NORTHWEST TERRITORIES
POWER
CORPORATION
Empowering Communities

Health, Safety, & Environment, 4 Capital Drive, Hay River, NT, X0E 1G2 Phone (867) 874-5248 Fax 1-888-371-9433
www.ntpc.com

February 04, 2021

Mardy Semmler
Executive Director
Inuvialuit Water Board
151 Mackenzie Road
Inuvik, NT X0E 0T0

Dear Ms. Semmler,

As per Water Licence N3L8-1838 Part B: General Conditions Item 1 in accordance with Water Licence N3L8-1838 Part B: Item 10 please find enclosed two (2) copies the *Annual Report 2020, Former Aklavik Power Plant, 68° 13' 6.24" North And 135° 0' 21.24" West, Aklavik, Northwest Territories* and two (2) electronic copies of the *Annual Report 2020, Former Aklavik Power Plant, 68° 13' 6.24" North And 135° 0' 21.24" West, Aklavik, Northwest Territories.*

If you have any questions or concerns, please contact me at 867-874-5248.

Thanks,

Joshua Clark
HSE Policy Coordinator

Matrix Solutions Inc.
ENVIRONMENT & ENGINEERING

Version 1.0
December 11, 2020 Matrix 21784-546

Mr. Travis Perkins
NORTHWEST TERRITORIES POWER CORPORATION
4 Capital Drive
Hay River, NT X0E 1G2

Subject: Annual Report 2020, Former Aklavik Power Plant, 68° 13' 6.24" North and 135° 0' 21.24" West, Aklavik, Northwest Territories

Dear Mr. Perkins:

1 INTRODUCTION

The Northwest Territories Power Corporation (NTPC) retained Matrix Solutions Inc. to apply a biological method of soil remediation at its former electricity generation plant in Aklavik, Northwest Territories. Bioaugmentation success has been reported for sites in northern Alberta, but this program marked the first time that Bio-Reclaim™ was used in the Northwest Territories. The program began with construction of a biotreatment cell in 2017 and continued until 2019. At the end of 2019 there was sufficient data to show that petroleum hydrocarbon concentrations were too slow for this to be a practical method for remediating this site (Matrix 2020).

The project is governed by a water licence issued by the Inuvialuit Water Board in 2016 (IWB 2016; Attachment A) and renewed in 2019 for another 3 years (IWB 2019; Attachment A). The licence requires submission of an annual report by January 31 of the following year. This report was prepared to fulfil the requirement for an annual report for calendar year 2020.

2 2020 ACTIVITY SUMMARY

The objective of the 2020 program was to manage surface water associated with the idled biotreatment cell. This work included collecting, treating, and testing, water from the biotreatment cell. No water was released to the municipal drainage ditch in 2020.

The 2020 work did not include adding or removing soil volumes to/from the biotreatment cell.

A treated water spill was reported to Northwest Territories Environment and Natural Resources (ENR) on August 6, 2020 (spill no. 2020258). Approximately 20 m^3 of treated water released from the holding tank as a result of a tear in a seam. Analytical results for this water are provided in this report.

3 METHODS

Throughout the 2020 field program, Matrix personnel were not onsite. NTPC fulfilled Prime Contractor duties and K&D Contracting Ltd. personnel who live in Aklavik conducted the physical work at the site. K&D personnel were provided training in previous years, so no further training was provided in 2020.

The onsite water treatment system was used to treat the surface water captured within the biotreatment cell. The water treatment system includes submersible pumps, settling tank, water treatment unit, and a post-treatment 40 m^3 Terra Tank™ to store the water until release. The water was treated in a three-stage process. First, the water was passed through a bag filter to remove entrained particulates and sediment. Second, the water was passed through two vessels containing a clay medium. Third, the water was filtered through two vessels containing an activated carbon medium, to remove any liquid- or dissolved-phase hydrocarbons.

Following a rain event or accumulation of water in the biotreatment cell, personnel from K&D Contacting Ltd. were onsite to manage surface water.

- Prior to the leak in the holding tank, this included operating the submersible pumps, monitoring pressures, and collecting water samples of the treated water for laboratory analysis. Water samples were collected from the water treatment system discharge port and from the post-treatment holding tank. Samples were shipped to AGAT Laboratories in Edmonton, Alberta, for analysis of parameters specified in the water licence.

- After the holding tank was discovered to be leaking and repair attempts were unsuccessful, water collecting in the sump was sprayed back onto the biotreatment cell to enhance soil treatment and prevent uncontrolled release of surface water. The biotreatment cell has a geomembrane liner that prevents seepage into the underlying soil.

4 RESULTS

The laboratory report for the water collected from the treatment system on July 28, 2020 is provided in Attachment B. In Table 1 the numerical values are compared to the site-specific water release criteria specified in the water licence. As Table 1 shows, all concentrations were within the site-specific release criteria except for lead. The lead concentration was 0.318 mg/L, compared with a water release criterion of 0.007 mg/L. As shown in Table 1, background water in the municipal ditch also exceeded release criterion when tested in 2017.

On August 6, 2020, it was discovered that the treated water holding tank had leaked an estimated 20 m^3 of treated water. Inspection by K&D personnel revealed that a seam repaired in 2019 had failed again. Follow-up discussions with ENR determined that at worst-case, the water release could result in soil concentrations up to 0.184 mg/kg, compared with residential and commercial soil quality guidelines of 140 mg/kg and 260 mg/kg, respectively (CCME 2020). The spill file (no. 2020258) was closed in August 2020.

Quality assurance/quality control measures in 2020 included comparing water analytical results with previous results to identify anomalies and following up with the analytical laboratory to confirm the lead result. The laboratory confirmed that the reported concentrations were reliable.

5 CONCLUSIONS

The objective of the 2020 program was to manage surface water associated with the idled biotreatment cell. This work included collecting, treating, and testing water from the biotreatment cell. Work in 2020 did not include adding or removing soil volumes to/from the biotreatment cell.

A spill of 20 m^3 of treated water was reported to ENR on August 6, 2020 (spill no. 2020258). Analytical results for this water showed that all parameters except lead met criteria for discharge to the municipal ditch. The spilled water seeped into the ground and was estimated to result in soil lead concentrations three orders of magnitude lower than soil quality guidelines. The spill file was closed.

No water was released to the municipal drainage ditch in 2020. After the spill, it was determined that the storage tank was irreparable and so water was managed by spraying onto the soil pile instead.

There were no reclamation or other closure activities in 2020. For 2021, NTPC is evaluating alternative remediation technologies for treatment or disposal of impacted material remaining onsite. At the time of this report, a decision was still pending.

6 CLOSURE

We trust that this letter report suits your present requirements. If you have any questions or comments, please call either of the undersigned at 403.237.0606.

Yours truly,

MATRIX SOLUTIONS INC.

Colin Badger, B.Sc. (Bio.E), E.I.T.
Environmental Engineer-in-Training

Reviewed by

Margaret Allan, M.Eng., P.Eng., P.Geo., FGC
Principal Engineer

December 11, 2020

CB/nf
Attachments

VERSION CONTROL

Version	Date	Issue Type	Filename	Description
V0.1	10-Dec-2020	Draft	21784-546 LR 2020-12-10 draft V0.1.docx	Issued to client for review
V1.0	11-Dec-2020	Final	21784-546 LR 2020-12-11 final V1.0.docx	Issued to client

REFERENCES

Canadian Council of Ministers of the Environment (CCME). 2020. *Canadian Environmental Quality Guidelines, Summary Table*. http://st-ts.ccme.ca/en/index.html

Inuvialuit Water Board (IWB). 2019. *Licence N3L8-1838 (Renewal)*. Issued to Northwest Territories Power Corporation. Inuvik, Northwest Territories. November 29, 2019.

Inuvialuit Water Board (IWB). 2016. *Licence N3L8-1838*. Issued to Northwest Territories Power Corporation. Inuvik, Northwest Territories. August 2016.

Matrix Solutions Inc. (Matrix). 2020. *Annual Report 2019 Former Aklavik Power Plant 68° 13' 6.24" North And 135° 0' 21.24" West, Aklavik, Northwest Territories*. Version 1.0. Northwest Territories Power Corporation. Calgary, Alberta. January 2020.

TABLE 1

Water Quality Results - Water Characterization

Northwest Territories Power Corporation

Aklavik, N.W.T.

