

Nunavut - Community & Government Services

- Rankin Inlet

ATTN: Simeoni Tatty/Hugh Ikoe

PO Box 490

Rankin Inlet NU X0C 0G0

Date Received: 23-AUG-13

Report Date: 27-AUG-13 12:40 (MT)

Version: FINAL

Client Phone: 867-645-8166

### **Certificate of Analysis**

Lab Work Order #: L1352190

Project P.O. #: NOT SUBMITTED

Job Reference: BAKER LAKE - COMMUNITY & GOV'T SERVICES

C of C Numbers:

Legal Site Desc: Baker Lake, NU

Chartal Bouchard

Chantal Bouchard Account Manager

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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



L1352190 CONTD.... PAGE 2 of 4 Version: FINAL

### ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1352190-1 WATER TRUCK 77							
Sampled By: Mike Fontaine on 21-AUG-13 @ 09:40							
Matrix: Water							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		23-AUG-13	R2678884
Escherichia Coli	0		0	MPN/100mL		23-AUG-13	R2678884
L1352190-2 RCMP STATION							
Sampled By: Mike Fontaine on 21-AUG-13 @ 10:25							
Matrix: Water							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		23-AUG-13	R2678884
Escherichia Coli	0		0	MPN/100mL		23-AUG-13	R2678884
L1352190-3 TRUCK 48							
Sampled By: Mike Fontaine on 21-AUG-13 @ 10:30							
Matrix: Water							
Total Coliform and E.coli Total Coliforms			•	MDNI/400 - 1		00 440 40	D0070004
Escherichia Coli	0		0 0	MPN/100mL MPN/100mL		23-AUG-13 23-AUG-13	R2678884 R2678884
	0			IVIPIN/TOUTIL		23-A0G-13	K2070004
L1352190-4 TRUCK 89 Sampled By: Mike Fontaine on 21-AUG-13 @ 10:40							
Matrix: Water							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		23-AUG-13	R2678884
Escherichia Coli	0		0	MPN/100mL		23-AUG-13	R2678884
L1352190-5 HEALTH CENTRE (HOSPITAL)							
Sampled By: Mike Fontaine on 21-AUG-13 @ 10:50							
Matrix: Water							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		23-AUG-13	R2678884
Escherichia Coli	0		0	MPN/100mL		23-AUG-13	R2678884
L1352190-6 TRUCK 52							
Sampled By: Mike Fontaine on 21-AUG-13 @ 11:05							
Matrix: Water							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		23-AUG-13	R2678884
Escherichia Coli	0		0	MPN/100mL		23-AUG-13	R2678884
L1352190-7 RAW WATER WT PLANT							
Sampled By: Mike Fontaine on 21-AUG-13 @ 11:10  Matrix: Water							
Total Coliform and E.coli			-	MDNI/400		00 4410 45	B007555
Total Coliforms	2		0	MPN/100mL		23-AUG-13	R2678884
Escherichia Coli	0		0	MPN/100mL		23-AUG-13	R2678884
L1352190-8 TREATED WATER WT PLANT							
Sampled By: Mike Fontaine on 21-AUG-13 @ 11:10							
Matrix: Water		1		1		1	

<sup>\*</sup> Refer to Referenced Information for Qualifiers (if any) and Methodology.

L1352190 CONTD.... PAGE 3 of 4 Version: FINAL

### ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1352190-8 TREATED WATER WT PLANT							
Sampled By: Mike Fontaine on 21-AUG-13 @ 11:10							
Matrix: Water							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		23-AUG-13	R2678884
Escherichia Coli	0		0	MPN/100mL		23-AUG-13	R2678884

<sup>\*</sup> Refer to Referenced Information for Qualifiers (if any) and Methodology.

L1352190 CONTD....

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#### **Reference Information**

Sample Parameter Qualifier Key:

Qualifier Description

**Test Method References:** 

ALS Test Code Matrix Test Description Method Reference\*\*

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

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 DPAET watermark are subject to change in

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



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ا**lliq** الماني: ٩٩هـ Kivalliq Livalliq

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

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

### **Bacteriological Analysis of Drinking Water Sample Collection Information Form**

Sample Collection Information

Sumple Concetto	
Community from which sample was collected:	Bader Lake NU
Location of sample collection:	TRUCK SZ
Date of sample collection:	21 AUG/13
Time of sample collection:	11:05 am
Name of person who collected sample:	Hugh Koe
Telephone number of person who collected sample:	8677932744
For Laborator	,
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 I	numan consumption.
Resample as soon as possible.	ogical Contamination  nsumption as bacteriological contamination is present.
Unsafe to Drink Sample collected is unsafe for human consum Resample as soon as possible.	ption as fecal contamination is present.



