

Municipal Water Licence Annual Report

Community Government of Wekweeti

Licence #: W2017L3-0001

Reporting year: 2018

Expires: September 27, 2027

The Licensee shall file an Annual Report with the Board not later than March 31st of the year following the calendar year reported which shall contain the following information:

1. Water Usage (Licensed Water Volume Withdrawal: 10,000 m³)

Total volume withdrawn for reporting year: 4756.5844 m³

Table 1: Monthly & Annual withdrawal volumes pumped (SNP 001-1)

Month	Volume from main source (m ³)	Volume from any other source (m ³)	TOTAL Volume (m ³)
January	469.0575		469.0575
February	387.3274		387.3274
March	357.2727		357.2727
April	409.9788		409.9788
May	408.9779		408.9779
June	410.7683		410.7683
July	387.9289		387.9289
August	416.2478		416.2478
September	411.8952		411.8952
October	464.6783		464.6783
November	436.2453		436.2453
December	196.2063		196.2063
TOTALS	4756.584		4756.584
% Increase/decrease from previous year	10%		10%

Reasons for increase/decrease: There were no big events in 2018 therefore, all water use is attributable to general use by Wekweeti residents and the community garden.

Reasons for exceeding licensed withdrawal volumes (if applicable): N/A

General information (e.g. information regarding any modifications to the water withdrawal procedure or facilities should be included here. If necessary please attach any relevant reports to the end of this document): N/A

2. Solid Waste Disposal

Approximate total yearly volume of solid waste deposited: 810 m³

Table 2: Monthly solid waste disposal volumes

Month	Volume of solid waste deposited (m ³)
January	67.5
February	67.5
March	67.5
April	67.5
May	67.5
June	67.5
July	67.5
August	67.5
September	67.5
October	67.5
November	67.5
December	67.5
TOTALS	810
% Increase/decrease from previous year	+4%

GNWT – MACA has provided a standard formula for estimating the amount of solid waste deposited into a Solid Waste Facility in the absence of a metered Garbage Truck. The following can be used: Volume per person per day X number of days X population

e.g. $0.015 \text{ m}^3 \times 30 \text{ days} \times 860 \text{ people} = 387 \text{ m}^3$ of domestic trash deposited into the Solid Waste Facility in a 30 day month

Reasons for increase/decrease (e.g. an industrial project close to Wekweeti or a large influx of people into town): This is a normal increase, based on the MACA standard formula since we do not have metered garbage trucks for actual readings. Similar projects were carried out in 2018 same as in 2017.

General information (e.g. information regarding any agreements with outside organizations to be a waste receiving facility should be outlined here along with an estimate of the amount and type of waste to be received): N/A

3. Sewage Deposited to Primary Sewage Cells

Table 3: Monthly sewage waste volumes deposited

Month	Volume of sewage waste deposited (m ³)		
	Pumper Truck	Utilidor	TOTAL
January	469.0575		469.0575
February	387.3274		387.3274
March	357.2727		357.2727
April	409.9788		409.9788
May	408.9779		408.9779
June	410.7683		410.7683
July	387.9289		387.9289
August	416.2478		416.2478
September	411.8952		411.8952
October	464.6783		464.6783
November	436.2453		436.2453
December	196.2063		196.2063
TOTALS	4756.584		4756.584
Is this an estimated volume?			
		YESV	NO
% Increase/decrease from previous year			
10%			10%

To calculate monthly sewage waste deposited to the Primary Lagoon, please provide the above information if metered information is available. If metered information is not available, please fill in the table using the corresponding TOTAL water volumes from Table 1. This provides estimation only and equals water in/sewage out.

Reasons for increase/decrease (e.g. an industrial project close to Wekweeti or a large influx of people into town): This is a normal decrease, goes with the water consumption volume changes

Has any sludge been removed from the primary sewage cells or from Snare Lake during this reporting year? If so, what volume of sludge was removed? What testing was completed on the sludge and where it was disposed of? Please

provide documentation for testing and GNWT Water License Inspector approval of placement. **No sludge was removed, and no testing has been completed.**

Was there any decanting at Snare Lake this reporting year? Please provide dates. What was the decant duration and the approximate volume decanted? As this is a Surveillance Network Program (SNP) site, the resulting testing is to be presented as part of the tabular SNP data to be provided as per the Water License [Part B(1)(d)]. **No decanting of Snare Lake occurred during the reporting year of 2018**

4. Problems, modifications or repairs completed during the year on water supply and waste disposal facilities

Include any work done to infrastructure for all facilities completed during the year in this section. This includes any changes, repairs and modifications. If any problems occurred during the year, please note them here. If there are no changes, make note of that. If required please attach any as-built drawings or reports as an appendices to this report. **There were no changes in 2018. However, Wekweeti is expecting to upgrade from the current old small water treatments system to a larger computerized water treatment plant. The upgrade is set to begin in May 2019 to be completed by August 2019.**

5. Surveillance Network Program Data

Surveillance Network Program (SNP) information is to be submitted in a tabular format and shall indicate date of testing, parameters tested for and any other information requested by the GNWT Water Licence Inspector or the WLWB. [Laboratory results should be summarized. A results table has been provided below for your convenience. Note: it is possible to copy/paste from Excel into Word provided the same number of cells are selected in each table].

