



CASH CLIENTS - WATERLOO
ATTN: DAVE DOLSON
MILLER LAKE COMMUNITY ASOC.
427 BRENTCLIFFE DR
WATERLOO ON -

Date Received: 28-AUG-17
Report Date: 29-AUG-17 12:25 (MT)
Version: FINAL

Client Phone: 519-404-3956

Certificate of Analysis

Lab Work Order #: L1981789

Project P.O. #: PAID BY CC 29-AUG-17

Job Reference: LAKE SAMPLING

C of C Numbers:

Legal Site Desc:

Rick Hawthorne
Account Manager

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ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
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ANALYTICAL GUIDELINE REPORT

L1981789 CONTD....

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LAKE SAMPLING

Sample Details Grouping		Analyte	Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits			
L1981789-1		SITE 25									
Sampled By:		D.DOLSON on 27-AUG-17 @ 09:1									
Matrix:		WATER									
Bacteriological Tests											
E. Coli			0		0	CFU/100m L	29-AUG-17	#1	#2		
								0			
L1981789-2		SITE 24									
Sampled By:		D.DOLSON on 27-AUG-17 @ 09:2									
Matrix:		WATER									
Bacteriological Tests											
E. Coli			1		0	CFU/100m L	29-AUG-17	#1	#2		
								*0			
L1981789-3		SITE 22									
Sampled By:		D.DOLSON on 27-AUG-17 @ 09:2									
Matrix:		WATER									
Bacteriological Tests											
E. Coli			0		0	CFU/100m L	29-AUG-17	#1	#2		
								0			
L1981789-4		SITE 20									
Sampled By:		D.DOLSON on 27-AUG-17 @ 09:3									
Matrix:		WATER									
Bacteriological Tests											
E. Coli			1		0	CFU/100m L	29-AUG-17	#1	#2		
								*0			
L1981789-5		SITE 18									
Sampled By:		D.DOLSON on 27-AUG-17 @ 09:3									
Matrix:		WATER									
Bacteriological Tests											
E. Coli			3		0	CFU/100m L	29-AUG-17	#1	#2		
								*0			
L1981789-6		SITE 15									
Sampled By:		D.DOLSON on 27-AUG-17 @ 09:4									
Matrix:		WATER									
Bacteriological Tests											
E. Coli			1		0	CFU/100m L	29-AUG-17	#1	#2		
								*0			
L1981789-7		SITE 13									
Sampled By:		D.DOLSON on 27-AUG-17 @ 09:4									
Matrix:		WATER									
Bacteriological Tests											
E. Coli			4		0	CFU/100m L	29-AUG-17	#1	#2		
								*0			

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Drinking Water Regulation (ODWQS) JAN.1,2017 = [Suite] - ON-DW-STANDARD+GUIDELINES

#1: Schedule 1 (Microbiological) and 2 (Chemical) Standards (JAN,2017)

#2: Ontario DW Aesthetic and Operational Guidelines



ANALYTICAL GUIDELINE REPORT

L1981789 CONTD....

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LAKE SAMPLING

Sample Details Grouping		Analyte	Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits			
L1981789-8		SITE 10									
Sampled By:		D.DOLSON on 27-AUG-17 @ 09:4									
Matrix:		WATER									
Bacteriological Tests											
E. Coli			0		0	CFU/100m L	29-AUG-17	#1	#2		
								0			
L1981789-9		SITE 6									
Sampled By:		D.DOLSON on 27-AUG-17 @ 09:5									
Matrix:		WATER									
Bacteriological Tests											
E. Coli			1		0	CFU/100m L	29-AUG-17	#1	#2		
								*0			
L1981789-10		SITE 4									
Sampled By:		D.DOLSON on 27-AUG-17 @ 09:5									
Matrix:		WATER									
Bacteriological Tests											
E. Coli			0		0	CFU/100m L	29-AUG-17	#1	#2		
								0			
L1981789-11		SITE 2									
Sampled By:		D.DOLSON on 27-AUG-17 @ 09:5									
Matrix:		WATER									
Bacteriological Tests											
E. Coli			0		0	CFU/100m L	29-AUG-17	#1	#2		
								0			
L1981789-12		SITE 1									
Sampled By:		D.DOLSON on 27-AUG-17 @ 09:5									
Matrix:		WATER									
Bacteriological Tests											
E. Coli			7		0	CFU/100m L	29-AUG-17	#1	#2		
								*0			
L1981789-13		SITE 47									
Sampled By:		D.DOLSON on 27-AUG-17 @ 10:1									
Matrix:		WATER									
Bacteriological Tests											
E. Coli			0		0	CFU/100m L	29-AUG-17	#1	#2		
								0			
L1981789-14		SITE 43									
Sampled By:		D.DOLSON on 27-AUG-17 @ 10:2									
Matrix:		WATER									
Bacteriological Tests											
E. Coli			0		0	CFU/100m L	29-AUG-17	#1	#2		
								0			

