



Water Quality Monitoring Report January 1 – December 31, 2025



Prepared by
District of Hope Staff

Introduction

Links

1.0	Acronyms	2
2.0	Executive summary	3
3.0	The water systems	3
4.0	Water system data	9
5.0	2025 event summary	10
6.0	Water main flushing program	11
7.0	Water quality, sampling and testing	11
8.0	Water system projects	13
9.0	Emergency response plan	13
10.0	Planning for the future	14
11.0	Flush message	14
12.0	Conclusion	15
13.0	Works Cited	15

Appendix 1 2025 Bacteriological Analysis

Appendix 2 2025 Metals Analysis

Introduction

Under the British Columbia Drinking Water Protection Act and the British Columbia Drinking Water Protection Regulation (BCDWPA & BCDWPR) the District of Hope is required to conduct water quality monitoring on the community's water distribution system(s) and to publish the results in an annual report. This document fulfills that requirement by presenting a summary and discussion of all water quality sampling results for the year 2025. An overview of projects and events as they relate to drinking water in the District of Hope is also provided in this report.

Please visit the following web sites for further information:

Health Canada – Canadian drinking water guidelines

<http://www.hc-sc.gc.ca/ewh-semt/water-eau/drink-potab/guide/index-eng.php>

Ministry of Health – Drinking water health topics

<https://www2.gov.bc.ca/gov/content/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/current-health-issues/drinking-water-health-topics>

Health Link BC File #56 – Persons with compromised or Weakened Immune Systems

<https://www.rdn.bc.ca/cms/wpattachments/wpID2360atID5822.pdf>

District of Hope

<http://www.hope.ca>

District of Hope Water Master Plan

<https://www.hope.ca/p/utilities>

World Health Organization

<https://www.who.int/news-room/fact-sheets/detail/drinking-water>

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1.0 Acronyms

AO: Aesthetic Objective

BCDWPA: British Columbia Drinking Water Protection Act

BCDWPR: British Columbia Drinking Water Protection

E.coli: Escherichia coli

EOCP: Environmental Operators Certification Program

GCDWQ: Guidelines for Canadian Drinking Water Quality

HAA: Haloacetic Acid

MAC: Maximum Acceptable Concentration

Mg/l: Milligrams per Liter

NTU: Nephelometric Turbidity Units PPB: Parts Per Billion

PPM: Parts Per Million

PRV: Pressure Regulating Valve

PVC: Polyvinyl Chloride

SCADA: Supervisory Control and Data Acquisition

UDF: Uni-directional Flushing

YTD: Year-to-Date

2.0 Executive Summary

The District of Hope supplies drinking water to residential and commercial users within District boundaries. The District of Hope is dedicated to providing high quality, aesthetically pleasing drinking water to approximately 2500 properties with an approximate population of 6700. Our drinking water is primarily sourced from deep groundwater aquifers. The Lake of the Woods water system gets its water from Schkam lake. All of the water is delivered un-treated with the following exceptions. The Kawkawa Lake water system, also referred to as the 138 zone, is chlorinated. The Lake of the Woods water is treated with media filters, cartridge filters and ultra violet. (UV)

The District of Hope collects drinking water samples from 15 locations within the distribution system on a weekly basis and multiple other locations on a bi-weekly basis. This report includes a summary of those bacteriological sampling results collected from the district's five water distribution systems during 2025 as well as a discussion of projects and events affecting water quality within the District of Hope. A complete record of 2025 water quality sampling results can be found in the appendices of this report.

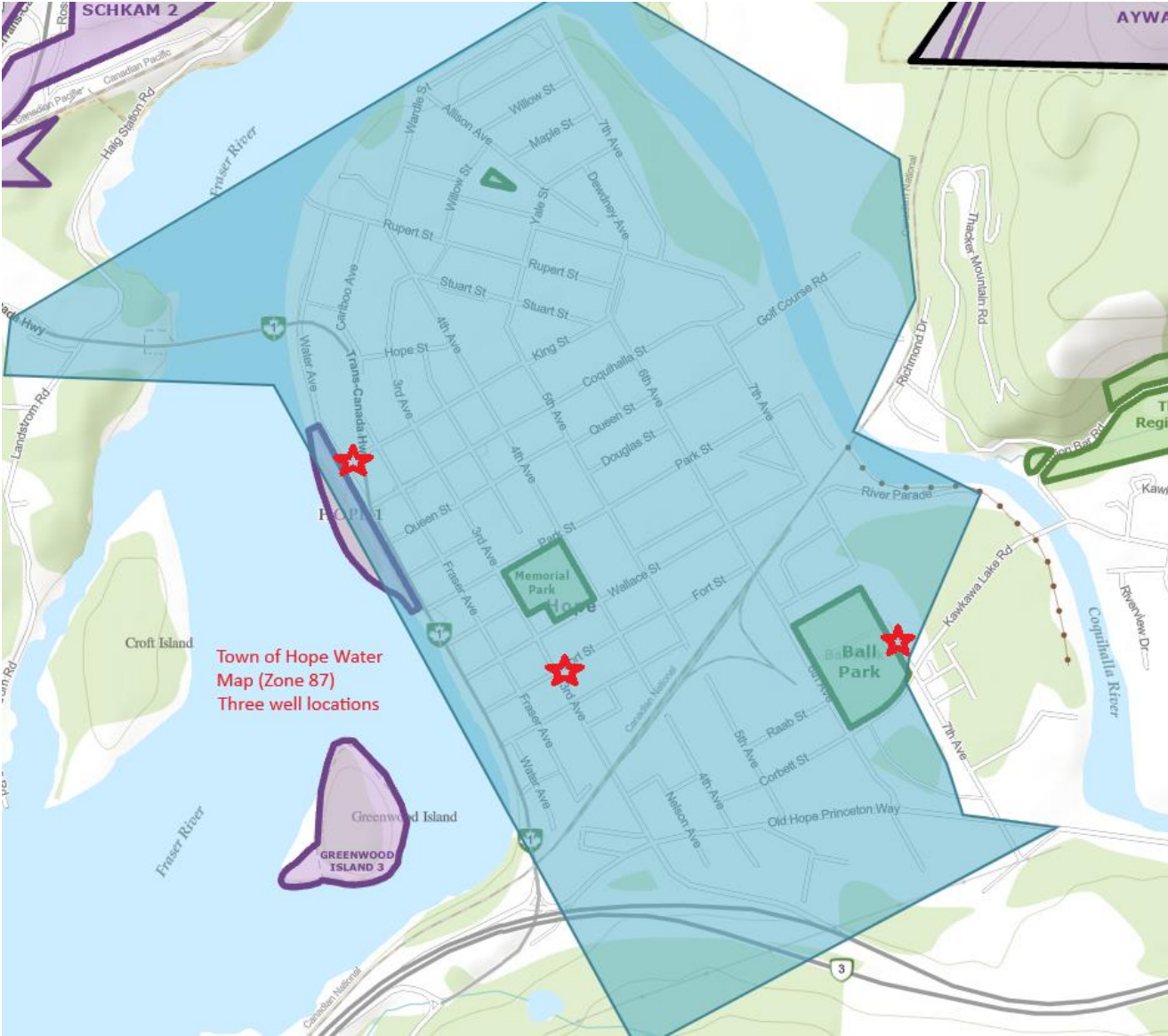
As part of our commitment to continual improvement, reliable service and high-water quality, the district completes operational and capital projects as well as water quality sampling on a regular and ongoing basis.

3.0 The Water Systems

In 2025 the total volume of water produced for all district operated water systems was 1,200,344m³ compared to 1,391,972m³ in 2024.

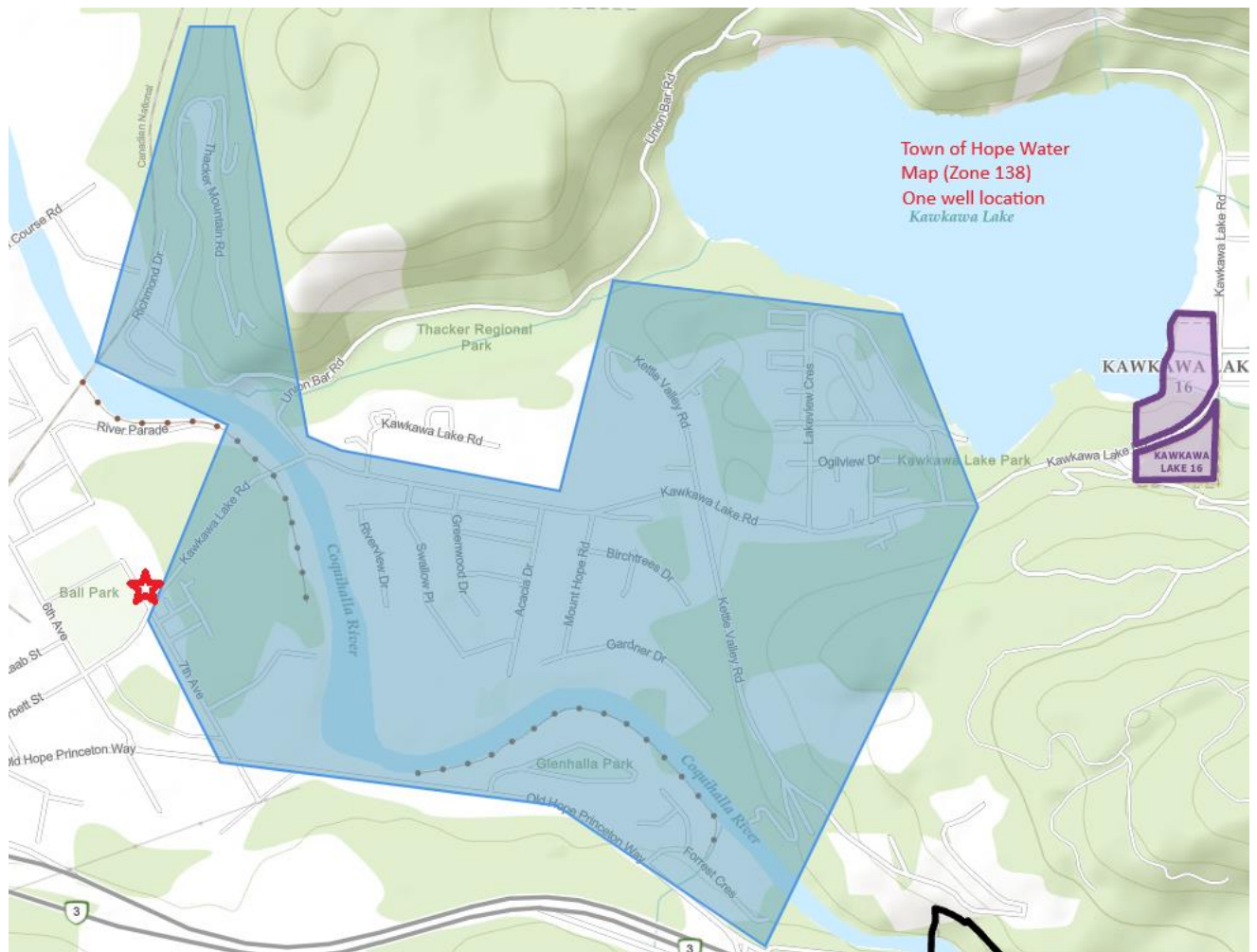
3.1 Town of Hope (87 zone)

Key components of this system are three deep groundwater wells which can pump a combined total of about 850gpm, a steel reservoir tank and a pressure reducing station. These well pumps supply drinking water and fire protection to the town of Hope and fill a 1,660,000L water reservoir located at the Mt Hope Lookout trailhead. This water system is unchlorinated and has produced 515,467m³ of drinking water to the residents of Hope in 2025 and services about 1400 connections.



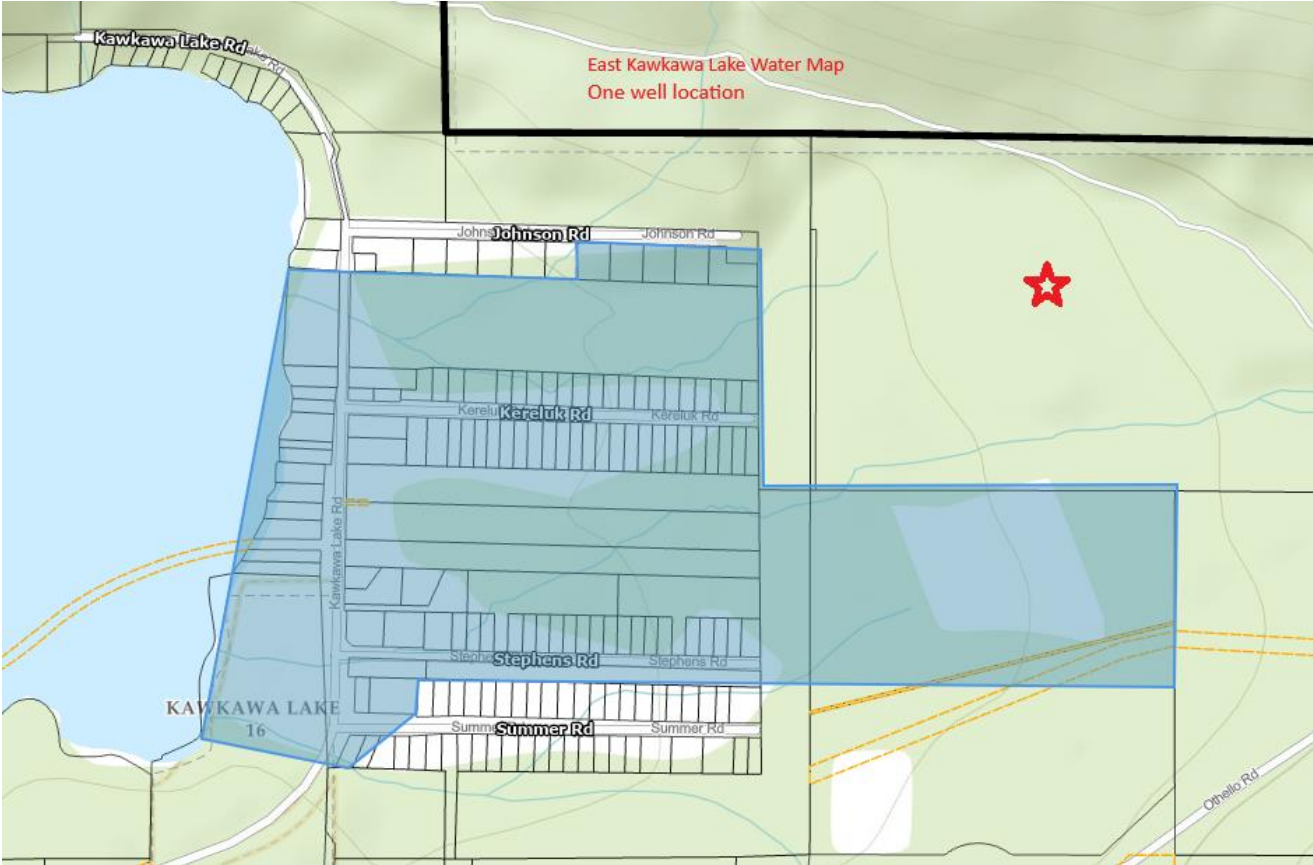
3.2 Kawkawa Lake (138 zone)

The Kawkawa Lake water system supplies water to about 540 properties between 7th Avenue and Kawkawa lake including the former 753 water system, Robertson Cr and Forrest Cr. This system is supplied currently by one source and is a deep groundwater well. This well produces approximately 800gpm and provides drinking water and fire protection. The reservoir capacity is 1,660,000L and is located at the east end of town along Old Hope Princeton Way. This water system produced 445,782m³ of drinking water to the residents in this part of Hope in 2025. Fraser Health Authority has issued a condition that we continue to chlorinate this water system.