Only the information presented in the SNP report below was received for 2018.

Surveillance Network Program Lab Results Summary

	Sewage Effluent					Snare Lake					Runoff from Waste Disposal Facility				
	SNP 001-2					SNP 001-3					SNP 001-4				
	June	July	Aug	Sept	Oct	June	July	Aug	Sept	Oct	June	July	Aug	Sept	Oct
pH	7.72		7.33	7.20		6.55		7.23	7.36		7.34		7.59	7.66	
Suspended Solids	<3		50	<3		4		<3	92		14		<3	<3	
Ammonia-Nitrogen	<0.005		9.79	<0.005		0.016		<0.005	21.7		Not required for SNP 001-4				
BOD	5		43	2		3		<2	37						
Total Phosphate															
Faecal Coliforms	30		7800	<1		120		<1	40000						
Oil and Grease															
Mercury	0.01		<0.01	<0.01		0.01		<0.01	<0.01						
Arsenic	Not required for SNP 001-2 and 001-3										0.4		0.3	0.2	
Aluminum	Not required for SNP 001-2 and 001-3										204		14.7	8.8	
Barium	Not required for SNP 001-2 and 001-3										6.9		14.0	15.0	
Boron	Not required for SNP 001-2 and 001-3										N/A				
Cadmium	Not required for SNP 001-2 and 001-3										<0.1		<0.1	<0.04	
Chromium	Not required for SNP 001-2 and 001-3										0.5		0.1	0.1	
Copper	Not required for SNP 001-2 and 001-3										23.6		1.1	1.0	
Iron	Not required for SNP 001-2 and 001-3										429		150	95	
Lead	Not required for SNP 001-2 and 001-3												<0.1	<0.1	
Manganese	Not required for SNP 001-2 and 001-3										51.3		7.9	34.5	
Molybdenum	Not required for SNP 001-2 and 001-3										0.4		0.2	0.2	
Nickel	Not required for SNP 001-2 and 001-3										1.8		0.5	0.6	
Selenium	Not required for SNP 001-2 and 001-3										<0.5		<0.5	<0.3	
Strontium	Not required for SNP 001-2 and 001-3										25.5		53.9	63.6	
Uranium	Not required for SNP 001-2 and 001-3										0.6		0.2	0.2	
Zinc	Not required for SNP 001-2 and 001-3										19.4		<5.0	0.7	

6. SNP Sample Locations See attached

Please attach a map showing SNP locations.

7. Unauthorized discharges

List any unauthorized discharges here including any spills, how and when they were reported, and how they were cleaned up. Please attach copies of spill reports, correspondence with the GNWT Water License Inspector or any other pertinent documentation as an appendices to this report. N/A

8. Spill Training and Communications Exercises

List any spill training and communications exercises that have been carried out including courses on spills prevention, waste management; SNP sampling, etc. On June 12th, 2018, Community Government employees were trained on sampling procedures and practical illustrations on how to collect samples at the SNP sample locations.

9. Closure and Reclamation

Include any closure and reclamation details here including any work anticipated to be completed during the next year. If required please attach any as-built drawings or reports as an appendices to this report. N/A

10. Studies requested by the Board

If the Board has requested that specific studies be completed, include details of the plan in this section with a summary of the outcome. Include any attachments with the submission of the Annual Report. N/A

11. Updates or revisions to approved plans

Details on any changes to approved plans such as the O&M Plan, the Closure and Reclamation Plan, the Spill Contingency Plan, or any other that is specific to this Municipal Water License. Please attach documents as appendices to this report. In July 2018, the Community Government closed/sealed an old dumpsite and opened a new dumpsite within the same fenced location for solid waste dumpsite. There are no appendices available for attachment, we have only paystubs for casuals hired to do the work.

12. Other Information

- Include any other information here that may be valuable to the WLWB or to GNWT. N/A
- Include details on upcoming studies that will be completed. None at the moment
- Please include any non-compliance items identified in the GNWT Water License Inspection report and detail how the Community Government of Wekweeti is addressing them. None identified
- If there is any contaminated soil piles currently in use (land farming), please list the details of containment, remediation and progress in this section. None for 2018

- Please identify any on-going compliance issues for the Community Government of Wekweeti. This can facilitate discussions to resolve the issues. Thank you Roberta Judas for the assistance you provided in figuring out the sources of information required to complete this report. Later submissions will not be completing this one for 2018 as indicated previous report, I have submitted this report after the last report for the final SNP samples we submitted for 2019 and after water readings for Dec 31, 2018 became available