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LAKE SAMPLING

Sample Details Grouping	Analyte	Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits			
L1981789-15	SITE 42									
Sampled By:	D.DOLSON on 27-AUG-17 @ 10:2						#1	#2		
Matrix:	WATER									
Bacteriological Tests										
E. Coli		0		0	CFU/100m L	29-AUG-17	0			
L1981789-16	SITE 39									
Sampled By:	D.DOLSON on 27-AUG-17 @ 10:2						#1	#2		
Matrix:	WATER									
Bacteriological Tests										
E. Coli		1		0	CFU/100m L	29-AUG-17	*0			
L1981789-17	SITE 37									
Sampled By:	D.DOLSON on 27-AUG-17 @ 10:3						#1	#2		
Matrix:	WATER									
Bacteriological Tests										
E. Coli		0		0	CFU/100m L	29-AUG-17	0			
L1981789-18	SITE 35									
Sampled By:	D.DOLSON on 27-AUG-17 @ 10:3						#1	#2		
Matrix:	WATER									
Bacteriological Tests										
E. Coli		2		0	CFU/100m L	29-AUG-17	*0			
L1981789-19	SITE 31									
Sampled By:	D.DOLSON on 27-AUG-17 @ 10:3						#1	#2		
Matrix:	WATER									
Bacteriological Tests										
E. Coli		3		0	CFU/100m L	29-AUG-17	*0			
L1981789-20	SITE 28									
Sampled By:	D.DOLSON on 27-AUG-17 @ 10:4						#1	#2		
Matrix:	WATER									
Bacteriological Tests										
E. Coli		0		0	CFU/100m L	29-AUG-17	0			
L1981789-21	SITE 27									
Sampled By:	D.DOLSON on 27-AUG-17 @ 10:4						#1	#2		
Matrix:	WATER									
Bacteriological Tests										
E. Coli		7		0	CFU/100m L	29-AUG-17	*0			

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#1: Schedule 1 (Microbiological) and 2 (Chemical) Standards (JAN,2017)

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Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference***
EC-MF-WT	Water	E. coli	SM 9222D
A 100 mL volume of sample is filtered through a membrane, the membrane is placed on mFC-BCIG agar and incubated at 44.5 –0 .2 °C for 24 – 2 h. Method ID: WT-TM-1200			

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

Chain of Custody numbers:

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	Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA		

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 ww - 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.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information.





Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878



1981789-COFC

OC Number: 15 -

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www.aisglobal.com

Report To						Contact and company name below will appear on the final report					
Company:						Select Report Format: <input checked="" type="checkbox"/> PDF <input type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL)					
Contact: Dave Dolson						Quality Control (QC) Report with Report <input type="checkbox"/> YES <input type="checkbox"/> NO					
Phone: 519-404-3956						<input type="checkbox"/> Compare Results to Criteria on Report - provide details below if box checked					
Company address below will appear on the final report						Select Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX					
Street: 427 Brentcliffe Dr						Email 1 or Fax ddoolson@golden.net					
City/Province: Waterloo, ON						Email 2					
Postal Code:						Email 3					
Invoice To Same as Report To <input type="checkbox"/> YES <input type="checkbox"/> NO						Invoice Distribution					
Copy of Invoice with Report <input type="checkbox"/> YES <input type="checkbox"/> NO						Select Invoice Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX					
Company:						Email 1 or Fax ddoolson@golden.net					
Contact:						Email 2					
Project Information						Oil and Gas Required Fields (client use)					
ALS Account # / Quote #:						AFE/Cost Center: PO#					
Job #: Lake Sampling						Major/Minor Code: Routing Code:					
PO / AFE:						Requisitioner:					
LSD:						Location:					
ALS Lab Work Order # (lab use only) U981789						ALS Contact: RICK H Sampler:					
ALS Sample # (lab use only)		Sample Identification and/or Coordinates (This description will appear on the report)				Date (dd-mm-yy)		Time (hh:mm)		Sample Type	
13		SITE 47				27-AUG-17		10:10		WATER	
14		SITE 43				"		10:20		WATER	
15		SITE 42				"		10:25		WATER	
16		SITE 39				"		10:29		WATER	
17		SITE 37				"		10:31		WATER	
18		SITE 35				"		10:36		WATER	
19		SITE 31				"		10:37		WATER	
20		SITE 28				"		10:41		WATER	
21		SITE 27				"		10:44		WATER	
22		SITE 26				"		10:47		WATER	
										WATER	
										WATER	
Drinking Water (DW) Samples ¹ (client use)						Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)					
Are samples taken from a Regulated DW System? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO											
Are samples for human drinking water use? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO											
SHIPMENT RELEASE (client use)						INITIAL SHIPMENT RECEPTION (lab use only)					
Released by:		Date:		Time:		Received by:		Date:		Time:	
SAMPLE CONDITION AS RECEIVED (lab use only)											
Frozen <input type="checkbox"/>						SIF Observations Yes <input type="checkbox"/> No <input type="checkbox"/>					
Ice Packs <input type="checkbox"/> Ice Cubes <input type="checkbox"/>						Custody seal intact Yes <input type="checkbox"/> No <input type="checkbox"/>					
Cooling Initiated <input checked="" type="checkbox"/>											
INITIAL COOLER TEMPERATURES °C						FINAL COOLER TEMPERATURES °C					
SHIPMENT RELEASE (client use)						INITIAL SHIPMENT RECEPTION (lab use only)					
Released by:		Date:		Time:		Received by:		Date:		Time:	
SHIPMENT RELEASE (client use)						INITIAL SHIPMENT RECEPTION (lab use only)					
Released by:		Date:		Time:		Received by:		Date:		Time:	

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

OCTOBER 2016 FROM