

## Site Assessment Report

Heating oil spill at the Travelodge Hotel  
9200 Glacier Highway  
Juneau, Alaska

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Excavation to remove the leaking UST, September 15, 2000.

ADEC/SPAR/PERP  
Rec'd @ SAPT 4/11/01 dL

## Overview

Passersby noticed an oily sheen on Duck Creek where it meets the Mendenhall River near the Juneau Airport on September 1, 2000. The spill was reported to the Alaska Department of Environmental Conservation (ADEC) and to the United States Coast Guard (USCG) Marine Safety Office. Personnel from both agencies responded to the reported spill and deployed oil absorbent materials in various locations in Duck Creek to collect the fuel.

leathrbam  
PERA

The USCG and ADEC traced the diesel (heating oil) to a culvert flowing into Duck Creek from the Travelodge parking lot, and followed the fuel through the storm sewer to the rear of the Travelodge building. No fuel was found in the storm sewer upstream of the Travelodge. A suspect underground storage tank (UST), containing heating oil for the Travelodge, was located within 60 feet of the storm sewer.

## Spill Response

The Travelodge Hotel contracted Channel Construction to remove the UST and Smith Bayliss LeResche Inc (SBL) to perform the site assessment during cleanup. Channel Construction removed the 600-gallon UST from the site on September 15, 2000. We found the single-walled steel tank in poor condition, with numerous corrosion holes in the bottom of the tank.

Channel Construction used sorbent materials to soak up free product present in the excavation area and began removing the oily dirt. All diesel-contaminated soil removed from the UST area was stored on site in a stockpile cell lined and covered with 10-mil polyethylene plastic. Channel Construction constructed the cell on the asphalt parking lot, using timbers to shore up the sides of the stockpile. We were not able to complete the excavation work at the site on September 15. Upon returning to the site on the morning of the morning of the 16<sup>th</sup>, we found about 15 gallons of diesel in the excavation. Channel collected this material using sorbent pads.

Channel removed about 160 cubic yards of diesel-contaminated soil from the Travelodge site during the remediation work on September 15 and 16, 2000. This material was stockpiled at the site, awaiting acceptance at United Soil Recycling's (USR) Juneau facility. Channel Construction hauled the contaminated soil to USR on December 1, 2000 for thermal remediation.

SBL personnel monitored the site and sorbent locations on Duck Creek daily to change out sorbent pads and prevent the further escape of petroleum. Diesel continued to show up in the storm sewer basin after the tank removal and excavation work was completed. On September 23, Channel Construction installed an oil/water separator in the lines running from beneath the Travelodge to the storm sewer culvert. We did not see any more product in the storm sewer culvert or Duck Creek after the installation of the oily water separator. After several weeks of diminishing recovery downstream, we removed all downstream sorbent booms from Duck Creek, with the approval of ADEC and the USCG.

Monitoring of the oily water separator turned up about two to three gallons of diesel per day for the first two weeks after installation. The lines that fed the oily water separator were believed to be foundation drain lines, but upon further investigation, were plumbed to a sump in a crawlspace under the Travelodge building. Upon entering the crawlspace, we found about 60 gallons of diesel fuel floating above the water that had pooled on top of the vapor barrier in the crawlspace. Al Kegler and Jason Ginter, SBL, used sorbent pads to collect the diesel.



We also used water to flush the plastic vapor barrier and to wash any remaining fuel from the soils to our collection point at the crawlspace sump and oily water separator. Continued monitoring of the oil/water separator after this event showed greatly reduced amounts of free product in the separator, from a few gallons per day to less than a quart per week to an unrecoverable iridescent sheen at the time of this report. The oily water separator remains in place, with sorbent pads in the separator to collect any petroleum that might collect there. The Travelodge maintenance personnel monitor the separator on a weekly basis.

The attached site sketch shows the sample locations and petroleum-affected areas at the Travelodge. Because the contaminated lens continued under the building's foundation, Channel Construction was not able to remove all diesel-contaminated soils during the remediation work. Channel installed perforated piping along the building's foundation to help in aeration of the soil and to collect any product that may seep from beneath the foundation. This piping will also be used to add a slurry of high nitrogen quick release fertilizer to aid in the in-situ remediation of the contamination under the foundation.

The Travelodge maintenance personnel have also dug a trench in the crawlspace area to drain any accumulated water to the floor sump. The floor sump drains to the oily water separator; any product or sheen that may be transported by the rise and fall of water beneath the building will wind up in the separator either via the sump or from the perforated piping installed around the foundation.

During both the tank excavation and removal and for delineation of the affected area in the crawlspace, we used an HNU Systems Model PI-101 photoionization detector (PID) and the hot water sheen test for field screening purposes. After field screening showed reduced contaminant levels, or we had reached the feasible limits of the excavation, we took samples for laboratory analysis. We sent all analytical samples to Analytical Resources Inc (ARI) in Seattle. ARI analyzed these samples for diesel range organics (DRO) by method AK102. Sample results are listed in the following table; sample locations and depths can be found on the attached site sketch.

#### Sample Results in ppm

Sample ID	Sample Depth	Diesel range organics
TL-CL01	7 feet	72
<b>TL-CL02</b>	7 feet	<b>18,000</b>
<b>TL-CL03</b>	5 feet	<b>8,400</b>
TL-CL04	4 feet	37
TL-CL05	5 feet	14
TL-CL06	4.5 feet	92
TL-CL07	4.5 feet	50
TL-CL08	4.5 feet	37
<b>TL-CZ01*</b>	from removed soils	<b>22,000</b>
<b>TL-CS01**</b>	1.5 feet (crawlspace)	<b>5,800</b>
<b>TL-CS02**</b>	1.5 feet (crawlspace)	<b>6,900</b>

Results in **boldface** exceed the ADEC matrix cleanup level of 200 ppm.

\* This sample characterizes removed soils. \*\* These samples were taken from the crawlspace beneath the Travelodge.

All quality control indicators are within range and all sample results are deemed valid.

## **Conclusions**

The fuel present in Duck Creek in September 2000 came from the leaking heating oil UST at the Travelodge. ADEC and the USCG responded with sorbent materials to collect the fuel, and the Travelodge contracted SBL Inc to assess the spill area and to monitor cleanup actions. We removed the sorbents from all locations downstream of the oil/water separator at the Travelodge on October 28, 2000, at which point there was no recoverable product or oil sheen present on Duck Creek.

Contaminated soil remains at the site, under the buildings foundation and in the crawlspace at the northeast corner of the Travelodge building. High nitrogen, quick release fertilizer has been applied to the crawlspace material to aid in in-situ remediation. The perforated piping installed along the contaminated horizon along the north side of the building can be used for future nutrient addition as well as an oil intercept. The oil/water separator installed in the foundation drain piping, before the culvert at Lee Smith Drive, will remain in place in the event any further product or oily sheen should wash out from beneath the Travelodge building.

Due to the location of the remaining contaminated soils, full remediation may not be feasible at this site. The Travelodge maintenance personnel will continue to monitor the ground level ports in the perforated piping and the oily water separator.

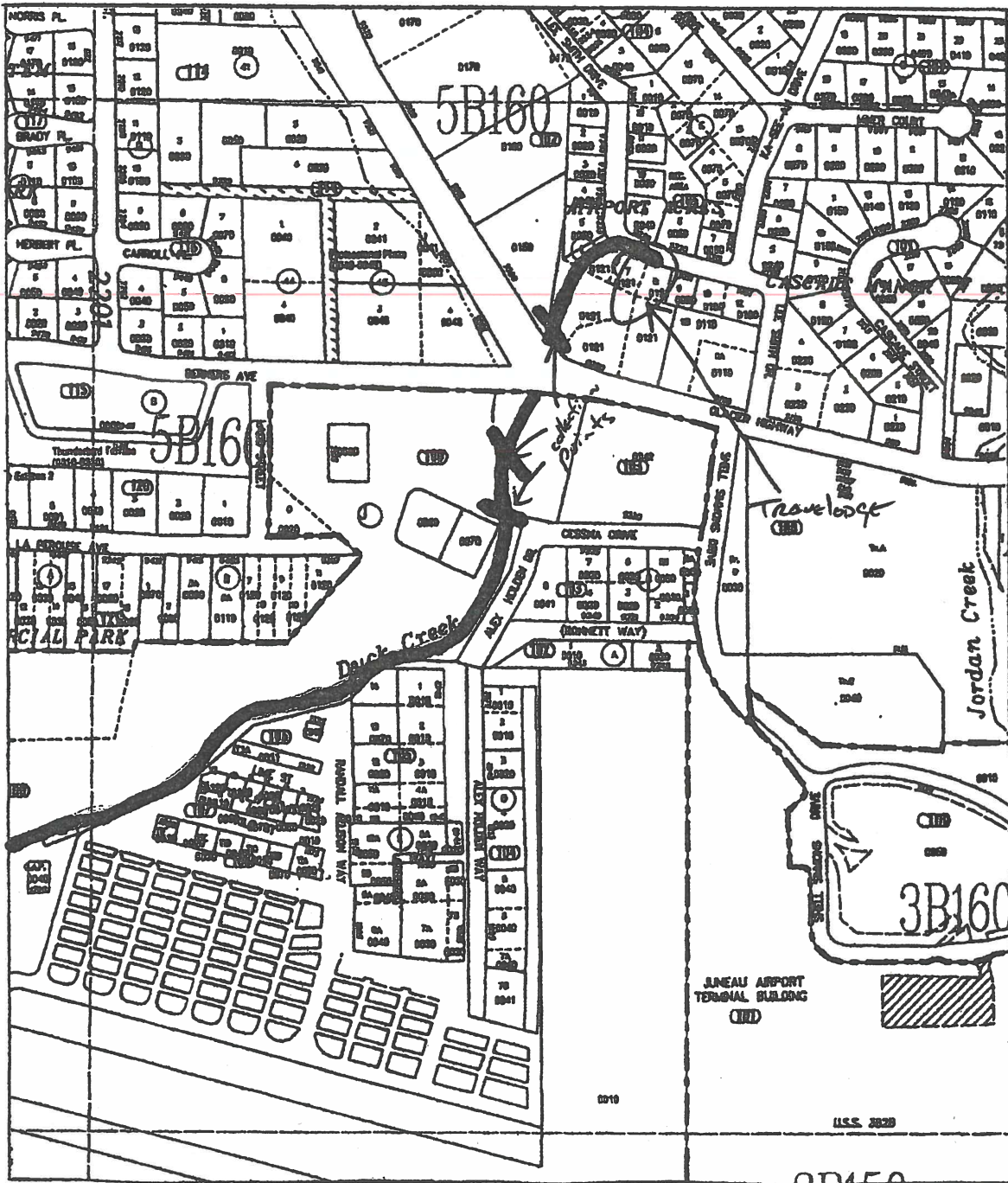


Smith Bayliss LeResche Inc by  
Jason Ginter  
Environmental Chemist  
5 April 2001



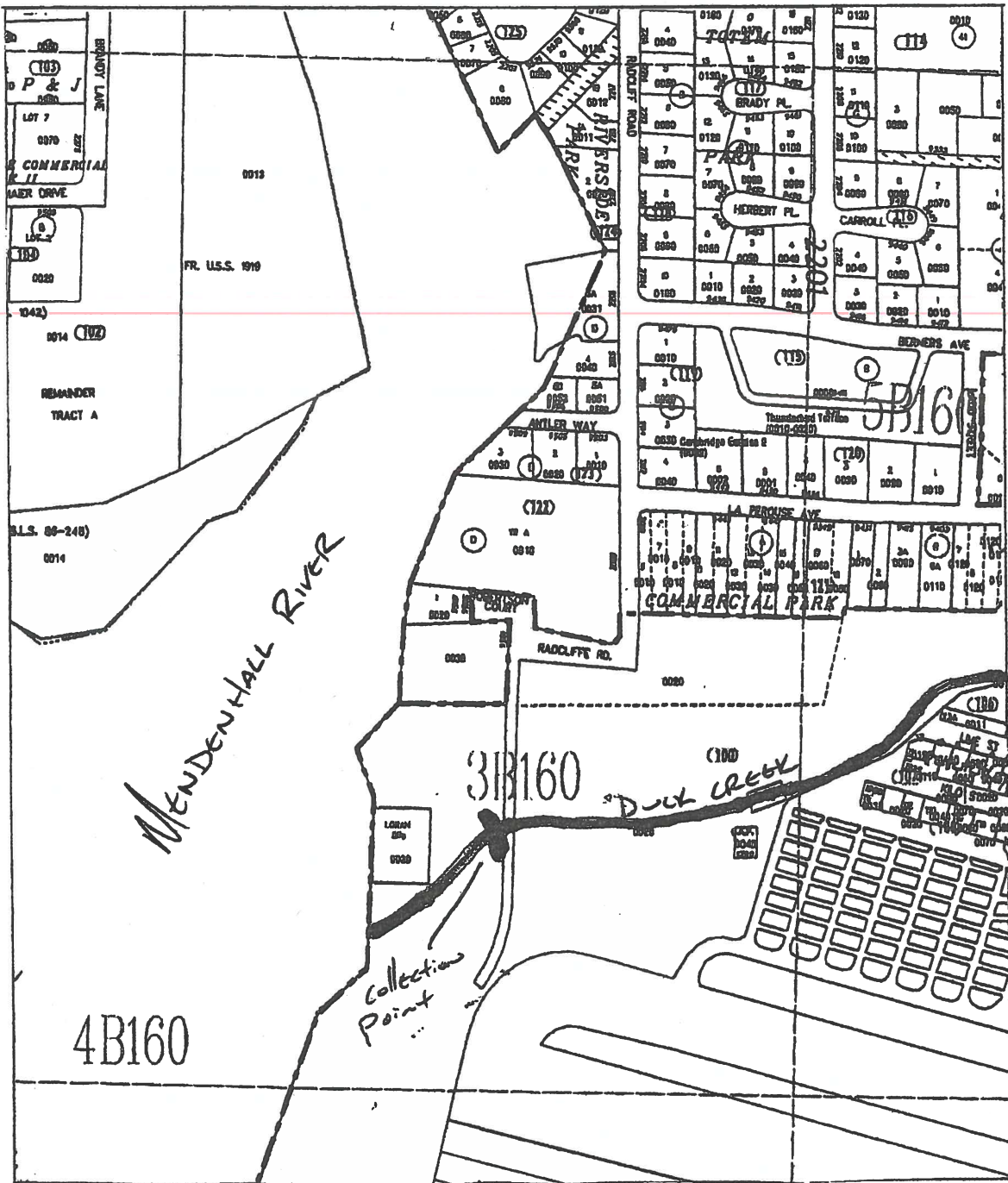


# Vicinity Map – Travelodge UST leak affected area



north

# Vicinity Map – Travelodge UST leak affected area



north ↑



**Vicinity Map**  
**Aerial photo showing the Travelodge Hotel and Duck Creek, Juneau, AK**



Taken from R&M Engineering's 4/22/98 aerial photograph.



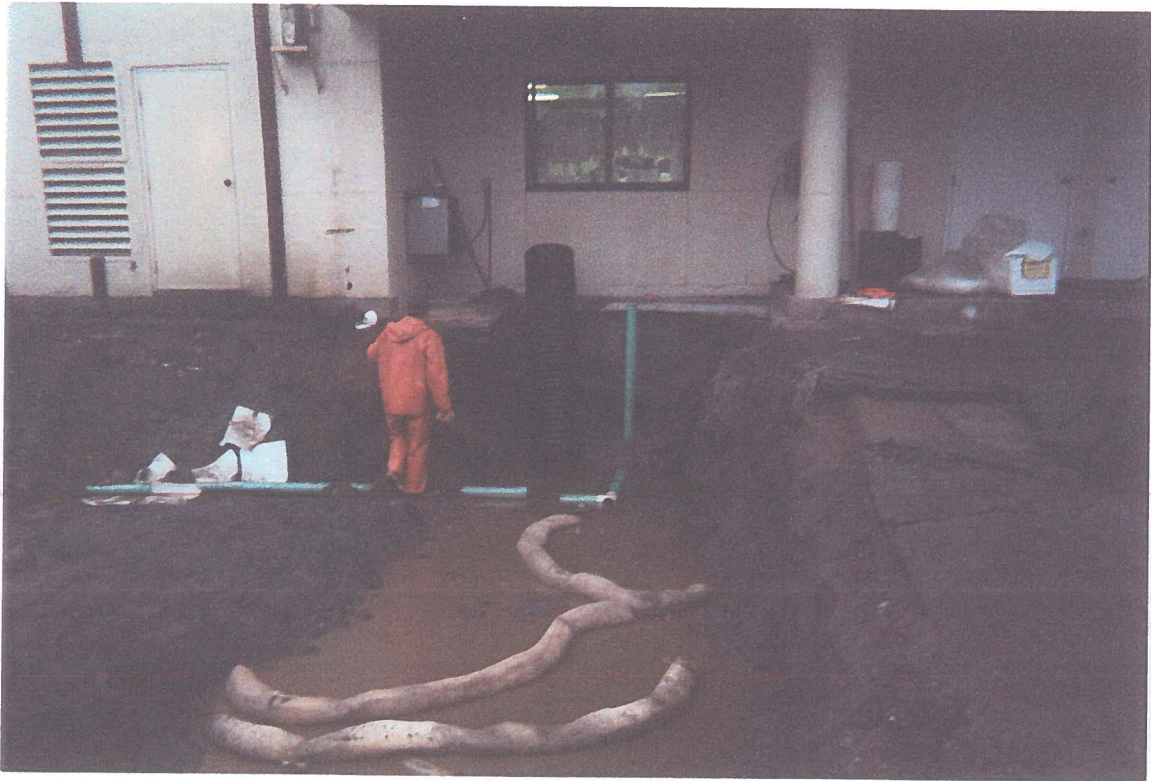


A Channel Construction worker uses a bucket to catch fuel leaking from the UST.



Contaminated soil excavation area, September 16, 2000.





Installing the perforated piping.



Backfilling the contaminated soil excavation area, note piping monitoring ports.





Sorbent boom and sweep deployed near the mouth of Duck Creek.



ADEC and USF&WS personnel inspect sorbent boom in Duck Creek at Cessna Dr culvert.





Contaminated soil stockpile in the Travelodge parking lot.



Oil/water separator, late September 2000.





