



SHELL CANADA LIMITED

Annual Report 2003 Water License N7L1-1762 Camp Farewell

January 28, 2004





Jan 28, 2004

Executive Assistant Northwest Territories Water Board P.O. Box 1500 YELLOWKNIFE, NT X1A 2R3

SUBJECT: ANNUAL REPORT 2003 - WATER LICENSE N7L1-1762 CAMP FAREWELL

The following is to provide the information required by Part B: 1. of the Water License General Conditions no later than March 31 of the year following the calendar year reported.

1.a) Total Quantities of Fresh Water Obtained From All Sources

Mackenzie River: 0m3 Unnamed Lake: 0m3

Total volume of fresh water 0m3 used during 2003.

- 1.b) Total Quantities of Each and All Waste Discharged

 The camp has experienced no activity in this reporting period, as Shell has had no active operations in the area.
- 1.c) Results of Sampling Carried Out Under the Surveillance Network Program
 No sewage effluent was discharged during 2003.
- 1.d) Summary of Any Modifications Carried Out On the Water Supply and Waste Disposal Facilities, Including All Associated Structures

An application to modify the sewage treatment plant was submitted on May 24, 2002. The modification was to replace the existing plant with a "extended aeration system" which is a modified activated sludge system. The Northwest Territories Water Board approved the modifications on June 11, 2002.

- 1.e) A List of Any Spills and Unauthorized Discharges
 No spills or unauthorized discharges occurred during 2003.
- 1.f) Any Other Details On Water Use Or Waste Disposal Requested By The Board Within Forty-Five Days Before The Annual Report Is Due No additional requests were received.
- 1.g) Details on the restoration of any Sumps
 No sump was restored.



1.h) Any revisions to the approved Contingency Plan The Revised Contingency Plan was submitted July 15/2003.

We trust this meets your requirements. Should any additional information be required, please contact the undersigned.

Yours truly,

R. (Randy) H. Hetman

DAR/Construction Manager

Ph. (403) 691-2521 Fax (403) 269-7948

Email: randy.hetman@shell.ca

Cc Inspector - Water Resources Officer, INAC (867) 777-2090

Camp Farewell - Lagoon Waste Water Sample Results

Licencee: Shell Canada

Licence number:

N7-1-1762

Station number:

1762-1

Current as of 2003-09-04

Test	•	pН	TSS	Ammonia- Nitrogen	Total Phosphorus	BOD	Faecal Coliform	Oil and Grease	Chlorine residual	Chlorine total
Units		рН	mg/l	mg/l	mg/l	mg/l	CFU/dL	mg/l	mg/l	mg/l
Detection lin	mit	0.05	3	0.005	0.004	2	1	0.2	0.01	0.01
Licence maximums		6.0 to 9.0	70	NLL	NLL	70	100,000	5.0	NLL.	NLL
Date/Time										
Sampled	Sample						W. B. B. C.			
Camp Fare	well									
LAGOON	1 8		107	0.392	2.100	113	<10	10.0		
9/4/03			110	0.475	2.200	112	<10	5.4		-
	Average	7.00	109	0.434	2.150	113	<10_	7.7		3
TSS = Total Suspended Solids BOD = Biological Oxygen Demand NLL = Not listed in licence P = Preliminary analysis results F = Final analysis results										
QA/QC = Quality control samples - blanks NA = Results not available										
					·					
										



4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3 Tel: (867)-669-2788

Fax: (867)-669-2718



- FINAL REPORT -

Prepared For: Kavik-Axys

Address: P.O. Box 2320

Inuvik, NWT

X0E0T0

Attn: Michael Fabijan

Facimile: (867) 777-4925

Final report has been reviewed and approved by:

Helene Harper

Client Services Officer

NOTES:

- Test methods and data are validated by the laboratory's Quality Assurance Program. Taiga Environmental Laboratory is accredited by the Standards Council of Canada (SCC) as a testing laboratory for specific tests registered with the Council.
- Routine methods are based on recognized procedures from sources such as
 - Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF;
 - 0 Environment Canada
 - **USEPA** 0
- Samples shall be kept for thirty (30) days after the final report is issued. All microbiological samples shall be disposed of immediately upon completion of analysis to minimize biohazardous risks to laboratory personnel. Please contact the laboratory if you have any special requirements.
- Final results are based on the specific tests at the time of analysis and do not represent the conditions during sampling.

