



Walgreen Co.
304 Wilmot Road, MS #3385
Deerfield, IL 60015
P 847-527-4788
www.Walgreens.com

January 26, 2016

RECEIVED

By Alameda County Environmental Health 9:03 am, Apr 08, 2016

Mr. Dillion Roe
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Submittal of Work Plan for Walgreens Fuel Spill Site Investigation
Interstate 680 at Koopman Road
Sunol, Alameda County, California
Site Cleanup Case No. RO0003158

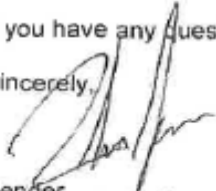
Dear Mr. Roe:

On behalf of Walgreens Distribution, Bureau Veritas North America, Inc. (BVNA) has prepared the attached technical report to comply with your letter dated June 11, 2015 to prepare a Work Plan to further characterize the nature and extent of residual petroleum hydrocarbons at the truck crash site that occurred on November 22, 2014.

"I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document is true and correct to the best of my knowledge."

If you have any questions or concerns, please contact Contact info.

Sincerely,


Sender
Title Vice President
Department Transportation

Enclosures

cc:



January 22, 2016

Dillon Roe
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Project No. 33115-015204.00

Subject: Work Plan for Walgreens Fuel Spill Site Investigation
Interstate 680 at Koopman Road
Sunol, Alameda County, California
Site Cleanup Case No. RO0003158

Dear Mr. Wickham:

Bureau Veritas North America Inc. (BVNA) prepared this work plan on behalf of Walgreens to address the letter issued by Alameda County Environmental Health (ACEH), dated June 11, 2015 requesting a technical report to further investigate a diesel fuel release that entered a storm water drainage and potentially impacted soil and groundwater in close proximity to a groundwater supply well west of the crash site.

If you have any questions or concerns, please contact me at (925) 426-2600.

Sincerely,

Donald A. Ashton, PG, REPA
Senior Geologist
Health, Safety and Environmental Services
Don.Ashton@us.bureauveritas.com

cc: William Ragsdale, Clean Harbors Environmental Services

Enclosures

Bureau Veritas North America, Inc.

Health, Safety, and Environmental Services

2430 Camino Ramon, Suite 122

San Ramon, CA 94583

Main: (925) 426.2600

Fax: (925) 426.0106

www.us.bureauveritas.com

Work Plan for Walgreens Diesel Spill Site Investigation

Truck Crash Site
Koopman Road and Interstate 680
Sunol, California

January 22, 2016
33115-015204.00

Prepared for
Clean Harbors Environmental Services
San Jose, California



For the benefit of business and people

Bureau Veritas North America, Inc.
2430 Camino Ramon, Suite 122
San Ramon, California 94583
925.426.2600
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1.0 INTRODUCTION

Bureau Veritas North America, Inc. (BVNA) prepared this work plan on behalf of Walgreens as requested by Alameda County Environmental Health (ACEH) in a letter dated June 11, 2015 to further characterize the release of diesel fuel from a Walgreens truck crash that occurred in Sunol, California on November 22, 2014. On behalf of Walgreens, Clean Harbors Environmental Services (CHES) conducted an emergency cleanup action following the crash, and summarized the cleanup operations in *Walgreens Diesel Spill Emergency Response and Cleanup Summary* report, dated January 2015. ACEH reviewed the CHES report and requested that the soil and groundwater in the area of an unlined drainage downgradient and west of the crash site be further characterized for diesel fuel impacts based on the finding of diesel ranged organics (DRO) in confirmation soil and groundwater samples collected following the cleanup action.

1.1 BACKGROUND

On November 22, 2014, a Walgreens semi-truck and trailer crashed during a rain event on the east side of Interstate 680 and released approximately 150 gallons of diesel fuel about 360 feet south of Koopman Road near a storm water concrete 'V' ditch. The ditch is located parallel and to the east of 680 and flows to the north to Koopman Road. The ditch then turns west and flows through a culvert under the freeway and Pleasanton-Sunol Road where it daylights and flows along an unlined channel toward Alameda Creek. The distance of this flow route is approximately 1,000 feet (see Figures 1 and 2); however, the CHES report indicated that the spilled fuel did not reach Alameda Creek.

Communications with CHES personnel indicates that the cleanup of the unlined portion of the drainage up to Alameda Creek involved removing soil in an area about 200 feet long by 2 to 15 feet wide and 2 feet deep. Following the cleanup action, two confirmation soil samples were reportedly collected at a depth of about 2 feet below the ground surface (bgs), close to where the drainage enters Alameda Creek. The unlined drainage and approximate location of the soil sample collected during the cleanup work are depicted on Figure 3.

Additionally, two grab groundwater samples were collected from a nearby groundwater well owned by the San Francisco Water Department. The well (Zone 7 Water Agency Permit No. 2013139; Well ID: 4S/1E-9E1) depth and screen interval (s) are unknown at this time. The well is located approximately 65 or more feet south of the drainage as shown on Figure 3 (SFWD Well).

The confirmation samples were analyzed by laboratory using EPA Method 8015B for total petroleum hydrocarbons as diesel ranged organics (DRO; C10 thru C28). DRO concentrations were reported in soil samples up to 505 micrograms per kilogram (mg/kg) and in groundwater samples up to 0.349 milligrams per liter (mg/L) that slightly exceeded the Environmental Screening Levels (ESLs) of 110 mg/kg and 0.100 mg/L, respectively, established by the Regional Water Control Board (2013). Based on the analytical results of DRO in the confirmation samples, ACEH requested a workplan to further investigate and characterize the potential for diesel impacts to soil and groundwater in order to protect the nearby irrigation well and surface waters of Alameda Creek by characterizing the nature and extent of residual diesel fuel in the drainage area.



The diesel release occurred on November 22, 2014 and the confirmation sampling occurred on December 1, 2014, nine (9) days after the crash. The crash occurred during a rain event, which reportedly contributed to the diesel release migrating to the unlined drainage, a distance of approximately 1,000 feet, where the release reportedly impacted the unlined drainage way soils.

BVNA reviewed the laboratory data records for the four samples collected by CHES and found that sample results were reported as a total concentration of DRO for each sample. BVNA obtained and reviewed the laboratory chromatograms for each of the samples along with a standard diesel chromatogram provided by the laboratory. Review of the chromatograms indicates that diesel standard chromatogram has a characteristic bell curve, and the two soil samples have a somewhat distinct petroleum hydrocarbon curve representative of DRO concentrations, but also a second and more pronounced curve of motor oil ranged organics (ORO); see Appendix A: C37385 page 20 and C37385R page 22). Chromatograms for the two water samples (Appendix A: C37385 page 22 and C37385R page 20) show a suppressed curve significantly skewed toward the longer chained carbon compounds within the DRO limits, characteristic of aged and weathered DRO with little to no ORO concentrations. Therefore, the skewed signature of DRO compounds in the well water samples indicate that that the petroleum hydrocarbons in the well water samples are likely from other sources and not due to the Walgreens release of diesel fuel to the drainage.

The finding of low concentrations of DRO and ORO compounds in confirmation soil samples is not unexpected due to the long term existence of the nearby and upgradient 680 Freeway and Pleasanton-Sunol Road with constructed drainage ditches that collect runoff from these roadways and discharge that runoff through the unlined drainage, then to Alameda Creek. Discharges to the unlined drainage and nearby areas from these roadways over time have the potential to impact shallow groundwater over time. Roadways are common non-point discharge sources for motor vehicle fluids, fuels and oils that occur over time and migrate in storm water runoff.

BVNA learned that another truck crash occurred on December 10, 2015 when a street sweeper truck veered off of the highway and crashed in essentially at the same location as the Walgreen truck crash in 2014. It is likely that numerous other vehicle crashes have occurred in the vicinity over the decades that these roadways have been in existence.

2.0 SCOPE OF WORK

The proposed scope of work includes the following steps:

- Schedule a site visit and sampling investigation by obtaining access from the California Department of Transportation (CalTrans) for access to the crash site, if required, and obtain access to the unlined drainage area and well owned by SFWD for drilling and sampling, submit a drilling permit with the Zone 7 Water Agency (Z7WA), and pay the fee required for advancing soil borings in the area of the unlined drainage, mark the drilling site in white paint and notify USA for utility clearance, and coordinate with CHES for an escort to identify the work area and sampling locations.



- BVNA will attempt to obtain access to the nearby groundwater well that was previously sampled and found to contain DRO. BVNA will attempt to obtain well construction information, if available. Reportedly the well is used for irrigation and the prior water samples were collected by running the well pump. If the well can be accessed directly, BVNA will attempt to assess the well condition, and measure the size and depth of the well to assist in evaluating the potential for a surficial fuel release to impact groundwater within the well. BVNA will attempt to collect a water sample for laboratory analysis by turning on the pump and/or by sampling water from the water table level by bailer or other acceptable methods.
- BVNA will mobilize field crews to the Site to evaluate the crash site and the lined and unlined drainage where the cleanup action occurred for indications of fuel impacted soils. BVNA proposes mobilizing a truck-mounted, direct push drill rig to collect soil samples in the area of the unlined drainage channel. Prior to drilling, BVNA will obtain the services of a private utility locator to clear the proposed soil boring locations. Four soil borings are proposed in this area to collect soil samples. See Figure 3 for the proposed drilling locations, which may be adjusted based on field conditions at the time of drilling. One soil boring will be advanced to a depth of approximately 20 feet below ground surface (bgs) or to refusal in an attempt to collect a grab-groundwater sample. A bottom soil sample will be collected if refusal is met or groundwater is not encountered. The other three borings will be advanced along the unlined drainage area to an approximate depth of 8 feet bgs. Soil cores will be field screened visually and with a photoionization detector (PID) at various depths. PID readings in parts per million will be used to select soil samples for analytical analysis. The samples will be submitted to a laboratory for analysis of volatile organic compounds (VOCs) and DRO/ORO.
- Drill cuttings and decontamination wastes will be containerized, labeled, and sampled for waste profiling and disposal at a local landfill. BVNA has budgeted for waste disposal as a non-hazardous waste for up to one drum of waste material. BVNA will not be a responsible party to the generation of the waste as a regulated material but will assist CHES on behalf of Walgreens in the disposal process, as Walgreens is reportedly the responsible party for the diesel release that resulted in this request for an investigation.
- If laboratory analyzed soil samples from the outfall area are found to contain DRO at or greater than 100 milligrams per kilogram, a soil sample(s) will be selected and forwarded to a forensics laboratory for high resolution analysis and age modeling of the detected petroleum hydrocarbons to assess whether the finding of petroleum hydrocarbons in soil is consistent with the November 2014 release of diesel fuel.
- BVNA will prepare a technical report summarizing its findings, conclusions and make recommendations, if appropriate. The report will be uploaded into the ACEH database.

