

REPORT TO: COMPANY: <u>EBA (Edm)</u> CONTACT: <u>Steve Taylor</u> ADDRESS: <u>EBA Edmonton</u> PHONE: <u>x 260</u> FAX: _____ INVOICE TO: <u>SAME</u> <u>Y</u> <u>N</u> COMPANY: _____ CONTACT: _____ ADDRESS: _____ PHONE: _____ FAX: _____		REPORT DISTRIBUTION: ALL FINAL RESULTS WILL BE MAILED EMAIL ☒ FAX ☐ EMAIL 1: <u>staylor@eba.ca</u> EMAIL 2: <u>bmurphy@eba.ca</u> SELECT: pdf ☒ digital ☒ both ☒		DATE: _____ ETL LAB WORK ORDER # <u>128687</u> SERVICE REQUESTED ☐ REGULAR SERVICE (DEFAULT) ☐ PRIORITY SERVICE (50% SURCHARGE) ☒ EMERGENCY SERVICE (100% SURCHARGE)		ANALYSIS REQUEST BTEX _____ TEH _____ TVH _____	
INDICATE BOTTLES: FILTERED/PRESERVED (F/P) ▲ JOB # <u>1740065</u> PO / AFE: _____ LSD: _____ QUOTE # _____		SAMPLED BY / DATE / TIME <u>Aug 29/03</u> SAMPLING METHOD <u>from tank</u> SAMPLE TYPE <u>Water</u>		SAMPLING LOCATION <u>Boston</u>			
LAB SAMPLE # 1 <u>Aug 28/03 11:00am before</u> 2 <u>Aug 28/03 11:00am after</u> 3 <u>Aug 28/03 4:00pm before</u> 4 <u>Aug 28/03 4:00pm after</u> 5 <u>Aug 28/03 9:00pm before</u> 6 <u>Aug 28/03 9:00pm after</u> 7 <u>Aug 29/03 11:00am before</u> 8 <u>Aug 29/03 11:00am after</u>		HAZARDOUS? (Y/N) 1 <u>yes</u> 2 <u>yes</u> 3 <u>yes</u> 4 <u>yes</u> 5 <u>yes</u> 6 <u>yes</u> 7 <u>yes</u> 8 <u>yes</u>		NUMBER OF CONTAINERS 1 <u>250</u> 2 <u>250</u> 3 <u>250</u> 4 <u>250</u> 5 <u>250</u> 6 <u>250</u> 7 <u>250</u> 8 <u>250</u>			
HIGHLY CONTAMINATED? (Y/N) 1 <u>yes</u> 2 <u>yes</u> 3 <u>yes</u> 4 <u>yes</u> 5 <u>yes</u> 6 <u>yes</u> 7 <u>yes</u> 8 <u>yes</u>		HAZARDOUS? (Y/N) 1 <u>yes</u> 2 <u>yes</u> 3 <u>yes</u> 4 <u>yes</u> 5 <u>yes</u> 6 <u>yes</u> 7 <u>yes</u> 8 <u>yes</u>		LAB SAMPLE # 1 <u>Aug 28/03 11:00am before</u> 2 <u>Aug 28/03 11:00am after</u> 3 <u>Aug 28/03 4:00pm before</u> 4 <u>Aug 28/03 4:00pm after</u> 5 <u>Aug 28/03 9:00pm before</u> 6 <u>Aug 28/03 9:00pm after</u> 7 <u>Aug 29/03 11:00am before</u> 8 <u>Aug 29/03 11:00am after</u>			

NOTES & CONDITIONS:
 1. Quote number must be provided to ensure proper pricing.
 2. Turnaround times will vary dependent on complexity of analysis & Lab workload at time of submission. Please contact the Lab to confirm turnaround time.
 3. All hazardous samples submitted must be labeled to comply with WHMIS and TDG regulations. This must include the nature of the hazard, as well as a contact name & phone number that the Lab can contact for further information.
 4. Raise D is necessary
 5. Failure to properly complete all portions of this form may delay analysis.

GUIDELINES / REGULATIONS		SPECIAL INSTRUCTIONS / NATURE OF HAZARDOUS MATERIAL	
RELINQUISHED BY: _____ DATE & TIME: _____	RECEIVED BY: <u>SP</u> DATE & TIME: <u>Sep 2/03 10:14</u>	RELINQUISHED BY: _____ DATE & TIME: _____	RECEIVED BY: _____ DATE & TIME: _____

RELINQUISHED BY: _____ **DATE & TIME:** _____

RECEIVED BY: _____ **DATE & TIME:** _____

RELINQUISHED BY: _____ **DATE & TIME:** _____

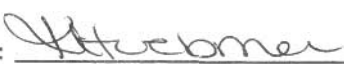
RECEIVED BY: _____ **DATE & TIME:** _____

ANALYTICAL REPORT

EBA ENG CONSULTANTS LTD
ATTN: STEVE TAYLOR
14940 123 AVE NORTH BLDG
EDMONTON AB T5V 1B4

DATE: 10-SEP-03 03:37 PM

Lab Work Order #: L128039 Sampled By: CLIENT Date Received: 02-SEP-03
P.O. #:
Job #: 1740065
Comments:

APPROVED BY: 

KAREN HUEBNER
Project Manager

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.
ANY REMAINING SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

LABORATORY ACCREDITATIONS:

- STANDARDS COUNCIL OF CANADA IN COOPERATION WITH THE CANADIAN ASSOCIATION FOR ENVIRONMENTAL ANALYTICAL LABORATORIES (CAEAL) FOR SPECIFIC TESTS AS REGISTERED BY THE COUNCIL (EDMONTON, CALGARY, GRANDE PRAIRIE, SASKATOON, WINNIPEG, THUNDER BAY, WATERLOO)
- AMERICAN INDUSTRIAL HYGIENE ASSOCIATION (AIHA) IN THE INDUSTRIAL HYGIENE PROGRAM (EDMONTON, WINNIPEG)
- STANDARDS COUNCIL OF CANADA IN COOPERATION WITH THE CANADIAN FOOD INSPECTION AGENCY (CFIA) FOR FERTILIZER AND FEED TESTING (SASKATOON) AND FOR MICROBIOLOGICAL TESTING IN FOOD (WINNIPEG)

LABORATORY RECOGNITIONS:

- STANDARDS COUNCIL OF CANADA - GLP COMPLIANT FACILITY (EDMONTON, OTTAWA)

9936 - 67 Avenue, Edmonton, Alberta T6E 0P5, Tel. (780) 413-5227, Fax (780) 437-2311
Canada Wide Tel. 1-800-668-9878 www.envirotest.com

(Edmonton, Calgary, Grande Prairie, Saskatoon, Winnipeg, Thunder Bay, Ottawa, Waterloo, Montreal)