**Appendix to: Municipal Water License Annual Report
Community Government of Wekweeti**

License #: W2017L3-0001

Reporting year: 2018

Expire: September 27, 2018

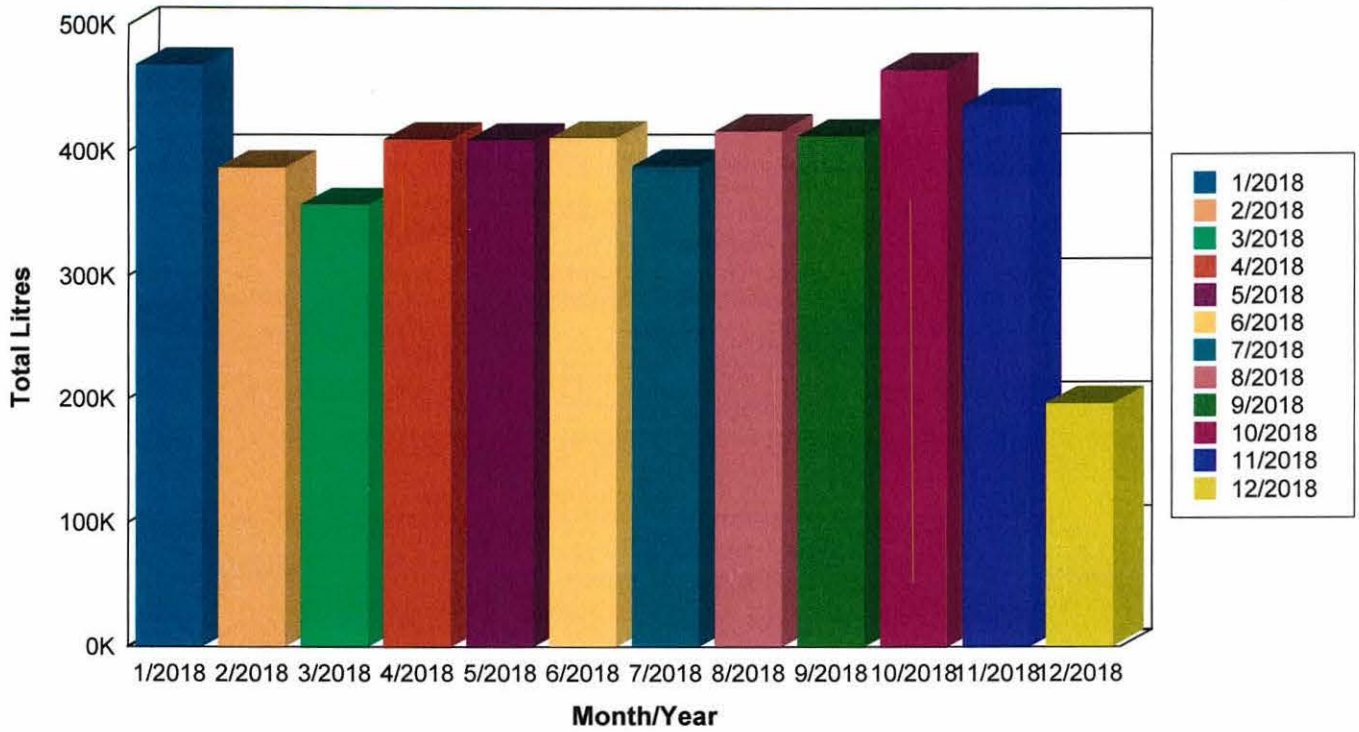
Item Included:

1. 2018 Water Volume Usage: Delivery Summary by Month and Year (1 page)
2. Map indicating Location of Surveillance Network Program sampling sites (1 page)
3. Results from Taiga Laboratories for Surveillance Network Program sampling
 - a) June 2018 Sampling(6 page)
 - b) August 2018 Sampling (6 page)
 - c) September Sampling (6 pages)

