Municipal Water License Annual Report

Hamlet of Aklavik

License #N3L3-0570

Reporting Year 2011

- 1. Water usage: as per attached spreadsheet, the Hamlet was filing as per the fiscal year so there is an overlap in the years
- 2. Solid waste and sewage deposited: same amount as water consumption as what is taken in the same amount comes out.
- 3. Hazardous waste storage and transportation: no monthly records have been kept
 The Hamlet did not transport any hazardous material out of the community.
- 4. In 2011 some work on where the old trucks were originally moved to have to be moved out of the water as one of the old trucks had an old engine and oil seemed to be leaking. Samples were taken.
- 5. Clean up is ongoing at the site and as a result for request from NWTHC disposing of old units the Hamlet developed and passed a tipping fee by-law.
- 6. Spill reports were received from ENR and filed.
- 7. Ongoing and education to Council and the public has been a priority. Hamlet staff has attended workshops and training in how to develop spill plans etc. and are trying to meet the deadlines for these plans.
- 8. No studies were requested.
- 9. During the spring of 2011 the Hamlet experienced high water conditions and this created problems for access to the sewage lagoon and so in consultation with Indian and Northern Affairs the sewage was disposed of at the road by the tank farm. This lasted for two days and a spill report was provided to INAC.
- 10. As per attached reports.



MONTHLY WATER CONSUMPTION Jan 2011-Dec 2011

Date	Residential	Commercial Garage		
lan-11	1 284 020	- Common of the last	Dovernment	lotal
	706,407,1	348,507	1,493,535	3,126,974
rep-11	1,182,778	169,210	1.340.305	2 692 203
Mar-11	1,231,539	194,618	1 437 234	2 863 304
Apr-11	1,140,510	145,579	1 261 721	2 547 040
May-11	1,107,356	143 922	1 267 551	2,347,010
Jun-11	1,089,593	333671	1 102 580	2,310,032
Jul-11	953 090	742 274	4 4 50 503	2,013,833
V 21.V	7 200,000	170,042	1,156,527	2,352,947
-Snw	1,065,894	145,569	1,253,746	2 465 209
Sep-11	1,108,328	148.685	1 275 672	2 522 GOE
Oct-11	1.085.484	232 188	1 270,724	2,002,000
Nov-11	1 040 744	202,100	1,210,134	2,588,406
77	1,010,1	330,656	1,170,246	2,519,613
Cec-11	1,216,440	176,095	1,340,827	2 733 362
				1,100,002
IOTAL	13,484,664	2,612,021	15.460.690	31 557 375
			2001221	20, 100,10



4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3 Tel: (867)-669-2788 Fax: (867)-669-2718

- FINAL REPORT -

Prepared For: Hamlet of Aklavik

Address: P.O. Box 87

Aklavik, NT X0E 0A0

Attn: Evelyn Storr

Facsimile: (867) 978-2555

Final report has been reviewed and approved by:

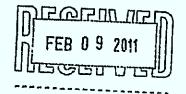
Helene Harper

Manager

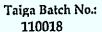
NOTES:

- > Test methods and data are validated by the laboratory's Quality Assurance Program. Taiga Environmental Laboratory is accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) as a testing laboratory for specific tests registered with CALA.
- > 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.

ReportDate: Tuesday, February 01, 2011 Print Date: Tuesday, February 01, 2011



Page 1 of 4





4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3 Tel: (867)-669-2788 Fax: (867)-669-2718

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Treated

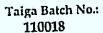
Taiga Sample ID: 001

Client Project:

Sample Type: Potable Received Date: 19-Jan-11 Sampling Date: 18-Jan-11 Sampling Time: 9:20

