

2025 Annual Groundwater Monitoring Report

Okanagan Falls Landfill (OC 15279)

3751 Allendale Lake Road, Okanagan Falls, BC



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Prepared For:
Regional District of Okanagan-Similkameen

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2025 ANNUAL GROUNDWATER MONITORING REPORT OKANAGAN FALLS LANDFILL (OC 15279)

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ACRONYMS AND ABBREVIATIONS

AO	Aesthetic Objective
BCAWQG	BC Approved Water Quality Guidelines
BC GWPR	BC Groundwater Protection Regulation
BC WGG	BC Water Quality Guidelines (combination of BCAWQG and BCWWQG)
BCWWQG	BC Working Water Quality Guidelines
BOD	Biological Oxygen Demand
CALA	Canadian Association for Laboratory Accreditation
CARO	Caro Analytical Services, Kelowna, BC
COD	Chemical Oxygen Demand
CSR	BC Contaminated Sites Regulation
CSR AW	CSR Freshwater Aquatic Water numerical standard
CSR DW	CSR Drinking Water numerical standard
CSR IW	CSR Irrigation Water numerical standard
CSR LW	CSR Livestock Watering numerical standard
DO	Dissolved Oxygen
DOCP	Design, Operations and Closure Plan
EC	Electrical Conductivity
EMA	Environmental Management Act
ENV	BC Ministry of Environment and Parks
GCDWQ	Guidelines for Canadian Drinking Water Quality
GLL	Gartner Lee Ltd.
m asl	Meters Above Sea Level
mbgs	Meters Below Ground Surface
mbtoc	Meters Below Top of Casing
MAC	Maximum Acceptable Concentration
OC	Operational Certificate
ORP	Oxidation-reduction Potential
QA/QC	Quality Assurance/Quality Control
RDOS	Regional District of Okanagan-Similkameen
STN ID	Climate Station ID
TDS	Total Dissolved Solids
WRA	Water Resource Atlas
WTN	Well Tag Number

1.0 INTRODUCTION

The Regional District of Okanagan-Similkameen (the Client) retained Ecoscape Environmental Consultants Ltd. (Ecoscape) to review groundwater and surface water quality data collected at the Okanagan Falls Landfill (the Site, Figure 1) and to prepare this Annual Environmental Monitoring Report per the Site's BC Ministry of Environment and Parks (ENV) Operational Certificate monitoring and reporting requirements.

This report presents a summary and analysis of environmental monitoring data collected by Regional District of Okanagan-Similkameen (RDOS) staff from January 1 to December 31, 2025, and includes a discussion of the applicable regulatory context, field procedures, quality assurance/quality control measures, water quality trends and recommendations for future Site monitoring. General terms and conditions applicable to this report are attached as Appendix A.

1.1. Background

The Okanagan Falls Landfill was originally designed and constructed as a natural attenuation landfill. The Site is classified as a natural attenuation landfill because it does not have a low permeability liner or a leachate collection system below the waste mass. The landfill relies on its small size, relatively low leachate generation potential (based on climatic conditions), deep groundwater conditions and the use of appropriate operating and closure procedures to protect the receiving environment from potential leachate impacts.

The Site has operated as a landfill since 1979 and received municipal solid waste from the RDOS until 2004, after which it was transitioned to a regional disposal location for demolition, renovation, and construction waste. The Site services businesses and residents from the community of Okanagan Falls (Area D), and surrounding areas including Naramata (Area E), the City of Penticton, and RDOS Electoral Areas B, G, I and portions of F.

The Site operates under Operational Certificate 15279 (the OC), which was most recently amended by the BC Ministry of Environment and Parks (ENV) in 2011. A copy of the OC is provided in Appendix B.

2.0 OBJECTIVE AND WORK SCOPE

The objective of this assessment was to fulfill the annual monitoring and reporting requirements outlined in the OC. This was accomplished by evaluating spatial and temporal trends in groundwater and surface water quality and identifying locations where water quality exceeded applicable guidelines and standards.

Key water quality questions answered in this report are:

- Does water quality meet applicable guidelines and standards at and beyond the Site boundary?
- Does water quality at and near the Site vary spatially between sample locations and temporally between seasons and years as a result of ongoing landfilling at the Site, and if so, what are the variances?
- If spatial and temporal trends in groundwater chemistry exist, do these trends suggest adverse effects, and is this linked to permitted landfill operations?

In meeting this objective and answering these questions, Ecoscape and RDOS undertook the following tasks:

- Collected representative groundwater and surface water samples from select monitoring locations on and near the Site (Figure 3) on a tri-annual basis, as summarized in Section 5;
- Submitted water quality samples for analyses to Caro Analytical Services (CARO), which is accredited by the Canadian Association for Laboratory Accreditation (CALA);
- Entered water quality data into a database (tabulated) and compared to applicable provincial guidelines and standards to determine if exceedances were observed;
- Analyzed temporal and spatial water quality trends to evaluate the potential for landfill leachate impacts on water quality; and
- Prepared this annual environmental monitoring report.

3.0 SITE DESCRIPTION

The Site is located approximately 4 km east of Okanagan Falls, BC (Figure 1), and is situated on land owned by the Provincial Crown and leased to the RDOS.

A Site description is provided in Table 1.

Table 1. Site Description	
Topic	Details
Civic Address	3751 Allendale Lake Road, Okanagan Falls, BC
Legal Description	District Lot 2710, Similkameen Division of Yale Land District, portion containing 9.66 ha, Refuse Disposal Area Adjacent to Sublots 10 and 21 PL 1189, Lease #341979.
Site Owner	Province of BC
Latitude and Longitude (of approx. Site centre)	49° 20' 23" N and 119° 31' 0" W
Approximate Site Area	9.66 ha
Current Land Use	Natural Attenuation Landfill

The property immediately north and west of the Site is owned by the Nature Trust conservation organization and is part of the larger Nature Trust Okanagan Falls Biodiversity Ranch. Properties to the south and east are Crown land.

The Site's geological and hydrogeological framework was previously developed by Gartner Lee Ltd. (GLL) in their report titled "*Hydrogeological Assessment for Okanagan Falls Landfill*", dated May 2000, and was expanded upon in the most recent Design, Operations, and Closure Plan (DOCP) prepared by Sperling Hansen Associates (SHA, 2021).

The following subsections summarize Site physiography, geology, and hydrogeology, as detailed in the above-listed assessments, along with available information online.

3.1. Climate and Biogeoclimatic Zones

The Site occurs within the Okanagan variant Very Dry Hot subzone of the Ponderosa Pine biogeoclimatic zone (PPxh1). The PP zone occupies low elevations within the very dry valleys of the southern Interior Plateau of BC and is generally the driest forested region in the province. The climate consists of hot, dry conditions in the summer and cool conditions with little snow in the winter (Hope et al., 1991).

Climate normal data from Environment Canada collected at the nearby Penticton Airport station (STN ID 1126151) between 1991 and 2020 indicated that the average annual total precipitation (rain and snow) was 344.1 mm, suggesting the Site and nearby surrounding area have been relatively dry. The highest precipitation typically occurred between May and June (as rain), while February was the driest month. The daily average temperatures

for July (the warmest month) and January (the coldest month) were 21.4 °C and --0.8 °C, respectively (Environment Canada, 2026).

It is important to note, however, that most climate models for the BC Interior indicate that seasonal precipitation and temperature patterns will likely shift from the above-referenced “normals”, which are based on some data collected over two decades ago. Specifically, we can expect to see warmer and drier summers, coupled with earlier spring freshet, while winter seasons will experience increased precipitation falling as rain as opposed to snow, particularly in low-elevation areas.

3.2. Topography, Drainage and Nearby Watercourses

The Site was constructed atop a north-to-northwest sloping knoll, with Site surface elevations ranging from approximately 580 m above sea level (masl) at the southeast corner down to 520 masl at the northwest corner.

No watercourses occur on the Site. McLean Creek is the nearest watercourse, approximately 50 m north and hydraulically cross- to upgradient of the Site, while Shuttleworth Creek is situated approximately 750 m to the south (Figure 1). Both creeks drain west to northwest with eventual discharge into Skaha Lake and the Okanagan River, respectively.

3.3. Regional And Local Geology and Hydrogeology

According to BC Geological Survey mapping, bedrock beneath the Site comprises Proterozoic-aged quartz-biotite gneiss, quartzite, marble, and/or amphibolite of the Grand Forks Gneiss / Monashee Complex (Cui et. al, 2017). The bedrock surface beneath and near the Site is highly variable but generally dips northwest based on available monitoring well log information and Site observations. Bedrock outcrops occur throughout the southern portion of the Site, while previous drilling investigations encountered bedrock anywhere from 3 m (MW17-5) to 19 m below ground surface (mbgs) (MW17-4) elsewhere on and near the Site.

As reported by GLL, and listed in available monitoring well logs, bedrock in the area is overlain by post-glacial sand and gravel deposits and silty fine sand (till). Overburden is generally unsaturated at and near the Site; however, groundwater may be intermittently perched atop the bedrock surface, particularly following heavy precipitation events. The hydraulic conductivity of the overburden was estimated by GLL to be 3×10^{-7} m/s at a depth of 25 mbgs (GLL, 2000). A cross-section prepared by GLL (2000) depicting inferred geology beneath and near the Site is included in Figure 4.

A review of the BC Water Resources Atlas (WRA) indicated the northern portion of the Site is underlain by ENV-mapped Aquifer 264. Aquifer 264 was classified as an unconfined sand and gravel aquifer, with moderate productivity, demand, and vulnerability to surface

sources of contamination at the time of mapping (ENV, 2026). Based on our review of available borehole logs, this aquifer was not encountered when the onsite monitoring wells were drilled and installed.

Based on onsite well lithology and long-term groundwater monitoring data, groundwater beneath the Site primarily flows through a poorly defined but locally important bedrock aquifer (not mapped by ENV). Groundwater is likely recharged from surrounding upland areas, in which precipitation and snowmelt infiltrates bedrock, migrates downward, and then flows laterally through bedrock fractures and in some cases above and along the bedrock-overburden interface towards the northwest. The bedrock aquifer may also be recharged by seepage losses from nearby sand and gravel Aquifer 264.

Single-well response testing conducted by GLL at BH-1, BH-2S, BH-2D and BH-3, all of which were completed in bedrock, indicated that saturated bedrock hydraulic conductivity beneath and near the Site ranges from approximately 4×10^{-7} m/sec to 8×10^{-7} m/sec. These estimates were consistent with industry-accepted hydraulic conductivity values for fractured metamorphic and igneous rock (Freeze and Cherry, 1979), and likely indicated that bedrock permeability was low and that groundwater flow was largely fracture-controlled. Static water levels in most monitoring wells were quite shallow compared to the depth of water-bearing fractures, thus indicating an upward hydraulic gradient in the area. Flowing artesian conditions have been documented at BH-2D (decommissioned), MW19-2D, MW17-5D, and the domestic well at 1545 Chapman Road, several hundred meters downgradient of the landfill.

4.0 REGULATORY FRAMEWORK

4.1. Operational Certificate and Landfill Criteria

The Site currently operates under OC 15279 issued by the BC ENV in 2011 under the provisions of the *Environmental Management Act* (EMA; SBC 2003, Chapter 53 assented October 23, 2003, current to December 31, 2024), and in accordance with the ENV-approved RDOS Solid Waste Management Plan.

The OC requires the RDOS to implement and maintain a groundwater monitoring program, prepared by a qualified professional, capable of identifying potential impacts on the receiving environment and public health. The current monitoring program includes triannual water level and quality monitoring to capture seasonal water quality trends. The OC stipulates that this program is to be reviewed and assessed annually by a suitably Qualified Professional.

The OC also requires RDOS to submit an annual monitoring report documenting any effect of the discharge on the quality of the receiving environment using appropriate statistical

and graphical analysis. Trend analyses and an evaluation of the impacts of the discharges on the receiving environment must be included in the report.

Per the OC, this assessment follows guidance provided in the BC ENV *Landfill Criteria for Municipal Solid Waste* (the Landfill Criteria) (2016) which indicates the following standards and guidelines are typically applicable to water quality assessments at current and historical landfill sites:

- The *Contaminated Sites Regulation* (CSR) Schedule 3.2 Generic Numerical Water Standards;
- The BC Approved and Working Water Quality Guidelines; and
- Other water quality criteria for parameters not addressed by the preceding guidelines and standards.

As a minimum, the appropriate water quality criteria must be satisfied at and beyond the landfill site boundary, or 150 m from the landfill footprint, whichever is closer. More stringent requirements may be set by the director. Existing and potential future groundwater uses within 1 km of the landfill footprint are to be considered when establishing applicable guidelines and standards.

The monitoring program outlined in this report was developed based on Site-specific hydrogeological reports, available monitoring well data, and input from RDOS staff so to meet the intent of the Landfill Criteria.

4.2. **Applicable Guidelines and Standards**

The *Contaminated Sites Regulation* (CSR) is the primary regulatory document that currently describes the EMA's requirements for contaminated sites management in BC. The CSR first came into effect in 1997 and was amended most recently in October 2025. Schedule 3.2 of the CSR provides numerical standards for various contaminant concentrations in water for the following uses: aquatic life (AW), irrigation (IW), livestock watering (LW), and drinking water (DW).

BC ENV also recognizes that background groundwater concentrations of certain inorganic parameters exceed the above-listed numerical standards in some regions throughout BC. Accordingly, BC ENV established Protocol 9 – Establishing Local Background Concentrations in Groundwater (2023), which lists regional background groundwater concentrations for select inorganic substances in three regions in British Columbia. A groundwater sample with a water quality parameter concentration that exceeds applicable numerical water quality standards but remains below the site's background concentration is not considered contaminated under the CSR. BC ENV-established background concentrations cannot be applied to the Site, as it falls outside the geographic boundaries of the regions included in Protocol 9; however, the province-wide background cobalt concentration of 0.02 mg/L has been applied to this assessment.

The following CSR standards were applied to this assessment for the protection of groundwater, irrigation and livestock watering users in the area:

- CSR Drinking Water (DW) numerical standards;
- CSR Irrigation Water (IW) numerical standards; and
- CSR Livestock Watering (LW) numerical standards.

The CSR Freshwater Aquatic Life standards and BC Approved Water Quality Guidelines for the protection of aquatic life were not considered applicable based on the inferred absence of downgradient surface waterbodies.

The *Guidelines for Canadian Drinking Water Quality* Maximum Acceptable Concentrations (health-based guideline) (GCDWQ MAC) and Aesthetic Objectives and Operational (based on aesthetic and operational considerations) (GCDWQ AO & O), which are typically reserved for potable water sources, were conservatively applied to all sampled wells as an added contingency.

With respect to the GCDWQ, samples with one or more parameters exceeding the health-based MACs are considered not potable. In samples where parameters exceed only AO & O, the water is deemed potable, but treatment may be desired to address taste, colour, or odour concerns.

RDOS notified all well owners whose well water exceeded the GCDWQ MAC guidelines, and water quality data was provided as requested, in keeping with the procedure agreed upon with RDOS and sampled domestic well owners.

5.0 ENVIRONMENTAL MONITORING PROGRAM

5.1 Recent Changes to the Monitoring Network

Water quality sampling was historically completed quarterly, but was reduced to tri-annually in 2017. Samples are collected in March/April, July/August, and November/December, to best capture the seasonally low, seasonally high, and receding arm of the South Okanagan groundwater hydrograph. Active and decommissioned monitoring wells are mapped on Figure 3.

Monitoring wells BH-1 and BH-2D were decommissioned in 2019 in accordance with the BC *Groundwater Protection Regulation* (BC GWPR), and were replaced by MW19-1 and MW19-2D, respectively. Unlike BH-1 and BH-2D, which were open to several water-bearing fracture zones, monitoring wells MW19-1 and MW19-2D were constructed with packers meant to isolate a select fracture zone in each well, the implications of which are discussed throughout this report.

Domestic well DMW-3841 located at 3841 Allendale Road had not been monitored since 2015 due to lack of access; however, the well was accessed via 1551 Chapman Road and

reintroduced to the monitoring program in 2019 as DMW-1551Cha (since the well supplies water to both properties). This well has not been sampled since 2019.

The domestic well at 1545 Chapman Road (DMW-1545Cha) was added to the monitoring program in 2021 and is typically sampled annually. This well is the nearest downgradient domestic well to the landfill and is presumably completed in the same bedrock aquifer as that underlying the Site.

Surface water samples have been collected from onsite ponded areas in recent years to better understand surface water chemistry at the Site. Sampled locations are mapped on Figure 3.

5.2. Current Monitoring Network

The Site's monitoring network currently comprises seven (7) groundwater monitoring wells (four onsite and three offsite) and three (3) offsite domestic wells (Figure 3). Surface water samples are collected from ponded areas when and if present.

Table 2 below summarizes the monitoring network, including historically monitored wells. Monitoring well locations are shown on Figure 3, and available well logs are included in Appendix C.

Table 2: Summary of Okanagan Falls Landfill Monitoring Network						
Monitoring ID	Location	Rationale	Well Depth (mbtoc)	Top of Casing elevation (masl)	Typical Depth to Water (mbtoc)	Screened Lithology
Landfill Monitoring Wells						
BH-1 (decommissioned)	North end of west Site boundary, downgradient of the landfill.	N/A	37.2	526.53 ¹	8.8	Bedrock
MW19-1 (Replacement for BH-1)	North end of west Site boundary, downgradient of the landfill.	Monitor potential offsite migration of leachate impacts the west	34.1	529.91 ¹	31.4	Bedrock
BH-2S	West Site boundary, cross-to downgradient of the landfill	Monitor potential offsite migration of leachate impacts the west	10.4	538.06 ¹	4.6	Bedrock
BH-2D (decommissioned)	West Site boundary, cross-to downgradient of the landfill	N/A	28.0	537.93 ¹	2.4	Bedrock
MW19-2D (Replacement for BH-2D)	West Site boundary, cross-to downgradient of the landfill	Monitor potential offsite migration of leachate impacts the west	24.0	539.91 ¹	Flowing Artesian	Bedrock
BH-3	Near the south Site boundary, cross- to upgradient of the landfill	Monitor potential offsite migration of leachate impacts the south	32.0	560.63 ¹	11.5	Bedrock

Table 2: Summary of Okanagan Falls Landfill Monitoring Network						
Monitoring ID	Location	Rationale	Well Depth (mbtoc)	Top of Casing elevation (masl)	Typical Depth to Water (mbtoc)	Screened Lithology
MW17-4	Approximately 415 m west and downgradient of the Site	Monitor general downgradient impacts	72.8	487 ²	28.7	Bedrock
MW17-5S	Approximately 80 m west and downgradient of the Site	Monitor general downgradient impacts	10.7	516 ²	4.9	Bedrock
MW17-5D	Approximately 80 m west and downgradient of the Site	Monitor general downgradient impacts	50.6	516 ²	Flowing Artesian	Bedrock
Private Domestic Wells						
DMW-3808	Approximately 660 m northwest and downgradient of the Site	Monitor downgradient impacts to domestic groundwater users	Unknown	478 ²	Unknown	Unknown - Presumably overburden
DMW-3816	Approximately 635 m northwest and downgradient of the Site	Monitor downgradient impacts to domestic groundwater users	Unknown	480 ²	Unknown	Unknown - Presumably overburden
DMW-1545Cha (WTN 61214)	Approximately 620 m west and downgradient of the Site	Provide background groundwater chemistry, and monitor downgradient impacts to domestic groundwater users.	79.2	480 ²	Flowing Artesian	Bedrock
Surface Water Sample Locations						
SW-1	On Site, near the approved	Monitor onsite surface water impacts	N/A	N/A	N/A	N/A

Table 2: Summary of Okanagan Falls Landfill Monitoring Network						
Monitoring ID	Location	Rationale	Well Depth (mbtoc)	Top of Casing elevation (masl)	Typical Depth to Water (mbtoc)	Screened Lithology
	demolition sorting facility					
SW-2	On Site, near the active face	Monitor onsite surface water impacts	N/A	N/A	N/A	N/A

Notes:

1 = Surveyed elevations

2= Not surveyed, approximate elevation only.

WTN = Well Tag Number

It is important to note that BH-3 was previously inferred to represent background groundwater quality as the well is situated topographically upslope of the active landfill; however, recently identified leachate-related impacts at this location have rendered it unsuitable as a background well. Water samples historically collected from domestic well DMW-1545Cha did not appear to be impacted by landfill leachate. As such, DMW-1545Cha is inferred to represent background groundwater quality in the local bedrock aquifer.

5.3. Sampling Methodology

Water quality monitoring and sampling was conducted by Environmental Technicians employed by the RDOS.

RDOS personnel collected water quality samples in general accordance with BC ENV's *British Columbia Field Sampling Manual* (2013) and BC ENV *Technical Guidance on Contaminated Sites 8* (ENV, 2021), and the sampling program generally meets the intent of the OC.

Monitoring well conditions and accessibility of sample locations were documented during each sampling event. RDOS personnel also observed vegetation near each sampling location for signs of abnormal stress (e.g., discolouration or mortality) or abundance potentially linked to landfill leachate, and for signs of liquid flowing from or along the site surface, which could indicate leachate breakout.

RDOS personnel completed the following procedures when collecting water quality samples:

- Measured static water level off a permanent marking on the top of each well riser using a decontaminated electric water level meter;

- Purged monitoring wells, where applicable, until temperature, pH, dissolved oxygen (DO), oxidation-reduction potential (ORP), total dissolved solids (TDS), turbidity, and electrical conductivity (EC) readings were stabilized (+/-10%);
- Recorded the above-listed field parameters in a notebook;
- Noted visual and olfactory water observations, including sheen, colour, turbidity and odour;
- Collected groundwater samples using a peristaltic pump (surface water and BH-2S), HydraSleeve, bladder pump and/or dedicated well pumps directly into clean, new laboratory-supplied containers, and field filtered (0.45 µm) and preserved them as required for each analytical parameter; and
- Stored sample bottles in ice-chilled coolers for transport to CARO for chemical analysis.

RDOS personnel followed proper chain-of-custody procedures during sample transport and ensured regular communication was maintained with CARO as necessary.

Field results, including water level elevations and field-measured parameters, were tabulated by RDOS staff and uploaded to the Wireless Water database.

Laboratory results were sent directly by CARO to the database manager Wireless Water, where laboratory data is merged with field data for long-term data storage and analysis.

6.0 MONITORING PROGRAM RESULTS

The 2025 Site observations, water level measurements, groundwater quality exceedances, and water quality trends are discussed in this section. The 2025 and historical water quality results are tabularized in Appendix D. Laboratory certificates of analysis are attached in Appendix E.

6.1. Site Observations

All monitoring well locations were readily accessible, in good condition, and generally available for sampling in 2025.

MW17-5S was only sampled in April because it was dry during the remaining sampling events.

RDOS staff did not observe signs of stressed vegetation at or near any of the monitoring locations during the 2025 sampling events.

6.2. Water Levels and Inferred Groundwater Flow Direction

RDOS personnel measured groundwater levels on April 8, July 24, and November 5, 2025, the results of which are summarized in Appendix D.

Groundwater depths, which provide a measure of the potentiometric surface, were consistent with previous years. Flowing artesian conditions were observed at MW17-5D, and MW19-2D. Water levels were deepest in BH-3, ranging from 8.4 (April) to 10.7 (July) meters below top of casing (m btoc) in 2025.

Water levels recorded in monitoring wells were plotted as a time series graph in Figure 5. As shown, groundwater levels throughout the monitoring network increased (i.e., became shallower) between 2009 and 2013, with water levels rising by up to 6 m (BH-2D). Water levels have remained variable but stable since 2013. Groundwater levels were generally highest in the spring and early summer months, during and following freshet, and lowest in fall and winter, following dry summers. No groundwater level measurements were collected for DMW-3808, DMW-3816, MW17-4, MW17-5D and MW19-2D during the 2025 sampling events.

GLL surveyed the elevations of BH-1, BH-2S, BH-2D and BH-3 to ± 0.01 m vertical accuracy as part of their hydrogeological investigation (2000) to facilitate groundwater elevation and flow direction measurements at the Site. Elevations of monitoring wells installed post-2000 were approximated using a handheld GPS or Google Earth. Based on this, groundwater elevations are typically highest at BH-3, and following topography, decrease towards the northwest, with lower elevations at MW19-2D and BH-2S, MW19-1 and MW17-5S (Figure 3). Accordingly, groundwater flow through the shallow portions of the bedrock aquifer beneath the Site is generally inferred to be towards the northwest, with an estimated hydraulic gradient of 0.15 m/m near the landfill (Figure 3).

Elevations of the piezometric surface were higher at MW17-5D and MW19-2D compared to MW17-5S and BH2-S, respectively, while some wells were flowing artesian, indicating an upward hydraulic gradient in the local bedrock aquifer.

6.3. 2025 Analytical Results Relative to Applicable Standards and Guidelines

RDOS personnel collected groundwater samples (and surface water samples, when present) on April 8, July 24, October 21, and November 5, 2025.

During each sampling event, personnel collected samples from wells with sufficient groundwater for sampling and submitted them to CARO in Kelowna, BC for chemical analysis of the following parameters:

- Alkalinity;
- Anions (bromide, chloride, fluoride, nitrate, nitrite, ammonia, and sulphate);
- Biological and Chemical Oxygen Demand (BOD and COD);
- Electrical conductivity and pH;
- Dissolved (all locations) and Total Metals (domestic wells and surface water only); and,
- Microbiological Parameters (domestic wells only)

In addition, personnel recorded depth to water, pH, temperature, DO, ORP, conductivity, turbidity, and total dissolved solids (TDS) in the field.

2025 water quality results are provided in detail in Appendix D following the text, with exceedances from the tri-annual sampling events summarized in Table 3 below. Consistent with previous years, water quality exceedances were noted at each sample location.

Table 3: Summary of 2025 Water Quality Exceedances		
Sampling Location	Guideline	Exceedances
3808 Allendale Lake Rd.	GCDWQ AO & O	pH [F], pH
3816 Allendale Lake Rd.	GCDWQ AO & O	Iron (dissolved), Iron (total), Manganese (dissolved), Manganese (total), Total dissolved solids [F]
	CSR DW	Lithium (dissolved), Lithium (total), Strontium (dissolved), Strontium (total)
BH-2S	GCDWQ MAC	Manganese (dissolved), Uranium (dissolved)
	GCDWQ AO & O	Manganese (dissolved), Total dissolved solids [F]
	CSR IW	Manganese (dissolved), Uranium (dissolved)
	CSR DW	Lithium (dissolved), Strontium (dissolved), Uranium (dissolved)
BH-3	GCDWQ MAC	Nitrate (as N), Nitrate + Nitrite (as N), Nitrate + Nitrite (as N) (calculated), Uranium (dissolved)
	GCDWQ AO & O	Manganese (dissolved), Total dissolved solids [F]
	CSR IW	Uranium (dissolved)
	CSR DW	Lithium (dissolved), Nitrate (as N), Nitrate + Nitrite (as N), Nitrate + Nitrite (as N) (calculated), Uranium (dissolved)
DMW-1545Cha	GCDWQ MAC	Uranium (dissolved), Uranium (total)
	CSR IW	Uranium (dissolved)
	CSR DW	Lithium (dissolved), Lithium (total), Uranium (dissolved), Uranium (total)
MW17-4	GCDWQ MAC	Uranium (dissolved)
	GCDWQ AO & O	Manganese (dissolved), Total dissolved solids [F]
	CSR IW	Uranium (dissolved)
	CSR DW	Lithium (dissolved), Uranium (dissolved)
MW17-5D	GCDWQ MAC	Manganese (dissolved)
	GCDWQ AO & O	Iron (dissolved), Manganese (dissolved)
	CSR IW	Uranium (dissolved)

Table 3: Summary of 2025 Water Quality Exceedances		
Sampling Location	Guideline	Exceedances
	CSR DW	Lithium (dissolved)
MW17-5S	CSR DW	Lithium (dissolved)
MW19-1	GCDWQ MAC	Arsenic (dissolved)
	GCDWQ AO & O	Iron (dissolved), Manganese (dissolved)
	CSR IW	Molybdenum (dissolved)
	CSR DW	Arsenic (dissolved), Lithium (dissolved)
MW19-2D	GCDWQ MAC	Manganese (dissolved), Uranium (dissolved)
	GCDWQ AO & O	Iron (dissolved), Manganese (dissolved), Total dissolved solids [F]
	CSR IW	Manganese (dissolved), Molybdenum (dissolved), Uranium (dissolved)
	CSR DW	Lithium (dissolved), Uranium (dissolved)
SW-1	GCDWQ MAC	Uranium (total)
	GCDWQ AO & O	Iron (total), Manganese (total), Total dissolved solids [F]
	CSR IW	Boron (total), Molybdenum (total), Uranium (total)
	CSR DW	Lithium (total), Uranium (total)
SW-2	GCDWQ MAC	Arsenic (total), Nitrate (as N), Nitrate + Nitrite (as N), Nitrate + Nitrite (as N) (calculated)
	GCDWQ AO & O	Total dissolved solids [F]
	CSR IW	Uranium (total)
	CSR DW	Arsenic (total), Nitrate (as N), Nitrate + Nitrite (as N), Nitrate + Nitrite (as N) (calculated)

Notes: [F] = Field Result

Concentrations of remaining parameters measured in the field and analyzed by the laboratory were below applicable guidelines and standards.

6.3.1 Historical Background Groundwater Quality

Dissolved uranium and lithium have consistently exceeded one or more applicable guidelines and/or standards in samples collected from DW-1545Cha. As such, lithium and uranium are likely naturally elevated in the local bedrock aquifer.

Per BC ENV Protocol 9, the background groundwater concentrations for lithium and uranium in the Thompson-Okanagan Region (the nearest ENV region to the Site) are 0.096 mg/L and 0.087 mg/L, respectively. These regional background concentrations are more than double the maximum lithium and uranium concentrations identified in groundwater

at and near the Site, further validating that lithium and uranium concentrations exceeding BC CSR DW are likely naturally occurring in the area.

6.3.2 Downgradient Groundwater Quality

Key landfill-leachate indicator parameters, including, total dissolved solids, nitrate, manganese, and iron exceeded applicable guidelines/standards in one or more samples collected from cross-gradient and downgradient monitoring wells. Several additional dissolved metals also exceeded guidelines and/or standards in samples collected downgradient of the landfill. Some metals are not contaminants of concern associated with municipal solid waste and construction demolition debris. Rather, leachate interactions with the receiving environment likely released and mobilized these metals from native soils and bedrock into groundwater.

6.3.3 Onsite Surface Water Quality

Total precipitation in 2025 was lower than previous years, and as such, surface water was only observed and sampled from locations SW-1 and SW-2. Both locations were only sampled in April, and were dry during the July and November sampling events. SW-1 is located near the approved demolition sorting facility and wood piles, while SW-2 is situated near the active face.

Nitrate, TDS, and several metals exceeded one or more guidelines and standards in samples collected from SW-1 and/or SW-2 in 2025. These exceedances were likely attributable to runoff from landfill operations. *It is important to note that the guidelines and standards referenced in this report do not apply to the onsite surface water locations, as they do not supply water to livestock, irrigation or drinking water users. Rather, the guidelines and standards were applied for discussion purposes and to help provide an understanding of water quality impacts.*

6.4. Water Quality Trend Analysis

Analyses and discussion of spatial and temporal trends in landfill leachate indicator parameter concentrations at the Site are discussed in this section.

Landfill leachate indicator parameters are typically present at concentrations above natural, background concentrations in leachate-impacted groundwater. The chemical composition of landfill leachate-impacted groundwater can vary, and largely depends on waste composition, climatic conditions, and the age and degradation rate of the solid waste (Bulc, 2006); however, indicator parameters generally include but are not limited to, alkalinity, chloride, electrical conductivity, sulphate, sodium, ammonia, nitrate, iron, manganese, and heavy metals boron, cadmium, chromium, copper, nickel and zinc (Christensen et al., 2001).

Ecoscope plotted time-series graphs of select leachate indicator parameters, displaying changes in concentration over time between 2006 and 2025. These are shown in Figures 6 through 10 as follows:

- Chloride (Figure 6)
 - Chloride concentrations are typically elevated in leachate due to the degradation of food waste and paper products; however, chloride also naturally occurs in groundwater and may come from external sources such as road salt, industrial processes, wastewater effluent disposal to ground, and agricultural activity. Chloride is often found at the leading edge of a landfill leachate plume because it is conservative (non-reactive) in the environment and is thus useful in evaluating the plume's extent.
- Electrical Conductivity (Figure 7)
 - Electrical conductivity is useful in monitoring landfill leachate impacts because it is a measure of the total dissolved minerals within groundwater, which are often elevated near landfill sites.
- Nitrate (Figure 7)
 - Garden and food waste and biosolids contribute to organic nitrogen within the landfill mass. Over time, waste decomposition can deplete oxygen, resulting in anaerobic conditions favourable for ammonification, during which heterotrophic bacteria convert organic nitrogen to ammonia. When ammonia in groundwater encounters appropriate aerobic conditions, microorganisms oxidize ammonium to nitrate (i.e., nitrification), with nitrite as an intermediary product. Other common anthropogenic sources of nitrate include wastewater disposal to ground, agricultural activities, industrial processes, and mining (blast residuals from explosives).
- Total and Dissolved Sodium (Figure 8)
 - Sodium is often the dominant cation in leachate; however, various geochemical processes, including dissolution, precipitation, and cation exchange, may affect concentrations during groundwater transport. Like chloride, sodium also naturally occurs in groundwater, and may also come from external sources such as road salt, industrial processes, residential water softener use, and agricultural activity.
- Sulphate (Figure 9)
 - Sulphate is often generated in landfill leachate during the decomposition of organic matter and soluble waste.
- Dissolved Boron (Figure 9)
 - Boron is commonly found in fibreglass, cosmetics, cleaning and bleaching agents, wood preservatives, fire retardant materials, fertilizers, ceramics,

and plastics, and is therefore often elevated in leachate-impacted groundwater.

- Total Alkalinity and Dissolved Calcium (Figure 10)
 - Calcium and alkalinity are often elevated at the leading edge of a leachate-impacted groundwater plume, a phenomenon sometimes referred to as a hardness halo (Griffen et al. 1976), as a result of ion exchange between calcium and/or magnesium ions bound to sediments and various cations present in the leachate.
- Dissolved Manganese (Figure 11)
 - Decomposition of organic matter in leachate can deplete oxygen, creating reducing conditions (and generating organic acids). Under reducing conditions, manganese oxides (both naturally occurring and anthropogenically produced) are generally reduced to more soluble forms, mobilizing dissolved manganese in groundwater.

Groundwater quality data from 2009 to 2025 and a summary of descriptive statistics (mean, maximum, minimum, standard deviation, etc.) are tabularized in Appendix D.

Trend observations at each sample location are discussed below.

6.4.1 Background Well – DMW-1545Cha (1545 Chapman Road)

DMW-1545Cha is a flowing artesian well inferred to be completed in the same bedrock aquifer that underlies the landfill and has generally shown no landfill-related impacts. Given its distance from the Site and absence of groundwater impacts, this well is assumed to represent background groundwater chemistry in the local bedrock aquifer.

DMW-1545Cha has been sampled annually in the fall since 2019, except for 2024. Water quality trends observed in samples from DMW-1545 during this period are as follows:

- Chloride – low and stable, around 5 to 15 mg/L.
- Conductivity – low and stable, remaining between 650 and 700 $\mu\text{s}/\text{cm}$.
- Nitrate – consistently below 1 mg/L, but concentrations have gradually increased over the past few years from 0.185 mg/L in 2019 to 0.532 mg/L in 2025.
- Sodium – total and dissolved concentrations have been low and stable, hovering around 25 to 30 mg/L.
- Sulphate – low and stable, fluctuating between 50 and 80 mg/L.
- Boron – total and dissolved concentrations have been consistently near or below the laboratory detection limit of 0.05 mg/L.
- Calcium – total and dissolved concentrations have been low and stable.
- Total Alkalinity – concentrations increased from 269 mg/L in 2019 to 325 mg/L in 2022, followed by a decrease to 302 mg/L in 2023. Concentrations remained near 300 mg/L in 2025.
- Dissolved manganese – low and stable, less than 0.01 mg/L.

For the remaining sample locations discussed below, the term “elevated” refers to parameter concentrations above background concentrations measured in samples from DMW-1545Cha.

6.4.2 Onsite Monitoring Wells

6.4.2.1. BH-2S

BH-2S (shallow) is nested with BH-2D (deep), near to and downgradient of the landfill footprint, and screened in weathered bedrock just beneath the bedrock-overburden interface. BH-2S continued to show the highest concentrations of leachate indicator parameters within the monitoring network. Some parameter concentrations have decreased or remained stable over the past few years, while others may be increasing. Offsite migration of leachate-impacted groundwater to the west remains a concern at this location.

The following trends were observed in samples collected from BH-2S:

- Chloride – elevated above background and variable over time. Concentrations peaked at 123 mg/L in 2012, decreased to around 75 mg/L in 2014, and rebounded above the CSR IW standard of 100 mg/L between 2015 and 2017. Concentrations then decreased to 38 mg/L in 2021, and have gradually increased to approximately 55 mg/L since then.
- Conductivity – elevated above background, with an increasing trend observed between 2010 and 2013. Values stabilized around 1,500 µs/cm between 2013 and 2017, followed by a decrease to just above 1,000 µs/cm by 2020. Since then, conductivity has rebounded, with a measurement of 1590 µs/cm in November 2025.
- Nitrate – elevated above background, with an increasing trend observed between September 2009 (0.2 mg/L) and December 2012 (10 mg/L). Concentrations have since shown a decreasing trend, likely because the Site no longer accepts bio-solids, with concentrations measured around 1 mg/L in 2025.
- Dissolved Sodium – elevated above background. Like most parameters, concentrations were low in 2009, at around 35 mg/L before increasing to approximately 100 mg/L in 2016. Concentrations decreased to about 70 mg/L in 2018 but have since rebounded, remaining near or slightly above 100 mg/L since 2024.
- Sulphate – elevated above background. Concentrations were less than 50 mg/L in 2009 before spiking above 250 mg/L between 2012 and 2015. Sulphate levels decreased to about 75 mg/L in 2021, but have generally been increasing since then, reaching nearly 100 mg/L in 2022 and 2023 and almost 140 mg/L in 2025.
- Dissolved Boron – elevated above background. Concentrations increased several orders of magnitude from 0.045 mg/L in March 2011 to over 2.5 mg/L in 2014. Concentrations exceeded the CSR LW standard of 0.5 mg/L between 2012 and 2019, but have since decreased and been stable at around 0.35 mg/L.

- Calcium – elevated above background. Concentrations increased from 90 mg/L in September 2009 to 204 mg/L in September 2015, before decreasing and stabilizing at around 120 mg/L in 2019. Concentrations are variable but have generally increased since then, reaching 190 mg/L in July 2025.
- Total Alkalinity – elevated above background, and generally increasing over time, with 2025 concentrations measured between 623 mg/L (July) and 730 mg/L (November).
- Dissolved manganese – elevated above background and highly variable over time. Concentrations were highest between 2011 and 2017 (peaking at 0.5 mg/L in 2012), before decreasing to less than 0.1 mg/L by 2019. Concentrations have since increased, reaching just over 0.34 mg/L in November 2025.

6.4.2.2. BH-2D (replaced by MW19-2D in 2019)

BH-2D was constructed to intercept groundwater flows from water-bearing fractures approximately 26 mbgs, much deeper than those screened by its nested pair BH-2S. The upward vertical hydraulic gradient at this location appeared to mitigate, but not entirely deter the downward migration of leachate-impacted groundwater, as some leachate indicator parameters were elevated above background in BH-2D. Furthermore, some of these parameters showed an increasing trend over the 2006 to 2019 monitoring period, as summarized below:

- Chloride – relatively low. Concentrations remained around 5 mg/L from 2009 to 2014 before increasing to 15 mg/L by the end of 2015, after which concentrations stabilized.
- Conductivity – slightly elevated above background. Values showed a gradually increasing trend throughout the monitoring period, increasing from 550 $\mu\text{s}/\text{cm}$ in 2009 to 800 $\mu\text{s}/\text{cm}$ in 2019.
- Nitrate – low and relatively stable, with an average concentration of 0.643 mg/L.
- Sulphate – low, but showed a slight increasing trend over the monitoring period, with a maximum concentration of 52.5 mg/L observed in April 2019.
- Dissolved Sodium – low and stable, around 25 mg/L.
- Calcium – elevated above background, with an average concentration of 84 mg/L. Concentrations appeared to increase over time.
- Total Alkalinity – elevated above background. Concentrations were stable at around 280 mg/L between 2009 and 2015, before gradually increasing to around 400 mg/L in 2019.
- Dissolved Boron – low and stable, but slightly elevated above background, with an average concentration of 0.035 mg/L over the monitoring period.
- Dissolved manganese – generally low and stable, with an average concentration of 0.003 mg/L.

6.4.2.3. MW19-2D (replacement well for BH-2D)

Similar to BH-2D, MW19-2D has shown some signs of leachate-impacted groundwater despite the upward hydraulic gradient in the area.

The following trends were observed in MW19-2D since the well was first sampled in 2019:

- Chloride – slightly elevated above background but relatively low. Concentrations remained stable at around 20 mg/L from 2019 to 2021, but have since increased, reaching a historical high of 45 mg/L in November 2025.
- Conductivity – elevated above background. Values increasing from 840 $\mu\text{s}/\text{cm}$ in April 2021 to just under 1,000 $\mu\text{s}/\text{cm}$ in November 2022, but have remained stable but variable since then, fluctuating between approximately 900 $\mu\text{s}/\text{cm}$ and 1100 $\mu\text{s}/\text{cm}$.

- Nitrate – low and relatively stable, slightly below background, fluctuating between 0.1 and 0.3 mg/L until July 2025. Concentrations in July and November 2025 were slightly elevated, at 0.79 mg/L and 0.86 mg/L, respectively.
- Sulphate – slightly elevated above background, but relatively low. Concentrations increased from around 65 mg/L in 2019 to a historical high of 108 mg/L in July 2025.
- Dissolved Sodium – slightly elevated above background, stable around 35 mg/L.
- Calcium – elevated above background. Concentrations have increased from around 110 mg/L in 2019 to 146 mg/L in November 2022 and remained relatively stable but variable since then, fluctuating between 135 mg/L to 145 mg/L
- Total Alkalinity – elevated above background. Concentrations have been variable but decreasing to a historical low of 377 mg/L in November 2024. Concentrations ranged from 383 mg/L to 411 mg/L in 2025.
- Dissolved Boron – near or below the laboratory detection limit since 2019.
- Dissolved manganese – elevated above background. Concentrations were initially measured at around 2.7 mg/L in 2019, but have since continually declined to a historical low of 0.25 mg/L in November 2025, possibly due to the gradual removal of fine-grained material introduced during drilling.

6.4.2.4. BH-1 (replaced by MW19-1 in 2019)

Low-level leachate impacts were apparent in samples collected from BH-1 between 2009 and 2019; however, most leachate indicator parameters were stable or trending downward.

The following trends were observed in BH-1 between 2009 and 2019 before the well was decommissioned:

- Chloride – elevated but trending downward, from 70 mg/L in 2009 to around 17 mg/L in 2019.
- Conductivity – generally elevated, with similar values to BH-2S between 2009 and 2011 before trending downward between 2011 and 2019.
- Nitrate – consistently low and stable, near or below the laboratory detection limit of 0.01 mg/L.
- Sulphate – low and stable, with an average concentration of 44 mg/L.
- Dissolved Sodium – low and stable, with an average concentration of 34 mg/L.
- Calcium – decreased from 128 mg/L in December 2010 to approximately 60 mg/L in 2012, and remained stable beyond then.
- Total Alkalinity – relatively low and stable at around 250 mg/L.
- Dissolved Boron – low and stable, but slightly elevated above background, with an average concentration of 0.08 mg/L over the monitoring period.
- Dissolved manganese – low and stable, but slightly elevated above background, with an average concentration of 0.13 mg/L during the monitoring period.

6.4.2.5. MW19-1 (replacement well for BH-1)

Monitoring well MW19-1 replaced BH-1 in 2019. Leachate indicator parameter concentrations have been somewhat lower in MW19-1 than those measured in BH-1. This is likely due to the well packers installed in MW19-1, which prohibit mixing from multiple potentially impacted bedrock fracture zones. In other words, the fracture zone captured by MW19-1 may be less impacted than those previously straddled by BH-1.

The following trends were observed in samples collected from MW19-1 since 2019:

- Chloride – low and stable, around 5 mg/L.
- Conductivity – low and stable at around 400 $\mu\text{s}/\text{cm}$.
- Nitrate – consistently below the laboratory detection limit of 0.01 mg/L.
- Sulphate – low and stable at 25 to 30 mg/L.
- Dissolved Sodium – low and stable, around 25 mg/L.
- Dissolved Calcium – low and stable, around 40 mg/L.
- Total Alkalinity – low and stable, between 175 mg/L and 200 mg/L.
- Dissolved Boron – low and stable, but slightly elevated above background, at around 0.05 mg/L.
- Dissolved manganese – low and stable, but slightly elevated above background, with concentrations typically around 0.08 mg/L.

6.4.2.6. BH-3

BH-3 penetrates a relatively deep fracture zone, and is situated cross-gradient and topographically above the active landfill; however, some leachate indicator parameters, particularly nitrate, have been elevated above background in recent years. These impacts may occur due to preferential flow of leachate-impacted groundwater through bedrock fractures from the waste mass.

The following trends were observed in samples collected from BH-3:

- Chloride – slightly elevated above background, but relatively low and stable, fluctuating between 5 and 25 mg/L.
- Conductivity – elevated above background. Values have been highly variable but may be increasing, reaching a historical maximum of 1620 $\mu\text{s}/\text{cm}$ in April.
- Nitrate – increasingly variable, and typically elevated above background. Concentrations have fluctuated between 1 and 12 mg/L, spiking above the 10 mg/L drinking water standard/guideline on several occasions: March 2017 (10.5 mg/L), March 2018 (12.4 mg/L), March 2022 (21.6 mg/L), July 2022 (13.6 mg/L), April 2024 (11.4 mg/L), and April 2025 (16.1 mg/L). Concentration spikes typically occur during the spring months.
- Dissolved Sodium – elevated above background. Concentrations have been variable, but stable, fluctuating between 30 and 70 mg/L since 2019.

- Sulphate – periodically elevated above background. From 2009 to 2016, concentrations remained consistently low and stable at approximately 35 mg/L. However, they spiked sharply to 204 mg/L in June 2017. By 2019, concentrations had decreased to around 70 mg/L, though they have since shown variability. Notably, concentrations spiked to 155 mg/L in July 2022, fell to 48 mg/L in November 2022, and then rose sharply to 357 mg/L in 2024 and 407 mg/L in 2025.
- Dissolved Boron – low and stable since 2019, ranging from 0.081 mg/L to 0.15 mg/L in 2025.
- Dissolved Calcium – generally elevated above background. Concentrations increased between 2009 and 2017, peaking at just over 150 mg/L in July 2017 before decreasing to 80 mg/L in 2018. Concentrations have been highly variable since 2018 but may have been increasing in recent years, reaching a historical high of 169 mg/L in April 2025.
- Total Alkalinity – elevated above background. Like calcium, concentrations increased between 2009 and 2017, peaking at just under 700 mg/L in 2016 and 2017. Concentrations have been highly variable since 2017 fluctuating between 300 mg/L and 600 mg/L.
- Dissolved manganese – elevated above background. Concentrations were stable between 2009 and 2013 at around 0.03 to 0.05 mg/L, but grew increasingly variable beyond then, peaking at around 0.33 mg/L in November 2016. Concentrations in 2025 fluctuated between 0.007 mg/L (April) and 0.08 mg/L (November).

6.4.3 Offsite Monitoring Wells

In December 2017 and April 2018, monitoring well MW17-4 and nested monitoring wells MW17-5S (shallow) and MW17-5D (deep) were drilled on the BC Natures Trust property west of the Site to better understand the extent of offsite leachate impacts.

Two (2) water-bearing fractures were encountered while drilling MW17-5D: one at approximately 10.5 mbgs and a second at 46 mbgs. The well was drilled to a total depth of 50.6 mbgs and a packer was installed to isolate the fracture at 46 mbgs. MW17-5S was drilled adjacent to MW17-5D to a depth of 10.7 mbgs to target the shallower fracture zone.

MW17-4 was installed further downgradient of the landfill to a depth of 72.8 mbgs. It is situated approximately two-thirds of the distance between the landfill and downgradient domestic wells (Figure 3).

6.4.3.1. MW17-5S

Concentrations of leachate indicator parameter concentrations have been elevated at MW17-5S, but generally to a lesser degree than BH-2S. Importantly, most indicator parameters appear to be decreasing over time.

The following trends were observed in samples collected from MW17-5S:

- Chloride – elevated above background, and highest concentrations within the monitoring network until 2022. Concentrations were just over the BC CSR DW standard of 250 mg/L when MW17-5S was first sampled in late 2017 but have since decreased to around 15 mg/L in 2025.
- Conductivity – elevated above background but appears to be decreasing. Like chloride, conductivity values were historically highest at MW17-5S compared to other sampling locations, reaching a historical maximum of 2,040 $\mu\text{s}/\text{cm}$ in May 2018. From 2018, values have decreased, reaching a historical low of 693 $\mu\text{s}/\text{cm}$ in 2024, before slightly rebounding to 714 $\mu\text{s}/\text{cm}$ in April 2025.
- Nitrate – low and stable. Concentrations were around 3 mg/L when the well was first sampled in late 2017 before spiking to 5.7 mg/L in May 2018. Concentrations have since decreased and have been near or below the laboratory detection limit of 0.01 mg/L since 2019.
- Dissolved Sodium – elevated above background but steadily decreasing. Dissolved sodium concentrations decreased from 210 mg/L in 2018 to around 42 mg/L in 2025.
- Sulphate – elevated above background and decreasing. Concentrations decreased from just under 400 mg/L in 2018 to around 80 mg/L in April 2025.
- Dissolved Boron – elevated above background. Concentrations decreased from 0.50 mg/L in 2018 to around 0.1 mg/L in 2025.
- Dissolved Calcium – historically elevated above background, but at or below background since 2021. Like most parameters, calcium concentrations were at their highest in mid-2018, reaching 181 mg/L, but decreased to around 80 mg/L by 2021, and have fluctuated between 60 and 80 mg/L since.
- Total Alkalinity – elevated above background. Concentrations have been decreasing since 2018 (557 mg/L), with concentrations in the 2025 sample measured at 271 mg/L.
- Dissolved manganese – elevated above background. Concentrations have been highly variable, reaching its historical peak concentration of 0.0822 mg/L in April 2021. Concentrations continued to be highly variable through 2023, but have remained below 0.02 mg/L since 2024.

6.4.3.2. MW17-5D

The upward hydraulic gradient and overlying massive bedrock appear to protect water quality in MW17-5D, as sample results for MW17-5D show little to no signs of leachate-impacted groundwater. Key leachate indicator parameter concentrations, including chloride, nitrate, sulphate, conductivity, boron, dissolved sodium, calcium, and alkalinity have been similar to or below background since the well was first installed in 2017. Furthermore, parameter concentrations have generally remained stable over time. Like MW19-2D, manganese concentrations were somewhat elevated, but given the absence of remaining leachate-indicator parameters, manganese is likely naturally elevated at this location.

6.4.3.3. MW17-4

Several leachate indicator parameters have been elevated above background at MW17-4; however, concentrations have been relatively stable since the well was first sampled in 2018.

The following trends were observed in samples collected from MW17-4:

- Chloride – elevated above background. Concentrations were around 100 mg/L when the well was installed, but have shown a slight decreasing trend since then, recently fluctuating between approximately 30 mg/L and 50 mg/L.
- Conductivity – elevated above background. Similar to chloride, values were highest shortly after the well was installed, at around 1,100 $\mu\text{s}/\text{cm}$, but have since decreased, reaching a historical low of 741 $\mu\text{s}/\text{cm}$ in April 2025 but rebounded slightly to 903 $\mu\text{s}/\text{cm}$ in November 2025.
- Nitrate – elevated above background. Concentrations were highest in 2018, just under 3 mg/L, but have since decreased and stabilized at less than 1 mg/L.
- Dissolved Sodium – elevated above background, but stable around 50 mg/L.
- Sulphate – elevated above background. Concentrations were historically stable around 100 mg/L to 120 mg/L, but since 2021 have been variable, fluctuating between approximately 70 and 140 mg/L.
- Dissolved Boron – low and stable, but slightly elevated above background, fluctuating between below the laboratory detection limits and 0.08 mg/L.
- Dissolved Calcium – historically elevated above background, but near background since June 2024. Concentrations historically have been stable but variable, peaking in June 2023 at 121 mg/L. Since then, they have trended downward, reaching a historical low of 77 mg/L in April 2025.
- Total Alkalinity – historically elevated above background, but at or below background since fall 2022. Concentrations showed a decreasing trend from fall 2022 onward, reaching a historical low of 258 mg/L in November 2024, and remaining around 260 mg/L until July 2025.

- Dissolved manganese – slightly elevated above background, but generally low and stable, between 0.001 mg/L and 0.06 mg/L. Concentrations in 2025 ranged from 0.009 mg/L (November) to 0.026 mg/L (July).

6.4.4 Offsite Domestic Wells

6.4.4.1. *DMW-3808 (3808 Allendale Lake Road)*

DMW-3808 was sampled in October 2025. Consistent with previous years, the water quality sample collected from DW-3808 showed no obvious signs of landfill leachate impacts.

This well was previously inferred to represent background water quality within the bedrock aquifer beneath the Site. However, the Provincial Groundwater Wells Database indicates that well WTN 32203 located on the 3808 Allendale Lake Road property (which we assume to be DMW-3808) is screened in sand and gravel. As such, this well is likely not well suited for background purposes.

6.4.4.2. *DMW-3816 (3816 Allendale Lake Road)*

DMW-3816 was sampled in October 2025. Like previous years, sodium concentrations were quite high in the DMW-3816 sample, which may be due to the influence of a water softener or old, highly mineralized groundwater. Chloride, sulphate, conductivity, and manganese were also slightly elevated in the DMW-3816 sample. Fluoride concentrations were measured at 0.9 mg/L, just below the 1 mg/L CSR IW and LW standards, and below the GCDWQ MAC limit of 1.5 mg/L. Dissolved and total lithium and strontium concentrations were above their respective CSR DW standards in 2025, but are likely naturally occurring. In general, the slightly elevated concentrations and exceedances at this location are likely not associated with landfill operations but should be carefully monitored moving forward, nonetheless.

The following trends were observed in samples collected from DMW-3816:

- Chloride – slightly above background, with a slight increasing trend from 12 mg/L in September 2015 to 36 mg/L in September 2024 and October 2025.
- Conductivity – values have been elevated above background and highly variable. Conductivity values decreased from 1120 $\mu\text{s}/\text{cm}$ in 2006 to a historical low of 699 $\mu\text{s}/\text{cm}$ in 2018, rebounded to all-time high of 1280 $\mu\text{s}/\text{cm}$ in 2024, and fell to 804 $\mu\text{s}/\text{cm}$ in 2025.
- Nitrate – concentrations have consistently been below the laboratory's detection limit of 0.01 mg/L.
- Sulphate – concentrations have been elevated above background, highly variable, and often the highest concentrations within the monitoring network. The concentration measured in 2025 was 159 mg/L.
- Sodium – total and dissolved concentrations have been consistently elevated above background and highly variable. Dissolved sodium concentrations reached

a historical low of 58.2 mg/L in December 2017, increased to a historical high of 112 mg/L in 2024, and then fell to 73 mg/L in 2025.

- Dissolved calcium – historically near or below background, but near or above background since 2020. Concentrations have been highly variable, ranging from 44 mg/L (December 2017) to 131 mg/L (September 2023).
- Total Alkalinity – concentrations have been low, but may be gradually increasing, reaching a historical high of 229 mg/L in 2025.
- Boron – consistently low and stable, around 0.10 mg/L to 0.15 mg/L.
- Manganese – consistently low and stable, fluctuating between 0.04 and 0.08 mg/L.

7.0 PIPER DIAGRAM

A Piper diagram can be a useful tool for characterizing groundwater chemistry and serves as a visual aid in differentiating between distinct water chemistry signatures and how these compare across monitoring locations. A Piper diagram shows the relative percent of anions and cations in two ternary plots, which are then projected onto a central diamond plot. The major ions include Na^+ , Ca^+ , Mg^+ , K^+ , HCO_3^- , CO_3^{2-} , SO_4^{2-} and Cl^- , which account for the vast majority of total dissolved solids present in natural groundwater. The central diamond plot is where monitoring locations can be visually grouped into distinct hydrogeochemical categories commonly referred to as facies. We produced a Piper plot using the average results from the 2023, 2024 and 2025 sampling data and present it in Figure 12.

Samples from the well at 3816 Allendale Lake Road plotted as a mixed type, with no dominant cation, while the remaining monitored locations plotted as magnesium bicarbonate type, which likely indicates that most wells are completed within the same hydrogeological regime (either within the same aquifer or hydraulically connected aquifers). Beyond falling within the magnesium bicarbonate portion of the central diamond, no obvious spatial patterns were observed within the Piper Diagram, with leachate-impacted wells (e.g., BH-2S, BH-3 and MW19-1) and presumably unimpacted wells (e.g., MW17-5D and 3808 Allendale Lake Road) plotting very close to one another.

Our review of the Piper Diagram produced in the 2021 Annual Environmental Monitoring Report (CaulWell, 2021), which was based on average concentrations throughout the entire monitoring period, showed similar patterns, with no obvious clustering between presumably impacted and unimpacted wells.

Comparison between piper plots included in the 2023, 2024, and 2025 reports indicate that BH-3 is shifting from a magnesium-carbonate dominated type to a magnesium-sulfate type. The shift in groundwater chemistry at BH-3 may be temporary or may be indicative of a larger trend in the system. The movement of BH-3 on the piper plots should be monitored to determine whether a long-term trend is occurring.

8.0 DISCUSSION

The cross-section prepared by GLL (2000) conceptually illustrates Site hydrostratigraphy Site geology and depicts monitoring well depths and locations across the Site (Figure 4), noting that MW19-1 and MW19-2D replaced BH-1 and BH-2D, respectively. As shown, the Site is underlain by generally unsaturated dense gravelly sand and till deposits above a poorly defined bedrock aquifer. The bedrock aquifer is intersected by the onsite monitoring wells as well as downgradient monitoring wells MW17-4, MW17-5S and -5D, and DMW-1545Cha. It is unknown which aquifers are screened by domestic wells DMW-3808 and DMW-3816, but Provincial aquifer mapping indicates these wells may be completed in the McClean Creek sand and gravel Aquifer 254.

The local unmapped bedrock aquifer beneath and near the Site likely comprises various rock units, including fractured metamorphic and volcanic rock, which can be highly fractured. Monitoring well depths within the aquifer are somewhat variable, ranging from approximately 10 to 79 mbgs, indicating that groundwater flows through a complex network of fractures, in which the presence, depth and number of water-bearing fractures may vary from one location to the next.

Based on measured groundwater elevations, regional groundwater flow in the bedrock aquifer likely mimics topography, with groundwater flow towards the northwest from topographically elevated recharge areas. Static water levels are generally quite shallow and, in some cases, flowing, indicating an upward hydraulic gradient in the bedrock aquifer near the Site.

Groundwater chemistry upgradient of the Site has not yet been established. BH-3 was originally installed as a background well based on its topographically elevated location and the premise that groundwater flowed north towards McClean Creek (GLL, 2000); however, recently elevated nitrate and sulphate concentrations in the well suggest that BH-3 does not represent background groundwater quality in the area. The well is likely affected by preferential leachate-impacted groundwater flow through bedrock fractures. Data from previous sampling events of downgradient domestic well DW-1545Cha do not appear to be impacted by landfill leachate. As a result, this well is inferred to represent background groundwater quality in the local bedrock aquifer.

Monitoring well BH-2S (shallow) is the nearest downgradient well to the active landfill and showed the highest degree of leachate-related impacts. Nitrate concentrations in BH-2S have decreased since the Site transitioned away from receiving biosolids/food waste (circa 2013). Remaining leachate parameter concentrations at this location generally decreased between 2017 and 2021, but have rebounded since 2022 (e.g., conductivity, sulphate, calcium, and manganese).

Samples collected from BH-2S' nested pair MW19-2D, which is screened approximately 12 m deeper than BH-2S, have shown lower leachate impacts. This is likely owing to the

strong upward hydraulic gradient and massive bedrock in the area, which presumably reduces the downward migration of leachate-impacted groundwater. However, some parameter concentrations have been elevated and are trending upward in samples from MW19-2D, requiring careful attention in 2026. The presence of elevated concentrations in the deep fracture straddled by MW19-2D, despite upward hydraulic gradients may be due to an increase in the leachate density over time (i.e., increased TDS), affecting the vertical positioning of the plume.

Leachate indicator parameters have also been slightly elevated in samples from downgradient monitoring well BH-1 (2009 to 2019), while concentrations in its replacement well MW19-1 (2020 to 2024) have generally been stable or decreasing, with low concentrations near or below background.

Samples collected from shallow offsite monitoring well MW17-5S have also shown signs of leachate impacts, but most elevated parameter concentrations have decreased since 2018. Samples collected from adjacent deep monitoring well MW17-5D have shown little to no sign of leachate impacts since it was first installed and sampled in 2017, likely owing to the upward hydraulic gradient and massive overlying bedrock in the area.

Several leachate-associated parameters have been elevated at MW17-4 since it was installed in 2017. Parameter concentrations have been relatively stable at MW17-4, with some showing decreasing trends since 2017. This location should continue to be carefully monitored moving forward, given its proximity to downgradient groundwater users.

No obvious leachate impacts were observed in the sampled domestic water wells.

In general, the following plotted parameters appeared to be showing long-term increasing trends:

- BH-2S: chloride, conductivity, dissolved sodium, sulphate, total alkalinity, dissolved calcium
- BH-2D / MW19-2D: chloride, sulphate
- DMW-3816: chloride, alkalinity

The following decreasing trends were observed in the time-series plots:

- BH-2S: nitrate
- BH-2D / MW19-2D: manganese
- MW17-4: chloride, conductivity, calcium, total alkalinity
- MW17-5S: chloride, conductivity, dissolved sodium, sulphate, total alkalinity, dissolved boron

No obvious long-term trends were noted for analyzed parameters at remaining sample locations. Some parameter concentrations were variable, possibly associated with seasonal and/or annual (e.g., wet vs. dry years) groundwater fluctuations and precipitation patterns.

9.0 QUALITY ASSURANCE/QUALITY CONTROL

A standardized Quality Assurance/Quality Control (QA/QC) program was implemented to ensure representative samples were collected and that representative analytical data were reported by the laboratory. The following procedures were performed as part of the QA/QC program:

- Calibrated field instruments during each field event;
- Recorded field notes during all stages of the field programs;
- Donned clean, new nitrile gloves at each sampling location;
- Collected samples using dedicated devices to preclude cross-contamination;
- Cleaned non-dedicated sampling equipment (e.g., electric water level) by washing with an Alconox™ (or equivalent)/potable water mixture before initial use and between uses to minimize the potential for cross-contamination; and,
- Submitted field replicates for laboratory analysis.

Specifically, a triplicate sample was collected from BH-2S in July 2025. The replicate sample analysis ensured laboratory quality control as well as reproducibility of field sampling procedures.

The reproducibility of field sampling techniques was quantified by a parameter referred to as the relative standard deviation (RSD). RSD is calculated using the following formula:

$$RSD = \frac{s}{x} * 100\%$$

Where: RSD = relative standard deviation

s = standard deviation of triplicate samples

x = mean of triplicate samples

RSD values greater than 20% generally suggest further review is required. However, analytical error generally increases near the method reporting limit (MRL); therefore, the RSD calculation was not applied unless the concentration of samples was greater than 5 times the reported detection limit.

As summarized in Appendix D, RSD values were less than 20% or were not calculable (due to concentrations less than 5 times the detection limit) for the triplicate samples collected from BH-2S, except nitrate (32%), suggesting that the sample and duplicate results are reproducible and reliable.

As a conservative measure, the highest concentration of a given parameter in a field triplicate sample set was used for comparison against the applicable standard or guideline.

Samples submitted to CARO are subject to five laboratory QA/QC procedures (i.e., method blanks, laboratory control samples, lab duplicates, surrogate recoveries, and reference materials), which are documented in the laboratory certificates of analysis provided in Appendix E.

10.0 SUMMARY AND CONCLUSIONS

Per the OC requirements, RDOS personnel conducted groundwater sampling events in the spring, summer, and fall of 2025. The samples were analyzed for parameters intended to illustrate potential groundwater effects from landfilling activities. Based on the sampling and analytical program findings, the following conclusions are made:

- The Site is a natural attenuation landfill that relies on its small size, relatively low leachate generation potential (based on climatic conditions), deep groundwater conditions and the use of proper operating and closure procedures to protect the receiving environment from potential leachate impacts. Nonetheless, concentrations of key landfill-leachate indicator parameters, including total dissolved solids, nitrate, and manganese, exceeded applicable guidelines/standards in one or more samples collected from cross- to downgradient monitoring wells in 2025. Given no other potential contaminating activities or anthropogenic sources were observed near the wells, these impacts are likely associated with current and historical landfilling operations.
- Concentrations were typically highest in samples from BH-2S, which is the nearest monitoring well to the active landfill but were also elevated above background in samples from BH-3, MW19-1, MW19-2D, MW17-4, and MW17-5S, likely indicative of leachate impacts at these locations. As such, landfill leachate-impacted groundwater has likely migrated off the Site to the west.
- Nitrate was quite elevated in samples collected from BH-3 despite it being situated upslope of the landfill, which may be due to preferential flow of leachate through fractured bedrock.
- DW-1545Cha is a flowing artesian well inferred to be completed in the same bedrock aquifer as that which occurs beneath the landfill. Historical water quality results indicate that this well is likely not impacted by landfilling operations. Given its distance from the Site and absence of groundwater impacts, DW-1545Cha is inferred to represent background groundwater chemistry in the local bedrock aquifer.
- The following plotted parameters appeared to be showing long-term increasing trends:
 - BH-2S: chloride, conductivity, dissolved sodium, sulphate, total alkalinity, dissolved calcium
 - BH-2D / MW19-2D: chloride, sulphate
 - DMW-3816: chloride, alkalinity

The following decreasing trends were observed in the time-series plots:

- BH-2S: nitrate
- BH-2D / MW19-2D: manganese
- MW17-4: chloride, conductivity, calcium, total alkalinity
- MW17-5S: chloride, conductivity, dissolved sodium, sulphate, total alkalinity, dissolved boron

No obvious long-term trends were noted at remaining sample locations. Some parameter concentrations were variable, possibly associated with seasonal and/or annual (e.g., wet vs. dry years) groundwater fluctuations and precipitation patterns.

- Surface water was only observed and sampled from locations SW-1 and SW-2 in April 2025. Nitrate, TDS and several metals exceeded one or more guidelines and standards in these samples, likely attributable to runoff from landfill operations.

11.0 RECOMMENDATIONS

Based on the annual monitoring program results and conclusions, we respectfully provide the following recommendations:

- Continue triannual monitoring and sampling of the seven (7) groundwater monitoring wells (four onsite and three offsite) and annual sampling of the three (3) offsite domestic wells because leachate indicator parameters remain elevated in groundwater downgradient of the landfill.
- Continue collecting surface water samples, if present, to help understand the potential for surface water impacts at the Site.
- Given historically identified surface water quality impacts, a Stormwater Management Plan should be developed for the Site. This may include, but not be limited to a series of ditches and infiltration galleries to help mitigate clean water interaction with potential contaminant sources, including stockpiled materials and the waste mass.
- Work with BC ENV to establish appropriate notification measures for potential offsite migration of leachate-impacted groundwater;
- Continue providing water quality results to sampled domestic well owners, and maintain regular communication with them. Given the potential landfill leachate to affect downgradient groundwater quality, it is recommended that well owners conduct their own sampling throughout the year. Ecoscape can instruct well owners on proper well sampling techniques and provide instructions for sample submission to the laboratory. It is also highly recommended that homeowners regularly shock chlorinate their wells (at least once per year) to mitigate bacteriological contamination. Concentrations of all elevated parameters can be reduced to below GCDWQ using in-home water quality treatment systems, and if necessary, a specialist in residential water treatment can be retained to design

systems appropriate for each well's water chemistry, noting that well water quality is the well owner's responsibility; and,

- Leachate management control measures may be necessary if groundwater quality continues to exceed applicable guidelines and standards beyond the Site boundary, particularly if risks to downgradient drinking water users are identified. The RDOS should maintain regular communication with ENV regarding leachate mitigation measures, as necessary.

12.0 LIMITATIONS

This report has been prepared by Ecoscape Environmental Consultants Ltd. (Ecoscape) for the Regional District of Okanagan-Similkameen (the Client) and is intended for the sole and exclusive use of the Client. With the exception of the Client, copying or distribution of this report or use of or reliance on the information contained herein, in whole or in part, is not permitted without the express written permission of Ecoscape.

Nothing in this report is intended to constitute or provide a legal opinion. Revisions to the regulatory standards referred to in this report may be expected over time. As a result, modifications to the findings, conclusions and recommendations in this report may be necessary.

This report has been prepared for specific application to the Site, based on Client requests, and Site conditions present at the time work for the report was completed. The conclusions provided herein are based on the specific areas investigated on the Site by soil and groundwater sampling, and analytical testing of selected soil samples and groundwater samples and cannot be extrapolated extensively away from sample locations. Ecoscape does not warranty information from third party sources used in this report.

If additional information becomes available that is inconsistent with the information provided herein or suggests that the potential for environmental concern may be present, Ecoscape should be contacted to reassess the conclusions provided in this report.

13.0 CLOSURE

We trust that this report satisfies your present requirements. Should you have any questions or comments, please contact the undersigned at your convenience.

Respectfully Submitted

Ecoscope Environmental Consultants Ltd.,

Written by:



Mike Schutten, M.A.Sc., P.Geo.
Hydrogeologist
Direct Line: 778-940-1964

Reviewed by:

A handwritten signature in black ink, appearing to read "Jacob Whitehouse".

Jacob Whitehouse, B.Sc., R.P.Bio
Environmental Scientist
Direct Line: 778-940-1964

Attachments: Figures

Appendices

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FIGURES

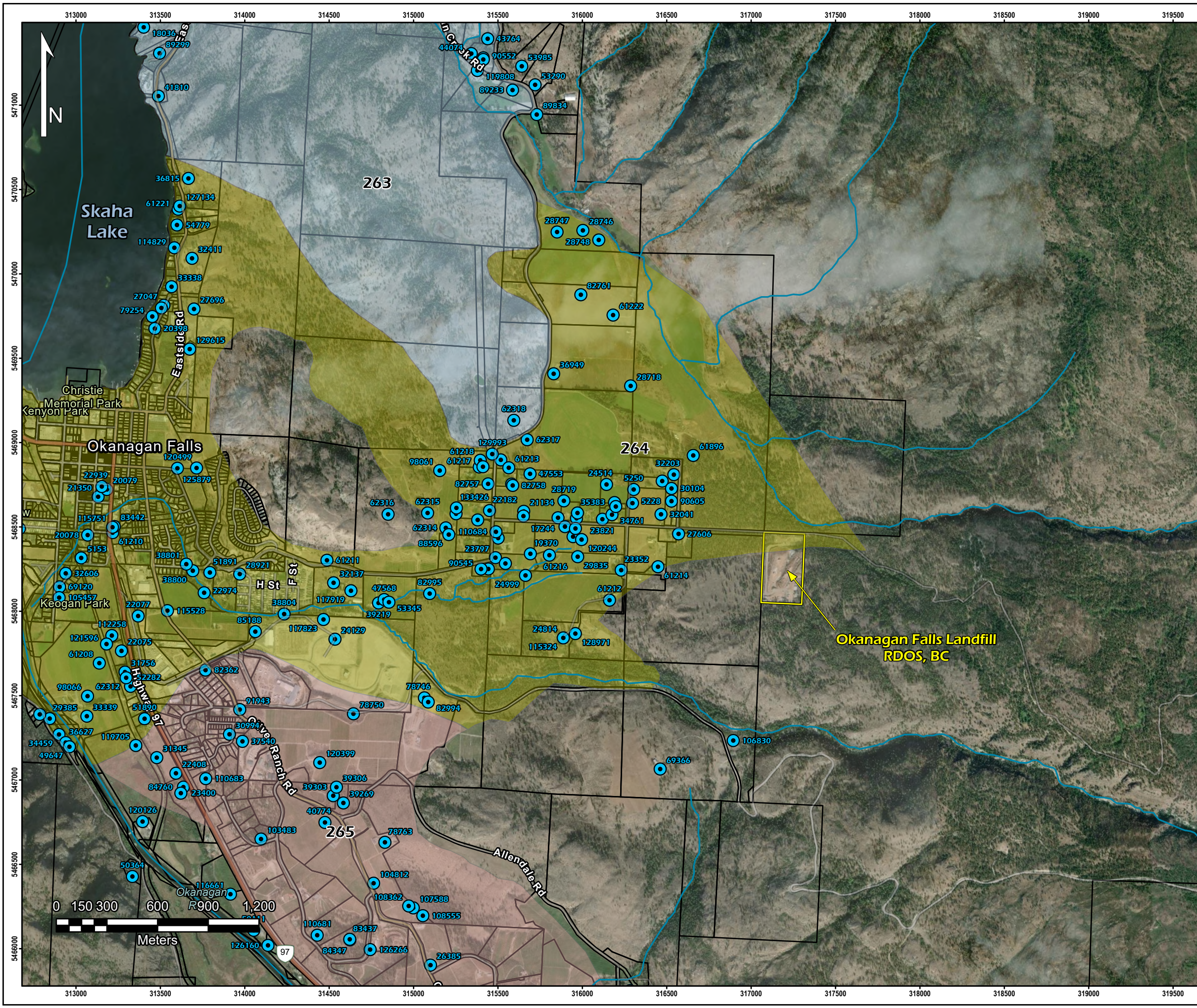


FIGURE 1
Site Location

Project: Annual Environmental Monitoring Report
 Location: RDOS
 Project No.: 22-4504
 Prepared for: RDOS
 Prepared by: Ecoscape Environmental Consultants Ltd.
 Mike Schutten, M.A.Sc., P.Geo

Coordinate System: NAD83-UTM Zone 11
 Imagery: ESRI World Imagery
 Map Date: February 9, 2026

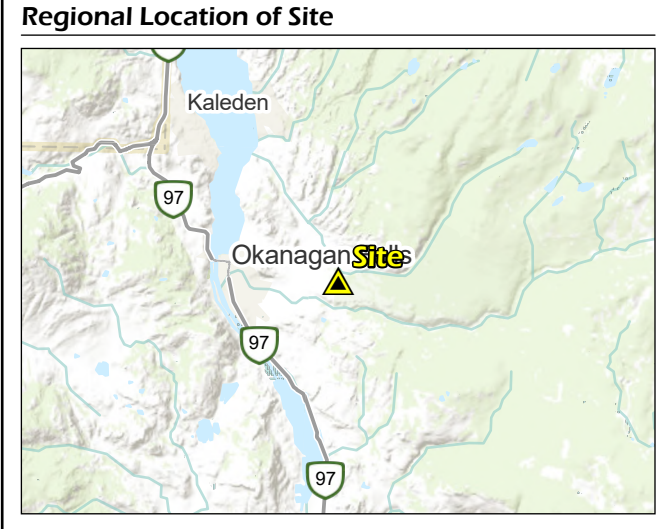
LEGEND

- Site
- Cadastre

ENV-Mapped Aquifers

- 263
- 264
- 265

- Streams and Rivers
- ENV-Mapped Well (WTN)



DISCLAIMER
 The data displayed is for conceptual purposes only and should not be interpreted as a legal survey or for legal purposes. If discrepancies are found between the data portrayed in this report and that of a legal survey, the legal survey will supersede any data presented herein.



FIGURE 2 Site Plan

Project: Annual Environmental Monitoring Report
 Location: RDOS
 Project No.: 22-4504
 Prepared for: RDOS
 Prepared by: Ecoscape Environmental Consultants Ltd.
 Mike Schutten, M.A.Sc., P.Geo.
 Coordinate System: NAD83-UTM Zone 11
 Imagery: ESRI World Imagery
 Map Date: February 9, 2026

LEGEND

- Site Feature
- Approximate Site Boundary
- Cadastre

DISCLAIMER
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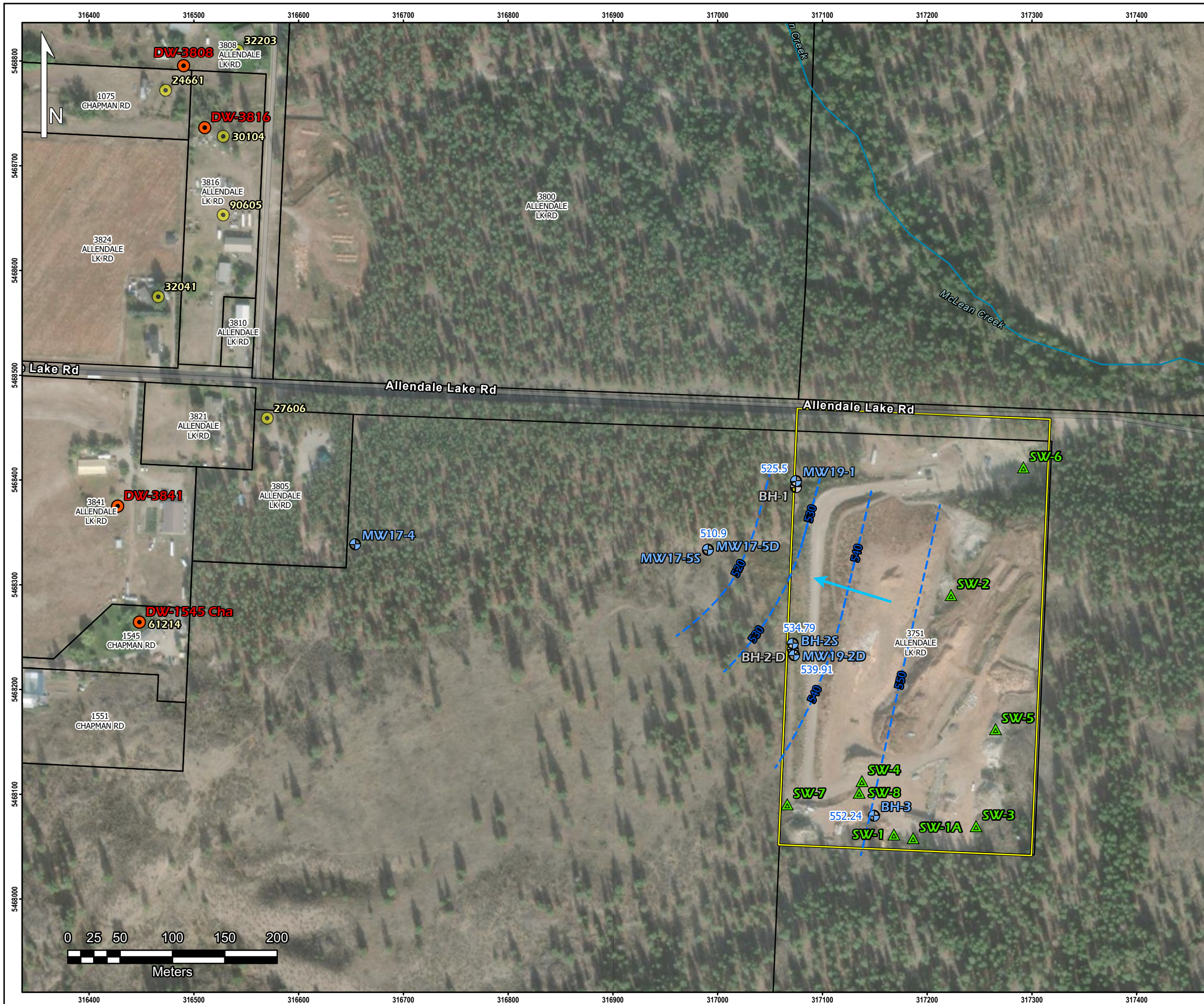



FIGURE 3
Groundwater and Surface Water Sample Locations

Project: Annual Environmental Monitoring Report
 Location: RDOS
 Project No.: 22-4504
 Prepared for: RDOS
 Prepared by: Ecoscape Environmental Consultants Ltd.
 Mike Schutten, M.A.Sc., P.Geo.

Coordinate System: NAD83-UTM Zone 11
 Imagery: ESRI World Imagery
 Map Date: February 9, 2026

- LEGEND**
- Inferred GW Flow Direction (in shallow bedrock)
 - Groundwater Contours (in shallow bedrock)
 - Surface Water Sampling Location
 - Sampled Domestic Well
 - Monitoring Well (active) (GW. Elev. April 8, 2025)
 - Monitoring Well (decommissioned)
 - BC Well Database (WTN)
 - Streams and Rivers
 - Approximate Site Boundary
 - Cadastre

DISCLAIMER
 The data displayed is for conceptual purposes only and should not be interpreted as a legal survey or for legal purposes. If discrepancies are found between the data portrayed in this report and that of a legal survey, the legal survey will supersede any data presented herein.