Sample Point		Background	Post-treatment	Site Specific
Sample Date		14-Sep-17	28-Jul-20	Water Release
MSI Sample Number		21784170914001	21784200728001	Criteria*
General and Inorganic Parameters				
Lab pH		7.81	8.16	6 to 9
Lab Electrical Conductivity	µS/cm	1650	808	NS
Calcium	mg/L	235	109	NS
Magnesium	mg/L	44.9	46.2	NS
Sodium	mg/L	38.4	9.4	NS
Potassium	mg/L	7.1	5.2	NS
Chloride	mg/L	236	3	NS
Sulphate	mg/L	72.3	309	NS
Fluoride	mg/L	0.07	<0.05	NS
Nitrite-Nitrogen	mg/L	<0.01	<0.02	NS
Nitrate-Nitrogen	mg/L	<0.02	<0.02	NS
(Nitrite + Nitrate)-Nitrogen	mg/L	<0.02	<0.02	NS
Total Alkalinity	mg/L	462	148	NS
Bicarbonate	mg/L	564	180	NS
Hardness	mg/L	772	462	NS
Total Dissolved Solids	mg/L	911	570	NS
Total Suspended Solids	mg/L	***965***	<1	15
Total Metals				
Aluminum	mg/L	39.9	0.266	NS
Antimony	mg/L	0.001	0.004	NS
Arsenic	mg/L	0.047	0.003	NS
Barium	mg/L	1.84	<0.05	NS
Beryllium	mg/L	0.0034	<0.001	NS
Boron	mg/L	0.18	0.07	NS
Cadmium	mg/L	0.00359	0.0014	NS
Chromium	mg/L	0.0683	0.003	NS
Cobalt	mg/L	0.059	0.001	NS
Copper	mg/L	0.14	0.78	NS
Iron	mg/L	170	1.9	NS
Lead	mg/L	***0.101***	***0.318***	0.007[H]
Lithium	mg/L	0.135	0.011	NS
Manganese	mg/L	2.8	0.138	NS
Mercury	mg/L	0.00027	---	NS
Molybdenum	mg/L	0.004	0.002	NS
Nickel	mg/L	0.137	0.036	NS
Selenium	mg/L	0.012	0.0014	NS
Silicon	mg/L	46.4	1.14	NS
Silver	mg/L	0.0007	0.00011	NS
Strontium	mg/L	1.75	0.405	NS
Thallium	mg/L	0.0002	<0.0005	NS
Tin	mg/L	0.0011	0.009	NS
Titanium	mg/L	0.129	0.008	NS
Uranium	mg/L	0.01	0.003	NS
Vanadium	mg/L	0.115	0.001	NS
Zinc	mg/L	0.976	2.91	NS
Petroleum Hydrocarbons				
Benzene	mg/L	<0.0005	<0.0005	0.37
Toluene	mg/L	<0.0003	<0.0003	0.002
Ethylbenzene	mg/L	<0.0005	<0.0005	0.09
Xylenes	mg/L	<0.0005	<0.0005	0.03
Styrene	mg/L	<0.0005	<0.0005	NS
VPHw	mg/L	<0.1	---	NS
VHw (C_6-C_{10})	mg/L	<0.1	<0.1	NS
EPHw (C_{10}-C_{19})	mg/L	0.8	<0.1	NS
LEPHw (C_{10}-C_{19})**	mg/L	0.8	---	NS
EPHw (C_{19}-C_{32})	mg/L	3.6	<0.1	NS
HEPHw (C_{19}-C_{32})**	mg/L	3.6	---	NS
Total Petroleum Hydrocarbons	mg/L	4.4	---	5
Oil & Grease	mg/L	***18.7***	0.2	5
Polycyclic Aromatic Hydrocarbons				
Acenaphthene	µg/L	<0.01	---	NS
Acridine	µg/L	<0.05	---	NS
Anthracene	µg/L	<0.010	---	NS
Benzo[a]anthracene	µg/L	<0.01	---	NS
Benzo[a]pyrene	µg/L	<0.007	---	0.015
Chrysene	µg/L	<0.01	---	NS
Fluoranthene	µg/L	<0.01	---	NS
Fluorene	µg/L	<0.01	---	NS
Naphthalene	µg/L	<0.01	---	NS
Phenanthrene	µg/L	0.03	---	NS
Pyrene	µg/L	<0.01	---	NS
Quinoline	µg/L	<0.1	---	NS

Notes:

NS - not specified

--- - not analyzed

[H] - dependent on hardness value

† - laboratory visual determination

* - *Water Licence N3L8-1838* (Inuvialuit Water Board 2016)

Italics - indicates values do not meet applicable guidelines

ATTACHMENT A
Water Licences

INUVIALUIT SIVUNNIUQPAIT IMAKKUN

INUVIALUIT WATER BOARD

August 5, 2016

Mr. Joshua Clark
Environmental Analyst
Northwest Territories Power Corporation
4 Capital Drive
Hay River, NT X0E 1G2

Dear Mr. Clark:

Re: N3L8-1838 – Northwest Territories Power Corporation – Remediation and Reclamation of the former Aklavik Power Plant Site, Aklavik, NWT

The Inuvialuit Water Board (IWB) is pleased to attach Water Licence N3L8-1838 granted to the Northwest Territories Power Corporation in accordance with the *Waters Act* for the period commencing August 15, 2016 and expiring December 31, 2019. Included with the attached Licence are the Terms and Conditions applying to the licence and the General Procedures for the Administration of Licences in that portion of the Inuvialuit Settlement Region located in the Northwest Territories. Please review the Licence, the Terms and Conditions and the General Procedures carefully and address any questions to the IWB.

A copy of this Licence and all documentation associated with the application for and issuance of this Licence has been filed in the Public Register. Copies are available at the IWB office and on the IWB website. All inspection reports and other documentation related to the implementation of this Licence will also be filed in the Public Register. All Public Register material will be considered if an amendment to the Licence is requested.

The IWB appreciates the cooperation of Northwest Territories Power Corporation in complying with the Terms and Conditions of the Licence. Should you have questions or concerns, please contact Mardy Semmler, Executive Director at (867) 678-2942.

Sincerely,

Roger Connelly
Chairperson

Attachments

Copied to: Philippe Thibert-Leduc, Water Resources Officer – ENR, Inuvik Region

INUVIALUIT SIVUNNIUQPAIT IMAKKUN

INUVIALUIT WATER BOARD

INUVIALUIT WATER BOARD

Pursuant to the *Waters Act* and Waters Regulations the Inuvialuit Water Board, hereinafter referred to as the Board, hereby grants to

Northwest Territories Power Corporation

4 Capital Drive
Hay River, NT X0E 1G2
(Mailing Address)

hereinafter called the Licensee, the right to deposit waste as provided for under the *Waters Act* and Waters Regulations and subject to and in accordance with the terms and conditions specified in this Licence.

Licence Number	N3L8-1838
Licence Type	"B"
Water Management Area	Northwest Territories 03
Location	68° 13' 6.24" North and 135° 0' 21.24" West Northwest Territories
Purpose	Waste Disposal
Description	Miscellaneous Undertaking
Quantity of Water Not To Be Exceeded	Not Applicable
Effective Date of Licence	August 15, 2016
Expiry Date of Licence	December 31, 2019

This Licence issued and recorded at Inuvik includes and is subject to the annexed conditions.

INUVIALUIT WATER BOARD

Chairperson

August 5 2016
Date

PART A: SCOPE AND DEFINITIONS

1. Scope

a) This Licence entitles the Licencee to dispose of waste associated with a miscellaneous undertaking for the remediation and reclamation of the former power plant site located in Aklavik within the Inuvialuit Settlement Region (ISR) of the Northwest Territories and with coordinates 68° 13' 6.24" North and 135° 0' 21.24" West.

b) This Licence is issued subject to the conditions contained herein with respect to the depositing of waste of any type in any waters or in any place under any conditions where such waste or any other waste that results from the deposits of such waste may enter any waters. Whenever new Regulations are made or existing Regulations are amended by the Commissioner in Executive Council under the *Waters Act*, or other statutes imposing more stringent conditions relating to the quantity or type of waste that may be so deposited or under which any such waste may be so deposited, this Licence shall be deemed, upon promulgation of such Regulations, to be automatically amended to conform with such Regulations.

c) Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable federal, territorial and municipal legislation for which any and all applicable licences and permits shall also be obtained by Licensee.

d) This Licence is issued subject to the conditions contained herein with respect to the deposit of waste as prescribed in Section 11 of the *Waters Act*.

2. Definitions

In this Licence: N3L8-1838

"Act" means the *Waters Act*;

"Amendment" means a change to any terms and conditions of this Licence as provided for under Section 36 (1)(b) of the *Waters Act*;

"Analyst" means an analyst designated by the minister under Section 65 (1) of the *Act;*

"Board" means the Inuvialuit Water Board continued under Section 13 (1) of the *Act;*

"Closure" means the permanent dismantlement of one or more components of the Project with the intent of making the components incapable of its intended use. This includes the removal of associated equipment and structures used in the construction or maintenance of the Project;

"Construction" means any activities undertaken to construct or build any component of, or associated with, the remediation, reclamation and closure of the Project;

"Discharge" or "Deposit" means the direct or indirect release of any waters or waste to the receiving environment;

"Engineer" means a professional engineer registered with the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists and whose principal field of specialization is appropriate to address the components of the undertaking at hand;

"Inspector" means an inspector designated by the minister under Section 65 (1) of the *Act*;

"Licence" means this Type B Water Licence N3L8-1838 as issued by the Board in accordance with the *Act*, to the Licensee;

"Licensee" means the holder of this Licence;

"Minister" means a duly appointed member of the Executive Council who is responsible for the *Act*;

"Modification" means an alteration to a physical work that introduces a new structure or replaces or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion;

"Monitoring Program" means any program designed to collect data on the quality or quantity of surface water or ground water to assess impacts on the environment of the Project;

"Project" means the remediation and reclamation activities to be carried out at the former Aklavik power plant site, Aklavik NT as defined in the Water Licence Application and associated documents, which includes the Description of Undertaking;

"Receiving Environment" means, for the purpose of this Licence, the natural environment that receives any deposit or discharge of waste, including seepage or runoff, from the Project;

"Reclamation" means the process of restoring the Project area as nearly as possible to the same condition as it was prior to the commencement of the licensed activity;

"Regulations" means Waters Regulations promulgated pursuant to Section 63 of the *Act*;

"Remediation" means the removal, reduction or neutralization of substances, wastes or hazardous materials from a site so as to prevent or minimize any adverse effects on the environment now or in the future;

"Seepage" includes water or waste that drains through or escapes from any structure designed to contain, treat, withhold, divert or retain water or waste;

"Spill" means to allow or accidentally release waste from containment vessels or structures into the receiving environment;

"Surveillance Network Program (SNP)" means a monitoring program established to define environmental sampling and analysis requirements, as detailed in Annex 1 of this Licence, to collect water quality data, and to assess discharge quality, compliance with Licence Terms and Conditions and potential for Licensee activity impact on the environment;

"Unauthorized Discharge" is a discharge of any water or waste not authorized under this Licence;

"Waste" means any substance defined as waste as defined by Section 1 of the *Act;*

"Water Licence Application" means the Type B Water Licence application received on June 13, 2016 and all supplemental information submitted to the Board;

"Waters" means any waters as defined by Section 1 of the *Act.*

PART B: GENERAL CONDITIONS

1. The Licensee shall file an Annual Report with the Board no later than January 31 of each year which shall contain the following information on Project related activities during the prior 12 month period January 1 to December 31:
    a) the monthly and annual quantities in cubic metres (m^3) of treated water discharged into the municipal drainage ditch;
    b) the monthly and annual quantities in cubic metres (m^3) of treated contaminated soil at the bio-treatment facility;
    c) a summary report which includes all data and information generated under the "Surveillance Network Program (SNP)";
    d) a list and description including location and volumes of all unauthorized discharges and spills, and summaries of all associated remediation activities and follow-up action taken;
    e) a description of any spill and operational training carried out;
    f) the results of any monitoring program undertaken (e.g. temperature, moisture of bio-treatment cell);
    g) a summary of remediation, reclamation and closure activities completed;
    h) A report complete with summary, conclusion and recommendation. The report will include analytical data and a description of any work anticipated for the next year.

