



Hamlet of *Tukttoyaktuk, NT*

Water Licence Number: *N7L3-0714*

Municipal Water Licence

Annual Report for the Year *2016*

Date Prepared: *June 09/17*

Municipal Water Licence Annual Report

Hamlet of TUKTOYAKTUK
 Licence # N7L3-0714
 Reporting year 2016

1. Water Usage

Table 1: Monthly and annual quantities of fresh water obtained from all sources

Month	Volume from Source (m ³ or L)	Volume from any other Source (m ³ or L)
January	3,530,520 (L)	0
February	4,150,470 (L)	0
March	4,307,070 (L)	0
April	4,143,590 (L)	0
May	4,325,330 (L)	0
June	4,176,760 (L)	0
July	4,123,740 (L)	0
August	4,515,890 (L)	0
September	4,220,870 (L)	0
October	4,253,900 (L)	0
November	3,945,340 (L)	0
December	3,985,440 (L)	0
TOTALS		
ANNUAL TOTAL (m³ or L)	49,678,920 (L)	
% Increase or decrease from previous year	0.58 % INCREASE	

Reasons for increase / decrease (if applicable):

Reasons for exceeding licensed withdrawal volumes (if applicable):

General information:

2. Sewage Disposal

Table 2: Monthly and annual quantities of sewage discharged to the sewage disposal facilities

Month	Volume of sewage discharged (m ³ or L)
January	3,530,580 L
February	4,150,470 L
March	4,307,070 L
April	4,143,590 L
May	4,325,330 L
June	4,176,760 L
July	4,123,740 L
August	4,515,890 L
September	4,220,870 L
October	4,253,900 L
November	3,945,340 L
December	3,985,440 L
ANNUAL TOTAL (m³ or L)	49,678,920 L
% Increase or decrease from previous year	

3. Hazardous Waste Storage and Transportation

On Table 3, list the types of hazardous waste accepted into the facility including volumes.

Table 3: Monthly and annual quantities of hazardous waste stored on site and transported off site

Month	Type of hazardous waste accepted (Volume in m ³ or L)	Type of hazardous waste transported off site (Volume in m ³ or L)
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		
ANNUAL TOTAL (m³ or L)		
% Increase or decrease from previous year		

If hazardous waste has been transported off site this year, please describe how it was transported and the final destination:

ALL ITEMS WERE ITEMIZED AND MEASURED FOR VOLUME AND WEIGHT BY KBL ENVIRONMENTAL FROM WHITEHORSE YUKON. ALL ITEMS WERE TRANSPORTED BY TRUCK TO WHITEHORSE, YK.

MOVEMENT DOCUMENTS ATTACHED: YT11167-9, YT11166-1, YT11165-3

NOTE: 600 KG OF BATTERIES DID NOT MAKE IT ON TRUCK, DUE TO TRUCK OVER LOADED. BATTERIES STORED IN COLD STORAGE.

Please include treatment or disposal plans for the remaining quantities:

- DISPOSAL PLANS: ARE IN ^{THE} FUTURE RECYCLE OIL/BATTERIE AND HAZARDOUS WASTE PROGRAM AS WE DID THIS YEAR.

Please describe any changes or improvements to temporary hazardous waste storage areas:

*NO CHANGES, TEMPORARY HAZARDOUS WASTE ARE STORED IN PUBLIC WORK YARD IN A DESIGNATED AREA.

4. Sewage Sludge Removal

Table 4: Monthly and annual quantities of sewage sludge removed from the sewage disposal facilities and disposal location

Month	Volume of sewage sludge removed (m ³ or L)	Disposal location
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		
ANNUAL TOTAL (m³ or L)		
% Increase or decrease from previous year		

5. Problems, Modifications or Repairs Completed During the Year on Water Supply and Waste Disposal Facilities

Include any changes to infrastructure of all facilities completed during the year, including any changes, repairs and modifications. Please note any problems that occurred during the year. If there are no changes, make note of that also.

- Fixed Broken Line from WATER SOURCE TO RESERVOIR - SEPT 2016
- 2016 TUKTOYAKTUK, NT SEWAGE LAGOON/SOLID WASTE SITE ANNUAL REPORT ATTACHED.
- 2016 TUKTOYAKTUK WATER RESERVOIR ANNUAL REFILL REPORT ATTACHED.

