

## Municipal Water Licence Annual Report

### Community Government of Wekweeti

Licence #: W2007L3-0001

Reporting year: **2017**

Expires: September 27, 2018

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

**1. Water Usage** (Licensed Water Volume Withdrawal: 10,000 m<sup>3</sup>)

Total volume withdrawn for reporting year: **4,177m<sup>3</sup>**

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

Month	Volume from main source (m <sup>3</sup> )	Volume from any other source (m <sup>3</sup> )	TOTAL Volume (m <sup>3</sup> )
January	366.4362		366.4362
February	248.4274		248.4274
March	216.7931		216.7931
April	354.6751		354.6751
May	431.3944		431.3944
June	419.4528		419.4528
July	388.6676		388.6676
August	376.8776		376.8776
September	363.3380		363.3380
October	386.2940		386.2940
November	301.4593		301.4593
December	324.3632		324.3632
TOTALS	4,177.1787		4,177.1787
% Increase/decrease from previous year	10%		10%

Reasons for increase/decrease: **There were no big events in 2017 therefore, all water use is attributable to general use by Wekweeti residents.**

Reasons for exceeding licenced 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: \_\_\_\_\_ m<sup>3</sup>

**Table 2: Monthly solid waste disposal volumes**

Month	Volume of solid waste deposited (m <sup>3</sup> )
January	64.8
February	65.7
March	64.8
April	64.8
May	65.7
June	63.9
July	64.8
August	64.8
September	64.8
October	63.9
November	64.8
December	65.7
TOTALS	778.5
% Decrease from previous year	10%

*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 m<sup>3</sup> X 30 days X 860 people = 387 m<sup>3</sup> 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 decrease, actual information is unavailable from the public works. I have made an assumption that there is 10% decrease in solid waste disposal which is an insignificant change, also no additional projects were noted for 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 <sup>3</sup> )		
	Pumper Truck	Utilidor	TOTAL
January	366.4362		366.4362
February	248.4274		248.4274
March	216.7931		216.7931
April	354.6751		354.6751
May	431.3944		431.3944
June	419.4528		419.4528
July	388.6676		388.6676
August	376.8776		376.8776
September	363.3380		363.3380
October	386.2940		386.2940
November	301.4593		301.4593
December	324.3632		324.3632
TOTALS	4,177.1787		4,177.1787
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 Licence 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 2017**

**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 2017. However, Wekweeti is expecting to upgrade from the current old small water treatment system to a larger computerized water treatment plant. The upgrade is set to begin in May 2019 and 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 2017.**

**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
<b>pH</b>	7.01		7.25	7.03		6.82		7.13	6.98		7.31		7.77	7.49	
<b>Suspended Solids</b>	42		6	142		6		34	<3		6		<3	<3	
<b>Ammonia-Nitrogen</b>	29.7		8.76	14.0		<0.005		<0.005	<0.005		Not required for SNP 001-4				
<b>BOD</b>	88		239	91		<2		<2	<2						
<b>Total Phosphate</b>															
<b>Faecal Coliforms</b>	35000		2000	3000		<1		<1	11						
<b>Oil and Grease</b>															
<b>Mercury</b>	0.04		<0.01	<0.01		<0.01		<0.01	<0.01		N/A		<0.01	<0.01	
<b>Arsenic</b>											0.2		0.3	0.2	
<b>Aluminum</b>											58.2		5.8	4.5	
<b>Barium</b>											9.5		14.3	14.7	
<b>Boron</b>											N/A		N/A	N/A	
<b>Cadmium</b>											<0.1		<0.04	<0.04	
<b>Chromium</b>											0.2		0.1	0.1	
<b>Copper</b>											2.3		0.8	0.9	
<b>Iron</b>	Not required for SNP 001-2 and 001-3										155		93	54	
<b>Lead</b>											0.3		<0.1	<0.1	
<b>Manganese</b>											26.2		10.1	20.2	
<b>Molybdenum</b>											<0.1		0.2	0.2	
<b>Nickel</b>											0.4		0.6	0.6	
<b>Selenium</b>											1.9		<0.3	<0.3	
<b>Strontium</b>											30.9		63.3	62.2	
<b>Uranium</b>											0.2		0.2	0.3	
<b>Zinc</b>											<5.0		<0.4	<0.4	