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**Enviror** 

Community from which sample was collected:

Bag 72, . \_..... met, NU, X0C 0G0

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

## **Bacteriological Analysis of Drinking Water Sample Collection Information Form**

**Sample Collection Information** 

	DTEFIC ONEL- 100
Location of sample collection:	WT PLANT RAW WATER
Date of sample collection:	21 AUG/13
Time of sample collection:	11:10 am
Name of person who collected sample:	H. IKOG
Telephone number of person who collected sample:	867 793 2744
For Laborator	
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 bacteriologically safe for bacteriologically	
Significant Evidence of Bacteriole Sample collected may be unsafe for human co Resample as soon as possible.	ogical Contamination nsumption as bacteriological contamination is present.
Unsafe to Drink Sample collected is unsafe for human consum Resample as soon as possible.	ption as fecal contamination is present.



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**Kivalliq** Landa Bervices Sociaux : Kivalliq

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

Phone: (867) 645-8273

Fax: (867) 645-8274

### **Bacteriological Analysis of Drinking Water Sample Collection Information Form**

Sample Collection Information

,	Sample Concent	ii iiiioi iiiatioii
Comm	unity from which sample was collected:	BAKER LAKE
	Location of sample collection:	WATER TREATMENT PLANT- WATER
	Date of sample collection:	21Ava/13
	Time of sample collection:	11:10am
	Name of person who collected sample:	H. IKIE
Telephone n	number of person who collected sample:	8677932941
	For Laborator	•
Date Receive	ed:	
Date Process	ed:	Processed by:
	Resu	ts
Total Colifor	m per 100ml:	E. coli per 100ml:
Date Read:		Read by:
	No Significant Evidence of Bacter Sample collected is bacteriologically safe for	
	Significant Evidence of Bacteriole Sample collected may be unsafe for human con Resample as soon as possible.	ogical Contamination  nsumption as bacteriological contamination is present.
	Unsafe to Drink Sample collected is unsafe for human consum Resample as soon as possible.	ption as fecal contamination is present.





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		E 1002 100	1-00FC												
Report To	R					Servic	e Requ	ested (Ru	ush for ro	outine a	nalysis sı	ubject to	availa	bility)	
Company: Nunavut Community & Gov't Services (W8133)	Standard L_ Other				Regular (Standard Turnaround Times - Business Days)										
Contact: Simeoni Tatty/Hugh Ikoe	✓ PDF					O Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT					TAT				
Address: PO Box 490	Email 1:	statty@gov.nu.d	a a			O Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT									
Rankin Inlet, NU, X0C 0G0	Email 2:					O Sam	e Day or \	Weekend En	nergency	<ul> <li>Contact</li> </ul>	t ALS to Co	onfirm TA	ıΤ		
Phone: 867-645-8166 Fax:	Email 3:							-		sis Re	<u>.                                    </u>				
Invoice To Yes No	Client / Pr	roject Informatio	on			Pleas	e indica	ite below	Filtered	i, Prese	erved or	both (F	:, P, F	/P)	
Hardcopy of Invoice with Report?	Job #:	-··		_								$\perp$			
Company: (W8133)	PO / AFE:					- 1					ĺ			- 1	
Contact: N. IKo &	LSD:					l									40
Address: P.U. Bux 309 BAKER LAKE NU															ner
Phone: 867 793 27 49	Quote #:		•			₽		ŀ							ntai
Lab Work Order # (lab use only)	ALS Contact:	<del></del>	Sampler:	Mike Fontair	ne	QT51-WP					1			;	Number of Containers
•	CONTIACE								ŀ			1	.		þer
Sample      Sample Identification		Date (dd-mmm-yy)	Time (hh:mm)	Sample	Туре	TC,EC									Nem
water truck 77		21 Auc/13	09:40	Treat	Ed										
REMP STATION		l '	10:25	1							1				
Truck 48			10:30												
Truck 89			10:40						,						
#5 HEATH CENTE. (HOSPITAL)			10:50		,										
TRUCK 52			11:05	1											_
RAW WATER WT PLANT			11:70	RA	J.										
TREATED WATER WT PLAN	2		11:10	Trut	eel	-									_
- ALL SAMPLES ARE CHLORINA	150										_				
EXCEPT RAW WATER. IS	•														
W v															
Special Instructions / Regulations with water or land	use (CCM	E-Freshwater A	quatic Life/BC	CSR - Cor	nmercia	al/AB 1	ier 1 -	Natural,	etc) / H	azardo	us Deta	ils			_
Failure to complete all	portions of	this form may	delay analysis	. Please fil	ll in this	form	LEGIB	LY.							
By the use of this form the user acknown Also provided on another Excel tab are the ALS location											mon an	alvses	<b>.</b>		
SHIPMENT_RELEASE_(client use)								HIPMEN						). 338	
Released by: Date (dd-mmm-yy) Time (hh-mm) Received	by:	Date:	Time:	Tempera	ture:	Verifie			ate:		Time:			rvatio	
	6H	Aug. 23/1	P7 30	0. 1	°C								If Yes	add S	SIF



Date Received:

Date Processed:

Date Read:

Total Coliform per 100ml:

Department

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Ministère de la Same et des Services Sociaux : Kivalliq

