Annual Report- 2013

Hamlet of Cambridge Bay
Water Licence: 3BM-CAM 0914

Submitted to the Nunavut Water Board

February 26, 2014

Cambridge Bay Water Licence 3BM-CAM 0914

Annual Report 2013

Hamlet of Cambridge Bay, Nunavut

Table of Contents

Description		Page/ number
Letter to Nunavut Water Board		3 pages
Annual Report 2013 (NWB Form)		4 pages
Appendix A:	Drawing showing Monitoring Stations	1 page
Appendix B:	Environmental Sample Results Summary	1 page
Appendix C:	Sewage Effluent Sample Results-Taiga lab	16 pages
Appendix D:	Water Sample Results Taiga Lab and Cambridge Bay Lab	1 2 pages

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Department of Community and Government Services
Nunalingni Kavamatkunnilu Pivikhaqautikkut
Ministère des Services Communautaires et gouvernementaux

Cambridge Bay Water Licence: 3BM-CAM 0914 Annual Report 2013

February 26, 2014

Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1L0

Attention: Phyllis Beaulieu, Manager of Licensing

RE: Annual Report 2013 - Hamlet of Cambridge Bay Water Licence: 3BM-CAM 0914

Dear Ms. Phyllis,

The Hamlet of Cambridge Bay is pleased to submit to Nunavut Water Board the attached file of "Annual Report 2013" of water uses and sewage solid waste disposal as required and directed under the compliance of Water Licence; 3BM-CAM-0914 as stated above. Copies of required tests reports are attached herewith (Appendices) as requested for your review and references.

With the help of Government of Nunavut though Community and Government Services, the hamlet has undertaken a comprehensive waste management program which has led to improve sewage and solid waste facilities, wetland and effluent discharges. The annual monitoring program for sewage and solid waste has been in effect since 2012. Samples test result shown excellent remediation of contamination parameters within allowable limit comprising BOD, TSS, E-coli and Toxicity components and quality control on sewage and solid waste effluent before discharging into ocean. We summarized those conditions and requirements outlined in Part B through part H as below:

Part B: General conditions:

Item1. (a through i):

- Tabular Form of Annual water consumption and sewage disposal are duly filled-up
- Quantities were measured on daily basis of water distribution and sewage disposal
- Addition of one new access vault to the north of existing last access vault and close near the pumphouse to connect the new pumphouse in summer 2014
- New sewage disposal point on new splash pad at the main cell of sewage lagoon
- No unauthorized discharge or disposal to solid waste.
- O&M manual for old sewage and solid waste facilities submitted to NWB.

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Items 2-7:

- Monitoring stations marked at site using GPS locator and location signage placed. Existing station CAM-3 no more active. New location for CAM-2 (run off from existing solid waste disposal facility) can be selected during summer 2014 for metal dump leachate before merging to wetland.
- No device Meter was used for volume measurement, however, truck-fill measurement uses as precise in taking the volume of water, sewage and solid waste.
- No Spill or emergency occurrences happened and reported during this period.
- No changes in Monitoring program as reported in QA/QC plan and Plan for Compliance.

Part C: Water Use:

- Water drawn from the Water Lake using twin intake lines and annual quantity 77,510 cubic metres limited within the allowable annual limit of 88,000 cubic metres.
- New screen with 2.54 mm slot, #60 wedge screen and 62.5% opening area installed for new intake system, 406 mm x 452 mm diameter with 3 mm cap plate and weld ring.
- Erosion control measures gravel bank built up for the new intake line and slope of new pumphouse.

Part D: Waste Disposal

- All sewage disposals to the sewage Lagoon from the day of operation. Raw sewage waste collect from household sewage tank by hamlet operated vacuum trucks.
- Sewage and effluent samples taken during summer and fall, tested in accredited laboratory and noted parameters contamination within allowable limits (Appendix C)
- Final discharge points identified and submitted to the Board as required minimum 30 days after such point(s) identification. No changes in Final Discharge point and no plan
- Freeboard at sewage lagoon maintained minimum 1.0m (Ref. Item 3) and discharge into secondary cell by pump decanting.
- The existing wetland area and facilities used for effluent treatment and remediation. Test results shown the effluent from Final Discharge Point CAM-6 within limiting values for BOD, TSS, Coliform, p^H meeting quality standards and DFO guidelines.

P.O. Bag 200, Helen Maksagak Centre
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Ministère des Services Communautaires et gouvernementaux

Part E-G: Modification, construction, operation, abandonment and restoration

- The sewage lagoon included a new splash pad and access road constructed and drawings submitted to the Board by the consultant. Diversion of sewage effluent discharge from waiting pond of wetland controlled by a pervious berm before entering to final discharge point.
- Abandonment of current phumphouse and intake line once new pumphouse and intake system open for operation. Amendment will be made sometime in summer 2014.
- New O&M manuals for new sewage and solid waste facilities submitted to NWB.

Part H: Monitoring Program

- Annual monitoring of sewage and solid waste effluent carried from Stations CAM-4, CAM-5, and CAM-6 during the summer and fall. Samples were taken from monitoring stations where available and convenient, and tested for parameters at Taiga Laboratory at Yellowknife, NWT (CALA approved). Test reports of such samples as well as Bacterial Test (Taiga Lab and Cambridge Bay Regional Lab) are included for your reference.
- Raw sewage collects by vacuum suction from household sewage tank using hamlet operated truck, haul to 1 km away sewage lagoon and offload on splash pad to lagoon. Number of truck load recorded on daily basis measures quantity of monthly and annually, not very quantity, but close to accuracy as possible. Truck driver/operator carries a Log sheet to be filled out for each load dispose to sewage lagoon. Full load capacity of sewage truck 10,000 liter.
- Location of monitoring stations marked on map with GPS coordinates.
- During the late summer and fall, monitoring stations CAM-4 found dry and not enough collection or flow of run-off from landfill. Therefore, more samples were not possible.

We hope that Nunavut Water Board will find this report and enclosed test results valuable to Annual Report in operating the Water Licence for water, sewage and solid waste facilities.

Best Regards,

Shah Alam, P. Eng.
Municipal Planning Engineer,
Government of Nunavut
Community and Government Services
Kitikmeot Region, Cambridge Bay, Nu
Phone: 867-983-4156, fax: 867-983-4124
salam@gov.nu.ca<mailto:salam@gov.nu.ca>

ANNUAL REPORT

YEAR BEING REPORTED: 2013

The following information is compiled pursuant to the requirements of **Part B**, Item 1 of Water Licence **3BM-CAM0914** issued to the **Hamlet of Cambridge Bay**
.

i) - iii) tabular summaries of all data generated under the "Monitoring Program"; monthly and annual quantities in cubic metres of freshwater obtained from all sources; monthly and annual quantities in cubic metres of each and all wastes discharged;

Attached are quantities of water used as reported by Fluid Manager and quantities of sewage waste based on discharged on daily basis.