6. SNP Data

A condition of the Water Licence is the Surveillance Network Program (SNP). The SNP outlines the sampling requirements and frequency at monitoring stations. In table 5, insert the sites sampled during the reporting year and the sampling period (sampling date). Attach the complete Taiga Laboratory results, with your "Municipal Water Licence Annual Report" to the Inuvialuit Water Board.

Table 5: Sampling station and sampling period

Sampling station	After break-up	Prior to freeze-up
SNP-0714-2	SEPT. 14, 2016	
SNP-0714-2		OCT. 18, 2016

7. Spills and Unauthorized Discharges

List any spills and unauthorized discharges, how and when they were reported, and clean up methods.

NIL

8. Spill Response Training and/or other Operator Training

Please provide a description of any Spill Response Training and/or other operator training carried out during the year.

Circuit Rider with MACA REP

9. Closure and Reclamation

Include a description of any closure, remediation and/or reclamation activities completed during the year and an outline of any work anticipated for next year.

NIL

10. Studies Requested by the Board that Relate to Water Use, Waste Disposal or Closure and Reclamation

If the Board has requested that specific studies be completed or have asked for specific information be included in the annual report, include these details in this section. Include a summary report of the study completed and the results. Include as attachments with the submission of the Annual Report. Include details of any upcoming studies that will be completed by the Hamlet.

NIL

11. Updates or Revisions to Approved Plans

Include details on any changes to approved plans such as the Solid and Sewage Waste Disposal Facilities Operating and Maintenance Plan (O&M Plan) or any other plans specific to your Water Licence.

- *Spill Contingency Plan*
- *Solid Waste Disposal Facilities Operation and Maintenance Plan*
- *Sewage Disposal Facilities Operation and Maintenance Plan*
- *Hazardous Waste Management Plan*
- *Closure and Reclamation Plan*

NIL

12. Inspection of Dams, Berms, Dykes and Control Structures

Include results of any inspections of all dams, berms, dykes and control structures related to the water intake facilities, solid waste disposal facilities, sewage disposal facilities and/or any other specific to your water licence.

ATTACHED: 2016 TUKTOYAKTUK, NT SEWAGE LAGOON / SOLID WASTE SITE ANNUAL REPORT

13. Inspections on all Water and Waste Disposal Facilities

Include results of regular staff inspections on all water and waste disposal facilities authorized under this licence and any corrective actions taken, as necessary.

- ATTACHED:

* 2016 TUKTOYAKTUK, NT SEWAGE LAGOON / SOLID WASTE SITE ANNUAL REPORT
* 2016 TUKTOYAKTUK WATER RESERVOIR ANNUAL REFILL REPORT.

14. Correspondence between the Inspector and the Licensee

Include all correspondence between the Inspector and the Licensee with your annual report.

15. Other Information

Include any other details on waste disposal requested by the Board by November 1, of the year being reported. In this section you may include non-compliance items identified in the inspection reports and how the Hamlet is addressing them. If there are any contaminated soil piles currently in use, please list the details of containment, remediation, and progress in this section. Ongoing issues with compliance can be identified here. If the IWB is aware of ongoing problems with the licence, discussions can occur to find a resolution.

ATTACHED: ESSO CREEK OLD DUMP SITE

PIN POINT - $69^{\circ}25'48.61''N$
 $132^{\circ}57'29.45''W$

NOTE: IWB REQUESTED OLD DUMP SITE.

MOVEMENT DOCUMENT / MANIFEST
DOCUMENT DE MOUVEMENT / MANIFESTE

This Movement document/manifest conforms to all federal and provincial environmental legislation.
 Ce document de mouvement/manifeste est conforme aux législations fédérale et provinciale sur l'environnement.

