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## North Shore Water Utility Nelson Ltd. Monthly Report

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**To:** Pouria Mojtahedi, Large Water Systems Environmental Health Officer, Interior Health Authority  
**From:** Aqua Diversities Inc.  
**Date:** April 16<sup>th</sup>, 2023  
**Re:** Monthly Report for North Shore Water Utility - **March 2023**

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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 March was 5,358.18 m<sup>3</sup>; average daily consumption was 172.84m<sup>3</sup>/day. The average flow was 7.20 m<sup>3</sup>/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**

On March 21st, a Water Quality Advisory was posted due to seasonal turbidity  $\geq 1$  NTU.

The IHA Health Officer was notified of this action. The NSWU website was updated, a text alert notification to subscribers was sent out and community signage was posted.

There were no other 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

 **PASSMORE  
LABORATORY LTD.**

Report# 5483  
Filename 230314AD.pdf

### ANALYTICAL RESULTS

Sample ID	Main Jet			Sample #	1
Date/Time Sampled	2023-03-14	12:00 PM	Matrix TW	Temperature on Receipt	18
Date/Time on Test	2023-03-14	4:55 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	2023-03-14	12:00 PM	Matrix TW	Temperature on Receipt	19
Date/Time on Test	2023-03-14	5:00 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	



Report# 5519  
Filename 230328AD.pdf

**ANALYTICAL RESULTS**

Sample ID	Main Jet			Sample #	1
Date/Time Sampled	2023-03-28	12:00 PM	Matrix TW	Temperature on Receipt	9

Date/Time on Test 2023-03-28 4:35 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	2023-03-28	12:00 PM	Matrix TW	Temperature on Receipt	7

Date/Time on Test 2023-03-28 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

# Appendix B

## Operator Log Sheet

14-017

Monthly Operator Log Sheet

Reviewed By:



**NSWU Operator Log**

Month: Mar-23

Date	Time	Cl2 Pump Setting	Cl2 pump duration	Cl2 pump frequency	Raw Water Turbidity (Res.)	Mainline		538 Johnston Rd		Comments	Weather	Sampled By
						Isaac Cr. NTU	Isaac Cr. mg/L	CL2 Residual (Res.) mg/L	CL2 Residual (Dist.) mg/L			
3/1/2023	24:00:00	Isaac Cr. (1-10)			Isaac Cr. NTU	Isaac Cr. mg/L	mg/L	mg/L		Microbiological Sample Taken/Filter Change/Etc.	Precip./Temp.	
3/2/2023	10:45	40%	2	9	0.57	0.6	0.63	0.64			snow 0"	mb
3/3/2023												
3/4/2023	8:30		2	9	0.73	0.79				Remote monitoring		mb
3/5/2023												
3/6/2023												
3/7/2023	3:30	40%	2	9	0.64	0.74	0.51	0.56			cloud 4	mb
3/8/2023												
3/9/2023	10:30	40%	2	9	0.68	0.76	0.49	0.6		flushed out/cleaned Cl2 analyzer, topped up Cl2	cloud 3	mb
3/10/2023												
3/11/2023	7:30		2	9	0.68	0.81				remote monitoring		mb
3/12/2023												
3/13/2023												
3/14/2023	11:30	40%	2	9	0.77	0.67	0.64	0.57		Microbac sample	sun 5	mb
3/15/2023												
3/16/2023	11:03	40%	2	9	0.52	0.7	0.61	0.54		cl2 analyzer flushed and running	sun 4	mb
3/17/2023												
3/18/2023	12:50		2	9	0.65	0.66				remote monitoring		mb
3/19/2023												
3/20/2023	10:50	40%	2	8	1.14	0.56				raw turb/cl2 residual data from hanna, flushed cl2 analyzer increased dosing	sun 3	mb
3/21/2023	10:30	40%	2	8	0.83	0.67	0.47	0.42		cleaned NTU meter, flushed cl2 analyzer	sun 5	mb
3/22/2023												
3/23/2023	2:40	40%	2	8	0.85	0.61	0.34	0.32		flushed cl2 analyzer, cl2 barrel empty	cloud 7	mb
3/24/2023												
3/25/2023	8:20		2	8	1.07	0.56				remote monitor		mb
3/26/2023												
3/27/2023												
3/28/2023	12:30	40%	2	8	0.84	0.73	0.6	0.41		microbac samples, flushed cl2 analyzer, cl2 barrel empty	sun 6	mb
3/29/2023												
3/30/2023	8:00	40%	2	7	1.18	0.55				Pump air locked-primed and running, flushed cl2 analyzer	sun 0	mb
3/31/2023												
Reading of flow meter for Sunny Side trailer court (to be recorded once a month)						897386						