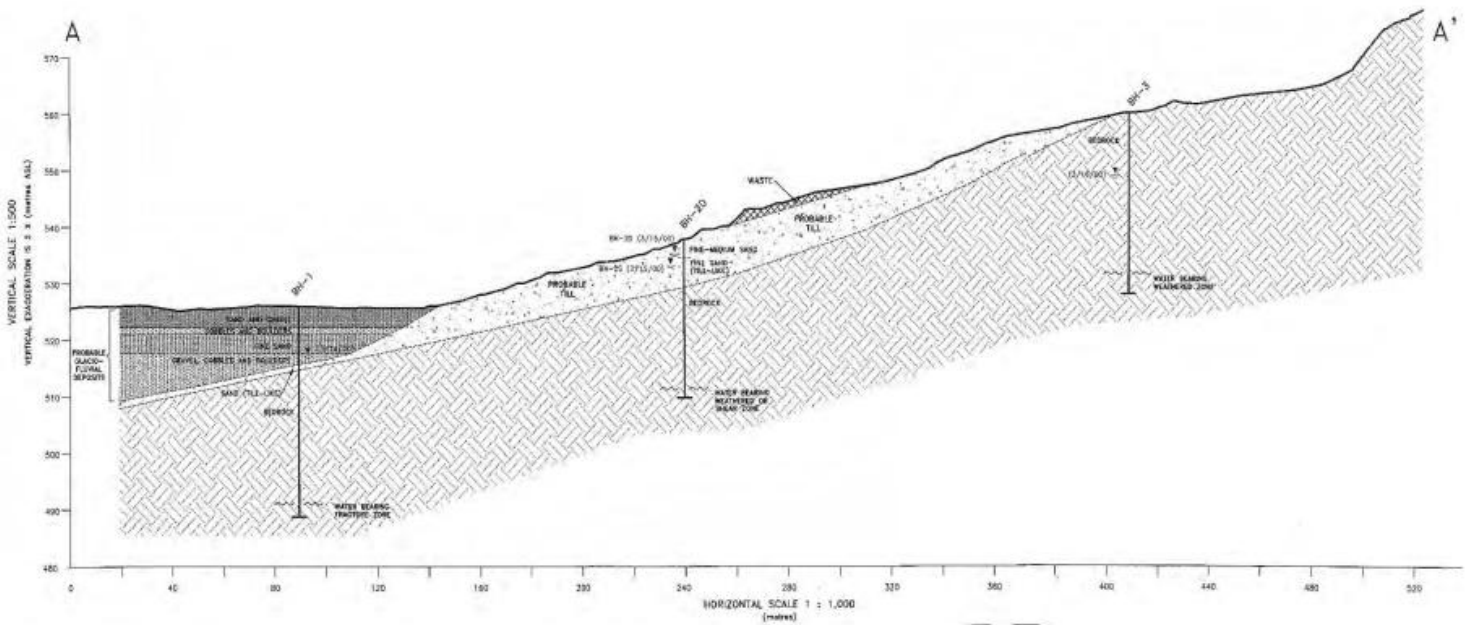


Figure 4: Conceptual Geological Cross-Section (from GLL, 2000)

Project: 2025 Annual Environmental Monitoring Report

Client: RDOS

Location: Okanagan Falls Landfill

File No: 22-4504

Date: January 8, 2026

Dwn by: MPS

Ckd by: MPS

Scale: N/A



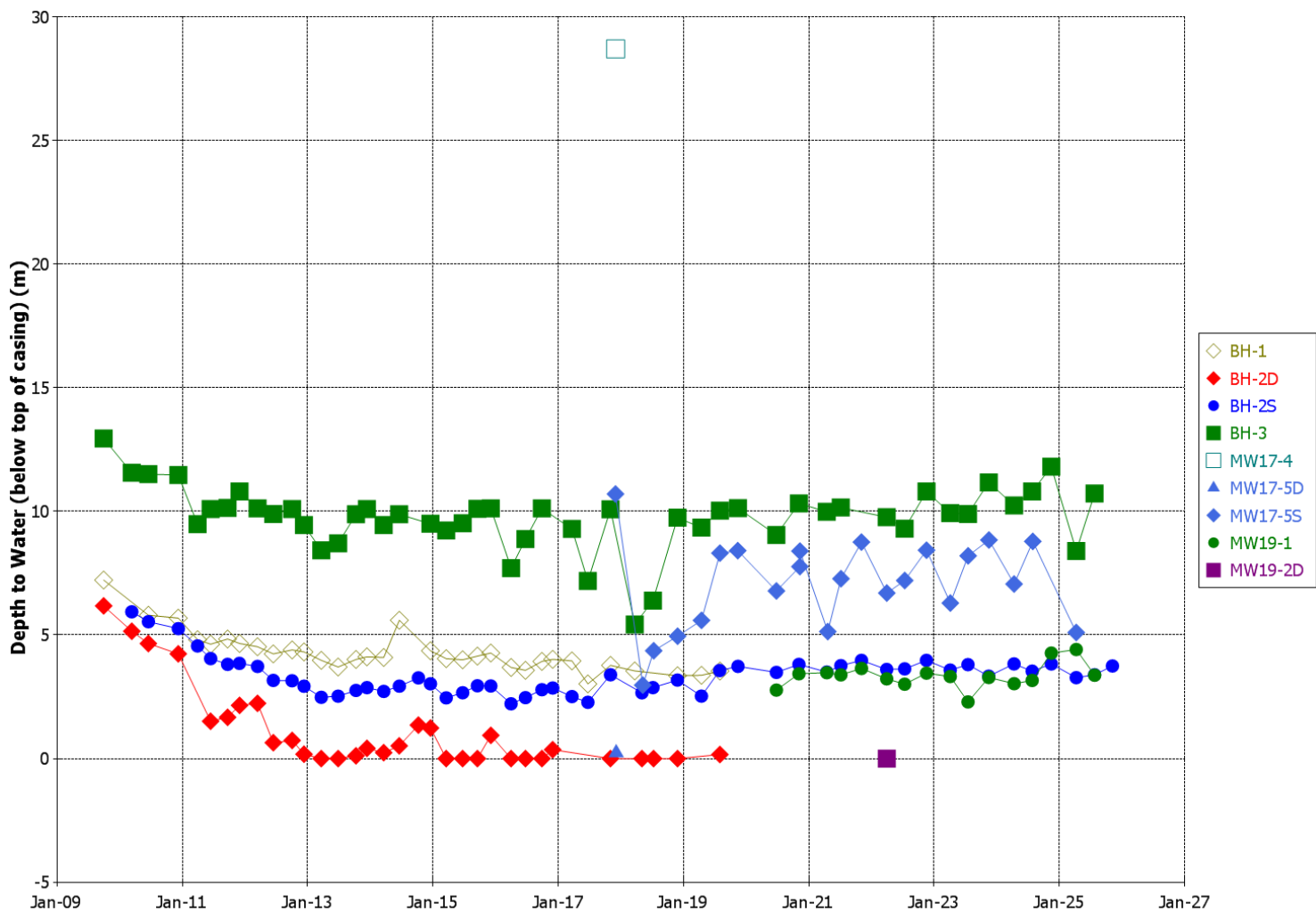


Figure 5: Depth to Water Times Series Plot



Project: 2025 Annual Environmental Monitoring Report

Client: RDOS

Location: Okanagan Falls Landfill

File No: 22-4504

Date: January 8, 2026

Dwn by: MPS

Ckd by: MPS

Scale: N/A

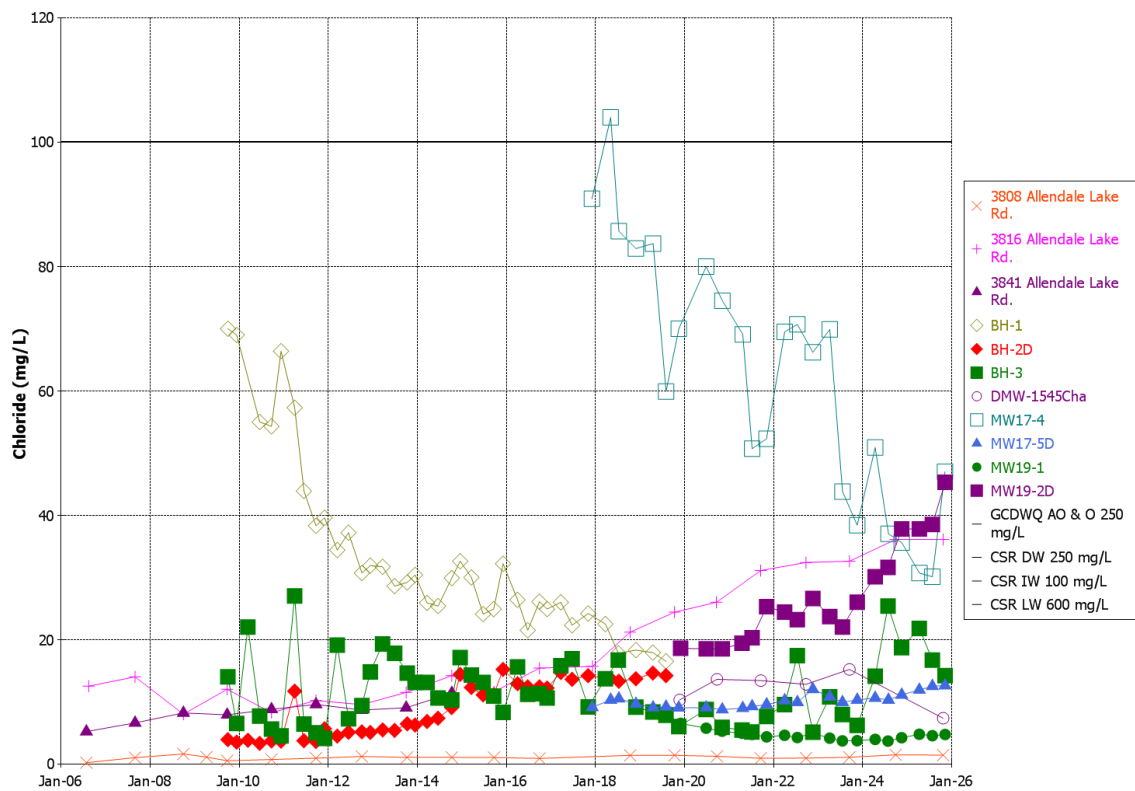
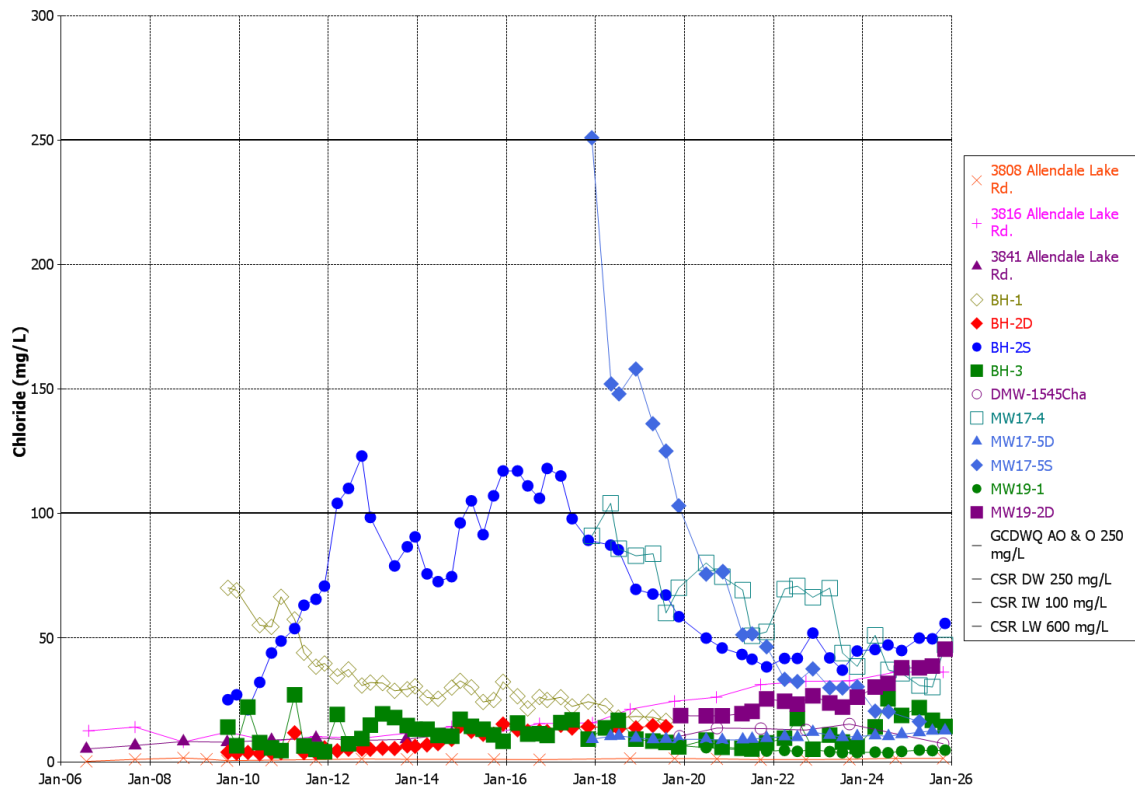


Figure 6: Chloride in Groundwater Time Series Plot

Project: 2025 Annual Environmental Monitoring Report

Client: RDOS

Location: Okanagan Falls Landfill

File No: 22-4504

Date: January 8, 2026

Dwn by: MPS

Ckd by: MPS

Scale: N/A



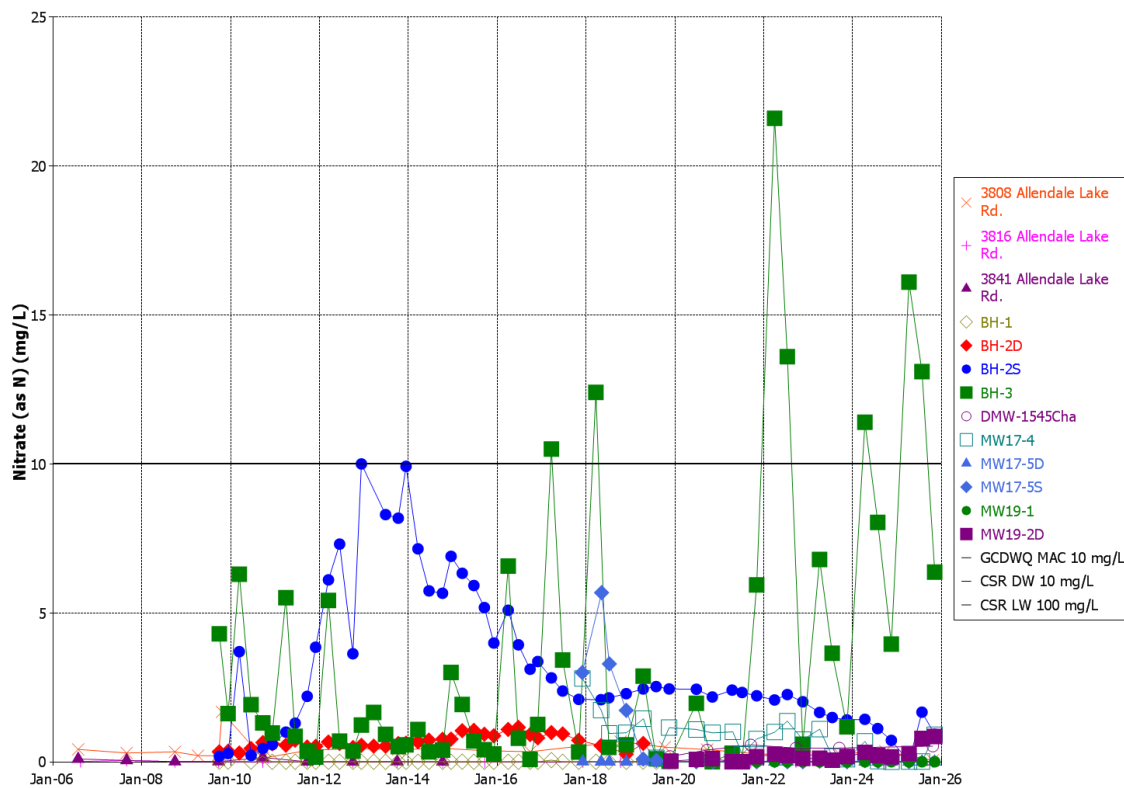
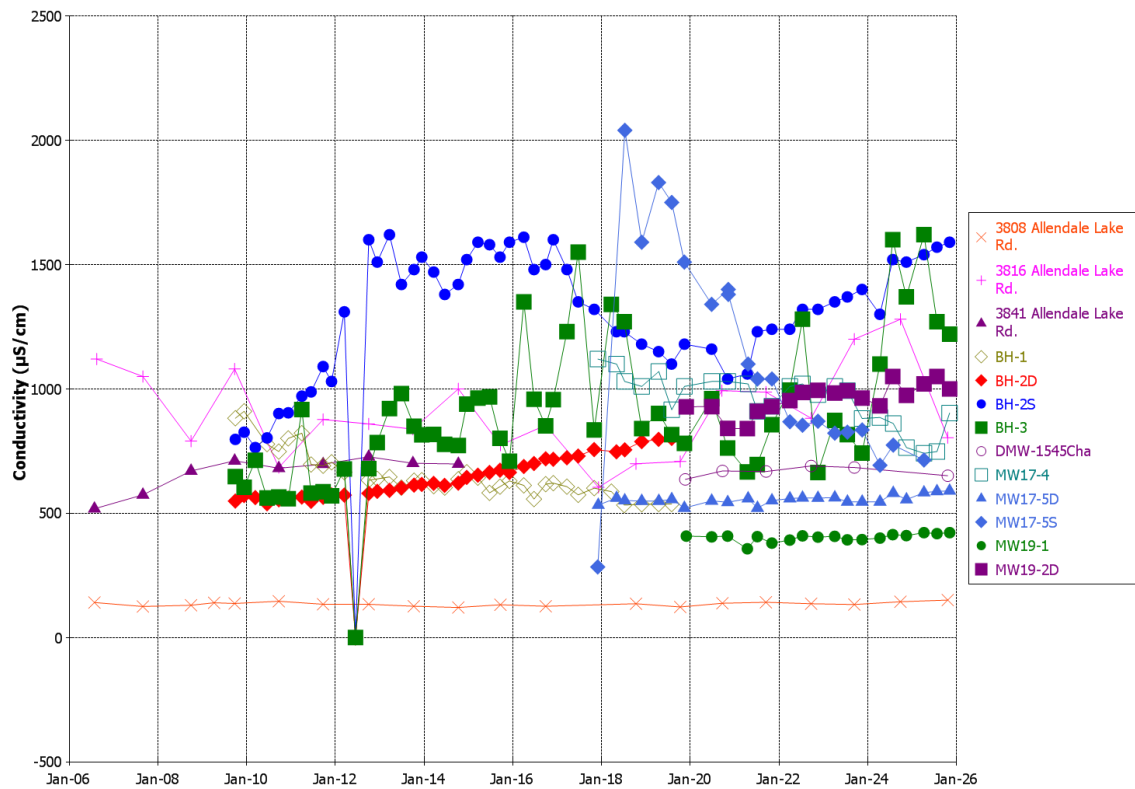


Figure 7: Electrical Conductivity (Top) and Nitrate (Bottom) in Groundwater Time Series Plot



Project: 2025 Annual Environmental Monitoring Report

Client: RDOS

Location: Okanagan Falls Landfill

File No: 22-4504

Date: January 8, 2026

Dwn by: MPS

Ckd by: MPS

Scale: N/A

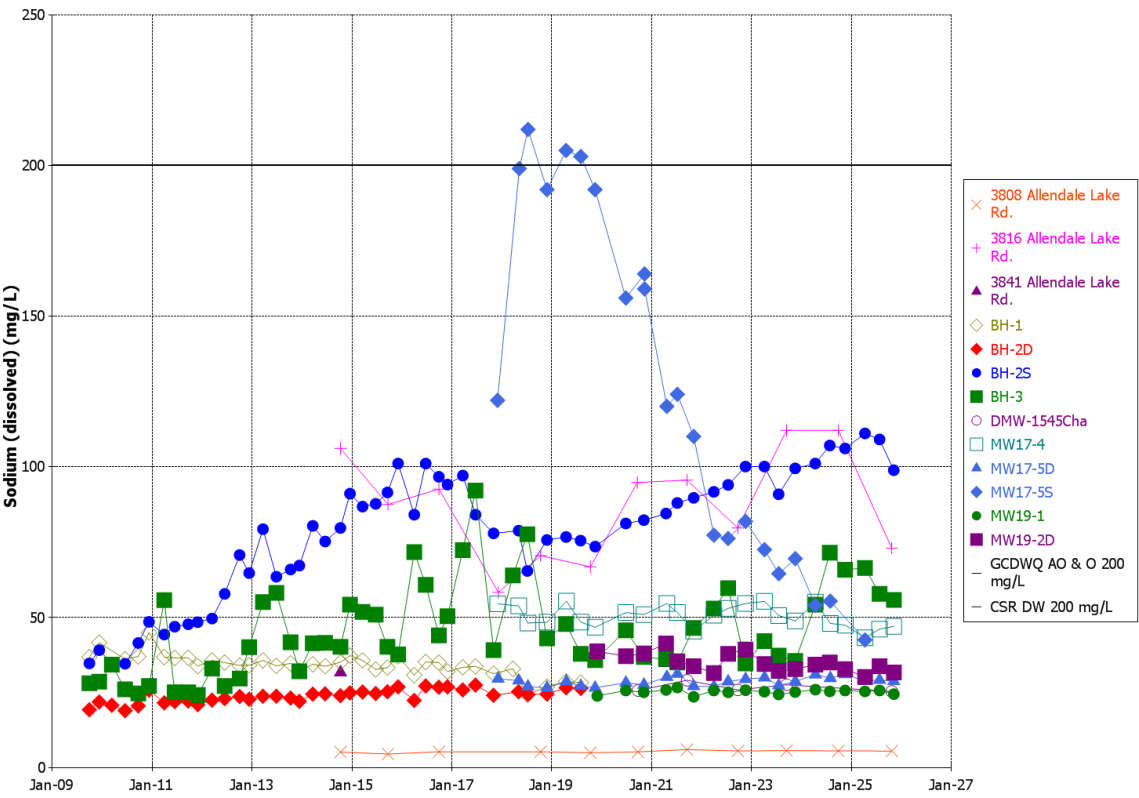
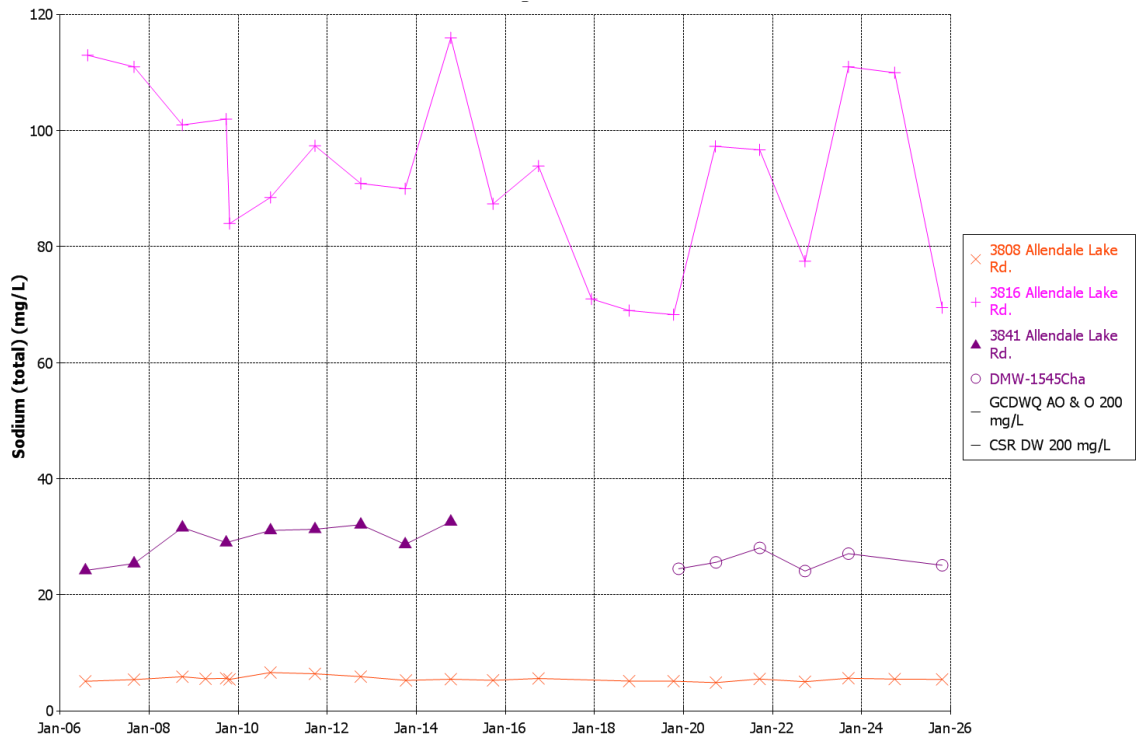


Figure 8: Total (Top) and Dissolved Sodium (Bottom) in Groundwater Time Series Plot

Project: 2025 Annual Environmental Monitoring Report

Client: RDOS

Location: Okanagan Falls Landfill

File No: 22-4504

Date: January 8, 2026

Dwn by: MPS

Ckd by: MPS

Scale: N/A



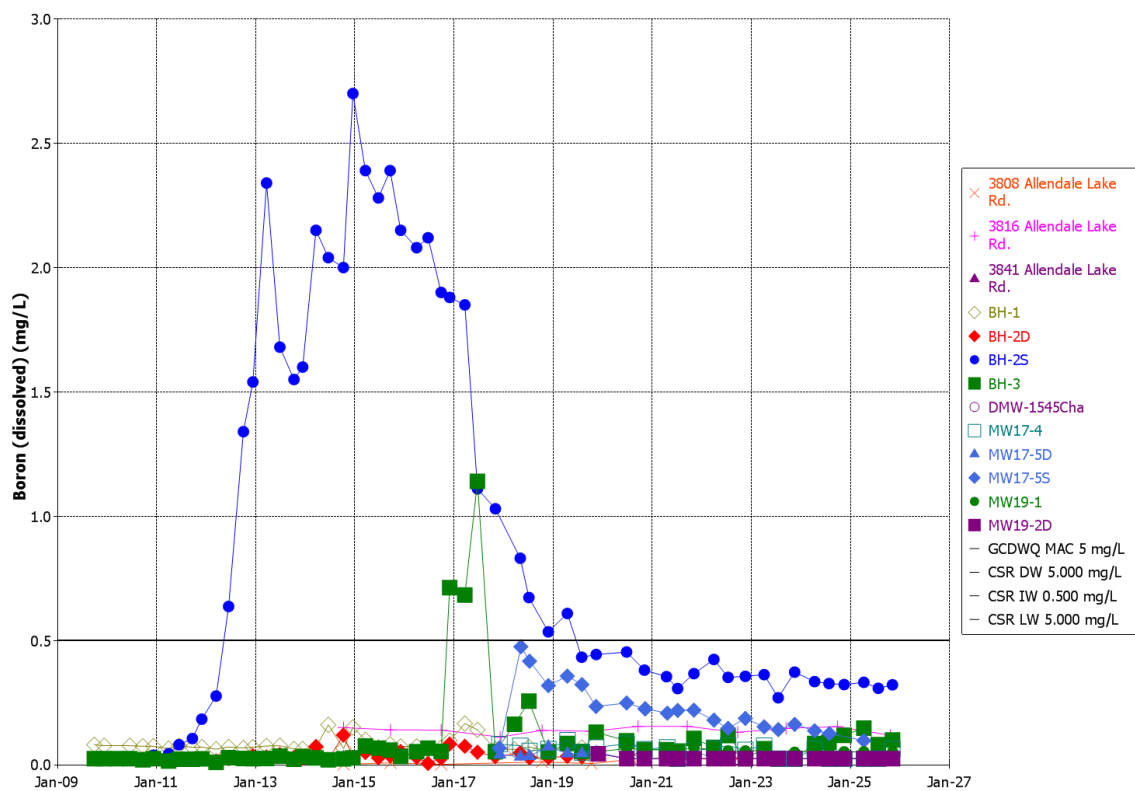
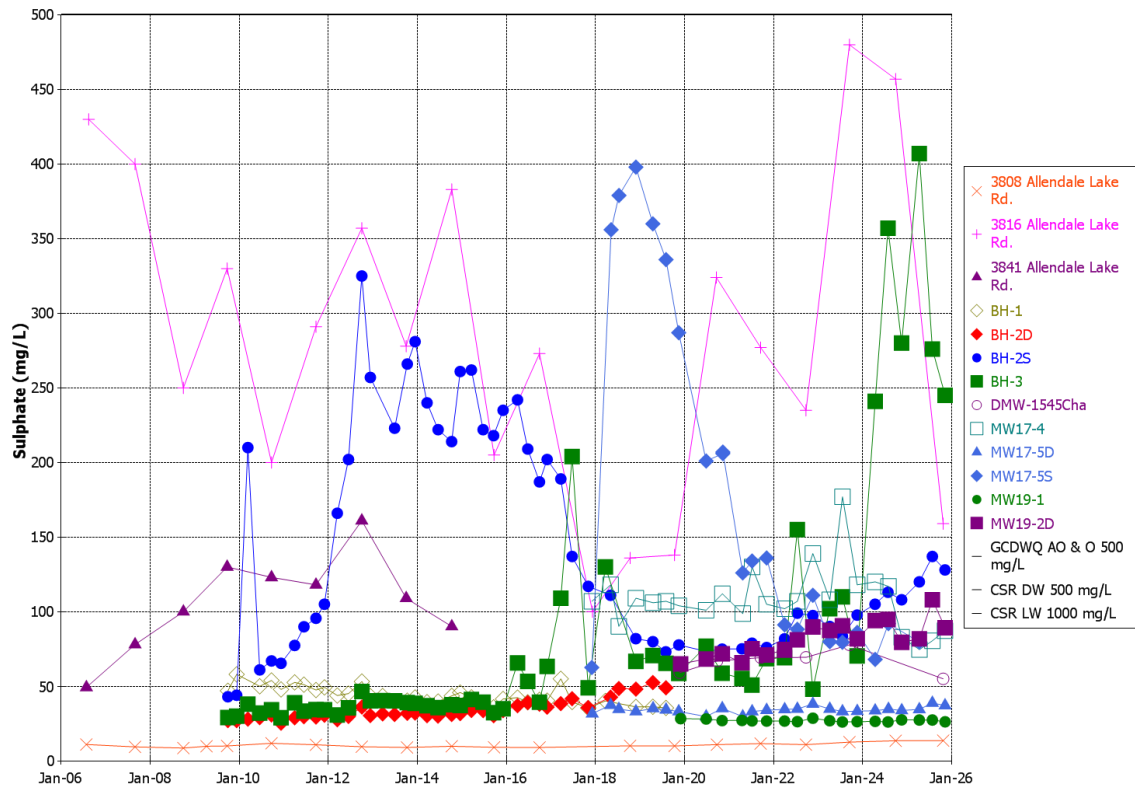


Figure 9: Sulfate (Top) and Dissolved Boron (Bottom) in Groundwater Time Series Plot



Project: 2025 Annual Environmental Monitoring Report

Client: RDOS

Location: Okanagan Falls Landfill

File No: 22-4504

Date: January 8, 2026

Dwn by: MPS

Ckd by: MPS

Scale: N/A

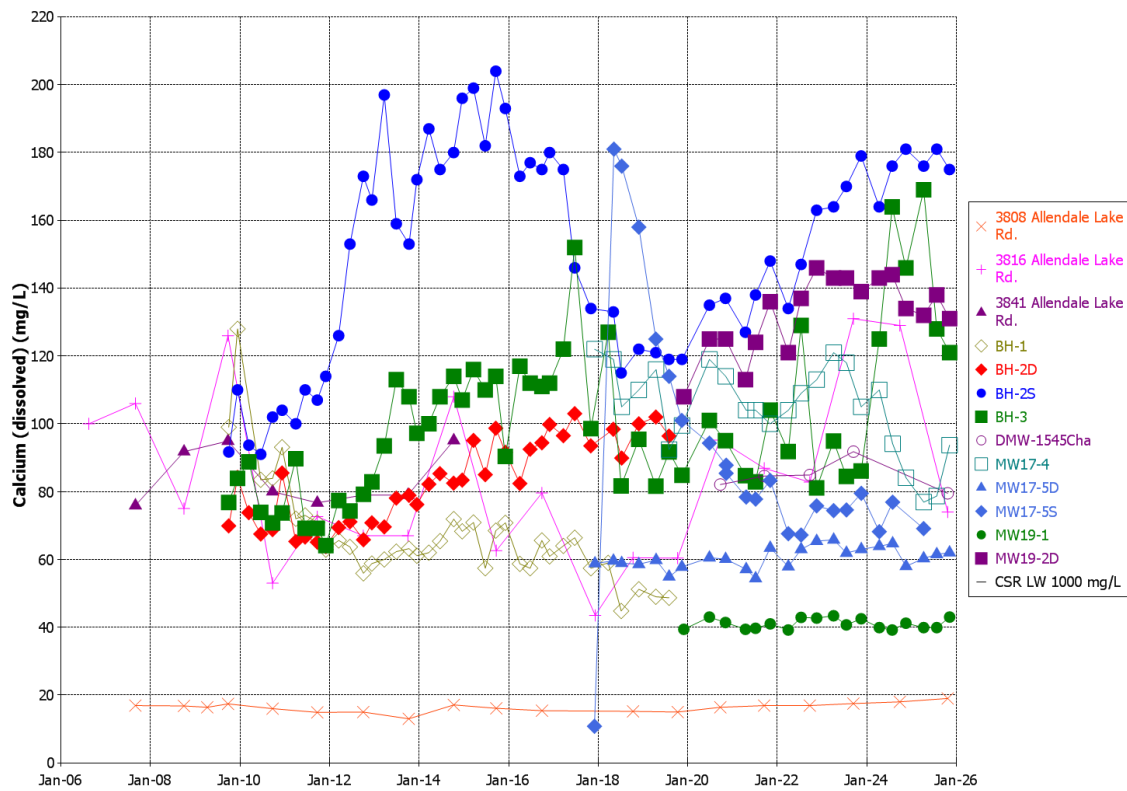
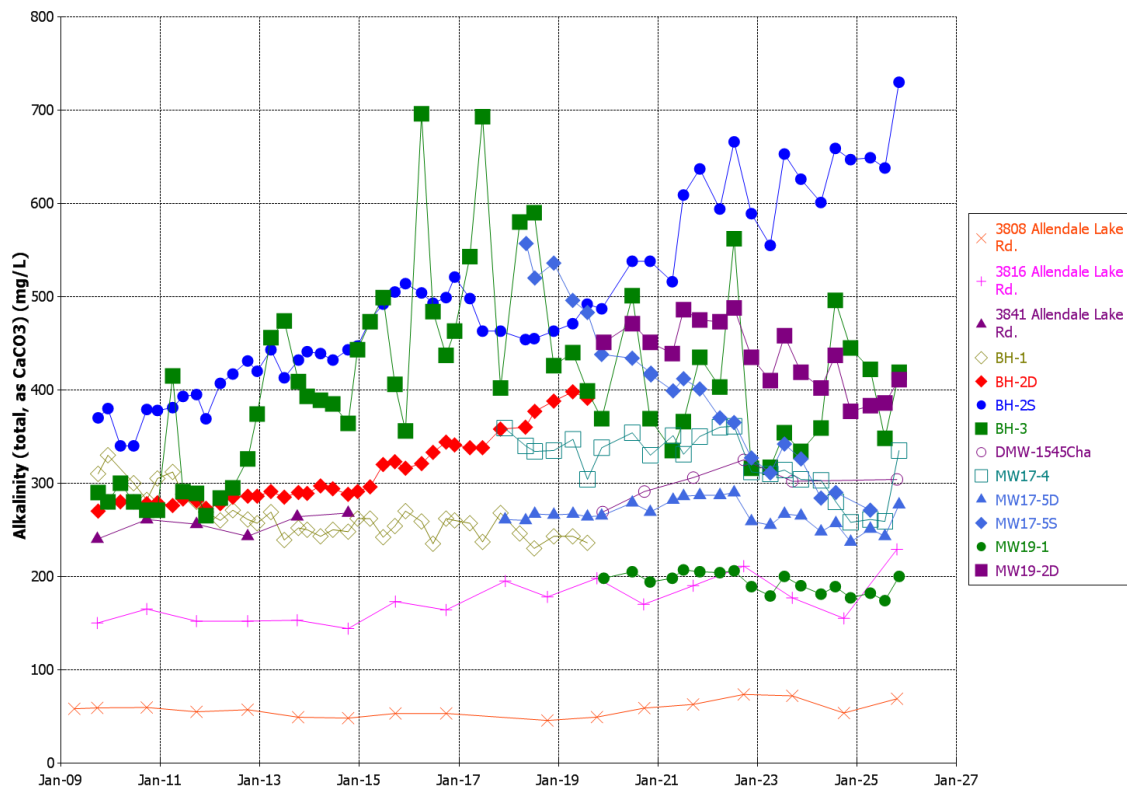


Figure 10: Alkalinity (Top) and Dissolved Calcium (Bottom) in Groundwater Time Series Plot



Project: 2025 Annual Environmental Monitoring Report

Client: RDOS

Location: Okanagan Falls Landfill

File No: 22-4504

Date: January 8, 2026

Dwn by: MPS

Ckd by: MPS

Scale: N/A

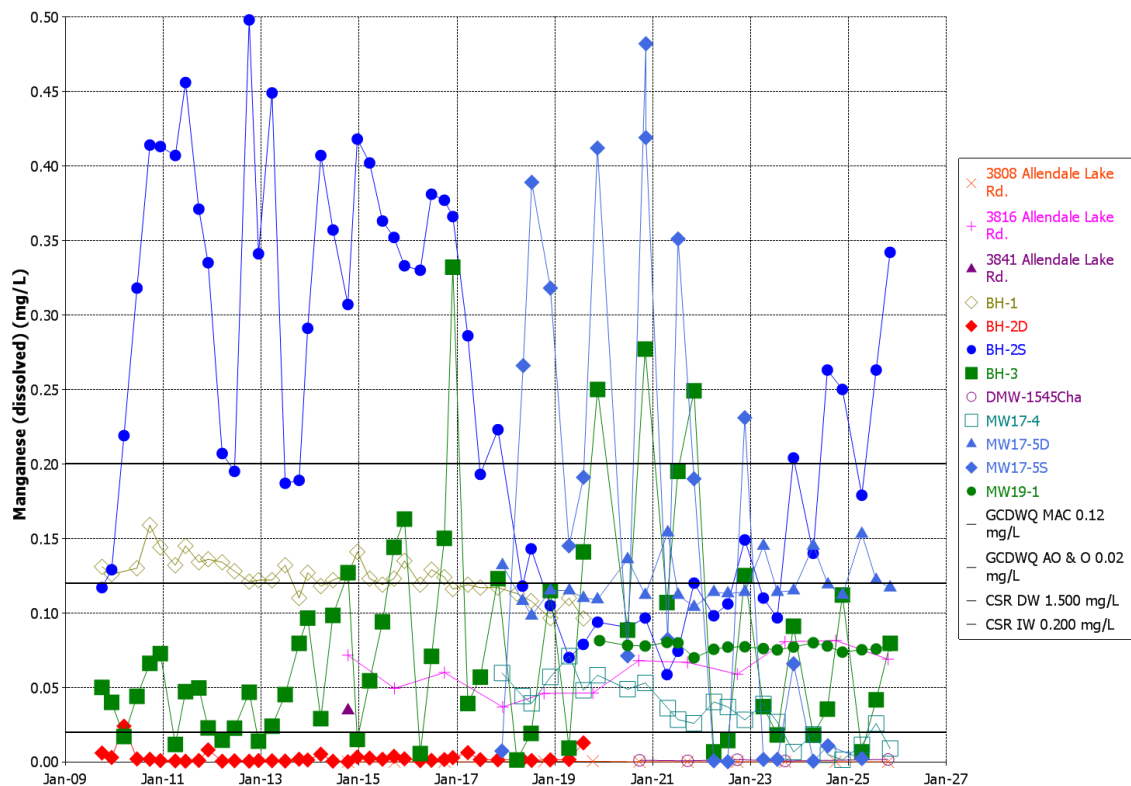
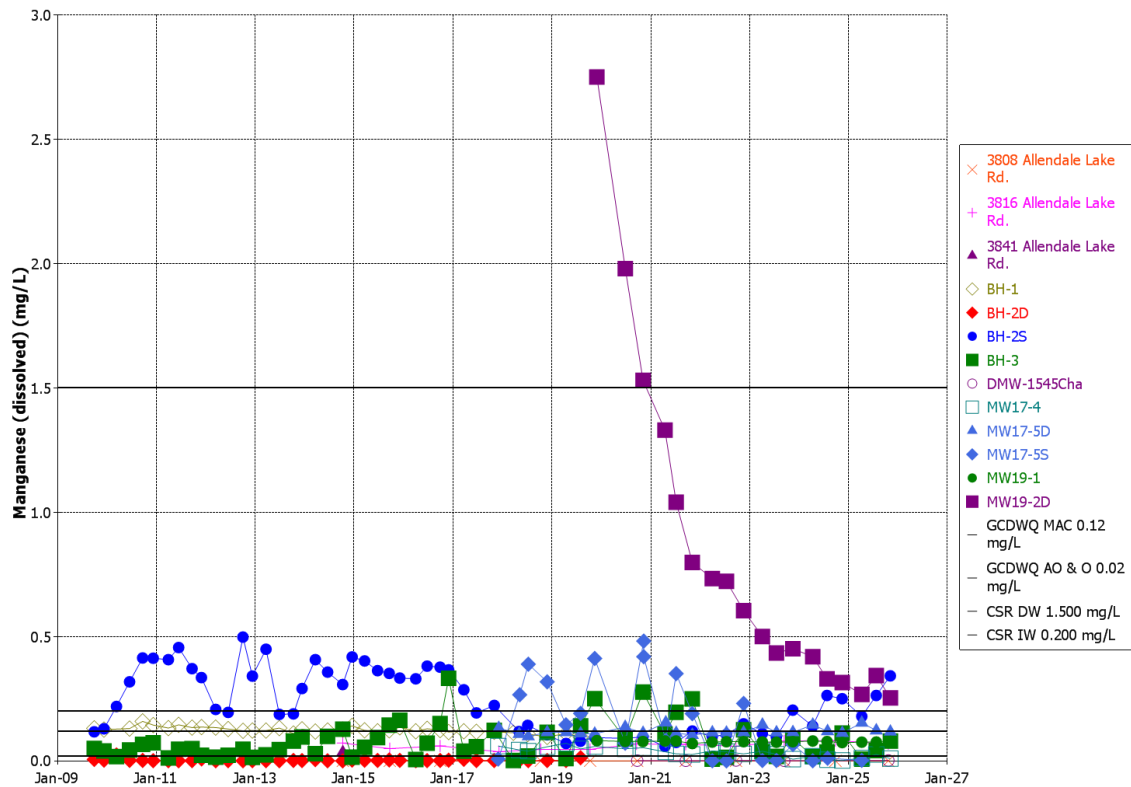


Figure 11: Manganese (Top) and Manganese without MW19-2D (Bottom) in Groundwater Time Series Plot

Project: 2025 Annual Environmental Monitoring Report

Client: RDOS

Location: Okanagan Falls Landfill

File No: 22-4504

Date: January 8, 2026

Dwn by: MPS

Ckd by: MPS

Scale: N/A



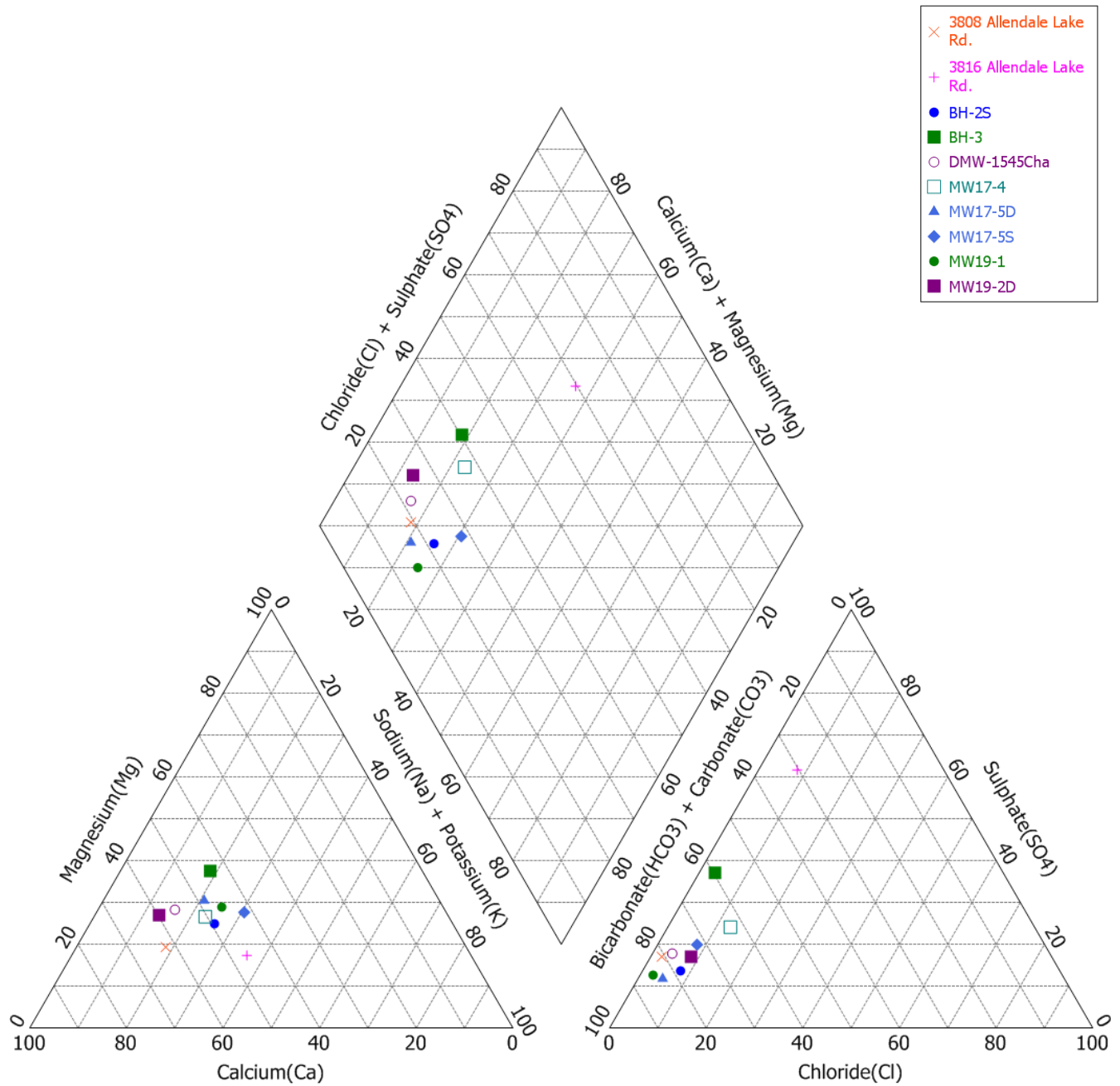


Figure 12: Piper Diagram based on Average Water Quality Results from 2023 to 2025



Project: 2025 Annual Environmental Monitoring Report

Client: RDOS

Location: Okanagan Falls Landfill

File No: 22-4504

Date: January 8, 2026

Dwn by: MPS

Ckd by: MPS

Scale: N/A

APPENDIX A: General Terms and Conditions

GENERAL CONDITIONS

This report applies and is subject to these “General Conditions”.

1.0 Use of Report

This report concerns a specific site and a specific scope of work, and is therefore not applicable to any other sites or any other developments not referred to in the report. Any deviation from the specific site or scope or work would require a supplementary investigation and assessment.

Conclusions and recommendations contained in this report are solely intended for the use of Ecoscape’s client. Ecoscape bears no responsibility for the accuracy of information, the analysis of data or recommendations contained or referenced in this report when the report is utilized by or relied upon by any party other than Ecoscape’s client, unless otherwise authorized in writing by Ecoscape. Any unauthorized application of this report is at the discretion and sole risk of its user.

This report is subject to copyright, and therefore shall not be reproduced in part or in whole without prior written consent by Ecoscape. Additional copies of this report may be available upon request, if required, and will be supplied after receipt of payment for expenses associated with report production.

2.0 Limitations of Report

This report was derived solely from the conditions that were present on site during Ecoscape’s investigation. The client, and any other parties making use of this report with the express written consent of the Ecoscape and the client, are aware that conditions affecting the environmental condition of the site can vary both temporally and spatially, and that the conclusions and recommendations included in this report are temporally sensitive.

The client, and any other parties making use of this report with the express written consent of the Ecoscape and the client, are also aware that conclusions and recommendations included within this report emanate from limited observations and information, and that both on-site and off-site conditions may vary, which in turn could affect the conclusions and recommendations that were made.

The client is aware that Ecoscape is not qualified to, nor is it making any recommendations in terms of purchase, sale, investment or development of the subject property, as such decisions are the sole responsibility of the client.

2.1 Information Provided to Ecoscape by Others

During the extent of the preparation and work carried out in this report, Ecoscape may have relied upon information

provided by parties other than the client. While Ecoscape strives to validate the accuracy of such information when instructed to do so by the client, Ecoscape accepts no responsibility for the validity of such information which may affect the report.

3.0 Limitation of Liability

The client acknowledges that property containing hazardous wastes and contaminants poses a high risk of claims brought by third parties stemming from the presence of those materials. Accounting for these risks, and in consideration of Ecoscape providing the requested services, the client agrees that Ecoscape’s liability to the client, with respect to any issues relating to hazardous wastes or contaminants located on the subject property shall be limited to the following:

(1) With respect to any claims brought against Ecoscape by the client arising out of the provision or failure to provide services hereunder shall be limited to the amount of fees paid by the client to Ecoscape under this Agreement, whether the action is based on breach of contract or tort;

(2) With respect to claims brought by third parties arising out of the presence of contaminants or hazardous wastes on the subject property, the client agrees to indemnify, defend and hold harmless Ecoscape from and against any and all claim or claims, action or actions, demands, damages, penalties, fines, losses, costs and expenses of every nature and kind whatsoever, including solicitor-client costs, arising or alleged to arise either in whole or part out of services provided by Ecoscape, whether the claim be brought against Ecoscape for breach of contract or tort.

4.0 Disclosure of Information by Client

The client agrees to fully cooperate with Ecoscape with respect to the provision of all available information on the past, current, or proposed conditions on the site, including historical information respecting the use of the site. The client acknowledges that in order for Ecoscape to properly provide the service, Ecoscape is relying on full disclosure and accuracy of any such information. Ecoscape does not accept any responsibility for conclusions drawn from erroneous, invalid, or inaccurate data provided to us by another party and used in the preparation of this report.

5.0 Standard of Care

Services performed by Ecoscape for this report have been completed in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions in the jurisdiction in which the services are provided. Professional judgement has been applied in developing the conclusions and/or recommendations made in this report. No warranty or guarantee, express or implied, is made concerning the

results, comments, recommendations, or any other portion of this report.

6.0 Notification of Authorities

The client acknowledges that in certain instances the discovery of hazardous materials, contaminants or conditions and materials may require that regulatory agencies and other parties be informed and the client agrees that notification to such parties or persons as required may be done by Ecoscape in its reasonably exercised discretion. Further, Ecoscape reserves the right to notify Provincial agencies when rare or endangered flora or fauna are observed, whether the species classifications are identified as such at the local, Provincial, or Federal levels of government.

7.0 Ownership of Instruments of Professional Service

The client acknowledges that all reports, plans, and data generated by Ecoscape during the performance of the work and other documents prepared by Ecoscape are considered its professional work product and shall remain the copyright property of Ecoscape.

8.0 Interpretation of the Report

8.1 Soil Description

Soils, rocks and geological units have been identified and logged using commonly accepted methods in professional geoscience practice; however, soil, rock and geological unit classification and identification are subject to the observers' and Report author's judgement. As such, Ecoscape does not warrant or guarantee the exactness of the insitu subsurface conditions described in this Report.

8.2 Test Pit and Borehole Logs

Test pit and borehole logs are an interpretive record of field observations and in some cases laboratory testing of select samples. It is not uncommon for sample recovery to be incomplete, even when using normal sampling procedures. Soil, rock and geological units described on the logs are based on interpretation of available data, and may therefore vary from actual insitu subsurface conditions.

8.3 Geological Cross-sections

Geological cross-sections were constructed based on information provided in test pit and borehole logs, topographic information, and information available online. Stratigraphy between logged locations were inferred based on hydrogeological and geological principles; however, actual geology and stratigraphy may vary from that drawn on our cross-sections.

8.4 Hydrogeological Conditions

Groundwater conditions described in the report and shown on borehole and test pit logs are a record of observed

conditions at the time of their measurement. Groundwater conditions may vary between tested locations, and are affected by natural seasonal fluctuations. Groundwater conditions can also be affected by anthropogenic activities.

9.0 Alternate Report Format

Where Ecoscape submits both an electronic file and hard copy versions of reports, drawings and other project-related documents and deliverables (collectively termed Ecoscape's instruments of professional service), the client agrees that only the signed and sealed hard copy versions shall be considered final and legally binding. The hard copy versions submitted by Ecoscape shall be the original documents for record and working purposes, and, in the event of a dispute or discrepancies, the hard copy versions shall govern over the electronic versions. Furthermore, the client agrees and waives all future right to dispute that the original hard copy signed version archived by Ecoscape shall be deemed to be the overall original for the Project.

The client agrees that both electronic file and hard copy versions of Ecoscape's instruments of professional service shall not, under any circumstances, no matter who owns or uses them, be altered by any party other than Ecoscape. The client warrants that Ecoscape's instruments of professional service will be used only and exactly as submitted by Ecoscape.

The client recognizes and agrees that electronic files submitted by Ecoscape have been prepared and submitted using specific software and hardware systems. Ecoscape makes no representation about the compatibility of these files with the client's current or future software and hardware systems.

APPENDIX B: Operational Certificate



June 28, 2011

Tracking Number: 94
Authorization Number: 15279

REGISTERED MAIL

REGIONAL DISTRICT OKANAGAN SIMILKAMEEN
101 Martin Street
Penticton, BC V2A 5J9

Dear Operational Certificate Holder:

Enclosed is Operational Certificate 15279 issued under the provisions of the *Environmental Management Act*. Your attention is respectfully directed to the terms and conditions outlined in the operational certificate. An annual fee will be determined according to the Permit Fees Regulation.

This operational certificate does not authorize entry upon, crossing over, or use for any purpose of private or Crown lands or works, unless and except as authorized by the owner of such lands or works. The responsibility for obtaining such authority rests with the operational certificate holder. It is also the responsibility of the operational certificate holder to ensure that all activities conducted under this authorization are carried out with regard to the rights of third parties, and comply with other applicable legislation that may be in force.

This decision may be appealed to the Environmental Appeal Board in accordance with Part 8 of the *Environmental Management Act*. An appeal must be delivered within 30 days from the date that notice of this decision is given. For further information, please contact the Environmental Appeal Board at (250) 387-3464.

Administration of this operational certificate will be carried out by staff from the Southern Interior Region - Okanagan. Plans, data and reports pertinent to the operational certificate are to be submitted to the Director, Environmental Protection, at Ministry of Environment, Regional Operations, Southern Interior Region - Okanagan, 102 Industrial Pl., Penticton, BC V2A 7C8.

Yours truly,

Sajid A. Barlas, Ph.D. , P.Ag.
for Director, *Environmental Management Act*
Southern Interior Region - Okanagan

Enclosure

cc: Environment Canada

Ministry of Environment

Environmental Protection
Division

102 Industrial Pl.
Penticton, BC V2A 7C8

Southern Interior Region -
Okanagan
Telephone: (250) 490-8200
Facsimile: (250) 490-2231



**MINISTRY OF
ENVIRONMENT**

OPERATIONAL CERTIFICATE

15279

Under the Provisions of the *Environmental Management Act*
REGIONAL DISTRICT of OKANAGAN SIMILKAMEEN

**101 Martin Street
Penticton, BC V2A 5J9**

is authorized to manage waste and recyclable material from the Regional District of Okanagan Similkameen and environs at the Okanagan Falls landfill facility located approximately 4 kilometres east of Okanagan Falls, British Columbia, subject to the conditions listed below. Contravention of any of these conditions is a violation of the *Environmental Management Act* and may result in prosecution.

1. **AUTHORIZED DISCHARGES**

1.1 **Authorized source**

This section applies to the discharge of Demolition, Land Clearing and Construction ("DLC") waste to a landfill. The site reference number for this discharge is E212368.

1.1.1 The maximum rate of discharge is 5000 tonnes per year.

1.1.2 The solid waste to be discharged at this landfill must be limited to Demolition, Land Clearing and Construction waste.

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- 1.1.3 The authorized works are modified sanitary landfill and related appurtenances approximately located as shown on Site Plan A.
- 1.1.4 The location from which the discharge originates is generally Okanagan Falls and surrounding area. (including Naramata, The City of Penticton and RDOS Areas B, G and part of Area F)
- 1.1.5 The location of the facilities for the management of waste and recyclable material to which this operational certificate is applicable is Part of Lot 2710, SDYD, described as follows: commencing at a point 91 metres south of the northeast corner of Sublot 10 of Lot 2710, Plan 1189, thence due east 244 metres, thence due south 335 metres, thence due west 244 m to the east boundary of Sublot 10, thence northerly along the said boundary of Sublot 10 to the point of commencement, and containing 8.2 hectares more or less., approximately located as shown on Site Plan A.

2. DEFINITIONS

- a. "Director" means the Director or a person delegated to act on behalf of the Director, as defined in the *Environmental Management Act*;
- b. "Qualified Professional (QP)" means an applied scientist or technologist specializing in a particular applied science including, but not necessarily limited to: agrology, biology, chemistry, engineering, geology, or hydrogeology; and 1) who is registered in British Columbia with their appropriate professional organization, acting under that association's Code of Ethics and subject to disciplinary action by that association; and 2) who, through suitable education, experience, accreditation and knowledge, may be reasonably relied on to provide advice within their area of expertise.

3. GENERAL REQUIREMENTS

3.1 Maintenance of Works and Emergency Procedures

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The Operational Certificate Holder must inspect the authorized works regularly and maintain them in good working order. In the event of an emergency or condition beyond the control of the Operational Certificate Holder which prevents effective operation of the authorized works or leads to unauthorized discharge, the Operational Certificate Holder must comply with all applicable statutory requirements, immediately notify the Director, Environmental Protection, and take appropriate remedial action for the prevention or mitigation of pollution. The Director may reduce or suspend operations to protect the environment until the authorized works have been restored and/or corrective steps have been taken to prevent unauthorized discharges.

3.2 **Process Modifications**

The Director must be notified by the Operational Certificate holder, prior to implementing changes to any process that may adversely affect the quality and/or quantity of the discharge. Despite notification under this section, permitted levels must not be exceeded.

3.3 **Plans - New Works**

Plans and specifications of the works must be certified by a Qualified Professional licensed to practice in the Province of British Columbia, and submitted to the Director. A Qualified Professional must certify that the works have been constructed in accordance with the plans before discharge commences

3.4 **Landfill Gas Management**

The Operational Certificate holder must comply with the requirements of the BC Landfill Gas Management Regulation.

3.4.1 **Gas Venting or Recovery and Management Systems**

If the emission of non-methane organic compounds (NMOCs) exceeds 150 tonnes/year, the installation and operation of a landfill gas recovery system is required.

3.4.2 **Lower Explosive Limit**

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The landfill must be operated such that combustible gas concentrations do not exceed the lower explosive limit in soils at the property boundary or 25% of the lower explosive limit in any on-site or off-site structure or facility, including any services (water, sewer, electrical, etc.). This provision does not apply to leachate or landfill gas works where appropriate signage and maintenance controls have been established to protect health and safety. Such provisions must be specified in an approved Design, Operation and Closure Plan.

3.4.3 **Landfill Gas Assessment**

When 100,000 tonnes of waste have been discharged at the landfill, or the annual waste acceptance rate exceeds 10,000 tonnes an assessment of the potential for landfill gas generation must be submitted to the Director, in accordance with the requirements of the BC Landfill Gas Management Regulation.

3.5 **Additional Facilities or Works**

The Director may require investigations, surveys, and the construction of additional facilities or works including, but not limited to, additional leachate, bear-proof and landfill gas facilities. The Director may also amend the requirements of any of the information required by this operational certificate including plans, programs, assessments and reports.

3.6 **Spill Reporting**

All spills to the environment (as defined in the Spill Reporting Regulation) must be reported immediately in accordance with the Spill Reporting Regulation. Notification must be via the Provincial Emergency Program at 1-800-663-3456.

3.7 **Waste Asbestos**

Waste asbestos is authorized for disposal subject to compliance with the requirements of section 40 of the Hazardous Waste Regulation and the following conditions:

- a. The asbestos waste may not be mixed with any other hazardous waste.
- b. The RDOS must approve the disposal before disposal takes place.

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- c. All other applicable requirements of the Hazardous Waste Regulation, including but not limited to manifesting and waste record keeping, must also be complied with.

3.8. **Landfill Design, Operation and Closure Plan**

- 3.8.1 A Landfill Design, Operational and Closure Plan, prepared by a QP must be submitted for approval by the Director, on or before June 30, 2012.
- 3.8.2 Terms of reference for the Design, Operational and Closure Plan are subject to approval by the Director.
- 3.8.4 The Director may request revisions to the Design, Operational and Closure Plan. Terms of reference for the revisions to the Design, Operational and Closure Plan are subject to approval by the Director.
- 3.8.5 Operation of this landfill is to be in accordance with the Design, Operational and Closure Plan, approved by the Director.
- 3.8.6 The final Closure Plan (to be included in the Design, Operational and Closure Plan) must include, at a minimum, the following information:
- Anticipated total waste volumes and tonnage, and life of the landfill (i.e: closure date);
 - A topographic plan showing the final elevation contours of the landfill and surface water diversion and drainage controls;
 - Rodent and nuisance wildlife control procedures;
 - Design of the final cover including the thickness and permeability of barrier layers and drainage layers, and information on topsoil, vegetative cover and erosion prevention controls;
 - Procedures for notifying the public about the closure and about alternative waste disposal facilities;
 - Proposed end use of the property after closure;
 - A plan and implementation schedule for monitoring groundwater, surface water and landfill gas, erosion and settlement for a minimum post closure period of 25 years; and,
 - Provisions for maintenance and corrective measures for a minimum 25-year post-closure period.

3.9 **Protection of Groundwater and Surface Water Quality**

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- 3.9.1 The Landfill must be managed such that both groundwater and surface water quality at or beyond the landfill property boundary meets the British Columbia Water Quality Guidelines (Criteria) and the most recent applicable Working Water Quality guidelines for British Columbia.
- 3.9.2 If results of groundwater or surface monitoring indicate any exceedance of the above-noted water quality criteria, the Director may require additional leachate management control measures including improvement/modification of the works. Terms of reference for any leachate management study and/or design work will be subject to the approval of the Director.

3.10 **Property Boundary**

The buffer zone between any municipal solid waste discharged and the property boundary is to be at least 50 metres of which the 15 metres closest to the property boundary must be reserved for natural or landscaped screening (berms or vegetative screens). Depending on adjacent land use and environmental factors, buffer zones of less than 50 metres but not less than 15 metres may be authorized by the Director.

3.11 **Setbacks**

The distance between the discharged municipal solid waste and the nearest residence, water supply intake, hotel, restaurant, food processing facility, school, church or public park is to be a minimum of 300 metres. The distance between the discharged municipal solid waste and the nearest surface water is to be a minimum of 100 metres. Greater or lesser separation distances may be authorized by the Director where justified. For those landfills designed to collect and recover methane gas generated, the issue of potential on-site or off-site users of the energy should be addressed in siting the landfill, consistent with the preceding regarding public places.

3.12 **Natural Control Landfill**

- 3.12.1 The bottommost solid waste cell is to be at least 1.2 metres above the seasonal high water table. Greater or lesser separation depths may be authorized based on soil permeability and the leachate renovation capability of the soil.

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3.12.2 There is to be at least a 2 metre thick layer of low permeability soil with a hydraulic conductivity of 1×10^{-6} cm/s or less (i.e. silt or clay), below each of the bottommost waste cells. Lesser thicknesses or no layer of low permeability soil may be authorized based on the potential for leachate generation and the unsaturated depth, permeability and leachate renovation capability of the existing soil.

3.13 Water

The disposal of municipal solid waste into water is unacceptable. Surface water diversion to restrict storm water runoff from contacting the wastes is required.

3.14 Odour Control

Should objectionable odours, attributable to operations of the facilities, occur beyond the property boundary, measures or additional works will be required to reduce odour to acceptable levels.

3.15 Access Road

An appropriately constructed and maintained access road to, and a road system within the landfill site capable of supporting all vehicles hauling waste, are required during the operating life of the landfill.

3.16 Hydrocarbon Contaminated Soils

The deposit of hydrocarbon contaminated soils below the Hazardous Waste Regulation criteria is authorized at this landfill subject to the following conditions:

- Soil contaminated with hydrocarbons must be deposited in layers less than 0.3 meters; and
- Soil contaminated with hydrocarbons must be deposited a minimum of 1.2 meters above the seasonal high groundwater level and a minimum of 2.0 meters below the final grade of the landfill to prevent the impact on groundwater and any future vegetation on the site.

3.17 Fencing and Access

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Fencing is required to be installed around the perimeter of the landfill. The type and extent of fencing will depend on the existing natural vegetation, topographic features and the type of material being accepted, is to be authorized by the Director. All access points are to have locking gates.

3.18 Design by Qualified Professional

Any further expansion or development is to be designed by a Qualified Professional. All plans, specifications, and reports are to be signed and sealed by a Qualified Professional.

3.19 Designated Areas

Maintain areas for the separation, handling and storage of recyclable or reusable materials where applicable.

When a separated recyclable material is a Hazardous Waste, it is to be stored and managed in accordance with the Hazardous Waste Regulation.

3.20 Signs

A sign is to be posted at each entrance of the landfill with the following current information:

- Site name; Owner and operator; Contact information for owner and operator, and phone number in case of emergency (such as fire); Hours of operation (if applicable); Materials/wastes accepted for landfill and recycling; Materials/wastes banned; and Tipping fees (if applicable).
- Additional signs which clearly indicate the directions to the active tipping face, public disposal area, recycling and waste separation areas, etc. should also be displayed.

3.21 Supervision

Fulltime, trained operators are required to be present at this landfill during operating hours. The gates are to be locked to prevent unauthorized access during non-operating hours. Properly designed and maintained public waste disposal and/or recyclable material bins situated outside the main gate may be provided for after hours use. The operator is required to be familiar with the

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Operational Certificate, inspection records, the authorized Operational and Closure Plan and all annual reports.

3.22 **Scavenging**

Scavenging of waste is to be prevented. The salvaging of wastes should be encouraged by providing areas and facilities for separation of recyclable or reusable materials.

3.23 **Dust Control**

Dust created within the landfill property is to be controlled, using methods and materials acceptable to the Director, such that it does not cause a public nuisance.

3.24 **Waste Compaction and Covering**

3.24.1 Wastes are to be spread in thin layers (0.6 m or less) on the working face and compacted. The working face area should be minimized as much as possible. A compacted layer of cover material of at least 0.15 metre of soil or functionally equivalent depth of other cover material, as authorized by the Director, is to be placed on all exposed solid waste at the end of each day of operation. If the landfill should operate continuously 24 hours per day, 0.15 m of cover material is to be applied at a frequency authorized by the Director. Under specific circumstances, such as during bear season, the Director may specify more stringent cover requirements. During periods of extreme weather conditions, such as those that cause the ground to freeze, an exemption to the normal cover requirements may be authorized at a frequency authorized by the Director.

3.24.2 An intermediate cover consisting of a compacted layer of at least 0.30 metre of soil or functionally equivalent depth of other cover material is to be placed where no additional solid waste has been deposited or will be deposited within a period of 30 days.

3.24.3 Final cover for landfill sites is to consist of a minimum of 1 metre of low permeability ($<1 \times 10^{-5}$ cm/s) compacted soil plus a minimum of 0.15 metre of topsoil with authorized vegetation established. The depth of the topsoil layer should be related to the type of vegetation proposed (ie rooting depth). Soils of higher permeability

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may be authorized based on leachate generation potential at the landfill site. Final cover is to be constructed with slopes between 4% and 33% with appropriate run-on/run-off drainage controls and erosion controls. An assessment of the need for gas collection and recovery systems must be made so that, in the event such systems are required, cover can be appropriately designed and constructed. Final cover is to be installed within 90 days of landfill closure or on any areas of the landfill which will not receive any more refuse within the next 12 months. Completed portions of the landfill are to progressively receive final cover during the active life of the landfill.

Additional layers of natural materials including earth and aggregate and/or synthetic materials may be necessary for inclusion in the final cover design due to site specific conditions and the presence of management systems for leachate and landfill gas.

3.25 Litter Control

Litter is to be controlled by compacting the waste, minimizing the working face area, applying cover, providing litter control fences and instituting a regular litter pickup and general good housekeeping program or any other measures required by the Director.

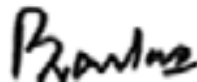
3.26 Vectors

Vectors are to be controlled by the application of cover material at a specified frequency or by other control measures as required and authorized by the Director.

3.27 Wildlife

The Operational Certificate holder is required to monitor wildlife (medium and large carnivores) activity at the facility and keep records of occurrences and observations of wildlife (medium and large carnivores). The landfill is to be operated so as to minimize the attraction of wildlife such as bears and birds by applying cover at required frequencies and instituting a good housekeeping program. Further control measures, such as bear control fences, and bird control devices, may be specified by the Director.

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3.28 Fire Protection

Adequate fire-fighting equipment is to be available to extinguish surface or underground fires. Recyclables and reusable materials are to be stored in such a manner as to not constitute a fire hazard.

3.29 Ozone Depleting Substances

Release of ozone depleting substances from the storage, handling and disposal of used refrigerator equipment, freezers, motor vehicle air conditioners and other air conditioning equipment, fire extinguishers or other equipment containing ozone depleting substances is strictly forbidden as per the requirements of the Ozone Depleting Substances Regulation.

3.30 Open Burning

No Open Burning is permitted at this facility unless it authorized by the Director.

4. MONITORING AND REPORTING REQUIREMENTS

4.1 Municipal Solid Waste Measurement

The Operational Certificate Holder must provide a complete record of the quantity of waste received in the Annual Report data in a form suitable for inspection by the Director and submit the data, suitably tabulated, to the Director, for the previous year.

4.1.1 Provide and maintain a weigh scale and record the weight of refuse discharged to the landfill over a 24-hour period or provide a volume measurement system and record the volume and a weight conversion of refuse discharged to the landfill over a 24-hour period.

4.1.2 Record the weight or volume of recyclable and reusable materials not being discharged and that are being separated, stored or processed at the landfill over a 24-hour period.

4.2 Vegetation Monitoring

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Inspect vegetation during the growing season in the vicinity of the landfill at least once per year to determine if any environmental impacts are occurring, and take appropriate remedial action if necessary.

4.3 **Monitoring Program**

- 4.3.1 A monitoring program must be developed to identify any impacts to the environment and public health from the landfill.

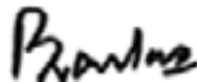
The monitoring program must address, but not be limited to, subsections 4.1, 4.2 and 7.15 of the Landfill Criteria for Municipal Solid Waste and the Guidelines for Environmental Monitoring at Municipal Solid Waste Landfills.

- 4.3.2 Monitoring must be conducted in accordance with the monitoring program.
- 4.3.3 Sampling is to be carried out in accordance with the procedures described in the "British Columbia Field Sampling Manual for Continuous Monitoring and the Collection of Air, Air-Emission, Water, Wastewater, Soil, Sediment, and Biological Samples, 2003 Edition (Permittee)", or most recent edition, or by suitable alternative procedures as authorized by the Director.
- 4.3.4 Analyses are to be carried out in accordance with procedures described in the "British Columbia Laboratory Manual (2009 Permittee Edition)", or the most recent edition, or by suitable alternative procedures as authorized by the Director.

A copy of the above mentioned may be purchased from the Queen's Printer Publications Centre, P. O. Box 9452, Stn. Prov. Gov't. Victoria, British Columbia, V8W 9V7 (1-800-663-6105 or (250) 387-6409) at the internet at www.crownpub.bc.ca. A copy of the manual is also available for review at all Environmental Protection offices.

- 4.3.5 Have a suitably Qualified Professional (QP) conduct a review of the existing groundwater monitoring program. The review, at a minimum must assesses the effectiveness and adequacy of the current ground water monitoring - the number and location of groundwater monitoring wells, the sampling frequency and the parameters being monitored. The review should also assess the need for surface water monitoring at

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the landfill, and if deemed necessary recommend sampling station locations, sampling frequency and the parameters to be monitored. A report summarizing the result of this review, conclusions and recommendations (prepared by a QP) must be submitted for approval by the Director, Environmental Protection, on or before December 31, 2011.

- 4.3.6 All the recommendations of the report required in section 4.3.5 including the installation of additional groundwater monitoring wells (if recommended by the QP) must be completed on or before September 30, 2012.
- 4.3.7 On the basis of findings during routine inspections and any other information related to the effect of the discharge on the receiving environment, the Director may allow reductions or require additional sampling and monitoring of the discharge and receiving environment.

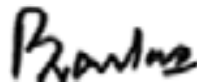
4.4 **Annual Operating and Monitoring Report**

4.4.1 **Annual Report**

The Operation Certificate Holder must submit an Annual Report to the Director on or before March 31, each year for the previous calendar year. The report must contain at least the following information:

- a. The type and tonnage of waste received, recycled and discharged for the proceeding 12-month period;
- b. A current topographic map of the active landfill area and soil stockpiles;
- c. Updated estimates for the remaining capacity, closure date for the current phase and closure date for the current landfill footprint;
- d. Any new information or proposed changes relating to the facilities and Design and Operation Plan;
- e. Occurrences or observations of wildlife (medium and large carnivores) at the facility;
- f. A statement regarding progress in reducing the waste stream, in accordance with the hierarchy of reduce, reuse and recycle principles;
- g. The results of all monitoring programs as specified in this Operational Certificate. Data interpretation and trend analysis, as well as an evaluation of the impacts of the discharges on the receiving environment in the previous year must be carried out by a qualified professional; and,

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for Director, *Environmental Management Act*
Southern Interior Region - Okanagan

- h. The methods and amounts of leachate collection, treatment and disposal, if applicable.

4.5 **Future Monitoring**

The Director may specify in writing a monitoring program if the Director feels it is necessary for the protection of the environment. This may include sampling of environmental media and the preparation and submission of related reports.

4.6 **Changes to Sampling and Monitoring Program**

On the basis of findings during routine inspections, the review of the annual report and any other information related to the effect of the discharge on the receiving environment, the Director may require modifications to the sampling and monitoring of the discharge and receiving environment.

4.7 **Format of Submission**

Monitoring and/or reporting information must be submitted in an electronic and/or printed format which is suitable for review by the public and/or other government agencies and is satisfactory to the Director.

4.8 **Declaration of Landfill**

Landfills sited on titled land must register a covenant that the property was used for the purpose of waste disposal as a charge against the title to the property as provided for under Section 215.1 of the *Land Title Act*. Landfills located on Crown land are to have a notation on file registered that the property was used for the purpose of waste disposal.

4.9 **Buildings and Structures**

The construction of buildings and other structures on landfills containing putrescible wastes is not recommended for a minimum period of 25 years after closure due to concerns about combustible gas and excessive settlement. Such activity will only be considered and /or authorized after an investigation and report by a QP. The report is to be submitted for authorization to the Director prior to initiating construction activities.

4.10 **Operation of Gas Recovery and Management System**

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Southern Interior Region - Okanagan

Where landfill gas recovery and management is required, operation of the system should be considered an integral part of overall landfill management. The system should be planned for from the early design stage of the landfill and arrangements made for its operation for a minimum 25 year life after closure.

4.11 Operation of Other Control Systems

Operation of other environmental control systems for leachate and run-off as well as monitoring of leachate, groundwater and surface water must be continued during the entire post closure period unless the early suspension of such operations or monitoring is authorized by the Director.

4.12 Prohibited Wastes

The co-disposal of the following wastes with the Demolition, Land Clearing and Construction waste is prohibited unless specifically authorized by the Director:

- Hazardous Wastes other than those specifically authorized in the Hazardous Waste Regulation;
- Bulk liquids and semisolid sludges which contain free liquid;
- Liquid or semisolid wastes including septage, black water, sewage treatment sludge, etc.;
- Automobiles, and any other objects, materials or substances not deemed recyclable;
- Biomedical waste as defined in the document Guidelines for the Management of Biomedical Waste in Canada (CCME, February 1992); and,
- Dead animals and slaughter house, fish hatchery and farming wastes or cannery wastes and by-products.

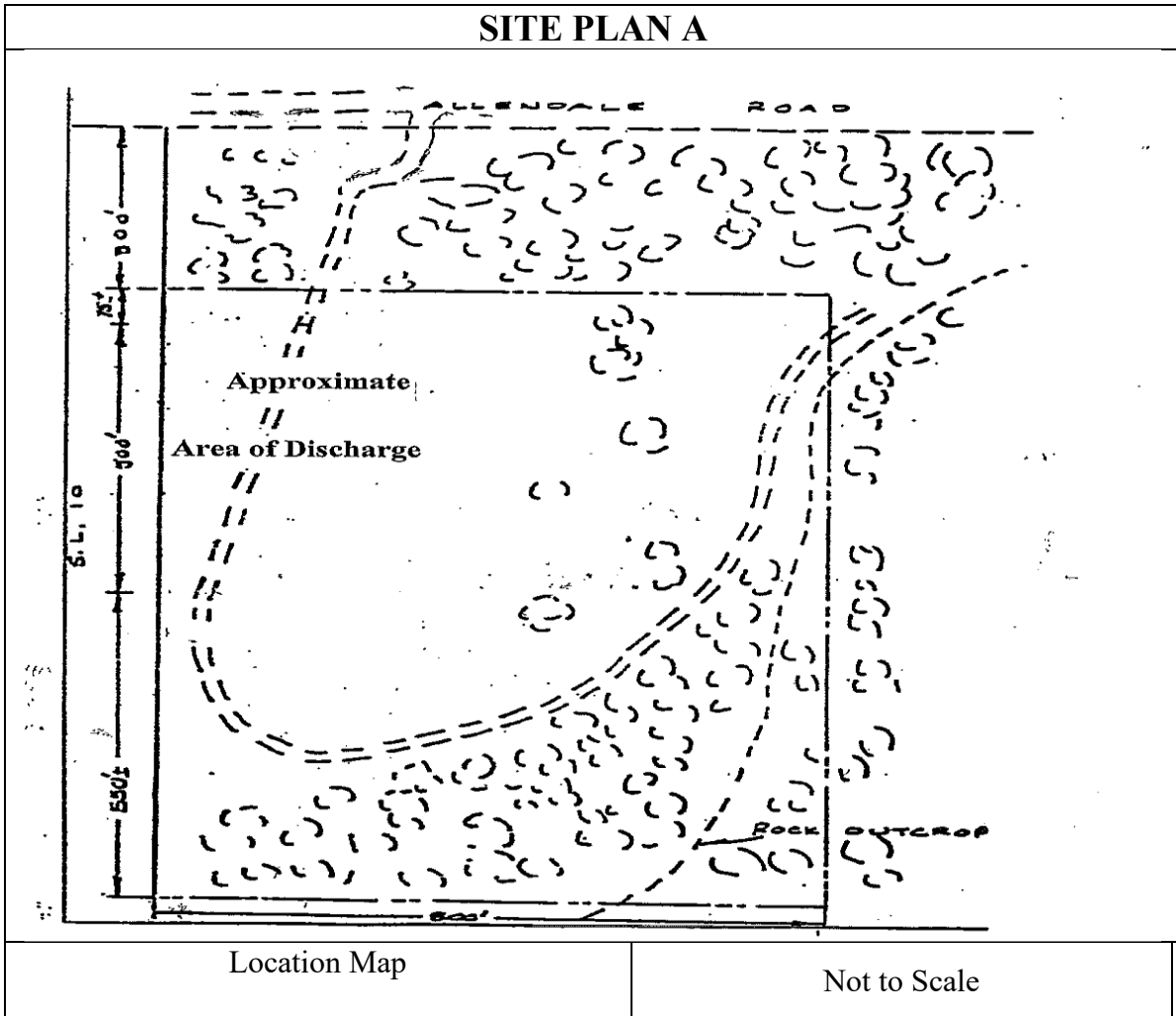
Burial of these wastes in dedicated locations (i.e. avoiding co-disposal) at a landfill site may be authorized by the Director only if there is no other viable alternative such as treatment/disposal, recycling, reprocessing or composting. The viability of alternatives is to be determined by the Director based on submission of cost data by the holder of the Operational Certificate. For those cases in which the dedicated disposal of otherwise prohibited wastes is authorized, the specific on-site location of the disposal must be recorded to

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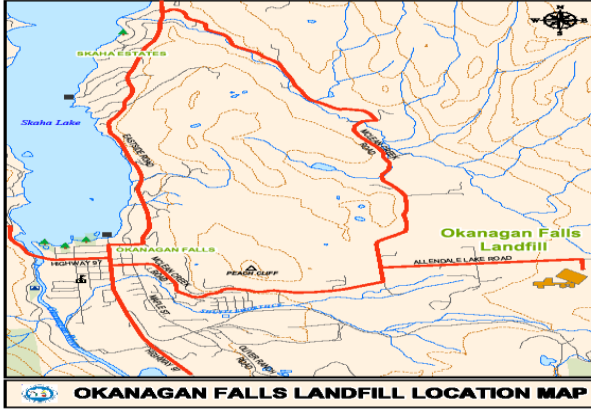
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allow ready access to the waste should corrective or further action pertaining to the management of these wastes be required by the Ministry at some time in the future.



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 <p>OKANAGAN FALLS LANDFILL LOCATION MAP</p>	Operational Certificate: No. 15279
	Date:
	for Director, <i>Environmental Management Act</i>

Date issued: June 28, 2011



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for Director, *Environmental Management Act*
Southern Interior Region - Okanagan

APPENDIX C: Well Logs

BOREHOLE LOG	PROJECT: 99-771	BOREHOLE: -BH1	1 of 4
Hydrogeological Assessment Okanagan Falls Sanitary Landfill FOR:		DATE: 11 March 2000	LOGGED BY: HC
		ELEVATION: 525.200	mASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						COMMENTS
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	
1		Turf and topsoil over grey-brown, moist, medium to coarse SAND and fine GRAVEL No fines, some cobbles and boulders. Dry below 3 m.								
2										
3										
3.7		COBBLES AND BOULDERS.								
4										
4.6		Brown, moist, gravelly, fine SAND. Some small dense lumps (till-like). Gravel content decreases with depth.								
5										
6.1		Brown, moist, fine SAND, some gravel, trace silt.								
7										
7.3		Brown, moist, silty, fine SAND, some gravel.								
8										
8.2		Brown GRAVEL, COBBLES AND BOULDERS.								
9										

BOREHOLE LOG	PROJECT: 99-771	BOREHOLE: _BH1	2 of 4
Hydrogeological Assessment Okanagan Falls Sanitary Landfill FOR:		DATE: 11 March 2000	LOGGED BY: HC
		ELEVATION: 525.200	mASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						COMMENTS
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	
10.2		Light, brown, slightly moist, fine to medium, silica SAND, no fines to trace silt.								
10.8		Grey, fine to medium SAND, some silt and gravel (Till).								
11										
11.3		Massive, fresh, green/dark grey to black granodiorite orthogneiss BEDROCK								
12										
13										
14										
14.3		white dust - probably highly weathered quartz vein								
14.7										
15										
16										
17										
18										
19										

BOREHOLE LOG	PROJECT: 99-771	BOREHOLE: _BH1	3 of 4
Hydrogeological Assessment Okanagan Falls Sanitary Landfill FOR:		DATE: 11 March 2000	LOGGED BY: HC
		ELEVATION: 525.200	mASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						COMMENTS
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	
21										
22										
23										
23.5		pink cutting due to potassium feldspar content								
24										
24.4										
25										
26										
27										
28										
29										
29.6		At 29.6 m, pink cutting due to potassium feldspar content.								

BOREHOLE LOG	PROJECT: 99-771	BOREHOLE: -BH1	4 of 4
Hydrogeological Assessment Okanagan Falls Sanitary Landfill FOR:		DATE: 11 March 2000	LOGGED BY: HC
		ELEVATION: 525.200	mASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					COMMENTS		
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER		% REC	% RQD
31.1		At 30.7 m, brown cuttings with some oxidized quartz - probable fracture zone. Damp to moist cuttings.				CY					
31		Green-dark grey Wet fine gravel cuttings				CY					
32											
33		Clay coating on rock chips and some wet clay lumps.									
34						CY					
35											
36		Fracture zone - very easy drilling. Water encountered. Quartz and oxidized quartz cuttings.				CY					
37											
37.2		End of borehole. Well developed by air lifting for 15 minutes.									

BOREHOLE LOG	PROJECT: 99-771	BOREHOLE: -BH2D	1 of 3
Hydrogeological Assessment Okanagan Falls Sanitary Landfill FOR:		DATE: 14 March 2000	LOGGED BY: HC
		ELEVATION: 537.400	mASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						COMMENTS
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	
1		Medium brown, fine to medium SAND, some silt and gravel. Grades lighter. Boulder (300 mm diameter) at 0.15 m.								
2		Light brown to grey	▼			CY				
3.0		Grey-brown to grey, fine SAND, some silt to silty, some gravel (Till-like). Grain size varies from uniform fine to medium and gravel content varies from trace to some.				CY				
4						CY				
5		Moist below 5 m.								
6						CY				
7		Cobble or boulder at 7 m.				CY				
8.5										
9		Massive, greenish-grey, slightly weathered, granodiorite orthogneiss (metamorphic) BEDROCK. Cutting are angular rock chips and powder.								




BOREHOLE LOG	PROJECT: 99-771	BOREHOLE: - BH2D	2 of 3
Hydrogeological Assessment Okanagan Falls Sanitary Landfill FOR:		DATE: 14 March 2000	LOGGED BY: HC
		ELEVATION: 537.400	mASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						COMMENTS	
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC		% RQD
11						CY					
12											
13											
13.7		soft, rusty weathered zone									
14											
14.6											
15											
15.5		soft, rusty weathered zone									
16											
16.2											
17											
18											
18.6		soft, rusty weathered zone									
19											
19.8											

BOREHOLE LOG	PROJECT: 99-771	BOREHOLE: _BH2D 3 of 3
Hydrogeological Assessment Okanagan Falls Sanitary Landfill FOR:		DATE: 14 March 2000 LOGGED BY: HC ELEVATION: 537.400 mASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						COMMENTS	
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC		% RQD
21		soft, extremely weathered or shear zone, rusty colour.				CY					
21.9											
22											
23.0		soft, rusty weathered zone				CY					
23											
24.1		brown zone									
24.4		soft, rusty weathered zone				CY					
24.8		brownish-green									
25											
25.6		brown									
25.9		Rusty coloured, highly weathered or shear zone. Water encountered at 26.5 m.									
26											
27											
28.0		End of borehole. Well developed by air lifting for 20 minutes.									
28											

BOREHOLE LOG	PROJECT: 99-771	BOREHOLE: _BH2S	1 of 2
Hydrogeological Assessment Okanagan Falls Sanitary Landfill FOR:		DATE: 13 March 2000	LOGGED BY: HC
		ELEVATION: 537.260	mASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						COMMENTS	
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC		% RQD
1		Medium brown, fine to medium SAND, some silt and gravel. Grades lighter. Boulder (300 mm diameter) at 0.15 m.									
3.0		Grey-brown to grey, fine SAND, some silt to silty, some gravel (Till-like). Grain size varies from uniform fine to medium and gravel content varies from trace to some.									
8.5		Massive, greenish-grey, slightly weathered, granodiorite orthogneiss (metamorphic) BEDROCK. Cutting are angular rock chips and powder.									

BOREHOLE LOG	PROJECT: 99-771	BOREHOLE: -BH2S 2 of 2
Hydrogeological Assessment Okanagan Falls Sanitary Landfill FOR:		DATE: 13 March 2000 LOGGED BY: HC ELEVATION: 537.260 mASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						COMMENTS
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	
10.4		End of borehole. Well developed for 15 minutes by air-lifting.								

BOREHOLE LOG	PROJECT: 99-771	BOREHOLE: -BH3	1 of 4
Hydrogeological Assessment Okanagan Falls Sanitary Landfill FOR:		DATE: 15 March 2000	LOGGED BY: HC
		ELEVATION: 560.130	mASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						COMMENTS
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	
1		Massive, greenish-grey, slightly weathered, granodiorite orthogneiss (metamorphic) BEDROCK. Cutting are angular rock chips and powder.								Well backfilled with cuttings between sand filter and bentonite seal
2										
3										
4										
5										
6										
7										
8										
9.1		soft, brown weathered zone								
9.4		Fresh, hard BEDROCK.								



BOREHOLE LOG	PROJECT: 99-771	BOREHOLE: - BH3	2 of 4
Hydrogeological Assessment Okanagan Falls Sanitary Landfill FOR:		DATE: 15 March 2000	LOGGED BY: HC
		ELEVATION: 560.130	mASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						COMMENTS	
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC		% RQD
11											
12											
13											
14											
15											
16											
17											
17.7		soft, brown weathered zone									
18											
18.3		Fresh, hard BEDROCK.									
19											

BOREHOLE LOG	PROJECT: 99-771	BOREHOLE: -BH3	3 of 4
Hydrogeological Assessment Okanagan Falls Sanitary Landfill FOR:		DATE: 15 March 2000	LOGGED BY: HC
		ELEVATION: 560.130	mASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						COMMENTS
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	
20.4		soft, brown weathered zone at 20.4 m								
20.7		Fresh, hard, greenish-black (metamorphic) BEDROCK.								
21										
22										
23										
24										
25										
25.9		Soft, moderately to highly weathered, brown BEDROCK Moist zone, no more powder.								
26										
27										
27.4		Fresh, hard, greenish-black (metamorphic) BEDROCK.								
28										
28.8		Trace water								
29										

BOREHOLE LOG	PROJECT: 99-771	BOREHOLE: -BH3	4 of 4
Hydrogeological Assessment Okanagan Falls Sanitary Landfill FOR:		DATE: 15 March 2000	LOGGED BY: HC
		ELEVATION: 560.130	mASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						COMMENTS
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	
31										
32.0		End of Borehole								

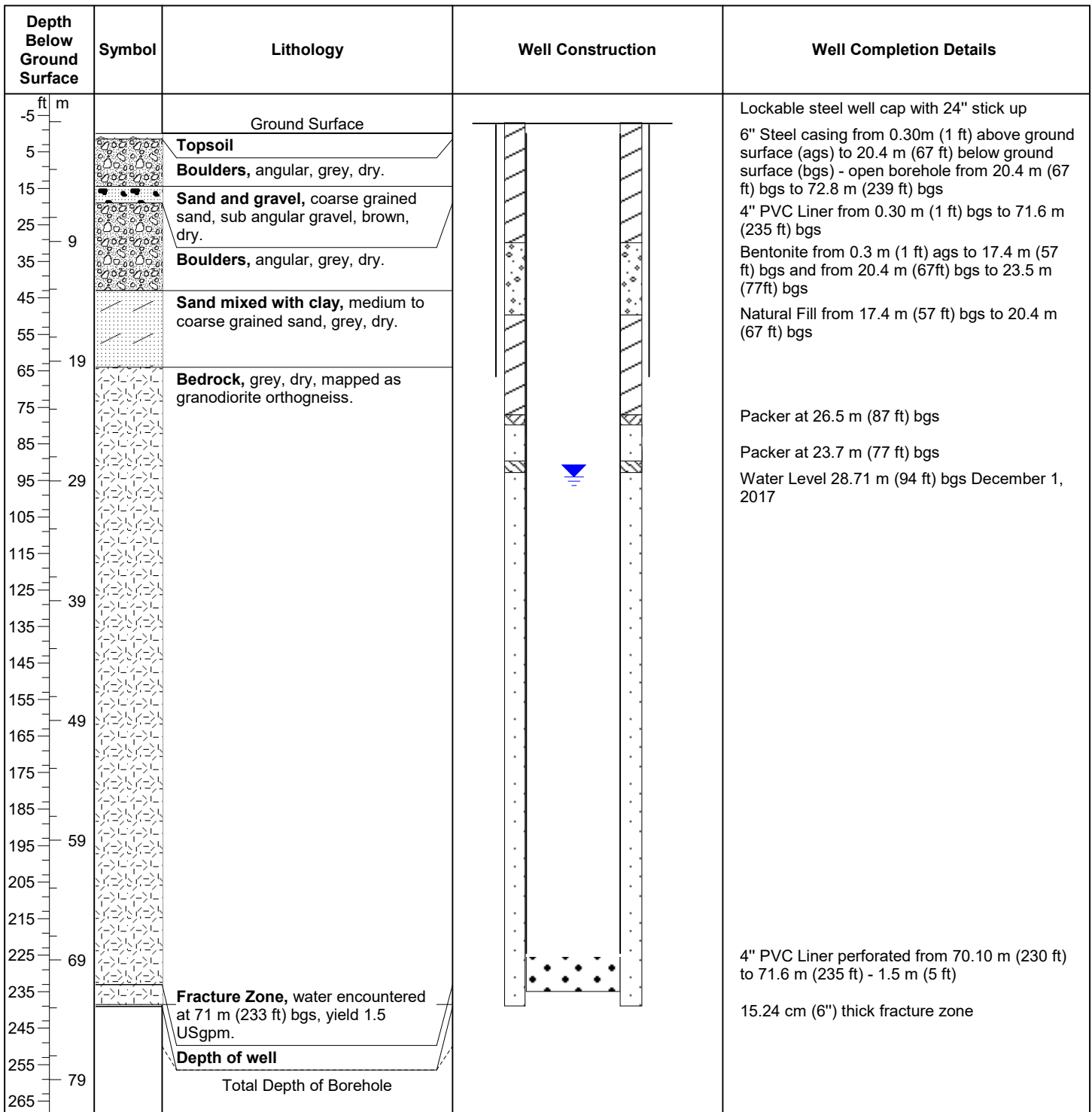
Monitoring Well ID: MW17-4

Client: RDOS

Project: RDOS OK Falls Landfill Drilling

Location: OK Falls - Natures Trust

Project Number: 12-024-06



Coordinates: N 5468328.79 E 683349.86 11U

Static Water Level: 28.71 m (94 ft) December 1, 2017

Ground Elevation: 487.07 m

Total Borehole Depth: 72.8 m (239 ft)

Drawn By: RA


Checked By: BRM

Drilling Contractor: Robbins Drilling

Drilling Method: Air Rotary - 6" boring

Date of Completion: December 1, 2017

Logged By: RA

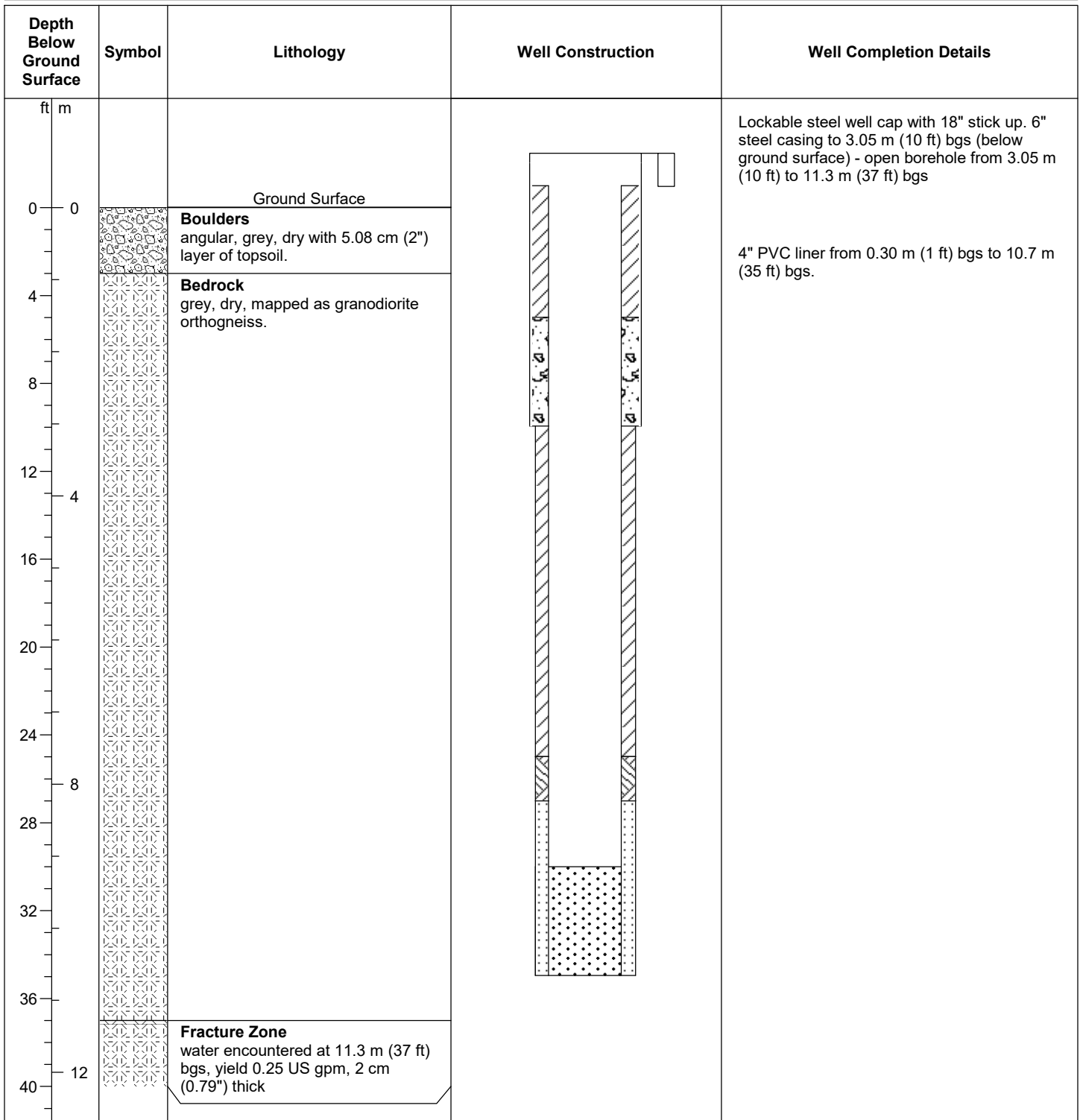
Monitoring Well ID: MW17-5	Client: RDOS	
Project: RDOS OK Falls Landfill Drilling		
Location: OK Falls - Natures Trust	Project Number: 12-024-06	

Depth Below Ground Surface	Symbol	Lithology	Well Construction	Well Completion Details
ft m				
-7		Ground Surface		Lockable steel well cap with 18" stick up
3		Boulders , angular, grey, dry with 5.08 cm (2") layer of topsoil.		6" Steel casing from 0 m (0 ft) below ground surface (bgs) to 3.05 m (10 ft) bgs - open borehole from 3.05 m (10 ft) to 50.6 m (166 ft) bgs
13		Bedrock , grey, dry, mapped as granodiorite orthogneiss.		4" PVC Liner from 0.30 m (1 ft) bgs to 46.9 m (154 ft) bgs
23				Bentonite from 0.3m (1 ft) ags to 1.52 m (5 ft) bgs and from 3.05 m (10 ft) bgs to 7.6 m (25 ft) bgs
8				Natural Fill from 1.5 m (5 ft) bgs to 3.05 m (10 ft) bgs
33		Fracture Zone , water encountered at 10.7 m (35 ft) bgs, yield 0.25 USgpm, 2 cm (0.79") thick.		Packers at 7.6m (25 ft) bgs and
43				13.7 m (45 ft) bgs to isolate the upper fracture zone
53				16.8 m (55 ft) bgs
18				
63				
73				
83				
83				Peziometric surface is above top of casing (toc) Flowing artesian, monitoring well construction was installed in accordance with Provincial Standards
93				Artesian flow 0.25 USgpm, artesian pressure 3 ft from the 46 m (151 ft) depth fracture
28				
103				
113				
123				
38				
133				
143				
153		Fracture Zone , water encountered 46 m (151 ft) bgs, 1.5 US gpm, 12.7 cm (5") thick zone.		4" PVC Liner perforated from 45.4 m (149 ft) to 46.9 m (154 ft) bgs - 1.5 m (5ft)
48				
163		Depth of Well		
173				

Coordinates: N 5468381.42 E 682926.37 11U	Drilling Contractor: Robbins Drilling
Static Water Level: Flowing artesian (see well details)	Drilling Method: Air Rotary - 6" boring
Ground Elevation: 515.15m	Date of Completion: December 1, 2017
Total Borehole Depth: 50.6 m (166 ft)	Logged By: RA
Drawn By: RA	Checked By: BRM

Monitoring Well: MW17-05S
 Project: OK Falls Landfill
 Location: OK Falls - Natures Trust

Client: RDOS
 WPID: 37319
 Project Number: 18-037-08



Coordinates: 11U 5468381 m E 682926 m N
 Static Water Level: ~ 5 m (16 ft) Feb 2018
 Ground Elevation: 515 m
 Total Depth: 10.7 m (35 ft)

Drilling Contractor: Robbins Drilling
 Drilling Method: Air - Rotary 6" boring
 Date of Completion: February 2018

Checked By: BM
 Drawn By: LM
 Logged By: RA

Monitoring Well: MW19-1
Project: OFLF
Location: OK Falls

Client: RDOS
WPID: 17962
Project Number: 18-037-08



Depth Below Ground Surface	Symbol	Lithology	Well Construction	Well Completion Details
ft m 0 0 4 8 12 4 16 20 24 28 8 32 36 40 12 44 48 52 16 56 60 64 20 68 72 76 80 24 84 88 92 28 96 100 104 32 108 112		<p style="text-align: center;">Ground Surface</p> <p>See log for original well, BH-1. Replacement well MW19-1 is adjacent to BH-1 and assumed to have similar lithology</p>		<p>Lockable cap. 3 ft stick up. Hydrant with sampling port adjacent to well. Bentonite surface seal 8" in diameter, to a depth of 1 m (3 ft) bgs (below ground surface)</p> <p>6 " steel casing</p> <p>4 " PVC liner to 112 ft bgs</p> <p>Bentonite from 0 ft to 60 ft</p> <p>Top Packer at 60 ft bgs</p> <p>Stabilized water level 31.4 m bgs (103 ft), November 2019</p> <p>Bottom Packer at 103 ft bgs</p> <p>Slotted 4" PVC screen from 106 ft to 112 ft</p> <p>Sand pack material from 103 ft to 112 ft</p>

<p>Coordinates: 11U 317070m E 5468388m N Stabilized Water Level: 31.4 m bgs (November, 2019) Ground Elevation: 529 m Well Depth: 34.1 m (112 ft)</p>	<p>Drilling Contractor: Robbins Drilling and Pump Ltd. Drilling Method: Air Rotary Date of Completion: September 2019 Total Borehole Depth: 34.1 m (112 ft)</p>	<p>Checked By: BM Drawn By: LM Logged By: Driller</p>
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Monitoring Well: MW19-2D

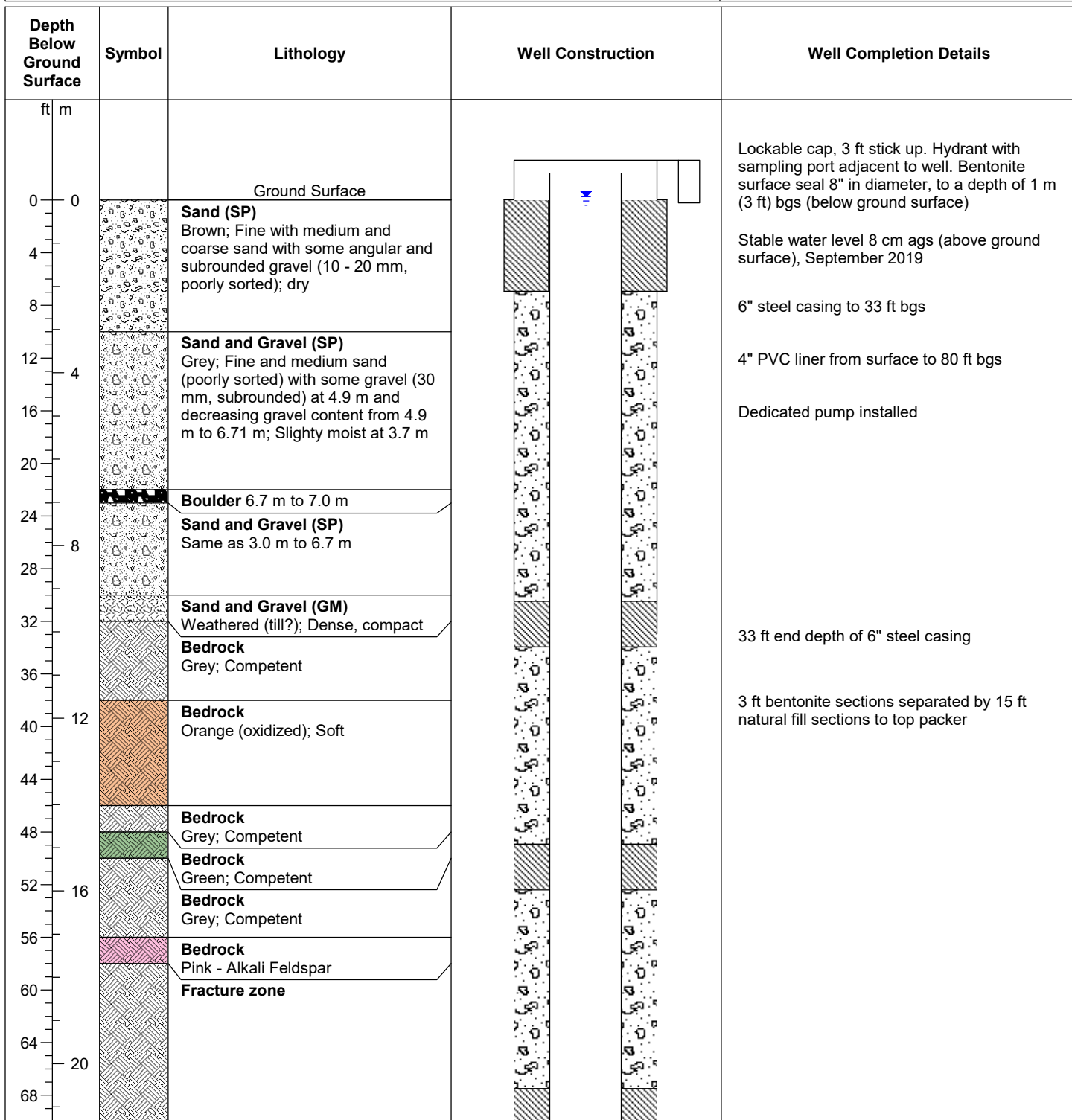
Project: OFLF

Location: OK Falls, B.C.

