

## Municipal Water Licence Annual Report

### Community Government of Behchokq

Licence #: W2014L3-0002

Reporting year: 2015

Expires: November 25, 2029

*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: 300,000 m<sup>3</sup>

Total volume withdrawn for reporting year: 112,383 m<sup>3</sup>

**Table 1(a): Monthly & annual quantities obtained from the raw water intake at the Edzo Water Supply Facility (SNP 2014-E1)**

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	4607		4607
February	1347		1347
March	1949		1949
April	1772		1772
May	4013		4013
June	2792		2792
July	2686		2686
August	2717		2717
September	2981		2981
October	3314		3314
November	3290		3290
December	2760		2760
TOTALS	34228		34228
% Increase/decrease from previous year	15% decrease		

**Table 1(b): Monthly & annual quantities obtained from the raw water intake at the Rae Water Supply Facility (SNP 2014-R1)**

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	5429		5429
February	7694		7694
March	8058		8058
April	8092		8092
May	5333		5333
June	6161		6161
July	5519		5519
August	5989		5989
September	6069		6069
October	5588		5588
November	8691		8691
December	5532		5532
TOTALS	78155		78155
% Increase/decrease from previous year	2.6% increase		

Reasons for increase/decrease:

Overall recorded water volumes were less in 2015 than in 2014.

As in 2014, continued freeze-up in West Channel, due to low water levels, resulted in the Edzo intake being inoperable for much of February, March and April in 2015. This resulted in the need to acquire raw water from Frank Channel during this period. This was supplemented from time to time with water deliveries from the Rae water plant. Total Edzo volumes for the additional water supply from Frank Channel and Rae are not available.

Over the latter part of 2015, the CGB acquired better equipment to deal with any future need to pump water from Frank Channel due to low water levels. In particular, a new raw water tanker truck with a capacity of 23,000 litres is now available.

The CGB continues to follow up on collection issues for outstanding water accounts in the community and these efforts have had some impact on water consumption and resultant overall lower raw water withdrawals.

## 2. Solid Waste Disposal

Approximate total yearly volume of solid waste deposited: 10,800 m<sup>3</sup>

**Table 2: Monthly and annual quantities of solid waste deposited based on population of 2,000**

Month	Volume of solid waste deposited (m <sup>3</sup> )
January	900
February	900
March	900
April	900
May	900
June	900
July	900
August	900
September	900
October	900
November	900
December	900
TOTALS	10,800
% Increase/decrease from previous year	N/A

*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*

*0.015 m<sup>3</sup> X 30 days X 2000 people = 900 m<sup>3</sup> of domestic trash deposited into Solid Waste Facility in a 30 day month*

**3. Sewage Deposited to Primary Sewage Cells**

**Table 3(a): Monthly and annual quantities deposited at Edzo Sewage Disposal Facility**

Month	Volume of sewage waste deposited (m <sup>3</sup> )		
	Pumper Truck	Utilidor	TOTAL
January			4607
February			1347
March			1949
April			1772
May			4013
June			2792
July			2686
August			2717
September			2981
October			3314
November			3290
December			2760
TOTALS			34228
Is this an estimated volume?			<b>YES</b>
% Increase/decrease from previous year			

*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.*

Has any sludge been removed during this reporting year? **NO**

**Table 3(b): Monthly and annual quantities deposited at Rae Sewage Disposal Facility**

Month	Volume of sewage waste deposited (m <sup>3</sup> )		
	Pumper Truck	Utilidor	TOTAL
January			5429
February			7694
March			8058
April			8092
May			5333
June			6161
July			5519
August			5989
September			6069
October			5588
November			8691
December			5532
TOTALS			78155
Is this an estimated volume?		<b>YES</b>	
% Increase/decrease from previous year			

*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.*

Has any sludge been removed during this reporting year? **NO**

**Decant dates and volume:**

The 2015 regularly scheduled annual decant of Cell 2 of the Rae lagoon began on October 6<sup>th</sup> and finished on October 13<sup>th</sup>. The decant process is not metered therefore actual volumes are not available.

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

As noted above, the Edzo intake was once again inoperable for many weeks in 2015. The CGB completed a plan of action in 2015 and submitted the Plan to the Board outlining the approach to be taken. The CGB implemented key components of the plan, as noted above.

## 5. Surveillance Network Program Data

As a result of the new Water Licence issued to the CGB in 2014, additional SNP locations were required in 2015, in particular in the area of the new and old solid waste sites and in Frank Channel. The CGB followed up on the considerable range and number of SNP sites throughout 2015. Attached are results for the 2015 SNP testing. The attachments are labelled by date and by SNP station, as follows:

- June8-SNP-R3
- June12-SNP-R3-R4
- June29-SNP-E2-E3
- July7-SNP-R5-R9-R10
- July7-SNP-EP1-EP2
- July7-SNP-E4-R5
- July8-SNP-R6-R7-R8
- July30-SNP-E2-E3-E4
- September8-SNP-E3-E4
- September17-SNP-R2-R3-RWTPsludge
- September30-SNP-R4
- October2-SNP-R6-R7-R8-R9-R10
- October8-SNP-R3
- October9-SNP-R4

## 6. SNP Sample Locations

The Community Government will work with the Board in finalizing an updated map showing exact locations of all SNP locations. Currently, the following information is available:

### Edzo

- SNP 2014-E1 – Raw water intake line at the water supply facilities serving Edzo
- SNP 2014-E2 – In the Sewage Disposal Facilities serving Edzo, immediately prior to flowing towards the overflow ditches ( N62 46 16.1 W116 01 35.6)
- SNP 2014-E3 – Point of junction at the outflow ditches from the Sewage Disposal Facilities serving Edzo (N62 46 16.1 W116 01 30.0)
- SNP 2014-E4 – In natural wetland system, immediately prior to entering Great Slave Lake (no coordinates recorded)
- SNP 2014-E5 (inactive unless E4 cannot be sampled) – Great Slave Lake downstream from Sewage Disposal Facilities serving Edzo (no coordinates recorded)

### Rae

- SNP 2014-R1 – Raw water intake line at the Water Supply Facilities serving Rae (no coordinates recorded)
- SNP 2014-R2 – Sewage Disposal Facilities Serving Rae near decant structure (N62 49 53.9 W116 00 33.9)
- SNP 2014-R3 – Point of outflow from the Sewage Disposal Facilities Serving Rae at the culvert crossing the Rae Access road (N62 49 43.9 W116 00 02.9)
- SNP 2014-R4 – At the end of Rae Wetland prior to entering Frank's Channel (N62 49 40.3 W117 13 50.2)

- SNP 2014-R5 – Run-off from old Solid Waste Disposal Facilities (north-west of Landfarm) (no coordinates recorded)
- SNP 2014-R6 – New Solid Waste Disposal Facilities (north of waste footprint) (coordinates TBD)
- SNP 2014-R7 – New Solid Waste Disposal Facilities (north-east of waste footprint, south-east of SNP station 2014-R6) (coordinates TBD)
- SNP 2014-R8 – New Solid Waste Disposal Facilities (south of waste footprint, north of waterbody) (coordinates TBD)
- SNP 2014-R9 – New Solid Waste Disposal Facilities (south of waste footprint, east of waterbody, south-east of SNP station 2014-R8) (coordinates TBD)

## **7. Unauthorized discharges**

In August 2015 a leak in the sewage forced main in Edzo occurred. Initial repairs to the pipe connections were not successful, resulting in the need to truck sewage from the lift station to the lagoon while awaiting more permanent repairs. Those repairs consisted of repairing a valve and installing the necessary gaskets.

## **8. Spill Training and Communications Exercises**

The Water Inspector assisted on several occasions with SNP testing in the community.

## **9. Closure and Reclamation**

In 2015 the CGB began construction of a new solid waste site and confirmed plans for the closure of the existing solid waste site. Both initiatives are being undertaken as per Board-approved plans, available on the Board’s website.

The CGB used, for the most part, in-house resources for the clearing of the new site as well as the hauling of materials for construction. The CGB also contracted professional project management (through BluMetric Engineering) to oversee construction and to ensure that the specifications for the project are in accordance with approved plans.

Owing to late thaw of clay construction materials, as well as to frequent rains throughout the summer, which made the site difficult to work, the new solid waste site was not entirely finished prior to freeze up. It will be finished in 2016 and it is planned that closure work on the existing site will also begin.

## **10. Studies requested by the Board**

As noted above, at the time the Board approved alternate water sources for Rae and Edzo in late 2014, the Board required that a plan for long term water use in Edzo and Rae be submitted. The CGB submitted a plan to the Board in April, 2015. The plan is posted on the Board’s Public Registry.

## **11. Updates or revisions to approved plans**

N/A

## **12. Other Information**

The focus of the CGB in 2015 was on construction of the new SWS. The project consumed available labour, equipment and funds, as well as requiring significant coordination between this project and other public works projects in the community.

As a result, finalizing an operating plan for the existing land farm site as well as completion of a geotechnical inspection of the Rae and Edzo sewage disposal facilities' berms and control structures, were held over until 2016.





**Taiga Environmental Laboratory**  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

**Taiga Batch No.:**  
**150345**

**- FINAL REPORT -**

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**Prepared For:** Community Government of Behchoko

**Address:** P.O. Box 68  
Behchoko, NT  
X0E 0Y0

**Attn:** Galvin Simpson

**Facsimile:** (867) 392-6967

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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:** Friday, June 19, 2015

**Print Date:** *Friday, June 19, 2015*

*Page 1 of 4*



## Taiga Environmental Laboratory

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Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150345**

### - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP-R3**

Taiga Sample ID: **001**

**Client Project:**

**Sample Type:** Sewage

**Received Date:** 08-Jun-15

**Sampling Date:** 08-Jun-15

**Sampling Time:** 11:30

**Location:** Behchoko R3

**Report Status:** Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	1.63	0.005	mg/L	12-Jun-15	SM4500-NH3:G	
Biochemical Oxygen Demand	8	2	mg/L	10-Jun-15	SM5210:B	
Chemical Oxygen Demand	77	5	mg/L	09-Jun-15	SM5220:D	
Phosphorous, Total	0.439	0.002	mg/L	11-Jun-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Alkalinity, Total (as CaCO <sub>3</sub> )	152	0.4	mg/L	08-Jun-15	SM2320:B	
pH	7.50		pH units	08-Jun-15	SM4500-H:B	
Solids, Total Suspended	28	3	mg/L	09-Jun-15	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	< 1	1	CFU/100mL	08-Jun-15	SM9222:D	
<b><u>Trace Metals, Total</u></b>						
Aluminum	507	5	µg/L	18-Jun-15	EPA200.8	
Antimony	0.1	0.1	µg/L	18-Jun-15	EPA200.8	
Arsenic	1.6	0.2	µg/L	18-Jun-15	EPA200.8	
Barium	84.4	0.1	µg/L	18-Jun-15	EPA200.8	

**ReportDate:** Friday, June 19, 2015

**Print Date:** *Friday, June 19, 2015*



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## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP-R3**

Taiga Sample ID: **001**

Beryllium	< 0.1	0.1	µg/L	18-Jun-15	EPA200.8
Cadmium	0.3	0.1	µg/L	18-Jun-15	EPA200.8
Cesium	< 0.1	0.1	µg/L	18-Jun-15	EPA200.8
Chromium	1.2	0.1	µg/L	18-Jun-15	EPA200.8
Cobalt	2.7	0.1	µg/L	18-Jun-15	EPA200.8
Copper	6.4	0.2	µg/L	18-Jun-15	EPA200.8
Iron	2060	5	µg/L	18-Jun-15	EPA200.8
Lead	0.5	0.1	µg/L	18-Jun-15	EPA200.8
Lithium	11.6	0.2	µg/L	18-Jun-15	EPA200.8
Manganese	772	0.1	µg/L	18-Jun-15	EPA200.8
Molybdenum	7.0	0.1	µg/L	18-Jun-15	EPA200.8
Nickel	2.7	0.1	µg/L	18-Jun-15	EPA200.8
Rubidium	13.1	0.1	µg/L	18-Jun-15	EPA200.8
Selenium	0.7	0.5	µg/L	18-Jun-15	EPA200.8
Silver	0.1	0.1	µg/L	18-Jun-15	EPA200.8
Strontium	737	0.1	µg/L	18-Jun-15	EPA200.8
Thallium	< 0.1	0.1	µg/L	18-Jun-15	EPA200.8
Titanium	18.2	0.1	µg/L	18-Jun-15	EPA200.8
Uranium	74.8	0.1	µg/L	18-Jun-15	EPA200.8
Vanadium	1.8	0.1	µg/L	18-Jun-15	EPA200.8
Zinc	2160	5	µg/L	18-Jun-15	EPA200.8

ReportDate: Friday, June 19, 2015

Print Date: *Friday, June 19, 2015*

*Page 3 of 4*



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### - CERTIFICATE OF ANALYSIS -

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Client Sample ID: **SNP-R3**

Taiga Sample ID: **001**

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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

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*Page 4 of 4*



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**Taiga Batch No.:**  
**150371**

**- FINAL REPORT -**

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**Prepared For:** Community Government of Behchoko

**Address:** P.O. Box 68  
Behchoko, NT  
X0E 0Y0

**Attn:** Galvin Simpson

**Facsimile:** (867) 392-6967

---

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

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

---

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

---

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**ReportDate:** Thursday, June 25, 2015

**Print Date:** *Thursday, June 25, 2015*

*Page 1 of 6*



# Taiga Environmental Laboratory

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Taiga Batch No.:  
**150371**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **R3**

Taiga Sample ID: **001**

**Client Project:**

**Sample Type:** Sewage

**Received Date:** 12-Jun-15

**Sampling Date:** 12-Jun-15

**Sampling Time:**

**Location:**

**Report Status:** Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	0.241	0.005	mg/L	19-Jun-15	SM4500-NH3:G	
Biochemical Oxygen Demand	17	2	mg/L	12-Jun-15	SM5210:B	
CBOD	17	2	mg/L	12-Jun-15	SM5210:B	
Chemical Oxygen Demand	85	5	mg/L	15-Jun-15	SM5220:D	
Phosphorous, Total	3.34	0.002	mg/L	23-Jun-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
pH	8.75		pH units	12-Jun-15	SM4500-H:B	
Solids, Total Suspended	22	3	mg/L	15-Jun-15	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	4	1	CFU/100mL	12-Jun-15	SM9222:D	
Coliforms, Total	>2420	1.0	MPN/100mL	12-Jun-15	SM9223:B	74
<b><u>Trace Metals, Total</u></b>						
Aluminum	185	5	µg/L	24-Jun-15	EPA200.8	
Antimony	0.2	0.1	µg/L	24-Jun-15	EPA200.8	
Arsenic	2.9	0.2	µg/L	24-Jun-15	EPA200.8	