2. The Licensee shall comply with the "Surveillance Network Program" annexed to this Licence, and any amendment to the said "Surveillance Network Program" as may be made from time to time, pursuant to the conditions of this Licence.

3. The "Surveillance Network Program" and compliance dates specified in the Licence may be modified at the discretion of the Board.

4. Any meters, devices or other such methods used for measuring the volumes of waste disposed and discharged shall be installed, operated and maintained by the Licensee to the satisfaction of the inspector.

5. The Licensee shall ensure a copy of this Licence is maintained at the site of operations at all times.

6. The Licensee shall, at a minimum, implement all of the policies, practices, mitigation measures, recommendations and procedures for the protection of the environment referred to in its application, Description of Undertaking and other documents submitted regarding the remediation and reclamation of the former power plant site in Aklavik. All field operations staff shall be provided with appropriate advice/training on how to implement these policies, practices, mitigation measures, recommendations and procedures.

7. The Licensee shall ensure that all contractors and sub-contractors conform to all Terms and Conditions of this Licence.

8. The Licensee shall take every reasonable precaution to protect the environment.

9. All equipment used during the Project activities shall be mechanically sound and free of leaks.

10. In a form acceptable to the Board, the Licensee shall submit two (2) copies of all reports, plans, maps and drawings in printed format accompanied by two (2) electronic copies (CD's).

PART C: CONDITIONS APPLYING TO WASTE DISPOSAL

1. The Licensee shall collect precipitation and groundwater seepage from the excavation and bio-treatment facility and pump it to the water treatment system for treatment.

2. All treated water discharged to the existing municipal drainage ditch north of the site at "Surveillance Network Program" Station Number 1838-1 shall meet the following effluent quality requirements:

Parameter	Maximum Concentration of any Grab Sample
Total suspended solids	15 mg/L
Oil and grease	5 mg/L and no visible sheen
Benzene	0.37 mg/L
Toluene	0.002 mg/L
Ethylbenzene	0.090 mg/L
Xylene	0.03 mg/L
Benzo*(a)*pyrene	0.000015 mg/L
Total Petroleum Hydrocarbons	5 mg/L
pH	Between 6 and 9
Total lead	When the hardness is 0 to ≤ 60 mg/L ($CaCO_3$), the maximum concentration is 0.001 mg/L At hardness >60 to ≤ 180 mg/L the maximum concentration is calculated using equation: $e^{[1.273[\ln(\underline{hardness})]-4.705]}$ At hardness >180 mg/L ($CaCO_3$), the maximum concentration is 0.007 mg/L, If the hardness is unknown, the maximum concentration is 0.001 mg/L

3. There should be no discharge of floating solids, garbage, grease, free oil, foam or sheen.

4. The Licensee shall inform the inspector at least five (5) days prior to initiating discharge of treated water to the municipal ditch system.

5. All analyses shall be conducted in accordance with methods prescribed in the current edition of "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, the American Waterworks Association and the Water Environmental Federation or by such other methods as may be approved by an analyst.

6. The Licensee shall contain all contaminated soil in such a manner as to minimize the potential for migration of contaminants into any waters to the satisfaction of the inspector.

7. Unless authorized by this Licence, the Licensee shall ensure that any wastes associated with this undertaking do not enter any water body.

8. Any contaminated soil that is not treated by a bio-treatment facility shall be shipped by the Licensee to a licenced disposal facility or remediated in another manner acceptable to and approved by the Board.

9. The Licensee shall dispose of all contaminated water that does not meet effluent criteria at a licenced disposal facility.

10. When transported off-site, contaminated soil or contaminated water shall be properly contained so as to prevent spillage or dispersal to the satisfaction of the inspector.

11. Where contaminated soils and/or water is to be transported to a licenced disposal facility, the Licensee shall provide to the Board, prior to shipment, copies of agreements or letters between the Licensee and the third parties where the third party has agreed to harbour, transport or dispose of such contaminated water and/or waste.

12. In the event that the surveillance station water quality exceeds the effluent standards outlined in this Licence the inspector shall be immediately notified.

13. The Licensee shall notify the Board and the inspector, in writing, at least forty-eight (48) hours prior to the shipping of any contaminated soil or contaminated water.

PART D: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

1. The Licensee shall submit to the Board for approval, at least five (5) days prior to mobilization, a Spill Contingency Plan in accordance with the "A Guide to the Spill Contingency Planning and Reporting Regulations, updated March 2011" found on the Government of the Northwest Territories, Department of Environment and Natural Resources website: http://www.enr.gov.nt.ca/node/3003.

2. The Licensee shall include in Part D, Item 1 additional information on contingency actions in the event discharge criteria are not achieved including information on the proposed storage capacity, contingency storage capacity and whether offsite disposal at an approved waste disposal location has been considered.

3. If not approved by the Board, the Spill Contingency Plan shall be revised and resubmitted within fifteen (15) days of receiving notification of the Board's decision.

4. The Licensee shall ensure that petroleum products, hazardous material and other wastes associated with the Project do not enter any waters.

5. If, during the period of this Licence, an unauthorised discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:
    a) report the incident immediately via the 24 Hour Spill Reporting Line **(867) 920-8130**;
    b) report each spill and unauthorized discharge of waste to the inspector at (867) 678-0623 (Cell), within 24 hours; and
    c) submit to the inspector a detailed report on each occurrence not later than thirty (30) days after initially reporting the event.

6. All spills and unauthorized discharges of water or waste shall be cleaned up and the affected area reclaimed to the satisfaction of the inspector.

PART E: CONDITIONS APPLYING TO MODIFICATIONS

1. the Licensee may, without written approval from the Board, carry out modifications to the planned undertakings provided that such modifications are consistent with the terms of this Licence and the following requirements are met:
    a) the Licensee has notified the Board and the inspector in writing of such proposed modifications at least five (5) days prior to beginning the modifications;
    b) such modifications do not place the Licensee in contravention of either the Licence or the *Act*;

c) the Board has not, during the five (5) days following notification of the proposed modifications, informed the Licensee that review of the proposal will require more than five (5) days; and
d) the Board has not rejected the proposed modifications.

2. Modifications for which the conditions referred to in Part E, Item 1 have not been met may be carried out only with written approval from the Board.

3. The Licensee shall provide to the Board as-built plans and drawings of the modifications signed and stamped by an engineer referred to in this Licence within ninety (90) days of completion of the modifications.

PART F: CONDITIONS APPLYING TO CONSTRUCTION

1. The Licensee shall ensure that construction of the bio-treatment facility and water treatment systems are supervised by an engineer.

2. The Licensee shall undertake necessary corrective measures to mitigate negative impacts on surface drainage resulting from the Licensee's activities to the satisfaction of the inspector.

3. The Licensee shall construct and operate all components of the Project designed to contain, treat, withhold, divert or retain water or waste in accordance with all applicable federal or territorial legislation and industry standards.

4. The Licensee shall provide to the Board, at least five (5) days prior to the mobilization, information for the bio-augmentation product intended to be used as part of the remediation (Bio-Reclaim) including how much of this product will be used, where will be stored, and how and when it will be applied.

5. A minimum of ten (10) days prior to commencement of construction of the bio-treatment facility and water treatment system, the Licensee shall provide written notification to the inspector.

PART G: CONDITIONS APPLYING TO RECLAMATION, CLOSURE AND MONITORING PLAN

1. The Licensee shall, at least five (5) days prior to mobilization, submit a Remediation and Reclamation Action Plan for the Project to the Board for approval.

2. A minimum of six (6) months prior to the expiry of the Licence, the Licensee shall provide to the Board a compilation report containing analytical data and effectiveness of the remediation and reclamation undertaken and water treatment system with summary, conclusion and recommendations.

INUVIALUIT WATER BOARD

Chairperson

August 5. 2016
Date

ANNEX 1: SURVEILLANCE NETWORK PROGRAM

LICENSEE: Northwest Territories Power Corporation
LICENCE NUMBER: N3L8-1838
EFFECTIVE DATE OF LICENCE: August 15, 2016
EFFECTIVE DATE OF SURVEILLANCE NETWORK PROGRAM: August 15, 2016

A. Sampling Stations

Station Number	Description of Sampling Stations
1838-1	Prior to discharge of treated water from storage container to municipal drainage ditch north of the site

B. Sampling and Analysis Requirements

1. Effluent at "Surveillance Network Program" shall be sampled and analyzed prior to discharge for the following parameters:

Station Number and description	Parameters
1838-1: Prior to discharge of treated water from storage container to municipal drainage ditch north of the site	Total suspended solids, Oil and Grease, Benzene, Toluene, Ethylbenzene, Xylene, Benzo*(a)*pyrene, Total Petroleum Hydrocarbon, Hardness, Chloride, Sulphate, pH, Total Cadmium (Cd), Total Chromium (Cr), Total Copper (Cu), Total Iron (Fe), Total Lead (Pb), Total Mercury (Hg), Total Molybdenum (Mo), Total Nickel (Ni), Total Zinc (Zn)

2. Sample collection requirements such as sampling location, frequency and parameters in accordance of the Surveillance Network Program may be modified by the inspector.