Delivery Summary By Month and Year

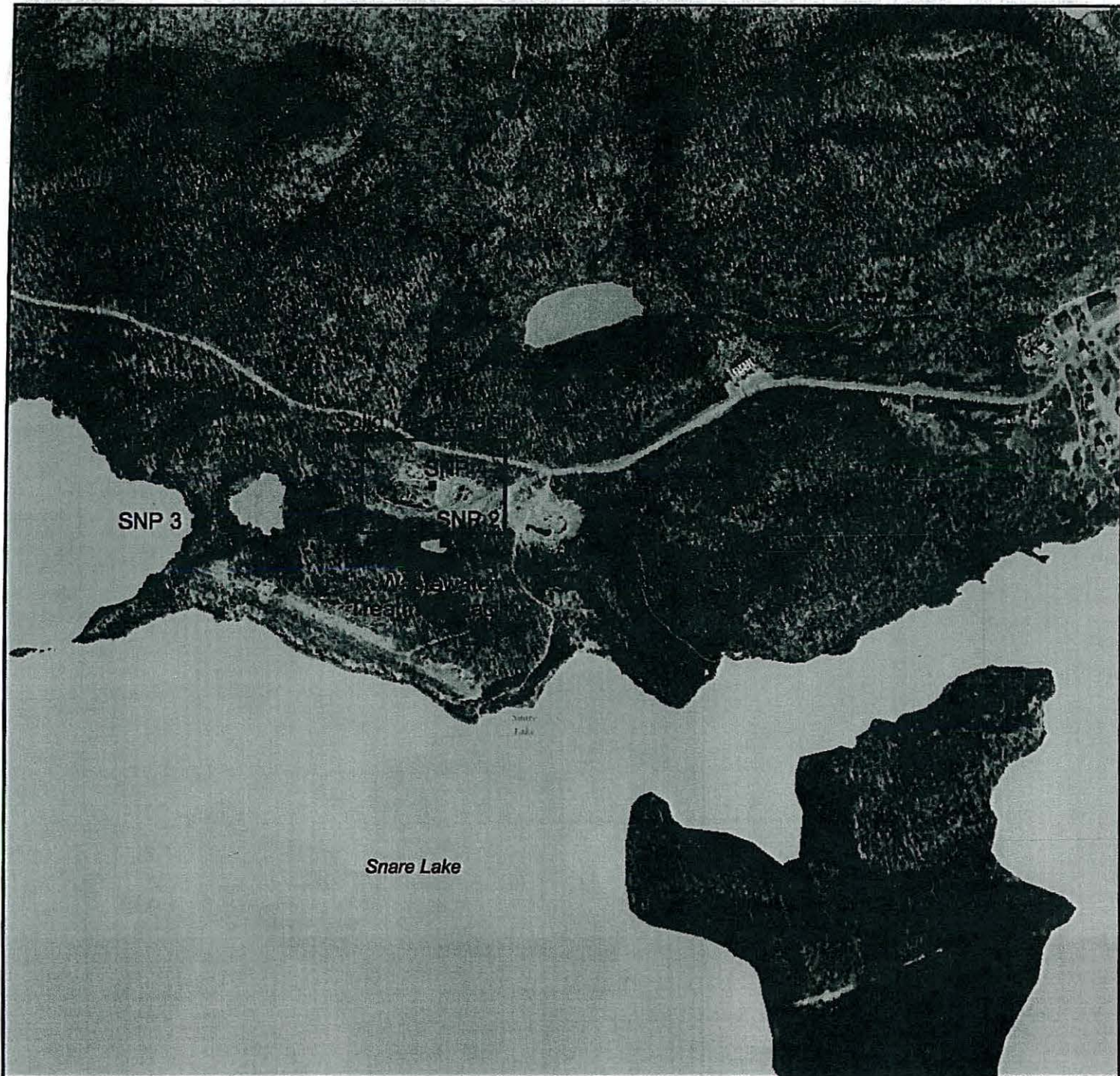
Date Range From: Jan-01-2018 To: Dec-31-2018

2



<u>Month / Year</u>	<u>Litres Delivered</u>
January 2018	469,057.50
February 2018	387,327.40
March 2018	357,272.70
April 2018	409,978.80
May 2018	408,977.90
June 2018	410,768.30
July 2018	387,928.90
August 2018	416,247.80
September 2018	411,895.20
October 2018	464,678.30
November 2018	436,245.30
December 2018	196,206.30

Grand Total: 4,756,584.40



Wekweëti Solid Waste and Wastewater Treatment Facilities

- Legend**
- Hydrography Point
 - Rock Outcrop
 - Hydrography Lines
 - Ordinary Highwater Mark (O.H.W.M.)
 - Line Approximately 30m from O.H.W.M.
 - Ditch
 - Intermittant Lake/Foreshore Flats
 - Intermittant Stream/Sandbar
 - Lagoon/Reservoir/Dugout
 - Rapids/Waterfall/Dam
 - River
 - Shoreline of Water Body
 - Stream
 - Hydrography Polygons
 - Lagoon/Reservoir/Dugout
 - Intermittant Lake/Foreshore Flats
 - Water Body
 - Marsh

Scale 1:8,627
Date April 05, 2017



June 2018



Taiga Environmental Laboratory
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9
Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
180374

- FINAL REPORT -

Prepared For: Community Government of Wekweeti

Address: P.O. Box 69
Wekweeti, NT
X1A 1W0

Attn: SAO

Facsimile: (867) 713-2030

Final report has been reviewed and approved by:

Judy Mah
Client Service Officer

NOTES:

- Test methods and data are validated. Environmental Laboratory is accredited Inc. (CALA) to ISO/IEC 17025 as a test laboratory.
- Routine methods are based on recognized standards:
 - Standard Methods for the Examination of Water and Wastewater
 - Environment Canada
 - USEPA
- Samples shall be kept for thirty (30) days. If not used, samples shall be disposed of immediately to avoid health risks to laboratory personnel. Please contact the laboratory for disposal instructions.
- Final results are based on the specific conditions during sampling.