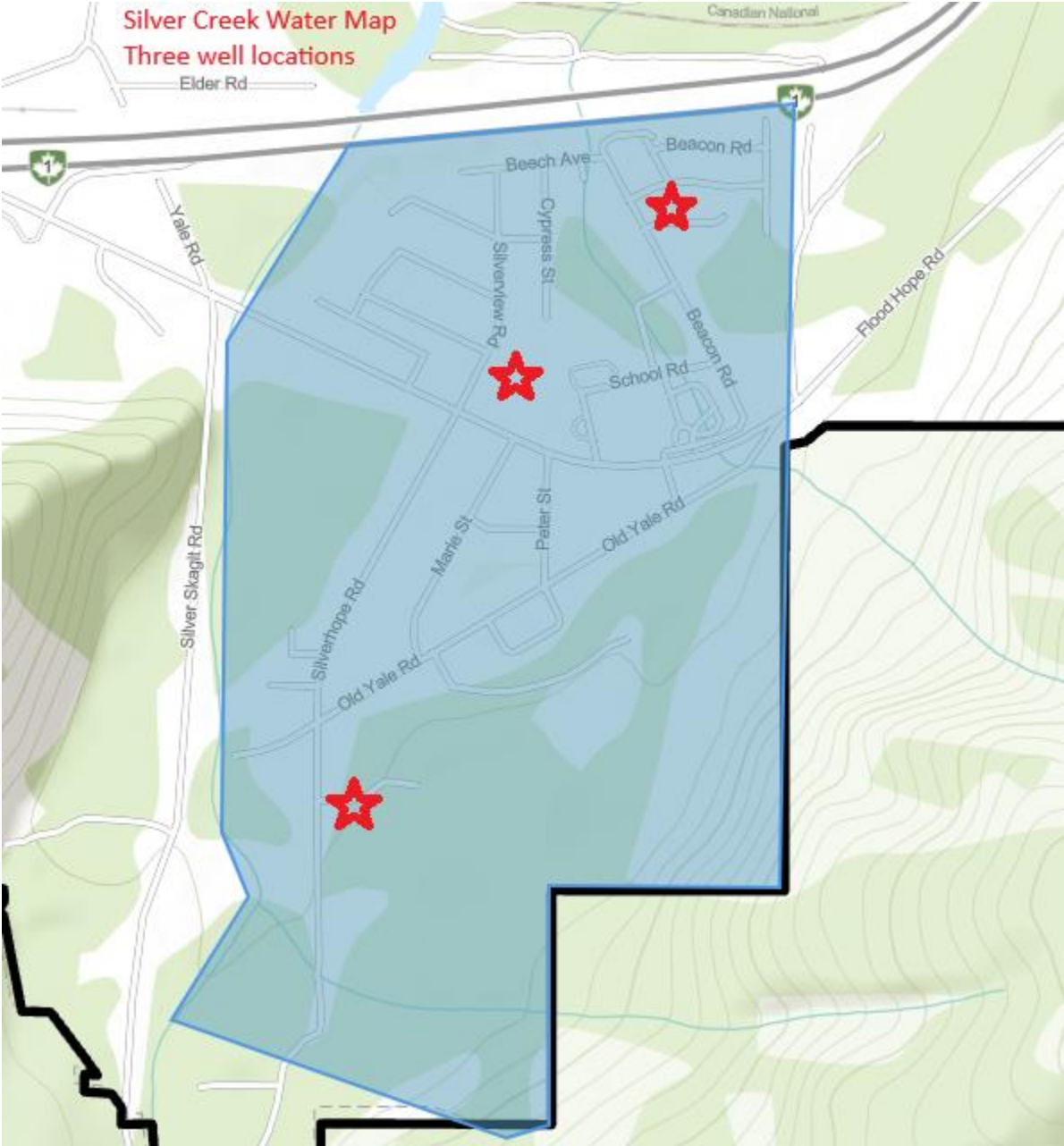
3.3 East Kawkawa Lake (EKL)

East Kawkawa lake water system is supplied by 1 deep groundwater well and services about 106 connections. This well produces about 396gpm and provides water to the residents on the east side of Kawkawa lake only. There is one reservoir that has a capacity of 53,000L. Fire protection is limited due to the small reservoir capacity. The water master plan has this system being connected to the Kawkawa lake (138 zone) in the future. This water system is unchlorinated and produced 62,516m3 of drinking water to its users in 2025.



3.4 Silver Creek (SC)

Silver Creek has about 500 users. There are three deep water wells which produce a total of 1050gpm and one 382,000L reservoir that provides drinking water and fire protection. Plans to connect this system to the Town of Hope system is planned for the future. This water system produced 173,696m3 of unchlorinated drinking water to the residents of Silver Creek in 2025.



3.5 Lake of the Woods (Schkam Lake)

With only 14 connections this is by far our smallest system. Water is pumped from Schkam lake into a treatment building on the south side of the Trans Canada Highway. Here the water is treated via two media filters, two cartridge filters and two ultra violet (UV) treatment units before being pumped up to Ross Rd and into two 1000g tanks. Water is sent through a small booster station into the distribution mains. There is no fire protection only drinking water. This water system produced 2883m3 of unchlorinated drinking water to its users in 2025.



4.0 Water System Data

4.1 System Infrastructure

This section provides information on the District of Hope's five water distribution systems. All of the components listed are operated and maintained by the district's operations utilities department.

Critical Asset components of the water distribution system

Asset:

• Fire hydrants	236
• Pressure reducing valves	1
• Wells/ pumphouses	8
• Reservoirs	5
• Water connections	2500 +
• Generators	6
• Water distribution pipe	60km

In addition to the critical components of the water distribution system, there are many other smaller components to the district's water distribution system, including:

- SCADA system
- Water meters
- Backflow preventers
- Air valves
- End of line blow off valves
- Line valves
- 23 Water sampling stations

All of these components are utilized effectively to help the district deliver safe, reliable drinking water.

4.2 Public Response

In 2025 the District of Hope utilities department responded to various concerns including: residential water service leaks, multiple pressure checks, water service locates, turn off/on requests, new service installations, an e.coli count as well as a variety of other types of calls.

4.3 Staff Certification

The District of Hope’s water distribution systems are classified by the *Environmental Operators Certification Program* (EOCP). The district’s five water systems are monitored, operated, and maintained by six competent staff. Five staff are currently certified by the EOCP.

Staff Certification

Certification Level	# of Staff
EOCP Water Distribution Level I	4
EOCP Water Distribution Level II	1
EOCP Water Distribution Level III	1
EOCP Water Treatment Level 1	1
Six total qualified staff	6

5.0 2025 Event Summary

In September 2025, we issued a boil water advisory to the Silver Creek Water system. The positive sample results were consistent with the reservoir cleaning conducted the week prior. During this cleaning, the tanks accidentally overflowed, causing water to spill out of the open hatches. This led to unusually high-water levels in the reservoir. We strongly believe that this, along with the cleaning process, caused the contamination. No other invasive maintenance procedures were conducted on this water system before the positive sample result. This water system has a long-standing history of providing safe supply and distribution. There was no reason to believe that there was any other source of contamination. In response, we chlorinated the reservoir immediately.

In October 2025 at Well #10 (1050 Seventh Ave) we had a well pump failure and a pump drive failure. Fortunately, we had the spare equipment sitting in our inventory to be able to make repairs immediately that same day. The reservoir was full when the equipment failed at around 1pm and we were able to put the system back into operation before completely emptying the reservoir at around 12am. The system is designed to allow water to be shared between two different water zones by operating a few valves to redirect water. We have already bought a replacement pump to keep in inventory in the event we have another pump failure.

6.0 Water Main Flushing Program

The District of Hope conducts directional and dead-end flushing bi-annually in order to maintain a high level of water quality in the distribution system. Regularly flushing water mains removes stagnant water and deposits from pipes. Spot flushing is also conducted “as needed” to resolve complaints of poor water quality.

7.0 Water Quality Sampling and Testing

Sampling and analysis for numerous water quality parameters are conducted on the District of Hope’s distribution system on a regular basis. Sample schedules for various constituents are broken into sections based on the number of samples recommended by the *GCDWQ* and/or mandated by the *BCDWPR*. Monitoring of drinking water in the district’s water distribution system is conducted for bacterial, chemical, and physical characteristics.

7.1 Metals

Metals can enter the drinking water system from either the source or in the distribution system itself. The District of Hope monitors the water distribution system for metals. Sampling is conducted every second year as per the *WQMRP*. Sampling for metals in 2024 was performed on March 19 2024. (Metals sampling is scheduled to occur next in March 2026)

A summary of relevant health-based MAC and Aesthetic Objective (AO) standards for metals in drinking water can be found below. This table summarizes only those parameters listed in the *GCDWQ* that are captured by the current version of the *WQMRP*.

MAC and AO Metals Standards Modified from the Guidelines for Canadian Drinking Water Quality (Chemical Parameters) (2025)

Parameter	MAC (mg/l)	AO (mg/l)	Year of Approval
Aluminum	2.9	OG: 0.1	2021
Antimony	0.006	None	2024
Arsenic	0.010	None	2006
Barium	2.0	None	2020
Cadmium	0.007	None	2020
Chromium	0.05	None	2018
Copper	2.0	1.0	2019
Iron	None	≤0.1	2024
Lead	0.005	None	2019
Manganese	0.12	0.02	2019
Mercury	0.001	None	1986
Selenium	0.05	None	2014
Vinyl Chloride	0.002	None	2013
Zinc		<5.0	1979 (2005)

7.2 Bacteriological Quality

All bacterial samples collected from municipal distribution systems are analyzed for *total coliform* and *E.coli* bacteria. The district meets or exceeds the minimum required samples per month for each of our 5 water systems. Further samples are collected by district personnel on an as needed basis in response to water main breaks, operational adjustments, water quality complaints, or where cross-connections are suspected.

Water Quality Standards for Potable Water (Sections 2 & 9)

Parameter:	Standard:
Fecal coliform bacteria	No detectable fecal coliform bacteria per 100ml
Escherichia coli	No detectable Escherichia coli per 100 ml
Total coliform bacteria:	

(a) 1 sample in a 30-day period	No detectable total coliform bacteria per 100 ml
(b) more than 1 sample in a 30-day period	At least 90% of samples have no detectable total coliform bacteria per 100ml and no sample has more than 10 total coliform bacteria per 100ml

(Province of British Columbia, 2011)

Frequency of Monitoring Samples for Prescribed Water Supply Systems *(Section 8)*

Population Served by the Prescribed Water Supply System:	Number of Samples Per Month:
less than 5,000	4
5,000 to 90,000	1 per 1,000 of population
more than 90,000	90 plus 1 per 10,000 of population in excess of 90,000

(Province of British Columbia, 2011)

8.0 Water Distribution System Projects

Projects for 2026 include:

1. Improvements to our SCADA network.
2. A new booster/ PRV station on Seventh Ave.
3. Rehabilitating the Thacker Mountain reservoir.
4. Continued efforts to work on the former 753 water system by looping water mains to eliminate dead ends and the decommissioning of several abandoned wells.
5. Continued efforts to implement the water master plan.

9.0 Emergency Response Plan

In the event of an emergency, the district may enact its Water System Emergency Response Plan. The goals of this plan are as follows:

- Rapidly restore service after an emergency
- Ensure adequate water supply for fire protection
- Minimize loss of service to users
- Provide emergency information to public
- Re-establish critical operations

10.0 Planning for the Future

The District of Hope is a growing community at the eastern end of the Fraser Valley, with an estimated population of 6686 residents (2021 Census). We continue to implement the 2019 “Water Master Plan”. The water supply and distribution systems are a key focus of Hope’s strategic infrastructure priorities. [Click here](#) for the 2019 Water Master Plan. (See Studies and Master Plans) We continue to upgrade the SCADA network to add more critical infrastructure to be monitored remotely in real time.

11.0 “Flush” Message from the Fraser Health Authority

Fraser Health has revised its metals at the tap “Flush” message. They have asked that all water purveyors include the following message in their annual report:

Anytime the water in a particular faucet has not been used for six hours or longer, “flush” your cold-water pipes by running the water until you notice a change in temperature. (This could take as little as five to thirty seconds if there has been recent heavy water use such as showering or toilet flushing. Otherwise, it could take two minutes or longer.)

The more time water has been sitting in your home’s pipes, the more lead it may contain.

Use only water from the cold-tap for drinking, cooking, and especially making baby formula. Hot water is likely to contain higher levels of lead.

The two actions recommended above are very important to the health of your family. They will probably be effective in reducing lead levels because most of the lead in household water usually comes from the plumbing in your house, not from the local water supply.

Conserving water is still important. Rather than just running the water down the drain you could use the water for things such as watering your plants (Zubel, 2014).

If residents have any questions, they are encouraged to contact the Fraser Health's Drinking Water Program at 604-870-7900

12.0 Conclusion

The 2025 year had Operations staff at the District of Hope continue improvements to the day-to-day operations of the water utility and continue to work closely with the Fraser Health Authority to ensure safe, clean potable water for the district's residents.

Every year the district budgets for the study, maintenance, and replacement of critical components of the water distribution system and 2025 was no exception. Continued resource focus on the operation and maintenance of the district's water system along with completing critical infrastructure upgrades, will be pivotal to maintaining a high level of drinking water quality in the years to come.

13.0 Works Cited

[AWWA](#). ANSI/AWWA C651-99 - AWWA Standard for Disinfecting Water Mains. Denver: American Water Works Association.

[Health Canada](#). (2025). *Guidelines for Canadian Drinking Water Quality*. Ottawa: Federal-Provincial- Territorial Committee on Drinking Water of the Federal-Provincial-Territorial Committee on Health and the Environment.

[Health Canada](#). (2025) Guidelines for Canadian Drinking Water Quality - Summary Tables

[Province of British Columbia](#). (2011). *British Columbia Drinking Water Protection Regulation*. Victoria.

[Province of British Columbia](#). (2014). *Population Estimates*. Retrieved March 27, 2014, from BC Stats

[USEPA](#). (2004). *Comprehensive Surface Water Treatment Rules Quick Reference Guide: Unfiltered*

Systems. Washington DC: US Environmental Protection Agency.

USEPA. (2002). *Effects of Water Age on Distribution System Water Quality*. Washington DC: US Environmental Protection Agency.

Zubel, M. (2014, June). Metals in Drinking Water - "Flush" Message in Annual Reports. British Columbia, Canada: Fraser Health.