3. All sampling, preservation, and analyses shall be conducted in accordance with methods prescribed in the current edition of "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, the American Waterworks Association and the Water Environmental Federation or by such other methods as approved by an analyst.

4. All analysis shall be performed in a laboratory as approved by an analyst.

5. The Licensee shall, within ten (10) days of Licence issuance, submit to an analyst for approval a Quality Assurance/Quality Control Plan, a copy of the approved plan shall be submitted to the Board.

6. The Quality Assurance/Quality Control Plan shall be implemented as approved by an analyst.

C. Flow and Volume Measurement Requirements

1. The Licensee shall measure and record in cubic metres (m^3) the daily, monthly and annual quantities of treated water discharged to the municipal drainage ditch.

D. Reports

1. The Licensee shall submit the following information in electronic and printed formats as part of the **Annual Report** required in Part B, Item 1 of the Licence:

   a) all laboratory results and analysis of all data collected during each SNP sampling period for the previous year;
   b) tabular summaries of all data and information generated under Part B and C of the SNP;
   c) rationale where samples were not collected from the SNP site;
   d) Quality Assurance/Quality Control results and interpretations, in accordance with the approved Quality Assurance/Quality Control Plan;
   e) any interpretive comments and calculations; and
   f) identification of any anomalies and trends.

INUVIALUIT WATER BOARD

Chairperson

August 5, 2016

Date

SUPPLEMENTAL INFORMATION TO BE SUBMITTED BY LICENSEE AS REQUIRED THROUGH LICENCE CONDITIONS

Licence Condition	Report/Others	Timeline for Submission	Required Board Action/Others
Part B, Item 1	Annual Report	Not later than January 31 of each year	Acceptance
Part C, Item 4	Notice of initiating discharge of treated water	At least five (5) days prior to initiating discharge	Inform the inspector
Part C, Item 12	Notice of shipment of any contaminated soil or contaminated water	At least forty-eight (48) hours prior to the shipping	Notify the Board and the inspector in writing
Part D, Item 1	Spill Contingency Plan	At least five (5) days prior to mobilization	Submit to the Board for approval
Part E, Item 1a)	Notice of modification	At least five (5) days prior to beginning the modification	Notify the Board and the inspector
Part E, Item 3	Submission of as-built plans and drawings of the modifications	Within ninety (90) days of completion of the modification	Provide to the Board for acceptance
Part F, Item 4	MSDS of bio-augmentation product	At least five (5) days prior to mobilization	Provide to the Board for acceptance
Part F, Item 5	Notification of construction of the bio-treatment facility and water treatment system	A minimum of ten (10) days prior to commencement	Provide written notification to the inspector
Part G, Item 1	Submission of Remediation and Reclamation Action Plan for the Project	At least five (5) days prior to mobilization	Submit to the Board for approval
Part G, Item 2	Submission of a compilation report	A minimum of six (6) months prior to the expiry of the Licence	Submit to the Board for acceptance
Annex 1: SNP Part B, Item 5	A Quality Assurance/Quality Control	Within ten (10) days of Licence issuance	Submit to an analyst for approval and submit approved plan to the Board

GENERAL PROCEDURES FOR THE ADMINISTRATION OF LICENCES ISSUED UNDER THE *WATERS ACT* IN THAT PORTION OF THE INUVIALUIT SETTLEMENT REGION LOCATED IN THE NORTHWEST TERRITORIES

1. At the time of issuance, a copy of the Licence is placed in the Public Register at the Inuvialuit Water Board (IWB) Office in Inuvik and on the IWB website.

2. To enforce the terms and conditions of the Licence, the Minister of Environment and Natural Resources has appointed Inspectors in accordance with Section 65(1) of the *Waters Act*. The Inspectors coordinate their activities with officials of the Water Resources Division of the Department of Environment and Natural Resources. The Inspector responsible for the Licence is located in the Department of Environment and Natural Resources Office in Inuvik.

3. To keep the IWB and members of the public informed of the Licensee's conformity to Licence Terms and Conditions, the Inspectors prepare reports which detail observations on how each requirement of the Licence has been met. These reports are forwarded to the Licensee with a covering letter indicating what action, if any, should be taken. The inspection reports and covering letters are placed in the Public Register, as are any responses received from the Licensee pertaining to the inspection reports. Licensees must respond to all areas of concern outlined in the inspection reports.

4. If renewal of the Licence is contemplated it is the responsibility of the Licensee to apply to the IWB for renewal of the Licence. The past performance of the Licensee, new documentation and information, and points raised during a public hearing, if required, will be used to determine the terms and conditions of any Licence renewal. Please note that if the Licence expires and another has not been issued, then water and waste disposal must cease, or the Licensee, will be in contravention of the *Waters Act*. It is suggested that an application for renewal of the Licence be made at least eight months in advance of the Licence expiry date.

5. If, for some reason the Licence requires an amendment, a public hearing may be required. You are reminded that applications for amendments should be submitted as soon as possible to provide the IWB with ample time to go through the amendment process. The process may take up to six (6) months or more depending on the scope of the amendment requested.

.....2

6. Specific clauses of your Licence make reference to the IWB, Analyst or Inspector. The contact person, address, phone and fax number of each is:

BOARD:
Executive Director
Inuvialuit Water Board
P.O. Box 2531
INUVIK, NT X0E 0T0
Phone No: (867) 678-2942
Fax No: (867) 678-2943

ANALYST:
Analyst
Taiga Environmental Laboratory
Environment and Natural Resources
Government of the NWT
P.O. Box 1320
YELLOWKNIFE, NT X1A 2L9
Phone No: (867) 765-6644
Fax No: (867) 920-8740

INSPECTOR:
Inspector
Environment and Natural Resources
Government of the Northwest Territories
P.O. Box 2749
INUVIK, NT X0E 0T0
Phone No: (867) 678-6676
Fax No: (867) 678-6699

INUVIALUIT SIVUNNIUQPAIT IMAKKUN

INUVIALUIT WATER BOARD

November 29, 2019

Joshua Clark
Environmental Analyst
Northwest Territories Power Corporation
4 Capital Drive
Hay River, NT X0E 1G2

Dear Mr. Clark:

Re: N3L8-1838 – Northwest Territories Power Corporation, Remediation and Reclamation - Aklavik Former Power Plant Site – Water Licence Renewal

Upon review of the annual project status reports submitted by the Northwest Territories Power Corporation (NTPC), the Inuvialuit Water Board (IWB) has determined that additional biotreatment of contaminated soil will be required beyond the December 31, 2019 expiry date of Water Licence N3L8-1838.

In recognition of this requirement and in accordance with *Waters Act s.36 (1) (a) (ii)*, the IWB has renewed Water Licence N3L8-1838 for an additional three (3) years, with an effective date of January 1, 2020 and expiry date of December 31, 2022. All other terms and conditions of Water Licence N3L8-1838 as originally issued will apply to this renewal. The water licence renewal is attached.

A copy of this renewal and all associated documentation has been filed on the IWB Public Register. Copies are available at the IWB office and on the IWB website at www.inuvwb.ca.

The IWB appreciates the continued cooperation of NTPC in complying with all terms and conditions of the licence. Should you have questions or concerns, please contact Mardy Semmler, Executive Director, at 867-678-8609 or semmlerm@inuvwb.ca.

Sincerely,

Roger Connelly
Chairperson

Attachments

cc: Lloyd Gruben, Water Resource Officer - ENR Inuvik

INUVIALUIT SIVUNNIUQPAIT IMAKKUN

INUVIALUIT WATER BOARD

INUVIALUIT WATER BOARD

Pursuant to the *Waters Act* and Waters Regulations the Inuvialuit Water Board, hereinafter referred to as the Board, hereby grants to

Northwest Territories Power Corporation

4 Capital Drive
Hay River, NT X0E 1G2
(Mailing Address)

hereinafter called the Licensee, the right to deposit waste as provided for under the *Waters Act* and Waters Regulations and subject to and in accordance with the terms and conditions specified in this Licence.

Licence Number	N3L8-1838 (Renewal)
Licence Type	"B"
Water Management Area	Northwest Territories 03
Location	68° 13' 6.24" North and 135° 0' 21.24" West Aklavik, Northwest Territories
Purpose	Waste Disposal
Description	Miscellaneous Undertaking
Quantity of Water Not To Be Exceeded	Not Applicable
Effective Date of Licence	January 1, 2020
Expiry Date of Licence	December 31, 2022

This Licence issued and recorded at Inuvik includes and is subject to the annexed conditions.

