



2025 Annual Drinking Water Quality Report  
Facility No. 12-098-00001

April 21, 2026



Gunite Reservoir - 2025

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**Appendix:**

Drinking Water Package – ALS Environmental

**Attachments:**

Municipal Water Supply Emergency Response and Contingency Plan - 2026 Update<sup>1</sup>

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<sup>1</sup> Will be included in Interior Health submission only.

## **1.0 Introduction**

The purpose of this report is to provide information on the monitoring and maintenance of the Town of Golden's water distribution system over the course of the last calendar year, as directed in the municipality's Interior Health Authority (IHA) Conditions on Permit (CoP) and mandated by the Drinking Water Protection Act.

The Drinking Water Quality Monitoring program generates data for the continuous trending of the community's water quality, as well as the performance of the entire distribution system in a reliable and systematic way. The program allows for potential health hazards to be quickly identified and corrected and for consumer enquiries to be accurately addressed in a timely manner.

Included in this document is:

- A brief introduction to the Town of Golden's water distribution system;
- Annual consumption information;
- Drinking water monitoring and testing program information;
- A description of any major improvements made to the system within the last calendar year;
- A brief summary of planned initiatives for the current year;
- A summary of all water sample results collected.

The information contained herein collectively serves to confirm and verify the water system's continued performance in delivering a safe and sufficient supply of drinking water to the community.

## **2.0 Water Distribution System Overview**

### ***Groundwater Wells:***

Currently there are four production wells in operation with a rated total (100% or 24 hour) pumping capacity of 1358 Imperial Gallons per Minute (Igpm) or 103 Litres per second (Lps) providing water to a common distribution system. One well is located on the north side of the Kicking Horse River and three are located on the south side.

Best practices in well pump operation suggest that wells be designed to operate at a maximum of eighteen hours per day allowing for maintenance over the workday. Based on this premise, the total pumping capacity (75% or 18 hour) that should be relied upon is 1019 Igpm or 77 Lps.

### ***Booster Stations:***

There are two booster stations servicing the benchlands of the community. The NE Booster Station supplies water to the north bench while the Selkirk Booster Station supplies water to the south bench. The NE Booster Station houses two pumps with rated capacities of 14 Lps and 17 Lps and the SE Booster Station houses two pumps with a matched capacity of 10 Lps each. Best practices in booster station operation suggest they be designed to operate at a maximum of twenty-one hours per day allowing for maintenance over the workday.

### ***Reservoirs:***

There are five reservoirs located at three reservoir sites within the municipality. The total available reservoir storage capacity is 1,530,000 Igal or 6.96 Mega Litres (ML). The first site is located on the north bench, the second and third sites are both located on the south bench.

***Pressure Zones:***

There are four pressure zones throughout the system. Two pressure zones service the north bench, one services the south bench, and the remainder of the community comprises the fourth pressure zone.

***Distribution System:***

Pipe sizes range from 150mm to 300mm. The pipe network includes asbestos cement (AC), polyvinylchloride (PVC), yellow jacket ductile iron (YJDI), ductile iron (DI), cast iron (CI) and polyethylene (PE) types.

There are about 182 fire hydrants included in an annual spring and fall maintenance program. Hydrant reports are required to be forwarded to operations staff each time a hydrant is used by the fire department to ensure those hydrants are rechecked and maintained as necessary. Hydrants are not typically used for filling tankards other than fire trucks; however occasionally select hydrants are used for the purposes of fire department training or filling the municipal water truck and street sweeper for street cleaning purposes.

***13<sup>th</sup> Street Well:***

This well is not connected to the distribution system. It is used for non-potable water use by the municipality as well as authorized contractors.

***Potable Bulk Water Filling Station:***

This facility serves as a potable filling station for authorized potable water haulers and rural citizens requiring potable water and it is supplied by the water distribution system.

***Consumption Stats:***

For overall annual system demand values are summarized in Section 11.0. For a visual representation of consumption by sector refer to Figure 1.

In 2025 overall consumption increased by 2.4% from 2024, however the Maximum Day Demand (MDD) decreased by 14.4%. The MDD occurred on Tuesday, July 8<sup>th</sup>.

The MDD figure is typically assumed to be reflective of residential and municipal irrigating as extensive irrigating on a given day would be a main contributor to this type of demand.

Corporate communications and Bylaw play critical roles in terms of necessary education and enforcement of bylaw sprinkling regulations to reduce non-permitted off hour/off day residential irrigation.

In 2025, Industrial, Commercial, and Institutional (ICI) demand accounted for about 38.7% of the total water pumped, a decrease of 4.1% of total water pumped over 2024.

Municipal parks demand accounted for about 1.8% of the total water pumped, a decrease of 0.1% of total water pumped over 2024.

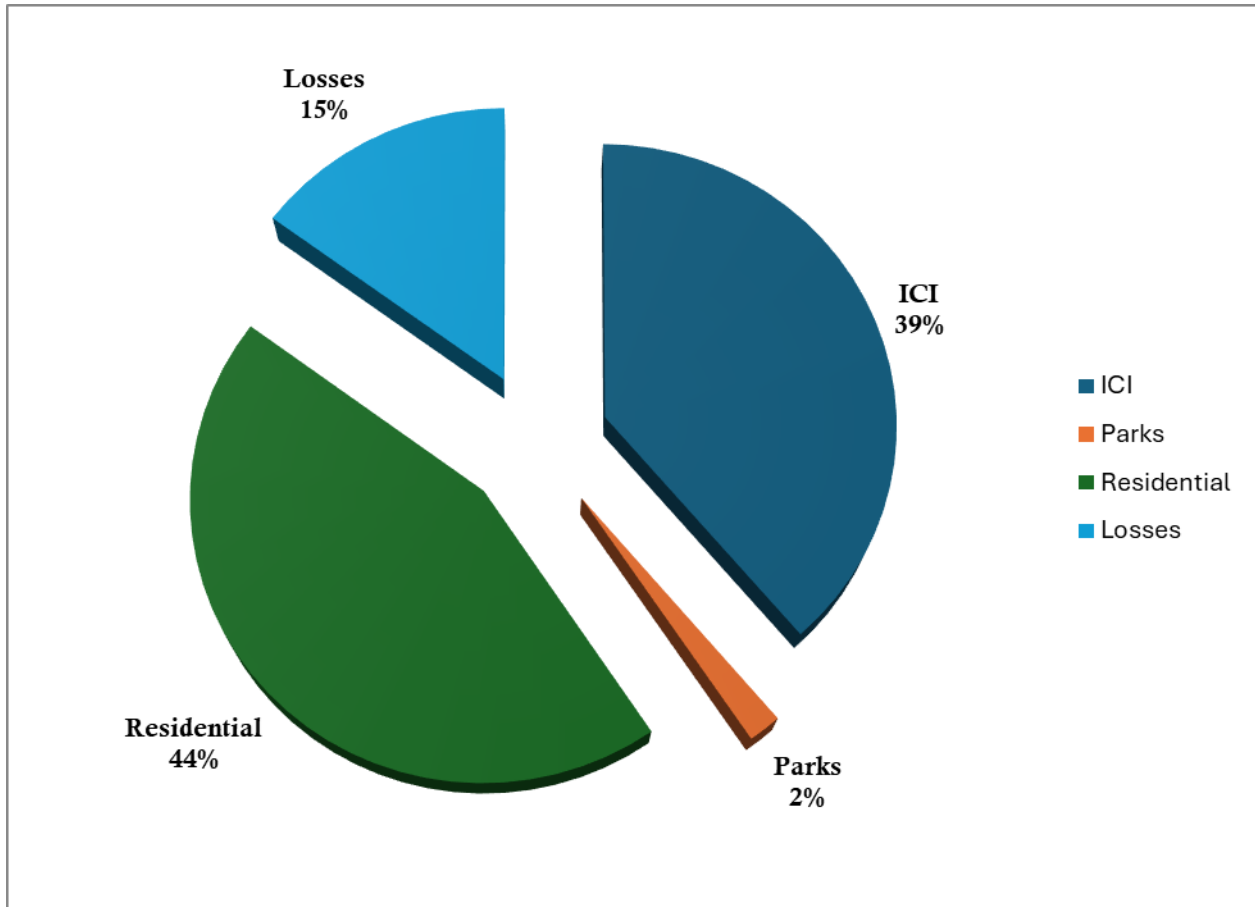
The remaining portion of the total volume pumped, represented as 59.5%, is in large part residential demand. Of the unmetered percentage of 59.5%, about 15%<sup>2</sup> is considered attributable to system

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<sup>2</sup> Based on the 2025 Total Pumped volume, 15% represents about 87,033 Igpd or about 60 Igpm. Environment Canada estimates that an average of 13% of municipal water is unaccounted for.

losses through leakage and other unaccounted-for water usage. Unaccounted-for usage may include fire flow demand and municipal and contractor usage from hydrants for example. Therefore, approximately 44.5% of the total water pumped is assumed to be residential demand, which is an increase of 4.2% over 2024.

*Figure 1 – 2025 Water Use by Sector*



### **3.0 Testing and Monitoring Program**

The water quality monitoring program includes source and distribution system monitoring with tabulated results shown in Section 12.0.

Routine weekly samples are collected at each well head and at alternating reservoir sites. These samples are collected by staff and forwarded to an accredited lab for microbiological testing. Lab results along with consumption and turbidity are reported to the Environmental Health Officer on a monthly basis.

A total of 263 samples were analyzed for total coliforms and E.coli. with one sample testing positive with total coliform counts of one or more. The positive Total Coliform sample was taken from the NE Reservoir Complex, with two successive clear resamples being the result.

As per schedule B of the Drinking Water Protection Act, the Town of Golden is required to analyze four (4) samples per month (population less than 5000). To emphasize the commitment to providing safe drinking water, the number of samples analyzed averaged twenty-two (22) per month.

The Town of Golden also conducts full spectrum analyses on each well source on an annual basis for physical and chemical parameters; these results are summarized in the appended tables.

#### **4.0 2025 System Maintenance and Repairs**

##### ***Groundwater Wells and Booster Stations:***

Well 7 planning work continued, and construction of the well was tendered and closed in December.

13<sup>th</sup> Street Well pump and motor were replaced.

Selkirk Booster Station motor and control valve were replaced.

##### ***Reservoirs:***

The Town of Golden has adopted an operations and maintenance (O&M) program that includes reservoir disinfections, draining, cleaning and inspections on an approximate 5-year cycle.

All reservoirs with the exception of the Hypalon reservoir were inspected with a Remotely Operated Vehicle (ROV).

Bear's Paw radio was replaced.

##### ***Distribution System:***

Hydrant inspections and maintenance, valve exercising, and dead-end main flushing occur on an annual basis.

Current and historic maintenance records are available. The Town of Golden has GIS mapping which is under continuous development and is intended to be used to access maintenance information by Systems staff.

All of the Town's visible water infrastructure (i.e. water main valves, fire hydrant service valves and fire hydrants) were surveyed by Global Position Satellite (GPS) and added to the mapping database.

##### ***Supervisory Control and Data Acquisition (SCADA) System:***

Ongoing work occurred throughout the year on SCADA alarm controls.

#### **5.0 2025 System Improvements and Updates**

##### ***Emergency Response and Contingency Plan (ERCP):***

A major update to the ERCP was completed to transition the Town plan to the Provincial Ministry of Health template format. This document is reviewed annually with all contacts updated as necessary for delivery with this report to IHA.

##### ***Integrated Water Strategy (IWS):***

The IWS report was completed and adopted in principle by Council. With climate change effects contemplated, the plan includes modelling analysis of the complete supply/pumping, storage and distribution network, considering current demands as well as demand related to 10 and 25-year development horizon scenarios for the community.

**Source Water Protection Plan:**

Golden’s Source Water Protection Plan was completed with consultant Western Water Associates Ltd., updating many of the findings detailed in the Aquifer Protection Plan (Golder, 2006) and the Municipal Groundwater Supply Protection Strategy (Golder, 2013).

Ecoscope Environmental Consultants Ltd. continue to provide Well 4 Sentry Well monitoring support with lab analysis data review.

**Water System Operations and Maintenance Plan Update:**

A major plan update was completed, satisfying deliverable #4 of the 2024 IHA Conditions-on-Permit for the Golden Public Water System. The plan is used for guidance in the day-to-day operations and maintenance of all aspects of the public water system.

**Water Asset Management Plan:**

Majority funded through a successful Local Government Infrastructure Planning Grant application, the plan satisfies deliverable #5 of the 2024 IHA Conditions-on-Permit for the Golden Public Water System. Building off of information contained within the IWS, the plan supports water system long-term capital planning, long-term financial planning, and enhances the municipality’s decision-making processes around water system renewals.

**Leak Detection Work:**

In 2025, no main breaks occurred.

One public-side residential service connection leak was repaired.

Follow-up leak detection surveying was completed under contract in various areas of the community to verify some previous leak detection findings.

**Metering:**

Work continued with the replacement of non-radio frequency (RF) compatible water meters or end-of-life related meter replacements with ten units replaced for existing ICI accounts. Work continues with meter updating with priority given to meters which are difficult to access, where RF registers have reached end-of-life, or where high hazard cross connection control can be addressed along with a meter update/retrofit.

**6.0 Operator Education and Training**

The Town of Golden has an established training program that follows Environmental Operator Certification Program (EOCP) guidelines for required training and certification maintenance. Operators maintain EOCP certifications annually through a variety of EOCP accredited and relevant training opportunities typically available from a variety of sources.

**EOCP Current Certification:**

EMPLOYEE	CERTIFICATION #	CERTIFICATION LEVEL
----------	-----------------	---------------------

Chief Systems Operator	6101	WD-III, CCC Tester
Senior Systems Operator	1000185	WD-II, CCC Tester

### **7.0 Cross Connection Control (CCC)**

Both Systems operators are certified testers and carry out tests on all municipally owned backflow assemblies. The Town of Golden currently tests and tracks 34 backflow assembly devices (all testable devices) located on various Town owned/operated facilities.

The Town is able to confirm the proper device for any new construction according to hazard level. After construction, backflow devices installed in private buildings are added to our database so that we can track and record the testing history of each assembly installed within the Town.

The Town is a client of Maintenance Training Systems (MTS) and is using their FAST software for our CCC program. More information on this software can be found at:  
<http://www.mtsinc.ca/index.php?m=public&p=software&s=fast&v=features>

Updating of the FAST database is currently underway for the purposes of ICI CCC tracking.

Work continues with the CCC program with priority given to all high and medium-hazard ICI service connections.

### **8.0 SCADA System**

Within the SCADA system numerous control parameters are in place, allowing Town of Golden staff to make changes on an as-needed basis according to ongoing process changes. All trending is done on a daily basis and is in “real time”. Trending and reporting continues to be compiled into monthly and yearly reports.

The following lists itemize all currently in-place SCADA control parameters at the various water facilities.

#### ***SE Booster Station:***

- Discharge flow in GPM's as well as total flow
- Discharge pressure
- Two pump run status
- Booster pump run times
- Room temperature
- Flood alarm
- Reservoir levels
- Reservoir hatch intrusion alarm

#### ***NE Booster Station:***

- Discharge flow in GPM's
- Room temperature
- Suction pressure
- Booster pump run times
- Discharge pressure
- Flood alarm
- Generator run status
- Reservoir levels

Reservoir hatch intrusion alarm

***Well Stations:***

Flow totalizers in Gallons  
Pump run times  
Distribution system pressure transducers in “psi” at all wells  
Level transducers at Wells 4 and 5  
Room temperatures  
Flood alarms  
Generator run status (where applicable)

***Bulk Water Filling Station:***

No flow, valve not closing  
Room temperature  
Flood alarm  
Intrusion alarm  
Power/communication failure

**9.0 2025 Events/Emergency Response**

No distribution system main breaks occurred.

No water quality issues occurred requiring public notification.

On April 15<sup>th</sup> Emergency Responders attended a diesel fuel spill on the Trans Canada East Frontage Road, where a transport truck, as a result of a ruptured fuel tank, lost about 800 litres of fuel into the adjacent storm drainage infrastructure. Ministry of Environment was notified and a HazMat team was dispatched from the Okanagan for clean-up.

**10.0 Recurring and 2026 Initiatives**

- Schedule leak detection repair work as identified;
- Continue with CCC Program and prioritize installs of back flow devices, concentrating first on those facilities with a high hazard rating. Replace existing water meters with new meters that use e-coders for totalizing and billing. Continue with FAST database updating;
- Continue with public education campaign relating to source-to-tap education, water conservation tips and tricks, and education and enforcement relating to sprinkling bylaw regulations through proactive communications and active Bylaw patrols;
- Continue with school classroom visits and/or facility tours by staff;
- Well 7 construction pending contract award and receipt of IHA construction permit;
- Gunitite and Bears Paw Reservoirs cleaning with corrosion protection for Bears Paw Reservoir;
- Minor system upgrades and service repairs on an as-required basis;
- Continue to advance the Groundwater Protection Program; proceed with recommendations contained within the Groundwater Monitoring Plan, Protection Strategy, and Screening

Study for Potential Groundwater at Risk of Pathogens (GARP) where and when practicable to do so;

- Proceed with new Annual Well Field Water Quality and Level Reviews.

**11.0 Annual Consumption**

Year	Total Annual Pumped			Maximum Day Demand				Average Day Demand (estimated)
	Volume Pumped			Date	Volume Pumped		Increase/Decrease Over Prior Year	Volume Pumped
	Imperial Gallons	M3	Increase/Decrease Over Prior Year		Imperial Gallons	M3		Imperial Gallons
2014	228,361,075	1,038,150	3.7% increase	Jul-13	1,304,971	5,933	19.4% increase	625,232
2015	223,125,807	1,014,350	2.3% decrease	Jul-05	1,325,686	6,027	1.6% increase	611,394
2016	240,422,993	1,092,985	7.8% increase	Aug-17	1,188,284	5,402	11.6% decrease	658,693
2017	277,272,091	1,260,504	15.3% increase	Jul-09	1,434,451	6,521	20.7% increase	759,650
2018	222,444,280	1,011,252	24.6% decrease	Jul-29	1,244,857	5,659	13.2% decrease	609,436
2019	213,660,331	971,319	4.1% decrease	Aug-11	1,107,329	5,034	12.4% decrease	585,371
2020	212,013,642	963,833	1.1% decrease	Aug-02	1,126,713	5,122	1.0% increase	580,859
2021	235,451,009	1,070,381	11.1% increase	Jun-29	1,373,824	6,246	21.9% increase	645,071
2022	241,672,154	1,098,663	2.6% increase	Aug-19	1,242,672	5,649	10.6% decrease	662,115
2023	207,921,753	945,231	16.2% decrease	Jul-09	1,102,046	5,010	12.8% decrease	569,649
2024	206,764,274	939,969	0.6% decrease	Jul-21	1,196,413	5,439	8.6% increase	566,477
2025	211,780,013	962,771	2.4% increase	Jul-08	1,024,397	4,657	14.4% decrease	580,219

**12.0 Bacteriological Sample Analysis Results**

DATE	WELLS					RESERVOIRS		
	#2	#3	#4	#5	Future #7	NE (yellow)	NE (green)	BEARS PAW
2025								
Jan 6	<1	<1	<1	<1		<1		<1
Jan 13	<1	<1	<1	<1			<1	<1
Jan 20	<1	<1	<1	<1		<1		<1
Jan 27	<1	<1	<1	<1			<1	<1
Feb 3	<1	<1	<1	<1		<1		<1
Feb 10	<1	<1	<1	<1			<1	<1
Feb 24	<1	<1	<1	<1		<1		<1
Mar 3	<1	<1	<1	<1			<1	<1
Mar 10	<1	<1	<1	<1		<1		<1
Mar 17	<1	<1	<1	<1			<1	<1
Mar 24	<1	<1	<1	<1		<1		<1

Mar 31	<1	<1	<1	<1		<1	<1
Apr 7	<1	<1	<1	<1		<1	<1
Apr 14	<1	<1	<1	<1		<1	<1
Apr 28	<1	<1	<1	<1		<1	<1
May 5	<1	<1	<1	<1		<1	<1
May 12	<1	<1	<1	<1		<1	<1
May 26	<1	<1	<1	<1		<1	<1
Jun 2	<1	<1	<1	<1		<1	<1
Jun 9	<1	<1	<1	<1		<1	<1
Jun 16	<1	<1	<1	<1		T-1, E<1	<1
Jun 23	<1	<1	<1	<1		<1	<1
Jul 7	<1	<1	<1	<1		<1	<1
Jul 14	<1	<1	<1	<1		<1	<1
Jul 21	<1	<1	<1	<1		<1	<1
Jul 28	<1	<1	<1	<1		<1	<1
Aug 11	<1	<1	<1	<1		<1	<1
Aug 18	<1	<1	<1	<1		<1	<1
Aug 25	<1	<1	<1	<1		<1	<1
Sep 8	<1	<1	<1	<1		<1	<1
Sep 15	<1	<1	<1	<1		<1	<1
Sep 22	<1	<1	offline	<1		<1	<1
Sep 29	<1	<1	<1	<1		<1	<1
Oct 6	<1	<1	<1	<1		<1	<1
Oct 20	<1	<1	<1	<1		<1	<1
Oct 27	<1	<1	offline	<1		<1	<1
Nov 3	<1	<1	<1	<1		<1	<1
Nov 10	<1	<1	<1	<1		<1	<1
Nov 17	<1	<1	<1	<1		<1	<1
Nov 24	<1	<1	<1	<1		<1	<1
Dec 1	<1	<1	<1	<1		<1	<1
Dec 8	<1	<1	<1	<1		<1	<1
Dec 15	<1	<1	<1	<1		<1	<1
Dec 22	<1	<1	<1	<1		<1	<1

**13.0 Turbidity Analysis (NTU)**

DATE	WELLS				
	#2	#3	#4	#5	Future #7
Jan 6	0.06	0.06	0.06	0.06	
Jan 13	0.06	0.06	0.05	0.06	
Jan 20	0.07	0.05	0.06	0.06	
Jan 27	0.07	0.07	0.06	0.07	
Feb 3	0.06	0.06	0.07	0.07	
Feb 10	0.08	0.06	0.07	0.06	

Feb 24	0.07	0.06	0.05	0.06	
Mar 3	0.05	0.05	0.07	0.07	
Mar 10	0.06	0.06	0.06	0.06	
Mar 17	0.06	0.05	0.05	0.05	
Mar 24	0.05	0.08	0.05	0.06	
Mar 31	0.06	0.05	0.05	0.06	
Apr 7	0.05	0.05	0.06	0.05	
Apr 14	0.05	0.05	0.06	0.05	
April 28	0.05	0.06	0.05	0.05	
May 5	0.06	0.06	0.06	0.06	
May 12	0.05	0.06	0.06	0.06	
May 26	0.06	0.06	0.06	0.06	
Jun 2	0.06	0.05	0.06	0.06	
Jun 9	0.06	0.05	0.06	0.06	
Jun 16	0.05	0.05	0.06	0.06	
Jun 23	0.05	0.06	0.06	0.05	
Jul 7	0.06	0.06	0.07	0.06	
Jul 21	0.06	0.05	0.06	0.06	
Jul 28	0.07	0.06	0.06	0.05	
Aug 11	0.06	0.05	0.06	0.06	
Aug 18	0.06	0.05	0.06	0.06	
Sept 8	0.06	0.06	0.06	0.06	
Sept 15	0.06	0.05	0.06	0.06	
Sept 22	0.06	0.06	offline	0.06	
Oct 6	0.05	0.06	0.06	0.05	
Oct 20	0.05	0.05	0.05	0.06	
Oct 27	0.06	0.05	offline	0.05	
Nov 3	0.06	0.05	0.05	0.06	
Nov 17	0.05	0.05	0.05	0.05	
Nov 24	0.05	0.06	0.06	0.05	
Dec 1	0.05	0.05	0.06	0.06	
Dec 8	0.06	0.06	0.06	0.05	
Dec 15	0.05	0.05	0.06	0.06	
Dec 22	0.05	0.05	0.06	0.05	
Average	0.06	0.06	0.06	0.06	
Hi	0.08	0.08	0.07	0.07	
Low	0.05	0.05	0.05	0.05	

**14.0 Summary**

The Town of Golden has worked with Interior Health officials since 2002 to develop and maintain a water quality monitoring program that exceeds the Drinking Water Regulation. The Town will continue with this monitoring program as part of its commitment to deliver a safe potable water supply to the community.

This report will be posted on the Town of Golden’s website for public information following receipt by Council.

