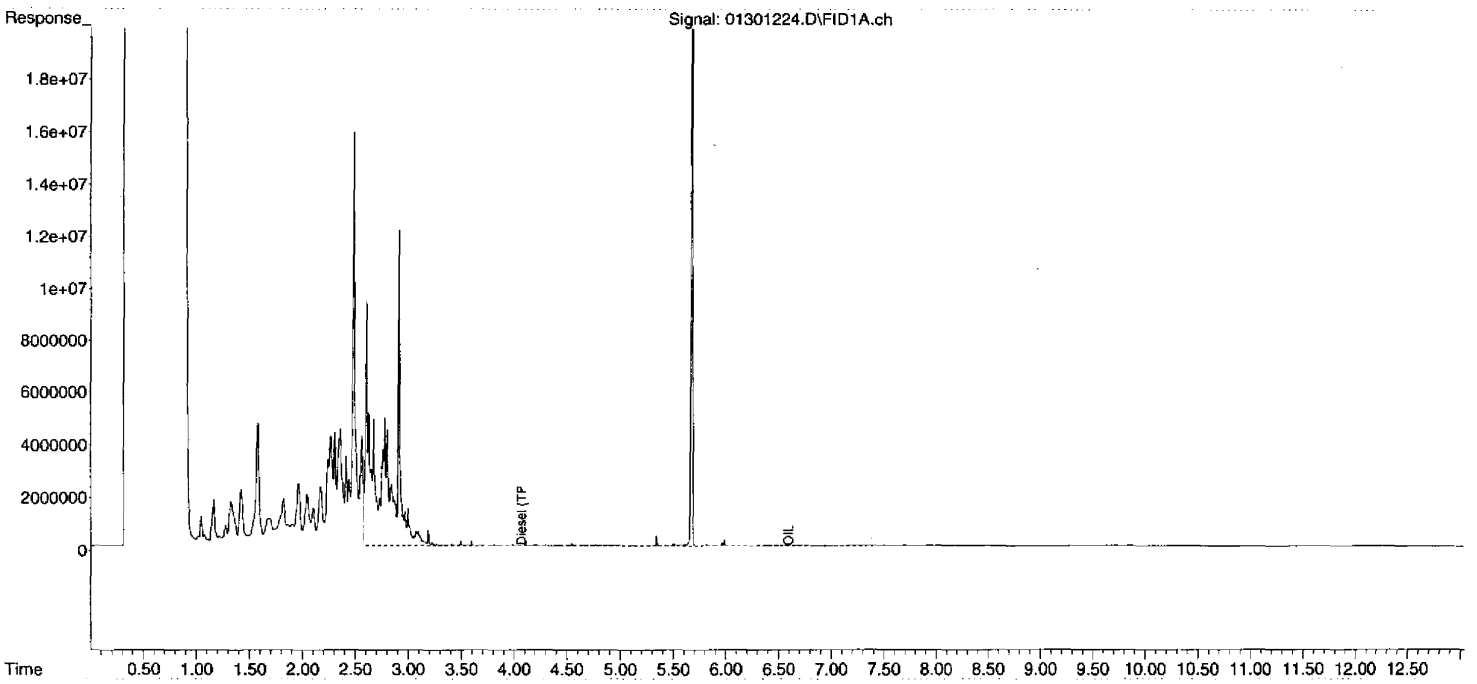
(f)=RT Delta > 1/2 Window (m)=manual int.

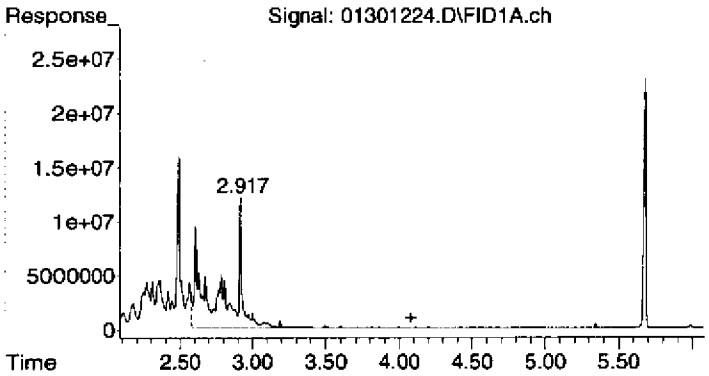
Quantitation Report (Not Reviewed)

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

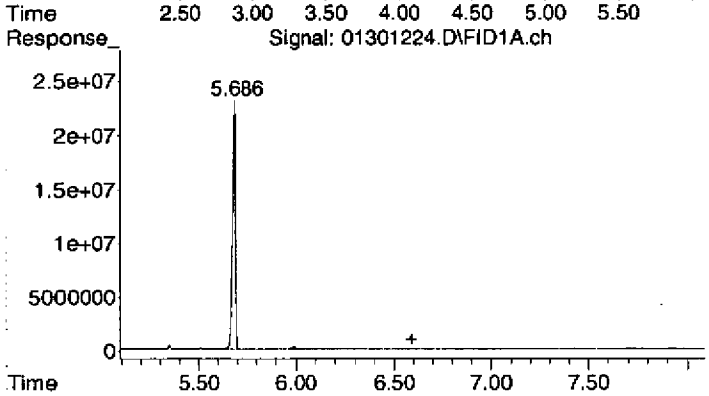
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





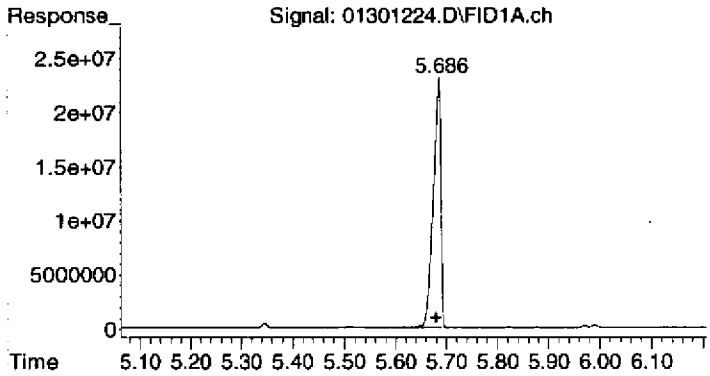
#1 Diesel (TPH)

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

SDG: 12038C / 12039A
Instrument: AG 7890-2
Analysis Date: 02-09-12

SAMPLE DATA

Injection Log

Operator: TD
Directory: C:\msdchem\1\2012\DATA\020912DROA\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	02091201.D	1	2020035-IBL1	2A11003 IB	9 Feb 2012 12:36 pm
2	02091202.D	1	2020035-LCV1	2A11004 DRO-QLS	9 Feb 2012 12:54 pm
3	02091203.D	1	2020035-LCV2	2A11011 OIL-A	9 Feb 2012 1:12 pm
4	02091204.D	1	2020035-CCV1	2A11005 DRO-CV	9 Feb 2012 1:29 pm
5	02091205.D	1	2020035-CCV2	2A11012 OIL-CV	9 Feb 2012 1:47 pm
6	02091206.D	1	B2B0037-BLK1	RB	9 Feb 2012 2:05 pm
7	02091207.D	1	B2B0037-BS1	BS	9 Feb 2012 2:23 pm
8	02091208.D	1	B2B0026-BLK1	BLK	9 Feb 2012 2:41 pm
9	02091209.D	1	B2B0026-BS1	BS	9 Feb 2012 2:59 pm
10	02091210.D	1	B2B0026-MS1	EB02	9 Feb 2012 3:17 pm
11	02091211.D	1	B2B0026-MSD1	EB02	9 Feb 2012 3:34 pm
12	02091212.D	1	1202017-01	EB02	9 Feb 2012 3:52 pm
13	02091213.D	1	1202017-02	HW45	9 Feb 2012 4:10 pm
14	02091214.D	1	1202017-03	HW45-P	9 Feb 2012 4:28 pm
15	02091215.D	1	1202020-01	HW43	9 Feb 2012 4:46 pm
16	02091216.D	1	1202020-02	HW43-P	9 Feb 2012 5:04 pm
17	02091217.D	1	1202020-03	HW31	9 Feb 2012 5:22 pm
18	02091218.D	1	1202020-04	HW31-P	9 Feb 2012 5:39 pm
19	02091219.D	1	1202020-05	HW31z	9 Feb 2012 5:57 pm
20	02091220.D	1	1202020-07	FB11	9 Feb 2012 6:15 pm
21	02091221.D	1	1202020-08	HW30	9 Feb 2012 6:33 pm
22	02091222.D	1	1202020-09	HW30-P	9 Feb 2012 6:51 pm
23	02091223.D	1	1202020-11	HW15a	9 Feb 2012 7:09 pm
24	02091224.D	1	1202020-12	HW15a-P	9 Feb 2012 7:26 pm
25	02091225.D	1	2020035-IBL2	2A11003	9 Feb 2012 7:44 pm
26	02091226.D	1	2020035-CCV3	2A11005 DRO CV	9 Feb 2012 8:02 pm
27	02091227.D	1	2020035-CCV4	2A11012 OIL CV	9 Feb 2012 8:20 pm
28	02091228.D	1	2020035-CCV5	2A11005 DRO CV	9 Feb 2012 8:38 pm
29	02091229.D	1	2020035-CCV6	2A11012 OIL CV	9 Feb 2012 8:56 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

Daily Calibration File : C:\msdchem\1\2012\DATA\020912DROA\02091204.D
Time Acquired : 9 Feb 2012 1:29 pm

File	Sample	Surrogate Recovery %	Internal Standard Responses
02091206.D (fails)	B2B0037-BL	89	
02091207.D (fails)	B2B0037-BS	89	
02091208.D (fails)	B2B0026-BL	82	
02091209.D (fails)	B2B0026-BS	86	
02091210.D (fails)	B2B0026-MS	85	
02091211.D (fails)	B2B0026-MSD	85	
02091212.D (fails)	1202017-01	84	
02091213.D (fails)	1202017-02	87	
02091214.D (fails)	1202017-03	82	
02091215.D (fails)	1202020-01	85	
02091216.D (fails)	1202020-02	94	
02091217.D (fails)	1202020-03	103	
02091218.D (fails)	1202020-04	87	
02091219.D (fails)	1202020-05	101	
02091220.D (fails)	1202020-07	87	
02091221.D (fails)	1202020-08	89	
02091222.D (fails)	1202020-09	88	
02091223.D (fails)	1202020-11	97	
02091224.D (fails)	1202020-12	95	

(fails) - fails 12hr time check * - fails criteria

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091201.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 12:36 pm Operator: TD
Sample : 2020035-IBL1 Inst : AG7890_2
Misc : 2A11003 IB
ALS Vial : 1 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 13:45:59 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	5.725f	166972570	47.003 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	94.01%
Target Compounds			
1) HM Diesel (TPH)	4.080	13492808	3.760 ug/mL
2) H OIL	6.590	6200289	3.238 ug/mL

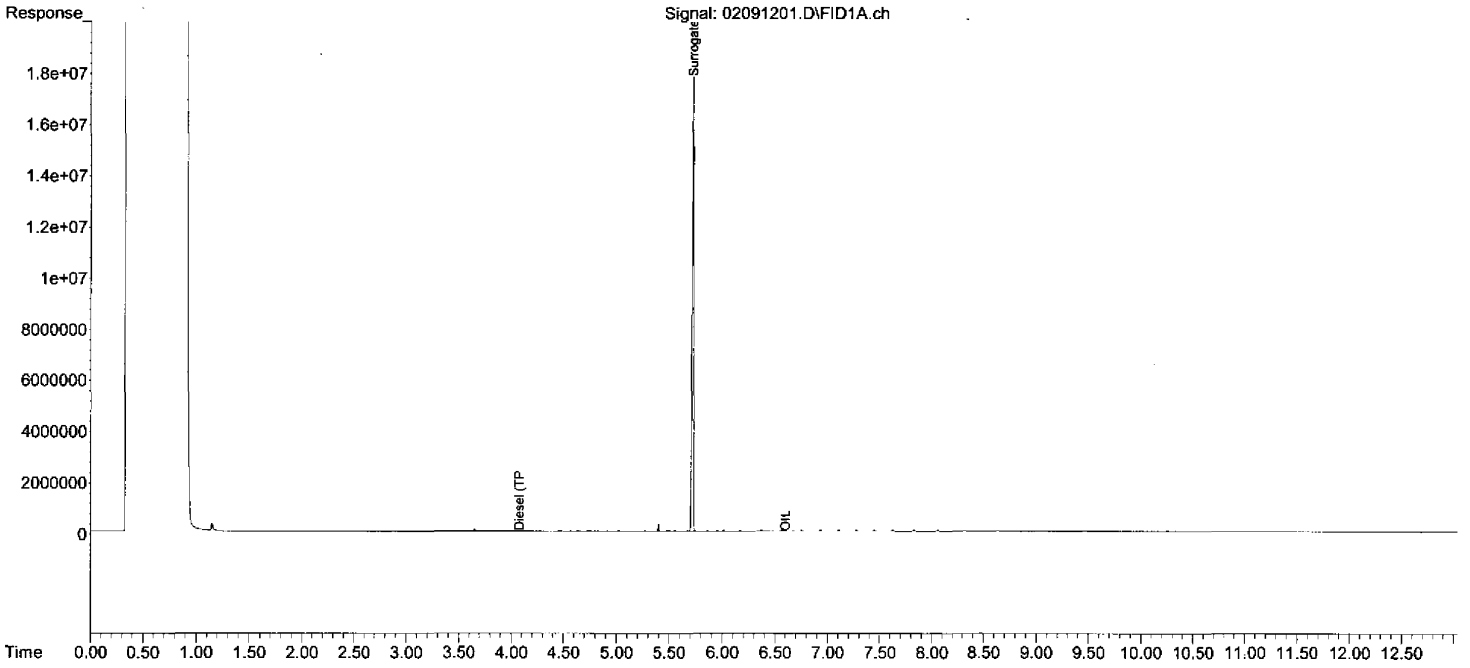
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

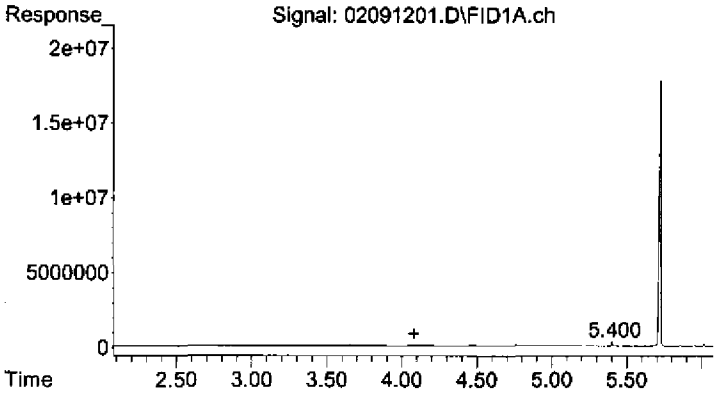
Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091201.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 12:36 pm
Operator: TD
Sample : 2020035-IBL1
Inst : AG7890_2
Misc : 2A11003 IB
ALS Vial : 1 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 13:45:59 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

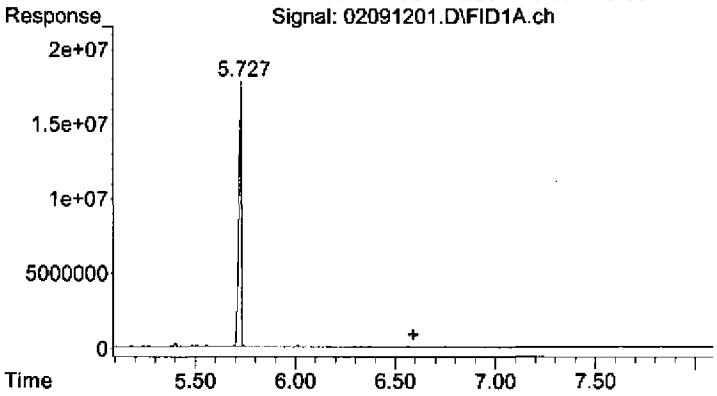


013012DROA.M Thu Feb 09 13:46:01 2012
Page: 2



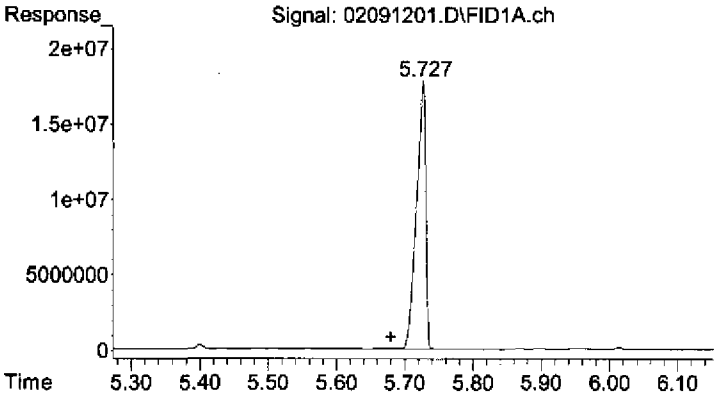
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 13492808
Conc: 3.76 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 6200289
Conc: 3.24 ug/mL



#3 Surrogate

R.T.: 5.725 min
Delta R.T.: 0.045 min
Response: 166972570
Conc: 47.00 ug/mL

Instrument Name: AG7890_2
Date Acquired: 2/9/2012 12:54
Acq. Method File: 012712DROA.M
Sample Name: 2020035-LCV1
Misc Info: 2A11004 DRO-QLS
Operator: TD

Name	Concentration ng/mL	Calculated	% Recovery	QC Limits	STATUS
Diesel (TPH)	50	50.98	101.97%	60 - 140	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091202.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 12:54 pm Operator: TD
Sample : 2020035-LCV1 Inst : AG7890_2
Misc : 2A11004 DRO-QLS
ALS Vial : 2 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 13:46:04 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	5.671	32963005	9.279 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	18.56%#
Target Compounds			
1) HM Diesel (TPH)	4.080	182951886	50.983 ug/mL
2) H OIL	6.590	3313808	1.731 ug/mL

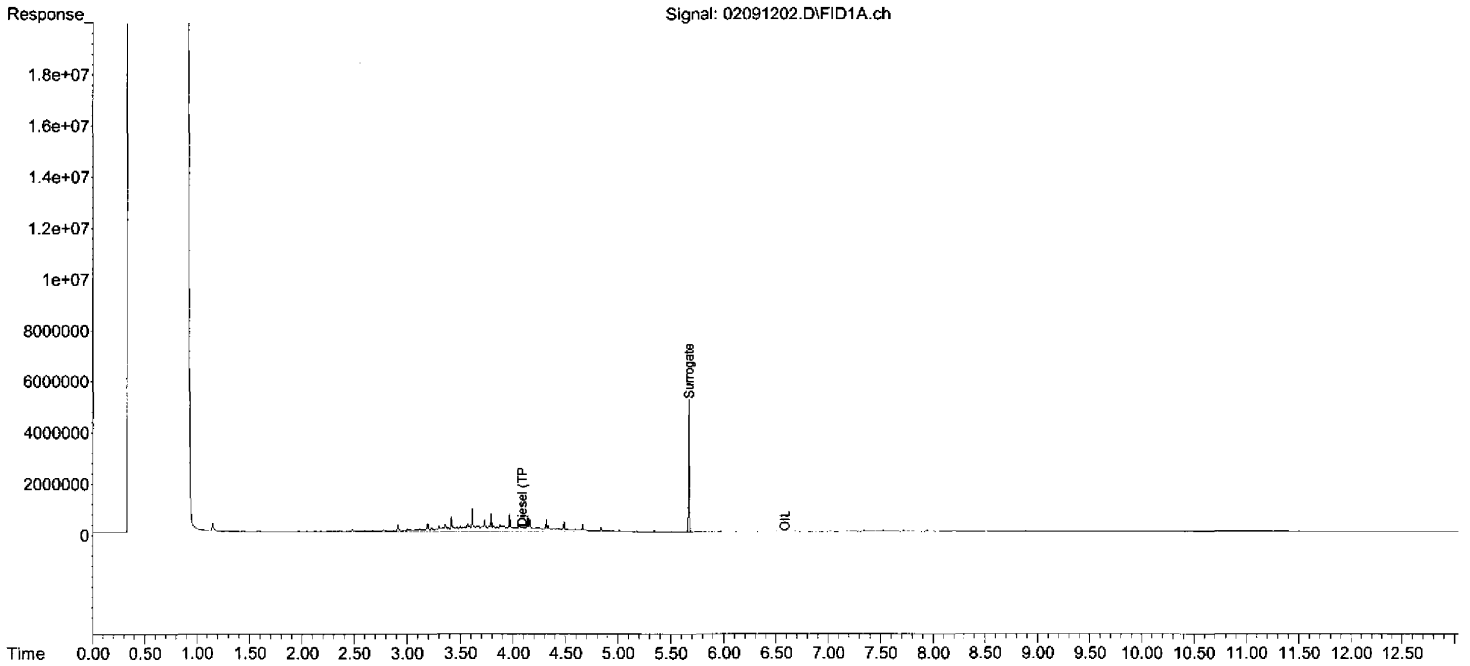
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

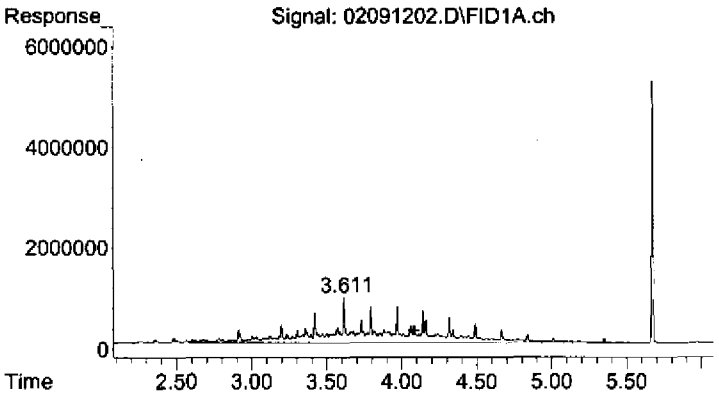
Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091202.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 12:54 pm
Operator: TD
Sample : 2020035-LCV1
Inst : AG7890_2
Misc : 2A11004 DRO-QLS
ALS Vial : 2 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 13:46:04 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

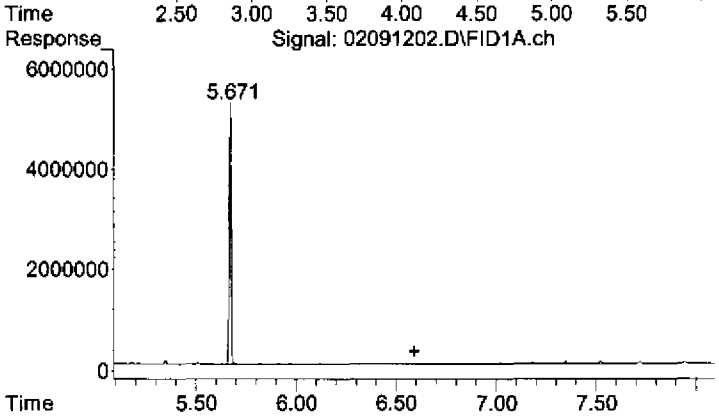


013012DROA.M Thu Feb 09 13:46:06 2012 Page: 2



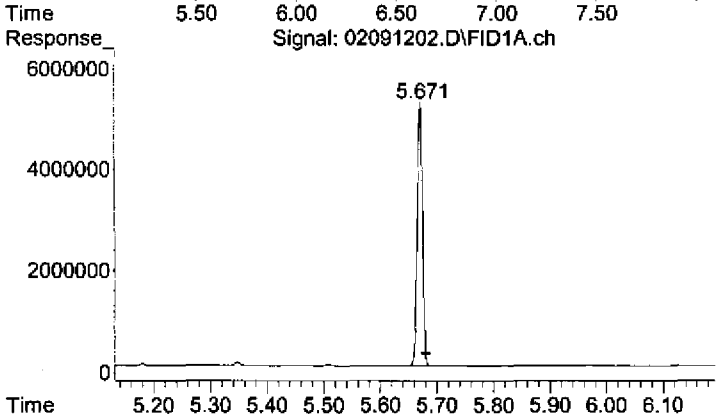
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 182951886
Conc: 50.98 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 3313808
Conc: 1.73 ug/mL



#3 Surrogate

R.T.: 5.671 min
Delta R.T.: -0.008 min
Response: 32963005
Conc: 9.28 ug/mL

Instrument Name: AG7890_2
Date Acquired: 2/9/2012 13:12
Acq. Method File: 012712DROA.M
Sample Name: 2020035-LCV2
Misc Info: 2A11011 OIL-A
Operator: TD

Name	Concentration ng/mL	Calculated	% Recovery	QC Limits	STATUS
OIL	200	201.54	100.77%	60 - 140	pass

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091203.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:12 pm Operator: TD
Sample : 2020035-LCV2 Inst : AG7890_2
Misc : 2A11011 OIL-A
ALS Vial : 3 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 13:47:36 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	5.680	163442813	46.009 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	92.02%
Target Compounds			
1) HM Diesel (TPH)	4.080	210694130	58.714 ug/mL
2) H OIL	6.590	385922980	201.539 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:

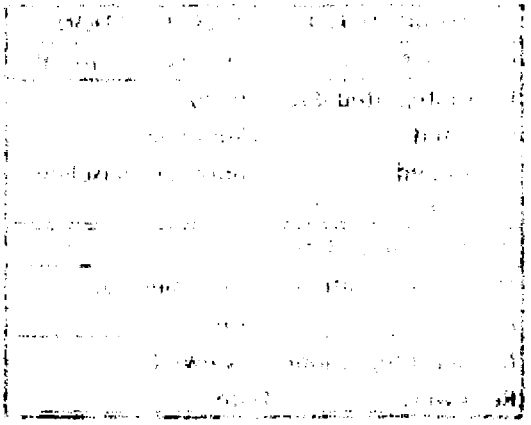
☑ After Manual Integration

Manual integration(s) performed by:

Analyst: TD Date: 02-10-12

Manual integration(s) reviewed by:

Reviewer: [illegible] Date: 2-10-12

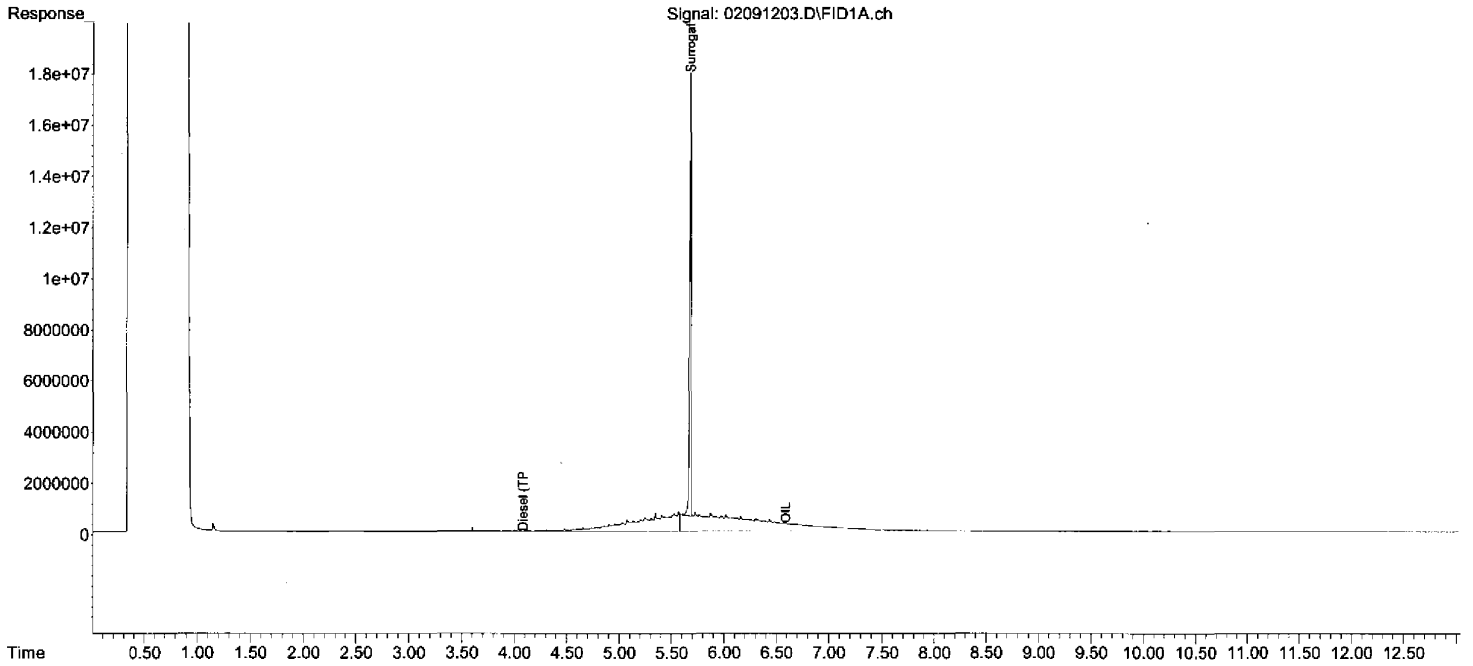


Quantitation Report (QT Reviewed)

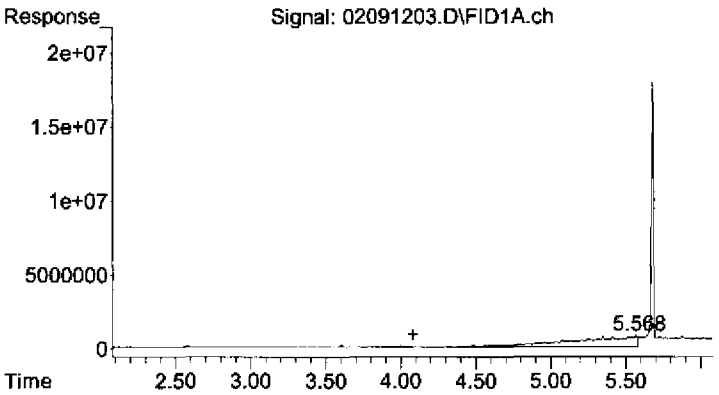
Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091203.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:12 pm Operator: TD
Sample : 2020035-LCV2 Inst : AG7890_2
Misc : 2A11011 OIL-A
ALS Vial : 3 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 13:47:36 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

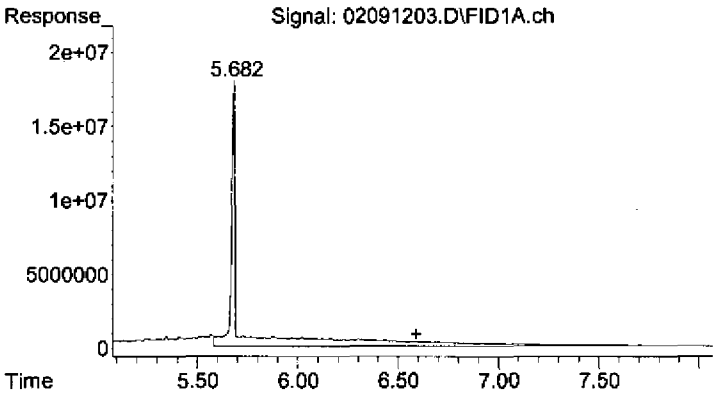


00162



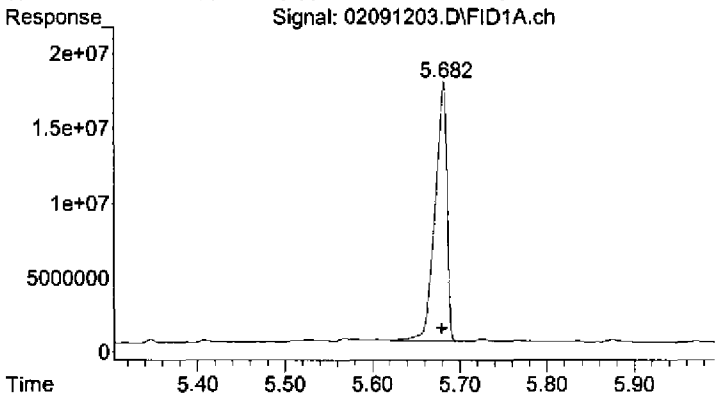
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 210694130
Conc: 58.71 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 385922980
Conc: 201.54 ug/mL m



#3 Surrogate

R.T.: 5.680 min
Delta R.T.: 0.000 min
Response: 163442813
Conc: 46.01 ug/mL

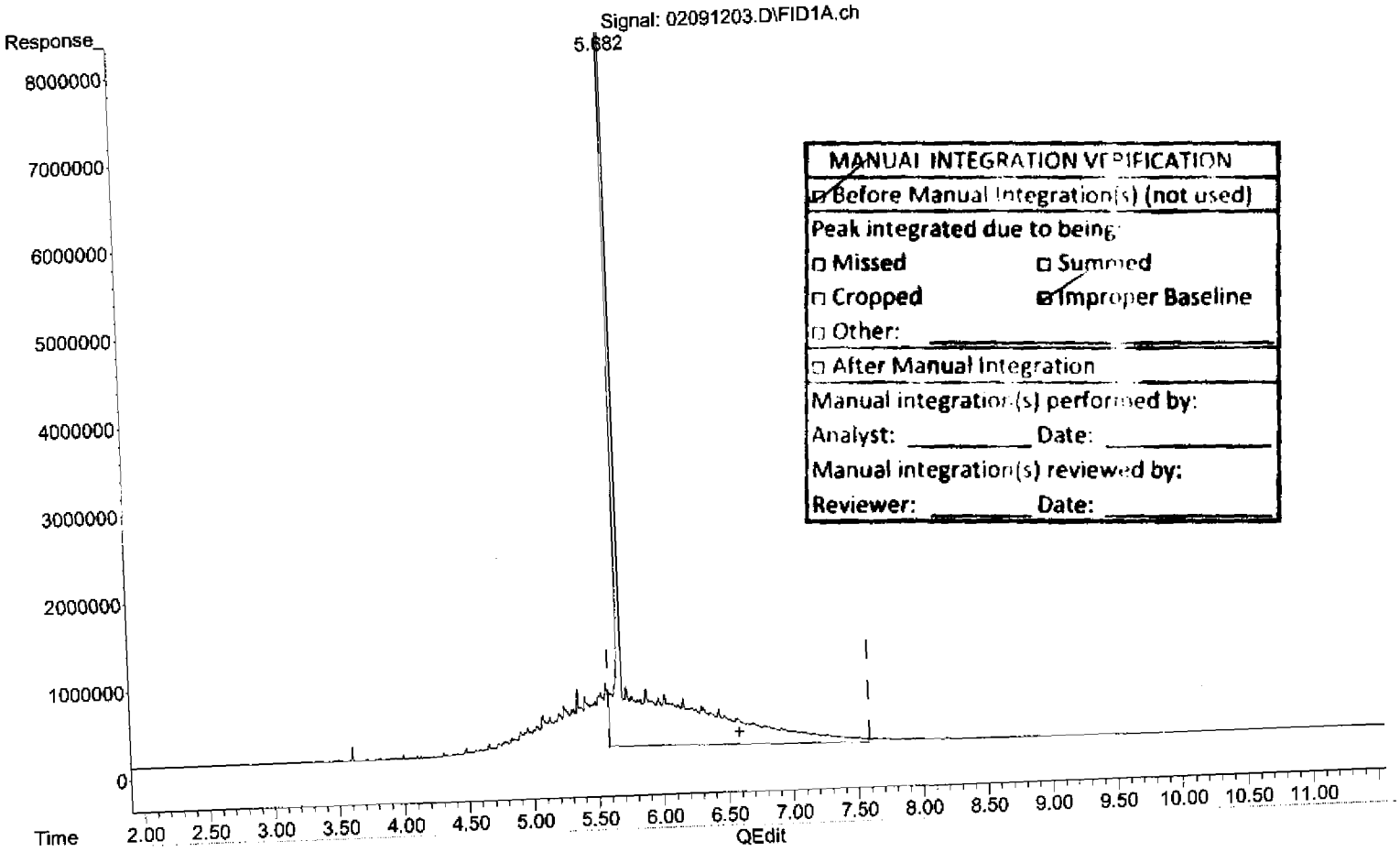
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091203.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:12 pm
Sample : 2020035-LCV2
Misc : 2A11011 OIL-A
ALS Vial : 3 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 09 13:46:09 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 176.506 ug/mL

response 337987773

(+) = Expected Retention Time
013012DROA.M Thu Feb 09 13:47:26 2012

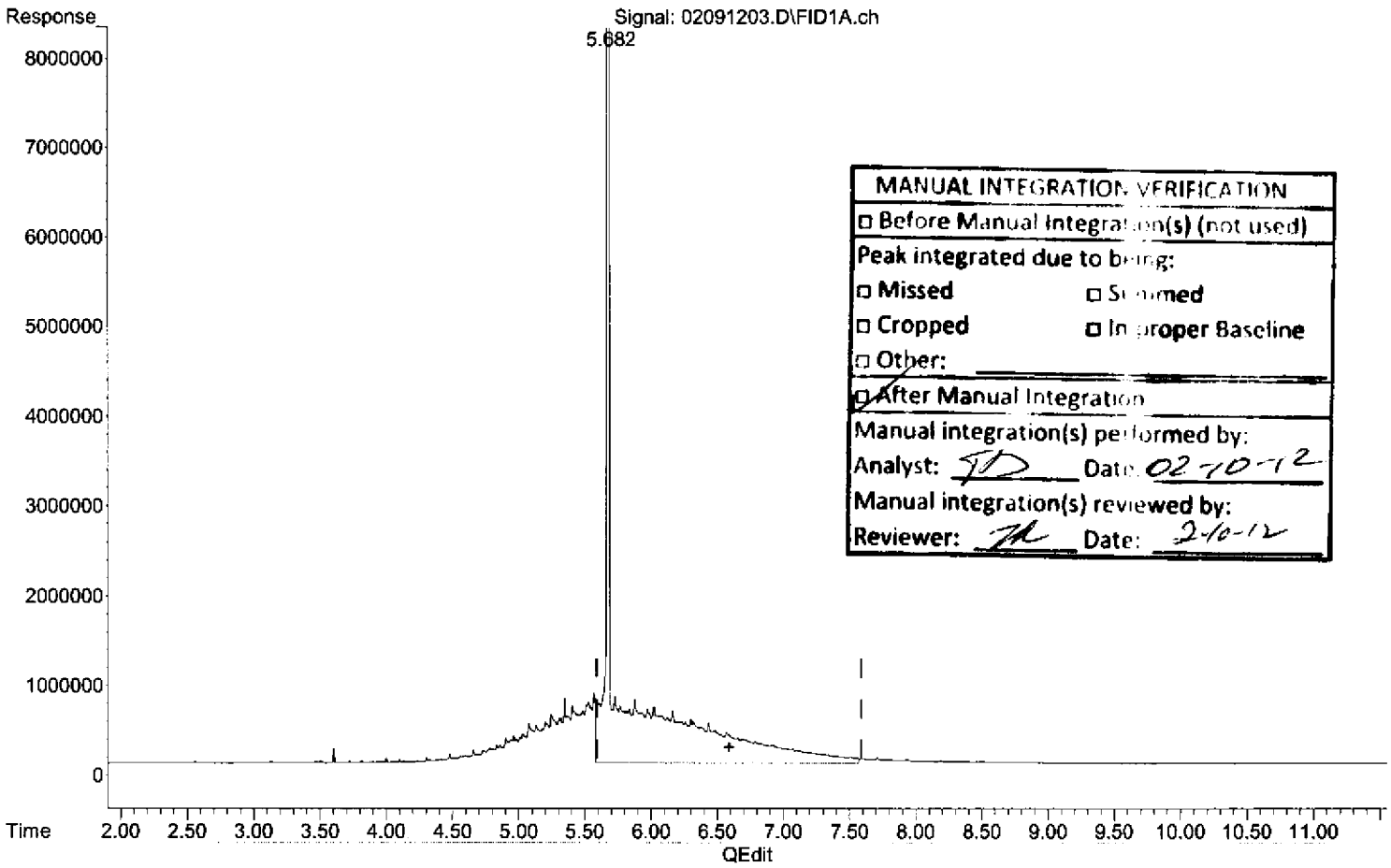
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091203.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:12 pm
Sample : 2020035-LCV2
Misc : 2A11011 OIL-A
ALS Vial : 3 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 09 13:46:09 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 ☐ Skimmed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 02-10-12
Manual integration(s) reviewed by:
Reviewer: TK Date: 2-10-12

(2) OIL (H)

6.590min 201.539 ug/mL m

response 385922980

(+) = Expected Retention Time
013012DROA.M Thu Feb 09 13:47:39 2012

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091203.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:12 pm Operator: TD
Sample : 2020035-LCV2 Inst : AG7890_2
Misc : 2A11011 OIL-A
ALS Vial : 3 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 13:46:09 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	163442813	46.009 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	92.02%
Target Compounds			
1) HM Diesel (TPH)	4.080	210694130	58.714 ug/mL
2) H OIL	6.590	337987773	176.506 ug/mL

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

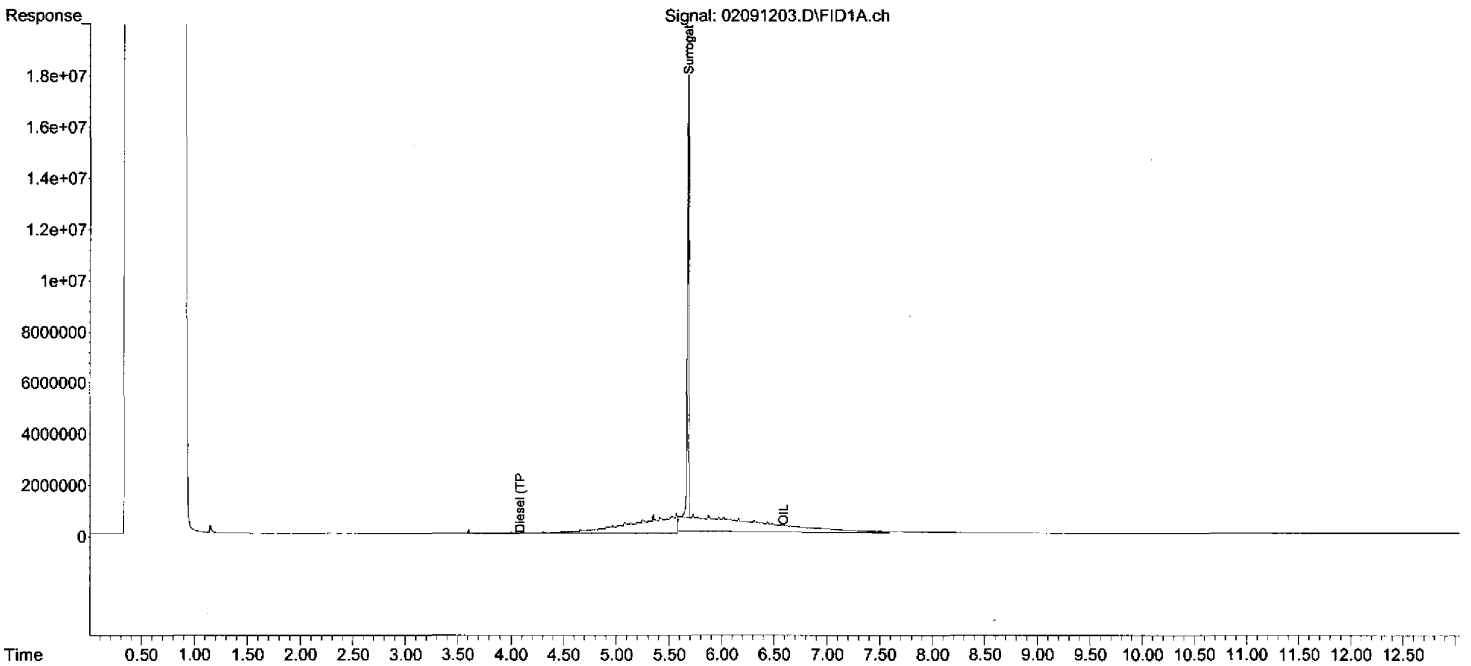
MANUAL INTEGRATION VERIFICATION
Before Manual Integration(s) (not used)
Peak integrated due to being:
Missed Summed
Cropped Improper Baseline
Other:
After Manual Integration
Manual integration(s) performed by:
Analyst: Date:
Manual integration(s) reviewed by:
Reviewer: Date:

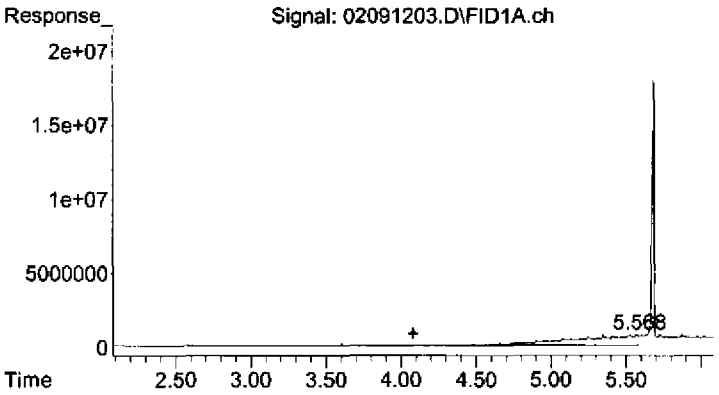
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091203.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:12 pm
Operator: TD
Sample : 2020035-LCV2
Inst : AG7890_2
Misc : 2A11011 OIL-A
ALS Vial : 3 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 13:46:09 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

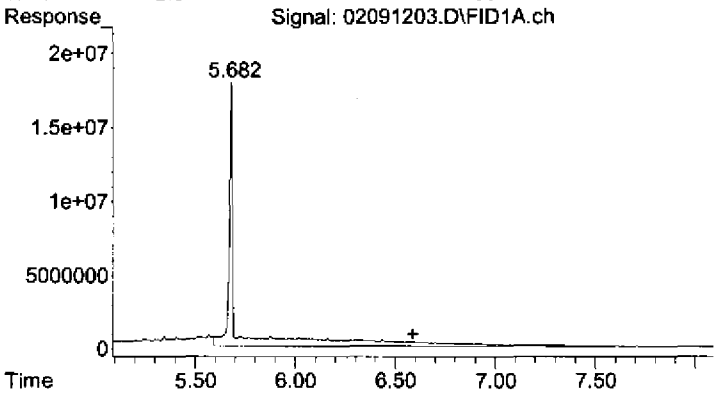
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





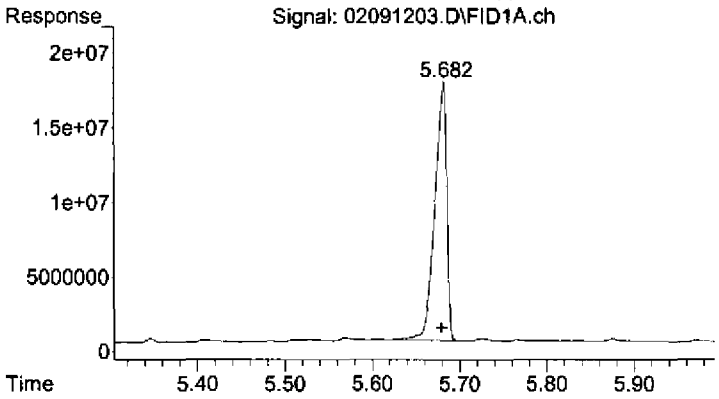
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 210694130
Conc: 58.71 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 337987773
Conc: 176.51 ug/mL



#3 Surrogate

R.T.: 5.680 min
Delta R.T.: 0.000 min
Response: 163442813
Conc: 46.01 ug/mL

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091204.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:29 pm Operator: TD
Sample : 2020035-CCV1 Inst : AG7890_2
Misc : 2A11005 DRO-CV
ALS Vial : 4 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 13:46:14 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	3.134 E6	12.7	99	0.00
2 H	OIL	1.915	0.000 E6	100.0#	113	0.00
3 S	Surrogate	3.552	3.253 E6	8.4	97	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\020912DROA\
Data File : 02091204.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:29 pm Operator: TD
Sample : 2020035-CCV1 Inst : AG7890_2
Misc : 2A11005 DRO-CV
ALS Vial : 4 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 13:46:14 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	162650197	45.786 ug/mL
Spiked Amount 50.000 Range 60 - 127 Recovery = 91.57%			
Target Compounds			
1) HM Diesel (TPH)	4.080	1566767142	436.610 ug/mL
2) H OIL	6.590	4370139	2.282 ug/mL

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

$\frac{162650197}{3.552E6} = 45.791$

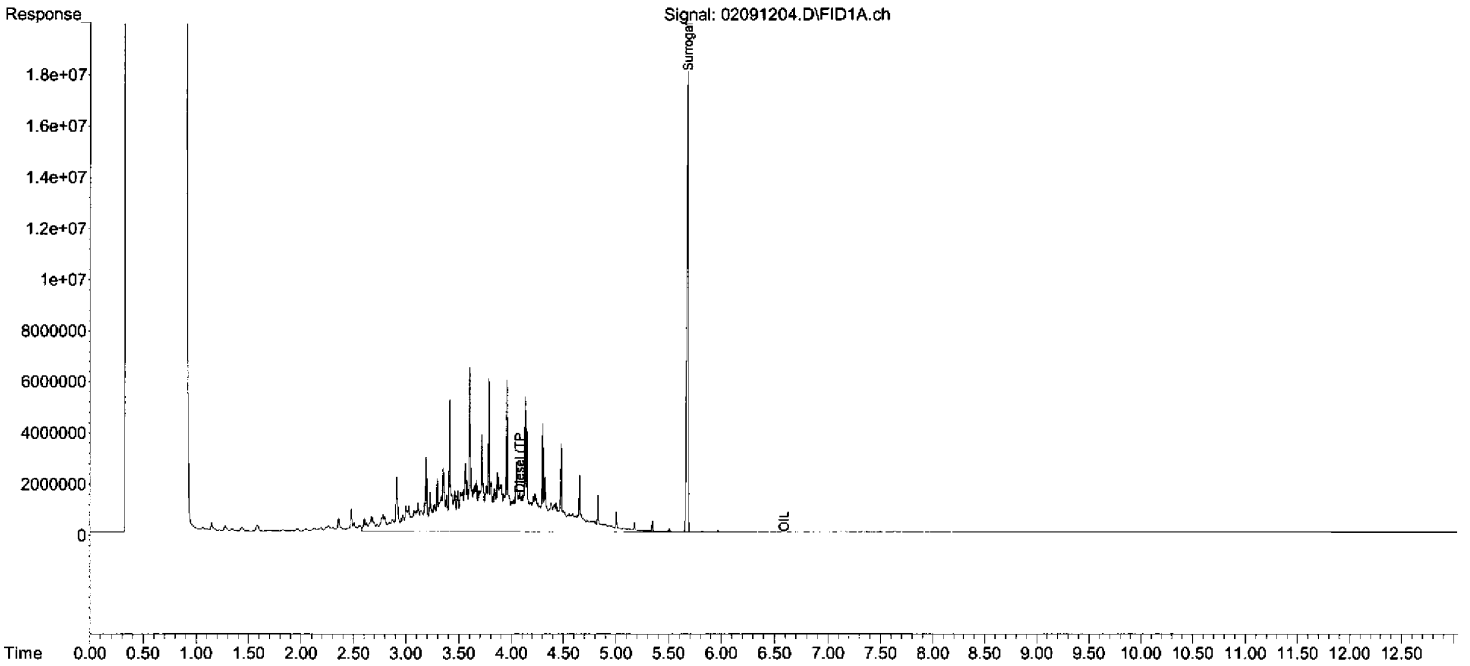
TD 02-10-12

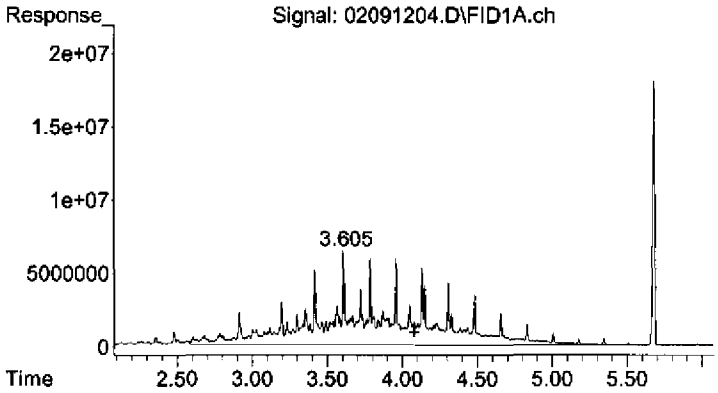
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091204.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:29 pm
Operator: TD
Sample : 2020035-CCV1
Inst : AG7890_2
Misc : 2A11005 DRO-CV
ALS Vial : 4 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 13:46:14 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

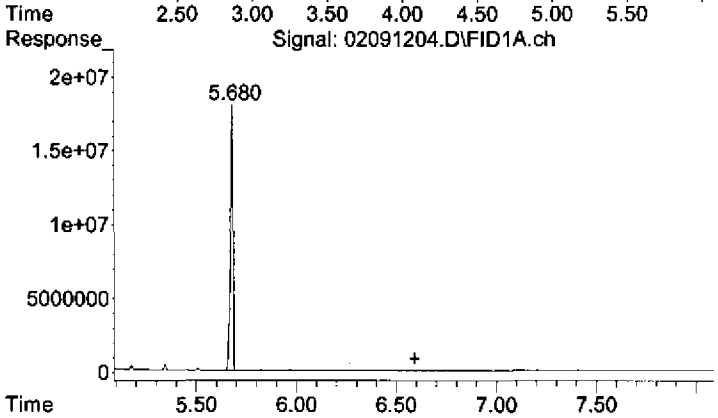
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





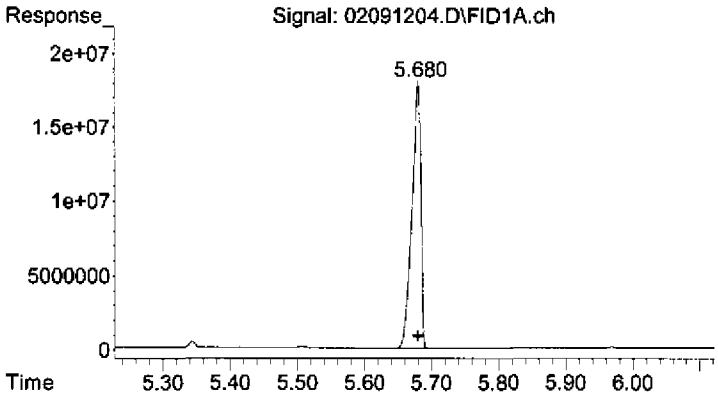
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1566767142
Conc: 436.61 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 4370139
Conc: 2.28 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.001 min
Response: 162650197
Conc: 45.79 ug/mL

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091205.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:47 pm Operator: TD
Sample : 2020035-CCV2 Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 14:32:54 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

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	1.832 E6	4.3	91	0.00
3 S	Surrogate	3.552	0.000 E6	100.0#	93	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\020912DROA\
Data File : 02091205.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:47 pm Operator: TD
Sample : 2020035-CCV2 Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 14:32:54 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	5.686	149542401	42.096 ug/mLm
Spiked Amount 50.000 Range 60 - 127 Recovery = 84.19%			
Target Compounds			
1) HM Diesel (TPH)	4.080	973394095	271.255 ug/mL
2) H OIL	6.590	1831653275	956.539 ug/mLm

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

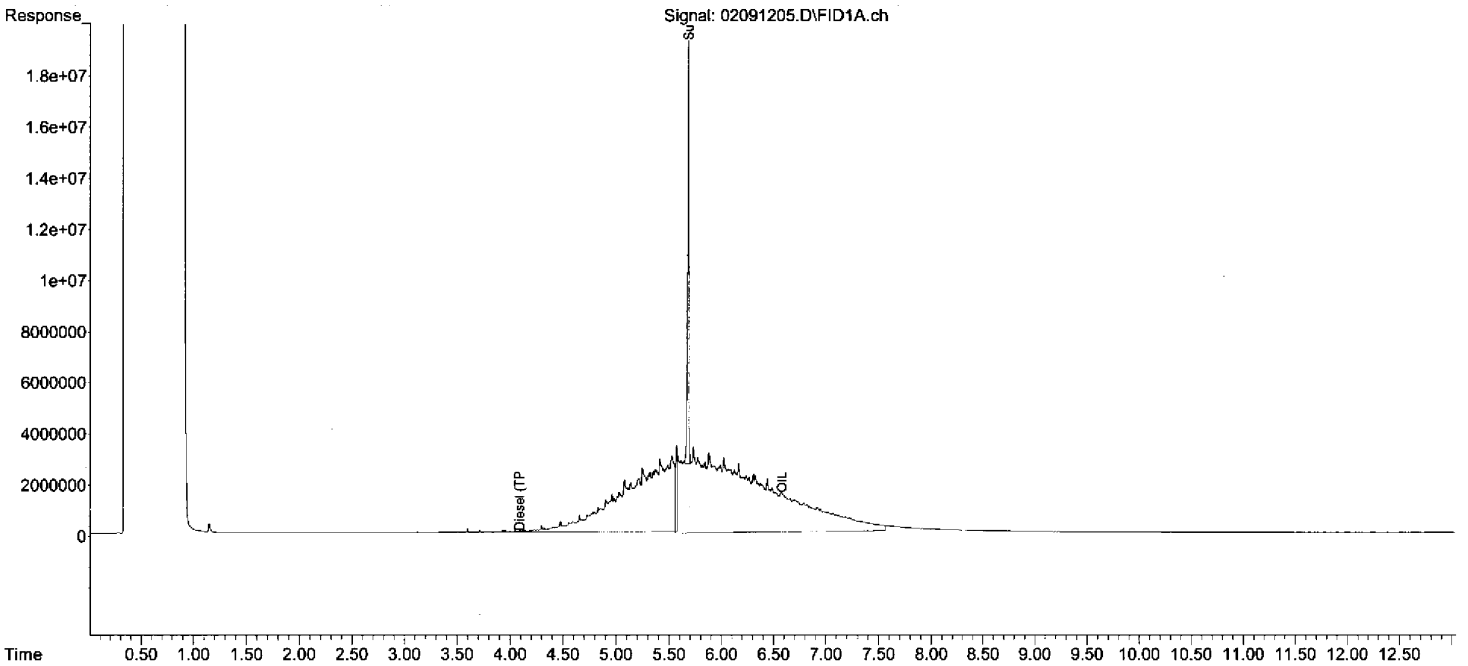
MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 02-10-12
Manual integration(s) reviewed by:
Reviewer: TL Date: 2-10-12

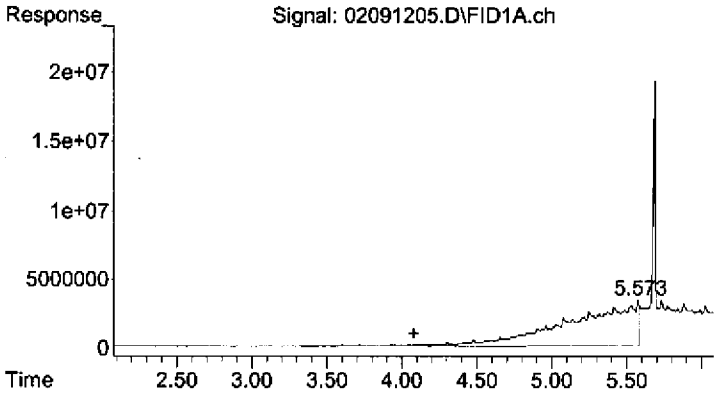
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091205.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:47 pm
Operator: TD
Sample : 2020035-CCV2
Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 14:32:54 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

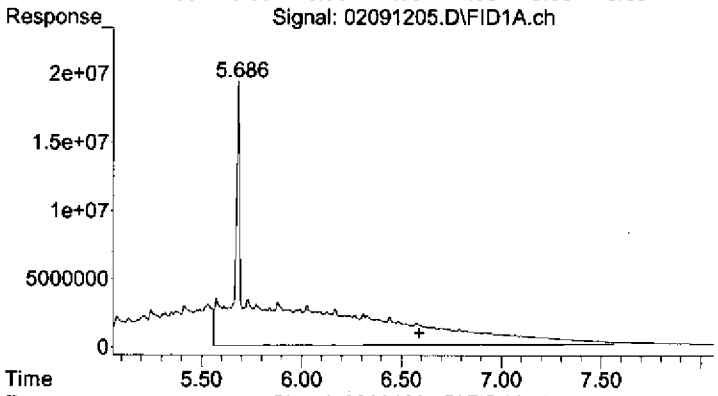
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





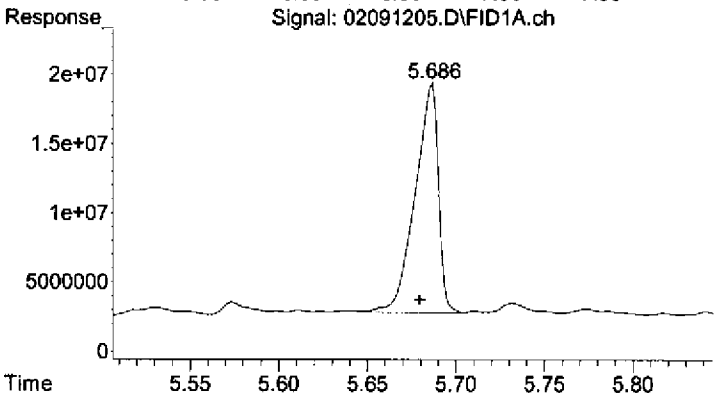
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 973394095
Conc: 271.26 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1831653275
Conc: 956.54 ug/mL m



