Rainy River District School Board
ATTN: Travis Enge
Crossroads
522 2ND ST EAST
FORT FRANCES ON P9A 1N4

Date Received: 03-OCT-17
Report Date: 11-OCT-17 10:04 (MT)
Version: FINAL

Client Phone: 807-275-6762

Certificate of Analysis

Lab Work Order #: L2001410

Project P.O. #: NOT SUBMITTED
Job Reference: 260009776
C of C Numbers:
Legal Site Desc:

Christina Shepherd
Account Manager

Sample Details Grouping	Analyte	Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits			
L2001410-1	~D1 DISTRIBUTED STAFFROOM									
Sampled By:	CD on 02-OCT-17 @ 13:40									
Matrix:	Distribution						#1	#2		
Bacteriological Tests										
	Escherichia Coli	0		0	MPN/100mL	03-OCT-17	0			
	Heterotrophic Plate Count	0		0	CFU/mL	03-OCT-17				
	Total Coliforms	0		0	MPN/100mL	03-OCT-17	0			
L2001410-2	~R1 RAW MECH ROOM									
Sampled By:	CD on 02-OCT-17 @ 13:36									
Matrix:	Raw Water						#1	#2		
Bacteriological Tests										
	Escherichia Coli	0		0	MPN/100mL	03-OCT-17	0			
	Total Coliforms	0		0	MPN/100mL	03-OCT-17	0			
L2001410-3	~E1 TREATED MECH ROOM									
Sampled By:	CD on 02-OCT-17 @ 13:45									
Matrix:	Treated Water						#1	#2		
Anions and Nutrients										
	Nitrate and Nitrite as N	<0.040		0.040	mg/L	05-OCT-17	10.0			
	Nitrate (as N)	<0.020		0.020	mg/L	04-OCT-17	10			
	Nitrite (as N)	<0.010		0.010	mg/L	04-OCT-17	1			

** 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**

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference***
ETL-N2N3-TB	Water	Calculate from NO2 + NO3	Calculation
HPC-PP-TB	Water	Heterotrophic Plate Count by Pour Plate	APHA 9215B (modified)
	Heterotrophic Plate Count in aqueous matrices are analyzed using aerobic incubation and pour plate method and incubated for 48 hours.		
HPC-PP-TB	Water	Heterotrophic Plate Count by Pour Plate	APHA 9215D (modified)
	Heterotrophic Plate Count in aqueous matrices are analyzed using aerobic incubation and pour plate method and incubated for 48 hours.		
NO2-DW-IC-TB	Water	Nitrite in Water by IC	EPA 300.1 (mod)
	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.		
NO3-DW-IC-TB	Water	Nitrate in Water by IC	EPA 300.1 (mod)
	Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.		
TC,EC-QT51-TB	Water	Total Coliform and E.coli	APHA 9223 B
	This analysis is carried out using procedures adapted from APHA Method 9223 "Enzyme Substrate Coliform Test". E. coli and Total Coliform are determined simultaneously. The sample is mixed with a mixture of hydrolyzable substrates and then sealed in a multi-well packet. The packet is incubated for 18 or 24 hours and then the number of wells exhibiting a positive response are counted. The final result is obtained by comparing the positive responses to a probability table.		
TC,EC-QT97-TB	Water	Total Coliform and E.coli	APHA 9223 B
	This analysis is carried out using procedures adapted from APHA Method 9223 "Enzyme Substrate Coliform Test". E. coli and Total Coliform are determined simultaneously. The sample is mixed with a mixture of hydrolyzable substrates and then sealed in a multi-well packet. The packet is incubated for 18 or 24 hours and then the number of wells exhibiting a positive response are counted. The final result is obtained by comparing the positive responses to a probability table.		

*** 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
TB	ALS ENVIRONMENTAL - THUNDER BAY, 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 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.

Quality Control Report

Workorder: L2001410 Report Date: 11-OCT-17

Client: Rainy River District School Board
Crossroads 522 2ND ST EAST
FORT FRANCES ON P9A 1N4

