

North Shore Water Utility Nelson Ltd. Monthly Report

To: Jennifer Beverly, Large Water Systems Environmental Health Officer, Interior Health Authority

From: Aqua Diversities Waterworks Inc.

Date: June 3rd, 2025

Re: Monthly Report for North Shore Water Utility - May 2025

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 May was 5,673m³; average daily consumption was 183m³/day. The average flow was 7.625m³/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 May, chlorine residuals were maintained above 0.2 mg/L across the distribution system.

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



4.0 Major Operational Events

A leak was discovered in the Sutherland reservoir, and patching /repair efforts began at the end of May.

5.0 Records of Customer Feedback and ResponseThere were no customer inquiries in the month of May.

Report Reviewed by:

Nicole Ward, BSc.P.Ag. Project Manager



Appendix A Laboratory Results



PASSMORE LABORATORY LTD.

Report# 8071

Filename 250520AD.pdf

ANALYTICAL RESULTS

Sample ID Main Je	t			Sample # 1
Date/Time Sampled	2025-05-20	11:00 AM Matrix T	W	Temperature on Receipt 5 °C
Date/Time on Test	2025-05-20	5:15 PM		
Analyses		<u>Result</u>	<u>Units</u>	RDL
Coliforms, Total		less than 1	CFU/100mL	1
Verified E.coli		less than 1	CFU/100mL	1

Sample ID NCCS 57	70 Johnstone Rd.				Sample # 2	
Date/Time Sampled	2025-05-20	11:00 AM	Matrix	TW	Temperature on Receipt	6 °C
Date/Time on Test	2025-05-20	5:20 PM				
<u>Analyses</u>		Result		<u>Units</u>	RDL	
Coliforms, Total		less tha	n 1	CFU/100mL	1	
Verified E.coli		less tha	n 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





Report# 8030

Filename 250506AD.pdf

ANALYTICAL RESULTS

Sample ID Main Je	t			Sample # 1
Date/Time Sampled	2025-05-06	11:00 AM Matrix	TW	Temperature on Receipt 9 °C
Date/Time on Test	2025-05-06	4:10 PM		
Analyses		Result	<u>Units</u>	RDL
Coliforms, Total		less than 1	CFU/100mL	1
Verified E.coli		less than 1	CFU/100mL	1

Sample ID NCCS 57	70 Johnstone Rd.				Sample # 2	
Date/Time Sampled	2025-05-06	11:00 AM	Matrix ⊤	W	Temperature on Receipt 8	°C
Date/Time on Test	2025-05-06	4:15 PM				
Analyses		Result		<u>Units</u>	RDL	
Coliforms, Total		less tha	n 1	CFU/100mL	1	
Verified E.coli		less tha	n 1	CFU/100mL	1	

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RDL Reportable Detection Limit

References



Appendix B Operator Log Sheet



Month:	May-25										570 Johnstone				
										MainJet	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
MM/DD/YYYY	24:00:00	(1-10)			NTU	mg/L	Cr.(1-10)	Cr. NTU	Cr. mg/L	mg/L	mg/L	m3	Microbiological Sample Taken/Filter Change/Etc.	Precip./Temp	. By
5/1/2025															
5/2/2025	11:00	-	10	12	0.75	0.76	-	-	-	0.66	0.64	111976	test north shore	24c sunny	ОН
5/3/2025															
5/4/2025	8:00	-	10	12	-	0.8	-	-	-	-	-	112484	remote monitoring		ОН
5/5/2025															
5/6/2025	12:00	-	10	12	0.58	0.70	-	-	-	0.74	0.78	112858	test north shore, tidy Isaac treatment plant, collect mic	23 sunny	OH
5/7/2025															
5/8/2025															
5/9/2025															
5/10/2025	8:00	-	10	12	-	0.81			-	-	-	113986	remote monitoring		ОН
5/11/2025															
5/12/2025															
5/13/2025	1:30	-	10	12	-	0.82	-	-	-	0.57	0.7	114572	tested north shore,	17 sunny	ОН
5/14/2025															
5/15/2025	10:00	-	10	12	0.64	0.71	-	-	-	0.65	0.72	114866	Tesed north shore, checkintake	13 cloudy	ОН
5/16/2025															
5/17/2025															
5/18/2025	8:00	-	10	12		0.72	-	-	-	-	-	-	remote monitoring		OH
5/19/2025															
5/20/2025	11:00	-	10	12	0.75	1.27	-	-	-	1.03	0.93	115672	Tested north shore, collect microbac samples, chlorine	10c cloudy	OH
5/21/2025															
5/22/2025															
5/23/2025	2:00	•	10	12	0.7	0.72	-		-	1.02	0.75	116230	tested north shore		OH
5/24/2025															
5/25/2025															
5/26/2025															\leftarrow
5/27/2025	3:00	-	10	12	0.64	1.02	-	-	-	0.93	0.54	110179	test north shore, turb pump was dead head exercised v	26C	OH
5/28/2025															\leftarrow
5/29/2025															\vdash
5/30/2025	11:30	-	10	12	0.78	0.83	-	-	-	0.57	0.38	117649	test north shore, add 1 carboy to chlorine reservoir.	20C	OH
5/31/2025															\vdash
Reading of flo	w meter for S	unny Side tra	iler court (to b	e recorded or	nce a month)	119613		Date:	May 6th						
											total flow	5673			



