APPENDIX C

LABORATORY ANALYTICAL REPORTS (ENVIRO-TEST LABORATORIES)

ETL Enviro-Test LABORATORIES

A DIVISION OF ETL CHEMSPEC ANALYTICAL LIMITED

PRELIMINARY RESULTS

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

DATE: 25-JUN-04 09:16 AM

Lab Work Order #: L181189 **Sampled By:** S.TAYLOR **Date Received:** 22-JUN-04

Project P.O. #:

Project Reference: MIRAMAR

Comments:

Sample Specific Comments: L181189-1: raise DL due to moisture content,

DOUG JOHNSON
Director of Operations, Edmonton

KAREN HUEBNER
Client Service Specialist

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)

ENVIRO-TEST ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By	Batch
L181189-1 WORST CASE								
Sample Date: 19-JUN-04								
Matrix: SOIL								
CCME TVHs and TEHs								
CCME Total Hydrocarbons								
F1 (C6-C10)	<5		5	mg/kg		24-JUN-04		
F1-BTEX	<5		5	mg/kg		24-JUN-04		
F2 (C10-C16)	240		5	mg/kg		24-JUN-04		
F3 (C16-C34)	1100		5	mg/kg		24-JUN-04		
F4 (C34-C50)	220		5	mg/kg		24-JUN-04		
Total Hydrocarbons (C6-C50)	1600		5	mg/kg		24-JUN-04		
Chromatogram to baseline at nC50	NO					24-JUN-04		
CCME Total Extractable Hydrocarbons								
Prep/Analysis Dates					23-JUN-04	24-JUN-04	AML	R193985
CCME BTEX								
Benzene	<0.06		0.06	mg/kg	22-JUN-04	23-JUN-04	IAG	R193764
Toluene	<0.06		0.06	mg/kg	22-JUN-04	23-JUN-04	IAG	R193764
Ethylbenzene	<0.06		0.06	mg/kg	22-JUN-04	23-JUN-04	IAG	R193764
Xylenes	<0.06		0.06	mg/kg	22-JUN-04	23-JUN-04	IAG	R193764
Note: raise DL due to moisture content								
% Moisture	73		0.1	%		23-JUN-04	BDH	R193591
L181189-2 A1								
Sample Date: 19-JUN-04								
Matrix: SOIL								
CCME TVHs and TEHs								
CCME Total Hydrocarbons								
F1 (C6-C10)	<5		5	mg/kg		24-JUN-04		
F1-BTEX	<5		5	mg/kg		24-JUN-04		
F2 (C10-C16)	<5		5	mg/kg		24-JUN-04		
F3 (C16-C34)	21		5	mg/kg		24-JUN-04		
F4 (C34-C50)	6		5	mg/kg		24-JUN-04		
Total Hydrocarbons (C6-C50)	27		5	mg/kg		24-JUN-04		
Chromatogram to baseline at nC50	YES					24-JUN-04		
CCME Total Extractable Hydrocarbons								
Prep/Analysis Dates					23-JUN-04	24-JUN-04	AML	R193985
CCME ETEX								
Benzene	<0.01		0.01	mg/kg	22-JUN-04	23-JUN-04	IAG	R193764
Toluene	<0.01		0.01	mg/kg	22-JUN-04	23-JUN-04	IAG	R193764
Ethylbenzene	<0.01		0.01	mg/kg	22-JUN-04	23-JUN-04	IAG	R193764
Xylenes	<0.01		0.01	mg/kg	22-JUN-04	23-JUN-04	IAG	R193764
% Moisture	20		0.1	%		23-JUN-04	BDH	R193591
L181189-3 A2								
Sample Date: 19-JUN-04								
Matrix: SOIL								
CCME TVHs and TEHs								
CCME Total Hydrocarbons								
F1 (C6-C10)	<5		5	mg/kg		24-JUN-04		
F1-BTEX	<5		5	mg/kg		24-JUN-04		
F2 (C10-C16)	<5		5	mg/kg		24-JUN-04		
F3 (C16-C34)	13		5	mg/kg		24-JUN-04		
F4 (C34-C50)	<5		5	mg/kg		24-JUN-04		
Total Hydrocarbons (C6-C50)	13		5	mg/kg		24-JUN-04		

