Government of Gouvernment des Northwest Territories Territoires du Nord-Ouest

Telephone: 867-678-6698 Fax: 867-678-6699

December 8, 2016

Hamlet of Aklavik P.O. Box 88 Aklavik, NT X0E 0A0

Attention: Fred Behrens, Senior Administrative Officer

File NumberG99L3-003 and N3L3-0570Type of OperationType B - MUNICIPAL

Dear Mr. Behrens,

An inspection of the Municipal Water Supply and Waste Disposal Facilities was conducted on August 25, 2016. Enclosed is a copy of the Municipal Water Licence inspection report.

There were three non-compliances identified as depicted on page 7 of the inspection report. Please review and address the concerns throughout the report.

Please note that as the Licensee, it is your responsibility to ensure compliance with all of the terms and conditions of the Water Licence. The Department of Environment and Natural Resources is available to assist you in achieving this goal.

A copy of this report will be sent to the Gwich'in Land and Water Board and the Inuvialuit Water Board for their review and public records. A copy will also be sent to the Mayor and Council in Aklavik. If you have any questions/concerns regarding the enclosed, please do not hesitate to contact me at (867) 678-6676.

Sincerely,

Philippe Thibert-Leduc Water Resource Officer Environment and Natural Resources Inuvik Region

Cc: Norman Snowshoe – Acting Superintendent, GNWT ENR Inuvik Region



Mardy Semmler – Executive Director, Inuvialuit Water Board Bijaya Adhikari – Science and Regulatory Coordinator, Inuvialuit Water Board Leonard DeBastien – Executive Director, Gwich'in Land and Water Board AlecSandra Macdonald – Regulatory Specialist, Gwich'in Land and Water Board Lorie Fyfe – Regional Superintendent, MACA Mayor and Council, Hamlet of Ulukhaktok

Enclosure: Municipal Water Use Inspection Report (16 pages)

LICENCE #s:	G99L3-003 and N3L3-0570	EXPIRY DATES:	November 30, 2019
LICENCEE:	Hamlet of Aklavik	PREVIOUS INSPECTION:	August 26, 2011 (AANDC)
COMPANY REP:	Fred Behrens, SAO	INSPECTION DATE:	August 25, 2016

WATER SUPPLY

Source:	Mackenzie River, Peel Channel	Quantity Used:	N/I
Owner/Operator:	Hamlet of Aklavik	Meter Reading:	N/I

Indicate: A

A - Acceptable

U - Unacceptable N/A -

N/A - Not Applicable N/I - Not Inspected

Intake Facilities	А	Storage Structures	А	Treatment Systems	А	Recycling	N/A
Flow Meas. Device	А	Conveyance Lines	A	Pumping Stations	А	Chem. Storage	А
Water Delivery Truck	N/I	Modifications	N/A				

Water Supply Comments:

- The water intake site, located behind the Water Treatment Plant (WTP) and drawing from the Peel Channel of the Mackenzie River, was clean looking with no litter nearby (Figure 1). Human activity around the water supply is constant however it has not affected water quality in recent years.
- The water intake pipe is fully submerged and does not enter into contact with any vessels/motorized vehicles operating around the WTP.
- From a source water protection standpoint, it would be a best management practice to berm all medium to large fuel storage tanks near the water intake area.

Water Treatment Plant Comments:

- The Water Treatment Plant (WTP) appeared to be in overall good condition (Figure 2). Protective pilings in front of the WTP were in good condition, however some rutting/ponding was identified at the truckfill station (Figure 3). This should be backfilled regularly to prevent ponding as part of regular access road maintenance.
- The WTP and other structures on site are kept locked at all times. The WTP is located close to Aklavik residences and
- The Hamlet benefits from having 3 certified Water Treatment Operators.
- Daily logs and record keeping requirements were being met. The overall condition of the WTP was clean and tidy.
- Please ensure that all chlorine barrels are labeled and dated properly upon receipt, and that empty chlorine containers are disposed of properly (Figure 4).
- There were some litter/wastes around the WTP site. Two unsealed containers likely containing
 waste oil were identified close to the WTP and the water intake site, without secondary
 containment. Both containers should be consolidated into a more secure container and stored
 somewhere dry and with secondary containment (e.g. Hamlet garage).