Appendix #1

Bacteriological Analysis

Appendix #2

Metals Analysis

Sample Range Report

Fraser Health Authority

Facility Name: District of Hope Water System

Date Range: Jan 1 2025 to Dec 31 2025

Operator Steve Glasson
325 Wallace Street

PO Box 609
Hope, BC V0X 1L0

<u>Sampling Site</u>	<u>Date Collected</u>	<u>Total Coliform</u>	<u>E. Coli</u>	<u>Fecal Coliform</u>
<u>Fraser Canyon Hospital, 1275 7th Avenue</u>	1-7-2025 9:20:00 AM	LT1	LT1	
	1-14-2025 9:20:00 AM	LT1	LT1	
	1-21-2025 9:25:00 AM	LT1	LT1	
	1-28-2025 9:15:00 AM	LT1	LT1	
	2-4-2025 9:40:00 AM	LT1	LT1	
	2-11-2025 9:25:00 AM	LT1	LT1	
	2-18-2025 9:40:00 AM	LT1	LT1	
	2-25-2025 9:25:00 AM	LT1	LT1	
	3-4-2025 9:15:00 AM	LT1	LT1	
	3-11-2025 9:10:00 AM	LT1	LT1	
	3-18-2025 9:40:00 AM	LT1	LT1	
	3-25-2025 9:30:00 AM	LT1	LT1	
	4-1-2025 9:50:00 AM	LT1	LT1	
	4-8-2025 10:05:00 AM	LT1	LT1	
	4-15-2025 9:30:00 AM	LT1	LT1	
	4-22-2025 9:40:00 AM	LT1	LT1	
	4-29-2025 9:20:00 AM	LT1	LT1	
	5-6-2025 9:50:00 AM	LT1	LT1	
	5-13-2025 9:50:00 AM	LT1	LT1	

5-20-2025 9:25:00 AM	LT1	LT1	
5-26-2025 9:25:00 AM	LT1	LT1	
6-3-2025 10:10:00 AM	LT1	LT1	
6-10-2025 9:40:00 AM	LT1	LT1	
6-17-2025 9:30:00 AM	LT1	LT1	
6-24-2025 9:35:00 AM	LT1	LT1	
7-8-2025 9:50:00 AM	LT1	LT1	
7-15-2025 10:30:00 AM	LT1	LT1	
7-22-2025 10:30:00 AM	LT1	LT1	
7-29-2025 9:20:00 AM	LT1	LT1	
8-12-2025 9:40:00 AM	LT1	LT1	
8-18-2025 10:00:00 AM	LT1	LT1	
8-26-2025 10:05:00 AM	LT1	LT1	
9-2-2025 10:20:00 AM	LT1	LT1	
9-9-2025 10:15:00 AM	LT1	LT1	
9-16-2025 10:15:00 AM	LT1	LT1	
9-23-2025 9:25:00 AM	LT1	LT1	
10-6-2025 9:15:00 AM	LT1	LT1	
10-14-2025 9:30:00 AM	LT1	LT1	
10-21-2025 10:10:00 AM	LT1	LT1	
10-28-2025 9:50:00 AM	LT1	LT1	
11-3-2025 9:20:00 AM	LT1	LT1	
11-18-2025 9:25:00 AM	LT1	LT1	
11-25-2025 10:20:00 AM	LT1	LT1	
12-2-2025 9:05:00 AM	LT1	LT1	
12-9-2025 9:20:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

Wallace Street

1-7-2025 8:30:00 AM	LT1	LT1
1-14-2025 8:35:00 AM	LT1	LT1
1-21-2025 8:40:00 AM	LT1	LT1
1-28-2025 8:25:00 AM	LT1	LT1
2-4-2025 8:50:00 AM	LT1	LT1
2-11-2025 8:31:00 AM	LT1	LT1
2-18-2025 8:45:00 AM	LT1	LT1
2-25-2025 8:35:00 AM	LT1	LT1
3-4-2025 8:25:00 AM	LT1	LT1
3-11-2025 8:29:00 AM	LT1	LT1
3-18-2025 8:45:00 AM	LT1	LT1
3-25-2025 8:45:00 AM	LT1	LT1
4-1-2025 9:10:00 AM	LT1	LT1
4-8-2025 11:45:00 AM	LT1	LT1
4-15-2025 8:35:00 AM	LT1	LT1
4-22-2025 8:30:00 AM	LT1	LT1
4-29-2025 12:00:00 PM	LT1	LT1
5-6-2025 8:45:00 AM	LT1	LT1
5-13-2025 8:50:00 AM	LT1	LT1
5-20-2025 8:25:00 AM	LT1	LT1
5-26-2025 8:15:00 AM	LT1	LT1
6-3-2025 11:55:00 AM	LT1	LT1
6-10-2025 8:40:00 AM	LT1	LT1
6-17-2025 11:35:00 AM	LT1	LT1
6-24-2025 8:35:00 AM	LT1	LT1
7-8-2025 11:50:00 AM	LT1	LT1
7-15-2025 12:00:00 PM	LT1	LT1
7-22-2025 12:05:00	LT1	LT1

PM			
7-25-2025 11:00:00	REJCT DELAY3	REJCT DELAY3	
AM			
8-5-2025 10:50:00	LT1	LT1	
AM			
8-12-2025 8:45:00	LT1	LT1	
AM			
8-18-2025 11:50:00	LT1	LT1	
AM			
8-26-2025 12:00:00	LT1	LT1	
PM			
9-2-2025 12:10:00	LT1	LT1	
PM			
9-9-2025 12:00:00	LT1	LT1	
PM			
9-16-2025 12:00:00	LT1	LT1	
PM			
10-6-2025 8:25:00	LT1	LT1	
AM			
10-14-2025 11:15:00	LT1	LT1	
AM			
10-21-2025 12:00:00	LT1	LT1	
PM			
10-28-2025 12:00:00	LT1	LT1	
PM			
11-3-2025 11:30:00	LT1	LT1	
AM			
11-18-2025 11:55:00	LT1	LT1	
AM			
11-25-2025 12:00:00	LT1	LT1	
PM			
12-2-2025 10:30:00	LT1	LT1	
AM			
12-9-2025 11:15:00	<u>LT1</u>	<u>LT1</u>	
AM			
Total Positive:	0	0	0

Well 1, Hope Fire
Hall - Third Ave

1-21-2025 8:35:00	LT1	LT1
AM		
2-18-2025 8:35:00	LT1	LT1
AM		
3-11-2025 8:20:00	LT1	LT1
AM		
4-1-2025 9:05:00	LT1	LT1
AM		
5-6-2025 8:40:00	LT1	LT1
AM		
6-10-2025 8:35:00	LT1	LT1
AM		
7-15-2025 7:50:00	LT1	LT1
AM		
8-12-2025 8:35:00	LT1	LT1
AM		

10-21-2025 7:00:00 AM	LT1	LT1	
10-28-2025 7:55:00 AM	LT1	LT1	
12-9-2025 7:50:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

Well 2, 110 King
Street

2-25-2025 9:00:00 AM	LT1	LT1	
3-18-2025 8:55:00 AM	LT1	LT1	
4-8-2025 8:15:00 AM	LT1	LT1	
4-29-2025 8:38:00 AM	LT1	LT1	
5-26-2025 8:30:00 AM	LT1	LT1	
6-24-2025 8:45:00 AM	LT1	LT1	
7-15-2025 8:35:00 AM	LT1	LT1	
8-18-2025 11:35:00 AM	LT1	LT1	
9-23-2025 8:25:00 AM	LT1	LT1	
10-14-2025 8:00:00 AM	LT1	LT1	
11-25-2025 8:20:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

7th Avenue
Sampling Port, 225
7th Ave

1-7-2025 9:00:00 AM	LT1	LT1	
1-14-2025 9:10:00 AM	LT1	LT1	
1-21-2025 9:15:00 AM	LT1	LT1	
1-28-2025 8:50:00 AM	LT1	LT1	
2-4-2025 9:20:00 AM	1	LT1	
2-11-2025 9:00:00 AM	LT1	LT1	
2-18-2025 9:15:00 AM	LT1	LT1	
2-25-2025 9:10:00 AM	LT1	LT1	
3-4-2025 8:55:00	LT1	LT1	

AM		
3-11-2025 8:55:00	LT1	LT1
AM		
3-18-2025 9:25:00	LT1	LT1
AM		
3-25-2025 9:10:00	LT1	LT1
AM		
4-1-2025 9:40:00	LT1	LT1
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4-8-2025 11:30:00	LT1	LT1
AM		
4-15-2025 9:10:00	LT1	LT1
AM		
4-22-2025 9:00:00	LT1	LT1
AM		
4-29-2025 11:45:00	LT1	LT1
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5-26-2025 9:10:00	LT1	LT1
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AM		
6-10-2025 9:25:00	LT1	LT1
AM		
6-17-2025 11:25:00	LT1	LT1
AM		
6-24-2025 9:25:00	LT1	LT1
AM		
7-8-2025 11:45:00	LT1	LT1
AM		
7-15-2025 11:55:00	LT1	LT1
AM		
7-22-2025 12:00:00	LT1	LT1
PM		
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AM		
8-5-2025 10:39:00	LT1	LT1
AM		
8-12-2025 9:25:00	LT1	LT1
AM		
8-18-2025 11:45:00	LT1	LT1
AM		
8-26-2025 11:50:00	LT1	LT1
AM		
9-2-2025 12:05:00	LT1	LT1
PM		
9-9-2025 11:50:00	LT1	LT1
AM		
9-16-2025 11:55:00	LT1	LT1
AM		
9-23-2025 9:10:00	LT1	LT1

AM			
10-6-2025 9:00:00	LT1	LT1	
AM			
10-14-2025 10:55:00	LT1	LT1	
AM			
10-21-2025 11:40:00	LT1	LT1	
AM			
10-28-2025 11:45:00	LT1	LT1	
AM			
11-3-2025 11:15:00	LT1	LT1	
AM			
11-18-2025 9:10:00	LT1	LT1	
AM			
11-25-2025 11:55:00	LT1	LT1	
AM			
12-2-2025 10:20:00	LT1	LT1	
AM			
12-9-2025 11:00:00	<u>LT1</u>	<u>LT1</u>	
AM			
Total Positive:	1	0	0

District Works Yard,
1225 Nelson Ave

1-7-2025 8:20:00	LT1	LT1
AM		
1-14-2025 8:25:00	LT1	LT1
AM		
1-21-2025 8:25:00	LT1	LT1
AM		
1-28-2025 8:15:00	LT1	LT1
AM		
2-4-2025 8:31:00	LT1	LT1
AM		
2-11-2025 8:25:00	LT1	LT1
AM		
2-18-2025 8:29:00	LT1	LT1
AM		
2-25-2025 8:25:00	LT1	LT1
AM		
3-4-2025 8:20:00	LT1	LT1
AM		
3-11-2025 8:15:00	LT1	LT1
AM		
3-18-2025 8:35:00	LT1	LT1
AM		
3-25-2025 8:25:00	LT1	LT1
AM		
4-1-2025 8:55:00	LT1	LT1
AM		
4-8-2025 9:30:00	LT1	LT1
AM		
4-15-2025 8:30:00	LT1	LT1
AM		
4-22-2025 8:25:00	LT1	LT1
AM		

4-29-2025 8:55:00 AM	LT1	LT1
5-6-2025 8:30:00 AM	LT1	LT1
5-13-2025 8:40:00 AM	LT1	LT1
5-20-2025 8:15:00 AM	LT1	LT1
5-26-2025 8:10:00 AM	LT1	LT1
6-3-2025 9:30:00 AM	LT1	LT1
6-10-2025 7:45:00 AM	LT1	LT1
6-17-2025 9:15:00 AM	LT1	LT1
6-24-2025 8:25:00 AM	LT1	LT1
7-8-2025 9:35:00 AM	LT1	LT1
7-15-2025 10:00:00 AM	LT1	LT1
7-22-2025 10:00:00 AM	LT1	LT1
7-29-2025 9:15:00 AM	LT1	LT1
8-5-2025 8:08:00 AM	LT1	LT1
8-12-2025 8:25:00 AM	LT1	LT1
8-18-2025 9:40:00 AM	LT1	LT1
8-26-2025 9:55:00 AM	LT1	LT1
9-2-2025 10:05:00 AM	LT1	LT1
9-9-2025 10:00:00 AM	LT1	LT1
9-16-2025 9:55:00 AM	LT1	LT1
9-23-2025 8:45:00 AM	LT1	LT1
10-6-2025 8:20:00 AM	LT1	LT1
10-14-2025 9:00:00 AM	LT1	LT1
10-21-2025 9:55:00 AM	LT1	LT1
10-28-2025 9:35:00 AM	LT1	LT1
11-3-2025 9:05:00 AM	LT1	LT1
11-18-2025 8:55:00 AM	LT1	LT1
11-25-2025 10:00:00 AM	LT1	LT1

12-2-2025 8:45:00 AM	LT1	LT1	
12-9-2025 9:00:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

Well 10, Kawkawa
Lk Rd

1-28-2025 9:05:00 AM	LT1	LT1	
2-4-2025 9:30:00 AM	LT1	LT1	
3-4-2025 9:10:00 AM	LT1	LT1	
4-15-2025 9:20:00 AM	LT1	LT1	
4-29-2025 11:25:00 AM	LT1	LT1	
5-6-2025 9:40:00 AM	LT1	LT1	
5-20-2025 9:15:00 AM	LT1	LT1	
5-26-2025 9:20:00 AM	LT1	LT1	
6-17-2025 11:15:00 AM	LT1	LT1	
7-29-2025 10:45:00 AM	LT1	LT1	
8-26-2025 11:45:00 AM	LT1	LT1	
11-3-2025 11:00:00 AM	LT1	LT1	
12-2-2025 10:10:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

Well 3,

1-7-2025 9:10:00 AM	LT1	LT1	
2-11-2025 9:10:00 AM	LT1	LT1	
3-25-2025 9:20:00 AM	LT1	LT1	
4-22-2025 9:30:00 AM	LT1	LT1	
5-13-2025 9:40:00 AM	LT1	LT1	
6-3-2025 11:30:00 AM	LT1	LT1	
7-8-2025 11:40:00 AM	LT1	LT1	
8-5-2025 8:25:00 AM	LT1	LT1	
9-16-2025 11:45:00	LT1	LT1	

AM			
10-6-2025 9:10:00	LT1	LT1	
AM			
11-18-2025 11:35:00	<u>LT1</u>	<u>LT1</u>	
AM			
Total Positive:	0	0	0

Lakeview Cres
Sampling Port.
Opposite 21256
Lakeview Cres

1-7-2025 10:55:00	LT1	LT1	
AM			
1-14-2025 10:35:00	LT1	LT1	
AM			
1-21-2025 10:35:00	LT1	LT1	
AM			
1-28-2025 10:10:00	LT1	LT1	
AM			
2-4-2025 10:40:00	LT1	LT1	
AM			
2-11-2025 10:20:00	LT1	LT1	
AM			
2-18-2025 10:25:00	LT1	LT1	
AM			
2-25-2025 10:40:00	LT1	LT1	
AM			
3-4-2025 10:10:00	LT1	LT1	
AM			
3-11-2025 10:10:00	LT1	LT1	
AM			
3-18-2025 10:45:00	LT1	LT1	
AM			
3-25-2025 10:25:00	LT1	LT1	
AM			
4-1-2025 10:50:00	LT1	LT1	
AM			
4-8-2025 10:55:00	LT1	LT1	
AM			
4-15-2025 10:20:00	LT1	LT1	
AM			
4-22-2025 10:35:00	LT1	LT1	
AM			
4-29-2025 11:00:00	LT1	LT1	
AM			
5-6-2025 10:50:00	LT1	LT1	
AM			
5-13-2025 10:50:00	LT1	LT1	
AM			
5-20-2025 10:20:00	LT1	LT1	
AM			
6-3-2025 10:55:00	LT1	LT1	
AM			
6-10-2025 10:45:00	LT1	LT1	
AM			

6-17-2025 10:35:00 AM	LT1	LT1
6-24-2025 10:30:00 AM	LT1	LT1
7-8-2025 11:05:00 AM	LT1	LT1
7-15-2025 11:10:00 AM	LT1	LT1
7-22-2025 11:20:00 AM	LT1	LT1
7-29-2025 10:15:00 AM	15	LT1
8-5-2025 8:51:00 AM	LT1	LT1
8-12-2025 10:40:00 AM	LT1	LT1
8-18-2025 10:55:00 AM	LT1	LT1
8-26-2025 11:05:00 AM	LT1	LT1
9-2-2025 11:20:00 AM	LT1	LT1
9-9-2025 11:15:00 AM	LT1	LT1
9-16-2025 11:10:00 AM	LT1	LT1
9-23-2025 10:25:00 AM	LT1	LT1
10-6-2025 10:10:00 AM	LT1	LT1
10-14-2025 10:15:00 AM	LT1	LT1
10-28-2025 11:15:00 AM	LT1	LT1
11-3-2025 10:25:00 AM	LT1	LT1
11-18-2025 9:50:00 AM	LT1	LT1
11-25-2025 11:05:00 AM	LT1	LT1
12-2-2025 9:45:00 AM	LT1	LT1
12-9-2025 10:25:00 AM	<u>LT1</u>	<u>LT1</u>
Total Positive:	1	0

0

1300 7th ave, 1300
7th ave

1-7-2025 9:30:00 AM	LT1	LT1
1-14-2025 9:30:00 AM	LT1	LT1
1-21-2025 9:40:00 AM	LT1	LT1
1-28-2025 9:25:00	LT1	LT1

AM 2-4-2025 9:50:00	LT1	LT1
AM 2-11-2025 9:35:00	LT1	LT1
AM 2-18-2025 9:25:00	LT1	LT1
AM 2-25-2025 9:35:00	LT1	LT1
AM 3-4-2025 9:30:00	LT1	LT1
AM 3-11-2025 9:20:00	LT1	LT1
AM 3-18-2025 9:50:00	LT1	LT1
AM 3-25-2025 9:40:00	LT1	LT1
AM 4-1-2025 10:00:00	LT1	LT1
AM 4-8-2025 10:00:00	LT1	LT1
AM 4-15-2025 9:40:00	LT1	LT1
AM 4-22-2025 9:50:00	LT1	LT1
AM 4-29-2025 9:15:00	LT1	LT1
AM 5-6-2025 10:00:00	LT1	LT1
AM 5-13-2025 10:05:00	LT1	LT1
AM 5-20-2025 9:35:00	LT1	LT1
AM 5-26-2025 9:40:00	LT1	LT1
AM 6-3-2025 11:45:00	LT1	LT1
AM 6-10-2025 10:00:00	LT1	LT1
AM 6-17-2025 9:25:00	LT1	LT1
AM 6-24-2025 9:50:00	LT1	LT1
AM 7-8-2025 9:45:00	LT1	LT1
AM 7-15-2025 10:25:00	LT1	LT1
AM 7-22-2025 10:25:00	LT1	LT1
AM 8-5-2025 8:14:00	LT1	LT1
AM 8-12-2025 9:50:00	LT1	LT1
AM 8-18-2025 9:55:00	LT1	LT1
AM 8-26-2025 7:45:00	LT1	LT1

