

From: [Erica Janes](#)
To: [Permits](#)
Subject: FW: Lagoon Sample (Approval to Decant Cell #5 of Sewage Lagoon)
Date: October 11, 2018 8:58:49 AM
Attachments: [180944 - 1819 - PRELIMINARY REPORT.PDF](#)
Importance: High

Please post email chain and attachment to MV2016L3-0001 – Ft Providence – 5 Reports and Studies / Ops and Nots – Inspector SDF decant approval and lab results for SNP stations 1412-2 and 2016-2 – Oct10-18

From: Wendy Bidwell <Wendy_Bidwell@gov.nt.ca>
Sent: Wednesday, October 10, 2018 2:00 PM
To: Clifford McLeod <provwork@ssimicro.com>; sao@fortprovidence.ca
Cc: Erica Janes <ejanes@mvlwb.com>
Subject: RE: Lagoon Sample (Approval to Decant Cell #5 of Sewage Lagoon)
Importance: High

Hi Clifford and Susan,

I have reviewed the preliminary sample results Judy provided for the 1412-2 sample Clifford collected on the September 13th (see attached). All results meet the licence Effluent Quality criteria. Thus, the Hamlet is approved to proceed with decant operations at Cell #5 of the Sewage Disposal Facilities.

In addition, please let me know when decant commences and ends. If decant is longer than a week, a weekly sample will be required for *every* week that the Hamlet decants as per the licence. Total effluent discharge volumes will need to be included in the annual water licence report, so it's important that this information is tracked and recorded.

If you have any questions regarding decant, don't hesitate to contact me.

Good luck and please keep me posted.

Regards,

Wendy

Mársi | Kinanaskomitin | Thank you | Merci | Hǫj' | Quana | Qujannamiik | Quyanainni | Máhsı | Máhsı | Mahsi
Wendy Bidwell

Water Resource Officer
South Slave Region
Department of Environment and Natural Resources
Government of the Northwest Territories

Highway #5
PO Box 900
Fort Smith, NT X0E 0P0

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From: Clifford McLeod [<mailto:provwork@ssimicro.com>]

Sent: Tuesday, October 09, 2018 1:58 PM

To: Wendy Bidwell

Subject: Lagoon Sample

Hi Wendy

Still for the go ahead t5o start decanting of lagoon cell #5

Clifford McLeod



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

Taiga Batch No.:
180944

- PRELIMINARY REPORT -

Prepared For: Hamlet of Fort Providence

Address: General Delivery
Fort Providence, NT
X0E 0L0

Attn: Susan Christie

Facsimile: (867) 699-4624

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:

Print Date: *Wednesday, October 10, 2018*

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Taiga Environmental Laboratory

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

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

Taiga Batch No.:
180944

- CERTIFICATE OF ANALYSIS -

Client Sample ID: **1412-2**

Taiga Sample ID: **001**

Client Project: MV2016L3-0001

Sample Type: Sewage Lagoon

Received Date: 13-Sep-18

Sampling Date: 13-Sep-18

Sampling Time: 8:45

Location:

Report Status: Preliminary

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<u>Inorganics - Nutrients</u>						
Ammonia as Nitrogen	8.40	0.005	mg/L	15-Sep-18	SM4500-NH3:G	
CBOD	31	2	mg/L	13-Sep-18	SM5210:B	
Phosphorous, Total	0.374	0.002	mg/L	25-Sep-18	SM4500-P:D	
<u>Inorganics - Physicals</u>						
pH	8.22		pH units	13-Sep-18	SM4500-H:B	
Solids, Total Suspended	18	3	mg/L	18-Sep-18	SM2540:D	
<u>Major Ions</u>						
Nitrate as Nitrogen	0.51	0.01	mg/L	16-Sep-18	SM4110:B	
Nitrite as Nitrogen	< 0.01	0.01	mg/L	16-Sep-18	SM4110:B	
<u>Microbiology</u>						
Coliforms, Fecal	28	1	CFU/100mL	13-Sep-18	SM9222:D	
<u>Organics</u>						
Hexane Extractable Material	< 2.0	2.0	mg/L	24-Sep-18	EPA1664A	

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Taiga Batch No.:
180944

- CERTIFICATE OF ANALYSIS -

Client Sample ID: **2016-2**

Taiga Sample ID: **002**

Client Project: MV2016L3-0001

Sample Type: Poned Leachate

Received Date: 13-Sep-18

Sampling Date: 13-Sep-18

Sampling Time: 8:45

Location:

Report Status: **Preliminary**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<u>Inorganics - Nutrients</u>						
Ortho-Phosphate as Phosphorus	0.223	0.002	mg/L	24-Sep-18	SM4500-P:D	
<u>Inorganics - Physicals</u>						
Conductivity, Specific (@25C)	6160	0.4	µS/cm	20-Sep-18	SM2510:B	
pH	6.99		pH units	13-Sep-18	SM4500-H:B	
Solids, Total Suspended	220	3	mg/L	18-Sep-18	SM2540:D	
<u>Major Ions</u>						
Calcium	513	0.1	mg/L	16-Sep-18	SM4110:B	
Magnesium	60.5	0.1	mg/L	16-Sep-18	SM4110:B	
Potassium	365	0.1	mg/L	16-Sep-18	SM4110:B	
Sodium	742	0.1	mg/L	16-Sep-18	SM4110:B	
Sulphate	1	1	mg/L	16-Sep-18	SM4110:B	
<u>Organics</u>						
Benzene	< 0.002	0.002	mg/L	15-Sep-18	EPA8260B	
Ethylbenzene	< 0.002	0.002	mg/L	15-Sep-18	EPA8260B	
F2: C10-C16	< 0.2	0.2	mg/L	18-Sep-18	EPA8015B	
F3: C16-C34	0.4	0.2	mg/L	18-Sep-18	EPA8015B	

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- CERTIFICATE OF ANALYSIS -

Client Sample ID: 2016-2

Taiga Sample ID: 002

F4: C34-C50	< 0.2	0.2	mg/L	18-Sep-18	EPA8015B
Hexane Extractable Material	6.3	2.0	mg/L	24-Sep-18	EPA1664A
Hydrocarbons, Total Extractable	0.4	0.2	mg/L	18-Sep-18	EPA8015B
Hydrocarbons, Total Purgeable	0.4	0.3	mg/L	15-Sep-18	EPA8015
Toluene	0.093	0.002	mg/L	15-Sep-18	EPA8260B
Xylenes	< 0.002	0.002	mg/L	15-Sep-18	EPA8260B
<u>Subcontracted Organics</u>					
Phenols, Total	0.0987	0.001	mg/L	21-Sep-18	AB ENV.06537
<u>Trace Metals, Total</u>					
Aluminum	1720	5	µg/L	04-Oct-18	EPA200.8
Antimony	4.5	0.1	µg/L	04-Oct-18	EPA200.8
Arsenic	13.7	0.2	µg/L	04-Oct-18	EPA200.8
Barium	741	0.1	µg/L	04-Oct-18	EPA200.8
Beryllium	0.1	0.1	µg/L	04-Oct-18	EPA200.8
Bismuth	< 0.2	0.2	µg/L	04-Oct-18	EPA200.8
Boron	1890	0.9	µg/L	04-Oct-18	EPA200.8
Cadmium	0.3	0.1	µg/L	04-Oct-18	EPA200.8
Cesium	0.4	0.1	µg/L	04-Oct-18	EPA200.8
Chromium	24.7	0.1	µg/L	04-Oct-18	EPA200.8
Cobalt	13.7	0.1	µg/L	04-Oct-18	EPA200.8
Copper	14.5	0.2	µg/L	04-Oct-18	EPA200.8
Iron	97000	5	µg/L	04-Oct-18	EPA200.8
Lead	5.5	0.1	µg/L	04-Oct-18	EPA200.8
Lithium	149	0.2	µg/L	04-Oct-18	EPA200.8
Manganese	3070	0.1	µg/L	04-Oct-18	EPA200.8

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Taiga Sample ID: **002**

Mercury	0.04	0.01	µg/L	04-Oct-18	EPA200.8
Molybdenum	2.7	0.1	µg/L	04-Oct-18	EPA200.8
Nickel	38.3	0.1	µg/L	04-Oct-18	EPA200.8
Rubidium	112	0.1	µg/L	04-Oct-18	EPA200.8
Selenium	1.4	0.5	µg/L	04-Oct-18	EPA200.8
Silver	< 0.1	0.1	µg/L	04-Oct-18	EPA200.8
Strontium	1820	0.1	µg/L	04-Oct-18	EPA200.8
Thallium	< 0.1	0.1	µg/L	04-Oct-18	EPA200.8
Tin	1.2	0.1	µg/L	04-Oct-18	EPA200.8
Titanium	42.8	0.1	µg/L	04-Oct-18	EPA200.8
Uranium	0.6	0.1	µg/L	04-Oct-18	EPA200.8
Vanadium	8.1	0.1	µg/L	04-Oct-18	EPA200.8
Zinc	680	5	µg/L	04-Oct-18	EPA200.8

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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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