INUVIALUIT WATER BOARD

Chairperson

Nov. 29. 2019

Date

ATTACHMENT B
Laboratory Report

AGAT Laboratories

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CANADA T6B 3P9
TEL (780)395-2525
FAX (780)462-2490
http://www.agatlabs.com

CLIENT NAME: MATRIX SOLUTIONS INC.
SUITE 600, 214 11 AVE SW
CALGARY, AB T2R0K1
(403) 237-0606
ATTENTION TO: Accounts Payable
PROJECT: 21784-546 Aklavik Water Treatment
AGAT WORK ORDER: 20E632453
TRACE ORGANICS REVIEWED BY: Melinda Guay, Technical Reviewer
WATER ANALYSIS REVIEWED BY: Melinda Guay, Technical Reviewer
DATE REPORTED: Aug 04, 2020
PAGES (INCLUDING COVER): 15
VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (780) 395-2525

*Notes

Disclaimer:

- *All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.*
- *All samples will be disposed of within 30 days following analysis, unless expressly agreed otherwise in writing. Please contact your Client Project Manager if you require additional sample storage time.*
- *AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.*
- *This Certificate shall not be reproduced except in full, without the written approval of the laboratory.*
- *The test results reported herewith relate only to the samples as received by the laboratory.*
- *Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the guidelines contained in this document.*
- *All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.*

AGAT Laboratories

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Certificate of Analysis

CLIENT NAME: MATRIX SOLUTIONS INC.

AGAT WORK ORDER: 20E632453

PROJECT: 21784-546 Aklavik Water Treatment

ATTENTION TO: Accounts Payable

SAMPLING SITE:

SAMPLED BY:

British Columbia CSR - Site Remediation Analysis - Water

SAMPLE TYPE: Water **SAMPLE ID: 1315727** **DATE RECEIVED: Jul 31, 2020**

DATE SAMPLED: Jul 28, 2020 **DATE REPORTED: Aug 04, 2020**

SAMPLE DESCRIPTION: 21784200728001

PARAMETER	UNIT	RESULT	G / S	RDL	DATE ANALYZED	INITIAL	DATE PREPARED
Benzene	mg/L	<0.0005		0.0005	Aug 01, 2020	MB	Aug 01, 2020
Toluene	mg/L	<0.0003		0.0003	Aug 01, 2020	MB	Aug 01, 2020
Ethylbenzene	mg/L	<0.0005		0.0005	Aug 01, 2020	MB	Aug 01, 2020
Xylenes	mg/L	<0.0005		0.0005	Aug 01, 2020	MB	Aug 01, 2020
Styrene	mg/L	<0.0005		0.0005	Aug 01, 2020	MB	Aug 01, 2020
VH W6-10	mg/L	<0.1		0.1	Aug 01, 2020	MB	Aug 01, 2020
VPH	mg/L	<0.1		0.1	Aug 01, 2020	MB	Aug 01, 2020
EPH (W C10-C19)	mg/L	<0.1		0.1	Aug 02, 2020	TD	Aug 01, 2020
EPH (W C19-C32)	mg/L	<0.1		0.1	Aug 02, 2020	TD	Aug 01, 2020
Sediment		None			Aug 02, 2020	SYS	Aug 02, 2020

SURROGATE	UNIT	RESULT	ACCEPTABLE LIMITS	DATE ANALYZED	INITIAL	DATE PREPARED
Toluene-d8 (BTEX)	%	97	60-140	Aug 01, 2020	MB	Aug 01, 2020
o-Terphenyl (EPH)	%	109	60-140	Aug 02, 2020	TD	Aug 01, 2020

COMMENTS:

RDL - Reported Detection Limit; G / S - Guideline / Standard
Xylenes is a calculated parameter. The calculated value is the sum of m&p-Xylenes + o-Xylene. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
VPH results have been corrected for BTEX contributions.
LEPH & HEPH results are not corrected for potential PAH contributions.
VPH: Volatile Petroleum Hydrocarbons (n-C6 - n-C10); all volatile compounds in the n-C6 to n-C10 range quantified based on o-xylene response.
LEPH: Light Extractable Petroleum Hydrocarbons (n-C10 - n-C19); all extractable compounds in the n-C10 to n-C19 range quantified based on n-decane response.
HEPH: Heavy Extractable Petroleum Hydrocarbons (n-C19 - n-C32); all extractable compounds in the n-C19 to n-C32 range quantified based on n-eicosane response.
Sediment parameter is comment only based on visual inspection of the sample prior to extraction and is not an accredited test.

Certified By:

AGAT Laboratories

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Certificate of Analysis

CLIENT NAME: MATRIX SOLUTIONS INC.

AGAT WORK ORDER: 20E632453

PROJECT: 21784-546 Aklavik Water Treatment

ATTENTION TO: Accounts Payable

SAMPLING SITE:

SAMPLED BY:

Oil and Grease in Water (FTIR)

SAMPLE TYPE: Water **SAMPLE ID: 1315727** **DATE RECEIVED: Jul 31, 2020**

DATE SAMPLED: Jul 28, 2020 **DATE REPORTED: Aug 04, 2020**

SAMPLE DESCRIPTION: 21784200728001

PARAMETER	UNIT	RESULT	G / S	RDL	DATE ANALYZED	INITIAL	DATE PREPARED
Oil Content, Infrared	mg/L	0.2		0.2	Aug 02, 2020	BV	Aug 02, 2020

COMMENTS:

RDL - Reported Detection Limit; G / S - Guideline / Standard

Certified By:

AGAT Laboratories

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Certificate of Analysis

CLIENT NAME: MATRIX SOLUTIONS INC.

AGAT WORK ORDER: 20E632453

PROJECT: 21784-546 Aklavik Water Treatment

ATTENTION TO: Accounts Payable

SAMPLING SITE:

SAMPLED BY:

Matrix Total Metals Scan in Water

SAMPLE TYPE: Water **SAMPLE ID: 1315727** **DATE RECEIVED: Jul 31, 2020**

DATE SAMPLED: Jul 28, 2020 **DATE REPORTED: Aug 04, 2020**

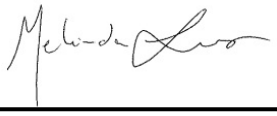
SAMPLE DESCRIPTION: 21784200728001

PARAMETER	UNIT	RESULT	G / S	RDL	DATE ANALYZED	INITIAL	DATE PREPARED
Total Aluminum	mg/L	0.266		0.004	Aug 01, 2020	LK	Aug 01, 2020
Total Antimony	mg/L	0.004		0.001	Aug 01, 2020	LK	Aug 01, 2020
Total Arsenic	mg/L	0.003		0.001	Aug 01, 2020	LK	Aug 01, 2020
Total Barium	mg/L	<0.05		0.05	Aug 01, 2020	LK	Aug 01, 2020
Total Beryllium	mg/L	<0.001		0.001	Aug 01, 2020	LK	Aug 01, 2020
Total Boron	mg/L	0.07		0.01	Aug 01, 2020	LK	Aug 01, 2020
Total Cadmium	mg/L	0.00140		0.000016	Aug 01, 2020	LK	Aug 01, 2020
Total Chromium	mg/L	0.003		0.001	Aug 01, 2020	LK	Aug 01, 2020
Total Cobalt	mg/L	0.001		0.001	Aug 01, 2020	LK	Aug 01, 2020
Total Copper	mg/L	0.78		0.01	Aug 01, 2020	LK	Aug 01, 2020
Total Iron	mg/L	1.9		0.1	Aug 01, 2020	LK	Aug 01, 2020
Total Lead	mg/L	0.318		0.0001	Aug 01, 2020	LK	Aug 01, 2020
Total Lithium	mg/L	0.011		0.001	Aug 01, 2020	LK	Aug 01, 2020
Total Manganese	mg/L	0.138		0.005	Aug 01, 2020	LK	Aug 01, 2020
Total Molybdenum	mg/L	0.002		0.001	Aug 01, 2020	LK	Aug 01, 2020
Total Nickel	mg/L	0.036		0.003	Aug 01, 2020	LK	Aug 01, 2020
Total Selenium	mg/L	0.0014		0.0005	Aug 01, 2020	LK	Aug 01, 2020
Total Silicon	mg/L	1.14		0.032	Aug 01, 2020	LK	Aug 01, 2020
Total Silver	mg/L	0.00011		0.00005	Aug 01, 2020	LK	Aug 01, 2020
Total Strontium	mg/L	0.405		0.001	Aug 01, 2020	LK	Aug 01, 2020
Total Thallium	mg/L	<0.0005		0.0005	Aug 01, 2020	LK	Aug 01, 2020
Total Tin	mg/L	0.009		0.003	Aug 01, 2020	LK	Aug 01, 2020
Total Titanium	mg/L	0.008		0.001	Aug 01, 2020	LK	Aug 01, 2020
Total Uranium	mg/L	0.003		0.001	Aug 01, 2020	LK	Aug 01, 2020
Total Vanadium	mg/L	0.001		0.001	Aug 01, 2020	LK	Aug 01, 2020
Total Zinc	mg/L	2.91		0.03	Aug 01, 2020	LK	Aug 01, 2020

COMMENTS:

RDL - Reported Detection Limit; G / S - Guideline / Standard
< - Values refer to Method Detection Limit.

Certified By:



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Certificate of Analysis

CLIENT NAME: MATRIX SOLUTIONS INC.