ENVIRO-TEST ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By	Batch
L181189-3 A2								
Sample Date: 19-JUN-04								
Matrix: SOIL								
CCME TVHs and TEHs								
CCME Total Hydrocarbons								
Chromatogram to baseline at nC50	YES					24-JUN-04		
CCME Total Extractable Hydrocarbons								
Prep/Analysis Dates					23-JUN-04	24-JUN-04	AML	R193985
CCME BTEX								
Benzene	<0.01		0.01	mg/kg	22-JUN-04	23-JUN-04	IAG	R193764
Toluene	<0.01		0.01	mg/kg	22-JUN-04	23-JUN-04	IAG	R193764
Ethylbenzene	<0.01		0.01	mg/kg	22-JUN-04	23-JUN-04	IAG	R193764
Xylenes	0.03		0.01	mg/kg	22-JUN-04	23-JUN-04	IAG	R193764
% Moisture	20		0.1	%		23-JUN-04	BDH	R193591
L181189-4 SPILL								
Sample Date: 20-JUN-04								
Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
F2 (>C10-C16)	0.85		0.05	mg/L	22-JUN-04	22-JUN-04	AML	R193782
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
Toluene	<0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
EthylBenzene	<0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
Xylenes	0.0019		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
F1(C6-C10)	<0.5		0.5	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
F1-BTEX	<0.1		0.1	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
L181189-5 NORTH								
Sample Date: 20-JUN-04								
Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
F2 (>C10-C16)	<0.05		0.05	mg/L	22-JUN-04	22-JUN-04	AML	R193782
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
Toluene	<0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
EthylBenzene	<0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
Xylenes	<0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
F1(C6-C10)	<0.5		0.5	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
F1-BTEX	<0.1		0.1	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
L181189-6 SOUTH								
Sample Date: 20-JUN-04								
Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
F2 (>C10-C16)	<0.05		0.05	mg/L	22-JUN-04	22-JUN-04	AML	R193782
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
Toluene	0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
EthylBenzene	<0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
Xylenes	0.0028		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
F1(C6-C10)	<0.5		0.5	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
F1-BTEX	<0.1		0.1	mg/L	22-JUN-04	23-JUN-04	EMP	R193689

ENVIRO-TEST ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By	Batch
L181189-7 EAST								
Sample Date: 20-JUN-04								
Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
F2 (>C10-C16)	<0.05		0.05	mg/L	22-JUN-04	22-JUN-04	AML	R193782
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
Toluene	<0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
EthylBenzene	<0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
Xylenes	<0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
F1(C6-C10)	<0.5		0.5	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
F1-BTEX	<0.1		0.1	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
L181189-8 TAP								
Sample Date: 20-JUN-04								
Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
F2 (>C10-C16)	<0.05		0.05	mg/L	22-JUN-04	22-JUN-04	AML	R193782
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
Toluene	<0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
EthylBenzene	<0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
Xylenes	<0.0005		0.0005	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
F1(C6-C10)	<0.5		0.5	mg/L	22-JUN-04	23-JUN-04	EMP	R193689
F1-BTEX	<0.1		0.1	mg/L	22-JUN-04	23-JUN-04	EMP	R193689

Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Methods Listed (if applicable):

ETL Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
BTX,F1-ED	Water	BTEX and F1 (C6-C10)	EPA 5030	EPA 5030/8015&8260-P&T GC-MS & FID
ETL-BTX,TVH-CCME-ED	Soil	CCME BTEX	EPA 5030	CCME CWS-PHC Dec-2000 - Pub# 1310
ETL-TEH-CCME-ED	Soil	CCME Total Extractable Hydrocarbons		CCME CWS-PHC Dec-2000 - Pub# 1310
F2-ED	Water	F2 (>C10-C16)		EPA 3510/8000-GC-FID
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:

097963

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 enviromental 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.