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- A large erosion channel was identified behind one of the two main water storage tanks (Figure 6).
 Please ensure that the erosion is monitored and that Water Treatment Operators are monitoring the WTP regularly for signs of erosion and subsidence. Before the erosion channel is backfilled, the source of erosion should be identified and promptly dealt with (i.e. redirecting drainage in the area as needed).
- The water delivery trucks were not inspected at this time. Please ensure that the water tanks, water hoses and nozzles are kept clean.
- There were fully supplied spill kits and spill containment and clean-up materials identified in the storage shed adjacent to the WTP.
- There is an old large storage tank adjacent to the WTP (Figure 7). Hamlet staff reported that the tank used to store dust suppressant oil and that it has not been used in years. The perimeter surrounding the tank was inspected and some oil/spilled materials were identified on the ground. It appeared that the tank was no longer in use; as such the Hamlet should identify the owner and request that the tank be decommissioned and the site tested for hydrocarbon contamination. ENR Inuvik Region can be of assistance as needed.

WASTE DISPOSAL - SEWAGE

A - Acceptable

Y - Yes

Disposal Met	hod	Primary Treatr	eatment				
Mechanical	N	Camp Sump	Ν	Natural Water Body	Y	Wetland Treatment	Y
Continuous Discharge	Y	Intermittent Discharge	Ν	Seasonal Discharge	Ν	Land Spread	N
Accelerated Biological	Ν	Other	N/A				

Indicate:

U - Unacceptable N - No

N/A - Not Applicable N/I - Not Inspected

Discharge	А	Decant Process &	N/A	Discharge	A			
Quality		Structures		Measurement Device				
Freeboard	А	Sludge Disposal Method	N/A	SNP Samples Collected	Yes ¹			
Periods Of	Continuo							
Discharge	Continuo	us						
Effluent								
Discharge	Natural o	Natural outflow into the wetland						
Rates								

Sewage Comments:

- The overall condition of the Sewage Disposal Facility (SDF) was satisfactory. The single discharge chute was in good working condition and the truck discharge pad did not show any sign of erosion, ponding or subsidence (Figure 8).
- Colour and smell were adequate and sewage lagoon appeared to be performing well.
- Freeboard level appeared to be adequate (e.g. >1 meter length). Maintaining adequate freeboard level has not been an issue in recent years according to Hamlet staff. One issue that was mentioned however, is when a flooding event occurs and flushes out the sewage lagoon into the surrounding environmental without proper natural filtration. This is a difficult challenge given the flooding history in the Hamlet. The Hamlet should prepare for such event and have capacity and

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equipment in place in the event that the SDF is temporarily inaccessible due to the access road being flooded.

- Overall, the discharge chute appeared to be performing well, however no catchment basin is being used underneath the discharge chute inlet. There were signs of erosion as a result (Figure 9). The hole/subsidence underneath the discharge chute should be backfilled and a catchment basin should be placed underneath to capture any spilled sewage at the time of discharge.
- There was some rutting and ponding identified on the truck discharge pad. The pad should be sloped and backfilled as needed to ensure there is positive drainage at all times. In addition, it would be a best management practice to use cinderblocks/wheel stops and high visibility to assist truck operators when backing up the sewage trucks.
- No litter/debris was identified on the surface and around the sewage lagoon (Figure 10). There
 were wastes nearby from the landfill however they were contained and far enough from the
 sewage lagoon and the discharge pad. Good and clear signage was also identified.
- There was no fencing at the site it is open access at all times.
- ¹Samples were collected for SNP-570-3. Results are discussed in the SNP section of the inspection report.

Disposal Me	ethod	Landfill					
Open Dump	N	Landfill	Y	Burn & Landfill	А	Underground	Ν
Offsite Removal	Ν	Other	N/A				
Owner / Operator	Hamlet of Ak	lavik					

WASTE DISPOSAL - SOLID WASTE

Indicate:	A - Acceptable	U - Unacceptable	N/A - Not Applicable N/I - Not Inspected
	Y - Yes	N - No	

Runoff Diversion	А	SNP Samples Collected	N/A
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Solid Waste Comments:

- The Solid Waste Disposal Facility (SWDF) is separated in 2 areas: general household wastes and bulk wastes (Figure 12).
- Household wastes were not being compacted/capped (Figure 13). There was significant ponding however no run-off was observed around the perimeter.
- At the household wastes site, there was a significant pile of clean wood debris and other authorized products which can be burned. The piled materials were blocking the designated burn pit (Figure 14). It is recommended that the Hamlet endeavor to reduce the pile of burnable products as soon as possible to ensure the burn pit remains accessible and to maximize the life expectancy of the SWDF.
- Overall, the condition of the SWDF could be largely improved if better segregation and consolidation of wastes was done.
- Near the bulk wastes area, there remained a large flooded cell (Figure 14). In the last Water
 Licence inspection report from the Department of Aboriginal Affairs and Northern Development
 Canada, it was reported that vehicles were pulled from the water and that sheen and oil were no

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longer present. At the time of the inspection, a large amount of used culverts were partly submerged in the cell. These should be removed from the water and relocated to the bulk waste area. No sheen/oil was identified in the flooded cell.