YT11166-1

Movement Document / Manifest Reference No.
 N° de référence du document de mouvement/manifeste

<p>A Generator / consignator Producteur / expéditeur</p> <p>Registration No. / Provincial ID No. N° d'immatriculation - d'Id. provincial</p> <p>Company name / Nom de l'entreprise Hamlet of Tuktoyaktuk</p> <p>Mailing address / Adresse postale Box 120 Tuktoyaktuk, NT X0E 0A0</p> <p>City / Ville Yukon</p> <p>Province NT</p> <p>Postal code / Code postal X0E 0A0</p> <p>E-mail / Courriel électronique 867-678-0396</p>		<p>B Carrier Transporteur</p> <p>Registration No. / Provincial ID No. N° d'immatriculation - d'Id. provincial</p> <p>Company name / Nom de l'entreprise Manatowlin Transport</p> <p>Mailing address / Adresse postale P 1 Airport Rd, Box 2630, Inuvik, NT X0E 0T0</p> <p>City / Ville Inuvik</p> <p>Province NT</p> <p>Postal code / Code postal X0E 0T0</p> <p>E-mail / Courriel électronique Manatowlin Transport</p>	
<p>C Receiver / consignee Réceptionnaire / destinataire</p> <p>Registration No. / Provincial ID No. N° d'immatriculation - d'Id. provincial</p> <p>Receiver / consignee information same as in Part A Les renseignements du réceptionnaire / destinataire sont les mêmes qu'à la Partie A</p> <p>Les renseignements du réceptionnaire / destinataire sont les mêmes qu'à la Partie A <input type="checkbox"/> Yes / Oui <input type="checkbox"/> No, complete the box below / Non, remplir la case ci-dessous</p> <p>Company name / Nom de l'entreprise</p> <p>Mailing address / Adresse postale</p> <p>City / Ville</p> <p>Province</p> <p>Postal code / Code postal</p> <p>E-mail / Courriel électronique</p> <p>Receiving site address / Adresse du lieu de destination</p> <p>Tel. No. / N° de tél.</p>		<p>21 Date shipped / Date of expedition Year / Année Month / Mois Day / Jour</p> <p>Time / Heure <input type="checkbox"/> A.M. <input type="checkbox"/> P.M.</p> <p>22 Scheduled arrival date / Date d'arrivée prévue Year / Année Month / Mois Day / Jour</p>	
<p>1 Intended Receiver / consignee Réceptionnaire / destinataire prévu</p> <p>Registration No. / Provincial ID No. N° d'immatriculation - d'Id. provincial</p> <p>Company name / Nom de l'entreprise KBL Environmental</p> <p>Mailing address / Adresse postale Box 119 Whitecourt</p> <p>City / Ville Whitecourt</p> <p>Province YT</p> <p>Postal code / Code postal X4A 5X9</p> <p>E-mail / Courriel électronique 867-335-5508</p>		<p>23 Name of authorized person (print) Nom de l'agent autorisé (caractères d'imprimés):</p> <p>Signature</p> <p>Year / Année Month / Mois Day / Jour 1 7 0 3 3 0</p>	
<p>2 Class / Classe Sub. class (ies) Sous-classe(s)</p> <p>8 2794</p> <p>8 1791</p> <p>3 1993</p> <p>3 1263</p>		<p>3 Shipping name Appellation réglementaire</p> <p>Batteries Wet Filled w/acid</p> <p>Sodium Hypochlorite</p> <p>Waste-Flammable Liquid</p> <p>Waste Paint Related Materials</p>	
<p>4 D or R code Code D ou R</p> <p>8</p> <p>8</p> <p>3</p> <p>3</p>		<p>5 National code in country of / Code du pays</p> <p>19</p>	
<p>6 Notice No. N° de notification</p> <p>7 D or R code Code D ou R</p> <p>8</p> <p>8</p> <p>3</p> <p>3</p>		<p>9 Packing / ret. gr. Gr. d'emballage / de retour</p> <p>10 Units L or / ou Kg</p> <p>600 Kg</p> <p>1435 L</p> <p>3075 L</p> <p>240 L</p>	
<p>11 Notes No. N° de notation</p> <p>12 D or R code Code D ou R</p> <p>13 C code Code C</p> <p>14 Basic Annex Vils or OECD Code Annexe Vils de Bâle ou Code ODE</p> <p>15 H code Code H</p> <p>16 Y code Code Y</p> <p>17 E code Code E</p> <p>18 Import / Importation</p> <p>19 Customs code(s) Code(s) de douanes</p>		<p>20 Phys. state État phys.</p> <p>21 Quantity received Quantité reçue</p> <p>22 L or / ou Kg Litres / Kilogrammes</p> <p>23 Units Unités</p> <p>24 Comments Commentaires</p> <p>25 Handling Code / Code de manutention</p> <p>26 Shipments / Envoyé Accepted / Refusé</p> <p>27 Name of authorized person (print) Nom de l'agent autorisé (caractères d'imprimés)</p> <p>28 Signature</p> <p>29 Tel. No. / N° de tél.</p>	
<p>30 Receiver / consignee certification / certify that the information contained in Part C is correct and complete. / Attestation du réceptionnaire / destinataire : J'atteste que tous les renseignements à la partie C sont exacts et complets.</p> <p>31 Name of authorized person (print) Nom de l'agent autorisé (caractères d'imprimés)</p> <p>32 Signature</p> <p>33 Tel. No. / N° de tél.</p>		<p>34 Registration No. / Provincial ID No. N° d'immatriculation / d'Id provincial</p> <p>35 Decant. / Decant.</p> <p>36 Peck. / Peck.</p> <p>37 Cont. / Cont.</p>	