ENVIRO-TEST ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By	Batch
L128039-1 N. WALL 1.0M Sample Date: 28-AUG-03 Matrix: SOIL CCME TVHs and TEHs CCME Total Hydrocarbons F1 (C6-C10) 700 5 mg/kg 10-SEP-03 F1-BTEX 650 5 mg/kg 10-SEP-03 F2 (C10-C16) 11000 5 mg/kg 10-SEP-03 F3 (C16-C34) 4300 5 mg/kg 10-SEP-03 F4 (C34-C50) 40 5 mg/kg 10-SEP-03 F4G-SG (GHH-Silica) 700 100 mg/kg 10-SEP-03 Total Hydrocarbons (C6-C50) 16000 5 mg/kg 10-SEP-03 Chromatogram to baseline at nC50 NO 10-SEP-03 CCME Total Extractable Hydrocarbons Prep/Analysis Dates 04-SEP-03 05-SEP-03 AMB R141695 CCME BTEX Benzene 0.39 0.01 mg/kg 04-SEP-03 08-SEP-03 TKP R141808 Toluene 14 0.01 mg/kg 04-SEP-03 08-SEP-03 TKP R141808 Ethylbenzene 2.8 0.01 mg/kg 04-SEP-03 08-SEP-03 TKP R141808 Xylenes 31 0.01 mg/kg 04-SEP-03 08-SEP-03 TKP R141808 % Moisture 13 0.1 % 04-SEP-03 RED R141151 Prep/Analysis Dates 10-SEP-03 10-SEP-03 CTL R142382								
L128039-2 S. WALL 1.0M Sample Date: 28-AUG-03 Matrix: SOIL CCME TVHs and TEHs CCME Total Hydrocarbons F1 (C6-C10) 17 5 mg/kg 08-SEP-03 F1-BTEX 17 5 mg/kg 08-SEP-03 F2 (C10-C16) 86 5 mg/kg 08-SEP-03 F3 (C16-C34) 26 5 mg/kg 08-SEP-03 F4 (C34-C50) <5 5 mg/kg 08-SEP-03 Total Hydrocarbons (C6-C50) 130 5 mg/kg 08-SEP-03 Chromatogram to baseline at nC50 YES 08-SEP-03 CCME Total Extractable Hydrocarbons Prep/Analysis Dates 04-SEP-03 05-SEP-03 AMB R141695 CCME BTEX Benzene <0.01 0.01 mg/kg 04-SEP-03 08-SEP-03 TKP R141808 Toluene <0.01 0.01 mg/kg 04-SEP-03 08-SEP-03 TKP R141808 Ethylbenzene <0.01 0.01 mg/kg 04-SEP-03 08-SEP-03 TKP R141808 Xylenes 0.02 0.01 mg/kg 04-SEP-03 08-SEP-03 TKP R141808 % Moisture 9.9 0.1 % 04-SEP-03 RED R141151								
L128039-3 W. WALL 1.0M Sample Date: 28-AUG-03 Matrix: SOIL CCME TVHs and TEHs CCME Total Hydrocarbons F1 (C6-C10) 12 5 mg/kg 09-SEP-03 F1-BTEX 10 5 mg/kg 09-SEP-03 F2 (C10-C16) 62 5 mg/kg 09-SEP-03 F3 (C16-C34) 39 5 mg/kg 09-SEP-03 F4 (C34-C50) 23 5 mg/kg 09-SEP-03 F4G-SG (GHH-Silica) 100 100 mg/kg 09-SEP-03								

ENVIRO-TEST ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By	Batch
L128039-3 W. WALL 1.0M Sample Date: 28-AUG-03 Matrix: SOIL CCME TVHs and TEHs CCME Total Hydrocarbons Total Hydrocarbons (C6-C50) Chromatogram to baseline at nC50 CCME Total Extractable Hydrocarbons Prep/Analysis Dates CCME BTEX Benzene Toluene Ethylbenzene Xylenes % Moisture Prep/Analysis Dates	140 NO		5	mg/kg		09-SEP-03 09-SEP-03		
					04-SEP-03	04-SEP-03	AMB	R141439
	<0.01		0.01	mg/kg	04-SEP-03	08-SEP-03	TKP	R141808
	0.31		0.01	mg/kg	04-SEP-03	08-SEP-03	TKP	R141808
	0.27		0.01	mg/kg	04-SEP-03	08-SEP-03	TKP	R141808
	1.4		0.01	mg/kg	04-SEP-03	08-SEP-03	TKP	R141808
	9.8		0.1	%		04-SEP-03	RED	R141151
					08-SEP-03	08-SEP-03	AMB	R142032
L128039-4 E. WALL 1.0M Sample Date: 28-AUG-03 Matrix: SOIL CCME TVHs and TEHs CCME Total Hydrocarbons F1 (C6-C10) F1-BTEX F2 (C10-C16) F3 (C16-C34) F4 (C34-C50) F4G-SG (GHH-Silica) Total Hydrocarbons (C6-C50) Chromatogram to baseline at nC50 CCME Total Extractable Hydrocarbons Prep/Analysis Dates CCME BTEX Benzene Toluene Ethylbenzene Xylenes % Moisture Prep/Analysis Dates	<5 <5 25 46 42 <100 110 NO		5 5 5 5 5 100 5	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg		09-SEP-03 09-SEP-03 09-SEP-03 09-SEP-03 09-SEP-03 09-SEP-03 09-SEP-03		
					04-SEP-03	05-SEP-03	AMB	R141439
	<0.01		0.01	mg/kg	04-SEP-03	08-SEP-03	TKP	R141808
	0.03		0.01	mg/kg	04-SEP-03	08-SEP-03	TKP	R141808
	<0.01		0.01	mg/kg	04-SEP-03	08-SEP-03	TKP	R141808
	0.17		0.01	mg/kg	04-SEP-03	08-SEP-03	TKP	R141808
	10		0.1	%		04-SEP-03	RED	R141151
					08-SEP-03	08-SEP-03	AMB	R142032
L128039-5 W/C Sample Date: 28-AUG-03 Matrix: SOIL CCME TVHs and TEHs CCME Total Hydrocarbons F1 (C6-C10) F1-BTEX F2 (C10-C16) F3 (C16-C34) F4 (C34-C50) F4G-SG (GHH-Silica) Total Hydrocarbons (C6-C50) Chromatogram to baseline at nC50 CCME Total Extractable Hydrocarbons Prep/Analysis Dates CCME BTEX	330 310 96000 22000 1400 6600 120000 NO		5 5 5 5 5 100 5	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg		10-SEP-03 10-SEP-03 10-SEP-03 10-SEP-03 10-SEP-03 10-SEP-03 10-SEP-03		
					04-SEP-03	05-SEP-03	AMB	R141695

Reference Information

Methods Listed (if applicable):

ETL Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
ETL-BTX,TVH-CCME-ED	Soil	CCME BTEX	EPA 5030	CCME CWS-PHC Dec-2000 - Pub# 1310
ETL-OGG-CCME-ED	Soil	CCME Gravimetric Heavy Hydrocarbons (Sil		CCME CWS-PHC Dec-2000 - Pub# 1310
ETL-TEH-CCME-ED	Soil	CCME Total Extractable Hydrocarbons		CCME CWS-PHC Dec-2000 - Pub# 1310
PREP-MOISTURE-ED	Soil	% Moisture		Oven dry 105C-Gravimetric

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
ED	Enviro-Test Laboratories - Edmonton, Alberta, Canada		

GLOSSARY OF REPORT TERMS

Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.

The reported surrogate recovery value provides a measure of method efficiency. The Laboratory warning units are determined under column heading D.L.

mg/kg (units) - unit of concentration based on mass, parts per million

mg/L (units) - unit of concentration based on volume, parts per million

< - Less than

D.L. - Detection Limit

N/A - Result not available. Refer to qualifier code and definition for explanation

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.

Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

Enviro-Test Laboratories has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, Enviro-Test Laboratories assumes no liability for the use or interpretation of the results.

ENVIRO-TEST QC REPORT

Workorder: L128039

Client: EBA ENG CONSULTANTS LTD
14940 123 AVE NORTH BLDG
EDMONTON AB T5V 1B4

Contact: STEVE TAYLOR

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ETL-BTX,TVH-CCME-ED <u>Soil</u>								
Batch	R141808							
WG136201-3	DUP	L128039-6						
Benzene		0.02	0.02	J	mg/kg	0.01	0.031	08-SEP-03
Ethylbenzene		0.72	0.84		mg/kg	16	48	08-SEP-03
Toluene		3.4	3.9		mg/kg	16	39	08-SEP-03
Xylenes		3.6	3.9		mg/kg	6.6	52	08-SEP-03
TVH: (C6-C10 / No BTEX Correction)		69	82		mg/kg	17	41	08-SEP-03
WG137193-2	LCS							
Benzene			104		%		60-122	08-SEP-03
Ethylbenzene			109		%		64-124	08-SEP-03
Toluene			108		%		61-126	08-SEP-03
TVH: (C6-C10 / No BTEX Correction)			119		%		59-128	08-SEP-03
Xylenes			108		%		68-122	08-SEP-03
WG137193-1	MB							
Benzene			<0.01		mg/kg		0.01	08-SEP-03
Ethylbenzene			<0.01		mg/kg		0.01	08-SEP-03
Toluene			<0.01		mg/kg		0.01	08-SEP-03
TVH: (C6-C10 / No BTEX Correction)			<5		mg/kg		5	08-SEP-03
Xylenes			<0.01		mg/kg		0.01	08-SEP-03
ETL-OGG-CCME-ED <u>Soil</u>								
Batch	R142382							
WG137830-1	MB							
Gravimetric Heavy Hydrocarbons (Silica)			0		mg/kg		100	10-SEP-03
ETL-TEH-CCME-ED <u>Soil</u>								
Batch	R141439							
WG136757-2	LCS							
TEH: (C10-C16)			79		%		58-118	04-SEP-03
TEH: (C16-C34)			79		%		58-118	04-SEP-03
TEH: (C34-C50)			79		%		58-118	04-SEP-03
WG136757-1	MB							
TEH: (C10-C16)			<5		mg/kg		5	04-SEP-03
TEH: (C16-C34)			<5		mg/kg		5	04-SEP-03
TEH: (C34-C50)			<5		mg/kg		5	04-SEP-03