**ReportDate:** Thursday, June 25, 2015

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Taiga Batch No.:  
**150371**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **R3**

Taiga Sample ID: **001**

Barium	26.7	0.1	µg/L	24-Jun-15	EPA200.8
Beryllium	< 0.1	0.1	µg/L	24-Jun-15	EPA200.8
Cadmium	< 0.1	0.1	µg/L	24-Jun-15	EPA200.8
Cesium	< 0.1	0.1	µg/L	24-Jun-15	EPA200.8
Chromium	0.8	0.1	µg/L	24-Jun-15	EPA200.8
Cobalt	0.6	0.1	µg/L	24-Jun-15	EPA200.8
Copper	1.7	0.2	µg/L	24-Jun-15	EPA200.8
Iron	395	5	µg/L	24-Jun-15	EPA200.8
Lead	0.2	0.1	µg/L	24-Jun-15	EPA200.8
Lithium	7.5	0.2	µg/L	24-Jun-15	EPA200.8
Manganese	169	0.1	µg/L	24-Jun-15	EPA200.8
Molybdenum	0.6	0.1	µg/L	24-Jun-15	EPA200.8
Nickel	2.0	0.1	µg/L	24-Jun-15	EPA200.8
Rubidium	12.2	0.1	µg/L	24-Jun-15	EPA200.8
Selenium	< 0.5	0.5	µg/L	24-Jun-15	EPA200.8
Silver	< 0.1	0.1	µg/L	24-Jun-15	EPA200.8
Strontium	96.2	0.1	µg/L	24-Jun-15	EPA200.8
Thallium	< 0.1	0.1	µg/L	24-Jun-15	EPA200.8
Titanium	6.1	0.1	µg/L	24-Jun-15	EPA200.8
Uranium	1.5	0.1	µg/L	24-Jun-15	EPA200.8
Vanadium	1.4	0.1	µg/L	24-Jun-15	EPA200.8
Zinc	8.1	5	µg/L	24-Jun-15	EPA200.8

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*Page 3 of 6*



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Taiga Batch No.:  
**150371**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **R4**

Taiga Sample ID: **002**

**Client Project:**

**Sample Type:** Freshwater/Sewage

**Received Date:** 12-Jun-15

**Sampling Date:** 12-Jun-15

**Sampling Time:**

**Location:**

**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	19-Jun-15	SM4500-NH3:G	
Biochemical Oxygen Demand	8	2	mg/L	12-Jun-15	SM5210:B	
CBOD	8	2	mg/L	12-Jun-15	SM5210:B	
Chemical Oxygen Demand	44	5	mg/L	15-Jun-15	SM5220:D	
Phosphorous, Total	1.62	0.002	mg/L	23-Jun-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
pH	7.93		pH units	12-Jun-15	SM4500-H:B	
Solids, Total Suspended	38	3	mg/L	15-Jun-15	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	30	1	CFU/100mL	12-Jun-15	SM9222:D	
Coliforms, Total	365	1.0	MPN/100mL	12-Jun-15	SM9223:B	
<b><u>Trace Metals, Total</u></b>						
Aluminum	702	5	µg/L	24-Jun-15	EPA200.8	
Antimony	< 0.1	0.1	µg/L	24-Jun-15	EPA200.8	
Arsenic	3.3	0.2	µg/L	24-Jun-15	EPA200.8	
Barium	31.4	0.1	µg/L	24-Jun-15	EPA200.8	

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**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **R4**

Taiga Sample ID: **002**

Beryllium	< 0.1	0.1	µg/L	24-Jun-15	EPA200.8
Cadmium	0.1	0.1	µg/L	24-Jun-15	EPA200.8
Cesium	< 0.1	0.1	µg/L	24-Jun-15	EPA200.8
Chromium	1.6	0.1	µg/L	24-Jun-15	EPA200.8
Cobalt	0.6	0.1	µg/L	24-Jun-15	EPA200.8
Copper	1.5	0.2	µg/L	24-Jun-15	EPA200.8
Iron	1920	5	µg/L	24-Jun-15	EPA200.8
Lead	0.4	0.1	µg/L	24-Jun-15	EPA200.8
Lithium	7.9	0.2	µg/L	24-Jun-15	EPA200.8
Manganese	221	0.1	µg/L	24-Jun-15	EPA200.8
Molybdenum	0.3	0.1	µg/L	24-Jun-15	EPA200.8
Nickel	2.0	0.1	µg/L	24-Jun-15	EPA200.8
Rubidium	6.2	0.1	µg/L	24-Jun-15	EPA200.8
Selenium	0.6	0.5	µg/L	24-Jun-15	EPA200.8
Silver	< 0.1	0.1	µg/L	24-Jun-15	EPA200.8
Strontium	103	0.1	µg/L	24-Jun-15	EPA200.8
Thallium	< 0.1	0.1	µg/L	24-Jun-15	EPA200.8
Titanium	29.3	0.1	µg/L	24-Jun-15	EPA200.8
Uranium	0.6	0.1	µg/L	24-Jun-15	EPA200.8
Vanadium	2.0	0.1	µg/L	24-Jun-15	EPA200.8
Zinc	< 5.0	5	µg/L	24-Jun-15	EPA200.8

ReportDate: Thursday, June 25, 2015

Print Date: *Thursday, June 25, 2015*

*Page 5 of 6*



Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:

150371

**- CERTIFICATE OF ANALYSIS -**

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Client Sample ID: **R4**

Taiga Sample ID: **002**

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**- DATA QUALIFIERS -**

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*Data Qualifier Descriptions:*

**74**      *Unable to repeat analysis at higher dilution. Holding time exceeded.*

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

SM - Standard Methods for the Examination of Water and Wastewater

EPA - United States Environmental Protection Agency

ReportDate: Thursday, June 25, 2015

Print Date: *Thursday, June 25, 2015*

*Page 6 of 6*



**Taiga Environmental Laboratory**  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

**Taiga Batch No.:**  
**150438**

**- FINAL REPORT -**

---

**Prepared For:** Community Government of Behchoko

**Address:** P.O. Box 68  
Behchoko, NT  
X0E 0Y0

**Attn:** Galvin Simpson

**Facsimile:** (867) 392-6967

---

**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.
- 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:** Monday, July 13, 2015

**Print Date:** *Tuesday, July 14, 2015*

*Page 1 of 6*



# Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150438**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **E2**

Taiga Sample ID: **001**

**Client Project:**

**Sample Type:** Sewage

**Received Date:** 30-Jun-15

**Sampling Date:** 29-Jun-15

**Sampling Time:** 15:15

**Location:** Edzo Lagoon

**Report Status:** Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	0.652	0.005	mg/L	30-Jun-15	SM4500-NH3:G	
Biochemical Oxygen Demand	39	2	mg/L	30-Jun-15	SM5210:B	
Chemical Oxygen Demand	124	5	mg/L	02-Jul-15	SM5220:D	
Phosphorous, Total	0.642	0.002	mg/L	03-Jul-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	423	0.4	µS/cm	30-Jun-15	SM2510:B	
pH	9.65		pH units	30-Jun-15	SM4500-H:B	
Solids, Total Suspended	51	3	mg/L	30-Jun-15	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	210	10	CFU/100mL	30-Jun-15	SM9222:D	
<b><u>Organics</u></b>						
Hexane Extractable Material		2.0	mg/L		EPA1664A	16
<b><u>Trace Metals, Total</u></b>						
Aluminum	775	5	µg/L	12-Jul-15	EPA200.8	
Antimony	0.4	0.1	µg/L	12-Jul-15	EPA200.8	

**ReportDate:** Monday, July 13, 2015

**Print Date:** *Tuesday, July 14, 2015*



Taiga Environmental Laboratory  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150438**

**- CERTIFICATE OF ANALYSIS -**

**Client Sample ID: E2**

**Taiga Sample ID: 001**

Arsenic	1.0	0.2	µg/L	12-Jul-15	EPA200.8
Barium	26.6	0.1	µg/L	12-Jul-15	EPA200.8
Beryllium	< 0.1	0.1	µg/L	12-Jul-15	EPA200.8
Cadmium	0.3	0.1	µg/L	12-Jul-15	EPA200.8
Cesium	< 0.1	0.1	µg/L	12-Jul-15	EPA200.8
Chromium	0.5	0.1	µg/L	12-Jul-15	EPA200.8
Cobalt	< 0.1	0.1	µg/L	12-Jul-15	EPA200.8
Copper	17.0	0.2	µg/L	12-Jul-15	EPA200.8
Iron	156	5	µg/L	12-Jul-15	EPA200.8
Lead	< 0.1	0.1	µg/L	12-Jul-15	EPA200.8
Lithium	8.9	0.2	µg/L	12-Jul-15	EPA200.8
Manganese	103	0.1	µg/L	12-Jul-15	EPA200.8
Molybdenum	10.7	0.1	µg/L	12-Jul-15	EPA200.8
Nickel	1.6	0.1	µg/L	12-Jul-15	EPA200.8
Rubidium	9.7	0.1	µg/L	12-Jul-15	EPA200.8
Selenium	1.5	0.5	µg/L	12-Jul-15	EPA200.8
Silver	< 0.1	0.1	µg/L	12-Jul-15	EPA200.8
Strontium	171	0.1	µg/L	12-Jul-15	EPA200.8
Thallium	< 0.1	0.1	µg/L	12-Jul-15	EPA200.8
Titanium	2.7	0.1	µg/L	12-Jul-15	EPA200.8
Uranium	0.3	0.1	µg/L	12-Jul-15	EPA200.8
Vanadium	< 0.1	0.1	µg/L	12-Jul-15	EPA200.8
Zinc	13.1	5	µg/L	12-Jul-15	EPA200.8

**ReportDate:** Monday, July 13, 2015

**Print Date:** *Tuesday, July 14, 2015*

*Page 3 of 6*



# Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150438**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **E3**

Taiga Sample ID: **002**

**Client Project:**

**Sample Type:** Sewage

**Received Date:** 30-Jun-15

**Sampling Date:** 29-Jun-15

**Sampling Time:** 15:15

**Location:** Wetlands

**Report Status:** Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	22.9	0.005	mg/L	13-Jul-15	SM4500-NH3:G	
Biochemical Oxygen Demand	>96.6	2	mg/L	30-Jun-15	SM5210:B	55
Chemical Oxygen Demand	534	50	mg/L	02-Jul-15	SM5220:D	
Phosphorous, Total	8.18	0.002	mg/L	03-Jul-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
pH	7.22		pH units	30-Jun-15	SM4500-H:B	
Solids, Total Suspended	1240	3	mg/L	30-Jun-15	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	80000	1000	CFU/100mL	30-Jun-15	SM9222:D	
<b><u>Trace Metals, Total</u></b>						
Aluminum	2420	5	µg/L	12-Jul-15	EPA200.8	
Antimony	0.7	0.1	µg/L	12-Jul-15	EPA200.8	
Arsenic	1.5	0.2	µg/L	12-Jul-15	EPA200.8	
Barium	70.9	0.1	µg/L	12-Jul-15	EPA200.8	
Beryllium	< 0.1	0.1	µg/L	12-Jul-15	EPA200.8	
Cadmium	0.5	0.1	µg/L	12-Jul-15	EPA200.8	

**ReportDate:** Monday, July 13, 2015

**Print Date:** *Tuesday, July 14, 2015*



Taiga Environmental Laboratory  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150438**

**- CERTIFICATE OF ANALYSIS -**

**Client Sample ID: E3**

**Taiga Sample ID: 002**

Cesium	< 0.1	0.1	µg/L	12-Jul-15	EPA200.8
Chromium	2.1	0.1	µg/L	12-Jul-15	EPA200.8
Cobalt	0.9	0.1	µg/L	12-Jul-15	EPA200.8
Copper	132	0.2	µg/L	12-Jul-15	EPA200.8
Iron	1850	5	µg/L	12-Jul-15	EPA200.8
Lead	1.4	0.1	µg/L	12-Jul-15	EPA200.8
Lithium	8.1	0.2	µg/L	12-Jul-15	EPA200.8
Manganese	134	0.1	µg/L	12-Jul-15	EPA200.8
Molybdenum	21.0	0.1	µg/L	12-Jul-15	EPA200.8
Nickel	3.4	0.1	µg/L	12-Jul-15	EPA200.8
Rubidium	11.7	0.1	µg/L	12-Jul-15	EPA200.8
Selenium	1.0	0.5	µg/L	12-Jul-15	EPA200.8
Silver	0.2	0.1	µg/L	12-Jul-15	EPA200.8
Strontium	181	0.1	µg/L	12-Jul-15	EPA200.8
Thallium	< 0.1	0.1	µg/L	12-Jul-15	EPA200.8
Titanium	21.6	0.1	µg/L	12-Jul-15	EPA200.8
Uranium	0.4	0.1	µg/L	12-Jul-15	EPA200.8
Vanadium	1.1	0.1	µg/L	12-Jul-15	EPA200.8
Zinc	128	5	µg/L	12-Jul-15	EPA200.8

**ReportDate:** Monday, July 13, 2015

**Print Date:** *Tuesday, July 14, 2015*

*Page 5 of 6*



Taiga Environmental Laboratory  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150438**

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**- CERTIFICATE OF ANALYSIS -**

---

Client Sample ID: **E3**

Taiga Sample ID: **002**

---

**- DATA QUALIFIERS -**

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*Data Qualifier Descriptions:*

- 16 *Test requested but no sample bottle received*
- 55 *BOD result is inconclusive; residual DO was less than 1 mg/L. For evaluation purposes only.*

**\* 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: Monday, July 13, 2015

Print Date: *Tuesday, July 14, 2015*

*Page 6 of 6*





**Taiga Environmental Laboratory**  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

**Taiga Batch No.:**  
**150479**

**- FINAL REPORT -**

---

**Prepared For:** Community Government of Behchoko

**Address:** P.O. Box 68  
Behchoko, NT  
X0E 0Y0

**Attn:** Galvin Simpson

**Facsimile:** (867) 392-6967

---

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

A handwritten signature in black ink, appearing to read 'Glen Hudy', is written over a horizontal line.