Appendix C Field Memos



FIELD WORK MEMO

DATE: May 13th,20th 2025 TIME: 1 hour	VEHICLE: PERSONAL DISTANCE:
PROJECT: NSWU	TYPE OF WORKS: O&M
WORKS REQUESTED: water shut off	
FIELD TECH: OH	SITE REP: YES / NO
MATERIALS: IN STOCK PURCHASED	RECEIPTS: YES / NO
DESCRIPTION OF WORKS COMPLETED:	PICTURES: VES / NO
shut off water and turn back on for 695 Stromme lane on M Shut off water and turn back on for 570 Goddard road on M	ay 13th lay 20th
WORKS COMPLETED: YES / NO	
ANTICIPATED RETURN DATE:	
FUTURE WORKS:	
MATERIALS REQUIRED:	DO PARTS NEED TO BE ORDERED? YES / NO
ADDITIONAL NOTES/SKETCHES:	



FIELD WORK MEMO

DATE: May 14 2025	IME: 2 hours	VEHICLE: PERSONAL DISTANCE:
PROJECT: NSWU		TYPE OF WORKS:
WORKS REQUESTED: respond	ding to low cl2 alarm	
FIELD TECH: OH		SITE REP: YES / NO
MATERIALS: IN STOCK PURCHA	ASED	RECEIPTS: VES / NO
chlorine analyzer membrane an	d electrolyte solution	
DESCRIPTION OF WORKS COI	MPLETED:	PICTURES: VES / NO
responded to low chlorine alarm the membrane and electrolyte s after replacing the membrane an	olution, I found that the elect	ibrating the analyzer and was unsuccessful, next I replaced trolyte solution may have leaked out and that's why it failed, hen back to normal operation.
WORKS COMPLETED: VES / NO]	
ANTICIPATED RETURN DATE:		
FUTURE WORKS:		
MATERIALS REQUIRED:		DO PARTS NEED TO BE ORDERED? YES / NO
ADDITIONAL NOTES/SKETCH	ES:	



FIELD WORK MEMO

DATE: May 30, 2025	ME: 1 hour	VEHICLE: PERSONAL DISTAN	CE:
PROJECT: NSWU		TYPE OF WORKS: new inst	tall
WORKS REQUESTED: plumb in	n existing turbidimeter to wat	ter line with chlorine analyzer	
FIELD TECH: OH		SITE REP: YES / NO	
MATERIALS: IN STOCK V PURCHA	SED	RECEIPTS: YES / NO	
1/2 inch SS tee PEX fitting 1/2 PEX to 1/2" treaded 1/2"-1/4" reducer 1/4" John guest valve 4"-1/2" PEX 1' of John guest tubing			
DESCRIPTION OF WORKS CO	MPLETED:		PICTURES: 📮 / 👨
Added tee in PEX tubing of the s	ame line as the chiorine and	aryzer and installed fittings to pic	imb to turbialmeter.
WORKS COMPLETED: VES / NO)		
WORKS COMPLETED: VES / NO)		
)		
ANTICIPATED RETURN DATE:)		
ANTICIPATED RETURN DATE:			
ANTICIPATED RETURN DATE:		DO PARTS NEED	O TO BE ORDERED? 🖳 / 😡
ANTICIPATED RETURN DATE: FUTURE WORKS:		DO PARTS NEED	O TO BE ORDERED? YES / NO
ANTICIPATED RETURN DATE: FUTURE WORKS:		DO PARTS NEED	OTO BE ORDERED? \sqrt{ES} / \sqrt{RO}