2.1 LABORATORY ANALYSIS II

BVNA proposes to submit up to a total of eight (8) samples for laboratory analysis. The analytical program will include up to three (3) grab-groundwater samples (potentially two from the water supply



well and one from one of the soil borings), and up to five (5) soil samples or some combination of soil and groundwater samples totaling up to eight samples, which will be dependent on the success of the field crew in obtaining access to the groundwater well and the success of the drilling operations in obtaining the proposed samples from the drilling program. Soil and groundwater samples will be submitted to a State-certified laboratory for chemical analysis by the following United States Environmental Protection Agency (USEPA) Methods:

- Total Petroleum Hydrocarbons (TPH) as diesel- and motor oil-range organics (DRO/ORO) by Method 8015M – up to 8 samples, groundwater and soil (Note: soil sample analysis will be conducted on a 3-day rush to allow for possible additional high resolution hydrocarbon analysis).
- Gasoline-range organics (GRO) and volatile organic compounds (VOCs) by Method 8260B – up to 8 samples, groundwater and soil.
- LUFT Metals by Method 6000 series analysis – one soil sample from generated wastes for soil profiling.

One of the soil samples, if found to contain a significant DRO concentration ($>$ or $=$ 100 mg/kg), will be forwarded to a forensic laboratory for additional analysis using the following methods:

- TPH analysis with emphasis on diesel range organics (DRO) by Method 8015M, high resolution (GCFID) for total hydrocarbons, with modeling using the Christensen-Larsen Model to age date the hydrocarbon results (Environmental Forensics Column, Christensen-Larsen 1993 Model; Gil Oudijk 2003).

Note that the Christensen-Larsen model has only been used on TPH residues found on soil and is not useful for water samples. The samples will be analyzed on a standard 5 to 10 business-day turn-around time. The forensics analysis and modeling will require an additional two to three week turn-around provided an appropriate sample is obtained. The laboratory analytical results will include electronic data deliverables (EDDs) suitable for uploading to the State Water Resources Control Board's GeoTracker online database.

3.0 REPORTING II

Upon project completion of the field activities and receipt of the laboratory analyses, BVNA will prepare a written electronic report summarizing the findings of work performed at the Site. The report will include a summary of investigative methodologies, analytical results, findings, and conclusions. In addition, tables will be provided summarizing analytical results, as well as figures showing the well location and sample locations. Appendices will also be provided, which will include permits, borings logs/well construction diagrams and certified analytical reports.

4.0 SCHEDULE

Upon ACEH approval of this work plan, BVNA will attempt to obtain access to the SFWD property unlined drainage area. Upon obtaining property access, BVNA anticipates it will take two to three weeks to obtain a drilling permit and complete the field activities to collect soil and groundwater samples. Upon



receiving preliminary laboratory results, a final technical report will be prepared and forwarded to the client and ACEH. It is anticipated that an electronic copy of our report will be submitted to you within ten days of receipt of the final analytical results.

4.1 ASSUMPTIONS

Any unexpected conditions or concerns that become apparent during the project, such as deviation from the assumptions outlined herein, may require a revision in the project scope, schedule, and fees. This proposed scope of work assumes the following:

- 1) Access to the drainage area and nearby irrigation well can be obtained without significant restriction;
- 2) BVNA can perform the fieldwork activities (i.e., utility clearance, drilling, and well sampling) within one business day;
- 3) Site conditions (i.e., drillable geology and topography) allow for completion of the proposed fieldwork using the proposed truck mounted direct push technology equipment (no special terrain equipment is required);
- 4) Laboratory analysis for both preliminary analysis and forensics analysis and modeling can be completed within four weeks;
- 5) Disposal of up to one drum of investigation-derived waste (e.g., soil cuttings, decontamination rinsate) is included in this proposal, accepted as non-hazardous waste at an appropriate waste disposal facility.

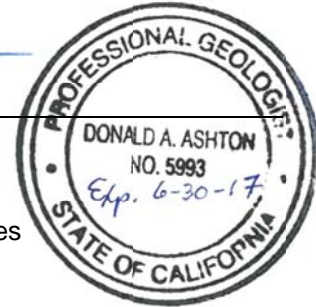
5.0 CLOSING

BVNA appreciates the opportunity to submit this work plan to ACEH and looks forward to working with you on this project. If you have any questions or comments regarding the information provided herein, please do not hesitate to contact us.



This report prepared by:

Donald A. Ashton, P.G., REPA
Senior Geologist
Health, Safety & Environmental Services



This report reviewed by:

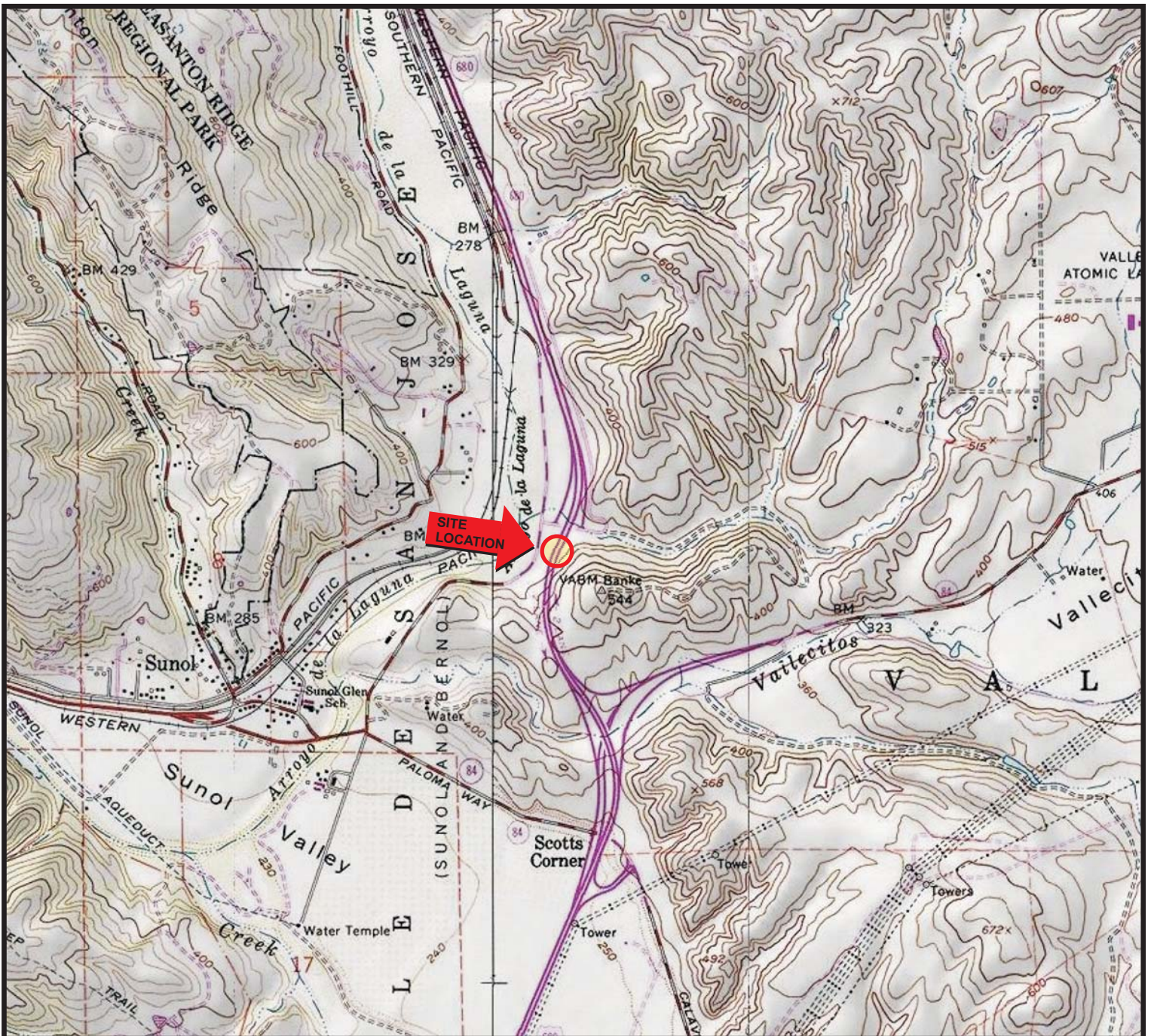
Mark Williams, P.G.
Senior Project Manager
Health, Safety, and Environmental Services

January 22, 2016

Project No. 33115-015204.00

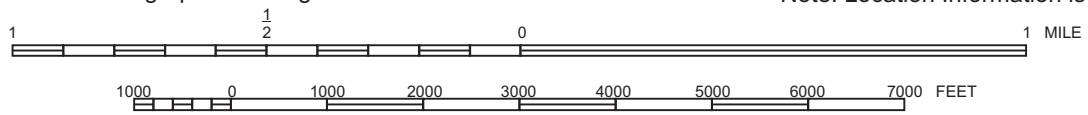


FIGURES



Source: TOPO! © 2000 National Geographic Holdings


Note: Location Information is Approximate



Portion of the 7.5-Minute Series La Costa Valley, California
 Quadrangle Topographic Map (Datum: NAD 83)
 United States Department of the Interior
 Geological Survey
 1996



QUADRANGLE LOCATION

SUBJECT PROPERTY LOCATION	FIGURE	 BUREAU VERITAS
Koopman Road & I 680 Sunol, California	1	
Project No. 33115-015204.00		



Google Imagery Date 10-30-2015

307 ft

WALGREENS SUNOL SPILL SITE

Koopman Road & I 680
Sunol, California

Project No. 33115-015204.00

FIGURE

2







APPENDIX A

LABORATORY ANALYTICAL REPORTS WITH CHROMATOGRAMS

Technical Report for

Cleanharbors-San Jose-Commercial Street

Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA

1403217363

Accutest Job Number: C37385

Sampling Date: 12/01/14

Report to:

Clean Harbors
1010 Commercial Street
San Jose, CA 95112
allred.norman@cleanharbors.com

ATTN: Chris Allred

Total number of pages in report: **26**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



James J. Rhudy
Lab Director

Client Service contact: Maureen Coloma 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925)
DoD ELAP (L-A-B L2242)

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



November 17, 2015

William Ragsdale
Clean Harbors
1010 Commercial Street
San Jose, CA 95112

Re: Accutest Job # C37385 Reissue

Dear Mr. Ragsdale,

This is a reissued report for Accutest Job # **C37385**, original report dated 12/5/2014.