Respectfully,

Chris Cochran, AScT,  
Director of Public Works

*Attachment*



**CERTIFICATE OF ANALYSIS**

<b>Work Order</b>	: <b>CG2517243</b>	<b>Laboratory</b>	: ALS Environmental - Calgary
<b>Client</b>	: <b>Town of Golden</b>	<b>Account Manager</b>	: Patryk Wojciak
<b>Contact</b>	: Al Taylor	<b>Address</b>	: 2559 29th Street NE
<b>Address</b>	: BOX 350		: Calgary AB Canada T1Y 7B5
	: Golden British Columbia Canada V0A 1H0	<b>E-mail</b>	: patryk.wojciak@alsglobal.com
<b>Telephone</b>	: 250-344-1488	<b>Telephone</b>	: +1 403 407 1800
<b>Project</b>	: ----	<b>Date Samples Received</b>	: 26-Nov-2025 09:30
<b>PO</b>	: ----	<b>Date Analysis Commenced</b>	: 26-Nov-2025
<b>C-O-C number</b>	: ----	<b>Issue Date</b>	: 30-Nov-2025 15:45
<b>Sampler</b>	: Ryan Robison		
<b>Site</b>	: ----		
<b>Quote number</b>	: CG21-GMGO100-0001 Drinking Water		
<b>No. of samples received</b>	: 4		
<b>No. of samples analysed</b>	: 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 Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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>
Cynthia Bauer	Organic Supervisor	Organics, Calgary, Alberta
Harpreet Chawla	Team Leader - Inorganics	Inorganics, Calgary, Alberta
Jyotsnarani Devi	Laboratory Analyst	Organics, Calgary, Alberta
Katarzyna Glinka	Analyst	Inorganics, Calgary, Alberta
Nguyen Tran	Laboratory Analyst	Organics, Calgary, Alberta
Ruifang Zheng	Analyst	Inorganics, Calgary, Alberta
Shirley Li	Team Leader - Inorganics	Metals, Calgary, Alberta
Sorina Motea	Team Leader - Organics	Organics, Calgary, Alberta



## 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).

Unit	Description
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
NTU	nephelometric turbidity units
pH units	pH units
µg/L	micrograms per litre
µS/cm	microsiemens per centimetre

<: 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.

## Sample Comments

Sample	Client Id	Comment
CG2517243-001	Well #2	<b>Sample(s) 001-004: Water sample for VOC analysis contained &gt; 5% headspace. Results may be biased low.</b>
CG2517243-002	Well #3	<b>Sample(s) 001-004: Water sample for VOC analysis contained &gt; 5% headspace. Results may be biased low.</b>
CG2517243-003	Well #4	<b>Sample(s) 001-004: Water sample for VOC analysis contained &gt; 5% headspace. Results may be biased low.</b>
CG2517243-004	Well #5	<b>Sample(s) 001-004: Water sample for VOC analysis contained &gt; 5% headspace. Results may be biased low.</b>

## Qualifiers

Qualifier	Description
DLDS	Detection Limit Raised: Dilution required due to high Dissolved Solids / Electrical Conductivity.



## Analytical Results

Sub-Matrix: Water (Matrix: Water)					Client sample ID	Well #2	Well #3	Well #4	Well #5	----
					Client sampling date / time	25-Nov-2025 09:17	25-Nov-2025 09:26	25-Nov-2025 09:49	25-Nov-2025 09:35	----
Analyte	CAS Number	Method/Lab	LOR	Unit	CG2517243-001	CG2517243-002	CG2517243-003	CG2517243-004	----	
					Result	Result	Result	Result	----	
<b>Physical Tests</b>										
Alkalinity, bicarbonate (as CaCO3)	----	E290/CG	1.0	mg/L	140	156	381	173	----	
Alkalinity, carbonate (as CaCO3)	----	E290/CG	1.0	mg/L	<1.0	<1.0	<1.0	<1.0	----	
Alkalinity, hydroxide (as CaCO3)	----	E290/CG	1.0	mg/L	<1.0	<1.0	<1.0	<1.0	----	
Alkalinity, phenolphthalein (as CaCO3)	----	E290/CG	1.0	mg/L	<1.0	<1.0	<1.0	<1.0	----	
Alkalinity, total (as CaCO3)	----	E290/CG	1.0	mg/L	140	156	381	173	----	
Colour, true	----	E329/CG	5.0	CU	<5.0	<5.0	<5.0	<5.0	----	
Conductivity	----	E100/CG	2.0	µS/cm	327	362	1090	410	----	
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/CG	0.50	mg/L	147	164	406	183	----	
pH	----	E108/CG	0.10	pH units	8.09	8.11	7.63	8.13	----	
Solids, total dissolved [TDS]	----	E162/CG	10	mg/L	179	189	599	254	----	
Turbidity	----	E121/CG	0.10	NTU	<0.10	<0.10	<0.10	<0.10	----	
<b>Anions and Nutrients</b>										
Chloride	16887-00-6	E235.Cl-L/CG	0.10	mg/L	11.7	14.2	120	16.7	----	
Fluoride	16984-48-8	E235.F/CG	0.020	mg/L	0.098	0.095	<0.100 DLDS	0.095	----	
Nitrate (as N)	14797-55-8	E235.NO3-L/CG	0.0050	mg/L	0.250	0.531	1.73	0.530	----	
Nitrite (as N)	14797-65-0	E235.NO2-L/CG	0.0010	mg/L	<0.0010	<0.0010	<0.0050 DLDS	<0.0010	----	
Sulfate (as SO4)	14808-79-8	E235.SO4-L/CG	0.050	mg/L	21.3	20.1	42.8	22.2	----	
Nitrate + Nitrite (as N)	----	EC235.N+N/CG	0.0050	mg/L	0.250	0.531	1.73	0.530	----	
<b>Total Metals</b>										
Aluminum, total	7429-90-5	E420/CG	0.0030	mg/L	<0.0030	<0.0030	<0.0030	<0.0030	----	
Antimony, total	7440-36-0	E420/CG	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----	



### Analytical Results

Sub-Matrix: Water  
 (Matrix: Water)

					Client sample ID	Well #2	Well #3	Well #4	Well #5	----
					Client sampling date / time	25-Nov-2025 09:17	25-Nov-2025 09:26	25-Nov-2025 09:49	25-Nov-2025 09:35	----
Analyte	CAS Number	Method/Lab	LOR	Unit	CG2517243-001	CG2517243-002	CG2517243-003	CG2517243-004	----	
					Result	Result	Result	Result	----	
<b>Total Metals</b>										
Arsenic, total	7440-38-2	E420/CG	0.00010	mg/L	<0.00010	<0.00010	0.00012	<0.00010	----	
Barium, total	7440-39-3	E420/CG	0.00010	mg/L	0.0562	0.121	0.230	0.0768	----	
Beryllium, total	7440-41-7	E420/CG	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	----	
Bismuth, total	7440-69-9	E420/CG	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	----	
Boron, total	7440-42-8	E420/CG	0.010	mg/L	<0.010	<0.010	0.014	<0.010	----	
Cadmium, total	7440-43-9	E420/CG	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	----	
Calcium, total	7440-70-2	E420/CG	0.050	mg/L	35.1	30.7	91.1	41.4	----	
Chromium, total	7440-47-3	E420/CG	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	----	
Cobalt, total	7440-48-4	E420/CG	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----	
Copper, total	7440-50-8	E420/CG	0.00050	mg/L	0.00050	0.00100	0.00255	0.00076	----	
Iron, total	7439-89-6	E420/CG	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	----	
Lead, total	7439-92-1	E420/CG	0.000050	mg/L	<0.000050	0.000062	0.000301	<0.000050	----	
Magnesium, total	7439-95-4	E420/CG	0.0050	mg/L	14.4	21.1	43.3	19.3	----	
Manganese, total	7439-96-5	E420/CG	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----	
Mercury, total	7439-97-6	E508/CG	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	----	
Molybdenum, total	7439-98-7	E420/CG	0.000050	mg/L	0.000610	0.000580	0.000170	0.000505	----	
Nickel, total	7440-02-0	E420/CG	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	----	
Phosphorus, total	7723-14-0	E420/CG	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	----	
Potassium, total	7440-09-7	E420/CG	0.050	mg/L	0.540	0.747	2.14	0.974	----	
Selenium, total	7782-49-2	E420/CG	0.000050	mg/L	<0.000050	<0.000050	0.000117	0.000056	----	
Silicon, total	7440-21-3	E420/CG	0.10	mg/L	2.14	2.88	4.72	2.56	----	



## Analytical Results

Sub-Matrix: Water  
 (Matrix: Water)

					Client sample ID	Well #2	Well #3	Well #4	Well #5	----
					Client sampling date / time	25-Nov-2025 09:17	25-Nov-2025 09:26	25-Nov-2025 09:49	25-Nov-2025 09:35	----
Analyte	CAS Number	Method/Lab	LOR	Unit	CG2517243-001	CG2517243-002	CG2517243-003	CG2517243-004	----	
					Result	Result	Result	Result	----	
<b>Total Metals</b>										
Silver, total	7440-22-4	E420/CG	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----	
Sodium, total	7440-23-5	E420/CG	0.050	mg/L	7.26	8.10	69.9	11.0	----	
Strontium, total	7440-24-6	E420/CG	0.00020	mg/L	0.301	0.337	0.487	0.348	----	
Sulfur, total	7704-34-9	E420/CG	0.50	mg/L	7.84	7.14	15.8	7.76	----	
Thallium, total	7440-28-0	E420/CG	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----	
Tin, total	7440-31-5	E420/CG	0.00010	mg/L	<0.00010	<0.00010	<0.00010	0.00011	----	
Titanium, total	7440-32-6	E420/CG	0.00030	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	----	
Uranium, total	7440-61-1	E420/CG	0.000010	mg/L	0.000552	0.000707	0.00129	0.000633	----	
Vanadium, total	7440-62-2	E420/CG	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	----	
Zinc, total	7440-66-6	E420/CG	0.0030	mg/L	<0.0030	<0.0030	0.0158	<0.0030	----	
<b>Volatile Organic Compounds</b>										
Benzene	71-43-2	E611A/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Chlorobenzene	108-90-7	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Chloromethane	74-87-3	E611C/CG	5.0	µg/L	<5.0	<5.0	<5.0	<5.0	----	
Dichlorobenzene, 1,2-	95-50-1	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Dichlorobenzene, 1,3-	541-73-1	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Dichlorobenzene, 1,4-	106-46-7	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Dichloropropane, 1,2-	78-87-5	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Dichloropropylene, cis-1,3-	10061-01-5	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Dichloropropylene, cis+trans-1,3-	542-75-6	E611C/CG	0.75	µg/L	<0.75	<0.75	<0.75	<0.75	----	
Ethylbenzene	100-41-4	E611A/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	



## Analytical Results

Sub-Matrix: Water  
 (Matrix: Water)

					Client sample ID	Well #2	Well #3	Well #4	Well #5	----
					Client sampling date / time	25-Nov-2025 09:17	25-Nov-2025 09:26	25-Nov-2025 09:49	25-Nov-2025 09:35	----
Analyte	CAS Number	Method/Lab	LOR	Unit	CG2517243-001	CG2517243-002	CG2517243-003	CG2517243-004	----	
					Result	Result	Result	Result	----	
<b>Volatile Organic Compounds</b>										
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611A/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Styrene	100-42-5	E611A/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Tetrachloroethane, 1,1,1,2-	630-20-6	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Tetrachloroethane, 1,1,2,2-	79-34-5	E611C/CG	0.20	µg/L	<0.20	<0.20	<0.20	<0.20	----	
Toluene	108-88-3	E611A/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Trichloroethane, 1,1,2-	79-00-5	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Trichlorofluoromethane	75-69-4	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Xylene, m+p-	179601-23-1	E611A/CG	0.40	µg/L	<0.40	<0.40	<0.40	<0.40	----	
Xylene, o-	95-47-6	E611A/CG	0.30	µg/L	<0.30	<0.30	<0.30	<0.30	----	
Xylenes, total	1330-20-7	E611A/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
BTEX, total	----	E611A/CG	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----	
BTEX+Styrene, total	n/a	E611A/CG	1.5	µg/L	<1.5	<1.5	<1.5	<1.5	----	
<b>Volatile Organic Compounds [Drycleaning]</b>										
Carbon tetrachloride	56-23-5	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Chloroethane	75-00-3	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Dichloroethane, 1,1-	75-34-3	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Dichloroethane, 1,2-	107-06-2	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Dichloroethylene, 1,1-	75-35-4	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Dichloroethylene, cis-1,2-	156-59-2	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Dichloroethylene, trans-1,2-	156-60-5	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----	
Dichloromethane	75-09-2	E611C/CG	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	----	



## Analytical Results

Sub-Matrix: Water  
 (Matrix: Water)

					Client sample ID	Well #2	Well #3	Well #4	Well #5	----
					Client sampling date / time	25-Nov-2025 09:17	25-Nov-2025 09:26	25-Nov-2025 09:49	25-Nov-2025 09:35	----
Analyte	CAS Number	Method/Lab	LOR	Unit	CG2517243-001	CG2517243-002	CG2517243-003	CG2517243-004	CG2517243-004	----
					Result	Result	Result	Result	Result	----
<b>Volatile Organic Compounds [Drycleaning]</b>										
Dichloropropylene, trans-1,3-	10061-02-6	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	----
Tetrachloroethylene	127-18-4	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	----
Trichloroethane, 1,1,1-	71-55-6	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	----
Trichloroethylene	79-01-6	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	----
Vinyl chloride	75-01-4	E611C/CG	0.40	µg/L	<0.40	<0.40	<0.40	<0.40	<0.40	----
<b>Volatile Organic Compounds [Fuels]</b>										
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	----
Styrene	100-42-5	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	----
<b>Volatile Organic Compounds [THMs]</b>										
Bromodichloromethane	75-27-4	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	----
Bromoform	75-25-2	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	----
Chloroform	67-66-3	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	----
Dibromochloromethane	124-48-1	E611C/CG	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	----
<b>Hydrocarbons</b>										
VHw (C6-C10)	----	E581.VH+F1/CG	100	µg/L	<100	<100	<100	<100	<100	----
VPHw	----	EC580A/CG	100	µg/L	<100	<100	<100	<100	<100	----
EPH (C10-C19)	----	E601A/CG	250	µg/L	<250	<250	<250	<250	<250	----
EPH (C19-C32)	----	E601A/CG	250	µg/L	<250	<250	<250	<250	<250	----
LEPHw	----	EC600A/CG	250	µg/L	<250	<250	<250	<250	<250	----
HEPHw	----	EC600A/CG	250	µg/L	<250	<250	<250	<250	<250	----



## Analytical Results

Sub-Matrix: Water  
 (Matrix: Water)

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Analyte	CAS Number	Method/Lab	LOR	Unit	CG2517243-001	CG2517243-002	CG2517243-003	CG2517243-004	----	
					Result	Result	Result	Result	----	
<b>Hydrocarbons Surrogates</b>										
Bromobenzotrifluoride, 2- (EPH surrogate)	392-83-6	E601A/CG	1.0	%	95.8	90.0	84.6	89.8	----	
Dichlorotoluene, 3,4-	95-75-0	E581.VH+F1/CG	1.0	%	108	106	101	106	----	
<b>Volatile Organic Compounds Surrogates</b>										
Bromofluorobenzene, 4-	460-00-4	E611C/CG	1.0	%	99.6	98.7	100	80.6	----	
Bromofluorobenzene, 4-	460-00-4	E611A/CG	1.0	%	99.6	98.7	100	80.6	----	
Difluorobenzene, 1,4-	540-36-3	E611C/CG	1.0	%	99.8	100.0	100	99.8	----	
Difluorobenzene, 1,4-	540-36-3	E611A/CG	1.0	%	99.8	100.0	100	99.8	----	
<b>Polycyclic Aromatic Hydrocarbons</b>										
Acenaphthene	83-32-9	E641A/CG	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	----	
Acenaphthylene	208-96-8	E641A/CG	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	----	
Acridine	260-94-6	E641A/CG	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	----	
Anthracene	120-12-7	E641A/CG	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	----	
Benz(a)anthracene	56-55-3	E641A/CG	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	----	
Benzo(a)pyrene	50-32-8	E641A/CG	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	----	
Benzo(b+j)fluoranthene	n/a	E641A/CG	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	----	
Benzo(b+j+k)fluoranthene	n/a	E641A/CG	0.015	µg/L	<0.015	<0.015	<0.015	<0.015	----	
Benzo(g,h,i)perylene	191-24-2	E641A/CG	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	----	
Benzo(k)fluoranthene	207-08-9	E641A/CG	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	----	
Chrysene	218-01-9	E641A/CG	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	----	
Dibenz(a,h)anthracene	53-70-3	E641A/CG	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	----	
Fluoranthene	206-44-0	E641A/CG	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	----	



## Analytical Results

Sub-Matrix: Water  
 (Matrix: Water)

					Client sample ID	Well #2	Well #3	Well #4	Well #5	----
					Client sampling date / time	25-Nov-2025 09:17	25-Nov-2025 09:26	25-Nov-2025 09:49	25-Nov-2025 09:35	----
Analyte	CAS Number	Method/Lab	LOR	Unit	CG2517243-001	CG2517243-002	CG2517243-003	CG2517243-004	----	
					Result	Result	Result	Result	----	
<b>Polycyclic Aromatic Hydrocarbons</b>										
Fluorene	86-73-7	E641A/CG	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010	----
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A/CG	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010	----
Methylnaphthalene, 1-	90-12-0	E641A/CG	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010	----
Methylnaphthalene, 2-	91-57-6	E641A/CG	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010	----
Naphthalene	91-20-3	E641A/CG	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.050	----
Phenanthrene	85-01-8	E641A/CG	0.020	µg/L	<0.020	<0.020	<0.020	<0.020	<0.020	----
Pyrene	129-00-0	E641A/CG	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010	----
Quinoline	91-22-5	E641A/CG	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.050	----
B(a)P total potency equivalents [B(a)P TPE]	----	E641A/CG	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010	----
<b>Polycyclic Aromatic Hydrocarbons Surrogates</b>										
Chrysene-d12	1719-03-5	E641A/CG	0.1	%	88.4	89.1	89.2	92.8	----	
Naphthalene-d8	1146-65-2	E641A/CG	0.1	%	95.6	90.5	93.0	96.7	----	
Phenanthrene-d10	1517-22-2	E641A/CG	0.1	%	93.6	90.9	92.8	98.3	----	

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



**CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)**

<b>Work Order</b>	: <b>CG2517243</b>	<b>Laboratory</b>	: ALS Environmental - Calgary
<b>Client</b>	: <b>Town of Golden</b>	<b>Account Manager</b>	: Patryk Wojciak
<b>Contact</b>	: Al Taylor	<b>Address</b>	: 2559 29th Street NE
<b>Address</b>	: BOX 350 Golden British Columbia Canada V0A 1H0		: Calgary AB Canada T1Y 7B5
<b>Telephone</b>	: 250-344-1488	<b>Telephone</b>	: +1 403 407 1800
<b>Project</b>	: ----	<b>Date Samples Received</b>	: 26-Nov-2025 09:30
<b>PO</b>	: ----	<b>Date Analysis Commenced</b>	: 26-Nov-2025
<b>C-O-C number</b>	: ----	<b>Issue Date</b>	: 30-Nov-2025 15:45
<b>Sampler</b>	: Ryan Robison		
<b>Site</b>	: ----		
<b>Quote number</b>	: CG21-GMGO100-0001 Drinking Water		
<b>No. of samples received</b>	: 4		
<b>No. of samples analysed</b>	: 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 Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

**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>
Cynthia Bauer	Organic Supervisor	Organics, Calgary, Alberta
Harpreet Chawla	Team Leader - Inorganics	Inorganics, Calgary, Alberta
Jyotsnarani Devi	Laboratory Analyst	Organics, Calgary, Alberta
Katarzyna Glinka	Analyst	Inorganics, Calgary, Alberta
Nguyen Tran	Laboratory Analyst	Organics, Calgary, Alberta
Ruifang Zheng	Analyst	Inorganics, Calgary, Alberta
Shirley Li	Team Leader - Inorganics	Metals, Calgary, Alberta
Sorina Motea	Team Leader - Organics	Organics, Calgary, Alberta



**Summary of Guideline Breaches by Sample**

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
Well #2 ----	Water	Phosphorus, total		BCDWQG	AO	<0.050 mg/L	0.01 mg/L
Well #3 ----	Water	Phosphorus, total		BCDWQG	AO	<0.050 mg/L	0.01 mg/L
Well #4 ----	Water	Solids, total dissolved [TDS]		BCDWQG	AO	599 mg/L	500 mg/L
	Water	Phosphorus, total		BCDWQG	AO	<0.050 mg/L	0.01 mg/L
Well #5 ----	Water	Phosphorus, total		BCDWQG	AO	<0.050 mg/L	0.01 mg/L

**Key:**

BCDWQG                                    British Columbia Drinking Water Quality Guidelines (JAN, 2023)

AO    Aesthetic Objective/Other Value

MAC     Maximum Acceptable Concentrations

OG    Operational Guidance



## 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.

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key: CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.

LOR: Limit of Reporting (detection limit).

Unit	Description
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
NTU	nephelometric turbidity units
pH units	pH units
µg/L	micrograms per litre
µS/cm	microsiemens per centimetre

>: greater than.

<: less than.

**Red** shading is applied where the result or the LOR is greater than the Guideline Upper Limit (or lower than the Guideline Lower Limit, if applicable).

For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit.

**Lavender** shading is applied where the LOR itself is greater than the Guideline Upper Limit (or Lower than the Guideline Lower Limit, if applicable).

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.

## Sample Comments

Sample	Client Id	Comment
CG2517243-001	Well #2	<b>Sample(s) 001-004: Water sample for VOC analysis contained &gt; 5% headspace. Results may be biased low.</b>
CG2517243-002	Well #3	<b>Sample(s) 001-004: Water sample for VOC analysis contained &gt; 5% headspace. Results may be biased low.</b>
CG2517243-003	Well #4	<b>Sample(s) 001-004: Water sample for VOC analysis contained &gt; 5% headspace. Results may be biased low.</b>
CG2517243-004	Well #5	<b>Sample(s) 001-004: Water sample for VOC analysis contained &gt; 5% headspace. Results may be biased low.</b>



## Qualifiers

<u>Qualifier</u>	<u>Description</u>
DLDS	Detection Limit Raised: Dilution required due to high Dissolved Solids / Electrical Conductivity.