Instructions on reverse
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Name of authorized person (print)
 Nom de l'agent autorisé (caractères d'imprimés)
DAVY KREUGNERPAK

Signature

Generator / consignator certification: I certify that the information contained in Part A is correct and complete. I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/packaged, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.
 Attestation du producteur / expéditeur: J'atteste que tous les renseignements à la partie A sont exacts et complets. Je déclare que le contenu de ce chargement est décrit ci-dessus de façon complète et exacte par la désignation officielle de transport et qu'il est convenablement classé, emballé, marqué, étiqueté, manipulé de façon appropriée et est en toutes circonstances en condition pour être transporté conformément aux réglementations internationales et nationales applicables.

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MOVEMENT DOCUMENT / MANIFEST
DOCUMENT DE MOUVEMENT / MANIFESTE

ovement document/manifest conforms to all federal
 vidual environmental legislation.
 ument de mouvement/manifeste est conforme aux législations
 e et provinciales sur l'environnement.

YT11167-9

Movement Document / Manifest Reference No.
 N° de référence du document de mouvement/manifeste

<p>1 Generator / consignior Producteur / expéditeur</p> <p>Registration No. / Provincial ID No. N° d'immatriculation - dtl. provincial</p> <p>City / Ville Postal code / Code postal</p> <p>Yukon XOE 1CO</p> <p>Tel. No. / N° de tél. 867-678-0396</p>		<p>23 Receiver / consignee Réceptionnaire / destinataire</p> <p>Registration No. / Provincial ID No. N° d'immatriculation - dtl. provincial</p> <p>City / Ville Postal code / Code postal</p> <p>Yukon XOE 6TO</p> <p>Tel. No. / N° de tél.</p>	
<p>24 Carrier Transporteur</p> <p>Company name / Nom de l'entreprise Monatoulin Transport</p> <p>Mailing address / Adresse postale Box 2630 Inuvik NT</p> <p>E-mail / Courrier électronique Tel. No. / N° de tél.</p>		<p>25 Vehicle / Véhicule Trailer - Rail car No. 1 1° remorque - wagon</p> <p>Trailer - Rail car No. 2 2° remorque - wagon</p> <p>Port of entry Point d'entrée</p> <p>Point of exit Point de sortie</p>	
<p>26 Registered Receiver / consignee Réceptionnaire / destinataire agréé</p> <p>Registration No. / Provincial ID No. N° d'immatriculation - dtl. provincial</p> <p>City / Ville Postal code / Code postal</p> <p>YT Y1A 5X9</p> <p>Tel. No. / N° de tél. 867-335-5508</p>		<p>27 Receiver / consignee information same as in Part A Les renseignements du réceptonnaire / destinataire sont les mêmes qu'à la Partie A</p> <p><input type="checkbox"/> Yes / OUI <input type="checkbox"/> No, complete the box below / Non, remplir la case ci-dessous</p> <p>Company name / Nom de l'entreprise</p> <p>Mailing address / Adresse postale</p> <p>City / Ville</p> <p>Province</p> <p>Postal code / Code postal</p> <p>E-mail / Courrier électronique</p> <p>Tel. No. / N° de tél.</p>	
<p>28 Authorized person (print) Nom de l'agent autorisé (caractères d'imprimerie)</p> <p>Year / Année Month / Mois Day / Jour</p> <p>17 03 30</p> <p>Signature</p>		<p>29 Waste or recyclable material to be transferred, specify intended company name / Si les déchets ou matières recyclables doivent être transférés, précisez le nom du destinataire</p> <p>Registration No. / Provincial ID No. N° d'immatriculation / dtl. provincial</p>	
<p>30 Shipping name Appellation réglementaire</p> <p>Class / Classe Sub-class / Sous-classe</p> <p>Quantity / Qté. (kg or lb) (kg/lb)</p>		<p>31 Quantity received Quantité reçue</p> <p>Units / Unités</p> <p>32 Comments Commentaires</p> <p>33 Handling Codes / Codes de manutention</p> <p>34 Shipment / Envoi Accepted / Reçu</p> <p>35 Decant. / Peck. / Vent. / Dég. / Vent. / Dég.</p>	
<p>36 If handling code "Other" (specify) Si code de manutention « autre » (spécifier)</p> <p>37 Receiver / consignee certification / certify that the information contained in Part C is correct and complete / Attestation du réceptonnaire / destinataire - J'atteste que tous les renseignements à la partie C sont exacts et complets.</p> <p>Name of authorized person (print) Nom de l'agent autorisé (caractères d'imprimerie)</p> <p>Signature</p> <p>Tel. No. / N° de tél.</p>		<p>38 Date shipped / Date d'expédition</p> <p>Year / Année Month / Mois Day / Jour</p> <p>Time / Heure <input type="checkbox"/> A.M. <input type="checkbox"/> P.M.</p>	
<p>39 Special handling / Manutention spéciale</p> <p><input type="checkbox"/> Attached / Joint <input type="checkbox"/> As follows / Comme :</p>		<p>40 Date shipped / Date d'expédition</p> <p>Year / Année Month / Mois Day / Jour</p> <p>Time / Heure <input type="checkbox"/> A.M. <input type="checkbox"/> P.M.</p>	

