



**SHELL CANADA LIMITED**  
**FAX**

COPY	
BOARD	6
G. W.	1
E. A.	1
W. RES.	016.
NMDO	1
FILE	1762

Page 1 of 1

Includes coversheet

SEND TO

FROM

ATTENTION: <b>Executive Assistant</b>		 <b>Randall Warren</b> D.A.R./ Construction Manager  <table> <tr> <td>Shell Canada Limited</td> <td>Business:</td> <td>(403) 691-2521</td> </tr> <tr> <td>400 - 4th Avenue S.W.</td> <td>Cell:</td> <td>(403) 813-0408</td> </tr> <tr> <td>P.O. Box 100, Station M</td> <td>Fax:</td> <td>(403) 269-7895</td> </tr> <tr> <td>Calgary, Alberta T2P 2H5</td> <td></td> <td>(403) 269-7948</td> </tr> </table> Email: randall.warren@shell.com		Shell Canada Limited	Business:	(403) 691-2521	400 - 4th Avenue S.W.	Cell:	(403) 813-0408	P.O. Box 100, Station M	Fax:	(403) 269-7895	Calgary, Alberta T2P 2H5		(403) 269-7948
Shell Canada Limited	Business:			(403) 691-2521											
400 - 4th Avenue S.W.	Cell:			(403) 813-0408											
P.O. Box 100, Station M	Fax:			(403) 269-7895											
Calgary, Alberta T2P 2H5		(403) 269-7948													
COMPANY: <b>Northwest Territories Water Board</b>															
DATE: <b>April 15, 2006</b>	LOCATION: <b>Yellowknife</b>														
FAX NO: <b>(867) 765-0114</b>	TELEPHONE NO: <b>(867) 765-0106</b>														
SUBJECT:  <p align="center"><b>SURVEILLANCE NETWORK PROGRAM N7L1-1762</b></p> <p align="center"><b>March, 2006 Data</b></p>															

DESCRIPTION / REMARKS:

Camp Farewell was shut down for the month of March. No water withdrawals or discharges occurred.

Should additional information be required, please contact the undersigned.

Yours truly,

Randall Warren

Attachment

Cc Inspector - Inuvik District Office (867) 777-2090





**SHELL CANADA LIMITED  
FAX**

COPY	
BOARD	6
G. W.	1
E. A.	1
W. RES.	0/26
NMDO	1
FILE	1762

Page 1 of 1

Includes coversheet

<b>SEND TO</b>		<b>FROM</b>	
ATTENTION: <b>Executive Assistant</b>		 <b>Randall Warren</b> D.A.R./ Construction Manager	
COMPANY: <b>Northwest Territories Water Board</b>		Shell Canada Limited 400 - 4th Avenue S.W. P.O. Box 100, Station M Calgary, Alberta T2P 2H5	
DATE: <b>Feb 15, 2006</b>	LOCATION: <b>Yellowknife</b>	Business:	(403) 691-2521
FAX NO: <b>(867) 765-0114</b>	TELEPHONE NO: <b>(867) 765-0106</b>	Cell:	(403) 813-0408
		Fax:	(403) 269-7895 (403) 269-7948
SUBJECT:		Email: randall.warren@shell.com	
<p align="center"><b>SURVEILLANCE NETWORK PROGRAM N7L1-1762</b>  <b>February, 2006 Data</b></p>			

**DESCRIPTION / REMARKS:**

Camp Farewell was shut down for the month of January. No water withdrawals or discharges occurred.

Should additional information be required, please contact the undersigned.

Yours truly,

Randall Warren

Attachment

Cc Inspector – Inuvik District Office (867) 777-2090






**SHELL CANADA LIMITED  
FAX**

COPY	
BOARD	6
G. W.	1
E. A.	1
W. RES.	OK 6.
NMDO	1
FILE	1762

Page 1 of 1

Includes coversheet

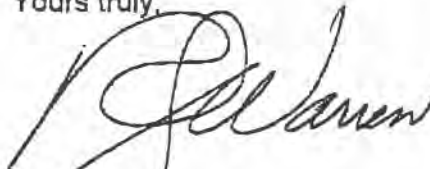
<b>SEND TO</b>		<b>FROM</b>	
<b>ATTENTION:</b> <p align="center"><b>Executive Assistant</b></p>		 <p align="center"><b>Randall Warren</b> D.A.R./ Construction Manager</p>	
<b>COMPANY:</b> <p align="center"><b>Northwest Territories Water Board</b></p>		<p><b>Shell Canada Limited</b>      <b>Business:</b> (403) 691-2521          400 - 4th Avenue S.W.      <b>Cell:</b> (403) 813-0408          P.O. Box 100, Station M      <b>Fax:</b> (403) 269-7895          Calgary, Alberta T2P 2H5      (403) 269-7948  <b>Email:</b> randall.warren@shell.com</p>	
<b>DATE:</b> <p align="center"><b>May 15, 2006</b></p>	<b>LOCATION:</b> <p align="center"><b>Yellowknife</b></p>		
<b>FAX NO:</b> <p align="center"><b>(867) 765-0114</b></p>	<b>TELEPHONE NO:</b> <p align="center"><b>(867) 765-0106</b></p>		
<b>SUBJECT:</b> <p align="center"><b>SURVEILLANCE NETWORK PROGRAM N7L1-1762</b>  <b>April, 2006 Data</b></p>			

## DESCRIPTION / REMARKS:

Camp Farewell was shut down for the month of April. No water withdrawals or discharges occurred.

Should additional information be required, please contact the undersigned.

Yours truly,

  
 Randall Warren

Attachment

Cc Inspector – Inuvik District Office (867) 777-2090





**SHELL CANADA LIMITED  
FAX**

COPY	
BOARD	5
G. W.	1
E. A.	1
W. RES.	OK
NMDO	1
FILE	1762

Page 1 of 1

Includes coversheet

SEND TO

FROM

ATTENTION: <b>Executive Assistant</b>		 <b>Randall Warren</b> D.A.R./ Construction Manager  <b>Shell Canada Limited</b> Business: (403) 691-2521 400 - 4th Avenue S.W. Cell: (403) 813-0408 P.O. Box 100, Station M Fax: (403) 269-7895 Calgary, Alberta T2P 2H5 (403) 269-7948 Email: randall.warren@shell.com	
COMPANY: <b>Northwest Territories Water Board</b>			
DATE: <b>July 15, 2006</b>	LOCATION: <b>Yellowknife</b>		
FAX NO: <b>(867) 765-0114</b>	TELEPHONE NO: <b>(867) 765-0106</b>		
SUBJECT: <b>SURVEILLANCE NETWORK PROGRAM N7L1-1762</b> <b>June, 2006 Data</b>			

DESCRIPTION / REMARKS:

Camp Farewell was shut down for the month of June. No water withdrawals or discharges occurred.

Should additional information be required, please contact the undersigned.

Yours truly,

  
Randall Warren

Attachment

Cc Inspector - Inuvik District Office (867) 777-2090





**SHELL CANADA LIMITED**  
**FAX**

BOARD	5
G. W.	1
E. A.	1
W. RES.	006
NMDO	1
FILE	1762

FILE
NMDO
W. RES.
E. A.
G. W.
BOARD
COPY

Page 1 of 1

Includes coversheet

SEND TO

ATTENTION:

**Executive Assistant**

COMPANY:

**Northwest Territories Water Board**

DATE:

**August 15, 2006**

LOCATION:

**Yellowknife**

FAX NO:

**(867) 765-0114**

TELEPHONE NO:

**(867) 765-0106****Randall Warren**

D.A.R./ Construction Manager

Shell Canada Limited

400 - 4th Avenue S.W.