AGAT WORK ORDER: 20E632453

PROJECT: 21784-546 Aklavik Water Treatment

ATTENTION TO: Accounts Payable

SAMPLING SITE:

SAMPLED BY:

Routine Chemistry Water Analysis - Matrix

SAMPLE TYPE: Water **SAMPLE ID: 1315727** **DATE RECEIVED: Jul 31, 2020**

DATE SAMPLED: Jul 28, 2020 **DATE REPORTED: Aug 04, 2020**

SAMPLE DESCRIPTION: 21784200728001

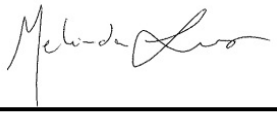
PARAMETER	UNIT	RESULT	G / S	RDL	DATE ANALYZED	INITIAL	DATE PREPARED
pH	pH Units	8.16		NA	Jul 31, 2020	KS	Jul 31, 2020
p - Alkalinity (as CaCO3)	mg/L	<5		5	Jul 31, 2020	KS	Jul 31, 2020
T - Alkalinity (as CaCO3)	mg/L	148		5	Jul 31, 2020	KS	Jul 31, 2020
Bicarbonate	mg/L	180		5	Jul 31, 2020	KS	Jul 31, 2020
Carbonate	mg/L	<5		5	Jul 31, 2020	KS	Jul 31, 2020
Hydroxide	mg/L	<5		5	Jul 31, 2020	KS	Jul 31, 2020
Electrical Conductivity	uS/cm	808		1	Jul 31, 2020	KS	Jul 31, 2020
Fluoride	mg/L	<0.05		0.05	Jul 31, 2020	KS	Jul 31, 2020
Chloride	mg/L	3		1	Jul 31, 2020	KS	Jul 31, 2020
Nitrite	mg/L	<0.40		0.40	Jul 31, 2020	KS	Jul 31, 2020
Nitrate	mg/L	<0.5		0.5	Jul 31, 2020	KS	Jul 31, 2020
Nitrite-N	mg/L	<0.02		0.02	Jul 31, 2020	SYS	Jul 31, 2020
Nitrate-N	mg/L	<0.02		0.02	Jul 31, 2020	SYS	Jul 31, 2020
Nitrate+Nitrite - Nitrogen	mg/L	<0.02		0.02	Jul 31, 2020	SYS	Jul 31, 2020
Sulfate	mg/L	309		1	Jul 31, 2020	KS	Jul 31, 2020
Dissolved Calcium	mg/L	109		0.3	Aug 01, 2020	LK	Aug 01, 2020
Dissolved Magnesium	mg/L	46.2		0.2	Aug 01, 2020	LK	Aug 01, 2020
Dissolved Sodium	mg/L	9.4		0.6	Aug 01, 2020	LK	Aug 01, 2020
Dissolved Potassium	mg/L	5.2		0.6	Aug 01, 2020	LK	Aug 01, 2020
Dissolved Iron	mg/L	<0.1		0.1	Aug 01, 2020	LK	Aug 01, 2020
Dissolved Manganese	mg/L	0.080		0.005	Aug 01, 2020	LK	Aug 01, 2020
Calculated TDS	mg/L	570		0.6	Aug 01, 2020	SYS	Aug 01, 2020
Sodium Adsorption Ratio	N/A	0.190			Aug 01, 2020	SYS	Aug 01, 2020
Hardness	mg CaCO3/L	462		1	Aug 01, 2020	SYS	Aug 01, 2020
Ion Balance	%	103		1	Aug 01, 2020	SYS	Aug 01, 2020

COMMENTS:

RDL - Reported Detection Limit; G / S - Guideline / Standard
< - Values refer to Report Detection Limits.

If sodium results in mg/L are less than detection, SAR is non-calculable and is reported as 0.

Certified By:



AGAT Laboratories

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Certificate of Analysis

CLIENT NAME: MATRIX SOLUTIONS INC.

AGAT WORK ORDER: 20E632453

PROJECT: 21784-546 Aklavik Water Treatment

ATTENTION TO: Accounts Payable

SAMPLING SITE:

SAMPLED BY:

Water Analysis - TSS

SAMPLE TYPE: Water **SAMPLE ID: 1315727** **DATE RECEIVED: Jul 31, 2020**

DATE SAMPLED: Jul 28, 2020 **DATE REPORTED: Aug 04, 2020**

SAMPLE DESCRIPTION: 21784200728001

PARAMETER	UNIT	RESULT	G / S	RDL	DATE ANALYZED	INITIAL	DATE PREPARED
Total Suspended Solids	mg/L	<1		1	Aug 01, 2020	NF	Aug 01, 2020

COMMENTS:

RDL - Reported Detection Limit; G / S - Guideline / Standard

Certified By:

AGAT Laboratories

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EDMONTON, ALBERTA
CANADA T6B 3P9
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http://www.agatlabs.com

Quality Assurance

CLIENT NAME: MATRIX SOLUTIONS INC.

AGAT WORK ORDER: 20E632453

PROJECT: 21784-546 Aklavik Water Treatment

ATTENTION TO: Accounts Payable

SAMPLING SITE:

SAMPLED BY:

Trace Organics Analysis

RPT Date: Aug 04, 2020			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Oil and Grease in Water (FTIR)															
Oil Content, Infrared	731	1312727	0.2	0.2	NA	< 0.2	107%	80%	120%	110%	70%	130%	112%	70%	130%

Comments: If the RPD value is NA, the results of the duplicates are under 5X the RDL and will not be calculated.
The sample spikes and dups are not from the same sample ID.

British Columbia CSR - Site Remediation Analysis - Water															
Benzene	3606	1316652	< 0.0005	< 0.0005	NA	< 0.0005	92%	60%	140%	93%	60%	140%	88%	60%	140%
Toluene	3606	1316652	< 0.0003	< 0.0003	NA	< 0.0003	95%	60%	140%	97%	60%	140%	92%	60%	140%
Ethylbenzene	3606	1316652	< 0.0005	< 0.0005	NA	< 0.0005	89%	60%	140%	90%	60%	140%	85%	60%	140%
Xylenes	3606	1316652	< 0.0005	< 0.0005	NA	< 0.0005	93%	60%	140%	96%	60%	140%	88%	60%	140%
Styrene	3606	1316652	< 0.0005	< 0.0005	NA	< 0.0005	114%	60%	140%	103%	60%	140%	96%	60%	140%
VH W6-10	3606	1316652	< 0.1	< 0.1	NA	< 0.1	95%	60%	140%	108%	60%	140%	102%	60%	140%
EPH (W C10-C19)	217	1315822	0.1	0.1	NA	< 0.1	100%	60%	140%	78%	60%	140%	104%	60%	140%
EPH (W C19-C32)	217	1315822	1.4	1.7	19.4%	< 0.1	97%	60%	140%	80%	60%	140%	98%	60%	140%

Comments: Duplicate NA: results are less than 5X the RDL and RDP will not be calculated.
The sample spikes and dups are not from the same sample ID.

Certified By:

AGAT Laboratories

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Quality Assurance

CLIENT NAME: MATRIX SOLUTIONS INC.

AGAT WORK ORDER: 20E632453

PROJECT: 21784-546 Aklavik Water Treatment

ATTENTION TO: Accounts Payable

SAMPLING SITE:

SAMPLED BY:

Water Analysis

RPT Date: Aug 04, 2020			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Routine Chemistry Water Analysis - Matrix															
pH	712	1313639	8.40	8.42	0.2%		100%	90%	110%						
p - Alkalinity (as CaCO3)	712	1313639	6	6	NA	< 5									
T - Alkalinity (as CaCO3)	712	1313639	186	187	0.5%	< 5	97%	80%	120%						
Bicarbonate	712	1313639	227	228	0.5%	< 5									
Carbonate	712	1313639	12	12	NA	< 5									
Hydroxide	712	1313639	<5	<5	NA	< 5									
Electrical Conductivity	712	1313639	952	955	0.3%	1	103%	90%	110%						
Fluoride	2274	1303806	<0.05	<0.05	NA	< 0.05	98%	70%	130%	98%	80%	120%	101%	70%	130%
Chloride	2274	1303806	7	7	2.7%	< 1	97%	70%	130%	101%	80%	120%	100%	70%	130%
Nitrite	2274	1303806	<0.05	<0.05	NA	< 0.05	101%	70%	130%	104%	80%	120%	100%	70%	130%
Nitrate	2274	1303806	0.8	0.8	NA	< 0.5	97%	70%	130%	101%	80%	120%	98%	70%	130%
Sulfate	2274	1303806	37	38	0.7%	< 1	95%	70%	130%	99%	80%	120%	103%	70%	130%
Dissolved Calcium	213	1313639	23.6	23.5	0.3%	< 0.3	96%	70%	130%	106%	80%	120%	111%	70%	130%
Dissolved Magnesium	213	1313639	6.1	6.2	1.1%	< 0.2	111%	70%	130%	112%	80%	120%	110%	70%	130%
Dissolved Sodium	213	1313639	186	187	0.4%	< 0.6	103%	70%	130%	104%	80%	120%	94%	70%	130%
Dissolved Potassium	213	1313639	7.2	7.2	0.9%	< 0.6	96%	70%	130%	101%	80%	120%	100%	70%	130%
Dissolved Iron	213	1313639	0.2	0.2	NA	< 0.1	103%	70%	130%	105%	80%	120%	103%	70%	130%
Dissolved Manganese	213	1313639	0.019	0.018	NA	< 0.005	105%	70%	130%	103%	80%	120%	103%	70%	130%

Comments: If the RPD value is NA, the results of the duplicates are under 5X the RDL and will not be calculated.
If Matrix spike value is NA, the spiked analyte concentration was lower than that of the matrix contribution.