At the time of the inspection, the Hamlet did not enforce any access control at the SWDF. It was
evident that the Industrial, Commercial and Institutional (ICI) sectors use the SWDF regularly to
dispose of bulk wastes and hazardous wastes (Figure 15). It would be a best management practice
for the Hamlet to request, through correspondence and/or bylaw for example, that ICI sectors
compensate the Hamlet for accepting such wastes as the SWDF was near capacity.

FUEL STORAGE

Indicate:	A - Acceptable	U - Unacceptable	N/A - Not Applicable	N/I - Not Inspected
maicate.	A Acceptable	o onacceptuble		Not inspected

Owner:	Hamlet of Aklavik	Operator:	Hamlet of Aklavik	Condition of tanks:	А
Berms & Liners	N/A	Water within Berm:	N/A	Evidence of Leaks:	None
Drainage Pipes	N/A	Pump Station and Catchment Berm	А	Runoff Diversion	N/A
Pipeline Condition	N/I				

Water Treatment Plant Fuel Storage Comments:

- Two above-ground fuel storage tanks were identified around the WTP. One was a 10,000L double walled tank connected to the WTP (Figure 16), and the other was a 1,000L tank connected to the storage shed adjacent to the WTP (Figure 17). It does not appear that the 1,000L tank is double-walled.
- The 10,000L tank appeared to be in good condition overall. No sign of leakage was observed. There were no protective pilings around the tank and no berm in place. The fuel supply line was equipped with a flex pipe which seemed to be fully stretched. Upon review of the last Water Licence inspection, it appears that the flex pipe has not shifted in recent years, which would indicate that there has not been shifting of the ground impacting the WTP and the fuel tank in recent years.
- The 1,000L tank appeared to be in good condition overall. No sign of leakage was identified at the time of the inspection. It is likely that this tank is not double-walled. As such, it would be a best management practice to provide for secondary containment around the tank as it poses a significant risk to the water supply. Upon review of the 2011 Water Licence inspection report, it appears that the flex pipe has not moved in recent years, which would again indicate that there has not been any significant shifting of the ground in recent years.
- There were spill kits on site in the event of an emergency.

SURVEILLANCE NETWORK PROGRAM

Samples Collected Licencee	No ¹		
Samples Collected ENR	Yes		
Signs Posted: SNP	No	Warning	Yes

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Surveillance Network Program Comments:

- Samples were collected by the Inspector on August 25, 2016 at one SNP Station.
- SNP Station Number 570-3 was sampled at the point of outflow from Clearing Lake Sewage Lagoon effluent before entering the adjacent wetland. It is important to note that the site is difficult to access and best done via canoeing and portage from a small water body between the SWDF and the Mackenzie River.
- SNP Station Number 570-3 is the only station under Water Licence N3L3-0570. In the future, it would be a best management practice to conduct additional sampling in order to identify possible future SNP locations that would effectively measure wetland treatment performance.
- All results came back within the Water Licence criteria. Sampling results are attached to this inspection report for the Hamlet's records.
- Under Water Licence G99L3-003, the only SNP Station is Number 570-1, for the raw water supply intake near the WTP. This is done regularly by Water Treatment Operators and volume estimates are provided in the Annual Reports.
- Overall, the SNP programs under both Water Licences should be revised as to include run-off escaping from the SWDF and the point(s) of outflow from the wetland filtration of the SDF effluents.
- ¹Sampling and reporting on SNP sampling by the Hamlet has not occurred despite the Water
 Licence requirements. Please note that ENR Inuvik Region is available to assist you in meeting the
 SNP sampling requirements and can offer training and supplies as needed.

