Woodward-Clyde

Engineering & sciences applied to the earth & its environment

September 11, 1997
961163NA

97 SEP 11 PM 4:20
ENVIRONMENTAL PROTECTION

Ms. Madhulla Logan
Hazardous Materials Specialist
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94503

Subject: **Addendum to the July 1, 1997 Risk Management Plan for Soil Impacted by TPH-motor oil Alameda Belt Line Site and Encinal Real Estate Site, Alameda, California**

On behalf of Encinal Real Estate, Inc., Woodward-Clyde is pleased to submit this Addendum to the Risk Management Plan (RMP) for on-site management of Total Petroleum Hydrocarbons as motor oil (TPH-motor oil) impacted soil at both the Alameda Belt Line site and the Encinal Real Estate site in Alameda, California. This Addendum provides the results of supplemental soil sampling and analyses for TPH-motor oil. The results of sampling and analyses support a modification of the understanding of the distribution of TPH-motor oil in soil at the site exceeding the 1,000 mg/kg criteria for on-site soil management.

Description of Supplemental Soil Sampling Activities

As shown on the attached Figure 4A, ten exploration pits were excavated at accessible locations on the site where laboratory analyses of previous exploration borings and shallow soil samples reported greater than 1,000 mg/kg of TPH-motor oil. The pits were excavated at previous exploration locations; S-1, S-3, S-4, S-6, SS-5, SS-8, B1, G-10, G-14, and G-15. The pits were identified with the addition of an "A" to the locations as shown on the attached pit logs. The pits were observed by Albert Ridley, engineering geologist, who also collected samples and prepared logs describing the soils encountered and sample locations. Logs are attached. Soil samples were collected in glass jars, were labeled and placed in an ice chest and transported to ITS Laboratories for analysis for TPH diesel and motor oil.

Results of Study

Exploratory pits S-3A and S-4A, located in the southern part of the site near Sherman Street exposed tan sand and clay fill material below a layer of crushed asphaltic concrete debris. The debris layer is about 6-inches thick. As shown on Table 1 the laboratory reported 8,600 mg/kg TPH-motor oil for the asphaltic concrete layer, using EPA 8015 analysis. The laboratory reported only 250 mg/kg TPH-motor oil in soil sample S3A-1 from a depth of 1/2 to 1 foot in pit S-3A, and only 130 mg/kg TPH-motor oil in sample S4A-2 at a depth of 3/4 to 1 foot. The soil samples in the area of these two pits,

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therefore, appear to have reported TPH-motor oil below the 1,000 mg/kg criteria for on-site management. The reported 8,600 mg/kg TPH -motor oil in the said asphaltic concrete is believed to represent a fraction of asphalt rather than evidence of motor oil. The layer of asphaltic concrete covers about one-acre, see Figure 4A, and is planned to be disposed at a landfill as construction debris during site cleanup. We will provide results of confirmation sampling following completion of cleanup.

Pits B1-A, S1-A, and S6-A were located in southern part of the site in an area of rubble fill material. This fill material contains pieces of asphaltic concrete and concrete as shown on the attached pit logs. As shown on attached logs the fill material ranges from about 1 to 3 feet in thickness and is underlain by fine sand and dark gray clay soil. The laboratory reports 190 mg/kg TPH-motor oil in sample B1A-1, 260 mg/kg TPH-motor oil in sample S1A-1, and 66 mg/kg TPH-motor oil in sample S6A-1 (Table 1). Because the concentrations of TPH-motor oil sample do not exceed the 1,000 mg/kg criteria for on-site management no management of this fill material is required.

Pits SS5-A and SS8-A were located at the north end of the site, as shown in Figure 4A. The pit logs show a brown sandy clay, with angular gravel and asphaltic concrete debris up to about 2-inches in diameter, occurs to a depth of from 1 to 2 feet. This fill layer is underlain by dark gray clayey sand and brown and gray silty clay. The laboratory reports only 81 mg/kg TPH-motor oil in sample SS5A1, at a depth of 1 to 1 and 1/2 feet, and 620 mg/kg TPH-motor oil in sample SS8A-1 at a depth of 1/2 to 1 foot. No management of soil in this area is required because the concentrations of TPH-motor oil do not exceed the 1,000 mg/kg criteria for on-site soil management.

Three additional pits were excavated inside the warehouse (G-10A) and along the edge of the site west of the warehouse (G14-A, and G15-A). The log of Pit G10-A shows a 6-inch thick asphaltic concrete pavement layer overlying about 3 feet of light brown sandy gravelly clay fill material. No TPH-motor oil was reported above the reporting limit of 10 mg/kg in soil sample G-10A-1 at a depth of 1 to 1 and 1/2 feet.

The laboratory reported 678 mg/kg TPH-motor oil in a 3-inch thick layer of gravelly sand(G-14A-1) immediately below the asphaltic concrete pavement in pit G14-A. This layer also had an observable petroleum odor. 366 mg/kg TPH-motor oil is reported for soil sample G-14A-2 at a depth of 1 to 1 and 1/4 feet. No management of soil in this area is required since the reported TPH-motor oil concentrations are less than the 1,000 mg/kg criteria.
The laboratory reports 1,620 mg/kg TPH-motor oil in soil sample G-15A-1 in a 6-inch thick gravelly clay layer immediately below the asphaltic concrete pavement in pit G-15A. A petroleum odor was observed in this layer. No TPH-motor oil was detected above the 10 mg/kg reporting limit in soil sample G-15A-2 from a depth of 2 to 2 and 1/2 feet in a fine gray clayey sand fill material. Due to inconclusive evaluation by the laboratory of chromatograms, to separate asphalt from motor oil, the 6-inch thick soil layer with a concentration of TPH-motor oil will require management since TPH-motor oil exceeds the 1,000 mg/kg criteria. An approximate area extending about 1/2 the distance to the nearest exploration location from pit G-15A is evaluated as an area that

extends less than previously shown on Figure 4 in the Risk Management Plan. Additional soil sampling may show that the extent of soil requiring on-site management is less than shown on the attached Figure 4A.

Areas near former exploration locations G-1 and SS-2 were not explored because a concrete slab was encountered below the asphaltic concrete pavement in those areas. Therefore, the previously shown area of soil with TPH-motor oil exceeding the 1,000 mg/kg criteria remains on Figure 4A. Additional soil sampling beneath the pavement in this area could further delineate the extent of soil with TPH-motor oil. However, since this area is currently covered by 6-inches of concrete and overlying asphaltic concrete pavement, and if the paving remains in place, no soil management may be required.

Conclusions

Based upon the supplemental soil exploration and laboratory results it is our opinion that the extent of soil with TPH-motor oil exceeding the 1,000 mg/kg criteria and requiring on-site management is less than previously shown on Figure 4 in the Risk Management Plan. The recent exploration and laboratory results support the presence of TPH-motor oil in soil exceeding the 1,000 mg/kg criteria in the areas as shown in the attached Figure 4A. Further exploration, soil sampling and laboratory analyses for TPH-motor oil could further delineate the extent of soils requiring on-site management.

Recommendations

Except for the areas of G-1, SS-2, and G15A, on-site management of soil for TPH motor oil is not required. We recommend that further confirmation soil sampling and analyses be performed in the area of G15A, as shown on Figure 4A with TPH-motor oil near G15A exceeding 1,000 mg/kg to delineate soil with TPH-motor oil. The sampling will be performed as soon as possible. If the pavement and concrete slab in the vicinity of G-1 and SS-2 is removed, then soil sampling to evaluate the extent of TPH in soil can be performed as part of on-site soil management. The recommended sampling activities should not delay site development.

Please consider this Addendum during your review of the Risk Management Plan. Please call if you have any questions.

Sincerely,

Albert P. Ridley, CEG
Project Manager

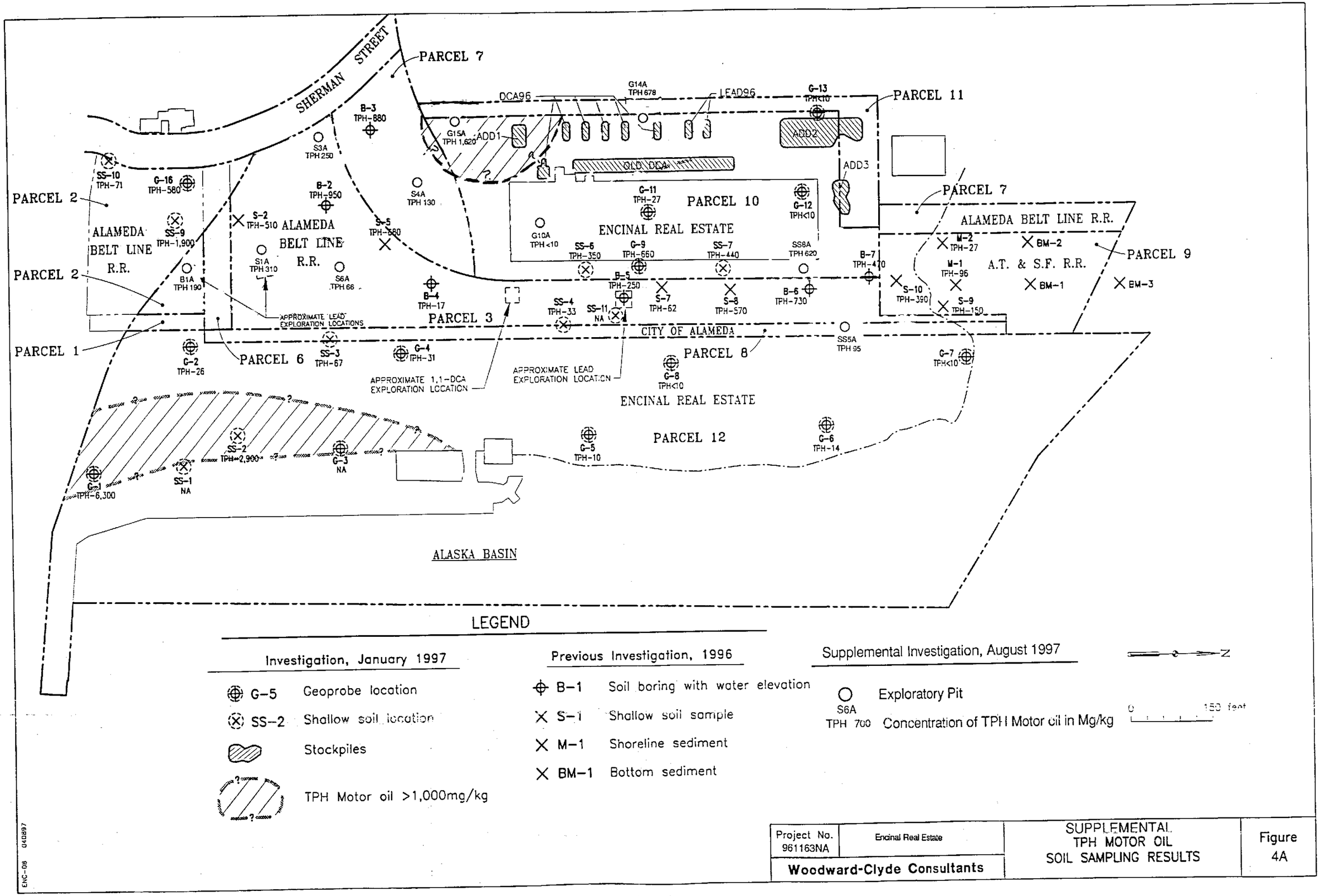
Marco C. Lobascio, PE, REA
Assistant Project Manager

Attachments: Table 1-Summary of TPH Diesel and Motor Oil in Soil
Figure 1- Supplemental TPH Motor Oil Sampling Results
Field Logs of Exploratory Pits
Laboratory Reports

TABLE 1 - SUMMARY OF TPH DIESEL AND MOTOR OIL IN SOIL
Alameda Beltline and Encinal Real Estate Sites

Figure 4 Location	Sampled	Depth in feet	Aug. "97 Results in MG/KG THP Diesel	TPH Motor Oil
B1	B1A-1	1/4 to 1/2	<100	190
B1	B1A-2	1 1/2 to 2	<10	<10
S-1	S1A-1	1/2 to 1	<100	260
S-1	S1A-2	1 1/2 to 2 3/4	<100	310
S-3	S3A-1	3/4 to 1	<100	250
S-3	S3A-2	1 1/2 to 2	<10	21
S-4	S4A-1	0 to 1/2	<10	8,600
S-4	S4A-2	3/4 to 1	<50	130
S-4	S4A-3	2 to 2 1/4	<10	<10
SS-5	SS5A-1	1 to 1 1/2	<20	81
SS-5	SS5A-2	2 to 2 1/2	<50	95
S-6	S6A-1	1/2 to 1	<20	66
SS-8	SS8A-1	1/2 to 1	<200	620
G-10	G-10A-1	1 to 1 1/2	<10	<10
G-14	G-14A-1	1/4 to 1/2	<10	678
G-14	G-14A-2	1 to 1 1/4	<10	366
G-15	G-15A-1	1 to 1 1/2	<50	1,620
G-15	G-15A-2	2 to 2 1/2	<10	<10

H:Marzella.Diesel



LEGEND

Investigation, January 1997

- G-5 — Geoprobe location
- SS-2 — Shallow soil location
- Stockpiles
- TPH Motor oil >1,000mg/kg

Previous Investigation, 1996

- B-1 — Soil boring with water elevation
- S-1 — Shallow soil sample
- M-1 — Shoreline sediment
- BM-1 — Bottom sediment

Supplemental Investigation, August 1997

- Exploratory Pit
- S6A / TPH 700 — Concentration of TPH Motor oil in Mg/kg

N

0 150 feet

ENC-08 040897

Project No. 961163NA	Encinal Real Estate	SUPPLEMENTAL TPH MOTOR OIL SOIL SAMPLING RESULTS	Figure 4A
Woodward-Clyde Consultants			

Project: Encinal Terminals **Project Number:** 961163NB **Location:** ABL Property	**Log of** B1A

Date(s) Drilled 8/5/97	Total Depth Drilled (feet)	Top of Casing Elevation (feet)	Groundwater Level (feet) ▽ First ▼ Completion ▽ 24 Hours	
Logged by A. Ridley / Checked by	Diameter of Hole (inches)	Diameter of Well (inches)	Number of Samples	Disturbed / Undisturbed
Drilling Company RSI	Drilling Method Backhoe		Drill Rig Type	
Sampler Type Grab	Drill Bit Size 12 INCH bucket		Type of Well Casing	
Screen Perforation		Type of Sand Pack		
Type of Seals				
Comments At location B1 on Figure 4				

Depth, feet	Elevation, feet	SAMPLES: Recovery / Sample	Blows/foot	USCS Classification	Graphic Log	MATERIAL DESCRIPTION	Well Completion Log	HNu (ppm)	REMARKS
0									
	B1A-1		11	TFill		Brown clayey sand with Gravel, 1" dia, dry Hard, Fill		190	No Petroleum odors
1'						Tan fine sand with clay layers, medium dense, Fill			
	B1A-2			<10					
2'									
3'									

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Project: Encinal Terminal **Project Number:** 961163 NA **Location:** ABL Parcel	**Log of** S1A

Date(s) Drilled 8/5/97	Total Depth Drilled (feet)	Top of Casing Elevation (feet)	Groundwater Level (feet) ▽ First ▼ Completion ▼ 24 Hours	
Logged by A. Ridley Checked by	Diameter of Hole (inches)	Diameter of Well (inches)	Number of Samples	Disturbed / Undisturbed
Drilling Company RSI	Drilling Method Backhoe		Drill Rig Type John Deere 510 D	
Sampler Type Grab	Drill Bit Size 12" Bucket		Type of Well Casing	
Screen Perforation		Type of Sand Pack		
Type of Seals				
Comments At location S-1 on Figure 4				

Depth, feet	Elevation, feet	SAMPLES: Recovery / Sample	SAMPLES: Blows/foot	USCS Classification	Graphic Log	MATERIAL DESCRIPTION	Well Completion Log	HNu (ppm)	REMARKS
0				TPH M.O.		Debris Fill			No Petroleum Odor
1'	S1A-1			260		Brown Gravely SAND with A.C. and Concrete 2" dia to 1' dia. AC AC			
2'									
	S1A-2			310					
3'						Tan Fine Sand with (SM) clay layers, FILL Moist, dense			

Project: Encinal Terminals	Log of S3-A
Project Number: 961163NA	
Location: ABL Parcel	

Date(s) Drilled: 8/5/97	Total Depth Drilled (feet):	Top of Casing Elevation (feet):	Groundwater Level (feet): First / Completion / 24 Hours
Logged by: A. Ridley	Checked by:	Diameter of Hole (inches): 12" / Diameter of Well (inches):	Number of Samples: Disturbed / Undisturbed
Drilling Company: RSI		Drilling Method: Backhol	Drill Rig Type: John Deere 510D
Sampler Type: Grab		Drill Bit Size: 12" Bucket	Type of Well Casing:
Screen Perforation:		Type of Sand Pack:	
Type of Seals:			
Comments: At location S-3 on Figure 4			

Depth, feet	Elevation, feet	SAMPLES: Recovery	Sample	Blows/foot	USCS Classification	Graphic Log	MATERIAL DESCRIPTION	Well Completion Log	HNu (ppm)	REMARKS
0					TPH Motor oil		Crushed A.C. 1" dia. Loose, dry			No Petroleum Odor in any soils or A.C. layers
1'	S3A-1		X		250		Brown silty clay with gravel, CL, Fill			
2'	S3A-2		X		21		Tan fine sand with tan clay layers (11.9?) Moist Fill Medium dense			
3'										

Project: 961163NA **Project Number:** ENCINAL TERMINALS **Location:** PLANATAL PARCEL	**Log of** SS5A

Date(s) Drilled 8/5/97	Total Depth Drilled (feet)	Top of Casing Elevation (feet)	Groundwater Level (feet) ▽ First ▼ Completion ▼ 24 Hours	
Logged by A. Ridley Checked by		Diameter of Hole (inches)	Diameter of Well (inches)	Number of Samples Disturbed Undisturbed
Drilling Company KSI		Drilling Method Backhoe		Drill Rig Type John Deere 510D
Sampler Type Grab		Drill Bit Size 12" Bucket		Type of Well Casing
Screen Perforation			Type of Sand Pack	
Type of Seals				
Comments At location SS-5 on Figure 4				

Depth, feet	Elevation, feet	SAMPLES Recovery	SAMPLES Sample	SAMPLES Blows/foot	USCS Classification	Graphic Log	MATERIAL DESCRIPTION	Well Completion Log	HNu (ppm)	REMARKS
0							A.C.			Pampas Grass, A.C. Debris on surface
					FL		Brown sandy clay with 2" angular rock, some 2" A.C. debris, FILL (dry)			
1'			SS5A-1		81		Some roots from pampas Grass			NO petroleum odor
2'			SS5A-2		95		Dark Gray clayey SAND FILL, medium dense, moist			
3'										

Project: Encinal Terminals **Project Number:** 961163NA **Location:** ABL Parcel	**Log of** S4-A

Date(s) Drilled 8/5/97	Total Depth Drilled (feet)	Top of Casing Elevation (feet)	Groundwater Level (feet) ▽ First ▽ Completion ▽ 24 Hours	
Logged by aRidley	Checked by	Diameter of Hole (inches)	Diameter of Well (inches)	Number of Samples: Disturbed / Undisturbed
Drilling Company RSI		Drilling Method Backhoe		Drill Rig Type John Deere 310D
Sampler Type Grab		Drill Bit Size 12" Bucket		Type of Well Casing
Screen Perforation			Type of Sand Pack	
Type of Seals				
Comments At location S-4 on Figure 4				

Depth, feet	Elevation, feet	SAMPLES: Recovery / Sample	SAMPLES: Blows/foot	USCS Classification	Graphic Log	MATERIAL DESCRIPTION	Well Completion Log	HNu (ppm)	REMARKS
0						6" Loose 1" dia crushed A.C.			
	S4-A1	X		TPH M.Oil 8600		Tan Fine Sand with silt (SM) brown clay, Fill"			No petroleum odor or stains in soil
1'	S4-A2	X		130		Light brown clay (CL) with some fine Sand			
2'	S4A-3	X		<10		Moist, Stiff			
3'									

Project: 961163NA Project Number: Location:	Log of SS8A

Date(s) Drilled 8/5/97	Total Depth Drilled (feet)	Top of Casing Elevation (feet)	Groundwater Level (feet) ▽ First ▽ Completion ▽ 24 Hours	
Logged by A. Ridic	Checked by	Diameter of Hole (inches)	Diameter of Well (inches)	Number of Samples: Disturbed / Undisturbed
Drilling Company RSI		Drilling Method Backhoe		Drill Rig Type J. Deere 510D
Sampler Type Grab		Drill Bit Size 12" Bucket		Type of Well Casing
Screen Perforation			Type of Sand Pack	
Type of Seals				
Comments At location SS-8 on Figure 4				

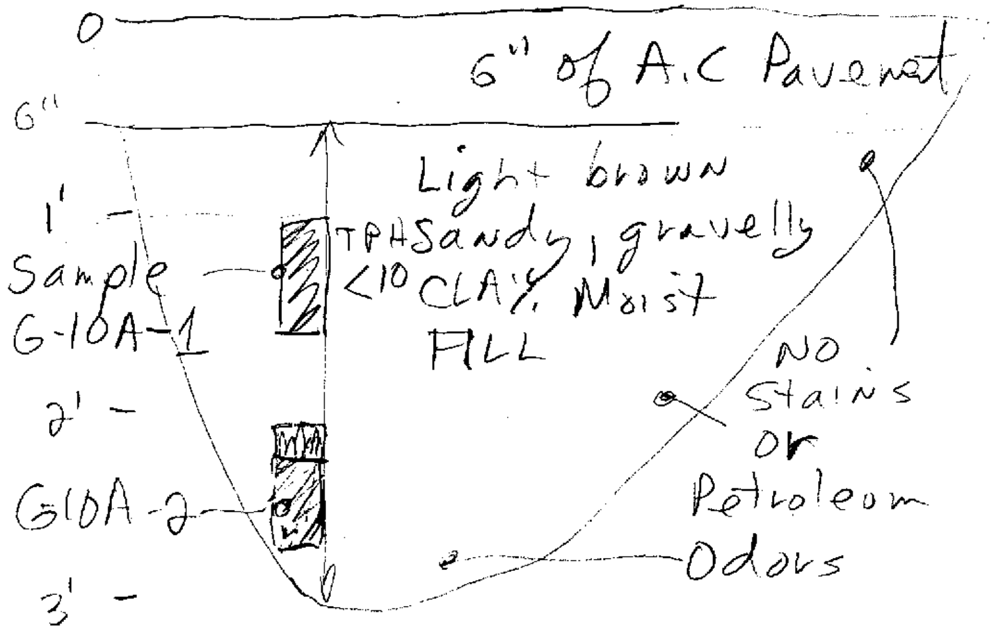
Depth, feet	Elevation, feet	SAMPLES: Recovery / Sample	SAMPLES: Blows/foot	USCS Classification	Graphic Log	MATERIAL DESCRIPTION	Well Completion Log	HNu (ppm)	REMARKS
0				TPH M.ai		Brown Sandy Clay with angular gravel and pieces of A.C. upto 2" dia FILL			No Petroleum Odor
1'	SS8A-1			620					
	SS8A-2					Brown gravel, 2" dia Rounded, with Fine Sand FILL and small roots			
2'						Brown and Gray Mottled Silty Clay, Decayed Plant odor fill?			