Client: RDOS

WPID: 37361

Project Number: 18-037-08



Coordinates: 11U 317072m E 5468241m N

Stabilized Water Level: 8 cm ags (artesian) Sept 2019

Ground Elevation: 539 m

Well Depth: 24.4 m (80 ft)

Drilling Contractor: Robbins Drilling and Pump Ltd.

Drilling Method: Air Rotary

Date of Completion: September 9, 2019

Total Borehole Depth: 42.67 m (140 ft)

Checked By: BM

Drawn By: LM

Logged By: LM

Monitoring Well: MW19-2D

Project: OFLF

Location: OK Falls, B.C.

Client: RDOS

WPID: 37361

Project Number: 18-037-08



Depth Below Ground Surface	Symbol	Lithology	Well Construction	Well Completion Details
72				Top packer 1 ft above perforated PVC
76		Fracture zone 23 m		Perforated liner (slotted by hand) from 73 ft to 80 ft
80	24	Bedrock Competent (grey) Soft oxidized 0.6 m zone in this layer between 24 m to 30 m		Bottom packer 1 ft below perforated liner
84				
88				
92	28			
96				
100				
104	32			
108				
112		Bedrock Pink - Alkali Feldspar		
116		Fracture Zone possible hard fracture zone at 34 m		
120	36	Bedrock Competent (grey)		
124		Bedrock Pink - Alkali Feldspar. hard		
128		Bedrock Competent (grey) potential fracture, oxidized zone at 37.2 m		
132	40			
136		Fracture Zone (possible) 41 m		
140		Bedrock Competent (grey)		
144				

Coordinates: 11U 317072m E 5468241m N

Stabilized Water Level: 8 cm ags (artesian) Sept 2019

Ground Elevation: 539 m

Well Depth: 24.4 m (80 ft)

Drilling Contractor: Robbins Drilling and Pump Ltd.

Drilling Method: Air Rotary

Date of Completion: September 9, 2019

Total Borehole Depth: 42.67 m (140 ft)

Checked By: BM

Drawn By: LM

Logged By: LM

CASCADE DRILLING



division

BOX 306, STN. A
KELOWNA, B.C.
V1Y 7N8

PHONE: (604) 769-3408
(604) 762-1362

NO

Be 'WELL' Satisfied

Name: STAN DAGNEAU.

Address: CHAPMAN ROAD.

Address: OKANAGAN FALLS, B.C.

WELL LOCATION: Lot _____ PL _____ DL _____

PROPOSED USE: Domestic Industrial _____ Municipal _____
Irrigation _____ Test Well _____ Other _____

TYPE OF WORK: Owner's number of well, (if more than one) _____
New Well Air Rotary
Deepened _____ Rotary _____
Reconditioned _____ Jetted _____
Liner Installed _____ Pressure Fractured _____

DIMENSIONS: Diameter of well 6 inches
Drilled 260 ft. Depth of completed well 260 ft.

CONSTRUCTION DETAILS:
CASING INSTALLED: _____ " Diam. from _____ ft. to _____ ft.
Threaded _____ " Diam. from _____ ft. to _____ ft.
Welded 6 3/4 " Diam. from 0 ft. to 39 ft.

PERFORATIONS: Yes No
Type of perforator used _____
SIZE of perforations _____ in. by _____ in.
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.

SCREENS: Yes No
Manufacturer _____
Type _____ Model No. _____
Diam. _____ Slot Size _____ from _____ ft. to _____ ft.
Diam. _____ Slot Size _____ from _____ ft. to _____ ft.

GRAVEL PACKED: Yes No Size of Gravel _____
Gravel placed from _____ ft. to _____ ft.

SURFACE SEAL: Yes No Depth 39 ft.
Material Used In Seal drive shoe, 6 5/8 steel casing
Method of Sealing strata off casing hammer.

PRODUCTION DATA AT TIME OF DRILLING:
Static Level ground (flowing) ft.
Measured from _____ ft. With _____
Pumping level 258 ft. at 15 GPM
Recommended Pump Setting 190 ft.
If Flowing Well 3 GPM
Recommended Max. Pump Output 900 GPH
Water Clear Coloured _____ Silty _____ Sandy _____
Duration of test 1.5 Hrs.

DATE: Spudded APR. 28/94 Completed APR. 30/94.
Rig # TWO. Other Equip. _____

DEPTH:
Overburden 39 ft. Tool Push _____
Bedrock 227 ft. Driller Doug Kilburn.
Total 260 ft. Roughneck Rocky Parson.

FORMATION

DEPTH

FROM	TO	FORMATION
GROUND LEVEL	6'	fine brown sand, gravel & cobbles.
6'	17'	gravel, cobbles, odd bolder.
17'	23'	gravel, cobbles, more sand.
23'	31'	dark grey silty clay & gravel moist.
31'	37'	wet grey clay & gravel.
37'	260'	bedrock.
		- most water coming from a fracture at 195'

WELL OWNER: Stan Dagneau Hereby Agree work has been completed in accordance with the contract and all material used has been of top quality.
CAPRI DRILLING (1985) LTD. Doug Kilburn
GENERAL REMARKS

IT IS HEREBY AGREED THAT FORMATIONS, QUALITY, QUANTITY AND TYPE OF WATER, ALONG WITH ALL OTHER REMARKS, ARE TRUE ONLY TO THE BEST KNOWLEDGE OF THE PERSONNEL AND COMPANY, AND THEY CANNOT BE HELD RESPONSIBLE FOR A MISTAKE IN CALCULATION.
THE COMPANY WILL NOT BE HELD RESPONSIBLE FOR PUBLIC LIABILITY OR PROPERTY DAMAGE CAUSED BY FLOWING WELL WASH OUTS OR ANY OTHER MISHAPS.
ALL MATERIALS SHALL REMAIN PROPERTY OF CAPRI DRILLING UNTIL ACCOUNT IS PAID IN FULL.

APPENDIX D: Historical Water Quality Data

Okanagan Falls Landfill
Water Quality Results

Analyte	Unit	BH-1	BH-1	BH-1	BH-1	BH-1	BH-1	BH-1	BH-1	BH-1	BH-1	BH-1	BH-1	BH-1	BH-1	BH-1	BH-1	BH-1	BH-1	BH-1	BH-1	BH-1	BH-1	
		02-Oct-12 2100190-03	10-Dec-12 2120464-01	21-Mar-13 3031065-04	27-Jun-13 3061697-04	09-Oct-13 3100686-01	12-Dec-13 3120679-04	20-Mar-14 4031149-06	19-Jun-14 4061398-02	09-Oct-14 4100707-02	17-Dec-14 4121099-02	19-Mar-15 5031324-06	23-Jun-15 5061767-03	17-Sep-15 5091477-03	04-Dec-15 5120411-01	31-Mar-16 6040018-03	23-Jun-16 6062054-05	27-Sep-16 6092035-03	29-Nov-16 6112170-03	21-Mar-17 7031559-02	22-Jun-17 7062246-05	01-Nov-17 7110266-02	22-Mar-18 8031860-02	06-Jul-18 8070560-03
		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	
Benzene	mg/L			<0.0005																				
Ethylbenzene	mg/L			<0.0010																				
Styrene	mg/L			<0.0010																				
Toluene	mg/L			<0.0010																				
Xylenes	mg/L			<0.0020																				
Nutrients																								
Ammonia (total, as N)	mg/L	0.115	<0.020	0.103	0.098	0.034	0.099	0.094	0.098	0.104	0.123	0.105	0.111	0.094	0.157	0.242	0.079	0.093	0.093	0.100	0.117	0.111	0.090	0.126
Nitrate (as N)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.060	<0.010	<0.010	<0.010	<0.010
Nitrate + Nitrite (as N)	mg/L	<0.020	<0.020	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	<0.010	<0.010	<0.020	<0.020	<0.020	<0.020	<0.020	0.0595	<0.0200	<0.0200	<0.0200	<0.0200
Nitrate + Nitrite (as N) (calculated)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.060	<0.010	<0.010	<0.010	<0.010
Nitrite (as N)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total nitrogen	mg/L	0.160	0.295	0.287	0.195	0.214	0.334	0.268	0.206	0.213	0.175	0.347	0.190	0.161										
Total kjeldahl nitrogen	mg/L	0.16	0.30	0.29	0.20	0.21	0.33	0.27	0.21	0.21	0.18	0.34	0.19	0.16										
Orthophosphate (dissolved, as P)	mg/L																							
Phosphorus (dissolved, by ICPMS/ICPOES)	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.020	<0.050	<0.050	<0.050	<0.050	
Phosphorus (total, by ICPMS/ICPOES)	mg/L																							
Potassium (dissolved)	mg/L	1.93	2.04	2.12	1.91	1.85	1.87	1.88	1.96	1.93	2.19	2.18	1.84	1.87	2.08	1.67	2.04	2.07	1.88	2.01	1.93	1.82	1.76	1.74
Potassium (total)	mg/L																							
Total Metals																								
Aluminum (total)	mg/L																							
Antimony (total)	mg/L																							
Arsenic (total)	mg/L																							
Barium (total)	mg/L																							
Beryllium (total)	mg/L																							
Bismuth (total)	mg/L																							
Boron (total)	mg/L																							
Cadmium (total)	mg/L																							
Calcium (total)	mg/L																							
Chromium (total)	mg/L																							
Cobalt (total)	mg/L																							
Copper (total)	mg/L																							
Iron (total)	mg/L																							
Lead (total)	mg/L																							
Lithium (total)	mg/L																							
Magnesium (total)	mg/L																							
Manganese (total)	mg/L																							
Mercury (total)	mg/L																							
Molybdenum (total)	mg/L																							
Nickel (total)	mg/L																							
Selenium (total)	mg/L																							
Silicon (total, as Si)	mg/L																							
Silver (total)	mg/L																							
Sodium (total)	mg/L																							
Strontium (total)	mg/L																							
Sulphur (total)	mg/L																							
Tellurium (total)	mg/L																							
Thallium (total)	mg/L																							
Thorium (total)	mg/L																							
Tin (total)	mg/L																							
Titanium (total)	mg/L																							
Tungsten (total)	mg/L																							
Uranium (total)	mg/L																							
Vanadium (total)	mg/L																							
Zinc (total)	mg/L																							
Zirconium (total)	mg/L																							



Okanagan Falls Landfill
Water Quality Results

Analyte	Unit	BH-1	BH-1	BH-1	BH-1	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	
		27-Nov-18 8112299-05 Normal	15-Apr-19 9041529-03 Normal	17-Apr-19 9041867-03 Normal	01-Aug-19 9080067-03 Normal	29-Sep-09 R06597 Normal	10-Dec-09 S14960 Normal	12-Mar-10 T23045 Normal	17-Jun-10 U88460 Normal	22-Sep-10 K010922-03 Normal	09-Dec-10 K0L0409-02 Normal	31-Mar-11 K1D0017-01 Normal	15-Jun-11 K1F0660-04 Normal	22-Sep-11 K110946-03 Normal	01-Dec-11 K1L0084-03 Normal	14-Mar-12 K2C0529-03 Normal	14-Jun-12 2060838-05 Normal	02-Oct-12 2100190-02 Normal	10-Dec-12 2120464-04 Normal	21-Mar-13 3031065-02 Normal	27-Jun-13 3061697-02 Normal	09-Oct-13 3100686-03 Normal	12-Dec-13 3120679-03 Normal	20-Mar-14 4031149-04 Normal
Benzene	mg/L			<0.0005																				
Ethylbenzene	mg/L			<0.0010																				
Styrene	mg/L			<0.0010																				
Toluene	mg/L			<0.0010																				
Xylenes	mg/L			<0.0020																				
Nutrients																								
Ammonia (total, as N)	mg/L	0.086	0.124	0.144	<0.005	<0.005	0.015	0.033	0.02	0.04	0.03	<0.02	0.02	0.03	<0.01	<0.020	<0.020	<0.020	0.023	<0.020	<0.020	0.021	<0.020	<0.020
Nitrate (as N)	mg/L	<0.010	0.010	<0.010	0.34	0.36	0.3	0.45	0.65	0.61	0.56	0.73	0.502	0.524	0.669	0.621	0.485	0.558	0.530	0.528	0.618	0.631	0.674	0.674
Nitrate + Nitrite (as N)	mg/L	<0.0200	<0.0200	<0.0200	0.34	0.36	0.34	0.46	0.65	0.61	0.56	0.73	0.502	0.524	0.669	0.621	0.485	0.558	0.530	0.528	0.618	0.631	0.674	0.674
Nitrate + Nitrite (as N) (calculated)	mg/L	<0.010	<0.010	<0.010	0.34	0.36	0.3	0.46	0.65	0.61	0.56	0.73	0.502	0.524	0.669	0.621	0.485	0.558	0.530	0.528	0.618	0.631	0.674	0.674
Nitrite (as N)	mg/L	<0.010	<0.010	<0.010	<0.005	<0.005	0.033	0.009	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total nitrogen	mg/L				0.39	0.5	0.38	0.54	0.65	0.67	0.68	0.84	0.59	0.646	0.751	0.713	0.571	0.744	0.694	0.677	0.761	0.782	0.928	0.928
Total kjeldahl nitrogen	mg/L				0.06	0.14	0.05	0.09	<0.05	0.07	0.12	0.1	0.09	0.12	0.08	0.09	0.09	0.19	0.16	0.15	0.14	0.15	0.25	0.25
Orthophosphate (dissolved, as P)	mg/L																							
Phosphorus (dissolved, by ICPMS/ICPOES)	mg/L	<0.050	<0.050	<0.050					0.02	<0.020	<0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02
Phosphorus (total, by ICPMS/ICPOES)	mg/L																							
Potassium (dissolved)	mg/L	1.47	1.66	1.62	2.26	2.59	2.34	2.23	2.46	2.75	2.34	2.42	2.32	2.32	2.42	2.45	2.56	2.58	2.66	2.54	2.33	2.46	2.53	2.53
Potassium (total)	mg/L																							
Total Metals																								
Aluminum (total)	mg/L																							
Antimony (total)	mg/L																							
Arsenic (total)	mg/L																							
Barium (total)	mg/L																							
Beryllium (total)	mg/L																							
Bismuth (total)	mg/L																							
Boron (total)	mg/L																							
Cadmium (total)	mg/L																							
Calcium (total)	mg/L																							
Chromium (total)	mg/L																							
Cobalt (total)	mg/L																							
Copper (total)	mg/L																							
Iron (total)	mg/L																							
Lead (total)	mg/L																							
Lithium (total)	mg/L																							
Magnesium (total)	mg/L																							
Manganese (total)	mg/L																							
Mercury (total)	mg/L																							
Molybdenum (total)	mg/L																							
Nickel (total)	mg/L																							
Selenium (total)	mg/L																							
Silicon (total, as Si)	mg/L																							
Silver (total)	mg/L																							
Sodium (total)	mg/L																							
Strontium (total)	mg/L																							
Sulphur (total)	mg/L																							
Tellurium (total)	mg/L																							
Thallium (total)	mg/L																							
Thorium (total)	mg/L																							
Tin (total)	mg/L																							
Titanium (total)	mg/L																							
Tungsten (total)	mg/L																							
Uranium (total)	mg/L																							
Vanadium (total)	mg/L																							
Zinc (total)	mg/L																							
Zirconium (total)	mg/L																							



Okanagan Falls Landfill
Water Quality Results

Analyte	Unit	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2D	BH-2S	BH-2S		
		18-Jun-14 4061328-01 Normal	08-Oct-14 4100628-02 Normal	17-Dec-14 4121099-04 Normal	19-Mar-15 5031324-07 Normal	23-Jun-15 5061767-04 Normal	17-Sep-15 5091477-04 Normal	04-Dec-15 5120411-03 Normal	31-Mar-16 6040018-04 Normal	23-Jun-16 6062054-06 Normal	27-Sep-16 6092035-04 Normal	29-Nov-16 6112170-05 Normal	21-Mar-17 7031559-06 Normal	22-Jun-17 7062246-06 Normal	01-Nov-17 7110266-04 Normal	03-May-18 8050527-02 Normal	10-Jul-18 8070987-04 Normal	27-Nov-18 8112299-01 Normal	27-Nov-18 8112299-02 Duplicate	27-Nov-18 8112299-03 Duplicate	15-Apr-19 9041529-04 Normal	01-Aug-19 9080067-02 Normal	29-Sep-09 R06595 Normal	10-Dec-09 S14962 Normal
Benzene	mg/L																							
Ethylbenzene	mg/L																							
Styrene	mg/L																							
Toluene	mg/L																							
Xylenes	mg/L																							
Nutrients																								
Ammonia (total, as N)	mg/L	0.023	0.042	0.024	0.037	0.028	<0.020	<0.020	<0.020	0.021	<0.020	0.025	0.052	0.032	0.059	<0.020	<0.020	<0.020	<0.020	0.049	0.051	<0.005	<0.005	
Nitrate (as N)	mg/L	0.734	0.761	0.767	1.05	1.06	0.931	0.878	1.09	1.16	0.917	0.806	0.985	0.942	0.726	0.544	0.487	0.262	0.262	0.258	0.621	0.114	0.19	0.28
Nitrate + Nitrite (as N)	mg/L	0.734	0.761	0.767	1.05	1.06	0.931	0.878	1.09	1.16	0.917	0.806	0.985	0.942	0.726	0.544	0.487	0.262	0.262	0.258	0.621	0.114	0.19	0.28
Nitrate + Nitrite (as N) (calculated)	mg/L	0.734	0.761	0.767	1.05	1.06	0.931	0.878	1.09	1.16	0.917	0.806	0.985	0.942	0.726	0.544	0.487	0.262	0.262	0.258	0.621	0.114	0.19	0.28
Nitrite (as N)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.005	<0.005
Total nitrogen	mg/L	0.958	0.942	0.924	1.17	1.21	1.12															0.42	0.37	
Total kjeldahl nitrogen	mg/L	0.22	0.18	0.16	0.12	0.15	0.19															0.23	0.08	
Orthophosphate (dissolved, as P)	mg/L																							
Phosphorus (dissolved, by ICPMS/ICPOES)	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050		
Phosphorus (total, by ICPMS/ICPOES)	mg/L																							
Potassium (dissolved)	mg/L	2.73	2.54	2.76	2.85	2.60	2.66	2.84	2.32	2.91	2.92	2.94	2.91	2.92	2.60	2.73	2.56	2.41	2.46	2.47	2.86	2.72	3.41	3.89
Potassium (total)	mg/L																							
Total Metals																								
Aluminum (total)	mg/L																							
Antimony (total)	mg/L																							
Arsenic (total)	mg/L																							
Barium (total)	mg/L																							
Beryllium (total)	mg/L																							
Bismuth (total)	mg/L																							
Boron (total)	mg/L																							
Cadmium (total)	mg/L																							
Calcium (total)	mg/L																							
Chromium (total)	mg/L																							
Cobalt (total)	mg/L																							
Copper (total)	mg/L																							
Iron (total)	mg/L																							
Lead (total)	mg/L																							
Lithium (total)	mg/L																							
Magnesium (total)	mg/L																							
Manganese (total)	mg/L																							
Mercury (total)	mg/L																							
Molybdenum (total)	mg/L																							
Nickel (total)	mg/L																							
Selenium (total)	mg/L																							
Silicon (total, as Si)	mg/L																							
Silver (total)	mg/L																							
Sodium (total)	mg/L																							
Strontium (total)	mg/L																							
Sulphur (total)	mg/L																							
Tellurium (total)	mg/L																							
Thallium (total)	mg/L																							
Thorium (total)	mg/L																							
Tin (total)	mg/L																							
Titanium (total)	mg/L																							
Tungsten (total)	mg/L																							
Uranium (total)	mg/L																							
Vanadium (total)	mg/L																							
Zinc (total)	mg/L																							
Zirconium (total)	mg/L																							



Okanagan Falls Landfill
Water Quality Results

Analyte	Unit	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	
		12-Mar-10 T23044 Normal	17-Jun-10 U88459 Normal	22-Sep-10 K0I0922-05 Normal	09-Dec-10 K0L0409-03 Normal	31-Mar-11 K1D0017-04 Normal	15-Jun-11 K1F0660-02 Normal	22-Sep-11 K1I0946-02 Normal	30-Nov-11 K1L0011-01 Normal	14-Mar-12 K2C0529-01 Normal	14-Jun-12 2060838-01 Normal	01-Oct-12 2100082-01 Normal	10-Dec-12 2120464-03 Normal	21-Mar-13 3031065-01 Normal	27-Jun-13 3061697-01 Normal	27-Jun-13 3061697-05 Duplicate	27-Jun-13 3061697-06 Duplicate	27-Jun-13 3061697-07 Duplicate	27-Jun-13 3061697-08 Duplicate	27-Jun-13 3061697-09 Duplicate	27-Jun-13 3061697-10 Duplicate	09-Oct-13 3100686-02 Normal	12-Dec-13 3120679-05 Duplicate
Vanadium (dissolved)	mg/L	<0.005	<0.005	0.0025	0.0026	0.001	0.001	0.001	0.002	0.002	0.002	<0.001	0.002	0.002	0.002						0.002	0.004	0.004
Zinc (dissolved)	mg/L	<0.005	<0.005	0.0042	0.0044	<0.0040	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004						<0.004	<0.004	<0.004
Zirconium (dissolved)	mg/L	<0.0005	<0.0005	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001						<0.0001	<0.0001	<0.0001
General																							
Bicarbonate alkalinity (as HCO3)	mg/L	420	420																				
Carbonate alkalinity (as CO3)	mg/L	<0.5	<0.5																				
Hydroxide alkalinity (as OH)	mg/L	<0.5	<0.5																				
Alkalinity (bicarbonate, as CaCO3)	mg/L			379	378	381	393	395	369	407	417	431	420	443	413						432	437	442
Alkalinity (carbonate, as CaCO3)	mg/L			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0						<1.0	<1.0	<1.0
Alkalinity (hydroxide, as CaCO3)	mg/L			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0						<1.0	<1.0	<1.0
Alkalinity (phenolphthalein, as CaCO3)	mg/L	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0						<1.0	<1.0	<1.0
Alkalinity (total, as CaCO3)	mg/L	340	340	379	378	381	393	395	369	407	417	431	420	443	413						432	437	442
Biochemical oxygen demand	mg/L		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10						<10	<10	<10
Bromide	mg/L																						
Total organic carbon	mg/L																						
Chemical oxygen demand	mg/L		70		8	<5	<5	<5	<5	16	11	29	29	36	19						18	11	15
Chloride	mg/L	21	32	43.8	48.6	53.6	63	65.4	70.7	104	110	123	98.3		78.8						86.5	83.9	84.9
Colour	CU																						
Conductivity	µS/cm	764	803	901	904	971	988	1090	1030	1310	<0	1600	1510	1620	1420						1480	1510	1510
Total cyanide	mg/L																						
Fluoride	mg/L	0.69	0.58	0.66	0.66	0.76	0.73	0.61	0.87	0.97	0.41	0.10	0.42		0.45						0.54	0.51	0.53
Hardness (as CaCO3), dissolved	mg/L	347	355	409	438	412	450	440	468	500	607	725	673	799	622						611	645	634
Hardness (as CaCO3), from total Ca/Mg	mg/L																						
Langelier Index																							
pH		8.1	8	7.85	7.79	7.77	7.71	7.8	7.75	7.77	7.84	7.71	7.57	7.74	7.86						7.75	7.72	7.74
Total dissolved solids (computed)	mg/L																						
Sulphate	mg/L	210	61	67	65.4	77.4	89.9	95.6	105	166	202	325	257		223						266	262	265
Temperature of observed pH	°C																						
Turbidity	NTU																						
Halogenated Methanes																							
Bromodichloromethane	mg/L																						
Bromoform	mg/L																						
Carbon tetrachloride	mg/L																						
Chloroform	mg/L																						
Dibromochloromethane	mg/L																						
Dibromomethane	mg/L																						
Dichloromethane	mg/L																						
Total Trihalomethanes (calculated)	mg/L																						
Trichlorofluoromethane	mg/L																						
Microbiological																							
Background bacteria	CFU/100 mL																						
Total coliforms (counts)	CFU/100 mL																						
Total coliforms (MPN)	MPN/100 mL																						
E. coli (counts)	CFU/100 mL																						
E. coli (MPN)	MPN/100 mL																						
Heterotrophic plate count (counts)	CFU/mL																						
Heterotrophic plate count (MPN)	MPN/mL																						
Miscellaneous Organic Substances																							
Chloroethane	mg/L																						
1,2-Dibromoethane	mg/L																						
1,2-Dichloropropane	mg/L																						
cis-1,3-Dichloropropene	mg/L																						
trans-1,3-Dichloropropene	mg/L																						
1,3-Dichloropropene (cis + trans)	mg/L																						
Methyl tert-butyl ether (MTBE)	mg/L																						
VHw6-10	mg/L																						
Vinyl chloride	mg/L																						
VPHw	mg/L																						
Monocyclic Aromatic Hydrocarbons (MAHs)																							

Okanagan Falls Landfill
Water Quality Results

Analyte	Unit	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S		
		12-Mar-10 T23044 Normal	17-Jun-10 U88459 Normal	22-Sep-10 K010922-05 Normal	09-Dec-10 K0L0409-03 Normal	31-Mar-11 K1D0017-04 Normal	15-Jun-11 K1F0660-02 Normal	22-Sep-11 K110946-02 Normal	30-Nov-11 K1L0011-01 Normal	14-Mar-12 K2C0529-01 Normal	14-Jun-12 2060838-01 Normal	01-Oct-12 2100082-01 Normal	10-Dec-12 2120464-03 Normal	21-Mar-13 3031065-01 Normal	27-Jun-13 3061697-01 Normal	27-Jun-13 3061697-05 Duplicate	27-Jun-13 3061697-06 Duplicate	27-Jun-13 3061697-07 Duplicate	27-Jun-13 3061697-08 Duplicate	27-Jun-13 3061697-09 Duplicate	27-Jun-13 3061697-10 Duplicate	09-Oct-13 3100686-02 Normal	12-Dec-13 3120679-05 Duplicate	12-Dec-13 3120679-06 Duplicate
Benzene	mg/L																							
Ethylbenzene	mg/L																							
Styrene	mg/L																							
Toluene	mg/L																							
Xylenes	mg/L																							
Nutrients																								
Ammonia (total, as N)	mg/L	<0.005	0.056	0.09	0.04	0.12	0.02	0.04	0.05	0.02	<0.020	0.054	0.947	0.043	0.040							0.128	0.030	0.039
Nitrate (as N)	mg/L	3.7	0.22	0.45	0.58	1	1.3	2.2	3.85	6.11	7.31	3.63	10.0		8.30	8.35	8.46	8.58	8.33	8.50	8.48	8.18	9.15	9.23
Nitrate + Nitrite (as N)	mg/L	3.7	0.22	0.45	0.58	1	1.3	2.2	3.85	6.11	7.31	3.63	10.1		8.30							8.23	9.17	9.26
Nitrate + Nitrite (as N) (calculated)	mg/L	3.7	0.22	0.45	0.58	1	1.3	2.2	3.85	6.11	7.31	3.63	10.1		8.30							8.24	9.18	9.25
Nitrite (as N)	mg/L	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	0.094		<0.010							0.056	0.026	0.024
Total nitrogen	mg/L	0.45	0.81	0.81	0.85	1.33	1.68	2.51	5.67	6.70	8.19	4.65	11.2		9.35							9.60	10.4	10.7
Total kjeldahl nitrogen	mg/L	0.1	0.22	0.36	0.27	0.33	0.37	0.31	1.82	0.59	0.87	1.02	1.11	1.22	1.05							1.36	1.18	1.46
Orthophosphate (dissolved, as P)	mg/L																							
Phosphorus (dissolved, by ICPMS/ICPOES)	mg/L			<0.020	<0.020	<0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02							<0.02	<0.02	<0.02
Phosphorus (total, by ICPMS/ICPOES)	mg/L																							
Potassium (dissolved)	mg/L	3.5	3.46	4.12	4.56	3.89	4.12	3.96	4.34	4.36	4.69	5.54	5.27	5.92	4.93							4.74	4.96	4.97
Potassium (total)	mg/L																							
Total Metals																								
Aluminum (total)	mg/L																							
Antimony (total)	mg/L																							
Arsenic (total)	mg/L																							
Barium (total)	mg/L																							
Beryllium (total)	mg/L																							
Bismuth (total)	mg/L																							
Boron (total)	mg/L																							
Cadmium (total)	mg/L																							
Calcium (total)	mg/L																							
Chromium (total)	mg/L																							
Cobalt (total)	mg/L																							
Copper (total)	mg/L																							
Iron (total)	mg/L																							
Lead (total)	mg/L																							
Lithium (total)	mg/L																							
Magnesium (total)	mg/L																							
Manganese (total)	mg/L																							
Mercury (total)	mg/L																							
Molybdenum (total)	mg/L																							
Nickel (total)	mg/L																							
Selenium (total)	mg/L																							
Silicon (total, as Si)	mg/L																							
Silver (total)	mg/L																							
Sodium (total)	mg/L																							
Strontium (total)	mg/L																							
Sulphur (total)	mg/L																							
Tellurium (total)	mg/L																							
Thallium (total)	mg/L																							
Thorium (total)	mg/L																							
Tin (total)	mg/L																							
Titanium (total)	mg/L																							
Tungsten (total)	mg/L																							
Uranium (total)	mg/L																							
Vanadium (total)	mg/L																							
Zinc (total)	mg/L																							
Zirconium (total)	mg/L																							



Okanagan Falls Landfill
Water Quality Results

Analyte	Unit	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	
		12-Dec-13 3120679-01	20-Mar-14 4031149-03	19-Jun-14 4061398-01	08-Oct-14 4100628-01	17-Dec-14 4121099-01	19-Mar-15 5031324-01	19-Mar-15 5031324-02	19-Mar-15 5031324-03	23-Jun-15 5061767-01	17-Sep-15 5091477-01	04-Dec-15 5120411-02	31-Mar-16 6040018-01	23-Jun-16 6062054-01	23-Jun-16 6062054-02	23-Jun-16 6062054-03	27-Sep-16 6092035-01	29-Nov-16 6112170-01	21-Mar-17 7031559-01	22-Jun-17 7062246-02	22-Jun-17 7062246-01	22-Jun-17 7062246-03	01-Nov-17 7110266-03	03-May-18 8050527-01
		Normal	Normal	Normal	Normal	Normal	Normal	Duplicate	Duplicate	Normal	Normal	Normal	Normal	Duplicate	Duplicate	Normal	Normal	Normal	Duplicate	Normal	Duplicate	Normal	Normal	
Benzene	mg/L																							
Ethylbenzene	mg/L															<0.0005								
Styrene	mg/L															<0.0010								
Toluene	mg/L															<0.0010								
Xylenes	mg/L															<0.0020								
Nutrients																								
Ammonia (total, as N)	mg/L	0.051	0.025	0.025	0.054	0.044	0.049	0.047	0.049	0.208	<0.020	0.020	0.035	<0.020	<0.020	<0.020	0.021	<0.020	<0.020	0.084	0.038	0.044	0.023	0.037
Nitrate (as N)	mg/L	9.92	7.15	5.74	5.66	6.90	6.33	6.48	6.59	5.92	5.18	3.99	5.09	3.93	3.96	3.90	3.11	3.37	2.82	2.34	2.38	2.48	2.10	2.09
Nitrate + Nitrite (as N)	mg/L	9.94	7.15	5.74	5.66	6.90	6.33	6.48	6.59	5.92	5.18	3.99	5.09	3.93	3.96	3.90	3.11	3.37	2.82	2.34	2.38	2.48	2.15	2.09
Nitrate + Nitrite (as N) (calculated)	mg/L	9.95	7.15	5.74	5.66	6.90	6.33	6.48	6.59	5.92	5.18	3.99	5.09	3.93	3.96	3.90	3.11	3.37	2.82	2.34	2.38	2.48	2.15	2.09
Nitrite (as N)	mg/L	0.027	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.050	<0.010
Total nitrogen	mg/L	11.2	8.22	6.69	6.56	8.00	7.30	7.35	7.44	6.95	6.19													
Total kjeldahl nitrogen	mg/L	1.24	1.07	0.96	0.90	1.10	0.97	0.87	0.85	1.03	1.00													
Orthophosphate (dissolved, as P)	mg/L																							
Phosphorus (dissolved, by ICPMS/ICPOES)	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	0.03	0.03	0.03	<0.02	<0.02	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050
Phosphorus (total, by ICPMS/ICPOES)	mg/L																							
Potassium (dissolved)	mg/L	5.11	5.61	5.25	5.58	6.30	6.02	6.44	5.78	5.59	5.73	6.32	5.08	6.46	6.52	6.39	6.04	5.76	5.97	5.43	5.25	5.68	4.75	4.82
Potassium (total)	mg/L																							
Total Metals																								
Aluminum (total)	mg/L																							
Antimony (total)	mg/L																							
Arsenic (total)	mg/L																							
Barium (total)	mg/L																							
Beryllium (total)	mg/L																							
Bismuth (total)	mg/L																							
Boron (total)	mg/L																							
Cadmium (total)	mg/L																							
Calcium (total)	mg/L																							
Chromium (total)	mg/L																							
Cobalt (total)	mg/L																							
Copper (total)	mg/L																							
Iron (total)	mg/L																							
Lead (total)	mg/L																							
Lithium (total)	mg/L																							
Magnesium (total)	mg/L																							
Manganese (total)	mg/L																							
Mercury (total)	mg/L																							
Molybdenum (total)	mg/L																							
Nickel (total)	mg/L																							
Selenium (total)	mg/L																							
Silicon (total, as Si)	mg/L																							
Silver (total)	mg/L																							
Sodium (total)	mg/L																							
Strontium (total)	mg/L																							
Sulphur (total)	mg/L																							
Tellurium (total)	mg/L																							
Thallium (total)	mg/L																							
Thorium (total)	mg/L																							
Tin (total)	mg/L																							
Titanium (total)	mg/L																							
Tungsten (total)	mg/L																							
Uranium (total)	mg/L																							
Vanadium (total)	mg/L																							
Zinc (total)	mg/L																							
Zirconium (total)	mg/L																							



Okanagan Falls Landfill
Water Quality Results

Analyte	Unit	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	
		06-Jul-18 8070560-01 Normal	26-Nov-18 8112138-01 Normal	15-Apr-19 9041529-01 Normal	30-Jul-19 9080145-01 Normal	14-Nov-19 N001917-02 Normal	25-Jun-20 0062745-01 Normal	25-Jun-20 0062745-02 Duplicate	25-Jun-20 0062745-03 Duplicate	03-Nov-20 20K0480-01 Normal	15-Apr-21 21D1742-01 Normal	06-Jul-21 21G0823-01 Normal	03-Nov-21 21K0711-01 Normal	30-Mar-22 22D0026-01 Normal	13-Jul-22 22G1860-01 Normal	17-Nov-22 22K2319-01 Normal	04-Apr-23 23D0472-01 Normal	17-Jul-23 23G2321-01 Normal	17-Jul-23 23G2321-02 Duplicate	17-Jul-23 23G2321-03 Duplicate	15-Nov-23 23K2023-01 Normal	10-Apr-24 24D1771-01 Normal	25-Jul-24 24G3474-01 Normal	25-Jul-24 24G3474-02 Duplicate
Benzene	mg/L																							
Ethylbenzene	mg/L																							
Styrene	mg/L																							
Toluene	mg/L																							
Xylenes	mg/L																							
Nutrients																								
Ammonia (total, as N)	mg/L	<0.020	0.024	0.052	0.028	0.096	<0.050	<0.050	<0.050	<0.050	0.066	<0.050	<0.050	1.12	<0.050	<0.050	<0.050	0.061	0.061	0.056	<0.050	<0.050	<0.050	<0.050
Nitrate (as N)	mg/L	2.15	2.29	2.45	2.53	2.45	2.44	2.48	2.50	2.18	2.41	2.33	2.22	2.08	2.26	2.02	1.66	1.49	1.51	1.54	1.41	1.43	1.12	1.16
Nitrate + Nitrite (as N)	mg/L	2.15	2.29	2.45	2.53	2.45	2.44	2.48	2.50	2.18	2.41	2.33	2.22	2.08	2.26	2.02	1.66	1.49	1.51	1.54	1.41	1.43	1.12	1.16
Nitrate + Nitrite (as N) (calculated)	mg/L	2.15	2.29	2.45	2.53	2.45	2.44	2.48	2.50	2.18	2.41	2.33	2.22	2.08	2.26	2.02	1.66	1.49	1.51	1.54	1.41	1.43	1.12	1.16
Nitrite (as N)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total nitrogen	mg/L																							
Total kjeldahl nitrogen	mg/L																							
Orthophosphate (dissolved, as P)	mg/L																							
Phosphorus (dissolved, by ICPMS/ICPOES)	mg/L	0.053	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
Phosphorus (total, by ICPMS/ICPOES)	mg/L																							
Potassium (dissolved)	mg/L	4.74	4.83	4.73	4.50	4.68	4.97	5.02	4.99	5.77	5.00	5.55	4.94	5.24	5.71	5.79	6.17	5.50	5.46	5.44	6.39	5.73	6.24	6.25
Potassium (total)	mg/L																							
Total Metals																								
Aluminum (total)	mg/L																							
Antimony (total)	mg/L																							
Arsenic (total)	mg/L																							
Barium (total)	mg/L																							
Beryllium (total)	mg/L																							
Bismuth (total)	mg/L																							
Boron (total)	mg/L																							
Cadmium (total)	mg/L																							
Calcium (total)	mg/L																							
Chromium (total)	mg/L																							
Cobalt (total)	mg/L																							
Copper (total)	mg/L																							
Iron (total)	mg/L																							
Lead (total)	mg/L																							
Lithium (total)	mg/L																							
Magnesium (total)	mg/L																							
Manganese (total)	mg/L																							
Mercury (total)	mg/L																							
Molybdenum (total)	mg/L																							
Nickel (total)	mg/L																							
Selenium (total)	mg/L																							
Silicon (total, as Si)	mg/L																							
Silver (total)	mg/L																							
Sodium (total)	mg/L																							
Strontium (total)	mg/L																							
Sulphur (total)	mg/L																							
Tellurium (total)	mg/L																							
Thallium (total)	mg/L																							
Thorium (total)	mg/L																							
Tin (total)	mg/L																							
Titanium (total)	mg/L																							
Tungsten (total)	mg/L																							
Uranium (total)	mg/L																							
Vanadium (total)	mg/L																							
Zinc (total)	mg/L																							
Zirconium (total)	mg/L																							



Okanagan Falls Landfill
Water Quality Results

Analyte	Unit	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-2S	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	
		25-Jul-24 24G3474-03	14-Nov-24 24K1877-01	08-Apr-25 25D1284-01	24-Jul-25 25G3733-01	24-Jul-25 25G3733-02	24-Jul-25 25G3733-03	05-Nov-25 25K0747-01	29-Sep-09 R06596	10-Dec-09 S14961	12-Mar-10 T23042	17-Jun-10 U88458	22-Sep-10 K0I0922-01	09-Dec-10 K0L0409-04	31-Mar-11 K1D0017-03	15-Jun-11 K1F0660-03	15-Jun-11 K1F0660-05	22-Sep-11 K1I0946-01	01-Dec-11 K1L0084-01	14-Mar-12 K2C0529-04	14-Jun-12 2060838-02	02-Oct-12 2100190-01	10-Dec-12 2120464-02	21-Mar-13 3031065-03
		Duplicate	Normal	Normal	Normal	Duplicate	Duplicate	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Duplicate	Normal	Normal	Normal	Normal	Normal	Normal	
Benzene	mg/L																						<0.0005	
Ethylbenzene	mg/L																						<0.0010	
Styrene	mg/L																						<0.0010	
Toluene	mg/L																						<0.0010	
Xylenes	mg/L																						<0.0020	
Nutrients																								
Ammonia (total, as N)	mg/L	<0.050	0.059	<0.050	<0.050	<0.050	<0.050	<0.050	<0.005	<0.005	<0.005	0.062	<0.02	0.02	<0.02	<0.02	0.01	0.01	<0.01	<0.020	0.022	0.089	<0.020	
Nitrate (as N)	mg/L	1.17	0.723	<0.010	1.67	1.03	0.942	0.931	4.3	1.62	6.3	1.92	1.31	0.97	5.51	0.86	0.349	0.163	5.42	0.696	0.364	1.24	1.66	
Nitrate + Nitrite (as N)	mg/L	1.17	0.723	<0.0100	1.67	1.03	0.942	0.931	4.3	1.63	6.3	1.92	1.31	0.97	5.59	0.86	0.349	0.163	5.42	0.696	0.364	1.24	1.66	
Nitrate + Nitrite (as N) (calculated)	mg/L	1.17	0.723	<0.010	1.67	1.03	0.942	0.931	4.3	1.63	6.3	1.92	1.31	0.97	5.60	0.86	0.349	0.163	5.42	0.696	0.364	1.24	1.66	
Nitrite (as N)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.047	0.007	0.008	<0.005	<0.01	<0.01	0.09	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	
Total nitrogen	mg/L								4.6	2.02	6.7	2.48	1.5	1.09	6.52	0.96	1.53	0.442	0.37	6.02	0.886	0.514	1.64	2.16
Total kjeldahl nitrogen	mg/L								0.3	0.4	0.4	0.56	0.19	0.12	0.93	0.1	0.69	0.09	0.21	0.61	0.19	0.15	0.40	0.50
Orthophosphate (dissolved, as P)	mg/L																							
Phosphorus (dissolved, by ICPMS/ICPOES)	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050					0.023	0.02	<0.020	<0.02	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.02	<0.02
Phosphorus (total, by ICPMS/ICPOES)	mg/L																							
Potassium (dissolved)	mg/L	6.14	6.39	6.19	5.90	5.70	6.35	5.97	3.22	3.18	3.82	3.23	2.91	3.17	4.43	2.46	2.43	2.32	2.43	3.64	2.53	2.46	3.47	4.86
Potassium (total)	mg/L																							
Total Metals																								
Aluminum (total)	mg/L																							
Antimony (total)	mg/L																							
Arsenic (total)	mg/L																							
Barium (total)	mg/L																							
Beryllium (total)	mg/L																							
Bismuth (total)	mg/L																							
Boron (total)	mg/L																							
Cadmium (total)	mg/L																							
Calcium (total)	mg/L																							
Chromium (total)	mg/L																							
Cobalt (total)	mg/L																							
Copper (total)	mg/L																							
Iron (total)	mg/L																							
Lead (total)	mg/L																							
Lithium (total)	mg/L																							
Magnesium (total)	mg/L																							
Manganese (total)	mg/L																							
Mercury (total)	mg/L																							
Molybdenum (total)	mg/L																							
Nickel (total)	mg/L																							
Selenium (total)	mg/L																							
Silicon (total, as Si)	mg/L																							
Silver (total)	mg/L																							
Sodium (total)	mg/L																							
Strontium (total)	mg/L																							
Sulphur (total)	mg/L																							
Tellurium (total)	mg/L																							
Thallium (total)	mg/L																							
Thorium (total)	mg/L																							
Tin (total)	mg/L																							
Titanium (total)	mg/L																							
Tungsten (total)	mg/L																							
Uranium (total)	mg/L																							
Vanadium (total)	mg/L																							
Zinc (total)	mg/L																							
Zirconium (total)	mg/L																							



Okanagan Falls Landfill
Water Quality Results

Analyte	Unit	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	BH-3	
		27-Jun-13 3061697-03	09-Oct-13 3100686-04	12-Dec-13 3120679-07	20-Mar-14 4031149-01	18-Jun-14 4061328-02	09-Oct-14 4100707-01	17-Dec-14 4121099-03	19-Mar-15 5031324-05	23-Jun-15 5061767-02	17-Sep-15 5091477-02	04-Dec-15 5120411-04	31-Mar-16 6040018-02	23-Jun-16 6062054-04	27-Sep-16 6092035-02	29-Nov-16 6112170-02	21-Mar-17 7031559-03	22-Jun-17 7062246-04	01-Nov-17 7110266-01	22-Mar-18 8031860-01	06-Jul-18 8070560-02	27-Nov-18 8112299-04	15-Apr-19 9041529-02	01-Aug-19 9080067-01
		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	
Benzene	mg/L																							
Ethylbenzene	mg/L																							
Styrene	mg/L																							
Toluene	mg/L																							
Xylenes	mg/L																							
Nutrients																								
Ammonia (total, as N)	mg/L	<0.020	<0.020	0.024	0.023	<0.020	<0.020	0.023	0.024	0.032	<0.020	0.020	<0.020	<0.020	<0.020	<0.020	0.035	0.074	0.032	0.064	0.094	<0.020	0.052	0.068
Nitrate (as N)	mg/L	0.925	0.517	0.574	1.09	0.338	0.395	3.00	1.93	0.704	0.412	0.268	6.57	0.794	0.087	1.26	10.5	3.42	0.331	12.4	0.488	0.571	2.88	0.104
Nitrate + Nitrite (as N)	mg/L	0.925	0.517	0.574	1.09	0.338	0.395	3.00	1.93	0.704	0.412	0.268	6.58	0.794	0.087	1.26	10.5	3.44	0.331	12.4	0.488	0.571	2.88	<0.110
Nitrate + Nitrite (as N) (calculated)	mg/L	0.925	0.517	0.574	1.09	0.338	0.395	3.00	1.93	0.704	0.412	0.268	6.59	0.794	0.087	1.26	10.5	3.43	0.331	12.4	0.488	0.571	2.88	0.104
Nitrite (as N)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.014	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total nitrogen	mg/L	1.41	1.03	0.816	1.55	0.611	0.575	4.08	2.37	1.02	0.576													
Total kjeldahl nitrogen	mg/L	0.48	0.51	0.24	0.47	0.27	0.18	1.08	0.44	0.31	0.16													
Orthophosphate (dissolved, as P)	mg/L																							
Phosphorus (dissolved, by ICPMS/ICPOES)	mg/L	0.06	<0.02	<0.02	<0.02	<0.02	<0.02	0.05	<0.02	0.03	<0.02	<0.02	0.12	0.07	<0.02	<0.02	0.126	0.233	<0.050	0.149	0.290	<0.050	<0.050	<0.050
Phosphorus (total, by ICPMS/ICPOES)	mg/L																							
Potassium (dissolved)	mg/L	4.55	2.56	2.36	3.38	2.84	2.60	6.89	4.98	3.69	2.68	2.67	12.0	5.75	3.14	4.26	13.2	18.2	3.63	13.8	14.9	5.39	7.00	4.09
Potassium (total)	mg/L																							
Total Metals																								
Aluminum (total)	mg/L																							
Antimony (total)	mg/L																							
Arsenic (total)	mg/L																							
Barium (total)	mg/L																							
Beryllium (total)	mg/L																							
Bismuth (total)	mg/L																							
Boron (total)	mg/L																							
Cadmium (total)	mg/L																							
Calcium (total)	mg/L																							
Chromium (total)	mg/L																							
Cobalt (total)	mg/L																							
Copper (total)	mg/L																							
Iron (total)	mg/L																							
Lead (total)	mg/L																							
Lithium (total)	mg/L																							
Magnesium (total)	mg/L																							
Manganese (total)	mg/L																							
Mercury (total)	mg/L																							
Molybdenum (total)	mg/L																							
Nickel (total)	mg/L																							
Selenium (total)	mg/L																							
Silicon (total, as Si)	mg/L																							
Silver (total)	mg/L																							
Sodium (total)	mg/L																							
Strontium (total)	mg/L																							
Sulphur (total)	mg/L																							
Tellurium (total)	mg/L																							
Thallium (total)	mg/L																							
Thorium (total)	mg/L																							
Tin (total)	mg/L																							
Titanium (total)	mg/L																							
Tungsten (total)	mg/L																							
Uranium (total)	mg/L																							
Vanadium (total)	mg/L																							
Zinc (total)	mg/L																							
Zirconium (total)	mg/L																							



Okanagan Falls Landfill
Water Quality Results

Analyte	Unit	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4	MW17-4
		02-Nov-21 21K0630-01	31-Mar-22 22D0147-04	13-Jul-22 22G1860-06	17-Nov-22 22K2319-07	05-Apr-23 23D0621-04	18-Jul-23 23G2483-04	16-Nov-23 23K2044-02	11-Apr-24 24D1772-05	29-Jul-24 24G3818-03	15-Nov-24 24K1920-03	09-Apr-25 25D1483-01	24-Jul-25 25G3733-07	05-Nov-25 25K0747-03	04-Dec-17 7120239-01	04-May-18 8050566-02	10-Jul-18 8070987-05	27-Nov-18 8112299-07	17-Apr-19 9041867-02	01-Aug-19 9080067-05	13-Nov-19 N0017776-02	25-Jun-20 0062745-07	04-Nov-20 20K0625-01	21-Apr-21 21D2450-02
Benzene	mg/L	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
Ethylbenzene	mg/L																							
Styrene	mg/L																							
Toluene	mg/L																							
Xylenes	mg/L																							
Nutrients																								
Ammonia (total, as N)	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.054	<0.050	<0.050	<0.050	<0.020	0.094	<0.020	0.130	0.056	0.058	0.050	<0.050	<0.050	<0.050	<0.050
Nitrate (as N)	mg/L	0.768	1.00	1.37	0.746	1.10	0.180	0.090	0.687	0.024	<0.010	0.012	0.015	0.911	<0.010	<0.010	<0.010	0.022	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate + Nitrite (as N)	mg/L	0.768	1.00	1.37	0.746	1.10	0.180	0.0895	0.687	0.0236	<0.0100	0.0122	0.0153	0.911	<0.0200	<0.0200	<0.0200	0.0217	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200
Nitrate + Nitrite (as N) (calculated)	mg/L	0.768	1.00	1.37	0.746	1.10	0.180	0.090	0.687	0.024	<0.010	0.012	0.015	0.911	<0.010	<0.010	<0.010	0.022	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrite (as N)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total nitrogen	mg/L				0.918	1.31	0.336																	
Total kjeldahl nitrogen	mg/L				0.172	0.201	0.156																	
Orthophosphate (dissolved, as P)	mg/L													<0.010										
Phosphorus (dissolved, by ICPMS/ICPOES)	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1.07	<0.050	<0.050	0.230	0.093	<0.050	<0.050	<0.050	<0.050	<0.050	
Phosphorus (total, by ICPMS/ICPOES)	mg/L																							
Potassium (dissolved)	mg/L	4.00	3.81	3.98	4.34	4.12	4.21	4.35	4.27	4.31	4.20	3.73	3.68	4.03	2.34	2.24	2.01	1.94	2.15	2.05	2.01	2.19	2.09	2.11
Potassium (total)	mg/L																							
Total Metals																								
Aluminum (total)	mg/L																							
Antimony (total)	mg/L																							
Arsenic (total)	mg/L																							
Barium (total)	mg/L																							
Beryllium (total)	mg/L																							
Bismuth (total)	mg/L																							
Boron (total)	mg/L																							
Cadmium (total)	mg/L																							
Calcium (total)	mg/L																							
Chromium (total)	mg/L																							
Cobalt (total)	mg/L																							
Copper (total)	mg/L																							
Iron (total)	mg/L																							
Lead (total)	mg/L																							
Lithium (total)	mg/L																							
Magnesium (total)	mg/L																							
Manganese (total)	mg/L																							
Mercury (total)	mg/L																							
Molybdenum (total)	mg/L																							
Nickel (total)	mg/L																							
Selenium (total)	mg/L																							
Silicon (total, as Si)	mg/L																							
Silver (total)	mg/L																							
Sodium (total)	mg/L																							
Strontium (total)	mg/L																							
Sulphur (total)	mg/L																							
Tellurium (total)	mg/L																							
Thallium (total)	mg/L																							
Thorium (total)	mg/L																							
Tin (total)	mg/L																							
Titanium (total)	mg/L																							
Tungsten (total)	mg/L																							
Uranium (total)	mg/L																							
Vanadium (total)	mg/L																							
Zinc (total)	mg/L																							
Zirconium (total)	mg/L																							



Okanagan Falls Landfill
Water Quality Results

Analyte	Unit	MW17-5D	MW17-5D	MW17-5D	MW17-5D	MW17-5D	MW17-5D	MW17-5D	MW17-5D	MW17-5D	MW17-5D	MW17-5D	MW17-5D	MW17-5D	MW17-5D	MW17-5S	MW17-5S	MW17-5S	MW17-5S	MW17-5S	MW17-5S	MW17-5S	MW17-5S	
		07-Jul-21 21G0928-03	03-Nov-21 21K0711-05	31-Mar-22 22D0147-03	13-Jul-22 22G1860-05	17-Nov-22 22K2319-03	05-Apr-23 23D0621-03	18-Jul-23 23G2483-03	16-Nov-23 23K2044-04RE1	16-Nov-23 23K2044-04RE1	11-Apr-24 24D1772-04	29-Jul-24 24G3818-02	15-Nov-24 24K1920-01	08-Apr-25 25D1284-05	24-Jul-25 25G3733-06	05-Nov-25 25K0747-02	30-Nov-17 7120105-01	08-May-18 8050934-01	11-Jul-18 8071174-01	27-Nov-18 8112299-06	15-Apr-19 9041529-05	01-Aug-19 9080067-04	01-Aug-19 9080067-04	01-Aug-19 9080067-07
Benzene	mg/L																							
Ethylbenzene	mg/L																							
Styrene	mg/L																							
Toluene	mg/L																							
Xylenes	mg/L																							
Nutrients																								
Ammonia (total, as N)	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050		<0.050	<0.050	0.054	<0.050	<0.050	0.508	0.115	0.214	0.254	0.038	0.119			0.369
Nitrate (as N)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	3.00	5.68	3.29	1.73	0.096	0.053			<0.010
Nitrate + Nitrite (as N)	mg/L	<0.0200	<0.0200	<0.0200	<0.0200	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100		5.84	3.73	2.52	0.0961	0.0526			<0.0200
Nitrate + Nitrite (as N) (calculated)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	3.00	5.85	3.72	2.52	0.096	0.053			<0.010
Nitrite (as N)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.500	0.167	0.434	0.791	<0.010	<0.010			<0.010
Total nitrogen	mg/L					<0.0500	0.145	0.134																
Total kjeldahl nitrogen	mg/L					<0.050	0.145	0.134																
Orthophosphate (dissolved, as P)	mg/L															<0.500								
Phosphorus (dissolved, by ICPMS/ICPOES)	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.500	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Phosphorus (total, by ICPMS/ICPOES)	mg/L																							
Potassium (dissolved)	mg/L	2.19	2.03	2.16	2.23	2.14	2.28	2.15	2.28		2.32	2.35	2.29	2.20	2.15	2.24	13.7	8.68	8.00	6.86	6.17	5.60	5.53	5.27
Potassium (total)	mg/L																							
Total Metals																								
Aluminum (total)	mg/L																							
Antimony (total)	mg/L																							
Arsenic (total)	mg/L																							
Barium (total)	mg/L																							
Beryllium (total)	mg/L																							
Bismuth (total)	mg/L																							
Boron (total)	mg/L																							
Cadmium (total)	mg/L																							
Calcium (total)	mg/L																							
Chromium (total)	mg/L																							
Cobalt (total)	mg/L																							
Copper (total)	mg/L																							
Iron (total)	mg/L																							
Lead (total)	mg/L																							
Lithium (total)	mg/L																							
Magnesium (total)	mg/L																							
Manganese (total)	mg/L																							
Mercury (total)	mg/L																							
Molybdenum (total)	mg/L																							
Nickel (total)	mg/L																							
Selenium (total)	mg/L																							
Silicon (total, as Si)	mg/L																							
Silver (total)	mg/L																							
Sodium (total)	mg/L																							
Strontium (total)	mg/L																							
Sulphur (total)	mg/L																							
Tellurium (total)	mg/L																							
Thallium (total)	mg/L																							
Thorium (total)	mg/L																							
Tin (total)	mg/L																							
Titanium (total)	mg/L																							
Tungsten (total)	mg/L																							
Uranium (total)	mg/L																							
Vanadium (total)	mg/L																							
Zinc (total)	mg/L																							
Zirconium (total)	mg/L																							



Okanagan Falls Landfill
Water Quality Results

Analyte	Unit	MW17-5S	MW17-5S	MW17-5S	MW17-5S	MW17-5S	MW17-5S	MW17-5S	MW17-5S	MW17-5S	MW17-5S	MW17-5S	MW17-5S	MW17-5S	MW17-5S	MW19-1	MW19-1	MW19-1	MW19-1	MW19-1	MW19-1	MW19-1	
		25-Jun-20 0062745-06	09-Nov-20 20K1139-01	09-Nov-20 20K1139-02	21-Apr-21 21D2450-01	07-Jul-21 21G0928-02	03-Nov-21 21K0711-04	31-Mar-22 22D0147-02	13-Jul-22 22G1860-04	17-Nov-22 22K2319-02	05-Apr-23 23D0621-02	18-Jul-23 23G2483-02	16-Nov-23 23K2044-03	11-Apr-24 24D1772-02	29-Jul-24 24G3818-01	08-Apr-25 25D1284-04	29-Nov-19 9111282-01	25-Jun-20 0062745-05	03-Nov-20 20K0480-03	15-Apr-21 21D1742-03	06-Jul-21 21G0823-03	03-Nov-21 21K0711-03	30-Mar-22 22D0026-03
Benzene	mg/L													<0.0005									
Ethylbenzene	mg/L													<0.0010									
Styrene	mg/L													<0.0010									
Toluene	mg/L													0.0041									
Xylenes	mg/L													<0.0020									
Nutrients																							
Ammonia (total, as N)	mg/L	<0.050	<0.050	0.052	<0.050	0.073	<0.050	<0.050	<0.050	<0.050	0.163	<0.050	<0.050	<0.050	0.057	0.062	0.107	0.078	0.090	0.076	0.067	0.080	0.051
Nitrate (as N)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.046	<0.010	<0.010	0.027	0.058	<0.010	0.045	0.020	0.014	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate + Nitrite (as N)	mg/L	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	0.0460	<0.0200	<0.0100	0.0274	0.0579	<0.0100	0.0452	0.0195	0.0138	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200
Nitrate + Nitrite (as N) (calculated)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.046	<0.010	<0.010	0.027	0.058	<0.010	0.045	0.020	0.014	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrite (as N)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total nitrogen	mg/L										0.280	0.228	0.523										
Total kjeldahl nitrogen	mg/L										0.280	0.201	0.465										
Orthophosphate (dissolved, as P)	mg/L																						
Phosphorus (dissolved, by ICPMS/ICPOES)	mg/L	<0.050	0.107	0.162	0.059	0.073	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
Phosphorus (total, by ICPMS/ICPOES)	mg/L																						
Potassium (dissolved)	mg/L	4.87	5.03	4.84	4.35	4.31	4.12	3.94	4.10	4.35	3.99	3.85	4.13	3.75	3.93	3.62	1.30	1.44	1.60	1.36	1.51	1.24	1.36
Potassium (total)	mg/L																						
Total Metals																							
Aluminum (total)	mg/L																						
Antimony (total)	mg/L																						
Arsenic (total)	mg/L																						
Barium (total)	mg/L																						
Beryllium (total)	mg/L																						
Bismuth (total)	mg/L																						
Boron (total)	mg/L																						
Cadmium (total)	mg/L																						
Calcium (total)	mg/L																						
Chromium (total)	mg/L																						
Cobalt (total)	mg/L																						
Copper (total)	mg/L																						
Iron (total)	mg/L																						
Lead (total)	mg/L																						
Lithium (total)	mg/L																						
Magnesium (total)	mg/L																						
Manganese (total)	mg/L																						
Mercury (total)	mg/L																						
Molybdenum (total)	mg/L																						
Nickel (total)	mg/L																						
Selenium (total)	mg/L																						
Silicon (total, as Si)	mg/L																						
Silver (total)	mg/L																						
Sodium (total)	mg/L																						
Strontium (total)	mg/L																						
Sulphur (total)	mg/L																						
Tellurium (total)	mg/L																						
Thallium (total)	mg/L																						
Thorium (total)	mg/L																						
Tin (total)	mg/L																						
Titanium (total)	mg/L																						
Tungsten (total)	mg/L																						
Uranium (total)	mg/L																						
Vanadium (total)	mg/L																						
Zinc (total)	mg/L																						
Zirconium (total)	mg/L																						



Okanagan Falls Landfill
Water Quality Results

Analyte	Unit	MW19-1	MW19-1	MW19-1	MW19-1	MW19-1	MW19-1	MW19-1	MW19-1	MW19-1	MW19-2D	MW19-2D	MW19-2D	MW19-2D	MW19-2D	MW19-2D	MW19-2D	MW19-2D	MW19-2D	MW19-2D	MW19-2D	MW19-2D	MW19-2D	
		17-Nov-22 22K2319-06	04-Apr-23 23D0472-03	17-Jul-23 23G2321-05	15-Nov-23 23K2023-02	11-Apr-24 24D1772-03	25-Jul-24 24G3474-05	14-Nov-24 24K1877-03	08-Apr-25 25D1284-03	24-Jul-25 25G3733-05	06-Nov-25 25K0903-03	29-Nov-19 9111282-02	26-Jun-20 0062751-01	04-Nov-20 20K0625-02	15-Apr-21 21D1742-04	07-Jul-21 21G0928-01	03-Nov-21 21K0711-06	31-Mar-22 22D0147-01	13-Jul-22 22G1860-07	17-Nov-22 22K2319-05	05-Apr-23 23D0621-01	18-Jul-23 23G2483-01	16-Nov-23 23K2044-01	11-Apr-24 24D1772-06
Benzene	mg/L	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	
Ethylbenzene	mg/L																							
Styrene	mg/L																							
Toluene	mg/L																							
Xylenes	mg/L																							
Nutrients																								
Ammonia (total, as N)	mg/L	0.097	0.091	0.120	0.084	0.079	0.088	0.150	0.120	0.098	0.064	0.096	0.110	0.093	0.096	0.065	0.153	<0.050	<0.050	0.121	0.097	0.095	<0.050	<0.050
Nitrate (as N)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.025	0.085	0.109	<0.010	<0.010	0.173	0.259	0.218	0.114	0.121	0.058	<0.183	0.319
Nitrate + Nitrite (as N)	mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	0.0251	0.0848	0.109	<0.0200	<0.0200	0.173	0.274	0.232	0.129	0.144	0.0579	0.213	0.319
Nitrate + Nitrite (as N) (calculated)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.025	0.085	0.109	<0.010	<0.010	0.173	0.274	0.232	0.129	0.143	0.058	0.213	0.319
Nitrite (as N)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.015	0.014	0.015	0.022	<0.010	0.030	<0.010	
Total nitrogen	mg/L	0.517																						
Total kjeldahl nitrogen	mg/L	0.517																						
Orthophosphate (dissolved, as P)	mg/L																							
Phosphorus (dissolved, by ICPMS/ICPOES)	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
Phosphorus (total, by ICPMS/ICPOES)	mg/L																							
Potassium (dissolved)	mg/L	1.36	1.43	1.35	1.45	1.39	1.41	1.38	1.37	1.34	1.42	6.96	5.21	4.55	4.58	4.06	4.01	3.96	4.46	4.32	4.04	3.80	3.99	4.08
Potassium (total)	mg/L																							
Total Metals																								
Aluminum (total)	mg/L																							
Antimony (total)	mg/L																							
Arsenic (total)	mg/L																							
Barium (total)	mg/L																							
Beryllium (total)	mg/L																							
Bismuth (total)	mg/L																							
Boron (total)	mg/L																							
Cadmium (total)	mg/L																							
Calcium (total)	mg/L																							
Chromium (total)	mg/L																							
Cobalt (total)	mg/L																							
Copper (total)	mg/L																							
Iron (total)	mg/L																							
Lead (total)	mg/L																							
Lithium (total)	mg/L																							
Magnesium (total)	mg/L																							
Manganese (total)	mg/L																							
Mercury (total)	mg/L																							
Molybdenum (total)	mg/L																							
Nickel (total)	mg/L																							
Selenium (total)	mg/L																							
Silicon (total, as Si)	mg/L																							
Silver (total)	mg/L																							
Sodium (total)	mg/L																							
Strontium (total)	mg/L																							
Sulphur (total)	mg/L																							
Tellurium (total)	mg/L																							
Thallium (total)	mg/L																							
Thorium (total)	mg/L																							
Tin (total)	mg/L																							
Titanium (total)	mg/L																							
Tungsten (total)	mg/L																							
Uranium (total)	mg/L																							
Vanadium (total)	mg/L																							
Zinc (total)	mg/L																							
Zirconium (total)	mg/L																							



Okanagan Falls Landfill
Water Quality Results

Analyte	Unit	SW-2	SW-2	SW-2	SW-2	SW-2	SW-3	SW-4	SW-4	SW-4	SW-5	SW-6	SW-7	SW-8	Test Pit 2014
		15-Apr-19 9041527-02	17-Apr-19 9041869-01	17-Apr-19 9041869-02	30-Mar-22 22D0027-01	08-Apr-25 25D1331-02	21-Jun-17 7062244-03	20-Jun-17 7062153-01	22-Mar-18 8031861-03	06-Jul-18 8070559-01	22-Mar-18	03-May-18 8050535-01	08-May-18 8050937-01	06-Jul-18 8070559-02	20-Mar-14 4031149-02
		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Field Only	Normal	Normal	Normal	Normal
Field Results															
Conductivity	µS/cm	1424	3543	2852	1716	1321	1737	2162	2063	2035	956	792	1235	2045	2196
Depth to Water (below top of casing)	m														
Oxidation reduction potential	mV	146.6	38.3	42.7	47.8	174.5	108.5	207.6	194.1	82.0	188.1	110.8	90.9	101.8	37.0
Dissolved oxygen	mg/L	19.86	7.68	4.82	13.89	8.15	3.56	1.56	2.74	0.92	7.57	12.22	8.23	1.69	9.90
pH		6.68	7.59	7.65	8.38	8.13	7.56	6.96	6.98	6.87	8.03	7.08	8.59	6.99	7.46
Salinity															
Total dissolved solids	mg/L	923.0	2307.5	1852.5	1118.0	845.0	1131.0	1404.0	1339.0	1332.5	624.0	513.5	805.0	1332.5	1423.5
Temperature	°C	12.2	16.5	13.9	12.3	10.9	25.5	18	6.4	21.2	7.7	10.0	28.3	19.6	5.8
Turbidity	NTU	1.85			6.73	1.82	31.1	2.49	70.4	0.48		0.59	1.62	0.36	
Volume Purged	L														
Lab Results															
Chlorinated Hydrocarbons															
1,2-Dichlorobenzene	mg/L														
1,3-Dichlorobenzene	mg/L														
1,4-Dichlorobenzene	mg/L														
1,1-Dichloroethane	mg/L														
1,2-Dichloroethane	mg/L														
1,1-Dichloroethylene	mg/L														
cis-1,2-Dichloroethylene	mg/L														
trans-1,2-Dichloroethylene	mg/L														
Monochlorobenzene	mg/L														
1,1,2,2-Tetrachloroethane	mg/L														
Tetrachloroethylene	mg/L														
1,1,1-Trichloroethane	mg/L														
1,1,2-Trichloroethane	mg/L														
Trichloroethylene	mg/L														
Dissolved Metals															
Aluminum (dissolved)	mg/L														0.007
Antimony (dissolved)	mg/L														0.0011
Arsenic (dissolved)	mg/L														0.0031
Barium (dissolved)	mg/L														0.095
Beryllium (dissolved)	mg/L														<0.0001
Bismuth (dissolved)	mg/L														<0.0001
Boron (dissolved)	mg/L														0.028
Cadmium (dissolved)	mg/L														0.00001
Calcium (dissolved)	mg/L														133
Chromium (dissolved)	mg/L														<0.0005
Cobalt (dissolved)	mg/L														0.00246
Copper (dissolved)	mg/L														0.0135
Iron (dissolved)	mg/L														0.012
Lead (dissolved)	mg/L														<0.0001
Lithium (dissolved)	mg/L														0.0454
Magnesium (dissolved)	mg/L														188
Manganese (dissolved)	mg/L														0.488
Mercury (dissolved)	mg/L														<0.00002
Molybdenum (dissolved)	mg/L														0.0159
Nickel (dissolved)	mg/L														0.0122
Selenium (dissolved)	mg/L														0.0010
Silicon (dissolved, as Si)	mg/L														14.2
Silver (dissolved)	mg/L														<0.00005
Sodium (dissolved)	mg/L														163
Strontium (dissolved)	mg/L														3.04
Sulphur (dissolved)	mg/L														19
Tellurium (dissolved)	mg/L														<0.0002
Thallium (dissolved)	mg/L														<0.00002
Thorium (dissolved)	mg/L														<0.0001
Tin (dissolved)	mg/L														<0.0002
Titanium (dissolved)	mg/L														<0.005
Tungsten (dissolved)	mg/L														
Uranium (dissolved)	mg/L														0.0527

Okanagan Falls Landfill
Water Quality Results

Analyte	Unit	SW-2	SW-2	SW-2	SW-2	SW-2	SW-3	SW-4	SW-4	SW-4	SW-5	SW-6	SW-7	SW-8	Test Pit 2014
		15-Apr-19 9041527-02 Normal	17-Apr-19 9041869-01 Normal	17-Apr-19 9041869-02 Normal	30-Mar-22 22D0027-01 Normal	08-Apr-25 25D1331-02 Normal	21-Jun-17 7062244-03 Normal	20-Jun-17 7062153-01 Normal	22-Mar-18 8031861-03 Normal	06-Jul-18 8070559-01 Normal	22-Mar-18 Field Only	03-May-18 8050535-01 Normal	08-May-18 8050937-01 Normal	06-Jul-18 8070559-02 Normal	20-Mar-14 4031149-02 Normal
Vanadium (dissolved)	mg/L														0.029
Zinc (dissolved)	mg/L														<0.004
Zirconium (dissolved)	mg/L														0.0025
General															
Bicarbonate alkalinity (as HCO3)	mg/L	185			280	285	686	1310	1170	1040		456	554	999	
Carbonate alkalinity (as CO3)	mg/L	15.9			10.7	<0.600	<0.600	<1.20	<0.600	<0.600		<0.600	21.4	<0.600	
Hydroxide alkalinity (as OH)	mg/L	<0.340			<0.340	<0.340	<0.340	<0.680	<0.340	<0.340		<0.340	<0.340	<0.340	
Alkalinity (bicarbonate, as CaCO3)	mg/L	151			230	233	563	1070	960	851		374	454	818	1270
Alkalinity (carbonate, as CaCO3)	mg/L	26.6			17.8	<1.0	<1.0	<2.0	<1.0	<1.0		<1.0	35.6	<1.0	<1
Alkalinity (hydroxide, as CaCO3)	mg/L	<1.0			<1.0	<1.0	<1.0	<2.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1
Alkalinity (phenolphthalein, as CaCO3)	mg/L	13.3			8.9	<1.0	<1.0	<2.0	<1.0	<1.0		<1.0	17.8	<1.0	<1
Alkalinity (total, as CaCO3)	mg/L	178			248	233	563	1070	960	851		374	489	818	1270
Biochemical oxygen demand	mg/L	<5.4			13.1	<8.0	12.3	<6.7	<5.5	<4.6		<5.5	6.0	<4.6	
Bromide	mg/L	<0.10	0.14	<0.10	<0.10	<0.10	<0.10	0.22	0.12	<0.10		<0.10	0.11	0.22	
Total organic carbon	mg/L														
Chemical oxygen demand	mg/L	376			340	251	100	91	87	79		26	120	74	
Chloride	mg/L	56.3	120	60.5	85.2	59.1	7.59	28.0	34.8	25.4		12.0	20.4	23.8	27.5
Colour	CU														
Conductivity	µS/cm	1450			1760	1280	1680	2110	2070	1980		795	1200	1990	2200
Total cyanide	mg/L														
Fluoride	mg/L	0.19	0.53	0.19	<0.10	<0.10	0.90	0.79	1.30	0.92		0.76	1.03	0.86	0.91
Hardness (as CaCO3), dissolved	mg/L														1110
Hardness (as CaCO3), from total Ca/Mg	mg/L	553			703	595	911	1230	1150	1130		346	526	1170	
Langelier Index															
pH		8.82			8.46	8.05	8.02	7.82	7.77	7.66		7.74	8.52	7.76	8.01
Total dissolved solids (computed)	mg/L														
Sulphate	mg/L	203	381	262	200	99.6	488	194	299			59.7	193		45.9
Temperature of observed pH	°C														
Turbidity	NTU														
Halogenated Methanes															
Bromodichloromethane	mg/L														
Bromoform	mg/L														
Carbon tetrachloride	mg/L														
Chloroform	mg/L														
Dibromochloromethane	mg/L														
Dibromomethane	mg/L														
Dichloromethane	mg/L														
Total Trihalomethanes (calculated)	mg/L														
Trichlorofluoromethane	mg/L														
Microbiological															
Background bacteria	CFU/100 mL														
Total coliforms (counts)	CFU/100 mL														
Total coliforms (MPN)	MPN/100 mL														
E. coli (counts)	CFU/100 mL														
E. coli (MPN)	MPN/100 mL														
Heterotrophic plate count (counts)	CFU/mL														
Heterotrophic plate count (MPN)	MPN/mL														
Miscellaneous Organic Substances															
Chloroethane	mg/L														
1,2-Dibromoethane	mg/L														
1,2-Dichloropropane	mg/L														
cis-1,3-Dichloropropene	mg/L														
trans-1,3-Dichloropropene	mg/L														
1,3-Dichloropropene (cis + trans)	mg/L														
Methyl tert-butyl ether (MTBE)	mg/L														
VHw6-10	mg/L														
Vinyl chloride	mg/L														
VPW	mg/L														
Monocyclic Aromatic Hydrocarbons (MAHs)															

Okanagan Falls Landfill
Water Quality Results

Analyte	Unit	SW-2	SW-2	SW-2	SW-2	SW-2	SW-3	SW-4	SW-4	SW-4	SW-5	SW-6	SW-7	SW-8	Test Pit 2014
		15-Apr-19 9041527-02 Normal	17-Apr-19 9041869-01 Normal	17-Apr-19 9041869-02 Normal	30-Mar-22 22D0027-01 Normal	08-Apr-25 25D1331-02 Normal	21-Jun-17 7062244-03 Normal	20-Jun-17 7062153-01 Normal	22-Mar-18 8031861-03 Normal	06-Jul-18 8070559-01 Normal	22-Mar-18 Field Only	03-May-18 8050535-01 Normal	08-May-18 8050937-01 Normal	06-Jul-18 8070559-02 Normal	20-Mar-14 4031149-02 Normal
Benzene	mg/L														
Ethylbenzene	mg/L														
Styrene	mg/L														
Toluene	mg/L														
Xylenes	mg/L														
Nutrients															
Ammonia (total, as N)	mg/L	0.234			0.257	0.133	0.066	0.469	0.162	0.297		0.127	0.102	0.127	0.476
Nitrate (as N)	mg/L	68.0	248	155	85.0	55.5	<0.010	<0.010	0.020	0.026		0.156	<0.010	0.248	6.47
Nitrate + Nitrite (as N)	mg/L	68.3			85.6	55.5	<0.0100	<0.0100	0.0203	0.0397		0.156	<0.0100	0.248	6.47
Nitrate + Nitrite (as N) (calculated)	mg/L	68.2	248	155	85.6	55.6	<0.010	<0.010	0.020	0.039		0.156	<0.010	0.248	6.47
Nitrite (as N)	mg/L	0.241	<0.010	0.166	0.559	0.071	<0.010	<0.010	<0.010	0.013		<0.010	<0.010	<0.010	<0.010
Total nitrogen	mg/L	79.4			98.3	62.6	1.48	1.60	1.14	1.43		10.3	1.53	1.34	9.32
Total kjeldahl nitrogen	mg/L	11.2			12.7	7.08	1.48	1.60	1.12	1.39		10.2	1.53	1.09	2.85
Orthophosphate (dissolved, as P)	mg/L														
Phosphorus (dissolved, by ICPMS/ICPOES)	mg/L														0.04
Phosphorus (total, by ICPMS/ICPOES)	mg/L	0.158			0.329	0.321	0.208	0.118	0.138	0.156		0.129	0.142	0.169	
Potassium (dissolved)	mg/L														26.1
Potassium (total)	mg/L	55.7			63.3	35.3	9.38	29.7	24.2	34.9		6.55	19.4	24.4	
Total Metals															
Aluminum (total)	mg/L	0.0454			0.0299	0.0262	0.503	0.0335	1.97	0.0858		0.0124	0.0203	0.0133	
Antimony (total)	mg/L	0.00104			0.00079	0.00070	0.00072	0.00040	0.00028	0.00028		<0.00020	0.00046	0.00028	
Arsenic (total)	mg/L	0.0169			0.0187	0.0116	0.00349	0.00353	0.00310	0.00246		0.00053	0.00491	0.00340	
Barium (total)	mg/L	0.0628			0.0984	0.0844	0.103	0.117	0.122	0.107		0.0659	0.0697	0.102	
Beryllium (total)	mg/L	<0.00010			<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	
Bismuth (total)	mg/L	<0.00010			<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	
Boron (total)	mg/L	0.181			0.152	0.201	0.306	0.472	<u>0.625</u>	<u>0.877</u>		0.0129	0.455	<u>1.53</u>	
Cadmium (total)	mg/L	0.000060			0.000086	0.000076	0.000120	0.000060	0.000033	0.000048		0.000021	0.000031	0.000049	
Calcium (total)	mg/L	116			183	161	300	208	183	185		76.6	88.4	196	
Chromium (total)	mg/L	0.00260			0.00160	0.00113	0.00208	<0.00050	0.00343	0.00052		<0.00050	0.00085	0.00096	
Cobalt (total)	mg/L	0.00169			0.00070	0.00046	0.00094	0.00117	0.00145	0.00143		<0.00010	0.00071	0.00108	
Copper (total)	mg/L	0.0351			0.0229	0.0175	0.00383	0.00971	0.0122	0.00701		0.00242	0.00802	0.00666	
Iron (total)	mg/L	0.100			0.054	0.047	0.962	0.059	2.62	0.140		0.012	0.046	0.014	
Lead (total)	mg/L	0.00022			0.00043	0.00026	0.0104	<0.00010	0.00116	<0.00020		<0.00020	<0.00020	<0.00020	
Lithium (total)	mg/L	0.00786			0.00914	0.00606	0.0209	0.0530	0.0396	0.0558		0.0107	0.0241	0.0552	
Magnesium (total)	mg/L	63.9			59.5	47.1	39.2	172	168	162		37.6	74.0	165	
Manganese (total)	mg/L	0.0238			0.0130	0.00970	0.227	0.231	0.0501	2.29		0.00077	0.0899	0.525	
Mercury (total)	mg/L	<0.000010			0.000017	<0.000010	0.000043	<0.000020	<0.00010	<0.00010		<0.000010	<0.000010	<0.000010	
Molybdenum (total)	mg/L	<u>0.0214</u>			<u>0.0151</u>	0.00883	0.00268	<u>0.0233</u>	0.00918	0.0100		0.00790	<u>0.0120</u>	<u>0.0109</u>	
Nickel (total)	mg/L	0.00440			0.00277	0.00203	0.00225	0.0123	0.00985	0.0183		<0.00040	0.00498	0.0122	
Selenium (total)	mg/L	<0.00050			<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		0.00086	<0.00050	<0.00050	
Silicon (total, as Si)	mg/L	<1.0			<1.0	7.1	22.2	17.8	19.1	9.6		13.3	8.9	9.5	
Silver (total)	mg/L	<0.000050			<0.000050	<0.000050	<0.000050	<0.000050	0.000059	<0.000050		<0.000050	<0.000050	<0.000050	
Sodium (total)	mg/L	60.6			57.4	39.7	57.9	119	96.3	97.6		54.8	105	112	
Strontium (total)	mg/L	1.19			1.52	1.15	2.75	3.72	3.12	3.67		1.01	1.45	3.19	
Sulphur (total)	mg/L	75.1			69.0	38.5	162	79.4	90.5	132		19.7	62.6	160	
Tellurium (total)	mg/L	<0.00050			<0.00050	<0.00050	<0.00020	<0.00020	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	
Thallium (total)	mg/L	<0.000020			<0.000020	<0.000020	0.000067	0.000026	0.000030	0.000035		<0.000020	<0.000020	0.000020	
Thorium (total)	mg/L	<0.00010			<0.00010	<0.00010	<0.00010	<0.00010	0.00033	<0.00010		<0.00010	<0.00010	<0.00010	
Tin (total)	mg/L	<0.00020			<0.00020	<0.00020	0.00025	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	
Titanium (total)	mg/L	<0.0050			<0.0050	<0.0050	0.0278	<0.0050	0.0847	<0.0050		<0.0050	<0.0050	<0.0050	
Tungsten (total)	mg/L	0.0011			<0.0010	<0.0010			<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	
Uranium (total)	mg/L	<u>0.0158</u>			<u>0.0144</u>	<u>0.0114</u>	<u>0.0112</u>	0.0349	0.0262	<u>0.0176</u>		0.0248	0.0289	<u>0.0200</u>	
Vanadium (total)	mg/L	0.0037			<0.0050	<0.0050	0.0061	0.0187	0.0212	0.0110		0.0056	0.0111	0.0158	
Zinc (total)	mg/L	0.0066			0.0124	0.0097	0.143	<0.0040	0.0088	0.0122		<0.0040	0.0047	0.0055	
Zirconium (total)	mg/L	0.00150			0.00078	0.00078	0.00084	0.00148	0.00312	0.00103		<0.00010	0.00081	0.00085	



Okanagan Falls Landfill

Water Quality Results

Legend for Reports for RDOS Landfill and Wastewater Treatment Sites Water Quality Results

<p><</p> <p>></p> <p>>=</p> <p>A</p> <p>Calc</p> <p>CSR DW</p> <p>CSR IW</p> <p>CSR LW</p> <p>GCDWQ AO & O</p> <p>GCDWQ MAC</p> <p>L</p> <p>m asl</p> <p>N</p> <p>ND</p> <p>NG</p> <p>NR</p> <p>NS</p> <p>NT</p> <p>OG</p> <p>P</p> <p>PR</p> <p>TK</p> <p>TNTC</p> <div style="background-color: #cccccc; width: 100px; height: 20px; margin-bottom: 5px;"></div> <p style="color: red; font-weight: bold;">100</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; padding: 2px;">CSR DW</td> </tr> <tr> <td style="text-align: center; padding: 2px;"><u>CSR IW</u></td> </tr> <tr> <td style="text-align: center; padding: 2px;">CSR LW</td> </tr> <tr> <td style="text-align: center; padding: 2px;">GCDWQ AO & O</td> </tr> <tr> <td style="text-align: center; padding: 2px;">GCDWQ MAC</td> </tr> <tr> <td style="text-align: center; padding: 2px;">SL Criteria Override</td> </tr> </table>	CSR DW	<u>CSR IW</u>	CSR LW	GCDWQ AO & O	GCDWQ MAC	SL Criteria Override	<p>Less than reported detection limit</p> <p>Greater than reported upper detection limit</p> <p>Greater than or equal to</p> <p>Absent</p> <p>Calculated guideline or standard. The guideline or standard is dependent on the value of one or more other analytes, and is calculated from a formula or table.</p> <p>BC CSR Generic Numerical Water Standards for Drinking Water</p> <p>BC CSR Generic Numerical Water Standards for Irrigation</p> <p>BC CSR Generic Numerical Water Standards for Livestock</p> <p>Guidelines for Canadian Drinking Water Quality - Aesthetic Objectives and Other</p> <p>Guidelines for Canadian Drinking Water Quality - Maximum Acceptable Concentrations</p> <p>Laboratory reading type (Lab result)</p> <p>metres above sea level</p> <p>Narrative type of guideline or standard, or Result Note.</p> <p>Non-detect. Result is less than lower detection limit.</p> <p>No Guideline</p> <p>No Result</p> <p>No Standard</p> <p>Not Tested</p> <p>Overgrown</p> <p>Present</p> <p>Presumptive</p> <p>Test kit reading type (Field result)</p> <p>Too numerous to count</p> <p>Highlighted value has a lower detection limit that is greater than the guideline/standard maximum and/or the guideline/standard minimum, or has an upper detection limit that is less than the guideline/standard maximum and/or the guideline/standard minimum.</p> <p>The maximum guideline/standard value cannot be determined because a result for a dependent analyte is not available for the sample.</p> <p>Highlighted value exceeds CSR DW</p> <p>Highlighted value exceeds CSR IW</p> <p>Highlighted value exceeds CSR LW</p> <p>Highlighted value exceeds GCDWQ AO & O</p> <p>Highlighted value exceeds GCDWQ MAC</p> <p>Highlighted value exceeds sampling location criteria override</p>
CSR DW							
<u>CSR IW</u>							
CSR LW							
GCDWQ AO & O							
GCDWQ MAC							
SL Criteria Override							

Guideline Notes for Reports for RDOS Landfill and Wastewater Treatment Sites Water Quality Results

1. Notes for Guidelines for Canadian Drinking Water Quality - Maximum Acceptable Concentrations (GCDWQ MAC)

2. Notes for Guidelines for Canadian Drinking Water Quality - Aesthetic Objectives and Other (GCDWQ AO & O)

General Notes:

Includes Aesthetic Objective, Operational Guidance Value, and Objective types of guidelines. The guidelines are Aesthetic Objectives unless stated otherwise in the guideline note.

3. Notes for BC CSR Generic Numerical Water Standards for Irrigation (CSR IW)

General Notes:

BC Contaminated Sites Regulation, Generic Numerical Water Standards, Schedule 3.2; includes amendments up to B.C. Reg. 133/2022 March 1, 2023.

Standards for all organic substances are for total substance concentrations. Any water sample to be analyzed for organic substances should not be filtered.

Standards for surface water samples to be analyzed for heavy metals, metalloids and inorganic ions are total substance concentrations. In addition, it is recommended that surface water samples being analyzed for heavy metals, metalloids and inorganic ions should also be analyzed for dissolved substance concentrations.

Standards for groundwater samples for heavy metals, metalloids and inorganic ions are for dissolved substance concentrations. In addition, it is recommended that groundwater samples being analyzed for heavy metals, metalloids and inorganic ions should also be analyzed for total substance concentrations.

Standards apply to irrigation of all soil types, unless otherwise indicated. / There are several different standards for site-specific factors for some analytes. The most stringent standards were used for this criteria set.

Note 3.1 for Boron (dissolved):

Standard varies depending on crop. This standard is for blackberry crop.

Note 3.2 for Chromium (dissolved):

Analytical results for chromium (all species) in water may be used to demonstrate compliance with the standards. Where the standards cannot be met based on analytical results for chromium (all species), chromium speciation may be necessary.

Standard is 8 µg/L for chromium, hexavalent. Standard is 5 µg/L for chromium, trivalent. The standard of 5 µg/L was used to identify exceedances for dissolved chromium in order to demonstrate compliance with the standards.

Note 3.3 for Iron (dissolved):

Standard applies to a site used for an industrial or commercial purpose or activity set out in Schedule 2 as

(a) item A6, A7, A8 or A11

(b) item C1, C2, C3, C4 or C6,

(c) item D2, D3, D5, or D6

(d) item E4, or

(e) item H14.

Standard applies to a site used for an industrial or commercial purpose or activity set out in Schedule 2 as item H11 or H20, but only if the site was used for the purpose or activity in conjunction with or as a result of the site also being used for at least one of the purposes or activities set out above.

Note 3.4 for Lithium (dissolved):

Standard to protect all types of crops.

Note 3.5 for Manganese (dissolved):

Okanagan Falls Landfill

Water Quality Results

Standard applies to a site used for an industrial or commercial purpose or activity set out in Schedule 2 as

- (a) item B1
- (b) item C1, C3 or C4
- (c) item D2, D3, D5, or D6
- (d) item E4, or
- (e) item H3 or H14.

Standard applies to a site used for an industrial or commercial purpose or activity set out in Schedule 2 as item H11 or H20, but only if the site was used for the purpose or activity in conjunction with or as a result of the site also being used for at least one of the purposes or activities set out above.

Note 3.6 for Molybdenum (dissolved):

Standard varies with crop, soil drainage and Mo:Cu ratio. Standard is 10 – 30 µg/L. Consult a director for further advice. The most stringent standard of 10 µg/L has been used.

Note 3.7 for Selenium (dissolved):

Standard varies with type of application; continuous or intermittent. This standard is for continuous applications on crops.

Note 3.8 for Zinc (dissolved):

The standard varies (from 1000 to 5000 µg/L) with soil pH. This standard (which is the most stringent) is for soil pH less than 6.0

Note 3.9 for Chloride:

Standard to protect all types of crops.

Note 3.10 for VHw6-10:

VHw6-10 - Volatile Hydrocarbons (nC6-nC10) in water as defined in the 2015 British Columbia Environmental Laboratory Manual, as updated from time to time.

Standard is applicable at all sites, irrespective of water use.

Note 3.11 for Boron (total):

Standard varies depending on crop. This standard is for blackberry crop.

Note 3.12 for Chromium (total):

Analytical results for chromium (all species) in water may be used to demonstrate compliance with the standards. Where the standards cannot be met based on analytical results for chromium (all species), chromium speciation may be necessary.

Standard is 8 µg/L for chromium, hexavalent. Standard is 5 µg/L for chromium, trivalent. The standard of 5 µg/L was used to identify exceedances for total chromium in order to demonstrate compliance with the standards.

Note 3.13 for Iron (total):

Standard applies to a site used for an industrial or commercial purpose or activity set out in Schedule 2 as

- (a) item A6, A7, A8 or A11
- (b) item C1, C2, C3, C4 or C6,
- (c) item D2, D3, D5, or D6
- (d) item E4, or
- (e) item H14.

Standard applies to a site used for an industrial or commercial purpose or activity set out in Schedule 2 as item H11 or H20, but only if the site was used for the purpose or activity in conjunction with or as a result of the site also being used for at least one of the purposes or activities set out above.

Note 3.14 for Lithium (total):

Standard to protect all types of crops.

Note 3.15 for Manganese (total):

Okanagan Falls Landfill

Water Quality Results

Standard applies to a site used for an industrial or commercial purpose or activity set out in Schedule 2 as

- (a) item B1
- (b) item C1, C3 or C4
- (c) item D2, D3, D5, or D6
- (d) item E4, or
- (e) item H3 or H14.

Standard applies to a site used for an industrial or commercial purpose or activity set out in Schedule 2 as item H11 or H20, but only if the site was used for the purpose or activity in conjunction with or as a result of the site also being used for at least one of the purposes or activities set out above.

Note 3.16 for Molybdenum (total):

Standard varies with crop, soil drainage and Mo:Cu ratio. Standard is 10 – 30 µg/L. Consult a director for further advice. The most stringent standard of 10 µg/L has been used.

Note 3.17 for Selenium (total):

Standard varies with type of application; continuous or intermittent. This standard is for continuous applications on crops.

Note 3.18 for Zinc (total):

The standard varies (from 1000 to 5000 µg/L) with soil pH. This standard (which is the most stringent) is for soil pH less than 6.0

4. Notes for BC CSR Generic Numerical Water Standards for Livestock (CSR LW)

General Notes:

BC Contaminated Sites Regulation, Generic Numerical Water Standards, Schedule 3.2; includes amendments up to B.C. Reg. 133/2022 March 1, 2023.

Standards for all organic substances are for total substance concentrations. Any water sample to be analyzed for organic substances should not be filtered.

Standards for surface water samples to be analyzed for heavy metals, metalloids and inorganic ions are total substance concentrations. In addition, it is recommended that surface water samples being analyzed for heavy metals, metalloids and inorganic ions should also be analyzed for dissolved substance concentrations.