P.O. Box 100, Station M

Calgary, Alberta T2P 2H5

Business: (403) 691-2521

Cell: (403) 813-0408

Fax: (403) 269-7895

(403) 269-7948

Email:

randall.warren@shell.com

SUBJECT:

**SURVEILLANCE NETWORK PROGRAM N7L1-1762****July, 2006 Data**

DESCRIPTION / REMARKS:

Camp Farewell was shut down for the month of July. No water withdrawals or discharges occurred.

Should additional information be required, please contact the undersigned.

Yours truly,

Randall Warren

Attachment

Cc Inspector – Inuvik District Office (867) 777-2090





**SHELL CANADA LIMITED  
FAX**

COPY	
BOARD	5
G. W.	1
E. A.	1
W. RES.	0816
NMDO	1
FILE	1762

Page 1 of 1

Includes coversheet

**SEND TO****FROM**

ATTENTION:

**Executive Assistant**

COMPANY:

**Northwest Territories Water Board**

DATE:

**Oct 15, 2006**

LOCATION:

**Yellowknife**

FAX NO:

**(867) 765-0114**

TELEPHONE NO:

**(867) 765-0106****Randall Warren**

D.A.R./ Construction Manager

Shell Canada Limited

400 - 4th Avenue S.W.

P.O. Box 100, Station M

Calgary, Alberta T2P 2H5

Business: (403) 691-2521

Cell: (403) 813-0408

Fax: (403) 269-7895

(403) 269-7948

Email:

randall.warren@shell.com

SUBJECT:

**SURVEILLANCE NETWORK PROGRAM N7L1-1762****September, 2006 Data**

## DESCRIPTION / REMARKS:

Camp Farewell was shut down for the month of September. No water withdrawals or discharges occurred.

Should additional information be required, please contact the undersigned.

Yours truly,

Randall Warren

Attachment

Cc Inspector – Inuvik District Office (867) 777-2090









Monday October 30, 2006

Dan Berry  
DAR/Construction  
Shell Canada Ltd.  
Calgary, Alberta

Dear Mr. Berry

**Re: Camp Farewell Sewage Lagoon Decant**

This is a summary report of activities undertaken by IEG Consultants on behalf of Shell Canada at Camp Farewell regarding the decanting of sewage lagoon (sump) water to the Mackenzie River in compliance with Shell's class B water licence.

**Summary of activities**

For the planned summer decant, water samples from the lagoon were taken on June 30<sup>th</sup>, 2006. Results for this sampling showed that all parameters were within acceptable water licence guidelines except for pH. Test results for pH were 9.96 and 9.92, while the guidelines required pH to be between 6 and 9.

INAC staff advised IEG that pH levels in most local water bodies tended to drop near the end of summer and on this advice the lagoon water was again tested for pH on August 24<sup>th</sup>, 2006. Laboratory results for this sampling confirmed that pH had dropped to 8.1.

The results of laboratory testing were relayed to INAC and permission was granted by INAC staff on Sept 8<sup>th</sup>, 2006 to decant the lagoon.

The decant was performed over a two day period. 1,295,640 litres of water were pumped from the lagoon to the river on the 14<sup>th</sup> of September. When the decant recommenced on the 19<sup>th</sup> of September a further 700,920 litres of water were pumped to the Mackenzie river. The two days of pumping resulted in a total of 1,996,560 litres of water being pumped from the Camp Farewell lagoon to the Mackenzie River.

**Methodology**

Water samples to confirm pre-decant water quality were taken on June 30<sup>th</sup> and August 24<sup>th</sup>, 2006. Results from laboratory testing were relayed to INAC to receive permission for the decanting of lagoon water to the Mackenzie River.

Sump/Lagoon Decant Summary Report

A04012A01.01



SHELL CANADA LIMITED  
Camp Farewell Surface Water Sampling

Monday, October 30, 2006

Up to 4, gas powered 2" trash pumps were used to take water from the lagoon, over the berm and down to the Mackenzie River for disposal. Intake hoses for each pump were set 200 mm above the bottom of the lagoon to insure that no sediment would be incorporated into the discharged water. This was achieved by tying the end of the hose to a metal bar which was then driven into the sediment.

Discharge hoses were laid out down the slope to the River's edge and set up to eliminate bank erosion at the hose outlet. Water being discharged was monitored when the pumps were started up and at regular intervals to check for signs of erosion, foam and water quality. At the first sign of poor water quality or hose set up, a signal was given to shut down the offending pump immediately so that adjustments could be made.

When water levels in the lagoon became too low to set intake hoses above the sediment, pumping operations ceased.

After pumping had ceased on the 19<sup>th</sup> of September, the pumping equipment was removed from the lagoon and water samples were taken from the roughly 153,400 litres remaining in the lagoon. These samples were sent to Taiga Laboratories in Yellowknife for analysis.

For future planning purposes, sediment samples were collected from two locations within the lagoon and sent to Maxxam Analytics for analysis. Sample LS06-1 was taken from the bottom of the lagoon, near the location where the water samples were collected. Sample LS06-2 was collected below the initial water level on the side of the lagoon wall at depth intervals of 0-0.2m, 0.2-0.5m and 0.5-0.7m below ground level.

#### **Disclosure and Discussion of Variances From Licence Standards During Operations**

While initiating pumping operations on the 19<sup>th</sup> of September, there were 3 occasions when the effluent reaching the river contained a high level of sediment from the lagoon bottom. On each occasion the pump being used was immediately shut down and the intake hose reset to suck clean water for discharge. The duration of each event was less than one minute and therefore the estimated volume of sediment laden discharge was less than 2,100 litres.

After decanting procedures finished on September 19, 2006, water samples were taken from the standing water remaining in the lagoon. The results of these tests showed that water quality for 3 parameters; Total suspended solids (222 mg/L) Biological Oxygen Demand (106 mg/L) and Hexane Extractable Materials (5.8 mg/L) exceeded the water licence decanting standards (see Table 1).

In each case, these exceedances are above previous sample results but are not significantly above standards set out in the water licence. The exceedances can likely be



SHELL CANADA LIMITED  
Camp Farewell Surface Water Sampling

Monday, October 30, 2006

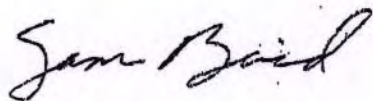
attributed to sampling conditions at the time. Slippery conditions existed near the water's edge after decanting. Access for collecting water samples was limited to a very shallow location (approximately 0.25 m deep). The intake hoses had also been dragged over this location 1 hour prior to sampling.

1. The time between the removal of suction hoses from the shallow standing water and sampling was approximately 1 hour. It is likely that this time interval did not allow for suspended solids to reach pre-disturbance levels resulting in a high result for Total Suspended Solids (TSS).
2. Past studies have shown that high BOD can be correlated with high TSS.
3. The elevated levels recorded for Hexane Extractable Materials may also be attributed to the disturbance of sediments and the low water levels. Lagoon sediment samples taken near the water sampling location show elevated levels of F2, F3 and F4 Hydrocarbons.

Further questions regarding this report may be directed to Sam Bird ([sbird@ieg.ca](mailto:sbird@ieg.ca) 403-990-1382) or David Wells ([dwells@ieg.ca](mailto:dwells@ieg.ca) 867-777-8521)

Yours truly,

IEG CONSULTANTS LTD.