## Analytical Results

SubMatrix: Water  
 (Matrix: Water )

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Well #2	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
					Client sampling date / time	----					
					CG2517243-001	25-Nov-2025 09:17					
<b>Physical Tests</b>											
Alkalinity, bicarbonate (as CaCO3)	---	E290/CG	1.0	mg/L	140		---	---	---	---	---
Alkalinity, carbonate (as CaCO3)	---	E290/CG	1.0	mg/L	<1.0		---	---	---	---	---
Alkalinity, hydroxide (as CaCO3)	---	E290/CG	1.0	mg/L	<1.0		---	---	---	---	---
Alkalinity, phenolphthalein (as CaCO3)	---	E290/CG	1.0	mg/L	<1.0		---	---	---	---	---
Alkalinity, total (as CaCO3)	---	E290/CG	1.0	mg/L	140		---	---	---	---	---
Colour, true	---	E329/CG	5.0	CU	<5.0		15 CU	---	---	---	---
Conductivity	---	E100/CG	2.0	µS/cm	327		---	---	---	---	---
Hardness (as CaCO3), from total Ca/Mg	---	EC100A/CG	0.50	mg/L	147		---	---	---	---	---
pH	---	E108/CG	0.10	pH units	8.09		---	---	7 - 10.5 pH units	---	---
Solids, total dissolved [TDS]	---	E162/CG	10	mg/L	179		500 mg/L	---	---	---	---
Turbidity	---	E121/CG	0.10	NTU	<0.10		---	1 NTU	---	---	---
<b>Anions and Nutrients</b>											
Chloride	16887-00-6	E235.Cl-L/CG	0.10	mg/L	11.7		250 mg/L	---	---	---	---
Fluoride	16984-48-8	E235.F/CG	0.020	mg/L	0.098		---	1.5 mg/L	---	---	---
Nitrate (as N)	14797-55-8	E235.NO3-L/CG	0.0050	mg/L	0.250		---	10 mg/L	---	---	---
Nitrite (as N)	14797-65-0	E235.NO2-L/CG	0.0010	mg/L	<0.0010		---	1 mg/L	---	---	---
Sulfate (as SO4)	14808-79-8	E235.SO4-L/CG	0.050	mg/L	21.3		500 mg/L	---	---	---	---
Nitrate + Nitrite (as N)	---	EC235.N+N/CG	0.0050	mg/L	0.250		---	10 mg/L	---	---	---
<b>Total Metals</b>											
Aluminum, total	7429-90-5	E420/CG	0.0030	mg/L	<0.0030		---	2.9 mg/L	---	---	---
Antimony, total	7440-36-0	E420/CG	0.00010	mg/L	<0.00010		---	0.006 mg/L	---	---	---
Arsenic, total	7440-38-2	E420/CG	0.00010	mg/L	<0.00010		---	0.01 mg/L	---	---	---
Barium, total	7440-39-3	E420/CG	0.00010	mg/L	0.0562		---	2 mg/L	---	---	---
Beryllium, total	7440-41-7	E420/CG	0.000020	mg/L	<0.000020		---	---	---	---	---
Bismuth, total	7440-69-9	E420/CG	0.000050	mg/L	<0.000050		---	---	---	---	---
Boron, total	7440-42-8	E420/CG	0.010	mg/L	<0.010		---	5 mg/L	---	---	---
Cadmium, total	7440-43-9	E420/CG	0.0000050	mg/L	<0.0000050		---	0.007 mg/L	---	---	---
Calcium, total	7440-70-2	E420/CG	0.050	mg/L	35.1		---	---	---	---	---
Chromium, total	7440-47-3	E420/CG	0.00050	mg/L	<0.00050		---	0.05 mg/L	---	---	---
Cobalt, total	7440-48-4	E420/CG	0.00010	mg/L	<0.00010		---	0.001 mg/L	---	---	---
Copper, total	7440-50-8	E420/CG	0.00050	mg/L	0.00050		1 mg/L	2 mg/L	---	---	---
Iron, total	7439-89-6	E420/CG	0.010	mg/L	<0.010		0.3 mg/L	---	---	---	---



Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Well #2	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
					Client sampling date / time	----					
						25-Nov-2025 09:17					
					CG2517243-001						
<b>Total Metals</b>											
Lead, total	7439-92-1	E420/CG	0.000050	mg/L	<0.000050		---	0.005 mg/L	---	---	---
Magnesium, total	7439-95-4	E420/CG	0.0050	mg/L	14.4		---	---	---	---	---
Manganese, total	7439-96-5	E420/CG	0.00010	mg/L	<0.00010		0.02 mg/L	0.12 mg/L	---	---	---
Mercury, total	7439-97-6	E508/CG	0.0000050	mg/L	<0.0000050		---	0.001 mg/L	---	---	---
Molybdenum, total	7439-98-7	E420/CG	0.000050	mg/L	0.000610		---	---	---	---	---
Nickel, total	7440-02-0	E420/CG	0.00050	mg/L	<0.00050		---	---	---	---	---
Phosphorus, total	7723-14-0	E420/CG	0.050	mg/L	<0.050		0.01 mg/L	---	---	---	---
Potassium, total	7440-09-7	E420/CG	0.050	mg/L	0.540		---	---	---	---	---
Selenium, total	7782-49-2	E420/CG	0.000050	mg/L	<0.000050		---	0.05 mg/L	---	---	---
Silicon, total	7440-21-3	E420/CG	0.10	mg/L	2.14		---	---	---	---	---
Silver, total	7440-22-4	E420/CG	0.000010	mg/L	<0.000010		---	---	---	---	---
Sodium, total	7440-23-5	E420/CG	0.050	mg/L	7.26		200 mg/L	---	---	---	---
Strontium, total	7440-24-6	E420/CG	0.00020	mg/L	0.301		---	7 mg/L	---	---	---
Sulfur, total	7704-34-9	E420/CG	0.50	mg/L	7.84		---	---	---	---	---
Thallium, total	7440-28-0	E420/CG	0.000010	mg/L	<0.000010		---	---	---	---	---
Tin, total	7440-31-5	E420/CG	0.00010	mg/L	<0.00010		---	---	---	---	---
Titanium, total	7440-32-6	E420/CG	0.00030	mg/L	<0.00030		---	---	---	---	---
Uranium, total	7440-61-1	E420/CG	0.000010	mg/L	0.000552		---	0.02 mg/L	---	---	---
Vanadium, total	7440-62-2	E420/CG	0.00050	mg/L	<0.00050		---	---	---	---	---
Zinc, total	7440-66-6	E420/CG	0.0030	mg/L	<0.0030		5 mg/L	---	---	---	---
<b>Volatile Organic Compounds</b>											
Benzene	71-43-2	E611A/CG	0.50	µg/L	<0.50		---	5 µg/L	---	---	---
Chlorobenzene	108-90-7	E611C/CG	0.50	µg/L	<0.50		30 µg/L	---	---	---	---
Chloromethane	74-87-3	E611C/CG	5.0	µg/L	<5.0		---	---	---	---	---
Dichlorobenzene, 1,2-	95-50-1	E611C/CG	0.50	µg/L	<0.50		3 µg/L	200 µg/L	---	---	---
Dichlorobenzene, 1,3-	541-73-1	E611C/CG	0.50	µg/L	<0.50		---	---	---	---	---
Dichlorobenzene, 1,4-	106-46-7	E611C/CG	0.50	µg/L	<0.50		1 µg/L	5 µg/L	---	---	---
Dichloropropane, 1,2-	78-87-5	E611C/CG	0.50	µg/L	<0.50		---	---	---	---	---
Dichloropropylene, cis-1,3-	10061-01-5	E611C/CG	0.50	µg/L	<0.50		---	---	---	---	---
Dichloropropylene, cis+trans-1,3-	542-75-6	E611C/CG	0.75	µg/L	<0.75		---	---	---	---	---
Ethylbenzene	100-41-4	E611A/CG	0.50	µg/L	<0.50		1.6 µg/L	140 µg/L	---	---	---
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611A/CG	0.50	µg/L	<0.50		15 µg/L	---	---	---	---
Styrene	100-42-5	E611A/CG	0.50	µg/L	<0.50		---	---	---	---	---



Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Well #2	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
					Client sampling date / time	----					
					CG2517243-001	25-Nov-2025 09:17					
<b>SubMatrix: Water (Matrix: Water)</b>											
<b>Volatile Organic Compounds</b>											
Tetrachloroethane, 1,1,1,2-	630-20-6	E611C/CG	0.50	µg/L	<0.50						
Tetrachloroethane, 1,1,2,2-	79-34-5	E611C/CG	0.20	µg/L	<0.20						
Toluene	108-88-3	E611A/CG	0.50	µg/L	<0.50	24 µg/L	60 µg/L				
Trichloroethane, 1,1,2-	79-00-5	E611C/CG	0.50	µg/L	<0.50						
Trichlorofluoromethane	75-69-4	E611C/CG	0.50	µg/L	<0.50						
Xylene, m+p-	179601-23-1	E611A/CG	0.40	µg/L	<0.40						
Xylene, o-	95-47-6	E611A/CG	0.30	µg/L	<0.30						
Xylenes, total	1330-20-7	E611A/CG	0.50	µg/L	<0.50	20 µg/L	90 µg/L				
BTEX, total	----	E611A/CG	1.0	µg/L	<1.0						
BTEX+Styrene, total	n/a	E611A/CG	1.5	µg/L	<1.5						
<b>Volatile Organic Compounds [Drycleaning]</b>											
Carbon tetrachloride	56-23-5	E611C/CG	0.50	µg/L	<0.50						
Chloroethane	75-00-3	E611C/CG	0.50	µg/L	<0.50						
Dichloroethane, 1,1-	75-34-3	E611C/CG	0.50	µg/L	<0.50						
Dichloroethane, 1,2-	107-06-2	E611C/CG	0.50	µg/L	<0.50		5 µg/L				
Dichloroethylene, 1,1-	75-35-4	E611C/CG	0.50	µg/L	<0.50		14 µg/L				
Dichloroethylene, cis-1,2-	156-59-2	E611C/CG	0.50	µg/L	<0.50						
Dichloroethylene, trans-1,2-	156-60-5	E611C/CG	0.50	µg/L	<0.50						
Dichloromethane	75-09-2	E611C/CG	1.0	µg/L	<1.0		50 µg/L				
Dichloropropylene, trans-1,3-	10061-02-6	E611C/CG	0.50	µg/L	<0.50						
Tetrachloroethylene	127-18-4	E611C/CG	0.50	µg/L	<0.50		10 µg/L				
Trichloroethane, 1,1,1-	71-55-6	E611C/CG	0.50	µg/L	<0.50						
Trichloroethylene	79-01-6	E611C/CG	0.50	µg/L	<0.50		5 µg/L				
Vinyl chloride	75-01-4	E611C/CG	0.40	µg/L	<0.40		2 µg/L				
<b>Volatile Organic Compounds [Fuels]</b>											
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C/CG	0.50	µg/L	<0.50	15 µg/L					
Styrene	100-42-5	E611C/CG	0.50	µg/L	<0.50						
<b>Volatile Organic Compounds [THMs]</b>											
Bromodichloromethane	75-27-4	E611C/CG	0.50	µg/L	<0.50						
Bromoform	75-25-2	E611C/CG	0.50	µg/L	<0.50						
Chloroform	67-66-3	E611C/CG	0.50	µg/L	<0.50						
Dibromochloromethane	124-48-1	E611C/CG	0.50	µg/L	<0.50						
<b>Hydrocarbons</b>											
VHw (C6-C10)	----	E581.VH+F1/CG	100	µg/L	<100						



Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Well #2	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
					Client sampling date / time	----					
					CG2517243-001	25-Nov-2025 09:17					
<b>Hydrocarbons</b>											
VPHw	---	EC580A/CG	100	µg/L	<100						
EPH (C10-C19)	---	E601A/CG	250	µg/L	<250						
EPH (C19-C32)	---	E601A/CG	250	µg/L	<250						
LEPHw	---	EC600A/CG	250	µg/L	<250						
HEPHw	---	EC600A/CG	250	µg/L	<250						
<b>Hydrocarbons Surrogates</b>											
Bromobenzotrifluoride, 2- (EPH surrogate)	392-83-6	E601A/CG	1.0	%	95.8						
Dichlorotoluene, 3,4-	95-75-0	E581.VH+F1/CG	1.0	%	108						
<b>Volatile Organic Compounds Surrogates</b>											
Bromofluorobenzene, 4-	460-00-4	E611C/CG	1.0	%	99.6						
Bromofluorobenzene, 4-	460-00-4	E611A/CG	1.0	%	99.6						
Difluorobenzene, 1,4-	540-36-3	E611C/CG	1.0	%	99.8						
Difluorobenzene, 1,4-	540-36-3	E611A/CG	1.0	%	99.8						
<b>Polycyclic Aromatic Hydrocarbons</b>											
Acenaphthene	83-32-9	E641A/CG	0.010	µg/L	<0.010						
Acenaphthylene	208-96-8	E641A/CG	0.010	µg/L	<0.010						
Acridine	260-94-6	E641A/CG	0.010	µg/L	<0.010						
Anthracene	120-12-7	E641A/CG	0.010	µg/L	<0.010						
Benz(a)anthracene	56-55-3	E641A/CG	0.010	µg/L	<0.010						
Benzo(a)pyrene	50-32-8	E641A/CG	0.0050	µg/L	<0.0050			0.04 µg/L			
Benzo(b+j)fluoranthene	n/a	E641A/CG	0.010	µg/L	<0.010						
Benzo(b+j+k)fluoranthene	n/a	E641A/CG	0.015	µg/L	<0.015						
Benzo(g,h,i)perylene	191-24-2	E641A/CG	0.010	µg/L	<0.010						
Benzo(k)fluoranthene	207-08-9	E641A/CG	0.010	µg/L	<0.010						
Chrysene	218-01-9	E641A/CG	0.010	µg/L	<0.010						
Dibenz(a,h)anthracene	53-70-3	E641A/CG	0.0050	µg/L	<0.0050						
Fluoranthene	206-44-0	E641A/CG	0.010	µg/L	<0.010						
Fluorene	86-73-7	E641A/CG	0.010	µg/L	<0.010						
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A/CG	0.010	µg/L	<0.010						
Methylnaphthalene, 1-	90-12-0	E641A/CG	0.010	µg/L	<0.010						
Methylnaphthalene, 2-	91-57-6	E641A/CG	0.010	µg/L	<0.010						
Naphthalene	91-20-3	E641A/CG	0.050	µg/L	<0.050						
Phenanthrene	85-01-8	E641A/CG	0.020	µg/L	<0.020						
Pyrene	129-00-0	E641A/CG	0.010	µg/L	<0.010						



SubMatrix: Water  
 (Matrix: Water )

Client sample ID

Well #2

----

Client sampling date / time

25-Nov-2025 09:17

Analyte	CAS Number	Method/Lab	LOR	Unit	CG2517243-001	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
<b>Polycyclic Aromatic Hydrocarbons</b>										
Quinoline	91-22-5	E641A/CG	0.050	µg/L	<0.050	----	----	----	----	----
B(a)P total potency equivalents [B(a)P TPE]	----	E641A/CG	0.010	µg/L	<0.010	----	0.04 µg/L	----	----	----
<b>Polycyclic Aromatic Hydrocarbons Surrogates</b>										
Chrysene-d12	1719-03-5	E641A/CG	0.1	%	88.4	----	----	----	----	----
Naphthalene-d8	1146-65-2	E641A/CG	0.1	%	95.6	----	----	----	----	----
Phenanthrene-d10	1517-22-2	E641A/CG	0.1	%	93.6	----	----	----	----	----

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



Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Well #3	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
					Client sampling date / time	----					
					CG2517243-002	25-Nov-2025 09:26					
<b>Physical Tests</b>											
Alkalinity, bicarbonate (as CaCO3)	---	E290/CG	1.0	mg/L	156		---	---	---	---	---
Alkalinity, carbonate (as CaCO3)	---	E290/CG	1.0	mg/L	<1.0		---	---	---	---	---
Alkalinity, hydroxide (as CaCO3)	---	E290/CG	1.0	mg/L	<1.0		---	---	---	---	---
Alkalinity, phenolphthalein (as CaCO3)	---	E290/CG	1.0	mg/L	<1.0		---	---	---	---	---
Alkalinity, total (as CaCO3)	---	E290/CG	1.0	mg/L	156		---	---	---	---	---
Colour, true	---	E329/CG	5.0	CU	<5.0		15 CU	---	---	---	---
Conductivity	---	E100/CG	2.0	µS/cm	362		---	---	---	---	---
Hardness (as CaCO3), from total Ca/Mg	---	EC100A/CG	0.50	mg/L	164		---	---	---	---	---
pH	---	E108/CG	0.10	pH units	8.11		---	---	7 - 10.5 pH units	---	---
Solids, total dissolved [TDS]	---	E162/CG	10	mg/L	189		500 mg/L	---	---	---	---
Turbidity	---	E121/CG	0.10	NTU	<0.10		---	1 NTU	---	---	---
<b>Anions and Nutrients</b>											
Chloride	16887-00-6	E235.Cl-L/CG	0.10	mg/L	14.2		250 mg/L	---	---	---	---
Fluoride	16984-48-8	E235.F/CG	0.020	mg/L	0.095		---	1.5 mg/L	---	---	---
Nitrate (as N)	14797-55-8	E235.NO3-L/CG	0.0050	mg/L	0.531		---	10 mg/L	---	---	---
Nitrite (as N)	14797-65-0	E235.NO2-L/CG	0.0010	mg/L	<0.0010		---	1 mg/L	---	---	---
Sulfate (as SO4)	14808-79-8	E235.SO4-L/CG	0.050	mg/L	20.1		500 mg/L	---	---	---	---
Nitrate + Nitrite (as N)	---	EC235.N+N/CG	0.0050	mg/L	0.531		---	10 mg/L	---	---	---
<b>Total Metals</b>											
Aluminum, total	7429-90-5	E420/CG	0.0030	mg/L	<0.0030		---	2.9 mg/L	---	---	---
Antimony, total	7440-36-0	E420/CG	0.00010	mg/L	<0.00010		---	0.006 mg/L	---	---	---
Arsenic, total	7440-38-2	E420/CG	0.00010	mg/L	<0.00010		---	0.01 mg/L	---	---	---
Barium, total	7440-39-3	E420/CG	0.00010	mg/L	0.121		---	2 mg/L	---	---	---
Beryllium, total	7440-41-7	E420/CG	0.000020	mg/L	<0.000020		---	---	---	---	---
Bismuth, total	7440-69-9	E420/CG	0.000050	mg/L	<0.000050		---	---	---	---	---
Boron, total	7440-42-8	E420/CG	0.010	mg/L	<0.010		---	5 mg/L	---	---	---
Cadmium, total	7440-43-9	E420/CG	0.0000050	mg/L	<0.0000050		---	0.007 mg/L	---	---	---
Calcium, total	7440-70-2	E420/CG	0.050	mg/L	30.7		---	---	---	---	---
Chromium, total	7440-47-3	E420/CG	0.00050	mg/L	<0.00050		---	0.05 mg/L	---	---	---
Cobalt, total	7440-48-4	E420/CG	0.00010	mg/L	<0.00010		---	0.001 mg/L	---	---	---
Copper, total	7440-50-8	E420/CG	0.00050	mg/L	0.00100		1 mg/L	2 mg/L	---	---	---
Iron, total	7439-89-6	E420/CG	0.010	mg/L	<0.010		0.3 mg/L	---	---	---	---
Lead, total	7439-92-1	E420/CG	0.000050	mg/L	0.000062		---	0.005 mg/L	---	---	---
Magnesium, total	7439-95-4	E420/CG	0.0050	mg/L	21.1		---	---	---	---	---



Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Well #3	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
					Client sampling date / time	----					
					CG2517243-002	25-Nov-2025 09:26					
<b>Total Metals</b>											
Manganese, total	7439-96-5	E420/CG	0.00010	mg/L	<0.00010		0.02 mg/L	0.12 mg/L	----	----	----
Mercury, total	7439-97-6	E508/CG	0.0000050	mg/L	<0.0000050		----	0.001 mg/L	----	----	----
Molybdenum, total	7439-98-7	E420/CG	0.000050	mg/L	0.000580		----	----	----	----	----
Nickel, total	7440-02-0	E420/CG	0.00050	mg/L	<0.00050		----	----	----	----	----
Phosphorus, total	7723-14-0	E420/CG	0.050	mg/L	<0.050		0.01 mg/L	----	----	----	----
Potassium, total	7440-09-7	E420/CG	0.050	mg/L	0.747		----	----	----	----	----
Selenium, total	7782-49-2	E420/CG	0.000050	mg/L	<0.000050		----	0.05 mg/L	----	----	----
Silicon, total	7440-21-3	E420/CG	0.10	mg/L	2.88		----	----	----	----	----
Silver, total	7440-22-4	E420/CG	0.000010	mg/L	<0.000010		----	----	----	----	----
Sodium, total	7440-23-5	E420/CG	0.050	mg/L	8.10		200 mg/L	----	----	----	----
Strontium, total	7440-24-6	E420/CG	0.00020	mg/L	0.337		----	7 mg/L	----	----	----
Sulfur, total	7704-34-9	E420/CG	0.50	mg/L	7.14		----	----	----	----	----
Thallium, total	7440-28-0	E420/CG	0.000010	mg/L	<0.000010		----	----	----	----	----
Tin, total	7440-31-5	E420/CG	0.00010	mg/L	<0.00010		----	----	----	----	----
Titanium, total	7440-32-6	E420/CG	0.00030	mg/L	<0.00030		----	----	----	----	----
Uranium, total	7440-61-1	E420/CG	0.000010	mg/L	0.000707		----	0.02 mg/L	----	----	----
Vanadium, total	7440-62-2	E420/CG	0.00050	mg/L	<0.00050		----	----	----	----	----
Zinc, total	7440-66-6	E420/CG	0.0030	mg/L	<0.0030		5 mg/L	----	----	----	----
<b>Volatile Organic Compounds</b>											
Benzene	71-43-2	E611A/CG	0.50	µg/L	<0.50		----	5 µg/L	----	----	----
Chlorobenzene	108-90-7	E611C/CG	0.50	µg/L	<0.50		30 µg/L	----	----	----	----
Chloromethane	74-87-3	E611C/CG	5.0	µg/L	<5.0		----	----	----	----	----
Dichlorobenzene, 1,2-	95-50-1	E611C/CG	0.50	µg/L	<0.50		3 µg/L	200 µg/L	----	----	----
Dichlorobenzene, 1,3-	541-73-1	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichlorobenzene, 1,4-	106-46-7	E611C/CG	0.50	µg/L	<0.50		1 µg/L	5 µg/L	----	----	----
Dichloropropane, 1,2-	78-87-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloropropylene, cis-1,3-	10061-01-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloropropylene, cis+trans-1,3-	542-75-6	E611C/CG	0.75	µg/L	<0.75		----	----	----	----	----
Ethylbenzene	100-41-4	E611A/CG	0.50	µg/L	<0.50		1.6 µg/L	140 µg/L	----	----	----
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611A/CG	0.50	µg/L	<0.50		15 µg/L	----	----	----	----
Styrene	100-42-5	E611A/CG	0.50	µg/L	<0.50		----	----	----	----	----
Tetrachloroethane, 1,1,1,2-	630-20-6	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Tetrachloroethane, 1,1,2,2-	79-34-5	E611C/CG	0.20	µg/L	<0.20		----	----	----	----	----



Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Well #3	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
					Client sampling date / time	----					
					CG2517243-002	25-Nov-2025 09:26					
<b>Volatile Organic Compounds</b>											
Toluene	108-88-3	E611A/CG	0.50	µg/L	<0.50		24 µg/L	60 µg/L	----	----	----
Trichloroethane, 1,1,2-	79-00-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Trichlorofluoromethane	75-69-4	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Xylene, m+p-	179601-23-1	E611A/CG	0.40	µg/L	<0.40		----	----	----	----	----
Xylene, o-	95-47-6	E611A/CG	0.30	µg/L	<0.30		----	----	----	----	----
Xylenes, total	1330-20-7	E611A/CG	0.50	µg/L	<0.50		20 µg/L	90 µg/L	----	----	----
BTEX, total	----	E611A/CG	1.0	µg/L	<1.0		----	----	----	----	----
BTEX+Styrene, total	n/a	E611A/CG	1.5	µg/L	<1.5		----	----	----	----	----
<b>Volatile Organic Compounds [Drycleaning]</b>											
Carbon tetrachloride	56-23-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Chloroethane	75-00-3	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloroethane, 1,1-	75-34-3	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloroethane, 1,2-	107-06-2	E611C/CG	0.50	µg/L	<0.50		----	5 µg/L	----	----	----
Dichloroethylene, 1,1-	75-35-4	E611C/CG	0.50	µg/L	<0.50		----	14 µg/L	----	----	----
Dichloroethylene, cis-1,2-	156-59-2	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloroethylene, trans-1,2-	156-60-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloromethane	75-09-2	E611C/CG	1.0	µg/L	<1.0		----	50 µg/L	----	----	----
Dichloropropylene, trans-1,3-	10061-02-6	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Tetrachloroethylene	127-18-4	E611C/CG	0.50	µg/L	<0.50		----	10 µg/L	----	----	----
Trichloroethane, 1,1,1-	71-55-6	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Trichloroethylene	79-01-6	E611C/CG	0.50	µg/L	<0.50		----	5 µg/L	----	----	----
Vinyl chloride	75-01-4	E611C/CG	0.40	µg/L	<0.40		----	2 µg/L	----	----	----
<b>Volatile Organic Compounds [Fuels]</b>											
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C/CG	0.50	µg/L	<0.50		15 µg/L	----	----	----	----
Styrene	100-42-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
<b>Volatile Organic Compounds [THMs]</b>											
Bromodichloromethane	75-27-4	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Bromoform	75-25-2	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Chloroform	67-66-3	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dibromochloromethane	124-48-1	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
<b>Hydrocarbons</b>											
VHw (C6-C10)	----	E581.VH+F1/CG	100	µg/L	<100		----	----	----	----	----
VPHw	----	EC580A/CG	100	µg/L	<100		----	----	----	----	----
EPH (C10-C19)	----	E601A/CG	250	µg/L	<250		----	----	----	----	----



Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Well #3	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
					Client sampling date / time	----					
					CG2517243-002	25-Nov-2025 09:26					
<b>Hydrocarbons</b>											
EPH (C19-C32)	----	E601A/CG	250	µg/L	<250						
LEPHw	----	EC600A/CG	250	µg/L	<250						
HEPHw	----	EC600A/CG	250	µg/L	<250						
<b>Hydrocarbons Surrogates</b>											
Bromobenzotrifluoride, 2- (EPH surrogate)	392-83-6	E601A/CG	1.0	%	90.0						
Dichlorotoluene, 3,4-	95-75-0	E581.VH+F1/CG	1.0	%	106						
<b>Volatile Organic Compounds Surrogates</b>											
Bromofluorobenzene, 4-	460-00-4	E611C/CG	1.0	%	98.7						
Bromofluorobenzene, 4-	460-00-4	E611A/CG	1.0	%	98.7						
Difluorobenzene, 1,4-	540-36-3	E611C/CG	1.0	%	100.0						
Difluorobenzene, 1,4-	540-36-3	E611A/CG	1.0	%	100.0						
<b>Polycyclic Aromatic Hydrocarbons</b>											
Acenaphthene	83-32-9	E641A/CG	0.010	µg/L	<0.010						
Acenaphthylene	208-96-8	E641A/CG	0.010	µg/L	<0.010						
Acridine	260-94-6	E641A/CG	0.010	µg/L	<0.010						
Anthracene	120-12-7	E641A/CG	0.010	µg/L	<0.010						
Benz(a)anthracene	56-55-3	E641A/CG	0.010	µg/L	<0.010						
Benzo(a)pyrene	50-32-8	E641A/CG	0.0050	µg/L	<0.0050		0.04 µg/L				
Benzo(b+j)fluoranthene	n/a	E641A/CG	0.010	µg/L	<0.010						
Benzo(b+j+k)fluoranthene	n/a	E641A/CG	0.015	µg/L	<0.015						
Benzo(g,h,i)perylene	191-24-2	E641A/CG	0.010	µg/L	<0.010						
Benzo(k)fluoranthene	207-08-9	E641A/CG	0.010	µg/L	<0.010						
Chrysene	218-01-9	E641A/CG	0.010	µg/L	<0.010						
Dibenz(a,h)anthracene	53-70-3	E641A/CG	0.0050	µg/L	<0.0050						
Fluoranthene	206-44-0	E641A/CG	0.010	µg/L	<0.010						
Fluorene	86-73-7	E641A/CG	0.010	µg/L	<0.010						
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A/CG	0.010	µg/L	<0.010						
Methylnaphthalene, 1-	90-12-0	E641A/CG	0.010	µg/L	<0.010						
Methylnaphthalene, 2-	91-57-6	E641A/CG	0.010	µg/L	<0.010						
Naphthalene	91-20-3	E641A/CG	0.050	µg/L	<0.050						
Phenanthrene	85-01-8	E641A/CG	0.020	µg/L	<0.020						
Pyrene	129-00-0	E641A/CG	0.010	µg/L	<0.010						
Quinoline	91-22-5	E641A/CG	0.050	µg/L	<0.050						
B(a)P total potency equivalents [B(a)P TPE]	----	E641A/CG	0.010	µg/L	<0.010		0.04 µg/L				