**Analytical Resources, Incorporated**  
Analytical Chemists and Consultants

October 30, 2000

Jason Ginter  
Smith, Bayliss, LaResche  
Suite 10  
119 Seward St.  
Juneau, AK 99801

**RE: Client Project: Travelodge Spill**  
**ARI Project No: CI34**

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Dear Jason:

Please find enclosed the original Chain-of-Custody record (COC) and the final results for the sample from the project referenced above. Analytical Resources, Inc. (ARI) received one soil sample on October 17, 2000. ARI received the sample intact and there were no discrepancies in the paperwork.

The sample was analyzed for DRO/AK102 as requested.

The analyst who performed the DRO analysis noted that sample **TL-CZ01** has a pattern in the diesel range that does not resemble the standard pattern, but could possibly be a heavy diesel.

No analytical complications were noted. A copy of these reports will be kept on file by ARI. Should you have any questions regarding these results, please feel free to call me at any time.

Sincerely,

ANALYTICAL RESOURCES, INC.

*Mary Lou Fox*  
Mary Lou Fox  
Project Manager  
206-389-6155  
e-mail [marylou@arilabs.com](mailto:marylou@arilabs.com)

MLF/si  
cc: file #CI34





**TOTAL DIESEL RANGE HYDROCARBONS  
AK102 TPHd Range C10 to C24 by GC/FID**

Matrix: Soil  
 QC Report No: CI34-Smith Bayliss LeResche Inc.  
 Project: Travelodge Spill

Data Release Authorized: *CIT*  
 Reported: 10/27/00 *plr/n* Date Received: 10/17/00

Lab ID	Client Sample ID	Date Extracted	Date Analyzed	Dilution Factor	Diesel Range Hydrocarbons	*Diesel ID	Surr Recovery
CI34-1020MB	Method Blank	10/20/00	10/26/00	1:1	5.0 U --		81.0%
CI34A	TL-CZ01	10/20/00	10/26/00	1:100	6900 NO		D

Values reported in ppm (mg/kg) on a dry weight basis.

Surrogate is Methyl-Arachidate.

\* In the opinion of the analyst, was there a pattern match for diesel (YES or NO).  
 Diesel quantitation on total peaks in the range from C10 to C24.

**Data Qualifiers**

- U Compound not detected at the given detection limit.
- J Indicates an estimated value below the calculated detection limit.
- S No value reported due to saturation of the detector. Dilution required.
- D Indicates the surrogate was not detected because of dilution of the extract.
- E Indicates a value above the linear range of the detector. Dilution required.
- NR Indicates no recovery due to matrix interference.
- B Indicates compound also detected in the method blank.

Method  
Blank

Analytical Resources Inc.  
NWTPH-D Quantitation Report

Data file: /chem2/fid3b.i/25oct00.b/1025b060.d  
Method: /chem2/fid3b.i/25oct00.b/tphfid3b.m  
Instrument: fid3b.i  
Operator: GSA  
Report Date: 10/26/2000  
Macro: FID:3B102400  
Calibration Dates: Gas:10/03/00 Diesel:10/24/00 M.Oil:10/18/00  
AK102:10/24/00

ARI ID: CI34 MBS10/20  
Client ID:  
Injection: 26-OCT-2000 08:10  
Dilution Factor: 1

Tazz-1B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.683	0.081	2045	196329	GAS (Tol-C12)	13728513	73
C8	1.981	-0.053	11367	1342862	DIESEL (C12-C24)	10209382	12
Solvent Peak	-----	-----	-----	-----	M.OIL (C24-C38)	5594016	7
C10	2.950	-0.037	3999	192206	AK-102 (C10-C24)	11176092	12
C12	-----	-----	-----	-----			
C14	3.939	0.012	3316	169460			
C16	-----	-----	-----	-----			
C18	-----	-----	-----	-----			
o-Terph Surr	4.832	0.028	12588	786487			
C20	5.083	-0.037	2625	143130			
C22	-----	-----	-----	-----			
ARACH-SURR	5.705	-0.003	364820	12587652			
C24	-----	-----	-----	-----			
C26	6.250	0.033	2085	102495			
C28	6.561	-0.006	4074	270273			
C30	-----	-----	-----	-----			
Filter Peak	7.931	-0.018	25603	1701835			
C32	7.295	0.001	5657	426585			
C34	-----	-----	-----	-----			
C36	8.026	0.027	3738	320788			
C38	-----	-----	-----	-----			
C40	8.679	0.015	2364	332650			

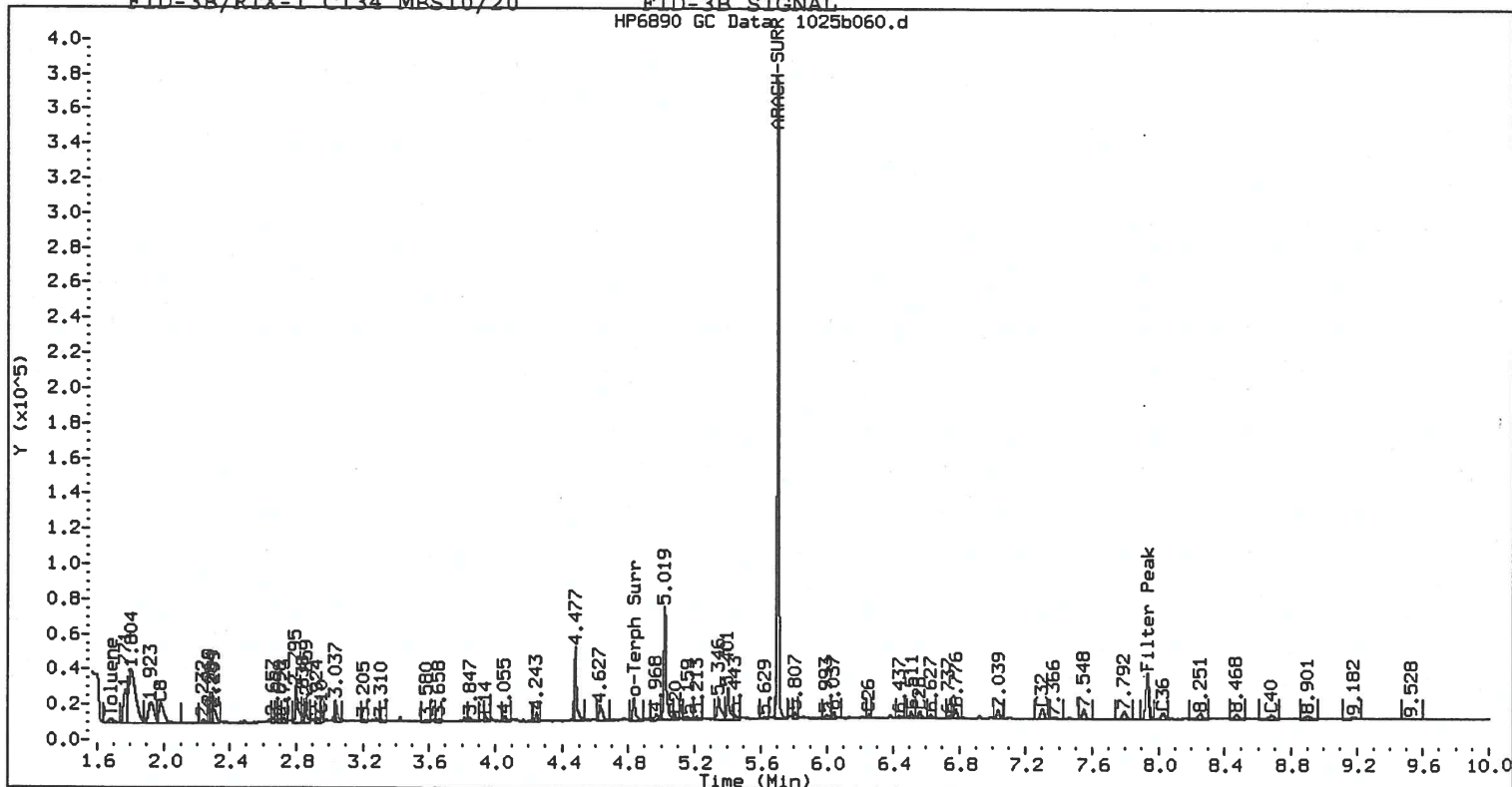
Me-Arach Surrogate Rec = 81%

NO

FID-3B/RTX-1 CI34 MBS10/20

FID-3B SIGNAL

HP6890 GC Data 1025b060.d





TL-C201

Analytical Resources Inc.  
NWTPH-D Quantitation Report

Data file: /chem2/fid3b.i/25oct00.b/1025b062.d  
Method: /chem2/fid3b.i/25oct00.b/tphfid3b.m  
Instrument: fid3b.i  
Operator: GSA  
Report Date: 10/26/2000  
Macro: FID:3B102400  
Calibration Dates: Gas:10/03/00 Diesel:10/24/00 M.Oil:10/18/00  
AK102:10/24/00

ARI ID: CI34 A 100x  
Client ID:  
Injection: 26-OCT-2000 08:50  
Dilution Factor: 1

Tazz-1B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	----				GAS (Tol-C12)	39839485	210
C8	----				DIESEL (C12-C24)	583764688	712
Solvent Peak	----				M.OIL (C24-C38)	9452932	12
C10	2.988	0.000	25447	581501	AK-102 (C10-C24)	621937506	671
C12	3.498	0.000	112448	3640673			
C14	3.926	-0.001	263233	9822585			
C16	4.325	0.001	416318	14589033			
C18	4.726	0.002	339390	14577555			
o-Terph Surr	4.802	-0.003	109592	4789829			
C20	5.119	-0.001	125152	8034782			
C22	5.498	-0.003	27784	3390098			
ARACH-SURR	5.709	0.001	10499	1118526			
C24	5.859	-0.006	8604	1114492			
C26	6.207	-0.010	2673	265155			
C28	6.562	-0.005	2043	148227			
C30	----						
Filter Peak	----						
C32	7.275	-0.018	18724	1191149			
C34	----						
C36	----						
C38	----						
C40	0.000	-8.663	0	0			

Me-Arach Surrogate Rec = 7% *D*

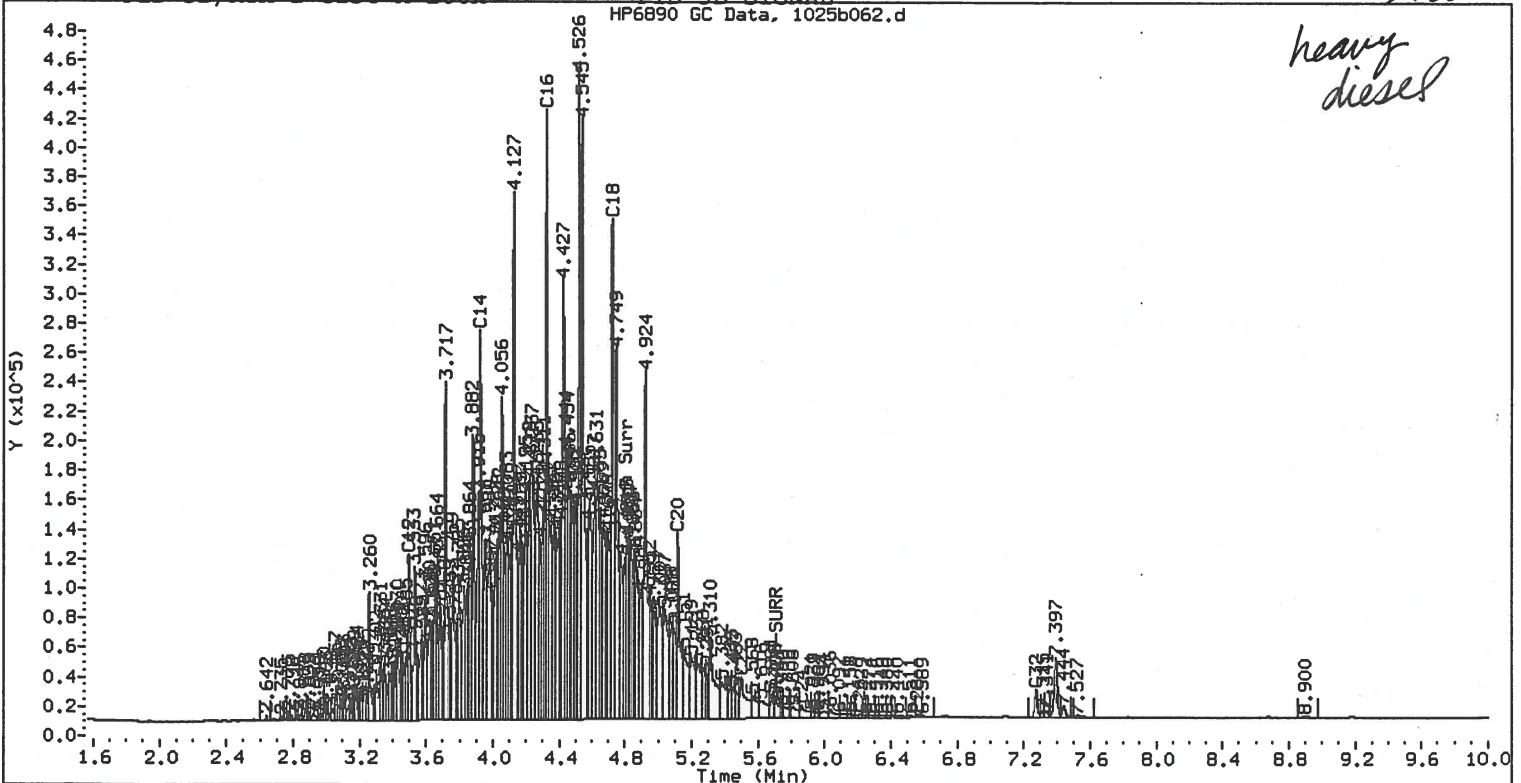
*DIESEL NO*

*heavy diesel*

FID-3B/RTX-1 CI34 A 100x

FID-3B SIGNAL

HP6890 GC Data, 1025b062.d



TOTAL DIESEL RANGE HYDROCARBONS  
AK102 TPHd Range C10 to C24 by GC/FID



Lab Sample ID: CI34SB                      QC Report No: CI34-Smith Bayliss LeResche Inc.  
LIMS ID: 00-19751                          Project: Travelodge Spill  
Matrix: Soil

Data Release Authorized: (1)  
Reported: 10/27/00                      10/27/00

LABORATORY CONTROL SAMPLE RECOVERY REPORT

Date extracted: 10/20/00  
Date analyzed: 10/26/00

CONSTITUENT	SPIKE FOUND	SPIKE ADDED	% RECOVERY
Diesel Range Hydrocarbons	46.6	50.0	93.2%

TPHd Surrogate Recovery

Methylarachidate                      78.0%

Values reported in ppm (mg/kg) on a dry weight basis.



Spike  
Blank

Analytical Resources Inc.  
NWTPH-D Quantitation Report

Data file: /chem2/fid3b.i/25oct00.b/1025b061.d  
 Method: /chem2/fid3b.i/25oct00.b/tphfid3b.m  
 Instrument: fid3b.i  
 Operator: GSA  
 Report Date: 10/26/2000  
 Macro: FID:3B102400  
 Calibration Dates: Gas:10/03/00 Diesel:10/24/00 M.Oil:10/18/00  
 AK102:10/24/00

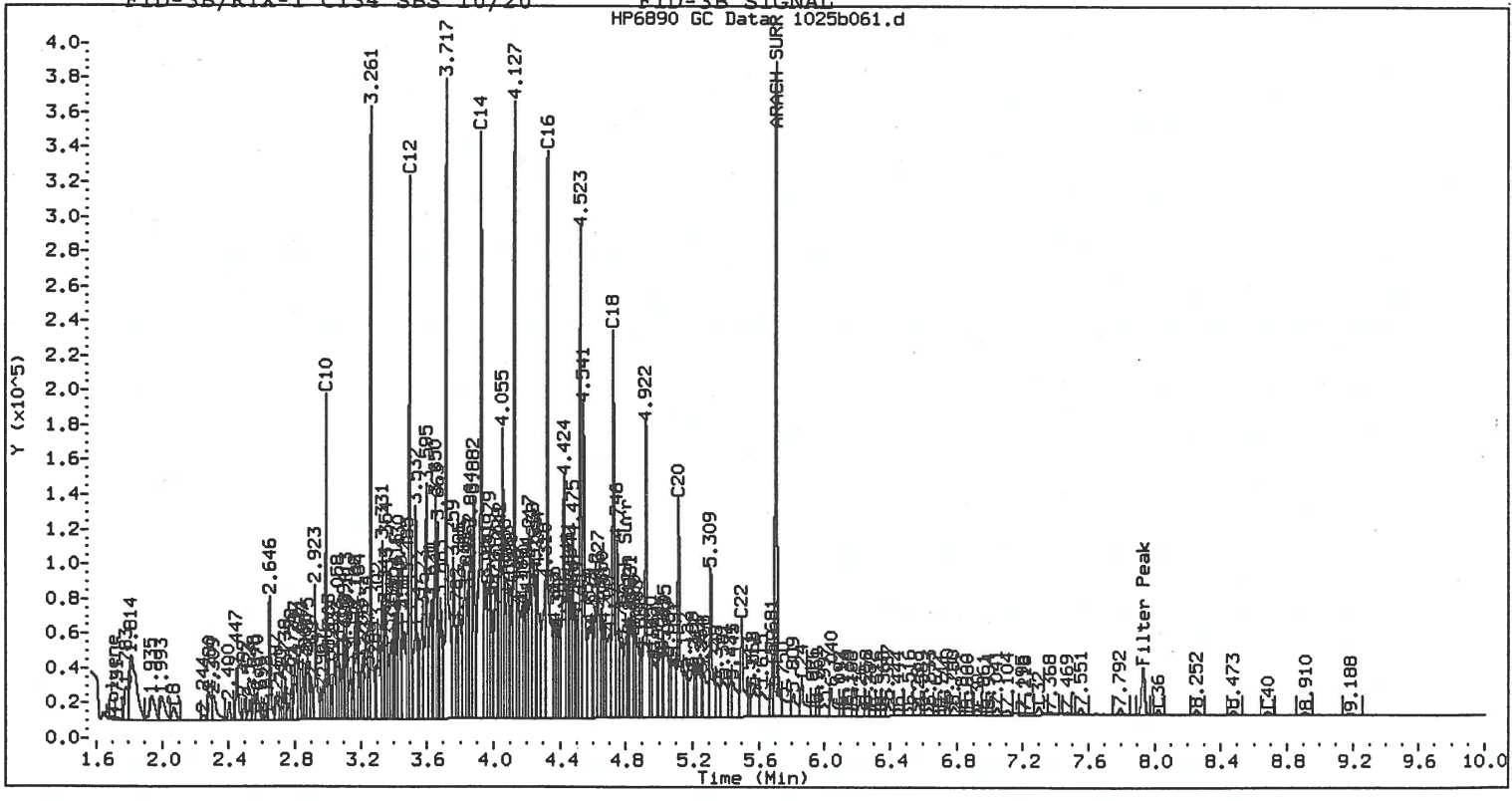
ARI ID: CI34 SBS 10/20  
 Client ID:  
 Injection: 26-OCT-2000 08:30  
 Dilution Factor: 1

Tazz-1B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.701	0.100	1751	147282	GAS (Tol-C12)	112258262	593
C8	2.069	0.035	7645	674469	DIESEL (C12-C24)	354209418	432
Solvent Peak	----				M.OIL (C24-C38)	17411990	23
C10	2.989	0.002	186808	3658063	AK-102 (C10-C24)	431656246	466
C12	3.498	0.000	311746	7914992			
C14	3.926	-0.001	337033	15559579			
C16	4.324	0.000	326558	12936847			
C18	4.723	-0.001	222952	8409563			
o-Terph Surr	4.798	-0.006	46716	2261567			
C20	5.117	-0.003	126387	6446507			
C22	5.497	-0.004	55677	3709442			
ARACH-SURR	5.706	-0.002	363647	12142267			
C24	5.861	-0.004	21620	1890284			
C26	6.214	-0.003	9103	778173			
C28	6.564	-0.002	7665	645494			
C30	6.922	-0.007	3619	311084			
Filter Peak	7.932	-0.018	26644	1774686			
C32	7.297	0.003	4415	493910			
C34	----						
C36	8.026	0.026	3262	254401	Me-Arach Surrogate Rec		78%
C38	----						
C40	8.686	0.022	2062	216191			

LCS

FID-3B/RTX-1 CI34 SBS 10/20 FID-3B SIGNAL  
 HP6890 GC Data 1025b061.d





**Analytical Resources, Incorporated**  
Analytical Chemists and Consultants

October 30, 2000

Jason Ginter  
Smith, Bayliss, LaResche  
Suite 10  
119 Seward St.  
Juneau, AK 99801

RE: Client Project: Travelodge Spill  
ARI Project No: CI36

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Dear Jason:

Please find enclosed the original Chain-of-Custody record (COC) and the final results for the sample from the project referenced above. Analytical Resources, Inc. (ARI) received nine soil samples on October 17, 2000. This data package is for the eight samples for which a standard turn-around-time was requested. ARI received the samples intact and there were no discrepancies in the paperwork.