Sam Bird  
Environmental Scientist

This report was prepared by IEG Consultants Ltd. for the account of Shell Canada. The material in it reflects IEG's best judgement in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. IEG accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

Table 1. Water Sampling-Summary of Laboratory Results

Sample ID Laboratory ID Collection Date: Parameter	Unit	M.D.L	WL	SW06-05 261766 6/30/2006	SW06-06 261767 6/30/2006	Camp Farewell Lagoon N 8/24/2006	Camp Farewell Lagoon S 8/24/2006	LWS06-1 263934 9/19/2006
<b>Routine Analysis</b>								
pH	units		6-9	9.96	9.92	8.1	8.1	6.94
Total Suspended Solids	mg/L	3	70	48	52			222
Residual Chlorine	mg/L	0.01	0.1	0.06	0.07			<0.01
Total Chlorine	mg/L	0.01	na	0.08	.09			<0.01
<b>Nutrient Analysis</b>								
Biological Oxygen Demand	mg/L	2	70	37	40			106
<b>Microbiological Analysis</b>								
Fecal Coliforms	CFU/100ml	10	10000	<10	<10			<100
<b>Organic Analysis</b>								
Hexane Extractable Materials	mg/L	5	5	<5	<5			5.8

**Comments:**

M.D.L - Method Detection Limit; WL - Water License



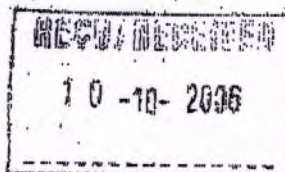
Table 2: Pumping Chart for Lagoon Decant

Manufacturers stated				
Pump capacity				
708 L/min				
42,480 L/hour				
Sept. 14				
time (hours)	pump 1	pump 2	pump 3	pump 4
	8.0	8.0	7.5	7.0
	339,840	339,840	318,600	297,360
Total				1,295,640
Sept. 19				
time (hours)	pump 1	pump 2	pump 3	pump 4
	6.5	6.0	3.0	1.0
	276,120	254,880	127,440	42,480
Total				700,920
Total water discharged to Mackenzie River				1,996,560
apx lagoon size				
cubic metres				2,150
L				2,150,000
apx L remaining				153,440

**Taiga Environmental Laboratory**

4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3

Tel: (867)-669-2788 Fax: (867)-669-2718

**- FINAL REPORT -****Prepared For:** IEG Consultants**Address:** PO BOX 3178  
Inuvik, XOE 0T0**Attn:** Sam Bird**Facsimile:** (867) 777-2747**Final report has been reviewed and approved by:**  
**Helene Harper**  
A/Laboratory Manager**NOTES:**

- Test methods and data are validated by the laboratory's Quality Assurance Program. Taiga Environmental Laboratory is accredited by the Canadian Association of Environmental Analytical Laboratories (CAEAL) as a testing laboratory for specific tests registered with CAEAL.
- Routine methods are based on recognized procedures from sources such as
  - Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF;
  - Environment Canada
  - USEPA
- 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:** Thursday, September 28, 2006**Print Date:** Thursday, September 28, 2006

Page 1 of 3





# Taiga Environmental Laboratory

4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3

Tel: (867)-669-2788 Fax: (867)-669-2718

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **LW906-1**

Taiga Sample ID: **263934**

Client Project: AD4012A01

Sample Type: Unknown Water

Received Date: 19-Sep-06

Sampling Date: 20-Sep-06

Location: Lagoon Sump-Camp Farwell

Report Status: FINAL

Approved By

*Helene Harper*  
Helene Harper

A/Laboratory Manager

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b>Physical/Routine Analysis</b>						
pH	6.94		pH units	21-Sep-06	SM4500-H:B	
Solids, Total Suspended	222	3	mg/L	22-Sep-06	SM2540:D	
Chlorine, Residual	< 0.01	0.01	mg/L	20-Sep-06	SM4500-Cl:G	
Chlorine, Total	< 0.01	0.01	mg/L	20-Sep-06	SM4500-Cl:G	
<b>Nutrient Analysis</b>						
Biological Oxygen Demand	106	2	mg/L	21-Sep-06	SM5210:B	
<b>Microbiological Analysis</b>						
Coliforms, Fecal	< 100	100	CFU/100mL	20-Sep-06	SM9222:D	68
<b>Total Metals</b>						
Cadmium	0.3	0.1	µg/L	25-Sep-06	EPA200.8	
Chromium	3.1	0.3	µg/L	25-Sep-06	EPA200.8	
Cobalt	2.1	0.1	µg/L	25-Sep-06	EPA200.8	
Copper	8.2	0.3	µg/L	25-Sep-06	EPA200.8	
Iron	35400	50	µg/L	25-Sep-06	EPA200.8	
Lead	21.5	0.1	µg/L	25-Sep-06	EPA200.8	
Manganese	1160	0.1	µg/L	25-Sep-06	EPA200.8	

Report Date: Thursday, September 28, 2006

Print Date: Thursday, September 28, 2006



**Taiga Environmental Laboratory**

4601-52nd Ave., Box 1500, Yellowknife, NT, X1A 2R3

Tel: (867)-669-2788 Fax: (867)-669-2718

**- CERTIFICATE OF ANALYSIS -****Client Sample ID: LWS06-1****Taiga Sample ID: 263934**

Nickel	8.6	0.1	µg/L	25-Sep-06	EPA200.8
Zinc	25	10	µg/L	25-Sep-06	EPA200.8
<b>Organic Analysis</b>					
Hexane Extractable Material	5.8	5.0	mg/L	26-Sep-06	EPA1664a

**- DATA QUALIFIERS -****Data Qualifier Descriptions:**

68 Unable to repeat analysis at lower dilution. Holding time exceeded.

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

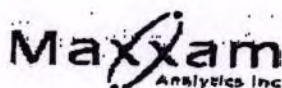
SM - Standard Methods for the Examination of Water and Wastewater

EPA - United States Environmental Protection Agency

CCME - Canadian Council of Ministers of the Environment

**Report Date:** Thursday, September 28, 2006**Print Date:** Thursday, September 28, 2006

Page 3 of 3



Your Project #: A04012 A01 CAMP FAREWELL WATER  
 Site: MACKENAIE DELTA PLOT  
 Your C.O.C. #: 87115

KLOHN-CRIPPEN CONSULTING LTD.  
 SUITE 114  
 6815 - 8TH STREET N.E.  
 CALGARY, AB  
 CANADA T2E 7H7

Report Date: 2006/10/03

### CERTIFICATE OF ANALYSIS

**MAXXAM JOB #: A645324**

**Received: 2006/09/27, 10:00**

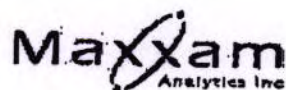
Sample Matrix: Soil

# Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Boron (Hot Water Soluble)	1	N/A	2006/09/29	EENVSOP-00034 v1	Carter SSMA 12.2.2
BTEX by HS GC/MS (MeOH extract)	4	2006/09/28	2006/09/28	EENVSOP-00005 V.2	EPA 8260B/5021A
Chloride (soluble)	2	N/A	2006/09/30	EENVSOP-00055 v1	SM 4110B
Hexavalent Chromium @	1	2006/10/02	2006/10/02	EENVSOP-00067 v4	SM 3500-Cr B
Conductivity (Soluble)	2	N/A	2006/09/30	EENVSOP-00052 v1	SM 2510B
F1-BTEX Soil Cal	4	2006/09/28	2006/09/28		
CCME Hydrocarbons (F1: MeOH; HSGC)	4	2006/09/28	2006/09/28	EENVSOP-00002 v7	CCME CWS for PHC
CCME Hydrocarbons (F2-F4 in soil)	4	2006/09/29	2006/09/29	EENVSOP-00007 v4	CWS PHCS Tier 1
CCME Hydrocarbons (F4G in soil)	2	2006/10/03	2006/10/03	EENVSOP-00121 v1	CWS PHCS Tier 1
Flash Point	1	2006/09/28	2006/09/28	EENVSOP-00079 v2	ASTM D3828-93
Ethylene, Di, Tri & Tetrachylene glycol @	1	N/A	2006/10/02	CAL SOP-00093	GC/FID-EXTRACTION
Mercury in Soil by CVAA	1	N/A	2006/09/29	EENVSOP-00032 V.1	EPA SW846 7471B
Elements by ICPMS - Soils	1	N/A	2006/10/02	EENVSOP-00123 v2	EPA 6020A
Ion Balance	2	N/A	2006/09/28		
Sum of Cations, Anions	2	N/A	2006/09/28		
Moisture	4	N/A	2006/09/29	BENVWI-00023 v2	Carter SSMA 51.2
Polychlorinated Biphenyls @	1	N/A	2006/10/02	CAL SOP-00149	GC/ECD-EXTRACTION
pH (Soluble)	2	N/A	2006/09/30	IN-206 v3.0	SM 4500 H
Sodium Adsorption Ratio	2	N/A	2006/09/29	CAL SOP# 0027, CAL WI# 0013	CALC
Ca,Mg,Na,K,SO4 (Soluble)	2	N/A	2006/10/01	EENVSOP-00034 v1	EPA SW846 6010C
Soluble Paste	2	N/A	2006/09/29	EENVSOP-00046 v1	Carter SSMA 18.2.2
Theoretical Gypsum Requirement	2	N/A	2006/09/28	CAL WI# 0013	CALC