The TPH chromatograms associated with samples *C37385-1* and *C37385-2* have been incorporated into this revised report as per 11/17/15 request from *Bureau Veritas*.

Please contact us at 408-588-0200 if we can be of further assistance in this matter, or if you have any questions regarding this data report.

Sincerely,

Accutest Laboratories

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1

2

3

4

5

6



Sample Summary

Cleanharbors-San Jose-Commercial Street

Job No: C37385

Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA

Project No: 1403217363

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C37385-1	12/01/14	10:20 BG	12/01/14	AQ	Water	WATER SAMPLE #1
C37385-2	12/01/14	10:20 BG	12/01/14	SO	Soil	SOIL SAMPLE #1

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

Summary of Hits

Job Number: C37385
Account: Cleanharbors-San Jose-Commercial Street
Project: Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA
Collected: 12/01/14

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
C37385-1	WATER SAMPLE #1					
TPH (C10-C28)		0.349	0.098	0.025	mg/l	SW846 8015B M
C37385-2	SOIL SAMPLE #1					
TPH (C10-C28)		283	100	25	mg/kg	SW846 8015B M

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	WATER SAMPLE #1		Date Sampled:	12/01/14
Lab Sample ID:	C37385-1		Date Received:	12/01/14
Matrix:	AQ - Water		Percent Solids:	n/a
Method:	SW846 8015B M SW846 3510C			
Project:	Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH319287.D	1	12/01/14	AG	12/01/14	OP11296	GHH1413
Run #2							

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.349	0.098	0.025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	84%		32-124%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	SOIL SAMPLE #1	Date Sampled:	12/01/14
Lab Sample ID:	C37385-2	Date Received:	12/01/14
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8015B M SW846 3550B		
Project:	Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH319274.D	3	12/01/14	AG	12/01/14	OP11297	GHH1413
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	10.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	283	100	25	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	120%		37-122%

(a) All results reported on a wet weight basis.

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

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



ACCUATEST
LABORATORIES

CHAIN OF CUSTODY

2105 Lundy Ave, San Jose, CA 95131
(408) 688-0200 FAX: (408) 688-0201

FED-EX Tracking #	Order Control #
Accutest Quote #	Accutest NC Job #: C C37385

Client / Reporting Information		Project Information	
Company Name Clean Harbors		Project Name Walgreens diesel spill	
Address 1010 Commercial St.		Street Hwy 84 & Hwy 680	
City San Jose	State CA	City Sunol	State CA
Zip 95112		Project # 1403217363	
Project Contact		EMAIL: cillred.norman@blougharbors.com	
Phone #		Client Purchase Order #	
Sampler's Name Bobby Griffin			

Requested Analysis	Matrix Codes
	WW- Wastewater
	GW- Ground Water
	SW- Surface Water
	SO- Soil
	OI- Oil
	WP- W/pt
	LID- Non aqueous liquids
	AIR
	DW- Drinking Water (Perforate Only)
	LAB USE ONLY

Accutest Sample ID	Sample ID / Field Point / Point of Collection	Collection		Matrix	# of bottles	Number of preserved bottles										LAB #					
		Date	Time			Q	Y	PH	PHD	PHO	PHS	PHC	PHM	PHN	PHO						
-	Water sample #1	12-1-14	10:20A	B	L	1														X	-1
-	" " #2	12-1-14	10:20A	B	L	1														X	-3
-	Soil sample #1	12-1-14	10:20A	B	S	1														X	-2
-	" " #2	12-1-14	10:20A	B	S	1														X	-4

1 DAY

Turnaround Time (Business days):
 10 Day
 5 Day
 3 Day
 2 Day
 1 Day
 Same Day

Approved By/Date: **Chris/12/1**

Data Deliverable Information:
 Commercial "A" - Results only
 Commercial "B" - Results with QC summaries
 Commercial "B+" - Results, QC, and chromatograms
 FULLY - Level 4 data package
 EDF for Geotracker EDD Format _____
 Provide EDF Global ID _____
 Provide EDF Logcode: _____

Emergency T/A data available VIA Lablink				Sample Custody must be documented below each time samples change possession, including courier delivery.			
1	Requisitioned by:	Date/Time: 12-1-14 10:20	Received By:	2	Requisitioned By:	Date/Time:	Received By:
3	Requisitioned by:	Date/Time:	Received By:	4	Custody Seal #	Appropriate Bottles / Pres. Y/N	Headspace Y/N
5						Labels match Coct? Y / N	Seals/Receiving Check List used: Y / N

On Ice V.H. **14.5/14.5** Cooler Temp

4.1
4

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: C37385 **Client:** CLEAN HARBORS **Project:** WALGREENS DEISEL SPILL
Date / Time Received: 12/1/2014 12:00:00 PM **Delivery Method:** Client **Airbill #'s:**
Cooler Temps (Initial/Adjusted): #1: (14.5/14.5):

<u>Cooler Security</u>	<u>Y or N</u>		<u>Y or N</u>	
1. Custody Seals Present:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input type="checkbox"/>	<input type="checkbox"/>	4. SmpI Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Cooler temp verification:	IR1;	
3. Cooler media:	No Ice	
4. No. Coolers:	1	

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Samples preserved properly:	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

<u>Sample Integrity - Documentation</u>	<u>Y or N</u>	
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
2. Bottles received for unspecified tests	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
4. Compositing instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>

Comments

4.1
4

GC Semi-volatiles

5

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: C37385
Account: CLNCASJ Cleanharbors-San Jose-Commercial Street
Project: Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11297-MB	HH319285.D	1	12/01/14	AG	12/01/14	OP11297	GHH1413

The QC reported here applies to the following samples:

Method: SW846 8015B M

C37385-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.3	0.83	mg/kg	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	91% 37-122%

Method Blank Summary

Job Number: C37385
Account: CLNCASJ Cleanharbors-San Jose-Commercial Street
Project: Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11296-MB	HH319290.D	1	12/01/14	AG	12/01/14	OP11296	GHH1413

The QC reported here applies to the following samples:

Method: SW846 8015B M

C37385-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.10	0.025	mg/l	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	92% 32-124%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C37385
Account: CLNCASJ Cleanharbors-San Jose-Commercial Street
Project: Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11297-BS	HH319282.D	1	12/01/14	AG	12/01/14	OP11297	GHH1413
OP11297-BSD	HH319283.D	1	12/01/14	AG	12/01/14	OP11297	GHH1413

The QC reported here applies to the following samples:

Method: SW846 8015B M

C37385-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	33.3	28.8	86	27.9	84	3	39-102/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	96%	94%	37-122%

* = Outside of Control Limits.

5.2.1
5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C37385
Account: CLNCASJ Cleanharbors-San Jose-Commercial Street
Project: Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11296-BS	HH319288.D	1	12/01/14	AG	12/01/14	OP11296	GHH1413
OP11296-BSD	HH319289.D	1	12/01/14	AG	12/01/14	OP11296	GHH1413

The QC reported here applies to the following samples:

Method: SW846 8015B M

C37385-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.920	92	1.01	101	9	38-115/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	93%	99%	32-124%

* = Outside of Control Limits.

5.2.2
 5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C37385
Account: CLNCASJ Cleanharbors-San Jose-Commercial Street
Project: Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11297-MS	HH319278.D	5	12/01/14	AG	12/01/14	OP11297	GHH1413
OP11297-MSD	HH319279.D	5	12/01/14	AG	12/01/14	OP11297	GHH1413
C37385-2	HH319274.D	3	12/01/14	AG	12/01/14	OP11297	GHH1413

The QC reported here applies to the following samples:

Method: SW846 8015B M

C37385-2

CAS No.	Compound	C37385-2 mg/kg	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	283	33.3	448	495* a	33.3	497	642* a	10	39-102/29

CAS No.	Surrogate Recoveries	MS	MSD	C37385-2	Limits
630-01-3	Hexacosane	66%	87%	120%	37-122%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

5.3.1
5

GC Semi-volatiles

Raw Data



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\GHH1413\HH319287.D Vial: 11
 Acq On : 01-Dec-2014, 21:55:55 Operator: ALLENG
 Sample : C37385-1 Inst : HP5890
 Misc : OP11296,GHH1413,1020,,,1,1,W Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Dec 02 09:49:46 2014 Quant Results File: GHH1360.RES

Quant Method : C:\MSDCHEM\2\METHODS\GHH1360.M (Chemstation Integrator)
 Title : TPH-Extractable by SW-846 Method 8015B
 Last Update : Thu Nov 13 11:38:16 2014
 Response via : Initial Calibration
 DataAcq Meth : ACQ_TPH5.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S Hexacosane	9.77	1662833	83.924 ppm
Spiked Amount 100.000		Recovery =	83.92%
Target Compounds			
2) H TPH (C10-C28)	6.80	7704320	355.984 ppm
3) H TPH (>C28-C40)	12.00	998433	82.254 ppm
4) H TPH (Mineral Spirits)	0.00	0	N.D. ppm
5) H TPH (Kerosene)	0.00	0	N.D. ppm
6) H TPH (Diesel)	6.80	7644008	355.136 ppm
7) H TPH (Motor Oil)	12.00	997446	81.220 ppm

(f)=RT Delta > 1/2 Window

(m)=manual int.