**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:** Wednesday, July 29, 2015

**Print Date:** *Wednesday, July 29, 2015*

*Page 1 of 7*



## Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150479**

### - CERTIFICATE OF ANALYSIS -

Client Sample ID: **E4**

Taiga Sample ID: **001**

**Client Project:**

**Sample Type:** Sewage

**Received Date:** 06-Jul-15

**Sampling Date:** 06-Jul-15

**Sampling Time:** 14:00

**Location:** E4

**Report Status:** Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	0.033	0.005	mg/L	08-Jul-15	SM4500-NH3:G	
Biochemical Oxygen Demand	3	2	mg/L	06-Jul-15	SM5210:B	
Chemical Oxygen Demand	69	5	mg/L	07-Jul-15	SM5220:D	
Phosphorous, Total	0.300	0.002	mg/L	14-Jul-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
pH	7.40		pH units	06-Jul-15	SM4500-H:B	
Solids, Total Suspended	4	3	mg/L	08-Jul-15	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	4	1	CFU/100mL	07-Jul-15	SM9222:D	
<b><u>Trace Metals, Total</u></b>						
Aluminum	11.4	5	µg/L	22-Jul-15	EPA200.8	
Antimony	0.1	0.1	µg/L	22-Jul-15	EPA200.8	
Arsenic	1.1	0.2	µg/L	22-Jul-15	EPA200.8	
Barium	20.5	0.1	µg/L	22-Jul-15	EPA200.8	
Beryllium	< 0.1	0.1	µg/L	22-Jul-15	EPA200.8	

**ReportDate:** Wednesday, July 29, 2015

**Print Date:** *Wednesday, July 29, 2015*

*Page 2 of 7*



Taiga Environmental Laboratory  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150479**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **E4**

Taiga Sample ID: **001**

Cadmium	0.3	0.1	µg/L	22-Jul-15	EPA200.8
Cesium	< 0.1	0.1	µg/L	22-Jul-15	EPA200.8
Chromium	0.6	0.1	µg/L	22-Jul-15	EPA200.8
Cobalt	0.4	0.1	µg/L	22-Jul-15	EPA200.8
Copper	1.0	0.2	µg/L	22-Jul-15	EPA200.8
Iron	134	5	µg/L	22-Jul-15	EPA200.8
Lead	0.5	0.1	µg/L	22-Jul-15	EPA200.8
Lithium	16.8	0.2	µg/L	22-Jul-15	EPA200.8
Manganese	115	0.1	µg/L	22-Jul-15	EPA200.8
Molybdenum	0.2	0.1	µg/L	22-Jul-15	EPA200.8
Nickel	2.3	0.1	µg/L	22-Jul-15	EPA200.8
Rubidium	1.8	0.1	µg/L	22-Jul-15	EPA200.8
Selenium	< 0.5	0.5	µg/L	22-Jul-15	EPA200.8
Silver	0.1	0.1	µg/L	22-Jul-15	EPA200.8
Strontium	425	0.1	µg/L	22-Jul-15	EPA200.8
Thallium	< 0.1	0.1	µg/L	22-Jul-15	EPA200.8
Titanium	0.5	0.1	µg/L	22-Jul-15	EPA200.8
Uranium	0.1	0.1	µg/L	22-Jul-15	EPA200.8
Vanadium	< 0.1	0.1	µg/L	22-Jul-15	EPA200.8
Zinc	< 5.0	5	µg/L	22-Jul-15	EPA200.8

ReportDate: Wednesday, July 29, 2015

Print Date: *Wednesday, July 29, 2015*

*Page 3 of 7*



# Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150479**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **R5**

Taiga Sample ID: **002**

**Client Project:**

**Sample Type:** Groundwater

**Received Date:** 06-Jul-15

**Sampling Date:** 06-Jul-15

**Sampling Time:** 14:00

**Location:** R5

**Report Status:** Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Phosphorous, Total	0.272	0.002	mg/L	14-Jul-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	1320	0.4	µS/cm	06-Jul-15	SM2510:B	
pH	8.26		pH units	06-Jul-15	SM4500-H:B	
Solids, Total Suspended	26	3	mg/L	08-Jul-15	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	3	1	CFU/100mL	07-Jul-15	SM9222:D	
<b><u>Organics</u></b>						
Hexane Extractable Material	< 2.0	2.0	mg/L		EPA1664A	
<b><u>Subcontracted Organics</u></b>						
Benzene		0.0005	mg/L		EPA 5021	16
Ethylbenzene		0.0005	mg/L		EPA 5021	16
Phenols, Total	0.0068	0.001	mg/L	15-Jul-15	AB ENV.06537	
Toluene		0.0005	mg/L		EPA 5021	16
Xylenes		0.00071	mg/L		EPA 5021	16
<b><u>Trace Metals, Total</u></b>						

**ReportDate:** Wednesday, July 29, 2015

**Print Date:** *Wednesday, July 29, 2015*



# Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:

150479

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **R5**

Taiga Sample ID: **002**

Aluminum	683	5	µg/L	22-Jul-15	EPA200.8
Antimony	0.1	0.1	µg/L	22-Jul-15	EPA200.8
Arsenic	3.3	0.2	µg/L	22-Jul-15	EPA200.8
Barium	94.1	0.1	µg/L	22-Jul-15	EPA200.8
Beryllium	< 0.1	0.1	µg/L	22-Jul-15	EPA200.8
Cadmium	0.2	0.1	µg/L	22-Jul-15	EPA200.8
Cesium	< 0.1	0.1	µg/L	22-Jul-15	EPA200.8
Chromium	1.7	0.1	µg/L	22-Jul-15	EPA200.8
Cobalt	0.6	0.1	µg/L	22-Jul-15	EPA200.8
Copper	1.4	0.2	µg/L	22-Jul-15	EPA200.8
Iron	786	5	µg/L	22-Jul-15	EPA200.8
Lead	0.8	0.1	µg/L	22-Jul-15	EPA200.8
Lithium	15.8	0.2	µg/L	22-Jul-15	EPA200.8
Manganese	112	0.1	µg/L	22-Jul-15	EPA200.8
Molybdenum	0.5	0.1	µg/L	22-Jul-15	EPA200.8
Nickel	1.4	0.1	µg/L	22-Jul-15	EPA200.8
Rubidium	2.8	0.1	µg/L	22-Jul-15	EPA200.8
Selenium	< 0.5	0.5	µg/L	22-Jul-15	EPA200.8
Silver	0.1	0.1	µg/L	22-Jul-15	EPA200.8
Strontium	321	0.1	µg/L	22-Jul-15	EPA200.8
Thallium	< 0.1	0.1	µg/L	22-Jul-15	EPA200.8
Titanium	27.7	0.1	µg/L	22-Jul-15	EPA200.8
Uranium	1.8	0.1	µg/L	22-Jul-15	EPA200.8
Vanadium	1.5	0.1	µg/L	22-Jul-15	EPA200.8
Zinc	< 5.0	5	µg/L	22-Jul-15	EPA200.8

ReportDate: Wednesday, July 29, 2015

Print Date: *Wednesday, July 29, 2015*



## Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

**Taiga Batch No.:**

**150479**

### - CERTIFICATE OF ANALYSIS -

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**Client Sample ID: R5**

**Taiga Sample ID: 002**

**ReportDate:** Wednesday, July 29, 2015

**Print Date:** *Wednesday, July 29, 2015*

*Page 6 of 7*



Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:

150479

**- CERTIFICATE OF ANALYSIS -**

---

Client Sample ID: **R5**

Taiga Sample ID: **002**

---

**- DATA QUALIFIERS -**

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*Data Qualifier Descriptions:*

**16**      *Test requested but no sample bottle received*

**\* 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 29, 2015

Print Date: *Wednesday, July 29, 2015*

*Page 7 of 7*



**Taiga Environmental Laboratory**  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

**Taiga Batch No.:**  
**150489**

**- FINAL REPORT -**

---

**Prepared For:** Community Government of Behchoko

**Address:** P.O. Box 68  
Behchoko, NT  
X0E 0Y0

**Attn:** Bruce Leblanc

**Facsimile:** (867) 392-6967

---

**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.
- 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:** Monday, July 27, 2015

**Print Date:** *Monday, July 27, 2015*

*Page 1 of 6*





## Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150489**

### - CERTIFICATE OF ANALYSIS -

Client Sample ID: **EP1**

Taiga Sample ID: **001**

Client Project: WL2014L3-0002

Sample Type: Freshwater

Received Date: 08-Jul-15

Sampling Date: 07-Jul-15

Sampling Time: 13:30

Location:

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Phosphorous, Total	0.338	0.002	mg/L	14-Jul-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	709	0.4	µS/cm	08-Jul-15	SM2510:B	
pH	8.07		pH units	08-Jul-15	SM4500-H:B	
Solids, Total Suspended	6	3	mg/L	08-Jul-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	48.5	0.1	mg/L	09-Jul-15	SM4110:B	
Magnesium	49.5	0.1	mg/L	09-Jul-15	SM4110:B	
Potassium	9.4	0.1	mg/L	09-Jul-15	SM4110:B	
Sodium	36.3	0.1	mg/L	09-Jul-15	SM4110:B	
Sulphate	32	1	mg/L	09-Jul-15	SM4110:B	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	8	1	CFU/100mL	08-Jul-15	SM9222:D	
<b><u>Organics</u></b>						
Hexane Extractable Material	< 2.0	2.0	mg/L	15-Jul-15	EPA1664A	

ReportDate: Monday, July 27, 2015

Print Date: **Monday, July 27, 2015**



Taiga Environmental Laboratory  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150489**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **EP1**

Taiga Sample ID: **001**

**Subcontracted Organics**

Benzene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
Ethylbenzene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
F1: C6-C10	< 0.10	0.1	mg/L	13-Jul-15	CCME CWS PHC
F2: C10-C16	< 0.25	0.25	mg/L	16-Jul-15	EPA3510
F3: C16-C34	< 0.25	0.25	mg/L	16-Jul-15	EPA3510
F4: C34-C50	< 0.25	0.25	mg/L	16-Jul-15	EPA3510
Phenols, Total	0.0033	0.001	mg/L	15-Jul-15	AB ENV.06537
Toluene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
Xylenes	< 0.00071	0.00071	mg/L	13-Jul-15	EPA 5021

**Trace Metals, Total**

Cadmium	0.3	0.1	µg/L	23-Jul-15	EPA200.8
Chromium	0.7	0.1	µg/L	23-Jul-15	EPA200.8
Copper	0.7	0.2	µg/L	23-Jul-15	EPA200.8
Iron	347	5	µg/L	23-Jul-15	EPA200.8
Lead	< 0.1	0.1	µg/L	23-Jul-15	EPA200.8
Mercury	< 0.01	0.01	µg/L	23-Jul-15	EPA200.8
Nickel	2.3	0.1	µg/L	23-Jul-15	EPA200.8
Zinc	< 5.0	5	µg/L	23-Jul-15	EPA200.8

ReportDate: Monday, July 27, 2015

Print Date: *Monday, July 27, 2015*



Taiga Environmental Laboratory  
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Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150489**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **EP2**

Taiga Sample ID: **002**

Client Project: WL2014L3-0002

Sample Type: Freshwater

Received Date: 08-Jul-15

Sampling Date: 07-Jul-15

Sampling Time: 13:30

Location:

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Nutrients</u></b>						
Phosphorous, Total	0.269	0.002	mg/L	14-Jul-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	1630	0.4	µS/cm	08-Jul-15	SM2510:B	
pH	7.60		pH units	08-Jul-15	SM4500-H:B	
Solids, Total Suspended	5	3	mg/L	08-Jul-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	88.1	0.1	mg/L	09-Jul-15	SM4110:B	
Magnesium	79.3	0.1	mg/L	09-Jul-15	SM4110:B	
Potassium	24.6	0.1	mg/L	09-Jul-15	SM4110:B	
Sodium	144	0.1	mg/L	09-Jul-15	SM4110:B	
Sulphate	143	1	mg/L	09-Jul-15	SM4110:B	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	4	1	CFU/100mL	08-Jul-15	SM9222:D	
<b><u>Organics</u></b>						
Hexane Extractable Material	< 2.0	2.0	mg/L	15-Jul-15	EPA1664A	
<b><u>Subcontracted Organics</u></b>						

ReportDate: Monday, July 27, 2015

Print Date: **Monday, July 27, 2015**



Taiga Environmental Laboratory  
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Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150489**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **EP2**

Taiga Sample ID: **002**

Benzene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
Ethylbenzene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
F1: C6-C10	< 0.10	0.1	mg/L	13-Jul-15	CCME CWS PHC
F2: C10-C16	< 0.25	0.25	mg/L	16-Jul-15	EPA3510
F3: C16-C34	0.97	0.25	mg/L	16-Jul-15	EPA3510
F4: C34-C50	< 0.25	0.25	mg/L	16-Jul-15	EPA3510
Phenols, Total	0.0045	0.001	mg/L	15-Jul-15	AB ENV.06537
Toluene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
Xylenes	< 0.00071	0.00071	mg/L	13-Jul-15	EPA 5021
<b><u>Trace Metals, Total</u></b>					
Cadmium	0.3	0.1	µg/L	23-Jul-15	EPA200.8
Chromium	0.8	0.1	µg/L	23-Jul-15	EPA200.8
Copper	0.4	0.2	µg/L	23-Jul-15	EPA200.8
Iron	237	5	µg/L	23-Jul-15	EPA200.8
Lead	< 0.1	0.1	µg/L	23-Jul-15	EPA200.8
Mercury	< 0.01	0.01	µg/L	23-Jul-15	EPA200.8
Nickel	3.0	0.1	µg/L	23-Jul-15	EPA200.8
Zinc	6.3	5	µg/L	23-Jul-15	EPA200.8

ReportDate: Monday, July 27, 2015

Print Date: *Monday, July 27, 2015*

*Page 5 of 6*



## Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:

**150489**

### - CERTIFICATE OF ANALYSIS -

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Client Sample ID: **EP2**

Taiga Sample ID: **002**

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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: Monday, July 27, 2015