Project: 961162.NA Project Number: Location:	Log of SGA

Date(s) Drilled 8-5-97	Total Depth Drilled (feet)	Top of Casing Elevation (feet)	Groundwater Level (feet) ▽ First ▽ Completion ▽ 24 Hours		
Logged by A. Ridley Checked by		Diameter of Hole (inches)	Diameter of Well (inches)	Number of Samples	Disturbed / Undisturbed
Drilling Company RSI		Drilling Method Backhoe		Drill Rig Type John Deere 510D	
Sampler Type Grab		Drill Bit Size 12" Bucket		Type of Well Casing	
Screen Perforation			Type of Sand Pack		
Type of Seals					
Comments At location S-6 on Figure 4					

Depth, feet	Elevation, feet	SAMPLES: Recovery / Sample	SAMPLES: Blows/foot	USCS Classification	Graphic Log	MATERIAL DESCRIPTION	Well Completion Log	HNu (ppm)	REMARKS
0				TPH Mod		Brown gravelly clay with sand, & Pieces of A.C. FILL			No Petroleum Odor
1'		SGA-1		66					
2'		SGA-2				Tan sandy clay with gravel, FILL			
3'						Dark Gray silty clay, Organic odor old bay sediment			

G-10A Pit 8/27/97



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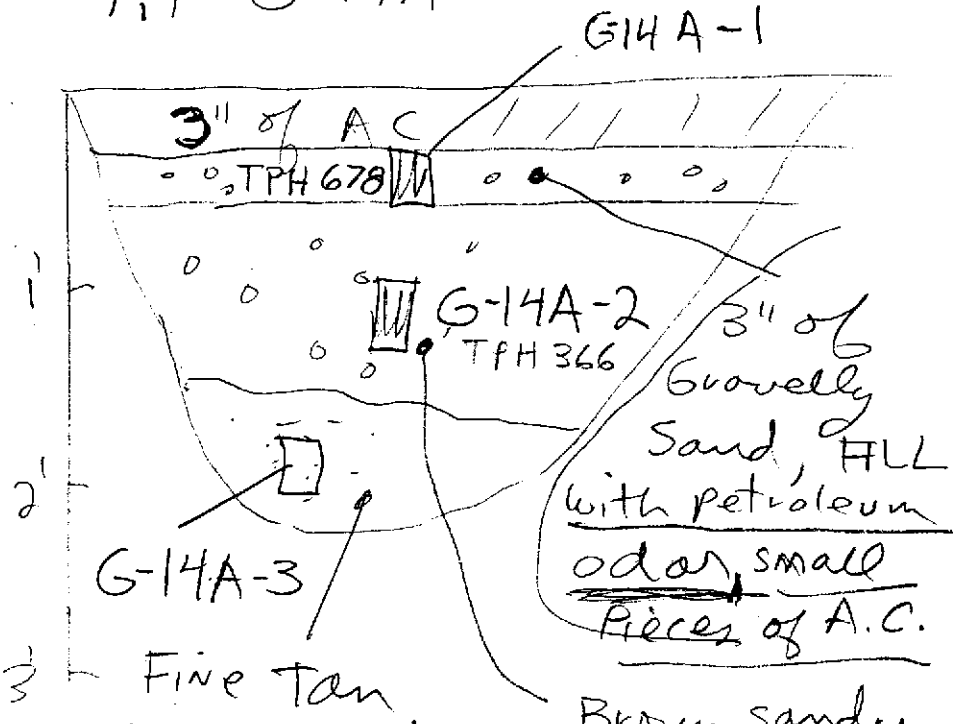
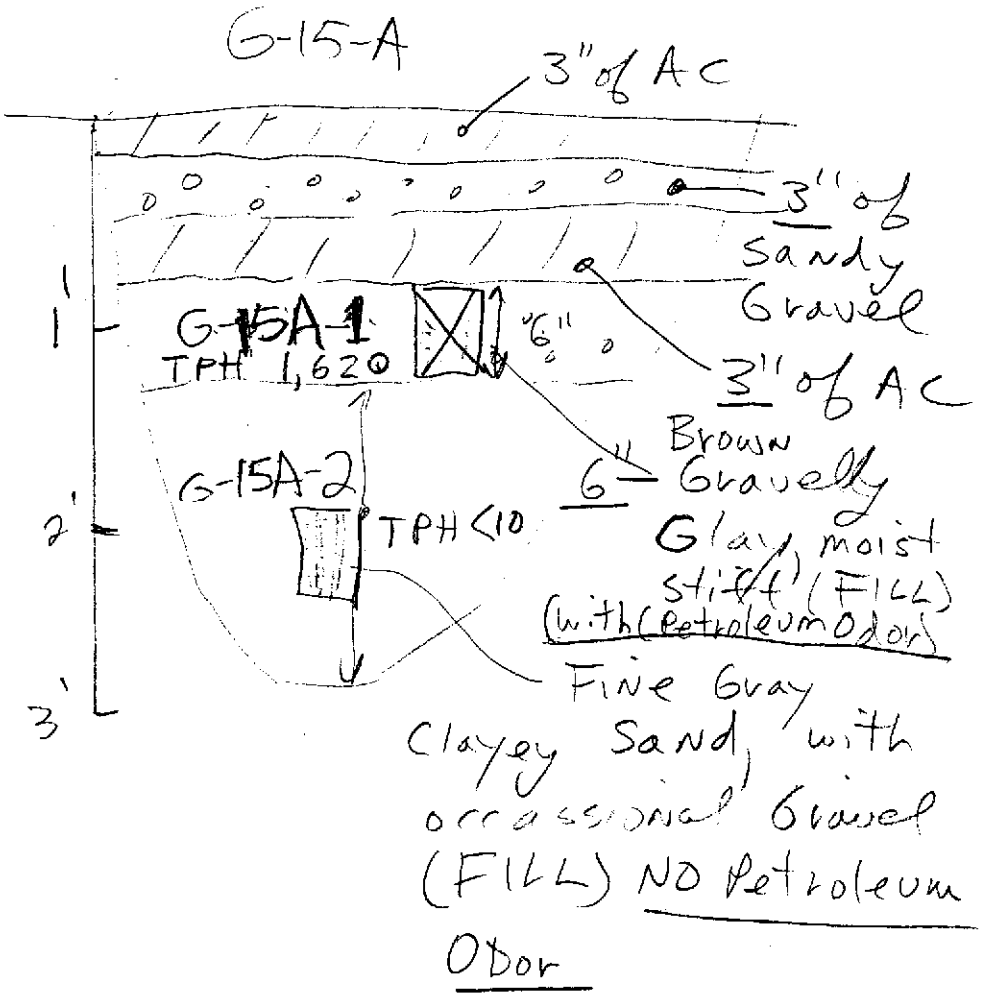
Pit G-14A



8/27/97

A. Ridley

96116 3NA



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16113NA

ITS Intertek Testing Services
Environmental Laboratories

To: AL RIDLEY Date: 08/21/97

Company: WCC-OAK Fax No.: 874-3268

From: Rich Pages: 7

Comments:

AL,

HERE ARE THE MOTOR OIL RESULTS AS WELL AS SAMPLE AND MOTOR OIL STD. CHROMATOGRAMS

Intertek Testing Services NA Inc.
1961 Concourse Drive, Suite E San Jose, CA 95131
Telephone (408) 432-8192 Fax (408) 432-8198

SECTION NARRATIVE

S.D.G. No. 1011 **GROUP No. 1011**

EXTRACTABLE TOTAL PETROLEUM HYDROCARBONS as DIESEL:

- All holding times have been met for the analyses reported in this section.
- The concentration reported as motor oil for sample S4A-1 is primarily due to the presence of combination of discrete peaks and a heavier petroleum product, possibly motor oil.

Peggie Dawson (for)
Sia Hosseinian
Organic Group Director

8/20/97
Date

TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL

INTERTEK TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory Group:	1011	Client Project ID:	961163NA
Matrix:	SOIL	Date Released:	8/20/97
Date Extracted:	8/19/97	Concentration Units:	mg/Kg
Instrument ID:	HP23		

Laboratory ID	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Reporting Limit	Amount Found	Surrogate Recovery
97080446	S4A-1	8/5/97	8/20/97	10	2000	8600	86%
BP0577S	Method Blank	N/A	8/19/97	1	10	ND	82%

ND: Not detected at or above the reporting limit for the method.
TPHd: Total Petroleum Hydrocarbons as motor oil is determined by GC/FID (modified EPA Method 8015) following sample extraction by EPA Method 3510.
Surrogate recovery quality control limits for o-terphenyl are 75-117%.
All testing procedures follow California Department of Health Services approved methods.

Quantitation Report

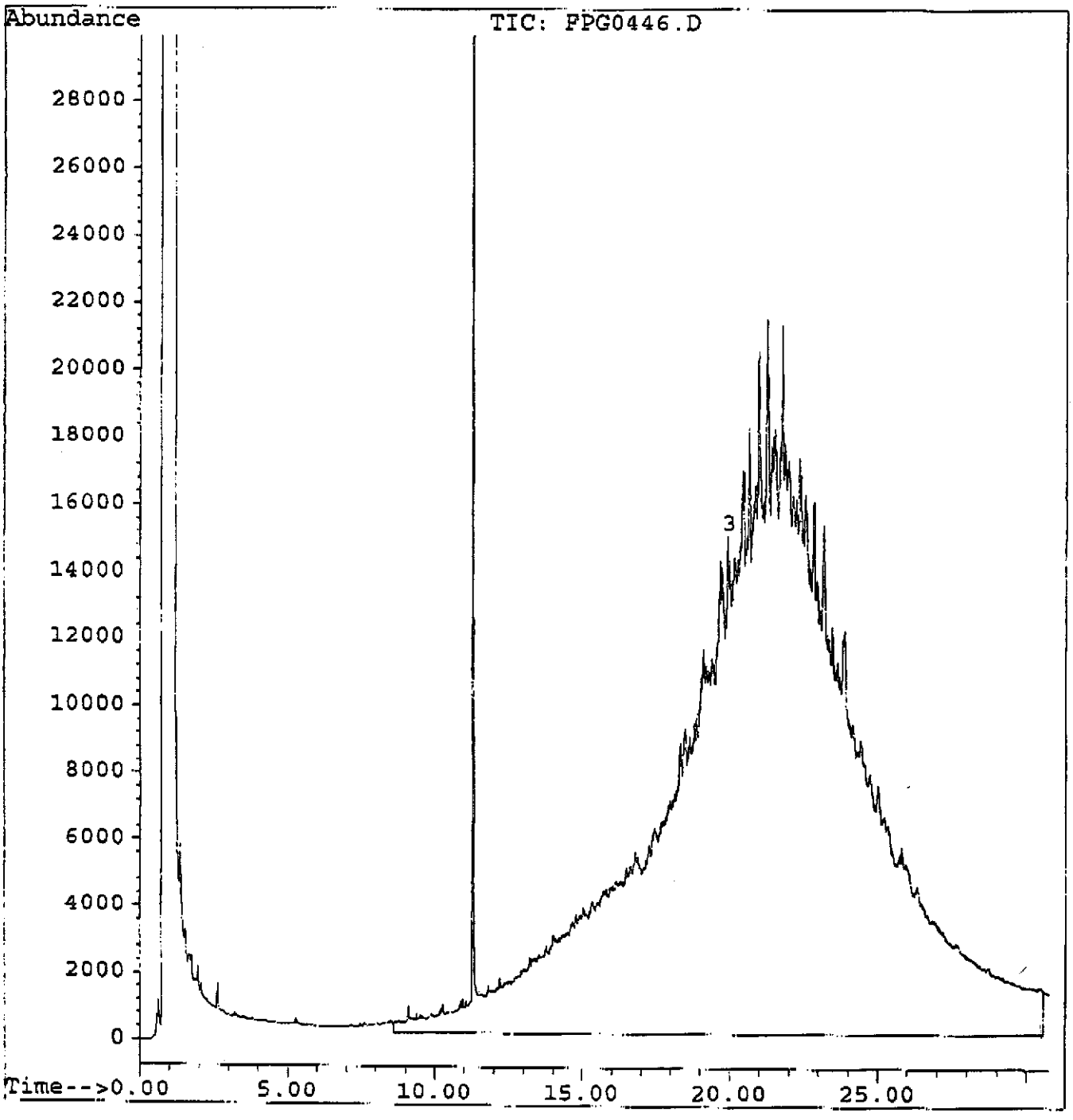
Data File : J:\GCTPH\HP23\DATA\23G19F1A\FPG0446.D
Acq On : 20 Aug 97 03:42 AM
Sample : S4A-1 #1011 SOIL
Misc :
Quant Time: Aug 21 9:31 1997

Oper: ARP
Vial: 14
Mult: 10.0

Method : J:\GCTPH\HP23\METHODS\23L15F1W.M
Title : TPHd - Anametrix, Inc
Last Update : Thu Aug 21 09:29:38 1997
Response via : Multiple Level Calibration

Volume Inj. : 3 uL
Signal Phase : DB-5
Signal Info : 0.53mm

Instrument ID : HP23



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Volume Inj. : 3 uL
Signal Phase : DB-5
Signal Info : 0.53mm

Instrument ID : HP23

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1)	o-TERPHENYL	11.30	1120140	86.46 ppb
	Target Compounds			
2)	DIESEL	0.00	0	N.D. ppb
3)	MOTOR OIL	20.00	76149322	8552.19 ppm

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

TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL

INTERTEK TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory Group:	1011	Client Project ID:	961163NA
Matrix:	SOIL	Date Released:	8/20/97
Date Extracted:	8/19/97	Concentration Units:	mg/Kg
Instrument ID:	HP23		

Laboratory ID	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Reporting Limit	Amount Found	Surrogate Recovery
97080446	S4A-1	8/5/97	8/20/97	10	2000	8600	86%
BP0577S	Method Blank	N/A	8/19/97	1	10	ND	82%

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Surrogate recovery quality control limits for o-terphenyl are 75-117%.
All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL

INTERTEK TESTING SERVICES/ ENVIRONMENTAL LABORATORIES

(408) 432-8192

LABORATORY CONTROL SAMPLE REPORT

Lab Group # :	1011	Laboratory ID:	M/NP0577S
Matrix:	SOIL	Date Released:	8/20/97
Date Extracted:	8/19/97	Instrument ID:	HP23
Date Analyzed:	8/19/97	Concentration Units:	mg/Kg

COMPOUND NAME	SPIKE AMT	LCS CONC	% REC LCS	LCSD CONC	%REC LCSD	RPD
Motor Oil	62.5	64	102%	69	110%	8%
o-Terphenyl			87%		94%	

Quality control limits for LCS/LCSD recovery are 58-118%.

Quality control limits for RPD(relative percent difference) are +/- 18%.

Quality control limits for o-terphenyl recovery are 75-117%.

SECTION NARRATIVE

S.D.G. No. 1011 **GROUP No. 1011**

EXTRACTABLE TOTAL PETROLEUM HYDROCARBONS as DIESEL:

- All holding times have been met for the analyses reported in this section.
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Reggie Dawson (for) 8/20/97

Sia Hosseinian **Date**
Organic Group Director

ITS Intertek Testing Services
Environmental Laboratories

AL RIDLEY
WOODWARD-CLYDE CONSULTANTS
500 12TH STREET, SUITE #100
OAKLAND CA 94607

ITS Group # : 955
Date Received: 08/05/97
Project ID : 961163NA

The following samples were received at Intertek for analysis :

ITS ID	CLIENT SAMPLE ID
97080129	B1A-1
97080130	B1A-2
97080131	S1A-1
97080132	S1A-2
97080133	S3A-1
97080134	S3A-2
97080135	S4A-1
97080136	S4A-2
97080137	S4A-3
97080138	SS5A-1
97080139	SS5A-2
97080140	S6A-1
97080141	S6A-2
97080142	SS8A-1
97080143	SS8A-2

This report is organized in sections according to the specific Intertek laboratory group which performed the analysis(es) and generated the data.

The results contained within this report relate to only the sample(s) tested. Additionally, these data should be considered in their entirety and Intertek cannot be responsible for the detachment, separation, or otherwise partial use of this report.

Intertek is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234.

If you have any further questions or comments on this report, please call your project manager as soon as possible. Thank you for using Intertek Testing Services.

Project Manager

08/13/97
Date

This report consists of 11 pages

SECTION NARRATIVE

S.D.G. No. 933 **GROUP No. 955**

GCTPH EXTRACTABLE

- All holding times have been met for the analyses reported in this section.

M. Hosseinian
Sia Hosseinian
Organic Group Director

8/12/97
Date

TOTAL PETROLEUM HYDROCARBONS AS DIESEL

INTERTEK TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory Group #:	955	Client Project ID:	961163NA
Matrix:	SOIL	Date Released:	8/12/97
Date Extracted:	8/6/97	Concentration Units:	mg/Kg
Instrument ID:	HP23		

Laboratory ID	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Reporting Limit	Amount Found	Surrogate Recovery
97080129	B1A-1	8/5/97	8/7/97	10	100	ND	81%
97080130	B1A-2	8/5/97	8/6/97	1	10	ND	83%
97080131	S1A-1	8/5/97	8/7/97	10	100	ND	76%
97080132	S1A-2	8/5/97	8/7/97	10	100	ND	91%
97080133	S3A-1	8/5/97	8/7/97	10	100	ND	84%
97080134	S3A-2	8/5/97	8/7/97	1	10	ND	82%
97080136	S4-A-2	8/5/97	8/7/97	5	50	ND	77%
97080137	S4-A-3	8/5/97	8/6/97	1	10	ND	88%

ND: Not detected at or above the reporting limit for the method.
TPHd: Total Petroleum Hydrocarbons as motor oil is determined by GC/FID (modified EPA Method 8015) following sample extraction by EPA Method 3550.
Surrogate recovery quality control limits for o-terphenyl are 75-117%.
All testing procedures follow California Department of Health Services approved methods.

Issued on 8/12/97 at 12:43 pm

TOTAL PETROLEUM HYDROCARBONS AS DIESEL

INTERTEK TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory Group #:	955	Client Project ID:	961163NA
Matrix:	SOIL	Date Released:	8/12/97
Date Extracted:	8/6/97	Concentration Units:	mg/Kg
Instrument ID:	HP23		

Laboratory ID	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Reporting Limit	Amount Found	Surrogate Recovery
97080138	SS5A-1	8/5/97	8/7/97	2	20	ND	80%
97080139	SS5A-2	8/5/97	8/7/97	5	50	ND	82%
97080140	S6A-1	8/5/97	8/7/97	2	20	ND	86%
97080142	SS8A-1	8/5/97	8/7/97	20	200	ND	73%
BP0534	Method Blank	N/A	8/6/97	1	10	ND	80%

ND: Not detected at or above the reporting limit for the method.
TPHd: Total Petroleum Hydrocarbons as motor oil is determined by GC/FID (modified EPA Method 8015) following sample extraction by EPA Method 3550.
Surrogate recovery quality control limits for o-terphenyl are 75-117%.
All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL

INTERTEK TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory Group #:	955	Client Project ID:	961163NA
Matrix:	SOIL	Date Released:	8/12/97
Date Extracted:	8/6/97	Concentration Units:	mg/Kg
Instrument ID:	HP23		

Laboratory ID	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Reporting Limit	Amount Found	Surrogate Recovery
97080129	B1A-1	8/5/97	8/7/97	10	100	190	81%
97080130	B1A-2	8/5/97	8/6/97	1	10	ND	83%
97080131	S1A-1	8/5/97	8/7/97	10	100	260	76%
97080132	S1A-2	8/5/97	8/7/97	10	100	310	91%
97080133	S3A-1	8/5/97	8/7/97	10	100	250	84%
97080134	S3A-2	8/5/97	8/7/97	1	10	21	82%
97080136	S4-A-2	8/5/97	8/7/97	5	50	130	77%
97080137	S4-A-3	8/5/97	8/6/97	1	10	ND	88%

ND: Not detected at or above the reporting limit for the method.
TPHd: Total Petroleum Hydrocarbons as motor oil is determined by GC/FID (modified EPA Method 8015) following sample extraction by EPA Method 3550.
Surrogate recovery quality control limits for o-terphenyl are 75-117%.
All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL

INTERTEK TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory Group #:	955	Client Project ID:	961163NA
Matrix:	SOIL	Date Released:	8/12/97
Date Extracted:	8/6/97	Concentration Units:	mg/Kg
Instrument ID:	HP23		

Laboratory ID	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Reporting Limit	Amount Found	Surrogate Recovery
97080138	SS5A-1	8/5/97	8/7/97	2	20	81	80%
97080139	SS5A-2	8/5/97	8/7/97	5	50	95	82%
97080140	S6A-1	8/5/97	8/7/97	2	20	66	86%
97080142	SS8A-1	8/5/97	8/7/97	20	200	620	73%
BP0534	Method Blank	N/A	8/6/97	1	10	ND	80%

ND: Not detected at or above the reporting limit for the method.
TPHd: Total Petroleum Hydrocarbons as motor oil is determined by GC/FID (modified EPA Method 8015) following sample extraction by EPA Method 3550.
Surrogate recovery quality control limits for o-terphenyl are 75-117%.
All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS DIESEL
INTERTEK TESTING SERVICES/ ENVIRONMENTAL LABORATORIES
(408) 432-8192

MATRIX SPIKE RECOVERY REPORT

Client Project ID:	961163NA	Laboratory ID:	97080139
Client Sample ID:	SS5A-2	Date Released:	8/12/97
Date Sampled:	8/5/97	Instrument ID:	HP23
Date Extracted:	8/6/97	Matrix:	SOIL
Date Analyzed:	8/7/97	Concentration Units:	mg/Kg

COMPOUND NAME	SPIKE AMT	SAMPLE CONC	MS CONC	% REC MS	MSD CONC	%REC MSD	RPD
Diesel	62.5	0	73.0	117%	65.9	105%	11%
o-Terphenyl				75%		84%	

Quality control limits for MS/MSD recovery are 32-143%

Quality control limits for RPD(relative percent difference) are +/- 30%.

Quality control limits for o-terphenyl recovery are 75-117%.

0007

Issued on 8/12/97 at 12:07 pm

TOTAL PETROLEUM HYDROCARBONS AS DIESEL

INTERTEK TESTING SERVICES/ ENVIRONMENTAL LABORATORIES

(408) 432-8192

LABORATORY CONTROL SAMPLE REPORT

Client Project ID:	961163NA	Laboratory ID:	M/NP0534
Matrix:	SOIL	Date Released:	8/12/97
Date Extracted:	8/6/97	Instrument ID:	HP23
Date Analyzed:	8/6/97	Concentration Units:	mg/Kg

COMPOUND NAME	SPIKE AMT	LCS CONC	% REC LCS	LCSD CONC	%REC LCSD	RPD
Diesel	62.5	47.7	76%	48.3	77%	1%
o-Terphenyl			90%		91%	

Quality control limits for LCS/LCSD recovery are 60-130%

Quality control limits for RPD(relative percent difference) are +/- 30%.

Quality control limits for o-terphenyl recovery are 75-117%

0008

955 ②

Woodward-Clyde Consultants
500 12th Street, Suite 100, Oakland, CA 94607-4014
(510) 893-3600

Chain of Custody Record

PROJECT NO. 961163NA

SAMPLERS: (Signature) [signature]

DATE	TIME	SAMPLE NUMBER	Sample Matrix (S)oil, (W)ater, (A)ir	EPA Method 8015 TPH-D, Motor Oil	EPA Method	EPA Method	EPA Method	HOLD		Number of Containers	REMARKS (Sample preservation, handling procedures, etc.)
	10:30	BIA-1		X					97080129	1	TPH D/and Motor by 8015M as noted
	10:40	BIA-2		X					97080130	1	
	10:00	S1A-1		X					97080131	1	
	10:10	S1A-2		X					97080132	1	
	9:30	S3A-1		X					97080133	1	
	9:40	S3A-2		X					97080134	1	
	9:00	S4A-1						X	97080135	1	
	9:10	S4-A-2		X					97080136	1	
	9:15	S4A-3		X					97080137	1	Request 48 hour Turnaround
	NOON	SS5A-1		X					97080138	1	
	12:15 PM	SS5A-2		X					97080139	1	
8-5-97	11:00	S6A-1		X					97080140	1	
	11:10	S6A-2						X	97080141	1	Glass Jar containers of soil
	11:30	SS8A-1		X					97080142	1	
	11:40	SS8A-2						X	97080143	1	

TOTAL NUMBER OF CONTAINERS: 15

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
[signature]	8.5.97 1:30 pm	[signature] 8-5-97 1750	[signature]	8-5-97 1906	

METHOD OF SHIPMENT:	SHIPPED BY: (Signature)	COURIER: (Signature)	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
			[signature]	8/5/97 1906

0009

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Environmental Laboratories

INCIDENT REPORT
Sample Receiving

Sample Custodian: Jose Perez Date: 8-6-97
Workorder Number: 955 Proj.ID/SDG: 961163NL

SAMPLE

___Containers with headspace
___Containers without labels
___Improper containers
___Containers broken
___Not properly preserved
___Transferred upon receipt
___Cooler temperature outside of range: ________
___Arrived outside of hold time for ________ METHOD (S)

CHAIN OF CUSTODY

___ not received
___ Illegible
① ✓ Containers do not match Sample I.D.
② ✓ Incomplete Date of Sampling not on C.O.C
___ No corrective action

___Other (Please specify): ________

Affected sample(s): ① Sample #97080130 - I.D. on C.O.C is BIA-2 but on container I.D. is SIA-2 ② Samples #97080127-97080139, 97080141-97080143

Corrective Action: ① Times of Sampling were the same on C.O.C and container ② Date was on C.O.C

Supervisor Verification: [signature] Date: 8-6-97

Project Manager Verification [signature] Date: 08/08/97

Intertek Testing Services NA Inc.
1961 Concourse Drive, Suite E San Jose, CA 95131
Telephone (408) 432-8192 Fax (408) 432-8198

ITS Intertek Testing Services
Environmental Laboratories

SAMPLE RECEIVING CHECKLIST

Workorder Number: 955	*Client Project ID:* 961163NA	*Quote Number:*

Cooler			
Shipping documentation present? If YES, enter Carrier and Airbill #:	YES	NO	(N/A)
Custody Seal on the outside of cooler? *Condition*: Intact Broken	YES	NO	(N/A)
Temperature of sample(s) within range? List temperatures of cooler(s): 3 °C **Note: If all samples taken within previous 4 hr, circle N/A and place in sample storage area as soon as possible.**	(YES) IR -1	NO Temp Blank	N/A ____
Samples			
Chain of custody seal present for each container? *Condition*: Intact Broken	YES	NO	(N/A)
Samples arrived within holding time?	(YES)	NO	N/A
Samples in proper containers for methods requested? *Condition of containers*: (Intact) Broken If NO, were samples transferred to proper container(s)? Yes No	(YES)	NO	
VOA containers received with zero headspace or bubbles < 6 mm?	YES	NO	(N/A)
Container labels complete? (ID, date, time, preservative)	(YES)	NO	N/A
Samples properly preserved? If NO, was the preservative added at time of receipt? Yes No	YES	NO	(N/A)
pH check of samples required at time of receipt?(volatiles checked at analysis) If YES, pH checked and recorded by:	YES	(NO)	
Sufficient amount of sample received for methods requested? If NO, has the client or PM been notified? Yes No	(YES)	NO	
Field blanks received with sample batch?	YES	NO	(N/A)
Trip blanks received with sample batch?	YES	NO	(N/A)
Chain of Custody			
Chain of custody form received with samples?	(YES)		NO
Has it been filled out completely and in ink?	(YES)		NO
Sample IDs on chain of custody form agree with labels?	YES		(NO)
Number of containers on chain agree with number received?	(YES)		NO
Analysis methods specified?	(YES)		NO
Sampling date and time indicated?	YES		(NO)
Proper signatures of sampler, courier and custodian in appropriate spaces? With time and date? (Yes) No	(YES)		NO
Turnaround time? Standard (Rush)			

Any NO responses and/or any BROKEN that was checked must be detailed in a Corrective Action Form.