Instructions on reverse / Instructions au verso

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MOVEMENT DOCUMENT / MANIFEST DOCUMENT DE MOUVEMENT / MANIFESTE

This Movement document/manifest conforms to all federal and provincial environmental legislation.
Ce document de mouvement/manifeste est conforme aux législations fédérale et provinciale sur l'environnement.

YT11165-3

Movement Document / Manifest Reference No.
N° de référence du document de mouvement/manifeste

A Generator / Producteur / expéditeur Registration No. / Provincial ID No. / N° d'immatriculation - d'Id. provincial Inc Hamlet of Tuktoyaktuk City / Ville Tuktoyaktuk, NT X0E 1C0 Mailing address / Adresse postale Box 120 Tuktoyaktuk, NT X0E 1C0 E-mail / Courrier électronique Tel. No. / N° de tél. 867-678-0396		B Carrier / Transporteur Registration No. / Provincial ID No. / N° d'immatriculation - d'Id. provincial Mana Toulin Transport City / Ville Mailing address / Adresse postale Airport RA, Box 2630, Inuvik, NT X0E, 0T0 E-mail / Courrier électronique Tel. No. / N° de tél.		C Receiver / consignee / destinataire Registration No. / Provincial ID No. / N° d'immatriculation - d'Id. provincial Receiver / consignee information same as in Part A Les renseignements du récipiendaire / destinataire sont les mêmes qu'à la Partie A <input type="checkbox"/> Yes / Oui <input type="checkbox"/> No, complete the box below / Non, remplissez la case ci-dessous Company name / Nom de l'entreprise Mailing address / Adresse postale City / Ville Province Postal code / Code postal E-mail / Courrier électronique Tel. No. / N° de tél. Receiving site address / Adresse du lieu de destination	
Shipping site address / Adresse du lieu deexpédition Same as above City / Ville Province Postal code / Code postal		Vehicle / Véhicule Trailer - Rail car No. 1 1 ^{er} remorque - wagon Trailer - Rail car No. 2 2 ^e remorque - wagon Port of entry / Point d'entrée Port of exit / Point de sortie Carrier Certification: I certify that I have received waste or recyclable material from the generator/consignor for delivery to the receiver/consignee as set out in Part A and that the information contained in Part B is complete and correct. Attestation du transporteur: J'atteste avoir reçu les déchets ou matériaux recyclables du producteur/expéditeur en vue de leur livraison au récipiendaire / destinataire, que le contenu de la partie A est que les renseignements inscrits à la partie B sont exacts et complets.		Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimé) Signature Year / Année Month / Mois Day / Jour 1 7 0 1 3 3 0	
Intended Receiver / consignee / destinataire prévu KBL Environmental City / Ville Whse Mailing address / Adresse postale Box 119 Whse E-mail / Courrier électronique Registration No. / Provincial ID No. / N° d'immatriculation - d'Id. provincial YG-42-124 Postal code / Code postal Y4A 5X9 Tel. No. / N° de tél. 867-335-5308		Intended Receiver / consignee / destinataire KBL Environmental City / Ville Whse Mailing address / Adresse postale Box 119 Whse E-mail / Courrier électronique Registration No. / Provincial ID No. / N° d'immatriculation - d'Id. provincial YG-42-124 Postal code / Code postal Y4A 5X9 Tel. No. / N° de tél. 867-335-5308		Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimé) Signature Year / Année Month / Mois Day / Jour 1 7 0 1 3 3 0	