**6. SNP Sample Locations**

Please attach a map showing SNP locations. [See attached](#)

**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 Licence 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 12<sup>th</sup>, 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 Licence. 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 Licence 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 2017**
- 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. Late submissions will not be an ongoing issue going forward since I have prepared for the 2018 reporting year while completing this one for 2017. I will be completing and submitting the report once I receive the last report for the final SNP samples we submitted for 2018.**

# Wekweèti 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
  - Intermittent Lake/Foreshore Flats
  - Intermittent Stream/Sandbar
  - Lagoon/Reservoir/Dugout
  - Rapids/Waterfall/Dam
  - River
  - Shoreline of Water Body
  - Stream
- Hydrography Polygons
  - Lagoon/Reservoir/Dugout
  - Intermittent Lake/Foreshore Flats
  - Water Body
  - Marsh



Scale 1:8,627

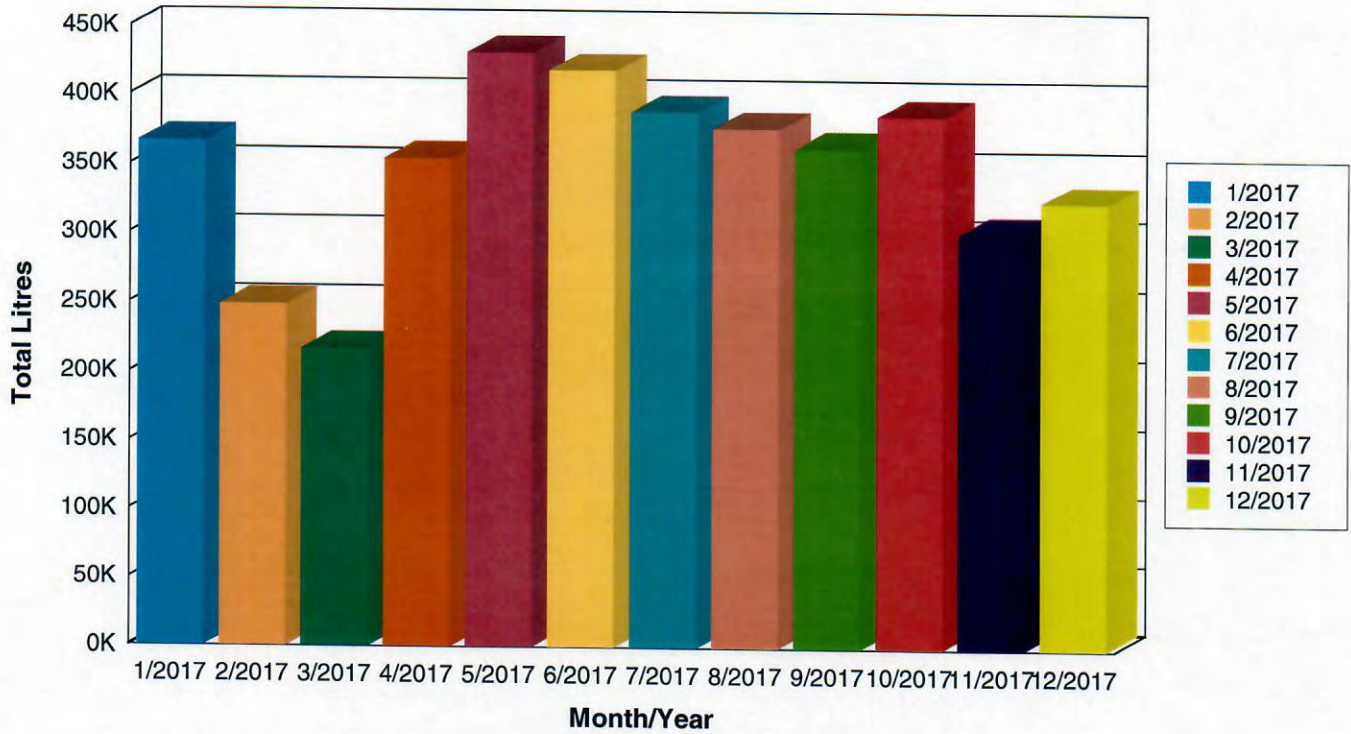
Date April 05, 2017





# Delivery Summary By Month and Year

Date Range From: Jan-01-2017 To: Dec-31-2017



**Month / Year**

**Litres Delivered**

January 2017	366,436.20
February 2017	248,427.40
March 2017	216,793.10
April 2017	354,675.10
May 2017	431,394.40
June 2017	418,452.80
July 2017	388,667.60
August 2017	376,877.60
September 2017	363,338.00
October 2017	386,294.00
November 2017	301,459.30
December 2017	324,363.20

**Grand Total:**

**4,177,178.70**



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

**Taiga Batch No.:**  
**170347**

**- FINAL REPORT -**

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**Prepared For:** Community Government of Wekweeti