GENERAL CONDITIONS/REPORTS/PLANS

Indicate:	A - Acceptable	U - Unacceptable	N/A - Not Applicable N/I - Not Inspected
malcate.	A Acceptable	o onacceptable	

C &R Plan	N/A	Records & Reporting	U ³	Final Report	N/A
Geotechnical Inspection	N/A	Posting, Signage	А	Contingency Plan	А
Restorations Activities	N/A	Spills	А	O&M Plan	А
Maintenance	U ²	Modifications	N/A	Annual Report	A ¹

General Condition Comments:

- On August 25, 2016, Water Resource Officer (Inspector) Philippe Thibert-Leduc conducted an inspection of Water Licences G99L3-003 and N3L3-0570 (expire November 30, 2019). Specifically, the water intake, water source, and waste disposal facilities were inspected. The inspection was preceded by a meeting with the SAO to discuss the Hamlet of Aklavik's Water Licence.
- A Water Licence inspection of the SDF was conducted on January 27, 2016, in response to a report
 of auto-transmission fluid (ATF) being spilled at the sewage lagoon and around the Hamlet. A
 number of non-compliances were identified. Shortly after the report, spillage of ATF fluids around
 the sewage lagoon ceased, and empty containers were no longer left behind at the site.
- August 25, 2016 forecast was partly cloudy with scattered showers with a high of 21°C and low of 11°C.
- ¹The Annual report for 2015 is on file and posted to the public register however it is limited in its level of detail.

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ADDITIONAL COMMENTS/REMARKS

- The Department of Environment and Natural Resources can provide support to communities on a number of matters relevant to the Water Licence. Please find below some programs from ENR:
 Water Source Protection Planning
 - http://www.nwtwaterstewardship.ca/swprotection
 - http://www.geomatics.gov.nt.ca/maps.aspx?i=8
 - ENR Waste Management Guidelines
 - http://www.enr.gov.nt.ca/sites/default/files/guidelines/general_management.pdf
 - http://www.enr.gov.nt.ca/sites/default/files/guidelines/biomedical_waste.pdf
 - <u>http://www.enr.gov.nt.ca/sites/default/files/guidelines/industrial_waste_guidelines.</u> pdf
 - http://www.enr.gov.nt.ca/files/ozone-depleting-substances-and-halocarbonalternatives
 - http://www.enr.gov.nt.ca/files/management-waste-antifreeze
 - http://www.enr.gov.nt.ca/sites/default/files/guidelines/asbestos.pdf
 - http://www.enr.gov.nt.ca/sites/default/files/guidelines/batteryguideline.pdf
 - http://www.enr.gov.nt.ca/sites/default/files/guidelines/guideline waste lead and paint.pdf
 - http://www.enr.gov.nt.ca/sites/default/files/guidelines/paintguideline.pdf
 - http://www.enr.gov.nt.ca/sites/default/files/guidelines/solvents.pdf
 - <u>http://www.enr.gov.nt.ca/sites/default/files/drum_disposal_protocol_for_municipal_landfill.pdf</u>
 - Other ENR Guidelines
 - http://www.enr.gov.nt.ca/sites/default/files/guidelines/solid wastes suitable open burning.pdf
 - <u>http://www.enr.gov.nt.ca/sites/default/files/guidelines/burning_and_demolition_of_buildings.pdf</u>
 - http://www.enr.gov.nt.ca/sites/default/files/guidelines/agricultural_waste.pdf
 - <u>http://www.enr.gov.nt.ca/sites/default/files/brochures/mcl_recycling_per_web_201</u>
 <u>2_guide.pdf</u>
 - http://www.enr.gov.nt.ca/sites/default/files/guidelines/siteremediation.pdf
 - http://www.enr.gov.nt.ca/sites/default/files/guidelines/dustsupression.pdf
 - $\circ~$ ENR Waste Reduction and Recycling Programs
 - <u>http://www.enr.gov.nt.ca/programs/electronics-recycling-program</u>
 - http://www.enr.gov.nt.ca/programs/beverage-container-program
 - ENR Mercury Handling Program
 - Please contact your regional ENR office to dispose of mercury containing products free of charge.

MATTERS FOR FOLLOW-UP

- ²Given the overall poor condition of the SWDF, it would be recommended to ensure Hamlet staff review the O&M plan under the Water Licence as well as the ENR Hazardous Waste Management guidelines. Moving forward, some high priority action items should be to segregate and consolidate all hazardous wastes currently at the SWDF, and begin disposing of clean wood debris using the designated burn pit on site.
- ³The Surveillance Network Program requirements are not being fully met. Please work with the Boards and the Inspector to resolve this non-compliance.

