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File-	1784

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October 16, 2003

Project No.: PIN-M (3.6)

Ms. Vicki Losier
Executive Assistant
Northwest Territories Water Board
P.O. Box 1500
Yellowknife, NT X1A 2R3



Dear Ms. Losier:

RE: Annual/Final Report, Water Use Licence N7L1-1784 for PIN-M, Cape Parry

UMA Engineering Ltd. (UMA), on behalf of Defence Construction Canada (DCC), is submitting the following annual report as per Section 1 of Part B of the Water Use Licence N7L1-1784. The information presented herein was summarized from the weekly reports submitted by the DCC Site Engineer and the scientific support staff.

Water Usage

All water was obtained from the Water Supply Lake (Drawing 101). A total of 215 cubic metres of water were used during the 2003 construction season, at a rate of approximately 4.3 cubic metres per day. All wastewater from camp operations (approximately 172 cubic metres) was discharged into a two-cell sewage lagoon at the construction camp.

Surveillance Network Program (SNP)

The sewage lagoon used in the 2002 season was not decommissioned at the end of the season because the analytical results showed the effluent exceeded the water use licence criteria, and there was insufficient time to incorporate treatment for the effluent. It was decided that the lagoon would be sampled and decommissioned at the start of the 2003 construction season.

Samples were collected from the 2002 lagoon and the results were submitted to a Water Resources Inspector, Mr. Kevin Glowa, for review. Upon review of the results, Mr. Glowa determined that the 2002 lagoon could be discharged.

A second sewage lagoon was constructed in 2003, adjacent to the 2002 sewage lagoon. Samples were collected from the 2003 lagoon, as per the requirements of the Surveillance Network Program. The analytical results showed the effluent from the 2003 lagoon exceed the water use licence criteria for total suspended solids, faecal coliforms, oil & grease and biological oxygen

J:\General\E&W\Eva Schulz\DEWLINE\2003\PIN-M\WUL annual report\L-NTWB01-101603 original.doc

demand. Because the effluent results exceeded the criteria and the quantity of effluent in the lagoon was relatively small (172 m³), the lagoon was not discharged. Instead, the 2003 lagoon was backfilled and buried in place with granular material.

Drawing 101 shows the location of the 2002 and 2003 sewage lagoons. Table 1 presents a summary of the SNP analytical results for the 2002 and 2003 sewage lagoons.

Table 1 – Summary of Surveillance Network Program Analytical Results

Parameter	Units	MAC ¹	2002 Sewage Lagoon			2003 Sewage Lagoon	
			11 Aug	20 Aug	25 Aug	20 Aug	25 Aug
BOD ₅	mg/L	30.0	8.68	17.56	20.09	29.93	181.08
TSS	mg/L	35.0	60	94	79	120	37
Faecal Coliforms	CFU/dL	250.0	360	10	<10	>max det. limit	638,000
Oil&Grease	mg/L	5.0	11.0	3.5	<1.0	38	16.3
Ammonia	mg/L	-	27	24	22	76	38
PH	pH units	-	7.78	8.37	8.73	8.16	7.84

¹ Maximum Average Concentration

Note: Parameters highlighted in bold exceed the criteria.

Spills and Unauthorized Discharges

There were four minor spills that occurred at PIN-M in 2003. Each spill was reported to the Spill Report Line and a report was filed. Each spill incident is outlined below and a copy of each spill report is appended to this report.

The first spill was reported on August 17, 2003 and occurred as a result of a leaking seal on a gravel truck. Approximately 3 litres of hydraulic fluid were spilled. The affected soil was excavated using shovels and put into a 22 litre plastic pail and placed within the berms of the fuel tank farm. Absorbent materials used to contain the spill were also bagged and placed within the berms.

The second spill was reported on August 20, 2003 and occurred as a result of a worn hydraulic line on a truck. Approximately 18 litres of hydraulic fluid was spilled. Absorbent booms were immediately placed around the spill area to prevent further spread of the fluid. The affected soils and absorbent materials were excavated by hand and stored in a steel container inside the containment berms.

October 16, 2003
Ms. Vicki Losier
Northwest Territories Water Board
Page 3



The third spill was reported on September 8, 2003 and also occurred as a result of a damaged hydraulic line in a truck. Approximately 10 litres of hydraulic fluid were released to the ground as a result of the spill. Absorbent materials were used to contain the spill until the affected area could be excavated. All used absorbent materials and affected soils were excavated and placed within the containment berms.

The fourth spill was reported on September 10, 2003. Approximately 10 litres of diesel fuel were spilled during a fuel transfer. Absorbent materials were deployed to contain the diesel fuel. All absorbent materials and affected soils were excavated and placed within the fuel tank containment berms.


Closure

All work has been completed at PIN-M, and no further remedial work is anticipated.

We trust this report meets the requirements to close the file on the water use licence. Should you require additional information, please contact the undersigned at (403) 270-9220.

