

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: July 12, 2024
Re: Monthly Report for North Shore Water Utility - June 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 June was 5,864m³; average daily consumption was 195.46m³/day. The average flow was 8.1 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 June, chlorine residuals were maintained above 0.71 mg/L across the distribution system.

See Appendix B for Operator Log Sheets.





4.0 Major Operational Events

On June 25th Sutherland reservoir was put online with the increase in water demand. On June 27th and 28th flushing of the distribution system was done.

5.0 Records of Customer Feedback and Response

There were no customer inquiries in the month of May.

Report Reviewed by:

Malad

Nicole Ward, BSc.P.Ag. Project Manager





Appendix A Laboratory Results

North Shore Water Utility Nelson Ltd. Monthly Report 14-017 June_2024MR V1.0.doc





Nelson, BC www.aquadiversities.com

> Report# 6921 Filename 240618AD.pdf

ANALYTICAL RESULTS											
Sample ID Main Jet Sample #											
Date/Time Sampled	2024-06-18	11:00 AM	Matrix	TW	Temperature on Receipt	11					
Date/Time on Test	2024-06-18	5:35 PM									
<u>Analyses</u>		<u>Result</u>		<u>Units</u>	RDL						
Coliforms, Total		less tha	an 1	CFU/100mL	1						
Verified E.coli		less tha	an 1	CFU/100mL	00mL 1						
Sample ID NCCS 57	70 Johnstone Rd				Sample #	2					
Sample ID NCCS 57 Date/Time Sampled	70 Johnstone Rd 2024-06-18	11:00 AM	Matrix	TW	Sample # Temperature on Receipt	2 11					
			Matrix	TW							
Date/Time Sampled	2024-06-18	11:00 AM	Matrix	TW <u>Units</u>							
Date/Time Sampled Date/Time on Test	2024-06-18	11:00 AM 5:35 PM			Temperature on Receipt						
Date/Time Sampled Date/Time on Test Analyses	2024-06-18	11:00 AM 5:35 PM <u>Result</u>	an 1	<u>Units</u>	Temperature on Receipt						
Date/Time Sampled Date/Time on Test <u>Analyses</u> Coliforms, Total	2024-06-18	11:00 AM 5:35 PM <u>Result</u> less tha	an 1	<u>Units</u> CFU/100mL	Temperature on Receipt RDL 1						

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 Pubic 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# 6868 Filename 240604AD.pdf

ANALYTICAL RESULTS											
et				Sample #	1						
2024-06-04	11:00 AM	Matrix	TW	Temperature on Receipt	10						
2024-06-04	4:20 PM										
	<u>Result</u>		<u>Units</u>	RDL							
	less thar	n 1	CFU/100mL	1							
	less than	n 1	CFU/100mL	1							
570 Johnstone Rd				Sample #	2						
2024-06-04	11:00 AM	Matrix	TW	Temperature on Receipt	13						
2024-06-04	4:25 PM										
	Result		<u>Units</u>	RDL							
	less thar	n 1	CFU/100mL	1							
	less than	n 1	CFU/100mL	1							
Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.											
interferences, insuf	ficient sample ve	olume, or o	dilutions.								
interferences, insuf American Pubic Hea		olume, or o	dilutions.								
	2024-06-04 570 Johnstone Rd 2024-06-04 2024-06-04	et 2024-06-04 11:00 AM 2024-06-04 4:20 PM <u>Result</u> less than less than 570 Johnstone Rd. 2024-06-04 11:00 AM 2024-06-04 4:25 PM <u>Result</u> less than less than less than	et 2024-06-04 11:00 AM Matrix 2024-06-04 4:20 PM <u>Result</u> less than 1 less than 1 570 Johnstone Rd. 2024-06-04 11:00 AM Matrix 2024-06-04 4:25 PM <u>Result</u> less than 1 less than 1 less than 1	et 2024-06-04 11:00 AM Matrix TW 2024-06-04 4:20 PM Result Units less than 1 CFU/100mL less than 1 CFU/100mL 570 Johnstone Rd. 2024-06-04 11:00 AM 2024-06-04 11:00 AM Matrix TW 2024-06-04 4:25 PM Result Units less than 1 CFU/100mL less than 1 CFU/100mL stant Less than 1 CFU/100mL less than 1 CFU/100mL	et Sample # 2024-06-04 11:00 AM Matrix TW Temperature on Receipt 2024-06-04 4:20 PM <u>Result</u> Units RDL less than 1 CFU/100mL 1 less than 1 CFU/100mL 1 570 Johnstone Rd. Sample # 2024-06-04 11:00 AM Matrix TW Temperature on Receipt 2024-06-04 4:25 PM <u>Result</u> Units RDL less than 1 CFU/100mL 1 less than 1 CFU/100mL 1 less than 1 CFU/100mL 1 less than 1 CFU/100mL 1 less than 1 CFU/100mL 1						

 Matrix
 SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water

 RDL
 Reportable Detection Limit

References





Appendix B Operator Log Sheet

Aquía Diversities Inc.

