

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: April 22, 2024
Re: Monthly Report for North Shore Water Utility - **March 2024**

This document includes the following items as part of the 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 March was 5,796 m³; average daily consumption was 186.9m³/day. The average flow was 7.79 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 March, 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 major events to report for the month of March .

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 in the month of March.

Report Reviewed by:



Nicole Ward, BSc.P.Ag. Project Manager

Appendix A

Laboratory Results



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Filename 240312AD.pdf

ANALYTICAL RESULTS

Sample ID	Main Jet			Sample #	1	
Date/Time Sampled	2024-03-12	12:00 PM	Matrix	TW	Temperature on Receipt	10
Date/Time on Test	2024-03-12	5:05 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	538 Johnstone Rd			Sample #	2	
Date/Time Sampled	2024-03-12	12:00 PM	Matrix	TW	Temperature on Receipt	10
Date/Time on Test	2024-03-12	5:05 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

ANALYTICAL RESULTS

Sample ID	Main Jet			Sample #	1	
Date/Time Sampled	2024-03-26	12:00 PM	Matrix	TW	Temperature on Receipt	10
Date/Time on Test	2024-03-26	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		

Sample ID	538 Johnstone Rd			Sample #	2	
Date/Time Sampled	2024-03-26	12:00 PM	Matrix	TW	Temperature on Receipt	8
Date/Time on Test	2024-03-26	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		

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References

Appendix B

Operator Log Sheet

NORTH WATER SHORE UTILITY Nelson Ltd		304 - 625 First Street Nelson, BC V1L 4R6 www.northshorewaterutility.com		NSWU Operator Log									
Month: Mar-24						MainJet		570 Johnstone Rd					
Date	Time	CL2 pump duration	CL2 pump frequency	Raw Water Turbidity (Res.)	CL2 Residual (Res.)	CL2 Residual (Dist.)	CL2 Residual (Dist.)	Flow Meter Reading	Comments	Weather	Sampled By		
YY/MM/DD	24:00:00			Isaac Cr. NTU	Isaac Cr. mg/L	mg/L	mg/L	m3/Hr	Microbiological Sample Taken/Filter Change/Etc.	Precip./Temp.			
3/1/2024													
3/2/2024	13:00	4	5	0.18	0.56	-	-	-	Remote Monitoring	heavy snow	jw		
3/3/2024													
3/4/2024													
3/5/2024	13:00	4	5	0.15	0.74	0.74	0.57	24062		2c, sunny	cr/jw		
3/6/2024													
3/7/2024	12:00	4	5	0.2	0.72	0.69	0.52	24467			FD		
3/8/2024													
3/9/2024	8:00	4	5	0.09	0.79	-	-	-	Remote Monitoring		FD		
3/10/2024													
3/11/2024													
3/12/2024	12:30	4	5	0.13	0.74	0.61	0.49	25464	MicroBac				
3/13/2024													
3/14/2024	10:00	4	5	0.89	0	0.65	0.52	25826	Booster pump feeding RAW NTU was off, turned it back on	0C sunny	FD		
3/15/2024													
3/16/2024	8:00	4	5	1.41	0.77	-	-	-	Remote Monitoring		FD		
3/17/2024													
3/18/2024	2:00	4	5	1.52	0.76	0.63	0.57	26103		7C sun	FD		
3/19/2024													
3/20/2024													
3/21/2024	11:00	4	5	0.92	0.68	0.62	0.53	27350		5C cloud	FD		
3/22/2024													
3/23/2024													
3/24/2024													
3/25/2024													
3/26/2024	12:00	4	5	0.93	0.6	0.67	0.49	28143	Micobac samples submitted and cleaned Isaac intake, topped up cl2	6C sun	MM/ FD		
3/27/2024													
3/28/2024	11:15	4	5	1.1	0.55	0.7	0.56	28475		3C rain	MM/FD		
3/29/2024													
3/30/2024													
3/31/2024													
Reading of flow meter for Sunny Side trailer court (to be recorded or 897986 G													