Print Date: *Monday, July 27, 2015*

*Page 6 of 6*



**Taiga Environmental Laboratory**  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

**Taiga Batch No.:**  
**150488**

**- FINAL REPORT -**

---

**Prepared For:** Community Government of Behchoko

**Address:** P.O. Box 68  
Behchoko, NT  
X0E 0Y0

**Attn:** Bruce Leblanc

**Facsimile:** (867) 392-6967

---

**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.
- 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:** Monday, July 27, 2015

**Print Date:** *Monday, July 27, 2015*

*Page 1 of 8*



## Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150488**

### - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP-2014-R5**

Taiga Sample ID: **001**

Client Project: W2014L3-0002

Sample Type: Freshwater

Received Date: 08-Jul-15

Sampling Date: 07-Jul-15

Sampling Time: 13:00

Location: N of Behchoko Landfill

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Phosphorous, Total	0.063	0.002	mg/L	14-Jul-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	1300	0.4	µS/cm	08-Jul-15	SM2510:B	
pH	8.40		pH units	08-Jul-15	SM4500-H:B	
Solids, Total Suspended	6	3	mg/L	08-Jul-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	71.1	0.1	mg/L	09-Jul-15	SM4110:B	
Magnesium	64.4	0.1	mg/L	09-Jul-15	SM4110:B	
Potassium	10.4	0.1	mg/L	09-Jul-15	SM4110:B	
Sodium	121	0.1	mg/L	09-Jul-15	SM4110:B	
Sulphate	29	1	mg/L	09-Jul-15	SM4110:B	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	< 1	1	CFU/100mL	08-Jul-15	SM9222:D	
<b><u>Organics</u></b>						
Hexane Extractable Material	< 2.0	2.0	mg/L	15-Jul-15	EPA1664A	

ReportDate: Monday, July 27, 2015

Print Date: **Monday, July 27, 2015**

Page 2 of 8



Taiga Environmental Laboratory  
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Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150488**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **SNP-2014-R5**

Taiga Sample ID: **001**

**Subcontracted Organics**

Benzene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
Ethylbenzene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
F1: C6-C10	< 0.10	0.1	mg/L	13-Jul-15	CCME CWS PHC
F2: C10-C16	< 0.25	0.25	mg/L	16-Jul-15	EPA3510
F3: C16-C34	< 0.25	0.25	mg/L	16-Jul-15	EPA3510
F4: C34-C50	< 0.25	0.25	mg/L	16-Jul-15	EPA3510
Phenols, Total	0.0013	0.001	mg/L	15-Jul-15	AB ENV.06537
Toluene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
Xylenes	< 0.00071	0.00071	mg/L	13-Jul-15	EPA 5021

**Trace Metals, Total**

Cadmium	0.2	0.1	µg/L	23-Jul-15	EPA200.8
Chromium	0.7	0.1	µg/L	23-Jul-15	EPA200.8
Copper	1.0	0.2	µg/L	23-Jul-15	EPA200.8
Iron	103	5	µg/L	23-Jul-15	EPA200.8
Lead	0.4	0.1	µg/L	23-Jul-15	EPA200.8
Mercury	0.02	0.01	µg/L	23-Jul-15	EPA200.8
Nickel	0.8	0.1	µg/L	23-Jul-15	EPA200.8
Zinc	< 5.0	5	µg/L	23-Jul-15	EPA200.8

ReportDate: Monday, July 27, 2015

Print Date: *Monday, July 27, 2015*





# Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150488**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP-2014-R9**

Taiga Sample ID: **002**

Client Project: W2014L3-0002

Sample Type: Freshwater

Received Date: 08-Jul-15

Sampling Date: 07-Jul-15

Sampling Time: 13:00

Location: N of Behchoko Landfill

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Phosphorous, Total	0.032	0.002	mg/L	14-Jul-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	340	0.4	µS/cm	08-Jul-15	SM2510:B	
pH	8.51		pH units	08-Jul-15	SM4500-H:B	
Solids, Total Suspended	< 3	3	mg/L	08-Jul-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	31.8	0.1	mg/L	09-Jul-15	SM4110:B	
Magnesium	24.4	0.1	mg/L	09-Jul-15	SM4110:B	
Potassium	4.4	0.1	mg/L	09-Jul-15	SM4110:B	
Sodium	15.5	0.1	mg/L	09-Jul-15	SM4110:B	
Sulphate	< 1	1	mg/L	09-Jul-15	SM4110:B	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	< 1	1	CFU/100mL	08-Jul-15	SM9222:D	
<b><u>Organics</u></b>						
Hexane Extractable Material	< 2.0	2.0	mg/L	15-Jul-15	EPA1664A	
<b><u>Subcontracted Organics</u></b>						

ReportDate: Monday, July 27, 2015

Print Date: **Monday, July 27, 2015**



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Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150488**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **SNP-2014-R9**

Taiga Sample ID: **002**

Benzene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
Ethylbenzene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
F1: C6-C10	< 0.10	0.1	mg/L	13-Jul-15	CCME CWS PHC
F2: C10-C16	< 0.25	0.25	mg/L	20-Jul-15	EPA3510
F3: C16-C34	< 0.25	0.25	mg/L	20-Jul-15	EPA3510
F4: C34-C50	< 0.25	0.25	mg/L	20-Jul-15	EPA3510
Phenols, Total	0.0015	0.001	mg/L	15-Jul-15	AB ENV.06537
Toluene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
Xylenes	< 0.00071	0.00071	mg/L	13-Jul-15	EPA 5021
<b><u>Trace Metals, Total</u></b>					
Cadmium	0.3	0.1	µg/L	23-Jul-15	EPA200.8
Chromium	1.1	0.1	µg/L	23-Jul-15	EPA200.8
Copper	0.7	0.2	µg/L	23-Jul-15	EPA200.8
Iron	487	5	µg/L	23-Jul-15	EPA200.8
Lead	0.4	0.1	µg/L	23-Jul-15	EPA200.8
Mercury	< 0.01	0.01	µg/L	23-Jul-15	EPA200.8
Nickel	1.0	0.1	µg/L	23-Jul-15	EPA200.8
Zinc	< 5.0	5	µg/L	23-Jul-15	EPA200.8

ReportDate: Monday, July 27, 2015

Print Date: *Monday, July 27, 2015*

*Page 5 of 8*



# Taiga Environmental Laboratory

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Taiga Batch No.:  
**150488**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP-2014-R10**

Taiga Sample ID: **003**

Client Project: W2014L3-0002

Sample Type: Freshwater

Received Date: 08-Jul-15

Sampling Date: 07-Jul-15

Sampling Time: 13:00

Location: N of Behchoko Landfill

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Nutrients</u></b>						
Phosphorous, Total	0.025	0.002	mg/L	14-Jul-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	535	0.4	µS/cm	08-Jul-15	SM2510:B	
pH	9.33		pH units	08-Jul-15	SM4500-H:B	
Solids, Total Suspended	3	3	mg/L	08-Jul-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	25.1	0.1	mg/L	09-Jul-15	SM4110:B	
Magnesium	25.8	0.1	mg/L	09-Jul-15	SM4110:B	
Potassium	8.4	0.1	mg/L	09-Jul-15	SM4110:B	
Sodium	48.4	0.1	mg/L	09-Jul-15	SM4110:B	
Sulphate	22	1	mg/L	09-Jul-15	SM4110:B	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	1	1	CFU/100mL	08-Jul-15	SM9222:D	
<b><u>Organics</u></b>						
Hexane Extractable Material	< 2.0	2.0	mg/L	15-Jul-15	EPA1664A	
<b><u>Subcontracted Organics</u></b>						

ReportDate: Monday, July 27, 2015

Print Date: *Monday, July 27, 2015*



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Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150488**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **SNP-2014-R10**

Taiga Sample ID: **003**

Benzene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
Ethylbenzene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
F1: C6-C10	< 0.10	0.1	mg/L	13-Jul-15	CCME CWS PHC
F2: C10-C16	< 0.25	0.25	mg/L	16-Jul-15	EPA3510
F3: C16-C34	< 0.25	0.25	mg/L	16-Jul-15	EPA3510
F4: C34-C50	< 0.25	0.25	mg/L	16-Jul-15	EPA3510
Phenols, Total	0.0019	0.001	mg/L	15-Jul-15	AB ENV.06537
Toluene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
Xylenes	< 0.00071	0.00071	mg/L	13-Jul-15	EPA 5021
<b><u>Trace Metals, Total</u></b>					
Cadmium	0.3	0.1	µg/L	23-Jul-15	EPA200.8
Chromium	0.4	0.1	µg/L	23-Jul-15	EPA200.8
Copper	0.4	0.2	µg/L	23-Jul-15	EPA200.8
Iron	84	5	µg/L	23-Jul-15	EPA200.8
Lead	< 0.1	0.1	µg/L	23-Jul-15	EPA200.8
Mercury	< 0.01	0.01	µg/L	23-Jul-15	EPA200.8
Nickel	1.0	0.1	µg/L	23-Jul-15	EPA200.8
Zinc	< 5.0	5	µg/L	23-Jul-15	EPA200.8

ReportDate: Monday, July 27, 2015

Print Date: *Monday, July 27, 2015*

*Page 7 of 8*



## Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:

**150488**

### - CERTIFICATE OF ANALYSIS -

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Client Sample ID: **SNP-2014-R10**

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: Monday, July 27, 2015

Print Date: *Monday, July 27, 2015*

*Page 8 of 8*



**Taiga Environmental Laboratory**  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

**Taiga Batch No.:**  
**150496**

**- FINAL REPORT -**

---

**Prepared For:** Community Government of Behchoko

**Address:** P.O. Box 68  
Behchoko, NT  
X0E 0Y0

**Attn:** Bruce Leblanc

**Facsimile:** (867) 392-6967

---

**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.
- 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:** Monday, July 27, 2015

**Print Date:** *Monday, July 27, 2015*

*Page 1 of 8*



## Taiga Environmental Laboratory

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Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150496**

### - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP-2014-R6**

Taiga Sample ID: **001**

Client Project: W2014L3-0002

Sample Type: Water

Received Date: 09-Jul-15

Sampling Date: 08-Jul-15

Sampling Time: 13:30

Location: Behchoko Landfill and area

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Phosphorous, Total	0.110	0.002	mg/L	14-Jul-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	1000	0.4	µS/cm	09-Jul-15	SM2510:B	
pH	7.54		pH units	09-Jul-15	SM4500-H:B	
Solids, Total Suspended	47	3	mg/L	10-Jul-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	63.6	0.1	mg/L	09-Jul-15	SM4110:B	
Magnesium	32.2	0.1	mg/L	09-Jul-15	SM4110:B	
Potassium	2.0	0.1	mg/L	09-Jul-15	SM4110:B	
Sodium	98.5	0.1	mg/L	09-Jul-15	SM4110:B	
Sulphate	10	1	mg/L	09-Jul-15	SM4110:B	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	< 1	1	CFU/100mL	09-Jul-15	SM9222:D	
<b><u>Organics</u></b>						
Hexane Extractable Material	< 2.0	2.0	mg/L	15-Jul-15	EPA1664A	

ReportDate: Monday, July 27, 2015

Print Date: **Monday, July 27, 2015**



Taiga Environmental Laboratory  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150496**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **SNP-2014-R6**

Taiga Sample ID: **001**

**Subcontracted Organics**

Benzene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
Ethylbenzene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
F1: C6-C10	< 0.10	0.1	mg/L	13-Jul-15	CCME CWS PHC
F2: C10-C16	< 0.25	0.25	mg/L	16-Jul-15	EPA3510
F3: C16-C34	< 0.25	0.25	mg/L	16-Jul-15	EPA3510
F4: C34-C50	< 0.25	0.25	mg/L	16-Jul-15	EPA3510
Phenols, Total	0.0039	0.001	mg/L	15-Jul-15	AB ENV.06537
Toluene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
Xylenes	< 0.00071	0.00071	mg/L	13-Jul-15	EPA 5021

**Trace Metals, Total**

Cadmium	0.3	0.1	µg/L	23-Jul-15	EPA200.8
Chromium	1.0	0.1	µg/L	23-Jul-15	EPA200.8
Copper	0.5	0.2	µg/L	23-Jul-15	EPA200.8
Iron	270	5	µg/L	23-Jul-15	EPA200.8
Lead	0.4	0.1	µg/L	23-Jul-15	EPA200.8
Mercury	0.03	0.01	µg/L	23-Jul-15	EPA200.8
Nickel	0.7	0.1	µg/L	23-Jul-15	EPA200.8
Zinc	< 5.0	5	µg/L	23-Jul-15	EPA200.8

ReportDate: Monday, July 27, 2015

Print Date: *Monday, July 27, 2015*





Taiga Environmental Laboratory  
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Taiga Batch No.:  
**150496**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **SNP-2014-R7**

Taiga Sample ID: **002**

Client Project: W2014L3-0002

Sample Type: Water

Received Date: 09-Jul-15

Sampling Date: 08-Jul-15

Sampling Time: 13:30

Location: Behchoko Landfill and area

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Nutrients</u></b>						
Phosphorous, Total	0.436	0.002	mg/L	14-Jul-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	926	0.4	µS/cm	09-Jul-15	SM2510:B	
pH	7.55		pH units	09-Jul-15	SM4500-H:B	
Solids, Total Suspended	253	3	mg/L	10-Jul-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	61.3	0.1	mg/L	09-Jul-15	SM4110:B	
Magnesium	31.1	0.1	mg/L	09-Jul-15	SM4110:B	
Potassium	2.6	0.1	mg/L	09-Jul-15	SM4110:B	
Sodium	89.6	0.1	mg/L	09-Jul-15	SM4110:B	
Sulphate	3	1	mg/L	09-Jul-15	SM4110:B	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	3	1	CFU/100mL	09-Jul-15	SM9222:D	
<b><u>Organics</u></b>						
Hexane Extractable Material	< 2.0	2.0	mg/L	15-Jul-15	EPA1664A	
<b><u>Subcontracted Organics</u></b>						

ReportDate: Monday, July 27, 2015

Print Date: **Monday, July 27, 2015**



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Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150496**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **SNP-2014-R7**