Sincerely,

UMA ENGINEERING LTD.



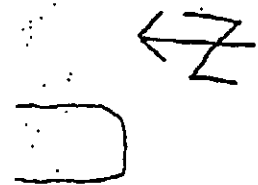
Eva Schulz, P.Ag.
Environmental Scientist
eschulz@umagroup.com

EMS/mv

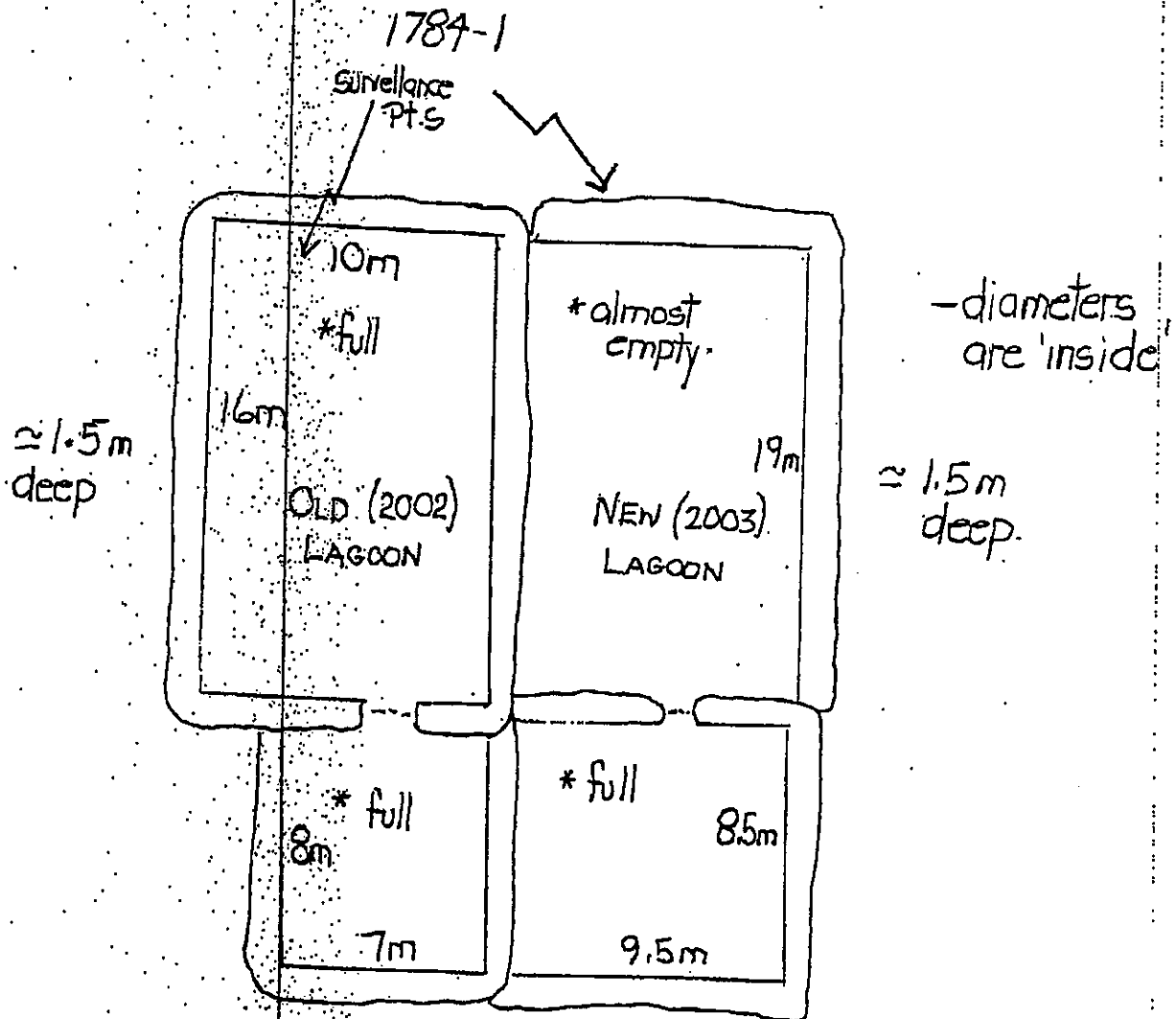
Encl. Drawing 101 - Overall Site Plan
Water Resources Inspector Letter
Analytical Laboratory Reports
Spill Reports

cc: Nahed Farah, DCC

PIN-M CAPE PARRY
SEWAGE LAGOONS.
28 AUG/03



ON-HAZ.
ANDFILL





Indian and Northern Affairs Canada
Affaires indiennes et du Nord Canada
www.inac.gc.ca www.ainc.gc.ca

North Mackenzie District
P.O. Box 2100
Inuvik, NT XOE 0T0

Telephone: (867) 777-3362
Fax: (867) 777-2090

Your file - Votre référence

August 27, 2003

Our file - Notre référence

2 pages sent by fax: (403) 270 0399

N7L1-1784

Ms. Eva Schultz
UMA Engineering Ltd.
2540 Kensington Road, N.W.
Calgary AB T2N 3S3

Attention: Ms. Eva Shultz, Environmental Scientist

Dear Eva:

**RE: AUGUST/SEPTEMBER DECANT OF SEWAGE LAGOON AT CAPE
PARRY PIN-M**

As per our August 21 and 27th telephone conversations UMA Engineering Ltd. wishes to decant sewage lagoon effluent to land located at Cape Parry PIN-M. The purpose of this decant is to decommission and remediate the sewage lagoon and camp area. The total volume of effluent to be discharged from the sewage lagoon is ~1000 m³.