ENVIRO-TEST QC REPORT

Workorder: L128039

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ETL-TEH-CCME-ED		Soil						
Batch	R141695							
WG137048-3	DUP	L128039-5						
TEH: (C10-C16)		96000	110000		mg/kg	17	40	05-SEP-03
TEH: (C16-C34)		22000	26000		mg/kg	14	37	05-SEP-03
TEH: (C34-C50)		1400	1500		mg/kg	9.0	42	05-SEP-03
WG137048-4	DUP	L128054-3						
TEH: (C10-C16)		51	54		mg/kg	6.7	40	06-SEP-03
TEH: (C16-C34)		620	470		mg/kg	29	37	06-SEP-03
TEH: (C34-C50)		270	220		mg/kg	19	42	06-SEP-03
WG137048-2	LCS							
TEH: (C10-C16)			74		%		58-118	05-SEP-03
TEH: (C16-C34)			74		%		58-118	05-SEP-03
TEH: (C34-C50)			74		%		58-118	05-SEP-03
WG137048-5	LCS							
TEH: (C10-C16)			80		%		58-118	06-SEP-03
TEH: (C16-C34)			80		%		58-118	06-SEP-03
TEH: (C34-C50)			80		%		58-118	06-SEP-03
WG137048-1	MB							
TEH: (C10-C16)			<5		mg/kg		5	05-SEP-03
TEH: (C16-C34)			<5		mg/kg		5	05-SEP-03
TEH: (C34-C50)			<5		mg/kg		5	05-SEP-03

Product - Batch and Sample Number Relations:

ETL-BTX,TVH-CCME-ED	2					
R141808		L128039-1	L128039-2	L128039-3	L128039-4	L128039-5
		L128039-6				
ETL-OGG-CCME-ED	2					
R142032		L128039-3	L128039-4			
ETL-OGG-CCME-ED	2					
R142382		L128039-1	L128039-5	L128039-6		
ETL-TEH-CCME-ED	2					
R141439		L128039-3	L128039-4			
ETL-TEH-CCME-ED	2					
R141695		L128039-1	L128039-2	L128039-5	L128039-6	
PREP-MOISTURE-ED	2					
R141151		L128039-1	L128039-2	L128039-3	L128039-4	L128039-5
		L128039-6				

Workorder # L128039

Legend:

Limit	95% Confidence Interval (Laboratory Warning Limits)
DUP	Duplicate
RPD	Relative Percent Difference ((higher result-lower result)/Average, expressed as %)
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Materials
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material

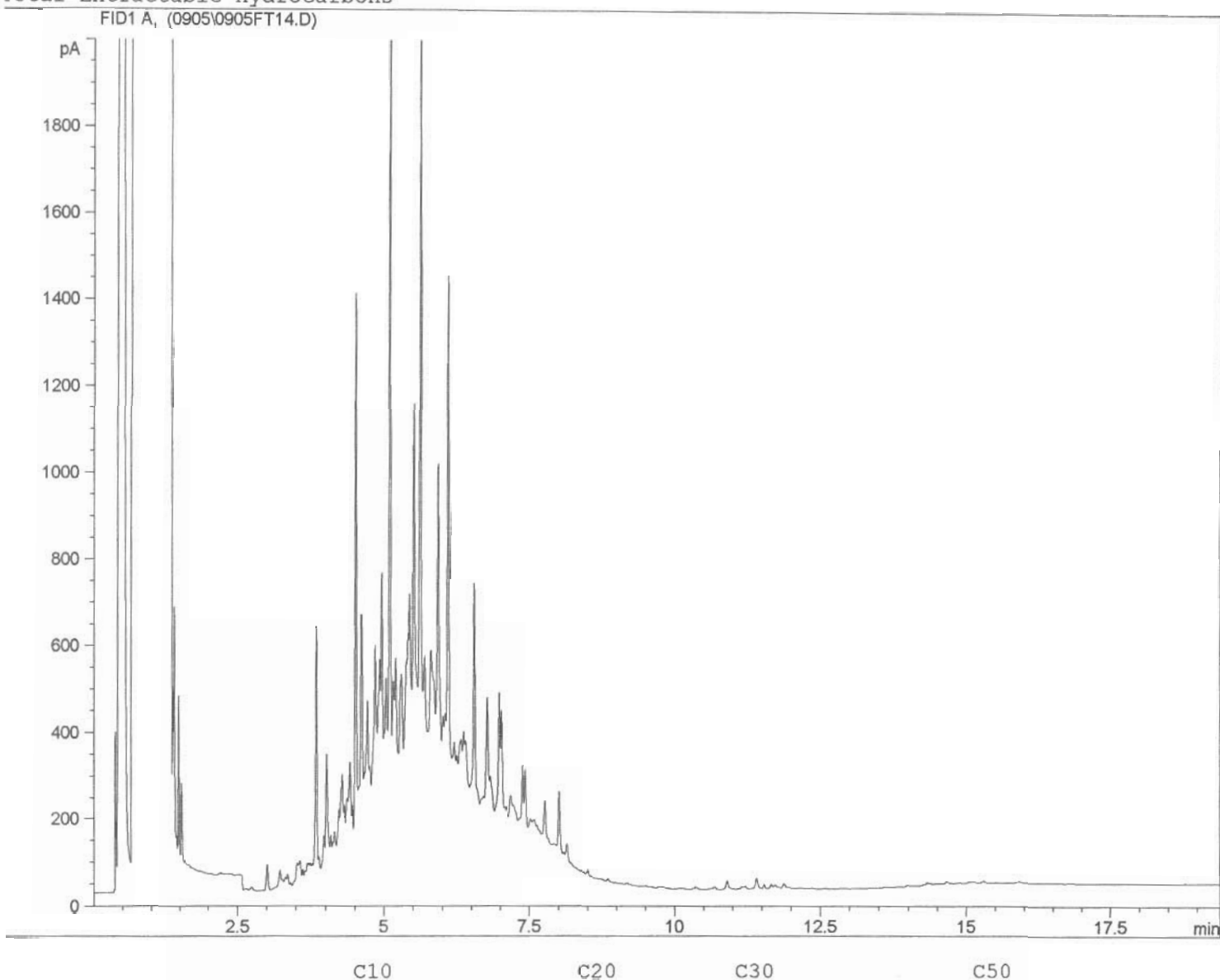
Qualifier:

RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.
A	Method blank exceeds acceptance limit. Blank correction not applied, unless the qualifier "RAMB" (result adjusted for method blank) appears in the Analytical Report.
B	Method blank result exceeds acceptance limit, however, it is less than 5% of sample concentration. Blank correction not applied.
E	Matrix spike recovery may fall outside the acceptance limits due to high sample background.
F	Silver recovery low, likely due to elevated chloride levels in sample.
G	Outlier - No assignable cause for nonconformity has been determined.
H	Result falls within the 99% Confidence Interval (Laboratory Control Limits)
J	Duplicate results and limit(s) are expressed in terms of absolute difference.
K	The sample referenced above is of a non-standard matrix type; standard QC acceptance criteria may not be achievable.