Sample Custodian: JP Date: 8-6-97 Project Manager: [signature] Date: 08/08/97

f:\forms\newscr2.doc

ITS Intertek Testing Services
Environmental Laboratories

ANALYTICAL REPORT

DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534
REPORT DATE : 4-SEP-1997

ATTENTION : Mr. Al Ridley
SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014

PROJECT : 961163NA

Included in this data package are the analytical results for the sample group which you have submitted to Intertek Testing Services for analysis. These results are representative of the samples as received by the laboratory.

The information contained herein has undergone extensive review and is deemed accurate and complete. Sample analysis and quality control were performed in accordance with all applicable protocols. Please refrain from reproducing this report except in its entirety.

If you have any questions regarding this report and its associated materials please call your Project Manager at (972) 238-5591.

We appreciate the opportunity to serve you and look forward to providing continued service in the future.

Martin Jeffus
General Manager

Intertek Testing Services NA Inc.
1089 East Collins Boulevard Richardson, TX 75081
Telephone (972) 238-5591 Fax (972) 238-5592

Intertek Testing Services
Environmental Laboratories

DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-1
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : G-10A-1
PROJECT : 961163NA
DATE SAMPLED : 27-AUG-1997
PREPARATION METHOD : EPA 3550A
PREPARED BY : CLT
PREPARED ON : 29-AUG-1997
ANALYSIS METHOD : EPA 8015M /1
ANALYZED BY : VHL
ANALYZED ON : 2-SEP-1997
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : AC193-83

TPH BY GC EXTENDED RUN (EXTRACTABLE)		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbons	10.0 mg/Kg	< 10.0 mg/Kg
Motor Oil		< 10.0 mg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Triacontane (SS)		85.2 %

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Environmental Laboratories

DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-1
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : G-10A-1
PROJECT : 961163NA
DATE SAMPLED : 27-AUG-1997
ANALYSIS METHOD : EPA 5030/8015M /1
ANALYZED BY : MGK
ANALYZED ON : 29-AUG-1997
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : 28-082897

TPH BY GC (VOLATILE)		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbon	50 µg/Kg	< 50 µg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Fluorobenzene		94.0 %

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DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-2
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : G-15A-1
PROJECT : 961163NA
DATE SAMPLED : 27-AUG-1997
PREPARATION METHOD : EPA 3550A
PREPARED BY : CLT
PREPARED ON : 29-AUG-1997
ANALYSIS METHOD : EPA 8015M /1
ANALYZED BY : VHL
ANALYZED ON : 2-SEP-1997
DILUTION FACTOR : 5
METHOD FACTOR : 1
QC BATCH NO : AC193-83

TPH BY GC EXTENDED RUN (EXTRACTABLE)		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbons	50.0 mg/Kg	< 50.0 mg/Kg
Motor Oil		1620 mg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Triacontane (SS)		200 % *

* Interference matrix effect.

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DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-2
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : G-15A-1
PROJECT : 961163NA
DATE SAMPLED : 27-AUG-1997
ANALYSIS METHOD : EPA 5030/8015M /1
ANALYZED BY : MGK
ANALYZED ON : 29-AUG-1997
DILUTION FACTOR : 5
METHOD FACTOR : 1
QC BATCH NO : 28-082897

TPH BY GC (VOLATILE)		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbon	250 µg/Kg	< 250 µg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Fluorobenzene		101 %

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DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-2
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : G-15A-1
PROJECT : 961163NA
DATE SAMPLED : 27-AUG-1997

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	94.8 %
Analyzed using ASTM D2216 mod. on 2-SEP-1997 by DPV QC Batch No : 156098A			

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DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-3
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : G-15A-2
PROJECT : 961163NA
DATE SAMPLED : 27-AUG-1997
PREPARATION METHOD : EPA 3550A
PREPARED BY : CLT
PREPARED ON : 29-AUG-1997
ANALYSIS METHOD : EPA 8015M /1
ANALYZED BY : VHL
ANALYZED ON : 2-SEP-1997
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : AC193-83

TPH BY GC EXTENDED RUN (EXTRACTABLE)		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbons	10.0 mg/Kg	< 10.0 mg/Kg
Motor Oil		< 10.0 mg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Triacontane (SS)		98.7 %

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ITS Intertek Testing Services
Environmental Laboratories

DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-3
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : G-15A-2
PROJECT : 961163NA
DATE SAMPLED : 27-AUG-1997
ANALYSIS METHOD : EPA 5030/8015M /1
ANALYZED BY : MGK
ANALYZED ON : 29-AUG-1997
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : 28-082897

TPH BY GC (VOLATILE)		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbon	50 µg/Kg	< 50 µg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Fluorobenzene		93.8 %

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Environmental Laboratories

DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-3
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : G-15A-2
PROJECT : 961163NA
DATE SAMPLED : 27-AUG-1997

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	92.4 %
Analyzed using ASTM D2216 mod. on 2-SEP-1997 by DPV QC Batch No : 156098A			

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Environmental Laboratories

DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-4
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : G-14A-1
PROJECT : 961163NA
DATE SAMPLED : 27-AUG-1997
PREPARATION METHOD : EPA 3550A
PREPARED BY : CLT
PREPARED ON : 29-AUG-1997
ANALYSIS METHOD : EPA 8015M /1
ANALYZED BY : VHL
ANALYZED ON : 3-SEP-1997
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : AC193-83

TPH BY GC EXTENDED RUN (EXTRACTABLE)		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbons	10.0 mg/Kg	< 10.0 mg/Kg
Motor Oil		678 mg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Triacontane (SS)		139 %

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ITS Intertek Testing Services
Environmental Laboratories

DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-4
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : G-14A-1
PROJECT : 961163NA
DATE SAMPLED : 27-AUG-1997
ANALYSIS METHOD : EPA 5030/8015M /1
ANALYZED BY : MGK
ANALYZED ON : 29-AUG-1997
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : 28-082897

TPH BY GC (VOLATILE)		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbon	50 µg/Kg	< 50 µg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Fluorobenzene		118 %

Intertek Testing Services NA Inc.
1089 East Collins Boulevard Richardson, TX 75081
Telephone (972) 238-5591 Fax (972) 238-5592

ITS Intertek Testing Services
Environmental Laboratories

DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-4
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : G-14A-1
PROJECT : 961163NA
DATE SAMPLED : 27-AUG-1997

MISCELLANEOUS ANALYSES

TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Solids /1	0.01 %	93.0 %

Analyzed using ASTM D2216 mod. on 2-SEP-1997 by DPV
QC Batch No : 156098A

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DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-5
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : G-14A-2
PROJECT : 961163NA
DATE SAMPLED : 27-AUG-1997
PREPARATION METHOD : EPA 3550A
PREPARED BY : CLT
PREPARED ON : 29-AUG-1997
ANALYSIS METHOD : EPA 8015M /1
ANALYZED BY : VHL
ANALYZED ON : 3-SEP-1997
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : AC193-83

TPH BY GC EXTENDED RUN (EXTRACTABLE)		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbons	10.0 mg/Kg	< 10.0 mg/Kg
Motor Oil		366 mg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Triacontane (SS)		133 %

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DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-5
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : G-14A-2
PROJECT : 961163NA
DATE SAMPLED : 27-AUG-1997
ANALYSIS METHOD : EPA 5030/8015M /1
ANALYZED BY : MGK
ANALYZED ON : 29-AUG-1997
DILUTION FACTOR : 5
METHOD FACTOR : 1
QC BATCH NO : 28-082897

TPH BY GC (VOLATILE)		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbon	250 µg/Kg	< 250 µg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Fluorobenzene		97.1 %

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DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-5
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : G-14A-2
PROJECT : 961163NA
DATE SAMPLED : 27-AUG-1997

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	93.7 %
Analyzed using ASTM D2216 mod. on 2-SEP-1997 by DPV QC Batch No : 156098A			

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DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-6
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : LABQC
: MB
PROJECT : 961163NA
DATE SAMPLED : 29-AUG-1997
PREPARATION METHOD : EPA 3550A
PREPARED BY : CLT
PREPARED ON : 29-AUG-1997
ANALYSIS METHOD : EPA 8015M /1
ANALYZED BY : VHL
ANALYZED ON : 2-SEP-1997
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : AC193-83

TPH BY GC EXTENDED RUN (EXTRACTABLE)		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbons	10.0 mg/Kg	< 10.0 mg/Kg
Motor Oil		< 10.0 mg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Triacontane (SS)		88.1 %

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DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-6
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : LABQC
: MB
PROJECT : 961163NA
DATE SAMPLED : 29-AUG-1997
ANALYSIS METHOD : EPA 5030/8015M /1
ANALYZED BY : MGK
ANALYZED ON : 28-AUG-1997
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : 28-082897

TPH BY GC (VOLATILE)		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbon	50 µg/Kg	< 50 µg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Fluorobenzene		96.6 %

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DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-7
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : LABQC
: LCS
PROJECT : 961163NA
DATE SAMPLED : 29-AUG-1997
PREPARATION METHOD : EPA 3550A
PREPARED BY : CLT
PREPARED ON : 29-AUG-1997
ANALYSIS METHOD : EPA 8015M /1
ANALYZED BY : VHL
ANALYZED ON : 2-SEP-1997
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : AC193-83

TPH BY GC EXTENDED RUN (EXTRACTABLE)		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbons	10.0 mg/Kg	68.9 mg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Triacontane (SS)		80.7 %

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DATE RECEIVED : 29-AUG-1997

REPORT NUMBER : D97-10534-7
REPORT DATE : 4-SEP-1997

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ADDRESS : 500 12th Street, Suite 200
: Oakland, CA 94607-4014
ATTENTION : Mr. Al Ridley

SAMPLE MATRIX : Soil
ID MARKS : LABQC
: LCS
PROJECT : 961163NA
DATE SAMPLED : 29-AUG-1997
ANALYSIS METHOD : EPA 5030/8015M /1
ANALYZED BY : MGK
ANALYZED ON : 28-AUG-1997
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : 28-082897

TPH BY GC (VOLATILE)		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbon	50 µg/Kg	441 µg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND		SPIKE RECOVERED
Fluorobenzene		104 %

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REPORT DATE : 4-SEP-1997 REPORT NUMBER : D97-10534

SAMPLE SUBMITTED BY : Woodward-Clyde Consultants
ATTENTION : Mr. Al Ridley
PROJECT : 961163NA

LABORATORY QUALITY CONTROL REPORT

ANALYTE	Total Petroleum Hydrocarbon	Total Petroleum Hydrocarbon
BATCH NO.	AC193-83	28-082897
LCS LOT NO.	AC111-81	AC033-38B
PREP METHOD	EPA 3550A	---
PREPARED BY	CLT	---
ANALYSIS METHOD	EPA 8015M	EPA 5030/8015M
ANALYZED BY	VHL	MGK
UNITS	mg/Kg	µg/Kg
METHOD BLANK	< 10.0	< 50.0
SPIKE LEVEL	83.3	500
SPK REC LIMITS	30.0 - 150	70.0 - 130
SPK RPD LIMITS	25.0	25.0
MS RESULT	76.4	361
MS RECOVERY %	91.7	72.2
MSD RESULT	72.6	352
MSD RECOVERY %	87.2	70.4
MS/MSD RPD %	5.10	2.52
BS RESULT	68.9	NA
BS RECOVERY %	82.7	NA
BSD RESULT	75.2	NA
BSD RECOVERY %	90.3	NA
BS/BSD RPD %	8.74	NA
DUP RPD LIMITS	---	---
DUPLICATE RPD %	NA	NA
LCS LEVEL	---	500
LCS REC LIMITS	---	70.0 - 130
LCS RESULT	SEE_BS	441
LCS RECOVERY %	SEE_BS	88.2
SPIKE SAMPLE ID	10534-1	10229-3
SAMPLE VALUE	< 10.0	< 50.0
DUP SAMPLE ID	---	---
DUP SAMPLE VAL/1	---	---
DUP SAMPLE VAL/2	---	---

SEE_BS LCS and LCS Duplicate reported as BS and BSD.
NA Not applicable

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Woodward-Clyde Consultants
500 12th Street, Suite 100, Oakland, CA 94607-4014
(510) 893-3600

Chain of Custody Record

PROJECT NO. 96W163WA

SAMPLERS: (Signature) A. Ridley

DATE	TIME	SAMPLE NUMBER	Sample Matrix (S)oil, (W)ater, (A)ir	ANALYSES: EPA Method 8015M	EPA Method	EPA Method	EPA Method	HOLD						Number of Containers	REMARKS (Sample preservation, handling procedures, etc.)
8.27.97	13:45	G-10A-1		X						10534+1				1	Glass Jars
8.27.97	13:55	G-10A-2						X						1	
8.27	14:10	G-15A-1		X									2	1	TPHd, Motor Oil EPA 8015M with Chromatograms
8.27	14:15	G-15A-2		X									3	1	
8.27	14:35	G-14A-1		X									4	1	
8.27	14:40	G-14A-2		X									5	1	
8.27	14:50	G-14A-3						X						1	24 hr Turnaround Please

COOLER TEMPERATURE WHEN RECEIVED: °C

ORIGINAL

TOTAL NUMBER OF CONTAINERS: 7

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
A. Ridley	8.28.97 08:00	8-28-97 11:19		8-28-97 1727	8-28-97 1727
METHOD OF SHIPMENT:		SHIPPED BY: (Signature)	COURIER: (Signature)	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
		8-28-97 1600			8/29/97 1000

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SAMPLES

Intertek Testing Services NA Inc.
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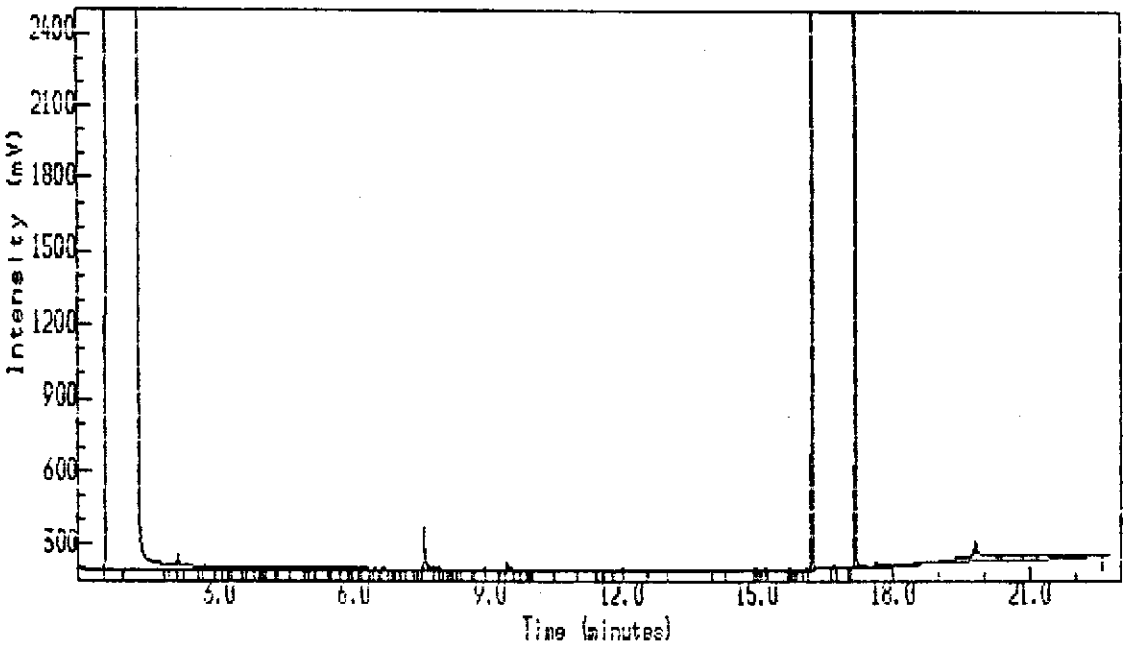
Reported on 2-SEP-1997 at 22:37

Injection Report

Acquired on 2-SEP-1997 at 22:14



Intertek Testing Services - Environmental Laboratories

Analyst Name : VHLOGAN
Lims Id :
Comment : TPH BY 8015
Method Title : TPH BY METHOD 8015 mod
Sample Name : 10534-1 30/5 AC193-83
Sample Id :
Sample Type : Sample Amount=2.00000
Bottle No : 26

TPH 210
Surr 85.2%
vh 9-3-97

PEAK INFORMATION

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
	8.306	2062404	1.945	TPH AS DIESEL	176745.2500	0.0000
2.686	8.306	61817	0.058	- C1	176745.2500	0.0000
2.792	8.306	206520	0.195	- C1	176745.2500	0.0000
3.094	8.306	94617	0.089	- C1	176745.2500	0.0000
3.192	8.306	67987	0.064	- C1	176745.2500	0.0000
3.321	8.306	29134	0.027	- C1	176745.2500	0.0000
3.348	8.306	36166	0.034	- C1	176745.2500	0.0000
3.423	8.306	110129	0.104	- C1	176745.2500	0.0000
3.668	8.306	45321	0.043	- C1	176745.2500	0.0000
3.726	8.306	81082	0.076	- C1	176745.2500	0.0000
3.908	8.306	59166	0.056	- C1	176745.2500	0.0000
4.041	8.306	22439	0.021	- C1	176745.2500	0.0000
4.112	8.306	27784	0.026	- C1	176745.2500	0.0000

Reported on 2-SEP-1997 at 22:37

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
4.174	8.306	77691	0.073	- C1	176745.2500	0.0000
4.397	8.306	18081	0.017	- C1	176745.2500	0.0000
4.503	8.306	96792	0.091	- C1	176745.2500	0.0000
4.717	8.306	91989	0.087	- C1	176745.2500	0.0000
5.037	8.306	29640	0.028	- C1	176745.2500	0.0000
5.130	8.306	36793	0.035	- C1	176745.2500	0.0000
5.268	8.306	58970	0.056	- C1	176745.2500	0.0000
5.574	8.306	12028	0.011	- C1	176745.2500	0.0000
5.632	8.306	33054	0.031	- C1	176745.2500	0.0000
5.841	8.306	21850	0.021	- C1	176745.2500	0.0000
5.992	8.306	13551	0.013	- C1	176745.2500	0.0000
6.161	8.306	15011	0.014	- C1	176745.2500	0.0000
6.241	8.306	7919	0.007	- C1	176745.2500	0.0000
6.401	8.306	29161	0.027	- C1	176745.2500	0.0000
6.499	8.306	6982	0.007	- C1	176745.2500	0.0000
6.574	8.306	15954	0.015	- C1	176745.2500	0.0000
6.703	8.306	5614	0.005	- C1	176745.2500	0.0000
6.779	8.306	20294	0.019	- C1	176745.2500	0.0000
6.908	8.306	4439	0.004	- C1	176745.2500	0.0000
6.988	8.306	4485	0.004	- C1	176745.2500	0.0000
7.050	8.306	11628	0.011	- C1	176745.2500	0.0000
7.179	8.306	10682	0.010	- C1	176745.2500	0.0000
7.299	8.306	5957	0.006	- C1	176745.2500	0.0000
7.508	8.306	3184	0.003	- C1	176745.2500	0.0000
7.579	8.306	3006	0.003	- C1	176745.2500	0.0000
7.672	8.306	402102	0.379	- C1	176745.2500	0.0000
7.934	8.306	30014	0.028	- C1	176745.2500	0.0000
8.010	8.306	8667	0.008	- C1	176745.2500	0.0000
8.108	8.306	4564	0.004	- C1	176745.2500	0.0000
8.188	8.306	2534	0.002	- C1	176745.2500	0.0000
8.250	8.306	2934	0.003	- C1	176745.2500	0.0000
8.339	8.306	6525	0.006	- C1	176745.2500	0.0000
8.454	8.306	1406	0.001	- C1	176745.2500	0.0000
8.717	8.306	5243	0.005	- C1	176745.2500	0.0000
9.312	8.306	880	8.299E-4	- C1	176745.2500	0.0000
9.477	8.306	102059	0.096	- C1	176745.2500	0.0000
9.632	8.306	13069	0.012	- C1	176745.2500	0.0000
9.948	8.306	1695	0.002	- C1	176745.2500	0.0000
10.032	8.306	452	4.265E-4	- C1	176745.2500	0.0000
10.512	8.306	522	4.918E-4	- C1	176745.2500	0.0000
11.437	8.306	569	5.368E-4	- C1	176745.2500	0.0000
11.583	8.306	868	8.186E-4	- C1	176745.2500	0.0000
11.788	8.306	847	7.986E-4	- C1	176745.2500	0.0000
12.561	8.306	537	5.062E-4	- C1	176745.2500	0.0000
16.223	16.287	7205460	8.065	n-OCTACOSANE	148898.0156	0.0000
17.170	17.233	6749309	7.100	TRIACONTANE	158425.2031	0.0000

Totals

Unknowns	412059136	N/A
Quantified	16017172	17.111
Grand Total	428076320	17.111

ANALYSIS SUMMARY

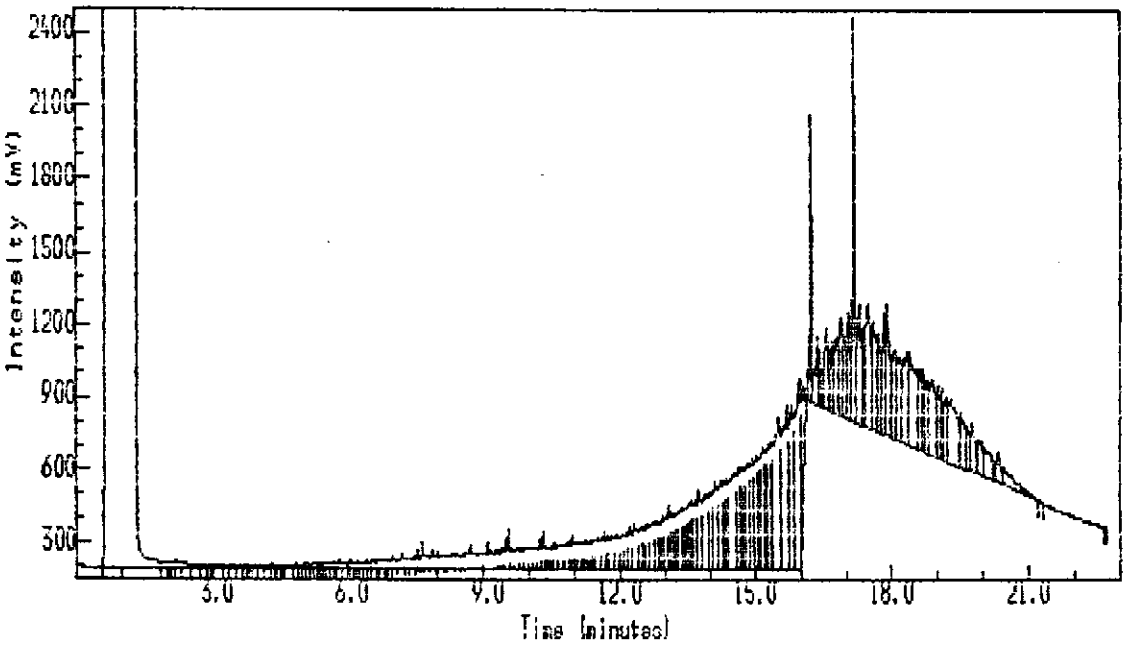
Method..... DRO
Run sequence..... DRO
Calibration..... DRO0397
External standard calibration using area
Calibration last modified on 31-JUL-1997 at 13:47

Uncalibrated peaks use user factor (0.0000)

Reported on 2-SEP-1997 at 23:08

Injection Report

Acquired on 2-SEP-1997 at 22:44



Intertek Testing Services - Environmental Laboratories

Analyst Name : VHLOGAN
Lims Id :
Comment : TPH BY 8015
Method Title : TPH BY METHOD 8015 mod
Sample Name : 10534-2DIL 1:5 30/5 AC193-83
Sample Id :
Sample Type : Sample Amount=2.00000
Bottle No : 27

Motor Oil 1620 mg/kg
~~Extended 1700 mg/kg~~

Dil 5

Surr 272%

Uh2 9-3-97

PEAK INFORMATION

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
	8.306	51587128	243.227	TPH AS DIESEL	176745.2500	0.0000
2.779	8.306	90803	0.428	- C1	176745.2500	0.0000
2.926	8.306	36873	0.174	- C1	176745.2500	0.0000
3.001	8.306	37308	0.176	- C1	176745.2500	0.0000
3.068	8.306	103750	0.489	- C1	176745.2500	0.0000
3.294	8.306	50218	0.237	- C1	176745.2500	0.0000
3.366	8.306	18025	0.085	- C1	176745.2500	0.0000
3.446	8.306	74091	0.349	- C1	176745.2500	0.0000
3.597	8.306	61461	0.290	- C1	176745.2500	0.0000
3.703	8.306	37088	0.175	- C1	176745.2500	0.0000
3.819	8.306	37093	0.175	- C1	176745.2500	0.0000
3.859	8.306	22941	0.108	- C1	176745.2500	0.0000
3.974	8.306	50971	0.240	- C1	176745.2500	0.0000