The samples were analyzed for DRO/AK102 as requested.

The analyst who performed the DRO analysis noted that samples TL-CL01, TL-CL02, TL CL03, TL-CL04, TL-CL06, TL-CL067 and TL-08 have a pattern in the diesel range that does not resemble the standard pattern, but could possibly be a heavy diesel.

A matrix spike and matrix spike duplicate (MS/MSD) were performed on sample TL-CL02. The level of diesel spiked in the sample was too low relative to the native level of diesel range hydrocarbons to yield meaningful recoveries or a meaningful relative percent difference (RPD).

No further analytical complications were noted. A copy of these reports will be kept on file by ARI. Should you have any questions regarding these results, please feel free to call me at any time.

Sincerely,

ANALYTICAL RESOURCES, INC.

*Mary Lou Fox*  
Mary Lou Fox  
Project Manager  
206-389-6155  
e-mail [marylou@arilabs.com](mailto:marylou@arilabs.com)

MLF/sl  
cc: file #CI36



# Chain of Custody Record & Laboratory Analysis Request

Analytical Resources, Incorporated  
 Analytical Chemist and Consultants  
 400 Ninth Avenue North  
 Seattle, WA 98109-4708  
 (206) 621-6490  
 (206) 621-7523 (Fax)



80  
 G136 60-19759 to 00-19766

Date: 10/16/02 of 2  
 Page 1 of 2  
 Number of coolers: \_\_\_\_\_  
 Cooler Temp: \_\_\_\_\_

ARI Client: Smith Bayliss LeResche Phone#: 506 6813  
 Client Contact: JASON GINTER  
 Client Project ID: TRAVELLOG SPILL  
 Samplers: J. GINTER & Al Keegan

Sample ID	Date	Time	Matx	No Cont	Lab ID	Analysis Required	Notes/Comments
1 TL-CL01	10/10/02	1530	Soil	1			
2 TL-CL02	10/10/02	1538	Soil	1			
3 TL-CL03	10/10/02	1605	Soil	1			
4 TL-CL04	10/10/02	1615	Soil	1			
5 TL-CL05	10/11/02	0805	Soil	1			
6 TL-CL06	10/10/02	1530	Soil	1			
7 TL-CL07	10/11/02	1210	Soil	1			

ARI Project No: \_\_\_\_\_  
 Relinquished by: [Signature]  
 Printed Name: Jason Ginter  
 Company: SBC  
 Date: 10/16/02 Time: 1540  
 Relinquished by: [Signature]  
 Printed Name: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_

T.A.T. Requested: Normal - except TL-CL01  
 Comments/Special Instructions: Please Rush TL-CL01  
3 DAY TAT  
 Relinquished by: [Signature]  
 Printed Name: Elysebeth Joshi  
 Company: ELYSEBETH JOSHI  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following Standard Operating Procedures and our Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the client.

8.0

# Chain of Custody Record & Laboratory Analysis Request

**Analytical Resources, Incorporated**  
 Analytical Chemist and Consultants  
 400 Ninth Avenue North  
 Seattle, WA 98109-4708  
 (206) 621-6490  
 (206) 621-7523 (Fax)



Date: 10-16-00  
 Page 2 of 2  
 Number of coolers: \_\_\_\_\_  
 Cooler Temp: \_\_\_\_\_

ARI Client: <u>SBL</u>		Phone#: <u>507 586 6813</u>			
Client Contact: <u>J. GINTEN</u>					
Client Project ID: <u>Travelodge Spill</u>					
Samplers: <u>J. GINTEN &amp; A. Keyler</u>					
Sample ID	Date	Time	Matx Cont	No Cont	Lab ID
1 <u>TL-C208</u>	<u>10/16/00</u>	<u>1240</u>	<u>soil</u>	<u>1</u>	
2 <u>TL-C201</u>	<u>10/16/00</u>	<u>1500</u>	<u>soil</u>	<u>1</u>	
3					
4					
5					
6					
7					

Analysis Required		Notes/Comments	
<u>DRG</u>			
<u>AK/02</u>			
<u>1</u>			<u>Please 3 Day TAT.</u>
<u>1</u>			

ARI Project No:	Relinquished by: (Signature) <u>[Signature]</u>	Relinquished by: (Signature)
T.A.T. Requested: <u>Personal except TL-C201</u>	Printed Name: <u>JAN GINTEN</u>	Printed Name:
Comments/Special Instructions: <u>Please 3 Day TAT-C201</u>	Company: <u>SBL</u>	Company:
	Date: <u>10/16/00</u> Time: <u>1555</u>	Date: Time:
	Received by: (Signature) <u>[Signature]</u>	Received by: (Signature)
	Printed Name: <u>ELISABETH JOSEPH</u>	Printed Name:
	Company: <u>ARI</u>	Company:
	Date: <u>10/17/00</u> Time: <u>1000</u>	Date: Time:

**Limits of Liability:** ARI will perform all requested services in accordance with appropriate methodology following Standard Operating Procedures and our Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the client.



**TOTAL DIESEL RANGE HYDROCARBONS  
AK102 TPHd Range C10 to C24 by GC/FID**

Matrix: Soil  
 QC Report No: CI36-Smith Bayliss LeResche Inc.  
 Project: Travelodge Spill

Data Release Authorized: *CH*  
 Reported: 10/27/00 *WML*  
 Date Received: 10/17/00

Lab ID	Client Sample ID	Date Extracted	Date Analyzed	Dilution Factor	Diesel Range Hydrocarbons	*Diesel ID	Surr Recovery
CI36-1020MB	Method Blank	10/20/00	10/26/00	1:1	5.0 U --		93.0%
CI36A	TL-CL01	10/20/00	10/26/00	1:1	72	NO	86.0%
CI36B	TL-CL02	10/20/00	10/26/00	1:200	18000	NO	D
CI36C	TL-CL03	10/20/00	10/26/00	1:100	8400	NO	D
CI36D	TL-CL04	10/20/00	10/26/00	1:1	37	NO	77.0%
CI36E	TL-CL05	10/20/00	10/26/00	1:1	14	NO	90.0%
CI36F	TL-CL06	10/20/00	10/26/00	1:1	92	NO	87.0%
CI36F-LD	TL-CL06	10/20/00	10/26/00	1:1	78	NO	70.0%
CI36G	TL-CL07	10/20/00	10/26/00	1:1	50	NO	81.0%
CI36H	TL-CL08	10/20/00	10/26/00	1:1	37	NO	80.0%

Values reported in ppm (mg/kg) on a dry weight basis.

Surrogate is Methyl-Arachidate.

\* In the opinion of the analyst, was there a pattern match for diesel (YES or NO).  
 Diesel quantitation on total peaks in the range from C10 to C24.

**Data Qualifiers**

- U Compound not detected at the given detection limit.
- J Indicates an estimated value below the calculated detection limit.
- S No value reported due to saturation of the detector. Dilution required.
- D Indicates the surrogate was not detected because of dilution of the extract.
- E Indicates a value above the linear range of the detector. Dilution required.
- NR Indicates no recovery due to matrix interference.
- B Indicates compound also detected in the method blank.

Method  
Blank

Analytical Resources Inc.  
NWTPH-D Quantitation Report

Data file: /chem2/fid4a.i/26oct00.b/1026a006.d  
Method: /chem2/fid4a.i/26oct00.b/tphfid4a.m  
Instrument: fid4a.i  
Operator: GSA  
Report Date: 10/27/2000  
Macro: FID:4A101900

ARI ID: CI34 MBS10/20  
Client ID:  
Injection: 26-OCT-2000 10:08

Dilution Factor: 1

Calibration Dates: Gas:09/14/00 Diesel:10/19/00 M.Oil:10/19/00  
AK102:10/19/00 AK103:10/19/00

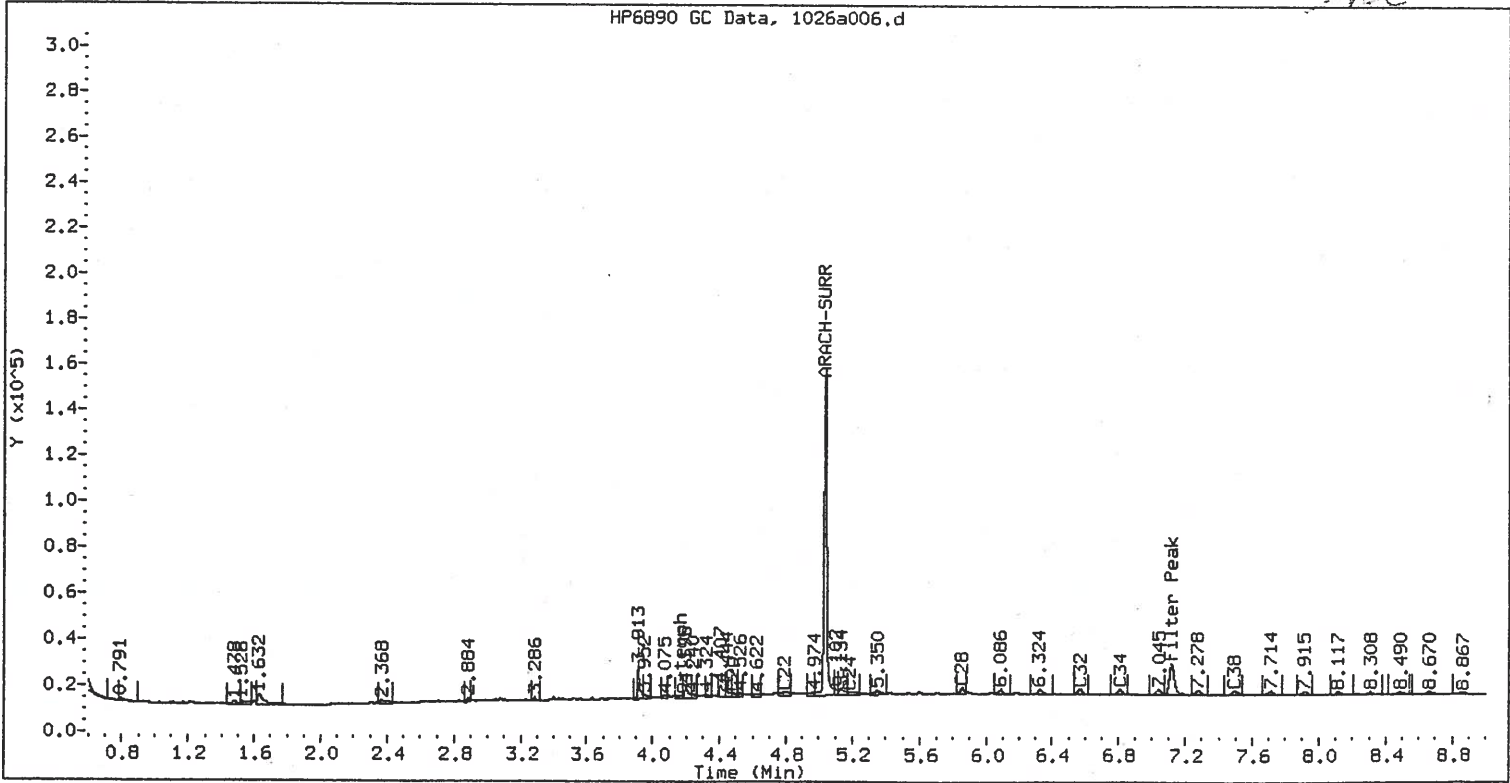
FID:4A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.365	0.037	2142	105294	GAS (Tol-C12)	9768829	42
C8	0.432	-0.022	4187	177672	DIESEL (C12-C24)	4087181	7
Solvent Peak	0.483	-0.002	114475	4665787	M.OIL (C24-C38)	3602707	8
C10	-----				AK-102 (C10-C24)	4414130	7
C12	-----				AK-103 (C24-C38)	3602707	8
C14	-----						
C16	-----						
C18	-----						
o-terph	4.165	-0.001	1206	113722			
C20	4.484	0.000	1474	115425			
C22	4.793	-0.049	1760	310090			
ARACH-SURR	5.038	-0.001	138566	8002991			
C24	5.189	-0.001	1291	216124			
C26	-----						
C28	5.855	-0.011	2545	227036			
C30	-----						
C32	6.571	0.049	2518	252685			
C34	6.811	-0.047	2178	233616			
Filter Peak	7.118	0.091	13586	1464110			
C36	-----						
C38	7.498	-0.019	1855	216048			
C40	-----						

Me-Arach Surrogate Rec = 93%

FID:4A-2C/RTX-1 CI34 MBS10/20

FID:4A SIGNAL





TL-C101

Analytical Resources Inc.  
NWTPH-D Quantitation Report

Data file: /chem2/fid4a.i/26oct00.b/1026a011.d  
Method: /chem2/fid4a.i/26oct00.b/tphfid4a.m  
Instrument: fid4a.i  
Operator: GSA  
Report Date: 10/27/2000  
Macro: FID:4A101900

ARI ID: CI36 A  
Client ID:  
Injection: 26-OCT-2000 11:48

Dilution Factor: 1

Calibration Dates: Gas:09/14/00 Diesel:10/19/00 M.Oil:10/19/00  
AK102:10/19/00 AK103:10/19/00

FID:4A RESULTS

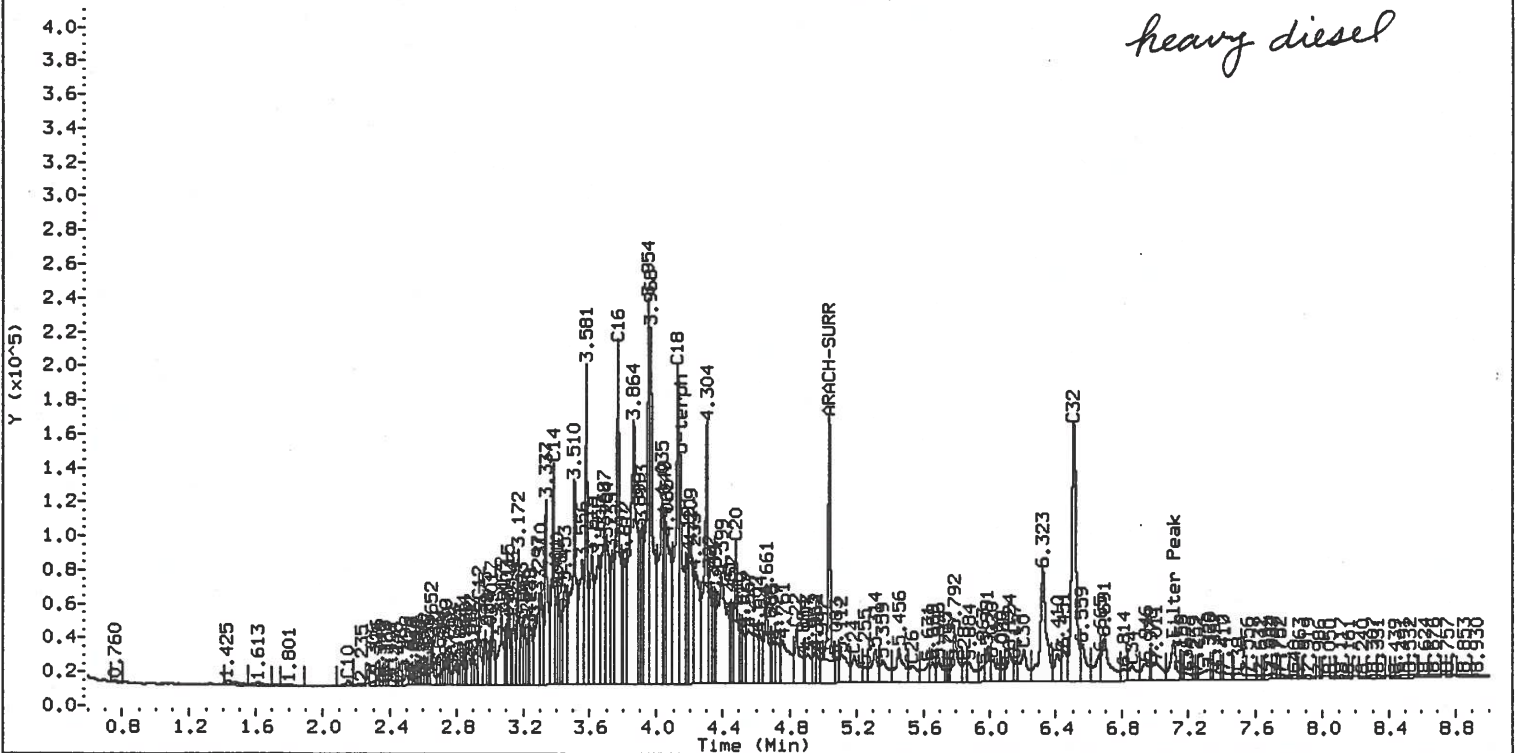
Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.368	0.040	23378	1322522	GAS (Tol-C12)	28618355	123
C8	0.415	-0.038	7982	260105	DIESEL (C12-C24)	339510432	585
Solvent Peak	0.482	-0.003	205488	8673082	M.OIL (C24-C38)	81089882	173
C10	2.152	0.007	3194	301735	AK-102 (C10-C24)	356653558	559
C12	2.938	0.000	49235	2209090	AK-103 (C24-C38)	81089882	173
C14	3.383	-0.001	129653	6794069			
C16	3.771	0.000	202094	15220233			
C18	4.128	-0.001	188452	14092962			
o-terph	4.147	-0.018	133900	10023072			
C20	4.482	-0.002	83656	6106846			
C22	4.840	-0.001	31810	3561272			
ARACH-SURR	5.037	-0.001	142831	7395717			
C24	5.187	-0.003	15698	2584038			
C26	5.535	0.000	9929	1705860			
C28	5.855	-0.011	11424	991255			
C30	6.211	0.023	18518	2700717			
C32	6.507	-0.015	151695	14195405			
C34	6.865	0.007	8807	1468179			
Filter Peak	7.115	-0.003	22900	2765404			
C36	7.188	-0.006	4333	697296			
C38	7.500	-0.016	3940	707369			
C40	7.834	0.004	2346	287791			

