

Nunavut - Community & Government Services

- Rankin Inlet

ATTN: JOE STRICKLAND - FACILITY MGR

P.O. Box 490

Rankin Inlet NU X0C 0G0

Date Received: 05-MAR-13

Report Date: 06-MAR-13 15:17 (MT)

Version: FINAL

Client Phone: 867-645-8158

Certificate of Analysis

Lab Work Order #: L1275195

Project P.O. #: NOT SUBMITTED

Job Reference: RANKIN INLET

C of C Numbers: Legal Site Desc:

Comments: ADDITIONAL 14-MAR-13 12:39

LEAH HAYWARD Account Manager

Hayward

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ADDRESS: 1329 Niakwa Road East, Unit 12, Winnipeg, MB R2J 3T4 Canada | Phone: +1 204 255 9720 | Fax: +1 204 255 9721 ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company



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L1275195 CONTD.... PAGE 2 of 3 Version: FINAL

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1275195-1 RANKIN INLET OLD TOWN - PUMPHO	JSE						
Sampled By: ROB HOGAN on 04-MAR-13 @ 10:30							
Matrix: Water							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		05-MAR-13	R2549629
Escherichia Coli	0		0	MPN/100mL		05-MAR-13	R2549629
L1275195-2 RANKIN INLET NEW TOWN - PUMPHC	USE						
Sampled By: ROB HOGAN on 04-MAR-13 @ 10:30							
Matrix: Water							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		05-MAR-13	R2549629
Escherichia Coli	0		0	MPN/100mL		05-MAR-13	R2549629
L1275195-3 RANKIN INLET AREA 5 L - PUMPHOUS	E						
Sampled By: ROB HOGAN on 04-MAR-13 @ 10:30							
Matrix: Water							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		05-MAR-13	R2549629
Escherichia Coli	0		0	MPN/100mL		05-MAR-13	R2549629
L1275195-4 RANKIN INLET NAVAH - PUMPHOUSE							
Sampled By: ROB HOGAN on 04-MAR-13 @ 10:30							
Matrix: Water							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		05-MAR-13	R2549629
Escherichia Coli	0		0	MPN/100mL		05-MAR-13	R2549629
L1275195-5 RANKIN INLET TOWN SUPPLY - PUMP	HOUSE						
Sampled By: ROB HOGAN on 04-MAR-13 @ 10:30							
Matrix: Water							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		05-MAR-13	R2549629
Escherichia Coli	0		0	MPN/100mL		05-MAR-13	R2549629
L1275195-6 RANKIN INLET KIVALLIQ - PUMPHOUS	E						
Sampled By: ROB HOGAN on 04-MAR-13 @ 10:30							
Matrix: Water							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		05-MAR-13	R2549629
Escherichia Coli	0		0	MPN/100mL		05-MAR-13	R2549629

^{*} Refer to Referenced Information for Qualifiers (if any) and Methodology.

RANKIN INLET L1275195 CONTD....

Reference Information

PAGE 3 of 3 Version: FINAL

Test Method References:

ALS Test Code Matrix Method Reference** **Test Description APHA 9223** TC.EC-QT51-WP Water Total Coliform and E.coli

The analysis of Total Coliform (TC) & Escherichia coli (EC) is processed by Quanti-tray (QT): Two substrates, ONPG for TC detection and MUG for EC detection are used. The substrates are added to the 100 ml sample dispensed into the 51 well tray. The tray is incubated at 35 Celcius for 24 hours. A colour reaction develops to indicate a positive reaction (presence of TC, EC). The number of positive wells are counted and converted to Most Probable Number Units (MPNU) per 100 ml. This test is also called 'rapid MPN method', therefore, the MPN results are derived from a statistical table with a 95% confidence and report as MPN units. The QT detection limit for a negative result is reported as zero.

TC,EC-QT51-WP Water Total Coliform and E.coli **APHA 9223 QT**

The analysis of Total Coliform (TC) & Escherichia coli (EC) is processed by Quanti-tray (QT): Two substrates, ONPG for TC detection and MUG for EC detection are used. The substrates are added to the 100 ml sample dispensed into the 51 well tray. The tray is incubated at 35 Celcius for 24 hours. A colour reaction develops to indicate a positive reaction (presence of TC, EC). The number of positive wells are counted and converted to Most Probable Number Units (MPNU) per 100 ml. This test is also called 'rapid MPN method', therefore, the MPN results are derived from a statistical table with a 95% confidence and report as MPN units. The QT detection limit for a negative result is reported as zero.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WP	ALS ENVIRONMENTAL - WINNIPEG, MANITOBA, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample mg/kg wwt - milligrams per kilogram based on wet weight of sample mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory. UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION. Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