Standards for groundwater samples for heavy metals, metalloids and inorganic ions are for dissolved substance concentrations. In addition, it is recommended that groundwater samples being analyzed for heavy metals, metalloids and inorganic ions should also be analyzed for total substance concentrations.

Note 4.1 for Chromium (dissolved):

Analytical results for chromium (all species) in water may be used to demonstrate compliance with the standards. Where the standards cannot be met based on analytical results for chromium (all species), chromium speciation may be necessary.

Standard is 50 µg/L for chromium, hexavalent. Standard is 50 µg/L for chromium, trivalent. The standard of 50 µg/L was used to identify exceedances for dissolved chromium in order to demonstrate compliance with the standards.

Note 4.2 for Fluoride:

Standard varies with type of livestock. Consult a director for further advice.

Note 4.3 for VHW6-10:

Standard is applicable at all sites, irrespective of water use.

VHW6-10 - Volatile Hydrocarbons (nC6-nC10) in water as defined in the 2015 British Columbia Environmental Laboratory Manual, as updated from time to time.

Note 4.4 for Nitrate (as N):

Where nitrate and nitrite are present, total nitrate plus nitrite-nitrogen should not exceed this value.

Note 4.5 for Nitrate + Nitrite (as N):

Where nitrate and nitrite are present, total nitrate plus nitrite-nitrogen should not exceed this value.

Okanagan Falls Landfill

Water Quality Results

Note 4.6 for Nitrate + Nitrite (as N) (calculated):

Where nitrate and nitrite are present, total nitrate plus nitrite-nitrogen should not exceed this value.

Note 4.7 for Chromium (total):

Analytical results for chromium (all species) in water may be used to demonstrate compliance with the standards. Where the standards cannot be met based on analytical results for chromium (all species), chromium speciation may be necessary.

Standard is 50 µg/L for chromium, hexavalent. Standard is 50 µg/L for chromium, trivalent. The standard of 50 µg/L was used to identify exceedances for total chromium in order to demonstrate compliance with the standards.

5. Notes for BC CSR Generic Numerical Water Standards for Drinking Water (CSR DW)**General Notes:**

BC Contaminated Sites Regulation, Generic Numerical Water Standards, Schedule 3.2; includes amendments up to B.C. Reg. 133/2022 March 1, 2023.

Drinking water standards are for unfiltered samples obtained at the point of consumption. Heavy metals, metalloids and inorganic ions are expressed as total substance concentrations unless otherwise indicated.

Note 5.1 for 1,2-Dichlorobenzene:

Standard may not address aesthetic (organoleptic) concerns related to drinking water quality. Water treatment may be required.

Note 5.2 for 1,4-Dichlorobenzene:

Standard may not address aesthetic (organoleptic) concerns related to drinking water quality. Water treatment may be required.

Note 5.3 for Monochlorobenzene:

Standard may not address aesthetic (organoleptic) concerns related to drinking water quality. Water treatment may be required.

Note 5.4 for Aluminum (dissolved):

Standard is specific to protection of human health. Standard is derived with TRV protective of adults. Standard may not adequately protect other age groups.

Standard may not address aesthetic (organoleptic) concerns related to drinking water quality. Water treatment may be required.

Note 5.5 for Chromium (dissolved):

Analytical results for chromium (all species) in water may be used to demonstrate compliance with the standards. Where the standards cannot be met based on analytical results for chromium (all species), chromium speciation may be necessary.

Standard is 50 µg/L for chromium, hexavalent. Standard is 6000 µg/L for chromium, trivalent. The standard of 50 µg/L was used to identify exceedances for dissolved chromium in order to demonstrate compliance with the standards.

Note 5.6 for Cobalt (dissolved):

The standard in Schedule 3.2 is 1 µg/L. However, BC CSR Protocol 9 has background concentrations in groundwater for cobalt in µg/L for regions of BC as follows.

“Lower Mainland Sub-Region 1: 62

Lower Mainland Sub-Region 2: 18

Thompson Okanagan Region: 16

Southern Vancouver Island Region: 14

The interim cobalt value of 20 µg/L for the remaining regions of the province remains in effect.”

Reference: BC CSR Protocol 9 for Contaminated Sites, Establishing Local Background Concentrations in Groundwater, BC Ministry of Environment and Climate Change Strategy, February 1, 2023.

Note 5.7 for Copper (dissolved):

Okanagan Falls Landfill

Water Quality Results

Standard is specific to protection of human health. Standard is derived with TRV protective of adults. Standard may not adequately protect other age groups.

Standard may not address aesthetic (organoleptic) concerns related to drinking water quality. Water treatment may be required.

Note 5.8 for Iron (dissolved):

Standard applies to a site used for an industrial or commercial purpose or activity set out in Schedule 2 as

- (a) item A6, A7, A8 or A11
- (b) item C1, C2, C3, C4 or C6,
- (c) item D2, D3, D5, or D6
- (d) item E4, or
- (e) item H14.

Standard applies to a site used for an industrial or commercial purpose or activity set out in Schedule 2 as item H11 or H20, but only if the site was used for the purpose or activity in conjunction with or as a result of the site also being used for at least one of the purposes or activities set out above.

Standard is specific to protection of human health. Standard is derived with TRV protective of adults. Standard may not adequately protect other age groups. Standard may not address aesthetic (organoleptic) concerns related to drinking water quality. Water treatment may be required.

Note 5.9 for Manganese (dissolved):

Standard applies to a site used for an industrial or commercial purpose or activity set out in Schedule 2 as

- (a) item B1
- (b) item C1, C3 or C4
- (c) item D2, D3, D5, or D6
- (d) item E4, or
- (e) item H3 or H14.

Standard applies to a site used for an industrial or commercial purpose or activity set out in Schedule 2 as item H11 or H20, but only if the site was used for the purpose or activity in conjunction with or as a result of the site also being used for at least one of the purposes or activities set out above.

Standard is specific to protection of human health. Standard is derived with TRV protective of adults. Standard may not adequately protect other age groups.

Standard may not address aesthetic (organoleptic) concerns related to drinking water quality. Water treatment may be required.

Note 5.10 for Sodium (dissolved):

Standard is specific to protection of human health. Standard is derived with TRV protective of adults. Standard may not adequately protect other age groups.

Note 5.11 for Zinc (dissolved):

Standard is specific to protection of human health. Standard is derived with TRV protective of adults. Standard may not adequately protect other age groups.

Note 5.12 for Chloride:

Standard to protect against taste and odour concerns.

Note 5.13 for Sulphate:

Standard to protect against taste and odour concerns.

Note 5.14 for Total cyanide:

To demonstrate compliance with the drinking water (DW) standard, samples for cyanide in water must be analyzed using the appropriate "Cyanide Strong Acid Dissociable (SAD)" analytical method for water specified in the 2015 British Columbia Environmental Laboratory Manual, as updated from time to time.

Note 5.15 for Bromodichloromethane:

Okanagan Falls Landfill

Water Quality Results

Standard is specific for total trihalomethanes. Sum of the concentrations of bromodichloromethane (BDCM), dibromochloromethane (DBCM), bromoform (tribromomethane) and chloroform (trichloromethane) must not exceed the standard specified.

Note 5.16 for Bromoform:

Standard is specific for total trihalomethanes. Sum of the concentrations of bromodichloromethane (BDCM), dibromochloromethane (DBCM), bromoform (tribromomethane) and chloroform (trichloromethane) must not exceed the standard specified.

Note 5.17 for Chloroform:

Standard is specific for total trihalomethanes. Sum of the concentrations of bromodichloromethane (BDCM), dibromochloromethane (DBCM), bromoform (tribromomethane) and chloroform (trichloromethane) must not exceed the standard specified.

Note 5.18 for Dibromochloromethane:

Standard is specific for total trihalomethanes. Sum of the concentrations of bromodichloromethane (BDCM), dibromochloromethane (DBCM), bromoform (tribromomethane) and chloroform (trichloromethane) must not exceed the standard specified.

Note 5.19 for Total Trihalomethanes (calculated):

Standard is specific for total trihalomethanes. Sum of the concentrations of bromodichloromethane (BDCM), dibromochloromethane (DBCM), tribromomethane (bromoform) and trichloromethane (chloroform) must not exceed the standard specified.

Note 5.20 for Methyl tert-butyl ether (MTBE):

Standard is specific to protection of human health. Standard is derived with TRV protective of adults. Standard may not adequately protect other age groups.

Standard may not address aesthetic (organoleptic) concerns related to drinking water quality. Water treatment may be required.

Note 5.21 for VHW6-10:

VHW6-10 - Volatile Hydrocarbons (nC6-nC10) in water as defined in the 2015 British Columbia Environmental Laboratory Manual, as updated from time to time. Standard is applicable at all sites, irrespective of water use.

Note 5.22 for Ethylbenzene:

Standard may not address aesthetic (organoleptic) concerns related to drinking water quality. Water treatment may be required.

Note 5.23 for Toluene:

Standard may not address aesthetic (organoleptic) concerns related to drinking water quality. Water treatment may be required.

Note 5.24 for Nitrate (as N):

Where nitrate and nitrite are present, total nitrate plus nitrite-nitrogen should not exceed this value.

Note 5.25 for Nitrate + Nitrite (as N):

Where nitrate and nitrite are present, total nitrate plus nitrite-nitrogen should not exceed this value.

Note 5.26 for Nitrate + Nitrite (as N) (calculated):

Where nitrate and nitrite are present, total nitrate plus nitrite-nitrogen should not exceed this value.

Note 5.27 for Aluminum (total):

Standard is specific to protection of human health. Standard is derived with TRV protective of adults. Standard may not adequately protect other age groups.

Standard may not address aesthetic (organoleptic) concerns related to drinking water quality. Water treatment may be required.

Note 5.28 for Chromium (total):

Okanagan Falls Landfill

Water Quality Results

Analytical results for chromium (all species) in water may be used to demonstrate compliance with the standards. Where the standards cannot be met based on analytical results for chromium (all species), chromium speciation may be necessary.

Standard is 50 µg/L for chromium, hexavalent. Standard is 6000 µg/L for chromium, trivalent. The standard of 50 µg/L was used to identify exceedances for total chromium in order to demonstrate compliance with the standards.

Note 5.29 for Cobalt (total):

The standard in Schedule 3.2 is 1 µg/L. However, BC CSR Protocol 9 has background concentrations in groundwater for cobalt in µg/L for regions of BC as follows.

“Lower Mainland Sub-Region 1: 62

Lower Mainland Sub-Region 2: 18

Thompson Okanagan Region: 16

Southern Vancouver Island Region: 14

The interim cobalt value of 20 µg/L for the remaining regions of the province remains in effect.”

Reference: BC CSR Protocol 9 for Contaminated Sites, Establishing Local Background Concentrations in Groundwater, BC Ministry of Environment and Climate Change Strategy, February 1, 2023.

Note 5.30 for Copper (total):

Standard is specific to protection of human health. Standard is derived with TRV protective of adults. Standard may not adequately protect other age groups.

Standard may not address aesthetic (organoleptic) concerns related to drinking water quality. Water treatment may be required.

Note 5.31 for Iron (total):

Standard applies to a site used for an industrial or commercial purpose or activity set out in Schedule 2 as

(a) item A6, A7, A8 or A11

(b) item C1, C2, C3, C4 or C6,

(c) item D2, D3, D5, or D6

(d) item E4, or

(e) item H14.

Standard applies to a site used for an industrial or commercial purpose or activity set out in Schedule 2 as item H11 or H20, but only if the site was used for the purpose or activity in conjunction with or as a result of the site also being used for at least one of the purposes or activities set out above.

Standard is specific to protection of human health. Standard is derived with TRV protective of adults. Standard may not adequately protect other age groups.

Standard may not address aesthetic (organoleptic) concerns related to drinking water quality. Water treatment may be required.

Note 5.32 for Manganese (total):

Okanagan Falls Landfill

Water Quality Results

Standard applies to a site used for an industrial or commercial purpose or activity set out in Schedule 2 as

- (a) item B1
- (b) item C1, C3 or C4
- (c) item D2, D3, D5, or D6
- (d) item E4, or
- (e) item H3 or H14.

Standard applies to a site used for an industrial or commercial purpose or activity set out in Schedule 2 as item H11 or H20, but only if the site was used for the purpose or activity in conjunction with or as a result of the site also being used for at least one of the purposes or activities set out above.

Standard is specific to protection of human health. Standard is derived with TRV protective of adults. Standard may not adequately protect other age groups.

Standard may not address aesthetic (organoleptic) concerns related to drinking water quality. Water treatment may be required.

Note 5.33 for Sodium (total):

Standard is specific to protection of human health. Standard is derived with TRV protective of adults. Standard may not adequately protect other age groups.

Note 5.34 for Zinc (total):

Standard is specific to protection of human health. Standard is derived with TRV protective of adults. Standard may not adequately protect other age groups.

Water Quality Data Summary Statistics

Okanagan Falls Landfill
Water Quality Results

Analyte	Sampling Location	Unit	Average	Median	Minimum	Maximum	95% Percentile	Standard Deviation	Number of Results	Number of Numerical Results	Number of Results with Exceedances
Boron (dissolved)	3808 Allendale Lake Rd.	mg/L	0.0163	0.0250	<0.004	0.0120	0.0250	0.0103	11	3	0
	3816 Allendale Lake Rd.	mg/L	0.140	0.141	0.112	0.155	0.155	0.014	12	12	0
	3841 Allendale Lake Rd.	mg/L	0.029	0.029	0.029	0.029	0.029		1	1	0
	BH-1	mg/L	0.0809	0.0720	0.0561	0.166	0.1520	0.0269	39	39	0
	BH-2D	mg/L	0.0359	0.0292	0.006	0.120	0.0754	0.0208	40	36	0
	BH-2S	mg/L	0.957	0.457	0.028	2.70	2.390	0.841	72	68	34
	BH-3	mg/L	0.0989	0.0529	0.010	1.14	0.3414	0.1893	57	50	3
	DMW-1545Cha	mg/L							5	0	0
	MW17-4	mg/L	0.0547	0.0596	<0.0500	0.0996	0.0845	0.0230	28	19	0
	MW17-5D	mg/L	0.0326	0.0250	0.0330	0.0731	0.0565	0.0131	24	8	0
	MW17-5S	mg/L	0.2258	0.2190	0.0677	0.475	0.4110	0.1021	23	23	0
	MW19-1	mg/L	0.0535	0.0556	<0.0500	0.0706	0.0660	0.0116	18	16	0
	MW19-2D	mg/L	0.0261	0.0250	0.0446	0.0446	0.0279	0.0046	18	1	0
	SW-1	mg/L	0.602	0.214	0.162	1.43	1.308	0.718	3	3	1
	SW-2	mg/L							0	0	0
Calcium (dissolved)	3808 Allendale Lake Rd.	mg/L	16.3	16.4	13	19.0	18.1	1.4	19	19	0
	3816 Allendale Lake Rd.	mg/L	84.0	77.3	43.5	131	129.1	25.7	20	20	0
	3841 Allendale Lake Rd.	mg/L	84.1	79.5	75.9	95.1	95.0	8.3	8	8	0
	BH-1	mg/L	67.2	64.0	44.8	128	93.7	15.1	39	39	0
	BH-2D	mg/L	83.6	83.8	63.8	103	101.1	12.8	40	40	0
	BH-2S	mg/L	155.1	164.0	91	204	197.9	30.8	72	72	0
	BH-3	mg/L	99.8	95.0	64.1	169	147.2	23.6	57	57	0
	DMW-1545Cha	mg/L	84.6	84.6	79.5	91.8	90.4	4.6	5	5	0
	MW17-4	mg/L	104.5	105.0	76.9	122	120.3	12.1	28	28	0
	MW17-5D	mg/L	60.5	60.2	54.4	65.8	65.3	3.1	24	24	0
	MW17-5S	mg/L	92.9	79.5	10.8	181	174.2	38.1	23	23	0
	MW19-1	mg/L	41.0	40.9	39.2	43.4	43.1	1.5	18	18	0
	MW19-2D	mg/L	132	135	108	146	144	11	18	18	0
	SW-1	mg/L	90.9	92.3	72.5	108	106.4	17.8	3	3	0
	SW-2	mg/L							0	0	0
Manganese (dissolved)	3808 Allendale Lake Rd.	mg/L	0.00016	0.00010	<0.0002	0.00046	0.00043	0.00013	11	2	0
	3816 Allendale Lake Rd.	mg/L	0.0612	0.0634	0.0369	0.0815	0.0810	0.0142	12	12	12
	3841 Allendale Lake Rd.	mg/L	0.0345	0.0345	0.0345	0.0345	0.0345		1	1	1
	BH-1	mg/L	0.1256	0.1240	0.0963	0.163	0.1464	0.0137	39	39	39
	BH-2D	mg/L	0.00280	0.00153	<0.0002	0.024	0.00833	0.00421	40	39	1
	BH-2S	mg/L	0.2480	0.2600	0.0586	0.498	0.4212	0.1226	72	72	72
	BH-3	mg/L	0.07636	0.04960	0.00130	0.332	0.24920	0.07276	57	57	43
	DMW-1545Cha	mg/L	0.00114	0.00112	0.00063	0.00166	0.00164	0.00046	5	5	0
	MW17-4	mg/L	0.03414	0.03650	0.00143	0.0710	0.05918	0.01778	28	28	22
	MW17-5D	mg/L	0.1203	0.1145	0.0981	0.154	0.1518	0.0154	24	24	24
	MW17-5S	mg/L	0.16606	0.14500	<0.00020	0.482	0.41830	0.16318	23	22	15
	MW19-1	mg/L	0.0770	0.0772	0.0699	0.0814	0.0804	0.0027	18	18	18
	MW19-2D	mg/L	0.822	0.552	0.253	2.75	2.095	0.679	18	18	18
	SW-1	mg/L	0.1414	0.1920	0.0163	0.216	0.2136	0.1090	3	3	2
	SW-2	mg/L							0	0	0
Sodium (dissolved)	3808 Allendale Lake Rd.	mg/L	5.31	5.25	4.49	5.96	5.80	0.39	11	11	0
	3816 Allendale Lake Rd.	mg/L	87.3	90.0	58.2	112	112.0	17.9	12	12	0
	3841 Allendale Lake Rd.	mg/L	31.6	31.6	31.6	31.6	31.6		1	1	0
	BH-1	mg/L	34.2	34.6	24.2	44.9	37.6	3.6	39	39	0
	BH-2D	mg/L	23.8	24.2	18.9	27.4	26.8	2.2	40	40	0
	BH-2S	mg/L	80.6	84.0	34.5	111	107.0	20.6	72	72	0
	BH-3	mg/L	45.0	41.4	24.1	92.0	71.7	15.4	57	57	0
	DMW-1545Cha	mg/L	26.6	25.8	25.3	29.0	28.7	1.6	5	5	0
	MW17-4	mg/L	50.3	50.1	43.1	55.3	55.1	3.4	28	28	0
	MW17-5D	mg/L	28.6	28.7	26.5	31.1	31.0	1.4	24	24	0
	MW17-5S	mg/L	128.3	122.0	42.4	212	204.8	59.1	23	23	4
	MW19-1	mg/L	25.2	25.3	23.5	26.6	26.0	0.8	18	18	0
	MW19-2D	mg/L	34.9	34.3	30.1	41.2	39.5	3.1	18	18	0
	SW-1	mg/L	68.3	63.6	42.6	98.8	95.3	28.4	3	3	0
	SW-2	mg/L							0	0	0
Alkalinity (total, as CaCO3)	3808 Allendale Lake Rd.	mg/L	57.3	57.0	45.5	73.4	72.2	8.2	17	17	0
	3816 Allendale Lake Rd.	mg/L	174	170	144	229	215	24	17	17	0
	3841 Allendale Lake Rd.	mg/L	255	259	240	268	267	11	6	6	0
	BH-1	mg/L	264	260	230	330	310	23	39	39	0
	BH-2D	mg/L	314	293	270	400	391	41	40	40	0
	BH-2S	mg/L	504	492	340	730	661	96	72	72	0
	BH-3	mg/L	401	393	265	696	582	100	57	57	0
	DMW-1545Cha	mg/L	300	303	269	325	320	19	6	6	0
	MW17-4	mg/L	324	335	258	361	360	30	28	28	0
	MW17-5D	mg/L	266	266	237	290	287	14	24	24	0
	MW17-5S	mg/L	400	401	271	557	536	85	21	21	0
	MW19-1	mg/L	193	196	174	207	206	11	18	18	0
	MW19-2D	mg/L	436	438	377	488	486	36	18	18	0
	SW-1	mg/L	445	449	235	588	588	106	13	13	0
	SW-2	mg/L	194	193	117	248	244	46	6	6	0
Chloride	3808 Allendale Lake Rd.	mg/L	1.05	1.05	<0.4	1.6	1.47	0.33	20	19	0
	3816 Allendale Lake Rd.	mg/L	19.14	14.80	8	36.1	36.10	9.88	20	20	0
	3841 Allendale Lake Rd.	mg/L	8.37	8.66	5.2	11.4	10.67	1.76	9	9	0
	BH-1	mg/L	34.1	30.0	16.5	70	66.7	14.4	39	39	0
	BH-2D	mg/L	9.17	10.08	3.3	15.2	14.60	4.37	40	40	0
	BH-2S	mg/L	70.6	67.1	21	123	116.0	28.7	71	71	16
	BH-3	mg/L	11.85	10.80	4.1	27	21.84	5.49	57	57	0
	DMW-1545Cha	mg/L	12.11	13.10	7.34	15.2	14.80	2.83	6	6	0
	MW17-4	mg/L	63.4	67.7	30.1	104	90.8	20.5	28	28	1
	MW17-5D	mg/L	10.19	10.06	8.74	12.6	12.43	1.15	24	24	0
	MW17-5S	mg/L	77.3	51.3	16.2	251	157.7	61.1	22	22	7
	MW19-1	mg/L	4.60	4.58	3.67	6.51	5.86	0.73	18	18	0
	MW19-2D	mg/L	27.1	24.9	18.5	45.3	39.5	8.1	18	18	0
	SW-1	mg/L	12.17	11.10	4.61	26.4	22.14	6.01	13	13	0
	SW-2	mg/L	72.2	59.8	36.7	120	116.9	30.1	8	8	2



Okanagan Falls Landfill
Water Quality Results

Analyte	Sampling Location	Unit	Average	Median	Minimum	Maximum	95% Percentile	Standard Deviation	Number of Results	Number of Numerical Results	Number of Results with Exceedances
Conductivity	3808 Allendale Lake Rd.	µS/cm	135	135	121	151	146	8	20	20	0
	3816 Allendale Lake Rd.	µS/cm	904	868	604	1280	1204	181	20	20	0
	3841 Allendale Lake Rd.	µS/cm	664	697	518	727	721	70	9	9	0
	BH-1	µS/cm	619	630	<0	910	828	171	39	37	0
	BH-2D	µS/cm	635	621	<0	801	797	133	40	39	0
	BH-2S	µS/cm	1317	1370	<0	1620	1600	280	72	71	0
	BH-3	µS/cm	886	835	<0	1620	1406	297	57	56	0
	DMW-1545Cha	µS/cm	667	669	636	690	689	20	6	6	0
	MW17-4	µS/cm	959	1002	741	1120	1090	100	28	28	0
	MW17-5D	µS/cm	555	553	521	590	587	18	24	24	0
	MW17-5S	µS/cm	1122	1040	284	2040	1830	444	21	21	0
	MW19-1	µS/cm	403	407	357	422	422	16	18	18	0
	MW19-2D	µS/cm	960	969	840	1050	1050	59	18	18	0
	SW-1	µS/cm	1040	1040	636	1460	1361	221	12	12	0
	SW-2	µS/cm	1465	1440	1150	1760	1750	240	6	6	0
Sulphate	3808 Allendale Lake Rd.	mg/L	10.6	10.1	8.6	13.6	13.5	1.5	20	20	0
	3816 Allendale Lake Rd.	mg/L	285	278	100	480	458	110	20	20	0
	3841 Allendale Lake Rd.	mg/L	106.5	109.0	49.3	161	148.6	32.3	9	9	0
	BH-1	mg/L	44.1	43.0	35.4	58	54.2	6.1	38	38	0
	BH-2D	mg/L	34.8	31.8	25.3	52.5	48.5	7.2	40	40	0
	BH-2S	mg/L	147.5	118.0	43	325	263.7	74.5	70	70	0
	BH-3	mg/L	82.5	47.3	28.9	407	277.0	85.4	56	56	0
	DMW-1545Cha	mg/L	66.3	68.1	55.0	77.8	75.7	8.1	6	6	0
	MW17-4	mg/L	109.5	107.0	74.6	177	141.0	21.1	28	28	0
	MW17-5D	mg/L	34.3	34.4	29.7	38.8	38.0	2.2	24	24	0
	MW17-5S	mg/L	180.2	130.0	62.6	398	378.1	117.4	22	22	0
	MW19-1	mg/L	27.0	26.9	26.1	28.6	28.3	0.8	18	18	0
	MW19-2D	mg/L	81.6	81.5	65.0	108	96.8	11.5	18	18	0
	SW-1	mg/L	159.8	127.5	57.2	371	340.7	97.5	12	12	0
	SW-2	mg/L	207.5	201.5	89.0	381	344.6	98.0	8	8	0
Nitrate (as N)	3808 Allendale Lake Rd.	mg/L	0.405	0.361	0.052	1.68	0.683	0.323	21	21	0
	3816 Allendale Lake Rd.	mg/L							20	0	0
	3841 Allendale Lake Rd.	mg/L	0.039	0.010	<0.010	0.15	0.130	0.052	9	2	0
	BH-1	mg/L	0.017	0.005	0.010	0.2	0.073	0.043	39	5	0
	BH-2D	mg/L	0.642	0.621	0.114	1.16	1.062	0.253	40	40	0
	BH-2S	mg/L	3.719	2.450	<0.010	10.0	8.694	2.824	77	76	0
	BH-3	mg/L	3.468	1.240	<0.010	21.6	13.200	4.682	57	55	7
	DMW-1545Cha	mg/L	0.436	0.465	0.185	0.570	0.561	0.136	6	6	0
	MW17-4	mg/L	0.779	0.919	<0.010	2.80	1.638	0.634	28	27	0
	MW17-5D	mg/L	0.006	0.005	<0.010	0.022	0.013	0.004	24	2	0
	MW17-5S	mg/L	0.641	0.017	<0.010	5.68	3.275	1.481	22	12	0
	MW19-1	mg/L							18	0	0
	MW19-2D	mg/L	0.222	0.173	<0.010	0.856	0.796	0.237	18	16	0
	SW-1	mg/L	3.101	0.219	<0.010	12.0	9.762	4.218	13	8	1
	SW-2	mg/L	105.2	79.9	55.5	248	215.4	65.2	8	8	8



Replicate Analysis

Okanagan Falls Landfill
Duplicate Water Samples Report

	Sampling Location	BH-2S	BH-2S	BH-2S	
	Date Sampled	24-Jul-25	24-Jul-25	24-Jul-25	
	Lab Sample ID	25G3733-01	25G3733-02	25G3733-03	
	Sample Type	Normal	Duplicate	Duplicate	
Analyte	Unit				RSD
Field Results					
Conductivity	µS/cm	1560			
Depth to Water (below top of casing)	m	3.389			
Oxidation reduction potential	mV	207.8			
Dissolved oxygen	mg/L	0.81			
pH		7.53			
Total dissolved solids	mg/L	1014			
Temperature	°C	16.8			
Turbidity	NTU	0.31			
Volume Purged	L	6.46			
Lab Results					
Dissolved Metals					
Aluminum (dissolved)	mg/L	<0.0050	<0.0050	<0.0050	
Antimony (dissolved)	mg/L	<0.00020	<0.00020	<0.00020	
Arsenic (dissolved)	mg/L	<0.00050	<0.00050	<0.00050	
Barium (dissolved)	mg/L	0.129	0.126	0.128	1.2%
Beryllium (dissolved)	mg/L	<0.00010	<0.00010	<0.00010	
Bismuth (dissolved)	mg/L	<0.00010	<0.00010	<0.00010	
Boron (dissolved)	mg/L	0.308	0.303	0.310	1.2%
Cadmium (dissolved)	mg/L	0.000017	0.000020	0.000016	11.8%
Calcium (dissolved)	mg/L	181	177	190	3.6%
Chromium (dissolved)	mg/L	<0.00050	<0.00050	<0.00050	
Cobalt (dissolved)	mg/L	0.00054	0.00055	0.00055	1.1%
Copper (dissolved)	mg/L	0.00201	0.00200	0.00198	0.8%
Iron (dissolved)	mg/L	<0.010	<0.010	<0.010	
Lead (dissolved)	mg/L	<0.00020	<0.00020	<0.00020	
Lithium (dissolved)	mg/L	0.0207	0.0206	0.0201	1.6%
Magnesium (dissolved)	mg/L	59.0	58.5	60.5	1.8%
Manganese (dissolved)	mg/L	0.263	0.264	0.261	0.6%
Mercury (dissolved)	mg/L	<0.000010	<0.000010	<0.000010	
Molybdenum (dissolved)	mg/L	0.00657	0.00642	0.00664	1.7%
Nickel (dissolved)	mg/L	0.00233	0.00234	0.00234	0.2%
Selenium (dissolved)	mg/L	<0.00050	<0.00050	<0.00050	
Silicon (dissolved, as Si)	mg/L	11.1	11.0	11.3	1.4%
Silver (dissolved)	mg/L	<0.000050	<0.000050	<0.000050	
Sodium (dissolved)	mg/L	109	109	107	1.1%
Strontium (dissolved)	mg/L	2.51	2.49	2.46	1.0%
Sulphur (dissolved)	mg/L	42.6	42.7	46.3	4.8%
Tellurium (dissolved)	mg/L	<0.00050	<0.00050	<0.00050	
Thallium (dissolved)	mg/L	<0.000020	<0.000020	<0.000020	
Thorium (dissolved)	mg/L	<0.00010	<0.00010	<0.00010	
Tin (dissolved)	mg/L	<0.00020	<0.00020	<0.00020	
Titanium (dissolved)	mg/L	<0.0050	<0.0050	<0.0050	
Tungsten (dissolved)	mg/L	<0.0010	<0.0010	<0.0010	
Uranium (dissolved)	mg/L	0.0525	0.0517	0.0527	1.0%
Vanadium (dissolved)	mg/L	<0.0050	<0.0050	<0.0050	
Zinc (dissolved)	mg/L	<0.0040	<0.0040	<0.0040	
Zirconium (dissolved)	mg/L	<0.00010	<0.00010	<0.00010	
General					
Bicarbonate alkalinity (as HCO ₃)	mg/L	778	760	778	1.3%
Carbonate alkalinity (as CO ₃)	mg/L	<0.600	<0.600	<0.600	
Hydroxide alkalinity (as OH)	mg/L	<0.340	<0.340	<0.340	
Alkalinity (bicarbonate, as CaCO ₃)	mg/L	638	623	638	1.4%
Alkalinity (carbonate, as CaCO ₃)	mg/L	<1.0	<1.0	<1.0	
Alkalinity (hydroxide, as CaCO ₃)	mg/L	<1.0	<1.0	<1.0	
Alkalinity (phenolphthalein, as CaCO ₃)	mg/L	<1.0	<1.0	<1.0	
Alkalinity (total, as CaCO ₃)	mg/L	638	623	638	1.4%
Bromide	mg/L	0.14	<0.10	<0.10	
Chemical oxygen demand	mg/L	25	26	28	5.8%
Chloride	mg/L	49.5	52.5	48.8	3.9%
Conductivity	µS/cm	1570	1570	1580	0.4%
Fluoride	mg/L	0.56	0.55	0.60	4.6%
Hardness (as CaCO ₃), dissolved	mg/L	695	684	723	2.9%
pH		7.81	7.84	7.93	0.8%
Sulphate	mg/L	137	119	122	7.7%
Nutrients					
Ammonia (total, as N)	mg/L	<0.050	<0.050	<0.050	
Nitrate (as N)	mg/L	1.67	1.03	0.942	32.7%
Nitrate + Nitrite (as N)	mg/L	1.67	1.03	0.942	32.7%
Nitrate + Nitrite (as N) (calculated)	mg/L	1.67	1.03	0.942	32.7%
Nitrite (as N)	mg/L	<0.010	<0.010	<0.010	
Phosphorus (dissolved, by ICPMS/ICPOES)	mg/L	<0.050	<0.050	<0.050	
Potassium (dissolved)	mg/L	5.90	5.70	6.35	5.6%



APPENDIX E: 2025 Laboratory Certificates of Analysis






CERTIFICATE OF ANALYSIS

REPORTED TO	Regional District of Okanagan Similkameen 101 Martin Street Penticton, BC V2A 5J9		WORK ORDER	25D1284
ATTENTION	Rob Palmer		RECEIVED / TEMP REPORTED	2025-04-09 10:18 / 3.8°C
PO NUMBER	TLGW		REPORTED	2025-04-16 11:47
PROJECT	Ok Falls - TLGW		COC NUMBER	eCOC#00022309
PROJECT INFO				

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

<p><i>Big Picture Sidekicks</i></p>  <p>You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.</p>	<p><i>We've Got Chemistry</i></p>  <p>It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.</p>	<p><i>Ahead of the Curve</i></p>  <p>Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.</p>
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Work Order Comments: Custody Seals Intact: YES

By engaging our services, you are agreeing to CARO Analytical Service's Standard Terms and Conditions outlined here: <https://www.caro.ca/terms-conditions>

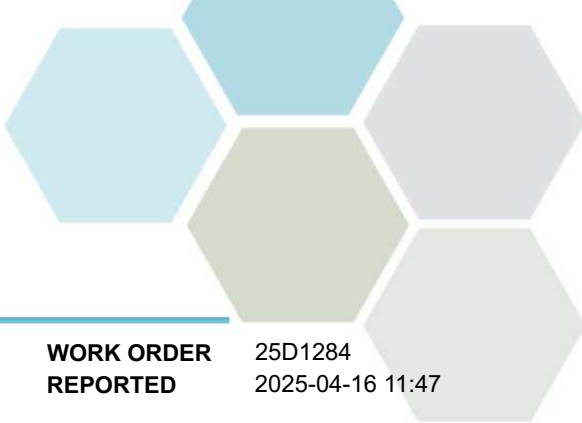
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

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TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1284
2025-04-16 11:47

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
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BH-2S (25D1284-01) | Matrix: Ground Water | Sampled: 2025-04-08 13:25

Anions

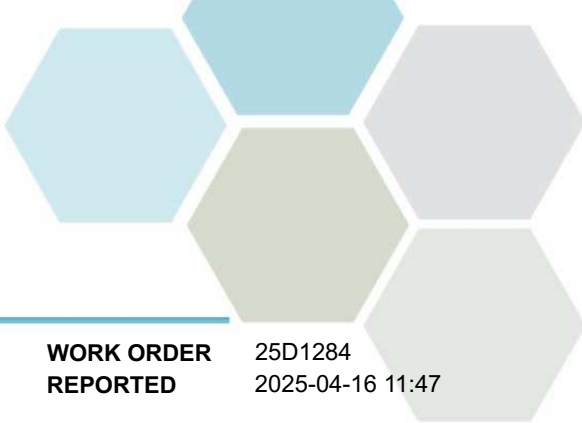
Bromide	0.37	N/A	0.10 mg/L	2025-04-10	
Chloride	49.8	AO ≤ 250	0.10 mg/L	2025-04-10	
Fluoride	0.47	MAC = 1.5	0.10 mg/L	2025-04-10	
Nitrate (as N)	< 0.010	MAC = 10	0.010 mg/L	2025-04-10	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2025-04-10	
Sulfate	120	AO ≤ 500	1.0 mg/L	2025-04-10	

Calculated Parameters

Bicarbonate (HCO3)	791	N/A	1.22 mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600 mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340 mg/L	N/A	
Hardness, Dissolved (as CaCO3)	680	N/A	0.500 mg/L	N/A	
Nitrate+Nitrite (as N)	< 0.0100	N/A	0.0100 mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-04-15	
Antimony, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-04-15	
Arsenic, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-04-15	
Barium, dissolved	0.127	N/A	0.0050 mg/L	2025-04-15	
Beryllium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-04-15	
Bismuth, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-04-15	
Boron, dissolved	0.332	N/A	0.0500 mg/L	2025-04-15	
Cadmium, dissolved	0.000021	N/A	0.000010 mg/L	2025-04-15	
Calcium, dissolved	176	N/A	0.20 mg/L	2025-04-15	
Chromium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-04-15	
Cobalt, dissolved	0.00047	N/A	0.00010 mg/L	2025-04-15	
Copper, dissolved	0.00199	N/A	0.00040 mg/L	2025-04-15	
Iron, dissolved	< 0.010	N/A	0.010 mg/L	2025-04-15	
Lead, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-04-15	
Lithium, dissolved	0.0239	N/A	0.00010 mg/L	2025-04-15	
Magnesium, dissolved	58.0	N/A	0.010 mg/L	2025-04-15	
Manganese, dissolved	0.179	N/A	0.00020 mg/L	2025-04-15	
Mercury, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-04-10	
Molybdenum, dissolved	0.00631	N/A	0.00010 mg/L	2025-04-15	
Nickel, dissolved	0.00247	N/A	0.00040 mg/L	2025-04-15	
Phosphorus, dissolved	< 0.050	N/A	0.050 mg/L	2025-04-15	
Potassium, dissolved	6.19	N/A	0.10 mg/L	2025-04-15	
Selenium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-04-15	
Silicon, dissolved	11.7	N/A	1.0 mg/L	2025-04-15	
Silver, dissolved	< 0.000050	N/A	0.000050 mg/L	2025-04-15	
Sodium, dissolved	111	N/A	0.10 mg/L	2025-04-15	
Strontium, dissolved	2.58	N/A	0.0010 mg/L	2025-04-15	
Sulfur, dissolved	43.5	N/A	3.0 mg/L	2025-04-15	
Tellurium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-04-15	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1284
2025-04-16 11:47

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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BH-2S (25D1284-01) | Matrix: Ground Water | Sampled: 2025-04-08 13:25, Continued

Dissolved Metals, Continued

Thallium, dissolved	< 0.000020	N/A	0.000020	mg/L	2025-04-15	
Thorium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-15	
Tin, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-04-15	
Titanium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-04-15	
Tungsten, dissolved	< 0.0010	N/A	0.0010	mg/L	2025-04-15	
Uranium, dissolved	0.0505	N/A	0.000020	mg/L	2025-04-15	
Vanadium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-04-15	
Zinc, dissolved	< 0.0040	N/A	0.0040	mg/L	2025-04-15	
Zirconium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-15	

General Parameters

Alkalinity, Total (as CaCO3)	649	N/A	1.0	mg/L	2025-04-12	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-04-12	
Alkalinity, Bicarbonate (as CaCO3)	649	N/A	1.0	mg/L	2025-04-12	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-04-12	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-04-12	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-04-10	
Chemical Oxygen Demand	34	N/A	20	mg/L	2025-04-11	
Conductivity (EC)	1540	N/A	2.0	µS/cm	2025-04-12	
pH	7.94	7.0-10.5	0.10	pH units	2025-04-12	HT2

BH-3 (25D1284-02) | Matrix: Ground Water | Sampled: 2025-04-08 14:00

Anions

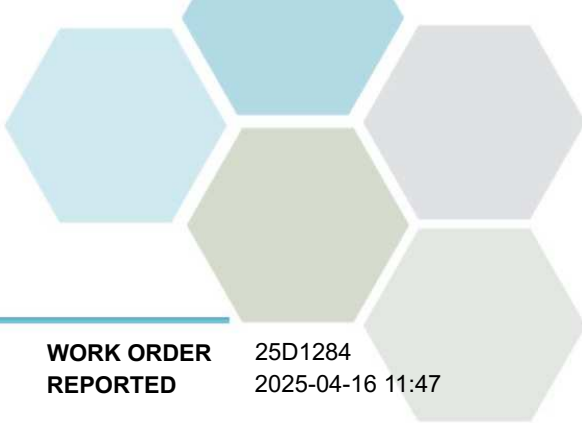
Bromide	< 0.10	N/A	0.10	mg/L	2025-04-10	
Chloride	21.8	AO ≤ 250	0.10	mg/L	2025-04-10	
Fluoride	0.37	MAC = 1.5	0.10	mg/L	2025-04-10	
Nitrate (as N)	16.1	MAC = 10	0.010	mg/L	2025-04-10	
Nitrite (as N)	0.093	MAC = 1	0.010	mg/L	2025-04-10	
Sulfate	407	AO ≤ 500	1.0	mg/L	2025-04-10	

Calculated Parameters

Bicarbonate (HCO3)	515	N/A	1.22	mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600	mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340	mg/L	N/A	
Hardness, Dissolved (as CaCO3)	822	N/A	0.500	mg/L	N/A	
Nitrate+Nitrite (as N)	16.1	N/A	0.100	mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-04-14	
Antimony, dissolved	0.00021	N/A	0.00020	mg/L	2025-04-14	
Arsenic, dissolved	0.00193	N/A	0.00050	mg/L	2025-04-14	
Barium, dissolved	0.0862	N/A	0.0050	mg/L	2025-04-14	
Beryllium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-14	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1284
2025-04-16 11:47

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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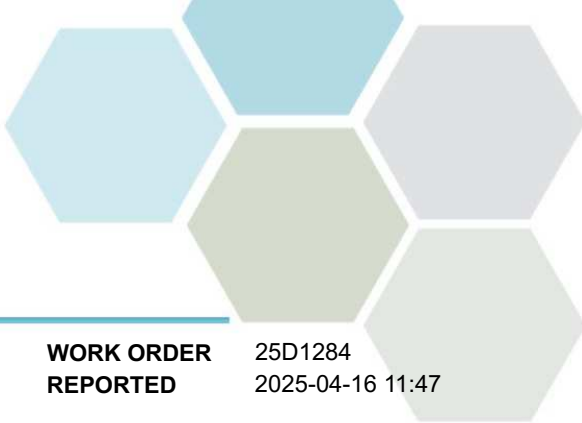
BH-3 (25D1284-02) | Matrix: Ground Water | Sampled: 2025-04-08 14:00, Continued

Dissolved Metals, Continued

Bismuth, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-14	
Boron, dissolved	0.148	N/A	0.0500	mg/L	2025-04-14	
Cadmium, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-04-14	
Calcium, dissolved	169	N/A	0.20	mg/L	2025-04-14	
Chromium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-04-14	
Cobalt, dissolved	0.00015	N/A	0.00010	mg/L	2025-04-14	
Copper, dissolved	0.00589	N/A	0.00040	mg/L	2025-04-14	
Iron, dissolved	< 0.010	N/A	0.010	mg/L	2025-04-14	
Lead, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-04-14	
Lithium, dissolved	0.0213	N/A	0.00010	mg/L	2025-04-14	
Magnesium, dissolved	97.2	N/A	0.010	mg/L	2025-04-14	
Manganese, dissolved	0.00678	N/A	0.00020	mg/L	2025-04-14	
Mercury, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-04-10	
Molybdenum, dissolved	0.00516	N/A	0.00010	mg/L	2025-04-14	
Nickel, dissolved	0.00158	N/A	0.00040	mg/L	2025-04-14	
Phosphorus, dissolved	0.102	N/A	0.050	mg/L	2025-04-14	
Potassium, dissolved	15.6	N/A	0.10	mg/L	2025-04-14	
Selenium, dissolved	0.00116	N/A	0.00050	mg/L	2025-04-14	
Silicon, dissolved	12.2	N/A	1.0	mg/L	2025-04-14	
Silver, dissolved	< 0.000050	N/A	0.000050	mg/L	2025-04-14	
Sodium, dissolved	66.3	N/A	0.10	mg/L	2025-04-14	
Strontium, dissolved	1.81	N/A	0.0010	mg/L	2025-04-14	
Sulfur, dissolved	139	N/A	3.0	mg/L	2025-04-14	
Tellurium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-04-14	
Thallium, dissolved	< 0.000020	N/A	0.000020	mg/L	2025-04-14	
Thorium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-14	
Tin, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-04-14	
Titanium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-04-14	
Tungsten, dissolved	< 0.0010	N/A	0.0010	mg/L	2025-04-14	
Uranium, dissolved	0.0265	N/A	0.000020	mg/L	2025-04-14	
Vanadium, dissolved	0.0103	N/A	0.0050	mg/L	2025-04-14	
Zinc, dissolved	< 0.0040	N/A	0.0040	mg/L	2025-04-14	
Zirconium, dissolved	0.00061	N/A	0.00010	mg/L	2025-04-14	

General Parameters

Alkalinity, Total (as CaCO3)	422	N/A	1.0	mg/L	2025-04-12	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-04-12	
Alkalinity, Bicarbonate (as CaCO3)	422	N/A	1.0	mg/L	2025-04-12	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-04-12	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-04-12	
Ammonia, Total (as N)	0.082	None Required	0.050	mg/L	2025-04-10	
Chemical Oxygen Demand	59	N/A	20	mg/L	2025-04-11	
Conductivity (EC)	1620	N/A	2.0	µS/cm	2025-04-12	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1284
2025-04-16 11:47

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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BH-3 (25D1284-02) | Matrix: Ground Water | Sampled: 2025-04-08 14:00, Continued

General Parameters, Continued

pH	7.80	7.0-10.5	0.10	pH units	2025-04-12	HT2
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MW19-1 (25D1284-03) | Matrix: Ground Water | Sampled: 2025-04-08 14:20

Anions

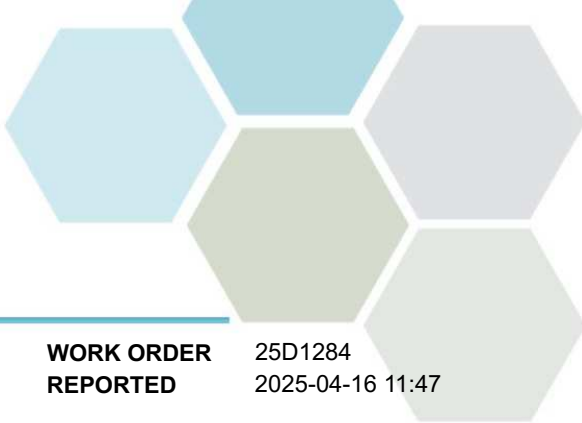
Bromide	< 0.10	N/A	0.10	mg/L	2025-04-10	
Chloride	4.76	AO ≤ 250	0.10	mg/L	2025-04-10	
Fluoride	0.57	MAC = 1.5	0.10	mg/L	2025-04-10	
Nitrate (as N)	< 0.010	MAC = 10	0.010	mg/L	2025-04-10	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-04-10	
Sulfate	27.4	AO ≤ 500	1.0	mg/L	2025-04-10	

Calculated Parameters

Bicarbonate (HCO ₃)	222	N/A	1.22	mg/L	N/A	
Carbonate (CO ₃)	< 0.600	N/A	0.600	mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340	mg/L	N/A	
Hardness, Dissolved (as CaCO ₃)	167	N/A	0.500	mg/L	N/A	
Nitrate+Nitrite (as N)	< 0.0100	N/A	0.0100	mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-04-14	
Antimony, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-04-14	
Arsenic, dissolved	0.0106	N/A	0.00050	mg/L	2025-04-14	
Barium, dissolved	0.0227	N/A	0.0050	mg/L	2025-04-14	
Beryllium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-14	
Bismuth, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-14	
Boron, dissolved	0.0523	N/A	0.0500	mg/L	2025-04-14	
Cadmium, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-04-14	
Calcium, dissolved	39.9	N/A	0.20	mg/L	2025-04-14	
Chromium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-04-14	
Cobalt, dissolved	0.00023	N/A	0.00010	mg/L	2025-04-14	
Copper, dissolved	< 0.00040	N/A	0.00040	mg/L	2025-04-14	
Iron, dissolved	0.141	N/A	0.010	mg/L	2025-04-14	
Lead, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-04-14	
Lithium, dissolved	0.0214	N/A	0.00010	mg/L	2025-04-14	
Magnesium, dissolved	16.3	N/A	0.010	mg/L	2025-04-14	
Manganese, dissolved	0.0753	N/A	0.00020	mg/L	2025-04-14	
Mercury, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-04-10	
Molybdenum, dissolved	0.0113	N/A	0.00010	mg/L	2025-04-14	
Nickel, dissolved	< 0.00040	N/A	0.00040	mg/L	2025-04-14	
Phosphorus, dissolved	< 0.050	N/A	0.050	mg/L	2025-04-14	
Potassium, dissolved	1.37	N/A	0.10	mg/L	2025-04-14	
Selenium, dissolved	0.00085	N/A	0.00050	mg/L	2025-04-14	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1284
2025-04-16 11:47

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
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MW19-1 (25D1284-03) | Matrix: Ground Water | Sampled: 2025-04-08 14:20, Continued

Dissolved Metals, Continued

Silicon, dissolved	9.7	N/A	1.0 mg/L	2025-04-14	
Silver, dissolved	< 0.000050	N/A	0.000050 mg/L	2025-04-14	
Sodium, dissolved	25.3	N/A	0.10 mg/L	2025-04-14	
Strontium, dissolved	1.90	N/A	0.0010 mg/L	2025-04-14	
Sulfur, dissolved	8.5	N/A	3.0 mg/L	2025-04-14	
Tellurium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-04-14	
Thallium, dissolved	< 0.000020	N/A	0.000020 mg/L	2025-04-14	
Thorium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-04-14	
Tin, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-04-14	
Titanium, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-04-14	
Tungsten, dissolved	< 0.0010	N/A	0.0010 mg/L	2025-04-14	
Uranium, dissolved	0.00182	N/A	0.000020 mg/L	2025-04-14	
Vanadium, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-04-14	
Zinc, dissolved	< 0.0040	N/A	0.0040 mg/L	2025-04-14	
Zirconium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-04-14	

General Parameters

Alkalinity, Total (as CaCO3)	182	N/A	1.0 mg/L	2025-04-12	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-04-12	
Alkalinity, Bicarbonate (as CaCO3)	182	N/A	1.0 mg/L	2025-04-12	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-04-12	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-04-12	
Ammonia, Total (as N)	0.120	None Required	0.050 mg/L	2025-04-10	
Chemical Oxygen Demand	< 20	N/A	20 mg/L	2025-04-11	
Conductivity (EC)	422	N/A	2.0 µS/cm	2025-04-12	
pH	8.06	7.0-10.5	0.10 pH units	2025-04-12	HT2

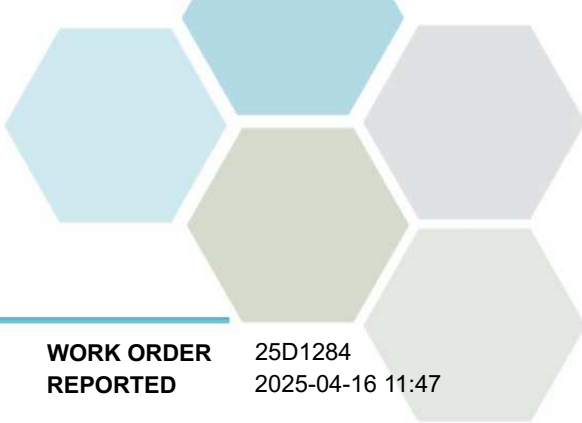
MW17-5S (25D1284-04) | Matrix: Ground Water | Sampled: 2025-04-08 15:20

Anions

Bromide	< 0.10	N/A	0.10 mg/L	2025-04-10	
Chloride	16.2	AO ≤ 250	0.10 mg/L	2025-04-10	
Fluoride	0.53	MAC = 1.5	0.10 mg/L	2025-04-10	
Nitrate (as N)	0.014	MAC = 10	0.010 mg/L	2025-04-10	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2025-04-10	
Sulfate	79.7	AO ≤ 500	1.0 mg/L	2025-04-10	

Calculated Parameters

Bicarbonate (HCO3)	330	N/A	1.22 mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600 mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340 mg/L	N/A	
Hardness, Dissolved (as CaCO3)	287	N/A	0.500 mg/L	N/A	
Nitrate+Nitrite (as N)	0.0138	N/A	0.0100 mg/L	N/A	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1284
2025-04-16 11:47

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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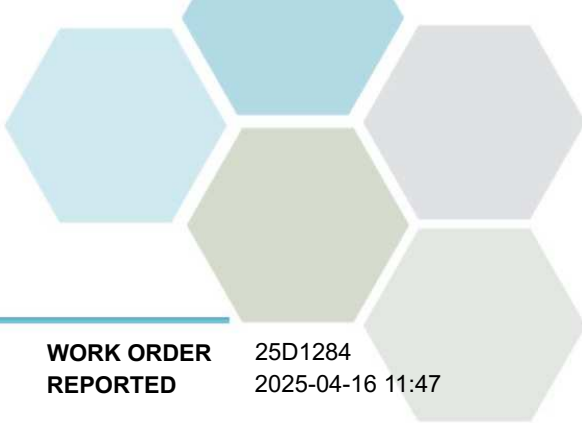
MW17-5S (25D1284-04) | Matrix: Ground Water | Sampled: 2025-04-08 15:20, Continued

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-04-14	
Antimony, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-04-14	
Arsenic, dissolved	0.00056	N/A	0.00050	mg/L	2025-04-14	
Barium, dissolved	0.0669	N/A	0.0050	mg/L	2025-04-14	
Beryllium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-14	
Bismuth, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-14	
Boron, dissolved	0.0977	N/A	0.0500	mg/L	2025-04-14	
Cadmium, dissolved	0.000011	N/A	0.000010	mg/L	2025-04-14	
Calcium, dissolved	69.1	N/A	0.20	mg/L	2025-04-14	
Chromium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-04-14	
Cobalt, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-14	
Copper, dissolved	0.00045	N/A	0.00040	mg/L	2025-04-14	
Iron, dissolved	< 0.010	N/A	0.010	mg/L	2025-04-14	
Lead, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-04-14	
Lithium, dissolved	0.0205	N/A	0.00010	mg/L	2025-04-14	
Magnesium, dissolved	27.7	N/A	0.010	mg/L	2025-04-14	
Manganese, dissolved	0.00225	N/A	0.00020	mg/L	2025-04-14	
Mercury, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-04-10	
Molybdenum, dissolved	0.00538	N/A	0.00010	mg/L	2025-04-14	
Nickel, dissolved	0.00108	N/A	0.00040	mg/L	2025-04-14	
Phosphorus, dissolved	< 0.050	N/A	0.050	mg/L	2025-04-14	
Potassium, dissolved	3.62	N/A	0.10	mg/L	2025-04-14	
Selenium, dissolved	0.00204	N/A	0.00050	mg/L	2025-04-14	
Silicon, dissolved	7.5	N/A	1.0	mg/L	2025-04-14	
Silver, dissolved	< 0.000050	N/A	0.000050	mg/L	2025-04-14	
Sodium, dissolved	42.4	N/A	0.10	mg/L	2025-04-14	
Strontium, dissolved	1.25	N/A	0.0010	mg/L	2025-04-14	
Sulfur, dissolved	26.1	N/A	3.0	mg/L	2025-04-14	
Tellurium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-04-14	
Thallium, dissolved	0.000053	N/A	0.000020	mg/L	2025-04-14	
Thorium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-14	
Tin, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-04-14	
Titanium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-04-14	
Tungsten, dissolved	< 0.0010	N/A	0.0010	mg/L	2025-04-14	
Uranium, dissolved	0.00944	N/A	0.000020	mg/L	2025-04-14	
Vanadium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-04-14	
Zinc, dissolved	< 0.0040	N/A	0.0040	mg/L	2025-04-14	
Zirconium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-14	

General Parameters

Alkalinity, Total (as CaCO3)	271	N/A	1.0	mg/L	2025-04-12	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-04-12	
Alkalinity, Bicarbonate (as CaCO3)	271	N/A	1.0	mg/L	2025-04-12	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1284
2025-04-16 11:47

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
MW17-5S (25D1284-04) Matrix: Ground Water Sampled: 2025-04-08 15:20, Continued					
<i>General Parameters, Continued</i>					
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-04-12	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-04-12	
Ammonia, Total (as N)	0.057	None Required	0.050 mg/L	2025-04-10	
Chemical Oxygen Demand	21	N/A	20 mg/L	2025-04-11	
Conductivity (EC)	714	N/A	2.0 µS/cm	2025-04-12	
pH	7.95	7.0-10.5	0.10 pH units	2025-04-12	HT2

MW17-5D (25D1284-05) | Matrix: Ground Water | Sampled: 2025-04-08 15:55

Anions

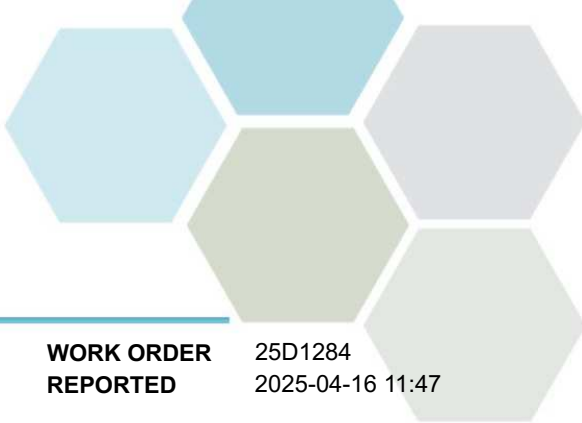
Bromide	< 0.10	N/A	0.10 mg/L	2025-04-10	
Chloride	11.9	AO ≤ 250	0.10 mg/L	2025-04-10	
Fluoride	0.47	MAC = 1.5	0.10 mg/L	2025-04-10	
Nitrate (as N)	< 0.010	MAC = 10	0.010 mg/L	2025-04-10	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2025-04-10	
Sulfate	34.5	AO ≤ 500	1.0 mg/L	2025-04-10	

Calculated Parameters

Bicarbonate (HCO3)	306	N/A	1.22 mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600 mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340 mg/L	N/A	
Hardness, Dissolved (as CaCO3)	251	N/A	0.500 mg/L	N/A	
Nitrate+Nitrite (as N)	< 0.0100	N/A	0.0100 mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-04-14	
Antimony, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-04-14	
Arsenic, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-04-14	
Barium, dissolved	0.0321	N/A	0.0050 mg/L	2025-04-14	
Beryllium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-04-14	
Bismuth, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-04-14	
Boron, dissolved	< 0.0500	N/A	0.0500 mg/L	2025-04-14	
Cadmium, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-04-14	
Calcium, dissolved	60.3	N/A	0.20 mg/L	2025-04-14	
Chromium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-04-14	
Cobalt, dissolved	0.00018	N/A	0.00010 mg/L	2025-04-14	
Copper, dissolved	< 0.00040	N/A	0.00040 mg/L	2025-04-14	
Iron, dissolved	1.59	N/A	0.010 mg/L	2025-04-14	
Lead, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-04-14	
Lithium, dissolved	0.0228	N/A	0.00010 mg/L	2025-04-14	
Magnesium, dissolved	24.4	N/A	0.010 mg/L	2025-04-14	
Manganese, dissolved	0.153	N/A	0.00020 mg/L	2025-04-14	
Mercury, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-04-10	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1284
2025-04-16 11:47

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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MW17-5D (25D1284-05) | Matrix: Ground Water | Sampled: 2025-04-08 15:55, Continued

Dissolved Metals, Continued

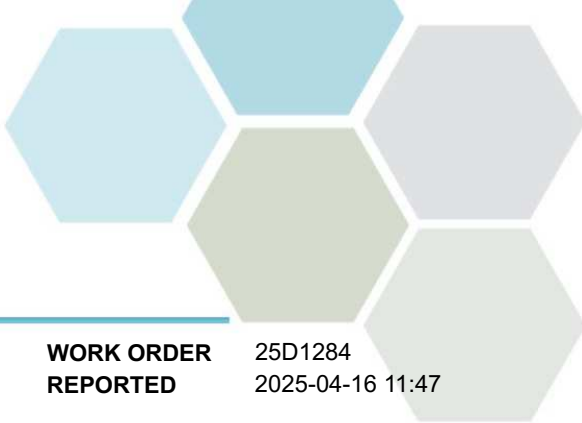
Molybdenum, dissolved	0.00941	N/A	0.00010	mg/L	2025-04-14	
Nickel, dissolved	< 0.00040	N/A	0.00040	mg/L	2025-04-14	
Phosphorus, dissolved	< 0.050	N/A	0.050	mg/L	2025-04-14	
Potassium, dissolved	2.20	N/A	0.10	mg/L	2025-04-14	
Selenium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-04-14	
Silicon, dissolved	9.8	N/A	1.0	mg/L	2025-04-14	
Silver, dissolved	< 0.000050	N/A	0.000050	mg/L	2025-04-14	
Sodium, dissolved	28.8	N/A	0.10	mg/L	2025-04-14	
Strontium, dissolved	2.02	N/A	0.0010	mg/L	2025-04-14	
Sulfur, dissolved	10.8	N/A	3.0	mg/L	2025-04-14	
Tellurium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-04-14	
Thallium, dissolved	< 0.000020	N/A	0.000020	mg/L	2025-04-14	
Thorium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-14	
Tin, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-04-14	
Titanium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-04-14	
Tungsten, dissolved	< 0.0010	N/A	0.0010	mg/L	2025-04-14	
Uranium, dissolved	0.00832	N/A	0.000020	mg/L	2025-04-14	
Vanadium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-04-14	
Zinc, dissolved	< 0.0040	N/A	0.0040	mg/L	2025-04-14	
Zirconium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-14	

General Parameters

Alkalinity, Total (as CaCO3)	251	N/A	1.0	mg/L	2025-04-12	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-04-12	
Alkalinity, Bicarbonate (as CaCO3)	251	N/A	1.0	mg/L	2025-04-12	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-04-12	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-04-12	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-04-10	
Chemical Oxygen Demand	< 20	N/A	20	mg/L	2025-04-11	
Conductivity (EC)	583	N/A	2.0	µS/cm	2025-04-12	
pH	8.04	7.0-10.5	0.10	pH units	2025-04-12	HT2

Sample Qualifiers:

HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1284
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Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Chemical Oxygen Demand in Water	SM 5220 D* (2022)	Closed Reflux, Colorimetry	✓	Kelowna
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Kelowna
Dissolved Metals in Water	EPA 200.8 / EPA 6020B	0.45 µm Filtration / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Hardness in Water	SM 2340 B (2021)	Calculation: 2.497 [diss Ca] + 4.118 [diss Mg]	✓	N/A
Mercury, dissolved in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	✓	Richmond
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method

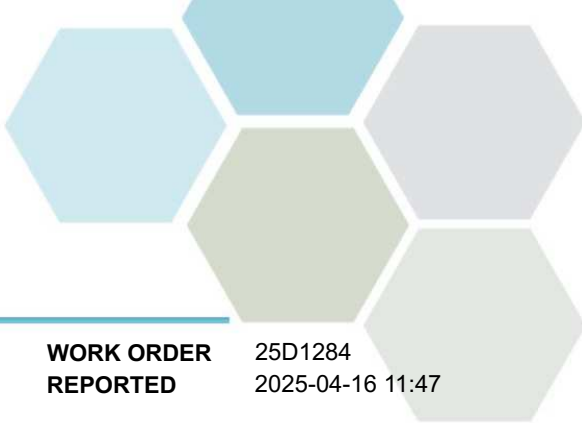
Glossary of Terms:

RL	Reporting Limit (default)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
pH units	pH < 7 = acidic, pH > 7 = basic
µS/cm	Microsiemens per centimetre
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

Guidelines Referenced in this Report:

[Guidelines for Canadian Drinking Water Quality \(Health Canada, September 2022\)](#)

Note: In some cases, the values displayed on the report represent the lowest guideline and are to be verified by the end user



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO Regional District of Okanagan Similkameen
PROJECT Ok Falls - TLGW

WORK ORDER 25D1284
REPORTED 2025-04-16 11:47

General Comments:

The results in this report apply to the received samples analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety. CARO is not responsible for any loss or damage resulting directly or indirectly from error or omission in the conduct of testing. Liability is limited to the cost of analysis. Caro will dispose of all samples within 30 days of sample receipt, unless otherwise agreed.

Results in **Bold** indicate values that are above CARO's method reporting limits. Any results that are above regulatory limits are highlighted **red**. Please note that results will only be highlighted red if the regulatory limits are included on the CARO report. Any Bold and/or highlighted results do not take into account method uncertainty. If you would like method uncertainty or regulatory limits to be included on your report, please contact your Account Manager: hhannaoui@caro.ca

Please note any regulatory guidelines applied to this report are added as a convenience to the client, at their request, to help provide some initial context to analytical results obtained. Although CARO makes every effort to ensure accuracy of the associated regulatory guideline(s) applied, the guidelines applied cannot be assumed to be correct due to a variety of factors and as such CARO Analytical Services assumes no liability or responsibility for the use of those guidelines to make any decisions. The original source of the regulation should be verified and a review of the guideline(s) should be validated as correct in order to make any decisions arising from the comparison of the analytical data obtained to the relevant regulatory guideline for one's particular circumstances. Further, CARO Analytical Services assumes no liability or responsibility for any loss attributed from the use of these guidelines in any way.



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1284
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The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

- **Method Blank (Blk):** A blank sample that undergoes sample processing identical to that carried out for the test samples. Method blank results are used to assess contamination from the laboratory environment and reagents.
- **Duplicate (Dup):** An additional or second portion of a randomly selected sample in the analytical run carried through the entire analytical process. Duplicates provide a measure of the analytical method's precision (reproducibility).
- **Blank Spike (BS):** A sample of known concentration which undergoes processing identical to that carried out for test samples, also referred to as a laboratory control sample (LCS). Blank spikes provide a measure of the analytical method's accuracy.
- **Matrix Spike (MS):** A second aliquot of sample is fortified with a known concentration of target analytes and carried through the entire analytical process. Matrix spikes evaluate potential matrix effects that may affect the analyte recovery.
- **Reference Material (SRM):** A homogenous material of similar matrix to the samples, certified for the parameter(s) listed. Reference Materials ensure that the analytical process is adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10-20 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Anions, Batch B5D2506									
Blank (B5D2506-BLK1)			Prepared: 2025-04-10, Analyzed: 2025-04-10						
Bromide	< 0.10	0.10 mg/L							
Chloride	< 0.10	0.10 mg/L							
Fluoride	< 0.10	0.10 mg/L							
Nitrate (as N)	< 0.010	0.010 mg/L							
Nitrite (as N)	< 0.010	0.010 mg/L							
Sulfate	< 1.0	1.0 mg/L							
LCS (B5D2506-BS1)			Prepared: 2025-04-10, Analyzed: 2025-04-10						
Bromide	3.90	0.10 mg/L	4.00		97	85-115			
Chloride	15.8	0.10 mg/L	16.0		98	90-110			
Fluoride	3.85	0.10 mg/L	4.00		96	88-108			
Nitrate (as N)	3.97	0.010 mg/L	4.00		99	90-110			
Nitrite (as N)	1.80	0.010 mg/L	2.00		90	85-115			
Sulfate	15.9	1.0 mg/L	16.0		99	90-110			
Duplicate (B5D2506-DUP1)			Source: 25D1284-03		Prepared: 2025-04-10, Analyzed: 2025-04-10				
Bromide	< 0.10	0.10 mg/L		< 0.10					10
Chloride	4.76	0.10 mg/L		4.76			< 1		10
Fluoride	0.53	0.10 mg/L		0.57			6		10
Nitrate (as N)	< 0.010	0.010 mg/L		< 0.010					10
Nitrite (as N)	< 0.010	0.010 mg/L		< 0.010					15
Sulfate	27.4	1.0 mg/L		27.4			< 1		10
Matrix Spike (B5D2506-MS1)			Source: 25D1284-03		Prepared: 2025-04-10, Analyzed: 2025-04-10				
Bromide	3.75	0.10 mg/L	4.00	< 0.10	93	80-120			
Chloride	20.6	0.10 mg/L	16.0	4.76	99	75-125			
Fluoride	4.70	0.10 mg/L	4.00	0.57	103	75-125			
Nitrate (as N)	3.83	0.010 mg/L	4.00	< 0.010	96	75-125			
Nitrite (as N)	1.97	0.010 mg/L	2.00	< 0.010	98	75-115			
Sulfate	43.3	1.0 mg/L	16.0	27.4	99	75-125			

Dissolved Metals, Batch B5D2641

Blank (B5D2641-BLK1)			Prepared: 2025-04-10, Analyzed: 2025-04-10						
Mercury, dissolved	< 0.000010	0.000010 mg/L							



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
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Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Dissolved Metals, Batch B5D2641, Continued									
Blank (B5D2641-BLK2)			Prepared: 2025-04-10, Analyzed: 2025-04-10						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5D2641-BLK3)			Prepared: 2025-04-10, Analyzed: 2025-04-10						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
LCS (B5D2641-BS1)			Prepared: 2025-04-10, Analyzed: 2025-04-10						
Mercury, dissolved	0.00249	0.000010 mg/L	0.00250		100	80-120			
LCS (B5D2641-BS2)			Prepared: 2025-04-10, Analyzed: 2025-04-10						
Mercury, dissolved	0.00242	0.000010 mg/L	0.00250		97	80-120			
LCS (B5D2641-BS3)			Prepared: 2025-04-10, Analyzed: 2025-04-10						
Mercury, dissolved	0.00269	0.000010 mg/L	0.00250		108	80-120			
Duplicate (B5D2641-DUP3)			Source: 25D1284-05			Prepared: 2025-04-10, Analyzed: 2025-04-10			
Mercury, dissolved	< 0.000010	0.000010 mg/L		< 0.000010				20	
Matrix Spike (B5D2641-MS1)			Source: 25D1284-03			Prepared: 2025-04-10, Analyzed: 2025-04-10			
Mercury, dissolved	0.00233	0.000010 mg/L	0.00250	< 0.000010	93	70-130			
Matrix Spike (B5D2641-MS2)			Source: 25D1284-04			Prepared: 2025-04-10, Analyzed: 2025-04-10			
Mercury, dissolved	0.00231	0.000010 mg/L	0.00250	< 0.000010	93	70-130			

Dissolved Metals, Batch B5D2879

Blank (B5D2879-BLK1)			Prepared: 2025-04-14, Analyzed: 2025-04-14						
Aluminum, dissolved	< 0.0050	0.0050 mg/L							
Antimony, dissolved	< 0.00020	0.00020 mg/L							
Arsenic, dissolved	< 0.00050	0.00050 mg/L							
Barium, dissolved	< 0.0050	0.0050 mg/L							
Beryllium, dissolved	< 0.00010	0.00010 mg/L							
Bismuth, dissolved	< 0.00010	0.00010 mg/L							
Boron, dissolved	< 0.0500	0.0500 mg/L							
Cadmium, dissolved	< 0.000010	0.000010 mg/L							
Calcium, dissolved	< 0.20	0.20 mg/L							
Chromium, dissolved	< 0.00050	0.00050 mg/L							
Cobalt, dissolved	< 0.00010	0.00010 mg/L							
Copper, dissolved	< 0.00040	0.00040 mg/L							
Iron, dissolved	< 0.010	0.010 mg/L							
Lead, dissolved	< 0.00020	0.00020 mg/L							
Lithium, dissolved	< 0.00010	0.00010 mg/L							
Magnesium, dissolved	< 0.010	0.010 mg/L							
Manganese, dissolved	< 0.00020	0.00020 mg/L							
Molybdenum, dissolved	< 0.00010	0.00010 mg/L							
Nickel, dissolved	< 0.00040	0.00040 mg/L							
Phosphorus, dissolved	< 0.050	0.050 mg/L							
Potassium, dissolved	< 0.10	0.10 mg/L							
Selenium, dissolved	< 0.00050	0.00050 mg/L							
Silicon, dissolved	< 1.0	1.0 mg/L							
Silver, dissolved	< 0.000050	0.000050 mg/L							
Sodium, dissolved	< 0.10	0.10 mg/L							
Strontium, dissolved	< 0.0010	0.0010 mg/L							
Sulfur, dissolved	< 3.0	3.0 mg/L							
Tellurium, dissolved	< 0.00050	0.00050 mg/L							
Thallium, dissolved	< 0.000020	0.000020 mg/L							
Thorium, dissolved	< 0.00010	0.00010 mg/L							
Tin, dissolved	< 0.00020	0.00020 mg/L							



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
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Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Dissolved Metals, Batch B5D2879, Continued

Blank (B5D2879-BLK1), Continued

Prepared: 2025-04-14, Analyzed: 2025-04-14

Titanium, dissolved	< 0.0050	0.0050 mg/L							
Tungsten, dissolved	< 0.0010	0.0010 mg/L							
Uranium, dissolved	< 0.000020	0.000020 mg/L							
Vanadium, dissolved	< 0.0050	0.0050 mg/L							
Zinc, dissolved	< 0.0040	0.0040 mg/L							
Zirconium, dissolved	< 0.00010	0.00010 mg/L							

LCS (B5D2879-BS1)

Prepared: 2025-04-14, Analyzed: 2025-04-14

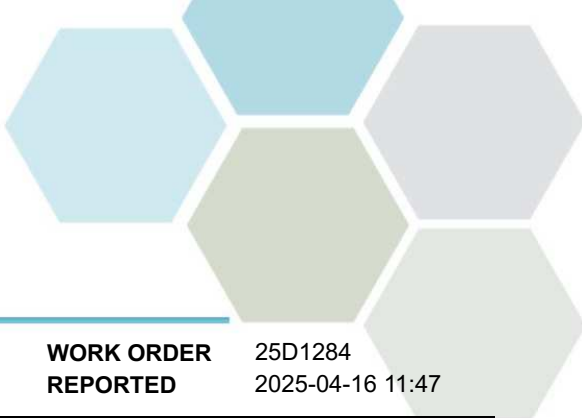
Aluminum, dissolved	4.12	0.0050 mg/L	4.00		103	80-120			
Antimony, dissolved	0.0404	0.00020 mg/L	0.0400		101	80-120			
Arsenic, dissolved	0.404	0.00050 mg/L	0.400		101	80-120			
Barium, dissolved	0.0412	0.0050 mg/L	0.0400		103	80-120			
Beryllium, dissolved	0.0405	0.00010 mg/L	0.0400		101	80-120			
Bismuth, dissolved	0.0405	0.00010 mg/L	0.0400		101	80-120			
Boron, dissolved	0.402	0.0500 mg/L	0.400		101	80-120			
Cadmium, dissolved	0.0400	0.000010 mg/L	0.0400		100	80-120			
Calcium, dissolved	4.09	0.20 mg/L	4.00		102	80-120			
Chromium, dissolved	0.0396	0.00050 mg/L	0.0400		99	80-120			
Cobalt, dissolved	0.0403	0.00010 mg/L	0.0400		101	80-120			
Copper, dissolved	0.0399	0.00040 mg/L	0.0400		100	80-120			
Iron, dissolved	4.11	0.10 mg/L	4.00		103	80-120			
Lead, dissolved	0.0405	0.00020 mg/L	0.0400		101	80-120			
Lithium, dissolved	0.0407	0.00010 mg/L	0.0400		102	80-120			
Magnesium, dissolved	4.09	0.10 mg/L	4.00		102	80-120			
Manganese, dissolved	0.0408	0.00020 mg/L	0.0400		102	80-120			
Molybdenum, dissolved	0.0405	0.00010 mg/L	0.0400		101	80-120			
Nickel, dissolved	0.0401	0.00040 mg/L	0.0400		100	80-120			
Phosphorus, dissolved	4.08	0.050 mg/L	4.00		102	80-120			
Potassium, dissolved	4.08	0.10 mg/L	4.00		102	80-120			
Selenium, dissolved	0.397	0.00050 mg/L	0.400		99	80-120			
Silicon, dissolved	4.1	1.0 mg/L	4.00		103	80-120			
Silver, dissolved	0.0398	0.000050 mg/L	0.0400		99	80-120			
Sodium, dissolved	4.11	0.10 mg/L	4.00		103	80-120			
Strontium, dissolved	0.0412	0.0010 mg/L	0.0400		103	80-120			
Sulfur, dissolved	37.4	3.0 mg/L	40.0		93	80-120			
Tellurium, dissolved	0.0397	0.00050 mg/L	0.0400		99	80-120			
Thallium, dissolved	0.0400	0.000020 mg/L	0.0400		100	80-120			
Thorium, dissolved	0.0405	0.00010 mg/L	0.0400		101	80-120			
Tin, dissolved	0.0402	0.00020 mg/L	0.0400		101	80-120			
Titanium, dissolved	0.0407	0.0050 mg/L	0.0400		102	80-120			
Tungsten, dissolved	0.0401	0.0010 mg/L	0.0400		100	80-120			
Uranium, dissolved	0.0408	0.000020 mg/L	0.0400		102	80-120			
Vanadium, dissolved	0.0403	0.0050 mg/L	0.0400		101	80-120			
Zinc, dissolved	0.408	0.0040 mg/L	0.400		102	80-120			
Zirconium, dissolved	0.0415	0.00010 mg/L	0.0400		104	80-120			

Dissolved Metals, Batch B5D3069

Blank (B5D3069-BLK1)

Prepared: 2025-04-15, Analyzed: 2025-04-15

Aluminum, dissolved	< 0.0050	0.0050 mg/L							
Antimony, dissolved	< 0.00020	0.00020 mg/L							
Arsenic, dissolved	< 0.00050	0.00050 mg/L							
Barium, dissolved	< 0.0050	0.0050 mg/L							
Beryllium, dissolved	< 0.00010	0.00010 mg/L							
Bismuth, dissolved	< 0.00010	0.00010 mg/L							
Boron, dissolved	< 0.0500	0.0500 mg/L							



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1284
2025-04-16 11:47

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Dissolved Metals, Batch B5D3069, Continued

Blank (B5D3069-BLK1), Continued

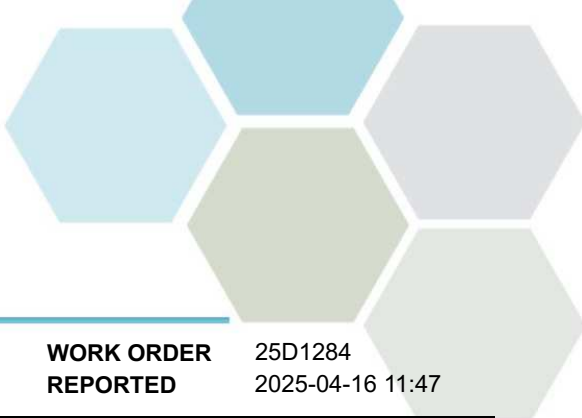
Prepared: 2025-04-15, Analyzed: 2025-04-15

Cadmium, dissolved	< 0.000010	0.000010 mg/L							
Calcium, dissolved	< 0.20	0.20 mg/L							
Chromium, dissolved	< 0.00050	0.00050 mg/L							
Cobalt, dissolved	< 0.00010	0.00010 mg/L							
Copper, dissolved	< 0.00040	0.00040 mg/L							
Iron, dissolved	< 0.010	0.010 mg/L							
Lead, dissolved	< 0.00020	0.00020 mg/L							
Lithium, dissolved	< 0.00010	0.00010 mg/L							
Magnesium, dissolved	< 0.010	0.010 mg/L							
Manganese, dissolved	< 0.00020	0.00020 mg/L							
Molybdenum, dissolved	< 0.00010	0.00010 mg/L							
Nickel, dissolved	< 0.00040	0.00040 mg/L							
Phosphorus, dissolved	< 0.050	0.050 mg/L							
Potassium, dissolved	< 0.10	0.10 mg/L							
Selenium, dissolved	< 0.00050	0.00050 mg/L							
Silicon, dissolved	< 1.0	1.0 mg/L							
Silver, dissolved	< 0.000050	0.000050 mg/L							
Sodium, dissolved	< 0.10	0.10 mg/L							
Strontium, dissolved	< 0.0010	0.0010 mg/L							
Sulfur, dissolved	< 3.0	3.0 mg/L							
Tellurium, dissolved	< 0.00050	0.00050 mg/L							
Thallium, dissolved	< 0.000020	0.000020 mg/L							
Thorium, dissolved	< 0.00010	0.00010 mg/L							
Tin, dissolved	< 0.00020	0.00020 mg/L							
Titanium, dissolved	< 0.0050	0.0050 mg/L							
Tungsten, dissolved	< 0.0010	0.0010 mg/L							
Uranium, dissolved	< 0.000020	0.000020 mg/L							
Vanadium, dissolved	< 0.0050	0.0050 mg/L							
Zinc, dissolved	< 0.0040	0.0040 mg/L							
Zirconium, dissolved	< 0.00010	0.00010 mg/L							

LCS (B5D3069-BS1)

Prepared: 2025-04-15, Analyzed: 2025-04-15

Aluminum, dissolved	4.09	0.0050 mg/L	4.00		102	80-120			
Antimony, dissolved	0.0411	0.00020 mg/L	0.0400		103	80-120			
Arsenic, dissolved	0.400	0.00050 mg/L	0.400		100	80-120			
Barium, dissolved	0.0406	0.0050 mg/L	0.0400		101	80-120			
Beryllium, dissolved	0.0415	0.00010 mg/L	0.0400		104	80-120			
Bismuth, dissolved	0.0407	0.00010 mg/L	0.0400		102	80-120			
Boron, dissolved	0.414	0.0500 mg/L	0.400		104	80-120			
Cadmium, dissolved	0.0404	0.000010 mg/L	0.0400		101	80-120			
Calcium, dissolved	3.98	0.20 mg/L	4.00		99	80-120			
Chromium, dissolved	0.0405	0.00050 mg/L	0.0400		101	80-120			
Cobalt, dissolved	0.0403	0.00010 mg/L	0.0400		101	80-120			
Copper, dissolved	0.0392	0.00040 mg/L	0.0400		98	80-120			
Iron, dissolved	3.96	0.010 mg/L	4.00		99	80-120			
Lead, dissolved	0.0418	0.00020 mg/L	0.0400		104	80-120			
Lithium, dissolved	0.0428	0.00010 mg/L	0.0400		107	80-120			
Magnesium, dissolved	4.05	0.010 mg/L	4.00		101	80-120			
Manganese, dissolved	0.0401	0.00020 mg/L	0.0400		100	80-120			
Molybdenum, dissolved	0.0405	0.00010 mg/L	0.0400		101	80-120			
Nickel, dissolved	0.0408	0.00040 mg/L	0.0400		102	80-120			
Phosphorus, dissolved	4.07	0.050 mg/L	4.00		102	80-120			
Potassium, dissolved	4.07	0.10 mg/L	4.00		102	80-120			
Selenium, dissolved	0.397	0.00050 mg/L	0.400		99	80-120			
Silicon, dissolved	4.2	1.0 mg/L	4.00		104	80-120			
Silver, dissolved	0.0408	0.000050 mg/L	0.0400		102	80-120			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1284
2025-04-16 11:47

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Dissolved Metals, Batch B5D3069, Continued									
LCS (B5D3069-BS1), Continued					Prepared: 2025-04-15, Analyzed: 2025-04-15				
Sodium, dissolved	4.07	0.10 mg/L	4.00		102	80-120			
Strontium, dissolved	0.0416	0.0010 mg/L	0.0400		104	80-120			
Sulfur, dissolved	41.1	3.0 mg/L	40.0		103	80-120			
Tellurium, dissolved	0.0390	0.00050 mg/L	0.0400		98	80-120			
Thallium, dissolved	0.0405	0.000020 mg/L	0.0400		101	80-120			
Thorium, dissolved	0.0404	0.00010 mg/L	0.0400		101	80-120			
Tin, dissolved	0.0417	0.00020 mg/L	0.0400		104	80-120			
Titanium, dissolved	0.0393	0.0050 mg/L	0.0400		98	80-120			
Tungsten, dissolved	0.0406	0.0010 mg/L	0.0400		102	80-120			
Uranium, dissolved	0.0409	0.000020 mg/L	0.0400		102	80-120			
Vanadium, dissolved	0.0406	0.0050 mg/L	0.0400		102	80-120			
Zinc, dissolved	0.403	0.0040 mg/L	0.400		101	80-120			
Zirconium, dissolved	0.0402	0.00010 mg/L	0.0400		100	80-120			

General Parameters, Batch B5D2563

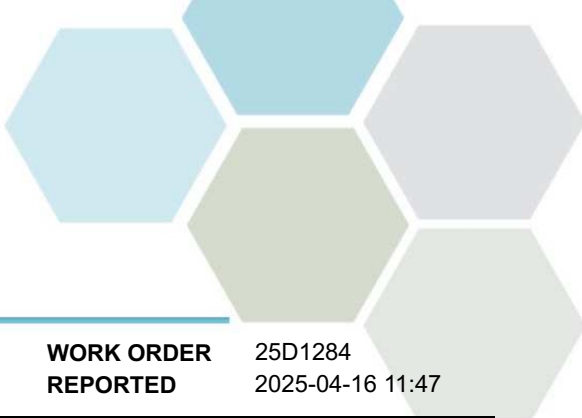
Blank (B5D2563-BLK2)					Prepared: 2025-04-10, Analyzed: 2025-04-10				
Ammonia, Total (as N)	0.040	0.010 mg/L							
Blank (B5D2563-BLK3)					Prepared: 2025-04-10, Analyzed: 2025-04-10				
Ammonia, Total (as N)	0.027	0.010 mg/L							
LCS (B5D2563-BS2)					Prepared: 2025-04-10, Analyzed: 2025-04-10				
Ammonia, Total (as N)	0.934	0.010 mg/L	1.00		93	85-115			
LCS (B5D2563-BS3)					Prepared: 2025-04-10, Analyzed: 2025-04-10				
Ammonia, Total (as N)	0.934	0.010 mg/L	1.00		93	85-115			

General Parameters, Batch B5D2585

Blank (B5D2585-BLK1)					Prepared: 2025-04-11, Analyzed: 2025-04-11				
Chemical Oxygen Demand	< 20	20 mg/L							
LCS (B5D2585-BS1)					Prepared: 2025-04-11, Analyzed: 2025-04-11				
Chemical Oxygen Demand	531	20 mg/L	500		106	89-115			

General Parameters, Batch B5D2811

Blank (B5D2811-BLK1)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Alkalinity, Total (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
Blank (B5D2811-BLK2)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Alkalinity, Total (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
LCS (B5D2811-BS1)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Alkalinity, Total (as CaCO3)	90.6	1.0 mg/L	100		91	80-120			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1284
2025-04-16 11:47

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B5D2811, Continued									
LCS (B5D2811-BS2)				Prepared: 2025-04-12, Analyzed: 2025-04-12					
Conductivity (EC)	1410	2.0 µS/cm	1410		100	95-105			
LCS (B5D2811-BS3)				Prepared: 2025-04-12, Analyzed: 2025-04-12					
Alkalinity, Total (as CaCO3)	90.7	1.0 mg/L	100		91	80-120			
LCS (B5D2811-BS4)				Prepared: 2025-04-12, Analyzed: 2025-04-12					
Conductivity (EC)	1420	2.0 µS/cm	1410		101	95-105			
Duplicate (B5D2811-DUP1)		Source: 25D1284-04		Prepared: 2025-04-12, Analyzed: 2025-04-12					
Alkalinity, Total (as CaCO3)	272	1.0 mg/L		271			< 1	10	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0 mg/L		< 1.0				10	
Alkalinity, Bicarbonate (as CaCO3)	272	1.0 mg/L		271			< 1	10	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0 mg/L		< 1.0				10	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0 mg/L		< 1.0				10	
Conductivity (EC)	720	2.0 µS/cm		714			< 1	5	
pH	7.97	0.10 pH units		7.95			< 1	4	
Reference (B5D2811-SRM1)				Prepared: 2025-04-12, Analyzed: 2025-04-12					
pH	7.02	0.10 pH units	7.01		100	98-102			
Reference (B5D2811-SRM2)				Prepared: 2025-04-12, Analyzed: 2025-04-12					
pH	7.01	0.10 pH units	7.01		100	98-102			



CERTIFICATE OF ANALYSIS

REPORTED TO	Regional District of Okanagan Similkameen 101 Martin Street Penticton, BC V2A 5J9	WORK ORDER	25D1331
ATTENTION	Rob Palmer	RECEIVED / TEMP REPORTED	2025-04-09 10:18 / 3.8°C 2025-04-15 14:28
PO NUMBER	TLSW	COC NUMBER	No Number
PROJECT	OK Falls - TLSW		
PROJECT INFO			

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

Big Picture Sidekicks



You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry



It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve



Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

Work Order Comments:

Custody Seals Intact: YES

By engaging our services, you are agreeing to CARO Analytical Service's Standard Terms and Conditions outlined here: <https://www.caro.ca/terms-conditions>

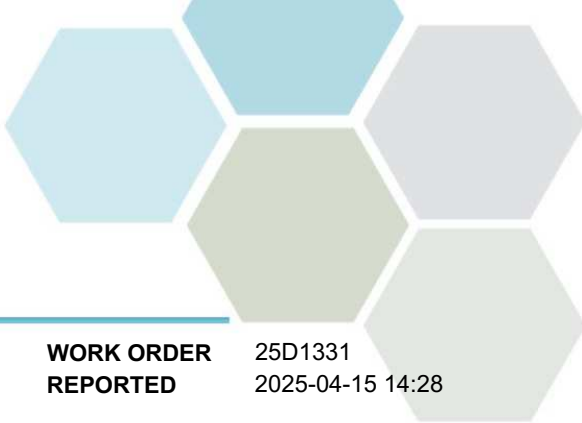
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 | #108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLSW

WORK ORDER REPORTED 25D1331
2025-04-15 14:28

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
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SW-1 (25D1331-01) | Matrix: Water | Sampled: 2025-04-08 10:55

Anions

Bromide	< 0.10	N/A	0.10 mg/L	2025-04-10	
Chloride	12.8	AO ≤ 250	0.10 mg/L	2025-04-10	
Fluoride	0.61	MAC = 1.5	0.10 mg/L	2025-04-10	
Nitrate (as N)	< 0.010	MAC = 10	0.010 mg/L	2025-04-10	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2025-04-10	
Sulfate	206	AO ≤ 500	1.0 mg/L	2025-04-10	

Calculated Parameters

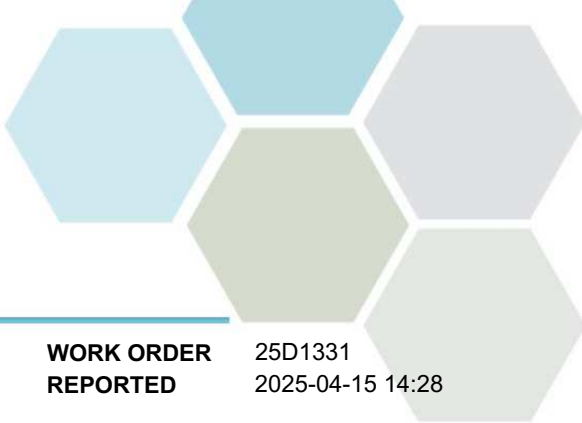
Bicarbonate (HCO3)	457	N/A	1.22 mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600 mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340 mg/L	N/A	
Hardness, Total (as CaCO3)	470	None Required	0.500 mg/L	N/A	
Nitrate+Nitrite (as N)	< 0.0100	N/A	0.0100 mg/L	N/A	
Nitrogen, Total	1.24	N/A	0.0500 mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO3)	375	N/A	1.0 mg/L	2025-04-12	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-04-12	
Alkalinity, Bicarbonate (as CaCO3)	375	N/A	1.0 mg/L	2025-04-12	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-04-12	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-04-12	
Ammonia, Total (as N)	< 0.050	None Required	0.050 mg/L	2025-04-10	
BOD, 5-day	< 8.0	N/A	8.0 mg/L	2025-04-15	
Chemical Oxygen Demand	96	N/A	20 mg/L	2025-04-11	
Conductivity (EC)	1100	N/A	2.0 µS/cm	2025-04-12	
Nitrogen, Total Kjeldahl	1.24	N/A	0.050 mg/L	2025-04-15	
pH	8.19	7.0-10.5	0.10 pH units	2025-04-12	HT2

Total Metals

Aluminum, total	0.0243	OG < 0.1	0.0050 mg/L	2025-04-12	
Antimony, total	0.00167	MAC = 0.006	0.00020 mg/L	2025-04-12	
Arsenic, total	0.00550	MAC = 0.01	0.00050 mg/L	2025-04-12	
Barium, total	0.0800	MAC = 2	0.0050 mg/L	2025-04-12	
Beryllium, total	< 0.00010	N/A	0.00010 mg/L	2025-04-12	
Bismuth, total	< 0.00010	N/A	0.00010 mg/L	2025-04-12	
Boron, total	0.885	MAC = 5	0.0500 mg/L	2025-04-12	
Cadmium, total	0.000041	MAC = 0.007	0.000010 mg/L	2025-04-12	
Calcium, total	107	None Required	0.20 mg/L	2025-04-12	
Chromium, total	0.00092	MAC = 0.05	0.00050 mg/L	2025-04-12	
Cobalt, total	0.00029	N/A	0.00010 mg/L	2025-04-12	
Copper, total	0.00909	MAC = 2	0.00040 mg/L	2025-04-12	
Iron, total	0.105	AO ≤ 0.1	0.010 mg/L	2025-04-12	
Lead, total	0.00110	MAC = 0.005	0.00020 mg/L	2025-04-12	
Lithium, total	0.0219	N/A	0.00010 mg/L	2025-04-12	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLSW

WORK ORDER REPORTED 25D1331
2025-04-15 14:28

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
SW-1 (25D1331-01) Matrix: Water Sampled: 2025-04-08 10:55, Continued					
<i>Total Metals, Continued</i>					
Magnesium, total	49.5	None Required	0.010 mg/L	2025-04-12	
Manganese, total	0.0309	MAC = 0.12	0.00020 mg/L	2025-04-12	
Mercury, total	< 0.000010	MAC = 0.001	0.000010 mg/L	2025-04-13	
Molybdenum, total	0.0128	N/A	0.00010 mg/L	2025-04-12	
Nickel, total	0.00183	N/A	0.00040 mg/L	2025-04-12	
Phosphorus, total	0.052	N/A	0.050 mg/L	2025-04-12	
Potassium, total	18.7	N/A	0.10 mg/L	2025-04-12	
Selenium, total	0.00056	MAC = 0.05	0.00050 mg/L	2025-04-12	
Silicon, total	16.7	N/A	1.0 mg/L	2025-04-12	
Silver, total	< 0.000050	None Required	0.000050 mg/L	2025-04-12	
Sodium, total	82.4	AO ≤ 200	0.10 mg/L	2025-04-12	
Strontium, total	1.20	MAC = 7	0.0010 mg/L	2025-04-12	
Sulfur, total	74.4	N/A	3.0 mg/L	2025-04-12	
Tellurium, total	< 0.00050	N/A	0.00050 mg/L	2025-04-12	
Thallium, total	< 0.000020	N/A	0.000020 mg/L	2025-04-12	
Thorium, total	< 0.00010	N/A	0.00010 mg/L	2025-04-12	
Tin, total	< 0.00020	N/A	0.00020 mg/L	2025-04-12	
Titanium, total	< 0.0050	N/A	0.0050 mg/L	2025-04-12	
Tungsten, total	< 0.0010	N/A	0.0010 mg/L	2025-04-12	
Uranium, total	0.0380	MAC = 0.02	0.000020 mg/L	2025-04-12	
Vanadium, total	< 0.0050	N/A	0.0050 mg/L	2025-04-12	
Zinc, total	0.0599	AO ≤ 5	0.0040 mg/L	2025-04-12	
Zirconium, total	0.00080	N/A	0.00010 mg/L	2025-04-12	

SW-2 (25D1331-02) | Matrix: Water | Sampled: 2025-04-08 11:30

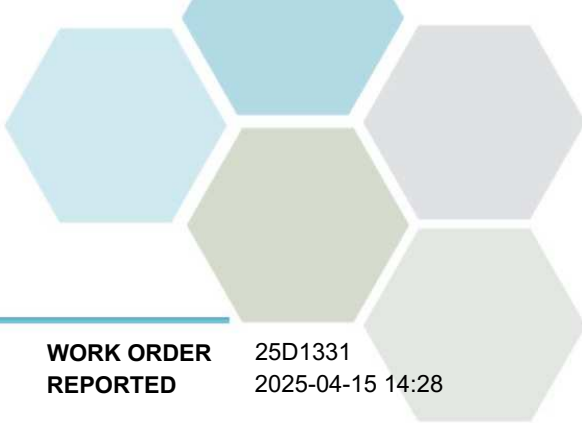
Anions

Bromide	< 0.10	N/A	0.10 mg/L	2025-04-10	
Chloride	59.1	AO ≤ 250	0.10 mg/L	2025-04-10	
Fluoride	< 0.10	MAC = 1.5	0.10 mg/L	2025-04-10	
Nitrate (as N)	55.5	MAC = 10	0.010 mg/L	2025-04-10	
Nitrite (as N)	0.071	MAC = 1	0.010 mg/L	2025-04-10	
Sulfate	99.6	AO ≤ 500	1.0 mg/L	2025-04-10	

Calculated Parameters

Bicarbonate (HCO3)	285	N/A	1.22 mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600 mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340 mg/L	N/A	
Hardness, Total (as CaCO3)	595	None Required	0.500 mg/L	N/A	
Nitrate+Nitrite (as N)	55.5	N/A	0.100 mg/L	N/A	
Nitrogen, Total	62.6	N/A	0.250 mg/L	N/A	

General Parameters



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLSW

WORK ORDER REPORTED 25D1331
2025-04-15 14:28

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
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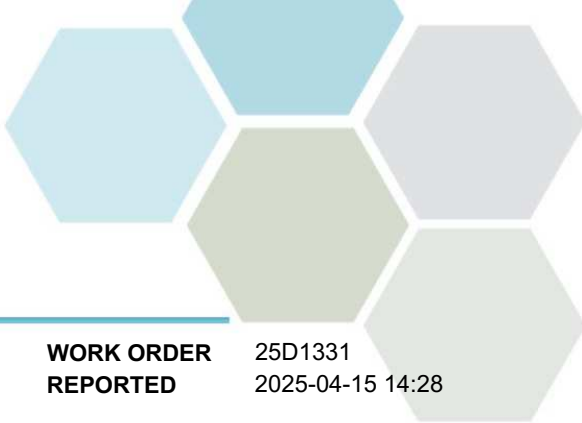
SW-2 (25D1331-02) | Matrix: Water | Sampled: 2025-04-08 11:30, Continued

General Parameters, Continued

Alkalinity, Total (as CaCO3)	233	N/A	1.0 mg/L	2025-04-12	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-04-12	
Alkalinity, Bicarbonate (as CaCO3)	233	N/A	1.0 mg/L	2025-04-12	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-04-12	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-04-12	
Ammonia, Total (as N)	0.133	None Required	0.050 mg/L	2025-04-10	
BOD, 5-day	< 8.0	N/A	8.0 mg/L	2025-04-15	
Chemical Oxygen Demand	251	N/A	20 mg/L	2025-04-11	
Conductivity (EC)	1280	N/A	2.0 µS/cm	2025-04-12	
Nitrogen, Total Kjeldahl	7.08	N/A	0.050 mg/L	2025-04-15	
pH	8.05	7.0-10.5	0.10 pH units	2025-04-12	HT2

Total Metals

Aluminum, total	0.0262	OG < 0.1	0.0050 mg/L	2025-04-12	
Antimony, total	0.00070	MAC = 0.006	0.00020 mg/L	2025-04-12	
Arsenic, total	0.0116	MAC = 0.01	0.00050 mg/L	2025-04-12	
Barium, total	0.0844	MAC = 2	0.0050 mg/L	2025-04-12	
Beryllium, total	< 0.00010	N/A	0.00010 mg/L	2025-04-12	
Bismuth, total	< 0.00010	N/A	0.00010 mg/L	2025-04-12	
Boron, total	0.201	MAC = 5	0.0500 mg/L	2025-04-12	
Cadmium, total	0.000076	MAC = 0.007	0.000010 mg/L	2025-04-12	
Calcium, total	161	None Required	0.20 mg/L	2025-04-12	
Chromium, total	0.00113	MAC = 0.05	0.00050 mg/L	2025-04-12	
Cobalt, total	0.00046	N/A	0.00010 mg/L	2025-04-12	
Copper, total	0.0175	MAC = 2	0.00040 mg/L	2025-04-12	
Iron, total	0.047	AO ≤ 0.1	0.010 mg/L	2025-04-12	
Lead, total	0.00026	MAC = 0.005	0.00020 mg/L	2025-04-12	
Lithium, total	0.00606	N/A	0.00010 mg/L	2025-04-12	
Magnesium, total	47.1	None Required	0.010 mg/L	2025-04-12	
Manganese, total	0.00970	MAC = 0.12	0.00020 mg/L	2025-04-12	
Mercury, total	< 0.000010	MAC = 0.001	0.000010 mg/L	2025-04-13	
Molybdenum, total	0.00883	N/A	0.00010 mg/L	2025-04-12	
Nickel, total	0.00203	N/A	0.00040 mg/L	2025-04-12	
Phosphorus, total	0.321	N/A	0.050 mg/L	2025-04-12	
Potassium, total	35.3	N/A	0.10 mg/L	2025-04-12	
Selenium, total	< 0.00050	MAC = 0.05	0.00050 mg/L	2025-04-12	
Silicon, total	7.1	N/A	1.0 mg/L	2025-04-12	
Silver, total	< 0.000050	None Required	0.000050 mg/L	2025-04-12	
Sodium, total	39.7	AO ≤ 200	0.10 mg/L	2025-04-12	
Strontium, total	1.15	MAC = 7	0.0010 mg/L	2025-04-12	
Sulfur, total	38.5	N/A	3.0 mg/L	2025-04-12	
Tellurium, total	< 0.00050	N/A	0.00050 mg/L	2025-04-12	
Thallium, total	< 0.000020	N/A	0.000020 mg/L	2025-04-12	



TEST RESULTS

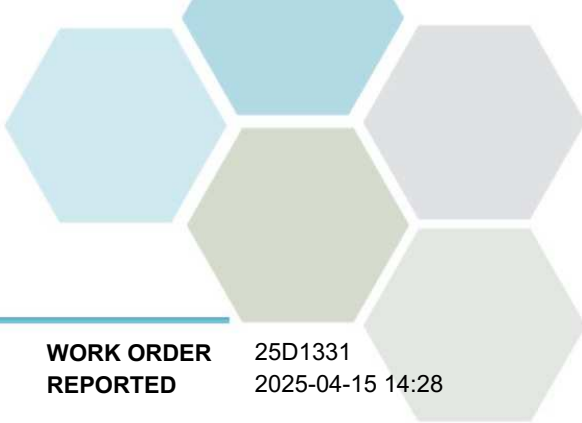
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OK Falls - TLSW

WORK ORDER REPORTED 25D1331
2025-04-15 14:28

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
SW-2 (25D1331-02) Matrix: Water Sampled: 2025-04-08 11:30, Continued						
<i>Total Metals, Continued</i>						
Thorium, total	< 0.00010	N/A	0.00010	mg/L	2025-04-12	
Tin, total	< 0.00020	N/A	0.00020	mg/L	2025-04-12	
Titanium, total	< 0.0050	N/A	0.0050	mg/L	2025-04-12	
Tungsten, total	< 0.0010	N/A	0.0010	mg/L	2025-04-12	
Uranium, total	0.0114	MAC = 0.02	0.000020	mg/L	2025-04-12	
Vanadium, total	< 0.0050	N/A	0.0050	mg/L	2025-04-12	
Zinc, total	0.0097	AO ≤ 5	0.0040	mg/L	2025-04-12	
Zirconium, total	0.00078	N/A	0.00010	mg/L	2025-04-12	

Sample Qualifiers:

HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Regional District of Okanagan Similkameen
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Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Biochemical Oxygen Demand in Water	SM 5210 B (2019)	Dissolved Oxygen Meter	✓	Kelowna
Chemical Oxygen Demand in Water	SM 5220 D* (2022)	Closed Reflux, Colorimetry	✓	Kelowna
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Kelowna
Hardness in Water	SM 2340 B* (2021)	Calculation: 2.497 [total Ca] + 4.118 [total Mg] (Est)	✓	N/A
Mercury, total in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	✓	Richmond
Nitrogen, Total Kjeldahl in Water	SM 4500-Norg D* (2021)	Block Digestion and Flow Injection Analysis	✓	Kelowna
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method

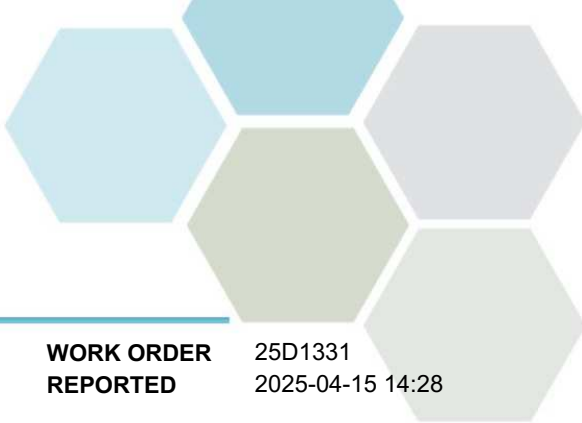
Glossary of Terms:

RL	Reporting Limit (default)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
OG	Operational Guideline (treated water)
pH units	pH < 7 = acidic, pH > 7 = basic
µS/cm	Microsiemens per centimetre
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

Guidelines Referenced in this Report:

[Guidelines for Canadian Drinking Water Quality \(Health Canada, September 2022\)](#)

Note: In some cases, the values displayed on the report represent the lowest guideline and are to be verified by the end user



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Regional District of Okanagan Similkameen
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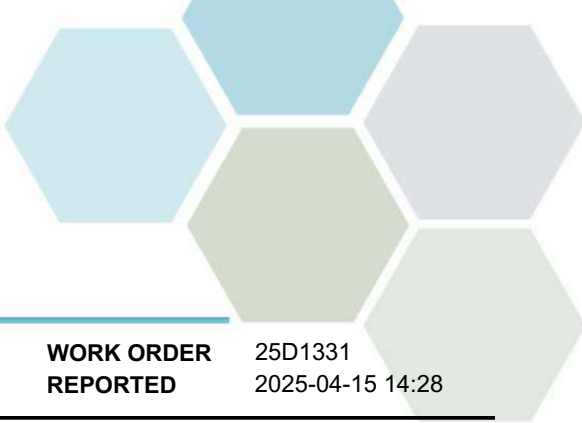
WORK ORDER REPORTED 25D1331
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General Comments:

The results in this report apply to the received samples analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety. CARO is not responsible for any loss or damage resulting directly or indirectly from error or omission in the conduct of testing. Liability is limited to the cost of analysis. Caro will dispose of all samples within 30 days of sample receipt, unless otherwise agreed.