To approve the decant Indian and Northern Affairs Canada (INAC) reviewed analytical results taken on August 11 at SNP station 1784-1 by the Environmental Sciences Group. The results were received by this office on August 21, 2003 by fax and are entitled "Analytical Results for Camp Sewage Lagoon at PIN-M (Cape Parry).

Review of the analytical results indicates that many parameters slightly exceed the Maximum Allowable Concentrations (MAC) as indicated in Water Licence N7L1-1784 (the 'Licence'). Specifically, total suspended solids (80 mg/l), fecal coliforms (360 CFU/dL), and oil and grease (11 mg/l) are slightly above the MAC (35 mg/l, 250 CFU/dL, 5 mg/l respectively).

Upon review of the PIN-M/Cape Parry area INAC considers discharging this sewage effluent generally not a concern because:

1. Discharge is to ground;
2. The discharge volume is relatively small (~1000 m³);
3. As indicated in your August 21 fax the closest water body (Franklin and Darnley Bay) is ~ 1 km from the lagoon. As a result, effluent will not directly enter these water bodies;
4. The water bodies to which this effluent will ultimately drain are large and will allow for high dilution; and

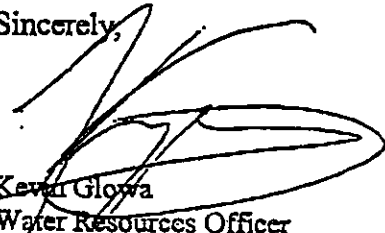
5. The Cape Parry PIN-M is a remote location. Furthermore, as discussed there are only ~12 people at the camp.

In light of the above review INAC **APPROVES** the decant but is subject to the following conditions and/or considerations:

1. Decant as slow as possible to minimise overland flow. To ensure this, it may be necessary to move the discharge pipe to different locations during decant. A slow decant will ensure adequate effluent infiltration and ultimately prevent sewage lagoon effluent from directly entering the ocean;
2. Ensure that all workers are aware of the discharge and the potential risks;
3. Inform this office by fax or telephone at least one day prior to initiating the decant and provide date and time that the decant will commence;
4. Even though oil and grease results indicate that levels are relatively low, ensure discharge of sewage effluent is through absorbent material designed to entrap any oil and grease;
5. If possible, please estimate the total volume decanted; and
6. This batch decant is approved for two weeks (14 days) following the issuance of this letter. If the decant has not commenced during the above stated two week time frame a further sample from SNP station 1784-1 may be required by UMA for review by INAC prior to any batch decants.

If you have any questions or concerns, or if additional information is required, please do not hesitate to contact me at (867) 777-3662.

Sincerely,



Kevin Glowa
Water Resources Officer

KRG/rw



Talga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT, X1A 2G3
Tel: (867) 669-2788 Fax: (867) 669-2718

FAX RESULTS TO:

ESG

DATE:

To Kathleen Francis 613-541-6820
Heather

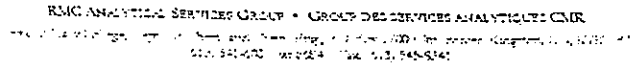
Client Project: 03-B01 Ad

Location: PIN-M-conf-DLCU

PRELIMINARY TEST RESULTS

Talga Sample #	Client Sample Id	Date Sample Received	BFC	TC	E.C.	BOD			
2337M	03-6026	Aug 12, 2003	4.0	4.0	4.0	—			
2337L5	03-6026	"	4.0	4.0	4.0	—			
2337L6	03-6026	"	4.0	4.0	4.0	—			
2337L8	03-6026	"	4.0	4.0	4.0	—			
2337L9	03-6026	"	4.0	4.0	4.0	8.68			

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P.O. Box 17000, Stn. Forces
Kingston Ontario K7K 7B4
(613) 541-6000 ext 6567
Fax: (613) 541-6596

RESULTS OF TOTAL SUSPENDED SOLIDS ANALYSIS

LABORATORY QA/QC

* SW = Surface Water SI = Sewage Influent SE = Sewage Effluent
 * Averaged result of duplicates

