
North Shore Water Utility Nelson Ltd. Monthly Report

To: Pouria Mojtahedi, Large Water Systems Environmental Health Officer, Interior Health Authority
From: Aqua Diversities Inc.
Date: January 16, 2023
Re: Monthly Report for North Shore Water Utility - **December 2022**

This document includes the following items as part of monthly report for the North Shore Water Utility Nelson Ltd. (NSWU):

- 1.0 Daily Water Consumption**
- 2.0 Microbiological Test Results**
- 3.0 Operator Log Sheets and Water Quality Events**
- 4.0 Major Operational Events**
- 5.0 Records of Customer Feedback and Response**

Submission of this report is to enhance communication with the local Environment Health Officer (EHO) and meet requirements for status compliance on the conditions summarized in the Operating Permit.

1.0 Daily Water Consumption

Total water consumption in December was 5,790.81 m³; average daily consumption was 186.80 m³/day. The average flow was 7.78 m³/hr.

2.0 Microbiological Test Results

A sample from both ends of the distribution system is collected and submitted to an accredited laboratory for bimonthly microbiological testing.

All monthly testing results satisfy the Maximum Allowable Concentration (MAC) standard as set out by the Guidelines for Canadian Drinking Water Quality (GCDWQ).

See **Appendix A** for Laboratory Results

3.0 Operator Log Sheets and Water Quality Events

NSWU continues to be tested on an every-other-day schedule as specified by the EHO. The log sheets include comments on the source, treatment, and distribution system events. Log sheets also include information on the weather for the corresponding test date, which helps correlate weather events to turbidity levels.

Throughout the month of December, chlorine residuals were maintained above 0.5 mg/L across the distribution system.

See **Appendix B** for Operator Log Sheets.

4.0 Major Operational Events

There were no other major events to report for the month of December.

Note that the pilot plant located in the Isaac Creek reservoir building continues to operate with the treated water going to waste (as per direction from EHE Marianne Crowe).

5.0 Records of Customer Feedback and Response

There were no customer inquiries or feedback in the month of December.

Report Reviewed by:



Nicole Ward, B.Sc. P.Ag- Project Manager

Appendix A

Laboratory Results

 **PASMORE LABORATORY LTD.**

Report# 5225
Filename 221206AD.pdf

ANALYTICAL RESULTS

Sample ID	538 Johnstone Rd			Sample #	1	
Date/Time Sampled	2022-12-06	12:00 PM	Matrix	TW	Temperature on Receipt	9
Date/Time on Test	2022-12-06	4:40 PM				
<u>Analyses</u>		<u>Result</u>	<u>Units</u>	<u>RDL</u>		
Coliforms, Total		less than 1	CFU/100mL	1		
Verified E.coli		less than 1	CFU/100mL	1		

Sample ID	Main Jet			Sample #	2	
Date/Time Sampled	2022-12-06	12:00 PM	Matrix	TW	Temperature on Receipt	10
Date/Time on Test	2022-12-06	4:45 PM				
<u>Analyses</u>		<u>Result</u>	<u>Units</u>	<u>RDL</u>		
Coliforms, Total		less than 1	CFU/100mL	1		
Verified E.coli		less than 1	CFU/100mL	1		

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Public Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW = Treated water, DW = Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References



Report# 5265
Filename 221220AD.pdf

ANALYTICAL RESULTS

Sample ID	538 Johnstone Rd			Sample #	1	
Date/Time Sampled	2022-12-20	11:00 AM	Matrix	TW	Temperature on Receipt	7

Date/Time on Test	2022-12-20	4:15 PM			
<u>Analyses</u>		<u>Result</u>	<u>Units</u>	<u>RDL</u>	
Coliforms, Total		less than 1	CFU/100mL	1	
Verified E.coli		less than 1	CFU/100mL	1	

Sample ID	Main Jet			Sample #	2	
Date/Time Sampled	2022-12-20	11:15 AM	Matrix	TW	Temperature on Receipt	7

Date/Time on Test	2022-12-20	4:20 PM			
<u>Analyses</u>		<u>Result</u>	<u>Units</u>	<u>RDL</u>	
Coliforms, Total		less than 1	CFU/100mL	1	
Verified E.coli		less than 1	CFU/100mL	1	

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Public Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

Appendix B

Operator Log Sheet



Operator Log Sheet

Month: Dec 2022

538 Johnstone
Sheet Division Office Main Jet

Reviewed By:

Date	Time	Cl2 Pump Setting	Raw Water Turbidity (Reservoir)	Cl2 Pump Setting	Raw Water Turbidity (Reservoir)	Cl2 RESIDUAL (Reservoir)	Cl2 RESIDUAL (Reservoir)	Cl2 RESIDUAL (Dist.)	End OF Distribution Location	Cl2 RESIDUAL (Dist.)	End OF Distribution Location	Comments	Weather
YY/MM/DD	24:00:00	Isaac Cr. (1-10)	Isaac Cr. NTU	Sutherland Cr. (1-10)	Sutherland Cr. NTU	Isaac Cr. mg/L	Sutherland Cr. mg/L	mg/L		mg/L		Microbiological Sample Taken/Filter Change/Etc.	Precip./Temp.
12/01	10:00		0.40			0.70		0.60		0.49			-3 cloud
12/06	11:00		0.83			0.76		0.54		0.44		Microbac	-4 cloud
12/08	9:15		0.67			0.74		0.44		0.72			-3 sun
12/10	10:00		0.69			0.53							
12/13	12:00		0.78			0.77		0.29		0.33			-1 cloud
12/15	10:20		0.85			0.79		0.48		0.30			-2 cloud
12/20	12:00		0.77			0.80		0.20		0.31		Microbac	-2 sun
12/22	9:30		0.37			0.86		0.09		0.95			0 sun
12/24	10:00		0.39			0.59							
12/27	10:30		0.35			0.82		0.72		0.65			-2 cloud
12/29	11:00		0.40			0.71		0.44		0.72			-2 sun

Reading of flow meter for Sunny Side trailer court (to be recorded once a month) 87 5963 Gallons Dec 29th