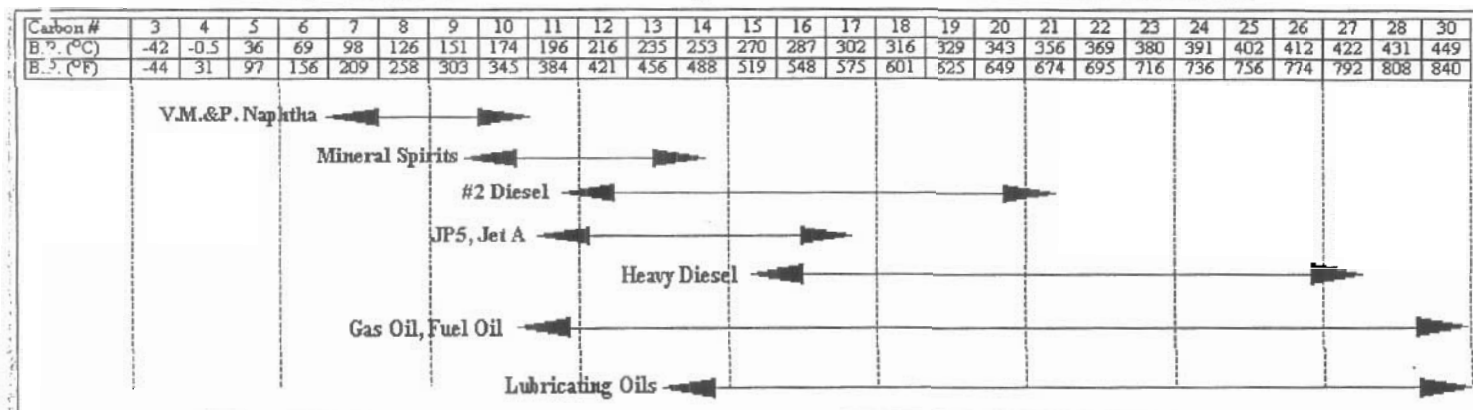
Client ID: N.WALL 1.0M
Sample ID: L128039-1 50
Injection Date: 9/5/03 7:39:43 PM
Instrument ID: Instrument A



Total Extractable Hydrocarbons



Boiling Point Distribution Range of Petroleum Based Fuel Products



Adapted from: Drews, A.W., ED. Manual on Hyrdocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

Client ID: S.WALL 1.0M



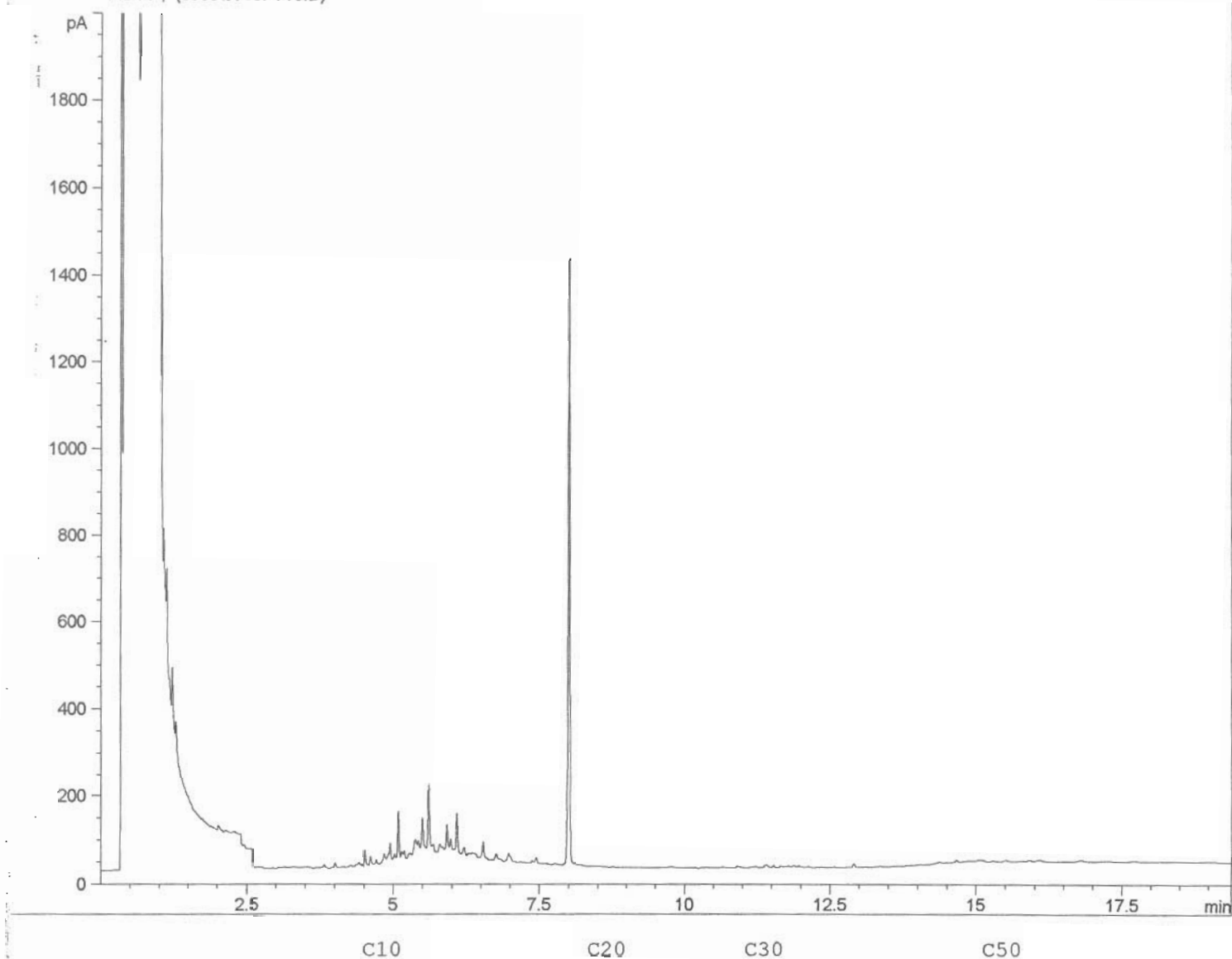
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Injection Date: 9/5/03 7:10:40 PM

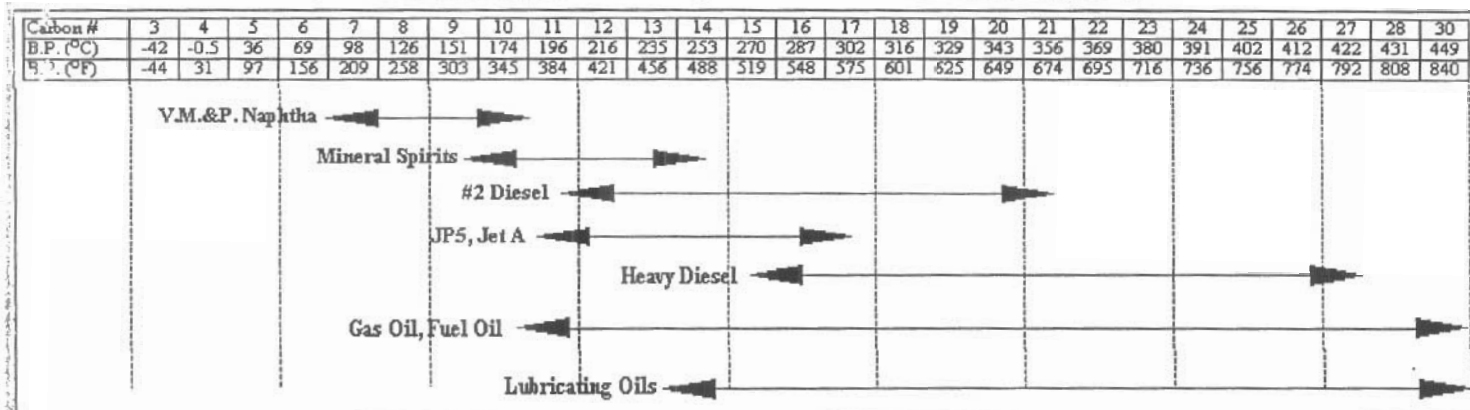
Instrument ID: Instrument A

Total Extractable Hydrocarbons

FID1 A, (0905V0905FT13.D)