#3 Surrogate

R.T.: 5.686 min
Delta R.T.: 0.007 min
Response: 149542401
Conc: 42.10 ug/mL m

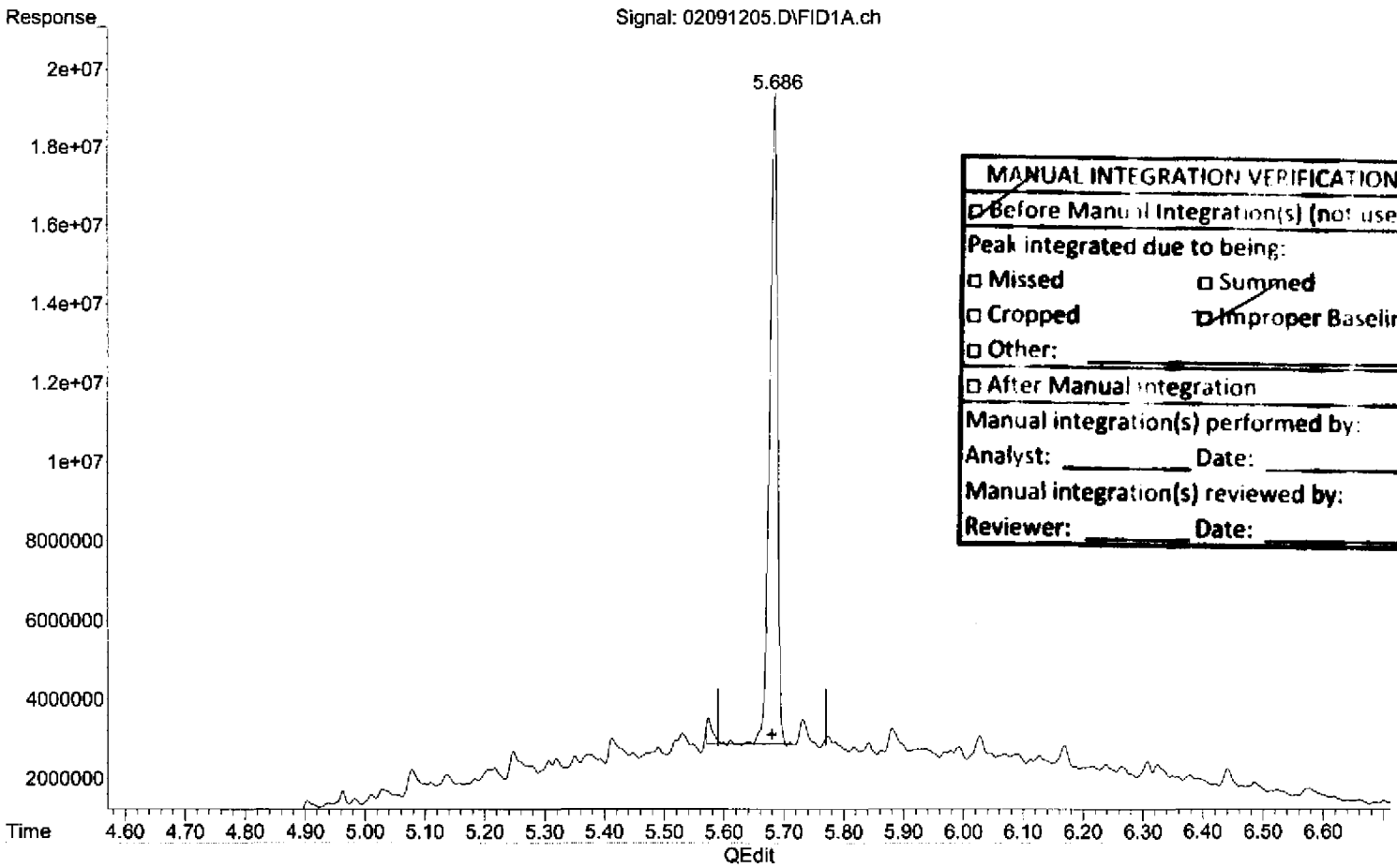
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091205.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:47 pm
Sample : 2020035-CCV2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 09 14:31:43 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)

5.685min 41.752 ug/mL

response 148318643

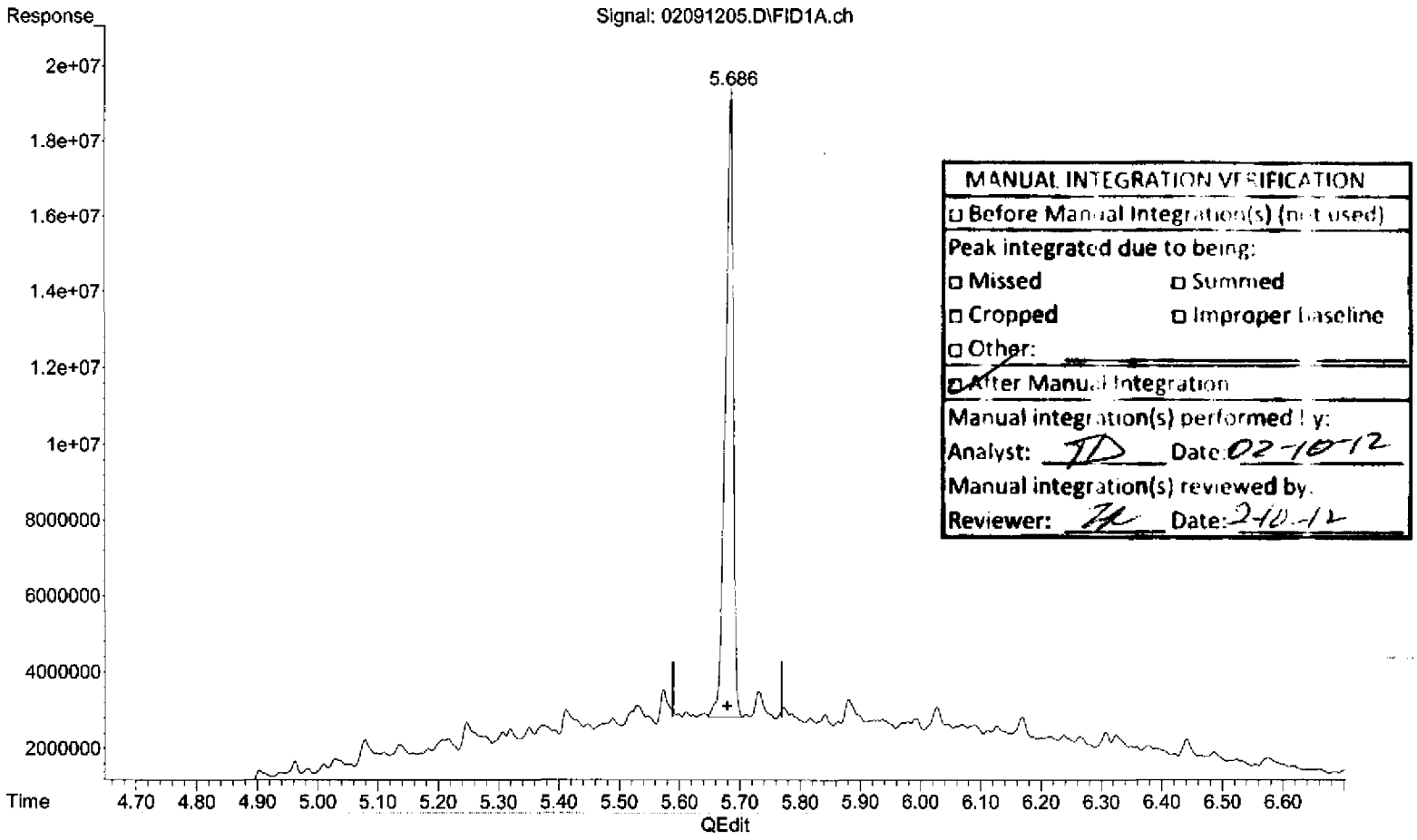
(+) = Expected Retention Time
013012DROA.M Thu Feb 09 14:32:02 2012

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091205.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:47 pm
Operator: TD
Sample : 2020035-CCV2
Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 14:31:43 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



(3) Surrogate (S)

5.686min 42.096 ug/mL m

response 149542401

(+) = Expected Retention Time

013012DROA.M Thu Feb 09 14:32:38 2012

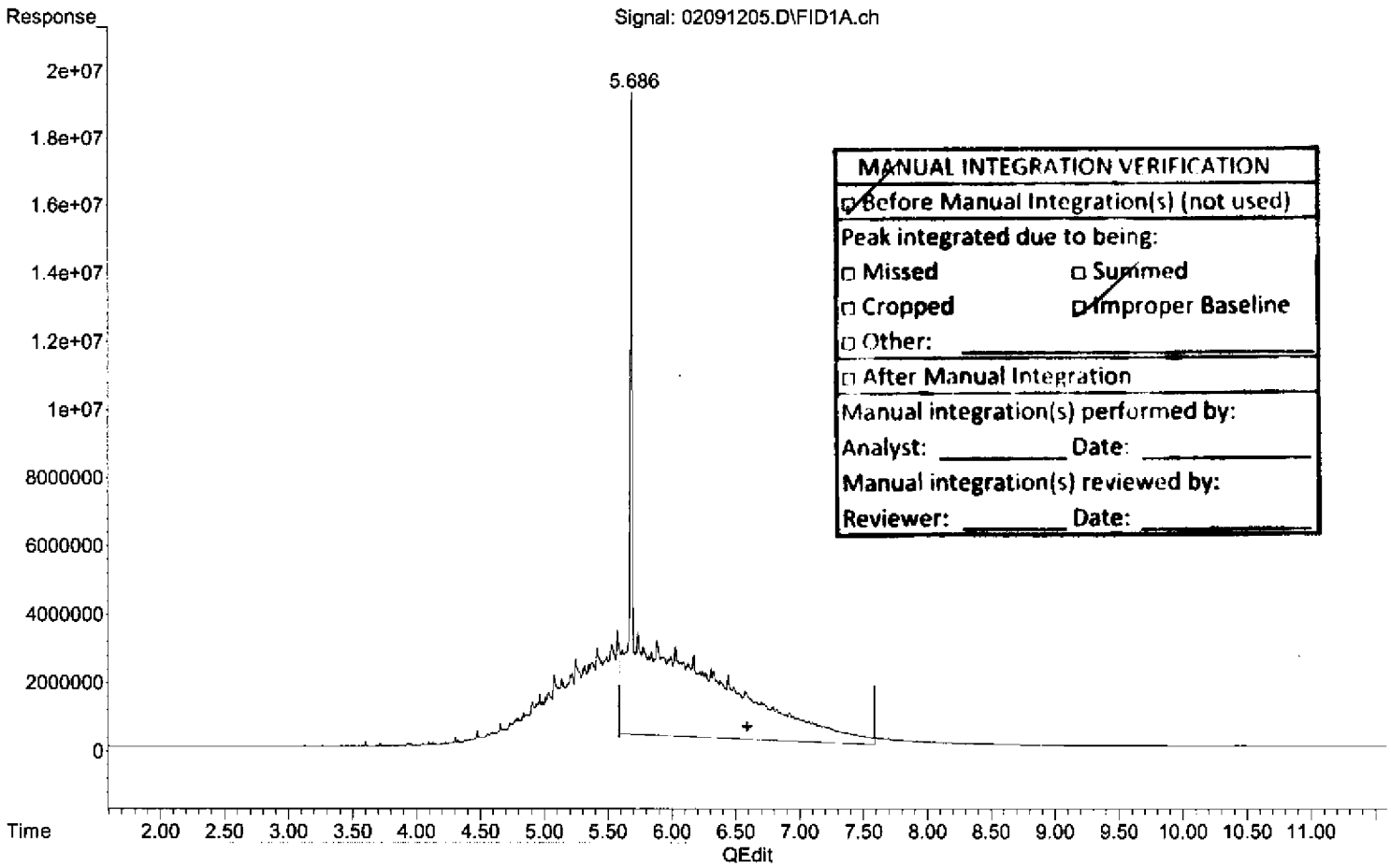
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091205.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:47 pm
Sample : 2020035-CCV2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 09 14:31:43 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 810.384 ug/mL

response 1551784295

(+) = Expected Retention Time
013012DROA.M Thu Feb 09 14:32:46 2012

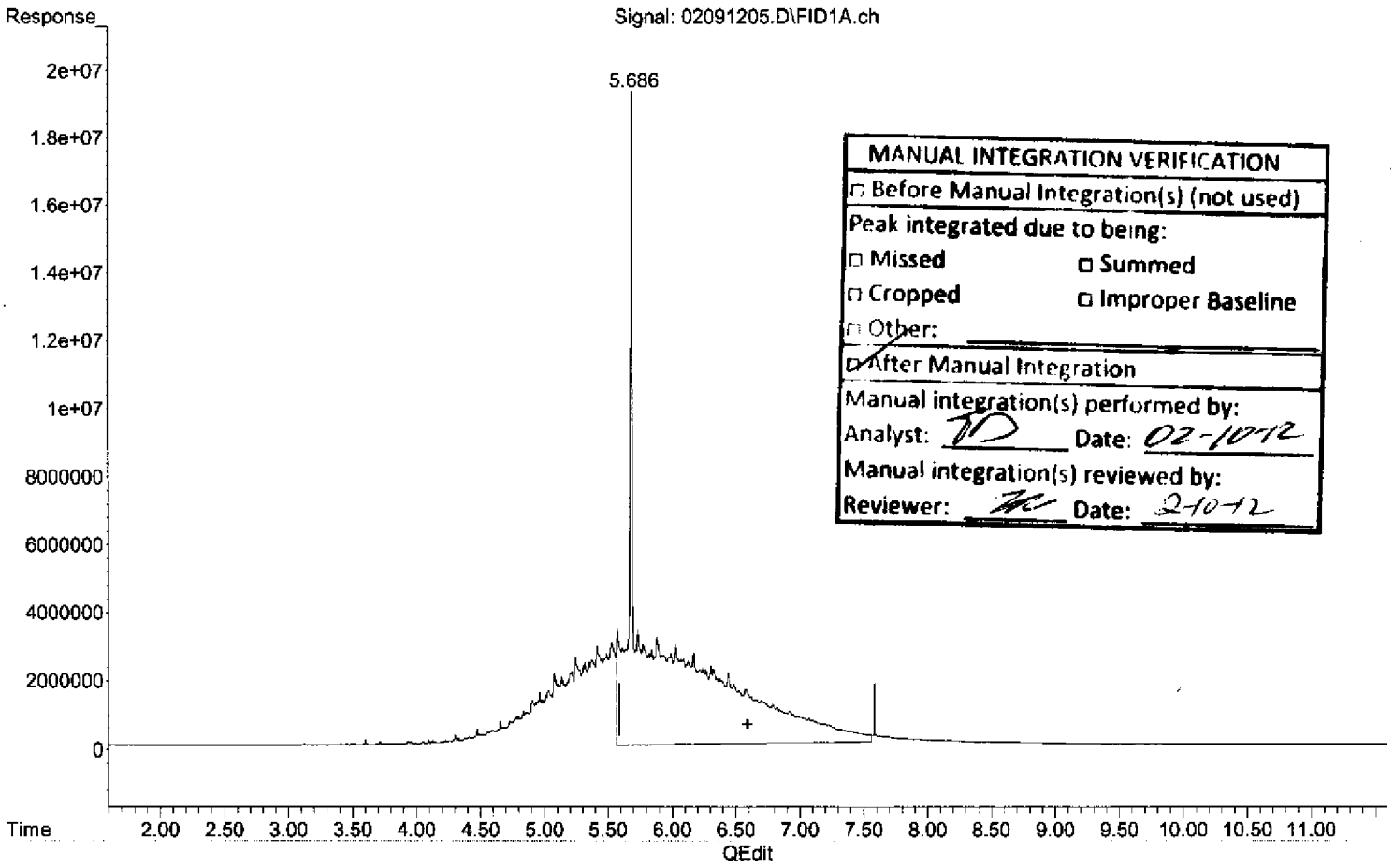
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091205.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:47 pm
Sample : 2020035-CCV2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 09 14:31:43 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: 02-10-12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 2-10-12

(2) OIL (H)

6.590min 956.539 ug/mL m

response 1831653275

(+) = Expected Retention Time
013012DROA.M Thu Feb 09 14:32:58 2012

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091205.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:47 pm Operator: TD
Sample : 2020035-CCV2 Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 14:31:43 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	148318643	41.752 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery = 83.50%	
Target Compounds			
1) HM Diesel (TPH)	4.080	973394095	271.255 ug/mL
2) H OIL	6.590	1553008052	811.023 ug/mL

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

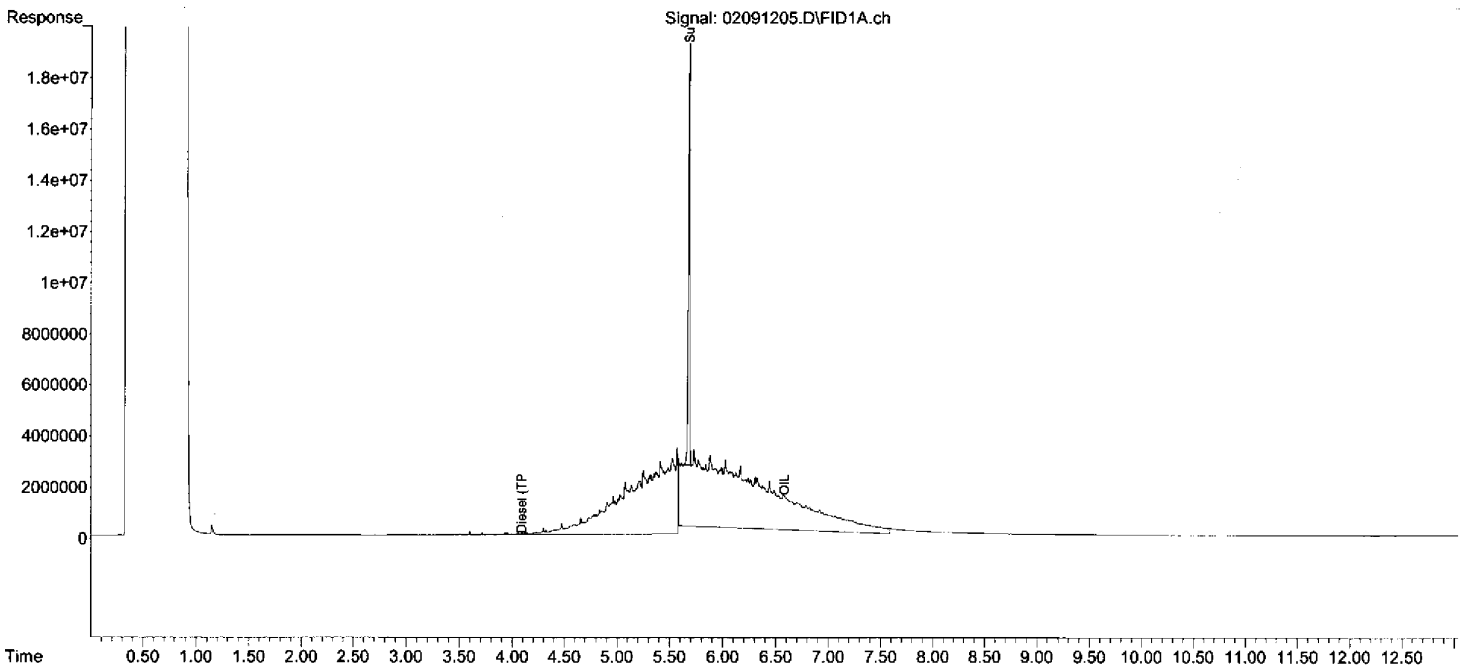
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: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

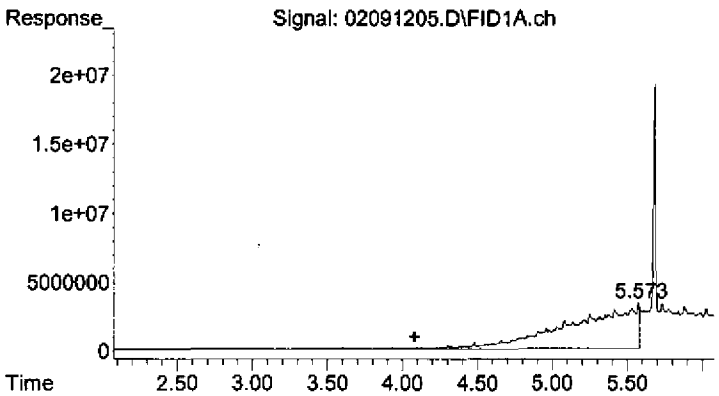
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091205.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 1:47 pm
Operator: TD
Sample : 2020035-CCV2
Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 14:31:43 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

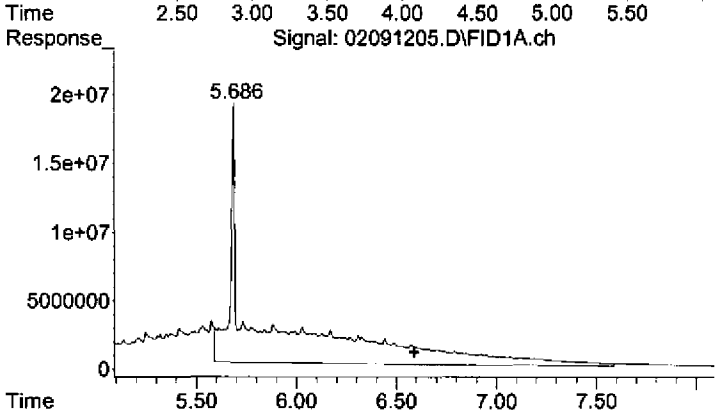
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





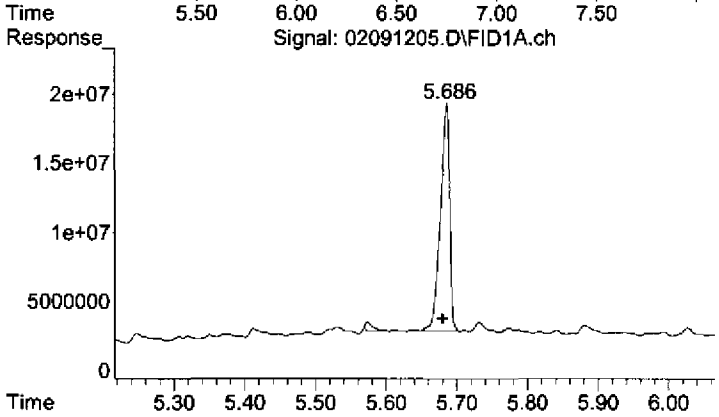
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 973394095
Conc: 271.26 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1553008052
Conc: 811.02 ug/mL



#3 Surrogate

R.T.: 5.685 min
Delta R.T.: 0.005 min
Response: 148318643
Conc: 41.75 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091206.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 2:05 pm Operator: TD
Sample : B2B0037-BLK1 Inst : AG7890_2
Misc : RB
ALS Vial : 6 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 14:35:23 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	5.678	157515677	44.341 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	88.68%
Target Compounds			
1) HM Diesel (TPH)	4.080	7916794	2.206 ug/mL
2) H OIL	6.590	5381752	2.810 ug/mL

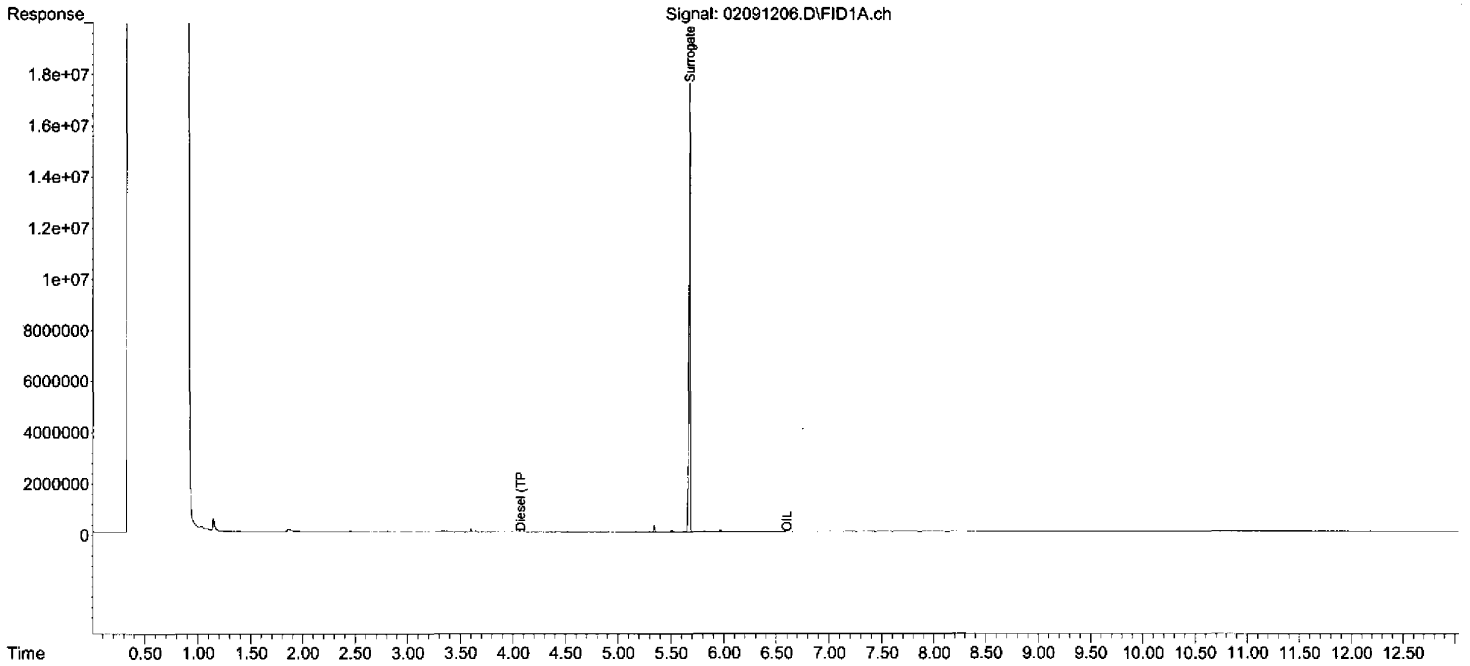
(f)=RT Delta > 1/2 Window (m)=manual int.

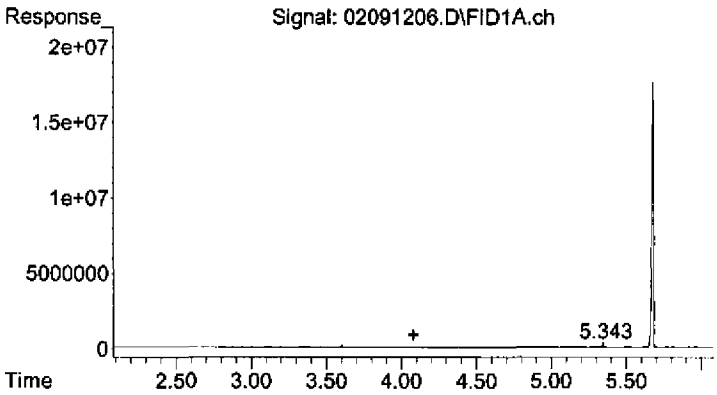
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091206.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 2:05 pm Operator: TD
Sample : B2B0037-BLK1 Inst : AG7890_2
Misc : RB
ALS Vial : 6 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 09 14:35:23 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

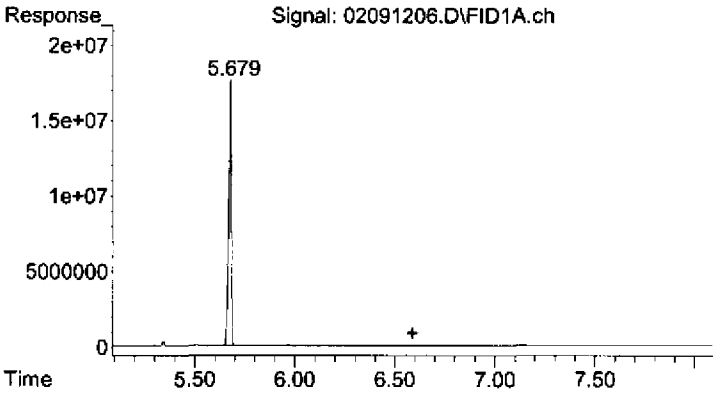
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





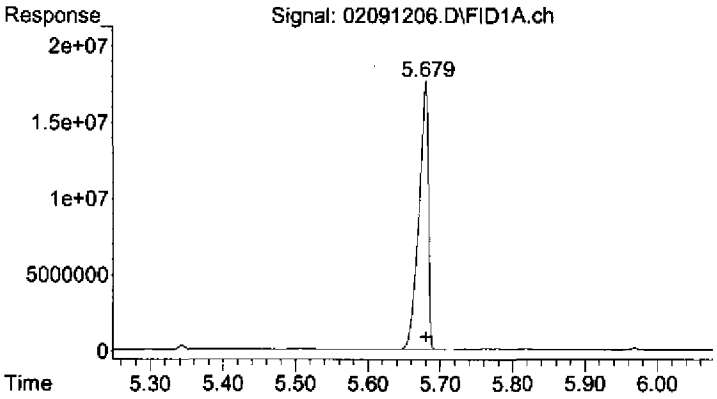
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 7916794
Conc: 2.21 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 5381752
Conc: 2.81 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.002 min
Response: 157515677
Conc: 44.34 ug/mL

DIESEL LCS WATER REPORT

Instrument Name: AG7890_2
Date Acquired: 2/9/2012 14:23
Acq. Method File: 012712DROA.M
Sample Name: B2B0037-BS1
Misc Info: BS
Operator: TD

Name	Concentration ng/mL	Calculated	% Recovery	QC Limits	STATUS
Diesel (TPH)	500	406.55	81.31%	54 - 115	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091207.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 2:23 pm Operator: TD
Sample : B2B0037-BS1 Inst : AG7890_2
Misc : BS
ALS Vial : 7 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:40:51 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	158644376	44.658 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	89.32%
Target Compounds			
1) HM Diesel (TPH)	4.080	1458899254	406.550 ug/mL
2) H OIL	6.590	5650112	2.951 ug/mL

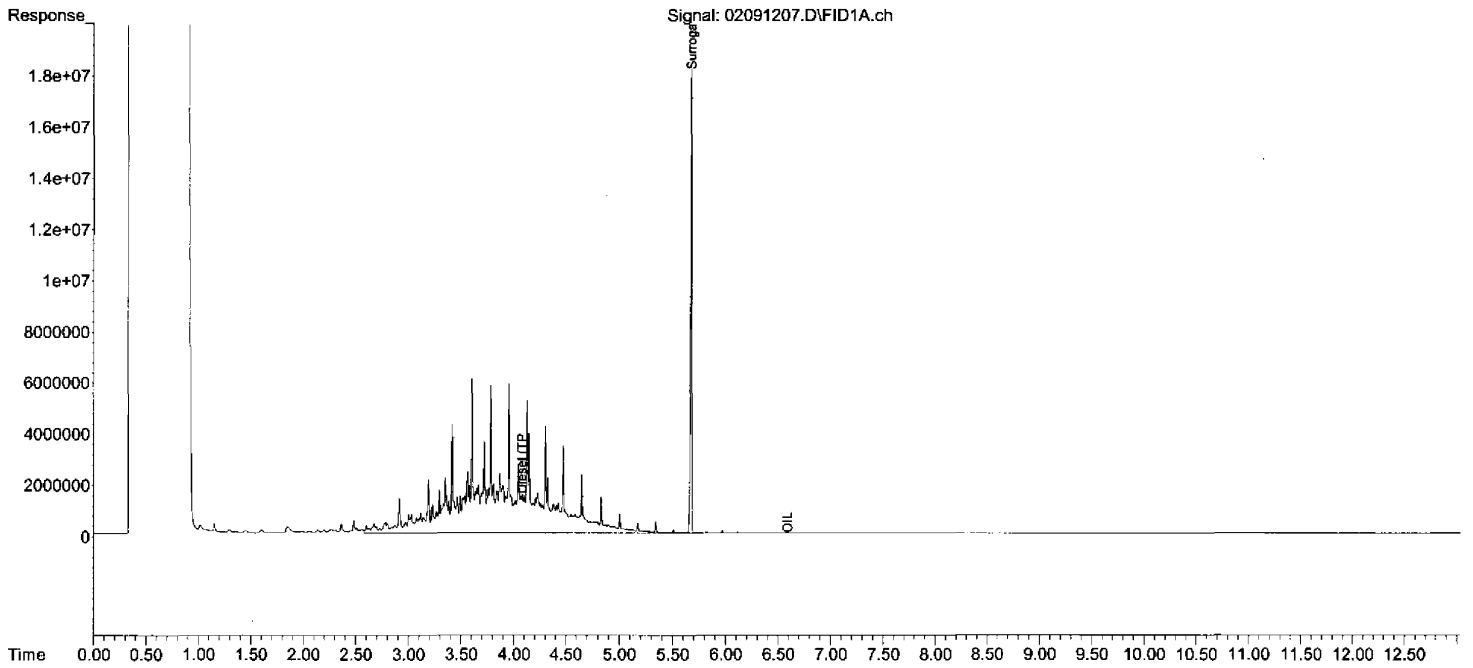
(f)=RT Delta > 1/2 Window (m)=manual int.

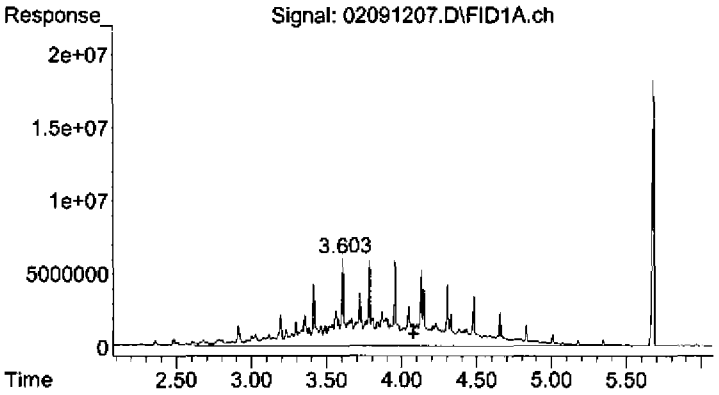
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091207.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 2:23 pm Operator: TD
Sample : B2B0037-BS1 Inst : AG7890_2
Misc : BS
ALS Vial : 7 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:40:51 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

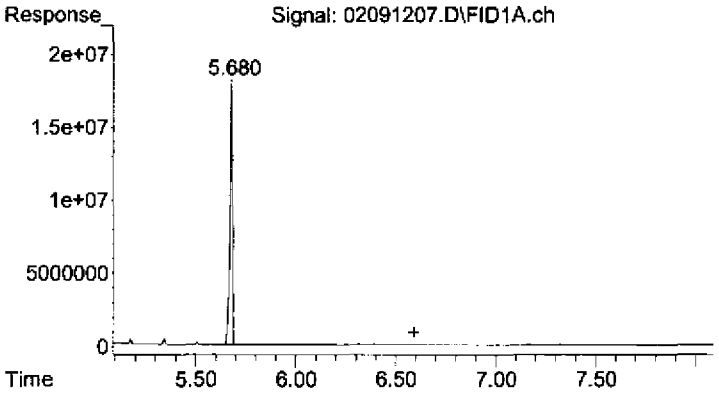
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





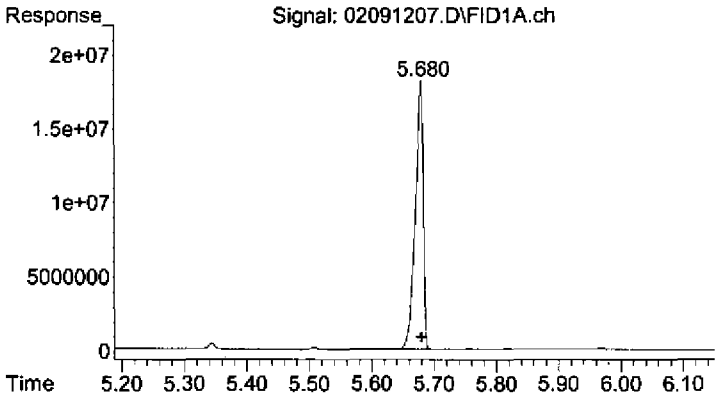
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1458899254
Conc: 406.55 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 5650112
Conc: 2.95 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.002 min
Response: 158644376
Conc: 44.66 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091208.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 2:41 pm Operator: TD
Sample : B2B0026-BLK1 Inst : AG7890_2
Misc : BLK
ALS Vial : 8 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:40:56 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	5.677	145147446	40.859 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	81.72%
Target Compounds			
1) HM Diesel (TPH)	4.080	21611547	6.022 ug/mL
2) H OIL	6.590	3866301	2.019 ug/mL

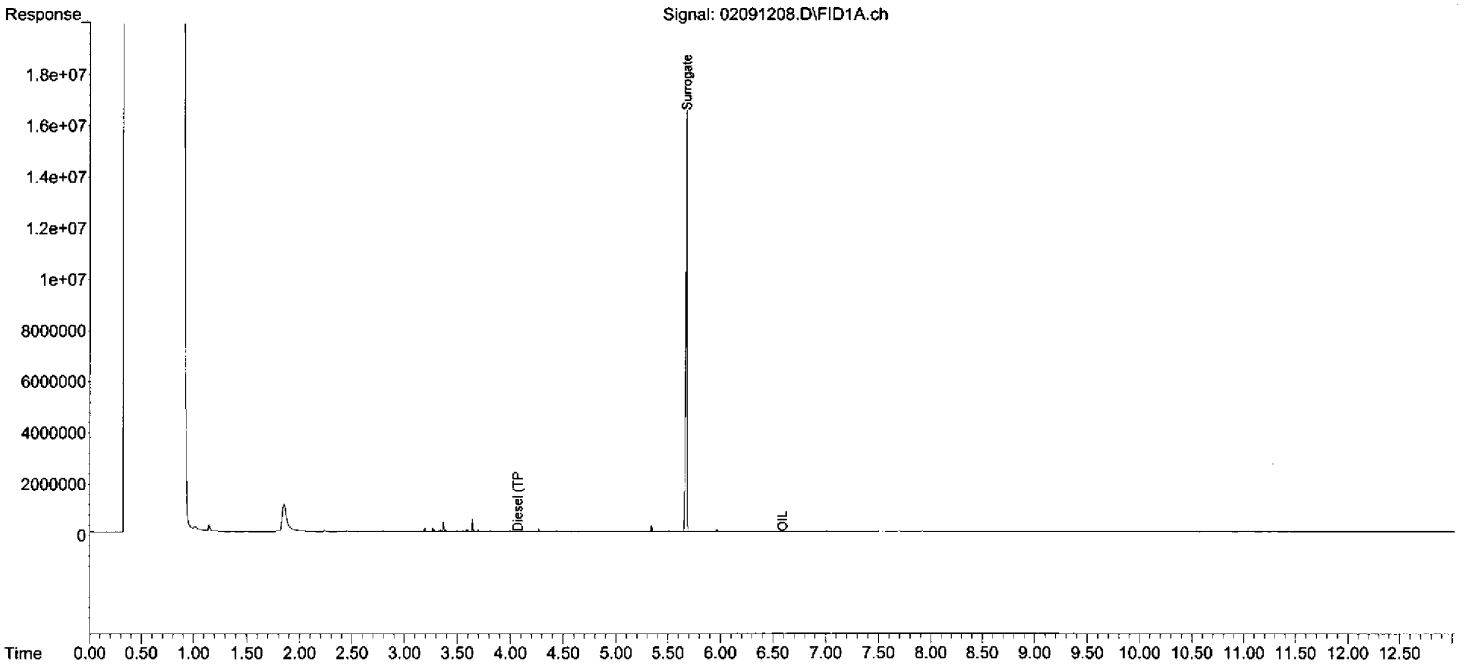
(f)=RT Delta > 1/2 Window (m)=manual int.

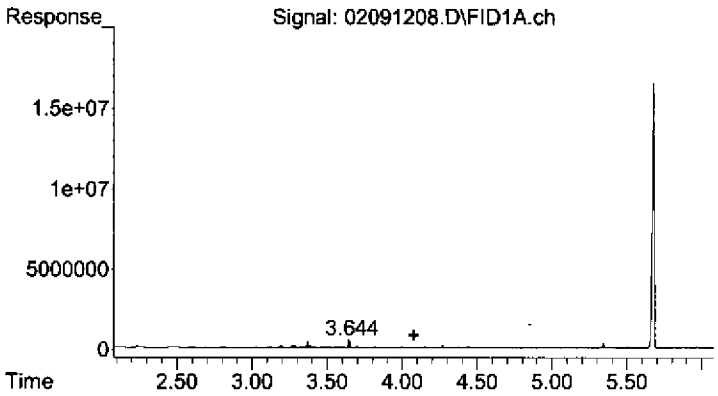
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091208.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 2:41 pm Operator: TD
Sample : B2B0026-BLK1 Inst : AG7890_2
Misc : BLK
ALS Vial : 8 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:40:56 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

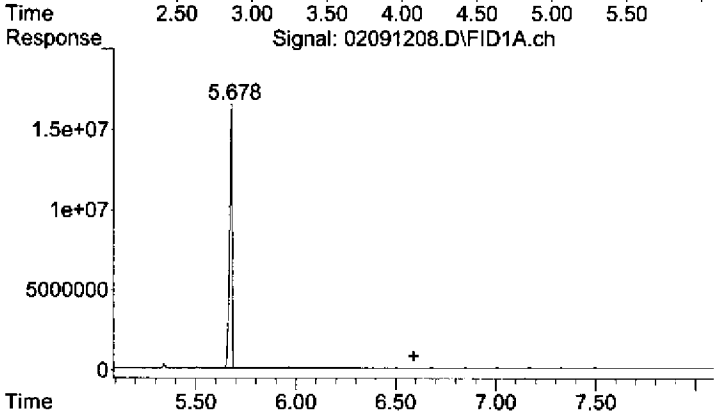
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





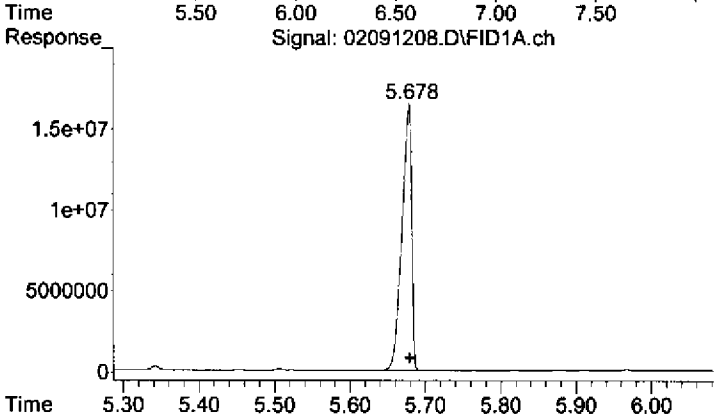
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 21611547
Conc: 6.02 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 3866301
Conc: 2.02 ug/mL



#3 Surrogate

R.T.: 5.677 min
Delta R.T.: -0.003 min
Response: 145147446
Conc: 40.86 ug/mL

DIESEL LCS WATER REPORT

Instrument Name: AG7890_2
Date Acquired: 2/9/2012 14:59
Acq. Method File: 012712DROA.M
Sample Name: B2B0026-BS1
Misc Info: BS
Operator: TD

Name	Concentration ng/mL	Calculated	% Recovery	QC Limits	STATUS
Diesel (TPH)	500	400.41	80.08%	54 - 115	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091209.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 2:59 pm Operator: TD
Sample : B2B0026-BS1 Inst : AG7890_2
Misc : BS
ALS Vial : 9 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:41:01 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	153393076	43.180 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	86.36%
Target Compounds			
1) HM Diesel (TPH)	4.080	1436853231	400.407 ug/mL
2) H OIL	6.590	4212139	2.200 ug/mL

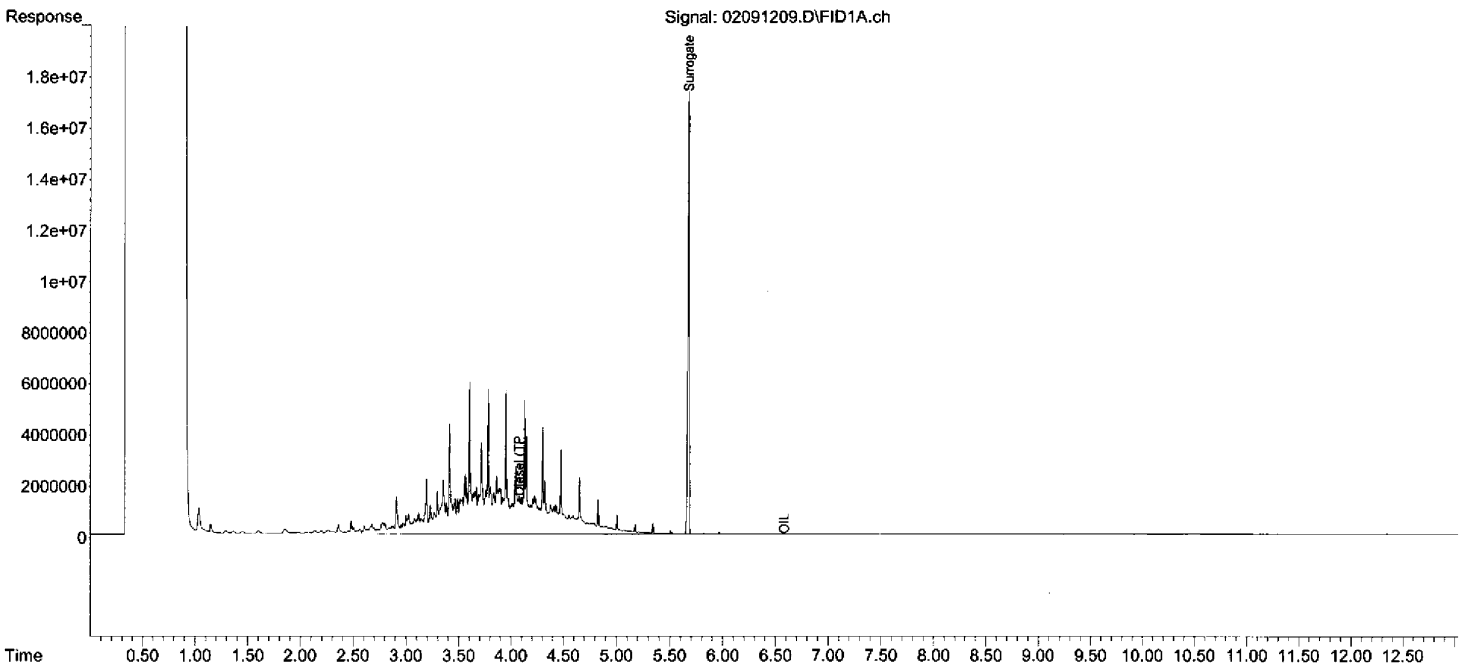
(f)=RT Delta > 1/2 Window (m)=manual int.

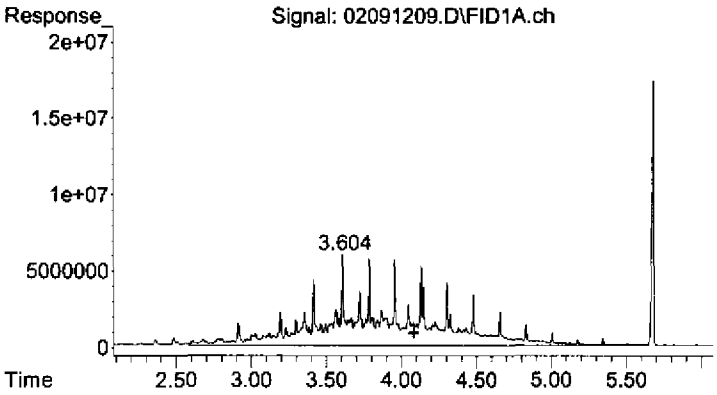
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091209.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 2:59 pm
Operator: TD
Sample : B2B0026-BS1
Inst : AG7890_2
Misc : BS
ALS Vial : 9 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:41:01 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

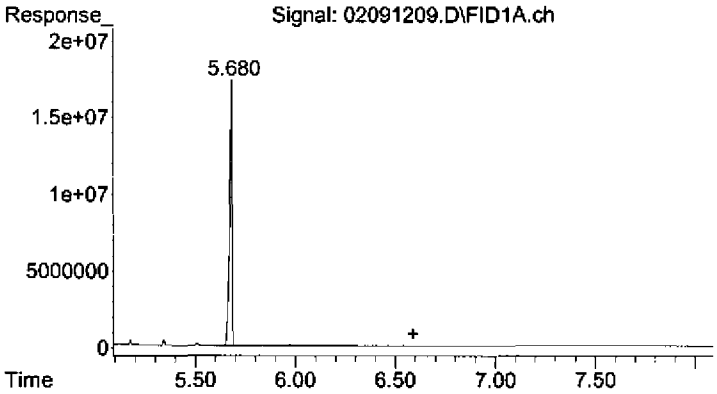
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





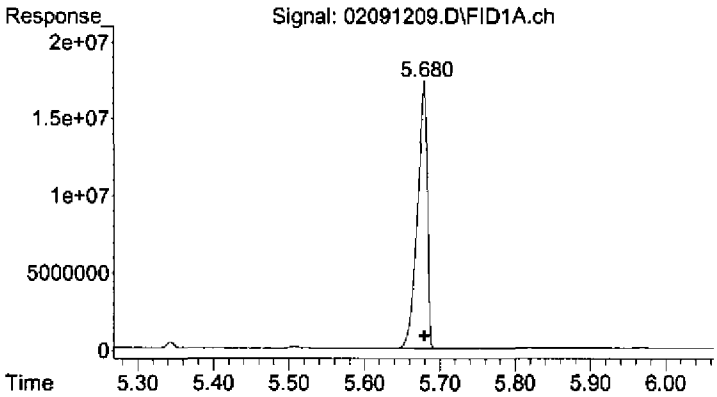
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1436853231
Conc: 400.41 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 4212139
Conc: 2.20 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.002 min
Response: 153393076
Conc: 43.18 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091210.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 3:17 pm Operator: TD
Sample : B2B0026-MS1 Inst : AG7890_2
Misc : EB02
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:41:06 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	150287735	42.306 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	84.61%
Target Compounds			
1) HM Diesel (TPH)	4.080	1464284344	408.051 ug/mL
2) H OIL	6.590	4200342	2.194 ug/mL

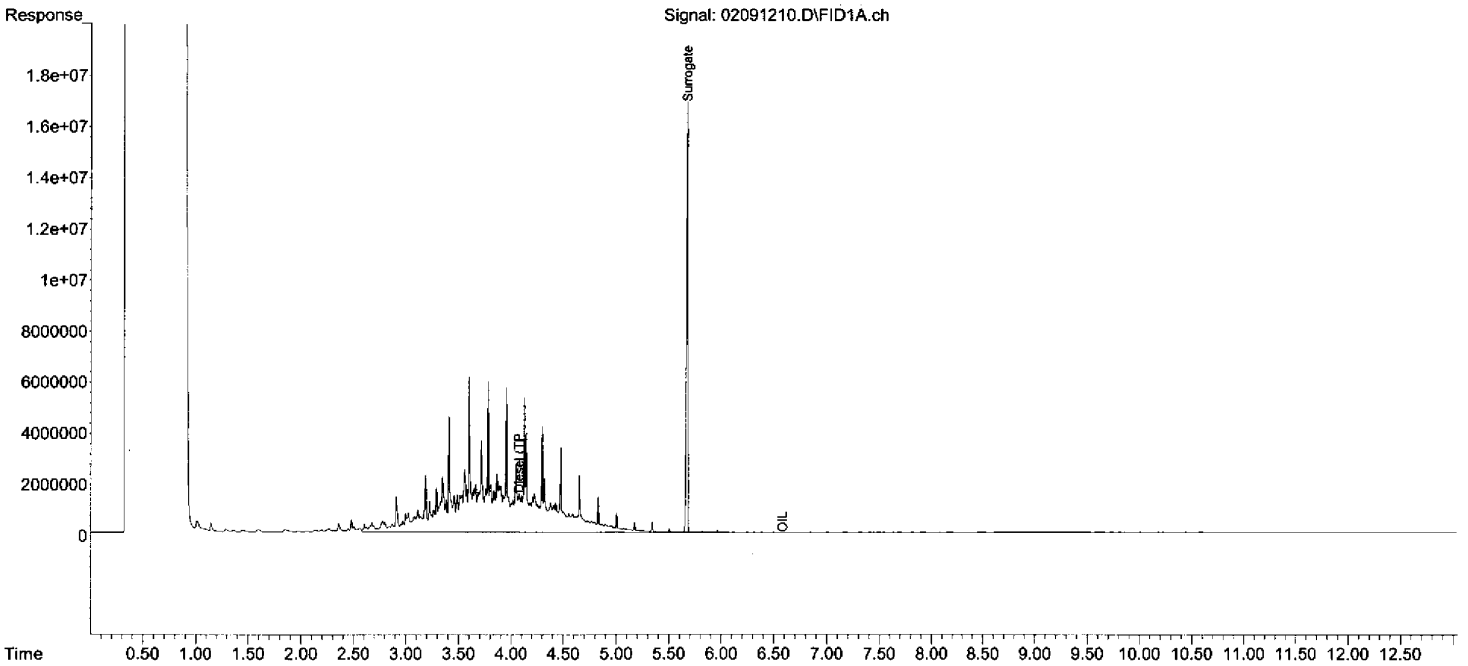
(f)=RT Delta > 1/2 Window (m)=manual int.

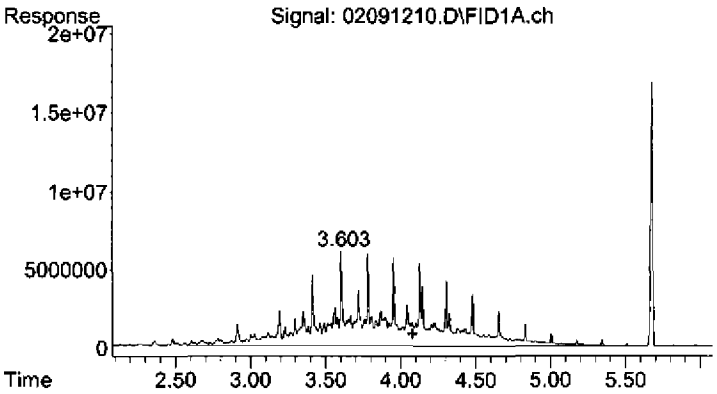
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091210.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 3:17 pm
Operator: TD
Sample : B2B0026-MS1
Inst : AG7890_2
Misc : EB02
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:41:06 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

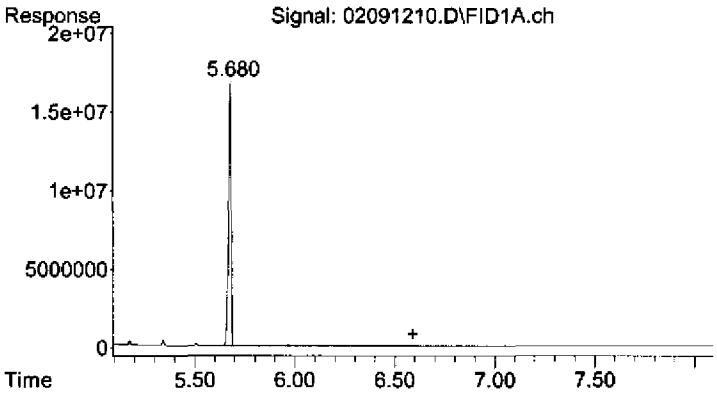
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





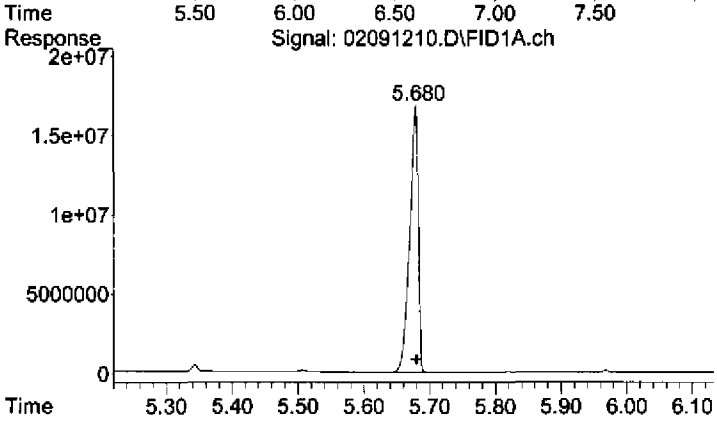
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1464284344
Conc: 408.05 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 4200342
Conc: 2.19 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.002 min
Response: 150287735
Conc: 42.31 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091211.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 3:34 pm Operator: TD
Sample : B2B0026-MSD1 Inst : AG7890_2
Misc : EB02
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:41:11 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	5.677	150423326	42.344 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	84.69%
Target Compounds			
1) HM Diesel (TPH)	4.080	1474122489	410.793 ug/mL
2) H OIL	6.590	7331785	3.829 ug/mL

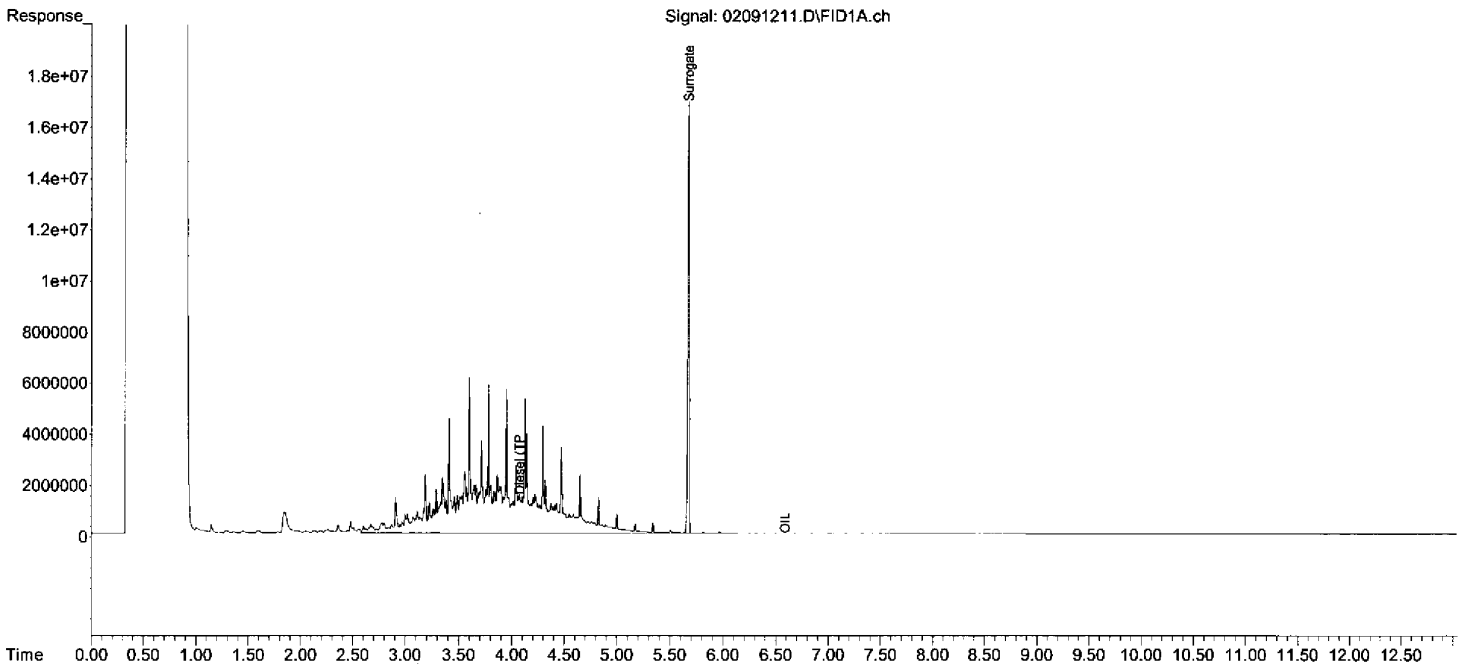
(f)=RT Delta > 1/2 Window (m)=manual int.

