

## **Municipal Water Licence Annual Report**

**Hamlet of Aklavik**

**Licence # N3L3-0570**

**Reporting Year 2009**

- 1: Water Usage: as per attached spreadsheet**
- 2: Solid Waste and sewage deposited: same amount as water 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. The Hamlet did a lot of cleaning and separated the waste and put signage to identify where hazardous material should be disposed and also put out public notices so that if people were not sure they can contact the Public Works Foreman.**
- 4: During the 2009 year the preparation on the site started for the new water treatment plant. Municipal and Community Affairs along with the contractor met with the Council to discuss the various phases of the new water treatment plant.**  
  
**During the summer of 2009 there was major clean up at the solid waste site. Separation of the waste and putting them in the proper locations was done to the best that it could be. New signage was put in the proper cells. The Hamlet started locking the gate to the solid waste site to have better control of what and where waste would get disposed. This is an ongoing issue as the locks keep getting broke off the chains.**
- 5: Ongoing clean up and maintenance will be done and this is to increase the life span of the solid waste site.**
- 6: Over the year the Hamlet received reports from ENR regarding spills that happened at different locations in the community. These spills were glycol leaks at the NTPC Plant and clean up was done accordingly to ENR guidelines. There were no major spills at our site.**
- 7: The Hamlet of Aklavik was finally able to locate their Municipal Solid Waste Operations and Maintenance Plan. The Hamlet will be reviewing the plan and updating during this year.**

8: No studies were requested

9: The maintenance of the solid waste site has been a priority for the Hamlet as we know that we are responsible and need to prolong the life span of this site as there is currently no room for expansion. Educating the residents is an ongoing issue and we will continue to work in that area. Educating leadership is also important as communities have gone through a lot of changes in their responsibilities. Management has become more aware of their responsibilities regarding the Water Licences and is ensuring all conditions are met.

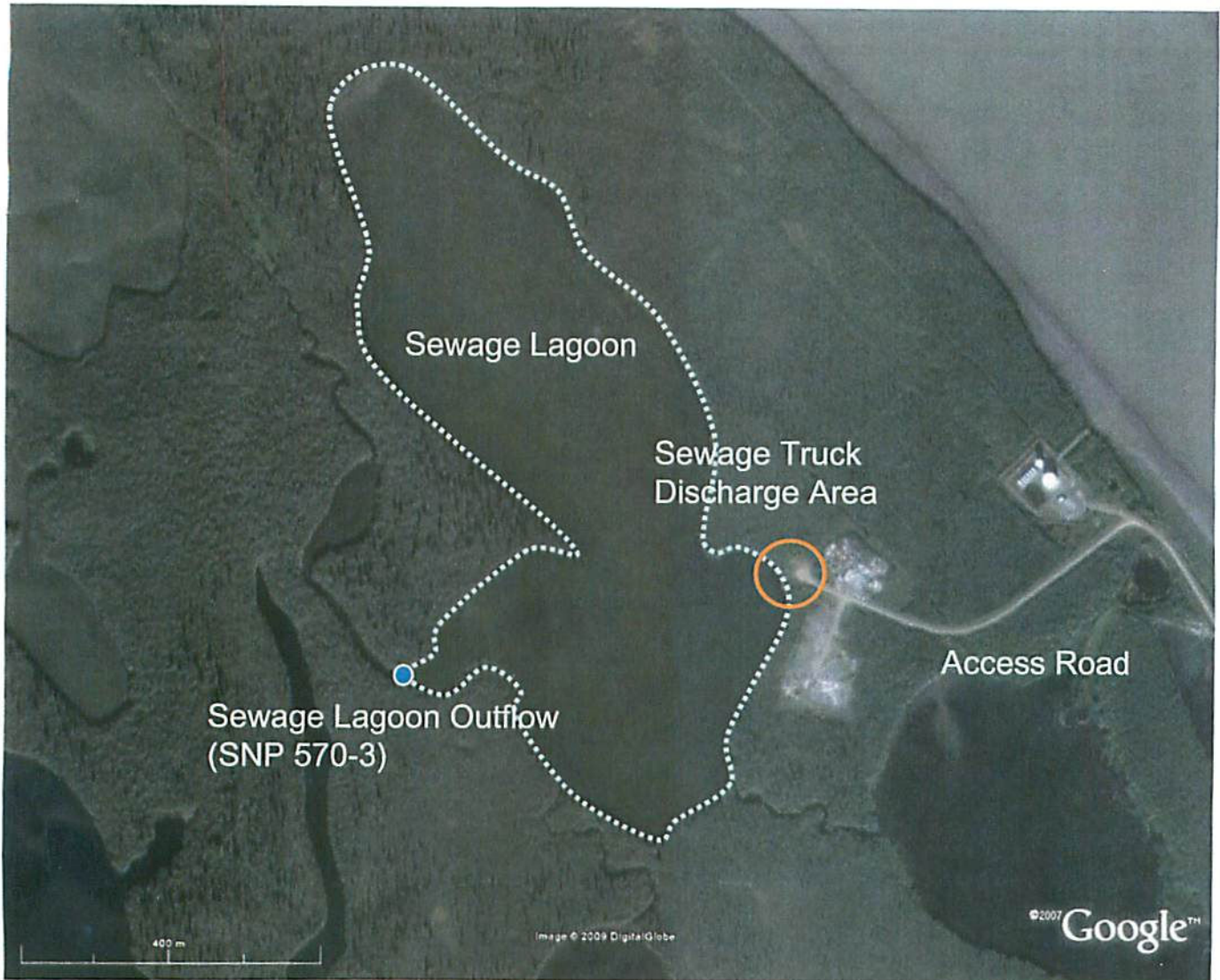
10: as per attached SNP reports - Sampling Station 570-3

