

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O Box 119, Gjoa Haven, Nunavut
XOB 1JO
Phone (867) 360-6338 ext. 27 Fax (867) 360-6369
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Date: March 28th 2013

RE: Water License 3BM-RAN 1214 Rankin Inlet Solid Waste Management Annual Report 2013

Good afternoon Phyllis,

Please find attached the annual report for the above mentioned license, you will also find attachments with respect to the sample results as well as any other related information pertaining to the license requirements.

Please contact me should you have any questions, comments, or concerns.

Thanks

Jagon Tologanak

Regional Director, Kivalliq Region Community & Government Services Rankin Inlet, Nunavut XOC OGO

Phone (867) 645-8101 Fax (867) 645-8197 Cell (867) 645-7255

ANNUAL REPORT FOR THE HAMLET OF RANKIN INLET SOLIDWASTE MANAGEMENT, 2012

YEAR BEING REPORTED: 2012

The following information is compiled pursuant to the requirements of Part B, Item 1 of Water License # 3BM-RAN 1214 issued to the Hamlet of Rankin Inlet Solid waste management system.

i) - iii) tabular summaries of all data generated under the "Monitoring Program"; monthly and annual quantities in cubic metres of freshwater obtained from all sources; monthly and annual quantities in cubic metres of each and all wastes discharged; Attached are quantities of water used as reported in our On Tap Water Delivery System and the estimated discharge of sewage waste based on quantities used.

Month Reported	Quantity of Water Obtained from all sources (litres)	Quantity of Sewage Waste Discharged (Estimated)
January 2012	Nil	Same
February 2012	Nil	Same
March 2012	Nil	Same
April 2012	Nil	Same
May 2012	Nil	Same
June 2012	Nil	Same
July 2012	Nil	Same
August 2012	Nil	Same
September 2012	Nil	Same
October 2012	Nil	Same
November 2012	Nil	Same
December 2012	Nil	Same
ANNUAL TOTAL	Nil	Same

Note: This license deals only waste facilities and has no concern for water.

ANNUAL REPORT FOR THE HAMLET OF RANKIN INLET SOLIDWASTE MANAGEMENT, 2012

 a summary of modifications and/or major maintenance work carried out on the Water Supply and Waste Disposal Facilities, including all associated structures and facilities;

A new waste management facility was built but not licensed and commissioned. Hamlet is still using the old waste management facility (land fill site).

v. a list of unauthorized discharges and summary of follow-up action taken;

Spills:

House 5-11, Sewage line, dated 2/2/2012 and # 2012025, 0L

Area 6, Diesel fuel oil, dated 5/7/2012 and #2012178, 100L

Rankin inlet, Diesel fuel oil, dated 5/11/2012, 450L

Northern store Grocery Manager's House, Heating oil, dated 5/23/2012 and #2012202, 650L

Northern store Warm Warehouse, Heating oil, dated 5/22/2012 and #2012203, 50L

Lot32, Plan 603, 40-4 Sivulliq Avenue, P-50, Heating oil, dated 6/12/2012 and # 2012237,100L

Lot 632, Plan 2542, 24-4 Sivulliq Avenue, P-50, Heating Oil, dated 6/12/2012 and# 2012240, 20L

NCC Blue Row House, P-50, dated 6/28/2012 and # 2012270, 100L

Rankin inlet, Jet A-1, dated 8/1/2012 and #2012313, 40L

Rankin Inlet, Jet A-1, dated 8/24/2012 and # 2012345, 24L

244-61 Mania Street, Heating fuel, dated 9/5/2012 and #2012355, 10L

Mosher sand pit, p-50 Diesel, dated 9/25/2012 and # 2012389, 100L

Unit 543-A, Heating fuel, dated 10/22/2012 and # 2012418, 500L

100-24 Inuksuk Avenue, P-50, dated 10/23/2012 and #2012419, 350L

Unit 33, P-50, dated 11/8/2012 and #2012438, 75L

New Hotel, P-50, dated 12/6/2012 and #2012452, 40L

vi. a summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year;