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- The large erosion channel identified behind one of the two main water storage tanks at the WTP should be dealt with promptly.

NON-COMPLIANCE/VIOLATIONS OF ACT OR LICENCE

Water Licence N3L3-0570:

- Part B: General Conditions, Item 2,
 "The Licensee shall comply with the "Surveillance Network Program annexed to this License, and any amendment to the said "Surveillance Network Program" as may be made from time to time, pursuant to the conditions of this Licence.
- Part D: Conditions Applying to Waste Disposal, Item 9,
 "The Licensee shall segregate and store hazardous wastes in a designated contained temporary storage area, to the satisfaction of the Inspector."
- Part D: Conditions Applying to Waste Disposal, Item 11,
 "The Licensee shall ensure that any unauthorized wastes associated with the municipal undertaking do not enter any waters.

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Inspector's Signature:

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INSPECTION IMAGES



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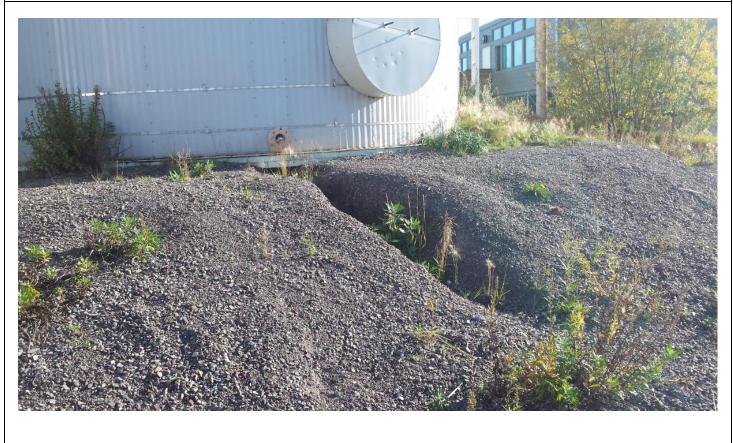
Figure 5

Water Treatment Plant: Unidentified wastes outside of the WTP, unsealed and without secondary containment.



Figure 6

Water Treatment Plant: Large erosion channel identified behind one of the main water storage tanks.



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Figure 11

Solid Waste Disposal Facility: Overview of the general wastes area, from the bulk wastes area.

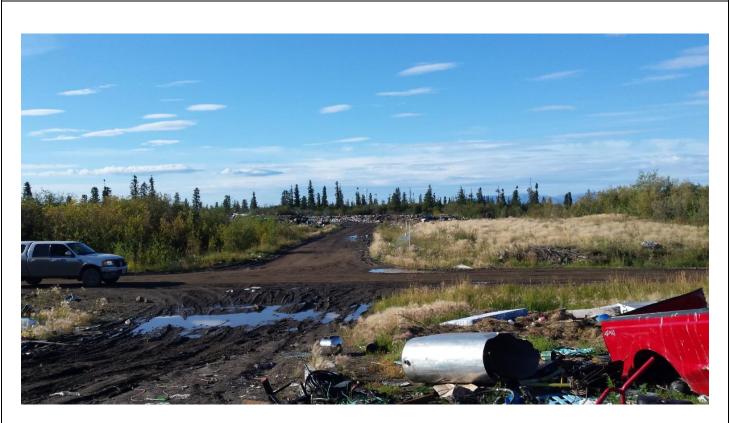
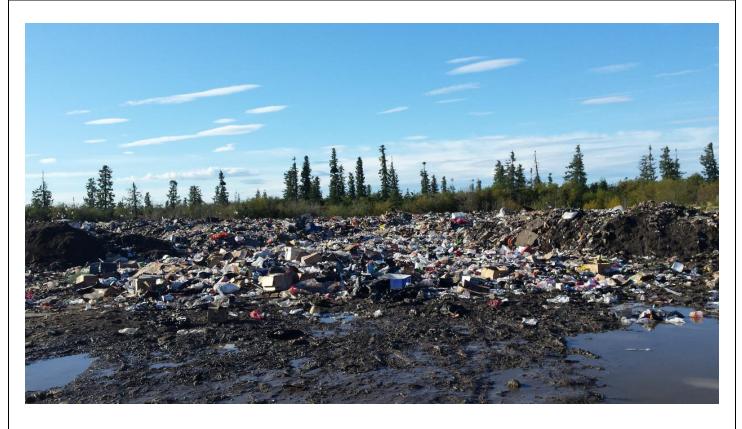


Figure 12 Solid Waste Disposal Facility: Household wastes.



