

Manitoba Water Services Board

ATTN: ANGELA MEIER

PO Box 217

St. Eustache MB R0H 1H0

Date Received: 16-SEP-21

Report Date: 17-SEP-21 13:14 (MT)

Version: FINAL

Client Phone: 204-353-4055

# **Certificate of Analysis**

Lab Work Order #: L2640280

Project P.O. #: NOT SUBMITTED

Job Reference: W157

C of C Numbers: Legal Site Desc:

Mone

Hua Wo

Chemistry Laboratory 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 An ALS Limited Company



L2640280 CONTD.... PAGE 2 of 3 Version: FINAL

## ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2640280-1 RM SHOP							
Sampled By: CLIENT on 16-SEP-21 @ 10:15							
Matrix: WATER							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		16-SEP-21	R5586206
Escherichia Coli	0		0	MPN/100mL		16-SEP-21	R5586206
L2640280-2 FANNYSTELLE RESERVOIR INCOMING	G						
Sampled By: CLIENT on 16-SEP-21 @ 08:40							
Matrix: WATER							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		16-SEP-21	R5586206
Escherichia Coli	0		0	MPN/100mL		16-SEP-21	R5586206
L2640280-3 ELLE RESERVOIR INCOMING							
Sampled By: CLIENT on 16-SEP-21 @ 09:35							
Matrix: WATER							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		16-SEP-21	R5586206
Escherichia Coli	0		0	MPN/100mL		16-SEP-21	R5586206
L2640280-4 ELLE RESERVOIR OUTGOING							
Sampled By: CLIENT on 16-SEP-21 @ 09:40							
Matrix: WATER							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		16-SEP-21	R5586206
Escherichia Coli	0		0	MPN/100mL		16-SEP-21	R5586206
L2640280-5 ELMBANK BOOSTER INCOMING							
Sampled By: CLIENT on 16-SEP-21 @ 10:15							
Matrix: WATER							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		16-SEP-21	R5586206
Escherichia Coli	0		0	MPN/100mL		16-SEP-21	R5586206

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

W157 L2640280 CONTD....

**Reference Information** 

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#### **Test Method References:**

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

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

This analysis is carried out using procedures adapted from APHA Method 9223B "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 51-well packet. The packet is incubated at 35.0 +/- 0.5 degrees C for 18 or 24 hours and then the number of wells exhibiting positive responses are counted. The final results are obtained by comparing the number of positive responses to a probability table.

\*\* 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:

<b>Laboratory Definition Code</b>	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.



## **Quality Control Report**

Workorder: L2640280 Report Date: 17-SEP-21 Page 1 of 2

Client: Manitoba Water Services Board

PO Box 217

St. Eustache MB R0H 1H0

Contact: ANGELA MEIER

Test		Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
TC,EC-QT51-WP		Water							
Batch R55	86206								
WG3618887-1 Total Coliforms	MB			0		MPN/100mL		1	16-SEP-21
Escherichia Coli				0		MPN/100mL		1	16-SEP-21
WG3618887-2 Total Coliforms	MB			0		MPN/100mL		1	16-SEP-21
Escherichia Coli				0		MPN/100mL		1	16-SEP-21
WG3618887-3 Total Coliforms	MB			0		MPN/100mL		1	16-SEP-21
Escherichia Coli				0		MPN/100mL		1	16-SEP-21

### **Quality Control Report**

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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

#### **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 predetermined 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.

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Address:	PO Box 217				Email 1:	cartierwtp@g	crwc.ca	•		<b>●</b> Erne	ergency (	1-2 Bus.	Days) - :	100% Sur	harge -	Contact	ALS to C	onfirm T	AT i			
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Phone:	204-353-4055 F	ax: 204-:	353-4068		Email 3:	angela,meier	@gov.mb.ca							A								
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Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

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By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

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ddress: PO Box 217 Email 1: <u>cartierwtp@crwc.ca</u>	% Surcharge - Contact ALS to Confirm TAT										
St. Eustache, MB ROH 1H0 Email 2: kale.black@gov.mb.ca Marc.Bakaen@gov.mb.ca Same Day or Weekend Emergency	y - Contact ALS to Confirm TAT										
hone: 204-353-4055 Fax: 204-353-4068 Email 3: <u>angela.meier@gov.mb.ca</u>											
Email 4: pastorind@ae.ca	Analysis Request										
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