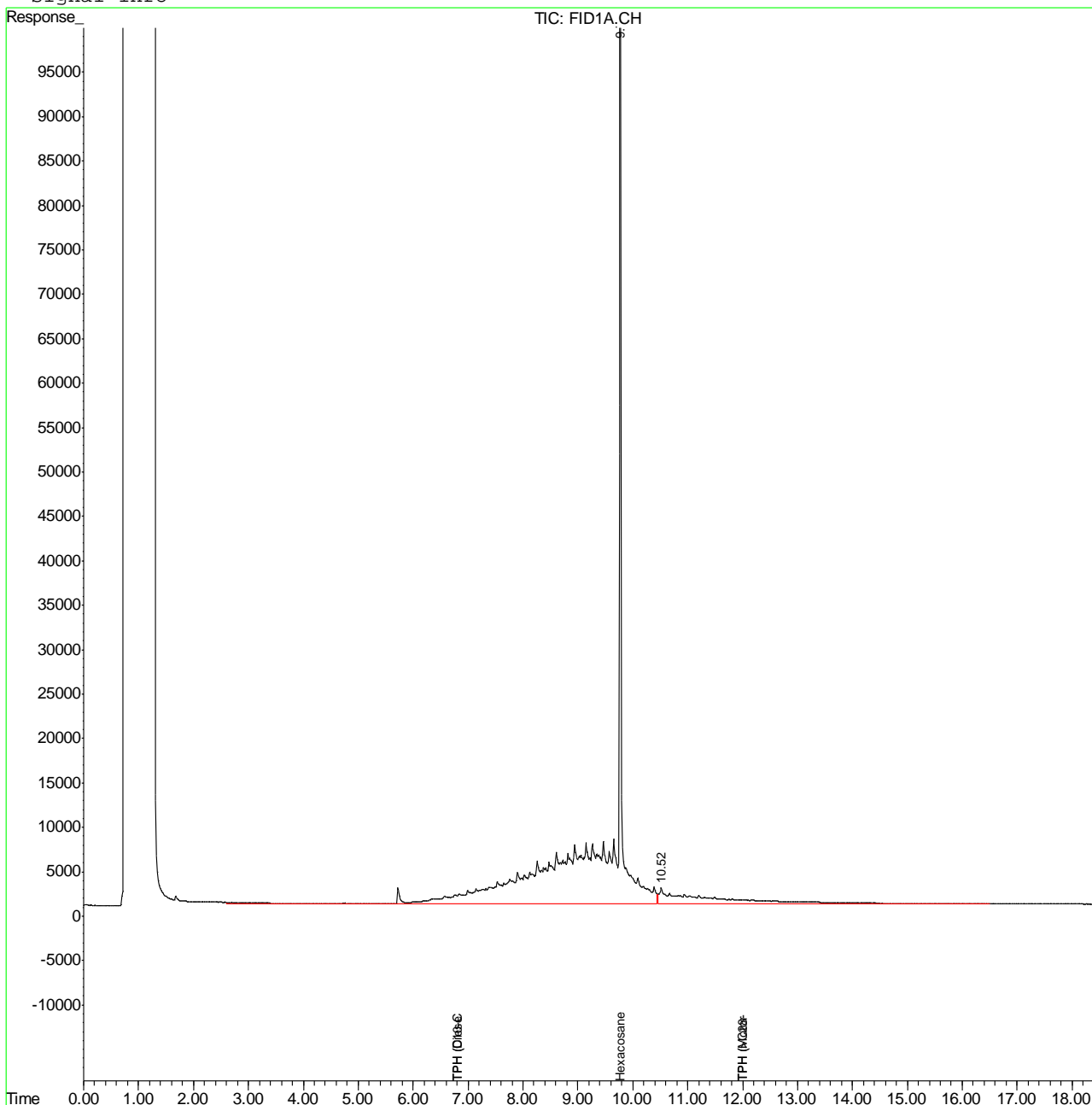
HH319287.D GHH1360.M Tue Dec 02 12:18:16 2014

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\GHH1413\HH319287.D Vial: 11
 Acq On : 01-Dec-2014, 21:55:55 Operator: ALLENG
 Sample : C37385-1 Inst : HP5890
 Misc : OP11296,GHH1413,1020,,,1,1,W Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Dec 2 12:13 2014 Quant Results File: GHH1360.RES

Quant Method : C:\MSDCHEM\2\METHODS\GHH1360.M (Chemstation Integrator)
 Title : TPH-Extractable by SW-846 Method 8015B
 Last Update : Thu Nov 13 11:38:16 2014
 Response via : Multiple Level Calibration
 DataAcq Meth : ACQ_TPH5.M

Volume Inj. :
 Signal Phase :
 Signal Info :



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\GHH1413\HH319274.D Vial: 4
 Acq On : 01-Dec-2014, 15:10:54 Operator: ALLENG
 Sample : C37385-2 Inst : HP5890
 Misc : OP11297,GHH1413,30.03,,,10,3,S Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Dec 01 16:46:38 2014 Quant Results File: GHH1360.RES

Quant Method : C:\MSDCHEM\2\METHODS\GHH1360.M (Chemstation Integrator)
 Title : TPH-Extractable by SW-846 Method 8015B
 Last Update : Thu Nov 13 11:38:16 2014
 Response via : Initial Calibration
 DataAcq Meth : ACQ_TPH5.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) S Hexacosane	9.78	79074	3.991	ppm m
Spiked Amount 100.000		Recovery =	3.99%	
Target Compounds				
2) H TPH (C10-C28)	6.80	6132973	283.379	ppm
3) H TPH (>C28-C40)	12.00	7262682	598.321	ppm
4) H TPH (Mineral Spirits)	0.00	0	N.D.	ppm
5) H TPH (Kerosene)	0.00	0	N.D.	ppm
6) H TPH (Diesel)	6.80	6139555	285.240	ppm
7) H TPH (Motor Oil)	12.00	7238553	589.422	ppm

6.1.2
 6

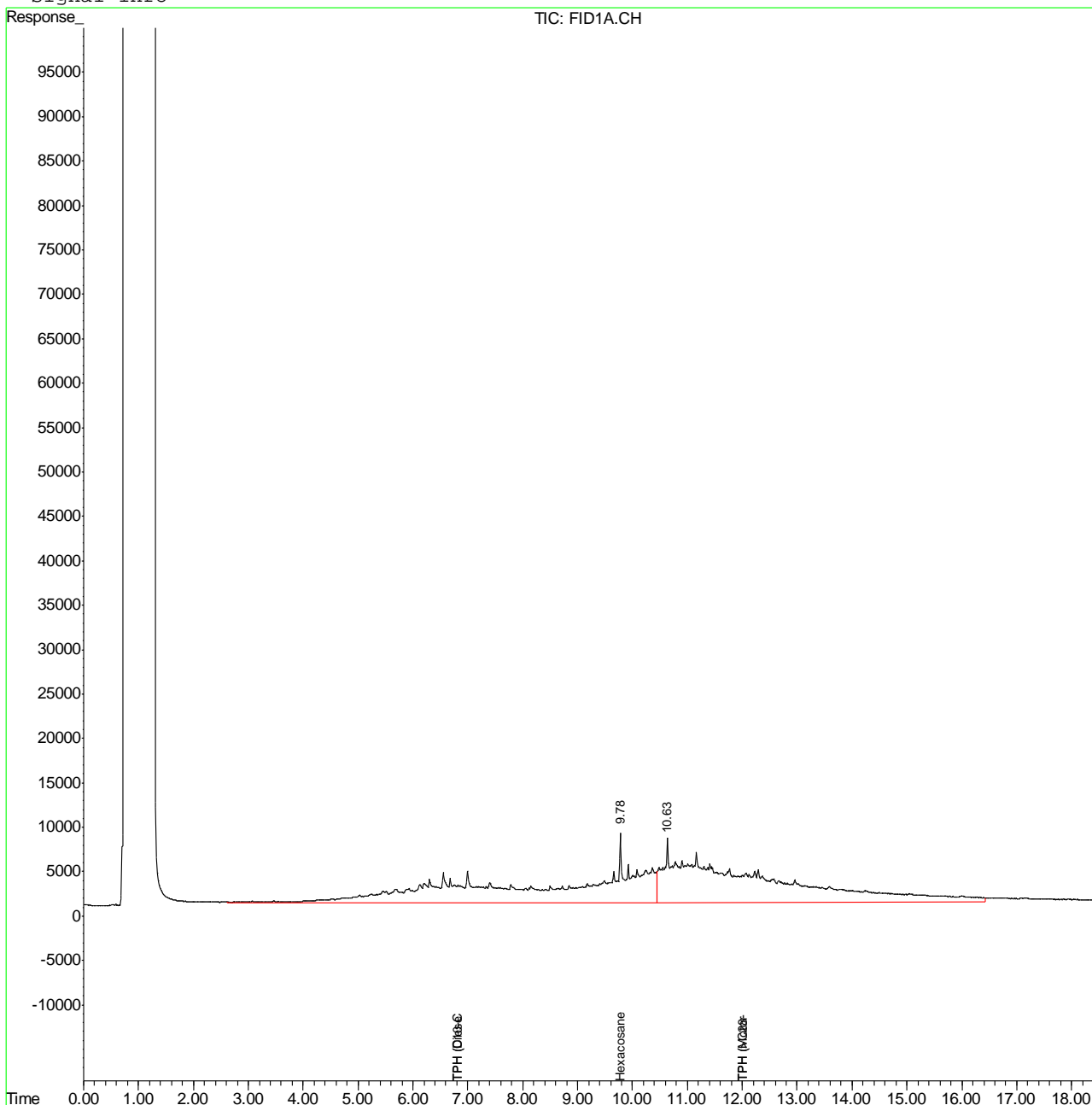
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 HH319274.D GHH1360.M Tue Dec 02 12:37:28 2014