AM			
9-2-2025 10:15:00	LT1	LT1	
AM			
9-9-2025 10:05:00	LT1	LT1	
AM			
9-16-2025 10:10:00	LT1	LT1	
AM			
9-23-2025 9:35:00	LT1	LT1	
AM			
10-6-2025 9:25:00	LT1	LT1	
AM			
10-14-2025 9:15:00	LT1	LT1	
AM			
10-21-2025 10:05:00	LT1	LT1	
AM			
10-28-2025 9:45:00	LT1	LT1	
AM			
11-3-2025 9:10:00	LT1	LT1	
AM			
11-18-2025 11:45:00	LT1	LT1	
AM			
11-25-2025 10:00:00	LT1	LT1	
AM			
12-2-2025 9:00:00	LT1	LT1	
AM			
12-9-2025 9:15:00	<u>LT1</u>	<u>LT1</u>	
AM			
Total Positive:	0	0	0

65573 Dogwood Dr.
65573 Dogwood Dr

1-7-2025 10:45:00	LT1	LT1	
AM			
1-14-2025 10:25:00	LT1	LT1	
AM			
1-21-2025 10:25:00	LT1	LT1	
AM			
1-28-2025 10:00:00	13	LT1	
AM			
2-4-2025 10:30:00	LT1	LT1	
AM			
2-11-2025 10:10:00	LT1	LT1	
AM			
2-18-2025 10:15:00	LT1	LT1	
AM			
2-25-2025 10:30:00	LT1	LT1	
AM			
3-4-2025 10:00:00	LT1	LT1	
AM			
3-11-2025 9:55:00	LT1	LT1	
AM			
3-18-2025 10:30:00	LT1	LT1	
AM			
3-25-2025 10:15:00	LT1	LT1	
AM			

4-1-2025 10:40:00 AM	LT1	LT1
4-8-2025 10:25:00 AM	LT1	LT1
4-15-2025 10:10:00 AM	LT1	LT1
4-22-2025 10:25:00 AM	LT1	LT1
4-29-2025 9:25:00 AM	LT1	LT1
5-6-2025 10:40:00 AM	LT1	LT1
5-13-2025 10:40:00 AM	LT1	LT1
5-20-2025 10:10:00 AM	LT1	LT1
5-26-2025 10:10:00 AM	LT1	LT1
6-3-2025 10:30:00 AM	LT1	LT1
6-10-2025 10:35:00 AM	LT1	LT1
6-17-2025 9:55:00 AM	LT1	LT1
6-24-2025 10:20:00 AM	LT1	LT1
7-8-2025 10:25:00 AM	LT1	LT1
7-15-2025 10:50:00 AM	LT1	LT1
7-22-2025 11:00:00 AM	LT1	LT1
7-29-2025 9:45:00 AM	LT1	LT1
8-5-2025 8:43:00 AM	LT1	LT1
8-12-2025 10:25:00 AM	LT1	LT1
8-18-2025 10:20:00 AM	LT1	LT1
8-26-2025 10:30:00 AM	LT1	LT1
9-2-2025 10:35:00 AM	LT1	LT1
9-9-2025 10:35:00 AM	LT1	LT1
9-16-2025 10:35:00 AM	LT1	LT1
9-23-2025 10:15:00 AM	LT1	LT1
10-6-2025 10:00:00 AM	LT1	LT1
10-14-2025 10:05:00 AM	LT1	LT1
10-21-2025 10:30:00 AM	LT1	LT1

10-28-2025 10:35:00 AM	LT1	LT1	
11-3-2025 9:45:00 AM	LT1	LT1	
11-18-2025 11:05:00 AM	LT1	LT1	
11-25-2025 10:35:00 AM	LT1	LT1	
12-2-2025 9:25:00 AM	LT1	LT1	
12-9-2025 9:45:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	1	0	0

21002 Swallow Pl.
21002 Swallow Pl
Hope

1-7-2025 9:50:00 AM	LT1	LT1
1-14-2025 9:55:00 AM	LT1	LT1
1-21-2025 10:10:00 AM	LT1	LT1
1-28-2025 9:50:00 AM	LT1	LT1
2-4-2025 10:20:00 AM	LT1	LT1
2-11-2025 9:55:00 AM	LT1	LT1
2-18-2025 10:05:00 AM	LT1	LT1
2-25-2025 10:20:00 AM	LT1	LT1
3-4-2025 9:50:00 AM	LT1	LT1
3-11-2025 9:45:00 AM	LT1	LT1
3-18-2025 10:20:00 AM	LT1	LT1
3-25-2025 10:05:00 AM	LT1	LT1
4-1-2025 10:30:00 AM	LT1	LT1
4-8-2025 10:15:00 AM	LT1	LT1
4-15-2025 10:00:00 AM	LT1	LT1
4-22-2025 10:15:00 AM	LT1	LT1
4-29-2025 9:35:00 AM	LT1	LT1
5-6-2025 10:35:00 AM	LT1	LT1
5-13-2025 10:30:00 AM	LT1	LT1

5-20-2025 10:00:00 AM	LT1	LT1
5-26-2025 10:00:00 AM	LT1	LT1
6-3-2025 10:20:00 AM	LT1	LT1
6-10-2025 10:25:00 AM	LT1	LT1
6-17-2025 9:45:00 AM	LT1	LT1
6-24-2025 10:15:00 AM	LT1	LT1
7-8-2025 10:20:00 AM	LT1	LT1
7-15-2025 10:40:00 AM	LT1	LT1
7-22-2025 10:40:00 AM	LT1	LT1
7-29-2025 9:35:00 AM	LT1	LT1
8-5-2025 8:34:00 AM	LT1	LT1
8-12-2025 10:15:00 AM	LT1	LT1
8-18-2025 10:10:00 AM	1	LT1
8-26-2025 10:20:00 AM	LT1	LT1
9-2-2025 10:45:00 AM	LT1	LT1
9-9-2025 10:25:00 AM	LT1	LT1
9-16-2025 10:25:00 AM	LT1	LT1
9-23-2025 10:05:00 AM	LT1	LT1
10-6-2025 9:50:00 AM	LT1	LT1
10-14-2025 9:55:00 AM	LT1	LT1
10-21-2025 10:25:00 AM	LT1	LT1
10-28-2025 10:25:00 AM	LT1	LT1
11-3-2025 9:30:00 AM	LT1	LT1
11-18-2025 11:00:00 AM	LT1	LT1
11-25-2025 10:30:00 AM	LT1	LT1
12-2-2025 9:15:00 AM	LT1	LT1
12-9-2025 9:35:00 AM	<u>LT1</u>	<u>LT1</u>
Total Positive:	1	0

0

Thacker Mtn
Sampling Port.
21407 Thacker Mtn
Rd

1-7-2025 9:40:00 AM	LT1	LT1
1-14-2025 9:45:00 AM	LT1	LT1
1-21-2025 9:50:00 AM	LT1	LT1
1-28-2025 9:40:00 AM	LT1	LT1
2-4-2025 10:10:00 AM	LT1	LT1
2-11-2025 9:45:00 AM	LT1	LT1
2-18-2025 9:50:00 AM	LT1	LT1
2-25-2025 10:05:00 AM	LT1	LT1
3-4-2025 9:40:00 AM	LT1	LT1
3-11-2025 9:35:00 AM	LT1	LT1
3-18-2025 10:05:00 AM	LT1	LT1
3-25-2025 9:55:00 AM	LT1	LT1
4-1-2025 10:15:00 AM	LT1	LT1
4-8-2025 11:10:00 AM	LT1	LT1
4-15-2025 9:50:00 AM	LT1	LT1
4-22-2025 10:05:00 AM	LT1	LT1
4-29-2025 11:15:00 AM	LT1	LT1
5-6-2025 10:10:00 AM	LT1	LT1
5-13-2025 10:20:00 AM	LT1	LT1
5-20-2025 9:50:00 AM	LT1	LT1
5-26-2025 9:50:00 AM	LT1	LT1
6-3-2025 11:20:00 AM	LT1	LT1
6-10-2025 10:10:00 AM	LT1	LT1
6-17-2025 10:55:00 AM	LT1	LT1
6-24-2025 10:05:00 AM	LT1	LT1
7-8-2025 11:30:00	LT1	LT1

AM		
7-15-2025 11:40:00	LT1	LT1
AM		
7-22-2025 11:40:00	LT1	LT1
AM		
7-29-2025 10:35:00	LT1	LT1
AM		
8-5-2025 9:50:00	LT1	LT1
AM		
8-12-2025 10:05:00	LT1	LT1
AM		
8-18-2025 11:15:00	LT1	LT1
AM		
8-26-2025 11:30:00	LT1	LT1
AM		
9-2-2025 11:45:00	LT1	LT1
AM		
9-9-2025 11:30:00	LT1	LT1
AM		
9-16-2025 11:30:00	LT1	LT1
AM		
9-23-2025 9:50:00	LT1	LT1
AM		
10-6-2025 9:40:00	LT1	LT1
AM		
10-14-2025 9:35:00	LT1	LT1
AM		
10-21-2025 11:20:00	LT1	LT1
AM		
10-28-2025 11:25:00	LT1	LT1
AM		
11-3-2025 10:45:00	LT1	LT1
AM		
11-18-2025 11:20:00	LT1	LT1
AM		
11-25-2025 11:20:00	LT1	LT1
AM		
12-2-2025 10:00:00	LT1	LT1
AM		
12-9-2025 10:35:00	<u>LT1</u>	<u>LT1</u>
AM		
Total Positive:	0	0

0

Result Values:

E - estimated

L - less than

G - greater than

Samples that contain total coliform:	4	0.88% of total
Samples that contain e. coli:	0	0.00% of total
Samples that contain fecal coliform:	0	0.00% of total
Number of consecutive samples that contain total coliform:	0	
Number of samples that contain total coliform in last 30 days:	0/0	
Total number of samples:	455	

Comments:

Environmental Health Officer
Feb 3 2026

FOR FURTHER INFORMATION PLEASE CALL: Jessica Hibbs (604) 870-7900

Sample Range Report

Fraser Health Authority

Facility Name: East Kawkawa Lake Water System

Date Range: Jan 1 2025 to Dec 31 2025

Operator Steve Glasson
325 Wallace St

PO Box 609
Hope, BC V0X 1L0

<u>Sampling Site</u>	<u>Date Collected</u>	<u>Total Coliform</u>	<u>E. Coli</u>	<u>Fecal Coliform</u>
<u>Stephens Rd</u>				
<u>Sampling Port.</u>				
<u>66456 Stephens Rd</u>				
	1-7-2025 11:05:00 AM	LT1	LT1	
	1-14-2025 10:45:00 AM	LT1	LT1	
	1-21-2025 10:45:00 AM	LT1	LT1	
	1-28-2025 10:20:00 AM	LT1	LT1	
	2-4-2025 10:55:00 AM	LT1	LT1	
	2-11-2025 10:35:00 AM	LT1	LT1	
	2-18-2025 10:35:00 AM	LT1	LT1	
	2-25-2025 10:50:00 AM	LT1	LT1	
	3-4-2025 10:25:00 AM	LT1	LT1	
	3-11-2025 10:25:00 AM	LT1	LT1	
	3-18-2025 10:55:00 AM	LT1	LT1	
	3-25-2025 10:35:00 AM	LT1	LT1	
	4-1-2025 11:00:00 AM	LT1	LT1	
	4-8-2025 10:35:00 AM	LT1	LT1	
	4-15-2025 10:35:00 AM	LT1	LT1	
	4-22-2025 10:45:00 AM	LT1	LT1	
	4-29-2025 10:10:00 AM	LT1	LT1	
	5-6-2025 11:10:00 AM	LT1	LT1	
	5-13-2025 11:10:00 AM	LT1	LT1	

5-20-2025 10:35:00 AM	4	2
5-26-2025 10:30:00 AM	LT1	LT1
6-3-2025 10:40:00 AM	LT1	LT1
6-10-2025 11:10:00 AM	LT1	LT1
6-17-2025 10:15:00 AM	LT1	LT1
6-24-2025 10:55:00 AM	2.0	LT1
7-8-2025 10:40:00 AM	LT1	LT1
7-15-2025 11:05:00 AM	LT1	LT1
7-22-2025 11:00:00 AM	LT1	LT1
7-29-2025 9:55:00 AM	LT1	LT1
8-5-2025 9:07:00 AM	LT1	LT1
8-12-2025 11:00:00 AM	LT1	LT1
8-18-2025 10:35:00 AM	LT1	LT1
8-26-2025 10:45:00 AM	LT1	LT1
9-2-2025 10:55:00 AM	LT1	LT1
9-9-2025 10:45:00 AM	LT1	LT1
9-16-2025 10:50:00 AM	LT1	LT1
9-23-2025 10:45:00 AM	LT1	LT1
10-6-2025 10:35:00 AM	LT1	LT1
10-14-2025 10:25:00 AM	LT1	LT1
10-21-2025 10:45:00 AM	LT1	LT1
10-28-2025 10:45:00 AM	LT1	LT1
11-3-2025 10:00:00 AM	LT1	LT1
11-18-2025 9:25:00 AM	LT1	LT1
11-25-2025 10:45:00 AM	LT1	LT1
12-2-2025 9:30:00 AM	LT1	LT1
12-9-2025 10:05:00 AM	<u>LT1</u>	<u>LT1</u>
Total Positive:	2	1

0

Johnson Rd.