ETL Enviro-Test LABORATORIES

A DIVISION OF ETL CHEMSPEC ANALYTICAL LIMITED

PRELIMINARY RESULTS

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

DATE: 25-JUN-04 04:49 PM

Lab Work Order #: L182149 **Sampled By:** S.TAYLOR **Date Received:** 24-JUN-04
Project P.O. #:
Project Reference: MIRAMAR
Comments:

DOUG JOHNSON
Director of Operations, Edmonton

KAREN HUEBNER
Client Service Specialist

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)

ENVIRO-TEST ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By	Batch
L182149-1 4 PM BEFORE								
Sample Date: 22-JUN-04								
Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
F2 (>C10-C16)	0.79		0.05	mg/L	24-JUN-04	24-JUN-04	AAT	R194427
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	23-JUN-04	25-JUN-04	K1M	R194487
Toluene	<0.0005		0.0005	mg/L	23-JUN-04	25-JUN-04	K1M	R194487
EthylBenzene	<0.0005		0.0005	mg/L	23-JUN-04	25-JUN-04	K1M	R194487
Xylenes	0.0040		0.0005	mg/L	23-JUN-04	25-JUN-04	K1M	R194487
F1(C6-C10)	0.1		0.1	mg/L	23-JUN-04	25-JUN-04	K1M	R194487
F1-BTEX	<0.1		0.1	mg/L	23-JUN-04	25-JUN-04	K1M	R194487
L182149-2 4 PM AFTER								
Sample Date: 22-JUN-04								
Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
F2 (>C10-C16)	0.19		0.05	mg/L	24-JUN-04	24-JUN-04	AAT	R194427
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	23-JUN-04	25-JUN-04	K1M	R194487
Toluene	<0.0005		0.0005	mg/L	23-JUN-04	25-JUN-04	K1M	R194487
EthylBenzene	<0.0005		0.0005	mg/L	23-JUN-04	25-JUN-04	K1M	R194487
Xylenes	<0.0005		0.0005	mg/L	23-JUN-04	25-JUN-04	K1M	R194487
F1(C6-C10)	<0.1		0.1	mg/L	23-JUN-04	25-JUN-04	K1M	R194487
F1-BTEX	<0.1		0.1	mg/L	23-JUN-04	25-JUN-04	K1M	R194487

Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Methods Listed (if applicable):

ETL Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
BTX.F1-ED	Water	BTEX and F1 (C6-C10)		EPA 5030/8015&8260-P&T GC-MS & FID
F2-ED	Water	F2 (>C10-C16)		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:

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 enviromental 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.

ETL Enviro-Test LABORATORIES

A DIVISION OF ETL CHEMSPEC ANALYTICAL LIMITED

PRELIMINARY RESULTS

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

DATE: 12-JUL-04 05:06 PM

Lab Work Order #: L184439 **Sampled By:** CLIENT **Date Received:** 02-JUL-04

Project P.O. #:

Project Reference: 40065.003

Comments:

DOUG JOHNSON
Director of Operations, Edmonton

KAREN HUEBNER
Client Service Specialist

ENVIRO-TEST ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By	Batch
L184439-1 B1								
Sample Date: 26-JUN-04								
Matrix: SOIL								
CCME TVHs and TEHs								
CCME Total Hydrocarbons								
F1 (C6-C10)	<5		5	mg/kg		12-JUL-04		
F1-BTEX	<5		5	mg/kg		12-JUL-04		
F2 (C10-C16)	<5		5	mg/kg		12-JUL-04		
F3 (C16-C34)	11		5	mg/kg		12-JUL-04		
F4 (C34-C50)	<5		5	mg/kg		12-JUL-04		
Total Hydrocarbons (C6-C50)	11		5	mg/kg		12-JUL-04		
Chromatogram to baseline at nC50	YES					12-JUL-04		
CCME Total Extractable Hydrocarbons								
Prep/Analysis Dates					08-JUL-04	08-JUL-04	AAT	R198290
CCME BTEX								
Benzene	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
Toluene	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
Ethylbenzene	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
Xylenes	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
% Moisture	16		0.1	%		07-JUL-04	DDU	R197545
L184439-2 B2								
Sample Date: 26-JUN-04								
Matrix: SOIL								
CCME TVHs and TEHs								
CCME Total Hydrocarbons								
F1 (C6-C10)	<5		5	mg/kg		12-JUL-04		
F1-BTEX	<5		5	mg/kg		12-JUL-04		
F2 (C10-C16)	110		5	mg/kg		12-JUL-04		
F3 (C16-C34)	990		5	mg/kg		12-JUL-04		
F4 (C34-C50)	430		5	mg/kg		12-JUL-04		
F4G-SG (GHH-Silica)	400		100	mg/kg		12-JUL-04		
Total Hydrocarbons (C6-C50)	1500		5	mg/kg		12-JUL-04		
Chromatogram to baseline at nC50	NO					12-JUL-04		
CCME Total Extractable Hydrocarbons								
Prep/Analysis Dates					08-JUL-04	08-JUL-04	AAT	R198290
CCME BTEX								
Benzene	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
Toluene	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
Ethylbenzene	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
Xylenes	0.06		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
% Moisture	21		0.1	%		07-JUL-04	DDU	R197545
Prep/Analysis Dates					12-JUL-04	12-JUL-04	AAT	R198840
L184439-3 B3								
Sample Date: 26-JUN-04								
Matrix: SOIL								
CCME TVHs and TEHs								
CCME Total Hydrocarbons								
F1 (C6-C10)	<5		5	mg/kg		12-JUL-04		
F1-BTEX	<5		5	mg/kg		12-JUL-04		
F2 (C10-C16)	49		5	mg/kg		12-JUL-04		
F3 (C16-C34)	32		5	mg/kg		12-JUL-04		
F4 (C34-C50)	<5		5	mg/kg		12-JUL-04		

ENVIRO-TEST ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By	Batch
L184439-3 B3								
Sample Date: 26-JUN-04								
Matrix: SOIL								
CCME TVHs and TEHs								
CCME Total Hydrocarbons								
Total Hydrocarbons (C6-C50)	81		5	mg/kg		12-JUL-04		
Chromatogram to baseline at nC50	YES					12-JUL-04		
CCME Total Extractable Hydrocarbons								
Prep/Analysis Dates					08-JUL-04	08-JUL-04	AAT	R198290
CCME BTEX								
Benzene	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
Toluene	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
Ethylbenzene	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
Xylenes	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
% Moisture	19		0.1	%		07-JUL-04	DDU	R197545
L184439-4 B4								
Sample Date: 26-JUN-04								
Matrix: SOIL								
CCME TVHs and TEHs								
CCME Total Hydrocarbons								
F1 (C6-C10)	<5		5	mg/kg		12-JUL-04		
F1-BTEX	<5		5	mg/kg		12-JUL-04		
F2 (C10-C16)	<5		5	mg/kg		12-JUL-04		
F3 (C16-C34)	19		5	mg/kg		12-JUL-04		
F4 (C34-C50)	5		5	mg/kg		12-JUL-04		
Total Hydrocarbons (C6-C50)	24		5	mg/kg		12-JUL-04		
Chromatogram to baseline at nC50	YES					12-JUL-04		
CCME Total Extractable Hydrocarbons								
Prep/Analysis Dates					08-JUL-04	08-JUL-04	AAT	R198290
CCME BTEX								
Benzene	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
Toluene	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
Ethylbenzene	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
Xylenes	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
% Moisture	17		0.1	%		07-JUL-04	DDU	R197545
L184439-5 B5								
Sample Date: 26-JUN-04								
Matrix: SOIL								
CCME TVHs and TEHs								
CCME Total Hydrocarbons								
F1 (C6-C10)	<5		5	mg/kg		12-JUL-04		
F1-BTEX	<5		5	mg/kg		12-JUL-04		
F2 (C10-C16)	12		5	mg/kg		12-JUL-04		
F3 (C16-C34)	24		5	mg/kg		12-JUL-04		
F4 (C34-C50)	<5		5	mg/kg		12-JUL-04		
Total Hydrocarbons (C6-C50)	36		5	mg/kg		12-JUL-04		
Chromatogram to baseline at nC50	YES					12-JUL-04		
CCME Total Extractable Hydrocarbons								
Prep/Analysis Dates					08-JUL-04	08-JUL-04	AAT	R198290
CCME BTEX								
Benzene	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
Toluene	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503