Taiga Sample ID: **002**

Benzene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
Ethylbenzene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
F1: C6-C10	< 0.10	0.1	mg/L	13-Jul-15	CCME CWS PHC
F2: C10-C16	< 0.25	0.25	mg/L	16-Jul-15	EPA3510
F3: C16-C34	< 0.25	0.25	mg/L	16-Jul-15	EPA3510
F4: C34-C50	< 0.25	0.25	mg/L	16-Jul-15	EPA3510
Phenols, Total	0.0036	0.001	mg/L	15-Jul-15	AB ENV.06537
Toluene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
Xylenes	< 0.00071	0.00071	mg/L	13-Jul-15	EPA 5021
<b><u>Trace Metals, Total</u></b>					
Cadmium	0.3	0.1	µg/L	23-Jul-15	EPA200.8
Chromium	0.6	0.1	µg/L	23-Jul-15	EPA200.8
Copper	0.7	0.2	µg/L	23-Jul-15	EPA200.8
Iron	975	5	µg/L	23-Jul-15	EPA200.8
Lead	< 0.1	0.1	µg/L	23-Jul-15	EPA200.8
Mercury	0.01	0.01	µg/L	23-Jul-15	EPA200.8
Nickel	1.0	0.1	µg/L	23-Jul-15	EPA200.8
Zinc	< 5.0	5	µg/L	23-Jul-15	EPA200.8

ReportDate: Monday, July 27, 2015

Print Date: *Monday, July 27, 2015*

*Page 5 of 8*



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Taiga Batch No.:  
**150496**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **SNP-2014-R8**

Taiga Sample ID: **003**

Client Project: W2014L3-0002

Sample Type: Water

Received Date: 09-Jul-15

Sampling Date: 08-Jul-15

Sampling Time: 13:30

Location: Behchoko Landfill and area

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Nutrients</u></b>						
Phosphorous, Total	4.64	0.002	mg/L	14-Jul-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	1440	0.4	µS/cm	09-Jul-15	SM2510:B	
pH	7.10		pH units	09-Jul-15	SM4500-H:B	
Solids, Total Suspended	1740	3	mg/L	10-Jul-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	64.7	0.1	mg/L	09-Jul-15	SM4110:B	
Magnesium	50.9	0.1	mg/L	09-Jul-15	SM4110:B	
Potassium	30.2	0.1	mg/L	09-Jul-15	SM4110:B	
Sodium	167	0.1	mg/L	09-Jul-15	SM4110:B	
Sulphate	36	1	mg/L	09-Jul-15	SM4110:B	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	100	10	CFU/100mL	09-Jul-15	SM9222:D	
<b><u>Organics</u></b>						
Hexane Extractable Material	< 2.0	2.0	mg/L	15-Jul-15	EPA1664A	
<b><u>Subcontracted Organics</u></b>						

ReportDate: Monday, July 27, 2015

Print Date: **Monday, July 27, 2015**



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Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150496**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **SNP-2014-R8**

Taiga Sample ID: **003**

Benzene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
Ethylbenzene	< 0.00050	0.0005	mg/L	13-Jul-15	EPA 5021
F1: C6-C10	< 0.10	0.1	mg/L	13-Jul-15	CCME CWS PHC
F2: C10-C16	1.79	0.3	mg/L	16-Jul-15	EPA3510
F3: C16-C34	3.62	0.3	mg/L	16-Jul-15	EPA3510
F4: C34-C50	0.73	0.3	mg/L	16-Jul-15	EPA3510
Phenols, Total	0.0146	0.001	mg/L	15-Jul-15	AB ENV.06537
Toluene	0.01330	0.0005	mg/L	13-Jul-15	EPA 5021
Xylenes	< 0.00071	0.00071	mg/L	13-Jul-15	EPA 5021
<b><u>Trace Metals, Total</u></b>					
Cadmium	0.4	0.1	µg/L	23-Jul-15	EPA200.8
Chromium	5.0	0.1	µg/L	23-Jul-15	EPA200.8
Copper	7.8	0.2	µg/L	23-Jul-15	EPA200.8
Iron	2920	5	µg/L	23-Jul-15	EPA200.8
Lead	2.4	0.1	µg/L	23-Jul-15	EPA200.8
Mercury	0.04	0.01	µg/L	23-Jul-15	EPA200.8
Nickel	9.8	0.1	µg/L	23-Jul-15	EPA200.8
Zinc	66.3	5	µg/L	23-Jul-15	EPA200.8

ReportDate: Monday, July 27, 2015

Print Date: *Monday, July 27, 2015*

*Page 7 of 8*



## Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:

**150496**

### - CERTIFICATE OF ANALYSIS -

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Client Sample ID: **SNP-2014-R8**

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: Monday, July 27, 2015

Print Date: *Monday, July 27, 2015*

*Page 8 of 8*



**Taiga Environmental Laboratory**  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

**Taiga Batch No.:**  
**150625**

**- FINAL REPORT -**

---

**Prepared For:** Community Government of Behchoko

**Address:** P.O. Box 68  
Behchoko, NT  
X0E 0Y0

**Attn:** Galvin Simpson

**Facsimile:** (867) 392-6967

---

**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.
- 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, August 13, 2015

**Print Date:** *Thursday, August 13, 2015*

*Page 1 of 5*



## Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150625**

### - CERTIFICATE OF ANALYSIS -

Client Sample ID: **E2**

Taiga Sample ID: **001**

**Client Project:**

**Sample Type:** Sewage

**Received Date:** 30-Jul-15

**Sampling Date:** 30-Jul-15

**Sampling Time:** 13:30

**Location:** Behchoko SNP

**Report Status:** Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	4.13	0.005	mg/L	31-Jul-15	SM4500-NH3:G	
Biochemical Oxygen Demand	51	2	mg/L	31-Jul-15	SM5210:B	
CBOD	51	2	mg/L	31-Jul-15	SM5210:B	
Phosphorous, Total	1.91	0.002	mg/L	11-Aug-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
pH	8.64		pH units	30-Jul-15	SM4500-H:B	
Solids, Total Suspended	190	3	mg/L	31-Jul-15	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	10	10	CFU/100mL	31-Jul-15	SM9222:D	

**ReportDate:** Thursday, August 13, 2015

**Print Date:** *Thursday, August 13, 2015*

*Page 2 of 5*



Taiga Environmental Laboratory  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150625**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **E3**

Taiga Sample ID: **002**

**Client Project:**

**Sample Type:** Sewage  
**Received Date:** 30-Jul-15  
**Sampling Date:** 30-Jul-15  
**Sampling Time:** 14:00  
**Location:** Behchoko SNP  
**Report Status:** Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	21.8	0.005	mg/L	31-Jul-15	SM4500-NH3:G	
Biochemical Oxygen Demand	83	2	mg/L	31-Jul-15	SM5210:B	
CBOD	82	2	mg/L	31-Jul-15	SM5210:B	
Phosphorous, Total	5.74	0.002	mg/L	11-Aug-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
pH	7.43		pH units	30-Jul-15	SM4500-H:B	
Solids, Total Suspended	231	3	mg/L	31-Jul-15	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	43000	1000	CFU/100mL	31-Jul-15	SM9222:D	

**ReportDate:** Thursday, August 13, 2015  
**Print Date:** *Thursday, August 13, 2015*





# Taiga Environmental Laboratory

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Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:

**150625**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **E4**

Taiga Sample ID: **003**

**Client Project:**

**Sample Type:** Sewage

**Received Date:** 30-Jul-15

**Sampling Date:** 30-Jul-15

**Sampling Time:** 14:30

**Location:** Behchoko SNP

**Report Status:** Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	0.165	0.005	mg/L	31-Jul-15	SM4500-NH3:G	
Biochemical Oxygen Demand	5	2	mg/L	31-Jul-15	SM5210:B	
CBOD	4	2	mg/L	31-Jul-15	SM5210:B	
Phosphorous, Total	0.140	0.002	mg/L	11-Aug-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
pH	7.28		pH units	30-Jul-15	SM4500-H:B	
Solids, Total Suspended	14	3	mg/L	31-Jul-15	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	< 1	1	CFU/100mL	31-Jul-15	SM9222:D	

**ReportDate:** Thursday, August 13, 2015

**Print Date:** *Thursday, August 13, 2015*



## Taiga Environmental Laboratory

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Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:

**150625**

### - CERTIFICATE OF ANALYSIS -

---

Client Sample ID: **E4**

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: Thursday, August 13, 2015

Print Date: *Thursday, August 13, 2015*

*Page 5 of 5*



**Taiga Environmental Laboratory**  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

**Taiga Batch No.:**  
**150798**

**- FINAL REPORT -**

---

**Prepared For:** Community Government of Behchoko

**Address:** P.O. Box 68  
Behchoko, NT  
X0E 0Y0

**Attn:** Galvin Simpson

**Facsimile:** (867) 392-6967

---

**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.
- 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, September 24, 2015

**Print Date:** *Thursday, September 24, 2015*

*Page 1 of 6*



## Taiga Environmental Laboratory

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Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150798**

### - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP E3**

Taiga Sample ID: **001**

**Client Project:**

**Sample Type:** Sewage

**Received Date:** 08-Sep-15

**Sampling Date:** 08-Sep-15

**Sampling Time:** 11:00

**Location:** Edzo Lagoon

**Report Status:** Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	17.3	0.005	mg/L	22-Sep-15	SM4500-NH3:G	
Biochemical Oxygen Demand	108	2	mg/L	10-Sep-15	SM5210:B	
Chemical Oxygen Demand	313	50	mg/L	10-Sep-15	SM5220:D	
Phosphorous, Total	2.19	0.002	mg/L	10-Sep-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
pH	7.24		pH units	08-Sep-15	SM4500-H:B	
Solids, Total Suspended	69	3	mg/L	21-Sep-15	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	25000	1000	CFU/100mL	09-Sep-15	SM9222:D	
<b><u>Trace Metals, Total</u></b>						
Aluminum	313	5	µg/L	24-Sep-15	EPA200.8	
Antimony	0.7	0.1	µg/L	24-Sep-15	EPA200.8	
Arsenic	2.2	0.2	µg/L	24-Sep-15	EPA200.8	
Barium	26.2	0.1	µg/L	24-Sep-15	EPA200.8	
Beryllium	< 0.1	0.1	µg/L	24-Sep-15	EPA200.8	

**ReportDate:** Thursday, September 24, 2015

**Print Date:** *Thursday, September 24, 2015*



# Taiga Environmental Laboratory

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Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150798**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP E3**

Taiga Sample ID: **001**

Cadmium	< 0.1	0.1	µg/L	24-Sep-15	EPA200.8
Cesium	< 0.1	0.1	µg/L	24-Sep-15	EPA200.8
Chromium	0.4	0.1	µg/L	24-Sep-15	EPA200.8
Cobalt	0.3	0.1	µg/L	24-Sep-15	EPA200.8
Copper	21.2	0.2	µg/L	24-Sep-15	EPA200.8
Iron	317	5	µg/L	24-Sep-15	EPA200.8
Lead	0.3	0.1	µg/L	24-Sep-15	EPA200.8
Lithium	8.5	0.2	µg/L	24-Sep-15	EPA200.8
Manganese	439	0.1	µg/L	24-Sep-15	EPA200.8
Molybdenum	2.9	0.1	µg/L	24-Sep-15	EPA200.8
Nickel	1.9	0.1	µg/L	24-Sep-15	EPA200.8
Rubidium	11.2	0.1	µg/L	24-Sep-15	EPA200.8
Selenium	0.8	0.5	µg/L	24-Sep-15	EPA200.8
Silver	0.6	0.1	µg/L	24-Sep-15	EPA200.8
Strontium	159	0.1	µg/L	24-Sep-15	EPA200.8
Thallium	< 0.1	0.1	µg/L	24-Sep-15	EPA200.8
Titanium	2.2	0.1	µg/L	24-Sep-15	EPA200.8
Uranium	0.1	0.1	µg/L	24-Sep-15	EPA200.8
Vanadium	< 0.1	0.1	µg/L	24-Sep-15	EPA200.8
Zinc	14.0	5	µg/L	24-Sep-15	EPA200.8

ReportDate: Thursday, September 24, 2015

Print Date: *Thursday, September 24, 2015*

Page 3 of 6



# Taiga Environmental Laboratory

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Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150798**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP E4**

Taiga Sample ID: **002**

**Client Project:**

**Sample Type:** Sewage

**Received Date:** 08-Sep-15

**Sampling Date:** 08-Sep-15

**Sampling Time:** 11:00

**Location:** Edzo Lagoon

**Report Status:** Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	10.8	0.005	mg/L	22-Sep-15	SM4500-NH3:G	
Biochemical Oxygen Demand	70	2	mg/L	10-Sep-15	SM5210:B	
Chemical Oxygen Demand	214	50	mg/L	10-Sep-15	SM5220:D	
Phosphorous, Total	1.27	0.002	mg/L	10-Sep-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
pH	7.23		pH units	08-Sep-15	SM4500-H:B	
Solids, Total Suspended	34	3	mg/L	21-Sep-15	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	9000	1000	CFU/100mL	09-Sep-15	SM9222:D	
<b><u>Trace Metals, Total</u></b>						
Aluminum	170	5	µg/L	24-Sep-15	EPA200.8	
Antimony	0.4	0.1	µg/L	24-Sep-15	EPA200.8	
Arsenic	1.8	0.2	µg/L	24-Sep-15	EPA200.8	
Barium	28.2	0.1	µg/L	24-Sep-15	EPA200.8	
Beryllium	< 0.1	0.1	µg/L	24-Sep-15	EPA200.8	
Cadmium	< 0.1	0.1	µg/L	24-Sep-15	EPA200.8	

**ReportDate:** Thursday, September 24, 2015

**Print Date:** *Thursday, September 24, 2015*



## Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:

**150798**

### - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP E4**

Taiga Sample ID: **002**

Cesium	< 0.1	0.1	µg/L	24-Sep-15	EPA200.8
Chromium	0.4	0.1	µg/L	24-Sep-15	EPA200.8
Cobalt	0.2	0.1	µg/L	24-Sep-15	EPA200.8
Copper	46.5	0.2	µg/L	24-Sep-15	EPA200.8
Iron	197	5	µg/L	24-Sep-15	EPA200.8
Lead	0.2	0.1	µg/L	24-Sep-15	EPA200.8
Lithium	6.2	0.2	µg/L	24-Sep-15	EPA200.8
Manganese	318	0.1	µg/L	24-Sep-15	EPA200.8
Molybdenum	1.5	0.1	µg/L	24-Sep-15	EPA200.8
Nickel	1.3	0.1	µg/L	24-Sep-15	EPA200.8
Rubidium	6.4	0.1	µg/L	24-Sep-15	EPA200.8
Selenium	0.8	0.5	µg/L	24-Sep-15	EPA200.8
Silver	0.2	0.1	µg/L	24-Sep-15	EPA200.8
Strontium	140	0.1	µg/L	24-Sep-15	EPA200.8
Thallium	< 0.1	0.1	µg/L	24-Sep-15	EPA200.8
Titanium	2.6	0.1	µg/L	24-Sep-15	EPA200.8
Uranium	< 0.1	0.1	µg/L	24-Sep-15	EPA200.8
Vanadium	< 0.1	0.1	µg/L	24-Sep-15	EPA200.8
Zinc	9.7	5	µg/L	24-Sep-15	EPA200.8

ReportDate: Thursday, September 24, 2015

Print Date: *Thursday, September 24, 2015*

*Page 5 of 6*



## Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:

**150798**

### - CERTIFICATE OF ANALYSIS -

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Client Sample ID: **SNP E4**

Taiga Sample ID: **002**

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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: Thursday, September 24, 2015

Print Date: *Thursday, September 24, 2015*

*Page 6 of 6*





**Taiga Environmental Laboratory**  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

**Taiga Batch No.:**  
**150854**

**- FINAL REPORT -**

---

**Prepared For:** Community Government of Behchoko

**Address:** P.O. Box 68  
Behchoko, NT  
X0E 0Y0

**Attn:** Galvin Simpson

**Facsimile:** (867) 392-6967

---

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

---

**Judy Mah**  
**Client Service 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, October 06, 2015

**Print Date:** *Tuesday, October 06, 2015*

*Page 1 of 9*



## Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150854**

### - CERTIFICATE OF ANALYSIS -

Client Sample ID: **R2**

Taiga Sample ID: **001**

**Client Project:**

**Sample Type:** Sewage

**Received Date:** 17-Sep-15

**Sampling Date:** 17-Sep-15

**Sampling Time:** 11:30

**Location:** Rae Lagoon

**Report Status:** Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	12.0	0.005	mg/L	22-Sep-15	SM4500-NH3:G	
Biochemical Oxygen Demand	10	2	mg/L	18-Sep-15	SM5210:B	81
Chemical Oxygen Demand	90	5	mg/L	18-Sep-15	SM5220:D	
Phosphorous, Total	8.69	0.002	mg/L	29-Sep-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
pH	8.51		pH units	17-Sep-15	SM4500-H:B	
Solids, Total Suspended	25	3	mg/L	23-Sep-15	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	520	10	CFU/100mL	18-Sep-15	SM9222:D	
<b><u>Trace Metals, Total</u></b>						
Aluminum	422	5	µg/L	26-Sep-15	EPA200.8	
Antimony	0.2	0.1	µg/L	26-Sep-15	EPA200.8	
Arsenic	2.6	0.2	µg/L	26-Sep-15	EPA200.8	
Barium	67.8	0.1	µg/L	26-Sep-15	EPA200.8	
Beryllium	< 0.1	0.1	µg/L	26-Sep-15	EPA200.8	

**ReportDate:** Tuesday, October 06, 2015

**Print Date:** *Tuesday, October 06, 2015*

*Page 2 of 9*



Taiga Environmental Laboratory  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150854**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **R2**

Taiga Sample ID: **001**

Cadmium	< 0.1	0.1	µg/L	26-Sep-15	EPA200.8
Cesium	< 0.1	0.1	µg/L	26-Sep-15	EPA200.8
Chromium	1.0	0.1	µg/L	26-Sep-15	EPA200.8
Cobalt	1.1	0.1	µg/L	26-Sep-15	EPA200.8
Copper	5.5	0.2	µg/L	26-Sep-15	EPA200.8
Iron	972	5	µg/L	26-Sep-15	EPA200.8
Lead	1.5	0.1	µg/L	26-Sep-15	EPA200.8
Lithium	8.3	0.2	µg/L	26-Sep-15	EPA200.8
Manganese	426	0.1	µg/L	26-Sep-15	EPA200.8
Molybdenum	0.5	0.1	µg/L	26-Sep-15	EPA200.8
Nickel	3.3	0.1	µg/L	26-Sep-15	EPA200.8
Rubidium	22.5	0.1	µg/L	26-Sep-15	EPA200.8
Selenium	< 0.5	0.5	µg/L	26-Sep-15	EPA200.8
Silver	< 0.1	0.1	µg/L	26-Sep-15	EPA200.8
Strontium	104	0.1	µg/L	26-Sep-15	EPA200.8
Thallium	< 0.1	0.1	µg/L	26-Sep-15	EPA200.8
Titanium	15.8	0.1	µg/L	26-Sep-15	EPA200.8
Uranium	0.6	0.1	µg/L	26-Sep-15	EPA200.8
Vanadium	1.5	0.1	µg/L	26-Sep-15	EPA200.8
Zinc	37.3	5	µg/L	26-Sep-15	EPA200.8

ReportDate: Tuesday, October 06, 2015

Print Date: *Tuesday, October 06, 2015*

*Page 3 of 9*



Taiga Environmental Laboratory  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150854**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **RWTP Sludge**

Taiga Sample ID: **002**

**Client Project:**

**Sample Type:** Sludge  
**Received Date:** 17-Sep-15  
**Sampling Date:** 17-Sep-15  
**Sampling Time:** 11:30

**Location:** RWTP

**Report Status:** Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	1.85	0.005	mg/L	22-Sep-15	SM4500-NH3:G	
Biochemical Oxygen Demand	27	2	mg/L	18-Sep-15	SM5210:B	81
CBOD	20	2	mg/L	18-Sep-15	SM5210:B	81
Chemical Oxygen Demand	1580	500	mg/L	18-Sep-15	SM5220:D	
Organic Carbon, Dissolved	7.6	0.5	mg/L	24-Sep-15	SM5310:B	
Organic Carbon, Total	224	0.5	mg/L	25-Sep-15	SM5310:B	
Phosphorous, Total	1.36	0.002	mg/L	29-Sep-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	263	0.4	µS/cm	17-Sep-15	SM2510:B	
pH	6.39		pH units	17-Sep-15	SM4500-H:B	
Solids, Total Suspended	10400	3	mg/L	23-Sep-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	17.1	0.1	mg/L	17-Sep-15	SM4110:B	
Chloride	1.6	0.7	mg/L	17-Sep-15	SM4110:B	
Fluoride	0.5	0.1	mg/L	17-Sep-15	SM4110:B	
Magnesium	8.4	0.1	mg/L	17-Sep-15	SM4110:B	

**ReportDate:** Tuesday, October 06, 2015

**Print Date:** *Tuesday, October 06, 2015*



Taiga Environmental Laboratory  
 4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
 Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150854**

**- CERTIFICATE OF ANALYSIS -**

**Client Sample ID: RWTP Sludge**

**Taiga Sample ID: 002**

Nitrate as Nitrogen	0.16	0.01	mg/L	17-Sep-15	SM4110:B
Nitrite as Nitrogen	< 0.01	0.01	mg/L	17-Sep-15	SM4110:B
Potassium	1.5	0.1	mg/L	17-Sep-15	SM4110:B
Sodium	17.1	0.1	mg/L	17-Sep-15	SM4110:B
Sulphate	82	1	mg/L	17-Sep-15	SM4110:B

**Microbiology**

Coliforms, Fecal	100	100	CFU/100mL	18-Sep-15	SM9222:D
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**Subcontracted Nutrients**

Kjeldahl Nitrogen, Total	32.1	0.05	mg/L	05-Oct-15	APHA4500-NORG (T
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**Trace Metals, Total**

Aluminum	943000	5	µg/L	26-Sep-15	EPA200.8
Antimony	0.2	0.1	µg/L	26-Sep-15	EPA200.8
Arsenic	16.0	0.2	µg/L	26-Sep-15	EPA200.8
Barium	469	0.1	µg/L	26-Sep-15	EPA200.8
Beryllium	1.4	0.1	µg/L	26-Sep-15	EPA200.8
Cadmium	0.2	0.1	µg/L	26-Sep-15	EPA200.8
Cesium	4.3	0.1	µg/L	26-Sep-15	EPA200.8
Chromium	73.3	0.1	µg/L	26-Sep-15	EPA200.8
Cobalt	18.9	0.1	µg/L	26-Sep-15	EPA200.8
Copper	99.9	0.2	µg/L	26-Sep-15	EPA200.8
Iron	41100	5	µg/L	26-Sep-15	EPA200.8
Lead	17.6	0.1	µg/L	26-Sep-15	EPA200.8
Lithium	104	0.2	µg/L	26-Sep-15	EPA200.8
Manganese	1110	0.1	µg/L	26-Sep-15	EPA200.8
Molybdenum	2.8	0.1	µg/L	26-Sep-15	EPA200.8

**ReportDate:** Tuesday, October 06, 2015

**Print Date:** *Tuesday, October 06, 2015*



Taiga Environmental Laboratory  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150854**

**- CERTIFICATE OF ANALYSIS -**

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Client Sample ID: **RWTP Sludge**

Taiga Sample ID: **002**

Nickel	64.5	0.1	µg/L	26-Sep-15	EPA200.8
Rubidium	60.8	0.1	µg/L	26-Sep-15	EPA200.8
Selenium	2.3	0.5	µg/L	26-Sep-15	EPA200.8
Silver	0.3	0.1	µg/L	26-Sep-15	EPA200.8
Strontium	204	0.1	µg/L	26-Sep-15	EPA200.8
Thallium	0.5	0.1	µg/L	26-Sep-15	EPA200.8
Titanium	1190	0.1	µg/L	26-Sep-15	EPA200.8
Uranium	17.2	0.1	µg/L	26-Sep-15	EPA200.8
Vanadium	80.4	0.1	µg/L	26-Sep-15	EPA200.8
Zinc	97.7	5	µg/L	26-Sep-15	EPA200.8

ReportDate: Tuesday, October 06, 2015

Print Date: *Tuesday, October 06, 2015*

*Page 6 of 9*



Taiga Environmental Laboratory  
 4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
 Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150854**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **R3**

Taiga Sample ID: **003**

**Client Project:**

**Sample Type:** Sewage  
**Received Date:** 17-Sep-15  
**Sampling Date:** 17-Sep-15  
**Sampling Time:** 11:30  
**Location:** Rae Lagoon

**Report Status:** Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	1.75	0.005	mg/L	22-Sep-15	SM4500-NH3:G	
Biochemical Oxygen Demand	6	2	mg/L	18-Sep-15	SM5210:B	
Chemical Oxygen Demand	69	5	mg/L	18-Sep-15	SM5220:D	
Phosphorous, Total	2.18	0.002	mg/L	29-Sep-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Alkalinity, Total (as CaCO3)	290	0.4	mg/L	17-Sep-15	SM2320:B	
pH	7.13		pH units	17-Sep-15	SM4500-H:B	
Solids, Total Suspended	73	3	mg/L	23-Sep-15	SM2540:D	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	< 1	1	CFU/100mL	18-Sep-15	SM9222:D	
<b><u>Trace Metals, Total</u></b>						
Aluminum	103	5	µg/L	26-Sep-15	EPA200.8	
Antimony	< 0.1	0.1	µg/L	26-Sep-15	EPA200.8	
Arsenic	4.6	0.2	µg/L	26-Sep-15	EPA200.8	
Barium	65.9	0.1	µg/L	26-Sep-15	EPA200.8	
Beryllium	< 0.1	0.1	µg/L	26-Sep-15	EPA200.8	

**ReportDate:** Tuesday, October 06, 2015

**Print Date:** *Tuesday, October 06, 2015*



Taiga Environmental Laboratory  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150854**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **R3**

Taiga Sample ID: **003**

Cadmium	< 0.1	0.1	µg/L	26-Sep-15	EPA200.8
Cesium	< 0.1	0.1	µg/L	26-Sep-15	EPA200.8
Chromium	0.3	0.1	µg/L	26-Sep-15	EPA200.8
Cobalt	1.7	0.1	µg/L	26-Sep-15	EPA200.8
Copper	1.3	0.2	µg/L	26-Sep-15	EPA200.8
Iron	5670	5	µg/L	26-Sep-15	EPA200.8
Lead	0.2	0.1	µg/L	26-Sep-15	EPA200.8
Lithium	12.2	0.2	µg/L	26-Sep-15	EPA200.8
Manganese	942	0.1	µg/L	26-Sep-15	EPA200.8
Molybdenum	1.7	0.1	µg/L	26-Sep-15	EPA200.8
Nickel	2.1	0.1	µg/L	26-Sep-15	EPA200.8
Rubidium	7.1	0.1	µg/L	26-Sep-15	EPA200.8
Selenium	< 0.5	0.5	µg/L	26-Sep-15	EPA200.8
Silver	0.1	0.1	µg/L	26-Sep-15	EPA200.8
Strontium	296	0.1	µg/L	26-Sep-15	EPA200.8
Thallium	< 0.1	0.1	µg/L	26-Sep-15	EPA200.8
Titanium	2.1	0.1	µg/L	26-Sep-15	EPA200.8
Uranium	11.7	0.1	µg/L	26-Sep-15	EPA200.8
Vanadium	1.7	0.1	µg/L	26-Sep-15	EPA200.8
Zinc	1110	5	µg/L	26-Sep-15	EPA200.8

ReportDate: Tuesday, October 06, 2015

Print Date: *Tuesday, October 06, 2015*

*Page 8 of 9*





## Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:

**150854**

### - CERTIFICATE OF ANALYSIS -

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Client Sample ID: **R3**

Taiga Sample ID: **003**

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### - DATA QUALIFIERS -

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*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, October 06, 2015

Print Date: *Tuesday, October 06, 2015*

*Page 9 of 9*



**Taiga Environmental Laboratory**  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

**Taiga Batch No.:**  
**150942**

**- FINAL REPORT -**

---

**Prepared For:** Community Government of Behchoko

**Address:** P.O. Box 68  
Behchoko, NT  
X0E 0Y0

**Attn:** Galvin Simpson

**Facsimile:** (867) 392-6967

---

**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.
- 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, October 14, 2015