1-14-2025 11:15:00 AM	LT1	LT1
3-18-2025 11:20:00 AM	LT1	LT1
4-22-2025 11:15:00 AM	LT1	LT1
5-20-2025 11:00:00 AM	LT1	LT1
5-26-2025 10:55:00 AM	LT1	LT1
6-24-2025 11:20:00 AM	LT1	LT1
7-8-2025 10:55:00 AM	LT1	LT1
8-18-2025 10:50:00 AM	LT1	LT1
9-2-2025 11:15:00 AM	LT1	LT1
11-3-2025 10:20:00 AM	LT1	LT1
11-18-2025 9:40:00 AM	<u>LT1</u>	<u>LT1</u>
Total Positive:	0	0

0

Kereluk Rd
Sampling Port.
66621 Kereluk

1-7-2025 11:20:00 AM	LT1	LT1
1-14-2025 11:00:00 AM	LT1	LT1
1-21-2025 11:05:00 AM	LT1	LT1
1-28-2025 10:30:00 AM	LT1	LT1
2-11-2025 10:55:00 AM	LT1	LT1
2-18-2025 10:55:00 AM	LT1	LT1
2-25-2025 11:05:00 AM	LT1	LT1
3-4-2025 10:45:00 AM	LT1	LT1
3-11-2025 10:40:00 AM	LT1	LT1
3-18-2025 11:10:00 AM	LT1	LT1
3-25-2025 10:50:00 AM	LT1	LT1
4-1-2025 11:15:00 AM	LT1	LT1
4-8-2025 10:45:00 AM	LT1	LT1

4-15-2025 10:50:00 AM	LT1	LT1
4-22-2025 11:00:00 AM	LT1	LT1
4-29-2025 10:25:00 AM	LT1	LT1
5-6-2025 11:25:00 AM	LT1	LT1
5-13-2025 11:30:00 AM	LT1	LT1
5-20-2025 10:45:00 AM	LT1	LT1
5-26-2025 10:40:00 AM	LT1	LT1
6-3-2025 10:45:00 AM	LT1	LT1
6-10-2025 11:25:00 AM	LT1	LT1
6-17-2025 10:25:00 AM	LT1	LT1
6-24-2025 11:10:00 AM	LT1	LT1
7-8-2025 10:50:00 AM	LT1	LT1
7-15-2025 11:05:00 AM	LT1	LT1
7-22-2025 11:10:00 AM	LT1	LT1
7-29-2025 10:05:00 AM	LT1	LT1
8-5-2025 9:22:00 AM	LT1	LT1
8-12-2025 11:10:00 AM	LT1	LT1
8-18-2025 10:45:00 AM	LT1	LT1
8-26-2025 10:55:00 AM	LT1	LT1
9-2-2025 11:05:00 AM	LT1	LT1
9-9-2025 10:55:00 AM	LT1	LT1
9-16-2025 11:00:00 AM	1	LT1
9-23-2025 11:00:00 AM	LT1	LT1
10-6-2025 10:55:00 AM	LT1	LT1
10-14-2025 10:45:00 AM	LT1	LT1
10-21-2025 11:00:00 AM	LT1	LT1
10-28-2025 11:00:00 AM	LT1	LT1
11-3-2025 10:15:00 AM	LT1	LT1

11-18-2025 9:35:00 AM	LT1	LT1
11-25-2025 10:55:00 AM	LT1	LT1
12-2-2025 9:35:00 AM	LT1	LT1
12-9-2025 10:15:00 AM	<u>LT1</u>	<u>LT1</u>
Total Positive:	1	0

Result Values: **E - estimated** **L - less than** **G - greater than**

Samples that contain total coliform:	3	2.94% of total
Samples that contain e. coli:	1	0.98% of total
Samples that contain fecal coliform:	0	0.00% of total
Number of consecutive samples that contain total coliform:	0	
Number of samples that contain total coliform in last 30 days:	0/0	
Total number of samples:	102	

Comments:

Environmental Health Officer
Feb 3 2026

FOR FURTHER INFORMATION PLEASE CALL: Jessica Hibbs (604) 870-7900

Sample Range Report

Fraser Health Authority

Facility Name: Lake Of The Woods Water System

Date Range: Jan 1 2025 to Dec 31 2025

Operator Steve Glasson
325 Wallace St

PO Box 609
Hope, BC V0X 1L0

<u>Sampling Site</u>	<u>Date Collected</u>	<u>Total Coliform</u>	<u>E. Coli</u>	<u>Fecal Coliform</u>
<u>Pumphouse Active,</u> <u>Ross Rd.</u>				
	1-7-2025 8:45:00 AM	LT1	LT1	
	1-14-2025 8:55:00 AM	LT1	LT1	
	1-21-2025 8:55:00 AM	LT1	LT1	
	1-28-2025 8:40:00 AM	LT1	LT1	
	2-4-2025 9:05:00 AM	LT1	LT1	
	2-11-2025 8:45:00 AM	LT1	LT1	
	2-18-2025 9:00:00 AM	LT1	LT1	
	2-25-2025 8:45:00 AM	LT1	LT1	
	3-4-2025 8:40:00 AM	LT1	LT1	
	3-11-2025 8:45:00 AM	LT1	LT1	
	3-18-2025 9:10:00 AM	LT1	LT1	
	3-25-2025 8:55:00 AM	LT1	LT1	
	4-1-2025 9:25:00 AM	LT1	LT1	
	4-8-2025 7:55:00 AM	LT1	LT1	
	4-15-2025 8:50:00 AM	LT1	LT1	
	4-22-2025 8:45:00 AM	LT1	LT1	
	5-6-2025 9:00:00 AM	LT1	LT1	
	5-13-2025 9:05:00 AM	LT1	LT1	
	5-20-2025 8:35:00 AM	LT1	LT1	
	5-26-2025 8:40:00	LT1	LT1	

AM			
6-3-2025 7:40:00	1	LT1	
AM			
6-10-2025 8:55:00	LT1	LT1	
AM			
6-17-2025 7:45:00	1	LT1	
AM			
6-24-2025 8:55:00	11.1	LT1	
AM			
7-8-2025 8:05:00	LT1	LT1	
AM			
7-15-2025 8:10:00	LT1	LT1	
AM			
7-22-2025 7:40:00	1	LT1	
AM			
7-29-2025 7:45:00	LT1	LT1	
AM			
8-5-2025 10:15:00	LT1	LT1	
AM			
8-12-2025 8:55:00	LT1	LT1	
AM			
8-18-2025 8:00:00	1	LT1	
AM			
8-26-2025 8:25:00	LT1	LT1	
AM			
9-2-2025 8:25:00	LT1	LT1	
AM			
9-9-2025 8:40:00	2	LT1	
AM			
9-16-2025 9:20:00	LT1	LT1	
AM			
9-23-2025 8:40:00	LT1	LT1	
AM			
10-14-2025 7:45:00	LT1	LT1	
AM			
10-21-2025 8:25:00	LT1	LT1	
AM			
10-28-2025 8:10:00	1	LT1	
AM			
11-3-2025 8:00:00	LT1	LT1	
AM			
11-18-2025 7:50:00	LT1	LT1	
AM			
11-25-2025 8:05:00	LT1	LT1	
AM			
12-2-2025 7:55:00	LT1	LT1	
AM			
12-9-2025 8:05:00	<u>LT1</u>	<u>LT1</u>	
AM			
Total Positive:	7	0	0

Arseneau Rd.

1-21-2025 9:00:00	LT1	LT1
AM		
4-8-2025 8:05:00	LT1	LT1

AM			
7-22-2025 7:45:00	LT1	LT1	
AM			
10-6-2025 8:45:00	<u>1</u>	<u>LT1</u>	
AM			
Total Positive:	1	0	0

Result Values: **E - estimated** **L - less than** **G - greater than**

Samples that contain total coliform:	8		16.67% of total
Samples that contain e. coli:	0		0.00% of total
Samples that contain fecal coliform:	0		0.00% of total
Number of consecutive samples that contain total coliform:	1		
Number of samples that contain total coliform in last 30 days:	0/0		
Total number of samples:	48		

Comments:

Environmental Health Officer
Feb 3 2026

FOR FURTHER INFORMATION PLEASE CALL: Jessica Hibbs (604) 870-7900

Sample Range Report

Fraser Health Authority

Facility Name: Silver Creek Water System

Date Range: Jan 1 2025 to Dec 31 2025

Operator Steve Glasson
325 Wallace St

PO Box 609
Hope, BC V0X 1L0

<u>Sampling Site</u>	<u>Date Collected</u>	<u>Total Coliform</u>	<u>E. Coli</u>	<u>Fecal Coliform</u>
<u>Pumphouse 5,</u>				
<u>Uplands Drive</u>				
<u>19590 Silverhope</u>				
<u>Road</u>				
	1-7-2025 8:00:00 AM	LT1	LT1	
	1-21-2025 8:05:00 AM	LT1	LT1	
	2-11-2025 8:05:00 AM	LT1	LT1	
	2-25-2025 8:00:00 AM	LT1	LT1	
	3-4-2025 8:00:00 AM	LT1	LT1	
	3-18-2025 8:15:00 AM	LT1	LT1	
	4-1-2025 8:35:00 AM	LT1	LT1	
	4-15-2025 8:10:00 AM	LT1	LT1	
	5-6-2025 8:05:00 AM	LT1	LT1	
	6-10-2025 8:10:00 AM	LT1	LT1	
	6-24-2025 8:05:00 AM	LT1	LT1	
	7-8-2025 9:05:00 AM	1	LT1	
	7-22-2025 9:25:00 AM	LT1	LT1	
	8-12-2025 8:05:00 AM	LT1	LT1	
	8-18-2025 9:05:00 AM	LT1	LT1	
	9-2-2025 8:55:00 AM	LT1	LT1	
	9-16-2025 8:50:00 AM	LT1	LT1	
	10-14-2025 8:25:00 AM	LT1	LT1	
	11-3-2025 8:35:00	LT1	LT1	

AM			
11-18-2025 8:32:00	LT1	LT1	
AM			
12-2-2025 8:30:00	LT1	LT1	
AM			
12-9-2025 8:40:00	<u>LT1</u>	<u>LT1</u>	
AM			
Total Positive:	1	0	0

Old Yale Rd
Sampling Port,
63950 Old Yale Rd

1-7-2025 7:40:00	LT1	LT1
AM		
1-14-2025 7:50:00	LT1	LT1
AM		
1-21-2025 7:45:00	LT1	LT1
AM		
1-28-2025 7:40:00	LT1	LT1
AM		
2-4-2025 7:45:00	LT1	LT1
AM		
2-11-2025 7:45:00	LT1	LT1
AM		
2-18-2025 7:45:00	LT1	LT1
AM		
2-25-2025 7:40:00	LT1	LT1
AM		
3-4-2025 7:40:00	LT1	LT1
AM		
3-11-2025 7:40:00	1	LT1
AM		
3-18-2025 7:55:00	LT1	LT1
AM		
3-25-2025 8:00:00	LT1	LT1
AM		
4-1-2025 8:20:00	LT1	LT1
AM		
4-8-2025 9:10:00	LT1	LT1
AM		
4-15-2025 7:50:00	LT1	LT1
AM		
4-22-2025 7:45:00	LT1	LT1
AM		
5-6-2025 7:40:00	LT1	LT1
AM		
5-13-2025 8:10:00	LT1	LT1
AM		
5-20-2025 7:45:00	LT1	LT1
AM		
5-26-2025 7:40:00	LT1	LT1
AM		
6-3-2025 9:10:00	LT1	LT1
AM		
6-10-2025 7:55:00	LT1	LT1

AM			
6-17-2025 8:50:00	LT1		LT1
AM			
6-24-2025 7:45:00	LT1		LT1
AM			
7-8-2025 9:20:00	LT1		LT1
AM			
7-15-2025 9:35:00	LT1		LT1
AM			
7-22-2025 9:45:00	LT1		LT1
AM			
7-29-2025 9:00:00	LT1		LT1
AM			
8-5-2025 7:54:00	LT1		LT1
AM			
8-12-2025 7:50:00	LT1		LT1
AM			
8-18-2025 9:20:00	LT1		LT1
AM			
8-26-2025 9:25:00	LT1		LT1
AM			
9-2-2025 9:35:00	2		LT1
AM			
9-9-2025 9:45:00	1		LT1
AM			
9-16-2025 8:55:00	LT1		LT1
AM			
9-23-2025 7:40:00	2		1
AM			
10-6-2025 8:05:00	LT1		LT1
AM			
10-14-2025 8:30:00	LT1		LT1
AM			
10-21-2025 9:30:00	LT1		LT1
AM			
10-28-2025 9:20:00	LT1		LT1
AM			
11-3-2025 8:50:00	LT1		LT1
AM			
11-18-2025 8:45:00	LT1		LT1
AM			
11-25-2025 9:25:00	LT1		LT1
AM			
12-2-2025 8:35:00	LT1		LT1
AM			
12-9-2025 8:45:00	<u>LT1</u>		<u>LT1</u>
AM			
Total Positive:	4		1
			0

Marie St Sampling
Port, 63810 Flood
Hope Rd and Marie
St

1-7-2025 7:50:00	LT1		LT1
AM			

1-14-2025 8:00:00 AM	LT1	LT1
1-21-2025 7:55:00 AM	LT1	LT1
1-28-2025 7:45:00 AM	LT1	LT1
2-4-2025 7:55:00 AM	LT1	LT1
2-11-2025 7:55:00 AM	LT1	LT1
2-18-2025 7:55:00 AM	LT1	LT1
2-25-2025 7:50:00 AM	LT1	LT1
3-4-2025 7:50:00 AM	LT1	LT1
3-11-2025 7:50:00 AM	LT1	LT1
3-18-2025 8:05:00 AM	LT1	LT1
3-25-2025 8:10:00 AM	LT1	LT1
4-1-2025 8:30:00 AM	LT1	LT1
4-8-2025 8:55:00 AM	LT1	LT1
4-15-2025 8:00:00 AM	LT1	LT1
4-22-2025 7:55:00 AM	LT1	LT1
5-6-2025 7:45:00 AM	LT1	LT1
5-13-2025 8:20:00 AM	LT1	LT1
5-20-2025 7:50:00 AM	LT1	LT1
5-26-2025 7:50:00 AM	LT1	LT1
6-3-2025 8:05:00 AM	LT1	LT1
6-10-2025 8:05:00 AM	LT1	LT1
6-17-2025 8:40:00 AM	2	LT1
6-24-2025 7:50:00 AM	LT1	LT1
7-8-2025 8:53:00 AM	LT1	LT1
7-15-2025 9:25:00 AM	LT1	LT1
7-22-2025 9:15:00 AM	LT1	LT1
7-29-2025 8:45:00 AM	LT1	LT1
8-5-2025 7:50:00 AM	LT1	LT1

8-12-2025 8:00:00 AM	LT1	LT1	
8-18-2025 8:55:00 AM	LT1	LT1	
8-26-2025 9:15:00 AM	LT1	LT1	
9-2-2025 9:20:00 AM	LT1	LT1	
9-9-2025 9:25:00 AM	LT1	LT1	
9-16-2025 8:40:00 AM	1	LT1	
9-23-2025 7:45:00 AM	LT1	LT1	
10-6-2025 8:10:00 AM	LT1	LT1	
10-14-2025 8:15:00 AM	LT1	LT1	
10-21-2025 9:15:00 AM	LT1	LT1	
10-28-2025 9:05:00 AM	LT1	LT1	
11-3-2025 8:25:00 AM	LT1	LT1	
11-18-2025 8:20:00 AM	LT1	LT1	
11-25-2025 9:15:00 AM	LT1	LT1	
12-2-2025 8:15:00 AM	LT1	LT1	
12-9-2025 8:35:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	2	0	0

Pumphouse 4,
Cypress

1-14-2025 8:05:00 AM	LT1	LT1	
1-28-2025 7:55:00 AM	LT1	LT1	
2-4-2025 8:10:00 AM	LT1	LT1	
2-18-2025 8:05:00 AM	LT1	LT1	
3-11-2025 7:55:00 AM	LT1	LT1	
3-25-2025 8:20:00 AM	LT1	LT1	
4-8-2025 8:45:00 AM	LT1	LT1	
4-22-2025 8:05:00 AM	LT1	LT1	
6-3-2025 8:35:00 AM	LT1	LT1	
6-17-2025 8:15:00	LT1	LT1	

AM			
7-8-2025 8:31:00	LT1	LT1	
AM			
7-15-2025 8:50:00	LT1	LT1	
AM			
8-5-2025 7:42:00	LT1	LT1	
AM			
8-26-2025 8:50:00	LT1	LT1	
AM			
9-9-2025 9:10:00	LT1	LT1	
AM			
9-23-2025 7:55:00	LT1	LT1	
AM			
10-6-2025 7:45:00	LT1	LT1	
AM			
10-21-2025 8:45:00	LT1	LT1	
AM			
10-28-2025 8:30:00	LT1	LT1	
AM			
11-25-2025 8:40:00	<u>LT1</u>	<u>LT1</u>	
AM			
Total Positive:	0	0	0

Well 11, 20118
Beacon Rd

1-7-2025 8:10:00	LT1	LT1
AM		
1-14-2025 8:15:00	LT1	LT1
AM		
1-21-2025 8:15:00	LT1	LT1
AM		
1-28-2025 8:05:00	LT1	LT1
AM		
2-4-2025 8:20:00	LT1	LT1
AM		
2-11-2025 8:15:00	LT1	LT1
AM		
2-18-2025 8:15:00	LT1	LT1
AM		
2-25-2025 8:15:00	LT1	LT1
AM		
3-4-2025 8:10:00	LT1	LT1
AM		
3-11-2025 8:05:00	LT1	LT1
AM		
3-18-2025 8:25:00	LT1	LT1
AM		
3-25-2025 8:25:00	LT1	LT1
AM		
4-1-2025 8:45:00	LT1	LT1
AM		
4-8-2025 8:30:00	LT1	LT1
AM		
4-15-2025 8:20:00	LT1	LT1
AM		