SubMatrix: Water (Matrix: Water )		Client sample ID			Well #3 ----					
		Client sampling date / time			25-Nov-2025 09:26					
Analyte	CAS Number	Method/Lab	LOR	Unit	CG2517243-002	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
<b>Polycyclic Aromatic Hydrocarbons Surrogates</b>										
Chrysene-d12	1719-03-5	E641A/CG	0.1	%	89.1	----	----	----	----	----
Naphthalene-d8	1146-65-2	E641A/CG	0.1	%	90.5	----	----	----	----	----
Phenanthrene-d10	1517-22-2	E641A/CG	0.1	%	90.9	----	----	----	----	----

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



Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Well #4	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
					Client sampling date / time	----					
					CG2517243-003	25-Nov-2025 09:49					
<b>Physical Tests</b>											
Alkalinity, bicarbonate (as CaCO3)	---	E290/CG	1.0	mg/L	381		---	---	---	---	---
Alkalinity, carbonate (as CaCO3)	---	E290/CG	1.0	mg/L	<1.0		---	---	---	---	---
Alkalinity, hydroxide (as CaCO3)	---	E290/CG	1.0	mg/L	<1.0		---	---	---	---	---
Alkalinity, phenolphthalein (as CaCO3)	---	E290/CG	1.0	mg/L	<1.0		---	---	---	---	---
Alkalinity, total (as CaCO3)	---	E290/CG	1.0	mg/L	381		---	---	---	---	---
Colour, true	---	E329/CG	5.0	CU	<5.0		15 CU	---	---	---	---
Conductivity	---	E100/CG	2.0	µS/cm	1090		---	---	---	---	---
Hardness (as CaCO3), from total Ca/Mg	---	EC100A/CG	0.50	mg/L	406		---	---	---	---	---
pH	---	E108/CG	0.10	pH units	7.63		---	---	7 - 10.5 pH units	---	---
Solids, total dissolved [TDS]	---	E162/CG	10	mg/L	599		500 mg/L	---	---	---	---
Turbidity	---	E121/CG	0.10	NTU	<0.10		---	1 NTU	---	---	---
<b>Anions and Nutrients</b>											
Chloride	16887-00-6	E235.Cl-L/CG	0.10	mg/L	120		250 mg/L	---	---	---	---
Fluoride	16984-48-8	E235.F/CG	0.020	mg/L	<0.100 <sup>DLDS</sup>		---	1.5 mg/L	---	---	---
Nitrate (as N)	14797-55-8	E235.NO3-L/CG	0.0050	mg/L	1.73		---	10 mg/L	---	---	---
Nitrite (as N)	14797-65-0	E235.NO2-L/CG	0.0010	mg/L	<0.0050 <sup>DLDS</sup>		---	1 mg/L	---	---	---
Sulfate (as SO4)	14808-79-8	E235.SO4-L/CG	0.050	mg/L	42.8		500 mg/L	---	---	---	---
Nitrate + Nitrite (as N)	---	EC235.N+N/CG	0.0050	mg/L	1.73		---	10 mg/L	---	---	---
<b>Total Metals</b>											
Aluminum, total	7429-90-5	E420/CG	0.0030	mg/L	<0.0030		---	2.9 mg/L	---	---	---
Antimony, total	7440-36-0	E420/CG	0.00010	mg/L	<0.00010		---	0.006 mg/L	---	---	---
Arsenic, total	7440-38-2	E420/CG	0.00010	mg/L	0.00012		---	0.01 mg/L	---	---	---
Barium, total	7440-39-3	E420/CG	0.00010	mg/L	0.230		---	2 mg/L	---	---	---
Beryllium, total	7440-41-7	E420/CG	0.000020	mg/L	<0.000020		---	---	---	---	---
Bismuth, total	7440-69-9	E420/CG	0.000050	mg/L	<0.000050		---	---	---	---	---
Boron, total	7440-42-8	E420/CG	0.010	mg/L	0.014		---	5 mg/L	---	---	---
Cadmium, total	7440-43-9	E420/CG	0.0000050	mg/L	<0.0000050		---	0.007 mg/L	---	---	---
Calcium, total	7440-70-2	E420/CG	0.050	mg/L	91.1		---	---	---	---	---
Chromium, total	7440-47-3	E420/CG	0.00050	mg/L	<0.00050		---	0.05 mg/L	---	---	---
Cobalt, total	7440-48-4	E420/CG	0.00010	mg/L	<0.00010		---	0.001 mg/L	---	---	---
Copper, total	7440-50-8	E420/CG	0.00050	mg/L	0.00255		1 mg/L	2 mg/L	---	---	---
Iron, total	7439-89-6	E420/CG	0.010	mg/L	<0.010		0.3 mg/L	---	---	---	---
Lead, total	7439-92-1	E420/CG	0.000050	mg/L	0.000301		---	0.005 mg/L	---	---	---
Magnesium, total	7439-95-4	E420/CG	0.0050	mg/L	43.3		---	---	---	---	---



Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Well #4	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
					Client sampling date / time	----					
					CG2517243-003	25-Nov-2025 09:49					
<b>Total Metals</b>											
Manganese, total	7439-96-5	E420/CG	0.00010	mg/L	<0.00010		0.02 mg/L	0.12 mg/L	----	----	----
Mercury, total	7439-97-6	E508/CG	0.0000050	mg/L	<0.0000050		----	0.001 mg/L	----	----	----
Molybdenum, total	7439-98-7	E420/CG	0.000050	mg/L	0.000170		----	----	----	----	----
Nickel, total	7440-02-0	E420/CG	0.00050	mg/L	<0.00050		----	----	----	----	----
Phosphorus, total	7723-14-0	E420/CG	0.050	mg/L	<0.050		0.01 mg/L	----	----	----	----
Potassium, total	7440-09-7	E420/CG	0.050	mg/L	2.14		----	----	----	----	----
Selenium, total	7782-49-2	E420/CG	0.000050	mg/L	0.000117		----	0.05 mg/L	----	----	----
Silicon, total	7440-21-3	E420/CG	0.10	mg/L	4.72		----	----	----	----	----
Silver, total	7440-22-4	E420/CG	0.000010	mg/L	<0.000010		----	----	----	----	----
Sodium, total	7440-23-5	E420/CG	0.050	mg/L	69.9		200 mg/L	----	----	----	----
Strontium, total	7440-24-6	E420/CG	0.00020	mg/L	0.487		----	7 mg/L	----	----	----
Sulfur, total	7704-34-9	E420/CG	0.50	mg/L	15.8		----	----	----	----	----
Thallium, total	7440-28-0	E420/CG	0.000010	mg/L	<0.000010		----	----	----	----	----
Tin, total	7440-31-5	E420/CG	0.00010	mg/L	<0.00010		----	----	----	----	----
Titanium, total	7440-32-6	E420/CG	0.00030	mg/L	<0.00030		----	----	----	----	----
Uranium, total	7440-61-1	E420/CG	0.000010	mg/L	0.00129		----	0.02 mg/L	----	----	----
Vanadium, total	7440-62-2	E420/CG	0.00050	mg/L	<0.00050		----	----	----	----	----
Zinc, total	7440-66-6	E420/CG	0.0030	mg/L	0.0158		5 mg/L	----	----	----	----
<b>Volatile Organic Compounds</b>											
Benzene	71-43-2	E611A/CG	0.50	µg/L	<0.50		----	5 µg/L	----	----	----
Chlorobenzene	108-90-7	E611C/CG	0.50	µg/L	<0.50		30 µg/L	----	----	----	----
Chloromethane	74-87-3	E611C/CG	5.0	µg/L	<5.0		----	----	----	----	----
Dichlorobenzene, 1,2-	95-50-1	E611C/CG	0.50	µg/L	<0.50		3 µg/L	200 µg/L	----	----	----
Dichlorobenzene, 1,3-	541-73-1	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichlorobenzene, 1,4-	106-46-7	E611C/CG	0.50	µg/L	<0.50		1 µg/L	5 µg/L	----	----	----
Dichloropropane, 1,2-	78-87-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloropropylene, cis-1,3-	10061-01-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloropropylene, cis+trans-1,3-	542-75-6	E611C/CG	0.75	µg/L	<0.75		----	----	----	----	----
Ethylbenzene	100-41-4	E611A/CG	0.50	µg/L	<0.50		1.6 µg/L	140 µg/L	----	----	----
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611A/CG	0.50	µg/L	<0.50		15 µg/L	----	----	----	----
Styrene	100-42-5	E611A/CG	0.50	µg/L	<0.50		----	----	----	----	----
Tetrachloroethane, 1,1,1,2-	630-20-6	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Tetrachloroethane, 1,1,2,2-	79-34-5	E611C/CG	0.20	µg/L	<0.20		----	----	----	----	----



Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Well #4	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
					Client sampling date / time	----					
					CG2517243-003	25-Nov-2025 09:49					
<b>Volatile Organic Compounds</b>											
Toluene	108-88-3	E611A/CG	0.50	µg/L	<0.50		24 µg/L	60 µg/L	----	----	----
Trichloroethane, 1,1,2-	79-00-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Trichlorofluoromethane	75-69-4	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Xylene, m+p-	179601-23-1	E611A/CG	0.40	µg/L	<0.40		----	----	----	----	----
Xylene, o-	95-47-6	E611A/CG	0.30	µg/L	<0.30		----	----	----	----	----
Xylenes, total	1330-20-7	E611A/CG	0.50	µg/L	<0.50		20 µg/L	90 µg/L	----	----	----
BTEX, total	----	E611A/CG	1.0	µg/L	<1.0		----	----	----	----	----
BTEX+Styrene, total	n/a	E611A/CG	1.5	µg/L	<1.5		----	----	----	----	----
<b>Volatile Organic Compounds [Drycleaning]</b>											
Carbon tetrachloride	56-23-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Chloroethane	75-00-3	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloroethane, 1,1-	75-34-3	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloroethane, 1,2-	107-06-2	E611C/CG	0.50	µg/L	<0.50		----	5 µg/L	----	----	----
Dichloroethylene, 1,1-	75-35-4	E611C/CG	0.50	µg/L	<0.50		----	14 µg/L	----	----	----
Dichloroethylene, cis-1,2-	156-59-2	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloroethylene, trans-1,2-	156-60-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloromethane	75-09-2	E611C/CG	1.0	µg/L	<1.0		----	50 µg/L	----	----	----
Dichloropropylene, trans-1,3-	10061-02-6	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Tetrachloroethylene	127-18-4	E611C/CG	0.50	µg/L	<0.50		----	10 µg/L	----	----	----
Trichloroethane, 1,1,1-	71-55-6	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Trichloroethylene	79-01-6	E611C/CG	0.50	µg/L	<0.50		----	5 µg/L	----	----	----
Vinyl chloride	75-01-4	E611C/CG	0.40	µg/L	<0.40		----	2 µg/L	----	----	----
<b>Volatile Organic Compounds [Fuels]</b>											
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C/CG	0.50	µg/L	<0.50		15 µg/L	----	----	----	----
Styrene	100-42-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
<b>Volatile Organic Compounds [THMs]</b>											
Bromodichloromethane	75-27-4	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Bromoform	75-25-2	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Chloroform	67-66-3	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dibromochloromethane	124-48-1	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
<b>Hydrocarbons</b>											
VHw (C6-C10)	----	E581.VH+F1/CG	100	µg/L	<100		----	----	----	----	----
VPHw	----	EC580A/CG	100	µg/L	<100		----	----	----	----	----
EPH (C10-C19)	----	E601A/CG	250	µg/L	<250		----	----	----	----	----



Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Well #4	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
					Client sampling date / time	----					
					CG2517243-003	25-Nov-2025 09:49					
<b>Hydrocarbons</b>											
EPH (C19-C32)	----	E601A/CG	250	µg/L	<250						
LEPHw	----	EC600A/CG	250	µg/L	<250						
HEPHw	----	EC600A/CG	250	µg/L	<250						
<b>Hydrocarbons Surrogates</b>											
Bromobenzotrifluoride, 2- (EPH surrogate)	392-83-6	E601A/CG	1.0	%	84.6						
Dichlorotoluene, 3,4-	95-75-0	E581.VH+F1/CG	1.0	%	101						
<b>Volatile Organic Compounds Surrogates</b>											
Bromofluorobenzene, 4-	460-00-4	E611C/CG	1.0	%	100						
Bromofluorobenzene, 4-	460-00-4	E611A/CG	1.0	%	100						
Difluorobenzene, 1,4-	540-36-3	E611C/CG	1.0	%	100						
Difluorobenzene, 1,4-	540-36-3	E611A/CG	1.0	%	100						
<b>Polycyclic Aromatic Hydrocarbons</b>											
Acenaphthene	83-32-9	E641A/CG	0.010	µg/L	<0.010						
Acenaphthylene	208-96-8	E641A/CG	0.010	µg/L	<0.010						
Acridine	260-94-6	E641A/CG	0.010	µg/L	<0.010						
Anthracene	120-12-7	E641A/CG	0.010	µg/L	<0.010						
Benz(a)anthracene	56-55-3	E641A/CG	0.010	µg/L	<0.010						
Benzo(a)pyrene	50-32-8	E641A/CG	0.0050	µg/L	<0.0050		0.04 µg/L				
Benzo(b+j)fluoranthene	n/a	E641A/CG	0.010	µg/L	<0.010						
Benzo(b+j+k)fluoranthene	n/a	E641A/CG	0.015	µg/L	<0.015						
Benzo(g,h,i)perylene	191-24-2	E641A/CG	0.010	µg/L	<0.010						
Benzo(k)fluoranthene	207-08-9	E641A/CG	0.010	µg/L	<0.010						
Chrysene	218-01-9	E641A/CG	0.010	µg/L	<0.010						
Dibenz(a,h)anthracene	53-70-3	E641A/CG	0.0050	µg/L	<0.0050						
Fluoranthene	206-44-0	E641A/CG	0.010	µg/L	<0.010						
Fluorene	86-73-7	E641A/CG	0.010	µg/L	<0.010						
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A/CG	0.010	µg/L	<0.010						
Methylnaphthalene, 1-	90-12-0	E641A/CG	0.010	µg/L	<0.010						
Methylnaphthalene, 2-	91-57-6	E641A/CG	0.010	µg/L	<0.010						
Naphthalene	91-20-3	E641A/CG	0.050	µg/L	<0.050						
Phenanthrene	85-01-8	E641A/CG	0.020	µg/L	<0.020						
Pyrene	129-00-0	E641A/CG	0.010	µg/L	<0.010						
Quinoline	91-22-5	E641A/CG	0.050	µg/L	<0.050						
B(a)P total potency equivalents [B(a)P TPE]	----	E641A/CG	0.010	µg/L	<0.010		0.04 µg/L				



SubMatrix: Water  
 (Matrix: Water )

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	BCDWQG	BCDWQG	BCDWQG	----	----
					Client sampling date / time	AO	MAC	OG		
					Well #4 ----					
					25-Nov-2025 09:49					
					CG2517243-003					
<b>Polycyclic Aromatic Hydrocarbons Surrogates</b>										
Chrysene-d12	1719-03-5	E641A/CG	0.1	%	89.2	----	----	----	----	----
Naphthalene-d8	1146-65-2	E641A/CG	0.1	%	93.0	----	----	----	----	----
Phenanthrene-d10	1517-22-2	E641A/CG	0.1	%	92.8	----	----	----	----	----

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



Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Well #5	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
					Client sampling date / time	----					
					CG2517243-004	25-Nov-2025 09:35					
<b>Physical Tests</b>											
Alkalinity, bicarbonate (as CaCO3)	---	E290/CG	1.0	mg/L	173						
Alkalinity, carbonate (as CaCO3)	---	E290/CG	1.0	mg/L	<1.0						
Alkalinity, hydroxide (as CaCO3)	---	E290/CG	1.0	mg/L	<1.0						
Alkalinity, phenolphthalein (as CaCO3)	---	E290/CG	1.0	mg/L	<1.0						
Alkalinity, total (as CaCO3)	---	E290/CG	1.0	mg/L	173						
Colour, true	---	E329/CG	5.0	CU	<5.0	15 CU					
Conductivity	---	E100/CG	2.0	µS/cm	410						
Hardness (as CaCO3), from total Ca/Mg	---	EC100A/CG	0.50	mg/L	183						
pH	---	E108/CG	0.10	pH units	8.13			7 - 10.5 pH units			
Solids, total dissolved [TDS]	---	E162/CG	10	mg/L	254	500 mg/L					
Turbidity	---	E121/CG	0.10	NTU	<0.10		1 NTU				
<b>Anions and Nutrients</b>											
Chloride	16887-00-6	E235.Cl-L/CG	0.10	mg/L	16.7	250 mg/L					
Fluoride	16984-48-8	E235.F/CG	0.020	mg/L	0.095		1.5 mg/L				
Nitrate (as N)	14797-55-8	E235.NO3-L/CG	0.0050	mg/L	0.530		10 mg/L				
Nitrite (as N)	14797-65-0	E235.NO2-L/CG	0.0010	mg/L	<0.0010		1 mg/L				
Sulfate (as SO4)	14808-79-8	E235.SO4-L/CG	0.050	mg/L	22.2	500 mg/L					
Nitrate + Nitrite (as N)	---	EC235.N+N/CG	0.0050	mg/L	0.530		10 mg/L				
<b>Total Metals</b>											
Aluminum, total	7429-90-5	E420/CG	0.0030	mg/L	<0.0030		2.9 mg/L				
Antimony, total	7440-36-0	E420/CG	0.00010	mg/L	<0.00010		0.006 mg/L				
Arsenic, total	7440-38-2	E420/CG	0.00010	mg/L	<0.00010		0.01 mg/L				
Barium, total	7440-39-3	E420/CG	0.00010	mg/L	0.0768		2 mg/L				
Beryllium, total	7440-41-7	E420/CG	0.000020	mg/L	<0.000020						
Bismuth, total	7440-69-9	E420/CG	0.000050	mg/L	<0.000050						
Boron, total	7440-42-8	E420/CG	0.010	mg/L	<0.010		5 mg/L				
Cadmium, total	7440-43-9	E420/CG	0.0000050	mg/L	<0.0000050		0.007 mg/L				
Calcium, total	7440-70-2	E420/CG	0.050	mg/L	41.4						
Chromium, total	7440-47-3	E420/CG	0.00050	mg/L	<0.00050		0.05 mg/L				
Cobalt, total	7440-48-4	E420/CG	0.00010	mg/L	<0.00010		0.001 mg/L				
Copper, total	7440-50-8	E420/CG	0.00050	mg/L	0.00076	1 mg/L	2 mg/L				
Iron, total	7439-89-6	E420/CG	0.010	mg/L	<0.010	0.3 mg/L					
Lead, total	7439-92-1	E420/CG	0.000050	mg/L	<0.000050		0.005 mg/L				
Magnesium, total	7439-95-4	E420/CG	0.0050	mg/L	19.3						



Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Well #5	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
					Client sampling date / time	----					
					CG2517243-004	25-Nov-2025 09:35					
<b>Total Metals</b>											
Manganese, total	7439-96-5	E420/CG	0.00010	mg/L	<0.00010		0.02 mg/L	0.12 mg/L	----	----	----
Mercury, total	7439-97-6	E508/CG	0.0000050	mg/L	<0.0000050		----	0.001 mg/L	----	----	----
Molybdenum, total	7439-98-7	E420/CG	0.000050	mg/L	0.000505		----	----	----	----	----
Nickel, total	7440-02-0	E420/CG	0.00050	mg/L	<0.00050		----	----	----	----	----
Phosphorus, total	7723-14-0	E420/CG	0.050	mg/L	<0.050		0.01 mg/L	----	----	----	----
Potassium, total	7440-09-7	E420/CG	0.050	mg/L	0.974		----	----	----	----	----
Selenium, total	7782-49-2	E420/CG	0.000050	mg/L	0.000056		----	0.05 mg/L	----	----	----
Silicon, total	7440-21-3	E420/CG	0.10	mg/L	2.56		----	----	----	----	----
Silver, total	7440-22-4	E420/CG	0.000010	mg/L	<0.000010		----	----	----	----	----
Sodium, total	7440-23-5	E420/CG	0.050	mg/L	11.0		200 mg/L	----	----	----	----
Strontium, total	7440-24-6	E420/CG	0.00020	mg/L	0.348		----	7 mg/L	----	----	----
Sulfur, total	7704-34-9	E420/CG	0.50	mg/L	7.76		----	----	----	----	----
Thallium, total	7440-28-0	E420/CG	0.000010	mg/L	<0.000010		----	----	----	----	----
Tin, total	7440-31-5	E420/CG	0.00010	mg/L	0.00011		----	----	----	----	----
Titanium, total	7440-32-6	E420/CG	0.00030	mg/L	<0.00030		----	----	----	----	----
Uranium, total	7440-61-1	E420/CG	0.000010	mg/L	0.000633		----	0.02 mg/L	----	----	----
Vanadium, total	7440-62-2	E420/CG	0.00050	mg/L	<0.00050		----	----	----	----	----
Zinc, total	7440-66-6	E420/CG	0.0030	mg/L	<0.0030		5 mg/L	----	----	----	----
<b>Volatile Organic Compounds</b>											
Benzene	71-43-2	E611A/CG	0.50	µg/L	<0.50		----	5 µg/L	----	----	----
Chlorobenzene	108-90-7	E611C/CG	0.50	µg/L	<0.50		30 µg/L	----	----	----	----
Chloromethane	74-87-3	E611C/CG	5.0	µg/L	<5.0		----	----	----	----	----
Dichlorobenzene, 1,2-	95-50-1	E611C/CG	0.50	µg/L	<0.50		3 µg/L	200 µg/L	----	----	----
Dichlorobenzene, 1,3-	541-73-1	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichlorobenzene, 1,4-	106-46-7	E611C/CG	0.50	µg/L	<0.50		1 µg/L	5 µg/L	----	----	----
Dichloropropane, 1,2-	78-87-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloropropylene, cis-1,3-	10061-01-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloropropylene, cis+trans-1,3-	542-75-6	E611C/CG	0.75	µg/L	<0.75		----	----	----	----	----
Ethylbenzene	100-41-4	E611A/CG	0.50	µg/L	<0.50		1.6 µg/L	140 µg/L	----	----	----
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611A/CG	0.50	µg/L	<0.50		15 µg/L	----	----	----	----
Styrene	100-42-5	E611A/CG	0.50	µg/L	<0.50		----	----	----	----	----
Tetrachloroethane, 1,1,1,2-	630-20-6	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Tetrachloroethane, 1,1,2,2-	79-34-5	E611C/CG	0.20	µg/L	<0.20		----	----	----	----	----



Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Well #5	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
					Client sampling date / time	----					
					CG2517243-004	25-Nov-2025 09:35					
<b>Volatile Organic Compounds</b>											
Toluene	108-88-3	E611A/CG	0.50	µg/L	<0.50		24 µg/L	60 µg/L	----	----	----
Trichloroethane, 1,1,2-	79-00-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Trichlorofluoromethane	75-69-4	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Xylene, m+p-	179601-23-1	E611A/CG	0.40	µg/L	<0.40		----	----	----	----	----
Xylene, o-	95-47-6	E611A/CG	0.30	µg/L	<0.30		----	----	----	----	----
Xylenes, total	1330-20-7	E611A/CG	0.50	µg/L	<0.50		20 µg/L	90 µg/L	----	----	----
BTEX, total	----	E611A/CG	1.0	µg/L	<1.0		----	----	----	----	----
BTEX+Styrene, total	n/a	E611A/CG	1.5	µg/L	<1.5		----	----	----	----	----
<b>Volatile Organic Compounds [Drycleaning]</b>											
Carbon tetrachloride	56-23-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Chloroethane	75-00-3	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloroethane, 1,1-	75-34-3	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloroethane, 1,2-	107-06-2	E611C/CG	0.50	µg/L	<0.50		----	5 µg/L	----	----	----
Dichloroethylene, 1,1-	75-35-4	E611C/CG	0.50	µg/L	<0.50		----	14 µg/L	----	----	----
Dichloroethylene, cis-1,2-	156-59-2	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloroethylene, trans-1,2-	156-60-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dichloromethane	75-09-2	E611C/CG	1.0	µg/L	<1.0		----	50 µg/L	----	----	----
Dichloropropylene, trans-1,3-	10061-02-6	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Tetrachloroethylene	127-18-4	E611C/CG	0.50	µg/L	<0.50		----	10 µg/L	----	----	----
Trichloroethane, 1,1,1-	71-55-6	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Trichloroethylene	79-01-6	E611C/CG	0.50	µg/L	<0.50		----	5 µg/L	----	----	----
Vinyl chloride	75-01-4	E611C/CG	0.40	µg/L	<0.40		----	2 µg/L	----	----	----
<b>Volatile Organic Compounds [Fuels]</b>											
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C/CG	0.50	µg/L	<0.50		15 µg/L	----	----	----	----
Styrene	100-42-5	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
<b>Volatile Organic Compounds [THMs]</b>											
Bromodichloromethane	75-27-4	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Bromoform	75-25-2	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Chloroform	67-66-3	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
Dibromochloromethane	124-48-1	E611C/CG	0.50	µg/L	<0.50		----	----	----	----	----
<b>Hydrocarbons</b>											
VHw (C6-C10)	----	E581.VH+F1/CG	100	µg/L	<100		----	----	----	----	----
VPHw	----	EC580A/CG	100	µg/L	<100		----	----	----	----	----
EPH (C10-C19)	----	E601A/CG	250	µg/L	<250		----	----	----	----	----



Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Well #5	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
					Client sampling date / time	----					
					CG2517243-004	25-Nov-2025 09:35					
<b>Hydrocarbons</b>											
EPH (C19-C32)	----	E601A/CG	250	µg/L	<250						
LEPHw	----	EC600A/CG	250	µg/L	<250						
HEPHw	----	EC600A/CG	250	µg/L	<250						
<b>Hydrocarbons Surrogates</b>											
Bromobenzotrifluoride, 2- (EPH surrogate)	392-83-6	E601A/CG	1.0	%	89.8						
Dichlorotoluene, 3,4-	95-75-0	E581.VH+F1/CG	1.0	%	106						
<b>Volatile Organic Compounds Surrogates</b>											
Bromofluorobenzene, 4-	460-00-4	E611C/CG	1.0	%	80.6						
Bromofluorobenzene, 4-	460-00-4	E611A/CG	1.0	%	80.6						
Difluorobenzene, 1,4-	540-36-3	E611C/CG	1.0	%	99.8						
Difluorobenzene, 1,4-	540-36-3	E611A/CG	1.0	%	99.8						
<b>Polycyclic Aromatic Hydrocarbons</b>											
Acenaphthene	83-32-9	E641A/CG	0.010	µg/L	<0.010						
Acenaphthylene	208-96-8	E641A/CG	0.010	µg/L	<0.010						
Acridine	260-94-6	E641A/CG	0.010	µg/L	<0.010						
Anthracene	120-12-7	E641A/CG	0.010	µg/L	<0.010						
Benz(a)anthracene	56-55-3	E641A/CG	0.010	µg/L	<0.010						
Benzo(a)pyrene	50-32-8	E641A/CG	0.0050	µg/L	<0.0050		0.04 µg/L				
Benzo(b+j)fluoranthene	n/a	E641A/CG	0.010	µg/L	<0.010						
Benzo(b+j+k)fluoranthene	n/a	E641A/CG	0.015	µg/L	<0.015						
Benzo(g,h,i)perylene	191-24-2	E641A/CG	0.010	µg/L	<0.010						
Benzo(k)fluoranthene	207-08-9	E641A/CG	0.010	µg/L	<0.010						
Chrysene	218-01-9	E641A/CG	0.010	µg/L	<0.010						
Dibenz(a,h)anthracene	53-70-3	E641A/CG	0.0050	µg/L	<0.0050						
Fluoranthene	206-44-0	E641A/CG	0.010	µg/L	<0.010						
Fluorene	86-73-7	E641A/CG	0.010	µg/L	<0.010						
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A/CG	0.010	µg/L	<0.010						
Methylnaphthalene, 1-	90-12-0	E641A/CG	0.010	µg/L	<0.010						
Methylnaphthalene, 2-	91-57-6	E641A/CG	0.010	µg/L	<0.010						
Naphthalene	91-20-3	E641A/CG	0.050	µg/L	<0.050						
Phenanthrene	85-01-8	E641A/CG	0.020	µg/L	<0.020						
Pyrene	129-00-0	E641A/CG	0.010	µg/L	<0.010						
Quinoline	91-22-5	E641A/CG	0.050	µg/L	<0.050						
B(a)P total potency equivalents [B(a)P TPE]	----	E641A/CG	0.010	µg/L	<0.010		0.04 µg/L				



SubMatrix: Water  
 (Matrix: Water )

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Well #5	BCDWQG AO	BCDWQG MAC	BCDWQG OG	----	----
					Client sampling date / time	----					
					CG2517243-004	25-Nov-2025 09:35					
<b>Polycyclic Aromatic Hydrocarbons Surrogates</b>											
Chrysene-d12	1719-03-5	E641A/CG	0.1	%	92.8	----	----	----	----	----	----
Naphthalene-d8	1146-65-2	E641A/CG	0.1	%	96.7	----	----	----	----	----	----
Phenanthrene-d10	1517-22-2	E641A/CG	0.1	%	98.3	----	----	----	----	----	----

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

## QUALITY CONTROL REPORT

<p><b>Work Order</b> : <b>CG2517243</b></p> <p>Client : Town of Golden</p> <p>Contact : Al Taylor</p> <p>Address : BOX 350 Golden BC Canada V0A 1H0</p> <p>Telephone : 250-344-1488</p> <p>Project : ----</p> <p>PO : ----</p> <p>C-O-C number : ----</p> <p>Sampler : Ryan Robison</p> <p>Site : ----</p> <p>Quote number : CG21-GMGO100-0001 Drinking Water</p> <p>No. of samples received : 4</p> <p>No. of samples analysed : 4</p>	<p>Page : 1 of 17</p> <p>Laboratory : ALS Environmental - Calgary</p> <p>Account Manager : Patryk Wojciak</p> <p>Address : 2559 29th Street NE Calgary, Alberta Canada T1Y 7B5</p> <p>Telephone : +1 403 407 1800</p> <p>Date Samples Received : 26-Nov-2025 09:30</p> <p>Date Analysis Commenced : 26-Nov-2025</p> <p>Issue Date : 30-Nov-2025 15:44</p>
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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>
Cynthia Bauer	Organic Supervisor	Calgary Organics, Calgary, Alberta
Harpreet Chawla	Team Leader - Inorganics	Calgary Inorganics, Calgary, Alberta
Jyotsnarani Devi	Laboratory Analyst	Calgary Organics, Calgary, Alberta
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Shirley Li	Team Leader - Inorganics	Calgary Metals, Calgary, Alberta
Sorina Motea	Team Leader - Organics	Calgary Organics, Calgary, Alberta

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Work Order : CG2517243  
Client : Town of Golden  
Project : ----



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## 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.

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## Workorder Comments

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

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### 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: <b>Water</b>					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
<b>Physical Tests (QC Lot: 2356946)</b>											
CG2517243-001	Well #2	Colour, true	----	E329	5.0	CU	<5.0	<5.0	0	Diff <2x LOR	----
<b>Physical Tests (QC Lot: 2357201)</b>											
CG2517219-004	Anonymous	pH	----	E108	0.10	pH units	7.01	6.95	0.860%	4%	----
<b>Physical Tests (QC Lot: 2357202)</b>											
CG2517235-001	Anonymous	Conductivity	----	E100	2.0	µS/cm	1340	1360	1.55%	10%	----
<b>Physical Tests (QC Lot: 2357203)</b>											
CG2517235-001	Anonymous	Alkalinity, bicarbonate (as CaCO3)	----	E290	1.0	mg/L	225	238	5.36%	20%	----
		Alkalinity, carbonate (as CaCO3)	----	E290	1.0	mg/L	8.0	6.8	1.2	Diff <2x LOR	----
		Alkalinity, hydroxide (as CaCO3)	----	E290	1.0	mg/L	<1.0	<1.0	0	Diff <2x LOR	----
		Alkalinity, phenolphthalein (as CaCO3)	----	E290	1.0	mg/L	4.0	3.4	0.6	Diff <2x LOR	----
		Alkalinity, total (as CaCO3)	----	E290	1.0	mg/L	233	244	4.69%	20%	----
<b>Physical Tests (QC Lot: 2358598)</b>											
CG2517236-001	Anonymous	Turbidity	----	E121	0.10	NTU	0.93	0.80	0.13	Diff <2x LOR	----
<b>Physical Tests (QC Lot: 2359351)</b>											
CG2517168-002	Anonymous	Solids, total dissolved [TDS]	----	E162	20	mg/L	2110	2080	1.00%	20%	----
<b>Physical Tests (QC Lot: 2359352)</b>											
CG2517243-003	Well #4	Solids, total dissolved [TDS]	----	E162	20	mg/L	599	619	3.29%	20%	----
<b>Anions and Nutrients (QC Lot: 2358667)</b>											
CG2517287-001	Anonymous	Fluoride	16984-48-8	E235.F	0.020	mg/L	0.092	0.091	0.001	Diff <2x LOR	----
<b>Anions and Nutrients (QC Lot: 2358668)</b>											
CG2517287-001	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	0.0050	mg/L	0.155	0.157	1.22%	20%	----
<b>Anions and Nutrients (QC Lot: 2358669)</b>											
CG2517287-001	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
<b>Anions and Nutrients (QC Lot: 2358670)</b>											
CG2517287-001	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4-L	0.050	mg/L	49.0	49.0	0.105%	20%	----
<b>Anions and Nutrients (QC Lot: 2358671)</b>											
CG2517287-001	Anonymous	Chloride	16887-00-6	E235.Cl-L	0.10	mg/L	8.79	8.79	0.0150%	20%	----
<b>Total Metals (QC Lot: 2357270)</b>											
CG2517243-001	Well #2	Mercury, total	7439-97-6	E508	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----



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
<b>Total Metals (QC Lot: 2358219)</b>											
CG2517190-003	Anonymous	Aluminum, total	7429-90-5	E420	0.0150	mg/L	0.0330	0.0344	0.0013	Diff <2x LOR	---
		Antimony, total	7440-36-0	E420	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	---
		Arsenic, total	7440-38-2	E420	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	---
		Barium, total	7440-39-3	E420	0.00050	mg/L	0.0160	0.0162	1.11%	20%	---
		Beryllium, total	7440-41-7	E420	0.000100	mg/L	<0.000100	<0.000100	0	Diff <2x LOR	---
		Bismuth, total	7440-69-9	E420	0.000250	mg/L	<0.000250	<0.000250	0	Diff <2x LOR	---
		Boron, total	7440-42-8	E420	0.050	mg/L	0.053	0.051	0.001	Diff <2x LOR	---
		Cadmium, total	7440-43-9	E420	0.0000250	mg/L	0.0000306	0.0000285	0.0000020	Diff <2x LOR	---
		Calcium, total	7440-70-2	E420	0.250	mg/L	347	346	0.351%	20%	---
		Chromium, total	7440-47-3	E420	0.00250	mg/L	<0.00250	<0.00250	0	Diff <2x LOR	---
		Cobalt, total	7440-48-4	E420	0.00050	mg/L	0.00057	0.00064	0.00007	Diff <2x LOR	---
		Copper, total	7440-50-8	E420	0.00250	mg/L	0.00545	0.00571	0.00026	Diff <2x LOR	---
		Iron, total	7439-89-6	E420	0.050	mg/L	0.209	0.212	0.002	Diff <2x LOR	---
		Lead, total	7439-92-1	E420	0.000250	mg/L	0.000305	0.000292	0.000013	Diff <2x LOR	---
		Magnesium, total	7439-95-4	E420	0.0250	mg/L	263	267	1.53%	20%	---
		Manganese, total	7439-96-5	E420	0.00050	mg/L	0.0710	0.0713	0.474%	20%	---
		Molybdenum, total	7439-98-7	E420	0.000250	mg/L	0.0547	0.0536	2.16%	20%	---
		Nickel, total	7440-02-0	E420	0.00250	mg/L	0.0202	0.0203	0.00009	Diff <2x LOR	---
		Phosphorus, total	7723-14-0	E420	0.250	mg/L	<0.250	<0.250	0	Diff <2x LOR	---
		Potassium, total	7440-09-7	E420	0.250	mg/L	4.77	4.87	2.02%	20%	---
		Selenium, total	7782-49-2	E420	0.000250	mg/L	19.7 µg/L	0.0194	1.95%	20%	---
		Silicon, total	7440-21-3	E420	0.50	mg/L	2.30	2.24	0.06	Diff <2x LOR	---
		Silver, total	7440-22-4	E420	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	---
		Sodium, total	7440-23-5	E420	0.250	mg/L	8.90	8.90	0.0116%	20%	---
		Strontium, total	7440-24-6	E420	0.00100	mg/L	0.265	0.258	2.54%	20%	---
		Sulfur, total	7704-34-9	E420	2.50	mg/L	502	481	4.28%	20%	---
		Thallium, total	7440-28-0	E420	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	---
		Tin, total	7440-31-5	E420	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	---
		Titanium, total	7440-32-6	E420	0.00150	mg/L	<0.00150	<0.00150	0	Diff <2x LOR	---
		Uranium, total	7440-61-1	E420	0.000050	mg/L	0.0159	0.0153	4.08%	20%	---
		Vanadium, total	7440-62-2	E420	0.00250	mg/L	<0.00250	<0.00250	0	Diff <2x LOR	---
		Zinc, total	7440-66-6	E420	0.0150	mg/L	<0.0150	<0.0150	0	Diff <2x LOR	---
<b>Volatile Organic Compounds (QC Lot: 2360916)</b>											
CG2517243-001	Well #2	Benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---



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
<b>Volatile Organic Compounds (QC Lot: 2360916) - continued</b>											
CG2517243-001	Well #2	Ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Methyl-tert-butyl ether [MTBE]	1634-04-4	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Xylene, m+p-	179601-23-1	E611A	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	---
		Xylene, o-	95-47-6	E611A	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	---
<b>Volatile Organic Compounds (QC Lot: 2360918)</b>											
CG2517243-001	Well #2	Bromodichloromethane	75-27-4	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Bromoform	75-25-2	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Carbon tetrachloride	56-23-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Chlorobenzene	108-90-7	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Chloroethane	75-00-3	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Chloroform	67-66-3	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Chloromethane	74-87-3	E611C	5.0	µg/L	<5.0	<5.0	0	Diff <2x LOR	---
		Dibromochloromethane	124-48-1	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Dichlorobenzene, 1,2-	95-50-1	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Dichlorobenzene, 1,3-	541-73-1	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Dichlorobenzene, 1,4-	106-46-7	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Dichloroethane, 1,1-	75-34-3	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Dichloroethane, 1,2-	107-06-2	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Dichloroethylene, 1,1-	75-35-4	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Dichloroethylene, cis-1,2-	156-59-2	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Dichloroethylene, trans-1,2-	156-60-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Dichloromethane	75-09-2	E611C	1.0	µg/L	<1.0	<1.0	0	Diff <2x LOR	---
		Dichloropropane, 1,2-	78-87-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Dichloropropylene, cis-1,3-	10061-01-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Dichloropropylene, trans-1,3-	10061-02-6	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Styrene	100-42-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Tetrachloroethane, 1,1,1,2-	630-20-6	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Tetrachloroethane, 1,1,2,2-	79-34-5	E611C	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	---
		Tetrachloroethylene	127-18-4	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Trichloroethane, 1,1,1-	71-55-6	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---
		Trichloroethane, 1,1,2-	79-00-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	---

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 Work Order : CG2517243  
 Client : Town of Golden  
 Project : ----



Sub-Matrix: <b>Water</b>					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
<b>Volatile Organic Compounds (QC Lot: 2360918) - continued</b>											
CG2517243-001	Well #2	Trichloroethylene	79-01-6	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Trichlorofluoromethane	75-69-4	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Vinyl chloride	75-01-4	E611C	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
<b>Hydrocarbons (QC Lot: 2360917)</b>											
CG2517243-001	Well #2	VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	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
<b>Physical Tests (QCLot: 2356946)</b>						
Colour, true	----	E329	5	CU	<5.0	----
<b>Physical Tests (QCLot: 2357202)</b>						
Conductivity	----	E100	1	µS/cm	<1.0	----
<b>Physical Tests (QCLot: 2357203)</b>						
Alkalinity, bicarbonate (as CaCO3)	----	E290	1	mg/L	<1.0	----
Alkalinity, carbonate (as CaCO3)	----	E290	1	mg/L	<1.0	----
Alkalinity, hydroxide (as CaCO3)	----	E290	1	mg/L	<1.0	----
Alkalinity, phenolphthalein (as CaCO3)	----	E290	1	mg/L	<1.0	----
Alkalinity, total (as CaCO3)	----	E290	1	mg/L	<1.0	----
<b>Physical Tests (QCLot: 2358598)</b>						
Turbidity	----	E121	0.1	NTU	<0.10	----
<b>Physical Tests (QCLot: 2359351)</b>						
Solids, total dissolved [TDS]	----	E162	10	mg/L	<10	----
<b>Physical Tests (QCLot: 2359352)</b>						
Solids, total dissolved [TDS]	----	E162	10	mg/L	<10	----
<b>Anions and Nutrients (QCLot: 2358667)</b>						
Fluoride	16984-48-8	E235.F	0.02	mg/L	<0.020	----
<b>Anions and Nutrients (QCLot: 2358668)</b>						
Nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	<0.0050	----
<b>Anions and Nutrients (QCLot: 2358669)</b>						
Nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	<0.0010	----
<b>Anions and Nutrients (QCLot: 2358670)</b>						
Sulfate (as SO4)	14808-79-8	E235.SO4-L	0.05	mg/L	<0.050	----
<b>Anions and Nutrients (QCLot: 2358671)</b>						
Chloride	16887-00-6	E235.Cl-L	0.1	mg/L	<0.10	----
<b>Total Metals (QCLot: 2357270)</b>						
Mercury, total	7439-97-6	E508	0.000005	mg/L	<0.0000050	----
<b>Total Metals (QCLot: 2358219)</b>						
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	----



Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
<b>Total Metals (QCLot: 2358219) - continued</b>						
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	---
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	---
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	---
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	---
Thallium, total	7440-28-0	E420	0.00001	mg/L	<0.000010	---
Tin, total	7440-31-5	E420	0.0001	mg/L	<0.00010	---
Titanium, total	7440-32-6	E420	0.0003	mg/L	<0.00030	---
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	---
<b>Volatile Organic Compounds (QCLot: 2360916)</b>						
Benzene	71-43-2	E611A	0.5	µg/L	<0.50	---
Ethylbenzene	100-41-4	E611A	0.5	µg/L	<0.50	---
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611A	0.5	µg/L	<0.50	---
Styrene	100-42-5	E611A	0.5	µg/L	<0.50	---
Toluene	108-88-3	E611A	0.5	µg/L	<0.50	---
Xylene, m+p-	179601-23-1	E611A	0.4	µg/L	<0.40	---



Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
<b>Volatile Organic Compounds (QCLot: 2360916) - continued</b>						
Xylene, o-	95-47-6	E611A	0.3	µg/L	<0.30	---
<b>Volatile Organic Compounds (QCLot: 2360918)</b>						
Bromodichloromethane	75-27-4	E611C	0.5	µg/L	<0.50	---
Bromoform	75-25-2	E611C	0.5	µg/L	<0.50	---
Carbon tetrachloride	56-23-5	E611C	0.5	µg/L	<0.50	---
Chlorobenzene	108-90-7	E611C	0.5	µg/L	<0.50	---
Chloroethane	75-00-3	E611C	0.5	µg/L	<0.50	---
Chloroform	67-66-3	E611C	0.5	µg/L	<0.50	---
Chloromethane	74-87-3	E611C	5	µg/L	<5.0	---
Dibromochloromethane	124-48-1	E611C	0.5	µg/L	<0.50	---
Dichlorobenzene, 1,2-	95-50-1	E611C	0.5	µg/L	<0.50	---
Dichlorobenzene, 1,3-	541-73-1	E611C	0.5	µg/L	<0.50	---
Dichlorobenzene, 1,4-	106-46-7	E611C	0.5	µg/L	<0.50	---
Dichloroethane, 1,1-	75-34-3	E611C	0.5	µg/L	<0.50	---
Dichloroethane, 1,2-	107-06-2	E611C	0.5	µg/L	<0.50	---
Dichloroethylene, 1,1-	75-35-4	E611C	0.5	µg/L	<0.50	---
Dichloroethylene, cis-1,2-	156-59-2	E611C	0.5	µg/L	<0.50	---
Dichloroethylene, trans-1,2-	156-60-5	E611C	0.5	µg/L	<0.50	---
Dichloromethane	75-09-2	E611C	1	µg/L	<1.0	---
Dichloropropane, 1,2-	78-87-5	E611C	0.5	µg/L	<0.50	---
Dichloropropylene, cis-1,3-	10061-01-5	E611C	0.5	µg/L	<0.50	---
Dichloropropylene, trans-1,3-	10061-02-6	E611C	0.5	µg/L	<0.50	---
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C	0.5	µg/L	<0.50	---
Styrene	100-42-5	E611C	0.5	µg/L	<0.50	---
Tetrachloroethane, 1,1,1,2-	630-20-6	E611C	0.5	µg/L	<0.50	---
Tetrachloroethane, 1,1,2,2-	79-34-5	E611C	0.2	µg/L	<0.20	---
Tetrachloroethylene	127-18-4	E611C	0.5	µg/L	<0.50	---
Trichloroethane, 1,1,1-	71-55-6	E611C	0.5	µg/L	<0.50	---
Trichloroethane, 1,1,2-	79-00-5	E611C	0.5	µg/L	<0.50	---
Trichloroethylene	79-01-6	E611C	0.5	µg/L	<0.50	---
Trichlorofluoromethane	75-69-4	E611C	0.5	µg/L	<0.50	---
Vinyl chloride	75-01-4	E611C	0.4	µg/L	<0.40	---
<b>Hydrocarbons (QCLot: 2358180)</b>						
EPH (C10-C19)	---	E601A	250	µg/L	<250	---
EPH (C19-C32)	---	E601A	250	µg/L	<250	---



Sub-Matrix: Water

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
<b>Hydrocarbons (QCLot: 2360917)</b>						
VHw (C6-C10)	---	E581.VH+F1	100	µg/L	<100	---
<b>Polycyclic Aromatic Hydrocarbons (QCLot: 2358181)</b>						
Acenaphthene	83-32-9	E641A	0.01	µg/L	<0.010	---
Acenaphthylene	208-96-8	E641A	0.01	µg/L	<0.010	---
Acridine	260-94-6	E641A	0.01	µg/L	<0.010	---
Anthracene	120-12-7	E641A	0.01	µg/L	<0.010	---
Benz(a)anthracene	56-55-3	E641A	0.01	µg/L	<0.010	---
Benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	<0.0050	---
Benzo(b+j)fluoranthene	n/a	E641A	0.01	µg/L	<0.010	---
Benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	<0.010	---
Benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	<0.010	---
Chrysene	218-01-9	E641A	0.01	µg/L	<0.010	---
Dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	<0.0050	---
Fluoranthene	206-44-0	E641A	0.01	µg/L	<0.010	---
Fluorene	86-73-7	E641A	0.01	µg/L	<0.010	---
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	<0.010	---
Methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	<0.010	---
Methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	<0.010	---
Naphthalene	91-20-3	E641A	0.05	µg/L	<0.050	---
Phenanthrene	85-01-8	E641A	0.02	µg/L	<0.020	---
Pyrene	129-00-0	E641A	0.01	µg/L	<0.010	---
Quinoline	91-22-5	E641A	0.05	µg/L	<0.050	---



