#### Liz

From: Mardy Semmler <semmlerm@nwtwb.com>
Sent: Wednesday, December 09, 2015 3:07 PM

**To:** 'Bijaya Adhikari'; 'Liz Castaneda'

**Subject:** FW: Emailing: 150995 - 1516 - FINAL REPORT, 150995 - 1516 - FINAL REPORT

**Attachments:** 150995 - 1516 - FINAL REPORT.pdf; 150995 - 1516 - FINAL REPORT.xls

Bijaya - for your review

Liz please upload to the Tuk Water Licence (expired) file.

Mardy

----Original Message-----

From: Tuk Foreman [mailto:tukforeman@northwestel.net]

Sent: November-18-15 4:29 PM

To: Philippe Thibert-Leduc@gov.nt.ca; Mardy Semmler

Cc: Grant Scott

Subject: FW: Emailing: 150995 - 1516 - FINAL REPORT, 150995 - 1516 - FINAL REPORT

Good Afternoon Phillippe/Mardy,

Attach is the final report from Tiaga Environmental Laboratory.

2015 Tuktoyaktuk Sewage Lagoon and Solid Waste Site Decant Summary:

Received final report results for samples of sewage lagoon and solid waste site from Tiaga Labs on Sept. 25/15. Forward final report results to Phillippe Thibert-Leduc, Inuvik Region Water Resource Officer. Approval was given to start decanting the sewage lagoon on Sept. 25/15. Completion date for decanting the sewage lagoon was on Oct. 01/15. 132.2 hours were the total hours on the decant pump.

Start date for decanting the Solid Waste Site was on Oct. 02/15. Completion date for decanting was on Oct. 08/15. 146.6 hours were the total hours on the decant pump.

The 2015 decant on both sites were very successful with just a few shut downs due to slush and debris build up on the pump. I will send the final volumes once I figure out the flow rate for the Berkeley Pump.

Regards,

Davy Krengnektak Municipal Works Manager Inc. Hamlet of Tuktoyaktuk

PH: 867 977 2479 FAX: 867 977 2110 CELL: 867 678 0396

E-mail: tukforeman@northwestel.net

----Original Message-----

From: taiga [mailto:taiga@gov.nt.ca]

Sent: Tuesday, November 10, 2015 9:04 AM

To: 'Davy Krengnektak'

Subject: Emailing: 150995 - 1516 - FINAL REPORT, 150995 - 1516 - FINAL REPORT

Davy,

Please see attached for final report 150995.

Have a good day.

Glen Hudy
Taiga Environmental Laboratory
Environment and Natural Resources
Government of the Northwest Territories
Main Line: 867-765-6645 I Fax: 867-920-8740 taiga@gov.nt.ca

Your message is ready to be sent with the following file or link attachments:

150995 - 1516 - FINAL REPORT 150995 - 1516 - FINAL REPORT

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

Client Name	Taiga Sample ID	Client Sample ID	Sample Type	Sampling Location	Sample Collect Date	Sample Received Date	Test Group Name	Lab Section
Hamlet of Tuktoyaktuk	150995-001	Sewage Lagoon	Water	SNP-0714-2	14-Oct-15	14-Oct-15	NH3-N	Inorganics - Nutrients
Hamlet of Tuktoyaktuk	150995-001	Sewage Lagoon	Water	SNP-0714-2	14-Oct-15	14-Oct-15	BOD	Inorganics - Nutrients
Hamlet of Tuktoyaktuk	150995-001	Sewage Lagoon	Water	SNP-0714-2	14-Oct-15	14-Oct-15	TSS	Inorganics - Physicals
Hamlet of Tuktoyaktuk	150995-001	Sewage Lagoon	Water	SNP-0714-2	14-Oct-15	14-Oct-15	pН	Inorganics - Physicals
Hamlet of Tuktoyaktuk	150995-001	Sewage Lagoon	Water	SNP-0714-2	14-Oct-15	14-Oct-15	FC - CFU	Microbiology
Hamlet of Tuktoyaktuk	150995-001	Sewage Lagoon	Water	SNP-0714-2	14-Oct-15	14-Oct-15	HEM	Organics
Hamlet of Tuktoyaktuk	150995-002	Solid Waste Site	Water	Solid Waste Site	14-Oct-15	14-Oct-15	BOD	Inorganics - Nutrients
Hamlet of Tuktoyaktuk	150995-002	Solid Waste Site	Water	Solid Waste Site	14-Oct-15	14-Oct-15	TSS	Inorganics - Physicals
Hamlet of Tuktoyaktuk	150995-002	Solid Waste Site	Water	Solid Waste Site	14-Oct-15	14-Oct-15	pН	Inorganics - Physicals
Hamlet of Tuktoyaktuk	150995-002	Solid Waste Site	Water	Solid Waste Site	14-Oct-15	14-Oct-15	FC - CFU	Microbiology
Hamlet of Tuktoyaktuk	150995-002	Solid Waste Site	Water	Solid Waste Site	14-Oct-15	14-Oct-15	PCB - ALS	Subcontracted Organics
Hamlet of Tuktoyaktuk	150995-002	Solid Waste Site	Water	Solid Waste Site	14-Oct-15	14-Oct-15	ICPMS3D	Trace Metals, Total
Hamlet of Tuktoyaktuk	150995-002	Solid Waste Site	Water	Solid Waste Site	14-Oct-15	14-Oct-15	ICPMS3D	Trace Metals, Total
Hamlet of Tuktoyaktuk	150995-002	Solid Waste Site	Water	Solid Waste Site	14-Oct-15	14-Oct-15	ICPMS3D	Trace Metals, Total
Hamlet of Tuktoyaktuk	150995-002	Solid Waste Site	Water	Solid Waste Site	14-Oct-15	14-Oct-15	ICPMS3D	Trace Metals, Total
Hamlet of Tuktoyaktuk	150995-002	Solid Waste Site	Water	Solid Waste Site	14-Oct-15	14-Oct-15	ICPMS3D	Trace Metals, Total
Hamlet of Tuktoyaktuk	150995-002	Solid Waste Site	Water	Solid Waste Site	14-Oct-15	14-Oct-15	ICPMS3D	Trace Metals, Total
Hamlet of Tuktoyaktuk	150995-002	Solid Waste Site	Water	Solid Waste Site	14-Oct-15	14-Oct-15	ICPMS3D	Trace Metals, Total
Hamlet of Tuktoyaktuk	150995-002	Solid Waste Site	Water	Solid Waste Site	14-Oct-15	14-Oct-15	ICPMS3D	Trace Metals, Total
Hamlet of Tuktoyaktuk	150995-002	Solid Waste Site	Water	Solid Waste Site	14-Oct-15	14-Oct-15	ICPMS3D	Trace Metals, Total
Hamlet of Tuktoyaktuk	150995-002	Solid Waste Site	Water	Solid Waste Site	14-Oct-15	14-Oct-15	ICPMS3D	Trace Metals, Total

Parameter Name	Result Flag	Reported Result	Units	CALC_MDL	Sample Result	Analysis Result	Analysis Date	Prep Method	Test Method	REPORT STATUS	DL
Ammonia as Nitrogen		7.13	mg/L	0.005			23-Oct-15		SM4500-NH3:G	Final	0.005
Biochemical Oxygen Demand		15	mg/L	2			15-Oct-15		SM5210:B	Final	2
Solids, Total Suspended		49	mg/L	3			16-Oct-15		SM2540:D	Final	3
pH		8.78	pH units				15-Oct-15		SM4500-H:B	Final	
Coliforms, Fecal		170	CFU/100mL	10			15-Oct-15		SM9222:D	Final	10
Hexane Extractable Material	<	2.0	mg/L	2.0			22-Oct-15		EPA1664A	Final	2
Biochemical Oxygen Demand		2	mg/L	2			15-Oct-15		SM5210:B	Final	2
Solids, Total Suspended		8	mg/L	3			16-Oct-15		SM2540:D	Final	3
pH		7.96	pH units				15-Oct-15		SM4500-H:B	Final	
Coliforms, Fecal	<	10	CFU/100mL	10			15-Oct-15		SM9222:D	Final	10
Polychlorinated Biphenyls		0.00011	mg/L	0.00005			20-Oct-15		EPA3510	Final	0.00005
Cadmium	<	0.1	μg/L	0.1			09-Nov-15		EPA200.8	Final	0.1
Chromium		0.4	μg/L	0.1			09-Nov-15		EPA200.8	Final	0.1
Cobalt		0.2	μg/L	0.1			09-Nov-15		EPA200.8	Final	0.1
Copper		1.8	μg/L	0.2			09-Nov-15		EPA200.8	Final	0.2
Iron		415	μg/L	5			09-Nov-15		EPA200.8	Final	5
Lead		0.4	μg/L	0.1			09-Nov-15		EPA200.8	Final	0.1
Manganese		12.0	μg/L	0.1			09-Nov-15		EPA200.8	Final	0.1
Mercury		0.02	μg/L	0.01			09-Nov-15		EPA200.8	Final	0.01
Nickel		3.7	μg/L	0.1			09-Nov-15		EPA200.8	Final	0.1
Zinc		18.4	μg/L	5			09-Nov-15		EPA200.8	Final	5