Me-Arach Surrogate Rec = 86%

FID:4A-2C/RTX-1 CI36 A

FID:4A SIGNAL

HP6890 GC Data, 1026a011.d



Analytical Resources Inc.  
 NWTPH-D Quantitation Report

TL-CLO2

Data file: /chem2/fid4a.i/26oct00.b/1026a022.d  
 Method: /chem2/fid4a.i/26oct00.b/tphfid4a.m  
 Instrument: fid4a.i  
 Operator: GSA  
 Report Date: 10/27/2000  
 Macro: FID:4A101900

ARI ID: CI36 B 200x  
 Client ID:  
 Injection: 26-OCT-2000 15:30

Dilution Factor: 1

Calibration Dates: Gas:09/14/00 Diesel:10/19/00 M.Oil:10/19/00  
 AK102:10/19/00 AK103:10/19/00

FID:4A RESULTS

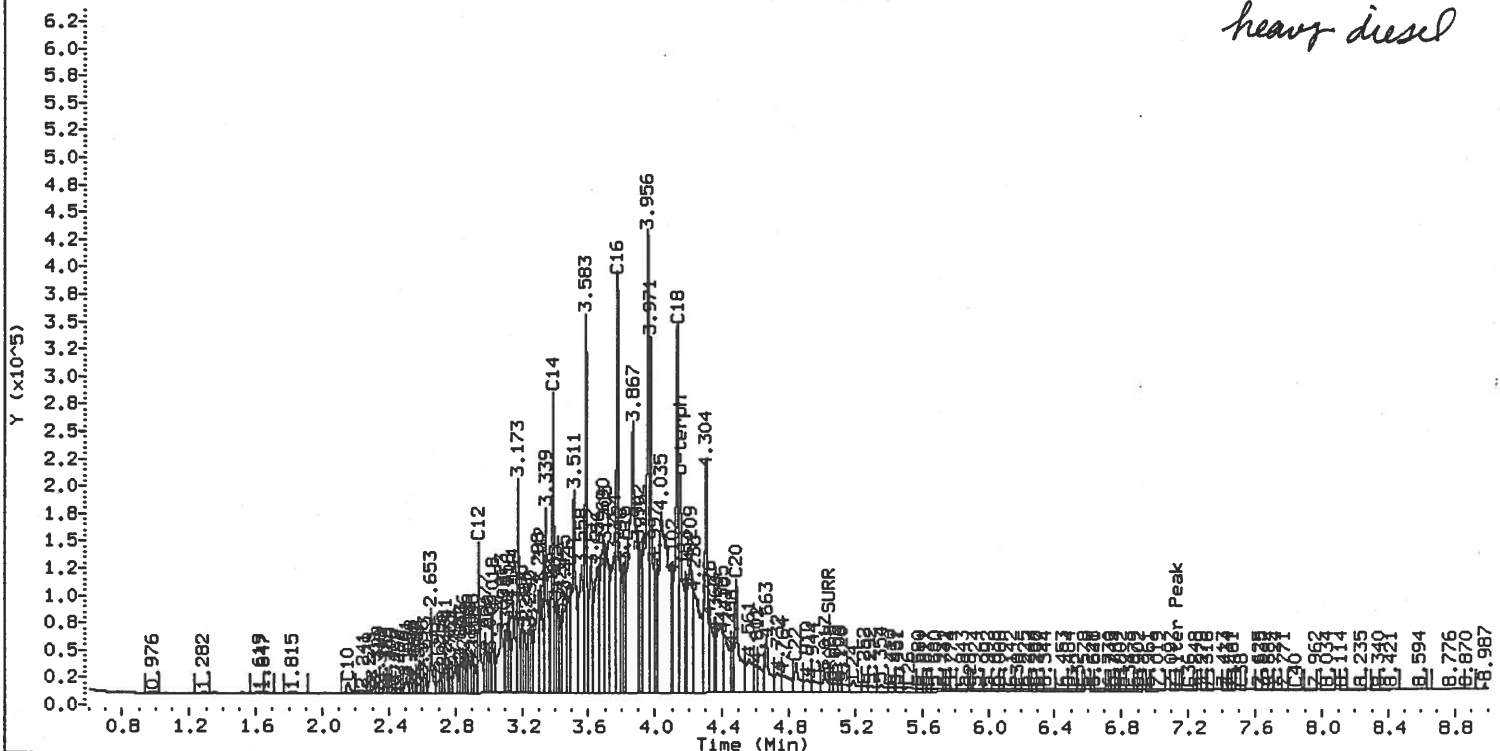
Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	----				GAS (Tol-C12)	45532198	196
C8	----				DIESEL (C12-C24)	487321864	840
Solvent Peak	0.483	-0.002	282326	11449565	M.OIL (C24-C38)	15783352	34
C10	2.155	0.009	9332	758829	AK-102 (C10-C24)	520655602	815
C12	2.939	0.001	137447	5272488	AK-103 (C24-C38)	15783352	34
C14	3.384	0.001	273739	11092821			
C16	3.773	0.003	385422	19025542			
C18	4.131	0.002	336946	18767634			
o-terph	4.149	-0.017	197549	14351650			
C20	4.483	-0.001	103259	9366433			
C22	4.841	-0.001	26840	2758610			
ARACH-SURR	5.043	0.005	286	3913			
C24	5.187	-0.003	9811	1486934			
C26	5.519	-0.015	4549	867462			
C28	5.890	0.023	2609	164115			
C30	6.180	-0.008	2397	284747			
C32	6.539	0.017	2215	168758			
C34	6.848	-0.010	1952	253729			
Filter Peak	7.127	0.009	1674	107018			
C36	7.205	0.011	1658	321719			
C38	7.520	0.004	1311	112488			
C40	7.840	0.010	1097	248116			

Me-Arach Surrogate Rec = 0% D

FID:4A-2C/RTX-1 CI36 B 200x

FID:4A SIGNAL

HP6890 GC Data, 1026a022.d





Analytical Resources Inc.  
NWTPH-D Quantitation Report

TL-C103

Data file: /chem2/fid4a.i/26oct00.b/1026a008.d  
Method: /chem2/fid4a.i/26oct00.b/tphfid4a.m  
Instrument: fid4a.i  
Operator: GSA  
Report Date: 10/27/2000  
Macro: FID:4A101900

ARI ID: CI36 C 100x  
Client ID:  
Injection: 26-OCT-2000 10:49

Dilution Factor: 1

Calibration Dates: Gas:09/14/00 Diesel:10/19/00 M.Oil:10/19/00  
AK102:10/19/00 AK103:10/19/00

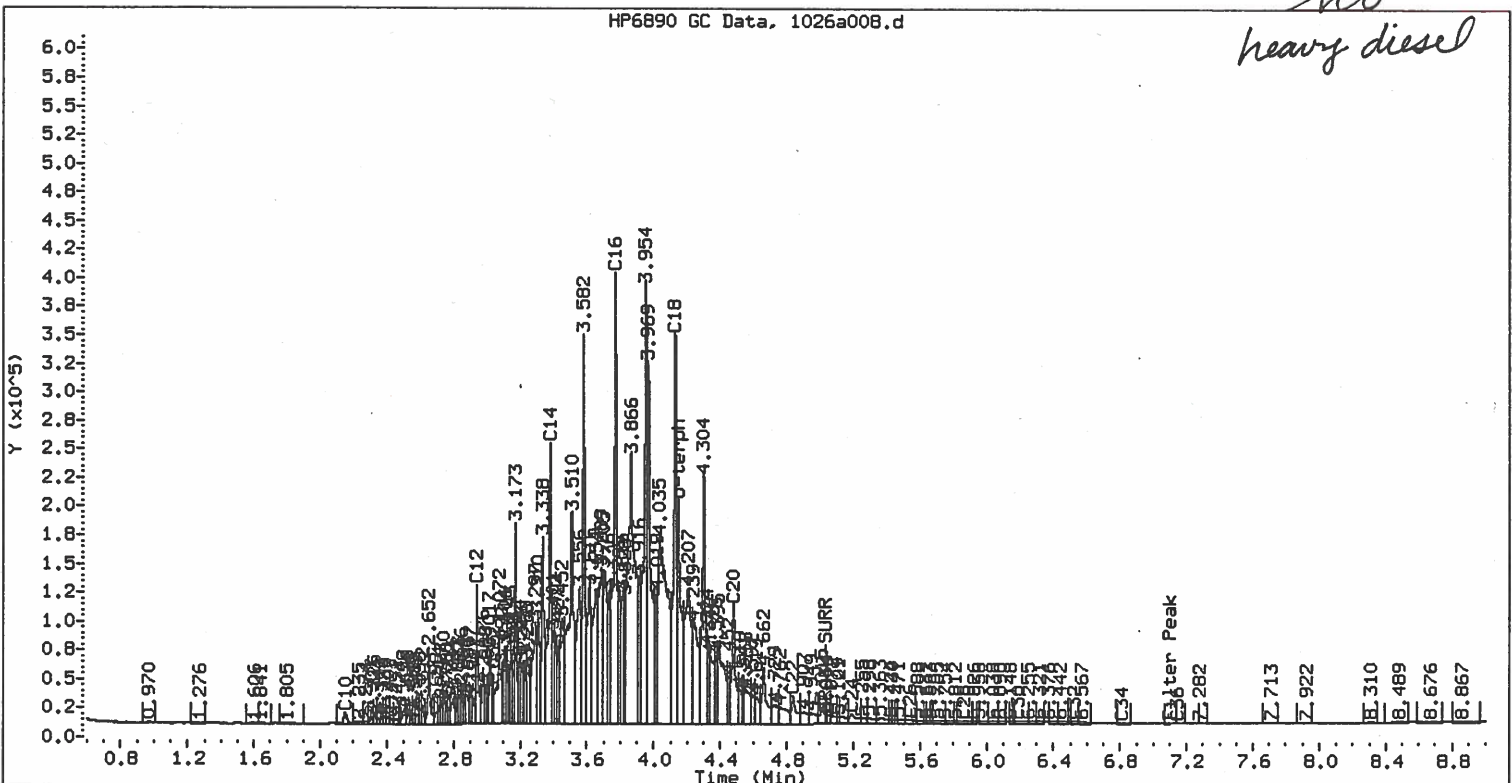
FID:4A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	----				GAS (Tol-C12)	41918530	181
C8	----				DIESEL (C12-C24)	471861542	813
Solvent Peak	0.481	-0.004	250014	10843706	M.OIL (C24-C38)	10047476	21
C10	2.148	0.003	9530	772744	AK-102 (C10-C24)	502159256	787
C12	2.938	0.000	120252	4670473	AK-103 (C24-C38)	10047476	21
C14	3.383	0.000	244798	12366269			
C16	3.772	0.002	391983	23547284			
C18	4.130	0.001	341291	17480932			
o-terph	4.147	-0.018	193171	15386550			
C20	4.482	-0.002	103427	7852153			
C22	4.840	-0.002	23416	2521373			
ARACH-SURR	5.038	0.000	247	1516			
C24	5.190	0.000	8112	1277665			
C26	5.539	0.004	3639	616805			
C28	5.870	0.004	2466	634337			
C30	6.190	0.002	1869	424804			
C32	6.524	0.002	1466	212879			
C34	6.810	-0.049	1206	275695			
Filter Peak	7.101	-0.017	1064	198266			
C36	7.145	-0.049	924	127016			
C38	----						
C40	----						

Me-Arach Surrogate Rec = 0%  $\nabla$

FID:4A-2C/RTX-1 CI36 C 100x

FID:4A SIGNAL



TL-CL04

Analytical Resources Inc.  
NWTPH-D Quantitation Report

Data file: /chem2/fid4a.i/26oct00.b/1026a009.d  
Method: /chem2/fid4a.i/26oct00.b/tphfid4a.m  
Instrument: fid4a.i  
Operator: GSA  
Report Date: 10/27/2000  
Macro: FID:4A101900

ARI ID: CI36 D  
Client ID:  
Injection: 26-OCT-2000 11:08

Dilution Factor: 1

Calibration Dates: Gas:09/14/00 Diesel:10/19/00 M.Oil:10/19/00  
AK102:10/19/00 AK103:10/19/00

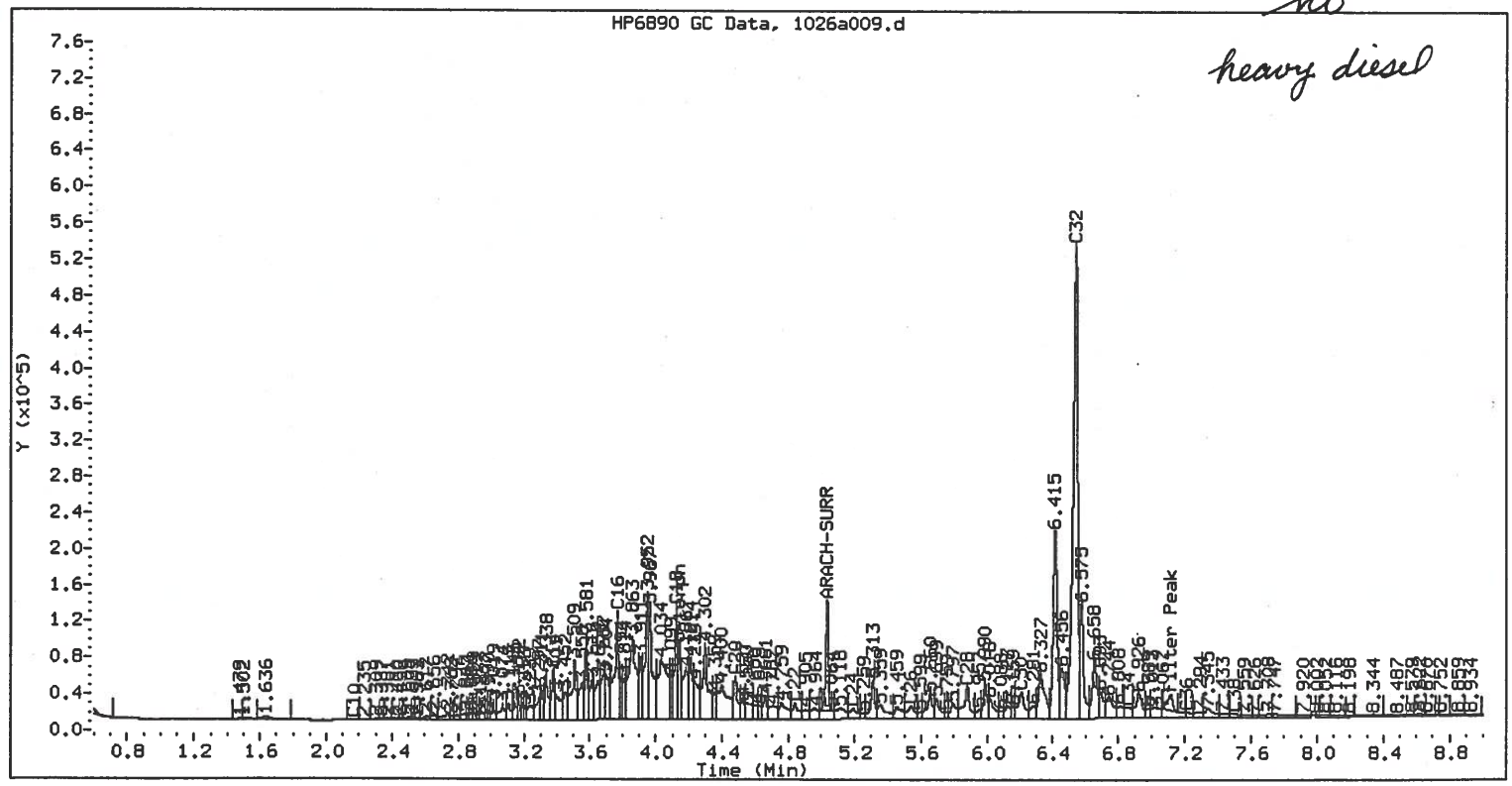
FID:4A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.405	0.077	38751	2409124	GAS (Tol-C12)	22459926	97
C8	0.453	0.000	4061	109237	DIESEL (C12-C24)	197962316	341
Solvent Peak	0.482	-0.003	253525	10263957	M.OIL (C24-C38)	163250276	348
C10	2.173	0.028	1203	136284	AK-102 (C10-C24)	205995651	323
C12	2.940	0.002	11630	831316	AK-103 (C24-C38)	163250276	348
C14	3.382	-0.001	55655	3052761			
C16	3.769	-0.001	119055	10685569			
C18	4.127	-0.002	126120	7033302			
o-terph	4.145	-0.020	82358	4494598			
C20	4.482	-0.002	46829	3856395			
C22	4.839	-0.003	17058	2163339			
ARACH-SURR	5.037	-0.002	121563	6592968			
C24	5.193	0.003	11739	1978927			
C26	5.545	0.010	14460	2094334			
C28	5.882	0.016	34638	4317399			
C30	6.211	0.023	29291	4129448			
C32	6.542	0.021	519968	50468241			
C34	6.864	0.006	12193	1702242			
Filter Peak	7.115	-0.003	17829	2036716			
C36	7.217	0.023	5459	584492			
C38	7.498	-0.019	4274	771325			
C40	-----						