## 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	Target Concentration	LCS	Low	High	Qualifier
<b>Physical Tests (QCLot: 2356946)</b>									
Colour, true	---	E329	5	CU	100 CU	96.6	85.0	115	---
<b>Physical Tests (QCLot: 2357201)</b>									
pH	---	E108	---	pH units	7 pH units	101	98.0	102	---
<b>Physical Tests (QCLot: 2357202)</b>									
Conductivity	---	E100	1	µS/cm	147 µS/cm	103	90.0	110	---
<b>Physical Tests (QCLot: 2357203)</b>									
Alkalinity, phenolphthalein (as CaCO <sub>3</sub> )	---	E290	1	mg/L	229 mg/L	113	75.0	125	---
Alkalinity, total (as CaCO <sub>3</sub> )	---	E290	1	mg/L	500 mg/L	103	85.0	115	---
<b>Physical Tests (QCLot: 2358598)</b>									
Turbidity	---	E121	0.1	NTU	200 NTU	99.6	85.0	115	---
<b>Physical Tests (QCLot: 2359351)</b>									
Solids, total dissolved [TDS]	---	E162	10	mg/L	1000 mg/L	100	85.0	115	---
<b>Physical Tests (QCLot: 2359352)</b>									
Solids, total dissolved [TDS]	---	E162	10	mg/L	1000 mg/L	101	85.0	115	---
<b>Anions and Nutrients (QCLot: 2358667)</b>									
Fluoride	16984-48-8	E235.F	0.02	mg/L	1 mg/L	104	90.0	110	---
<b>Anions and Nutrients (QCLot: 2358668)</b>									
Nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	2.5 mg/L	99.5	90.0	110	---
<b>Anions and Nutrients (QCLot: 2358669)</b>									
Nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	0.5 mg/L	103	90.0	110	---
<b>Anions and Nutrients (QCLot: 2358670)</b>									
Sulfate (as SO <sub>4</sub> )	14808-79-8	E235.SO4-L	0.05	mg/L	100 mg/L	100	90.0	110	---
<b>Anions and Nutrients (QCLot: 2358671)</b>									
Chloride	16887-00-6	E235.Cl-L	0.1	mg/L	100 mg/L	100.0	90.0	110	---
<b>Total Metals (QCLot: 2357270)</b>									
Mercury, total	7439-97-6	E508	0.000005	mg/L	0 mg/L	108	80.0	120	---
<b>Total Metals (QCLot: 2358219)</b>									
Aluminum, total	7429-90-5	E420	0.003	mg/L	2 mg/L	90.8	80.0	120	---
Antimony, total	7440-36-0	E420	0.0001	mg/L	1 mg/L	88.5	80.0	120	---
Arsenic, total	7440-38-2	E420	0.0001	mg/L	1 mg/L	94.6	80.0	120	---



Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
<b>Total Metals (QCLot: 2358219) - continued</b>									
Barium, total	7440-39-3	E420	0.0001	mg/L	0.25 mg/L	93.0	80.0	120	---
Beryllium, total	7440-41-7	E420	0.00002	mg/L	0.1 mg/L	85.9	80.0	120	---
Bismuth, total	7440-69-9	E420	0.00005	mg/L	1 mg/L	86.3	80.0	120	---
Boron, total	7440-42-8	E420	0.01	mg/L	1 mg/L	85.1	80.0	120	---
Cadmium, total	7440-43-9	E420	0.000005	mg/L	0.1 mg/L	92.2	80.0	120	---
Calcium, total	7440-70-2	E420	0.05	mg/L	50 mg/L	87.0	80.0	120	---
Chromium, total	7440-47-3	E420	0.0005	mg/L	0.25 mg/L	90.3	80.0	120	---
Cobalt, total	7440-48-4	E420	0.0001	mg/L	0.25 mg/L	90.7	80.0	120	---
Copper, total	7440-50-8	E420	0.0005	mg/L	0.25 mg/L	88.9	80.0	120	---
Iron, total	7439-89-6	E420	0.01	mg/L	1 mg/L	106	80.0	120	---
Lead, total	7439-92-1	E420	0.00005	mg/L	0.5 mg/L	86.9	80.0	120	---
Magnesium, total	7439-95-4	E420	0.005	mg/L	50 mg/L	92.9	80.0	120	---
Manganese, total	7439-96-5	E420	0.0001	mg/L	0.25 mg/L	90.8	80.0	120	---
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	0.25 mg/L	87.7	80.0	120	---
Nickel, total	7440-02-0	E420	0.0005	mg/L	0.5 mg/L	88.3	80.0	120	---
Phosphorus, total	7723-14-0	E420	0.05	mg/L	10 mg/L	93.2	70.0	130	---
Potassium, total	7440-09-7	E420	0.05	mg/L	50 mg/L	90.9	80.0	120	---
Selenium, total	7782-49-2	E420	0.00005	mg/L	1 mg/L	90.3	80.0	120	---
Silicon, total	7440-21-3	E420	0.1	mg/L	10 mg/L	89.1	60.0	140	---
Silver, total	7440-22-4	E420	0.00001	mg/L	0.1 mg/L	85.7	80.0	120	---
Sodium, total	7440-23-5	E420	0.05	mg/L	50 mg/L	91.8	80.0	120	---
Strontium, total	7440-24-6	E420	0.0002	mg/L	0.25 mg/L	88.3	80.0	120	---
Sulfur, total	7704-34-9	E420	0.5	mg/L	50 mg/L	93.6	80.0	120	---
Thallium, total	7440-28-0	E420	0.00001	mg/L	1 mg/L	87.6	80.0	120	---
Tin, total	7440-31-5	E420	0.0001	mg/L	0.5 mg/L	87.2	80.0	120	---
Titanium, total	7440-32-6	E420	0.0003	mg/L	0.25 mg/L	88.3	80.0	120	---
Uranium, total	7440-61-1	E420	0.00001	mg/L	0.005 mg/L	88.5	80.0	120	---
Vanadium, total	7440-62-2	E420	0.0005	mg/L	0.5 mg/L	92.0	80.0	120	---
Zinc, total	7440-66-6	E420	0.003	mg/L	0.5 mg/L	87.7	80.0	120	---
<b>Volatile Organic Compounds (QCLot: 2360916)</b>									
Benzene	71-43-2	E611A	0.5	µg/L	100 µg/L	98.8	70.0	130	---
Ethylbenzene	100-41-4	E611A	0.5	µg/L	100 µg/L	90.4	70.0	130	---
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611A	0.5	µg/L	100 µg/L	94.0	70.0	130	---
Styrene	100-42-5	E611A	0.5	µg/L	100 µg/L	116	70.0	130	---
Toluene	108-88-3	E611A	0.5	µg/L	100 µg/L	91.5	70.0	130	---



Sub-Matrix: **Water**

Laboratory Control Sample (LCS) Report

Analyte	CAS Number	Method	LOR	Unit	Spike		Recovery Limits (%)		Qualifier
					Target Concentration	LCS	Low	High	
<b>Volatile Organic Compounds (QCLot: 2360916) - continued</b>									
Xylene, m+p-	179601-23-1	E611A	0.4	µg/L	200 µg/L	99.7	70.0	130	---
Xylene, o-	95-47-6	E611A	0.3	µg/L	100 µg/L	108	70.0	130	---
<b>Volatile Organic Compounds (QCLot: 2360918)</b>									
Bromodichloromethane	75-27-4	E611C	0.5	µg/L	100 µg/L	110	70.0	130	---
Bromoform	75-25-2	E611C	0.5	µg/L	100 µg/L	85.3	70.0	130	---
Carbon tetrachloride	56-23-5	E611C	0.5	µg/L	100 µg/L	101	70.0	130	---
Chlorobenzene	108-90-7	E611C	0.5	µg/L	100 µg/L	98.9	70.0	130	---
Chloroethane	75-00-3	E611C	0.5	µg/L	100 µg/L	93.5	70.0	130	---
Chloroform	67-66-3	E611C	0.5	µg/L	100 µg/L	99.3	70.0	130	---
Chloromethane	74-87-3	E611C	5	µg/L	100 µg/L	104	70.0	130	---
Dibromochloromethane	124-48-1	E611C	0.5	µg/L	100 µg/L	106	70.0	130	---
Dichlorobenzene, 1,2-	95-50-1	E611C	0.5	µg/L	100 µg/L	96.2	70.0	130	---
Dichlorobenzene, 1,3-	541-73-1	E611C	0.5	µg/L	100 µg/L	94.4	70.0	130	---
Dichlorobenzene, 1,4-	106-46-7	E611C	0.5	µg/L	100 µg/L	93.5	70.0	130	---
Dichloroethane, 1,1-	75-34-3	E611C	0.5	µg/L	100 µg/L	105	70.0	130	---
Dichloroethane, 1,2-	107-06-2	E611C	0.5	µg/L	100 µg/L	112	70.0	130	---
Dichloroethylene, 1,1-	75-35-4	E611C	0.5	µg/L	100 µg/L	101	70.0	130	---
Dichloroethylene, cis-1,2-	156-59-2	E611C	0.5	µg/L	100 µg/L	103	70.0	130	---
Dichloroethylene, trans-1,2-	156-60-5	E611C	0.5	µg/L	100 µg/L	96.8	70.0	130	---
Dichloromethane	75-09-2	E611C	1	µg/L	100 µg/L	120	70.0	130	---
Dichloropropane, 1,2-	78-87-5	E611C	0.5	µg/L	100 µg/L	112	70.0	130	---
Dichloropropylene, cis-1,3-	10061-01-5	E611C	0.5	µg/L	100 µg/L	112	70.0	130	---
Dichloropropylene, trans-1,3-	10061-02-6	E611C	0.5	µg/L	100 µg/L	101	70.0	130	---
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C	0.5	µg/L	100 µg/L	94.0	70.0	130	---
Styrene	100-42-5	E611C	0.5	µg/L	100 µg/L	116	70.0	130	---
Tetrachloroethane, 1,1,1,2-	630-20-6	E611C	0.5	µg/L	100 µg/L	98.8	70.0	130	---
Tetrachloroethane, 1,1,2,2-	79-34-5	E611C	0.2	µg/L	100 µg/L	87.9	70.0	130	---
Tetrachloroethylene	127-18-4	E611C	0.5	µg/L	100 µg/L	92.5	70.0	130	---
Trichloroethane, 1,1,1-	71-55-6	E611C	0.5	µg/L	100 µg/L	97.5	70.0	130	---
Trichloroethane, 1,1,2-	79-00-5	E611C	0.5	µg/L	100 µg/L	99.0	70.0	130	---
Trichloroethylene	79-01-6	E611C	0.5	µg/L	100 µg/L	105	70.0	130	---
Trichlorofluoromethane	75-69-4	E611C	0.5	µg/L	100 µg/L	109	60.0	140	---
Vinyl chloride	75-01-4	E611C	0.4	µg/L	100 µg/L	101	60.0	140	---
<b>Hydrocarbons (QCLot: 2358180)</b>									
EPH (C10-C19)	---	E601A	250	µg/L	6950 µg/L	104	70.0	130	---



Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
<b>Hydrocarbons (QCLot: 2358180) - continued</b>									
EPH (C19-C32)	---	E601A	250	µg/L	4230 µg/L	104	70.0	130	---
<b>Hydrocarbons (QCLot: 2360917)</b>									
VHw (C6-C10)	---	E581.VH+F1	100	µg/L	2940 µg/L	100	60.0	140	---
<b>Polycyclic Aromatic Hydrocarbons (QCLot: 2358181)</b>									
Acenaphthene	83-32-9	E641A	0.01	µg/L	0.5 µg/L	112	60.0	130	---
Acenaphthylene	208-96-8	E641A	0.01	µg/L	0.5 µg/L	112	60.0	130	---
Acridine	260-94-6	E641A	0.01	µg/L	0.5 µg/L	101	60.0	130	---
Anthracene	120-12-7	E641A	0.01	µg/L	0.5 µg/L	108	60.0	130	---
Benz(a)anthracene	56-55-3	E641A	0.01	µg/L	0.5 µg/L	107	60.0	130	---
Benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	0.5 µg/L	107	60.0	130	---
Benzo(b+)fluoranthene	n/a	E641A	0.01	µg/L	0.5 µg/L	105	60.0	130	---
Benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	0.5 µg/L	126	60.0	130	---
Benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	0.5 µg/L	# 131	60.0	130	---
Chrysene	218-01-9	E641A	0.01	µg/L	0.5 µg/L	118	60.0	130	---
Dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	0.5 µg/L	113	60.0	130	---
Fluoranthene	206-44-0	E641A	0.01	µg/L	0.5 µg/L	120	60.0	130	---
Fluorene	86-73-7	E641A	0.01	µg/L	0.5 µg/L	118	60.0	130	---
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	0.5 µg/L	106	60.0	130	---
Methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	0.5 µg/L	105	60.0	130	---
Methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	0.5 µg/L	118	60.0	130	---
Naphthalene	91-20-3	E641A	0.05	µg/L	0.5 µg/L	111	50.0	130	---
Phenanthrene	85-01-8	E641A	0.02	µg/L	0.5 µg/L	110	60.0	130	---
Pyrene	129-00-0	E641A	0.01	µg/L	0.5 µg/L	121	60.0	130	---
Quinoline	91-22-5	E641A	0.05	µg/L	0.5 µg/L	116	60.0	130	---



### 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
<b>Anions and Nutrients (QCLot: 2358667)</b>										
CG2517287-013	Anonymous	Fluoride	16984-48-8	E235.F	1.11 mg/L	1 mg/L	111	75.0	125	----
<b>Anions and Nutrients (QCLot: 2358668)</b>										
CG2517287-013	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	2.65 mg/L	2.5 mg/L	106	75.0	125	----
<b>Anions and Nutrients (QCLot: 2358669)</b>										
CG2517287-013	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	0.547 mg/L	0.5 mg/L	109	75.0	125	----
<b>Anions and Nutrients (QCLot: 2358670)</b>										
CG2517287-013	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4-L	105 mg/L	100 mg/L	105	75.0	125	----
<b>Anions and Nutrients (QCLot: 2358671)</b>										
CG2517287-013	Anonymous	Chloride	16887-00-6	E235.Cl-L	106 mg/L	100 mg/L	106	75.0	125	----
<b>Total Metals (QCLot: 2357270)</b>										
CG2517243-002	Well #3	Mercury, total	7439-97-6	E508	0.000107 mg/L	0 mg/L	107	70.0	130	----
<b>Total Metals (QCLot: 2358219)</b>										
CG2517196-001	Anonymous	Aluminum, total	7429-90-5	E420	2.12 mg/L	2 mg/L	106	70.0	130	----
		Antimony, total	7440-36-0	E420	0.198 mg/L	0.2 mg/L	99.1	70.0	130	----
		Arsenic, total	7440-38-2	E420	0.223 mg/L	0.2 mg/L	111	70.0	130	----
		Barium, total	7440-39-3	E420	0.213 mg/L	0.2 mg/L	107	70.0	130	----
		Beryllium, total	7440-41-7	E420	0.409 mg/L	0.4 mg/L	102	70.0	130	----
		Bismuth, total	7440-69-9	E420	0.107 mg/L	0.1 mg/L	107	70.0	130	----
		Boron, total	7440-42-8	E420	1.01 mg/L	1 mg/L	101	70.0	130	----
		Cadmium, total	7440-43-9	E420	0.0445 mg/L	0.04 mg/L	111	70.0	130	----
		Calcium, total	7440-70-2	E420	ND mg/L	----	ND	70.0	130	----
		Chromium, total	7440-47-3	E420	0.426 mg/L	0.4 mg/L	107	70.0	130	----
		Cobalt, total	7440-48-4	E420	0.219 mg/L	0.2 mg/L	110	70.0	130	----
		Copper, total	7440-50-8	E420	0.229 mg/L	0.2 mg/L	114	70.0	130	----
		Iron, total	7439-89-6	E420	21.9 mg/L	20 mg/L	109	70.0	130	----
		Lead, total	7439-92-1	E420	0.205 mg/L	0.2 mg/L	102	70.0	130	----
		Magnesium, total	7439-95-4	E420	ND mg/L	----	ND	70.0	130	----
		Manganese, total	7439-96-5	E420	0.216 mg/L	0.2 mg/L	108	70.0	130	----
		Molybdenum, total	7439-98-7	E420	0.201 mg/L	0.2 mg/L	100	70.0	130	----
		Nickel, total	7440-02-0	E420	0.421 mg/L	0.4 mg/L	105	70.0	130	----
		Phosphorus, total	7723-14-0	E420	109 mg/L	100 mg/L	109	70.0	130	----
		Potassium, total	7440-09-7	E420	42.6 mg/L	40 mg/L	106	70.0	130	----
		Selenium, total	7782-49-2	E420	0.430 mg/L	0.4 mg/L	108	70.0	130	----
		Silicon, total	7440-21-3	E420	94.8 mg/L	100 mg/L	94.8	70.0	130	----
		Silver, total	7440-22-4	E420	0.0424 mg/L	0.04 mg/L	106	70.0	130	----
		Sodium, total	7440-23-5	E420	21.8 mg/L	20 mg/L	109	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
<b>Total Metals (QCLot: 2358219) - continued</b>										
CG2517196-001	Anonymous	Strontium, total	7440-24-6	E420	ND mg/L	----	ND	70.0	130	----
		Sulfur, total	7704-34-9	E420	209 mg/L	200 mg/L	104	70.0	130	----
		Thallium, total	7440-28-0	E420	0.0412 mg/L	0.04 mg/L	103	70.0	130	----
		Tin, total	7440-31-5	E420	0.196 mg/L	0.2 mg/L	98.1	70.0	130	----
		Titanium, total	7440-32-6	E420	0.396 mg/L	0.4 mg/L	99.0	70.0	130	----
		Uranium, total	7440-61-1	E420	0.0420 mg/L	0.04 mg/L	105	70.0	130	----
		Vanadium, total	7440-62-2	E420	1.05 mg/L	1 mg/L	105	70.0	130	----
		Zinc, total	7440-66-6	E420	4.32 mg/L	4 mg/L	108	70.0	130	----
<b>Volatile Organic Compounds (QCLot: 2360916)</b>										
CG2517243-001	Well #2	Benzene	71-43-2	E611A	88.7 µg/L	100 µg/L	88.7	70.0	130	----
		Ethylbenzene	100-41-4	E611A	91.8 µg/L	100 µg/L	91.8	70.0	130	----
		Methyl-tert-butyl ether [MTBE]	1634-04-4	E611A	101 µg/L	100 µg/L	101	70.0	130	----
		Styrene	100-42-5	E611A	115 µg/L	100 µg/L	115	70.0	130	----
		Toluene	108-88-3	E611A	115 µg/L	100 µg/L	115	70.0	130	----
		Xylene, m+p-	179601-23-1	E611A	202 µg/L	200 µg/L	101	70.0	130	----
		Xylene, o-	95-47-6	E611A	108 µg/L	100 µg/L	108	70.0	130	----
<b>Volatile Organic Compounds (QCLot: 2360918)</b>										
CG2517243-001	Well #2	Bromodichloromethane	75-27-4	E611C	96.5 µg/L	100 µg/L	96.5	70.0	130	----
		Bromoform	75-25-2	E611C	94.7 µg/L	100 µg/L	94.7	70.0	130	----
		Carbon tetrachloride	56-23-5	E611C	74.4 µg/L	100 µg/L	74.4	70.0	130	----
		Chlorobenzene	108-90-7	E611C	99.3 µg/L	100 µg/L	99.3	70.0	130	----
		Chloroethane	75-00-3	E611C	74.4 µg/L	100 µg/L	74.4	70.0	130	----
		Chloroform	67-66-3	E611C	77.5 µg/L	100 µg/L	77.5	70.0	130	----
		Chloromethane	74-87-3	E611C	75.8 µg/L	100 µg/L	75.8	70.0	130	----
		Dibromochloromethane	124-48-1	E611C	105 µg/L	100 µg/L	105	70.0	130	----
		Dichlorobenzene, 1,2-	95-50-1	E611C	99.5 µg/L	100 µg/L	99.5	70.0	130	----
		Dichlorobenzene, 1,3-	541-73-1	E611C	98.7 µg/L	100 µg/L	98.7	70.0	130	----
		Dichlorobenzene, 1,4-	106-46-7	E611C	99.5 µg/L	100 µg/L	99.5	70.0	130	----
		Dichloroethane, 1,1-	75-34-3	E611C	79.0 µg/L	100 µg/L	79.0	70.0	130	----
		Dichloroethane, 1,2-	107-06-2	E611C	106 µg/L	100 µg/L	106	70.0	130	----
		Dichloroethylene, 1,1-	75-35-4	E611C	73.4 µg/L	100 µg/L	73.4	70.0	130	----
		Dichloroethylene, cis-1,2-	156-59-2	E611C	80.5 µg/L	100 µg/L	80.5	70.0	130	----
		Dichloroethylene, trans-1,2-	156-60-5	E611C	74.5 µg/L	100 µg/L	74.5	70.0	130	----
		Dichloromethane	75-09-2	E611C	91.1 µg/L	100 µg/L	91.1	70.0	130	----
		Dichloropropane, 1,2-	78-87-5	E611C	97.8 µg/L	100 µg/L	97.8	70.0	130	----
		Dichloropropylene, cis-1,3-	10061-01-5	E611C	98.3 µg/L	100 µg/L	98.3	70.0	130	----
		Dichloropropylene, trans-1,3-	10061-02-6	E611C	117 µg/L	100 µg/L	117	70.0	130	----
		Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C	101 µg/L	100 µg/L	101	70.0	130	----
		Styrene	100-42-5	E611C	115 µg/L	100 µg/L	115	70.0	130	----
		Tetrachloroethane, 1,1,1,2-	630-20-6	E611C	98.1 µg/L	100 µg/L	98.1	70.0	130	----
		Tetrachloroethane, 1,1,2,2-	79-34-5	E611C	92.6 µg/L	100 µg/L	92.6	70.0	130	----
		Tetrachloroethylene	127-18-4	E611C	115 µg/L	100 µg/L	115	70.0	130	----
		Trichloroethane, 1,1,1-	71-55-6	E611C	76.7 µg/L	100 µg/L	76.7	70.0	130	----

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 Work Order : CG2517243  
 Client : Town of Golden  
 Project : ----



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
<b>Volatile Organic Compounds (QCLot: 2360918) - continued</b>										
CG2517243-001	Well #2	Trichloroethane, 1,1,2-	79-00-5	E611C	115 µg/L	100 µg/L	115	70.0	130	----
		Trichloroethylene	79-01-6	E611C	93.8 µg/L	100 µg/L	93.8	70.0	130	----
		Trichlorofluoromethane	75-69-4	E611C	87.8 µg/L	100 µg/L	87.8	70.0	130	----
		Vinyl chloride	75-01-4	E611C	74.7 µg/L	100 µg/L	74.7	70.0	130	----
<b>Hydrocarbons (QCLot: 2360917)</b>										
CG2517243-001	Well #2	VHw (C6-C10)	----	E581.VH+F1	2730 µg/L	2940 µg/L	93.0	60.0	140	----




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## QUALITY CONTROL INTERPRETIVE REPORT

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<p><b>Work Order</b> : <b>CG2517243</b></p> <p><b>Client</b> : <b>Town of Golden</b></p> <p><b>Contact</b> : Al Taylor</p> <p><b>Address</b> : BOX 350 Golden BC Canada V0A 1H0</p> <p><b>Telephone</b> : 250-344-1488</p> <p><b>Project</b> : ----</p> <p><b>PO</b> : ----</p> <p><b>C-O-C number</b> : ----</p> <p><b>Sampler</b> : Ryan Robison</p> <p><b>Site</b> : ----</p> <p><b>Quote number</b> : CG21-GMGO100-0001 Drinking Water</p> <p><b>No. of samples received</b> : 4</p> <p><b>No. of samples analysed</b> : 4</p>	<p><b>Page</b> : 1 of 17</p> <p><b>Laboratory</b> : ALS Environmental - Calgary</p> <p><b>Account Manager</b> : Patryk Wojciak</p> <p><b>Address</b> : 2559 29th Street NE Calgary, Alberta Canada T1Y 7B5</p> <p><b>Telephone</b> : +1 403 407 1800</p> <p><b>Date Samples Received</b> : 26-Nov-2025 09:30</p> <p><b>Issue Date</b> : 30-Nov-2025 15:44</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.

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### ***Workorder Comments***

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

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### ***Summary of Outliers***

#### ***Outliers : Quality Control Samples***

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Matrix Spike outliers occur.
- Laboratory Control Sample (LCS) outliers occur - please see following pages for full details.
- 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.