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

#### - FINAL REPORT -

Prepared For: Hamlet of Tuktoyaktuk

Address: P.O. Box 120

Tuktoyaktuk,NT

X0E 1C0

Attn: Davy Krengnektak Facsimile: (867) 977-2110

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

Glen Hudy

**Quality Assurance Officer** 

#### **NOTES:**

- For the thought 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
  - o Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF;
  - o Environment Canada
  - o 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, November 10, 2015

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Print Date: Tuesday, November 10, 2015





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## - CERTIFICATE OF ANALYSIS -

Client Sample ID: Sewage Lagoon Taiga Sample ID: 001

**Client Project:** 

Sample Type: Water Received Date: 14-Oct-15 Sampling Date: 14-Oct-15 Sampling Time: 8:34

Location: Sewage Lagoon SNP-0714-2

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Nutrients						
Ammonia as Nitrogen	7.13	0.005	mg/L	23-Oct-15	SM4500-NH3:G	
Biochemical Oxygen Demand	15	2	mg/L	15-Oct-15	SM5210:B	
<u>Inorganics - Physicals</u>						
рН	8.78		pH units	15-Oct-15	SM4500-H:B	
Solids, Total Suspended	49	3	mg/L	16-Oct-15	SM2540:D	
<u>Microbiology</u>						
Coliforms, Fecal	170	10	CFU/100mL	15-Oct-15	SM9222:D	
<u>Organics</u>						
Hexane Extractable Material	< 2.0	2.0	mg/L	22-Oct-15	EPA1664A	

ReportDate: Tuesday, November 10, 2015 Print Date: *Tuesday, November 10, 2015* 



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## - CERTIFICATE OF ANALYSIS -

Client Sample ID: Solid Waste Site Taiga Sample ID: 002

**Client Project:** 

Sample Type: Water Received Date: 14-Oct-15 Sampling Date: 14-Oct-15 Sampling Time: 8:54

**Location:** Solid Waste Site

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Nutrients						
Biochemical Oxygen Demand	2	2	mg/L	15-Oct-15	SM5210:B	
<u>Inorganics - Physicals</u>						
рН	7.96		pH units	15-Oct-15	SM4500-H:B	
Solids, Total Suspended	8	3	mg/L	16-Oct-15	SM2540:D	
<u>Microbiology</u>						
Coliforms, Fecal	< 10	10	CFU/100mL	15-Oct-15	SM9222:D	
<b>Subcontracted Organics</b>						
Polychlorinated Biphenyls	0.00011	0.00005	mg/L	20-Oct-15	EPA3510	
Trace Metals, Total						
Cadmium	< 0.1	0.1	μg/L	09-Nov-15	EPA200.8	
Chromium	0.4	0.1	μg/L	09-Nov-15	EPA200.8	
Cobalt	0.2	0.1	μg/L	09-Nov-15	EPA200.8	
Copper	1.8	0.2	μg/L	09-Nov-15	EPA200.8	
Iron	415	5	μg/L	09-Nov-15	EPA200.8	
Lead	0.4	0.1	μg/L	09-Nov-15	EPA200.8	
Manganese	12.0	0.1	μg/L	09-Nov-15	EPA200.8	

ReportDate: Tuesday, November 10, 2015

Print Date: Tuesday, November 10, 2015





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## - CERTIFICATE OF ANALYSIS -

Client Sample ID:	Solid Waste Site		Ta	Taiga Sample ID: 002			
Mercury	0.02	0.01	μg/L	09-Nov-15	EPA200.8		
Nickel	3.7	0.1	μg/L	09-Nov-15	EPA200.8		
Zinc	18.4	5	μg/L	09-Nov-15	EPA200.8		

ReportDate: Tuesday, November 10, 2015
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Taiga Batch No.: 150995

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## - CERTIFICATE OF ANALYSIS -

Client Sample ID: Solid Waste Site Taiga Sample ID: 002

\* 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, November 10, 2015
Print Date: Tuesday, November 10, 2015