Me-Arach Surrogate Rec = 77%

FID:4A-2C/RTX-1 CI36 D

FID:4A SIGNAL





Analytical Resources Inc.  
NWTPH-D Quantitation Report

TL-CLOS

Data file: /chem2/fid4a.i/26oct00.b/1026a012.d  
Method: /chem2/fid4a.i/26oct00.b/tphfid4a.m  
Instrument: fid4a.i  
Operator: GSA  
Report Date: 10/27/2000  
Macro: FID:4A101900

ARI ID: CI36 E  
Client ID:  
Injection: 26-OCT-2000 12:09  
Dilution Factor: 1

Calibration Dates: Gas:09/14/00 Diesel:10/19/00 M.Oil:10/19/00  
AK102:10/19/00 AK103:10/19/00

FID:4A RESULTS

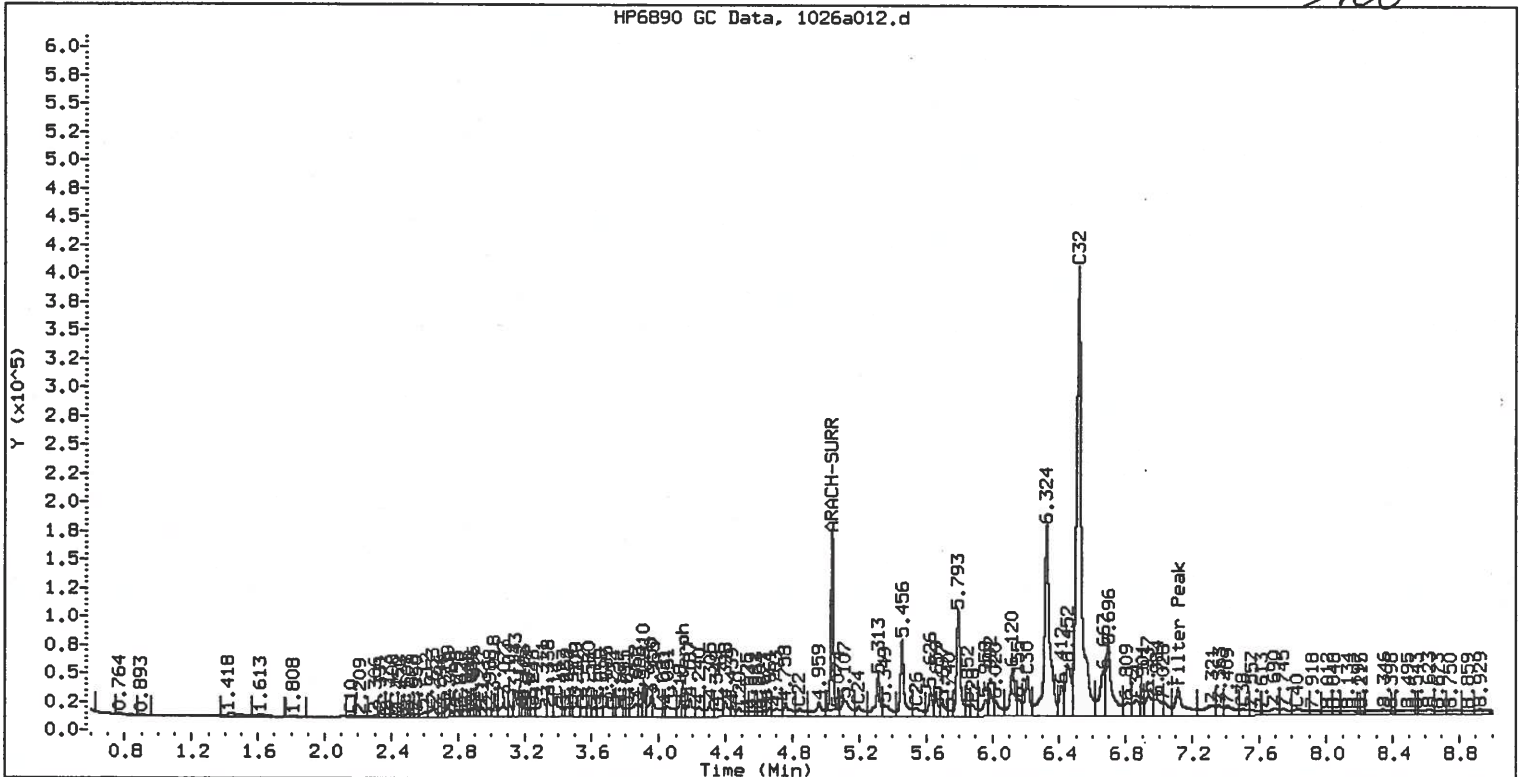
Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.373	0.045	40633	3559833	GAS (Tol-C12)	26912827	116
C8	0.418	-0.035	15417	1232747	DIESEL (C12-C24)	55348494	95
Solvent Peak	0.482	-0.003	230415	10945805	M.OIL (C24-C38)	143375932	305
C10	2.157	0.011	1865	176385	AK-102 (C10-C24)	64562148	101
C12	2.939	0.001	11663	768029	AK-103 (C24-C38)	143375932	305
C14	3.382	-0.002	17420	1725843			
C16	3.768	-0.002	15654	1305906			
C18	4.125	-0.003	15412	1067041			
o-terph	4.145	-0.020	10312	529819			
C20	4.480	-0.005	8374	908750			
C22	4.840	-0.002	6868	1157411			
ARACH-SURR	5.037	-0.002	155969	7764546			
C24	5.195	0.005	9189	1369838			
C26	5.545	0.010	7484	1233394			
C28	5.880	0.014	10226	1168450			
C30	6.208	0.021	35209	3431356			
C32	6.517	-0.005	393990	42553844			
C34	6.864	0.005	14518	2011552			
Filter Peak	7.115	-0.003	23704	4109471			
C36	----						
C38	7.501	-0.015	5789	972805			
C40	7.824	-0.006	5319	1299281			

Me-Arach Surrogate Rec = 90%

FID:4A-2C/RTX-1 CI36 E

FID:4A SIGNAL

HP6890 GC Data, 1026a012.d



Analytical Resources Inc.  
 NWTPH-D Quantitation Report

TL-C106

Data file: /chem2/fid4a.i/26oct00.b/1026a014.d  
 Method: /chem2/fid4a.i/26oct00.b/tphfid4a.m  
 Instrument: fid4a.i  
 Operator: GSA  
 Report Date: 10/27/2000  
 Macro: FID:4A101900

ARI ID: CI36 F  
 Client ID:  
 Injection: 26-OCT-2000 12:49

Dilution Factor: 1

Calibration Dates: Gas:09/14/00 Diesel:10/19/00 M.Oil:10/19/00  
 AK102:10/19/00 AK103:10/19/00

FID:4A RESULTS

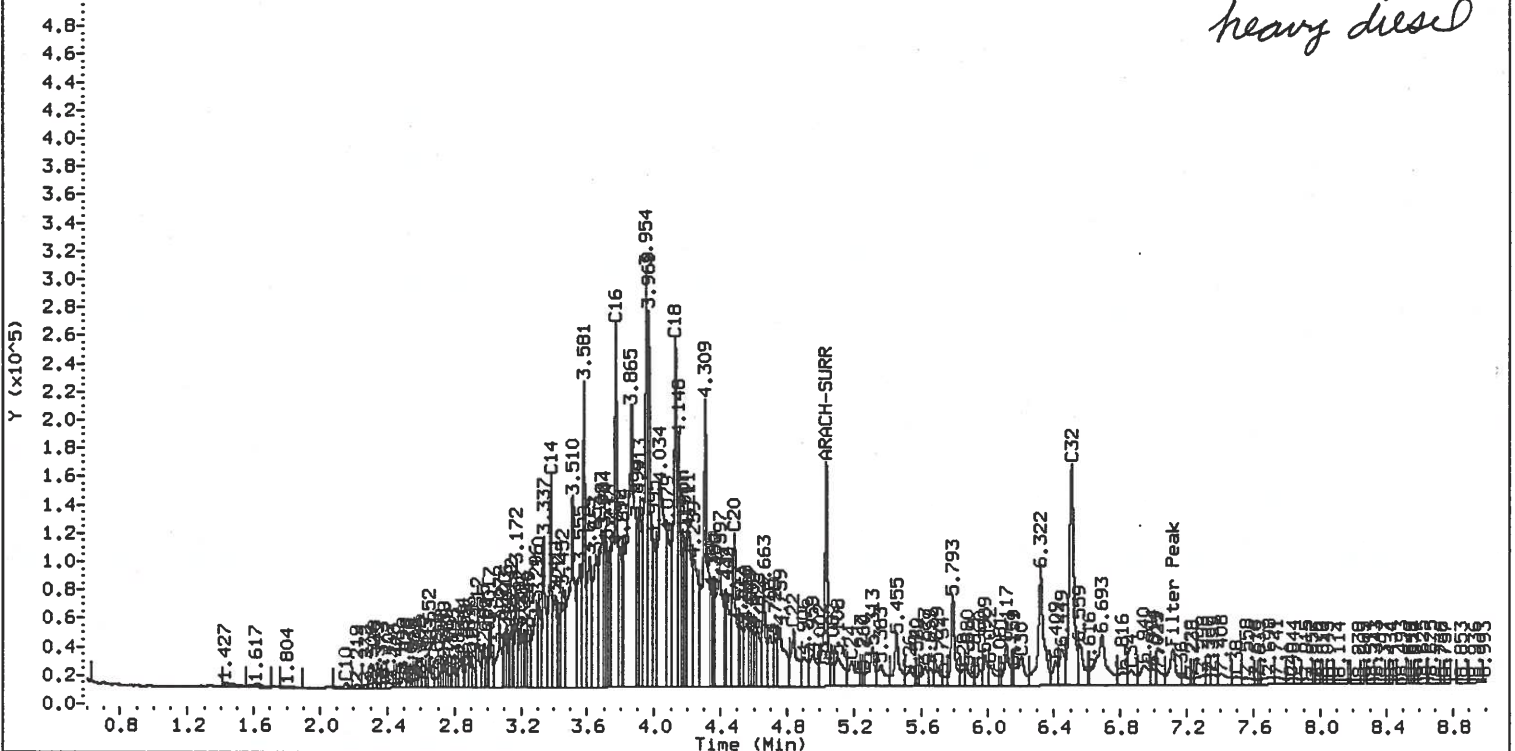
Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.378	0.050	36446	3470387	GAS (Tol-C12)	31102584	134
C8	0.423	-0.030	15038	1053141	DIESEL (C12-C24)	432993715	746
Solvent Peak	0.481	-0.004	118013	5052098	M.OIL (C24-C38)	95795161	204
C10	2.155	0.009	3644	345872	AK-102 (C10-C24)	452819275	709
C12	2.938	0.000	52456	2421229	AK-103 (C24-C38)	95795161	204
C14	3.383	-0.001	146822	7638541			
C16	3.771	0.000	253609	18408853			
C18	4.129	0.000	245946	17111999			
o-terph	4.169	0.004	95689	3754341			
C20	4.482	-0.002	108409	8892269			
C22	4.840	-0.002	39541	5057444			
ARACH-SURR	5.037	-0.001	141711	7486932			
C24	5.190	0.000	17745	2649356			
C26	5.534	-0.001	11201	1522317			
C28	5.857	-0.009	11762	977478			
C30	6.209	0.021	19917	3247464			
C32	6.508	-0.014	154163	15029809			
C34	6.864	0.005	10654	1649196			
Filter Peak	7.119	0.001	24698	3447365			
C36	7.172	-0.022	5734	868789			
C38	7.499	-0.018	5689	911185			
C40	7.827	-0.003	3721	453619			

Me-Arach Surrogate Rec = 87%

FID:4A-2C/RTX-1 CI36 F

FID:4A SIGNAL

HP6890 GC Data, 1026a014.d



TL-CL06  
Duplicate

Analytical Resources Inc.  
NWTPH-D Quantitation Report

Data file: /chem2/fid4a.i/26oct00.b/1026a015.d  
Method: /chem2/fid4a.i/26oct00.b/tphfid4a.m  
Instrument: fid4a.i  
Operator: GSA  
Report Date: 10/27/2000  
Macro: FID:4A101900

ARI ID: CI36 Fdup  
Client ID:  
Injection: 26-OCT-2000 13:09

Dilution Factor: 1

Calibration Dates: Gas:09/14/00 Diesel:10/19/00 M.Oil:10/19/00  
AK102:10/19/00 AK103:10/19/00

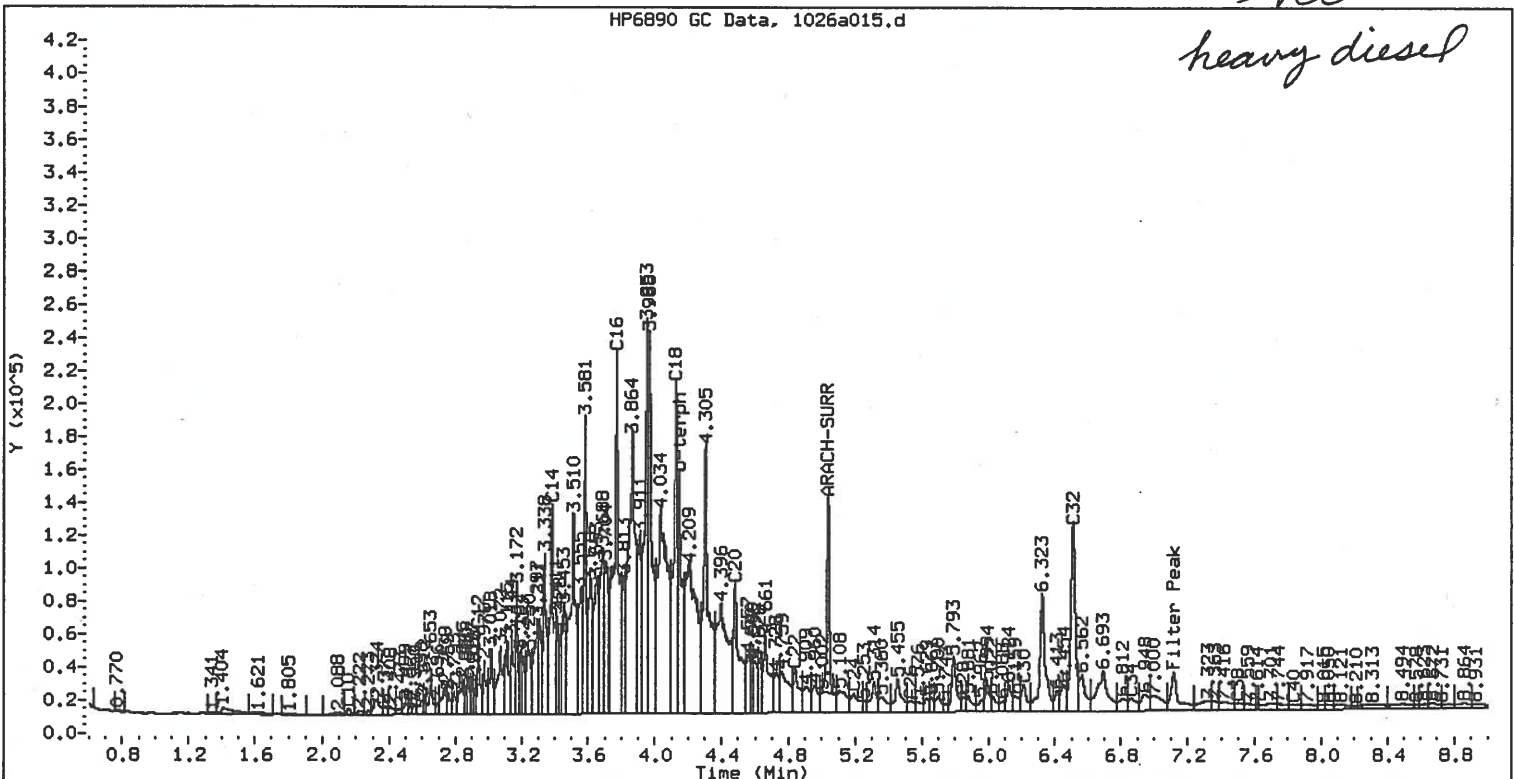
FID:4A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.375	0.048	32032	3333369	GAS (Tol-C12)	36692782	158
C8	0.424	-0.030	12888	905616	DIESEL (C12-C24)	363512556	626
Solvent Peak	0.481	-0.004	213731	9647367	M.OIL (C24-C38)	70464462	150
C10	2.155	0.009	3735	340221	AK-102 (C10-C24)	384027431	601
C12	2.938	0.000	50487	2352797	AK-103 (C24-C38)	70464462	150
C14	3.383	-0.001	127294	8739821			
C16	3.771	0.000	220749	23589508			
C18	4.128	0.000	201132	14444924			
o-terph	4.147	-0.018	144493	12324370			
C20	4.481	-0.003	79058	9686766			
C22	4.839	-0.003	26056	3326332			
ARACH-SURR	5.037	-0.002	118380	5991512			
C24	5.190	0.000	11225	2009811			
C26	5.534	0.000	6578	895166			
C28	5.854	-0.012	8845	788278			
C30	6.213	0.025	16031	1820184			
C32	6.508	-0.014	113357	10940533			
C34	6.867	0.008	7526	1232848			
Filter Peak	7.117	-0.001	23016	3645839			
C36	---	---	---	---			
C38	7.502	-0.014	4210	731738			
C40	7.834	0.004	2959	670709			

