



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

Taiga Batch No.:
120878

- FINAL REPORT -

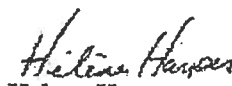
Prepared For: Hamlet of Cambridge Bay
Municipal Works

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:



Helene Harper
Manager

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: Friday, October 12, 2012
Print Date: Friday, October 12, 2012

Page 1 of 8



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

Taiga Batch No.:
120878

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-5

Taiga Sample ID: 001

Client Project: 3BM-CAM0914
Sample Type: Sewage
Received Date: 21-Sep-12
Sampling Date: 21-Sep-12
Sampling Time: 10:15
Location: Cambridge Bay
Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<u>Inorganics - Physicals</u>						
Alkalinity, Total (as CaCO ₃)	256	0.4	mg/L	24-Sep-12	SM2320:B	
Conductivity, Specific (@ 25°C)	947	0.4	µS/cm	24-Sep-12	SM2510:B	
pH	9.32		pH units	24-Sep-12	SM4500-H:B	
Solids, Total Suspended	54	3	mg/L	26-Sep-12	SM2540:D	
<u>Inorganics - Nutrients</u>						
Ammonia as Nitrogen	0.07	0.01	mg/L	01-Oct-12	SM4500-NH3:	
Biochemical Oxygen Demand	26	2	mg/L	21-Sep-12	SM5210:B	
Organic Carbon, Total	55.5	0.5	mg/L	01-Oct-12	SM5310:B	
<u>Major Ions</u>						
Calcium	51.3	0.1	mg/L	23-Sep-12	SM4110:B	
Chloride	138	0.7	mg/L	23-Sep-12	SM4110:B	
Hardness	286	0.7	mg/L	23-Sep-12	SM2340:B	
Magnesium	38.3	0.1	mg/L	23-Sep-12	SM4110:B	
Nitrate as Nitrogen	0.21	0.01	mg/L	23-Sep-12	SM4110:B	

Report Date: Friday, October 12, 2012
Print Date: Friday, October 12, 2012

Page 2 of 8



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

**Taiga Batch No.:
120878**

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-5

Taiga Sample ID: 001

Nitrite as Nitrogen	< 0.01	0.01	mg/L	23-Sep-12	SM4110:B
Potassium	17.8	0.1	mg/L	23-Sep-12	SM4110:B
Sodium	92.8	0.1	mg/L	23-Sep-12	SM4110:B
Sulphate	43	1	mg/L	23-Sep-12	SM4110:B

Microbiology

Coliforms, Fecal	3900	100	CFU/100mL	21-Sep-12	SM9222:D
------------------	------	-----	-----------	-----------	----------

Organics

Oil and Grease, visible	Non-visible			12-Oct-12	Visual Exam
-------------------------	-------------	--	--	-----------	-------------

Trace Metals, Total

Aluminum	75	5	µg/L	02-Oct-12	EPA200.8
Arsenic	2.3	0.2	µg/L	02-Oct-12	EPA200.8
Cadmium	< 0.1	0.1	µg/L	02-Oct-12	EPA200.8
Chromium	0.8	0.1	µg/L	02-Oct-12	EPA200.8
Cobalt	0.6	0.1	µg/L	02-Oct-12	EPA200.8
Copper	8.1	0.2	µg/L	02-Oct-12	EPA200.8
Iron	682	5	µg/L	02-Oct-12	EPA200.8
Lead	1.0	0.1	µg/L	02-Oct-12	EPA200.8
Manganese	52.3	0.1	µg/L	02-Oct-12	EPA200.8
Mercury	< 0.01	0.01	µg/L	02-Oct-12	EPA200.8
Nickel	3.5	0.1	µg/L	02-Oct-12	EPA200.8
Zinc	9	5	µg/L	02-Oct-12	EPA200.8

ReportDate: Friday, October 12, 2012
Print Date: Friday, October 12, 2012

Page 3 of 8



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

Taiga Batch No.:
120878

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-6

Taiga Sample ID: 002

Client Project: 3BM-CAM0914
Sample Type: Sewage
Received Date: 21-Sep-12
Sampling Date: 21-Sep-12
Sampling Time: 10:15
Location: Cambridge Bay
Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<u>Inorganics - Physicals</u>						
Alkalinity, Total (as CaCO ₃)	241	0.4	mg/L	24-Sep-12	SM2320:B	
Conductivity, Specific (@ 25°C)	1220	0.4	µS/cm	24-Sep-12	SM2510:B	
pH	9.34		pH units	24-Sep-12	SM4500-H:B	
Solids, Total Suspended	72	3	mg/L	26-Sep-12	SM2540:D	
<u>Inorganics - Nutrients</u>						
Ammonia as Nitrogen	0.06	0.01	mg/L	01-Oct-12	SM4500-NH3:	
Biochemical Oxygen Demand	43	2	mg/L	21-Sep-12	SM5210:B	
Organic Carbon, Total	61.0	0.5	mg/L	01-Oct-12	SM5310:B	
<u>Major Ions</u>						
Calcium	51.2	0.1	mg/L	23-Sep-12	SM4110:B	
Chloride	212	0.7	mg/L	23-Sep-12	SM4110:B	
Hardness	330	0.7	mg/L	23-Sep-12	SM2340:B	
Magnesium	49.1	0.1	mg/L	23-Sep-12	SM4110:B	
Nitrate as Nitrogen	0.27	0.01	mg/L	23-Sep-12	SM4110:B	
Nitrite as Nitrogen	< 0.01	0.01	mg/L	23-Sep-12	SM4110:B	