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
4.103	8.306	60811	0.287	- C1	176745.2500	0.0000
4.174	8.306	73174	0.345	- C1	176745.2500	0.0000
4.339	8.306	56843	0.268	- C1	176745.2500	0.0000
4.428	8.306	28729	0.135	- C1	176745.2500	0.0000
4.490	8.306	39881	0.188	- C1	176745.2500	0.0000
4.579	8.306	31674	0.149	- C1	176745.2500	0.0000
4.619	8.306	21590	0.102	- C1	176745.2500	0.0000
4.748	8.306	85516	0.403	- C1	176745.2500	0.0000
4.886	8.306	81827	0.386	- C1	176745.2500	0.0000
4.970	8.306	53702	0.253	- C1	176745.2500	0.0000
5.072	8.306	69940	0.330	- C1	176745.2500	0.0000
5.126	8.306	65820	0.310	- C1	176745.2500	0.0000
5.259	8.306	78563	0.370	- C1	176745.2500	0.0000
5.321	8.306	69078	0.326	- C1	176745.2500	0.0000
5.397	8.306	44481	0.210	- C1	176745.2500	0.0000
5.450	8.306	37422	0.176	- C1	176745.2500	0.0000
5.521	8.306	58557	0.276	- C1	176745.2500	0.0000
5.570	8.306	73143	0.345	- C1	176745.2500	0.0000
5.677	8.306	91008	0.429	- C1	176745.2500	0.0000
5.743	8.306	74030	0.349	- C1	176745.2500	0.0000
5.872	8.306	142558	0.672	- C1	176745.2500	0.0000
6.050	8.306	183782	0.867	- C1	176745.2500	0.0000
6.099	8.306	123594	0.583	- C1	176745.2500	0.0000
6.188	8.306	73764	0.348	- C1	176745.2500	0.0000
6.246	8.306	105947	0.500	- C1	176745.2500	0.0000
6.317	8.306	99842	0.471	- C1	176745.2500	0.0000
6.446	8.306	154091	0.727	- C1	176745.2500	0.0000
6.494	8.306	90064	0.425	- C1	176745.2500	0.0000
6.592	8.306	203543	0.960	- C1	176745.2500	0.0000
6.694	8.306	82601	0.389	- C1	176745.2500	0.0000
6.806	8.306	227417	1.072	- C1	176745.2500	0.0000
6.886	8.306	148072	0.698	- C1	176745.2500	0.0000
6.966	8.306	139804	0.659	- C1	176745.2500	0.0000
7.019	8.306	305181	1.439	- C1	176745.2500	0.0000
7.223	8.306	393493	1.855	- C1	176745.2500	0.0000
7.321	8.306	257633	1.215	- C1	176745.2500	0.0000
7.481	8.306	318575	1.502	- C1	176745.2500	0.0000
7.566	8.306	284517	1.341	- C1	176745.2500	0.0000
7.619	8.306	131851	0.622	- C1	176745.2500	0.0000
7.668	8.306	289858	1.367	- C1	176745.2500	0.0000
7.730	8.306	311884	1.470	- C1	176745.2500	0.0000
7.894	8.306	475882	2.244	- C1	176745.2500	0.0000
8.006	8.306	284355	1.341	- C1	176745.2500	0.0000
8.139	8.306	321521	1.516	- C1	176745.2500	0.0000
8.174	8.306	177152	0.835	- C1	176745.2500	0.0000
8.352	8.306	641843	3.026	- C1	176745.2500	0.0000
8.441	8.306	415833	1.961	- C1	176745.2500	0.0000
8.561	8.306	305998	1.443	- C1	176745.2500	0.0000
8.672	8.306	322322	1.520	- C1	176745.2500	0.0000
8.721	8.306	414021	1.952	- C1	176745.2500	0.0000
8.806	8.306	294699	1.389	- C1	176745.2500	0.0000
8.908	8.306	254347	1.199	- C1	176745.2500	0.0000
8.961	8.306	230603	1.087	- C1	176745.2500	0.0000

Reported on 2-SEP-1997 at 23:08

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
9.014	8.306	226857	1.070	- C1	176745.2500	0.0000
9.112	8.306	669955	3.159	- C1	176745.2500	0.0000
9.299	8.306	488059	2.301	- C1	176745.2500	0.0000
9.343	8.306	236842	1.117	- C1	176745.2500	0.0000
9.410	8.306	297327	1.402	- C1	176745.2500	0.0000
9.454	8.306	222301	1.048	- C1	176745.2500	0.0000
9.552	8.306	737578	3.478	- C1	176745.2500	0.0000
9.619	8.306	425922	2.008	- C1	176745.2500	0.0000
9.748	8.306	503394	2.373	- C1	176745.2500	0.0000
9.846	8.306	422781	1.993	- C1	176745.2500	0.0000
9.952	8.306	673241	3.174	- C1	176745.2500	0.0000
10.054	8.306	370313	1.746	- C1	176745.2500	0.0000
10.157	8.306	529617	2.497	- C1	176745.2500	0.0000
10.259	8.306	584559	2.756	- C1	176745.2500	0.0000
10.326	8.306	508770	2.399	- C1	176745.2500	0.0000
10.374	8.306	304920	1.438	- C1	176745.2500	0.0000
10.432	8.306	370315	1.746	- C1	176745.2500	0.0000
10.508	8.306	280787	1.324	- C1	176745.2500	0.0000
10.579	8.306	505549	2.384	- C1	176745.2500	0.0000
10.646	8.306	292185	1.378	- C1	176745.2500	0.0000
10.717	8.306	501996	2.367	- C1	176745.2500	0.0000
10.779	8.306	330837	1.560	- C1	176745.2500	0.0000
10.877	8.306	585493	2.761	- C1	176745.2500	0.0000
10.917	8.306	328628	1.549	- C1	176745.2500	0.0000
10.970	8.306	564653	2.662	- C1	176745.2500	0.0000
11.041	8.306	386436	1.822	- C1	176745.2500	0.0000
11.108	8.306	472788	2.229	- C1	176745.2500	0.0000
11.179	8.306	419150	1.976	- C1	176745.2500	0.0000
11.250	8.306	517606	2.440	- C1	176745.2500	0.0000
11.312	8.306	343090	1.618	- C1	176745.2500	0.0000
11.366	8.306	322246	1.519	- C1	176745.2500	0.0000
11.441	8.306	507400	2.392	- C1	176745.2500	0.0000
11.517	8.306	911632	4.298	- C1	176745.2500	0.0000
11.650	8.306	795507	3.751	- C1	176745.2500	0.0000
11.717	8.306	639249	3.014	- C1	176745.2500	0.0000
11.801	8.306	785046	3.701	- C1	176745.2500	0.0000
11.943	8.306	1054320	4.971	- C1	176745.2500	0.0000
12.059	8.306	786017	3.706	- C1	176745.2500	0.0000
12.157	8.306	819354	3.863	- C1	176745.2500	0.0000
12.206	8.306	694116	3.273	- C1	176745.2500	0.0000
12.308	8.306	1546293	7.291	- C1	176745.2500	0.0000
12.459	8.306	876764	4.134	- C1	176745.2500	0.0000
12.508	8.306	525132	2.476	- C1	176745.2500	0.0000
12.592	8.306	1141073	5.380	- C1	176745.2500	0.0000
12.717	8.306	1107522	5.222	- C1	176745.2500	0.0000
12.783	8.306	1242307	5.857	- C1	176745.2500	0.0000
12.872	8.306	603898	2.847	- C1	176745.2500	0.0000
12.930	8.306	787843	3.715	- C1	176745.2500	0.0000
13.019	8.306	981897	4.630	- C1	176745.2500	0.0000
13.068	8.306	1228105	5.790	- C1	176745.2500	0.0000
13.139	8.306	648311	3.057	- C1	176745.2500	0.0000
13.197	8.306	827901	3.903	- C1	176745.2500	0.0000
13.268	8.306	1093768	5.157	- C1	176745.2500	0.0000

Reported on 2-SEP-1997 at 23:08

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
13.339	8.306	946586	4.463	- C1	176745.2500	0.0000
13.388	8.306	966300	4.556	- C1	176745.2500	0.0000
13.459	8.306	911565	4.298	- C1	176745.2500	0.0000
13.534	8.306	1241190	5.852	- C1	176745.2500	0.0000
13.579	8.306	926227	4.367	- C1	176745.2500	0.0000
13.668	8.306	1567018	7.388	- C1	176745.2500	0.0000
13.739	8.306	1977547	9.324	- C1	176745.2500	0.0000
16.219	16.287	2052093	11.485	n-OCTACOSANE	148898.0156	0.0000
17.166	17.233	4309441	22.668	TRIACONTANE	158425.2031	0.0000

Totals		
Unknowns	538154304	N/A
Quantified	57948660	277.380
Grand Total	596102976	277.380

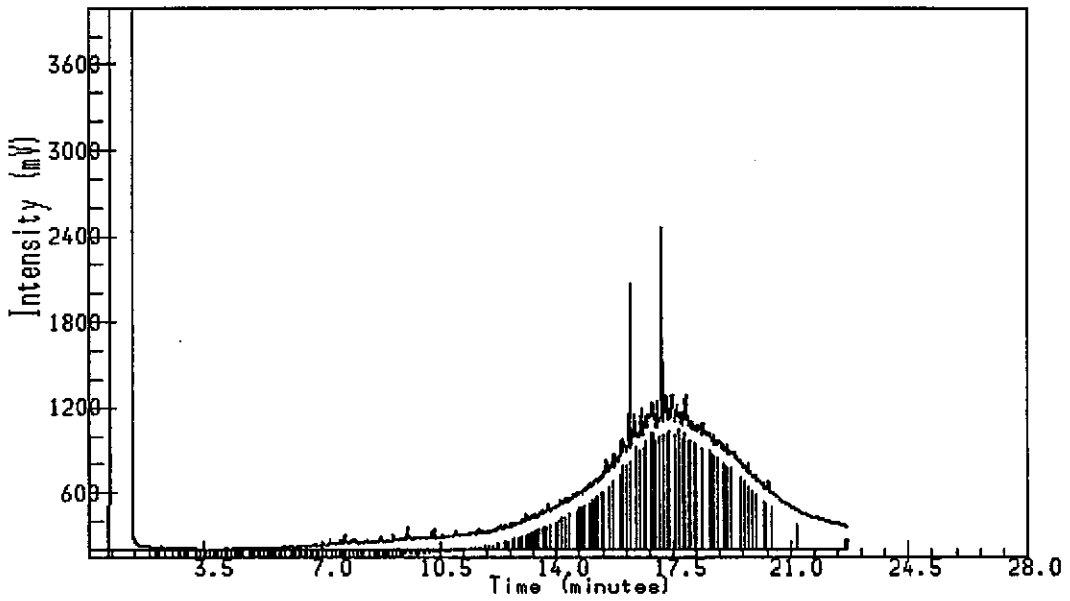
ANALYSIS SUMMARY

Method..... DRO
Run sequence..... DRO
Calibration..... DR00397
External standard calibration using area
Calibration last modified on 31-JUL-1997 at 13:47

Uncalibrated peaks use user factor (0.0000)

Injectio

Acquired on 2-SEP-1997 at 22:44



Intertek Testing Services - Environmental Laboratories

Analyst Name : VHLOGAN
Lims Id :
Comment : TPH BY 8015
Method Title : TPH BY METHOD 8015 mod
Sample Name : 10534-2DIL 1:5 30/5 AC193-83
Sample Id :
Sample Type : Sample Amount=2.00000
Bottle No : 27

PEAK INFORMATION

VHL 9-3-97

RT mins	RT Corr	RT Exp	Hght uV	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
		15.630	54488664	353927296	1621.467	MOTOR OIL	181896.6875	0.0000
9.748	9.748	15.630	85795	509344	2.333	- C1	181896.6875	0.0000
9.846	9.846	15.630	82836	427740	1.950	- C1	181896.6875	0.0000
9.952	9.952	15.630	87473	680927	3.120	- C1	181896.6875	0.0000
10.054	10.054	15.630	84007	374528	1.716	- C1	181896.6875	0.0000
10.157	10.157	15.630	85950	535567	2.454	- C1	181896.6875	0.0000
10.259	10.259	15.630	116963	590509	2.705	- C1	181896.6875	0.0000
10.326	10.326	15.630	148950	513233	2.351	- C1	181896.6875	0.0000
10.374	10.374	15.630	90737	308143	1.412	- C1	181896.6875	0.0000
10.432	10.432	15.630	89490	374282	1.715	- C1	181896.6875	0.0000
10.508	10.508	15.630	90778	283762	1.300	- C1	181896.6875	0.0000
10.579	10.579	15.630	106275	510508	2.339	- C1	181896.6875	0.0000

RT mins	RT Corr	RT Exp	Hght uV	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
10.646	10.646	15.630	96176	295160	1.352	- C1	181896.6875	0.0000
10.717	10.717	15.630	101461	506955	2.323	- C1	181896.6875	0.0000
10.779	10.779	15.630	99261	334060	1.530	- C1	181896.6875	0.0000
10.877	10.877	15.630	103712	590948	2.707	- C1	181896.6875	0.0000
10.917	10.917	15.630	111783	331603	1.519	- C1	181896.6875	0.0000
10.970	10.970	15.630	143638	569364	2.608	- C1	181896.6875	0.0000
11.041	11.041	15.630	106940	389907	1.786	- C1	181896.6875	0.0000
11.108	11.108	15.630	108955	477003	2.185	- C1	181896.6875	0.0000
11.179	11.179	15.630	108073	422869	1.937	- C1	181896.6875	0.0000
11.250	11.250	15.630	112715	522069	2.392	- C1	181896.6875	0.0000
11.312	11.312	15.630	110872	346065	1.585	- C1	181896.6875	0.0000
11.366	11.366	15.630	117233	324974	1.489	- C1	181896.6875	0.0000
11.441	11.441	15.630	116303	511615	2.344	- C1	181896.6875	0.0000
11.517	11.517	15.630	124769	918822	4.209	- C1	181896.6875	0.0000
11.650	11.650	15.630	147390	801457	3.672	- C1	181896.6875	0.0000
11.717	11.717	15.630	138691	643960	2.950	- C1	181896.6875	0.0000
11.801	11.801	15.630	133772	790748	3.623	- C1	181896.6875	0.0000
11.943	11.943	15.630	137246	1061758	4.864	- C1	181896.6875	0.0000
12.059	12.059	15.630	138509	791471	3.626	- C1	181896.6875	0.0000
12.157	12.157	15.630	150461	824809	3.779	- C1	181896.6875	0.0000
12.206	12.206	15.630	172644	698331	3.199	- C1	181896.6875	0.0000
12.308	12.308	15.630	183003	1555466	7.126	- C1	181896.6875	0.0000
12.459	12.459	15.630	175004	881722	4.039	- C1	181896.6875	0.0000
12.508	12.508	15.630	169241	528107	2.419	- C1	181896.6875	0.0000
12.592	12.592	15.630	187664	1147271	5.256	- C1	181896.6875	0.0000
12.717	12.717	15.630	194783	1113224	5.100	- C1	181896.6875	0.0000
12.783	12.783	15.630	192361	1248506	5.720	- C1	181896.6875	0.0000
12.872	12.872	15.630	196405	606873	2.780	- C1	181896.6875	0.0000
12.930	12.930	15.630	211592	791562	3.626	- C1	181896.6875	0.0000
13.019	13.019	15.630	212948	986360	4.519	- C1	181896.6875	0.0000
13.068	13.068	15.630	258505	1233064	5.649	- C1	181896.6875	0.0000
13.139	13.139	15.630	230963	651038	2.983	- C1	181896.6875	0.0000
13.197	13.197	15.630	229847	831372	3.809	- C1	181896.6875	0.0000
13.268	13.268	15.630	240610	1098231	5.031	- C1	181896.6875	0.0000
13.339	13.339	15.630	253358	950305	4.354	- C1	181896.6875	0.0000
13.388	13.388	15.630	250797	970019	4.444	- C1	181896.6875	0.0000
13.459	13.459	15.630	254004	915036	4.192	- C1	181896.6875	0.0000
13.534	13.534	15.630	276864	1245653	5.707	- C1	181896.6875	0.0000
13.579	13.579	15.630	281563	929450	4.258	- C1	181896.6875	0.0000
13.668	13.668	15.630	277855	1572473	7.204	- C1	181896.6875	0.0000
13.739	13.739	15.630	321405	1983993	9.089	- C1	181896.6875	0.0000
13.934	13.934	15.630	305839	2800036	12.828	- C1	181896.6875	0.0000
14.019	14.019	15.630	313833	1475979	6.762	- C1	181896.6875	0.0000
14.112	14.112	15.630	353508	2704528	12.390	- C1	181896.6875	0.0000
14.250	14.250	15.630	359762	2265354	10.378	- C1	181896.6875	0.0000
14.334	14.334	15.630	362816	1667383	7.639	- C1	181896.6875	0.0000
14.388	14.388	15.630	367808	1039401	4.762	- C1	181896.6875	0.0000
14.530	14.530	15.630	395324	4196266	19.225	- C1	181896.6875	0.0000
14.663	14.663	15.630	412517	2403553	11.012	- C1	181896.6875	0.0000
14.721	14.721	15.630	413406	1618095	7.413	- C1	181896.6875	0.0000
14.770	14.770	15.630	414364	1193274	5.467	- C1	181896.6875	0.0000
14.846	14.846	15.630	433374	2349839	10.765	- C1	181896.6875	0.0000
14.948	14.948	15.630	459704	2449758	11.223	- C1	181896.6875	0.0000

RT mins	RT Corr	RT Exp	Hght uV	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
15.032	15.032	15.630	473633	2768887	12.685	- C1	181896.6875	0.0000
15.103	15.103	15.630	464406	1832173	8.394	- C1	181896.6875	0.0000
15.179	15.179	15.630	505149	2578420	11.813	- C1	181896.6875	0.0000
15.241	15.241	15.630	495226	1820754	8.342	- C1	181896.6875	0.0000
15.330	15.330	15.630	515299	2404277	11.015	- C1	181896.6875	0.0000
15.370	15.370	15.630	527160	1642156	7.523	- C1	181896.6875	0.0000
15.512	15.512	15.630	634201	5928908	27.162	- C1	181896.6875	0.0000
15.699	15.699	15.630	672743	6151194	28.181	- C1	181896.6875	0.0000
15.788	15.788	15.630	678642	5017467	22.987	- C1	181896.6875	0.0000
15.988	15.988	15.630	783353	6317068	28.941	- C1	181896.6875	0.0000
16.072	16.072	15.630	752242	5177202	23.719	- C1	181896.6875	0.0000
16.219	16.219	15.630	1868408	7370438	33.767	- C1	181896.6875	0.0000
16.361	16.361	15.630	962846	6858461	31.421	- C1	181896.6875	0.0000
16.410	16.410	15.630	908005	2689350	12.321	- C1	181896.6875	0.0000
16.450	16.450	15.630	829401	3261978	14.944	- C1	181896.6875	0.0000
16.561	16.561	15.630	995698	6926509	31.733	- C1	181896.6875	0.0000
16.677	16.677	15.630	944882	5344181	24.484	- C1	181896.6875	0.0000
16.792	16.792	15.630	963802	6176503	28.297	- C1	181896.6875	0.0000
16.899	16.899	15.630	1040564	6001923	27.497	- C1	181896.6875	0.0000
16.979	16.979	15.630	958500	5161970	23.649	- C1	181896.6875	0.0000
17.050	17.050	15.630	1056485	5523396	25.305	- C1	181896.6875	0.0000
17.166	17.166	15.630	2265918	8690138	39.813	- C1	181896.6875	0.0000
17.299	17.299	15.630	1094084	7939546	36.374	- C1	181896.6875	0.0000
17.379	17.379	15.630	994475	4059818	18.599	- C1	181896.6875	0.0000
17.477	17.477	15.630	1090596	8886509	40.712	- C1	181896.6875	0.0000
17.597	17.597	15.630	1023741	6949291	31.837	- C1	181896.6875	0.0000
17.712	17.712	15.630	972095	5696181	26.096	- C1	181896.6875	0.0000
17.846	17.846	15.630	1061216	6090657	27.903	- C1	181896.6875	0.0000
17.903	17.903	15.630	1088383	5877493	26.927	- C1	181896.6875	0.0000
18.001	18.001	15.630	886610	3037179	13.914	- C1	181896.6875	0.0000
18.081	18.081	15.630	908122	4947768	22.667	- C1	181896.6875	0.0000
18.192	18.192	15.630	874684	5498429	25.190	- C1	181896.6875	0.0000
18.352	18.352	15.630	893581	8668205	39.712	- C1	181896.6875	0.0000
18.410	18.410	15.630	891101	9957103	45.617	- C1	181896.6875	0.0000
18.614	18.614	15.630	823908	4471543	20.486	- C1	181896.6875	0.0000
18.699	18.699	15.630	813034	3337510	15.290	- C1	181896.6875	0.0000
18.779	18.779	15.630	774293	4242453	19.436	- C1	181896.6875	0.0000
18.890	18.890	15.630	776732	7379601	33.809	- C1	181896.6875	0.0000
19.010	19.010	15.630	747831	3824575	17.522	- C1	181896.6875	0.0000
19.103	19.103	15.630	744360	3385491	15.510	- C1	181896.6875	0.0000
19.206	19.206	15.630	709181	4029212	18.459	- C1	181896.6875	0.0000
19.312	19.312	15.630	695307	10681509	48.936	- C1	181896.6875	0.0000
19.521	19.521	15.630	640719	4997249	22.894	- C1	181896.6875	0.0000
19.659	19.659	15.630	591497	3498455	16.028	- C1	181896.6875	0.0000
19.770	19.770	15.630	603600	4987665	22.850	- C1	181896.6875	0.0000
19.912	19.912	15.630	530133	4258343	19.509	- C1	181896.6875	0.0000
20.046	20.046	15.630	497737	6361758	29.145	- C1	181896.6875	0.0000
20.263	20.263	15.630	446005	1643528	7.530	- C1	181896.6875	0.0000
20.352	20.352	15.630	483847	3770087	17.272	- C1	181896.6875	0.0000
20.472	20.472	15.630	412796	16194524	74.193	- C1	181896.6875	0.0000
21.232	21.232	15.630	281546	18946552	86.801	- C1	181896.6875	0.0000

otals

Unknowns	12900626	418664064	N/A
Quantified	54488664	353927296	1621.467
Grand Total	67389288	772591360	1621.467

ANALYSIS SUMMARY

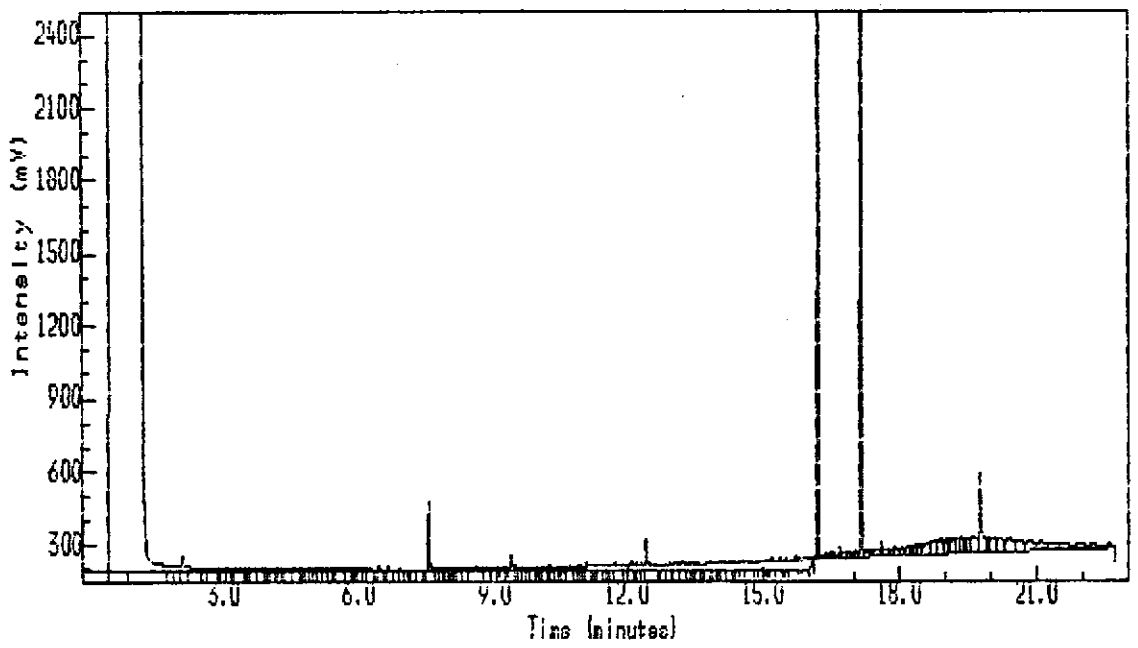
Method..... DROXTEND
Run sequence..... DRO
Calibration..... MOIL3597
External standard calibration using area
Calibration last modified on 7-MAR-1997 at 13:05

Uncalibrated peaks use user factor (0.0000)

Reported on 2-SEP-1997 at 23:38

Injection Report

Acquired on 2-SEP-1997 at 23:15



Intertek Testing Services - Environmental Laboratories

Analyst Name : VHLOGAN
Lims Id :
Comment : TPH BY 8015
Method Title : TPH BY METHOD 8015 mod
Sample Name : 10534-3 30/5 AC193-83
Sample Id :
Sample Type : Sample Amount=2.00000
Bottle No : 28

TPHK10
Surr 98.7%
VH 9-3-97

PEAK INFORMATION

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
	8.306	7223696	6.812	TPH AS DIESEL	176745.2500	0.0000
2.783	8.306	136915	0.129	- C1	176745.2500	0.0000
2.997	8.306	22970	0.022	- C1	176745.2500	0.0000
3.086	8.306	71413	0.067	- C1	176745.2500	0.0000
3.183	8.306	43109	0.041	- C1	176745.2500	0.0000
3.308	8.306	35714	0.034	- C1	176745.2500	0.0000
3.410	8.306	95679	0.090	- C1	176745.2500	0.0000
3.592	8.306	23522	0.022	- C1	176745.2500	0.0000
3.659	8.306	21764	0.021	- C1	176745.2500	0.0000
3.721	8.306	50710	0.048	- C1	176745.2500	0.0000
3.903	8.306	54637	0.052	- C1	176745.2500	0.0000
4.037	8.306	16896	0.016	- C1	176745.2500	0.0000
4.103	8.306	21271	0.020	- C1	176745.2500	0.0000