Receiving site address / Adresse du lieu de destination 91972 Alaska Hwy City / Ville Whse Postal code / Code postal Y4A 5X9		Receiving site address / Adresse du lieu de destination 91972 Alaska Hwy City / Ville Whse Postal code / Code postal Y4A 5X9		Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimé) Signature Year / Année Month / Mois Day / Jour 1 7 0 1 3 3 0	
Class / Classe / Sub. class(es) / Sous-classe(s) Waste Leachate-Mix NR NR Waste Leachate-Mix NR NR		Packing / emballage / Gr. of packaging / Groupe d'emballage Units shipped / Quantité expédiée 2000 L NR 1435 L NR		Units / Unités L or ou / kg 2000 L NR 1435 L NR	
Shipping name / Appellation réglementaire Waste Leachate-Mix NR NR Waste Leachate-Mix NR NR		UN No. / N° NU NR NR NR NR		Phys. state / État phys. L L L L	
National Line No. / N° de notification 11		Shipment / Envoi 12		Basis Annex VIII or OECD Code / Annexe VIII de Bâle ou Code OCDE 13	
D or R code / Code D ou R 14		Y code / Code Y 15		National code in country of / Code du pays 16	
C code / Code C 17		Export / Exportation 18		Customs code(s) / Code(s) de douanes 19	
H code / Code H 20		Import / Importation 21		Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimé) Name of originator / Destinataire ANY KRANJEVIC Signature	
If handling code "Other" (specify) / Si code de manutention « autre » (spécifier) 22		Special handling / Manutention spéciale <input type="checkbox"/> Attached / Ci-joint <input type="checkbox"/> As follows / Ci-contre :		Signature Tel. No. / N° de tél.	
Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimé) Signature Year / Année Month / Mois Day / Jour 23		Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimé) Signature Year / Année Month / Mois Day / Jour 24		Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimé) Signature Year / Année Month / Mois Day / Jour 25	

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Instructions au verso



Taiga Environmental Laboratory

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

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

Taiga Batch No.:
160894

- FINAL REPORT -

Prepared For: Hamlet of Tuktoyaktuk

Address: P.O. Box 120
Tuktoyaktuk, NT
X0E 1C0

Attn: Davy Krengnektak

Facsimile: (867) 977-2110

Final report has been reviewed and approved by:

Judy Mah
Client Service Officer

NOTES:

- Test methods and data are validated by the laboratory's Quality Assurance Program. Taiga Environmental Laboratory is accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) to ISO/IEC 17025 as a testing laboratory for specific tests registered with CALA.
- Routine methods are based on recognized procedures from sources such as
 - Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF;
 - Environment Canada
 - USEPA
- Samples shall be kept for thirty (30) days after the final report is issued. All microbiological samples shall be disposed of immediately upon completion of analysis to minimize biohazardous risks to laboratory personnel. Please contact the laboratory if you have any special requirements.
- Final results are based on the specific tests at the time of analysis and do not represent the conditions during sampling.