Me-Arach Surrogate Rec = 70%

FID:4A-2C/RTX-1 CI36 Fdup

FID:4A SIGNAL





Analytical Resources Inc.  
NWTPH-D Quantitation Report

TL-CL07

Data file: /chem2/fid4a.i/26oct00.b/1026a010.d  
Method: /chem2/fid4a.i/26oct00.b/tphfid4a.m  
Instrument: fid4a.i  
Operator: GSA  
Report Date: 10/27/2000  
Macro: FID:4A101900

ARI ID: CI36 G  
Client ID:  
Injection: 26-OCT-2000 11:28

Dilution Factor: 1

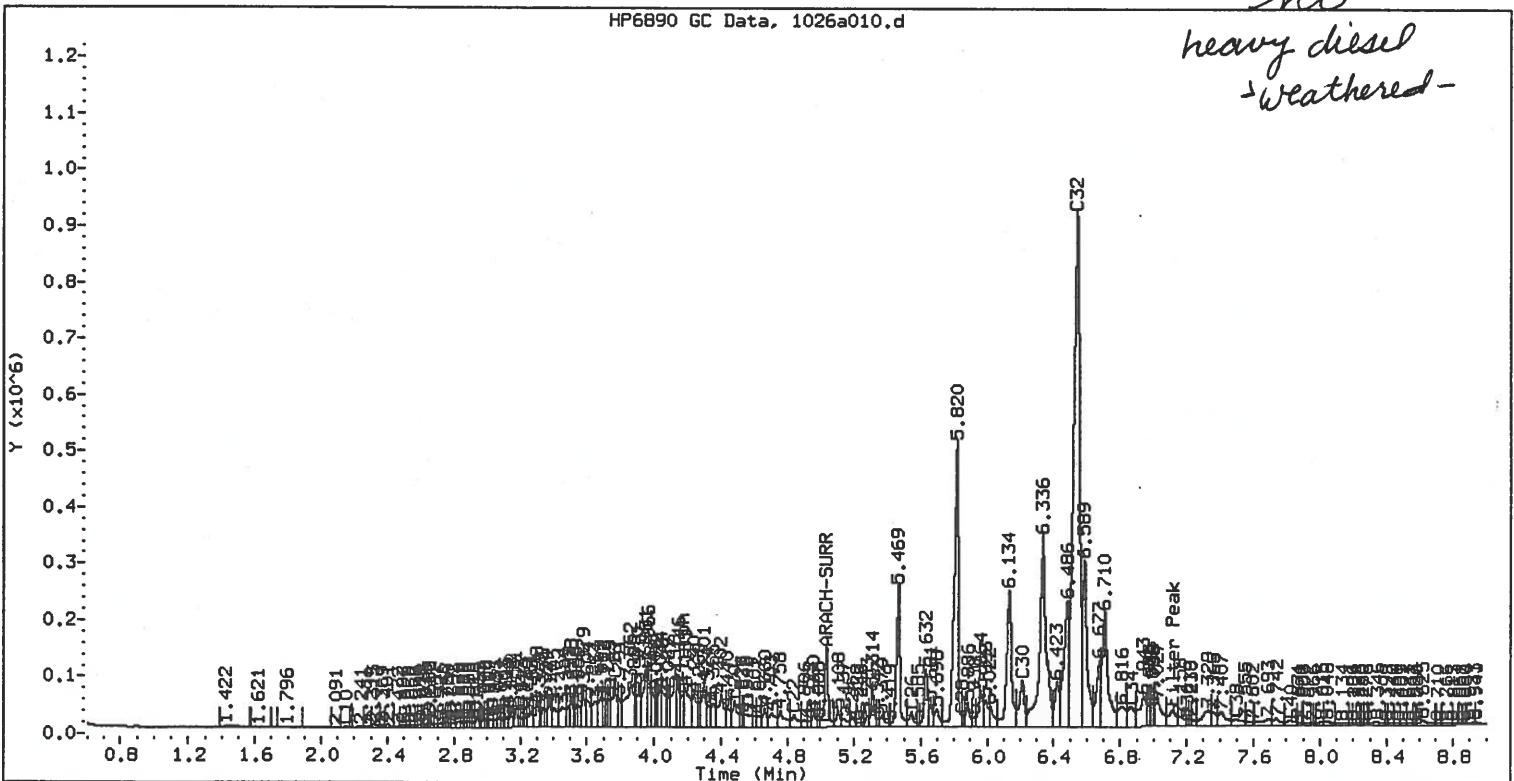
Calibration Dates: Gas:09/14/00 Diesel:10/19/00 M.Oil:10/19/00  
AK102:10/19/00 AK103:10/19/00

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.373	0.045	24221	1955679	GAS (Tol-C12)	25865365	112
C8	0.428	-0.026	7174	320504	DIESEL (C12-C24)	223556597	385
Solvent Peak	0.480	-0.005	201642	8544663	M.OIL (C24-C38)	448910298	956
C10	2.152	0.007	1671	183880	AK-102 (C10-C24)	236954138	371
C12	2.937	-0.001	20998	995583	AK-103 (C24-C38)	448910298	956
C14	3.381	-0.002	50333	3584619			
C16	3.768	-0.002	84605	6858251			
C18	4.126	-0.003	100257	8578234			
o-terph	4.170	0.005	55052	2770222			
C20	4.480	-0.004	47135	4436852			
C22	4.839	-0.003	20725	2936708			
ARACH-SURR	5.036	-0.002	127606	6972627			
C24	5.194	0.004	18911	1609261			
C26	5.547	0.012	26707	2527800			
C28	5.854	-0.012	20253	1063885			
C30	6.212	0.024	81607	8305083			
C32	6.543	0.022	913834	111263550			
C34	6.870	0.011	35100	4582024			
Filter Peak	7.116	-0.002	28874	4235409	Me-Arach Surrogate Rec		81%
C36	7.205	0.012	12020	453717			
C38	7.499	-0.018	11389	2353970			
C40	7.826	-0.004	9449	1676485			

FID:4A-2C/RTX-1 CI36 G

FID:4A SIGNAL



Analytical Resources Inc.  
 NWTPH-D Quantitation Report

TL-C108

Data file: /chem2/fid4a.i/26oct00.b/1026a013.d  
 Method: /chem2/fid4a.i/26oct00.b/tphfid4a.m  
 Instrument: fid4a.i  
 Operator: GSA  
 Report Date: 10/27/2000  
 Macro: FID:4A101900

ARI ID: CI36 H  
 Client ID:  
 Injection: 26-OCT-2000 12:29

Dilution Factor: 1

Calibration Dates: Gas:09/14/00 Diesel:10/19/00 M.Oil:10/19/00  
 AK102:10/19/00 AK103:10/19/00

FID:4A RESULTS

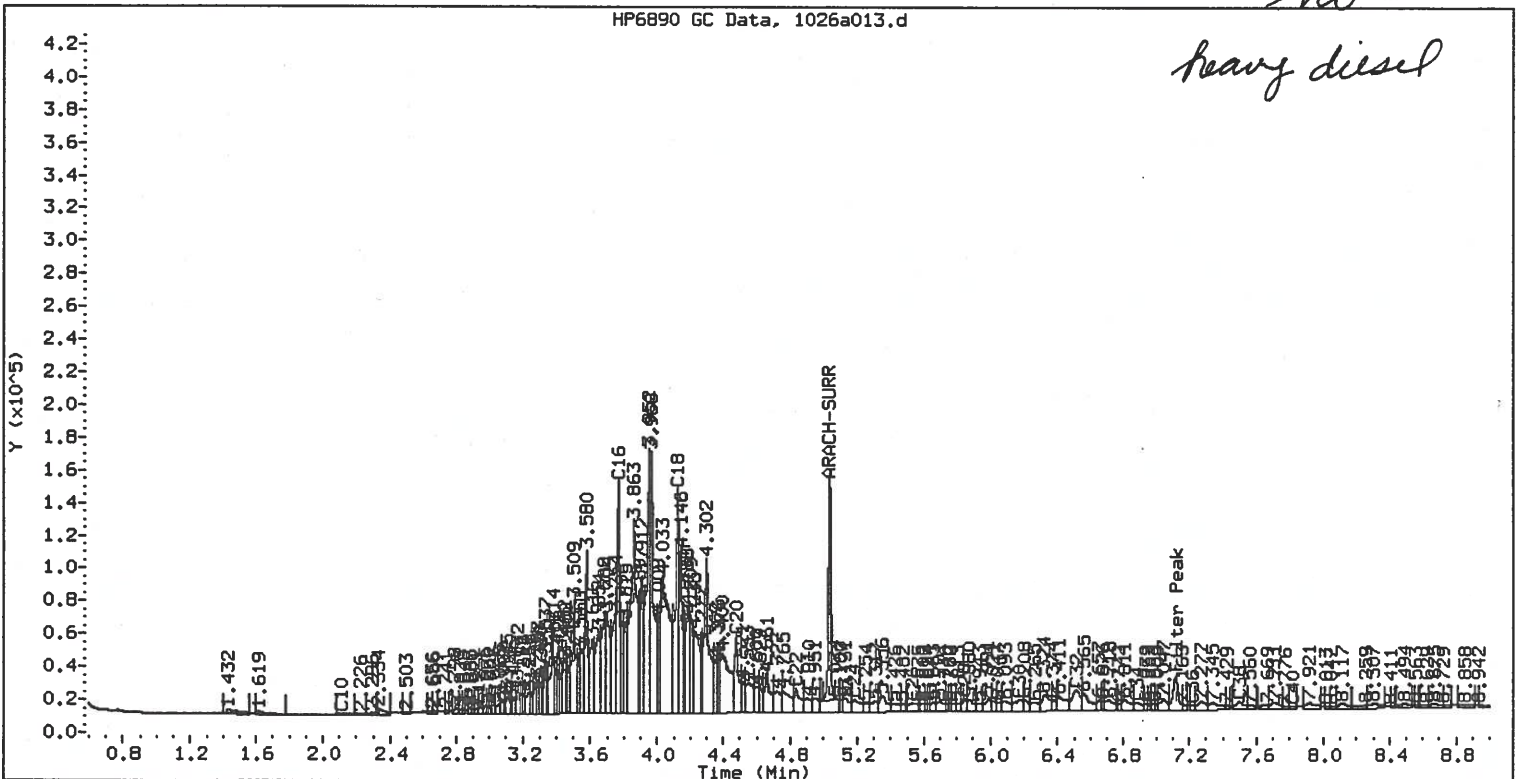
Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.376	0.048	31880	2718079	GAS (Tol-C12)	17065825	74
C8	0.420	-0.034	6466	384700	DIESEL (C12-C24)	213416881	368
Solvent Peak	0.482	-0.003	237768	9734500	M.OIL (C24-C38)	35851091	76
C10	2.115	-0.030	830	193570	AK-102 (C10-C24)	216701196	339
C12	2.940	0.002	4744	340868	AK-103 (C24-C38)	35851091	76
C14	3.383	-0.001	55020	3415833			
C16	3.769	-0.001	139820	6829386			
C18	4.127	-0.001	136091	9159039			
o-terph	4.166	0.001	53252	1868444			
C20	4.481	-0.003	46845	3859943			
C22	4.839	-0.003	14312	1790456			
ARACH-SURR	5.037	-0.002	134918	6890679			
C24	5.188	-0.002	7673	1268626			
C26	5.533	-0.002	5418	934050			
C28	5.855	-0.012	7509	738578			
C30	6.178	-0.010	6890	1222940			
C32	6.519	-0.003	12419	2104342			
C34	6.886	0.027	4607	732131			
Filter Peak	7.121	0.003	21318	2291416			
C36	7.222	0.028	3144	318429			
C38	7.501	-0.016	4676	828402			
C40	7.823	-0.007	1875	257124			

Me-Arach Surrogate Rec = 80%

FID:4A-2C/RTX-1 CI36 H

FID:4A SIGNAL

HP6890 GC Data, 1026a013.d



**TOTAL DIESEL RANGE HYDROCARBONS**  
**AK102 TPHd Range C10 to C24 by GC/FID**



Lab Sample ID: CI36B      Sample No: TL-CL02  
LIMS ID: 00-19760      QC Report No: CI36-Smith Bayliss LeResche Inc.  
Matrix: Soil      Project: Travelodge Spill  
Date Received: 10/17/00  
Data Release Authorized: *1/12*  
Reported: 10/27/00      *10/27/00*

**MATRIX SPIKE/SPIKE DUPLICATE RECOVERY**

Date extracted: 10/20/00  
Date analyzed: 10/26/00

CONSTITUENT	SAMPLE VALUE	SPIKE VALUE	SPIKE ADDED	% RECOVERY	RPD
MATRIX SPIKE					
Diesel Range Hydrocarbons	18200	27800	55.7	1720%	
MATRIX SPIKE DUPLICATE					
Diesel Range Hydrocarbons	18200	23600	55.9	9660%	56.3%

**TPHd Surrogate Recovery**

Matrix Spike	Methylarachidate	D
Matrix Spike Dup	Methylarachidate	D

Values reported in ppm (mg/kg) on a dry weight basis.



Analytical Resources Inc.  
 NWTPH-D Quantitation Report

Matrix  
Spike

Data file: /chem2/fid4a.i/26oct00.b/1026a023.d  
 Method: /chem2/fid4a.i/26oct00.b/tphfid4a.m  
 Instrument: fid4a.i  
 Operator: GSA  
 Report Date: 10/27/2000  
 Macro: FID:4A101900

ARI ID: CI36 Bms 200x  
 Client ID:  
 Injection: 26-OCT-2000 15:51

Dilution Factor: 1

Calibration Dates: Gas:09/14/00 Diesel:10/19/00 M.Oil:10/19/00  
 AK102:10/19/00 AK103:10/19/00

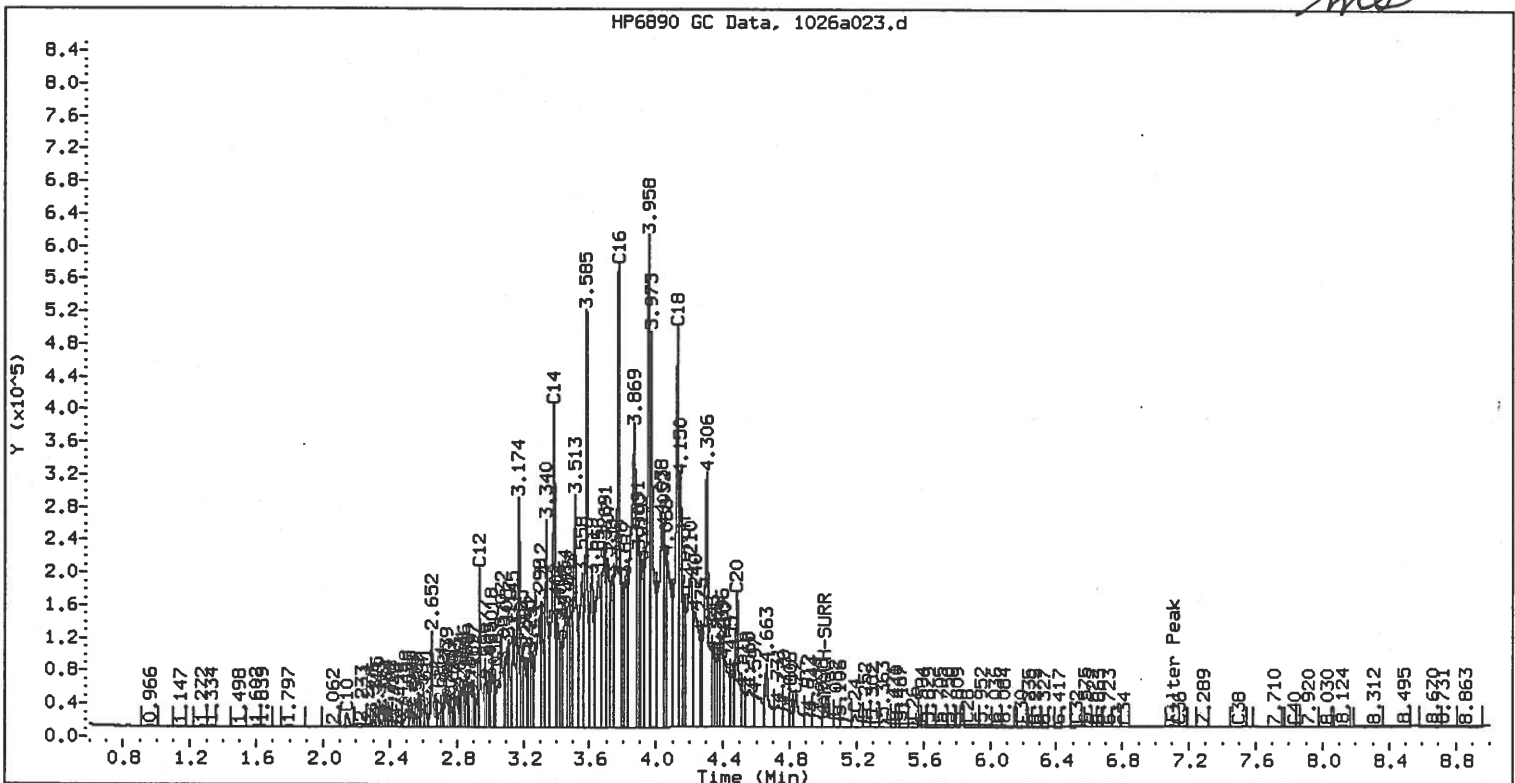
FID:4A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	----				GAS (Tol-C12)	59134856	255
C8	----				DIESEL (C12-C24)	746456834	1286
Solvent Peak	0.481	-0.004	164957	6678628	M.OIL (C24-C38)	12290914	26
C10	2.145	0.000	15620	1207405	AK-102 (C10-C24)	797094522	1248
C12	2.939	0.001	194277	8019127	AK-103 (C24-C38)	12290914	26
C14	3.386	0.002	395395	19624785			
C16	3.775	0.005	567677	36903048			
C18	4.133	0.004	486375	30509800			
o-terph	4.168	0.003	157441	6990232			
C20	4.484	0.000	163688	11280266			
C22	4.841	-0.001	39252	4520111			
ARACH-SURR	5.014	-0.025	11369	576260			
C24	5.190	0.000	14865	1954152			
C26	5.538	0.004	5505	844254			
C28	5.868	0.002	2492	636011			
C30	6.191	0.003	1762	297034			
C32	6.528	0.006	2017	355832			
C34	6.816	-0.043	1163	196002			
Filter Peak	7.108	-0.010	1283	274484			
C36	7.150	-0.044	959	129075			
C38	7.502	-0.015	750	209015			
C40	7.831	0.001	592	116279			