Hamlet of Aklavik

31/03/2010

**MONTHLY WATER CONSUMPTION**

<b>Date</b>	<b>Residential</b>	<b>Commercial</b>	<b>Hamlet</b>	<b>Government</b>	<b>Total</b>
Jan-09	1,164,442	123,230	35,049	1,343,903	2,666,624
Feb-09	1,025,523	101,674	20,699	1,179,319	2,327,215
Mar-09	1,176,235	115,488	33,694	1,435,957	2,761,374
Apr-09	1,186,988	113,169	13,624	1,387,631	2,701,412
May-09	1,171,644	152,980	7,542	1,450,154	2,782,320
Jun-09	1,149,044	136,044	108,853	1,342,196	2,736,137
Jul-09	1,000,381	120,158	52,844	1,368,155	2,541,538
Aug-09	962,183	119,083	44,452	1,177,273	2,302,991
Sep-09	1,095,159	184,061	18,953	1,260,106	2,558,279
Oct-09	1,070,628	173,951	27,886	1,284,534	2,556,999
Nov-09	969,639	134,067	207,257	1,187,832	2,498,795
Dec-09	1,128,484	110,376	35,710	1,220,996	2,495,566
<b>TOTAL</b>	<b>9,734,150</b>	<b>1,243,889</b>	<b>517,121</b>	<b>11,678,877</b>	<b>23,174,037</b>



Hamlet of Aklavik  
Water Licence Renewal Background Report

**Figure 3. Sewage Lagoon Site Plan**

290049



## Taiga Environmental Laboratory

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

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

Taiga Batch No.:  
290049

### - FINAL REPORT -

---

Prepared For: Hamlet of Aklavik

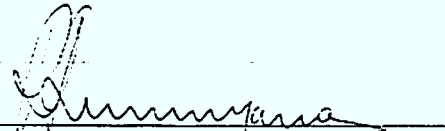
Address: P.O. Box 87  
Aklavik, NT  
X0E 0A0

Attn: Archie Arey

Facsimile: (867) 978-2555

---

Final report has been reviewed and approved by:

  
Angelique Ruzindana  
Quality Assurance Officer

---

**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.

ReportDate: Tuesday, March 10, 2009

Print Date: Tuesday, March 10, 2009

Page 1 of 5



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

Taiga Batch No.:  
290049

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Aklavik

Taiga Sample ID: 001

Client Project:

