

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:** February 16, 2023

Re: Monthly Report for North Shore Water Utility – January 2023

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 January was 4,767.2 m³; average daily consumption was 153.8 m³/day. The average flow was 6.40 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 January, chlorine residuals were maintained above 0.5 mg/L across the distribution system.

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

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4.0 Major Operational Events

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

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 records of customer feedback in the month of January.

Report Reviewed by:

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



Appendix A Laboratory Results

LABORATORY LTD.			Filename 2	30103AD.pdf			
	ANALYTICAL RESULTS						
Sample ID 538 Johnstone Rd			Sample	# 1			
Date/Time Sampled 2023-01-	03 12:15 PM Matrix	α TW	Temperature on Receip	t 13			
Date/Time on Test 2023-01-0	03 4:35 PM						
Analyses	Result	Units	RDL				
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 2023-01-	03 12:15 PM Matrix	α TW	Temperature on Receip	t 11			
Date/Time on Test 2023-01-(03 4:40 PM						
Analyses	Result	<u>Units</u>	RDL				
Coliforms, Total	less than 1	CFU/100mL	1				
Verified E.coli	less than 1	CFU/100mL	1				

LABORATORY LTD.			Filename 2	30124AD.pdf		
ANALYTICAL RESULTS						
Sample ID 538 Johnstone Rd			Sample	¥ 1		
Date/Time Sampled 2023-01-2	4 8:00 AM Matrix	t TW	Temperature on Receip	10		
Date/Time on Test 2023-01-2	5:25 PM					
Analyses	Result	Units	RDL			
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 2023-01-2	4 8:00 AM Matrix	w TW	Temperature on Receip	8		
Date/Time on Test 2023-01-2	4 5:25 PM					
Analyses	Result	Units	RDL			
Coliforms, Total	less than 1	CFU/100mL	1			
Verified E.coli	less than 1	CFU/100mL	1			

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Appendix B Operator Log Sheet

Date	Time	CI2 Pump Setting	CL2 pump duration	CL2 pump frequency	Rew Water Turbidity (Res.)	CL2 Residual (Res.)	CL2 Residual (Dist.)	CL2 Residual (Dist.)	Comments	Weather	
		Iseac Cr.									Sampled
YY/MM/DD 1/1/2023	24:00:00	(1-10)		8 6	Isaac Cr. NTU	Isaac Cr. mg/L	mg/L	mg/L	Microbiological Sample Takin/Filter Change/Etc.	Precip,/Temp.	Bγ
1/1/2023	-	4		a - 6	-	-	3	3		-	
1/3/2023	12:00	40%	3.00	10.00	0.63	0.96	0.64	0.58	MicroBac, calibrated CL2 analyses, cleaned both NTU meters, topped up CL2	Cloudy -4	FD
1/4/2023	12.00	40.0	2.000	10.00	2.423	0.00	0.04	u.au	restored, cartering the analysis, creating when his other is, repaire up the	Library -	15
1/5/2023	1:30	40%	3.00	10.00	0.37	0.71	0.74	0.66		Eloudy -1	FD
1/6/2023	2000	0.000	0.0000		-		0700	2000			0.070
1/7/2023	7:00	40%	3.00	10.00	0.43	0.82	n/a	n/a			FD
1/8/2023											
1/9/2023											-
1/10/2023	9:30	40%	3.00	10.00	0.55	0.75	0.77	0.84		cloudy 1C	FD
1/11/2023		1 3	10000		1	1		19 19		A DOMESTIC	1
1/12/2023											
1/13/2023	2:00	40%	3.00	10.00	0.78	0.87	0.75	0.64		cloudy 1C	FD
1/14/2023		S		-	-		8	1			
1/15/2023											
1/16/2023		6					6	3			
1/17/2023	9:30	40%	4	10	0.89	0.45	0.57	0.27		Cloudy 1C	FD
1/18/2023											
1/19/2023	4:30	40%	4	10	8.97	0.78	0.65	0,71		5un 4C	FD
1/20/2023											
1/21/2023	8:00	40%	4	10	0.78	0.76		8.5 - FL			FD
1/22/2023		8 - 19		8 - 6			ŝ	3 - B		8	
1/23/2023		[
1/24/2023	10:30	40%	4	10	0.75	0.76	0.75	0.48	submitted MicroBac samples	Cloudy -4	FD
1/25/2023							0				
1/26/2023	4:00	40%	- 14	10	0.8	1.02	0.84	0.68		Cloudy-1	FD
1/27/2023		3		1				2 3			
1/28/2023	8:00	40%	3		0.66	0.84					
1/29/2023											
1/31/2023	8:00	%40	2	10	0.65	1.03	0.89	0.78	submitted MicroBac samples, cleaned contacts on booster pump pressure swi	the toward in C	FD