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

**Attn:** Robert Moretti

**Facsimile:** (867) 713-2030

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**Final report has been reviewed and approved by:**

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**Glen Hudy**  
**Quality Assurance Officer**

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**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:** Wednesday, July 05, 2017

**Print Date:** *Friday, July 07, 2017*

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## Taiga Environmental Laboratory

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

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

Taiga Batch No.:  
**170347**

### - CERTIFICATE OF ANALYSIS -

Client Sample ID: **001-2**

Taiga Sample ID: **001**

Client Project: W2007L3-0001

Sample Type: Sewage Effluent

Received Date: 08-Jun-17

Sampling Date: 08-Jun-17

Sampling Time: 9:57

Location: Wekweeti

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	29.7	0.005	mg/L	22-Jun-17	SM4500-NH3:G	
Biochemical Oxygen Demand	88	2	mg/L	10-Jun-17	SM5210:B	
<b><u>Inorganics - Physicals</u></b>						
pH	7.01		pH units	12-Jun-17	SM4500-H:B	
Solids, Total Suspended	42	3	mg/L	12-Jun-17	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	35000	1000	CFU/100mL	09-Jun-17	SM9222:D	
<b><u>Organics</u></b>						
Hexane Extractable Material	33.2	2.0	mg/L	20-Jun-17	EPA1664A	
<b><u>Trace Metals, Total</u></b>						
Aluminum	168	5	µg/L	20-Jun-17	EPA200.8	
Antimony	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8	
Arsenic	0.4	0.2	µg/L	20-Jun-17	EPA200.8	
Barium	4.7	0.1	µg/L	20-Jun-17	EPA200.8	
Beryllium	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8	

ReportDate: Wednesday, July 05, 2017

Print Date: **Friday, July 07, 2017**

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Taiga Batch No.:  
**170347**