4-22-2025 8:15:00 AM	LT1	LT1
5-6-2025 8:15:00 AM	LT1	LT1
5-13-2025 8:25:00 AM	LT1	LT1
5-20-2025 8:05:00 AM	LT1	LT1
5-26-2025 8:00:00 AM	LT1	LT1
6-3-2025 8:50:00 AM	LT1	LT1
6-10-2025 8:25:00 AM	LT1	LT1
6-17-2025 8:25:00 AM	LT1	LT1
6-24-2025 8:15:00 AM	LT1	LT1
7-8-2025 8:40:00 AM	LT1	LT1
7-15-2025 9:05:00 AM	LT1	LT1
7-22-2025 9:05:00 AM	LT1	LT1
7-29-2025 8:35:00 AM	LT1	LT1
8-5-2025 7:38:00 AM	LT1	LT1
8-12-2025 8:15:00 AM	LT1	LT1
8-18-2025 8:35:00 AM	LT1	LT1
8-26-2025 9:00:00 AM	LT1	LT1
9-2-2025 9:05:00 AM	LT1	LT1
9-16-2025 8:25:00 AM	LT1	LT1
9-23-2025 8:05:00 AM	LT1	LT1
10-6-2025 7:55:00 AM	LT1	LT1
10-14-2025 8:45:00 AM	LT1	LT1
10-21-2025 9:00:00 AM	LT1	LT1
10-28-2025 8:50:00 AM	LT1	LT1
11-3-2025 8:15:00 AM	LT1	LT1
11-18-2025 8:10:00 AM	LT1	LT1
11-25-2025 8:50:00 AM	LT1	LT1
12-2-2025 8:10:00 AM	LT1	LT1

12-9-2025 8:00:00
AM

LT1

LT1

Total Positive:

0

0

0

Result Values:

E - estimated

L - less than

G - greater than

Samples that contain total coliform:	7	3.98% of total
Samples that contain e. coli:	1	0.57% of total
Samples that contain fecal coliform:	0	0.00% of total
Number of consecutive samples that contain total coliform:	1	
Number of samples that contain total coliform in last 30 days:	0/0	
Total number of samples:	176	

Comments:

Environmental Health Officer
Feb 3 2026

FOR FURTHER INFORMATION PLEASE CALL: Jessica Hibbs (604) 870-7900



CERTIFICATE OF ANALYSIS

Work Order : **VA24A5730**
Amendment : **1**
Client : **District of Hope**
Contact : Steve Glasson
Address : 1225 Nelson Ave PO Box 609
 Hope BC Canada V0X 1L0
Telephone : ----
Project : 2024 metals testing
PO : 3064
C-O-C number : ----
Sampler : ----
Site : ----
Quote number : Q36001 - 2024 metals testing
No. of samples received : 4
No. of samples analysed : 4

Page : 1 of 4
Laboratory : ALS Environmental - Vancouver
Account Manager : Sneha Sansare
Address : 8081 Lougheed Highway
 Burnaby BC Canada V5A 1W9
Telephone : +1 604 253 4188
Date Samples Received : 19-Mar-2024 11:20
Date Analysis Commenced : 20-Mar-2024
Issue Date : 04-Apr-2024 12:58

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Metals, Burnaby, British Columbia
Sam Silveira	Analyst	Metals, Burnaby, British Columbia
Tracy Harley	Supervisor - Water Quality Instrumentation	Inorganics, Burnaby, British Columbia



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

<i>Unit</i>	<i>Description</i>
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
NTU	nephelometric turbidity units
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Workorder Comments

Amendment (02/04/2024): This report has been amended to allow the distribution of an Electronic Data Deliverable (EDD) not previously provided. All analysis results are as per the previous report.
Change from monthly effluent monitoring to 2024 metals testing.



Analytical Results

Sub-Matrix: Water (Matrix: Water)					Client sample ID	SILVER CREEK WATER SYSTEM	DISTRICT OF HOPE WATER SYSTEM 87 ZONE	DISTRICT OF HOPE WATER SYSTEM 138 ZONE	EAST KAWKAWA LAKE WATER SYSTEM	----
Client sampling date / time					19-Mar-2024 07:45	19-Mar-2024 08:00	19-Mar-2024 08:20	19-Mar-2024 08:35	----	
Analyte	CAS Number	Method/Lab	LOR	Unit	VA24A5730-001	VA24A5730-002	VA24A5730-003	VA24A5730-004	-----	
					Result	Result	Result	Result	----	
Physical Tests										
Colour, true	----	E329/VA	5.0	CU	<5.0	<5.0	<5.0	<5.0	----	
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/VA	0.60	mg/L	49.6	55.9	75.6	52.6	----	
pH	----	E108/VA	0.10	pH units	7.80	7.76	7.85	7.80	----	
Turbidity	----	E121/VA	0.10	NTU	<0.10	0.16	<0.10	<0.10	----	
Anions and Nutrients										
Fluoride	16984-48-8	E235.F/VA	0.020	mg/L	0.031	0.032	0.036	0.054	----	
Nitrate (as N)	14797-55-8	E235.NO3-L/V A	0.0050	mg/L	0.660	0.342	0.414	0.272	----	
Nitrite (as N)	14797-65-0	E235.NO2-L/V A	0.0010	mg/L	0.0010	<0.0010	<0.0010	<0.0010	----	
Total Metals										
Aluminum, total	7429-90-5	E420/VA	0.0030	mg/L	<0.0030	<0.0030	<0.0030	<0.0030	----	
Antimony, total	7440-36-0	E420/VA	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----	
Arsenic, total	7440-38-2	E420/VA	0.00010	mg/L	0.00091	0.00016	0.00031	<0.00010	----	
Barium, total	7440-39-3	E420/VA	0.00010	mg/L	0.0144	0.0100	0.00926	0.0297	----	
Beryllium, total	7440-41-7	E420/VA	0.000100	mg/L	<0.000100	<0.000100	<0.000100	<0.000100	----	
Bismuth, total	7440-69-9	E420/VA	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	----	
Boron, total	7440-42-8	E420/VA	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	----	
Cadmium, total	7440-43-9	E420/VA	0.0000050	mg/L	0.0000059	0.0000094	0.0000062	0.0000052	----	
Calcium, total	7440-70-2	E420/VA	0.050	mg/L	14.0	14.6	18.6	15.0	----	
Cesium, total	7440-46-2	E420/VA	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----	
Chromium, total	7440-47-3	E420/VA	0.00050	mg/L	0.00170	0.00134	0.00259	0.00118	----	
Cobalt, total	7440-48-4	E420/VA	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----	
Copper, total	7440-50-8	E420/VA	0.00050	mg/L	0.00189	0.00092	0.00254	0.00509	----	
Iron, total	7439-89-6	E420/VA	0.010	mg/L	<0.010	0.022	<0.010	<0.010	----	
Lead, total	7439-92-1	E420/VA	0.000050	mg/L	0.000184	0.000075	0.000264	0.000363	----	
Lithium, total	7439-93-2	E420/VA	0.0010	mg/L	0.0015	<0.0010	<0.0010	<0.0010	----	
Magnesium, total	7439-95-4	E420/VA	0.0050	mg/L	3.55	4.72	7.09	3.68	----	



Analytical Results

Sub-Matrix: Water (Matrix: Water)					Client sample ID	SILVER CREEK WATER SYSTEM	DISTRICT OF HOPE WATER SYSTEM 87 ZONE	DISTRICT OF HOPE WATER SYSTEM 138 ZONE	EAST KAWKAWA LAKE WATER SYSTEM	----
Client sampling date / time					19-Mar-2024 07:45	19-Mar-2024 08:00	19-Mar-2024 08:20	19-Mar-2024 08:35	----	
Analyte	CAS Number	Method/Lab	LOR	Unit	VA24A5730-001	VA24A5730-002	VA24A5730-003	VA24A5730-004	-----	
					Result	Result	Result	Result	----	
Total Metals										
Manganese, total	7439-96-5	E420/VA	0.00010	mg/L	0.00014	0.00269	0.00015	<0.00010	----	
Mercury, total	7439-97-6	E508/VA	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	----	
Molybdenum, total	7439-98-7	E420/VA	0.000050	mg/L	0.000725	0.000471	0.000533	0.000423	----	
Nickel, total	7440-02-0	E420/VA	0.00050	mg/L	<0.00050	0.00114	0.00094	0.00062	----	
Phosphorus, total	7723-14-0	E420/VA	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	----	
Potassium, total	7440-09-7	E420/VA	0.050	mg/L	1.21	0.716	0.888	1.44	----	
Rubidium, total	7440-17-7	E420/VA	0.00020	mg/L	<0.00020	0.00022	<0.00020	<0.00020	----	
Selenium, total	7782-49-2	E420/VA	0.000050	mg/L	0.000193	0.000266	0.000357	0.000242	----	
Silicon, total	7440-21-3	E420/VA	0.10	mg/L	7.20	6.62	7.43	7.04	----	
Silver, total	7440-22-4	E420/VA	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----	
Sodium, total	7440-23-5	E420/VA	0.050	mg/L	3.82	2.63	2.83	2.24	----	
Strontium, total	7440-24-6	E420/VA	0.00020	mg/L	0.0597	0.0655	0.0759	0.0704	----	
Sulfur, total	7704-34-9	E420/VA	0.50	mg/L	1.04	2.35	2.80	2.14	----	
Tellurium, total	13494-80-9	E420/VA	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	----	
Thallium, total	7440-28-0	E420/VA	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----	
Thorium, total	7440-29-1	E420/VA	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----	
Tin, total	7440-31-5	E420/VA	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----	
Titanium, total	7440-32-6	E420/VA	0.00030	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	----	
Tungsten, total	7440-33-7	E420/VA	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----	
Uranium, total	7440-61-1	E420/VA	0.000010	mg/L	0.000071	0.000078	0.000213	0.000129	----	
Vanadium, total	7440-62-2	E420/VA	0.00050	mg/L	0.00064	<0.00050	0.00062	<0.00050	----	
Zinc, total	7440-66-6	E420/VA	0.0030	mg/L	0.0085	0.0159	0.0394	0.0040	----	
Zirconium, total	7440-67-7	E420/VA	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	----	

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Please refer to the Accreditation section for an explanation of analyte accreditations.



QUALITY CONTROL INTERPRETIVE REPORT

<p>Work Order : VA24A5730</p> <p>Amendment : 1</p> <p>Client : District of Hope</p> <p>Contact : Steve Glasson</p> <p>Address : 1225 Nelson Ave PO Box 609 Hope BC Canada V0X 1L0</p> <p>Telephone : ----</p> <p>Project : 2024 metals testing</p> <p>PO : 3064</p> <p>C-O-C number : ----</p> <p>Sampler : ----</p> <p>Site : ----</p> <p>Quote number : Q36001 - 2024 metals testing</p> <p>No. of samples received : 4</p> <p>No. of samples analysed : 4</p>	<p>Page : 1 of 8</p> <p>Laboratory : ALS Environmental - Vancouver</p> <p>Account Manager : Sneha Sansare</p> <p>Address : 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9</p> <p>Telephone : +1 604 253 4188</p> <p>Date Samples Received : 19-Mar-2024 11:20</p> <p>Issue Date : 04-Apr-2024 12:58</p>
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This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

- Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
- CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
- DQO: Data Quality Objective.
- LOR: Limit of Reporting (detection limit).
- RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "----" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- Analysis Holding Time Outliers exist - please see following pages for full details.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.



Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Water** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
Anions and Nutrients : Fluoride in Water by IC											
HDPE DISTRICT OF HOPE WATER SYSTEM 138 ZONE	E235.F	19-Mar-2024	22-Mar-2024	28 days	3 days	✔	22-Mar-2024	28 days	3 days	✔	
Anions and Nutrients : Fluoride in Water by IC											
HDPE DISTRICT OF HOPE WATER SYSTEM 87 ZONE	E235.F	19-Mar-2024	22-Mar-2024	28 days	3 days	✔	22-Mar-2024	28 days	3 days	✔	
Anions and Nutrients : Fluoride in Water by IC											
HDPE EAST KAWKAWA LAKE WATER SYSTEM	E235.F	19-Mar-2024	22-Mar-2024	28 days	3 days	✔	22-Mar-2024	28 days	3 days	✔	
Anions and Nutrients : Fluoride in Water by IC											
HDPE SILVER CREEK WATER SYSTEM	E235.F	19-Mar-2024	22-Mar-2024	28 days	3 days	✔	22-Mar-2024	28 days	3 days	✔	
Anions and Nutrients : Nitrate in Water by IC (Low Level)											
HDPE DISTRICT OF HOPE WATER SYSTEM 138 ZONE	E235.NO3-L	19-Mar-2024	22-Mar-2024	3 days	3 days	✔	22-Mar-2024	3 days	3 days	✔	
Anions and Nutrients : Nitrate in Water by IC (Low Level)											
HDPE DISTRICT OF HOPE WATER SYSTEM 87 ZONE	E235.NO3-L	19-Mar-2024	22-Mar-2024	3 days	3 days	✔	22-Mar-2024	3 days	3 days	✔	
Anions and Nutrients : Nitrate in Water by IC (Low Level)											
HDPE EAST KAWKAWA LAKE WATER SYSTEM	E235.NO3-L	19-Mar-2024	22-Mar-2024	3 days	3 days	✔	22-Mar-2024	3 days	3 days	✔	



Matrix: **Water** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
Anions and Nutrients : Nitrate in Water by IC (Low Level)											
HDPE SILVER CREEK WATER SYSTEM	E235.NO3-L	19-Mar-2024	22-Mar-2024	3 days	3 days	✔	22-Mar-2024	3 days	3 days	✔	
Anions and Nutrients : Nitrite in Water by IC (Low Level)											
HDPE DISTRICT OF HOPE WATER SYSTEM 138 ZONE	E235.NO2-L	19-Mar-2024	22-Mar-2024	3 days	3 days	✔	22-Mar-2024	3 days	3 days	✔	
Anions and Nutrients : Nitrite in Water by IC (Low Level)											
HDPE DISTRICT OF HOPE WATER SYSTEM 87 ZONE	E235.NO2-L	19-Mar-2024	22-Mar-2024	3 days	3 days	✔	22-Mar-2024	3 days	3 days	✔	
Anions and Nutrients : Nitrite in Water by IC (Low Level)											
HDPE EAST KAWKAWA LAKE WATER SYSTEM	E235.NO2-L	19-Mar-2024	22-Mar-2024	3 days	3 days	✔	22-Mar-2024	3 days	3 days	✔	
Anions and Nutrients : Nitrite in Water by IC (Low Level)											
HDPE SILVER CREEK WATER SYSTEM	E235.NO2-L	19-Mar-2024	22-Mar-2024	3 days	3 days	✔	22-Mar-2024	3 days	3 days	✔	
Physical Tests : Colour (True) by Spectrometer (5 CU)											
HDPE DISTRICT OF HOPE WATER SYSTEM 138 ZONE	E329	19-Mar-2024	22-Mar-2024	3 days	3 days	✔	22-Mar-2024	3 days	3 days	✔	
Physical Tests : Colour (True) by Spectrometer (5 CU)											
HDPE DISTRICT OF HOPE WATER SYSTEM 87 ZONE	E329	19-Mar-2024	22-Mar-2024	3 days	3 days	✔	22-Mar-2024	3 days	3 days	✔	
Physical Tests : Colour (True) by Spectrometer (5 CU)											
HDPE EAST KAWKAWA LAKE WATER SYSTEM	E329	19-Mar-2024	22-Mar-2024	3 days	3 days	✔	22-Mar-2024	3 days	3 days	✔	
Physical Tests : Colour (True) by Spectrometer (5 CU)											
HDPE SILVER CREEK WATER SYSTEM	E329	19-Mar-2024	22-Mar-2024	3 days	3 days	✔	22-Mar-2024	3 days	3 days	✔	