Contact: Travis Enge

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
HPC-PP-TB	**Water**							
Batch R3847538								
WG2631191-2 DUP		**L2001455-3**						
Heterotrophic Plate Count		0	0		CFU/mL	0.0	65	03-OCT-17
WG2631191-1 MB								
Heterotrophic Plate Count			0		CFU/mL		1	03-OCT-17
NO2-DW-IC-TB	**Water**							
Batch R3846871								
WG2631919-10 LCS								
Nitrite (as N)			99.3		%		90-110	04-OCT-17
WG2631919-9 MB								
Nitrite (as N)			<0.010		mg/L		0.01	04-OCT-17
NO3-DW-IC-TB	**Water**							
Batch R3846871								
WG2631919-10 LCS								
Nitrate (as N)			99.3		%		90-110	04-OCT-17
WG2631919-9 MB								
Nitrate (as N)			<0.020		mg/L		0.02	04-OCT-17
TC,EC-QT51-TB	**Water**							
Batch R3846223								
WG2631263-1 MB								
Total Coliforms			0		MPN/100mL		1	03-OCT-17
Escherichia Coli			0		MPN/100mL		1	03-OCT-17
TC,EC-QT97-TB	**Water**							
Batch R3846298								
WG2631228-2 DUP		**L2001380-1**						
Total Coliforms		411	613		MPN/100mL	39	65	03-OCT-17
Escherichia Coli		11	4	G	MPN/100mL	93	65	03-OCT-17
WG2631228-1 MB								
Total Coliforms			0		MPN/100mL		1	03-OCT-17
Escherichia Coli			0		MPN/100mL		1	03-OCT-17

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Workorder: L2001410 Report Date: 11-OCT-17

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Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
G	QC result did not meet ALS DQO. Refer to narrative comments for further information.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

L2001410-COFC

DRINKING WATER CHAIN OF CUSTODY

ALS Thunder Bay, 1081 Barton Street, Thunder Bay, ON P7B 5N3
Ph: 807-623-6463 Fax: 807-623-7598 Toll-Free 1-800-668-9878

PLEASE CIRCLE APPLICABLE REGULATION:

(Reg 170/03) Reg 318/08 319/08 Reg 243 C of A

Is this a resample from an adverse water quality incident? Yes ☐ No ☒

WORKS NAME: RRDSB - Crossroads School	WORKS PHONE: School: 807-486-3329, Sherri: 807-275-4979
CLIENT CONTACT NAME: Travis Enge	WORKS FAX: School: 807-486-1268, Admin: 807-274-5078
WORKS ADDRESS(physical): Hwy 613 North, Devlin, ON, P0W 1C0	AFTER HOURS PHONE: Peter: 807-275-6762, Travis: 807-276-4733
REPORTING ADDRESS: 522 Second St. E., Fort Frances, ON, P9A 1N4	HEALTH UNIT: NWDHU
WORKS/DWIS/SDWS NUMBER: 260009776 / ~~5001441857~~	HEALTH UNIT Kenora: 807-468-3147/807-468-3914, PHONE/FAX Fort Frances: 807-274-9827/807-274-0779
EMAIL: sherri.belluz@mail.rrdsb.com, peter.gardiman@mail.rrdsb.com	Requested Service (Circle One): (Reg) Pri (50%) Emerg (100%)

SAMPLE DESCRIPTION (This description will appear on the report)	Chlorine Residual mg/L	Sample Date	Sample Time	Regulated Sample Type * (R,T,D,P, PS,PF)	Total Coliform/E. coli (TC/EC)	Het. Plate Count (HPC)	Nitrate/Nitrite	THM (Max. Res. Time)	Sched 23 Inorganics	Sched 24 Organics	Sodium	Fluoride	Turbidity	Lead	Alkalinity	Other:		Field pH
DISTRIBUTED STAFFROOM	1.76	Oct 2/17	1:40 PM	D	X	X												
RAW MECH. ROOM		Oct 2/17	1:36 PM	R	X													
TREATED MECH. ROOM	2.05	Oct 2/17	1:45 PM	T			X											

ANALYSES REQUESTED — Please indicate test for each sample by Checkmark in the box below

FOR LAB USE ONLY

SUBMISSION NO.	L2001410
LOGGED BY	JRB
DATE	10/3/17
TIME	15:39
TEMPERATURE AT RECEIPT [C]	12.1

pH <2	Volume 1L	Time Check

* Sample Type Legend: R - Raw Water T - Treated Source D - Distribution Sample P - Plumbing PS - Plumbing Standing PF - Plumbing Flushed

SAMPLED BY (PRINT): CHARLES DESCHAMPS	SAMPLED BY (SIGNATURE): Charles Deschamps	DATE/TIME RECEIVED AT LAB: 3-Oct-17 14:38	Other Comments/Cautions (Please Identify known or suspected hazards): Quanty Tray
SUBMITTED TO LAB BY (PRINT): CHARLES DESCHAMPS	SUBMITTED TO LAB BY (SIGNATURE): Charles Deschamps	RECEIVED AT LAB BY:	

CHECK TO LIST ON REPORT

Chlorine Residual(s)	
Field pH(s)	

Original with Submission: Please Photocopy for your Records