- (1) This test was performed by Maxxam Calgary  
 (2) Results reported on a dry weight basis.





Your Project #: A04012 A01 CAMP FAREWELL WATER  
Site: MACKENAIE DELTA PLOT  
Your C.O.C. #: 87115

KLOHN-CRIPPEN CONSULTING LTD.  
SUITE 114  
6815 - 8TH STREET N.E.  
CALGARY, AB  
CANADA T2E 7H7

Report Date: 2006/10/03

**CERTIFICATE OF ANALYSIS**

-2-

**Encryption Key**

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

JEREMY WAKARUK, BSc., Senior Project Manager  
Email: jwakaruk@maxxamanalytics.com  
Phone# (780) 465-1212 Ext:223

---

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. SCC and CABAL have approved this reporting process and electronic report format.

Total cover pages: 2

Edmonton: 9331 - 48th Street T6B 2R4 Telephone(780) 468-3500 FAX(780) 466-3332  
Edmonton: 9619 - 42 Avenue T6E 5R2 Telephone(780) 465-1212 FAX(780) 450-4187



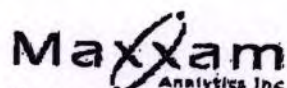
**Maxxam**  
Analytics Inc  
Maxxam Job #: A645324  
Report Date: 2006/10/03

KLOHN-CRIPPEN CONSULTING LTD.  
Client Project #: A04012 A01 CAMP FAREWELL WATER  
Site Reference: MACKENAIE DELTA PLOT  
Sampler Initials: SB

### CCME METALS PACKAGE ON SOILS (SOIL)

Maxxam ID		C93751		
Sampling Date		2006/09/19		
COC Number		87115		
	Units	LS06-1 (0-.1M)	RDL	QC Batch

Elements				
Soluble (Hot water) Boron (B)	mg/kg	2.7	0.1	1289858
Hex. Chromium (Cr 6+)	mg/kg	<0.2	0.2	12892311
Mercury (Hg)	mg/kg	0.07	0.05	1289784
Total Antimony (Sb)	mg/kg	1	1	1289861
Total Arsenic (As)	mg/kg	6	1	1289861
Total Barium (Ba)	mg/kg	1520	10	1289861
Total Beryllium (Be)	mg/kg	<0.4	0.4	1289861
Total Cadmium (Cd)	mg/kg	0.6	0.1	1289861
Total Chromium (Cr)	mg/kg	30	1	1289861
Total Cobalt (Co)	mg/kg	4	1	1289861
Total Copper (Cu)	mg/kg	47	5	1289861
Total Lead (Pb)	mg/kg	32	1	1289861
Total Molybdenum (Mo)	mg/kg	1.9	0.4	1289861
Total Nickel (Ni)	mg/kg	15	1	1289861
Total Selenium (Se)	mg/kg	<0.5	0.5	1289861
Total Silver (Ag)	mg/kg	<1	1	1289861
Total Thallium (Tl)	mg/kg	<0.3	0.3	1289861
Total Tin (Sn)	mg/kg	3	1	1289861
Total Vanadium (V)	mg/kg	11	1	1289861
Total Zinc (Zn)	mg/kg	134	10	1289861
RDL = Reportable Detection Limit				



Maxxam Job #: A645324  
Report Date: 2006/10/03

KLOHN-CRIPPEN CONSULTING LTD.  
Client Project #: A04012 A01 CAMP FAREWELL WATER  
Site Reference: MACKENAIE DELTA PLOT  
Sampler Initials: SB

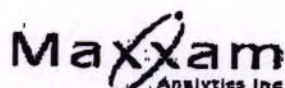
### CCMEHC MECHANICAL EXTRACTION (SOIL)

Maxxam ID		C93751		C93758	C93759		
Sampling Date		2006/09/19		2006/09/19	2006/09/19		
COC Number		87115		87115	87115		
	Units	LS06-1 (0-1M)	QC Batch	LS06-2 (0-2M)	LS06-2 (.2-.5M)	RDL	QC Batch

<b>Physical Properties</b>							
Moisture	%	60.3	1288647	8.8	13.7	0.3	1288690
<b>Ext. Pet. Hydrocarbon</b>							
F1 (C06-C10)	mg/kg	112	1288200	<10	11	10	1288200
F1 (C06-C10) - BTEX	mg/kg	86	1288175	<10	<10	10	1288175
F2 (C10-C16 Hydrocarbons)	mg/kg	1420	1289305	158	240	10	1289305
F3 (C16-C34 Hydrocarbons)	mg/kg	5930	1289305	1300	2460	10	1289305
F4 (C34-C50 Hydrocarbons)	mg/kg	1220	1289305	154	1400	10	1289305
Reached Baseline at C50	mg/kg	No	1289305	Yes	No	1	1289305
<b>Volatiles</b>							
Benzene	mg/kg	0.13	1288192	<0.0050	0.012	0.0050	1288192
Toluene	mg/kg	16	1288192	0.031	0.064	0.020	1288192
Ethylbenzene	mg/kg	0.94	1288192	<0.010	0.39	0.010	1288192
Xylenes (Total)	mg/kg	9.1	1288192	<0.020	3.9	0.020	1288192
m & p-Xylene	mg/kg	5.7	1288192	<0.020	1.9	0.020	1288192
o-Xylene	mg/kg	3.3	1288192	<0.020	2.0	0.020	1288192
<b>Surrogate Recovery (%)</b>							
4-BROMOFLUOROBENZENE (sur.)	%	91	1288200	90	76	N/A	1288200
O-TERPHENYL (sur.)	%	92	1289305	81	92	N/A	1289305
4-BROMOFLUOROBENZENE (sur.)	%	100	1288192	107	100	N/A	1288192
D10-ETHYLBENZENE (sur.)	%	118	1288192	114	120	N/A	1288192
D4-1,2-DICHLOROETHANE (sur.)	%	98	1288192	100	97	N/A	1288192
D8-TOLUENE (sur.)	%	101	1288192	100	100	N/A	1288192

N/A = Not Applicable  
RDL = Reportable Detection Limit





Maxxam Job #: A645324  
Report Date: 2006/10/03

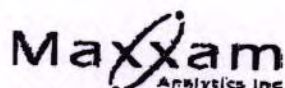
KLOHN-CRIPPEN CONSULTING LTD.  
Client Project #: A04012 A01 CAMP FAREWELL WATER  
Site Reference: MACKENAIE DELTA PLOT  
Sampler Initials: SB

### CCMEHC MECHANICAL EXTRACTION (SOIL)

Maxxam ID		C93762		
Sampling Date		2006/09/19		
COC Number		87115		
	Units	LS06-2 (.5-.7M)	RDL	QC Batch