**Outliers : Quality Control Samples**

*Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes*

Matrix: **Water**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
<b>Laboratory Control Sample (LCS) Recoveries</b>								
Polycyclic Aromatic Hydrocarbons	QC-2358181-002	----	Benzo(k)fluoranthene	207-08-9	E641A	131 %	60.0-130%	Recovery greater than upper control limit



## 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	
<b>Anions and Nutrients : Chloride in Water by IC (Low Level)</b>										
HDPE Well #2	E235.Cl-L	25-Nov-2025	27-Nov-2025	28 days	2 days	✔	27-Nov-2025	28 days	2 days	✔
<b>Anions and Nutrients : Chloride in Water by IC (Low Level)</b>										
HDPE Well #3	E235.Cl-L	25-Nov-2025	27-Nov-2025	28 days	2 days	✔	27-Nov-2025	28 days	2 days	✔
<b>Anions and Nutrients : Chloride in Water by IC (Low Level)</b>										
HDPE Well #4	E235.Cl-L	25-Nov-2025	27-Nov-2025	28 days	2 days	✔	27-Nov-2025	28 days	2 days	✔
<b>Anions and Nutrients : Chloride in Water by IC (Low Level)</b>										
HDPE Well #5	E235.Cl-L	25-Nov-2025	27-Nov-2025	28 days	2 days	✔	27-Nov-2025	28 days	2 days	✔
<b>Anions and Nutrients : Fluoride in Water by IC</b>										
HDPE Well #2	E235.F	25-Nov-2025	27-Nov-2025	28 days	2 days	✔	27-Nov-2025	28 days	2 days	✔
<b>Anions and Nutrients : Fluoride in Water by IC</b>										
HDPE Well #3	E235.F	25-Nov-2025	27-Nov-2025	28 days	2 days	✔	27-Nov-2025	28 days	2 days	✔
<b>Anions and Nutrients : Fluoride in Water by IC</b>										
HDPE Well #4	E235.F	25-Nov-2025	27-Nov-2025	28 days	2 days	✔	27-Nov-2025	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	
<b>Anions and Nutrients : Fluoride in Water by IC</b>										
HDPE Well #5	E235.F	25-Nov-2025	27-Nov-2025	28 days	2 days	✔	27-Nov-2025	28 days	2 days	✔
<b>Anions and Nutrients : Nitrate in Water by IC (Low Level)</b>										
HDPE Well #2	E235.NO3-L	25-Nov-2025	27-Nov-2025	3 days	2 days	✔	27-Nov-2025	3 days	2 days	✔
<b>Anions and Nutrients : Nitrate in Water by IC (Low Level)</b>										
HDPE Well #3	E235.NO3-L	25-Nov-2025	27-Nov-2025	3 days	2 days	✔	27-Nov-2025	3 days	2 days	✔
<b>Anions and Nutrients : Nitrate in Water by IC (Low Level)</b>										
HDPE Well #4	E235.NO3-L	25-Nov-2025	27-Nov-2025	3 days	2 days	✔	27-Nov-2025	3 days	2 days	✔
<b>Anions and Nutrients : Nitrate in Water by IC (Low Level)</b>										
HDPE Well #5	E235.NO3-L	25-Nov-2025	27-Nov-2025	3 days	2 days	✔	27-Nov-2025	3 days	2 days	✔
<b>Anions and Nutrients : Nitrite in Water by IC (Low Level)</b>										
HDPE Well #2	E235.NO2-L	25-Nov-2025	27-Nov-2025	3 days	2 days	✔	27-Nov-2025	3 days	2 days	✔
<b>Anions and Nutrients : Nitrite in Water by IC (Low Level)</b>										
HDPE Well #3	E235.NO2-L	25-Nov-2025	27-Nov-2025	3 days	2 days	✔	27-Nov-2025	3 days	2 days	✔
<b>Anions and Nutrients : Nitrite in Water by IC (Low Level)</b>										
HDPE Well #4	E235.NO2-L	25-Nov-2025	27-Nov-2025	3 days	2 days	✔	27-Nov-2025	3 days	2 days	✔
<b>Anions and Nutrients : Nitrite in Water by IC (Low Level)</b>										
HDPE Well #5	E235.NO2-L	25-Nov-2025	27-Nov-2025	3 days	2 days	✔	27-Nov-2025	3 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	
<b>Anions and Nutrients : Sulfate in Water by IC (Low Level)</b>										
HDPE Well #2	E235.SO4-L	25-Nov-2025	27-Nov-2025	28 days	2 days	✔	27-Nov-2025	28 days	2 days	✔
<b>Anions and Nutrients : Sulfate in Water by IC (Low Level)</b>										
HDPE Well #3	E235.SO4-L	25-Nov-2025	27-Nov-2025	28 days	2 days	✔	27-Nov-2025	28 days	2 days	✔
<b>Anions and Nutrients : Sulfate in Water by IC (Low Level)</b>										
HDPE Well #4	E235.SO4-L	25-Nov-2025	27-Nov-2025	28 days	2 days	✔	27-Nov-2025	28 days	2 days	✔
<b>Anions and Nutrients : Sulfate in Water by IC (Low Level)</b>										
HDPE Well #5	E235.SO4-L	25-Nov-2025	27-Nov-2025	28 days	2 days	✔	27-Nov-2025	28 days	2 days	✔
<b>Hydrocarbons : BC PHCs - EPH by GC-FID</b>										
Amber glass/Teflon lined cap (sodium bisulfate) Well #2	E601A	25-Nov-2025	27-Nov-2025	14 days	2 days	✔	27-Nov-2025	40 days	0 days	✔
<b>Hydrocarbons : BC PHCs - EPH by GC-FID</b>										
Amber glass/Teflon lined cap (sodium bisulfate) Well #3	E601A	25-Nov-2025	27-Nov-2025	14 days	2 days	✔	27-Nov-2025	40 days	0 days	✔
<b>Hydrocarbons : BC PHCs - EPH by GC-FID</b>										
Amber glass/Teflon lined cap (sodium bisulfate) Well #4	E601A	25-Nov-2025	27-Nov-2025	14 days	2 days	✔	27-Nov-2025	40 days	0 days	✔
<b>Hydrocarbons : BC PHCs - EPH by GC-FID</b>										
Amber glass/Teflon lined cap (sodium bisulfate) Well #5	E601A	25-Nov-2025	27-Nov-2025	14 days	2 days	✔	27-Nov-2025	40 days	0 days	✔
<b>Hydrocarbons : VH and F1 by Headspace GC-FID</b>										
Glass vial (sodium bisulfate) Well #2	E581.VH+F1	25-Nov-2025	28-Nov-2025	14 days	3 days	✔	28-Nov-2025	14 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		
<b>Hydrocarbons : VH and F1 by Headspace GC-FID</b>											
Glass vial (sodium bisulfate) Well #3	E581.VH+F1	25-Nov-2025	28-Nov-2025	14 days	3 days	✓	28-Nov-2025	14 days	3 days	✓	
<b>Hydrocarbons : VH and F1 by Headspace GC-FID</b>											
Glass vial (sodium bisulfate) Well #4	E581.VH+F1	25-Nov-2025	28-Nov-2025	14 days	3 days	✓	28-Nov-2025	14 days	3 days	✓	
<b>Hydrocarbons : VH and F1 by Headspace GC-FID</b>											
Glass vial (sodium bisulfate) Well #5	E581.VH+F1	25-Nov-2025	28-Nov-2025	14 days	3 days	✓	28-Nov-2025	14 days	3 days	✓	
<b>Physical Tests : Alkalinity Species by Titration</b>											
HDPE Well #2	E290	25-Nov-2025	26-Nov-2025	14 days	1 days	✓	26-Nov-2025	14 days	1 days	✓	
<b>Physical Tests : Alkalinity Species by Titration</b>											
HDPE Well #3	E290	25-Nov-2025	26-Nov-2025	14 days	1 days	✓	26-Nov-2025	14 days	1 days	✓	
<b>Physical Tests : Alkalinity Species by Titration</b>											
HDPE Well #4	E290	25-Nov-2025	26-Nov-2025	14 days	1 days	✓	26-Nov-2025	14 days	1 days	✓	
<b>Physical Tests : Alkalinity Species by Titration</b>											
HDPE Well #5	E290	25-Nov-2025	26-Nov-2025	14 days	1 days	✓	26-Nov-2025	14 days	1 days	✓	
<b>Physical Tests : Colour (True) by Spectrometer (5 CU)</b>											
HDPE Well #2	E329	25-Nov-2025	26-Nov-2025	3 days	1 days	✓	26-Nov-2025	3 days	1 days	✓	
<b>Physical Tests : Colour (True) by Spectrometer (5 CU)</b>											
HDPE Well #3	E329	25-Nov-2025	26-Nov-2025	3 days	1 days	✓	26-Nov-2025	3 days	1 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		
<b>Physical Tests : Colour (True) by Spectrometer (5 CU)</b>											
HDPE Well #4	E329	25-Nov-2025	26-Nov-2025	3 days	1 days	✓	26-Nov-2025	3 days	1 days	✓	
<b>Physical Tests : Colour (True) by Spectrometer (5 CU)</b>											
HDPE Well #5	E329	25-Nov-2025	26-Nov-2025	3 days	1 days	✓	26-Nov-2025	3 days	1 days	✓	
<b>Physical Tests : Conductivity in Water</b>											
HDPE Well #2	E100	25-Nov-2025	26-Nov-2025	28 days	1 days	✓	26-Nov-2025	28 days	1 days	✓	
<b>Physical Tests : Conductivity in Water</b>											
HDPE Well #3	E100	25-Nov-2025	26-Nov-2025	28 days	1 days	✓	26-Nov-2025	28 days	1 days	✓	
<b>Physical Tests : Conductivity in Water</b>											
HDPE Well #4	E100	25-Nov-2025	26-Nov-2025	28 days	1 days	✓	26-Nov-2025	28 days	1 days	✓	
<b>Physical Tests : Conductivity in Water</b>											
HDPE Well #5	E100	25-Nov-2025	26-Nov-2025	28 days	1 days	✓	26-Nov-2025	28 days	1 days	✓	
<b>Physical Tests : pH by Meter</b>											
HDPE Well #3	E108	25-Nov-2025	26-Nov-2025	0.25 hrs	28 hrs	* EHTR-FM	26-Nov-2025	0.25 hrs	28 hrs	* EHTR-FM	
<b>Physical Tests : pH by Meter</b>											
HDPE Well #4	E108	25-Nov-2025	26-Nov-2025	0.25 hrs	28 hrs	* EHTR-FM	26-Nov-2025	0.25 hrs	28 hrs	* EHTR-FM	
<b>Physical Tests : pH by Meter</b>											
HDPE Well #5	E108	25-Nov-2025	26-Nov-2025	0.25 hrs	28 hrs	* EHTR-FM	26-Nov-2025	0.25 hrs	28 hrs	* EHTR-FM	



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		
<b>Physical Tests : pH by Meter</b>											
HDPE Well #2	E108	25-Nov-2025	26-Nov-2025	0.25 hrs	29 hrs	* EHTR-FM	26-Nov-2025	0.25 hrs	29 hrs	* EHTR-FM	
<b>Physical Tests : TDS by Gravimetry</b>											
HDPE Well #2	E162	25-Nov-2025	----	----	----		27-Nov-2025	7 days	2 days	✓	
<b>Physical Tests : TDS by Gravimetry</b>											
HDPE Well #3	E162	25-Nov-2025	----	----	----		27-Nov-2025	7 days	2 days	✓	
<b>Physical Tests : TDS by Gravimetry</b>											
HDPE Well #4	E162	25-Nov-2025	----	----	----		27-Nov-2025	7 days	2 days	✓	
<b>Physical Tests : TDS by Gravimetry</b>											
HDPE Well #5	E162	25-Nov-2025	----	----	----		27-Nov-2025	7 days	2 days	✓	
<b>Physical Tests : Turbidity by Nephelometry</b>											
HDPE Well #2	E121	25-Nov-2025	----	----	----		27-Nov-2025	3 days	2 days	✓	
<b>Physical Tests : Turbidity by Nephelometry</b>											
HDPE Well #3	E121	25-Nov-2025	----	----	----		27-Nov-2025	3 days	2 days	✓	
<b>Physical Tests : Turbidity by Nephelometry</b>											
HDPE Well #4	E121	25-Nov-2025	----	----	----		27-Nov-2025	3 days	2 days	✓	
<b>Physical Tests : Turbidity by Nephelometry</b>											
HDPE Well #5	E121	25-Nov-2025	----	----	----		27-Nov-2025	3 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	
<b>Polycyclic Aromatic Hydrocarbons : PAHs in Water by Hexane LVI GC-MS</b>										
Amber glass/Teflon lined cap (sodium bisulfate) Well #2	E641A	25-Nov-2025	27-Nov-2025	14 days	2 days	✔	27-Nov-2025	40 days	0 days	✔
<b>Polycyclic Aromatic Hydrocarbons : PAHs in Water by Hexane LVI GC-MS</b>										
Amber glass/Teflon lined cap (sodium bisulfate) Well #3	E641A	25-Nov-2025	27-Nov-2025	14 days	2 days	✔	27-Nov-2025	40 days	0 days	✔
<b>Polycyclic Aromatic Hydrocarbons : PAHs in Water by Hexane LVI GC-MS</b>										
Amber glass/Teflon lined cap (sodium bisulfate) Well #4	E641A	25-Nov-2025	27-Nov-2025	14 days	2 days	✔	27-Nov-2025	40 days	0 days	✔
<b>Polycyclic Aromatic Hydrocarbons : PAHs in Water by Hexane LVI GC-MS</b>										
Amber glass/Teflon lined cap (sodium bisulfate) Well #5	E641A	25-Nov-2025	27-Nov-2025	14 days	2 days	✔	27-Nov-2025	40 days	0 days	✔
<b>Total Metals : Total Mercury in Water by CVAAS</b>										
Glass vial total (hydrochloric acid) Well #2	E508	25-Nov-2025	26-Nov-2025	28 days	1 days	✔	26-Nov-2025	28 days	1 days	✔
<b>Total Metals : Total Mercury in Water by CVAAS</b>										
Glass vial total (hydrochloric acid) Well #3	E508	25-Nov-2025	26-Nov-2025	28 days	1 days	✔	26-Nov-2025	28 days	1 days	✔
<b>Total Metals : Total Mercury in Water by CVAAS</b>										
Glass vial total (hydrochloric acid) Well #4	E508	25-Nov-2025	26-Nov-2025	28 days	1 days	✔	26-Nov-2025	28 days	1 days	✔
<b>Total Metals : Total Mercury in Water by CVAAS</b>										
Glass vial total (hydrochloric acid) Well #5	E508	25-Nov-2025	26-Nov-2025	28 days	1 days	✔	26-Nov-2025	28 days	1 days	✔
<b>Total Metals : Total Metals in Water by CRC ICPMS</b>										
HDPE total (nitric acid) Well #2	E420	25-Nov-2025	28-Nov-2025	180 days	3 days	✔	29-Nov-2025	180 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		
<b>Total Metals : Total Metals in Water by CRC ICPMS</b>											
<b>HDPE total (nitric acid)</b> Well #3	E420	25-Nov-2025	28-Nov-2025	180 days	3 days	✓	29-Nov-2025	180 days	3 days	✓	
<b>Total Metals : Total Metals in Water by CRC ICPMS</b>											
<b>HDPE total (nitric acid)</b> Well #4	E420	25-Nov-2025	28-Nov-2025	180 days	3 days	✓	29-Nov-2025	180 days	3 days	✓	
<b>Total Metals : Total Metals in Water by CRC ICPMS</b>											
<b>HDPE total (nitric acid)</b> Well #5	E420	25-Nov-2025	28-Nov-2025	180 days	3 days	✓	29-Nov-2025	180 days	3 days	✓	
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>											
<b>Glass vial (sodium bisulfate)</b> Well #2	E611A	25-Nov-2025	28-Nov-2025	14 days	3 days	✓	28-Nov-2025	14 days	3 days	✓	
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>											
<b>Glass vial (sodium bisulfate)</b> Well #3	E611A	25-Nov-2025	28-Nov-2025	14 days	3 days	✓	28-Nov-2025	14 days	3 days	✓	
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>											
<b>Glass vial (sodium bisulfate)</b> Well #4	E611A	25-Nov-2025	28-Nov-2025	14 days	3 days	✓	28-Nov-2025	14 days	3 days	✓	
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>											
<b>Glass vial (sodium bisulfate)</b> Well #5	E611A	25-Nov-2025	28-Nov-2025	14 days	3 days	✓	28-Nov-2025	14 days	3 days	✓	
<b>Volatile Organic Compounds : VOCs (BC List) by Headspace GC-MS</b>											
<b>Glass vial (sodium bisulfate)</b> Well #2	E611C	25-Nov-2025	28-Nov-2025	14 days	3 days	✓	28-Nov-2025	14 days	3 days	✓	
<b>Volatile Organic Compounds : VOCs (BC List) by Headspace GC-MS</b>											
<b>Glass vial (sodium bisulfate)</b> Well #3	E611C	25-Nov-2025	28-Nov-2025	14 days	3 days	✓	28-Nov-2025	14 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	
<b>Volatile Organic Compounds : VOCs (BC List) by Headspace GC-MS</b>										
Glass vial (sodium bisulfate) Well #4	E611C	25-Nov-2025	28-Nov-2025	14 days	3 days	✔	28-Nov-2025	14 days	3 days	✔
<b>Volatile Organic Compounds : VOCs (BC List) by Headspace GC-MS</b>										
Glass vial (sodium bisulfate) Well #5	E611C	25-Nov-2025	28-Nov-2025	14 days	3 days	✔	28-Nov-2025	14 days	3 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 (%)		
			QC	Regular	Actual	Expected	Evaluation
<b>Analytical Methods</b>							
<b>Laboratory Duplicates (DUP)</b>							
Conductivity in Water	E100	2357202	1	19	5.2	5.0	✓
pH by Meter	E108	2357201	1	20	5.0	5.0	✓
Turbidity by Nephelometry	E121	2358598	1	20	5.0	5.0	✓
TDS by Gravimetry	E162	2359351	2	40	5.0	5.0	✓
Chloride in Water by IC (Low Level)	E235.Cl-L	2358671	1	17	5.8	5.0	✓
Fluoride in Water by IC	E235.F	2358667	1	17	5.8	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	2358669	1	17	5.8	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	2358668	1	19	5.2	5.0	✓
Sulfate in Water by IC (Low Level)	E235.SO4-L	2358670	1	17	5.8	5.0	✓
Alkalinity Species by Titration	E290	2357203	1	19	5.2	5.0	✓
Colour (True) by Spectrometer (5 CU)	E329	2356946	1	4	25.0	5.0	✓
Total Metals in Water by CRC ICPMS	E420	2358219	1	18	5.5	5.0	✓
Total Mercury in Water by CVAAS	E508	2357270	1	5	20.0	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	2360917	1	4	25.0	5.0	✓
BTEX by Headspace GC-MS	E611A	2360916	1	14	7.1	5.0	✓
VOCs (BC List) by Headspace GC-MS	E611C	2360918	1	4	25.0	5.0	✓
<b>Laboratory Control Samples (LCS)</b>							
Conductivity in Water	E100	2357202	1	19	5.2	5.0	✓
pH by Meter	E108	2357201	1	20	5.0	5.0	✓
Turbidity by Nephelometry	E121	2358598	1	20	5.0	5.0	✓
TDS by Gravimetry	E162	2359351	2	40	5.0	5.0	✓
Chloride in Water by IC (Low Level)	E235.Cl-L	2358671	1	17	5.8	5.0	✓
Fluoride in Water by IC	E235.F	2358667	1	17	5.8	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	2358669	1	17	5.8	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	2358668	1	19	5.2	5.0	✓
Sulfate in Water by IC (Low Level)	E235.SO4-L	2358670	1	17	5.8	5.0	✓
Alkalinity Species by Titration	E290	2357203	1	19	5.2	5.0	✓
Colour (True) by Spectrometer (5 CU)	E329	2356946	1	4	25.0	5.0	✓
Total Metals in Water by CRC ICPMS	E420	2358219	1	18	5.5	5.0	✓
Total Mercury in Water by CVAAS	E508	2357270	1	5	20.0	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	2360917	1	4	25.0	5.0	✓
BC PHCs - EPH by GC-FID	E601A	2358180	1	4	25.0	5.0	✓
BTEX by Headspace GC-MS	E611A	2360916	1	14	7.1	5.0	✓
VOCs (BC List) by Headspace GC-MS	E611C	2360918	1	4	25.0	5.0	✓
PAHs in Water by Hexane LVI GC-MS	E641A	2358181	1	15	6.6	5.0	✓



Matrix: **Water**

Evaluation: ✖ = QC frequency outside specification; ✔ = QC frequency within specification.

Quality Control Sample Type	Method	QC Lot #	Count		Frequency (%)		
			QC	Regular	Actual	Expected	Evaluation
<b>Analytical Methods</b>							
<b>Method Blanks (MB)</b>							
Conductivity in Water	E100	2357202	1	19	5.2	5.0	✔
Turbidity by Nephelometry	E121	2358598	1	20	5.0	5.0	✔
TDS by Gravimetry	E162	2359351	2	40	5.0	5.0	✔
Chloride in Water by IC (Low Level)	E235.Cl-L	2358671	1	17	5.8	5.0	✔
Fluoride in Water by IC	E235.F	2358667	1	17	5.8	5.0	✔
Nitrite in Water by IC (Low Level)	E235.NO2-L	2358669	1	17	5.8	5.0	✔
Nitrate in Water by IC (Low Level)	E235.NO3-L	2358668	1	19	5.2	5.0	✔
Sulfate in Water by IC (Low Level)	E235.SO4-L	2358670	1	17	5.8	5.0	✔
Alkalinity Species by Titration	E290	2357203	1	19	5.2	5.0	✔
Colour (True) by Spectrometer (5 CU)	E329	2356946	1	4	25.0	5.0	✔
Total Metals in Water by CRC ICPMS	E420	2358219	1	18	5.5	5.0	✔
Total Mercury in Water by CVAAS	E508	2357270	1	5	20.0	5.0	✔
VH and F1 by Headspace GC-FID	E581.VH+F1	2360917	1	4	25.0	5.0	✔
BC PHCs - EPH by GC-FID	E601A	2358180	1	4	25.0	5.0	✔
BTEX by Headspace GC-MS	E611A	2360916	1	14	7.1	5.0	✔
VOCs (BC List) by Headspace GC-MS	E611C	2360918	1	4	25.0	5.0	✔
PAHs in Water by Hexane LVI GC-MS	E641A	2358181	1	15	6.6	5.0	✔
<b>Matrix Spikes (MS)</b>							
Chloride in Water by IC (Low Level)	E235.Cl-L	2358671	1	17	5.8	5.0	✔
Fluoride in Water by IC	E235.F	2358667	1	17	5.8	5.0	✔
Nitrite in Water by IC (Low Level)	E235.NO2-L	2358669	1	17	5.8	5.0	✔
Nitrate in Water by IC (Low Level)	E235.NO3-L	2358668	1	19	5.2	5.0	✔
Sulfate in Water by IC (Low Level)	E235.SO4-L	2358670	1	17	5.8	5.0	✔
Total Metals in Water by CRC ICPMS	E420	2358219	1	18	5.5	5.0	✔
Total Mercury in Water by CVAAS	E508	2357270	1	5	20.0	5.0	✔
VH and F1 by Headspace GC-FID	E581.VH+F1	2360917	1	4	25.0	5.0	✔
BTEX by Headspace GC-MS	E611A	2360916	1	14	7.1	5.0	✔
VOCs (BC List) by Headspace GC-MS	E611C	2360918	1	4	25.0	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
Conductivity in Water	E100 ALS Environmental - Calgary	Water	APHA 2510 (mod)	Conductivity, also known as Electrical Conductivity (EC) or Specific Conductance, is measured by immersion of a conductivity cell with platinum electrodes into a water sample. Conductivity measurements are temperature-compensated to 25°C.
pH by Meter	E108 ALS Environmental - Calgary	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 - Calgary	Water	APHA 2130 B (mod)	Turbidity is measured by the nephelometric method, by measuring the intensity of light scatter under defined conditions.
TDS by Gravimetry	E162 ALS Environmental - Calgary	Water	APHA 2540 C (mod)	Total Dissolved Solids (TDS) are determined by filtering a sample through a glass fibre filter, with evaporation of the filtrate at 180 ± 2°C for 16 hours or to constant weight, with gravimetric measurement of the residue.
Chloride in Water by IC (Low Level)	E235.CI-L ALS Environmental - Calgary	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Fluoride in Water by IC	E235.F ALS Environmental - Calgary	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 - Calgary	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 - Calgary	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate in Water by IC (Low Level)	E235.SO4-L ALS Environmental - Calgary	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Alkalinity Species by Titration	E290 ALS Environmental - Calgary	Water	APHA 2320 B (mod)	Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.



Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Colour (True) by Spectrometer (5 CU)	E329 ALS Environmental - Calgary	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 - Calgary	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 - Calgary	Water	EPA 1631E (mod)	Water samples undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS
VH and F1 by Headspace GC-FID	E581.VH+F1 ALS Environmental - Calgary	Water	BC MOE Lab Manual / CCME PHC in Soil - Tier 1 (mod)	Volatile Hydrocarbons (VH and F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.  Analytical methods for CCME Petroleum Hydrocarbons (PHCs) are validated to comply fully with the Reference Method for the Canada-Wide Standard for PHC. Unless qualified, all required quality control criteria of the CCME PHC method have been met, including response factor and linearity requirements.
BC PHCs - EPH by GC-FID	E601A ALS Environmental - Calgary	Water	BC MOE Lab Manual	Sample extracts are analyzed by GC-FID for BC hydrocarbon fractions.
BTEX by Headspace GC-MS	E611A ALS Environmental - Calgary	Water	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
VOCs (BC List) by Headspace GC-MS	E611C ALS Environmental - Calgary	Water	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.  Total Xylenes is the sum of m,p-Xylene & o-Xylene. Total BTEX is the sum of Benzene, Toluene, Ethylbenzene, & Total Xylenes. Total BTEX+Styrene is the sum of Total BTEX & Styrene. Total Trihalomethanes [THMs] is the sum of Bromodichloromethane, Bromoform, Chloroform, & Dibromochloromethane.



Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
PAHs in Water by Hexane LVI GC-MS	E641A ALS Environmental - Calgary	Water	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are analyzed by large-volume injection (LVI) GC-MS. Totals and sub-totals (e.g., ΣPAH, low and high MW PAHs) are reported as the sum of the individual target compounds detected; the detection limit for any sum is calculated by the root-sum-of-squares (RSS) of the individual analyte limits (per CCME Vol. 4 Analytical Methods). Benzo[a]pyrene total potency equivalents (B[a]P-TEQ/TPEQ) are calculated in accordance with CCME using the published potency-equivalency factors; non-detects are assigned one-half of the limit of reporting (LOR) in the TEQ calculation.
Hardness (Calculated) from Total Ca/Mg	EC100A ALS Environmental - Calgary	Water	APHA 2340B	"Hardness (as CaCO <sub>3</sub> ), from total Ca/Mg" is calculated from the sum of total Calcium and Magnesium concentrations, expressed as CaCO <sub>3</sub> 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 hardness is a property of water due to dissolved divalent cations. In non-turbid waters, Hardness from total Ca/Mg is normally comparable to Dissolved Hardness, but may be biased high if particulate forms of Ca or Mg are present.
Nitrate and Nitrite (as N) (Calculation)	EC235.N+N ALS Environmental - Calgary	Water	EPA 300.0	Nitrate and Nitrite (as N) is a calculated parameter. Nitrate and Nitrite (as N) = Nitrite (as N) + Nitrate (as N).
VPH: VH-BTEX-Styrene	EC580A ALS Environmental - Calgary	Water	BC MOE Lab Manual (VPH in Water and Solids) (mod)	Volatile Petroleum Hydrocarbons (VPH) is calculated as follows: VPHw = Volatile Hydrocarbons (VH C6-C10) minus benzene, toluene, ethylbenzene, xylenes (BTEX) and styrene.
LEPH and HEPH: EPH-PAH	EC600A ALS Environmental - Calgary	Water	BC MOE Lab Manual (LEPH and HEPH)	Light Extractable Petroleum Hydrocarbons (LEPH) and Heavy Extractable Petroleum Hydrocarbons (HEPH) are calculated as follows: LEPH = Extractable Petroleum Hydrocarbons (EPH10-19) minus Acenaphthene, Acridine, Anthracene, Fluorene, Naphthalene and Phenanthrene; HEPH = Extractable Petroleum Hydrocarbons (EPH19-32) minus Benz(a)anthracene, Benzo(a)pyrene, Fluoranthene, and Pyrene.
Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
VOCs Preparation for Headspace Analysis	EP581 ALS Environmental - Calgary	Water	EPA 5021A (mod)	Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler. An aliquot of the headspace is then injected into a GC-MS-FID.
PHCs and PAHs Hexane Extraction	EP601 ALS Environmental - Calgary	Water	EPA 3511 (mod)	Petroleum Hydrocarbons (PHCs) and Polycyclic Aromatic Hydrocarbons (PAHs) are extracted using a hexane liquid-liquid extraction.



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Chain of Custody (COC) / Analytical Request Form

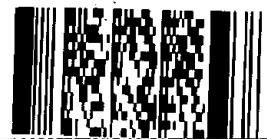
COC Number: 25 -

Page 1 of 4

Canada Toll Free: 1 800 668 9878

<b>Report To</b> Contact and company name below will appear on the final report		<b>Reports / Recipients</b>			<b>Turnaround Time (TAT) Requested</b>										<b>AFFIX ALS BARCODE LABEL HERE (ALS use only)</b>						
Company:	Town of Golden (GMGO100)	Select Report Format:	<input checked="" type="checkbox"/> PDF	<input type="checkbox"/> EXCEL	<input type="checkbox"/> EDD (DIGITAL)	<input checked="" type="checkbox"/> Routine [R] if received by 3pm M-F - no surcharges apply															
Contact:	Al Taylor	Merge QC/QCI Reports with COA	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum															
Phone:	250-344-1488	<input type="checkbox"/> Compare Results to Criteria on Report - provide details below if box checked				<input type="checkbox"/> 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum															
Company address below will appear on the final report		Select Distribution:	<input checked="" type="checkbox"/> EMAIL	<input type="checkbox"/> MAIL	<input type="checkbox"/> FAX	<input type="checkbox"/> 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum															
Street:	BOX 350	Email 1 or Fax:	al.taylor@golden.ca, ryan.robison@golden.ca			<input type="checkbox"/> 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum															
City/Province:	Golden, BC	Email 2:	jennifer.beverley@interiorhealth.ca			<input type="checkbox"/> Same day [E2] if received by 10am M-S - 200% rush surcharge.															
Postal Code:	V0A 1H0	Email 3:	chris.cochran@golden.ca			Additional fees may apply to rush requests on weekends, statutory holidays and for non-routine tests.															
<b>Invoice To</b>	Same as Report To <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<b>Invoice Recipients</b>			<b>Date and Time Required for all E&amp;P TATs:</b>										dd-mmm-yy hh:mm am/pm						
	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	For all tests with rush TATs requested, please contact your AM to confirm availability.															
Company:	Town of Golden	Email 1 or Fax:	ap@golden.ca			<b>Analysis Request</b>										<b>SAMPLES ON HOLD</b>	<b>EXTENDED STORAGE REQUIRED</b>	<b>SUSPECTED HAZARD (see notes)</b>			
Contact:	Accounts Payable	Email 2:				Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below															
<b>Project Information</b>		<b>Oil and Gas Required Fields (client use)</b>			<b>NUMBER OF CONTAINERS</b>																
ALS Client Code / QUOTE #:	CG2021GMGO1000001	AFE/Cost Center:	PO#			BTEX, VPH, EPH, LEPH/HEPH, PAH (S666A-D)															
Job / Project #:		Major/Minor Code:	Routing Code:			VOC (E611C)															
PO / AFE:		Requisitioner:				Nitrate + Nitrite (S235.NH-N-L)															
LSD:		Location:			Total Metals (E420)																
ALS Lab Work Order # (ALS use only):		ALS Contact:	PAT W	Sampler:	Total Mercury (E508)																
				RYAN ROBISON 250-344-1382	Colour True (E329)																
ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Alkalinity (E290A-L)																
	Well # 2	25-Nov-25	09:17	Water	TDS (E162)																
	Well # 3	25-Nov-25	09:26	Water	Turbidity (E121)																
	Well # 4	25-Nov-25	09:49	Water	pH (E108) and EC (E100)																
	Well # 5	25-Nov-25	09:35	Water	Chloride (E235.CH-L)																
					Fluoride (E235.F)																
					Sulfate (E235.SO4-L)																
					Total Hardness Calc (EC100A)																
<b>Drinking Water (DW) Samples (client use)</b>		<b>Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)</b>			<b>SAMPL</b>										<b>INITIATED</b> <input type="checkbox"/> YES <input type="checkbox"/> N/A						
Are samples taken from a Regulated DW System? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO					Cooling Method: <input type="checkbox"/> NONE <input type="checkbox"/>																
Are samples for human consumption/ use? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO					Cooler Custody Seals Intact: <input type="checkbox"/>																
					INITIAL COOLER TEMPERATURES °C																
<b>SHIPMENT RELEASE (client use)</b>		<b>INITIAL SHIPMENT RECEPTION (ALS use only)</b>			<b>FINAL SHIPMENT RECEPTION (ALS use only)</b>																
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:							
RYAN ROBISON	25.NOV.25	09:56																			

Environmental Division  
Calgary  
Work Order Reference  
CG2517243



Telephone: +1403 407 1800

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

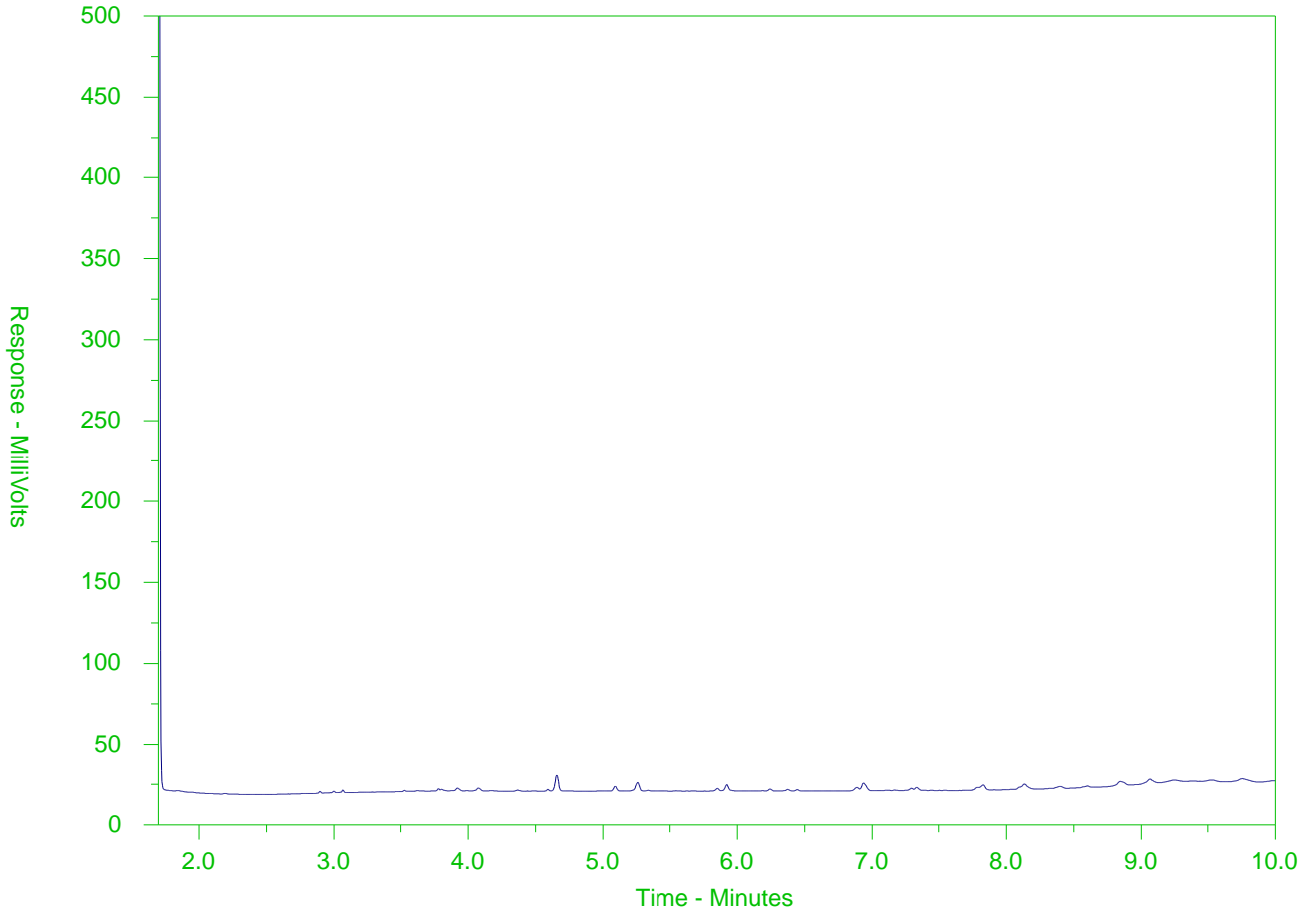
OCT 2023 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

# BC EPH HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: CG2517243-001-E601A  
 Client Sample ID: Well #2



← EPH10-19 →		← EPH19-32 →	
nC10	nC19	nC32	
174°C	330°C	467°C	
346°F	626°F	873°F	
← Gasoline →		← Diesel/ Jet Fuels →	
← Motor Oils/ Lube Oils/ Grease →			

The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

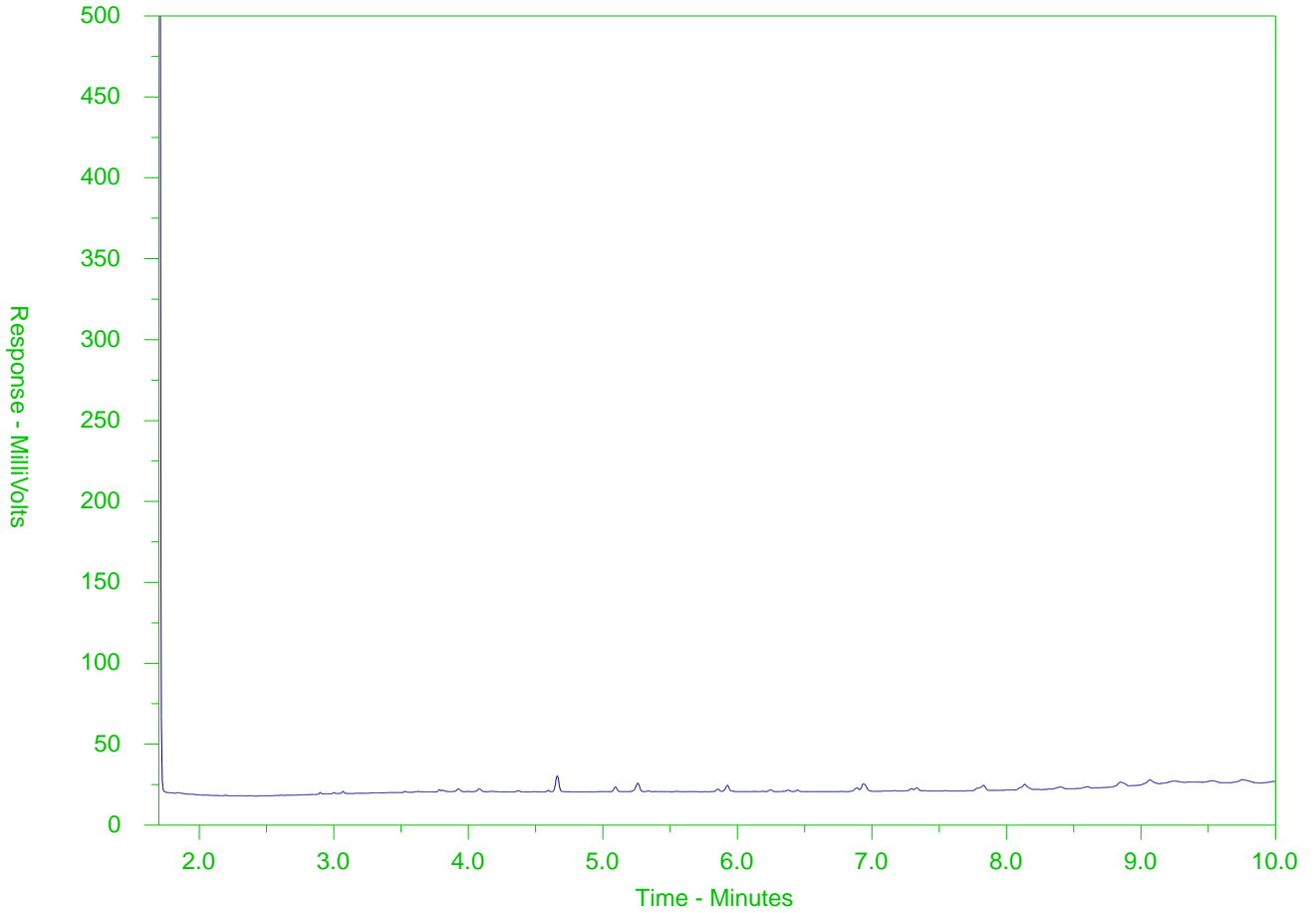
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.

Note: This chromatogram was produced using GC conditions that are specific to the ALS Canada EPH method. Refer to the ALS Canada EPH Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# BC EPH HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: CG2517243-002-E601A  
 Client Sample ID: Well #3



← EPH10-19 →		← EPH19-32 →	
nC10	nC19	nC32	
174°C	330°C	467°C	
346°F	626°F	873°F	
← Gasoline →		← Motor Oils/ Lube Oils/ Grease →	
← Diesel/ Jet Fuels →			

The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

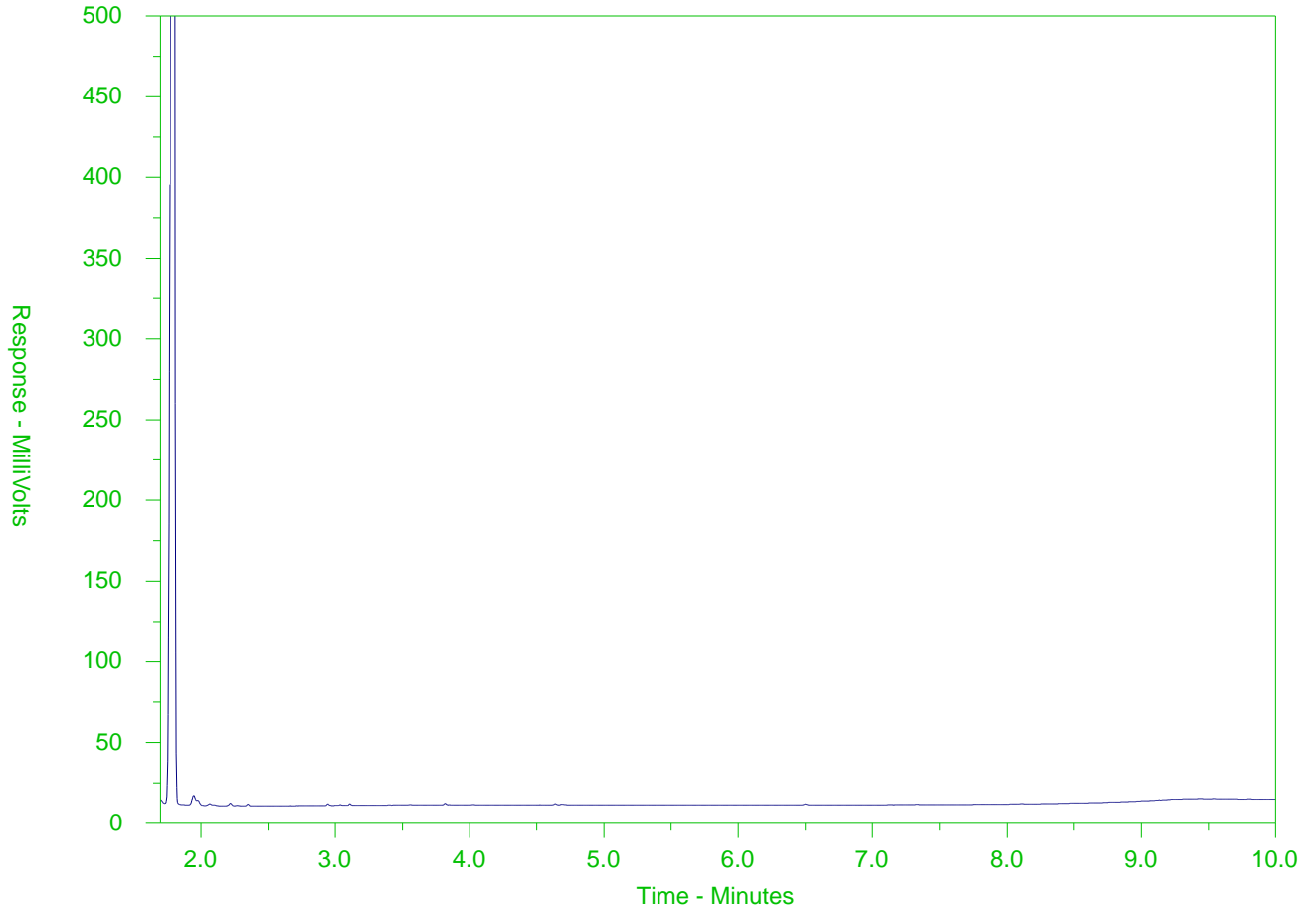
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.

Note: This chromatogram was produced using GC conditions that are specific to the ALS Canada EPH method. Refer to the ALS Canada EPH Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# BC EPH HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: CG2517243-003-E601A  
 Client Sample ID: Well #4



← EPH10-19 →		← EPH19-32 →	
nC10	nC19	nC32	
174°C	330°C	467°C	
346°F	626°F	873°F	
← Gasoline →	← Diesel/ Jet Fuels →		
← Motor Oils/ Lube Oils/ Grease →			

The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

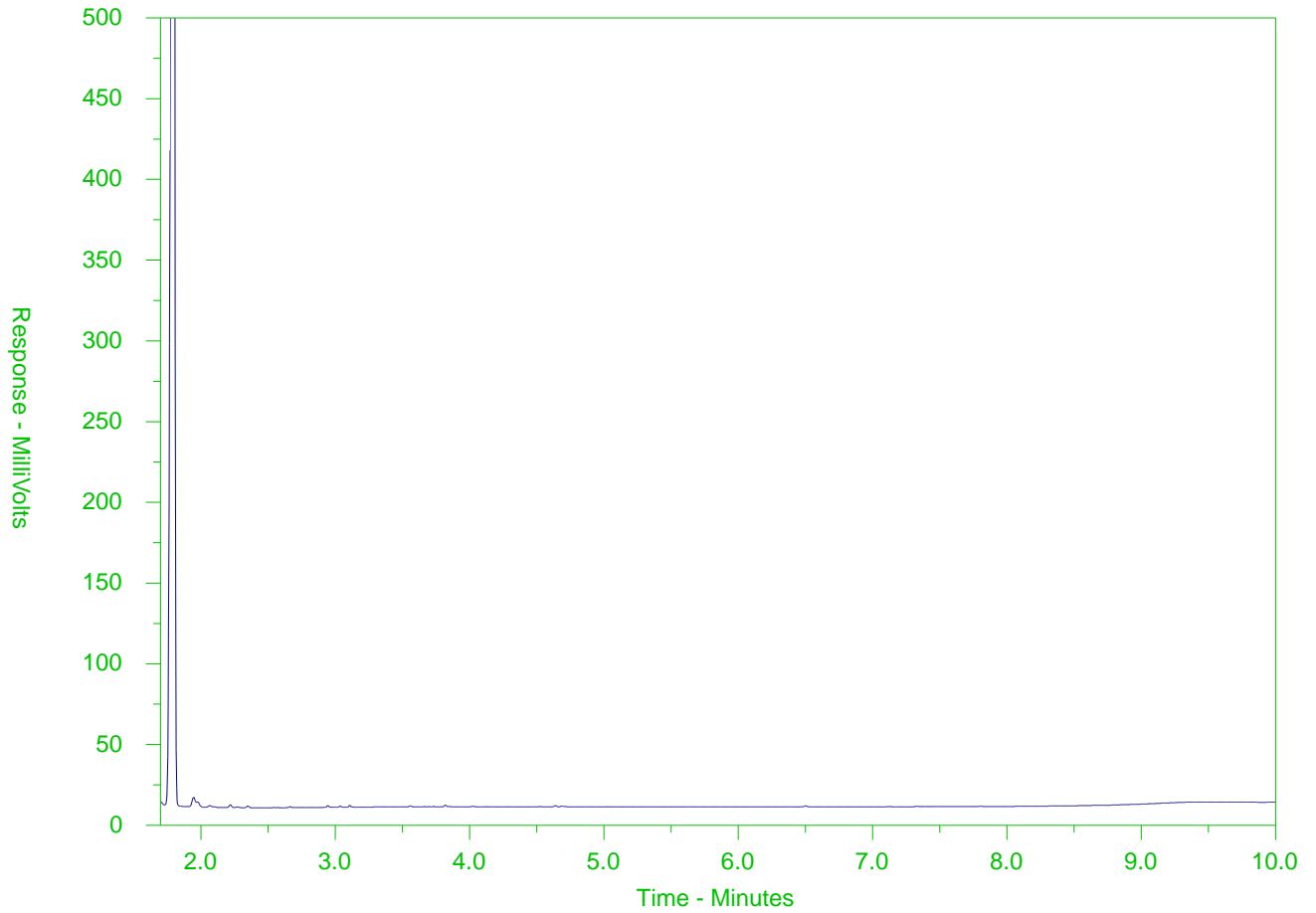
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.

Note: This chromatogram was produced using GC conditions that are specific to the ALS Canada EPH method. Refer to the ALS Canada EPH Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR library can be found at [www.alsglobal.com](http://www.alsglobal.com).

# BC EPH HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: CG2517243-004-E601A  
 Client Sample ID: Well #5



← EPH10-19 →		← EPH19-32 →	
nC10	nC19	nC32	
174°C	330°C	467°C	
346°F	626°F	873°F	
← Gasoline →		← Diesel/ Jet Fuels →	
← Motor Oils/ Lube Oils/ Grease →			

The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.

Note: This chromatogram was produced using GC conditions that are specific to the ALS Canada EPH method. Refer to the ALS Canada EPH Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR library can be found at [www.alsglobal.com](http://www.alsglobal.com).