Location: Aklavik
Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Physicals						
Alkalinity, Total (as CaCO3)	117	0.4	mg/L	19-Jan-11	SM2320:B	
Colour, True	< 5	5	TCU	19-Jan-11	SM2120:B	
pH	7. 50		pH units	19-jan-11	SM4500-H:B	
Solids, Total Dissolved	262	10	mg/L	25-Jan-11	SM2540:C	
Solids, Total Suspended	<3	3	mg/L	25-Jan-11	SM2540:D	
Turbidity	0.16	0.05	NTU	19-Jan-11	SM2130:B	
Inorganics - Nutrients						
Organic Carbon, Dissolved	1.5	0.5	mg/L	20-Jan-11	SM5310:B	
Organic Carbon, Total	1.4	0.5	mg/L	20-Jan-11	SM5310:B	
Major Ions						
Chloride	7.5	0.7	mg/L	19-Jan-11	SM4110:B	
Hardness	219	0.7	mg/L	19-Jan-11	SM2340:B	
Nitrate as Nitrogen	0.23	0.01	mg/L	19-Jan-11	SM4110:B	
Sodium	8.4	0.1	mg/L	19-Jan-11	SM4110:B	





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: Treated			Taig	ga Sample ID): 001
Sulphate	113	1	mg/L	19-Jan-11	SM4110:B
race Metals, Total					
Aluminum	59.5	0.6	μg/L	26-Jan-11	EPA200.8
Arsenic	< 0.2	0.2	μg/L	26-Jan-11	EPA200.8
Barium	61.1	0.1	μg/L	26-Jan-11	EPA200.8
Cadmium	< 0.05	0.05	μg/L	26-Jan-11	EPA200.8
Chromium	0,5	0.1	μg/L	26-Jan-11	EPA200.8
Copper	3.1	0.2	μg/L	26-Jan-11	EPA200.8
lron	< 5	5	μg/L	26-Jan-11	EPA200.8
Lend	< 0.1	0.1	μg/L	26-Jan-11	EPA200.8
Manganese	11.2	0.1	μg/L	26-Jan-11	EPA200.8
Mercury	< 0.01	0.01	μg/L	31-Jan-11	EPA200.8
Selenium	0.6	0.3	μg/L	26-Jan-11	EPA200.8
Uranium	0.2	0.1	μg/L	26-Jan-11	EPA200.8
Zinc	0.9	0.4	μg/L	26- J an-11	EPA200.8
ubcontracted Organics					
Cyanide, Weak Acid Dissociable	< 0.002	0.002	mg/L	25-Jan-11	SM4500-CN:I



Taiga Environmental Laboratory 4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3 Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 110018

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Treated

Taiga Sample ID: 001

* 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



4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3 Tel: (867)-669-2788 Fax: (867)-669-2718

- FINAL REPORT -

Prepared For: Hamlet of Aklavik

Address: P.O. Box 87

Aklavik, NT X0E 0A0

Attn: Evelyn Storr

Facsimile: (867) 978-2434

Final report has been reviewed and approved by:

Helene Harper

Manager

NOTES:

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 - o Environment Canada
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- Final results are based on the specific tests at the time of analysis and do not represent the conditions during sampling.

Taiga Batch No.: 110717



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:

Taiga Sample ID: 001

Client Project:

Sample Type: Potable
Received Date: 23-Sep-11
Sampling Date: 22-Sep-11
Sampling Time: 8:15

Location: Aklavik Water Plant

Report Status: Final

•						
Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<u>Organics</u>						
Bromodichloromethane	< 0.005	0.005	mg/L	07-Oct-11	EPA8260B	
Bromoform	< 0.005	0.005	mg/L	07-Oct-11	EPA8260B	
Chloroform	0.016	0.005	mg/L	07-Oct-11	EPA8260B	
Dibromochloromethane	< 0.005	0.005	mg/L	07-Oct-11	EPA8260B	
Trihalomethanes, Total	0.018	0.005	mg/L	07-Oct-11	EPA8260B	



Taiga Batch No.: 110717

4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3 Tel: (867)-669-2788 Fax: (867)-669-2718

- CERTIFICATE OF ANALYSIS -

Client Sample ID:

Taiga Sample ID: 001

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Client Name	Taioa Sample I	DICtient Sample ID	Sample	Type Sampling Loc	ationample Collect Da
Aklavik	110717-001	!!	Potable	Plant	22-Sep-11
Aklavik	110717-001	· · · ·	Potable	Plant	22-Sep-11
Aklavik	110717-001	···	Potable	Plant	22-Sep-11
Aklavik	110717-001	-	Potable	Plant	22-Sep-11
	110717-001		Potable	Plant	22-Sep-11
Aklavik	110717-001				

.