Reported on 2-SEP-1997 at 23:38

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
4.174	8.306	30999	0.029	- C1	176745.2500	0.0000
4.259	8.306	13808	0.013	- C1	176745.2500	0.0000
4.334	8.306	31301	0.030	- C1	176745.2500	0.0000
4.441	8.306	19289	0.018	- C1	176745.2500	0.0000
4.490	8.306	53782	0.051	- C1	176745.2500	0.0000
4.708	8.306	44250	0.042	- C1	176745.2500	0.0000
4.832	8.306	9131	0.009	- C1	176745.2500	0.0000
4.881	8.306	12958	0.012	- C1	176745.2500	0.0000
5.023	8.306	35891	0.034	- C1	176745.2500	0.0000
5.121	8.306	19276	0.018	- C1	176745.2500	0.0000
5.263	8.306	17857	0.017	- C1	176745.2500	0.0000
5.326	8.306	17608	0.017	- C1	176745.2500	0.0000
5.446	8.306	15240	0.014	- C1	176745.2500	0.0000
5.557	8.306	7395	0.007	- C1	176745.2500	0.0000
5.677	8.306	22819	0.022	- C1	176745.2500	0.0000
5.837	8.306	15067	0.014	- C1	176745.2500	0.0000
6.014	8.306	10116	0.010	- C1	176745.2500	0.0000
6.148	8.306	11804	0.011	- C1	176745.2500	0.0000
6.232	8.306	9597	0.009	- C1	176745.2500	0.0000
6.392	8.306	23824	0.022	- C1	176745.2500	0.0000
6.494	8.306	4759	0.004	- C1	176745.2500	0.0000
6.566	8.306	33086	0.031	- C1	176745.2500	0.0000
6.694	8.306	3232	0.003	- C1	176745.2500	0.0000
6.766	8.306	34908	0.033	- C1	176745.2500	0.0000
6.957	8.306	8545	0.008	- C1	176745.2500	0.0000
7.023	8.306	14429	0.014	- C1	176745.2500	0.0000
7.166	8.306	9022	0.009	- C1	176745.2500	0.0000
7.223	8.306	6496	0.006	- C1	176745.2500	0.0000
7.281	8.306	7764	0.007	- C1	176745.2500	0.0000
7.486	8.306	10810	0.010	- C1	176745.2500	0.0000
7.570	8.306	8739	0.008	- C1	176745.2500	0.0000
7.663	8.306	487160	0.459	- C1	176745.2500	0.0000
7.810	8.306	26562	0.025	- C1	176745.2500	0.0000
7.926	8.306	33797	0.032	- C1	176745.2500	0.0000
8.001	8.306	14032	0.013	- C1	176745.2500	0.0000
8.099	8.306	11704	0.011	- C1	176745.2500	0.0000
8.183	8.306	9421	0.009	- C1	176745.2500	0.0000
8.241	8.306	11423	0.011	- C1	176745.2500	0.0000
8.326	8.306	25696	0.024	- C1	176745.2500	0.0000
8.446	8.306	23666	0.022	- C1	176745.2500	0.0000
8.703	8.306	93528	0.088	- C1	176745.2500	0.0000
9.001	8.306	33430	0.032	- C1	176745.2500	0.0000
9.112	8.306	25365	0.024	- C1	176745.2500	0.0000
9.170	8.306	14061	0.013	- C1	176745.2500	0.0000
9.303	8.306	31003	0.029	- C1	176745.2500	0.0000
9.357	8.306	13846	0.013	- C1	176745.2500	0.0000
9.454	8.306	162272	0.153	- C1	176745.2500	0.0000
9.552	8.306	38305	0.036	- C1	176745.2500	0.0000
9.610	8.306	52535	0.050	- C1	176745.2500	0.0000
9.766	8.306	38145	0.036	- C1	176745.2500	0.0000
9.814	8.306	35187	0.033	- C1	176745.2500	0.0000
9.903	8.306	58200	0.055	- C1	176745.2500	0.0000
10.028	8.306	52010	0.049	- C1	176745.2500	0.0000

Reported on 2-SEP-1997 at 23:38

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
10.094	8.306	26684	0.025	- C1	176745.2500	0.0000
10.214	8.306	67482	0.064	- C1	176745.2500	0.0000
10.263	8.306	40666	0.038	- C1	176745.2500	0.0000
10.326	8.306	64532	0.061	- C1	176745.2500	0.0000
10.454	8.306	51608	0.049	- C1	176745.2500	0.0000
10.508	8.306	41601	0.039	- C1	176745.2500	0.0000
10.574	8.306	53235	0.050	- C1	176745.2500	0.0000
10.641	8.306	31389	0.030	- C1	176745.2500	0.0000
10.743	8.306	99964	0.094	- C1	176745.2500	0.0000
10.877	8.306	65643	0.062	- C1	176745.2500	0.0000
10.921	8.306	40003	0.038	- C1	176745.2500	0.0000
10.970	8.306	71248	0.067	- C1	176745.2500	0.0000
11.068	8.306	44500	0.042	- C1	176745.2500	0.0000
11.108	8.306	145641	0.137	- C1	176745.2500	0.0000
11.246	8.306	67868	0.064	- C1	176745.2500	0.0000
11.317	8.306	39134	0.037	- C1	176745.2500	0.0000
11.401	8.306	138568	0.131	- C1	176745.2500	0.0000
11.530	8.306	88317	0.083	- C1	176745.2500	0.0000
11.574	8.306	54356	0.051	- C1	176745.2500	0.0000
11.650	8.306	96619	0.091	- C1	176745.2500	0.0000
11.739	8.306	255214	0.241	- C1	176745.2500	0.0000
11.943	8.306	113201	0.107	- C1	176745.2500	0.0000
12.081	8.306	200532	0.189	- C1	176745.2500	0.0000
12.152	8.306	69168	0.065	- C1	176745.2500	0.0000
12.206	8.306	129595	0.122	- C1	176745.2500	0.0000
12.308	8.306	142712	0.135	- C1	176745.2500	0.0000
12.414	8.306	568203	0.536	- C1	176745.2500	0.0000
12.717	8.306	89508	0.084	- C1	176745.2500	0.0000
12.806	8.306	149035	0.141	- C1	176745.2500	0.0000
12.930	8.306	166272	0.157	- C1	176745.2500	0.0000
13.068	8.306	250161	0.236	- C1	176745.2500	0.0000
13.201	8.306	239531	0.226	- C1	176745.2500	0.0000
13.348	8.306	140404	0.132	- C1	176745.2500	0.0000
13.397	8.306	97830	0.092	- C1	176745.2500	0.0000
13.459	8.306	82093	0.077	- C1	176745.2500	0.0000
13.530	8.306	171124	0.161	- C1	176745.2500	0.0000
13.632	8.306	101085	0.095	- C1	176745.2500	0.0000
13.690	8.306	68338	0.064	- C1	176745.2500	0.0000
13.739	8.306	161724	0.153	- C1	176745.2500	0.0000
13.837	8.306	77302	0.073	- C1	176745.2500	0.0000
13.930	8.306	171853	0.162	- C1	176745.2500	0.0000
16.219	16.287	7865865	8.805	n-OCTACOSANE	148898.0156	0.0000
17.166	17.233	7818387	8.225	TRIACONTANE	158425.2031	0.0000

Totals		
Unknowns	432578688	N/A
Quantified	22907948	23.841
Grand Total	455486624	23.841

ANALYSIS SUMMARY

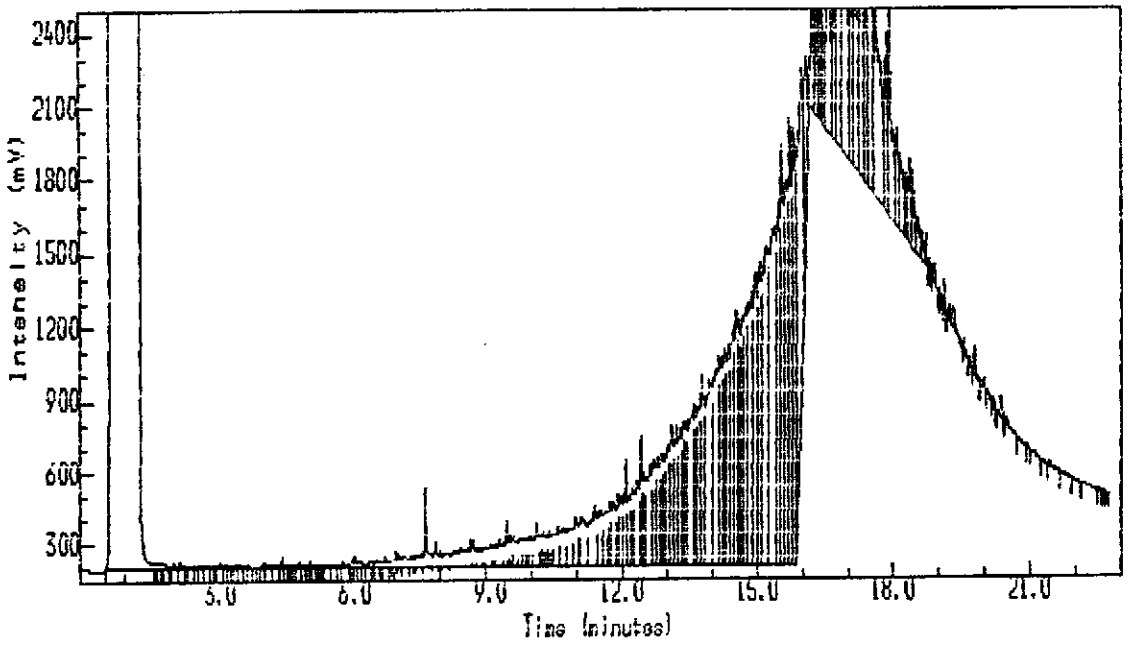
Method..... DRO
Run sequence..... DRO
Calibration..... DR00397
External standard calibration using area
Calibration last modified on 31-JUL-1997 at 13:47

Uncalibrated peaks use user factor (0.0000)

Reported on 3-SEP-1997 at 09:55

Injection Report

Acquired on 3-SEP-1997 at 09:31



Intertek Testing Services - Environmental Laboratories

Analyst Name : VHLOGAN
Lims Id :
Comment : TPH BY 8015
Method Title : TPH BY METHOD 8015 mod
Sample Name : 10534-4RR 30/5 AC193-83
Sample Id :
Sample Type : Sample Amount=2.00000
Bottle No : 4

Motor Oil 678 mg/kg
~~Extended 775 mg/kg~~
Sum 139%

VHL 9-3-97

PEAK INFORMATION

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
	8.306	103430256	97.532	TPH AS DIESEL	176745.2500	0.0000
2.752	8.306	133356	0.126	- C1	176745.2500	0.0000
2.943	8.306	55370	0.052	- C1	176745.2500	0.0000
3.006	8.306	72785	0.069	- C1	176745.2500	0.0000
3.117	8.306	148945	0.140	- C1	176745.2500	0.0000
3.223	8.306	58292	0.055	- C1	176745.2500	0.0000
3.326	8.306	77888	0.073	- C1	176745.2500	0.0000
3.383	8.306	54700	0.052	- C1	176745.2500	0.0000
3.454	8.306	72941	0.069	- C1	176745.2500	0.0000
3.570	8.306	84736	0.080	- C1	176745.2500	0.0000
3.668	8.306	53818	0.051	- C1	176745.2500	0.0000
3.730	8.306	91653	0.086	- C1	176745.2500	0.0000
3.877	8.306	42474	0.040	- C1	176745.2500	0.0000

Reported on 3-SEP-1997 at 09:55

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
3.988	8.306	57350	0.054	- C1	176745.2500	0.0000
4.050	8.306	55547	0.052	- C1	176745.2500	0.0000
4.108	8.306	55933	0.053	- C1	176745.2500	0.0000
4.161	8.306	115996	0.109	- C1	176745.2500	0.0000
4.326	8.306	119430	0.113	- C1	176745.2500	0.0000
4.428	8.306	54253	0.051	- C1	176745.2500	0.0000
4.494	8.306	107547	0.101	- C1	176745.2500	0.0000
4.574	8.306	72349	0.068	- C1	176745.2500	0.0000
4.641	8.306	50730	0.048	- C1	176745.2500	0.0000
4.721	8.306	48947	0.046	- C1	176745.2500	0.0000
4.761	8.306	66129	0.062	- C1	176745.2500	0.0000
4.886	8.306	100472	0.095	- C1	176745.2500	0.0000
4.948	8.306	88162	0.083	- C1	176745.2500	0.0000
5.028	8.306	55849	0.053	- C1	176745.2500	0.0000
5.072	8.306	60224	0.057	- C1	176745.2500	0.0000
5.130	8.306	87190	0.082	- C1	176745.2500	0.0000
5.192	8.306	86478	0.082	- C1	176745.2500	0.0000
5.268	8.306	70049	0.066	- C1	176745.2500	0.0000
5.339	8.306	48402	0.046	- C1	176745.2500	0.0000
5.401	8.306	68974	0.065	- C1	176745.2500	0.0000
5.512	8.306	129020	0.122	- C1	176745.2500	0.0000
5.654	8.306	146849	0.138	- C1	176745.2500	0.0000
5.757	8.306	78188	0.074	- C1	176745.2500	0.0000
5.846	8.306	206229	0.194	- C1	176745.2500	0.0000
6.059	8.306	151194	0.143	- C1	176745.2500	0.0000
6.103	8.306	138401	0.131	- C1	176745.2500	0.0000
6.188	8.306	137660	0.130	- C1	176745.2500	0.0000
6.263	8.306	155350	0.146	- C1	176745.2500	0.0000
6.459	8.306	172699	0.163	- C1	176745.2500	0.0000
6.508	8.306	105230	0.099	- C1	176745.2500	0.0000
6.579	8.306	218267	0.206	- C1	176745.2500	0.0000
6.699	8.306	82238	0.078	- C1	176745.2500	0.0000
6.774	8.306	279393	0.263	- C1	176745.2500	0.0000
6.899	8.306	105963	0.100	- C1	176745.2500	0.0000
7.028	8.306	326635	0.308	- C1	176745.2500	0.0000
7.068	8.306	236647	0.223	- C1	176745.2500	0.0000
7.228	8.306	469867	0.443	- C1	176745.2500	0.0000
7.397	8.306	293148	0.276	- C1	176745.2500	0.0000
7.446	8.306	173033	0.163	- C1	176745.2500	0.0000
7.579	8.306	392216	0.370	- C1	176745.2500	0.0000
7.672	8.306	1183254	1.116	- C1	176745.2500	0.0000
7.903	8.306	531048	0.501	- C1	176745.2500	0.0000
7.992	8.306	251326	0.237	- C1	176745.2500	0.0000
8.157	8.306	637225	0.601	- C1	176745.2500	0.0000
8.326	8.306	730500	0.689	- C1	176745.2500	0.0000
8.437	8.306	540055	0.509	- C1	176745.2500	0.0000
8.574	8.306	388515	0.366	- C1	176745.2500	0.0000
8.681	8.306	502466	0.474	- C1	176745.2500	0.0000
8.730	8.306	498770	0.470	- C1	176745.2500	0.0000
8.832	8.306	409959	0.387	- C1	176745.2500	0.0000
8.917	8.306	306780	0.289	- C1	176745.2500	0.0000
8.970	8.306	271426	0.256	- C1	176745.2500	0.0000
9.126	8.306	788499	0.744	- C1	176745.2500	0.0000

Reported on 3-SEP-1997 at 09:55

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
9.183	8.306	345680	0.326	- C1	176745.2500	0.0000
9.308	8.306	1012842	0.955	- C1	176745.2500	0.0000
9.463	8.306	754526	0.712	- C1	176745.2500	0.0000
9.521	8.306	371601	0.350	- C1	176745.2500	0.0000
9.566	8.306	333057	0.314	- C1	176745.2500	0.0000
9.623	8.306	784335	0.740	- C1	176745.2500	0.0000
9.783	8.306	728752	0.687	- C1	176745.2500	0.0000
9.841	8.306	478829	0.452	- C1	176745.2500	0.0000
9.903	8.306	521192	0.491	- C1	176745.2500	0.0000
9.983	8.306	725271	0.684	- C1	176745.2500	0.0000
10.121	8.306	1180923	1.114	- C1	176745.2500	0.0000
10.228	8.306	446489	0.421	- C1	176745.2500	0.0000
10.268	8.306	424722	0.401	- C1	176745.2500	0.0000
10.339	8.306	559120	0.527	- C1	176745.2500	0.0000
10.383	8.306	577537	0.545	- C1	176745.2500	0.0000
10.468	8.306	566680	0.534	- C1	176745.2500	0.0000
10.588	8.306	1143081	1.078	- C1	176745.2500	0.0000
10.726	8.306	1325561	1.250	- C1	176745.2500	0.0000
10.846	8.306	1384074	1.305	- C1	176745.2500	0.0000
10.979	8.306	1362940	1.285	- C1	176745.2500	0.0000
11.054	8.306	567193	0.535	- C1	176745.2500	0.0000
11.130	8.306	1789317	1.687	- C1	176745.2500	0.0000
11.392	8.306	2763004	2.605	- C1	176745.2500	0.0000
11.526	8.306	1703107	1.606	- C1	176745.2500	0.0000
11.659	8.306	1430876	1.349	- C1	176745.2500	0.0000
11.730	8.306	1103266	1.040	- C1	176745.2500	0.0000
11.797	8.306	1475663	1.392	- C1	176745.2500	0.0000
11.908	8.306	1270423	1.198	- C1	176745.2500	0.0000
11.988	8.306	1454682	1.372	- C1	176745.2500	0.0000
12.077	8.306	1895194	1.787	- C1	176745.2500	0.0000
12.161	8.306	1364951	1.287	- C1	176745.2500	0.0000
12.219	8.306	1230058	1.160	- C1	176745.2500	0.0000
12.326	8.306	2802688	2.643	- C1	176745.2500	0.0000
12.419	8.306	1524402	1.437	- C1	176745.2500	0.0000
12.472	8.306	1479489	1.395	- C1	176745.2500	0.0000
12.632	8.306	3523768	3.323	- C1	176745.2500	0.0000
12.694	8.306	2550919	2.405	- C1	176745.2500	0.0000
12.797	8.306	2046555	1.930	- C1	176745.2500	0.0000
12.886	8.306	2093229	1.974	- C1	176745.2500	0.0000
12.948	8.306	1673130	1.578	- C1	176745.2500	0.0000
13.032	8.306	2677651	2.525	- C1	176745.2500	0.0000
13.081	8.306	2869473	2.706	- C1	176745.2500	0.0000
13.192	8.306	3104988	2.928	- C1	176745.2500	0.0000
13.286	8.306	2759832	2.602	- C1	176745.2500	0.0000
13.343	8.306	2140771	2.019	- C1	176745.2500	0.0000
13.388	8.306	2172345	2.048	- C1	176745.2500	0.0000
13.548	8.306	5336738	5.032	- C1	176745.2500	0.0000
13.592	8.306	2933011	2.766	- C1	176745.2500	0.0000
13.690	8.306	3124152	2.946	- C1	176745.2500	0.0000
13.752	8.306	4891722	4.613	- C1	176745.2500	0.0000
13.908	8.306	7195431	6.785	- C1	176745.2500	0.0000
16.241	16.287	6837995	7.654	n-OCTACOSANE	148898.0156	0.0000
17.188	17.233	11046903	11.622	TRIACONTANE	158425.2031	0.0000

Reported on 3-SEP-1997 at 09:55

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept

Totals		
Unknowns	635731968	N/A
Quantified	121315152	116.808
Grand Total	757047104	116.808

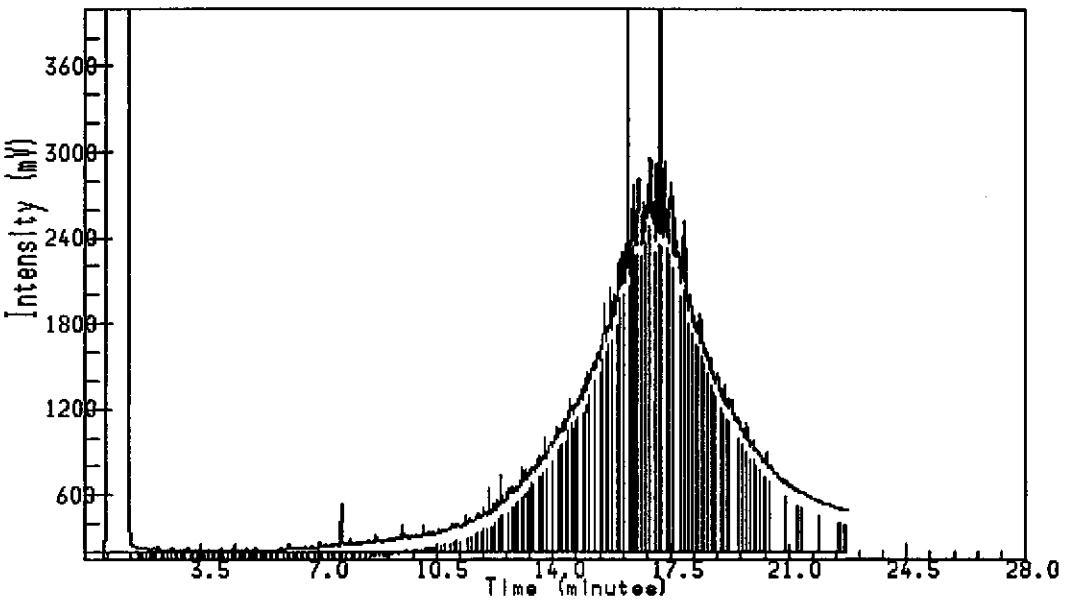
ANALYSIS SUMMARY

Method..... DRO
Run sequence..... DRO
Calibration..... DR00397
External standard calibration using area
Calibration last modified on 31-JUL-1997 at 13:47

Uncalibrated peaks use user factor (0.0000)

Injectio

Acquired on 3-SEP-1997 at 09:31



Intertek Testing Services - Environmental Laboratories

Analyst Name : VHLOGAN
Lims Id :
Comment : TPH BY 8015
Method Title : TPH BY METHOD 8015 mod
Sample Name : 10534-4RR 30/5 AC193-83
Sample Id :
Sample Type : Sample Amount=2.00000
Bottle No : 4

PEAK INFORMATION

VHL 9-3-97

RT mins	RT Corr	RT Exp	Hght uV	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
		15.630	122048408	740260608	678.279	MOTOR OIL	181896.6875	0.0000
9.783	9.783	15.630	116339	735777	0.674	- C1	181896.6875	0.0000
9.841	9.841	15.630	115480	483325	0.443	- C1	181896.6875	0.0000
9.903	9.903	15.630	121181	525969	0.482	- C1	181896.6875	0.0000
9.983	9.983	15.630	126300	731734	0.670	- C1	181896.6875	0.0000
10.121	10.121	15.630	184040	1190477	1.091	- C1	181896.6875	0.0000
10.228	10.228	15.630	134396	450142	0.412	- C1	181896.6875	0.0000
10.268	10.268	15.630	148799	428094	0.392	- C1	181896.6875	0.0000
10.339	10.339	15.630	139761	563616	0.516	- C1	181896.6875	0.0000
10.383	10.383	15.630	152776	582033	0.533	- C1	181896.6875	0.0000
10.468	10.468	15.630	139189	571176	0.523	- C1	181896.6875	0.0000
10.588	10.588	15.630	171881	1151511	1.055	- C1	181896.6875	0.0000

RT mins	RT Corr	RT Exp	Hght uV	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
10.726	10.726	15.630	161869	1334833	1.223	- C1	181896.6875	0.0000
10.846	10.846	15.630	165658	1393346	1.277	- C1	181896.6875	0.0000
10.979	10.979	15.630	198436	1371089	1.256	- C1	181896.6875	0.0000
11.054	11.054	15.630	183193	570565	0.523	- C1	181896.6875	0.0000
11.130	11.130	15.630	203640	1799433	1.649	- C1	181896.6875	0.0000
11.392	11.392	15.630	260088	2777616	2.545	- C1	181896.6875	0.0000
11.526	11.526	15.630	241170	1711256	1.568	- C1	181896.6875	0.0000
11.659	11.659	15.630	239086	1437620	1.317	- C1	181896.6875	0.0000
11.730	11.730	15.630	268514	1108043	1.015	- C1	181896.6875	0.0000
11.797	11.797	15.630	269294	1481845	1.358	- C1	181896.6875	0.0000
11.908	11.908	15.630	306687	1275481	1.169	- C1	181896.6875	0.0000
11.988	11.988	15.630	290408	1460301	1.338	- C1	181896.6875	0.0000
12.077	12.077	15.630	445926	1901656	1.742	- C1	181896.6875	0.0000
12.161	12.161	15.630	295045	1370009	1.255	- C1	181896.6875	0.0000
12.219	12.219	15.630	337395	1234273	1.131	- C1	181896.6875	0.0000
12.326	12.326	15.630	361733	2811679	2.576	- C1	181896.6875	0.0000
12.419	12.419	15.630	545552	1528336	1.400	- C1	181896.6875	0.0000
12.472	12.472	15.630	390134	1483703	1.359	- C1	181896.6875	0.0000
12.632	12.632	15.630	418350	3533603	3.238	- C1	181896.6875	0.0000
12.694	12.694	15.630	441165	2557382	2.343	- C1	181896.6875	0.0000
12.797	12.797	15.630	452447	2051613	1.880	- C1	181896.6875	0.0000
12.886	12.886	15.630	464127	2098287	1.923	- C1	181896.6875	0.0000
12.948	12.948	15.630	465264	1677064	1.537	- C1	181896.6875	0.0000
13.032	13.032	15.630	504088	2683551	2.459	- C1	181896.6875	0.0000
13.081	13.081	15.630	590408	2875092	2.634	- C1	181896.6875	0.0000
13.192	13.192	15.630	584576	3111169	2.851	- C1	181896.6875	0.0000
13.286	13.286	15.630	579488	2765170	2.534	- C1	181896.6875	0.0000
13.343	13.343	15.630	595736	2144705	1.965	- C1	181896.6875	0.0000
13.388	13.388	15.630	599861	2176279	1.994	- C1	181896.6875	0.0000
13.548	13.548	15.630	650408	5346011	4.898	- C1	181896.6875	0.0000
13.592	13.592	15.630	678623	2937787	2.692	- C1	181896.6875	0.0000
13.690	13.690	15.630	668912	3129209	2.867	- C1	181896.6875	0.0000
13.752	13.752	15.630	798876	4899027	4.489	- C1	181896.6875	0.0000
13.908	13.908	15.630	771847	7205824	6.602	- C1	181896.6875	0.0000
14.121	14.121	15.630	873024	7905606	7.244	- C1	181896.6875	0.0000
14.206	14.206	15.630	868642	4494698	4.118	- C1	181896.6875	0.0000
14.259	14.259	15.630	907757	3935509	3.606	- C1	181896.6875	0.0000
14.343	14.343	15.630	923521	4008627	3.673	- C1	181896.6875	0.0000
14.459	14.459	15.630	990073	5953085	5.455	- C1	181896.6875	0.0000
14.517	14.517	15.630	1063983	4542524	4.162	- C1	181896.6875	0.0000
14.570	14.570	15.630	1027260	3721619	3.410	- C1	181896.6875	0.0000
14.654	14.654	15.630	1031651	5362401	4.913	- C1	181896.6875	0.0000
14.748	14.748	15.630	1066906	4731919	4.336	- C1	181896.6875	0.0000
14.854	14.854	15.630	1132257	8998356	8.245	- C1	181896.6875	0.0000
14.957	14.957	15.630	1216640	6748405	6.183	- C1	181896.6875	0.0000
15.054	15.054	15.630	1256342	7652101	7.011	- C1	181896.6875	0.0000
15.192	15.192	15.630	1326976	12132680	11.117	- C1	181896.6875	0.0000
15.388	15.388	15.630	1399164	14044105	12.868	- C1	181896.6875	0.0000
15.477	15.477	15.630	1495621	7593132	6.957	- C1	181896.6875	0.0000
15.530	15.530	15.630	1734261	8347299	7.648	- C1	181896.6875	0.0000
15.637	15.637	15.630	1585095	8246244	7.556	- C1	181896.6875	0.0000
15.717	15.717	15.630	1849453	9282507	8.505	- C1	181896.6875	0.0000
15.810	15.810	15.630	1804681	12150517	11.133	- C1	181896.6875	0.0000

