

# 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: March 16, 2023

Re: Monthly Report for North Shore Water Utility - February 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 February was 4,794.07 m<sup>3</sup>; average daily consumption was 171.22 m<sup>3</sup>/day. The average flow was 6.11 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 February, chlorine residuals were maintained above 0.5 mg/L across the distribution system.

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

North Shore Water Utility Nelson Ltd. Monthly Report



#### 4.0 Major Operational Events

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

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 February.

Report Reviewed by:

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



Appendix A Laboratory Results

LABORATOR	Y LTD.				Filename 230	131AD.pdf
			ANALYT	ICAL RESULTS		100
Sample ID 538 Joh	nstone Rd				Sample #	1
Date/Time Sampled	2023-01-31	8:00 AM	Matrix	TW	Temperature on Receipt	12
Date/Time on Test	2023-01-31	3:50 PM				
Analyses		Result		Units	RDL	
Coliforms, Total	oliforms, Total		an 1	CFU/100mL	1	
/erified E.coli		less the	an 1	CFU/100mL	1	
Sample ID Main Je	t				Sample #	2
Date/Time Sampled	2023-01-31	8:00 AM	Matrix	TW	Temperature on Receipt	15
Date/Time on Test	2023-01-31	3:50 PM				
Analyses		Result		Units	RDL	
Coliforms, Total		less than 1		CFU/100mL	1	
Verified E.coli	less the	525 al	CFU/100mL	1		

LABORATORY LTD.			Filename 230	0214AD.pdf
	ANALY	FICAL RESULTS		
Sample ID 538 Johnstone Rd			Sample #	1
Date/Time Sampled 2023-02-14	10:00 AM Matrix	TW	Temperature on Receipt	18
Date/Time on Test 2023-02-14	4:45 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 2023-02-14	4 10:00 AM Matrix	TW	Temperature on Receipt	18
Date/Time on Test 2023-02-14	4:50 PM			
Analyses	Result	Units	RDL	
Coliforms, Total	less than 1	CFU/100mL	1	
Verified E.coli	less than 1	CFU/100mL	1	

North Shore Water Utility Nelson Ltd. Monthly Report



# Appendix B Operator Log Sheet

14-017

Monthly Operator Log Sheet



**NSWU Operator Log** 

Date	Time	CI2 Pump Setting	CL2 pump run time	CL2 pump pulse rate	Raw Water Turbidity (Res.)	CL2 Residual (Res.)	CL2 Residual (Dist.)	CL2 Residual (Dist.)	Comments	Weather	
YY/MM/DD	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.	Sampled By
2/1/2023	24.00.00	1				ange/se		114/1	the corological sample reversioner county of each	recept remp.	-
2/2/2023	9:00		2.00	10.00	0.68	0.71	0.66	0.74			WS
2/3/2023											
2/4/2023	8:00		2.00	10.00	0.77	0.65				-	FD
2/5/2023	21 - 35			5 S		2	5				
2/6/2023	<u>9</u> 6		7	S 8		8	5 - E				7
2/7/2023	9:00		2.00	10.00	0.55	0.67	0.77	0.65			WS
2/8/2023			7 7767	C	10.000	5 - C - C	5 - 2000 - E	2012/02/201			1000
2/9/2023	9:00		2.00	10.00	0.95	0.59	0.5	0.55			WS
2/10/2023	12 (d)		2.000	5 8		6	5				
2/11/2023	8:00		2.00	10.00	0.77	0.65					FD
2/12/2023	9 6		3	S - 8		<u>8</u> 1	5 5				2
2/13/2023											
2/14/2023	9:00		2.00	8.00		8	0.47	0.52	MicroBac samples submitted, low CL2 alarm		FD
2/15/2023											
2/16/2023	4:15		2	10	0.72	0.99	0.76	0.65	flushed out and calibrated CL2 analyzer	cloud-1	FD
2/17/2023											
2/18/2023	8:00		8 - I	( i	0.58	0.81	S 23			2	8
2/19/2023											
2/20/2023	Q - Q		8 1	()		12 - I	S 23				8
2/21/2023	11:45	40%	2	10	0.94	0.67	0.31	0.28	topped up CL2, cleaned NTU meters and CL2 analyzer	snow-4	MB/FD
2/22/2023	2 - 3		8 1	9		2 3	S - 1 - 22		Calibrate CL2 analyzer and increased CL2 dosing, Clean	ed both intake	5
2/23/2023	4:20	40%	2	9	0.63	0.76	0.5	0.5		sun-9	MB
2/24/2023	Q - Q		8	()		Q	1				8
2/25/2023	8:00		2	9	0.61	0.8					MB
2/26/2023	2 - 23		8			2 1	1				8
2/27/2023											
2/28/2023	12:45	40%	2	9	0.55	0.8	0.59	0.65	MicroBac samples submitted, clened CL2 analyzer, cut	cloud +1	FD, MB

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