Matrix Total Metals Scan in Water															
Total Aluminum	214	1306744	0.091	0.091	0.0%	< 0.004	97%	70%	130%	110%	80%	120%	94%	70%	130%
Total Antimony	214	1306744	0.001	<0.001	NA	< 0.001	87%	70%	130%	93%	80%	120%	84%	70%	130%
Total Arsenic	214	1306744	<0.001	0.001	NA	< 0.001	103%	70%	130%	119%	80%	120%	106%	70%	130%
Total Barium	214	1306744	0.13	0.13	NA	< 0.05	99%	70%	130%	111%	80%	120%	88%	70%	130%
Total Beryllium	214	1306744	<0.001	<0.001	NA	< 0.001	95%	70%	130%	117%	80%	120%	103%	70%	130%
Total Boron	214	1306744	1.56	1.82	15.4%	< 0.01	97%	70%	130%	112%	80%	120%	102%	70%	130%
Total Cadmium	214	1306744	0.000457	0.000456	0.2%	< 0.000016	97%	70%	130%	116%	80%	120%	95%	70%	130%
Total Chromium	214	1306744	0.008	0.008	0.0%	< 0.001	93%	70%	130%	108%	80%	120%	96%	70%	130%
Total Cobalt	214	1306744	<0.001	<0.001	NA	< 0.001	95%	70%	130%	105%	80%	120%	95%	70%	130%
Total Copper	214	1306744	<0.001	<0.001	NA	< 0.001	99%	70%	130%	107%	80%	120%	90%	70%	130%
Total Iron	214	1306744	<0.1	<0.1	NA	< 0.1	102%	70%	130%	109%	80%	120%	109%	70%	130%
Total Lead	214	1306744	0.0002	0.0002	NA	< 0.0001	98%	70%	130%	119%	80%	120%	94%	70%	130%
Total Lithium	214	1306744	0.106	0.107	0.9%	< 0.001	89%	70%	130%	118%	80%	120%	86%	70%	130%
Total Manganese	214	1306744	0.014	0.014	NA	< 0.005	105%	70%	130%	109%	80%	120%	109%	70%	130%
Total Molybdenum	214	1306744	0.218	0.220	0.9%	< 0.001	93%	70%	130%	111%	80%	120%	79%	70%	130%
Total Nickel	214	1306744	0.301	0.300	0.3%	< 0.003	93%	80%	120%	106%	80%	120%	90%	80%	120%

AGAT Laboratories

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Quality Assurance

CLIENT NAME: MATRIX SOLUTIONS INC.

AGAT WORK ORDER: 20E632453

PROJECT: 21784-546 Aklavik Water Treatment

ATTENTION TO: Accounts Payable

SAMPLING SITE:

SAMPLED BY:

Water Analysis (Continued)

RPT Date: Aug 04, 2020			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Total Selenium	214	1306744	0.0512	0.0518	1.2%	< 0.0005	103%	70%	130%	100%	80%	120%	107%	70%	130%
Total Silicon	214	1306744	8.37	8.33	0.5%	< 0.032	106%	80%	120%				106%	80%	120%
Total Silver	214	1306744	0.00012	<0.00005	NA	< 0.00005	95%	70%	130%	115%	80%	120%	85%	70%	130%
Total Strontium	214	1306744	2.06	1.98	4.0%	< 0.001	107%	70%	130%	109%	80%	120%	109%	70%	130%
Total Thallium	214	1306744	<0.0005	<0.0005	NA	< 0.0005	98%	70%	130%	118%	80%	120%	95%	70%	130%
Total Tin	214	1306744	<0.003	<0.003	NA	< 0.001	90%	70%	130%	116%	80%	120%	86%	70%	130%
Total Titanium	214	1306744	<0.001	<0.001	NA	< 0.001	92%	70%	130%	86%	80%	120%	74%	70%	130%
Total Uranium	214	1306744	0.005	0.005	0.0%	< 0.001	95%	70%	130%	119%	80%	120%	101%	70%	130%
Total Vanadium	214	1306744	0.061	0.061	0.0%	< 0.001	101%	70%	130%	109%	80%	120%	95%	70%	130%
Total Zinc	214	1306744	<0.01	<0.01	NA	< 0.01	98%	70%	130%	104%	80%	120%	80%	70%	130%

Comments: If Matrix spike value is NA, the spiked analyte concentration was lower than that of the matrix contribution.
If the RPD value is NA, the results of the duplicates are under 5X the RDL and will not be calculated.

Water Analysis - TSS

Total Suspended Solids	214	1313639	40	35	13.3%	< 1	102%	80%	120%	NA			129%		

Comments: If the RPD value is NA, the results of the duplicates are under 5X the RDL and will not be calculated.

Certified By:

AGAT Laboratories

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Method Summary

CLIENT NAME: MATRIX SOLUTIONS INC.

AGAT WORK ORDER: 20E632453

PROJECT: 21784-546 Aklavik Water Treatment

ATTENTION TO: Accounts Payable

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Benzene	TO-0542	EPA SW-846 5021 & 8260	GC/MS
Toluene	TO-0542	EPA SW-846 5021 & 8260	GC/MS
Ethylbenzene	TO-0542	EPA SW-846 5021 & 8260	GC/MS
Xylenes	TO-0542	EPA SW-846 5021 & 8260	GC/MS
Styrene	TO-0542	EPA SW-846 5021 & 8260	GC/MS
VH W6-10	TO-0542	EPA SW-846 5021, B.C. ENVIRONMENT	GC/FID
VPH	TO-0542	EPA SW-846 5021, B.C. ENVIRONMENT	GC/MS/FID
EPH (W C10-C19)	TO-0511	EPA SW-846 3511, B.C. ENVIRONMENT	GC/FID
EPH (W C19-C32)	TO-0511	EPA SW-846 3511, B.C. ENVIRONMENT	GC/FID
Toluene-d8 (BTEX)	TO-0543	EPA SW-846 5021 & 8260	GC/MS
o-Terphenyl (EPH)	TO-0511	CCME Tier 1 Method	GC/FID
Sediment	TO-0511	EPA SW-846 3511, B.C. ENVIRONMENT	GC/FID
Oil Content, Infrared	ORG-170-5200	Method 5520C	FTIR

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Method Summary

CLIENT NAME: MATRIX SOLUTIONS INC.

AGAT WORK ORDER: 20E632453

PROJECT: 21784-546 Aklavik Water Treatment

ATTENTION TO: Accounts Payable

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Water Analysis			
Total Aluminum	INOR-171-6201, INOR-171-6100	SM 3030 E; SM 3125 B	ICP-MS
Total Antimony	INOR-171-6201, INOR-171-6100	SM 3030 E; SM 3125 B	ICP-MS
Total Arsenic	INOR-171-6201	SM 3030 E; SM 3125 B	ICP-MS
Total Barium	INOR-171-6201	SM 3030 E; SM 3125 B	ICP-MS
Total Beryllium	INOR-171-6100, -6202	SM 3030 E; SM 3125 B	ICP-MS
Total Boron	INOR-171-6201	SM 3030 E; SM 3125 B	ICP-MS
Total Cadmium	INOR-171-6201	SM 3030 E; SM 3125 B	ICP/MS
Total Chromium	INOR-171-6202	SM 3030 E; SM 3125 B	ICP-MS
Total Cobalt	INOR-171-6100, -6202	SM 3030 E; SM 3125 B	ICP-MS
Total Copper	INOR-171-6100, -6202	SM 3030 E; SM 3125 B	ICP-MS
Total Iron	INOR-171-6100, 171-6201	SM 3030 E; SM 3120 B	ICP/OES
Total Lead	INOR-171-6202	SM 3030 E; SM 3125 B	ICP-MS
Total Lithium	INOR-171-6202	SM 3030 E; SM 3125 B	ICP-MS
Total Manganese	INOR-171-6201	SM 3030 E; SM 3120 B	ICP/OES
Total Molybdenum	INOR-171-6202	SM 3030 E; SM 3125 B	ICP/MS
Total Nickel	INOR-171-6202	SM 3030 E; SM 3125 B	ICP-MS
Total Selenium	INOR-171-6202	SM 3030 E; SM 3125 B	ICP-MS
Total Silicon	INOR-171-6201	SM 3030 E; SM 3120 B	ICP/OES
Total Silver	INO-171-6202	SM 3030 E; SM 3125 B	ICP-MS
Total Strontium	INOR-171-6201	SM 3030 E; SM 3120 B	ICP/OES
Total Thallium	INOR-171-6202	SM 3030 E; SM 3125 B	ICP-MS
Total Tin	INOR-171-6202	SM 3030 E; SM 3125 B	ICP-MS
Total Titanium	INOR-171-6100, -6202	SM 3030 E; SM 3125 B	ICP/MS
Total Uranium	INOR-171-6202	SM 3030 E; SM 3125 B	ICP-MS
Total Vanadium	INORG-171-6202	SM 3030 E; SM 3125 B	ICP-MS
Total Zinc	INORG-171-6202	SM 3030 E; SM 3125 B	ICP-MS
pH	INOR-171-6205	SM 4500 H+	PH METER
p - Alkalinity (as CaCO3)	INOR-171-6205	SM 2320 B	TITRATION
T - Alkalinity (as CaCO3)	INOR-171-6205	SM 2320 B	TITRATION
Bicarbonate	INOR-171-6205	SM 2320 B	PC TITRATE
Carbonate	INOR-171-6205	SM 2320 B	PC TITRATE
Hydroxide	INOR-171-6205	SM 2320 B	TITRATION
Electrical Conductivity	INOR-171-6205	SM 2510 B	CONDUCTIVITY METER
Fluoride	INST 0150	SM 4110 B	ION CHROMATOGRAPH
Chloride	INOR-171-6200	SM 4110 B	ION CHROMATOGRAPH
Nitrite	INST 0150	SM 4110 B	ION CHROMATOGRAPH
Nitrate	INOR-171-6200	SM 4110 B	ION CHROMATOGRAPH
Nitrite-N	INST 0150	SM 4110 B	ION CHROMATOGRAPH
Nitrate-N	INST 0150	SM 4110 B	ION CHROMATOGRAPH
Nitrate+Nitrite - Nitrogen	INOR-171-6200	SM 4110 B	ION CHROMATOGRAPH
Sulfate	INOR-171-6200	SM 4110 B	ION CHROMATOGRAPH
Dissolved Calcium	INOR-171-6201	SM 3120 B	ICP/OES
Dissolved Magnesium	INST 0140	SM 3120 B	ICP/OES
Dissolved Sodium	INOR-171-6201	SM 3120 B	ICP/OES
Dissolved Potassium	INST 0140	SM 3120 B	ICP/OES
Dissolved Iron	INOR-171-6201	SM 3120 B	ICP/OES
Dissolved Manganese	INOR-171-6201	SM 3120 B	ICP/OES

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Method Summary

CLIENT NAME: MATRIX SOLUTIONS INC.