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Figure 13

Solid Waste Disposal Facility: Overview of burn pit and stockpiled products that are authorized for burning.



Figure 14

Solid Waste Disposal Facility: Old culverts submerged near the bulk wastes area.



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Solid Waste Disposal Facility: Industrial, commercial and institutional wastes.

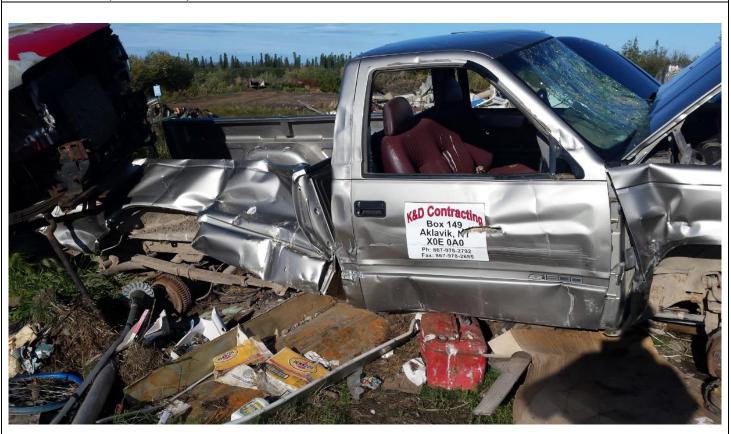


Figure 16

Water Treatment Plant: Large fuel tank and fixtures.



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Taiga Batch No.: 160827

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

- FINAL REPORT -

Prepared For: GNWT - Environment and Natural Resources

Address: P.O. Box 2749 Inuvik,NT X0E 0T0

Attn: Philippe Thibert-Leduc

Facsimile: (867) 678-6659

Final report has been reviewed and approved by:

Idu

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
 - 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.



Taiga Batch No.: 160827

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

- CERTIFICATE OF ANALYSIS -

Client Sample ID: SNP 570-3

Taiga Sample ID: 001

Report Status:	Final
Location:	Aklavik
Sampling Time:	14:30
Sampling Date:	25-Aug-16
Received Date:	26-Aug-16
Sample Type:	Sewage
Client Project:	N3L3-0570

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Nutrients						
Biochemical Oxygen Demand	3	2	mg/L	26-Aug-16	SM5210:B	
Chemical Oxygen Demand	27	5	mg/L	30-Aug-16	SM5220:D	
Inorganics - Physicals						
рН	8.33		pH units	29-Aug-16	SM4500-H:B	
Solids, Total Suspended	6	3	mg/L	06-Sep-16	SM2540:D	
<u>Microbiology</u>						
Coliforms, Fecal	31	1	CFU/100mL	26-Aug-16	SM9222:D	
<u>Organics</u>						
Hexane Extractable Material	< 2.0	2.0	mg/L	01-Sep-16	EPA1664A	
Trace Metals, Total						
Aluminum	46.1	5	μg/L	08-Sep-16	EPA200.8	
Antimony	0.3	0.1	μg/L	08-Sep-16	EPA200.8	
Arsenic	1.4	0.2	µg/L	08-Sep-16	EPA200.8	
Barium	80.8	0.1	µg/L	08-Sep-16	EPA200.8	
Beryllium	< 0.1	0.1	μg/L	08-Sep-16	EPA200.8	