Results in **Bold** indicate values that are above CARO's method reporting limits. Any results that are above regulatory limits are highlighted **red**. Please note that results will only be highlighted red if the regulatory limits are included on the CARO report. Any Bold and/or highlighted results do not take into account method uncertainty. If you would like method uncertainty or regulatory limits to be included on your report, please contact your Account Manager: hhannaoui@caro.ca

Please note any regulatory guidelines applied to this report are added as a convenience to the client, at their request, to help provide some initial context to analytical results obtained. Although CARO makes every effort to ensure accuracy of the associated regulatory guideline(s) applied, the guidelines applied cannot be assumed to be correct due to a variety of factors and as such CARO Analytical Services assumes no liability or responsibility for the use of those guidelines to make any decisions. The original source of the regulation should be verified and a review of the guideline(s) should be validated as correct in order to make any decisions arising from the comparison of the analytical data obtained to the relevant regulatory guideline for one's particular circumstances. Further, CARO Analytical Services assumes no liability or responsibility for any loss attributed from the use of these guidelines in any way.



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
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The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

- **Method Blank (Blk):** A blank sample that undergoes sample processing identical to that carried out for the test samples. Method blank results are used to assess contamination from the laboratory environment and reagents.
- **Duplicate (Dup):** An additional or second portion of a randomly selected sample in the analytical run carried through the entire analytical process. Duplicates provide a measure of the analytical method's precision (reproducibility).
- **Blank Spike (BS):** A sample of known concentration which undergoes processing identical to that carried out for test samples, also referred to as a laboratory control sample (LCS). Blank spikes provide a measure of the analytical method's accuracy.
- **Matrix Spike (MS):** A second aliquot of sample is fortified with a known concentration of target analytes and carried through the entire analytical process. Matrix spikes evaluate potential matrix effects that may affect the analyte recovery.
- **Reference Material (SRM):** A homogenous material of similar matrix to the samples, certified for the parameter(s) listed. Reference Materials ensure that the analytical process is adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10-20 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Anions, Batch B5D2506

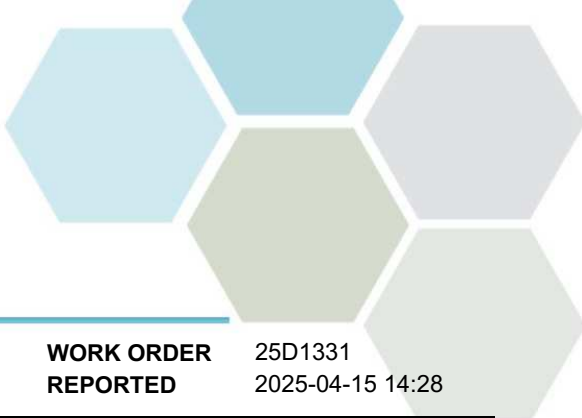
Blank (B5D2506-BLK1)			Prepared: 2025-04-10, Analyzed: 2025-04-10						
Bromide	< 0.10	0.10 mg/L							
Chloride	< 0.10	0.10 mg/L							
Fluoride	< 0.10	0.10 mg/L							
Nitrate (as N)	< 0.010	0.010 mg/L							
Nitrite (as N)	< 0.010	0.010 mg/L							
Sulfate	< 1.0	1.0 mg/L							
LCS (B5D2506-BS1)			Prepared: 2025-04-10, Analyzed: 2025-04-10						
Bromide	3.90	0.10 mg/L	4.00		97	85-115			
Chloride	15.8	0.10 mg/L	16.0		98	90-110			
Fluoride	3.85	0.10 mg/L	4.00		96	88-108			
Nitrate (as N)	3.97	0.010 mg/L	4.00		99	90-110			
Nitrite (as N)	1.80	0.010 mg/L	2.00		90	85-115			
Sulfate	15.9	1.0 mg/L	16.0		99	90-110			

General Parameters, Batch B5D2563

Blank (B5D2563-BLK2)			Prepared: 2025-04-10, Analyzed: 2025-04-10						
Ammonia, Total (as N)	0.040	0.010 mg/L							
Blank (B5D2563-BLK3)			Prepared: 2025-04-10, Analyzed: 2025-04-10						
Ammonia, Total (as N)	0.027	0.010 mg/L							
LCS (B5D2563-BS2)			Prepared: 2025-04-10, Analyzed: 2025-04-10						
Ammonia, Total (as N)	0.934	0.010 mg/L	1.00		93	85-115			
LCS (B5D2563-BS3)			Prepared: 2025-04-10, Analyzed: 2025-04-10						
Ammonia, Total (as N)	0.934	0.010 mg/L	1.00		93	85-115			

General Parameters, Batch B5D2585

Blank (B5D2585-BLK1)			Prepared: 2025-04-11, Analyzed: 2025-04-11						
Chemical Oxygen Demand	< 20	20 mg/L							
LCS (B5D2585-BS1)			Prepared: 2025-04-11, Analyzed: 2025-04-11						
Chemical Oxygen Demand	531	20 mg/L	500		106	89-115			

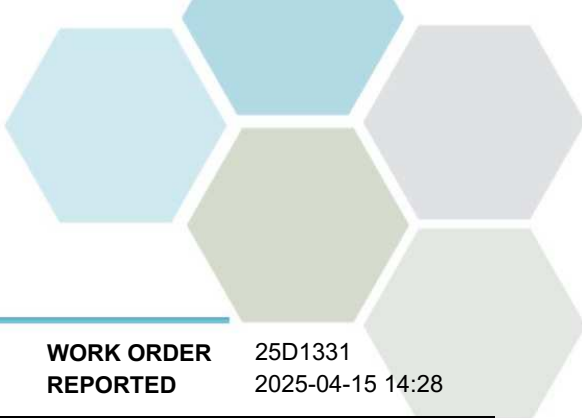


APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLSW

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Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B5D2616									
Blank (B5D2616-BLK1)					Prepared: 2025-04-10, Analyzed: 2025-04-15				
BOD, 5-day	< 2.0	2.0 mg/L							
LCS (B5D2616-BS1)					Prepared: 2025-04-10, Analyzed: 2025-04-15				
BOD, 5-day	186	66.6 mg/L	198		94	85-115			
General Parameters, Batch B5D2811									
Blank (B5D2811-BLK1)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Alkalinity, Total (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
Blank (B5D2811-BLK2)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Alkalinity, Total (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
LCS (B5D2811-BS1)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Alkalinity, Total (as CaCO3)	90.6	1.0 mg/L	100		91	80-120			
LCS (B5D2811-BS2)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Conductivity (EC)	1410	2.0 µS/cm	1410		100	95-105			
LCS (B5D2811-BS3)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Alkalinity, Total (as CaCO3)	90.7	1.0 mg/L	100		91	80-120			
LCS (B5D2811-BS4)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Conductivity (EC)	1420	2.0 µS/cm	1410		101	95-105			
Reference (B5D2811-SRM1)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
pH	7.02	0.10 pH units	7.01		100	98-102			
Reference (B5D2811-SRM2)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
pH	7.01	0.10 pH units	7.01		100	98-102			
General Parameters, Batch B5D2936									
Blank (B5D2936-BLK1)					Prepared: 2025-04-14, Analyzed: 2025-04-15				
Nitrogen, Total Kjeldahl	< 0.050	0.050 mg/L							
Blank (B5D2936-BLK2)					Prepared: 2025-04-14, Analyzed: 2025-04-15				
Nitrogen, Total Kjeldahl	< 0.050	0.050 mg/L							
LCS (B5D2936-BS1)					Prepared: 2025-04-14, Analyzed: 2025-04-15				
Nitrogen, Total Kjeldahl	0.980	0.050 mg/L	1.00		98	85-115			
LCS (B5D2936-BS2)					Prepared: 2025-04-14, Analyzed: 2025-04-15				
Nitrogen, Total Kjeldahl	0.979	0.050 mg/L	1.00		98	85-115			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLSW

WORK ORDER REPORTED 25D1331
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Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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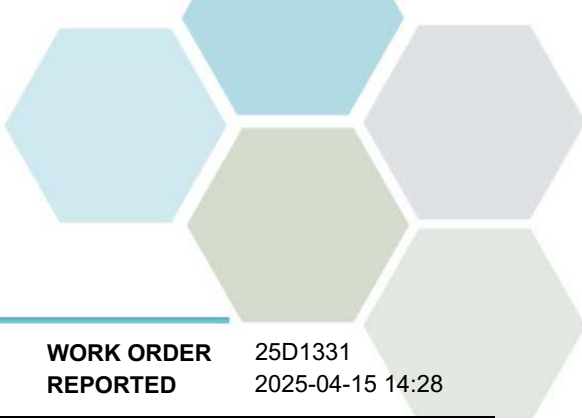
General Parameters, Batch B5D2936, Continued

Duplicate (B5D2936-DUP2)		Source: 25D1331-01		Prepared: 2025-04-14, Analyzed: 2025-04-15					
Nitrogen, Total Kjeldahl	1.18	0.050 mg/L		1.24			5	15	
Matrix Spike (B5D2936-MS2)		Source: 25D1331-01		Prepared: 2025-04-14, Analyzed: 2025-04-15					
Nitrogen, Total Kjeldahl	2.09	0.050 mg/L	1.00	1.24	85	65-135			

Total Metals, Batch B5D2774

Blank (B5D2774-BLK1)			Prepared: 2025-04-11, Analyzed: 2025-04-12						
Aluminum, total	< 0.0050	0.0050 mg/L							
Antimony, total	< 0.00020	0.00020 mg/L							
Arsenic, total	< 0.00050	0.00050 mg/L							
Barium, total	< 0.0050	0.0050 mg/L							
Beryllium, total	< 0.00010	0.00010 mg/L							
Bismuth, total	< 0.00010	0.00010 mg/L							
Boron, total	< 0.0500	0.0500 mg/L							
Cadmium, total	< 0.000010	0.000010 mg/L							
Calcium, total	< 0.20	0.20 mg/L							
Chromium, total	< 0.00050	0.00050 mg/L							
Cobalt, total	< 0.00010	0.00010 mg/L							
Copper, total	< 0.00040	0.00040 mg/L							
Iron, total	< 0.010	0.010 mg/L							
Lead, total	< 0.00020	0.00020 mg/L							
Lithium, total	< 0.00010	0.00010 mg/L							
Magnesium, total	< 0.010	0.010 mg/L							
Manganese, total	< 0.00020	0.00020 mg/L							
Molybdenum, total	< 0.00010	0.00010 mg/L							
Nickel, total	< 0.00040	0.00040 mg/L							
Phosphorus, total	< 0.050	0.050 mg/L							
Potassium, total	< 0.10	0.10 mg/L							
Selenium, total	< 0.00050	0.00050 mg/L							
Silicon, total	< 1.0	1.0 mg/L							
Silver, total	< 0.000050	0.000050 mg/L							
Sodium, total	< 0.10	0.10 mg/L							
Strontium, total	< 0.0010	0.0010 mg/L							
Sulfur, total	< 3.0	3.0 mg/L							
Tellurium, total	< 0.00050	0.00050 mg/L							
Thallium, total	< 0.000020	0.000020 mg/L							
Thorium, total	< 0.00010	0.00010 mg/L							
Tin, total	< 0.00020	0.00020 mg/L							
Titanium, total	< 0.0050	0.0050 mg/L							
Tungsten, total	< 0.0010	0.0010 mg/L							
Uranium, total	< 0.000020	0.000020 mg/L							
Vanadium, total	< 0.0050	0.0050 mg/L							
Zinc, total	< 0.0040	0.0040 mg/L							
Zirconium, total	< 0.00010	0.00010 mg/L							

Blank (B5D2774-BLK2)			Prepared: 2025-04-11, Analyzed: 2025-04-12						
Aluminum, total	< 0.0050	0.0050 mg/L							
Antimony, total	< 0.00020	0.00020 mg/L							
Arsenic, total	< 0.00050	0.00050 mg/L							
Barium, total	< 0.0050	0.0050 mg/L							
Beryllium, total	< 0.00010	0.00010 mg/L							
Bismuth, total	< 0.00010	0.00010 mg/L							
Boron, total	< 0.0500	0.0500 mg/L							
Cadmium, total	< 0.000010	0.000010 mg/L							
Calcium, total	< 0.20	0.20 mg/L							



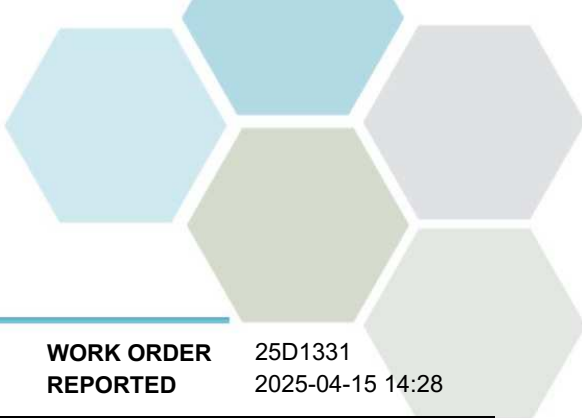
APPENDIX 2: QUALITY CONTROL RESULTS

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OK Falls - TLSW

WORK ORDER REPORTED 25D1331
2025-04-15 14:28

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B5D2774, Continued									
Blank (B5D2774-BLK2), Continued					Prepared: 2025-04-11, Analyzed: 2025-04-12				
Chromium, total	< 0.00050	0.00050 mg/L							
Cobalt, total	< 0.00010	0.00010 mg/L							
Copper, total	< 0.00040	0.00040 mg/L							
Iron, total	< 0.010	0.010 mg/L							
Lead, total	< 0.00020	0.00020 mg/L							
Lithium, total	< 0.00010	0.00010 mg/L							
Magnesium, total	< 0.010	0.010 mg/L							
Manganese, total	< 0.00020	0.00020 mg/L							
Molybdenum, total	< 0.00010	0.00010 mg/L							
Nickel, total	< 0.00040	0.00040 mg/L							
Phosphorus, total	< 0.050	0.050 mg/L							
Potassium, total	< 0.10	0.10 mg/L							
Selenium, total	< 0.00050	0.00050 mg/L							
Silicon, total	< 1.0	1.0 mg/L							
Silver, total	< 0.000050	0.000050 mg/L							
Sodium, total	< 0.10	0.10 mg/L							
Strontium, total	< 0.0010	0.0010 mg/L							
Sulfur, total	< 3.0	3.0 mg/L							
Tellurium, total	< 0.00050	0.00050 mg/L							
Thallium, total	< 0.000020	0.000020 mg/L							
Thorium, total	< 0.00010	0.00010 mg/L							
Tin, total	< 0.00020	0.00020 mg/L							
Titanium, total	< 0.0050	0.0050 mg/L							
Tungsten, total	< 0.0010	0.0010 mg/L							
Uranium, total	< 0.000020	0.000020 mg/L							
Vanadium, total	< 0.0050	0.0050 mg/L							
Zinc, total	< 0.0040	0.0040 mg/L							
Zirconium, total	< 0.00010	0.00010 mg/L							

LCS (B5D2774-BS1)				Prepared: 2025-04-11, Analyzed: 2025-04-12					
Aluminum, total	3.87	0.0050 mg/L	4.00	97	80-120				
Antimony, total	0.0401	0.00020 mg/L	0.0400	100	80-120				
Arsenic, total	0.398	0.00050 mg/L	0.400	100	80-120				
Barium, total	0.0417	0.0050 mg/L	0.0400	104	80-120				
Beryllium, total	0.0378	0.00010 mg/L	0.0400	94	80-120				
Bismuth, total	0.0401	0.00010 mg/L	0.0400	100	80-120				
Boron, total	0.397	0.0500 mg/L	0.400	99	80-120				
Cadmium, total	0.0399	0.000010 mg/L	0.0400	100	80-120				
Calcium, total	4.02	0.20 mg/L	4.00	100	80-120				
Chromium, total	0.0396	0.00050 mg/L	0.0400	99	80-120				
Cobalt, total	0.0398	0.00010 mg/L	0.0400	99	80-120				
Copper, total	0.0397	0.00040 mg/L	0.0400	99	80-120				
Iron, total	3.98	0.010 mg/L	4.00	99	80-120				
Lead, total	0.0409	0.00020 mg/L	0.0400	102	80-120				
Lithium, total	0.0365	0.00010 mg/L	0.0400	91	80-120				
Magnesium, total	3.85	0.010 mg/L	4.00	96	80-120				
Manganese, total	0.0395	0.00020 mg/L	0.0400	99	80-120				
Molybdenum, total	0.0408	0.00010 mg/L	0.0400	102	80-120				
Nickel, total	0.0396	0.00040 mg/L	0.0400	99	80-120				
Phosphorus, total	3.92	0.050 mg/L	4.00	98	80-120				
Potassium, total	3.91	0.10 mg/L	4.00	98	80-120				
Selenium, total	0.395	0.00050 mg/L	0.400	99	80-120				
Silicon, total	4.0	1.0 mg/L	4.00	100	80-120				
Silver, total	0.0397	0.000050 mg/L	0.0400	99	80-120				
Sodium, total	3.90	0.10 mg/L	4.00	98	80-120				
Strontium, total	0.0396	0.0010 mg/L	0.0400	99	80-120				



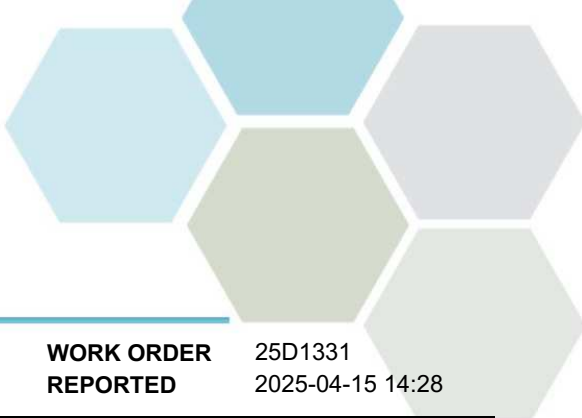
APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLSW

WORK ORDER REPORTED 25D1331
2025-04-15 14:28

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B5D2774, Continued									
LCS (B5D2774-BS1), Continued					Prepared: 2025-04-11, Analyzed: 2025-04-12				
Sulfur, total	40.2	3.0 mg/L	40.0		101	80-120			
Tellurium, total	0.0376	0.00050 mg/L	0.0400		94	80-120			
Thallium, total	0.0407	0.000020 mg/L	0.0400		102	80-120			
Thorium, total	0.0398	0.00010 mg/L	0.0400		99	80-120			
Tin, total	0.0405	0.00020 mg/L	0.0400		101	80-120			
Titanium, total	0.0387	0.0050 mg/L	0.0400		97	80-120			
Tungsten, total	0.0403	0.0010 mg/L	0.0400		101	80-120			
Uranium, total	0.0406	0.000020 mg/L	0.0400		101	80-120			
Vanadium, total	0.0402	0.0050 mg/L	0.0400		100	80-120			
Zinc, total	0.396	0.0040 mg/L	0.400		99	80-120			
Zirconium, total	0.0403	0.00010 mg/L	0.0400		101	80-120			
LCS (B5D2774-BS2)					Prepared: 2025-04-11, Analyzed: 2025-04-12				
Aluminum, total	3.91	0.0050 mg/L	4.00		98	80-120			
Antimony, total	0.0401	0.00020 mg/L	0.0400		100	80-120			
Arsenic, total	0.399	0.00050 mg/L	0.400		100	80-120			
Barium, total	0.0410	0.0050 mg/L	0.0400		103	80-120			
Beryllium, total	0.0375	0.00010 mg/L	0.0400		94	80-120			
Bismuth, total	0.0399	0.00010 mg/L	0.0400		100	80-120			
Boron, total	0.394	0.0500 mg/L	0.400		99	80-120			
Cadmium, total	0.0398	0.000010 mg/L	0.0400		99	80-120			
Calcium, total	3.95	0.20 mg/L	4.00		99	80-120			
Chromium, total	0.0400	0.00050 mg/L	0.0400		100	80-120			
Cobalt, total	0.0400	0.00010 mg/L	0.0400		100	80-120			
Copper, total	0.0406	0.00040 mg/L	0.0400		101	80-120			
Iron, total	3.97	0.010 mg/L	4.00		99	80-120			
Lead, total	0.0408	0.00020 mg/L	0.0400		102	80-120			
Lithium, total	0.0368	0.00010 mg/L	0.0400		92	80-120			
Magnesium, total	3.87	0.010 mg/L	4.00		97	80-120			
Manganese, total	0.0399	0.00020 mg/L	0.0400		100	80-120			
Molybdenum, total	0.0405	0.00010 mg/L	0.0400		101	80-120			
Nickel, total	0.0402	0.00040 mg/L	0.0400		101	80-120			
Phosphorus, total	3.92	0.050 mg/L	4.00		98	80-120			
Potassium, total	3.97	0.10 mg/L	4.00		99	80-120			
Selenium, total	0.394	0.00050 mg/L	0.400		99	80-120			
Silicon, total	4.0	1.0 mg/L	4.00		99	80-120			
Silver, total	0.0396	0.000050 mg/L	0.0400		99	80-120			
Sodium, total	3.94	0.10 mg/L	4.00		98	80-120			
Strontium, total	0.0400	0.0010 mg/L	0.0400		100	80-120			
Sulfur, total	39.5	3.0 mg/L	40.0		99	80-120			
Tellurium, total	0.0380	0.00050 mg/L	0.0400		95	80-120			
Thallium, total	0.0407	0.000020 mg/L	0.0400		102	80-120			
Thorium, total	0.0404	0.00010 mg/L	0.0400		101	80-120			
Tin, total	0.0405	0.00020 mg/L	0.0400		101	80-120			
Titanium, total	0.0392	0.0050 mg/L	0.0400		98	80-120			
Tungsten, total	0.0406	0.0010 mg/L	0.0400		101	80-120			
Uranium, total	0.0409	0.000020 mg/L	0.0400		102	80-120			
Vanadium, total	0.0402	0.0050 mg/L	0.0400		101	80-120			
Zinc, total	0.396	0.0040 mg/L	0.400		99	80-120			
Zirconium, total	0.0396	0.00010 mg/L	0.0400		99	80-120			

Duplicate (B5D2774-DUP2)		Source: 25D1331-01		Prepared: 2025-04-11, Analyzed: 2025-04-12	
Aluminum, total	0.0232	0.0050 mg/L	0.0243		20
Antimony, total	0.00161	0.00020 mg/L	0.00167	4	20
Arsenic, total	0.00537	0.00050 mg/L	0.00550	2	20
Barium, total	0.0793	0.0050 mg/L	0.0800	1	20
Beryllium, total	< 0.00010	0.00010 mg/L	< 0.00010		20



APPENDIX 2: QUALITY CONTROL RESULTS

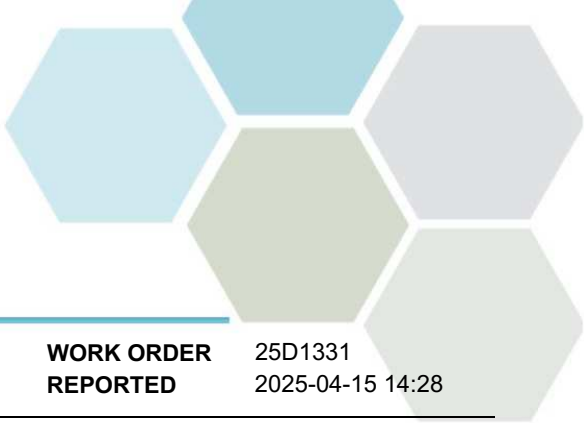
REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLSW

WORK ORDER REPORTED 25D1331
2025-04-15 14:28

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B5D2774, Continued									
Duplicate (B5D2774-DUP2), Continued		Source: 25D1331-01		Prepared: 2025-04-11, Analyzed: 2025-04-12					
Bismuth, total	< 0.00010	0.00010 mg/L		< 0.00010				20	
Boron, total	0.819	0.0500 mg/L		0.885			8	20	
Cadmium, total	0.000043	0.000010 mg/L		0.000041				20	
Calcium, total	109	0.20 mg/L		107			2	20	
Chromium, total	0.00085	0.00050 mg/L		0.00092				20	
Cobalt, total	0.00030	0.00010 mg/L		0.00029				20	
Copper, total	0.00934	0.00040 mg/L		0.00909			3	20	
Iron, total	0.110	0.010 mg/L		0.105			5	20	
Lead, total	0.00109	0.00020 mg/L		0.00110			1	20	
Lithium, total	0.0205	0.00010 mg/L		0.0219			6	20	
Magnesium, total	48.9	0.010 mg/L		49.5			1	20	
Manganese, total	0.0312	0.00020 mg/L		0.0309			< 1	20	
Molybdenum, total	0.0126	0.00010 mg/L		0.0128			2	20	
Nickel, total	0.00195	0.00040 mg/L		0.00183				20	
Phosphorus, total	< 0.050	0.050 mg/L		0.052				20	
Potassium, total	18.7	0.10 mg/L		18.7			< 1	20	
Selenium, total	0.00050	0.00050 mg/L		0.00056				20	
Silicon, total	16.6	1.0 mg/L		16.7			< 1	20	
Silver, total	< 0.000050	0.000050 mg/L		< 0.000050				20	
Sodium, total	81.9	0.10 mg/L		82.4			< 1	20	
Strontium, total	1.22	0.0010 mg/L		1.20			2	20	
Sulfur, total	75.7	3.0 mg/L		74.4			2	20	
Tellurium, total	< 0.00050	0.00050 mg/L		< 0.00050				20	
Thallium, total	< 0.000020	0.000020 mg/L		< 0.000020				20	
Thorium, total	< 0.00010	0.00010 mg/L		< 0.00010				20	
Tin, total	< 0.00020	0.00020 mg/L		< 0.00020				20	
Titanium, total	< 0.0050	0.0050 mg/L		< 0.0050				20	
Tungsten, total	< 0.0010	0.0010 mg/L		< 0.0010				20	
Uranium, total	0.0384	0.000020 mg/L		0.0380			1	20	
Vanadium, total	< 0.0050	0.0050 mg/L		< 0.0050				20	
Zinc, total	0.0602	0.0040 mg/L		0.0599			< 1	20	
Zirconium, total	0.00074	0.00010 mg/L		0.00080			8	20	

Total Metals, Batch B5D2868

Blank (B5D2868-BLK1)		Prepared: 2025-04-13, Analyzed: 2025-04-13							
Mercury, total	< 0.000010	0.000010 mg/L							
Blank (B5D2868-BLK2)		Prepared: 2025-04-13, Analyzed: 2025-04-13							
Mercury, total	< 0.000010	0.000010 mg/L							
Blank (B5D2868-BLK3)		Prepared: 2025-04-13, Analyzed: 2025-04-13							
Mercury, total	< 0.000010	0.000010 mg/L							
Blank (B5D2868-BLK4)		Prepared: 2025-04-13, Analyzed: 2025-04-13							
Mercury, total	< 0.000010	0.000010 mg/L							
LCS (B5D2868-BS1)		Prepared: 2025-04-13, Analyzed: 2025-04-13							
Mercury, total	0.00245	0.000010 mg/L		0.00250	98	80-120			
LCS (B5D2868-BS2)		Prepared: 2025-04-13, Analyzed: 2025-04-13							
Mercury, total	0.00248	0.000010 mg/L		0.00250	99	80-120			
LCS (B5D2868-BS3)		Prepared: 2025-04-13, Analyzed: 2025-04-13							
Mercury, total	0.00265	0.000010 mg/L		0.00250	106	80-120			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLSW

WORK ORDER REPORTED 25D1331
2025-04-15 14:28

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
<i>Total Metals, Batch B5D2868, Continued</i>									
LCS (B5D2868-BS4)					Prepared: 2025-04-13, Analyzed: 2025-04-13				
Mercury, total	0.00255	0.000010 mg/L	0.00250		102	80-120			



CERTIFICATE OF ANALYSIS

REPORTED TO	Regional District of Okanagan Similkameen 101 Martin Street Penticton, BC V2A 5J9	WORK ORDER	25D1483
ATTENTION	Rob Palmer	RECEIVED / TEMP REPORTED	2025-04-10 11:00 / 6.1°C
PO NUMBER	TLGW	REPORTED	2025-04-16 11:01
PROJECT	Ok Falls - TLGW	COC NUMBER	eCOC#00022364
PROJECT INFO			

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

Big Picture Sidekicks



You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry



It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve



Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

Work Order Comments:

Custody Seals Intact: YES

By engaging our services, you are agreeing to CARO Analytical Service's Standard Terms and Conditions outlined here: <https://www.caro.ca/terms-conditions>

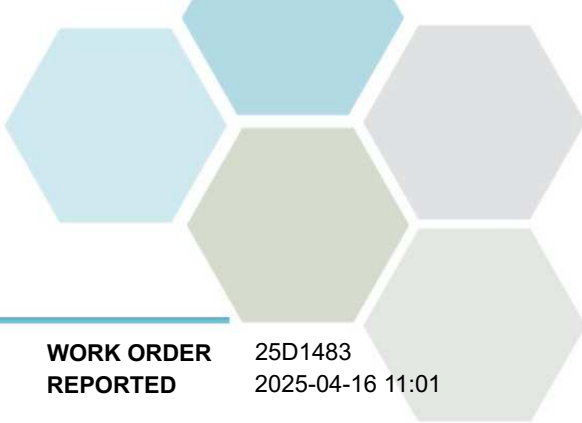
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 | #108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1483
2025-04-16 11:01

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
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MW 17-4 (25D1483-01) | Matrix: Ground Water | Sampled: 2025-04-09 13:00

Anions

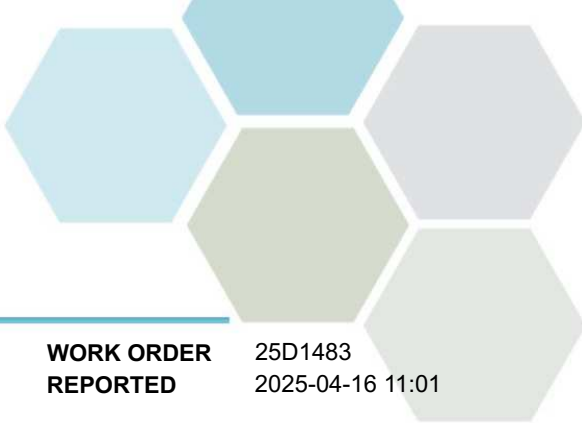
Bromide	< 0.10	N/A	0.10 mg/L	2025-04-11	
Chloride	30.7	AO ≤ 250	0.10 mg/L	2025-04-11	
Fluoride	0.41	MAC = 1.5	0.10 mg/L	2025-04-11	
Nitrate (as N)	0.012	MAC = 10	0.010 mg/L	2025-04-11	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2025-04-11	
Sulfate	74.6	AO ≤ 500	1.0 mg/L	2025-04-11	

Calculated Parameters

Bicarbonate (HCO3)	319	N/A	1.22 mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600 mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340 mg/L	N/A	
Hardness, Dissolved (as CaCO3)	296	N/A	0.500 mg/L	N/A	
Nitrate+Nitrite (as N)	0.0122	N/A	0.0100 mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-04-14	
Antimony, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-04-14	
Arsenic, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-04-14	
Barium, dissolved	0.0545	N/A	0.0050 mg/L	2025-04-14	
Beryllium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-04-14	
Bismuth, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-04-14	
Boron, dissolved	< 0.0500	N/A	0.0500 mg/L	2025-04-14	
Cadmium, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-04-14	
Calcium, dissolved	76.9	N/A	0.20 mg/L	2025-04-14	
Chromium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-04-14	
Cobalt, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-04-14	
Copper, dissolved	0.00048	N/A	0.00040 mg/L	2025-04-14	
Iron, dissolved	0.054	N/A	0.010 mg/L	2025-04-14	
Lead, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-04-14	
Lithium, dissolved	0.0198	N/A	0.00010 mg/L	2025-04-14	
Magnesium, dissolved	25.3	N/A	0.010 mg/L	2025-04-14	
Manganese, dissolved	0.0115	N/A	0.00020 mg/L	2025-04-14	
Mercury, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-04-12	
Molybdenum, dissolved	0.00713	N/A	0.00010 mg/L	2025-04-14	
Nickel, dissolved	< 0.00040	N/A	0.00040 mg/L	2025-04-14	
Phosphorus, dissolved	< 0.050	N/A	0.050 mg/L	2025-04-14	
Potassium, dissolved	3.73	N/A	0.10 mg/L	2025-04-14	
Selenium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-04-14	
Silicon, dissolved	8.8	N/A	1.0 mg/L	2025-04-14	
Silver, dissolved	< 0.000050	N/A	0.000050 mg/L	2025-04-14	
Sodium, dissolved	43.1	N/A	0.10 mg/L	2025-04-14	
Strontium, dissolved	1.51	N/A	0.0010 mg/L	2025-04-14	
Sulfur, dissolved	24.7	N/A	3.0 mg/L	2025-04-14	
Tellurium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-04-14	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1483
2025-04-16 11:01

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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MW 17-4 (25D1483-01) | Matrix: Ground Water | Sampled: 2025-04-09 13:00, Continued

Dissolved Metals, Continued

Thallium, dissolved	< 0.000020	N/A	0.000020	mg/L	2025-04-14	
Thorium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-14	
Tin, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-04-14	
Titanium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-04-14	
Tungsten, dissolved	< 0.0010	N/A	0.0010	mg/L	2025-04-14	
Uranium, dissolved	0.0218	N/A	0.000020	mg/L	2025-04-14	
Vanadium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-04-14	
Zinc, dissolved	< 0.0040	N/A	0.0040	mg/L	2025-04-14	
Zirconium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-14	

General Parameters

Alkalinity, Total (as CaCO3)	261	N/A	1.0	mg/L	2025-04-14	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-04-14	
Alkalinity, Bicarbonate (as CaCO3)	261	N/A	1.0	mg/L	2025-04-14	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-04-14	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-04-14	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-04-14	
Chemical Oxygen Demand	23	N/A	20	mg/L	2025-04-16	
Conductivity (EC)	741	N/A	2.0	µS/cm	2025-04-14	
pH	7.86	7.0-10.5	0.10	pH units	2025-04-14	HT2

MW 19-2D (25D1483-02) | Matrix: Ground Water | Sampled: 2025-04-09 10:40

Anions

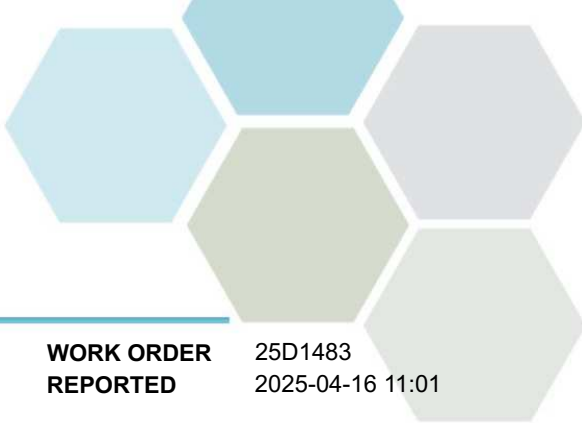
Bromide	< 0.10	N/A	0.10	mg/L	2025-04-11	
Chloride	37.8	AO ≤ 250	0.10	mg/L	2025-04-11	
Fluoride	0.21	MAC = 1.5	0.10	mg/L	2025-04-11	
Nitrate (as N)	0.281	MAC = 10	0.010	mg/L	2025-04-11	
Nitrite (as N)	0.030	MAC = 1	0.010	mg/L	2025-04-11	
Sulfate	81.8	AO ≤ 500	1.0	mg/L	2025-04-11	

Calculated Parameters

Bicarbonate (HCO3)	467	N/A	1.22	mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600	mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340	mg/L	N/A	
Hardness, Dissolved (as CaCO3)	476	N/A	0.500	mg/L	N/A	
Nitrate+Nitrite (as N)	0.311	N/A	0.0100	mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-04-12	
Antimony, dissolved	0.00040	N/A	0.00020	mg/L	2025-04-12	
Arsenic, dissolved	0.00057	N/A	0.00050	mg/L	2025-04-12	
Barium, dissolved	0.106	N/A	0.0050	mg/L	2025-04-12	
Beryllium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-12	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1483
2025-04-16 11:01

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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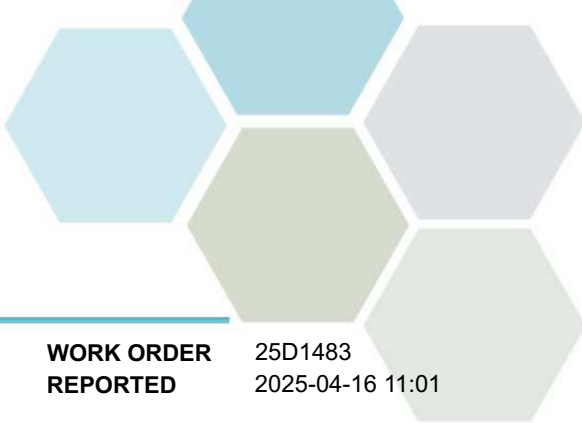
MW 19-2D (25D1483-02) | Matrix: Ground Water | Sampled: 2025-04-09 10:40, Continued

Dissolved Metals, Continued

Bismuth, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-12	
Boron, dissolved	< 0.0500	N/A	0.0500	mg/L	2025-04-12	
Cadmium, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-04-12	
Calcium, dissolved	132	N/A	0.20	mg/L	2025-04-12	
Chromium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-04-12	
Cobalt, dissolved	0.00082	N/A	0.00010	mg/L	2025-04-12	
Copper, dissolved	0.00048	N/A	0.00040	mg/L	2025-04-12	
Iron, dissolved	0.070	N/A	0.010	mg/L	2025-04-12	
Lead, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-04-12	
Lithium, dissolved	0.0183	N/A	0.00010	mg/L	2025-04-12	
Magnesium, dissolved	35.3	N/A	0.010	mg/L	2025-04-12	
Manganese, dissolved	0.267	N/A	0.00020	mg/L	2025-04-12	
Mercury, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-04-12	
Molybdenum, dissolved	0.0128	N/A	0.00010	mg/L	2025-04-12	
Nickel, dissolved	0.00217	N/A	0.00040	mg/L	2025-04-12	
Phosphorus, dissolved	< 0.050	N/A	0.050	mg/L	2025-04-12	
Potassium, dissolved	3.83	N/A	0.10	mg/L	2025-04-12	
Selenium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-04-12	
Silicon, dissolved	11.0	N/A	1.0	mg/L	2025-04-12	
Silver, dissolved	< 0.000050	N/A	0.000050	mg/L	2025-04-12	
Sodium, dissolved	30.1	N/A	0.10	mg/L	2025-04-12	
Strontium, dissolved	2.15	N/A	0.0010	mg/L	2025-04-12	
Sulfur, dissolved	30.7	N/A	3.0	mg/L	2025-04-12	
Tellurium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-04-12	
Thallium, dissolved	< 0.000020	N/A	0.000020	mg/L	2025-04-12	
Thorium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-12	
Tin, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-04-12	
Titanium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-04-12	
Tungsten, dissolved	< 0.0010	N/A	0.0010	mg/L	2025-04-12	
Uranium, dissolved	0.0494	N/A	0.000020	mg/L	2025-04-12	
Vanadium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-04-12	
Zinc, dissolved	0.0249	N/A	0.0040	mg/L	2025-04-12	
Zirconium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-04-12	

General Parameters

Alkalinity, Total (as CaCO3)	383	N/A	1.0	mg/L	2025-04-14	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-04-14	
Alkalinity, Bicarbonate (as CaCO3)	383	N/A	1.0	mg/L	2025-04-14	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-04-14	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-04-14	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-04-14	
Chemical Oxygen Demand	91	N/A	20	mg/L	2025-04-16	
Conductivity (EC)	1020	N/A	2.0	µS/cm	2025-04-14	



TEST RESULTS

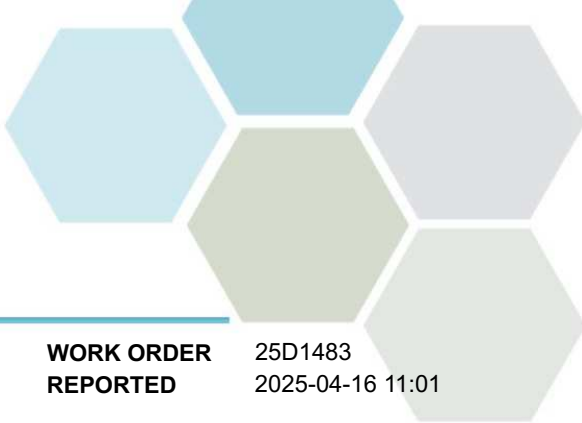
REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1483
2025-04-16 11:01

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
MW 19-2D (25D1483-02) Matrix: Ground Water Sampled: 2025-04-09 10:40, Continued						
<i>General Parameters, Continued</i>						
pH	7.77	7.0-10.5	0.10	pH units	2025-04-14	HT2

Sample Qualifiers:

HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1483
2025-04-16 11:01

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Chemical Oxygen Demand in Water	SM 5220 D* (2022)	Closed Reflux, Colorimetry	✓	Kelowna
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Kelowna
Dissolved Metals in Water	EPA 200.8 / EPA 6020B	0.45 µm Filtration / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Hardness in Water	SM 2340 B (2021)	Calculation: 2.497 [diss Ca] + 4.118 [diss Mg]	✓	N/A
Mercury, dissolved in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	✓	Richmond
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method

Glossary of Terms:

RL	Reporting Limit (default)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
pH units	pH < 7 = acidic, pH > 7 = basic
µS/cm	Microsiemens per centimetre
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

Guidelines Referenced in this Report:

[Guidelines for Canadian Drinking Water Quality \(Health Canada, September 2022\)](#)

Note: In some cases, the values displayed on the report represent the lowest guideline and are to be verified by the end user



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO Regional District of Okanagan Similkameen
PROJECT Ok Falls - TLGW

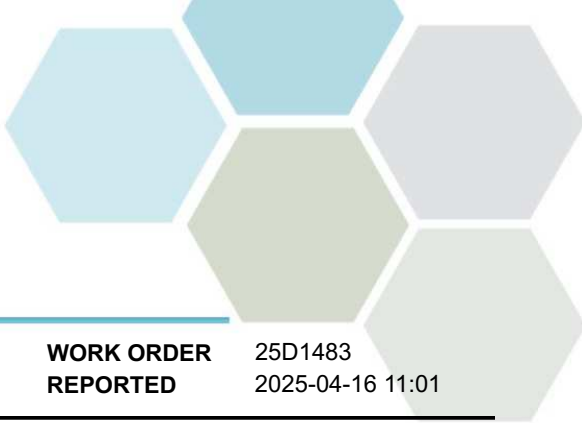
WORK ORDER 25D1483
REPORTED 2025-04-16 11:01

General Comments:

The results in this report apply to the received samples analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety. CARO is not responsible for any loss or damage resulting directly or indirectly from error or omission in the conduct of testing. Liability is limited to the cost of analysis. Carro will dispose of all samples within 30 days of sample receipt, unless otherwise agreed.

Results in **Bold** indicate values that are above CARO's method reporting limits. Any results that are above regulatory limits are highlighted **red**. Please note that results will only be highlighted red if the regulatory limits are included on the CARO report. Any Bold and/or highlighted results do not take into account method uncertainty. If you would like method uncertainty or regulatory limits to be included on your report, please contact your Account Manager: hhannaoui@caro.ca

Please note any regulatory guidelines applied to this report are added as a convenience to the client, at their request, to help provide some initial context to analytical results obtained. Although CARO makes every effort to ensure accuracy of the associated regulatory guideline(s) applied, the guidelines applied cannot be assumed to be correct due to a variety of factors and as such CARO Analytical Services assumes no liability or responsibility for the use of those guidelines to make any decisions. The original source of the regulation should be verified and a review of the guideline(s) should be validated as correct in order to make any decisions arising from the comparison of the analytical data obtained to the relevant regulatory guideline for one's particular circumstances. Further, CARO Analytical Services assumes no liability or responsibility for any loss attributed from the use of these guidelines in any way.



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1483
2025-04-16 11:01

The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

- **Method Blank (Blk):** A blank sample that undergoes sample processing identical to that carried out for the test samples. Method blank results are used to assess contamination from the laboratory environment and reagents.
- **Duplicate (Dup):** An additional or second portion of a randomly selected sample in the analytical run carried through the entire analytical process. Duplicates provide a measure of the analytical method's precision (reproducibility).
- **Blank Spike (BS):** A sample of known concentration which undergoes processing identical to that carried out for test samples, also referred to as a laboratory control sample (LCS). Blank spikes provide a measure of the analytical method's accuracy.
- **Matrix Spike (MS):** A second aliquot of sample is fortified with a known concentration of target analytes and carried through the entire analytical process. Matrix spikes evaluate potential matrix effects that may affect the analyte recovery.
- **Reference Material (SRM):** A homogenous material of similar matrix to the samples, certified for the parameter(s) listed. Reference Materials ensure that the analytical process is adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10-20 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Anions, Batch B5D2604

Blank (B5D2604-BLK1)			Prepared: 2025-04-11, Analyzed: 2025-04-11						
Bromide	< 0.10	0.10 mg/L							
Chloride	< 0.10	0.10 mg/L							
Fluoride	< 0.10	0.10 mg/L							
Nitrate (as N)	< 0.010	0.010 mg/L							
Nitrite (as N)	< 0.010	0.010 mg/L							
Sulfate	< 1.0	1.0 mg/L							
LCS (B5D2604-BS1)			Prepared: 2025-04-11, Analyzed: 2025-04-11						
Bromide	3.90	0.10 mg/L	4.00		97	85-115			
Chloride	15.8	0.10 mg/L	16.0		98	90-110			
Fluoride	3.85	0.10 mg/L	4.00		96	88-108			
Nitrate (as N)	3.98	0.010 mg/L	4.00		100	90-110			
Nitrite (as N)	1.97	0.010 mg/L	2.00		99	85-115			
Sulfate	15.9	1.0 mg/L	16.0		99	90-110			

Dissolved Metals, Batch B5D2801

Blank (B5D2801-BLK1)			Prepared: 2025-04-12, Analyzed: 2025-04-12						
Aluminum, dissolved	< 0.0050	0.0050 mg/L							
Antimony, dissolved	< 0.00020	0.00020 mg/L							
Arsenic, dissolved	< 0.00050	0.00050 mg/L							
Barium, dissolved	< 0.0050	0.0050 mg/L							
Beryllium, dissolved	< 0.00010	0.00010 mg/L							
Bismuth, dissolved	< 0.00010	0.00010 mg/L							
Boron, dissolved	< 0.0500	0.0500 mg/L							
Cadmium, dissolved	< 0.000010	0.000010 mg/L							
Calcium, dissolved	< 0.20	0.20 mg/L							
Chromium, dissolved	< 0.00050	0.00050 mg/L							
Cobalt, dissolved	< 0.00010	0.00010 mg/L							
Copper, dissolved	< 0.00040	0.00040 mg/L							
Iron, dissolved	< 0.010	0.010 mg/L							
Lead, dissolved	< 0.00020	0.00020 mg/L							
Lithium, dissolved	< 0.00010	0.00010 mg/L							
Magnesium, dissolved	< 0.010	0.010 mg/L							
Manganese, dissolved	< 0.00020	0.00020 mg/L							
Molybdenum, dissolved	< 0.00010	0.00010 mg/L							



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1483
2025-04-16 11:01

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Dissolved Metals, Batch B5D2801, Continued

Blank (B5D2801-BLK1), Continued

Prepared: 2025-04-12, Analyzed: 2025-04-12

Nickel, dissolved	< 0.00040	0.00040 mg/L
Phosphorus, dissolved	< 0.050	0.050 mg/L
Potassium, dissolved	< 0.10	0.10 mg/L
Selenium, dissolved	< 0.00050	0.00050 mg/L
Silicon, dissolved	< 1.0	1.0 mg/L
Silver, dissolved	< 0.000050	0.000050 mg/L
Sodium, dissolved	< 0.10	0.10 mg/L
Strontium, dissolved	< 0.0010	0.0010 mg/L
Sulfur, dissolved	< 3.0	3.0 mg/L
Tellurium, dissolved	< 0.00050	0.00050 mg/L
Thallium, dissolved	< 0.000020	0.000020 mg/L
Thorium, dissolved	< 0.00010	0.00010 mg/L
Tin, dissolved	< 0.00020	0.00020 mg/L
Titanium, dissolved	< 0.0050	0.0050 mg/L
Tungsten, dissolved	< 0.0010	0.0010 mg/L
Uranium, dissolved	< 0.000020	0.000020 mg/L
Vanadium, dissolved	< 0.0050	0.0050 mg/L
Zinc, dissolved	< 0.0040	0.0040 mg/L
Zirconium, dissolved	< 0.00010	0.00010 mg/L

Blank (B5D2801-BLK2)

Prepared: 2025-04-12, Analyzed: 2025-04-12

Aluminum, dissolved	< 0.0050	0.0050 mg/L
Antimony, dissolved	< 0.00020	0.00020 mg/L
Arsenic, dissolved	< 0.00050	0.00050 mg/L
Barium, dissolved	< 0.0050	0.0050 mg/L
Beryllium, dissolved	< 0.00010	0.00010 mg/L
Bismuth, dissolved	< 0.00010	0.00010 mg/L
Boron, dissolved	< 0.0500	0.0500 mg/L
Cadmium, dissolved	< 0.000010	0.000010 mg/L
Calcium, dissolved	< 0.20	0.20 mg/L
Chromium, dissolved	< 0.00050	0.00050 mg/L
Cobalt, dissolved	< 0.00010	0.00010 mg/L
Copper, dissolved	< 0.00040	0.00040 mg/L
Iron, dissolved	< 0.010	0.010 mg/L
Lead, dissolved	< 0.00020	0.00020 mg/L
Lithium, dissolved	< 0.00010	0.00010 mg/L
Magnesium, dissolved	< 0.010	0.010 mg/L
Manganese, dissolved	< 0.00020	0.00020 mg/L
Molybdenum, dissolved	< 0.00010	0.00010 mg/L
Nickel, dissolved	< 0.00040	0.00040 mg/L
Phosphorus, dissolved	< 0.050	0.050 mg/L
Potassium, dissolved	< 0.10	0.10 mg/L
Selenium, dissolved	< 0.00050	0.00050 mg/L
Silicon, dissolved	< 1.0	1.0 mg/L
Silver, dissolved	< 0.000050	0.000050 mg/L
Sodium, dissolved	< 0.10	0.10 mg/L
Strontium, dissolved	< 0.0010	0.0010 mg/L
Sulfur, dissolved	< 3.0	3.0 mg/L
Tellurium, dissolved	< 0.00050	0.00050 mg/L
Thallium, dissolved	< 0.000020	0.000020 mg/L
Thorium, dissolved	< 0.00010	0.00010 mg/L
Tin, dissolved	< 0.00020	0.00020 mg/L
Titanium, dissolved	< 0.0050	0.0050 mg/L
Tungsten, dissolved	< 0.0010	0.0010 mg/L
Uranium, dissolved	< 0.000020	0.000020 mg/L
Vanadium, dissolved	< 0.0050	0.0050 mg/L



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1483
2025-04-16 11:01

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Dissolved Metals, Batch B5D2801, Continued

Blank (B5D2801-BLK2), Continued

Prepared: 2025-04-12, Analyzed: 2025-04-12

Zinc, dissolved	< 0.0040	0.0040 mg/L							
Zirconium, dissolved	< 0.00010	0.00010 mg/L							

LCS (B5D2801-BS1)

Prepared: 2025-04-12, Analyzed: 2025-04-12

Aluminum, dissolved	3.85	0.0050 mg/L	4.00		96	80-120			
Antimony, dissolved	0.0393	0.00020 mg/L	0.0400		98	80-120			
Arsenic, dissolved	0.383	0.00050 mg/L	0.400		96	80-120			
Barium, dissolved	0.0404	0.0050 mg/L	0.0400		101	80-120			
Beryllium, dissolved	0.0411	0.00010 mg/L	0.0400		103	80-120			
Bismuth, dissolved	0.0405	0.00010 mg/L	0.0400		101	80-120			
Boron, dissolved	0.458	0.0500 mg/L	0.400		115	80-120			
Cadmium, dissolved	0.0402	0.000010 mg/L	0.0400		100	80-120			
Calcium, dissolved	4.02	0.20 mg/L	4.00		100	80-120			
Chromium, dissolved	0.0389	0.00050 mg/L	0.0400		97	80-120			
Cobalt, dissolved	0.0384	0.00010 mg/L	0.0400		96	80-120			
Copper, dissolved	0.0383	0.00040 mg/L	0.0400		96	80-120			
Iron, dissolved	3.84	0.010 mg/L	4.00		96	80-120			
Lead, dissolved	0.0404	0.00020 mg/L	0.0400		101	80-120			
Lithium, dissolved	0.0415	0.00010 mg/L	0.0400		104	80-120			
Magnesium, dissolved	3.87	0.010 mg/L	4.00		97	80-120			
Manganese, dissolved	0.0386	0.00020 mg/L	0.0400		96	80-120			
Molybdenum, dissolved	0.0397	0.00010 mg/L	0.0400		99	80-120			
Nickel, dissolved	0.0384	0.00040 mg/L	0.0400		96	80-120			
Phosphorus, dissolved	3.86	0.050 mg/L	4.00		96	80-120			
Potassium, dissolved	3.85	0.10 mg/L	4.00		96	80-120			
Selenium, dissolved	0.395	0.00050 mg/L	0.400		99	80-120			
Silicon, dissolved	4.1	1.0 mg/L	4.00		101	80-120			
Silver, dissolved	0.0394	0.000050 mg/L	0.0400		99	80-120			
Sodium, dissolved	3.90	0.10 mg/L	4.00		98	80-120			
Strontium, dissolved	0.0388	0.0010 mg/L	0.0400		97	80-120			
Sulfur, dissolved	40.3	3.0 mg/L	40.0		101	80-120			
Tellurium, dissolved	0.0386	0.00050 mg/L	0.0400		96	80-120			
Thallium, dissolved	0.0404	0.000020 mg/L	0.0400		101	80-120			
Thorium, dissolved	0.0404	0.00010 mg/L	0.0400		101	80-120			
Tin, dissolved	0.0411	0.00020 mg/L	0.0400		103	80-120			
Titanium, dissolved	0.0373	0.00050 mg/L	0.0400		93	80-120			
Tungsten, dissolved	0.0401	0.0010 mg/L	0.0400		100	80-120			
Uranium, dissolved	0.0404	0.000020 mg/L	0.0400		101	80-120			
Vanadium, dissolved	0.0379	0.00050 mg/L	0.0400		95	80-120			
Zinc, dissolved	0.394	0.0040 mg/L	0.400		99	80-120			
Zirconium, dissolved	0.0393	0.00010 mg/L	0.0400		98	80-120			

LCS (B5D2801-BS2)

Prepared: 2025-04-12, Analyzed: 2025-04-12

Aluminum, dissolved	3.73	0.0050 mg/L	4.00		93	80-120			
Antimony, dissolved	0.0387	0.00020 mg/L	0.0400		97	80-120			
Arsenic, dissolved	0.380	0.00050 mg/L	0.400		95	80-120			
Barium, dissolved	0.0404	0.0050 mg/L	0.0400		101	80-120			
Beryllium, dissolved	0.0390	0.00010 mg/L	0.0400		97	80-120			
Bismuth, dissolved	0.0401	0.00010 mg/L	0.0400		100	80-120			
Boron, dissolved	0.416	0.0500 mg/L	0.400		104	80-120			
Cadmium, dissolved	0.0398	0.000010 mg/L	0.0400		100	80-120			
Calcium, dissolved	4.01	0.20 mg/L	4.00		100	80-120			
Chromium, dissolved	0.0385	0.00050 mg/L	0.0400		96	80-120			
Cobalt, dissolved	0.0381	0.00010 mg/L	0.0400		95	80-120			
Copper, dissolved	0.0377	0.00040 mg/L	0.0400		94	80-120			
Iron, dissolved	3.80	0.010 mg/L	4.00		95	80-120			
Lead, dissolved	0.0401	0.00020 mg/L	0.0400		100	80-120			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1483
2025-04-16 11:01

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Dissolved Metals, Batch B5D2801, Continued									
LCS (B5D2801-BS2), Continued					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Lithium, dissolved	0.0390	0.00010 mg/L	0.0400		97	80-120			
Magnesium, dissolved	3.78	0.010 mg/L	4.00		94	80-120			
Manganese, dissolved	0.0384	0.00020 mg/L	0.0400		96	80-120			
Molybdenum, dissolved	0.0396	0.00010 mg/L	0.0400		99	80-120			
Nickel, dissolved	0.0384	0.00040 mg/L	0.0400		96	80-120			
Phosphorus, dissolved	3.75	0.050 mg/L	4.00		94	80-120			
Potassium, dissolved	3.77	0.10 mg/L	4.00		94	80-120			
Selenium, dissolved	0.400	0.00050 mg/L	0.400		100	80-120			
Silicon, dissolved	3.9	1.0 mg/L	4.00		98	80-120			
Silver, dissolved	0.0395	0.000050 mg/L	0.0400		99	80-120			
Sodium, dissolved	3.84	0.10 mg/L	4.00		96	80-120			
Strontium, dissolved	0.0387	0.0010 mg/L	0.0400		97	80-120			
Sulfur, dissolved	40.3	3.0 mg/L	40.0		101	80-120			
Tellurium, dissolved	0.0380	0.00050 mg/L	0.0400		95	80-120			
Thallium, dissolved	0.0399	0.000020 mg/L	0.0400		100	80-120			
Thorium, dissolved	0.0400	0.00010 mg/L	0.0400		100	80-120			
Tin, dissolved	0.0403	0.00020 mg/L	0.0400		101	80-120			
Titanium, dissolved	0.0376	0.0050 mg/L	0.0400		94	80-120			
Tungsten, dissolved	0.0399	0.0010 mg/L	0.0400		100	80-120			
Uranium, dissolved	0.0399	0.000020 mg/L	0.0400		100	80-120			
Vanadium, dissolved	0.0375	0.0050 mg/L	0.0400		94	80-120			
Zinc, dissolved	0.396	0.0040 mg/L	0.400		99	80-120			
Zirconium, dissolved	0.0385	0.00010 mg/L	0.0400		96	80-120			

Dissolved Metals, Batch B5D2845

Blank (B5D2845-BLK1)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5D2845-BLK2)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5D2845-BLK3)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5D2845-BLK4)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Mercury, dissolved	< 0.000010	0.000010 mg/L							
LCS (B5D2845-BS1)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Mercury, dissolved	0.00249	0.000010 mg/L	0.00250		100	80-120			
LCS (B5D2845-BS2)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Mercury, dissolved	0.00256	0.000010 mg/L	0.00250		102	80-120			
LCS (B5D2845-BS3)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Mercury, dissolved	0.00247	0.000010 mg/L	0.00250		99	80-120			
LCS (B5D2845-BS4)					Prepared: 2025-04-12, Analyzed: 2025-04-12				
Mercury, dissolved	0.00227	0.000010 mg/L	0.00250		91	80-120			

Dissolved Metals, Batch B5D2879

Blank (B5D2879-BLK1)					Prepared: 2025-04-14, Analyzed: 2025-04-14				
Aluminum, dissolved	< 0.0050	0.0050 mg/L							
Antimony, dissolved	< 0.00020	0.00020 mg/L							
Arsenic, dissolved	< 0.00050	0.00050 mg/L							



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1483
2025-04-16 11:01

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Dissolved Metals, Batch B5D2879, Continued

Blank (B5D2879-BLK1), Continued

Prepared: 2025-04-14, Analyzed: 2025-04-14

Barium, dissolved	< 0.0050	0.0050 mg/L							
Beryllium, dissolved	< 0.00010	0.00010 mg/L							
Bismuth, dissolved	< 0.00010	0.00010 mg/L							
Boron, dissolved	< 0.0500	0.0500 mg/L							
Cadmium, dissolved	< 0.000010	0.000010 mg/L							
Calcium, dissolved	< 0.20	0.20 mg/L							
Chromium, dissolved	< 0.00050	0.00050 mg/L							
Cobalt, dissolved	< 0.00010	0.00010 mg/L							
Copper, dissolved	< 0.00040	0.00040 mg/L							
Iron, dissolved	< 0.010	0.010 mg/L							
Lead, dissolved	< 0.00020	0.00020 mg/L							
Lithium, dissolved	< 0.00010	0.00010 mg/L							
Magnesium, dissolved	< 0.010	0.010 mg/L							
Manganese, dissolved	< 0.00020	0.00020 mg/L							
Molybdenum, dissolved	< 0.00010	0.00010 mg/L							
Nickel, dissolved	< 0.00040	0.00040 mg/L							
Phosphorus, dissolved	< 0.050	0.050 mg/L							
Potassium, dissolved	< 0.10	0.10 mg/L							
Selenium, dissolved	< 0.00050	0.00050 mg/L							
Silicon, dissolved	< 1.0	1.0 mg/L							
Silver, dissolved	< 0.000050	0.000050 mg/L							
Sodium, dissolved	< 0.10	0.10 mg/L							
Strontium, dissolved	< 0.0010	0.0010 mg/L							
Sulfur, dissolved	< 3.0	3.0 mg/L							
Tellurium, dissolved	< 0.00050	0.00050 mg/L							
Thallium, dissolved	< 0.000020	0.000020 mg/L							
Thorium, dissolved	< 0.00010	0.00010 mg/L							
Tin, dissolved	< 0.00020	0.00020 mg/L							
Titanium, dissolved	< 0.0050	0.0050 mg/L							
Tungsten, dissolved	< 0.0010	0.0010 mg/L							
Uranium, dissolved	< 0.000020	0.000020 mg/L							
Vanadium, dissolved	< 0.0050	0.0050 mg/L							
Zinc, dissolved	< 0.0040	0.0040 mg/L							
Zirconium, dissolved	< 0.00010	0.00010 mg/L							

LCS (B5D2879-BS1)

Prepared: 2025-04-14, Analyzed: 2025-04-14

Aluminum, dissolved	4.12	0.0050 mg/L	4.00		103	80-120			
Antimony, dissolved	0.0404	0.00020 mg/L	0.0400		101	80-120			
Arsenic, dissolved	0.404	0.00050 mg/L	0.400		101	80-120			
Barium, dissolved	0.0412	0.0050 mg/L	0.0400		103	80-120			
Beryllium, dissolved	0.0405	0.00010 mg/L	0.0400		101	80-120			
Bismuth, dissolved	0.0405	0.00010 mg/L	0.0400		101	80-120			
Boron, dissolved	0.402	0.0500 mg/L	0.400		101	80-120			
Cadmium, dissolved	0.0400	0.000010 mg/L	0.0400		100	80-120			
Calcium, dissolved	4.09	0.20 mg/L	4.00		102	80-120			
Chromium, dissolved	0.0396	0.00050 mg/L	0.0400		99	80-120			
Cobalt, dissolved	0.0403	0.00010 mg/L	0.0400		101	80-120			
Copper, dissolved	0.0399	0.00040 mg/L	0.0400		100	80-120			
Iron, dissolved	4.11	0.010 mg/L	4.00		103	80-120			
Lead, dissolved	0.0405	0.00020 mg/L	0.0400		101	80-120			
Lithium, dissolved	0.0407	0.00010 mg/L	0.0400		102	80-120			
Magnesium, dissolved	4.09	0.010 mg/L	4.00		102	80-120			
Manganese, dissolved	0.0408	0.00020 mg/L	0.0400		102	80-120			
Molybdenum, dissolved	0.0405	0.00010 mg/L	0.0400		101	80-120			
Nickel, dissolved	0.0401	0.00040 mg/L	0.0400		100	80-120			
Phosphorus, dissolved	4.08	0.050 mg/L	4.00		102	80-120			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1483
2025-04-16 11:01

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Dissolved Metals, Batch B5D2879, Continued									
LCS (B5D2879-BS1), Continued					Prepared: 2025-04-14, Analyzed: 2025-04-14				
Potassium, dissolved	4.08	0.10 mg/L	4.00		102	80-120			
Selenium, dissolved	0.397	0.00050 mg/L	0.400		99	80-120			
Silicon, dissolved	4.1	1.0 mg/L	4.00		103	80-120			
Silver, dissolved	0.0398	0.000050 mg/L	0.0400		99	80-120			
Sodium, dissolved	4.11	0.10 mg/L	4.00		103	80-120			
Strontium, dissolved	0.0412	0.0010 mg/L	0.0400		103	80-120			
Sulfur, dissolved	37.4	3.0 mg/L	40.0		93	80-120			
Tellurium, dissolved	0.0397	0.00050 mg/L	0.0400		99	80-120			
Thallium, dissolved	0.0400	0.000020 mg/L	0.0400		100	80-120			
Thorium, dissolved	0.0405	0.00010 mg/L	0.0400		101	80-120			
Tin, dissolved	0.0402	0.00020 mg/L	0.0400		101	80-120			
Titanium, dissolved	0.0407	0.0050 mg/L	0.0400		102	80-120			
Tungsten, dissolved	0.0401	0.0010 mg/L	0.0400		100	80-120			
Uranium, dissolved	0.0408	0.000020 mg/L	0.0400		102	80-120			
Vanadium, dissolved	0.0403	0.0050 mg/L	0.0400		101	80-120			
Zinc, dissolved	0.408	0.0040 mg/L	0.400		102	80-120			
Zirconium, dissolved	0.0415	0.00010 mg/L	0.0400		104	80-120			

General Parameters, Batch B5D2894

Blank (B5D2894-BLK1)					Prepared: 2025-04-14, Analyzed: 2025-04-14				
Alkalinity, Total (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
Blank (B5D2894-BLK2)					Prepared: 2025-04-14, Analyzed: 2025-04-14				
Alkalinity, Total (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
LCS (B5D2894-BS1)					Prepared: 2025-04-14, Analyzed: 2025-04-14				
Alkalinity, Total (as CaCO ₃)	91.8	1.0 mg/L	100		92	80-120			
LCS (B5D2894-BS2)					Prepared: 2025-04-14, Analyzed: 2025-04-14				
Conductivity (EC)	1420	2.0 µS/cm	1410		101	95-105			
LCS (B5D2894-BS3)					Prepared: 2025-04-14, Analyzed: 2025-04-14				
Alkalinity, Total (as CaCO ₃)	100	1.0 mg/L	100		100	80-120			
LCS (B5D2894-BS4)					Prepared: 2025-04-14, Analyzed: 2025-04-14				
Conductivity (EC)	1410	2.0 µS/cm	1410		100	95-105			
Reference (B5D2894-SRM1)					Prepared: 2025-04-14, Analyzed: 2025-04-14				
pH	7.01	0.10 pH units	7.01		100	98-102			
Reference (B5D2894-SRM2)					Prepared: 2025-04-14, Analyzed: 2025-04-14				
pH	7.01	0.10 pH units	7.01		100	98-102			

General Parameters, Batch B5D2898



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25D1483
2025-04-16 11:01

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B5D2898, Continued									
Blank (B5D2898-BLK1)			Prepared: 2025-04-14, Analyzed: 2025-04-14						
Ammonia, Total (as N)	< 0.050	0.050 mg/L							
Blank (B5D2898-BLK3)			Prepared: 2025-04-14, Analyzed: 2025-04-14						
Ammonia, Total (as N)	< 0.050	0.050 mg/L							
Blank (B5D2898-BLK4)			Prepared: 2025-04-14, Analyzed: 2025-04-14						
Ammonia, Total (as N)	< 0.050	0.050 mg/L							
LCS (B5D2898-BS1)			Prepared: 2025-04-14, Analyzed: 2025-04-14						
Ammonia, Total (as N)	0.954	0.050 mg/L	1.00		95	85-115			
LCS (B5D2898-BS3)			Prepared: 2025-04-14, Analyzed: 2025-04-14						
Ammonia, Total (as N)	0.947	0.050 mg/L	1.00		95	85-115			
LCS (B5D2898-BS4)			Prepared: 2025-04-14, Analyzed: 2025-04-14						
Ammonia, Total (as N)	0.870	0.050 mg/L	1.00		87	85-115			
General Parameters, Batch B5D3048									
Blank (B5D3048-BLK1)			Prepared: 2025-04-16, Analyzed: 2025-04-16						
Chemical Oxygen Demand	< 20	20 mg/L							
Blank (B5D3048-BLK2)			Prepared: 2025-04-16, Analyzed: 2025-04-16						
Chemical Oxygen Demand	< 20	20 mg/L							
LCS (B5D3048-BS1)			Prepared: 2025-04-16, Analyzed: 2025-04-16						
Chemical Oxygen Demand	525	20 mg/L	500		105	89-115			
LCS (B5D3048-BS2)			Prepared: 2025-04-16, Analyzed: 2025-04-16						
Chemical Oxygen Demand	513	20 mg/L	500		103	89-115			



CERTIFICATE OF ANALYSIS

REPORTED TO	Regional District of Okanagan Similkameen 101 Martin Street Penticton, BC V2A 5J9	WORK ORDER	25G3733
ATTENTION	Rob Palmer	RECEIVED / TEMP REPORTED	2025-07-25 10:45 / 3.3°C
PO NUMBER	20259001-TLGW	REPORTED	2025-07-30 13:15
PROJECT	Ok Falls - TLGW	COC NUMBER	eCOC#00026020
PROJECT INFO			

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

Big Picture Sidekicks



You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry



It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve



Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

Work Order Comments:

Custody Seals Intact: n/a

By engaging our services, you are agreeing to CARO Analytical Service's Standard Terms and Conditions outlined here: <https://www.caro.ca/terms-conditions>

If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager



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#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 | #108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
2025-07-30 13:15

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
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BH-2S (25G3733-01) | Matrix: Ground Water | Sampled: 2025-07-24 11:30

Anions

Bromide	0.14	N/A	0.10 mg/L	2025-07-25	
Chloride	49.5	AO ≤ 250	0.10 mg/L	2025-07-25	
Fluoride	0.56	MAC = 1.5	0.10 mg/L	2025-07-25	
Nitrate (as N)	1.67	MAC = 10	0.010 mg/L	2025-07-25	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2025-07-25	
Sulfate	137	AO ≤ 500	1.0 mg/L	2025-07-25	

Calculated Parameters

Bicarbonate (HCO3)	778	N/A	1.22 mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600 mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340 mg/L	N/A	
Hardness, Dissolved (as CaCO3)	695	N/A	0.500 mg/L	N/A	
Nitrate+Nitrite (as N)	1.67	N/A	0.100 mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-07-28	
Antimony, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-07-28	
Arsenic, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-07-28	
Barium, dissolved	0.129	N/A	0.0050 mg/L	2025-07-28	
Beryllium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-07-28	
Bismuth, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-07-28	
Boron, dissolved	0.308	N/A	0.0500 mg/L	2025-07-28	
Cadmium, dissolved	0.000017	N/A	0.000010 mg/L	2025-07-28	
Calcium, dissolved	181	N/A	0.20 mg/L	2025-07-28	
Chromium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-07-28	
Cobalt, dissolved	0.00054	N/A	0.00010 mg/L	2025-07-28	
Copper, dissolved	0.00201	N/A	0.00040 mg/L	2025-07-28	
Iron, dissolved	< 0.010	N/A	0.010 mg/L	2025-07-28	
Lead, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-07-28	
Lithium, dissolved	0.0207	N/A	0.00010 mg/L	2025-07-28	
Magnesium, dissolved	59.0	N/A	0.010 mg/L	2025-07-28	
Manganese, dissolved	0.263	N/A	0.00020 mg/L	2025-07-28	
Mercury, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-07-29	
Molybdenum, dissolved	0.00657	N/A	0.00010 mg/L	2025-07-28	
Nickel, dissolved	0.00233	N/A	0.00040 mg/L	2025-07-28	
Phosphorus, dissolved	< 0.050	N/A	0.050 mg/L	2025-07-28	
Potassium, dissolved	5.90	N/A	0.10 mg/L	2025-07-28	
Selenium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-07-28	
Silicon, dissolved	11.1	N/A	1.0 mg/L	2025-07-28	
Silver, dissolved	< 0.000050	N/A	0.000050 mg/L	2025-07-28	
Sodium, dissolved	109	N/A	0.10 mg/L	2025-07-28	
Strontium, dissolved	2.51	N/A	0.0010 mg/L	2025-07-28	
Sulfur, dissolved	42.6	N/A	3.0 mg/L	2025-07-28	
Tellurium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-07-28	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
2025-07-30 13:15

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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BH-2S (25G3733-01) | Matrix: Ground Water | Sampled: 2025-07-24 11:30, Continued

Dissolved Metals, Continued

Thallium, dissolved	< 0.000020	N/A	0.000020	mg/L	2025-07-28	
Thorium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	
Tin, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-07-28	
Titanium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-07-28	
Tungsten, dissolved	< 0.0010	N/A	0.0010	mg/L	2025-07-28	
Uranium, dissolved	0.0525	N/A	0.000020	mg/L	2025-07-28	
Vanadium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-07-28	
Zinc, dissolved	< 0.0040	N/A	0.0040	mg/L	2025-07-28	
Zirconium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	

General Parameters

Alkalinity, Total (as CaCO3)	638	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Bicarbonate (as CaCO3)	638	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-07-26	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-07-30	
Chemical Oxygen Demand	25	N/A	20	mg/L	2025-07-29	
Conductivity (EC)	1570	N/A	2.0	µS/cm	2025-07-26	
pH	7.81	7.0-10.5	0.10	pH units	2025-07-26	HT2

Rep-001 (25G3733-02) | Matrix: Ground Water | Sampled: 2025-07-24 11:30

Anions

Bromide	< 0.10	N/A	0.10	mg/L	2025-07-25	
Chloride	52.5	AO ≤ 250	0.10	mg/L	2025-07-25	
Fluoride	0.55	MAC = 1.5	0.10	mg/L	2025-07-25	
Nitrate (as N)	1.03	MAC = 10	0.010	mg/L	2025-07-25	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-07-25	
Sulfate	119	AO ≤ 500	1.0	mg/L	2025-07-25	

Calculated Parameters

Bicarbonate (HCO3)	760	N/A	1.22	mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600	mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340	mg/L	N/A	
Hardness, Dissolved (as CaCO3)	684	N/A	0.500	mg/L	N/A	
Nitrate+Nitrite (as N)	1.03	N/A	0.0100	mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-07-28	
Antimony, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-07-28	
Arsenic, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-28	
Barium, dissolved	0.126	N/A	0.0050	mg/L	2025-07-28	
Beryllium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
2025-07-30 13:15

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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Rep-001 (25G3733-02) | Matrix: Ground Water | Sampled: 2025-07-24 11:30, Continued

Dissolved Metals, Continued

Bismuth, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	
Boron, dissolved	0.303	N/A	0.0500	mg/L	2025-07-28	
Cadmium, dissolved	0.000020	N/A	0.000010	mg/L	2025-07-28	
Calcium, dissolved	177	N/A	0.20	mg/L	2025-07-28	
Chromium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-28	
Cobalt, dissolved	0.00055	N/A	0.00010	mg/L	2025-07-28	
Copper, dissolved	0.00200	N/A	0.00040	mg/L	2025-07-28	
Iron, dissolved	< 0.010	N/A	0.010	mg/L	2025-07-28	
Lead, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-07-28	
Lithium, dissolved	0.0206	N/A	0.00010	mg/L	2025-07-28	
Magnesium, dissolved	58.5	N/A	0.010	mg/L	2025-07-28	
Manganese, dissolved	0.264	N/A	0.00020	mg/L	2025-07-28	
Mercury, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-07-29	
Molybdenum, dissolved	0.00642	N/A	0.00010	mg/L	2025-07-28	
Nickel, dissolved	0.00234	N/A	0.00040	mg/L	2025-07-28	
Phosphorus, dissolved	< 0.050	N/A	0.050	mg/L	2025-07-28	
Potassium, dissolved	5.70	N/A	0.10	mg/L	2025-07-28	
Selenium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-28	
Silicon, dissolved	11.0	N/A	1.0	mg/L	2025-07-28	
Silver, dissolved	< 0.000050	N/A	0.000050	mg/L	2025-07-28	
Sodium, dissolved	109	N/A	0.10	mg/L	2025-07-28	
Strontium, dissolved	2.49	N/A	0.0010	mg/L	2025-07-28	
Sulfur, dissolved	42.7	N/A	3.0	mg/L	2025-07-28	
Tellurium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-28	
Thallium, dissolved	< 0.000020	N/A	0.000020	mg/L	2025-07-28	
Thorium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	
Tin, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-07-28	
Titanium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-07-28	
Tungsten, dissolved	< 0.0010	N/A	0.0010	mg/L	2025-07-28	
Uranium, dissolved	0.0517	N/A	0.000020	mg/L	2025-07-28	
Vanadium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-07-28	
Zinc, dissolved	< 0.0040	N/A	0.0040	mg/L	2025-07-28	
Zirconium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	

General Parameters

Alkalinity, Total (as CaCO3)	623	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Bicarbonate (as CaCO3)	623	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-07-26	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-07-30	
Chemical Oxygen Demand	26	N/A	20	mg/L	2025-07-29	
Conductivity (EC)	1570	N/A	2.0	µS/cm	2025-07-26	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
2025-07-30 13:15

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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Rep-001 (25G3733-02) | Matrix: Ground Water | Sampled: 2025-07-24 11:30, Continued

General Parameters, Continued

pH	7.84	7.0-10.5	0.10	pH units	2025-07-26	HT2
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Rep-002 (25G3733-03) | Matrix: Ground Water | Sampled: 2025-07-24 11:30

Anions

Bromide	< 0.10	N/A	0.10	mg/L	2025-07-25	
Chloride	48.8	AO ≤ 250	0.10	mg/L	2025-07-25	
Fluoride	0.60	MAC = 1.5	0.10	mg/L	2025-07-25	
Nitrate (as N)	0.942	MAC = 10	0.010	mg/L	2025-07-25	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-07-25	
Sulfate	122	AO ≤ 500	1.0	mg/L	2025-07-25	

Calculated Parameters

Bicarbonate (HCO3)	778	N/A	1.22	mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600	mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340	mg/L	N/A	
Hardness, Dissolved (as CaCO3)	723	N/A	0.500	mg/L	N/A	
Nitrate+Nitrite (as N)	0.942	N/A	0.0100	mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-07-28	
Antimony, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-07-28	
Arsenic, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-28	
Barium, dissolved	0.128	N/A	0.0050	mg/L	2025-07-28	
Beryllium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	
Bismuth, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	
Boron, dissolved	0.310	N/A	0.0500	mg/L	2025-07-28	
Cadmium, dissolved	0.000016	N/A	0.000010	mg/L	2025-07-28	
Calcium, dissolved	190	N/A	0.20	mg/L	2025-07-28	
Chromium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-28	
Cobalt, dissolved	0.00055	N/A	0.00010	mg/L	2025-07-28	
Copper, dissolved	0.00198	N/A	0.00040	mg/L	2025-07-28	
Iron, dissolved	< 0.010	N/A	0.010	mg/L	2025-07-28	
Lead, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-07-28	
Lithium, dissolved	0.0201	N/A	0.00010	mg/L	2025-07-28	
Magnesium, dissolved	60.5	N/A	0.010	mg/L	2025-07-28	
Manganese, dissolved	0.261	N/A	0.00020	mg/L	2025-07-28	
Mercury, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-07-29	
Molybdenum, dissolved	0.00664	N/A	0.00010	mg/L	2025-07-28	
Nickel, dissolved	0.00234	N/A	0.00040	mg/L	2025-07-28	
Phosphorus, dissolved	< 0.050	N/A	0.050	mg/L	2025-07-28	
Potassium, dissolved	6.35	N/A	0.10	mg/L	2025-07-28	
Selenium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-28	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
2025-07-30 13:15

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
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Rep-002 (25G3733-03) | Matrix: Ground Water | Sampled: 2025-07-24 11:30, Continued

Dissolved Metals, Continued

Silicon, dissolved	11.3	N/A	1.0 mg/L	2025-07-28	
Silver, dissolved	< 0.000050	N/A	0.000050 mg/L	2025-07-28	
Sodium, dissolved	107	N/A	0.10 mg/L	2025-07-28	
Strontium, dissolved	2.46	N/A	0.0010 mg/L	2025-07-28	
Sulfur, dissolved	46.3	N/A	3.0 mg/L	2025-07-28	
Tellurium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-07-28	
Thallium, dissolved	< 0.000020	N/A	0.000020 mg/L	2025-07-28	
Thorium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-07-28	
Tin, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-07-28	
Titanium, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-07-28	
Tungsten, dissolved	< 0.0010	N/A	0.0010 mg/L	2025-07-28	
Uranium, dissolved	0.0527	N/A	0.000020 mg/L	2025-07-28	
Vanadium, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-07-28	
Zinc, dissolved	< 0.0040	N/A	0.0040 mg/L	2025-07-28	
Zirconium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-07-28	