The results reported here relate only to the items tested

Prepared By Nelson Melo, Analyst

Authorization: _____
Cindy Cowin Lab Manager

Test Report ID: TSS9652r1



RMC ANALYTICAL SERVICES GROUP • GROUPE DES SERVICES ANALYTIQUES CMR

Royal Military College, Dept. of Chem. and Chem. Eng., P.O. Box 17000, Stn. Forces, Kingston, ON K7K 7B4
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P.O. Box 17000, Stn. Forces
Kingston, Ontario K7K 7B4
(613) 541-6000 ext 6567
Fax: (613) 541-6596

ASG Login No: 9682
Site: Pin-M
Client No: 03-115
Samples Received: 25-Aug-03
Date of analysis: 25-Aug-03
Method No: ASG 023
Date Reported: 26-Aug-03
Page: 1 of 1

RESULTS OF BTEX IN WATER ANALYSIS

Sample ID	Type**	Unit	Benzene	Toluene	Ethyl Benzene	Xylenes
03-6207 *	W	µg/L	< 2.0	< 2.0	< 2.0	< 2.0

* Averaged result of duplicates

LABORATORY QA/QC

Sample ID	Type**	Unit	Benzene	Toluene	Ethyl Benzene	Xylenes
Duplicate : 03-6207	W	µg/L	< 2.0 ; < 2.0	< 2.0 ; < 2.0	< 2.0 ; < 2.0	< 2.0 ; < 2.0
Blank		µg/L	< 2.0	< 2.0	< 2.0	< 2.0
Control Sample		µg/L	21	20	20	55
Control Target		µg/L	20	20	20	60

** S = soil, W = water

The results reported here relate only to the items tested.

Prepared by :
Steve White: Senior Analyst

Authorization :
David Kelly: Assistant Director
03-115, Aug 26, BTEXw9682r1

ASU #	6422	Report ID:	PIN-M W7-AMEND					
Client:	ASG 9682	Date submitted	24-Aug-03					
		Date tested	25-Aug-03					
Site:	PIN-M	Date	27-Aug-03					
ESG#:	03-115	Matrix	Water					
AMENDED REPORT								
Preliminary Report of Analysis								
	All results in mg/L							
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As
03-6207 Total	0.005	0.005	0.003	0.001	0.010	0.030	0.005	0.003
03-6207 Dissolved	0.005	0.005	0.003	0.001	0.010	0.030	0.005	0.003
03-6207 Control	7.68	8.11	7.61	4.18	40.1	15.3	3.93	4.00
03-6207 Total	-	-	-	-	-	0.030	0.005	<0.003
03-6207 Dissolved	<0.005	<0.005	<0.003	<0.001	<0.010	-	-	-
Blank	<0.005	<0.005	<0.003	<0.001	<0.010	<0.010	<0.005	<0.003
Control	7.68	8.11	7.61	4.18	40.1	15.3	3.93	4.00
Control Target	8.00	8.00	8.00	4.00	40.0	15.0	4.00	4.00



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2000-01-01 to 2000-12-31

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ASG Login No: 9682
Site: Pin-M
ESG No: 03-115
Samples Received: 25-Aug-03
Date of analysis: 25-Aug-03
Method No: ASG 014 & ASG 021
Date Reported: 26-Aug-03
Sheet: 1 of 1

RESULTS OF MERCURY IN WATER ANALYSIS#

Sample I.D.	Unit	Total Mercury [^]	Dissolved Mercury
03-6207*	µg/L	< 0.4	< 0.1

LABORATORY QA/QC

Duplicate : 03-6207	µg/L	< 0.4	< 0.4	< 0.4	< 0.1	< 0.1
Blank	µg/L	< 0.4			< 0.1	
Control Target	µg/L	4.0			2.0	
Control	µg/L	4.9			1.9	

* Averaged result of replicates.

[^] Acid digestion performed.

Reported at 0.4 µg/L detection limit.

The results reported here relate only to the items tested.

Prepared By: _____
Steve White; Senior Analyst

Authorization: _____
David Kelly; Assistant Director
Test Report I.D: 03-115, Aug 26, Hgw9682r1 (Total)



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P.O. Box 17000, Stn. Forces
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ASG Login No: 9682
Site: Pin-M
Client No: 03-115
Samples Received: 25-Aug-03
Date of analysis: 26-Aug-03
Method No: ASG 037
Date Reported: 26-Aug-03
Page: ASG 037

RESULTS OF pH ANALYSIS

Sample I.D.	pH
03-6207*	7.67

* Averaged result of duplicates

LABORATORY QA/QC

Sample I.D.	pH
03-6207; Duplicate	7.67; 7.67
control	6.98
control target	7.00

The results reported here relate only to the items tested.