Decommissioning Plan of the land Farm is in progress. It is expected to be implemented in 2014.

vii. a summary of any studies requested by the Board that relate to waste disposal, water use or reclamation, and a brief description of any future studies planned;

An engineering consulting firm Arktis solutions Inc. has completed the Nunavut wise Feasibility study on waste management and recommended a new guidelines to GN. In

ANNUAL REPORT FOR THE HAMLET OF RANKIN INLET SOLIDWASTE MANAGEMENT, 2012

the future projects, GN is planning to implement these new standard and criteria.

viii. any other details on water use or waste disposal requested by the Board by November 1st of the year being reported; and

Ground water and leachate quality are advised to be monitored.

ix. Updates or revisions to the approved Operation and Maintenance Plans.

The O&M plan will be revised along with the up gradation of the facility.

ADDITIONAL INFORMATION THAT THE LICENSEE DEEMS USEFUL:

Enforce the extended sampling and testing program of leachate and groundwater Quality in 2013

FOLLOW-UP REGARDING INSPECTION/COMPLIANCE CONCERNS:

- Annual Reporting in time
- > Improve Monitoring program from 2013
- Plan for Segregation of wastes

• The Lab Test Results for 2012





Your Project #: 2005-2150 Site: OLD LAND FARM Your C.O.C. #: 81802

Attention: CLAY PECK

FSC YELLOWKNIFE 4910 53 STREET YELLOWKNIFE, NT CANADA X1A 2P4

Report Date: 2010/07/30

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B062905 Received: 2010/07/27, 11:45

Sample Matrix: Soil # Samples Received: 5

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
BTEX/F1 by HS GC/MS (MeOH extract)	5	2010/07/27	2010/07/29	EENVSOP-00005	EPA 8260C/CCME
				EENVSOP-00002	
CCME Hydrocarbons (F2-F4 in soil)	5	2010/07/27	2010/07/30	EENVSOP-00007	CCME PHC-CWS
				AB WI-00016	
Moisture	5	N/A	2010/07/28	EENVSOP-00139	Carter SSMA 51.2
Particle Size by Sieve (75 micron)	5	N/A	2010/07/28	EENVSOP-00077	SSMA 47.4

Encryption Key

aynatinique Tanya Eugine

03 Aug 2010 17:23:16 -06:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

TANYA EUGINE, Project Manager

Email: tanya.eugine@maxxamanalytics.com

Phone# (780) 577-7100

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



FSC

Client Project #: 2005-2150 Site Reference: OLD LAND FARM Sampler Initials: CP

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		V73076	V73093	V73094	V73095	V73096		
Sampling Date		2010/07/25	2010/07/25	2010/07/25	2010/07/25	2010/07/25		
COC Number		81802	81802	81802	81802	81802		
	Units	OL 001	OL 002	OL 003	OL 004	OL 005	RDL	QC Batch
Physical Properties							T	
Moisture	%	9.8	8.5	6.5	6.9	5.0	0.3	4136500
Ext. Pet. Hydrocarbon								
F2 (C10-C16 Hydrocarbons)	mg/kg	36	55	57	57	20	10	4136438
F3 (C16-C34 Hydrocarbons)	mg/kg	35	41	44	45	37	10	4136438
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	12	15	14	11	10	4136438
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	Yes	N/A	4136438
Volatiles							700000000000000000000000000000000000000	
Benzene	mg/kg	<0.0050	<0.0050	0.0092	<0.0050	<0.0050	0.0050	4136366
Toluene	mg/kg	<0.020	<0.020	0.055	0.022	<0.020	0.020	4136366
Ethylbenzene	mg/kg	<0.010	<0.010	0.015	<0.010	<0.010	0.010	4136366
Xylenes (Total)	mg/kg	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	4136366
m & p-Xylene	mg/kg	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	4136366
o-Xylene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	4136366
F1 (C6-C10) - BTEX	mg/kg	<12	<12	<12	<12	15	12	4136366
(C6-C10)	mg/kg	<12	<12	<12	<12	15	12	4136366
Surrogate Recovery (%)								
4-BROMOFLUOROBENZENE (sur.)	%	87	68	119	106	106	N/A	4136366
D10-ETHYLBENZENE (sur.)	%	103	96	110	109	104	N/A	4136366
D4-1,2-DICHLOROETHANE (sur.)	%	98	91	99	85	85	N/A	4136366
D8-TOLUENE (sur.)	%	88	93	103	102	98	N/A	4136366
O-TERPHENYL (sur.)	%	89	93	89	88	85	N/A	4136438