Taiga Batch No.: 160827

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

- CERTIFICATE OF ANALYSIS -

Client Sample ID: SNP 570-3 Taiga Sample ID: 001 < 0.1 Cadmium 0.1 μg/L 08-Sep-16 EPA200.8 Cesium < 0.1 0.1 μg/L 08-Sep-16 EPA200.8 Chromium 0.1 0.1 μg/L 08-Sep-16 EPA200.8 Cobalt 0.2 0.1μg/L 08-Sep-16 EPA200.8 Copper 0.9 0.2 08-Sep-16 EPA200.8 µg/L Iron 336 5 08-Sep-16 μg/L EPA200.8 Lead < 0.1 0.1 08-Sep-16 EPA200.8 μg/L Lithium 5.5 0.2 µg/L 08-Sep-16 EPA200.8 Manganese 25.3 0.1 08-Sep-16 μg/L EPA200.8 Molybdenum 1.5 0.1 μg/L 08-Sep-16 EPA200.8 Nickel 2.1 0.1 μg/L 08-Sep-16 EPA200.8 Rubidium 1.0 0.108-Sep-16 μg/L EPA200.8 Selenium < 0.5 0.5 08-Sep-16 μg/L EPA200.8 Silver < 0.1 0.1 μg/L 08-Sep-16 EPA200.8 Strontium 105 0.1 μg/L 08-Sep-16 EPA200.8 Thallium < 0.1 0.1 08-Sep-16 μg/L EPA200.8 Titanium 0.7 0.1 μg/L 08-Sep-16 EPA200.8 Uranium 0.3 0.1 08-Sep-16 μg/L EPA200.8 Vanadium 0.3 0.1μg/L 08-Sep-16 EPA200.8 Zinc < 5.0 5 μg/L 08-Sep-16 EPA200.8



Taiga Batch No.: 160827

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

- CERTIFICATE OF ANALYSIS -

Client Sample ID: SNP 570-3

Taiga Sample ID: 001

* 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

Client Name	Taiga Sample ID	Client Sample ID	Sample Type
GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage
GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage
GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage
GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage
GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage
GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage
GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage
GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage
GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage
GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage
GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage
GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage
GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage
GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage
GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage
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GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage
GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage
GNWT - Environment and Natural Resources	160827-001	SNP 570-3	Sewage

Sampling Location	Sample Collect Date	Sample Received Date	Test Group Name	Lab Section
Aklavik	25-Aug-16	26-Aug-16	BOD	Inorganics - Nutrients
Aklavik	25-Aug-16	26-Aug-16	COD	Inorganics - Nutrients
Aklavik	25-Aug-16	26-Aug-16	TSS	Inorganics - Physicals
Aklavik	25-Aug-16	26-Aug-16	рН	Inorganics - Physicals
Aklavik	25-Aug-16	26-Aug-16	FC - CFU	Microbiology
Aklavik	25-Aug-16	26-Aug-16	HEM	Organics
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total
Aklavik	25-Aug-16	26-Aug-16	ICPMS3D	Trace Metals, Total

Parameter Name	Result Flag	Reported Result	Units
Biochemical Oxygen Demand		3	mg/L
Chemical Oxygen Demand		27	mg/L
Solids, Total Suspended		6	mg/L
рН		8.33	pH units
Coliforms, Fecal		31	CFU/100mL
Hexane Extractable Material	<	2.0	mg/L
Aluminum		46.1	µg/L
Antimony		0.3	µg/L
Arsenic		1.4	µg/L
Barium		80.8	µg/L
Beryllium	<	0.1	µg/L
Cadmium	<	0.1	µg/L
Cesium	<	0.1	µg/L
Chromium		0.1	µg/L
Cobalt		0.2	µg/L
Copper		0.9	µg/L
Iron		336	µg/L
Lead	<	0.1	µg/L
Lithium		5.5	µg/L
Manganese		25.3	µg/L
Molybdenum		1.5	µg/L
Nickel		2.1	µg/L
Rubidium		1.0	µg/L
Selenium	<	0.5	µg/L
Silver	<	0.1	µg/L
Strontium		105	µg/L
Thallium	<	0.1	µg/L
Titanium		0.7	µg/L
Uranium		0.3	µg/L
Vanadium		0.3	µg/L
Zinc	<	5.0	µg/L

CALC_MDL	mple Result Qual i lysis Result Qu	al Analysis Date	Prep Method	Test Method
2		26-Aug-16		SM5210:B
5		30-Aug-16		SM5220:D
3		06-Sep-16		SM2540:D
		29-Aug-16		SM4500-H:B
1		26-Aug-16		SM9222:D
2.0		01-Sep-16		EPA1664A
5		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
0.2		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
0.2		08-Sep-16		EPA200.8
5		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
0.2		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
0.5		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
0.1		08-Sep-16		EPA200.8
5		08-Sep-16		EPA200.8

REPORT STATUS	DL
Final	2
Final	5
Final	3
Final	
Final	1
Final	2
Final	5
Final	0.1
Final	0.2
Final	0.1
Final	0.2
Final	5
Final	0.1
Final	0.2
Final	0.1
Final	0.5
Final	0.1
Final	5