* Roberta - Oct 2018
Paul called about not being able to take a water sample

ReportDate: Tuesday, June 26, 2018

Print Date: Tuesday, June 26, 2018



Taiga Environmental Laboratory
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9
Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
180374

- CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP 001-2**

Taiga Sample ID: **001**

Client Project: W2017L3-0001
Sample Type: Sewage
Received Date: 12-Jun-18
Sampling Date: 12-Jun-18
Sampling Time: 11:30
Location: Wekweeti
Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<u>Inorganics - Nutrients</u>						
Ammonia as Nitrogen	< 0.005 ↗	0.005	mg/L	20-Jun-18	SM4500-NH3:G	
CBOD	5 ↗	2	mg/L	13-Jun-18	SM5210:B	81
<u>Inorganics - Physicals</u>						
pH	7.72 ↗		pH units	12-Jun-18	SM4500-H:B	
Solids, Total Suspended	< 3 ↗	3	mg/L	15-Jun-18	SM2540:D	
<u>Microbiology</u>						
Coliforms, Fecal	30 ↗	10	CFU/100mL	13-Jun-18	SM9222:D	
<u>Organics</u>						
Hexane Extractable Material	< 2.0	2.0	mg/L	18-Jun-18	EPA1664A	
<u>Trace Metals, Total</u>						
Mercury	< 0.01 ↗	0.01	µg/L	19-Jun-18	EPA200.8	

ReportDate: Tuesday, June 26, 2018
Print Date: Tuesday, June 26, 2018



Taiga Environmental Laboratory

4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9
Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
180374

- CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP 001-3**

Taiga Sample ID: **002**

Client Project: W2017L3-0001
Sample Type: Outflow
Received Date: 12-Jun-18
Sampling Date: 12-Jun-18
Sampling Time: 11:30
Location: Wekweeti
Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<u>Inorganics - Nutrients</u>						
Ammonia as Nitrogen	0.016	0.005	mg/L	20-Jun-18	SM4500-NH3:G	
CBOD	3 ✓	2	mg/L	13-Jun-18	SM5210:B	
<u>Inorganics - Physicals</u>						
pH	6.55 ✓		pH units	12-Jun-18	SM4500-H:B	
Solids, Total Suspended	4 ✓	3	mg/L	15-Jun-18	SM2540:D	
<u>Microbiology</u>						
Coliforms, Fecal	120 ✓	1	CFU/100mL	13-Jun-18	SM9222:D	
<u>Organics</u>						
Hexane Extractable Material	< 2.0	2.0	mg/L	25-Jun-18	EPA1664A	
<u>Trace Metals, Total</u>						
Mercury	< 0.01	0.01	µg/L	19-Jun-18	EPA200.8	

ReportDate: Tuesday, June 26, 2018
Print Date: Tuesday, June 26, 2018

Page 3 of 6



Taiga Environmental Laboratory

4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9

Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
180374

- CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP 001-4**

Taiga Sample ID: **003**

Client Project: W2017L3-0001

Sample Type: Runoff

Received Date: 12-Jun-18

Sampling Date: 12-Jun-18

Sampling Time: 11:30

Location: Wekweeti

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<u>Inorganics - Physicals</u>						
pH	7.34 ✓		pH units	12-Jun-18	SM4500-H:B	
Solids, Total Suspended	14 ✓	3	mg/L	15-Jun-18	SM2540:D	
<u>Trace Metals, Total</u>						
Aluminum	204 ✓	5	µg/L	19-Jun-18	EPA200.8	
Arsenic	0.4 ✓	0.2	µg/L	19-Jun-18	EPA200.8	
Barium	6.9 ✓	0.1	µg/L	19-Jun-18	EPA200.8	
Cadmium	< 0.1 ✗	0.1	µg/L	19-Jun-18	EPA200.8	
Chromium	0.5 ✓	0.1	µg/L	19-Jun-18	EPA200.8	
Copper	23.6 ✓	0.2	µg/L	19-Jun-18	EPA200.8	
Iron	429 ✓	5	µg/L	19-Jun-18	EPA200.8	
Manganese	51.3 ✓	0.1	µg/L	19-Jun-18	EPA200.8	
Mercury	< 0.01 ✗	0.01	µg/L	19-Jun-18	EPA200.8	
Molybdenum	0.4 ✓	0.1	µg/L	19-Jun-18	EPA200.8	
Nickel	1.8 ✓	0.1	µg/L	19-Jun-18	EPA200.8	
Selenium	< 0.5 ✗	0.5	µg/L	19-Jun-18	EPA200.8	
Strontium	25.5 ✓	0.1	µg/L	19-Jun-18	EPA200.8	

ReportDate: Tuesday, June 26, 2018

Print Date: Tuesday, June 26, 2018



Taiga Environmental Laboratory

4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9

Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:

180374

- CERTIFICATE OF ANALYSIS -

Client Sample ID: SNP 001-4

Taiga Sample ID: 003

Uranium	0.6 ✓	0.1	µg/L	19-Jun-18	EPA200.8
Zinc	19.4 ✓	5	µg/L	19-Jun-18	EPA200.8

ReportDate: Tuesday, June 26, 2018

Print Date: Tuesday, June 26, 2018

Page 5 of 6



Taiga Environmental Laboratory

4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9

Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:

180374

- CERTIFICATE OF ANALYSIS -

Client Sample ID: SNP 001-4

Taiga Sample ID: 003

- DATA QUALIFIERS -

Data Qualifier Descriptions:

81 *Results are inconclusive due to insufficient depletion of sample, minimum 2 mg/L required over 5 days.*

*** 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

ReportDate: Tuesday, June 26, 2018

Print Date: Tuesday, June 26, 2018

Page 6 of 6



Taiga Environmental Laboratory
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9
Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
180705

- FINAL REPORT -

Prepared For: Community Government of Wekweeti

Address: P.O. Box 69
Wekweeti, NT
X1A 1W0

Attn: SAO

Facsimile: (867) 713-2030

Final report has been reviewed and approved by:

A handwritten signature in black ink, appearing to read 'Glen Hudy'.

Glen Hudy
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 for Laboratory Accreditation Inc. (CALA) to ISO/IEC 17025 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;
 - 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: Saturday, September 01, 2018

Print Date: Saturday, September 01, 2018



Taiga Environmental Laboratory
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9
Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
180705

- CERTIFICATE OF ANALYSIS -

Client Sample ID: 001-2

Taiga Sample ID: 001

Client Project: W2007L3-0001
Sample Type: Sewage Effluent
Received Date: 09-Aug-18
Sampling Date: 09-Aug-18
Sampling Time: 11:00
Location: Wekweeti
Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<u>Inorganics - Nutrients</u>						
Ammonia as Nitrogen	9.79 ✓	0.005	mg/L	14-Aug-18	SM4500-NH3:G	
Biochemical Oxygen Demand	43 ✓	2	mg/L	10-Aug-18	SM5210:B	
<u>Inorganics - Physicals</u>						
pH	7.33 ✓		pH units	10-Aug-18	SM4500-H:B	
Solids, Total Suspended	50 ✓	3	mg/L	13-Aug-18	SM2540:D	
<u>Microbiology</u>						
Coliforms, Fecal	7800 ✓	100	CFU/100mL	09-Aug-18	SM9222:D	
<u>Organics</u>						
Hexane Extractable Material	13.2	2.0	mg/L	15-Aug-18	EPA1664A	
<u>Trace Metals, Total</u>						
Mercury	< 0.01 ✗	0.01	µg/L	18-Aug-18	EPA200.8	

ReportDate: Saturday, September 01, 2018
Print Date: Saturday, September 01, 2018



Taiga Environmental Laboratory

4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9

Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
180705

- CERTIFICATE OF ANALYSIS -

Client Sample ID: 001-3

Taiga Sample ID: 002

Client Project: W2007L3-0001

Sample Type: Water

Received Date: 09-Aug-18

Sampling Date: 09-Aug-18

Sampling Time: 11:00

Location: Wekweeti

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<u>Inorganics - Nutrients</u>						
Ammonia as Nitrogen	< 0.005 ✘	0.005	mg/L	14-Aug-18	SM4500-NH3:G	
Biochemical Oxygen Demand	< 2 ✘	2	mg/L	10-Aug-18	SM5210:B	
<u>Inorganics - Physicals</u>						
pH	7.23 ✓		pH units	10-Aug-18	SM4500-H:B	
Solids, Total Suspended	< 3 ✘	3	mg/L	13-Aug-18	SM2540:D	
<u>Microbiology</u>						
Coliforms, Fecal	< 1 ✘	1	CFU/100mL	09-Aug-18	SM9222:D	
<u>Organics</u>						
Hexane Extractable Material	< 2.0	2.0	mg/L	15-Aug-18	EPA1664A	
<u>Trace Metals, Total</u>						
Mercury	< 0.01 ✘	0.01	µg/L	18-Aug-18	EPA200.8	