N/A = Not Applicable RDL = Reportable Detection Limit



Report Date: 2010/07/30

FSC

Client Project #: 2005-2150 Site Reference: OLD LAND FARM Sampler Initials: CP

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		V73076	V73093	V73094	V73095	V73096		
Sampling Date		2010/07/25	2010/07/25	2010/07/25	2010/07/25	2010/07/25		
COC Number		81802	81802	81802	81802	81802		A STATE OF THE STA
	Units	OL 001	OL 002	OL 003	OL 004	OL 005	RDL	QC Batch
		r	1	T		1	_	
Physical Properties	1 8	2						
Sieve - Pan	%	22	20	14	12	14	0.2	4136365
Sieve - #200 (>0.075mm)	%	78	80	86	88	86	0.2	4136365
Grain Size	%	COARSE	COARSE	COARSE	COARSE	COARSE	0.2	4136365



Report Date: 2010/07/30

FSC

Client Project #: 2005-2150 Site Reference: OLD LAND FARM Sampler Initials: CP

General	Comments	

Results relate only to the items tested.



FSC

Attention: CLAY PECK Client Project #: 2005-2150

P.O. #:

Site Reference: OLD LAND FARM

Quality Assurance Report Maxxam Job Number: EB062905

QA/QC Batch		-	Date Analyzed				
Num Init	QC Type	Parameter	yyyy/mm/dd	Value	Recovery	Units	QC Limi
4136365 JM9	Method Blank	Sieve - Pan	2010/07/28	<0.2	Recovery	%	QC LIIII
+100000 01010	Wethou blank	Sieve - #200 (>0.075mm)	2010/07/28	<0.2		%	
	RPD	Sieve - Pan	2010/07/28	0.8		%	:
	INF D	Sieve - #200 (>0.075mm)				%	
1426266 DC7	Matrix Calle	F10 T0 D10 D10 D10 D10 D10 D10 D10 D10 D10 D1	2010/07/28	24.5	00		
1136366 PS7	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/07/29		99	%	60 - 14
		D10-ETHYLBENZENE (sur.)	2010/07/29		128	%	30 - 13
		D4-1,2-DICHLOROETHANE (sur.)	2010/07/29		81	%	60 - 1
		D8-TOLUENE (sur.)	2010/07/29		122	%	60 - 1
		Benzene	2010/07/29		103	%	60 - 1
		Toluene	2010/07/29		119	%	60 - 1
		Ethylbenzene	2010/07/29		126	%	60 - 1
		m & p-Xylene	2010/07/29		121	%	60 - 1
		o-Xylene	2010/07/29		103	%	60 - 1
		(C6-C10)	2010/07/29		99	%	60 - 14
	Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/07/29		118	%	60 - 1
		D10-ETHYLBENZENE (sur.)	2010/07/29		100	%	30 - 1
		D4-1,2-DICHLOROETHANE (sur.)	2010/07/29		105	%	60 - 1
		D8-TOLUENE (sur.)	2010/07/29		111	%	60 - 1
		Benzene	2010/07/29		100	%	60 - 14
		Toluene	2010/07/29		103	%	60 - 1
		Ethylbenzene	2010/07/29		96	%	60 - 1
		m & p-Xylene	2010/07/29		101	%	60 - 14
		o-Xylene	2010/07/29		104	%	60 - 1