Report Date: Friday, October 12, 2012
Print Date: Friday, October 12, 2012

Page 4 of 8



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

Taiga Batch No.:
120878

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-6

Taiga Sample ID: 002

Potassium	19.2	0.1	mg/L	23-Sep-12	SM4110:B
Sodium	134	0.1	mg/L	23-Sep-12	SM4110:B
Sulphate	81	1	mg/L	23-Sep-12	SM4110:B

Microbiology

Coliforms, Fecal	1000	100	CFU/100mL	21-Sep-12	SM9222:D
------------------	------	-----	-----------	-----------	----------

Organics

Oil and Grease, visible	Non-visible			12-Oct-12	Visual Exam
-------------------------	-------------	--	--	-----------	-------------

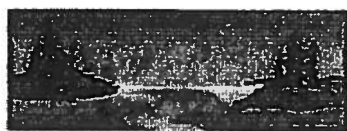
Trace Metals, Total

Aluminum	99	5	µg/L	02-Oct-12	EPA200.8
Arsenic	3.1	0.2	µg/L	02-Oct-12	EPA200.8
Cadmium	< 0.1	0.1	µg/L	02-Oct-12	EPA200.8
Chromium	0.5	0.1	µg/L	02-Oct-12	EPA200.8
Cobalt	0.8	0.1	µg/L	02-Oct-12	EPA200.8
Copper	6.7	0.2	µg/L	02-Oct-12	EPA200.8
Iron	793	5	µg/L	02-Oct-12	EPA200.8
Lead	1.2	0.1	µg/L	02-Oct-12	EPA200.8
Manganese	58.3	0.1	µg/L	02-Oct-12	EPA200.8
Mercury	< 0.01	0.01	µg/L	02-Oct-12	EPA200.8
Nickel	4.2	0.1	µg/L	02-Oct-12	EPA200.8
Zinc	8	5	µg/L	02-Oct-12	EPA200.8

ReportDate: Friday, October 12, 2012

Page 5 of 8

Print Date: Friday, October 12, 2012



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

Taiga Batch No.:
120878

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-3

Taiga Sample ID: 003

Client Project: 3BM-CAM0914
Sample Type: Sewage
Received Date: 21-Sep-12
Sampling Date: 21-Sep-12
Sampling Time: 10:15

Location: Cambridge Bay

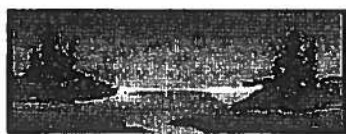
Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<u>Inorganics - Physicals</u>						
Alkalinity, Total (as CaCO ₃)	261	0.4	mg/L	24-Sep-12	SM2320:B	
Conductivity, Specific (@ 25°C)	880	0.4	µS/cm	24-Sep-12	SM2510:B	
pH	9.31		pH units	24-Sep-12	SM4500-H:B	
Solids, Total Suspended	48	3	mg/L	26-Sep-12	SM2540:D	
<u>Inorganics - Nutrients</u>						
Ammonia as Nitrogen	0.07	0.01	mg/L	01-Oct-12	SM4500-NH3:	
Biochemical Oxygen Demand	22	2	mg/L	21-Sep-12	SM5210:B	
Organic Carbon, Total	47.0	0.5	mg/L	01-Oct-12	SM5310:B	
<u>Major Ions</u>						
Calcium	51.3	0.1	mg/L	23-Sep-12	SM4110:B	
Chloride	120	0.7	mg/L	23-Sep-12	SM4110:B	
Hardness	284	0.7	mg/L	23-Sep-12	SM2340:B	
Magnesium	37.8	0.1	mg/L	23-Sep-12	SM4110:B	
Nitrate as Nitrogen	0.02	0.01	mg/L	23-Sep-12	SM4110:B	
Nitrite as Nitrogen	< 0.01	0.01	mg/L	23-Sep-12	SM4110:B	

Report Date: Friday, October 12, 2012

Print Date: Friday, October 12, 2012

Page 6 of 8



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

Taiga Batch No.:
120878

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-3

Taiga Sample ID: 003

Potassium	17.7	0.1	mg/L	23-Sep-12	SM4110:B
Sodium	83.2	0.1	mg/L	23-Sep-12	SM4110:B
Sulphate	33	1	mg/L	23-Sep-12	SM4110:B

Microbiology

Coliforms, Fecal	5800	100	CFU/100mL	21-Sep-12	SM9222:D
------------------	------	-----	-----------	-----------	----------

Organics

Oil and Grease, visible	Non-visible			12-Oct-12	Visual Exam
-------------------------	-------------	--	--	-----------	-------------

Trace Metals, Total

Aluminum	45	5	µg/L	02-Oct-12	EPA200.8
Arsenic	2.0	0.2	µg/L	02-Oct-12	EPA200.8
Cadmium	< 0.1	0.1	µg/L	02-Oct-12	EPA200.8
Chromium	0.4	0.1	µg/L	02-Oct-12	EPA200.8
Cobalt	0.5	0.1	µg/L	02-Oct-12	EPA200.8
Copper	8.0	0.2	µg/L	02-Oct-12	EPA200.8
Iron	579	5	µg/L	02-Oct-12	EPA200.8
Lead	0.7	0.1	µg/L	02-Oct-12	EPA200.8
Manganese	47.6	0.1	µg/L	02-Oct-12	EPA200.8
Mercury	< 0.01	0.01	µg/L	02-Oct-12	EPA200.8
Nickel	2.9	0.1	µg/L	02-Oct-12	EPA200.8
Zinc	8	5	µg/L	02-Oct-12	EPA200.8

ReportDate: Friday, October 12, 2012

Page 7 of 8

Print Date: Friday, October 12, 2012



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

Taiga Batch No.:
120878

- CERTIFICATE OF ANALYSIS -

Client Sample ID: CAM-3

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: Friday, October 12, 2012
Print Date: Friday, October 12, 2012

Page 8 of 8