	Nelson,	BC
www.aq	uadiversities.co	m

NORTH WATER	SHORE		www.ndt	304 - 625 Front Str Nelson, BC V1L4 thsharewateratility o	bet B6 em								NSMU	Operate	orlog
Month:	Nelson Ltd												113000	Operation	or Log
wonth:	Jun-24									MainJet	570 Johnstone Rd				
Date	Time	Cl2 Pump Setting	CL2 pump duration	CL2 pump frequency	Raw Water Turbidity (Res.)	CL2 Residual (Res.)	Cl2 Pump Setting	Raw Water Turbidity (Res.)	CL2 Residual (Res.)	CL2 Residual (Dist.)	CL2 Residual (Dist.)	Flow Meter Reading	Comments	Weather	
		Isaac Cr.			Isaac Cr.	Isaac Cr.	Sutherland	Sutherland	Sutherland						Sampled
YY/MM/DD	24:00:00	(1-10)			NTU	mg/L	Cr.(1-10)	Cr. NTU	Cr. mg/L	mg/L	mg/L	m3/Hr	Microbiological Sample Taken/Filter Change/Etc.	Precip./Temp.	
6/1/2024	8:00	-	7.00	8	1.02	0.73	-	-	•	-	-	41753	remote monitoring	15C Cloudy	OH
6/2/2024															
6/3/2024	2:00		7.00	8.00	1.4	0.6	-	-	-	-		-	cleaned raw turbudimeter, grab sample of reservoir wa	10c neavy rain	n OH
6/4/2024	11:00	-	7.00	8.00	0.4	0.65	-	•	•	0.69	0.23	42154			он
6/5/2024															
6/6/2024	12:00	-	7.00	8.00	0.43	0.65	-	•	-	0.55	0.78	42655	add 20 L of Cclorine, weed wcked road up to intake.	17c Sunny	он
6/7/2024															
6/8/2024	7:51	-	7.00	8.00	0.39	0.69	-	-	•	-	-	43204	remote monitoring		он
6/9/2024													removed 11 carboys of empty Cl containers and brough	nt back 8 full co	о ОН
6/10/2024															
6/11/2024	10:00	-	7.00	8.00	0.67	0.72	•	-	-	0.72	0.58	43782	tested free chlorine from the tap needs recalibration	24 cloudy	OH
6/12/2024	12:30	-	7.00	8.00	-	1.06	-	-	•	-	-	-	added 40L of chlorine, calibrated Cl sensor	22 sunny	OH/FD
6/13/2024	11:30	-	7.00	8.00	0.72	0.66	-	-	•	0.43	0.63	44193	calibrated Cl sensore, removed tree from Isaac	21 sunny	OH
6/14/2024															
6/15/2024															
6/16/2024	7:51	-	7	8	0.84	0.65	-	-	-	-	-	-	remote monitoring		
6/17/2024															
6/18/2024	11:00	-	7	8	0.88	0.69	-	-	-	0.56	0.72	45263	tested NSWU, cleaned sutherland reservoir, reseroir wa	a 15 rain	OH
6/19/2024															
6/20/2024	11:30	-	7	8	0.9	0.78		-	-	0.54	0.34	45657	tested chlorine residual in sutherland reservoir was un	24 sunny	ОН
6/21/2024													deliverd 8 carboys of chlorine to sutherland		OH
6/22/2024	7:51	-	7	8	7.92	0.79		-	-	-	-	-	remote monitoring		ОН
6/23/2024															
6/24/2024															
6/25/2024	7:50	-	7	8	0.94	0.74	3.5	0.93	0.89	0.52	0.37	46842	put sutherland online, tested north shore, cleaned raw	27 sunny	он
6/26/2024															
6/27/2024													Flushing NSWU	15 rain	OH, FD
6/28/2024	2:45	-	9	10	0.77	0.78	4	1.03	0.37			47617		22 broken cl	OH, FD
6/29/2024	7:51	-	9	10	0.85	0.6	4	-	-	-	-	-	remote monitoring	он	
6/30/2024															
Reading of flo	w meter for S	Sunny Side tra	iler court (to b	pe recorded or	ice a month)	996249		Date:	06/03/2024						