. .

mple Received Direct Group Nam	Lab Section	Parameter Name F	Result Flag Reported Result
23-Sep-11 Total THM	Organics	ethane <	0.005
23-Sep-11 Total THM	Organics	Bromoform <	0.005
23-Sep-11 Total THM	Organics	Chloroform	0.016
23-Sep-11 Total THM	Organics	ethane <	0.005
23-Sep-11 Total THM	Organics	s, Total	0.018

,

UNITS	Calc MDL	mple Result Qua	liliysis	Result	Qual		Prep Method
mg/L	0.005				1	<u> </u>	1 EPA5030B
mg/L	0.005						1 EPA5030B
mg/L	0.005	•					1 EPA5030B
mg/L	0.005				ì		1 EPA5030B
mg/L	0.005				·	07-Oct-1	1 EPA5030B

• •

Milest Method	[[Report Status]
EPA8260B	Final

í

		Aklavik Bacteriological Sampling from Sep 1, 2011 to Sep 30, 2011	gical S	ampling fi	om Sep 1,	2011 to Se	ip 30, 2011	ļ	
Source Water: Mad	er: Macker	ckenzie River (Peel Channel)	9			1			
				١	40.		Coliforn	Coliform Counts (organisms/100mL)	s/100mL)
			Treated		Coliform Presence/Absence				
,			J. Daw	Total (TC)	or Baw Total (TC) Fecal (FC) Ecoli (EC)	Ecoli (EC)	Fecal (FC)	Fecal (FC) Total (TC)	HPC
Sample Date Sample	Sample ID	Sample Lucation	100	1					
Sep 07, 2011	2952	School	Treated	ŝ		e Ž			
Sen 07, 2011	2766	School	Treated	2		No.			

Municipal Water License Annual Report

Hamlet of Aklavik

License #N3L3-0570

Reporting Year 2011

- 1. Water usage: as per attached spreadsheet, the Hamlet was filing as per the fiscal year so there is an overlap in the years
- 2. Solid waste and sewage deposited: same amount as water consumption as what is taken in the same amount comes out.
- 3. Hazardous waste storage and transportation: no monthly records have been kept
 The Hamlet did not transport any hazardous material out of the community.
- 4. In 2011 some work on where the old trucks were originally moved to have to be moved out of the water as one of the old trucks had an old engine and oil seemed to be leaking. Samples were taken.
- 5. Clean up is ongoing at the site and as a result for request from NWTHC disposing of old units the Hamlet developed and passed a tipping fee by-law.
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MONTHLY WATER CONSUMPTION Jan 2011-Dec 2011

17.0				
Date	Kesidential	Commercial	Commercial Government	Total
Jan-11	1,284,932	348.507	1 403 535	2 426 074
Feb-11	1.182.778	169 210	1 340 005	9,120,974
Mar-11	1 234 520	100,210	1,040,000	2,092,293
A 2 4 4	500,103,1	194,018	1,437,234	2,863,391
Apr-1d-	1,140,510	145,579	1,261,721	2 547 810
May-11	1,107,356	143,922	1 267 554	2 518 822
Jun-11	1,089,593	333674	1 100 500	2,010,032
1117	062 000	10000	1,132,309	2,015,853
	880,008	243,321	1,156,527	2,352,947
Aug-11	1,065,894	145,569	1.253 746	2 465 200
Sep-11	1,108,328	148 685	1 275 672	2 522,503
Oct-11	1 085 181	250 400	1,210,012	2,332,003
No. 44	101,000,1	232,188	1,270,734	2,588,406
NOV-11	1,018,711	330,656	1,170,246	2519613
Dec-11	1,216,440	176.095	1 340 827	2 723 260
			120,010,	200,007,3
TOTAL	13,484,664	2.612 021	15 ARD ROD	24 EE7 27F
		10011011	000,001,01	0/5/00/10