ENVIRO-TEST ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By	Batch
L184439-5 B5								
Sample Date: 26-JUN-04								
Matrix: SOIL								
CCME TVHs and TEHs								
CCME BTEX								
Ethylbenzene	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
Xylenes	<0.01		0.01	mg/kg	10-JUL-04	12-JUL-04	IAG	R198503
% Moisture	19		0.1	%		07-JUL-04	DDU	R197545
L184439-6 B6								
Sample Date: 26-JUN-04								
Matrix: SOIL								
CCME TVHs and TEHs								
CCME Total Hydrocarbons								
F1 (C6-C10)	<5		5	mg/kg		12-JUL-04		
F1-BTEX	<5		5	mg/kg		12-JUL-04		
F2 (C10-C16)	<5		5	mg/kg		12-JUL-04		
F3 (C16-C34)	16		5	mg/kg		12-JUL-04		
F4 (C34-C50)	<5		5	mg/kg		12-JUL-04		
Total Hydrocarbons (C6-C50)	16		5	mg/kg		12-JUL-04		
Chromatogram to baseline at nC50	YES					12-JUL-04		
CCME Total Extractable Hydrocarbons								
Prep/Analysis Dates					08-JUL-04	08-JUL-04	AAT	R198290
CCME BTEX								
Benzene	<0.01		0.01	mg/kg	10-JUL-04	11-JUL-04	IAG	R198503
Toluene	<0.01		0.01	mg/kg	10-JUL-04	11-JUL-04	IAG	R198503
Ethylbenzene	<0.01		0.01	mg/kg	10-JUL-04	11-JUL-04	IAG	R198503
Xylenes	<0.01		0.01	mg/kg	10-JUL-04	11-JUL-04	IAG	R198503
% Moisture	18		0.1	%		07-JUL-04	DDU	R197545

Refer to Referenced Information for Qualifiers (if any) and Methodology.

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
ETL-TVH,TEH-CCME-ED	Soil	CCME Total Hydrocarbons		CCME CWS-PHC Dec-2000 - Pub# 1310

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

Hydrocarbon results are expressed on a dry weight basis.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.
In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:
1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:
1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 resporse factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

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		

Reference Information

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 enviromental 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.

ETL Enviro-Test LABORATORIES

A DIVISION OF ETL CHEMSPEC ANALYTICAL LIMITED

PRELIMINARY RESULTS

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

DATE: 12-JUL-04 06:23 PM

Lab Work Order #: L184451 **Sampled By:** CLIENT **Date Received:** 02-JUL-04

Project P.O. #:

Project Reference: MIRAMAR 40065.003

Comments:

DOUG JOHNSON
Director of Operations, Edmonton

KAREN HUEBNER
Client Service Specialist

ENVIRO-TEST ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By	Batch
L184451-1 N OF SPILL								
Sample Date: 30-JUN-04								
Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
F2 (>C10-C16)	<0.05		0.05	mg/L	07-JUL-04	07-JUL-04	AMB	R197809
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	11-JUL-04	12-JUL-04	IAG	R198848
Toluene	<0.0005		0.0005	mg/L	11-JUL-04	12-JUL-04	IAG	R198848
EthylBenzene	<0.0005		0.0005	mg/L	11-JUL-04	12-JUL-04	IAG	R198848
Xylenes	<0.0005		0.0005	mg/L	11-JUL-04	12-JUL-04	IAG	R198848
F1(C6-C10)	<0.1		0.1	mg/L	11-JUL-04	12-JUL-04	IAG	R198848
F1-BTEX	<0.1		0.1	mg/L	11-JUL-04	12-JUL-04	IAG	R198848
L184451-2 S OF SPILL								
Sample Date: 30-JUN-04								
Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
F2 (>C10-C16)	<0.05		0.05	mg/L	07-JUL-04	07-JUL-04	AMB	R197809
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	11-JUL-04	12-JUL-04	IAG	R198848
Toluene	<0.0005		0.0005	mg/L	11-JUL-04	12-JUL-04	IAG	R198848
EthylBenzene	<0.0005		0.0005	mg/L	11-JUL-04	12-JUL-04	IAG	R198848
Xylenes	<0.0005		0.0005	mg/L	11-JUL-04	12-JUL-04	IAG	R198848
F1(C6-C10)	<0.1		0.1	mg/L	11-JUL-04	12-JUL-04	IAG	R198848
F1-BTEX	<0.1		0.1	mg/L	11-JUL-04	12-JUL-04	IAG	R198848
L184451-3 SPILL								
Sample Date: 30-JUN-04								
Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
F2 (>C10-C16)	0.09		0.05	mg/L	07-JUL-04	07-JUL-04	AMB	R197809
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	11-JUL-04	12-JUL-04	IAG	R198848
Toluene	<0.0005		0.0005	mg/L	11-JUL-04	12-JUL-04	IAG	R198848
EthylBenzene	<0.0005		0.0005	mg/L	11-JUL-04	12-JUL-04	IAG	R198848
Xylenes	<0.0005		0.0005	mg/L	11-JUL-04	12-JUL-04	IAG	R198848
F1(C6-C10)	<0.1		0.1	mg/L	11-JUL-04	12-JUL-04	IAG	R198848
F1-BTEX	<0.1		0.1	mg/L	11-JUL-04	12-JUL-04	IAG	R198848

Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Methods Listed (if applicable):

ETL Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
BTX,F1-ED	Water	BTEX and F1 (C6-C10)	EPA 5030	EPA 5030/8015&8260-P&T GC-MS & FID
F2-ED	Water	F2 (>C10-C16)		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:

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 enviromental 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.

ETL Enviro-Test LABORATORIES

A DIVISION OF ETL CHEMSPEC ANALYTICAL LIMITED

PRELIMINARY RESULTS

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

DATE: 03-JUL-04 02:51 PM

Lab Work Order #: L184325 **Sampled By:** CLIENT **Date Received:** 02-JUL-04
Project P.O. #:
Project Reference: MIRAMAR
Comments:

DOUG JOHNSON
Director of Operations, Edmonton

KAREN HUEBNER
Client Service Specialist

ENVIRO-TEST ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By	Batch
L184325-1 TAP								
Sample Date: 30-JUN-04								
Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
F2 (>C10-C16)	<0.05		0.05	mg/L	02-JUL-04	02-JUL-04	AMB	R196275
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	02-JUL-04	03-JUL-04	EMP	R196232
Toluene	<0.0005		0.0005	mg/L	02-JUL-04	03-JUL-04	EMP	R196232
EthylBenzene	<0.0005		0.0005	mg/L	02-JUL-04	03-JUL-04	EMP	R196232
Xylenes	<0.0005		0.0005	mg/L	02-JUL-04	03-JUL-04	EMP	R196232
F1(C6-C10)	<0.1		0.1	mg/L	02-JUL-04	03-JUL-04	EMP	R196232
F1-BTEX	<0.1		0.1	mg/L	02-JUL-04	03-JUL-04	EMP	R196232

Refer to Referenced Information for Qualifiers (if any) and Methodology.