Prepared By: _____
Jovie Velasco, Analyst

Authorization: _____
Cindy Cowin, Laboratory Manager
03-115, Aug 26, pH9682r1



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ASG Login No: 9628
Site: Pin-M
Client No: 03-115
Samples Received: 25-Aug-03
Date of analysis: 21-Aug-03
Method No: ASG 006
Date Reported: 26-Aug-03
Sheet No: 1 of 1

RESULTS OF PCB IN WATER ANALYSIS

Sample Type **	Sample I.D.	Unit	Aroclor 1254	Aroclor 1260
W	03-6207	µg/L	< 3.0	< 3.0

LABORATORY QA/QC

Blank	µg/L	< 3.0	< 3.0
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** S = Soil, C = Concrete, PC = Paint Chip, SW = Swab, P = Plant, W = Water

All results corrected for the recovery of the surrogate decachlorobiphenyl

The results reported here relate only to the items tested.

Prepared By: _____
Stephanie Dwyre, Analyst

Authorization: _____
Cindy Cowin, Lab Manager
03-115, Aug 26, PCBw9682r1

2



Taiga Environmental Laboratory
4601 52nd Ave., Box 1500, Yellowknife, NT, X1A 2K1
Tel: (867) 669-2738 Fax: (867) 669 2718

Rec'd 10:10 p.m. 21/03
Apr 23/03

FAX RESULTS TO: ESG Group attention: "Kathleen Francis" (RMC)
Fax (613) 541-6820 and Heather Ducharme @ 600-701-9294

Note The Client Project # and the ESG Request # are always the same #.

PRELIMINARY TEST RESULTS:

Location: _____
Date: _____

Taiga Sample #	Client Sample Id	Unit Sample Received	BOD	TC	EC	EC			
232923	2003-6286	Aug. 22		—	—	10		241	lagoon
232924	2003-6287			—	—	2500000		241	lagoon
232925	2003-6288			—	—	Too much Colours		241	lagoon
232926	2003-6289			—	—			241	lagoon
232927	2003-6290			—	—			241	lagoon
232928	2003-6291			—	—			241	lagoon

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FAX RESULTS TO: ESG Group

Fax 1613-541-6820
1600-701-9294

03-903?
P_{int}-K-conf-use

[illegible]

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Fax: (613) 541-6596

ASG Login No: 8685
Site: Pin M
Client Login No: 03-123
Samples Received: 25-Aug-03
Date of analysis: 26-Aug-03
Method No: ASG 039
Date Reported: 27-Aug-03
Sheet: 1 of 1

RESULTS OF TOTAL SUSPENDED SOLIDS ANALYSIS

Sample I.D.	Sample Type ^A	Unit	Total Suspended Solids
2003-6286*	N/A	mg/L	94
2003-6287	N/A	mg/L	120

LABORATORY QA/QC

Duplicate : 2003-6286*	N/A	N/A	mg/L	92 : 96
Blank	Control		mg/L	< 2.0

^ASW = Surface Water, SI = Sewage Influent SE = Sewage Effluent
* Averaged result of duplicates

The results reported here relate only to the items tested.

Prepared By _____
Saran Walsh, Analyst

Authorization: _____
Cindy Cowin, Lab Manager

Test Report I D 03-128 Aug 27 TSS685r1



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ASG Login No: 9685
Site: Pin-M
Client No: 03-128
Samples Received: 25-Aug-03
Date of analysis: 26-Aug-03
Method No: ASG 037
Date Reported: 26-Aug-03
Page: 1 of 1

RESULTS OF pH ANALYSIS

Sample I.D.	pH
2003-6286*	8.37
2003-6287	8.16

* Averaged result of duplicates

LABORATORY QA/QC

Sample I.D.	pH
2003-6286; Duplicate	8.37; 8.37
control	6.98
control target	7.00

The results reported here relate only to the items tested.

Prepared By: _____
Jovie Velasco, Analyst

Authorization: _____
Cindy Cowin, Laboratory Manager
03-128, Aug 26, pH9685r1



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Fax: (613) 541-6596

ASG Login No: 9736
Site: Pin-M
Client No: 03-143
Samples Received: 29-Aug-03
Date of analysis: 02-Sep-03
Method No: ASG 023
Date Reported: 03-Sep-03
Page: 1 of 1

RESULTS OF BTEX IN WATER ANALYSIS

Sample ID	Type**	Unit	Benzene	Toluene	Ethyl Benzene	Xylenes
03-6313	W	µg/L	< 2.0	< 2.0	< 2.0	< 2.0
03-6313	W	µg/L	< 2.0	< 2.0	< 2.0	< 2.0

* Averaged result of duplicates

LABORATORY QA/QC

Sample ID	Type**	Unit	Benzene	Toluene	Ethyl Benzene	Xylenes
Blank	W	µg/L	< 2.0	< 2.0	< 2.0	< 2.0
Control Sample		µg/L	20	19	18	57
Control Target		µg/L	20	20	20	60

** S = soil, W = water

The results reported here relate only to the items tested.