Boiling Point Distribution Range of Petroleum Based Fuel Products



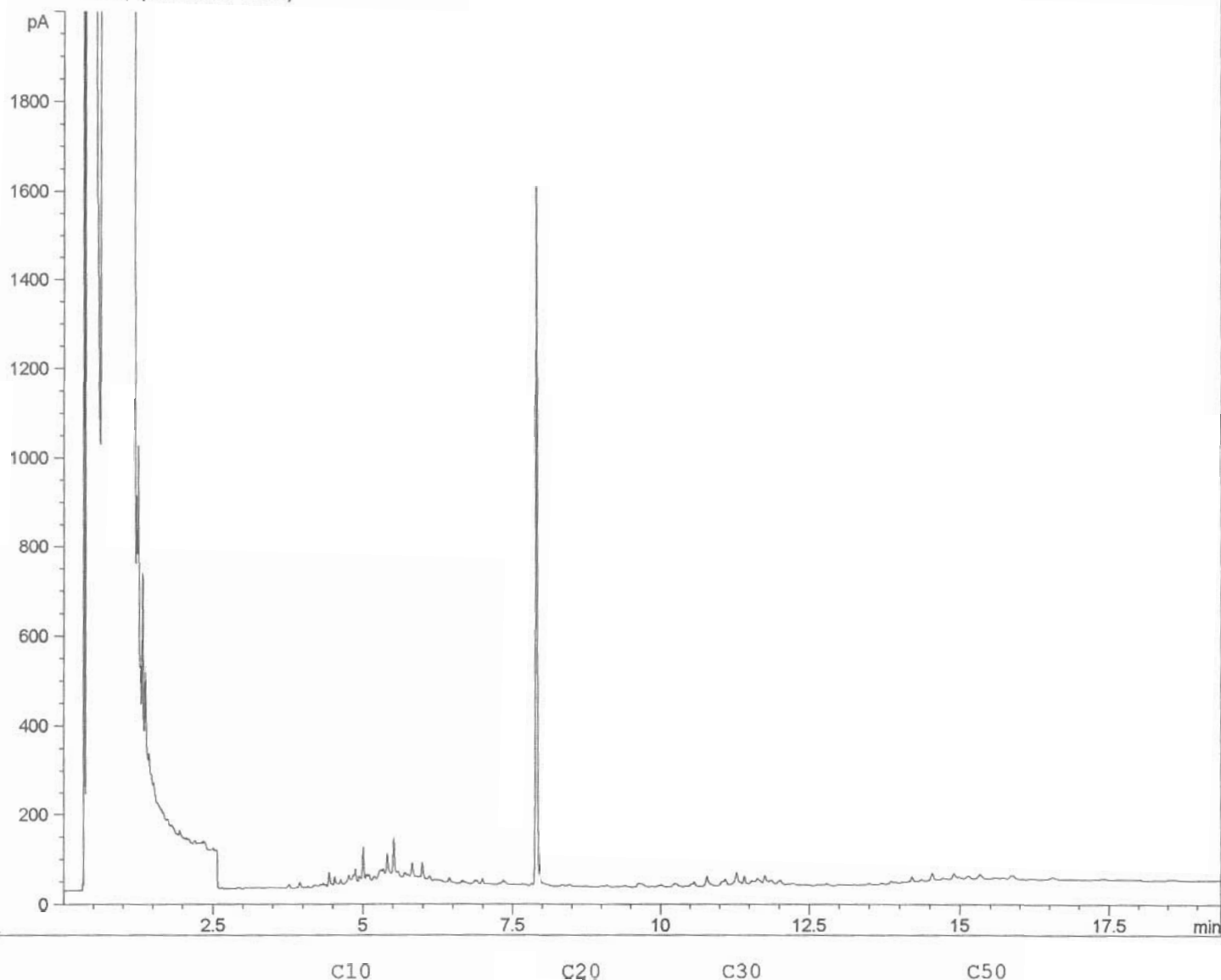
Adapted from: Drews, A.W., ED. Manual on Hyrdocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

Client ID: W.WALL 1.0M
Sample ID: L128039-3 5
Injection Date: 9/4/03 11:52:28 PM
Instrument ID: Instrument A

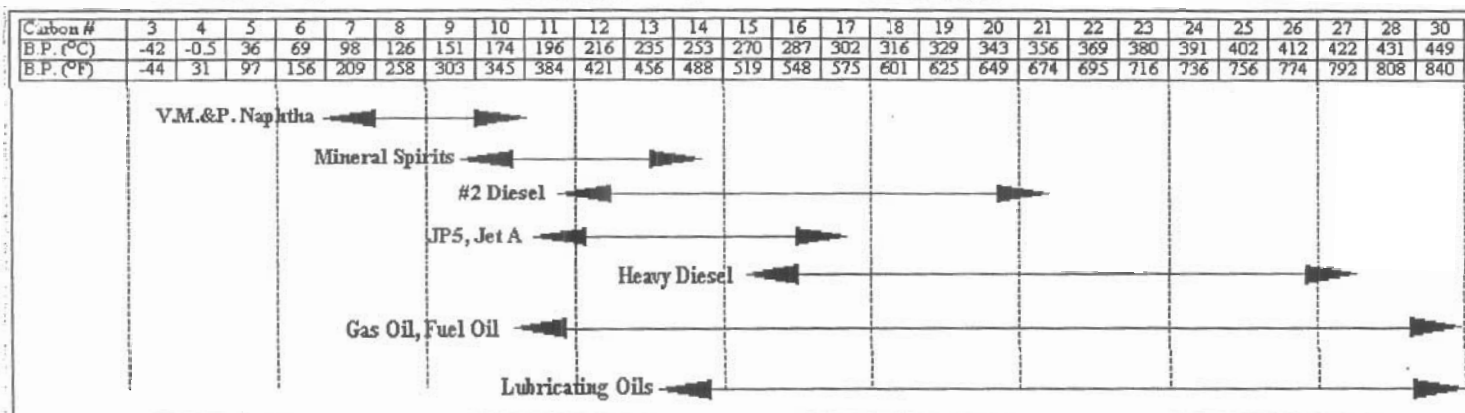


Total Extractable Hydrocarbons

FID1 A, (0904\0904FT14.D)



Boiling Point Distribution Range of Petroleum Based Fuel Products



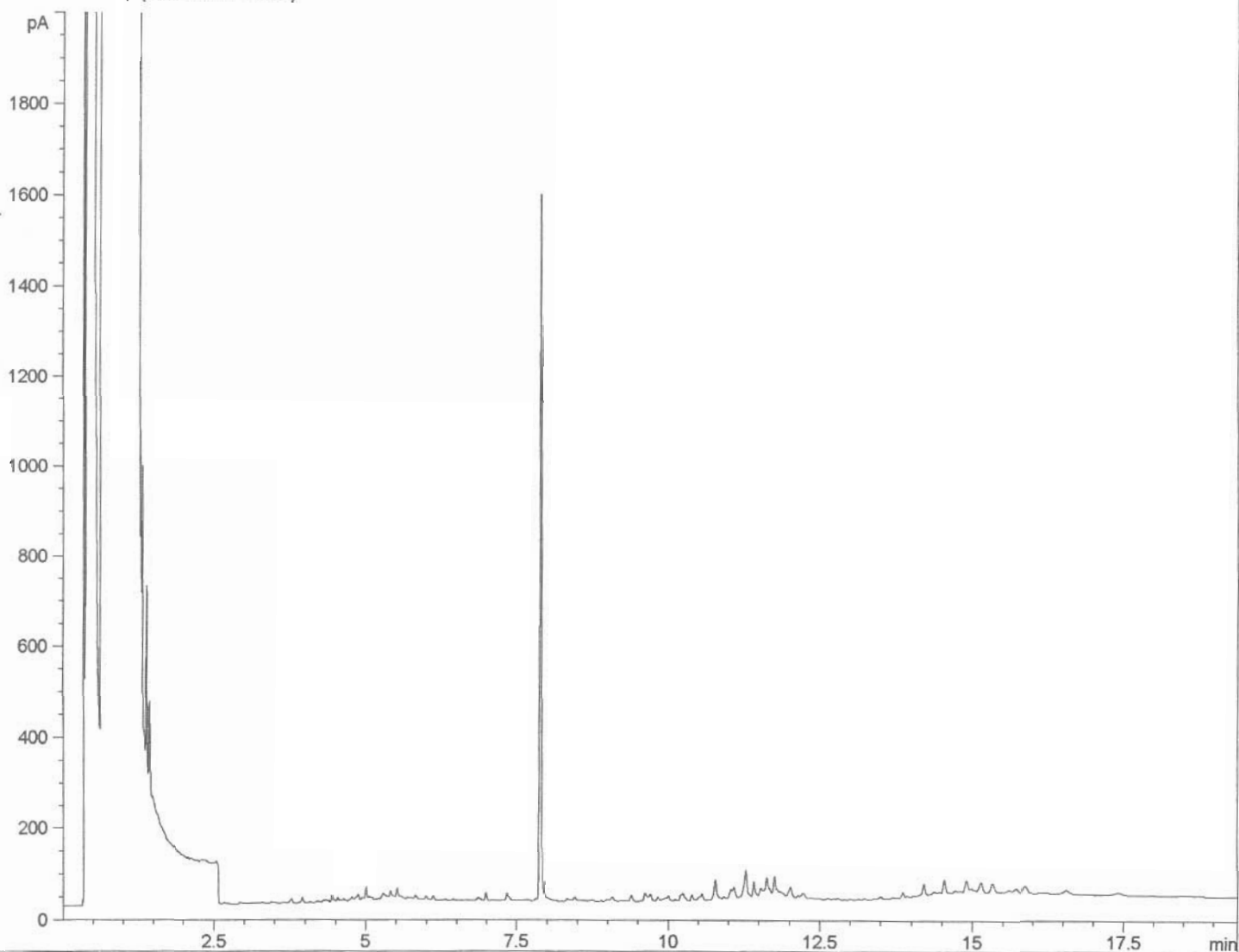
Adapted from: Drews, A.W., ED. Manual on Hyrdocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