ReportDate: Tuesday, September 27, 2016

Print Date: Tuesday, September 27, 2016

Page 1 of 3



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

Taiga Batch No.:
160894

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Sewage Lagoon

Taiga Sample ID: 001

Client Project:

Sample Type: Sewage
Received Date: 14-Sep-16
Sampling Date: 14-Sep-16
Sampling Time: 8:30

Location: Sewage Lagoon SNP-0714-2

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<u>Inorganics - Nutrients</u>						
Ammonia as Nitrogen	11.9	0.005	mg/L	16-Sep-16	SM4500-NH3:G	
Biochemical Oxygen Demand	32	2	mg/L	14-Sep-16	SM5210:B	
<u>Inorganics - Physicals</u>						
pH	7.49		pH units	15-Sep-16	SM4500-H:B	
Solids, Total Suspended	24	3	mg/L	16-Sep-16	SM2540:D	
<u>Microbiology</u>						
Coliforms, Fecal	28300	100	CFU/100mL	14-Sep-16	SM9222:D	
<u>Organics</u>						
Hexane Extractable Material	< 2.0	2.0	mg/L	23-Sep-16	EPA1664A	

ReportDate: Tuesday, September 27, 2016

Print Date: Tuesday, September 27, 2016



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

Taiga Batch No.:
160894

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Sewage Lagoon

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

ReportDate: Tuesday, September 27, 2016
Print Date: *Tuesday, September 27, 2016*

Page 3 of 3



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

Taiga Batch No.:
161031

- FINAL REPORT -

Prepared For: Hamlet of Tuktoyaktuk

Address: P.O. Box 120
Tuktoyaktuk, NT
X0E 1C0

Attn: Davy Krengnektak

Facsimile: (867) 977-2110

Final report has been reviewed and approved by:

Glen Hudy
Quality Assurance Officer

NOTES:

- Test methods and data are validated by the laboratory's Quality Assurance Program. Taiga Environmental Laboratory is accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) to ISO/IEC 17025 as a testing laboratory for specific tests registered with CALA.
- Routine methods are based on recognized procedures from sources such as
 - Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF;
 - Environment Canada
 - USEPA
- Samples shall be kept for thirty (30) days after the final report is issued. All microbiological samples shall be disposed of immediately upon completion of analysis to minimize biohazardous risks to laboratory personnel. Please contact the laboratory if you have any special requirements.
- Final results are based on the specific tests at the time of analysis and do not represent the conditions during sampling.

ReportDate: Friday, October 28, 2016
Print Date: *Friday, October 28, 2016*

Page 1 of 3



Taiga Environmental Laboratory
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Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
161031

- CERTIFICATE OF ANALYSIS -

Client Sample ID: **Sewage Lagoon SNP 0714-2**

Taiga Sample ID: **001**

Client Project:

Sample Type: Sewage
Received Date: 18-Oct-16
Sampling Date: 18-Oct-16
Sampling Time: 9:06

Location: Sewage Lagoon SNP-0714-2

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<u>Inorganics - Nutrients</u>						
Ammonia as Nitrogen	20.7	0.005	mg/L	27-Oct-16	SM4500-NH3:G	
Biochemical Oxygen Demand	10	2	mg/L	18-Oct-16	SM5210:B	
<u>Inorganics - Physicals</u>						
pH	7.65		pH units	19-Oct-16	SM4500-H:B	
Solids, Total Suspended	20	3	mg/L	24-Oct-16	SM2540:D	
<u>Microbiology</u>						
Coliforms, Fecal	440	10	CFU/100mL	18-Oct-16	SM9222:D	
<u>Organics</u>						
Hexane Extractable Material	< 2.0	2.0	mg/L	24-Oct-16	EPA1664A	

Report Date: Friday, October 28, 2016
Print Date: Friday, October 28, 2016



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

Taiga Batch No.:
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- CERTIFICATE OF ANALYSIS -

Client Sample ID: Sewage Lagoon SNP 0714-2

Taiga Sample ID: 001

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ReportDate: Friday, October 28, 2016
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Page 3 of 3

2016 TUKTOYAKTUK, NT SEWAGE LAGOON/SOLID WASTE SITE ANNUAL REPORT

The Annual Inspection of the Sewage Lagoon and Solid Waste Site were done on September 09, 2016.

Sewage Lagoon Berm:

- The berm was inspected and no deficiencies were detected. The level of the free board for the berm was at 1.3 meters.

Discharge Chutes:

- South discharge chute was damaged, but no leaks were detected and tire stops were in good condition. Repairs are scheduled for summer/fall of 2017.
- North discharge chute was damaged and repairs were done in October, 2016.