Prepared by : Nelson Melo; Analyst

Authorization : Steve White; Senior Analyst

BTEXw9736r2



RMC ANALYTICAL SERVICES GROUP • GROUPE DES SERVICES ANALYTIQUES CMR
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Fax: (613) 541-6596

ASG Login No: 9736
Site: Pin-M
Client No: 03-143
Samples Received: 29-Aug-03
Date of analysis: 29-Aug-03
Method No: ASG 006
Date Reported: 02-Sep-03
Sheet No: 1 of 1

RESULTS OF PCB IN WATER ANALYSIS

Sample Type **	Sample I.D.	Unit	Aroclor 1254	Aroclor 1260
W	03-6313 *	µg/L	< 3.0	< 3.0

* Averaged result of duplicates

LABORATORY QA/QC

W	03-6313, Duplicate	µg/L	< 3.0; < 3.0	< 3.0; < 3.0
	Blank	µg/L	< 3.0	< 3.0
	Control Sample	µg/L	16	< 3.0
	Control Sample Target	µg/L	16.0	< 3.0

** S = Soil, C = Concrete, PC = Paint Chip, SW = Swab, P = Plant, W = Waters

All results corrected for the recovery of the surrogate decachlorobiphenyl

The results reported here relate only to the items tested.

Prepared By: _____
Stephanie Dwyre, Analyst

Authorization: _____
Cindy Cowin, Lab Manager
PCBw9736r1

ASU #	6452	Report ID:	PIN-M W13					
Client:	ASG 9736	Date Submitted:	29-Aug-03					
		Date tested:	30-Aug-03					
Site:	PIN-M	Date:	2-Sep-03					
	03-143	Matrix:	Water					
Preliminary Report of Analysis								
Total Metals		Results in mg/L						
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As
03-6313	-	-	-	-	-	0.062	<0.005	0.003
Blank	-	-	-	-	-	<0.010	<0.005	<0.003
Control	-	-	-	-	-	1.31	0.40	1.19
Control Target	-	-	-	-	-	1.20	0.40	1.20
Dissolved Metals		Results in mg/L						
SAMPLE	Cu	Ni	Co	Cd	Pb	Zn	Cr	As
03-6313	0.006	<0.005	<0.003	<0.001	<0.010	-	-	-
Blank	<0.005	<0.005	<0.003	<0.001	<0.010	-	-	-
Control	2.14	2.22	2.13	0.39	2.22	-	-	-
Control Target	2.20	2.20	2.20	0.40	2.20	-	-	-

Prepared By: _____

PIN-M W13
Page1of1

Authorization: _____



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Client : ESG
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P.O. Box 17000, Stn. Forces
Kingston, Ontario K7K 7B4
(613) 541-6000 ext 6567
Fax: (613) 541-6596

ASG Login No: 9736
Site: Pin-M
ESG No: 03-143
Samples Received: 29-Aug-03
Date of analysis: 03-Sep-03
Method No: ASG 014 & ASG 021
Date Reported: 03-Sep-03
Sheet: 1 of 1

RESULTS OF MERCURY IN WATER ANALYSIS#

Sample I.D.	Unit	Total Mercury [^]	Dissolved Mercury
03-6313*	µg/L	< 0.4	< 0.1

LABORATORY QA/QC

Replicate : 03-6313	µg/L	< 0.4 ; < 0.4 ; < 0.4	< 0.1 ; < 0.1
Blank	µg/L	< 0.4	< 0.1
Control Target	µg/L	4.0	2.0
Control	µg/L	3.9	2.0

* Averaged result of replicates.

[^] Acid digestion performed.

Reported at 0.4 µg/L detection limit.

The results reported here relate only to the items tested.

Prepared By: _____
Nelson Melo; Analyst

Authorization: _____
Dr. David Kelly; Assistant Director
Test Report I.D: Hgw9736r1(Total)



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ASG Login No: 9736
Site: Pin M
Client No: 03-143
Samples Received: 29-Aug-03
Date of analysis: 29-Aug-03
Method No: ASG 037
Date Reported: 29-Aug-03
Page: 1 of 1

RESULTS OF pH ANALYSIS

Sample I.D.	pH
03-06313	8.08
03-06314	8.73
03-06315*	7.84

* Averaged result of duplicates

LABORATORY QA/QC

Sample I.D.	pH
03-06315: Duplicate	7.84; 7.83
control	6.96
control target	7.00

The results reported here relate only to the items tested.

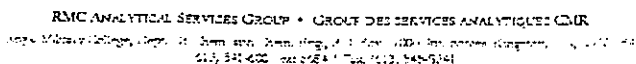
Prepared By: _____
Jovie Velasco, Analyst

Authorization: _____
Cindy Cowin, Laboratory Manager
pH9736r1

ASU #	6452	Report ID:	PIN-M W14
Client:	ASG 9736	Date Submitted:	29-Aug-03
Site:	PIN-M	Date:	2-Sep-03
	03-143	Matrix:	Water
Preliminary Report of Analysis			
SAMPLE	*Phenols	Oil & Grease	Ammonia
	ug/L	mg/L	mg/L
03-6313	<1.0	2.6	-
03-6314	-	<1.0	22
03-6315	-	16.3	38
	-		-
Blank	<1.0	<1.0	<0.10
Control	11.0	14.0	1.1
Control Target	10.0	15.6	1.0
Date Tested	2-Sep-03	2-Sep-03	2-Sep-03
* Samples run in duplicate and results averaged			