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\GHH1413\HH319274.D Vial: 4
 Acq On : 01-Dec-2014, 15:10:54 Operator: ALLENG
 Sample : C37385-2 Inst : HP5890
 Misc : OP11297,GHH1413,30.03,,,10,3,S Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Dec 2 12:36 2014 Quant Results File: GHH1360.RES

Quant Method : C:\MSDCHEM\2\METHODS\GHH1360.M (Chemstation Integrator)
 Title : TPH-Extractable by SW-846 Method 8015B
 Last Update : Thu Nov 13 11:38:16 2014
 Response via : Multiple Level Calibration
 DataAcq Meth : ACQ_TPH5.M

Volume Inj. :
 Signal Phase :
 Signal Info :



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\GHH1413\HH319285.D Vial: 10
 Acq On : 01-Dec-2014, 21:06:56 Operator: ALLENG
 Sample : OP11297-MB Inst : HP5890
 Misc : OP11297,GHH1413,30.00,,,1,1,S Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Dec 02 09:49:44 2014 Quant Results File: GHH1360.RES

Quant Method : C:\MSDCHEM\2\METHODS\GHH1360.M (Chemstation Integrator)
 Title : TPH-Extractable by SW-846 Method 8015B
 Last Update : Thu Nov 13 11:38:16 2014
 Response via : Initial Calibration
 DataAcq Meth : ACQ_TPH5.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S Hexacosane	9.78	1800267	90.860 ppm
Spiked Amount 100.000		Recovery =	90.86%
Target Compounds			
2) H TPH (C10-C28)	6.80	485982	22.455 ppm
3) H TPH (>C28-C40)	12.00	162191	13.362 ppm
4) H TPH (Mineral Spirits)	0.00	0	N.D. ppm
5) H TPH (Kerosene)	0.00	0	N.D. ppm
6) H TPH (Diesel)	6.80	485982	22.578 ppm
7) H TPH (Motor Oil)	12.00	162191	13.207 ppm

(f)=RT Delta > 1/2 Window (m)=manual int.
 HH319285.D GHH1360.M Tue Dec 02 12:18:14 2014

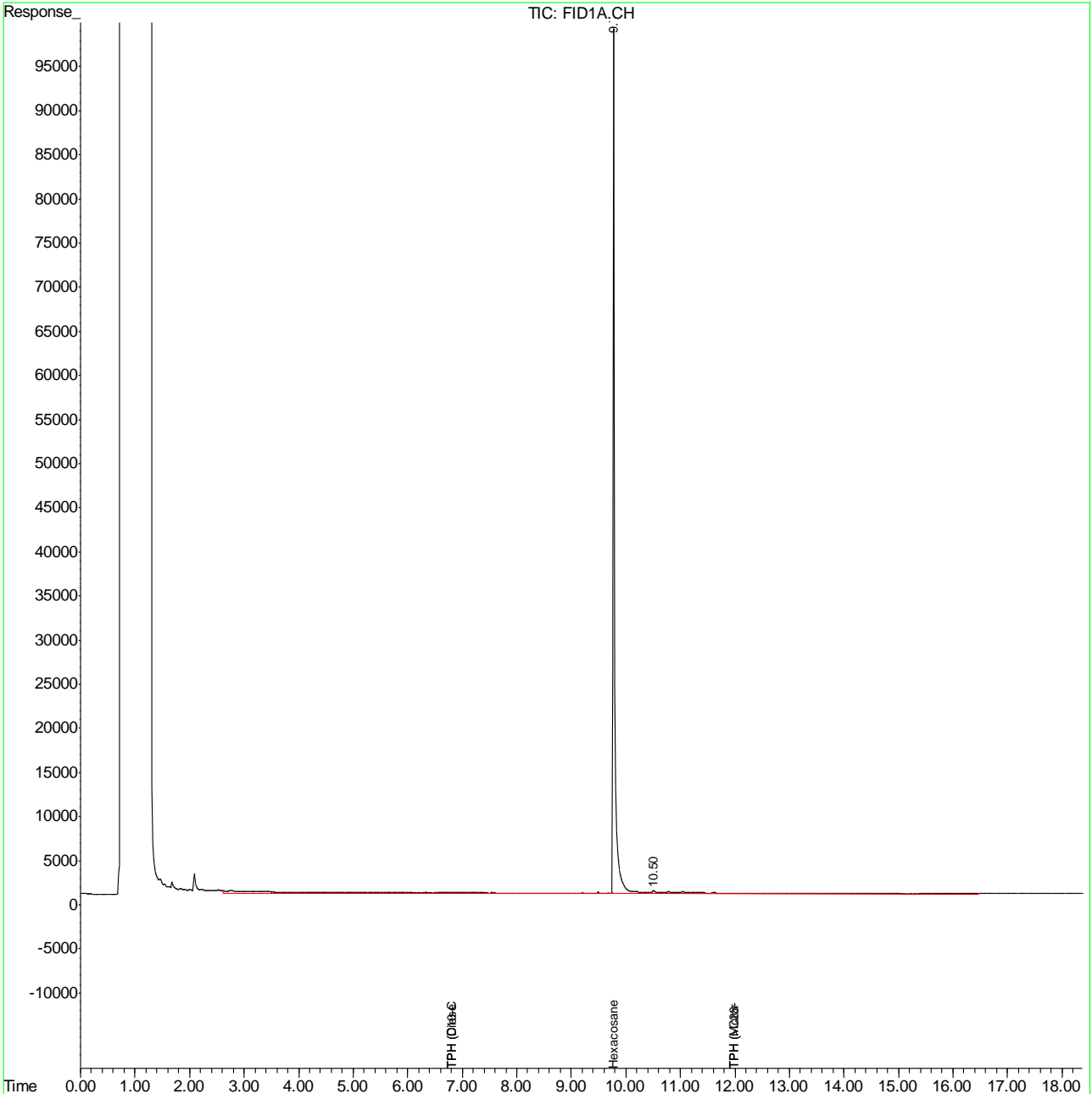
6.2.1
6

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\GHH1413\HH319285.D Vial: 10
 Acq On : 01-Dec-2014, 21:06:56 Operator: ALLENG
 Sample : OP11297-MB Inst : HP5890
 Misc : OP11297,GHH1413,30.00,,,1,1,S Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Dec 2 12:11 2014 Quant Results File: GHH1360.RES

Quant Method : C:\MSDCHEM\2\METHODS\GHH1360.M (Chemstation Integrator)
 Title : TPH-Extractable by SW-846 Method 8015B
 Last Update : Thu Nov 13 11:38:16 2014
 Response via : Multiple Level Calibration
 DataAcq Meth : ACQ_TPH5.M

Volume Inj. :
 Signal Phase :
 Signal Info :



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\GHH1413\HH319290.D Vial: 14
 Acq On : 01-Dec-2014, 23:09:20 Operator: ALLENG
 Sample : OP11296-MB Inst : HP5890
 Misc : OP11296,GHH1413,1000,,,1,1,W Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Dec 02 09:49:49 2014 Quant Results File: GHH1360.RES

Quant Method : C:\MSDCHEM\2\METHODS\GHH1360.M (Chemstation Integrator)
 Title : TPH-Extractable by SW-846 Method 8015B
 Last Update : Thu Nov 13 11:38:16 2014
 Response via : Initial Calibration
 DataAcq Meth : ACQ_TPH5.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S Hexacosane	9.77	1822752	91.995 ppm
Spiked Amount 100.000		Recovery =	92.00%
Target Compounds			
2) H TPH (C10-C28)	6.80	534615	24.702 ppm
3) H TPH (>C28-C40)	12.00	426544	35.140 ppm
4) H TPH (Mineral Spirits)	0.00	0	N.D. ppm
5) H TPH (Kerosene)	0.00	0	N.D. ppm
6) H TPH (Diesel)	6.80	534615	24.838 ppm
7) H TPH (Motor Oil)	12.00	426544	34.733 ppm