Me-Arach Surrogate Rec = 7% D

FID:4A-2C/RTX-1 CI36 Bms 200x

FID:4A SIGNAL



Matrix Spike  
Duplicate

Analytical Resources Inc.  
NWTPH-D Quantitation Report

Data file: /chem2/fid4a.i/26oct00.b/1026a024.d  
Method: /chem2/fid4a.i/26oct00.b/tphfid4a.m  
Instrument: fid4a.i  
Operator: GSA  
Report Date: 10/27/2000  
Macro: FID:4A101900

ARI ID: CI36 Bmsd 200x  
Client ID:  
Injection: 26-OCT-2000 16:11

Dilution Factor: 1

Calibration Dates: Gas:09/14/00 Diesel:10/19/00 M.Oil:10/19/00  
AK102:10/19/00 AK103:10/19/00

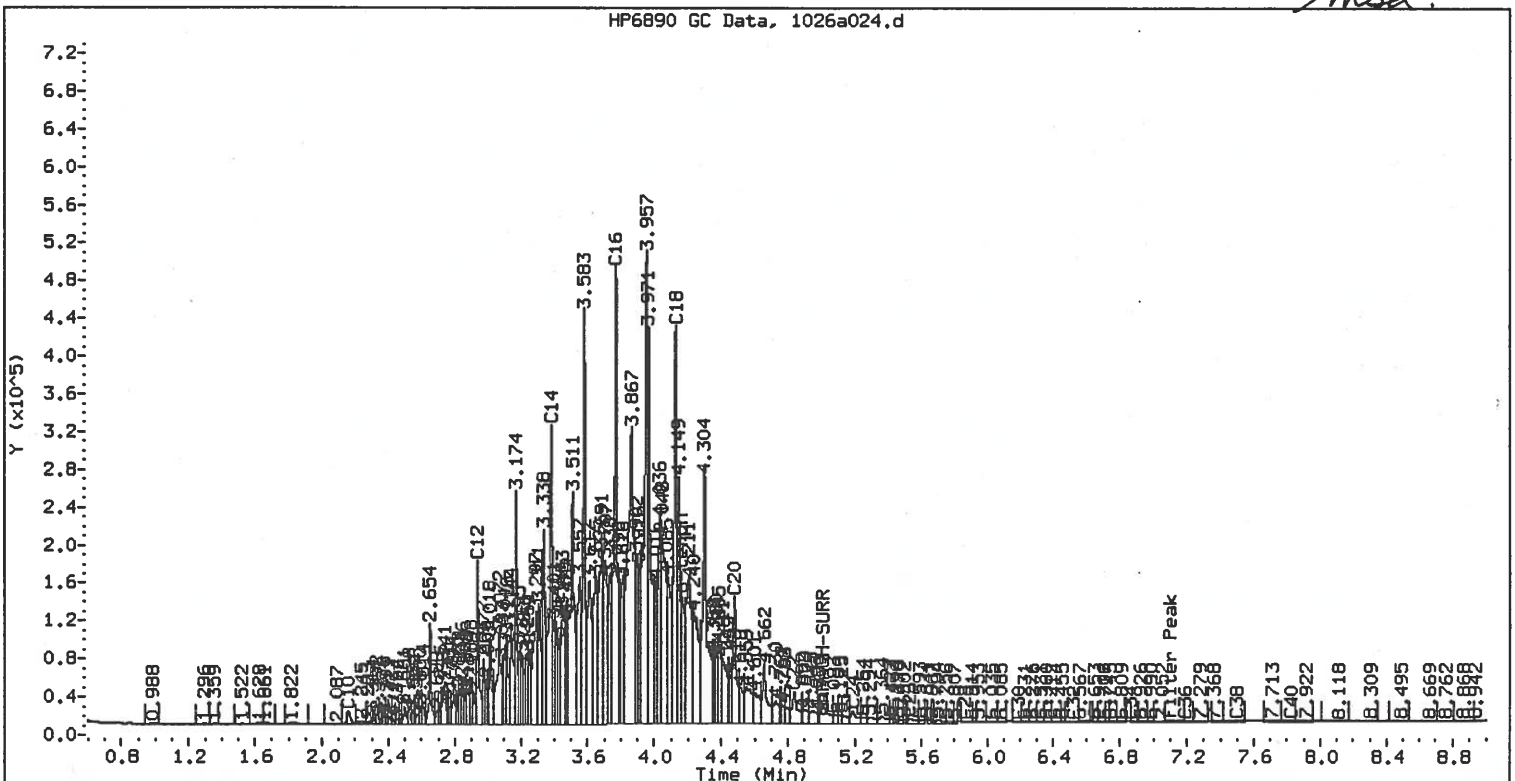
FID:4A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	----				GAS (Tol-C12)	54888675	237
C8	----				DIESEL (C12-C24)	630971327	1087
Solvent Peak	0.483	-0.002	256210	10315847	M.OIL (C24-C38)	12974586	28
C10	2.159	0.013	13912	1012817	AK-102 (C10-C24)	674117724	1056
C12	2.939	0.001	172494	6851889	AK-103 (C24-C38)	12974586	28
C14	3.384	0.001	316645	16946313			
C16	3.773	0.003	485828	31361462			
C18	4.131	0.002	415986	22875762			
o-terph	4.166	0.001	135276	9203542			
C20	4.483	-0.001	133407	9972396			
C22	4.840	-0.002	33748	3822231			
ARACH-SURR	5.015	-0.024	9893	473943			
C24	5.190	0.000	12587	1780926			
C26	5.537	0.002	4955	780871			
C28	5.867	0.000	2344	431885			
C30	6.189	0.001	1676	274856			
C32	6.526	0.004	1986	378661			
C34	6.868	0.009	1075	108431			
Filter Peak	7.103	-0.015	1159	344154			
C36	7.193	-0.001	864	123975			
C38	7.500	-0.017	763	275187			
C40	7.828	-0.002	563	147175			

Me-Arach Surrogate Rec = 6% D

FID:4A-2C/RTX-1 CI36 Bmsd 200x

FID:4A SIGNAL



TOTAL DIESEL RANGE HYDROCARBONS  
AK102 TPHd Range C10 to C24 by GC/FID



Lab Sample ID: CI36SB                      QC Report No: CI36-Smith Bayliss LeResche Inc.  
LIMS ID: 00-19759                          Project: Travelodge Spill  
Matrix: Soil

Data Release Authorized: *CA*  
Reported: 10/27/00                      *uM/n*

LABORATORY CONTROL SAMPLE RECOVERY REPORT

Date extracted: ~~10/20/00~~  
Date analyzed: 10/26/00

CONSTITUENT	SPIKE FOUND	SPIKE ADDED	% RECOVERY
Diesel Range Hydrocarbons	44.7	50.0	89.4%

TPHd Surrogate Recovery

Methylarachidate                      76.0%

Values reported in ppm (mg/kg) on a dry weight basis.



Spike  
Blank

Analytical Resources Inc.  
NWTPH-D Quantitation Report

Data file: /chem2/fid4a.i/26oct00.b/1026a007.d  
Method: /chem2/fid4a.i/26oct00.b/tphfid4a.m  
Instrument: fid4a.i  
Operator: GSA  
Report Date: 10/27/2000  
Macro: FID:4A101900

ARI ID: CI34 SBS10/20  
Client ID:  
Injection: 26-OCT-2000 10:28

Dilution Factor: 1

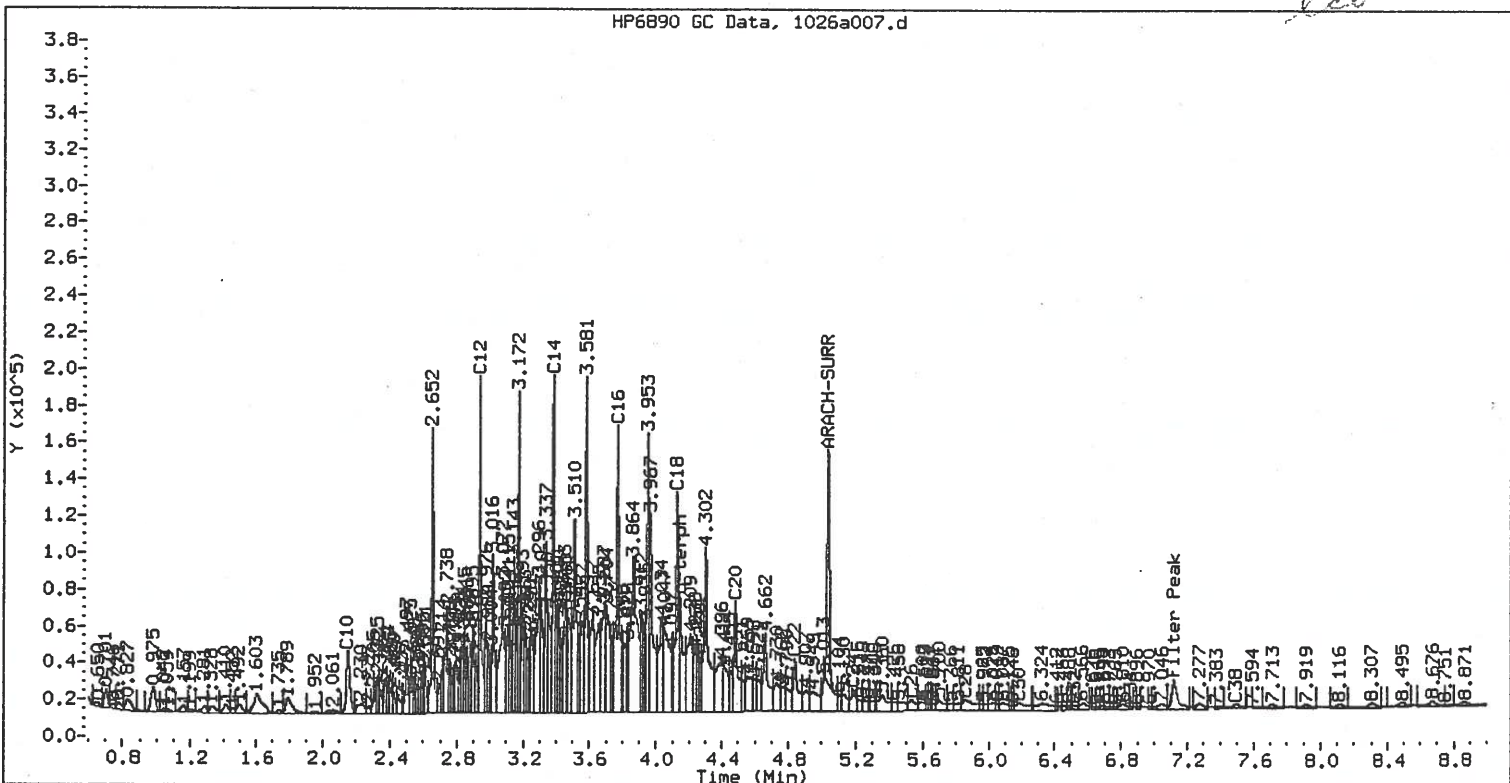
Calibration Dates: Gas:09/14/00 Diesel:10/19/00 M.Oil:10/19/00  
AK102:10/19/00 AK103:10/19/00

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.380	0.053	43138	3003970	GAS (Tol-C12)	72301846	312
C8	0.424	-0.030	7378	247777	DIESEL (C12-C24)	235349417	405
Solvent Peak	0.482	-0.003	201858	8435800	M.OIL (C24-C38)	20328620	43
C10	2.147	0.002	33820	2630387	AK-102 (C10-C24)	285168693	447
C12	2.938	0.000	182285	6142238	AK-103 (C24-C38)	20328620	43
C14	3.383	-0.001	183721	6763795			
C16	3.771	0.000	154187	9924224			
C18	4.128	-0.001	119750	6799890			
o-terph	4.145	-0.020	63864	4782235			
C20	4.482	-0.002	59894	4769994			
C22	4.839	-0.003	28181	2698276			
ARACH-SURR	5.036	-0.002	127121	6516880			
C24	5.188	-0.002	11755	1193634			
C26	5.532	-0.003	6106	876923			
C28	5.857	-0.009	5969	1457034			
C30	6.183	-0.005	3991	979809			
C32	6.518	-0.003	2521	267197			
C34	6.857	-0.001	1644	118592			
Filter Peak	7.118	0.000	15950	1905983	Me-Arach Surrogate Rec	76%	
C36	---	---	---	---			
C38	7.498	-0.019	2491	492578			
C40	---	---	---	---			

FID:4A-2C/RTX-1 CI34 SBS10/20

FID:4A SIGNAL





**Analytical Resources, Incorporated**  
Analytical Chemists and Consultants

November 17, 2000

Jason Ginter  
Smith, Bayliss, LaResche  
Suite 10  
119 Seward St.  
Juneau, AK 99801

---

**RE: Client Project: Travelodge**  
**ARI Project No: CK60**

Dear Jason:

Please find enclosed the original Chain-of-Custody record (COC) and the final results for the sample from the project referenced above. Analytical Resources, Inc. (ARI) accepted two soil samples on November 8, 2000. The samples were received intact, with no discrepancies between the paperwork and the sample containers' labels.

The samples were analyzed for DRO/AK102 as requested.

No analytical complications were noted. A copy of these reports will be kept on file by ARI. Should you have any questions regarding these results, please feel free to call me at any time.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mary Lou Fox  
Project Manager  
206-389-6155  
e-mail [marylou@arilabs.com](mailto:marylou@arilabs.com)

MLF/mlf  
cc: file #CK60

# Chain of Custody Record & Laboratory Analysis Request

00-21303 CK 60  
00-21304

Analytical Resources, Incorporated  
Analytical Chemist and Consultants  
400 Ninth Avenue North  
Seattle, WA 98109-4708  
(206) 621-6490  
(206) 621-7523 (Fax)



Date: 1-7-2000  
Page 1 of 1  
Number of coolers: \_\_\_\_\_  
Cooler Temp: \_\_\_\_\_

ARI Client: Smith Bayliss Leporella Phone#: 526 6413  
Client Contact: Jason Ginter

Client Project ID: Travelodge  
Samplers: J Ginter

Sample ID	Date	Time	Matx	No Cont	Lab ID	Analysis Required							Notes/Comments		
1 TLCS-01	11-7-00	1230	Soil	1											5.3 °C (in cooler)
2 TLCS-02	11-7-00	1230	soil	1											
3															
4															
5															
6															
7															

ARI Project No: \_\_\_\_\_

T.A.T. Requested: *Wanna*

Comments/Special Instructions: \_\_\_\_\_

Relinquished by: (Signature) <i>[Signature]</i>	Relinquished by: (Signature)
Printed Name: Jason Ginter	Printed Name:
Company: SBC Inc	Company:
Date: 11-7-00	Date:
Time: 1230	Time:
Received by: (Signature) <i>[Signature]</i>	Received by: (Signature)
Printed Name: Dan M King	Printed Name:
Company: DENNIS W. SARRA	Company:
Date: 11-8-00	Date:
Time: 1045	Time:

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following Standard Operating Procedures and our Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the client.



**TOTAL DIESEL RANGE HYDROCARBONS  
AK102 TPHd Range C10 to C24 by GC/FID**

Matrix: Soil

QC Report No: CK60-Smith Bayliss LeResche Inc.  
Project: Travelodge

Data Release Authorized:  
Reported: 11/15/00

Date Received: 11/08/00

*CK 1115/00*

Lab ID	Client Sample ID	Date Extracted	Date Analyzed	Dilution Factor	Diesel Range Hydrocarbons	*Diesel ID	Surr Recovery
CK60-1110MB	Method Blank	11/10/00	11/13/00	1:1	5.0 U --		92.0%
CK60A	TLCS-01	11/10/00	11/14/00	1:200	22000 YES		D
CK60B	TLCS-02	11/10/00	11/14/00	1:50	5800 YES		D

Values reported in ppm (mg/kg) on a dry weight basis.

Surrogate is Methyl-Arachidate.

\* In the opinion of the analyst, was there a pattern match for diesel (YES or NO).  
Diesel quantitation on total peaks in the range from C10 to C24.

**Data Qualifiers**

- U Compound not detected at the given detection limit.
- J Indicates an estimated value below the calculated detection limit.
- S No value reported due to saturation of the detector. Dilution required.
- D Indicates the surrogate was not detected because of dilution of the extract.
- E Indicates a value above the linear range of the detector. Dilution required.
- NR Indicates no recovery due to matrix interference.
- B Indicates compound also detected in the method blank.