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

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

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# **Bacteriological Analysis of Drinking Water Sample Collection Information Form**

007261849

Sample Collection	007261849	
Community from which sample was collected:	Baker Lake	
Location of sample collection:	Truck 77	-
Date of sample collection:	21 AUG/13	98-1-1
Time of sample collection:	9:40 am	
Name of person who collected sample:	H. IKOE	
Telephone number of person who collected sample:	867 793 2744	

For Laboratory Use Only

Processed by:

Results

E. coli per 100ml:

Read by:

No Significant Evidence of Bacteriological Contamination Sample collected is bacteriologically safe for human consumption.
Significant Evidence of Bacteriological Contamination Sample collected may be unsafe for human consumption as bacteriological contamination is present Resample as soon as possible.
Unsafe to Drink Sample collected is unsafe for human consumption as fecal contamination is present. Resample as soon as possible.



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L1352190-COFC

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

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

## **Bacteriological Analysis of Drinking Water Sample Collection Information Form**

**Sample Collection Information** 

Commu	nity from which sample was collected:	RCM POLICE STATION, BAKER LK				
	Location of sample collection:	RCM POLICIE STATION				
	Date of sample collection:	21 AU4/13				
	Time of sample collection:	10:25				
1	Name of person who collected sample:	H. IKOE				
Telephone nu	mber of person who collected sample:	867 793 274 Y				
	For Laborator					
Date Received	:					
Date Processed	d:	Processed by:				
	Resu	lts				
Total Coliform	per 100ml:	E. coli per 100ml:				
Date Read:		Read by:				
No Significant Evidence of Bacteriological Contamination.  Sample collected is bacteriologically safe for human consumption.						
	Significant Evidence of Bacteriological Contamination Sample collected may be unsafe for human consumption as bacteriological contamination is present. Resample as soon as possible.					
	Unsafe to Drink Sample collected is unsafe for human consumption as fecal contamination is present.  Resample as soon as possible					



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Enviror.

Bag 72, Rankin Inlet, NU, X0C 0G0

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

## **Bacteriological Analysis of Drinking Water Sample Collection Information Form**

Sample Collection Information

Sample Conection Information					
Community from which sample was collected:	Buyer Lake NU				
Location of sample collection:	TRUCK 48				
Date of sample collection:	21 AUG/13				
Time of sample collection:	16:30 am				
Name of person who collected sample:	Hugh lloc				
Telephone number of person who collected sample:	8677932744				
For Laborator					

Date Received:

Date Processed:

Results

Total Coliform per 100ml:

Date Read:

Read by:

No Significant Evidence of Bacteriological Contamination
Sample collected is bacteriologically safe for human consumption.

Significant Evidence of Bacteriological Contamination
Sample collected may be unsafe for human consumption as bacteriological contamination is present.

Resample as soon as possible.

Unsafe to Drink
Sample collected is unsafe for human consumption 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.

Resample as soon as possible.



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Ministère de i

\_\_\_vices Sociaux : Kivalliq

**Environmental Health Officer** 

Bag 72, Rankin Inlet, NU, X0C 0G0 Phone: (867) 645-8273

Fax: (867) 645-8274

### **Bacteriological Analysis of Drinking Water Sample Collection Information Form**

Sample Collection Information					
Community from which sample was collected:	Bayley Lavie NV				
Location of sample collection:	TRUCK 89				
Date of sample collection:	21 AUG/13				
Time of sample collection:	10:40 am				
Name of person who collected sample:	4ngh Koc				
Telephone number of person who collected sample:	861 793 Z744				
For Laborator	•••				
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 I Significant Evidence of Bacteriologically sample collected may be unsafe for human concept Resample as soon as possible.	numan consumption.  Ogical Contamina 007261995				
Unsafe to Drink					

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.

Resample as soon as possible.

Sample collected is unsafe for human consumption as fecal contamination is present.



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Ministère d Sociaux : Kivalliq Environmental Health Officer

Bag 72, Rankin Inlet, NU, X0C 0G0 Phone: (867) 645-8273 Fax: (8

Fax: (867) 645-8274

### **Bacteriological Analysis of Drinking Water Sample Collection Information Form**

Sample Collection Information

Community from which sample was collected:

Location of sample collection:

Date of sample collection:

Time of sample collection:

Name of person who collected sample:

Telephone number of person who collected sample:

SAKEN LAKE W

HEALTH CENTRE - HOSPITAL

21 Aug //3

10:50am

Hugh / Koc

For Laboratory Use Only Date Received: Date Processed: Processed by: Results Total Coliform per 100ml: E. coli per 100ml: Date Read: Read by: No Significant Evidence of Bacteriological Contamination Sample collected is bacteriologically safe for human consumption. Significant Evidence of Bacteriological Contamination Sample collected may be unsafe for human consumption as bacteriological contamination is present. Resample as soon as possible. Unsafe to Drink Sample collected is unsafe for human consumption 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.

Resample as soon as possible.