RT mins	RT Corr	RT Exp	Hght uV	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
15.974	15.974	15.630	2051711	18292300	16.761	- C1	181896.6875	0.0000
16.090	16.090	15.630	2096190	13793609	12.639	- C1	181896.6875	0.0000
16.241	16.241	15.630	5973406	22416884	20.540	- C1	181896.6875	0.0000
16.343	16.343	15.630	2416921	11625923	10.652	- C1	181896.6875	0.0000
16.388	16.388	15.630	2566693	7476494	6.850	- C1	181896.6875	0.0000
16.432	16.432	15.630	2549367	7418587	6.797	- C1	181896.6875	0.0000
16.481	16.481	15.630	2230024	7611234	6.974	- C1	181896.6875	0.0000
16.552	16.552	15.630	2608049	19873404	18.209	- C1	181896.6875	0.0000
16.699	16.699	15.630	2448370	13376973	12.257	- C1	181896.6875	0.0000
16.810	16.810	15.630	2570929	17334636	15.883	- C1	181896.6875	0.0000
16.886	16.886	15.630	2765608	27709934	25.390	- C1	181896.6875	0.0000
17.072	17.072	15.630	2720532	14048618	12.872	- C1	181896.6875	0.0000
17.188	17.188	15.630	6376786	22786626	20.879	- C1	181896.6875	0.0000
17.317	17.317	15.630	2735071	20190396	18.500	- C1	181896.6875	0.0000
17.406	17.406	15.630	2396862	9093594	8.332	- C1	181896.6875	0.0000
17.494	17.494	15.630	2586350	20789976	19.049	- C1	181896.6875	0.0000
17.614	17.614	15.630	2342732	28423144	26.043	- C1	181896.6875	0.0000
17.868	17.868	15.630	2209666	11304845	10.358	- C1	181896.6875	0.0000
17.926	17.926	15.630	2323456	17776714	16.288	- C1	181896.6875	0.0000
18.094	18.094	15.630	1801798	10118045	9.271	- C1	181896.6875	0.0000
18.157	18.157	15.630	1690054	10403894	9.533	- C1	181896.6875	0.0000
18.286	18.286	15.630	1616275	7121656	6.525	- C1	181896.6875	0.0000
18.374	18.374	15.630	1670058	9164423	8.397	- C1	181896.6875	0.0000
18.428	18.428	15.630	1628089	8765782	8.032	- C1	181896.6875	0.0000
18.517	18.517	15.630	1434805	8951873	8.202	- C1	181896.6875	0.0000
18.623	18.623	15.630	1375766	7464850	6.840	- C1	181896.6875	0.0000
18.717	18.717	15.630	1362030	5140847	4.710	- C1	181896.6875	0.0000
18.792	18.792	15.630	1271286	7178812	6.578	- C1	181896.6875	0.0000
18.899	18.899	15.630	1248863	11645393	10.670	- C1	181896.6875	0.0000
19.028	19.028	15.630	1146564	5596638	5.128	- C1	181896.6875	0.0000
19.121	19.121	15.630	1175654	5480719	5.022	- C1	181896.6875	0.0000
19.219	19.219	15.630	1077678	5545037	5.081	- C1	181896.6875	0.0000
19.312	19.312	15.630	1067622	15705632	14.391	- C1	181896.6875	0.0000
19.539	19.539	15.630	940661	7330152	6.716	- C1	181896.6875	0.0000
19.663	19.663	15.630	864072	5109512	4.682	- C1	181896.6875	0.0000
19.783	19.783	15.630	899894	7494983	6.867	- C1	181896.6875	0.0000
19.934	19.934	15.630	767743	3434301	3.147	- C1	181896.6875	0.0000
19.992	19.992	15.630	777390	2990181	2.740	- C1	181896.6875	0.0000
20.063	20.063	15.630	727744	5076886	4.652	- C1	181896.6875	0.0000
20.166	20.166	15.630	696177	4466469	4.092	- C1	181896.6875	0.0000
20.277	20.277	15.630	643141	2362945	2.165	- C1	181896.6875	0.0000
20.370	20.370	15.630	700078	4993273	4.575	- C1	181896.6875	0.0000
20.481	20.481	15.630	608184	15637068	14.328	- C1	181896.6875	0.0000
20.930	20.930	15.630	499728	9383275	8.598	- C1	181896.6875	0.0000
21.263	21.263	15.630	438888	3513584	3.219	- C1	181896.6875	0.0000
21.432	21.432	15.630	417950	12332450	11.300	- C1	181896.6875	0.0000

Totals

Unknowns	14916365	437704256	N/A
Quantified	122048408	740260608	678.279
Grand Total	136964768	1177964928	678.279

ANALYSIS SUMMARY

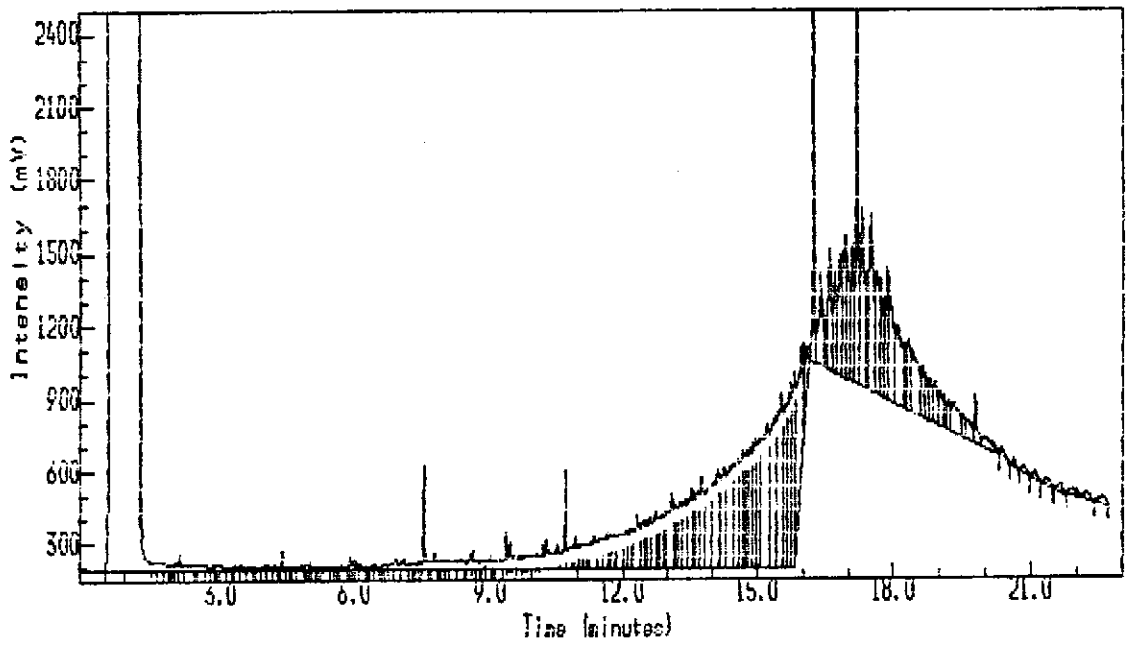
Method..... DROXTEND
Run sequence..... DRO
Calibration..... MOIL3597
External standard calibration using area
Calibration last modified on 7-MAR-1997 at 13:05

Uncalibrated peaks use user factor (0.0000)

Reported on 3-SEP-1997 at 10:25

Injection Report

Acquired on 3-SEP-1997 at 10:02



Intertek Testing Services - Environmental Laboratories

Analyst Name : VHLOGAN
Lims Id :
Comment : TPH BY 8015
Method Title : TPH BY METHOD 8015 mod
Sample Name : 10534-5RR 30/5 AC193-83
Sample Id :
Sample Type : Sample Amount=2.00000
Bottle No : 5

Motor Oil 366 mg/kg
~~Extended~~
Sun 133%

Vtr 9-3-97

PEAK INFORMATION

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
	8.306	50436840	47.561	TPH AS DIESEL	176745.2500	0.0000
2.783	8.306	100055	0.094	- C1	176745.2500	0.0000
2.930	8.306	55072	0.052	- C1	176745.2500	0.0000
2.992	8.306	67407	0.064	- C1	176745.2500	0.0000
3.068	8.306	55083	0.052	- C1	176745.2500	0.0000
3.108	8.306	117718	0.111	- C1	176745.2500	0.0000
3.303	8.306	74606	0.070	- C1	176745.2500	0.0000
3.374	8.306	53369	0.050	- C1	176745.2500	0.0000
3.441	8.306	76253	0.072	- C1	176745.2500	0.0000
3.592	8.306	108099	0.102	- C1	176745.2500	0.0000
3.726	8.306	74361	0.070	- C1	176745.2500	0.0000
3.868	8.306	39585	0.037	- C1	176745.2500	0.0000
3.930	8.306	55424	0.052	- C1	176745.2500	0.0000

Reported on 3-SEP-1997 at 10:25

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
4.099	8.306	86712	0.082	- C1	176745.2500	0.0000
4.174	8.306	88673	0.084	- C1	176745.2500	0.0000
4.312	8.306	76044	0.072	- C1	176745.2500	0.0000
4.414	8.306	41837	0.039	- C1	176745.2500	0.0000
4.490	8.306	149190	0.141	- C1	176745.2500	0.0000
4.579	8.306	57214	0.054	- C1	176745.2500	0.0000
4.708	8.306	46141	0.044	- C1	176745.2500	0.0000
4.752	8.306	44195	0.042	- C1	176745.2500	0.0000
4.926	8.306	126930	0.120	- C1	176745.2500	0.0000
5.019	8.306	43471	0.041	- C1	176745.2500	0.0000
5.068	8.306	36212	0.034	- C1	176745.2500	0.0000
5.121	8.306	68132	0.064	- C1	176745.2500	0.0000
5.183	8.306	45898	0.043	- C1	176745.2500	0.0000
5.259	8.306	38508	0.036	- C1	176745.2500	0.0000
5.334	8.306	30158	0.028	- C1	176745.2500	0.0000
5.388	8.306	36170	0.034	- C1	176745.2500	0.0000
5.503	8.306	73682	0.069	- C1	176745.2500	0.0000
5.646	8.306	50604	0.048	- C1	176745.2500	0.0000
5.694	8.306	30739	0.029	- C1	176745.2500	0.0000
5.748	8.306	37537	0.035	- C1	176745.2500	0.0000
5.837	8.306	112362	0.106	- C1	176745.2500	0.0000
6.014	8.306	137607	0.130	- C1	176745.2500	0.0000
6.094	8.306	81047	0.076	- C1	176745.2500	0.0000
6.170	8.306	92651	0.087	- C1	176745.2500	0.0000
6.254	8.306	86812	0.082	- C1	176745.2500	0.0000
6.397	8.306	32548	0.031	- C1	176745.2500	0.0000
6.450	8.306	26380	0.025	- C1	176745.2500	0.0000
6.499	8.306	39662	0.037	- C1	176745.2500	0.0000
6.570	8.306	83839	0.079	- C1	176745.2500	0.0000
6.690	8.306	39403	0.037	- C1	176745.2500	0.0000
6.766	8.306	56740	0.054	- C1	176745.2500	0.0000
6.810	8.306	72173	0.068	- C1	176745.2500	0.0000
6.948	8.306	111875	0.105	- C1	176745.2500	0.0000
7.054	8.306	251161	0.237	- C1	176745.2500	0.0000
7.174	8.306	243954	0.230	- C1	176745.2500	0.0000
7.388	8.306	115171	0.109	- C1	176745.2500	0.0000
7.437	8.306	49405	0.047	- C1	176745.2500	0.0000
7.490	8.306	78069	0.074	- C1	176745.2500	0.0000
7.570	8.306	82817	0.078	- C1	176745.2500	0.0000
7.663	8.306	786220	0.741	- C1	176745.2500	0.0000
7.761	8.306	137056	0.129	- C1	176745.2500	0.0000
7.894	8.306	287225	0.271	- C1	176745.2500	0.0000
7.983	8.306	140590	0.133	- C1	176745.2500	0.0000
8.108	8.306	146931	0.139	- C1	176745.2500	0.0000
8.148	8.306	139282	0.131	- C1	176745.2500	0.0000
8.317	8.306	313819	0.296	- C1	176745.2500	0.0000
8.463	8.306	285907	0.270	- C1	176745.2500	0.0000
8.579	8.306	79064	0.075	- C1	176745.2500	0.0000
8.672	8.306	213969	0.202	- C1	176745.2500	0.0000
8.721	8.306	218859	0.206	- C1	176745.2500	0.0000
8.823	8.306	159229	0.150	- C1	176745.2500	0.0000
8.899	8.306	81888	0.077	- C1	176745.2500	0.0000
9.112	8.306	407917	0.385	- C1	176745.2500	0.0000

Reported on 3-SEP-1997 at 10:25

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
9.166	8.306	111568	0.105	- C1	176745.2500	0.0000
9.299	8.306	338035	0.319	- C1	176745.2500	0.0000
9.450	8.306	373327	0.352	- C1	176745.2500	0.0000
9.512	8.306	211766	0.200	- C1	176745.2500	0.0000
9.557	8.306	230666	0.218	- C1	176745.2500	0.0000
9.619	8.306	274741	0.259	- C1	176745.2500	0.0000
9.766	8.306	273041	0.257	- C1	176745.2500	0.0000
9.846	8.306	214429	0.202	- C1	176745.2500	0.0000
9.899	8.306	191132	0.180	- C1	176745.2500	0.0000
9.988	8.306	279315	0.263	- C1	176745.2500	0.0000
10.059	8.306	195098	0.184	- C1	176745.2500	0.0000
10.117	8.306	343092	0.324	- C1	176745.2500	0.0000
10.259	8.306	416253	0.393	- C1	176745.2500	0.0000
10.330	8.306	562180	0.530	- C1	176745.2500	0.0000
10.468	8.306	272457	0.257	- C1	176745.2500	0.0000
10.574	8.306	610918	0.576	- C1	176745.2500	0.0000
10.739	8.306	1116045	1.052	- C1	176745.2500	0.0000
10.832	8.306	485115	0.457	- C1	176745.2500	0.0000
10.921	8.306	319277	0.301	- C1	176745.2500	0.0000
10.970	8.306	587543	0.554	- C1	176745.2500	0.0000
11.103	8.306	597545	0.563	- C1	176745.2500	0.0000
11.183	8.306	481599	0.454	- C1	176745.2500	0.0000
11.254	8.306	405548	0.382	- C1	176745.2500	0.0000
11.383	8.306	1142266	1.077	- C1	176745.2500	0.0000
11.530	8.306	758787	0.716	- C1	176745.2500	0.0000
11.654	8.306	841834	0.794	- C1	176745.2500	0.0000
11.712	8.306	661961	0.624	- C1	176745.2500	0.0000
11.788	8.306	527365	0.497	- C1	176745.2500	0.0000
11.846	8.306	413384	0.390	- C1	176745.2500	0.0000
11.943	8.306	1068380	1.007	- C1	176745.2500	0.0000
12.072	8.306	980970	0.925	- C1	176745.2500	0.0000
12.161	8.306	688691	0.649	- C1	176745.2500	0.0000
12.210	8.306	546293	0.515	- C1	176745.2500	0.0000
12.312	8.306	1591814	1.501	- C1	176745.2500	0.0000
12.454	8.306	1090938	1.029	- C1	176745.2500	0.0000
12.517	8.306	678409	0.640	- C1	176745.2500	0.0000
12.597	8.306	1185220	1.118	- C1	176745.2500	0.0000
12.726	8.306	1265725	1.194	- C1	176745.2500	0.0000
12.779	8.306	934118	0.881	- C1	176745.2500	0.0000
12.877	8.306	1060168	1.000	- C1	176745.2500	0.0000
12.934	8.306	891277	0.840	- C1	176745.2500	0.0000
13.072	8.306	2517622	2.374	- C1	176745.2500	0.0000
13.148	8.306	875922	0.826	- C1	176745.2500	0.0000
13.201	8.306	730269	0.689	- C1	176745.2500	0.0000
13.272	8.306	1307018	1.232	- C1	176745.2500	0.0000
13.388	8.306	2073833	1.956	- C1	176745.2500	0.0000
13.534	8.306	2381474	2.246	- C1	176745.2500	0.0000
13.579	8.306	949337	0.895	- C1	176745.2500	0.0000
13.677	8.306	1923536	1.814	- C1	176745.2500	0.0000
13.739	8.306	2234498	2.107	- C1	176745.2500	0.0000
13.926	8.306	2948325	2.780	- C1	176745.2500	0.0000
16.228	16.287	7813887	8.746	n-OCTACOSANE	148898.0156	0.0000
17.174	17.233	10560066	11.109	TRIACONTANE	158425.2031	0.0000

Reported on 3-SEP-1997 at 10:25

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept

Totals		
Unknowns	532900416	N/A
Quantified	68810792	67.417
Grand Total	601711232	67.417

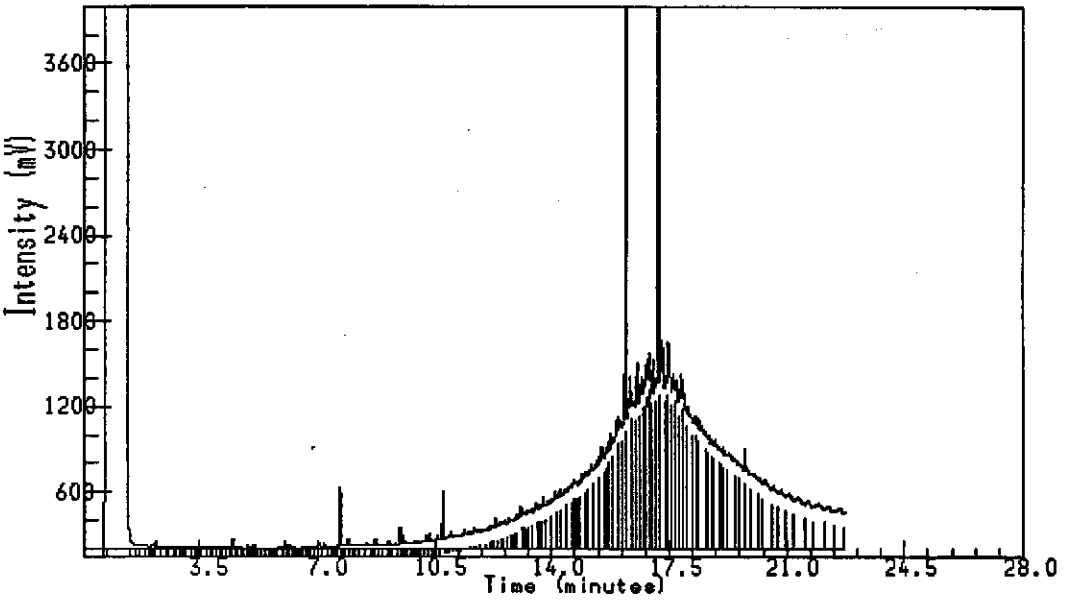
ANALYSIS SUMMARY

Method..... DRO
Run sequence..... DRO
Calibration..... DR00397
External standard calibration using area
Calibration last modified on 31-JUL-1997 at 13:47

Uncalibrated peaks use user factor (0.0000)

Injectio

Acquired on 3-SEP-1997 at 10:02



Intertek Testing Services - Environmental Laboratories

Analyst Name : VHLOGAN
Lims Id :
Comment : TPH BY 8015
Method Title : TPH BY METHOD 8015 mod
Sample Name : 10534-5RR 30/5 AC193-83
Sample Id :
Sample Type : Sample Amount=2.00000
Bottle No : 5

PEAK INFORMATION

VH 9-3-97

RT mins	RT Corr	RT Exp	Hght uV	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
		15.630	65201576	399053184	365.641	MOTOR OIL	181896.6875	0.0000
9.766	9.766	15.630	49748	279199	0.256	- C1	181896.6875	0.0000
9.846	9.846	15.630	48256	219047	0.201	- C1	181896.6875	0.0000
9.899	9.899	15.630	51975	194980	0.179	- C1	181896.6875	0.0000
9.988	9.988	15.630	53472	284703	0.261	- C1	181896.6875	0.0000
10.059	10.059	15.630	50876	198946	0.182	- C1	181896.6875	0.0000
10.117	10.117	15.630	62337	349250	0.320	- C1	181896.6875	0.0000
10.259	10.259	15.630	95882	422668	0.387	- C1	181896.6875	0.0000
10.330	10.330	15.630	117013	569877	0.522	- C1	181896.6875	0.0000
10.468	10.468	15.630	62713	276819	0.254	- C1	181896.6875	0.0000
10.574	10.574	15.630	94654	619385	0.568	- C1	181896.6875	0.0000
10.739	10.739	15.630	403335	1125282	1.031	- C1	181896.6875	0.0000

RT mins	RT Corr	RT Exp	Hght uV	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
10.832	10.832	15.630	84054	491017	0.450	- C1	181896.6875	0.0000
10.921	10.921	15.630	98087	322869	0.296	- C1	181896.6875	0.0000
10.970	10.970	15.630	124609	593444	0.544	- C1	181896.6875	0.0000
11.103	11.103	15.630	100062	603703	0.553	- C1	181896.6875	0.0000
11.183	11.183	15.630	100186	486474	0.446	- C1	181896.6875	0.0000
11.254	11.254	15.630	100774	409653	0.375	- C1	181896.6875	0.0000
11.383	11.383	15.630	132582	1152529	1.056	- C1	181896.6875	0.0000
11.530	11.530	15.630	119383	765202	0.701	- C1	181896.6875	0.0000
11.654	11.654	15.630	150826	848505	0.777	- C1	181896.6875	0.0000
11.712	11.712	15.630	144646	666836	0.611	- C1	181896.6875	0.0000
11.788	11.788	15.630	142374	531214	0.487	- C1	181896.6875	0.0000
11.846	11.846	15.630	133533	416463	0.382	- C1	181896.6875	0.0000
11.943	11.943	15.630	138576	1076077	0.986	- C1	181896.6875	0.0000
12.072	12.072	15.630	149068	987641	0.905	- C1	181896.6875	0.0000
12.161	12.161	15.630	165803	693053	0.635	- C1	181896.6875	0.0000
12.210	12.210	15.630	167594	549629	0.504	- C1	181896.6875	0.0000
12.312	12.312	15.630	217569	1600794	1.467	- C1	181896.6875	0.0000
12.454	12.454	15.630	190026	1096840	1.005	- C1	181896.6875	0.0000
12.517	12.517	15.630	191271	682001	0.625	- C1	181896.6875	0.0000
12.597	12.597	15.630	209062	1191378	1.092	- C1	181896.6875	0.0000
12.726	12.726	15.630	222540	1271883	1.165	- C1	181896.6875	0.0000
12.779	12.779	15.630	210075	938479	0.860	- C1	181896.6875	0.0000
12.877	12.877	15.630	219578	1065043	0.976	- C1	181896.6875	0.0000
12.934	12.934	15.630	243947	895126	0.820	- C1	181896.6875	0.0000
13.072	13.072	15.630	301437	2527372	2.316	- C1	181896.6875	0.0000
13.148	13.148	15.630	264549	879257	0.806	- C1	181896.6875	0.0000
13.201	13.201	15.630	254743	733091	0.672	- C1	181896.6875	0.0000
13.272	13.272	15.630	274040	1311893	1.202	- C1	181896.6875	0.0000
13.388	13.388	15.630	285210	2081274	1.907	- C1	181896.6875	0.0000
13.534	13.534	15.630	324947	2389428	2.189	- C1	181896.6875	0.0000
13.579	13.579	15.630	313191	952416	0.873	- C1	181896.6875	0.0000
13.677	13.677	15.630	313077	1929693	1.768	- C1	181896.6875	0.0000
13.739	13.739	15.630	371570	2241168	2.054	- C1	181896.6875	0.0000
13.926	13.926	15.630	338905	2957049	2.709	- C1	181896.6875	0.0000
14.112	14.112	15.630	406699	3714154	3.403	- C1	181896.6875	0.0000
14.161	14.161	15.630	381245	988068	0.905	- C1	181896.6875	0.0000
14.254	14.254	15.630	414209	2762980	2.532	- C1	181896.6875	0.0000
14.446	14.446	15.630	422704	4067976	3.727	- C1	181896.6875	0.0000
14.552	14.552	15.630	450518	3554675	3.257	- C1	181896.6875	0.0000
14.663	14.663	15.630	482683	2767499	2.536	- C1	181896.6875	0.0000
14.726	14.726	15.630	469393	1721201	1.577	- C1	181896.6875	0.0000
14.770	14.770	15.630	477190	1479237	1.355	- C1	181896.6875	0.0000
14.837	14.837	15.630	485119	2272907	2.083	- C1	181896.6875	0.0000
14.943	14.943	15.630	530071	3201866	2.934	- C1	181896.6875	0.0000
15.037	15.037	15.630	534784	3167390	2.902	- C1	181896.6875	0.0000
15.197	15.197	15.630	591292	6762101	6.196	- C1	181896.6875	0.0000
15.374	15.374	15.630	619831	4704712	4.311	- C1	181896.6875	0.0000
15.512	15.512	15.630	716664	6902282	6.324	- C1	181896.6875	0.0000
15.623	15.623	15.630	681874	3368498	3.086	- C1	181896.6875	0.0000
15.703	15.703	15.630	761037	3814257	3.495	- C1	181896.6875	0.0000
15.792	15.792	15.630	808801	3985532	3.652	- C1	181896.6875	0.0000
15.992	15.992	15.630	927555	9790058	8.970	- C1	181896.6875	0.0000
16.086	16.086	15.630	908961	6027295	5.523	- C1	181896.6875	0.0000