Client ID: E.WALL 1.0M
Sample ID: L128039-4 5
Injection Date: 9/5/03 12:21:24 AM
Instrument ID: Instrument A



Total Extractable Hydrocarbons

FID1 A, (0904\0904FT15.D)



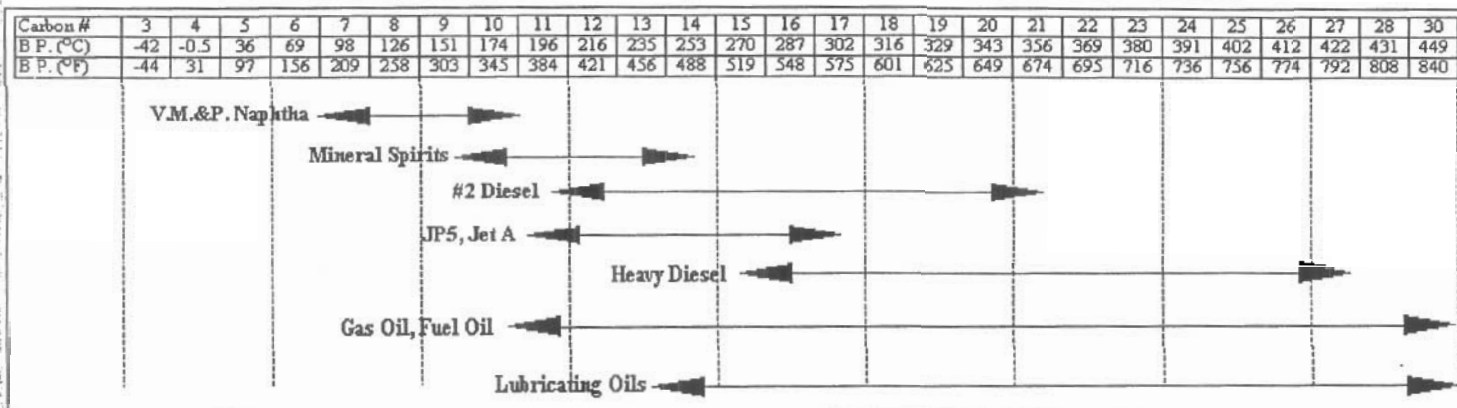
C10

C20

C30

C50

Boiling Point Distribution Range of Petroleum Based Fuel Products



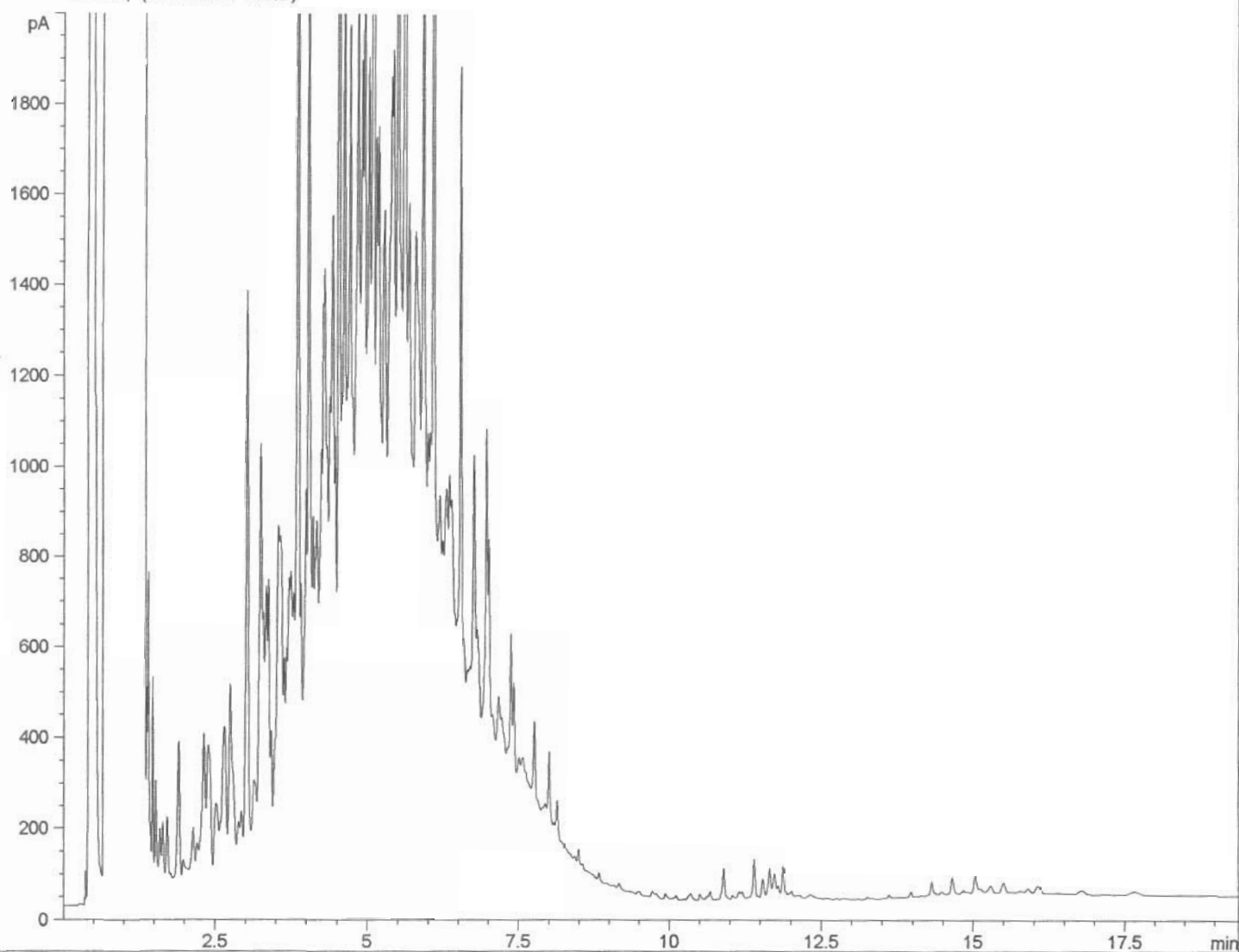
Adapted from: Drews, A.W., ED. Manual on Hyrdocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

Client ID: W/C
Sample ID: L128039-5 50
Injection Date: 9/5/03 8:08:33 PM
Instrument ID: Instrument A