<b>Physical Properties</b>				
Moisture	%	39.9	0.3	1289690
<b>Ext. Pet. Hydrocarbon</b>				
F1 (C06-C10)	mg/kg	96	10	1288200
F1 (C06-C10) - BTEX	mg/kg	76	10	1288175
F2 (C10-C16 Hydrocarbons)	mg/kg	551	10	1289305
F3 (C16-C34 Hydrocarbons)	mg/kg	1540	10	1289305
F4 (C34-C50 Hydrocarbons)	mg/kg	638	10	1289305
Reached Baseline at C50	mg/kg	Yes	1	1289305
<b>Volatiles</b>				
Benzene	mg/kg	0.21	0.0050	1288192
Toluene	mg/kg	0.41	0.020	1288192
Ethylbenzene	mg/kg	3.1	0.010	1288192
Xylenes (Total)	mg/kg	17	0.020	1288192
m & p-Xylene	mg/kg	13	0.020	1288192
o-Xylene	mg/kg	3.6	0.020	1288192
<b>Surrogate Recovery (%)</b>				
4-BROMOFLUOROBENZENE (sur.)	%	96	N/A	1288200
O-TERPHENYL (sur.)	%	93	N/A	1289305
4-BROMOFLUOROBENZENE (sur.)	%	101	N/A	1288192
D10-ETHYLBENZENE (sur.)	%	123	N/A	1288192
D4-1,2-DICHLOROETHANE (sur.)	%	97	N/A	1288192
D8-TOLUENE (sur.)	%	101	N/A	1288192
N/A = Not Applicable RDL = Reportable Detection Limit				





Maxxam Job #: A645324  
Report Date: 2006/10/03

KLOHN-CRIPPEN CONSULTING LTD.  
Client Project #: A04012 A01 CAMP FAREWELL WATER  
Site Reference: MACKENAIE DELTA PLOT  
Sampler Initials: SB

### SOIL SALINITY 4 (SOIL)

Maxxam ID		C93751	C93762		
Sampling Date		2006/09/19	2006/09/19		
COC Number		87115	87115		
	Units	LS06-1 (0-.1M)	LS06-2 (.5-.7M)	RDL	QC Batch

<b>Calculated Parameters</b>					
Anion Sum	meq/L	45.4	24.4	N/A	1288484
Cation Sum	meq/L	46.8	26.0	N/A	1288484
Ion Balance	N/A	1.03	1.07	0.01	1288482
<b>Soluble Parameters</b>					
Soluble Chloride (Cl)	mg/L	874	11	5	1290978
Soluble Conductivity	dS/m	4.57	1.95	0.01	1289746
Soluble pH	N/A	7.31	6.82	0.01	1289750
Sodium Adsorption Ratio	N/A	5.6	0.5	0.1	1289909
Soluble Calcium (Ca)	mg/L	321	364	2	1291113
Soluble Magnesium (Mg)	mg/L	113	69	1	1291113
Soluble Sodium (Na)	mg/L	458	40	3	1291113
Soluble Potassium (K)	mg/L	80	18	1	1291113
Saturation %	%	75.8	61.5	N/A	1289743
Soluble Sulphate (SO4)	mg/L	997	1160	5	1291113
Theoretical Gypsum Requirement	tons/ac	<0.1	<0.1	0.1	1288361
RDL = Reportable Detection Limit					

**Maxxam**  
Analytics Inc  
Maxxam Job #: A845324  
Report Date: 2006/10/03

KLOHN-CRIPPEN CONSULTING LTD.  
Client Project #: A04012 A01 CAMP FAREWELL WATER  
Site Reference: MACKENAIE DELTA PLOT  
Sampler Initials: SB

**RESULTS OF CHEMICAL ANALYSES OF SOIL**

Maxxam ID		C93751		
Sampling Date		2006/09/19		
COC Number		87115		
	Units	LS06-1 (0-.1M)	RDL QC Batch	

<b>FOR OIL ANALYSES</b>				
Flash point	°C	>61	23	1288446
RDL = Reportable Detection Limit				



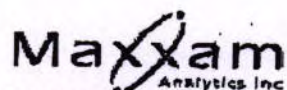
**Maxxam**  
Analytics Inc.  
Maxxam Job #: A645324  
Report Date: 2006/10/03

KLOHN-CRIPPEN CONSULTING LTD.  
Client Project #: A04012 A01 CAMP FAREWELL WATER  
Site Reference: MACKENAIE DELTA PLOT  
Sampler Initials: SB

### PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		C93751	C93750		
Sampling Date		2006/09/19	2006/09/19		
COC Number		87115	87115		
	Units	LS06-1 (0-.1M)	LS06-2 (.2-.5M)	RDL	QC Batch

<b>OIL &amp; GREASE</b>					
F4SG (Heavy Hydrocarbons-Grav.)	mg/kg	12000	5500	200	1292982
RDL = Reportable Detection Limit					



Maxxam Job #: A645324

Report Date: 2006/10/03

KLOHN-CRIPPEN CONSULTING LTD.

Client Project #: A04012 A01 CAMP FAREWELL WATER

Site Reference: MACKENAIE DELTA PLOT

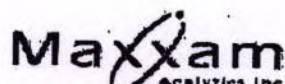
Sampler Initials: SB

## GLYCOLS BY GC-FID (SOIL)

Maxxam ID		C93751		
Sampling Date		2006/09/19		
COC Number		87115		
	Units	LS06-1 (0-.1M)	RDL	QC Batch

Glycols				
Extractable (Water) Ethylene Glycol	mg/kg	<5.0	5.0	1291352
Extractable (Water) Diethylene Glycol	mg/kg	<7.6	7.6	1291352
Extractable (Water) Triethylene Glycol	mg/kg	<15	15	1291352
Extractable (Water) Tetraethylene Glycol	mg/kg	<25	25	1291352
Extractable (Water) Propylene Glycol	mg/kg	<25	25	1291352
Surrogate Recovery (%)				
Extractable (Water) SULFOLANE (sur.)	%	86	N/A	1291352
N/A = Not Applicable RDL = Reportable Detection Limit				





Maxxam Job #: A645324  
Report Date: 2006/10/03

KLOHN-CRIPPEN CONSULTING LTD.  
Client Project #: A04012 A01 CAMP FAREWELL WATER  
Site Reference: MACKENAIE DELTA PLOT  
Sampler Initials: SB

### POLYCHLORINATED BIPHENYLS BY GC-ECD (SOIL)

Maxxam ID		C93758		
Sampling Date		2006/09/19		
COC Number		87115		
	Units	LS06-2 (0-.2M)	RDL	QC Batch

Polychlorinated Biphenyls				
Aroclor 1016	mg/kg	<0.01	0.01	1289275
Aroclor 1221	mg/kg	<0.01	0.01	1289275
Aroclor 1232	mg/kg	<0.01	0.01	1289275
Aroclor 1242	mg/kg	<0.01	0.01	1289275
Aroclor 1248	mg/kg	<0.01	0.01	1289275
Aroclor 1254	mg/kg	<0.01	0.01	1289275
Aroclor 1260	mg/kg	<0.01	0.01	1289275
Aroclor 1262	mg/kg	<0.01	0.01	1289275
Aroclor 1268	mg/kg	<0.01	0.01	1289275
Total Aroclors	mg/kg	<0.01	0.01	1289275
Surrogate Recovery (%)				
NONACHLOROBIPHENYL (sur.)	%	97	N/A	1289275

N/A = Not Applicable  
RDL = Reportable Detection Limit

**Maxxam**  
Analytics Inc  
Maxxam Job #: A645324  
Report Date: 2006/10/03

KLOHN-CRIPPEN CONSULTING LTD.  
Client Project #: A04012 A01 CAMP FAREWELL WATER  
Site Reference: MACKENAIE DELTA PLOT  
Sampler Initials: SB

**SOIL SALINITY 4 (SOIL) Comments**

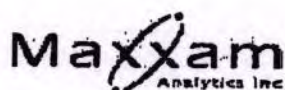
Sample C93751-01 Chloride (soluble): Matrix spike exceeds acceptance limits for Cl due to matrix interference. Reanalysis yields similar results.