Prepared by: _____

Authorization: _____



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ASG Login No: 9736
Site Pin-M
Client Login No: 03-143
Samples Received: 29-Aug-03
Date of analysis: 29-Aug-03
Method No: ASG 039
Date Reported: 02-Sep-03
Sheet: 1 of 1

Sample I.D.	Sample Type*	Unit	Total Suspended Solids
2003-6314	N/A	mg/L	79
2003-6315*	N/A	mg/L	37

Duplicate : 2003-6315*	N/A	N/A	mg/L :	38 : 37
Blank	Control :		mg/L	< 2.0

^aSW = Surface Water, SI = Sewage Influent SE = Sewage Effluent
* Averaged result of duplicates

The results reported here relate only to the items tested.

Prepared By: Sarah Walsh, Analyst

Authorization Cindy Cowin, Lab Manager

Test Report I D TSS9736r1

ILWA

Spill 17 AUG 03

NWT SPILL REPORT

Oil, Gas, Hazardous Chemicals or other Materials

24-Hour Report
Phone: 867-920-6111
Fax: 867-923-6552

Spill Date and Time: 10:00 AM 17 AUG 2003
Spill Location: 1:00 PM
Original Report: ☒
Update No: 01

Spill Coordinates (Latitude and Longitude):
FIRE PARTY, NT 70° 10' 18" N 124° 43' 42" W

Spill Description: ILA TRANSPORT SUBSTRUCTURE TO E. GROBE'S TRANSPORT

Spill Type: DIESELIC FLUID 3 LITRES

Spill Details: LEAKING SEAL ON THIRD STAGE OF RAU ON KENWORTH BODY OF GRAVEL TRUCK

Spill Status: ☒ Spill is continuing, give estimated rate ☐ Is further spillage possible? ☒ Yes ☐ No
Extent of contamination area (in square metres): 0.25

Spill Impact: N/A
Containment, recovery, disposal, etc.: STAINED SOILS SHOVELLED UP

Spill Action: COMPLETED - CONTAMINATED SOIL SHOVELLED UP & CONTAINED IN PLASTIC BZL BAG (half full) & stored in fuel tank berm. Absorbents bagged & contained in berm

Spill Hazards: Possible hazards to persons, property or environment; eg. fire, burning, etc. N/A

Spill Recommendations: N/A

FOR SPILL LINE USE ONLY	
Lead Agency	
Spill Significance	
Lead Agency contact information	
Spill Site Photo Count	

TRUCK SHUT DOWN AWAITING REPAIROMENT OF COMPLETE TRAILER. TRAILER TOO DAMAGED TO REPACK.

LEAKING ONLY OCCURRED WHEN TRUCK BOX FULLY RAISED & THIRD TRAILER EXTENDED

WAS CAUGHT AFTER 3 LOADS THEREFORE SHALL STAY IN DUMPING AREA EG. ZS4?

Spill Site Superintendent: E. GROBE'S TRANSPORT
Phone: 600-702-4032

* ILA MONITOR ON SITE INFORMED IMMEDIATELY, DISCUSSED REPORT FORM HAND DELIVERED TO ETHAN SANCHUK DURING SITE INSPECTION AUG 18/03

NWT SPILL REPORT

(Oil, Gas, Hazardous Chemicals or other Materials)

24-Hour Report Line
Phone: (867) 820-3130
Fax: (867) 873-8924

A Report date and time AUG 20/03 15:30		B Date and time of spill (if known) AUG 20/03 12:50 PM		C <input checked="" type="checkbox"/> Original report <input type="checkbox"/> Update no. _____		Spill number 002	
D Location and map coordinates (if known) and direction (if known) CAPE PARRY, NT 70° 10' 18" N 124° 43' 42" W							
E Person responsible for spill E. GROEN'S TRANSPORT LTD							
F Product(s) spilled and estimated quantities (provide mass/volume/weights if possible) HYDRAULIC OIL 18 LITRES							
G Cause of spill WORKED HYDRAULIC LINE							
H Is spill terminated? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no		I If spill is continuing, give estimated rate		J Is further spillage possible? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no		K Extent of contaminated area (in square metres if possible) 0.4 metres	
L Factors affecting spill or recovery (weather conditions, terrain, known coral, etc.) N/A				M Containment (if less than 100% contained) BAGGED IN BEACH			
N Action, if any, taken or proposed to contain, recover, clean up or dispose of product(s) and contaminated materials SHOVELLED UP BY CREW BY HAND, BAGGED SOIL & ABSORBENTS & STORED IN STEEL CONTAINMENT BEACH							
O Do you require assistance? <input checked="" type="checkbox"/> no <input type="checkbox"/> yes, describe				P Possible hazards to persons, property, or environment eg: fire, drinking water, fish or wildlife N/A			
Q Comments and/or recommendations One stain plus dripping over 200 metres road. All shovelled up.						FOR SPILL LINE USE ONLY	
						Lead Agency	
						Spill significance	
						Lead Agency contact and time	
						Is this file now closed? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	
Reported by BOB STEFURE		Position, Employer, Location CONSTRUCTION WORKMAN E. GROEN'S TRANSPORT, CAPE PARRY		Telephone 600-702-4082			
Prepared by DAN STEVENS		Position, Employer, Location SITE SUPERINTENDENT E. GROEN'S TRANSPORT, CAPE PARRY		Telephone 600-702-4082			