General Parameters

Alkalinity, Total (as CaCO3)	638	N/A	1.0 mg/L	2025-07-26	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-07-26	
Alkalinity, Bicarbonate (as CaCO3)	638	N/A	1.0 mg/L	2025-07-26	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-07-26	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-07-26	
Ammonia, Total (as N)	< 0.050	None Required	0.050 mg/L	2025-07-30	
Chemical Oxygen Demand	28	N/A	20 mg/L	2025-07-29	
Conductivity (EC)	1580	N/A	2.0 µS/cm	2025-07-26	
pH	7.93	7.0-10.5	0.10 pH units	2025-07-26	HT2

BH-3 (25G3733-04) | Matrix: Ground Water | Sampled: 2025-07-24 12:40

Anions

Bromide	< 0.10	N/A	0.10 mg/L	2025-07-26	
Chloride	16.7	AO ≤ 250	0.10 mg/L	2025-07-26	
Fluoride	0.56	MAC = 1.5	0.10 mg/L	2025-07-26	
Nitrate (as N)	13.1	MAC = 10	0.010 mg/L	2025-07-26	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2025-07-26	
Sulfate	276	AO ≤ 500	1.0 mg/L	2025-07-26	

Calculated Parameters

Bicarbonate (HCO3)	425	N/A	1.22 mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600 mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340 mg/L	N/A	
Hardness, Dissolved (as CaCO3)	606	N/A	0.500 mg/L	N/A	
Nitrate+Nitrite (as N)	13.1	N/A	0.100 mg/L	N/A	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
2025-07-30 13:15

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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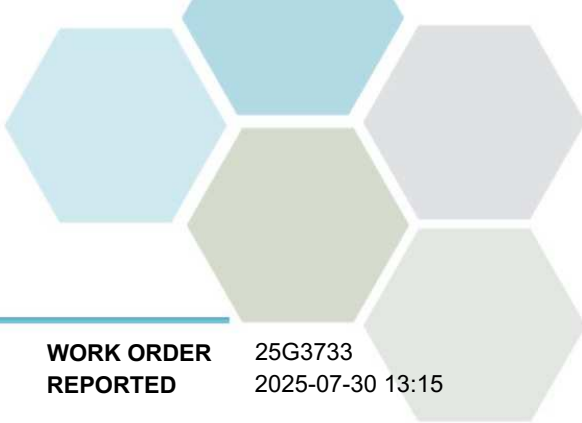
BH-3 (25G3733-04) | Matrix: Ground Water | Sampled: 2025-07-24 12:40, Continued

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-07-27	
Antimony, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-07-27	
Arsenic, dissolved	0.00116	N/A	0.00050	mg/L	2025-07-27	
Barium, dissolved	0.0523	N/A	0.0050	mg/L	2025-07-27	
Beryllium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-27	
Bismuth, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-27	
Boron, dissolved	0.0814	N/A	0.0500	mg/L	2025-07-27	
Cadmium, dissolved	0.000011	N/A	0.000010	mg/L	2025-07-27	
Calcium, dissolved	128	N/A	0.20	mg/L	2025-07-27	
Chromium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-27	
Cobalt, dissolved	0.00018	N/A	0.00010	mg/L	2025-07-27	
Copper, dissolved	0.00470	N/A	0.00040	mg/L	2025-07-27	
Iron, dissolved	< 0.010	N/A	0.010	mg/L	2025-07-27	
Lead, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-07-27	
Lithium, dissolved	0.0173	N/A	0.00010	mg/L	2025-07-27	
Magnesium, dissolved	69.6	N/A	0.010	mg/L	2025-07-27	
Manganese, dissolved	0.0417	N/A	0.00020	mg/L	2025-07-27	
Mercury, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-07-29	
Molybdenum, dissolved	0.00703	N/A	0.00010	mg/L	2025-07-27	
Nickel, dissolved	0.00172	N/A	0.00040	mg/L	2025-07-27	
Phosphorus, dissolved	0.059	N/A	0.050	mg/L	2025-07-27	
Potassium, dissolved	13.3	N/A	0.10	mg/L	2025-07-27	
Selenium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-27	
Silicon, dissolved	10.8	N/A	1.0	mg/L	2025-07-27	
Silver, dissolved	< 0.000050	N/A	0.000050	mg/L	2025-07-27	
Sodium, dissolved	57.7	N/A	0.10	mg/L	2025-07-27	
Strontium, dissolved	1.46	N/A	0.0010	mg/L	2025-07-27	
Sulfur, dissolved	86.0	N/A	3.0	mg/L	2025-07-27	
Tellurium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-27	
Thallium, dissolved	0.000029	N/A	0.000020	mg/L	2025-07-27	
Thorium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-27	
Tin, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-07-27	
Titanium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-07-27	
Tungsten, dissolved	< 0.0010	N/A	0.0010	mg/L	2025-07-27	
Uranium, dissolved	0.0213	N/A	0.000020	mg/L	2025-07-27	
Vanadium, dissolved	0.0061	N/A	0.0050	mg/L	2025-07-27	
Zinc, dissolved	0.0048	N/A	0.0040	mg/L	2025-07-27	
Zirconium, dissolved	0.00020	N/A	0.00010	mg/L	2025-07-27	

General Parameters

Alkalinity, Total (as CaCO3)	348	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Bicarbonate (as CaCO3)	348	N/A	1.0	mg/L	2025-07-26	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
2025-07-30 13:15

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
BH-3 (25G3733-04) Matrix: Ground Water Sampled: 2025-07-24 12:40, Continued					
<i>General Parameters, Continued</i>					
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0 mg/L	2025-07-26	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0 mg/L	2025-07-26	
Ammonia, Total (as N)	< 0.050	None Required	0.050 mg/L	2025-07-30	
Chemical Oxygen Demand	39	N/A	20 mg/L	2025-07-29	
Conductivity (EC)	1270	N/A	2.0 µS/cm	2025-07-26	
pH	7.64	7.0-10.5	0.10 pH units	2025-07-26	HT2

MW 19-1 (25G3733-05) | Matrix: Ground Water | Sampled: 2025-07-24 13:50

Anions

Bromide	< 0.10	N/A	0.10 mg/L	2025-07-26	
Chloride	4.54	AO ≤ 250	0.10 mg/L	2025-07-26	
Fluoride	0.74	MAC = 1.5	0.10 mg/L	2025-07-26	
Nitrate (as N)	< 0.010	MAC = 10	0.010 mg/L	2025-07-26	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2025-07-26	
Sulfate	27.4	AO ≤ 500	1.0 mg/L	2025-07-26	

Calculated Parameters

Bicarbonate (HCO ₃)	212	N/A	1.22 mg/L	N/A	
Carbonate (CO ₃)	< 0.600	N/A	0.600 mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340 mg/L	N/A	
Hardness, Dissolved (as CaCO ₃)	163	N/A	0.500 mg/L	N/A	
Nitrate+Nitrite (as N)	< 0.0100	N/A	0.0100 mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-07-28	
Antimony, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-07-28	
Arsenic, dissolved	0.0110	N/A	0.00050 mg/L	2025-07-28	
Barium, dissolved	0.0200	N/A	0.0050 mg/L	2025-07-28	
Beryllium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-07-28	
Bismuth, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-07-28	
Boron, dissolved	< 0.0500	N/A	0.0500 mg/L	2025-07-28	
Cadmium, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-07-28	
Calcium, dissolved	39.9	N/A	0.20 mg/L	2025-07-28	
Chromium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-07-28	
Cobalt, dissolved	0.00027	N/A	0.00010 mg/L	2025-07-28	
Copper, dissolved	< 0.00040	N/A	0.00040 mg/L	2025-07-28	
Iron, dissolved	0.141	N/A	0.010 mg/L	2025-07-28	
Lead, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-07-28	
Lithium, dissolved	0.0202	N/A	0.00010 mg/L	2025-07-28	
Magnesium, dissolved	15.3	N/A	0.010 mg/L	2025-07-28	
Manganese, dissolved	0.0758	N/A	0.00020 mg/L	2025-07-28	
Mercury, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-07-29	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
2025-07-30 13:15

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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MW 19-1 (25G3733-05) | Matrix: Ground Water | Sampled: 2025-07-24 13:50, Continued

Dissolved Metals, Continued

Molybdenum, dissolved	0.0112	N/A	0.00010	mg/L	2025-07-28	
Nickel, dissolved	< 0.00040	N/A	0.00040	mg/L	2025-07-28	
Phosphorus, dissolved	< 0.050	N/A	0.050	mg/L	2025-07-28	
Potassium, dissolved	1.34	N/A	0.10	mg/L	2025-07-28	
Selenium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-28	
Silicon, dissolved	9.9	N/A	1.0	mg/L	2025-07-28	
Silver, dissolved	< 0.000050	N/A	0.000050	mg/L	2025-07-28	
Sodium, dissolved	25.6	N/A	0.10	mg/L	2025-07-28	
Strontium, dissolved	1.79	N/A	0.0010	mg/L	2025-07-28	
Sulfur, dissolved	8.7	N/A	3.0	mg/L	2025-07-28	
Tellurium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-28	
Thallium, dissolved	< 0.000020	N/A	0.000020	mg/L	2025-07-28	
Thorium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	
Tin, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-07-28	
Titanium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-07-28	
Tungsten, dissolved	< 0.0010	N/A	0.0010	mg/L	2025-07-28	
Uranium, dissolved	0.00189	N/A	0.000020	mg/L	2025-07-28	
Vanadium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-07-28	
Zinc, dissolved	< 0.0040	N/A	0.0040	mg/L	2025-07-28	
Zirconium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	

General Parameters

Alkalinity, Total (as CaCO3)	174	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Bicarbonate (as CaCO3)	174	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-07-26	
Ammonia, Total (as N)	0.098	None Required	0.050	mg/L	2025-07-30	
Chemical Oxygen Demand	< 20	N/A	20	mg/L	2025-07-29	
Conductivity (EC)	418	N/A	2.0	µS/cm	2025-07-26	
pH	8.03	7.0-10.5	0.10	pH units	2025-07-26	HT2

MW 17-5D (25G3733-06) | Matrix: Ground Water | Sampled: 2025-07-24 13:25

Anions

Bromide	< 0.10	N/A	0.10	mg/L	2025-07-26	
Chloride	12.5	AO ≤ 250	0.10	mg/L	2025-07-26	
Fluoride	0.50	MAC = 1.5	0.10	mg/L	2025-07-26	
Nitrate (as N)	< 0.010	MAC = 10	0.010	mg/L	2025-07-26	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-07-26	
Sulfate	38.8	AO ≤ 500	1.0	mg/L	2025-07-26	

Calculated Parameters



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
2025-07-30 13:15

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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MW 17-5D (25G3733-06) | Matrix: Ground Water | Sampled: 2025-07-24 13:25, Continued

Calculated Parameters, Continued

Bicarbonate (HCO ₃)	296	N/A	1.22	mg/L	N/A	
Carbonate (CO ₃)	< 0.600	N/A	0.600	mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340	mg/L	N/A	
Hardness, Dissolved (as CaCO ₃)	249	N/A	0.500	mg/L	N/A	
Nitrate+Nitrite (as N)	< 0.0100	N/A	0.0100	mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-07-28	
Antimony, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-07-28	
Arsenic, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-28	
Barium, dissolved	0.0314	N/A	0.0050	mg/L	2025-07-28	
Beryllium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	
Bismuth, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	
Boron, dissolved	< 0.0500	N/A	0.0500	mg/L	2025-07-28	
Cadmium, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-07-28	
Calcium, dissolved	61.5	N/A	0.20	mg/L	2025-07-28	
Chromium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-28	
Cobalt, dissolved	0.00020	N/A	0.00010	mg/L	2025-07-28	
Copper, dissolved	< 0.00040	N/A	0.00040	mg/L	2025-07-28	
Iron, dissolved	0.803	N/A	0.010	mg/L	2025-07-28	
Lead, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-07-28	
Lithium, dissolved	0.0210	N/A	0.00010	mg/L	2025-07-28	
Magnesium, dissolved	23.2	N/A	0.010	mg/L	2025-07-28	
Manganese, dissolved	0.122	N/A	0.00020	mg/L	2025-07-28	
Mercury, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-07-29	
Molybdenum, dissolved	0.00967	N/A	0.00010	mg/L	2025-07-28	
Nickel, dissolved	< 0.00040	N/A	0.00040	mg/L	2025-07-28	
Phosphorus, dissolved	< 0.050	N/A	0.050	mg/L	2025-07-28	
Potassium, dissolved	2.15	N/A	0.10	mg/L	2025-07-28	
Selenium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-28	
Silicon, dissolved	10.5	N/A	1.0	mg/L	2025-07-28	
Silver, dissolved	< 0.000050	N/A	0.000050	mg/L	2025-07-28	
Sodium, dissolved	29.1	N/A	0.10	mg/L	2025-07-28	
Strontium, dissolved	1.98	N/A	0.0010	mg/L	2025-07-28	
Sulfur, dissolved	11.8	N/A	3.0	mg/L	2025-07-28	
Tellurium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-28	
Thallium, dissolved	< 0.000020	N/A	0.000020	mg/L	2025-07-28	
Thorium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	
Tin, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-07-28	
Titanium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-07-28	
Tungsten, dissolved	< 0.0010	N/A	0.0010	mg/L	2025-07-28	
Uranium, dissolved	0.0138	N/A	0.000020	mg/L	2025-07-28	
Vanadium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-07-28	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
2025-07-30 13:15

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
MW 17-5D (25G3733-06) Matrix: Ground Water Sampled: 2025-07-24 13:25, Continued						
<i>Dissolved Metals, Continued</i>						
Zinc, dissolved	< 0.0040	N/A	0.0040	mg/L	2025-07-28	
Zirconium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	
<i>General Parameters</i>						
Alkalinity, Total (as CaCO3)	243	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Bicarbonate (as CaCO3)	243	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-07-26	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-07-30	
Chemical Oxygen Demand	< 20	N/A	20	mg/L	2025-07-29	
Conductivity (EC)	588	N/A	2.0	µS/cm	2025-07-26	
pH	8.12	7.0-10.5	0.10	pH units	2025-07-26	HT2

MW 17-4 (25G3733-07) | Matrix: Ground Water | Sampled: 2025-07-24 15:30

<i>Anions</i>						
Bromide	0.16	N/A	0.10	mg/L	2025-07-26	
Chloride	30.1	AO ≤ 250	0.10	mg/L	2025-07-26	
Fluoride	0.57	MAC = 1.5	0.10	mg/L	2025-07-26	
Nitrate (as N)	0.015	MAC = 10	0.010	mg/L	2025-07-26	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-07-26	
Sulfate	80.5	AO ≤ 500	1.0	mg/L	2025-07-26	

<i>Calculated Parameters</i>						
Bicarbonate (HCO3)	316	N/A	1.22	mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600	mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340	mg/L	N/A	
Hardness, Dissolved (as CaCO3)	302	N/A	0.500	mg/L	N/A	
Nitrate+Nitrite (as N)	0.0153	N/A	0.0100	mg/L	N/A	

<i>Dissolved Metals</i>						
Aluminum, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-07-28	
Antimony, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-07-28	
Arsenic, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-28	
Barium, dissolved	0.0516	N/A	0.0050	mg/L	2025-07-28	
Beryllium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	
Bismuth, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	
Boron, dissolved	< 0.0500	N/A	0.0500	mg/L	2025-07-28	
Cadmium, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-07-28	
Calcium, dissolved	78.7	N/A	0.20	mg/L	2025-07-28	
Chromium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-28	
Cobalt, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	
Copper, dissolved	0.00050	N/A	0.00040	mg/L	2025-07-28	



TEST RESULTS

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Ok Falls - TLGW

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Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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MW 17-4 (25G3733-07) | Matrix: Ground Water | Sampled: 2025-07-24 15:30, Continued

Dissolved Metals, Continued

Iron, dissolved	0.045	N/A	0.010	mg/L	2025-07-28	
Lead, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-07-28	
Lithium, dissolved	0.0182	N/A	0.00010	mg/L	2025-07-28	
Magnesium, dissolved	25.5	N/A	0.010	mg/L	2025-07-28	
Manganese, dissolved	0.0258	N/A	0.00020	mg/L	2025-07-28	
Mercury, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-07-29	
Molybdenum, dissolved	0.00704	N/A	0.00010	mg/L	2025-07-28	
Nickel, dissolved	< 0.00040	N/A	0.00040	mg/L	2025-07-28	
Phosphorus, dissolved	< 0.050	N/A	0.050	mg/L	2025-07-28	
Potassium, dissolved	3.68	N/A	0.10	mg/L	2025-07-28	
Selenium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-28	
Silicon, dissolved	9.0	N/A	1.0	mg/L	2025-07-28	
Silver, dissolved	< 0.000050	N/A	0.000050	mg/L	2025-07-28	
Sodium, dissolved	46.0	N/A	0.10	mg/L	2025-07-28	
Strontium, dissolved	1.51	N/A	0.0010	mg/L	2025-07-28	
Sulfur, dissolved	27.1	N/A	3.0	mg/L	2025-07-28	
Tellurium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-07-28	
Thallium, dissolved	< 0.000020	N/A	0.000020	mg/L	2025-07-28	
Thorium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	
Tin, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-07-28	
Titanium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-07-28	
Tungsten, dissolved	< 0.0010	N/A	0.0010	mg/L	2025-07-28	
Uranium, dissolved	0.0252	N/A	0.000020	mg/L	2025-07-28	
Vanadium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-07-28	
Zinc, dissolved	< 0.0040	N/A	0.0040	mg/L	2025-07-28	
Zirconium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-07-28	

General Parameters

Alkalinity, Total (as CaCO3)	259	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Bicarbonate (as CaCO3)	259	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-07-26	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-07-26	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-07-30	
Chemical Oxygen Demand	< 20	N/A	20	mg/L	2025-07-29	
Conductivity (EC)	748	N/A	2.0	µS/cm	2025-07-26	
pH	7.89	7.0-10.5	0.10	pH units	2025-07-26	HT2

MW 19-2D (25G3733-08) | Matrix: Ground Water | Sampled: 2025-07-24 15:55

Anions

Bromide	< 0.10	N/A	0.10	mg/L	2025-07-26	
Chloride	38.5	AO ≤ 250	0.10	mg/L	2025-07-26	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

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Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
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MW 19-2D (25G3733-08) | Matrix: Ground Water | Sampled: 2025-07-24 15:55, Continued

Anions, Continued

Fluoride	0.58	MAC = 1.5	0.10 mg/L	2025-07-26	
Nitrate (as N)	0.786	MAC = 10	0.010 mg/L	2025-07-26	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2025-07-26	
Sulfate	108	AO ≤ 500	1.0 mg/L	2025-07-26	

Calculated Parameters

Bicarbonate (HCO ₃)	471	N/A	1.22 mg/L	N/A	
Carbonate (CO ₃)	< 0.600	N/A	0.600 mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340 mg/L	N/A	
Hardness, Dissolved (as CaCO ₃)	509	N/A	0.500 mg/L	N/A	
Nitrate+Nitrite (as N)	0.786	N/A	0.0100 mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-07-28	
Antimony, dissolved	0.00028	N/A	0.00020 mg/L	2025-07-28	
Arsenic, dissolved	0.00089	N/A	0.00050 mg/L	2025-07-28	
Barium, dissolved	0.112	N/A	0.0050 mg/L	2025-07-28	
Beryllium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-07-28	
Bismuth, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-07-28	
Boron, dissolved	< 0.0500	N/A	0.0500 mg/L	2025-07-28	
Cadmium, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-07-28	
Calcium, dissolved	138	N/A	0.20 mg/L	2025-07-28	
Chromium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-07-28	
Cobalt, dissolved	0.00097	N/A	0.00010 mg/L	2025-07-28	
Copper, dissolved	< 0.00040	N/A	0.00040 mg/L	2025-07-28	
Iron, dissolved	1.04	N/A	0.010 mg/L	2025-07-28	
Lead, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-07-28	
Lithium, dissolved	0.0184	N/A	0.00010 mg/L	2025-07-28	
Magnesium, dissolved	39.6	N/A	0.010 mg/L	2025-07-28	
Manganese, dissolved	0.343	N/A	0.00020 mg/L	2025-07-28	
Mercury, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-07-29	
Molybdenum, dissolved	0.0108	N/A	0.00010 mg/L	2025-07-28	
Nickel, dissolved	0.00199	N/A	0.00040 mg/L	2025-07-28	
Phosphorus, dissolved	< 0.050	N/A	0.050 mg/L	2025-07-28	
Potassium, dissolved	4.13	N/A	0.10 mg/L	2025-07-28	
Selenium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-07-28	
Silicon, dissolved	11.4	N/A	1.0 mg/L	2025-07-28	
Silver, dissolved	< 0.000050	N/A	0.000050 mg/L	2025-07-28	
Sodium, dissolved	33.7	N/A	0.10 mg/L	2025-07-28	
Strontium, dissolved	2.34	N/A	0.0010 mg/L	2025-07-28	
Sulfur, dissolved	32.4	N/A	3.0 mg/L	2025-07-28	
Tellurium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-07-28	
Thallium, dissolved	< 0.000020	N/A	0.000020 mg/L	2025-07-28	
Thorium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-07-28	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
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Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
MW 19-2D (25G3733-08) Matrix: Ground Water Sampled: 2025-07-24 15:55, Continued					
<i>Dissolved Metals, Continued</i>					
Tin, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-07-28	
Titanium, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-07-28	
Tungsten, dissolved	< 0.0010	N/A	0.0010 mg/L	2025-07-28	
Uranium, dissolved	0.0510	N/A	0.000020 mg/L	2025-07-28	
Vanadium, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-07-28	
Zinc, dissolved	0.0228	N/A	0.0040 mg/L	2025-07-28	
Zirconium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-07-28	
<i>General Parameters</i>					
Alkalinity, Total (as CaCO3)	386	N/A	1.0 mg/L	2025-07-26	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-07-26	
Alkalinity, Bicarbonate (as CaCO3)	386	N/A	1.0 mg/L	2025-07-26	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-07-26	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-07-26	
Ammonia, Total (as N)	< 0.050	None Required	0.050 mg/L	2025-07-30	
Chemical Oxygen Demand	37	N/A	20 mg/L	2025-07-29	
Conductivity (EC)	1050	N/A	2.0 µS/cm	2025-07-26	
pH	7.73	7.0-10.5	0.10 pH units	2025-07-26	HT2

Sample Qualifiers:

HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
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Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Chemical Oxygen Demand in Water	SM 5220 D* (2022)	Closed Reflux, Colorimetry	✓	Kelowna
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Kelowna
Dissolved Metals in Water	EPA 200.8 / EPA 6020B	0.45 µm Filtration / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Hardness in Water	SM 2340 B (2021)	Calculation: 2.497 [diss Ca] + 4.118 [diss Mg]	✓	N/A
Mercury, dissolved in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	✓	Richmond
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method

Glossary of Terms:

RL	Reporting Limit (default)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
pH units	pH < 7 = acidic, pH > 7 = basic
µS/cm	Microsiemens per centimetre
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

Guidelines Referenced in this Report:

[Guidelines for Canadian Drinking Water Quality \(Health Canada, September 2022\)](#)

Note: In some cases, the values displayed on the report represent the lowest guideline and are to be verified by the end user



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO Regional District of Okanagan Similkameen
PROJECT Ok Falls - TLGW

WORK ORDER 25G3733
REPORTED 2025-07-30 13:15

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any liability is limited to the cost of analysis. CARO will dispose of all samples within 30 days of sample receipt, unless otherwise agreed .

Results in **Bold** indicate values that are above CARO's method reporting limits. Results in **red** indicate values above the regulatory limits where these have been included. Any Bold and/or highlighted results do not take into account method uncertainty. If you would like method uncertainty or regulatory limits to be included on your report, please contact your Account Manager: hhannaoui@caro.ca

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
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The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

- **Method Blank (Blk):** A blank sample that undergoes sample processing identical to that carried out for the test samples. Method blank results are used to assess contamination from the laboratory environment and reagents.
- **Duplicate (Dup):** An additional or second portion of a randomly selected sample in the analytical run carried through the entire analytical process. Duplicates provide a measure of the analytical method's precision (reproducibility).
- **Blank Spike (BS):** A sample of known concentration which undergoes processing identical to that carried out for test samples, also referred to as a laboratory control sample (LCS). Blank spikes provide a measure of the analytical method's accuracy.
- **Matrix Spike (MS):** A second aliquot of sample is fortified with a known concentration of target analytes and carried through the entire analytical process. Matrix spikes evaluate potential matrix effects that may affect the analyte recovery.
- **Reference Material (SRM):** A homogenous material of similar matrix to the samples, certified for the parameter(s) listed. Reference Materials ensure that the analytical process is adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10-20 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Anions, Batch B5G4663									
Blank (B5G4663-BLK1)			Prepared: 2025-07-25, Analyzed: 2025-07-26						
Bromide	< 0.05	0.05 mg/L							
Chloride	< 0.10	0.10 mg/L							
Fluoride	< 0.05	0.05 mg/L							
Nitrate (as N)	< 0.010	0.010 mg/L							
Nitrite (as N)	< 0.010	0.010 mg/L							
Sulfate	< 0.5	0.5 mg/L							
LCS (B5G4663-BS1)			Prepared: 2025-07-25, Analyzed: 2025-07-26						
Bromide	3.87	0.05 mg/L	4.00		97	85-115			
Chloride	15.7	0.10 mg/L	16.0		98	90-110			
Fluoride	4.03	0.05 mg/L	4.00		101	88-108			
Nitrate (as N)	4.02	0.010 mg/L	4.00		101	90-110			
Nitrite (as N)	2.01	0.010 mg/L	2.00		100	85-115			
Sulfate	16.0	0.5 mg/L	16.0		100	90-110			

Dissolved Metals, Batch B5G4765

Blank (B5G4765-BLK1)			Prepared: 2025-07-27, Analyzed: 2025-07-27						
Aluminum, dissolved	< 0.0050	0.0050 mg/L							
Antimony, dissolved	< 0.00020	0.00020 mg/L							
Arsenic, dissolved	< 0.00050	0.00050 mg/L							
Barium, dissolved	< 0.0050	0.0050 mg/L							
Beryllium, dissolved	< 0.00010	0.00010 mg/L							
Bismuth, dissolved	< 0.00010	0.00010 mg/L							
Boron, dissolved	< 0.0500	0.0500 mg/L							
Cadmium, dissolved	< 0.000010	0.000010 mg/L							
Calcium, dissolved	< 0.20	0.20 mg/L							
Chromium, dissolved	< 0.00050	0.00050 mg/L							
Cobalt, dissolved	< 0.00010	0.00010 mg/L							
Copper, dissolved	< 0.00040	0.00040 mg/L							
Iron, dissolved	< 0.010	0.010 mg/L							
Lead, dissolved	< 0.00020	0.00020 mg/L							
Lithium, dissolved	< 0.00010	0.00010 mg/L							
Magnesium, dissolved	< 0.010	0.010 mg/L							
Manganese, dissolved	< 0.00020	0.00020 mg/L							
Molybdenum, dissolved	< 0.00010	0.00010 mg/L							



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
2025-07-30 13:15

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Dissolved Metals, Batch B5G4765, Continued

Blank (B5G4765-BLK1), Continued

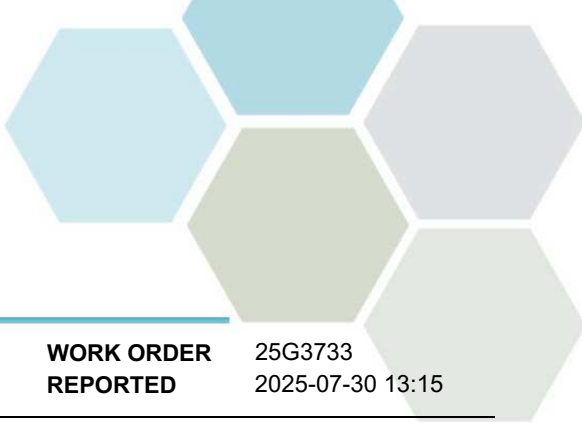
Prepared: 2025-07-27, Analyzed: 2025-07-27

Nickel, dissolved	< 0.00040	0.00040 mg/L
Phosphorus, dissolved	< 0.050	0.050 mg/L
Potassium, dissolved	< 0.10	0.10 mg/L
Selenium, dissolved	< 0.00050	0.00050 mg/L
Silicon, dissolved	< 1.0	1.0 mg/L
Silver, dissolved	< 0.000050	0.000050 mg/L
Sodium, dissolved	< 0.10	0.10 mg/L
Strontium, dissolved	< 0.0010	0.0010 mg/L
Sulfur, dissolved	< 3.0	3.0 mg/L
Tellurium, dissolved	< 0.00050	0.00050 mg/L
Thallium, dissolved	< 0.000020	0.000020 mg/L
Thorium, dissolved	< 0.00010	0.00010 mg/L
Tin, dissolved	< 0.00020	0.00020 mg/L
Titanium, dissolved	< 0.0050	0.0050 mg/L
Tungsten, dissolved	< 0.0010	0.0010 mg/L
Uranium, dissolved	< 0.000020	0.000020 mg/L
Vanadium, dissolved	< 0.0050	0.0050 mg/L
Zinc, dissolved	< 0.0040	0.0040 mg/L
Zirconium, dissolved	< 0.00010	0.00010 mg/L

Blank (B5G4765-BLK2)

Prepared: 2025-07-27, Analyzed: 2025-07-27

Aluminum, dissolved	< 0.0050	0.0050 mg/L
Antimony, dissolved	< 0.00020	0.00020 mg/L
Arsenic, dissolved	< 0.00050	0.00050 mg/L
Barium, dissolved	< 0.0050	0.0050 mg/L
Beryllium, dissolved	< 0.00010	0.00010 mg/L
Bismuth, dissolved	< 0.00010	0.00010 mg/L
Boron, dissolved	< 0.0500	0.0500 mg/L
Cadmium, dissolved	< 0.000010	0.000010 mg/L
Calcium, dissolved	< 0.20	0.20 mg/L
Chromium, dissolved	< 0.00050	0.00050 mg/L
Cobalt, dissolved	< 0.00010	0.00010 mg/L
Copper, dissolved	< 0.00040	0.00040 mg/L
Iron, dissolved	< 0.010	0.010 mg/L
Lead, dissolved	< 0.00020	0.00020 mg/L
Lithium, dissolved	< 0.00010	0.00010 mg/L
Magnesium, dissolved	< 0.010	0.010 mg/L
Manganese, dissolved	< 0.00020	0.00020 mg/L
Molybdenum, dissolved	< 0.00010	0.00010 mg/L
Nickel, dissolved	< 0.00040	0.00040 mg/L
Phosphorus, dissolved	< 0.050	0.050 mg/L
Potassium, dissolved	< 0.10	0.10 mg/L
Selenium, dissolved	< 0.00050	0.00050 mg/L
Silicon, dissolved	< 1.0	1.0 mg/L
Silver, dissolved	< 0.000050	0.000050 mg/L
Sodium, dissolved	< 0.10	0.10 mg/L
Strontium, dissolved	< 0.0010	0.0010 mg/L
Sulfur, dissolved	< 3.0	3.0 mg/L
Tellurium, dissolved	< 0.00050	0.00050 mg/L
Thallium, dissolved	< 0.000020	0.000020 mg/L
Thorium, dissolved	< 0.00010	0.00010 mg/L
Tin, dissolved	< 0.00020	0.00020 mg/L
Titanium, dissolved	< 0.0050	0.0050 mg/L
Tungsten, dissolved	< 0.0010	0.0010 mg/L
Uranium, dissolved	< 0.000020	0.000020 mg/L
Vanadium, dissolved	< 0.0050	0.0050 mg/L



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
2025-07-30 13:15

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Dissolved Metals, Batch B5G4765, Continued

Blank (B5G4765-BLK2), Continued

Prepared: 2025-07-27, Analyzed: 2025-07-27

Zinc, dissolved	< 0.0040	0.0040 mg/L							
Zirconium, dissolved	< 0.00010	0.00010 mg/L							

LCS (B5G4765-BS1)

Prepared: 2025-07-27, Analyzed: 2025-07-27

Aluminum, dissolved	3.85	0.0050 mg/L	4.00		96	80-120			
Antimony, dissolved	0.0383	0.00020 mg/L	0.0400		96	80-120			
Arsenic, dissolved	0.379	0.00050 mg/L	0.400		95	80-120			
Barium, dissolved	0.0400	0.0050 mg/L	0.0400		100	80-120			
Beryllium, dissolved	0.0385	0.00010 mg/L	0.0400		96	80-120			
Bismuth, dissolved	0.0358	0.00010 mg/L	0.0400		89	80-120			
Boron, dissolved	0.401	0.0500 mg/L	0.400		100	80-120			
Cadmium, dissolved	0.0385	0.000010 mg/L	0.0400		96	80-120			
Calcium, dissolved	3.96	0.20 mg/L	4.00		99	80-120			
Chromium, dissolved	0.0391	0.00050 mg/L	0.0400		98	80-120			
Cobalt, dissolved	0.0387	0.00010 mg/L	0.0400		97	80-120			
Copper, dissolved	0.0379	0.00040 mg/L	0.0400		95	80-120			
Iron, dissolved	3.86	0.010 mg/L	4.00		96	80-120			
Lead, dissolved	0.0383	0.00020 mg/L	0.0400		96	80-120			
Lithium, dissolved	0.0376	0.00010 mg/L	0.0400		94	80-120			
Magnesium, dissolved	3.82	0.010 mg/L	4.00		95	80-120			
Manganese, dissolved	0.0386	0.00020 mg/L	0.0400		96	80-120			
Molybdenum, dissolved	0.0386	0.00010 mg/L	0.0400		96	80-120			
Nickel, dissolved	0.0394	0.00040 mg/L	0.0400		99	80-120			
Phosphorus, dissolved	3.75	0.050 mg/L	4.00		94	80-120			
Potassium, dissolved	3.88	0.10 mg/L	4.00		97	80-120			
Selenium, dissolved	0.387	0.00050 mg/L	0.400		97	80-120			
Silicon, dissolved	3.7	1.0 mg/L	4.00		93	80-120			
Silver, dissolved	0.0375	0.000050 mg/L	0.0400		94	80-120			
Sodium, dissolved	3.87	0.10 mg/L	4.00		97	80-120			
Strontium, dissolved	0.0387	0.0010 mg/L	0.0400		97	80-120			
Sulfur, dissolved	37.7	3.0 mg/L	40.0		94	80-120			
Tellurium, dissolved	0.0368	0.00050 mg/L	0.0400		92	80-120			
Thallium, dissolved	0.0359	0.000020 mg/L	0.0400		90	80-120			
Thorium, dissolved	0.0393	0.00010 mg/L	0.0400		98	80-120			
Tin, dissolved	0.0383	0.00020 mg/L	0.0400		96	80-120			
Titanium, dissolved	0.0374	0.00050 mg/L	0.0400		94	80-120			
Tungsten, dissolved	0.0381	0.0010 mg/L	0.0400		95	80-120			
Uranium, dissolved	0.0390	0.000020 mg/L	0.0400		98	80-120			
Vanadium, dissolved	0.0383	0.00050 mg/L	0.0400		96	80-120			
Zinc, dissolved	0.384	0.0040 mg/L	0.400		96	80-120			
Zirconium, dissolved	0.0383	0.00010 mg/L	0.0400		96	80-120			

LCS (B5G4765-BS2)

Prepared: 2025-07-27, Analyzed: 2025-07-27

Aluminum, dissolved	3.87	0.0050 mg/L	4.00		97	80-120			
Antimony, dissolved	0.0382	0.00020 mg/L	0.0400		96	80-120			
Arsenic, dissolved	0.388	0.00050 mg/L	0.400		97	80-120			
Barium, dissolved	0.0390	0.0050 mg/L	0.0400		97	80-120			
Beryllium, dissolved	0.0386	0.00010 mg/L	0.0400		97	80-120			
Bismuth, dissolved	0.0378	0.00010 mg/L	0.0400		95	80-120			
Boron, dissolved	0.403	0.0500 mg/L	0.400		101	80-120			
Cadmium, dissolved	0.0388	0.000010 mg/L	0.0400		97	80-120			
Calcium, dissolved	4.00	0.20 mg/L	4.00		100	80-120			
Chromium, dissolved	0.0396	0.00050 mg/L	0.0400		99	80-120			
Cobalt, dissolved	0.0391	0.00010 mg/L	0.0400		98	80-120			
Copper, dissolved	0.0387	0.00040 mg/L	0.0400		97	80-120			
Iron, dissolved	3.90	0.010 mg/L	4.00		98	80-120			
Lead, dissolved	0.0385	0.00020 mg/L	0.0400		96	80-120			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
2025-07-30 13:15

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Dissolved Metals, Batch B5G4765, Continued									
LCS (B5G4765-BS2), Continued					Prepared: 2025-07-27, Analyzed: 2025-07-27				
Lithium, dissolved	0.0378	0.00010 mg/L	0.0400		95	80-120			
Magnesium, dissolved	3.76	0.010 mg/L	4.00		94	80-120			
Manganese, dissolved	0.0389	0.00020 mg/L	0.0400		97	80-120			
Molybdenum, dissolved	0.0387	0.00010 mg/L	0.0400		97	80-120			
Nickel, dissolved	0.0397	0.00040 mg/L	0.0400		99	80-120			
Phosphorus, dissolved	3.91	0.050 mg/L	4.00		98	80-120			
Potassium, dissolved	3.87	0.10 mg/L	4.00		97	80-120			
Selenium, dissolved	0.388	0.00050 mg/L	0.400		97	80-120			
Silicon, dissolved	3.8	1.0 mg/L	4.00		95	80-120			
Silver, dissolved	0.0383	0.000050 mg/L	0.0400		96	80-120			
Sodium, dissolved	3.92	0.10 mg/L	4.00		98	80-120			
Strontium, dissolved	0.0393	0.0010 mg/L	0.0400		98	80-120			
Sulfur, dissolved	39.3	3.0 mg/L	40.0		98	80-120			
Tellurium, dissolved	0.0375	0.00050 mg/L	0.0400		94	80-120			
Thallium, dissolved	0.0382	0.000020 mg/L	0.0400		95	80-120			
Thorium, dissolved	0.0389	0.00010 mg/L	0.0400		97	80-120			
Tin, dissolved	0.0383	0.00020 mg/L	0.0400		96	80-120			
Titanium, dissolved	0.0387	0.0050 mg/L	0.0400		97	80-120			
Tungsten, dissolved	0.0390	0.0010 mg/L	0.0400		97	80-120			
Uranium, dissolved	0.0391	0.000020 mg/L	0.0400		98	80-120			
Vanadium, dissolved	0.0392	0.0050 mg/L	0.0400		98	80-120			
Zinc, dissolved	0.389	0.0040 mg/L	0.400		97	80-120			
Zirconium, dissolved	0.0391	0.00010 mg/L	0.0400		98	80-120			

Dissolved Metals, Batch B5G4837

Blank (B5G4837-BLK1)			Prepared: 2025-07-28, Analyzed: 2025-07-28						
Aluminum, dissolved	< 0.0050	0.0050 mg/L							
Antimony, dissolved	< 0.00020	0.00020 mg/L							
Arsenic, dissolved	< 0.00050	0.00050 mg/L							
Barium, dissolved	< 0.0050	0.0050 mg/L							
Beryllium, dissolved	< 0.00010	0.00010 mg/L							
Bismuth, dissolved	< 0.00010	0.00010 mg/L							
Boron, dissolved	< 0.0500	0.0500 mg/L							
Cadmium, dissolved	< 0.000010	0.000010 mg/L							
Calcium, dissolved	< 0.20	0.20 mg/L							
Chromium, dissolved	< 0.00050	0.00050 mg/L							
Cobalt, dissolved	< 0.00010	0.00010 mg/L							
Copper, dissolved	< 0.00040	0.00040 mg/L							
Iron, dissolved	< 0.010	0.010 mg/L							
Lead, dissolved	< 0.00020	0.00020 mg/L							
Lithium, dissolved	< 0.00010	0.00010 mg/L							
Magnesium, dissolved	< 0.010	0.010 mg/L							
Manganese, dissolved	< 0.00020	0.00020 mg/L							
Molybdenum, dissolved	< 0.00010	0.00010 mg/L							
Nickel, dissolved	< 0.00040	0.00040 mg/L							
Phosphorus, dissolved	< 0.050	0.050 mg/L							
Potassium, dissolved	< 0.10	0.10 mg/L							
Selenium, dissolved	< 0.00050	0.00050 mg/L							
Silicon, dissolved	< 1.0	1.0 mg/L							
Silver, dissolved	< 0.000050	0.000050 mg/L							
Sodium, dissolved	< 0.10	0.10 mg/L							
Strontium, dissolved	< 0.0010	0.0010 mg/L							
Sulfur, dissolved	< 3.0	3.0 mg/L							
Tellurium, dissolved	< 0.00050	0.00050 mg/L							
Thallium, dissolved	< 0.000020	0.000020 mg/L							



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
2025-07-30 13:15

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Dissolved Metals, Batch B5G4837, Continued									
Blank (B5G4837-BLK1), Continued					Prepared: 2025-07-28, Analyzed: 2025-07-28				
Thorium, dissolved	< 0.00010	0.00010 mg/L							
Tin, dissolved	< 0.00020	0.00020 mg/L							
Titanium, dissolved	< 0.0050	0.0050 mg/L							
Tungsten, dissolved	< 0.0010	0.0010 mg/L							
Uranium, dissolved	< 0.000020	0.000020 mg/L							
Vanadium, dissolved	< 0.0050	0.0050 mg/L							
Zinc, dissolved	< 0.0040	0.0040 mg/L							
Zirconium, dissolved	< 0.00010	0.00010 mg/L							
LCS (B5G4837-BS1)									
					Prepared: 2025-07-28, Analyzed: 2025-07-28				
Aluminum, dissolved	4.07	0.0050 mg/L	4.00		102	80-120			
Antimony, dissolved	0.0405	0.00020 mg/L	0.0400		101	80-120			
Arsenic, dissolved	0.407	0.00050 mg/L	0.400		102	80-120			
Barium, dissolved	0.0417	0.0050 mg/L	0.0400		104	80-120			
Beryllium, dissolved	0.0411	0.00010 mg/L	0.0400		103	80-120			
Bismuth, dissolved	0.0401	0.00010 mg/L	0.0400		100	80-120			
Boron, dissolved	0.417	0.0500 mg/L	0.400		104	80-120			
Cadmium, dissolved	0.0409	0.000010 mg/L	0.0400		102	80-120			
Calcium, dissolved	4.04	0.20 mg/L	4.00		101	80-120			
Chromium, dissolved	0.0404	0.00050 mg/L	0.0400		101	80-120			
Cobalt, dissolved	0.0406	0.00010 mg/L	0.0400		102	80-120			
Copper, dissolved	0.0405	0.00040 mg/L	0.0400		101	80-120			
Iron, dissolved	4.08	0.010 mg/L	4.00		102	80-120			
Lead, dissolved	0.0400	0.00020 mg/L	0.0400		100	80-120			
Lithium, dissolved	0.0410	0.00010 mg/L	0.0400		103	80-120			
Magnesium, dissolved	4.09	0.010 mg/L	4.00		102	80-120			
Manganese, dissolved	0.0407	0.00020 mg/L	0.0400		102	80-120			
Molybdenum, dissolved	0.0405	0.00010 mg/L	0.0400		101	80-120			
Nickel, dissolved	0.0406	0.00040 mg/L	0.0400		101	80-120			
Phosphorus, dissolved	4.11	0.050 mg/L	4.00		103	80-120			
Potassium, dissolved	4.04	0.10 mg/L	4.00		101	80-120			
Selenium, dissolved	0.394	0.00050 mg/L	0.400		99	80-120			
Silicon, dissolved	4.1	1.0 mg/L	4.00		101	80-120			
Silver, dissolved	0.0402	0.000050 mg/L	0.0400		101	80-120			
Sodium, dissolved	4.10	0.10 mg/L	4.00		102	80-120			
Strontium, dissolved	0.0414	0.0010 mg/L	0.0400		103	80-120			
Sulfur, dissolved	41.0	3.0 mg/L	40.0		103	80-120			
Tellurium, dissolved	0.0396	0.00050 mg/L	0.0400		99	80-120			
Thallium, dissolved	0.0403	0.000020 mg/L	0.0400		101	80-120			
Thorium, dissolved	0.0397	0.00010 mg/L	0.0400		99	80-120			
Tin, dissolved	0.0407	0.00020 mg/L	0.0400		102	80-120			
Titanium, dissolved	0.0410	0.0050 mg/L	0.0400		103	80-120			
Tungsten, dissolved	0.0394	0.0010 mg/L	0.0400		98	80-120			
Uranium, dissolved	0.0402	0.000020 mg/L	0.0400		101	80-120			
Vanadium, dissolved	0.0409	0.0050 mg/L	0.0400		102	80-120			
Zinc, dissolved	0.407	0.0040 mg/L	0.400		102	80-120			
Zirconium, dissolved	0.0397	0.00010 mg/L	0.0400		99	80-120			

Dissolved Metals, Batch B5G4838

Blank (B5G4838-BLK1)					Prepared: 2025-07-28, Analyzed: 2025-07-28				
Aluminum, dissolved	< 0.0050	0.0050 mg/L							
Antimony, dissolved	< 0.00020	0.00020 mg/L							
Arsenic, dissolved	< 0.00050	0.00050 mg/L							
Barium, dissolved	< 0.0050	0.0050 mg/L							
Beryllium, dissolved	< 0.00010	0.00010 mg/L							



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
2025-07-30 13:15

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Dissolved Metals, Batch B5G4838, Continued

Blank (B5G4838-BLK1), Continued

Prepared: 2025-07-28, Analyzed: 2025-07-28

Bismuth, dissolved	< 0.00010	0.00010 mg/L							
Boron, dissolved	< 0.0500	0.0500 mg/L							
Cadmium, dissolved	< 0.000010	0.000010 mg/L							
Calcium, dissolved	< 0.20	0.20 mg/L							
Chromium, dissolved	< 0.00050	0.00050 mg/L							
Cobalt, dissolved	< 0.00010	0.00010 mg/L							
Copper, dissolved	< 0.00040	0.00040 mg/L							
Iron, dissolved	< 0.010	0.010 mg/L							
Lead, dissolved	< 0.00020	0.00020 mg/L							
Lithium, dissolved	< 0.00010	0.00010 mg/L							
Magnesium, dissolved	< 0.010	0.010 mg/L							
Manganese, dissolved	< 0.00020	0.00020 mg/L							
Molybdenum, dissolved	< 0.00010	0.00010 mg/L							
Nickel, dissolved	< 0.00040	0.00040 mg/L							
Phosphorus, dissolved	< 0.050	0.050 mg/L							
Potassium, dissolved	< 0.10	0.10 mg/L							
Selenium, dissolved	< 0.00050	0.00050 mg/L							
Silicon, dissolved	< 1.0	1.0 mg/L							
Silver, dissolved	< 0.000050	0.000050 mg/L							
Sodium, dissolved	< 0.10	0.10 mg/L							
Strontium, dissolved	< 0.0010	0.0010 mg/L							
Sulfur, dissolved	< 3.0	3.0 mg/L							
Tellurium, dissolved	< 0.00050	0.00050 mg/L							
Thallium, dissolved	< 0.000020	0.000020 mg/L							
Thorium, dissolved	< 0.00010	0.00010 mg/L							
Tin, dissolved	< 0.00020	0.00020 mg/L							
Titanium, dissolved	< 0.0050	0.0050 mg/L							
Tungsten, dissolved	< 0.0010	0.0010 mg/L							
Uranium, dissolved	< 0.000020	0.000020 mg/L							
Vanadium, dissolved	< 0.0050	0.0050 mg/L							
Zinc, dissolved	< 0.0040	0.0040 mg/L							
Zirconium, dissolved	< 0.00010	0.00010 mg/L							

LCS (B5G4838-BS1)

Prepared: 2025-07-28, Analyzed: 2025-07-28

Aluminum, dissolved	3.98	0.0050 mg/L	4.00		100	80-120			
Antimony, dissolved	0.0400	0.00020 mg/L	0.0400		100	80-120			
Arsenic, dissolved	0.398	0.00050 mg/L	0.400		100	80-120			
Barium, dissolved	0.0392	0.0050 mg/L	0.0400		98	80-120			
Beryllium, dissolved	0.0399	0.00010 mg/L	0.0400		100	80-120			
Bismuth, dissolved	0.0406	0.00010 mg/L	0.0400		101	80-120			
Boron, dissolved	0.389	0.0500 mg/L	0.400		97	80-120			
Cadmium, dissolved	0.0401	0.000010 mg/L	0.0400		100	80-120			
Calcium, dissolved	3.98	0.20 mg/L	4.00		100	80-120			
Chromium, dissolved	0.0399	0.00050 mg/L	0.0400		100	80-120			
Cobalt, dissolved	0.0397	0.00010 mg/L	0.0400		99	80-120			
Copper, dissolved	0.0395	0.00040 mg/L	0.0400		99	80-120			
Iron, dissolved	3.95	0.010 mg/L	4.00		99	80-120			
Lead, dissolved	0.0404	0.00020 mg/L	0.0400		101	80-120			
Lithium, dissolved	0.0396	0.00010 mg/L	0.0400		99	80-120			
Magnesium, dissolved	4.00	0.010 mg/L	4.00		100	80-120			
Manganese, dissolved	0.0400	0.00020 mg/L	0.0400		100	80-120			
Molybdenum, dissolved	0.0404	0.00010 mg/L	0.0400		101	80-120			
Nickel, dissolved	0.0393	0.00040 mg/L	0.0400		98	80-120			
Phosphorus, dissolved	4.04	0.050 mg/L	4.00		101	80-120			
Potassium, dissolved	4.01	0.10 mg/L	4.00		100	80-120			
Selenium, dissolved	0.399	0.00050 mg/L	0.400		100	80-120			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
2025-07-30 13:15

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Dissolved Metals, Batch B5G4838, Continued

LCS (B5G4838-BS1), Continued

Prepared: 2025-07-28, Analyzed: 2025-07-28

Silicon, dissolved	4.0	1.0 mg/L	4.00		100	80-120			
Silver, dissolved	0.0397	0.000050 mg/L	0.0400		99	80-120			
Sodium, dissolved	4.07	0.10 mg/L	4.00		102	80-120			
Strontium, dissolved	0.0397	0.0010 mg/L	0.0400		99	80-120			
Sulfur, dissolved	39.7	3.0 mg/L	40.0		99	80-120			
Tellurium, dissolved	0.0388	0.00050 mg/L	0.0400		97	80-120			
Thallium, dissolved	0.0402	0.000020 mg/L	0.0400		101	80-120			
Thorium, dissolved	0.0402	0.00010 mg/L	0.0400		100	80-120			
Tin, dissolved	0.0400	0.00020 mg/L	0.0400		100	80-120			
Titanium, dissolved	0.0397	0.0050 mg/L	0.0400		99	80-120			
Tungsten, dissolved	0.0398	0.0010 mg/L	0.0400		100	80-120			
Uranium, dissolved	0.0405	0.000020 mg/L	0.0400		101	80-120			
Vanadium, dissolved	0.0402	0.0050 mg/L	0.0400		100	80-120			
Zinc, dissolved	0.398	0.0040 mg/L	0.400		100	80-120			
Zirconium, dissolved	0.0406	0.00010 mg/L	0.0400		102	80-120			

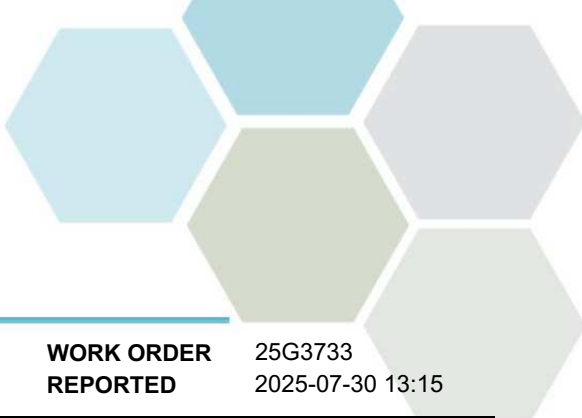
Matrix Spike (B5G4838-MS1)

Source: 25G3733-08

Prepared: 2025-07-28, Analyzed: 2025-07-28

Aluminum, dissolved	3.96	0.0050 mg/L	4.00	< 0.0050	99	70-130			
Antimony, dissolved	0.0434	0.00020 mg/L	0.0400	0.00028	108	70-130			
Arsenic, dissolved	0.419	0.00050 mg/L	0.400	0.00089	105	70-130			
Barium, dissolved	0.155	0.0050 mg/L	0.0400	0.112	108	70-130			
Beryllium, dissolved	0.0398	0.00010 mg/L	0.0400	< 0.00010	99	70-130			
Bismuth, dissolved	0.0368	0.00010 mg/L	0.0400	< 0.00010	92	70-130			
Boron, dissolved	0.398	0.0500 mg/L	0.400	< 0.0500	91	70-130			
Cadmium, dissolved	0.0419	0.000010 mg/L	0.0400	< 0.000010	105	70-130			
Calcium, dissolved	139	0.20 mg/L	4.00	138	18	70-130			MS2
Chromium, dissolved	0.0390	0.00050 mg/L	0.0400	< 0.00050	98	70-130			
Cobalt, dissolved	0.0382	0.00010 mg/L	0.0400	0.00097	93	70-130			
Copper, dissolved	0.0359	0.00040 mg/L	0.0400	< 0.00040	89	70-130			
Iron, dissolved	4.82	0.010 mg/L	4.00	1.04	95	70-130			
Lead, dissolved	0.0414	0.00020 mg/L	0.0400	< 0.00020	103	70-130			
Lithium, dissolved	0.0581	0.00010 mg/L	0.0400	0.0184	99	70-130			
Magnesium, dissolved	42.1	0.010 mg/L	4.00	39.6	61	70-130			MS2
Manganese, dissolved	0.371	0.00020 mg/L	0.0400	0.343	69	70-130			MS2
Molybdenum, dissolved	0.0536	0.00010 mg/L	0.0400	0.0108	107	70-130			
Nickel, dissolved	0.0382	0.00040 mg/L	0.0400	0.00199	90	70-130			
Phosphorus, dissolved	4.20	0.050 mg/L	4.00	< 0.050	105	70-130			
Potassium, dissolved	7.99	0.10 mg/L	4.00	4.13	96	70-130			
Selenium, dissolved	0.434	0.00050 mg/L	0.400	< 0.00050	108	70-130			
Silicon, dissolved	15.0	1.0 mg/L	4.00	11.4	88	70-130			
Silver, dissolved	0.0330	0.000050 mg/L	0.0400	< 0.000050	83	70-130			
Sodium, dissolved	37.2	0.10 mg/L	4.00	33.7	88	70-130			
Strontium, dissolved	2.35	0.0010 mg/L	0.0400	2.34	3	70-130			MS2
Sulfur, dissolved	71.2	3.0 mg/L	40.0	32.4	97	70-130			
Tellurium, dissolved	0.0452	0.00050 mg/L	0.0400	< 0.00050	113	70-130			
Thallium, dissolved	0.0412	0.000020 mg/L	0.0400	< 0.000020	103	70-130			
Thorium, dissolved	0.0431	0.00010 mg/L	0.0400	< 0.00010	108	70-130			
Tin, dissolved	0.0428	0.00020 mg/L	0.0400	< 0.00020	107	70-130			
Titanium, dissolved	0.0395	0.0050 mg/L	0.0400	< 0.0050	99	70-130			
Tungsten, dissolved	0.0417	0.0010 mg/L	0.0400	< 0.0010	104	70-130			
Uranium, dissolved	0.0960	0.000020 mg/L	0.0400	0.0510	113	70-130			
Vanadium, dissolved	0.0404	0.0050 mg/L	0.0400	< 0.0050	100	70-130			
Zinc, dissolved	0.406	0.0040 mg/L	0.400	0.0228	96	70-130			
Zirconium, dissolved	0.0435	0.00010 mg/L	0.0400	< 0.00010	108	70-130			

Dissolved Metals, Batch B5G4926



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT	Regional District of Okanagan Similkameen Ok Falls - TLGW	WORK ORDER REPORTED	25G3733 2025-07-30 13:15
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Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Dissolved Metals, Batch B5G4926, Continued									
Blank (B5G4926-BLK1)			Prepared: 2025-07-29, Analyzed: 2025-07-29						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5G4926-BLK2)			Prepared: 2025-07-29, Analyzed: 2025-07-29						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5G4926-BLK3)			Prepared: 2025-07-29, Analyzed: 2025-07-29						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5G4926-BLK4)			Prepared: 2025-07-29, Analyzed: 2025-07-29						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
LCS (B5G4926-BS1)			Prepared: 2025-07-29, Analyzed: 2025-07-29						
Mercury, dissolved	0.00284	0.000010 mg/L	0.00250		114	80-120			
LCS (B5G4926-BS2)			Prepared: 2025-07-29, Analyzed: 2025-07-29						
Mercury, dissolved	0.00263	0.000010 mg/L	0.00250		105	80-120			
LCS (B5G4926-BS3)			Prepared: 2025-07-29, Analyzed: 2025-07-29						
Mercury, dissolved	0.00281	0.000010 mg/L	0.00250		112	80-120			
LCS (B5G4926-BS4)			Prepared: 2025-07-29, Analyzed: 2025-07-29						
Mercury, dissolved	0.00264	0.000010 mg/L	0.00250		105	80-120			
Matrix Spike (B5G4926-MS3)			Source: 25G3733-06		Prepared: 2025-07-29, Analyzed: 2025-07-29				
Mercury, dissolved	0.00298	0.000010 mg/L	0.00250	< 0.000010	119	70-130			

General Parameters, Batch B5G4757

Blank (B5G4757-BLK1)			Prepared: 2025-07-26, Analyzed: 2025-07-26						
Alkalinity, Total (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
Blank (B5G4757-BLK2)			Prepared: 2025-07-26, Analyzed: 2025-07-26						
Alkalinity, Total (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
Blank (B5G4757-BLK3)			Prepared: 2025-07-26, Analyzed: 2025-07-26						
Alkalinity, Total (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
Blank (B5G4757-BLK4)			Prepared: 2025-07-26, Analyzed: 2025-07-26						
Alkalinity, Total (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0 mg/L							



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25G3733
2025-07-30 13:15

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B5G4757, Continued									
Blank (B5G4757-BLK4), Continued			Prepared: 2025-07-26, Analyzed: 2025-07-26						
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0 mg/L							
LCS (B5G4757-BS1)			Prepared: 2025-07-26, Analyzed: 2025-07-26						
Alkalinity, Total (as CaCO3)	87.2	1.0 mg/L	100		87	80-120			
LCS (B5G4757-BS2)			Prepared: 2025-07-26, Analyzed: 2025-07-26						
Conductivity (EC)	1420	2.0 µS/cm	1410		100	95-105			
LCS (B5G4757-BS3)			Prepared: 2025-07-26, Analyzed: 2025-07-26						
Alkalinity, Total (as CaCO3)	87.8	1.0 mg/L	100		88	80-120			
LCS (B5G4757-BS4)			Prepared: 2025-07-26, Analyzed: 2025-07-26						
Conductivity (EC)	1410	2.0 µS/cm	1410		100	95-105			
LCS (B5G4757-BS5)			Prepared: 2025-07-26, Analyzed: 2025-07-26						
Alkalinity, Total (as CaCO3)	87.9	1.0 mg/L	100		88	80-120			
LCS (B5G4757-BS6)			Prepared: 2025-07-26, Analyzed: 2025-07-26						
Conductivity (EC)	1420	2.0 µS/cm	1410		100	95-105			
LCS (B5G4757-BS7)			Prepared: 2025-07-26, Analyzed: 2025-07-26						
Alkalinity, Total (as CaCO3)	85.8	1.0 mg/L	100		86	80-120			
LCS (B5G4757-BS8)			Prepared: 2025-07-26, Analyzed: 2025-07-26						
Conductivity (EC)	1420	2.0 µS/cm	1410		100	95-105			
Duplicate (B5G4757-DUP3)			Source: 25G3733-03		Prepared: 2025-07-26, Analyzed: 2025-07-26				
Alkalinity, Total (as CaCO3)	636	1.0 mg/L		638			< 1	10	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0 mg/L		< 1.0				10	
Alkalinity, Bicarbonate (as CaCO3)	636	1.0 mg/L		638			< 1	10	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0 mg/L		< 1.0				10	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0 mg/L		< 1.0				10	
Conductivity (EC)	1570	2.0 µS/cm		1580			< 1	5	
pH	7.97	0.10 pH units		7.93			< 1	4	HT2
Reference (B5G4757-SRM1)			Prepared: 2025-07-26, Analyzed: 2025-07-26						
pH	7.00	0.10 pH units	7.01		100	98-102			
Reference (B5G4757-SRM2)			Prepared: 2025-07-26, Analyzed: 2025-07-26						
pH	7.00	0.10 pH units	7.01		100	98-102			
Reference (B5G4757-SRM3)			Prepared: 2025-07-26, Analyzed: 2025-07-26						
pH	7.00	0.10 pH units	7.01		100	98-102			
Reference (B5G4757-SRM4)			Prepared: 2025-07-26, Analyzed: 2025-07-26						
pH	7.00	0.10 pH units	7.01		100	98-102			

General Parameters, Batch B5G4802

Blank (B5G4802-BLK1)			Prepared: 2025-07-29, Analyzed: 2025-07-29						
Chemical Oxygen Demand	< 20	20 mg/L							
Blank (B5G4802-BLK2)			Prepared: 2025-07-29, Analyzed: 2025-07-29						
Chemical Oxygen Demand	< 20	20 mg/L							
LCS (B5G4802-BS1)			Prepared: 2025-07-29, Analyzed: 2025-07-29						
Chemical Oxygen Demand	490	20 mg/L	500		98	89-115			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT	Regional District of Okanagan Similkameen Ok Falls - TLGW	WORK ORDER REPORTED	25G3733 2025-07-30 13:15
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Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B5G4802, Continued									
LCS (B5G4802-BS2)				Prepared: 2025-07-29, Analyzed: 2025-07-29					
Chemical Oxygen Demand	497	20 mg/L	500		99	89-115			
General Parameters, Batch B5G5068									
Blank (B5G5068-BLK1)				Prepared: 2025-07-30, Analyzed: 2025-07-30					
Ammonia, Total (as N)	< 0.050	0.050 mg/L							
LCS (B5G5068-BS1)				Prepared: 2025-07-30, Analyzed: 2025-07-30					
Ammonia, Total (as N)	1.07	0.050 mg/L	1.00		107	85-115			
Duplicate (B5G5068-DUP1)				Source: 25G3733-01		Prepared: 2025-07-30, Analyzed: 2025-07-30			
Ammonia, Total (as N)	< 0.050	0.050 mg/L		< 0.050				15	
Matrix Spike (B5G5068-MS1)				Source: 25G3733-01		Prepared: 2025-07-30, Analyzed: 2025-07-30			
Ammonia, Total (as N)	0.256	0.050 mg/L	0.204	< 0.050	108	75-125			

QC Qualifiers:

- HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.
- MS2 The native sample concentration is greater than the spike concentration hence the matrix spike limits do not apply.



CERTIFICATE OF ANALYSIS

REPORTED TO	Regional District of Okanagan Similkameen 101 Martin Street Penticton, BC V2A 5J9	WORK ORDER	25J2956
ATTENTION	Rob Palmer	RECEIVED / TEMP REPORTED	2025-10-22 10:30 / 11°C 2025-10-28 17:56
PO NUMBER	20259001- TLDW	COC NUMBER	eCOC#00029129
PROJECT	OK Falls - TLDW		
PROJECT INFO			

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

Big Picture Sidekicks



You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry



It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve



Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

Work Order Comments:

Custody Seals Intact: N/A

By engaging our services, you are agreeing to CARO Analytical Service's Standard Terms and Conditions outlined here: <https://www.caro.ca/terms-conditions>

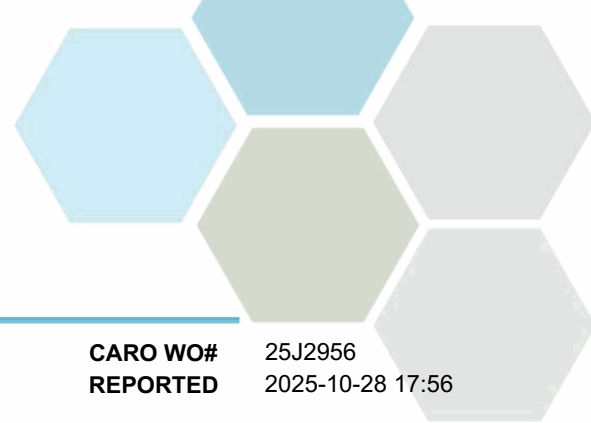
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 | #108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2956
2025-10-28 17:56

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
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1545 Chapman Road (25J2956-01) | Matrix: Drinking Water | Sampled: 2025-10-21 11:55

Anions

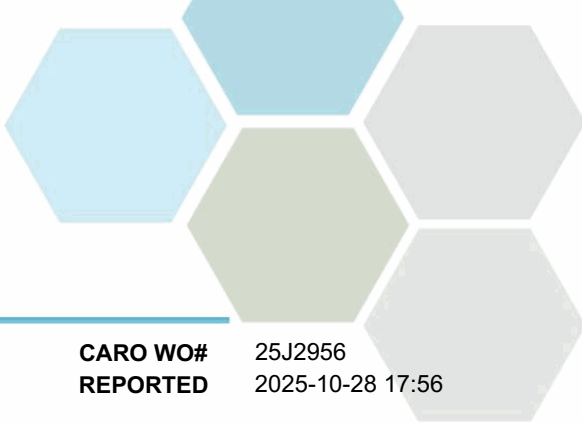
Bromide	< 0.10	N/A	0.10 mg/L	2025-10-22	
Chloride	7.34	AO ≤ 250	0.10 mg/L	2025-10-22	
Fluoride	0.34	MAC = 1.5	0.10 mg/L	2025-10-22	
Nitrate (as N)	0.532	MAC = 10	0.010 mg/L	2025-10-22	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2025-10-22	
Sulfate	55.0	AO ≤ 500	1.0 mg/L	2025-10-22	

Calculated Parameters

Bicarbonate (HCO3)	371	N/A	1.22 mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600 mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340 mg/L	N/A	
Hardness, Dissolved (as CaCO3)	298	N/A	0.500 mg/L	N/A	
Nitrate+Nitrite (as N)	0.532	N/A	0.0100 mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-10-23	
Antimony, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-10-23	
Arsenic, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-10-23	
Barium, dissolved	0.0214	N/A	0.0050 mg/L	2025-10-23	
Beryllium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-10-23	
Bismuth, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-10-23	
Boron, dissolved	< 0.0500	N/A	0.0500 mg/L	2025-10-23	
Cadmium, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-10-23	
Calcium, dissolved	79.5	N/A	0.20 mg/L	2025-10-23	
Chromium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-10-23	
Cobalt, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-10-23	
Copper, dissolved	0.00226	N/A	0.00040 mg/L	2025-10-23	
Iron, dissolved	< 0.010	N/A	0.010 mg/L	2025-10-23	
Lead, dissolved	0.00118	N/A	0.00020 mg/L	2025-10-23	
Lithium, dissolved	0.0137	N/A	0.00010 mg/L	2025-10-23	
Magnesium, dissolved	24.2	N/A	0.010 mg/L	2025-10-23	
Manganese, dissolved	0.00166	N/A	0.00020 mg/L	2025-10-23	
Mercury, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-10-24	
Molybdenum, dissolved	0.00715	N/A	0.00010 mg/L	2025-10-23	
Nickel, dissolved	< 0.00040	N/A	0.00040 mg/L	2025-10-23	
Phosphorus, dissolved	< 0.050	N/A	0.050 mg/L	2025-10-23	
Potassium, dissolved	2.60	N/A	0.10 mg/L	2025-10-23	
Selenium, dissolved	0.00159	N/A	0.00050 mg/L	2025-10-23	
Silicon, dissolved	9.7	N/A	1.0 mg/L	2025-10-23	
Silver, dissolved	< 0.000050	N/A	0.000050 mg/L	2025-10-23	
Sodium, dissolved	25.3	N/A	0.10 mg/L	2025-10-23	
Strontium, dissolved	1.25	N/A	0.0010 mg/L	2025-10-23	
Sulfur, dissolved	18.0	N/A	3.0 mg/L	2025-10-23	
Tellurium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-10-23	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2956
2025-10-28 17:56

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
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1545 Chapman Road (25J2956-01) | Matrix: Drinking Water | Sampled: 2025-10-21 11:55, Continued

Dissolved Metals, Continued

Thallium, dissolved	< 0.000020	N/A	0.000020 mg/L	2025-10-23	
Thorium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-10-23	
Tin, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-10-23	
Titanium, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-10-23	
Tungsten, dissolved	< 0.0010	N/A	0.0010 mg/L	2025-10-23	
Uranium, dissolved	0.0250	N/A	0.000020 mg/L	2025-10-23	
Vanadium, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-10-23	
Zinc, dissolved	0.0045	N/A	0.0040 mg/L	2025-10-23	
Zirconium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-10-23	

General Parameters

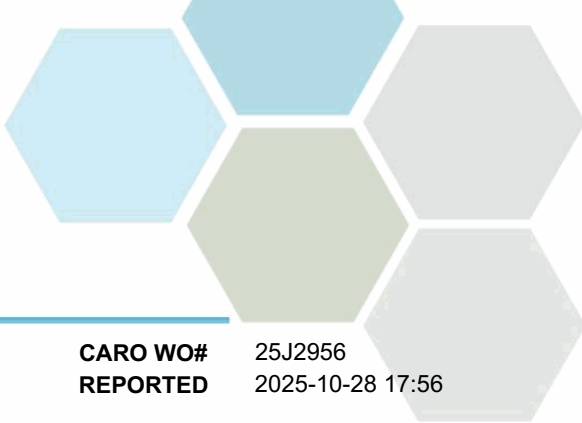
Alkalinity, Total (as CaCO3)	304	N/A	1.0 mg/L	2025-10-23	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-10-23	
Alkalinity, Bicarbonate (as CaCO3)	304	N/A	1.0 mg/L	2025-10-23	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-10-23	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-10-23	
Ammonia, Total (as N)	< 0.050	None Required	0.050 mg/L	2025-10-25	
Chemical Oxygen Demand	< 20	N/A	20 mg/L	2025-10-24	
Conductivity (EC)	651	N/A	2.0 µS/cm	2025-10-23	
pH	7.79	7.0-10.5	0.10 pH units	2025-10-23	HT2

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1 CFU/100 mL	2025-10-22	
E. coli	< 1	MAC = 0	1 CFU/100 mL	2025-10-22	

Total Metals

Aluminum, total	< 0.0050	OG < 0.1	0.0050 mg/L	2025-10-26	
Antimony, total	< 0.00020	MAC = 0.006	0.00020 mg/L	2025-10-26	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050 mg/L	2025-10-26	
Barium, total	0.0220	MAC = 2	0.0050 mg/L	2025-10-26	
Beryllium, total	< 0.00010	N/A	0.00010 mg/L	2025-10-26	
Bismuth, total	< 0.00010	N/A	0.00010 mg/L	2025-10-26	
Boron, total	< 0.0500	MAC = 5	0.0500 mg/L	2025-10-26	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010 mg/L	2025-10-26	
Calcium, total	79.1	None Required	0.20 mg/L	2025-10-26	
Chromium, total	< 0.00050	MAC = 0.05	0.00050 mg/L	2025-10-26	
Cobalt, total	< 0.00010	N/A	0.00010 mg/L	2025-10-26	
Copper, total	0.00265	MAC = 2	0.00040 mg/L	2025-10-26	
Iron, total	< 0.010	AO ≤ 0.1	0.010 mg/L	2025-10-26	
Lead, total	0.00130	MAC = 0.005	0.00020 mg/L	2025-10-26	
Lithium, total	0.0156	N/A	0.00010 mg/L	2025-10-26	
Magnesium, total	25.8	None Required	0.010 mg/L	2025-10-26	
Manganese, total	0.00171	MAC = 0.12	0.00020 mg/L	2025-10-26	
Mercury, total	< 0.000010	MAC = 0.001	0.000010 mg/L	2025-10-24	
Molybdenum, total	0.00757	N/A	0.00010 mg/L	2025-10-26	



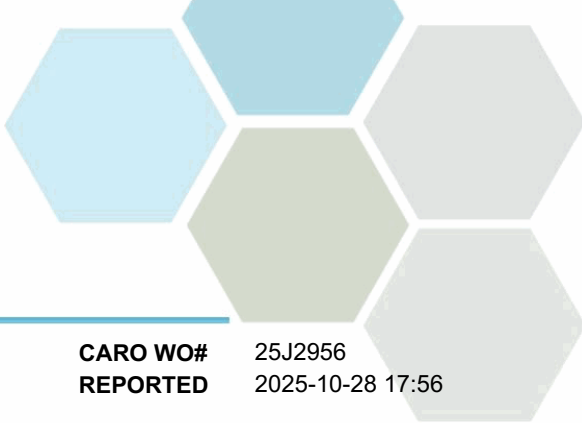
TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2956
2025-10-28 17:56

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
1545 Chapman Road (25J2956-01) Matrix: Drinking Water Sampled: 2025-10-21 11:55, Continued					
<i>Total Metals, Continued</i>					
Nickel, total	< 0.00040	N/A	0.00040 mg/L	2025-10-26	
Phosphorus, total	< 0.050	N/A	0.050 mg/L	2025-10-26	
Potassium, total	2.62	N/A	0.10 mg/L	2025-10-26	
Selenium, total	0.00128	MAC = 0.05	0.00050 mg/L	2025-10-26	
Silicon, total	10.1	N/A	1.0 mg/L	2025-10-26	
Silver, total	< 0.000050	None Required	0.000050 mg/L	2025-10-26	
Sodium, total	25.1	AO ≤ 200	0.10 mg/L	2025-10-26	
Strontium, total	1.26	MAC = 7	0.0010 mg/L	2025-10-26	
Sulfur, total	18.8	N/A	3.0 mg/L	2025-10-26	
Tellurium, total	< 0.00050	N/A	0.00050 mg/L	2025-10-26	
Thallium, total	< 0.000020	N/A	0.000020 mg/L	2025-10-26	
Thorium, total	< 0.00010	N/A	0.00010 mg/L	2025-10-26	
Tin, total	< 0.00020	N/A	0.00020 mg/L	2025-10-26	
Titanium, total	< 0.0050	N/A	0.0050 mg/L	2025-10-26	
Tungsten, total	< 0.0010	N/A	0.0010 mg/L	2025-10-26	
Uranium, total	0.0243	MAC = 0.02	0.000020 mg/L	2025-10-26	
Vanadium, total	< 0.0050	N/A	0.0050 mg/L	2025-10-26	
Zinc, total	0.0045	AO ≤ 5	0.0040 mg/L	2025-10-26	
Zirconium, total	< 0.00010	N/A	0.00010 mg/L	2025-10-26	

Sample Qualifiers:
HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

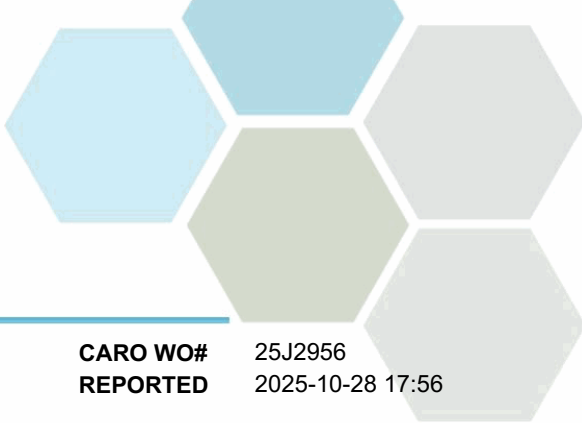
CARO WO# REPORTED 25J2956
2025-10-28 17:56

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Chemical Oxygen Demand in Water	SM 5220 D* (2022)	Closed Reflux, Colorimetry	✓	Kelowna
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Kelowna
Dissolved Metals in Water	EPA 200.8 / EPA 6020B	0.45 µm Filtration / Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)	✓	Richmond
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
Hardness in Water	SM 2340 B (2021)	Calculation: 2.497 [diss Ca] + 4.118 [diss Mg]	✓	N/A
Mercury, dissolved in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	✓	Richmond
Mercury, total in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	✓	Richmond
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)	✓	Richmond

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method

Glossary of Terms:

RL	Reporting Limit (default)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
AO	Aesthetic Objective
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
OG	Operational Guideline (treated water)
pH units	pH < 7 = acidic, pH > 7 = basic
µS/cm	Microsiemens per centimetre
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO Regional District of Okanagan Similkameen
PROJECT OK Falls - TLDW

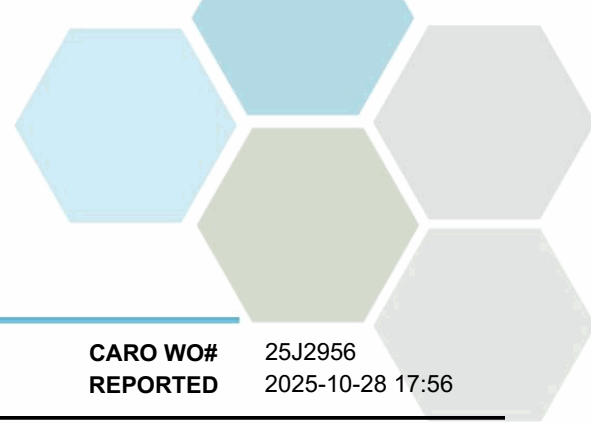
CARO WO# 25J2956
REPORTED 2025-10-28 17:56

General Comments:

The results in this report apply to the received samples analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety. CARO is not responsible for any loss or damage resulting directly or indirectly from error or omission in the conduct of testing. Liability is limited to the cost of analysis. Samples will be disposed of 30 days after the test report has been issued or once samples expire, whichever comes first. Longer hold is possible if agreed to in writing.

Results in **Bold** indicate values that are above CARO's method reporting limits. Any results that are above regulatory limits are highlighted **red**. Please note that results will only be highlighted red if the regulatory limits are included on the CARO report. Any Bold and/or highlighted results do not take into account method uncertainty. If you would like method uncertainty or regulatory limits to be included on your report, please contact your Account Manager: [{@Email}](#)

Please note any regulatory guidelines applied to this report are added as a convenience to the client, at their request, to help provide some initial context to analytical results obtained. Although CARO makes every effort to ensure accuracy of the associated regulatory guideline(s) applied, the guidelines applied cannot be assumed to be correct due to a variety of factors and as such CARO Analytical Services assumes no liability or responsibility for the use of those guidelines to make any decisions. The original source of the regulation should be verified and a review of the guideline(s) should be validated as correct in order to make any decisions arising from the comparison of the analytical data obtained to the relevant regulatory guideline for one's particular circumstances. Further, CARO Analytical Services assumes no liability



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2956
2025-10-28 17:56

The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

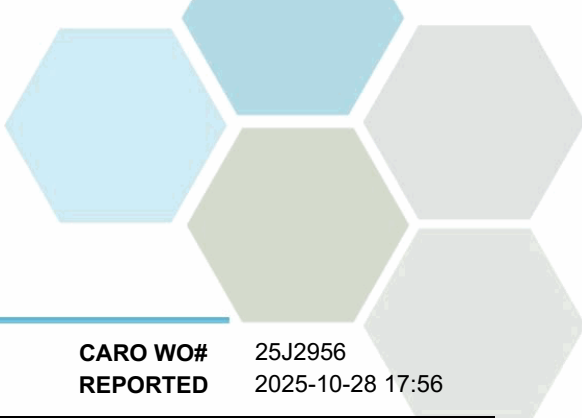
- **Method Blank (Blk):** A blank sample that undergoes sample processing identical to that carried out for the test samples. Method blank results are used to assess contamination from the laboratory environment and reagents.
- **Duplicate (Dup):** An additional or second portion of a randomly selected sample in the analytical run carried through the entire analytical process. Duplicates provide a measure of the analytical method's precision (reproducibility).
- **Blank Spike (BS):** A sample of known concentration which undergoes processing identical to that carried out for test samples, also referred to as a laboratory control sample (LCS). Blank spikes provide a measure of the analytical method's accuracy.
- **Matrix Spike (MS):** A second aliquot of sample is fortified with a known concentration of target analytes and carried through the entire analytical process. Matrix spikes evaluate potential matrix effects that may affect the analyte recovery.
- **Reference Material (SRM):** A homogenous material of similar matrix to the samples, certified for the parameter(s) listed. Reference Materials ensure that the analytical process is adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10-20 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Anions, Batch B5J4358									
Blank (B5J4358-BLK1)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Bromide	< 0.10	0.10 mg/L							
Chloride	< 0.10	0.10 mg/L							
Fluoride	< 0.10	0.10 mg/L							
Nitrate (as N)	< 0.010	0.010 mg/L							
Nitrite (as N)	< 0.010	0.010 mg/L							
Sulfate	< 1.0	1.0 mg/L							
LCS (B5J4358-BS1)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Bromide	4.05	0.10 mg/L	4.00		101	85-115			
Chloride	16.2	0.10 mg/L	16.0		101	90-110			
Fluoride	3.78	0.10 mg/L	4.00		95	88-108			
Nitrate (as N)	4.07	0.010 mg/L	4.00		102	90-110			
Nitrite (as N)	2.01	0.010 mg/L	2.00		100	85-115			
Sulfate	16.4	1.0 mg/L	16.0		102	90-110			

Dissolved Metals, Batch B5J4582

Blank (B5J4582-BLK1)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Aluminum, dissolved	< 0.0050	0.0050 mg/L							
Antimony, dissolved	< 0.00020	0.00020 mg/L							
Arsenic, dissolved	< 0.00050	0.00050 mg/L							
Barium, dissolved	< 0.0050	0.0050 mg/L							
Beryllium, dissolved	< 0.00010	0.00010 mg/L							
Bismuth, dissolved	< 0.00010	0.00010 mg/L							
Boron, dissolved	< 0.0500	0.0500 mg/L							
Cadmium, dissolved	< 0.000010	0.000010 mg/L							
Calcium, dissolved	< 0.20	0.20 mg/L							
Chromium, dissolved	< 0.00050	0.00050 mg/L							
Cobalt, dissolved	< 0.00010	0.00010 mg/L							
Copper, dissolved	< 0.00040	0.00040 mg/L							
Iron, dissolved	< 0.010	0.010 mg/L							
Lead, dissolved	< 0.00020	0.00020 mg/L							
Lithium, dissolved	< 0.00010	0.00010 mg/L							
Magnesium, dissolved	< 0.010	0.010 mg/L							
Manganese, dissolved	< 0.00020	0.00020 mg/L							
Molybdenum, dissolved	< 0.00010	0.00010 mg/L							

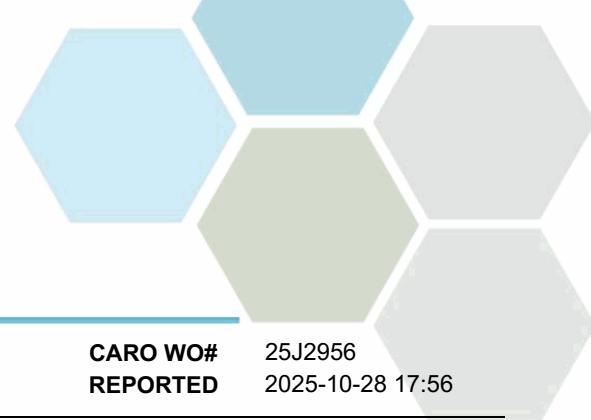


APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2956
2025-10-28 17:56

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Dissolved Metals, Batch B5J4582, Continued									
Blank (B5J4582-BLK1), Continued					Prepared: 2025-10-23, Analyzed: 2025-10-23				
Nickel, dissolved	< 0.00040	0.00040 mg/L							
Phosphorus, dissolved	< 0.050	0.050 mg/L							
Potassium, dissolved	< 0.10	0.10 mg/L							
Selenium, dissolved	< 0.00050	0.00050 mg/L							
Silicon, dissolved	< 1.0	1.0 mg/L							
Silver, dissolved	< 0.000050	0.000050 mg/L							
Sodium, dissolved	< 0.10	0.10 mg/L							
Strontium, dissolved	< 0.0010	0.0010 mg/L							
Sulfur, dissolved	< 3.0	3.0 mg/L							
Tellurium, dissolved	< 0.00050	0.00050 mg/L							
Thallium, dissolved	< 0.000020	0.000020 mg/L							
Thorium, dissolved	< 0.00010	0.00010 mg/L							
Tin, dissolved	< 0.00020	0.00020 mg/L							
Titanium, dissolved	< 0.0050	0.0050 mg/L							
Tungsten, dissolved	< 0.0010	0.0010 mg/L							
Uranium, dissolved	< 0.000020	0.000020 mg/L							
Vanadium, dissolved	< 0.0050	0.0050 mg/L							
Zinc, dissolved	< 0.0040	0.0040 mg/L							
Zirconium, dissolved	< 0.00010	0.00010 mg/L							
LCS (B5J4582-BS1)					Prepared: 2025-10-23, Analyzed: 2025-10-23				
Aluminum, dissolved	3.97	0.0050 mg/L	4.00		99	80-120			
Antimony, dissolved	0.0402	0.00020 mg/L	0.0400		100	80-120			
Arsenic, dissolved	0.400	0.00050 mg/L	0.400		100	80-120			
Barium, dissolved	0.0395	0.0050 mg/L	0.0400		99	80-120			
Beryllium, dissolved	0.0397	0.00010 mg/L	0.0400		99	80-120			
Bismuth, dissolved	0.0401	0.00010 mg/L	0.0400		100	80-120			
Boron, dissolved	0.402	0.0500 mg/L	0.400		100	80-120			
Cadmium, dissolved	0.0404	0.000010 mg/L	0.0400		101	80-120			
Calcium, dissolved	4.03	0.20 mg/L	4.00		101	80-120			
Chromium, dissolved	0.0401	0.00050 mg/L	0.0400		100	80-120			
Cobalt, dissolved	0.0399	0.00010 mg/L	0.0400		100	80-120			
Copper, dissolved	0.0400	0.00040 mg/L	0.0400		100	80-120			
Iron, dissolved	4.04	0.010 mg/L	4.00		101	80-120			
Lead, dissolved	0.0400	0.00020 mg/L	0.0400		100	80-120			
Lithium, dissolved	0.0391	0.00010 mg/L	0.0400		98	80-120			
Magnesium, dissolved	3.97	0.010 mg/L	4.00		99	80-120			
Manganese, dissolved	0.0407	0.00020 mg/L	0.0400		102	80-120			
Molybdenum, dissolved	0.0397	0.00010 mg/L	0.0400		99	80-120			
Nickel, dissolved	0.0402	0.00040 mg/L	0.0400		101	80-120			
Phosphorus, dissolved	3.99	0.050 mg/L	4.00		100	80-120			
Potassium, dissolved	3.99	0.10 mg/L	4.00		100	80-120			
Selenium, dissolved	0.402	0.00050 mg/L	0.400		101	80-120			
Silicon, dissolved	3.8	1.0 mg/L	4.00		95	80-120			
Silver, dissolved	0.0394	0.000050 mg/L	0.0400		99	80-120			
Sodium, dissolved	4.05	0.10 mg/L	4.00		101	80-120			
Strontium, dissolved	0.0404	0.0010 mg/L	0.0400		101	80-120			
Sulfur, dissolved	40.5	3.0 mg/L	40.0		101	80-120			
Tellurium, dissolved	0.0407	0.00050 mg/L	0.0400		102	80-120			
Thallium, dissolved	0.0405	0.000020 mg/L	0.0400		101	80-120			
Thorium, dissolved	0.0398	0.00010 mg/L	0.0400		99	80-120			
Tin, dissolved	0.0398	0.00020 mg/L	0.0400		99	80-120			
Titanium, dissolved	0.0398	0.0050 mg/L	0.0400		99	80-120			
Tungsten, dissolved	0.0399	0.0010 mg/L	0.0400		100	80-120			
Uranium, dissolved	0.0403	0.000020 mg/L	0.0400		101	80-120			
Vanadium, dissolved	0.0410	0.0050 mg/L	0.0400		102	80-120			

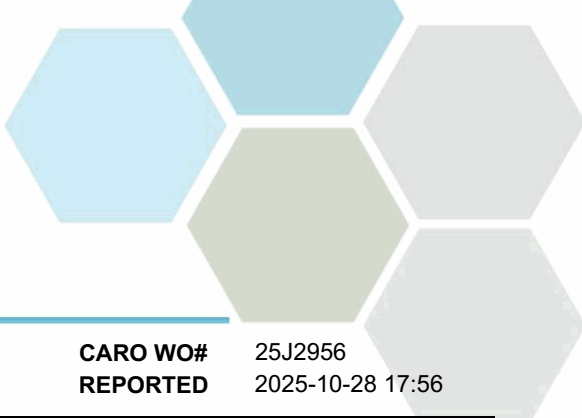


APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2956
2025-10-28 17:56

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Dissolved Metals, Batch B5J4582, Continued									
LCS (B5J4582-BS1), Continued			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Zinc, dissolved	0.404	0.0040 mg/L	0.400		101	80-120			
Zirconium, dissolved	0.0401	0.00010 mg/L	0.0400		100	80-120			
Dissolved Metals, Batch B5J4727									
Blank (B5J4727-BLK1)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK2)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK3)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK4)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
LCS (B5J4727-BS1)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	0.00261	0.000010 mg/L	0.00250		105	80-120			
LCS (B5J4727-BS2)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	0.00286	0.000010 mg/L	0.00250		114	80-120			
LCS (B5J4727-BS3)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	0.00283	0.000010 mg/L	0.00250		113	80-120			
LCS (B5J4727-BS4)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	0.00262	0.000010 mg/L	0.00250		105	80-120			
General Parameters, Batch B5J4486									
Blank (B5J4486-BLK1)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Alkalinity, Total (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
Blank (B5J4486-BLK2)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Alkalinity, Total (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
LCS (B5J4486-BS1)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Alkalinity, Total (as CaCO ₃)	101	1.0 mg/L	100		101	80-120			
LCS (B5J4486-BS2)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Conductivity (EC)	1420	2.0 µS/cm	1410		100	95-105			
LCS (B5J4486-BS3)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Alkalinity, Total (as CaCO ₃)	97.2	1.0 mg/L	100		97	80-120			

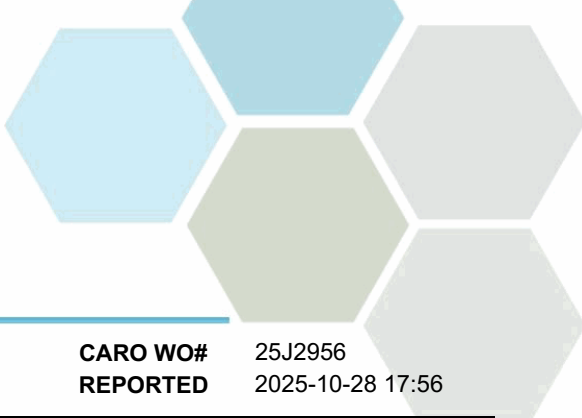


APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2956
2025-10-28 17:56

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
General Parameters, Batch B5J4486, Continued									
LCS (B5J4486-BS4)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Conductivity (EC)	1420	2.0 µS/cm	1410		100	95-105			
Reference (B5J4486-SRM1)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
pH	7.01	0.10 pH units	7.01		100	98-102			
Reference (B5J4486-SRM2)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
pH	7.01	0.10 pH units	7.01		100	98-102			
General Parameters, Batch B5J4519									
Blank (B5J4519-BLK1)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Chemical Oxygen Demand	< 20	20 mg/L							
LCS (B5J4519-BS1)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Chemical Oxygen Demand	535	20 mg/L	500		107	89-115			
General Parameters, Batch B5J4779									
Blank (B5J4779-BLK1)			Prepared: 2025-10-25, Analyzed: 2025-10-25						
Ammonia, Total (as N)	< 0.050	0.050 mg/L							
Blank (B5J4779-BLK2)			Prepared: 2025-10-25, Analyzed: 2025-10-25						
Ammonia, Total (as N)	< 0.050	0.050 mg/L							
LCS (B5J4779-BS1)			Prepared: 2025-10-25, Analyzed: 2025-10-25						
Ammonia, Total (as N)	0.998	0.050 mg/L	1.00		100	85-115			
LCS (B5J4779-BS2)			Prepared: 2025-10-25, Analyzed: 2025-10-25						
Ammonia, Total (as N)	1.00	0.050 mg/L	1.00		100	85-115			
Duplicate (B5J4779-DUP1)			Source: 25J2956-01		Prepared: 2025-10-25, Analyzed: 2025-10-25				
Ammonia, Total (as N)	< 0.050	0.050 mg/L		< 0.050					15
Matrix Spike (B5J4779-MS1)			Source: 25J2956-01		Prepared: 2025-10-25, Analyzed: 2025-10-25				
Ammonia, Total (as N)	0.194	0.050 mg/L	0.204	< 0.050	95	75-125			
Microbiological Parameters, Batch B5J4328									
Blank (B5J4328-BLK1)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Blank (B5J4328-BLK2)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Blank (B5J4328-BLK3)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Blank (B5J4328-BLK4)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Blank (B5J4328-BLK5)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							