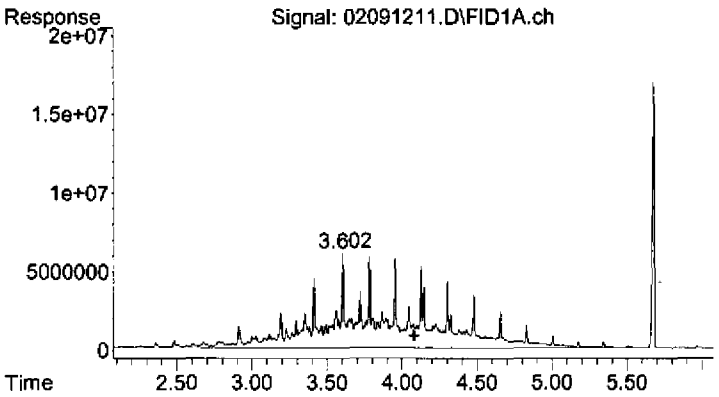
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091211.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 3:34 pm
Operator: TD
Sample : B2B0026-MSD1
Inst : AG7890_2
Misc : EB02
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:41:11 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

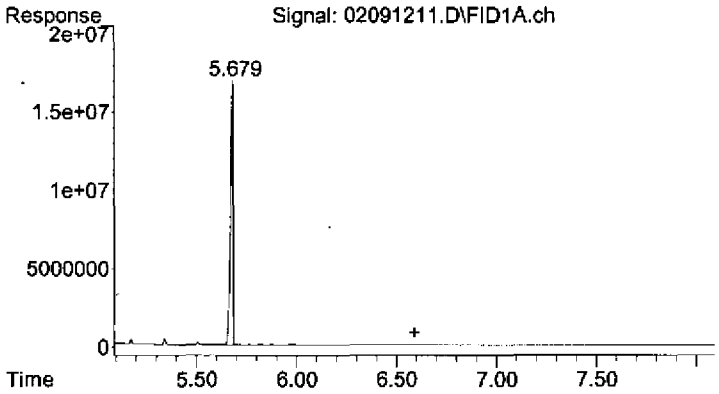
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





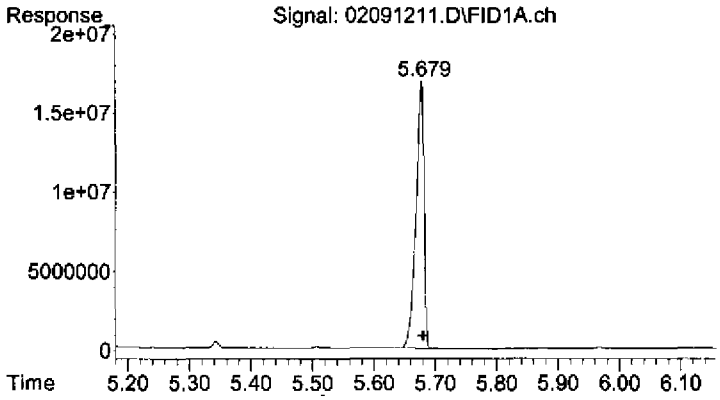
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1474122489
Conc: 410.79 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 7331785
Conc: 3.83 ug/mL



#3 Surrogate

R.T.: 5.677 min
Delta R.T.: -0.003 min
Response: 150423326
Conc: 42.34 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091212.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 3:52 pm Operator: TD
Sample : 1202017-01 Inst : AG7890_2
Misc : EB02
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:41:16 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	5.677	149359255	42.045 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	84.09%
Target Compounds			
1) HM Diesel (TPH)	4.080	54053499	15.063 ug/mL
2) H OIL	6.590	3513149	1.835 ug/mL

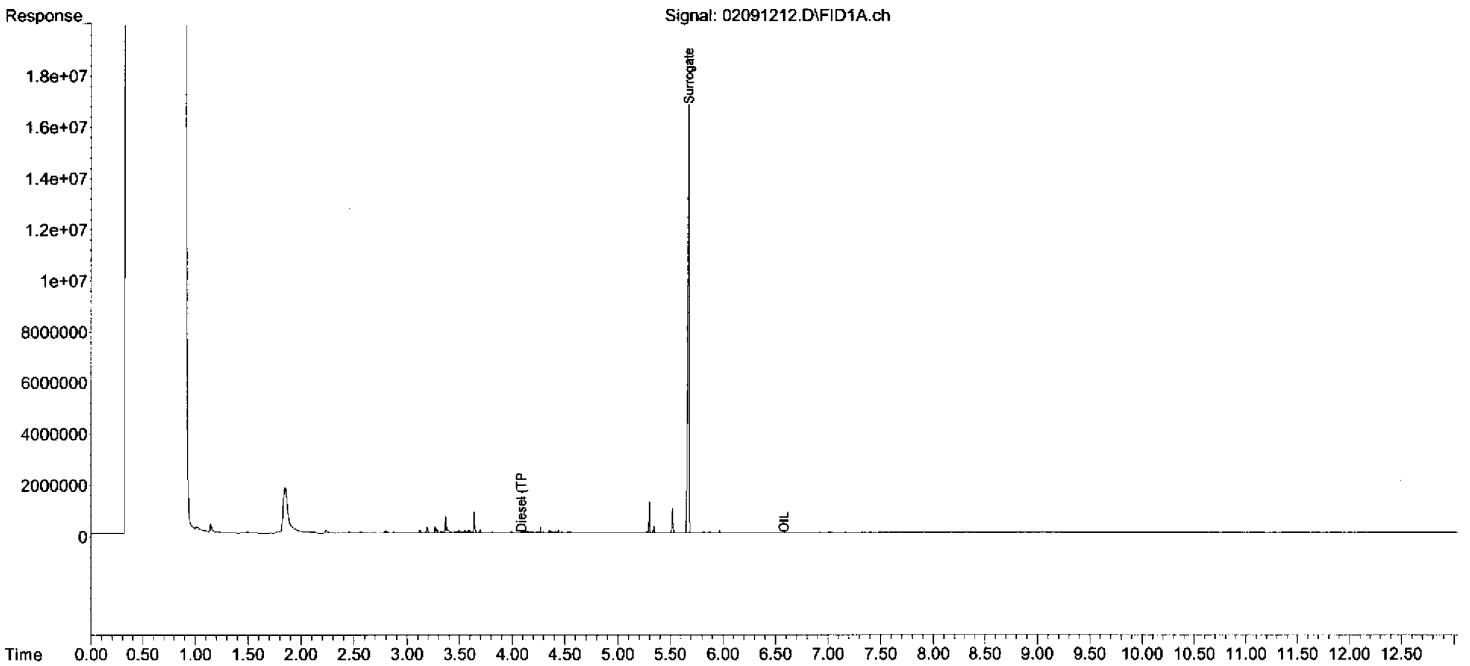
(f)=RT Delta > 1/2 Window (m)=manual int.

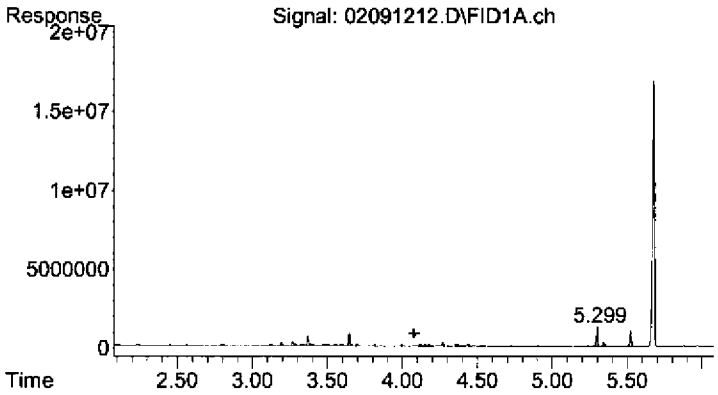
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091212.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 3:52 pm Operator: TD
Sample : 1202017-01 Inst : AG7890_2
Misc : EB02
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:41:16 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

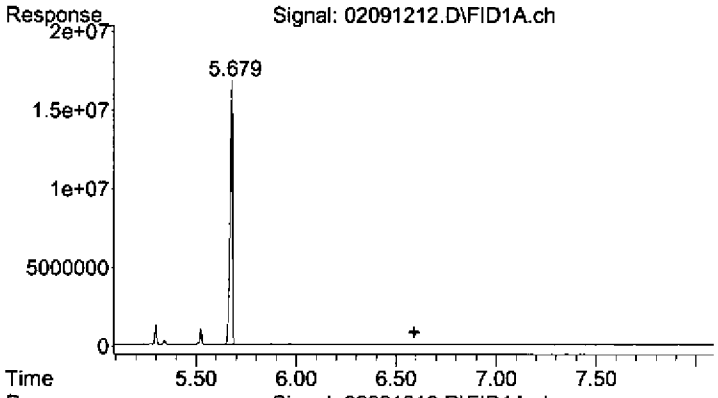
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





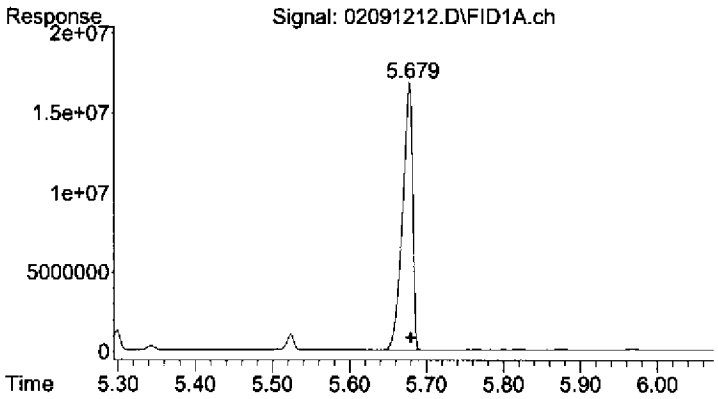
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 54053499
Conc: 15.06 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 3513149
Conc: 1.83 ug/mL



#3 Surrogate

R.T.: 5.677 min
Delta R.T.: -0.002 min
Response: 149359255
Conc: 42.04 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091213.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 4:10 pm Operator: TD
Sample : 1202017-02 Inst : AG7890_2
Misc : HW45
ALS Vial : 13 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:41:21 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	154016384	43.355 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	86.71%
Target Compounds			
1) HM Diesel (TPH)	4.080	38252604	10.660 ug/mL
2) H OIL	6.590	4327770	2.260 ug/mL

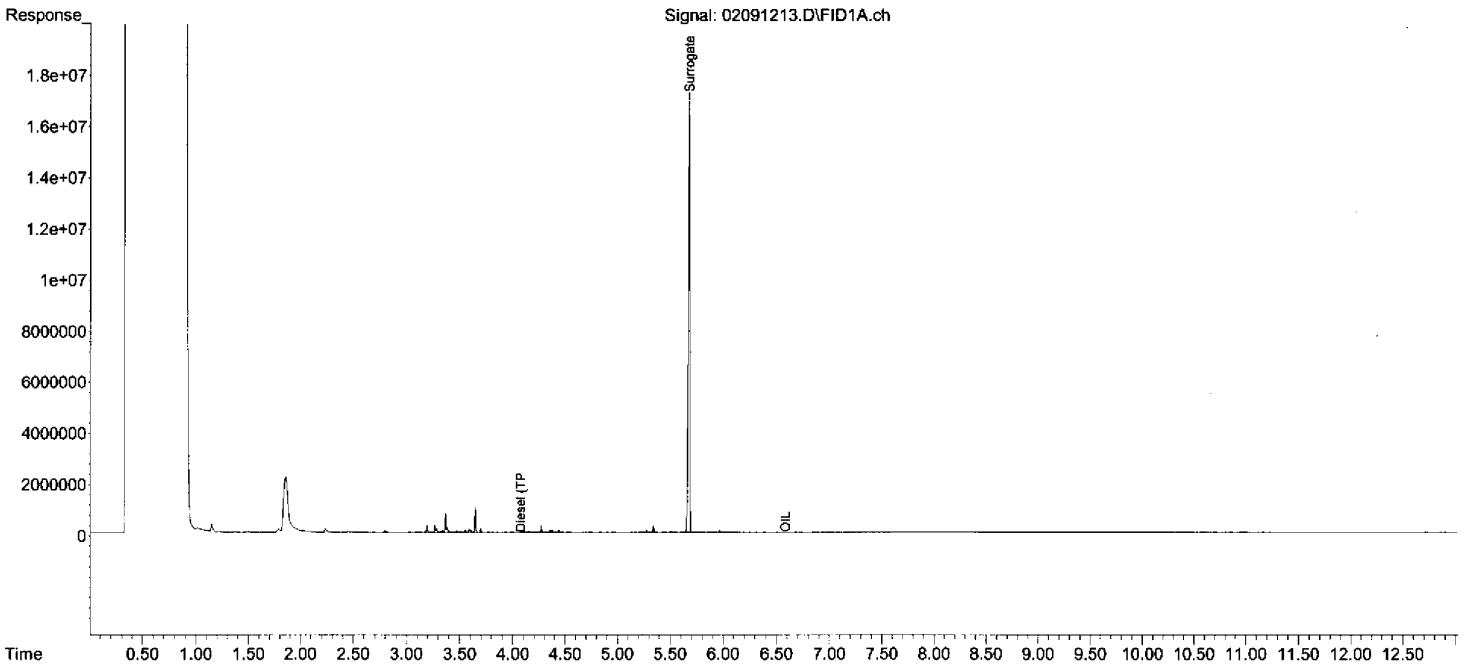
(f)=RT Delta > 1/2 Window (m)=manual int.

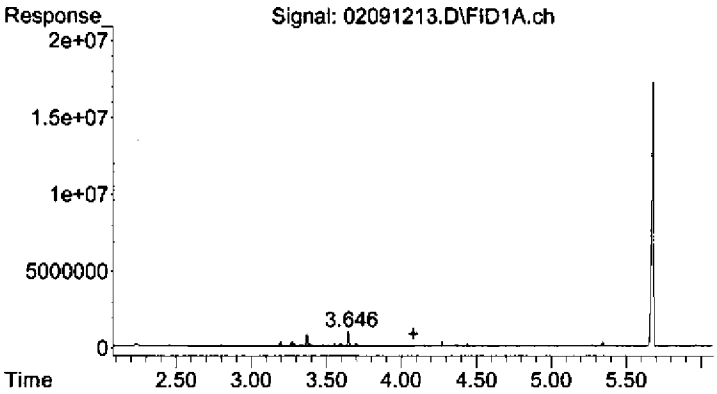
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091213.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 4:10 pm
Operator: TD
Sample : 1202017-02
Inst : AG7890_2
Misc : HW45
ALS Vial : 13 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:41:21 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

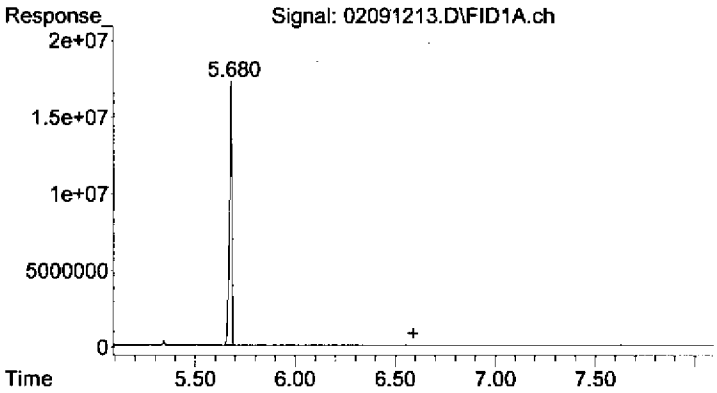
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





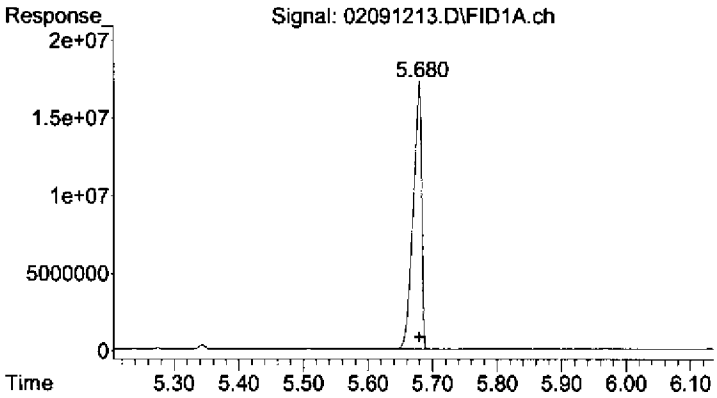
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 38252604
Conc: 10.66 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 4327770
Conc: 2.26 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.002 min
Response: 154016384
Conc: 43.36 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091214.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 4:28 pm Operator: TD
Sample : 1202017-03 Inst : AG7890_2
Misc : HW45-P
ALS Vial : 14 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:41:25 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	5.677	144891878	40.787 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	81.57%
Target Compounds			
1) HM Diesel (TPH)	4.080	43438161	12.105 ug/mL
2) H OIL	6.590	6224038	3.250 ug/mL

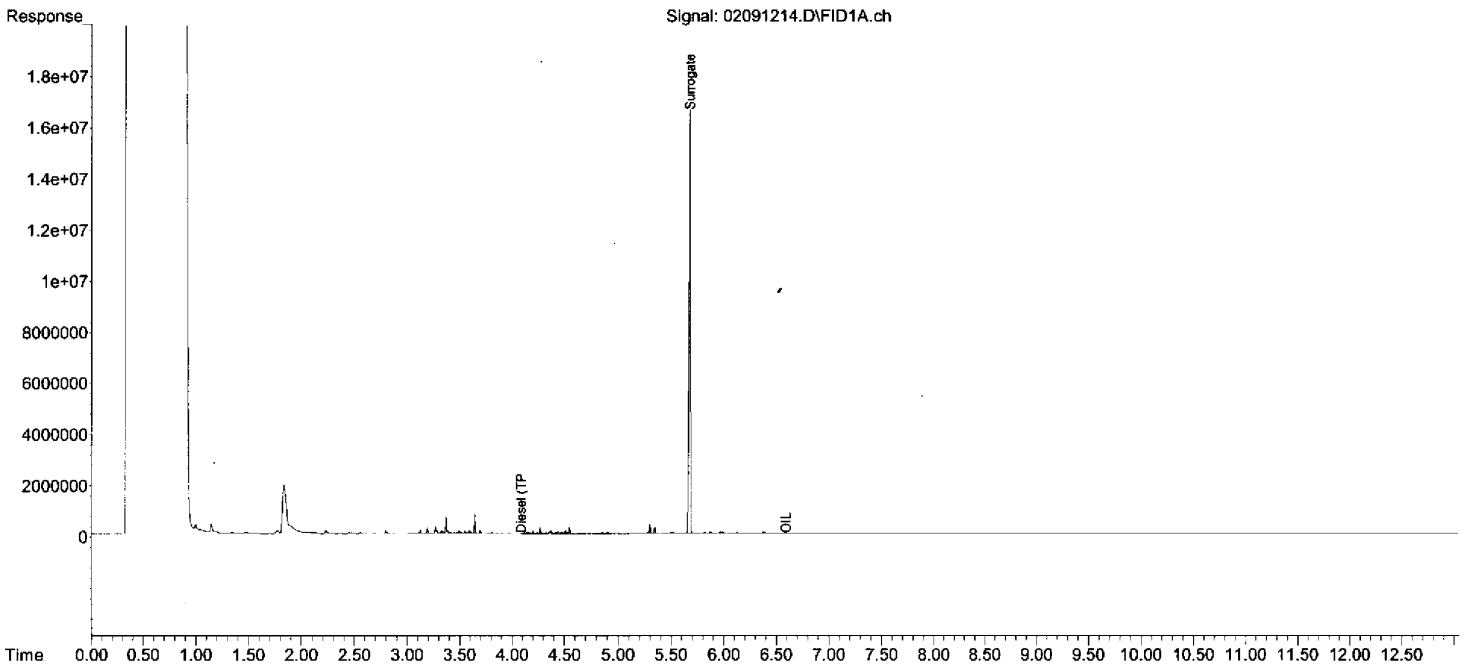
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

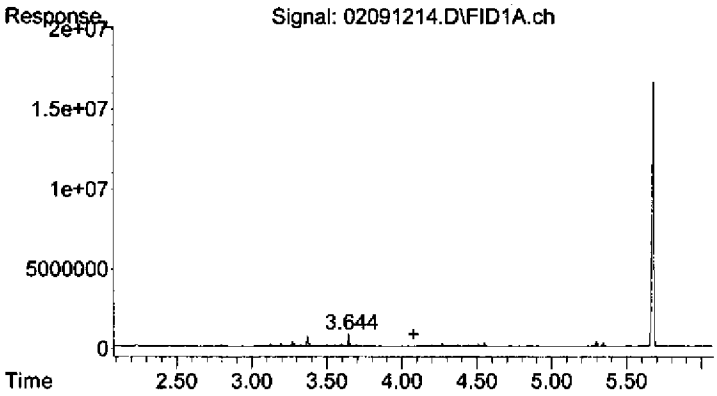
Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091214.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 4:28 pm
Operator: TD
Sample : 1202017-03
Inst : AG7890_2
Misc : HW45-P
ALS Vial : 14 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:41:25 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

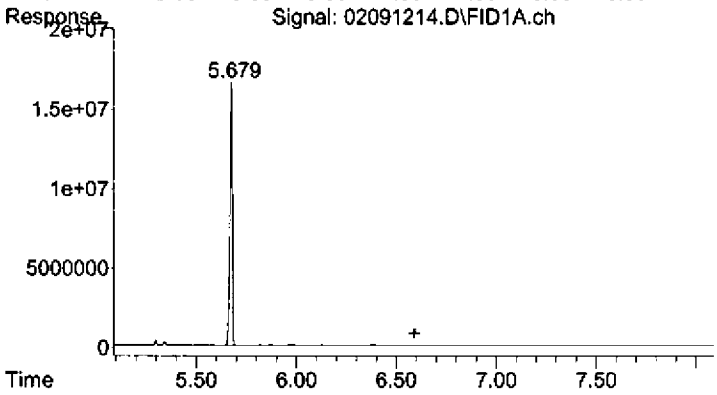


00268



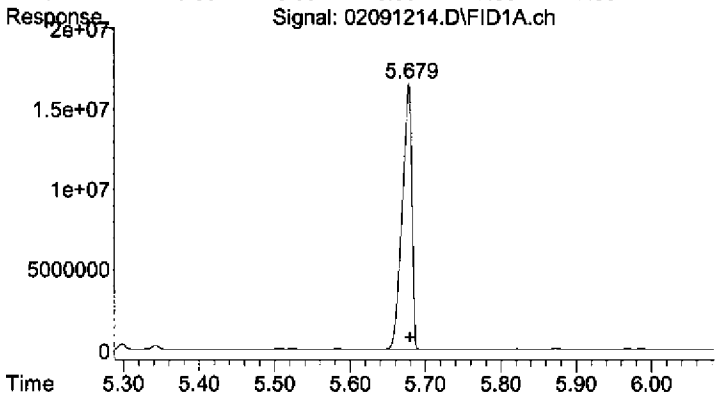
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 43438161
Conc: 12.10 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 6224038
Conc: 3.25 ug/mL



#3 Surrogate

R.T.: 5.677 min
Delta R.T.: -0.003 min
Response: 144891878
Conc: 40.79 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091215.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 4:46 pm Operator: TD
Sample : 1202020-01 Inst : AG7890_2
Misc : HW43
ALS Vial : 15 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:35:09 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	151421446	42.625 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	85.25%
Target Compounds			
1) HM Diesel (TPH)	4.080	8443373	2.353 ug/mL
2) H OIL	6.590	3219663	1.681 ug/mL

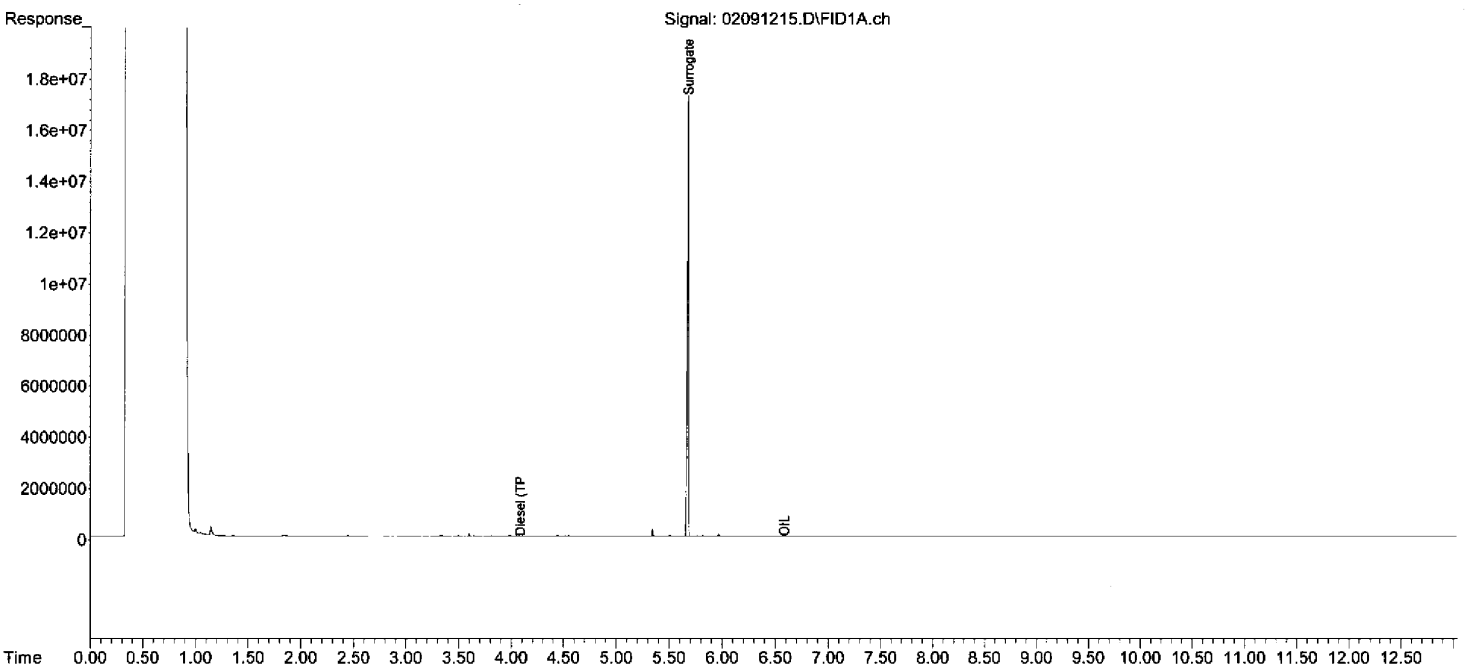
(f)=RT Delta > 1/2 Window (m)=manual int.

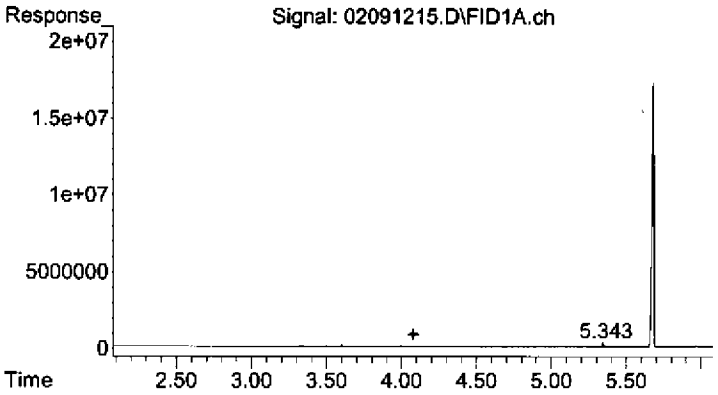
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091215.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 4:46 pm Operator: TD
Sample : 1202020-01 Inst : AG7890_2
Misc : HW43
ALS Vial : 15 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:35:09 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

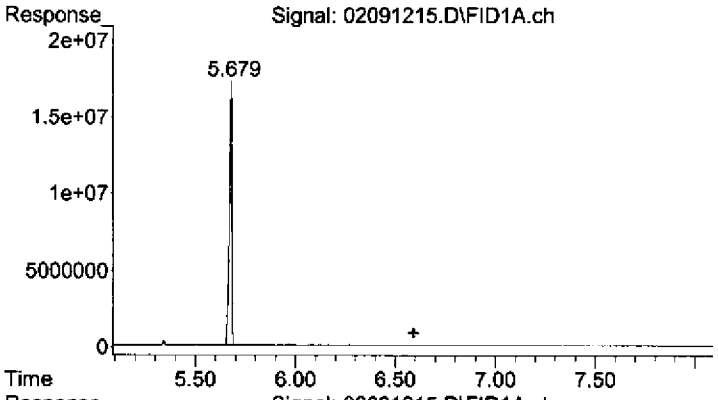
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





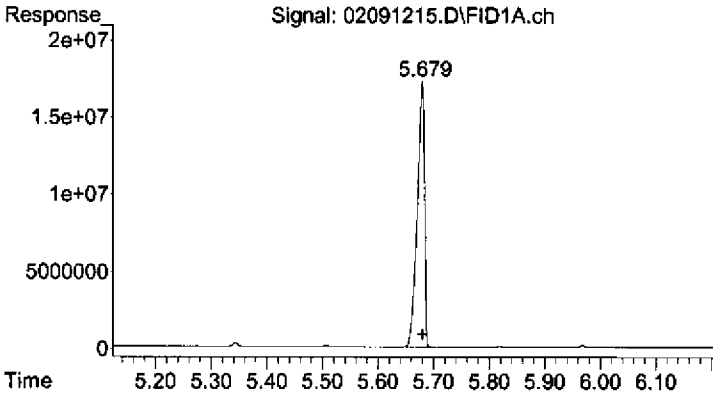
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 8443373
Conc: 2.35 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 3219663
Conc: 1.68 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.002 min
Response: 151421446
Conc: 42.63 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091216.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 5:04 pm Operator: TD
Sample : 1202020-02 Inst : AG7890_2
Misc : HW43-P
ALS Vial : 16 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:35:35 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	166102989	46.758 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	93.52%
Target Compounds			
1) HM Diesel (TPH)	4.080	13306601	3.708 ug/mL
2) H OIL	6.590	5420904	2.831 ug/mL

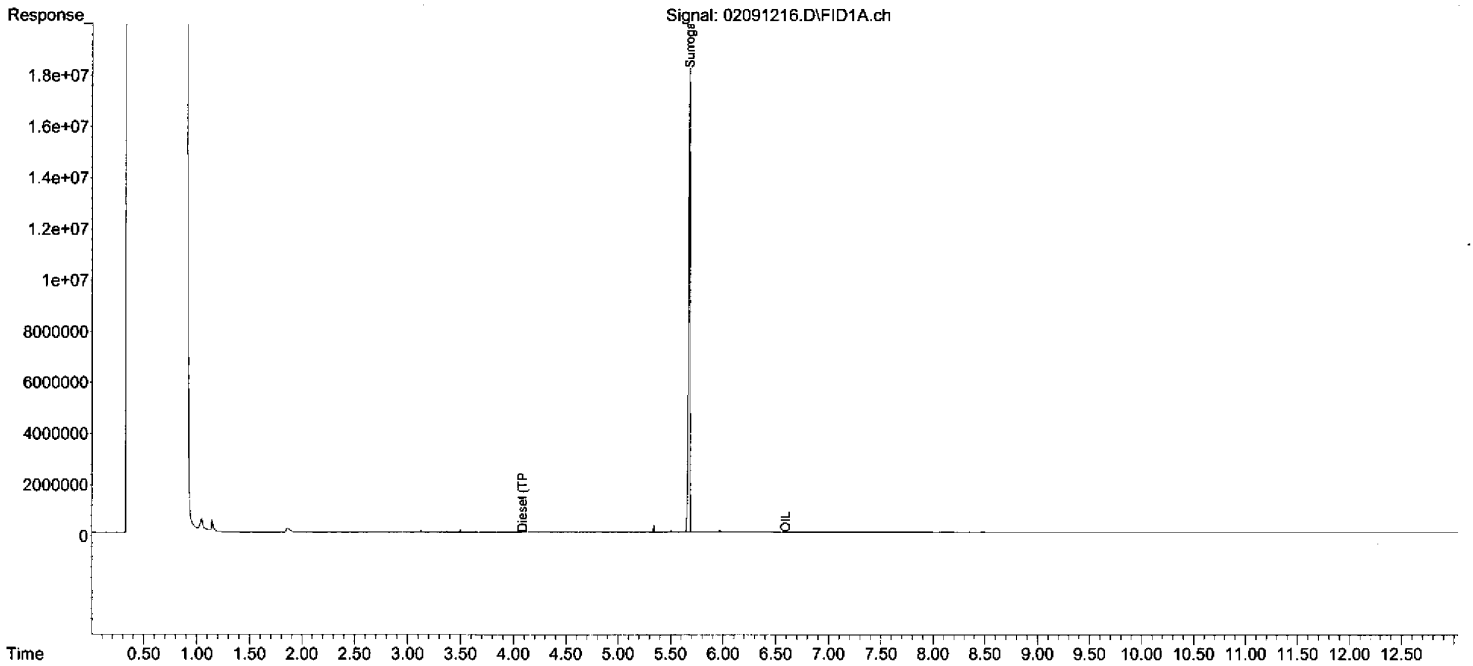
(f)=RT Delta > 1/2 Window (m)=manual int.

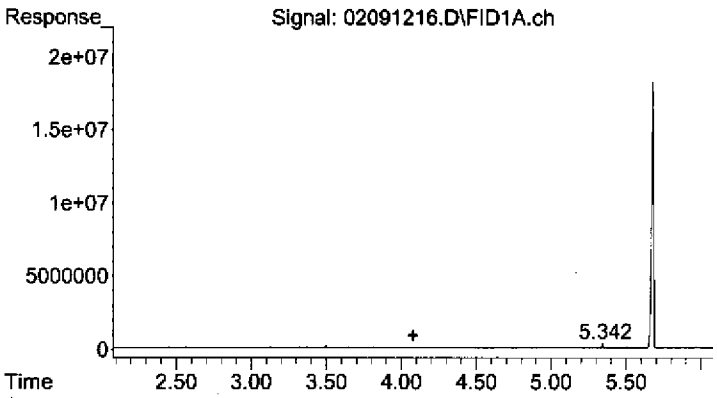
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091216.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 5:04 pm
Operator: TD
Sample : 1202020-02
Inst : AG7890_2
Misc : HW43-P
ALS Vial : 16 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:35:35 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

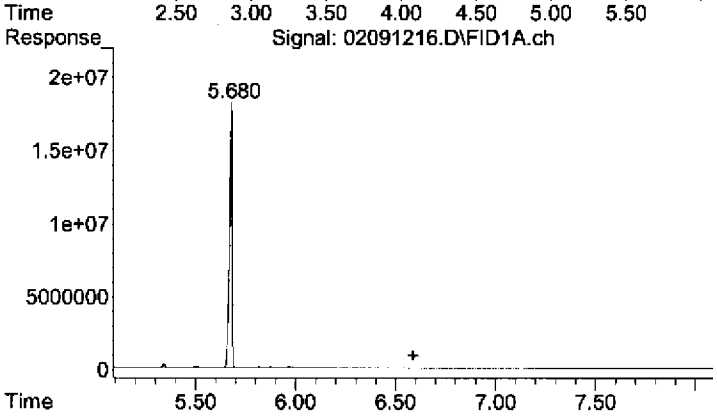
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





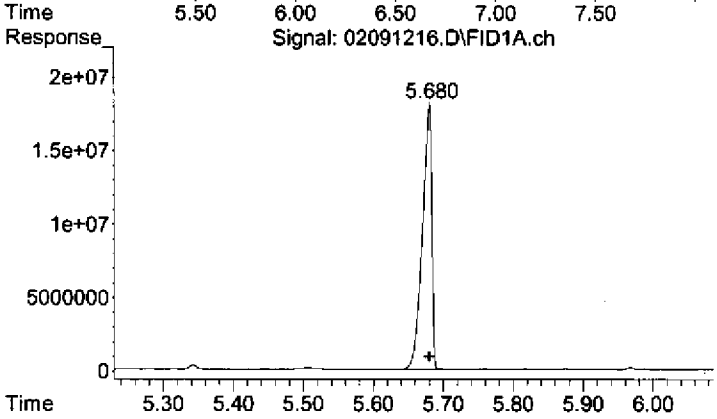
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 13306601
Conc: 3.71 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 5420904
Conc: 2.83 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.001 min
Response: 166102989
Conc: 46.76 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091217.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 5:22 pm Operator: TD
Sample : 1202020-03 Inst : AG7890_2
Misc : HW31
ALS Vial : 17 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:36:02 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	182351499	51.332 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	102.66%
Target Compounds			
1) HM Diesel (TPH)	4.080	15090703	4.205 ug/mL
2) H OIL	6.590	3034963	1.585 ug/mL

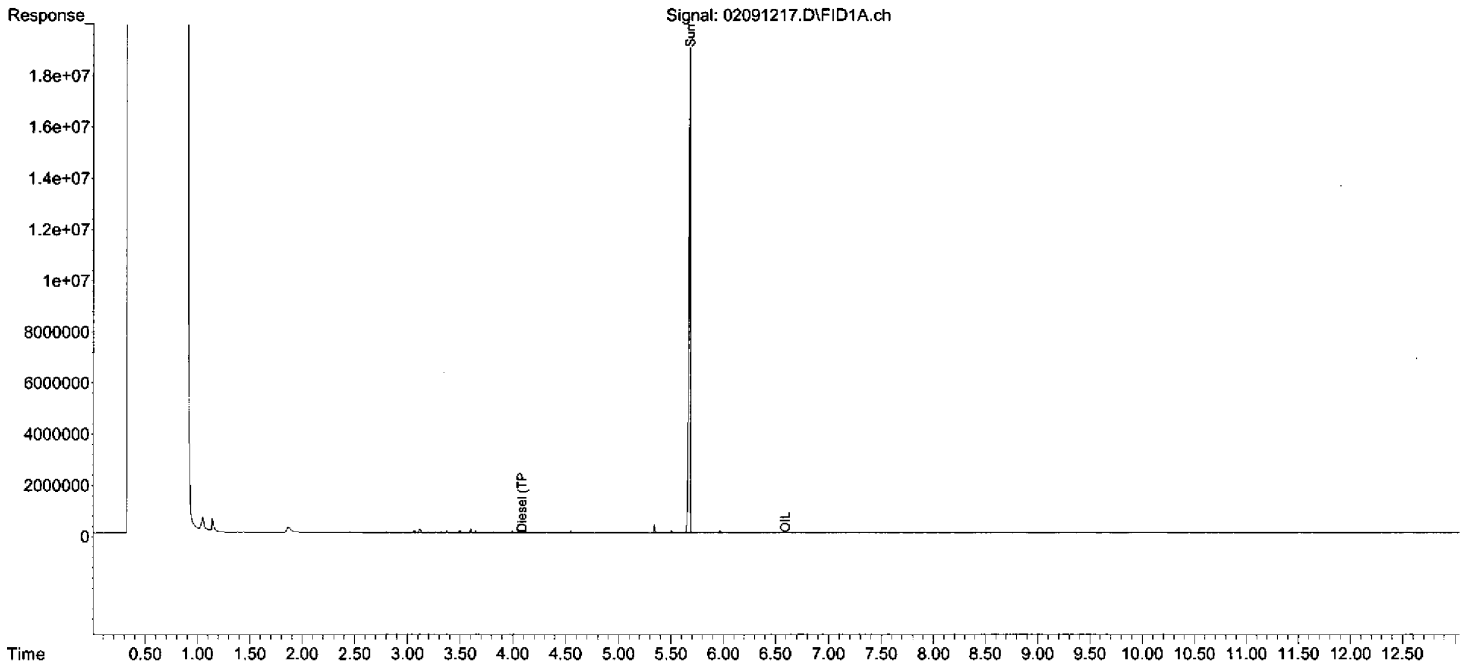
(f)=RT Delta > 1/2 Window (m)=manual int.

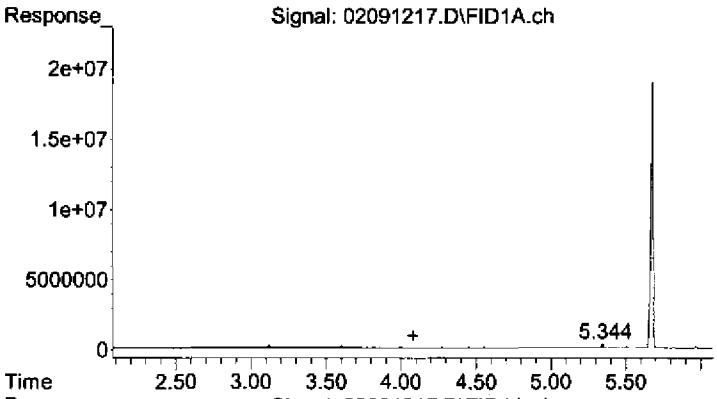
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091217.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 5:22 pm
Operator: TD
Sample : 1202020-03
Inst : AG7890_2
Misc : HW31
ALS Vial : 17 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:36:02 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

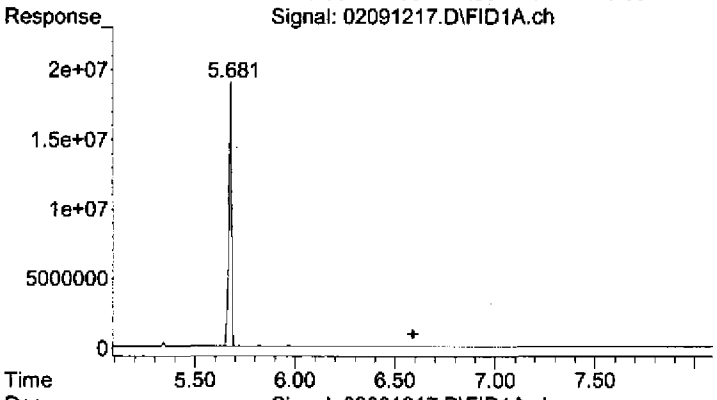
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





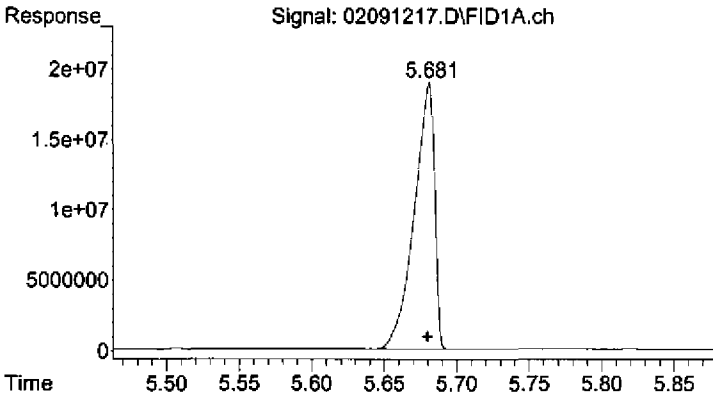
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 15090703
Conc: 4.21 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 3034963
Conc: 1.58 ug/mL



#3 Surrogate

R.T.: 5.679 min
Delta R.T.: 0.000 min
Response: 182351499
Conc: 51.33 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091218.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 5:39 pm Operator: TD
Sample : 1202020-04 Inst : AG7890_2
Misc : HW31-P
ALS Vial : 18 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:36:29 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	154342231	43.447 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	86.89%
Target Compounds			
1) HM Diesel (TPH)	4.080	10350351	2.884 ug/mL
2) H OIL	6.590	2620206	1.368 ug/mL

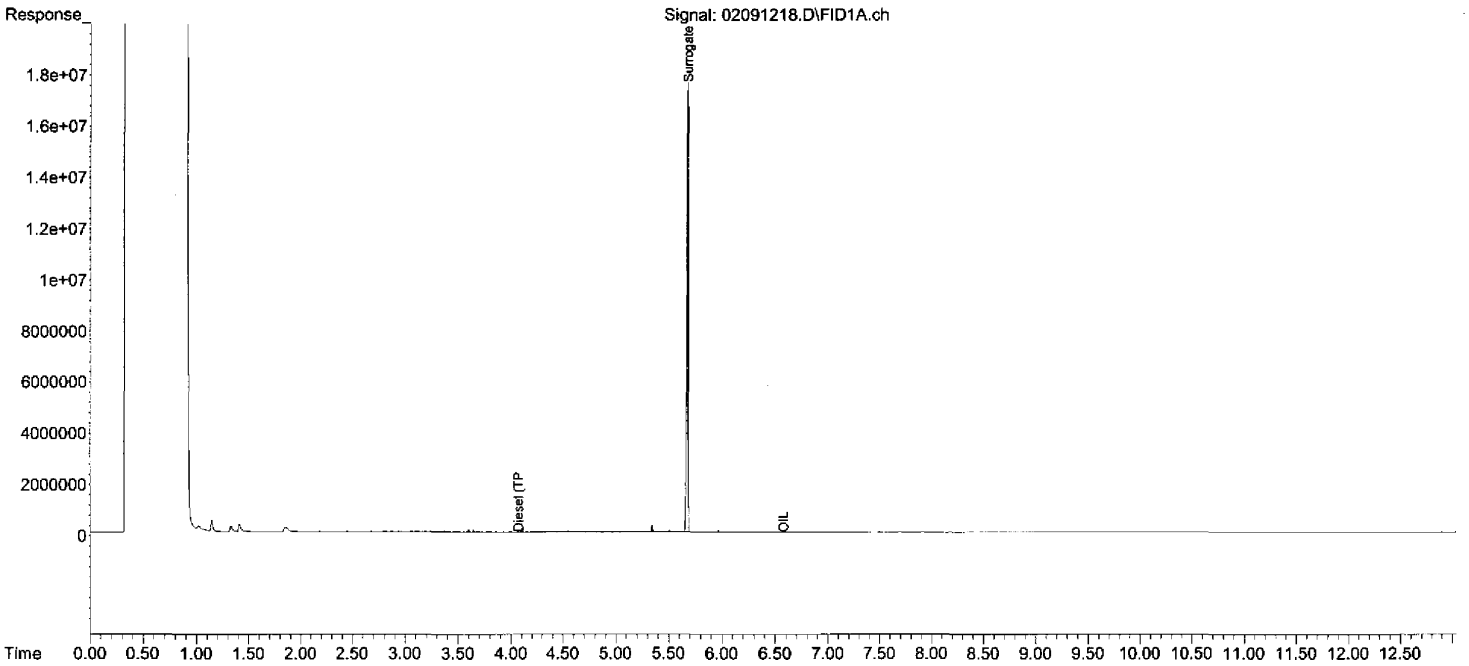
(f)=RT Delta > 1/2 Window (m)=manual int.

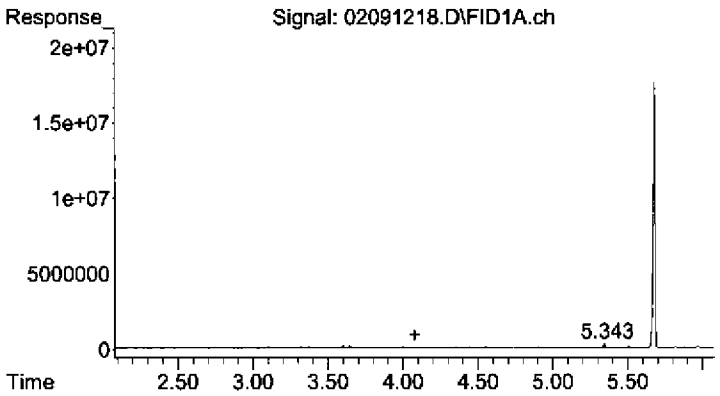
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091218.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 5:39 pm
Operator: TD
Sample : 1202020-04
Inst : AG7890_2
Misc : HW31-P
ALS Vial : 18 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:36:29 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

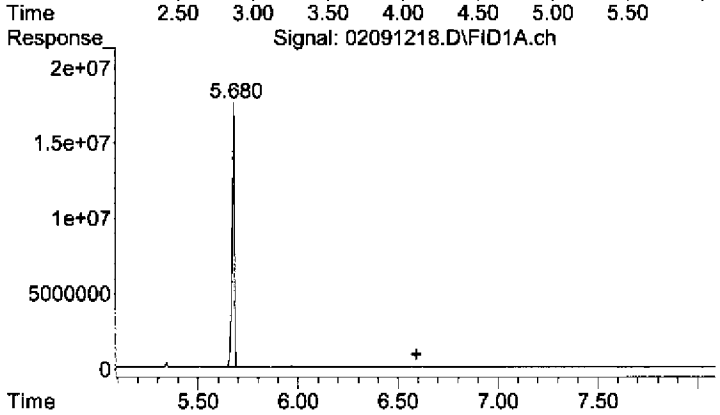
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





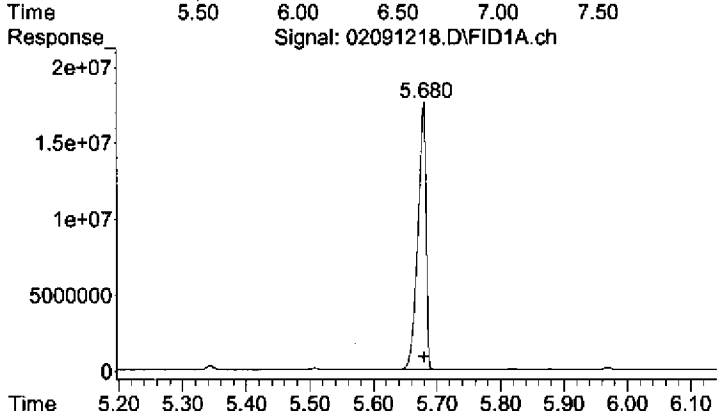
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 10350351
Conc: 2.88 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 2620206
Conc: 1.37 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.002 min
Response: 154342231
Conc: 43.45 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091219.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 5:57 pm Operator: TD
Sample : 1202020-05 Inst : AG7890_2
Misc : HW31z
ALS Vial : 19 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:36:44 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	5.678	178927676	50.368 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	100.74%
Target Compounds			
1) HM Diesel (TPH)	4.080	12987952	3.619 ug/mL
2) H OIL	6.590	3272337	1.709 ug/mL

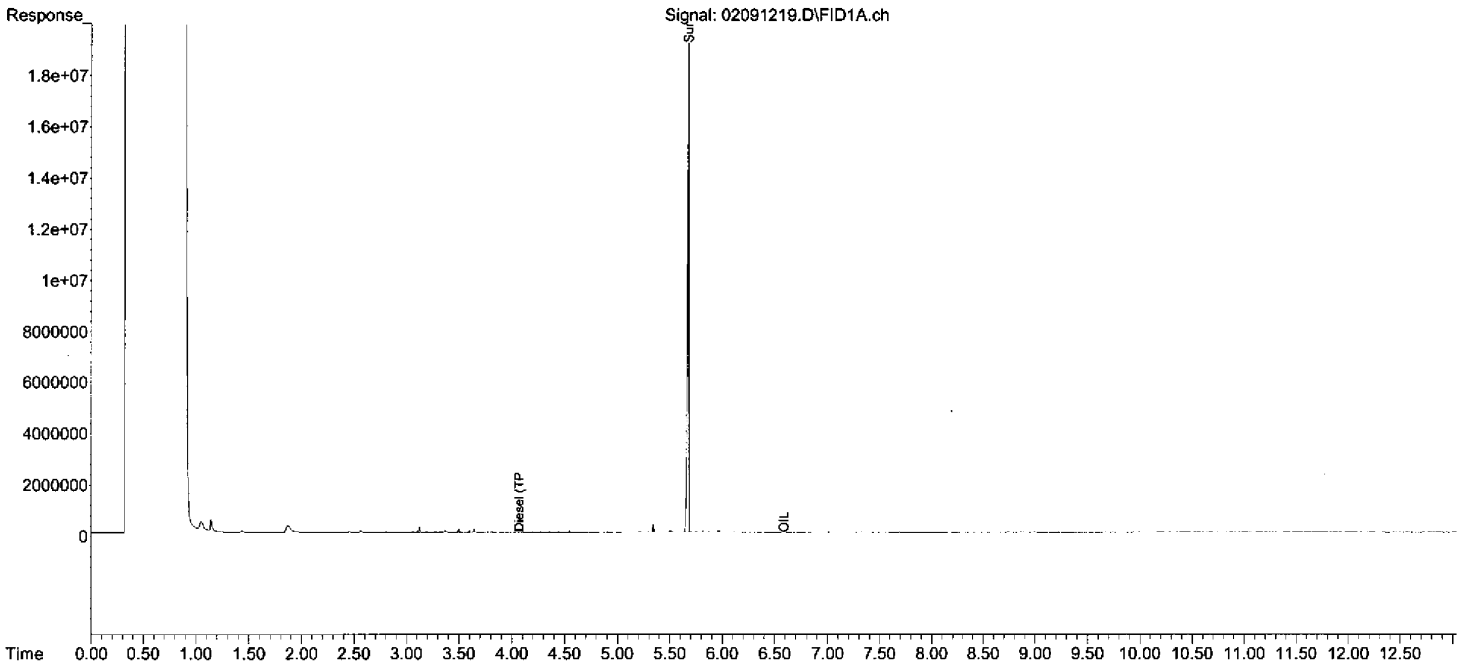
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

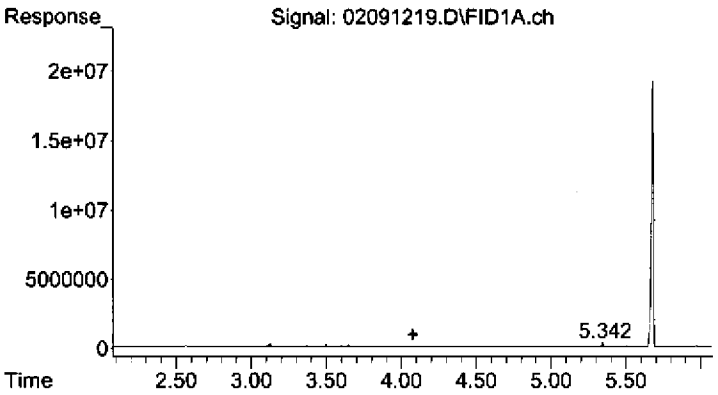
Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091219.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 5:57 pm Operator: TD
Sample : 1202020-05 Inst : AG7890_2
Misc : HW31z
ALS Vial : 19 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:36:44 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

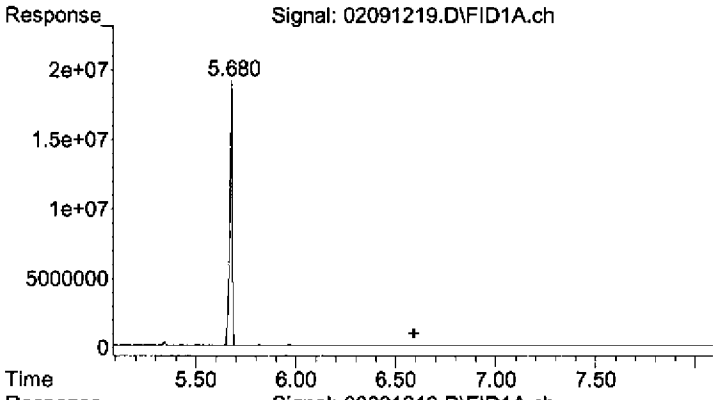


013012DROA.M Fri Feb 10 07:36:46 2012 Page: 2



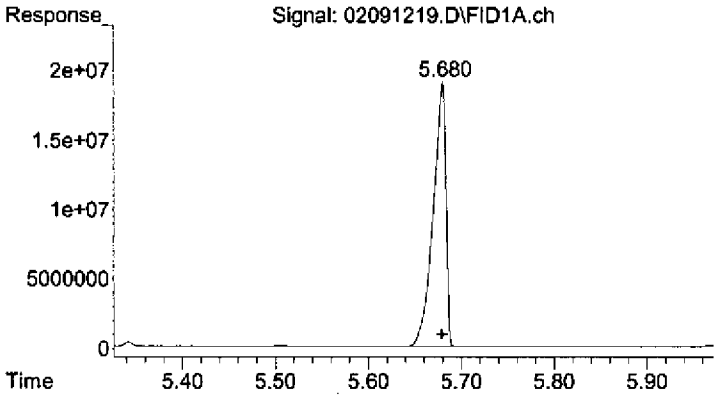
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 12987952
Conc: 3.62 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 3272337
Conc: 1.71 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.001 min
Response: 178927676
Conc: 50.37 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091220.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 6:15 pm Operator: TD
Sample : 1202020-07 Inst : AG7890_2
Misc : FB11
ALS Vial : 20 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:36:58 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	5.677	154340984	43.447 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	86.89%
Target Compounds			
1) HM Diesel (TPH)	4.080	17410669	4.852 ug/mL
2) H OIL	6.590	3143024	1.641 ug/mL

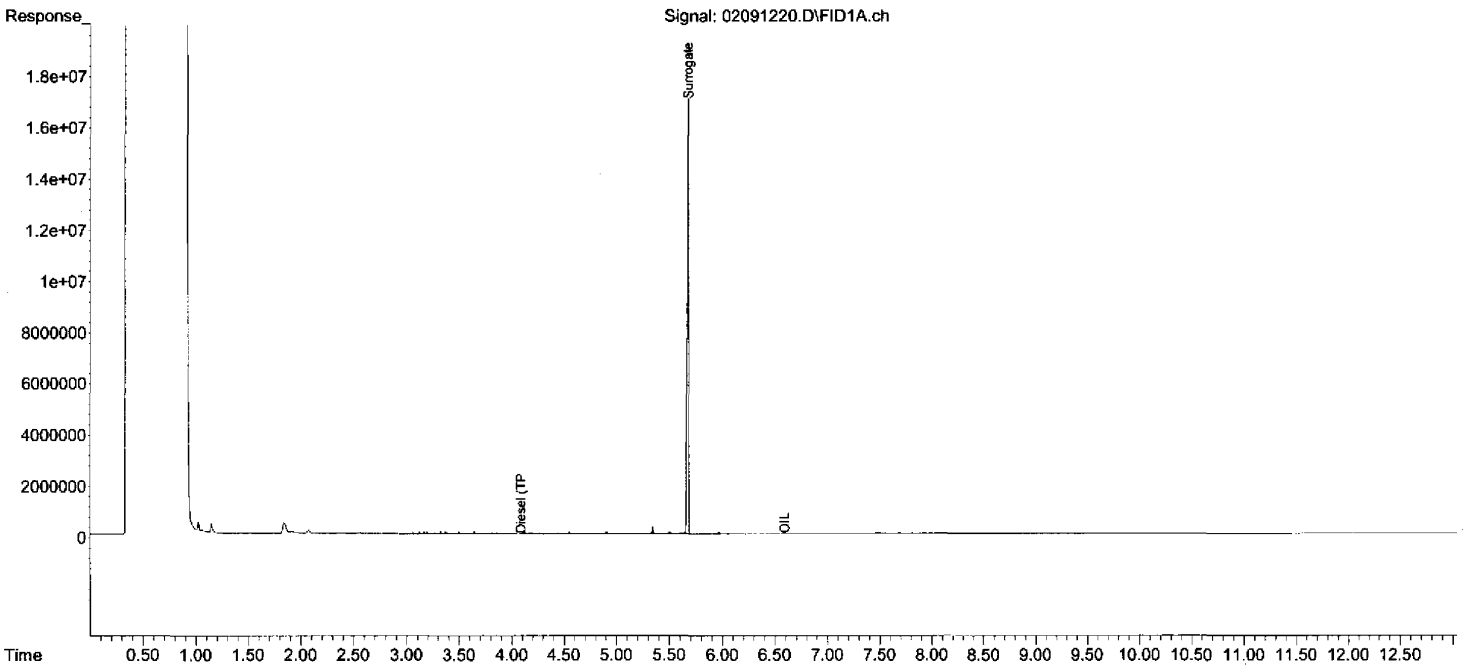
(f)=RT Delta > 1/2 Window (m)=manual int.

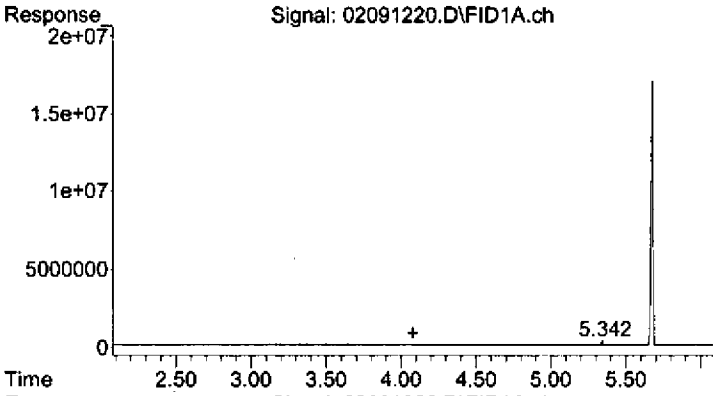
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091220.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 6:15 pm Operator: TD
Sample : 1202020-07 Inst : AG7890_2
Misc : FB11
ALS Vial : 20 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:36:58 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

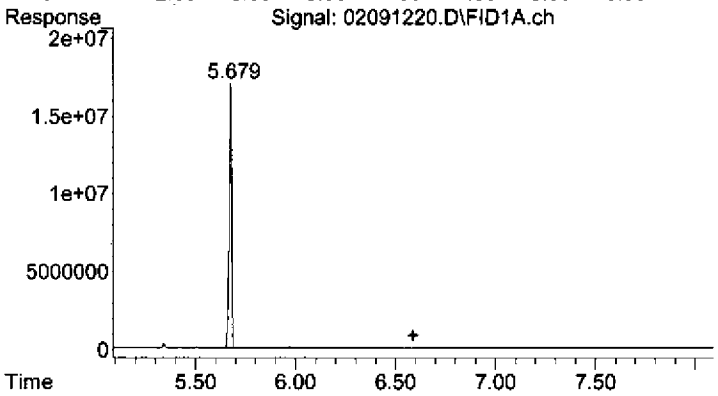
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





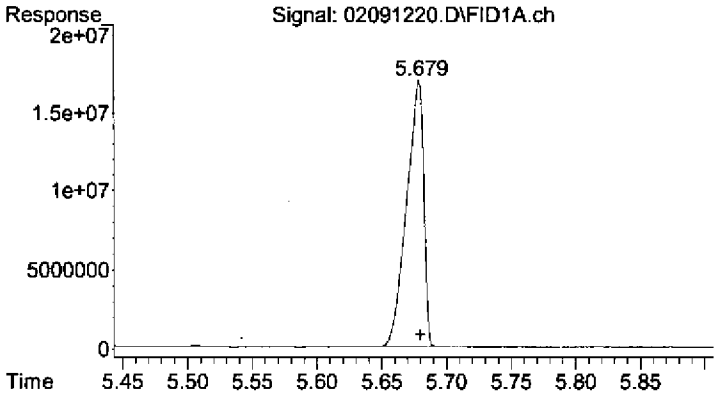
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 17410669
Conc: 4.85 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 3143024
Conc: 1.64 ug/mL



#3 Surrogate

R.T.: 5.677 min
Delta R.T.: -0.003 min
Response: 154340984
Conc: 43.45 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091221.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 6:33 pm Operator: TD
Sample : 1202020-08 Inst : AG7890_2
Misc : HW30
ALS Vial : 21 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:37:10 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	5.678	157541366	44.348 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	88.70%
Target Compounds			
1) HM Diesel (TPH)	4.080	16001673	4.459 ug/mL
2) H OIL	6.590	3469309	1.812 ug/mL

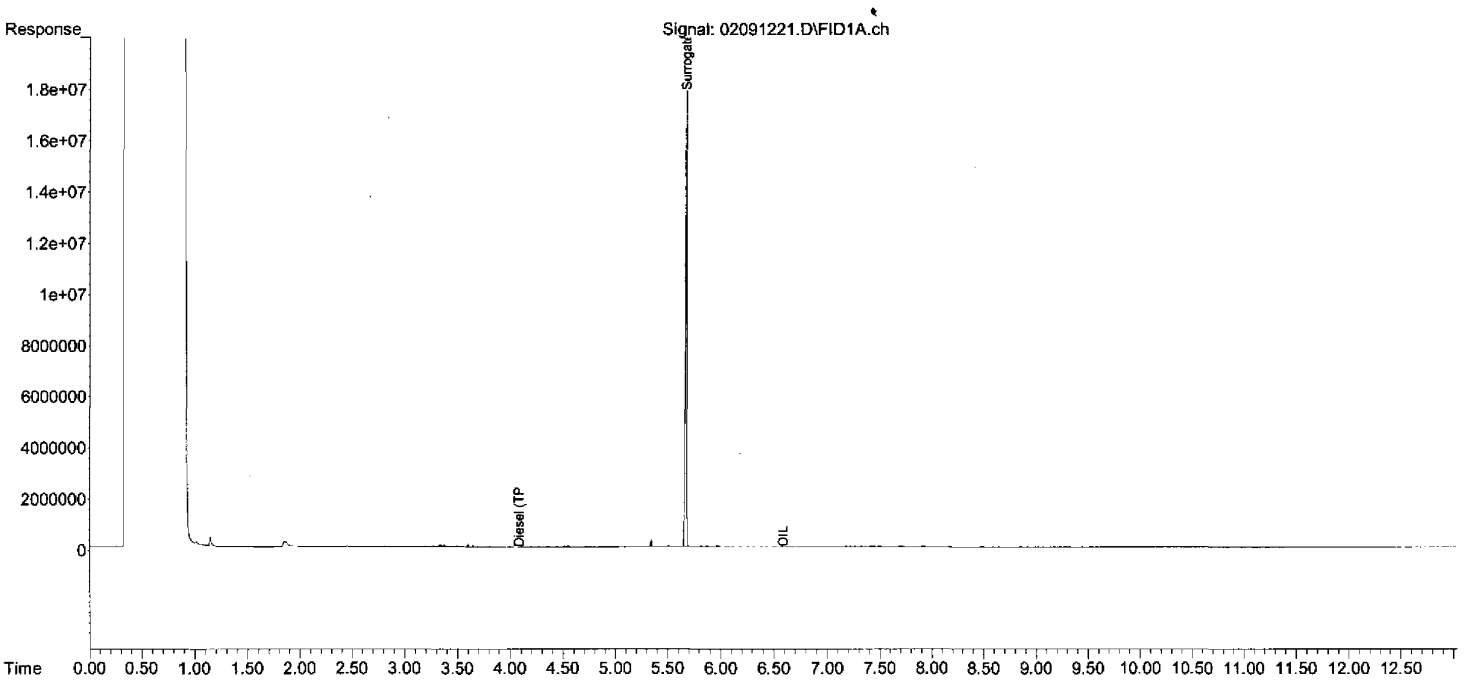
(f)=RT Delta > 1/2 Window (m)=manual int.