W8133



Chain of Custody / Analytical Request Form Canada Toll Free: 1 800 668 9878

www.alsglobal.com

L1276195

Page of

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Lab Work Or	rder # (lab use only)				ALS Contact:		Sampler:		₩ -											Number of Containers
Sample #	(This	•	entification appear on the re	port)		Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	¥				L12	2751	95-C	OFC			14	Numbe
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Department of Health & Social Services: Kivalliq ለርධልላና ዕቴፊላቴቴፌፕጋርቪትሪና ላላጜ የጋርቪትሪቴ ነር የኖርቴ

Okoa Kavamat Monakhikakvilikiot Olasilikiot : Kivalliq Ministère de la Santé et des Services Sociaux : Kivalliq

Environmental Health Officer Bag 72, Rankin Inlet, NU, X0C 0G0

Phone: (867) 645-8273

Fax: (867) 645-8274

Mar5/13 6.70 10:35 AM

Bacteriological Analysis of Drinking Water Sample Collection Information Form



	Sample Collection	on Information
Community fr	om which sample was collected:	Kanbia Tulet Old Toron
	Location of sample collection:	Pemp House
	Date of sample collection:	4-3-13
	Time of sample collection:	1030
Name	of person who collected sample:	Mas Holas
Telephone number	of person who collected sample:	862-45-8122
	For Laborato	ry Use Only
Date-Received:		
Date Processed:		Processed by:
	Resu	llts
Total Coliform per 1	00ml:	E. coli per 100ml:
Date Read:		Read by:
	ignificant Evidence of Bact e collected is bacteriologically safe for	L1275195-COFC
Sampl	ificant Evidence of Bacteriol e collected may be unsafe for human comple as soon as possible.	ogical Contamination onsumption as bacteriological contamination is present.
Sampl	afe to Drink le collected is unsafe for human consum aple as soon as possible.	aption as fecal contamination is present.

The above results relate only to the sample tested. This water sample was only tested for the presence of both Total Coliform and E. coli bacterial indicators of contamination by using membrane filtration.



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Okoa Kavamat Monakhikakvilikiot Olasilikiot : Kivalliq Ministère de la Santé et des Services Sociaux : Kivalliq

Environmental Health Officer

Bag 72, Rankin Inlet, NU, X0C 0G0

Phone: (867) 645-8273 Fax: (867) 645-8274

Mar5/13 6.7°c 10:35AM SA

Bacteriological Analysis of Drinking Water Sample Collection Information Form



	Sample Collectio	n Information
Comm	unity from which sample was collected:	New Towa / Karhin Lake
	Location of sample collection:	Pann thear
	Date of sample collection:	4.3.13
	Time of sample collection:	1030
	Name of person who collected sample:	Acs Holan
Telephone n	number of person who collected sample:	867-645-8122
	For Laborator	ry Use Only
Date Receive	d:	
Date Processed:		Processed by:
	Resu	lts
Total Colifor	m per 100ml:	E. coli per 100ml;
Date Read:		Read by:
	No Significant Evidence of Bacter Sample collected is bacteriologically safe for leading to the Significant Evidence of Bacteriologically safe for human conference as soon as possible.	human consun L1275195-COFC
	Unsafe to Drink Sample collected is unsafe for human consum Resample as soon as possible.	ption as fecal contamination is present.

The above results relate only to the sample tested. This water sample was only tested for the presence of both Total Coliform and E. *coli* bacterial indicators of contamination by using membrane filtration.



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Environmental Health Officer

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Phone: (867) 645-8273 Fax: (867) 645-8274

Mar5li3 6.7°L 10:35AN

Bacteriological Analysis of Drinking Water Sample Collection Information Form

3

Sample Collection	on Information
Community from which sample was collected:	Kwaller / Rentia Latet
Location of sample collection:	Pun House
Date of sample collection:	
Time of sample collection:	102°
Name of person who collected sample:	Mas House
Telephone number of person who collected sample:	867-645-8122
For Laborato	•
Date Received:	
Date Processed:	Processed by:
Resu	ılts
Total Coliform per 100ml:	E. coli per 100ml:
Date Read:	Read by:
No Significant Evidence of Bacte Sample collected is bacteriologically safe for Significant Evidence of Bacteriol Sample collected may be unsafe for human or Resample as soon as possible.	human L1275195-COFC
Unsafe to Drink Sample collected is unsafe for human consum Resample as soon as possible.	uption as fecal contamination is present.