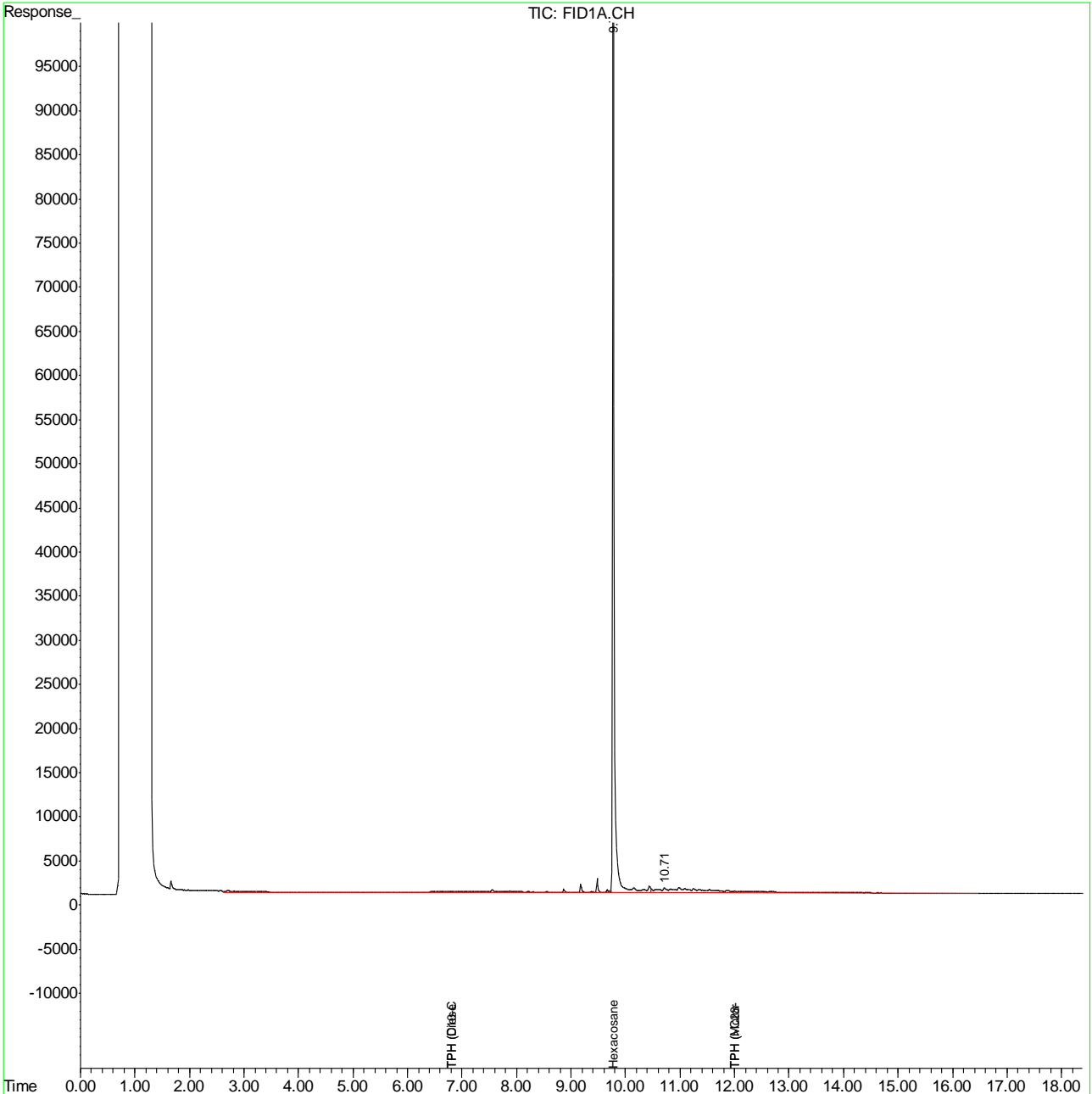
(f)=RT Delta > 1/2 Window (m)=manual int.
 HH319290.D GHH1360.M Tue Dec 02 12:18:19 2014

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\GHH1413\HH319290.D Vial: 14
 Acq On : 01-Dec-2014, 23:09:20 Operator: ALLENG
 Sample : OP11296-MB Inst : HP5890
 Misc : OP11296,GHH1413,1000,,,1,1,W Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Dec 2 12:16 2014 Quant Results File: GHH1360.RES

Quant Method : C:\MSDCHEM\2\METHODS\GHH1360.M (Chemstation Integrator)
 Title : TPH-Extractable by SW-846 Method 8015B
 Last Update : Thu Nov 13 11:38:16 2014
 Response via : Multiple Level Calibration
 DataAcq Meth : ACQ_TPH5.M

Volume Inj. :
 Signal Phase :
 Signal Info :



Technical Report for

Cleanharbors-San Jose-Commercial Street

Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA

1403217363

Accutest Job Number: C37385R

Sampling Date: 12/01/14

Report to:

**Clean Harbors
1010 Commercial Street
San Jose, CA 95112
allred.norman@cleanharbors.com**

ATTN: Chris Allred

Total number of pages in report: 26



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



**James J. Rhudy
Lab Director**

Client Service contact: Maureen Coloma 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925)
DoD ELAP (L-A-B L2242)

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Test results relate only to samples analyzed.



December 1, 2015

William Ragsdale
Clean Harbors
1010 Commercial Street
San Jose, CA 95112

Re: Accutest Job # C37385R Reissue

Dear Mr. Ragsdale,

This is a reissued report for Accutest Job # **C37385R**, original report dated 12/4/2014.

The TPH chromatograms associated with samples *C37385-3* and *C37385-4* have been incorporated into this revised report as per 11/17/15 request from *Bureau Veritas*.

Please contact us at 408-588-0200 if we can be of further assistance in this matter, or if you have any questions regarding this data report.

Sincerely,

Accutest Laboratories

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3

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Sample Summary

Cleanharbors-San Jose-Commercial Street

Job No: C37385R

Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA

Project No: 1403217363

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C37385-3	12/01/14	10:20 BG	12/01/14	AQ	Water	WATER SAMPLE #2
C37385-4	12/01/14	10:20 BG	12/01/14	SO	Soil	SOIL SAMPLE #2

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

Summary of Hits

Job Number: C37385R
Account: Cleanharbors-San Jose-Commercial Street
Project: Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA
Collected: 12/01/14

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
C37385-3	WATER SAMPLE #2					
TPH (C10-C28)		0.135	0.095	0.024	mg/l	SW846 8015B M
C37385-4	SOIL SAMPLE #2					
TPH (C10-C28)		505	170	42	mg/kg	SW846 8015B M

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	WATER SAMPLE #2		Date Sampled:	12/01/14
Lab Sample ID:	C37385-3		Date Received:	12/01/14
Matrix:	AQ - Water		Percent Solids:	n/a
Method:	SW846 8015B M SW846 3510C			
Project:	Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH319322.D	1	12/03/14	AG	12/03/14	OP11315	GHH1415
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.135	0.095	0.024	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
630-01-3	Hexacosane	80%		32-124%		

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

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

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	SOIL SAMPLE #2	Date Sampled:	12/01/14
Lab Sample ID:	C37385-4	Date Received:	12/01/14
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8015B M SW846 3550B		
Project:	Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG56360.D	5	12/03/14	NN	12/03/14	OP11309	GGG1620
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	10.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	505	170	42	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	118%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: C37385 **Client:** CLEAN HARBORS **Project:** WALGREENS DEISEL SPILL
Date / Time Received: 12/1/2014 12:00:00 PM **Delivery Method:** Client **Airbill #'s:**
Cooler Temps (Initial/Adjusted): #1: (14.5/14.5):

<u>Cooler Security</u>	<u>Y or N</u>				<u>Y or N</u>	
1. Custody Seals Present:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Custody Seals Intact:	<input type="checkbox"/>	<input type="checkbox"/>	4. SmpI Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Cooler temp verification:	IR1;	
3. Cooler media:	No Ice	
4. No. Coolers:	1	

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y or N</u>	
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

4.1
4

GC Semi-volatiles

5

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary**Job Number:** C37385R**Account:** CLNCASJ Cleanharbors-San Jose-Commercial Street**Project:** Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11309-MB	GG56345.D	1	12/02/14	NN	12/02/14	OP11309	GGG1620

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

C37385-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.3	0.83	mg/kg	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	120% 37-122%

Method Blank Summary**Job Number:** C37385R**Account:** CLNCASJ Cleanharbors-San Jose-Commercial Street**Project:** Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11315-MB	HH319326.D	1	12/03/14	AG	12/03/14	OP11315	GHH1415

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

C37385-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.10	0.025	mg/l	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	77% 32-124%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C37385R
Account: CLNCASJ Cleanharbors-San Jose-Commercial Street
Project: Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11309-BS	GG56346.D	1	12/02/14	NN	12/02/14	OP11309	GGG1620
OP11309-BSD	GG56347.D	1	12/02/14	NN	12/02/14	OP11309	GGG1620

The QC reported here applies to the following samples:

Method: SW846 8015B M

C37385-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	33.3	28.0	84	27.7	83	1	39-102/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	116%	110%	37-122%

* = Outside of Control Limits.

5.2.1
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C37385R
Account: CLNCASJ Cleanharbors-San Jose-Commercial Street
Project: Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11315-BS	HH319324.D	1	12/03/14	AG	12/03/14	OP11315	GHH1415
OP11315-BSD	HH319325.D	1	12/03/14	AG	12/03/14	OP11315	GHH1415

The QC reported here applies to the following samples:

Method: SW846 8015B M

C37385-3

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.871	87	0.847	85	3	38-115/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	92%	89%	32-124%

* = Outside of Control Limits.

5.2.2
 5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C37385R
Account: CLNCASJ Cleanharbors-San Jose-Commercial Street
Project: Walgreens Diesel Spill - HWY 84 & HWY 680 Sunol CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11309-MS	GG56358.D	1	12/03/14	NN	12/03/14	OP11309	GGG1620
OP11309-MSD	GG56359.D	1	12/03/14	NN	12/03/14	OP11309	GGG1620
C37427-1	GG56355.D	1	12/03/14	NN	12/02/14	OP11309	GGG1620

The QC reported here applies to the following samples:

Method: SW846 8015B M

C37385-4

CAS No.	Compound	C37427-1 mg/kg	Spike Q mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	6.69	33.2	33.8	82	33.2	35.4	86	5	39-102/29

CAS No.	Surrogate Recoveries	MS	MSD	C37427-1	Limits
630-01-3	Hexacosane	110%	115%	116%	37-122%

* = Outside of Control Limits.

5.3.1
 5

GC Semi-volatiles

Raw Data



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\GHH1415\HH319322.D Vial: 91
 Acq On : 03-Dec-2014, 13:35:50 Operator: ALLENG
 Sample : C37385-3 Inst : HP5890
 Misc : OP11315,GHH1415,1050,,,1,1,W Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Dec 03 16:21:24 2014 Quant Results File: GHH1360.RES

Quant Method : C:\MSDCHEM\2\METHODS\GHH1360.M (Chemstation Integrator)
 Title : TPH-Extractable by SW-846 Method 8015B
 Last Update : Thu Nov 13 11:38:16 2014
 Response via : Initial Calibration
 DataAcq Meth : ACQ_TPH5.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S Hexacosane	9.78	1581989	79.844 ppm
Spiked Amount 100.000		Recovery =	79.84%
Target Compounds			
2) H TPH (C10-C28)	6.80	3058661	141.328 ppm
3) H TPH (>C28-C40)	12.00	508360	41.880 ppm
4) H TPH (Mineral Spirits)	0.00	0	N.D. ppm
5) H TPH (Kerosene)	0.00	0	N.D. ppm
6) H TPH (Diesel)	6.80	3036705	141.083 ppm
7) H TPH (Motor Oil)	12.00	508360	41.395 ppm

(f)=RT Delta > 1/2 Window

(m)=manual int.