		(C6-C10)	2010/07/29		89	%	60 - 1
	Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/07/29		114	%	60 - 14
	Wicarioa Biarin	D10-ETHYLBENZENE (sur.)	2010/07/29		91	%	30 - 13
		D4-1,2-DICHLOROETHANE (sur.)	2010/07/29		101	%	60 - 14
		D8-TOLUENE (sur.)	2010/07/29		91	%	60 - 14
		Benzene	2010/07/29	< 0.0050	31	mg/kg	00 - 1-
		Toluene	2010/07/29	<0.020		mg/kg	
			2010/07/29	< 0.020			
		Ethylbenzene				mg/kg	
		Xylenes (Total)	2010/07/29	<0.040		mg/kg	
		m & p-Xylene	2010/07/29	<0.040		mg/kg	
		o-Xylene	2010/07/29	<0.020		mg/kg	
		F1 (C6-C10) - BTEX	2010/07/29	<12		mg/kg	
	10,000	(C6-C10)	2010/07/29	<12		mg/kg	
	RPD	Benzene	2010/07/29	NC		%	3
		Toluene	2010/07/29	NC		%	
		Ethylbenzene	2010/07/29	NC		%	
		Xylenes (Total)	2010/07/29	NC		%	
		m & p-Xylene	2010/07/29	NC		%	
		o-Xylene	2010/07/29	NC		%	
		F1 (C6-C10) - BTEX	2010/07/29	NC		%	į
		(C6-C10)	2010/07/29	NC		%	į
136438 RC6	Matrix Spike	O-TERPHENYL (sur.)	2010/07/30		83	%	50 - 13
		F2 (C10-C16 Hydrocarbons)	2010/07/30		96	%	50 - 13
		F3 (C16-C34 Hydrocarbons)	2010/07/30		92	%	50 - 13
		F4 (C34-C50 Hydrocarbons)	2010/07/30		96	%	50 - 13
	Spiked Blank	O-TERPHENYL (sur.)	2010/07/30		91	%	50 - 13
	- 6	F2 (C10-C16 Hydrocarbons)	2010/07/30		113	%	80 - 12
		F3 (C16-C34 Hydrocarbons)	2010/07/30		113	%	80 - 12
		F4 (C34-C50 Hydrocarbons)	2010/07/30		119	%	80 - 12
	Method Blank	O-TERPHENYL (sur.)	2010/07/30		83	%	50 - 13
	METHOR DISHK	F2 (C10-C16 Hydrocarbons)		<10	03		30 - 13
			2010/07/30			mg/kg	
		F3 (C16-C34 Hydrocarbons)	2010/07/30	<10		mg/kg	



FSC

Attention: CLAY PECK Client Project #: 2005-2150

P.O. #:

Site Reference: OLD LAND FARM

Quality Assurance Report (Continued)

Maxxam Job Number: EB062905

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4136438 RC6	Method Blank	F4 (C34-C50 Hydrocarbons)	2010/07/30	<10		mg/kg	
	RPD	F2 (C10-C16 Hydrocarbons)	2010/07/30	8.3		%	50
		F3 (C16-C34 Hydrocarbons)	2010/07/30	3.7		%	50
		F4 (C34-C50 Hydrocarbons)	2010/07/30	NC		%	50
4136500 JL8	Method Blank	Moisture	2010/07/28	< 0.3		%	
	RPD	Moisture	2010/07/28	3.8		%	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.

Maxxam Analytics International Corporation o/a Maxxam Analytics Edmonton: 9331 - 48th Street T6B 2R4 Telephone(780)577-7100 Fax(780)450-4187