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

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

- FINAL REPORT -

Prepared For: Hamlet of Aklavik

Address: P.O. Box 87

Aklavik, NT X0E 0A0

Attn: Evelyn Storr

Facsimile: (867) 978-2555

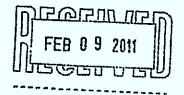
Final report has been reviewed and approved by:

Helene Harper Manager

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ReportDate: Tuesday, February 01, 2011 Print Date: Tuesday, February 01, 2011



Page 1 of 4



4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3 Tel: (867)-669-2788 Fax: (867)-669-2718

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Treated

Taiga Sample ID: 001

Client Project:

Sample Type: Potable
Received Date: 19-Jan-11
Sampling Date: 18-Jan-11
Sampling Time: 9:20

Location: Aklavik
Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Physicals			•			
Alkalinity, Total (as CaCO3)	117	0.4	mg/L	19-Jan-11	SM2320:B	
Colour, True	< 5	5	TCU	19-Jan-11	SM2120:B	
pН	7.50		pH units	19-Jan-11	SM4500-H:B	
Solids, Total Dissolved	262	10	mg/L	25-Jan-11	SM2540:C	
Solids, Total Suspended	<3	3	mg/L	25-Jan-11	SM2540:D	
Turbidity	0.16	0.05	NTU	19-Jan-11	SM2130:B	
Inorganics - Nutrients						
Organic Carbon, Dissolved	1.5	0.5	mg/L	20-Jan-11	SM5310:B	
Organic Carbon, Total	1.4	0.5	mg/L	20-Jan-11	SM5310:B	
Major Ions			-			
Chloride	7.5	0.7	mg/L	19-Jan-11	SM4110:B	
Hardness	219	0.7	mg/L	19-Jan-11		
Nitrate as Nitrogen	0.23	0.01	mg/L	-	SM4110:B	
Sodium	8.4	0.1	mg/L	19-Jan-11	SM4110:B	



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: Treated			Taig	ga Sample II): 001
Sulphate	113	1	mg/L	19-Jan-11	SM4110:B
Trace Metals, Total					4
Aluminum	59.5	0.6	μg/L	26-Jan-11	EPA200.8
Arsenic	< 0.2	0.2	μg/L	26-Jan-11	EPA200.8
Barium	61.1	0.1	μg/L	26-Jan-11	EPA200.8
Cadmium	< 0.05	0.05	μg/L	26-Jan-11	EPA200.8
Chromium	0.5	0.1	μg/L	26-Jan-11	EPA200.8
Copper	3.1	0.2	μg/L	26-Jan-11	EPA200.8
Iron	< 5	5	μg/L	26-Jan-11	EPA200.8
Lead	< 0.1	0.1	μg/L	26-Jan-11	EPA200.8
Manganese	11.2	0.1	μg/L	26-Jan-11	EPA200.8
Mercury	< 0.01	0.01	μg/L	31-Jan-11	EPA200.8
Selenium	0.6	0.3	μg/L	26-Jan-11	EPA200.8
Uranium	0.2	0.1	μg/L	26-Jan-11	EPA200.8
Zinc	0.9	0.4	μg/L	26-Jan-11	EPA200.8
Subcontracted Organics					
Cyanide, Weak Acid Dissociable	< 0.002	0.002	mg/L	25-Jan-11	SM4500-CN:1



Taiga Environmental Laboratory 4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3 Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 110018