Month Reported	Quantity of Water Obtained from all sources (litres)	Quantity of Sewage Waste Discharged
January	6,683,647.76	Same
February	6,186,158.19	Same
March	6,825,762.94	Same
April	6,214,017.04	Same
May	6,421,323.81	Same
June	6,098,721.75	Same
July	6,465,804.93	Same
August	6,584,298.78	Same
September	6,704,652.65	Same
October	6,785,493.57	Same
November	6,470,065.89	Same
December	6,070.320.70	Same
ANNUAL TOTAL	**77,510,268.01**	Same

iv. **a summary of modifications and/or major maintenance work carried out on the Water Supply and Waste Disposal Facilities, including all associated structures and facilities**:

Water Supply:

- New intake pumphouse(PH)prefabricated outside, shipped on site in summer 2013 and integrated with new twin intake lines onsite, placed close near to the existing intake PH. New intake lines installed about 156 m to water Lake from new PH. Construction contact included new prefabricated PH, heat traced intake line, new generator plus 3-phase power line and truck-fill station started summer 2013 and expecting completion by Fall 2014.
- New intake screen details: 2.54 mm slot #60 wedge screen and 62.5% open area. 406 mm x 452 mm diameter screen area with 3 mm cap plate and weld ring.

Sewage lagoon:

- Used new splash pad for sewage disposal at the main cell and repaired berm height sufficient to maintain more than 1.0m freeboard for the retention cell.
- Samples collected from sewage lagoon secondary cell nearby location before decanting.
- Annual decanting carried of sewage by pump from secondary cell into wetland waiting pond through dispersion structure integrated with HDPE solid pipe connected to close end HDPE perforated pipe riprap all around with gravels.

Waste Disposal Facility:

- Repaired liner cells at the metal dump site and secured with sand bags on sides and seam.
- Completed fence along the perimeter of the new MSW site and monitoring entrance gate.
- A video surveillance, operator control and record system watching unit (container) placed inside the new MSW site close near the entrance gate to control and direct waste disposal.
- Controlled disposal by segregating wood pieces, paper boards, animal carcass, broken metals and hazardous items etc. from general municipal waste before dumping at landfill. Push down the pile of municipal waste at landfill, grade wastes towards lower areas and cover with covering materials.
- Cleaned debris off from fence, shallow trench along the perimeter inside the fence
- Scrap metals broken to smaller pieces and stored in metal dump area.

v. a list of unauthorized discharges and summary of follow-up action taken;

- No unauthorized discharges during the period of the year.

vi. a summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year;

- Run-off detention sump inside solid waste area near the sewage lagoon has been removed and filled the area with waste materials. Supplementary berm was constructed in 2012 close near the existing run-off sump to stop leakage from solid waste and sewage lagoon.
- Constructed new shallow sump for solid waste leachate run-off retention near the access road and sewage lagoon intersection, GPS location for this sump area is identified as CAM-4 for control ponding of leachate.
- New cells for hazardous waste, honey bag carcass, burn pit and equipment storage at the new dump area beside the new landfill area. This arrangement replaces the uses previous disposal areas at metal dump site.
- Existing sewage disposal location no more in use-cleaned up and filled with gravel.
- Expected decommissioning of current pumphouse and intake lines in summer 2014 when new intake pumphouse and intake lines will start operation.

vii. a summary of any studies requested by the Board that relate to waste disposal, water use or reclamation, and a brief description of any future studies planned;

- Current water Licence not included a separate Land Farm construction or operation facility. Previously this facility and operation conducted by private operator for treating hydrocarbon contaminated soil. An amendment will be requested by the Licensee if this requirements to the hamlet in future. Liner cells are alternative for contaminated soil storage before shipping outside of the facility.
- NWB imposed the requirement of submission a "**Sewage Sludge Management Plan**" as commended by EC (Environment Canada) prior to removal of sludge from the lagoon. Hamlet has no plan currently for sewage sludge removal, but will submit a plan to NWB for approval if require in near future.

viii. any other details on water use or waste disposal requested by the Board by November 1st of the year being reported; and

None

ix. Updates or revisions to the approved Operation and Maintenance Plans

- New and updated version of Operation and Maintenance (O&M) manuals for sewage and solid waste facilities submitted to the Board as requested.
- Existing version of O&M manual for water system & intake pumphouse remains active until the new O&M manual for new intake system and treatment plant.
- A spill contingency plan for sewage and solid waste facilities submitted accordingly.
- A QA/QC plan requested and submitted to the Board as requested.

ADDITIONAL INFORMATION THAT THE LICENSEE DEEMS USEFUL:

- The improvement of sewage and solid waste facilities will accommodate community sewage and solid waste for the next ten (10) years at least.
- Run-off from landfill facility sample results shown contamination parameters within and at very low level of maximum allowable limits and in compliance with ***Environmental Guideline for Industrial Waste Discharge, Schedule 1.***
- Existing metals at old dump site crushed into smaller pieces and buried with cover materials, compacted and graded 2% slopped down from centre crest with no stagnant of water within the area covering the cell.
- New cells were built with 60 mils HDPE liner at the bottom and sand bedding on liner, berm all around with compacted sand-gravel and slopped 1:2 as per design for storage of new hazardous materials. Battery and waste oil are stored inside individual containment within the lined cell.

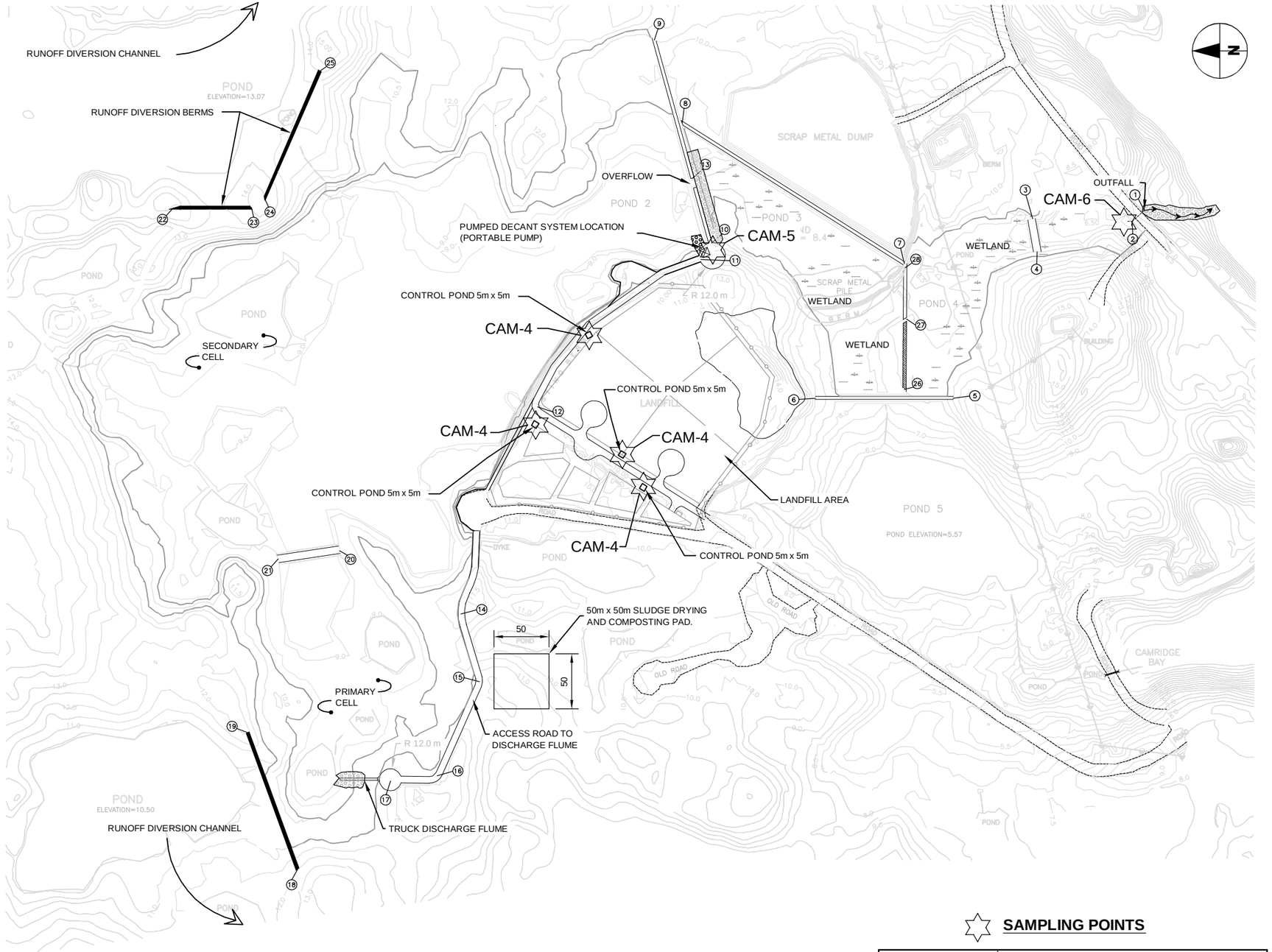
FOLLOW-UP REGARDING INSPECTION/COMPLIANCE CONCERNS:

- Solid Waste Facility is fenced all around as identified un-fenced and requested by INAC inspector in July 2008.
- Drums of hazardous waste and honeybag/carcass removed from site as noted in INAC inspection in 2003.

Appendix A:

Drawing showing monitoring location

Cambridge Bay Water Licence 3BM-CAM0914



0 100 200 m

1:4000

LEGEND

- EDGE OF ROAD (ELEV. 10.0m)
- DRAINAGE ROUTE
- RIP-RAP
- SEWAGE LAGOON/WETLAND BERM
- RUNOFF DIVERSION BERM
- OPEN WATER SECTION OF WETLAND
- FREE BOARD
- MAX OPERATION WATER LEVEL
- OPEN WATER SECTION
- SAMPLE POINT

NOTES:

ELEVATIONS ARE EXPRESSED IN METER OR DECIMALS THEREOF.

CAM-4 SAMPLING LOCATION(S) CONSIST OF ANY LOCATION(S) WHERE LIQUID ORIGINATING IN THE LANDFILL AREA IS DISCHARGED TO THE LAGOON.

BERM LOCATION POINTS

BERM POINTS	NORTHING	EASTING
1	7667952.67	498928.34
2	7667964.75	498917.18
3	7668055.83	498919.56
4	7668050.75	498889.87
5	7668126.82	499757.16
6	7668252.15	498757.16
7	7668170.48	498878.77
8	7668372.90	499006.76
9	7668397.97	499082.42
10	7668347.00	498898.03
11	7668357.13	498883.20
12	7668505.96	498748.79
13	7668363.63	498956.63
14	7668573.61	498560.76
15	7668557.39	498499.29
16	7668597.34	498411.69
17	7668638.10	498410.28
18	7668722.31	498329.19
19	7668767.59	498452.94
20	7668684.04	498619.15
21	7668740.07	498610.20
22	7668835.17	498930.79
23	7668764.43	498930.23
24	7668752.28	498938.93
25	7668702.41	499054.24
26	7668171.72	498764.31
27	7668171.12	498829.37
28	7668170.48	498878.77
29	7667956.60	498915.42
30	7667970.84	498901.51

SAMPLING POINTS

SAMPLING LOCATION	DESCRIPTION
CAM-4	EFFLUENT FROM MODIFIED SOLID WASTE DISPOSAL FACILITIES BEING DISCHARGED TO THE RETENTION SEWAGE LAGOON
CAM-5	FINAL DISCHARGE POINT FOR EFFLUENT FROM THE RETENTION SEWAGE LAGOON TO THE SEWAGE WETLAND
CAM-6	OUTFALL AREA FOR THE SEWAGE WETLAND

AECOM

Figure: 7-1

SEWAGE LAGOON AND LANDFILL MONITORING STATIONS

CAMBRIDGE BAY
SEWAGE AND SOLID WASTE
NUNAVUT
Project No.: 91011

Date: 2013-11-DD

Project Management Initials: Designer: Checked: Approved: ANSI B 11" x 17"

Last saved by: LEEE1 (2013-11-28) Last Plotted: 2013-11-28
Filename: L:\WORK\91\00\91011\02A-CAD\WATWORKING DRAWINGS\REPORT\FIGURE 7-1.DWG

Appendix B:

Results summary: sewage and solid waste samples

Cambridge Bay Water Licence 3BM-CAM0914

Part H: Monitoring program.

samples collected on June 25, and Aug 01, 2013 and tested results

	MAC	units	June 25, 2013			Aug 01, 2013		
Parameter	Limits		CAM-3	CAM -4	CAM-5	CAM-3	CAM-5	CAM-6
Alkalinity, as CaCo3		mg/L	301		215	232	236	271
Conductivity		µS/cm	964		775	858	864	979
P^H	6-9		7.53	7.18	9.12	8.78	9.41	8.23
TSS	120	mg/L	36	114	54	114	100	50
Ammonia as N2	80	mg/L	31.5		<0.005	0.38	0.10	0.137
BOD	100	mg/L	30	294	33	45	52	32
Organic Carbon		mg/L	51.6		54.2	59.8	69.1	57.6
Nitrate as N2		mg/L	<0.01		<0.01	2.56	0.84	0.21
Phosphorous, Total							2.66	2.16
Calcium		mg/L	41.1		39	45.4	45.4	53.6
Chloride		mg/L	106	265	113	118	128	128
Hardness		mg/L	225		253	252	264	308
Magnesium		mg/L	29.8		37.7	33.6	36.5	42.3
Nitrite as N2		mg/L	<0.01		<0.01	0.34	0.54	<0.01
Potasium		mg/L	18.1		13.7	19	18.7	17
Sodium		mg/L	73		72.1	81.9	87.9	89
Sulphate		mg/L	21	1140	35	24	32	43
Fecal Coliform	10000	CFU/100mL	5300		<10	1000	<10	10
Oil and Gas	5000	µg/L	none		non-vis	non-vis	non-vis	non-vis
Aluminium		µg/L	31	176	83	77	85	26
Arsenic	100	µg/L	1.6	7.8	3	2.2	3.1	4.0
Cadmium	10	µg/L	<0.1	0.6	<0.1	<0.1	<0.1	<0.1
Chromium	100	µg/L	0.5	6.2	0.6	0.5	0.5	0.6
Cobalt	50	µg/L	0.4		0.5	0.4	0.5	0.8
Copper	200	µg/L	29.3	69	4.4	13.7	11.1	5.3
Iron		µg/L	827	25300	427	718	918	1140
Lead	50	µg/L	0.4	21.1	1.9	0.2	0.8	0.2
Manganese		µg/L	120		40.3	98.7	81.4	113
Nickel	200	µg/L	2.3	42.8	3.6	2.5	3.7	3.7
Zinc	500	µg/L	14	455	8	12	12	5
Mercury	0.6	µg/L	<0.01	0.06	0.01			