RT mins	RT Corr	RT Exp	Hght uV	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
16.228	16.228	15.630	5902202	14828044	13.587	- C1	181896.6875	0.0000
16.361	16.361	15.630	1216771	11127344	10.196	- C1	181896.6875	0.0000
16.459	16.459	15.630	1040840	4095370	3.752	- C1	181896.6875	0.0000
16.570	16.570	15.630	1308586	8558736	7.842	- C1	181896.6875	0.0000
16.677	16.677	15.630	1217730	7418020	6.797	- C1	181896.6875	0.0000
16.792	16.792	15.630	1294603	7848589	7.191	- C1	181896.6875	0.0000
16.903	16.903	15.630	1371422	7413452	6.793	- C1	181896.6875	0.0000
16.943	16.943	15.630	1286614	6756920	6.191	- C1	181896.6875	0.0000
17.054	17.054	15.630	1338522	6748330	6.183	- C1	181896.6875	0.0000
17.174	17.174	15.630	6130418	16207231	14.850	- C1	181896.6875	0.0000
17.272	17.272	15.630	1476872	10971255	10.053	- C1	181896.6875	0.0000
17.388	17.388	15.630	1221757	4735463	4.339	- C1	181896.6875	0.0000
17.472	17.472	15.630	1455836	10822459	9.916	- C1	181896.6875	0.0000
17.601	17.601	15.630	1230037	8729484	7.999	- C1	181896.6875	0.0000
17.703	17.703	15.630	1191194	6211560	5.691	- C1	181896.6875	0.0000
17.850	17.850	15.630	1232648	7660645	7.019	- C1	181896.6875	0.0000
17.903	17.903	15.630	1190128	9260268	8.485	- C1	181896.6875	0.0000
18.068	18.068	15.630	998556	11149145	10.216	- C1	181896.6875	0.0000
18.246	18.246	15.630	931916	4132560	3.787	- C1	181896.6875	0.0000
18.312	18.312	15.630	935583	5525686	5.063	- C1	181896.6875	0.0000
18.414	18.414	15.630	899524	10562501	9.678	- C1	181896.6875	0.0000
18.619	18.619	15.630	826547	4263133	3.906	- C1	181896.6875	0.0000
18.694	18.694	15.630	794351	4108914	3.765	- C1	181896.6875	0.0000
18.779	18.779	15.630	770692	3577807	3.278	- C1	181896.6875	0.0000
18.881	18.881	15.630	764749	6457594	5.917	- C1	181896.6875	0.0000
19.010	19.010	15.630	721414	4500791	4.124	- C1	181896.6875	0.0000
19.099	19.099	15.630	714323	2754954	2.524	- C1	181896.6875	0.0000
19.197	19.197	15.630	684573	3758364	3.444	- C1	181896.6875	0.0000
19.303	19.303	15.630	676109	9203300	8.433	- C1	181896.6875	0.0000
19.477	19.477	15.630	627861	3941863	3.612	- C1	181896.6875	0.0000
19.579	19.579	15.630	603878	6266310	5.742	- C1	181896.6875	0.0000
19.770	19.770	15.630	709679	5821208	5.334	- C1	181896.6875	0.0000
19.974	19.974	15.630	533876	8821733	8.083	- C1	181896.6875	0.0000
20.197	20.197	15.630	505585	3593291	3.292	- C1	181896.6875	0.0000
20.357	20.357	15.630	488667	6443435	5.904	- C1	181896.6875	0.0000
20.628	20.628	15.630	442536	5482410	5.023	- C1	181896.6875	0.0000
20.854	20.854	15.630	416853	5791308	5.306	- C1	181896.6875	0.0000
21.081	21.081	15.630	388496	5240595	4.802	- C1	181896.6875	0.0000
21.339	21.339	15.630	361321	6334903	5.804	- C1	181896.6875	0.0000
21.610	21.610	15.630	339522	4996876	4.578	- C1	181896.6875	0.0000

Totals			
Unknowns	13462904	430381056	N/A
Quantified	65201576	399053184	365.641
Grand Total	78664480	829434240	365.641

ANALYSIS SUMMARY

Method..... DROXTEND
Run sequence..... DRO
Calibration..... MOIL3597
External standard calibration using area
Calibration last modified on 7-MAR-1997 at 13:05

Uncalibrated peaks use user factor (0.0000)

ITS Intertek Testing Services
Environmental Laboratories

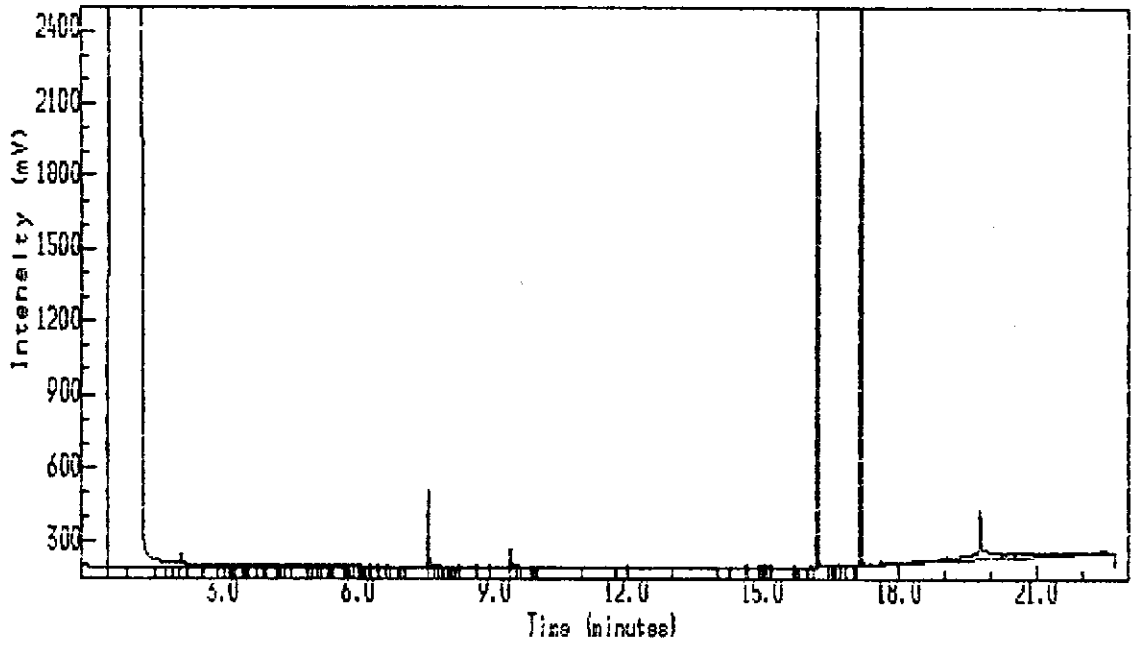
QUALITY CONTROL DATA

Intertek Testing Services NA Inc.
1089 East Collins Boulevard Richardson, TX 75081
Telephone (972) 238-5591 Fax (972) 238-5592

Reported on 2-SEP-1997 at 20:04

Injection Report

Acquired on 2-SEP-1997 at 19:40



Intertek Testing Services - Environmental Laboratories

Analyst Name : VHLOGAN
Lims Id :
Comment : TPH BY 8015
Method Title : TPH BY METHOD 8015 mod
Sample Name : BLK 30/5 AC193-83
Sample Id :
Sample Type : Sample Amount=2.00000
Bottle No : 19

TPH <10 <5
Surr 88.1%
VHL 9-3-97

PEAK INFORMATION

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
	8.306	1429765	1.348	TPH AS DIESEL	176745.2500	0.0000
2.783	8.306	130944	0.123	- C1	176745.2500	0.0000
3.086	8.306	61291	0.058	- C1	176745.2500	0.0000
3.183	8.306	40104	0.038	- C1	176745.2500	0.0000
3.312	8.306	20428	0.019	- C1	176745.2500	0.0000
3.357	8.306	18783	0.018	- C1	176745.2500	0.0000
3.410	8.306	53346	0.050	- C1	176745.2500	0.0000
3.606	8.306	21281	0.020	- C1	176745.2500	0.0000
3.654	8.306	16339	0.015	- C1	176745.2500	0.0000
3.717	8.306	38655	0.036	- C1	176745.2500	0.0000
3.890	8.306	35844	0.034	- C1	176745.2500	0.0000
4.023	8.306	15504	0.015	- C1	176745.2500	0.0000
4.103	8.306	44607	0.042	- C1	176745.2500	0.0000

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
4.321	8.306	8720	0.008	- C1	176745.2500	0.0000
4.374	8.306	6596	0.006	- C1	176745.2500	0.0000
4.446	8.306	15137	0.014	- C1	176745.2500	0.0000
4.499	8.306	28119	0.027	- C1	176745.2500	0.0000
4.703	8.306	43877	0.041	- C1	176745.2500	0.0000
5.023	8.306	16972	0.016	- C1	176745.2500	0.0000
5.117	8.306	12649	0.012	- C1	176745.2500	0.0000
5.254	8.306	6512	0.006	- C1	176745.2500	0.0000
5.317	8.306	8692	0.008	- C1	176745.2500	0.0000
5.472	8.306	3257	0.003	- C1	176745.2500	0.0000
5.557	8.306	2038	0.002	- C1	176745.2500	0.0000
5.628	8.306	5339	0.005	- C1	176745.2500	0.0000
5.837	8.306	530	4.994E-4	- C1	176745.2500	0.0000
5.903	8.306	232	2.188E-4	- C1	176745.2500	0.0000
6.148	8.306	1297	0.001	- C1	176745.2500	0.0000
6.232	8.306	825	7.776E-4	- C1	176745.2500	0.0000
6.312	8.306	1400	0.001	- C1	176745.2500	0.0000
6.392	8.306	6133	0.006	- C1	176745.2500	0.0000
6.566	8.306	6284	0.006	- C1	176745.2500	0.0000
6.766	8.306	8756	0.008	- C1	176745.2500	0.0000
7.032	8.306	1563	0.001	- C1	176745.2500	0.0000
7.166	8.306	1944	0.002	- C1	176745.2500	0.0000
7.659	8.306	531841	0.502	- C1	176745.2500	0.0000
7.810	8.306	19595	0.018	- C1	176745.2500	0.0000
7.926	8.306	17102	0.016	- C1	176745.2500	0.0000
7.997	8.306	1043	9.838E-4	- C1	176745.2500	0.0000
8.099	8.306	1078	0.001	- C1	176745.2500	0.0000
8.179	8.306	257	2.428E-4	- C1	176745.2500	0.0000
8.241	8.306	1135	0.001	- C1	176745.2500	0.0000
8.330	8.306	2260	0.002	- C1	176745.2500	0.0000
8.703	8.306	5463	0.005	- C1	176745.2500	0.0000
9.454	8.306	156023	0.147	- C1	176745.2500	0.0000
9.619	8.306	7136	0.007	- C1	176745.2500	0.0000
9.921	8.306	1290	0.001	- C1	176745.2500	0.0000
10.023	8.306	511	4.820E-4	- C1	176745.2500	0.0000
11.766	8.306	1034	9.754E-4	- C1	176745.2500	0.0000
16.214	16.287	7344499	8.221	n-OCTACOSANE	148898.0156	0.0000
17.161	17.233	6974830	7.338	TRIACONTANE	158425.2031	0.0000

Totals		
Unknowns	421089952	N/A
Quantified	15749093	16.907
Grand Total	436839040	16.907

Reported on 2-SEP-1997 at 20:04

ANALYSIS SUMMARY

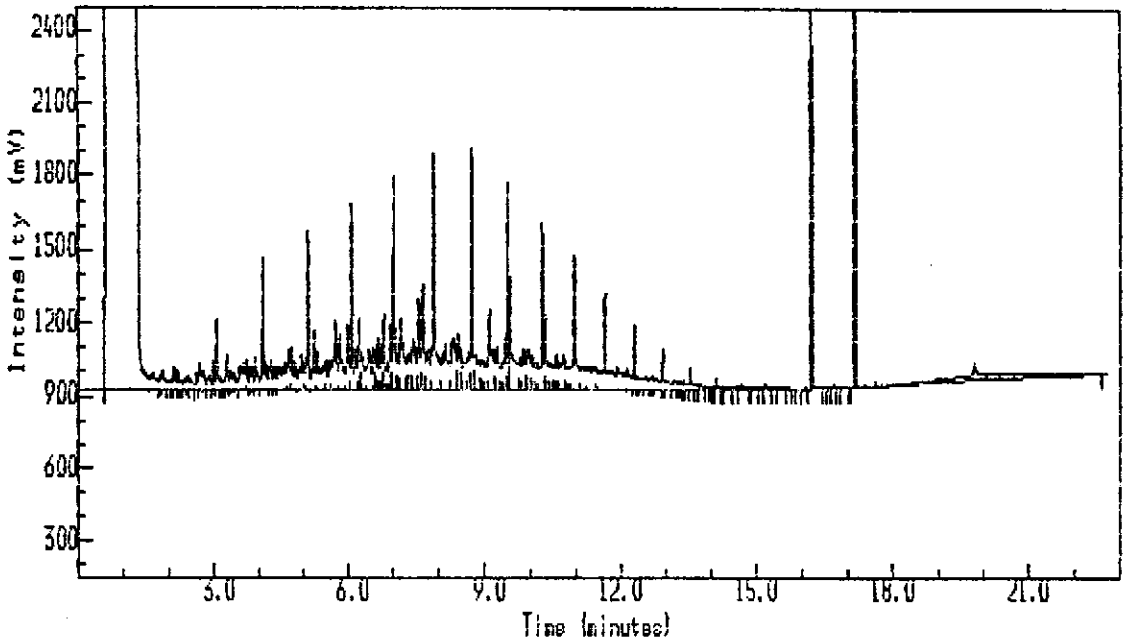
Method.......................... DRO
Run sequence.................... DRO
Calibration..................... DRO0397
External standard calibration using area
Calibration last modified on 31-JUL-1997 at 13:47

Uncalibrated peaks use user factor (0.0000)

Reported on 2-SEP-1997 at 20:35

Injection Report

Acquired on 2-SEP-1997 at 20:11



Intertek Testing Services - Environmental Laboratories

Analyst Name : VHLOGAN
Lims Id :
Comment : TPH BY 8015
Method Title : TPH BY METHOD 8015 mod
Sample Name : BS 30/5 AC193-83
Sample Id :
Sample Type : Sample Amount=2.00000
Bottle No : 22

TPH 68.9 mg/Kg
Surr 80.7%
VHL 9-3-97

PEAK INFORMATION

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
	8.306	73114960	68.946	TPH AS DIESEL	176745.2500	0.0000
2.770	8.306	299554	0.282	- C1	176745.2500	0.0000
2.899	8.306	311851	0.294	- C1	176745.2500	0.0000
2.979	8.306	261008	0.246	- C1	176745.2500	0.0000
3.059	8.306	607093	0.572	- C1	176745.2500	0.0000
3.152	8.306	113949	0.107	- C1	176745.2500	0.0000
3.201	8.306	106489	0.100	- C1	176745.2500	0.0000
3.290	8.306	444070	0.419	- C1	176745.2500	0.0000
3.366	8.306	199804	0.188	- C1	176745.2500	0.0000
3.410	8.306	157759	0.149	- C1	176745.2500	0.0000
3.454	8.306	240367	0.227	- C1	176745.2500	0.0000
3.583	8.306	394032	0.372	- C1	176745.2500	0.0000
3.650	8.306	343038	0.323	- C1	176745.2500	0.0000

Reported on 2-SEP-1997 at 20:35

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
3.721	8.306	282933	0.267	- C1	176745.2500	0.0000
3.788	8.306	203095	0.192	- C1	176745.2500	0.0000
3.854	8.306	305492	0.288	- C1	176745.2500	0.0000
3.921	8.306	466491	0.440	- C1	176745.2500	0.0000
4.090	8.306	1141372	1.076	- C1	176745.2500	0.0000
4.170	8.306	240741	0.227	- C1	176745.2500	0.0000
4.277	8.306	444189	0.419	- C1	176745.2500	0.0000
4.334	8.306	359977	0.339	- C1	176745.2500	0.0000
4.432	8.306	428197	0.404	- C1	176745.2500	0.0000
4.606	8.306	653452	0.616	- C1	176745.2500	0.0000
4.694	8.306	652951	0.616	- C1	176745.2500	0.0000
4.748	8.306	427629	0.403	- C1	176745.2500	0.0000
4.814	8.306	322628	0.304	- C1	176745.2500	0.0000
4.966	8.306	699658	0.660	- C1	176745.2500	0.0000
5.019	8.306	253413	0.239	- C1	176745.2500	0.0000
5.112	8.306	1373662	1.295	- C1	176745.2500	0.0000
5.250	8.306	760085	0.717	- C1	176745.2500	0.0000
5.330	8.306	631410	0.595	- C1	176745.2500	0.0000
5.481	8.306	459270	0.433	- C1	176745.2500	0.0000
5.517	8.306	331961	0.313	- C1	176745.2500	0.0000
5.583	8.306	262773	0.248	- C1	176745.2500	0.0000
5.730	8.306	1370784	1.293	- C1	176745.2500	0.0000
5.828	8.306	1099140	1.036	- C1	176745.2500	0.0000
6.001	8.306	1059632	0.999	- C1	176745.2500	0.0000
6.090	8.306	1275322	1.203	- C1	176745.2500	0.0000
6.166	8.306	516968	0.487	- C1	176745.2500	0.0000
6.246	8.306	816462	0.770	- C1	176745.2500	0.0000
6.317	8.306	609268	0.575	- C1	176745.2500	0.0000
6.486	8.306	966737	0.912	- C1	176745.2500	0.0000
6.588	8.306	595581	0.562	- C1	176745.2500	0.0000
6.632	8.306	379619	0.358	- C1	176745.2500	0.0000
6.681	8.306	511172	0.482	- C1	176745.2500	0.0000
6.748	8.306	489543	0.462	- C1	176745.2500	0.0000
6.801	8.306	761113	0.718	- C1	176745.2500	0.0000
6.881	8.306	271955	0.256	- C1	176745.2500	0.0000
6.930	8.306	718663	0.678	- C1	176745.2500	0.0000
7.014	8.306	1896823	1.789	- C1	176745.2500	0.0000
7.099	8.306	407459	0.384	- C1	176745.2500	0.0000
7.166	8.306	1501305	1.416	- C1	176745.2500	0.0000
7.303	8.306	349193	0.329	- C1	176745.2500	0.0000
7.370	8.306	612999	0.578	- C1	176745.2500	0.0000
7.441	8.306	1037307	0.978	- C1	176745.2500	0.0000
7.566	8.306	1120104	1.056	- C1	176745.2500	0.0000
7.659	8.306	1363113	1.285	- C1	176745.2500	0.0000
7.748	8.306	740711	0.698	- C1	176745.2500	0.0000
7.890	8.306	2935303	2.768	- C1	176745.2500	0.0000
8.134	8.306	1536044	1.448	- C1	176745.2500	0.0000
8.317	8.306	1497331	1.412	- C1	176745.2500	0.0000
8.419	8.306	722871	0.682	- C1	176745.2500	0.0000
8.477	8.306	406277	0.383	- C1	176745.2500	0.0000
8.552	8.306	513199	0.484	- C1	176745.2500	0.0000
8.659	8.306	698073	0.658	- C1	176745.2500	0.0000
8.717	8.306	1833804	1.729	- C1	176745.2500	0.0000

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
8.806	8.306	864917	0.816	- C1	176745.2500	0.0000
8.890	8.306	262101	0.247	- C1	176745.2500	0.0000
8.948	8.306	488670	0.461	- C1	176745.2500	0.0000
9.006	8.306	456801	0.431	- C1	176745.2500	0.0000
9.108	8.306	1523716	1.437	- C1	176745.2500	0.0000
9.219	8.306	397231	0.375	- C1	176745.2500	0.0000
9.281	8.306	582245	0.549	- C1	176745.2500	0.0000
9.348	8.306	327480	0.309	- C1	176745.2500	0.0000
9.450	8.306	737344	0.695	- C1	176745.2500	0.0000
9.503	8.306	1415436	1.335	- C1	176745.2500	0.0000
9.552	8.306	2014016	1.899	- C1	176745.2500	0.0000
9.774	8.306	457363	0.431	- C1	176745.2500	0.0000
9.841	8.306	606050	0.571	- C1	176745.2500	0.0000
9.899	8.306	358621	0.338	- C1	176745.2500	0.0000
9.983	8.306	799829	0.754	- C1	176745.2500	0.0000
10.041	8.306	515939	0.487	- C1	176745.2500	0.0000
10.130	8.306	445846	0.420	- C1	176745.2500	0.0000
10.254	8.306	1496780	1.411	- C1	176745.2500	0.0000
10.326	8.306	993334	0.937	- C1	176745.2500	0.0000
10.423	8.306	568040	0.536	- C1	176745.2500	0.0000
10.508	8.306	246856	0.233	- C1	176745.2500	0.0000
10.561	8.306	544182	0.513	- C1	176745.2500	0.0000
10.708	8.306	875949	0.826	- C1	176745.2500	0.0000
10.770	8.306	349032	0.329	- C1	176745.2500	0.0000
10.846	8.306	305240	0.288	- C1	176745.2500	0.0000
10.966	8.306	1869993	1.763	- C1	176745.2500	0.0000
11.121	8.306	690989	0.652	- C1	176745.2500	0.0000
11.254	8.306	586299	0.553	- C1	176745.2500	0.0000
11.401	8.306	468896	0.442	- C1	176745.2500	0.0000
11.459	8.306	261952	0.247	- C1	176745.2500	0.0000
11.534	8.306	409948	0.387	- C1	176745.2500	0.0000
11.650	8.306	848105	0.800	- C1	176745.2500	0.0000
11.734	8.306	332861	0.314	- C1	176745.2500	0.0000
11.792	8.306	394851	0.372	- C1	176745.2500	0.0000
11.908	8.306	542097	0.511	- C1	176745.2500	0.0000
12.063	8.306	330933	0.312	- C1	176745.2500	0.0000
12.134	8.306	529909	0.500	- C1	176745.2500	0.0000
12.303	8.306	540420	0.510	- C1	176745.2500	0.0000
12.361	8.306	140063	0.132	- C1	176745.2500	0.0000
12.432	8.306	252264	0.238	- C1	176745.2500	0.0000
12.552	8.306	321126	0.303	- C1	176745.2500	0.0000
12.623	8.306	159777	0.151	- C1	176745.2500	0.0000
12.699	8.306	133699	0.126	- C1	176745.2500	0.0000
12.757	8.306	334903	0.316	- C1	176745.2500	0.0000
12.926	8.306	324486	0.306	- C1	176745.2500	0.0000
13.006	8.306	224703	0.212	- C1	176745.2500	0.0000
13.152	8.306	170512	0.161	- C1	176745.2500	0.0000
13.237	8.306	105491	0.099	- C1	176745.2500	0.0000
13.308	8.306	70733	0.067	- C1	176745.2500	0.0000
13.366	8.306	83917	0.079	- C1	176745.2500	0.0000
13.419	8.306	93401	0.088	- C1	176745.2500	0.0000
13.526	8.306	205557	0.194	- C1	176745.2500	0.0000
13.632	8.306	94129	0.089	- C1	176745.2500	0.0000

Reported on 2-SEP-1997 at 20:35

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
13.739	8.306	100044	0.094	- C1	176745.2500	0.0000
13.890	8.306	65617	0.062	- C1	176745.2500	0.0000
16.214	16.287	6820485	7.634	n-OCTACOSANE	148898.0156	0.0000
17.161	17.233	6385092	6.717	TRIACONTANE	158425.2031	0.0000