**- CERTIFICATE OF ANALYSIS -**

**Client Sample ID: 001-2**

**Taiga Sample ID: 001**

Cadmium	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8
Cesium	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8
Chromium	0.6	0.1	µg/L	20-Jun-17	EPA200.8
Cobalt	0.9	0.1	µg/L	20-Jun-17	EPA200.8
Copper	36.9	0.2	µg/L	20-Jun-17	EPA200.8
Iron	443	5	µg/L	20-Jun-17	EPA200.8
Lead	0.7	0.1	µg/L	20-Jun-17	EPA200.8
Lithium	1.8	0.2	µg/L	20-Jun-17	EPA200.8
Manganese	58.2	0.1	µg/L	20-Jun-17	EPA200.8
Mercury	0.04	0.01	µg/L	20-Jun-17	EPA200.8
Molybdenum	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8
Nickel	1.9	0.1	µg/L	20-Jun-17	EPA200.8
Rubidium	12.5	0.1	µg/L	20-Jun-17	EPA200.8
Selenium	0.6	0.5	µg/L	20-Jun-17	EPA200.8
Silver	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8
Strontium	20.8	0.1	µg/L	20-Jun-17	EPA200.8
Thallium	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8
Titanium	3.6	0.1	µg/L	20-Jun-17	EPA200.8
Uranium	0.2	0.1	µg/L	20-Jun-17	EPA200.8
Vanadium	0.2	0.1	µg/L	20-Jun-17	EPA200.8
Zinc	32.5	5	µg/L	20-Jun-17	EPA200.8

**ReportDate:** Wednesday, July 05, 2017

**Print Date:** *Friday, July 07, 2017*

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

Taiga Batch No.:  
**170347**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **001-3**

Taiga Sample ID: **002**

Client Project: W2007L3-0001

Sample Type: Water

Received Date: 08-Jun-17

Sampling Date: 08-Jun-17

Sampling Time: 9:32

Location: Wekweeti

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	< 0.005	0.005	mg/L	22-Jun-17	SM4500-NH3:G	
Biochemical Oxygen Demand	< 2	2	mg/L	10-Jun-17	SM5210:B	
<b><u>Inorganics - Physicals</u></b>						
pH	6.82		pH units	12-Jun-17	SM4500-H:B	
Solids, Total Suspended	6	3	mg/L	12-Jun-17	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	< 1	1	CFU/100mL	09-Jun-17	SM9222:D	
<b><u>Organics</u></b>						
Hexane Extractable Material	< 2.0	2.0	mg/L	20-Jun-17	EPA1664A	
<b><u>Trace Metals, Total</u></b>						
Aluminum	13.1	0.6	µg/L	20-Jun-17	EPA200.8	
Antimony	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8	
Arsenic	0.3	0.2	µg/L	20-Jun-17	EPA200.8	
Barium	2.3	0.1	µg/L	20-Jun-17	EPA200.8	
Beryllium	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8	
Cadmium	< 0.04	0.04	µg/L	20-Jun-17	EPA200.8	

ReportDate: Wednesday, July 05, 2017

Print Date: **Friday, July 07, 2017**



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

Taiga Batch No.:

170347

### - CERTIFICATE OF ANALYSIS -

Client Sample ID: 001-3

Taiga Sample ID: 002

Cesium	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8
Chromium	0.1	0.1	µg/L	20-Jun-17	EPA200.8
Cobalt	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8
Copper	0.7	0.2	µg/L	20-Jun-17	EPA200.8
Iron	46	5	µg/L	20-Jun-17	EPA200.8
Lead	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8
Lithium	0.9	0.2	µg/L	20-Jun-17	EPA200.8
Manganese	10.9	0.1	µg/L	20-Jun-17	EPA200.8
Mercury	< 0.01	0.01	µg/L	20-Jun-17	EPA200.8
Molybdenum	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8
Nickel	0.3	0.1	µg/L	20-Jun-17	EPA200.8
Rubidium	2.0	0.1	µg/L	20-Jun-17	EPA200.8
Selenium	< 0.3	0.3	µg/L	20-Jun-17	EPA200.8
Silver	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8
Strontium	9.9	0.1	µg/L	20-Jun-17	EPA200.8
Thallium	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8
Titanium	0.2	0.1	µg/L	20-Jun-17	EPA200.8
Uranium	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8
Vanadium	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8
Zinc	0.5	0.4	µg/L	20-Jun-17	EPA200.8

ReportDate: Wednesday, July 05, 2017

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Taiga Batch No.:  
**170347**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **001-4**

Taiga Sample ID: **003**

Client Project: W2007L3-0001

Sample Type: Wastewater

Received Date: 08-Jun-17

Sampling Date: 08-Jun-17

Sampling Time:

Location: Wekweeti

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Physicals</u></b>						
pH	7.31		pH units	12-Jun-17	SM4500-H:B	
Solids, Total Suspended	6	3	mg/L	12-Jun-17	SM2540:D	
<b><u>Trace Metals, Total</u></b>						
Aluminum	58.2	5	µg/L	20-Jun-17	EPA200.8	
Antimony	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8	
Arsenic	0.2	0.2	µg/L	20-Jun-17	EPA200.8	
Barium	9.5	0.1	µg/L	20-Jun-17	EPA200.8	
Beryllium	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8	
Cadmium	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8	
Cesium	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8	
Chromium	0.2	0.1	µg/L	20-Jun-17	EPA200.8	
Cobalt	0.3	0.1	µg/L	20-Jun-17	EPA200.8	
Copper	2.3	0.2	µg/L	20-Jun-17	EPA200.8	
Iron	155	5	µg/L	20-Jun-17	EPA200.8	
Lead	0.3	0.1	µg/L	20-Jun-17	EPA200.8	
Lithium	0.5	0.2	µg/L	20-Jun-17	EPA200.8	

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Taiga Batch No.:  
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### - CERTIFICATE OF ANALYSIS -

Client Sample ID: **001-4**

Taiga Sample ID: **003**

Manganese	26.2	0.1	µg/L	20-Jun-17	EPA200.8
Molybdenum	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8
Nickel	0.4	0.1	µg/L	20-Jun-17	EPA200.8
Rubidium	2.4	0.1	µg/L	20-Jun-17	EPA200.8
Selenium	1.9	0.5	µg/L	20-Jun-17	EPA200.8
Silver	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8
Strontium	30.9	0.1	µg/L	20-Jun-17	EPA200.8
Thallium	< 0.1	0.1	µg/L	20-Jun-17	EPA200.8
Titanium	1.4	0.1	µg/L	20-Jun-17	EPA200.8
Uranium	0.2	0.1	µg/L	20-Jun-17	EPA200.8
Vanadium	0.2	0.1	µg/L	20-Jun-17	EPA200.8
Zinc	< 5.0	5	µg/L	20-Jun-17	EPA200.8

ReportDate: Wednesday, July 05, 2017

Print Date: *Friday, July 07, 2017*

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**Taiga Environmental Laboratory**

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

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

**Taiga Batch No.:**

**170347**

**- CERTIFICATE OF ANALYSIS -**

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**Client Sample ID: 001-4**

**Taiga Sample ID: 003**

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**\* 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:** Wednesday, July 05, 2017

**Print Date:** *Friday, July 07, 2017*

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

**Taiga Batch No.:**  
**170782**

**- FINAL REPORT -**

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**Prepared For:** Community Government of Wekweeti

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

**Attn:** Robert Moretti

**Facsimile:** (867) 713-2030

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**Final report has been reviewed and approved by:**

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**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:** Tuesday, September 05, 2017

**Print Date:** *Tuesday, September 05, 2017*

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## Taiga Environmental Laboratory

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

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

Taiga Batch No.:  
170782

### - CERTIFICATE OF ANALYSIS -

Client Sample ID: **001-2**

Taiga Sample ID: **001**

Client Project: W2007L3-0001

Sample Type: Sewage Effluent

Received Date: 21-Aug-17

Sampling Date: 21-Aug-17

Sampling Time: 10:15

Location: Wekweeti

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	8.76	0.005	mg/L	25-Aug-17	SM4500-NH3:G	
Biochemical Oxygen Demand	239	2	mg/L	22-Aug-17	SM5210:B	55
<b><u>Inorganics - Physicals</u></b>						
pH	7.25		pH units	23-Aug-17	SM4500-H:B	
Solids, Total Suspended	6	3	mg/L	28-Aug-17	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	2000	1000	CFU/100mL	21-Aug-17	SM9222:D	
<b><u>Organics</u></b>						
Hexane Extractable Material	23.9	2.0	mg/L	24-Aug-17	EPA1664A	
<b><u>Trace Metals, Total</u></b>						
Mercury	< 0.01	0.01	µg/L	30-Aug-17	EPA200.8	