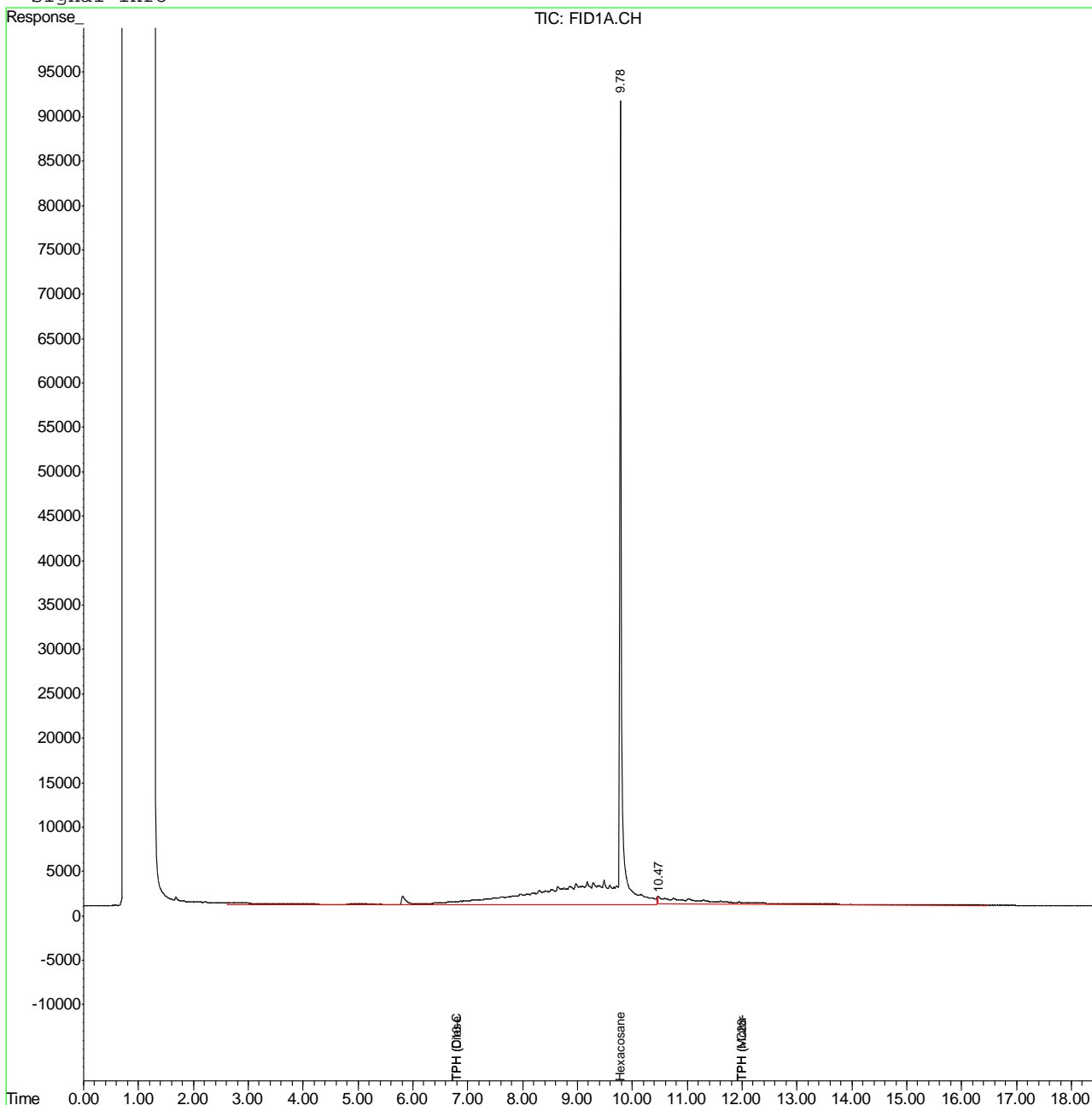
HH319322.D GHH1360.M Wed Dec 03 16:45:44 2014

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\GHH1415\HH319322.D Vial: 91
 Acq On : 03-Dec-2014, 13:35:50 Operator: ALLENG
 Sample : C37385-3 Inst : HP5890
 Misc : OP11315,GHH1415,1050,,,1,1,W Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Dec 3 16:26 2014 Quant Results File: GHH1360.RES

Quant Method : C:\MSDCHEM\2\METHODS\GHH1360.M (Chemstation Integrator)
 Title : TPH-Extractable by SW-846 Method 8015B
 Last Update : Thu Nov 13 11:38:16 2014
 Response via : Multiple Level Calibration
 DataAcq Meth : ACQ_TPH5.M

Volume Inj. :
 Signal Phase :
 Signal Info :



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\D#2\DATA\GGG1620\GG56360.D Vial: 8
 Acq On : 12-3-14 1:33:00 PM Operator: NHATN
 Sample : C37385-4 Inst : Diesel #2
 Misc : OP11309,GGG1620,30.03,,,10,5,S Multiplr: 1.00
 IntFile : autoint1.e
 Quant Time: Dec 3 15:38 2014 Quant Results File: GGG1453.RES

Quant Method : C:\HPCHEM\D#2\METHODS\GGG1453.M (Chemstation Integrator)
 Title : DRO calibration: Back column
 Last Update : Tue Dec 02 17:08:36 2014
 Response via : Initial Calibration
 DataAcq Meth : ACQ_GG2.M

Volume Inj. : 1.0 uL
 Signal Phase : HP-5
 Signal Info : 0.32 mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) S,M Hexacosane	11.10f	2577615	2.358	ppm m
Spiked Amount	100.000	Recovery	=	2.36%
Target Compounds				
2) H,M TPH (C10-C28)	6.00	454021240	303.173	ppm
3) H TPH (>C28-C40)	14.00	491216306	631.459	ppm
4) H TPH (Mineral Spirits)	0.00	0	N.D.	ppm
5) H TPH (Kerosene)	0.00	0	N.D.	ppm
6) H,M TPH (Diesel)	6.00	455017149	304.123	ppm
7) H TPH (Motor Oil)	14.00	488716019	625.325	ppm

6.1.2
6

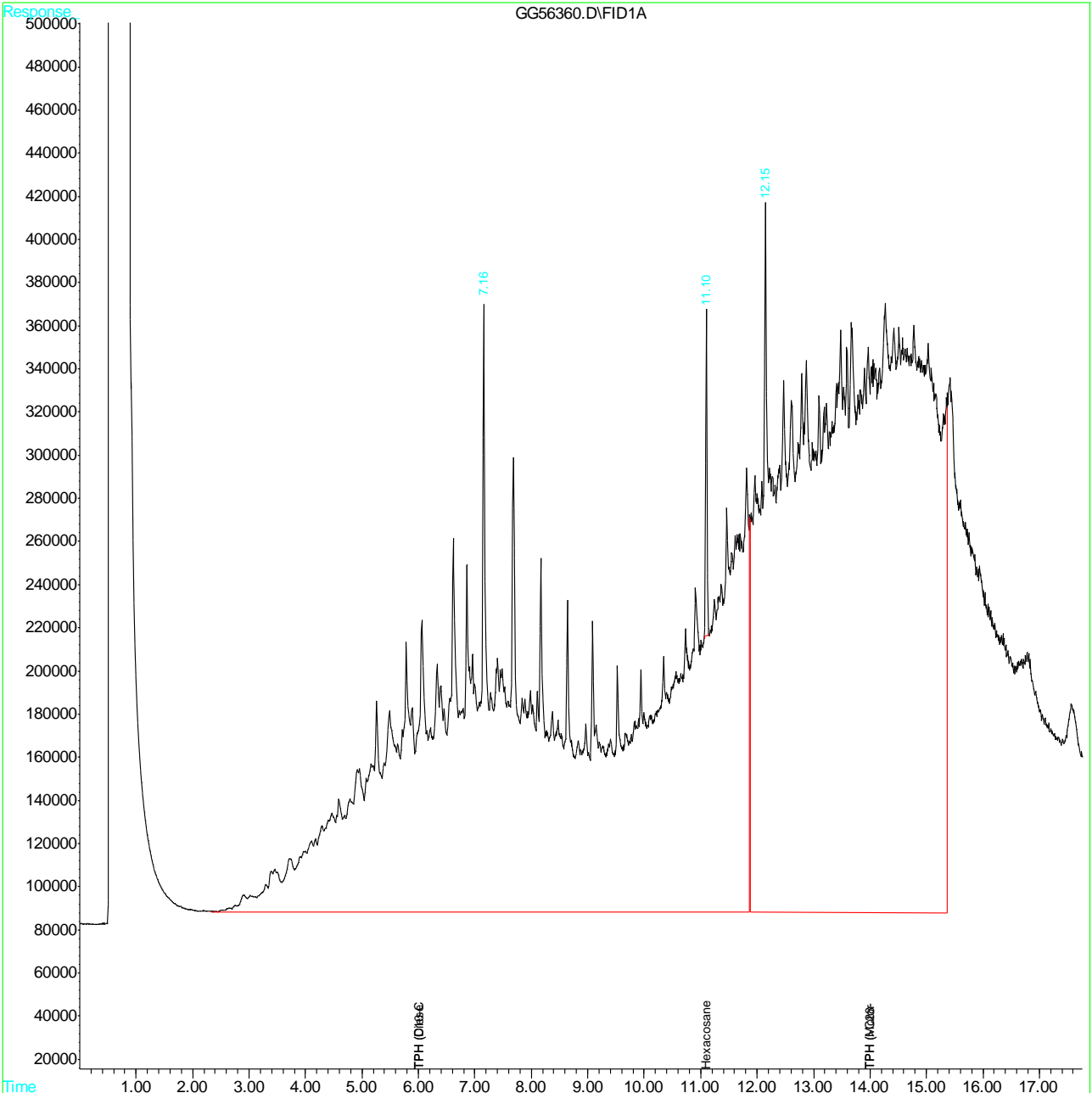
(f)=RT Delta > 1/2 Window (m)=manual int.
 GG56360.D GGG1453.M Wed Dec 03 15:41:01 2014