Appendix C:

Sewage and Solid Waste Sample Results: 2013

Cambridge Bay Water Licence 3BM-CAM0914

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 130421

- PRELIMINARY REPORT -

Prepared For: Hamlet of Cambridge Bay
Municipal Works

Address: P.O. Box 16
Cambridge Bay, NU
X0B 0C0

Attn: **Wayne Weese** **Facsimile: (867) 983-2186**

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) as a testing laboratory for specific tests registered with CALA.
- Routine methods are based on recognized procedures from sources such as
  - Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF;
  - Environment Canada
  - USEPA
- Samples shall be kept for thirty (30) days after the final report is issued. All microbiological samples shall be disposed of immediately upon completion of analysis to minimize biohazardous risks to laboratory personnel. Please contact the laboratory if you have any special requirements.
- Final results are based on the specific tests at the time of analysis and do not represent the conditions during sampling.

ReportDate:
Print Date: Thursday, July 11, 2013

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 130421

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-3 **Taiga Sample ID:** 001

Client Project:
Sample Type: Sewage
Received Date: 26-Jun-13
Sampling Date: 25-Jun-20
Sampling Time: 9:30
Location: Cambridge Bay
Report Status: **Preliminary**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Physicals						
Alkalinity, Total (as CaCO3)	301	0.4	mg/L	26-Jun-13	SM2320:B	
Conductivity, Specific (@ 25°C)	964	0.4	µS/cm	26-Jun-13	SM2510:B	
pH	7.53		pH units	26-Jun-13	SM4500-H:B	
Solids, Total Suspended	36	3	mg/L	27-Jun-13	SM2540:D	
Inorganics - Nutrients						
Ammonia as Nitrogen	31.5	0.005	mg/L	28-Jun-13	SM4500-NH3:	
Biochemical Oxygen Demand	30	2	mg/L	26-Jun-13	SM5210:B	
Organic Carbon, Total	51.6	0.5	mg/L	27-Jun-13	SM5310:B	
Major Ions						
Calcium	41.1	0.1	mg/L	26-Jun-13	SM4110:B	
Chloride	106	0.7	mg/L	26-Jun-13	SM4110:B	
Hardness	225	0.7	mg/L	26-Jun-13	SM2340:B	
Magnesium	29.8	0.1	mg/L	26-Jun-13	SM4110:B	
Nitrate as Nitrogen	< 0.01	0.01	mg/L	26-Jun-13	SM4110:B	

ReportDate:
Print Date: Thursday, July 11, 2013

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 130421

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-3 **Taiga Sample ID:** 001

Nitrite as Nitrogen	< 0.01	0.01	mg/L	26-Jun-13	SM4110:B
Potassium	18.1	0.1	mg/L	26-Jun-13	SM4110:B
Sodium	73.0	0.1	mg/L	26-Jun-13	SM4110:B
Sulphate	21	1	mg/L	26-Jun-13	SM4110:B
Microbiology					
Coliforms, Fecal (other)	5300	100	CFU/100mL	26-Jun-13	SM9222:D
Organics					
Oil and Grease, visible	Non-visible			10-Jul-13	Visual Exam
Trace Metals, Total					
Aluminum	31	5	µg/L	06-Jul-13	EPA200.8
Arsenic	1.6	0.2	µg/L	06-Jul-13	EPA200.8
Cadmium	< 0.1	0.1	µg/L	06-Jul-13	EPA200.8
Chromium	0.5	0.1	µg/L	06-Jul-13	EPA200.8
Cobalt	0.4	0.1	µg/L	06-Jul-13	EPA200.8
Copper	29.3	0.2	µg/L	06-Jul-13	EPA200.8
Iron	827	5	µg/L	06-Jul-13	EPA200.8
Lead	0.4	0.1	µg/L	06-Jul-13	EPA200.8
Manganese	120	0.1	µg/L	06-Jul-13	EPA200.8
Mercury	< 0.01	0.01	µg/L	06-Jul-13	EPA200.8
Nickel	2.3	0.1	µg/L	06-Jul-13	EPA200.8
Zinc	14	5	µg/L	06-Jul-13	EPA200.8

ReportDate:
Print Date: Thursday, July 11, 2013

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 130421

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-4 **Taiga Sample ID:** 002

Client Project:
Sample Type: Wastewater
Received Date: 26-Jun-13
Sampling Date: 25-Jun-20
Sampling Time: 9:30
Location: Cambridge Bay
Report Status: **Preliminary**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Physicals						
pH	7.18		pH units	26-Jun-13	SM4500-H:B	
Solids, Total Suspended	114	3	mg/L	27-Jun-13	SM2540:D	
Inorganics - Nutrients						
Biochemical Oxygen Demand	294	2	mg/L	26-Jun-13	SM5210:B	
Phosphorous, Total			mg/L		SM4500-P:D	
Major Ions						
Chloride	265	0.7	mg/L	26-Jun-13	SM4110:B	
Floride	12.8	0.1	mg/L	26-Jun-13	SM4110:B	
Sulphate	1140	1	mg/L	26-Jun-13	SM4110:B	
Organics						
Hexane Extractable Material	2.2	2.0	mg/L	03-Jul-13	EPA1664A	
Trace Metals, Total						
Aluminum	176	5	µg/L	06-Jul-13	EPA200.8	
Arsenic	7.8	0.2	µg/L	06-Jul-13	EPA200.8	

ReportDate:
Print Date: Thursday, July 11, 2013

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4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 130421

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-4 **Taiga Sample ID:** 002

Barium	76.2	0.1	µg/L	06-Jul-13	EPA200.8
Cadmium	0.6	0.1	µg/L	06-Jul-13	EPA200.8
Chromium	6.2	0.1	µg/L	06-Jul-13	EPA200.8
Copper	69.0	0.2	µg/L	06-Jul-13	EPA200.8
Iron	25300	5	µg/L	06-Jul-13	EPA200.8
Lead	21.1	0.1	µg/L	06-Jul-13	EPA200.8
Mercury	0.06	0.01	µg/L	06-Jul-13	EPA200.8
Nickel	42.8	0.1	µg/L	06-Jul-13	EPA200.8
Silver	0.2	0.1	µg/L	06-Jul-13	EPA200.8
Tin	3.3	0.1	µg/L	06-Jul-13	EPA200.8
Zinc	455	5	µg/L	06-Jul-13	EPA200.8
Subcontracted Organics					
Cyanide, Total	0.033	0.002	mg/L	28-Jun-13	EPA335.3
Phenols, Total	0.030	0.002	mg/L	03-Jul-13	APHA 5530D
Subcontracted Nutrients					
Sulphide	4.60	0.005	mg/L	03-Jul-13	SM4500-S2-E