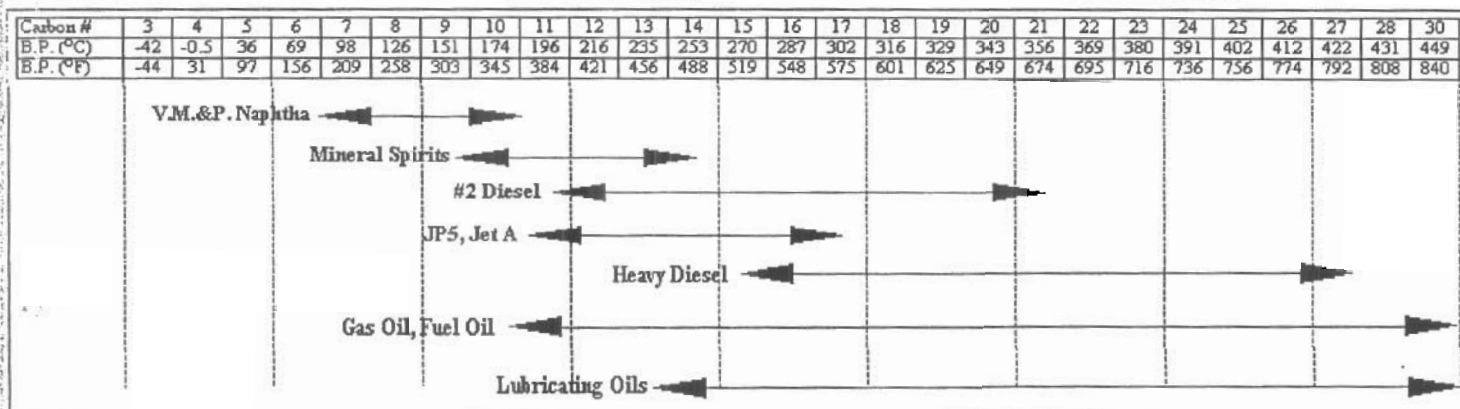
Total Extractable Hydrocarbons

FID1 A, (0905\0905FT15.D)



C10 C20 C30 C50

Boiling Point Distribution Range of Petroleum Based Fuel Products



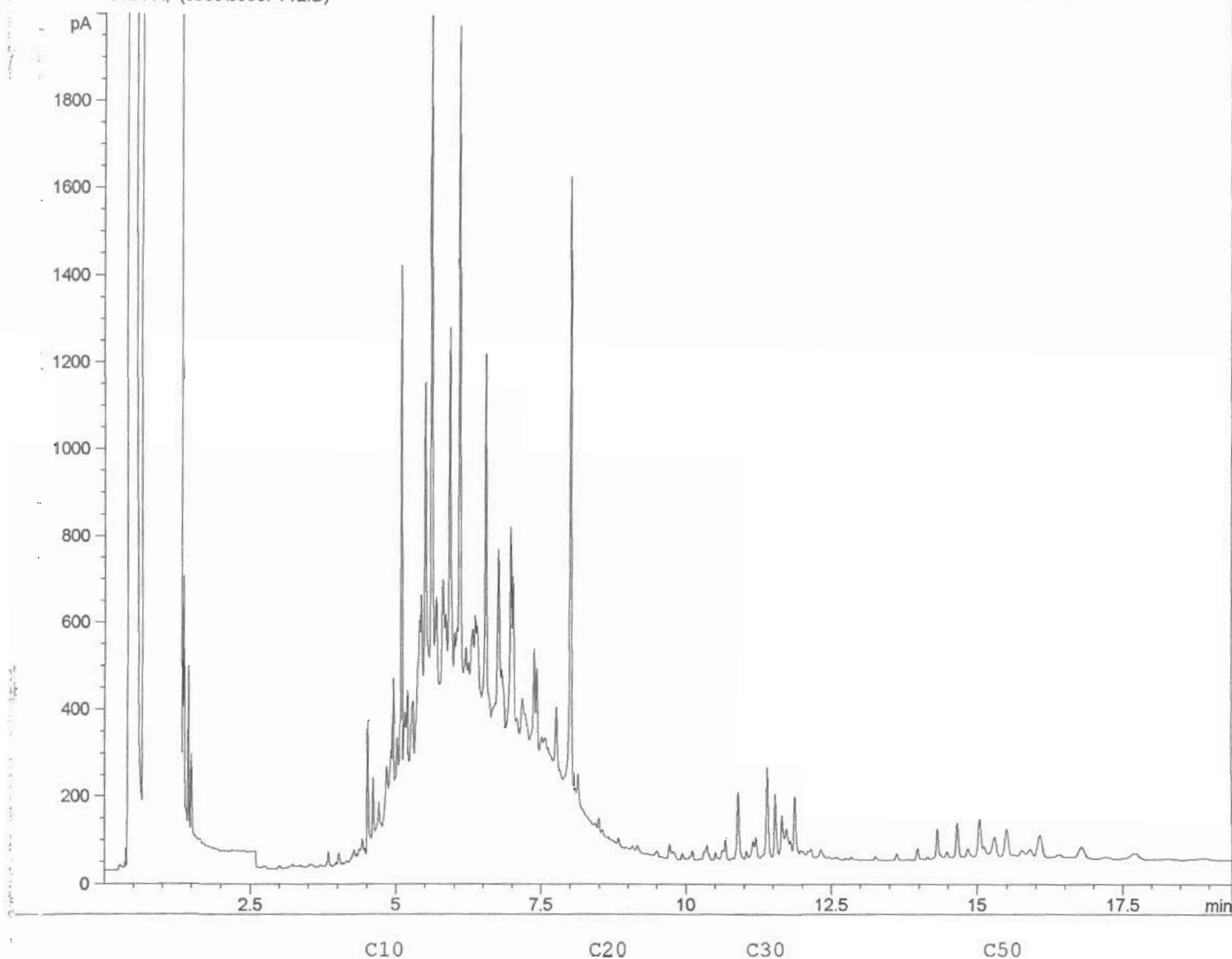
Adapted from: Drews, A.W., ED. Manual on Hyrdocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

Client ID: BASE 1.5M
Sample ID: L128039-6 5 RR
Injection Date: 9/5/03 6:42:01 PM
Instrument ID: Instrument A

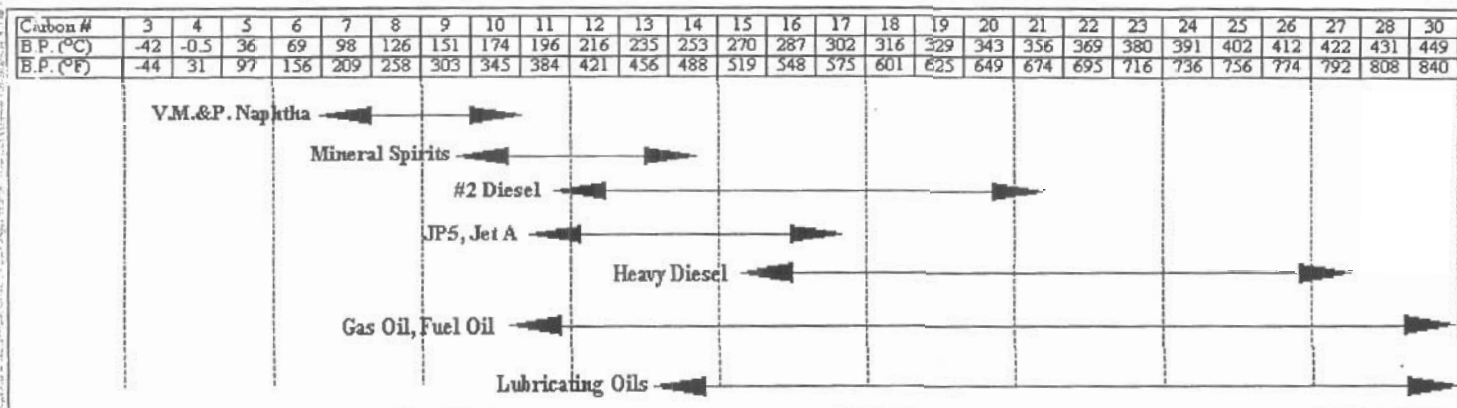


Total Extractable Hydrocarbons

FID1 A, (0905\0905FT12.D)



Boiling Point Distribution Range of Petroleum Based Fuel Products



Adapted from: Drews, A.W., ED. Manual on Hyrdocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

