



North Shore Water Utility Nelson Ltd. Monthly Report

To: Pouria Mojtahedi, Large Water Systems Environmental Health Officer, Interior Health Authority
From: Aqua Diversities Waterworks Inc.
Date: November 4, 2022
Re: Monthly Report for North Shore Water Utility – October 2022

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

1. **Daily Water Consumption**
2. **Microbiological Test Results**
3. **Operator Log Sheets and Water Quality Events**
4. **Major Operational Events**
5. **Records of Customer Feedback and Response**

The 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. Daily Water Consumption

Total water consumption in October was 4,290 m³; average daily consumption was 138.4 m³/day. The average flow was 5.76 m³/hr.

2. 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. 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 October, chlorine residuals were maintained above 0.20 mg/L across the distribution system.

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

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NSWU MR Oct 2022.docx

4. Major Operational Events

No major operational events for the month of October.

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. Records of Customer Feedback and Response

There was no record of customer feedback for the month of October

Report Reviewed by:

Nathan Ward, EOCP Operator 4130

A handwritten signature in black ink that reads "Nathan Ward".



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Appendix A

Laboratory Results

PASSMORE LABORATORY LTD.		Report# 5077	
		Filename 221018A0.pdf	
ANALYTICAL RESULTS			
Sample ID	538 Johnstone Rd	Sample #	1
Date/Time Sampled	2022-10-18 1:30 PM	Matrix	TW
		Temperature on Receipt	14
Date/Time on Test	2022-10-18 4:30 PM		
Analyzes	Result	Units	SDL
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	2022-10-18 1:45 PM	Matrix	TW
		Temperature on Receipt	13
Date/Time on Test	2022-10-18 4:30 PM		
Analyzes	Result	Units	SDL
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			

PASSMORE LABORATORY LTD.		Report#	5037
		Filename	221004AD.pdf
ANALYTICAL RESULTS			
Sample ID	338 Johnstone Rd	Sample #	1
Date/Time Sampled	2022-10-04 11:30 AM	Matrix	TW
		Temperature on Receipt	17
Date/Time on Test	2022-10-04 5:30 PM		
Analysis	Result	Units	BDL
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	2022-10-04 11:30 AM	Matrix	TW
		Temperature on Receipt	18
Date/Time on Test	2022-10-04 5:30 PM		
Analysis	Result	Units	BDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
<u>Glossary of Terms</u>			
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		
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RDL	Reportable Detection Limit		
<u>References</u>			

Appendix B Operator Log

NORTH SHORE UTILITY **Operator Log Sheet**
Nelson Ltd.

Reviewed By: _____

Month: OCTOBER 2022 MINIST 538JUNSTONE

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	Sample By
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	NTU	mg/L	NTU	Microbiological Sample Taken/Filter Change/Etc.	Precip./Temp.	
22/10/04	4:00	8.3	0.41	/	/	0.71	/	0.59	/	0.41	/	MICROBAC	SUN/18	FD
22/10/06	3:00	8.3	0.47	/	/	0.78	/	0.68	/	0.38	/		SUN/20	FD
22/10/11	3:30pm	8.3	0.23	/	/	0.75	/	0.82	/	0.86	/		SUN/18	CJS
22/10/04	3:30pm	8.3	0.32	/	/	0.91	/	0.85	/	0.89	/			
22/10/18	1:10pm	8.3	0.17	/	/	0.84	/	0.63	/	0.88	/			
22/10/20	9:45	8.3	0.29	/	/	0.90	/	0.80	0.54	0.73	0.32	Removed 6x empty carbonyls	Rain 5c	Ⓢ
22/10/28	9:00	8.3	0.37	/	/	0.92	/	0.71	0.26	0.86	0.24		Rain 5c	Ⓢ
22/10/29	9:00	8.3	0.23	/	/	0.80	/	/	/	/	/	Remote monitoring.	Cloud 10c	Ⓢ
22/11/1	10:00	8.3	0.37	/	/	0.85	/	0.68	0.38	0.41	0.35	Micro Bac	Rain 4'	Ⓢ
22/11/3	9:30	8.3	0.73	/	/	0.86	/	0.83	0.32	0.70	0.26	Add Hypo to day tank.	Cold 2c	Ⓢ
22/11/5												SAT remote monitoring		

Reading of flow meter for Sunny Side trailer court (to be recorded once a month) 876,76800 g OCT 31st
57,676,800 gallons