ReportDate: Tuesday, September 05, 2017

Print Date: *Tuesday, September 05, 2017*

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# Taiga Environmental Laboratory

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

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

Taiga Batch No.:  
**170782**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **001-3**

Taiga Sample ID: **002**

Client Project: W2007L3-0001

Sample Type: Water

Received Date: 21-Aug-17

Sampling Date: 21-Aug-17

Sampling Time: 10:15

Location: Wekweeti

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	< 0.005	0.005	mg/L	25-Aug-17	SM4500-NH3:G	
Biochemical Oxygen Demand	< 2	2	mg/L	22-Aug-17	SM5210:B	
<b><u>Inorganics - Physicals</u></b>						
pH	7.13		pH units	23-Aug-17	SM4500-H:B	
Solids, Total Suspended	34	3	mg/L	28-Aug-17	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	< 1	1	CFU/100mL	21-Aug-17	SM9222:D	
<b><u>Organics</u></b>						
Hexane Extractable Material	< 2.0	2.0	mg/L	24-Aug-17	EPA1664A	
<b><u>Trace Metals, Total</u></b>						
Mercury	< 0.01	0.01	µg/L	30-Aug-17	EPA200.8	

ReportDate: Tuesday, September 05, 2017

Print Date: *Tuesday, September 05, 2017*



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

Taiga Batch No.:  
**170782**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **001-4**

Taiga Sample ID: **003**

Client Project: W2017L3-0001

Sample Type: Wastewater

Received Date: 21-Aug-17

Sampling Date: 21-Aug-17

Sampling Time: 10:15

Location: Wekweeti

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Physicals</u></b>						
pH	7.77		pH units	23-Aug-17	SM4500-H:B	
Solids, Total Suspended	< 3	3	mg/L	28-Aug-17	SM2540:D	
<b><u>Trace Metals, Total</u></b>						
Aluminum	5.8	0.6	µg/L	30-Aug-17	EPA200.8	
Antimony	< 0.1	0.1	µg/L	30-Aug-17	EPA200.8	
Arsenic	0.3	0.2	µg/L	30-Aug-17	EPA200.8	
Barium	14.3	0.1	µg/L	30-Aug-17	EPA200.8	
Beryllium	< 0.1	0.1	µg/L	30-Aug-17	EPA200.8	
Cadmium	< 0.04	0.04	µg/L	30-Aug-17	EPA200.8	
Cesium	< 0.1	0.1	µg/L	30-Aug-17	EPA200.8	
Chromium	0.1	0.1	µg/L	30-Aug-17	EPA200.8	
Cobalt	< 0.1	0.1	µg/L	30-Aug-17	EPA200.8	
Copper	0.8	0.2	µg/L	30-Aug-17	EPA200.8	
Iron	93	5	µg/L	30-Aug-17	EPA200.8	
Lead	< 0.1	0.1	µg/L	30-Aug-17	EPA200.8	
Lithium	0.5	0.2	µg/L	30-Aug-17	EPA200.8	