FSC

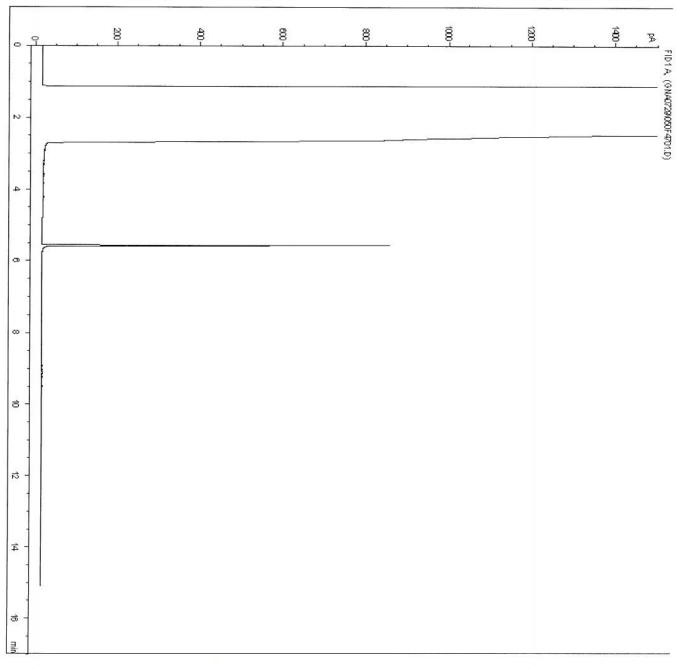
Client Project #: 2005-2150 Site Reference: OLD LAND FARM

Client ID: OL 001

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

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Sample Name: V73076



*** End of Report ***

Instrument 1 2010/07/30 8:47:10 AM RC6

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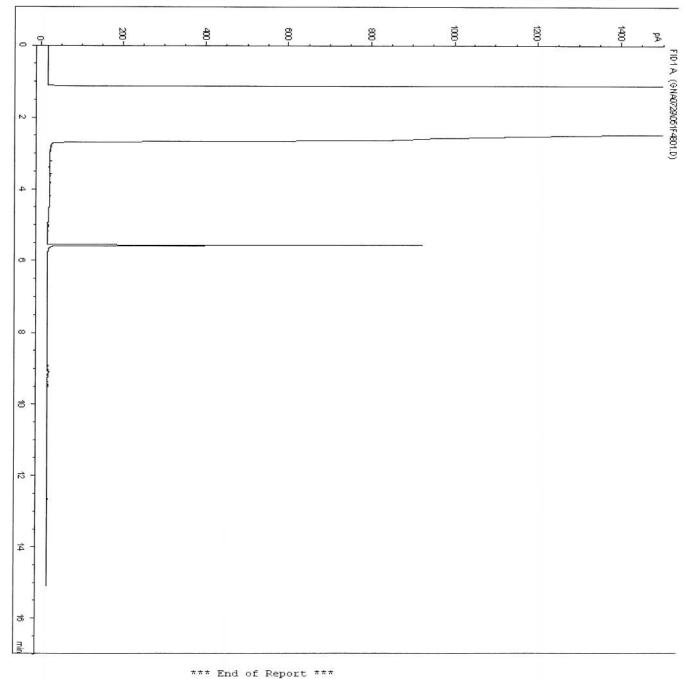
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Client ID: OL 002

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

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Sample Name: V73093



""" End of Repo

Instrument 1 2010/07/30 8:47:13 AM RC6

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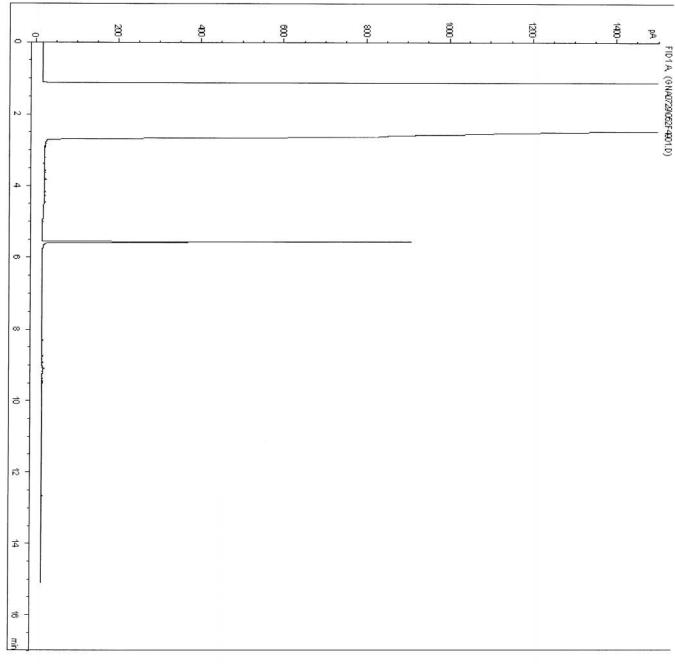
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Client ID: OL 003

