




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

Date Received: 07-NOV-17  
Report Date: 10-NOV-17 09:50 (MT)  
Version: FINAL

Client Phone: 807-275-6762

## Certificate of Analysis

Lab Work Order #: L2018949  
Project P.O. #: NOT SUBMITTED  
Job Reference: 260009841  
C of C Numbers:  
Legal Site Desc:

  
\_\_\_\_\_  
Christina Shepherd  
Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 1081 Barton Street, Thunder Bay, ON P7B 5N3 Canada | Phone: +1 807 623 6463 | Fax: +1 807 623 7598  
ALS CANADA LTD Part of the ALS Group An ALS Limited Company



# ANALYTICAL GUIDELINE REPORT

260009841

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits					
Grouping	Analyte						#1	#2				
L2018949-1 ~D1 DISTRIBUTED KINDERGARTEN ROOM Sampled By: CD on 06-NOV-17 @ 13:17 Matrix: Distribution							#1	#2				
<b>Bacteriological Tests</b>												
	Escherichia Coli	0		0	MPN/100m L	07-NOV-17	0					
	Heterotrophic Plate Count	0		0	CFU/mL	07-NOV-17						
	Total Coliforms	0		0	MPN/100m L	07-NOV-17	0					
L2018949-2 ~R1 RAW MECHANICAL ROOM Sampled By: CD on 06-NOV-17 @ 13:12 Matrix: Raw Water							#1	#2				
<b>Bacteriological Tests</b>												
	Escherichia Coli	0		0	MPN/100m L	07-NOV-17	0					
	Total Coliforms	0		0	MPN/100m L	07-NOV-17	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

## Reference Information

**Methods Listed (if applicable):**

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

*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.*



### Quality Control Report

Workorder: L2018949

Report Date: 10-NOV-17

Page 1 of 2

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

Contact: Travis Enge

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>HPC-PP-TB</b>								
	<b>Water</b>							
<b>Batch</b>	<b>R3880118</b>							
<b>WG2658974-2</b>	<b>DUP</b>	<b>L2019238-1</b>						
Heterotrophic Plate Count		15	12		CFU/mL	22	65	07-NOV-17
<b>WG2658974-1</b>	<b>MB</b>							
Heterotrophic Plate Count			0		CFU/mL		1	07-NOV-17
<b>TC,EC-QT51-TB</b>								
	<b>Water</b>							
<b>Batch</b>	<b>R3878926</b>							
<b>WG2658910-1</b>	<b>MB</b>							
Total Coliforms			0		MPN/100mL		1	07-NOV-17
Escherichia Coli			0		MPN/100mL		1	07-NOV-17
<b>TC,EC-QT97-TB</b>								
	<b>Water</b>							
<b>Batch</b>	<b>R3878689</b>							
<b>WG2658773-2</b>	<b>DUP</b>	<b>L2018927-2</b>						
Total Coliforms		0	0		MPN/100mL	0.0	65	07-NOV-17
Escherichia Coli		0	0		MPN/100mL	0.0	65	07-NOV-17
<b>WG2658773-1</b>	<b>MB</b>							
Total Coliforms			0		MPN/100mL		1	07-NOV-17
Escherichia Coli			0		MPN/100mL		1	07-NOV-17

# Quality Control Report

Workorder: L2018949

Report Date: 10-NOV-17

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

Page 2 of 2

Contact: Travis Enge

## 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

## 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.





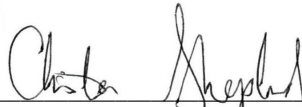
Rainy River District School Board  
ATTN: Travis Enge  
Sturgeon Creek School  
522 2ND ST EAST  
FORT FRANCES ON P9A 1N4

Date Received: 08-NOV-17  
Report Date: 14-NOV-17 13:29 (MT)  
Version: FINAL

Client Phone: 807-275-6762

## Certificate of Analysis

Lab Work Order #: L2019806  
Project P.O. #: NOT SUBMITTED  
Job Reference: 260009841  
C of C Numbers:  
Legal Site Desc:

  
\_\_\_\_\_  
Christina Shepherd  
Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 1081 Barton Street, Thunder Bay, ON P7B 5N3 Canada | Phone: +1 807 623 6463 | Fax: +1 807 623 7598  
ALS CANADA LTD Part of the ALS Group An ALS Limited Company



# ANALYTICAL GUIDELINE REPORT

260009841

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits							
Grouping	Analyte						#1	#2						
L2019806-1	-D1 DISTRIBUTED KINDERGARTEN ROOM													
Sampled By: CD on 07-NOV-17 @ 13:40														
Matrix: Distribution														
<b>Bacteriological Tests</b>														
Escherichia Coli		0		0	MPN/100m L	08-NOV-17	0							
Heterotrophic Plate Count		0		0	CFU/mL	08-NOV-17								
Total Coliforms		0		0	MPN/100m L	08-NOV-17	0							
L2019806-2	-R1 RAW MECHANICAL ROOM													
Sampled By: CD on 07-NOV-17 @ 13:48														
Matrix: Raw Water														
<b>Bacteriological Tests</b>														
Escherichia Coli		0		0	MPN/100m L	08-NOV-17	0							
Total Coliforms		0		0	MPN/100m L	08-NOV-17	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



## Reference Information

### Methods Listed (if applicable):

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

*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.*



### Quality Control Report

Workorder: L2019806

Report Date: 14-NOV-17

Page 1 of 2

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

Contact: Travis Enge

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>HPC-PP-TB</b>								
	<b>Water</b>							
<b>Batch</b>	<b>R3880988</b>							
<b>WG2659983-2</b>	<b>DUP</b>	<b>L2019914-2</b>						
Heterotrophic Plate Count		5	3		CFU/mL	50	65	08-NOV-17
<b>WG2659983-1</b>	<b>MB</b>							
Heterotrophic Plate Count			0		CFU/mL		1	08-NOV-17
<b>TC,EC-QT51-TB</b>								
	<b>Water</b>							
<b>Batch</b>	<b>R3879651</b>							
<b>WG2659896-1</b>	<b>MB</b>							
Total Coliforms			0		MPN/100mL		1	08-NOV-17
Escherichia Coli			0		MPN/100mL		1	08-NOV-17
<b>TC,EC-QT97-TB</b>								
	<b>Water</b>							
<b>Batch</b>	<b>R3879710</b>							
<b>WG2659902-2</b>	<b>DUP</b>	<b>L2019543-1</b>						
Total Coliforms		4	13	G	MPN/100mL	106	65	08-NOV-17
Escherichia Coli		0	0		MPN/100mL	0.0	65	08-NOV-17
<b>WG2659902-1</b>	<b>MB</b>							
Total Coliforms			0		MPN/100mL		1	08-NOV-17
Escherichia Coli			0		MPN/100mL		1	08-NOV-17

# Quality Control Report

Workorder: L2019806

Report Date: 14-NOV-17

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

Page 2 of 2

Contact: Travis Enge

## 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.