**Print Date:** *Thursday, October 15, 2015*

*Page 1 of 4*



## Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150942**

### - CERTIFICATE OF ANALYSIS -

Client Sample ID: **R4**

Taiga Sample ID: **001**

**Client Project:**

**Sample Type:** Water

**Received Date:** 01-Oct-15

**Sampling Date:** 30-Sep-15

**Sampling Time:** 13:00

**Location:** R4

**Report Status:** Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	0.010	0.005	mg/L	02-Oct-15	SM4500-NH3:G	
Biochemical Oxygen Demand	4	2	mg/L	02-Oct-15	SM5210:B	
CBOD	4	2	mg/L	02-Oct-15	SM5210:B	
Phosphorous, Total	0.234	0.002	mg/L	06-Oct-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	450	0.4	µS/cm	01-Oct-15	SM2510:B	
pH	7.19		pH units	01-Oct-15	SM4500-H:B	
Solids, Total Suspended	11	3	mg/L	05-Oct-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	22.7	0.1	mg/L	01-Oct-15	SM4110:B	
Magnesium	16.9	0.1	mg/L	01-Oct-15	SM4110:B	
Potassium	4.9	0.1	mg/L	01-Oct-15	SM4110:B	
Sodium	36.1	0.1	mg/L	01-Oct-15	SM4110:B	
Sulphate	6	1	mg/L	01-Oct-15	SM4110:B	

**Microbiology**

**ReportDate:** Wednesday, October 14, 2015

**Print Date:** *Thursday, October 15, 2015*

*Page 2 of 4*



Taiga Environmental Laboratory  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150942**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **R4**

Taiga Sample ID: **001**

Coliforms, Fecal	3	1	CFU/100mL	01-Oct-15	SM9222:D
<b><u>Organics</u></b>					
Hexane Extractable Material	< 2.0	2.0	mg/L	09-Oct-15	EPA1664A
<b><u>Subcontracted Organics</u></b>					
Phenols, Total	0.0029	0.001	mg/L	13-Oct-15	AB ENV.06537
<b><u>Trace Metals, Total</u></b>					
Cadmium	< 0.1	0.1	µg/L	09-Oct-15	EPA200.8
Chromium	0.4	0.1	µg/L	09-Oct-15	EPA200.8
Copper	1.3	0.2	µg/L	09-Oct-15	EPA200.8
Iron	1230	5	µg/L	09-Oct-15	EPA200.8
Lead	0.2	0.1	µg/L	09-Oct-15	EPA200.8
Mercury	0.02	0.01	µg/L	09-Oct-15	EPA200.8
Nickel	1.0	0.1	µg/L	09-Oct-15	EPA200.8
Zinc	< 5.0	5	µg/L	09-Oct-15	EPA200.8

ReportDate: Wednesday, October 14, 2015

Print Date: *Thursday, October 15, 2015*

*Page 3 of 4*



## Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:

**150942**

### - CERTIFICATE OF ANALYSIS -

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Client Sample ID: **R4**

Taiga Sample ID: **001**

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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, October 14, 2015

Print Date: *Thursday, October 15, 2015*

*Page 4 of 4*



**Taiga Environmental Laboratory**  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

**Taiga Batch No.:**  
**150954**

**- FINAL REPORT -**

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**Prepared For:** Community Government of Behchoko

**Address:** P.O. Box 68  
Behchoko, NT  
X0E 0Y0

**Attn:** Galvin Simpson

**Facsimile:** (867) 392-6967

---

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

---

**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:** Thursday, October 15, 2015

**Print Date:** *Friday, October 16, 2015*

*Page 1 of 14*



## Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150954**

### - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP-2014-R5**

Taiga Sample ID: **001**

Client Project: W2014L3-0002

Sample Type: Freshwater

Received Date: 02-Oct-15

Sampling Date: 02-Oct-15

Sampling Time: 10:00

Location: Behchoko Landfill and area

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Phosphorous, Total	0.357	0.002	mg/L	06-Oct-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	1480	0.4	µS/cm	02-Oct-15	SM2510:B	
pH	8.05		pH units	02-Oct-15	SM4500-H:B	
Solids, Total Suspended	79	3	mg/L	05-Oct-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	76.6	0.1	mg/L	02-Oct-15	SM4110:B	
Magnesium	67.9	0.1	mg/L	02-Oct-15	SM4110:B	
Potassium	11.6	0.1	mg/L	02-Oct-15	SM4110:B	
Sodium	130	0.1	mg/L	02-Oct-15	SM4110:B	
Sulphate	37	1	mg/L	02-Oct-15	SM4110:B	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	1	1	CFU/100mL	02-Oct-15	SM9222:D	
<b><u>Organics</u></b>						
Benzene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	

ReportDate: Thursday, October 15, 2015

Print Date: **Friday, October 16, 2015**



Taiga Environmental Laboratory  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150954**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **SNP-2014-R5**

Taiga Sample ID: **001**

Ethylbenzene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	
Hexane Extractable Material	< 2.0	2.0	mg/L	13-Oct-15	EPA1664A	
Toluene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	
Xylenes	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	
<b><u>Subcontracted Organics</u></b>						
F2: C10-C16	< 0.20	0.2	mg/L	07-Oct-15	EPA3510	220
F3: C16-C34	< 0.50	0.5	mg/L	07-Oct-15	EPA3510	220
F4: C34-C50	< 0.50	0.5	mg/L	07-Oct-15	EPA3510	220
Hydrocarbons, Total Extractable	< 0.50	0.5	mg/L	07-Oct-15	EPA3510	220
Phenols, Total	0.0075	0.001	mg/L	14-Oct-15	AB ENV.06537	
<b><u>Trace Metals, Total</u></b>						
Cadmium	< 0.1	0.1	µg/L	14-Oct-15	EPA200.8	
Chromium	3.0	0.1	µg/L	14-Oct-15	EPA200.8	
Copper	1.6	0.2	µg/L	14-Oct-15	EPA200.8	
Iron	1650	5	µg/L	14-Oct-15	EPA200.8	
Lead	0.8	0.1	µg/L	14-Oct-15	EPA200.8	
Mercury	0.05	0.01	µg/L	14-Oct-15	EPA200.8	
Nickel	2.6	0.1	µg/L	14-Oct-15	EPA200.8	
Zinc	6.1	5	µg/L	14-Oct-15	EPA200.8	

ReportDate: Thursday, October 15, 2015

Print Date: *Friday, October 16, 2015*

*Page 3 of 14*





# Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150954**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP-2014-R6**

Taiga Sample ID: **002**

Client Project: W2014L3-0002

Sample Type: Freshwater

Received Date: 02-Oct-15

Sampling Date: 02-Oct-15

Sampling Time: 10:00

Location: Behchoko Landfill and area

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Phosphorous, Total	0.027	0.002	mg/L	06-Oct-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	796	0.4	µS/cm	02-Oct-15	SM2510:B	
pH	7.70		pH units	02-Oct-15	SM4500-H:B	
Solids, Total Suspended	25	3	mg/L	05-Oct-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	53.8	0.1	mg/L	02-Oct-15	SM4110:B	
Magnesium	35.7	0.1	mg/L	02-Oct-15	SM4110:B	
Potassium	4.4	0.1	mg/L	02-Oct-15	SM4110:B	
Sodium	65.9	0.1	mg/L	02-Oct-15	SM4110:B	
Sulphate	12	1	mg/L	02-Oct-15	SM4110:B	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	< 1	1	CFU/100mL	02-Oct-15	SM9222:D	
<b><u>Organics</u></b>						
Benzene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	
Ethylbenzene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	

ReportDate: Thursday, October 15, 2015

Print Date: **Friday, October 16, 2015**



Taiga Environmental Laboratory  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150954**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **SNP-2014-R6**

Taiga Sample ID: **002**

Hexane Extractable Material	< 2.0	2.0	mg/L	13-Oct-15	EPA1664A
Toluene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B
Xylenes	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B
<b><u>Subcontracted Organics</u></b>					
F2: C10-C16	< 0.10	0.1	mg/L	07-Oct-15	EPA3510
F3: C16-C34	< 0.25	0.25	mg/L	07-Oct-15	EPA3510
F4: C34-C50	< 0.25	0.25	mg/L	07-Oct-15	EPA3510
Hydrocarbons, Total Extractable	< 0.25	0.25	mg/L	07-Oct-15	EPA3510
Phenols, Total	0.0081	0.001	mg/L	14-Oct-15	AB ENV.06537
<b><u>Trace Metals, Total</u></b>					
Cadmium	< 0.1	0.1	µg/L	14-Oct-15	EPA200.8
Chromium	0.1	0.1	µg/L	14-Oct-15	EPA200.8
Copper	0.4	0.2	µg/L	14-Oct-15	EPA200.8
Iron	54	5	µg/L	14-Oct-15	EPA200.8
Lead	< 0.1	0.1	µg/L	14-Oct-15	EPA200.8
Mercury	0.02	0.01	µg/L	14-Oct-15	EPA200.8
Nickel	0.6	0.1	µg/L	14-Oct-15	EPA200.8
Zinc	< 5.0	5	µg/L	14-Oct-15	EPA200.8

ReportDate: Thursday, October 15, 2015

Print Date: **Friday, October 16, 2015**

*Page 5 of 14*



# Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150954**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP-2014-R7**

Taiga Sample ID: **003**

Client Project: W2014L3-0002

Sample Type: Freshwater

Received Date: 02-Oct-15

Sampling Date: 02-Oct-15

Sampling Time: 10:00

Location: Behchoko Landfill and area

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Nutrients</u></b>						
Phosphorous, Total	0.046	0.002	mg/L	06-Oct-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	871	0.4	µS/cm	02-Oct-15	SM2510:B	
pH	7.72		pH units	02-Oct-15	SM4500-H:B	
Solids, Total Suspended	12	3	mg/L	05-Oct-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	55.9	0.1	mg/L	02-Oct-15	SM4110:B	
Magnesium	30.3	0.1	mg/L	02-Oct-15	SM4110:B	
Potassium	2.2	0.1	mg/L	02-Oct-15	SM4110:B	
Sodium	87.3	0.1	mg/L	02-Oct-15	SM4110:B	
Sulphate	5	1	mg/L	02-Oct-15	SM4110:B	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	< 1	1	CFU/100mL	02-Oct-15	SM9222:D	
<b><u>Organics</u></b>						
Benzene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	
Ethylbenzene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	

ReportDate: Thursday, October 15, 2015

Print Date: **Friday, October 16, 2015**



# Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:

**150954**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP-2014-R7**

Taiga Sample ID: **003**

Hexane Extractable Material	< 2.0	2.0	mg/L	13-Oct-15	EPA1664A
Toluene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B
Xylenes	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B
<b><u>Subcontracted Organics</u></b>					
F2: C10-C16	< 0.10	0.10	mg/L	07-Oct-15	EPA3510
F3: C16-C34	< 0.25	0.25	mg/L	07-Oct-15	EPA3510
F4: C34-C50	< 0.25	0.25	mg/L	07-Oct-15	EPA3510
Hydrocarbons, Total Extractable	< 0.25	0.25	mg/L	07-Oct-15	EPA3510
Phenols, Total	0.0050	0.001	mg/L	14-Oct-15	AB ENV.06537
<b><u>Trace Metals, Total</u></b>					
Cadmium	< 0.1	0.1	µg/L	14-Oct-15	EPA200.8
Chromium	0.4	0.1	µg/L	14-Oct-15	EPA200.8
Copper	0.3	0.2	µg/L	14-Oct-15	EPA200.8
Iron	191	5	µg/L	14-Oct-15	EPA200.8
Lead	< 0.1	0.1	µg/L	14-Oct-15	EPA200.8
Mercury	0.02	0.01	µg/L	14-Oct-15	EPA200.8
Nickel	0.8	0.1	µg/L	14-Oct-15	EPA200.8
Zinc	< 5.0	5	µg/L	14-Oct-15	EPA200.8

ReportDate: Thursday, October 15, 2015

Print Date: **Friday, October 16, 2015**

*Page 7 of 14*



# Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150954**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP-2014-R8**

Taiga Sample ID: **004**

Client Project: W2014L3-0002

Sample Type: Freshwater

Received Date: 02-Oct-15

Sampling Date: 02-Oct-15

Sampling Time: 10:00

Location: Behchoko Landfill and area

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Phosphorous, Total	0.809	0.002	mg/L	06-Oct-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	1160	0.4	µS/cm	02-Oct-15	SM2510:B	
pH	7.40		pH units	02-Oct-15	SM4500-H:B	
Solids, Total Suspended	102	3	mg/L	05-Oct-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	53.0	0.1	mg/L	02-Oct-15	SM4110:B	
Magnesium	42.1	0.1	mg/L	02-Oct-15	SM4110:B	
Potassium	21.0	0.1	mg/L	02-Oct-15	SM4110:B	
Sodium	118	0.1	mg/L	02-Oct-15	SM4110:B	
Sulphate	57	1	mg/L	02-Oct-15	SM4110:B	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	3	1	CFU/100mL	02-Oct-15	SM9222:D	
<b><u>Organics</u></b>						
Benzene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	
Ethylbenzene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	

ReportDate: Thursday, October 15, 2015

Print Date: **Friday, October 16, 2015**



Taiga Environmental Laboratory  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150954**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **SNP-2014-R8**

Taiga Sample ID: **004**

Hexane Extractable Material	< 2.0	2.0	mg/L	13-Oct-15	EPA1664A	
Toluene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	
Xylenes	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	
<b><u>Subcontracted Organics</u></b>						
F2: C10-C16	< 0.20	0.2	mg/L	07-Oct-15	EPA3510	220
F3: C16-C34	< 0.50	0.5	mg/L	07-Oct-15	EPA3510	220
F4: C34-C50	< 0.50	0.5	mg/L	07-Oct-15	EPA3510	220
Hydrocarbons, Total Extractable	< 0.50	0.5	mg/L	07-Oct-15	EPA3510	220
Phenols, Total	0.0143	0.001	mg/L	14-Oct-15	AB ENV.06537	
<b><u>Trace Metals, Total</u></b>						
Cadmium	< 0.1	0.1	µg/L	14-Oct-15	EPA200.8	
Chromium	0.7	0.1	µg/L	14-Oct-15	EPA200.8	
Copper	0.9	0.2	µg/L	14-Oct-15	EPA200.8	
Iron	315	5	µg/L	14-Oct-15	EPA200.8	
Lead	0.2	0.1	µg/L	14-Oct-15	EPA200.8	
Mercury	0.04	0.01	µg/L	14-Oct-15	EPA200.8	
Nickel	1.9	0.1	µg/L	14-Oct-15	EPA200.8	
Zinc	15.2	5	µg/L	14-Oct-15	EPA200.8	