NWT SPILL REPORT

(Oil, Gas, Hazardous Chemicals or other Materials)

24 - Hour Report Line
Phone: (867) 920-8130
Fax: (867) 873-8924

A Report date and time Sept 8/03		B Date and time of spill (if known) Sept 8/03 11:30 AM		C <input checked="" type="checkbox"/> Original report <input type="checkbox"/> Update no. 003	
D Location and map coordinates (if known) and direction of flow CAPE PARRY, NT 70° 10' 18" N 124° 43' 42" W					
E Party responsible for spill E. Gruben's Transport Ltd.					
F Product(s) spilled and estimated quantities (provide name, volume/weight if possible) Hydraulic Oil - 40 Litres					
G Cause of spill Busted Hydraulic Filter Housing					
H Is spill terminated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		I If spill is continuing, state estimated rate <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		J Is further spillage possible? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
K Extent of contaminated area (in square metres if possible) 5 m		L Factors affecting spill or recovery (weather conditions, terrain, snow cover, etc.) N/A			
M Containment (regime, duration, etc.) Bagged in Berm		N Action, if any, taken or proposed to contain, recover, clean up or dispose of product(s) and contaminated materials Shovelled up by crew - Used Absorbents Bagged Absorbents - Shovelled Contaminated Gravel into Bags + Placed in Berm			
O Do you require assistance? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, describe:		P Possible hazards to persons, property, or environment eg: fire, drinking water, fish or wildlife N/A			
Q Comments and/or recommendations Once steam then Dripping For Approx. 30 min All Shovelled up					
FOR SPILL LINE USE ONLY					
Lead Agency					
Spill significance					
Lead Agency contact and time					
Is this file now closed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Reported by Bob Stedman		Position, Employer, Location Site Superintendent		Telephone 600-702-4082	
Reported to Bob Stedman		Position, Employer, Location Site Superintendent		Telephone 600-702-4082	



NWT SPILL REPORT

(Oil, Gas, Hazardous Chemicals or other Materials)

24-Hour Report Line
Phone: (867) 820-8130
Fax: (867) 875-6924

A Report date and time <u>Sept 10/03</u>		B Date and time of spill (if known) <u>Sept 10/03 7 PM</u>		C <input checked="" type="checkbox"/> Original report <input type="checkbox"/> Update no. <u> </u>		D Spill number <u>004</u>					
D Location and map coordinates (if known) and direction of spill (if known) <u>CAPE PARRY, NT</u> <u>70° 10' 18" N</u> <u>124° 43' 42" W</u>											
E Party responsible for spill <u>E. Bruden's Transport Ltd.</u>											
F Product(s) spilled and estimated quantities (provide exact volumes/weights if possible) <u>Diesel Fuel</u> <u>10L</u>											
G Cause of spill <u>Fuel Transfering Hose Spillage</u>											
H Is spill contained? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		I If spill is continuing, give estimated rate		J Is further spillage possible? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		K Extent of contaminated area (in square metres if possible) <u>4m</u>					
L Factors affecting spill or recovery (weather conditions, terrain, snow, wind, etc.) <u>N/A</u>				M Containment (method, equipment, etc.) <u>Absorbents - Bagged in Beam</u>							
N Action, if any, taken or proposed to contain, recover, clean up or dispose of product(s) and contaminated material <u>Absorbent all Spill Shovelled & gravel</u> <u>into Bags & Placed in Fuel Beam</u>											
O Do you require assistance? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, describe				P Possible hazards to persons, property, or environment eg: fire, drinking water, fish or wildlife <u>N/A</u>							
Q Comments and/or recommendations <u>3 Small Ar -</u> <u>Spilled</u> <u>Approx 5g</u>						FOR SPILL LINE USE ONLY					
						Lead Agency					
						Spill significance					
						Lead Agency contact and time					
						Is this file now closed? <input type="checkbox"/> yes <input type="checkbox"/> no					
Reported by <u>Bob Seckine</u>		Position, Employer, Location <u>Sine Superintendent</u>		Telephone <u>600-702-4082</u>		Reported to <u>Bob Seckine</u>		Position, Employer, Location <u>Sine Superintendent</u>		Telephone <u>600-702-4082</u>	