**GLYCOLS BY GC-FID (SOIL) Comments**

Sample C93751-02 Ethylene, Di, Tri & Tetraethylene glycol: Detection limits raised due to high moisture content

**Results relate only to the items tested.**





KLOHN-CRIPPEN CONSULTING LTD.

Attention:

Client Project #: A04012 A01 CAMP FAREWELL WATER

P.O. #:

Site Reference: MACKENAIE DELTA PLOT

## Quality Assurance Report

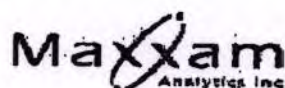
Maxxam Job Number: EA645324

QA/QC Batch	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1288192 HW4	MATRIX SPIKE	4-BROMOFLUOROBENZENE (sur.)	2006/09/28		98	%	60 - 140
		D10-ETHYLBENZENE (sur.)	2006/09/28		116	%	60 - 130
		D4-1,2-DICHLOROETHANE (sur.)	2006/09/28		97	%	60 - 140
		D8-TOLUENE (sur.)	2006/09/28		99	%	60 - 140
		Benzene	2006/09/28		89	%	60 - 140
		Toluene	2006/09/28		95	%	60 - 140
		Ethylbenzene	2006/09/28		98	%	60 - 140
		m & p-Xylene	2006/09/28		98	%	60 - 140
		o-Xylene	2006/09/28		97	%	60 - 140
	SPIKE	4-BROMOFLUOROBENZENE (sur.)	2006/09/28		94	%	60 - 140
		D10-ETHYLBENZENE (sur.)	2006/09/28		111	%	60 - 130
		D4-1,2-DICHLOROETHANE (sur.)	2006/09/28		99	%	60 - 140
		D8-TOLUENE (sur.)	2006/09/28		98	%	60 - 140
		Benzene	2006/09/28		88	%	60 - 140
		Toluene	2006/09/28		93	%	60 - 140
		Ethylbenzene	2006/09/28		93	%	60 - 140
		m & p-Xylene	2006/09/28		90	%	60 - 140
		o-Xylene	2006/09/28		110	%	60 - 140
	BLANK	4-BROMOFLUOROBENZENE (sur.)	2006/09/28		95	%	60 - 140
		D10-ETHYLBENZENE (sur.)	2006/09/28		110	%	60 - 130
		D4-1,2-DICHLOROETHANE (sur.)	2006/09/28		99	%	60 - 140
		D8-TOLUENE (sur.)	2006/09/28		99	%	60 - 140
		Benzene	2006/09/28	<0.0050		mg/kg	
		Toluene	2006/09/28	<0.020		mg/kg	
		Ethylbenzene	2006/09/28	<0.010		mg/kg	
		Xylenes (Total)	2006/09/28	<0.020		mg/kg	
		m & p-Xylene	2006/09/28	<0.020		mg/kg	
		o-Xylene	2006/09/28	<0.020		mg/kg	
1288200 RI2	MATRIX SPIKE	4-BROMOFLUOROBENZENE (sur.)	2006/09/28		89	%	60 - 130
		F1 (C06-C10)	2006/09/28		97	%	60 - 130
	SPIKE	4-BROMOFLUOROBENZENE (sur.)	2006/09/28		94	%	60 - 130
		F1 (C06-C10)	2006/09/28		95	%	60 - 120
	BLANK	4-BROMOFLUOROBENZENE (sur.)	2006/09/28		94	%	60 - 130
		F1 (C06-C10)	2006/09/28	<10		mg/kg	
	RPD	F1 (C06-C10)	2006/09/28	NC		%	50
1288446 RV	BLANK	Flash point	2006/09/28	>61, RDL=23		°C	
	RPD	Flash point	2006/09/28	NC		%	N/A
1288647 HL2	BLANK	Moisture	2006/09/28	<0.3		%	
	RPD	Moisture	2006/09/29	3.0		%	20
1289275 RTA	Calibration Check	NONACHLOROBIPHENYL (sur.)	2006/10/02		94	%	53 - 127
		Aroclor 1254	2006/10/02		104	%	80 - 132
		Aroclor 1260	2006/10/02		84	%	60 - 117
	SPIKE	NONACHLOROBIPHENYL (sur.)	2006/10/02		99	%	53 - 127
		Aroclor 1260	2006/10/02		92	%	64 - 128
	BLANK	NONACHLOROBIPHENYL (sur.)	2006/10/02		103	%	53 - 127
		Aroclor 1016	2006/10/02	<0.01		mg/kg	
		Aroclor 1221	2006/10/02	<0.01		mg/kg	
		Aroclor 1232	2006/10/02	<0.01		mg/kg	
		Aroclor 1242	2006/10/02	<0.01		mg/kg	
		Aroclor 1248	2006/10/02	<0.01		mg/kg	
		Aroclor 1254	2006/10/02	<0.01		mg/kg	
		Aroclor 1260	2006/10/02	<0.01		mg/kg	
		Aroclor 1262	2006/10/02	<0.01		mg/kg	
		Aroclor 1268	2006/10/02	<0.01		mg/kg	
		Total Aroclors	2006/10/02	<0.01		mg/kg	

Edmonton: 9331 - 48th Street T6B 2R4 Telephone(780) 468-3500 FAX(780) 466-3332

Edmonton: 9619 - 42 Avenue T6E 5R4 Telephone(780) 465-1212 FAX(780) 460-4187





KLOHN-CRIPPEN CONSULTING LTD.

Attention:

Client Project #: A04012 A01 CAMP FAREWELL WATER

P.O. #:

Site Reference: MACKENAIE DELTA PLOT

## Quality Assurance Report (Continued)

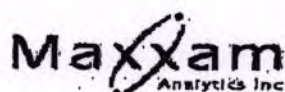
Maxxam Job Number: EA645324

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1289275 RTA	RPD	Aroclor 1016	2006/10/02	NC		%	N/A
		Aroclor 1221	2006/10/02	NC		%	N/A
		Aroclor 1232	2006/10/02	NC		%	N/A
		Aroclor 1242	2006/10/02	NC		%	N/A
		Aroclor 1248	2006/10/02	NC		%	N/A
		Aroclor 1254	2006/10/02	NC		%	N/A
		Aroclor 1260	2006/10/02	NC		%	N/A
		Aroclor 1262	2006/10/02	NC		%	N/A
		Aroclor 1268	2006/10/02	NC		%	N/A
		Total Aroclors	2006/10/02	NC		%	N/A
1289305 KB4	MATRIX SPIKE	O-TERPHENYL (sur.)	2006/09/29		88	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/09/29		105	%	50 - 130
		F3 (C16-C34 Hydrocarbons)	2006/09/29		106	%	50 - 130
		F4 (C34-C50 Hydrocarbons)	2006/09/29		112	%	50 - 130
	SPIKE	O-TERPHENYL (sur.)	2006/09/29		80	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/09/29		100	%	80 - 120
		F3 (C16-C34 Hydrocarbons)	2006/09/29		102	%	80 - 120
		F4 (C34-C50 Hydrocarbons)	2006/09/29		105	%	80 - 120
	BLANK	O-TERPHENYL (sur.)	2006/09/29		85	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2006/09/29	<10		mg/kg	
		F3 (C16-C34 Hydrocarbons)	2006/09/29	<10		mg/kg	
		F4 (C34-C50 Hydrocarbons)	2006/09/29	<10		mg/kg	
		Reached Baseline at C50	2006/09/29	YES, RDL=1		mg/kg	
	RPD	F2 (C10-C16 Hydrocarbons)	2006/09/29	NC		%	50
		F3 (C16-C34 Hydrocarbons)	2006/09/29	NC		%	50
		F4 (C34-C50 Hydrocarbons)	2006/09/29	NC		%	50
		Reached Baseline at C50	2006/09/29	NC		%	50
1289690 HL2	BLANK	Moisture	2006/09/29	<0.3		%	
	RPD	Moisture	2006/09/29	9.8		%	20
1289743 JQ	BLANK	Saturation %	2006/09/29	0		%	
	RPD	Saturation %	2006/09/29	5.4		%	12
1289746 JQ	Calibration Check	Soluble Conductivity	2006/09/30		98	%	80 - 120
	BLANK	Soluble Conductivity	2006/09/30	0.01, RDL=0.01		dS/m	
	RPD	Soluble Conductivity	2006/09/30	3.5		%	35
1289750 JQ	Calibration Check	Soluble pH	2006/09/30		100	%	80 - 120
	RPD	Soluble pH	2006/09/30	0.1		%	5
1289784 YY1	Calibration Check	Mercury (Hg)	2006/09/29		97	%	85 - 115
	QC STANDARD	Mercury (Hg)	2006/09/29		101	%	N/A
	BLANK	Mercury (Hg)	2006/09/29	<0.05		mg/kg	
	RPD	Mercury (Hg)	2006/09/29	NC		%	35
1289858 MC3	MATRIX SPIKE	Soluble (Hot water) Boron (B)	2006/09/29		113	%	80 - 120
	SPIKE	Soluble (Hot water) Boron (B)	2006/09/29		109	%	85 - 115
	BLANK	Soluble (Hot water) Boron (B)	2006/09/29	<0.1		mg/kg	
	RPD	Soluble (Hot water) Boron (B)	2006/09/29	1.6		%	40
1289861 MS2	Calibration Check	Total Antimony (Sb)	2006/10/02		98	%	80 - 120
		Total Arsenic (As)	2006/10/02		102	%	80 - 120
		Total Barium (Ba)	2006/10/02		98	%	80 - 120
		Total Beryllium (Be)	2006/10/02		103	%	80 - 120
		Total Cadmium (Cd)	2006/10/02		98	%	80 - 120
		Total Chromium (Cr)	2006/10/02		98	%	80 - 120
		Total Cobalt (Co)	2006/10/02		102	%	80 - 120
		Total Copper (Cu)	2006/10/02		99	%	80 - 120
		Total Lead (Pb)	2006/10/02		105	%	80 - 120
		Total Molybdenum (Mo)	2006/10/02		99	%	80 - 120
		Total Nickel (Ni)	2006/10/02		100	%	80 - 120

Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780) 468-3500 FAX (780) 466-3332

Edmonton: 9819 - 42 Avenue T6E 5R6 Telephone (780) 465-1212 FAX (780) 450-4187





KLOHN-CRIPPEN CONSULTING LTD.

Attention:

Client Project #: A04012 A01 CAMP FAREWELL WATER

P.O. #:

Site Reference: MACKENAIE DELTA PLOT

## Quality Assurance Report (Continued)

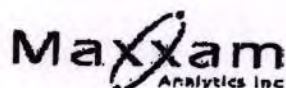
Maxxam Job Number: EA645324

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1289861 MS2	Calibration Check	Total Selenium (Se)	2006/10/02		102	%	80 - 120
		Total Silver (Ag)	2006/10/02		106	%	80 - 120
		Total Thallium (Tl)	2006/10/02		101	%	80 - 120
		Total Tin (Sn)	2006/10/02		100	%	80 - 120
		Total Vanadium (V)	2006/10/02		100	%	80 - 120
	MATRIX SPIKE	Total Zinc (Zn)	2006/10/02		100	%	80 - 120
		Total Arsenic (As)	2006/10/02		104	%	80 - 120
		Total Cadmium (Cd)	2006/10/02		101	%	N/A
		Total Lead (Pb)	2006/10/02		97	%	N/A
		Total Selenium (Se)	2006/10/02		115	%	80 - 120
	BLANK	Total Thallium (Tl)	2006/10/02		101	%	80 - 120
		Total Antimony (Sb)	2006/10/02	<1		mg/kg	
		Total Arsenic (As)	2006/10/02	<1		mg/kg	
		Total Barium (Ba)	2006/10/02	<10		mg/kg	
		Total Beryllium (Be)	2006/10/02	<0.4		mg/kg	
		Total Cadmium (Cd)	2006/10/02	<0.1		mg/kg	
		Total Chromium (Cr)	2006/10/02	<1		mg/kg	
		Total Cobalt (Co)	2006/10/02	<1		mg/kg	
		Total Copper (Cu)	2006/10/02	<5		mg/kg	
		Total Lead (Pb)	2006/10/02	<1		mg/kg	
		Total Molybdenum (Mo)	2006/10/02	<0.4		mg/kg	
		Total Nickel (Ni)	2006/10/02	<1		mg/kg	
		Total Selenium (Se)	2006/10/02	<0.5		mg/kg	
	RPD	Total Silver (Ag)	2006/10/02	<1		mg/kg	
		Total Thallium (Tl)	2006/10/02	<0.3		mg/kg	
		Total Tin (Sn)	2006/10/02	<1		mg/kg	
		Total Vanadium (V)	2006/10/02	<1		mg/kg	
		Total Zinc (Zn)	2006/10/02	<10		mg/kg	
		Total Antimony (Sb)	2006/10/02	NC		%	35
		Total Arsenic (As)	2006/10/02	0.5		%	35
		Total Barium (Ba)	2006/10/02	0.8		%	35
		Total Beryllium (Be)	2006/10/02	NC		%	35
		Total Cadmium (Cd)	2006/10/02	NC		%	35
		Total Chromium (Cr)	2006/10/02	2.3		%	35
		Total Cobalt (Co)	2006/10/02	2.3		%	35
		Total Copper (Cu)	2006/10/02	NC		%	35
		Total Lead (Pb)	2006/10/02	4.4		%	35
		Total Molybdenum (Mo)	2006/10/02	NC		%	35
		Total Nickel (Ni)	2006/10/02	0.9		%	35
		Total Selenium (Se)	2006/10/02	NC		%	35
		Total Silver (Ag)	2006/10/02	NC		%	35
		Total Thallium (Tl)	2006/10/02	NC		%	35
		Total Tin (Sn)	2006/10/02	NC		%	35
		Total Vanadium (V)	2006/10/02	17.3		%	35
		Total Zinc (Zn)	2006/10/02	3.1		%	35
1290978 JP2	Calibration Check	Soluble Chloride (Cl)	2006/09/30		109	%	80 - 120
	MATRIX SPIKE [C93751-01]	Soluble Chloride (Cl)	2006/09/30		129 (1)	%	75 - 125
	BLANK	Soluble Chloride (Cl)	2006/09/30	<5		mg/L	
	RPD [C93751-01]	Soluble Chloride (Cl)	2006/09/30	2.4		%	40
1291113 MC3	Calibration Check	Soluble Calcium (Ca)	2006/10/01		95	%	80 - 120
		Soluble Magnesium (Mg)	2006/10/01		100	%	80 - 120
		Soluble Sodium (Na)	2006/10/01		107	%	80 - 120
		Soluble Potassium (K)	2006/10/01		104	%	80 - 120
	BLANK	Soluble Calcium (Ca)	2006/10/01	<2		mg/L	

Edmonton: 9331 - 48th Street T6B 2R4 Telephone(780) 468-3500 FAX(780) 466-3332

Edmonton: 9619 - 42 Avenue T6E 5R4 Telephone(780) 465-1212 FAX(780) 450-4187





KLOHN-CRIPPEN CONSULTING LTD.