Sample Type: Treated Water

Received Date: 18-Feb-09

Sampling Date: 18-Feb-09

Sampling Time: 8:30

Location:

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Physicals</u></b>						
Alkalinity, Total (as CaCO <sub>3</sub> )	138	0.4	mg/L	20-Feb-09	SM2320:B	
Colour, Apparent	20	5	CU	19-Feb-09	SM2120:B	
pH	7.76		pH units	20-Feb-09	SM4500-H:B	
Solids, Total Suspended	< 3	3	mg/L	25-Feb-09	SM2540:D	
Turbidity	0.20	0.05	NTU	19-Feb-09	SM2130:B	
<b><u>Subcontracted Nutrients</u></b>						
Organic Carbon, Dissolved	1.6	0.5	mg/L	25-Feb-09	SM5310:B	
Organic Carbon, Total	2.9	0.5	mg/L	25-Feb-09	SM5310:B	
<b><u>Major Ions</u></b>						
Calcium	51.0	0.1	mg/L	20-Feb-09	SM4110:B	
Chloride	8.0	0.7	mg/L	20-Feb-09	SM4110:B	
Fluoride	< 0.1	0.1	mg/L	20-Feb-09	SM4110:B	
Hardness	191	0.7	mg/L	20-Feb-09	SM2340:B	
Magnesium	15.5	0.1	mg/L	20-Feb-09	SM4110:B	

Report Date: Tuesday, March 10, 2009

Print Date: Tuesday, March 10, 2009





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

Taiga Batch No.:  
290049

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Aklavik

Taiga Sample ID: 001

Nitrate	0.13	0.01	mg/L	20-Feb-09	SM4110:B
Nitrite	< 0.01	0.01	mg/L	20-Feb-09	SM4110:B
Potassium	0.7	0.1	mg/L	20-Feb-09	SM4110:B
Sodium	8.8	0.1	mg/L	20-Feb-09	SM4110:B
Sulphate	74	1	mg/L	20-Feb-09	SM4110:B

Microbiology

Coliforms, Total	< 1.0	1.0	MPN/100mL	19-Feb-09	SM9223:B
Escherichia coli	< 1.0	1.0	MPN/100mL	19-Feb-09	SM9223:B

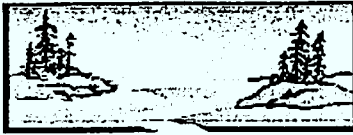
Organics

Bromodichloromethane			mg/L	EPA8260B	111
Bromoform			mg/L	EPA8260B	111
Chloroform			mg/L	EPA8260B	111
Dibromochloromethane			mg/L	EPA8260B	111
Trihalomethanes, Total			mg/L	EPA8260B	111

Trace Metals, Total

Aluminum	62	5	µg/L	05-Mar-09	EPA200.8
Antimony	< 0.1	0.1	µg/L	05-Mar-09	EPA200.8
Arsenic	< 0.2	0.2	µg/L	05-Mar-09	EPA200.8
Barium	66.0	0.1	µg/L	05-Mar-09	EPA200.8
Beryllium	< 0.1	0.1	µg/L	05-Mar-09	EPA200.8
Cadmium	< 0.1	0.1	µg/L	05-Mar-09	EPA200.8
Cesium	< 0.1	0.1	µg/L	05-Mar-09	EPA200.8
Chromium	< 0.1	0.1	µg/L	05-Mar-09	EPA200.8
Cobalt	< 0.1	0.1	µg/L	05-Mar-09	EPA200.8