ReportDate: Thursday, October 15, 2015

Print Date: **Friday, October 16, 2015**

Page 9 of 14



# Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150954**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP-2014-R9**

Taiga Sample ID: **005**

Client Project: W2014L3-0002

Sample Type: Freshwater

Received Date: 02-Oct-15

Sampling Date: 02-Oct-15

Sampling Time: 10:00

Location: Behchoko Landfill and area

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Nutrients</u></b>						
Phosphorous, Total	0.211	0.002	mg/L	06-Oct-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	299	0.4	µS/cm	02-Oct-15	SM2510:B	
pH	6.98		pH units	02-Oct-15	SM4500-H:B	
Solids, Total Suspended	6	3	mg/L	05-Oct-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	24.9	0.1	mg/L	02-Oct-15	SM4110:B	
Magnesium	18.9	0.1	mg/L	02-Oct-15	SM4110:B	
Potassium	4.7	0.1	mg/L	02-Oct-15	SM4110:B	
Sodium	12.3	0.1	mg/L	02-Oct-15	SM4110:B	
Sulphate	1	1	mg/L	02-Oct-15	SM4110:B	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	< 1	1	CFU/100mL	02-Oct-15	SM9222:D	
<b><u>Organics</u></b>						
Benzene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	
Ethylbenzene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	

ReportDate: Thursday, October 15, 2015

Print Date: **Friday, October 16, 2015**



# Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:

**150954**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP-2014-R9**

Taiga Sample ID: **005**

Hexane Extractable Material	< 2.0	2.0	mg/L	13-Oct-15	EPA1664A	
Toluene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	
Xylenes	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	
<b><u>Subcontracted Organics</u></b>						
F2: C10-C16	< 0.20	0.2	mg/L	07-Oct-15	EPA3510	220
F3: C16-C34	< 0.50	0.5	mg/L	07-Oct-15	EPA3510	220
F4: C34-C50	< 0.50	0.5	mg/L	07-Oct-15	EPA3510	220
Hydrocarbons, Total Extractable	< 0.50	0.5	mg/L	07-Oct-15	EPA3510	220
Phenols, Total	0.0034	0.001	mg/L	14-Oct-15	AB ENV.06537	
<b><u>Trace Metals, Total</u></b>						
Cadmium	< 0.1	0.1	µg/L	14-Oct-15	EPA200.8	
Chromium	0.3	0.1	µg/L	14-Oct-15	EPA200.8	
Copper	0.6	0.2	µg/L	14-Oct-15	EPA200.8	
Iron	526	5	µg/L	14-Oct-15	EPA200.8	
Lead	< 0.1	0.1	µg/L	14-Oct-15	EPA200.8	
Mercury	< 0.01	0.01	µg/L	14-Oct-15	EPA200.8	
Nickel	1.3	0.1	µg/L	14-Oct-15	EPA200.8	
Zinc	< 5.0	5	µg/L	14-Oct-15	EPA200.8	

ReportDate: Thursday, October 15, 2015

Print Date: *Friday, October 16, 2015*

*Page 11 of 14*





# Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150954**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP-2014-R10**

Taiga Sample ID: **006**

Client Project: W2014L3-0002

Sample Type: Freshwater

Received Date: 02-Oct-15

Sampling Date: 02-Oct-15

Sampling Time: 10:00

Location: Behchoko Landfill and area

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<b><u>Inorganics - Nutrients</u></b>						
Phosphorous, Total	0.038	0.002	mg/L	06-Oct-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	740	0.4	µS/cm	02-Oct-15	SM2510:B	
pH	7.80		pH units	02-Oct-15	SM4500-H:B	
Solids, Total Suspended	11	3	mg/L	06-Oct-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	41.1	0.1	mg/L	02-Oct-15	SM4110:B	
Magnesium	33.0	0.1	mg/L	02-Oct-15	SM4110:B	
Potassium	11.4	0.1	mg/L	02-Oct-15	SM4110:B	
Sodium	55.8	0.1	mg/L	02-Oct-15	SM4110:B	
Sulphate	28	1	mg/L	02-Oct-15	SM4110:B	
<b><u>Microbiology</u></b>						
Coliforms, Fecal	2	1	CFU/100mL	02-Oct-15	SM9222:D	
<b><u>Organics</u></b>						
Benzene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	
Ethylbenzene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	

ReportDate: Thursday, October 15, 2015

Print Date: **Friday, October 16, 2015**



# Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150954**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **SNP-2014-R10**

Taiga Sample ID: **006**

Hexane Extractable Material	< 2.0	2.0	mg/L	13-Oct-15	EPA1664A	
Toluene	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	
Xylenes	< 0.005	0.005	mg/L	14-Oct-15	EPA8260B	
<b><u>Subcontracted Organics</u></b>						
F2: C10-C16	< 0.20	0.2	mg/L	07-Oct-15	EPA3510	220
F3: C16-C34	< 0.50	0.5	mg/L	07-Oct-15	EPA3510	220
F4: C34-C50	< 0.50	0.5	mg/L	07-Oct-15	EPA3510	220
Hydrocarbons, Total Extractable	< 0.50	0.5	mg/L	07-Oct-15	EPA3510	220
Phenols, Total	0.0068	0.001	mg/L	14-Oct-15	AB ENV.06537	
<b><u>Trace Metals, Total</u></b>						
Cadmium	< 0.1	0.1	µg/L	14-Oct-15	EPA200.8	
Chromium	0.3	0.1	µg/L	14-Oct-15	EPA200.8	
Copper	< 0.2	0.2	µg/L	14-Oct-15	EPA200.8	
Iron	42	5	µg/L	14-Oct-15	EPA200.8	
Lead	< 0.1	0.1	µg/L	14-Oct-15	EPA200.8	
Mercury	< 0.01	0.01	µg/L	14-Oct-15	EPA200.8	
Nickel	1.3	0.1	µg/L	14-Oct-15	EPA200.8	
Zinc	< 5.0	5	µg/L	14-Oct-15	EPA200.8	

ReportDate: Thursday, October 15, 2015

Print Date: *Friday, October 16, 2015*

Page 13 of 14



Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:

150954

**- CERTIFICATE OF ANALYSIS -**

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Client Sample ID: **SNP-2014-R10**

Taiga Sample ID: **006**

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**- DATA QUALIFIERS -**

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*Data Qualifier Descriptions:*

**220**      *Detection Limit Raised: Dilution required due to high dissolved solids/electrical conductivity.*

**\* 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 15, 2015

Print Date: *Friday, October 16, 2015*

*Page 14 of 14*



**Taiga Environmental Laboratory**  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

**Taiga Batch No.:**  
**150981**

**- FINAL REPORT -**

---

**Prepared For:** Community Government of Behchoko

**Address:** P.O. Box 68  
Behchoko, NT  
X0E 0Y0

**Attn:** Galvin Simpson

**Facsimile:** (867) 392-6967

---

**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.
- 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:** Monday, November 09, 2015

**Print Date:** *Monday, November 09, 2015*

*Page 1 of 4*



## Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150981**

### - CERTIFICATE OF ANALYSIS -

Client Sample ID: **R3**

Taiga Sample ID: **001**

Client Project: W2014L3-0002

Sample Type: Water

Received Date: 08-Oct-15

Sampling Date: 08-Oct-15

Sampling Time: 15:00

Location: R3

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	12.3	0.005	mg/L	14-Oct-15	SM4500-NH3:G	
Biochemical Oxygen Demand	4	2	mg/L	09-Oct-15	SM5210:B	
CBOD	3	2	mg/L	09-Oct-15	SM5210:B	
Phosphorous, Total	6.58	0.002	mg/L	21-Oct-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	741	0.4	µS/cm	08-Oct-15	SM2510:B	
pH	7.54		pH units	08-Oct-15	SM4500-H:B	
Solids, Total Suspended	5	3	mg/L	09-Oct-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	34.3	0.1	mg/L	08-Oct-15	SM4110:B	
Magnesium	15.5	0.1	mg/L	08-Oct-15	SM4110:B	
Potassium	24.9	0.1	mg/L	08-Oct-15	SM4110:B	
Sodium	85.5	0.1	mg/L	08-Oct-15	SM4110:B	
Sulphate	21	1	mg/L	08-Oct-15	SM4110:B	
<b><u>Microbiology</u></b>						

ReportDate: Monday, November 09, 2015

Print Date: *Monday, November 09, 2015*

Page 2 of 4



Taiga Environmental Laboratory  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150981**

**- CERTIFICATE OF ANALYSIS -**

**Client Sample ID: R3**

**Taiga Sample ID: 001**

Coliforms, Fecal	5	1	CFU/100mL	09-Oct-15	SM9222:D
<b><u>Organics</u></b>					
Hexane Extractable Material	< 2.0	2.0	mg/L	20-Oct-15	EPA1664A
<b><u>Subcontracted Organics</u></b>					
Phenols, Total	0.0065	0.001	mg/L	22-Oct-15	AB ENV.06537
<b><u>Trace Metals, Total</u></b>					
Cadmium	< 0.1	0.1	µg/L	06-Nov-15	EPA200.8
Chromium	0.4	0.1	µg/L	06-Nov-15	EPA200.8
Copper	0.6	0.2	µg/L	06-Nov-15	EPA200.8
Iron	619	5	µg/L	06-Nov-15	EPA200.8
Lead	0.2	0.1	µg/L	06-Nov-15	EPA200.8
Mercury	< 0.01	0.01	µg/L	06-Nov-15	EPA200.8
Nickel	2.5	0.1	µg/L	06-Nov-15	EPA200.8
Zinc	5.8	5	µg/L	06-Nov-15	EPA200.8

**ReportDate:** Monday, November 09, 2015

**Print Date:** *Monday, November 09, 2015*

*Page 3 of 4*



## Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:

**150981**

### - CERTIFICATE OF ANALYSIS -

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Client Sample ID: **R3**

Taiga Sample ID: **001**

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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: Monday, November 09, 2015

Print Date: *Monday, November 09, 2015*

*Page 4 of 4*



**Taiga Environmental Laboratory**  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

**Taiga Batch No.:**  
**150986**

**- FINAL REPORT -**

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**Prepared For:** Community Government of Behchoko

**Address:** P.O. Box 68  
Behchoko, NT  
X0E 0Y0

**Attn:** Galvin Simpson

**Facsimile:** (867) 392-6967

---

**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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  - 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:** Monday, November 09, 2015

**Print Date:** *Monday, November 09, 2015*

*Page 1 of 4*





# Taiga Environmental Laboratory

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

Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150986**

## - CERTIFICATE OF ANALYSIS -

Client Sample ID: **R4**

Taiga Sample ID: **001**

Client Project: W2014L3-0002

Sample Type: Water

Received Date: 09-Oct-15

Sampling Date: 09-Oct-15

Sampling Time: 15:00

Location: R4

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<b><u>Inorganics - Nutrients</u></b>						
Ammonia as Nitrogen	0.489	0.005	mg/L	14-Oct-15	SM4500-NH3:G	
Biochemical Oxygen Demand	< 2	2	mg/L	09-Oct-15	SM5210:B	
CBOD	< 2	2	mg/L	09-Oct-15	SM5210:B	
Phosphorous, Total	0.333	0.002	mg/L	21-Oct-15	SM4500-P:D	
<b><u>Inorganics - Physicals</u></b>						
Conductivity, Specific (@25C)	598	0.4	µS/cm	14-Oct-15	SM2510:B	
pH	7.02		pH units	14-Oct-15	SM4500-H:B	
Solids, Total Suspended	133	3	mg/L	13-Oct-15	SM2540:D	
<b><u>Major Ions</u></b>						
Calcium	29.2	0.1	mg/L	14-Oct-15	SM4110:B	
Magnesium	22.9	0.1	mg/L	14-Oct-15	SM4110:B	
Potassium	4.9	0.1	mg/L	14-Oct-15	SM4110:B	
Sodium	44.5	0.1	mg/L	14-Oct-15	SM4110:B	
Sulphate	7	1	mg/L	14-Oct-15	SM4110:B	

### **Microbiology**

ReportDate: Monday, November 09, 2015

Print Date: **Monday, November 09, 2015**



Taiga Environmental Laboratory  
4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9  
Tel: (867)-765-6645 Fax: (867)-873-2652

Taiga Batch No.:  
**150986**

**- CERTIFICATE OF ANALYSIS -**

Client Sample ID: **R4**

Taiga Sample ID: **001**

Coliforms, Fecal	1	1	CFU/100mL	09-Oct-15	SM9222:D
<b><u>Organics</u></b>					
Hexane Extractable Material	< 2.0	2.0	mg/L	20-Oct-15	EPA1664A
<b><u>Subcontracted Organics</u></b>					
Phenols, Total	0.0059	0.001	mg/L	23-Oct-15	AB ENV.06537
<b><u>Trace Metals, Total</u></b>					
Cadmium	< 0.1	0.1	µg/L	06-Nov-15	EPA200.8
Chromium	8.2	0.1	µg/L	06-Nov-15	EPA200.8
Copper	3.8	0.2	µg/L	06-Nov-15	EPA200.8
Iron	12100	5	µg/L	06-Nov-15	EPA200.8
Lead	2.2	0.1	µg/L	06-Nov-15	EPA200.8
Mercury	< 0.01	0.01	µg/L	06-Nov-15	EPA200.8
Nickel	7.1	0.1	µg/L	06-Nov-15	EPA200.8
Zinc	17.5	5	µg/L	06-Nov-15	EPA200.8

ReportDate: Monday, November 09, 2015

Print Date: *Monday, November 09, 2015*

*Page 3 of 4*



**Taiga Environmental Laboratory**

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

Tel: (867)-765-6645 Fax: (867)-873-2652

**Taiga Batch No.:**

**150986**

**- CERTIFICATE OF ANALYSIS -**

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**Client Sample ID: R4**

**Taiga Sample ID: 001**

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

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EPA - United States Environmental Protection Agency

**ReportDate:** Monday, November 09, 2015

**Print Date:** *Monday, November 09, 2015*

*Page 4 of 4*