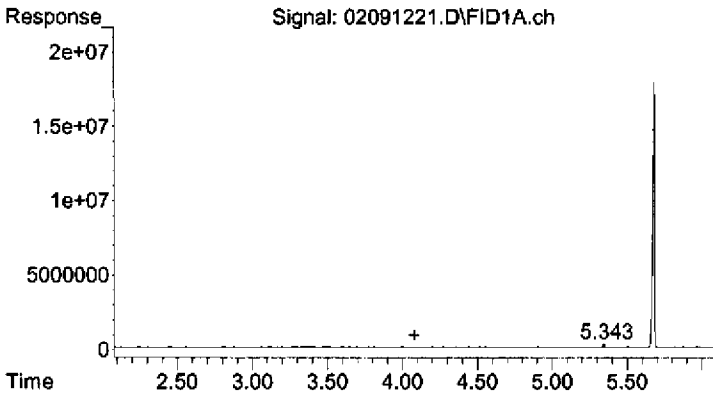
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091221.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 6:33 pm
Operator: TD
Sample : 1202020-08
Inst : AG7890_2
Misc : HW30
ALS Vial : 21 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:37:10 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

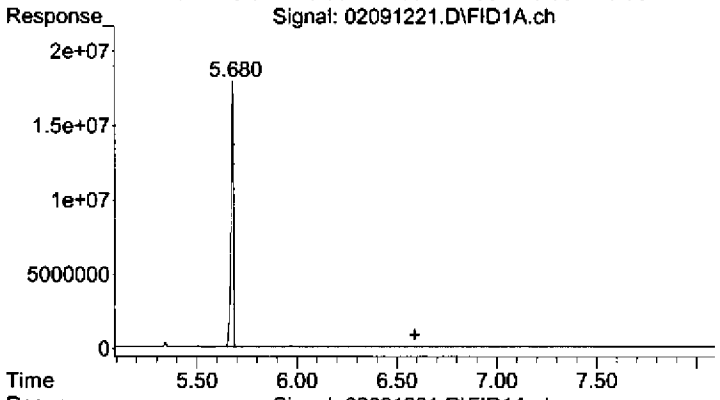
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





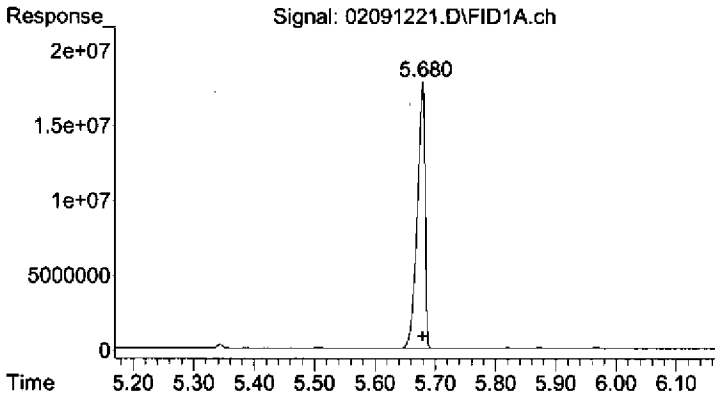
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 16001673
Conc: 4.46 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 3469309
Conc: 1.81 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.001 min
Response: 157541366
Conc: 44.35 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091222.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 6:51 pm Operator: TD
Sample : 1202020-09 Inst : AG7890_2
Misc : HW30-P
ALS Vial : 22 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:37:23 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	5.677	156759803	44.128 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	88.26%
Target Compounds			
1) HM Diesel (TPH)	4.080	15896451	4.430 ug/mL
2) H OIL	6.590	2664590	1.392 ug/mL

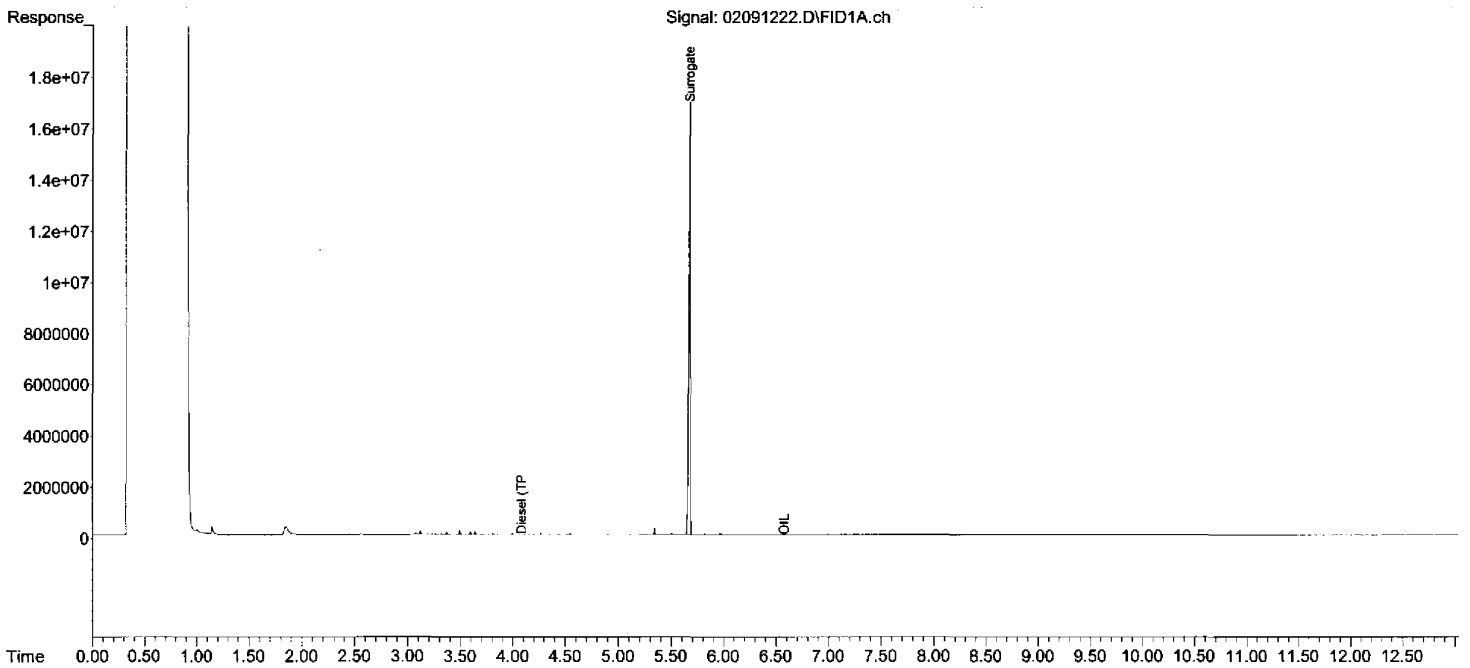
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

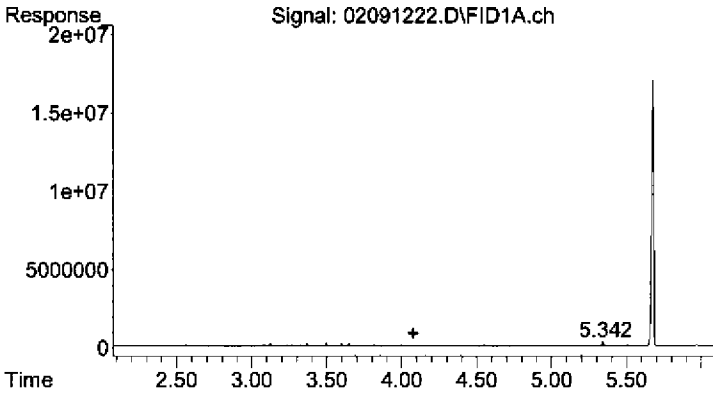
Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091222.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 6:51 pm Operator: TD
Sample : 1202020-09 Inst : AG7890_2
Misc : HW30-P
ALS Vial : 22 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:37:23 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

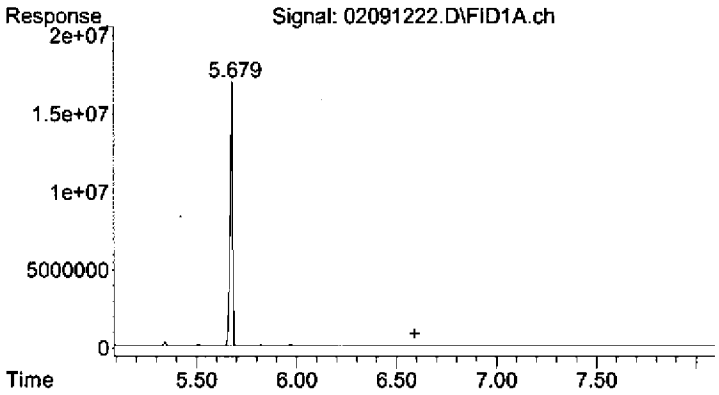


00231



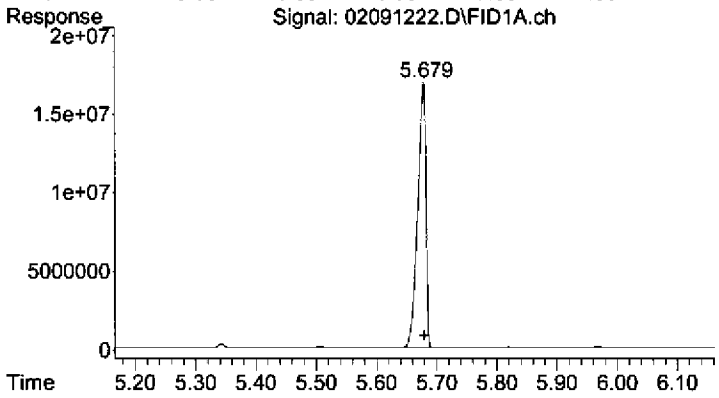
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 15896451
Conc: 4.43 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 2664590
Conc: 1.39 ug/mL



#3 Surrogate

R.T.: 5.677 min
Delta R.T.: -0.002 min
Response: 156759803
Conc: 44.13 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091223.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 7:09 pm Operator: TD
Sample : 1202020-11 Inst : AG7890_2
Misc : HW15a
ALS Vial : 23 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:37:37 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	171558178	48.294 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	96.59%
Target Compounds			
1) HM Diesel (TPH)	4.080	15073563	4.201 ug/mL
2) H OIL	6.590	2971410	1.552 ug/mL

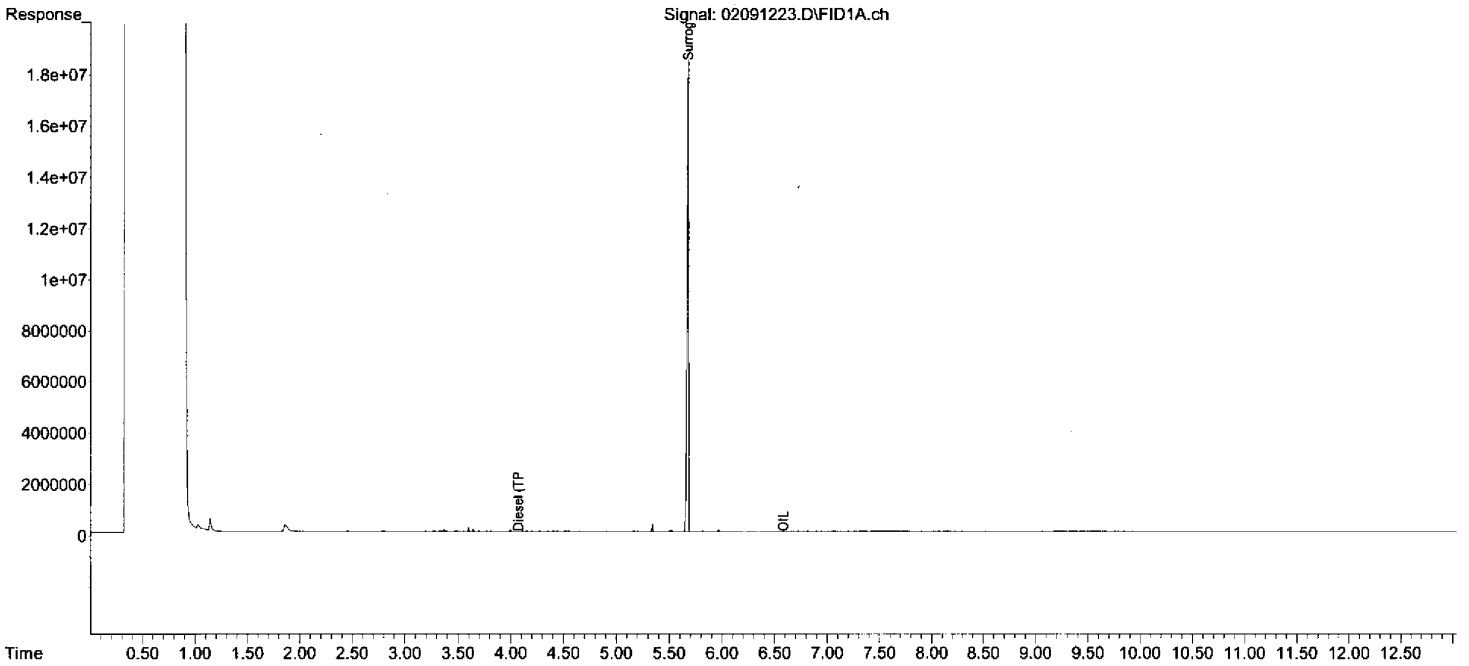
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

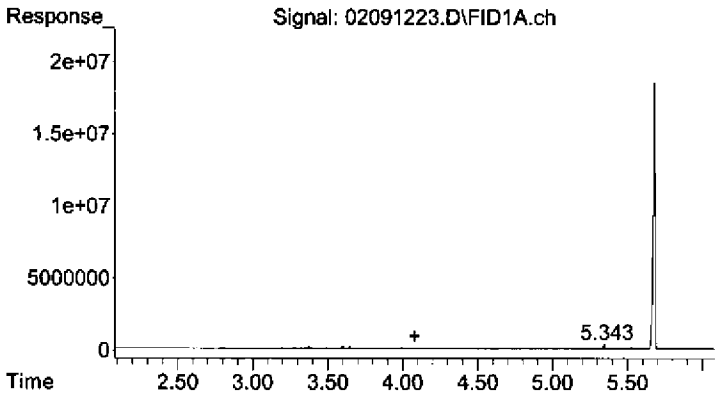
Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091223.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 7:09 pm Operator: TD
Sample : 1202020-11 Inst : AG7890_2
Misc : HW15a
ALS Vial : 23 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:37:37 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

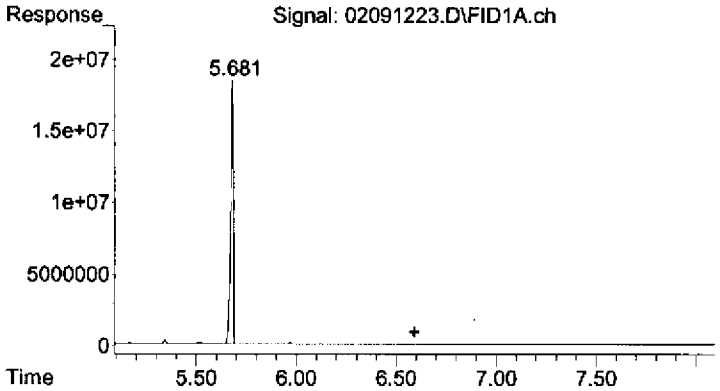


DIM0035998 DIM0036644



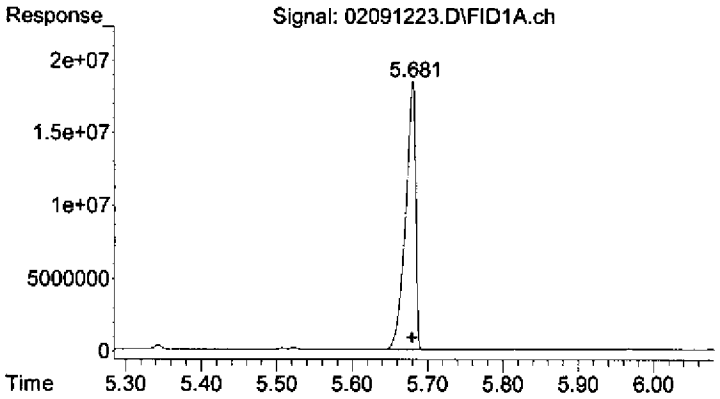
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 15073563
Conc: 4.20 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 2971410
Conc: 1.55 ug/mL



#3 Surrogate

R.T.: 5.679 min
Delta R.T.: 0.000 min
Response: 171558178
Conc: 48.29 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091224.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 7:26 pm Operator: TD
Sample : 1202020-12 Inst : AG7890_2
Misc : HW15a-P
ALS Vial : 24 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:37:50 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	168180473	47.343 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	94.69%
Target Compounds			
1) HM Diesel (TPH)	4.080	14515303	4.045 ug/mL
2) H OIL	6.590	3754699	1.961 ug/mL

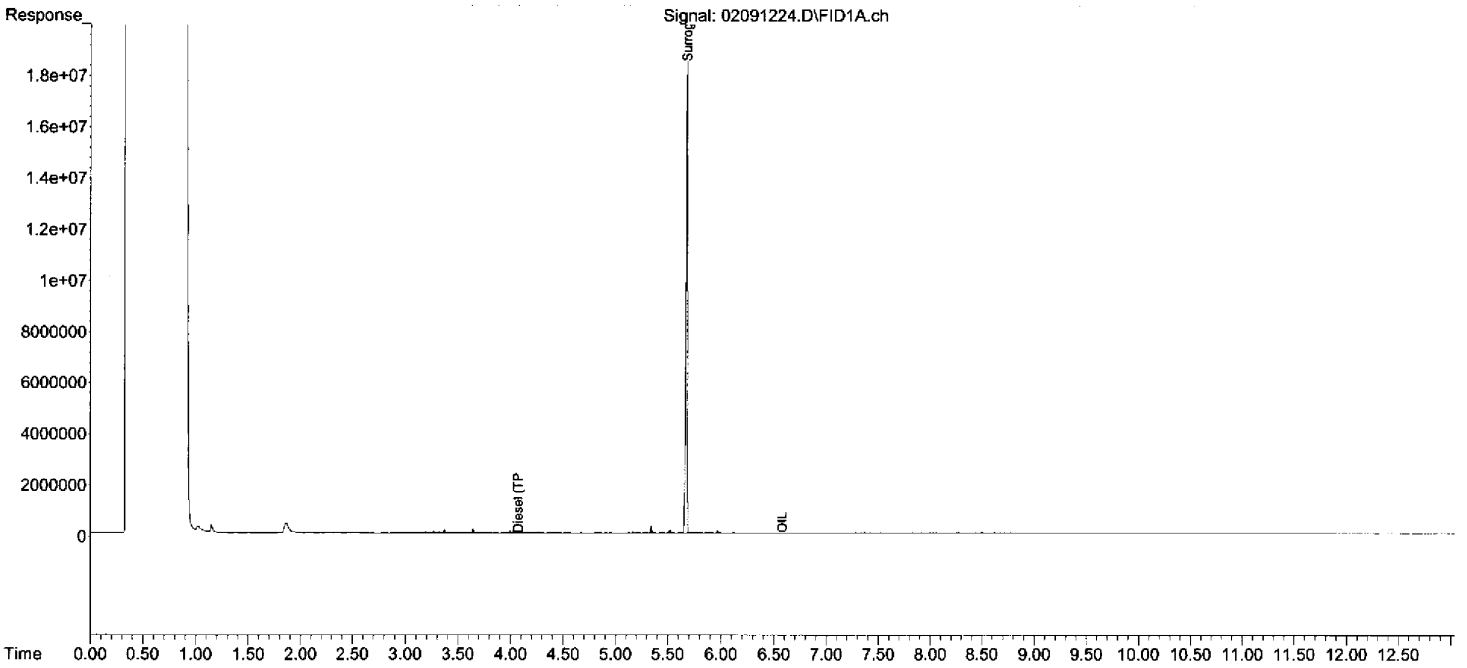
(f)=RT Delta > 1/2 Window (m)=manual int.

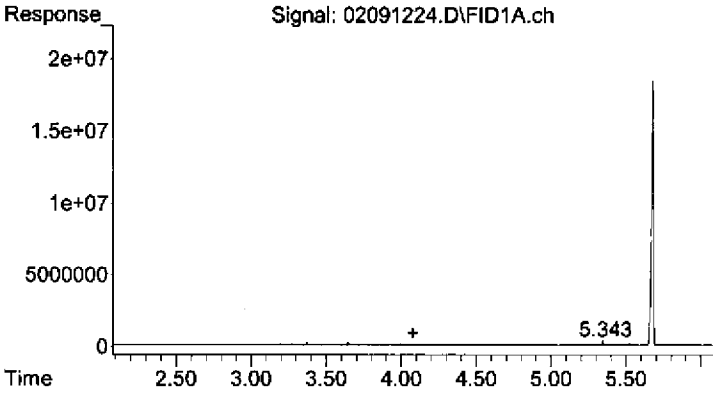
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091224.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 7:26 pm Operator: TD
Sample : 1202020-12 Inst : AG7890_2
Misc : HW15a-P
ALS Vial : 24 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:37:50 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

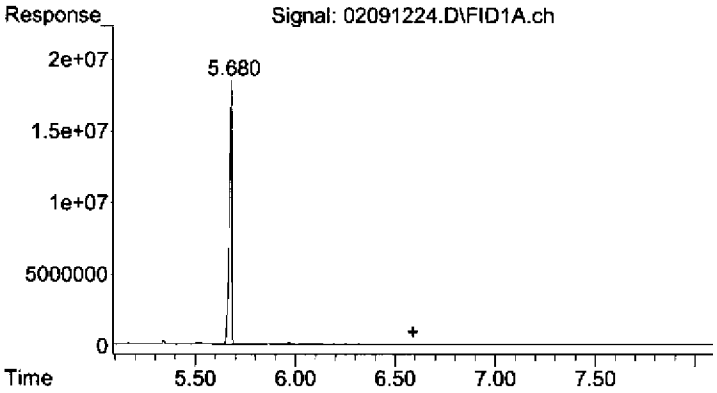
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





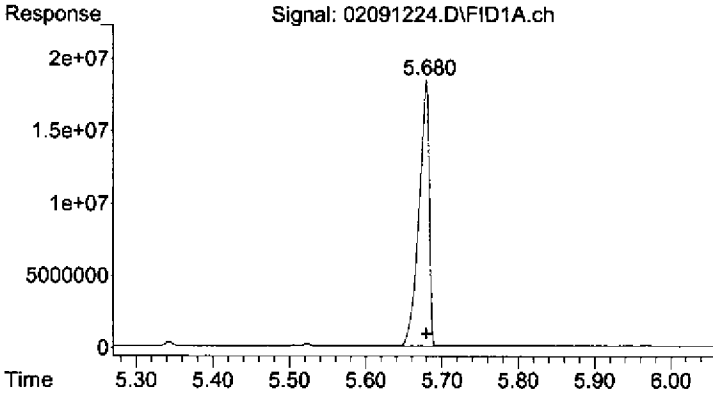
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 14515303
Conc: 4.04 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 3754699
Conc: 1.96 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.001 min
Response: 168180473
Conc: 47.34 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091225.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 7:44 pm Operator: TD
Sample : 2020035-IBL2 Inst : AG7890_2
Misc : 2A11003
ALS Vial : 25 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:42:17 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	167084453	47.034 ug/mL
Spiked Amount 50.000 Range 60 - 127 Recovery = 94.07%			
Target Compounds			
1) HM Diesel (TPH)	4.080	5338709	1.488 ug/mL
2) H OIL	6.590	2734954	1.428 ug/mL

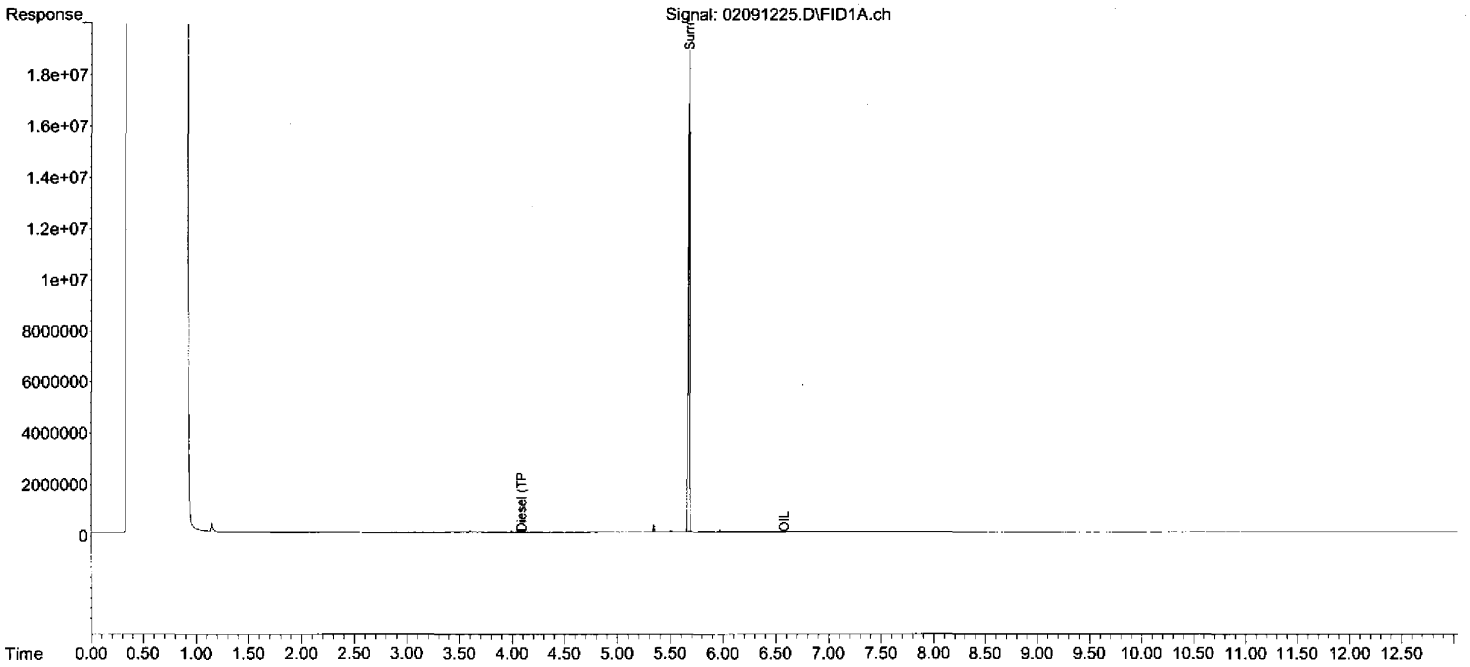
(f)=RT Delta > 1/2 Window (m)=manual int.

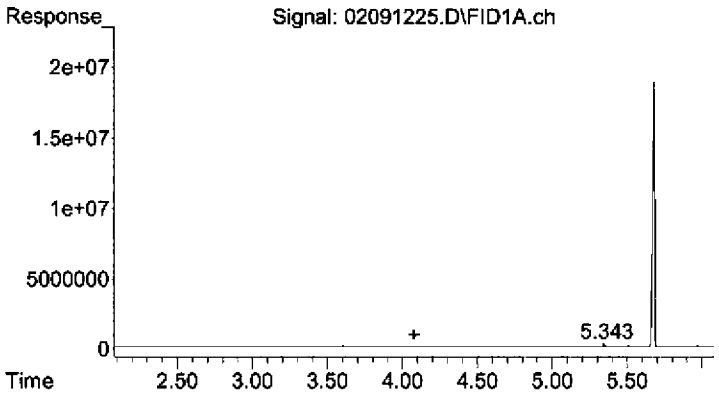
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091225.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 7:44 pm
Operator: TD
Sample : 2020035-IBL2
Inst : AG7890_2
Misc : 2A11003
ALS Vial : 25 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:42:17 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

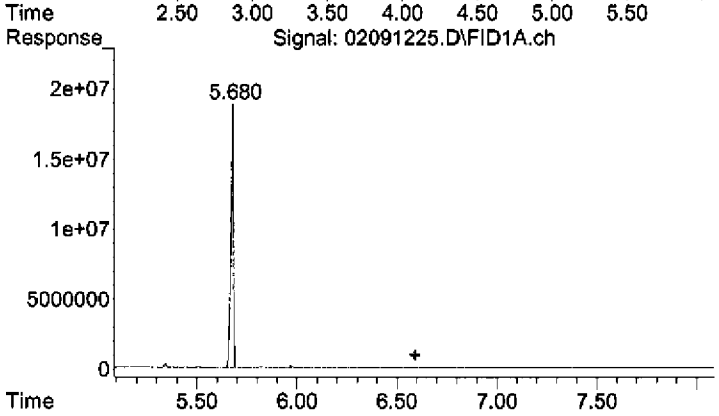
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





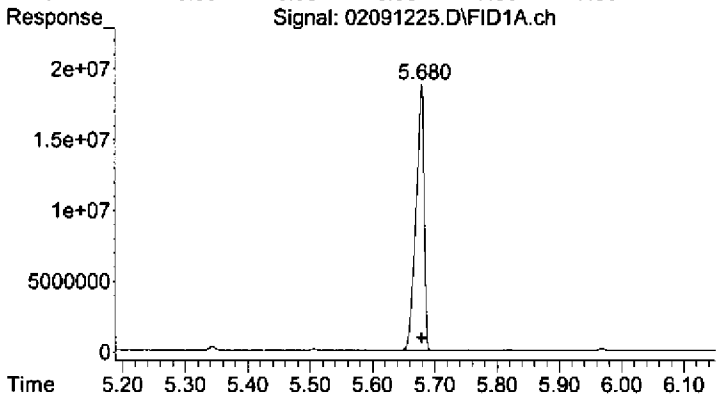
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 5338709
Conc: 1.49 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 2734954
Conc: 1.43 ug/mL



#3 Surrogate

R.T.: 5.679 min
Delta R.T.: -0.001 min
Response: 167084453
Conc: 47.03 ug/mL

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091226.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 8:02 pm Operator: TD
Sample : 2020035-CCV3 Inst : AG7890_2
Misc : 2A11005 DRO CV
ALS Vial : 26 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:42:22 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	3.219 E6	10.3	102	0.00
2 H	OIL	1.915	0.000 E6	100.0#	114	0.00
3 S	Surrogate	3.552	3.367 E6	5.2	100	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\020912DROA\
Data File : 02091226.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 8:02 pm Operator: TD
Sample : 2020035-CCV3 Inst : AG7890_2
Misc : 2A11005 DRO CV
ALS Vial : 26 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:42:22 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	168359306	47.393 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	94.79%
Target Compounds			
1) HM Diesel (TPH)	4.080	1609724943	448.581 ug/mL
2) H OIL	6.590	4404020	2.300 ug/mL

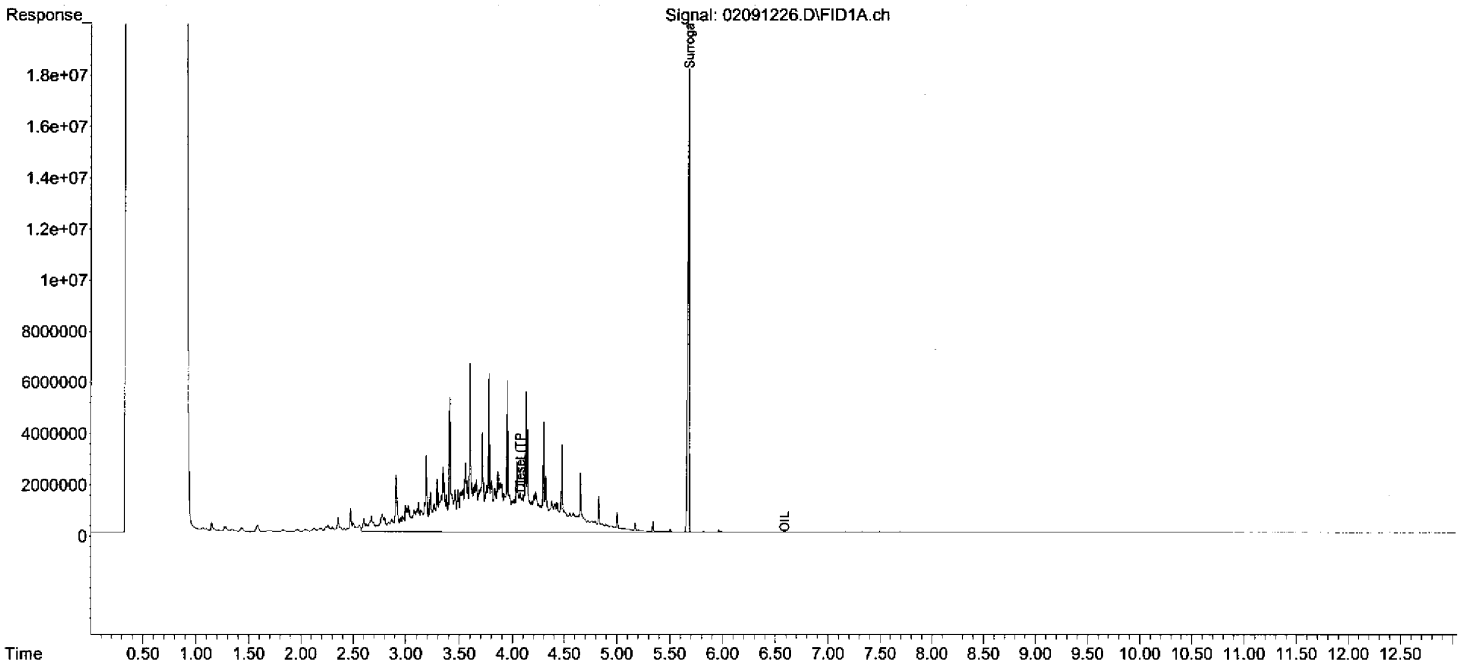
(f)=RT Delta > 1/2 Window (m)=manual int.

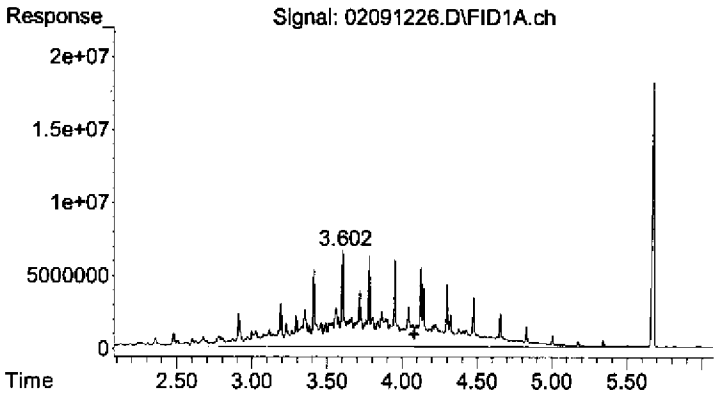
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091226.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 8:02 pm
Operator: TD
Sample : 2020035-CCV3
Inst : AG7890_2
Misc : 2A11005 DRO CV
ALS Vial : 26 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:42:22 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

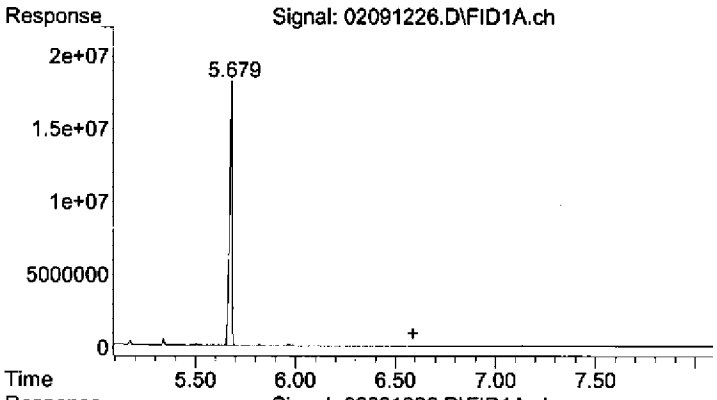
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





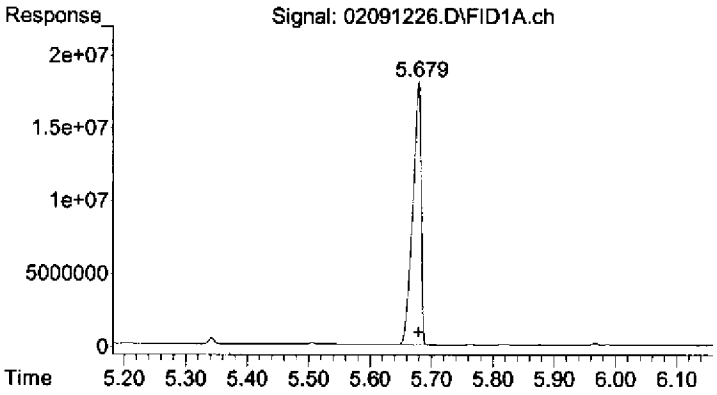
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1609724943
Conc: 448.58 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 4404020
Conc: 2.30 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.002 min
Response: 168359306
Conc: 47.39 ug/mL

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091227.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 8:20 pm Operator: TD
Sample : 2020035-CCV4 Inst : AG7890_2
Misc : 2A11012 OIL CV
ALS Vial : 27 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:27:36 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

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#	92	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\020912DROA\
Data File : 02091227.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 8:20 pm Operator: TD
Sample : 2020035-CCV4 Inst : AG7890_2
Misc : 2A11012 OIL CV
ALS Vial : 27 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:27:36 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	5.685	148114497	41.694 ug/mLm
Spiked Amount 50.000 Range 60 - 127		Recovery =	83.39%
Target Compounds			
1) HM Diesel (TPH)	4.080	958643175	267.144 ug/mL
2) H OIL	6.590	1790206450	934.894 ug/mLm

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

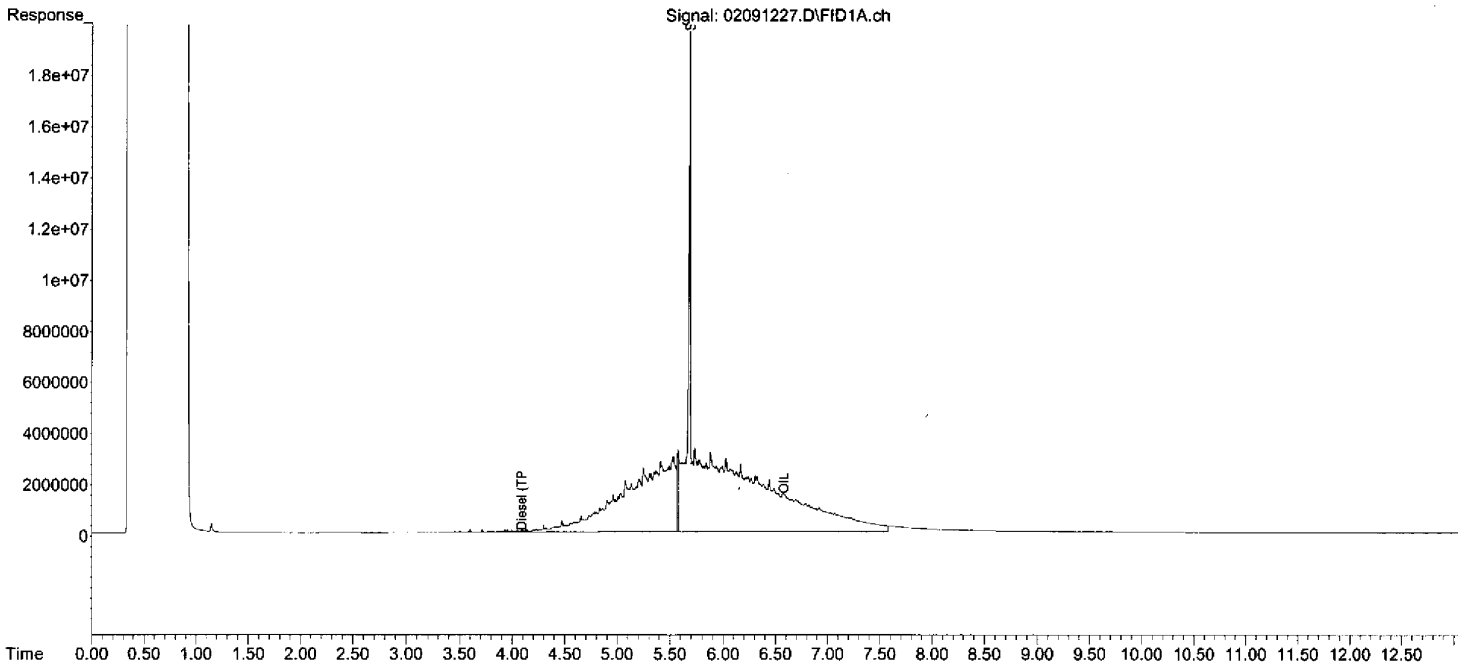
MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 02-10-12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 2-10-12

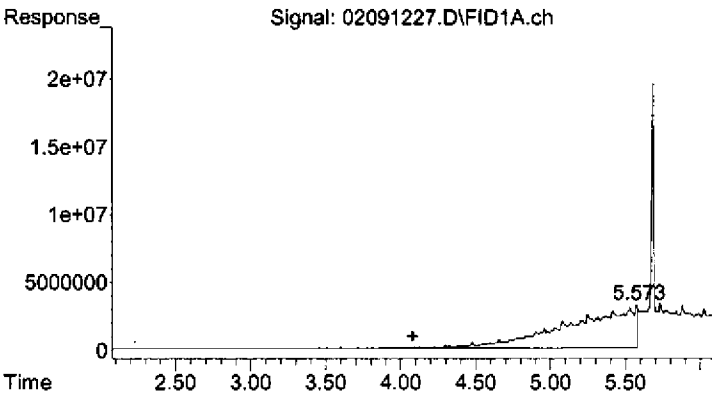
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091227.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 8:20 pm
Operator: TD
Sample : 2020035-CCV4
Inst : AG7890_2
Misc : 2A11012 OIL CV
ALS Vial : 27 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:27:36 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

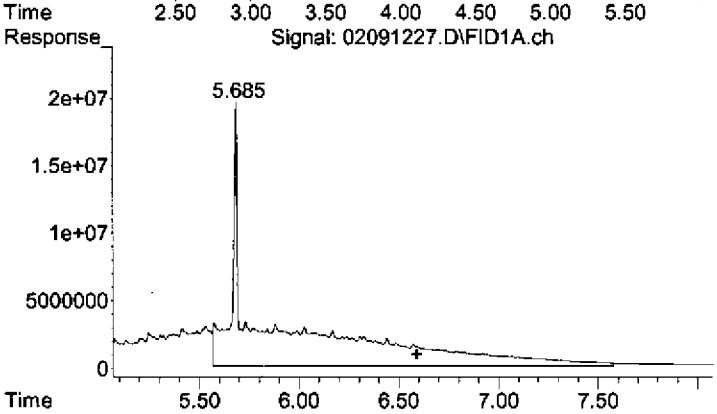
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





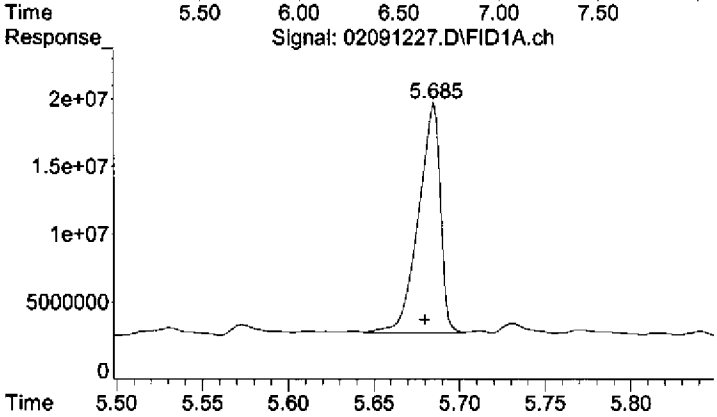
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 958643175
Conc: 267.14 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1790206450
Conc: 934.89 ug/mL m



#3 Surrogate

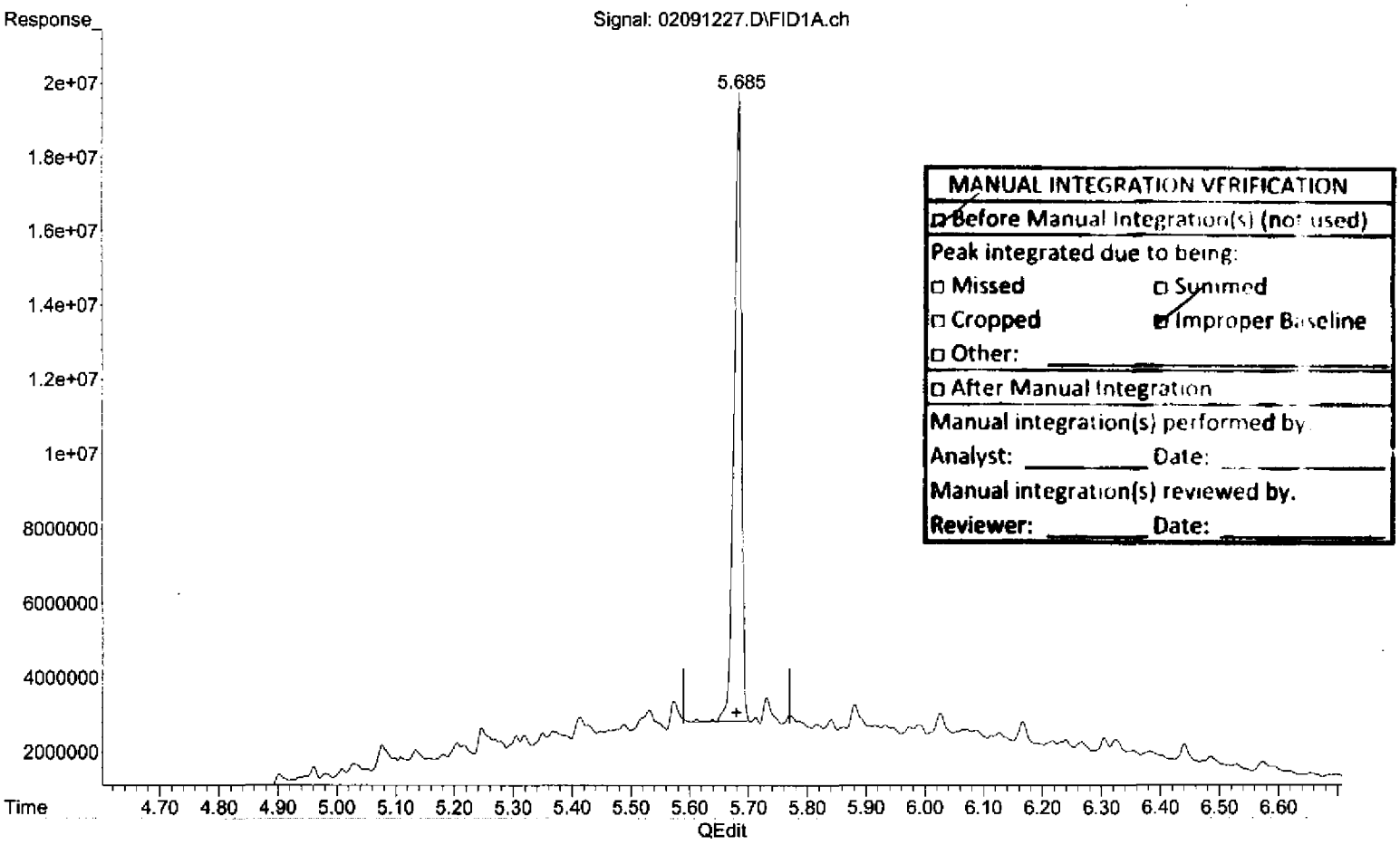
R.T.: 5.685 min
Delta R.T.: 0.005 min
Response: 148114497
Conc: 41.69 ug/mL m

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091227.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 8:20 pm
Operator: TD
Sample : 2020035-CCV4
Inst : AG7890_2
Misc : 2A11012 OIL CV
ALS Vial : 27 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:42:27 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



(3) Surrogate (S)

5.684min 41.534 ug/mL

response 147546152

(+) = Expected Retention Time

013012DROA.M Fri Feb 10 07:25:33 2012

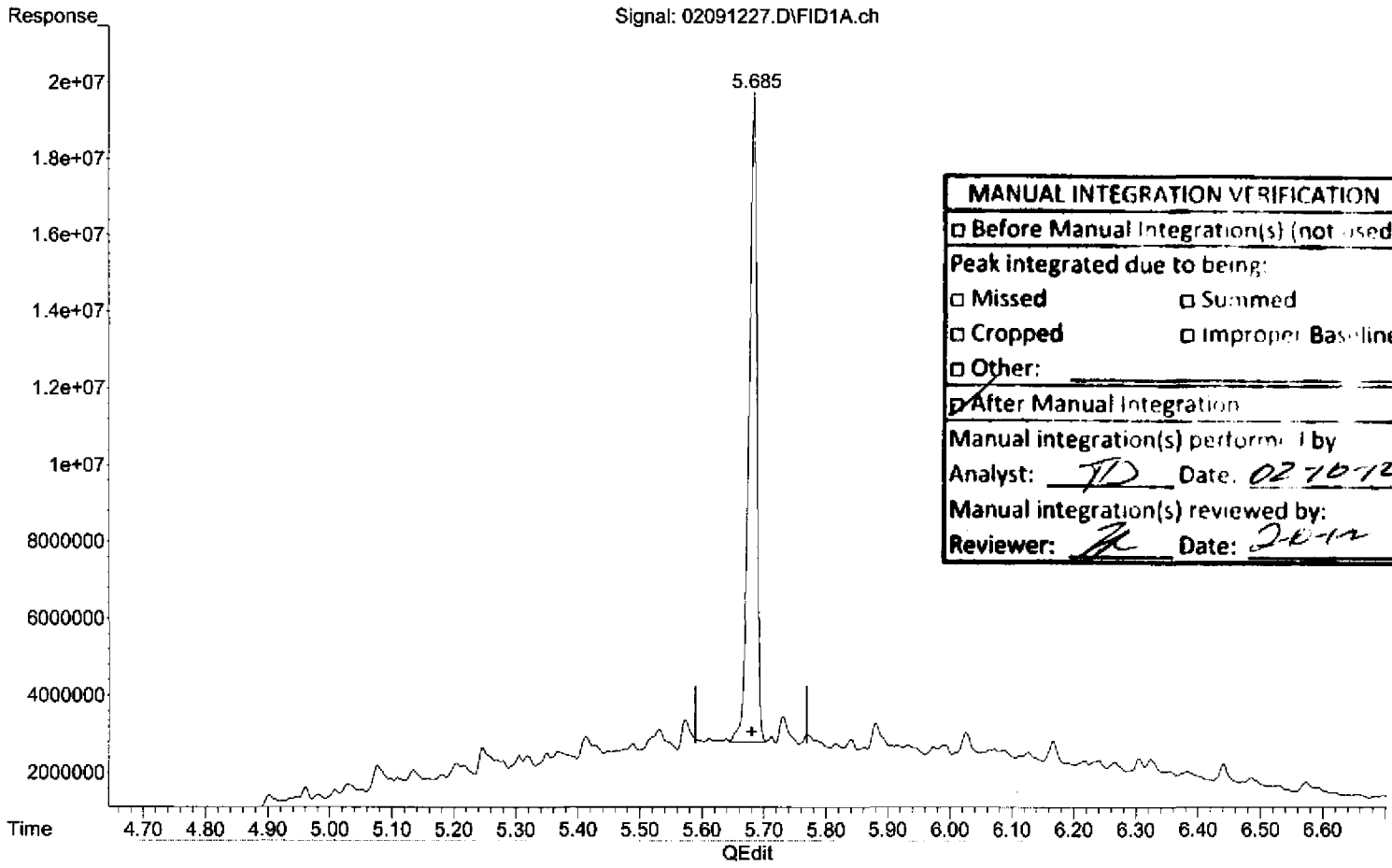
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091227.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 8:20 pm
Sample : 2020035-CCV4
Misc : 2A11012 OIL CV
ALS Vial : 27 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:42:27 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: 02/10/12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 2-10-12

(3) Surrogate (S)

5.685min 41.694 ug/mL m

response 148114497

(+) = Expected Retention Time
013012DROA.M Fri Feb 10 07:25:49 2012

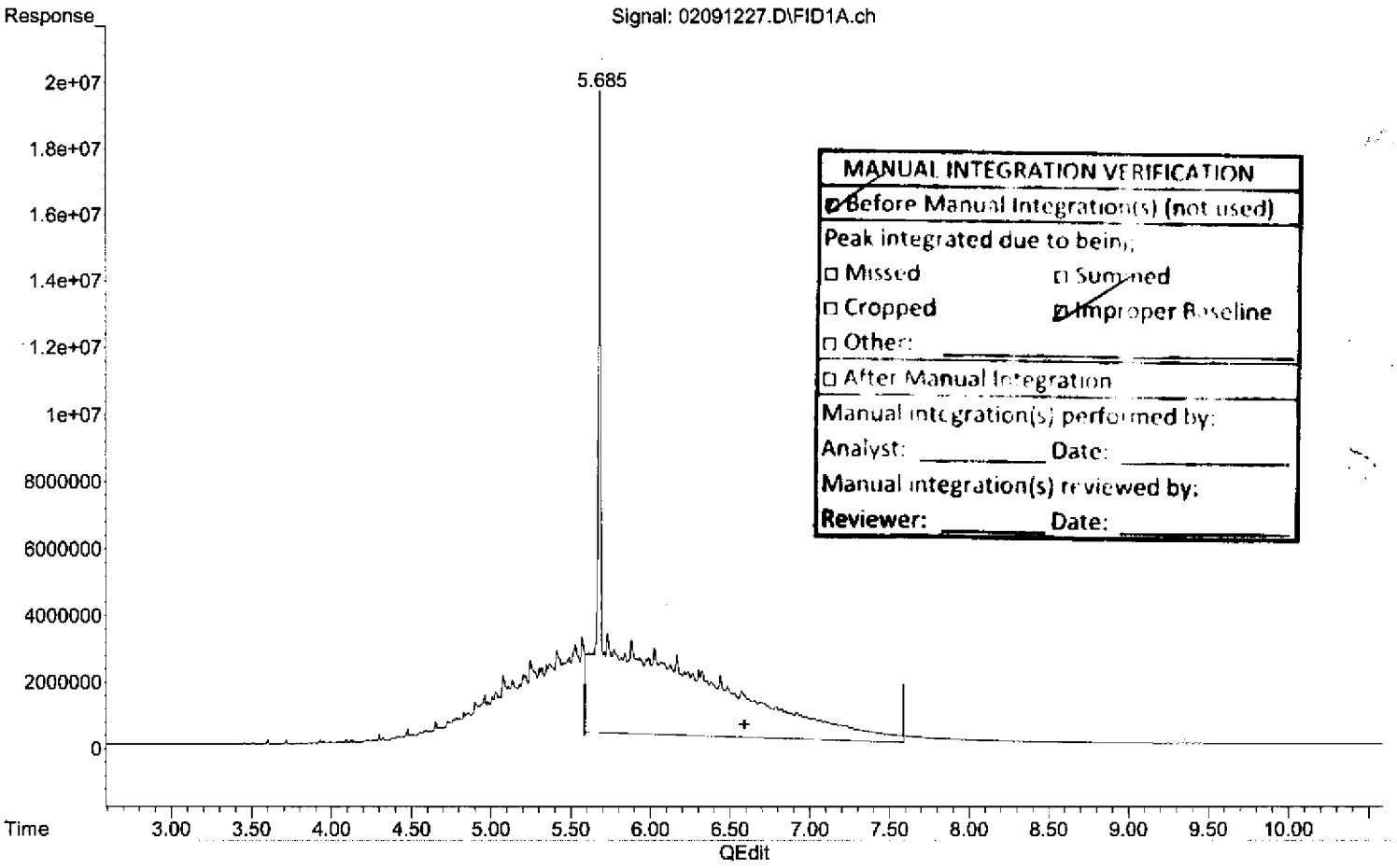
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091227.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 8:20 pm
Sample : 2020035-CCV4
Misc : 2A11012 OIL CV
ALS Vial : 27 Sample Multiplier: 1

Operator: TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:42:27 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 799.871 ug/mL

response 1531653314

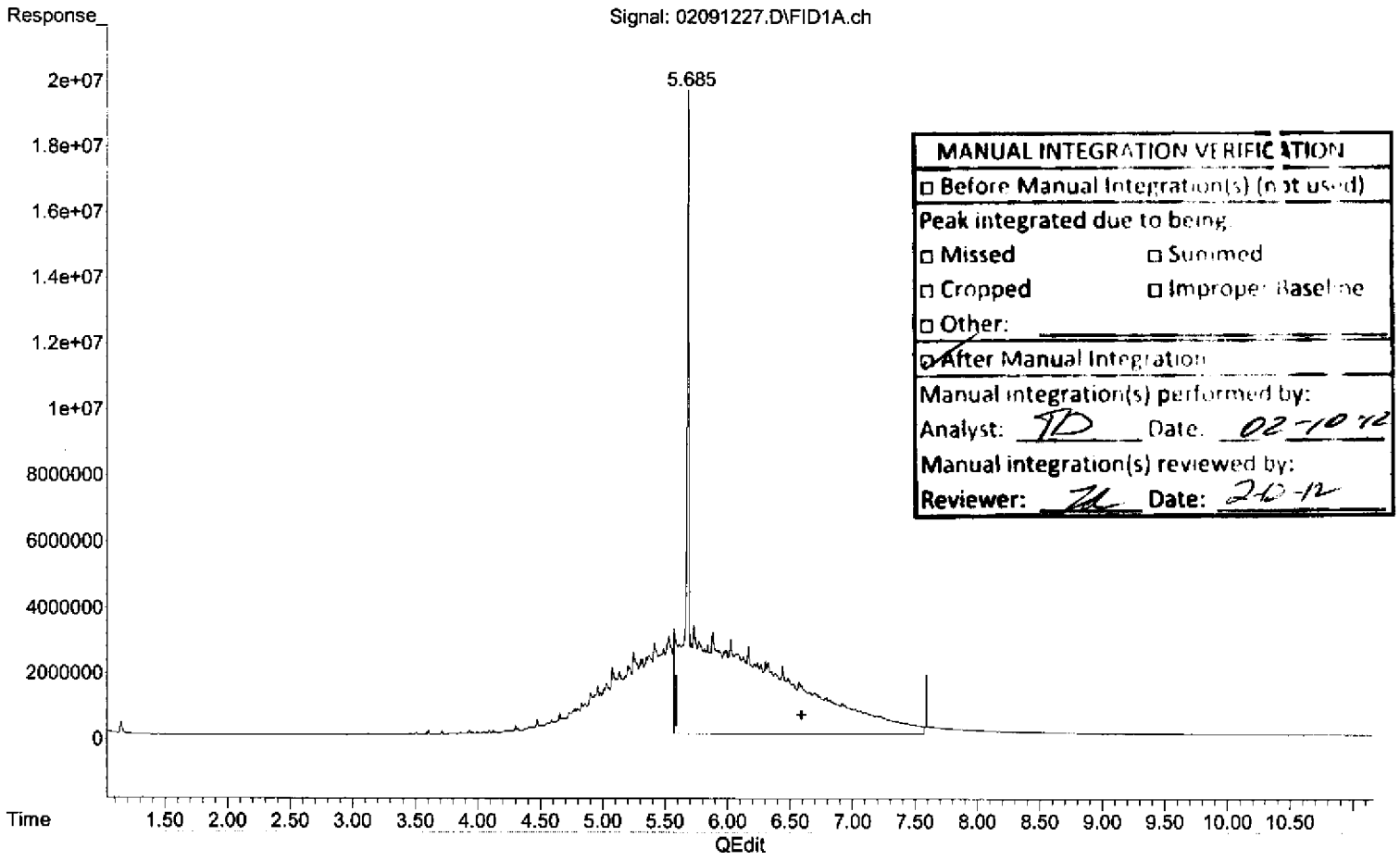
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091227.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 8:20 pm
Operator: TD
Sample : 2020035-CCV4
Inst : AG7890_2
Misc : 2A11012 OIL CV
ALS Vial : 27 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 07:25:58 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



(2) OIL (H)