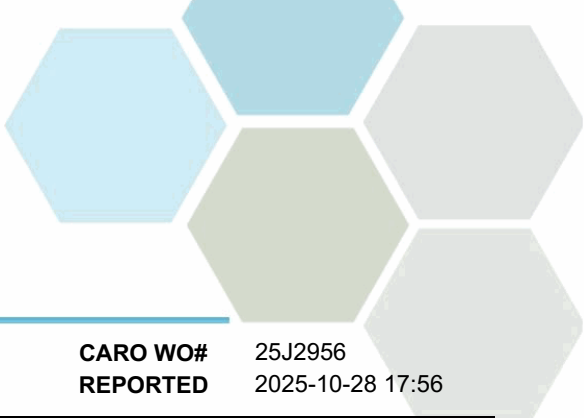


APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2956
2025-10-28 17:56

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Microbiological Parameters, Batch B5J4328, Continued									
Blank (B5J4328-BLK5), Continued			Prepared: 2025-10-22, Analyzed: 2025-10-22						
E. coli	< 1	1 CFU/100 mL							
Blank (B5J4328-BLK6)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Blank (B5J4328-BLK7)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Total Metals, Batch B5J4727									
Blank (B5J4727-BLK1)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, total	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK2)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, total	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK3)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, total	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK4)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, total	< 0.000010	0.000010 mg/L							
LCS (B5J4727-BS1)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, total	0.00261	0.000010 mg/L	0.00250		105	80-120			
LCS (B5J4727-BS2)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, total	0.00286	0.000010 mg/L	0.00250		114	80-120			
LCS (B5J4727-BS3)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, total	0.00283	0.000010 mg/L	0.00250		113	80-120			
LCS (B5J4727-BS4)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, total	0.00262	0.000010 mg/L	0.00250		105	80-120			
Total Metals, Batch B5J4790									
Blank (B5J4790-BLK1)			Prepared: 2025-10-25, Analyzed: 2025-10-25						
Aluminum, total	< 0.0050	0.0050 mg/L							
Antimony, total	< 0.00020	0.00020 mg/L							
Arsenic, total	< 0.00050	0.00050 mg/L							
Barium, total	< 0.0050	0.0050 mg/L							
Beryllium, total	< 0.00010	0.00010 mg/L							
Bismuth, total	< 0.00010	0.00010 mg/L							
Boron, total	< 0.0500	0.0500 mg/L							
Cadmium, total	< 0.000010	0.000010 mg/L							
Calcium, total	< 0.20	0.20 mg/L							
Chromium, total	< 0.00050	0.00050 mg/L							
Cobalt, total	< 0.00010	0.00010 mg/L							
Copper, total	< 0.00040	0.00040 mg/L							
Iron, total	< 0.010	0.010 mg/L							
Lead, total	< 0.00020	0.00020 mg/L							
Lithium, total	< 0.00010	0.00010 mg/L							
Magnesium, total	< 0.010	0.010 mg/L							
Manganese, total	< 0.00020	0.00020 mg/L							

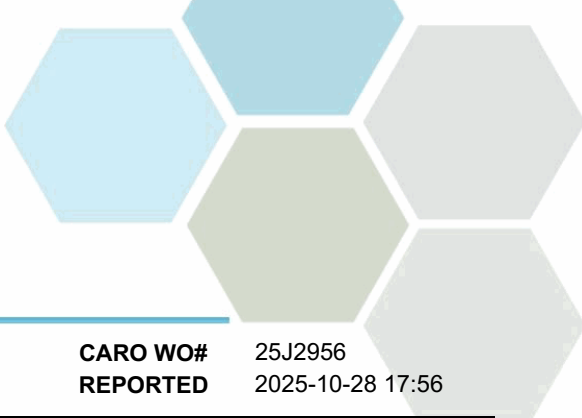


APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2956
2025-10-28 17:56

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Total Metals, Batch B5J4790, Continued									
Blank (B5J4790-BLK1), Continued					Prepared: 2025-10-25, Analyzed: 2025-10-25				
Molybdenum, total	< 0.00010	0.00010 mg/L							
Nickel, total	< 0.00040	0.00040 mg/L							
Phosphorus, total	< 0.050	0.050 mg/L							
Potassium, total	< 0.10	0.10 mg/L							
Selenium, total	< 0.00050	0.00050 mg/L							
Silicon, total	< 1.0	1.0 mg/L							
Silver, total	< 0.000050	0.000050 mg/L							
Sodium, total	< 0.10	0.10 mg/L							
Strontium, total	< 0.0010	0.0010 mg/L							
Sulfur, total	< 3.0	3.0 mg/L							
Tellurium, total	< 0.00050	0.00050 mg/L							
Thallium, total	< 0.000020	0.000020 mg/L							
Thorium, total	< 0.00010	0.00010 mg/L							
Tin, total	< 0.00020	0.00020 mg/L							
Titanium, total	< 0.0050	0.0050 mg/L							
Tungsten, total	< 0.0010	0.0010 mg/L							
Uranium, total	< 0.000020	0.000020 mg/L							
Vanadium, total	< 0.0050	0.0050 mg/L							
Zinc, total	< 0.0040	0.0040 mg/L							
Zirconium, total	< 0.00010	0.00010 mg/L							
LCS (B5J4790-BS1)					Prepared: 2025-10-25, Analyzed: 2025-10-26				
Aluminum, total	3.99	0.0050 mg/L	4.00		100	80-120			
Antimony, total	0.0389	0.00020 mg/L	0.0400		97	80-120			
Arsenic, total	0.389	0.00050 mg/L	0.400		97	80-120			
Barium, total	0.0405	0.0050 mg/L	0.0400		101	80-120			
Beryllium, total	0.0407	0.00010 mg/L	0.0400		102	80-120			
Bismuth, total	0.0390	0.00010 mg/L	0.0400		97	80-120			
Boron, total	0.415	0.0500 mg/L	0.400		104	80-120			
Cadmium, total	0.0394	0.000010 mg/L	0.0400		99	80-120			
Calcium, total	4.05	0.20 mg/L	4.00		101	80-120			
Chromium, total	0.0404	0.00050 mg/L	0.0400		101	80-120			
Cobalt, total	0.0402	0.00010 mg/L	0.0400		101	80-120			
Copper, total	0.0400	0.00040 mg/L	0.0400		100	80-120			
Iron, total	4.00	0.010 mg/L	4.00		100	80-120			
Lead, total	0.0395	0.00020 mg/L	0.0400		99	80-120			
Lithium, total	0.0414	0.00010 mg/L	0.0400		104	80-120			
Magnesium, total	3.82	0.010 mg/L	4.00		95	80-120			
Manganese, total	0.0402	0.00020 mg/L	0.0400		100	80-120			
Molybdenum, total	0.0401	0.00010 mg/L	0.0400		100	80-120			
Nickel, total	0.0413	0.00040 mg/L	0.0400		103	80-120			
Phosphorus, total	3.92	0.050 mg/L	4.00		98	80-120			
Potassium, total	3.94	0.10 mg/L	4.00		98	80-120			
Selenium, total	0.390	0.00050 mg/L	0.400		97	80-120			
Silicon, total	4.0	1.0 mg/L	4.00		101	80-120			
Silver, total	0.0398	0.000050 mg/L	0.0400		100	80-120			
Sodium, total	4.02	0.10 mg/L	4.00		101	80-120			
Strontium, total	0.0393	0.0010 mg/L	0.0400		98	80-120			
Sulfur, total	40.2	3.0 mg/L	40.0		101	80-120			
Tellurium, total	0.0374	0.00050 mg/L	0.0400		94	80-120			
Thallium, total	0.0402	0.000020 mg/L	0.0400		101	80-120			
Thorium, total	0.0395	0.00010 mg/L	0.0400		99	80-120			
Tin, total	0.0400	0.00020 mg/L	0.0400		100	80-120			
Titanium, total	0.0388	0.0050 mg/L	0.0400		97	80-120			
Tungsten, total	0.0394	0.0010 mg/L	0.0400		99	80-120			
Uranium, total	0.0398	0.000020 mg/L	0.0400		100	80-120			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# 25J2956
REPORTED 2025-10-28 17:56

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
<i>Total Metals, Batch B5J4790, Continued</i>									
LCS (B5J4790-BS1), Continued					Prepared: 2025-10-25, Analyzed: 2025-10-26				
Vanadium, total	0.0401	0.0050 mg/L	0.0400		100	80-120			
Zinc, total	0.393	0.0040 mg/L	0.400		98	80-120			
Zirconium, total	0.0398	0.00010 mg/L	0.0400		99	80-120			



CERTIFICATE OF ANALYSIS

REPORTED TO	Regional District of Okanagan Similkameen 101 Martin Street Penticton, BC V2A 5J9	WORK ORDER	25J2961
ATTENTION	Rob Palmer	RECEIVED / TEMP REPORTED	2025-10-22 10:30 / 11°C 2025-10-28 08:27
PO NUMBER	20259001- TLDW	COC NUMBER	eCOC#00029125
PROJECT	OK Falls - TLDW		
PROJECT INFO			

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

Big Picture Sidekicks



You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry



It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve



Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

Work Order Comments:

Custody Seals Intact: N/A

By engaging our services, you are agreeing to CARO Analytical Service's Standard Terms and Conditions outlined here: <https://www.caro.ca/terms-conditions>

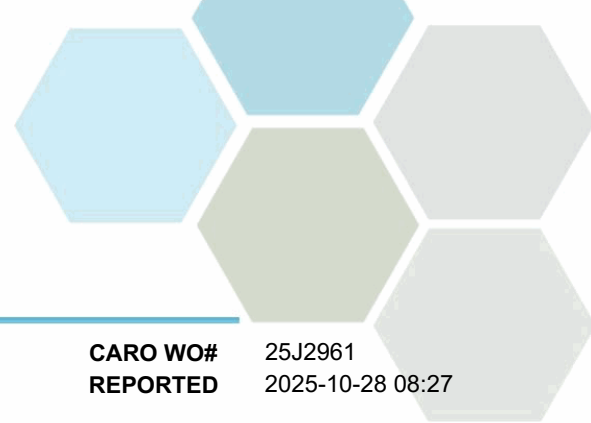
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

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#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 | #108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2961
2025-10-28 08:27

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
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3816 Allendale Lake Road (25J2961-01) | Matrix: Drinking Water | Sampled: 2025-10-21 12:55

Anions

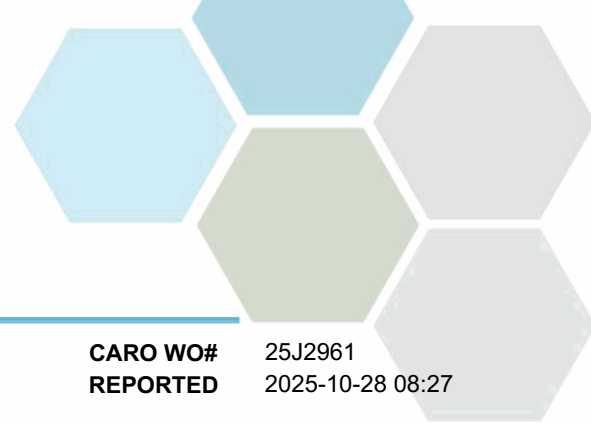
Bromide	0.17	N/A	0.10 mg/L	2025-10-23	
Chloride	36.1	AO ≤ 250	0.10 mg/L	2025-10-23	
Fluoride	0.90	MAC = 1.5	0.10 mg/L	2025-10-23	
Nitrate (as N)	< 0.010	MAC = 10	0.010 mg/L	2025-10-23	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2025-10-23	
Sulfate	159	AO ≤ 500	1.0 mg/L	2025-10-22	

Calculated Parameters

Bicarbonate (HCO3)	279	N/A	1.22 mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600 mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340 mg/L	N/A	
Hardness, Dissolved (as CaCO3)	257	N/A	0.500 mg/L	N/A	
Nitrate+Nitrite (as N)	< 0.0100	N/A	0.0100 mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-10-23	
Antimony, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-10-23	
Arsenic, dissolved	0.00180	N/A	0.00050 mg/L	2025-10-23	
Barium, dissolved	0.0291	N/A	0.0050 mg/L	2025-10-23	
Beryllium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-10-23	
Bismuth, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-10-23	
Boron, dissolved	0.119	N/A	0.0500 mg/L	2025-10-23	
Cadmium, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-10-23	
Calcium, dissolved	74.0	N/A	0.20 mg/L	2025-10-23	
Chromium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-10-23	
Cobalt, dissolved	0.00013	N/A	0.00010 mg/L	2025-10-23	
Copper, dissolved	0.00053	N/A	0.00040 mg/L	2025-10-23	
Iron, dissolved	0.451	N/A	0.010 mg/L	2025-10-23	
Lead, dissolved	0.00050	N/A	0.00020 mg/L	2025-10-23	
Lithium, dissolved	0.0468	N/A	0.00010 mg/L	2025-10-23	
Magnesium, dissolved	17.4	N/A	0.010 mg/L	2025-10-23	
Manganese, dissolved	0.0689	N/A	0.00020 mg/L	2025-10-23	
Mercury, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-10-24	
Molybdenum, dissolved	0.00511	N/A	0.00010 mg/L	2025-10-23	
Nickel, dissolved	0.00053	N/A	0.00040 mg/L	2025-10-23	
Phosphorus, dissolved	< 0.050	N/A	0.050 mg/L	2025-10-23	
Potassium, dissolved	1.18	N/A	0.10 mg/L	2025-10-23	
Selenium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-10-23	
Silicon, dissolved	9.7	N/A	1.0 mg/L	2025-10-23	
Silver, dissolved	< 0.000050	N/A	0.000050 mg/L	2025-10-23	
Sodium, dissolved	72.9	N/A	0.10 mg/L	2025-10-23	
Strontium, dissolved	3.75	N/A	0.0010 mg/L	2025-10-23	
Sulfur, dissolved	51.3	N/A	3.0 mg/L	2025-10-23	
Tellurium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-10-23	

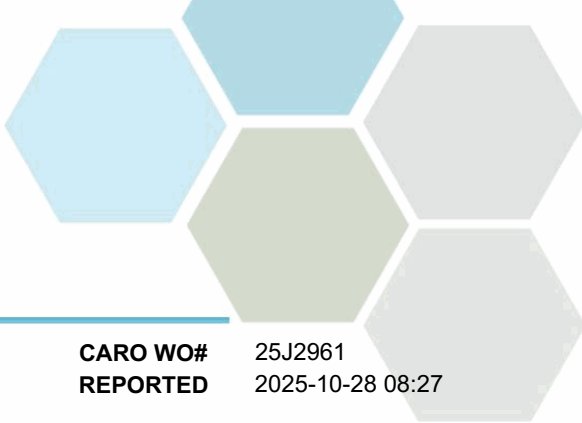


TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2961
2025-10-28 08:27

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
3816 Allendale Lake Road (25J2961-01) Matrix: Drinking Water Sampled: 2025-10-21 12:55, Continued					
<i>Dissolved Metals, Continued</i>					
Thallium, dissolved	< 0.000020	N/A	0.000020 mg/L	2025-10-23	
Thorium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-10-23	
Tin, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-10-23	
Titanium, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-10-23	
Tungsten, dissolved	< 0.0010	N/A	0.0010 mg/L	2025-10-23	
Uranium, dissolved	0.000567	N/A	0.000020 mg/L	2025-10-23	
Vanadium, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-10-23	
Zinc, dissolved	0.0056	N/A	0.0040 mg/L	2025-10-23	
Zirconium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-10-23	
<i>General Parameters</i>					
Alkalinity, Total (as CaCO3)	229	N/A	1.0 mg/L	2025-10-23	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-10-23	
Alkalinity, Bicarbonate (as CaCO3)	229	N/A	1.0 mg/L	2025-10-23	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-10-23	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-10-23	
Ammonia, Total (as N)	0.126	None Required	0.050 mg/L	2025-10-25	
Chemical Oxygen Demand	< 20	N/A	20 mg/L	2025-10-24	
Conductivity (EC)	804	N/A	2.0 µS/cm	2025-10-23	
pH	7.96	7.0-10.5	0.10 pH units	2025-10-23	HT2
<i>Microbiological Parameters</i>					
Coliforms, Total	< 1	MAC = 0	1 CFU/100 mL	2025-10-22	
E. coli	< 1	MAC = 0	1 CFU/100 mL	2025-10-22	
<i>Total Metals</i>					
Aluminum, total	< 0.0050	OG < 0.1	0.0050 mg/L	2025-10-24	
Antimony, total	< 0.00020	MAC = 0.006	0.00020 mg/L	2025-10-24	
Arsenic, total	0.00181	MAC = 0.01	0.00050 mg/L	2025-10-24	
Barium, total	0.0290	MAC = 2	0.0050 mg/L	2025-10-24	
Beryllium, total	< 0.00010	N/A	0.00010 mg/L	2025-10-24	
Bismuth, total	< 0.00010	N/A	0.00010 mg/L	2025-10-24	
Boron, total	0.127	MAC = 5	0.0500 mg/L	2025-10-24	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010 mg/L	2025-10-24	
Calcium, total	71.7	None Required	0.20 mg/L	2025-10-24	
Chromium, total	< 0.00050	MAC = 0.05	0.00050 mg/L	2025-10-24	
Cobalt, total	0.00013	N/A	0.00010 mg/L	2025-10-24	
Copper, total	0.00147	MAC = 2	0.00040 mg/L	2025-10-24	
Iron, total	0.577	AO ≤ 0.1	0.010 mg/L	2025-10-24	
Lead, total	0.00087	MAC = 0.005	0.00020 mg/L	2025-10-24	
Lithium, total	0.0469	N/A	0.00010 mg/L	2025-10-24	
Magnesium, total	17.1	None Required	0.010 mg/L	2025-10-24	
Manganese, total	0.0669	MAC = 0.12	0.00020 mg/L	2025-10-24	
Mercury, total	< 0.000010	MAC = 0.001	0.000010 mg/L	2025-10-24	
Molybdenum, total	0.00521	N/A	0.00010 mg/L	2025-10-24	



TEST RESULTS

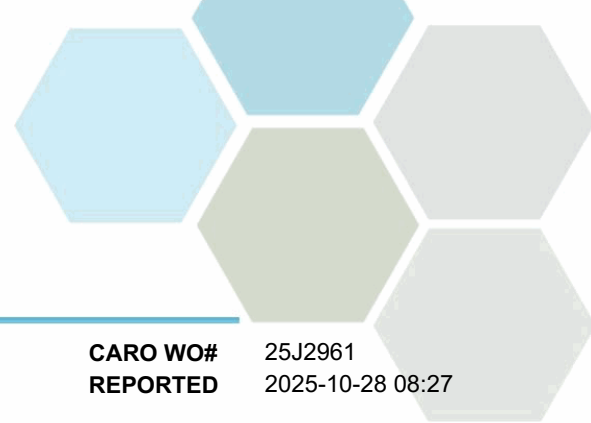
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Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
3816 Allendale Lake Road (25J2961-01) Matrix: Drinking Water Sampled: 2025-10-21 12:55, Continued					
<i>Total Metals, Continued</i>					
Nickel, total	0.00055	N/A	0.00040 mg/L	2025-10-24	
Phosphorus, total	< 0.050	N/A	0.050 mg/L	2025-10-24	
Potassium, total	1.16	N/A	0.10 mg/L	2025-10-24	
Selenium, total	< 0.00050	MAC = 0.05	0.00050 mg/L	2025-10-24	
Silicon, total	9.7	N/A	1.0 mg/L	2025-10-24	
Silver, total	< 0.000050	None Required	0.000050 mg/L	2025-10-24	
Sodium, total	69.5	AO ≤ 200	0.10 mg/L	2025-10-24	
Strontium, total	3.75	MAC = 7	0.0010 mg/L	2025-10-24	
Sulfur, total	50.2	N/A	3.0 mg/L	2025-10-24	
Tellurium, total	< 0.00050	N/A	0.00050 mg/L	2025-10-24	
Thallium, total	< 0.000020	N/A	0.000020 mg/L	2025-10-24	
Thorium, total	< 0.00010	N/A	0.00010 mg/L	2025-10-24	
Tin, total	< 0.00020	N/A	0.00020 mg/L	2025-10-24	
Titanium, total	< 0.0050	N/A	0.0050 mg/L	2025-10-24	
Tungsten, total	< 0.0010	N/A	0.0010 mg/L	2025-10-24	
Uranium, total	0.000560	MAC = 0.02	0.000020 mg/L	2025-10-24	
Vanadium, total	< 0.0050	N/A	0.0050 mg/L	2025-10-24	
Zinc, total	0.0044	AO ≤ 5	0.0040 mg/L	2025-10-24	
Zirconium, total	< 0.00010	N/A	0.00010 mg/L	2025-10-24	

Sample Qualifiers:

HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.



APPENDIX 1: SUPPORTING INFORMATION

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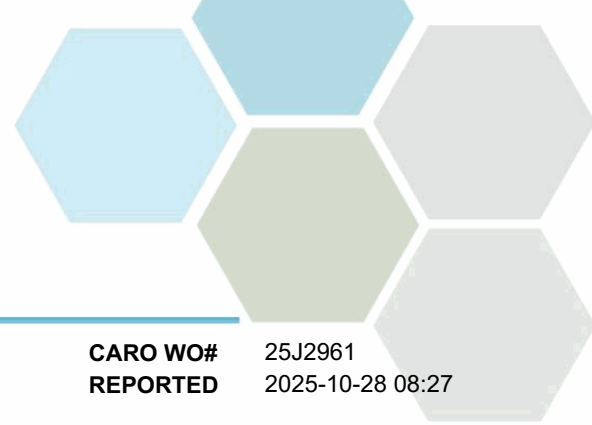
CARO WO# REPORTED 25J2961
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Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Chemical Oxygen Demand in Water	SM 5220 D* (2022)	Closed Reflux, Colorimetry	✓	Kelowna
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Kelowna
Dissolved Metals in Water	EPA 200.8 / EPA 6020B	0.45 µm Filtration / Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)	✓	Richmond
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
Hardness in Water	SM 2340 B (2021)	Calculation: 2.497 [diss Ca] + 4.118 [diss Mg]	✓	N/A
Mercury, dissolved in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	✓	Richmond
Mercury, total in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	✓	Richmond
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)	✓	Richmond

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method

Glossary of Terms:

RL	Reporting Limit (default)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
AO	Aesthetic Objective
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
OG	Operational Guideline (treated water)
pH units	pH < 7 = acidic, pH > 7 = basic
µS/cm	Microsiemens per centimetre
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association



APPENDIX 1: SUPPORTING INFORMATION

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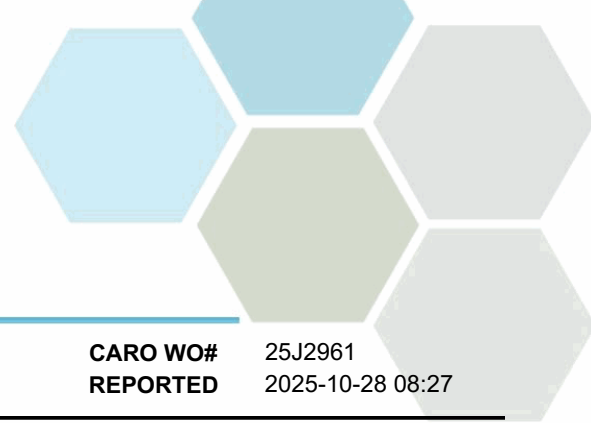
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General Comments:

The results in this report apply to the received samples analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety. CARO is not responsible for any loss or damage resulting directly or indirectly from error or omission in the conduct of testing. Liability is limited to the cost of analysis. Samples will be disposed of 30 days after the test report has been issued or once samples expire, whichever comes first. Longer hold is possible if agreed to in writing.

Results in **Bold** indicate values that are above CARO's method reporting limits. Any results that are above regulatory limits are highlighted **red**. Please note that results will only be highlighted red if the regulatory limits are included on the CARO report. Any Bold and/or highlighted results do not take into account method uncertainty. If you would like method uncertainty or regulatory limits to be included on your report, please contact your Account Manager: [{@Email}](#)

Please note any regulatory guidelines applied to this report are added as a convenience to the client, at their request, to help provide some initial context to analytical results obtained. Although CARO makes every effort to ensure accuracy of the associated regulatory guideline(s) applied, the guidelines applied cannot be assumed to be correct due to a variety of factors and as such CARO Analytical Services assumes no liability or responsibility for the use of those guidelines to make any decisions. The original source of the regulation should be verified and a review of the guideline(s) should be validated as correct in order to make any decisions arising from the comparison of the analytical data obtained to the relevant regulatory guideline for one's particular circumstances. Further, CARO Analytical Services assumes no liability



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
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The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

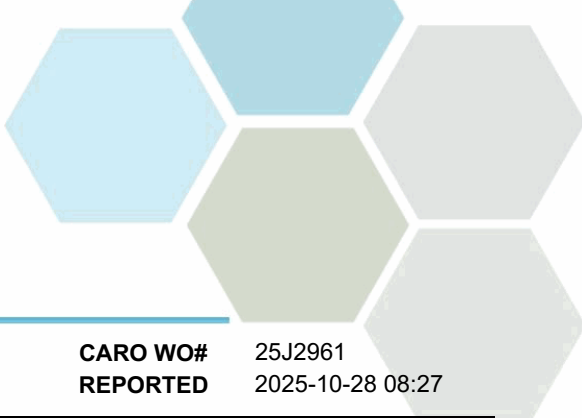
- **Method Blank (Blk):** A blank sample that undergoes sample processing identical to that carried out for the test samples. Method blank results are used to assess contamination from the laboratory environment and reagents.
- **Duplicate (Dup):** An additional or second portion of a randomly selected sample in the analytical run carried through the entire analytical process. Duplicates provide a measure of the analytical method's precision (reproducibility).
- **Blank Spike (BS):** A sample of known concentration which undergoes processing identical to that carried out for test samples, also referred to as a laboratory control sample (LCS). Blank spikes provide a measure of the analytical method's accuracy.
- **Matrix Spike (MS):** A second aliquot of sample is fortified with a known concentration of target analytes and carried through the entire analytical process. Matrix spikes evaluate potential matrix effects that may affect the analyte recovery.
- **Reference Material (SRM):** A homogenous material of similar matrix to the samples, certified for the parameter(s) listed. Reference Materials ensure that the analytical process is adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10-20 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Anions, Batch B5J4358									
Blank (B5J4358-BLK1)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Bromide	< 0.10	0.10 mg/L							
Chloride	< 0.10	0.10 mg/L							
Fluoride	< 0.10	0.10 mg/L							
Nitrate (as N)	< 0.010	0.010 mg/L							
Nitrite (as N)	< 0.010	0.010 mg/L							
Sulfate	< 1.0	1.0 mg/L							
LCS (B5J4358-BS1)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Bromide	4.05	0.10 mg/L	4.00		101	85-115			
Chloride	16.2	0.10 mg/L	16.0		101	90-110			
Fluoride	3.78	0.10 mg/L	4.00		95	88-108			
Nitrate (as N)	4.07	0.010 mg/L	4.00		102	90-110			
Nitrite (as N)	2.01	0.010 mg/L	2.00		100	85-115			
Sulfate	16.4	1.0 mg/L	16.0		102	90-110			

Dissolved Metals, Batch B5J4582

Blank (B5J4582-BLK1)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Aluminum, dissolved	< 0.0050	0.0050 mg/L							
Antimony, dissolved	< 0.00020	0.00020 mg/L							
Arsenic, dissolved	< 0.00050	0.00050 mg/L							
Barium, dissolved	< 0.0050	0.0050 mg/L							
Beryllium, dissolved	< 0.00010	0.00010 mg/L							
Bismuth, dissolved	< 0.00010	0.00010 mg/L							
Boron, dissolved	< 0.0500	0.0500 mg/L							
Cadmium, dissolved	< 0.000010	0.000010 mg/L							
Calcium, dissolved	< 0.20	0.20 mg/L							
Chromium, dissolved	< 0.00050	0.00050 mg/L							
Cobalt, dissolved	< 0.00010	0.00010 mg/L							
Copper, dissolved	< 0.00040	0.00040 mg/L							
Iron, dissolved	< 0.010	0.010 mg/L							
Lead, dissolved	< 0.00020	0.00020 mg/L							
Lithium, dissolved	< 0.00010	0.00010 mg/L							
Magnesium, dissolved	< 0.010	0.010 mg/L							
Manganese, dissolved	< 0.00020	0.00020 mg/L							
Molybdenum, dissolved	< 0.00010	0.00010 mg/L							

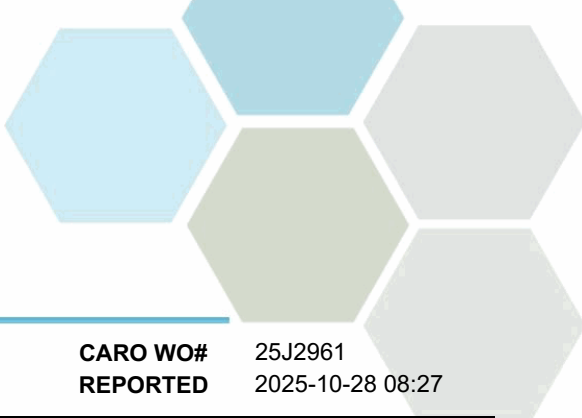


APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2961
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Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Dissolved Metals, Batch B5J4582, Continued									
Blank (B5J4582-BLK1), Continued					Prepared: 2025-10-23, Analyzed: 2025-10-23				
Nickel, dissolved	< 0.00040	0.00040 mg/L							
Phosphorus, dissolved	< 0.050	0.050 mg/L							
Potassium, dissolved	< 0.10	0.10 mg/L							
Selenium, dissolved	< 0.00050	0.00050 mg/L							
Silicon, dissolved	< 1.0	1.0 mg/L							
Silver, dissolved	< 0.000050	0.000050 mg/L							
Sodium, dissolved	< 0.10	0.10 mg/L							
Strontium, dissolved	< 0.0010	0.0010 mg/L							
Sulfur, dissolved	< 3.0	3.0 mg/L							
Tellurium, dissolved	< 0.00050	0.00050 mg/L							
Thallium, dissolved	< 0.000020	0.000020 mg/L							
Thorium, dissolved	< 0.00010	0.00010 mg/L							
Tin, dissolved	< 0.00020	0.00020 mg/L							
Titanium, dissolved	< 0.0050	0.0050 mg/L							
Tungsten, dissolved	< 0.0010	0.0010 mg/L							
Uranium, dissolved	< 0.000020	0.000020 mg/L							
Vanadium, dissolved	< 0.0050	0.0050 mg/L							
Zinc, dissolved	< 0.0040	0.0040 mg/L							
Zirconium, dissolved	< 0.00010	0.00010 mg/L							
LCS (B5J4582-BS1)					Prepared: 2025-10-23, Analyzed: 2025-10-23				
Aluminum, dissolved	3.97	0.0050 mg/L	4.00		99	80-120			
Antimony, dissolved	0.0402	0.00020 mg/L	0.0400		100	80-120			
Arsenic, dissolved	0.400	0.00050 mg/L	0.400		100	80-120			
Barium, dissolved	0.0395	0.0050 mg/L	0.0400		99	80-120			
Beryllium, dissolved	0.0397	0.00010 mg/L	0.0400		99	80-120			
Bismuth, dissolved	0.0401	0.00010 mg/L	0.0400		100	80-120			
Boron, dissolved	0.402	0.0500 mg/L	0.400		100	80-120			
Cadmium, dissolved	0.0404	0.000010 mg/L	0.0400		101	80-120			
Calcium, dissolved	4.03	0.20 mg/L	4.00		101	80-120			
Chromium, dissolved	0.0401	0.00050 mg/L	0.0400		100	80-120			
Cobalt, dissolved	0.0399	0.00010 mg/L	0.0400		100	80-120			
Copper, dissolved	0.0400	0.00040 mg/L	0.0400		100	80-120			
Iron, dissolved	4.04	0.010 mg/L	4.00		101	80-120			
Lead, dissolved	0.0400	0.00020 mg/L	0.0400		100	80-120			
Lithium, dissolved	0.0391	0.00010 mg/L	0.0400		98	80-120			
Magnesium, dissolved	3.97	0.010 mg/L	4.00		99	80-120			
Manganese, dissolved	0.0407	0.00020 mg/L	0.0400		102	80-120			
Molybdenum, dissolved	0.0397	0.00010 mg/L	0.0400		99	80-120			
Nickel, dissolved	0.0402	0.00040 mg/L	0.0400		101	80-120			
Phosphorus, dissolved	3.99	0.050 mg/L	4.00		100	80-120			
Potassium, dissolved	3.99	0.10 mg/L	4.00		100	80-120			
Selenium, dissolved	0.402	0.00050 mg/L	0.400		101	80-120			
Silicon, dissolved	3.8	1.0 mg/L	4.00		95	80-120			
Silver, dissolved	0.0394	0.000050 mg/L	0.0400		99	80-120			
Sodium, dissolved	4.05	0.10 mg/L	4.00		101	80-120			
Strontium, dissolved	0.0404	0.0010 mg/L	0.0400		101	80-120			
Sulfur, dissolved	40.5	3.0 mg/L	40.0		101	80-120			
Tellurium, dissolved	0.0407	0.00050 mg/L	0.0400		102	80-120			
Thallium, dissolved	0.0405	0.000020 mg/L	0.0400		101	80-120			
Thorium, dissolved	0.0398	0.00010 mg/L	0.0400		99	80-120			
Tin, dissolved	0.0398	0.00020 mg/L	0.0400		99	80-120			
Titanium, dissolved	0.0398	0.0050 mg/L	0.0400		99	80-120			
Tungsten, dissolved	0.0399	0.0010 mg/L	0.0400		100	80-120			
Uranium, dissolved	0.0403	0.000020 mg/L	0.0400		101	80-120			
Vanadium, dissolved	0.0410	0.0050 mg/L	0.0400		102	80-120			

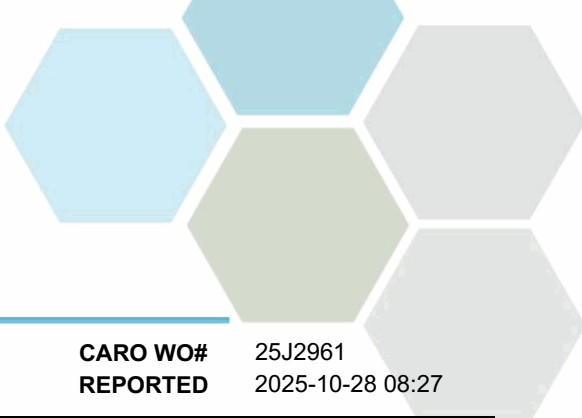


APPENDIX 2: QUALITY CONTROL RESULTS

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OK Falls - TLDW

CARO WO# REPORTED 25J2961
2025-10-28 08:27

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Dissolved Metals, Batch B5J4582, Continued									
LCS (B5J4582-BS1), Continued			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Zinc, dissolved	0.404	0.0040 mg/L	0.400		101	80-120			
Zirconium, dissolved	0.0401	0.00010 mg/L	0.0400		100	80-120			
Dissolved Metals, Batch B5J4727									
Blank (B5J4727-BLK1)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK2)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK3)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK4)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
LCS (B5J4727-BS1)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	0.00261	0.000010 mg/L	0.00250		105	80-120			
LCS (B5J4727-BS2)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	0.00286	0.000010 mg/L	0.00250		114	80-120			
LCS (B5J4727-BS3)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	0.00283	0.000010 mg/L	0.00250		113	80-120			
LCS (B5J4727-BS4)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	0.00262	0.000010 mg/L	0.00250		105	80-120			
General Parameters, Batch B5J4486									
Blank (B5J4486-BLK1)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Alkalinity, Total (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
Blank (B5J4486-BLK2)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Alkalinity, Total (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
LCS (B5J4486-BS1)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Alkalinity, Total (as CaCO ₃)	101	1.0 mg/L	100		101	80-120			
LCS (B5J4486-BS2)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Conductivity (EC)	1420	2.0 µS/cm	1410		100	95-105			
LCS (B5J4486-BS3)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Alkalinity, Total (as CaCO ₃)	97.2	1.0 mg/L	100		97	80-120			

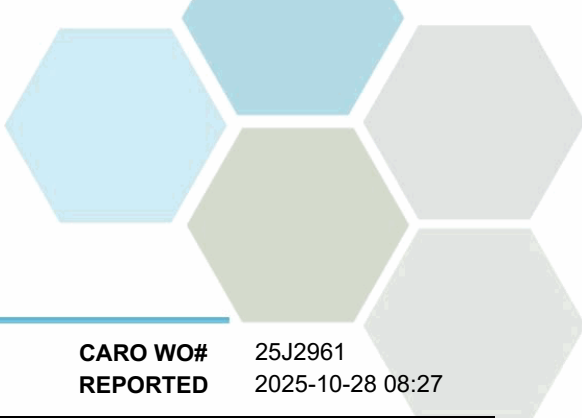


APPENDIX 2: QUALITY CONTROL RESULTS

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OK Falls - TLDW

CARO WO# REPORTED 25J2961
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Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
General Parameters, Batch B5J4486, Continued									
LCS (B5J4486-BS4)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Conductivity (EC)	1420	2.0 µS/cm	1410		100	95-105			
Reference (B5J4486-SRM1)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
pH	7.01	0.10 pH units	7.01		100	98-102			
Reference (B5J4486-SRM2)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
pH	7.01	0.10 pH units	7.01		100	98-102			
General Parameters, Batch B5J4519									
Blank (B5J4519-BLK1)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Chemical Oxygen Demand	< 20	20 mg/L							
LCS (B5J4519-BS1)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Chemical Oxygen Demand	535	20 mg/L	500		107	89-115			
General Parameters, Batch B5J4779									
Blank (B5J4779-BLK1)			Prepared: 2025-10-25, Analyzed: 2025-10-25						
Ammonia, Total (as N)	< 0.050	0.050 mg/L							
Blank (B5J4779-BLK2)			Prepared: 2025-10-25, Analyzed: 2025-10-25						
Ammonia, Total (as N)	< 0.050	0.050 mg/L							
LCS (B5J4779-BS1)			Prepared: 2025-10-25, Analyzed: 2025-10-25						
Ammonia, Total (as N)	0.998	0.050 mg/L	1.00		100	85-115			
LCS (B5J4779-BS2)			Prepared: 2025-10-25, Analyzed: 2025-10-25						
Ammonia, Total (as N)	1.00	0.050 mg/L	1.00		100	85-115			
Microbiological Parameters, Batch B5J4328									
Blank (B5J4328-BLK1)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Blank (B5J4328-BLK2)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Blank (B5J4328-BLK3)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Blank (B5J4328-BLK4)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Blank (B5J4328-BLK5)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Blank (B5J4328-BLK6)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2961
2025-10-28 08:27

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
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Microbiological Parameters, Batch B5J4328, Continued

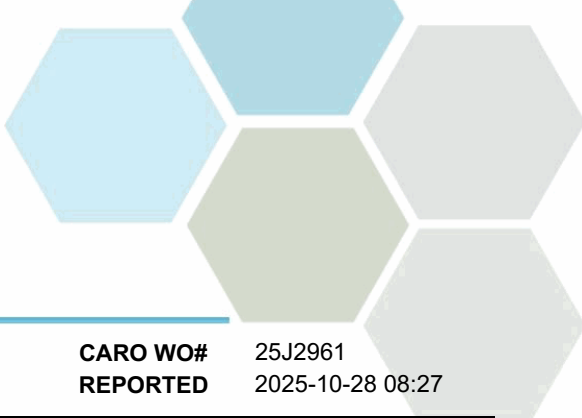
Blank (B5J4328-BLK7)		Prepared: 2025-10-22, Analyzed: 2025-10-22							
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							

Total Metals, Batch B5J4727

Blank (B5J4727-BLK1)		Prepared: 2025-10-24, Analyzed: 2025-10-24							
Mercury, total	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK2)		Prepared: 2025-10-24, Analyzed: 2025-10-24							
Mercury, total	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK3)		Prepared: 2025-10-24, Analyzed: 2025-10-24							
Mercury, total	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK4)		Prepared: 2025-10-24, Analyzed: 2025-10-24							
Mercury, total	< 0.000010	0.000010 mg/L							
LCS (B5J4727-BS1)		Prepared: 2025-10-24, Analyzed: 2025-10-24							
Mercury, total	0.00261	0.000010 mg/L	0.00250		105	80-120			
LCS (B5J4727-BS2)		Prepared: 2025-10-24, Analyzed: 2025-10-24							
Mercury, total	0.00286	0.000010 mg/L	0.00250		114	80-120			
LCS (B5J4727-BS3)		Prepared: 2025-10-24, Analyzed: 2025-10-24							
Mercury, total	0.00283	0.000010 mg/L	0.00250		113	80-120			
LCS (B5J4727-BS4)		Prepared: 2025-10-24, Analyzed: 2025-10-24							
Mercury, total	0.00262	0.000010 mg/L	0.00250		105	80-120			
Duplicate (B5J4727-DUP4)		Source: 25J2961-01		Prepared: 2025-10-24, Analyzed: 2025-10-24					
Mercury, total	< 0.000010	0.000010 mg/L		< 0.000010					20

Total Metals, Batch B5J4738

Blank (B5J4738-BLK1)		Prepared: 2025-10-24, Analyzed: 2025-10-24							
Aluminum, total	< 0.0050	0.0050 mg/L							
Antimony, total	< 0.00020	0.00020 mg/L							
Arsenic, total	< 0.00050	0.00050 mg/L							
Barium, total	< 0.0050	0.0050 mg/L							
Beryllium, total	< 0.00010	0.00010 mg/L							
Bismuth, total	< 0.00010	0.00010 mg/L							
Boron, total	< 0.0500	0.0500 mg/L							
Cadmium, total	< 0.000010	0.000010 mg/L							
Calcium, total	< 0.20	0.20 mg/L							
Chromium, total	< 0.00050	0.00050 mg/L							
Cobalt, total	< 0.00010	0.00010 mg/L							
Copper, total	< 0.00040	0.00040 mg/L							
Iron, total	< 0.010	0.010 mg/L							
Lead, total	< 0.00020	0.00020 mg/L							
Lithium, total	< 0.00010	0.00010 mg/L							
Magnesium, total	< 0.010	0.010 mg/L							
Manganese, total	< 0.00020	0.00020 mg/L							
Molybdenum, total	< 0.00010	0.00010 mg/L							
Nickel, total	< 0.00040	0.00040 mg/L							
Phosphorus, total	< 0.050	0.050 mg/L							

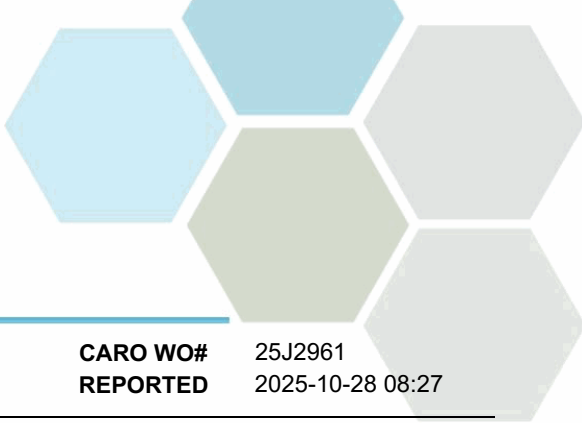


APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2961
2025-10-28 08:27

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Total Metals, Batch B5J4738, Continued									
Blank (B5J4738-BLK1), Continued					Prepared: 2025-10-24, Analyzed: 2025-10-24				
Potassium, total	< 0.10	0.10 mg/L							
Selenium, total	< 0.00050	0.00050 mg/L							
Silicon, total	< 1.0	1.0 mg/L							
Silver, total	< 0.000050	0.000050 mg/L							
Sodium, total	< 0.10	0.10 mg/L							
Strontium, total	< 0.0010	0.0010 mg/L							
Sulfur, total	< 3.0	3.0 mg/L							
Tellurium, total	< 0.00050	0.00050 mg/L							
Thallium, total	< 0.000020	0.000020 mg/L							
Thorium, total	< 0.00010	0.00010 mg/L							
Tin, total	< 0.00020	0.00020 mg/L							
Titanium, total	< 0.0050	0.0050 mg/L							
Tungsten, total	< 0.0010	0.0010 mg/L							
Uranium, total	< 0.000020	0.000020 mg/L							
Vanadium, total	< 0.0050	0.0050 mg/L							
Zinc, total	< 0.0040	0.0040 mg/L							
Zirconium, total	< 0.00010	0.00010 mg/L							
LCS (B5J4738-BS1)					Prepared: 2025-10-24, Analyzed: 2025-10-24				
Aluminum, total	3.84	0.0050 mg/L	4.00		96	80-120			
Antimony, total	0.0396	0.00020 mg/L	0.0400		99	80-120			
Arsenic, total	0.380	0.00050 mg/L	0.400		95	80-120			
Barium, total	0.0398	0.0050 mg/L	0.0400		100	80-120			
Beryllium, total	0.0380	0.00010 mg/L	0.0400		95	80-120			
Bismuth, total	0.0391	0.00010 mg/L	0.0400		98	80-120			
Boron, total	0.392	0.0500 mg/L	0.400		98	80-120			
Cadmium, total	0.0390	0.000010 mg/L	0.0400		98	80-120			
Calcium, total	3.91	0.20 mg/L	4.00		98	80-120			
Chromium, total	0.0385	0.00050 mg/L	0.0400		96	80-120			
Cobalt, total	0.0386	0.00010 mg/L	0.0400		96	80-120			
Copper, total	0.0382	0.00040 mg/L	0.0400		95	80-120			
Iron, total	3.87	0.010 mg/L	4.00		97	80-120			
Lead, total	0.0393	0.00020 mg/L	0.0400		98	80-120			
Lithium, total	0.0382	0.00010 mg/L	0.0400		95	80-120			
Magnesium, total	3.88	0.010 mg/L	4.00		97	80-120			
Manganese, total	0.0387	0.00020 mg/L	0.0400		97	80-120			
Molybdenum, total	0.0392	0.00010 mg/L	0.0400		98	80-120			
Nickel, total	0.0381	0.00040 mg/L	0.0400		95	80-120			
Phosphorus, total	3.94	0.050 mg/L	4.00		99	80-120			
Potassium, total	3.91	0.10 mg/L	4.00		98	80-120			
Selenium, total	0.391	0.00050 mg/L	0.400		98	80-120			
Silicon, total	3.8	1.0 mg/L	4.00		95	80-120			
Silver, total	0.0391	0.000050 mg/L	0.0400		98	80-120			
Sodium, total	3.76	0.10 mg/L	4.00		94	80-120			
Strontium, total	0.0393	0.0010 mg/L	0.0400		98	80-120			
Sulfur, total	39.9	3.0 mg/L	40.0		100	80-120			
Tellurium, total	0.0381	0.00050 mg/L	0.0400		95	80-120			
Thallium, total	0.0401	0.000020 mg/L	0.0400		100	80-120			
Thorium, total	0.0402	0.00010 mg/L	0.0400		101	80-120			
Tin, total	0.0406	0.00020 mg/L	0.0400		101	80-120			
Titanium, total	0.0380	0.0050 mg/L	0.0400		95	80-120			
Tungsten, total	0.0384	0.0010 mg/L	0.0400		96	80-120			
Uranium, total	0.0404	0.000020 mg/L	0.0400		101	80-120			
Vanadium, total	0.0380	0.0050 mg/L	0.0400		95	80-120			
Zinc, total	0.379	0.0040 mg/L	0.400		95	80-120			
Zirconium, total	0.0397	0.00010 mg/L	0.0400		99	80-120			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# 25J2961
REPORTED 2025-10-28 08:27

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
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CERTIFICATE OF ANALYSIS

REPORTED TO	Regional District of Okanagan Similkameen 101 Martin Street Penticton, BC V2A 5J9		
ATTENTION	Rob Palmer	WORK ORDER	25J2967
PO NUMBER	20259001- TLDW	RECEIVED / TEMP REPORTED	2025-10-22 10:30 / 11°C 2025-10-28 09:02
PROJECT	OK Falls - TLDW	COC NUMBER	eCOC#00029115
PROJECT INFO			

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

Big Picture Sidekicks



You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry



It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve



Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

Work Order Comments:

Custody Seals Intact: N/A

By engaging our services, you are agreeing to CARO Analytical Service's Standard Terms and Conditions outlined here: <https://www.caro.ca/terms-conditions>

If you have any questions or concerns, please contact me at hhannaoui@caro.ca

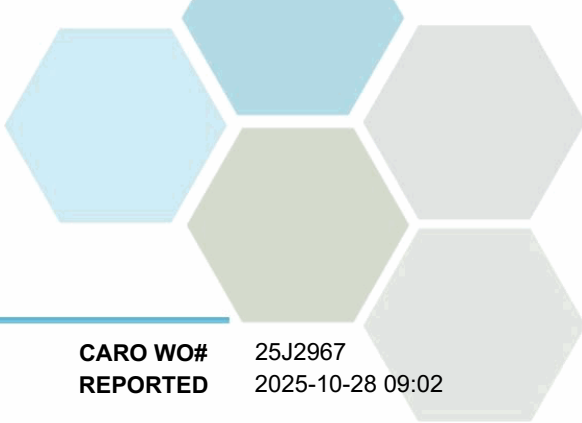
Authorized By:

Hanane El Hannaoui
Junior Account Manager



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#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 | #108 4475 Wayburne Drive Burnaby, BC V5G 4X4

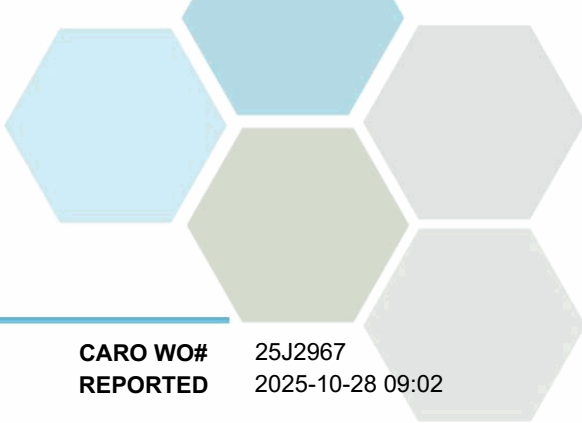


TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2967
2025-10-28 09:02

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
3805 Allendale Lake Road (25J2967-01) Matrix: Drinking Water Sampled: 2025-10-21 13:20					
Anions					
Bromide	< 0.10	N/A	0.10 mg/L	2025-10-23	
Chloride	1.41	AO ≤ 250	0.10 mg/L	2025-10-23	
Fluoride	0.12	MAC = 1.5	0.10 mg/L	2025-10-23	
Nitrate (as N)	0.052	MAC = 10	0.010 mg/L	2025-10-23	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2025-10-23	
Sulfate	13.6	AO ≤ 500	1.0 mg/L	2025-10-23	
Calculated Parameters					
Bicarbonate (HCO ₃)	83.9	N/A	1.22 mg/L	N/A	
Carbonate (CO ₃)	< 0.600	N/A	0.600 mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340 mg/L	N/A	
Hardness, Dissolved (as CaCO ₃)	61.3	N/A	0.500 mg/L	N/A	
Nitrate+Nitrite (as N)	0.0519	N/A	0.0100 mg/L	N/A	
Dissolved Metals					
Aluminum, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-10-23	
Antimony, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-10-23	
Arsenic, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-10-23	
Barium, dissolved	0.0144	N/A	0.0050 mg/L	2025-10-23	
Beryllium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-10-23	
Bismuth, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-10-23	
Boron, dissolved	< 0.0500	N/A	0.0500 mg/L	2025-10-23	
Cadmium, dissolved	0.000025	N/A	0.000010 mg/L	2025-10-23	
Calcium, dissolved	19.0	N/A	0.20 mg/L	2025-10-23	
Chromium, dissolved	0.00129	N/A	0.00050 mg/L	2025-10-23	
Cobalt, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-10-23	
Copper, dissolved	0.00544	N/A	0.00040 mg/L	2025-10-23	
Iron, dissolved	< 0.010	N/A	0.010 mg/L	2025-10-23	
Lead, dissolved	0.00058	N/A	0.00020 mg/L	2025-10-23	
Lithium, dissolved	0.00167	N/A	0.00010 mg/L	2025-10-23	
Magnesium, dissolved	3.38	N/A	0.010 mg/L	2025-10-23	
Manganese, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-10-23	
Mercury, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-10-24	
Molybdenum, dissolved	0.00032	N/A	0.00010 mg/L	2025-10-23	
Nickel, dissolved	0.00076	N/A	0.00040 mg/L	2025-10-23	
Phosphorus, dissolved	< 0.050	N/A	0.050 mg/L	2025-10-23	
Potassium, dissolved	1.08	N/A	0.10 mg/L	2025-10-23	
Selenium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-10-23	
Silicon, dissolved	8.9	N/A	1.0 mg/L	2025-10-23	
Silver, dissolved	< 0.000050	N/A	0.000050 mg/L	2025-10-23	
Sodium, dissolved	5.49	N/A	0.10 mg/L	2025-10-23	
Strontium, dissolved	0.164	N/A	0.0010 mg/L	2025-10-23	
Sulfur, dissolved	4.7	N/A	3.0 mg/L	2025-10-23	
Tellurium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-10-23	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2967
2025-10-28 09:02

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
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3805 Allendale Lake Road (25J2967-01) | Matrix: Drinking Water | Sampled: 2025-10-21 13:20, Continued

Dissolved Metals, Continued

Thallium, dissolved	< 0.000020	N/A	0.000020 mg/L	2025-10-23	
Thorium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-10-23	
Tin, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-10-23	
Titanium, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-10-23	
Tungsten, dissolved	< 0.0010	N/A	0.0010 mg/L	2025-10-23	
Uranium, dissolved	0.000298	N/A	0.000020 mg/L	2025-10-23	
Vanadium, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-10-23	
Zinc, dissolved	0.0046	N/A	0.0040 mg/L	2025-10-23	
Zirconium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-10-23	

General Parameters

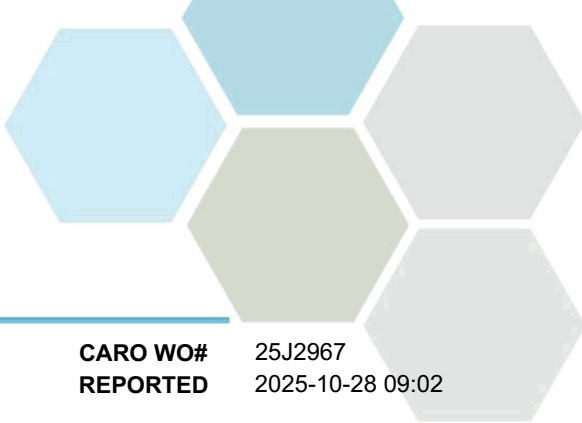
Alkalinity, Total (as CaCO3)	68.8	N/A	1.0 mg/L	2025-10-24	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-10-24	
Alkalinity, Bicarbonate (as CaCO3)	68.8	N/A	1.0 mg/L	2025-10-24	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-10-24	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-10-24	
Ammonia, Total (as N)	< 0.050	None Required	0.050 mg/L	2025-10-25	
Chemical Oxygen Demand	< 20	N/A	20 mg/L	2025-10-25	
Conductivity (EC)	151	N/A	2.0 µS/cm	2025-10-24	
pH	6.95	7.0-10.5	0.10 pH units	2025-10-24	HT2

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1 CFU/100 mL	2025-10-22	
E. coli	< 1	MAC = 0	1 CFU/100 mL	2025-10-22	

Total Metals

Aluminum, total	< 0.0050	OG < 0.1	0.0050 mg/L	2025-10-24	
Antimony, total	< 0.00020	MAC = 0.006	0.00020 mg/L	2025-10-24	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050 mg/L	2025-10-24	
Barium, total	0.0150	MAC = 2	0.0050 mg/L	2025-10-24	
Beryllium, total	< 0.00010	N/A	0.00010 mg/L	2025-10-24	
Bismuth, total	< 0.00010	N/A	0.00010 mg/L	2025-10-24	
Boron, total	< 0.0500	MAC = 5	0.0500 mg/L	2025-10-24	
Cadmium, total	0.000022	MAC = 0.007	0.000010 mg/L	2025-10-24	
Calcium, total	18.8	None Required	0.20 mg/L	2025-10-24	
Chromium, total	0.00134	MAC = 0.05	0.00050 mg/L	2025-10-24	
Cobalt, total	< 0.00010	N/A	0.00010 mg/L	2025-10-24	
Copper, total	0.00590	MAC = 2	0.00040 mg/L	2025-10-24	
Iron, total	< 0.010	AO ≤ 0.1	0.010 mg/L	2025-10-24	
Lead, total	0.00047	MAC = 0.005	0.00020 mg/L	2025-10-24	
Lithium, total	0.00180	N/A	0.00010 mg/L	2025-10-24	
Magnesium, total	3.51	None Required	0.010 mg/L	2025-10-24	
Manganese, total	< 0.00020	MAC = 0.12	0.00020 mg/L	2025-10-24	
Mercury, total	< 0.000010	MAC = 0.001	0.000010 mg/L	2025-10-24	
Molybdenum, total	0.00036	N/A	0.00010 mg/L	2025-10-24	



TEST RESULTS

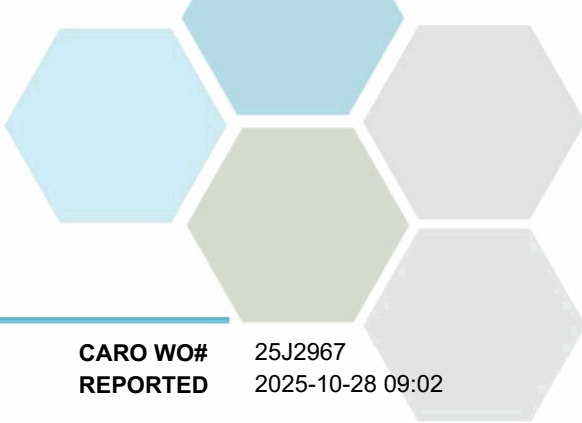
REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2967
2025-10-28 09:02

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
3805 Allendale Lake Road (25J2967-01) Matrix: Drinking Water Sampled: 2025-10-21 13:20, Continued					
<i>Total Metals, Continued</i>					
Nickel, total	0.00076	N/A	0.00040 mg/L	2025-10-24	
Phosphorus, total	< 0.050	N/A	0.050 mg/L	2025-10-24	
Potassium, total	1.10	N/A	0.10 mg/L	2025-10-24	
Selenium, total	< 0.00050	MAC = 0.05	0.00050 mg/L	2025-10-24	
Silicon, total	9.0	N/A	1.0 mg/L	2025-10-24	
Silver, total	< 0.000050	None Required	0.000050 mg/L	2025-10-24	
Sodium, total	5.43	AO ≤ 200	0.10 mg/L	2025-10-24	
Strontium, total	0.167	MAC = 7	0.0010 mg/L	2025-10-24	
Sulfur, total	4.8	N/A	3.0 mg/L	2025-10-24	
Tellurium, total	< 0.00050	N/A	0.00050 mg/L	2025-10-24	
Thallium, total	< 0.000020	N/A	0.000020 mg/L	2025-10-24	
Thorium, total	< 0.00010	N/A	0.00010 mg/L	2025-10-24	
Tin, total	< 0.00020	N/A	0.00020 mg/L	2025-10-24	
Titanium, total	< 0.0050	N/A	0.0050 mg/L	2025-10-24	
Tungsten, total	< 0.0010	N/A	0.0010 mg/L	2025-10-24	
Uranium, total	0.000322	MAC = 0.02	0.000020 mg/L	2025-10-24	
Vanadium, total	< 0.0050	N/A	0.0050 mg/L	2025-10-24	
Zinc, total	0.0041	AO ≤ 5	0.0040 mg/L	2025-10-24	
Zirconium, total	< 0.00010	N/A	0.00010 mg/L	2025-10-24	

Sample Qualifiers:

HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

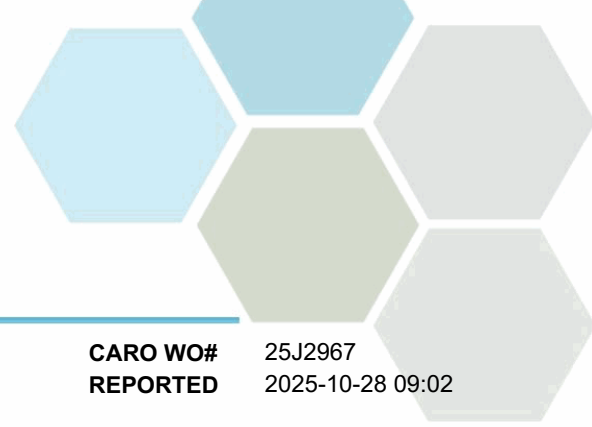
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Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Chemical Oxygen Demand in Water	SM 5220 D* (2022)	Closed Reflux, Colorimetry	✓	Kelowna
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Kelowna
Dissolved Metals in Water	EPA 200.8 / EPA 6020B	0.45 µm Filtration / Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)	✓	Richmond
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
Hardness in Water	SM 2340 B (2021)	Calculation: 2.497 [diss Ca] + 4.118 [diss Mg]	✓	N/A
Mercury, dissolved in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	✓	Richmond
Mercury, total in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	✓	Richmond
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)	✓	Richmond

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method

Glossary of Terms:

RL	Reporting Limit (default)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
AO	Aesthetic Objective
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
OG	Operational Guideline (treated water)
pH units	pH < 7 = acidic, pH > 7 = basic
µS/cm	Microsiemens per centimetre
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO Regional District of Okanagan Similkameen
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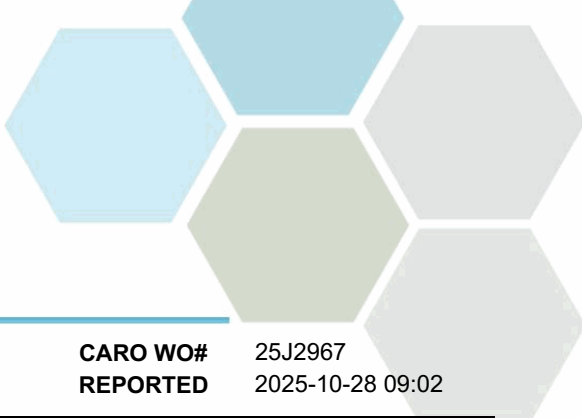
CARO WO# 25J2967
REPORTED 2025-10-28 09:02

General Comments:

The results in this report apply to the received samples analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety. CARO is not responsible for any loss or damage resulting directly or indirectly from error or omission in the conduct of testing. Liability is limited to the cost of analysis. Samples will be disposed of 30 days after the test report has been issued or once samples expire, whichever comes first. Longer hold is possible if agreed to in writing.

Results in **Bold** indicate values that are above CARO's method reporting limits. Any results that are above regulatory limits are highlighted **red**. Please note that results will only be highlighted red if the regulatory limits are included on the CARO report. Any Bold and/or highlighted results do not take into account method uncertainty. If you would like method uncertainty or regulatory limits to be included on your report, please contact your Account Manager: [{@Email}](#)

Please note any regulatory guidelines applied to this report are added as a convenience to the client, at their request, to help provide some initial context to analytical results obtained. Although CARO makes every effort to ensure accuracy of the associated regulatory guideline(s) applied, the guidelines applied cannot be assumed to be correct due to a variety of factors and as such CARO Analytical Services assumes no liability or responsibility for the use of those guidelines to make any decisions. The original source of the regulation should be verified and a review of the guideline(s) should be validated as correct in order to make any decisions arising from the comparison of the analytical data obtained to the relevant regulatory guideline for one's particular circumstances. Further, CARO Analytical Services assumes no liability



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
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The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

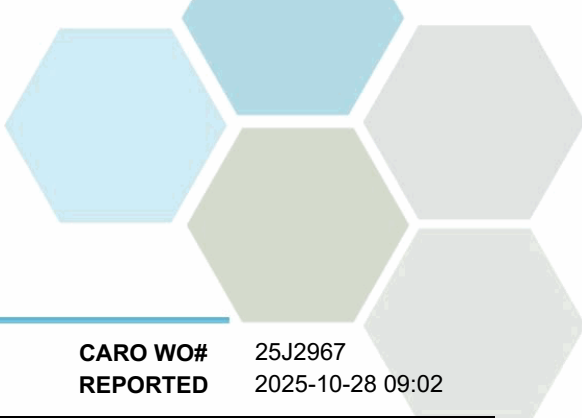
- **Method Blank (Blk):** A blank sample that undergoes sample processing identical to that carried out for the test samples. Method blank results are used to assess contamination from the laboratory environment and reagents.
- **Duplicate (Dup):** An additional or second portion of a randomly selected sample in the analytical run carried through the entire analytical process. Duplicates provide a measure of the analytical method's precision (reproducibility).
- **Blank Spike (BS):** A sample of known concentration which undergoes processing identical to that carried out for test samples, also referred to as a laboratory control sample (LCS). Blank spikes provide a measure of the analytical method's accuracy.
- **Matrix Spike (MS):** A second aliquot of sample is fortified with a known concentration of target analytes and carried through the entire analytical process. Matrix spikes evaluate potential matrix effects that may affect the analyte recovery.
- **Reference Material (SRM):** A homogenous material of similar matrix to the samples, certified for the parameter(s) listed. Reference Materials ensure that the analytical process is adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10-20 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Anions, Batch B5J4573									
Blank (B5J4573-BLK1)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Bromide	< 0.10	0.10 mg/L							
Chloride	< 0.10	0.10 mg/L							
Fluoride	< 0.10	0.10 mg/L							
Nitrate (as N)	< 0.010	0.010 mg/L							
Nitrite (as N)	< 0.010	0.010 mg/L							
Sulfate	< 1.0	1.0 mg/L							
LCS (B5J4573-BS1)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Bromide	4.06	0.10 mg/L	4.00		101	85-115			
Chloride	16.0	0.10 mg/L	16.0		100	90-110			
Fluoride	4.08	0.10 mg/L	4.00		102	88-108			
Nitrate (as N)	4.08	0.010 mg/L	4.00		102	90-110			
Nitrite (as N)	1.99	0.010 mg/L	2.00		99	85-115			
Sulfate	16.1	1.0 mg/L	16.0		101	90-110			

Dissolved Metals, Batch B5J4582

Blank (B5J4582-BLK1)			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Aluminum, dissolved	< 0.0050	0.0050 mg/L							
Antimony, dissolved	< 0.00020	0.00020 mg/L							
Arsenic, dissolved	< 0.00050	0.00050 mg/L							
Barium, dissolved	< 0.0050	0.0050 mg/L							
Beryllium, dissolved	< 0.00010	0.00010 mg/L							
Bismuth, dissolved	< 0.00010	0.00010 mg/L							
Boron, dissolved	< 0.0500	0.0500 mg/L							
Cadmium, dissolved	< 0.000010	0.000010 mg/L							
Calcium, dissolved	< 0.20	0.20 mg/L							
Chromium, dissolved	< 0.00050	0.00050 mg/L							
Cobalt, dissolved	< 0.00010	0.00010 mg/L							
Copper, dissolved	< 0.00040	0.00040 mg/L							
Iron, dissolved	< 0.010	0.010 mg/L							
Lead, dissolved	< 0.00020	0.00020 mg/L							
Lithium, dissolved	< 0.00010	0.00010 mg/L							
Magnesium, dissolved	< 0.010	0.010 mg/L							
Manganese, dissolved	< 0.00020	0.00020 mg/L							
Molybdenum, dissolved	< 0.00010	0.00010 mg/L							

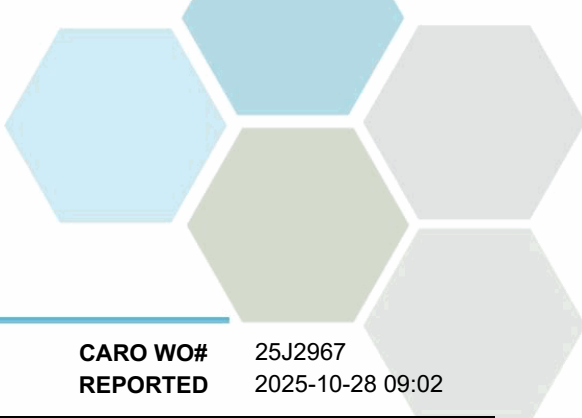


APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2967
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Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Dissolved Metals, Batch B5J4582, Continued									
Blank (B5J4582-BLK1), Continued					Prepared: 2025-10-23, Analyzed: 2025-10-23				
Nickel, dissolved	< 0.00040	0.00040 mg/L							
Phosphorus, dissolved	< 0.050	0.050 mg/L							
Potassium, dissolved	< 0.10	0.10 mg/L							
Selenium, dissolved	< 0.00050	0.00050 mg/L							
Silicon, dissolved	< 1.0	1.0 mg/L							
Silver, dissolved	< 0.000050	0.000050 mg/L							
Sodium, dissolved	< 0.10	0.10 mg/L							
Strontium, dissolved	< 0.0010	0.0010 mg/L							
Sulfur, dissolved	< 3.0	3.0 mg/L							
Tellurium, dissolved	< 0.00050	0.00050 mg/L							
Thallium, dissolved	< 0.000020	0.000020 mg/L							
Thorium, dissolved	< 0.00010	0.00010 mg/L							
Tin, dissolved	< 0.00020	0.00020 mg/L							
Titanium, dissolved	< 0.0050	0.0050 mg/L							
Tungsten, dissolved	< 0.0010	0.0010 mg/L							
Uranium, dissolved	< 0.000020	0.000020 mg/L							
Vanadium, dissolved	< 0.0050	0.0050 mg/L							
Zinc, dissolved	< 0.0040	0.0040 mg/L							
Zirconium, dissolved	< 0.00010	0.00010 mg/L							
LCS (B5J4582-BS1)					Prepared: 2025-10-23, Analyzed: 2025-10-23				
Aluminum, dissolved	3.97	0.0050 mg/L	4.00		99	80-120			
Antimony, dissolved	0.0402	0.00020 mg/L	0.0400		100	80-120			
Arsenic, dissolved	0.400	0.00050 mg/L	0.400		100	80-120			
Barium, dissolved	0.0395	0.0050 mg/L	0.0400		99	80-120			
Beryllium, dissolved	0.0397	0.00010 mg/L	0.0400		99	80-120			
Bismuth, dissolved	0.0401	0.00010 mg/L	0.0400		100	80-120			
Boron, dissolved	0.402	0.0500 mg/L	0.400		100	80-120			
Cadmium, dissolved	0.0404	0.000010 mg/L	0.0400		101	80-120			
Calcium, dissolved	4.03	0.20 mg/L	4.00		101	80-120			
Chromium, dissolved	0.0401	0.00050 mg/L	0.0400		100	80-120			
Cobalt, dissolved	0.0399	0.00010 mg/L	0.0400		100	80-120			
Copper, dissolved	0.0400	0.00040 mg/L	0.0400		100	80-120			
Iron, dissolved	4.04	0.010 mg/L	4.00		101	80-120			
Lead, dissolved	0.0400	0.00020 mg/L	0.0400		100	80-120			
Lithium, dissolved	0.0391	0.00010 mg/L	0.0400		98	80-120			
Magnesium, dissolved	3.97	0.010 mg/L	4.00		99	80-120			
Manganese, dissolved	0.0407	0.00020 mg/L	0.0400		102	80-120			
Molybdenum, dissolved	0.0397	0.00010 mg/L	0.0400		99	80-120			
Nickel, dissolved	0.0402	0.00040 mg/L	0.0400		101	80-120			
Phosphorus, dissolved	3.99	0.050 mg/L	4.00		100	80-120			
Potassium, dissolved	3.99	0.10 mg/L	4.00		100	80-120			
Selenium, dissolved	0.402	0.00050 mg/L	0.400		101	80-120			
Silicon, dissolved	3.8	1.0 mg/L	4.00		95	80-120			
Silver, dissolved	0.0394	0.000050 mg/L	0.0400		99	80-120			
Sodium, dissolved	4.05	0.10 mg/L	4.00		101	80-120			
Strontium, dissolved	0.0404	0.0010 mg/L	0.0400		101	80-120			
Sulfur, dissolved	40.5	3.0 mg/L	40.0		101	80-120			
Tellurium, dissolved	0.0407	0.00050 mg/L	0.0400		102	80-120			
Thallium, dissolved	0.0405	0.000020 mg/L	0.0400		101	80-120			
Thorium, dissolved	0.0398	0.00010 mg/L	0.0400		99	80-120			
Tin, dissolved	0.0398	0.00020 mg/L	0.0400		99	80-120			
Titanium, dissolved	0.0398	0.0050 mg/L	0.0400		99	80-120			
Tungsten, dissolved	0.0399	0.0010 mg/L	0.0400		100	80-120			
Uranium, dissolved	0.0403	0.000020 mg/L	0.0400		101	80-120			
Vanadium, dissolved	0.0410	0.0050 mg/L	0.0400		102	80-120			

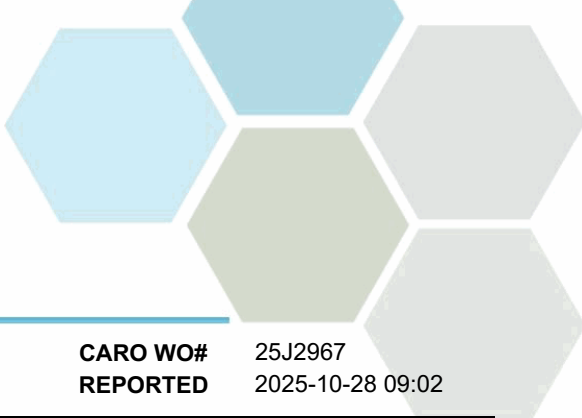


APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2967
2025-10-28 09:02

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Dissolved Metals, Batch B5J4582, Continued									
LCS (B5J4582-BS1), Continued			Prepared: 2025-10-23, Analyzed: 2025-10-23						
Zinc, dissolved	0.404	0.0040 mg/L	0.400		101	80-120			
Zirconium, dissolved	0.0401	0.00010 mg/L	0.0400		100	80-120			
Dissolved Metals, Batch B5J4727									
Blank (B5J4727-BLK1)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK2)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK3)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK4)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	< 0.000010	0.000010 mg/L							
LCS (B5J4727-BS1)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	0.00261	0.000010 mg/L	0.00250		105	80-120			
LCS (B5J4727-BS2)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	0.00286	0.000010 mg/L	0.00250		114	80-120			
LCS (B5J4727-BS3)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	0.00283	0.000010 mg/L	0.00250		113	80-120			
LCS (B5J4727-BS4)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, dissolved	0.00262	0.000010 mg/L	0.00250		105	80-120			
General Parameters, Batch B5J4633									
Blank (B5J4633-BLK1)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Alkalinity, Total (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
LCS (B5J4633-BS1)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Alkalinity, Total (as CaCO ₃)	101	1.0 mg/L	100		101	80-120			
LCS (B5J4633-BS2)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Conductivity (EC)	1410	2.0 µS/cm	1410		100	95-105			
Reference (B5J4633-SRM1)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
pH	7.01	0.10 pH units	7.01		100	98-102			
General Parameters, Batch B5J4646									
Blank (B5J4646-BLK1)			Prepared: 2025-10-25, Analyzed: 2025-10-25						
Chemical Oxygen Demand	< 20	20 mg/L							
LCS (B5J4646-BS1)			Prepared: 2025-10-25, Analyzed: 2025-10-25						
Chemical Oxygen Demand	512	20 mg/L	500		102	89-115			

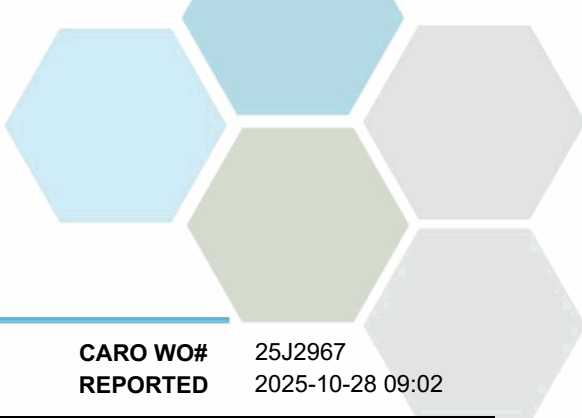


APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

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Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
General Parameters, Batch B5J4816									
Blank (B5J4816-BLK1)			Prepared: 2025-10-25, Analyzed: 2025-10-25						
Ammonia, Total (as N)	< 0.050	0.050 mg/L							
LCS (B5J4816-BS1)			Prepared: 2025-10-25, Analyzed: 2025-10-25						
Ammonia, Total (as N)	1.05	0.050 mg/L	1.00		105	85-115			
Microbiological Parameters, Batch B5J4328									
Blank (B5J4328-BLK1)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Blank (B5J4328-BLK2)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Blank (B5J4328-BLK3)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Blank (B5J4328-BLK4)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Blank (B5J4328-BLK5)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Blank (B5J4328-BLK6)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Blank (B5J4328-BLK7)			Prepared: 2025-10-22, Analyzed: 2025-10-22						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Total Metals, Batch B5J4727									
Blank (B5J4727-BLK1)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, total	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK2)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, total	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK3)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, total	< 0.000010	0.000010 mg/L							
Blank (B5J4727-BLK4)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, total	< 0.000010	0.000010 mg/L							
LCS (B5J4727-BS1)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, total	0.00261	0.000010 mg/L	0.00250		105	80-120			
LCS (B5J4727-BS2)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, total	0.00286	0.000010 mg/L	0.00250		114	80-120			
LCS (B5J4727-BS3)			Prepared: 2025-10-24, Analyzed: 2025-10-24						
Mercury, total	0.00283	0.000010 mg/L	0.00250		113	80-120			



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Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
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Total Metals, Batch B5J4727, Continued

LCS (B5J4727-BS4)

Prepared: 2025-10-24, Analyzed: 2025-10-24

Mercury, total	0.00262	0.000010 mg/L	0.00250		105	80-120			
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Total Metals, Batch B5J4738

Blank (B5J4738-BLK1)

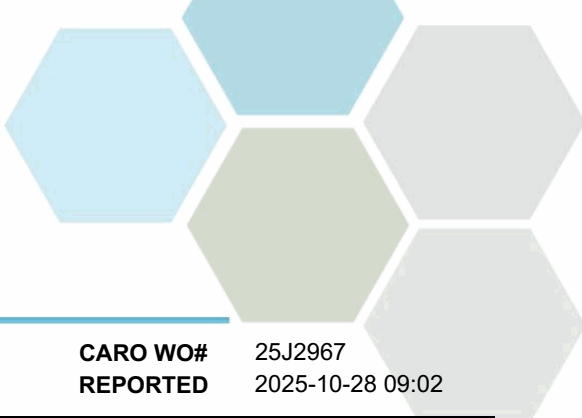
Prepared: 2025-10-24, Analyzed: 2025-10-24

Aluminum, total	< 0.0050	0.0050 mg/L							
Antimony, total	< 0.00020	0.00020 mg/L							
Arsenic, total	< 0.00050	0.00050 mg/L							
Barium, total	< 0.0050	0.0050 mg/L							
Beryllium, total	< 0.00010	0.00010 mg/L							
Bismuth, total	< 0.00010	0.00010 mg/L							
Boron, total	< 0.0500	0.0500 mg/L							
Cadmium, total	< 0.000010	0.000010 mg/L							
Calcium, total	< 0.20	0.20 mg/L							
Chromium, total	< 0.00050	0.00050 mg/L							
Cobalt, total	< 0.00010	0.00010 mg/L							
Copper, total	< 0.00040	0.00040 mg/L							
Iron, total	< 0.010	0.010 mg/L							
Lead, total	< 0.00020	0.00020 mg/L							
Lithium, total	< 0.00010	0.00010 mg/L							
Magnesium, total	< 0.010	0.010 mg/L							
Manganese, total	< 0.00020	0.00020 mg/L							
Molybdenum, total	< 0.00010	0.00010 mg/L							
Nickel, total	< 0.00040	0.00040 mg/L							
Phosphorus, total	< 0.050	0.050 mg/L							
Potassium, total	< 0.10	0.10 mg/L							
Selenium, total	< 0.00050	0.00050 mg/L							
Silicon, total	< 1.0	1.0 mg/L							
Silver, total	< 0.000050	0.000050 mg/L							
Sodium, total	< 0.10	0.10 mg/L							
Strontium, total	< 0.0010	0.0010 mg/L							
Sulfur, total	< 3.0	3.0 mg/L							
Tellurium, total	< 0.00050	0.00050 mg/L							
Thallium, total	< 0.000020	0.000020 mg/L							
Thorium, total	< 0.00010	0.00010 mg/L							
Tin, total	< 0.00020	0.00020 mg/L							
Titanium, total	< 0.0050	0.0050 mg/L							
Tungsten, total	< 0.0010	0.0010 mg/L							
Uranium, total	< 0.000020	0.000020 mg/L							
Vanadium, total	< 0.0050	0.0050 mg/L							
Zinc, total	< 0.0040	0.0040 mg/L							
Zirconium, total	< 0.00010	0.00010 mg/L							

LCS (B5J4738-BS1)

Prepared: 2025-10-24, Analyzed: 2025-10-24

Aluminum, total	3.84	0.0050 mg/L	4.00		96	80-120			
Antimony, total	0.0396	0.00020 mg/L	0.0400		99	80-120			
Arsenic, total	0.380	0.00050 mg/L	0.400		95	80-120			
Barium, total	0.0398	0.0050 mg/L	0.0400		100	80-120			
Beryllium, total	0.0380	0.00010 mg/L	0.0400		95	80-120			
Bismuth, total	0.0391	0.00010 mg/L	0.0400		98	80-120			
Boron, total	0.392	0.0500 mg/L	0.400		98	80-120			
Cadmium, total	0.0390	0.000010 mg/L	0.0400		98	80-120			
Calcium, total	3.91	0.20 mg/L	4.00		98	80-120			
Chromium, total	0.0385	0.00050 mg/L	0.0400		96	80-120			
Cobalt, total	0.0386	0.00010 mg/L	0.0400		96	80-120			
Copper, total	0.0382	0.00040 mg/L	0.0400		95	80-120			

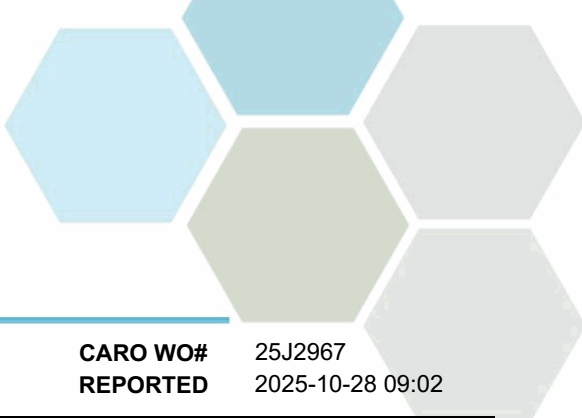


APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2967
2025-10-28 09:02

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Total Metals, Batch B5J4738, Continued									
LCS (B5J4738-BS1), Continued					Prepared: 2025-10-24, Analyzed: 2025-10-24				
Iron, total	3.87	0.010 mg/L	4.00		97	80-120			
Lead, total	0.0393	0.00020 mg/L	0.0400		98	80-120			
Lithium, total	0.0382	0.00010 mg/L	0.0400		95	80-120			
Magnesium, total	3.88	0.010 mg/L	4.00		97	80-120			
Manganese, total	0.0387	0.00020 mg/L	0.0400		97	80-120			
Molybdenum, total	0.0392	0.00010 mg/L	0.0400		98	80-120			
Nickel, total	0.0381	0.00040 mg/L	0.0400		95	80-120			
Phosphorus, total	3.94	0.050 mg/L	4.00		99	80-120			
Potassium, total	3.91	0.10 mg/L	4.00		98	80-120			
Selenium, total	0.391	0.00050 mg/L	0.400		98	80-120			
Silicon, total	3.8	1.0 mg/L	4.00		95	80-120			
Silver, total	0.0391	0.000050 mg/L	0.0400		98	80-120			
Sodium, total	3.76	0.10 mg/L	4.00		94	80-120			
Strontium, total	0.0393	0.0010 mg/L	0.0400		98	80-120			
Sulfur, total	39.9	3.0 mg/L	40.0		100	80-120			
Tellurium, total	0.0381	0.00050 mg/L	0.0400		95	80-120			
Thallium, total	0.0401	0.000020 mg/L	0.0400		100	80-120			
Thorium, total	0.0402	0.00010 mg/L	0.0400		101	80-120			
Tin, total	0.0406	0.00020 mg/L	0.0400		101	80-120			
Titanium, total	0.0380	0.0050 mg/L	0.0400		95	80-120			
Tungsten, total	0.0384	0.0010 mg/L	0.0400		96	80-120			
Uranium, total	0.0404	0.000020 mg/L	0.0400		101	80-120			
Vanadium, total	0.0380	0.0050 mg/L	0.0400		95	80-120			
Zinc, total	0.379	0.0040 mg/L	0.400		95	80-120			
Zirconium, total	0.0397	0.00010 mg/L	0.0400		99	80-120			
Duplicate (B5J4738-DUP1)			Source: 25J2967-01		Prepared: 2025-10-24, Analyzed: 2025-10-24				
Aluminum, total	< 0.0050	0.0050 mg/L		< 0.0050				20	
Antimony, total	< 0.00020	0.00020 mg/L		< 0.00020				20	
Arsenic, total	< 0.00050	0.00050 mg/L		< 0.00050				20	
Barium, total	0.0149	0.0050 mg/L		0.0150				20	
Beryllium, total	< 0.00010	0.00010 mg/L		< 0.00010				20	
Bismuth, total	< 0.00010	0.00010 mg/L		< 0.00010				20	
Boron, total	< 0.0500	0.0500 mg/L		< 0.0500				20	
Cadmium, total	0.000025	0.000010 mg/L		0.000022				20	
Calcium, total	18.9	0.20 mg/L		18.8		< 1		20	
Chromium, total	0.00133	0.00050 mg/L		0.00134				20	
Cobalt, total	< 0.00010	0.00010 mg/L		< 0.00010				20	
Copper, total	0.00578	0.00040 mg/L		0.00590			2	20	
Iron, total	< 0.010	0.010 mg/L		< 0.010				20	
Lead, total	0.00049	0.00020 mg/L		0.00047				20	
Lithium, total	0.00182	0.00010 mg/L		0.00180			1	20	
Magnesium, total	3.47	0.010 mg/L		3.51			1	20	
Manganese, total	< 0.00020	0.00020 mg/L		< 0.00020				20	
Molybdenum, total	0.00036	0.00010 mg/L		0.00036				20	
Nickel, total	0.00076	0.00040 mg/L		0.00076				20	
Phosphorus, total	< 0.050	0.050 mg/L		< 0.050				20	
Potassium, total	1.10	0.10 mg/L		1.10		< 1		20	
Selenium, total	< 0.00050	0.00050 mg/L		< 0.00050				20	
Silicon, total	9.2	1.0 mg/L		9.0			2	20	
Silver, total	< 0.000050	0.000050 mg/L		< 0.000050				20	
Sodium, total	5.48	0.10 mg/L		5.43		< 1		20	
Strontium, total	0.168	0.0010 mg/L		0.167		< 1		20	
Sulfur, total	5.0	3.0 mg/L		4.8				20	
Tellurium, total	< 0.00050	0.00050 mg/L		< 0.00050				20	



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
OK Falls - TLDW

CARO WO# REPORTED 25J2967
2025-10-28 09:02

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Total Metals, Batch B5J4738, Continued									
Duplicate (B5J4738-DUP1), Continued		Source: 25J2967-01		Prepared: 2025-10-24, Analyzed: 2025-10-24					
Thallium, total	< 0.000020	0.000020 mg/L		< 0.000020				20	
Thorium, total	< 0.00010	0.00010 mg/L		< 0.00010				20	
Tin, total	< 0.00020	0.00020 mg/L		< 0.00020				20	
Titanium, total	< 0.0050	0.0050 mg/L		< 0.0050				20	
Tungsten, total	< 0.0010	0.0010 mg/L		< 0.0010				20	
Uranium, total	0.000320	0.000020 mg/L		0.000322			< 1	20	
Vanadium, total	< 0.0050	0.0050 mg/L		< 0.0050				20	
Zinc, total	0.0040	0.0040 mg/L		0.0041				20	
Zirconium, total	< 0.00010	0.00010 mg/L		< 0.00010				20	

CERTIFICATE OF ANALYSIS

REPORTED TO Regional District of Okanagan Similkameen
101 Martin Street
Penticton, BC V2A 5J9

ATTENTION Rob Palmer

PO NUMBER 20259001-TLGW

PROJECT Ok Falls - TLGW

PROJECT INFO

WORK ORDER 25K0747

RECEIVED / TEMP 2025-11-06 10:14 / 8.9°C

REPORTED 2025-11-14 14:39

COC NUMBER eCOC#00029736

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

Big Picture Sidekicks



You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry



It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve



Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

Work Order Comments:

Custody Seals Intact: N/A

By engaging our services, you are agreeing to CARO Analytical Service's Standard Terms and Conditions outlined here: <https://www.caro.ca/terms-conditions>

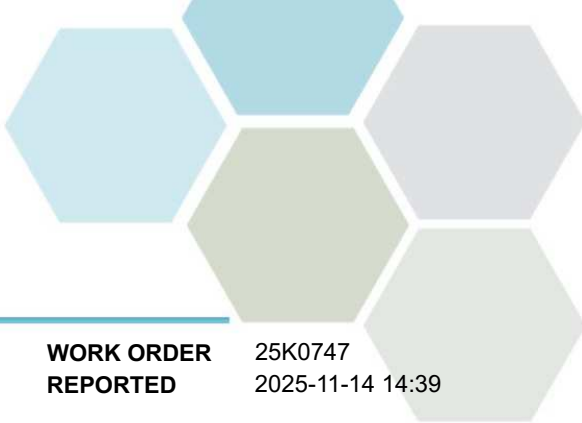
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 | #108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0747
2025-11-14 14:39

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
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BH-2S (25K0747-01) | Matrix: Ground Water | Sampled: 2025-11-05 11:50

Anions

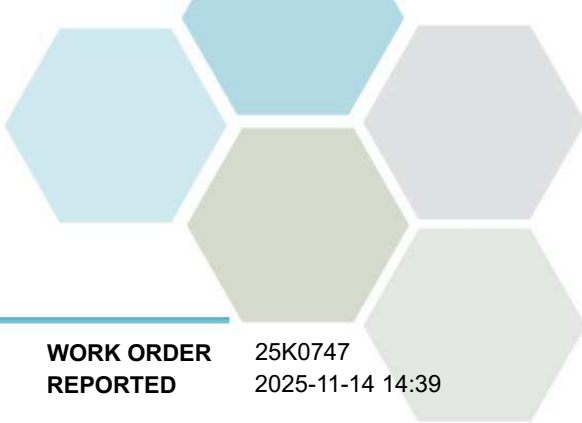
Bromide	0.35	N/A	0.10 mg/L	2025-11-07	
Chloride	55.7	AO ≤ 250	0.10 mg/L	2025-11-07	
Fluoride	0.52	MAC = 1.5	0.10 mg/L	2025-11-07	
Nitrate (as N)	0.931	MAC = 10	0.010 mg/L	2025-11-07	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2025-11-07	
Sulfate	128	AO ≤ 500	1.0 mg/L	2025-11-07	

Calculated Parameters

Bicarbonate (HCO3)	891	N/A	1.22 mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600 mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340 mg/L	N/A	
Hardness, Dissolved (as CaCO3)	650	N/A	0.500 mg/L	N/A	
Nitrate+Nitrite (as N)	0.931	N/A	0.0100 mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-11-13	
Antimony, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-11-13	
Arsenic, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-11-13	
Barium, dissolved	0.130	N/A	0.0050 mg/L	2025-11-13	
Beryllium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-11-13	
Bismuth, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-11-13	
Boron, dissolved	0.322	N/A	0.0500 mg/L	2025-11-13	
Cadmium, dissolved	0.000016	N/A	0.000010 mg/L	2025-11-13	
Calcium, dissolved	175	N/A	0.20 mg/L	2025-11-13	
Chromium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-11-13	
Cobalt, dissolved	0.00066	N/A	0.00010 mg/L	2025-11-13	
Copper, dissolved	0.00213	N/A	0.00040 mg/L	2025-11-13	
Iron, dissolved	0.016	N/A	0.010 mg/L	2025-11-13	
Lead, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-11-13	
Lithium, dissolved	0.0212	N/A	0.00010 mg/L	2025-11-13	
Magnesium, dissolved	51.9	N/A	0.010 mg/L	2025-11-13	
Manganese, dissolved	0.342	N/A	0.00020 mg/L	2025-11-13	
Mercury, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-11-14	
Molybdenum, dissolved	0.00657	N/A	0.00010 mg/L	2025-11-13	
Nickel, dissolved	0.00263	N/A	0.00040 mg/L	2025-11-13	
Phosphorus, dissolved	< 0.050	N/A	0.050 mg/L	2025-11-13	
Potassium, dissolved	5.97	N/A	0.10 mg/L	2025-11-13	
Selenium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-11-13	
Silicon, dissolved	10.9	N/A	1.0 mg/L	2025-11-13	
Silver, dissolved	< 0.000050	N/A	0.000050 mg/L	2025-11-13	
Sodium, dissolved	98.8	N/A	0.10 mg/L	2025-11-13	
Strontium, dissolved	2.55	N/A	0.0010 mg/L	2025-11-13	
Sulfur, dissolved	42.5	N/A	3.0 mg/L	2025-11-13	
Tellurium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-11-13	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0747
2025-11-14 14:39

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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BH-2S (25K0747-01) | Matrix: Ground Water | Sampled: 2025-11-05 11:50, Continued

Dissolved Metals, Continued

Thallium, dissolved	< 0.000020	N/A	0.000020	mg/L	2025-11-13	
Thorium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-11-13	
Tin, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-11-13	
Titanium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-11-13	
Tungsten, dissolved	< 0.0010	N/A	0.0010	mg/L	2025-11-13	
Uranium, dissolved	0.0519	N/A	0.000020	mg/L	2025-11-13	
Vanadium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-11-13	
Zinc, dissolved	< 0.0040	N/A	0.0040	mg/L	2025-11-13	
Zirconium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-11-13	

General Parameters

Alkalinity, Total (as CaCO3)	730	N/A	1.0	mg/L	2025-11-10	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-11-10	
Alkalinity, Bicarbonate (as CaCO3)	730	N/A	1.0	mg/L	2025-11-10	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-11-10	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-11-10	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-11-13	
Chemical Oxygen Demand	29	N/A	20	mg/L	2025-11-14	RE2
Conductivity (EC)	1590	N/A	2.0	µS/cm	2025-11-10	
pH	7.67	7.0-10.5	0.10	pH units	2025-11-10	HT2

MW 17-5D (25K0747-02) | Matrix: Ground Water | Sampled: 2025-11-05 14:52

Anions

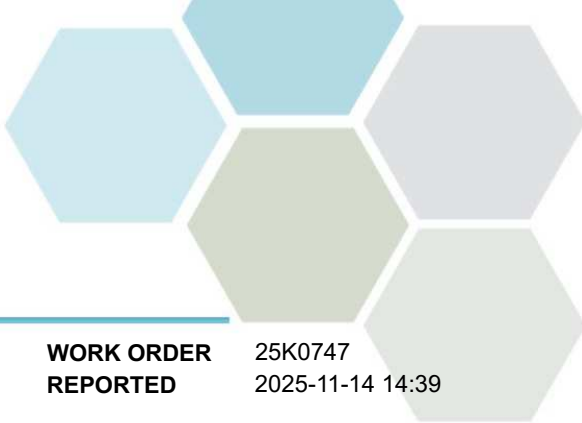
Bromide	< 0.10	N/A	0.10	mg/L	2025-11-07	
Chloride	12.6	AO ≤ 250	0.10	mg/L	2025-11-07	
Fluoride	0.52	MAC = 1.5	0.10	mg/L	2025-11-07	
Nitrate (as N)	< 0.010	MAC = 10	0.010	mg/L	2025-11-07	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-11-07	
Sulfate	37.1	AO ≤ 500	1.0	mg/L	2025-11-07	

Calculated Parameters

Bicarbonate (HCO3)	338	N/A	1.22	mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600	mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340	mg/L	N/A	
Hardness, Dissolved (as CaCO3)	250	N/A	0.500	mg/L	N/A	
Nitrate+Nitrite (as N)	< 0.0100	N/A	0.0100	mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-11-13	
Antimony, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-11-13	
Arsenic, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-11-13	
Barium, dissolved	0.0310	N/A	0.0050	mg/L	2025-11-13	
Beryllium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-11-13	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0747
2025-11-14 14:39

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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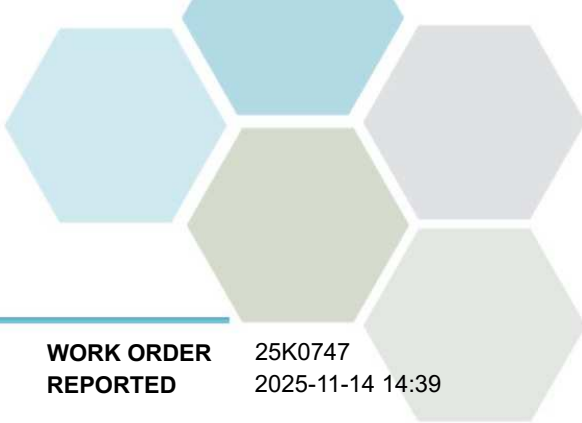
MW 17-5D (25K0747-02) | Matrix: Ground Water | Sampled: 2025-11-05 14:52, Continued

Dissolved Metals, Continued

Bismuth, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-11-13	
Boron, dissolved	< 0.0500	N/A	0.0500	mg/L	2025-11-13	
Cadmium, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-11-13	
Calcium, dissolved	62.0	N/A	0.20	mg/L	2025-11-13	
Chromium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-11-13	
Cobalt, dissolved	0.00033	N/A	0.00010	mg/L	2025-11-13	
Copper, dissolved	< 0.00040	N/A	0.00040	mg/L	2025-11-13	
Iron, dissolved	0.097	N/A	0.010	mg/L	2025-11-13	
Lead, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-11-13	
Lithium, dissolved	0.0228	N/A	0.00010	mg/L	2025-11-13	
Magnesium, dissolved	23.0	N/A	0.010	mg/L	2025-11-13	
Manganese, dissolved	0.117	N/A	0.00020	mg/L	2025-11-13	
Mercury, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-11-14	
Molybdenum, dissolved	0.00995	N/A	0.00010	mg/L	2025-11-13	
Nickel, dissolved	< 0.00040	N/A	0.00040	mg/L	2025-11-13	
Phosphorus, dissolved	< 0.050	N/A	0.050	mg/L	2025-11-13	
Potassium, dissolved	2.24	N/A	0.10	mg/L	2025-11-13	
Selenium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-11-13	
Silicon, dissolved	10.5	N/A	1.0	mg/L	2025-11-13	
Silver, dissolved	< 0.000050	N/A	0.000050	mg/L	2025-11-13	
Sodium, dissolved	28.7	N/A	0.10	mg/L	2025-11-13	
Strontium, dissolved	2.06	N/A	0.0010	mg/L	2025-11-13	
Sulfur, dissolved	12.1	N/A	3.0	mg/L	2025-11-13	
Tellurium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-11-13	
Thallium, dissolved	< 0.000020	N/A	0.000020	mg/L	2025-11-13	
Thorium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-11-13	
Tin, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-11-13	
Titanium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-11-13	
Tungsten, dissolved	< 0.0010	N/A	0.0010	mg/L	2025-11-13	
Uranium, dissolved	0.0129	N/A	0.000020	mg/L	2025-11-13	
Vanadium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-11-13	
Zinc, dissolved	0.0040	N/A	0.0040	mg/L	2025-11-13	
Zirconium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-11-13	

General Parameters

Alkalinity, Total (as CaCO3)	277	N/A	1.0	mg/L	2025-11-10	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-11-10	
Alkalinity, Bicarbonate (as CaCO3)	277	N/A	1.0	mg/L	2025-11-10	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-11-10	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-11-10	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-11-13	
Chemical Oxygen Demand	< 20	N/A	20	mg/L	2025-11-14	
Conductivity (EC)	590	N/A	2.0	µS/cm	2025-11-10	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0747
2025-11-14 14:39

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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MW 17-5D (25K0747-02) | Matrix: Ground Water | Sampled: 2025-11-05 14:52, Continued

General Parameters, Continued

pH	7.64	7.0-10.5	0.10	pH units	2025-11-10	HT2
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MW 17-4 (25K0747-03) | Matrix: Ground Water | Sampled: 2025-11-05 15:55

Anions

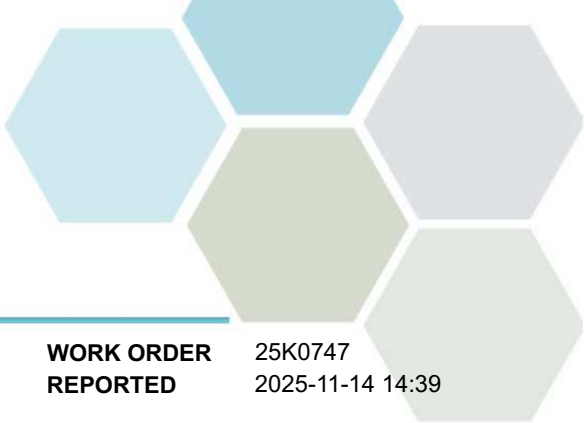
Bromide	0.17	N/A	0.10	mg/L	2025-11-07	
Chloride	47.0	AO ≤ 250	0.10	mg/L	2025-11-07	
Fluoride	0.52	MAC = 1.5	0.10	mg/L	2025-11-07	
Nitrate (as N)	0.911	MAC = 10	0.010	mg/L	2025-11-07	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-11-07	
Sulfate	87.3	AO ≤ 500	1.0	mg/L	2025-11-07	

Calculated Parameters

Bicarbonate (HCO ₃)	409	N/A	1.22	mg/L	N/A	
Carbonate (CO ₃)	< 0.600	N/A	0.600	mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340	mg/L	N/A	
Hardness, Dissolved (as CaCO ₃)	362	N/A	0.500	mg/L	N/A	
Nitrate+Nitrite (as N)	0.911	N/A	0.0100	mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-11-13	
Antimony, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-11-13	
Arsenic, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-11-13	
Barium, dissolved	0.0568	N/A	0.0050	mg/L	2025-11-13	
Beryllium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-11-13	
Bismuth, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-11-13	
Boron, dissolved	0.0639	N/A	0.0500	mg/L	2025-11-13	
Cadmium, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-11-13	
Calcium, dissolved	93.7	N/A	0.20	mg/L	2025-11-13	
Chromium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-11-13	
Cobalt, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-11-13	
Copper, dissolved	0.00069	N/A	0.00040	mg/L	2025-11-13	
Iron, dissolved	0.038	N/A	0.010	mg/L	2025-11-13	
Lead, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-11-13	
Lithium, dissolved	0.0203	N/A	0.00010	mg/L	2025-11-13	
Magnesium, dissolved	31.0	N/A	0.010	mg/L	2025-11-13	
Manganese, dissolved	0.00905	N/A	0.00020	mg/L	2025-11-13	
Mercury, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-11-14	
Molybdenum, dissolved	0.00631	N/A	0.00010	mg/L	2025-11-13	
Nickel, dissolved	0.00076	N/A	0.00040	mg/L	2025-11-13	
Phosphorus, dissolved	< 0.050	N/A	0.050	mg/L	2025-11-13	
Potassium, dissolved	4.03	N/A	0.10	mg/L	2025-11-13	
Selenium, dissolved	0.00070	N/A	0.00050	mg/L	2025-11-13	



TEST RESULTS

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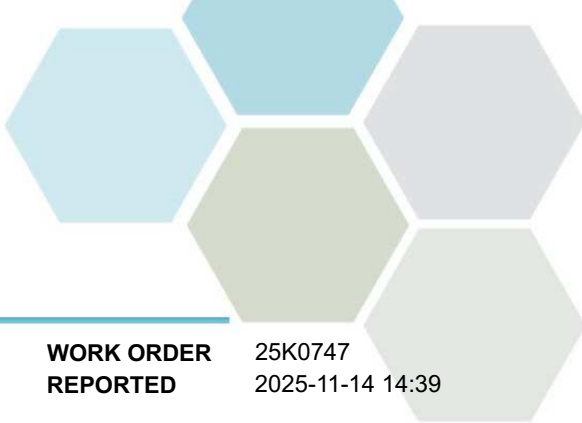
Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
MW 17-4 (25K0747-03) Matrix: Ground Water Sampled: 2025-11-05 15:55, Continued					
<i>Dissolved Metals, Continued</i>					
Silicon, dissolved	9.2	N/A	1.0 mg/L	2025-11-13	
Silver, dissolved	< 0.000050	N/A	0.000050 mg/L	2025-11-13	
Sodium, dissolved	46.9	N/A	0.10 mg/L	2025-11-13	
Strontium, dissolved	1.97	N/A	0.0010 mg/L	2025-11-13	
Sulfur, dissolved	30.0	N/A	3.0 mg/L	2025-11-13	
Tellurium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-11-13	
Thallium, dissolved	< 0.000020	N/A	0.000020 mg/L	2025-11-13	
Thorium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-11-13	
Tin, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-11-13	
Titanium, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-11-13	
Tungsten, dissolved	< 0.0010	N/A	0.0010 mg/L	2025-11-13	
Uranium, dissolved	0.0363	N/A	0.000020 mg/L	2025-11-13	
Vanadium, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-11-13	
Zinc, dissolved	< 0.0040	N/A	0.0040 mg/L	2025-11-13	
Zirconium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-11-13	

General Parameters

Alkalinity, Total (as CaCO3)	335	N/A	1.0 mg/L	2025-11-10	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-11-10	
Alkalinity, Bicarbonate (as CaCO3)	335	N/A	1.0 mg/L	2025-11-10	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-11-10	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-11-10	
Ammonia, Total (as N)	< 0.050	None Required	0.050 mg/L	2025-11-13	
Chemical Oxygen Demand	< 20	N/A	20 mg/L	2025-11-14	
Conductivity (EC)	903	N/A	2.0 µS/cm	2025-11-10	
pH	7.61	7.0-10.5	0.10 pH units	2025-11-10	HT2

Sample Qualifiers:

HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.
RE2 Result was confirmed by re-analysis prior to reporting.