Matrix: **Water** Evaluation: * = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis					
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval		
				Rec	Actual			Rec	Actual			
Physical Tests : pH by Meter												
HDPE EAST KAWKAWA LAKE WATER SYSTEM	E108	19-Mar-2024	22-Mar-2024	0.25 hrs	74 hrs	*	EHTR-FM	22-Mar-2024	0.25 hrs	77 hrs	*	EHTR-FM
Physical Tests : pH by Meter												
HDPE DISTRICT OF HOPE WATER SYSTEM 138 ZONE	E108	19-Mar-2024	22-Mar-2024	0.25 hrs	74 hrs	*	EHTR-FM	22-Mar-2024	0.25 hrs	78 hrs	*	EHTR-FM
Physical Tests : pH by Meter												
HDPE DISTRICT OF HOPE WATER SYSTEM 87 ZONE	E108	19-Mar-2024	22-Mar-2024	0.25 hrs	74 hrs	*	EHTR-FM	22-Mar-2024	0.25 hrs	78 hrs	*	EHTR-FM
Physical Tests : pH by Meter												
HDPE SILVER CREEK WATER SYSTEM	E108	19-Mar-2024	22-Mar-2024	0.25 hrs	74 hrs	*	EHTR-FM	22-Mar-2024	0.25 hrs	78 hrs	*	EHTR-FM
Physical Tests : Turbidity by Nephelometry												
HDPE DISTRICT OF HOPE WATER SYSTEM 138 ZONE	E121	19-Mar-2024	----	----	----			21-Mar-2024	3 days	2 days	✓	
Physical Tests : Turbidity by Nephelometry												
HDPE DISTRICT OF HOPE WATER SYSTEM 87 ZONE	E121	19-Mar-2024	----	----	----			21-Mar-2024	3 days	2 days	✓	
Physical Tests : Turbidity by Nephelometry												
HDPE EAST KAWKAWA LAKE WATER SYSTEM	E121	19-Mar-2024	----	----	----			21-Mar-2024	3 days	2 days	✓	
Physical Tests : Turbidity by Nephelometry												
HDPE SILVER CREEK WATER SYSTEM	E121	19-Mar-2024	----	----	----			21-Mar-2024	3 days	2 days	✓	
Total Metals : Total Mercury in Water by CVAAS												
Glass vial - total (lab preserved) DISTRICT OF HOPE WATER SYSTEM 138 ZONE	E508	19-Mar-2024	21-Mar-2024	28 days	2 days	✓		21-Mar-2024	28 days	2 days	✓	



Matrix: **Water** Evaluation: * = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
Total Metals : Total Mercury in Water by CVAAS											
Glass vial - total (lab preserved) DISTRICT OF HOPE WATER SYSTEM 87 ZONE	E508	19-Mar-2024	21-Mar-2024	28 days	2 days	✓	21-Mar-2024	28 days	2 days	✓	
Total Metals : Total Mercury in Water by CVAAS											
Glass vial - total (lab preserved) EAST KAWKAWA LAKE WATER SYSTEM	E508	19-Mar-2024	21-Mar-2024	28 days	2 days	✓	21-Mar-2024	28 days	2 days	✓	
Total Metals : Total Mercury in Water by CVAAS											
Glass vial - total (lab preserved) SILVER CREEK WATER SYSTEM	E508	19-Mar-2024	21-Mar-2024	28 days	2 days	✓	21-Mar-2024	28 days	2 days	✓	
Total Metals : Total Metals in Water by CRC ICPMS											
HDPE - total (lab preserved) DISTRICT OF HOPE WATER SYSTEM 138 ZONE	E420	19-Mar-2024	20-Mar-2024	180 days	1 days	✓	21-Mar-2024	180 days	2 days	✓	
Total Metals : Total Metals in Water by CRC ICPMS											
HDPE - total (lab preserved) DISTRICT OF HOPE WATER SYSTEM 87 ZONE	E420	19-Mar-2024	20-Mar-2024	180 days	1 days	✓	21-Mar-2024	180 days	2 days	✓	
Total Metals : Total Metals in Water by CRC ICPMS											
HDPE - total (lab preserved) EAST KAWKAWA LAKE WATER SYSTEM	E420	19-Mar-2024	20-Mar-2024	180 days	1 days	✓	21-Mar-2024	180 days	2 days	✓	
Total Metals : Total Metals in Water by CRC ICPMS											
HDPE - total (lab preserved) SILVER CREEK WATER SYSTEM	E420	19-Mar-2024	20-Mar-2024	180 days	2 days	✓	21-Mar-2024	180 days	2 days	✓	

Legend & Qualifier Definitions

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended
 Rec. HT: ALS recommended hold time (see units).



Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water** Evaluation: * = QC frequency outside specification; ✓ = QC frequency within specification.

Quality Control Sample Type	Method	QC Lot #	Count		Frequency (%)		Evaluation
			QC	Regular	Actual	Expected	
Analytical Methods							
Laboratory Duplicates (DUP)							
Colour (True) by Spectrometer (5 CU)	E329	1376521	1	5	20.0	5.0	✓
Fluoride in Water by IC	E235.F	1376509	1	11	9.0	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1376510	1	18	5.5	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1376511	1	17	5.8	5.0	✓
pH by Meter	E108	1376516	1	16	6.2	5.0	✓
Total Mercury in Water by CVAAS	E508	1375801	1	18	5.5	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1373620	2	17	11.7	5.0	✓
Turbidity by Nephelometry	E121	1375309	1	20	5.0	5.0	✓
Laboratory Control Samples (LCS)							
Colour (True) by Spectrometer (5 CU)	E329	1376521	1	5	20.0	5.0	✓
Fluoride in Water by IC	E235.F	1376509	1	11	9.0	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1376510	1	18	5.5	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1376511	1	17	5.8	5.0	✓
pH by Meter	E108	1376516	1	16	6.2	5.0	✓
Total Mercury in Water by CVAAS	E508	1375801	1	18	5.5	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1373620	1	17	5.8	5.0	✓
Turbidity by Nephelometry	E121	1375309	1	20	5.0	5.0	✓
Method Blanks (MB)							
Colour (True) by Spectrometer (5 CU)	E329	1376521	1	5	20.0	5.0	✓
Fluoride in Water by IC	E235.F	1376509	1	11	9.0	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1376510	1	18	5.5	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1376511	1	17	5.8	5.0	✓
Total Mercury in Water by CVAAS	E508	1375801	1	18	5.5	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1373620	1	17	5.8	5.0	✓
Turbidity by Nephelometry	E121	1375309	1	20	5.0	5.0	✓
Matrix Spikes (MS)							
Fluoride in Water by IC	E235.F	1376509	1	11	9.0	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1376510	1	18	5.5	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1376511	1	17	5.8	5.0	✓
Total Mercury in Water by CVAAS	E508	1375801	1	18	5.5	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1373620	1	17	5.8	5.0	✓



Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
pH by Meter	E108 ALS Environmental - Vancouver	Water	APHA 4500-H (mod)	pH is determined by potentiometric measurement with a pH electrode, and is conducted at ambient laboratory temperature (normally 20 ± 5°C). For high accuracy test results, pH should be measured in the field within the recommended 15 minute hold time.
Turbidity by Nephelometry	E121 ALS Environmental - Vancouver	Water	APHA 2130 B (mod)	Turbidity is measured by the nephelometric method, by measuring the intensity of light scatter under defined conditions.
Fluoride in Water by IC	E235.F ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrite in Water by IC (Low Level)	E235.NO2-L ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate in Water by IC (Low Level)	E235.NO3-L ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Colour (True) by Spectrometer (5 CU)	E329 ALS Environmental - Vancouver	Water	APHA 2120 C (mod)	Colour (True Colour) is determined by filtering a sample through a 0.45 micron membrane filter followed by analysis of the filtrate using the platinum-cobalt colourimetric method. Colour measurements can be highly pH dependent, and apply to the pH of the sample as received (at time of testing), without pH adjustment.
Total Metals in Water by CRC ICPMS	E420 ALS Environmental - Vancouver	Water	EPA 200.2/6020B (mod)	Water samples are digested with nitric and hydrochloric acids, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Total Mercury in Water by CVAAS	E508 ALS Environmental - Vancouver	Water	EPA 1631E (mod)	Water samples undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS
Hardness (Calculated) from Total Ca/Mg	EC100A ALS Environmental - Vancouver	Water	APHA 2340B	"Hardness (as CaCO ₃), from total Ca/Mg" is calculated from the sum of total Calcium and Magnesium concentrations, expressed in CaCO ₃ equivalents. "Total Hardness" refers to the sum of Calcium and Magnesium Hardness. Hardness is normally or preferentially calculated from dissolved Calcium and Magnesium concentrations, because it is a property of water due to dissolved divalent cations. Hardness from total Ca/Mg is normally comparable to Dissolved Hardness in non-turbid waters.

QUALITY CONTROL REPORT

Work Order	: VA24A5730	Page	: 1 of 10
Amendment	: 1		
Client	: District of Hope	Laboratory	: ALS Environmental - Vancouver
Contact	: Steve Glasson	Account Manager	: Sneha Sansare
Address	: 1225 Nelson Ave PO Box 609 Hope BC Canada V0X 1L0	Address	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
Telephone	:	Telephone	: +1 604 253 4188
Project	: 2024 metals testing	Date Samples Received	: 19-Mar-2024 11:20
PO	: 3064	Date Analysis Commenced	: 20-Mar-2024
C-O-C number	: ----	Issue Date	: 04-Apr-2024 12:58
Sampler	: ---- ----		
Site	: ----		
Quote number	: Q36001 - 2024 metals testing		
No. of samples received	: 4		
No. of samples analysed	: 4		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Vancouver Metals, Burnaby, British Columbia
Sam Silveira	Analyst	Vancouver Metals, Burnaby, British Columbia
Tracy Harley	Supervisor - Water Quality Instrumentation	Vancouver Inorganics, Burnaby, British Columbia



General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.

CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.

DQO = Data Quality Objective.

LOR = Limit of Reporting (detection limit).

RPD = Relative Percent Difference

= Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.



Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: Water					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Physical Tests (QC Lot: 1375309)											
KS2400917-001	Anonymous	Turbidity	----	E121	0.10	NTU	<0.10	<0.10	0	Diff <2x LOR	----
Physical Tests (QC Lot: 1376516)											
VA24A5797-001	Anonymous	pH	----	E108	0.10	pH units	7.61	7.61	0.00%	4%	----
Physical Tests (QC Lot: 1376521)											
VA24A5797-001	Anonymous	Colour, true	----	E329	5.0	CU	20.9	22.7	1.9	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1376509)											
VA24A5763-001	Anonymous	Fluoride	16984-48-8	E235.F	0.020	mg/L	0.028	0.028	0.0002	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1376510)											
VA24A5763-001	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	0.0050	mg/L	0.634	0.633	0.0237%	20%	----
Anions and Nutrients (QC Lot: 1376511)											
VA24A5763-001	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	0.0010	mg/L	0.0057	0.0058	0.0001	Diff <2x LOR	----
Total Metals (QC Lot: 1373620)											
VA24A5794-001	Anonymous	Aluminum, total	7429-90-5	E420	0.0030	mg/L	0.0282	0.0309	0.0027	Diff <2x LOR	----
VA24A5794-001	Anonymous	Antimony, total	7440-36-0	E420	0.00010	mg/L	0.0111	0.0109	1.42%	20%	----
		Arsenic, total	7440-38-2	E420	0.00010	mg/L	0.00507	0.00507	0.0534%	20%	----
		Barium, total	7440-39-3	E420	0.00010	mg/L	0.0427	0.0427	0.178%	20%	----
		Beryllium, total	7440-41-7	E420	0.000020	mg/L	<0.000020	<0.000020	0	Diff <2x LOR	----
		Bismuth, total	7440-69-9	E420	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		Boron, total	7440-42-8	E420	0.010	mg/L	0.114	0.115	0.504%	20%	----
		Cadmium, total	7440-43-9	E420	0.0000050	mg/L	0.0000221	0.0000260	0.0000039	Diff <2x LOR	----
		Calcium, total	7440-70-2	E420	0.050	mg/L	25.2	25.9	2.95%	20%	----
		Cesium, total	7440-46-2	E420	0.000010	mg/L	0.00254	0.00252	0.706%	20%	----
		Chromium, total	7440-47-3	E420	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		Cobalt, total	7440-48-4	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Copper, total	7440-50-8	E420	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		Iron, total	7439-89-6	E420	0.010	mg/L	<0.010	<0.010	0	Diff <2x LOR	----
		Lead, total	7439-92-1	E420	0.000050	mg/L	0.000212	0.000215	0.000002	Diff <2x LOR	----
		Lithium, total	7439-93-2	E420	0.0010	mg/L	0.0599	0.0618	3.22%	20%	----
		Magnesium, total	7439-95-4	E420	0.0050	mg/L	1.95	1.96	0.370%	20%	----
		Manganese, total	7439-96-5	E420	0.00010	mg/L	0.0813	0.0815	0.182%	20%	----



Sub-Matrix: Water					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Total Metals (QC Lot: 1373620) - continued											
VA24A5794-001	Anonymous	Molybdenum, total	7439-98-7	E420	0.000050	mg/L	0.0117	0.0115	1.52%	20%	----
		Nickel, total	7440-02-0	E420	0.000050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		Phosphorus, total	7723-14-0	E420	0.050	mg/L	<0.050	<0.050	0	Diff <2x LOR	----
		Potassium, total	7440-09-7	E420	0.050	mg/L	15.1	15.0	1.08%	20%	----
		Rubidium, total	7440-17-7	E420	0.00020	mg/L	0.0188	0.0193	2.48%	20%	----
		Selenium, total	7782-49-2	E420	0.000050	mg/L	0.00104	0.00106	1.85%	20%	----
		Silicon, total	7440-21-3	E420	0.10	mg/L	1.74	1.74	0.264%	20%	----
		Silver, total	7440-22-4	E420	0.000010	mg/L	<0.000010	<0.000010	0	Diff <2x LOR	----
		Sodium, total	7440-23-5	E420	0.050	mg/L	35.8	35.0	2.09%	20%	----
		Strontium, total	7440-24-6	E420	0.00020	mg/L	0.524	0.517	1.50%	20%	----
		Sulfur, total	7704-34-9	E420	0.50	mg/L	26.2	26.2	0.0570%	20%	----
		Tellurium, total	13494-80-9	E420	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
		Thallium, total	7440-28-0	E420	0.000010	mg/L	0.000053	0.000052	0.000001	Diff <2x LOR	----
		Thorium, total	7440-29-1	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Tin, total	7440-31-5	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Titanium, total	7440-32-6	E420	0.00030	mg/L	0.00037	0.00040	0.00002	Diff <2x LOR	----
		Tungsten, total	7440-33-7	E420	0.00010	mg/L	0.00121	0.00121	0.189%	20%	----
		Uranium, total	7440-61-1	E420	0.000010	mg/L	0.000466	0.000472	1.28%	20%	----
		Vanadium, total	7440-62-2	E420	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		Zinc, total	7440-66-6	E420	0.0030	mg/L	<0.0030	<0.0030	0	Diff <2x LOR	----
		Zirconium, total	7440-67-7	E420	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
Total Metals (QC Lot: 1375801)											
FJ2400798-009	Anonymous	Mercury, total	7439-97-6	E508	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----



Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: Water

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 1375309)						
Turbidity	---	E121	0.1	NTU	<0.10	---
Physical Tests (QCLot: 1376521)						
Colour, true	---	E329	5	CU	<5.0	---
Anions and Nutrients (QCLot: 1376509)						
Fluoride	16984-48-8	E235.F	0.02	mg/L	<0.020	---
Anions and Nutrients (QCLot: 1376510)						
Nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	<0.0050	---
Anions and Nutrients (QCLot: 1376511)						
Nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	<0.0010	---
Total Metals (QCLot: 1373620)						
Aluminum, total	7429-90-5	E420	0.003	mg/L	<0.0030	---
Antimony, total	7440-36-0	E420	0.0001	mg/L	<0.00010	---
Arsenic, total	7440-38-2	E420	0.0001	mg/L	<0.00010	---
Barium, total	7440-39-3	E420	0.0001	mg/L	<0.00010	---
Beryllium, total	7440-41-7	E420	0.00002	mg/L	<0.000020	---
Bismuth, total	7440-69-9	E420	0.00005	mg/L	<0.000050	---
Boron, total	7440-42-8	E420	0.01	mg/L	<0.010	---
Cadmium, total	7440-43-9	E420	0.000005	mg/L	<0.0000050	---
Calcium, total	7440-70-2	E420	0.05	mg/L	<0.050	---
Cesium, total	7440-46-2	E420	0.00001	mg/L	<0.000010	---
Chromium, total	7440-47-3	E420	0.0005	mg/L	<0.00050	---
Cobalt, total	7440-48-4	E420	0.0001	mg/L	<0.00010	---
Copper, total	7440-50-8	E420	0.0005	mg/L	<0.00050	---
Iron, total	7439-89-6	E420	0.01	mg/L	<0.010	---
Lead, total	7439-92-1	E420	0.00005	mg/L	<0.000050	---
Lithium, total	7439-93-2	E420	0.001	mg/L	<0.0010	---
Magnesium, total	7439-95-4	E420	0.005	mg/L	<0.0050	---
Manganese, total	7439-96-5	E420	0.0001	mg/L	<0.00010	---
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	<0.000050	---
Nickel, total	7440-02-0	E420	0.0005	mg/L	<0.00050	---
Phosphorus, total	7723-14-0	E420	0.05	mg/L	<0.050	---
Potassium, total	7440-09-7	E420	0.05	mg/L	<0.050	---



Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 1373620) - continued						
Rubidium, total	7440-17-7	E420	0.0002	mg/L	<0.00020	----
Selenium, total	7782-49-2	E420	0.00005	mg/L	<0.000050	----
Silicon, total	7440-21-3	E420	0.1	mg/L	<0.10	----
Silver, total	7440-22-4	E420	0.00001	mg/L	<0.000010	----
Sodium, total	7440-23-5	E420	0.05	mg/L	<0.050	----
Strontium, total	7440-24-6	E420	0.0002	mg/L	<0.00020	----
Sulfur, total	7704-34-9	E420	0.5	mg/L	<0.50	----
Tellurium, total	13494-80-9	E420	0.0002	mg/L	<0.00020	----
Thallium, total	7440-28-0	E420	0.00001	mg/L	<0.000010	----
Thorium, total	7440-29-1	E420	0.0001	mg/L	<0.00010	----
Tin, total	7440-31-5	E420	0.0001	mg/L	<0.00010	----
Titanium, total	7440-32-6	E420	0.0003	mg/L	<0.00030	----
Tungsten, total	7440-33-7	E420	0.0001	mg/L	<0.00010	----
Uranium, total	7440-61-1	E420	0.00001	mg/L	<0.000010	----
Vanadium, total	7440-62-2	E420	0.0005	mg/L	<0.00050	----
Zinc, total	7440-66-6	E420	0.003	mg/L	<0.0030	----
Zirconium, total	7440-67-7	E420	0.0002	mg/L	<0.00020	----
Total Metals (QCLot: 1375801)						
Mercury, total	7439-97-6	E508	0.000005	mg/L	<0.0000050	----



Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: Water

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 1375309)									
Turbidity	----	E121	0.1	NTU	200 NTU	101	85.0	115	----
Physical Tests (QCLot: 1376516)									
pH	----	E108	----	pH units	7 pH units	100	98.0	102	----
Physical Tests (QCLot: 1376521)									
Colour, true	----	E329	5	CU	100 CU	102	85.0	115	----
Anions and Nutrients (QCLot: 1376509)									
Fluoride	16984-48-8	E235.F	0.02	mg/L	1 mg/L	96.0	90.0	110	----
Anions and Nutrients (QCLot: 1376510)									
Nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	2.5 mg/L	100	90.0	110	----
Anions and Nutrients (QCLot: 1376511)									
Nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	0.5 mg/L	93.6	90.0	110	----
Total Metals (QCLot: 1373620)									
Aluminum, total	7429-90-5	E420	0.003	mg/L	2 mg/L	102	80.0	120	----
Antimony, total	7440-36-0	E420	0.0001	mg/L	1 mg/L	107	80.0	120	----
Arsenic, total	7440-38-2	E420	0.0001	mg/L	1 mg/L	106	80.0	120	----
Barium, total	7440-39-3	E420	0.0001	mg/L	0.25 mg/L	102	80.0	120	----
Beryllium, total	7440-41-7	E420	0.00002	mg/L	0.1 mg/L	104	80.0	120	----
Bismuth, total	7440-69-9	E420	0.00005	mg/L	1 mg/L	99.9	80.0	120	----
Boron, total	7440-42-8	E420	0.01	mg/L	1 mg/L	104	80.0	120	----
Cadmium, total	7440-43-9	E420	0.000005	mg/L	0.1 mg/L	101	80.0	120	----
Calcium, total	7440-70-2	E420	0.05	mg/L	50 mg/L	102	80.0	120	----
Cesium, total	7440-46-2	E420	0.00001	mg/L	0.05 mg/L	106	80.0	120	----
Chromium, total	7440-47-3	E420	0.0005	mg/L	0.25 mg/L	101	80.0	120	----
Cobalt, total	7440-48-4	E420	0.0001	mg/L	0.25 mg/L	102	80.0	120	----
Copper, total	7440-50-8	E420	0.0005	mg/L	0.25 mg/L	100	80.0	120	----
Iron, total	7439-89-6	E420	0.01	mg/L	1 mg/L	98.9	80.0	120	----
Lead, total	7439-92-1	E420	0.00005	mg/L	0.5 mg/L	100	80.0	120	----
Lithium, total	7439-93-2	E420	0.001	mg/L	0.25 mg/L	93.6	80.0	120	----
Magnesium, total	7439-95-4	E420	0.005	mg/L	50 mg/L	109	80.0	120	----
Manganese, total	7439-96-5	E420	0.0001	mg/L	0.25 mg/L	101	80.0	120	----
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	0.25 mg/L	104	80.0	120	----



Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 1373620) - continued									
Nickel, total	7440-02-0	E420	0.0005	mg/L	0.5 mg/L	101	80.0	120	----
Phosphorus, total	7723-14-0	E420	0.05	mg/L	10 mg/L	111	80.0	120	----
Potassium, total	7440-09-7	E420	0.05	mg/L	50 mg/L	98.4	80.0	120	----
Rubidium, total	7440-17-7	E420	0.0002	mg/L	0.1 mg/L	104	80.0	120	----
Selenium, total	7782-49-2	E420	0.00005	mg/L	1 mg/L	105	80.0	120	----
Silicon, total	7440-21-3	E420	0.1	mg/L	10 mg/L	102	80.0	120	----
Silver, total	7440-22-4	E420	0.00001	mg/L	0.1 mg/L	98.8	80.0	120	----
Sodium, total	7440-23-5	E420	0.05	mg/L	50 mg/L	105	80.0	120	----
Strontium, total	7440-24-6	E420	0.0002	mg/L	0.25 mg/L	101	80.0	120	----
Sulfur, total	7704-34-9	E420	0.5	mg/L	50 mg/L	94.3	80.0	120	----
Tellurium, total	13494-80-9	E420	0.0002	mg/L	0.1 mg/L	107	80.0	120	----
Thallium, total	7440-28-0	E420	0.00001	mg/L	1 mg/L	99.6	80.0	120	----
Thorium, total	7440-29-1	E420	0.0001	mg/L	0.1 mg/L	102	80.0	120	----
Tin, total	7440-31-5	E420	0.0001	mg/L	0.5 mg/L	106	80.0	120	----
Titanium, total	7440-32-6	E420	0.0003	mg/L	0.25 mg/L	100	80.0	120	----
Tungsten, total	7440-33-7	E420	0.0001	mg/L	0.1 mg/L	101	80.0	120	----
Uranium, total	7440-61-1	E420	0.00001	mg/L	0.005 mg/L	105	80.0	120	----
Vanadium, total	7440-62-2	E420	0.0005	mg/L	0.5 mg/L	102	80.0	120	----
Zinc, total	7440-66-6	E420	0.003	mg/L	0.5 mg/L	98.8	80.0	120	----
Zirconium, total	7440-67-7	E420	0.0002	mg/L	0.1 mg/L	104	80.0	120	----
Total Metals (QCLot: 1375801)									
Mercury, total	7439-97-6	E508	0.000005	mg/L	0.0001 mg/L	102	80.0	120	----



Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Anions and Nutrients (QCLot: 1376509)										
VA24A5763-002	Anonymous	Fluoride	16984-48-8	E235.F	1.03 mg/L	1 mg/L	103	75.0	125	----
Anions and Nutrients (QCLot: 1376510)										
VA24A5763-002	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	2.56 mg/L	2.5 mg/L	102	75.0	125	----
Anions and Nutrients (QCLot: 1376511)										
VA24A5763-002	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	0.489 mg/L	0.5 mg/L	97.8	75.0	125	----
Total Metals (QCLot: 1373620)										
VA24A5794-002	Anonymous	Aluminum, total	7429-90-5	E420	0.197 mg/L	0.2 mg/L	98.6	70.0	130	----
		Antimony, total	7440-36-0	E420	0.0196 mg/L	0.02 mg/L	97.9	70.0	130	----
		Arsenic, total	7440-38-2	E420	0.0199 mg/L	0.02 mg/L	99.3	70.0	130	----
		Barium, total	7440-39-3	E420	ND mg/L	0.02 mg/L	ND	70.0	130	----
		Beryllium, total	7440-41-7	E420	0.0372 mg/L	0.04 mg/L	93.1	70.0	130	----
		Bismuth, total	7440-69-9	E420	0.00907 mg/L	0.01 mg/L	90.7	70.0	130	----
		Boron, total	7440-42-8	E420	ND mg/L	0.1 mg/L	ND	70.0	130	----
		Cadmium, total	7440-43-9	E420	0.00384 mg/L	0.004 mg/L	96.1	70.0	130	----
		Calcium, total	7440-70-2	E420	ND mg/L	4 mg/L	ND	70.0	130	----
		Cesium, total	7440-46-2	E420	0.00970 mg/L	0.01 mg/L	97.0	70.0	130	----
		Chromium, total	7440-47-3	E420	0.0381 mg/L	0.04 mg/L	95.3	70.0	130	----
		Cobalt, total	7440-48-4	E420	0.0190 mg/L	0.02 mg/L	95.2	70.0	130	----
		Copper, total	7440-50-8	E420	0.0189 mg/L	0.02 mg/L	94.6	70.0	130	----
		Iron, total	7439-89-6	E420	1.88 mg/L	2 mg/L	93.9	70.0	130	----
		Lead, total	7439-92-1	E420	0.0182 mg/L	0.02 mg/L	91.2	70.0	130	----
		Lithium, total	7439-93-2	E420	0.0812 mg/L	0.1 mg/L	81.2	70.0	130	----
		Magnesium, total	7439-95-4	E420	ND mg/L	1 mg/L	ND	70.0	130	----
		Manganese, total	7439-96-5	E420	ND mg/L	0.02 mg/L	ND	70.0	130	----
		Molybdenum, total	7439-98-7	E420	0.0196 mg/L	0.02 mg/L	98.3	70.0	130	----
		Nickel, total	7440-02-0	E420	0.0382 mg/L	0.04 mg/L	95.4	70.0	130	----
		Phosphorus, total	7723-14-0	E420	9.95 mg/L	10 mg/L	99.5	70.0	130	----
		Potassium, total	7440-09-7	E420	ND mg/L	4 mg/L	ND	70.0	130	----
		Rubidium, total	7440-17-7	E420	0.0184 mg/L	0.02 mg/L	91.8	70.0	130	----
		Selenium, total	7782-49-2	E420	0.0396 mg/L	0.04 mg/L	99.0	70.0	130	----
		Silicon, total	7440-21-3	E420	9.38 mg/L	10 mg/L	93.8	70.0	130	----



Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Total Metals (QCLot: 1373620) - continued										
VA24A5794-002	Anonymous	Silver, total	7440-22-4	E420	0.00384 mg/L	0.004 mg/L	96.0	70.0	130	----
		Sodium, total	7440-23-5	E420	ND mg/L	2 mg/L	ND	70.0	130	----
		Strontium, total	7440-24-6	E420	ND mg/L	0.02 mg/L	ND	70.0	130	----
		Sulfur, total	7704-34-9	E420	ND mg/L	20 mg/L	ND	70.0	130	----
		Tellurium, total	13494-80-9	E420	0.0410 mg/L	0.04 mg/L	103	70.0	130	----
		Thallium, total	7440-28-0	E420	0.00350 mg/L	0.004 mg/L	87.6	70.0	130	----
		Thorium, total	7440-29-1	E420	0.0186 mg/L	0.02 mg/L	93.2	70.0	130	----
		Tin, total	7440-31-5	E420	0.0201 mg/L	0.02 mg/L	100	70.0	130	----
		Titanium, total	7440-32-6	E420	0.0394 mg/L	0.04 mg/L	98.5	70.0	130	----
		Tungsten, total	7440-33-7	E420	0.0185 mg/L	0.02 mg/L	92.7	70.0	130	----
		Uranium, total	7440-61-1	E420	0.00372 mg/L	0.004 mg/L	93.1	70.0	130	----
		Vanadium, total	7440-62-2	E420	0.0970 mg/L	0.1 mg/L	97.0	70.0	130	----
		Zinc, total	7440-66-6	E420	0.384 mg/L	0.4 mg/L	96.0	70.0	130	----
		Zirconium, total	7440-67-7	E420	0.0404 mg/L	0.04 mg/L	101	70.0	130	----
Total Metals (QCLot: 1375801)										
FJ2400798-012	Anonymous	Mercury, total	7439-97-6	E508	0.000101 mg/L	0.0001 mg/L	101	70.0	130	----



Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here
(lab use only)

COC Number: 17 -

Page of

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Report To Contact and company name below will appear on the final report		Report Format / Distribution			Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)								
Company:	District of Hope	Select Report Format: <input type="checkbox"/> PDF <input checked="" type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL)			Regular [R] <input checked="" type="checkbox"/> Standard TAT if received by 3 pm - business days - no surcharges apply								
Contact:	Steve Glasson	Quality Control (QC) Report with Report <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			PRIORITY (Business Days)	4 day [P4-20%] <input type="checkbox"/>		EMERGENCY	1 Business day [E1 - 100%] <input type="checkbox"/>				
Phone:	604-860-9527	<input type="checkbox"/> Compare Results to Criteria on Report - provide details below if box checked				3 day [P3-25%] <input type="checkbox"/>			Same Day, Weekend or Statutory holiday [E2-200%] <input type="checkbox"/>				
Company address below will appear on the final report		Select Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX				2 day [P2-50%] <input type="checkbox"/>			(Laboratory opening fees may apply)				
Street:	1225 Nelson Ave	Email 1 or Fax: sglasson@hope.ca			Date and Time Required for all E&P TATs:								
City/Province:	Hope BC	Email 2: bclarke@hope.ca			For tests that can not be performed according to the service level selected, you will be contacted.								
Postal Code:	V0X1L4	Email 3: tfoster@hope.ca			Analysis Request								
Invoice To	Same as Report To <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Invoice Distribution			Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below								
	Copy of Invoice with Report <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Select Invoice Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX											
Company:		Email 1 or Fax: tfoster@hope.ca			TOTAL METALS	PH HARDNESS	TURBIDITY/COLOR	TOTAL METAL CORY	NITRATE/NITRITE	FLOURIDE	SAMPLES ON HOLD	Sample is hazardous (please provide further detail)	NUMBER OF CONTAINERS
Contact:		Email 2: sglasson@hope.ca											
Project Information		Oil and Gas Required Fields (client use)											
ALS Account # / Quote #:		AFE/Cost Center:	PO#										
Job #:		Major/Minor Code:	Routing Code:										
PO / AFE:	3064	Requisitioner:											
LSD:		Location:											
ALS Lab Work Order # (lab use only):		ALS Contact:	Sampler:										
ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type									
	SILVER CREEK WATER SYSTEM	24-Mar-19	7:45AM	Water									
	DISTRICT OF HOPE WATER SYSTEM 87 ZONE	24-Mar-19	8:00AM	Water	✓	✓	✓	✓	✓	✓		N	6
	DISTRICT OF HOPE WATER SYSTEM 138 ZONE	24-Mar-19	8:20AM	Water	✓	✓	✓	✓	✓	✓		N	6
	EAST KAWKAWA LAKE WATER SYSTEM	24-Mar-19	8:35AM	Water	✓	✓	✓	✓	✓	✓		N	6

Environmental Division
Vancouver
Work Order Reference
VA24A5730



Telephone: +1 604 263 4188

Drinking Water (DW) Samples¹ (client use)	Special Instructions:
Are samples taken from a Regulated DW System? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
Are samples for human consumption/ use? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
SHIPMENT RELEASE (client use)	
DAN McMILLAN	Time: 11:25

ie drop-down list below	SAMPLE CONDITION AS RECEIVED (lab use only)			
	Frozen <input type="checkbox"/>	SIF Observations	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	Ice Packs <input checked="" type="checkbox"/> Ice Cubes <input type="checkbox"/>	Custody seal intact	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	Cooling Initiated <input type="checkbox"/>			
	INITIAL COOLER TEMPERATURES °C		FINAL COOLER TEMPERATURES °C	
			5	
IN (lab use only)	FINAL SHIPMENT RECEPTION (lab use only)			
Time:	Received by:	Date:	Time:	
	JL	19-3-24	11:20am	