6.590min 934.894 ug/mL m

response 1790206450

(+) = Expected Retention Time

013012DROA.M Fri Feb 10 07:27:39 2012

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091227.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 8:20 pm Operator: TD
Sample : 2020035-CCV4 Inst : AG7890_2
Misc : 2A11012 OIL CV
ALS Vial : 27 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:42:27 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	147546152	41.534 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	83.07%
Target Compounds			
1) HM Diesel (TPH)	4.080	958643175	267.144 ug/mL
2) H OIL	6.590	1532221660	800.168 ug/mL

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

~~not evaluated~~
TD 02-10-12

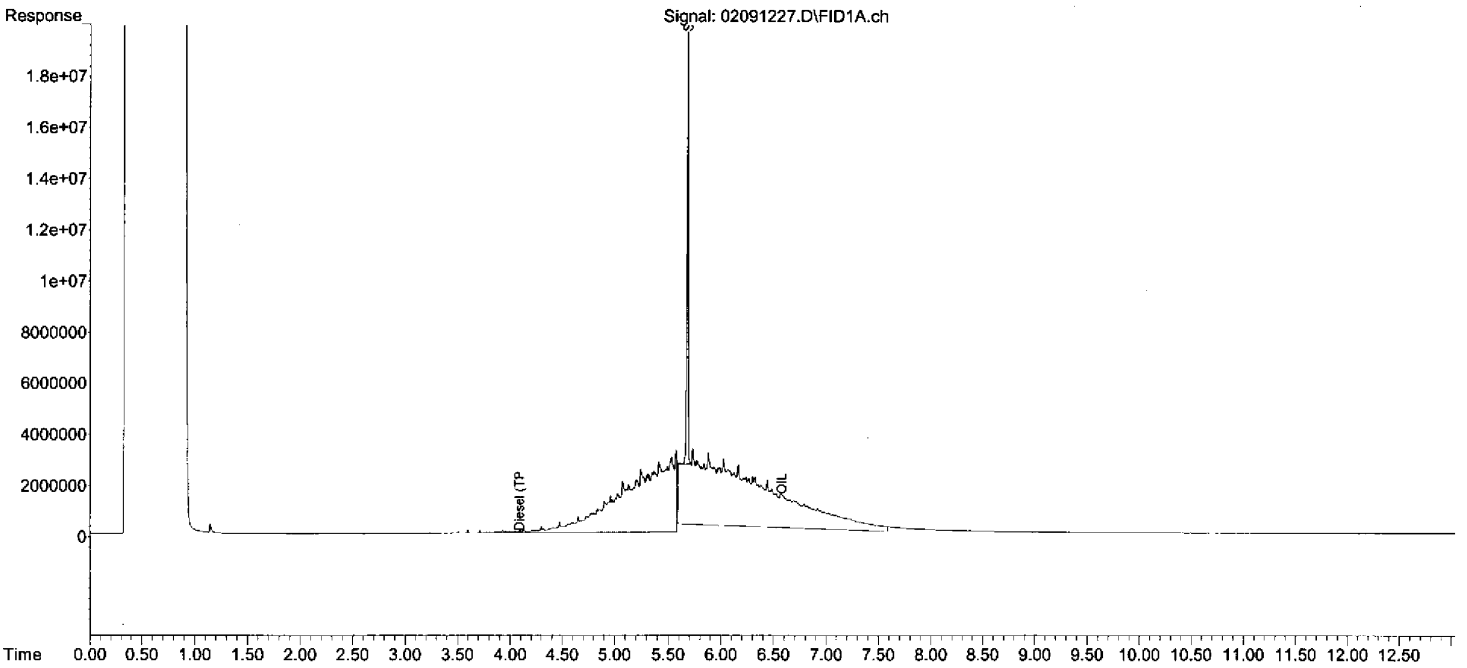
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by
Analyst: _____ Date: _____
Manual integration(s) reviewed by.
Reviewer: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

Quantitation Report (Not Reviewed)

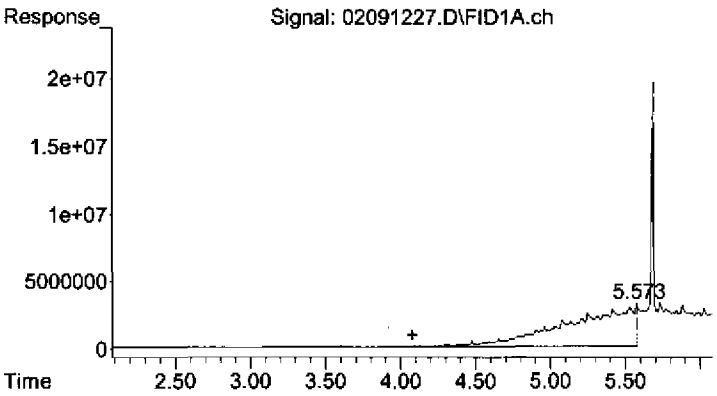
Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091227.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 8:20 pm Operator: TD
Sample : 2020035-CCV4 Inst : AG7890_2
Misc : 2A11012 OIL CV
ALS Vial : 27 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:42:27 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

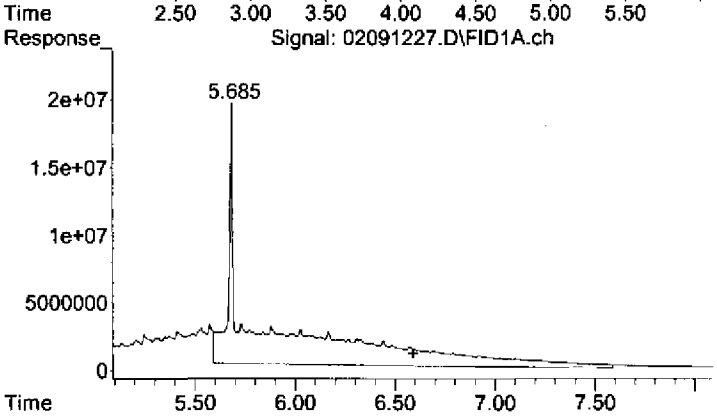


DIM0035998 DIM0036668



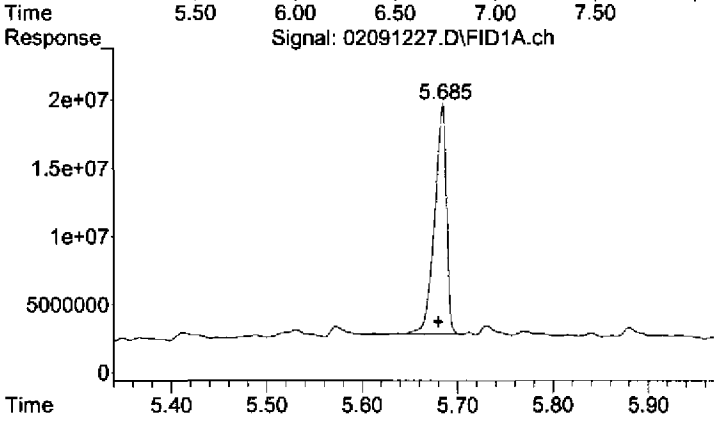
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 958643175
Conc: 267.14 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1532221660
Conc: 800.17 ug/mL



#3 Surrogate

R.T.: 5.684 min
Delta R.T.: 0.004 min
Response: 147546152
Conc: 41.53 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091228.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 8:38 pm Operator: TD
Sample : 2020035-CCV5 Inst : AG7890_2
Misc : 2A11005 DRO CV
ALS Vial : 28 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:42:31 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	5.679	193195627	54.384 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery = 108.77%	
Target Compounds			
1) HM Diesel (TPH)	4.080	1814653776	505.688 ug/mL
2) H OIL	6.590	6629831	3.462 ug/mL

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

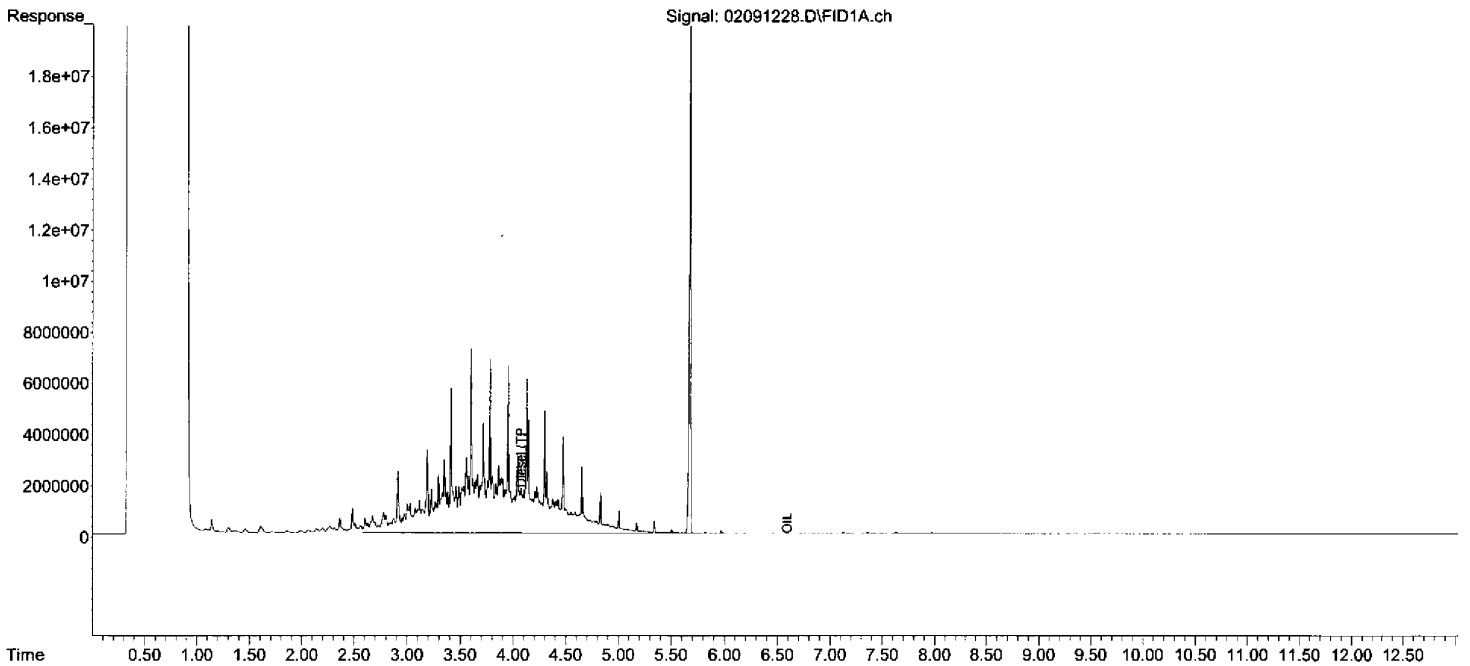
not evaluated

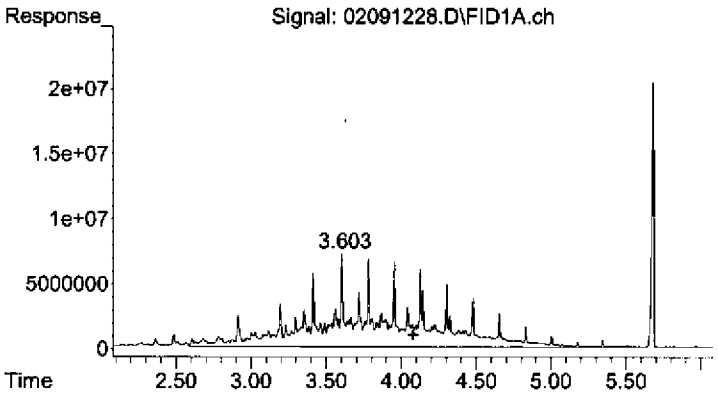
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091228.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 8:38 pm
Operator: TD
Sample : 2020035-CCV5
Inst : AG7890_2
Misc : 2A11005 DRO CV
ALS Vial : 28 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:42:31 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

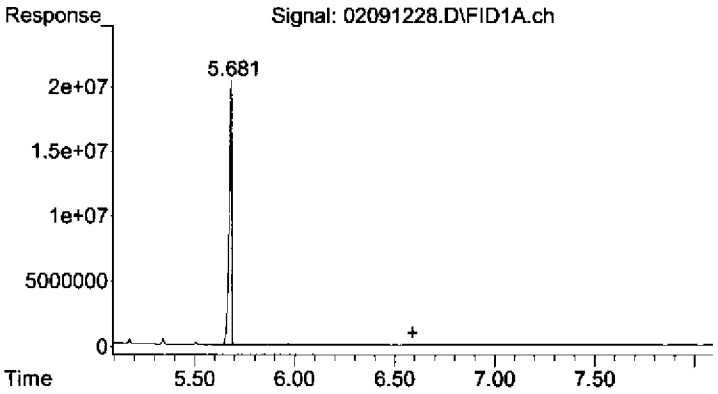
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





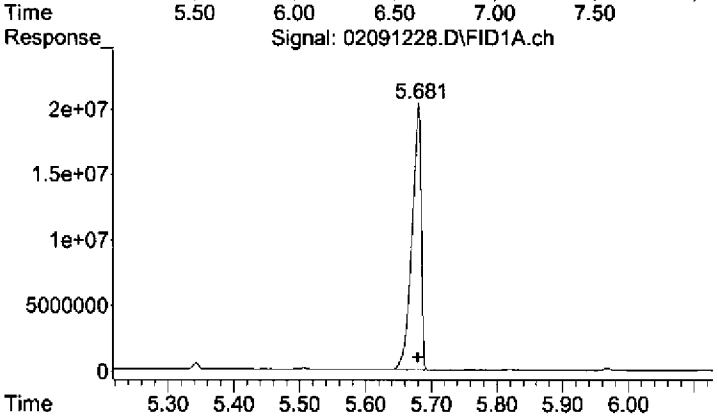
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1814653776
Conc: 505.69 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 6629831
Conc: 3.46 ug/mL



#3 Surrogate

R.T.: 5.679 min
Delta R.T.: 0.000 min
Response: 193195627
Conc: 54.38 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091229.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 8:56 pm Operator: TD
Sample : 2020035-CCV6 Inst : AG7890_2
Misc : 2A11012 OIL CV
ALS Vial : 29 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:42:36 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	5.684	145263939	40.892 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	81.78%
Target Compounds			
1) HM Diesel (TPH)	4.080	940065418	261.967 ug/mL
2) H OIL	6.590	1493398059	779.893 ug/mL

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

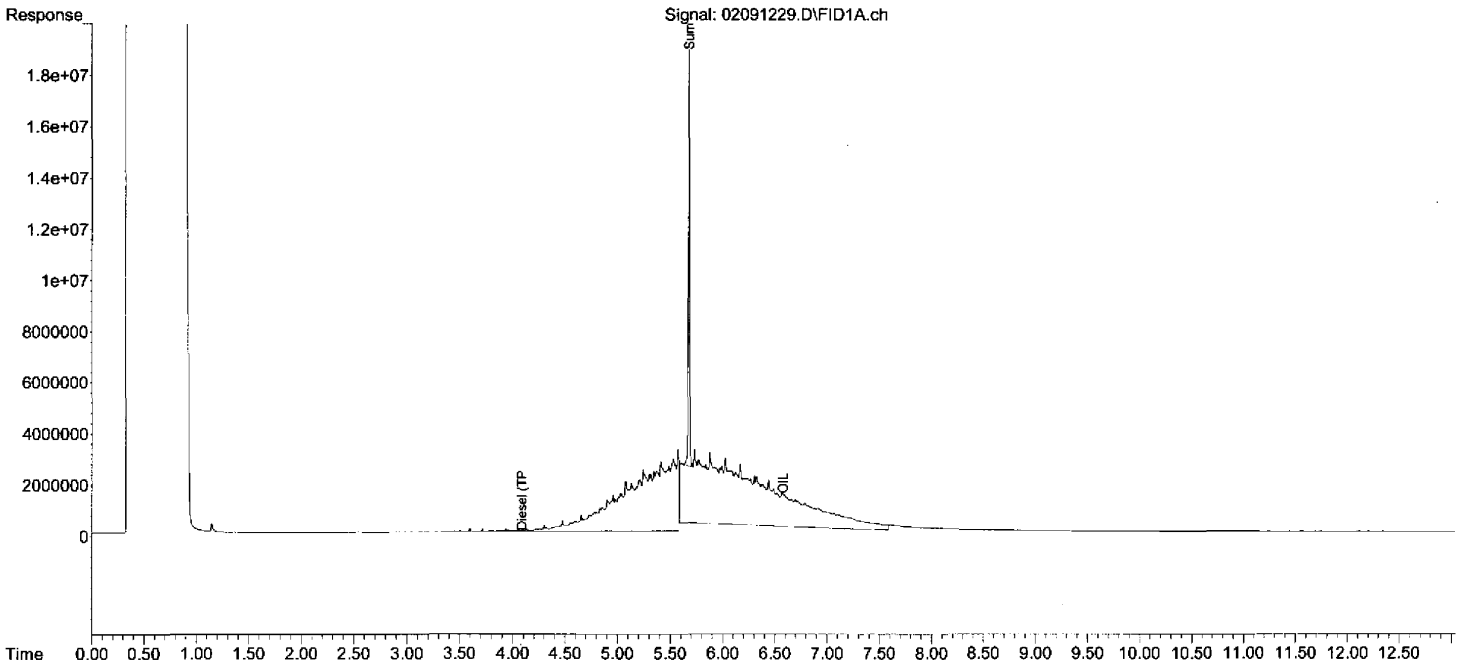
not validated

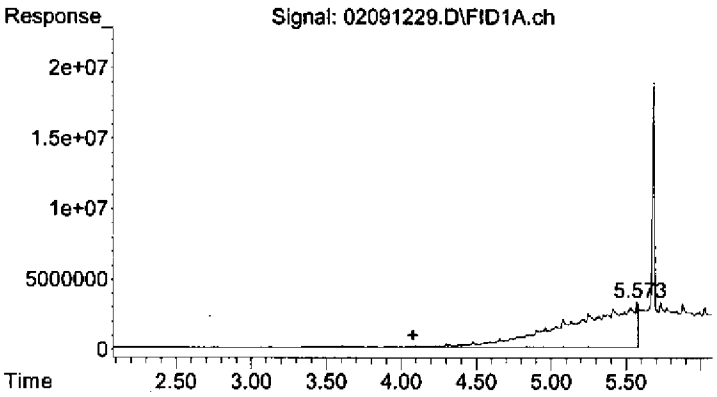
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\020912DROA\
Data File : 02091229.D
Signal(s) : FID1A.ch
Acq On : 9 Feb 2012 8:56 pm
Operator: TD
Sample : 2020035-CCV6
Inst : AG7890_2
Misc : 2A11012 OIL CV
ALS Vial : 29 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 10 06:42:36 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

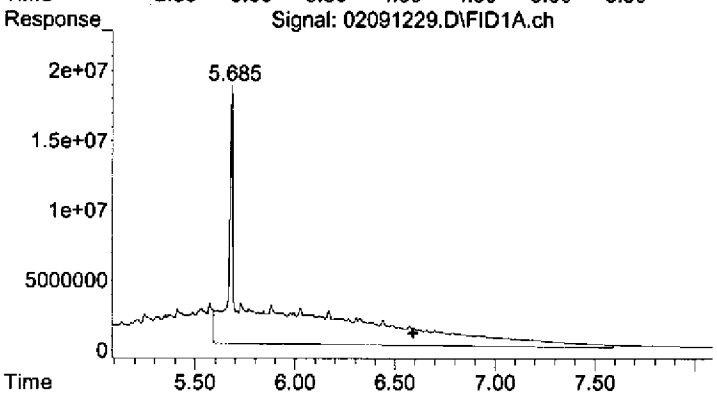
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





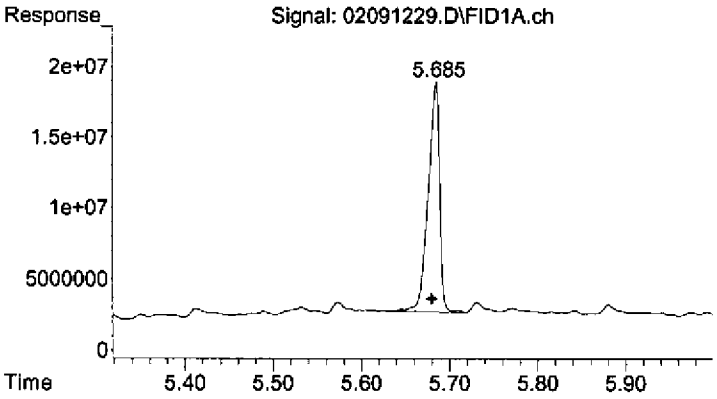
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 940065418
Conc: 261.97 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1493398059
Conc: 779.89 ug/mL



#3 Surrogate

R.T.: 5.684 min
Delta R.T.: 0.004 min
Response: 145263939
Conc: 40.89 ug/mL

SDG: 120394
Instrument: AG 7890-2
Analysis Date: 02-10-12

SAMPLE DATA

DIM0036676

DIM0035998

Injection Log

Operator: SUL/TD
Directory: C:\msdchem\1\2012\DATA\021012A\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	02101201.D	1	2020040-IBL1	2A11003 IB	10 Feb 2012 2:26 pm
2	02101202.D	1	2020040-LCV1	2A11004 DRO-QLS	10 Feb 2012 2:43 pm
3	02101203.D	1	2020040-LCV2	2A11011 OIL-A	10 Feb 2012 3:01 pm
4	02101204.D	1	2020040-CCV1	2A11005 DRO-CV	10 Feb 2012 3:19 pm
5	02101205.D	1	2020040-CCV2	2A11012 OIL-CV	10 Feb 2012 3:37 pm
6	02101206.D	1	B2B0043-BLK1	RB	10 Feb 2012 3:55 pm
7	02101207.D	1	B2B0043-BS1	BS	10 Feb 2012 4:13 pm
8	02101208.D	1	1202023-01	FB12	10 Feb 2012 4:30 pm
9	02101209.D	1	1202023-02	HW51	10 Feb 2012 4:48 pm
10	02101210.D	1	1202023-03	HW51-P	10 Feb 2012 5:06 pm
11	02101211.D	1	1202023-05	HW47	10 Feb 2012 5:24 pm
12	02101212.D	1	1202023-06	HW47-P	10 Feb 2012 5:42 pm
13	02101213.D	1	1202023-08	FB13	10 Feb 2012 6:00 pm
14	02101214.D	1	1202023-09	HW38	10 Feb 2012 6:18 pm
15	02101215.D	1	1202023-10	HW38-P	10 Feb 2012 6:36 pm
16	02101216.D	1	2020040-IBL2	2A11003 IB	10 Feb 2012 6:53 pm
17	02101217.D	1	2020040-CCV3	2A11005 DRO-CV	10 Feb 2012 7:11 pm
18	02101218.D	1	2020040-CCV4	2A11012 OIL-CV	10 Feb 2012 7:29 pm
19	02101219.D	1	2020040-CCV5	2A11005 DRO-CV	10 Feb 2012 7:47 pm
20	02101220.D	1	2020040-CCV6	2A11012 OIL-CV	10 Feb 2012 8:05 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

Daily Calibration File : C:\msdchem\1\2012\DATA\021012A\02101204.D
Time Acquired : 10 Feb 2012 3:19 pm

File	Sample	Surrogate Recovery %	Internal Standard Responses
02101206.D	B2B0043-BL	88	
02101207.D	B2B0043-BS	91	
02101208.D	1202023-01	92	
02101209.D	1202023-02	86	
02101210.D	1202023-03	88	
02101211.D	1202023-05	84	
02101212.D	1202023-06	92	
02101213.D	1202023-08	86	
02101214.D	1202023-09	96	
02101215.D	1202023-10	88	

(fails) - fails 12hr time check * - fails criteria

Created: Mon Feb 13 08:27:38 2012 AG7890_2

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101201.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 2:26 pm Operator: SUL/TD
Sample : 2020040-IBL1 Inst : AG7890_2
Misc : 2A11003 IB
ALS Vial : 1 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:00:40 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	5.722	188017791	52.927 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery = 105.85%	
Target Compounds			
1) HM Diesel (TPH)	4.080	11850328	3.302 ug/mL
2) H OIL	6.590	3556431	1.857 ug/mL

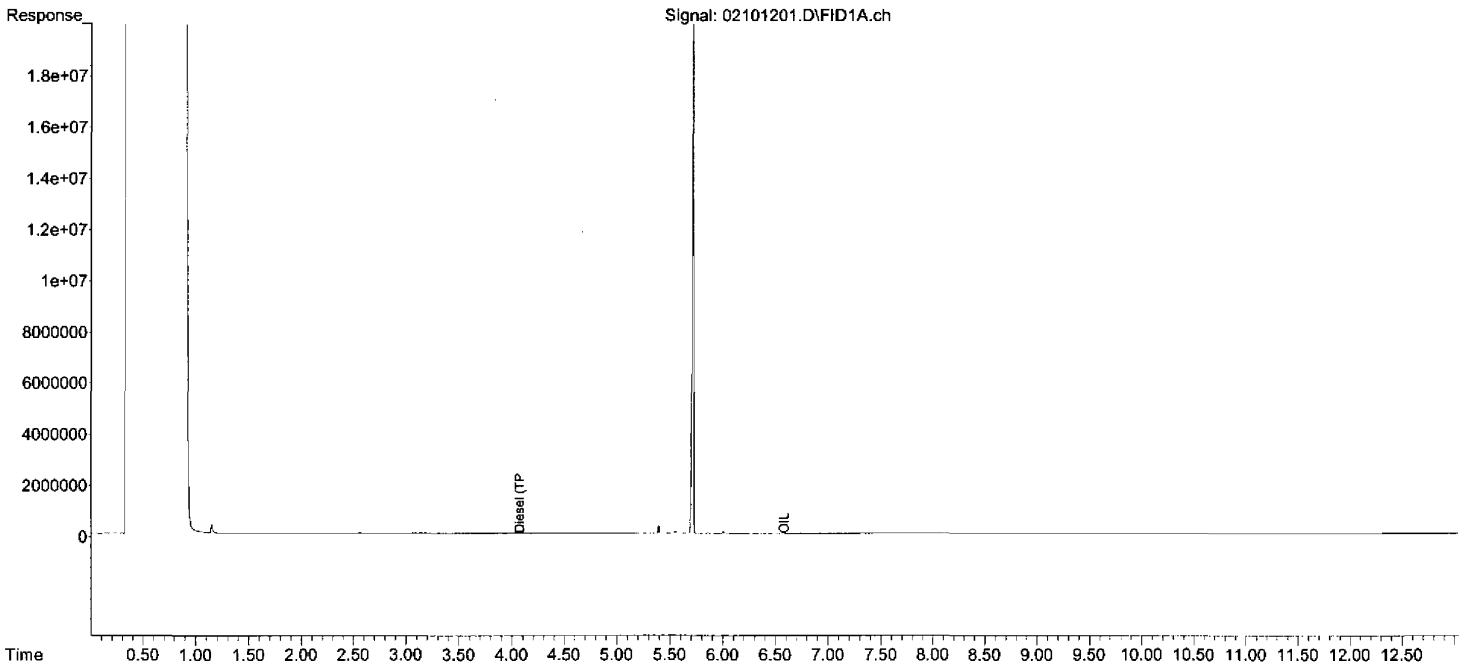
(f)=RT Delta > 1/2 Window (m)=manual int.

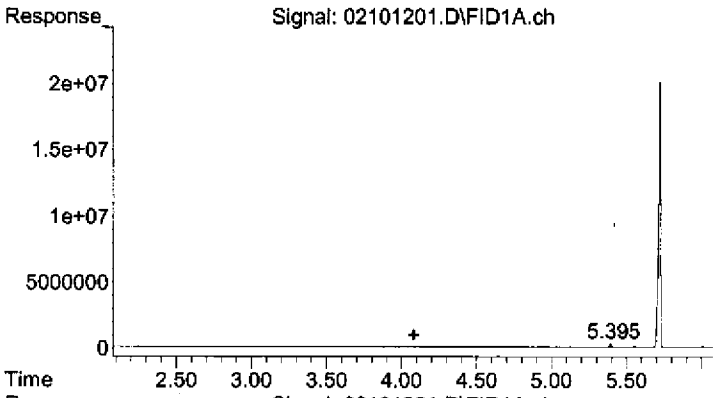
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101201.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 2:26 pm
Operator: SUL/TD
Sample : 2020040-IBL1
Inst : AG7890_2
Misc : 2A11003 IB
ALS Vial : 1 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:00:40 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

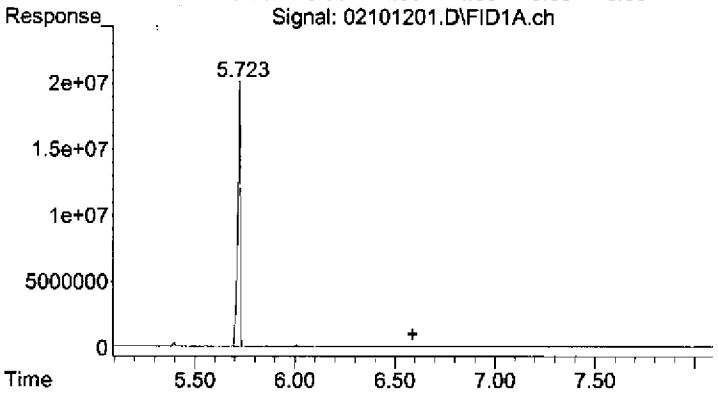
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





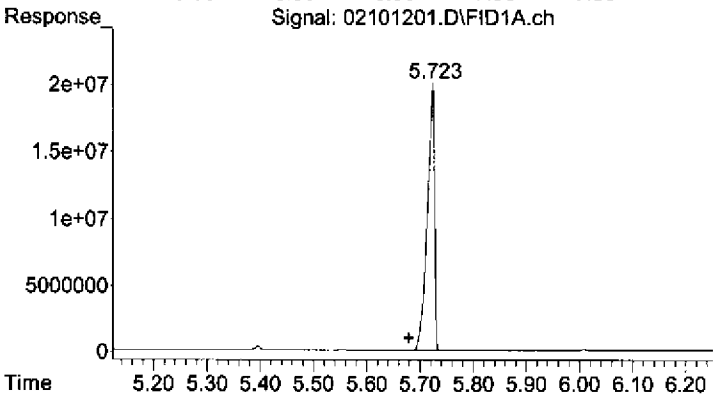
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 11850328
Conc: 3.30 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 3556431
Conc: 1.86 ug/mL



#3 Surrogate

R.T.: 5.722 min
Delta R.T.: 0.042 min
Response: 188017791
Conc: 52.93 ug/mL

C:\msdchem\1\2012\DATA\021012A\02101202.D

Instrument Name: AG7890_2
Date Acquired: 2/10/2012 14:43
Acq. Method File: 012712DROA.M
Sample Name: 2020040-LCV1
Misc Info: 2A11004 DRO-QLS
Operator: SUL/TD

Name	Concentration ng/mL	Calculated	% Recovery	QC Limits	STATUS
Diesel (TPH)	50	49.09	98.17%	60 - 140	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101202.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 2:43 pm Operator: SUL/TD
Sample : 2020040-LCV1 Inst : AG7890_2
Misc : 2A11004 DRO-QLS
ALS Vial : 2 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:22 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	5.670	31767502	8.943 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	17.89%#
Target Compounds			
1) HM Diesel (TPH)	4.080	176143888	49.086 ug/mL
2) H OIL	6.590	1884280	0.984 ug/mL

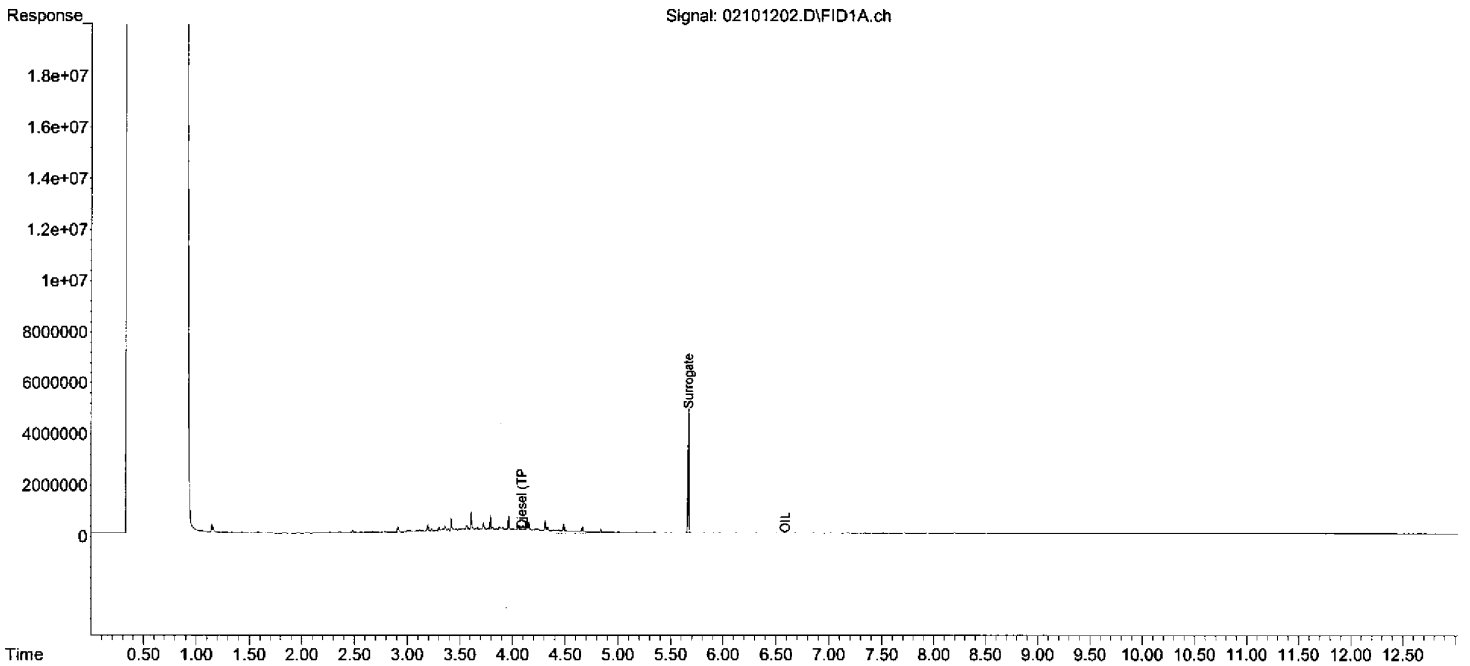
(f)=RT Delta > 1/2 Window (m)=manual int.

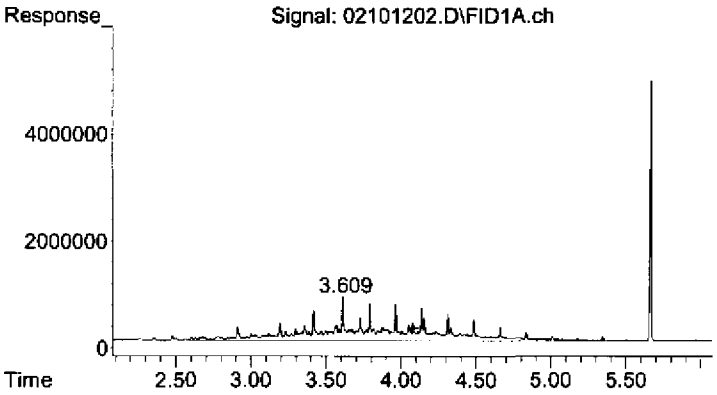
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101202.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 2:43 pm
Operator: SUL/TD
Sample : 2020040-LCV1
Inst : AG7890_2
Misc : 2A11004 DRO-QLS
ALS Vial : 2 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:22 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

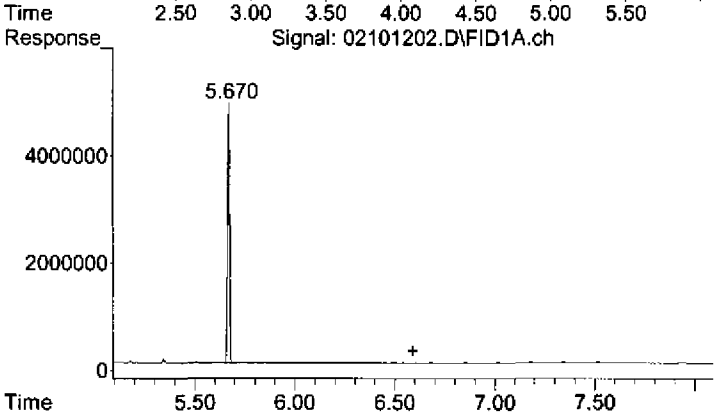
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





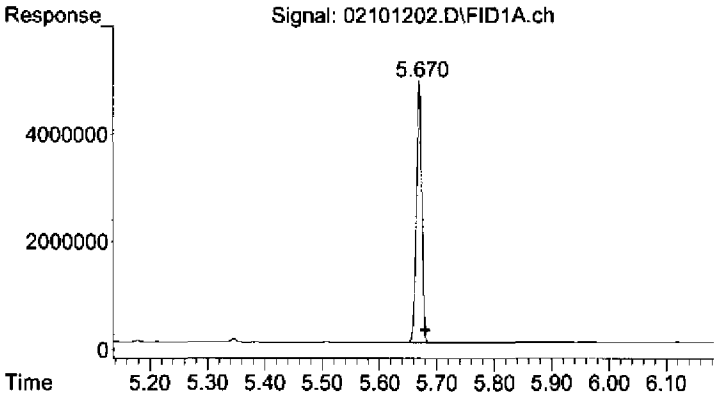
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 176143888
Conc: 49.09 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1884280
Conc: 0.98 ug/mL



#3 Surrogate

R.T.: 5.670 min
Delta R.T.: -0.010 min
Response: 31767502
Conc: 8.94 ug/mL

Instrument Name: AG7890_2
Date Acquired: 2/10/2012 15:01
Acq. Method File: 012712DROA.M
Sample Name: 2020040-LCV2
Misc Info: 2A11011 OIL-A
Operator: SUL/TD

Name	Concentration ng/mL		% Recovery	QC Limits	STATUS
		Calculated			
OIL	200	192.74	96.37%	60 - 140	pass

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101203.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:01 pm Operator: SUL/TD
Sample : 2020040-LCV2 Inst : AG7890_2
Misc : 2A11011 OIL-A
ALS Vial : 3 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:11:37 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	152616686	42.961 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	85.92%
Target Compounds			
1) HM Diesel (TPH)	4.080	200455653	55.861 ug/mL
2) H OIL	6.590	369079072	192.743 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:

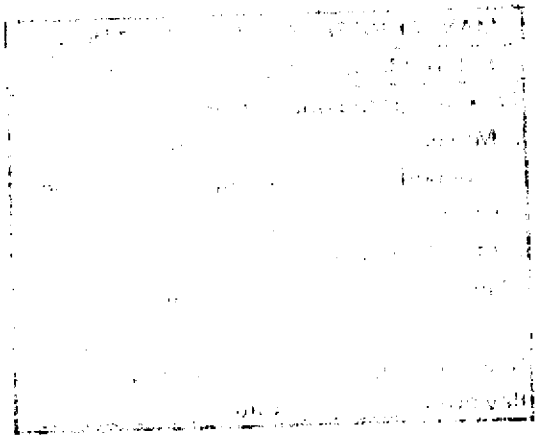
☑ After Manual Integration

Manual integration(s) performed by:

Analyst: TD Date: 02-13-12

Manual integration(s) reviewed by:

Reviewer: TL Date: 2-13-12

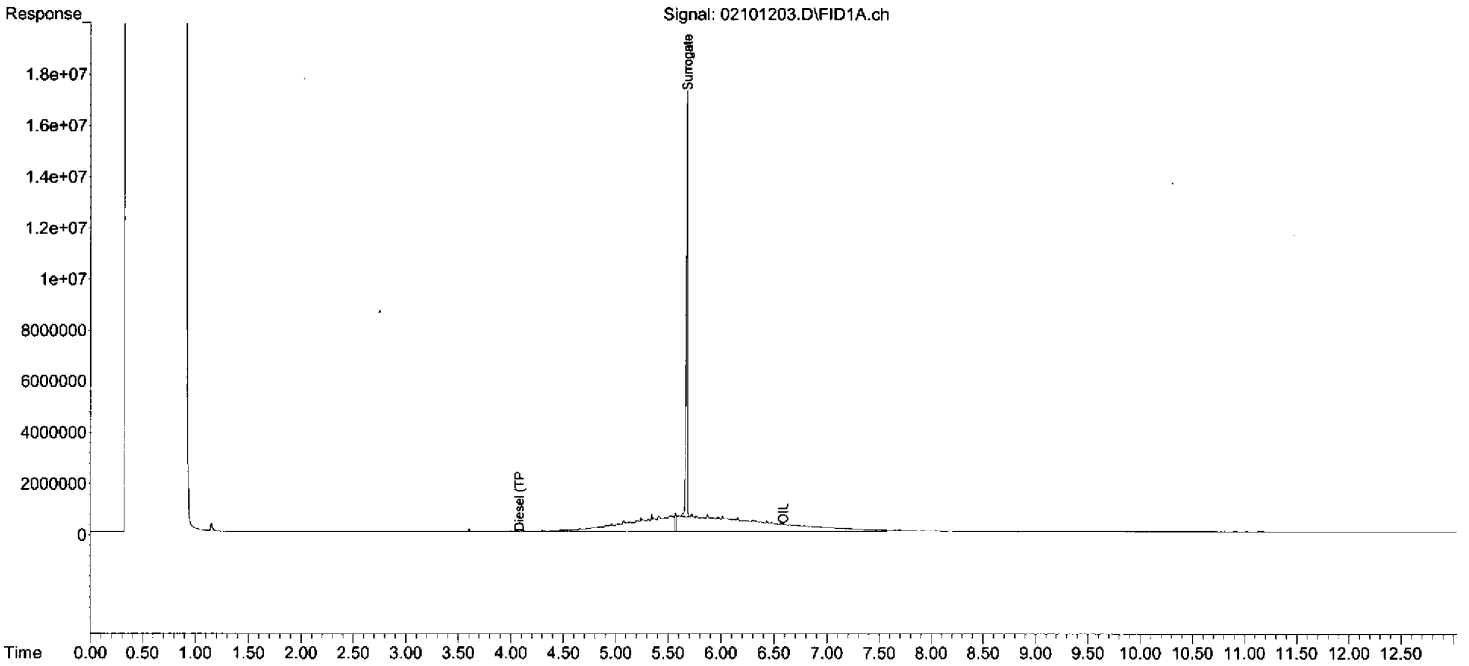


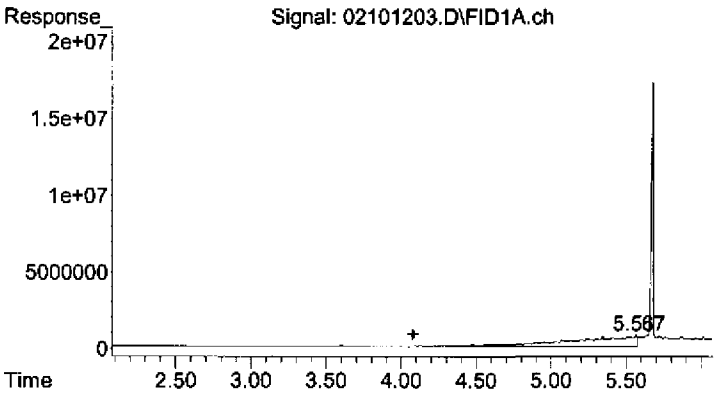
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101203.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:01 pm
Operator: SUL/TD
Sample : 2020040-LCV2
Inst : AG7890_2
Misc : 2A11011 OIL-A
ALS Vial : 3 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:11:37 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

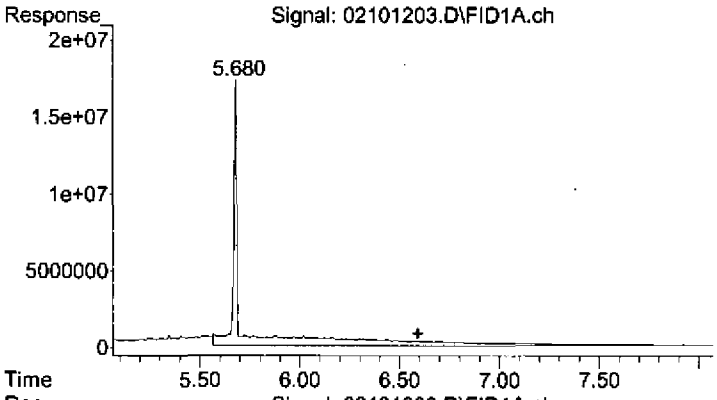
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





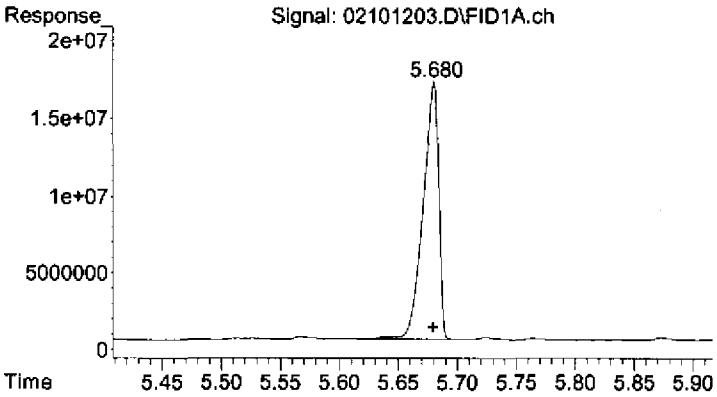
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 200455653
Conc: 55.86 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 369079072
Conc: 192.74 ug/mL m



#3 Surrogate

R.T.: 5.679 min
Delta R.T.: 0.000 min
Response: 152616686
Conc: 42.96 ug/mL

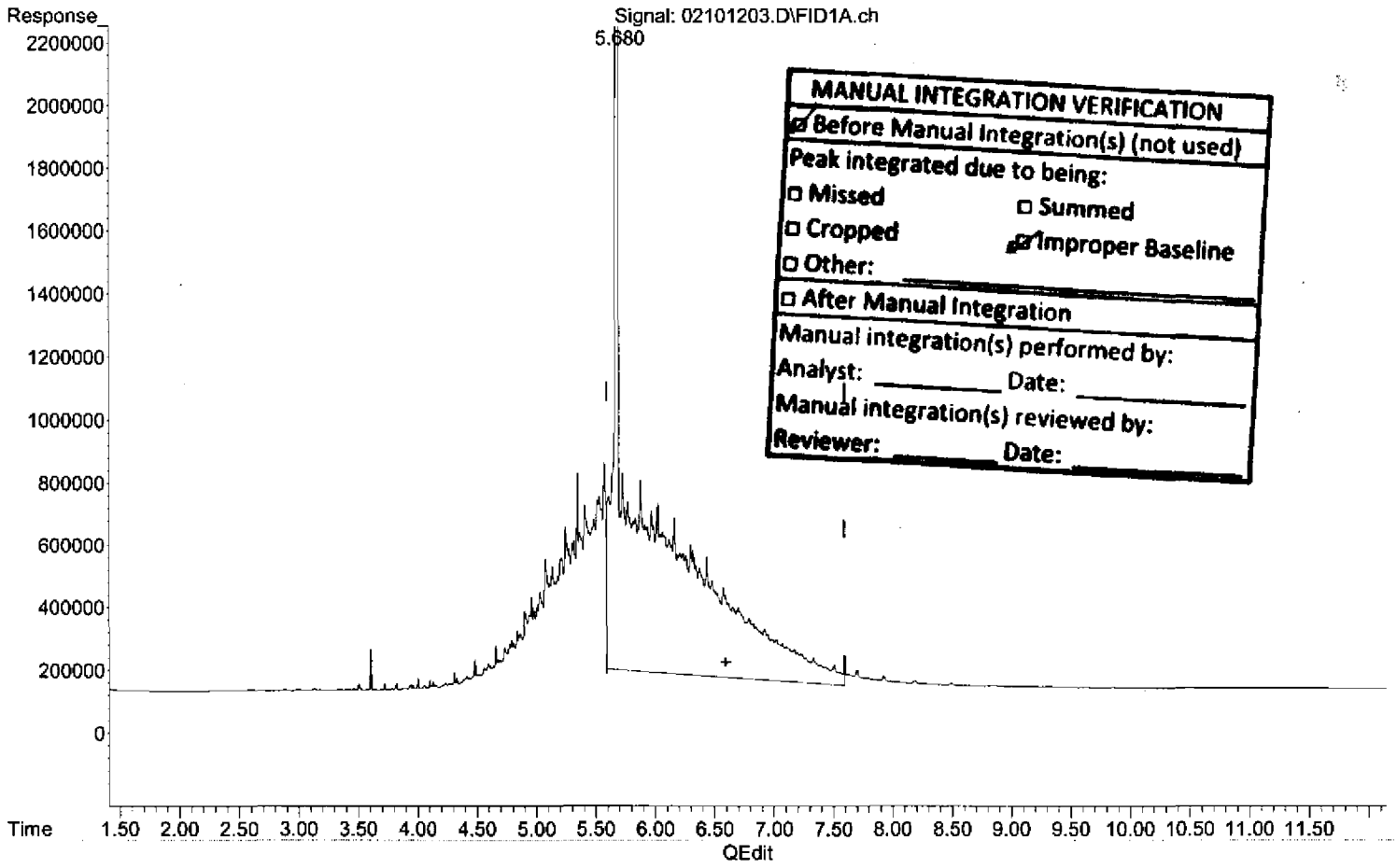
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101203.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:01 pm
Sample : 2020040-LCV2
Misc : 2A11011 OIL-A
ALS Vial : 3 Sample Multiplier: 1

Operator: SUL/TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:26 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



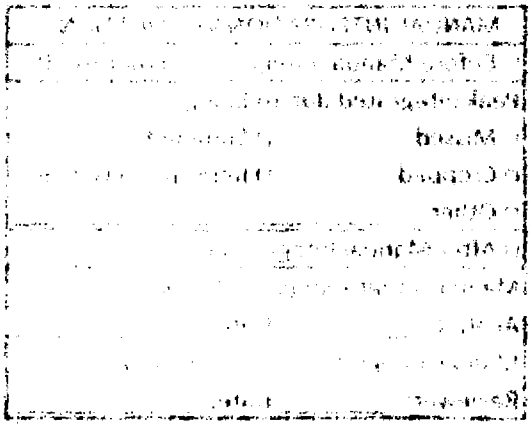
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☑ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: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

(2) OIL (H)

6.590min 165.561 ug/mL

response 317029598

(+) = Expected Retention Time
013012DROA.M Mon Feb 13 08:11:23 2012



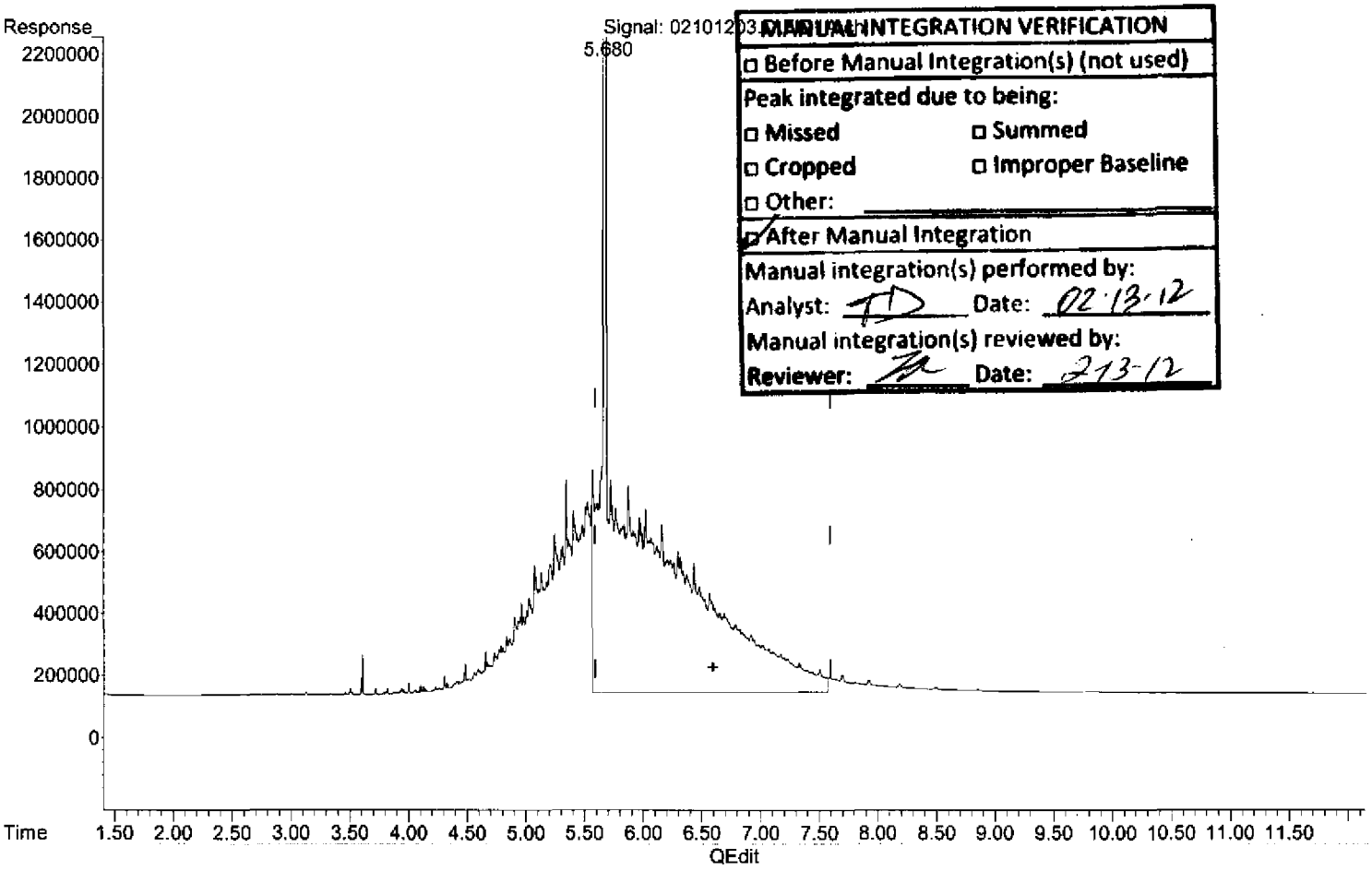
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101203.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:01 pm
Sample : 2020040-LCV2
Misc : 2A11011 OIL-A
ALS Vial : 3 Sample Multiplier: 1

Operator: SUL/TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:26 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



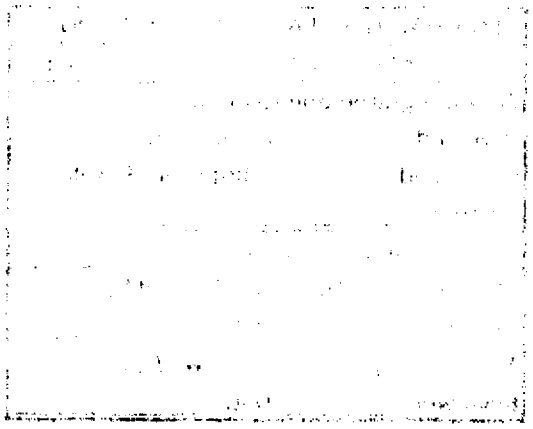
MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 02.13.12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 2-13-12

(2) OIL (H)

6.590min 192.743 ug/mL m

response 369079072

(+) = Expected Retention Time
013012DROA.M Mon Feb 13 08:11:41 2012



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101203.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:01 pm Operator: SUL/TD
Sample : 2020040-LCV2 Inst : AG7890_2
Misc : 2A11011 OIL-A
ALS Vial : 3 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:26 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	5.679	152616686	42.961 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	85.92%
Target Compounds			
1) HM Diesel (TPH)	4.080	200455653	55.861 ug/mL
2) H OIL	6.590	317029598	165.561 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

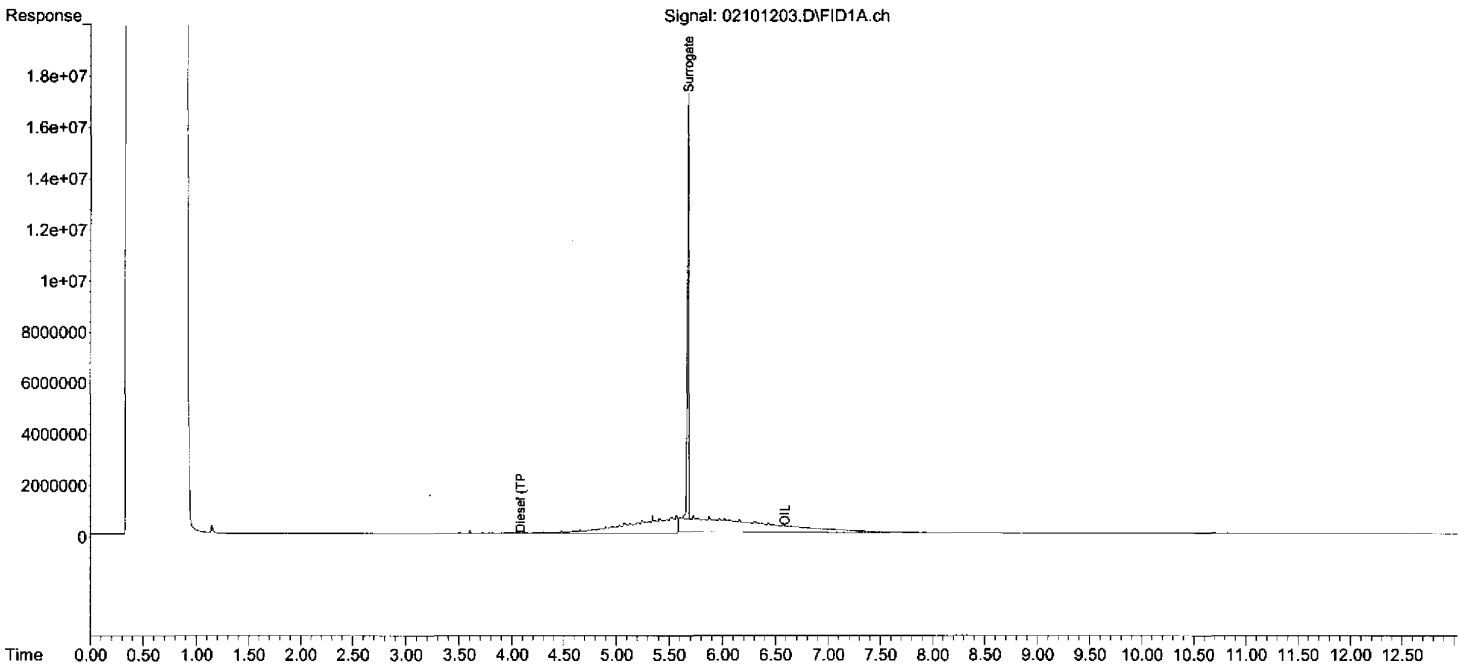
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

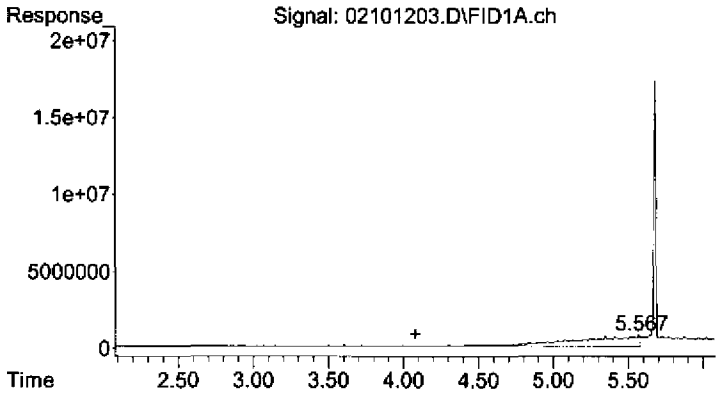
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101203.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:01 pm
Operator: SUL/TD
Sample : 2020040-LCV2
Inst : AG7890_2
Misc : 2A11011 OIL-A
ALS Vial : 3 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:26 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

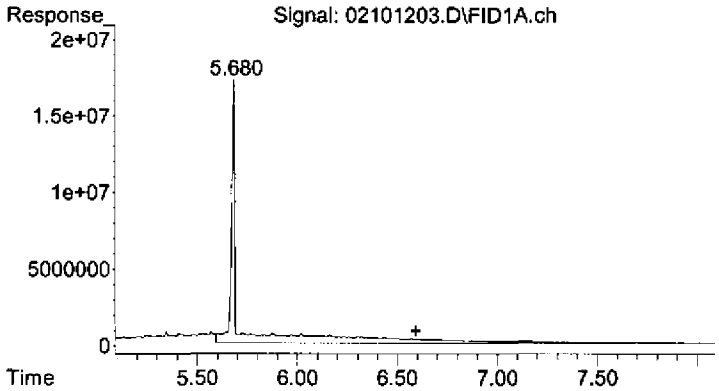
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





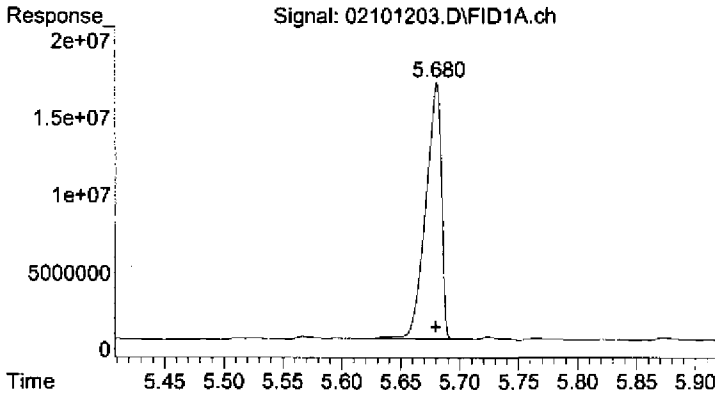
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 200455653
Conc: 55.86 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 317029598
Conc: 165.56 ug/mL



#3 Surrogate

R.T.: 5.679 min
Delta R.T.: 0.000 min
Response: 152616686
Conc: 42.96 ug/mL

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101204.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:19 pm Operator: SUL/TD
Sample : 2020040-CCV1 Inst : AG7890_2
Misc : 2A11005 DRO-CV
ALS Vial : 4 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:31 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