ReportDate: Saturday, September 01, 2018

Print Date: Saturday, September 01, 2018

Page 3 of 6



Taiga Environmental Laboratory

4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9

Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
180705

- CERTIFICATE OF ANALYSIS -

Client Sample ID: 001-4

Taiga Sample ID: 003

Client Project: W2007L3-0001

Sample Type: Wastewater

Received Date: 09-Aug-18

Sampling Date: 09-Aug-18

Sampling Time: 11:00

Location: Wekweeti

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<u>Inorganics - Physicals</u>						
pH	7.59 ✓		pH units	10-Aug-18	SM4500-H:B	
Solids, Total Suspended	< 3 ✗	3	mg/L	13-Aug-18	SM2540:D	
<u>Trace Metals, Total</u>						
Aluminum	14.7	5	µg/L	18-Aug-18	EPA200.8	
Antimony	< 0.1	0.1	µg/L	18-Aug-18	EPA200.8	
Arsenic	0.3	0.2	µg/L	18-Aug-18	EPA200.8	
Barium	14.0	0.1	µg/L	18-Aug-18	EPA200.8	
Beryllium	< 0.1	0.1	µg/L	18-Aug-18	EPA200.8	
Cadmium	< 0.1	0.1	µg/L	18-Aug-18	EPA200.8	
Cesium	< 0.1	0.1	µg/L	18-Aug-18	EPA200.8	
Chromium	0.1	0.1	µg/L	18-Aug-18	EPA200.8	
Cobalt	< 0.1	0.1	µg/L	18-Aug-18	EPA200.8	
Copper	1.1	0.2	µg/L	18-Aug-18	EPA200.8	
Iron	150	5	µg/L	18-Aug-18	EPA200.8	
Lead	< 0.1	0.1	µg/L	18-Aug-18	EPA200.8	
Lithium	0.5	0.2	µg/L	18-Aug-18	EPA200.8	

ReportDate: Saturday, September 01, 2018

Print Date: Saturday, September 01, 2018

Page 4 of 6



Taiga Environmental Laboratory

4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9

Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
180705

- CERTIFICATE OF ANALYSIS -

Client Sample ID: 001-4

Taiga Sample ID: 003

Manganese	7.9	0.1	µg/L	18-Aug-18	EPA200.8
Mercury	< 0.01 *	0.01	µg/L	18-Aug-18	EPA200.8
Molybdenum	0.2	0.1	µg/L	18-Aug-18	EPA200.8
Nickel	0.5	0.1	µg/L	18-Aug-18	EPA200.8
Rubidium	3.5	0.1	µg/L	18-Aug-18	EPA200.8
Selenium	< 0.5	0.5	µg/L	18-Aug-18	EPA200.8
Silver	< 0.1	0.1	µg/L	18-Aug-18	EPA200.8
Strontium	53.9	0.1	µg/L	18-Aug-18	EPA200.8
Thallium	< 0.1	0.1	µg/L	18-Aug-18	EPA200.8
Titanium	0.4	0.1	µg/L	18-Aug-18	EPA200.8
Uranium	0.2	0.1	µg/L	18-Aug-18	EPA200.8
Vanadium	0.2	0.1	µg/L	18-Aug-18	EPA200.8
Zinc	< 5.0	5	µg/L	18-Aug-18	EPA200.8

ReportDate: Saturday, September 01, 2018

Print Date: Saturday, September 01, 2018

Page 5 of 6



Taiga Environmental Laboratory

4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9

Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
180705

- CERTIFICATE OF ANALYSIS -

Client Sample ID: 001-4

Taiga Sample ID: 003

*** 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

ReportDate: Saturday, September 01, 2018

Print Date: *Saturday, September 01, 2018*

Page 6 of 6



Taiga Environmental Laboratory

4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9

Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
180921

- FINAL REPORT -

Prepared For: Community Government of Wekweeti

Address: P.O. Box 69
Wekweeti, NT
X1A 1W0

Attn: Robert Moretti

Facsimile: (867) 713-2030

Final report has been reviewed and approved by:

A handwritten signature in black ink that reads "Glen Hudy".

Glen Hudy
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 for Laboratory Accreditation Inc. (CALA) to ISO/IEC 17025 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;
 - 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: Thursday, October 04, 2018

Print Date: Thursday, October 04, 2018



Taiga Environmental Laboratory

4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9

Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
180921

- CERTIFICATE OF ANALYSIS -

Client Sample ID: **001-2**

Taiga Sample ID: **001**

Client Project: W2007L3-0001
Sample Type: Sewage Effluent
Received Date: 11-Sep-18
Sampling Date: 11-Sep-18
Sampling Time: 11:00
Location: Wekweeti
Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<u>Inorganics - Nutrients</u>						
Ammonia as Nitrogen	< 0.005	0.005	mg/L	12-Sep-18	SM4500-NH3:G	
Biochemical Oxygen Demand	2	2	mg/L	12-Sep-18	SM5210:B	
<u>Inorganics - Physicals</u>						
pH	7.20		pH units	11-Sep-18	SM4500-H:B	
Solids, Total Suspended	< 3	3	mg/L	13-Sep-18	SM2540:D	
<u>Microbiology</u>						
Coliforms, Fecal	< 1	1	CFU/100mL	12-Sep-18	SM9222:D	
<u>Organics</u>						
Hexane Extractable Material	< 2.0	2.0	mg/L	12-Sep-18	EPA1664A	
<u>Trace Metals, Total</u>						
Mercury	< 0.01	0.01	µg/L	03-Oct-18	EPA200.8	