Attention:

Client Project #: A04012 A01 CAMP FAREWELL WATER

P.O. #:

Site Reference: MACKENAIE DELTA PLOT

## Quality Assurance Report (Continued)

Maxxam Job Number: EA645324

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1291113 MC3	BLANK	Soluble Magnesium (Mg)	2006/10/01	<1		mg/L	
		Soluble Sodium (Na)	2006/10/01	<3		mg/L	
		Soluble Potassium (K)	2006/10/01	<1		mg/L	
		Soluble Sulphate (SO4)	2006/10/01	<5		mg/L	
	RPD	Soluble Calcium (Ca)	2006/10/01	1.3		%	35
		Soluble Magnesium (Mg)	2006/10/01	NC		%	35
		Soluble Sodium (Na)	2006/10/01	3.5		%	35
		Soluble Potassium (K)	2006/10/01	1.5		%	35
		Soluble Sulphate (SO4)	2006/10/01	0.7		%	35
1291352 VK3	Calibration Check	Extractable (Water) Ethylene Glycol	2006/10/02		108	%	80 - 120
		Extractable (Water) Diethylene Glycol	2006/10/02		108	%	80 - 120
		Extractable (Water) Triethylene Glycol	2006/10/02		114	%	80 - 120
		Extractable (Water) Tetraethylene Glycol	2006/10/02		109	%	80 - 120
		Extractable (Water) Propylene Glycol	2006/10/02		108	%	80 - 120
	MATRIX SPIKE [C93751-02]	Extractable (Water) SULFOLANE (sur.)	2006/10/02		65	%	48 - 123
		Extractable (Water) Ethylene Glycol	2006/10/02		98	%	30 - 130
		Extractable (Water) Diethylene Glycol	2006/10/02		95	%	30 - 130
		Extractable (Water) Triethylene Glycol	2006/10/02		89	%	30 - 130
		Extractable (Water) Tetraethylene Glycol	2006/10/02		72	%	30 - 130
		Extractable (Water) Propylene Glycol	2006/10/02		70	%	30 - 130
	SPIKE	Extractable (Water) SULFOLANE (sur.)	2006/10/02		101	%	48 - 123
		Extractable (Water) Ethylene Glycol	2006/10/02		118	%	30 - 130
		Extractable (Water) Diethylene Glycol	2006/10/02		130	%	30 - 130
		Extractable (Water) Triethylene Glycol	2006/10/02		129	%	30 - 130
		Extractable (Water) Tetraethylene Glycol	2006/10/02		127	%	30 - 130
		Extractable (Water) Propylene Glycol	2006/10/02		112	%	30 - 130
	BLANK	Extractable (Water) SULFOLANE (sur.)	2006/10/02		107	%	48 - 123
		Extractable (Water) Ethylene Glycol	2006/10/02	<2.0		mg/kg	
		Extractable (Water) Diethylene Glycol	2006/10/02	<3.0		mg/kg	
		Extractable (Water) Triethylene Glycol	2006/10/02	<6.1		mg/kg	
		Extractable (Water) Tetraethylene Glycol	2006/10/02	<10		mg/kg	
		Extractable (Water) Propylene Glycol	2006/10/02	<10		mg/kg	
	RPD [C93751-02]	Extractable (Water) Ethylene Glycol	2006/10/02	NC		%	40
		Extractable (Water) Diethylene Glycol	2006/10/02	NC		%	40
		Extractable (Water) Triethylene Glycol	2006/10/02	NC		%	40
		Extractable (Water) Tetraethylene Glycol	2006/10/02	NC		%	40
		Extractable (Water) Propylene Glycol	2006/10/02	NC		%	40
1292311 CB2	MATRIX SPIKE	Hex. Chromium (Cr 6+)	2006/10/02		95	%	75 - 125
	SPIKE	Hex. Chromium (Cr 6+)	2006/10/02		101	%	N/A
	BLANK	Hex. Chromium (Cr 6+)	2006/10/02	<0.2		mg/kg	
	RPD	Hex. Chromium (Cr 6+)	2006/10/02	NC		%	35
1292982 JR1	SPIKE	F4SG (Heavy Hydrocarbons-Grav.)	2006/10/03		81	%	70 - 130
	BLANK	F4SG (Heavy Hydrocarbons-Grav.)	2006/10/03	<200		mg/kg	
	RPD	F4SG (Heavy Hydrocarbons-SilicaGel)	2006/10/03	85.6 (1)		%	50

N/A = Not Applicable

NC = Non-calculable

RPD = Relative Percent Difference

(1) Please note that the recovery of some compounds are outside control limits however the overall quality control for this analysis meets our acceptability criteria.

Edmonton: 9331 - 48th Street T6B 2R4 Telephone(780) 468-3500 FAX(780) 466-3332

Edmonton: 9819 - 42 Avenue T6E 5R2 Telephone(780) 465-1212 FAX(780) 450-4187





**SHELL CANADA LIMITED**  
**FAX**

COPY	
BOARD	6
G. W.	1
E. A.	1
W. RES.	02/6
NMDO	1
FROM FILE	1762

Page 1 of 1

Includes coversheet

SEND TO

ATTENTION:

**Executive Assistant**

COMPANY:

**Northwest Territories Water Board**

DATE:

**Nov 15, 2006**

LOCATION:

**Yellowknife**

FAX NO:

**(867) 765-0114**

TELEPHONE NO:

**(867) 765-0106****Randall Warren**

D.A.R./ Construction Manager

Shell Canada Limited

400 - 4th Avenue S.W.

P.O. Box 100, Station M

Calgary, Alberta T2P 2H5

Business: (403) 691-2521

Cell: (403) 813-0408

Fax: (403) 269-7895

(403) 269-7948

Email:

randall.warren@shell.com

SUBJECT:

**SURVEILLANCE NETWORK PROGRAM N7L1-1762****October, 2006 Data**

DESCRIPTION / REMARKS:

Camp Farewell was shut down for the month of October. No water withdrawals or discharges occurred.

Should additional information be required, please contact the undersigned.

Yours truly,

Randall Warren



Attachment

Cc Inspector - Inuvik District Office (867) 777-2090



**SHELL CANADA LIMITED  
FAX**

COPY	
BOARD	6
G. W.	1
E. A.	1
W. RES.	0015
NMDO	1
FILE	1762

Page 1 of 1

Includes coversheet

<b>SEND TO</b>		<b>FROM</b>	
ATTENTION: <b>Executive Assistant</b>		 <b>Randall Warren</b> D.A.R./ Construction Manager Shell Canada Limited 400 - 4th Avenue S.W. P.O. Box 100, Station M Calgary, Alberta T2P 2H5 Business: (403) 691-2521 Cell: (403) 813-0408 Fax: (403) 269-7895 (403) 269-7948 Email: randall.warren@shell.com	
COMPANY: <b>Northwest Territories Water Board</b>			
DATE: <b>December 15, 2006</b>	LOCATION: <b>Yellowknife</b>		
FAX NO: <b>(867) 765-0114</b>	TELEPHONE NO: <b>(867) 765-0106</b>		
SUBJECT: <b>SURVEILLANCE NETWORK PROGRAM N7L1-1762 November, 2006 Data</b>			

## DESCRIPTION / REMARKS:

Camp Farewell was shut down for the month of November. No water withdrawals or discharges occurred.

Should additional information be required, please contact the undersigned.

Yours truly,

Randall Warren

Attachment

Cc Inspector - Inuvik District Office (867) 777-2090