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\D#2\DATA\GGG1620\GG56360.D Vial: 8
 Acq On : 12-3-14 1:33:00 PM Operator: NHATN
 Sample : C37385-4 Inst : Diesel #2
 Misc : OP11309,GGG1620,30.03,,,10,5,S Multiplr: 1.00
 IntFile : autoint1.e
 Quant Time: Dec 3 15:38 2014 Quant Results File: GGG1453.RES

Quant Method : C:\HPCHEM\D#2\METHODS\GGG1453.M (Chemstation Integrator)
 Title : DRO calibration: Back column
 Last Update : Tue Dec 02 17:08:36 2014
 Response via : Multiple Level Calibration
 DataAcq Meth : ACQ_GG2.M

Volume Inj. : 1.0 uL
 Signal Phase : HP-5
 Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\D#2\DATA\GGG1620\GG56345.D Vial: 4
 Acq On : 12-2-14 8:02:53 PM Operator: NHATN
 Sample : OP11309-MB Inst : Diesel #2
 Misc : OP11309,GGG1620,30.00,,,1,1,S Multiplr: 1.00
 IntFile : autoint1.e
 Quant Time: Dec 2 20:36 2014 Quant Results File: GGG1453.RES

Quant Method : C:\HPCHEM\D#2\METHODS\GGG1453.M (Chemstation Integrator)
 Title : DRO calibration: Back column
 Last Update : Tue Dec 02 17:08:36 2014
 Response via : Initial Calibration
 DataAcq Meth : ACQ_GG2.M

Volume Inj. : 1.0 uL
 Signal Phase : HP-5
 Signal Info : 0.32 mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) S,M Hexacosane	11.10	131701810	120.458	ppm m
Spiked Amount	100.000	Recovery	=	120.46%
Target Compounds				
2) H,M TPH (C10-C28)	6.00	14775033	9.866	ppm
3) H TPH (>C28-C40)	14.00	11554235	14.853	ppm
4) H TPH (Mineral Spirits)	0.00	0	N.D.	ppm
5) H TPH (Kerosene)	0.00	0	N.D.	ppm
6) H,M TPH (Diesel)	6.00	14775033	9.875	ppm
7) H TPH (Motor Oil)	14.00	11554235	14.784	ppm

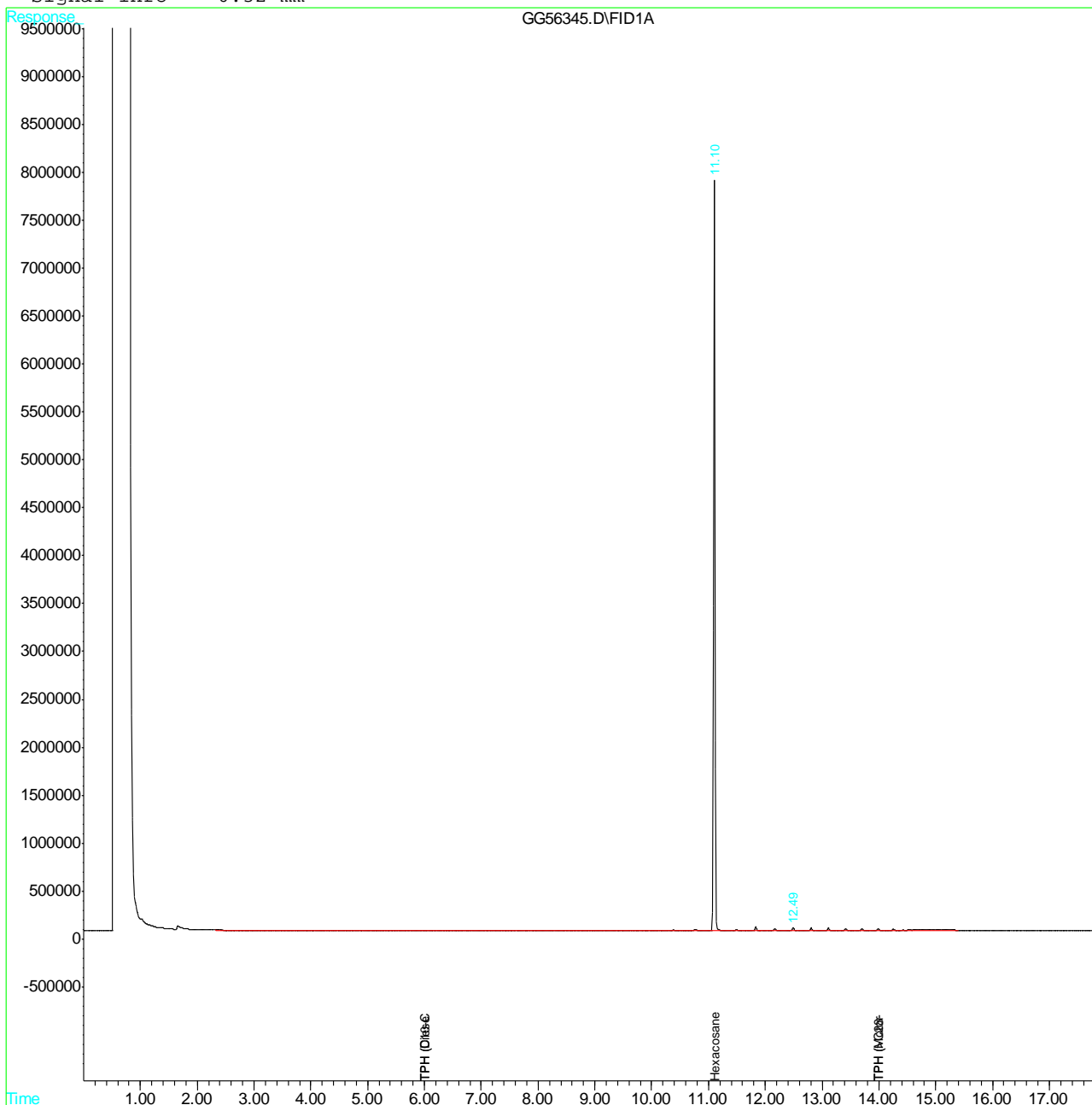
(f)=RT Delta > 1/2 Window (m)=manual int.
 GG56345.D GGG1453.M Wed Dec 03 15:30:51 2014

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\D#2\DATA\GGG1620\GG56345.D Vial: 4
 Acq On : 12-2-14 8:02:53 PM Operator: NHATN
 Sample : OP11309-MB Inst : Diesel #2
 Misc : OP11309,GGG1620,30.00,,,1,1,S Multiplr: 1.00
 IntFile : autoint1.e
 Quant Time: Dec 2 20:36 2014 Quant Results File: GGG1453.RES

Quant Method : C:\HPCHEM\D#2\METHODS\GGG1453.M (Chemstation Integrator)
 Title : DRO calibration: Back column
 Last Update : Tue Dec 02 17:08:36 2014
 Response via : Multiple Level Calibration
 DataAcq Meth : ACQ_GG2.M

Volume Inj. : 1.0 uL
 Signal Phase : HP-5
 Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\GHH1415\HH319326.D Vial: 95
 Acq On : 03-Dec-2014, 15:14:06 Operator: ALLENG
 Sample : OP11315-MB Inst : HP5890
 Misc : OP11315,GHH1415,1000,,,1,1,W Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Dec 03 16:21:28 2014 Quant Results File: GHH1360.RES

Quant Method : C:\MSDCHEM\2\METHODS\GHH1360.M (Chemstation Integrator)
 Title : TPH-Extractable by SW-846 Method 8015B
 Last Update : Thu Nov 13 11:38:16 2014
 Response via : Initial Calibration
 DataAcq Meth : ACQ_TPH5.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S Hexacosane	9.78	1529944	77.217 ppm
Spiked Amount 100.000		Recovery =	77.22%
Target Compounds			
2) H TPH (C10-C28)	6.80	526864	24.344 ppm
3) H TPH (>C28-C40)	12.00	287551	23.689 ppm
4) H TPH (Mineral Spirits)	0.00	0	N.D. ppm
5) H TPH (Kerosene)	0.00	0	N.D. ppm
6) H TPH (Diesel)	6.80	531329	24.685 ppm
7) H TPH (Motor Oil)	12.00	287551	23.415 ppm

(f)=RT Delta > 1/2 Window (m)=manual int.
 HH319326.D GHH1360.M Wed Dec 03 16:37:16 2014

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\GHH1415\HH319326.D Vial: 95
 Acq On : 03-Dec-2014, 15:14:06 Operator: ALLENG
 Sample : OP11315-MB Inst : HP5890
 Misc : OP11315,GHH1415,1000,,,1,1,W Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Dec 3 16:36 2014 Quant Results File: GHH1360.RES

Quant Method : C:\MSDCHEM\2\METHODS\GHH1360.M (Chemstation Integrator)
 Title : TPH-Extractable by SW-846 Method 8015B
 Last Update : Thu Nov 13 11:38:16 2014
 Response via : Multiple Level Calibration
 DataAcq Meth : ACQ_TPH5.M

Volume Inj. :
 Signal Phase :
 Signal Info :