ReportDate: Thursday, October 04, 2018

Print Date: Thursday, October 04, 2018

Page 2 of 6



Taiga Environmental Laboratory

4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9

Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
180921

- CERTIFICATE OF ANALYSIS -

Client Sample ID: **001-3**

Taiga Sample ID: **002**

Client Project: W2007L3-0001

Sample Type: Water

Received Date: 11-Sep-18

Sampling Date: 11-Sep-18

Sampling Time: 11:00

Location: Wekweeti

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<u>Inorganics - Nutrients</u>						
Ammonia as Nitrogen	21.7	0.005	mg/L	12-Sep-18	SM4500-NH3:G	
Biochemical Oxygen Demand	37	2	mg/L	12-Sep-18	SM5210:B	
<u>Inorganics - Physicals</u>						
pH	7.36		pH units	11-Sep-18	SM4500-H:B	
Solids, Total Suspended	92	3	mg/L	13-Sep-18	SM2540:D	
<u>Microbiology</u>						
Coliforms, Fecal	40000	10000	CFU/100mL	12-Sep-18	SM9222:D	
<u>Organics</u>						
Hexane Extractable Material	5.4	2.0	mg/L	12-Sep-18	EPA1664A	
<u>Trace Metals, Total</u>						
Mercury	< 0.01	0.01	µg/L	03-Oct-18	EPA200.8	

ReportDate: Thursday, October 04, 2018

Print Date: Thursday, October 04, 2018

Page 3 of 6



Taiga Environmental Laboratory

4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9

Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
180921

- CERTIFICATE OF ANALYSIS -

Client Sample ID: **001-4**

Taiga Sample ID: **003**

Client Project: W2007L3-0001

Sample Type: Wastewater

Received Date: 11-Sep-18

Sampling Date: 11-Sep-18

Sampling Time: 11:00

Location: Wekweeti

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<u>Inorganics - Physicals</u>						
pH	7.66		pH units	11-Sep-18	SM4500-H:B	
Solids, Total Suspended	< 3	3	mg/L	13-Sep-18	SM2540:D	
<u>Trace Metals, Total</u>						
Aluminum	8.8	0.6	µg/L	03-Oct-18	EPA200.8	
Antimony	< 0.1	0.1	µg/L	03-Oct-18	EPA200.8	
Arsenic	0.2	0.2	µg/L	03-Oct-18	EPA200.8	
Barium	15.0	0.1	µg/L	03-Oct-18	EPA200.8	
Beryllium	< 0.1	0.1	µg/L	03-Oct-18	EPA200.8	
Cadmium	< 0.04	0.04	µg/L	03-Oct-18	EPA200.8	
Cesium	< 0.1	0.1	µg/L	03-Oct-18	EPA200.8	
Chromium	0.1	0.1	µg/L	03-Oct-18	EPA200.8	
Cobalt	0.1	0.1	µg/L	03-Oct-18	EPA200.8	
Copper	1.0	0.2	µg/L	03-Oct-18	EPA200.8	
Iron	95	5	ug/L	03-Oct-18	EPA200.8	
Lead	< 0.1	0.1	µg/L	03-Oct-18	EPA200.8	
Lithium	0.6	0.2	µg/L	03-Oct-18	EPA200.8	

ReportDate: Thursday, October 04, 2018

Print Date: *Thursday, October 04, 2018*

Page 4 of 6



Taiga Environmental Laboratory

4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9

Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
180921

- CERTIFICATE OF ANALYSIS -

Client Sample ID: **001-4**

Taiga Sample ID: **003**

Manganese	34.5	0.1	µg/L	03-Oct-18	EPA200.8
Molybdenum	0.2	0.1	µg/L	03-Oct-18	EPA200.8
Nickel	0.6	0.1	µg/L	03-Oct-18	EPA200.8
Rubidium	3.7	0.1	µg/L	03-Oct-18	EPA200.8
Selenium	< 0.3	0.3	µg/L	03-Oct-18	EPA200.8
Silver	< 0.1	0.1	µg/L	03-Oct-18	EPA200.8
Strontium	63.6	0.1	µg/L	03-Oct-18	EPA200.8
Thallium	< 0.1	0.1	µg/L	03-Oct-18	EPA200.8
Titanium	0.3	0.1	µg/L	03-Oct-18	EPA200.8
Uranium	0.2	0.1	µg/L	03-Oct-18	EPA200.8
Vanadium	0.1	0.1	µg/L	03-Oct-18	EPA200.8
Zinc	0.7	0.4	µg/L	03-Oct-18	EPA200.8

ReportDate: Thursday, October 04, 2018

Print Date: Thursday, October 04, 2018

Page 5 of 6



Taiga Environmental Laboratory

4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9

Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
180921

- CERTIFICATE OF ANALYSIS -

Client Sample ID: **001-4**

Taiga Sample ID: **003**

*** 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

ReportDate: Thursday, October 04, 2018

Print Date: *Thursday, October 04, 2018*

Page 6 of 6