Report Date: Monday, February 23, 2004

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Accredited Laboratory
Scope of Accreditation 187

X1A 2R3

Cornect canadien des normes
Laboratorie accredité
Porce d'accreditation 187

Standards Council of Carrada

- CERTIFICATE OF ANALYSIS -

Client Sample ID: 1

Taiga Sample ID: 233185

Client Project:

Sample Type: sewage Received Date: 04-Sep-03 Sampling Date: 02-Sep-03

Location:

Report Status: FINAL

Approved By Helene Harper

Client Services Officer

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Physicals						
Chlorine, Residual			mg/L		SM4500-Cl:G	2
Chlorine, Total			mg/L		SM4500-Cl:G	2
pH	6.94	0.05	pH units	16-Sep-03	SM4500-H:B	
Solids, Total Suspended	107	.3	mg/L	11-Sep-03	SM2540:D	
Nutrients						
Ammonia as N	0.392	0.005	mg/L	17-Sep-03	SM4500-NH3:0	3
Biological Oxygen Demand	113	2	mg/L	04-Sep-03	SM5210:B	
Phosphorous, Total	2.10	0.002	mg/L	11-Sep-03	SM4500-P:D	·
Microbiology						
Coliforms, Fecal	< 1000	1000	CFU/100mL	05-Sep-03	SM9222:D	2



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CERTIFICATE OF ANALYSIS -

Client Sample ID: 1

Taiga Sample ID: 233185

Organic

Oil and Grease

10.0

0.2

mg/L

11-Sep-03 SM5520:B

* Taiga analytical methods are based on the following standard analytical methods

SM - Standard Methods for the Examination of Water and Wastewater

EPA - United States Environmental Protection Agency

- DATA QUALIFERS -

Data Qualifier Descriptions:

Holding time exceeded upon receipt of sample



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- CERTIFICATE OF ANALYSIS -

Client Sample ID: 2

Taiga Sample ID: 233186

Client Project:

Sample Type: sewage Received Date: 04-Sep-03

Sampling Date:

Location:

Approved By

Helene Harper

Client Services Officer

Report Status: #Error

Test Parameter	Result	Detection Result Limit Units		Analysis Date	Analytical Method *	Qualifer	
<u>Physicals</u>							
Chlorine, Residual			mg/L		SM4500-CI:G	2	
Chlorine, Total			mg/L		SM4500-CI:G	2	
pН	6.95	0.05	pH units	16-Sep-03	SM4500-H:B		
Solids, Total Suspended	110	3	mg/L	11-Sep-03	SM2540:D		
Nutrients							
Ammonia as N	0.471	0.005	mg/L	17-Sep-03	SM4500-NH3:G	r	
Biological Oxygen Demand	112	2	mg/L	04-Sep-03	SM5210:B	2	
Phosphorous, Total	2.21	0.002	mg/L	11-Sep-03	SM4500-P:D		
Microbiology							
Coliforms, Fecal	< 1000	1000	CFU/100mL	05-Sep-03	SM9222:D	2 .	



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· CERTIFICATE OF ANALYSIS -

Client Sample ID: 2

Taiga Sample ID: 233186

Organic

Oil and Grease

9.4

0.2

mg/L

11-Sep-03 SM5520:B

* Taiga analytical methods are based on the following standard analytical methods

SM - Standard Methods for the Examination of Water and Wastewater

EPA - United States Environmental Protection Agency

- DATA QUALIFERS -

Data Qualifier Descriptions:

2 Holding time exceeded upon receipt of sample

R. Shane Hamish Quality Assurance Officer Taiga Environmental Laboratory 4601 52nd Avenue, P.O. Box 1500 Yellowknife, NT X1A 2R3

September 22, 2003



Environmental Laboratory Laboratoira Environmental

Micheal Fabijan Kavik-Axya P.O. Box 2320 78 Bootlake Road Inuvik, NT X0E 0T0

Dear Mr. Fabijan,

As per our conversation September 22, 2003 regarding Taiga Sample IDs 233185 and 233186, it is our professional option that the fecal counts for these samples are accurate. The samples were received at the laboratory in good condition after the recommended holding time of 24 hours, but only by a few hours. Within this time, fecal counts would not have drastically changed (i.e. from 10⁴ to <10 or vice versa).

Should you have any other questions or further requests, do not hesitate to contact Helene Harper or myself at the Taiga Environmental Laboratory.

Sincerely.

R. Shane Harnish, M.Sc. Quality Assurance Officer