ReportDate: Tuesday, September 05, 2017

Print Date: *Tuesday, September 05, 2017*



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

Taiga Batch No.:  
**170782**

**- CERTIFICATE OF ANALYSIS -**

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**Client Sample ID: 001-4**

**Taiga Sample ID: 003**

Manganese	10.1	0.1	µg/L	30-Aug-17	EPA200.8
Mercury	< 0.01	0.01	µg/L	30-Aug-17	EPA200.8
Molybdenum	0.2	0.1	µg/L	30-Aug-17	EPA200.8
Nickel	0.6	0.1	µg/L	30-Aug-17	EPA200.8
Rubidium	3.7	0.1	µg/L	30-Aug-17	EPA200.8
Selenium	< 0.3	0.3	µg/L	30-Aug-17	EPA200.8
Silver	< 0.1	0.1	µg/L	30-Aug-17	EPA200.8
Strontium	63.3	0.1	µg/L	30-Aug-17	EPA200.8
Thallium	< 0.1	0.1	µg/L	30-Aug-17	EPA200.8
Titanium	0.2	0.1	µg/L	30-Aug-17	EPA200.8
Uranium	0.2	0.1	µg/L	30-Aug-17	EPA200.8
Vanadium	0.1	0.1	µg/L	30-Aug-17	EPA200.8
Zinc	< 0.4	0.4	µg/L	30-Aug-17	EPA200.8

**ReportDate:** Tuesday, September 05, 2017

**Print Date:** *Tuesday, September 05, 2017*

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## Taiga Environmental Laboratory

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

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

Taiga Batch No.:

170782

### - CERTIFICATE OF ANALYSIS -

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Client Sample ID: 001-4

Taiga Sample ID: 003

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### - DATA QUALIFIERS -

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*Data Qualifier Descriptions:*

55 *BOD result is inconclusive; residual DO was less than 1 mg/L. For evaluation purposes only.*

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EPA - United States Environmental Protection Agency

ReportDate: Tuesday, September 05, 2017

Print Date: *Tuesday, September 05, 2017*

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

**Taiga Batch No.:**  
**170913**

**- 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:**

---

**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.
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  - USEPA
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**ReportDate:** Thursday, September 28, 2017

**Print Date:** *Thursday, September 28, 2017*

*Page 1 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.:  
**170913**

### - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP001-2**

Taiga Sample ID: **001**

Client Project: W2007L3-0001

Sample Type: Sewage Lagoon

Received Date: 12-Sep-17

Sampling Date: 12-Sep-17

Sampling Time: 10:05

Location:

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	14.0	0.005	mg/L	15-Sep-17	SM4500-NH3:G	
Biochemical Oxygen Demand	91	2	mg/L	13-Sep-17	SM5210:B	
<b><u>Inorganics - Physicals</u></b>						
pH	7.03		pH units	12-Sep-17	SM4500-H:B	
Solids, Total Suspended	142	3	mg/L	15-Sep-17	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	3000	100	CFU/100mL	12-Sep-17	SM9222:D	
<b><u>Organics</u></b>						
Hexane Extractable Material	10.3	2.0	mg/L	22-Sep-17	EPA1664A	
<b><u>Trace Metals, Total</u></b>						
Mercury	< 0.01	0.01	µg/L	19-Sep-17	EPA200.8	

ReportDate: Thursday, September 28, 2017

Print Date: **Thursday, September 28, 2017**

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# Taiga Environmental Laboratory

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

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

Taiga Batch No.:  
**170913**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP001-3**

Taiga Sample ID: **002**

Client Project: W2007L3-0001

Sample Type: Snare Lake

Received Date: 12-Sep-17

Sampling Date: 12-Sep-17

Sampling Time: 9:41

Location:

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	< 0.005	0.005	mg/L	15-Sep-17	SM4500-NH3:G	
Biochemical Oxygen Demand	< 2	2	mg/L	13-Sep-17	SM5210:B	
<b><u>Inorganics - Physicals</u></b>						
pH	6.98		pH units	12-Sep-17	SM4500-H:B	
Solids, Total Suspended	< 3	3	mg/L	15-Sep-17	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	11	1	CFU/100mL	12-Sep-17	SM9222:D	
<b><u>Organics</u></b>						
Hexane Extractable Material	< 2.0	2.0	mg/L	22-Sep-17	EPA1664A	
<b><u>Trace Metals, Total</u></b>						
Mercury	< 0.01	0.01	µg/L	19-Sep-17	EPA200.8	

ReportDate: Thursday, September 28, 2017

Print Date: *Thursday, September 28, 2017*

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.:  
**170913**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **SNP001-4**