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	3.202 E6	10.8	101	0.00
2 H	OIL	1.915	0.000 E6	100.0#	94	0.00
3 S	Surrogate	3.552	3.395 E6	4.4	101	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\021012A\
Data File : 02101204.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:19 pm
Operator: SUL/TD
Sample : 2020040-CCV1
Inst : AG7890_2
Misc : 2A11005 DRO-CV
ALS Vial : 4 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:31 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	5.678	169765443	47.789 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	95.58%
Target Compounds			
1) HM Diesel (TPH)	4.080	1600862117	446.111 ug/mL
2) H OIL	6.590	3655256	1.909 ug/mL

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

$$\frac{169765443}{3.552E6} = 47.794$$

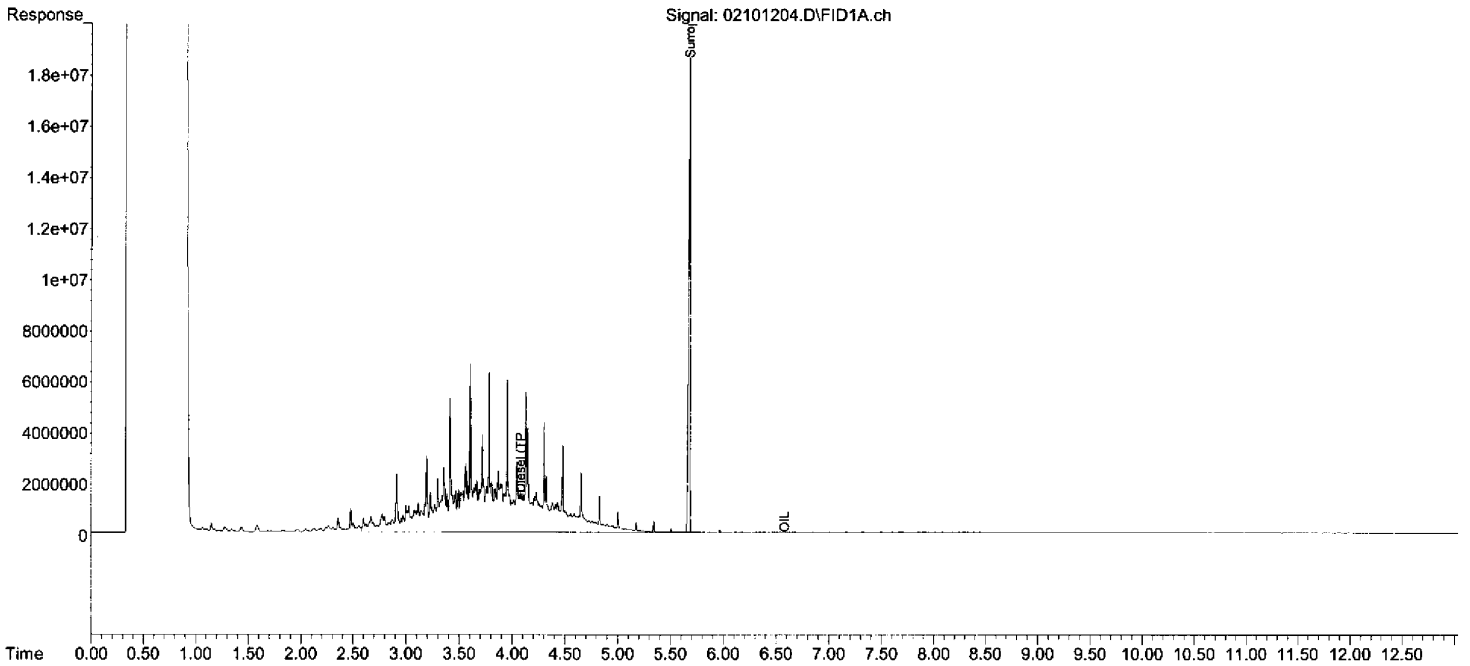
Quantitation Report (Not Reviewed)

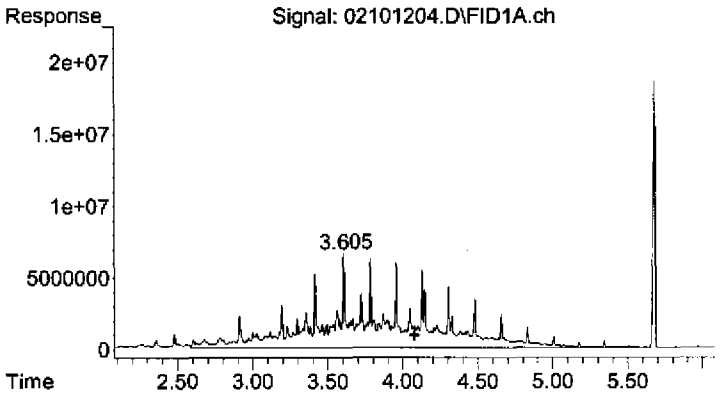
Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101204.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:19 pm
Sample : 2020040-CCV1
Misc : 2A11005 DRO-CV
ALS Vial : 4 Sample Multiplier: 1

Operator: SUL/TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:31 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

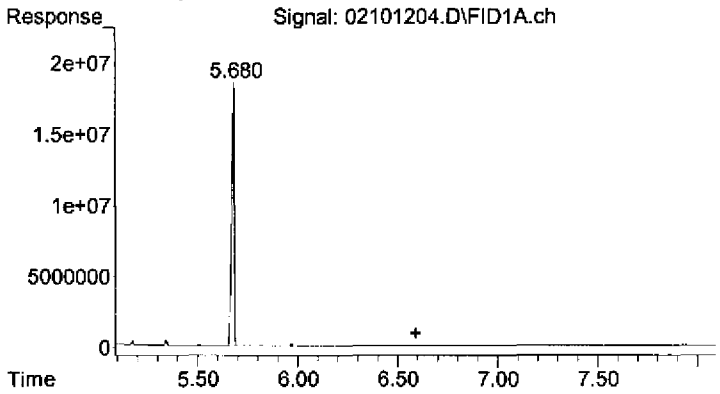
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





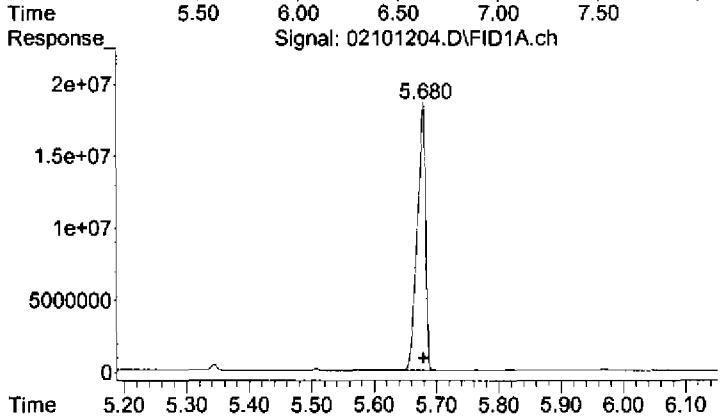
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1600862117
Conc: 446.11 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 3655256
Conc: 1.91 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.001 min
Response: 169765443
Conc: 47.79 ug/mL

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101205.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:37 pm Operator: SUL/TD
Sample : 2020040-CCV2 Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:19:47 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	1.826 E6	4.6	91	0.00
3 S	Surrogate	3.552	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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101205.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:37 pm Operator: SUL/TD
Sample : 2020040-CCV2 Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:19:47 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	146442093	41.223 ug/mLm
Spiked Amount 50.000	Range 60 - 127	Recovery =	82.45%
Target Compounds			
1) HM Diesel (TPH)	4.080	940204368	262.006 ug/mL
2) H OIL	6.590	1826293249	953.740 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: 02-13-12
Manual integration(s) reviewed by:	
Reviewer: ZR	Date: 2-13-12

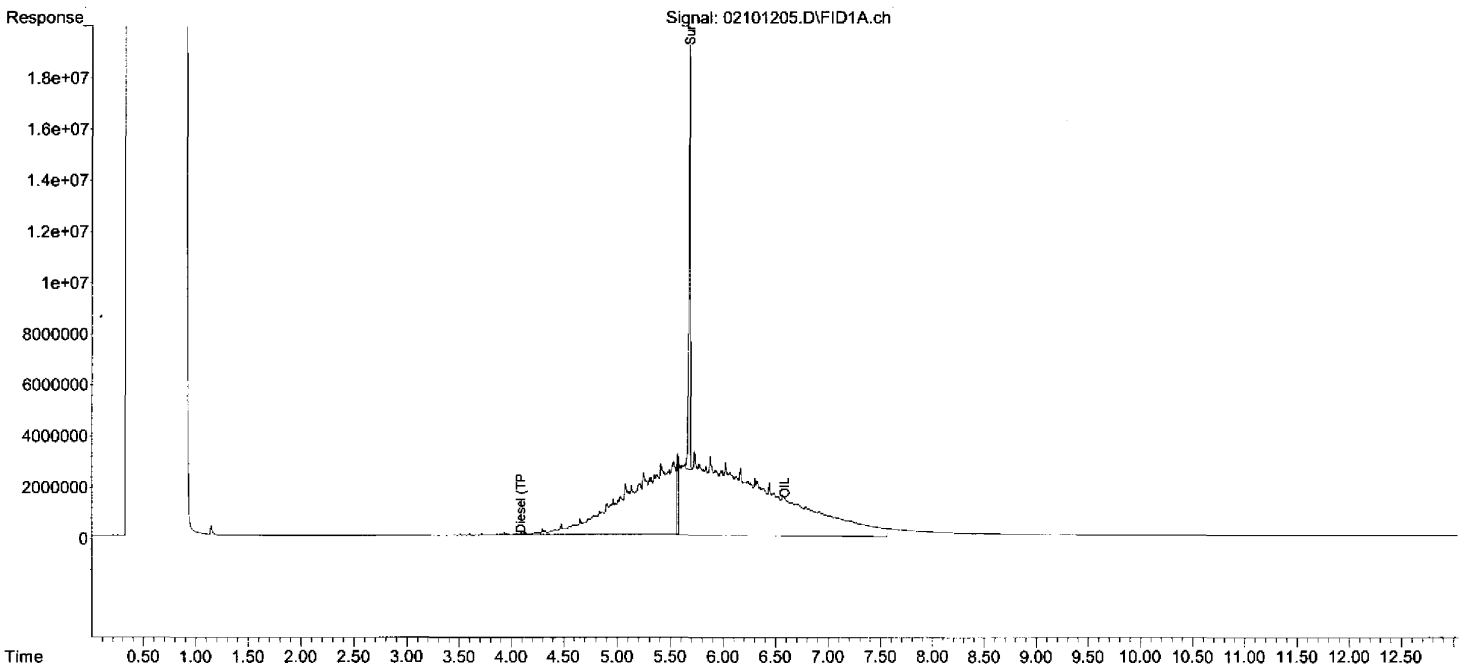
Quantitation Report (QT Reviewed)

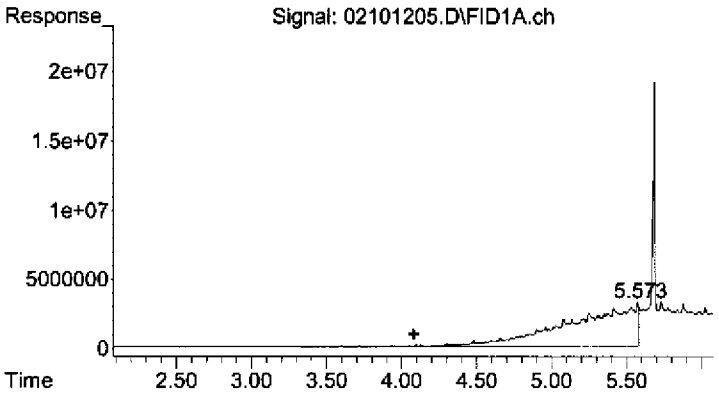
Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101205.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:37 pm
Sample : 2020040-CCV2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Operator: SUL/TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:19:47 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

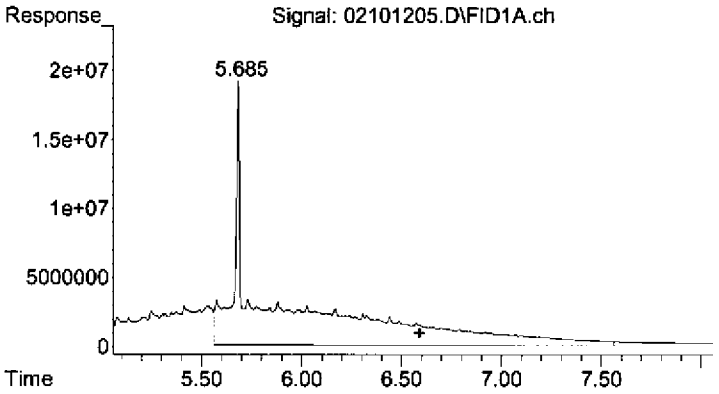
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





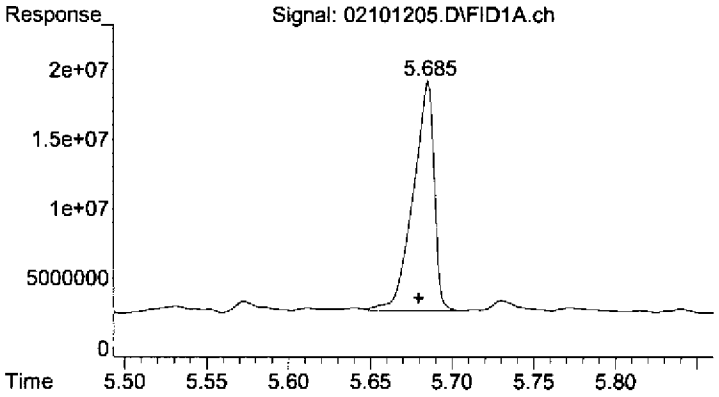
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 940204368
Conc: 262.01 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1826293249
Conc: 953.74 ug/mL m



#3 Surrogate

R.T.: 5.685 min
Delta R.T.: 0.006 min
Response: 146442093
Conc: 41.22 ug/mL m

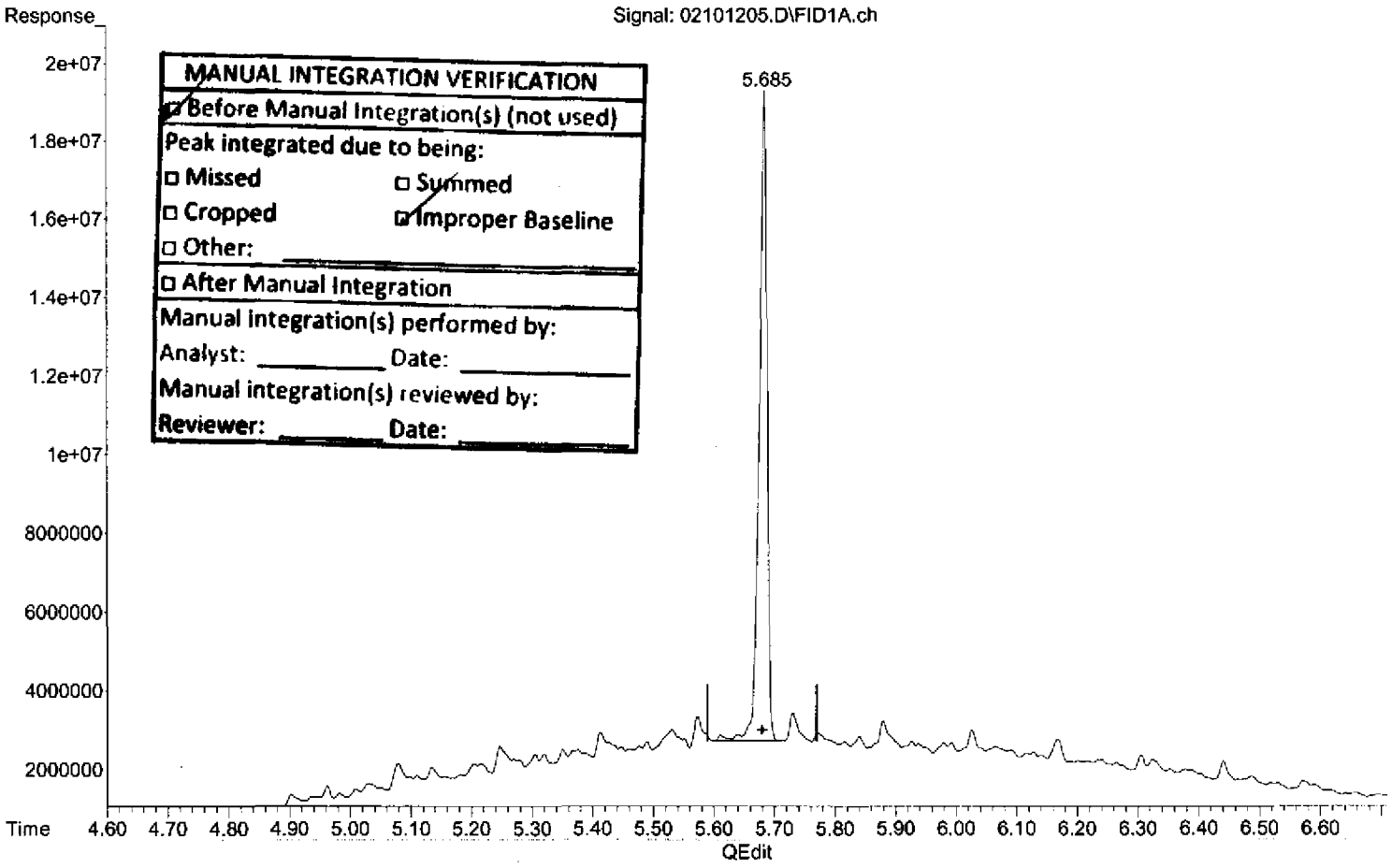
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101205.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:37 pm
Sample : 2020040-CCV2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Operator: SUL/TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:36 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



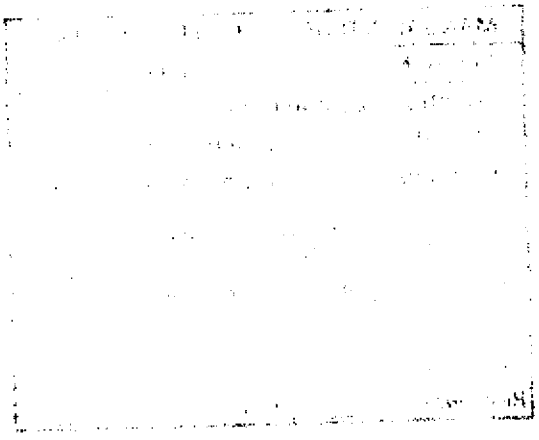
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☑ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: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

(3) Surrogate (S)

5.684min 41.720 ug/mL

response 148206815

(+) = Expected Retention Time
013012DROA.M Mon Feb 13 08:18:46 2012



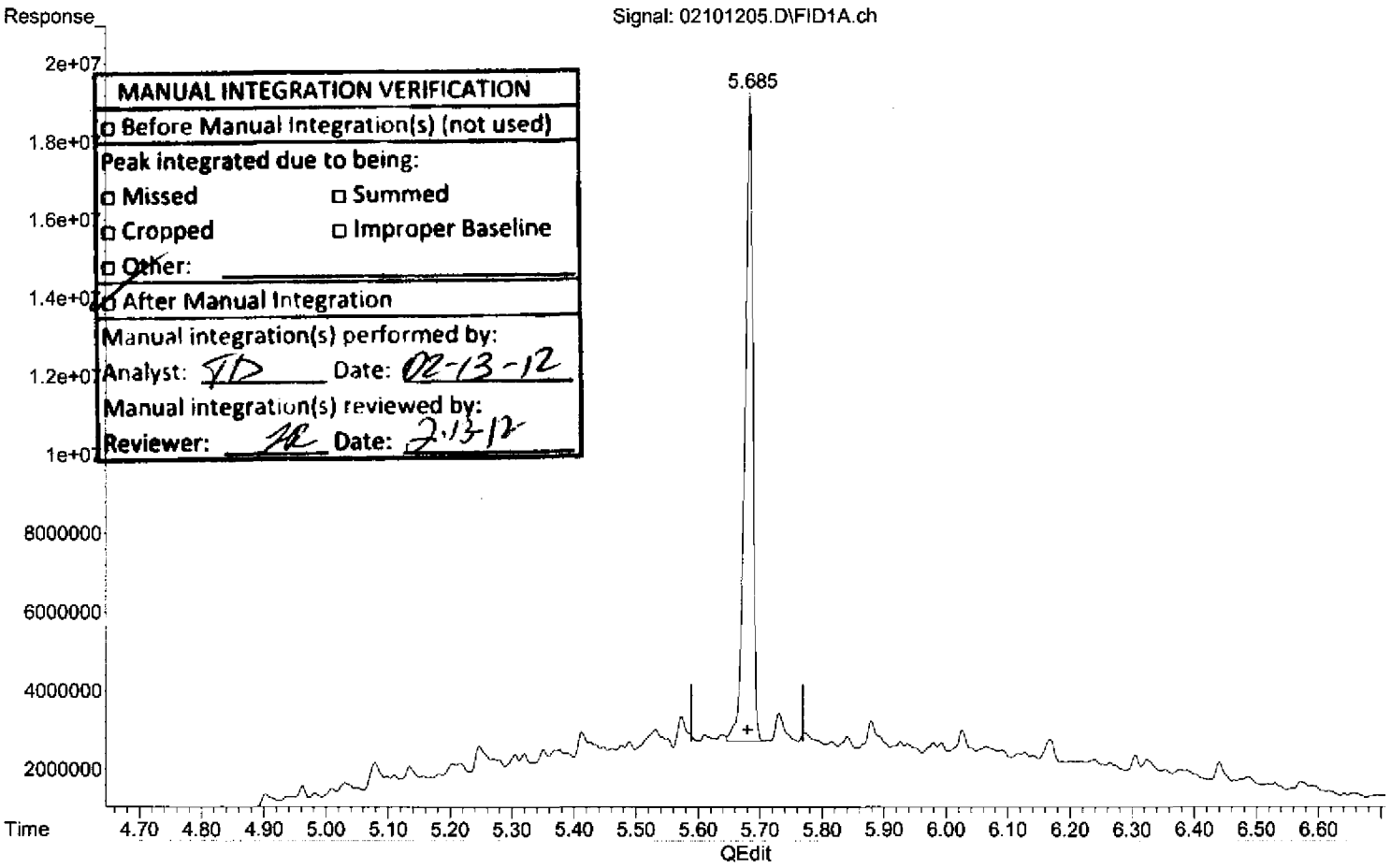
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101205.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:37 pm
Sample : 2020040-CCV2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Operator: SUL/TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:36 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



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: JD Date: 02-13-12
Manual integration(s) reviewed by:
Reviewer: JL Date: 2-13-12

(3) Surrogate (S)

5.685min 41.223 ug/mL m

response 146442093

(+) = Expected Retention Time
013012DROA.M Mon Feb 13 08:19:02 2012

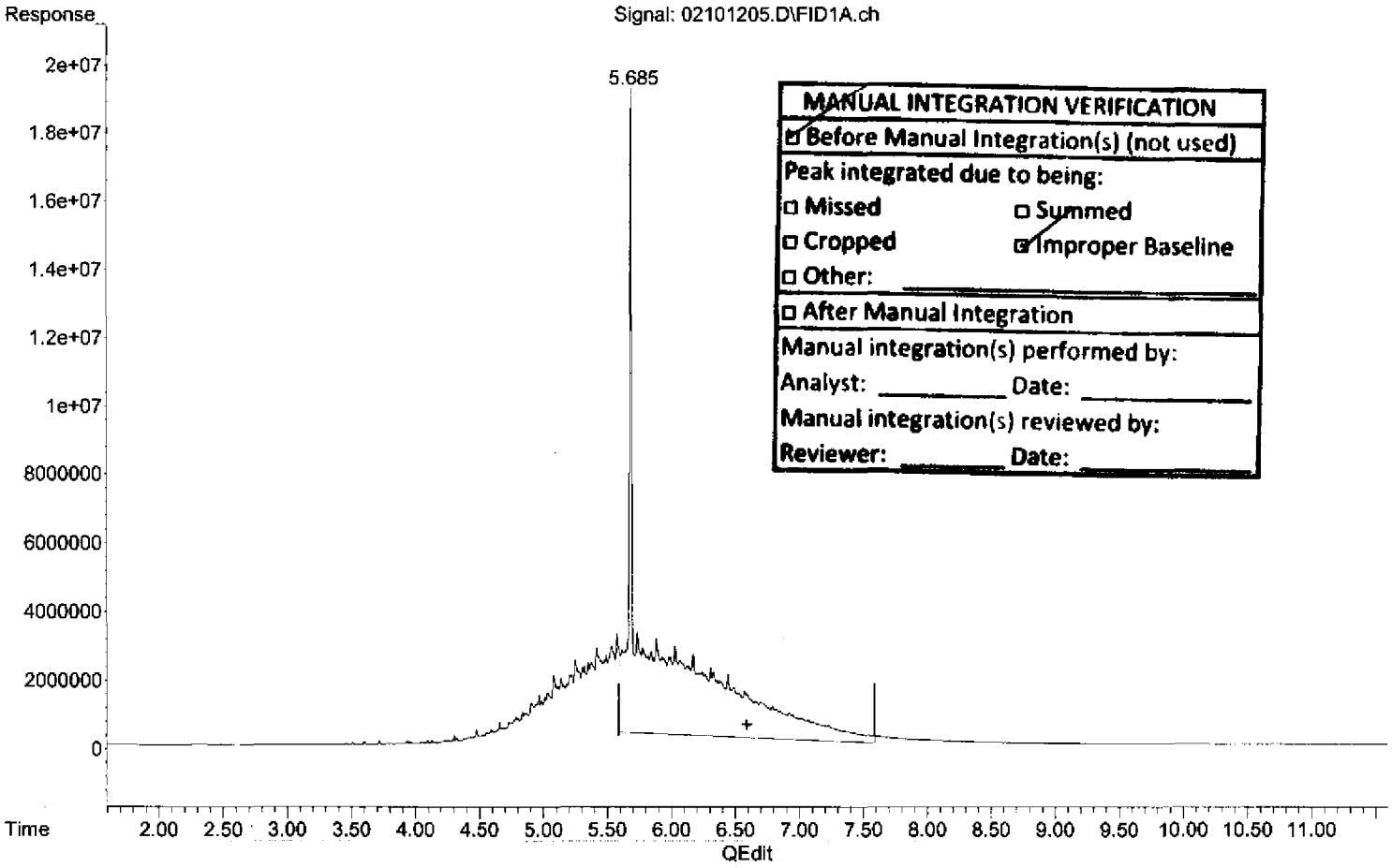
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101205.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:37 pm
Sample : 2020040-CCV2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Operator: SUL/TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:36 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



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: _____

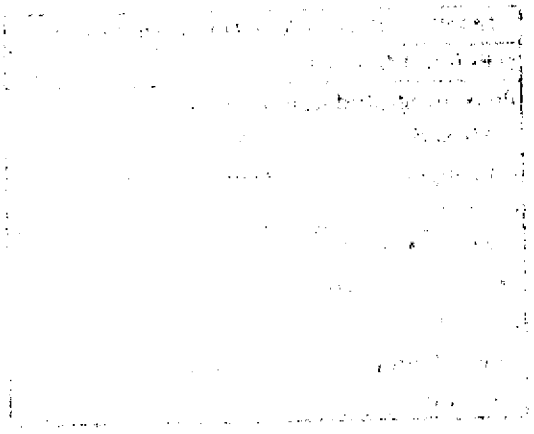
(2) OIL (H)

6.590min 783.759 ug/mL

response 1500800427

(+) = Expected Retention Time

013012DROA.M Mon Feb 13 08:19:37 2012



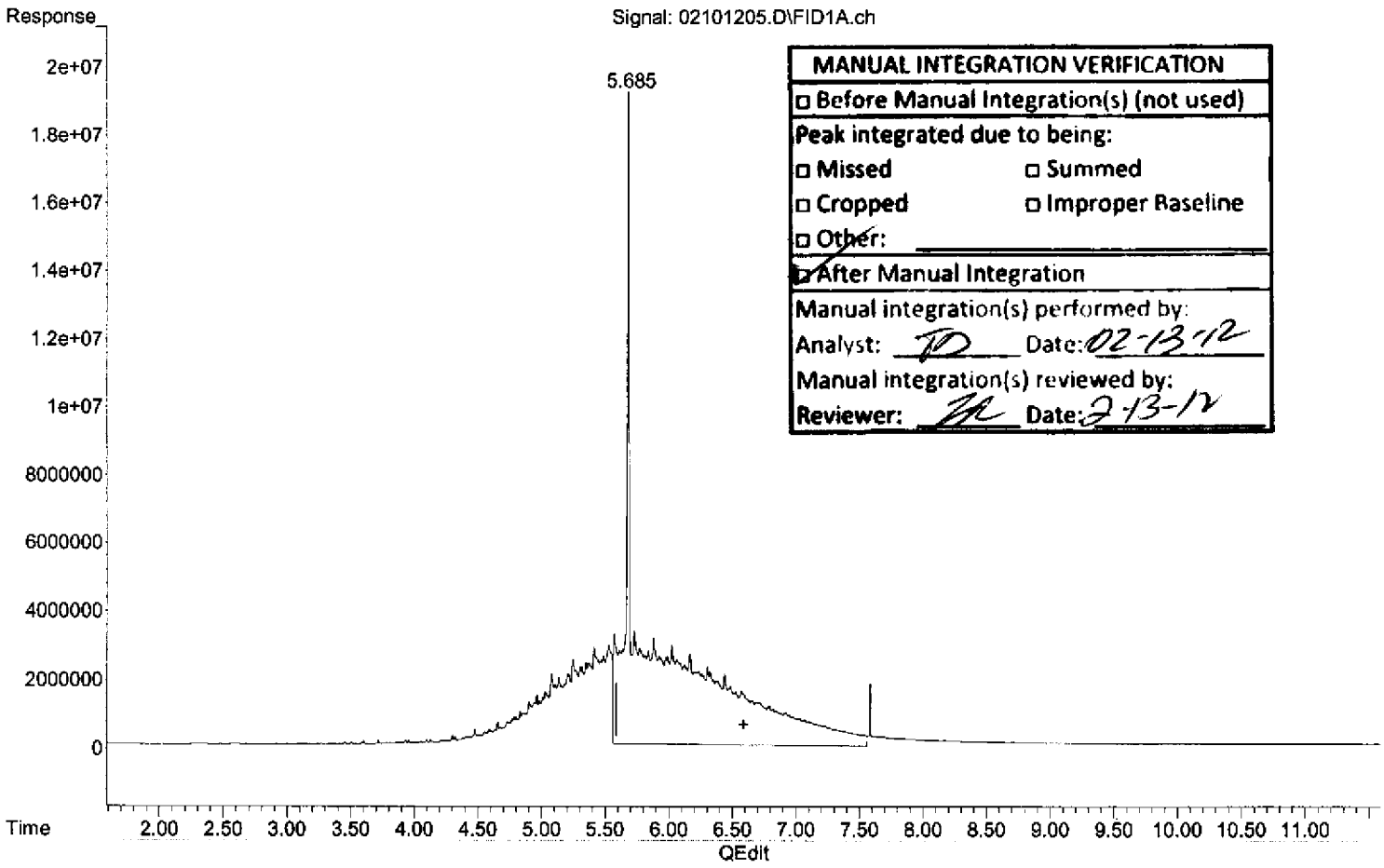
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101205.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:37 pm
Sample : 2020040-CCV2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Operator: SUL/TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:36 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



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: 02-13-12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 2-13-12

(2) OIL (H)

6.590min 953.740 ug/mL m

response 1826293249

(+) = Expected Retention Time
013012DROA.M Mon Feb 13 08:19:49 2012

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101205.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:37 pm Operator: SUL/TD
Sample : 2020040-CCV2 Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:36 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	5.684	148206815	41.720 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	83.44%
Target Compounds			
1) HM Diesel (TPH)	4.080	940204368	262.006 ug/mL
2) H OIL	6.590	1499035704	782.837 ug/mL

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

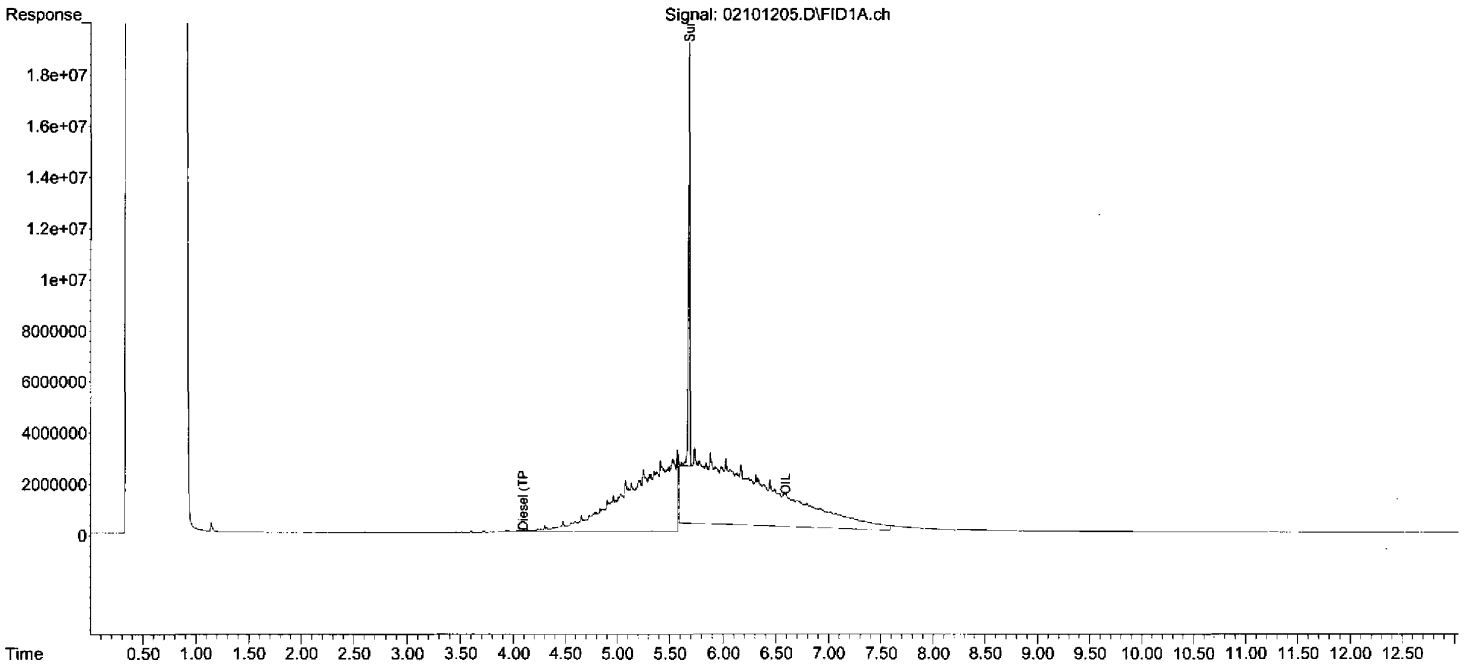
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: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

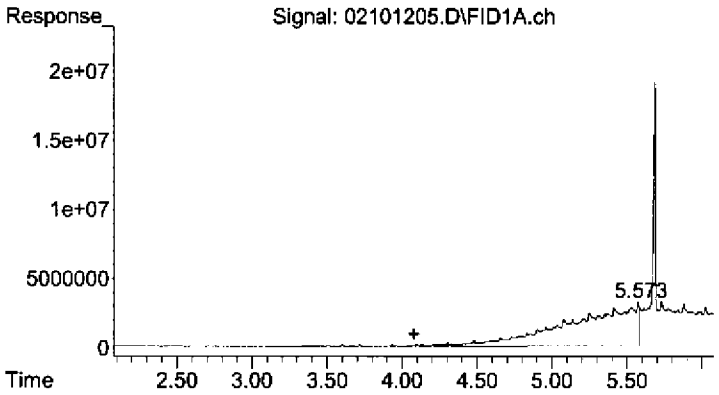
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101205.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:37 pm
Operator: SUL/TD
Sample : 2020040-CCV2
Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 5 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:36 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

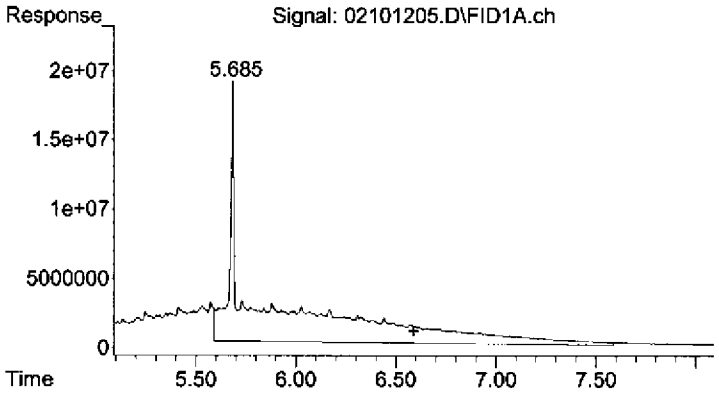
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





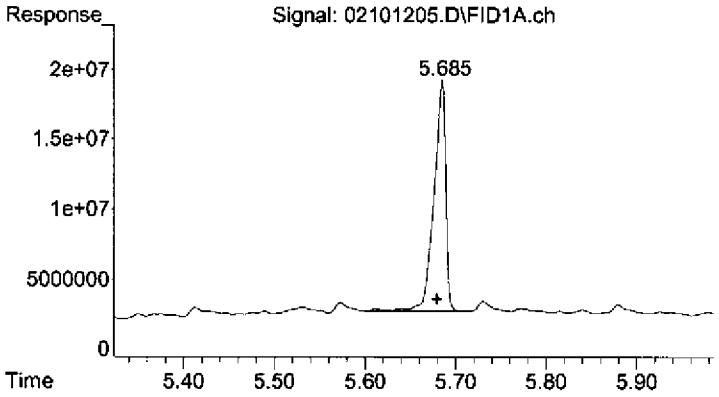
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 940204368
Conc: 262.01 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1499035704
Conc: 782.84 ug/mL



#3 Surrogate

R.T.: 5.684 min
Delta R.T.: 0.004 min
Response: 148206815
Conc: 41.72 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101206.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:55 pm Operator: SUL/TD
Sample : B2B0043-BLK1 Inst : AG7890_2
Misc : RB
ALS Vial : 6 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:41 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	5.677	156851061	44.153 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	88.31%
Target Compounds			
1) HM Diesel (TPH)	4.080	8402272	2.341 ug/mL
2) H OIL	6.590	3715810	1.940 ug/mL

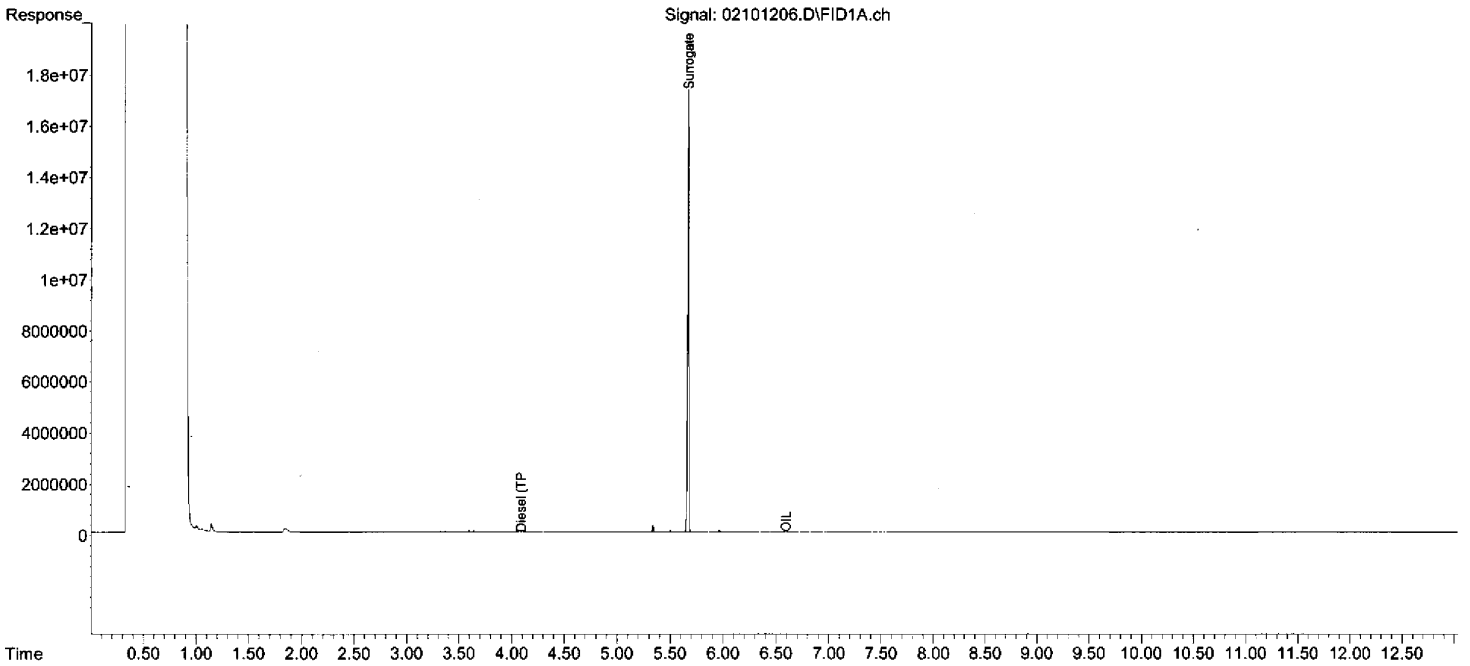
(f)=RT Delta > 1/2 Window (m)=manual int.

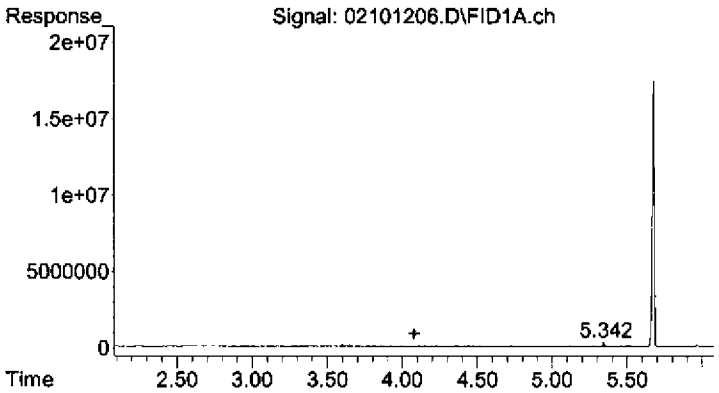
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101206.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 3:55 pm
Operator: SUL/TD
Sample : B2B0043-BLK1
Inst : AG7890_2
Misc : RB
ALS Vial : 6 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:41 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

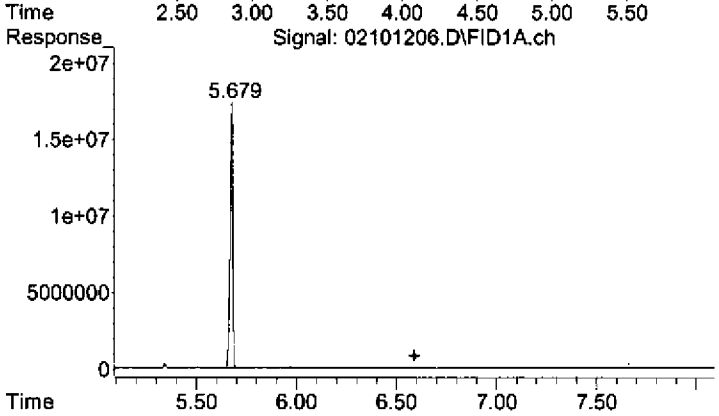
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





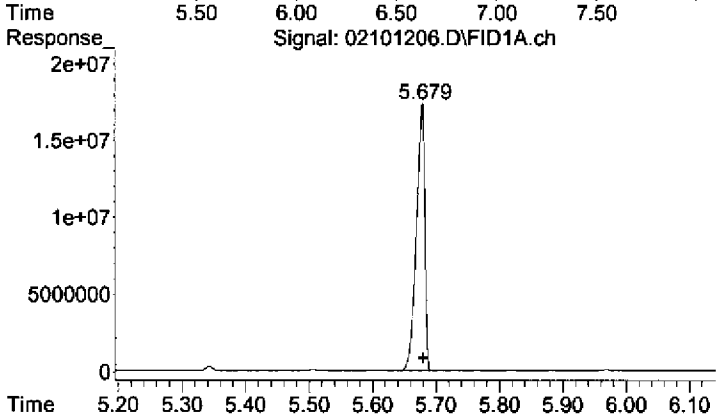
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 8402272
Conc: 2.34 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 3715810
Conc: 1.94 ug/mL



#3 Surrogate

R.T.: 5.677 min
Delta R.T.: -0.002 min
Response: 156851061
Conc: 44.15 ug/mL

DIESEL LCS WATER REPORT

Instrument Name: AG7890_2
Date Acquired: 2/10/2012 16:13
Acq. Method File: 012712DROA.M
Sample Name: B2B0043-BS1
Misc Info: BS
Operator: SUL/TD

Name	Concentration ng/mL	Calculated	% Recovery	QC Limits	STATUS
Diesel (TPH)	500	408.19	81.64%	54 - 115	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101207.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 4:13 pm Operator: SUL/TD
Sample : B2B0043-BS1 Inst : AG7890_2
Misc : BS
ALS Vial : 7 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:46 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	5.678	162204575	45.660 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery = 91.32%	
Target Compounds			
1) HM Diesel (TPH)	4.080	1464778345	408.189 ug/mL
2) H OIL	6.590	4637016	2.422 ug/mL

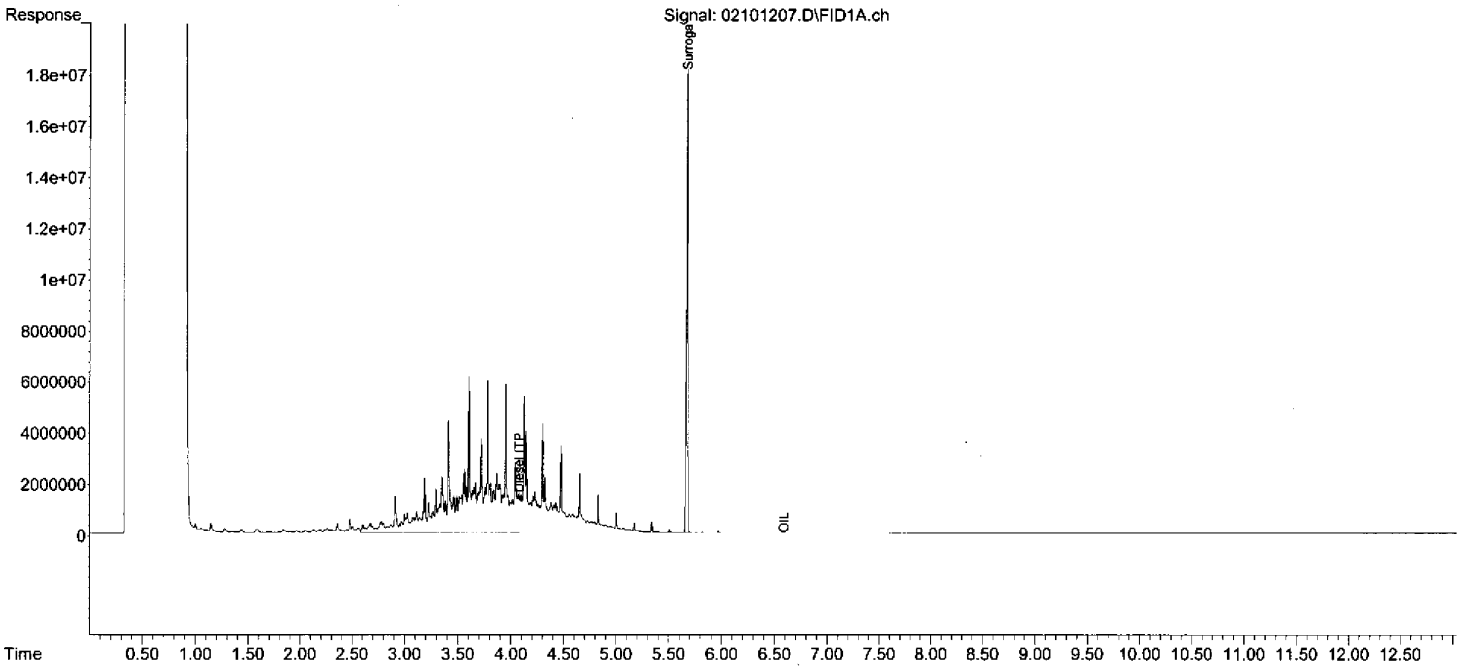
(f)=RT Delta > 1/2 Window (m)=manual int.

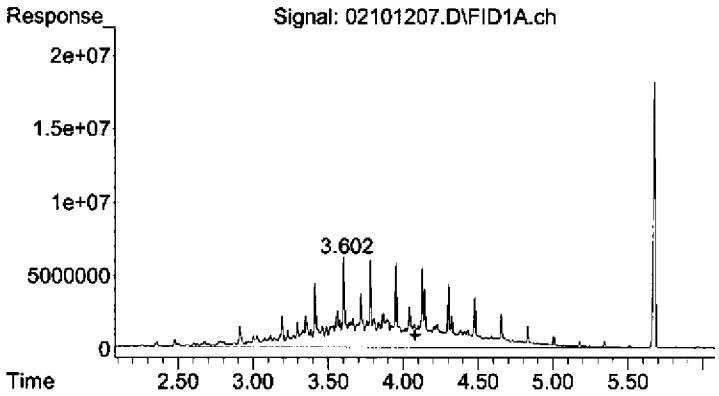
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101207.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 4:13 pm
Operator: SUL/TD
Sample : B2B0043-BS1
Inst : AG7890_2
Misc : BS
ALS Vial : 7 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:46 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

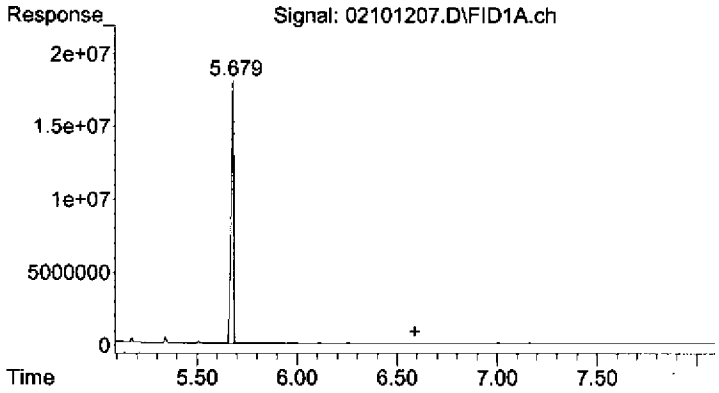
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





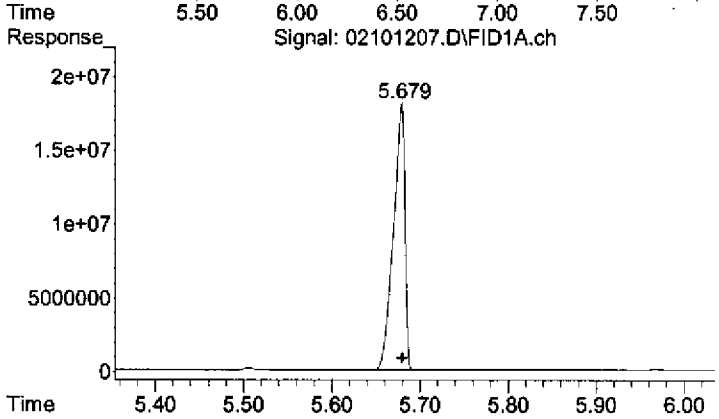
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1464778345
Conc: 408.19 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 4637016
Conc: 2.42 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.002 min
Response: 162204575
Conc: 45.66 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101208.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 4:30 pm Operator: SUL/TD
Sample : 1202023-01 Inst : AG7890_2
Misc : FB12
ALS Vial : 8 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:51 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	163259995	45.958 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	91.92%
Target Compounds			
1) HM Diesel (TPH)	4.080	19114131	5.327 ug/mL
2) H OIL	6.590	4909728	2.564 ug/mL

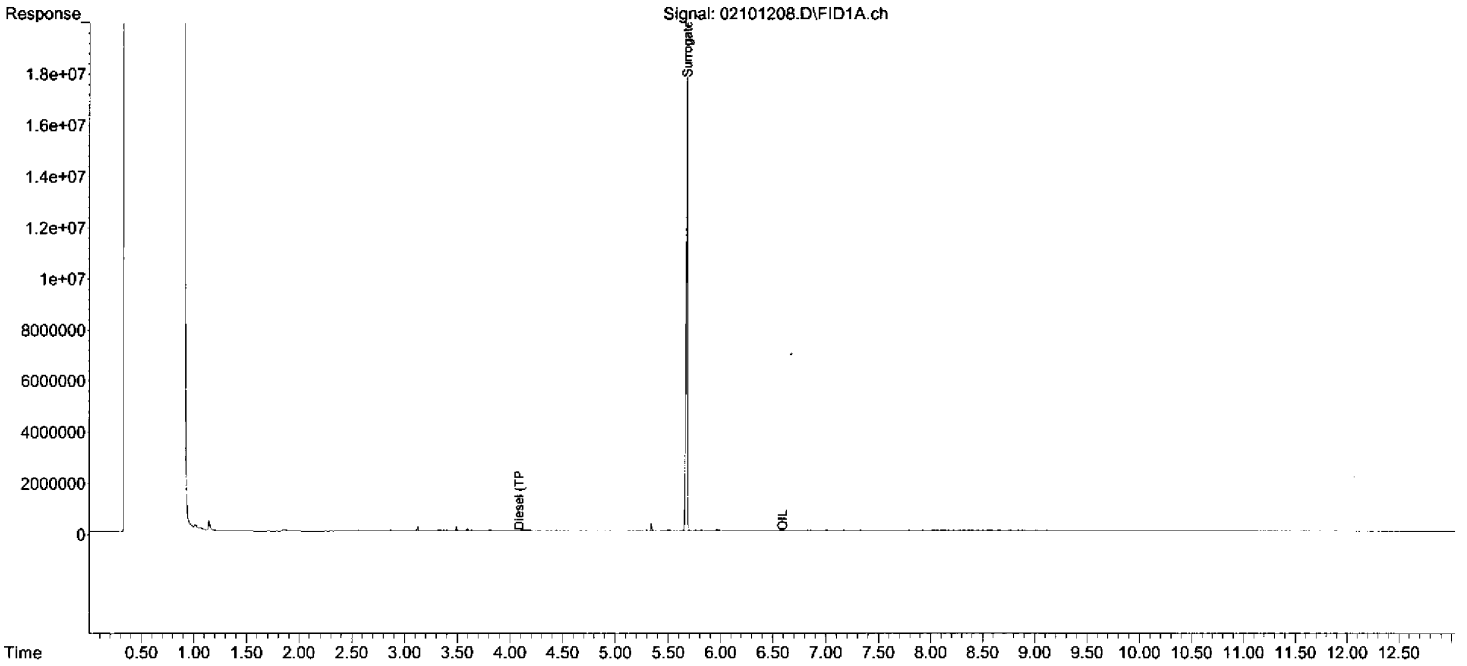
(f)=RT Delta > 1/2 Window (m)=manual int.

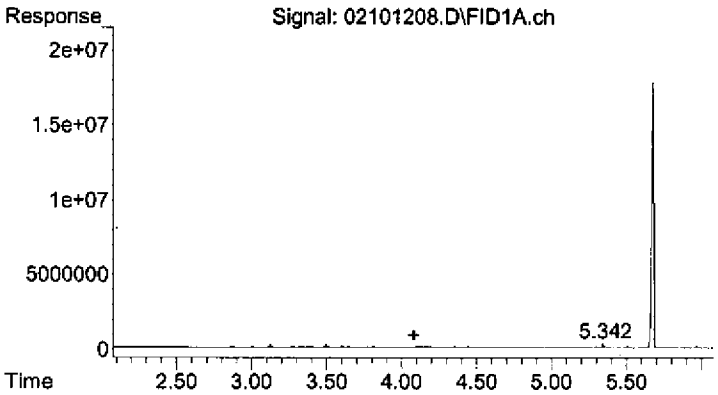
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101208.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 4:30 pm
Operator: SUL/TD
Sample : 1202023-01
Inst : AG7890_2
Misc : FB12
ALS Vial : 8 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:51 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

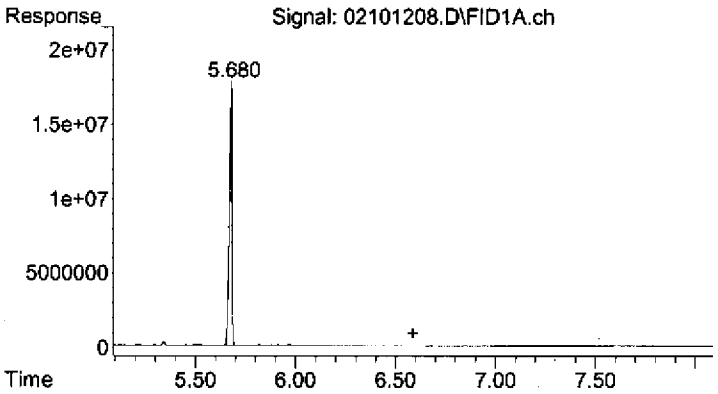
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





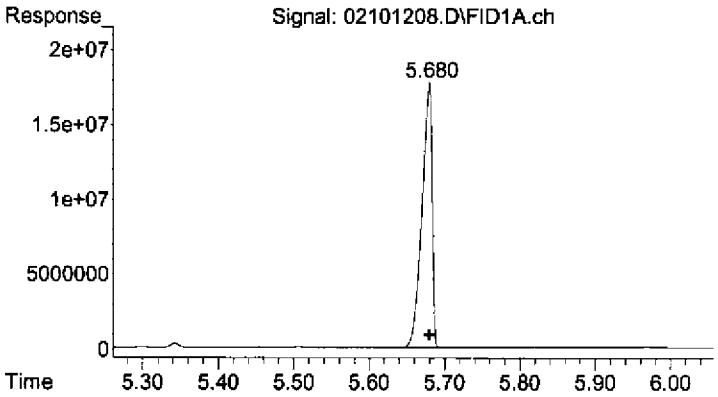
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 19114131
Conc: 5.33 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 4909728
Conc: 2.56 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.001 min
Response: 163259995
Conc: 45.96 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101209.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 4:48 pm Operator: SUL/TD
Sample : 1202023-02 Inst : AG7890_2
Misc : HW51
ALS Vial : 9 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:56 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	5.677	152822088	43.019 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	86.04%
Target Compounds			
1) HM Diesel (TPH)	4.080	12138880	3.383 ug/mL
2) H OIL	6.590	5878486	3.070 ug/mL

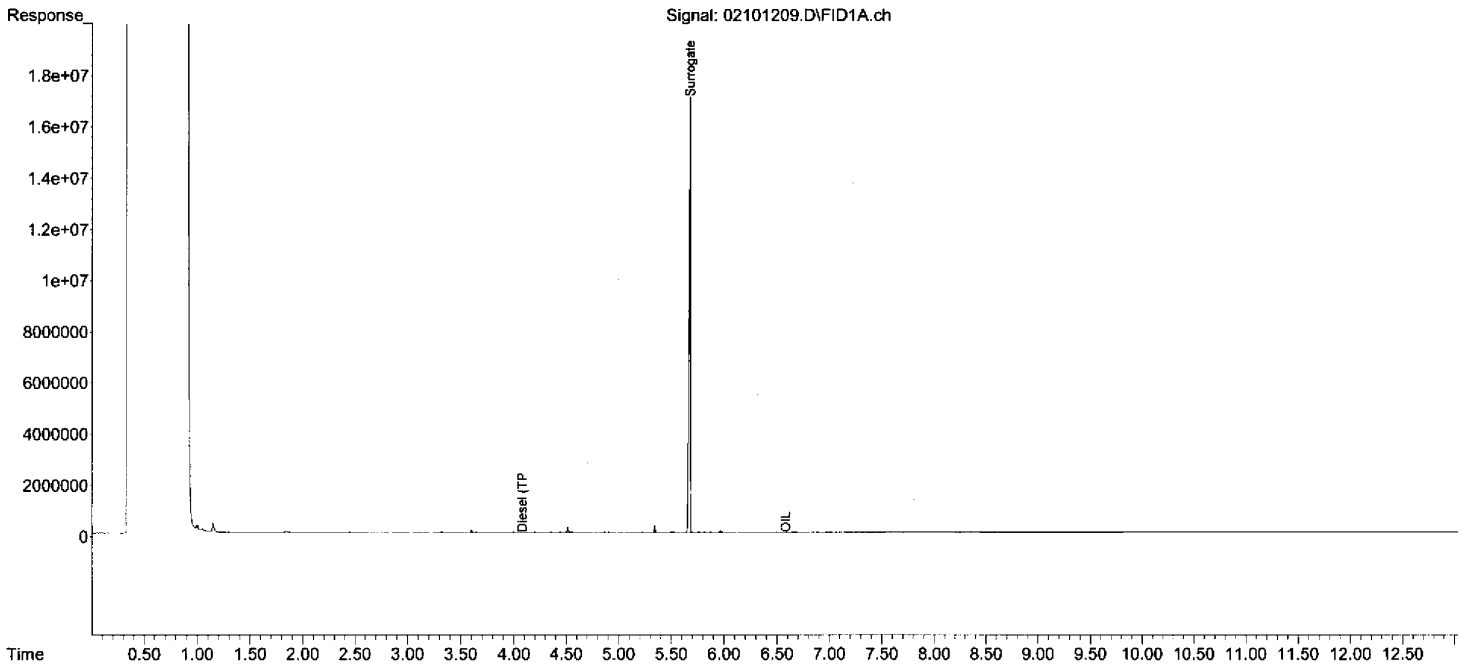
(f)=RT Delta > 1/2 Window (m)=manual int.