REPORT TO: COMPANY: EBA (Edm) CONTACT: Steve Taylor ADDRESS: PHONE: 451 2130 x260 FAX: INVOICE TO: SAME N COMPANY: CONTACT: ADDRESS: PHONE: FAX:		DATE: REPORT DISTRIBUTION: ALL FINAL RESULTS WILL BE MAILED EMAIL ☒ FAX ☐ EMAIL 1: Staylor@eba.ca EMAIL 2: bmurphy@eba.ca SELECT: pdf ☐ digital ☐ both ☒		ETL LAB WORK ORDER # L128039 SERVICE REQUESTED ☒ REGULAR SERVICE (DEFAULT) ☐ PRIORITY SERVICE (50% SURCHARGE) ☐ EMERGENCY SERVICE (100% SURCHARGE)		ANALYSIS REQUEST INDICATE BOTTLES: FILTERED/PRESERVED (F/P) ☒ JOB # 1740065 PO / AFE: LSD: QUOTE #	
NOTES & CONDITIONS: 1. Quote number must be provided to ensure proper pricing.		2. Turnaround times will vary dependent on complexity of analysis & Lab workload at time of submission. Please contact the Lab to confirm turnaround time.		3. All hazardous samples submitted must be labeled to comply with WHMIS and TDG regulations. This must include the nature of the hazard, as well as a contact name & phone number that the Lab can contact for further information.			
GUIDELINES / REGULATIONS CCME		SPECIAL INSTRUCTIONS / NATURE OF HAZARDOUS MATERIAL					
RELINQUISHED BY: RELINQUISHED BY:		RECEIVED BY: RECEIVED BY:		DATE & TIME: DATE & TIME:			
DATE & TIME: DATE & TIME:		DATE & TIME: DATE & TIME:		DATE & TIME: DATE & TIME:			

SAMPLE ID	SAMPLING LOCATION	SAMPLED BY / DATE / TIME	SAMPLING METHOD	SAMPLE TYPE	HAZARDOUS? (Y/N)	NUMBER OF CONTAINERS	HIGHLY CONTAMINATED? (Y/N)	LAB SAMPLE #
N. Wall 1.0m	Boston Camp	Aug 28 2003	Grab	Soil	X	X	X	
S. Wall 1.0m					X	X	X	
W. Wall 1.0m					X	X	X	
E. Wall 1.0m					X	X	X	
W/C					X	X	X	
Base 1.5m					X	X	X	

Prep-Moisture
BTX, TWA, TEH, CO, ME, ED
Chromatogram
FI-F4
BTEX
yellow dot
1st Green

ANALYTICAL REPORT

EBA ENG CONSULTANTS LTD
ATTN: STEVE TAYLOR
14940 123 AVE NORTH BLDG
EDMONTON AB T5V 1B4

DATE: 24-SEP-03 02:15 PM

Lab Work Order #: L130912

Sampled By: D.STAPLETON

Date Received: 17-SEP-03

Project P.O. #: NA

Project Reference: 1740065

Comments: L130912-1, -3, -5, -7, -9, -11, -13, -15 BTEX, TVH, TEH ANALYSIS CANCELLED DUE TO FREE PHASE HYDROCARBONS

APPROVED BY:


TONY CIARLA
Project Manager

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.
ANY REMAINING SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

LABORATORY ACCREDITATIONS:

- STANDARDS COUNCIL OF CANADA IN COOPERATION WITH THE CANADIAN ASSOCIATION FOR ENVIRONMENTAL ANALYTICAL LABORATORIES (CAEAL) FOR SPECIFIC TESTS AS REGISTERED BY THE COUNCIL (EDMONTON, CALGARY, GRANDE PRAIRIE, SASKATOON, WINNIPEG, THUNDER BAY, WATERLOO)
- AMERICAN INDUSTRIAL HYGIENE ASSOCIATION (AIHA) IN THE INDUSTRIAL HYGIENE PROGRAM (EDMONTON, WINNIPEG)
- STANDARDS COUNCIL OF CANADA IN COOPERATION WITH THE CANADIAN FOOD INSPECTION AGENCY (CFIA) FOR FERTILIZER AND FEED TESTING (SASKATOON) AND FOR MICROBIOLOGICAL TESTING IN FOOD (WINNIPEG)

LABORATORY RECOGNITIONS:

- STANDARDS COUNCIL OF CANADA - GLP COMPLIANT FACILITY (EDMONTON, OTTAWA)

RECEIVED
OCT - 2 2003

ENVIRO-TEST ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By	Batch
L130912-2 SEPT 5 3PM AFTER Sample Date: 05-SEP-03 Matrix: WATER BTEX, TVH and TEH TEH (C11-C30) BTEX and TVH (C5-C10) Benzene Toluene Ethylbenzene Xylenes Total Volatiles	280 <0.0005 <0.0005 <0.0005 0.0018 0.8		0.05 0.0005 0.0005 0.0005 0.0005 0.1	mg/L mg/L mg/L mg/L mg/L	19-SEP-03 21-SEP-03 21-SEP-03 21-SEP-03 21-SEP-03	20-SEP-03 20-SEP-03 20-SEP-03 20-SEP-03 20-SEP-03	OAL MNM MNM MNM MNM	R144641 R144569 R144569 R144569 R144569 R144569
L130912-4 SEPT 6 3PM AFTER Sample Date: 05-SEP-03 Matrix: WATER BTEX, TVH and TEH TEH (C11-C30) BTEX and TVH (C5-C10) Benzene Toluene Ethylbenzene Xylenes Total Volatiles	180 <0.0005 0.0013 <0.0005 0.0008 0.9		0.05 0.0005 0.0005 0.0005 0.0005 0.1	mg/L mg/L mg/L mg/L mg/L	19-SEP-03 22-SEP-03 22-SEP-03 22-SEP-03 22-SEP-03	20-SEP-03 20-SEP-03 20-SEP-03 20-SEP-03 20-SEP-03	OAL MNM MNM MNM MNM	R144641 R144569 R144569 R144569 R144569 R144569
L130912-6 SEPT 7 3PM AFTER Sample Date: 05-SEP-03 Matrix: WATER BTEX, TVH and TEH TEH (C11-C30) BTEX and TVH (C5-C10) Benzene Toluene Ethylbenzene Xylenes Total Volatiles	47 <0.0005 0.0006 <0.0005 0.0033 <0.1		0.05 0.0005 0.0005 0.0005 0.0005 0.1	mg/L mg/L mg/L mg/L mg/L	19-SEP-03 22-SEP-03 22-SEP-03 22-SEP-03 22-SEP-03	20-SEP-03 20-SEP-03 20-SEP-03 20-SEP-03 20-SEP-03	OAL MNM MNM MNM MNM	R144641 R144569 R144569 R144569 R144569 R144569
L130912-8 SEPT 8 3PM AFTER Sample Date: 05-SEP-03 Matrix: WATER BTEX, TVH and TEH TEH (C11-C30) BTEX and TVH (C5-C10) Benzene Toluene Ethylbenzene Xylenes Total Volatiles	57 <0.0005 0.0005 <0.0005 0.0033 0.1		0.05 0.0005 0.0005 0.0005 0.0005 0.1	mg/L mg/L mg/L mg/L mg/L	19-SEP-03 22-SEP-03 22-SEP-03 22-SEP-03 22-SEP-03	20-SEP-03 22-SEP-03 22-SEP-03 22-SEP-03 22-SEP-03	OAL MNM MNM MNM MNM	R144641 R144569 R144569 R144569 R144569 R144569
L130912-10 SEPT 9 3PM AFTER Sample Date: 05-SEP-03 Matrix: WATER BTEX, TVH and TEH TEH (C11-C30) BTEX and TVH (C5-C10)	200		0.05	mg/L	19-SEP-03	20-SEP-03	OAL	R144641

ENVIRO-TEST ANALYTICAL REPORT

[illegible]

Reference Information

Methods Listed (if applicable):

ETL Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
BTX,TVH-CL	Water	BTEX and TVH (C5-C10)	EPA 5030B	EPA 5030/8015& 8260-P&T GC-MS/FID
TVH includes BTEX contribution.				
TEH-CL	Water	TEH (C11-C30)	EPA 3550B	EPA 3510/8000-GC-FID

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

59951 59954

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
CL	Enviro-Test Laboratories - Calgary, Alberta, Canada		

GLOSSARY OF REPORT TERMS

Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.

The reported surrogate recovery value provides a measure of method efficiency. The Laboratory warning units are determined under column heading D.L.

mg/kg (units) - unit of concentration based on mass, parts per million

mg/L (units) - unit of concentration based on volume, parts per million

< - Less than

D.L. - Detection Limit

N/A - Result not available. Refer to qualifier code and definition for explanation

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.

Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

Enviro-Test Laboratories has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, Enviro-Test Laboratories assumes no liability for the use or interpretation of the results.