Taiga Sample ID: **003**

Client Project: W2007L3-0001

Sample Type: Wetland

Received Date: 12-Sep-17

Sampling Date: 12-Sep-17

Sampling Time: 9:55

Location:

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Physicals</u></b>						
pH	7.49		pH units	12-Sep-17	SM4500-H:B	
Solids, Total Suspended	< 3	3	mg/L	15-Sep-17	SM2540:D	
<b><u>Trace Metals, Total</u></b>						
Aluminum	4.5	0.6	µg/L	19-Sep-17	EPA200.8	
Antimony	< 0.1	0.1	µg/L	19-Sep-17	EPA200.8	
Arsenic	0.2	0.2	µg/L	19-Sep-17	EPA200.8	
Barium	14.7	0.1	µg/L	19-Sep-17	EPA200.8	
Beryllium	< 0.1	0.1	µg/L	19-Sep-17	EPA200.8	
Cadmium	< 0.04	0.04	µg/L	19-Sep-17	EPA200.8	
Cesium	< 0.1	0.1	µg/L	19-Sep-17	EPA200.8	
Chromium	0.1	0.1	µg/L	19-Sep-17	EPA200.8	
Cobalt	< 0.1	0.1	µg/L	19-Sep-17	EPA200.8	
Copper	0.9	0.2	µg/L	19-Sep-17	EPA200.8	
Iron	54	5	µg/L	19-Sep-17	EPA200.8	
Lead	< 0.1	0.1	µg/L	19-Sep-17	EPA200.8	
Lithium	0.6	0.2	µg/L	19-Sep-17	EPA200.8	

ReportDate: Thursday, September 28, 2017

Print Date: **Thursday, September 28, 2017**



## Taiga Environmental Laboratory

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

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

Taiga Batch No.:  
**170913**

### - CERTIFICATE OF ANALYSIS -

---

Client Sample ID: **SNP001-4**

Taiga Sample ID: **003**

Manganese	20.2	0.1	µg/L	19-Sep-17	EPA200.8
Mercury	< 0.01	0.01	µg/L	19-Sep-17	EPA200.8
Molybdenum	0.2	0.1	µg/L	19-Sep-17	EPA200.8
Nickel	0.6	0.1	µg/L	19-Sep-17	EPA200.8
Rubidium	3.7	0.1	µg/L	19-Sep-17	EPA200.8
Selenium	< 0.3	0.3	µg/L	19-Sep-17	EPA200.8
Silver	< 0.1	0.1	µg/L	19-Sep-17	EPA200.8
Strontium	62.2	0.1	µg/L	19-Sep-17	EPA200.8
Thallium	< 0.1	0.1	µg/L	19-Sep-17	EPA200.8
Titanium	< 0.1	0.1	µg/L	19-Sep-17	EPA200.8
Uranium	0.3	0.1	µg/L	19-Sep-17	EPA200.8
Vanadium	0.1	0.1	µg/L	19-Sep-17	EPA200.8
Zinc	< 0.4	0.4	µg/L	19-Sep-17	EPA200.8

ReportDate: Thursday, September 28, 2017

Print Date: *Thursday, September 28, 2017*

*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.:**  
**170913**

### - CERTIFICATE OF ANALYSIS -

---

**Client Sample ID: SNP001-4**

**Taiga Sample ID: 003**

---

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SM - Standard Methods for the Examination of Water and Wastewater

EPA - United States Environmental Protection Agency

**ReportDate:** Thursday, September 28, 2017

**Print Date:** *Thursday, September 28, 2017*

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**Appendix to: Municipal Water License Annual Report**

**Community Government of Wekweeti**

**License #: W2007L3-0001**

**Reporting year: 2017**

**Expires: September 27, 2018**

**Items Included:**

1. 2017 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. July 2017 Sampling (6 pages)
  - b. August 2017 Sampling (6 pages)
  - c. September Sampling (6 pages)