ReportDate: Tuesday, March 10, 2009  
Print Date: Tuesday, March 10, 2009



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

Taiga Batch No.:  
290049

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Aklavik

Taiga Sample ID: 001

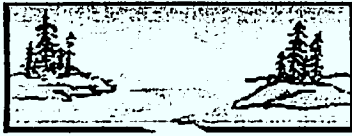
Copper	14.0	0.2	µg/L	05-Mar-09	EPA200.8
Iron	< 5	5	µg/L	05-Mar-09	EPA200.8
Lead	0.6	0.1	µg/L	05-Mar-09	EPA200.8
Lithium	5.3	0.2	µg/L	05-Mar-09	EPA200.8
Manganese	1.6	0.1	µg/L	05-Mar-09	EPA200.8
Mercury	< 0.01	0.01	µg/L	05-Mar-09	EPA200.8
Molybdenum	0.8	0.1	µg/L	05-Mar-09	EPA200.8
Nickel	1.2	0.1	µg/L	05-Mar-09	EPA200.8
Rubidium	0.4	0.1	µg/L	05-Mar-09	EPA200.8
Selenium	0.8	0.5	µg/L	05-Mar-09	EPA200.8
Silver	< 0.1	0.1	µg/L	05-Mar-09	EPA200.8
Strontium	198	0.1	µg/L	05-Mar-09	EPA200.8
Thallium	< 0.1	0.1	µg/L	05-Mar-09	EPA200.8
Titanium	0.3	0.1	µg/L	05-Mar-09	EPA200.8
Uranium	1.0	0.1	µg/L	05-Mar-09	EPA200.8
Vanadium	< 0.1	0.1	µg/L	05-Mar-09	EPA200.8
Zinc	12	5	µg/L	05-Mar-09	EPA200.8

Subcontracted Organics

Cyanide, Weak Acid Dissociable	< 0.002	0.002	mg/L	02-Mar-09	SM4500-CN:I
--------------------------------	---------	-------	------	-----------	-------------

ReportDate: Tuesday, March 10, 2009  
Print Date: Tuesday, March 10, 2009





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

**Taiga Batch No.:**  
**290049**

---

**- CERTIFICATE OF ANALYSIS -**

---

**Client Sample ID: Aklavik**

**Taiga Sample ID: 001**

---

**- DATA QUALIFIERS -**

---

*Data Qualifier Descriptions:*

111 *Sample bottle contained air bubble, analysis not possible.*

**\* 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**



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

Taiga Batch No.:  
290390

- FINAL REPORT -

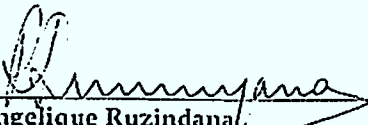
Prepared For: Hamlet of Aklavik

Address: P.O. Box 87  
Aklavik, NT  
X0E 0A0

Attn: Evelyn Storr

Facsimile: (867) 978-2555

Final report has been reviewed and approved by:

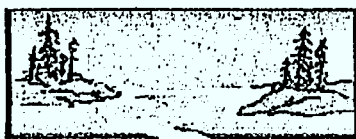
  
Angelique Ruzindana  
Quality Assurance Officer

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: Tuesday, July 21, 2009  
Print Date: Tuesday, July 21, 2009

Page 1 of 3



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

Taiga Batch No.:  
290390

- CERTIFICATE OF ANALYSIS -

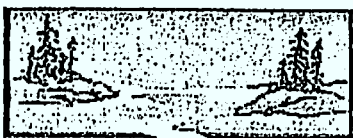
Client Sample ID:

Taiga Sample ID: 001

Client Project: N3L3-0570  
Sample Type: Water  
Received Date: 13-Jul-09  
Sampling Date: 10-Jul-09  
Sampling Time:  
Location:  
Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<u>Inorganics - Physicals</u>						
pH	7.34		pH units	13-Jul-09	SM4500-H:B	
Solids, Total Suspended	66	3	mg/L	15-Jul-09	SM2540:D	
<u>Inorganics - Nutrients</u>						
Biochemical Oxygen Demand			mg/L		SM5210:B	105
<u>Microbiology</u>						
Coliforms, Fecal			CFU/100mL		SM9222:D	105

Report Date: Tuesday, July 21, 2009  
Print Date: Tuesday, July 21, 2009



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

Taiga Batch No.:  
290390

- CERTIFICATE OF ANALYSIS -

---

Client Sample ID:

Taiga Sample ID: 001

- DATA QUALIFIERS -

---

*Data Qualifier Descriptions:*

105      *Samples received past hold time; analysis not possible.*

\* 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