AGAT WORK ORDER: 20E632453

PROJECT: 21784-546 Aklavik Water Treatment

ATTENTION TO: Accounts Payable

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Calculated TDS		SM 1030E	CALCULATION
Sodium Adsorption Ratio		CARTER & GREGORICH 2007	ICP/OES
Hardness		SM 3120 B	ICP/OES
Ion Balance		SM 1030E	CALCULATION
Total Suspended Solids	INORG-171-6102	SM 2540 D	GRAVIMETRIC

Emmanuelle Benjamino 20E632453

From: Reed Lannan
Sent: Friday, July 31, 2020 2:47 PM
To: Emmanuelle Benjamino; Roy de Guzman; Abegail Benjamino; AGAT AB Env CPMA; AGAT Calgary Env Co-ordinators
Cc: AGAT Edmonton Env Shipping; Jarrod Roberts
Subject: Re: Incoming Matrix Samples Tonight

Please assign:

Routine
TSS
Total Metals
Oil and Grease
BC Hydrocarbons
} 5727

They would like the results on Sunday if possible

Thanks,
Reed

Get Outlook for iOS

From: Emmanuelle Benjamino <ebenjamino@agatlabs.com>
Sent: Friday, July 31, 2020 2:27 PM
To: Reed Lannan; Roy de Guzman; Abegail Benjamino; AGAT AB Env CPMA; AGAT Calgary Env Co-ordinators
Cc: AGAT Edmonton Env Shipping; Jarrod Roberts
Subject: RE: Incoming Matrix Samples Tonight

I checked one of the samples and here is the information that I have

Client name: Matrix
Contact: Kyle Meyook

No LSD nor proj number

Hope this helps

From: Emmanuelle Benjamino
Sent: Friday, July 31, 2020 2:20 PM
To: Reed Lannan; Roy de Guzman; Abegail Benjamino; AGAT AB Env CPMA; AGAT Calgary Env Co-ordinators
Cc: AGAT Edmonton Env Shipping; Jarrod Roberts
Subject: RE: Incoming Matrix Samples Tonight

Yup when I check it there were no COC to be found

AGAT Laboratories

SAMPLE INTEGRITY RECEIPT FORM

'20 JUL 31 12:00

RECEIVING BASICS - Shipping

Company/Consultant: Matrix

Courier: P/U - Can North Prepaid Collect

Waybill# 518-30R171651

Branch: EDM GP FN FM RD VAN LYD FSJ EST SASK Other:___

If multiple sites were submitted at once: Yes No

Custody Seal Intact: Yes No NA

TAT: <24hr 24-48hr 48-72hr Reg Other_____

Cooler Quantity: 1

TIME SENSITIVE ISSUES - Shipping

ALREADY EXCEEDED HOLD TIME? Yes No

Inorganic Tests (Please Circle): Mibi , BOD , Nitrate/Nitrite , Turbidity , Color , Microtox , Ortho PO4 , Tedlar Bag , Residual Chlorine , Chlorophyll* , Chloroamines*

Earliest Expiry:_____

Hydrocarbons: Earliest Expiry _____

SAMPLE INTEGRITY - Shipping

Hazardous Samples: YES (NO) Precaution Taken:_____

Legal Samples: Yes (No)

International Samples: Yes (No)

Tape Sealed: Yes (No)

Coolant Used: Icepack (Bagged Ice) Free Ice Free Water None

Temperature (Bottles/Jars only) N/A if only Soil Bags Received

FROZEN (Please Circle if samples received Frozen)

1 (Bottle/Jar) 10 + 10 + 10 = 10 °C
2 (Bottle/Jar)___+___+___=____°C
3 (Bottle/Jar)___+___+___=____°C
4 (Bottle/Jar)___+___+___=____°C
5 (Bottle/Jar)___+___+___=____°C
6 (Bottle/Jar)___+___+___=____°C
7 (Bottle/Jar)___+___+___=____°C
8 (Bottle/Jar)___+___+___=____°C
9 (Bottle/Jar)___+___+___=____°C
10 (Bottle/Jar)___+___+___=____°C

(If more than 10 coolers are received use another sheet of paper and attach)

LOGISTICS USE ONLY

Workorder No: 20E632453

Samples Damaged: Yes (No) If YES why?

No Bubble Wrap Frozen Courier

Other: _____

Account Project Manager: _____ have they been notified of the above issues: Yes No

Whom spoken to: _____ Date/Time: _____

CPM Initial_____

General Comments: NO COC provided; Assign Routine, TSS, T-MT, OG, BC HC due Sunday as per CPM.

* Subcontracted Analysis (See CPM)

E 18392

Date issued: March 11, 2020

CANADIAN NORTH CARGO

518- 30317161

NOT NEGOTIABLE / NON NÉGOCIABLE
AIR WAYBILL
LETTRE DE TRANSPORT AÉRIEN

SHIPPER'S NAME / NOM DE L'EXPÉDITEUR | ACCOUNT NUMBER / NO. DE COMPTE

ADDRESS / ADRESSE

CITY / VILLE | PROVINCE | POSTAL CODE / CODE POSTAL

TELEPHONE (REQUIRED / REQUIS) | SHIPPER'S REFERENCE NUMBER / NO. DE RÉFÉRENCE DE L'EXPÉDITEUR

CONSIGNEE'S NAME / NOM DU DESTINATAIRE | ACCOUNT NUMBER / NO. DE COMPTE

ADDRESS / ADRESSE

CITY / VILLE | PROVINCE | POSTAL CODE / CODE POSTAL

TELEPHONE (REQUIRED / REQUIS) | ATTENTION / À L'ATTENTION DE

SERVICE REQUIRED (DESCRIPTION ON BACK)
SERVICE REQUIS (DESCRIPTION AU VERSO)

☐ GUARANTEED PRIORITY / PRIORITAIRE GARANTI | DATE

REQUESTED FLIGHT | EQUIPMENT FLT

☐ ENVELOPE ☐ GENERAL

THIRD PARTY ACCOUNT # / NAME / NOM

INSURANCE / ASSURANCE
IF INSURANCE IS REQUIRED, INDICATE THE AMOUNT TO BE INSURED
SI UNE ASSURANCE EST REQUISE, INDIQUER LE MONTANT À ASSURER

AMOUNT OF INSURANCE / DECLARED VALUE
MONTANT DE L'ASSURANCE / VALEUR DÉCLARÉE

☐ INSURANCE DECLINED / L'ASSURANCE A DÉCLINÉ

INITIAL / INITIALE

METHOD OF PAYMENT
MODE DE PAIEMENT

☐ PREPAID / PORT PAYÉ ☐ COLLECT / PORT DÛ

☐ CASH / COMPTANT ☐ ACCOUNT / COMPTE ☐ CREDIT CARD / CARTE DE CRÉDIT

The carrier's liability in the event of loss, damage or delay, whether it be caused by the negligence of the carrier or otherwise, is limited to CAD $1.10 per kilogram, but not less than CAD $50.00, unless a higher value for the shipment is declared on the Air Waybill at the time of receipt of the shipment from the shipper.

NUMBER OF PIECES / NO. DE COLIS	WEIGHT / POIDS	REQUIRED DESCRIPTION OF CONTENTS / DESCRIPTION DU CONTENU REQUIS
	KG	

AGENT'S SIGNATURE / SIGNATURE DE L'AGENT

X

DATE | TIME / HEURE AM PM

M J Y/A

SHIPPER'S SIGNATURE / SIGNATURE DE L'EXPÉDITEUR

X

DELIVERY / LIVRAISON ☐ HOLD AND NOTIFY / CONSERVEZ ET AVISEZ ☐ NORMAL / NORMALE ☐ SPECIAL / SPÉCIALE

SPECIAL DELIVERY INSTRUCTIONS / DIRECTIVES SPÉCIALES

SHIPPER CERTIFIES THAT THE PARTICULARS ON THE FACE HEREOF ARE CORRECT AND THAT INSOFAR AS ANY PART OF THE CONSIGNMENT CONTAINS DANGEROUS GOODS, SUCH PARTS IS PROPERLY DESCRIBED BY NAME AND IS IN PROPER CONDITION FOR CARRIAGE BY AIR ACCORDING TO THE APPLICABLE DANGEROUS GOODS REGULATIONS. SHIPPER HEREBY AGREES THAT THIS AIR WAYBILL IS SUBJECT TO THE TERMS AND CONDITIONS ON THE REVERSE HEREOF.

L'EXPÉDITEUR CERTIFIE QUE LES INDICATIONS PORTÉES SUR LE PRÉSENT DOCUMENT SONT EXACTES ET QUE, DANS LA MESURE OÙ UNE PARTIE QUELCONQUE DE L'EXPÉDITION CONTIENT DES MARCHANDISES DANGEREUSES, CETTE PARTIE D'EXPÉDITION EST CORRECTEMENT DÉSIGNÉE ET BIEN PRÉPARÉE POUR LE TRANSPORT AÉRIEN, CONFORMÉMENT À LA RÉGLEMENTATION POUR LE TRANSPORT DES MARCHANDISES DANGEREUSES APPLICABLE. PAR LA PRÉSENTE, L'EXPÉDITEUR CONVIENT QUE LA PRÉSENTE LETTRE DE TRANSPORT AÉRIEN EST ASSUJETTIE AUX CONDITIONS QUI FIGURENT AU VERSO.

1 of 1
30 lbs
EV
PRIORITY
1 of 1
30 lbs