Totals		
Unknowns	396349504	N/A
Quantified	86320536	83.297
Grand Total	482670048	83.297

ANALYSIS SUMMARY

Method.......................... DRO
Run sequence.................... DRO
Calibration..................... DRO0397
External standard calibration using area
Calibration last modified on 31-JUL-1997 at 13:47

Uncalibrated peaks use user factor (0.0000)

ITS Intertek Testing Services
Environmental Laboratories

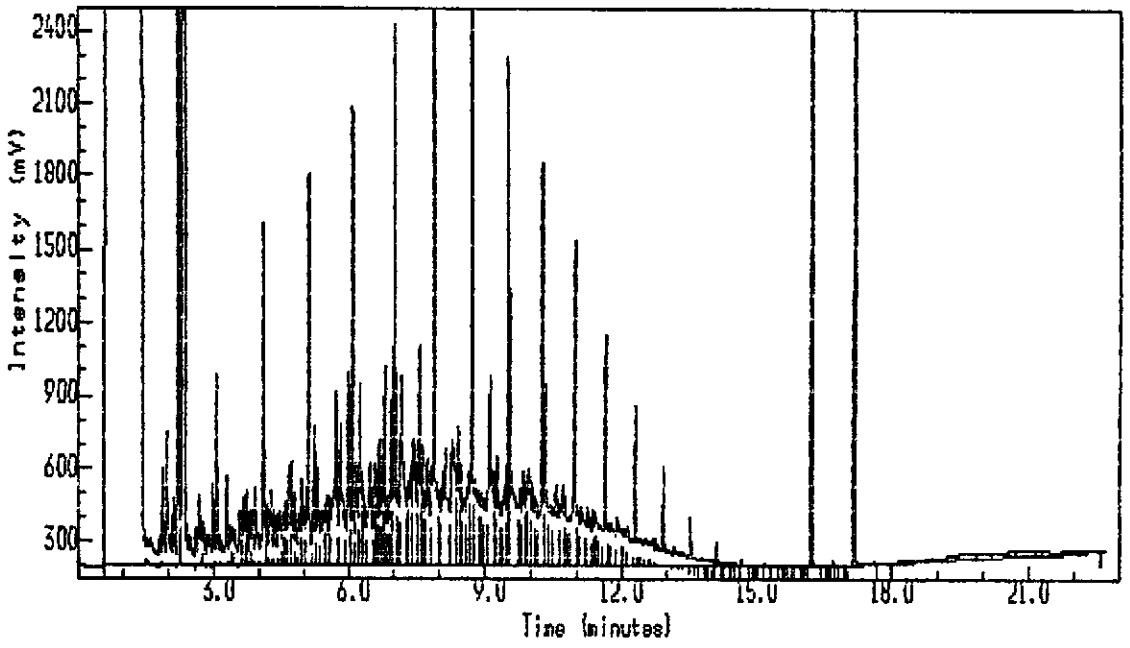
CALIBRATION DATA

Intertek Testing Services NA Inc.
1089 East Collins Boulevard Richardson, TX 75081
Telephone (972) 238-5591 Fax (972) 238-5592

Reported on 2-SEP-1997 at 19:33

Injection Report

Acquired on 2-SEP-1997 at 19:10



Intertek Testing Services - Environmental Laboratories

Analyst Name : VHLOGAN
Lims Id :
Comment : TPH BY 8015
Method Title : TPH BY METHOD 8015 mod
Sample Name : 1000 UG/ML DIESEL STD.
Sample Id :
Sample Type : Sample Amount=2.00000
Bottle No : 7

PEAK INFORMATION

vth 9-3-97

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
	8.306	179236480	1014.095	TPH AS DIESEL 101%	176745.2500	0.0000
2.774	8.306	700437	3.963	- C1	176745.2500	0.0000
2.903	8.306	741151	4.193	- C1	176745.2500	0.0000
2.983	8.306	653184	3.696	- C1	176745.2500	0.0000
3.063	8.306	1518591	8.592	- C1	176745.2500	0.0000
3.157	8.306	270801	1.532	- C1	176745.2500	0.0000
3.206	8.306	223947	1.267	- C1	176745.2500	0.0000
3.294	8.306	1115542	6.312	- C1	176745.2500	0.0000
3.370	8.306	441569	2.498	- C1	176745.2500	0.0000
3.414	8.306	419588	2.374	- C1	176745.2500	0.0000
3.459	8.306	555856	3.145	- C1	176745.2500	0.0000
3.592	8.306	1041373	5.892	- C1	176745.2500	0.0000
3.650	8.306	829974	4.696	- C1	176745.2500	0.0000

Reported on 2-SEP-1997 at 19:33

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
3.726	8.306	671390	3.799	- C1	176745.2500	0.0000
3.788	8.306	476802	2.698	- C1	176745.2500	0.0000
3.854	8.306	762454	4.314	- C1	176745.2500	0.0000
3.921	8.306	1151693	6.516	- C1	176745.2500	0.0000
4.094	8.306	2867814	16.226	- C1	176745.2500	0.0000
4.174	8.306	547338	3.097	- C1	176745.2500	0.0000
4.277	8.306	1119657	6.335	- C1	176745.2500	0.0000
4.339	8.306	855659	4.841	- C1	176745.2500	0.0000
4.463	8.306	992140	5.613	- C1	176745.2500	0.0000
4.539	8.306	596658	3.376	- C1	176745.2500	0.0000
4.606	8.306	1048185	5.930	- C1	176745.2500	0.0000
4.694	8.306	1607348	9.094	- C1	176745.2500	0.0000
4.752	8.306	1059152	5.993	- C1	176745.2500	0.0000
4.819	8.306	806754	4.565	- C1	176745.2500	0.0000
4.912	8.306	858420	4.857	- C1	176745.2500	0.0000
4.966	8.306	1442840	8.163	- C1	176745.2500	0.0000
5.117	8.306	3396612	19.218	- C1	176745.2500	0.0000
5.254	8.306	1846890	10.449	- C1	176745.2500	0.0000
5.330	8.306	1190312	6.735	- C1	176745.2500	0.0000
5.481	8.306	1505631	8.519	- C1	176745.2500	0.0000
5.521	8.306	826055	4.674	- C1	176745.2500	0.0000
5.583	8.306	656311	3.713	- C1	176745.2500	0.0000
5.730	8.306	3430779	19.411	- C1	176745.2500	0.0000
5.832	8.306	2719538	15.387	- C1	176745.2500	0.0000
6.001	8.306	2704345	15.301	- C1	176745.2500	0.0000
6.090	8.306	3133651	17.730	- C1	176745.2500	0.0000
6.161	8.306	1328034	7.514	- C1	176745.2500	0.0000
6.246	8.306	2113562	11.958	- C1	176745.2500	0.0000
6.317	8.306	1434820	8.118	- C1	176745.2500	0.0000
6.486	8.306	2407357	13.620	- C1	176745.2500	0.0000
6.588	8.306	1454514	8.229	- C1	176745.2500	0.0000
6.632	8.306	1010915	5.720	- C1	176745.2500	0.0000
6.686	8.306	1271354	7.193	- C1	176745.2500	0.0000
6.748	8.306	1125517	6.368	- C1	176745.2500	0.0000
6.806	8.306	1911057	10.812	- C1	176745.2500	0.0000
6.881	8.306	711995	4.028	- C1	176745.2500	0.0000
6.934	8.306	1672577	9.463	- C1	176745.2500	0.0000
7.019	8.306	4821094	27.277	- C1	176745.2500	0.0000
7.103	8.306	989189	5.597	- C1	176745.2500	0.0000
7.161	8.306	3748613	21.209	- C1	176745.2500	0.0000
7.308	8.306	867317	4.907	- C1	176745.2500	0.0000
7.370	8.306	1535144	8.686	- C1	176745.2500	0.0000
7.441	8.306	2584393	14.622	- C1	176745.2500	0.0000
7.570	8.306	2837335	16.053	- C1	176745.2500	0.0000
7.637	8.306	1318219	7.458	- C1	176745.2500	0.0000
7.694	8.306	884045	5.002	- C1	176745.2500	0.0000
7.748	8.306	1797316	10.169	- C1	176745.2500	0.0000
7.890	8.306	6454606	36.519	- C1	176745.2500	0.0000
8.010	8.306	862298	4.879	- C1	176745.2500	0.0000
8.134	8.306	3755086	21.246	- C1	176745.2500	0.0000
8.299	8.306	3762624	21.288	- C1	176745.2500	0.0000
8.423	8.306	1800126	10.185	- C1	176745.2500	0.0000
8.481	8.306	1007914	5.703	- C1	176745.2500	0.0000

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
8.566	8.306	1288140	7.288	- C1	176745.2500	0.0000
8.659	8.306	1818482	10.289	- C1	176745.2500	0.0000
8.721	8.306	4449057	25.172	- C1	176745.2500	0.0000
8.783	8.306	2148851	12.158	- C1	176745.2500	0.0000
8.890	8.306	658576	3.726	- C1	176745.2500	0.0000
8.948	8.306	1213637	6.867	- C1	176745.2500	0.0000
9.006	8.306	1202472	6.803	- C1	176745.2500	0.0000
9.112	8.306	3697896	20.922	- C1	176745.2500	0.0000
9.223	8.306	988864	5.595	- C1	176745.2500	0.0000
9.281	8.306	1441682	8.157	- C1	176745.2500	0.0000
9.348	8.306	810594	4.586	- C1	176745.2500	0.0000
9.441	8.306	1506846	8.526	- C1	176745.2500	0.0000
9.508	8.306	3637245	20.579	- C1	176745.2500	0.0000
9.552	8.306	4832371	27.341	- C1	176745.2500	0.0000
9.774	8.306	1135096	6.422	- C1	176745.2500	0.0000
9.846	8.306	1559185	8.822	- C1	176745.2500	0.0000
9.903	8.306	804366	4.551	- C1	176745.2500	0.0000
9.983	8.306	1972608	11.161	- C1	176745.2500	0.0000
10.046	8.306	1143584	6.470	- C1	176745.2500	0.0000
10.108	8.306	1236015	6.993	- C1	176745.2500	0.0000
10.259	8.306	3671677	20.774	- C1	176745.2500	0.0000
10.326	8.306	2383106	13.483	- C1	176745.2500	0.0000
10.432	8.306	1464529	8.286	- C1	176745.2500	0.0000
10.561	8.306	1933134	10.937	- C1	176745.2500	0.0000
10.708	8.306	2100660	11.885	- C1	176745.2500	0.0000
10.770	8.306	801739	4.536	- C1	176745.2500	0.0000
10.850	8.306	795696	4.502	- C1	176745.2500	0.0000
10.970	8.306	3752762	21.233	- C1	176745.2500	0.0000
11.037	8.306	923383	5.224	- C1	176745.2500	0.0000
11.112	8.306	1310207	7.413	- C1	176745.2500	0.0000
11.210	8.306	486435	2.752	- C1	176745.2500	0.0000
11.254	8.306	1380090	7.808	- C1	176745.2500	0.0000
11.366	8.306	593299	3.357	- C1	176745.2500	0.0000
11.406	8.306	576843	3.264	- C1	176745.2500	0.0000
11.459	8.306	635186	3.594	- C1	176745.2500	0.0000
11.526	8.306	950758	5.379	- C1	176745.2500	0.0000
11.650	8.306	2121628	12.004	- C1	176745.2500	0.0000
11.712	8.306	680154	3.848	- C1	176745.2500	0.0000
11.779	8.306	1049571	5.938	- C1	176745.2500	0.0000
11.903	8.306	1417165	8.018	- C1	176745.2500	0.0000
12.028	8.306	754612	4.269	- C1	176745.2500	0.0000
12.126	8.306	1192848	6.749	- C1	176745.2500	0.0000
12.303	8.306	1358860	7.688	- C1	176745.2500	0.0000
12.361	8.306	343269	1.942	- C1	176745.2500	0.0000
12.414	8.306	628572	3.556	- C1	176745.2500	0.0000
12.512	8.306	755207	4.273	- C1	176745.2500	0.0000
12.628	8.306	275331	1.558	- C1	176745.2500	0.0000
12.699	8.306	481292	2.723	- C1	176745.2500	0.0000
12.757	8.306	820027	4.640	- C1	176745.2500	0.0000
12.930	8.306	787350	4.455	- C1	176745.2500	0.0000
13.006	8.306	594301	3.362	- C1	176745.2500	0.0000
13.152	8.306	590830	3.343	- C1	176745.2500	0.0000
13.312	8.306	239867	1.357	- C1	176745.2500	0.0000

Reported on 2-SEP-1997 at 19:33

RT mins	RT Exp	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
13.366	8.306	442431	2.503	- C1	176745.2500	0.0000
13.530	8.306	508110	2.875	- C1	176745.2500	0.0000
13.628	8.306	236055	1.336	- C1	176745.2500	0.0000
13.739	8.306	266127	1.506	- C1	176745.2500	0.0000
13.894	8.306	134342	0.760	- C1	176745.2500	0.0000
16.219	16.287	8171751	54.882	n-OCTACOSANE 109.8%	148898.0156	0.0000
17.166	17.233	7341938	46.343	TRIACONTANE 92.6%	158425.2031	0.0000

Totals		
Unknowns	480414784	N/A
Quantified	194750160	1115.320
Grand Total	675164928	1115.320

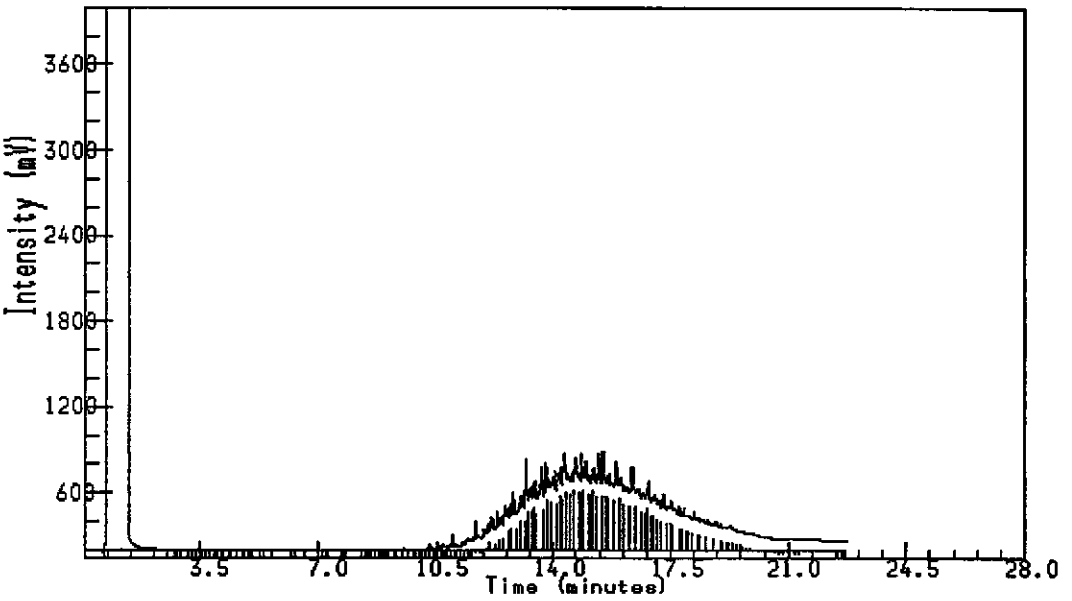
ANALYSIS SUMMARY

Method..... DRO
Run sequence..... DRO
Calibration..... DRO0397
External standard calibration using area
Calibration last modified on 31-JUL-1997 at 13:47

Uncalibrated peaks use user factor (0.0000)

Injectio

cquired on 3-SEP-1997 at 09:00



Intertek Testing Services - Environmental Laboratories

nalyst Name : VHLOGAN
Lims Id :
Comment : TPH BY 8015
ethod Title : TPH BY METHOD 8015 mod
ample Name : 1000 UG/ML MOTOR OIL STD. AC018-58-1
Sample Id :
Sample Type : Sample Amount=2.00000
ottle No : 3

PEAK INFORMATION

VH 9-3-97

RT mins	RT Corr	RT Exp	Hght uV	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
		15.630	30037532	189946064	1044.252	MOTOR OIL 1040	181896.6875	0.0000
9.792	9.792	15.630	4319	28297	0.156	- C1	181896.6875	0.0000
9.859	9.859	15.630	7068	21784	0.120	- C1	181896.6875	0.0000
9.961	9.961	15.630	9603	60005	0.330	- C1	181896.6875	0.0000
10.054	10.054	15.630	8377	22673	0.125	- C1	181896.6875	0.0000
10.148	10.148	15.630	10537	51732	0.284	- C1	181896.6875	0.0000
10.268	10.268	15.630	41572	135336	0.744	- C1	181896.6875	0.0000
10.339	10.339	15.630	35585	102491	0.563	- C1	181896.6875	0.0000
10.446	10.446	15.630	14709	77696	0.427	- C1	181896.6875	0.0000
10.561	10.561	15.630	24570	151093	0.831	- C1	181896.6875	0.0000
10.677	10.677	15.630	43911	142775	0.785	- C1	181896.6875	0.0000
10.721	10.721	15.630	43155	96449	0.530	- C1	181896.6875	0.0000

RT mins	RT Corr	RT Exp	Hght uV	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
10.770	10.770	15.630	32743	108470	0.596	- C1	181896.6875	0.0000
10.930	10.930	15.630	44962	271644	1.493	- C1	181896.6875	0.0000
10.983	10.983	15.630	106403	255958	1.407	- C1	181896.6875	0.0000
11.068	11.068	15.630	44941	187091	1.029	- C1	181896.6875	0.0000
11.268	11.268	15.630	61180	669710	3.682	- C1	181896.6875	0.0000
11.419	11.419	15.630	85334	372222	2.046	- C1	181896.6875	0.0000
11.472	11.472	15.630	80816	286707	1.576	- C1	181896.6875	0.0000
11.557	11.557	15.630	80599	376949	2.072	- C1	181896.6875	0.0000
11.663	11.663	15.630	208332	710671	3.907	- C1	181896.6875	0.0000
11.717	11.717	15.630	112161	505739	2.780	- C1	181896.6875	0.0000
11.801	11.801	15.630	101398	332955	1.830	- C1	181896.6875	0.0000
11.926	11.926	15.630	156692	1379607	7.585	- C1	181896.6875	0.0000
12.077	12.077	15.630	188545	825167	4.536	- C1	181896.6875	0.0000
12.139	12.139	15.630	236355	1734745	9.537	- C1	181896.6875	0.0000
12.317	12.317	15.630	276104	1100442	6.050	- C1	181896.6875	0.0000
12.419	12.419	15.630	230910	1459053	8.021	- C1	181896.6875	0.0000
12.561	12.561	15.630	311133	2923553	16.073	- C1	181896.6875	0.0000
12.712	12.712	15.630	321020	1448977	7.966	- C1	181896.6875	0.0000
12.770	12.770	15.630	412759	2558675	14.067	- C1	181896.6875	0.0000
12.943	12.943	15.630	332605	1835181	10.089	- C1	181896.6875	0.0000
13.023	13.023	15.630	388223	2886050	15.866	- C1	181896.6875	0.0000
13.166	13.166	15.630	639938	3216231	17.682	- C1	181896.6875	0.0000
13.330	13.330	15.630	442282	2983629	16.403	- C1	181896.6875	0.0000
13.388	13.388	15.630	480882	1479554	8.134	- C1	181896.6875	0.0000
13.437	13.437	15.630	488998	1957432	10.761	- C1	181896.6875	0.0000
13.646	13.646	15.630	586144	6218128	34.185	- C1	181896.6875	0.0000
13.757	13.757	15.630	612084	3542955	19.478	- C1	181896.6875	0.0000
13.877	13.877	15.630	507401	2261180	12.431	- C1	181896.6875	0.0000
14.032	14.032	15.630	557686	5309473	29.189	- C1	181896.6875	0.0000
14.166	14.166	15.630	549628	3555324	19.546	- C1	181896.6875	0.0000
14.250	14.250	15.630	583457	2802025	15.404	- C1	181896.6875	0.0000
14.321	14.321	15.630	681540	3902460	21.454	- C1	181896.6875	0.0000
14.446	14.446	15.630	547952	2890898	15.893	- C1	181896.6875	0.0000
14.503	14.503	15.630	519802	1462494	8.040	- C1	181896.6875	0.0000
14.566	14.566	15.630	546676	2053344	11.289	- C1	181896.6875	0.0000
14.614	14.614	15.630	570091	1693735	9.312	- C1	181896.6875	0.0000
14.672	14.672	15.630	656673	4388404	24.126	- C1	181896.6875	0.0000
14.792	14.792	15.630	548572	2082479	11.449	- C1	181896.6875	0.0000
14.863	14.863	15.630	685722	3201967	17.603	- C1	181896.6875	0.0000
14.979	14.979	15.630	629624	6152448	33.824	- C1	181896.6875	0.0000
15.121	15.121	15.630	518631	1473308	8.100	- C1	181896.6875	0.0000
15.174	15.174	15.630	575301	1960657	10.779	- C1	181896.6875	0.0000
15.232	15.232	15.630	579931	2991338	16.445	- C1	181896.6875	0.0000
15.388	15.388	15.630	674538	5687804	31.269	- C1	181896.6875	0.0000
15.517	15.517	15.630	695888	5061192	27.825	- C1	181896.6875	0.0000
15.637	15.637	15.630	523342	2107696	11.587	- C1	181896.6875	0.0000
15.708	15.708	15.630	540470	4228587	23.247	- C1	181896.6875	0.0000
15.894	15.894	15.630	621137	4955231	27.242	- C1	181896.6875	0.0000
16.046	16.046	15.630	509576	4664542	25.644	- C1	181896.6875	0.0000
16.174	16.174	15.630	447835	3712897	20.412	- C1	181896.6875	0.0000
16.379	16.379	15.630	584034	5119168	28.143	- C1	181896.6875	0.0000
16.570	16.570	15.630	438410	4654203	25.587	- C1	181896.6875	0.0000
16.690	16.690	15.630	407490	2679633	14.732	- C1	181896.6875	0.0000

RT mins	RT Corr	RT Exp	Hght uV	Area uVs	Mg/L-Mg/Kg	Peak name	RF slope	RF intercept
16.792	16.792	15.630	426349	1797858	9.884	- C1	181896.6875	0.0000
16.850	16.850	15.630	482465	2657453	14.610	- C1	181896.6875	0.0000
16.970	16.970	15.630	381199	1825647	10.037	- C1	181896.6875	0.0000
17.054	17.054	15.630	393597	2307203	12.684	- C1	181896.6875	0.0000
17.179	17.179	15.630	352241	2457659	13.511	- C1	181896.6875	0.0000
17.303	17.303	15.630	401334	2826390	15.538	- C1	181896.6875	0.0000
17.428	17.428	15.630	317368	2208014	12.139	- C1	181896.6875	0.0000
17.521	17.521	15.630	356616	1925170	10.584	- C1	181896.6875	0.0000
17.628	17.628	15.630	300764	2373361	13.048	- C1	181896.6875	0.0000
17.752	17.752	15.630	315026	1794279	9.864	- C1	181896.6875	0.0000
17.903	17.903	15.630	306808	2087807	11.478	- C1	181896.6875	0.0000
17.979	17.979	15.630	251407	1122781	6.173	- C1	181896.6875	0.0000
18.050	18.050	15.630	250265	1698284	9.337	- C1	181896.6875	0.0000
18.183	18.183	15.630	266775	2226411	12.240	- C1	181896.6875	0.0000
18.317	18.317	15.630	229823	1289927	7.092	- C1	181896.6875	0.0000
18.414	18.414	15.630	225271	2250058	12.370	- C1	181896.6875	0.0000
18.601	18.601	15.630	221766	2382790	13.100	- C1	181896.6875	0.0000
18.779	18.779	15.630	188281	583857	3.210	- C1	181896.6875	0.0000
18.872	18.872	15.630	205535	1925983	10.588	- C1	181896.6875	0.0000
19.001	19.001	15.630	188874	1146397	6.302	- C1	181896.6875	0.0000
19.108	19.108	15.630	172853	882768	4.853	- C1	181896.6875	0.0000
19.210	19.210	15.630	165969	735273	4.042	- C1	181896.6875	0.0000
19.281	19.281	15.630	173048	1308498	7.194	- C1	181896.6875	0.0000
19.401	19.401	15.630	157548	1114866	6.129	- C1	181896.6875	0.0000
19.526	19.526	15.630	144490	645419	3.548	- C1	181896.6875	0.0000
19.570	19.570	15.630	141903	699468	3.845	- C1	181896.6875	0.0000
19.663	19.663	15.630	134789	869923	4.783	- C1	181896.6875	0.0000
19.806	19.806	15.630	127698	1023131	5.625	- C1	181896.6875	0.0000
19.930	19.930	15.630	124084	2418817	13.298	- C1	181896.6875	0.0000
20.259	20.259	15.630	102025	509351	2.800	- C1	181896.6875	0.0000
20.366	20.366	15.630	100590	1800353	9.898	- C1	181896.6875	0.0000
20.641	20.641	15.630	88455	577401	3.174	- C1	181896.6875	0.0000
20.761	20.761	15.630	85868	697915	3.837	- C1	181896.6875	0.0000
20.894	20.894	15.630	83760	1576840	8.669	- C1	181896.6875	0.0000
21.294	21.294	15.630	81381	729622	4.011	- C1	181896.6875	0.0000
21.481	21.481	15.630	82950	1898766	10.439	- C1	181896.6875	0.0000

Totals			
Unknowns	10242587	408063840	N/A
Quantified	30037532	189946064	1044.252
Grand Total	40280120	598009920	1044.252

ANALYSIS SUMMARY

Method..... DROXTEND
Run sequence..... DRO
Calibration..... MOIL3597
External standard calibration using area
Calibration last modified on 7-MAR-1997 at 13:05

Uncalibrated peaks use user factor (0.0000)