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

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Sample Name: V73094



*** End of Report ***

Instrument 1 2010/07/30 8:47:16 AM RC6

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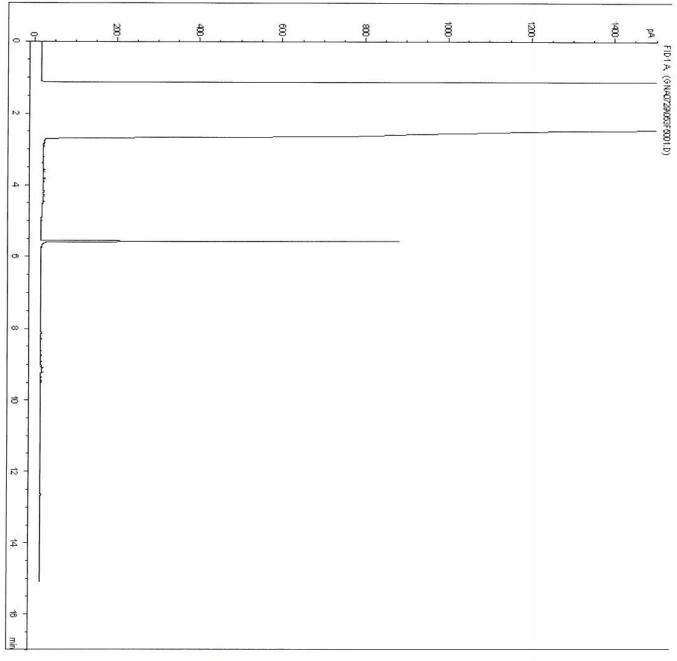
Client Project #: 2005-2150 Site Reference: OLD LAND FARM

Client ID: OL 004

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

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Sample Name: V73095



*** End of Report ***

Instrument 1 2010/07/30 8:47:19 AM RC6

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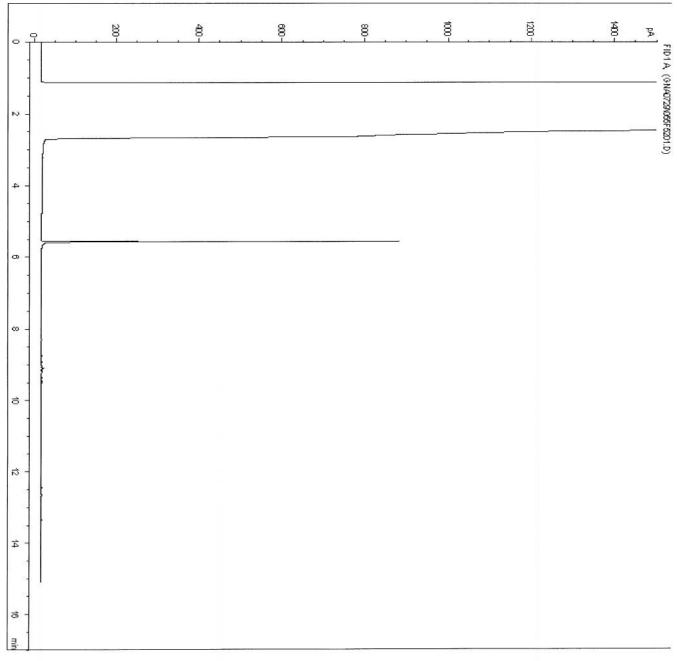
Client Project #: 2005-2150 Site Reference: OLD LAND FARM

Client ID: OL 005

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Data File C:\HPCHEM\1\DATA\GNA0729\055F5201.D

Sample Name: V73096



*** End of Report ***

Instrument 1 2010/07/30 8:47:25 AM RC6

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