2016 Sewage Lagoon Controlled Decant:

- Samples were sent to Taiga Environmental Laboratory on September 14, 2016. Received results back on September 27, 2016 and the results were forwarded the Water Resource Officer with ENR. With approval of ENR the Hamlet of Tuktoyaktuk began a controlled decant on September 28, 2016. Completed decanting on October 06, 2016. Samples were sent out October 18, 2016 and the final results were received on October 28, 2016. Forward final results to ENR.

Solid Waste Site Berm:

- The berm at the Solid Waste Site was inspected on September 09, 2016. The berm had no deficiencies and the free board was at 1.5 meters. No decanting required.

Report submitted on November 08, 2016.



Davy Krengnektak
Municipal Works Manager
Inc. Hamlet of Tuktoyaktuk

2016 TUKTOYAKTUK WATER RESERVOIR ANNUAL REFILL REPORT

Mid-September 2015 our pipeline was hit by an unknown source of water vessel and broke apart. We salvaged 2900 feet of pipeline and lost 1900 feet under the harbor. 10 - 50 ft. length were ordered in April of 2016, and 16 electro fusion coupling were also ordered too. Work Started on July 11, 2016, hired 6 casuals and started connecting the pipeline from the Kudlak Lake to the harbor. We connected the 2900 ft. that we recovered and added 1200 ft. The 1200 ft. included the order we made in April of 500 ft. and 500 feet that we had from the last pipeline replacement and 200 ft. of what was recovered from the last pipeline replacement. We also moved the pipeline from the front of the water reservoir to the rear, that added an extra 700 ft. All the pipeline was connected across the harbor, 4100 ft was the total length. 5 boats were used to pull the pipeline across and connected on both ends, 2 Hamlet boats and 3 rented from town. The pipeline was moved further away from NTCL's dock to avoid less chances of getting hit by any water vessels. September 06, 2016 the pipeline was finally connected on both ends.

Start Date for Reservoir Refill: September 07, 2016 @ 5:45 pm.

Hour Meter on Pump: 3891 hrs.

Pump Pressure: 70 PSI

RPM: 1500 rpm

Propane Tank Levels:

- 1000 lb. Tank # 1 @ 80%
- 1000 lb. Tank # 2 @ 80%
- 500 lb. Tank # 3 @ 82%
- 500 lb. Tank # 4 @ 80%
- 500 lb. Tank #5 @ 88%
- 500 lb. Tank # 6 @ 83%

The pump was running fine until September 09, 2016, the pump stopped. The stoppage was due to faulty Murphy Switch on the pump, the switch was replaced and pumping continued until completed.

Completion Date for Reservoir Refill: September 25, 2016 @ 4 pm.

Hour Meter on Pump: 4299 hrs.

Propane Tank Levels:

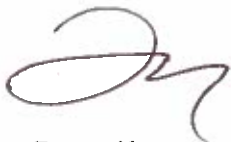
2016 TUKTOYAKTUK WATER RESERVOIR ANNUAL REFILL REPORT

- 1000 lb. Tank # 1 @ 3%
- 1000 lb. Tank # 2 @ 3%
- 500 lb. Tank # 3 @ 2%
- 500 lb. Tank #4 @ 15%
- 500 lb. Tank #5 @ 88%
- 500 lb. Tank #6 @ 83%

The total number of days to complete pumping was 19 days, but the 19 days excluded the down time and stoppage for adding fluids to the pump. The pump ran for 17 days on the hour meter.

In Summary the whole 2016 Pipeline Replacement Project and Reservoir Refill was a learning experience to myself and the pipeline crew. The pipeline crew did an awesome job! A lot of overtime was required, but they did not complain and kept their moral high. My only concern was when we were getting to the end of August and the pipeline wasn't connected yet, but when that last bolt was tightened to connect the last flange on September 6th I felt as if a big weight was taken off my shoulder.

Report Submitted on October 13, 2016.



Davy Krengnektak
Municipal Works Manager
Inc. Hamlet of Tuktoyaktuk

Esso Creek Old Dump Site



Esso Creek Old Dump Site

Legend

- Bar 3 from the Tuk Harbour
- Old Dump Site
- Pipe Length

Google Earth

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Image © 2017 DigitalGlobe

1000 ft