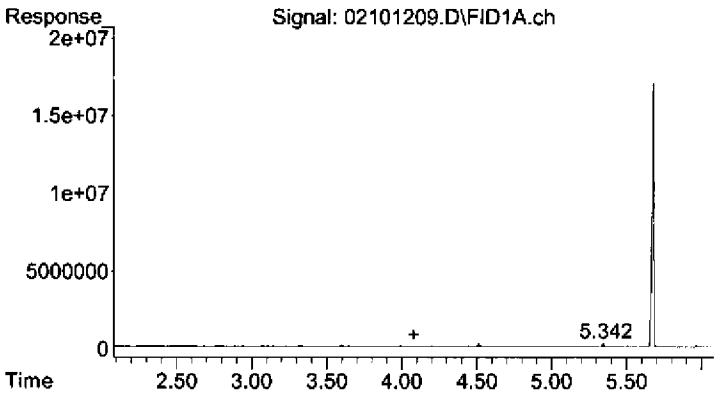
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101209.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 4:48 pm
Operator: SUL/TD
Sample : 1202023-02
Inst : AG7890_2
Misc : HW51
ALS Vial : 9 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:01:56 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

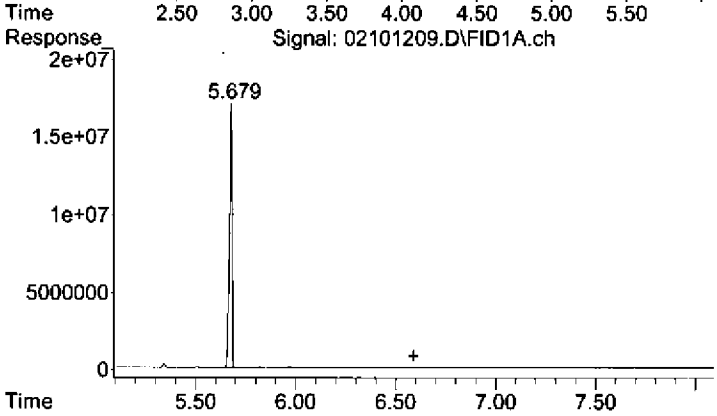
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





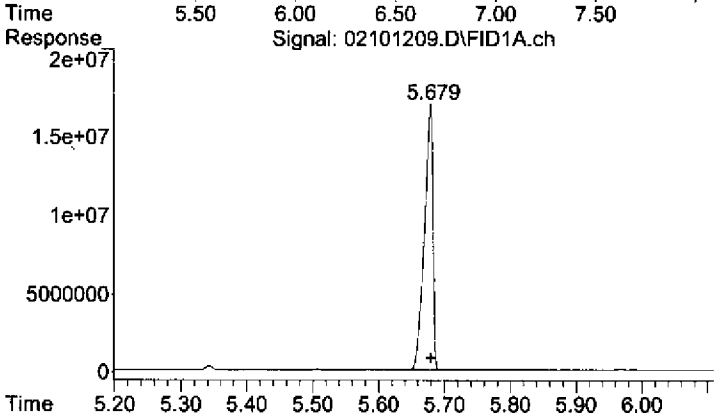
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 12138880
Conc: 3.38 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 5878486
Conc: 3.07 ug/mL



#3 Surrogate

R.T.: 5.677 min
Delta R.T.: -0.002 min
Response: 152822088
Conc: 43.02 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101210.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 5:06 pm Operator: SUL/TD
Sample : 1202023-03 Inst : AG7890_2
Misc : HW51-P
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:00 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	5.678	155681780	43.824 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	87.65%
Target Compounds			
1) HM Diesel (TPH)	4.080	22649891	6.312 ug/mL
2) H OIL	6.590	5944155	3.104 ug/mL

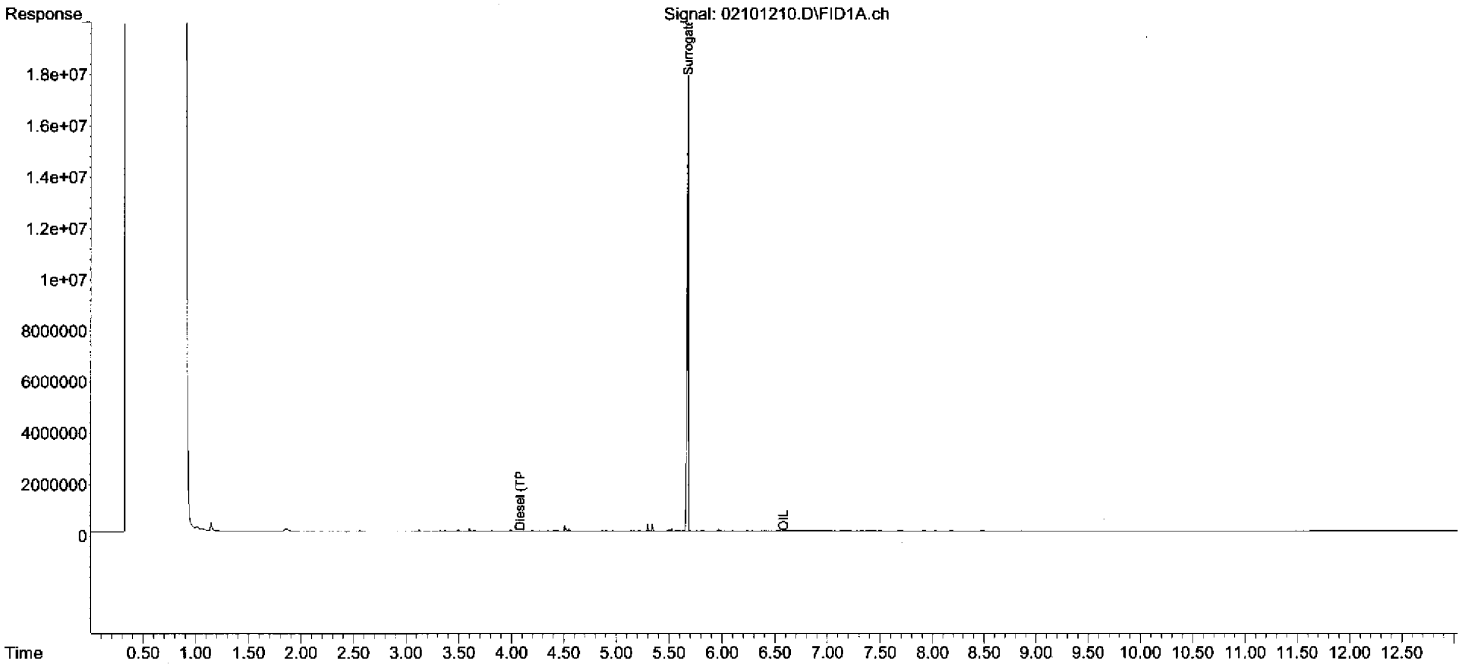
(f)=RT Delta > 1/2 Window (m)=manual int.

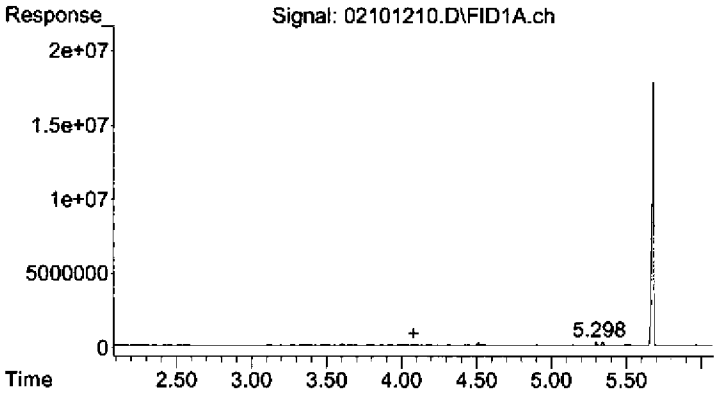
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101210.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 5:06 pm Operator: SUL/TD
Sample : 1202023-03 Inst : AG7890_2
Misc : HW51-P
ALS Vial : 10 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:00 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

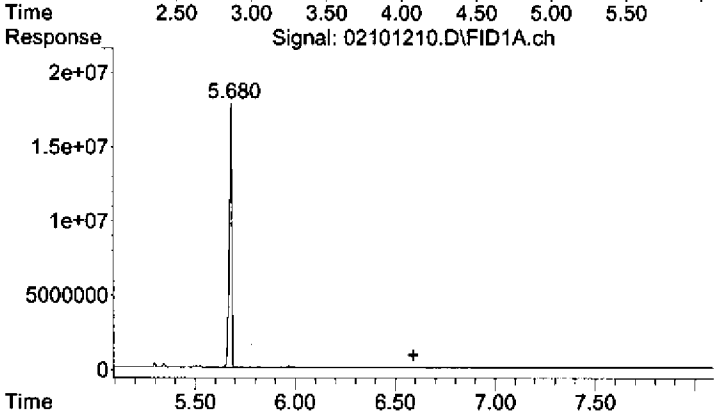
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





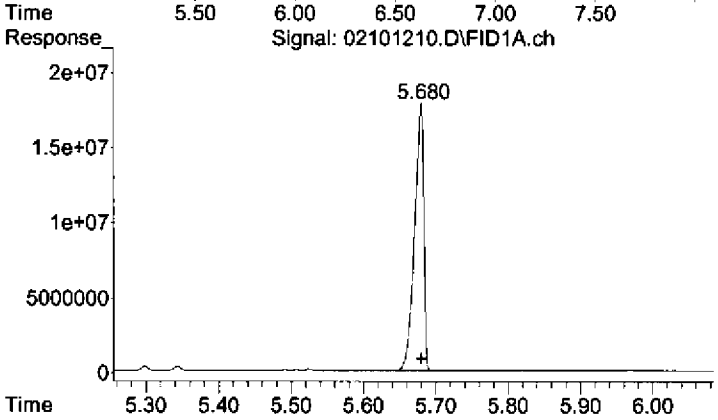
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 22649891
Conc: 6.31 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 5944155
Conc: 3.10 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.002 min
Response: 155681780
Conc: 43.82 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101211.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 5:24 pm Operator: SUL/TD
Sample : 1202023-05 Inst : AG7890_2
Misc : HW47
ALS Vial : 11 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:05 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	5.677	149680388	42.135 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	84.27%
Target Compounds			
1) HM Diesel (TPH)	4.080	23927469	6.668 ug/mL
2) H OIL	6.590	4903148	2.561 ug/mL

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

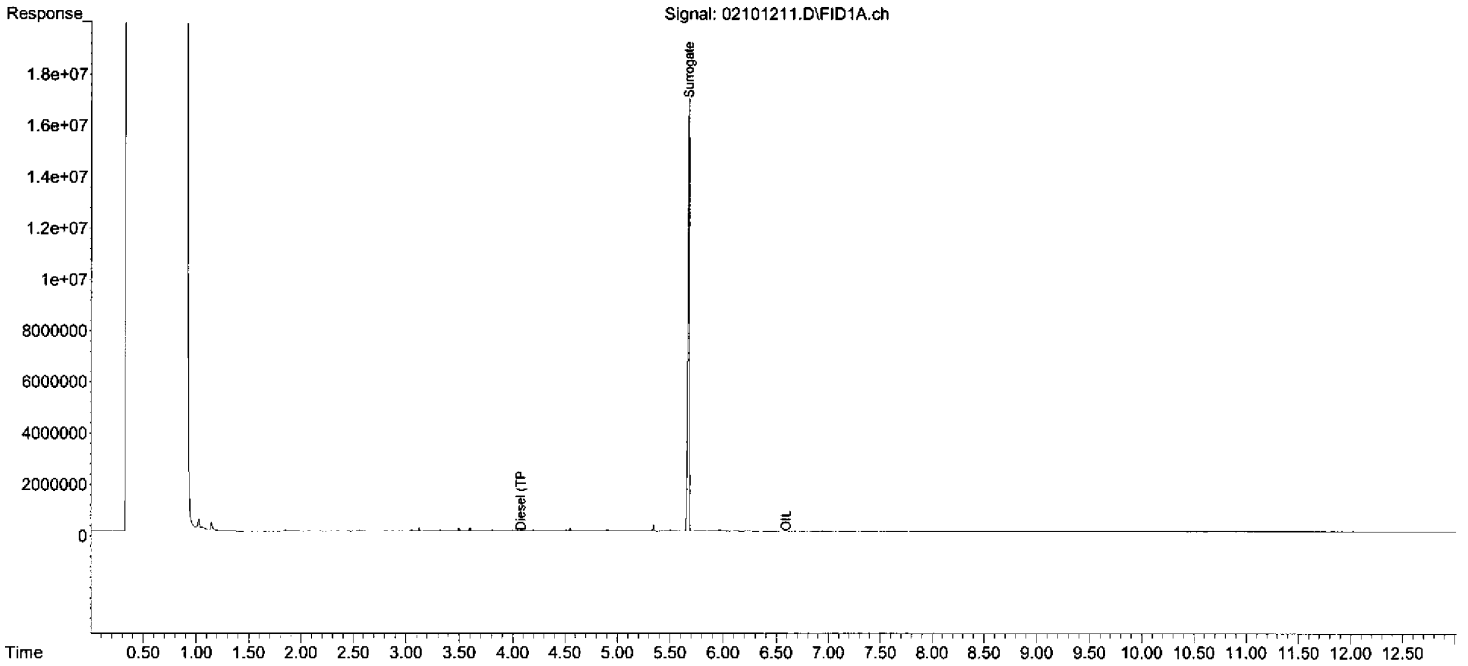
Quantitation Report (Not Reviewed)

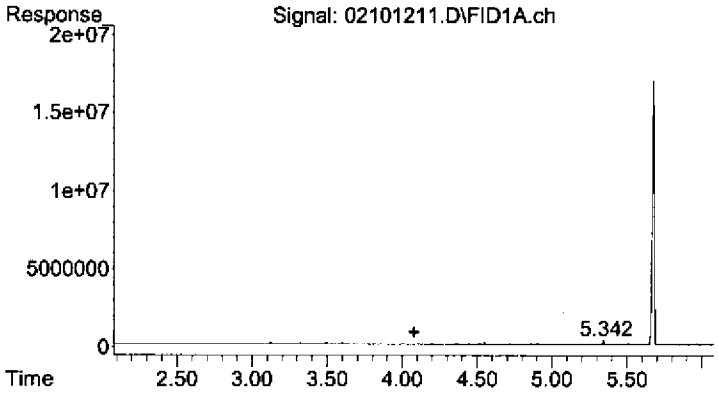
Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101211.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 5:24 pm
Sample : 1202023-05
Misc : HW47
ALS Vial : 11 Sample Multiplier: 1

Operator: SUL/TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:05 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

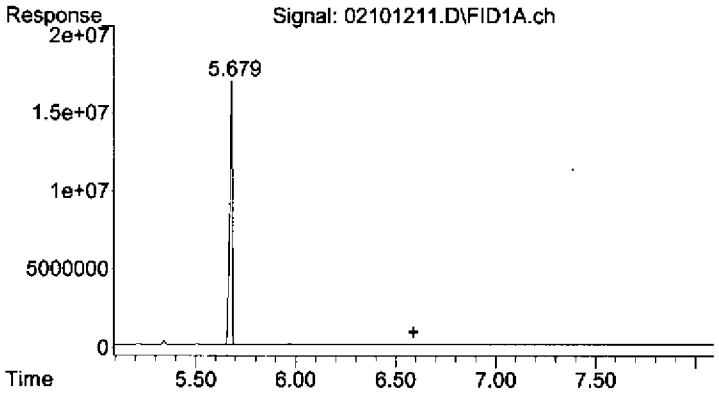
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





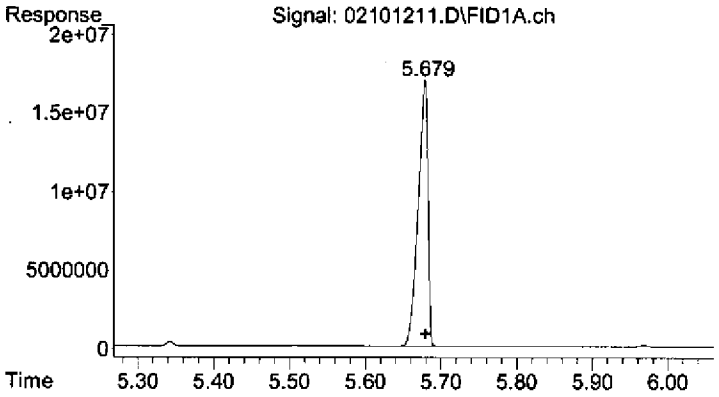
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 23927469
Conc: 6.67 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 4903148
Conc: 2.56 ug/mL



#3 Surrogate

R.T.: 5.677 min
Delta R.T.: -0.002 min
Response: 149680388
Conc: 42.13 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101212.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 5:42 pm Operator: SUL/TD
Sample : 1202023-06 Inst : AG7890_2
Misc : HW47-P
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:09 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	5.677	163738716	46.092 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	92.18%
Target Compounds			
1) HM Diesel (TPH)	4.080	19279907	5.373 ug/mL
2) H OIL	6.590	3424892	1.789 ug/mL

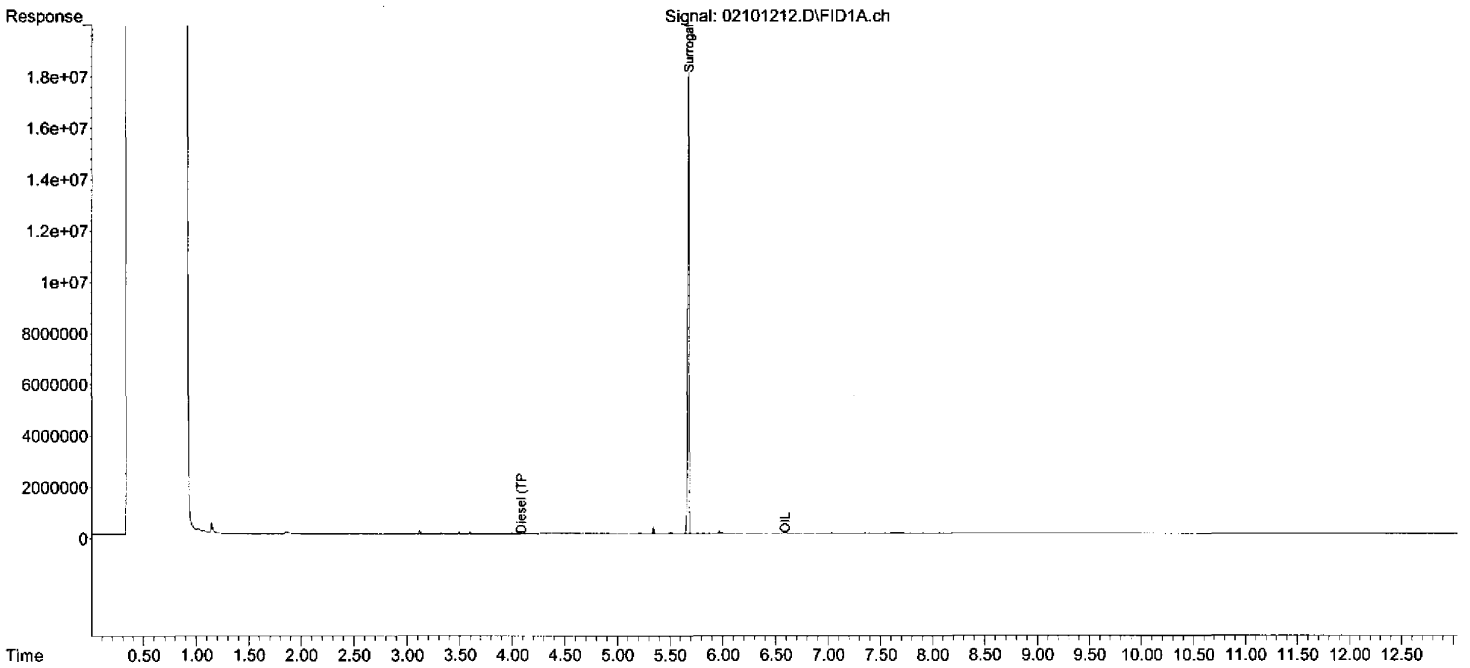
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

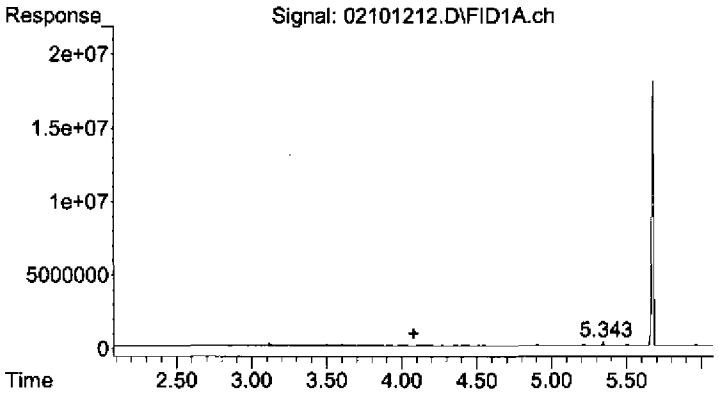
Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101212.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 5:42 pm
Operator: SUL/TD
Sample : 1202023-06
Inst : AG7890_2
Misc : HW47-P
ALS Vial : 12 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:09 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

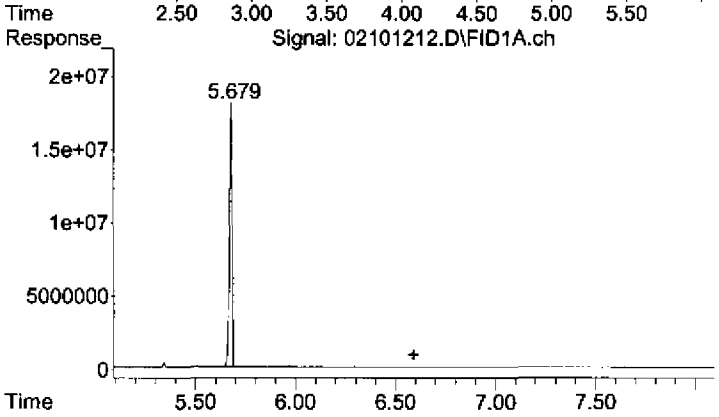


00311



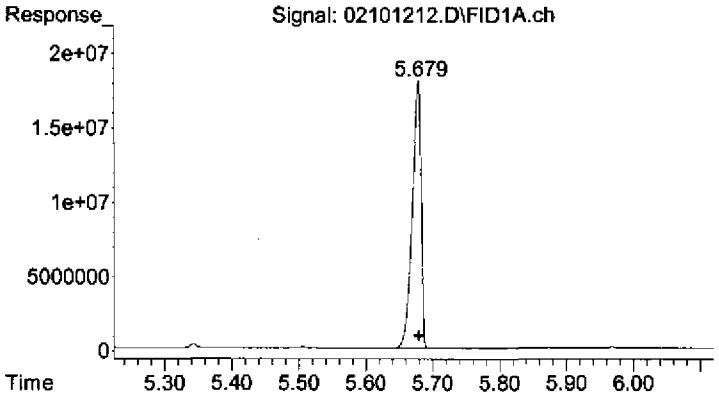
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 19279907
Conc: 5.37 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 3424892
Conc: 1.79 ug/mL



#3 Surrogate

R.T.: 5.677 min
Delta R.T.: -0.002 min
Response: 163738716
Conc: 46.09 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101213.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 6:00 pm Operator: SUL/TD
Sample : 1202023-08 Inst : AG7890_2
Misc : FB13
ALS Vial : 13 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:14 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	5.677	152802126	43.014 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	86.03%
Target Compounds			
1) HM Diesel (TPH)	4.080	18129434	5.052 ug/mL
2) H OIL	6.590	7106203	3.711 ug/mL

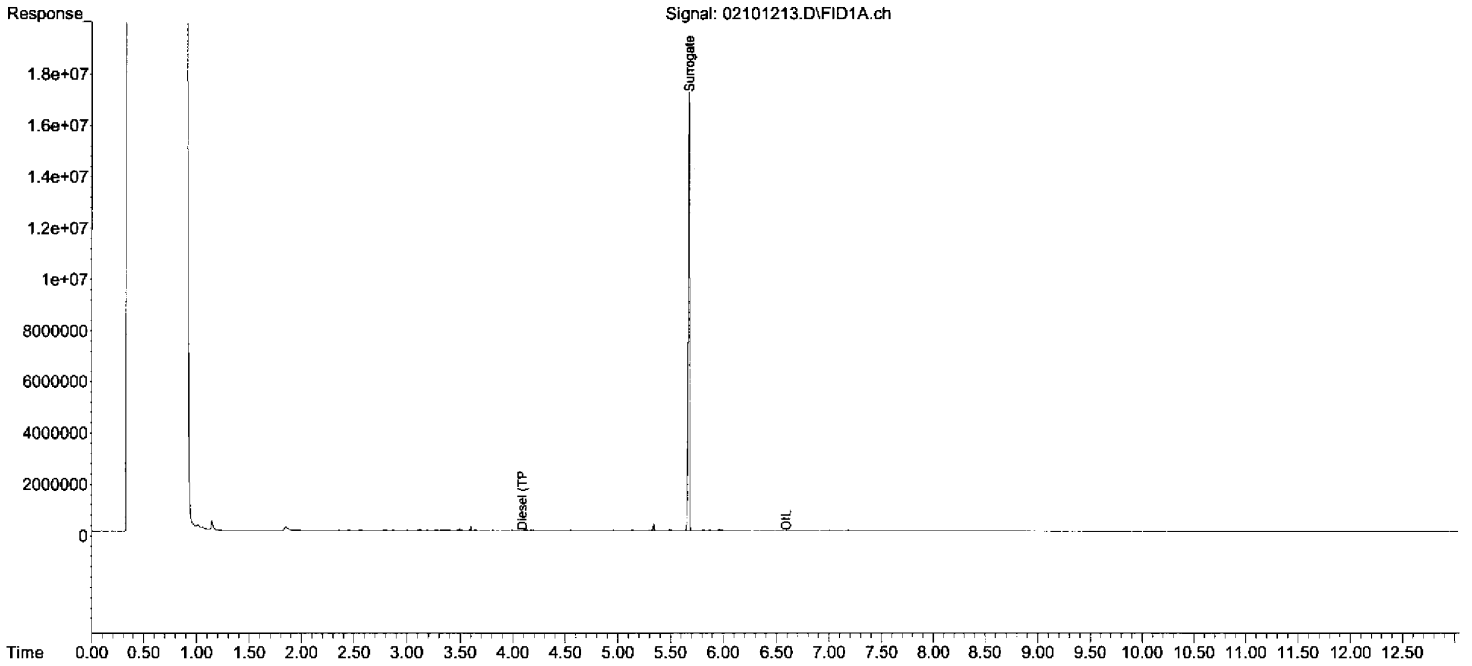
(f)=RT Delta > 1/2 Window (m)=manual int.

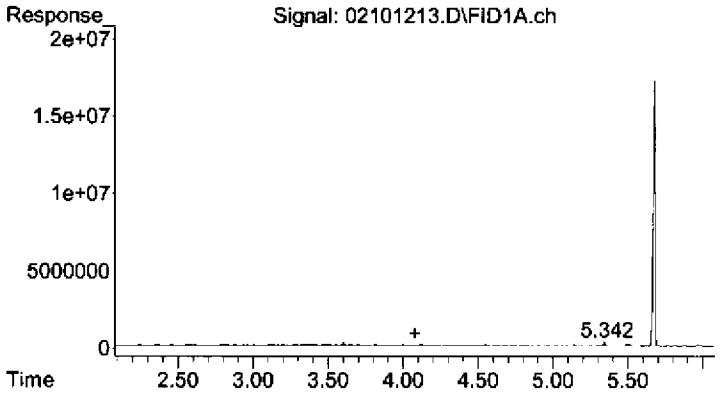
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101213.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 6:00 pm
Operator: SUL/TD
Sample : 1202023-08
Inst : AG7890_2
Misc : FB13
ALS Vial : 13 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:14 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

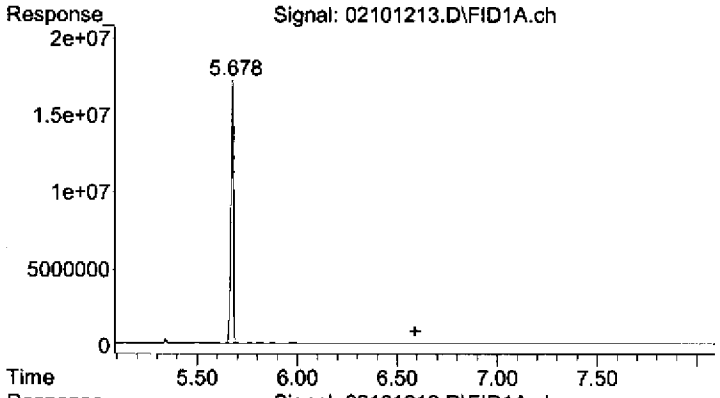
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





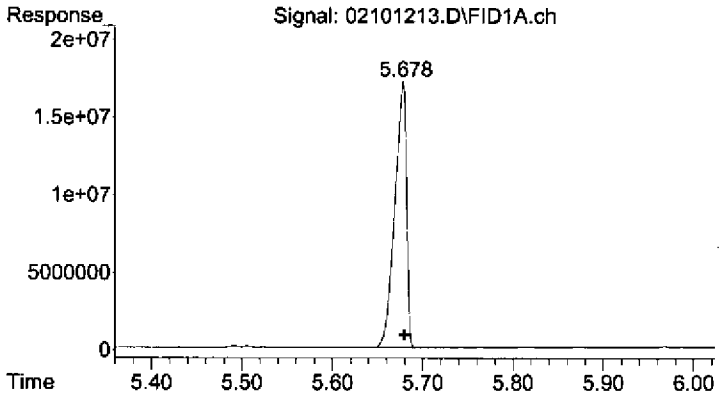
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 18129434
Conc: 5.05 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 7106203
Conc: 3.71 ug/mL



#3 Surrogate

R.T.: 5.677 min
Delta R.T.: -0.003 min
Response: 152802126
Conc: 43.01 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101214.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 6:18 pm Operator: SUL/TD
Sample : 1202023-09 Inst : AG7890_2
Misc : HW38
ALS Vial : 14 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:19 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	169886444	47.823 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	95.65%
Target Compounds			
1) HM Diesel (TPH)	4.080	16288631	4.539 ug/mL
2) H OIL	6.590	3338341	1.743 ug/mL

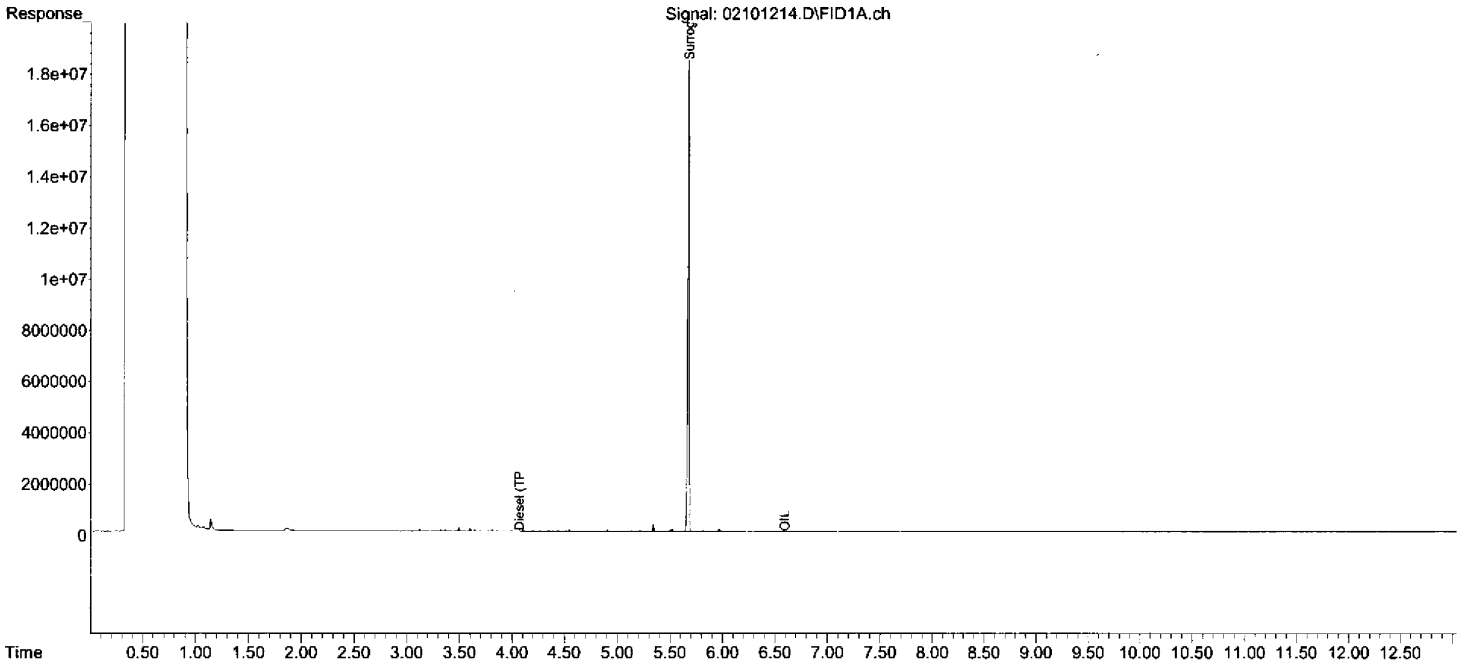
(f)=RT Delta > 1/2 Window (m)=manual int.

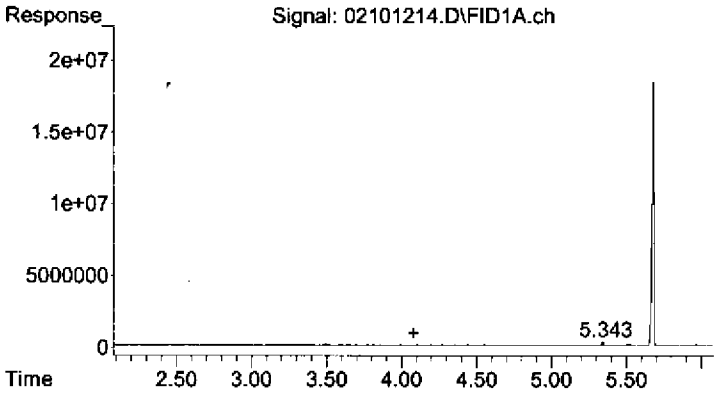
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101214.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 6:18 pm
Operator: SUL/TD
Sample : 1202023-09
Inst : AG7890_2
Misc : HW38
ALS Vial : 14 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:19 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

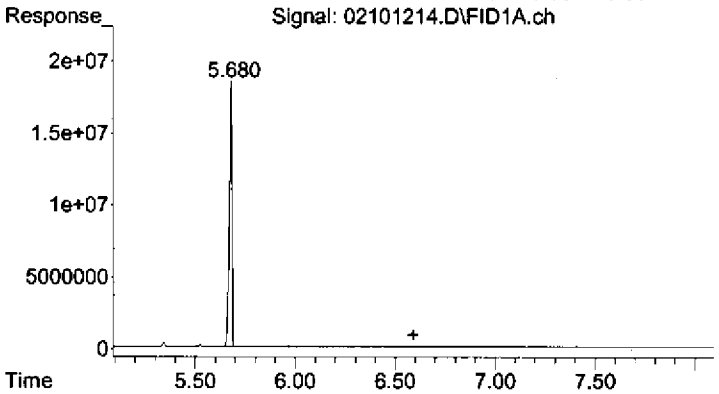
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





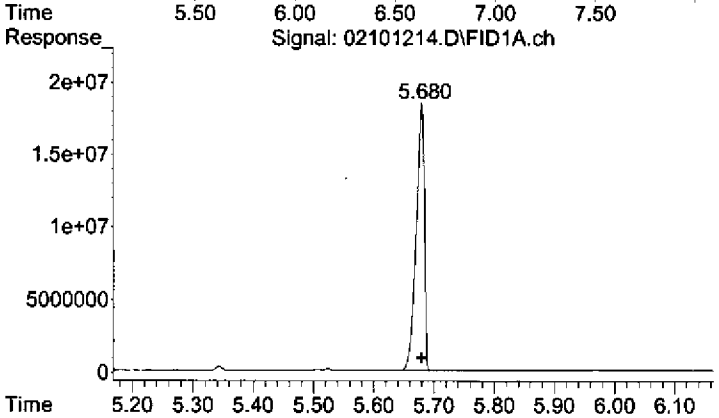
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 16288631
Conc: 4.54 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 3338341
Conc: 1.74 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.001 min
Response: 169886444
Conc: 47.82 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101215.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 6:36 pm Operator: SUL/TD
Sample : 1202023-10 Inst : AG7890_2
Misc : HW38-P
ALS Vial : 15 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:24 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	5.677	155946307	43.899 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	87.80%
Target Compounds			
1) HM Diesel (TPH)	4.080	12441306	3.467 ug/mL
2) H OIL	6.590	5233887	2.733 ug/mL

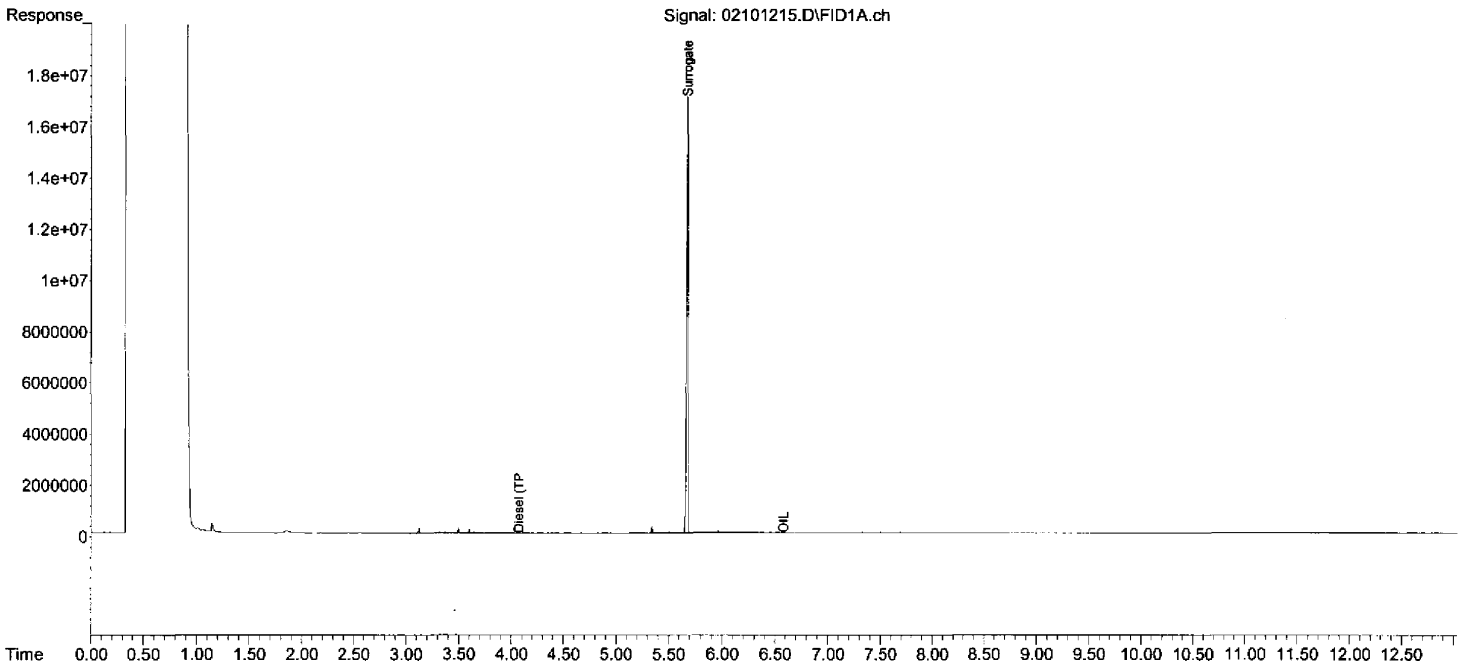
(f)=RT Delta > 1/2 Window (m)=manual int.

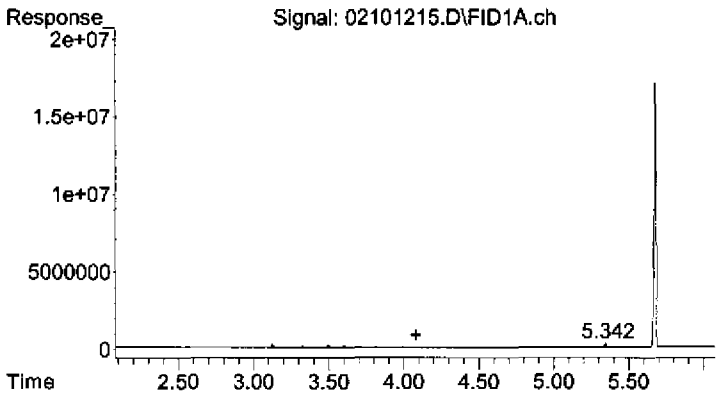
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101215.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 6:36 pm
Operator: SUL/TD
Sample : 1202023-10
Inst : AG7890_2
Misc : HW38-P
ALS Vial : 15 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:24 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

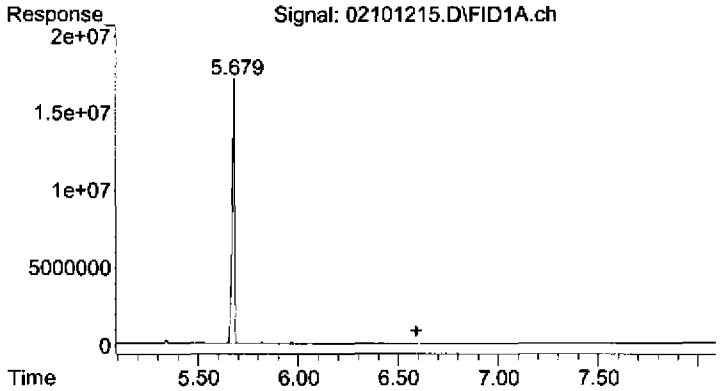
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





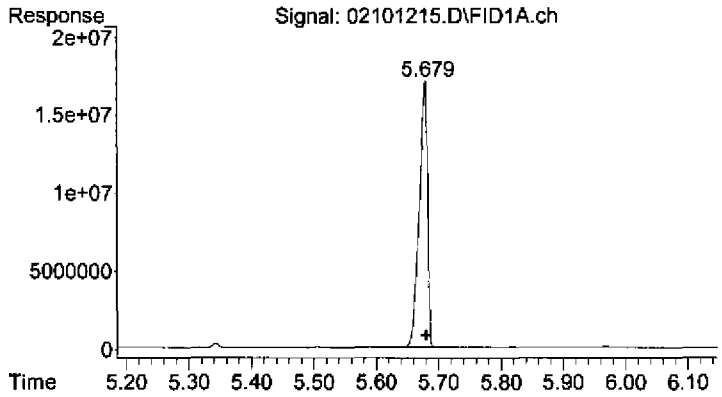
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 12441306
Conc: 3.47 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 5233887
Conc: 2.73 ug/mL



#3 Surrogate

R.T.: 5.677 min
Delta R.T.: -0.002 min
Response: 155946307
Conc: 43.90 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101216.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 6:53 pm Operator: SUL/TD
Sample : 2020040-IBL2 Inst : AG7890_2
Misc : 2A11003 IB
ALS Vial : 16 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:29 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	181460719	51.081 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	102.16%
Target Compounds			
1) HM Diesel (TPH)	4.080	5107478	1.423 ug/mL
2) H OIL	6.590	4083116	2.132 ug/mL

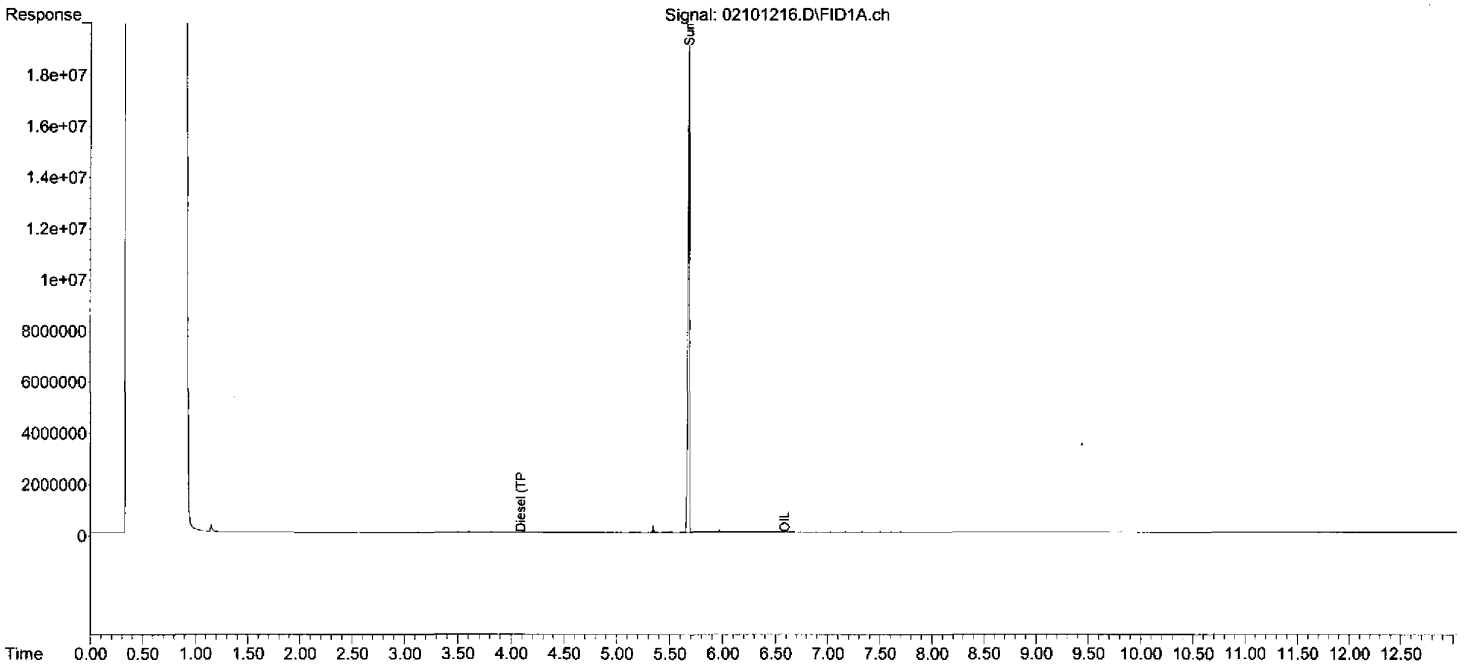
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

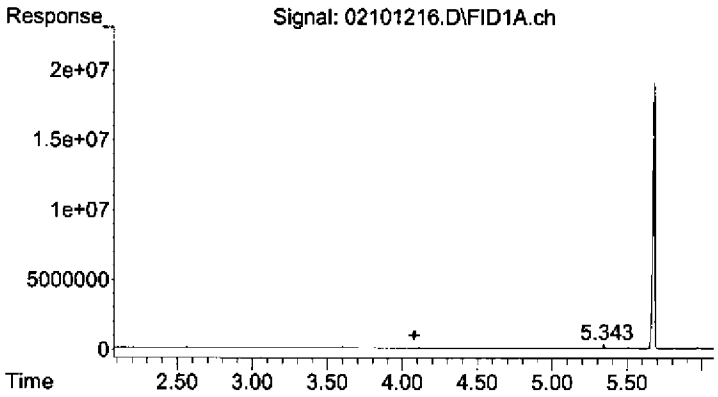
Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101216.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 6:53 pm
Operator: SUL/TD
Sample : 2020040-IBL2
Inst : AG7890_2
Misc : 2A11003 IB
ALS Vial : 16 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:29 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

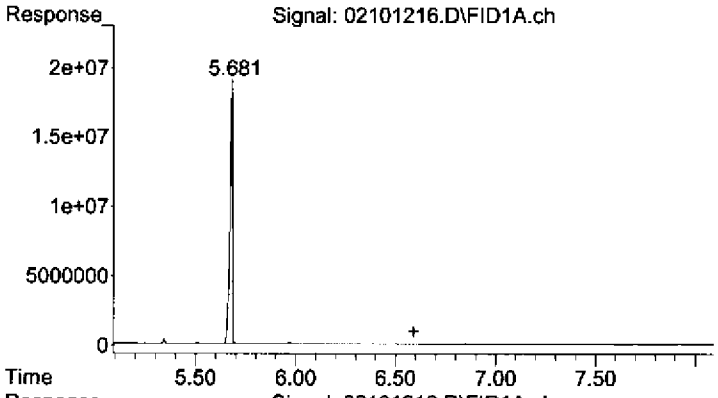


00326



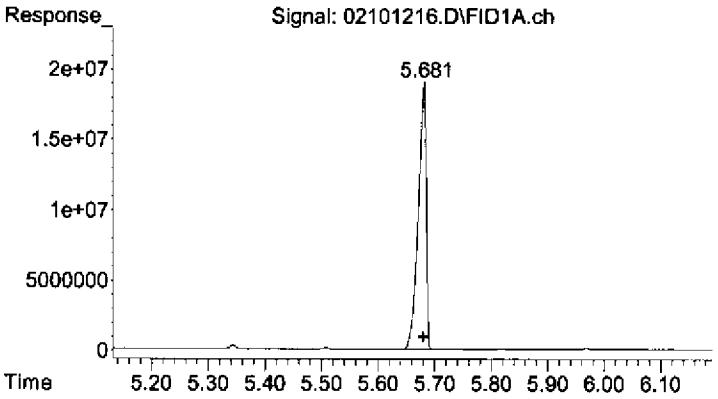
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 5107478
Conc: 1.42 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 4083116
Conc: 2.13 ug/mL



#3 Surrogate

R.T.: 5.679 min
Delta R.T.: 0.000 min
Response: 181460719
Conc: 51.08 ug/mL

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101217.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 7:11 pm
Operator: SUL/TD
Sample : 2020040-CCV3
Inst : AG7890_2
Misc : 2A11005 DRO-CV
ALS Vial : 17 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:33 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	3.208 E6	10.6	101	0.00
2	H	OIL	1.915	0.000 E6	100.0#	103	0.00
3	S	Surrogate	3.552	3.352 E6	5.6	100	0.00

Evaluate Continuing Calibration Report - Not Founds

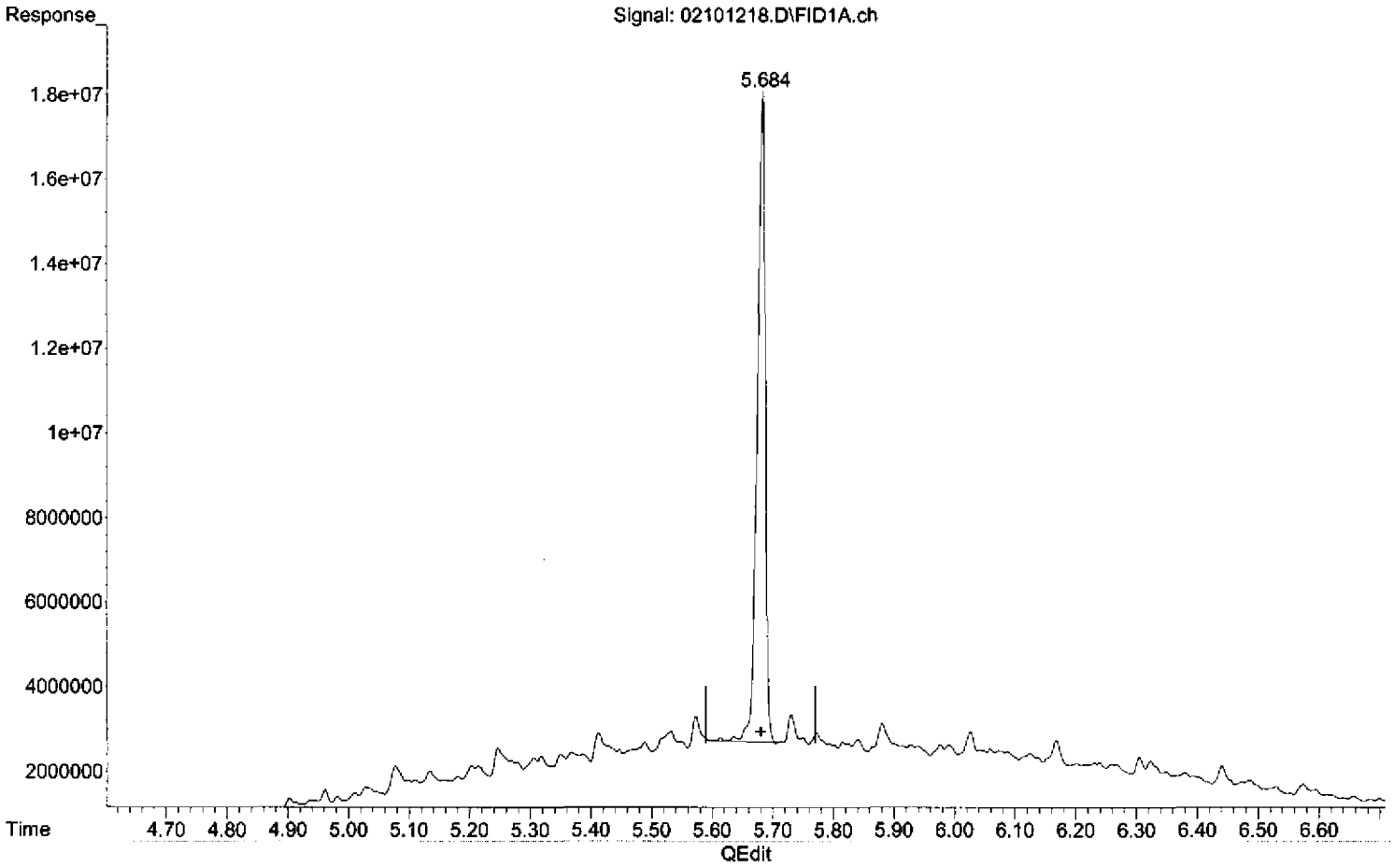
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101218.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 7:29 pm
Operator: SUL/TD
Sample : 2020040-CCV4
Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 18 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:38 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



(3) Surrogate (S)

5.683min 39.959 ug/mL

response 141952030

(+) = Expected Retention Time

013012DROA.M Mon Feb 13 08:34:08 2012

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101217.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 7:11 pm Operator: SUL/TD
Sample : 2020040-CCV3 Inst : AG7890_2
Misc : 2A11005 DRO-CV
ALS Vial : 17 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:33 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	167612918	47.183 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	94.37%
Target Compounds			
1) HM Diesel (TPH)	4.080	1603761682	446.919 ug/mL
2) H OIL	6.590	4009051	2.094 ug/mL

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

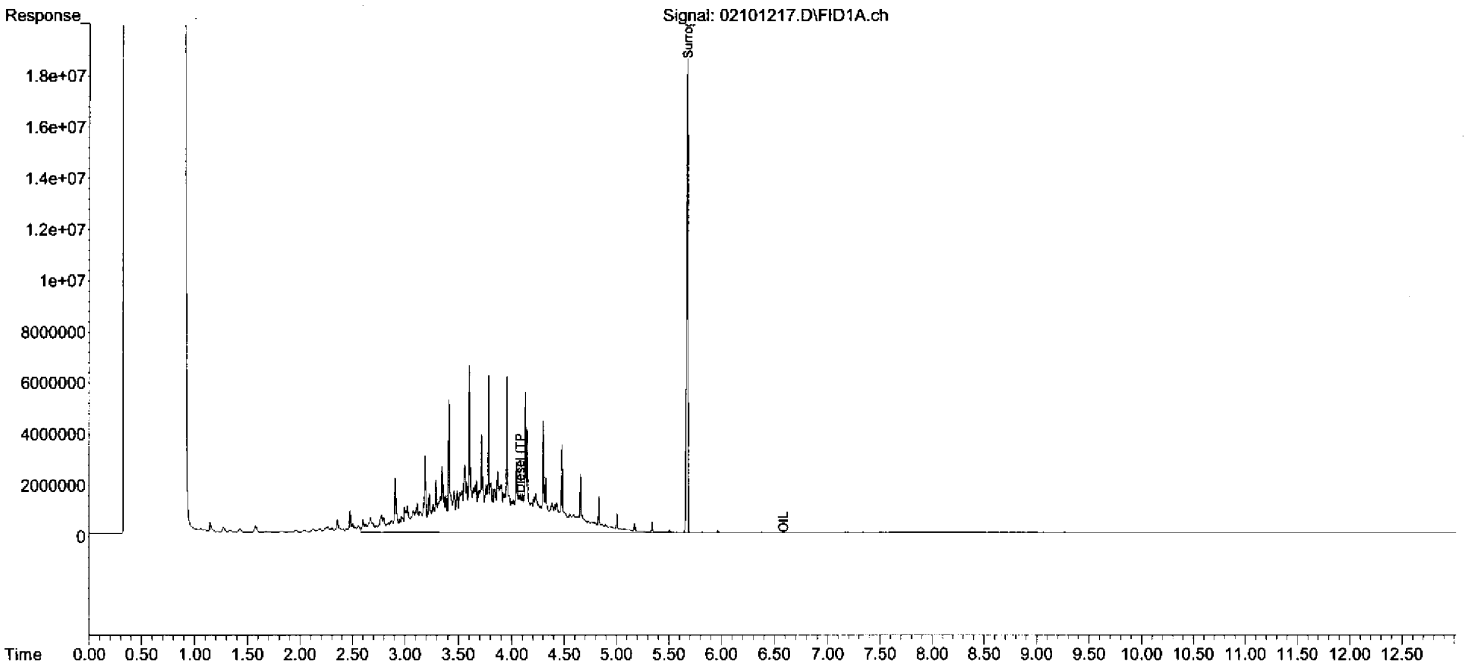
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101217.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 7:11 pm
Sample : 2020040-CCV3
Misc : 2A11005 DRO-CV
ALS Vial : 17 Sample Multiplier: 1

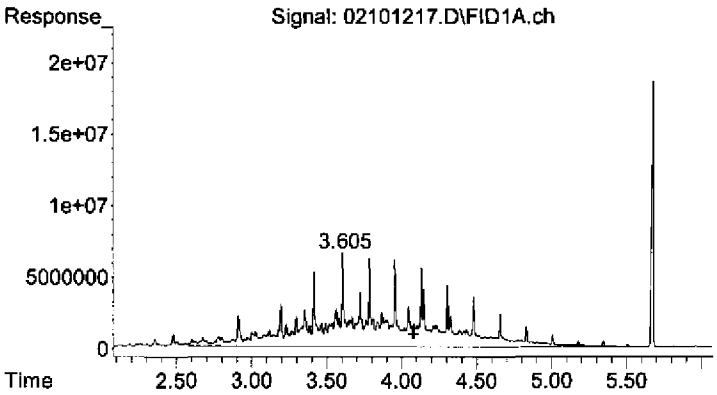
Operator: SUL/TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:33 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

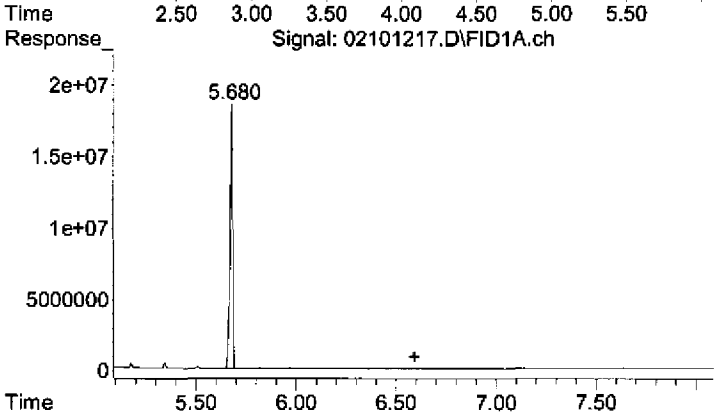


00331



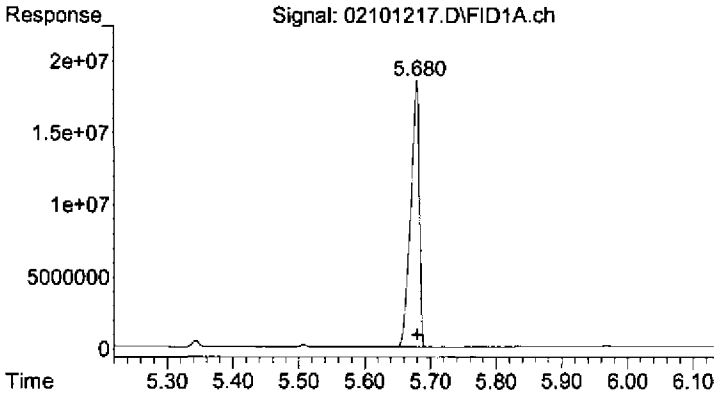
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1603761682
Conc: 446.92 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 4009051
Conc: 2.09 ug/mL



#3 Surrogate

R.T.: 5.678 min
Delta R.T.: -0.001 min
Response: 167612918
Conc: 47.18 ug/mL

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101218.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 7:29 pm Operator: SUL/TD
Sample : 2020040-CCV4 Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 18 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:38:20 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	1.708 E6	10.8	85	0.00
3 S	Surrogate	3.552	0.000 E6	100.0#	89	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\021012A\
Data File : 02101218.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 7:29 pm
Operator: SUL/TD
Sample : 2020040-CCV4
Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 18 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:38:20 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	142809674	40.201 ug/mLm
Spiked Amount 50.000	Range 60 - 127	Recovery =	80.40%
Target Compounds			
1) HM Diesel (TPH)	4.080	924336136	257.584 ug/mL
2) H OIL	6.590	1707901876	891.913 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: 02-13-12

Manual integration(s) reviewed by:

Reviewer: [illegible] Date: 2/13/12

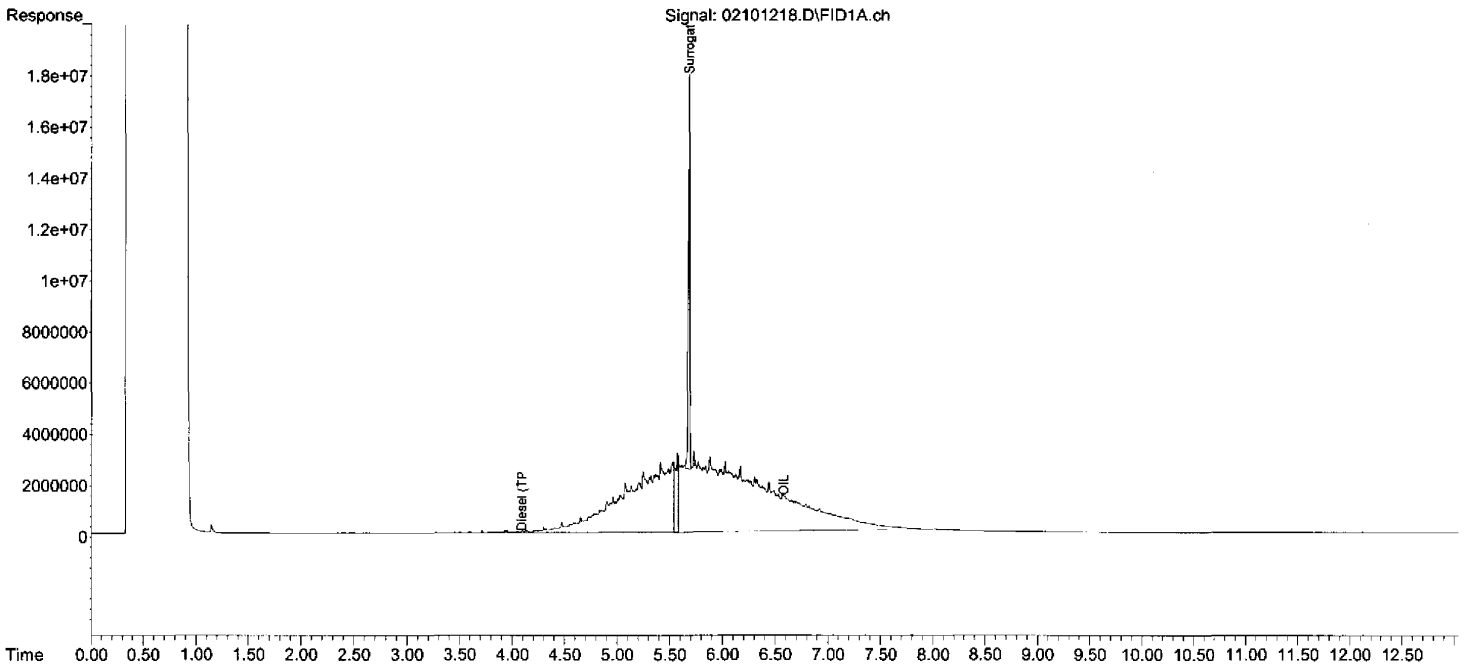
Quantitation Report (QT Reviewed)

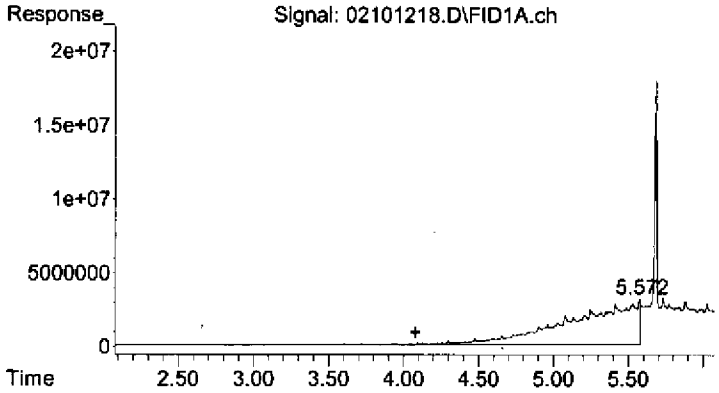
Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101218.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 7:29 pm
Sample : 2020040-CCV4
Misc : 2A11012 OIL-CV
ALS Vial : 18 Sample Multiplier: 1

Operator: SUL/TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:38:20 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

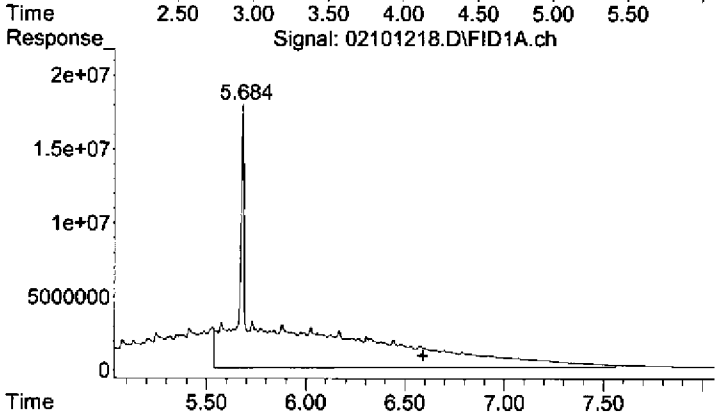
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





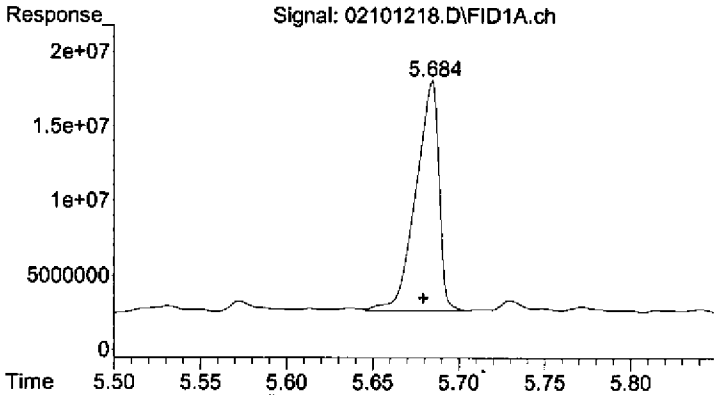
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 924336136
Conc: 257.58 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1707901876
Conc: 891.91 ug/mL m



#3 Surrogate

R.T.: 5.684 min
Delta R.T.: 0.005 min
Response: 142809674
Conc: 40.20 ug/mL m

Quantitation Report (Qedit)

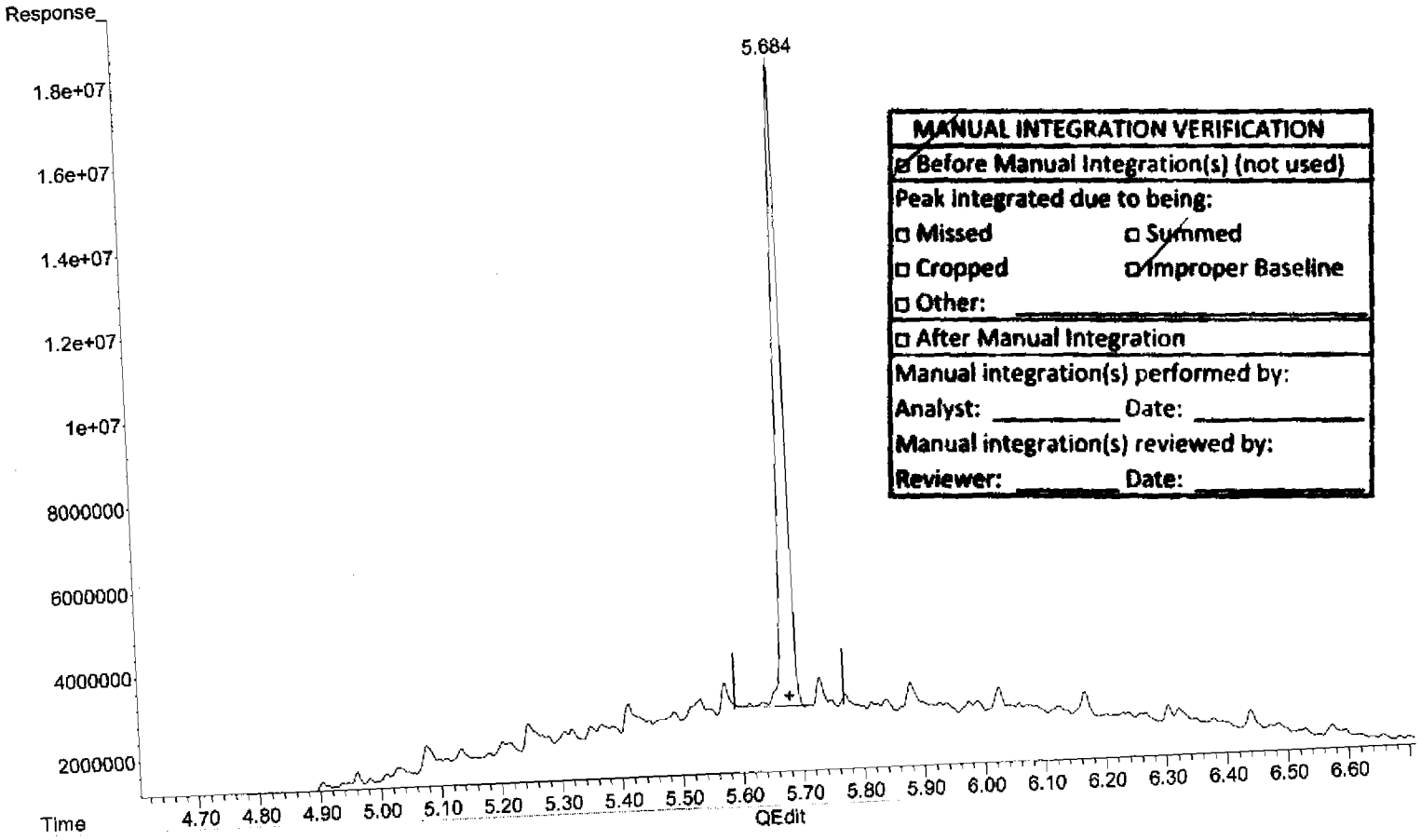
Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101218.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 7:29 pm
Sample : 2020040-CCV4
Misc : 2A11012 OIL-CV
ALS Vial : 18 Sample Multiplier: 1

Operator: SUL/TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:36:45 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: 02101218.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)

5.683min 39.959 ug/mL

response 141952030

(+) = Expected Retention Time
013012DROA.M Mon Feb 13 08:37:45 2012

DIM0035998

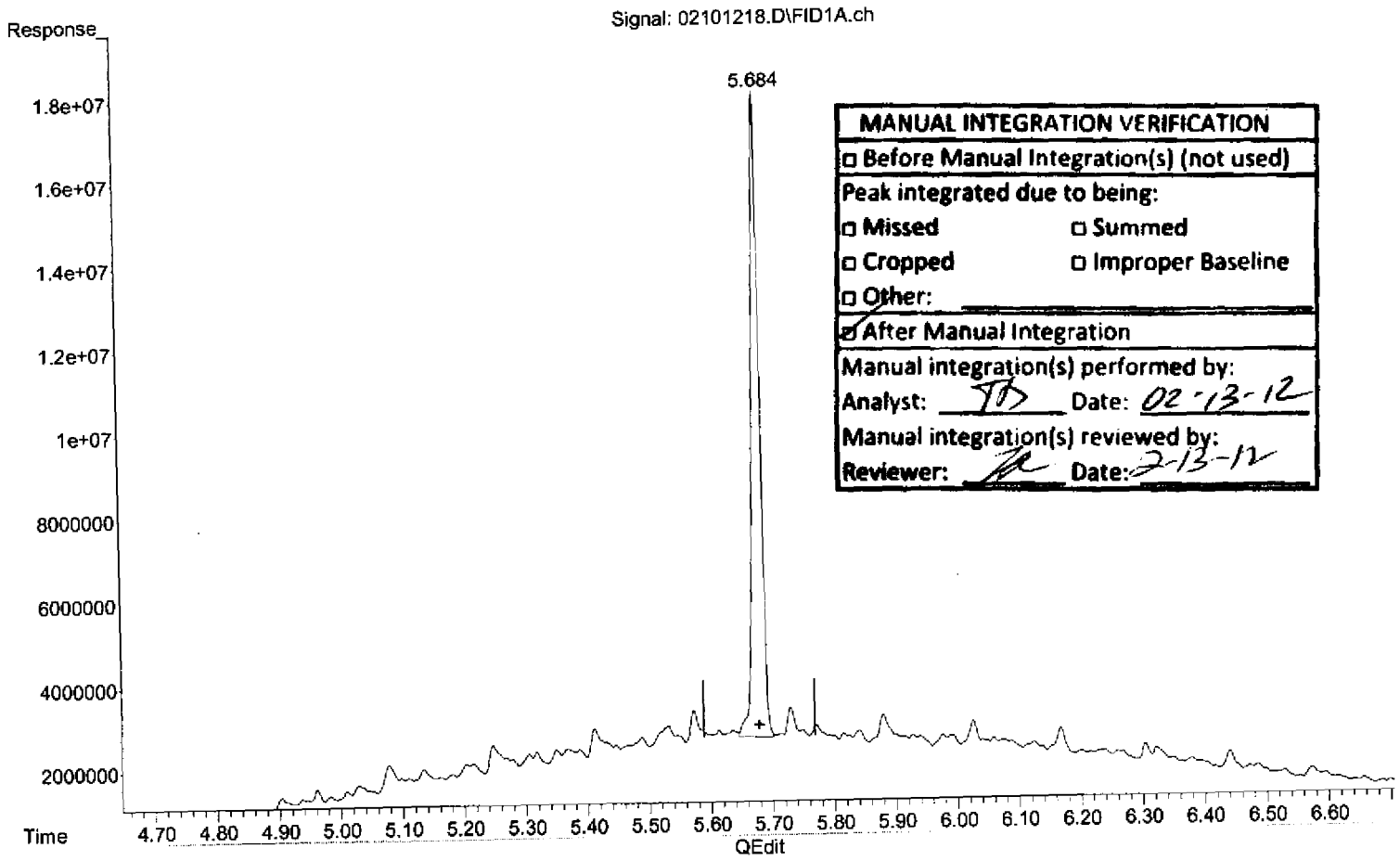
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101218.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 7:29 pm
Sample : 2020040-CCV4
Misc : 2A11012 OIL-CV
ALS Vial : 18 Sample Multiplier: 1

Operator: SUL/TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:36:45 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



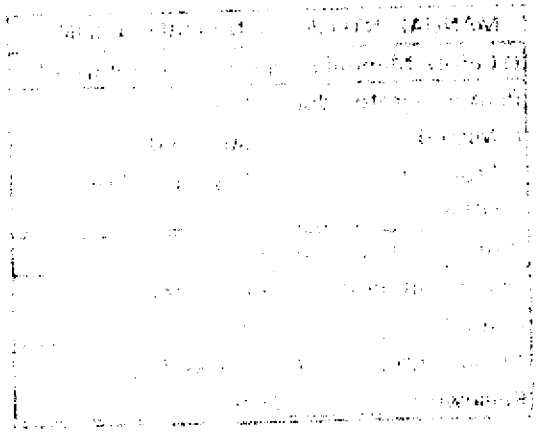
MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: TD Date: 02-13-12
Manual integration(s) reviewed by:
Reviewer: [signature] Date: 2-13-12

(3) Surrogate (S)

5.684min 40.201 ug/mL m

response 142809674

(+) = Expected Retention Time
013012DROA.M Mon Feb 13 08:38:05 2012



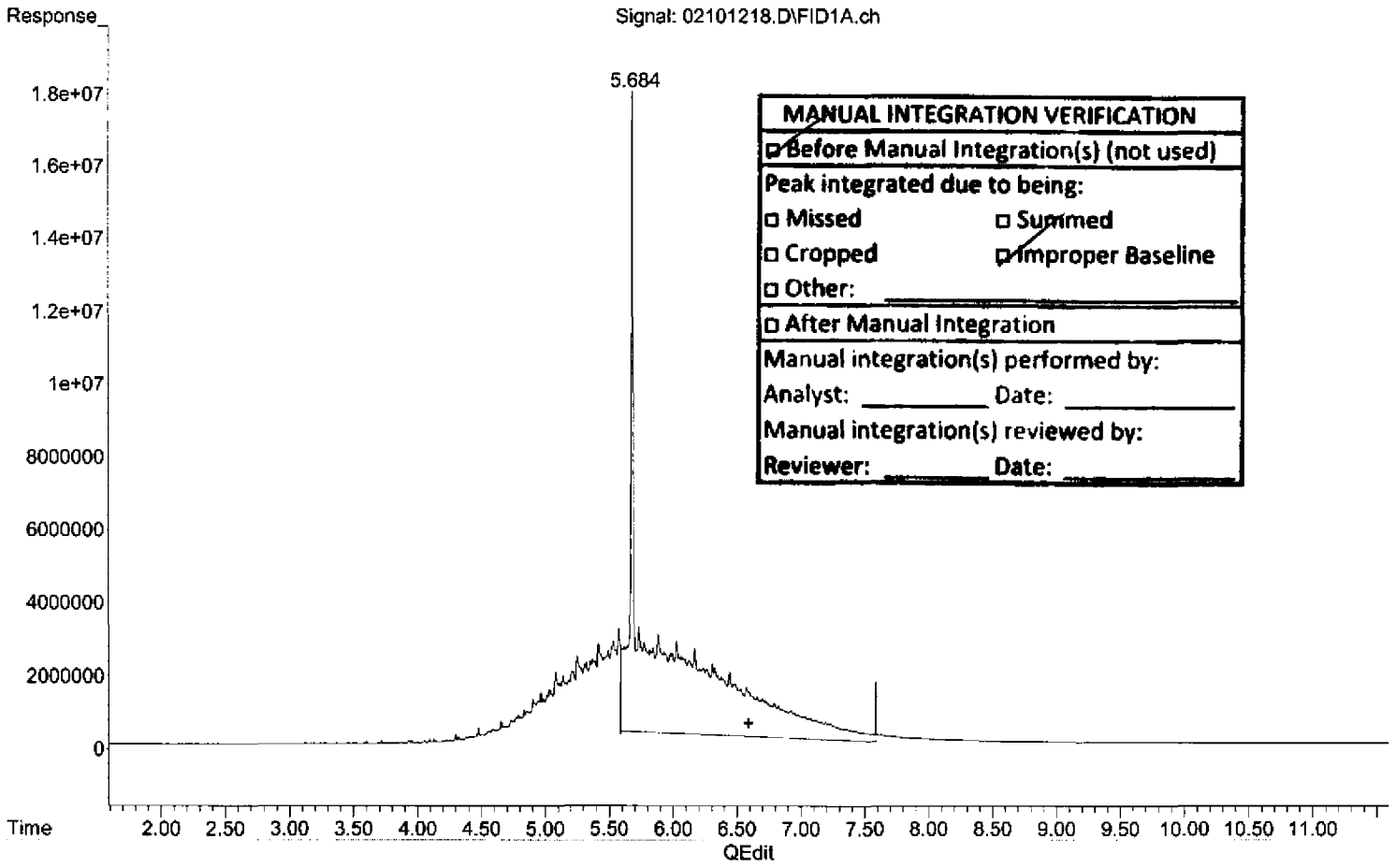
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101218.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 7:29 pm
Sample : 2020040-CCV4
Misc : 2A11012 OIL-CV
ALS Vial : 18 Sample Multiplier: 1

Operator: SUL/TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:36:45 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



(2) OIL (H)

6.590min 767.388 ug/mL

response 1469452669

(+) = Expected Retention Time
013012DROA.M Mon Feb 13 08:38:14 2012

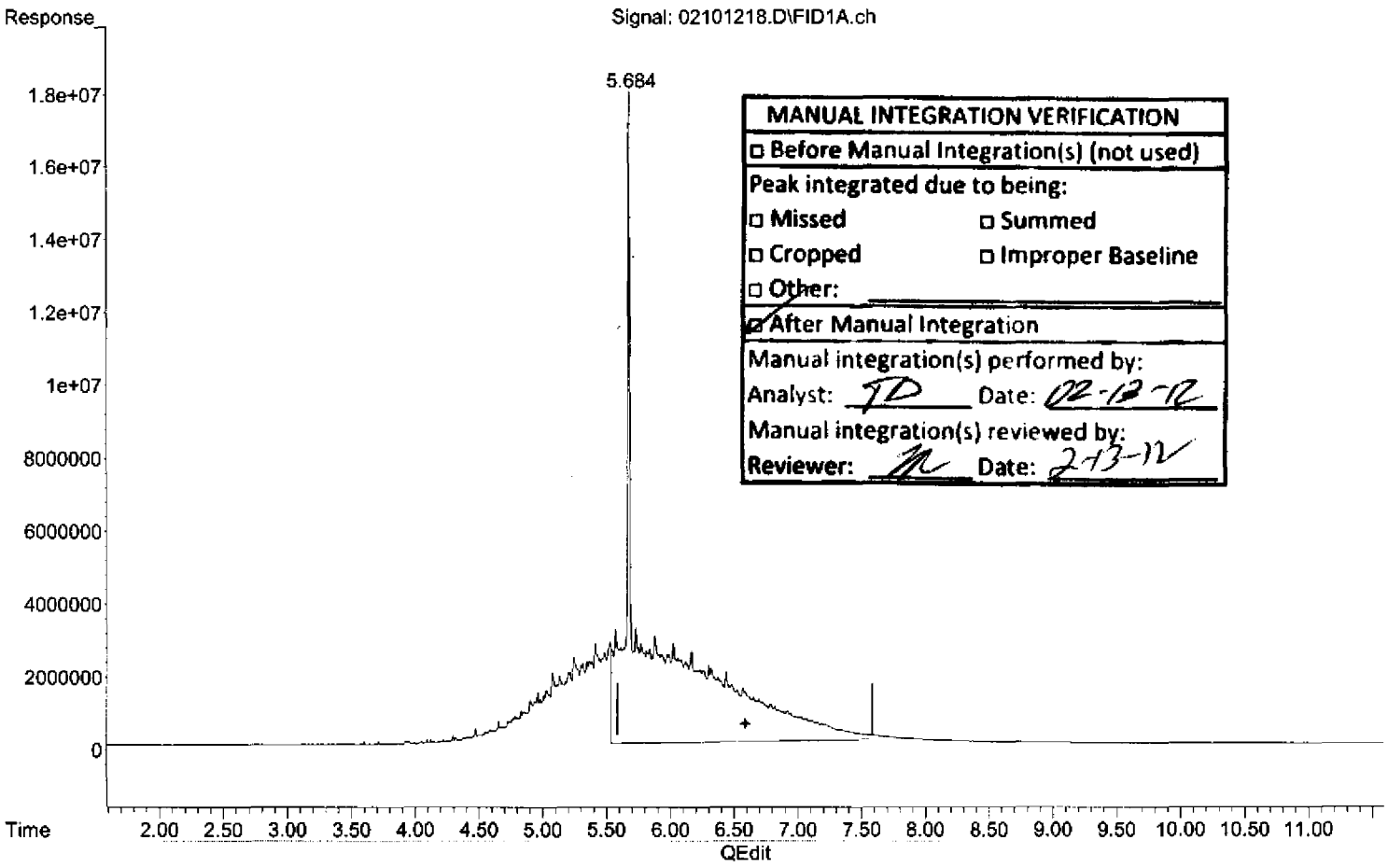
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101218.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 7:29 pm
Sample : 2020040-CCV4
Misc : 2A11012 OIL-CV
ALS Vial : 18 Sample Multiplier: 1

Operator: SUL/TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:36:45 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: 02-13-12
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 2-13-12

(2) OIL (H)

6.590min 891.913 ug/mL m

response 1707901876

(+) = Expected Retention Time

013012DROA.M Mon Feb 13 08:38:23 2012

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101218.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 7:29 pm Operator: SUL/TD
Sample : 2020040-CCV4 Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 18 Sample Multiplier: 1

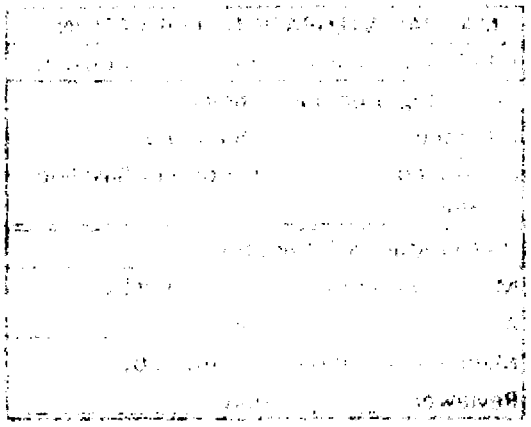
Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:38 2012
Quant Method : C:\msdchem\1\2012\METHOD\013012DROA.M
Quant Title : GC TPH Method
QLast Update : Tue Jan 31 09:45:52 2012
Response via : Initial Calibration
Integrator: ChemStation

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	5.683	141952030	39.959 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	79.92%
Target Compounds			
1) HM Diesel (TPH)	4.080	924336136	257.584 ug/mL
2) H OIL	6.590	1470310313	767.836 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: _____

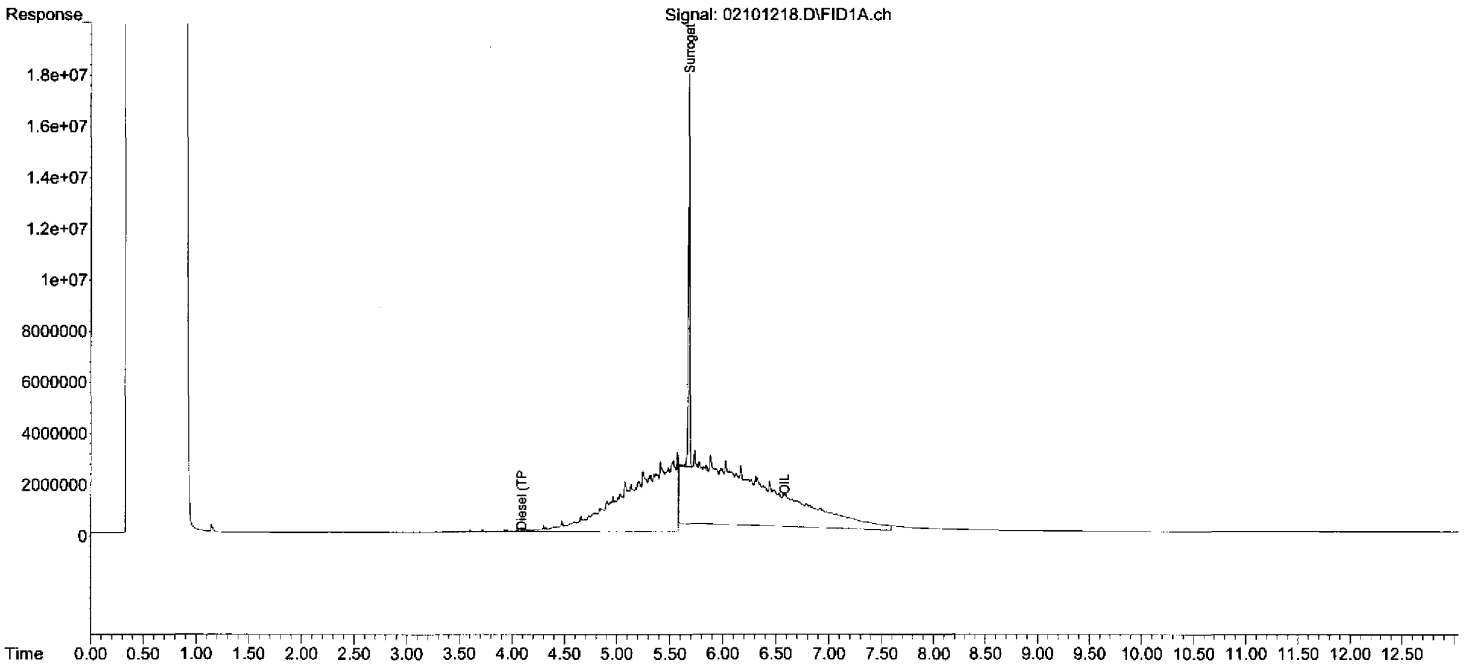


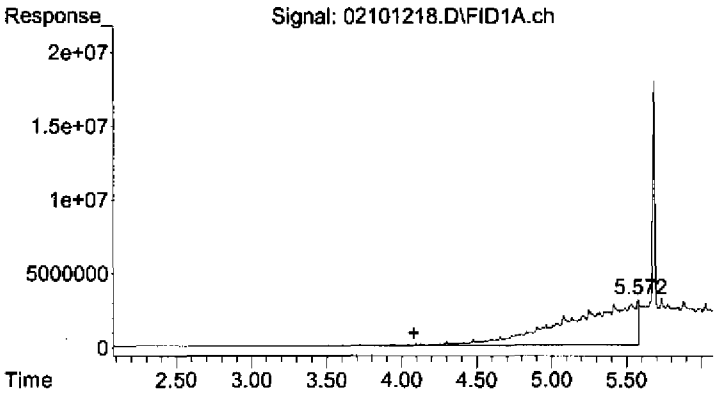
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101218.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 7:29 pm
Operator: SUL/TD
Sample : 2020040-CCV4
Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 18 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:38 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

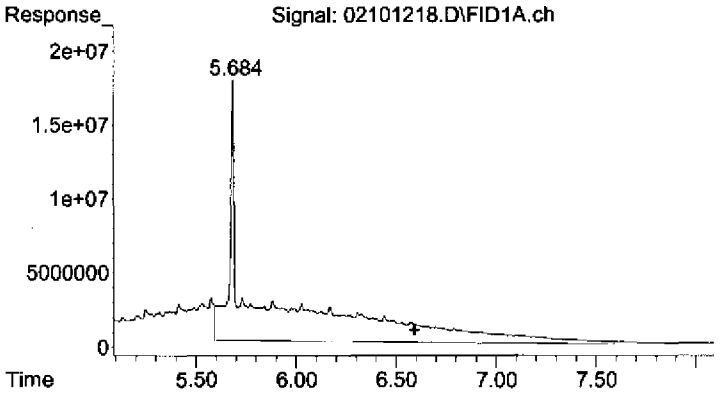
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





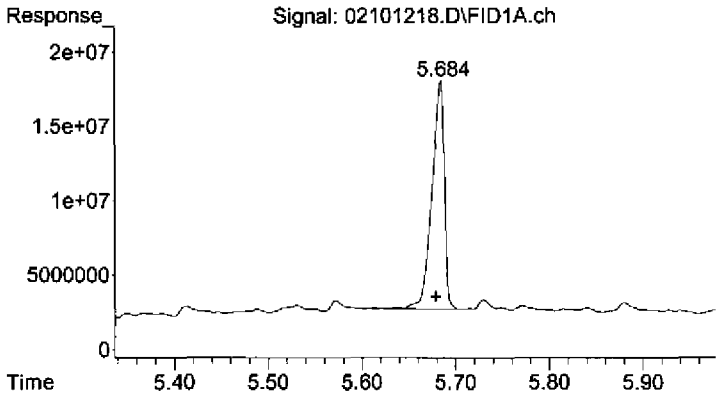
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 924336136
Conc: 257.58 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1470310313
Conc: 767.84 ug/mL



#3 Surrogate

R.T.: 5.683 min
Delta R.T.: 0.003 min
Response: 141952030
Conc: 39.96 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101219.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 7:47 pm Operator: SUL/TD
Sample : 2020040-CCV5 Inst : AG7890_2
Misc : 2A11005 DRO-CV
ALS Vial : 19 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:43 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	166697012	46.925 ug/mL
Spiked Amount 50.000	Range 60 - 127	Recovery =	93.85%
Target Compounds			
1) HM Diesel (TPH)	4.080	1602870844	446.671 ug/mL
2) H OIL	6.590	4988231	2.605 ug/mL

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

not validated

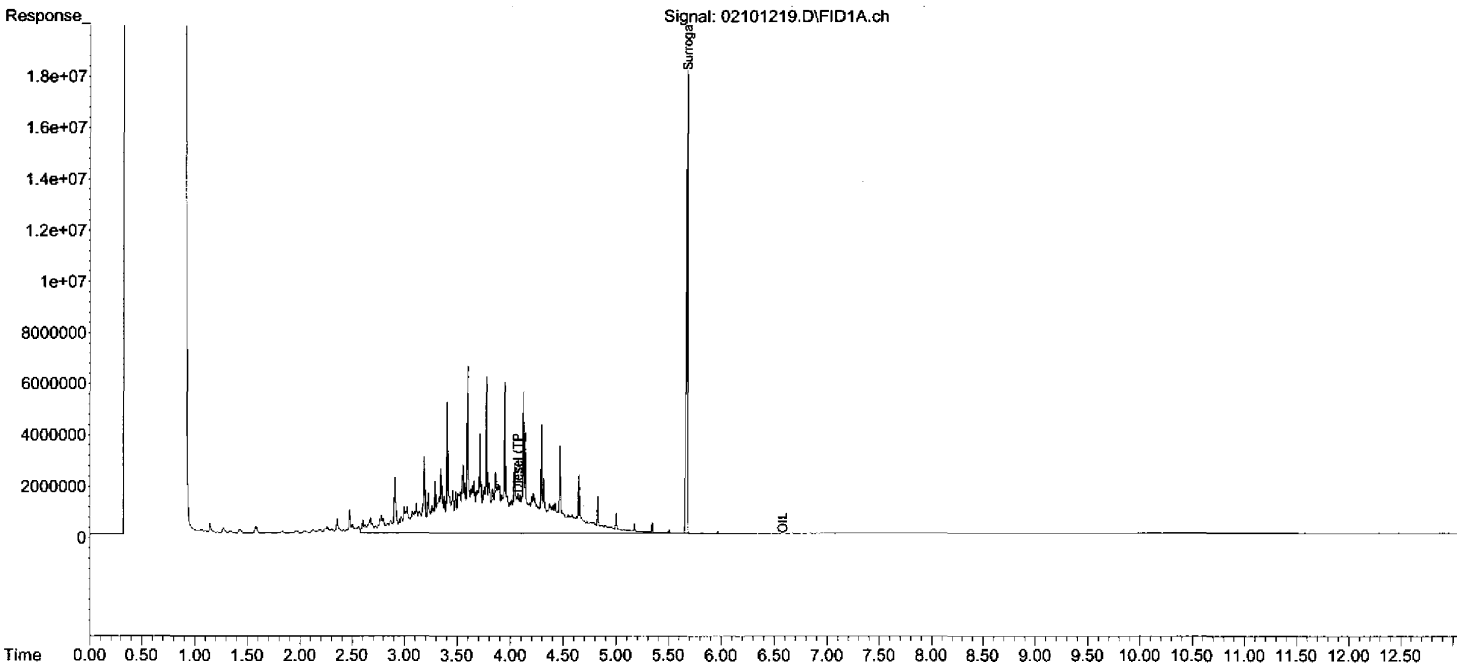
Quantitation Report (Not Reviewed)

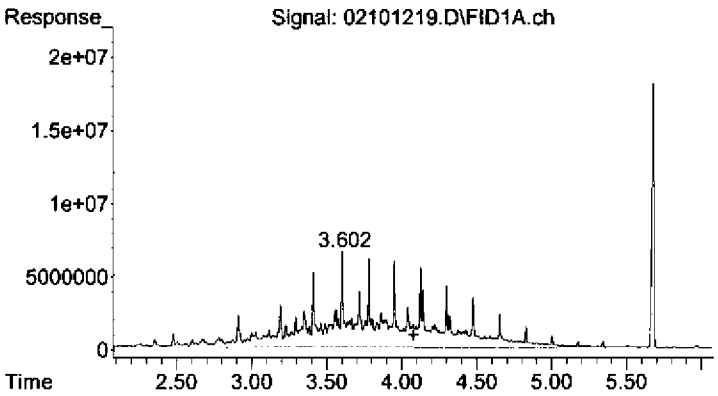
Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101219.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 7:47 pm
Sample : 2020040-CCV5
Misc : 2A11005 DRO-CV
ALS Vial : 19 Sample Multiplier: 1

Operator: SUL/TD
Inst : AG7890_2

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:43 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

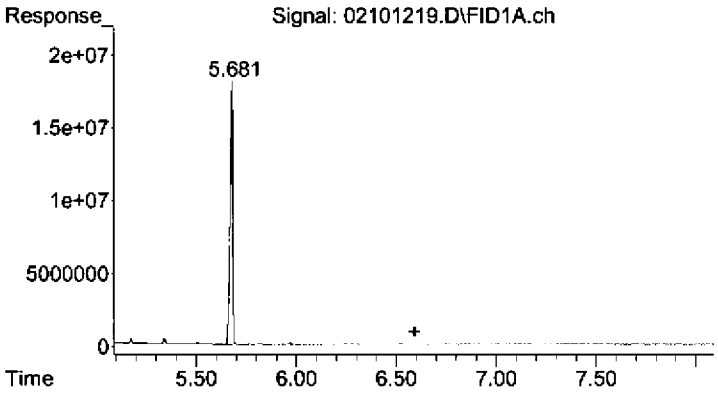
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





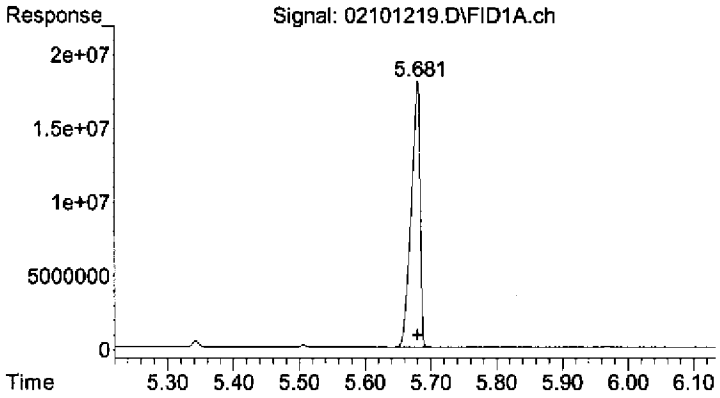
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 1602870844
Conc: 446.67 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 4988231
Conc: 2.60 ug/mL



#3 Surrogate

R.T.: 5.679 min
Delta R.T.: 0.000 min
Response: 166697012
Conc: 46.93 ug/mL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101220.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 8:05 pm Operator: SUL/TD
Sample : 2020040-CCV6 Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 20 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:48 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	5.684	149799159	42.168 ug/mL
Spiked Amount 50.000 Range 60 - 127		Recovery =	84.34%
Target Compounds			
1) HM Diesel (TPH)	4.080	985320699	274.579 ug/mL
2) H OIL	6.590	1553112722	811.078 ug/mL

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

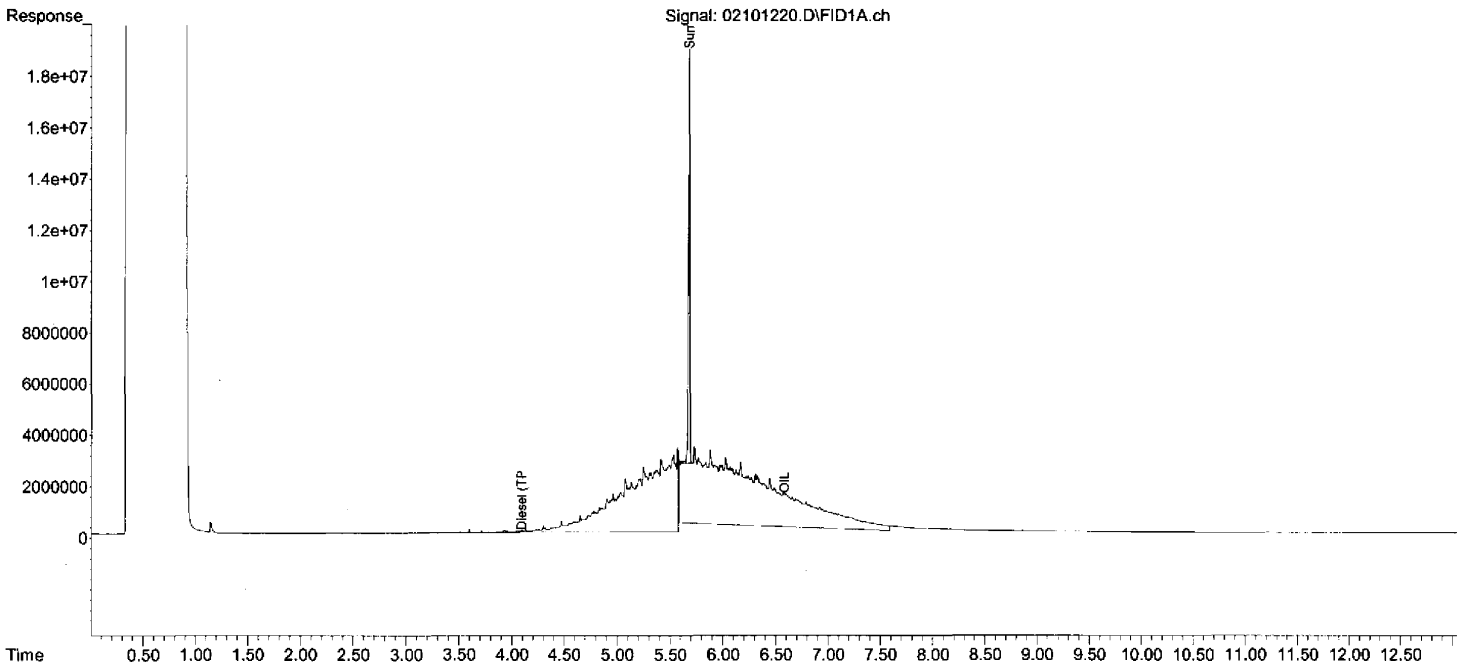
not quantated

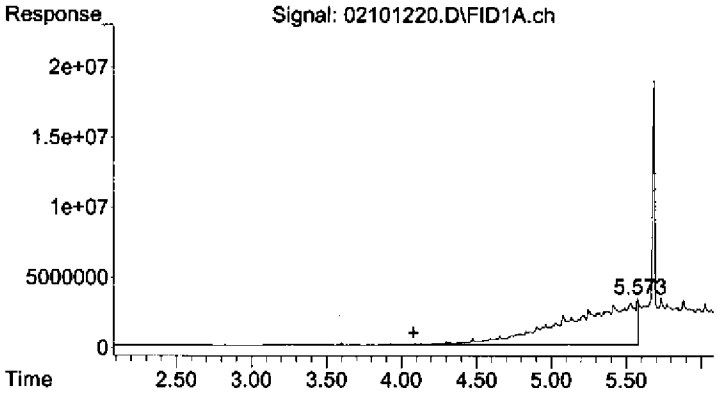
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\2012\DATA\021012A\
Data File : 02101220.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2012 8:05 pm
Operator: SUL/TD
Sample : 2020040-CCV6
Inst : AG7890_2
Misc : 2A11012 OIL-CV
ALS Vial : 20 Sample Multiplier: 1

Integration File: HEXACOSANE.E
Quant Time: Feb 13 08:02:48 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

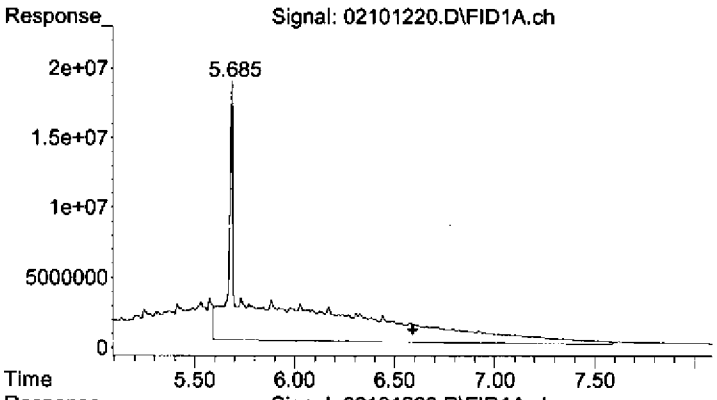
Volume Inj. : 2 uL
Signal Phase : Rtx-1 15m
Signal Info : 0.32 mm 0.1um





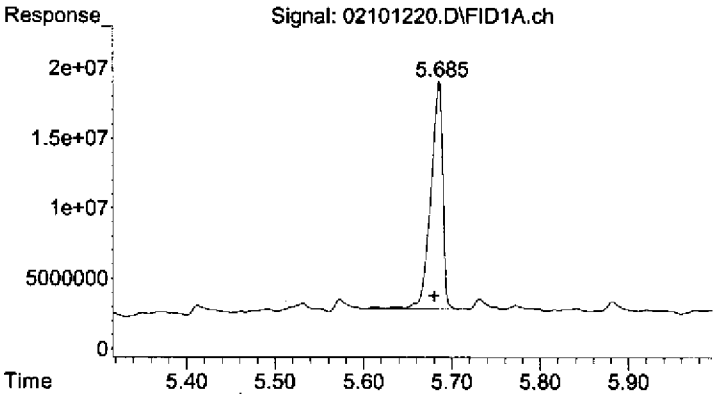
#1 Diesel (TPH)

R.T.: 4.080 min
Delta R.T.: 0.000 min
Response: 985320699
Conc: 274.58 ug/mL



#2 OIL

R.T.: 6.590 min
Delta R.T.: 0.000 min
Response: 1553112722
Conc: 811.08 ug/mL



#3 Surrogate

R.T.: 5.684 min
Delta R.T.: 0.004 min
Response: 149799159
Conc: 42.17 ug/mL

Standard Records

: 00348

DIM0035998

DIM0036783

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)

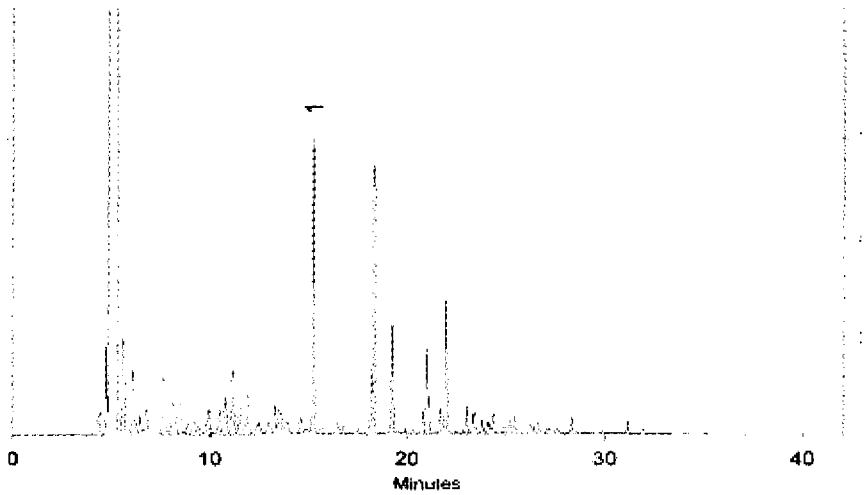
Carrier Gas:
hydrogen @ 40 cm/sec.

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 achelve 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)

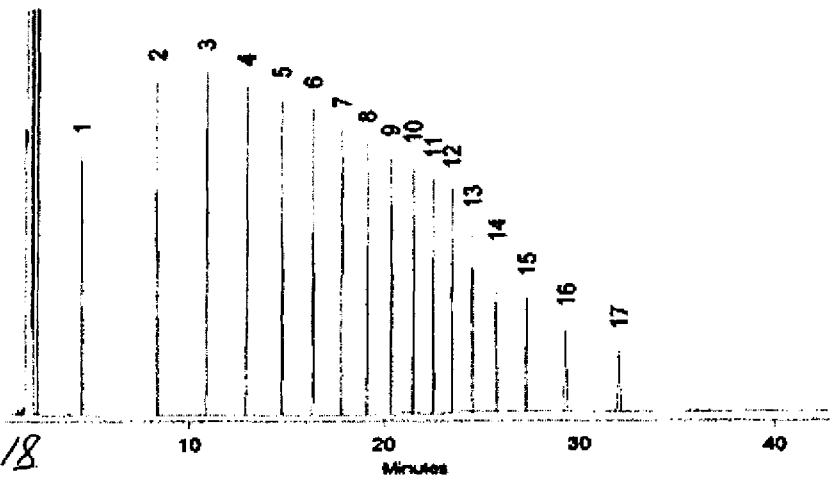
Carrier Gas:
hydrogen @ 40cm/sec.

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
5 | 21
6 | 22

: 00352

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

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.
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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

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

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OR-ORG/INO-001
Rev. 7/10

: 00356

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) | 1B16004
(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

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Rev. 7/10

Analytical Standard Record

EPA Region 9 Laboratory

1B18007

Description:	DRO:Composite #2 Diesil Fuel Solution, 5	**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
1R18004
open 02.18.11
yab

1R18005
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. 0861-01

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

: 00360

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.L., 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)

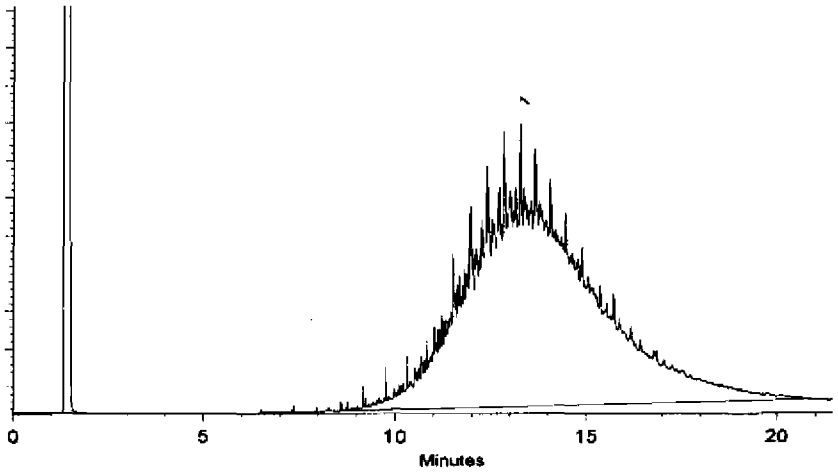
Carrier Gas:
hydrogen-constant pressure 10 psi.

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
4	10
5	11

: 00362

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

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. (weight/volume) [3]	% Grav Uncert. (95% C.L.; K=2) [4]
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)

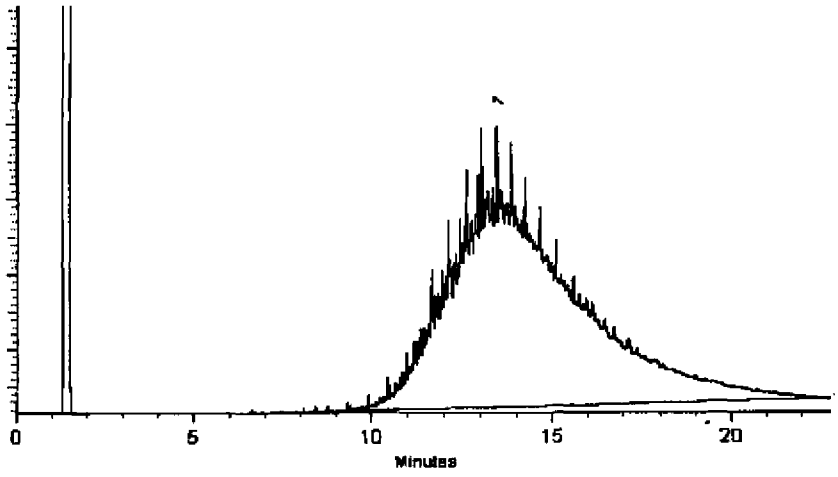
Carrier Gas:
hydrogen-constant pressure 10 psi.

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 - QAA 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

: 00364

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 (weight/volume) [3]	% Grav Uncert. (95% C.L.; K=2) [4]
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)

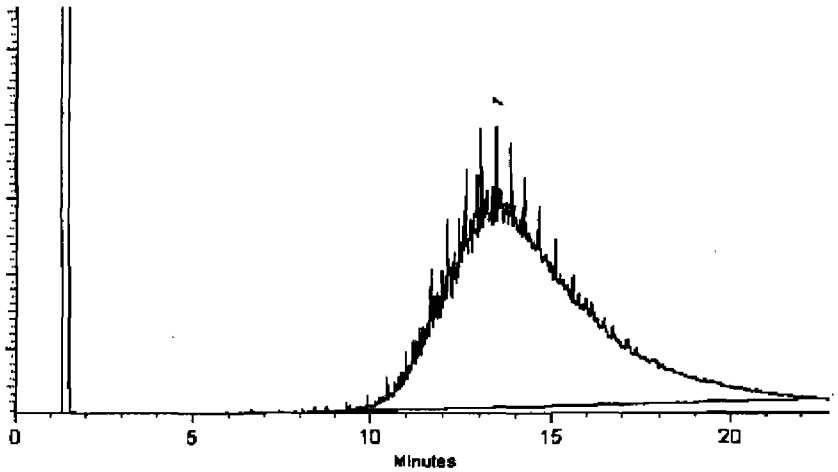
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

: 00365

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)

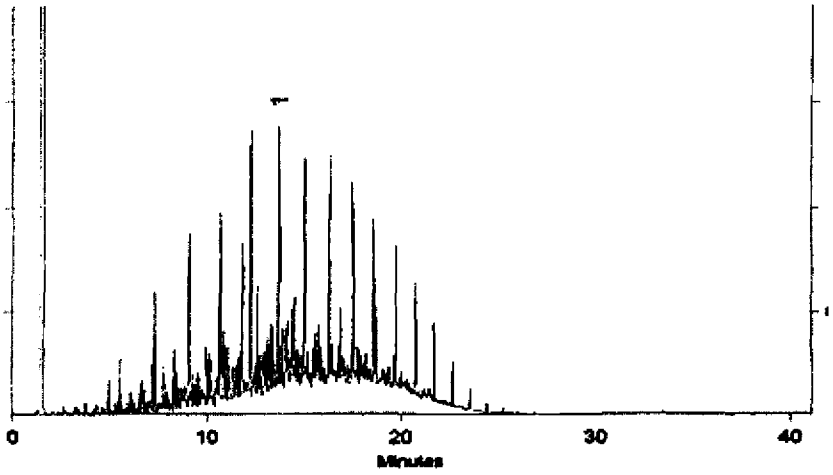
Carrier Gas:
hydrogen-constant pressure 10 psi

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
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.
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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.

AU003406	1022017
7	1022018
8	19
9	20
10	21

: 00357

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)

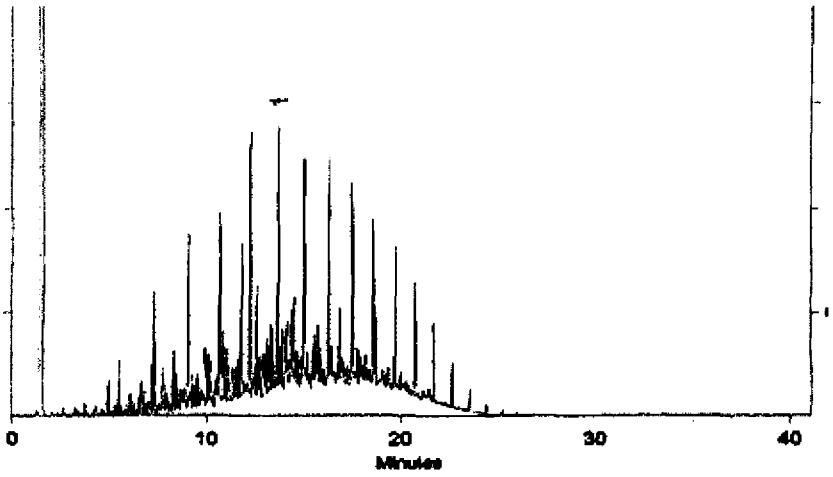
Carrier Gas:
hydrogen-constant pressure 10 psi

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.
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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 | 1e22017
7 | 1e22018
8 | 19
9 | 20
10 | 21

00369

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.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)

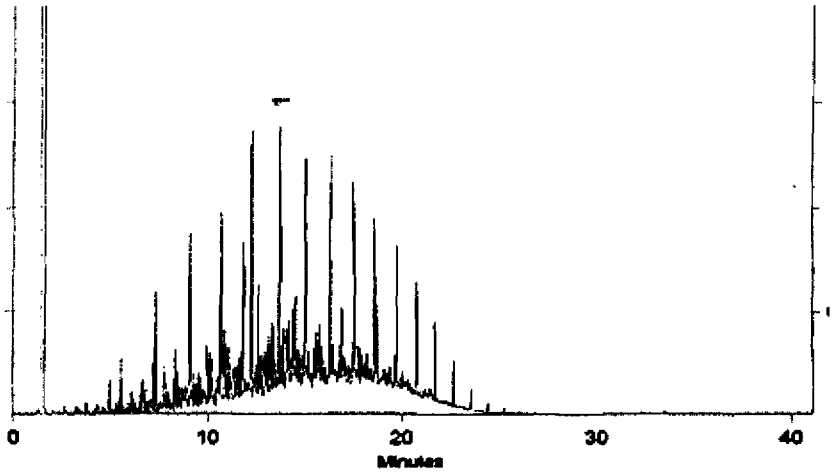
Carrier Gas:
hydrogen-constant pressure 10 psi

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

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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

00371

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)

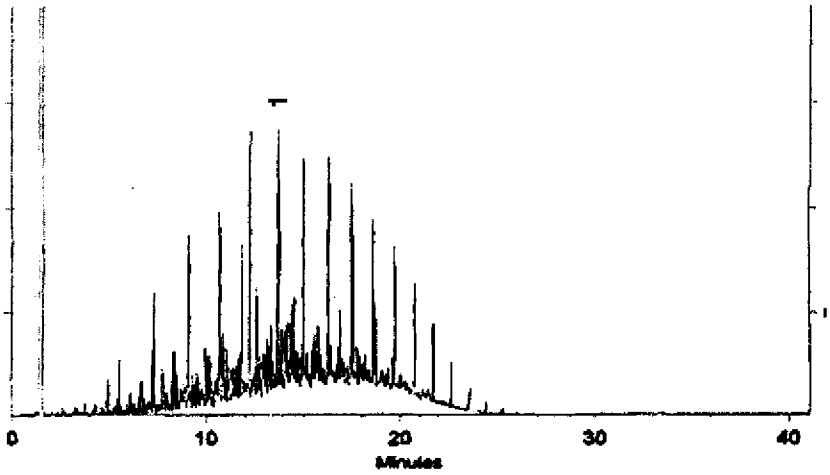
Carrier Gas:
hydrogen-constant pressure 10 psi

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
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.
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A4003440	1C22022
41	23
42	24
48	25
49	26
50	27
57	28
52	29

00373

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)

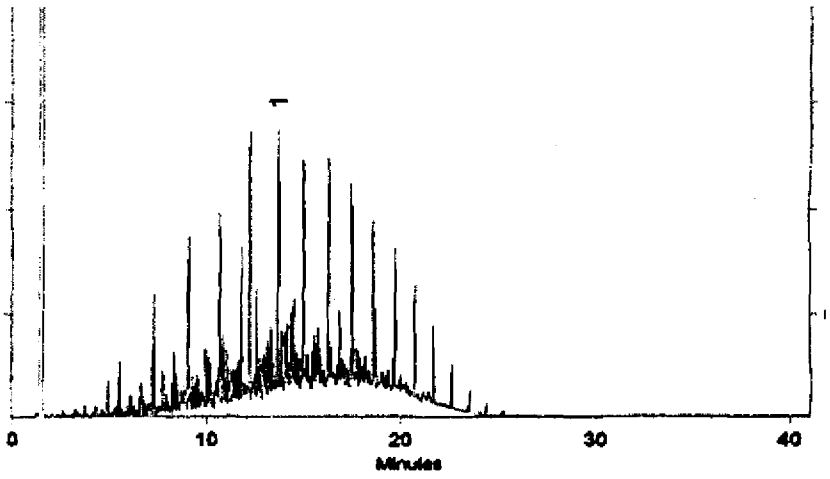
Carrier Gas:
hydrogen-constant pressure 10 psi

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 / QA Analyst **Date Passed:** 08/18/2009 **Balance:** 1128382313

Manufactured under Restek's ISO 9001-2000 Registered Quality System Certificate #FMB0397

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A4003440	1C22022
41	23
42	24
48	25
49	26
50	27
57	28
52	29

00376

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.

ACCREDITED

ISO Guide 34 -Reference Materials Manufacturer Certificate # 2495.01, ISO 17025 -Chemical Testing Certificate # 2495.02

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SPEX CERTIPREP, INC 203 NORCROSS AVENUE METUCHEN, NJ 08840
732-549-7144 1-800-LAB-SPEX FAX: 732-603-9647
www.spexcertiprep.com

SPEX CertiPrep Organic Certificate of Analysis, Revision 2 9-2020

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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 Stand:	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

: 00382

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 (A+B)
A100335 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

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

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
~~1I23008~~ D
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

OR-ORG/INO-001
Rev 7/10

00385

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

QR-ORG/NO-001
Rev 7/10

00386

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

00387

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

IZ23012
IZ23013
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

QR-ORG/INO-001
Rev 7/10

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:ACB 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, Std	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)
1I23012	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

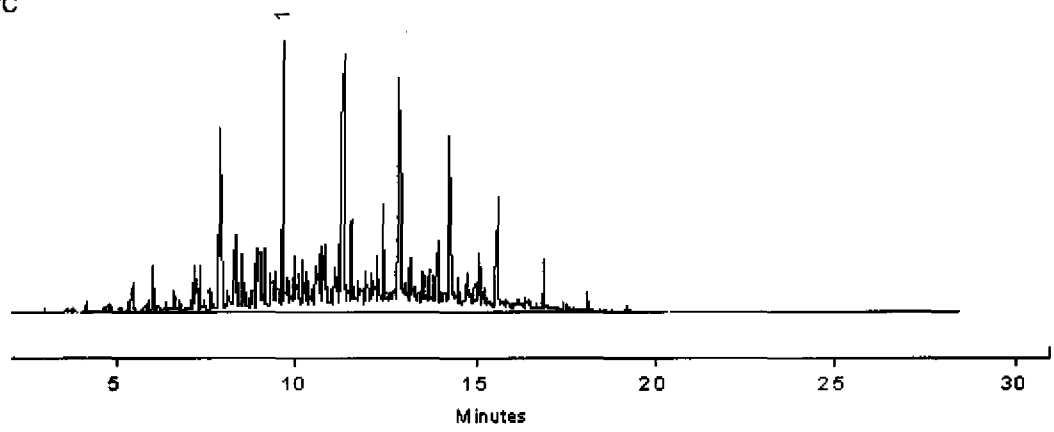
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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 #FM60397

: 00416

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