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Regional District of Okanagan Similkameen
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Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Chemical Oxygen Demand in Water	SM 5220 D* (2022)	Closed Reflux, Colorimetry	✓	Kelowna
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Kelowna
Dissolved Metals in Water	EPA 200.8 / EPA 6020B	0.45 µm Filtration / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Hardness in Water	SM 2340 B (2021)	Calculation: 2.497 [diss Ca] + 4.118 [diss Mg]	✓	N/A
Mercury, dissolved in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	✓	Richmond
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method

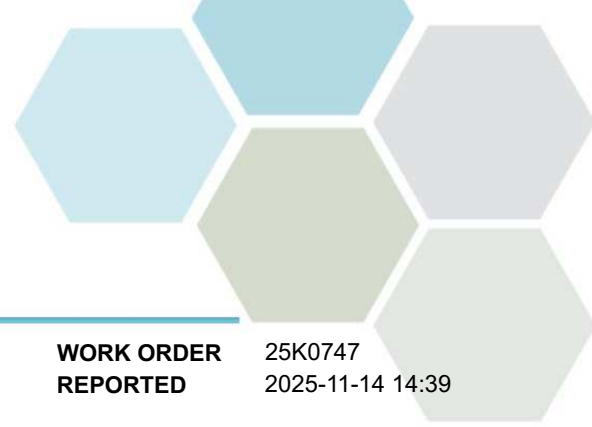
Glossary of Terms:

RL	Reporting Limit (default)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
pH units	pH < 7 = acidic, pH > 7 = basic
µS/cm	Microsiemens per centimetre
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

Guidelines Referenced in this Report:

[Guidelines for Canadian Drinking Water Quality \(Health Canada\)](#)

Note: In some cases, the values displayed on the report represent the lowest guideline and are to be verified by the end user



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO Regional District of Okanagan Similkameen
PROJECT Ok Falls - TLGW

WORK ORDER 25K0747
REPORTED 2025-11-14 14:39

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any liability is limited to the cost of analysis. CARO will dispose of all samples within 30 days of sample receipt, unless otherwise agreed.

Results in **Bold** indicate values that are above CARO's method reporting limits. Results in **red** indicate values above the regulatory limits where these have been included. Any Bold and/or highlighted results do not take into account method uncertainty. If you would like method uncertainty or regulatory limits to be included on your report, please contact your Account Manager: hhannaoui@caro.ca

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

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The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

- **Method Blank (Blk):** A blank sample that undergoes sample processing identical to that carried out for the test samples. Method blank results are used to assess contamination from the laboratory environment and reagents.
- **Duplicate (Dup):** An additional or second portion of a randomly selected sample in the analytical run carried through the entire analytical process. Duplicates provide a measure of the analytical method's precision (reproducibility).
- **Blank Spike (BS):** A sample of known concentration which undergoes processing identical to that carried out for test samples, also referred to as a laboratory control sample (LCS). Blank spikes provide a measure of the analytical method's accuracy.
- **Matrix Spike (MS):** A second aliquot of sample is fortified with a known concentration of target analytes and carried through the entire analytical process. Matrix spikes evaluate potential matrix effects that may affect the analyte recovery.
- **Reference Material (SRM):** A homogenous material of similar matrix to the samples, certified for the parameter(s) listed. Reference Materials ensure that the analytical process is adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10-20 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Anions, Batch B5K2443									
Blank (B5K2443-BLK1)			Prepared: 2025-11-07, Analyzed: 2025-11-07						
Bromide	< 0.10	0.10 mg/L							
Chloride	< 0.10	0.10 mg/L							
Fluoride	< 0.10	0.10 mg/L							
Nitrate (as N)	< 0.010	0.010 mg/L							
Nitrite (as N)	< 0.010	0.010 mg/L							
Sulfate	< 1.0	1.0 mg/L							
Blank (B5K2443-BLK2)			Prepared: 2025-11-07, Analyzed: 2025-11-07						
Bromide	< 0.10	0.10 mg/L							
Chloride	< 0.10	0.10 mg/L							
Fluoride	< 0.10	0.10 mg/L							
Nitrate (as N)	< 0.010	0.010 mg/L							
Nitrite (as N)	< 0.010	0.010 mg/L							
Sulfate	< 1.0	1.0 mg/L							
LCS (B5K2443-BS1)			Prepared: 2025-11-07, Analyzed: 2025-11-07						
Bromide	4.02	0.10 mg/L	4.00		101	85-115			
Chloride	16.1	0.10 mg/L	16.0		100	90-110			
Fluoride	4.03	0.10 mg/L	4.00		101	88-108			
Nitrate (as N)	4.05	0.010 mg/L	4.00		101	90-110			
Nitrite (as N)	2.00	0.010 mg/L	2.00		100	85-115			
Sulfate	16.0	1.0 mg/L	16.0		100	90-110			
LCS (B5K2443-BS2)			Prepared: 2025-11-07, Analyzed: 2025-11-07						
Bromide	4.03	0.10 mg/L	4.00		101	85-115			
Chloride	16.0	0.10 mg/L	16.0		100	90-110			
Fluoride	4.06	0.10 mg/L	4.00		102	88-108			
Nitrate (as N)	4.09	0.010 mg/L	4.00		102	90-110			
Nitrite (as N)	2.01	0.010 mg/L	2.00		100	85-115			
Sulfate	16.1	1.0 mg/L	16.0		101	90-110			
Duplicate (B5K2443-DUP1)			Source: 25K0747-02		Prepared: 2025-11-07, Analyzed: 2025-11-07				
Bromide	< 0.10	0.10 mg/L		< 0.10					10
Chloride	12.5	0.10 mg/L		12.6			< 1		10
Fluoride	0.51	0.10 mg/L		0.52			< 1		10
Nitrate (as N)	< 0.010	0.010 mg/L		< 0.010					10
Nitrite (as N)	< 0.010	0.010 mg/L		< 0.010					15



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0747
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Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Anions, Batch B5K2443, Continued

Duplicate (B5K2443-DUP1), Continued Source: 25K0747-02 Prepared: 2025-11-07, Analyzed: 2025-11-07

Sulfate	37.1	1.0 mg/L		37.1			< 1	10	
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Matrix Spike (B5K2443-MS1) Source: 25K0747-02 Prepared: 2025-11-07, Analyzed: 2025-11-07

Bromide	4.14	0.10 mg/L	4.00	< 0.10	102	80-120			
Chloride	28.5	0.10 mg/L	16.0	12.6	99	75-125			
Fluoride	4.34	0.10 mg/L	4.00	0.52	96	75-125			
Nitrate (as N)	4.20	0.010 mg/L	4.00	< 0.010	105	75-125			
Nitrite (as N)	1.93	0.010 mg/L	2.00	< 0.010	97	75-115			
Sulfate	53.6	1.0 mg/L	16.0	37.1	103	75-125			

Dissolved Metals, Batch B5K2927

Blank (B5K2927-BLK1) Prepared: 2025-11-12, Analyzed: 2025-11-13

Aluminum, dissolved	< 0.0050	0.0050 mg/L							
Antimony, dissolved	< 0.00020	0.00020 mg/L							
Arsenic, dissolved	< 0.00050	0.00050 mg/L							
Barium, dissolved	< 0.0050	0.0050 mg/L							
Beryllium, dissolved	< 0.00010	0.00010 mg/L							
Bismuth, dissolved	< 0.00010	0.00010 mg/L							
Boron, dissolved	< 0.0500	0.0500 mg/L							
Cadmium, dissolved	< 0.000010	0.000010 mg/L							
Calcium, dissolved	< 0.20	0.20 mg/L							
Chromium, dissolved	< 0.00050	0.00050 mg/L							
Cobalt, dissolved	< 0.00010	0.00010 mg/L							
Copper, dissolved	< 0.00040	0.00040 mg/L							
Iron, dissolved	< 0.010	0.010 mg/L							
Lead, dissolved	< 0.00020	0.00020 mg/L							
Lithium, dissolved	< 0.00010	0.00010 mg/L							
Magnesium, dissolved	< 0.010	0.010 mg/L							
Manganese, dissolved	< 0.00020	0.00020 mg/L							
Molybdenum, dissolved	< 0.00010	0.00010 mg/L							
Nickel, dissolved	< 0.00040	0.00040 mg/L							
Phosphorus, dissolved	< 0.050	0.050 mg/L							
Potassium, dissolved	< 0.10	0.10 mg/L							
Selenium, dissolved	< 0.00050	0.00050 mg/L							
Silicon, dissolved	< 1.0	1.0 mg/L							
Silver, dissolved	< 0.000050	0.000050 mg/L							
Sodium, dissolved	< 0.10	0.10 mg/L							
Strontium, dissolved	< 0.0010	0.0010 mg/L							
Sulfur, dissolved	< 3.0	3.0 mg/L							
Tellurium, dissolved	< 0.00050	0.00050 mg/L							
Thallium, dissolved	< 0.000020	0.000020 mg/L							
Thorium, dissolved	< 0.00010	0.00010 mg/L							
Tin, dissolved	< 0.00020	0.00020 mg/L							
Titanium, dissolved	< 0.0050	0.0050 mg/L							
Tungsten, dissolved	< 0.0010	0.0010 mg/L							
Uranium, dissolved	< 0.000020	0.000020 mg/L							
Vanadium, dissolved	< 0.0050	0.0050 mg/L							
Zinc, dissolved	< 0.0040	0.0040 mg/L							
Zirconium, dissolved	< 0.00010	0.00010 mg/L							

Blank (B5K2927-BLK2) Prepared: 2025-11-12, Analyzed: 2025-11-13

Aluminum, dissolved	< 0.0050	0.0050 mg/L							
Antimony, dissolved	< 0.00020	0.00020 mg/L							
Arsenic, dissolved	< 0.00050	0.00050 mg/L							
Barium, dissolved	< 0.0050	0.0050 mg/L							



APPENDIX 2: QUALITY CONTROL RESULTS

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Ok Falls - TLGW

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Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Dissolved Metals, Batch B5K2927, Continued

Blank (B5K2927-BLK2), Continued

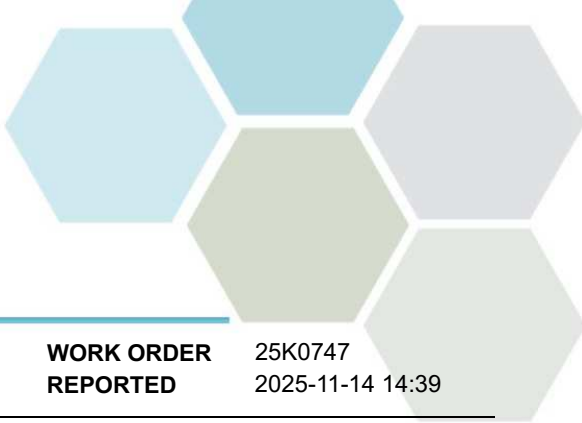
Prepared: 2025-11-12, Analyzed: 2025-11-13

Beryllium, dissolved	< 0.00010	0.00010 mg/L							
Bismuth, dissolved	< 0.00010	0.00010 mg/L							
Boron, dissolved	< 0.0500	0.0500 mg/L							
Cadmium, dissolved	< 0.000010	0.000010 mg/L							
Calcium, dissolved	< 0.20	0.20 mg/L							
Chromium, dissolved	< 0.00050	0.00050 mg/L							
Cobalt, dissolved	< 0.00010	0.00010 mg/L							
Copper, dissolved	< 0.00040	0.00040 mg/L							
Iron, dissolved	< 0.010	0.010 mg/L							
Lead, dissolved	< 0.00020	0.00020 mg/L							
Lithium, dissolved	< 0.00010	0.00010 mg/L							
Magnesium, dissolved	< 0.010	0.010 mg/L							
Manganese, dissolved	< 0.00020	0.00020 mg/L							
Molybdenum, dissolved	< 0.00010	0.00010 mg/L							
Nickel, dissolved	< 0.00040	0.00040 mg/L							
Phosphorus, dissolved	< 0.050	0.050 mg/L							
Potassium, dissolved	< 0.10	0.10 mg/L							
Selenium, dissolved	< 0.00050	0.00050 mg/L							
Silicon, dissolved	< 1.0	1.0 mg/L							
Silver, dissolved	< 0.000050	0.000050 mg/L							
Sodium, dissolved	< 0.10	0.10 mg/L							
Strontium, dissolved	< 0.0010	0.0010 mg/L							
Sulfur, dissolved	< 3.0	3.0 mg/L							
Tellurium, dissolved	< 0.00050	0.00050 mg/L							
Thallium, dissolved	< 0.000020	0.000020 mg/L							
Thorium, dissolved	< 0.00010	0.00010 mg/L							
Tin, dissolved	< 0.00020	0.00020 mg/L							
Titanium, dissolved	< 0.0050	0.0050 mg/L							
Tungsten, dissolved	< 0.0010	0.0010 mg/L							
Uranium, dissolved	< 0.000020	0.000020 mg/L							
Vanadium, dissolved	< 0.0050	0.0050 mg/L							
Zinc, dissolved	< 0.0040	0.0040 mg/L							
Zirconium, dissolved	< 0.00010	0.00010 mg/L							

LCS (B5K2927-BS1)

Prepared: 2025-11-13, Analyzed: 2025-11-13

Aluminum, dissolved	3.97	0.0050 mg/L	4.00		99	80-120			
Antimony, dissolved	0.0401	0.00020 mg/L	0.0400		100	80-120			
Arsenic, dissolved	0.393	0.00050 mg/L	0.400		98	80-120			
Barium, dissolved	0.0409	0.0050 mg/L	0.0400		102	80-120			
Beryllium, dissolved	0.0404	0.00010 mg/L	0.0400		101	80-120			
Bismuth, dissolved	0.0401	0.00010 mg/L	0.0400		100	80-120			
Boron, dissolved	0.399	0.0500 mg/L	0.400		100	80-120			
Cadmium, dissolved	0.0404	0.000010 mg/L	0.0400		101	80-120			
Calcium, dissolved	3.99	0.20 mg/L	4.00		100	80-120			
Chromium, dissolved	0.0397	0.00050 mg/L	0.0400		99	80-120			
Cobalt, dissolved	0.0399	0.00010 mg/L	0.0400		100	80-120			
Copper, dissolved	0.0400	0.00040 mg/L	0.0400		100	80-120			
Iron, dissolved	4.01	0.010 mg/L	4.00		100	80-120			
Lead, dissolved	0.0400	0.00020 mg/L	0.0400		100	80-120			
Lithium, dissolved	0.0402	0.00010 mg/L	0.0400		100	80-120			
Magnesium, dissolved	4.02	0.010 mg/L	4.00		101	80-120			
Manganese, dissolved	0.0401	0.00020 mg/L	0.0400		100	80-120			
Molybdenum, dissolved	0.0403	0.00010 mg/L	0.0400		101	80-120			
Nickel, dissolved	0.0395	0.00040 mg/L	0.0400		99	80-120			
Phosphorus, dissolved	3.95	0.050 mg/L	4.00		99	80-120			
Potassium, dissolved	4.03	0.10 mg/L	4.00		101	80-120			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0747
2025-11-14 14:39

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Dissolved Metals, Batch B5K2927, Continued

LCS (B5K2927-BS1), Continued

Prepared: 2025-11-13, Analyzed: 2025-11-13

Selenium, dissolved	0.397	0.00050 mg/L	0.400		99	80-120			
Silicon, dissolved	4.0	1.0 mg/L	4.00		100	80-120			
Silver, dissolved	0.0395	0.000050 mg/L	0.0400		99	80-120			
Sodium, dissolved	3.92	0.10 mg/L	4.00		98	80-120			
Strontium, dissolved	0.0403	0.0010 mg/L	0.0400		101	80-120			
Sulfur, dissolved	42.9	3.0 mg/L	40.0		107	80-120			
Tellurium, dissolved	0.0392	0.00050 mg/L	0.0400		98	80-120			
Thallium, dissolved	0.0411	0.000020 mg/L	0.0400		103	80-120			
Thorium, dissolved	0.0404	0.00010 mg/L	0.0400		101	80-120			
Tin, dissolved	0.0409	0.00020 mg/L	0.0400		102	80-120			
Titanium, dissolved	0.0398	0.0050 mg/L	0.0400		100	80-120			
Tungsten, dissolved	0.0402	0.0010 mg/L	0.0400		101	80-120			
Uranium, dissolved	0.0405	0.000020 mg/L	0.0400		101	80-120			
Vanadium, dissolved	0.0394	0.0050 mg/L	0.0400		98	80-120			
Zinc, dissolved	0.395	0.0040 mg/L	0.400		99	80-120			
Zirconium, dissolved	0.0397	0.00010 mg/L	0.0400		99	80-120			

LCS (B5K2927-BS2)

Prepared: 2025-11-13, Analyzed: 2025-11-13

Aluminum, dissolved	4.01	0.0050 mg/L	4.00		100	80-120			
Antimony, dissolved	0.0401	0.00020 mg/L	0.0400		100	80-120			
Arsenic, dissolved	0.394	0.00050 mg/L	0.400		98	80-120			
Barium, dissolved	0.0400	0.0050 mg/L	0.0400		100	80-120			
Beryllium, dissolved	0.0411	0.00010 mg/L	0.0400		103	80-120			
Bismuth, dissolved	0.0402	0.00010 mg/L	0.0400		100	80-120			
Boron, dissolved	0.406	0.0500 mg/L	0.400		102	80-120			
Cadmium, dissolved	0.0398	0.000010 mg/L	0.0400		100	80-120			
Calcium, dissolved	4.01	0.20 mg/L	4.00		100	80-120			
Chromium, dissolved	0.0399	0.00050 mg/L	0.0400		100	80-120			
Cobalt, dissolved	0.0398	0.00010 mg/L	0.0400		100	80-120			
Copper, dissolved	0.0401	0.00040 mg/L	0.0400		100	80-120			
Iron, dissolved	3.95	0.010 mg/L	4.00		99	80-120			
Lead, dissolved	0.0402	0.00020 mg/L	0.0400		100	80-120			
Lithium, dissolved	0.0406	0.00010 mg/L	0.0400		101	80-120			
Magnesium, dissolved	4.09	0.010 mg/L	4.00		102	80-120			
Manganese, dissolved	0.0398	0.00020 mg/L	0.0400		100	80-120			
Molybdenum, dissolved	0.0399	0.00010 mg/L	0.0400		100	80-120			
Nickel, dissolved	0.0401	0.00040 mg/L	0.0400		100	80-120			
Phosphorus, dissolved	3.98	0.050 mg/L	4.00		99	80-120			
Potassium, dissolved	4.06	0.10 mg/L	4.00		101	80-120			
Selenium, dissolved	0.405	0.00050 mg/L	0.400		101	80-120			
Silicon, dissolved	4.1	1.0 mg/L	4.00		102	80-120			
Silver, dissolved	0.0396	0.000050 mg/L	0.0400		99	80-120			
Sodium, dissolved	4.14	0.10 mg/L	4.00		104	80-120			
Strontium, dissolved	0.0402	0.0010 mg/L	0.0400		101	80-120			
Sulfur, dissolved	39.3	3.0 mg/L	40.0		98	80-120			
Tellurium, dissolved	0.0397	0.00050 mg/L	0.0400		99	80-120			
Thallium, dissolved	0.0411	0.000020 mg/L	0.0400		103	80-120			
Thorium, dissolved	0.0402	0.00010 mg/L	0.0400		101	80-120			
Tin, dissolved	0.0396	0.00020 mg/L	0.0400		99	80-120			
Titanium, dissolved	0.0392	0.0050 mg/L	0.0400		98	80-120			
Tungsten, dissolved	0.0406	0.0010 mg/L	0.0400		102	80-120			
Uranium, dissolved	0.0408	0.000020 mg/L	0.0400		102	80-120			
Vanadium, dissolved	0.0392	0.0050 mg/L	0.0400		98	80-120			
Zinc, dissolved	0.395	0.0040 mg/L	0.400		99	80-120			
Zirconium, dissolved	0.0396	0.00010 mg/L	0.0400		99	80-120			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0747
2025-11-14 14:39

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Dissolved Metals, Batch B5K2962									
Blank (B5K2962-BLK1)					Prepared: 2025-11-13, Analyzed: 2025-11-13				
Aluminum, dissolved	< 0.0050	0.0050 mg/L							
Antimony, dissolved	< 0.00020	0.00020 mg/L							
Arsenic, dissolved	< 0.00050	0.00050 mg/L							
Barium, dissolved	< 0.0050	0.0050 mg/L							
Beryllium, dissolved	< 0.00010	0.00010 mg/L							
Bismuth, dissolved	< 0.00010	0.00010 mg/L							
Boron, dissolved	< 0.0500	0.0500 mg/L							
Cadmium, dissolved	< 0.000010	0.000010 mg/L							
Calcium, dissolved	< 0.20	0.20 mg/L							
Chromium, dissolved	< 0.00050	0.00050 mg/L							
Cobalt, dissolved	< 0.00010	0.00010 mg/L							
Copper, dissolved	< 0.00040	0.00040 mg/L							
Iron, dissolved	< 0.010	0.010 mg/L							
Lead, dissolved	< 0.00020	0.00020 mg/L							
Lithium, dissolved	< 0.00010	0.00010 mg/L							
Magnesium, dissolved	< 0.010	0.010 mg/L							
Manganese, dissolved	< 0.00020	0.00020 mg/L							
Molybdenum, dissolved	< 0.00010	0.00010 mg/L							
Nickel, dissolved	< 0.00040	0.00040 mg/L							
Phosphorus, dissolved	< 0.050	0.050 mg/L							
Potassium, dissolved	< 0.10	0.10 mg/L							
Selenium, dissolved	< 0.00050	0.00050 mg/L							
Silicon, dissolved	< 1.0	1.0 mg/L							
Silver, dissolved	< 0.000050	0.000050 mg/L							
Sodium, dissolved	< 0.10	0.10 mg/L							
Strontium, dissolved	< 0.0010	0.0010 mg/L							
Sulfur, dissolved	< 3.0	3.0 mg/L							
Tellurium, dissolved	< 0.00050	0.00050 mg/L							
Thallium, dissolved	< 0.000020	0.000020 mg/L							
Thorium, dissolved	< 0.00010	0.00010 mg/L							
Tin, dissolved	< 0.00020	0.00020 mg/L							
Titanium, dissolved	< 0.0050	0.0050 mg/L							
Tungsten, dissolved	< 0.0010	0.0010 mg/L							
Uranium, dissolved	< 0.000020	0.000020 mg/L							
Vanadium, dissolved	< 0.0050	0.0050 mg/L							
Zinc, dissolved	< 0.0040	0.0040 mg/L							
Zirconium, dissolved	< 0.00010	0.00010 mg/L							

LCS (B5K2962-BS1)					Prepared: 2025-11-13, Analyzed: 2025-11-13				
Aluminum, dissolved	4.02	0.0050 mg/L	4.00		100	80-120			
Antimony, dissolved	0.0396	0.00020 mg/L	0.0400		99	80-120			
Arsenic, dissolved	0.401	0.00050 mg/L	0.400		100	80-120			
Barium, dissolved	0.0401	0.0050 mg/L	0.0400		100	80-120			
Beryllium, dissolved	0.0404	0.00010 mg/L	0.0400		101	80-120			
Bismuth, dissolved	0.0402	0.00010 mg/L	0.0400		100	80-120			
Boron, dissolved	0.398	0.0500 mg/L	0.400		100	80-120			
Cadmium, dissolved	0.0400	0.000010 mg/L	0.0400		100	80-120			
Calcium, dissolved	4.04	0.20 mg/L	4.00		101	80-120			
Chromium, dissolved	0.0410	0.00050 mg/L	0.0400		103	80-120			
Cobalt, dissolved	0.0405	0.00010 mg/L	0.0400		101	80-120			
Copper, dissolved	0.0400	0.00040 mg/L	0.0400		100	80-120			
Iron, dissolved	4.06	0.010 mg/L	4.00		102	80-120			
Lead, dissolved	0.0405	0.00020 mg/L	0.0400		101	80-120			
Lithium, dissolved	0.0409	0.00010 mg/L	0.0400		102	80-120			
Magnesium, dissolved	4.05	0.010 mg/L	4.00		101	80-120			
Manganese, dissolved	0.0404	0.00020 mg/L	0.0400		101	80-120			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0747
2025-11-14 14:39

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Dissolved Metals, Batch B5K2962, Continued									
LCS (B5K2962-BS1), Continued					Prepared: 2025-11-13, Analyzed: 2025-11-13				
Molybdenum, dissolved	0.0396	0.00010 mg/L	0.0400		99	80-120			
Nickel, dissolved	0.0403	0.00040 mg/L	0.0400		101	80-120			
Phosphorus, dissolved	4.08	0.050 mg/L	4.00		102	80-120			
Potassium, dissolved	4.05	0.10 mg/L	4.00		101	80-120			
Selenium, dissolved	0.397	0.00050 mg/L	0.400		99	80-120			
Silicon, dissolved	4.0	1.0 mg/L	4.00		100	80-120			
Silver, dissolved	0.0397	0.000050 mg/L	0.0400		99	80-120			
Sodium, dissolved	4.10	0.10 mg/L	4.00		103	80-120			
Strontium, dissolved	0.0403	0.0010 mg/L	0.0400		101	80-120			
Sulfur, dissolved	38.5	3.0 mg/L	40.0		96	80-120			
Tellurium, dissolved	0.0394	0.00050 mg/L	0.0400		98	80-120			
Thallium, dissolved	0.0406	0.000020 mg/L	0.0400		102	80-120			
Thorium, dissolved	0.0403	0.00010 mg/L	0.0400		101	80-120			
Tin, dissolved	0.0408	0.00020 mg/L	0.0400		102	80-120			
Titanium, dissolved	0.0413	0.0050 mg/L	0.0400		103	80-120			
Tungsten, dissolved	0.0399	0.0010 mg/L	0.0400		100	80-120			
Uranium, dissolved	0.0403	0.000020 mg/L	0.0400		101	80-120			
Vanadium, dissolved	0.0397	0.0050 mg/L	0.0400		99	80-120			
Zinc, dissolved	0.398	0.0040 mg/L	0.400		99	80-120			
Zirconium, dissolved	0.0399	0.00010 mg/L	0.0400		100	80-120			

Dissolved Metals, Batch B5K3157

Blank (B5K3157-BLK1)					Prepared: 2025-11-14, Analyzed: 2025-11-14				
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5K3157-BLK2)					Prepared: 2025-11-14, Analyzed: 2025-11-14				
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5K3157-BLK3)					Prepared: 2025-11-14, Analyzed: 2025-11-14				
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5K3157-BLK4)					Prepared: 2025-11-14, Analyzed: 2025-11-14				
Mercury, dissolved	< 0.000010	0.000010 mg/L							
LCS (B5K3157-BS1)					Prepared: 2025-11-14, Analyzed: 2025-11-14				
Mercury, dissolved	0.00292	0.000010 mg/L	0.00250		117	80-120			
LCS (B5K3157-BS2)					Prepared: 2025-11-14, Analyzed: 2025-11-14				
Mercury, dissolved	0.00248	0.000010 mg/L	0.00250		99	80-120			
LCS (B5K3157-BS3)					Prepared: 2025-11-14, Analyzed: 2025-11-14				
Mercury, dissolved	0.00282	0.000010 mg/L	0.00250		113	80-120			
LCS (B5K3157-BS4)					Prepared: 2025-11-14, Analyzed: 2025-11-14				
Mercury, dissolved	0.00217	0.000010 mg/L	0.00250		87	80-120			
Matrix Spike (B5K3157-MS1)					Prepared: 2025-11-14, Analyzed: 2025-11-14				
Mercury, dissolved	0.00260	0.000010 mg/L	0.00250	< 0.000010	104	70-130			

General Parameters, Batch B5K2697

Blank (B5K2697-BLK1)					Prepared: 2025-11-10, Analyzed: 2025-11-10				
Alkalinity, Total (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0 mg/L							



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0747
2025-11-14 14:39

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B5K2697, Continued									
Blank (B5K2697-BLK1), Continued			Prepared: 2025-11-10, Analyzed: 2025-11-10						
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
LCS (B5K2697-BS1)			Prepared: 2025-11-10, Analyzed: 2025-11-10						
Alkalinity, Total (as CaCO3)	99.8	1.0 mg/L	100		100	80-120			
LCS (B5K2697-BS2)			Prepared: 2025-11-10, Analyzed: 2025-11-10						
Conductivity (EC)	1400	2.0 µS/cm	1410		100	95-105			
Reference (B5K2697-SRM1)			Prepared: 2025-11-10, Analyzed: 2025-11-10						
pH	7.01	0.10 pH units	7.01		100	98-102			
General Parameters, Batch B5K3026									
Blank (B5K3026-BLK1)			Prepared: 2025-11-14, Analyzed: 2025-11-14						
Chemical Oxygen Demand	< 20	20 mg/L							
Blank (B5K3026-BLK2)			Prepared: 2025-11-14, Analyzed: 2025-11-14						
Chemical Oxygen Demand	< 20	20 mg/L							
LCS (B5K3026-BS1)			Prepared: 2025-11-14, Analyzed: 2025-11-14						
Chemical Oxygen Demand	499	20 mg/L	500		100	89-115			
LCS (B5K3026-BS2)			Prepared: 2025-11-14, Analyzed: 2025-11-14						
Chemical Oxygen Demand	486	20 mg/L	500		97	89-115			
Duplicate (B5K3026-DUP2)			Source: 25K0747-01		Prepared: 2025-11-14, Analyzed: 2025-11-14				
Chemical Oxygen Demand	29	20 mg/L		29					14
Matrix Spike (B5K3026-MS2)			Source: 25K0747-01		Prepared: 2025-11-14, Analyzed: 2025-11-14				
Chemical Oxygen Demand	152	20 mg/L	125	29	99	75-125			
General Parameters, Batch B5K3125									
Blank (B5K3125-BLK1)			Prepared: 2025-11-13, Analyzed: 2025-11-13						
Ammonia, Total (as N)	< 0.050	0.050 mg/L							
Blank (B5K3125-BLK2)			Prepared: 2025-11-13, Analyzed: 2025-11-13						
Ammonia, Total (as N)	< 0.050	0.050 mg/L							
LCS (B5K3125-BS1)			Prepared: 2025-11-13, Analyzed: 2025-11-13						
Ammonia, Total (as N)	0.857	0.050 mg/L	1.00		86	85-115			
LCS (B5K3125-BS2)			Prepared: 2025-11-13, Analyzed: 2025-11-13						
Ammonia, Total (as N)	0.856	0.050 mg/L	1.00		86	85-115			
Duplicate (B5K3125-DUP1)			Source: 25K0747-01		Prepared: 2025-11-13, Analyzed: 2025-11-13				
Ammonia, Total (as N)	< 0.050	0.050 mg/L		< 0.050					15
Duplicate (B5K3125-DUP2)			Source: 25K0747-02		Prepared: 2025-11-13, Analyzed: 2025-11-13				
Ammonia, Total (as N)	< 0.050	0.050 mg/L		< 0.050					15
Matrix Spike (B5K3125-MS1)			Source: 25K0747-01		Prepared: 2025-11-13, Analyzed: 2025-11-13				
Ammonia, Total (as N)	0.199	0.050 mg/L	0.204	< 0.050	81	75-125			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0747
2025-11-14 14:39

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
<i>General Parameters, Batch B5K3125, Continued</i>									
Matrix Spike (B5K3125-MS2)		Source: 25K0747-02		Prepared: 2025-11-13, Analyzed: 2025-11-13					
Ammonia, Total (as N)	0.238	0.050 mg/L	0.204	< 0.050	103	75-125			



CERTIFICATE OF ANALYSIS

REPORTED TO	Regional District of Okanagan Similkameen 101 Martin Street Penticton, BC V2A 5J9	WORK ORDER	25K0903
ATTENTION	Rob Palmer	RECEIVED / TEMP REPORTED	2025-11-07 10:16 / 8.2°C 2025-11-17 14:19
PO NUMBER	20259001-TLGW	COC NUMBER	eCOC#00029792
PROJECT	Ok Falls - TLGW		
PROJECT INFO			

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

Big Picture Sidekicks



You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry



It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve



Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

Work Order Comments:

Custody Seals Intact: N/A

By engaging our services, you are agreeing to CARO Analytical Service's Standard Terms and Conditions outlined here: <https://www.caro.ca/terms-conditions>

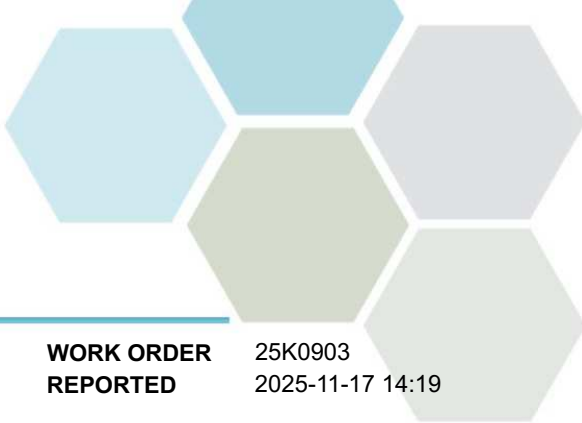
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

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#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 | #108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0903
2025-11-17 14:19

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
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MW 19-2D (25K0903-01) | Matrix: Ground Water | Sampled: 2025-11-06 09:42

Anions

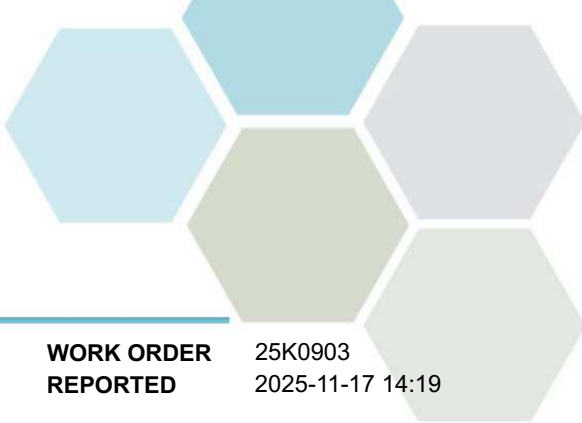
Bromide	0.21	N/A	0.10 mg/L	2025-11-07	
Chloride	45.3	AO ≤ 250	0.10 mg/L	2025-11-07	
Fluoride	0.40	MAC = 1.5	0.10 mg/L	2025-11-07	
Nitrate (as N)	0.856	MAC = 10	0.010 mg/L	2025-11-07	
Nitrite (as N)	0.025	MAC = 1	0.010 mg/L	2025-11-07	
Sulfate	89.2	AO ≤ 500	1.0 mg/L	2025-11-07	

Calculated Parameters

Bicarbonate (HCO3)	501	N/A	1.22 mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600 mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340 mg/L	N/A	
Hardness, Dissolved (as CaCO3)	478	N/A	0.500 mg/L	N/A	
Nitrate+Nitrite (as N)	0.881	N/A	0.0100 mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-11-13	
Antimony, dissolved	0.00026	N/A	0.00020 mg/L	2025-11-13	
Arsenic, dissolved	0.00055	N/A	0.00050 mg/L	2025-11-13	
Barium, dissolved	0.0997	N/A	0.0050 mg/L	2025-11-13	
Beryllium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-11-13	
Bismuth, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-11-13	
Boron, dissolved	< 0.0500	N/A	0.0500 mg/L	2025-11-13	
Cadmium, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-11-13	
Calcium, dissolved	131	N/A	0.20 mg/L	2025-11-13	
Chromium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-11-13	
Cobalt, dissolved	0.00084	N/A	0.00010 mg/L	2025-11-13	
Copper, dissolved	0.00046	N/A	0.00040 mg/L	2025-11-13	
Iron, dissolved	0.152	N/A	0.010 mg/L	2025-11-13	
Lead, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-11-13	
Lithium, dissolved	0.0183	N/A	0.00010 mg/L	2025-11-13	
Magnesium, dissolved	36.4	N/A	0.010 mg/L	2025-11-13	
Manganese, dissolved	0.253	N/A	0.00020 mg/L	2025-11-13	
Mercury, dissolved	< 0.000010	N/A	0.000010 mg/L	2025-11-15	
Molybdenum, dissolved	0.0105	N/A	0.00010 mg/L	2025-11-13	
Nickel, dissolved	0.00209	N/A	0.00040 mg/L	2025-11-13	
Phosphorus, dissolved	< 0.050	N/A	0.050 mg/L	2025-11-13	
Potassium, dissolved	4.12	N/A	0.10 mg/L	2025-11-13	
Selenium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-11-13	
Silicon, dissolved	11.0	N/A	1.0 mg/L	2025-11-13	
Silver, dissolved	< 0.000050	N/A	0.000050 mg/L	2025-11-13	
Sodium, dissolved	31.6	N/A	0.10 mg/L	2025-11-13	
Strontium, dissolved	2.27	N/A	0.0010 mg/L	2025-11-13	
Sulfur, dissolved	29.9	N/A	3.0 mg/L	2025-11-13	
Tellurium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-11-13	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0903
2025-11-17 14:19

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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MW 19-2D (25K0903-01) | Matrix: Ground Water | Sampled: 2025-11-06 09:42, Continued

Dissolved Metals, Continued

Thallium, dissolved	< 0.000020	N/A	0.000020	mg/L	2025-11-13	
Thorium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-11-13	
Tin, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-11-13	
Titanium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-11-13	
Tungsten, dissolved	< 0.0010	N/A	0.0010	mg/L	2025-11-13	
Uranium, dissolved	0.0464	N/A	0.000020	mg/L	2025-11-13	
Vanadium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-11-13	
Zinc, dissolved	0.0214	N/A	0.0040	mg/L	2025-11-13	
Zirconium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-11-13	

General Parameters

Alkalinity, Total (as CaCO3)	411	N/A	1.0	mg/L	2025-11-11	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-11-11	
Alkalinity, Bicarbonate (as CaCO3)	411	N/A	1.0	mg/L	2025-11-11	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-11-11	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-11-11	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-11-14	
Chemical Oxygen Demand	30	N/A	20	mg/L	2025-11-15	
Conductivity (EC)	1000	N/A	2.0	µS/cm	2025-11-11	
pH	7.63	7.0-10.5	0.10	pH units	2025-11-11	HT2

BH-3 (25K0903-02) | Matrix: Ground Water | Sampled: 2025-11-06 09:26

Anions

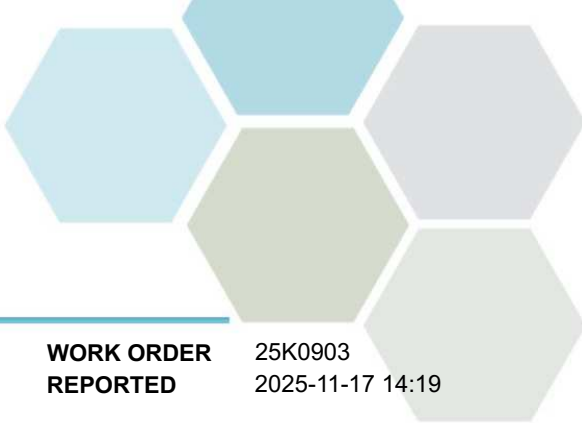
Bromide	< 0.10	N/A	0.10	mg/L	2025-11-07	
Chloride	14.2	AO ≤ 250	0.10	mg/L	2025-11-07	
Fluoride	0.53	MAC = 1.5	0.10	mg/L	2025-11-07	
Nitrate (as N)	6.37	MAC = 10	0.010	mg/L	2025-11-07	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-11-07	
Sulfate	245	AO ≤ 500	1.0	mg/L	2025-11-07	

Calculated Parameters

Bicarbonate (HCO3)	511	N/A	1.22	mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600	mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340	mg/L	N/A	
Hardness, Dissolved (as CaCO3)	564	N/A	0.500	mg/L	N/A	
Nitrate+Nitrite (as N)	6.37	N/A	0.0100	mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-11-13	
Antimony, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-11-13	
Arsenic, dissolved	0.00110	N/A	0.00050	mg/L	2025-11-13	
Barium, dissolved	0.0501	N/A	0.0050	mg/L	2025-11-13	
Beryllium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-11-13	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0903
2025-11-17 14:19

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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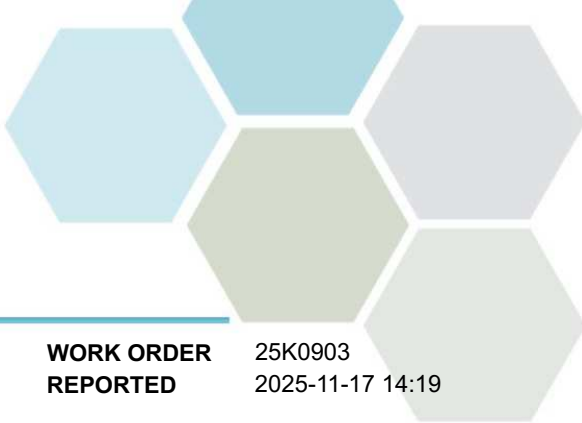
BH-3 (25K0903-02) | Matrix: Ground Water | Sampled: 2025-11-06 09:26, Continued

Dissolved Metals, Continued

Bismuth, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-11-13	
Boron, dissolved	0.100	N/A	0.0500	mg/L	2025-11-13	
Cadmium, dissolved	0.000014	N/A	0.000010	mg/L	2025-11-13	
Calcium, dissolved	121	N/A	0.20	mg/L	2025-11-13	
Chromium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-11-13	
Cobalt, dissolved	0.00024	N/A	0.00010	mg/L	2025-11-13	
Copper, dissolved	0.00400	N/A	0.00040	mg/L	2025-11-13	
Iron, dissolved	< 0.010	N/A	0.010	mg/L	2025-11-13	
Lead, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-11-13	
Lithium, dissolved	0.0199	N/A	0.00010	mg/L	2025-11-13	
Magnesium, dissolved	63.6	N/A	0.010	mg/L	2025-11-13	
Manganese, dissolved	0.0796	N/A	0.00020	mg/L	2025-11-13	
Mercury, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-11-15	
Molybdenum, dissolved	0.00844	N/A	0.00010	mg/L	2025-11-13	
Nickel, dissolved	0.00208	N/A	0.00040	mg/L	2025-11-13	
Phosphorus, dissolved	0.075	N/A	0.050	mg/L	2025-11-13	
Potassium, dissolved	11.9	N/A	0.10	mg/L	2025-11-13	
Selenium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-11-13	
Silicon, dissolved	11.3	N/A	1.0	mg/L	2025-11-13	
Silver, dissolved	< 0.000050	N/A	0.000050	mg/L	2025-11-13	
Sodium, dissolved	55.7	N/A	0.10	mg/L	2025-11-13	
Strontium, dissolved	1.48	N/A	0.0010	mg/L	2025-11-13	
Sulfur, dissolved	81.0	N/A	3.0	mg/L	2025-11-13	
Tellurium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-11-13	
Thallium, dissolved	0.000028	N/A	0.000020	mg/L	2025-11-13	
Thorium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-11-13	
Tin, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-11-13	
Titanium, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-11-13	
Tungsten, dissolved	< 0.0010	N/A	0.0010	mg/L	2025-11-13	
Uranium, dissolved	0.0213	N/A	0.000020	mg/L	2025-11-13	
Vanadium, dissolved	0.0061	N/A	0.0050	mg/L	2025-11-13	
Zinc, dissolved	< 0.0040	N/A	0.0040	mg/L	2025-11-13	
Zirconium, dissolved	0.00018	N/A	0.00010	mg/L	2025-11-13	

General Parameters

Alkalinity, Total (as CaCO3)	419	N/A	1.0	mg/L	2025-11-11	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-11-11	
Alkalinity, Bicarbonate (as CaCO3)	419	N/A	1.0	mg/L	2025-11-11	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-11-11	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-11-11	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-11-14	
Chemical Oxygen Demand	30	N/A	20	mg/L	2025-11-15	
Conductivity (EC)	1220	N/A	2.0	µS/cm	2025-11-11	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0903
2025-11-17 14:19

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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BH-3 (25K0903-02) | Matrix: Ground Water | Sampled: 2025-11-06 09:26, Continued

General Parameters, Continued

pH	7.63	7.0-10.5	0.10	pH units	2025-11-11	HT2
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MW 19-1 (25K0903-03) | Matrix: Ground Water | Sampled: 2025-11-06 10:05

Anions

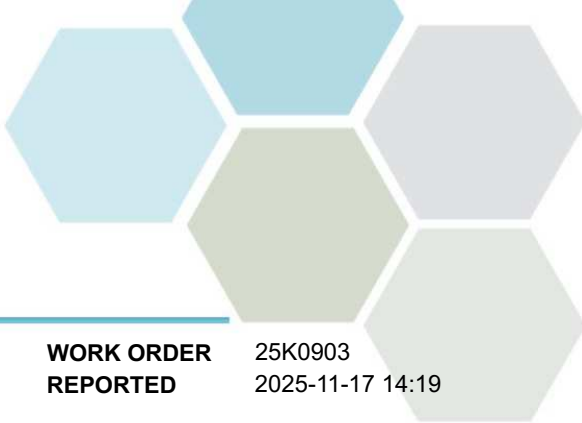
Bromide	< 0.10	N/A	0.10	mg/L	2025-11-07	
Chloride	4.73	AO ≤ 250	0.10	mg/L	2025-11-07	
Fluoride	0.61	MAC = 1.5	0.10	mg/L	2025-11-07	
Nitrate (as N)	< 0.010	MAC = 10	0.010	mg/L	2025-11-07	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-11-07	
Sulfate	26.2	AO ≤ 500	1.0	mg/L	2025-11-07	

Calculated Parameters

Bicarbonate (HCO3)	244	N/A	1.22	mg/L	N/A	
Carbonate (CO3)	< 0.600	N/A	0.600	mg/L	N/A	
Hydroxide (OH)	< 0.340	N/A	0.340	mg/L	N/A	
Hardness, Dissolved (as CaCO3)	173	N/A	0.500	mg/L	N/A	
Nitrate+Nitrite (as N)	< 0.0100	N/A	0.0100	mg/L	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.0050	N/A	0.0050	mg/L	2025-11-15	
Antimony, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-11-15	
Arsenic, dissolved	0.0103	N/A	0.00050	mg/L	2025-11-15	
Barium, dissolved	0.0214	N/A	0.0050	mg/L	2025-11-15	
Beryllium, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-11-15	
Bismuth, dissolved	< 0.00010	N/A	0.00010	mg/L	2025-11-15	
Boron, dissolved	0.0519	N/A	0.0500	mg/L	2025-11-15	
Cadmium, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-11-15	
Calcium, dissolved	43.0	N/A	0.20	mg/L	2025-11-15	
Chromium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-11-15	
Cobalt, dissolved	0.00029	N/A	0.00010	mg/L	2025-11-15	
Copper, dissolved	< 0.00040	N/A	0.00040	mg/L	2025-11-15	
Iron, dissolved	0.119	N/A	0.010	mg/L	2025-11-15	
Lead, dissolved	< 0.00020	N/A	0.00020	mg/L	2025-11-15	
Lithium, dissolved	0.0209	N/A	0.00010	mg/L	2025-11-15	
Magnesium, dissolved	15.9	N/A	0.010	mg/L	2025-11-15	
Manganese, dissolved	0.0782	N/A	0.00020	mg/L	2025-11-15	
Mercury, dissolved	< 0.000010	N/A	0.000010	mg/L	2025-11-15	
Molybdenum, dissolved	0.0118	N/A	0.00010	mg/L	2025-11-15	
Nickel, dissolved	< 0.00040	N/A	0.00040	mg/L	2025-11-15	
Phosphorus, dissolved	< 0.050	N/A	0.050	mg/L	2025-11-15	
Potassium, dissolved	1.42	N/A	0.10	mg/L	2025-11-15	
Selenium, dissolved	< 0.00050	N/A	0.00050	mg/L	2025-11-15	



TEST RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0903
2025-11-17 14:19

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
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MW 19-1 (25K0903-03) | Matrix: Ground Water | Sampled: 2025-11-06 10:05, Continued

Dissolved Metals, Continued

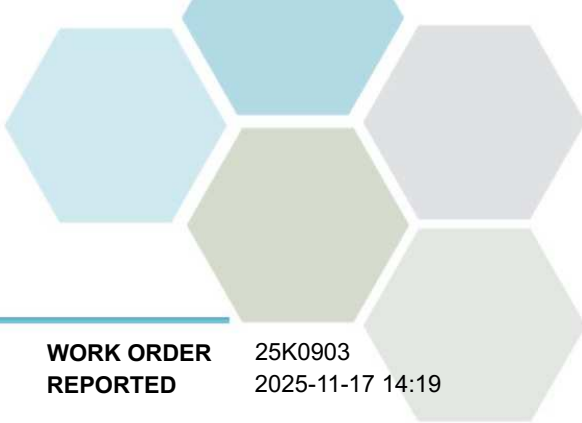
Silicon, dissolved	10.0	N/A	1.0 mg/L	2025-11-15	
Silver, dissolved	< 0.000050	N/A	0.000050 mg/L	2025-11-15	
Sodium, dissolved	24.4	N/A	0.10 mg/L	2025-11-15	
Strontium, dissolved	1.88	N/A	0.0010 mg/L	2025-11-15	
Sulfur, dissolved	9.9	N/A	3.0 mg/L	2025-11-15	
Tellurium, dissolved	< 0.00050	N/A	0.00050 mg/L	2025-11-15	
Thallium, dissolved	< 0.000020	N/A	0.000020 mg/L	2025-11-15	
Thorium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-11-15	
Tin, dissolved	< 0.00020	N/A	0.00020 mg/L	2025-11-15	
Titanium, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-11-15	
Tungsten, dissolved	< 0.0010	N/A	0.0010 mg/L	2025-11-15	
Uranium, dissolved	0.00194	N/A	0.000020 mg/L	2025-11-15	
Vanadium, dissolved	< 0.0050	N/A	0.0050 mg/L	2025-11-15	
Zinc, dissolved	< 0.0040	N/A	0.0040 mg/L	2025-11-15	
Zirconium, dissolved	< 0.00010	N/A	0.00010 mg/L	2025-11-15	

General Parameters

Alkalinity, Total (as CaCO3)	200	N/A	1.0 mg/L	2025-11-11	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-11-11	
Alkalinity, Bicarbonate (as CaCO3)	200	N/A	1.0 mg/L	2025-11-11	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-11-11	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0 mg/L	2025-11-11	
Ammonia, Total (as N)	0.064	None Required	0.050 mg/L	2025-11-14	
Chemical Oxygen Demand	< 20	N/A	20 mg/L	2025-11-15	
Conductivity (EC)	422	N/A	2.0 µS/cm	2025-11-11	
pH	7.54	7.0-10.5	0.10 pH units	2025-11-11	HT2

Sample Qualifiers:

HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0903
2025-11-17 14:19

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Chemical Oxygen Demand in Water	SM 5220 D* (2022)	Closed Reflux, Colorimetry	✓	Kelowna
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Kelowna
Dissolved Metals in Water	EPA 200.8 / EPA 6020B	0.45 µm Filtration / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Hardness in Water	SM 2340 B (2021)	Calculation: 2.497 [diss Ca] + 4.118 [diss Mg]	✓	N/A
Mercury, dissolved in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	✓	Richmond
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method

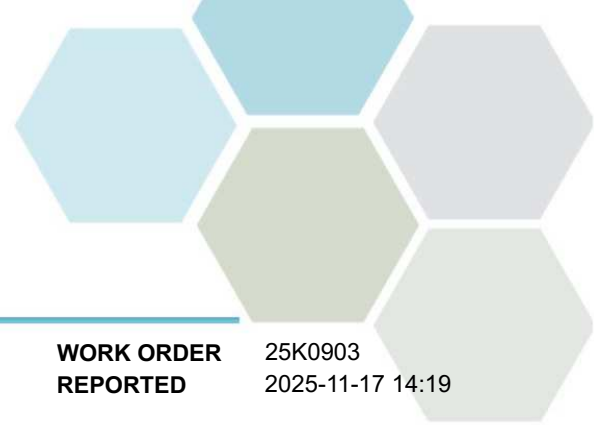
Glossary of Terms:

RL	Reporting Limit (default)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
pH units	pH < 7 = acidic, pH > 7 = basic
µS/cm	Microsiemens per centimetre
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

Guidelines Referenced in this Report:

[Guidelines for Canadian Drinking Water Quality \(Health Canada\)](#)

Note: In some cases, the values displayed on the report represent the lowest guideline and are to be verified by the end user



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO Regional District of Okanagan Similkameen
PROJECT Ok Falls - TLGW

WORK ORDER 25K0903
REPORTED 2025-11-17 14:19

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any liability is limited to the cost of analysis. CARO will dispose of all samples within 30 days of sample receipt, unless otherwise agreed.

Results in **Bold** indicate values that are above CARO's method reporting limits. Results in **red** indicate values above the regulatory limits where these have been included. Any Bold and/or highlighted results do not take into account method uncertainty. If you would like method uncertainty or regulatory limits to be included on your report, please contact your Account Manager: hhannaoui@caro.ca

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0903
2025-11-17 14:19

The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

- **Method Blank (Blk):** A blank sample that undergoes sample processing identical to that carried out for the test samples. Method blank results are used to assess contamination from the laboratory environment and reagents.
- **Duplicate (Dup):** An additional or second portion of a randomly selected sample in the analytical run carried through the entire analytical process. Duplicates provide a measure of the analytical method's precision (reproducibility).
- **Blank Spike (BS):** A sample of known concentration which undergoes processing identical to that carried out for test samples, also referred to as a laboratory control sample (LCS). Blank spikes provide a measure of the analytical method's accuracy.
- **Matrix Spike (MS):** A second aliquot of sample is fortified with a known concentration of target analytes and carried through the entire analytical process. Matrix spikes evaluate potential matrix effects that may affect the analyte recovery.
- **Reference Material (SRM):** A homogenous material of similar matrix to the samples, certified for the parameter(s) listed. Reference Materials ensure that the analytical process is adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10-20 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Anions, Batch B5K2534									
Blank (B5K2534-BLK1)			Prepared: 2025-11-07, Analyzed: 2025-11-07						
Bromide	< 0.10	0.10 mg/L							
Chloride	< 0.10	0.10 mg/L							
Fluoride	< 0.10	0.10 mg/L							
Nitrate (as N)	< 0.010	0.010 mg/L							
Nitrite (as N)	< 0.010	0.010 mg/L							
Sulfate	< 1.0	1.0 mg/L							
Blank (B5K2534-BLK2)			Prepared: 2025-11-07, Analyzed: 2025-11-07						
Bromide	< 0.10	0.10 mg/L							
Chloride	< 0.10	0.10 mg/L							
Fluoride	< 0.10	0.10 mg/L							
Nitrate (as N)	< 0.010	0.010 mg/L							
Nitrite (as N)	< 0.010	0.010 mg/L							
Sulfate	< 1.0	1.0 mg/L							
LCS (B5K2534-BS1)			Prepared: 2025-11-07, Analyzed: 2025-11-07						
Bromide	4.01	0.10 mg/L	4.00		100	85-115			
Chloride	15.8	0.10 mg/L	16.0		99	90-110			
Fluoride	4.04	0.10 mg/L	4.00		101	88-108			
Nitrate (as N)	4.05	0.010 mg/L	4.00		101	90-110			
Nitrite (as N)	1.90	0.010 mg/L	2.00		95	85-115			
Sulfate	16.2	1.0 mg/L	16.0		101	90-110			
LCS (B5K2534-BS2)			Prepared: 2025-11-07, Analyzed: 2025-11-07						
Bromide	4.09	0.10 mg/L	4.00		102	85-115			
Chloride	16.2	0.10 mg/L	16.0		101	90-110			
Fluoride	4.02	0.10 mg/L	4.00		100	88-108			
Nitrate (as N)	4.17	0.010 mg/L	4.00		104	90-110			
Nitrite (as N)	2.03	0.010 mg/L	2.00		101	85-115			
Sulfate	16.0	1.0 mg/L	16.0		100	90-110			
Duplicate (B5K2534-DUP2)			Source: 25K0903-03		Prepared: 2025-11-07, Analyzed: 2025-11-07				
Bromide	< 0.10	0.10 mg/L		< 0.10					10
Chloride	4.70	0.10 mg/L		4.73			< 1		10
Fluoride	0.62	0.10 mg/L		0.61			< 1		10
Nitrate (as N)	< 0.010	0.010 mg/L		< 0.010					10
Nitrite (as N)	< 0.010	0.010 mg/L		< 0.010					15



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0903
2025-11-17 14:19

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Anions, Batch B5K2534, Continued

Duplicate (B5K2534-DUP2), Continued		Source: 25K0903-03		Prepared: 2025-11-07, Analyzed: 2025-11-07					
Sulfate	26.6	1.0 mg/L		26.2			1	10	

Matrix Spike (B5K2534-MS2)		Source: 25K0903-03		Prepared: 2025-11-07, Analyzed: 2025-11-07					
Bromide	3.95	0.10 mg/L	4.00	< 0.10	98	80-120			
Chloride	21.1	0.10 mg/L	16.0	4.73	103	75-125			
Fluoride	4.40	0.10 mg/L	4.00	0.61	95	75-125			
Nitrate (as N)	4.01	0.010 mg/L	4.00	< 0.010	100	75-125			
Nitrite (as N)	1.96	0.010 mg/L	2.00	< 0.010	98	75-115			
Sulfate	43.5	1.0 mg/L	16.0	26.2	108	75-125			

Dissolved Metals, Batch B5K2974

Blank (B5K2974-BLK1)		Prepared: 2025-11-13, Analyzed: 2025-11-13							
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Aluminum, dissolved	< 0.0050	0.0050 mg/L							
Antimony, dissolved	< 0.00020	0.00020 mg/L							
Arsenic, dissolved	< 0.00050	0.00050 mg/L							
Barium, dissolved	< 0.0050	0.0050 mg/L							
Beryllium, dissolved	< 0.00010	0.00010 mg/L							
Bismuth, dissolved	< 0.00010	0.00010 mg/L							
Boron, dissolved	< 0.0500	0.0500 mg/L							
Cadmium, dissolved	< 0.000010	0.000010 mg/L							
Calcium, dissolved	< 0.20	0.20 mg/L							
Chromium, dissolved	< 0.00050	0.00050 mg/L							
Cobalt, dissolved	< 0.00010	0.00010 mg/L							
Copper, dissolved	< 0.00040	0.00040 mg/L							
Iron, dissolved	< 0.010	0.010 mg/L							
Lead, dissolved	< 0.00020	0.00020 mg/L							
Lithium, dissolved	< 0.00010	0.00010 mg/L							
Magnesium, dissolved	< 0.010	0.010 mg/L							
Manganese, dissolved	< 0.00020	0.00020 mg/L							
Molybdenum, dissolved	< 0.00010	0.00010 mg/L							
Nickel, dissolved	< 0.00040	0.00040 mg/L							
Phosphorus, dissolved	< 0.050	0.050 mg/L							
Potassium, dissolved	< 0.10	0.10 mg/L							
Selenium, dissolved	< 0.00050	0.00050 mg/L							
Silicon, dissolved	< 1.0	1.0 mg/L							
Silver, dissolved	< 0.000050	0.000050 mg/L							
Sodium, dissolved	< 0.10	0.10 mg/L							
Strontium, dissolved	< 0.0010	0.0010 mg/L							
Sulfur, dissolved	< 3.0	3.0 mg/L							
Tellurium, dissolved	< 0.00050	0.00050 mg/L							
Thallium, dissolved	< 0.000020	0.000020 mg/L							
Thorium, dissolved	< 0.00010	0.00010 mg/L							
Tin, dissolved	< 0.00020	0.00020 mg/L							
Titanium, dissolved	< 0.0050	0.0050 mg/L							
Tungsten, dissolved	< 0.0010	0.0010 mg/L							
Uranium, dissolved	< 0.000020	0.000020 mg/L							
Vanadium, dissolved	< 0.0050	0.0050 mg/L							
Zinc, dissolved	< 0.0040	0.0040 mg/L							
Zirconium, dissolved	< 0.00010	0.00010 mg/L							

LCS (B5K2974-BS1)		Prepared: 2025-11-13, Analyzed: 2025-11-13							
Aluminum, dissolved	4.01	0.0050 mg/L	4.00		100	80-120			
Antimony, dissolved	0.0393	0.00020 mg/L	0.0400		98	80-120			
Arsenic, dissolved	0.401	0.00050 mg/L	0.400		100	80-120			
Barium, dissolved	0.0401	0.0050 mg/L	0.0400		100	80-120			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0903
2025-11-17 14:19

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Dissolved Metals, Batch B5K2974, Continued									
LCS (B5K2974-BS1), Continued					Prepared: 2025-11-13, Analyzed: 2025-11-13				
Beryllium, dissolved	0.0399	0.00010 mg/L	0.0400		100	80-120			
Bismuth, dissolved	0.0394	0.00010 mg/L	0.0400		98	80-120			
Boron, dissolved	0.394	0.0500 mg/L	0.400		99	80-120			
Cadmium, dissolved	0.0400	0.000010 mg/L	0.0400		100	80-120			
Calcium, dissolved	4.05	0.20 mg/L	4.00		101	80-120			
Chromium, dissolved	0.0403	0.00050 mg/L	0.0400		101	80-120			
Cobalt, dissolved	0.0403	0.00010 mg/L	0.0400		101	80-120			
Copper, dissolved	0.0405	0.00040 mg/L	0.0400		101	80-120			
Iron, dissolved	4.08	0.010 mg/L	4.00		102	80-120			
Lead, dissolved	0.0394	0.00020 mg/L	0.0400		99	80-120			
Lithium, dissolved	0.0399	0.00010 mg/L	0.0400		100	80-120			
Magnesium, dissolved	4.01	0.010 mg/L	4.00		100	80-120			
Manganese, dissolved	0.0407	0.00020 mg/L	0.0400		102	80-120			
Molybdenum, dissolved	0.0400	0.00010 mg/L	0.0400		100	80-120			
Nickel, dissolved	0.0405	0.00040 mg/L	0.0400		101	80-120			
Phosphorus, dissolved	3.99	0.050 mg/L	4.00		100	80-120			
Potassium, dissolved	4.04	0.10 mg/L	4.00		101	80-120			
Selenium, dissolved	0.399	0.00050 mg/L	0.400		100	80-120			
Silicon, dissolved	3.9	1.0 mg/L	4.00		97	80-120			
Silver, dissolved	0.0397	0.000050 mg/L	0.0400		99	80-120			
Sodium, dissolved	4.06	0.10 mg/L	4.00		101	80-120			
Strontium, dissolved	0.0403	0.0010 mg/L	0.0400		101	80-120			
Sulfur, dissolved	39.4	3.0 mg/L	40.0		99	80-120			
Tellurium, dissolved	0.0391	0.00050 mg/L	0.0400		98	80-120			
Thallium, dissolved	0.0401	0.000020 mg/L	0.0400		100	80-120			
Thorium, dissolved	0.0393	0.00010 mg/L	0.0400		98	80-120			
Tin, dissolved	0.0402	0.00020 mg/L	0.0400		101	80-120			
Titanium, dissolved	0.0396	0.0050 mg/L	0.0400		99	80-120			
Tungsten, dissolved	0.0395	0.0010 mg/L	0.0400		99	80-120			
Uranium, dissolved	0.0389	0.000020 mg/L	0.0400		97	80-120			
Vanadium, dissolved	0.0400	0.0050 mg/L	0.0400		100	80-120			
Zinc, dissolved	0.400	0.0040 mg/L	0.400		100	80-120			
Zirconium, dissolved	0.0398	0.00010 mg/L	0.0400		99	80-120			

Dissolved Metals, Batch B5K3307

Blank (B5K3307-BLK1)					Prepared: 2025-11-15, Analyzed: 2025-11-15				
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5K3307-BLK2)					Prepared: 2025-11-15, Analyzed: 2025-11-15				
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5K3307-BLK3)					Prepared: 2025-11-15, Analyzed: 2025-11-15				
Mercury, dissolved	< 0.000010	0.000010 mg/L							
Blank (B5K3307-BLK4)					Prepared: 2025-11-15, Analyzed: 2025-11-15				
Mercury, dissolved	< 0.000010	0.000010 mg/L							
LCS (B5K3307-BS1)					Prepared: 2025-11-15, Analyzed: 2025-11-15				
Mercury, dissolved	0.00252	0.000010 mg/L	0.00250		101	80-120			
LCS (B5K3307-BS2)					Prepared: 2025-11-15, Analyzed: 2025-11-15				
Mercury, dissolved	0.00264	0.000010 mg/L	0.00250		105	80-120			
LCS (B5K3307-BS3)					Prepared: 2025-11-15, Analyzed: 2025-11-15				
Mercury, dissolved	0.00262	0.000010 mg/L	0.00250		105	80-120			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0903
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Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Dissolved Metals, Batch B5K3307, Continued

LCS (B5K3307-BS4)

Prepared: 2025-11-15, Analyzed: 2025-11-15

Mercury, dissolved	0.00265	0.000010 mg/L	0.00250		106	80-120			
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Dissolved Metals, Batch B5K3350

Blank (B5K3350-BLK1)

Prepared: 2025-11-15, Analyzed: 2025-11-15

Aluminum, dissolved	< 0.0050	0.0050 mg/L							
Antimony, dissolved	< 0.00020	0.00020 mg/L							
Arsenic, dissolved	< 0.00050	0.00050 mg/L							
Barium, dissolved	< 0.0050	0.0050 mg/L							
Beryllium, dissolved	< 0.00010	0.00010 mg/L							
Bismuth, dissolved	< 0.00010	0.00010 mg/L							
Boron, dissolved	< 0.0500	0.0500 mg/L							
Cadmium, dissolved	< 0.000010	0.000010 mg/L							
Calcium, dissolved	< 0.20	0.20 mg/L							
Chromium, dissolved	< 0.00050	0.00050 mg/L							
Cobalt, dissolved	< 0.00010	0.00010 mg/L							
Copper, dissolved	< 0.00040	0.00040 mg/L							
Iron, dissolved	< 0.010	0.010 mg/L							
Lead, dissolved	< 0.00020	0.00020 mg/L							
Lithium, dissolved	< 0.00010	0.00010 mg/L							
Magnesium, dissolved	< 0.010	0.010 mg/L							
Manganese, dissolved	< 0.00020	0.00020 mg/L							
Molybdenum, dissolved	< 0.00010	0.00010 mg/L							
Nickel, dissolved	< 0.00040	0.00040 mg/L							
Phosphorus, dissolved	< 0.050	0.050 mg/L							
Potassium, dissolved	< 0.10	0.10 mg/L							
Selenium, dissolved	< 0.00050	0.00050 mg/L							
Silicon, dissolved	< 1.0	1.0 mg/L							
Silver, dissolved	< 0.000050	0.000050 mg/L							
Sodium, dissolved	< 0.10	0.10 mg/L							
Strontium, dissolved	< 0.0010	0.0010 mg/L							
Sulfur, dissolved	< 3.0	3.0 mg/L							
Tellurium, dissolved	< 0.00050	0.00050 mg/L							
Thallium, dissolved	< 0.000020	0.000020 mg/L							
Thorium, dissolved	< 0.00010	0.00010 mg/L							
Tin, dissolved	< 0.00020	0.00020 mg/L							
Titanium, dissolved	< 0.0050	0.0050 mg/L							
Tungsten, dissolved	< 0.0010	0.0010 mg/L							
Uranium, dissolved	< 0.000020	0.000020 mg/L							
Vanadium, dissolved	< 0.0050	0.0050 mg/L							
Zinc, dissolved	< 0.0040	0.0040 mg/L							
Zirconium, dissolved	< 0.00010	0.00010 mg/L							

LCS (B5K3350-BS1)

Prepared: 2025-11-15, Analyzed: 2025-11-15

Aluminum, dissolved	4.06	0.0050 mg/L	4.00		102	80-120			
Antimony, dissolved	0.0394	0.00020 mg/L	0.0400		99	80-120			
Arsenic, dissolved	0.404	0.00050 mg/L	0.400		101	80-120			
Barium, dissolved	0.0404	0.0050 mg/L	0.0400		101	80-120			
Beryllium, dissolved	0.0398	0.00010 mg/L	0.0400		100	80-120			
Bismuth, dissolved	0.0410	0.00010 mg/L	0.0400		102	80-120			
Boron, dissolved	0.398	0.0500 mg/L	0.400		99	80-120			
Cadmium, dissolved	0.0400	0.000010 mg/L	0.0400		100	80-120			
Calcium, dissolved	4.04	0.20 mg/L	4.00		101	80-120			
Chromium, dissolved	0.0404	0.00050 mg/L	0.0400		101	80-120			
Cobalt, dissolved	0.0405	0.00010 mg/L	0.0400		101	80-120			
Copper, dissolved	0.0404	0.00040 mg/L	0.0400		101	80-120			



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0903
2025-11-17 14:19

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Dissolved Metals, Batch B5K3350, Continued

LCS (B5K3350-BS1), Continued				Prepared: 2025-11-15, Analyzed: 2025-11-15					
Iron, dissolved	4.12	0.010 mg/L	4.00		103	80-120			
Lead, dissolved	0.0404	0.00020 mg/L	0.0400		101	80-120			
Lithium, dissolved	0.0398	0.00010 mg/L	0.0400		99	80-120			
Magnesium, dissolved	4.01	0.010 mg/L	4.00		100	80-120			
Manganese, dissolved	0.0407	0.00020 mg/L	0.0400		102	80-120			
Molybdenum, dissolved	0.0396	0.00010 mg/L	0.0400		99	80-120			
Nickel, dissolved	0.0408	0.00040 mg/L	0.0400		102	80-120			
Phosphorus, dissolved	4.09	0.050 mg/L	4.00		102	80-120			
Potassium, dissolved	4.05	0.10 mg/L	4.00		101	80-120			
Selenium, dissolved	0.392	0.00050 mg/L	0.400		98	80-120			
Silicon, dissolved	4.0	1.0 mg/L	4.00		99	80-120			
Silver, dissolved	0.0394	0.000050 mg/L	0.0400		98	80-120			
Sodium, dissolved	3.91	0.10 mg/L	4.00		98	80-120			
Strontium, dissolved	0.0409	0.0010 mg/L	0.0400		102	80-120			
Sulfur, dissolved	42.3	3.0 mg/L	40.0		106	80-120			
Tellurium, dissolved	0.0401	0.00050 mg/L	0.0400		100	80-120			
Thallium, dissolved	0.0408	0.000020 mg/L	0.0400		102	80-120			
Thorium, dissolved	0.0406	0.00010 mg/L	0.0400		102	80-120			
Tin, dissolved	0.0400	0.00020 mg/L	0.0400		100	80-120			
Titanium, dissolved	0.0408	0.00050 mg/L	0.0400		102	80-120			
Tungsten, dissolved	0.0406	0.0010 mg/L	0.0400		102	80-120			
Uranium, dissolved	0.0410	0.000020 mg/L	0.0400		102	80-120			
Vanadium, dissolved	0.0404	0.00050 mg/L	0.0400		101	80-120			
Zinc, dissolved	0.404	0.0040 mg/L	0.400		101	80-120			
Zirconium, dissolved	0.0400	0.00010 mg/L	0.0400		100	80-120			

Duplicate (B5K3350-DUP1)		Source: 25K0903-03		Prepared: 2025-11-15, Analyzed: 2025-11-15					
Aluminum, dissolved	< 0.0050	0.0050 mg/L	< 0.0050					20	
Antimony, dissolved	< 0.00020	0.00020 mg/L	< 0.00020					20	
Arsenic, dissolved	0.0101	0.00050 mg/L	0.0103				2	20	
Barium, dissolved	0.0213	0.0050 mg/L	0.0214					20	
Beryllium, dissolved	< 0.00010	0.00010 mg/L	< 0.00010					20	
Bismuth, dissolved	< 0.00010	0.00010 mg/L	< 0.00010					20	
Boron, dissolved	0.0522	0.0500 mg/L	0.0519					20	
Cadmium, dissolved	< 0.000010	0.000010 mg/L	< 0.000010					20	
Calcium, dissolved	43.5	0.20 mg/L	43.0				1	20	
Chromium, dissolved	< 0.00050	0.00050 mg/L	< 0.00050					20	
Cobalt, dissolved	0.00029	0.00010 mg/L	0.00029					20	
Copper, dissolved	< 0.00040	0.00040 mg/L	< 0.00040					20	
Iron, dissolved	0.119	0.010 mg/L	0.119				< 1	20	
Lead, dissolved	< 0.00020	0.00020 mg/L	< 0.00020					20	
Lithium, dissolved	0.0211	0.00010 mg/L	0.0209				< 1	20	
Magnesium, dissolved	15.8	0.010 mg/L	15.9				< 1	20	
Manganese, dissolved	0.0778	0.00020 mg/L	0.0782				< 1	20	
Molybdenum, dissolved	0.0117	0.00010 mg/L	0.0118				1	20	
Nickel, dissolved	< 0.00040	0.00040 mg/L	< 0.00040					20	
Phosphorus, dissolved	< 0.050	0.050 mg/L	< 0.050					20	
Potassium, dissolved	1.41	0.10 mg/L	1.42				< 1	20	
Selenium, dissolved	< 0.00050	0.00050 mg/L	< 0.00050					20	
Silicon, dissolved	10.0	1.0 mg/L	10.0				< 1	20	
Silver, dissolved	< 0.000050	0.000050 mg/L	< 0.000050					20	
Sodium, dissolved	24.2	0.10 mg/L	24.4				< 1	20	
Strontium, dissolved	1.88	0.0010 mg/L	1.88				< 1	20	
Sulfur, dissolved	9.4	3.0 mg/L	9.9					20	
Tellurium, dissolved	< 0.00050	0.00050 mg/L	< 0.00050					20	
Thallium, dissolved	< 0.000020	0.000020 mg/L	< 0.000020					20	



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Regional District of Okanagan Similkameen
Ok Falls - TLGW

WORK ORDER REPORTED 25K0903
2025-11-17 14:19

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Dissolved Metals, Batch B5K3350, Continued									
Duplicate (B5K3350-DUP1), Continued		Source: 25K0903-03		Prepared: 2025-11-15, Analyzed: 2025-11-15					
Thorium, dissolved	< 0.00010	0.00010 mg/L		< 0.00010				20	
Tin, dissolved	< 0.00020	0.00020 mg/L		< 0.00020				20	
Titanium, dissolved	< 0.0050	0.0050 mg/L		< 0.0050				20	
Tungsten, dissolved	< 0.0010	0.0010 mg/L		< 0.0010				20	
Uranium, dissolved	0.00194	0.000020 mg/L		0.00194			< 1	20	
Vanadium, dissolved	< 0.0050	0.0050 mg/L		< 0.0050				20	
Zinc, dissolved	< 0.0040	0.0040 mg/L		< 0.0040				20	
Zirconium, dissolved	< 0.00010	0.00010 mg/L		< 0.00010				20	

General Parameters, Batch B5K2787

Blank (B5K2787-BLK1)			Prepared: 2025-11-11, Analyzed: 2025-11-11						
Alkalinity, Total (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
Blank (B5K2787-BLK2)			Prepared: 2025-11-11, Analyzed: 2025-11-11						
Alkalinity, Total (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
Blank (B5K2787-BLK3)			Prepared: 2025-11-11, Analyzed: 2025-11-11						
Alkalinity, Total (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
LCS (B5K2787-BS1)			Prepared: 2025-11-11, Analyzed: 2025-11-11						
Alkalinity, Total (as CaCO3)	102	1.0 mg/L	100	102	80-120				
LCS (B5K2787-BS2)			Prepared: 2025-11-11, Analyzed: 2025-11-11						
Conductivity (EC)	1410	2.0 µS/cm	1410	100	95-105				
LCS (B5K2787-BS3)			Prepared: 2025-11-11, Analyzed: 2025-11-11						
Alkalinity, Total (as CaCO3)	105	1.0 mg/L	100	105	80-120				
LCS (B5K2787-BS4)			Prepared: 2025-11-11, Analyzed: 2025-11-11						
Conductivity (EC)	1420	2.0 µS/cm	1410	100	95-105				
LCS (B5K2787-BS5)			Prepared: 2025-11-11, Analyzed: 2025-11-11						
Alkalinity, Total (as CaCO3)	103	1.0 mg/L	100	103	80-120				
LCS (B5K2787-BS6)			Prepared: 2025-11-11, Analyzed: 2025-11-11						
Conductivity (EC)	1420	2.0 µS/cm	1410	101	95-105				
Reference (B5K2787-SRM1)			Prepared: 2025-11-11, Analyzed: 2025-11-11						
pH	6.98	0.10 pH units	7.01	100	98-102				



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT	Regional District of Okanagan Similkameen Ok Falls - TLGW	WORK ORDER REPORTED	25K0903 2025-11-17 14:19
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Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B5K2787, Continued									
Reference (B5K2787-SRM2)			Prepared: 2025-11-11, Analyzed: 2025-11-11						
pH	7.00	0.10 pH units	7.01		100	98-102			
Reference (B5K2787-SRM3)			Prepared: 2025-11-11, Analyzed: 2025-11-11						
pH	7.01	0.10 pH units	7.01		100	98-102			
General Parameters, Batch B5K3210									
Blank (B5K3210-BLK1)			Prepared: 2025-11-14, Analyzed: 2025-11-14						
Ammonia, Total (as N)	< 0.050	0.050 mg/L							
Blank (B5K3210-BLK2)			Prepared: 2025-11-14, Analyzed: 2025-11-14						
Ammonia, Total (as N)	< 0.050	0.050 mg/L							
LCS (B5K3210-BS1)			Prepared: 2025-11-14, Analyzed: 2025-11-14						
Ammonia, Total (as N)	0.922	0.050 mg/L	1.00		92	85-115			
LCS (B5K3210-BS2)			Prepared: 2025-11-14, Analyzed: 2025-11-14						
Ammonia, Total (as N)	0.912	0.050 mg/L	1.00		91	85-115			
Duplicate (B5K3210-DUP1)			Source: 25K0903-01		Prepared: 2025-11-14, Analyzed: 2025-11-14				
Ammonia, Total (as N)	< 0.050	0.050 mg/L		< 0.050					15
Duplicate (B5K3210-DUP2)			Source: 25K0903-02		Prepared: 2025-11-14, Analyzed: 2025-11-14				
Ammonia, Total (as N)	< 0.050	0.050 mg/L		< 0.050					15
Matrix Spike (B5K3210-MS1)			Source: 25K0903-01		Prepared: 2025-11-14, Analyzed: 2025-11-14				
Ammonia, Total (as N)	0.195	0.050 mg/L	0.204	< 0.050	90	75-125			
Matrix Spike (B5K3210-MS2)			Source: 25K0903-02		Prepared: 2025-11-14, Analyzed: 2025-11-14				
Ammonia, Total (as N)	0.210	0.050 mg/L	0.204	< 0.050	98	75-125			
General Parameters, Batch B5K3258									
Blank (B5K3258-BLK1)			Prepared: 2025-11-15, Analyzed: 2025-11-15						
Chemical Oxygen Demand	< 20	20 mg/L							
Blank (B5K3258-BLK2)			Prepared: 2025-11-15, Analyzed: 2025-11-15						
Chemical Oxygen Demand	< 20	20 mg/L							
LCS (B5K3258-BS1)			Prepared: 2025-11-15, Analyzed: 2025-11-15						
Chemical Oxygen Demand	500	20 mg/L	500		100	89-115			
LCS (B5K3258-BS2)			Prepared: 2025-11-15, Analyzed: 2025-11-15						
Chemical Oxygen Demand	491	20 mg/L	500		98	89-115			
Duplicate (B5K3258-DUP1)			Source: 25K0903-02		Prepared: 2025-11-15, Analyzed: 2025-11-15				
Chemical Oxygen Demand	31	20 mg/L		30					14
Matrix Spike (B5K3258-MS1)			Source: 25K0903-02		Prepared: 2025-11-15, Analyzed: 2025-11-15				
Chemical Oxygen Demand	159	20 mg/L	125	30	103	75-125			