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Treated

Taiga Sample ID: 001

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SM - Standard Methods for the Examination of Water and Wastewater
EPA - United States Environmental Protection Agency



4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3 Fax: (867)-669-2718 Tel: (867)-669-2788

- FINAL REPORT -

Prepared For: Hamlet of Aklavik

Address: P.O. Box 87

Aklavik, NT X0E 0A0

Attn: Evelyn Storr

Facsimile: (867) 978-2434

Final report has been reviewed and approved by:

Helene Harper

Manager

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ReportDate: Friday, October 07, 2011 Friday, October 07, 2011 Print Date:

Taiga Batch No.: 110717



Taiga Environmental Laboratory

4601-52nd Ave., Box 1500, Yellowknife, NT. X1 A 2R3 Tel: (867)-669-2788 Fax: (867)-669-2718

- CERTIFICATE OF ANALYSIS -

Client Sample ID:

Taiga Sample ID: 001

Client Project:

Sample Type: Potable Received Date: 23-Sep-11 Sampling Date: 22-Sep-11 Sampling Time: 8:15

Location: Aklavik Water Plant

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<u>Organics</u>						
Bromodichloromethane	< 0.005	0.005	mg/L	07-Oct-11	EPA8260B	
Bromoform	< 0.005	0.005	mg/L	07-Oct-11	EPA8260B	
Chloroform	0.016	0.005	mg/L	07-Oct-11	EPA8260B	
Dibromochloromethane	< 0.005	0.005	mg/L	07-Oct-11	EPA8260B	
Trihalomethanes, Total	0.018	0.005	mg/L	07-Oct-11	EPA8260B	
					i.	



Taiga Batch No.: 110717

4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3 Tel: (867)-669-2788 Fax: (867)-669-2718

- CERTIFICATE OF ANALYSIS -

Client Sample ID:

Taiga Sample ID: 001

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Client Name	Taiga Sample ID Clie	nt Sample ID Sample Typ	e Sampling Loc	atio ample Collect Da
Aklavik	110717-001	Potable	Plant	22-Sep-11
Aklavik	110717-001	Potable	Plant	22-Sep-11
Aklavik	110717-001	Potable	Plant	22-Sep-11
Aklavik	110717-001	Potable	Plant	22-Sep-11
Aklavik	110717-001	Potable	Plant	22-Sep-11

.

mple Received Difest Group Nan	ne Lab Section	Parameter Na	me Result	Flag Reported Result
23-Sep-11 Total THM	Organics	ethane	<	0.005
23-Sep-11 Total THM	Organics	Bromoform	<	0.005
23-Sep-11 Total THM	Organics	Chloroform		0.016
23-Sep-11 Total THM	Organics	ethane	<	0.005
23-Sep-11 Total THM	Organics	s, Total		0.018

UNITS	Galc MDL	mple Result Qualitysis Result Qual Analysis Date Prep Method
mg/L	0.005	07-Oct-11 EPA5030B

Milest Method	∐ReportiStatus_
EPA8260B	Final

		Aklavik Bacteriological Sampling from Sep 1, 2011 to Sep 30, 2011	gical S	ampling fi	rom Sep 1,	2011 to Se	p 30, 2011		
Source Water: Ma	ter: Mackel	ckenzle River (Peel Channel)	e])						
				Colifor	Ocilion Discours/Ahsence	SPICE	Coliform C	Coliform Counts (organisms/100mL)	s/100mL)
			Lealed	3	a manager I III			1000	001
Commis Date	Clegation	Sample Location	of Raw	or Raw Total (TC) Fecal (FC) Ecoli (EC)	Fecal (FC)	Ecoli (EC)	Fecal (FC) Total (1C)	Total (1C)	ב ב
Salipie Date	Saltiple	Cample Economy						•	
Sep 07, 2011	2952	School	Treated	2		Ž	• ••	•••	
Sep 07, 2011	2766	School	Treated	2		No			