ReportDate:
Print Date: Thursday, July 11, 2013

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 130421

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-5 **Taiga Sample ID:** 003

Client Project:
Sample Type: Sewage
Received Date: 26-Jun-13
Sampling Date: 25-Jun-20
Sampling Time: 9:30
Location: Cambridge Bay
Report Status: **Preliminary**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Physicals						
Alkalinity, Total (as CaCO3)	215	0.4	mg/L	26-Jun-13	SM2320:B	
Conductivity, Specific (@ 25°C)	775	0.4	µS/cm	26-Jun-13	SM2510:B	
pH	9.12		pH units	26-Jun-13	SM4500-H:B	
Solids, Total Suspended	54	3	mg/L	27-Jun-13	SM2540:D	
Inorganics - Nutrients						
Ammonia as Nitrogen	< 0.005	0.005	mg/L	28-Jun-13	SM4500-NH3:	
Biochemical Oxygen Demand	33	2	mg/L	26-Jun-13	SM5210:B	
Organic Carbon, Total	54.2	0.5	mg/L	27-Jun-13	SM5310:B	
Major Ions						
Calcium	39.0	0.1	mg/L	26-Jun-13	SM4110:B	
Chloride	113	0.7	mg/L	26-Jun-13	SM4110:B	
Hardness	253	0.7	mg/L	26-Jun-13	SM2340:B	
Magnesium	37.7	0.1	mg/L	26-Jun-13	SM4110:B	
Nitrate as Nitrogen	< 0.01	0.01	mg/L	26-Jun-13	SM4110:B	
Nitrite as Nitrogen	< 0.01	0.01	mg/L	26-Jun-13	SM4110:B	

ReportDate:
Print Date: Thursday, July 11, 2013

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 130421

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-5 **Taiga Sample ID:** 003

Potassium	13.7	0.1	mg/L	26-Jun-13	SM4110:B
Sodium	72.1	0.1	mg/L	26-Jun-13	SM4110:B
Sulphate	35	1	mg/L	26-Jun-13	SM4110:B
Microbiology					
Coliforms, Fecal (other)	< 10	10	CFU/100mL	26-Jun-13	SM9222:D
Organics					
Oil and Grease, visible	Non-visible			10-Jul-13	Visual Exam
Trace Metals, Total					
Aluminum	83	5	µg/L	06-Jul-13	EPA200.8
Arsenic	3.0	0.2	µg/L	06-Jul-13	EPA200.8
Cadmium	< 0.1	0.1	µg/L	06-Jul-13	EPA200.8
Chromium	0.6	0.1	µg/L	06-Jul-13	EPA200.8
Cobalt	0.5	0.1	µg/L	06-Jul-13	EPA200.8
Copper	4.4	0.2	µg/L	06-Jul-13	EPA200.8
Iron	427	5	µg/L	06-Jul-13	EPA200.8
Lead	1.9	0.1	µg/L	06-Jul-13	EPA200.8
Manganese	40.3	0.1	µg/L	06-Jul-13	EPA200.8
Mercury	0.01	0.01	µg/L	06-Jul-13	EPA200.8
Nickel	3.6	0.1	µg/L	06-Jul-13	EPA200.8
Zinc	8	5	µg/L	06-Jul-13	EPA200.8

ReportDate:
Print Date: Thursday, July 11, 2013

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 130421

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-5 **Taiga Sample ID:** 003

*** 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:

Print Date: Thursday, July 11, 2013

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 130610

- FINAL REPORT -

Prepared For: Hamlet of Cambridge Bay
Municipal Works

Address: P.O. Box 16
Cambridge Bay, NU
X0B 0C0

Attn: **Wayne Weese** **Facsimile: (867) 983-2186**

Final report has been reviewed and approved by:

Angelique Ruzindana
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) 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: Sunday, August 18, 2013
Print Date: Sunday, August 18, 2013

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 130610

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-3 **Taiga Sample ID:** 001

Client Project: CAM 0813
Sample Type: Water
Received Date: 02-Aug-13
Sampling Date: 01-Aug-13
Sampling Time: 9:30
Location: Cambridge Bay
Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Physicals						
Alkalinity, Total (as CaCO3)	232	0.4	mg/L	02-Aug-13	SM2320:B	
Conductivity, Specific (@ 25°C)	858	0.4	µS/cm	02-Aug-13	SM2510:B	
pH	8.78		pH units	02-Aug-13	SM4500-H:B	
Solids, Total Suspended	114	3	mg/L	06-Aug-13	SM2540:D	
Inorganics - Nutrients						
Ammonia as Nitrogen	0.388	0.005	mg/L	14-Aug-13	SM4500-NH3:	
Biochemical Oxygen Demand	45	2	mg/L	02-Aug-13	SM5210:B	6
Organic Carbon, Total	59.8	0.5	mg/L	14-Aug-13	SM5310:B	
Major Ions						
Calcium	45.4	0.1	mg/L	02-Aug-13	SM4110:B	
Chloride	118	0.7	mg/L	02-Aug-13	SM4110:B	
Hardness	252	0.7	mg/L	02-Aug-13	SM2340:B	
Magnesium	33.6	0.1	mg/L	02-Aug-13	SM4110:B	
Nitrate as Nitrogen	2.56	0.01	mg/L	02-Aug-13	SM4110:B	

ReportDate: Sunday, August 18, 2013
Print Date: Sunday, August 18, 2013

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 130610

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-3 **Taiga Sample ID:** 001

Nitrite as Nitrogen	0.34	0.01	mg/L	02-Aug-13	SM4110:B	
Potassium	19.0	0.1	mg/L	02-Aug-13	SM4110:B	
Sodium	81.9	0.1	mg/L	02-Aug-13	SM4110:B	
Sulphate	24	1	mg/L	02-Aug-13	SM4110:B	
Microbiology						
Coliforms, Fecal (other)	1000	100	CFU/100mL	02-Aug-13	SM9222:D	6
Organics						
Oil and Grease, visible	Non-visible			14-Aug-13	Visual Exam	
Trace Metals, Total						
Aluminum	77	5	µg/L	15-Aug-13	EPA200.8	
Arsenic	2.2	0.2	µg/L	15-Aug-13	EPA200.8	
Cadmium	< 0.1	0.1	µg/L	15-Aug-13	EPA200.8	
Chromium	0.5	0.1	µg/L	15-Aug-13	EPA200.8	
Cobalt	0.4	0.1	µg/L	15-Aug-13	EPA200.8	
Copper	13.7	0.2	µg/L	15-Aug-13	EPA200.8	
Iron	718	5	µg/L	15-Aug-13	EPA200.8	
Lead	0.2	0.1	µg/L	15-Aug-13	EPA200.8	
Manganese	98.7	0.1	µg/L	15-Aug-13	EPA200.8	
Mercury	< 0.01	0.01	µg/L	15-Aug-13	EPA200.8	
Nickel	2.5	0.1	µg/L	15-Aug-13	EPA200.8	
Zinc	12	5	µg/L	15-Aug-13	EPA200.8	