FORM-1 TPHD

Method Blank

Analytical Resources Inc.  
NWTPH-D Quantitation Report

Data file: /chem2/fid3b.i/13nov00.b/1113b036.d  
Method: /chem2/fid3b.i/13nov00.b/tphfid3b.m  
Instrument: fid3b.i  
Operator: GSA  
Report Date: 11/14/2000  
Macro: FID:3B111000

ARI ID: CK60 MBS 11/10  
Client ID:  
Injection: 13-NOV-2000 21:49

Dilution Factor: 1

Calibration Dates: Gas:10/31/00 Diesel:11/10/00 M.Oil:11/06/00  
AK102:11/10/00 AK103:11/06/00

Tazz-1B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	----				GAS (Tol-C12)	40117167	110
C8	1.872	-0.024	20067	2322890	DIESEL (C12-C24)	10021370	12
Solvent Peak	----				M.OIL (C24-C38)	4410564	6
C10	2.928	-0.032	13570	1360453	AK-102 (C10-C24)	17234169	19
C12	3.484	0.006	2292	152077	AK-103 (C24-C38)	4410564	6
C14	3.935	0.024	1601	350787			
C16	4.318	0.007	1122	127190			
C18	4.741	0.026	932	101047			
o-Terph Surr	4.840	0.022	4581	555175			
C20	5.145	0.030	1278	203289			
C22	----						
ARACH-SURR	5.701	-0.003	241740	12584708			
C24	5.818	-0.044	4364	1162228			
C26	6.223	0.007	982	125527			
C28	6.575	0.009	3382	555909			
C30	----						
Filter Peak	7.954	0.019	3544	544605			
C32	7.299	0.007	2460	117797			
C34	----						
C36	8.029	0.031	2191	283839			
C38	----						
C40	8.696	0.031	1167	155741			

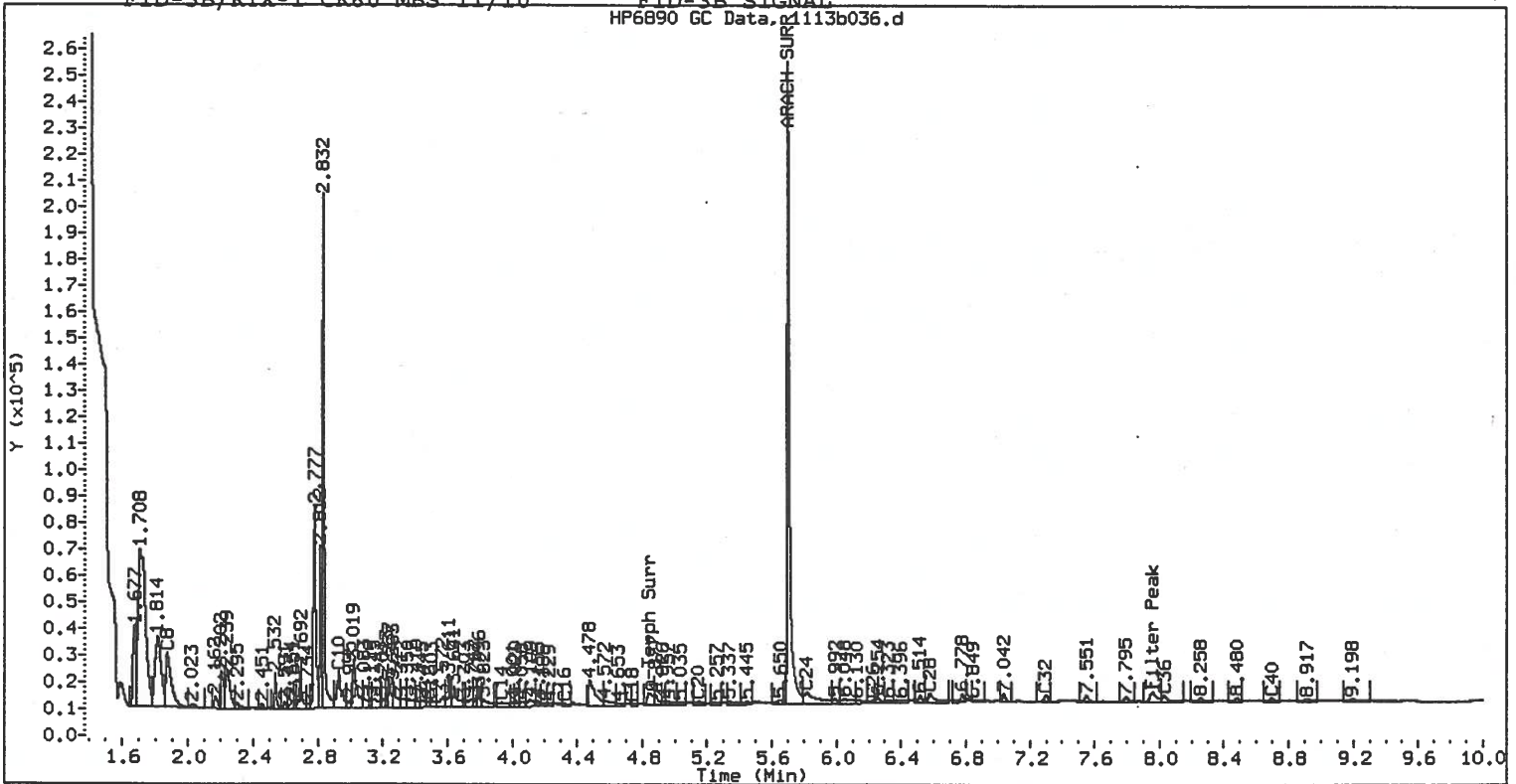
Me-Arach Surrogate Rec = 92%

NO

FID-3B/RTX-1 CK60 MBS 11/10

FID-3B SIGNAL

HP6890 GC Data:1113b036.d



Analytical Resources Inc.  
 NWTPH-D Quantitation Report

TLCS-01

Data file: /chem2/fid3b.i/14nov00.b/1114b015.d  
 Method: /chem2/fid3b.i/14nov00.b/tphfid3b.m  
 Instrument: fid3b.i  
 Operator: GSA  
 Report Date: 11/15/2000  
 Macro: FID:3B111000

ARI ID: CK60 A 200x  
 Client ID:  
 Injection: 14-NOV-2000 17:20  
 Dilution Factor: 1

Calibration Dates: Gas:10/31/00 Diesel:11/10/00 M.Oil:11/06/00  
 AK102:11/10/00 AK103:11/06/00

Tazz-1B RESULTS

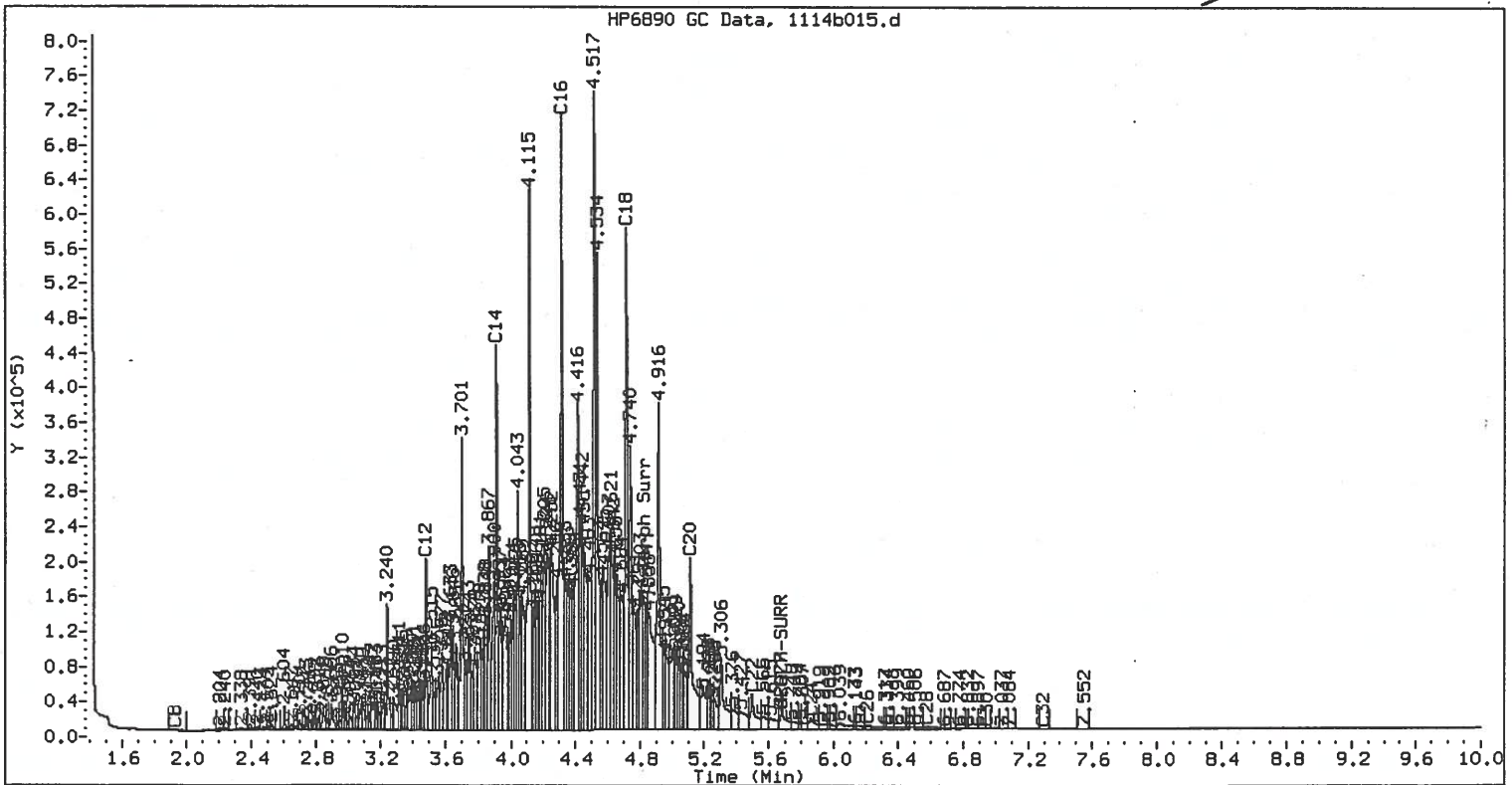
Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	----				GAS (Tol-C12)	60294538	166
C8	1.925	-0.001	1245	130189	DIESEL (C12-C24)	746486689	926
Solvent Peak	----				M.OIL (C24-C38)	8254163	11
C10	2.963	0.001	69631	1696636	AK-102 (C10-C24)	798096750	876
C12	3.480	0.001	193158	5823268	AK-103 (C24-C38)	8254163	11
C14	3.913	0.001	439676	15100044			
C16	4.315	0.002	714911	33883582			
C18	4.717	0.001	579436	25315095			
o-Terph Surr	4.826	0.009	152121	8149044			
C20	5.112	-0.003	195072	16115990			
C22	5.495	-0.001	41087	4186292			
ARACH-SURR	5.679	-0.023	1568	15900			
C24	5.859	0.000	12402	1675513			
C26	6.213	0.004	4038	1096007			
C28	6.578	0.019	1899	556978			
C30	6.945	0.024	995	102079			
Filter Peak	----						
C32	7.296	0.009	718	113383			
C34	----						
C36	----						
C38	----						
C40	0.000	-8.655	0	0			

Me-Arach Surrogate Rec = 0% D

FID-3B/RTX-1 CK60 A 200x

FID-3B SIGNAL

DIESEL





Analytical Resources Inc.  
 NWTPH-D Quantitation Report

TLLS-02

Data file: /chem2/fid3b.i/14nov00.b/1114b018.d  
 Method: /chem2/fid3b.i/14nov00.b/tphfid3b.m  
 Instrument: fid3b.i  
 Operator: GSA  
 Report Date: 11/15/2000  
 Macro: FID:3B111000

ARI ID: CK60 B 50x  
 Client ID:  
 Injection: 14-NOV-2000 18:21

Dilution Factor: 1

Calibration Dates: Gas:10/31/00 Diesel:11/10/00 M.Oil:11/06/00  
 AK102:11/10/00 AK103:11/06/00

Tazz-1B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	----				GAS (Tol-C12)	7942417	22
C8	----				DIESEL (C12-C24)	777239535	964
Solvent Peak	----				M.OIL (C24-C38)	9862646	13
C10	2.964	0.001	6947	198060	AK-102 (C10-C24)	784712988	861
C12	3.481	0.001	25230	934534	AK-103 (C24-C38)	9862646	13
C14	3.911	-0.001	227429	12640968			
C16	4.314	0.002	658259	39582812			
C18	4.718	0.002	663972	31212524			
o-Terph Surr	4.827	0.010	206827	11949133			
C20	5.112	-0.002	253521	21730180			
C22	5.495	-0.001	52754	5391311			
ARACH-SURR	5.704	0.001	1100	15511			
C24	5.859	0.000	14428	2159109			
C26	6.211	0.002	4451	1141710			
C28	6.576	0.017	2218	583209			
C30	----						
Filter Peak	----						
C32	7.300	0.013	869	116351			
C34	----						
C36	----						
C38	----						
C40	0.000	-8.655	0	0			

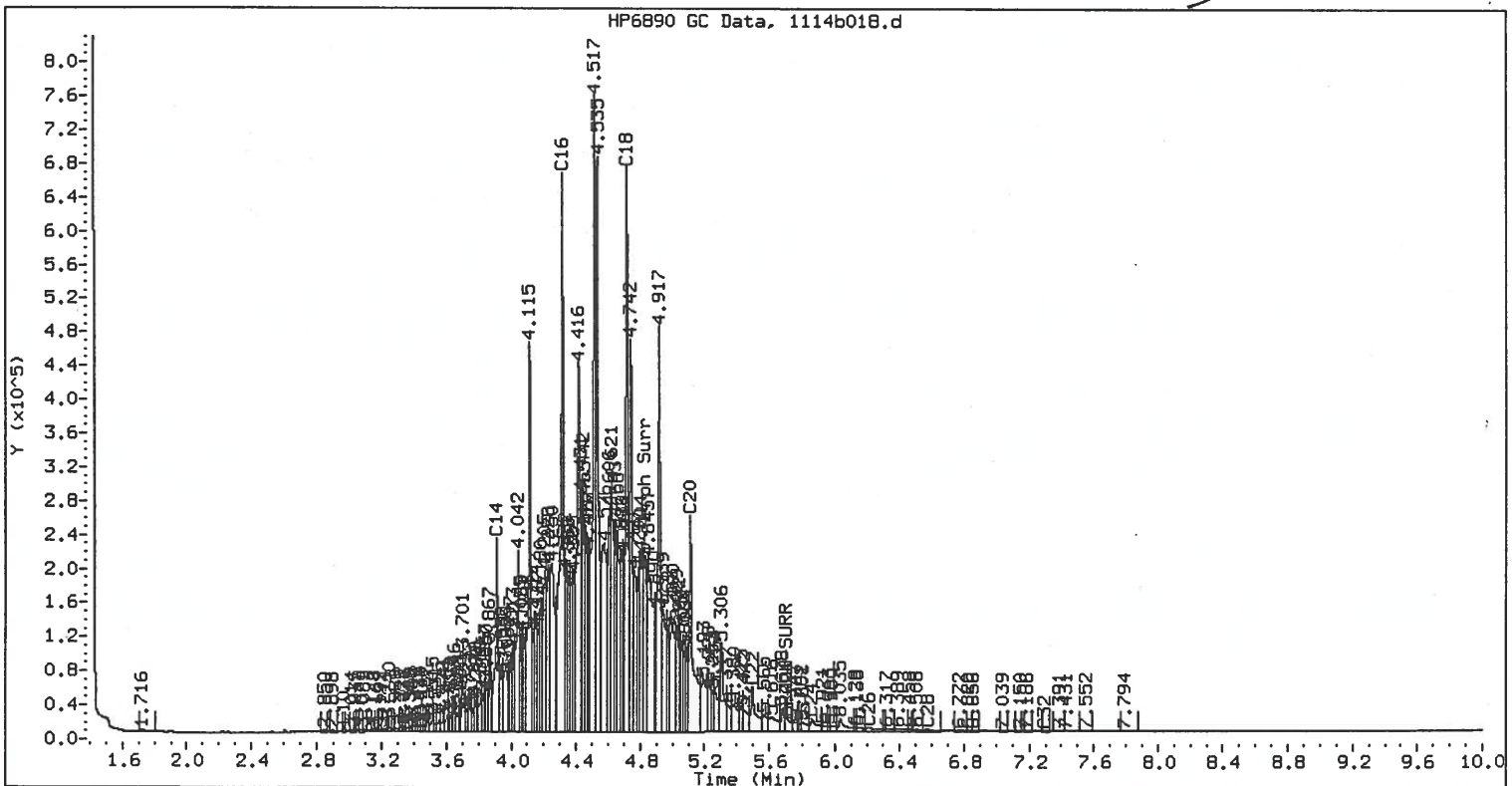
Me-Arach Surrogate Rec =

0%

FID-3B/RTX-1 CK60 B 50x

FID-3B SIGNAL

DIESEL



TOTAL DIESEL RANGE HYDROCARBONS  
AK102 TPHd Range C10 to C24 by GC/FID



Lab Sample ID: CK60SB                      QC Report No: CK60-Smith Bayliss LeResche Inc.  
LIMS ID: 00-21303                          Project: Travelodge  
Matrix: Soil

Data Release Authorized:  
Reported: 11/15/00 *OK 11/15/00*

LABORATORY CONTROL SAMPLE RECOVERY REPORT

Date extracted: 11/10/00  
Date analyzed: 11/13/00

CONSTITUENT	SPIKE FOUND	SPIKE ADDED	% RECOVERY
Diesel Range Hydrocarbons	55.3	50.0	111%

TPHd Surrogate Recovery

Methylarachidate                      79.0%

Values reported in ppm (mg/kg) on a dry weight basis.

Analytical Resources Inc.  
NWTPH-D Quantitation Report

*Spike Blank*

Data file: /chem2/fid3b.i/13nov00.b/1113b037.d  
Method: /chem2/fid3b.i/13nov00.b/tphfid3b.m  
Instrument: fid3b.i  
Operator: GSA  
Report Date: 11/14/2000  
Macro: FID:3B111000  
Calibration Dates: Gas:10/31/00 Diesel:11/10/00 M.Oil:11/06/00  
AK102:11/10/00 AK103:11/06/00

ARI ID: CK60 SBS 11/10  
Client ID:  
Injection: 13-NOV-2000 22:10  
Dilution Factor: 1

Tazz-1B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.463	-0.025	17827	4678837	GAS (Tol-C12)	158514659	436
C8	1.881	-0.015	21753	2142699	DIESEL (C12-C24)	406598110	504
Solvent Peak	----				M.OIL (C24-C38)	17208569	23
C10	2.963	0.004	200280	7295892	AK-102 (C10-C24)	503708410	553
C12	3.480	0.002	328608	12211164	AK-103 (C24-C38)	17208569	23
C14	3.911	0.000	364934	18454648			
C16	4.311	0.000	333173	21238584			
C18	4.714	-0.002	224660	13695501			
o-Terph Surr	4.824	0.007	66039	4419097			
C20	5.112	-0.003	122309	10691364			
C22	5.495	-0.002	56347	4803331			
ARACH-SURR	5.702	-0.002	270121	10871889			
C24	5.861	-0.001	16642	2186123			
C26	6.217	0.001	5591	622826			
C28	6.571	0.005	5423	1014811			
C30	6.932	0.006	1740	260836			
Filter Peak	7.947	0.012	6713	1061070			
C32	7.301	0.008	3392	410174			
C34	7.652	0.002	1049	171451			
C36	8.028	0.030	2906	403929			
C38	8.346	0.009	822	170470			
C40	8.693	0.027	1547	308089			

Me-Arach Surrogate Rec = 79%

*LCS*

FTD-3B/RTX-1 CK60 SBS 11/10

FTD-3B SIGNAL

HP6890 GC Data, 1113b037.d