The above results relate only to the sample tested. This water sample was only tested for the presence of both Total Coliform and E. *coli* bacterial indicators of contamination by using membrane filtration.



Department of Health & Social Services: Kivalliq ለርሲልላና ሳቴታላቴ ሚገንርሲት የር ላላኒትንርሲት የተጋ: የኖርቱ

Okoa Kavamat Monakhikakvilikiot Olasilikiot : Kivalliq Ministère de la Santé et des Services Sociaux : Kivalliq

Environmental Health Officer

Bag 72, Rankin Inlet, NU, X0C 0G0

Phone: (867) 645-8273 Fax: (867) 645-8274 Mar 5/13 10:35AM 6.7°C BA

Bacteriological Analysis of Drinking Water Sample Collection Information Form



	Sample Collectio	n Information
Commu	nity from which sample was collected:	AREAS Revisi Telet
	Location of sample collection:	Peup House
	Date of sample collection:	4.3.13
	Time of sample collection:	1020
	Name of person who collected sample:	Rab Hoson
Telephone ni	umber of person who collected sample:	867-845-8122
	For Laborator	ry Use Only
Date Received		
Date Processe	d:	Processed by:
	Resu	lts
Total Coliforn	n per 100ml:	E. coli per 100ml:
Date Read:		Read by:
	No Significant Evidence of Bacter Sample collected is bacteriologically safe for h	
	Significant Evidence of Bacteriolo Sample collected may be unsafe for human co Resample as soon as possible.	
	Unsafe to Drink Sample collected is unsafe for human consum Resample as soon as possible.	ption as fecal contamination is present.

The above results relate only to the sample tested. This water sample was only tested for the presence of both Total Coliform and E. coli bacterial indicators of contamination by using membrane filtration.



Okoa Kavamat Monakhikakvilikiot Olasilikiot : Kivalliq

Ministère de la Santé et des Services Sociaux : Kivalliq

Environmental Health Officer

Bag 72, Rankin Inlet, NU, X0C 0G0

Phone: (867) 645-8273 Fax: (867) 645-8274

Mar 5/13 10:35AM

SA

Bacteriological Analysis of Drinking Water Sample Collection Information Form

Sample Collection	n Information
Community from which sample was collected:	Nagah /Ranhin Tules
Location of sample collection:	Pans House
Date of sample collection:	4.3.13
Time of sample collection:	1030
Name of person who collected sample:	Mab Hosen
Telephone number of person who collected sample:	
For Laborator	ry Use Only
Date Received:	
Date Processed:	Processed by:
Resu	lts
Total Coliform per 100ml:	E. coli per 100ml:
Date Read:	Read by:
No Significant Evidence of Bacter Sample collected is bacteriologically safe for Significant Evidence of Bacteriologically Sample collected may be unsafe for human con Resample as soon as possible.	hur L1275195-COFC
Unsafe to Drink Sample collected is unsafe for human consum Resample as soon as possible.	ption as fecal contamination is present.

The above results relate only to the sample tested. This water sample was only tested for the presence of both Total Coliform and E. coli bacterial indicators of contamination by using membrane filtration.



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Okoa Kavamat Monakhikakvilikiot Olasilikiot : Kivalliq Ministère de la Santé et des Services Sociaux : Kivalliq

Environmental Health Officer

Bag 72, Rankin Inlet, NU, X0C 0G0

Phone: (867) 645-8273 Fax: (867) 645-8274

Mar5/13 6.1'c 10:35AM 8A

Bacteriological Analysis of Drinking Water Sample Collection Information Form



Sample Collection	on Information
Community from which sample was collected:	Vantie Tilet Town Son
Location of sample collection:	Pamp House
Date of sample collection:	
Time of sample collection:	10:30
Name of person who collected sample:	Rob Holesw
Telephone number of person who collected sample:	
For Laborato	ry Use Only
Date Received:	
Date Processed:	Processed by:
Resu	ılts
Total Coliform per 100ml:	E. coli per 100ml:
Date Read:	Read by:
No Significant Evidence of Bacte Sample collected is bacteriologically safe for	
Significant Evidence of Bacteriol Sample collected may be unsafe for human or Resample as soon as possible.	
Unsafe to Drink Sample collected is unsafe for human consun Resample as soon as possible.	nption as fecal contamination is present.

The above results relate only to the sample tested. This water sample was only tested for the presence of both Total Coliform and E. *coli* bacterial indicators of contamination by using membrane filtration.