ReportDate: Sunday, August 18, 2013
Print Date: Sunday, August 18, 2013

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 130610

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-5 **Taiga Sample ID:** 002

Client Project: CAM 0813
Sample Type: Water
Received Date: 02-Aug-13
Sampling Date: 01-Aug-13
Sampling Time: 9:30
Location: Cambridge Bay
Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Physicals						
Alkalinity, Total (as CaCO3)	236	0.4	mg/L	02-Aug-13	SM2320:B	
Conductivity, Specific (@ 25°C)	864	0.4	µS/cm	02-Aug-13	SM2510:B	
pH	9.41		pH units	02-Aug-13	SM4500-H:B	
Solids, Total Suspended	100	3	mg/L	06-Aug-13	SM2540:D	
Inorganics - Nutrients						
Ammonia as Nitrogen	0.104	0.005	mg/L	14-Aug-13	SM4500-NH3:	
Biochemical Oxygen Demand	52	2	mg/L	02-Aug-13	SM5210:B	6
Organic Carbon, Total	69.1	0.5	mg/L	14-Aug-13	SM5310:B	
Phosphorous, Dissolved	0.870	0.002	mg/L	10-Aug-13	SM4500-P:D	
Phosphorous, Total	2.66	0.002	mg/L	09-Aug-13	SM4500-P:D	
Major Ions						
Calcium	45.4	0.1	mg/L	02-Aug-13	SM4110:B	
Chloride	128	0.7	mg/L	02-Aug-13	SM4110:B	
Hardness	264	0.7	mg/L	02-Aug-13	SM2340:B	
Magnesium	36.5	0.1	mg/L	02-Aug-13	SM4110:B	

ReportDate: Sunday, August 18, 2013
Print Date: Sunday, August 18, 2013

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 130610

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-5 **Taiga Sample ID:** 002

Nitrate as Nitrogen	0.84	0.01	mg/L	02-Aug-13	SM4110:B	
Nitrite as Nitrogen	0.54	0.01	mg/L	02-Aug-13	SM4110:B	
Potassium	18.7	0.1	mg/L	02-Aug-13	SM4110:B	
Sodium	87.9	0.1	mg/L	02-Aug-13	SM4110:B	
Sulphate	32	1	mg/L	02-Aug-13	SM4110:B	
Microbiology						
Coliforms, Fecal (other)	< 10	10	CFU/100mL	02-Aug-13	SM9222:D	6
Organics						
Oil and Grease, visible	Non-visible			14-Aug-13	Visual Exam	
Trace Metals, Total						
Aluminum	85	5	µg/L	15-Aug-13	EPA200.8	
Arsenic	3.1	0.2	µg/L	15-Aug-13	EPA200.8	
Cadmium	< 0.1	0.1	µg/L	15-Aug-13	EPA200.8	
Chromium	0.5	0.1	µg/L	15-Aug-13	EPA200.8	
Cobalt	0.5	0.1	µg/L	15-Aug-13	EPA200.8	
Copper	11.1	0.2	µg/L	15-Aug-13	EPA200.8	
Iron	918	5	µg/L	15-Aug-13	EPA200.8	
Lead	0.8	0.1	µg/L	15-Aug-13	EPA200.8	
Manganese	81.4	0.1	µg/L	15-Aug-13	EPA200.8	
Mercury	< 0.01	0.01	µg/L	15-Aug-13	EPA200.8	
Nickel	3.7	0.1	µg/L	15-Aug-13	EPA200.8	
Zinc	12	5	µg/L	15-Aug-13	EPA200.8	

ReportDate: Sunday, August 18, 2013
Print Date: Sunday, August 18, 2013

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 130610

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-6 **Taiga Sample ID:** 003

Client Project: CAM 0813
Sample Type: Water
Received Date: 02-Aug-13
Sampling Date: 01-Aug-13
Sampling Time: 9:30
Location: Cambridge Bay
Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Physicals						
Alkalinity, Total (as CaCO3)	271	0.4	mg/L	02-Aug-13	SM2320:B	
Conductivity, Specific (@ 25°C)	979	0.4	µS/cm	02-Aug-13	SM2510:B	
pH	8.23		pH units	02-Aug-13	SM4500-H:B	
Solids, Total Suspended	50	3	mg/L	06-Aug-13	SM2540:D	
Inorganics - Nutrients						
Ammonia as Nitrogen	0.137	0.005	mg/L	14-Aug-13	SM4500-NH3:	
Biochemical Oxygen Demand	32	2	mg/L	02-Aug-13	SM5210:B	6
Organic Carbon, Total	57.6	0.5	mg/L	14-Aug-13	SM5310:B	
Phosphorous, Dissolved	1.15	0.002	mg/L	10-Aug-13	SM4500-P:D	
Phosphorous, Total	2.16	0.002	mg/L	09-Aug-13	SM4500-P:D	
Major Ions						
Calcium	53.6	0.1	mg/L	02-Aug-13	SM4110:B	
Chloride	128	0.7	mg/L	02-Aug-13	SM4110:B	
Hardness	308	0.7	mg/L	02-Aug-13	SM2340:B	
Magnesium	42.3	0.1	mg/L	02-Aug-13	SM4110:B	

ReportDate: Sunday, August 18, 2013
Print Date: Sunday, August 18, 2013

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 130610

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-6 **Taiga Sample ID:** 003

Nitrate as Nitrogen	0.21	0.01	mg/L	02-Aug-13	SM4110:B	
Nitrite as Nitrogen	< 0.01	0.01	mg/L	02-Aug-13	SM4110:B	
Potassium	17.0	0.1	mg/L	02-Aug-13	SM4110:B	
Sodium	89.0	0.1	mg/L	02-Aug-13	SM4110:B	
Sulphate	43	1	mg/L	02-Aug-13	SM4110:B	
Microbiology						
Coliforms, Fecal (other)	10	10	CFU/100mL	02-Aug-13	SM9222:D	6
Organics						
Oil and Grease, visible	Non-visible			14-Aug-13	Visual Exam	
Trace Metals, Total						
Aluminum	26	5	µg/L	15-Aug-13	EPA200.8	
Arsenic	4.0	0.2	µg/L	15-Aug-13	EPA200.8	
Cadmium	< 0.1	0.1	µg/L	15-Aug-13	EPA200.8	
Chromium	0.6	0.1	µg/L	15-Aug-13	EPA200.8	
Cobalt	0.8	0.1	µg/L	15-Aug-13	EPA200.8	
Copper	5.3	0.2	µg/L	15-Aug-13	EPA200.8	
Iron	1140	5	µg/L	15-Aug-13	EPA200.8	
Lead	0.2	0.1	µg/L	15-Aug-13	EPA200.8	
Manganese	113	0.1	µg/L	15-Aug-13	EPA200.8	
Mercury	< 0.01	0.01	µg/L	15-Aug-13	EPA200.8	
Nickel	3.7	0.1	µg/L	15-Aug-13	EPA200.8	
Zinc	5	5	µg/L	15-Aug-13	EPA200.8	

ReportDate: Sunday, August 18, 2013
Print Date: Sunday, August 18, 2013

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 130610

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-6 **Taiga Sample ID:** 003

- DATA QUALIFERS -

Data Qualifier Descriptions:

6 *Sample received above the recommended temperature*

*** 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: Sunday, August 18, 2013
Print Date: Sunday, August 18, 2013

Appendix D:

Water Bacterial test results: 2013

Cambridge Bay Water Licence 3BM-CAM0914

STANTON TERRITORIAL HEALTH AUTHORITY

LABORATORY REPORT

Stanton Territorial Hospital Laboratory

550 Byrne Road, P.O. Box 10
Yellowknife, NT X1A 2N1
Phone: 867-669-4163 Fax: 867- 669-4141

Lab No. 25040250

Patient: **CAMBRIDGE BAY , HAMLET OF**
DOB: Age: **51** Sex: **M**
HCN: Client ID: **HX00000007**
Stanton Chart No:
Pt. Phone: 8676694373
Location: **EHO - KITIKMEOT**
Room: Adm. Date: 05/12/11

Encounter: WX00000007
Attending Pract.: PHYSICIAN, NOT
Requested by: PHYSICIAN, NOT
Send to: KITIKMEOT REGIONAL ENGINEER
Copy to: KITIKMEOT REGIONAL
KITIKMEOT MUNICIPAL

Test, Water

MICROBIOLOGY

Requested on: 04/01/13 13:05 Status:

KITIKMEOT REGIONAL ENGINEER, KRE - Cambridge Bay NU,

Source: **Water #9001**
Order#: **25040250**

Collected: **03/01/13 10:27**
Received: **04/01/13 13:04**

TOTAL COLIFORM & E.COLI TESTING (P/A COLILERT METHOD)	*** FINAL**	**05/01/13**	**13:36**

05/01/13 ***TOTAL COLIFORM: absent***
E.COLI: absent

Micro Key for Results: * - New Results ** - Result was modified after Final status set

SCC

STATUS
Page 1 of 1

Printed: 01/05/13 13:39

STANTON TERRITORIAL HEALTH AUTHORITY

LABORATORY REPORT

Stanton Territorial Hospital Laboratory

550 Byrne Road, P.O. Box 10
Yellowknife, NT X1A 2N1
Phone: 867-669-4163 Fax: 867-669-4141

Lab No. 26080350

Patient: **CAMBRIDGE BAY . HAMLET OF**
DOB: Age: **51** Sex: **M**
HCN: Client ID: HX00000007
Stanton Chart No:
Pt. Phone: 8676694373
Location: KITIKMEOT REGIONAL ENGINEER
Room: Adm. Date: 05/12/11

Encounter: WX00000007
Attending Pract.: PHYSICIAN, NOT
Requested by: PHYSICIAN, NOT
Send to: KITIKMEOT MUNICIPAL PLANNER
Copy to: KITIKMEOT REGIONAL
KITIKMEOT MUNICIPAL

Test, Water

MICROBIOLOGY

Requested on: 08/02/13 14:08 Status:

KITIKMEOT MUNICIPAL PLANNER, KMP Cambridge Bay NU

Switcher

Source: **Water #9001**
Order#: **26080350**

Collected: **07/02/13 10:27**
Received: **08/02/13 14:09**

TOTAL COLIFORM & E.COLI TESTING (P/A COLILERT METHOD)	*** FINAL**	**09/02/13**	**14:59**
09/02/13	***TOTAL COLIFORM: absent***		
	E.COLI: absent		

*Micro Key for Results: * - New Results ** - Result was modified after Final status set*

STANTON TERRITORIAL HEALTH AUTHORITY

LABORATORY REPORT

Stanton Territorial Hospital Laboratory

550 Byrne Road, P.O. Box 10
Yellowknife, NT X1A 2N1
Phone: 867-669-4163 Fax: 867-669-4141

Lab No: 26080352

Patient: **CAMBRIDGE BAY , HAMLET OF**
DOB: Age: **51** Sex: **M**
HCN: Client ID: HX00000007
Stanton Chart No:
Pt. Phone: 8676694373
Location: KITIKMEOT REGIONAL ENGINEERR
Room. Adm. Date: 05/12/11

Encounter: WX00000007
Attending Pract.: PHYSICIAN, NOT
Requested by: PHYSICIAN, NOT
Send to: KITIKMEOT MUNICIPAL PLANNER
Copy to: KITIKMEOT REGIONAL
KITIKMEOT MUNICIPAL

Test, Water

MICROBIOLOGY

Requested on: 08/02/13 14:09 Status:

KITIKMEOT MUNICIPAL PLANNER, KMP - Cambridge Bay NU.

Switcher

Source: **Water #9002**
Order#: **26080352**

Collected: **07/02/13 10:23**
Received: **08/02/13 14:10**

TOTAL COLIFORM & E.COLI TESTING (P/A COLILERT METHOD)	*** FINAL**	**09/02/13**	**14:59**

09/02/13 ***TOTAL COLIFORM: absent***
E.COLI: absent

Micro Key for Results: * - New Results ** - Result was modified after Final status set

SCC

STATUS
Page 1 of 1

Printed: 02/09/13 15:09

STANTON TERRITORIAL HEALTH AUTHORITY

LABORATORY REPORT

Stanton Territorial Hospital Laboratory

550 Byrne Road, P.O. Box 10
Yellowknife, NT X1A 2N1
Phone: 867-669-4163 Fax: 867- 669-4141

Lab No. 26080353

Patient: **CAMBRIDGE BAY , HAMLET OF**
DOB: Age: 51 Sex: M
HCN: Client ID: HX00000007
Stanton Chart No:
Pt. Phone: 8676694373
Location: KITIKMEOT REGIONAL ENGINEER
Room: Adm. Date: 05/12/11

Encounter: WX00000007
Attending Pract.: PHYSICIAN, NOT
Requested by: PHYSICIAN, NOT
Send to: KITIKMEOT MUNICIPAL PLANNER
Copy to: KITIKMEOT REGIONAL
KITIKMEOT MUNICIPAL

Test: Water

MICROBIOLOGY

Requested on: 08/02/13 14:10 Status:

KITIKMEOT MUNICIPAL PLANNER, KMP - Cambridge Bay NU.

Switcher

Source: **Water #9003**
Order#: **26080353**

Collected: **07/02/13 10:20**
Received: **08/02/13 14:10**

TOTAL COLIFORM & E.COLI TESTING (P/A COLILERT METHOD)	*** FINAL**	**09/02/13**	**14:59**

09/02/13 ***TOTAL COLIFORM: absent***
E.COLI: absent

Micro Key for Results: * - New Results ** - Result was modified after Final status set

SCC

STATUS
Page 1 of 1

Printed: 02/09/13 15:09

STANTON TERRITORIAL HEALTH AUTHORITY

LABORATORY REPORT

Stanton Territorial Hospital Laboratory

550 Byrne Road, P.O. Box 10
Yellowknife, NT X1A 2N1
Phone: 867-669-4163 Fax: 867-669-4141

Lab No: 25040248

Patient: **CAMBRIDGE BAY , HAMLET OF**
DOB: Age: 51 Sex: M
HCN: Client ID: HX00000007
Stanton Chart No:
Pt. Phone: 8676694373
Location: EHO - KITIKMEOT
Room: Adm. Date: 05/12/11

Encounter: WX00000007
Attending Pract : PHYSICIAN, NOT
Requested by: PHYSICIAN, NOT
Send to: KITIKMEOT REGIONAL ENGINEEL
Copy to: KITIKMEOT REGIONAL
KITIKMEOT MUNICIPAL

Test, Water

MICROBIOLOGY

Requested on: 04/01/13 12:30 Status:

KITIKMEOT REGIONAL ENGINEER, KRE Cambridge Bay NU,

Source: **Water #9002** Collected: **03/01/13 10:35**
Order#: **25040248** Received: **04/01/13 13:01**

TOTAL COLIFORM & E.COLI TESTING (P/A COLILERT METHOD)	*** FINAL**	**05/01/13**	**13:36**

05/01/13 ***TOTAL COLIFORM: absent***
E.COLI: absent

Micro Key for Results: * - New Results ** - Result was modified after Final status set

SCC

STATUS
Page 1 of 1

Printed: 01/05/13 13:39

LABORATORY REPORT

STANTON TERRITORIAL HEALTH AUTHORITY

Stanton Territorial Hospital Laboratory
550 Byrne Road, P.O. Box 10
Yellowknife, NT X1A 2N1
Phone: 867-669-4163 Fax: 867-669-4141

Lab No: 25040249

Patient: **CAMBRIDGE BAY , HAMLET OF**
DOB: Age: **51** Sex: **M**
HCN: Client ID: HX00000007
Stanton Chart No:
Pt. Phone: 8676694373
Location: EHO - KITIKMEOT
Room: Adm. Date: 05/12/11

Encounter: WX00000007
Attending Pract.: PHYSICIAN, NOT
Requested by: PHYSICIAN, NOT
Send to: KITIKMEOT REGIONAL ENGINEEE
Copy to: KITIKMEOT REGIONAL
KITIKMEOT MUNICIPAL

Test, Water

MICROBIOLOGY

Reprinted on: 04/01/13 13:02 Status:

KITIKMEOT REGIONAL ENGINEER, KRE Cambridge Bay NU,

Source: **Water #9003**
Order#: **25040249**

Collected: **03/01/13 10:31**
Received: **04/01/13 13:03**

TOTAL COLIFORM & E.COLI TESTING (P/A COLILERT METHOD) *** FINAL** **05/01/13 13:36**

05/01/13 ***TOTAL COLIFORM: absent***
E.COLI: absent

Micro Key for Results: * - New Results ** - Result was modified after Final status set

SCC

STATUS
Page 1 of 1

Printed: 01/05/13 13:39

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Munarhiliqiyikkut Inuuhiriknirmullu
Department of Health and Social Services
Ministère de la Santé et des Services sociaux

LABORATORY REPORT

Cambridge Bay Water Laboratory
Reporting Date: April 09, 2013

Reference Number 410-04-01

Source of water: Water truck # 9001, Cambridge Bay.
Date & time collected: April 08, 2013; 13:15.
Date & Time Received: April 08, 2013; 13:30

TOTAL COLIFORM AND E. COLI TESTING (Present / Absent; Coliert method).

1. TOTAL COLIFORM: absent
2. E. Coli: absent

REMARK:

Satisfactory

Wilfred Ntiamoah, MPH, CPHI(C)
Regional Environmental Health Officer
Kitikmeot Region - Dept. of Health & Social Services
Helen Maksagak Centre, P.O. Box 83
Cambridge Bay, NUNAVUT, X0B 0C0
Phone: (867) 983-4236
Email : wntiamoah@gov.nu.ca.

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Munarhiliqiyikkut Inuuhiriknirmullu
Department of Health and Social Services
Ministère de la Santé et des Services sociaux

LABORATORY REPORT

Cambridge Bay Water Laboratory
Reporting Date: April 09, 2013

Reference Number 410-04-01

Source of water: Water truck # 9002, Cambridge Bay.
Date & time collected: April 08, 2013; 13:15.
Date & Time Received: April 08, 2013; 13:30.

TOTAL COLIFORM AND E. COLI TESTING (Present / Absent; Coliert method).

1. TOTAL COLIFORM: absent
2. E. Coli: absent

REMARK:

Satisfactory

Wilfred Ntiamoah, MPH, CPHI(C)
Regional Environmental Health Officer
Kitikmeot Region - Dept. of Health & Social Services
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Building Nunavut Together
Nunavuliuqatigiingniq
Bâtir le Nunavut ensemble

Nunavut

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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

LABORATORY REPORT

Cambridge Bay Water Laboratory
Reporting Date: May 14, 2013

Reference Number 410-05-01

Source of water: Water Truck # 9001 - Hamlet of Cambridge Bay
Date & Time collected: May 13, 2013; 11:14 AM.
Date & Time Received: May 13, 2013; 11:45 AM.

TOTAL COLIFORM AND E. COLI TESTING (Present / Absent; Coliert method).

1. TOTAL COLIFORM: **absent**
2. E. Coli: **absent**

REMARK:

Satisfactory

Wilfred Ntiamoah, MPH, CPHI(C)
Regional Environmental Health Officer
Kitikmeot Region - Dept. of Health
Helen Maksagak Centre, P.O. Box 83
Cambridge Bay, NUNAVUT, X0B 0C0
Phone: (867) 983-4236
Email : wntiamoah@gov.nu.ca.

LABORATORY REPORT

Cambridge Bay Water Laboratory
Reporting Date: May 14, 2013

Reference Number 410-05-01

Source of water: Water Tank # 9002 - Hamlet of Cambridge Bay
Date & Time collected: May 13, 2013; 11:12 AM.
Date & Time Received: May 13, 2013; 11:45 AM.

TOTAL COLIFORM AND E. COLI TESTING (Present / Absent; Coliert method).

1. TOTAL COLIFORM: **absent**
2. E. Coli: **absent**

REMARK:

Satisfactory

Wilfred Ntiamoah, MPH, CPHI(C)
Regional Environmental Health Officer
Kitikmeot Region - Dept. of Health
Helen Maksagak Centre, P.O. Box 83
Cambridge Bay, NUNAVUT, X0B 0C0
Phone: (867) 983-4236
Email : wntiamoah@gov.nu.ca.

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Building Nunavut Together
Nunavuliuqatigiingniq
Bâtir le Nunavut ensemble

Nunavut

Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

LABORATORY REPORT

Cambridge Bay Water Laboratory
Reporting Date: May 14, 2013

Reference Number 410-05-01

Source of water: Water Truck # 9003 - Hamlet of Cambridge Bay
Date & Time collected: May 13, 2013; 11:18 AM.
Date & Time Received: May 13, 2013; 11:45 AM.

TOTAL COLIFORM AND E. COLI TESTING (Present / Absent; Coliert method).

1. TOTAL COLIFORM: **absent**
2. E. Coli: **absent**

REMARK:

Satisfactory

Wilfred Ntiamoah, MPH, CPHI(C)
Regional Environmental Health Officer
Kitikmeot Region - Dept. of Health
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Munarhiliqiyikkut Inuuhiriknirmullu
Department of Health and Social Services
Ministère de la Santé et des Services sociaux

LABORATORY REPORT

Cambridge Bay Water Laboratory
Reporting Date: April 09, 2013

Reference Number 410-04-01

Source of water: Water truck # 9003, Cambridge Bay.
Date & time collected: April 08, 2013; 13:15.
Date & Time Received: April 08, 2013; 13:30

TOTAL COLIFORM AND E. COLI TESTING (Present / Absent; Coliert method).

1. TOTAL COLIFORM: absent
2. E. Coli: absent

REMARK:

Satisfactory

Wilfred Ntiamoah, MPH, CPHI(C)
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